# CECIL COUNTY PUBLIC SCHOOLS
## PURCHASING DEPARTMENT

GEORGE WASHINGTON CARVER EDUCATION LEADERSHIP CENTER
201 BOOTH STREET • ELKTON, MD 21921

*Serving Learners, Families, and the Community*

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*Superintendent of Schools*

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April 02, 2024

**CCPS RFP#24-15 – NORTH EAST MIDDLE/HIGH SCHOOL REPLACEMENT PROJECT**

**ADDENDUM #5**

**This addendum is to address Bid RFIS and contract drawings, and specification modifications as noted below.** Proposers and related parties will be responsible for reading and understanding all documents, the scope of work, addenda and all related solicitation documents issued. These documents will become attached to and part of the solicitation and award of bid contract.

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ITEM No. 1 **Bid RFIs responses.**

ITEM No. 2 **CONTRACT DRAWINGS AND SPECIFICATIONS- Changes and Clarifications dated 04/02/2024.**

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Authorized Signature/Date: _____

Printed Name/Title: _____

Contractor Name: _____

Address: _____

***Note: Bidder must sign and submit Addenda with the proposal submission. The same person signing the Addenda acknowledgement(s) must sign the Bid Form.**

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| SUBMITTED RFIS LOG | | | |
| **RFI #** | **Date recvd** | **Question** | **Answer** |
| | **NOTE: RFI responses added or modified since the issuance of Addendum 3 are in bold text.** | | |
| 1 | 2/29/2024 | Per drawing E601, HS-MSB is identified as 4000A on the riser diagram, but 3000A in the schedule (drawing E708). Please clarify. | HS-MSB is 3000A. Riser will be updated to reflect |
| 2 | 3/1/2024 | Is Siemens an acceptable alternative fire alarm system manufacturer? | Yes. Manufacturer will be added as acceptable alternative. |
| 3 | 3/1/2024 | Please provide clarification on the floor depression for the walk-in cooler/freezer, Line item 1. Written specs call for 6" deep floor recess, but the Kitchen drawings call for 4" deep recess. | 4" depression is correct 3/18/2024: see Addendum 2. |
| 4 | 3/1/2024 | Is Automated Logic's Webctrl an acceptable manufacturer substitution for specifications 230900? | No |
| 5 | 3/1/2024 | I was looking into if there were any utility locating services needed on the project in regards to sitework. | Utility location service is required on the project and is covered in several spec sections. |
| 6 | 3/4/2024 | 1. Variable-Frequency Motor Controllers – May "Yaskawa" be added to the list of acceptable manufacturers for spec section 230515.2.1.B | No |
| 7 | 3/4/2024 | 2. Energy Recovery Units – May "Petra Engineering" be added to the list of acceptable manufacturers for spec section 237200.2.1.A | No |
| 8 | 3/4/2024 | 3. Electric Resistance Air Coils – May "Neptronic" be added to the list of acceptable manufacturers for spec section 238216.14.2.2.A | No |
| 9 | 3/4/2024 | 4. Finned-Tube Radiation Heaters – May "Raywall" be added to the list of acceptable manufacturers for spec section 238236.2.2.A | No |
| 10 | 3/4/2024 | 5. Unit Heaters – May "Raywall" be added to the list of acceptable manufacturers for spec section 238239.2.1.A &2.2.A | No |
| 11 | 3/4/2024 | 6. Cabinet Unit Heaters – May "Raywall" be added to the list of acceptable manufacturers for spec section 238239.13.2.1.A | No |
| 12 | 3/4/2024 | 7. Wall and Ceiling Unit Heaters – May "Raywall" be added to the list of acceptable manufacturers for spec section 238239.19.2.1.B | No |
| 13 | 3/4/2024 | 8. Electric Radiant Ceiling Panels – May "Raywall" be added to the list of acceptable manufacturers for this equipment | No |
| 14 | 3/4/2024 | 9. Energy Recovery Ventilators – May "System Air" be added to the list of acceptable manufacturers for this equipment | No |
| 15 | 3/5/2024 | Are both the current middle and high school to be demolished? | The existing High school will be demolished. The existing middle school is not scheduled for demolition. |
| 16 | 3/5/2024 | Is the site visit on 3/6 required for the demolition package and will we be walking the inside of the school? | The site visit is not required to submit a bid. There will be a separate pre-bid meeting for the school demolition that will be scheduled closer to the scheduled demolition of the school. |
| 17 | 3/5/2024 | Will there be another site visit for when the Demolition RFP comes back around? | Yes. |
| 18 | 3/5/2024 | Is there a hazmat report for the schools to be demolished? | An AHERA 6 month inspection dated September 13, 2023. Will be provided in the next addendum. |
| 19 | 3/5/2024 | I am reaching out in regards to this project, North East Middle-High School. I represent Industrial Louvers and we are specified. Do you have a list of bidders for this scope? | Louvers are in the 6A bid package, spec section 08 91 19. For a potential list of Prime Bidders by package reach out to HESS via NEMHS@hessconstruction.com. |
| 20 | 3/5/2024 | We also represent Vetrotech Saint Gobain for the fire rated. Do you have a list of bidders for that scope as well? | For a potential list of Prime Bidders by package reach out to HESS via NEMHS@hessconstruction.com. |
| 21 | 3/6/2024 | Wanted to ask if there should be a "A103C" included in the set because Building C has a third level. please provide | Drawing set Is correct. Area C has 3 levels; 00, 01 and 02 |
| 22 | 3/6/2024 | Please specify if the following door frames should be aluminum frames w/ wood doors or hollow metal frames w/ wood doors. B007A, B007B, B007C, D104A, D104B, D120A, D120B, F001A, F001B. | Frames are hollow metal |

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| 23 | 3/7/2024 | Should the MV transformers (MS-XFMR and HS-XMF) be mineral oil or less-flammable insulating liquid (seed oil)? Spec section 261219 2.2.I calls for mineral oil. But 2.3.G.6 requires compliance with FM Global Class No. 3990 (seed oil) and 2.3.G.7 requires less- flammable insulating liquid. | MV Transformers shall be FR3 Fluid Filled. Mineral oil will be removed from specification |
| 24 | 3/7/2024 | Regarding the 34kV Switchgear; please clarify whether the 34kV switchgear is to be vacuum breaker Metal-Clad switchgear or fused switch Metal Enclosed Switchgear. Gear is labeled as Metal-Clad on the riser but the individual sections are labeled with fused and unfused switches (Metal Enclosed). The only Spec section provided is labeled as Metal Enclosed, but within that section vacuum breakers and relays which would be for Metal Clad and Feeder Switch Sections which would be for Metal Enclosed are both discussed. | Will be addressed in forthcoming Addendum.<br>3/25/2024 UPDATE: Under Addendum #3, primary service has been revised. Campus primary cabinet/switchgear is replaced with (2) separate pieces of equipment. CT Metering cabinet by Utility and Pad-mounted switchgear by EC. Specifications shall be provided for pad-mounted switchgear under forthcoming Addendum. Basis of design is Eaton KPMT7B39.<br>**04/02/2024: Refer to Addendum 5 for revised information.** |
| 25 | 3/7/2024 | Please clarify what contractors should put on the bid form regarding alternate bids that do not pertain to our bid package. Would you like "0", "No Bid", "N/A" or for the space to be left blank? | Use " N/A" |
| 26 | 3/7/2024 | Please confirm who is responsible for the demolition of the existing school building? Is it the 31A Sitework package? | The demolition of the existing high school building will be a future bid package. The demolition of all other outbuilding structures, and all site demolition is part of the 31A sitework package. |
| 27 | 3/7/2024 | Please confirm if abatement or the removal of hazardous material will be required for the existing school building | Yes. |
| 28 | 3/7/2024 | Please confirm who is responsible for stripping, handling, and respreading the topsoil. Please define "respread" in the 31A SOW, Item 21, does this include topsoil? | ~~*32B is responsible per 32B SOW "Landscaping Specific Scope" Item 1*~~<br>~~*31A SOW item 21 refers to respreading of stockpile from other contractor's spoils*~~ *REVISED RESPONSE: The 31A Contractor is responsible for striping, stockpiling, protecting, stabilizing, respreading, and amending topsoil. See revised 31A and 32B work scopes* ADD#3 |
| 29 | 3/7/2024 | Please confirm who is responsible for root pruning, signage, etc. as it is stated in both the 31A Sitework and 32B Landscaping & Fencing scope of work. (31A SOW Earthwork Item 1 v.s. 32B SOW Landscaping Item 4) | ~~Root pruning, signage, etc. should be 32B SOW~~ *REVISED RESPONSE: Root pruning, signage etc. is in the 31A Package* ADD#3 |
| 30 | 3/7/2024 | Please confirm that the 31A Sitework package does not include any stone base for the concrete or asphalt paving | CONFIRMED. Per 32A SOW they are to provide stone for their work |
| 31 | 3/7/2024 | Please confirm who is responsible for the Utility asphalt patch and striping for the waterline installation that goes through Irishtown Road. See SOW 32A Concrete Item 7. | 32A is responsible per 32A SOW Concrete Item 7 and per Road and Parking accessories. ***AMENDED RESPONSE: The 31A Contractor is required to provide a temporary patch immediately following the installation of the waterline*** **ADD#5** |
| 32 | 3/7/2024 | Please confirm who is responsible for furnishing and installing the sleeves / sonotubes for the retaining walls. (31A SOW Segmental Retaining Item 7 v.s. 32B SOW Fencing Item 5). | ~~32B is responsible. 32B SOW needs to be updated to clarify Furnish and INSTALL~~ *REVISED RESPONSE: Sleeves/sonotubes will be furnished and installed by the 05A Contractor (for steel railings) and the 32B Contractor (for fencing). The 31A Contractor will work in coordination with these contractors while performing geogrid placement and backfill, and shall account for the sleeves/sonotubes in the wall engineering* ADD#3 |
| 33 | 3/8/2024 | After review of the attached notice, I did not see a Material Testing & Inspections scope being bid. Is there an opportunity for Specialized to propose services on this project? | ~~*Response will be provided in next addendum*~~ . *REVISED RESPONSE: There will be a separate solicitation for 3rd party testing and inspections* ADD#3 |
| 34 | 3/8/2024 | Will a site logistics plan be provided? | Site Logistics, in terms of LOD and phasing requirements are within the civil drawings. Temporary roads and staging areas are described in the 31A work scope. Additional logistics will be coordinated with the prime contractors during construction phase |
| 35 | 3/8/2024 | Who is responsible for the geothermal field spoils? | 23B contractor will place spoils in the stockpile area for spoils<br>31A is responsible for spoils pile |
| 36 | 3/11/2024 | Specification 00 45 28 – Prevailing Wage does not have Ironworkers or steel workers listed in the wage determination. Please provide a complete list including ironworkers. | Refer to attached MD Dept. of Labor letter dated 3/22/24 for wage rates indicated for Glazier, Ironworker-Structural, Painter, and Roofer/Waterproofer. |

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| 37 | 3/11/2024 | Is there any steel support for the sign and/or brick for the Marquee Sign on A211? | Response will be provided in next addendum 03/18/2024: No Steel support is required. |
| 38 | 3/11/2024 | The bollard detail located on C-12 is not called out on any of the civil plans. Please provide locations and / or quantity of bollards required. | Bollards are shown on dumpster detail only. |
| 39 | 3/11/2024 | Which trade contractor is to pick up the metal swing gate on C-12? | 32B SOW Item 3 |
| 40 | 3/11/2024 | Please confirm there is only one location for the metal swing gate on C-12. | Metal swing gate is specified at connection of student parking and bus loop only. |
| 41 | 3/11/2024 | Specification 009000 – Specific Scopes of Work. Package 05A item 16 states to pick up aluminum & SS at trench drains. Package 23A item 45 states to pick up trough / trench drains (furnish & install a complete plumbing systems). Package 31A item 13 states to furnish and install trench drain, inclusive of angles and grating. Please advise on which package(s) is to pick up stuff at the trench drains. | 31A SOW should own this work to Furnish & Install the site TDs |
| 42 | 3/11/2024 | Which trade package is to pick up the cast-in aluminum receiver and trench cover on detail A16/A427? | 05A to furnish and 03A to install |
| 43 | 3/11/2024 | Stair 4 on details H12 & H18/A507, A/S403 shows it drawn as a cast in place concrete stair, but details called out on architectural drawings refer to page A505 which shows a steel pan stair. Please advise if this stair is a concrete stair or a steel pan stair. | Stair is a concrete stair. Details on A505 will be reviewed and modified where required in a future addenda.<br>**04/02/2024 No modifications to details required.** |
| 44 | 3/11/2024 | If Stair 4 is a concrete stair, how does the stringer attach to the stair? Or is the railing to be attached to the stair without a stringer? Please advise and provide details. | Per detail A/S404 connection detail of stringer to stair is to be provided by stair engineer. |
| 45 | 3/11/2024 | Is there a trade package 02A specific scope for this project? I did not see one in spec 00 90 00. Please advise. | The typical 02A package has been split up in several packages (31A, 32A, 32B) |
| 46 | 3/12/2024 | Verify the workbench in room B022 on sheet A800B is to use detail G18/A804. | Item is Furniture N.I.C. |
| 47 | 3/12/2024 | Verify 06B contractor is to furnish and install all LK5 and LK6 lockers. | Lockers are furnished and installed by 06A |
| 48 | 3/12/2024 | Provide details for table legs or similar at the end of peninsulas in science rooms. Currently no counter support or model number is shown. | **Refer to addendum 5 Sheets A800 and A800C** |
| 49 | 3/12/2024 | Is an epoxy resin sill/cap intended at non-window wall locations in science rooms? Similar to details D13 & G13/A804. | Sill cap is not required at non-window wall locations. |
| 50 | 3/12/2024 | Are we to include the scheduled casework shown under the counter at the millwork desk in room A100 on sheet A801A or include counter supports as detailed at G18/A805? | Provide scheduled casework as shown on A801A |
| 51 | 3/12/2024 | Low wall railings in the Auditorium on sheet A801D have the wrong call-out as A18/A809, this should be B13/A809. | Call out A18/A809 is correct. |
| 52 | 3/12/2024 | Is there a chase wall/wall cap intended at the window wall in room F107? | Yes. Chase wall/wall cap is similar to detail D13/A804. At F107 counter top and sill cap to be plastic laminate. 03/18/2024: Corrected response. Refer to Detail G13/A804. At F107 countertop and sill cap to be plastic laminate. |
| 53 | 3/12/2024 | Verify that package 05A is to furnish and install the steel pipe posts, flanges, plates and privacy screens at D10/A804. | The steel pipe posts, flanges, plates and privacy screens is to be furnished and installed by the 06B Contractor for a complete countertop installation |
| 54 | 3/12/2024 | 06B specific scopes lists interior wood frames and jambs, closer kits, wood handrail and dark room door: None of these items can be found on the construction documents. Verify they are not part of the project. | VERIFED |
| 55 | 3/12/2024 | Provide details for the temporary circulation desk on A012. What package is responsible to furnish and install this temporary desk? | Circulation desk will be movable furniture as is N.I.C. |
| 56 | 3/12/2024 | Verify all gas fixtures in science labs are furnished and installed by package 23A. | CONFIRMED. These items are listed on the plumbing schedule drawing P901 |
| 57 | 3/12/2024 | Verify there are 2 kilns, kiln hoods and kiln ventilators required for the project. The kilns are not scheduled on the plans. | Verified there are 2 Kilns. Kiln Hoods and Kiln ventilators are required. Items will be identified in plans in future addenda |

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| 58 | 3/12/2024 | There are multiple line items in the 06B scope that refer to owning in-wall blocking. Verify that 06B only owns coordination of in-wall blocking. Blocking is by 06A. | All in-wall blocking is to be furnished and installed by the 06A Contractor. The 06B Contractor shall coordinate with the 06A Contractor to verify locations required and check installation prior to close-in. |
| 59 | 3/12/2024 | Verify Alternate #16 is for the seats only, not the balconies themselves. | Alternate is for seats only |
| 60 | 3/12/2024 | Verify that 06A shall furnish and install all "Vertical Acoustic Wood Planks AWP3" and "Vertical Flush Joint Linear Wood Planks" as well as the ¾" metal reveals in the Auditorium per the specific scope. Hardwood caps would remain part of 06B. | Confirmed |
| 61 | 3/12/2024 | Provide a detail for the millwork treads and risers at the stage front stairs. | Response will be provided in next addendum 03/18/2024: Treads and risers are RTF-4. Refer to Floor patterns on B18/A11A. |
| 62 | 3/12/2024 | Is wood base intended along the entire perimeter of the auditorium walls? 7A/A610 for reference. | Wood base is required as per finish schedule on A304 |
| 63 | 3/12/2024 | Verify that Alternate #3 changes Base Bid Math room C021 into Pre-K C021. There is no additional room built alongside C021 Math in this Alternate. | Correct. |
| 64 | 3/12/2024 | B12/A423 indicates a window sill, but the detail is never called out on the drawings. Where does this detail belong? Is the sill intended to be solid surface? | Refer to wall section A5/A419. Material is Solid surface. |
| 65 | 3/12/2024 | We are an expansion joint manufacturer, and we would like to submit our products to be considered as an equal to the specified products for the North East Middle and High School project. I reviewed the specifications, and the substitution requests with the proper forms are attached for the products listed in Sections 079100 & 079513. Our products are a direct equal to those specified and will not require any changes to the project documents (with the possible exception of our inclusion in an addendum) | Decision on substitution request will be provided in future addenda. 03/18/24: Refer to Addendum 2 revised specifications for addition of products accepted as substitutions. |
| 66 | 3/12/2024 | There is no rate for the glazer in the wage scale. | Refer to attached MD Dept. of Labor letter dated 3/22/24 for wage rates indicated for Glazier, Ironworker-Structural, Painter, and Roofer/Waterproofer. |
| 67 | 3/12/2024 | Our scope referenced 07 21 60 - Thermal Break and this specification is not included in the documents. | This specification should be removed from the 04A and 08A SOW as there is no specification 07 21 60. Also page 253 and 299 of the Vol 1 specifications need to be updated to remove this specification |
| 68 | 3/12/2024 | All of the finish for the storefront and curtain wall calls for a Mica Finish. There is a blurb in 08 44 13 page 6 para. 2.3.b.4 that calls for clear anodized. | Item has been corrected. Refer to Addendum 2 |
| 69 | 3/12/2024 | There is a requirement for the subcontractors to submit an AIA 305 Contractor Qualification Form. Can we provide this form? | **AIA 305 included in Addendum #3. Financial Statements will not be required at the time of bid, but will be required for review prior to contract award.** |
| 70 | 3/12/2024 | Do you have a start date for the greenhouse part of this project, or at least the end date? | ~~green house is an alternate. If accepted at bid time schedule for green house construction will be determined in review of schedule for the project based on whether the 3 phase or 2 phase construction approach is accepted.~~ ***UPDATED RESPONSE: The greenhouse is part of Phase 1. For Base Bid 1, Phase 1 substantial completion is 5/15/26. For Base Bid 2, Phase 1 substantial completion is 5/15/27*** **ADD#5** |
| 71 | 3/12/2024 | DWG. A906-Alternates- Detail #A9 - Is Pre-K Classroom #C021- Detailed on A800 Series Drawing? No casework tags here. | No casework is required for Pre-K Classroom C021 |
| 72 | 3/12/2024 | DWG. A903-Ticket Booth-Detail #A18 - C-Top on brackets, ledge needed at roll up door? | Refer to revised details on A903 in Addendum 3. |
| 73 | 3/12/2024 | DWG. A903- Concessions-Detail #A15 - C-Top on brackets, ledge needed at roll up door? C-Top (C8) on brackets? | Refer to revised details on A903 in Addendum 3. |
| 74 | 3/12/2024 | DWG. A804- Details (#J14, #D10 & #D7 - Please confirm that Pipe Support post, perforated material privacy screens are part of the 05 Contractor. | This is part of the 06B SOW |
| 75 | 3/12/2024 | DWG. A806-Detail #D18 & #L11 - Reference "Solid Surface Clad Partial Height Partition" but detail #H18 Notes "Painted Finish". Please clarify. | "Painted Finish" refers to gypboard wall only. |

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| 76 | 3/12/2024 | DWG. A800B - M.S. Cafeteria B007-Lower right corner calls for Detail #J10/A804, however it looks more like a counter wall mounted. Please clarify. | Detail reference has been revised to D7/804 |
| 77 | 3/12/2024 | DWG. A806-Room# C029 - Casework on North wall is not tagged. Is it the same as RM #C031? | Yes |
| 78 | 3/12/2024 | Please confirm that bathroom (framed) mirrors are not in the 8B scope. | CONFIRMED. They belong to 06A SOW Plastic Toilet Partition Item 2 |
| 79 | 3/12/2024 | Is section 084500 to be included in the 8B scope? The section is listed at the top of the SOW, but no further detail is provided in the paragraphs below. | Yes. This is Alternate #5 |
| 80 | 3/12/2024 | The following door frames are noted on the door schedule as being aluminum, but are labeled with hollow metal marks, please clarify: B007A, B007B, B007C, D104A, D104B, D120A, D120B, F001A, F001B. | Refer to response to RFI #22 |
| 81 | 3/12/2024 | Glass type G14 is specified as having a laminated inboard lite with an opaque interlayer. The Glass Type Key describes the inboard lite as tempered spandrel. Which is to be used? | Glass type G14 as described in specifications. |
| 82 | 3/12/2024 | Detail A11/A421 shows .080" aluminum closure from the wall to the mullion. Which scope is to include this metal? | The pre-finished alum. Closure (080), should be provided by the storefront contractor. *AMENDED RESPONSE: To clarify, this work is to be provided by the 08B Contractor* ADD#3 |
| 83 | 3/12/2024 | Details A7 and A12 on sheet A530 show a smaller piece of flashing under the window sill, and a large piece extending further to the exterior. Which scope(s) are to pick up these pieces of flashing? | The storefront high performance sill should be provided by the storefront contractor. The pre-fin. .063" alum. sill and pre-fin. metal panel type 4 below should be provided by the metal panel contractor. |
| 84 | 3/12/2024 | Regarding window types SP1 and SP2, on A312, the specified manufacturer Ready Access has stated that they do not manufacture this window type in custom sizes. The sizes available on their quote request form are listed below, please let us know which to use: 47.5" x 43.5"<br>47.5" x 35.75" 35.75" x 35.75" | Revise dimensions of SP1 and SP2 to 47.5"x 43.5". Documents will be updated via addendum.<br>**04/02/2024: refer to Addendum 3.** |
| 85 | 3/13/2024 | Fixture type SLE4 shown on drawings L700 and L701 are overlapping and difficult to see. Please advise how many of these fixture types are needed or provide a clearer detail that better shows each symbol. | 24 lights are required in this location. |
| 86 | 3/13/2024 | Division 274116 AV Performance Systems - The auditorium line diagram on AV601 shows 11 speakers and 3 subs in the left/right clusters and 14 speakers in the main cluster. Drawing AV901 indicates 9 speakers and 3 subs in the left/right clusters and 9 speakers in the main cluster. Which one is correct? | The line diagram on AV601 is correct |
| 87 | 3/13/2024 | Division 274116 AV Performance Systems - The drawings show projectors type 1 and 2, but the spec only lists a type 1. Please clarify. | Where in drawing documents Type 2 projectors are referenced provide Type 1. |
| 88 | 3/13/2024 | Division 274116 AV Performance Systems - The video monitors are listed on the line drawing as "Confidence", "Preview Type 4", and "Pit Monitor". The spec has "Flat Panel Type 1", "Flat Panel Type 2" and "Flat Panel Type 3". What monitors are supposed to be used in which places? | Flat panel type 1 = Confidence (Sharp/NEC E437Q)<br>Flat panel type 3 = Preview & Program Dell SE2222H (The type (type 4) is shown incorrectly on the drawings, should be type 3)<br>Flat panel type 2 = Pit Monitors (Beetronics 15VG7M) |
| 89 | 3/13/2024 | Division 274116 AV Performance Systems - The spec list Type 1 and Type 2 wireless but there are no quantities listed, only the receivers on the line drawing. What is supposed to be provided? | There should be (2) sets for the Type (1) Shure QLXD 124/85, and (6) of the Type 2 Shure QLXD 24/B58 |
| 90 | 3/13/2024 | Per addendum 1, bidder must sign and submit Addenda with the proposal submission. The same person signing the Addenda acknowledgement(s) must sign the Bid Form. Would you like all pages of each addendum submitted with the bid submission or just the signed cover page? | Only include a signed Addendum cover sheet with your bid submission. |

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| 91 | 3/13/2024 | As mentioned per the Grimm and Parker Architect and Contractor for Transfer of Computer Aided Drafting (CAD) Drawing Files Agreement, the CAD/DWG Release Form, the Release Agreement for Digital Files on Electronic Media, the Alban Engineering, Inc., release of CAD Electronic Media form, as well as the Columbia Engineering, Inc., form, is it possible for an earthwork CAD file to be presented for sitework contractor bidding purposes of this specific project? | No |
| 92 | 3/13/2024 | Provide circuit feeding Y fixtures in corridor A02 on E100A. | E1L1A-8 (corridor circuit) |
| 93 | 3/13/2024 | Room A138 pm E101A shows (1) C2 fixture and (1) F fixture. Please clarify that this is correct. If not please indicate the correct type and quantities. | Type 'F' |
| 94 | 3/13/2024 | Room A135 on E101A shows (2) C2 fixtures and (2) F2 fixtures. Please clarify that this is correct. If not please indicate the correct type and quantities. | Type 'F2' |
| 95 | 3/13/2024 | Stairway STO3 on E101C shows type F fixtures, but other stairways show type FH fixtures. Please clarify that type F is correct for this stair. If not please indicate correct fixture type. | Type 'FH' |
| 96 | 3/13/2024 | Please confirm that un-named fixtures in rooms B207 and B211 are fixture type F2. | Type 'F2' |
| 97 | 3/13/2024 | Please confirm that light fixtures shown with a solid black dot indicate that they are to be provided with an emergency backup battery. | Refer to electrical legend. The only battery backup required is part of the Exit Signage, rest of project is generator based for emergency lighting. |
| 98 | 3/13/2024 | Please confirm that bid pack 26A is only responsible for spec section 13 21 48 as it relates to the electrical scope and not fully responsible for the entirety of the spec section. | Confirmed. This is in the 06B SOW Sound Conditioned Music Practice Room Specific Scope. |
| 99 | 3/13/2024 | Honeywell Fireline is the only fire alarm system noted. Will notifier also be acceptable. | Acceptable alternate manufacturers have been added through Addendum #1. |
| 100 | 3/13/2024 | Is Blue Star an acceptable alternate manufacture for the generator system? | Please submit formal substitution request for this manufacturers' equipment. |
| 101 | 3/13/2024 | Will the site work, site lighting, BBF/SBF lighting be broken out into phases? If so, please provide the delineation between the 2 phases. | The project phasing drawings are located in Vol 1 F-ESD drawings F-ESD-2 through F-ESD-13 |
| 102 | 3/13/2024 | Please provide a specification on the Hand Hole boxes required for the Primary Service conduits? | Under Addendum #3, (2) primary service handholes have been removed from the Fire Pump transformer primary feeder run. Utility Primary Handhole Detail added to sheet E002. All other handholes shall be per detail 12/E501 and sized per conduit run. |
| 103 | 3/14/2024 | Is Simplex an acceptable alternative fire alarm system manufacturer? | Acceptable alternate manufacturers have been added through Addendum #1. |
| 104 | 3/14/2024 | On the FP Drawings all of Sprinkler Zone Control Valves are in the fire pump room. Can Zone Control Valves be located in the stairwells, supplied from the Standpipe Mains? This would eliminate the long runs of main back to the pump room and provide a substantial cost savings to the owner. | The fire protection system is a delegated design specification. The fire protection system shall be designed in accordance with NFPA requirements and the local Authority Having Jurisdiction. Confirm locations of Sprinkler Zone Control Valves with the architect.<br>**04/02/2024 Additional response: location of zone controls in stairs is permissible subject to shop drawing review by architect to confirm there is adequate space to meet code requirements.** |
| 105 | 3/13/2024 | On S101B, at the elevator found between lines 5.5 to 5.8 and P.3 to P.7, the walls have details cut at two of the walls. Is framing not necessary on the remaining two walls? This is true of both elevators (sections B and F) at each floor, where some walls don't have any detail cuts. If additional cuts are needed, please revise showing the added details. | In typical conditions, elevator walls will be braced per P/S303. Additional details will be provided in forthcoming addenda if needed. |

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| 106 | 3/13/2024 | Currently, the wording of item #19 is very open ended. Please revise this item to something similar to "Contractor shall provide shop installed beam penetrations where specifically shown structural drawings and approved by the structural engineer prior to bid." This way, during the bidding process we have a fixed number of shop installed beam penetrations at the time of the bid. Field penetrations can be costly depending upon where they are located and when they are requested. | Please clarify what Item #19 is referencing. If referencing Steel general note #7 on S001, CEI's response is as follows: For bid purposes, there are no openings structural steel beams. This note is in place to make sure no penetrations in beams are installed without CEI review and approval. |
| 107 | 3/13/2024 | Item # 26 of the 5a Steel scope requires that the 5a contractor to cut all holes in the metal deck and then provide cover for those holes. Will you consider revising the scope, and have the floor/roof openings that do not require safety railing (larger than 2'x2') to be cut open by the trade contractor that requires the opening. This typically works well with minimizing protection requirements, lowering project costs and timing of the final work needed at the openings. Pour stop will be provided at all opening as required by the contract documents. | No. Scope remains as is. |
| 108 | 3/15/2024 | Please clarify whether 7A contractor is responsible for furnishing and installation of all 23A Mechanical contractor's equipment curbs and smoke vents. | ~~Yes per line item 13 of 07A SOW~~ *REVISED RESPONSE: The 23A Contractor shall provide all HVAC equipment curbs. The smoke vents shall be provided by the 07A Contractor as specified under 07 72 00* |
| 109 | 3/15/2024 | Roof Screening, RTU Screening, and built-up asphalt roofing items are not applicable to the project. Please provide clarification. | Remove these items from 07A SOW. Roof is TPO and there are no roof top screens shown on drawings |
| 110 | 3/15/2024 | Please confirm if the 3" cladding support system and metal panel system are included in the 7B metal wall panel. | The thermal break cladding support system as specified under 07 48 13 is to be provided by the 07B Contractor. |
| 111 | 3/15/2024 | Can you clarify what preformed joint seals outlined is spec section 07 91 00 the 3A bid package is responsible for and where they are to be installed? Per the 06A bid package, they are responsible for the furnish and installation of the expansion joint cover assemblies which would include the preformed joint seals. | **Correct. 6A will provide expansion joint cover assemblies. 03A Contractor shall provide proper formwork of expansion joint within concrete construction to coordinate with EJ Cover assemblies** |
| 112 | 3/15/2024 | Scope item #1 of the 03A scope states "site concrete and any concrete outside the building perimeter is not part of this scope". The next sentence states "all structures requiring a footing or slab are to be provided by this contractor". This is very open ended. Can you clarify specifically what is to be included under this section beyond what is listed in scope item #36? | ~~We can clarify 03A SOW to state "all structures within the building foot print requiring a footing or slab"~~<br><br>~~Also update the 32A SOW to more clearly state they own ALL footing outside of the building foot prints.~~ *REVISED RESPONSE: The 03A and 32A work scopes have been revised to clarify site features that shall be provided by the 03A Contractor* ADD#3 |
| 113 | 3/15/2024 | Can you remove the reference of sealers and hardeners from the 03A scope of work. Bid package 06A specific scope of work requires their bid package furnish and installs concrete floor enhancements for areas labeled CONC-1 and CONC-2 on the finish schedule. Per spec section 03 35 46.23 Concrete Floor Enhancements this includes sealers and hardeners. | YES |
| 114 | 3/15/2024 | Can you confirm that the deck will not require shoring prior to concrete placement? The structural steel is shown to be designed with 3/4" to 1" camber. Shoring will not allow for deflection of the structural steel. | Composite decks are designed as unshored. Refer to Concrete general note 17 on S001. |
| 115 | 3/15/2024 | Can you clarify that the 03A bid package is only responsible for below grade waterproofing applied to work installed by this bid package and the 04A bid package is responsible for waterproofing applied to their work? | Confirmed<br>03A SOW item 33<br>04A SOW item 18<br><br>SOW for both contractors can be clarified to state as it pertains to this contractor's work |
| 116 | 3/15/2024 | The prevailing wage rate sheet issued with the bid documents does not provide a rate for structural steel workers or iron workers. Can you provide a rate to use for these work classifications on this project? | Refer to attached MD Dept. of Labor letter dated 3/22/24 for wage rates indicated for Glazier, Ironworker-Structural, Painter, and Roofer/Waterproofer. |
| 117 | 3/15/2024 | On drawing L502, there are photos of fixtures for type EL-1, EL-2, and EL-3 light poles and heads. Please provide complete part numbers for these fixtures for pricing. | Updated product numbers have been provided as part of Addendum 3. |

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| 118 | 3/15/2024 | There is a general note on the lighting drawings that states " All exit signage shall have audible buzzer activated/ powered via fire alarm system." We have not seen this before and are concerned that the buzzer would interfere with the voice evacuation commands and would cause confusion. Please confirm that every exit sign in the building is to have an audible buzzer and be activated/ powered via the fire alarm system. | Will be addressed in forthcoming Addendum.<br>3/25/2024 UPDATE: Confirmed. Per owner request, intention is for exit signs to have audible buzzer controlled by the fire alarm system. |
| 119 | 3/15/2024 | Spec 009000 Submittals: This spec states that CADD documents may be available for use by this contractor for a fee TBD by the Architect. Since BIM is required on this project, shouldn't these be available at no extra cost to the contractors to avoid having to carry unnecessary costs? | Architect and its consultants fee for use of the CADD models is $0( Zero dollars) |
| 120 | 3/15/2024 | Base Bid 1 Option: Without being able to invoice for any costs associated with Phase 2 or 3 until the beginning of Phase 2, please clarify which phase the following things fall under: Outdoor Site Lighting (E004), Baseball and Softball Field Lighting (E005), Concessions and Ticketing (E901), The Fieldhouse (E902), Geothermal North and South Buildings (E903), and the Greenhouse (E903) | Refer to Phasing plans in Civil drawings, indicating Phase Break lines |
| 121 | 3/17/2024 | The civil drawings call out proposed stairs on plans C-4 through C-6 with a callout to a detail on C-12. The detail on C-12 does not show railing. Please confirm that guardrails and handrails are NOT needed for the site stairs. If railing is needed for the proposed site stairs, please provide details and material callouts. | Handrails are needed for site stairs. Details for site stairs, including handrails, are shown on sheet L520. Bottom extension typical of site handrails is shown on detail E/L520. Handrail extension dimension is to be equal to tread depth. |
| 122 | 3/17/2024 | Is guardrail required at the retaining wall on C-5? If so, please provide details and material callouts. | Sheets L101, L102, and L104 call out guardrail atop retaining wall. Detail E/L530 indicates general dimensions for guardrail. |
| 123 | 3/17/2024 | There is a HSS column in Stair 1 tower supporting the mid landings with no details. It runs from Level 0 concrete slab to steel beam at roof level. Please provide size (including wall thickness) for column along with bottom and top connection details and materials. | Landing and roof steel beams supported to column per typical connection details, See A/S304. Details for support of tubes in exterior wall will be provided in addendum. |
| 124 | 3/17/2024 | 05A specific scope item #16 states steel to pick up racks. Please specify and advise as to what exactly this is and detail number from drawings that apply. | Item has been removed from 05A scope |
| 125 | 3/17/2024 | 05A specific scope item #16 calls out to pick up hangers for OTPT hooks. Please advise on details, drawings, and quantity for this item. | Item has been removed from 05A scope |
| 126 | 3/17/2024 | 05A specific scope item #16 calls out to pick up yokes at spaces. Please provide details, drawings, and locations where this occurs. | Item has been removed from 05A scope |
| 127 | 3/17/2024 | 05A specific scope item #4 calls out to pick up swing hook accessories. Please advise if this job has this item. If so, please provide details, drawings, and quantity. | Item has been removed from 05A scope |
| 128 | 3/17/2024 | 05A specific scope item #13 calls out to pick up swing hooks. Please advise if this job has this item. If so, please provide details, drawings, and quantity. | Item has been removed from 05A scope |
| 129 | 3/17/2024 | 05A specific scope item #16 calls out to pick up swivel hooks. Please advise if this job has this item. If so, please provide details, drawings, and quantity. | Item has been removed from 05A scope |
| 130 | 3/17/2024 | Can you confirm that the under slab drainage system shown in details 45, 46, 47, 48, and 49 on sheet P704 is to be furnished and installed by the 23A Mechanical and Plumbing bid package? | Confirmed<br>These details are part of drawing P003 which belongs to the 23A contractor<br>*AMENDED ANSWER: The 03A Contractor is still responsible for the drain tile at the base of concrete retaining walls* ADD#3 |
| 131 | 3/17/2024 | Can a plan be provided showing the location of the under slab drainage piping and clean out locations? | Under Addendum #3, cleanouts have been indicated on under slab drainage plan. |
| 132 | 3/17/2024 | Contract Package 6A and 6B both have spec section 10 56 13.23 Cantivlever Metal Library Shelving. Please advise which scope package will be responsible for spec section 10 56 13.23 Cantivlever Metal Library Shelving. | 06B SOW section "Cantilever Metal Library Shelving Specific Scope" |

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| 133 | 3/17/2024 | Will there be another wage scale added in a future addenda? No listing for the painters rate found on provided schedule. Please advise. | Refer to attached MD Dept. of Labor letter dated 3/22/24 for wage rates indicated for Glazier, Ironworker-Structural, Painter, and Roofer/Waterproofer. |
| 134 | 3/17/2024 | Please advise if Datum can be approved as an accepted manufacturer for Metal Canopies. | A substitution request in format described in contract documents was required for consideration. |
| 135 | 3/17/2024 | 11 00 05- Misc. Equipment-Part 2 Matting for Catwalks:Basis of Design, Pawling Corporation; Punishment Pads P-50 or equal. Manufacture has no such product description or product number "P-50" listed. Please Advise | 11 00 05- 2.1 Matting for catwalks, will be deleted from specifications. Documents will be updated via addendum. **04/02/2024: refer to Addendum 3.** |
| 136 | 3/17/2024 | Numbered remarks on pages A309, A310, A311, A312 indicate where roller shades are to be installed and where louver blinds are NOT to be installed. Hollow metal frame note #5 indicates "horizontal blinds at all interior and exterior openings including door sidelites, but excluding door lites unless otherwise noted." Please confirm if blinds are required at windows that do not have a numbered remark? | Blinds are required at window frames that do not have a numbered remark. |
| 137 | 3/17/2024 | Please confirm the 6B scope package is responsible for Spec section 11 00 05, section 1.1D, 2-4? | Confirmed per 06B SOW Interior Architectural Woodwork Item 1, Appliances Item 2, and Miscellaneous Item 1 |
| 138 | 3/17/2024 | Please confirm the 6A scope package is responsible for Spec section 11 00 05, section 1.1D, 1? | 11 00 05 Miscellaneous Equipment, 1.1 D, item #1 "Matting for Catwalks" has been deleted from the project |
| 139 | 3/17/2024 | Confirm 06A responsible for providing dumpsters for all prime scope packages except 07A . If so, please advise on if a specific quantity of dumpsters can be specified for 06A to include as an allowance for 03A, 04A, 31A, 32A, & 32B scope packages. | ***Work Scopes has been revised as follows: 03A, 04A, 7A, 31A, 32A, and 32B will provide dumpsters/trash disposal for their own work. Dumpsters for all other construction trash will be provided by the 06A Contractor. Each contactor is responsible to place their trash at the end of the work day into the dumpsters.*** ADD#5 |
| 140 | 3/17/2024 | Please verify if 06A, 03A, or 05A will be responsible for supply / install of MOSH compliant: wire rope safety cable fall protection & slab diamond covers / protection around steel protruding thru concrete. | At concrete SOG diamonds, the 03A Contractor shall cover the openings upon completing SOG placement. The 05A Contractor will remove covers, and shall be responsible to provide safety measures until ready for the 03A Contractor to infill. At SOD edges, the 05A Contractor shall provide safety cabling. If/when the 03A, 04A, and/or 06A Contractor requires the safety cables to be removed in order to install their work, The contractor working the edge of SOD condition is responsible to install safety measures necessary to maintain OSHA compliance. |
| 141 | 3/17/2024 | Please verify if 06A or 07A will be responsible for supply / install of MOSH compliant parapet clamp guardrail systems at all roof parapets. | 06A SOW section "Fall Protection" Item 7 |
| 142 | 3/17/2024 | Please verify if 06A is responsible for providing 1 supervisor + 2 general laborers in addition to the 1 laborer manday / 8 worker manday onsite / week for CM clean up crew. Please also confirm a 2nd shift CM clean up crew / week specified in 06A scope package – Construction Waste Management Specific Scope Item #4 is not applicable to this project | Yes to 1st part. The additional 2 laborers will act as foreman under the supervisor to direct laborers provided by the other trades per the General Scope section "Clean Up" Item 2.<br><br>~~We will only be 1 shift UNLESS the schedule begins to suffer~~ *REVISED RESPONSE: A 2nd shift clean up crew will not be required.* ADD#3 |
| 143 | 3/17/2024 | Please clarify whether 03A or 06A prime contractor is responsible for concrete floor enhancement for Conc- 1 & CONC-2 areas. | 06A per section "Concrete Floor Enhancement" |
| 144 | 3/17/2024 | Please advise what type of temp floor protection is required for polished concrete floor areas. | There are no polished concrete floors; however, under Section 03 35 46.23, Paragraph 2.2.C you will find products for protecting the exposed enhanced finish. |
| 145 | 3/17/2024 | Please clarify whether 06A or 07B is responsible for wood blocking / furring strips for metal panel scopes of work. | ~~06A SOW which is stated in 07B SOW "Metal Wall Panel Specific Scope" Item 12~~ *REVISED RESPONSE: No blocking for the installation of metal panels or cladding support system is required from the 06A Contractor. The 06A Contractor is responsible to coordinate with the The 07B Contractor for engineering purposes. The 07B Contractor is responsible for all strapping, girts, blocking (if required), cladding support system, and all other incidentals necessary for the installation of the metal panels.* ADD#3 |
| 146 | 3/17/2024 | Please advise if 06A or 04A is responsible for grouting of 06A hollow metal frames. | 04A SOW Masonry Specific Scope Item 11 |

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| 147 | 3/17/2024 | Please provide further clarification on 06A Drywall Rough Carpentry & Acoustical Assembly Scope Package Item #16" particularly in regards to the required scope of work for "tenting of light fixtures". | ***Scope item has been deleted per ADD#5*** ADD#5 |
| 148 | 3/17/2024 | Please verify 06A is responsible for providing a Level 4 finish or Level 5 finish at all drywall assemblies. | Provide Level finishes as indicated in 09 29 00.-3.7 |
| 149 | 3/17/2024 | Please clarify whether 06A or 03A responsible for install of 05A supplied stair nosings. | ~~06A SOW item 29~~ *REVISED RESPONSE: The 03A Contractor is responsible to install nosings furnished by the 05A Contractor for stairs indicated within the building. For site stairs that require nosings, the 03A Contractor shall furnish and install.* ADD#3 |
| 150 | 3/17/2024 | Clarify verify 04A responsible for caulking interior & exterior side of 04A assembly control joints. | This pertains to masonry control joints only. *AMENDED RESPONSE: Confirmed that the 04A Contractor is responsible to provide caulking for masonry control joints* ADD#3 |
| 151 | 3/17/2024 | Please confirm 06A is responsible for supplying & installing door hardware for 08B assemblies. | ~~06A only furnishes per 08B SOW Item 3 and 06A SOW Doors, Frames, Hardware Item 2. 08B installs~~ *REVISED RESPONSE: For hardware associated with aluminum doors, the 06A contractor shall furnish to the 08B Contractor for installation. See clarified work scopes for additional information* ADD#3 |
| 152 | 3/17/2024 | Please advise if there is a specific locksmith that 06A will be responsible for contracting to provide final keying services. | **All locksets will be furnished and installed with temporary construction cores. The permanent cores will be furnished by 06A Contractor, and sent directly from the hardware supplier (under 06A) to CCPS in-house specialist. The CCPS hardware specialist will remove the temporary construction cores and install the permanent cores.** |
| 152 | 3/17/2024 | Please clarify if 06A or 11B responsible for supply / install of hook & loop mat hangers + coordinating wall padding, high impact corner guards for complete install as indicated on construction documents. | 06A SOW Miscellaneous Specialties Item 9 |
| 154 | 3/17/2024 | Please clarify if 06A or 05A responsible for supply & install of wire mesh partition scopes of work. | 06A SOW section Wire Mesh Partitions |
| 155 | 3/17/2024 | Please provide further specifications / designs for custom graphic design that will be applied to Decorative Protection Panels. | Refer to Materials Schedule, sheet A305, and finish designations WC-1 through WC-7 and GWP-1 through GWP-4. The schedule outlines types of graphics and minimum number of colors for each of these.<br>For WC-1 to -7, graphics will be picked from manufacturers standard custom mural program which includes stock imagery with ability to change colors and scale of selected imagery.<br>GWP items are described in detail on schedule, see each line item for specifics |
| 156 | 3/17/2024 | Please advise if 06A or another prime contractor is responsible for supply / install of Pergolas shown on sheet L502. If 06A responsible, please also clarify whether 06A or another prime contractor is responsible for furnish & install of footers required for pergolas. | 06A SOW Site Amenities |
| 157 | 3/17/2024 | Please advise if 06A responsible for providing BIM coordinated drawings for Greenhouse, elevator, or any other 06A scopes of work. | **BIM modelling is not required for the 06A contractor, however coordination with the CM and other trades through field use approved shop drawings and participation in coordination meetings, field verification, etc. is required.** |
| 158 | 3/17/2024 | Please advise if an allowance amount can be added to 06A scope package base bid for material & labor price escalations throughout the duration of the project. If no allowance for price escalations can be added to 06A scope package, please advise if 06A could invoice for stored material costs for Phase 2 scopes of work to minimize the costs incurred by 06A for price escalations of Phase 2 materials. | **No. For Base Bid 1, bidders must account for Phase 2 & 3 material price escalation in their bid price per section 00 31 00** |
| 159 | 3/17/2024 | Please confirm the MBE Attachment B form in Spec 004339 are the correct version of MBE Attachment B Form that contractors are to submit with their bid. | Revised MBE Forms have been provided in ADD#3 |
| 160 | 3/17/2024 | Please clarify if a particular prime contractor will provide final cleaning services for all other prime contractors for the entire project or if each individual prime contractor will be responsible for final cleaning services required for their applicable scopes of work. | **The 06A Contractor shall be responsible for all final cleaning services. See revised 06A scope of work included in ADD#5** |

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| 161 | 3/17/2024 | Please clarify if 06A or 26A is responsible for supplying of power supplies for electric door hardware. | ~~Read 26A SOW Item 48~~ *REVISED RESPONSE: The power supplies for the electric door hardware are to be furnished by the 06A Contractor, and installed/wired by the 26A Contractor* ADD#3 |
| 162 | 3/17/2024 | Please advise if G-16 type glass will be covered by window shades? | Refer to frame elevations for glazing locations and where window shades are required. |
| 163 | 3/17/2024 | There are discrepancies between the finish schedule and RCP for the ceiling tile be advise whether to follow the finish schedule or the reflective ceiling plan? Examples: HS Café B001 Finish Schedule Calls for APC-3 / APC-4 / APC-5 /GYP but the RCP does not have APC-3 (2x4 Tile), Only has 2x2 APC-4. Corridor B02 Finish Schedule Calls for APC-2 which is 2x2 Tile but the RCP shows 2x4 Tile. MS Aux Storage B010 Finish Schedule Calls for APC-1 but the RCP Shows EXPOSED. | B001 HS Café (Cafeteria), ignore APC-2 (2x4 tile)<br>B02 corridor, to be APC-1 (2x4) as shown on RCP<br>B010 MS Aux Storage should be exposed, ignore APC-1 |
| 164 | 3/17/2024 | Please provide further clarification and specifications for alternate Bid #4 – Front Canopy (Cantilever Curved Arbor). | Additional canopy information has been provided on sheet L523 as part of Addendum 3. |
| 165 | 3/17/2024 | Please advise who is responsible for the concrete footings required for the alternate Bid #4 – Front Canopy (Cantilever Curved Arbor). | 06A. This is a Pergola canopy |
| 166 | 3/17/2024 | Please advise whether Hollow Metal doors and frames are to abide by "Buy American Steel" on the bid form? | Supply of all materials shall abide by all applicable State of Maryland procurement laws. |
| 167 | 3/17/2024 | Please advise what hardware door opening E107B is to receive? | Door #E107B should have Hardware Set 518. |
| 168 | 3/17/2024 | Please advise what hardware door opening XC06 is to receive? | At XC06- Provide Hardware Set 402 and Remark #23 |
| 169 | 3/17/2024 | Please advise what minimum coating is to be applied to the interior doors and frames for 08 11 13 2.3, B-1- C; and 08 11 13 2.3, B-2-A. | **Refer to revisions to 08 11 13 provided in Addendum 3** |
| 170 | 3/17/2024 | Please advise on alternates 14,15, and 17 if the doors, frames, and hardware to be included in base bid or on the alternates? | Doors frames and hardware are to be included. Refer to Addendum 1. |
| 171 | 3/18/2024 | This is a large project and we have asked multiple questions can the bid be extended? | Bid is currently scheduled for 4/4.<br>**04/02/2024: Bid is currently scheduled for 4/12/2024.** |
| 171 | | Hess pricing bid options shown on the Pre-Bid Meeting Agenda, calls for us to include High School demo in the base bid, but RFI Response #26 says demo of the existing high school will be in future bid pack. Please clarify if demo of high school should be included in the base bid for bid pack 26-A. | **The demolition of the existing HS building will be a separate bid package that will be solicited in the future. However, the electrical cut/cap/make safe is to be in the base bid for 26A, along with all other related electrical sitework** |
| 172 | 3/18/2024 | Per the Bid Form and Specifications, we are to provide the Contractors qualification statement and AIA A305. Can you please provide AIA A305? | AIA 305 included in Addendum #3. Financial Statements will not be required at the time of bid, but will be required for review prior to contract award. |
| 174 | | Please clarify that the SL8 Fixtures shown on the outside of vestibule A11 on Sheet E101A are for alternate #4. | Correct, SL8 fixtures are intended for the canopy and are not required if canopy is not provided. |
| 175 | | Electrical Scope of work #2 – Construction Manager Trailer – can an allowance be give for this item? There is no way for us to know what the utility cost would be for electric and cable services until after award and discussion with appropriate utility providers. Furthermore, we wouldn't know how long we would need to provide temporary generators either for temporary service. Nor would we know how to estimate the monthly service bills. | **There has been an allowance established within the 26A Electrical package for utility service connection fees, power consumption charges, and generator rental/fuel. See revised 26A work scope issued in ADD#5** |
| 176 | | Electrical scope of work item #3 – Temporary Power to Site- Can an allowance be given? We're being asked to carry all utility connection fees and temporary generators until permanent service is available. We have no way of knowing when the utility providers will be able to tun on permanents services to the site. The utility company will need the Electrical application completed prior to giving us an estimated date of service availability | **There has been an allowance established within the 26A Electrical package for utility service connection fees, power consumption charges, and generator rental/fuel. See revised 26A work scope issued in ADD#5** |

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| 177 | | Electrical Scope of Work #4 – can an allowance be provided for this? We have no way of knowing which trades will need what type of power and when they will need it. Also as mentioned above, we're unable to know when permanent services will be made available to the site. In your scope of work, we could potentially own an unknown power source for potentially elevators, crane, grinders, etc. | **Scope has been modified per ADD#5** |
| 178 | | Electrical Scope of Work #5- Sames as 2,3,&4, above can an allowance be made? We have no way of quantifying what is to be estimated for work in this scope item. | **Scope has been modified per ADD#5** |
| 179 | | Scope of Work item #7 – Please clarify that this line item is intended only for temporary transition from temporary electric to temporary power or electric service shutdown needed during construction by the electric contractor. | **The intent of this scope item is to ensure that power service to the building during construction is maintained. If the building is energized by permanent power but a shutdown is required for electrical construction purposes, the 26A Contractor shall provide temporary power via generator.** |
| 180 | | Electric Scope of work #14 states that all interior housekeeping, and equipment pads will be provided by the concrete contractor. Will they also provide exterior housekeeping pads for electrical i.e. generator and transformer pads etc.? Also, this scope item says in the event concrete pad is required and not shown the electrical contractor owns it. Please clarify where the pads are needed but not shown so that we may properly estimate the cost. | **All housekeeping pads, both interior and exterior, are to be provided by the 03A Contractor. All layout for housekeeping pads are by the 23A and 26A Contractors respectively.** |
| 181 | | Electrical scope of work item #15 – please clarify that all electric required by equipment and appliance contractors are indicated on project documents. | **Electrical provisions are shown, but need to be further coordinated with other trade contractors during submittal phase** |
| 182 | | Electrical Scope of work item #16 – Please clarify regular maintenance on all equipment is referring only to electrical distribution equipment utilized for HVAC Feeds. | **Permanent electrical systems, including but not limited to distribution equipment serving the mechanical system, will be in use during construction phase. It is the responsibility of electrical contractor to provide required maintenance of all components of the electrical system until substantial completion, so that it is turned over "like new" with valid warranties.** |
| 183 | | Electrical scope of work item #27- Please clarify that all required escutcheons, pedestals, and the like for completed finish trim are indicated as needed in project documents. | Will be addressed in forthcoming Addendum.<br>3/25/2024 UPDATE: Confirmed, required escutcheons, pedestals, and similar for completed finish trim are included in drawings and specifications. |
| 184 | | Electrical scope of work item #32 – Refers to painting and stenciling of conduits per specifications, however section 26 05 53 labels Identification of Electrical Systems refers to paint but doesn't tell us what needs to be painted and stenciled. Please clarify if it is required, if so, what is to be painted and stenciled and where is it located? | Labeling requirements are indicated in Spec Section 260553 - 3.2(A)-(P). Spec Section 260501 - 3.10 defines paint execution. |
| 185 | | Please confirm Electric Utility is terminating the service conductors at the Utility poles. | Confirmed. Contractors are responsible for conduit extension to the poles. |
| 186 | | Please confirm Secondary conductors from the Middle school, High School and the Fire pump transformer will be made of Copper, per the single line drawing E601. | Confirmed. |
| 187 | | Please confirm the conductors from the Generator to ATS-1, ATS-2A, ATS-2B, ATS-3 will be made of Copper, per the single line drawing E601. | Confirmed. |
| 188 | | Please confirm the conductors from the Generator docking station will be made of Copper , per the single line drawing E601. | Confirmed. |
| 189 | | Please advise on how the HS service will be grounded/bonded to the Middle school service. Or will there be (2) standalone grounded systems. | The grounding system will be (1) complete system per NEC 250.58. Detail 1/#502 has been modified to reflect. |
| 190 | | The Middle school secondary conduit bank detail #13 on drawing E501, shows 18 conduits in this bank, drawing E601 note #24 calls out for 14 conduits, are you requesting (4) conduit spares in this bank, please advise. | Intention is to provide 4 spare conduits. 18-way duct bank is correct. |

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| 191 | | Drawing E501 detail #11, which shows the Generator 120v circuits for the for the battery charger and miscellaneous loads is calling out to be fed from panel E1RIC, this panel is not on the single line, please advise. | **Under Addendum #3, Generator accessory circuits have been added to Panel E2R0B AND E2L0B to accommodate either voltage. Detail 11/E501 has been revised to match.** |
| 192 | | Specification Section 116143, Article 2.2 specifies various types of fabrics for curtains, i.e. 23oz, 13oz.... but does not provide a schedule that clarifies what fabric is to be used in the fabrication of the individual curtains. On the other hand, the Curtain Schedule depicted on Drawing TE001 lists 25oz fabric for all the curtains except for Lineset No. 28. Therefore, what fabric should we follow? | All drapers are 25oz velour except Lineset 28. |
| 193 | | Specification Section 116143, Article 2.3, Paragraph A.8 states to provide lining for each curtain in same fullness as face fabric? Typically, the Valance and Front curtain would receive lining and the remaining curtains (cyclorama curtains) would not. Please clarify. | Please refer to Section 2.3.A.8. |
| 194 | 3/19/2024 | The two-part phasing plan for the North East Middle / High School project is incredibly challenging for many reasons, but one of the most concerning issues pertains to lighting, lighting controls, fire alarm, gear, PA, etc. material packages. Our understanding is that that the owner will be unable to pay for any materials that are part of phase 2 until it begins. Our concerns/questions are as follows: We will have to buy all material packages up front in phase 1 to hold pricing and availability of the products. Will we be guaranteed to be paid the cost of these materials in phase 2? | **Yes, for Base Bid 1 any Phase 2 or 3 materials that are purchased by Contractors during Phase 1 as a means to hold pricing and/or ensure availability of products will be paid during Phase 2 performance period.** |
| 195 | 3/19/2024 | 26A Scope of Work #2 & #3- These state the 26A contractor is to include the utility company connection fees for the temporary services. The owner or CM usually picks this cost up, so it is difficult for us to price this competitively. It also states the 26A contractor is responsible for the monthly service bill for the construction manager's trailer. Can these charges be paid for by the owner/ CM or could you provide an allowance for it? | **There has been an allowance established within the 26A Electrical package for utility service connection fees, power consumption charges, and generator rental/fuel. See revised 26A work scope issued in ADD#5** |
| 196 | 3/19/2024 | Which trade is responsible for the generator equipment pad? | **03A Contractor, per layout provided by 26A Contractor** |
| 197 | 3/19/2024 | Which trade is responsible for fire-rated plywood in the telecom closets and/ or electrical closets? | **26A Contractor is responsible per 26A Work Scope #28** |
| 198 | 3/19/2024 | Alternate Bid No. 5- Which trade is responsible for the translucent wall cladding system and back lighting | **Translucent wall cladding system is provided by the 08B-Glass contractor. The luminous wall (back lighting) is provided by the 26A Contractor, mounted to the CMU back-up wall.** |
| 199 | 3/19/2024 | Alternate Bid No. 14, 15, and 17- Per the base bid, all of the rooms listed in these alternates are N.I.C. Please confirm that we are not to carry any pricing for lighting fixtures, lighting controls, fire alarm devices, telecom/AV prices, branch circuit power, wiring devices, or any wall rough-ins for these rooms as part of our base bid. | **Refer to ADD#1 clarifications** |
| 200 | 3/19/2024 | Which contractor is responsible for the dog houses shown for rooftop penetrations? | **Rooftop enclosures for mechanical/plumbing work are by the 23A Contractor. Rooftop enclosures for electrical penetrations are by the 26A Contractor** |
| 201 | 3/19/2024 | Drawings E002 and E003- On these drawings, there are "HH" handhole shown at various locations. Some are in line with the primary duct banks and others are in line with branch circuit panel feeders. The only detail found is Detail #12 on E501which is an exterior junction box detail. Usually, the utility companies have their own sizing and standards for these. The specs also talk about two different types, pre-cast concrete ones and fiberglass ones. Please provide more details on the handholes shown on these drawings to include types and sizes required. | Under Addendum #3, (2) primary service handholes have been removed from the Fire Pump transformer primary feeder run. Utility Primary Handhole Detail added to sheet E002. All other handholes shall be per detail 12/E501 and sized per conduit run. |

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| 202 | 3/19/2024 | Drawing E003, Note 1 calls for (2) direct buried conduits for the primary feeders. Detail #1 on E503 calls for (2) 5" direct buried conduits. Please clarify what size conduits are to be installed for the primary feeders and verify that these are not to be concrete encased even if shown under a parking lot. | **Correct size is 6" for primary feeders. Routing should be coordinated with utility prior to installation. Bid pricing shall include concrete encasing for conduits under paved areas.** |
| 203 | 3/19/2024 | Spec 260548 Seismic Controls- This spec tends to add a fair amount of unnecessary and costly measures that are usually not required for this part of the country. This spec has been removed from some previous projects in a cost saving effort. Please confirm if we are to adhere to this spec. | Seismic Control Specification can be removed. |
| 204 | 3/19/2024 | Spec 282300- This spec calls for a "complete conduit system" for the Video Surveillance system. In an effort to cut costs, could this be changed to allow J-hooks above accessible ceilings and conduit in exposed locations only? | Structured cabling related to the CCTV does not have to be a complete closed conduit system. See TY501 for pathway details. Structured cabling can follow the pathways of other structured cables in the facility. (J-hooks, cable trays, sleeves, etc.,) |
| 205 | 3/19/2024 | Spec 260543.2.2.C.3- This specs calls for the use of concrete warning planks. These are very costly and not shown on any of the direct buried details. Please clarify if the proper use of the burial marking tape as shown on the details will be acceptable without the use of these planks. | Proper use of underground warning tape as indicated in details and Spec Section 260553-3.1(T) is acceptable without the use of concrete planks. |
| 206 | 3/19/2024 | Spec 260519.3.3.G- This states that MC Cable may only be used in 6' lengths and not from lighting fixture to fixture. Please confirm that the base bid does allow the use of MC Cable where not exposed for all branch circuits, lighting, and fire alarm. | Confirmed. |
| 207 | 3/19/2024 | Spec 260533.3.1.B.3- This states that GRC is required in mechanical rooms and boiler rooms due to them being exposed and "subject to severe physical damage." These rooms really aren't subject to severe physical damage. In a cost saving effort, could EMT conduit be acceptable these rooms? | Yes, EMT may be used in lieu of GRC in mechanical and boiler rooms. |
| 208 | 3/19/2024 | Stage Curtains 116143-7/2.1 Curtain Schedule does not match Curtain Schedule TE001 and TE401. There is a line set numbering issue and discrepancy on the quantity of empty linesets between the 2nd Electric and 3rd Electric. | Please refer to Section 2.3.A.8. |
| 209 | 3/19/2024 | Confirm the TE001 Curtain Schedule Track Lengths are to be disregarded as they do not match the rest of the TE documentation. | All curtain and track widths should be 60'. |
| 210 | 3/19/2024 | Please identify which Stage Curtains 116143 require lining. Confirm the lining is BLACK vs TBD. Confirm lining is to be polyester to match the polyester fabric face fabric, not cotton per 2.2C. | All lining should be black. |
| 211 | 3/19/2024 | Reference TE001 Curtain Schedule and 116143-7/2.1 Curtain schedule and adjust. The current design intent appears to be dead hung linesets not LIFT. We need to verify which linesets require tracks and bi-parting operation. | All rigging is dead hung. |
| 212 | 3/19/2024 | Reference 265561-11/2.6 Lighting Fixtures and Accessories. Provide quantities. | B. Assorted Color Gels (Qty. 30) |
| 213 | 3/19/2024 | Reference 116143. Verify the Cyclorama is to be constructed from SEAMLESS IFR TREVIRA MUSLIN which is only available in white. | Color is white. |
| 214 | 3/19/2024 | Verify if the Theatrical Lighting System infrastructure is CAT5e per TE601 Belden 1573A or CAT6 per 265561-4/1.8C1. | Use manufacturers specified data cable. |
| 215 | 3/19/2024 | Verify if the Theatrical Lighting Control Console is ETC GIO@5 per 265561-11 or EOS APEX 5 per TE601. If the console is a GIO @5 then define the channel count as 4K or 24K per 265561-10/2.4A1. | Refer to drawing TE 601. The EOS APEX is noted. |
| 216 | 3/19/2024 | Reference TE601 and confirm the 'IPAD ANDROID APP' is to be installed on an Owner Furnished Device and that a new IPAD is not in the 265561 contract scope. | The IPAD will be Owner furnished. |

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| 217 | 3/19/2024 | Reference TE601, TE901 and confirm all CS and CS1 devices are ETC Paradigm Inspire and not ETC Unison Heritage per 265561-11/2.4C | Use the Unison Paradigm Inspire Control Stations. |
| 218 | 3/19/2024 | Reference 265561-11/2.5C. Confirm the ColorSource Raceways mounted to the 8' tormentors are 8' long per TE902 and not 10' long per the specification. | Refer to sheet TE501 detail #4. The raceways are 96". |
| 219 | 3/19/2024 | Reference 265561-11/2.5D+E and TE902. Verify if the ColorSource Raceways mounted at the Front of House / Catwalk locations are 56' or 60' or another length. | See Drawing TE 902 (56'). |
| 220 | 3/19/2024 | Reference E709, TE601, TE902, 265561-11/2.5E. Verify if the FOH2 ColorSource Raceway is to accommodate 4-20A circuits or 3-20A circuits. | 3 ckts at 20A. |
| 221 | 3/19/2024 | Reference E709, TE601, TE902, 265561-11/2.5A1a: Verify if the Second Electric is to accommodate 8-20A circuits wired on 16-20A Edison receptacles or 6-20A circuits. | See drawing TE 601. |
| 222 | 3/19/2024 | Specification 265561-3/ 1.8 SYSTEM(S) DESCRIPTION AND REQUIREMENTS states this Theater Lighting System accommodates 48 dimmable circuits and 16 non-dimmable circuits. This isn't supported by equipment detailed on TE601 and the TE001 Circuit Schedule. Please advise. | Refer to drawing TE-601. |
| 223 | 3/19/2024 | E709 LDR panel schedule is populated to circuit 57/60 with an overall capacity of 84 single pole circuits. The ETC IQ48 has a capacity of 48-20A 120V single pole circuits as detailed on TE001. Please advise | See Drawing TE-601. There are (47) circuits. |
| 224 | 3/19/2024 | TE601 details 0-10v control signal outputted from the ELTS device sourced with DMX control signal. This is not a current design feature of the specified ETC SC1008. Verify if 0-10v control signal is required in the Theater Lighting System and it can be added to the IQ48. | Provide 0-10 control as noted on TE601. |
| 225 | 3/19/2024 | E709 requires a 400A MCB on LDR not detailed on TE601. Clarify if a 400A MCB is required on the ETC IQ48 as LDR. | Provide 200A Main for the LDR. |
| 226 | 3/19/2024 | E716 Panel Schedule E1RPF includes 8 circuits identified as eLTG for the Auditorium or Stage. Confirm only (4) of those circuits are managed by the Theatrical Lighting System per the (4) SC1008 specified on TE601. | See TE 601 (4 circuits). |
| 227 | 3/19/2024 | The TE601 riser indicates X17 sourcing ELTS. Please add (1) ETC DEBC-6 and (1) ETC EBDK to manage emergency DMX control signal associated with the ELTS. | Provide DEBC and EBDK. |
| 228 | 3/19/2024 | Reference 265561-12: How many pattern holders are required in contract for the specified metal stock gobos. | Please refer to the attached Lighting Plot and Instrument Schedule. |
| 229 | 3/19/2024 | Reference 116143 Stage Curtains. Verify no center overlap is required for the Curtain Travelers as none seems to be specified. Overlap of 24" is specified for the associated track assemblies. | Provide 24" overlap. |
| 230 | 3/19/2024 | Reference 116143-8/2.2 Stage Curtains. Verify KM Fabrics' IFR 24oz Charisma with its opaque matte finish is acceptable. | Charisma fabric is acceptable. |
| 231 | 3/19/2024 | Confirm (4) Tormentors and associated wiring devices are required per the TE drawings as they do not seem to appear on A609 and A610. | See TE 601. The tormentors are required. |
| 232 | 3/19/2024 | We were planning on bidding the 11B and 12A packages but see a requirement for an AIA Document A305-Contractor's Qualification Statement. This seems like quite an extensive form to fill out for a bid and also requires our company to include our past three year's financial statements, which we are not willing to submit and have them become public knowledge. The form must also be paid for through AIA to avoid copyright infringement. Is it possible for this requirement to be waived for the smaller packages or potentially only required to be submitted to Hess if we are being considered for award on the project? | **AIA 305 included in Addendum #3. Financial Statements will not be required at the time of bid, but will be required for review prior to contract award.** |

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| 233 | 3/19/2024 | 07B and 07A scopes include roof screen walls, are the screen wall panels only to be included in 07B scope? | **There are no roof screen walls. It was removed from the 07A work scope in ADD#3, and has been removed from the 07B work scope via ADD#5** |
| 234 | 3/19/2024 | 07B and 07A scopes both mention they are responsible for moisture and/or air barriers at the exterior, there are no material specification sections for these products included in our scope. Are the moisture and air barriers by others? | **Fluid-Applied Membrane air barrier as specified under 07 27 26 shall be provided for the entire building by the 04A Contractor. See revised scopes issued in ADD#5.** |
| 235 | 3/19/2024 | 07A scope item #13 says they are responsible for roof curbs, equipment supports, pipe and duct support, this is uncommon. Are these curbs and supports to be furnished and installed by others? | **See work package scope clarifications for 07A and 23A packages issued in ADD#3** |
| 236 | 3/19/2024 | 07B spec calls for soffits, are the soffits to be included in 07B scope? | **Soffit panels to be provided by 07B Contractor as specified.** |
| 237 | 3/19/2024 | Are there details for different roof types? Roof types not identified on roof plan for acoustical decking and non-acoustical decking, metal roofing at concession vs metal roof on main roof. | Reference Roof Deck Plan on Sheet S003 for roof deck types. Refer to note on Roof Plan on Sheet A105 for standing seam metal roof at main building. Refer to Sheet A903 for standing seam metal roof notes for Tickets and Concessions buildings. Refer to Sheet A905 standing seam metal roof notes for Dugouts. |
| 238 | 3/19/2024 | Is there any roof work at the existing Field House? A901 | **Include an allowance of 500 SF for misc. roof patchwork on existing Field House. See revised 07A Scope issued in ADD#5** |
| 239 | 3/19/2024 | There is an alternate for the green house. Does this mean the Concession, Ticket Booth, Geothermal North, Geothermal South, Dugout are all included in the base bid? Is the dugout drawing on A905 typical of two total dugouts? | **The greenhouse is Alternate #2. The new concessions building, new ticket booth, two (2) new geothermal pump houses, four (4) new dugouts, and renovation to the existing field house are all part of Base Bid #1 and Base Bid #2** |
| 240 | 3/19/2024 | Is the illuminated cladding alternate in the 07B scope of work? | **No** |
| 241 | 3/19/2024 | Can you provide a prevailing wage scale rate for "Roofing"? | Refer to attached MD Dept. of Labor letter dated 3/22/24 for wage rates indicated for Glazier, Ironworker-Structural, Painter, and Roofer/Waterproofer. |
| 242 | 3/19/2024 | Is the EIFS work to be included in 07B scope? Specification is listed but no mention in scope of work. Is this EIFS work only located at temporary walls in phase 1 of the base bid? No EIFS work in Alternate with continuous construction of phase 1 and 2? | **Yes, it is in the 07B package, and yes it is only for temporary construction as indicated on Dwg A010. Temporary construction is only required for Base Bid 1 (is not applicable for Base Bid 2).** |
| 243 | 3/19/2024 | [P002B, P303B] Piping serving bathrooms B004, B005 shows five (5) connections for six (6) lavatories | **Under Addendum 5, 6th connection has been provided.** |
| 244 | 3/19/2024 | [P401] Notes 3 and 4 appear to be mismatched. | Corrected under Addendum #3 |
| 245 | 3/19/2024 | [P605] Please confirm Water Hammer Arrestors are not required for the x2 P8 fixtures on this diagram. | Not Confirmed. Water hammer arrestors are required for P8 fixtures. Added under Addendum #3 |
| 246 | 3/19/2024 | [P403] Notes 2 and 3 appear to be mismatched. | Corrected under Addendum #3 |
| 247 | 3/19/2024 | [P100A, P601, P607] P607 shows room A012 with a fixture P3A, but P601 and P100A show a P5. | P5 is correct. Corrected under Addendum #3 |
| 248 | 3/19/2024 | [P608, P100A] P608 shows room A028 with a 4" FD-A, but P100A shows a 3" FD-B. | 4" FD-A is correct. Corrected under Addendum #3 |
| 249 | 3/19/2024 | I have questions - regarding Greenhouse (alternate #2) section 133413: 1.1 A notes to include doors & hardware but there is no written spec in the greenhouse section. On drawing A906 notes greenhouse doors as H601 A & B and also in masonry portion as H602 & H603. | See response to RFI #250 |
| 250 | 3/19/2024 | These doors are not listed on the door schedule on drawing A306 & A307. With over 200 doors on the project, it makes sense for the overall door supplier to include these doors but if the greenhouse supplier is required - we need a spec for the doors, sizes and hardware. | The door schedule for the outbuildings, including the greenhouse, is on sheet A900. Doors H601A and H601B are identified as part of the greenhouse enclosure, and are to be provided by the greenhouse supplier. Doors H602 and H603 are HM doors in masonry, and are to be provided with the rest of the door package. |
| 251 | 3/19/2024 | 2.15 E - Notes gaskets in the glazing system. Are gaskets required? If required are they required for roof and wall glazing or just roof? We typically do not use gaskets with 8mm polycarbonate. | Provide gaskets as indicated in the contract documents. |
| 252 | 3/19/2024 | 3.3 J - references an "Atlas" vent machine. We would like to use motors supplied by Wadsworth, which is the same supplier as the environmental controller specified. Is this an acceptable "or equal" or do we need to go through the substitution format? | Where "or equal" is listed, a substitution request is not required. The product will be evaluated at the time of submittals. |

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| 253 | 3/19/2024 | 3.7 - Retractable shade/heat retention curtain system; The system specified is a manufacturer specific "proprietary" design that is a group of parts supplied by the specified greenhouse manufacturer. We would like to use a system supplied by Wadsworth which is the environmental controller brand specified. Is this an acceptable "or equal" or do we need to go through the substitution format? | Where "or equal" is listed, a substitution request is not required. The product will be evaluated at the time of submittals. |
| 254 | 3/19/2024 | 3.8 A - Bench top Drip Irrigation, "Each bench shall be controlled individually by the environmental control system". I don't believe that one EnviroStep can control 20 benches individually along with the other equipment. Should we add a controller specifically for the irrigation system? | Provide a sufficient quantity of controllers to satisfy the control requirements. |
| 255 | 3/19/2024 | 3.12 Benches. Is there a bench layout for these 20 benches? Also, we recommend anchoring the legs to the floor as the narrow width is easy to tip - especially in a school setting. | Bench layout has not been documented. |
| 256 | 3/19/2024 | 3.13 - Emergency Power. Not sure what we are to do with this information? | Greenhouse will be removed from emergency power requirements. Specs will be updated via addendum.<br>**04/02/2024: Refer to Addendum 3.** |
| 257 | 3/19/2024 | Volume #1 Specs - Page 244 - Number 20 states that we (23A) will furnish AND install all access doors and frames. Volume #1 Specs - Page 319 - Number 5 states that we (23A) will furnish access doors and frames for installation by 06A contractor. Which is correct? | **All contractors shall furnish access doors/frames (i.e., access panels) for required their work, and provide layout for the 06A Contractor to install. 06A Contractor will install all access panels.** |
| 258 | 3/19/2024 | Volume #1 Specs - Page 242 - Miscellaneous Scope, Number 1: Please define Engineering and what Engineering will be required for the 23A scope. | **Engineering requirements under the 23A work package are identified within the mechanical/plumbing plans and specifications.** |
| 259 | 3/19/2024 | Volume #1 Specs - Page 244 - Number 29: Can this scope be assigned to 07A – Roofing scope of work and not in "other" trades scope of work? | **No. Any contractor that makes a roof penetration AFTER roofing installation is responsible for properly waterproofing and counterflashing the penetration, or incurring the cost of the work to be performed by the 07A roofing contractor. The intent is that all contractors install their roof penetrations before the roofing installation occurs, in which case it will be part of the 07A roofing work at no additional cost to the contractor making the penetration.** |
| 260 | 3/19/2024 | Volume #1 Specs - Page 323 - Number 45: Please define the temporary measures that will be required. | **An allowance has been made within the 23A work scope to accommodate temporary conditioning of the building. See revised scope of work issued in ADD#5** |
| 261 | 3/19/2024 | Spec: Metal Ducts (23 31 13) Duct Schedule: Supply spiral pipe runouts to ceiling diffuser and diffuser boxes. Metal Duct Schedule: (3.10) Supply Ducts (e) Provide double wall ductwork for **all** supply air ductwork connected to water to air heat pump units. Question: Is it the Engineer's intent to run spiral double wall lined with perforated metal liner from the mains to the diffusers? HVAC Insulation 3.13 Duct Schedule: Indoor, concealed **supply** and **outdoor** ducts to be wrapped. (Conflicting Spec. If the intent is to use duct wrap, we assume this ductwork should not be lined. Or please have the Engineer of record provide a responsibility matrix showing what ductwork systems require duct wrap vs. ductwork to be lined, since the drawings and specification are contradicting themselves. | Round concealed runout ducts serving single diffuser plenum boxes shall be externally insulated single wall type. Sound lined ductwork shall be provided where specified. |
| 262 | 3/19/2024 | Please show and spell out all piping expansion loops, guides and anchors on the HVAC and Plumbing drawings. | **Under addendum 5, general note has been provided to address offsets such that straight piping lengths shall not exceed 100'-0".** |
| 263 | 3/19/2024 | Please provide sizes of piping mains on the HVAC drawings...every HVAC drawing is lacking with pipe sizes. | **Under Addendum 5, pipe sizes are provided for mains and where transitions in sizes occur. Individual equipment connections are sized per detail details 12 & 13 on M701 and manufacturer requirements.** |
| 264 | 3/19/2024 | What does Note #3 mean on drawing M201A – between columns H&G, 4.5. | Referenced drawing note bubble should be Note 1. Revised under Addendum 3 |
| 265 | 3/19/2024 | Please provide a list of all attic stock that will be required and quantities for each item. | Refer to the specification requirements. |

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| 266 | 3/19/2024 | Per Vol. #1 Spec, page 320 of 1058, note #13, please confirm all concrete pads will be by the concrete subcontractor. If pads are not shown, however will be required, please show / locate these concrete pads on the design drawings. | **Confirmed, all pads are to be provided by 03A-Concrete Contractor** |
| 267 | 3/19/2024 | Per Vol. #1 Spec, page 320 of 1058, note #14, please all architectural louvers, including door louvers will be furnished and installed by another trade. | **All architectural louvers as specified under 08 91 19 and louvers within wood doors are by 06A Contractor. All Mechanical louvers specified under Division 23 are by the 23A Contractor** |
| 268 | 3/19/2024 | Please indicate what trade will be responsible for painting all exposed ductwork and piping? If 23A is responsible for painting exposed materials, please indicate all items to be painted. | **Painting of exposed ductwork and piping is part of the 06A Package. See 06A "Painting Specific Scope" item #4** |
| 269 | 3/19/2024 | Please provide a list of all owner supplied equipment. | Refer to schedules on A800 for N.I.C. items |
| 270 | 3/19/2024 | Per Vol. #1 Spec, page 323 of 1058, note #42, please provide a bid allowance for this scope of work, since there are items not shown on the contract documents and will be required for this the 23A scope of work. | **No** |
| 271 | 3/19/2024 | Per Vol. #1 Spec, page 323 of 1058, note #44, please provide a better scope of work for this effort. It is hard to price up two different scopes within one directive. | **Contractor shall include plumbing hook-ups for water and sanitary tanks to serve the CM trailer. This includes providing heat trace for exterior lines.** |
| 272 | 3/19/2024 | Per Vol. #1 Spec, page 323 of 1058, note #48, please provide drawings for the complete radon sub-slab ventilation system | There is no under slab radon system in the documents. |
| 273 | 3/19/2024 | Per Vol. #1 Spec, page 323 of 1058, note #49, please re-write this scope to say: Furnish and install all fire dampers as shown. If drawings are incomplete and do not shown all fire dampers, please provide a bid day allowance for fire dampers not shown associated with this scope of work. | See Addendum 3 for fire damper locations. |
| 274 | 3/19/2024 | Please provide a detailed explanation of the "Harmonic Analysis" associated with the VFD's required by the Engineer of Record for this project. | The VFD manufacturer is required to develop this project specific harmonic analysis report per the specification requirements. |
| 275 | 3/19/2024 | Per Spec, 23 05 00-19 + 22 33 00-1, 1.6 Warranty, please confirm this scope will be a requirement for this project:Contractor shall provide five (5) year parts and labor warranty for all refrigeration systems (i.e., water source heat pumps, split systems/condensing units), including loss of refrigerant. Extended warranties for specific components, equipment and/or systems are individually indicated within the specifications. | The basic warranty shall be provided as well as additional extended warranties for individual items shall be provided as specified. |
| 276 | 3/19/2024 | Per spec 23 05 00-21, Lintels, if Lintels will be in the 23A scope of work, please show all required lintels on the HVAC & Plumbing drawings. | **CMU and/or steel lintels will be provided by the 04A and 05A Contractors respectively. The 23A Contractor shall provide dimensioned size, locations, and elevation to other contractors that shall build the wall opening. If the 23A Contractor does not provide this information and requires an opening after the wall is built, the costs associated with making the opening will be the 23A Contractor's responsibility.** |
| 277 | 3/19/2024 | The HVAC specifications is unclear if duct cleaning by a professional service is a requirement, please indicate if we are to use a certified / professional company to provide duct cleaning for all of the ductwork within these buildings. | Duct cleaning/cleanliness is defined is spec section 233113. |
| 278 | 3/19/2024 | Per spec section 23 05 00-27, 3.34, Liquid Level Alarm Sensors, please show where all drain pans and leak detection will be required for this project. | The Mechanical Contractor is responsible for quantities, the specifications indicate locations where liquid level alarms are required. |
| 279 | 3/19/2024 | Per spec 03 05 29-6, 3.2 Equipment Supports, please indicate if the 23A package will requie structural steel for our Equipment. If so, please show and provide details for this scope of work. | Refer to mechanical detail sheets for equipment support information. ~~HESS to coordinate bid package scoping~~. ***AMENDED RESPONSE: The equipment supports referenced in 23 05 29 and detailed on mechanical drawings are by the 23A Contractor.*** ADD#5 |
| 280 | 3/19/2024 | Per specification 22 05 33 – Heat Tracing. Please indicate if this scope will be a requirement for 23A, If so, please shown heating tracing on systems, within the HVAC & Plumbing drawings. | The specifications indicate heat trace applications. |

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| 281 | 3/19/2024 | Per specification 22 11 16-14, Water Meters, please indicate if water meters are required for this project, if so, please indicate where on the HVAC & Plumbing drawings they are located. If required and not shown, please indicate where required and associated sizing. | **Water sub meters addressed in Addendum 5.** |
| 282 | 3/19/2024 | Do all HVAC & Plumbing systems carrying pressurized liquid need to have pitch/ fall and not horizontally level? If so, can you please provide a detailed scope explanation for our BIM coordination process? | All piping will have pitch/fall to allow drainage of the systems without leaving dead water spots. Pitch/fall is defined in respective piping specifications. ~~HESS to coordinate bid package scoping.~~ ***AMENDED RESPONSE: Required sloping of piping/elevations should be reflected in BIM model*** **ADD#5** |
| 283 | 3/19/2024 | Per specification 22 14 13-4, 3.3, E please indicate what and where an encasement is required for our scope of work. | Encasement of underground storm water pipe is not a requirement. |
| 284 | 3/19/2024 | Per drawing P003, the drawing shows interior under slab drainage, however this drawing does not show the exterior below wall grade drainage. Is the exterior wall underground drainage in our 23A scope of work or is this scope by others. If this scope is to be in the 23A scope, please show all required work on this drawing. | **Bid per contract documents.** |
| 285 | 3/19/2024 | Please refer to spec section 23 09 00-1, Part 1, 1.2.D. – it stated we will need to use a Johnson Metasys System (sole source), however if you also refer to spec section 23 09 00-9, Part 2, 2.2.A, it states we are to use a Tridium/Honeywell – Control System. Can we use both for this project? If no, which manufacture does the owner want to use for this project? | The project is Johnson Sole source. References to Honeywell/Tridium are not applicable and is NOT an option. |
| 286 | 3/19/2024 | We respectfully request that AAON products be added to the list of acceptable manufacturers for Custom Water Cooled Energy Recovery Units. AAON offers significant value and will meet or exceed the project requirements. | It is too late to evaluate additional requested manufacturers without appropriate accompanying information for review. This is not a very feasible request at this point. |
| 287 | 3/19/2024 | Is it possible for the AIA Document A305-Contractor's Qualification Statement requirement to be waived for the smaller packages or potentially only required to be submitted to Hess if we are being considered for award on the project? If this is not possible, would it be possible to submit this statement without the financial statements and only provide those if we are being considered for award? | **The AIA 305 Contractors Qualification Statement is required with the bid submission. Forms have been included in ADD#3. Financial Statements will not be required at the time of bid, but will be required for review prior to contract award.** |
| 288 | 3/19/2024 | Phase 1 of Base Bid 1 has the gym being constructed but what will be the Middle School gym is to be fit out as temporary classrooms during Phase 2 construction. Can it be assumed that all gym equipment and bleachers can be installed during Phase 1, as the hoops/curtain could be raised up and bleachers closed? | **Yes** |
| 289 | 3/19/2024 | Bid Package 12A includes Section 12 00 05 – Miscellaneous Furnishings which has Loose Upholstered Seating for Auditorium and Study Carrels for rooms A144, A163 and B102. Can these items be provided by the 06A – General Trades bid package in lieu of the 12A – Fixed | **No.** |
| 290 | 3/19/2024 | Section 116623, paragraph 2.3.A.1. specifies #3103 rear-braced, forward fold backstops but the drawings indicate 3107 front-braced, forward fold backstops. 3107 backstops will be necessary for the (1) HS gym basketball backstop with a batting cage located behind it, the (2) MS gym side court basketball backstops nearest the operable wall and the (3) basketball backstops on the plan north side of each gym due to the main HVAC runs. Can it be confirmed that all backstops should be 3107 front-braced, forward fold to maintain symmetry with all hoops? | Confirmed. All backstops will be 3107 front-braced, forward fold backstops. This will be updated in the specs via addendum. |

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| 291 | 3/19/2024 | Section 116623 specifies the basketball hoop winches, archery net and batting cage to be operated by a TSC1500 group control system, as does Section 116653 for the divider curtains, but E200A mentions key-switches for the archery net and batting cage and there is not a clear indication of the operation for the basketball hoop winches or divider curtains. Should this equipment be operated by the TSC1500 group control system or key-switch? If controlled by the TSC1500, can you confirm (2) keypad locations are required, one for the HS gym and one for the MS gym? | Confirmed - equipment to be operated by TSC1500 control system. Provide two keypad locations, one in the HS gym and one in the MS gym. |
| 292 | 3/19/2024 | Section 116623, paragraph 2.3.A.5. specifies only AFRG42 backboards but drawing A800, PE Equipment item P4 states to provide 934 wood backboards at the side baskets. 934 wood backboards are no longer made, these could be 1342B fiberglass backboards or 1272B steel backboards but these are only about $100 less expensive than AFRG42 backboards. Can it be confirmed all backboards should be AFRG42 as specified in Section 116623? | Confirmed. All backboards will be AFRG42 as indicated in the specs. This will be updated in the drawing schedule via addendum. |
| 293 | 3/19/2024 | Section 116623, paragraph 2.3.B. does not specify a height for the wall padding but the drawings indicate the padding to be 6'-1 ½" high. Standard wall pads are 6'-0" high and this additional 1 ½" of height will increase the cost of the padding by about 20%. Can 6'-0" high padding be provided in lieu of the 6'-1 ½" high padding shown on the drawings? | Confirmed. 6'-0" tall wall pads can be provided. |
| 294 | 3/19/2024 | Drawing A601, detail A18 indicates removable padding to be provided over the mirrors in the auxiliary gym. It would be assumed this padding would need to be mounted above the mirrors, making them 7'-6" high, which will provide enough Velcro attachment surface to hold the top of pads in place and run to the floor for additional support when in place. Can you confirm the padding in front of the mirrors in the auxiliary gym should be 7'-6" high and attached at the top with Velcro and use the floor for additional support? | Wall pads at the mirrors in the auxiliary gym will need to be tall enough to mount above the mirror, with Velcro provided above the mirror for attachment, min 7'-6". It is acceptable to use the floor for additional supports. |
| 295 | 3/19/2024 | Section 116623, paragraph 2.3.C. specifies only enough volleyball equipment for (2) courts but it would be possible to potentially have (5) courts used at one time (2 regulation in the HS gym and 3 non-regulation in the MS gym). Based on this it would be assumed that (4) winch uprights, (3) anchor uprights, (3) competition volleyball nets with boundary markers/net antenna, (3) custom length volleyball nets with boundary markers/net antenna, (7) upright pads & (2) storage carts would be necessary. Can you confirm the quantity of volleyball equipment should be as previously mentioned in this RFI? | Additional volleyball equipment should be provided to concurrently run 5 games of volleyball. Specs will be updated via addendum.<br>**04/02/2024: Refer to Addendum 3.** |
| 296 | 3/19/2024 | Section 116623, paragraph 2.3.F. specifies Senoh foor sleeves for volleyball but paragraph 2.3.C. specifies Jaypro volleyball equipment. Can it be confirmed that the volleyball floor sleeves and equipment can be provided by any of the approved manufacturers in paragraph 2.1.A.? | **Refer to revisions to 11 66 23 provided in Addendum 3.** |
| 297 | 3/19/2024 | Section 116623, paragraph 2.4.A.2. does not specify a height of the archery net, which are generally 10 to 12 feet high. Can you confirm the height of the archery net to be provided? | Provided archery net to be 10' tall. |
| 298 | 3/19/2024 | Section 116623, paragraph 2.5.A. specifies a 4080-70 batting cage but does not state to provide Option 1, single lift point, or Option 2, dual lift point. Can you confirm if Option 1 or Option 2 model 4080-70 batting cage should be provided (cut sheet attached for reference)? | Provide Option 2, dual lift point. |
| 299 | 3/19/2024 | Drawing E200A does not indicate a power supply or key-switch for the mat hoist specified in Section 116623, paragraph 2.6. Can a power supply and key-switch be provided for the mat hoist? | Under Addendum #3, mat hoist electrical provisions have been shown in Aux Gym A001. |

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| 300 | 3/19/2024 | Section 116643, paragraph 2.3 does not specify a quantity of control consoles to be provided, it is generally recommended that one per scoreboard be provided or a total of four on this project. Can it be confirmed that four control consoles should be provided, one for each scoreboard? | Confirmed, provide 4 control consoles. |
| 301 | 3/19/2024 | Section 116647 does not specify a quantity of shot clocks to be provided. Can it be confirmed that only two shot clocks are required, one mounted to each main court basketball hoop in the HS gym? | Confirmed. Provide 2 shot clocks, one mounted to each main court basketball hoop in the HS gym. |
| 302 | 3/19/2024 | Section 126100, paragraph 2.3.B. specifies chair mounting standard material in steel, cast metal and molded plastic but elsewhere in the spec it calls for only cast metal standards. Can it be confirmed that the standards should be cast metal and not steel or molded plastic? | **Refer to revisions to 12 61 00 provided in Addendum 3.** |
| 303 | 3/19/2024 | Section 126100. paragraph 2.7.D. specifies T2m folding laptop tablet arms and drawing A801D only indicates tablet arms at the first two rows of fixed seating. Can it be confirmed that tablet arms are only to be provided at the first two rows of fixed seating at the main level of the auditorium? | Confirmed. Provide tablet arms as indicated on A801D. |
| 304 | 3/19/2024 | Section 126600, paragraph 2.2.B.3. specifies 22” row spacing but the open dimensions of the 7 row bleacher and 15 row bleacher reflect 26” row spacing. Can it be confirmed the row spacing should be 26”? | Provide 22" row spacing as specified. |
| 305 | 3/19/2024 | Section 126600, paragraph 2.2.B.4. specifies row rise between 11 and 12 inches but the elevation drawings indicate 16” row rise. It would be recommended that the row rise be 9-5/8”, as this will extend the life of the bleacher because with higher rises there is a large open space between each seating row which will allow people to climb the bleacher much like a ladder and lead to deck sag, which will cause binding as the bleachers age. Can it be confirmed that the row rise for the bleachers should be 9-5/8” (nominal 10” rise)? | 10" nominal rise is acceptable for HS gym bleachers. 16" nominal rise is required in MS gym to maintain line of sight. Specifications will be updated via addendum. |
| 306 | 3/19/2024 | Section 126600, paragraph 2.2.B.8.b. specifies limit switches but each gym will receive a wood floor, which does not require limit switches for proper operation of the bleachers. Can it be confirmed that limit switches are only required, as recommended by the manufacturer? | Confirmed - provide limit switches as recommended by the manufacturer. |
| 307 | 3/19/2024 | Section 126600, paragraph 2.3.C. specifies 3/4" thick decking when all the approved manufacturer’s utilize 5/8” thick decking. Will 5/8” thick decking be acceptable? | **Refer to revisions to 12 66 00 provided in Addendum 3.** |
| 308 | 3/19/2024 | Section 126600, paragraph 2.5.A. specifies FSC certified wood but not all approved manufacturers can provide this type of decking, which is more expensive than standard decking. Can it be confirmed that FSC certified wood is not a requirement for the bleachers? | **Refer to revisions to 12 66 00 provided in Addendum 3.** |
| 309 | 3/19/2024 | The 7 row bleachers in the HS gym are indicated as 84’-6” long but if these were reduced by 1’-6” to 83’-0” they can be provided much more economically in only three sections per side. Can the 7 row bleachers in the HS gym be reduced in length to 83’-0”? | Provide bleacher length as indicated on the contract documents. |
| 310 | 3/19/2024 | Can the working hours shown in the drawings be adjusted to allow for a 10 hour work day? | **10 hour days are allowable under the sole discretion of the CM, depending on the necessity and timeframe requested** |
| 311 | 3/19/2024 | Can the bid be extended? | **The bid deadline has been extended to April 12, 2024** |
| 312 | 3/19/2024 | Can I get a list of subs for the 11B package? | **For a potential list of Prime Bidders by package reach out to HESS via NEMHS@hessconstruction.com.** |
| 313 | 3/19/2024 | Scoreboard specs 11 66 43 and 11 66 47 list Daktronics, Nevco and Sportable. Can we bid Fair-Play? | A substitution request in format described in contract documents was required for consideration. |
| 314 | 3/19/2024 | Are outdoor scoreboards in any of these packages? Or will outdoor boards be in a future separate bid? | **Outdoor Scoreboards will be separate future bid.** |

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| 315 | 3/20/2024 | Please clarify which packages are to carry the following in their proposals pertaining to the theatrical equipment: Rigging Systems and Controls, Stage Curtains, Theatrical Lighting Systems. We have had previous projects where the 6A contractor purchases all of these and the 16A contractor is responsible for pathways and wiring only. The theatrical lighting spec almost reads like it bids separately or at a later time. Please clarify. | **26A Electrical is responsible for these scope items** |
| 316 | 3/20/2024 | Please clarify if Belden is an approved manufacturer for copper/ fiber cabling. | Belden is approved for building copper wiring. For Telecomm wiring, per Div 27, structured cabling must meet the performance specification. If the selected Belden product meets the performance specification, then it would be acceptable. |
| 317 | 3/20/2024 | The scoreboard spec 11 66 43 says Daktronics or equal by Nevco or Sportable. The scoreboard spec does not say equal product by other manufacturers by substitution request are allowed. Substitution requests during construction are allowed only if the need arises. Am I spinning my wheels submitting a substitution request? | Substitutions requests are allowed subject to the requirements of the documents. |
| 318 | 3/20/2024 | 31A – Sitework Questions: 1.00 41 00 Bid Form Pages 4 – 6 Unit Prices – There several unit prices that are below current industry standards. We propose the following changes: SEE ATTACHMENT | **Unit prices shall remain.** |
| 319 | 3/20/2024 | 00 90 00-31A – Package 31A-Sitework Scope Item #6 – Is the layback limit responsibility for the 31A contract based on the middle school slab subgrade elevation then a 2:1 slope back into the area of the high school? | **From top of footing elevation, then 2:1 slope** |
| 320 | 3/20/2024 | 00 90 00-31A – Package 31 A Sitework Scope Item #8 – The wood piles mentioned to be removed are they existing or part of the potential sheeting & shoring for the new school construction? | **There are no wood piles to remove. Scope has been revised per ADD#5** |
| 321 | 3/20/2024 | 00 90 00–31A – Package 31 A Sitework Scope Item #17&18 - Can RC-6 be used in lieu of CR-6? | RC-6 can be used as a base material under asphalt, concrete, or pavers as long as the submittal demonstrates that the product meets the requirements of CR-6. |
| 322 | 3/20/2024 | 00 90 00–31A – Package 31 A Sitework Scope Item #17&18 - Can the temporary stone be incorporated below subgrade and remain? | Temporary stone must not be abandoned in place in areas that are to be vegetated. Temporary stone abandoned in place under proposed pavement is acceptable. |
| 323 | 3/20/2024 | 00 90 00–31A – Package 31 A Sitework Scope Item #21- Can an allowance and unit price be added to the bid form to be incorporated into the base bid amount for other trade spoils? | **No** |
| 324 | 3/20/2024 | 00 90 00–31A – Package 31 A Sitework Scope Item #23 – Which out buildings are the responsibility of the 31A contractor to demolish? | **All existing outbuildings/sheds, except the ones shown to remain.** |
| 325 | 3/20/2024 | Can a site demo plan be provided showing what is required to be demolished? | **No. Please compare existing conditions to proposed conditions** |
| 326 | 3/20/2024 | What is the 31A scopes responsibility in regard to the pump houses? | **31A shall prepare the building pad, and connect storm/water/sanitary utilities** |
| 327 | 3/20/2024 | Can alternate be listed for spreading trade spoils onsite based on a set quantity and a unit price provided by the contractor? | **No** |
| 328 | 3/20/2024 | Which trade is responsible for the 48SF project sign? | **The 06A Contractor shall provide temporary project signage per specification 01 58 13.00, including the 48SF project sign** |
| 329 | 3/20/2024 | Which trade is responsible for termite control? | **03A-Concrete** |
| 330 | 3/20/2024 | Plan Sheet F-ESD-18 & 19 - Details are given for MBR 1-5 but it does not list the detail for MBR-6, which section should that use? | Section for MBR-6 is shown on sheet F-ESD-38. |

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| 331 | 3/20/2024 | There are several issues with the storm drain that need clarification or additional information: Missing Profiles (size & type) Pipe Runs<br>P12 P43 P95 P111 P112<br>RD to I-58 and intersecting SD RD to I-13 Temp pipe w/ no label (size?) No info on "to and from"<br>I88 I46 I67<br>Unlabeled Structures Sheet F-ESD-11 Roof drain shown to be installed in phase<br>1. Phase 2 shows unlabeled pipe and 2 inlets. Need clarification/info.<br>Conflicting Info: P-103Called 6" PVC on ESD 5 Plan view. Called 8" Steel pipe on Sheet ESD 30 Profile. Need clarification. | Roof drain tie ins were not profiled. P-12 is a roof drain that ties into P-11 from the existing restroom building (see profile on sheet F-ESD-30a). Size and material information now provided for P-12 and P-10.<br><br>P-43 and P-95 are profiled on sheet F-ESD-29. P-111 and P-112 are profiled on sheet F-ESD-30b.<br><br>The RD to I-58 has been revised. The roof drain shown shall be installed in phase 2, not phase 1 (layer issue resolved). 2 unlabeled pipes and inlets are now labeled. See sheet F-ESD-11 or C-23.<br><br>Temp. structures and pipe now have labels on sheet F-ESD-9.<br><br>I-13 is profiled on sheet F-ESD-30, label for roof drain tie in has been added.<br><br>I-88 is profiled on sheet F-ESD-29 with two pipes labeled in the profile, the third pipe that ties in from the building is profiled on sheet F-ESD-30a.<br><br>I-46 and I-67 are profiled on sheet F-ESD-28.<br><br>Label on sheet F-ESD-5 has been updated to call P-103 out as 8" steel pipe. |
| 332 | 3/20/2024 | 31A – Asphalt & Site Concrete Questions: 1.00 90 00-32A – Package 32A Asphalt & Site Concrete Scope Item #5 – Can allowance with a unit price be added to the bid form for Base Patching prior to Surface Paving? There is no way to quantify how much patching will be required for damage caused by other. | **See revised 32A scope issued in ADD#5** |
| 333 | 3/20/2024 | 00 90 00-32A – Package 32A Asphalt & Site Concrete Scope Item #9 – m – Mow strip at fencing is in both the 32A & 32B scope. Which trade is responsible? | **Mow strip at fencing is by the 32B Contractor. All other mow strips are by the 32A Contractor.** |
| 334 | 3/20/2024 | 00 90 00-32A – Package 32A Asphalt & Site Concrete Scope Item #9 – l – Flagpoles are in both the 32A & 32B scope. Which trade is responsible? | **32A Contractor. See ADD#5 revised work scopes** |
| 335 | 3/20/2024 | Which trade/s are responsible for the bocce ball courts? | **03A Contractor installs concrete footings/walls, drainage board with gravel backfill and 4" perforated PVC drain pipe wrapped in filter fabric at bottom of wall/ftg. 32B Contractor installs synthetic turf system in its entirety, including composite nailer board, drainage sub-base layer (#8 stone and #57 stone) and 4" perforated PVC wrapped in filter fabric within turf sub-base layer, and geotextile fabric at bottom of sub-base.** |
| 336 | 3/20/2024 | Basketball goals are listed in both the 32A & 32B scopes. I do not see any basketball goals on the plans. Are there any and which scope is responsible? | **There are no exterior basketball goals on the project. See scope clarifications issued in ADD#3/ADD#5** |
| 337 | 3/20/2024 | The paving limits for Irishtown road are not clear on sheets RS-2 thru 4. Can a better plan/s be provided showing clear limits? | The RS sheets are not a part of this bid. |
| 338 | 3/20/2024 | Section 27 15 01 2.1 - Is there any Color code for Cat6 and Cat6a Cable and Jack for data, voice, wireless access points, cctv and others? Please provide if any. | Sheet T500, Detail 10. |
| 339 | 3/20/2024 | T500, T501, T502,T503 -The drawing shows Cat 6A only for Patch Panel. Please confirm if this a mistake and Cat6 cable will be terminated in a Cat 6 Patch panel. | All patch panels shall be rated for Cat 6A cables. |
| 340 | 3/20/2024 | T500- Please confirm if fiber core switch will be provided by Telecommunication Contractor. | Network switching electronics are by owner. Some items are owner provided contractor installed. See Section 27 20 01 for specific information. |
| 341 | 3/20/2024 | REVD2024-2- 23_2023-12-22_Vol 4 SPECS_NEMHS<br>Bid Set Please confirm who will provide the WAP. Statement from Div 27 does not match. | WAPs are owner provided, contractor installed. See Section 27 20 01 for specific information. |
| 342 | 3/20/2024 | What is the prevailing wage for "Communication Technician" | Refer to attached MD Dept. of Labor letter dated 3/27/24 for wage rates indicated for Glazier, Ironworker-Structural, Painter, and Roofer/Waterproofer. |

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| 343 | 3/20/2024 | DWG. A906-Alternates- Detail #A9 - Is Pre-K Classroom #C021- Detailed on A800 Series Drawing? No casework tags here. | Refer to response to RFI 71 |
| 344 | 3/20/2024 | DWG. A903-Ticket Booth-Detail #A18 - C-Top on brackets, ledge needed at roll up door? | Refer to response to RFI 72 |
| 345 | 3/20/2024 | DWG. A903- Concessions-Detail #A15 - C-Top on brackets, ledge needed at roll up door? C-Top (C8) on brackets? | Refer to response to RFI 73 |
| 346 | 3/20/2024 | DWG. A804- Details (#J14, #D10 & #D7) - Please confirm that Pipe Support post, perforated material privacy screens are part of the 05 Contractor. | Refer to response to RFI 53 |
| 347 | 3/20/2024 | DWG. A806-Detail #D18 & #L11 - Reference "Solid Surface Clad Partial Height Partition" but detail #H18 Notes "Painted Finish". Please clarify. | Refer to response to RFI 75 |
| 348 | 3/20/2024 | DWG. A800B - M.S. Cafeteria B007-Lower right corner calls for Detail #J10/A804, however it looks more like a counter wall mounted. Please clarify. | Refer to response to RFI 76 |
| 349 | 3/20/2024 | DWG. A806-Room# C029 = Casework on North wall is not tagged. Is it the same as RM #C031? | Refer to response to RFI 77 |
| 350 | 3/20/2024 | On dwg. A012-Phase 1 Temporary Conditions, Detail #A8-M.S. Media, Who is to provide "Temporary Media Circulation Desk-Stevens Furniture".? | Refer to response to RFI 55 |
| 351 | 3/20/2024 | Under 06B Scope of Work, Item #1 in "Interior Architectural Woodwork, Casework, and Millwork Scope, Lists that we are to provide "Interior Wood Frames and Jambs". Please clarify what this is? | **There are no interior wood frames and jambs on the project. 06B Scope has been revised accordingly.** |
| 352 | 3/20/2024 | Under 06AB Scope of Work, Item #3 in "Interior Architectural Woodwork, Casework and Millwork Scope", states "Contractor shall furnish and install the stage/platform wood edge, proscenium, and any wood paneling called for in the theater". However, the drawings call for "Vertical flush joint linear wood planks which is part of Specification 097853, which is under the 06A Contractor. Please clarify. | **06A is to provide the linear wood planks.**<br><br>**06B is to provide all other wood finishes as detailed in the finish schedule and in contract documents** |
| 353 | 3/20/2024 | Under 06B Scope of Work, Item #12 notes that we are to furnish mounting clips/kits for all sinks not furnished and installed under this scope. Doesn't the sink typically come with mounting clips? | **Correct, 23A Contractor shall provide mounting hardware for sinks they provide, and will coordinate with the 06B Contractor for countertop cut-outs/mounting details . 06B Contractor shall provide all mounting hardware for sinks provided by them.** |
| 354 | 3/20/2024 | Under 06B Scope of Work, Item#13 notes the 06B Contractor is to furnish and install " In- Wall" blocking is typical by 06A Contractor. Please clarify | **06A shall provide all in-wall blocking. 06B shall coordinate with the 06A Contractor for blocking requirements and layout. See revisions to scopes issued in ADD#3** |
| 355 | 3/20/2024 | Under 06B Scope of Work, "Appliances Special Scope", Item #1- to provide commercial washer & dryers, "Belco" is specified for the dryer, they will only sell direct to school systems. Can we use "UniMac".? | Additional acceptable products for the athletic washer and dryer are E4 - UniMac UWT085V4, E5 - UniMac UT075NVN. Documents will be updated via addendum.<br>**04/02/2024: Refer to Addendum 3.** |
| 356 | 3/20/2024 | Under 06B Scope, Misc. Equipment Scope, to Furnish & Install "Handicapped access darkroom door". Please clarify where this is? | **Scope item has been removed.** |
| 357 | 3/20/2024 | On Details #D10, #J14, on DWG. A804, calls for "Pop-up outlet, see electrical." Please confirm these are supplied by the electrical contractor and that the 06B Contractor is providing a cut-out for that. | **Confirmed.** |
| 358 | 3/20/2024 | On Details #D7, #D10 and #J14, on DWG. A804, please confirm the steel pipe and accessories are by the steel contractor. | **No, these are by the 06B Contractor** |
| 359 | 3/20/2024 | Detail #G9/A804 calls for Fabric Wrapped Cushions on benches. Do you have the manufacturer and color of this fabric? | Refer to Addendum 3 for additional information regarding the referenced fabric. |
| 360 | 3/20/2024 | Spec. Section 064023 Notes " Face Frames" for Wood Casework in Library, is this required? | See documents |

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| 361 | 3/20/2024 | Specification Section 116143, Article 2.3 Paragraph M indicates grade 80 chain is required. Grade 80 chain is not used in dead-hung supports due to the size and shape of its links. ¼" Grade 30 chain is typically used to suspend dead-hung items over a stage as it greatly exceeds the minimum safety factors required for static loads. Please advise | Use the specified Grade 80 chain. |
| 362 | 3/20/2024 | The Curtain Schedule on Drawing TE001, Set No's. 10, 16, 23, 28 and 29 depicts "Lift" in the column for Method. Please clarify | System is all Dead Hung. |
| 363 | 3/20/2024 | The Curtain Schedule on Drawing TE001, Set No. 4 depicts "Lift / Draw" in the column for Method. Please clarify. | System is all Dead Hung. |
| 364 | 3/20/2024 | The Curtain Schedule on Drawing TE001, Set No. 5 depicts "Aircraft Cable" in the column for Method and is not in concert with the other Electric Sets. Please clarify. | System is all Dead Hung. |
| 365 | 3/20/2024 | Specification Section 116143, Article 2.3 entitled Rigging offers different options in the way you can install the rigging linesets. For example chain, cable..... It is permissible to hang the battens with grade 30 chain in lieu of ¼" cable? | Use as specified. |
| 366 | 3/20/2024 | The Curtain Schedule on Drawing TE001, suggests that all the linesets are to receive track except for linesets 2 and 21 as noted in the Track Length Column. This is not typical to what we generally see where only sets with curtains receive tracks. Therefore, please clarify what sets are to receive curtain tracks. | Line 2 is a projection screen no track, and 20 as corrected is an empty, For more details on the projection screen please refer to the AV drawings. |
| 367 | 3/20/2024 | The Blackout Curtain (Set No. 29) depicted on the Curtain Schedule on Drawing TE001 notes that the curtain is to be fabricated with 25% sewn-in fullness. Please clarify if this is correct. | See drawing TE 001. |
| 368 | 3/20/2024 | The Bid Form says that we have to include the "Plan for Utilization of Minority Business Enterprises (If available)" was listed, please clarify if this form is required for submission and if so please provide the form. (It was not included) | **See ADD#3 revised bid form and Section 00 43 09 for requirements** |
| 369 | 3/20/2024 | The bid form asks for the Contractors Qualification Statement & AIA A305 to be attached with the bid. There are (5) Exhibits referenced in the AIA A305. Can we postpone completing AIA A305 until after the bid submission? The Document asks for redundant information such as references and past projects and it asks for our company financials to be given and available at that point to anyone in possession of our bid. | **AIA 305 and Exhibits are to be included with the bid. Financial statements do NOT have to be included with the bid, but may be requested for CCPS review prior to contract award.** |
| 370 | 3/20/2024 | Electrical scope item #21, we take exception to this note since the conduit routing was on the drawings and were bid like so. | **See revised work scope. Contractor shall still verify with utility company. If size/routing differs from what is shown on the drawings, it will be considered a change.** |
| 371 | 3/20/2024 | Electrical scope item #42, we also take exception to this note because we do not know exactly what and where the electrical utility is and what size conduit and wire. Can an allowance be provided for this item? | **Relocation of existing electrical utilities along Irishtown road will be part of the future off-site improvements bid package, or will be performed by local utility provider. Item has been removed from 26A Scope. Removal of light poles on-site is the responsibility of the 31A Contractor. 26A Contractor shall de-energize and make safe for demolition** |
| 372 | 3/20/2024 | Is the Electrical Contractor providing the floorboxes? Symbol sheet says "by others"; is that the Technology vendor? If the Electrical Contractor is furnishing, then please provide a part number for the "D" floorboxes shown on T101E/E201E in Room E107 | **See T504 and Section 27 05 00 for floor box and poke through information related to the technology scope of work. ~~HESS to coordinate bid package scoping~~. *AMENDED RESPONSE: The Technology vendor is part of the 26A Electrical work package.*** ADD#5 |
| 373 | 3/20/2024 | Will Building Demolition Contractor be responsible for the site demolition in the existing courtyard? | **The existing high school courtyard will be part of the future HS demolition package. All other site demolition is part of the 31A Package** |
| 374 | 3/20/2024 | Please advise if the existing buildings to be demolished have basements. | **The existing outbuildings that are to be demolished as part of the 31A package do not have basements. Information regarding the foundation conditions of the existing high school to be demolished in Phase 3 will be part of the future HS demolition package** |

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| 375 | | Please reference Specification 31 20 00. Paragraph 3.24 states that satisfactory soil is to be transported to a designated storage area on owner's property. Can you please provide the location of this area? Is it anticipated this material can be stockpiled or will it need spread? | **All surplus material shall be disposed of off-site by the 31A Contractor and not left on-site or delivered to a CCPS designated storage area.** |
| 376 | 3/20/2024 | Will the Building Demolition Contractor be responsible for removing the stone under the existing building slabs? | **Yes** |
| 377 | 3/20/2024 | Spec section 00 45 28, Prevailing Wage Section, does not contain a wage scale for painters. Please provide further clarification. | Refer to attached MD Dept. of Labor letter dated 3/22/24 for wage rates indicated for Glazier, Ironworker-Structural, Painter, and Roofer/Waterproofer. |
| 378 | 3/20/2024 | Wallcovering WC-1 thru WC-7 are custom murals, pattern TBD. Typically, price for custom murals can not be obtained from manufacturer before digital images and field-measured dimensions are provided to them. Please advise if these should be excluded at this time. | These are a standard custom program by manufacturer. See Materials Schedule for description. To be included in pricing and contact manufacturer's rep: Jennifer Calhoun for pricing/quote information. She can provide the information needed for pricing.<br>jennifer.calhoun@nationalsolutions.com<br>703-206-8824<br>800-222-1028 |
| 379 | 3/20/2024 | Please advise where Spec Section 09 96 00 – High Performance Coatings Exterior, Section 3.6.B Concrete Substrates, Horizontal Surfaces, Epoxy Non-Slip Deck Coating System is to be used | **Refer to revisions to 09 96 00 provided in Addendum 3.** |
| 380 | 3/20/2024 | On A305 Material Schedule, Finishes WD-3 Stained Top Cap & WD-5 Stained Wood Base, both are to match the doors in the Auditorium. Please advise if these items are in painter's scope for field finish, and if so please advise on wood species and stain color. | See interior stained door specification for wood species and stain color. |
| 381 | 3/20/2024 | Please confirm Paint color marked PTD-13 SW 6884 Greenblack should be PTD-14 SW 6994 Greenblack | Yes, corrected color number should be SW 6994 Greenblack |
| 382 | 3/20/2024 | Please advise Paint color marked PTD-15 should be SW 7069 Iron Ore or SW 7674 Peppercorn | To be SW7069 Iron Ore |
| 383 | 3/20/2024 | Several Paint colors (PTD-3, PTD-4, PTD-5, PTD-7, PTD-9, PTD-10 & PTD-11) list Acoustical Panels in Material column. Please advise if these Acoustical Panels are field finished | Yes, these are field painted acoustical panels. |
| 384 | 3/20/2024 | Please confirm Window Sill shown is Solid Surface and does not receive field finish | Refer to RFI-064 Response. |
| 385 | 3/20/2024 | The preliminary construction schedule has no mention of the Alternate #2 greenhouses start or completion dates. This information is critical to the subcontractors pricing this portion of this project. Please clarify | **See answer elsewhere in RFI log** |
| 386 | 3/20/2024 | Please confirm that Alternate #4 pertains to the Front Pergola (Manufactured by Icon) and not 10 73 10 Protective Covers (Mapes). | Correct. |
| 387 | 3/20/2024 | Please clarify the acoustical wall panel types ( dark shaded and light shaded) on A609 and A610. | Unclear question - the vertical line shaded shapes are all acoustical wall panels. Anything with a wood grain is part of the architecture. All shaded acoustical panels are shown at 2'-0" x 2'-0" or 4'-0" x 4'-0" and 4'-0" x 8'-0". |
| 388 | 3/20/2024 | Please provide specification for AP- 5 . | See Specification Section 09 84 00.01 (Polysonics) |
| 389 | 3/20/2024 | Please provide specifications for AP 6B and AP 6C. | See Specification section 09 84 00.01 |
| 390 | 3/20/2024 | Please confirm that the verbiage "protective covers" and "canopy" refers to the spec section 10 73 10: Protective Covers. | **Correct** |
| 391 | 3/20/2024 | Please clarify which prime contractor is responsible for the scaffolding "dance floor" in the theater for all the ceiling and high work to be performed by the different trades. Also clarify the duration this scaffolding will be required. It would not make any sense to have all trades cover the scaffolding in their individual scope package. The theater will have the scaffolding set up and removed by 4 different prime contractors. | **A dance floor scaffold is not currently scoped in any bid package. Each contractor shall be responsible for their own means/methods. If during construction phase the applicable contractors collectively decide it would be mutually beneficial, the CM will help facilitate, provided it is at no additional cost.** |

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| 392 | 3/20/2024 | Drawing A305 Material Schedule list WC1 through WC7 as wall murals at several loctions and list the manufacture to be used as National Wall Covering. No specifications found in 12 10 13 for this manufacture. This spec section only list 3m products to be used for the murals. Please provide manufacture specifications and model numbers for these products. Also which prime contractor is responsible for the install of these products. | Refer to Section 09 72 00. |
| 393 | 3/20/2024 | Please provide panel depth for APC 5 and APC 6 Blades. | APC5 is a convex (dimensional) wall panel, see specification section 09 84 00.01. AP6's are fabric wrapped panels, see specification section 09 84 00.01 |
| 394 | 3/20/2024 | Detail J4/A308 is a hollow metal mullion with a 1" frame face. This is the only hollow metal mullion profile like this in the details on Sheet A308. Other mullions like H3 and J5 on Sheet A308 have an industry standard 2" frame face. All the hollow metal frame elevations on Sheet A312 show all the mullions with the J4 detail dimensioned with a 2" face like H3 and J5. We note this an expensive hollow metal frame profile to make on a mullion. Given the increased expense to manufacture this profile and the dimensions shown on the frame elevations, we request to make the J4 detail with a 2" frame face to maintain a consistent look on the hollow metal frames. Please advise. | 2" frame face is acceptable. Detail J4/A308 will be updated via addendum. **04/02/2024: Refer to Addendum 3.** |
| 395 | 3/20/2024 | Special frame elevations SP1, SP2 & SP3 on Sheet A308 are drawn that appears to be a hollow metal borrowed light frame with 2" frame faces, and a sliding glass kit attached between the vertical mullions of the frame; however, details H9, H12, K9, K12, L9 & L12 on Sheet A421 show the sliding glass kit to installed attached to the wall. Please clarify if there is to be a hollow metal frame holding the sliding glass kits because the glass on one or both sides of the sliding glass kit is to be 1/4" thick and 1" thick insulated per the glass type key. If so, please provide more details | Frames SP1, SP2 and SP3 are manufactured frames. Refer to response to RFI 84 Also refer to specifications sections as follows: SP1, SP2-reference 10 00 05. 2.5, SP3-reference 10 00 05. 2.4 |
| 396 | 3/20/2024 | Section 08 14 16 ¶2.3-D-2 specifies that doors between classrooms are to be a minimum of STC52. Does this apply to the doors into the Science Prep Rooms B209, G304, G312 and G316 and Kiln Room D113? Please advise. | Doors listed in the RFI are not required to be a minimum STC52 rating. |
| 397 | 3/20/2024 | Does the statement all Music Room Doors and Practice Room Doors in Section 08 14 16 ¶2.3-D-2 include the Music Offices E102 and E110, Instrument Storage E105 and E113, and Band Equipment E114? Please advise. | Doors listed in the RFI are not required to be a minimum STC52 rating. |
| 398 | 3/20/2024 | We request that all doors intended to be STC rated be specified as such in the door schedule. This would greatly assist in eliminating guesswork about questionable rooms and whether they are classrooms or not. Please provide. | Will be addressed in forthcoming Addendum. **04/02/2024: Refer to Addendum 3** |
| 399 | 3/20/2024 | We have not found any doors in the door schedule specified to be Aluminum Flush Doors per Section 08 11 16. Please advise if this correct or provide a revised door schedule specifying them | Aluminum flush doors are indicated in the Door Schedule. |
| 400 | 3/20/2024 | Doors A154 and A158 are not marked on the floor plan. Please advise. | Doors are doors at rooms HS NURSE OFFICE - 154 and MS NURSE OFFICE - 158. refer to A101A for room locations. |
| 401 | 3/20/2024 | 6A Scope of Work, Fall Protection/Safety Specific Scope, Note #4 – can this scope of work be assigned to 5A Contractor as this is typically done by the steel contractor as they are setting steel and metal decking? | **See answer elsewhere in RFI log** |
| 402 | 3/20/2024 | 6A Scope of Work, Fall Protection/Safety Specific Scope, Note #6 – can this scope of work be assigned to either 3A or 4A Contractor as the rebar caps should be installed immediately following the installation of the rebars? | **See answer elsewhere in RFI log** |
| 403 | 3/20/2024 | Scope of Work, Construction Waste Management, Note #4, indicates for this Contractor to provide day & night shift composite cleaning crews. Please clarify if this is a two shift project | **See answer elsewhere in RFI log** |

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| 404 | 3/20/2024 | 6A Scope of Work, Construction Waste Management, Note #4 – Please confirm that the 6A Contractor is required to provide (1) supervisor and (2) laborers to lead the composite cleaning crew for the entire duration of the project whether this Contractor is on-site or not. | **See answer elsewhere in RFI log** |
| 405 | 3/20/2024 | 6A Scope of Work, Drywall, Rough Carpentry, and Acoustical Assemblies, Note #22 indicates for this Contractor to provide Level 5 drywall finish. Does this apply to all drywall surfaces requiring finishing, therefore, superseding the specification requirement in Spec. Sec. 09 29 00? | **See answer elsewhere in RFI log** |
| 406 | 3/20/2024 | 6A Scope of Work and 6B Scope of Work both list section 10 56 13.23 Cantilever Metal Library Shelving. Please clarify which trade package is to furnish and install this specification section | **See answer elsewhere in RFI log** |
| 407 | 3/20/2024 | Please confirm trade package 8B is responsible for mirrors specified in section 08 83 00. | **See answer elsewhere in RFI log** |
| 408 | 3/20/2024 | Which trade package furnishes and installs Stage Curtains section 11 61 43? | **See answer elsewhere in RFI log** |
| 409 | 3/20/2024 | Scope of Work states to install stair nosings furnished by the 5A contractor. It appears that these are also in multiple other trade packages. Please confirm 3A installs imbedded stairnosings and 9B installs resilient stair nosings. Clarify 6A's responsibilities related to stair nosings | **See answer elsewhere in RFI log** |
| 410 | 3/20/2024 | Both 6A Scope of Work and 23A Scope of Work state to furnish and install all louvers. Please clarify which louvers are to be provided by each of these contractors. | **See answer elsewhere in RFI log** |
| 411 | 3/20/2024 | 6A Scope of Work states to furnish and install the Pergolas shown on sheet L502. Please confirm this is in reference to detail G on L502 "Alternate Bid No. 4 – Front Canopy", or otherwise clarify as no 'Pergolas' appear to be shown on sheet L502. | **See answer elsewhere in RFI log** |
| 412 | 3/20/2024 | 6A Scope of Work states to furnish and install Decorative Protection Panels per section 10 26 23.11. These appear to be millwork items. Should this specification section be assigned to the 6B contractor? | **See answer elsewhere in RFI log** |
| 413 | 3/20/2024 | 10 11 00 – Visual Display Units: The specs mention both factory-assembled and field-assembled boards. The basis-of-design is a factory-assembled board. Please confirm factory-assembled boards are required. | Factory fabricated boards are required. Refer to 10 11 00 - 1.3.C. for conditions where field-assembly of factory -fabricated units is required. |
| 414 | 3/20/2024 | 10 11 00 – Visual Display Units: Is aluminum trim required on the "Porcelain Marker Surface" (for example elevation D8/A614)? Paragraph 2.3 does not mention any perimeter trim. | Trim is not required at Porcelain Marker Surfaces provided under 10 11 00-2.3. |
| 415 | 3/20/2024 | 10 28 00 – Toilet, Bath, and Laundry Accessories : Toilet Accessory Schedule grab bar model numbers (items 9-15) for Bobrick and ASI are incorrect. Bobrick should be 6806.99 and 68616.99. ASI should be 3801 and 3874. | Product numbers on drawings will be revised.<br>**04/02/2024: Refer to Addendum 3** |
| 416 | 3/20/2024 | 10 28 00 – Toilet, Bath, and Laundry Accessories: Toilet Accessory Schedule item 22 (utility shelf w/ mop holder) model numbers do not match the spec description. To match the specs the model numbers should be Bobrick B-224x36, ASI 1315-4, and Bradley 9984. | Product numbers on drawings will be revised.<br>**04/02/2024: Refer to Addendum 3** |
| 417 | 3/20/2024 | 10 28 00 – Toilet, Bath, and Laundry Accessories: Toilet Accessory Schedule item 23 (ladder hanger) model numbers have been discontinued. Please provide an alternate manufacturer and model number. | Model numbers are still shown as available.<br>**04/02/2024: Refer to Addendum 3** |
| 418 | 3/20/2024 | 10 28 00 – Toilet, Bath, and Laundry Accessories: Toilet Accessory Schedule item 24 (changing table) model numbers for Bobrick and ASI do not match the spec description as they are plastic and the specs call for stainless steel. To match the specs, Bobrick model should be KB310- SSWM, and ASI model should be 9013-9. | Product numbers on drawings will be revised.<br>**04/02/2024: Refer to Addendum 3** |

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| 419 | 3/20/2024 | 10 28 00 – Toilet, Bath, and Laundry Accessories: Are Toilet Accessory Schedule items 27, 28, and 29 (36x80, 48x48, and 48x80 mirrors) by section 08 83 00? These are too large for most toilet accessory manufacturers. | Provide mirrors of sizes in schedule where identified in drawing documents. Oversize mirrors not available from toilet accessory manufacturers may be from a different source subject to review and approval during submittal process. |
| 420 | 3/20/2024 | 10 00 05 Miscellaneous Specialties: Paragraph 2.6 Art Display Rail calls for 150 cables and 150 hooks. Is this correct? We've seen this same quantity in other specs that require more display rail. | Specified quantity is sufficient. |
| 421 | 3/20/2024 | 10 00 05 Miscellaneous Specialties: Please provide the required lengths for the cables and rods in Paragraph 2.6 Art Display Rail. | **Requested information is provided in revised section 10 00 05 part 2.6.C included in Addendum 5** |
| 422 | 3/20/2024 | Most Maryland counties do not charge for permits for school projects. I believe that Cecil county is an exception to that. Do we know what the costs for permits will be for something this size or could an allowance be put in for this? | **Cecil county will pay for the building and site permits. All other trade permits are to be paid for by the respective trade.** |
| 423 | 3/20/2024 | Please confirm who is responsible for porta pots. | **The CM** |
| 424 | 3/20/2024 | Please confirm who is responsible for dumpsters. | **See revised scopes in ADD#5** |
| 425 | 3/20/2024 | See 31A SOW Item 25, please confirm the need for 2 full time wash rack attendants. | **Yes** |
| 426 | 3/20/2024 | Please provide a site logistics plan for the temporary stone staging area, parking lot, and access road around the building perimeter. | **Temporary stone for staging area, parking area and access roads is described in the 31A scope and can be quantified accordingly. A site logistics plan will be coordinated during construction phase** |
| 427 | 3/20/2024 | Please provide a demolition sheet. | **No. Please compare existing conditions to proposed conditions** |
| 428 | 3/20/2024 | Considering that the building will be demolished in the future and is a part of a separate package, what are the limits of demolition that we should account for at this time? Please provide a visual if possible. | **The limits of scope for the existing HS Building Demolition package (which will be bid later) includes the existing building in its entirety, including foundations, and the existing courtyard.** |
| 429 | 3/20/2024 | See Sheet C-6, please confirm that the dark grey area is the only area of the submerged gravel wetland getting stone and planting material. Are all other areas of the submerged gravel wetland to be assumed topsoil and seeded areas? | Please bid the stormwater features from their specific design sheets. Sheet F-ESD-25 defines the media area required. The rest of the SGW bottom is 4" topsoil, seed, and mulch. |
| 430 | 3/20/2024 | See Sheet F-ESD-18, please confirm that the dark grey area of the bioretention pond is the only area getting stone and planting material. | The media area is the 50' x 10' solid gray hatched area. The rest of the MBR bottom is 4" topsoil, seed, and mulch. |
| 431 | 3/20/2024 | See Sheet F-ESD-8, who is responsible for the 25' temporary gravel construction access road? | HESS to coordinate bid package scoping. |
| 432 | 3/20/2024 | See Sheet F-ESD-20, please confirm the depth of the Type 1 Plunge Pool at the end of the storm drain run. | The bottom of the plunge pool is EL 58, the pool is 1.5' deep. |
| 433 | 3/20/2024 | See Sheet F-ESD-17, please confirm who is responsible for the CL Fence called out for the Rock Gabion Forebay detail. | HESS to coordinate bid package scoping. |
| 434 | 3/20/2024 | See Sheet F-ESD-17, please confirm that the 10' x 8' stone window is #57 Stone. | Confirmed. Stone window sides should be lined with filter fabric |
| 435 | 3/20/2024 | See Sheet F-ESD-17, please confirm if filter fabric is required on the bottom of the submerged gravel wetlands. | Filter fabric is not required for the bottom of SGW-2 |
| 436 | 3/20/2024 | See Sheet F-ESD-18, please confirm if filter fabric is required on the bottom of the micro-bioretention's. | Filter fabric is <u>not permitted</u> on the bottom of any Microbioretention. |
| 437 | 3/20/2024 | See Sheet F-ESD-21, please confirm that the Sediment Basins get impermeable liner. | SB-1 requires an impermeable liner consisting of 12" of clay installed over a geotextile fabric. |
| 438 | 3/20/2024 | See Sheet F-ESD-21, please clarify the note for the sediment basin liner specification on sheet F-ESD-22, are we are to install a 12" Clay liner? | SB-1 requires an impermeable liner consisting of 12" of clay installed over a geotextile fabric. |
| 439 | 3/20/2024 | To provide enough time to review RFI responses and possible updated plans provided with the future addendums, could the bid due date be extended by at least two weeks for this project? | **Bid date has been extended to April 12** |
| 440 | 3/20/2024 | RS-2 through RS-4 regarding the paving for the three entrances is unclear and do not coincide with the site plan paving limits. There is cross hatching shown in some areas on RS-2 through RS-4, but it is not identified what this hatching represents. These plans also cut off some areas, therefore not making it clear where the limits of work is. Please clarify on both the entrance and site plans the total limits of full depth paving and mill and overlay for the three entrance areas. | **Road improvements are not part of this bid. The revised Civil Drawings issued in ADD#5 provide clarification to the delineation of work between on-site work (part of this bid) and off-site work (part of future bid)** |

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| 441 | 3/20/2024 | There are multiple scope packages involved with the work shown on the Entrance Plans (such as earthwork/demo, utilities, paving, etc) and it appears all scopes will need to include maintenance of traffic (flaggers) for their work – but who will be responsible for the initial maintenance of traffic set up and resetting (temporary signs, barrels, etc) for all of the entrance work? | **Road improvements are not part of this bid. The revised Civil Drawings issued in ADD#5 provide clarification to the delineation of work between on-site work (part of this bid) and off-site work (part of future bid)** |
| 442 | 3/20/2024 | In reference to Section 00 31 00 Available Project Information, what is the difference (and reasoning) between Base Bid 1 and Base Bid 2? | **The difference is the project phasing, and temporary construction required to accommodate the phasing approach of Base Bid 1. The reason for bidding the project both ways is to accommodate potential cash flow constraints. The project is funded over multiple fiscal years, and available cash flow to pay for the entire new building construction under Phase 1 (Base Bid 2) may not be feasible.** |
| 443 | 3/20/2024 | In reference to Section 00 11 13 Advertisement of Bid, Page 2 states that the Irishtown Road Improvements Bid Package will be advertised at a later date and should not be included with this current package, but there is no indication on the plans of this. In fact, the Irishtown Road Entrance Plans are included with the Civil Plans. Please clarify if we should include the Irishtown Road Improvements as shown in the plans with this package, or not. | **Road improvements are not part of this bid. The revised Civil Drawings issued in ADD#5 provide clarification to the delineation of work between on-site work (part of this bid) and off-site work (part of future bid)** |
| 444 | 3/20/2024 | In reference to Sheet C-13, the tennis court detail shows 1.5" base paving using 19mm and 1" of surface paving using 9.5mm, which are not realistic. The minimum thickness required using 19mm asphalt is 3" and the minimum thickness using 9.5mm asphalt is 1.5". We suggest this detail be revised to reflect either 1 course of surface asphalt paving directly on top of the stone base at 2.5" using 12.5mm or a base asphalt course of 1.5" using 9.5mm and surface asphalt course of 1.5" using 9.5mm. Please advise. | Please use a base asphalt course of 1.5" using 9.5mm and surface asphalt course of 1.5" using 9.5mm |
| 445 | 3/20/2024 | Will there be any temporary asphalt paving required between phases and which scope would that fall under? | **No temporary asphalt paving, other than at utility patch for water line, is required** |
| 446 | 3/20/2024 | Please provide the limits on the plan sheets of all utility trench patching required in non-pervious areas (existing asphalt pavement, concrete areas, etc). | Please bid the plans as drawn. |
| 447 | 3/20/2024 | What scope is responsible for all work associated with Alternate 4 Front Canopy, including any concrete footers associated with it? | **06A - General Trades** |
| 448 | 3/20/2024 | Since it states that it is excluded from Scope 32A, what scope is responsible for the tennis court color coating and lines? | **The 32A scope has been revised to <u>INCLUDE</u> tennis court color coating, lines and posts/nets per plan and details on Drawing C-13. See revised 32A scope issued in ADD#5** |
| 449 | 3/20/2024 | What scope is responsible for furnishing and installing all handrails? | **05A Steel Contractor** |
| 450 | 3/20/2024 | What scope is responsible for the flag pole footings (it is mentioned in both Scope 32A and Scope 32B). | **Flagpoles, including footings, are by the 32A Contractor. See scope revisions issued in ADD#5** |
| 451 | 3/20/2024 | What scope is responsible for furnishing and installing the flag pole (it is mentioned in both Scope 32A and Scope 32B). | **32A Contractor. See ADD#5 revised work scopes** |
| 452 | 3/20/2024 | What scope is responsible for the basketball goal footings? | **There are no exterior basketball goals on the project. See scope clarifications issued in ADD#3/ADD#5** |
| 453 | 3/20/2024 | What scope is responsible for furnishing and installing the basketball goals? | **There are no exterior basketball goals on the project. See scope clarifications issued in ADD#3/ADD#5** |
| 454 | 3/20/2024 | What scope is responsible for the tennis court post footings? | **32A Contractor. See ADD#5 revised work scopes** |
| 455 | 3/20/2024 | What scope is responsible for furnishing and installing the tennis court posts and nets? | **32A Contractor. See ADD#5 revised work scopes** |
| 456 | 3/20/2024 | Is the 32A Scope responsible for any of the retaining walls? | **31A is responsible for modular retaining wall systems** |
| 457 | 3/20/2024 | What scope is responsible for the seat wall? | **Concrete seat walls are by the 03A Contractor. See revised scope in ADD#3** |
| 458 | 3/20/2024 | What scope is responsible for the amphitheater steps and seating? | **03A-Concrete. See revised scopes issued in ADD#3** |

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| 459 | 3/20/2024 | Do the site stairs require the same nosings as the interior stairs? | Site stair nosings and product information are reflected on detail sheet L520. They are shown as a separate product selection as compared to the architectural stair nosings. |
| 460 | 3/20/2024 | What trade package is responsible for picking up the roof ladders on A105? | **05A Steel Contractor** |
| 461 | 3/20/2024 | Could you provide the section for the asphalt sidewalk? | Use light duty pavement section, as noted in detail for asphalt sidewalks. |
| 462 | 3/20/2024 | [P601, P303A] - a.P303A (3) shows x2-P3B and x1-P3C in room A010, but P601 shows x2-P3C and x1-P3B | **Addressed in Addendum 5** |
| 463 | 3/20/2024 | Would you consider extending the RFI deadline now that the bid date has been moved? | **No.** |
| 464 | 3/20/2024 | Line item 1 states all weather barriers All notes regarding typical parapets reference 04A contract for air Barrier as does 04A SOW | **See work scope clarifications issued with ADD#5** |
| 465 | 3/20/2024 | Line Item 26 Contractor shall furnish and install all structural thermal break material system as shown on contract documents. All notes regarding typical parapets and thermal Z furring list this as 07B contractors work | **07B Contractor provides 07 48 13 Thermal Break Cladding Support Systems** |
| 466 | 3/20/2024 | Line Item 22 Contractor to provide a level 5 finish Specs state level 5 required at public gathering areas with walls greater than 25 in length all other exposed areas to view are level 4 | **Provide Level finishes as indicated in 09 29 00.-3.7** |
| 467 | 3/20/2024 | HS Café B001 Finish Schedule Calls for APC-3 / APC-4 / APC-5 /GYP but the RCP does not have APC-3 (2x4 Tile), Only has 2x2 APC-4 | **Finish Schedule has been revised. Refer to Finish Schedule for Ceiling types. See Addendum 5.** |
| 468 | 3/20/2024 | Corridor B02 Finish Schedule Calls for APC-2 which is 2x2 Tile but the RCP shows 2x4 Tile | **Finish Schedule has been revised. Refer to Finish Schedule for Ceiling types. See Addendum 5.** |
| 469 | 3/20/2024 | MS Aux Storage B010 Finish Schedule Calls for APC-1 but the RCP Shows EXPOSED.4.These are few examples, please confirm which to follow, Finish Schedule or RCP? | **Finish Schedule has been revised. Refer to Finish Schedule for Ceiling types. See Addendum 5.** |
| 470 | 3/20/2024 | What product is to be used for 2x2 acoustical wall panels in the auditorium? | These are fabric wrapped panels. |
| 471 | 3/20/2024 | What product is to be used for 4x4/ 4x8 acoustical wall panels shown in auditorium? | These are painted panels to match the wall color. |
| 472 | 3/20/2024 | Should we be picking up the AWP 1, 2, & 3 or just AP 1-6? | All to be included. Reference Material Schedule and written specifications for product details and spec codes. |
| 473 | 3/20/2024 | Please confirm the product used for APC 5 & 6 are the same product? | Yes |

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| 474 | 3/20/2024 | On page A701E the band/ vocal/ orchestra rooms, is there a spec for the grid and what the 5/8 gyp tile is supposed to be? For AP-2 the left and right parallelograms are not scaling to standard sizes please confirm we can use the 12"x24" shown in the attached.2.For AP-2 it is requiring an 85 NRC but the drawing is showing gaps in between some of the panels so that NRC would not be achievable.a.-if the gaps are supposed to be there then we would not achieve nrc and would attach directly to the block b.if the NRC is required then the gaps would need to be filled and a new drawing would be required to show how they would be filled | AP-2 are wall panels, standard product from Armstrong, shapes are shown on elevations, provided as standard options from their Tectum DesignArt line. Any NRC listed is the rating of the panels themselves, per product cutsheet, not the arrangement on the wall. Page A701E are reflected ceiling plans. Ceiling tile and grid specs are on the Materials Schedule. The RCP Legend has two hatches - one for GWB ceilings and one for omitted ceiling tiles - area E only. The omitted tile hatch applies to the Band/Vocal/ Orchestra rooms. |
| 475 | 3/20/2024 | Drawing no.- 96-A432 ROOF DETAILS - D18- TYP LOW ROOF FLASHING @ STUDS W/MTL.PANEL W/ROOF EJ<br>Does that mean two layers of 5/8" ext. frt plywood sheathing or single layer? | The intent of details A14/A432, A18/A432 & D18/A432 are to have a single layer of 5/8" Ext. FRT Plywood Sheathing. |
| 476 | 3/20/2024 | Sheet A301, Exterior Wall Types, indicates that Wall Types 1.1 through 6.3 are constructed with 2-1/2" Rigid Insulation. Description and hatching consistent with other drawings in the set. | **See work scope clarifications issued with ADD#5** |
| 477 | 3/20/2024 | Sheet A431, Roof Details, is consistent with the Wall Types on Sheet A301. | **See work scope clarifications issued with ADD#5** |
| 478 | 3/20/2024 | Sheet A432, Roof Details, Mineral Wool insulation indicated by description and hatching throughout the details. | **See work scope clarifications issued with ADD#5** |
| 479 | 3/20/2024 | Package 04A-Masonry - Page 3, Item 28. " furnish and install all exterior rigid and mineral wool insulation on masonry back-up walls, including but limited to behind, brick, precast, cast stone, and finish block areas.". Mineral wool is not shown on the Wall Types Schedule, A301 | **See work scope clarifications issued with ADD#5** |
| 480 | 3/20/2024 | Page 4, Item 2. Assign both mineral wool and rigid insulation behind metal panel,, albeit on CMU back-up, to the 4A Package. The supply and install of this insulation, regardless of which type is correct, is best assigned to the contractor installing the finish material as it will integrate with both the support system and flashing for which that bid package is responsible. | **See work scope clarifications issued with ADD#5** |
| 481 | 3/20/2024 | Page 4, Item 3. @ CMU & Stud Back-up; Assigns Foamed-in-place insulation to 4A. No where on the bid drawings is foamed-in - place insulation indicated. The details referenced indicate rigid insulation behind masonry veneer. The assignment of the rigid insulation to 4A is the expected industry practice. | **See work scope clarifications issued with ADD#5** |
| 482 | 3/20/2024 | Page 4, Item 4. Metal Panels @ CMU & Stud Back-up; Assigns "insulation" to 4A. Sheet A432 shows Metal Panels on both stud and CMU back-up systems and indicates both mineral wool and rigid insulation. The supply and install of this insulation, regardless of which type is correct, is best assigned to the contractor installing the finish material as it will integrate with both the support system and flashing for which that bid package is responsible | **See work scope clarifications issued with ADD#5** |
| 483 | 3/20/2024 | Page 5, Item 5. Again the reference to Foamed-in-place insulation. The mineral wool cavity insulation behind the metal panels is not assigned to any trade. | **See work scope clarifications issued with ADD#5** |
| 484 | 3/20/2024 | Substitution request - Folding Panel Partitions Section 102239 Kwikwall is Made In America, quality product, and an equal to Modernfold Kwikwall should be considered an equal . The product quality is equal or better. | A substitution request in format described in contract documents was required for consideration. |

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| 485 | 3/20/2024 | Substitution request - Fixed Audience Seating SECTION 12 61 00 First Class Seating Product should be considered an equal to Hussey Better lead times and equal quality,<br>Would be good to have this as an approved option | A substitution request in format described in contract documents was required for consideration. |
| 486 | 3/20/2024 | Please advise who is responsible for furnishing and pumping in the glycol associated with the geothermal system. Will the 23A be responsible for the piping they install, and 23B be responsible for their installed piping? | **Correct, the 23A and 23B Contractors shall flush and fill its own piping system.** |
| 487 | 3/20/2024 | Could you provide a section for the asphalt sidewalk? | Use light duty pavement section, as noted in detail for asphalt sidewalks. |
| 488 | 3/20/2024 | Which bid package is responsible for constructing the dumpster enclosure CMU walls? Brick fascia? Wooden gates? | **CMU and Brick is by 04A. Wood Gates are by 32B** |
| 489 | 3/20/2024 | Shear Walls SWA-E and SWA-F, indicated at Stair 6, are not identified in Shear Wall Schedules on sheets S203 and S204. Please identify. Sheet S100E: along column line K' between column lines 1' and 5', several steps in the footing are indicated by break lines, however, no TOF heights are provided. Please provide. Detail M/S301, regarding rebar dowels; detail indicates "at Contractor option, bar can be grouted into slab ....." Please confirm, that for bidding purposes, we can assume that all rebar dowels projecting from the concrete will be provided and cast in by the 3A Package and not drilled and epoxied in the field by 4A. | Shear wall plan will be updated in addendum. Missing footing elevations will be provided in addendum**.**<br>**04/02/2024: Refer to Addendum 3 for revised drawings.** ***Confirmed that rebar dowels projecting from concrete will be provided and cast in by the 03A package.*** *ADD#5* |
| 490 | 3/1/2024 | Per drawing E601, HS-MSB is identified as 4000A on the riser diagram, but 3000A in the schedule (drawing E708). Please clarify. | Refer to Addendum #1 |
| 491 | 3/1/2024 | Is Siemens an acceptable alternative fire alarm system manufacturer? | Refer to Addendum #1 |
| 492 | 3/1/2024 | Is Automated Logic's Webctrl an acceptable manufacturer substitution for specifications 230900 | Johnson Controls - Sole Source |
| 493 | 3/14/2024 | Scheduled equipment items E2, E4 & E12 are discontinued. Please provide new model numbers. | Additional acceptable models are as follows; E2 - GE JB480STSS, E4 - UniMac UWT085V4, E5 - UniMac UT075EVN, E12 - Summit Appliances CR4B30T11B. Documents will be updated via addendum.<br>**04/02/2024: Refer to Addendum 3** |
| 494 | 3/14/2024 | Scheduled equipment items E2, E4 & E12 are discontinued. Please provide new model numbers. | Refer to response to response to RFI 493. |
| 495 | 3/14/2024 | 123553, Rift Cut White Oak is a rare request for Wood Lab Casework, which adds considerable cost to the project with no advantages. Industry standard would be Plain Sliced Red Oak. Advise if Plain Sliced Red Oak is acceptable. This would bring down the cost of the wood lab casework considerably. | Provide casework as indicated in contract documents. |
| 496 | 3/14/2024 | Is the greenhouse to be bid by itself as its own project or is it part of packaged deal. Needing to know if we bid to general contractors. | **The greenhouse (Alternate 2) is part of the 06A package** |
| 497 | 3/14/2024 | Sheet C-4 does not clearly show what is new striping, new wheel stops, and what is existing to remain. Please clarify the limits on the plans of what is the proposed striping and wheel stops and what is existing to remain. | Existing features are gray and proposed features are black. New wheel stops are proposed for all spaces facing the new ball field. All existing parking striping will need to be re-striped. |
| 498 | 3/14/2024 | Sheet C-4: Do any existing parking spaces, get repainted? If so, please clarify these limits on the plan | All existing parking striping will need to be re-striped. |
| 499 | 3/14/2024 | Sheet C-4: Does existing paving remain and striping stay as is, or will these areas get milled, resurfaced, and new striping? | All existing parking striping will need to be re-striped. |
| 500 | 3/14/2024 | Regarding striping, the notes and specs call for painted arrows, but the detail on C10 states inlaid tape (arrows are typically painted on parking lots and the existing arrows there are also painted). Please advise what material to use for the arrows. | Please Paint arrows. |

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| 501 | 3/14/2024 | Could you please provide an overall site plan showing and clarifying the limits of the Base Bid 1 and Base Bid 2 areas and their related phases? | **The F-ESD Drawings indicate phasing limits of Phases 1, 2 and 3 for Base Bid 1. For Base Bid 2, the phasing limits for Phase 1 is a combination of Base Bid 1 phases 1 & 2. Base Bid 1 Phase 3 is the same as Base Bid 2 Phase 2** |
| 502 | 3/14/2024 | Regarding sheets RS-5 and RS-6: Is OFFSITE striping going to be all extruded thermoplastic? Please advise. | **Road improvements are not part of this bid. The revised Civil Drawings issued in ADD#5 provide clarification to the delineation of work between on-site work (part of this bid) and off-site work (part of future bid)** |
| 503 | 3/14/2024 | Regarding Package 32A: Page 1 of 5, #4 under asphalt scope; "proper elevations" to +/- what grade? Will the subgrade be provided to the asphalt contractor? | **The 31A Contractor will provide compacted earth subgrade (i.e. bottom of graded aggregate base course) to within +/- 1/10 subgrade elevation. The 32A Contractor provides the Graded Aggregate Base Course and the asphalt per plans and specifications** |
| 504 | 3/14/2024 | Regarding Package 32A: Page 2 of 5, #6 under asphalt scope; please confirm what the prevailing AC index will be. Page 2 of 5 indicates both November 2023 $620.00 and September of 2024 which will not be published at the time of bid. | **See revised 32A scope issued in ADD#3** |
| 505 | 3/14/2024 | Regarding Package 32A: Page 2 of 5, #4 under site concrete scope; please clarify that the contractor is to include repairing 5% of sidewalk, curb, and asphalt in their lump sum price, and anything beyond that would be tracked by ticket or | **Yes, the 5% repair/replace allowance of curb&gutter, sidewalks, and asphalt pavement is to be included in base bid. All repairs will need to be tracked on a daily work ticket for verification by CM.** |
| 506 | 3/14/2024 | Regarding Package 32A: Page 2 of 5, #4 under site concrete scope; please clarify that a deduct change order will be calculated using the unit prices shown on the Bid Form for the unused amount of the 5% of sidewalk, curb, and asphalt to be included in the lump sum price? | **Yes, unless otherwise agreed upon.** |
| 507 | 3/14/2024 | Regarding Package 32A: Page 3 of 5, #5 under site concrete scope; shouldn't this be under the asphalt scope? Does #4 under site concrete scope regarding repairing 5% of the work apply to the base asphalt repairs this scope item references to as well? Please clarify how the asphalt contractor should quantify possible base asphalt repairs in the lump sum bid. | **Yes, Site Concrete #5 is intended to apply to the asphalt specific scope within the same bid package (32A). Yes, 5% of the asphalt paving replacement should be assumed in the base bid. This should include 5% of the base asphalt, and 5% of the surface asphalt.** |
| 508 | 3/14/2024 | Regarding Package 32A: Page 3 of 5, #7 under site concrete scope; shouldn't this be under the asphalt scope? This item states that this scope package should include sawcutting and removing the asphalt for the underground utilities – does this mean this scope will need to do this prior to the utility contractor installs their work, or after? Typically, the utility contractor removes the asphalt, installs their work, backfills the trench, and places a temporary patch – then the asphalt contractor comes in, removes the temporary patch (provides sawcutting for cut backs if the detail calls for it), and installs the permanent patch. Please advise what the responsibility of the utility contractor and asphalt contractor is for utility trench patches. | **31A Contractor will sawcut and remove existing asphalt for utility installation and backfill, and provides a temporary patch. 32A Contractor will remove the temporary patch and install the permanent patch.** |
| 509 | 3/14/2024 | Regarding Package 32A: Page 3 of 5, #10 under site concrete scope; please clarify what the "other scope of work" is. | **The 03A-Concrete scope of work.** |
| 510 | 3/14/2024 | Regarding Package 32A: Page 5 of 5, #6 under road and parking scope; would temporary striping be per the final striping plan? How can a contractor account for this without knowing what will need to be striped? | **Scope item has been revised per ADD#5 to include temporary striping of 60 regular parking spaces and 2 HC parking spaces.** |
| 511 | 3/14/2024 | Regarding Package 32A: Page 5 of 5, #10 under road and parking scope; Is there a detail for the address sign? | **Item has been removed from the 32A scope per ADD#5** |
| 512 | 3/14/2024 | Regarding Package 32A: Page 5 of 5, #1 under special considerations; this should not be the burden of the asphalt contractor. The earthwork contractor should be required to meet compaction requirements of the subgrade. | **Item has been removed from 32A scope. 31A Contractor shall prepare the earth subgrade. 32A Contractor is responsible for providing the compacted graded aggregate base** |
| 513 | 3/14/2024 | Regarding Package 32A: Page 4 of 5, #13 under concrete scope, this item should not apply to this package. Please clarify. | **Scope item remains, as it may apply in some conditions (ex. Bike Rack)** |

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| 514 | 3/14/2024 | Regarding Package 32A: Do we need to include third party testing with this scope package? | **No, unless testing is a result of negligence, poor workmanship, or failure of work to meet the requirement of the documents (non-compliant work corrective actions)** |
| 515 | 3/14/2024 | Regarding Package 32A: Do we need to include utility structure adjustments in pavement/concrete areas with this scope package or should that be included with the Scope 31A Sitework scope package? | **31A Contractor shall adjust all structure tops within paved areas.** |
| 516 | 3/14/2024 | Regarding Package 32A: Will there be any temporary asphalt walks, lots, etc required between phases? If so, please indicate the limits, sections, and which phase it will be required in on the plans. | Not planned at this time. |
| 517 | 3/14/2024 | Will there be any special safety training, orientations, drug testing, badging, fingerprinting, background checks (including fees) that will be required for this project? | **Each contractor shall provide background checks for their own workers** |
| 518 | 3/14/2024 | Will there be any project manager or invoicing software required for the project that we need to consider costs for? | **Yes, all contractors are to use the CM's software (Autodesk). There are no costs associated with using this platform.** |
| 519 | 3/14/2024 | Which package is responsible for the Construction Manager's office trailer? | **The CM will provide it's own office trailer** |
| 520 | 3/14/2024 | Which package is responsible for providing and covering the expenses for the on-site port-o-pots? | **The CM will provide on-site porta-johns for contractor use.** |
| 521 | 3/14/2024 | On drawing M703 and detail 29 shows a duct detector and test switch for the smoke damper. I wanted to know who is responsible for providing the duct detector and test switch? Would this be the mechanical contractor or fire alarm contractor? | The Mechanical Contractor is responsible for materials indicated on the Mechanical contract documents and specifications. |
| 522 | 3/14/2024 | On drawing E303F, should there be a pull station by Stair 10? | Yes, pull station has been added. Thank you. |
| 523 | 3/14/2024 | On drawing E101A, rooms A138 has both an F and a C2 fixture shown. Should these both be type F fixtures? Room A135 has both F2 and C2 fixtures shown. Should these all be type F2 fixtures? Should room A179 have a ceiling mounted vacancy sensor? | A138 and A135 questions answered in with RFI-93 and 94 responses. A138 has (2) 'F' fixtures and A135 has (4) 'F2' fixtures. Yes, ceiling mounted vacancy sensor added to A179. |
| 524 | 3/14/2024 | On drawing E101C, please confirm that the (3) fixtures on the stair 3 landing should be type F and not type F2 like the other stair landings have. Stair 2 and 3 have (2) type W8 fixtures each. Please confirm that Stair 1 only gets (1) type W8 fixture. | E101C - Stair 3 - three type 'FH' and two type 'W8'. Stair 1 - only one type 'W8' due to windows. |
| 525 | 3/14/2024 | On drawing E102C: Stair 2 and 3 have (2) type W8 fixtures each. Please confirm that Stair 1 only gets (1) type W8 fixture. Should room C202 have a ceiling mounted vacancy sensor? | Stair 2 and 3 - Confirmed, (2) Type 'W8'. Stair 1 - Confirmed, (1) Type 'W8'. Room C202 - Yes, please provide (1) ceiling mounted, low voltage, dual tech vacancy sensor. |
| 526 | 3/14/2024 | On drawing E102D Auditorium Catwalk Lighting detail, there is a unidentified dot that looks like it could be a type AHS fixture similar to the one on the Level 2 plan below it. Please confirm if there is a fixture that goes there. | Confirmed - This is a light fixture, Type 'AHS' connected to circuit E1LPF-9. |
| 527 | 3/14/2024 | On drawing E102G: most of the rooms with the type U10 fixtures have a dimmer switch shown to control them. There is no dimmer switch shown in rooms G204, G206, and G215. Please clarify if these get dimmer switches. | G204, G206 and G215 - Yes, please add the localized dimmer switch for control of under cabinet lighting system. |
| 528 | 3/14/2024 | On drawing E103G, please confirm if room G304 gets (2) wall vacancy switches like the other similar rooms have or if it only gets the (1) shown | G304 - Please add additional Wall Sensor Dimmer Switch Combination at entry from HS Science G306. |
| 529 | 3/14/2024 | On drawing E100A, please confirm if room A016A gets a wall vacancy switch like the other similar rooms. | A016A - Please provide Wall Sensor Switch Combination. |
| 530 | 3/13/2024 | In 09 84 00 Sound Absorbing Wall Panels 2.3: Please verify that AWP1 and AWP2 are Kinetics. And that AWP3 is 9 Wood. | Confirmed. |
| 531 | 3/13/2024 | Spec section 10 56 13.13 Cantilever Metal Library Shelving is listed fully in both 6a and 6b packages. Please confirm that 6A only provides blocking. | **The 06B Contractor provides the cantilever metal library shelving. The 06A Contractor will provide in-wall blocking as required.** |
| 532 | 3/13/2024 | Final Cleaning is not in 6A SOW. Is this correct? | **The 06A-General Trades scope of work has been revised to include final cleaning** |

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| 533 | 3/13/2024 | There is no wage rate given for dry wall finisher. Please advise or provide. | Refer to attached MD Dept. of Labor letter dated 3/27/24 for wage rates indicated for Glazier, Ironworker-Structural, Painter, and Roofer/Waterproofer. |
| 534 | 3/6/2024 | Plumbing Drawings [P001A, P001B, P003] show Underslab Drainage, but it is not noted in Work Scope Category 23A | **Under slab drainage is part of the 23A package. See scope clarifications issued in ADD#3** |
| 535 | 3/6/2024 | Plumbing Drawing [P704] Details (45-49) show Underslab Drain Details, c.Which division is responsible for this piping? | **23A Package** |
| 536 | 3/6/2024 | Specifications 22.14.13-4 (D.) a.Please confirm you would like aboveground Storm Drainage Force Mains to be L Copper with solder joints. b.Is PVC schedule 40 acceptable? | Provided forced main piping materials as specified. |
| 537 | 3/6/2024 | Specifications 22.14.13-4 (E.) a.Please confirm you would like exposed Exterior Condensate Drain (on the roof) to be DWV Copper with solder joints. b.Is PVC schedule 40 or DWV acceptable? | Provide condensate drain piping materials as specified. |
| 538 | 3/6/2024 | Drawing P901 Note (6) Kitchen Equipment Plumbing Schedule, please confirm/clarify condensate drain lines from blower coils by Kitchen Contractor, not Plumbing. This note does not appear on [K103]. | Confirmed, drain lines from blower coil are by the Kitchen Equipment Contractor (KEC). See note 5 on sheet K103. |
| 539 | 3/6/2024 | Drawing K103 DTV-15 Drain Tempering Kit as shown will require cold water supply. Please provide preferred piping location and connection size | 1/2" cold water connection, 10" high AFF to be located in the vicinity of the dish machine. |
| 540 | 3/19/2024 | [P401, P606, P614] P614 shows x1 more P2/Urinal than is shown on P401; P614 shows x1 more P1/Toilet than is shown on P401; P401 shows x1 more P1/Toilet than is shown on P606; d.P401 shows FD-A not shown on P614. | **Addressed in Addendum 5** |

April 02, 2024

**PROJECT NAME North East Middle & High School**
**PSC # 07.044.23 / BTL**
**CCPS RFP#24-15**
**ADDENDUM NO. #5**
**PROJECT# GP22105.00**

TO THE CONTRACT DRAWINGS AND SPECIFICATIONS FOR THE REFERENCED PROJECT, DATED 12/22/2023, AS PREPARED BY GRIMM & PARKER ARCHITECTS, 11720 BELTSVILLE DRIVE, SUITE 600, CALVERTON, MARYLAND 20705.

This Addendum includes changes and clarifications to the Contract Documents. The information includes the following:

**SPECIFICATION ITEMS:**

*ITEM NO. 1* SECTION 00 90 00 "PRIME BID PACKAGE SCOPES

***REVISE*** Revise work scope of the following bid packages as per the attached revised specification section 00 90 00:
00-GENERAL SCOPE, 03A-CONCRETE, 04A-MASONRY, 05A-STEEL, 06A-GENERAL TRADES, 06B-MILLWORK & CASEWORK, 07A-ROOFING, 07B-METAL PANELS, 23A-MECHANICAL, 26A-ELECTRICAL, 31A-SITEWORK, 32A-ASPHALT & SITE CONCRETE, 32B-LANDSCAPING

*ITEM NO. 2* SECTION 07 54 23 - THERMOPLASTIC-POLYOLEFIN (TPO) ROOFING

***CHANGE*** Paragraph 2.2.A.c to read:

c. GAF.
   1) EverGuard 80 mil TPO on glass mat faced gypsum panel cover board, with EverGuard Extreme accessories and flashing systems; or,
   2) EverGuard TPO 80-mil Fleece-Back on high-density polyisocyanurate cover board, with EverGuard Extreme accessories and flashing systems; as selected by installer.

*ITEM NO. 3* SECTION 10 00 05 - MISCELLANEOUS SPECIALTIES

***CHANGE*** Paragraph 2.6.C to read:

C. Accessories:

1. Cable:
   a. Stainless Steel with P-end.
   b. Length: 48 inches.
   c. Quantity: 150.
2. Hooks:
   a. P-End Rod.
      1) Length: 12 inches.
      2) Quantity: 150.

ITEM NO. 4 <u>SECTION 12 35 50 - EDUCATIONAL CASEWORK</u>

**CHANGE** Paragraph 2.2.K.7 to read:

7. Locks: Cylinder type, diecast, with 5 disc tumbler mechanism. Each lock to be provided with a milled brass key keyed alike each room and master keyed per school. Provide locks on all cabinet doors and drawers unless otherwise noted in the drawings.

   a. Basis-of-Design: Natrional Lock, No. 68-054; satin chrome.

ITEM NO. 5 <u>SECTION 261323 – MEDIUM-VOLTAGE UNDERGROUND DISTRIBUTION SWITCHGEAR</u>

**REPLACE** Entire Section.

ITEM NO. 5<u>SECTION 263213.16 – EMERGENCY ENGINE GENERATORS</u>

**REVISE** Paragraph 2.4(B) - Basis of design Model # and alternator.
**REVISE** Paragraph 2.6(A)(2) – Fuel Tank to be 24hrs tank in lieu of 48hrs.

**<u>DRAWING ITEMS:</u>**

**CIVIL**

ITEM NO. C1 <u>SHEET O-1 OVERALL CIVIL CONSTRUCTION COVER SHEET</u>
Revise sheet O-1 per attached reissued sheet:
**REVISE** REVISED LIST OF DRAWINGS TO REMOVE RS-SERIES.

ITEM NO. C2 <u>SHEET C-1 COVER SHEET</u>
Revise sheet C-1 per attached reissued sheet:
**REVISE** REVISED FLOOD CERTIFCATION

ITEM NO. C3 <u>SHEET C-4 MAJOR SITE PLAN (WEST)</u>
Revise sheet C-4 per attached reissued sheet:
**REVISE** REVISED SIDEWALK WIDTH TO 10’

ITEM NO. C4 SHEET C-5 MAJOR SITE PLAN (CENTER)
Revise sheet C-5 per attached reissued sheet:
**REVISE** REVISED TREELINE

ITEM NO. C5 SHEET C-6 MAJOR SITE PLAN (EAST)

Revise sheet C-6 per attached reissued sheet:
**REVISE** REVISED TREELINE.

ITEM NO. C6 SHEET C-7 GRADING PLAN (WEST)
Revise sheet C-7 per attached reissued sheet:
**REVISE** SIDEWALK WIDTH INCREASED TO 10'. REVISED GRADING.

ITEM NO. C7 SHEET C-B GRADING PLAN (CENTER)
Revise sheet C-8 per attached reissued sheet:
**REVISE** REVISED GRADING AT IB-1.

ITEM NO. C8 SHEET C-9 GRADING PLAN (EAST)
Revise sheet C-9 per attached reissued sheet:
**REVISE** REVISED TREELINE AT WETLANDS.
**ADD** ADDED FENCING AROUND SGW-1.

ITEM NO. C9 SHEET C-10 – SITE DETAILS
Revise sheet C-10 per attached reissued sheet:
**REVISE** REVISED ARROW DETAILS NOTES. PAVEMENT MARKINGS SHALL BE PAINTED AND ALL EXISTING PAVING STRIPING SHALL BE RE-STRIPED

ITEM NO. C10 SHEET C-13 – TENNIS COURT PLAN AND DETAILS
Revise sheet C-13 per attached reissued sheet:
**REVISE** REVISED BOTH THE BASE COURSE AND SURFACE COURSE TO BE 1.5" OF 9.5MM

ITEM NO. C11 SHEET C-15 RETAINING WALL PLAN AND PROFILES
Revise sheet C-15 per attached reissued sheet:
**ADD** ADDED FENCING AROUND SGW-1.

ITEM NO. C12 SHEET C-16 RETAINING WALL PLAN AND PROFILES
Revise sheet C-16 per attached reissued sheet:
**ADD** ADDED FENCING AROUND SGW-1.

ITEM NO. C13 SHEET C-18 RETAINING WALL PLAN AND PROFILES
Revise sheet C-18 per attached reissued sheet:
**REVISE** REVISED TREELINE

ITEM NO. C14 SHEET C-19 SUPPLEMENTAL PLAN VIEWS
Revise sheet C-19 per attached reissued sheet:
**ADD** ADDED FENCING AROUND SGW-1.

ITEM NO. C15 SHEET C-20 SUPPLEMENTAL PLAN VIEWS
Revise sheet C-20 per attached reissued sheet:
**REVISE** REVISED GRADING AT IB-1.

ITEM NO. C16 SHEET C-21 SUPPLEMENTAL PLAN VIEWS
Revise sheet C-21 per attached reissued sheet:
**REVISE** REVISED GRADING AT IB-1.

ITEM NO. C17 SHEET C-23 –SUPPLEMENTAL PLAN VIEWS
Revise sheet C-22 per attached reissued sheet:
**ADD** ADDED LABELS FOR CATCH BASINS I-107 & I-108 AND PIPES P-132 & P-133.
**ADD** ADDED INVERT ELEVATIONS FOR P-132 & P-133 (P-132 slope changed)
**REVISE** ROOF DRAIN TO I-107

ITEM NO. C18 SHEET C-24 SUPPLEMENTAL PLAN VIEWS
Revise sheet C-24 per attached reissued sheet:
**ADD** ADDED SLOPE INFORMATION AT PAVED AREAS.
**ADD** ADDED SPOT ELEVATIONS.

ITEM NO. C19 SHEET C-25 SIGNAGE PLAN (WEST)
Revise sheet C-25 per attached reissued sheet:
**REVISE** SIDEWALK WIDTH INCREASED TO 10’. REVISED GRADING.

ITEM NO. C20 SHEET C-26 SIGNAGE PLAN (EAST)
Revise sheet C-26 per attached reissued sheet:
**REVISE** REVISED TREELINE

ITEM NO. C21 SHEET CS-27 - ENTRANCE IMPROVEMENTS PLAN – BiD DELINIATION - IRISHTOWN ROAD
Add sheet CS-27:
**ADD** ADD SHEET IN ITS ENTIRETY.

ITEM NO. C22 SHEET RS-1 - OVERALL COUNTY ENTRANCE IMPROVEMENTS PLAN - IRISHTOWN ROAD
Delete sheet RS-1:
**DELETE** DELETE SHEET IN ITS ENTIRETY. Work will be under a future bid.

ITEM NO. C23 SHEET RS-2 - MAIN ENTRANCE IMPROVEMENTS PLAN - IRISHTOWN ROAD
Delete sheet RS-2:
**DELETE** DELETE SHEET IN ITS ENTIRETY. Work will be under a future bid.

ITEM NO. C24 SHEET RS-3 - STUDENT ENTRANCE IMPROVEMENTS PLAN - IRISHTOWN ROAD ROAD
Delete sheet RS-3:
**DELETE** DELETE SHEET IN ITS ENTIRETY. Work will be under a future bid.

ITEM NO. C25 SHEET RS-4 - BUS LOOP ENTRANCE IMPROVEMENTS PLAN - IRISHTOWN ROAD
Delete sheet RS-4:
**DELETE** DELETE SHEET IN ITS ENTIRETY. Work will be under a future bid.

ITEM NO. C26 SHEET RS- RS-5 - SIGNAGE AND STRIPING PLAN
Delete sheet RS-5:
**DELETE** DELETE SHEET IN ITS ENTIRETY. Work will be under a future bid.

ITEM NO. C27 SHEET RS-6 - SIGNAGE AND STRIPING PLAN
Delete sheet RS-6:
**DELETE** DELETE SHEET IN ITS ENTIRETY. Work will be under a future bid.

ITEM NO. C28 SHEET RS-7 - ENTRANCE DETAILS
Delete sheet RS-7:
**DELETE** DELETE SHEET IN ITS ENTIRETY. Work will be under a future bid.

ITEM NO. C29 SHEET RS-8 - MAINTENANCE OF TRAFFIC PLAN AND DETAILS
Delete sheet RS-8:
**DELETE** DELETE SHEET IN ITS ENTIRETY. Work will be under a future bid.

ITEM NO. C30 SHEET F-ESD-1 COVER SHEET AND GENERAL NOTES
Revise sheet F-ESD-1 per attached reissued sheet:
**REVISE** REVISED CERTIFICATION BLOCKS AND ESD PROVIDED.

ITEM NO. C31 SHEET F-ESD-2 PHASED SEQUENCES OF CONSTRUCTION
Revise sheet F-ESD-2 per attached reissued sheet:
**REVISE** UPDATED P3 SEQUENCE, P2 LOD.
REVISE WHERE SOIL STABLISATION IS NOTED AS “6” REVSIE TO READ “MINIMUM 6”

ITEM NO. C32 SHEET F-ESD-3 EXISTING CONDITIONS PLAN PH. 1 (WEST)
Revise sheet F-ESD-3 per attached reissued sheet:
**REVISE** PROVIDED GRADING FOR TEMPORARY SWALE SB-1 EMBANKMENT.
**REVISE** LOCATION OF SPILLWAY.

ITEM NO. C33 SHEET F-ESD-4 EXISTING CONDITIONS PLAN PH. 1 (EAST)
Revise sheet F-ESD-4 per attached reissued sheet:
**REVISE** PROVIDED GRADING FOR TEMPORARY DYKES/SWALES, SB-1
**REVISE** LOCATION OF SPILLWAY.

ITEM NO. C34 SHEET F-ESD-5 – PROPOSED CONDITIONS PLAN PH. 1 (WEST)
Revise sheet F-ESD-5 per attached reissued sheet:
**REVISE** REVISED P-103 LABEL TO MATCH PROFILE (8” SCH. 40 STEEL PIPE)
**REVISE** REVISED NOTE ON EX. SGW’. CHANGE TO READ ”TO REMAIN UNTIL BUILDING DEMO”.

ITEM NO. C35 SHEET F-ESD-6 PROPOSED CONDITIONS PLAN PH. 1 (CENTER)

Revise sheet F-ESD-6 per attached reissued sheet:

**REVISE** GRADING AT SB-1 EMBANKMENT
**REVISE** RELOCATED SPILLWAY**.**
**REVISE** REVISE PROPOSED TREELINE

ITEM NO. C36 <u>SHEET F-ESD-7 PROPOSED CONDITIONS PLAN PH. 1 (EAST)</u>
Revise sheet F-ESD-7 per attached reissued sheet:

**ADD** ADDED FENCING AROUND SGW-1.
**REVISE** REVISE PROPOSED TREELINE

ITEM NO. C37 <u>SHEET F-ESD-8 INTERMEDIATE CONDITIONS PLAN PH. 2 (CENTER)</u>
Revise sheet F-ESD-8 per attached reissued sheet:

**REVISE** GRADED TEMPORARY EARTH DIKE 4. REVISED GRADING AT SB-1.

ITEM NO. C38 <u>SHEET F-ESD-9 – INTERMEDIATE CONDITIONS PLAN PH. 2 (EAST)</u>
Revise sheet F-ESD-9 per attached reissued sheet:

**REVISE** PHASE 2 ROOF DRAIN NO LONGER SHOWS UP ON THIS SHEET
**REVISE** SIZE AND MATERIAL ADDED FOR TEMP. PIPES CONNECTING TO 2’ X 2’ NDS CB
REVISE GRADED TEMPORARY EARTH DIKE 4, REVISED LOD AROUND SCE.

ITEM NO. C39 <u>SHEET F-ESD-10 PROPOSED CONDITIONS PLAN PH. 2 (CENTER)</u>
Revise sheet F-ESD-10 per attached reissued sheet:

**REVISE** CORRECTLY NUMBERED INLETS I-95 AND I-96
**REVISE** REVISED GRADING AT IB-1 EMBANKMENT.
**REVISE** SPILLWAY RELOCATED

ITEM NO. C40 <u>SHEET F-ESD-11 – PROPOSED CONDITIONS PLAN PH. 2 (EAST)</u>
Revise sheet F-ESD-11 per attached reissued sheet:

**ADD** ADDED LABELS FOR CATCH BASINS I-107 & I-108 AND PIPES P-132 & P-133.
**REVISE** ROOF DRAIN TO I-107
**REVISE** REVISED LOD AND PROPOSED TREELINE

ITEM NO. C41 <u>SHEET F-ESD-12 INTERMEDIATE CONDITIONS PLAN PH. 3 (WEST)</u>
Revise sheet F-ESD-12 per attached reissued sheet:

**REVISE** LOD ADJUSTMENT TO FIT GRADING FOR REVISED SIDEWALK.

ITEM NO. C42 <u>SHEET F-ESD-13 PROPOSED CONDITIONS PLAN PH. 3 (WEST)</u>
Revise sheet F-ESD-13 per attached reissued sheet:

**REVISE** SIDEWALK WIDTH INCREASED TO 10’. REVISED GRADING.

ITEM NO. C43 <u>SHEET F-ESD-14 PROPOSED CONDITIONS PLAN ESD (WEST)</u>
Revise sheet F-ESD-14 per attached reissued sheet:

**REVISE** SIDEWALK WIDTH INCREASED TO 10’. REVISED GRADING.

ITEM NO. C44 <u>SHEET F-ESD-15 PROPOSED CONDITIONS PLAN ESD (CENTER)</u>
Revise sheet F-ESD-15 per attached reissued sheet:

**REVISE** REVISED IB-1 GRADING AT TREELINE

ITEM NO. C45 SHEET F-ESD-16 PROPOSED CONDITIONS PLAN ESD (EAST)
Revise sheet F-ESD-16 per attached reissued sheet:
**REVISE** REVISED TREELINE AT EXISTING WETLANDS.

ITEM NO. C46 SHEET F-ESD-17 SUBMERGED GRAVEL WETLAND (SGW-2) PLAN VIEW & PROFILE
Revise sheet F-ESD-17 per attached reissued sheet:
**REVISE** REVISED SEQUENCE OF CONSTRUCTION FOR SGW-2.

ITEM NO. C47 SHEET F-ESD-18 MICROBIORETENTION (MBR-1) PLAN VIEW & PROFILE
Revise sheet F-ESD-18 per attached reissued sheet:
**REVISE** SHOW REVISED IB-1 GRADING.

ITEM NO. C48 SHEET F-ESD-19 MICROBIORETENTION (MBR-2, MBR-3, MBR-4, & MB PLAN VIEW & PROFILE
Revise sheet F-ESD-19 per attached reissued sheet:
**REVISE** SHOW REVISED IB-1 GRADING.

ITEM NO. C49 SHEET F-ESD-21 SEDIMENT BASIN (SB-1) PLAN VIEW
Revise sheet F-ESD-21 per attached reissued sheet:
**REVISE** SHOW REVISED IB-1 GRADING.

ITEM NO. C50 SHEET F-ESD-22 INFILTRATION BASIN (IB-1) PLAN VIEW
Revise sheet F-ESD-22 per attached reissued sheet:
**REVISE** SHOW REVISED IB-1 GRADING.

ITEM NO. C51 SHEET F-ESD-23 INFILTRATION BASIN (IB-1) PROFILES
Revise sheet F-ESD-23 per attached reissued sheet:
**ADD** ADD I-04 AND I-05 BORING LOGS
**REVISE** REVISED EMERGENCY SPILLWAY PROFILE.
**ADD** ADDED 100YR HGL TO PRINCIPAL SPILLWAY PROFILE

ITEM NO. C52 SHEET F-ESD-24 SEDIMENT BASIN (SB-2) PLAN VIEW
Revise sheet F-ESD-24 per attached reissued sheet:
**REVISE** REVISED GRADING FOR TEMPORARY SWALE TO SB-2.

ITEM NO. C53 SHEET F-ESD-25 SUBMERGED GRAVEL WETLAND (SGW-1) PLAN VIEW
Revise sheet F-ESD-25 per attached reissued sheet:
**ADD** ADDED FENCING AROUND SGW-1.

ITEM NO. C54 SHEET F-ESD-27 STORMWATER PRACTICE DETAILS & SPECIFICATIONS
Revise sheet F-ESD-27 per attached reissued sheet:
**REVISED** REVISED PEAK TRASH RACK DETAIL.
**ADD** ADDED TRASH RACK DETAILS.

ITEM NO. C55 SHEET F-ESD-30 – STORM DRAIN PROFILES

Revise sheet F-ESD-30 per attached reissued sheet:
**ADD** ADDED ROOF DRAIN TIE IN AND LABEL FOR RD THAT TIES IN TO I-13

ITEM NO. C56 SHEET F-ESD-30A – STORM DRAIN PROFILES
Revise sheet F-ESD-30A per attached reissued sheet:
**ADD** ADDED SIZE AND MATERIAL TO LABELS FOR P-10 AND P-12 CONNECTIONS

ITEM NO. C57 SHEET F-ESD-38 SWPPP PLAN
Revise sheet F-ESD-38 per attached reissued sheet:
**ADD** ADDED DETAILS.
**LANDSCAPE** **NO ITEMS**

**ARCHITECTURAL**

ITEM NO. A1 A304 – FINISH SCHEDULE
Revise sheet A304 per attached reissued sheet:
**REVISE** Revision to ceiling and wall types at various rooms.

ITEM NO. A2 A306 – DOOR SCHEDULE
Revise sheet A306 per attached reissued sheet:
**ADD** to Door schedule, ADD remark notes 25 and 26 to indicate STC rating at doors where required.

ITEM NO. A3 A307 – DOOR SCHEDULE
Revise sheet A307 per attached reissued sheet:
**ADD** to Door schedule, ADD remark notes 25 and 26 to indicate STC rating at doors where required.

ITEM NO. A4 A406 – WALL SECTIONS
Revise sheet A406 per attached reissued sheet:
**REVISE** A3/A406, revise to metal panel type 1 on CFMF notation.
**REVISE** A12/A406, revise to metal panel type 1 on CFMF notation.
**REVISE** A15/A406, revise to metal panel type 1 on CFMF notation.
**ADD** A15/A06, add wall type tag, gutter, downspout & splashblock notations.

ITEM NO. A5 A416 – WALL SECTIONS
Revise sheet A419 per attached reissued sheet:
**REVISE** A3/A416, revise to metal panel type 4 on CFMF notation and add TPO roofing system notation.
**REVISE** A12/A416, revise to metal panel type 4 on CFMF notation and add TPO roofing system notation.
**REVISE** F18/A416, revise to clarify wall components.

ITEM NO. A6 A800 – FURNITURE AND EQUIPMENT SCHEDULES
Revise sheet A800 per attached reissued sheet:

**REVISE** To Equipment Schedule revised model numbers for Items E5 to electrically powered model.
**ADD** To Furnishing Schedule- Science, add items S57 and S58.

ITEM NO. A6 A800C – LEVEL 00 AREA C FURNITURE PLAN
Revise sheet A800C per attached reissued sheet:
**ADD** To MS Science rooms, add items S57 and S58.

**KITCHEN** **NO ITEMS**

**STRUCTURAL**

ITEM NO. S1 S100F – FOUNDATION AND SLAB ON GRADE PLAN-AREA F
Revise sheet S100F per attached reissued sheet:
**REVISE** Revise (2) -pier to "P24A"

ITEM NO. S2 S101B – LEVEL 01 AND LOW ROOF FRAMING PLAN-AREA B
Revise sheet S101B per attached reissued sheet:
**ADD** Add steel lintel for openings in interior masonry walls with overhead/roll up doors.

ITEM NO. S3 S101F – LEVEL 01 FLOOR FRAMING PLAN-AREA F
Revise sheet S101F per attached reissued sheet:
**REVISE** Revise framing along masonry wall.
**ADD** ADD lintel for masonry wall opening. And perimeter detail along slab edge

ITEM NO. S4 S102A – ROOF FRAMING PLAN-AREA A
Revise sheet S102A per attached reissued sheet:
**ADD** Add missing top of steel elevations.

ITEM NO. S5 S102B – LEVEL 02 FLOOR AND LOW ROOF FRAMING PLAN -AREA B
Revise sheet S102B per attached reissued sheet:
**ADD** Add missing top of steel elevation.

ITEM NO. S6 S102D – LEVEL 02 FLOOR AND LOW ROOF FRAMING PLAN -AREA D
Revise sheet S102D per attached reissued sheet:
**ADD** Add missing dimensions, bearing plate type, and top of steel elevation.

ITEM NO. S7 S102E – ROOF FRAMING PLAN -AREA E
Revise sheet S102E per attached reissued sheet:
**ADD** Add missing dimensions and framing tags.
**REVISE** Framing Sizes long line 1#
**Remove** cross bracing at joists.

ITEM NO. S8 S102F – LEVEL 02 FLOOR AND LOW ROOF FRAMING PLAN -AREA F

Revise sheet S102F per attached reissued sheet:

**ADD** Add missing composite studs and reactions to composite framing.
**ADD** Framing for canopy support along line 1.'
**ADD** Section cuts to plan (A/S516, H/S503)
**ADD** Masonry pier tags.
**ADD** Section cuts to plan (A/S516, H/S503)
**ADD** Framing at star landing along wall on line J.2.'
**REVISE** Framing size to W21x48 [18] on line L.'

ITEM NO. S9 S102G – LEVEL 02 FLOOR FRAMING PLAN -AREA G

Revise sheet S102G per attached reissued sheet:

**ADD** Section cut H/S517
**ADD** Add missing masonry pier tags/locations.
**ADD** add missing framing tag.

ITEM NO. S10 S103A – HIGH ROOF FRAMING PLAN -AREA A

Revise sheet S103A per attached reissued sheet:

**ADD** Section cut K/S514
**ADD** Tags to C8x11.5 members.

ITEM NO. S11 S103G – LEVEL 03 FLOOR FRAMING PLAN -AREA G

Revise sheet S103G per attached reissued sheet:

**ADD** Section cut H/S517
**ADD** Add missing masonry pier tags/locations.

ITEM NO. S12 S104F – ROOF FRAMING PLAN -AREA F

Revise sheet S104F per attached reissued sheet:

**ADD** Framing at edge of elevator.
**ADD** bearing plate type for elevator roof beams.
**ADD** Add framing at column J'-1."

ITEM NO. S13 S104G – ROOF AND PENTHOUSE FLOOR FRAMING PLAN -AREA G

Revise sheet S104G per attached reissued sheet:

**ADD** Section cut J/S514 TO PLANS

ITEM NO. S14 S105 –PENTHOUSE ROOF FRAMING PLANS -AREA C&G

Revise sheet S105 per attached reissued sheet:

**ADD** Section cut H/S5115 AND J/S515 TO PLANS

ITEM NO. S15 S204 –SHEAR WALL SCHEDULE AND TEMPORARY BRACED FRAME

Revise sheet S204 per attached reissued sheet:

**ADD** Section C/S204
**ADD** Loading to braced frame elevation.

ITEM NO. S16 S514 –SECTIONS

Revise sheet S514per attached reissued sheet:
**ADD** Sections J and K

ITEM NO. S17 S515–SECTIONS

Revise sheet S515 per attached reissued sheet:
**ADD** Sections H and J.

ITEM NO. S18 S517–SECTIONS

Revise sheet S517 per attached reissued sheet:
**ADD** Sections G and H.

**MECHANICAL**

ITEM NO. M1 SHEET M001 – MECHANICAL LEGEND & ABBREVIATION
Revise sheet M001 per attached reissued sheet:
**ADD** General Note 49.

ITEM NO. M2 M200 SERIES – PIPING
Revise sheets M200A-M204 per attached reissued sheets:
**REVISE** HVAC pipe sizes provided for mains and where transitions in sizes occur. Individual equipment connections are sized per details 12 & 13 on M701 and manufacturer requirements.

**PLUMBING**

ITEM NO. P1 SHEET P001 – PLUMBING GENERAL NOTE AND LEGEND
Revise sheet P001 per attached reissued sheet:
**ADD** General Note 28.

ITEM NO. P2 SHEET P002B – AREA B PARTIAL FOUNDATION PLAN

Revise sheet P002B per attached reissued sheet:
**ADD** Sanitary connection for Men's Toilet B005 LAV P3C.

ITEM NO. P3 SHEET P002D – AREA D PARTIAL FOUNDATION PLAN
Revise sheet P002D per attached reissued sheet:
**ADD** (2) Stormwater branches to collect condensate.

ITEM NO. P4 SHEET P002E – AREA E PARTIAL FOUNDATION PLAN
Revise sheet P002E per attached reissued sheet:
**ADD** (1) Stormwater branch to collect condensate.

ITEM NO. P5 SHEET P100B – LEVEL 00 AREA B PARTIAL FLOOR PLAN
Revise sheet P100B per attached reissued sheet:
**ADD** Sub meter to B024 PART PLAN

**REMOVE** Unlabeled condensate line from B023.

ITEM NO. P6 SHEET P101D – LEVEL 01 AREA D PARTIAL FLOOR PLAN
Revise sheet P101D per attached reissued sheet:
**REVISE** Sheet to show mechanical equipment.

ITEM NO. P7 SHEET P101E – LEVEL 01 AREA E PARTIAL FLOOR PLAN
Revise sheet P101E per attached reissued sheet:
**ADD** Sheet to show mechanical equipment.

ITEM NO. P8 SHEET P101F – LEVEL 01 AREA F PARTIAL FLOOR PLAN
Revise sheet P101F per attached reissued sheet:
**ADD** Sheet to show mechanical equipment.

ITEM NO. P9 SHEET P101G – LEVEL 01 AREA G PARTIAL FLOOR PLAN
Revise sheet P101G per attached reissued sheet:
**ADD** Sheet to show mechanical equipment.

ITEM NO. P10 SHEET P301 – PENTHOUSE AREA C & G PART PLANS
Revise sheet P301 per attached reissued sheet:
**ADD** Sub meter to MIDDLE SCHOOL and HIGH SCHOOL PENTHOUSE

ITEM NO. P11 SHEET P303B – TOILET ROOM PART PLANS – AREA B
Revise sheet P303B per attached reissued sheet:
**ADD** CW, HW, HWR and V connection for Men's Toilet B005 LAV P3C.

ITEM NO. P12 SHEET 401 – OUTBUILDINGS – CONCESSIONS AND TICKET BOOTH
Revise sheet P401 per attached reissued sheet:
**ADD** Sub meter to MECH H308

ITEM NO. P13 SHEET 402 – OUTBUILDINGS – ATHLETICS BUILDINGS
Revise sheet P402 per attached reissued sheet:
**ADD** Sub meter to MECHANICAL H108

ITEM NO. P14 SHEET 403 – GEOTHERMAL PUMP ROOMS
Revise sheet P403 per attached reissued sheet:
**ADD** (2) Sub meter to GEOTHERMAL PUMP HOUSE H501

ITEM NO. P15 SHEET 404 – GREENHOUSE – ADD ALTERNATE No.2
Revise sheet P404 per attached reissued sheet:
**ADD** Sub meter to GREENHOUSE MECH H603.

ITEM NO. P16 SHEET P601 – DOMESTIC WATER RISER DIAGRAMS – AREA A
Revise sheet P601 per attached reissued sheet:
**REVISE** P3C to P3B in A010.
**REVISE** P1 to P1A in B102.

ITEM NO. P17 SHEET P602 – DOMESTIC WATER RISER DIAGRAMS – AREA B
Revise sheet P602 per attached reissued sheet:
**ADD** Domestic water sub meter to DOMESTIC WATER RISER DIAGRAM WATER ROOM – AREA B
**REVISE** P11B to P11A in B107

ITEM NO. P18 SHEET P603 – DOMESTIC WATER RISER DIAGRAMS – AREA C
Revise sheet P603 per attached reissued sheet:
**ADD** Domestic water sub meter to DOMESTIC WATER RISER DIAGRAM WATER ROOM – AREA C
**REMOVE** P5G from room C016.

ITEM NO. P19 SHEET P604 – DOMESTIC WATER RISER DIAGRAMS – AREA D/E/G
Revise sheet P604 per attached reissued sheet:
**ADD** Room tags to DOMESTIC WATER RISER DIAGRAM AREAS D
**ADD** (2) P6 to A12

ITEM NO. P20 SHEET P605 – DOMESTIC WATER RISER DIAGRAMS – AREA F/G
Revise sheet P605 per attached reissued sheet:
**ADD** Domestic water sub meter to DOMESTIC WATER RISER DIAGRAM HIGH SCHOOL PENTHOUSE

ITEM NO. P21 SHEET P606 – DOMESTIC WATER RISER DIAGRAMS – OUTBUILDINGS
Revise sheet P606 per attached reissued sheet:
**ADD** Domestic water sub meter to ELECTRIC HOT WATER GENERATOR DETAIL

ITEM NO. P22 SHEET P609 – SANITARY & VENT RISER DIAGRAMS – AREA B
Revise sheet P609 per attached reissued sheet:
**ADD** Room B112 to C112.

ITEM NO. P23 SHEET P614 – SANITARY & VENT RISER DIAGRAMS – OUTBUILDINGS
Revise sheet P614 per attached reissued sheet:
**REVISE** P1 to 4" FD-A.
**REMOVE** P2 UR from H303.
**ADD** Room tags.

**ELECTRICAL**

ITEM NO. E1 SHEET E002 – ELECTRICAL SITE PLAN – WEST
Revise sheet E002 per attached reissued sheet:
**ADD** General Notes 3 and 4.
**ADD** Note indicating concession building feeder conduits to be installed in Phase 1 or prior to finishing parking area at front of building.
**ADD** Circuit for scoreboard at softball field.

ITEM NO. E2 SHEET E003 – ELECTRICAL SITE PLAN – EAST
Revise sheet E003 per attached reissued sheet:
**ADD** General Notes 4 and 5.
**ADD** Note indicating concession building feeder conduits to be installed in Phase 1 or prior to finishing parking area at front of building.

ITEM NO. E3 SHEET E200B – LEVEL 00 AREA B PARTIAL FLOOR PLAN – POWER
Revise sheet E200B per attached reissued sheet:
**ADD** Power circuit for FACP in MDF Room.

ITEM NO. E3 SHEET E300B – LEVEL 00 AREA B PARTIAL FLOOR PLAN – FIRE ALARM
Revise sheet E300B per attached reissued sheet:
**ADD** FACP to MDF Room.

ITEM NO. E4 SHEET E601 – SCHEMATIC POWER RISER DIAGRAM
Revise sheet E601 per attached reissued sheet:
**REVISE** Fuse size serving MS-XFMR.

ITEM NO. E5 SHEET E707 – PANEL SCHEDULES
Revise sheet E707 per attached reissued sheet:
**ADD** Scoreboard circuit to Panel FHR.

ITEM NO. E6 SHEET E716 – PANEL SCHEDULES
Revise sheet E716 per attached reissued sheet:
**ADD** FACP circuit to E1R0B.

**AUDIOVISUAL** **NO ITEMS**
**THEATER** **NO ITEMS**
**SECURITY** **NO ITEMS**

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## GENERAL WORK SCOPE – ALL PACKAGES

**ALL TRADES ARE TO INCLUDE THE FOLLOWING AS PART OF BASE BID. All work is to be performed as shown on the plans and/or specified under the following sections. For specific scopes of work, contractors are to review their individual scope of work listed elsewhere within this specification section:**

| SECTION | NAME |
|---|---|
| ~~00 31 19~~ | ~~EXISTING CONDITION INFORMATION~~ ADD#3 |
| ~~00 90 00~~ | ~~LIST OF DRAWINGS~~ ADD#3 |
| ***00 01 15*** | ***LIST OF DRAWINGS*** ADD#3 |

DIVISION 0 – PROCUREMENT AND CONTRACTING REQUIREMENTS

| | |
|---|---|
| 00 11 13 | ADVERTISEMENT FOR BIDS |
| 00 11 14 | IDENTIFICATIONS |
| 00 21 13 | INSTRUCTIONS TO BIDDERS |
| 00 31 00 | AVAILABLE PROJECT INFORMATION |
| ***00 31 19*** | ***EXISTING DRAWING INFORMATION*** ADD#3 |
| 00 41 00 | BID FORM |
| 00 43 13 | BID SECURITY |
| 00 43 30 | CONTRACTOR QUALIFICATION STATEMENT |
| 00 43 36 | PROPOSED SUBCONTRACTORS FORM |
| 00 43 37 | SEX OFFENDER CERTIFICATION |
| 00 43 38 | REFERENCES |
| 00 43 39 | MINORITY BUSINESS ENTERPRISE |
| 00 45 17 | ANTI-BRIBERY AFFIDAVIT |
| 00 45 18 | CERTIFICATION REGARDING DEBARMENT |
| 00 45 19 | NON-COLLUSION AFFIDAVIT |
| 00 45 27 | LABOR RELATIONS |
| 00 45 28 | PREVAILING WAGE SECTION |
| 00 45 30 | UNSKILLED CONSTRUCTION LABORER'S WORK |
| 00 61 13 | PERFORMANCE AND PAYMENT BOND FORMS |
| 00 61 14 | BID BOND (AIA Document A310) |
| 00 71 00 | STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR |
| 00 72 00 | GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION (AIA Document A201 - 2017 Edition) |
| 00 73 00 | ARTICLE 15 - SUPPLEMENTARY GENERAL CONDITIONS TO AIA Document A201 - 2017 Edition |
| 00 80 00 | PRELIMINARY CONSTRUCTION SCHEDULE |
| 00 90 00 | PRIME BID PACKAGE SCOPES |

DIVISION 1 - GENERAL REQUIREMENTS

| | |
|---|---|
| 01 10 00 | SUMMARY |
| 01 21 00 | ALLOWANCES |
| 01 22 00 | UNIT PRICES |
| 01 23 00 | ALTERNATE BIDS |
| 01 25 00 | SUBSTITUTION PROCEDURES |
| 01 30 00 | ADMINISTRATIVE REQUIREMENTS |
| 01 31 14 | FACILITY SERVICES COORDINATION |
| 01 32 16 | CONSTRUCTION PROGRESS SCHEDULE |
| 01 35 13 | SPECIAL PROJECT PROCEDURES FOR BUILDING ENCLOSURE |
| 01 35 53 | SECURITY PROCEDURES |
| 01 40 00 | QUALITY REQUIREMENTS |
| 01 50 00 | TEMPORARY FACILITIES AND CONTROLS |
| 01 51 00 | TEMPORARY UTILITIES |

01 52 13 FIELD OFFICES AND SHEDS
01 55 00 VEHICULAR ACCESS AND PARKING
01 58 13 TEMPORARY PROJECT SIGNAGE
01 60 00 PRODUCT REQUIREMENTS
01 70 00 EXECUTION AND CLOSEOUT REQUIREMENTS
01 71 23 FIELD ENGINEERING
01 74 19 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL
01 77 00 CLOSEOUT PROCEDURES
01 78 00 CLOSEOUT SUBMITTALS
01 79 00 DEMONSTRATION AND TRAINING
01 81 13 SUSTAINABLE DESIGN REQUIREMENTS
01 91 13 GENERAL COMMISSIONING REQUIREMENTS

Geotechnical Report issued by ECS Mid Atlantic, LLC dated February 3, 2023, with addendum dated March 21, 2023 for informational purposes only.

In addition to items noted above, the Work includes AIA Documents A201 and A401, Division 00 Bidding Documents and Conditions of the Contract, and Division 01 General Requirements of the Project Manual. The Contractor is obligated to review and understand the work descriptions and responsibilities of all other Work Scope Categories. This Contractor along with its subcontractors is bound to the *HESS Safety Manual.* As well this contractor is to supply all weekly and daily documentation necessary, and or required by specification, for the administration of the North East Middle/High School Replacement Project.

**THE SCOPE OF WORK IS TO INCLUDE, but is not limited to, the following items:**

**BIM Coordination:**

1. All Steel, Mechanical, Plumbing, Electrical and Fire Protection Trade Contractors will be required to prepare 3D coordination models compatible with the latest AutoCAD, Revit and Navisworks software. The Construction Manager shall manage the use of construction coordination models through the project Sharefile site. Each Trade Contractor shall be responsible for coordinating his work with each trade. However, the Mechanical Contractor will be responsible for leading the coordination process including running clash detection and producing clash reports. The Construction Manager shall play the role of the Quality Control Manager during this process.

2. Conflicts in the layout and sequencing of the work will be discussed and resolved in a series of periodic construction coordination meetings. Such meetings can be held via web conference if the Construction Manager approves. Coordination processes such as clash detection, submittals, trade sequencing, etc. shall be performed using the Construction Coordination model. The shop drawings submitted for records and approval must be generated from the Construction Coordination model.

3. After the review and approval of coordination in 3D, the Mechanical Contractor shall provide a Color Composite set of drawings. These drawings are separate from Shop Drawings and are merely an overlay of all trades (color coded) without the dimensions and labels. These drawings must be submitted digitally and two (2) sets of full-scale prints. Each trade contractor indicating their acceptance and approval of the indicated routings and layouts and their relationship with the adjoining or contiguous work of all contractors shall then sign off these final composite drawings.

**Permits, Testing and Inspections:**

1. Contractor shall coordinate with all jurisdictional agencies and inspectors.

2. Contractor shall perform all work to comply with the rules and the regulations of the governing bodies and state local laws. Contractor shall obtain all required bonds and permits, secure all inspections, and provide all tests and

certifications required by code. Contractor shall provide copies of all its permits and inspection certificates to the Construction Manager for their records.

3. This Contractor is responsible for providing the required testing and certification through an approved agency for all equipment assemblies that require a UL rating.

4. Provide start up services, testing, turnover and warranty of all materials and equipment, as per specifications. Submit a turnover plan as part of the submittal process indicating the equipment, testing, reporting and witnessing requirements.

5. Contractor shall participate in the commissioning per the specifications.

6. Contractor shall provide any and all trade certifications, licenses, and sign-offs required to secure any and all approvals, permits, and certifications.

**Submittals:**

1. CADD documents **may** be available for use by this Contractor for a fee TBD by the Architect. Contractor agrees to sign waiver and assumes all liability and understands this is solely for their beneficial use for preparation of BIM files, shop, and coordination drawings. Failure to provide CADD in a timely fashion does not relieve this contractor of responsibility of submission times dictated here-in. Any delay in construction due to a delay in the submittal and or procurement process will be this contractor's responsibility. All acceleration costs of subsequent trades will be the responsibility of this contractor.

2. Contractor shall provide all required submittals to the Construction Manager within thirty (30) days after issuance of a "Letter of Intent" or the Contract, whichever is issued first or sooner if necessary to avoid delay to work of all other Contractors. Contractor shall use a submittal cover sheet with all applicable required information completed, conforming and in accordance with the contract for North East Middle/High School Replacement Project. No substitutions will be allowed without prior written approval by CCPS. Non-conformance submittals which are rejected shall not be cause for schedule delay.

3. Contractor to submit five (5) copies of all submittals for proper distribution to Architect, Consultants, Engineers and other Contractors. When applicable and at the sole discretion of the Construction Manager, electronic submittals may be utilized.

**Safety:**

1. Contractor shall be required to conduct his activities in a safe manner and shall be responsible for observing the safety regulations of ~~V~~***M***OSH [ADD#3], OSHA, and local life safety agencies. Contractor shall provide all necessary safety equipment, guardrails, barricades, and the like for full compliance. Contractor shall comply with any safety direction of the Construction Manager immediately and without recourse to additional cost.

2. Contractor shall furnish, install, provide, and maintain all traffic control (including flagmen) for this Contractor's work as required by the Contract Documents and/or governing authorities having jurisdiction over them.

3. Contractor shall furnish, install, and maintain all safety and/or warning signs as required for this work and/or per the direction of the authorities having jurisdiction over the work.

4. Contractor shall furnish, install, and maintain all fall protection and barricades, including toe boards, with its scaffolding systems and when working adjacent to edge of slabs.

5. ***Contractor shall provide a written safety plan with Accident Hazard Analysis (AHA) for each of it's definable features of work within 30 days of notice of award for review/comment by the CM.*** [ADD#3]

**Bonds and Releases:**

1. All Prime Contractors are to include a 100% performance bond and 100% payment bond from a surety company acceptable to the Owner and Construction Manager.

2. Contractor to include with first pay application detailed list of all second tier Contractors, suppliers etc. for those furnishing any hauling, labor or material over $500 in value. From the second pay application through the completion of the project, second tier partial lien release(s) will be required to be submitted with the contractor's pay application as condition of payment. With contractor's final pay application, contractor must submit final second-tier supplier/Contractor lien release(s) as condition of payment.

**Punchlist, As-Builts, Warranties, O&M's and Closeout**

1. Contractor shall maintain a set of as-built drawings as required by the contract documents. Contractor will also assist the Construction Manager with updating the Construction Manager's field as-built drawings. Contractor understands that as-built drawings will be checked on a weekly basis and will be reviewed as a prerequisite to requisition approval. Contractor shall submit two sets of final certified as-built drawings within ten (10) days following substantial completion to the Construction Manager. Contractor shall provide complete operation and maintenance manuals with spare parts list within ten (10) days following substantial completion to the Construction Manager. In addition to the required paper and pdf copies of as-builts required by specifications, the 05A, 21A, 23A and 26A contractors must submit final as-built BIM files within thirty (30) days of final project completion.

2. Contractor to participate in HESS' Punchlist Program. All final punchlist work developed by the Architect, Engineers, and Owner are to be completed with two weeks of receipt. All work to complete lists issued by HESS are to be complete within two weeks of receipt. Failure to perform in a timely fashion will result in HESS performing the work at your expense and will be backcharged accordingly. In addition to the cost of the work being backcharged, a fee of $50 per day per item will also be accessed until the work is completed.

3. Contractor shall furnish and install touch-up paint at all equipment installed by this Contractor.

4. Contractor shall be responsible for all training requirements for all equipment and systems it has installed per the specifications. Contractor includes professional recording of all required training. Media to be provided within ten (10) days of final training session. In addition to the training requirements of respective specifications, contractor to include additional training of 10 hours per system installed, to be used at Owner's digression. All additional training to be tracked via ticket basis, any unused hours will be credited back to the Owner.

5. Contractor shall be responsible for replacing and repairing at no cost to the Owner and/or the Construction Manager any work performed by this Contractor that is determined to be unacceptable to the Owner, Construction Manager, and/or applicable inspectors. In said event, the Contractor shall coordinate and prioritize its work as to eliminate impact to the project schedule.

6. Contractor warrants its work in accordance with the requirements of the specifications. If no guarantee or warranty is called out within the specifications, then the Contractor shall guarantee or warranty its work against deficiencies and defects in materials and/or workmanship for one (1) year from the date of substantial completion of all or a portion designated by the Construction Manager and Owner. Contractor shall furnish all operations manuals, maintenance manuals, cleaning instructions, supplier/manufacturer warranties, and the like for all work performed.

7. Contractor shall provide start up services, turnover, and warranty of all materials and equipment, as per specifications. Contractor shall submit a turnover plan as part of the submittal process indicating the equipment, testing, reporting and witnessing requirements

8. Contractor includes and agrees to create separate line items in the schedule of values to address Punchlist, General Clean Up and As-builts/Closeout Documentation. Dollar value will be based on overall value of contract in accordance with HESS' internal policy. Contractor can expect line items to range from 1%-3% of contract value. This is in addition to the retainage requirements of the contract. Monies will be released on a monthly basis, determined by contractor's performance in each respective category, similar to any other line item in the schedule of values.

9. Contractor to provide detailed list of all MEP equipment furnished under their respective contracts on the project including serial number(s) and room location, or above ceiling location. List to be provided within (10) days following substantial completion.

10. Contractor to include attic stock per the specifications. Contractor to submit list within 90 days of award the required attic stock per the specifications for review and approval by Construction Manager. Any materials originally intended for attic stock, which were used during project completion, will be replaced at no charge to the owner within 4 weeks following substantial completion. All attic stock will be given in full packaging. Where specifications call for a percentage, material will be rounded up to the next full package. Opened material will not be accepted for attic stock.

**Clean Up:**

1. The Contractor shall provide daily clean-up and disposal of all trash, debris, and excess material generated by this work. Means and Methods shall be as required within the Construction Manager's Waste Management Plan for the Project. Should the Contractor's cleanup be unsatisfactory, the Construction Manager shall perform the work at the Contractor's expense.

2. Contracts which exceed $150,000 in value will be required to dedicate one person per eight workers onsite to be dedicated to project composite cleanup crew. Composite cleanup will be performed one day per week, typically Fridays, for 8 hours. This is in addition to your daily required cleanup efforts. At each weekly foreman's meeting, the HESS superintendent will choose which contractor is to take the lead in directing the crew each week. Contractors are responsible for providing brooms, sweeping compound, mops, shop vacuums, trash cans etc.

3. When performing cleaning work, use only approved HEPA type vacuum units. No "blowing out" (pressure cleaning) will be allowed.

4. Contractor shall be responsible for all street cleaning as necessary for dirt and debris that may be generated by its trucks and/or equipment and including this Contractor's suppliers and Contractors. This Contractor shall make provisions to provide at a minimum one laborer to be used at the discretion of the Construction Manager to keep the streets clean during the time period in which this Contractor has trucks, equipment, and/or deliveries (including those of its suppliers and sub-Contractors) entering and leaving the job site.

5. Subcontractor acknowledges that all vehicles exiting the jobsite must sufficiently wash their own tires at the wash rack (wash rack and water source provided by 31A) to prevent mud/debris from entering the adjacent roads. Failure to do so will result in back charges against this subcontract for related roadway clean-up costs. 31A contractor will have a man at the wash rack while they are on site, but for times when they are not, all contractors will be responsible for their own delivery trucks.

**Schedule:**

1. This work shall be performed in accordance with the schedule as updated irrespective of the amount of overtime or level of manpower required. The Contractor shall not be entitled to any damages or other compensation from the Owner or Construction Manager by reason of delay or interruption of its work caused by other Contractors working on the project, weather impact, permit issuance, or Owner related delays. Incorporated into the project

schedule are days for inclement weather. The Owner or Construction Manager will not be charged for any incidental stand-by-time by the Contractor, or any of its agents, sub-Contractors, suppliers, vendors, or deliveries.

2. The Construction Manager has developed a CPM Schedule. To help coordinate activities, the Trade Contractor and the Construction Manager will meet within twenty (20) days of execution of this contract. The meeting will discuss specific start dates, durations, and eliminating potential schedule conflicts. This schedule will reflect commencement, completion, and any milestone dates established elsewhere in the Contract Documents.

3. Contractor to submit for review and approval an Execution plan for each item of work provided under this contract. Contractor to compare with the CPM schedule for the project and notify any discrepancy in writing to allow for CM to properly adjust, when necessary and allowable, to the CPM schedule. Execution plan is due within twenty (20) days of issuance of "Letter of Intent" or "Contract", whichever is issued first. Contractor acknowledges specified laydown, staging, etc. areas may have to be adjusted/relocated during construction, Contractor agrees to comply at no additional cost to Construction Manager or the Owner

4. **Major trades (03A, 04A, 05A, 06A, 07A, 08B, 09B, 21A, 23A, 26A and 31A) acknowledge and have accounted for within the bid, the second and fourth Saturdays of each month are required workdays with the same size crew used Monday through Friday. No exceptions.**

5. The Trade Contractor agrees that if, in the good faith judgment of the Construction Manager, the Contract completion date will not be met, the Trade Contractor shall immediately, without any further direction, take any and/or all of the following actions and any other additional actions as otherwise directed by the Construction Manager, necessary to insure timely completion, at no additional cost to the Construction Manager and/or Owner.

   a) Increase the Trade Contractor's workforce in such quantities and crafts that will ensure, in the good faith judgment of the Construction Manager, timely completion of the Contract completion dates.
   b) Increase the number of working hours per shift, shifts working per day, working days per week, the amount of construction equipment, and/or any combination thereof, that will ensure, in the good faith judgment of the Construction Manager, timely completion of the Contract completion dates.
   c) Reschedule activities to achieve maximum practical concurrency of accomplishment of activities that will insure, in the good faith judgment of the Construction Manager, timely completion of the Contract completion dates.

**<u>Miscellaneous Scope:</u>**

1. Contractor shall provide layout, engineering, and coordination with other trades.

2. Contractor's price includes cost increase in material prices during the project and shall not be compensated for the cost increase.

3. Contractor shall be required to carefully review all alternate proposal requests contained within the Contract Documents. Contractor shall provide costs for all work contained in the alternates, associated and/or specifically indicated as part of the Contract Package. Contractor shall be responsible for providing all such work upon acceptance of the alternates by the Owner.

4. ~~The Construction Manager will establish approximately 30 building corners, 6 control lines (3 each direction) and four (4) benchmarks. This service by the Construction Manager will be provided as a one-time service and future stake-out required for stakes that have been damaged or removed by this Contractor will be performed at an extra cost to this Contractor. Stake-out which is lost due to delay by Contractor to mobilize will be reestablished at Contractor's cost. The Contractor shall provide all additional stake-out and survey work required to complete this Contractor's work as required by the Contract Documents. Any other surveying to perform this work will be at this contractor's expense. All site utility work must be certified by the Engineer of Record at the installation contractor's expense.~~ **ADD#3**

5. Contractor shall survey existing conditions and notify the Construction Manager of any discrepancy before the Contractor's work starts. Start of work shall constitute this Contractor's acceptance of the existing conditions.

6. Contractor is responsible for providing a complete and operational scope of work in accordance with the Contract Documents and all state, county, and local authority having jurisdiction over the work.

7. Contractor has a full understanding and knowledge of contract documents and takes full responsibility for their implementation and coordination.

8. Contractor is responsible for dewatering all excavations created by this Contractor caused by any means including rainwater, run-off from perimeter properties, underground water, leeching water, underground streams, and the like. Contractor is responsible for cleaning of substrate which Contractor's work is to be applied to, i.e.… cleaning of footings in order to start masonry.

9. Multiple mobilizations may be required and are included within this Contractor's work.

10. If there are Owner, Construction Manager, or other trade furnished items that are to be installed by this Contractor, this Contractor must provide a minimum thirty (30) day written notice to the Construction Manager prior to the installation date of each item. The Contractor shall be liable for costs associated with the delay should this Contractor fail to meet this requirement. This Contractor shall schedule, receive, inspect, inventory, store, rig, and install all items furnished by others that are to be installed by this Contractor. Contractor is responsible at the time of delivery for the verification of these items for correctness and shall report any discrepancies in writing to the Construction Manager within forty-eight (48) hours. If discrepancies are not reported within that period, the Contactor shall be responsible for those items in its charge.

11. Contractor shall schedule all material and equipment deliveries through the Construction Manager. Contractor shall phase, sequence, deliver, and store their materials and equipment in a manner which provides full and continual access for all trades. Contractor to coordinate night work as required keeping continual access to the site with the Construction Manager.

12. Contractor shall maintain sufficient workforce levels to meet scheduling requirements and avoid delays to other phases of work.

13. Provide all supervision, to include a full time Superintendent/Foreman, labor, equipment, and materials to perform the work. Submit resume of the Superintendent/Foreman to the Construction Manager for approval prior to the start of work.

14. Contractor shall provide all trade certifications, licenses, and sign-offs required to secure all approvals, permits, and certifications.

15. If there is any conflict in the language between these contract documents and the Contractor's original cost proposal, the language of these contract documents shall prevail.

16. Contractor shall be responsible for the site/building in its charge. It shall protect adjacent and its own work and materials from soiling or damage.

17. Contractor shall submit alternate prices identified in the Bidding Documents, which pertain to their work. These alternate prices must be separate from their base bid on the Bid Proposal Form as described in Instructions to Bidders. If no price is applicable to work under this contract, the bidder must indicate $0.00 bid amount for alternate category.

18. This contractor understands that other contractors may be on site during the work of this contract. Contractor agrees to make every effort to cooperate and coordinate the schedule of the work with that of the other Contractors as to not delay the project. Contractor shall coordinate daily with other Contractors and Construction Manager to avoid conflicts in installation. Correction or re-installation of work due to lack of coordination will be done at no cost to the Owner or Construction Manager.

19. In the event of a conflict between drawings or specified requirements, the Contractor will be responsible to provide the superior quality and/or quantity of product and installation.

20. Contractor shall furnish ~~and install~~ all access doors and frames in all walls, floors, and ceilings as required for its work under this contract whether they are indicated in the contract documents or not. Contractor shall coordinate the locations of all access doors with ***the 06A Contractor. The 06A Contractor shall install all access panels.*** ~~the Construction Manager~~.[ADD#5]

21. Contractor includes all fire/smoke stopping, sound and/or weather sealants etc… at all penetrations required for own work.

22. Contractor is responsible for contacting and coordinating with Miss Utility and or a private utility locating company for locating and marking existing utilities if required to perform this work.

23. Contractor to submit a truck route plan within 30 days of notice of award. Strict adherence to the approved plan will be enforced. Complaints by the neighborhood will not be tolerated, contractor will be held accountable via backcharge of $500 per complaint.

24. Coordinate all work with the work of others through the Construction Manager for proper function, time, and sequence to avoid delays in the work.

25. Contractor includes all temporary utilities, i.e. water and power, to perform its work as permanent utilities may not be available.

26. Contractor shall coordinate with all other trades regarding built-in and embedded items required by the Contract Documents

27. Contractor shall furnish and install covering and protection for all equipment provided or installed by this Contractor.

28. Contractor shall provide for all its material deliveries, hoist equipment with operators, hot/cold weather protection (including tenting, heaters, and enclosures), scaffolding, and related items needed for work to proceed expeditiously, and without interruption.

29. Contractor shall furnish and install all waterproofing and counterflashing of its work when it penetrates the completed roof system, walls, and any other weather barrier surfaces. Any work performed by other contractors in having to go behind and make this contractor's penetrations weather-tight will be back-charged to this contractor.

30. Contractor shall include material and labor cost increases for the project's duration.

31. In the event this contractor is to install items furnished by others, Construction Manager or Owner, installing contractor is expected and has included unloading, uncrating, distribution, cleanup of associated trash, hoisting, etc. All required miscellaneous scope to install said item of work.

32. ***The work identified in each trade package scope applies to the main NEMHS building and each outbuilding. The outbuildings include:*** [ADD#3]

A. ***Concessions Building*** ADD#3
B. ***Ticket Booth*** ADD#3
C. ***Four (4) Dugouts*** ADD#3
D. ***Two (2) Geothermal Pump Buildings*** ADD#3
E. ***Existing Field House*** ADD#3
F. ***Greenhouse Building (alternate)*** ADD#3

**SPECIAL CONSIDERATIONS:**

1. Jobsite hours are as follows:
    a. Monday thru Friday – 7:00am to 4:00pm
    b. Saturday – 9:00am to 3:30pm
    c. Sundays – 9:00 am to 3:30pm (as coordinated with Construction Manager)

2. Strict adherence to Cecil County's Noise Ordinances.

3. Contractors' supervisor is required to attend weekly foreman's meetings at the project site beginning two weeks prior to the start of the trades work through the completion of the work. Meetings are mandatory and will cover schedule, material delivery, trade coordination, safety, etc. Failure to attend a scheduled meeting will result in a $250 backcharge per occurrence.

4. Contractors Project Manager is required to attend monthly Project Managers' meeting at the project site beginning two weeks prior to the start of the trades work through the completion of the work. Meetings are mandatory and will cover submittals, change orders, RFIs, material delivery, monthly requisitions, schedule, closeout plans, etc. Failure to attend a scheduled meeting will result in a $1000 backcharge per occurrence.

5. Excavation and/or drilling work under this contract is **unclassified to design sub-grade**, and includes but not limited to, excavation and removal of soil, shale, rock, fill, abandoned utilities, abandoned tanks, abandoned wells, abandoned structures, and any and all other subsurface conditions encountered in the contract area **to this trades lowest design elevation in same area**. The Contractor shall make his own soil and subsurface investigations, examination, tests, and exploratory borings of existing subsurface conditions to determine the nature of the soil conditions underlying the project site and thereby assuming all responsibility in excavating for this project without recourse to subsurface information obtained from the engineer, or indirectly from the Owner. The risk of unanticipated soil conditions **from current elevations to this trades lowest design elevation in same area** is solely the Contractor's. No extra or additional compensation for excavation or claim otherwise will be made or paid under this contract **until added excavations below this trades lowest design elevation in same area is required**. Contractor is responsible for furnishing and placing any import fill material that may be required to complete the work.

6. Contractor is responsible for providing full-time competent supervision while working onsite for all its forces, its 2nd-tier contractors and/or suppliers. Contractor must submit resume of proposed project manager and field supervisor for review before project award. Contractor cannot remove approved individuals from project without prior written consent of Construction Manager.

7. Contractor expressly warrants and covenants that it will comply fully with Maryland law and prime contract requirements with respect to the mandatory restrictions on registered sex offenders performing work on school system property. Such restrictions require the Contractor to certify that no employee, subcontractor, subcontractor employee, or material supplier who is a registered sex offender shall be allowed to enter onto school property at any time in the performance of the work or services for which this contract is awarded.

8. The Contractor certifies that they will follow the above requirements. Contractor will be fully responsible to the Owner and Construction Manager for any loss, damage, claim, or harm, including attorneys' fees, incurred by or threatened against the Owner and Construction Manager arising in connection with any violation of the

mandatory restrictions on registered sex offenders as stated above. The Owner and Construction Manager reserves the right to demand evidence of compliance, including copies of background checks for any employee, agent, vendor, supplier, consultant or other individual whom the Contractor has employed or contracted at any time during the performance of this agreement. The Owner and Construction Manager reserves the right to demand the immediate removal from the project site of any such individual for whom evidence of compliance cannot be produced. Contractor will not be entitled to any extensions of time or additional cost associated with the removal of any individual(s) pursuant to this provision. Notwithstanding anything to the contrary, Contractor is fully and solely responsible for compliance with the registered sex offender mandatory restrictions and certifications included in this agreement.

9. Prior to working onsite, all Contractor workers are to report with respective foreman or superintendent to be issued Hard Hat Sticker. A copy of the issued sticker along with workers photo ID will be taken for security purposes. It is the respective Contractors responsibility to ensure each worker has a Hard Hat with the ID sticker for identification purposes. Failure to follow this policy after written notice will result in employee being removed from project and is not grounds for schedule delay.

10. All Contractors shall utilize "Autodesk", the Construction Manager's online Project Management software. There is no additional cost to the Contractor and the Construction Manager will provide access. All cost implications for any changes are to be submitted through Procore's RFQ tool. The Construction Manager shall send out an RFQ when change documentation is generated, and the Contractor is to respond with appropriate backup through Procore.

**EXCLUDED FROM THIS CONTRACTOR WORK is:**

1. Testing costs unless specifically called for in **their specific** scope, a result of negligence, poor workmanship, or failure of work to meet the requirement of the documents

## END OF GENERAL WORK SCOPE – ALL PACKAGES

## WORK SCOPE CATEGORY 03A CONCRETE

The work of this bid category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all Concrete work in accordance with the specifications, drawings and applicable codes. All work is to be performed as shown on the plans and/or specified under the following technical sections:

| SECTION | NAME |
|---|---|
| 03 10 00 | CONCRETE FORMING AND ACCESSORIES |
| 03 20 00 | CONCRETE REINFORCING |
| 03 30 00 | CAST-IN-PLACE CONCRETE |
| 03 35 13 | HIGH-TOLERANCE CONCRETE FLOOR FINISHING |
| 03 35 46.23 | CONCRETE FLOOR ENHANCEMENT (for coordination purposes) |
| 03 39 00 | CONCRETE CURING |
| 07 11 13 | BITUMINOUS DAMPPROOFING |
| 07 13 00 | SHEET WATERPROOFING ***(as it relates to this scope)*** ADD#3 |
| 07 14 16 | COLD FLUID-APPLIED WATERPROOFING |
| 07 18 00 | TRAFFIC COATING (for coordination purposes) |
| 07 21 00 | THERMAL INSULATION (as it relates to this scope) |
| 07 91 00 | PREFORMED JOINT SEALS ***(as it relates to this scope)*** ADD#5 |
| 07 92 00 | JOINT SEALANTS |
| 07 95 13 | EXPANSION JOINT COVER ASSEMBLIES (as it relates to this scope) |
| 09 30 13 | CERAMIC TILING (for coordination purposes) |
| 09 64 29 | WOOD FLOOR ASSEMBLIES (for coordination purposes) |
| 09 64 66 | WOOD ATHLETIC FLOORING (for coordination purposes) |
| 09 65 10 | HYBRID RESILIENT FLOORING (VCTT) (for coordination purposes) |
| 09 65 16 | RESILIENT SHEET FLOORING (for coordination purposes) |
| 09 65 19 | RESILIENT TILE FLOORING (for coordination purposes) |
| ~~09 65 23~~ | ~~RESILIENT PERFROMANCE FLOORING (for coordination purposes)~~ ADD#3 |
| ***09 65 16.23*** | ***COMMERCIAL SLIP RESISTANT RESILIIENT SHEET VINYL FLOORING (for coordination purposes)*** ADD#3 |
| 09 65 66 | RESILIENT ATHLATIC FLOORING (for coordination purposes) |
| 09 67 23 | RESINOUS FLOORING (for coordination purposes) |
| 09 68 13 | TILE CARPETING (for coordination purposes) |
| 10 50 00 | LOCKERS (for coordination purposes) |
| ~~10 56 26~~ | ~~STORAGE SPECIALTIES (for coordination purposes)~~ ADD#3 |
| 11 40 00 | FOOD SERVICE EQUIPMENT (for coordination purposes) |
| 11 66 23 | GYMNASIUM EQUIPMENT (for coordination purposes) |
| 13 21 48 | SOUND-CONDITIONED MUSIC PRACTICE ROOMS (for coordination purposes) |
| 14 24 00 | PASSENGER ELEVATORS (for coordination purposes) |
| 14 42 00 | WHEELCHAIR LIFTS (for coordination purposes) |
| 31 20 00 | EXCAVATION FILING AND GRADING (as it relates to this scope) |
| 31 31 16 | TERMITE CONTROL |
| DIVISION 22 | PLUMBING inclusive (for coordination purposes) |
| DIVISION 26 | ELECTRICAL inclusive (for coordination purposes) |

Geotechnical Report issued by ECS Mid Atlantic, LLC dated February 3, 2023, with addendum dated March 21, 2023 for informational purposes only.

In addition to the above, trade contractors are to include, but are not limited to, AIA Documents A201 and A401, and various other Technical Specifications interfacing with this work. The Contractors are required to review the work descriptions of the other categories so as to not misunderstand the scope responsibilities. The Contractors are also

bound to the HESS Safety Manual and all related weekly and daily documentation for North East Middle/High School Replacement Project for the administration of the contract.

**General Scope:**
**Contractor is responsible for General Scope of Work listed elsewhere in this specification section.**

**THE SPECIFIC SCOPE OF WORK IS TO INCLUDE, but is not limited to, the following items:**

**Concrete Specific Scope:**

1) Site Concrete and any concrete outside the building(s) perimeter is not part of this scope of work unless otherwise noted within this scope. All structures requiring a concrete footing or slab are provided by this contractor, including excavation and backfill.

2) Contractor to furnish and install two wash stations at the direction of the Construction Manager. Stations to be constructed out of pressure treated material and will be 35' in length and 10' wide.

3) Contractor to include excavation, concrete, rebar, and labor to pour temporary foundation for mockup panel(s).

4) Contractor shall seal and or apply hardener for all concrete called out to be sealed and or hardened per the contract documents. Under no circumstance unless specifically approved by Architect shall product be of a "wax" base. At areas to remain exposed, Contractor shall provide one additional coat and cleaning of surface prior to application, which will be applied just prior to substantial completion as directed by the Construction Manager.

5) Contractor shall furnish and install all concrete on metal floor and roof decks as required by the Contract Documents, including all temporary shoring and bracing required to support the load imposed by the Contractor's work and to prevent excess deflection of the structure. Contractor shall form all openings through decks and slabs as shown on the drawings and as required by others. Contractor shall grout all base plates. Contractor shall provide its own layout for any of its openings being formed.

6) Contractor shall apply termite control measures as required by the contract documents.

7) Contractor shall furnish and install all perimeter rigid insulation under slab on grade as required.

***8)*** Contractor shall furnish and install all concrete work associated with exterior site features that require concrete ie... site sign and site walls. ***Work shall include waterproofing, drainage board, drainage gravel, drain pipe, and filter fabric as indicated. Contractor shall furnish and install exterior stair nosings as indicated on L-dwgs. Contractor shall include backfilling as part of the work. Site features include, but are not limited to:*** **ADD#3**

- ***a) Outbuildings:*** **ADD#3**
  - ***i) Two (2) Geothermal Pump Houses*** **ADD#3**
  - ***ii) Four (4) dugouts*** **ADD#3**
  - ***iii) Concessions Building*** **ADD#3**
  - ***iv) Ticket Booth*** **ADD#3**
  - ***v) Ex. Field House*** **ADD#3**
  - ***vi) Greenhouse (alternate)*** **ADD#3**
- ***b) East Entrance - seat walls, stair cheek walls, stairs and retaining walls*** **ADD#3**
- ***c) West Entrance/Amphitheater - retaining walls, cheek walls, seating, stair cheek walls, stairs and planter walls*** **ADD#3**
- ***d) Stadium Entrance – seat walls, stair cheek walls, stairs mural wall (fnd & wall) and pillar wall foundations*** **ADD#3**
- ***e) Outdoor Communal Areas – footings, walls, stair cheek walls and stairs*** **ADD#3**
- ***f) Loading dock/South Courtyard – footings, walls, switchback ramp*** **ADD#3**

***g) Dumpster Pad and Screen wall foundation*** ADD#3
***h) Marquee Site Sign - foundation*** ADD#3
***i) All other concrete site stairs and ramps throughout site.*** ADD#3
***j) Generator pad and transformer pads*** ADD#5

9) Contractor shall coordinate, layout and protect threaded embedded items to prevent bending, deformation, and corrosion. Contractor shall repair or restore all damaged threaded embed items prior to commencement of steel erection.

10) Contractor shall furnish and install all locker bases, including embedded treated wood sleepers if applicable.

11) Contractor shall install only all anchor bolts, base plates, leveling plates, bearing plates, inserts, sleeves, clips, and reglets required by the Contract Documents. Contractor to include grouting of base plates. Diamonds are not to be poured until approved by 05A contractor. This contractor is responsible for the protection of the diamonds and shall provide a cover at each.

12) Contractor shall coordinate with Mechanical and Electrical Contractors to ensure all rough-ins are complete prior to slab, deck, and wall pours. Contractor shall coordinate with the Construction Manager regarding scheduling of all concrete pours. Contractor shall submit each week to the Construction Manager, in writing, a weekly pour schedule for coordination with other trades.

13) Contractor shall be responsible for all excavation and backfill work required for the installation of concrete foundations, walls, and slabs. Contractor shall provide all pumping, dewatering, temporary bracing and shoring for its concrete work and temporary protection necessary to complete its work, and as required by the Contract Documents. Contractor shall maintain foundations free of water, mud, and the like until masonry operations have commenced, at which time it becomes the mason's responsibility, until backfill operations commence in each area. Contractor shall be responsible for backfilling to sub-grade and compacting of interior and exterior foundations, slabs, and walls. Contractor shall be responsible for all fine grading required to perform all its work. The Contractor shall dispose of his excavation and/or grading spoils in a central location onsite as directed by the Construction Manager.

14) Contractor includes all reinforcing bar, wire, chairs, etc… for this work.

15) Contractor shall slope slabs to floor drains as required. Failure to properly slope to drain and all future corrective actions to obtain proper drainage will become this contractor's fiscal responsibility.

16) Contractor shall furnish and install all concrete within the building exterior perimeter, reinforcing, formwork, excavation, backfilling, fine grading, fill, gravel (including granular backfill and geofoam lightweight fill where called out), weep holes, water stops, sleeves, support chairs, concrete pumping, hot/cold weather protection and the like for all of the following:

    i) footings / foundations,
    ii) slabs-on-grade,
    iii) elevated slabs / slabs-on-metal deck,
    iv) interior walls,
    v) piers,
    vi) grade beams,
    vii) slab haunches,
    viii) housekeeping / equipment pads,
    ix) Locker bases,
    x) pits,
    xi) elevator pits,

xii) interior stairs/ramps,
xiii) platforms and or stages,
xiv) loading dock (including stairs),
xv) concrete retaining walls,
xvi) slab depressions, note some depressions will be only if alternates are accepted,
xvii) mechanical yards,
xviii) and any other building concrete item called out within the drawings and specifications.

17) Contractor shall furnish and install the fine grading, gravel, vapor barrier and retarders, expansion joints, control joints, including all required scoring patterns for all slabs. Contractor is to provide slab edge assembly per UL# FW-D-0036 where required.

18) Contractor shall furnish and install all concrete and reinforcing steel for all pipe penetrations that penetrate its work per structural details. Contractor acknowledges steel sleeves for pipe penetrations through floor slabs extend above finish floor elevation at least two inches and includes all costs associated with properly hand finishing around said sleeves. This contractor is responsible for ensuring that sleeves are maintained at the correct elevation.

19) Contractor to protect CMU walls and/or adjacent finishes from splashing caused by concrete placement. If concrete splashes on CMU walls and/or adjacent finishes, the Contractor shall remove the splashed concrete.

20) Contractor shall provide as-built elevations shots of the slabs, platforms, ramps, and any other items installed by this Contactor including anchor bolts and leveling plates. Contractor shall provide as-built elevations of all top of footing elevations. Contractor shall provide this as- built information within forty-eight (48) hours after concrete has been poured. Once survey is completed in an area, contractor shall correct all deficiencies found within 24 hours to avoid project delays.

21) Contractor shall provide all hoisting required for its work.

22) Contractor shall supply and install all concrete and reinforcing mesh at all metal pan stairs and metal stair landings. Contractor to remove all over pour on underside of stairs to allow for painting. Include wash down of cleaning or protecting agents to allow painting operation to begin.

23) Contractor shall complete the installation of all anchor bolts and leveling plates promptly upon completion of supporting foundations in each building area.

24) Contractor shall provide for all floor slabs to be level and ready to receive specified floor finish. Contractor shall coordinate ~~sealers, hardeners, etc...~~ **ADD#3** with finish schedule to properly achieve this.

25) Contractor shall grade all backfill so that water runs away from any building structure.

26) Contractor shall furnish and install all necessary formwork, construction joints, diamond joints, control joints, isolation joints, expansion joints, waterproof seals, welded wire fabric, removable plastic or hardboard pre-formed strips, roofing felts, and vapor barriers. Contractor to carefully layout construction joints and control joints with finish schedule to allow for patterns to match architectural layout. All expansion joint material is to be of the “zip cap” variety.

27) Contractor shall furnish and install all moisture retaining covers and curing compounds as required to complete its work and to not delay future trades. This is to be closely coordinated with future floor finish requirements.

28) Contractor shall rub and finish all exposed concrete walls installed by this contractor.

29) Contractor shall provide for all excavation and backfill of own work.

30) Contractor to coordinate building retaining walls with earthwork contractor. This contractor shall install all cast-in-place concrete walls throughout the building and site including waterproofing systems, drainage systems, under drain systems, connections to storm systems where applicable, accessories, adhesives, backfill, final grading etc… for a complete system. Backfilling the walls will be the responsibility of this contractor with adequate material furnished in proximity by the 31A contractor.

31) Contractor shall provide stamped engineered shop drawings for all form work as required by the specifications or LJA.

32) Contractor includes installation and maintenance of fall protection and toeboards at slab block outs, toeboards at elevated slab perimeter and diamonds as necessary. Contractor to coordinate with masonry and steel contractor for removal of protection to allow for installation of their work.

33) Contractor includes below grade waterproofing of all below grade walls such as elevator pits, retaining walls where required at below grade walls. ***Contractor shall provide waterproofing/damproofing where called for on concrete substrates.*** **ADD#3**

34) Contractor includes caulking of own work, inclusive of plastic "zip cap" type expansion material for clean sealant joint.

35) Contractor has all costs associated with performing this scope of work in winter and summer conditions.

36) Contractor shall include all concrete required for the site sign, pump houses, mechanical and dumpster screen walls, ticket booth and concession building.

***37) Contractor shall furnish and install stair nosings for exterior (site) stairs as noted on L-dwgs. Contractor shall install aluminum stair nosings that are furnished by the 05A Contractor for stairs inside the building as detailed on A505 and A506.*** **ADD#3**

***38) Contractor shall be responsible for its own trash removal/off-site disposal (i.e., shall provide its own dumpsters or other means to haul debris from site).*** **ADD#5**

**SPECIAL CONSIDERATIONS:**

1. The Construction Manager has assumed slab on grade will be placed in no more than twenty pours. In the event Contractor requires more than twenty pours, Contractor to arrange with Construction Manager's Testing Agency for performance of floor levelness and floor flatness testing for all pours past pour twenty. All costs for this additional testing are the responsibility of this Contractor. Failure to properly coordinate the additional testing will result in the Construction Manager performing this service at the Contractor's expense.

2. Contractor is responsible for all FF and FL requirements.

3. **Contractor acknowledges and has accounted for within his bid, the second and fourth Saturdays of each month as required workdays. The contractor is expected to provide a crew of the same size that is provided during Monday through Friday. No exceptions.**

4. This bid package has an MBE goal of _10_ percent. All prime contractors, including certified MBE firms, when submitting bids or proposals as a prime contractor, must try to achieve this goal from MDOT certified MBE firms. All submittals of MBE materials and reporting requirements are applicable for the project, including the submittal of MBE Attachments A and B with its bid as described in specification section 00 43 39 - Minority Business Enterprises Procedures.

**EXCLUDED FROM THIS CONTRACTOR WORK is:**

1. Testing costs, unless specifically called for in this scope, are a result of negligence, poor workmanship, or failure of work to meet the requirement of the documents.

**END OF SCOPE 03A**

# WORK SCOPE CATEGORY 04A - Masonry

The work of this bid category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all Masonry work in accordance with the specifications, drawings, and applicable codes. All work is to be performed as shown on the plans and/or specified under the following technical sections:

| SECTION | NAME |
|---|---|
| 04 20 00 | UNIT MASONRY |
| 04 72 00 | CAST STONE MASONRY |
| 05 12 00 | STRUCTURAL STEEL FRAMING (for coordination purposes) |
| 05 12 13 | ARCHITECTURALLY EXPOSED STRUCTURAL STEEL FRAMING (for coordination purposes) |
| 05 21 00 | STEEL JOIST FRAMING (for coordination purposes) |
| 05 50 00 | METAL FABRICATIONS (for coordination purposes) |
| 05 51 13 | METAL PAN STAIRS (for coordination purposes) |
| 05 52 13 | PIPE AND TUBE RAILINGS (for coordination purposes) |
| ~~05 71 00~~ | ~~DECORATIVE METAL STAIRS (for coordination purposes)~~ ADD#3 |
| 05 73 00 | DECORATIVE METAL RAILINGS (for coordination purposes) |
| 07 11 13 | BITUMINOUS DAMPPROOFING |
| ***07 13 00*** | ***SHEET WATERPROOFING (as it relates to this scope)*** ADD#3 |
| ***07 14 16*** | ***COLD FLUID APPLIED WATERPROOFING (as it relates to this scope)*** ADD#3 |
| 07 21 00 | THERMAL INSULATION (as it relates to this scope) |
| ~~07 21 60~~ | ~~STRUCTURAL THEMAL BREAK (as it relates to this scope)~~ ADD#3 |
| 07 27 26 | FLUID-APPLIED MEMBRANE AIR BARRIERS |
| 07 62 00 | SHEET METAL FLASHING AND TRIM (as it relates to this scope) |
| 07 84 13 | PENETRATION FIRESTOPPING (as it relates to this scope) |
| 07 84 43 | JOINT FIRESTOPPING (as it relates to this scope) |
| 07 91 00 | PREFORMED JOINT SEALS (as it relates to this scope) |
| 07 92 00 | JOINT SEALANTS (as it relates to this scope) |
| 07 92 19 | ACOUSTICAL JOINT SEALANTS (as it relates to this scope) |
| 07 95 13 | EXPANSION JOINT COVER ASSEMBLIES (as it relates to this scope) |
| 08 11 13 | HOLLOW METAL DOORS AND FRAMES (as it relates to this scope) |
| 08 31 13 | ACCESS DOORS AND PANELS (as it relates to this scope) |
| 14 24 00 | PASSENGER ELEVATORS (for coordination purposes) |

Geotechnical Report issued by ECS Mid Atlantic, LLC dated February 3, 2023, with addendum dated March 21, 2023, for informational purposes only.

In addition to the above, trade contractors are to include, but are not limited to, AIA Documents A201 and A401, and various other Technical Specifications interfacing with this work. The Contractors are required to review the work descriptions of the other categories so as not to misunderstand the scope responsibilities. The Contractors are also bound to the HESS Safety Manual and all related weekly and daily documentation for North East Middle/High School Replacement Project for the administration of the contract.

**General Scope:**
**Contractor is responsible for General Scope of Work listed elsewhere in this specification section.**

**THE SPECIFIC SCOPE OF WORK IS TO INCLUDE, but is not limited to, the following items:**

**Masonry Specific Scope:**

1. Contractor includes full mockup panel for craftsmanship for Architect/Owner review and approval. Once approved, the mockup will be the standard for installation.

2. Contractor shall furnish and install all masonry work required by the Contract Documents, including, but not limited to, all brick, block, architectural pre-cast concrete (plant cast), shear walls, glazed block, ground face, split face, mortar, grout, masonry fill, parging, mortar washes, masonry reinforcement (vertical and horizontal), masonry and cast stone steel reinforcement bars, joint reinforcement, masonry lintels, ties and masonry anchors, point up, insulation (mineral wool, compressible, rigid, perlite, and the like for sound ratings) contiguous to this Contractor's work, masonry fire walls, masonry portal frame columns, column isolation, isolation strips, building paper, flashing, pre-molded control joints, weeps, flashings, mortar netting, samples, mock-ups, masonry cleaners, sealers, and dampproofing and/or waterproofing, spray and roll on vapor or air barrier**,** head of wall fireproofing, elevated slab edge to masonry wall fireproofing, and or smoke barriers, interior and exterior control joint caulking, final cleaning and washdown inclusive of louvers, window, curtainwall, storefront frame and glass protection and all other items required for a complete Masonry scope of work.

3. Contractor shall install only all loose angle lintels, beam lintels, anchor bolts (embedded in masonry) bolted structural steel, structural angles, structural tubing (anchors furnished by others) attached to masonry, and the like that are supplied by others. Contractor to include installation of elevator hoist beam. Contractor shall grout all bearing/leveling plates at all CMU walls. Contractor shall install all angles that are to be bolted to the CMU; this contractor shall furnish the epoxy material while all other items will be furnished by the 05A contractor.

4. Contractor shall coordinate the install of all hollow metal frames located within masonry walls furnished by the 06A contractor and set by the 06A contractor. This contractor shall ensure hollow metal frames remain installed plumb, level, square, and true to line until the frame is completely enclosed in masonry. Contractor shall be responsible for any repair or damage costs to the hollow metal frames.

5. Contractor shall furnish and install all masonry work associated with exterior site features that require masonry ie... site sign and site walls.

6. Contractor shall furnish and install all build in place expansion joints (rated, non-rated, expand-o flash joint covers, and the like) and accessories located at and within interior and exterior masonry walls.

7. Contractor includes furnish and install all Knox boxes located within masonry walls. Contractor to coordinate with local fire marshal for approval and installation. Type to be recessed and include decorative frame, finish bronze or equal.

8. Contractor shall be responsible for installation of all openings within masonry walls where required by other trades. Contractor shall provide adequate protection at designated openings for feeding of material to the building. Contractor shall remove the protection as directed by the Construction Manager.

9. Any wall penetration required by other trades which has a diameter or horizontal dimension greater than 12" shall require a lintel be installed. The majority of lintels will be masonry, contractor to refer to structural notes for requirements.

10. In the event an opening is required in a masonry wall and is not properly coordinated between the other trades and the 04A contractor, it is the other trades sole responsibility to implement the required fix. All other trades are required to perform layout of required openings as the walls progress. All costs to either saw-cut, or tooth cmu to allow for the opening is the responsibility of the other trades. In the event this contractor has missed the indicated opening, or has miss-sized the opening, the costs required for the fix is the responsibility of this contractor.

11. Contractor shall furnish and install all grouting where required for hollow metal frames, bearing plates, sills, bond beams, wall reinforcing, and other areas that are required.

12. Contractor shall fill all openings, including top of wall conditions, at full height masonry walls and provide all fire-safing, fire stopping, insulation and/or fire resistive joint systems as required, inclusive of elevated slab edge conditions short of masonry walls.

13. Contractor shall provide several mixing stations and/or staging areas as needed for the phasing of the project. Contractor includes **three** relocation(s) of mixing station(s) and staging areas as required for construction sequencing/logistics per the direction of the Construction Manager.

14. Contractor will furnish and install all temporary wall bracing of masonry walls inclusive of braces and footings in accordance with MOSH standards and/or good practice. All masonry walls are to be braced at all times until steel joists and deck are set in place and inspected. Contractor to coordinate bracing with concrete contractor pour schedule. Contractor to provide engineered wall bracing drawings and calculations for record and coordination purposes.

15. Contractor shall perform all dewatering and mucking out as required to perform its work, including cleaning of footings.

16. Contractor shall coordinate with other trades to allow them to properly set items to be embedded in masonry.

17. Contractor shall scrape and washdown all walls and floors of excess materials generated by it work.

18. Contractor shall furnish and install all water and/or dampproofing that is applied to its work.

19. Contractor includes the installation of 1,000 LF of miscellaneous steel lintels, angles, and/or plates that may not be shown on the drawings but may be required during construction.

20. Contractor shall layout all CMU foundations and walls, elevations, and the like to complete its scope of work. Brick points will be provided by the 31A Contractor at no more than 25’ intervals.

21. Contractor shall point up around all mechanical openings, electrical openings, sleeves, structural steel and the like located in masonry walls.

22. Contractor shall protect and maintain all architectural pre-cast concrete protection.

23. Contractor includes daily covering of head of wall conditions to prevent infiltration as required by owner. This includes areas where precast caps are set and not yet caulked due to weather conditions.

24. Contractor includes complete additional washdown prior to substantial completion to eliminate any efflorescence at no cost to the owner.

25. Contractor to include all temporary heating measures to perform all of its own work inclusive of tenting, heating, equipment and fuel.

26. Contractor to furnish and install all Architectural Precast Concrete (APC). Contractor includes engineered shop drawings and calculations for all APC. Contractor includes all inserts, attachment and anchorage devices/hardware, clips, angles, welding, and caulking for a complete installation of APC.

27. Contractor to coordinate with 06A, 21A, 23B and 26A contractor for installation of access doors furnished and installed by other contractors. This contractor to include cutting of all masonry to allow for installation of access doors by the 06A Contractor.

28. Contractor to furnish and install all exterior rigid and mineral wool insulation on masonry backup walls, including but limited to behind, brick, precast, cast stone and finish block areas. Contractor to coordinate with exterior framing being provided by 06A contractor.

29. Contractor shall include all masonry ***and architectural precast*** ADD#3required for the site sign, pump houses, mechanical and dumpster screen walls, ***Greenhouse (alt), dugouts, existing field House, mural wall, stadium entry pillars,*** ADD#3 ticket booth and concession building.

30. ***Contractor shall be responsible for its own trash removal/off-site disposal (i.e., shall provide its own dumpsters or other means to haul debris from site).*** ADD#5

**~~Responsibilities for Typical Parapet Walls~~**

1. ~~Responsibilities for Typical Parapet at CMU Back-up, Details D5, A5 /A431 (and other typical details) are assigned below:~~

~~a) 04A – Air barrier, continuous air barrier transition membrane, rigid insulation, CMU, brick veneer and attachments. Install anchor bolts furnished by the 05A Contractor.~~
~~b) 06A – Exterior fire rated plywood sheathing and blocking at top of parapet. Exterior fire rated plywood sheathing and blocking at both sides of parapet (if indicated),~~ ***~~mineral wool insulation~~*** ~~ADD#5, 2X wood blocking where required, batt insulation.~~
~~c) 05A - Furnish anchor bolts to 04A.~~
~~d) 07A – Adhered membrane flashing, flashing strip, closed cell backer rod, pre-finished aluminum coping. 1 /4" cover board over plywood.~~
~~e) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~2. Responsibilities for Typical Metal Panel Parapet at CMU Back-up, Details D5, A5 /A432, (and other typical details) are assigned below:~~

~~a) 04A – Air barrier and continuous air barrier overlapping transition membrane. CMU. Rigid foam insulation. Mineral wool insulation ADD#5. Install anchor bolts furnished by the 05A Contractor. Cont. STPE Sealant at termination bar. Thermal break cladding support system ADD#3,~~
~~b) 06A – Exterior fire rated plywood sheathing and blocking at top and sides of the parapet. Exterior fire rated plywood sheathing and blocking and rigid foam board insulation, mineral wool insulation at side low roof (detail A14/A432) ADD#3. 2X wood blocking where required,~~
~~c) 07A – Adhered membrane flashing, flashing strip, closed cell backer rod, pre-finished aluminum coping. 1 /4" cover board over plywood. All flashings and counter-flashings.~~
~~d) 07B – Metal panel system, thermal break cladding, mineral wool insulation at side low roof (*see* detail D14, A14/A432) ADD#3, continuous air barrier transition membrane, 2-piece prefinished aluminum metal panel base, 18 GA Min galvanized sheet metal 05A – Furnish anchor bolts to 04A.~~
~~e) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~3. Responsibilities for Typical Parapet at Stud Wall Back-up, Details D9 & A9 /A431, (and other typical details) are assigned below:~~

~~a) 04A – Continuous air barrier transition membrane and air barrier over 5/8" exterior gypsum sheathing.~~ ***~~Rigid board insulation~~*** ~~Foamed-in-place insulation. ADD#3 - Brick veneer and attachments.~~
~~b) 07A – Adhered membrane flashing, flashing strip, backer rod, pre-finished aluminum coping. 1 /4" cover board over plywood.~~

~~c) 06A – CFMF, batt insulation, 5/8" exterior gypsum sheathing, 5/8" exterior fire rated plywood sheathing, 2X wood blocking, ¾" and ½" plywood on top of parapet, metal studs, metal stud slide clip, ***continuous air barrier transition membrane and air barrier over 5/8" exterior gypsum sheathing***. ADD#3~~
~~d) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~4. Responsibilities for Typical Metal Panel Parapet at Stud Wall Back-up, Details D9 & A9 /A432 (and other typical details) are assigned below:~~
~~a) 04A – Continuous air barrier transition membrane and air barrier over 5/8" exterior gypsum sheathing. insulation. ADD#3~~
~~b) 06A – Exterior fire rated plywood sheathing and blocking at top of the parapet and side of wall, CFMF, batt insulation, 5/8" exterior gypsum sheathing all blocking, ¾" and ½" plywood, metal studs, metal stud slide clip, ***continuous air barrier transition membrane and air barrier*** mineral wool insulation. ADD#3~~
~~c) 07A – Adhered membrane flashing, flashing strip, backer rod, pre-finished aluminum coping. 3" cladding support system, metal panel system ADD#3. 1 /4" cover board over plywood.~~
~~d) 05A – Furnish and install continuous galvanized steel bent plate at top of parapet wall.~~
~~e) 07B – Metal panel system, thermal break cladding, mineral wool insulation at side low roof (detail D9 & A9/A432), continuous air barrier transition membrane, ADD#3 - 2-piece prefinished aluminum metal panel base,~~
~~f) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~5. Responsibilities for Typical Low Roof Studs w/ Metal Panel, Details D18 & A18 /A432 (and other typical details) are assigned below:~~
~~a) 04A – Continuous air barrier overlapping transition membrane over 5/8" exterior gypsum sheathing. Foamed-in-place insulation. ADD#3~~
~~b) 06A – 3" rigid foam insulation, exterior fire rated plywood sheathing and blocking, rigid foam board insulation and mineral wool insulation below blocking, CFMF, batt insulation, 5/8" exterior gypsum sheathing, galvanized sheet metal angle***, continuous air barrier and transition membrane***. ADD#3~~
~~d) 07A – All flashings and counter-flashings ***(to include the SS receiver and counterflashing)***. Mineral wool insulation at bottom of panel. ADD#3 - 1 /4" cover board over plywood and adhered membrane flashing~~
~~e) 07B – Metal panel system, thermal break cladding, ***thermal break cladding support system, continuous flexible flashing,*** ADD#3 - mineral wool insulation at side low roof (detail D14 & A14/A432), continuous air barrier transition membrane ADD#3, 2-piece prefinished aluminum metal panel base, continuous flexible flashing~~
~~f) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

***Responsibilities for Parapet Walls – REVISED PER ADDENDUM #5***

***04A – CMU, masonry veneer, grout, flashing and all other incidentals as shown and specified under 04 20 00. Install anchor bolts in CMU, furnished by 05A Contractor. Cavity wall insulation (rigid or mineral wool as shown) at all locations where insulation is behind masonry. All fluid applied membrane air barrier system complete, including continuous air barrier transition membrane at top of parapet, regardless of substrate. Provide termination sealant accepted for air barrier warranty as shown. The air barrier system for the entire building must be certified and warranted as a complete system as specified per 07 27 26.***
**ADD#5**

***05A – Furnish anchor bolts for parapet blocking to 04A Contractor for installation. Provide galvanized steel bent plates/angles at all locations shown.*** **ADD#5**

***06A – Provide all wood blocking, plywood, metal stud framing, bridge plates and exterior sheathing as shown. Provide batt insulation and mineral wool insulation within metal stud framing and at expansion joint cavities as indicated. Provide rigid foam board insulation where directly behind plywood sheathing (example A14/A432, and similar.)*** **ADD#5**

***07A – Provide all pre-finished coping and products specified under 07 41 13.16, cover board, flashings/counter-flashings for roof system, transition membrane from roof membrane over parapet blocking (overlapped to air barrier transition membrane). Provide closed cell backer rod, flashing strips, and all other incidentals necessary for a complete termination of roofing system as shown and specified under 07 54 23.*** **ADD#5**

***07B – Provide all thermal break cladding support systems complete as shown and specified. Provide all insulation (rigid and mineral wool) where shown behind metal panels. Provide all metal panels as shown and specified.*** **ADD#5**

**SPECIAL CONSIDERATIONS:**

1. In the event the contractor wishes to feed scaffolding without slabs being poured and the subgrade is disturbed, destroyed, rutted, becomes unsuitable, etc…, subgrade will be reestablished at this contractor's expense.

2. **Contractor acknowledges and has accounted for within his bid, the second and fourth Saturdays of each month as required workdays. Contractor is expected to provide a crew of the same size that is provided during Monday through Friday. No exceptions.**

3. This bid package has an MBE goal of _10_ percent. All prime contractors, including certified MBE firms, when submitting bids or proposals as a prime contractor, must try to achieve this goal from MDOT certified MBE firms. All submittals of MBE materials and reporting requirements are applicable for the project, including the submittal of MBE Attachments A and B with its bid as described in specification section 00 43 39 - Minority Business Enterprises Procedures.

**EXCLUDED FROM THIS CONTRACTOR WORK is:**

1. Testing costs, unless specifically called for in this scope, a result of negligence, poor workmanship, or failure of work to meet the requirement of the documents.

**END OF SCOPE 04A**

# WORK SCOPE CATEGORY 05A - Steel

The work of this bid category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all Steel work in accordance with the specifications, drawings and applicable codes. All work is to be performed as shown on the plans and/or specified under the following technical sections:

| SECTION | NAME |
|---|---|
| 00 91 00 | BIM COORDINATION REQUIREMENTS |
| 04 20 00 | UNIT MASONRY ASSEMBLIES (for coordination purposes) |
| 04 72 00 | CAST STONE MASONRY (for coordination purposes) |
| 05 12 00 | STRUCTURAL STEEL FRAMING |
| 05 12 13 | ARCHITECTURALLY EXPOSED STRUCTURAL STEEL FRAMING |
| 05 21 00 | STEEL JOIST FRAMING |
| 05 31 00 | STEEL DECKING |
| 05 50 00 | METAL FABRICATIONS |
| 05 51 13 | METAL PAN STAIRS |
| 05 51 40 | FABRICATED SPIRAL STAIRS |
| 05 52 13 | PIPE AND TUBE RAILINGS |
| 05 53 20 | STAIR NOSINGS |
| 05 73 00 | DECORATIVE METAL RAILINGS |
| 07 95 13 | EXPANSION JOINT COVER ASSEMBLIES (as it relates to this scope) |
| 08 33 13 | COILING COUNTER DOORS (for coordination purposes) |
| 08 33 23 | OVERHEAD COILING DOORS (for coordination purposes) |
| ~~08 33 13~~ | ~~SECTIONAL DOORS (for coordination purposes)~~ **ADD#2** |
| 08 36 53 | ***VERTICALLY OPERATING SECTIONAL DOORS (For coordination purposes)*** **ADD#3** |
| 08 41 13 | ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS (for coordination purposes) |
| 08 44 13 | GLAZED ALUMINUM CURTAIN WALLS (for coordination purposes) |
| 08 45 00 | TRANSLUCENT SINGLE PANEL WALL CLADDING ASSEMBLIES (for coordination purposes) |
| 08 91 19 | FIXED LOUVERS (for coordination purposes) |
| 09 91 23 | INTERIOR PAINTING (for coordination purposes) |
| 09 93 00 | STAINING AND TRANSPARENT FINISHING (for coordination purposes) |
| 09 96 00 | HIGH-PERFORMANCE COATINGS (for coordination purposes) |
| 10 00 05 | MISCELLANEOUS SPECIALTIES (for coordination purposes) |
| 10 11 00 | VISUAL DISPLAY SURFACES (for coordination purposes) |
| 10 21 13.19 | PLASTIC TOILET COMPARTMENTS (for coordination purposes) |
| 10 21 23 | CUBICLE CURTAINS AND TRACK (for coordination purposes) |
| 10 22 39 | FOLDING PANEL PARTITIONS (for coordination purposes) |
| ~~10 22 39.13~~ | ~~FOLDING GLASS PANEL PARTITIONS (for coordination purposes)~~ **ADD#3** |
| ~~10 56 26~~ | ~~STORAGE SPECIALTIES (for coordination purposes)~~ **ADD#3** |
| ***10 56 13*** | ***METAL STORAGE SHELVING (For coordination purposes)*** **ADD#3** |
| 10 73 10 | PROTECTIVE COVERS (for coordination purposes) |
| 11 00 05 | MISCELLANEOUS EQUIPMENT (for coordination purposes) |
| 11 40 00 | FOOD SERVICE EQUIPMENT (for coordination purposes) |
| 11 53 13 | LABORATORY FUME HOODS (for coordination purposes) |
| 11 61 33 | RIGGING SYSTEMS AND CONTROLS (for coordination purposes) |
| 11 61 43 | STAGE CURTAINS (for coordination purposes) |
| 11 66 23 | GYMNASIUM EQUIPMENT (for coordination purposes) |
| 11 66 53 | GYMNASIUM DIVIDER (for coordination purposes) |
| 13 21 48 | SOUND-CONDITIONED MUSIC PRACTICE ROOMS (for coordination purposes) |
| 13 34 13 | GREENHOUSE AND GREENHOUSE RELATED EQUIPMENT (for coordination purposes) |
| 14 24 00 | PASSENGER ELEVATORS (for coordination purposes) |

14 42 00 WHEELCHAIR LIFTS (for coordination purposes)

Geotechnical Report issued by ECS Mid Atlantic, LLC dated February 3, 2023, with addendum dated March 21, 2023, for informational purposes only.

In addition to the above, trade contractors are to include, but are not limited to, AIA Documents A201 and A401, and various other Technical Specifications interfacing with this work. The Contractors are required to review the work descriptions of the other categories so as to not misunderstand the scope responsibilities. The Contractors are also bound to the HESS Safety Manual and all related weekly and daily documentation for North East Middle/High School Replacement Project for the administration of the contract.

**General Scope:**
**Contractor is responsible for General Scope of Work listed elsewhere in this specification section.**

**THE SPECIFIC SCOPE OF WORK IS TO INCLUDE, but is not limited to, the following items:**

**Steel and Miscellaneous Metals Specific Scope:**

1. As the Construction Manager, HESS shall manage the use of construction coordination models throughout the construction process. All BIM-related information shall be exchanged through the BIM FTP site managed by HESS. Each contractor shall be responsible to coordinate his work with each trade. However, the Mechanical contractor will be responsible to lead the coordination process. HESS shall play the role of the Quality Control Manager during this process. Utilizing design models created by A/E and fabrication/coordination models prepared and submitted by the listed trade contractors, HESS will maintain an up-to-date Federated model throughout the construction phase. The Federated model will be used to fully and properly coordinate and sequence the work of the trades, to maximize efficiencies during construction. Conflicts in the layout and sequencing of the work will be discussed and resolved in a series of periodic construction coordination meetings.

   All Steel, Mechanical, Plumbing, Electrical and Fire Protection contractors will be required to prepare 3D coordination models compatible with latest AutoCAD and Navisworks software. For clash detection to work properly, all models shall have a common reference point which shall be derived from the Architectural Design Model. All costs shall be included in the contractors bid. Contract architectural, MEP and structural drawings (3D) will be available electronically from the designated FTP site. During the construction phase these individual fabrication models shall be combined to create a Federated Construction Coordination model. BIM processes such as clash detection, submittals, trade sequencing, etc. will be done using the Construction Coordination model. The shop drawings submitted for records and approval will be generated from the Construction Coordination model or from individual models therein. The Construction Coordination model will be updated and maintained throughout construction to create an accurate as-built digital record of the construction of the project. The as-built BIM will be conveyed to the Owner on completion of construction, as a tool to assist owner in facility operation and maintenance.

   The Mechanical contractor will take the lead and develop a drawing list for approval by the Construction Manager subdividing the building into separate areas. The drawing list will be for submission and will indicate a submission schedule coordinated with the construction activities. The drawings shall be developed in a sequential fashion so as to not delay installation of the work or the overall project schedule. The Construction Manager shall prepare a schedule identifying the activity and duration of each submission. The Mechanical contractor will call meetings, weekly, or as required, which all required contractors must attend to avoid delay. Such meeting can be held via web conference if agreed upon mutually by all parties. Failure to attend will require the contractor to field run the work not coordinated. No extra compensation will be paid to any contractor for relocating any equipment, duct, pipe, conduit, or other material that has been installed without proper coordination. If the installation of any uncoordinated work or improper installation or coordinated work necessitates additional work by other contractors, the cost of such additional work shall be assessed to the contractor responsible as determined by the Construction Manager. Where conflicts are found in the Model, regardless of the phase of the Project or LOD, the discovering party shall promptly notify the Model Element

Author(s). Upon such notification, the Model Element Author shall act promptly to mitigate the conflict. At the conclusion of each coordination phase, the Mechanical contractor will notify the Construction Manager whereupon an onsite coordination meeting will be scheduled for the purpose of signing off on each respective area. After the review and approval of coordination in 3D, the Mechanical contractor shall provide one color composite set of drawings and forward them to the Construction Manager. In the preparation of all the final composite drawings, large scale details as well as cross and longitudinal sections shall be made as required to fully delineate all conditions. Particular attention shall be given to the locations, size and clearance dimensions of equipment items, shafts, and similar features. The final composite drawings shall include the locations of all controls, tie-ins, connections for other subcontractor's work, and pipe and duct insulation as required. Each trade contractor indicating their acceptance and approval of the indicated routings and layouts and their relationship with the adjoining or contiguous work of all contractors shall then sign off these final composite drawings. Therefore, no unauthorized deviations will be permitted. If deviations are made without the knowledge and agreement of the Construction Manager and other affected contractors, the work in question will be subject to removal and correction at no additional cost to the Owner.

2. After final composite drawings have been accepted and approved, the Mechanical contractor shall print one (1) color copy to be signed by all contractors. The Mechanical contractor shall provide the composite drawings digitally to all contractors through the HESS FTP site and will also submit two (2) set of prints for submittal purposes to the Construction Manager. The original signed off drawing shall be sent to the Construction Manager for permanent possession. No contractor will be authorized to release any material for fabrication or installation until the composite drawing(s) has been prepared and the signature process is executed and approved by the Construction Manager

3. Contractor shall review and comply fully with the Building Information Modeling (BIM) requirements detailed in specification section 00910 – BIM COORDINATION REQUIREMENTS.

4. Contractor shall furnish and install all structural steel, architectural exposed structural steel, steel joists, metal decking, nelson studs, column covers, decorative metal, decorative column covers, framing for all roof openings and penetrations, floor openings and penetrations, wall bracing, angles, sump pump frames/grates, bent plates, security gates, swing gates, metal pan stairs, alternating tread stairs, spiral stairs railings, handrails, guardrails, roof screen framing, galvanized metal pour stops, ~~swing hooks~~ **ADD#3**, accessories, architectural metals and miscellaneous metals. Contractor shall maintain adequate crews and cranes to meet construction schedule.

5. Contractor is responsible for crane staging requirements outside of the project ring road identified in the 31A contractor's scope of work.

6. Contractor shall furnish only all anchor bolts, nuts, washings, leveling plates, bollards (interior and exterior), bearing plates, bent plates, pads, straps, ties, fabricated lintels and hung plates inclusive of metal drip edge, loose lintels, bent plates, angles, and all other embedded steel for the entire project in which other trades are installing. Steel lintels are to be provided for all openings in load bearing masonry per the structural drawing schedule for the Masonry Contractor to install. Mason will only install loose lintels and elevator hoist beam, any lintels requiring welded attachment to the structure will be installed by this contractor. Contractor shall provide delivery tickets for all furnish only items to the installing Contractor and the Construction Manager.

7. Any wall penetration required by other trades which has a diameter or horizontal dimension greater than 12" shall require a lintel be installed. The majority of lintels will be masonry, contractor to refer to structural notes for requirements.

8. Contractor includes furnish and install of miscellaneous metals for support of projection screens, therapeutic equipment, stage curtains, athletic equipment, roof top equipment, folding partitions, etc… as indicated.

9. Contractor to provide prime shop coating, field painting, and touch up as required for all structural steel, joists, and miscellaneous metals. Contractor to coordinate primer with fire resistive material requirements of the project. Contractor also includes all insulative coatings where required.

10. Contractor to shop galvanize any metals which remain exposed to exterior elements, and as indicated on the construction documents, whichever is more stringent.

11. Contractor shall provide all masonry anchors attached to steel. Contractor to coordinate each of the trades as necessary to determine the exact type of anchor required. Contractor shall furnish all anchor bolts for the parapet wood blocking and any other wood shown to be anchor with anchor bolts.

12. Contractor shall furnish and install all epoxy bolts as necessary (including the epoxy).

13. ~~Contractor shall furnish and install all swing hooks including, but not limited to, all angle steel, tube steel, steel plate, threaded holes, and stainless steel threaded hooks.~~ **ADD#3**

14. Contractor shall coordinate with each of the trades to provide all steel framing, supports, openings, sleeves, and bracing that is required. Typically, all roof penetrations larger than 12" require a steel frame. Note all roof drains, regardless of size, require a roof frame below the deck.

15. Contractor shall core drill for all railings installed in concrete. Contractor shall ensure that unless rail is intended to be removable, the railing posts are set in non-expansive materials.

16. Contractor shall furnish and install all miscellaneous metal fabrications, including but not limited to, all gratings, ladders, rails, stairs, spiral stars, stair nosings (furnish only), bollards (furnish only), ~~racks, swivel hooks~~ **ADD#3**, tracks, bracing, closures, ~~hangers for OTPT hooks, yokes at spaces~~ **ADD#3**, folding partition supports, ships ladders, alternating tread ladders, roof ladders includes serrated grab bars, angles at elevator door sills, aluminum and stainless steel at trench drains, exterior retaining wall rails, exterior site stair rails and all other miscellaneous and ornamental items that are required as indicated. Note that the bollards and embedded nosings will be installed by the Concrete Contractor. ***All references to furnishing of stair nosings within this scope apply to stair nosings within the building. Refer to details on A-504 through A-506 and specification 05 53 20. Exterior stair nosings will be furnished and installed by the 03A Contractor*** **ADD#3**

17. Contractor shall immediately provide and maintain MOSH compliant temporary handrails at all steel pan stairs, safety rails at all slab edges, stairwells, slab openings, roof openings, elevator openings, edge of deck at roof level and penthouses. Handrails shall be maintained and removed by this Contractor at the direction of the Construction Manager.

18. Contractor shall touch up and paint/field galvanize all welds including, but not limited to, those welds at all joists, beams, columns, moment connections, metal decking, and any other steel or miscellaneous metals item supplied by this Contractor. For galvanized material, contractor to minimize field welding on galvanized metals. Galvanized materials should be fabricated in the longest practical lengths to avoid field repairs to the galvanized coating. All galvanizing holes are to be plugged and touched up at shop prior to field installation.

19. Contractor shall provide field beam penetrations where approved by the structural engineer. This contractor to coordinate with other trades on the projects "Coordination Drawings".

20. Contractor shall coordinate the joist and beam layout with the Division 21, 23 and 26 Contractors and shift the layout as necessary to accommodate the work of these contractors prior to fabrication and at no additional cost to the Owner, given structural engineer approval.

21. Contractor includes supplying 1,000 LF of galvanized steel lintels (L6 x 3-1/2 x 3/8 LLV) that may not be graphically shown on the drawings or called out in a structural note but may be required during construction. This is in addition to what is shown and or noted on the construction documents. Contractor to pay particular attention to general lintel schedule and notes as not all lintels will be graphically shown.

22. Contractor includes supplying and installing 800 LF of miscellaneous galvanized bracing angles (4 x 4 x ¼). Contractor includes fabrication of needed lengths. This is in addition to what is shown and or noted on the construction documents.

23. Contractor shall furnish and install all lintels and hung plates attached to steel and shall, by use of instrument or other accurate device, ensure that all lintels and hung plates are set to proper line and grade and measured from established control points. Contractor to coordinate hung plate length(s) with masonry opening size to ensure end gaps of plate are not more than 3/8" so caulking contractor can provide adequate seal.

24. Contractor shall provide anchor bolt drawings and templates to both the Construction Manager and the Concrete Contractor within thirty (30) days of receiving a Letter of Intent, Notice of Award or the Contract, whichever is issued first.

25. Contractor shall completely survey and verify all anchor bolts. Survey to be completed at foundation completion but no later than two (2) weeks prior to erection of steel. Survey must be submitted within 48 hours of completion of survey. Contractor will notify the Construction Manager of any discrepancies or variations. If the Contractor does not advise the Construction Manager prior to the erection of steel, then the cost of the correcting any discrepancies or variations shall be the sole responsibility of this Contractor.

26. Contractor shall furnish, install, reconfigure, maintain, and remove all OSHA specified protection required in relation to its work at the direction of the Construction Manager. Contractor shall cover and provide fall protection for all openings in metal deck created by this Contractor.

27. Contractor shall furnish, install, reconfigure, maintain, and remove barriers in areas where steel is being installed and around the entire perimeter of elevated floors and roofs. Contractor shall provide the proper barriers to prevent people from entering areas steel is passing over.

28. Contractor shall review all documents for locations of openings in the Roof System that will be required by others. Contractor shall furnish and install all structural supports, angle, and safety rails for these openings. Contractor will be responsible for cutting of all openings shown on all drawings in its work.

29. Contractor shall protect all adjacent work and structures from welding sparks, slag, or any other results of this Contractor's work. Contractor to include all necessary fire watches.

30. Contractor shall coordinate with all other trades to properly set items supplied by this contractor and embedded or otherwise installed by others. Contractor is also responsible for coordination and layout of required angles used to support the drywall bulkheads.

31. Contractor shall coordinate with all other trades which require access through structural elements.

32. Contractor shall coordinate with the Masonry Contractor and confirm in the field to assure that wall mounted handrail connections on masonry walls are fastened through solid grouted CMU.

33. Contractor has reviewed existing site conditions and access roads for confirmation of delivery of long span items. In the event deliveries cannot be made, contractor to field splice items on site as necessary at no added cost to the Owner or Construction Manager.

34. Contractor to furnish and install all acoustical decking. Contractor to ensure "sandwich" type decking is stored in dry location and installed quickly to ensure no water infiltration in seems. In the event it is "lay-in acoustical insulation" type deck, 05A is to furnish to the 07A contractor for installation by 07A said insulation.

35. All Architecturally Exposed Structural Steel (AESS) shall be installed in strict accordance with the contract documents.

**36.** ***05A Contractor shall furnish aluminum receiver and trench cover detailed on A16/A-427, for installation by 03A Contractor. 05A Contractor will coordinate with 09B Contractor for proper recess for flush installation of finish flooring material.*** **ADD#3**

**~~Responsibilities for Typical Parapet Walls~~**

~~1. Responsibilities for Typical Parapet at CMU Back-up, Details D5, A5 /A431 (and other typical details) are assigned below:~~

~~a) 04A – Air barrier, continuous air barrier transition membrane, rigid insulation, CMU, brick veneer and attachments. Install anchor bolts furnished by the 05A Contractor.~~

~~b) 06A – Exterior fire rated plywood sheathing and blocking at top of parapet. Exterior fire rated plywood sheathing and blocking at both sides of parapet (if indicated), 2X wood blocking where required, batt insulation.~~

~~c) 05A – Furnish anchor bolts to 04A.~~

~~d) 07A – Adhered membrane flashing, flashing strip, closed cell backer rod, pre finished aluminum coping. 1 /4" cover board over plywood.~~

~~e) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~2. Responsibilities for Typical Metal Panel Parapet at CMU Back-up, Details D5, A5 /A432, (and other typical details) are assigned below:~~

~~a) 04A – Air barrier and continuous air barrier overlapping transition membrane. CMU. Rigid foam insulation. Mineral wool insulation. Install anchor bolts furnished by the 05A Contractor. Cont. STPE Sealant at termination bar. Thermal break cladding support system~~ ~~ADD#3~~~~,~~

~~b) 06A – Exterior fire rated plywood sheathing and blocking at top and sides of the parapet. Exterior fire rated plywood sheathing and blocking and rigid foam board insulation, mineral wool insulation at side low roof (detail A14/A432)~~ ~~ADD#3~~~~. 2X wood blocking where required,~~

~~c) 07A – Adhered membrane flashing, flashing strip, closed cell backer rod, pre finished aluminum coping. 1 /4" cover board over plywood. All flashings and counter flashings.~~

~~d) 07B – Metal panel system, thermal break cladding, mineral wool insulation at side low roof (~~***~~see~~*** ~~detail D14, A14/A432)~~ ~~ADD#3~~~~, continuous air barrier transition membrane, 2 piece prefinished aluminum metal panel base, 18 GA Min galvanized sheet metal 05A – Furnish anchor bolts to 04A.~~

~~e) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~3. Responsibilities for Typical Parapet at Stud Wall Back-up, Details D9 & A9 /A431, (and other typical details) are assigned below:~~

~~a) 04A – Continuous air barrier transition membrane and air barrier over 5/8" exterior gypsum sheathing.~~ ~~***Rigid board insulation***~~~~Foamed-in-place insulation.~~ ~~ADD#3~~~~. Brick veneer and attachments.~~

~~b) 07A – Adhered membrane flashing, flashing strip, backer rod, pre finished aluminum coping. 1 /4" cover board over plywood.~~

~~c) 06A – CFMF, batt insulation, 5/8" exterior gypsum sheathing, 5/8" exterior fire rated plywood sheathing, 2X wood blocking, ¾" and ½" plywood on top of parapet, metal studs, metal stud slide clip,~~ ~~***continuous air barrier transition membrane and air barrier over 5/8" exterior gypsum sheathing***~~~~.~~ ~~ADD#3~~

~~d) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before~~

~~completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~4. Responsibilities for Typical Metal Panel Parapet at Stud Wall Back up, Details D9 & A9 /A432 (and other typical details) are assigned below:~~

~~a) 04A – Continuous air barrier transition membrane and air barrier over 5/8" exterior gypsum sheathing. insulation.~~ ~~ADD#3~~

~~b) 06A – Exterior fire rated plywood sheathing and blocking at top of the parapet and side of wall, CFMF, batt insulation, 5/8" exterior gypsum sheathing all blocking, ¾" and ½" plywood, metal studs, metal stud slide clip,~~ ~~***continuous air barrier transition membrane and air barrier***~~ ~~mineral wool insulation.~~ ~~ADD#3~~

~~c) 07A – Adhered membrane flashing, flashing strip, backer rod, pre finished aluminum coping. 3" cladding support system, metal panel system~~ ~~ADD#3~~~~. 1 /4" cover board over plywood.~~

~~d) 05A – Furnish and install continuous galvanized steel bent plate at top of parapet wall.~~

~~e) 07B – Metal panel system, thermal break cladding, mineral wool insulation at side low roof (detail D9 & A9/A432), continuous air barrier transition membrane,~~ ~~ADD#3~~ ~~2-piece prefinished aluminum metal panel base,~~

~~f) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~5. Responsibilities for Typical Low Roof Studs w/ Metal Panel, Details D18 & A18 /A432 (and other typical details) are assigned below:~~

~~a) 04A – Continuous air barrier overlapping transition membrane over 5/8" exterior gypsum sheathing. Foamed in place insulation.~~ ~~ADD#3~~

~~b) 06A – 3" rigid foam insulation, exterior fire rated plywood sheathing and blocking, rigid foam board insulation and mineral wool insulation below blocking, CFMF, batt insulation, 5/8" exterior gypsum sheathing, galvanized sheet metal angle~~~~***, continuous air barrier and transition membrane***~~~~.~~ ~~ADD#3~~

~~d) 07A – All flashings and counter flashings~~ ~~***(to include the SS receiver and counterflashing)***~~~~. Mineral wool insulation at bottom of panel.~~ ~~ADD#3~~~~. 1 /4" cover board over plywood and adhered membrane flashing~~

~~e) 07B – Metal panel system, thermal break cladding,~~ ~~***thermal break cladding support system, continuous flexible flashing,***~~ ~~ADD#3~~~~ – mineral wool insulation at side low roof (detail D14 & A14/A432), continuous air barrier transition membrane~~ ~~ADD#3~~~~, 2-piece prefinished aluminum metal panel base, continuous flexible flashing~~

~~f) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

***Responsibilities for Parapet Walls – REVISED PER ADDENDUM #5***

***04A – CMU, masonry veneer, grout, flashing and all other incidentals as shown and specified under 04 20 00. Install anchor bolts in CMU, furnished by 05A Contractor. Cavity wall insulation (rigid or mineral wool as shown) at all locations where insulation is behind masonry. All fluid applied membrane air barrier system complete, including continuous air barrier transition membrane at top of parapet, regardless of substrate. Provide termination sealant accepted for air barrier warranty as shown. The air barrier system for the entire building must be certified and warranted as a complete system as specified per 07 27 26.***
**ADD#5**

***05A – Furnish anchor bolts for parapet blocking to 04A Contractor for installation. Provide galvanized steel bent plates/angles at all locations shown.*** **ADD#5**

***06A – Provide all wood blocking, plywood, metal stud framing, bridge plates and exterior sheathing as shown. Provide batt insulation and mineral wool insulation within metal stud framing and at expansion***

***joint cavities as indicated. Provide rigid foam board insulation where directly behind plywood sheathing (example A14/A432, and similar.)*** **ADD#5**

***07A – Provide all pre-finished coping and products specified under 07 41 13.16, cover board, flashings/counter-flashings for roof system, transition membrane from roof membrane over parapet blocking (overlapped to air barrier transition membrane). Provide closed cell backer rod, flashing strips, and all other incidentals necessary for a complete termination of roofing system as shown and specified under 07 54 23.*** **ADD#5**

***07B – Provide all thermal break cladding support systems complete as shown and specified. Provide all insulation (rigid and mineral wool) where shown behind metal panels. Provide all metal panels as shown and specified.*** **ADD#5**

**Miscellaneous Specialties Scope:**

1. Contractor shall furnish and install all miscellaneous metals including but limited to, steel ladders, loose bearing plates, loose steel lintels, shelf angles, support angles for elevator door sill, steel framing and supports for overhead doors, steel framing and supports for mechanical and electrical equipment, elevator sump grates, pipe grid, miscellaneous storm drain piping specialties. This will include any miscellaneous fasteners required to provide a complete installation.

2. Contractor shall furnish and install all metal stairs, pipe and tube railings and decorative metal railings shown on the contract documents. This will include any design calculations required and miscellaneous fasteners and material need for a complete installation.

3. Contractor shall furnish and install all glass railing complete including but not limited to, exposed fasteners, concealed fasteners, etc… as indicated on the contract documents. Contractor to include all blocking required for this work.

4. Contractor to include own labor and equipment for unloading of deliveries, deliveries which arrive without contractor forces onsite will be immediately denied access to the site.

5. Contractor includes all incidental caulking associated with this work for a complete installation.

6. Contractor responsible for final cleaning and adjustment of materials furnished under this contract immediately prior to substantial completion.

7. ***Contractor shall furnish and install all site handrails and guardrails throughout site, including excavation for footing, compacted aggregate sub-base, concrete, core drilling, sleeves, non-shrink grout, fasteners, sealant, and all other incidental work for a complete installation. Railings are required at all site stairs, ramps, retaining walls, and other conditions as called for on civil/landscape drawings.*** **ADD#3**

**SPECIAL CONSIDERATIONS:**

1. **Contractor acknowledges and has accounted for within his bid, the second and fourth Saturdays of each month as required workdays. Contractor is expected to provide a crew of the same size that is provided during Monday through Friday, Including crane operator. No exceptions.**

2. This bid package has an MBE goal of _5_ percent. All prime contractors, including certified MBE firms, when submitting bids or proposals as a prime contractor, must try to achieve this goal from MDOT certified MBE firms. All submittals of MBE materials and reporting requirements are applicable for the project, including the submittal of MBE Attachments A and B with its bid as described in specification section 00 43 39 - Minority Business Enterprises Procedures.

**EXCLUDED FROM THIS CONTRACTOR WORK:**

1. Testing costs unless specifically called for in this scope, a result of negligence, poor workmanship, or failure of work to meet the requirement of the documents.

2. Installation of embeds and anchor bolts.

3. Grouting of base plates.

4. Spray-on fire proofing or paints. Contractor is to coordinate priming, or not priming of materials which are to receive fire resistive materials by others to ensure compatibility of materials.

5. Final painting unless noted as included in above scope.

**END OF SCOPE 05A**

## WORK SCOPE CATEGORY 06A – General Trades

The work of this bid category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all Concrete Floor Enhancements, Stair Nosings, Column Covers, Rough Carpentry, Drywall & ACT, Cubicles, Installation of Frames, Doors, Hardware, ***cold formed metal framing, fireproofing, expansion joints, counter doors, coiling doors, overhead doors, sectional doors, mirrors, louvers, and interior finishes, specialties, equipment, furnishings, greenhouse, elevator, and wheelchair lift*** ADD#3 work in accordance with the specifications, drawings and applicable codes. All work is to be performed as shown on the plans and/or specified under the following technical sections:

| SECTION | NAME |
|---|---|
| ***01 58 13.00*** | ***TEMPORARY PROJECT SIGNAGE*** ADD#5 |
| ***02 41 19*** | ***SELECTIVE DEMOLITION (as it relates to this scope)*** ADD#3 |
| 03 35 46.23 | CONCRETE FLOOR ENHANCEMENT |
| 05 12 00 | STRUCTURAL STEEL FRAMING (for coordination purposes) |
| 05 12 13 | ARCHITECTURALLY EXPOSED STRUCTURAL STEEL FRAMING (for coordination purposes) |
| 05 21 00 | STEEL JOIST FRAMING (for coordination purposes) |
| 05 31 00 | STEEL DECKING (for coordination purposes) |
| 05 40 00 | COLD-FORMED METAL FRAMING |
| 05 50 00 | METAL FABRICATIONS (for coordination purposes) |
| 05 51 13 | METAL PAN STAIRS (for coordination purposes) |
| 05 51 40 | FABRICATED SPIRAL STAIRS (for coordination purposes) |
| 05 52 13 | PIPE AND TUBE RAILINGS (for coordination purposes) |
| 05 53 20 | STAIR NOSINGS (as it relates to this scope) |
| 05 58 13 | COLUMN COVERS |
| 05 71 00 | DECOARATIVE METAL STAIRS (for coordination purposes) |
| 05 73 00 | DECORATIVE METAL RAILINGS (for coordination purposes) |
| 06 10 53 | MISCELLANEOUS ROUGH CARPENTRY |
| 06 16 43 | GYPSUM SHEATHING |
| ***07 18 00*** | ***TRAFFIC COATINGS*** ADD#3 |
| 07 21 00 | THERMAL INSULATION (as it relates to this scope) |
| 07 27 26 | FLUID-APPLIED MEMBRANE AIR BARRIERS (for coordination only) |
| 07 42 13.13 | METAL WALL PANELS (for coordination purposes) |
| ~~07 42 13.16~~ | ~~METAL PLATE WALL PANELS (for coordination purposes)~~ ADD#3 |
| 07 42 13.19 | INSULATED METAL WALL PANELS (for coordination purposes) |
| ***07 42 13.23*** | ***METAL COMPOSITE MATERIAL WALL PANELS (for coordination purposes)*** ADD#3 |
| 07 48 13 | THERMAL BREAK CLADDING SUPPORT SYSTEM (for coordination purposes) |
| ~~07 52 16~~ | ~~MODIFIED BITUMINOUS MEMBRANE ROOFING (for coordination purposes)~~ ADD#3 |
| ***07 54 23*** | ***THERMOPLASTIC -POLYOLEFIN (TPO) ROOFING*** ADD#3 |
| 07 62 00 | SHEET METAL FLASHING AND TRIM (for coordination purposes) |
| 07 71 00 | ROOF SPECIALTIES (for coordination purposes) |
| 07 71 29 | MANUFACTURED ROOF EXPANSION JOINTS (for coordination purposes) |
| 07 72 00 | ROOF ACCESSORIES (for coordination purposes) |
| 07 81 00 | APPLIED FIREPROOFING |
| 07 81 23 | INTUMESCENT FIREPROOFING |
| 07 84 13 | PENETRATION FIRESTOPPING (as it relates to this scope) |
| 07 84 43 | JOINT FIRESTOPPING (as it relates to this scope) |
| 07 91 00 | PREFORMED JOINT SEALS (as it relates to this scope) |
| 07 92 00 | JOINT SEALANTS (as it relates to this scope) |
| 07 92 19 | ACOUSTICAL JOINT SEALANTS (as it relates to this scope) |
| 07 95 13 | EXPANSION JOINT COVER ASSEMBLIES |

| | |
|---|---|
| 08 11 13 | HOLLOW METAL DOORS AND FRAMES |
| 08 14 16 | FLUSH WOOD DOORS ~~(for installation and coordination purposes)~~ **ADD#3** |
| 08 31 13 | ACCESS DOORS AND PANELS (as it relates to this scope) |
| 08 33 00 | INSULATED COILING COUNTER DOORS |
| 08 33 13 | COILING COUNTER DOORS |
| 08 33 23 | OVERHEAD COILING DOORS |
| 08 36 53 | VERTICALLY OPERATING SECTIONAL DOORS |
| 08 41 13 | ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS (for coordination purposes) |
| 08 44 13 | GLAZED ALUMINUM CURTAIN WALLS (for coordination purposes) |
| 08 45 00 | TRANSLUCENT SINGE PANEL WALL CLADDING ASSEMBLIES (for coordination purposes) |
| 08 71 00 | DOOR HARDWARE |
| 08 83 00 | MIRRORS |
| 08 91 19 | FIXED LOUVERS |
| 09 21 16.23 | GYPSUM BOARD SHAFT WALL ASSEMBLIES |
| 09 22 16 | NON-STRUCTURAL METAL FRAMING |
| 09 29 00 | GYPSUM BOARD |
| 09 51 13 | ACOUSTICAL PANEL CEILINGS |
| 09 54 23 | LINEAR METAL CEILINGS |
| 09 54 46 | POLYESTER FELT BLADE BAFFLE PANELS |
| ***09 72 00*** | ***WALL COVERINGS*** **ADD#3** |
| 09 72 53 | SPECIAL WALL COVERING |
| 09 78 53 | FLUSH JOINT LINEAR WALL PANEL SYSTEM |
| 09 84 00 | ACOUSTICAL WALL PANELS |
| 09 84 00.01 | FABRIC WRAPPED SOUND-ABSORBING WALL PANELS |
| 09 84 00.03 | SOUND-REFLECTING CEILING PANELS |
| 09 84 17 | CEMENTITIOUS WOOD FIBER WALL SHAPES ACOUSTICAL WALL PANELS |
| 09 91 23 | INTERIOR PAINTING |
| 09 93 00 | STAINING AND TRANSPARENT FINISHING (for coordination purposes) |
| 09 96 00 | HIGH-PERFORMANCE COATINGS |
| 09 96 72 | FLUID APPLIED INSULATIVE COATING |
| 10 00 05 | MISCELLANEOUS SPECIALTIES |
| 10 11 00 | VISUAL DISPLAY ~~BOARDS~~ ***UNITS*** **ADD#3** |
| 10 14 00 | SIGNAGE |
| 10 21 13.19 | PLASTIC TOILET PARTITIONS |
| 10 21 23 | CUBCILE CURTAINS AND TRACK |
| 10 22 13 | WIRE MESH PARTITIONS |
| 10 22 39 | FOLDING PANEL PARTITIONS |
| 10 26 23.11 | DECORATIVE PROTECTION PANELS |
| 10 28 00 | TOILET, BATH, AND LAUNDRY ACCESSORIES |
| 10 28 00.13 | ELECTRIC HAND DRYERS |
| 10 44 13 | FIRE PROTECTION CABINETS |
| 10 44 16 | FIRE EXTINGUISHERS |
| 10 50 00 | LOCKERS |
| 10 50 53 | ATHLETIC LOCKERS & STORAGE ASSEMBLIES |
| 10 56 13 | METAL STORAGE SHELVING |
| 10 56 13.23 | CANTILEVER METAL LIBRARY SHELVING ***(for coordination purposes)*** **ADD#3** |
| 10 73 10 | PROTECTIVE COVERS |
| 11 00 05 | MISCELLANEOUS EQUIPMENT |
| 11 13 13 | LOADING DOCK BUMPERS |
| 12 10 13 | MURALS |
| 12 21 13 | HORIZONTAL LOUVER BLINDS |

| | |
|---|---|
| 12 24 13 | WINDOW SHADE SYSTEMS |
| 13 34 13 | GREENHOUSE AND GREENHOUSE RELATED EQUIPMENT |
| 14 24 00 | PASSENGER ELEVATOR |
| 14 42 00 | WHEELCHAIR LIFTS |

* Provide the temporary fit outs indicated in the drawings as well as the removal of the temporary conditions and complete finishes as part of Phase 2. If the Base Bid 2 option is selected, the temporary fit out work will not be required.

Geotechnical Report issued by ECS Mid Atlantic, LLC dated February 3, 2023, with addendum dated March 21, 2023, for informational purposes only.

In addition to the above, trade contractors are to include, but are not limited to, AIA Documents A201 and A401, and various other Technical Specifications interfacing with this work. The Contractors are required to review the work descriptions of the other categories so as to not misunderstand the scope responsibilities. The Contractors are also bound to the HESS Safety Manual and all related weekly and daily documentation for North East Middle/High School Replacement Project for the administration of the contract.

**General Scope:**
**Contractor is responsible for General Scope of Work listed elsewhere in this specification section.**

**THE SPECIFIC SCOPE OF WORK IS TO INCLUDE, but is not limited to, the following items:**

**Temporary Facilities Specific Scope:**

1. Contractor to provide temporary project identification signs, waste disposal services, temporary fire extinguishers, barricades, warning signs. Contractor shall provide temporary sanitary facilities for CM/Owner's field office (250 Gallon Waste Tank and 100 Gallon Flush Water Tank serviced 2 times per week for the duration of the project). Contractor to provide temporary sanitary facilities and hand-washing stations for the use of all Prime Contractors' personnel for the duration of the project. Contractor is responsible for its own temporary facilities.

2. Contractor includes all stairs, plan tables and rack(s) at the Construction Manager's temporary facilities for this project. Contractor to assume two sets of 4' wide stairs with 6'x4' platform decks, two (2) 22' long drafting tables, 37" high with sloped surfaces, topped with finish grade plywood and Vyco vinyl sheet drafting board covers. Provide one (1) Brookside Design rolling blueprint stand with one dozen pivot hangers and one dozen 42" long hanging drawing clamps. Removal of temp stairs & tables will be by this Contractor at end of project.

3. Within one calendar day of mobilization on site and prior to the commencement of work activities, Contractor is to provide a clear weatherproof covered bulletin board not less than 36 by 48 inches in size for displaying the Equal Employment Opportunity poster, a copy of the wage decision contained in the contract, Wage Rate Information poster, Safety and Health Information. Contractor shall include all posts and bracing as needed for proper support. Sign shall be located as directed by the CM.

4. Contractor shall furnish, install and remove when directed, the State of Maryland project sign. Contractor shall include all posts and wood bracing needed for proper support. Sign shall be located as directed by the CM.

5. Contractor shall furnish and install temporary openings protection with dimensional wood framing and heavy-duty reinforced fiber poly as needed. Quantity may be used at the discretion of the CM. Areas protected may include heights up to 15' tall at storefront locations. Removal of protection to occur at the discretion of the CM. The owner reserves the right to a credit for all unused temporary protection. Quantities are as follows:

   a. Curtainwalls – 4,000 SF

b. Windows – 4,000 SF
c. Partitions – 2,000 SF

**Fall Protection / Safety Specific Scope:**

1. Contractor to provide, maintain, and remove, when directed, to MOSHA/OSHA compliant temporary rails, toe boards, etc. at the perimeter of all floors, raised slab edges, roofs, pits, elevator shafts, window openings, exterior wall openings, and any other area deemed a potential falling hazard by OSHA. Contractor to patch all construction damaged by temporary rails and toe boards. Contractor shall maintain all temporary measures through completion of project.

2. Contractor to provide and maintain MOSHA/OSHA compliant covers at all slab diamonds and temporary slab openings until concrete infill is installed. Holes made by any trade shall be covered and maintained by this Contractor. Covers must be of adequate strength to support 2 times the anticipated potential loads, secured against displacement and labeled as "hole" or with a fluorescent orange "X". If hole covers are damaged, Contractor shall immediately repair the hole cover and notify the CM.

3. Contractor to provide and maintain MOSH compliant temporary handrails at all stairways, safety rails at all slab edges, stairwells, slab openings, roof openings, and elevator openings. This must be maintained until permanent rails are installed, or as determined by the CM. Additionally, provide ¾" plywood tread protection tapconed to concrete at all stair treads. Adequate protection over all stair treads to eliminate damage of treads and/or nosings, after stairs are poured. Maintenance will be required on these. Removal and disposal of this work shall be by this Contractor when directed by the C.M.

4. ~~Contractor shall furnish and install the wire rope safety cable for this scope of work. This Contractor is to remove, reinstall and maintain all safety cables as needed by all trades to allow them to perform their work during the course of construction. Minimum height requirements of safety cable must be maintained by this contractor both before and after slab on metal deck pour. Remove safety cable and safety posts and grind down smooth with floor when hazard no longer exists at the discretion of the CM.~~ **ADD#5**

5. Contractor to provide, maintain, and remove, when directed, temporary wood fillers in all metal pan stair treads and landings, if any. Wood fillers to be a snug fit to the full depth and width of all treads and landings and flush with the leading edge of the metal pans. Fillers to be OSHA/MOSHA compliant.

6. ~~Contractor to provide MOSHA/OSHA compliant protection on all reinforcing steel protruding from concrete. The Contractor to maintain this protection until work has been placed over the reinforcing steel.~~ **ADD#5**

7. Contractor to provide and maintain parapet clamp guardrail system per OSHA standards (i.e., Manufacturer: Guardian Fall Protection) at all roof parapets, while performing work.

**Construction Waste Management Specific Scope:**

1. Contractor to provide Waste Management Service in accordance with Division 1 and any LEED requirements.

2. Contractor to provide enough dumpsters for the proper and legal disposal of construction waste for all the Trades/Prime Contractors, for the duration of the project, except for Prime Contractor ***03A, 04A,*** 07A***, 31A, 32A, and 32B Contract packages.*** ~~Roofing Package~~. **ADD#5**

3. Contractor to provide a minimum of twenty (20) 40-yard dumpsters for the exclusive use of the Owner's school personnel, as needed at any time during the project duration. Location of dumpsters to be coordinated with the CM.

4. Contractor will be required to dedicate one person per eight workers onsite, dedicated to project composite cleanup crew, once per week, for 8 hours (day shift & night shift, 2 cleaning crews total per week), for the duration of the project, typically on Fridays. In addition to this, Contractor shall provide one (1) competent supervisor and a minimum of two (2) laborers to oversee and take the lead in directing the composite cleanup crew for the entire duration of the project (including time during Owner move-in and occupancy for each phase) whether working on site or not. Refer to special considerations at the end of this scope.

5. Contractor to submit within 30 days from Notice to Proceed with Construction Waste Management Plan, if required by specifications, for review and approval by Owner, Architect and CM.

6. Contractor to submit a Construction Waste Management Report, if required by specifications, with associated documentation on a monthly basis with the submission of the Payment Application. CM reserves the right to recommend payment rejection due to the lack of LEED Documentation.

7. ***Final Cleaning: All final cleaning required for the interior and exterior of the building as specified under 01 70 00 and other Div 0/1 sections. As it relates to resilient flooring, contractor shall provide final cleaning services (labor and equipment/tools) to include cleaning, stripping and three (3) coats of wax using floor stripper/floor wax material furnished by CCPS.*** **ADD#5**

**Concrete Floor Enhancement Specific Scope:**

1. Contractor shall furnish and install concrete floor enhancement for CONC-1 and CONC-2 in areas designated on the contract documents.

2. Contractor shall provide protection of polished floors from subsequent construction activities until direct to remove by the Construction Manager.

**Column Cover Specific Scope:**

1. Contractor to furnish and install all column covers interior and exterior called for on the contract documents.

2. Contractor includes all miscellaneous fasteners and caulking required for a complete and finished product.

**Drywall, Rough Carpentry, and Acoustical Assemblies Specific Scope:**

1. Contractor shall furnish and install cold formed metal framing, insulation, all weather barrier, drywall, and acoustical assemblies, ceiling tiles, wall panels, and the like work required by the Contract documents, including, but not limited to, all gypsum board, acoustical ceilings, translucent ceiling panels, grid suspension systems, acoustical treatment, acoustical panels, "Clouds", cementitious wood fiber panels, glass fiber reinforce plastic, cold formed metal framing, C-shaped loading bearing metal framing, metal stud kickers, hat channel, z channel, z-clips ***(7B trade contractor provides z channel and z clips at metal panel locations),*** metal furring, metal blocking, gypsum sheathing, dense glass, dense deck masonry back-up, acoustical joint sealers, acoustical sealants, hat channel, metal furring, drywall accessories, firestopping (as it relates to this Contractor's work), fire caulking (as it relates to this Contractor's work), sound caulking (as it relates to this Contractor's work), shaft wall assemblies, framing components for suspended / furred ceilings, corner bead, edge trim, control joints, access panels (including furnish and install of own and installation of those provided by other trades at drywall and masonry ), and interior building insulation.

2. Contractor is to furnish and install all wood blocking which is exterior to the building, roof and window, as well as all wood blocking located within metal studs which is covered by drywall, dens-glass, or sheathing. This includes but not limited to lumber, wood structural panels, fire retardant treated materials, dimensional lumber, miscellaneous lumber, sheathing, etc. Contractor to coordinate with other trades for final locations and requirements.

3. Contractor shall coordinate with other Contractors on location of all work installed in partitions and ceilings. Contractor shall ensure that all required inspections have been made prior to closing walls and ceilings.

4. Contractor shall be responsible for the layout of all work in this Contract Package. The Contractor shall layout all partitions.

5. Contractor shall perform all welding required to complete its work.

6. Contractor shall furnish and install all light gauge metal bent plates, angles, plates, clip angles, and the like as required for attaching studwork to the structure.

7. Contractor shall inspect (jointly with the Painting Contractor) all drywall work with a droplight before and after the prime coat of paint and perform all necessary point–up. All drywall work to be finished per specification section 09 29 00.

8. Contractor to include drywall expansion/control joints as recommended by manufacturer if not specified elsewhere.

9. Contractor will coordinate with the 04A contractor for installation of hollow metal frames located in masonry walls. This Contractor shall ensure hollow metal frames are set plumb, level, square, and true to line. The 04A Contractor shall be responsible for maintaining hollow metal frames until the frame is completely enclosed in masonry and accepted by this contractor for installation of door slabs and finish hardware.

10. Contractor shall furnish and install temporary protection at each exterior opening of the building once the 04A contractor has completed work in that area. This protection shall consist of wood framing with a 15-mill poly attached. All maintenance of temporary protection is included and no additional payment will be made for this work.

11. Contractor to furnish and install acoustical panel ceiling, linear metal ceiling, polyester felt blade baffle panels, flexible wood veneers, fabric wrapped sound-absorbing wall panels, sound-reflecting ceiling panels and cementitious wood fiber wall shape acoustical wall panel assemblies. Contractor shall furnish all acoustic tile cut-ins for other trade Contractors. Contractor shall coordinate furnishings and installation of cut tile with the Construction Manager. Contractor shall coordinate installation and arrangement of ceilings system with affected trade contractors through the Construction Manager. The 21A Contractor shall coordinate and verify sprinkler head locations prior to cutting tile or installing grid by the 06A Contractor.

12. Contractor to include protection of acoustical treatments after installation.

13. Contractor to furnish and install all acoustical ceiling cloud and reflector systems complete. Contractor includes complete composite construction, shape and suspension as specified. Contractor acknowledges fire rating of cloud system as specified.

14. Contractor shall furnish and install all batt and acoustic insulation.

15. Contractor shall coordinate all embedded items incorporated in this work including, but not limited to, mechanical and electrical equipment for proper alignment, leveling, and access.

~~16. Contractor includes "tenting" of light fixtures if required by code.~~ **ADD#5**

17. Contractor includes all reasonably inferred chases and bulkheads for mechanical piping shown on both architectural and mechanical drawings.

18. Contractor shall include full replacement of 5% of total square footage provided for ceiling tile and grid prior to acceptance of the ceiling systems at no additional cost. Contractor shall provide maintenance stock material as specified at no additional cost.

19. Contractor shall provide ventilator when installing drywall to reduce dust and humidity.

20. Contractor shall provide drywall point-up between prime and finish paint coats. Point-up to be inspected by the Construction Manager, Drywall and Painting Contractors prior to final coat of paint.

21. Contractor shall furnish and install infill with metal stud and drywall and fire sealant where applicable, where masonry walls cannot extend to deck.

22. Contractor shall provide a Level 5 drywall finish. Therefore, point-up of drywall should be minimal after priming of the surface. Excessive point-up or poor-quality workmanship will not be tolerated. Butts joints are to be taken out 24" minimum, factory joints 12" minimum. No board joints are to break at window or doorjambs.

23. Contractor to coordinate with 21A, 23A, and 26A contractor for installation of access doors furnished ~~and installed~~ by other contractors. This contractor to include cutting of all drywall and additional framing to allow for installation of access doors. ***The 06A Contractor shall furnish and install access panels required for its own work and shall install access panels for other contractors' work. Other contractors shall furnish the access panels to the 06A contractor and provide layout.*** **ADD#5**

24. Fire stopping of all penetrations is to be performed by the contractor making the respective penetration, ie… by 21A, 23A, and 26A.

25. The 04A Contractor is to furnish and install all exterior rigid and spray applied insulation on masonry backup walls, including but limited to behind, brick, precast, cast stone, finish block, and metal panel areas. Contractor to coordinate exterior framing being provided by this contractor. All other rigid insulation which is contiguous to this contractor's work is to be provided by this contractor.

26. Contractor shall furnish and install all structural thermal break material system as shown on contract documents.

27. Contractor to include preformed airtight steel flute deck sealer where required at drywall assembly construction.

28. Contractor to furnish and install sanitary wall panel systems in areas identified on the contract documents. Contractor includes all fasteners and miscellaneous accessories to provide a finished system.

29. Contractor shall install stair nosings furnished by 05A Contractor in locations shown on the contract documents.

**Applied Fireproofing Specific Scope:**

1. Contractor shall furnish and install all spray fireproofing necessary for a complete installation as required by the Contract Documents.

2. Contractor is to ensure that fireproofing operations will not damage or mar any adjoining finishes. Contractor includes masking of all surfaces to remain exposed. All cost associated with repairing finishes as a result of contractor's negligence will be borne by this contractor.

3. Contractor to coordinate with 05A Contractor to ensure spray fireproofing is compatible with steel and joist primer.

4. Contractor shall include an allowance of $54,000.00 for material and labor for patching as directed by the Construction Manager. Contractor to provide crew rate to Construction Manager within 10 days of execution of contract.

5. Contractor includes patching of all area's owners testing agency disturbs at no additional cost.

6. Contractor includes all additional materials and cost of retesting areas which do not pass owner provided testing agency requirements.

7. Contractor is responsible for cleanup to return workspace to condition it was given to prior to the start of spray fireproofing.

8. Contractor assumes multiple mobilizations for the work.

9. Temporary electric and water connections from a single location per floor. Temporary electric and water connections to each floor will be provided by MEP contractors.

10. Contractor responsible for any minor preparations necessary to apply fireproofing. Contractor responsible for an inspection of substrates 2 weeks prior to beginning of work. Commencement of work is acceptance of substrate.

**Intumescent Paint Specific Scope:**

1. Contractor shall furnish and install all intumescent paints necessary for and incidental to a complete installation as required by the Contract Documents.

2. Contractor is to ensure that intumescent operations will not damage or mar any adjoining finishes. Contractor includes masking of all surfaces to remain exposed. All cost associated with repairing finishes as a result of contractor's negligence will be borne by this contractor.

3. Contractor includes cleaning and surface preparation prior to application of materials.

4. Contractor to coordinate with 05A Contractor to ensure intumescent paint is compatible with steel, joists, and decking substrate.

**Sealants Specific Scope:**

1. Contractor shall furnish and install all sealants and caulking necessary for and incidental to a complete installation as required by the Contract Documents.

2. Contractor is to ensure that caulking operations will not damage or mar any adjoining finishes. All cost associated with repairing finishes as a result of contractor's negligence will be borne by this contractor.

3. The following caulking items are included in this scope of work as noted:

a) Joints between differing materials
b) Perimeter joints of hollow metal frames and elevator jambs, interior and exterior sides,
c) Control and expansion joints in ceilings and other overhead surfaces,
d) Interior joints of all perimeter of slab on grade to wall,
e) Joints between all plumbing fixtures and adjoining walls, floors and counters,
f) Perimeter (both sides) of all interior windows,
g) Interior and exterior perimeter of wall louvers,
h) Exterior perimeter of exterior wall scuppers,
i) Top and bottom of stair stringer to wall joint,
j) Perimeter of all access panels,
k) Toilet accessories to substrate when applicable,
l) Plumbing fixtures to substrate when applicable,
m) Mirrors to substrate when applicable,
n) Dissimilar materials which can lead to possible water infiltration,
o) Other joints as indicated on contract documents or specifications,
p) Access to own work.

**Expansion joint Cover Assemblies Specific Scope:**

1. Contractor will furnish and install all expansion joints and covers inclusive of fire rated joint system assemblies complete, inclusive of floor, wall and ceilings. Roof expansion joints are by the 07A Contractor. Exterior expansion joints located in masonry are by the 04A Contractor. Contractor to coordinate with the 03A contractor prior to slab pours. Fire-rated joint systems at curtainwalls are furnished and installed by the 08B Contractor.

2. Contractor shall provide anchoring devices for installation and embedding by the 03A contractor. Provide templates and rough-in measurements.

**Doors, Frames, Hardware Specific Scope:**

1. Contractor shall furnish and install all hollow metal door frames (including sidelights, borrowed lights, transom frames, and architectural stick assemblies), hollow metal window frames, hollow metal doors, pre-finished wood doors, and finish hardware (including but not limited to all hinges, continuous hinges, locks, latch sets, deadlocks, exit devices, removable mullions, door closers, electro-magnetic locks, power supplies, key switches, power door operators, overhead stops, overhead holders, push plates, pull plates, anti-vandal pulls, kick plates, armor plates, flush bolts, floor stops, wall stops, thresholds, astragals, weatherstripping, gasketing, door silencers, key cabinets, and the like). Contractor shall adhere to the requirements of the contract documents with regard to quality assurance, regulatory agencies, submittals, samples, products, warranties, factory staining, key control systems, keys/keying, and the like.

2. Contractor shall furnish ~~and install~~ **ADD#3** all hardware required for the aluminum doors on the project. All hardware will be delivered to the 08B contractor for installation. Contractor shall provide a list of hardware provided and have the 08B contractor acknowledge receipt. If contractor fails to have a delivery receipt signed by 08B contractor than this contractor will be required to provide any missing items.

3. Contractor to install (1) 3’ x 7’ hollow metal frame within masonry mockup panel.

4. Contractor to install all final keyed cores under this scope as well as storefront and overhead doors scope per Owner direction. Contractor to include installation and setting up of key cabinet.

**Coiling Door Specific Scope:**

1. Contractor shall provide and install a complete coiling counter doors, overhead coiling doors and sectional door package. Contractor shall adhere to the requirements of the contract documents with regard to performance, submittals, quality assurance, warranty, manufacturers, door curtain materials & construction, hoods & accessories, counterbalancing mechanisms, guides, manual door operators, finishes, installation, adjusting, protection, cleaning, and demonstration.

2. Contractor to coordinate with Electrical contractor to ensure proper power requirements are brought to door operator as well as connections to fire alarm system. Contractor will furnish and install any transformer, rectifiers, controls, as required, Electrical contractor has final connection of electrical and F/A only. All control switches are to be of the keyed variety unless specifically authorized otherwise in writing by the architect.

3. Contractor includes furnish and installation of electric door operator with means of disconnect, electric motors, remote control station, etc.

4. Contractor includes cost of factory-authorized service representative to perform startup and training of owner's personnel.

5. Contractor includes furnishing and installation of loading dock bumpers as required by contract documents.

**Fixed Louver Specific Scope:**

1. Contractor shall furnish and install all fixed louvers with insect screens and blank-off panels identified on the contract documents.

2. Contractor shall provide a finish warranty for all Factory-Applied finished as outlined in specifications.

**Painting Specific Scope:**

1. Contractor to include all , interior and exterior prepping, priming, and painting of all materials as called out in specifications and construction documents including but not limited to steel, galvanized metals, aluminum, concrete, masonry, wood, gypsum, etc.

2. Contractor to include stenciling/labeling of all fire walls as directed by contract documents and by local jurisdiction.

3. Contractor to include light sanding of walls between primer, first and second coats when applicable.

4. Contractor to include painting of mechanical and electrical work to include but limited to, when applicable, uninsulated metal piping, uninsulated plastic piping, pipe hangers and supports, tanks without factory finishes, visible portions of internal portion of metal ducts without liner, behind all diffusers and grilles, exposed ductwork, all mechanical equipment without a factory finish, all electrical equipment without a factory finish, exposed conduits, etc which is not concealed in chases or above ceilings as directed by the specifications.

5. Contractor to include sealing and or hardeners of all exposed concrete floors. Material is to be of the tinted variety. Contractor to apply product one time immediately prior to substantial completion. Contractor to include cleaning of floors to manufacturer's standard prior to application.

6. Contractor to include all block filler applications. Two coats minimum.

7. Contractor to include painting of all exterior rails, lintels, exposed non prefinished metallic materials.

8. Contractor to include proper preparation for painting of all galvanized materials.

9. Contractor to include all cleaning of surfaces as dictated in the specifications prior to application of product.

10. Contractor to include caulking of drywall to block and or concrete surfaces.

11. Contractor shall be responsible for all minor touch-up and repainting work caused by installation of adjacent work.

12. Contractor to provide a paint schedule for submittal to the Architect, Owner, and Construction Manager.

13. Contractor is responsible for any rework as a result of dirt blown into finish, unless notice is given to the Construction Manager prior to beginning work that the area in question is not ready for painting.

14. Contractor to include any masking off of materials as required to properly protect other finished materials. Contractor to product adjacent finished surfaces. Overspray to be cleaned at this contractor's expense

**Miscellaneous Specialties Specific Scope:**

1. Contractor shall furnish labor materials, tools, equipment, services and supervision required for the complete work for the display and poster cases, Outdoor LED message display and art display rail as indicated and required by the contract documents.

2. Contractor shall include all incidental and complementary work shown, specified or necessary to provide a complete installation.

3. Contractor to furnish and install all prefabricated bulletin boards and display cases including but not limited to recessed trophy and display cases, glass doors, metal trim and accessories, wood box enclosures, lighting fixtures, etc.

4. Contractor to coordinate opening sizes with 04A and 05A contractors depending on location.

5. Contractor to coordinate with the 21A contractor on sprinkler head requirements and locations. Contractor to include any and all modifications to allow for access of this system at no cost to owner.

6. Contractor to coordinate all voltage requirements with the 26A contractor.

7. Contractor includes any incidental caulking of work provided under this scope for a complete and finished product.

8. Contractor is responsible for coordination of all in wall blocking required for this work, prior to wall close-in. Blocking to be furnished and installed by the 06A contractor if covered by drywall, all other blocking for this scope is by this contractor.

9. Contractor to furnish and install all hook and loop mat hangers and coordinating wall padding, high-impact corner guards, for a complete installation as indicated on construction documents

**Visual Display Units Specific Scope:**

1. Contractor to furnish and install all visual display surfaces including but not limited to markerboards, tackboards, display and map rails, and all related accessories etc for a complete installation as indicated on construction documents.

2. Contractor to coordinate substrate requirements with 04A, and 06A contractors depending on location.

3. Contractor includes any incidental caulking of work provided under this scope for a complete and finished product.

4. Contractor is responsible for coordination of all inwall blocking required for this work, prior to wall close-in by the 06A drywall contractor. Blocking to be furnished and installed by the 06A contractor if covered by drywall, all other blocking for this scope is by this contractor.

**Signage Specific Scope:**

1. Contractor to furnish and install all interior signage, educational signage, panel signage (both interior and exterior), dimensional characters, cast metal plaques, way finding signage, outdoor LED signs, signage accessories and the like inclusive of fasteners, mastics(s) and perimeter sealant.

2. Contractor is responsible for coordination of any in-wall blocking if needed for this work, prior to wall close-in. Blocking to be furnished and installed by the 06A contractor if covered by drywall, any other blocking for this scope is by this contractor. Contractor is responsible for coordination of the required power requirements with the 26A package.

3. Contractor includes all incidental caulking of own work for a complete installation.

4. Room identification signage to be mounted at latch side of door or as indicated on construction documents.

5. ***Contractor shall provide all temporary project signage per specification 01 58 13.00*** **ADD#5**

**Plastic Toilet Partitions and Toilet Accessories Specific Scope:**

1. Contractor to furnish and install all toilet compartments inclusive of solid polymer units, pilaster shoes and sleeves, brackets, heat-sink strips and any other accessory required for a complete installation as indicated on contract documents and specifications including but not limited to overhead braced toilet enclosures, and wall mounted urinal screens.

2. Toilet and Bath accessories which will be furnished and installed by this contractor are to include, but not limited to, all mirror units, grab bars, toilet tissue dispensers, soap dispensers (including every sink throughout the building), paper towel dispensers (including every sink throughout the building), sanitary napkin disposals, shower curtain rods, shower curtain and hooks, diaper changing stations, warm-air dryer, coat hooks, robe hooks, mop and broom holders and all other accessories, anchors, fasteners and caulking as indicated or specified for a complete installation.

3. Contractor to coordinate with 05A Contractor for structural support of all items furnished under this scope of work.

4. Contractor is responsible for coordination of all in-wall blocking required for this work, prior to wall close-in by the 06A drywall contractor. Blocking to be furnished and installed by this contractor if covered by drywall, all other blocking for this scope is by this contractor.

5. Contractor to coordinate with tile contractor for installation of floor fasteners as applicable. Any damaged tile which occurs during installation of work, under this scope, will be the responsibility of this contractor.

6. Contractor responsible for final adjustment of hardware per the specification immediately prior to substantial completion.

7. Contractor to furnish only, for installation by Electrical Contractor all electric hand dryers, and associated anchors and fasteners. Contractor to coordinate with Electrical Contractor for exact power requirements.

**Cubicles Specific Scope:**

1. Contractor to furnish and install all cubicles complete including but not limited to, track, curtain, track accessories, curtain carriers, exposed fasteners, concealed fasteners, etc. as indicated on the contract documents. Contractor to include all own blocking for this work.

2. Contractor includes field measuring of spaces prior to fabrication.

**Wire Mesh Partitions Specific Scope:**

3. Contractor to furnish and install all wire mesh partitions complete including but not limited to, woven wire mesh, framing/support members, doors, welding fasteners, accessories, fabrication, etc. as indicated on the contract documents. Contractor to include all own blocking for this work.

4. Contractor includes field measuring of spaces prior to fabrication.

**Folding Panel Partitions:**

1. Contractor shall provide and install a complete operable folding panel partitions and folding glass-panel partition systems including but not limited to special warranty, design intent and arrangement, panel construction, panel weight, panel thickness, panel closure, hardware, vertical and horizontal seals, finish facing, acoustical wall carpet covering, trimless edges, suspension tracks, carriers, aluminum finish, steel finish, electric operators (coordinate with 26A contractor for proper voltage), control equipment, motor characteristics, remote control stations, infra-red detector system with alarm, limit switches, emergency release mechanisms, pass doors with self-illuminating exit signs, adjustments, light leakage tests, acoustical tests by independent certified acoustical consultant, cleaning and demonstrations

2. Contractor to coordinate with 05A and 06A Contractors for structural support, above ceiling acoustical treatment requirements, final ceiling heights and adjacent flooring requirements.

3. Contractor to coordinate with 26A Electrical Contractor to ensure proper power requirements are brought to door operator as well as connections to fire alarm system. The 26A Contractor will provide power to the motor, all wiring within the system will be the responsibility of this contractor.

4. Contractor includes cost of factory-authorized service representative to perform startup and training of owner's personnel.

5. Contractor to protect wood floor with two layers of ¾ inch plywood with resin paper between the wood floor and the plywood for any lift work over the finished floor.

**Decorative Protection Panel Specific Scope:**

1. Contractor to furnish and install decorative protection panels with custom graphic designs as designated on the contract documents.

2. Contractor includes any incidental caulking of work provided under this scope for a complete and finished product.

3. Contractor is responsible for coordination of all inwall blocking required for this work, prior to wall close-in. Blocking to be furnished and installed by this contractor if covered by drywall, all other blocking for this scope is by this contractor.

**Fire Protection Specific Scope:**

1. Contractor to furnish and install fire protection cabinets and fire extinguishers in the locations shown on the contract documents.

2. Contractor is responsible for coordination of all wall openings within masonry walls with the 04A contractor. Blocking in drywall partitions to be furnished and installed by this contractor.

**Locker Specific Scope:**

1. Contractor to furnish and install all metal and metal grid lockers, solid phenolic lockers as indicated including, locks, locker accessories, fasteners and anchors, doors, perforated doors, hinges, recessed handles and latches, interior shelving, bases, angled tops, finished end panels, hooks, identification plates, center dividers, acoustical treatment, concealed vents, combination pad locks, interior equipment, recess trim, latch stiffeners, filler panels, boxed end panels, final cleaning and lubrication prior to substantial completion, etc.

2. Contractor to submit numbered layout drawing prior to fabrication for approval.

3. Contractor to coordinate concrete pads and wood sleeper (locker base) requirements with Concrete Contractor.

4. Contractor to coordinate base requirements with the Resilient Flooring and Floor Tile Contractor.

5. Contractor is responsible for coordination of all in wall blocking required for this work, prior to wall close-in. Blocking to be furnished and installed by this contractor if covered by drywall.

6. Contractor to include incidental caulking associated with this work for a complete system.

7. Contractor to include own labor and equipment for unloading of deliveries; deliveries which arrive without contractor forces onsite will be immediately denied access to the site.

**Metal Storage Shelving Specific Scope:**

1. Contractor to furnish and install all Metal Storage Shelving including but not limited to Post-And-Shelf metal storage shelving, inclusive of posts, bracing, solid shelves, shelf-to-post connectors, bases, and baked enamel finish.

2. Contractor to coordinate concrete pads if required with Concrete Contractor.

3. Contractor includes permanent attachment of shelving to adjacent walls. Single point attachment to slab will not be accepted.

4. Contractor is responsible for coordination of all in wall blocking required for this work, prior to wall close-in. Blocking to be furnished and installed by this contractor if covered by drywall, all other blocking for this scope.

5. Contractor to include own labor and equipment for unloading of deliveries, deliveries which arrive without contractor forces onsite will be immediately denied access to the site.

**Storage Specialties Specific Scope:**

1. Contractor to furnish and install gliding high-density cart, portable high-density carts and all accessories necessary for a complete installation.

2. Contractor to examine all areas for compliance with manufacturers installation tolerances including overhead clearances prior to starting work. Once contractor has started installation, this will constitute acceptance of previously installed work.

**Protective Cover Specific Scope:**

1. Contractor to furnish and install all protective covers as indicated, detailed, and specified including but not limited to general design requirements and arrangements, structural performance, field measurements, special warranties, steel, aluminum, anchors, fasteners, fittings, hardware, galvanize repair paint, bituminous paint, grout, gaskets, aluminum flashing, support structure, extruded aluminum roof decking, roll-formed aluminum roof deck, metal roofing and fascias, excavation, placement and backfill of concrete foundations, anchor bolts, plumbing connections and piping to storm system to a point 5' outside of canopy roof edge, coordination of electrical installation for a complete turn-key installation.

2. Contractor is responsible to coordinate with 04A, 05A, 21A, 23A, 26A contractors for flashing, plumbing, sprinkler and electrical rough-ins. All structural support, flashing, counter flashing, etc… is to be provided by this contractor. In wall flashing or reglets required for this work is to be furnished by this contractor to the 04A contractor for installation prior to start of exterior façade work.

3. Contractor to include incidental caulking associated with this work for a complete system.

**Mural Specific Scope:**

1. Contractor shall furnish and install mural system in locations as show on contract documents. This scope of work will require that the wall area receive an extremely high finish. Please review material product data and installation instructions for proper install

2. Contractor/Installer shall be by a certified, trained and approved by the film manufacturer.

3. Contractor shall provide the eight-year warranty as outlined in the specifications.

4. Contractor shall inspect substrate prior to installation to ensure moisture content and surfaces are treated to meet manufacturers requirements.

**Blinds and Shades Specific Scope:**

1. Contractor to furnish and install all louvered blinds and roller shades (manual and electrical operated) including but not limited to proper louver slats, headrail/valance, bottom rail, tilt control, lift operation, cord lock position, ladders, mounting, colors, textures and gloss for a complete and operational installation.

2. Contractor to seal all screw holes and penetrations through window framing.

3. Contractor to acknowledges that every window, storefront, curtainwall, door lite, sidelite, transom etc.; every piece of glass within the building and building perimeter is to receive a louvered blind or shade, depending on location per specifications. This is in the event of a code red and associated security measures.

4. Contractor to coordinate with HM Frame and Aluminum Frame suppliers for method of attachment.

5. Contractor responsible for final adjustment, cleaning, and touch-up immediately prior to substantial completion.

6. Contractor to include own labor and equipment for unloading of deliveries, deliveries which arrive without contractor forces onsite will be immediately denied access to the site.

7. Contractor includes all incidental caulking related to this scope of work.

**Site Amenities Specific Scope:**

1. Contractor shall furnish and install the Pergolas ***(i.e. front canopy)*** **ADD#3** shown on sheet L502 in locations shown on the contract documents. Contractor shall provide all core drilling, anchoring materials, and the like to complete the installation of the items. Contractor to coordinate and install foundations required for these items.

2. Contractor shall furnish and install all footings required for items included in this scope.

3. All furnishings are to be installed level, plumb and true and securely anchored or positioned at locations as indicated on drawings.

**Greenhouse Specific Scope:**

1. Contractor to furnish and install all material and erection of the greenhouse superstructure including all glazing, doors and door hardware, and ventilation as shown on plans for a complete and operational installation.

2. Contractor to seal all areas where greenhouse contacts with dissimilar material as well as any sealants required for a complete installation.

3. Contractor shall include structural design signed and sealed by an engineer licensed in the state of Maryland. This design shall meet the Maryland IBC 2018 requirements.

4. Contractor shall include all necessary and required expansion control as well as any covers necessary or specified.

5. Contractor is responsible for all sill flashing where greenhouse meets foundation walls.

6. Contractor to furnish and install all exhaust fans, EVAP cooling system and heating system, horizontal air flow fans, retractable shade/heat retention curtain system, benchtop drip irrigation, automatic controls, supplemental plant growth lighting, overhead fixed lighting support system, environmental control system and benches.

7. Contractor to include own labor and equipment for unloading of deliveries, deliveries which arrive without contractor forces onsite will be immediately denied access to the site.

8. Contractor to include two year warranty on materials and workmanship and a preventative maintenance agreement that includes one trip per year scheduled through the greenhouse manufacturer.

**Passenger Elevator Specific Scope:**

1. Contractor to furnish and install a complete elevator system including but not limited to, rails, car frame and platform, doors, operator, call buttons, hall lanterns, pumps, sensors, piping, inserts, car enclosure, entrances, signal equipment, etc. Cars to be of “machine room-less”, traction type, and meet all other requirements of section 14 24 00. Contractor to include the costs of all third party and state inspections.

2. Mechanical and Electrical final connections will be performed by others. Contractor shall provide all connectors, piping, integral wiring and piping, as well as all equipment connections, cords with plugs, etc., incidental to this phase of the work. Coordinate with Electrical and Mechanical Contractors to provide complete installation.

3. Contractor to coordinate floor finishes and recessed areas with Steel, Concrete, and Flooring Contractor(s).

4. Contractor will secure all necessary inspections as required by the applicable local or state agencies.

5. Contractor shall schedule all required inspections. Contractor shall coordinate with other trades regarding final inspections.

6. Contractor is to supply all necessary brackets, embeds, or other mounting hardware that must be installed concurrently with the Concrete Contractor or Masonry Contractor.

7. Contractor to coordinate all metal fabrications as required for installation of the lift systems and accessories including but not limited to attachment plates, structural steel shapes for sub-sills, sump pits and pit ladders.

8. Contractor to coordinate integration of the elevator systems with the fire control system including any necessary submittals to local or state fire control agencies.

9. Contractor to coordinate integration of the elevator systems with the electrical and voice systems.

10. It is understood that the elevator will be used for access to upper floors prior to substantial completion of the project. It is assumed this contractor will obtain a construction use permit, and therefore not install cab finishes until a second mobilization, at which time, upon completion of cab finishes, a final inspection will be obtained.

11. Contractor has included the cost for maintenance during the construction use period, Contractor to assume a construction use period of three (3) months. Actual usage will be tracked monthly via ticket and a contract adjustment, if necessary, will be made at scope completion.

12. Contractor to warrant the elevator systems per the specifications and has included the costs for the extended warranty of the construction use period.

13. Contractor to coordinate with Miscellaneous Metal Contractor and MEP Contractor(s) for location of pit ladder, sump pit, fire alarm devices, sprinkler heads and lighting.

14. Contractor to include forty (40) hours labor use of the platform by other trades to accomplish installation of all MEP devices and Sprinkler Head, Masonry Shaft point up, fire caulking etc. Actual hours will be tracked via ticket and a contract adjustment, if necessary, will be made at scope completion.

15. Contractor to provide pit layout as a separate submittal within two weeks of Letter of Intent, Notice to Award, or Contract, whichever is issued first.

16. Elevator cab flooring will be tile flooring, by others.

17. Contractor has included two mobilizations for installation of elevators in each phase.

18. Contractor has included three (3) days of standby time for observation of elevator during the first week school is open during school hours to ensure proper operation. This will be an additional mobilization which this contractor has included.

19. Contractor to coordinate with Electrical Contractor for fire alarm activation and integration with Elevator.

20. Elevator door key to be furnished to Construction Manager for access to pit after hours.

21. Contractor has included keyed switch operation. Contractor to furnish a minimum of twenty-five (25) keys (of each type and use) to Construction Manager at scope completion.

**~~Responsibilities for Typical Parapet Walls~~**

~~1. Responsibilities for Typical Parapet at CMU Back-up, Details D5, A5 /A431 (and other typical details) are assigned below:~~

~~a) 04A – Air barrier, continuous air barrier transition membrane, rigid insulation, CMU, brick veneer and attachments. Install anchor bolts furnished by the 05A Contractor.~~
~~b) 06A - Exterior fire rated plywood sheathing and blocking at top of parapet. Exterior fire rated plywood sheathing and blocking at both sides of parapet (if indicated), 2X wood blocking where required, batt insulation.~~
~~c) 05A – Furnish anchor bolts to 04A.~~
~~d) 07A – Adhered membrane flashing, flashing strip, closed cell backer rod, pre-finished aluminum coping. 1 /4" cover board over plywood.~~
~~e) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~2. Responsibilities for Typical Metal Panel Parapet at CMU Back-up, Details D5, A5 /A432, (and other typical details) are assigned below:~~

~~a) 04A – Air barrier and continuous air barrier overlapping transition membrane. CMU. Rigid foam insulation. Mineral wool insulation. Install anchor bolts furnished by the 05A Contractor. Cont. STPE Sealant at termination bar. Thermal break cladding support system~~ ~~ADD#3~~~~;~~
~~b) 06A – Exterior fire rated plywood sheathing and blocking at top and sides of the parapet. Exterior fire rated plywood sheathing and blocking and rigid foam board insulation, mineral wool insulation at side low roof (detail A14/A432)~~ ~~ADD#3~~~~. 2X wood blocking where required,~~
~~c) 07A – Adhered membrane flashing, flashing strip, closed cell backer rod, pre-finished aluminum coping. 1 /4" cover board over plywood. All flashings and counter-flashings.~~
~~d) 07B – Metal panel system, thermal break cladding, mineral wool insulation at side low roof (~~***~~see~~*** ~~detail D14, A14/A432)~~ ~~ADD#3~~~~, continuous air barrier transition membrane, 2-piece prefinished aluminum metal panel base, 18 GA Min galvanized sheet metal 05A – Furnish anchor bolts to 04A.~~
~~e) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~3. Responsibilities for Typical Parapet at Stud Wall Back-up, Details D9 & A9 /A431, (and other typical details) are assigned below:~~

~~a) 04A – Continuous air barrier transition membrane and air barrier over 5/8" exterior gypsum sheathing.~~ ***~~Rigid board insulation~~***~~Foamed-in-place insulation.~~ ~~ADD#3~~~~-~~ ~~Brick veneer and attachments.~~
~~b) 07A – Adhered membrane flashing, flashing strip, backer rod, pre-finished aluminum coping. 1 /4" cover board over plywood.~~

~~c) 06A – CFMF, batt insulation, 5/8" exterior gypsum sheathing, 5/8" exterior fire rated plywood sheathing, 2X wood blocking, ¾" and ½" plywood on top of parapet, metal studs, metal stud slide clip, ***continuous air barrier transition membrane and air barrier over 5/8" exterior gypsum sheathing***. ADD#3~~
~~d) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~4. Responsibilities for Typical Metal Panel Parapet at Stud Wall Back-up, Details D9 & A9 /A432 (and other typical details) are assigned below:~~

~~a) 04A – Continuous air barrier transition membrane and air barrier over 5/8" exterior gypsum sheathing. insulation. ADD#3~~
~~b) 06A – Exterior fire rated plywood sheathing and blocking at top of the parapet and side of wall, CFMF, batt insulation, 5/8" exterior gypsum sheathing all blocking, ¾" and ½" plywood, metal studs, metal stud slide clip, ***continuous air barrier transition membrane and air barrier*** mineral wool insulation. ADD#3~~
~~c) 07A – Adhered membrane flashing, flashing strip, backer rod, pre-finished aluminum coping. 3" cladding support system, metal panel system ADD#3. 1 /4" cover board over plywood.~~
~~d) 05A – Furnish and install continuous galvanized steel bent plate at top of parapet wall.~~
~~e) 07B – Metal panel system, thermal break cladding, mineral wool insulation at side low roof (detail D9 & A9/A432), continuous air barrier transition membrane, ADD#3 2-piece prefinished aluminum metal panel base,~~
~~f) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~5. Responsibilities for Typical Low Roof Studs w/ Metal Panel, Details D18 & A18 /A432 (and other typical details) are assigned below:~~

~~a) 04A – Continuous air barrier overlapping transition membrane over 5/8" exterior gypsum sheathing. Foamed-in-place insulation. ADD#3~~
~~b) 06A – 3" rigid foam insulation, exterior fire rated plywood sheathing and blocking, rigid foam board insulation and mineral wool insulation below blocking, CFMF, batt insulation, 5/8" exterior gypsum sheathing, galvanized sheet metal angle***, continuous air barrier and transition membrane***. ADD#3~~
~~d) 07A – All flashings and counter-flashings ***(to include the SS receiver and counterflashing)***. Mineral wool insulation at bottom of panel. ADD#3 1 /4" cover board over plywood and adhered membrane flashing~~
~~e) 07B – Metal panel system, thermal break cladding, ***thermal break cladding support system, continuous flexible flashing,*** ADD#3 mineral wool insulation at side low roof (detail D14 & A14/A432), continuous air barrier transition membrane ADD#3, 2-piece prefinished aluminum metal panel base, continuous flexible flashing~~
~~f) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

***Responsibilities for Parapet Walls – REVISED PER ADDENDUM #5***

***04A – CMU, masonry veneer, grout, flashing and all other incidentals as shown and specified under 04 20 00. Install anchor bolts in CMU, furnished by 05A Contractor. Cavity wall insulation (rigid or mineral wool as shown) at all locations where insulation is behind masonry. All fluid applied membrane air barrier system complete, including continuous air barrier transition membrane at top of parapet, regardless of substrate. Provide termination sealant accepted for air barrier warranty as shown. The air barrier system for the entire building must be certified and warranted as a complete system as specified per 07 27 26.***
**ADD#5**

***05A – Furnish anchor bolts for parapet blocking to 04A Contractor for installation. Provide galvanized steel bent plates/angles at all locations shown.*** ADD#5

***06A – Provide all wood blocking, plywood, metal stud framing, bridge plates and exterior sheathing as shown. Provide batt insulation and mineral wool insulation within metal stud framing and at expansion joint cavities as indicated. Provide rigid foam board insulation where directly behind plywood sheathing (example A14/A432, and similar.)*** ADD#5

***07A – Provide all pre-finished coping and products specified under 07 41 13.16, cover board, flashings/counter-flashings for roof system, transition membrane from roof membrane over parapet blocking (overlapped to air barrier transition membrane). Provide closed cell backer rod, flashing strips, and all other incidentals necessary for a complete termination of roofing system as shown and specified under 07 54 23.*** ADD#5

***07B – Provide all thermal break cladding support systems complete as shown and specified. Provide all insulation (rigid and mineral wool) where shown behind metal panels. Provide all metal panels as shown and specified.*** ADD#5

**Wheelchair Lift Specific Scope:**

1. Contractor to furnish and install vertical platform lift with all accessories called for in locations indicated on the contract documents.

2. Contractor shall visually inspect area lift is to be installed prior to starting and confirm in writing that the area is acceptable. Once installation is started this will constitute acceptance and any deficiencies encountered will be the responsibility of this contractor.

3. Contractor includes all permits and inspections required by local jurisdictions.

4. Contractor includes all demonstrations and turnover documents.

***Selective Demolition Scope*** ADD#3

1. ***Contractor shall provide all selective demolition indicated and as required for new work associated with the existing field house.*** ADD#3

**SPECIAL CONSIDERATIONS:**

1. **Contractor acknowledges and has accounted for within his bid, the second and fourth Saturdays of each month as required workdays. Contractor is expected to provide a crew of the same size that is provided during Monday through Friday. No exceptions.**

2. This bid package has a MBE goal of _20_ percent. All prime contractors, including certified MBE firms, when submitting bids or proposals as a prime contractor, are required to attempt to achieve this goal from MDOT certified MBE firms. All submittals of MBE materials and reporting requirements are applicable for the project, including the submittal of MBE Attachments A and B with its bid as described in specification section 00 43 39 - Minority Business Enterprises Procedures.

**EXCLUDED FROM THIS CONTRACTOR WORK is:**

1. Testing costs, unless specifically called for in this scope, or a result of negligence, poor workmanship, or failure of work to meet the requirement of the documents.

**END OF SCOPE 06A**

# WORK SCOPE CATEGORY 06B – Finish Carpentry, Millwork, Casework & Appliances

The work of this bid category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all Finish Carpentry, Millwork, Casework & Appliances work in accordance with the specifications, drawings and applicable codes. All work is to be performed as shown on the plans and/or specified under the following technical sections:

| SECTION | NAME |
|---|---|
| 06 10 53 | MISCELLANEOUS ROUGH CARPENTRY (as it relates to this scope) |
| 06 40 23 | INTERIOR ARCHITECTURAL WOODWORK |
| 07 92 00 | JOINT SEALANTS (as it relates to this scope) |
| 08 71 00 | DOOR HARDWARE (as it relates to this scope) |
| 08 80 00 | GLAZING (as it relates to this scope) |
| 09 93 00 | STAINING AND TRANSPARENT FINISHING |
| 10 00 05 | MISCELLANEOUS SPECIALTIES (as it relates to this scope) |
| 10 56 13.23 | CANTILEVER METAL LIBRARY SHELVING |
| 11 00 05 | MISCELLANEOUS EQUIPMENT (as it relates to this scope) |
| 11 30 13 | APPLIANCES |
| 11 53 13 | LABORATORY FUME HOODS |
| 12 35 50 | EDUCATIONAL CASEWORK |
| 12 35 51 | MUSICAL INSTRUMENT STORAGE CABINETS |
| 12 35 53 | WOOD LABORATORY CASEWORK |
| 12 36 00 | COUNTERTOPS |
| 13 21 48 | SOUND-CONDITIONED MUSIC PRACTICE ROOMS |

Geotechnical Report issued by ECS Mid Atlantic, LLC dated February 3, 2023, with addendum dated March 21, 2023, for informational purposes only.

* Provide the temporary fit outs indicated in the drawings as well as the removal of the temporary conditions and complete finishes as part of Phase 2. If the Base Bid 2 option is selected, the temporary fit out work will not be required.

In addition to the above, trade contractors are to include, but are not limited to, AIA Documents A201 and A401, and various other Technical Specifications interfacing with this work. The Contractors are required to review the work descriptions of the other categories so as to not misunderstand the scope responsibilities. The Contractors are also bound to the HESS Safety Manual and all related weekly and daily documentation for North East Middle/High School Replacement Project for the administration of the contract.

**General Scope:**
**Contractor is responsible for General Scope of Work listed elsewhere in this specification section.**

**THE SPECIFIC SCOPE OF WORK IS TO INCLUDE, but is not limited to, the following items:**

**Interior Architectural Woodwork, Casework and Millwork Scope:**

1. Contractor is to furnish and install all interior architectural woodwork including but limited to, architectural casework, educational casework, laboratory casework, laboratory fume hoods, music instrument storage, wood benches, casework hardware and accessories, interior standing and running trim, ~~interior wood frames and jambs~~ ADD#5, wood cabinets, plastic laminate cabinets, custom casework, wood railings, shop finishing, laminate and solid surface countertops, closer kits, etc. This will include all items identified in the "Furnishings Schedule - General", "Furnish Schedule – Media Center", "Furnish Schedule - Music", "Furnishing Schedule – Countertops", and "Furnishing Schedule - Science" on sheet A800.

2. Contractor to furnish and install all finish carpentry items including but not limited to integral shelving and clothes rod, heavy duty shelving standards and brackets, all required hardware, piano hinges, coat hooks, racks, glazing, fasteners, etc… for a complete system.

3. Steps, both treads and risers, to stage/platform area in the Theater are assumed to be wood installed and finished by this contractor. Contractor shall furnish and install the stage/platform wood edge, proscenium and any wood paneling called for in the theater.

4. Contractor shall furnish and install of all high-pressure decorative laminate, solid surface, simulated stone countertops, as well as coordination with other trades as necessary for a complete and full installation.

5. Contractor to furnish and install all laboratory casework including but not limited to cabinet body panels, door and cabinet body edging, doors, back panels, shelving, end panels and hardware and epoxy countertops including all items identified in the "Furnishing Schedule – Science" on sheet A800. Contractor shall furnish and install the laboratory fume hoods with final electrical connections being made by the 26A contractor.

6. Contractor to furnish and install all music instrument storage casework including but not limited to cabinet body panels, door and cabinet body edging, doors, back panels, shelving, end panels and hardware. This will include all items identified in the "Furnishing Schedule - Music" on sheet A800.

7. Contractor to furnish and install all laminate clad educational casework including but not limited to cabinet body panels, door and cabinet body edging, doors, drawers, back panels, shelving, end panels and hardware including all items identified in the "Furnishing Schedule – General" on sheet A800.

8. Contractor to include all cutouts to accommodate sinks, faucet assemblies, electrical and data outlets and other hardware.

9. Contractor acknowledges and has included that all "backs and ends" will have finished ends if potentially exposed to view.

10. Contractor to furnish and install all adjustable wood shelving called for.

11. Contractor to furnish all art room casework and equipment including but not limited to cabinet body panels, door and cabinet body edging, doors, back panels, shelving, end panels and hardware. This will include all items identified in the "Art Equipment Schedule" on sheet A800.

12. Contractor to furnish and install sinks as directed by the construction documents. ~~Contractor to furnish Plumbing contractor, mounting clips/kits for all sinks not furnished and installed under this scope of work.~~ ADD#5 Final connection of mechanical, plumbing and electrical is by the respective contractor.

13. ~~Contractor to perform all in-wall blocking requirements for support of materials furnished and installed by this contractor. Contractor to coordinate with 06A contractor prior to wall close-in.~~ ***In-wall blocking within metal stud walls for millwork/casework will be furnished and installed by the 06A Contractor. The 06B contractor shall furnish drawings to the 06A Contractor providing locations, and shall check installation prior to close-in. All other blocking required for installation of work provided by 06B will be performed by the 06B Contractor.*** **ADD#3**

14. Contractor to coordinate with vinyl/rubber base contractor for installation of work.

15. Contractor to include all hardware including keying requirements for all work provided within this scope of work, in accordance with respective specification section. No hardware will be provided by other trades to make this scope a work complete.

16. Contractor to provide all glass and glazing required for a complete installation of work provided under this contract. No glass or glazing will be provided by other trades to make this scope a work complete.

17. Contractor is responsible for all hardware necessary to anchor or affix its work in a permanent location.

18. Contractor is responsible for all unloading of material and required equipment to do so. Material which arrives on the project without proper personnel and or equipment to unload will be turned away by Construction Manager.

19. Contractor is responsible for coordination of all rough-in with MEP trades.

20. Contractor is responsible for all labor necessary to unload, place and install all work covered under this scope.

21. Contractor is responsible to take all packing, crating, etc… to dumpster(s) provided by Construction Manager or make other arrangements to remove from site.

22. Contractor is responsible to wipe down all surfaces after installation and provide temporary protection of materials as necessary. Contractor is responsible for removal and disposal of protection at Construction Manager's direction.

**Cantilever Metal Library Shelving Specific Scope:**

1. Contractor is to furnish and install all cantilever metal library shelving including but limited to, casework hardware and accessories, interior standing and running trim, interior wood frames and jambs, wood cabinets, plastic laminate cabinets, shop finishing, laminate and solid surface countertops, closer kits, etc.

2. The 06A Contractor will furnish and install blocking within metal studs which is covered by drywall, all other blocking for this package is by this contractor.

3. Contractor to furnish and install all media casework and equipment including but limited to shelving, label holders, leg based and mobile furniture, custom end panels, computer and reading tables, circulation desk, mobile units, etc… This will include all items identified in the "Media Casework Schedule" on sheet A800.

4. Contractor acknowledges and has included that all "backs and ends" will have finished ends if potentially exposed to view.

~~23. Contractor to perform all in-wall blocking requirements for support of materials furnished and installed by this contractor. Contractor to coordinate with 06A contractor prior to wall close-in.~~ ***In-wall blocking within metal stud walls for millwork/casework will be furnished and installed by the 06A Contractor. The 06B contractor shall furnish drawings to the 06A Contractor providing locations, and shall check installation prior to close-in. All other blocking required (i.e. not within stud walls) for installation of work provided by 06B will be performed by the 06B Contractor.*** **ADD#3**

~~5.~~

6. Contractor to coordinate with vinyl/rubber base contractor for installation of work.

7. Contractor to include all hardware including keying requirements for all work provided within this scope of work, in accordance with respective specification section. No hardware will be provided by other trades to make this scope a work complete.

8. Contractor is responsible for all hardware necessary to anchor or affix its work in a permanent location.

9. Contractor is responsible for all unloading of material and required equipment to do so. Material which arrives on the project without proper personnel and or equipment to unload will be turned away by Construction Manager.

10. Contractor is responsible for all labor necessary to unload, place and install all work covered under this scope.

11. Contractor is responsible to take all packing, crating, etc… to dumpster(s) provided by Construction Manager, or make other arrangements to remove from site.

12. Contractor is responsible to wipe down all surfaces after installation and provide temporary protection of materials as necessary. Contractor is responsible for removal and disposal of protection at Construction Manager's direction.

**Appliances Specific Scope:**

1. Contractor to furnish and install all Commercial clothes washer and dryers as specified.

2. Contractor to furnish and install all Residential Equipment including the refrigerator/top freezers, electric dishwashers, electric ranges with self-cleaning ovens, ~~downdraft~~ (Not required per Equipment Schedule on A800) electric cooktops, electric ovens, electric clothes washers, electric clothes dryers, compact refrigerator/freezers, flammable materials storage refrigerators/freezers (this is not listed on drawing A800 in any schedule), electric cooktops, ice machines, mobile changer, fume hood, etc… for a complete and fully functional installation. This will include all items identified in the "Equipment Schedule" on sheet A800.

3. Contractor to coordinate with 21A, 23A and 26A contractors for plumbing venting rough-ins, sprinkler head rough-ins, and electrical rough-ins respectively. Additional costs due to failure to properly coordinate all rough-ins for this equipment will be the responsibility of this contractor.

4. Contractor includes all warranties and guarantees per the specifications.

5. Contractor includes all colors per the specifications.

6. Contractor includes coordination for all built-in equipment.

7. Contractor includes all bolts, anchors, fasteners, etc… for a complete installation.

8. Contractor includes all incidental caulking associated with this work for a complete installation.

9. Final connections of all items supplied under this scope of work are by the 21A, 23A and 26A Contractors.

10. Contractor includes verification of proper clearances for all equipment being furnished under this scope for proper operation as well as verification all accessories have been installed and are functioning properly.

11. Contractor to include removal and disposal of all packing material to dumpster provided by Construction Manager.

12. Contractor to include final wipe down of all equipment furnished under this scope and leave units in clean condition, ready for use after final connections have been made by others.

13. Contractor to include own labor and equipment for unloading of deliveries, deliveries which arrive without contractor forces onsite will be immediately denied access to the site.

14. Contractor includes all costs for a factory authorized service representative to train all owner personnel to adjust, operate, and maintain all equipment furnished under this scope of work.

**Miscellaneous Equipment Specific Scope:**

1. Contractor shall furnish and install kiln, kiln hood, kiln ventilator, ice machine, changing table, science equipment, miscellaneous room equipment and furnishings ~~and handicapped access darkroom door~~ ADD#5 including but not limited to fasteners and accessories for a complete installation.

**Sound-Conditioned Music Practice Room Specific Scope:**

1. Contractor to furnish and install all sound-conditioned music practice rooms including but not limited to neoprene floor seals, door with vision light, corner posts with integrated speaker enclosures and wiring, wall panels with integrated wiring and mountings for microphones, ceiling frame, ceiling panels, integrated ventilation, illumination, system control and power and signal distribution systems and access raceways for signal distribution systems.

2. Contractor to install with personnel that meet the installer qualifications outlined in the specifications.

3. Contractor to provide special warranty as outlined in the specifications for a period of 5-years from the date of substantial completion.

**SPECIAL CONSIDERATIONS:**

1. Contractor includes all incidental caulking associated with this work for a complete and finished installation.

    2. This bid package has an MBE goal of _20_ percent. All prime contractors, including certified MBE firms, when submitting bids or proposals as a prime contractor, are required to attempt to achieve this goal from MDOT certified MBE firms. All submittals of MBE materials and reporting requirements are applicable for the project, including the submittal of MBE Attachments A and B with its bid as described in specification section 00 43 39 - Minority Business Enterprises Procedures.

**EXCLUDED FROM THIS CONTRACTOR WORK is:**

1. Testing costs unless specifically called for in this scope, a result of negligence, poor workmanship, or failure of work to meet the requirement of the documents.

**END OF SCOPE 06B**

## WORK SCOPE CATEGORY 07A – Roofing

The work of this bid category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all Roofing work in accordance with the specifications, drawings and applicable codes. All work is to be performed as shown on the plans and/or specified under the following technical sections:

| SECTION | NAME |
|---|---|
| 05 12 00 | STRUCTURAL STEEL FRAMING (for coordination purposes) |
| 05 12 13 | ARCHITECTURALLY EXPOSED STRUCTURAL STEEL FRAMING (for coordination purposes) |
| 05 21 00 | STEEL JOIST FRAMING (for coordination purposes) |
| 05 40 00 | COLD-FORMED METAL FRAMING (for coordination purposes) |
| 05 50 00 | METAL FABRICATIONS (for coordination purposes) |
| 06 10 ~~00~~ ***53*** | ***MISCELLANEOUS*** ROUGH CARPENTRY (as it relates to this scope) **ADD#3** |
| 07 21 00 | THERMAL INSULATION (as it relates to this scope) |
| 07 41 13.16 | STANDING SEAM METAL ROOF PANELS |
| 07 54 23 | THERMOPLASTIC-POLYOLEFIN (TPO) ROOFING |
| 07 62 00 | SHEET METAL FLASHING AND TRIM |
| 07 71 00 | ROOF SPECIALTIES |
| 07 71 29 | MANUFACTURED ROOF EXPANSION JOINTS |
| 07 72 00 | ROOF ACCESSORIES |
| 07 92 00 | JOINT SEALANTS (as it relates to this scope) |
| 07 95 13 | EXPANSION JOINT COVER ASSEMBLIES (as it relates to this scope) |

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In addition to the above, trade contractors are to include, but are not limited to, AIA Documents A201 and A401, and various other Technical Specifications interfacing with this work. The Contractors are required to review the work descriptions of the other categories so as to not misunderstand the scope responsibilities. The Contractors are also bound to the HESS Safety Manual and all related weekly and daily documentation for North East Middle/High School Replacement Project for the administration of the contract.

**General Scope:**
**Contractor is responsible for General Scope of Work listed elsewhere in this specification section.**

**THE SPECIFIC SCOPE OF WORK IS TO INCLUDE, but is not limited to, the following items:**

**Roofing Specific Scope:**

1. Contractor is responsible for own removal of trash associated with this scope of work from work area to dumpsters provided by this contractor.

2. Contractor shall furnish and install all roof hatches, roofing accessories, insulation (as it relates to roofing), ~~built-up asphalt roofing~~ **ADD#3**, bituminous vapor retarder, perlite, roofing cement, glass fiber fabric, preformed edge strips, flashing , counter-flashing (as it relates to roofing), sheet metal (as it relates to roofing), surfacing aggregate and or colored cap sheet, gravel stops, walkway protection pads, mastic sealant, ~~asphaltic~~ **ADD#3** primer, fasteners, cant strips, cleats, temporary roofing, metal wall copings, metal roof panels, soffit panels, fascia, reglets, reglets with insect screen, gutters, downspouts, ~~roof screening, RTU screening~~ **ADD#3**, expansion joints/covers located at and/or within the roofing system, joint sealants (as it relates to roofing), and the like as required by the Contract Documents.

3. ~~Roof screening will be by this contractor, structural steel attachment for roof screens and roof top units will be provided by the 05A contractor.~~ADD#3

4. Light gauge framing, blocking, dens-glass at parapet, are the responsibility of the 06A Contractor. ~~This contractor is responsible for moisture and/or air barriers at the exterior.~~ ADD#5

5. Contractor shall provide for and coordinate all manufacturers' testing and inspections and final certifications.

6. Contractor shall review all documents for locations of openings and penetrations in the roof system that will be required by others. Contractor shall furnish and install all opening and penetration sealer requirements for these openings, Contractor will be responsible for making weather tight, all openings and penetrations thru the roofing.

7. Contractor shall furnish and install all sealants and caulking necessary for and incidental to a complete roofing installation package as required by the Contractor Documents. At the Construction Manager's discretion, roofing will be held back and temporarily sealed from the building's edge, prior to completion of exterior or above roofline masonry or metal stud work where appropriate and practical. Contractor shall fill these areas and complete roofing when work of other trades is complete, at no extra cost. All temporary seals shall conform to manufacturer's recommendations and specifications.

8. In the event roofing expansion joints are required by the manufacturer but not detailed on the contract drawings, the Contractor shall be responsible for all costs associated to add these joints. This includes, but is not limited to, carpentry, roofing and trim.

9. Contractor shall furnish and install boots and/or pitch pockets for all roof penetrations, including flashing, hardware and clamps to make a completely watertight roofing system.

10. Contractor is responsible to have work certified by manufacturer's representative for proper installation.

11. Wood blocking will be performed by the 06A contractor to the extent of what is shown on the contract documents. Additional wood blocking required to meet particular roofing manufacturers requirements that is not shown on the Contract documents is the responsibility of the 07A contractor. In the event less wood blocking is required then what is shown on the contract documents in order to meet a particular roofing manufacturers requirement a deduct credit will be issued by the 06A contractor for unused labor and materials.

12. The 05A Contractor is to furnish for installation by this contractor all insulation for the acoustical metal decking. Unloading, hoisting, etc… is the responsibility of this contractor.

13. Contractor shall furnish and install all ~~roof curbs~~ADD#3, equipment supports, roof hatches, heat and smoke vents, pipe and duct supports, and pipe portals required by the contract documents.

~~**Responsibilities for Typical Parapet Walls**~~

~~1. Responsibilities for Typical Parapet at CMU Back-up, Details D5, A5 /A431 (and other typical details) are assigned below:~~

~~a) 04A – Air barrier, continuous air barrier transition membrane, rigid insulation, CMU, brick veneer and attachments. Install anchor bolts furnished by the 05A Contractor.~~
~~b) 06A – Exterior fire rated plywood sheathing and blocking at top of parapet. Exterior fire rated plywood sheathing and blocking at both sides of parapet (if indicated), 2X wood blocking where required, batt insulation.~~
~~c) 05A – Furnish anchor bolts to 04A.~~
~~d) 07A – Adhered membrane flashing, flashing strip, closed cell backer rod, pre-finished aluminum coping. 1 /4" cover board over plywood.~~

~~e) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~2. Responsibilities for Typical Metal Panel Parapet at CMU Back-up, Details D5, A5 /A432, (and other typical details) are assigned below:~~

~~a) 04A – Air barrier and continuous air barrier overlapping transition membrane. CMU. Rigid foam insulation. Mineral wool insulation. Install anchor bolts furnished by the 05A Contractor. Cont. STPE Sealant at termination bar. Thermal break cladding support system ADD#3,~~

~~b) 06A – Exterior fire rated plywood sheathing and blocking at top and sides of the parapet. Exterior fire rated plywood sheathing and blocking and rigid foam board insulation, mineral wool insulation at side low roof (detail A14/A432) ADD#3. 2X wood blocking where required,~~

~~c) 07A – Adhered membrane flashing, flashing strip, closed cell backer rod, pre-finished aluminum coping. 1 /4" cover board over plywood. All flashings and counter-flashings.~~

~~d) 07B – Metal panel system, thermal break cladding, mineral wool insulation at side low roof (*see* detail D14, A14/A432) ADD#3, continuous air barrier transition membrane, 2-piece prefinished aluminum metal panel base, 18 GA Min galvanized sheet metal 05A – Furnish anchor bolts to 04A.~~

~~e) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~3. Responsibilities for Typical Parapet at Stud Wall Back-up, Details D9 & A9 /A431, (and other typical details) are assigned below:~~

~~a) 04A – Continuous air barrier transition membrane and air barrier over 5/8" exterior gypsum sheathing. ***Rigid board insulation*** Foamed-in-place insulation. ADD#3 - Brick veneer and attachments.~~

~~b) 07A – Adhered membrane flashing, flashing strip, backer rod, pre-finished aluminum coping. 1 /4" cover board over plywood.~~

~~c) 06A – CFMF, batt insulation, 5/8" exterior gypsum sheathing, 5/8" exterior fire rated plywood sheathing, 2X wood blocking, ¾" and ½" plywood on top of parapet, metal studs, metal stud slide clip, ***continuous air barrier transition membrane and air barrier over 5/8" exterior gypsum sheathing***. ADD#3~~

~~d) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~4. Responsibilities for Typical Metal Panel Parapet at Stud Wall Back-up, Details D9 & A9 /A432 (and other typical details) are assigned below:~~

~~a) 04A – Continuous air barrier transition membrane and air barrier over 5/8" exterior gypsum sheathing. insulation. ADD#3~~

~~b) 06A – Exterior fire rated plywood sheathing and blocking at top of the parapet and side of wall, CFMF, batt insulation, 5/8" exterior gypsum sheathing all blocking, ¾" and ½" plywood, metal studs, metal stud slide clip, ***continuous air barrier transition membrane and air barrier*** mineral wool insulation. ADD#3~~

~~c) 07A – Adhered membrane flashing, flashing strip, backer rod, pre-finished aluminum coping. 3" cladding support system, metal panel system ADD#3. 1 /4" cover board over plywood.~~

~~d) 05A – Furnish and install continuous galvanized steel bent plate at top of parapet wall.~~

~~e) 07B – Metal panel system, thermal break cladding, mineral wool insulation at side low roof (detail D9 & A9/A432), continuous air barrier transition membrane, ADD#3 - 2-piece prefinished aluminum metal panel base,~~

~~f) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~5. Responsibilities for Typical Low Roof Studs w/ Metal Panel, Details D18 & A18 /A432 (and other typical details) are assigned below:~~

~~a) 04A – Continuous air barrier overlapping transition membrane over 5/8" exterior gypsum sheathing. Foamed-in-place insulation.~~ ~~ADD#3~~

~~b) 06A – 3" rigid foam insulation, exterior fire rated plywood sheathing and blocking, rigid foam board insulation and mineral wool insulation below blocking, CFMF, batt insulation, 5/8" exterior gypsum sheathing, galvanized sheet metal angle~~~~***, continuous air barrier and transition membrane***~~. ~~ADD#3~~

~~d) 07A – All flashings and counter-flashings~~ ~~***(to include the SS receiver and counterflashing)***~~. ~~Mineral wool insulation at bottom of panel.~~ ~~ADD#3~~ ~~- 1/4" cover board over plywood and adhered membrane flashing~~

~~e) 07B – Metal panel system, thermal break cladding,~~ ~~***thermal break cladding support system, continuous flexible flashing,***~~ ~~ADD#3~~ ~~- mineral wool insulation at side low roof (detail D14 & A14/A432), continuous air barrier transition membrane~~ ~~ADD#3~~~~, 2-piece prefinished aluminum metal panel base, continuous flexible flashing~~

~~f) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

***Responsibilities for Parapet Walls – REVISED PER ADDENDUM #5***

***04A – CMU, masonry veneer, grout, flashing and all other incidentals as shown and specified under 04 20 00. Install anchor bolts in CMU, furnished by 05A Contractor. Cavity wall insulation (rigid or mineral wool as shown) at all locations where insulation is behind masonry. All fluid applied membrane air barrier system complete, including continuous air barrier transition membrane at top of parapet, regardless of substrate. Provide termination sealant accepted for air barrier warranty as shown. The air barrier system for the entire building must be certified and warranted as a complete system as specified per 07 27 26.*** **ADD#5**

***05A – Furnish anchor bolts for parapet blocking to 04A Contractor for installation. Provide galvanized steel bent plates/angles at all locations shown.*** **ADD#5**

***06A – Provide all wood blocking, plywood, metal stud framing, bridge plates and exterior sheathing as shown. Provide batt insulation and mineral wool insulation within metal stud framing and at expansion joint cavities as indicated. Provide rigid foam board insulation where directly behind plywood sheathing (example A14/A432, and similar.)*** **ADD#5**

***07A – Provide all pre-finished coping and products specified under 07 41 13.16, cover board, flashings/counter-flashings for roof system, transition membrane from roof membrane over parapet blocking (overlapped to air barrier transition membrane). Provide closed cell backer rod, flashing strips, and all other incidentals necessary for a complete termination of roofing system as shown and specified under 07 54 23.*** **ADD#5**

***07B – Provide all thermal break cladding support systems complete as shown and specified. Provide all insulation (rigid and mineral wool) where shown behind metal panels. Provide all metal panels as shown and specified.*** **ADD#5**

**SPECIAL CONSIDERATIONS:**

1. **Contractor acknowledges and has accounted for within his bid, the second and fourth Saturdays of each month as required workdays. Contractor is expected to provide a crew of the same size that is provided during Monday through Friday. No exceptions.**

2. Contractor is fully aware and has properly taken into account alternates may affect his package.

3. This bid package has an MBE goal of _15_ percent. All prime contractors, including certified MBE firms, when submitting bids or proposals as a prime contractor, are required to attempt to achieve this goal from MDOT certified MBE firms. All submittals of MBE materials and reporting requirements are applicable for the project, including the submittal of MBE Attachments A and B with its bid as described in specification section 00 43 39 - Minority Business Enterprises Procedures.

4. ***Contractor shall include an allowance of 500 SF of roof patchwork associated with penetrations associated with existing Field House renovations.*** **-ADD#5**

**EXCLUDED FROM THIS CONTRACTOR WORK is:**

1. Testing costs unless specifically called for in this scope, a result of negligence, poor workmanship, or failure of work to meet the requirement of the documents.

**END OF SCOPE 07A**

# WORK SCOPE CATEGORY 07B – Metal Wall Panel

The work of this bid category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all Metal Wall Panel work in accordance with the specifications, drawings and applicable codes. All work is to be performed as shown on the plans and/or specified under the following technical sections:

| SECTION | NAME |
|---|---|
| 07 21 00 | THERMAL INSULATION |
| 07 24 19 | WATER DRAINAGE EXTERIOR INSULATION & FINISH SYSTEM (EIFS) |
| 07 42 13.13 | FORMED METAL WALL PANELS |
| 07 42 13.19 | INSULATED METAL WALL PANELS |
| 07 42 13.23 | METAL COMPOSITE MATERIAL WALL PANELS |
| 07 48 13 | THERMAL BREAK CLADDING SUPPORT SYSTEMS |
| 07 91 00 | PREFORMED JOINT SEALS (as it relates to this scope) |
| 07 92 00 | JOINT SEALANTS (as it relates to this scope) |
| 07 95 13 | EXPANSION JOINT COVER ASSEMBLIES (as it relates to this scope) |

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In addition to the above, trade contractors are to include, but are not limited to, AIA Documents A201 and A401, and various other Technical Specifications interfacing with this work. The Contractors are required to review the work descriptions of the other categories so as to not misunderstand the scope responsibilities. The Contractors are also bound to the HESS Safety Manual and all related weekly and daily documentation for North East Middle/High School Replacement Project for the administration of the contract.

**General Scope:**
**Contractor is responsible for General Scope of Work listed elsewhere in this specification section.**

**THE SPECIFIC SCOPE OF WORK IS TO INCLUDE, but is not limited to, the following items:**

**Metal Wall Panel Specific Scope:**

1. Contractor is responsible for own removal of trash associated with this scope of work from work area to dumpsters provided by Construction Manager.

2. Contractor shall furnish and install all metal wall panels, subframing/support system, mineral wool, expansion joints/covers located at and/or within the wall panel system, joint sealants (as it relates to roofing), and the like as required by the Contract Documents.

3. ~~Roof screening will be by this contractor, structural steel attachment for roof screens and roof top units will be provided by the 05A contractor.~~ **ADD#5**

4. Light gauge framing, blocking, dens-glass, are the responsibility of the 06A Contractor. ~~This contractor is responsible for moisture and/or air barriers at the exterior.~~ **ADD#5**

5. Contractor shall furnish and install all metal panels and flashings. Any access doors required with the metal panels shall be provided and installed by this contractor.

6. ~~Contractor shall furnish and install roofing screen complete. Note this will require a separate mobilization as this work will not be installed until after all other roof related work is 100% complete.~~ **ADD#5**

7. Contractor shall provide for and coordinate all manufacturers' testing and inspections and final certifications.

8. Contractor shall review all documents for locations of openings and penetrations in the Wall Panel System that will be required by others. Contractor shall furnish and install all opening and penetration sealer requirements for these openings, Contractor will be responsible for making weather tight, all openings and penetrations thru the wall panels.

9. Contractor shall furnish and install all sealants and caulking necessary for and incidental to a complete wall panel installation package as required by the Contractor Documents. Contractor will be responsible for final caulking between metal wall panels and other materials for a finished product.

10. Contractor shall furnish and install flashing, hardware and clamps to make a completely watertight wall panel system where panels meet the curtainwall and storefront system.

11. Contractor is responsible to have work certified by manufacturer's representative for proper installation.

12. Wood blocking will be performed by the 06A contractor to the extent of what is shown on the contract documents. Any additional blocking required will be by this contractor.

13. Contractor shall furnish all warranties required by the contract documents.

**~~Responsibilities for Typical Parapet Walls~~**

~~1. Responsibilities for Typical Parapet at CMU Back-up, Details D5, A5 /A431 (and other typical details) are assigned below:~~

~~a) 04A – Air barrier, continuous air barrier transition membrane, rigid insulation, CMU, brick veneer and attachments. Install anchor bolts furnished by the 05A Contractor.~~
~~b) 06A - Exterior fire rated plywood sheathing and blocking at top of parapet. Exterior fire rated plywood sheathing and blocking at both sides of parapet (if indicated), 2X wood blocking where required, batt insulation.~~
~~c) 05A – Furnish anchor bolts to 04A.~~
~~d) 07A – Adhered membrane flashing, flashing strip, closed cell backer rod, pre-finished aluminum coping. 1 /4" cover board over plywood.~~
~~e) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~2. Responsibilities for Typical Metal Panel Parapet at CMU Back-up, Details D5, A5 /A432, (and other typical details) are assigned below:~~

~~a) 04A – Air barrier and continuous air barrier overlapping transition membrane. CMU. Rigid foam insulation. Mineral wool insulation. Install anchor bolts furnished by the 05A Contractor. Cont. STPE Sealant at termination bar. Thermal break cladding support system~~ ~~ADD#3~~~~;~~
~~b) 06A – Exterior fire rated plywood sheathing and blocking at top and sides of the parapet. Exterior fire rated plywood sheathing and blocking and rigid foam board insulation, mineral wool insulation at side low roof (detail A14/A432)~~ ~~ADD#3~~~~. 2X wood blocking where required,~~
~~c) 07A – Adhered membrane flashing, flashing strip, closed cell backer rod, pre-finished aluminum coping. 1 /4" cover board over plywood. All flashings and counter-flashings.~~
~~d) 07B – Metal panel system, thermal break cladding, mineral wool insulation at side low roof (~~***~~see~~~~ detail D14, A14/A432)~~ ~~ADD#3~~~~, continuous air barrier transition membrane, 2-piece prefinished aluminum metal panel base, 18 GA Min galvanized sheet metal 05A – Furnish anchor bolts to 04A.~~
~~e) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before~~

~~completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~3. Responsibilities for Typical Parapet at Stud Wall Back-up, Details D9 & A9 /A431, (and other typical details) are assigned below:~~

~~a) 04A – Continuous air barrier transition membrane and air barrier over 5/8" exterior gypsum sheathing.~~ ***Rigid board insulation***~~Foamed-in-place insulation.~~ ~~ADD#3~~ ~~- Brick veneer and attachments.~~

~~b) 07A – Adhered membrane flashing, flashing strip, backer rod, pre-finished aluminum coping. 1 /4" cover board over plywood.~~

~~c) 06A – CFMF, batt insulation, 5/8" exterior gypsum sheathing, 5/8" exterior fire rated plywood sheathing, 2X wood blocking, ¾" and ½" plywood on top of parapet, metal studs, metal stud slide clip,~~ ***continuous air barrier transition membrane and air barrier over 5/8" exterior gypsum sheathing***~~.~~ ~~ADD#3~~

~~d) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~4. Responsibilities for Typical Metal Panel Parapet at Stud Wall Back-up, Details D9 & A9 /A432 (and other typical details) are assigned below:~~

~~a) 04A – Continuous air barrier transition membrane and air barrier over 5/8" exterior gypsum sheathing. insulation.~~ ~~ADD#3~~

~~b) 06A – Exterior fire rated plywood sheathing and blocking at top of the parapet and side of wall, CFMF, batt insulation, 5/8" exterior gypsum sheathing all blocking, ¾" and ½" plywood, metal studs, metal stud slide clip,~~ ***continuous air barrier transition membrane and air barrier*** ~~mineral wool insulation.~~ ~~ADD#3~~

~~c) 07A – Adhered membrane flashing, flashing strip, backer rod, pre-finished aluminum coping. 3" cladding support system, metal panel system~~ ~~ADD#3~~~~. 1 /4" cover board over plywood.~~

~~d) 05A – Furnish and install continuous galvanized steel bent plate at top of parapet wall.~~

~~e) 07B – Metal panel system, thermal break cladding, mineral wool insulation at side low roof (detail D9 & A9/A432), continuous air barrier transition membrane,~~ ~~ADD#3~~ ~~- 2-piece prefinished aluminum metal panel base,~~

~~f) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

~~5. Responsibilities for Typical Low Roof Studs w/ Metal Panel, Details D18 & A18 /A432 (and other typical details) are assigned below:~~

~~a) 04A – Continuous air barrier overlapping transition membrane over 5/8" exterior gypsum sheathing. Foamed-in-place insulation.~~ ~~ADD#3~~

~~b) 06A – 3" rigid foam insulation, exterior fire rated plywood sheathing and blocking, rigid foam board insulation and mineral wool insulation below blocking, CFMF, batt insulation, 5/8" exterior gypsum sheathing, galvanized sheet metal angle~~***, continuous air barrier and transition membrane***~~.~~ ~~ADD#3~~

~~d) 07A – All flashings and counter-flashings~~ ***(to include the SS receiver and counterflashing)***~~. Mineral wool insulation at bottom of panel.~~ ~~ADD#3~~ ~~- 1 /4" cover board over plywood and adhered membrane flashing~~

~~e) 07B – Metal panel system, thermal break cladding,~~ ***thermal break cladding support system, continuous flexible flashing,*** ~~ADD#3~~ ~~- mineral wool insulation at side low roof (detail D14 & A14/A432), continuous air barrier transition membrane~~ ~~ADD#3~~~~, 2-piece prefinished aluminum metal panel base, continuous flexible flashing~~

~~f) Insulation shall be protected by the installing contractor to ensure a weathertight condition and that the insulation is protected from the elements. Should insulation be compromised after installation and before completion of the finished system, it will be the responsibility of the installing Contractor to remove and replace it at no additional cost to the Owner.~~

***Responsibilities for Parapet Walls – REVISED PER ADDENDUM #5***

***04A – CMU, masonry veneer, grout, flashing and all other incidentals as shown and specified under 04 20 00. Install anchor bolts in CMU, furnished by 05A Contractor. Cavity wall insulation (rigid or mineral wool as shown) at all locations where insulation is behind masonry. All fluid applied membrane air barrier system complete, including continuous air barrier transition membrane at top of parapet, regardless of substrate. Provide termination sealant accepted for air barrier warranty as shown. The air barrier system for the entire building must be certified and warranted as a complete system as specified per 07 27 26.*** **ADD#5**

***05A – Furnish anchor bolts for parapet blocking to 04A Contractor for installation. Provide galvanized steel bent plates/angles at all locations shown.*** **ADD#5**

***06A – Provide all wood blocking, plywood, metal stud framing, bridge plates and exterior sheathing as shown. Provide batt insulation and mineral wool insulation within metal stud framing and at expansion joint cavities as indicated. Provide rigid foam board insulation where directly behind plywood sheathing (example A14/A432, and similar.)*** **ADD#5**

***07A – Provide all pre-finished coping and products specified under 07 41 13.16, cover board, flashings/counter-flashings for roof system, transition membrane from roof membrane over parapet blocking (overlapped to air barrier transition membrane). Provide closed cell backer rod, flashing strips, and all other incidentals necessary for a complete termination of roofing system as shown and specified under 07 54 23.*** **ADD#5**

***07B – Provide all thermal break cladding support systems complete as shown and specified. Provide all insulation (rigid and mineral wool) where shown behind metal panels. Provide all metal panels as shown and specified.*** **ADD#5**

**SPECIAL CONSIDERATIONS:**

1. **Contractor acknowledges and has accounted for within his bid, the second and fourth Saturdays of each month as required workdays. Contractor is expected to provide a crew of the same size that is provided during Monday through Friday. No exceptions.**

2. Contractor is fully aware and has properly taken into account alternates may affect his package.

3. This bid package has an MBE goal of _10_ percent. All prime contractors, including certified MBE firms, when submitting bids or proposals as a prime contractor, are required to attempt to achieve this goal from MDOT certified MBE firms. All submittals of MBE materials and reporting requirements are applicable for the project, including the submittal of MBE Attachments A and B with its bid as described in specification section 00 43 39 - Minority Business Enterprises Procedures.

**EXCLUDED FROM THIS CONTRACTOR WORK is:**

1. Testing costs, unless specifically called for in this scope, a result of negligence, poor workmanship, or failure of work to meet the requirement of the documents.

**END OF SCOPE 07B**

# WORK SCOPE CATEGORY 23A – Mechanical & Plumbing

The work of this bid category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all Mechanical & Plumbing work in accordance with the specifications, drawings and applicable codes. All work is to be performed as shown on the plans and/or specified under the following technical sections:

| SECTION | NAME |
|---|---|
| 02 41 19 | SELECTIVE DEMOLITION (as it relates to this scope) |
| 07 84 13 | PENETRATION FIRESTOPPING (as it relates to this scope) |
| 07 84 43 | JOINT FIRESTOPPING (as it relates to this scope) |
| 07 91 00 | PREFORMED JOINT SEALS (as it relates to this scope) |
| 07 92 00 | JOINT SEALANTS (as it relates to this scope) |
| 07 92 19 | ACOUSTICAL JOINT SEALANTS (as it relates to this scope) |
| 08 31 13 | ACCESS DOORS AND PANELS (as it relates to this scope) |

DIVISION 21 – FIRE PROTECTION (in its entirety for coordination purposes and as sections relate to this scope)

DIVISION 22 – PLUMBING

| | |
|---|---|
| 22 05 00 | COMMON WORK RESULTS PLUMBING |
| 22 05 13 | COMMON MOTOR REQUIREMENTS PLUMBING EQUIPMENT PERMIT |
| 22 05 19 | METERS GAUGES PLUMBING PIPING PERMIT |
| 22 05 23 | GENERAL DUTY VALVES PLUMBING PIPING |
| 22 05 29 | HANGERS SUPPORTS PLUMBING PIPING & EQUIPMENT |
| 22 05 33 | HEAT TRACING FOR PLUMBING PIPING |
| 22 05 48 | VIBRATION CONTROLS FOR PLUMBING PIPING & EQUIPMENT |
| 22 05 53 | ID FOR PLUMBING PIPING & EQUIPMENT |
| 22 07 00 | PLUMBING INSULATION |
| ***22 08 00*** | ***PLUMBING SYSTEMS COMMISSIONING*** **ADD#3** |
| 22 11 16 | DOMESTIC WATER PIPING |
| 22 11 19 | DOMESTIC WATER PIPING SPECIALTIES |
| 22 11 23 | DOMESTIC WATER PUMPS |
| 22 13 16 | SANITARY WASTE & VENT PIPING |
| 22 13 19 | SANITARY WASTE PIPING SPECIALTIES |
| 22 14 13 | FACILITY STORM DRAINAGE PIPING |
| 22 14 23 | STORM DRAINAGE PIPING SPECIALTIES |
| 22 14 29 | SUMP PUMPS |
| 22 33 00 | ELECTRIC DOMESTIC WATER HEATERS |
| 22 40 00 | PLUMBING FIXTURES |
| 22 45 00 | EMERGENCY PLUMBING FIXTURE |
| 22 47 00 | WATER COOLERS |
| 22 63 23 | FACILITY LIQUEFIED PETROLEUM GAS PIPING |
| 22 66 59 | LABORATORY UTILITY SHUTOFF SYSTEMS |

DIVISION 23 – HEATING VENTILATING AND AIR CONDITIONING

| | |
|---|---|
| 23 05 00 | COMMON WORK RESULTS HVAC |
| 23 05 13 | COMMON MOTOR REQUIREMENTS HVAC EQUIPMENT |
| 23 05 15 | VARIABLE FREQUENCY MOTOR CONTROLLERS |
| 23 05 16 | EXPANSION FITTINGS AND LOOPS FOR HVAC PIPING-20039 |
| 23 05 19 | METERS & GAUGES HVAC PIPING |
| 23 05 23 | GENERAL DUTY VALVES HVAC PIPING |
| 23 05 29 | HANGERS & SUPPORTS HVAC PIPING & EQUIPMENT |
| 23 05 48 | VIBRATION & SEISMIC CONTROLS HVAC PIPING & EQUIPMENT |
| 23 05 53 | ID HVAC PIPING & EQUIPMENT |
| 23 05 93 | TESTING ADJUSTING BALANCING HVAC |

| | |
|---|---|
| 23 07 00 | HVAC INSULATION |
| ***23 08 00*** | ***HVAC SYSTEMS COMMISSIONING*** ADD#3 |
| 23 09 00 | NEW INSTRUMENTATION & CONTROL FOR HVAC |
| 23 21 13 | HYDRONIC PIPING |
| 23 21 13.33 | GROUND LOOP HEAT PUMP-PIPING |
| 23 21 23 | HYDRONIC PUMPS |
| 23 23 00 | REFRIGERANT PIPING |
| 23 25 00 | HVAC WATER TREATMENT |
| 23 31 13 | METAL DUCTS |
| 23 33 00 | AIR DUCT ACCESSORIES |
| 23 34 23 | HVAC POWER VENTILATORS |
| 23 37 13 | DIFFUSERS REGISTERS & GRILLES |
| 23 37 23 | HVAC GRAVITY VENTILATORS |
| 23 37 33 | SPECIAL EXHAUST SYSTEMS |
| 23 41 00 | PARTICULATE AIR FILTRATION |
| 23 72 00 | ENERGY RECOVERY UNIT |
| 23 73 33 | OUTDOOR HEATING & VENTILATING UNITS |
| 23 81 26 | SPLIT SYSTEM AIR CONDITIONERS |
| 23 81 46 | WATER-SOURCE UNITARY HEAT PUMPS |
| 23 82 16.14 | ELECTRIC-RESISTANCE AIR COILS |
| 23 82 36 | FINNED-TUBE RADIATION HEATERS |
| 23 82 39 | UNIT HEATERS |
| 23 82 39.13 | CABINET UNIT HEATERS |
| 23 82 39.19 | WALL & CEILING UNIT HEATERS |

DIVISION 26, 27 & 28 - ELECTRICAL (in its entirety for coordination purposes and as sections relate to this scope)

***31 20 00*** ***EXCAVATING FILLING AND GRADING (as it relates to this scope)*** ADD#3

Geotechnical Report issued by ECS Mid Atlantic, LLC dated February 3, 2023, with addendum dated March 21, 2023, for informational purposes only.

* Provide the temporary fit outs indicated in the drawings as well as the removal of the temporary conditions and complete finishes as part of Phase 2. If the Base Bid 2 option is selected, the temporary fit out work will not be required.

In addition to the above, trade contractors are to include, but are not limited to, AIA Documents A201 and A401, and various other Technical Specifications interfacing with this work. The Contractors are required to review the work descriptions of the other categories so as to not misunderstand the scope responsibilities. The Contractors are also bound to the HESS Safety Manual and all related weekly and daily documentation for North East Middle/High School Replacement Project for the administration of the contract.

**General Scope:**
**Contractor is responsible for General Scope of Work listed elsewhere in this specification section.**

**THE SPECIFIC SCOPE OF WORK IS TO INCLUDE, but is not limited to, the following items:**

**Mechanical and Plumbing Specific Scope:**

1. As the Construction Manager, HESS shall manage the use of construction coordination models throughout the construction process. All BIM-related information shall be exchanged through the BIM FTP site managed by HESS. Each contractor shall be responsible to coordinate his work with each trade. However, the Mechanical contractor will be responsible to lead the coordination process. HESS shall play the role of the Quality Control Manager during this process. Utilizing design models created by A/E and fabrication/coordination models prepared and submitted by the listed trade contractors, HESS will maintain an up-to-date Federated model throughout the construction phase. The Federated model will be used to fully and properly coordinate and sequence the work of the trades, to maximize efficiencies during

construction. Conflicts in the layout and sequencing of the work will be discussed and resolved in a series of periodic construction coordination meetings.

All Steel, Mechanical, Plumbing, Electrical and Fire Protection contractors will be required to prepare 3D coordination models compatible with latest AutoCAD and Navisworks software. For clash detection to work properly, all models shall have a common reference point which shall be derived from the Architectural Design Model. All costs shall be included in the contractors bid. Contract architectural, MEP and structural drawings (3D) will be available electronically from the designated FTP site. During the construction phase these individual fabrication models shall be combined to create a Federated Construction Coordination model. BIM processes such as clash detection, submittals, trade sequencing, etc. will be done using the Construction Coordination model. The shop drawings submitted for records and approval will be generated from the Construction Coordination model or from individual models therein. The Construction Coordination model will be updated and maintained throughout construction to create an accurate as-built digital record of the construction of the project. The as-built BIM will be conveyed to the Owner on completion of construction, as a tool to assist owner in facility operation and maintenance.

The Mechanical contractor will take the lead and develop a drawing list for approval by the Construction Manager subdividing the building into separate areas. The drawing list will be for submission and will indicate a submission schedule coordinated with the construction activities. The drawings shall be developed in a sequential fashion so as to not delay installation of the work or the overall project schedule. The Construction Manager shall prepare a schedule identifying the activity and duration of each submission. The Mechanical contractor will call meetings, weekly, or as required, which all required contractors must attend to avoid delay. Such meeting can be held via web conference if agreed upon mutually by all parties. Failure to attend will require the contractor to field run the work not coordinated. No extra compensation will be paid to any contractor for relocating any equipment, duct, pipe, conduit, or other material that has been installed without proper coordination. If the installation of any uncoordinated work or improper installation or coordinated work necessitates additional work by other contractors, the cost of such additional work shall be assessed to the contractor responsible as determined by the Construction Manager. Where conflicts are found in the Model, regardless of the phase of the Project or LOD, the discovering party shall promptly notify the Model Element Author(s). Upon such notification, the Model Element Author shall act promptly to mitigate the conflict. At the conclusion of each coordination phase, the Mechanical contractor will notify the Construction Manager whereupon an onsite coordination meeting will be scheduled for the purpose of signing off on each respective area. After the review and approval of coordination in 3D, the Mechanical contractor shall provide one color composite set of drawings and forward them to the Construction Manager. In the preparation of all the final composite drawings, large scale details as well as cross and longitudinal sections shall be made as required to fully delineate all conditions. Particular attention shall be given to the locations, size and clearance dimensions of equipment items, shafts, and similar features. The final composite drawings shall include the locations of all controls, tie-ins, connections for other subcontractor's work, and pipe and duct insulation as required. Each trade contractor indicating their acceptance and approval of the indicated routings and layouts and their relationship with the adjoining or contiguous work of all contractors shall then sign off these final composite drawings. Therefore, no unauthorized deviations will be permitted. If deviations are made without the knowledge and agreement of the Construction Manager and other affected contractors, the work in question will be subject to removal and correction at no additional cost to the Owner.

2. After final composite drawings have been accepted and approved, the Mechanical contractor shall print one (1) color copy to be signed by all contractors. The Mechanical contractor shall provide the composite drawings digitally to all contractors through the HESS FTP site and will also submit two (2) set of prints for submittal purposes to the Construction Manager. The original signed off drawing shall be sent to the Construction Manager for permanent possession. No contractor will be authorized to release any material for fabrication or installation until the composite drawing(s) has been prepared and the signature process is executed and approved by the Construction Manager.

3. Contractor shall furnish and install all indirect drain piping from all air handling units, pumps, and the like complete with hangers and insulation as required to the nearest floor drain or as directed by the documents.

4. Contractor shall review and comply fully with the Building Information Modeling (BIM) requirements detailed in the general scope.

5. Contractor shall furnish for installation by 06A all access doors and frames in all walls, floors, and ceilings as required for its work under this contract whether they are indicated in the contract documents or not. Contractor shall coordinate the locations of all access doors with the Construction Manager and the 06A Contractor.

6. Contractor shall make the final connection to all underground utilities (except electrical, telephone, and cable). Contractor shall extend its piping (water, storm, sanitary, gas) from the building (and structures connected to the building such as canopies) to a point five (5) feet from the building line or to a point farther than five (5) feet from the building if it is specifically indicated as such in the contract documents. All final connections (water, storm, sanitary, gas) are by this contractor, regardless of timing and installation by the 31A Contractor or utility company(s). The 31A Contractor is to bring building domestic water service and fire water service to the building up to and including the first capped flange within the building at which point this contractor will set the backflow preventer for fire service at which point the 21A contractor takes responsibility for the sprinkler system, and for domestic water this contractor runs all remaining interior piping. The 23B contractor is to bring both supply and return for the geothermal system up to the first flange(s) within the building, at which point this contractor is responsible for all remaining interior piping. Note, the 23B Contractor is not running piping all the way to the mechanical room, just stubbed up and capped at the first flange, from which this contractor is responsible to take piping to the mechanical room, and all other interior geothermal mechanical piping.

7. Contractor shall make the final connections to the geothermal well piping from a capped flange three feet (3') above the main building mechanical room slab on grade. Capped flange and piping to and below the slab on grade is by the geothermal well subcontractor.

8. This contractor to furnish and install the fire sprinkler service backflow preventer, from which all further fire sprinkler piping will be provided by the 21A Contractor.

9. Contractor shall coordinate with Concrete Contractor regarding underground work, mechanical openings, and embedded items. Contractor shall coordinate with Masonry Contractor, Steel Contractor, and Drywall Contractor regarding duct openings, pipe sleeves, and embedded piping. Contractor shall provide field layout for ductwork penetrations, sleeves, and pipe penetrations. Contractor shall provide all sleeves required for its penetrations. Contractor shall provide information showing all pipe sleeve sizes, duct penetration sizes and dimensional layout of these penetrations for all steel penetrations for incorporation into the Steel Contractors steel fabrication shop drawings. Contractor shall provide all information for concrete, masonry, and steel within thirty (30) days of receiving a Letter of Intent, Notice to Award or the Contract, whichever is issued first.

10. Contractor shall coordinate with Structural Steel Contractor regarding openings, supports, framing, and bracing for all mechanical equipment. Contractor shall, within thirty (30) days of receiving a Letter of Intent, Notice to Award or the Contract, whichever is issued first, Contractor shall issue information showing actual dimensioned opening locations, opening sizes, support locations, support sizes, weights, loads, and any other items required for the necessary detailing and fabrication of the structural steel with relation to all mechanical work.

11. In the event an opening is required in a masonry wall and is not properly coordinated between this and the 04A contractor it is this contractor's sole responsibility to implement the required fix dictated by the Structural Engineer of Record (SER). All costs to either sawcut, or tooth CMU to allow for the opening is the responsibility of this contractor. In the event the 04A contractor has missed the indicated opening, or has miss-sized the opening, which has been laid out by this contractor, the costs required for the fix is the responsibility of the 04A contractor.

12. Contractor shall furnish and install all sound caulking, firesafing and fire caulking at all mechanical penetrations through walls, ceilings, and / or floors as required by specifications.

13. Contractor shall be required to furnish layout for all concrete pads related to the work in this package, including concrete housekeeping pads, equipment bases, roof top units, block-outs and all other mechanical equipment pads installed by others. In the event pads are required at equipment under this package but are not shown on the drawings, this Contractor shall furnish and install these pads in their entirety.

14. Contractor shall furnish and install all louvers and/or vents, inclusive of architectural louvers, regardless of document provisions. This is to include all architectural and mechanical louvers with the exception of louvers located within Hollow Metal (HM) or wood doors. HM or wood door louver to be furnished by the HM supplier. In the event ductwork furnished under this contract is to align with a HM or wood door louver, coordination of exact size and location of the louver is the responsibility of this contractor.

15. Contractor to furnish and install all bird and or insect screening as indicated on contract documents and specifications.

16. Contractor shall promptly furnish and install temporary closures at all louver openings and maintain closures until permanent louvers are installed.

17. Contractor shall furnish and install all caulk around all plumbing fixtures, exterior louvers, and exterior vents.

18. Contractor shall protect and maintain protection of all drains/cleanouts with tape or appropriate material to prevent debris generated by other Contractors from clogging drainage piping. Contractor shall be responsible for the removal and cleaning of this protective material.

19. Contractor shall immediately furnish, install, and maintain properly secured and labeled protective covers over all deck and roof penetrations left by its work.

20. The permanent HVAC equipment will be utilized for temporary climate control as directed by the CPM Schedule. The permanent equipment shall remain in operation following start-ups, as directed by the Construction Manager. Contractor shall perform regular maintenance on all equipment as necessary to maintain equipment in “like new” condition. This contractor includes labor and material for all temporary filters required during construction. Additionally, the Contractor shall provide a complete filter change on all units, within ten (10) days of Substantial Completion. The required warranty for all equipment commences on the date of substantial completion. Any costs for extended warranty due to early start up are to be included in this Contractor’s base cost. Supplemental temporary filter media shall be applied and maintained for all return intakes, in addition to all required unit filters, for temporary HVAC unit operation. Removal of all temporary filter media will be the responsibility of the Contractor prior to balancing and testing. This is a LEED project, Contractor to bear all costs associated with all required filter changes throughout construction and at project substantial completion and prior to turn over.

21. All equipment being furnished under this scope of work shall be sufficiently covered and sealed during transport to protect against inclement weather and adverse effects weather has on such equipment, per LEED requirements. Failure to do so may result in the equipment having to be replaced in the future at no additional cost to the Owner or Construction Manager.

22. Failure to properly rig, handle, transfer, set, install all equipment causing damage to said equipment will result in said equipment being replaced at no additional cost to Owner or Construction Manager, and will not be grounds for delay to the project. All set equipment is to be protected and remain in factory like condition until startup and acceptance of equipment by owner. Any and all costs associated with acceleration of following trades will be the full cost of this contractor.

23. Contractor shall solicit the services of the manufacturer to clean all coils within ten (10) days prior to Substantial Completion.

24. Contractor shall be responsible for all excavation, grading, backfill, approved compaction, and any other item associated with its interior and exterior work provided under this package. Contractor shall dispose of its excavation spoils to a central location as directed by the Construction Manager. Contractor shall be responsible for dewatering its excavations as necessary to maintain progress for its work. Contractor is responsible for the excavation and backfill for all its mechanical work and is responsible for restoring all excavations to their original grade and compaction. If in the event this Contractor must perform an excavation operation for reason caused by itself after the stone base of the concrete slab has been installed, it will be the responsibility of this Contractor to repair the stone base for the concrete slab, replace any stone base that may have been contaminated by this Contractor’s excavation operations, and bring this area back to its original grade prior to this Contractor’s excavation.

25. This Contractor shall provide all duct and pipe insulation inclusive of labeling, color coding etc required for its work.

26. Contractor shall cap off all ductwork at the end of each workday with clean unused polypropylene sheets. Ductwork not capped off shall be required to be mopped clean and then HEPA vacuumed under the inspection of the Construction Manager. If this requirement is not adhered to, the Construction Manager will perform the work and back charge the Contractor. When performing the cleaning work, use only approved HEPA type vacuum units. No "blowing out" (pressure cleaning) will be allowed. All ductwork shall be sealed when stored on and off site prior to installation.

27. All ductwork installed prior to building close-in is required to be fully wrapped with unused polypropylene sheets to protect against water infiltration. No duct insulation or sound lined duct shall be installed prior to building close-in.

28. Contractor shall furnish and install all duct lining, external duct, equipment, and pipe insulation as per specifications. Contractor shall install all duct mounted smoke detectors which shall be supplied by the Electrical Contractor.

29. Contractor shall provide vibration and sound control as specified. Steel supports and/ or racks for this Contractor's equipment and piping, such as hangers shall be furnished and installed by this Contractor. **All thread shall not extend lower than manufacturers required minimum below the support angle or rack regardless of the system it is supporting**.

30. Contractor shall coordinate box outs directly with the Masonry and or Concrete Contractor where possible. If failure to coordinate occurs, this Contractor is responsible for neatly core drilling or cutting masonry walls where its work will pass through masonry walls. "Beating" of holes will not be permitted.

31. Contractor shall furnish and install all piping, ductwork, and rough-in for all equipment and appliances. Contractor is responsible for making the final mechanical (plumbing, gas, and HVAC) connections, hook-ups, and tie-ins to all equipment and appliances. Contractor shall provide all mechanical connections, hook-ups, and tie-ins for all Owner furnished equipment, casework, appliances, and the like. Contractor shall provide all mechanical connections, hook-ups, and tie-ins for all equipment furnished by any other trade(s).

32. Contractor shall furnish and install temporary filtration media at the supply and return side of all mechanical equipment in accordance with the Construction Manager's Indoor Air Quality Management Plan and LEED Requirements. Contractor shall provide for filter changes, during construction, at the end of each phase of construction, prior to the flush out period, and as directed by the Construction Manager and or LEED Requirements. Contractor shall furnish, install, and maintain all temporary screens at strainers. Contractor shall, at the completion of its work and just prior to balancing and acceptance, remove all temporary screens and filters and install new, final filters and screens. Contractor to pay close attention to all MERV filter requirements during and post construction.

33. Contractor shall furnish and install all waterproofing and counter-flashing of its work when it penetrates the completed roof system, walls, and any other weather barrier surfaces. Any work performed by other contractor's in having to go behind and make this contractor's penetrations weather-tight will be back-charged to this contractor.

34. Contractor shall provide chlorination and certification of domestic water system.

35. Contractor shall furnish and install all Control Wiring requirements outlined in the drawings and specifications.

36. Contractor shall furnish and install prime coat painting for all unprotected support and hanger steel. "Black iron" will not be permitted.

37. Contractor shall furnish the Concrete Contractor with equipment (housekeeping) base layouts, anchor bolts, washers, sleeves, plates and templates for the mechanical equipment. It is this Contractor's responsibility to coordinate and check this work directly with the Concrete Contractor prior to concrete placement.

38. Contractor shall furnish and install any and all backflow preventers that are shown and/or that may be required by local codes. This contractor to include backflow preventer for hydrant meters and sprinkler systems, and all kitchen equipment as required.

39. Contractor shall coordinate the connection of the completed ATC system with any off-site component with the Construction Manager and Owner.

40. Contractor shall furnish and install grease interceptor and connections where indicated, including all cutting, excavation, support, backfilling, and patching as required. Contractor includes sheeting and shoring of excavation if required due to proximity of other structures or excavations.

41. Contractor shall furnish and install equipment, duct, and piping with sufficient space to allow for proper operation, maintenance, and removal as needed. Relocation of equipment, piping or ductwork to provide access will be at the expense of the Contractor if its work is found not to be in compliance.

42. Contractor understands and has taken into account that the drawings are shown diagrammatically and are not intended to show every fitting, valve and offset. Contractor is to provide equipment, fittings, valves, offsets, piping, and devices necessary to make a complete and operating system.

43. Contractor shall not install pipes over, around, in front of, in back of, or above, electrical controls, panels, switches, terminals, boxes, or similar electrical equipment. Drip pans will not be permitted around electrical equipment. Contractor also shall not install any piping over spaces for alternating tread stairs up to penthouses. These areas shall remain clear.

44. Contractor shall provide sanitary and water connection to the Construction Manager's office Trailer~~. In the event that this cannot be done, the Contractor shall be responsible for providing temporary means of and continued maintenance of sanitary and water service to the trailers.~~ **ADD#5** Contractor includes, permits, bonds, labor, and material, including heat tape for connection by electrical contractor. At the completion of the project per the direction of the Construction Manager, Contractor shall disconnect, remove, and dispose of the sanitary and water connections. Monthly usage charges will be paid by the Construction Manager.

45. Contractor shall furnish and install a complete plumbing system to include, but is not limited to, all taps, valves, pipes, fittings, water treatment systems, controllers, vertical by-pass feeders, turbine water meters, chillers, boilers, temporary measures, booster pumps, chemical pumps, line strainers, filter housings, filters, chemicals, tanks, open system cleaners, closed system cleaners, closed re-circulating systems, boilers, vents, couplings, nipples, insulation, plumbing fixtures, shock absorbers, wall hydrants, floor drains, roof drains, water heaters, floor sinks, open site drains, overflow drains, downspout nozzles at overflow drains, cleanouts, backflow preventers, hangers, rods, equipment supports, adhesives, manual air vents, automatic air vents, balance cocks, thermometers, drain cocks, pressure gauges, expansion tanks, automatic air separator eliminators, motors, tempered water valves, sump pumps, trap primers, electrical trap primers, washer connection box, trough/trench drains, grating at trough / trench drains, french drains, rooftop piping supports, gas piping and regulating system, water service for sprinkler system, backflow preventers for sprinkler system and kitchen equipment, drain tile, testing & balancing, and the like as required by the contract documents and jurisdictions having authority.

46. Contractor shall furnish and install a complete HVAC system to include, but not is limited to, all hydronic heat pumps, temperature controls, fans, pumps, plate heat exchangers, electric heaters, expansion tanks, air separators, energy & heat recovery units, insulation, control systems, diffusers, grilles, registers, distribution vaults, louvers, intake hoods, smoke vents, coordination with and installation and connection of hoods furnished by others, roof caps, brick vents, roof curbs, equipment, equipment supports, hangers, rods, adhesives, filters, motors, fans, heat pumps, roof top units, refrigerant piping, fire dampers, smoke dampers, automation systems, exhaust fans, manual volume dampers, condensate drain pipes, cabinet heaters, electric baseboard heaters, roof weather caps, coordination with and connection of kiln hoods furnished by others, air conditioning units, freeze protection pumps, coordination with testing & balancing contractor, participation and coordination in commissioning, and the like as required by the contract documents and jurisdictions having authority.

47. Testing and Balancing (TABS) to be performed by this Contractor.

~~48. Contractor shall furnish and install a complete Radon sub-slab ventilation system as required by the contract documents and jurisdictions having authority.~~ **ADD#5**

49. Contractor shall furnish and install all fire dampers as required. If a fire damper is not shown on the drawings, but is required based on fire rating and/or UL design, then it will be the responsibility of the Contractor to supply and install such fire dampers at no additional cost to the Construction Manager and/or Owner.

50. Contractor shall provide services of equipment manufacturer's representatives, where required by specifications, during installation, field inspection, testing, and owner demonstration and training.

51. Low voltage wiring for the work. No low voltage wiring for this package will be performed by either the Owner or 26A Contractor with respect to this scope of work and is the responsibility of this contractor to perform.

52. Contractor to provide all labor and prestartup test reports necessary for coordination with the Commissioning Agent and TABS Contractor at no extra cost to Owner or Construction Manager.

53. Furnish and install all Variable Frequency Drives.

54. All motor starters, AFD's, VFD's, etc furnished and installed by this contract are to include phase monitoring per the specifications, by this contractor.

55. Enthalpy wheels/desiccant wheels, where provided with Dedicated Outdoor Air units or "other" HVAC equipment, should be protected during construction and removed while temporary operation of units proceeds during construction. These wheels should be stored, protected and subsequently reinstalled in accordance with manufacturer's guidelines so as to not affect warranty coverage.

***56. Contractor shall provide all underslab drainage as indicated on plumbing drawings*** **ADD#3**

**SPECIAL CONSIDERATIONS:**

1. **Contractor acknowledges and has accounted for within his bid, the second and fourth Saturdays of each month as required workdays. Contractor is expected to provide a crew of the same size that is provided during Monday through Friday. No exceptions.**

2. This bid package has an MBE goal of _20_ percent. All prime contractors, including certified MBE firms, when submitting bids or proposals as a prime contractor, are required to attempt to achieve this goal from MDOT certified MBE firms. All submittals of MBE materials and reporting requirements are applicable for the project, including the submittal of MBE Attachments A and B with its bid as described in specification section 00 43 39 - Minority Business Enterprises Procedures.

3. ***Contractor shall include an allowance of $300,000 within base bid 1 and 2 to accommodate temporary heating/cooling/dehumidification measures necessary to condition the building for interior finishes prior to the start-up of permanent systems. This allowance may also be used for temporary water usage costs by respective utility company.*** **ADD#5**

**EXCLUDED FROM THIS CONTRACTOR WORK is:**

1. Testing costs, unless specifically called for in this scope, are a result of negligence, poor workmanship, or failure of work to meet the requirement of the documents.

**END OF SCOPE 23A**

## WORK SCOPE CATEGORY 26A – Electrical

The work of this bid category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all Electrical work in accordance with the specifications, drawings and applicable codes. All work is to be performed as shown on the plans and/or specified under the following technical sections:

| SECTION | NAME |
|---|---|
| 02 30 00 | SUBSURFACE DRILLING AND SAMPLING INFORMATION (as it relates to this scope) |
| 02 41 19 | SELECTIVE DEMOLITION (as it relates to this scope) |
| 03 10 00 | CONCRETE FORMING AND ACCESSORIES (as it relates to this scope) |
| 03 20 00 | CONCRETE REINFORCING (as it relates to this scope) |
| 03 30 00 | CAST-IN-PLACE CONCRETE (as it relates to this scope) |
| 05 12 00 | STRUCTURAL STEEL FRAMING (as it relates to this scope) |
| 05 21 00 | STEEL JOIST FRAMING (as it relates to this scope) |
| 05 31 00 | STEEL DECKING (as it relates to this scope) |
| 06 40 23 | INTERIOR ARCHITECTURAL WOODWORK (for coordination purposes) |
| 07 54 23 | THERMOPLASTIC-POLYOLEFIN (TPO) ROOFING (for coordination purposes) |
| 07 62 00 | SHEET METAL FLASHING AND TRIM (for coordination purposes) |
| 07 71 00 | ROOF SPECIALTIES (for coordination purposes) |
| 07 81 00 | APPLIED FIREPROOFING (for coordination purposes) |
| 07 81 23 | INTUMESCENT FIREPROOFING (for coordination purposes) |
| 07 84 13 | PENETRATION FIRESTOPPING (as it relates to this scope) |
| 07 91 00 | PREFORMED JOINT SEALS (as it relates to this scope) |
| 07 92 00 | JOINT SEALANTS (as it relates to this scope) |
| 07 92 19 | ACOUSTICAL JOINT SEALANTS (as it relates to this scope) |
| 08 31 13 | ACCESS DOORS AND PANELS (as it relates to this scope) |
| 08 33 13 | COILING COUNTER DOORS (for coordination purposes) |
| 08 33 23 | OVERHEAD COILING DOORS (for coordination purposes) |
| 08 71 00 | DOOR HARDWARE (as it relates to this scope) |
| 10 00 05 | MISCELLANEOUS SPECIALTIES (as it relates to this scope) |
| 10 11 00 | VISUAL DISPLAY UNITS (for coordination purposes) |
| 10 22 39 | FOLDING PANEL PARTITIONS (as it relates to this scope) |
| 10 28 00.13 | ELECTRIC HAND DRYERS (as it relates to this scope) |
| 11 00 05 | MISCELLANEOUS EQUIPMENT (as it relates to this scope) |
| 11 30 13 | APPLIANCES (as it relates to this scope) |
| 11 40 00 | FOODSERVICE EQUIPMENT (as it relates to this scope) |
| 11 53 13 | LABORATORY FUME HOODS (as it relates to this scope) |
| 11 61 33 | RIGGING SYSTEMS AND CONTROLS |
| 11 61 43 | STAGE CURTAINS |
| 11 66 23 | GYMNASIUM EQUIPMENT (as it relates to this scope) |
| 11 66 43 | BASKETBALL SCOREBOARD (as it relates to this scope) |
| 11 66 47 | BASKETBALL SHOT TIMER SCOREBOARD (as it relates to this scope) |
| 11 66 53 | GYMNASIUM DIVIDER (as it relates to this scope) |
| 12 24 13 | WINDOW SHADE SYSTEMS (for coordination purposes) |
| 12 35 50 | EDUCATIONAL CASEWORK (for coordination purposes) |
| 12 35 51 | MUSICAL INSTRUMENT STORAGE CABINETS (for coordination purposes) |
| 12 35 53 | WOOD LABORATORY CASEWORK (for coordination purposes) |
| 12 36 00 | COUNTERTOPS (for coordination purposes) |
| 12 61 00 | FIXED AUDIENCE SEATING (as it relates to this scope) |
| 12 66 00 | TELESCOPING STANDS (as it relates to this scope) |
| 13 21 48 | SOUND-CONDITIONED MUSIC PRACTICE ROOMS |
| 13 34 13 | GREENHOUSE AND GREENHOUSE RELATED EQUIPMENT (as it relates to this scope) |
| 14 24 00 | PASSENGER ELEVATORS (as it relates to this scope) |
| 14 42 00 | WHEELCHAIR LIFTS (as it relates to this scope) |
| 21 05 00 | COMMON WORK RESULTS FOR FIRE SUPPRESSION (as it relates to this scope) |

21 31 13 ELECTRIC-DRIVE CENTRIFUGAL FIRE PUMPS (as it relates to this scope)
21 34 00 PRESSURE MAINTENANCE PUMPS (as it relates to this scope)
21 39 00 CONTROLLERS FOR FIRE-PUMPS (as it relates to this scope)

DIVISION 22 – PLUMBING (in its entirety for coordination purposes and as it relates to this scope)
DIVISION 23 HETING VENTILATING AND AIR CONDITIONING (in its entirety for coordination purposes and as it relates to this scope)

DIVISION 26 - ELECTRICAL
26 05 01 GENERAL ELECTRICAL REQUIREMENTS
26 05 13 MEDIUM-VOLTAGE CABLES
26 05 19 LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES
26 05 26 GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS
26 05 29 HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS
26 05 33 RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS
26 05 43 UNDERGROUND DUCTBANKS
26 05 44 SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING
~~26 05 48.16~~ ~~SEISMIC CONTROLS FOR ELECTRICAL SYSTEMS~~ ~~ADD#5~~
26 05 53 IDENTIFICATION FOR ELECTRICAL SYSTEMS
26 05 73 OVERCURRENT PROTECTIVE DEVICE COORDINATION STUDY
26 05 74 OVERCURRENT PROTECTIVE DEVICE ARC-FLASH STUDY
***26 08 00*** ***ELECTRICAL SYSTEMS COMMISSIONING*** **ADD#3**
26 09 23 LIGHTING CONTROL DEVICES
26 09 26 LIGHTING CONTROL PANELS
26 12 19 PAD-MOUNTED, LIQUID-FILLED, MEDIUM-VOLTAGE TRANSFORMERS
26 13 23 MEDIUM-VOLTAGE METAL-ENCLOSED SWITCHGEAR
26 22 00 LOW-VOLTAGE TRANSFORMERS
26 24 13 SWITCHBOARDS
26 24 16 PANELBOARDS
26 27 26 WIRING DEVICES
26 28 13 FUSES
26 28 16 ENCLOSED SWITCHES AND CIRCUIT BREAKERS
26 29 13 ENCLOSED CONTROLLERS
26 32 13.16 GASEOUS EMERGENCY ENGINE GENERATORS
26 36 00 TRANSFER SWITCHES
26 41 13 LIGHTNING PROTECTION FOR STRUCTURES
26 43 13 SURGE PROTECTION DEVICES
26 51 19 LED INTERIOR LIGHTING
26 55 61 THEATER LIGHTING SYSTEMS
26 56 13 LIGHTING POLES AND STANDARDS
26 56 19 LED EXTERIOR LIGHTING

DIVISION 27 - COMMUNICATIONS
27 05 00 TELECOM PATHWAYS AND SPACES
27 05 33.1 CONDUIT RACEWAYS AND BOXES FOR AUDIOVISUAL SYSTEMS
27 15 01 TELECOMMUNICATIONS CABLING AND EQUIPMENT
27 20 01 NETWORK EQUIPMENT
27 41 00 AUDIO VISUAL AND SOUND SYSTEMS
27 41 01 CLASSROOM AUDIO VISUAL AND SOUND SYSTEMS
27 41 13 PROJECTION SCREENS
27 41 16 AV PERFORMANCE SYSTEMS
27 50 00 INTERCOM AND CLOCKS

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY
28 10 00 ACCESS CONTROL AND INTRUSION DETECTION

| | |
|---|---|
| 28 23 00 | VIDEO SURVEILLANCE SYSTEM |
| 28 31 11 | DIGITAL ADDRESSABLE FIRE-ALARM SYSTEM |
| | |
| 31 20 00 | EXCAVATING FILLING AND GRADING (as it relates to this scope) |
| 31 23 19 | DEAWTERING (as it relates to this scope) |
| 33 05 00 | COMMON WORK RESULTS FOR UTILITIES (as it relates to this scope) |
| 33 30 00 | SANITARY SEWERAGE SYSTEM (as it relates to this scope) |

Geotechnical Report issued by ECS Mid Atlantic, LLC dated February 3, 2023, with addendum dated March 21, 2023 for informational purposes only.

* Provide the temporary fit outs indicated in the drawings as well as the removal of the temporary conditions and complete finishes as part of Phase 2. If the Base Bid 2 option is selected, the temporary fit out work will not be required.

In addition to the above, trade contractors are to include, but are not limited to, AIA Documents A201 and A401, and various other Technical Specifications interfacing with this work. The Contractors are required to review the work descriptions of the other categories so as to not misunderstand the scope responsibilities. The Contractors are also bound to the HESS Safety Manual and all related weekly and daily documentation for North East Middle/High School Replacement Project for the administration of the contract.

**General Scope:**
**Contractor is responsible for General Scope of Work listed elsewhere in this specification section.**

**THE SPECIFIC SCOPE OF WORK IS TO INCLUDE, but is not limited to, the following items:**

**Electrical Specific Scope:**

1. As the Construction Manager, HESS shall manage the use of construction coordination models throughout the construction process. All BIM-related information shall be exchanged through the BIM FTP site managed by HESS. Each contractor shall be responsible to coordinate his work with each trade. However, the Mechanical contractor will be responsible to lead the coordination process. HESS shall play the role of the Quality Control Manager during this process. Utilizing design models created by A/E and fabrication/coordination models prepared and submitted by the listed trade contractors, HESS will maintain an up-to-date Federated model throughout the construction phase. The Federated model will be used to fully and properly coordinate and sequence the work of the trades, to maximize efficiencies during construction. Conflicts in the layout and sequencing of the work will be discussed and resolved in a series of periodic construction coordination meetings.

   All Steel, Mechanical, Plumbing, Electrical and Fire Protection contractors will be required to prepare 3D coordination models compatible with latest AutoCAD and Navisworks software. For clash detection to work properly, all models shall have a common reference point which shall be derived from the Architectural Design Model. All costs shall be included in the contractors bid. Contract architectural, MEP and structural drawings (3D) will be available electronically from the designated FTP site. During the construction phase these individual fabrication models shall be combined to create a Federated Construction Coordination model. BIM processes such as clash detection, submittals, trade sequencing, etc. will be done using the Construction Coordination model. The shop drawings submitted for records and approval will be generated from the Construction Coordination model or from individual models therein. The Construction Coordination model will be updated and maintained throughout construction to create an accurate as-built digital record of the construction of the project. The as-built BIM will be conveyed to the Owner on completion of construction, as a tool to assist owner in facility operation and maintenance.

   The Mechanical contractor will take the lead and develop a drawing list for approval by the Construction Manager subdividing the building into separate areas. The drawing list will be for submission and will indicate a submission schedule coordinated with the construction activities. The drawings shall be developed in a sequential fashion so as to not delay installation of the work or the overall project schedule. The Construction Manager shall prepare a schedule identifying the activity and duration of each submission. The Mechanical contractor will call meetings, weekly, or as required, which all required contractors must attend to avoid delay. Such meeting can be held via web conference if agreed upon mutually by

all parties. Failure to attend will require the contractor to field run the work not coordinated. No extra compensation will be paid to any contractor for relocating any equipment, duct, pipe, conduit, or other material that has been installed without proper coordination. If the installation of any uncoordinated work or improper installation or coordinated work necessitates additional work by other contractors, the cost of such additional work shall be assessed to the contractor responsible as determined by the Construction Manager. Where conflicts are found in the Model, regardless of the phase of the Project or LOD, the discovering party shall promptly notify the Model Element Author(s). Upon such notification, the Model Element Author shall act promptly to mitigate the conflict. At the conclusion of each coordination phase, the Mechanical contractor will notify the Construction Manager whereupon an onsite coordination meeting will be scheduled for the purpose of signing off on each respective area. After the review and approval of coordination in 3D, the Mechanical contractor shall provide one color composite set of drawings and forward them to the Construction Manager. In the preparation of all the final composite drawings, large scale details as well as cross and longitudinal sections shall be made as required to fully delineate all conditions. Particular attention shall be given to the locations, size and clearance dimensions of equipment items, shafts, and similar features. The final composite drawings shall include the locations of all controls, tie-ins, connections for other subcontractor's work, and pipe and duct insulation as required. Each trade contractor indicating their acceptance and approval of the indicated routings and layouts and their relationship with the adjoining or contiguous work of all contractors shall then sign off these final composite drawings. Therefore, no unauthorized deviations will be permitted. If deviations are made without the knowledge and agreement of the Construction Manager and other affected contractors, the work in question will be subject to removal and correction at no additional cost to the Owner.

After final composite drawings have been accepted and approved, the Mechanical contractor shall print one (1) color copy to be signed by all contractors. The Mechanical contractor shall provide the composite drawings digitally to all contractors through the HESS FTP site and will also submit two (2) set of prints for submittal purposes to the Construction Manager. The original signed off drawing shall be sent to the Construction Manager for permanent possession. No contractor will be authorized to release any material for fabrication or installation until the composite drawing(s) has been prepared and the signature process is executed and approved by the Construction Manager.

After final composite drawings have been accepted and approved, the Mechanical contractor shall print one (1) color copy to be signed by all contractors. The Mechanical contractor shall provide the composite drawings digitally to all contractors through the HESS FTP site and will also submit two (2) set of prints for submittal purposes to the Construction Manager. The original signed off drawing shall be sent to the Construction Manager for permanent possession. No contractor will be authorized to release any material for fabrication or installation until the composite drawing(s) has been prepared and the signature process is executed and approved by the Construction Manager.

2. **Construction Managers Trailer:** Contractor includes permits, bonds, ~~utility company connection fees~~, labor and material and all miscellaneous costs to supply and install a 120/208V 200AMP electrical and cable service to the Construction Managers Office Trailer. This service will be in place for approximately ~~30~~ ***60*** months. ~~In the event permanent services are not initially available, Contractor shall furnish, install, fuel, and maintain temporary generators until service from the respective utility company can be established. Once established, Contractor is responsible for monthly service bills until project completion. In the event they cannot be established, Contractor is responsible for all costs to furnish, install, fuel, and maintain temporary generators until project completion~~. Contractor includes installation of and final connection of heat tape for temporary office furnished by 21A contractor. Contractor includes final disconnect and disposal of service at project completion. ***Utility company service connection fees, temporary generator rental and fuel, and power consumption charges will be charged against the temporary power allowance assigned to this package. The value of the allowance shall be part of the 26A Contractor base bid. See SPECIAL CONSIDERATIONS Item #3 at the end of this scope of work.*** **ADD#5**

3. **Temporary Power to Site:** Contractor includes permits, bonds, ~~utility company connection fees~~, labor and material and all miscellaneous costs to supply and install a minimum of 277/480V 3 Phase 400 AMP service with distribution points at 120/208 V located at such points that no electrical cords will be over 100 lf in length and as approved by the Construction Manager. This service will be in place for approximately ~~30~~ ***60*** months for the new facility construction. ~~In the event permanent services are not initially available, Contractor shall furnish, install, fuel, and maintain temporary generators until service from the respective utility company can be established. Once established, Construction Manager is responsible for monthly service bills until project completion. In the event they cannot be established, Contractor is responsible for all costs to furnish, install, fuel, and maintain temporary generators until project completion~~. Contractor includes final disconnect and disposal of service at project completion. ***Utility company service connection fees,***

***temporary generator rental and fuel, and power consumption charges will be charged against the temporary power allowance assigned to this package. The value of the allowance shall be part of the 26A Contractor base bid. See SPECIAL CONSIDERATIONS Item #3 at the end of this scope of work.*** **ADD#5**

4. Contractor shall furnish, install, and maintain adequate temporary lighting, as specified by MOSH and OSHA codes, ~~and adequate electrical service for all trades regardless of status of permanent power from utility company. In the event permanent services are not available, Contractor shall furnish, install, fuel, and maintain temporary generators to provide adequate temporary lighting.~~ ***Contractor includes removal of all temporary lights once permanent lighting is available.*** **ADD#5**

5. Contractor shall furnish and install dedicated temporary requirements for connection of all trades equipment such as masonry contractor's saw, tile contractor's saw, spray applied fire proofers equipment, wood flooring contractor's sanders and elevator equipment. ~~Contractor shall furnish, install, fuel and maintain temporary generators until service from the utility company can be established.~~ **ADD#5**

6. Contractor shall furnish and install all electrical work indicated in the Contract Documents, including, but not limited to, fire alarm systems complete, electrical systems complete, public address systems complete, sound systems, music systems complete, and any other Division 26 systems. These systems shall include, but are not limited to, all primary service, secondary service, raceways, outlet boxes, pull boxes, junction boxes, wire ways, wiring, cables, wiring devices, receptacles, switches, hangers, supports, identification inclusive of painting of conduits per the specifications, contactors, time clocks, wall mounted clock with cage in gymnasium, photocells/photo-controls, connections to equipment, switches, panel boards, transformers, switchboards, service entrance surge suppression, grounding, lightning protection as indicated, emergency stand-by generators, dimming systems, controls, conduit, spare conduit with pull string where called out, automatic and/or push button door openers, power/data requirements for exterior signage, kilns, battery chargers, emergency cut-offs, gym control panels, fire hydrant supervision, light guards/cages, and the like for the complete installation of all systems unless noted otherwise elsewhere. **(Note cabling and conduit restrictions per specifications)**

7. If at any time during the course of construction, permanent utilities which are being used for construction need to be terminated, regardless of length of time, this Contractor shall (A) furnish, install, and maintain temporary generators until service from the utility company can be reestablished, to allow for other trades to continue work uninterrupted, or (B) schedule shut-offs, switch-over(s) off hours. At which time they are to be coordinated with the Construction Manager a minimum of seven (7) days in advance.

8. Contractor shall coordinate with the Concrete Contractor and the Masonry Contractor to provide all required embedded items, including, but not limited to, sleeves, conduit, device boxes, panel boxes, and the like included in this scope. The Contractor shall be responsible for the proper location and installation of all embedded items. Note surface applied/exposed conduits, boxes, etc will not be allowed unless specifically approved via RFI prior to installation. This includes control wiring, conduit and boxes.

9. In the event an opening is required in a masonry wall and is not properly coordinated between this and 04A contractor, it is this contractor's sole responsibility to implement the required fix issued by the SER. All costs to either sawcut, or tooth cmu to allow for the opening is the responsibility of this contractor. In the event the 04A contractor has missed the indicated opening, or has miss-sized the opening, the costs required for the fix is the responsibility of the 04A contractor.

10. Contractor shall furnish and install complete power connections and final connections for all equipment installed under this scope and other trades scopes including, but not limited to, food service equipment, miscellaneous equipment and appliances, casework, specialties, toilet accessories, motorized partitions, motorized projectors, electric hardware, stage equipment, athletic equipment/devices, electrical equipment, mechanical equipment, shop equipment, pumps, motors, panels, appliances, and the like as required by the Contract Documents. The Contractor shall check and verify that the power it is providing (amperage, voltage, etc.) matches the power requirements of the equipment it is connecting to. The Contractor shall report any deviations to the Construction Manager prior to making the connection.

11. Contractor shall coordinate with Mechanical Contractor and any other trades regarding motor starters including final connections for all mechanical equipment. Electrical Contractor shall furnish and install for all trades all motor starters, control panels, fuses, contactors, safety switches, disconnect switches, and controls when stated in the specifications or drawings and is not specifically assigned to others by the Contract Documents. Where it is unclear as to the intent of the drawings or specifications as to who furnishes the required equipment of other trades, it shall be the responsibility of this Contractor to provide the required equipment.

12. Contractor shall furnish and install a complete fire alarm system as indicated by the Contract Documents. Contractor shall furnish and install all required electrical connections to all alarm devices, including but not limited to, water gongs, flow switches, connections to electric door hardware, and tamper switches installed by others. This contractor has all F/A connections and programming of all devices. Contractor also includes all inherent off hour work required for this scope item.

13. Contractor includes coordination and installation all power requirements and/or fire alarm connections for all prefabricated display cases, display surfaces, bulletin boards, protective covers, operable panel partitions, miscellaneous equipment, stage curtains, motorized projection screens, projection screens, solid waste handling equipment, food service equipment, ansul systems, residential equipment, gymnasium equipment, laminated casework, wood casework, for complete and fully functional systems.

14. Contractor shall furnish and install all exterior work, conduit ducts, and/or duct banks, including but not limited to, electrical, phone, CATV, fiber optic, spares, transformer pads, manholes, concrete, and the like as required. Contractor shall also furnish and install all concrete and accessories for the site lighting package. Contractor shall be required to furnish and install all concrete related to the work of this scope, including, but not limited to encasement of underground conduits, anchor bolts, reinforcing steel, and light pole bases. Contractor shall note that the interior housekeeping and equipment pads will be provided by the Concrete Contractor. The coordination and layout of the interior housekeeping and equipment pads for this Contractor will be provided by this Contractor. In the event a concrete pad is required but not shown on the drawing, this Contractor will be responsible to install this concrete work complete. Contractor shall furnish and install all exterior equipment foundations and pads. Contractor shall coordinate this work with the Construction Manager, Owner and all applicable Utility companies. Contractor shall perform all excavating and backfilling required for all work outlined in this section.

15. Contractor will coordinate with all equipment and appliance Contractors, to ensure that proper rough-ins and receptacles are provided under this Contract.

16. The permanent HVAC equipment will be utilized for temporary climate control as directed by the CPM Schedule. The permanent equipment shall remain in operation following start-ups, as directed by the Construction Manager. Contractor shall perform regular maintenance on all equipment as necessary to maintain equipment in “like new” condition. Contractor shall complete all work necessary to properly electrify (on a temporary and/or permanent basis) the equipment for its use as described above. The use of permanent electrical equipment to provide power shall not alter required warranties. The required warranty for all equipment commences on the date of substantial completion. Any costs for extended warranty due to early start up are to be included in this Contractor’s base cost.

17. Contractor includes all costs associated with start-ups and reports.

18. Contractor shall furnish and install all sound caulking, firesaffing and fire caulking at all penetrations this Contractor makes through walls, ceilings, and/or slabs, inclusive of exterior perimeter of pathways for the technical wiring Contractor.

19. Contractor shall coordinate placement of conduit under slab on grade with the Mechanical Contractor, Concrete Contractor, and Construction Manager.

20. Contractor shall be responsible for all excavation, grading, backfill, approved compaction, and any other item associated with its interior and exterior work provided under this package. Contractor shall dispose of its excavation spoils to a central location as directed by the Construction Manager. Contractor shall be responsible for dewatering its excavations as necessary to maintain progress for its work. Contractor is responsible for the excavation and backfill for all its mechanical work and is responsible for restoring all excavations to their original grade and compaction. If in the event this Contractor

must perform an excavation operation for reason caused by itself after the stone base of the concrete slab has been installed, it will be the responsibility of this Contractor to repair the stone base for the concrete slab, replace any stone base that may have been contaminated by this Contractor's excavation operations, and bring this area back to its original grade prior to this Contractor's excavation.

21. Contractor is responsible to verify size, quantity, and final routing of underground conduits for cable and telephone prior to installation, with respective utility company ~~at no additional cost to the owner or construction manager~~. **ADD#5**

22. The Sprinkler System Contractor and the Electrical Contractor shall submit concurrently to the Fire Marshall and any other jurisdiction having authority, a coordinated sprinkler system/fire alarm system submittal in accordance with the Fire Marshall's and any other jurisdictions having authority requirements. The Contractors shall provide the required coordinated submittal in its entirety within one week of completion of the BIM process.

23. Contractor shall review and comply fully with the Building Information Modeling (BIM) requirements.

24. Contractor shall coordinate with Concrete Contractor regarding underground work, mechanical openings, and embedded items. Contractor shall coordinate with 04A Masonry Contractor, 05A Steel Contractor, and 06A General Trades/Drywall Contractor regarding duct-banks, raceways, and conduit sleeves. Contractor shall provide field layout duct-banks, raceways, and conduit sleeves. Contractor shall provide all sleeves required for its penetrations. Contractor shall provide coordination drawings showing all duct-banks, raceways, and conduit sleeves and dimensional layout of these penetrations for all steel penetrations for incorporation into the Steel Contractors steel fabrication shop drawings. Contractor shall provide all coordination drawings for concrete, masonry, and steel within Thirty (30) days of receiving a Letter of Intent, Notice to Award or the Contract, whichever is issued first.

25. Contractor shall coordinate box outs directly with the Masonry Contractor where possible. When not possible contractor is responsible for neatly core drilling or cutting masonry walls where its work will pass through masonry walls. "Beating" of holes will not be permitted.

26. Contractor to coordinate with concrete contractor for floor penetrations. When not possible contractor is responsible for neatly core drilling through concrete. Where floor removal is required, Contractor will replace floor slabs removed by this Contractor in the manner specified, if work must be done out of concrete pour sequence.

27. Contractor shall furnish and install all required escutcheons, pedestals, and the like for complete finish trim for this Contractor's work in all ceilings, walls, floors, millwork, casework, and the like.

28. Contractor shall furnish and install all specified backing and supports for fixtures and equipment, including telephone and security equipment and backboards, and all cabinets necessary for this Contractor's work. This includes plywood.

29. Contractor shall furnish and install the Emergency Generator, including electrical connections, accessories, connections to, pumps, and transfer switches, exhaust piping and tanks. Fuel connections are by the 23A Contractor.

30. Contractor shall design, furnish, and install a complete Fire Alarm System with shop drawings and wiring interface of various pieces of equipment to be controlled as detailed in the specifications, drawings, and equipment data. Fire Alarm System and Sprinkler System zones <u>must</u> match and/or coincide. This Contractor shall design, furnish, and install the system to meet with every one of the following standards that are the minimum: State Fire Marshall, County Fire Department, Applicable Safety Codes, BOCA Codes, ANSI Elevator Codes, National Fire Protection Association Standards, and National Electrical Code, Article 760. Contractor shall coordinate with the Mechanical Contractor before any work on this system can commence. Contractor to furnish to Mechanical Contractor duct-smoke detectors for installation, final connections and tie in with fire alarm system is by this contractor.

31. Contractor shall provide the Construction Manager with a copy of the latest edition of the NECA labor-pricing manual at no additional cost.

32. This Contractor shall provide all labeling and identification required for its work inclusive of painting and stenciling of conduits as required per the specifications.

33. Contractor will survey the entire building prior to substantial completion in order to allow Contractor to replace **any failed lamps** within two weeks following substantial completion and/or at the direction of the Construction Manager at no additional cost to Owner or Construction Manager.

34. Contractor to provide all temporary lighting as required in order to use the space for its intended use.

35. Contractor shall furnish and install all miscellaneous steel and support hanger steel required for ceiling and/or wall mounted equipment it is installing, including light fixtures, specialty fixtures, panels, transformers, and the like. Contractor shall furnish and install prime coat painting for all unprotected support and hanger steel. All support hangers to be installed prior to spray applied fireproofing. If contractor fails to install these items prior to fireproofing be installed, patching costs will be the responsibility of this contractor.

36. Contractor shall review all casework, mechanical equipment, shop equipment, signage, theatre equipment, stage equipment, appliance, equipment submittals, shop drawings, and product data to assure that all electrical components are compatible and operable with the electrical system (including the fire alarm system). Contractor shall provide to the Construction Manager written verification of its review and bring forward in writing any discrepancies found within this data within three (3) weeks after receiving this data. If discrepancies are not reported within that time frame, the Contractor shall be responsible for any costs associated with those discrepancies. Non-conformance to this requirement shall not be cause for schedule delay.

37. Contractor shall furnish and install all outlets, wire mold, and other electrical devices/components required for casework and millwork. Cutouts for this work will be provided by others. This Contractor shall provide templates for locating and completing these cutouts to the Millwork Contractor.

38. If documents call for “empty conduit” or any version thereof, this contractor has included “empty conduit”, clips, anchoring, hangers, etc, and associated pull string(s) and blank cover plate.

39. Contractor shall furnish and install all Control Systems electrical requirements outlined on in the drawings and specifications.

40. Contractor shall furnish and install equipment and devices with sufficient space to allow for proper operation, maintenance, and removal as needed. Relocation of equipment and/or devices to provide access will be at the expense of the Contractor if its work is found not to be in compliance.

41. Contractor has included all plating of otherwise empty work boxes.

42. ~~Contractor shall include relocation of existing electrical utilities, light poles etc… as indicated on Contract Documents.~~ **ADD#5**

43. Contractor shall furnish and install all conduit and pull strings for site signage.

44. This Contractor will install only, furnished by others; all electric hand dryers, associated anchors and fasteners.

45. Permanent Service: Contractor to include excavation, installation of conduits and associated sweeps concrete, photo documentation, backfill, compaction, end staking, etc… for primary electric service installation. Power Company will set transformer. This contractor includes transformer pad, transformer switch pad(s) and primary and secondary ductbank to building inclusive of any permits, bonds, and labor. Contractor includes furnish and installation of primary and secondary wire which will be terminated by power company. Power company connection charges and any pole relocations for this site will be paid direct by CCPS; utility usage charges will be paid by Construction manager.

46. Contractor includes in its entirety all interior and exterior, fire alarm system, public address and music equipment, school intercom and programming equipment, security systems, sound systems, clock systems, etc.

47. Contractor shall participate in door hardware coordination meeting once hollow metal frames have been approved.

48. Contractor includes wiring and step-down transformers and or power supplies for all electrified door hardware. Actual hardware at door is installed by the 06A contractor. This contractor to coordinate routing of conduits within door frames prior to frame installation.

49. Contractor has final connection of equipment being provided by others located within the main building.

50. Contactor includes furnish of all access doors required for own work. Access doors to be installed by 06A Contractor at both Masonry and Drywall locations.

51. All motor starters, AFD's, VFD's, etc… furnished and installed by this contract are to include phase monitoring per the specifications, by this contractor.

52. Contractor shall include an allowance of $200,000.00 in their bid to cover the cost of the Distributed Antenna System.

53. Contractor shall furnish and install the wall sconce and light poles 1,2 and 3 as shown on sheet L502 inclusive of any footings required by the manufacturer in locations shown on the contract documents.

**Low Voltage specific scope:**

1. Contractor shall furnish and install equipment and devices, assemble, and terminate FACP components and perform programming, startup, and finial testing of the fire detection and alarm system.

2. Contractor shall furnish and install system cabling, equipment, device and head end terminations, programming, system test, and check out for Security Intrusion System, Door Access Video Entry System, CCTV Surveillance System, Wireless Master Clock and Program System, Sound and Intercommunications Systems, Classroom Amplification Systems, Auxiliary Sound Reinforcing Systems, Telecommunications System, Cable Television/Broadband Distribution System and Multi-Media Presentation Control System.

3. Contractor shall provide all required warranties and certifications for systems as specified.

4. Contractor shall provide labor to cut, identify, and make safe existing low-voltage cables and devices for demolition.

5. Contractor shall de-program the existing fire-alarm devices prior to demolition.

6. Contractor shall de-program existing intercom and security devices prior to demolition.

7. Contractor shall relocate the existing CATV, telecommunications, intercom and security system equipment and devices as shown including extension of existing cables as required.

**SPECIAL CONSIDERATIONS:**

1. **Contractor acknowledges and has accounted for within his bid, the second and fourth Saturdays of each month as required workdays. Contractor is expected to provide a crew of the same size that is provided during Monday through Friday. No exceptions.**

2. This bid package has an MBE goal of 20 percent. All prime contractors, including certified MBE firms, when submitting bids or proposals as a prime contractor, are required to attempt to achieve this goal from MDOT certified MBE firms. All submittals of MBE materials and reporting requirements are applicable for the project, including the submittal of MBE Attachments A and B with its bid as described in specification section 00 43 39 - Minority Business Enterprises Procedures.

3. ***Contractor shall include an allowance of $500,000 within both base bid 1 & 2 for utility provider service connection fees and power consumption charges related to temporary and permanent power during construction. Invoices will be paid directly from the 26A Contractor to the utility company directly, with copies of the invoices submitted***

***to the CM for reimbursement through this allowance. No OH&P mark-up of any kind will be allowed on these charges.*** ADD#5

**EXCLUDED FROM THIS CONTRACTOR WORK is:**

1. Testing costs unless specifically called for in this scope, a result of negligence, poor workmanship, or failure of work to meet the requirement of the documents.

**END OF SCOPE 26A**

## WORK SCOPE CATEGORY 31A SITEWORK

The work of this bid category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all Earthwork, Site Utilities and Selective Site Demolition work in accordance with the specifications, drawings and applicable codes. All work is to be performed as shown on the plans and / or specified under the following technical sections:

| **SECTION** | **NAME** |
|---|---|
| ***01 71 23*** | ***FIELD ENGINEERING*** ADD#3 |
| 02 30 00 | SUBSURFACE DRILLING AND SAMPLING INFORMATION |
| 02 41 16 | STRUCTURE DEMOLITION |
| 02 41 19 | SELECTIVE DEMOLITON |
| 3 30 00 | CAST-IN-PLACE CONCRETE (as it relates to this work) |
| 04 20 00 | UNIT MASONRY ASSEMBLIES (as it relates to this work) |
| 05 50 00 | METAL FABRICATIONS (as it relates to this work) |
| 05 52 13 | PIPE AND TUBE RAILINGS (as it relates to this work) |
| 05 53 20 | STAIR NOSINGS (as it relates to this scope) |
| 05 73 00 | DECORATIVE METAL RAILINGS (as it relates to this work) |
| 07 11 13 | BITUMINOUS DAMPPROOFING (as it relates to this) |
| 07 13 00 | SHEET WATERPROOFING (as it relates to this) |
| 07 92 00 | JOINT SEALANTS (as it relates to this work) |
| 31 10 00 | SITE CLEARING |
| 31 20 00 | EXCAVATING FILLING AND GRADING |
| 31 23 19 | DEWATERING |
| 32 01 90 | TREE PROTECTION AND TRIMMING |
| 32 12 00 | HOT-MIXED ASPHALT PAVING (as it relates to this work) |
| 32 13 00 | CONCRETE PAVING (as it relates to this scope) |
| 32 13 13 | EXPOSED AGGREGATE CONCRETE (as it relates to this work) |
| 32 13 73 | CONCRETE PAVING JOINT SEALANTS (as it relates to this work) |
| 32 31 00 | FENCING AND GATES (as it relates to this work) |
| 32 32 23 | SEGMENTAL CONCRETE RETAINING WALLS ~~(as it relates to this work)~~ ADD#3 |
| 32 92 00 | LAWNS AND GRASSES (as it relates to this work) |
| 32 93 00 | EXTERIOR PLANTS (as it relates to this work) |
| 33 05 00 | COMMON WORK RESULTS FOR UTILITIES |
| 33 10 00 | WATER UTILITIES |
| 33 30 00 | SANITARY SEWER SYSTEM |
| 33 41 00 | STORM DRAINAGE UTILITIES |
| 33 46 00 | SUBDRAINAGE |

Geotechnical Report issued by ECS Mid Atlantic, LLC dated February 3, 2023 with addendum dated March 21, 2023 for informational purposes only.

In addition to the above, trade contractors are to include, but are not limited to, AIA Documents A201 and A401, and various other Technical Specifications interfacing with this work. The Contractors are required to review the work descriptions of the other categories so as not to misunderstand the scope responsibilities. The Contractors are also bound to the HESS Safety Manual and all related weekly and daily documentation for North East Middle/High School Replacement Project for the administration of the contract.

**General Scope:**
**Contractor is responsible for General Scope of Work listed elsewhere in this specification section**

**THE SPECIFIC SCOPE OF WORK IS TO INCLUDE, but is not limited to, the following items:**

**Earthwork and Utilities Specific Scope:**

1. Remove trees, shrubs, grass, and other vegetation, improvements, or obstructions, as required, to permit installation of new construction. Site clearing and grubbing, including removal and disposal, shall be as indicated on the plans. The contractor will acknowledge locations of all protected foliage per the plans and specifications prior to the start of any work, and will be responsible for installation, root pruning, signage, etc and maintenance of this protection while contractor is on the project. This Contractor includes dressing up and stabilization around Construction Manager Trailer and removal and restoration of area at project completion.

2. Contractor includes demolition and removal of masonry mockup panel(s) and foundation as directed by Construction Manager.

3. Contractor shall furnish, install, maintain and remove at the direction of the Construction Manager and/or any governing agency all sediment and erosion control measures and devices, stabilized construction entrances, storm water management facilities and all sediment traps required by the Contract Documents. This Contractor is responsible for all temporary seed required for the site stabilization including maintenance and watering as required per the specifications. Maintenance of green areas between the LOD and the existing sidewalks and/or curb shall be by this contractor. Contractor shall furnish, install, and maintain all structures, manholes, clean outs, and the like associated with its work as required by the Contract Documents for the entire duration of the project. Contractor shall furnish, install, and maintain all concrete, reinforcing, rip-rap, stone and filter cloth related to this work for the entire duration of the project. Contractor shall furnish, install, and maintain all required protection of inlets, structures, and any other erosion and sediment control device that is shown, implied, or required for the entire duration of the project at the Construction Manager's and/or governing agency's direction. Contractor shall remove and properly dispose of all protection after site is stabilized with approvals of Local Authorities, Owner and Construction Manager.

4. This Contractor is responsible for all snow and ice removal onsite inclusive of the public sidewalks along the LOD and owners property line throughout the duration of project at all construction areas in order for other trades to access the site, park, and perform work. Contractor should anticipate normal inclement weather conditions as defined by specifications.

5. This Contractor is responsible for dust control on site until project completion. This is limited to dust control created by the 31A package and site activities (all vehicles and equipment maneuvering throughout the construction area. The 31A package is not responsible for controlling dust generated from within the build or building pad, or from cutting/mixing operations unless dust is created from a direct operation of the 31A contractor.

6. Contractor is responsible for all layback, and/or sheeting and shoring requirements to perform this scope of work. Contractor to coordinate final location with Construction Manager, 03A, 04A, and 05A contractors. Contractor is responsible to coordinate design loading of sheeting and shoring with live load operations adjacent to sheeting and shoring to allow all contractors to perform their work. Contractor to include temporary wire rope railings, toe boards, and angles at all sheeting and shoring locations for safety reasons. Contractor to include jersey barriers at areas of construction traffic roadways as needed around shored or layback areas. ***Contractor shall bench the outside grades along perimeter exterior walls of new building as required to accommodate masonry scaffolding while exterior masonry work is taking place. At the conclusion of masonry work, Contractor shall backfill/establish final grade as required.*** **ADD#3**

7. It is this contractor's responsibility to provide, install and maintain driven six-foot perimeter site security fencing with flagging in accordance with the LOD shown on P-ESD drawings. Contractor to assume three twenty-foot rolling gates and two man gates. Contractor shall furnish and install 16"x16" aluminum signs on fence and T-posts as follows: 30 ea. "No Trespassing; 10ea. "Hard Hat Area"; . Contractor shall coordinate with the "Right-of-Way"

inspector prior to the installation of the security fence. At completion of project, this contractor to remove from site all security fencing and gates and make repairs as necessary to restore to existing conditions.

8. Contractor shall be responsible for the demolition, removal, and disposal of the existing, asphalt foundations, ~~wood piles~~, walls, site walls, site stairs, utilities, etc~~… Contractor shall legally dispose of wood piles once removed. Any testing of piles to determine to level of creosote for suitable disposal shall be done by this contractor~~. **ADD#5**

9. Contractor shall provide adequate soil meeting the contract specifications for material to be used for backfill at retaining walls. This material shall be placed in close proximity to each wall. All final grading once the retaining wall has been installed, shall be by this contractor.

10. Contractor understands that the construction entrance may have to be removed, altered, repaired, and/or replaced in order for the permanent storm system, water system, and electrical system to be installed. It shall be this Contractor's responsibility to remove, alter, repair and / or replace and consistently maintain any and all aspects of the construction entrance for these systems to be installed. Contractor shall coordinate and prioritize its work as to eliminate impact to site access and / or the project schedule.

11. Contractor shall establish rough grade to within ± 1/10 sub-grade, to include proper compaction and elevations for sidewalks, pavements, drives, curbs, landscape, and / or topsoil areas. Landscape, topsoil and other open areas (excluding ball fields and play areas) to be graded to within +/- 0.20' of design elevation. Contractor shall furnish and install the backfill for curbs, gutters, and sidewalks to re-establish rough grade.

12. Contractor shall establish rough grade to within ± 1/10 sub-grade, to include proper compaction and elevations for building pad for acceptance by 03A Contractor.

13. Contractor shall furnish and install a complete storm water drainage system including, but not limited to, all pipes, inlets, manholes, laterals, cleanouts, trench drains (both precast and pour in place inclusive of angles and grating), rip rap, geotextile fabric, observation wells, granite blocks, pipe anchors, gratings, bedding materials, foundations, cut off walls with rip rap outlets, perforate pvc at the play areas, temporary fence at ponds, storm filters, flow splitters, sand filters, underground quantity control facilities, trash racks, trench drains, and all related devices as required. Contractor shall flush the entire storm water drainage system at the direction of the Construction Manager and/or any governing agency, if required. This contractor shall be responsible for the complete installation of the trench drain located in the courtyard. ***Contractor shall adjust all manhole/structure tops as required to align with finish grades/finished asphalt as needed. Multiple mobilizations will be required. For ANY structure tops, valves, etc. (water, sewer, storm) that are within paved areas, Contractor shall provide barricade protection to avoid damage from construction traffic.*** **ADD#3**

14. Contractor shall furnish and install complete sanitary sewer systems in accordance with local codes consisting of all piping, manholes, laterals, cleanouts, and all related devices as required.

15. Contractor shall furnish and install a complete water system for potable water service and fire protection service outside the building in accordance with local codes consisting of all piping, manholes, laterals, valves, vaults, cleanouts, hydrants, standpipes and all related fittings as required. This particular utility will be brought into the building by this contractor. The 23A contractor will take responsibility from the first flange within the main building up to and including the backflow preventer, the 21A contractor will take responsibility at the backflow preventer furnished and installed by the 23A contractor. Coordination of exact location required by the 23A contractor is the responsibility of this contractor. Fire hydrant flushing is the responsibility of this contractor. Coordination of all inspections by AHJ, such as Fire Marshall, The Town of North East Water Works, Civil Engineer etc…, are the responsibility of this contractor.

16. Contractor shall furnish and install all outside site utilities systems complete, including all testing and proper connection to the appropriate systems outside the building. Contractor shall extend its piping from the indicated

utility connection to a point five (5) feet from the building line or to a point further than five (5) feet from the building if it is specifically indicated as such in the contract documents.

17. Contractor shall furnish, install, and maintain one (1) stabilized trailer staging area for the Construction Manager and one (1) additional stabilized area for parking. The trailer staging area shall be 100' x 75' (or 7,500 square feet in surface area) and stabilized with stabilizing cloth and 8" of CR-6. The parking area shall be 150' x 200 ' (or 30,000 square feet in surface area) and stabilized with stabilizing cloth and 8" of CR-6. At the direction of the Construction Manager, the Contractor shall remove and restore these areas to a finished condition. In the event that the stabilized trailer staging area and/or stabilized area for parking are installed at, around, or near any existing or future utilities that may need to be removed, repaired, and/or installed, this Contractor shall remove, adjust, and/or repair sections of these stabilized areas as necessary.

18. The Contactor shall furnish, install, and maintain suitable temporary construction access roads around the entire perimeter of the Building, as well as access from the main roadway to the building ring road. The Contractor shall remove the temporary roads and perform all necessary re-grading and restoration upon receipt of direction from the Construction Manager. Roads shall be adequate to support all construction traffic and equipment. The roads <u>at a minimum</u> shall be constructed of stabilizing cloth and 8" of adequately sized stone. The road shall be a minimum of 18' -0" wide and shall start ± 10'- 0" off of the face of the building. In the event that the stabilized area is installed at, around, or near any existing or future utilities that may need to be removed, repaired, and/or installed, this Contractor shall remove, adjust, and/or repair sections of these stabilized areas as necessary at no additional cost to Owner or Construction Manager.

19. Limits of building pads shall extend a minimum of 25' beyond the building footprint and where applicable around the entire perimeter of the building. This shall also include the ground floor elevation inside the building which will need to be extended 10' beyond to allow for installation of the retaining wall footings. Final grades shall be temporarily adjusted as necessary to meet this requirement. At the direction of the Construction Manager, the Contractor shall re-grade around the perimeter of the building to the final grades required by the Contract Documents inclusive of removal of temporary ring road(s) or parking areas. Contractor shall rough grade to required tolerances for slab on grade. Backfilling of all building walls, foundations, and slabs shall be the responsibility of the Concrete Contractor. Backfilling of all site concrete walls, segmental retaining walls, site foundations, and site slabs installed by this contractor shall be the responsibility of this Contractor.

20. Contractor will close or cover all subgrade or utility excavation at the end of each workday unless exempted by Construction Manager's representative. Any unsuitable conditions caused as a result of contractor's failure to protect trenches or exposed subgrades will be remedied at contractor's sole expense and at no cost to the Owner or Construction Manager.

21. Contractor is responsible for re-spread, if allowed by owner and design team, and/or removal of the centrally located spoil stockpile generated by footings, walls, utilities, electrical excavations, plumbing excavations, etc provided there will be no design grade / elevation changes from the contract documents. For informational purposes only this is anticipated to be approximately 15,000cy, however this is in no way shall be interpreted as a stipulated sum, allowance or formal direction of quantity. Contractor is encouraged to perform own takeoff for this work as a full contract document set has been issued for use. Contractor is responsible for removal of any and all excess spoils from site that cannot be respread and stay within design parameters.

22. Contractor shall saw cut, remove, and dispose of existing asphalt to complete the work. Contractor shall provide all temporary protection requirements of these areas (steel plates, temporary patch, etc.) as required by the governing authority until the permanent asphalt patch has been completed. This will include any necessary temporary pavement markings.

23. This Contractor shall provide for all site demolition shown or implied on the drawings include, but is not limited to, the complete demolition, removal, and disposal of all existing out buildings, existing curb & gutter, asphalt paving

& sub-base, concrete paving & sub-base, concrete sidewalks, concrete walls, concrete foundations, underground utilities, fences, gates, rails, ball hoops, signs, plants, lights, parking bumpers, backstops, courts, decks, wood ramps, tanks, monitoring wells, posts, nets, post footings, field equipment footings, portable classroom footings, and the like. Contractor shall supply and install all plugs shown or required at all utilities that are removed. Contractor shall remove existing water meter vault and provide backfill to reestablish grade.

24. The contractor shall with the assistance of the CM coordinate with all public utilities for the removal of the existing services. With approval of Utility Company(s) it is this contractor's responsibility for the removal from site and or cutting, capping, filling and abandoning in place of all existing utilities. This shall include any work required within the LOD.

25. Contractor shall be responsible for maintaining the wash rack during construction. Contractor shall also be responsible for providing water and labor to operate two separate wash racks during the entire project until project completion or allowed removal of wash rack by LAHJ.

26. If contaminated soils are encountered Time and Material (tracked and approved by the CM) shall be reimbursed at cost.

27. Contractor is only responsible for the flushing of the water line to achieve a passing test for chlorination. This contractor is not responsible for a flow test if required by the Fire Marshall; this will be the 21A contractor's responsibility. Contractor shall include an additional flush-out test once the water meter has been installed by the 23A contractor.

28. This Contractor is responsible for keeping the streets clean of construction debris, mud, dirt etc… only if caused by this contractor's failure to properly maintain the construction entrance, stoned roadways, access roads, wash rack, etc. Maintenance of roadway debris caused by other contractor's general neglect to properly use the equipment and facilities provided by this contractor or Construction Manager, will be the respective contractor's debris to clean up and not the responsibility of this contractor.

29. Contractor shall provide all shown or required traffic maintenance for this scope inclusive of any costs for permits or bonds.

30. ***Contractor is responsible for all final site connections to building roof drains, including furnishing and installing cast iron downspout boots as indicated.*** **ADD#3**

31. ***Contractor shall strip, screen, stockpile, protect, test, amend and stabilize all topsoil as required by the contract documents and governing jurisdiction having authority requirements. Contractor shall re-spread topsoil in all areas provided the topsoil meets project standards as indicated on drawings. Topsoil on ball fields shall be motor graded to within plus/minus 1/10 of a foot of the design elevation. Maximum size of screen shall be ¾" sieve. Topsoil shall be a 4–8-inch layer, lightly compacted to minimum thickness of 4 inches. Contractor shall supply tested, screened, amended topsoil from offsite if and/or when the onsite quantities are insufficient. Contractor to test and make all amendments to bring material within project specifications. It is the contractor's responsibility to submit test results to Construction Manager for approval with required recommendations to bring material within project specifications, prior to the start of any topsoil work. This requires the Contractor to hire a third-party independent testing agency. Contractor shall export/dispose of any surplus topsoil as needed.*** **ADD#3**

32. ***Contractor shall provide and install all forest conservation requirements to include, but is not limited to, all arborist reports, root pruning, tree protection signs, deep-root fertilization, crown reduction, watering, vertical mulching, and all other items outlined within the Forest Conservation Drawings and as required by the County Forester.*** **ADD#3**

33. ***Contractor includes independent third-party testing of all topsoil material and associated recommendations and amendments to bring material to within project specifications. Contractor to submit all tests and recommendations prior to the start of topsoil re-spread work for approval.*** **ADD#3**

34. ***Contractor shall furnish and install infield mix at baseball diamond and bullpens as indicated. Contractor shall coordinate with the 32B Contractor for the installation of baseball bases, plates and pitching rubber.*** **ADD#3**

35. ***Contractor shall furnish and install stone chips for shot put throwing sector area as indicated.*** **ADD#3**

36. ***Contractor shall furnish and install warning track, including stone dust, GAB, #57 stone, perforated PVC drainage, and filter cloth as indicated. Contractor will coordinate with 32B contractor regarding sequencing of work with adjacent fencing and turf installation.*** **ADD#3**

37. ***Contractor shall furnish and install all flowable fill as indicated for abandonment of existing utilities, including capping of existing utilities as required.*** **ADD#3**

38. ***Contractor shall be responsible for its own trash removal/off-site disposal (i.e., shall provide its own dumpsters or other means to haul debris from site).*** **ADD#5**

**Surveying Specific Scope:**

1. Contractor shall establish control on the site for the use of all trades. Three (3) permanent control points will be established on site in a location that will not be disturbed by construction. Contractor shall review the drawings within 15 days from NTP and confirm that all information has been provided for the performance of the lay-out work.

2. Contractor shall recover horizontal and vertical controls.

3. Contractor shall flag limits of clearing as shown on erosion and sediment control plans.

4. Contractor shall stakeout siltation and erosion control limits for sediment trap, outfall pipe, temporary swales, earth dikes, silt fence, super silt fence, ect…

5. Contractor shall stakeout construction entrances and contractor staging area.

6. Contractor shall stakeout rough grading with all corners of building pad.

7. Contractor shall stakeout sanitary and laterals – provide single offset at 50’ stations and manhole locations. Laterals shall be at appropriate offsets.

8. Contractor shall stakeout waterline – on offsets at 25’ stations with horizontal and vertical bends and fire hydrants.

9. Contractor shall stakeout storm drain – single offset at 50’ stations and manhole locations. Include centerline of swales at 50’ stations.

10. Contractor shall stakeout segmental block retaining walls – 25’ stations.

11. Contractor shall stakeout concrete wall footings on site – 25’ stations.

12. Contractor shall stakeout tennis courts as well as the tennis net posts.

13. Contractor shall stakeout all fencing.

14. Contractor shall stakeout light pole bases.

15. Contractor shall stakeout all electrical services and associated manholes.

16. Contractor shall stakeout telecommunication ductbank and associated handholes.

17. Contractor shall stakeout all curb and gutter. Contractor shall assume the restake of 10% of the overall length of curb and gutter.

18. Contractor shall stakeout HC parking areas for concrete paving.

19. Contractor shall stakeout areas of pervious concrete paving.

20. Contractor shall stakeout sidewalk not adjacent to curb on offsets.

21. Contractor shall provide 50 building corners each with 4 offsets each at locations to be dictated by the Construction Manager. This will be required for each phase of construction.

22. Contractor shall provide control line stakeout. Six (6) control lines in a North-South direction and six (6) control lines in an East-West direction will be provided. When floor slabs are poured, contractor will strike the column lines on to the ground floor, first, second and third floor slabs with a chalk line or similar apparatus and protect the markings with clear paint.

23. Contractor to provide brick points at 25-foot intervals and/or at the ends and midpoint of walls less than 50 feet long.

24. Contractor to include stakeout for Construction Manager's field office facility for construction.

25. Contractor to provide a wall check survey including slab elevation.

26. Contractor shall stakeout cast-in-place retaining wall footing at North end of site.

27. Contractor shall stakeout generator pad.

28. Contractor shall provide stakeout for all site amenities shown on sheets L500 – L502.

29. Contractor shall stakeout site sign, mural wall and pillars.

30. Contractor shall provide as builts and certifications for all bioretention areas.

31. Contractor shall provide as builts for waterlines, storm drain and sanitary sewer.

~~39. Contractor shall provide stakeout for all required work associated with Irishtown Road.~~ **ADD#3**

**<u>Segmental Retaining Specific Scope:</u>**

1. Contractor shall furnish and install all materials and services for a complete install of all segmental retaining walls in accordance with the contract documents.

2. Contractor shall meet all qualification as outlined in the contract documents.

3. Contractor is responsible for all engineering for this scope of work.

4. Contractor shall apply and pay for any permits required beyond the building permit supplied by owner.

5. Contractor shall furnish and install all modular units, cap adhesives, geosynthetic reinforcements, drainage fill, filtering material, filter fabric, drainage pipe, leveling pad, drainage board, drainage aggregate and anything reasonably incidental for a complete segmental retaining wall install per the contract documents.

6. Contractor is responsible for all backfilling of walls, once all associated segmental wall materials are set in place. Contractor shall furnish material that meets the requirement outlined on the segmental wall submittals.

7. Contractor shall coordinate and assist with setting sonotubes/sleeves for fencing or safety rails that are to be installed in walls.

8. Contractor shall remove excess spoils form this scope of work.

**SPECIAL CONSIDERATIONS:**

1. Excavation and/or drilling work under this contract is unclassified to design sub-grade, and includes but not limited to, excavation and removal of soil, shale, rock, fill, abandoned utilities, abandoned tanks, abandoned wells, abandoned structures, and any and all other subsurface conditions encountered in the contract area to this trades lowest design elevation in same area. The Contractor shall make his own soil and subsurface investigations, examination, tests, and exploratory borings of existing subsurface conditions to determine the nature of the soil conditions underlying the project site and thereby assuming all responsibility in excavating for this project without recourse to subsurface information obtained from the engineer, or indirectly from the Owner. The risk of unanticipated soil conditions from current elevations to this trades lowest design elevation in same area is solely the Contractor's. No extra or additional compensation for excavation or claim otherwise will be made or paid under this contract until added excavations below this trades lowest design elevation in same area is required. Contractor is responsible for furnishing and placing any import fill material ***or exporting surplus material*** ADD#3 that may be required to complete the work.

2. Contractor shall perform its own survey of existing conditions and notify the Construction Manager of any discrepancy prior to the start of the Contractor's work. Start of work shall constitute this Contractor's acceptance of the existing conditions.

3. **Contractor acknowledges and has accounted for within his bid, the second and fourth Saturdays of each month are required workdays. Contractor is expected to provide a crew of the same size that is provided during Monday - Friday.**

4. This bid package has an MBE goal of _15_ percent. All prime contractors, including certified MBE firms, when submitting bids or proposals as a prime contractor, must try to achieve this goal from MDOT certified MBE firms. All submittals of MBE materials and reporting requirements are applicable for the project, including the submittal of MBE Attachments A and B with its bid as described in specification section 00 43 39 - Minority Business Enterprises Procedures.

**EXCLUDED FROM THIS CONTRACTOR WORK is:**

1. Testing costs, unless specifically called for in this scope, are a result of negligence, poor workmanship, or failure of work to meet the requirement of the documents.

**END OF SCOPE 31A**

## WORK SCOPE CATEGORY 32A ASPHALT & SITE CONCRETE

The work of this bid category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all ASPHALT & SITE CONCRETE work in accordance with the specifications, drawings and applicable codes. All work is to be performed as shown on the plans and/or specified under the following technical sections:

| SECTION | NAME |
|---|---|
| 07 92 00 | JOINT SEALANTS (as it relates to this scope) |
| 10 75 00 | FLAGPOLES ~~(as it relates to this scope)~~ ADD#5 |
| 32 12 00 | HOT-MIX ASPHALT PAVING |
| 32 13 00 | CONCRETE PAVING |
| 32 13 13 | EXPOSED AGGREGATE CONCRETE |
| 32 13 73 | CONCRETE PAVING JOINT SEALANTS |

Geotechnical Report issued by ECS Mid Atlantic, LLC dated February 3, 2023, with addendum dated March 21, 2023, for informational purposes only.

In addition to the above, trade contractors are to include, but are not limited to, AIA Documents A201 and A401, and various other Technical Specifications interfacing with this work. The Contractors are required to review the work descriptions of the other categories so as not to misunderstand the scope responsibilities. The Contractors are also bound to the HESS Safety Manual and all related weekly and daily documentation for North East Middle/High School Replacement Project for the administration of the contract.

**General Scope:**
**Contractor is responsible for General Scope of Work listed elsewhere in this specification section.**

**THE SPECIFIC SCOPE OF WORK IS TO INCLUDE, but is not limited to, the following items:**

**Asphalt Paving Specific Scope:**

1. Contractor shall clean off all utility covers, curbs, sidewalks, and any other installed items of asphalt products in the paved areas.

2. Contractor shall provide all necessary permits, fees, and inspections that may be required.

3. Contractor includes all bonds for Right of Way Work. Contractor shall comply with all MDOT rules and regulations for the work within Public Right of Way. This will include all costs associated with maintenance of traffic required for this scope of work.

4. Contractor shall furnish and place stone fill as required to establish proper elevations. Contractor shall protect all excavations until approved including protection from freezing and dewatering.

5. Contractor shall furnish and install all sub-base courses, asphalt base (binder) courses, tack coats, overlay binder coats, overlay protective membranes, overlay protective membrane strips, asphalt surface courses, bitumastic sealant, and joint sealants. This work also includes cleaning the base course surface prior to installation of the surface course of all dirt and debris caused by this contractor or others.

6. Asphalt Binder Escalation: An adjustment will be made to the final Contract Sum if the price of asphalt binder fluctuates from the prevailing price as quoted here to the actual price on the date of placement. The Contract Sum will be adjusted if asphalt binder fluctuation is above 10% or below negative 10%. Only the differential percent change beyond the above noted 10% will be used.

For the purpose of making these calculations, a monthly price index is maintained by the MD State Highway Administration. This index is the average FOB selling price of asphalt binder at the supplier's terminal in the State of Maryland.

Contract price adjustment will be computed monthly by using the following formula:

F= (PP-Pb)/Pb

Where:

F = price increase/decrease of asphalt binder, expressed as a decimal
PP = index price of asphalt binder per ton at placement date
Pb = the prevailing index price of asphalt binder per ton in ~~**November 2023**~~ ***March 2024***[ADD#3], as specified by MDSHA.

Contract Price adjustment due to Contractor or Owner when price of asphalt binder does not increase or decrease significantly.
(i.e.: -0.10 >F>0.10) – Zero Dollars

Contract price adjustment is due to Contractor as a cost to Owner when price of asphalt binder increases significantly.
(i.e. F>0.10) – A= [(F-0.10) x T x Pb] x Tons
Contract price adjustment is due to Owner as a credit to Contractor when price of asphalt binder decreases significantly.
(i.e. F< -0.10) – A= [(F-0.10) x T x Pb] x Tons
Where:

A = Addition/Deduction to Contract Sum
F = price increase/decrease of asphalt binder, expressed as a decimal
T = design target asphalt content as stated in the asphalt manufacturer's mix design for base or surface course expressed as a decimal
Pb = the prevailing index price of asphalt binder per ton in September of 2014 as specified by MDSHA
Tons = ACTUAL Tonnage of Hot Mix Asphalt Base or Surface (Base & Surface Mix cost increase/decrease will be calculated separately using the design target asphalt contents for each per "T" above), as documented by certified, dated, weighted tickets furnished by the asphalt manufacturer.

Please note that the Contract Price Adjustment does NOT include Overhead & Profit markup, which will not be allowed or required on adjustments due the Contractor or Owner. The Contract Price Adjustment also does not include a state sales tax or bond markup, but these markups/markdowns will be allowed/required on both adjustments due the Contractor and Owner.

**Site Concrete Specific Scope:**

1. Contractor includes exterior sport coatings at paved play areas. Contractor includes stenciling and markings of paved play areas.

2. Contractor shall furnish and install all curb and gutter, sidewalk, pervious paving, cast-in-place concrete caps at retaining walls and heavy-duty concrete paving shown.

3. Contractor shall install all pipe bollards supplied by others. Contractor to include concrete in pipe bollards. Contractor to include multiple mobilizations for this scope of work.

4. Contractor should assume to repair/replace 5% of the total lf of curb and gutter, sf of sidewalks, and sy of asphalt pavement ***(base and surface pavement)*** [ADD#5] on the project due to damage caused by others. All work performed

for this 5% is to be tracked via ticket and proper backup documentation must be provided to the Construction Manager. In the event 5% is not fully used at project completion, a deduct change order will be issued to the 32A contractor for the unused amount.

~~5.~~ Construction Manager reserves the right to schedule the installation of the base course of asphalt paving and then the surface course of asphalt paving as two separate construction events. ~~Contractor shall be responsible for repairing damages, even if caused by others, to the base course asphalt as necessary prior to the installation of the final course asphalt.~~ **ADD#5**

6. Contractor shall prepare and provide for all means required to tie in new asphalt to existing asphalt at all required locations.

7. Contractor shall provide patching of existing asphalt in existing roads as needed for the connection of utilities. Contractor shall saw cut, remove, and dispose of existing asphalt for the water line, gas, storm and electrical line(s). It will be the responsibility of this Contractor to furnish and install the permanent asphalt requirements at this location at the time and direction provided by the Construction Manager.

8. Contractor shall provide all fine grading and proof rolling as necessary prior to the installation of the sub-base course.

9. Construction Manager to provide survey stakeout and this contractor to provide any additional layout required to allow furnishing and installation of all concrete, reinforcing, formwork, excavation, backfilling, fine grading, fill, gravel(including granular backfill where called out), perforated PVC, under drains at its work (including stone and filter fabric), bio-barriers (where called out), fence sleeves, waterproofing, support chairs, concrete pumping, control joints, expansion joints **(zip cap type)**, expansion filler, weld wire mesh, scoring joints, hot/cold weather protection, caulking and the like for all of the following site concrete items:

    a. curb and gutter,
    b. sidewalks (regular and heavy duty including all the way up to the face of building / face of door and the like, inclusive of stone as indicated
    c. turn down slab details with all associated stone,
    d. platforms/stoops,
    e. concrete paving
    f. exterior reinforced concrete pad(s),
    g. ~~concrete stairs, switchbacks, landings, and pads at the exterior~~, **ADD#3**
    ~~h. exterior ramps and handicapped ramps,~~ **ADD#3**
    i. furnish and install flagpole footing and flagpole and accessories,
    ~~j. exterior basketball goals and footings,~~ **ADD#5**
    k. play areas (tennis courts, shot put pad, etc)
    l. ~~new school sign footing; masonry and sign by others~~, **ADD#3**
    m. mow strip(s) at fencing, top of walls, and building perimeter,
    n. dumpster pad(s) and other building service area concrete on grade,
    ~~o. courtyards within the building footprint concrete,~~ **ADD#3**
    p. and any other site concrete item called out within the drawings and specifications unless noted otherwise.

10. Contractor shall carefully review the 03A scope of work. It will be the responsibility of the Site Concrete Contractor to furnish and install any and all site concrete not specifically stated in this other scope of work.

11. Contractor shall seal all concrete called out to be sealed per the contract documents. Contractor shall provide one additional coat which will be applied just prior to substantial completion as directed by the Construction Manager.

12. Contractor shall protect threaded and/or embedded items to prevent bending, deformation, and corrosion. Contractor shall repair or restore all damaged threaded and/or embedded items prior to commencement of installation on these embedded items.

13. Contractor shall receive, unload, inventory, sign for and accept all embedded items furnished by other Contractors for installation by this Contractor. Contractor shall properly store and protect items furnished by others.

14. Contractor shall coordinate with Mechanical and Electrical Contractors to ensure all rough ins are complete prior to concrete work associated to this scope. Contractor shall coordinate with the Construction Manager regarding scheduling of all concrete pours. Contractor shall submit each week to the Construction Manager, in writing, a weekly pour schedule for coordination with other trades.

15. Contractor to protect CMU walls and/or adjacent finishes from splashing caused by concrete placement. If concrete splashes on CMU walls and/or adjacent finishes, then the Contractor shall be responsible for the removal of the splashed concrete.

16. Contractor shall provide as-built elevations shots of the slabs, platforms, ramps, loading areas, mechanical yards, the stage, and any other item installed by this Contactor. Contractor shall provide as-built elevations of all top of footing elevations. Contractor shall provide this as- built information within forty-eight (48) hours after concrete has been poured.

17. Contractor shall grade all backfill so that water runs away from any building structure.

18. Contractor shall furnish and install all moisture retaining covers and curing compounds as required to complete own work.

19. Contractor includes installation of zip cap expansion joint material, and all associated caulking of own work, inclusive of removing plastic cap and proper preparation prior to application of sealant.

20. Contractor shall furnish and install all integral color concrete, unit pavers and detectable warning pavers shown on sheet L500 in locations shown on the contract documents inclusive of all base material.

21. ***Contractor shall be responsible for its own trash removal/off-site disposal (i.e., shall provide its own dumpsters or other means to haul debris from site).*** **ADD#5**

22. ***Contractor shall furnish and install flagpoles in entirety, including foundation.*** **ADD#5**

**Road and Parking Accessories Specific Scope:**

1. Contractor shall adhere to all Maryland Department of Transportation State Highway Administration's current Standard Specifications for Construction Materials and the ANSI D6.1-1971 Manual on Uniform Traffic Control Devices for Streets and Highways.

2. Contractor shall adhere to the product delivery, storage, handling, project conditions, products/materials, surface preparation, application, protection, and restoration requirements outlined within the project specifications and drawings.

3. Contractor shall coordinate and work with the Construction Manager with regards to the Fire Marshall's requirements.

4. Contractor shall adhere to the sign location and installation requirements outlined within the project specifications and drawings.

5. Contractor shall layout and paint all play area striping and all parking lot striping to include, but is not limited to all parking spaces, regular handicapped spaces, van accessible spaces, parahatch areas at handicapped spaces, bus spaces, traffic arrows, center lines, stop bars, and pedestrian crosswalks, fire lane curbing and associated stenciling, etc.

***6.*** ~~In the event final paving is not installed at same time as base paving, contractor has included temporary striping as required for temporary use at no extra cost to Owner~~. ***Contractor to include temporary striping of base asphalt for sixty (60) regular parking spaces and two (2) HC parking spaces in the base bid.*** **ADD#5**

7. Contractor shall furnish and install all concrete wheel stops.

8. Contractor shall layout and paint all stenciled markings.

9. Contractor shall furnish and install all posts and signs for site including but not limited to handicapped signs, van handicapped signs, drug free school zone signs, do not enter signs, student drop off signs, fire lane signs, no parking anytime signs, buses only signs, staff parking signs, one-way signs, no U-turn signs, reserved only signs, hybrid signs, etc.

~~10. Contractor includes nonelectrical exterior of building address signage as required by the fire marshal prior to final acceptance.~~ **ADD#5**

**SPECIAL CONSIDERATIONS:**

~~1. Excavation and/or drilling work under this contract is unclassified to design sub-grade, and includes but not limited to, excavation and removal of soil, shale, rock, fill, abandoned utilities, abandoned tanks, abandoned wells, abandoned structures, and any and all other subsurface conditions encountered in the contract area to this trades' lowest design elevation in same area. The Contractor shall make his own soil and subsurface investigations, examination, tests, and exploratory borings of existing subsurface conditions to determine the nature of the soil conditions underlying the project site and thereby assuming all responsibility in excavating for this project without recourse to subsurface information obtained from the engineer, or indirectly from the Owner. The risk of unanticipated soil conditions from current elevations to this trades' lowest design elevation in same area is solely the Contractor's. No extra or additional compensation for excavation or claim otherwise will be made or paid under this contract until added excavations below this trades' lowest design elevation in same area is required. Contractor is responsible for furnishing and placing any import fill material that may be required to complete the work.~~ **ADD#5**

2. Contractor shall perform its own survey of existing conditions and notify the Construction Manager of any discrepancy prior to the start of the Contractor's work. Start of work shall constitute this Contractor's acceptance of the existing conditions.

3. **Contractor acknowledges and has accounted for within his bid, the second and fourth Saturdays of each month are required workdays.**

4. Contractor is fully aware and has properly taken into account alternates that may affect his package.

5. This bid package has an MBE goal of _15_ percent. All prime contractors, including certified MBE firms, when submitting bids or proposals as a prime contractor, are required to attempt to achieve this goal from MDOT certified MBE firms. All submittals of MBE materials and reporting requirements are applicable for the project, including the submittal of MBE Attachments A and B with its bid as described in specification 00 43 39 - Minority Business Enterprises Procedures.

6. ***Contractor shall provide final cleaning of asphalt and site concrete surfaces prior to substantial completion of each work phase. Cleaning shall include, but not be limited to, flush trucks and pressure washing to remove dirt from asphalt/concrete surface.*** **ADD#5**

7. ***This contractor shall provide tennis court surfacing (color concentrate with sand by sportsmaster or approved equal), lines, and nets including posts and concrete footings for posts and center strap detail.*** **ADD#5**

**EXCLUDED FROM THIS CONTRACTOR WORK:**

1. Testing costs unless specifically called for in this scope, a result of negligence, poor workmanship, or failure of work to meet the requirement of the documents.

~~2. Tennis court nets and posts and color coating/lines for tennis courts~~ **ADD#5**

**END OF SCOPE 32A**

## WORK SCOPE CATEGORY 32B Landscaping & Fencing

The work of this bid category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all Landscaping & Fencing work in accordance with the specifications, drawings and applicable codes. All work is to be performed as shown on the plans and/or specified under the following technical sections:

| SECTION | NAME |
|---|---|
| ***12 93 73*** | ***SOUND BARRIERS*** ADD#5 |
| 31 20 00 | EXCAVATING FILLING AND GRADING (as it relates to this scope) |
| 32 01 90 | TREE PROTECTION AND TRIMMING |
| 32 31 00 | FENCES AND GATES |
| ~~32 32 23~~ | ~~SEGMENTAL CONCRETE RETAINING WALLS~~ ADD#3 |
| 32 33 00 | SITE FURNISHINGS |
| 32 92 00 | LAWNS AND GRASSES |
| 32 93 00 | EXTERIOR PLANTS |

Geotechnical Report issued ECS Mid Atlantic, LLC dated February 3, 2023, with addendum dated March 21, 2023, for informational purposes only.

In addition to the above, trade contractors are to include, but are not limited to, AIA Documents A201 and A401, and various other Technical Specifications interfacing with this work. The Contractors are required to review the work descriptions of the other categories so as not to misunderstand the scope responsibilities. The Contractors are also bound to the HESS Safety Manual and all related weekly and daily documentation for North East Middle/High School Replacement Project for the administration of the contract.

**General Scope:**
**Contractor is responsible for General Scope of Work listed elsewhere in this specification section.**

**~~WE NEED TO ADD A SPECIFIC SCOPE FOR SEGMENTAL WALLS~~** ADD#3

**THE SPECIFIC SCOPE OF WORK IS TO INCLUDE, but is not limited to, the following items:**

**Fencing Specific Scope:**

1. Contractor shall furnish and install all chain link and ornamental fencing related items to include, but is not limited to, posts, rails, braces, bracing assemblies, powder coating, bottom tension wire, continuous top rails, continuous bottom rails, continuous mid rails, fabric, terminal posts, line posts, gate posts, hinge posts, terminal & gate post bracing assemblies, stretcher bars, sleeves, non-shrink grout, gates, hardware, accessories, tie wire, grounding, padlocks, knox boxes and/or knox locks, excavation for posts, concrete formwork/sonatubes, concrete for posts, fence line grading, and the like for a complete scope of work.

2. Contractor to review specifications to ensure all applicable pieces and parts coated per spec; color to be Black.

3. Contractor shall furnish and install fence/gate assemblies to include, but is not limited to, the following locations: site walls, fire lanes, play areas, ~~basketball courts~~,ADD#5 tennis courts, ball fields, backstops, service yards, general site, and parking lots.

4. Contractor shall furnish and install the screen fence identified on sheet L502 in locations shown on the contract documents.

5. Contractor shall furnish and provide layout for the sleeves needed for the fence posts located on top of concrete walls and segmented walls (if applicable).

6. Contractor to include all mow strips at own work.

7. Contractor to include one lock with two keys for each gate; locks to be “Steel Secrete Service” per specifications.

8. Contractor to provide warranty per specifications for all coated rails, fencing and gates against peeling, cracking and corrosion.

9. Contractor shall furnish and install all guardrail as shown on contract documents.

10. ***Contractor to furnish and install polycap fence cap as indicated***. **ADD#3**

11. ***Contractor to furnish and install fencing within all dugouts as indicated on A905*** **ADD#3**

**Site Amenities Specific Scope:**

1. Contractor shall furnish and install all site amenities, to include but limited to trash receptacles, benches ***throughout site and in dugouts***, **ADD#3** ~~flag poles~~ **ADD#5**, skate deterrent and bike racks, soccer goals, ***foul poles, batting cages, baseball bases, plates, pitcher's rubber etc., baseball/athletic field backstops,*** **ADD#3**tree grates as detailed on sheets L500, L501 and L502. Contractor shall provide all core drilling, anchoring materials, and the like to complete the installation of the items. Contractor to coordinate and install foundations required for these items.

2. Contractor shall furnish and install all footings required for items included in this scope.

~~3. Contractor shall furnish and install infield mix and warning track as detailed in the Civil Drawings.~~ **ADD#3**

4. All furnishings are to be installed level, plumb and true and securely anchored or positioned at locations as indicated on drawings.

5. ***Contractor shall furnish the shotput toe board for installation by 32A Contractor.*** **ADD#3**

6. ***Contractor shall furnish and install sound barriers as specified. The sound barrier is located at the East corner of the High School building, enclosing the exterior dust collector.*** **ADD#3**

**Landscaping Specific Scope:**

~~1. Contractor shall strip, screen, stockpile, protect, test, amend and stabilize all topsoil as required by the contract documents and governing jurisdiction having authority requirements. Contractor shall re-spread topsoil in all areas provided the topsoil meets project standards as indicated on drawings. Topsoil on ball fields shall be motor graded to within plus/minus 1/10 of a foot of the design elevation. Maximum size of screen shall be ¾" sieve. Topsoil shall be a 4-8-inch layer, lightly compacted to minimum thickness of 4 inches. Contractor shall supply tested, screened, amended topsoil from offsite if and/or when the onsite quantities are insufficient. Contractor to test and make all amendments to bring material within project specifications. It is the contractor's responsibility to submit test results to Construction Manager for approval with required recommendations to bring material within project specifications, prior to the start of any topsoil work. This requires the Contractor to hire a third-party independent testing agency.~~ **ADD#3**

2. Contractor shall layout all landscaping with flagging and receive approval from the landscape architect and CCPS prior to installation. Contractor shall provide and install all landscape plantings to include, but is not limited to, all guarantees, certificates, submittals, plants, trees, shrubs, topsoil amendments, sand (if required), organic matter, planting soil mix, anti-desiccant, tree paint, herbicide, fertilizer, stakes for supporting trees, wires for guying trees, mulch, and the like to complete all landscape plantings shown or implied within the drawings and specifications. Contractor shall furnish water and necessary temporary or permanent irrigation equipment per the specifications.

3. Contractor shall provide and install all seeding and sod to include, but is not limited to, guarantees, certificates, submittals, delivery, storage, topsoil testing and amendments, sand (if required), organic matter, seed mixtures, sod types, mulch, hydraulic seeding, sod stakes, water, protection, restoration, cleaning, maintenance, turf inspections/reviews by a qualified turf agronomist, and the like to complete all seeding and sod shown or implied within the drawings and specifications. Contractor shall furnish water and necessary temporary or permanent irrigation equipment per the specifications. Maintenance of seed and sod will be strictly enforced, or areas will not be accepted.

~~4. Contractor shall provide and install all forest conservation requirements to include, but is not limited to, all arborist reports, root pruning, tree protection signs, deep root fertilization, crown reduction, watering, vertical mulching, and all other items outlined within the Forest Conservation Drawings and as required by the County Forester.~~ **ADD#3**

5. Contractor shall provide and install all maintenance requirements to include, but is not limited to, maintaining all plants and turf in a healthy condition. Contractor shall provide for all pruning, cutting, watering, fertilizing, cultivating, weeding, mulching, tightening/repairing of staking, setting plants to proper grades or upright in position, restoration of the planting saucer, and furnishing/applying sprays and other items as necessary to keep the plantings free of insects and disease and in a thriving condition. Maintenance shall begin immediately after each planting is completed and shall continue for a period of twelve months following project substantial completion. Contractor shall furnish own water and irrigation equipment and irrigate areas as required throughout this period. Maintenance of the interior courtyard after occupancy of the building will be performed by CCPS, as access is restricted.

~~6. Contractor includes independent third-party testing of all topsoil material and associated recommendations and amendments to bring material to within project specifications. Contractor to submit all tests and recommendations prior to the start of topsoil work for approval.~~ **ADD#3**

7. Contractor includes all mulching, pretreatment of mulched areas, inclusive of mulch walkways, maintenance of mulching etc.

8. Contractor includes all portable drip irrigation bags as required.

9. Contractor includes monthly turf inspections by a qualified turf agronomist for a period of one year following project substantial completion. The months of Dec., Jan. and Feb. are exempt from this requirement.

10. Contractor shall furnish and install the synthetic turf and decomposed granite in locations shown on the contract documents and inclusive of all subgrade material.

11. ***Contractor shall be responsible for its own trash removal/off-site disposal (i.e., shall provide its own dumpsters or other means to haul debris from site).*** **ADD#5**

**SPECIAL CONSIDERATIONS:**

1. Excavation and/or drilling work under this contract is unclassified to design sub-grade, and includes but not limited to, excavation and removal of soil, shale, rock, fill, abandoned utilities, abandoned tanks, abandoned wells, abandoned structures, and any and all other subsurface conditions encountered in the contract area to this trades lowest design elevation in same area. The Contractor shall make his own soil and subsurface investigations, examination, tests, and exploratory borings of existing subsurface conditions to determine the nature of the soil conditions underlying the project site and thereby assuming all responsibility in excavating for this project without recourse to subsurface information obtained from the engineer, or indirectly from the Owner. The risk of unanticipated soil conditions from current elevations to this trades lowest design elevation in same area is solely the Contractor's. No extra or additional compensation for excavation or claim otherwise will be made or paid under this contract until added excavations below this trades lowest design elevation in same area is required. Contractor is responsible for furnishing and placing any import fill material that may be required to complete the work.

2. Contractor shall perform its own survey of existing conditions and notify the Construction Manager of any discrepancy prior to the start of the Contractor's work. Start of work shall constitute this Contractor's acceptance of the existing conditions.

3. **Contractor acknowledges and has accounted for within his bid, the second and fourth Saturdays of each month are required workdays.**

4. Contractor is fully aware and has properly taken into account alternates that may affect his package.

5. This bid package has no MBE goals assigned.

**EXCLUDED FROM THIS CONTRACTOR WORK is:**

1. Testing costs, unless specifically called for in this scope, are a result of negligence, poor workmanship, or failure of work to meet the requirement of the documents.

2. Pergolas shown in B&C on sheet L502.

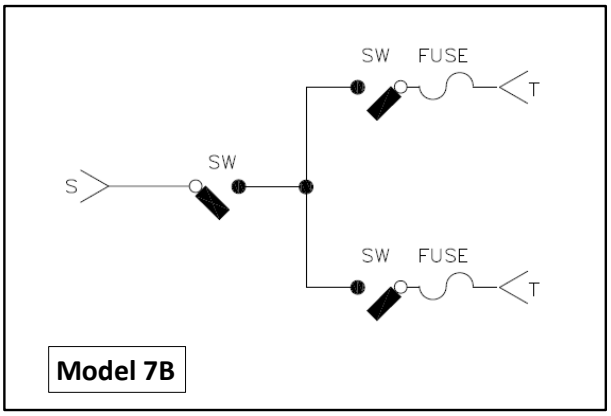
**END OF SCOPE 32B**

***SECTION 26 13 23 – MEDIUM-VOLTAGE UNDERGROUND DISTRIBUTION SWITCHGEAR***

PART 1 - GENERAL

1.1 SCOPE

A. This specification applies to three-phase, 3-way (600A -source, 200A -tap), 50-60 Hz, fully dead front, sectionalizing underground distribution switchgear; with maximum main bus rating of 600 amperes continuous current and maximum tap rating of 200 amperes. Source switching shall be accomplished with under-oil switches. Tap overcurrent protection shall be accomplished utilizing drawout under-oil current-limiting fuses.




B. The unit is to be insulated with FR3 fluid contained in a sealed tank design, so operation is unimpaired by flood conditions or contaminated environments (except control). The unit shall utilize under-oil sectionalizing switches for current loadbreak switching. The unit shall be designed for installation on a concrete pad at ground level.

C. This specification shall only cover the purchase and shipment of switchgear. The contractor shall be responsible for all site-work, electrical connections, and installation as described in Div 26 specifications and drawings.

1.2 APPLICABLE STANDARDS

A. IEEE Std C37.74™-2003 standard – IEEE Standard Requirements for Subsurface, Vault, and Pad-Mounted Load-Interrupter Switchgear and Fused Load-Interrupter Switchgear for Alternating Current Systems Up to 38 Kv

B. IEEE Std C57.12.28™-2005 standard – Standard for Pad-Mounted Equipment - Enclosure Integrity

C. IEEE Std C57.12.29™-2005 standard – IEEE Standard for Pad-Mounted Equipment - Enclosure Integrity for Coastal Environments – applicable when stainless steel construction is specified

D. IEEE Std 386™-2006 standard – Standard for Separable Insulated Connector Systems for Power Distribution Systems Above 600 V

E. IEC 801-3 – Radiated Electromagnetic Field Requirements

F. IEC 68-2-30 – Environmental Testing

1.3 Submittals

A. The manufacturer shall furnish a detailed list of ratings and accessories and set of drawings defined as follows:

1. Detailed front elevation
2. Single Line
3. Base Plan
4. Schematics

B. The manufacturer shall furnish instruction manuals covering the installation of the switchgear and the operation of its various components.

PART 2 - PRODUCTS

2.1 Manufacturers:

A. Eaton (Basis of Design)

B. Larson Electronics

C. Square D

D. ABB

2.2 Ratings:

A. The switchgear shall be rated as follows:

| Nominal Voltage | 35 kV |
|---|---|
| Maximum Design Voltage…… | 38 |
| BIL…… | 150 |
| 1-minute Withstand Switch* and Terminators… | 50 |
| Continuous Current, amps…… | 200* |
| Load Switching, amps…… | 200* |
| Momentary Current 10 Cycles, amps (asym.)….. | 16,000 |
| 2 Sec., Short Time Current, amps (sym.)…….. | 10,000 |
| 3 Shot Make and Latch amps (asym.)……. | 9,600 |

B. The switchgear shall have an ambient operating temperature range of -30 ºC to +40 ºC.

2.3 Construction

A. The underground distribution switchgear shall consist of a 2-sided, sealed insulation tank, and separate front and rear cable compartments. Overall height, width, depth and layout shall conform to the manufacturer's standard construction practices for the configuration, ratings, and voltage class specified. Standard construction shall be of mild steel with stainless steel hardware.

B. The liquid-filled unit shall have a tamperproof bolted tank cover design, utilizing Buna-N rubber gaskets. The sealed tank (with deadfront terminators installed) shall be capable of withstanding flood immersion while energized, and shall be impervious to contaminants and animals, so as not to compromise the main insulation structure. The cable compartments shall be located at the front and back of the tank respectively. The main cable compartments may house a combination of source way(s) and load or tap way(s). All switch operating handles shall be located on the same front plate as the ways that they operate, in order to reduce the likelihood of operating an incorrect switch. Recessed lifting provisions for suitable balanced lift shall be provided on the tank ends.

C. Cable compartments shall both be sized to provide ease of cable installation and allow for the addition of termination accessories.

D. Top-hinged cabinet style doors shall be provided. Top hinged doors will allow access to cable terminations with swing-up type doors with door stays and stainless steel hinges. Units wider than 46 inches shall have split doors to allow easy operation by one person. Both source and tap doors must be able to open fully at the same time. Each door shall have a floating lock pocket with padlock hasp and pentahead stainless steel door bolt.

E. Cabinet construction shall meet all NEMA and ANSI security requirements as defined in the IEEE C57.12.28-2005 standard and the construction requirements of the IEEE Std C37.74™-2003 standard.

F. Units shall be shipped complete with FR3 fluid.

G. The unit shall be equipped with a 1-inch oil-fill plug and a 1-inch drain plug with 3/8" sampler. A single automatic pressure relief valve shall be supplied that is hotstick-operable and located on the source-side front plate above the oil level indicator within the switchgear. The unit shall have sight gages to monitor the dielectric level located on each unit side equipped with an operating handle.

H. A 1/2-13 UNC stainless steel ground nut shall be provided that is welded to the switchgear tank and mounted beneath each bushing.

I. A non-corrosive operating diagram (one-line schematic of the unit) shall be affixed to the inside of the right hand, first opening door, on both sides of the unit, if two (2) sided. A single

nameplate shall be provided that is mounted on the source side tank front plate in the upper right hand corner. The nameplate shall contain the following information:

1. Catalog Number/Model Number
2. Serial Number
3. Nominal voltage class, kV
4. Rated maximum voltage, kV
5. BIL, kV
6. Manufacturing Date: MM/YYYY
7. Rated continuous current, A
8. Rated load interrupting rating, A
9. Momentary current rating, kA asym.
10. Close & latch rating, kA asym.
11. Total weight, lbs.
12. Liquid dielectric volume (gallons)

J. Three (3) Faulted Circuit Indicator mounting provisions shall be provided in the sills beneath the cabinet doors at the position of each way. The provisions shall include a 1-1/16 diameter hole sized for Eaton's Cooper Power series type S.T.A.R. fault indicator small remote display, cover plate, and tamperproof mounting bolts. There shall be provisions for mounting at least one fault indicator for each equipment bushing.

## 2.4 Bushings

A. Bushings shall be deadfront type for use with separable connectors conforming to IEEE Std 386™-2006 standard and ANSI Standard C119.2. The source ways shall have a continuous current rating of 600 ampere with bushings. Tap ways shall have a continuous current rating of 200 ampere with wells for bushing inserts.

B. Horizontally configured at 24 inches above the pad and accept molded, separable deadfront connectors. Bushings shall be mounted with minimum spacing of 8.0-inches between centerlines, except between the C-phase bushings which may be a minimum of 7.0-inches. A standoff bracket or parking stand shall be supplied for each bushing and shall be mounted horizontally adjacent to each bushing on a 4.0-inch centerline from the bushing centerline. The standard phasing of the bushings from left to right shall follow the sequence ABC-CBA. Each bushing shall have identification affixed to the front plate identifying its source or tap designation, as shown on the one-line operating diagram, and its phase identification.

C. Eaton's Cooper Power series one-piece, loadbreak, large interface, integral bushings shall be supplied.

## 2.5 Source Switches

A. Source Switches shall use Eaton's Cooper Power series three-phase gang-operated loadmake/loadbreak oil sectionalizing switches that meet the performance requirements of the IEEE Std C37.74™-2003 standard. The switch mechanism shall use a manually-charged, stored-energy, spring-loaded over-toggle assembly, which is independent of operator speed. The switch shall operate by rotation of the operating handle. The switch shall provide positive latching in each position and shall have positive indication of switch position. A 2-position single-blade Open-Closed type, 3-position single-blade Selector type, 4-position V -blade type, or 4-position T-blade type sectionalizing switch shall be provided as indicated in the one-line diagram given for the switchgear configuration that is required. The operating handles shall be

sidemounted and in a separate tamper-resistant compartment that is integral to the tank, externally accessible, and secured with a pentahead bolt that may be padlocked for security. Frontplate mounted switch operating handles shall be available as an option. The switch shall be operable by a hotstick or by an optional "T" handle accessory. Each switch shall have provisions for field installed key interocks.

2.6 Fusing

A. Overcurrent protection shall be provided by Eaton's Cooper Power series types ELSG under-oil, full-range, current-limiting fuses that shall be mounted in Eaton's Cooper Power series type ELSG wet well drawout fuseholders.

B. 35 kV rated switchgear shall be provided with fuseholders that accept 23.0 kV maximum rated fuses.

C. The switchgear shall be provided with fuseholders only unless otherwise specified

2.7 Finish Performance Requirements

A. The switchgear shall be constructed of mild steel with stainless steel details and painted green conforming to Munsell 7GY 3.29/1.5. The coating system employed shall meet or exceed IEEE Std C57.12.28™-2005 standard coating system requirements for underground distribution equipment, including the following performance tests:

1. 1500-hour 5% salt spray corrosion test per ASTM B117 / D1654
2. 1000-hour humidity test per ASTM D2247 / D1654
3. 500-hour ultraviolet accelerated weathering test per ASTM G53 / D523
4. Direct impact test with 160 in. lb. falling dart per ASTM D2794
5. Tabor abrasion test 3,000 cycles per ASTM D4060
6. Crosshatch adhesion per ASTM D3359

2.8 Optional Features

A. 200 ampere bushing well switch module inserts.

B. T-handle (for manual operation of switch handles without using hotstick).

C. Fault indicator mounting provisions located on the source and tap compartment door sill.

## PART 3 - EXECUTION

### 3.1 Certified Design Data

A. A. Certified design test data shall be furnished upon request. The test data shall be available for the following:

1. Switch ratings per IEEE Std C37.74™-2003 standard
2. Coatings per IEEE Std C57.12.28™-2005 standard

### 3.2 Production Testing

A. The unit shall be subjected to the following production tests:

B. Continuity test to assure correct internal connections.

C. Hi-pot test to determine dielectric strength of the unit.

D. Pressure test to assure tank is completely sealed.

### 3.3 Quality Assurance

A. The manufacturer shall be a company specializing in medium-voltage underground distribution switchgear with at least fifteen years of documented experience.

B. Equipment shall be built in accordance with the industry standards for medium-voltage equipment.

C. The manufacturer shall be registered and certified as ISO 9001 compliant by a recognized international and independent body.

### 3.4 Warranty

A. The underground distribution switchgear shall be provided with a one-year warranty in-service/18 months maximum from date of shipment.

**END OF SECTION 26 13 23**

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# SECTION 26 32 13.16 - EMERGENCY ENGINE GENERATORS

## PART 1 - GENERAL

### 1.1 SUMMARY

A. Section includes packaged engine generators for emergency use with the following features:

1. Diesel engine.
2. Unit-mounted cooling system.
3. Unit-mounted control and monitoring.
4. Outdoor enclosure.
5. Generator overcurrent and fault protection.
6. Generator, exciter, and voltage regulator.

B. Related Requirements:

1. Section 263600 "Transfer Switches" for transfer switches including sensors and relays to initiate automatic-starting and -stopping signals for engine generators.

### 1.2 DEFINITIONS

A. EPS: Emergency power supply.

B. EPSS: Emergency power supply system.

### 1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings:

1. Include plans and elevations for engine generator and other components specified.
2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
3. Identify fluid drain ports and clearance requirements for proper fluid drain.
4. Design calculations for selecting vibration isolators and seismic restraints and for designing vibration isolation bases.
5. Vibration Isolation Base Details: Detail fabrication, including anchorages and attachments to structure and supported equipment. Include base weights.
6. Include diagrams for power, signal, and control wiring. Complete schematic, wiring, and interconnection diagrams showing terminal markings for EPS equipment and functional relationship between all electrical components.

### 1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer, manufacturer and testing agency.

B. Seismic Qualification Data: Certificates, for engine generator, accessories, and components, from manufacturer.

C. Source quality-control reports.

D. Field quality-control reports.

E. Warranty.

1.5 CLOSEOUT SUBMITTALS

A. Operation and maintenance data.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: An authorized representative who is trained and approved by manufacturer.

B. Testing Agency Qualifications: Accredited by NETA.

1. Testing Agency's Field Supervisor: Certified by NETA to supervise on-site testing.

1.7 WARRANTY

A. Manufacturer's Warranty: Manufacturer agrees to repair or replace components of packaged engine generators and associated auxiliary components that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Five (5), years comprehensive warranty, from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Kohler Power Systems
2. MTU Onsite Energy Corporation.
3. Cummins Power Generation.
4. Caterpillar, Inc.; Electric Power Division.
***5. Generac Power Systems***

2.2 PERFORMANCE REQUIREMENTS

A. Seismic Performance: Engine generator housing, engine generator, batteries, battery racks, silencers, sound attenuating equipment, accessories, and components shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.

1. The term "withstand" means "the unit will remain in place without separation of any parts when subjected to the seismic forces specified and the unit will be fully operational after the seismic event."
2. Shake-table testing shall comply with ICC-ES AC156. Testing shall be performed with all fluids at worst-case normal levels.

B. B11 Compliance: Comply with B11.19.

C. NFPA Compliance:

1. Comply with NFPA 37.
2. Comply with NFPA 70.
3. Comply with NFPA 99.
4. Comply with NFPA 110 requirements for Level 1 2 EPSS.

D. UL Compliance: Comply with UL 2200.

E. Engine Exhaust Emissions: Comply with EPA Tier 3 requirements and applicable state and local government requirements.

F. Noise Emission: Comply with applicable state and local government requirements for maximum noise level at adjacent property boundaries due to sound emitted by engine generator, including engine, engine exhaust, engine cooling-air intake and discharge, and other components of installation.

G. Environmental Conditions: Engine generator system shall withstand the following environmental conditions without mechanical or electrical damage or degradation of performance capability:

1. Ambient Temperature: 5 to 104 deg F (Minus 15 to plus 40 deg C).
2. Relative Humidity: Zero to 95 percent.
3. Altitude: Sea level to 1000 feet (300 m).

## 2.3 ENGINE GENERATOR ASSEMBLY DESCRIPTION

A. Mounting Frame: Structural-steel framework to maintain alignment of mounted components without depending on concrete foundation. Provide lifting attachments sized and spaced to prevent deflection of base during lifting and moving.

1. Rigging Diagram: Inscribed on metal plate permanently attached to mounting frame to indicate location and lifting capacity of each lifting attachment and engine generator center of gravity.

B. Capacities and Characteristics:

1. Power Output Ratings: Nominal ratings as indicated at 0.8 power factor excluding power required for the continued and repeated operation of the unit and auxiliaries, with capacity as required to operate as a unit as evidenced by records of prototype testing.
2. Nameplates: For each major system component to identify manufacturer's name and address, and model and serial number of component.

C. Engine Generator Performance:

1. Steady-State Voltage Operational Bandwidth: 3 percent of rated output voltage, from no load to full load.

2. Transient Voltage Performance: Not more than 20 percent variation for 50 percent step-load increase or decrease. Voltage shall recover and remain within the steady-state operating band within three seconds.
3. Steady-State Frequency Operational Bandwidth: 0.5 percent of rated frequency, from no load to full load.
4. Steady-State Frequency Stability: When system is operating at any constant load within the rated load, there shall be no random speed variations outside the steady-state operational band and no hunting or surging of speed.
5. Transient Frequency Performance: Less than 5 percent variation for 50 percent step-load increase or decrease. Frequency shall recover and remain within the steady-state operating band within five seconds.
6. Output Waveform: At no load, harmonic content measured line to line or line to neutral shall not exceed 5 percent total and 3 percent for single harmonics. Telephone influence factor, determined according to NEMA MG 1, shall not exceed 50 percent.
7. Sustained Short-Circuit Current: For a three-phase, bolted short circuit at system output terminals, system shall supply a minimum of 250 percent of rated full-load current for not less than 10 seconds and then clear the fault automatically, without damage to generator system components.
8. Start Time: Comply with NFPA 110, Type 10, system requirements.

## 2.4 ENGINE

A. Fuel: Diesel.

***B. Basis of Design: Kohler KD1250 with KH04590T04D alternator.***

C. Lubrication System: Engine or skid mounted.

1. Filter and Strainer: Rated to remove 90 percent of particles 5 micrometers and smaller while passing full flow.
2. Thermostatic Control Valve: Control flow in system to maintain optimum oil temperature. Unit shall be capable of full flow and is designed to be fail-safe.
3. Crankcase Drain: Arranged for complete gravity drainage to an easily removable container with no disassembly and without use of pumps, siphons, special tools, or appliances.

D. Jacket Coolant Heater: Electric-immersion type, factory installed in coolant jacket system. Comply with NFPA 110 requirements for Level 1 equipment for heater capacity and with UL 499.

E. Cooling System: Closed loop, liquid cooled, with radiator factory mounted on engine generator mounting frame and integral engine-driven coolant pump.

1. Coolant: Solution of 50 percent ethylene-glycol-based antifreeze and 50 percent water, with anticorrosion additives as recommended by engine manufacturer.
2. Size of Radiator: Adequate to contain expansion of total system coolant, from cold start to 110 percent load condition.
3. Expansion Tank: Constructed of welded steel plate and rated to withstand maximum closed-loop coolant-system pressure for engine used. Equip with gage glass and petcock.
4. Temperature Control: Self-contained, thermostatic-control valve modulates coolant flow automatically to maintain optimum constant coolant temperature as recommended by engine manufacturer.

5. Coolant Hose: Flexible assembly with inside surface of nonporous rubber and outer covering of aging-, UV-, and abrasion-resistant fabric.

    a. Rating: 50-psig (345-kPa) maximum working pressure with coolant at 180 deg F (82 deg C), and noncollapsible under vacuum.
    b. End Fittings: Flanges or steel pipe nipples with clamps to suit piping and equipment connections.

F. Muffler/Silencer: Critical type, sized as recommended by engine manufacturer and selected with exhaust piping system to not exceed engine manufacturer's engine backpressure requirements.

1. Minimum sound attenuation of 25 dB at 500 Hz.
2. Sound level measured at a distance of 25 feet (8 m) from exhaust discharge after installation is complete shall be 78 dBA or less.

G. Air-Intake Filter: Heavy-duty, engine-mounted air cleaner with replaceable dry-filter element and "blocked filter" indicator.

H. Starting System: 24-V electric, with negative ground.

1. Components: Sized so they are not damaged during a full engine-cranking cycle, with ambient temperature at maximum specified in "Performance Requirements" Article.
2. Cranking Motor: Heavy-duty unit that automatically engages and releases from engine flywheel without binding.
3. Cranking Cycle: As required by NFPA 110 for system level specified.
4. Battery: Adequate capacity within ambient temperature range specified in "Performance Requirements" Article to provide specified cranking cycle at least twice without recharging.
5. Battery Cable: Size as recommended by engine manufacturer for cable length indicated. Include required interconnecting conductors and connection accessories.
6. Battery Compartment: Factory fabricated of metal with acid-resistant finish and thermal insulation. Thermostatically controlled heater shall be arranged to maintain battery above 50 deg F (10 deg C) regardless of external ambient temperature within range specified in "Performance Requirements" Article. Include accessories required to support and fasten batteries in place. Provide ventilation to exhaust battery gases.
7. Battery-Charging Alternator: Factory mounted on engine with solid-state voltage regulation and 35-A minimum continuous rating.
8. Battery Charger: Current-limiting, automatic-equalizing and float-charging type. Unit shall comply with UL 1236 and include the following features:

    a. Operation: Equalizing-charging rate of 10 A shall be initiated automatically after battery has lost charge until an adjustable equalizing voltage is achieved at battery terminals. Unit shall then be automatically switched to a lower float-charging mode and shall continue to operate in that mode until battery is discharged again.
    b. Automatic Temperature Compensation: Adjust float and equalize voltages for variations in ambient temperature from minus 40 to 140 deg F (minus 40 to plus 60 deg C) to prevent overcharging at high temperatures and undercharging at low temperatures.
    c. Automatic Voltage Regulation: Maintain constant output voltage regardless of input voltage variations up to plus or minus 10 percent.
    d. Ammeter and Voltmeter: Flush mounted in door. Meters shall indicate charging rates.
    e. Safety Functions: Sense abnormally low battery voltage and close contacts providing low battery voltage indication on control and monitoring panel. Sense high battery voltage and loss of ac input or dc output of battery charger. Either

condition shall close contacts that provide a battery-charger malfunction indication at system control and monitoring panel.

f. Enclosure and Mounting: NEMA 250, Type 1, wall-mounted cabinet.

## 2.5 FUEL SYSTEM

A. Engine Fuel System:

1. Fuel Filters: One for each fuel type.
2. Manual Fuel Shutoff Valves: One for each fuel type.
3. Flexible Fuel Connectors: Minimum one for each fuel connection.

B. Main Fuel Pump: Mounted on engine. Pump ensures adequate primary fuel flow under starting and load conditions.

## 2.6 FUEL STORAGE

A. Base-Mounted Fuel Tank: Factory installed and piped, complying with UL 142 fuel tank. Features include the following:
1. Tank level indicator.
2. Capacity: Fuel for minimum ***24*** hours' continuous operation at 100 percent rated power output.
3. Vandal-resistant fill cap.
4. Containment Provision: Comply with requirements of authorities having jurisdiction.

B. Provide full tank for owner after all testing/startup has been completed.

## 2.7 CONTROL AND MONITORING

A. Automatic Starting System Sequence of Operation: When mode-selector switch on the control and monitoring panel is in the automatic position, remote-control contacts in one or more separate automatic transfer switches initiate starting and stopping of engine generator. When mode-selector switch is switched to the on position, engine generator starts. The off position of same switch initiates engine generator shutdown. When engine generator is running, specified system or equipment failures or derangements automatically shut down engine generator and initiate alarms.

B. Provide minimum run-time control set for 30 minutes, with override only by operation of a remote emergency-stop switch.

C. Comply with UL 508A.

D. Configuration: Operating and safety indications, protective devices, basic system controls, and engine gages shall be grouped in a common wall-mounted control and monitoring panel. Panel shall be powered from the engine generator battery.

E. Control and Monitoring Panel:

1. Digital controller with integrated LCD display, controls, and microprocessor, capable of local and remote control, monitoring, and programming, with battery backup.
2. Analog control panel with dedicated gages and indicator lights for the instruments and alarms indicated below.

3. Instruments: Located on the control and monitoring panel and viewable during operation.

    a. Engine lubricating-oil pressure gage.
    b. Engine-coolant temperature gage.
    c. DC voltmeter (alternator battery charging).
    d. Running-time meter.
    e. AC voltmeter, connected to a phase selector switch.
    f. AC ammeter, connected to a phase selector switch.
    g. AC frequency meter.
    h. Generator-voltage adjusting rheostat.

4. Controls and Protective Devices: Controls, shutdown devices, and common visual alarm indication as required by NFPA 110 for Level 1 system, including the following:
    a. Control switch not in automatic position alarm.
    b. Overcrank alarm.
    c. Overcrank shutdown device.
    d. High engine temperature pre-alarm.
    e. High engine temperature.
    f. High engine temperature shutdown device.
    g. Overspeed alarm.
    h. Overspeed shutdown device.
    i. Coolant low-level alarm.
    j. Coolant low-level shutdown device.
    k. Coolant high-temperature prealarm.
    l. Coolant high-temperature alarm.
    m. Coolant low-temperature alarm.
    n. Coolant high-temperature shutdown device.
    o. EPS load indicator.
    p. Battery high-voltage alarm.
    q. Low-cranking voltage alarm.
    r. Battery-charger malfunction alarm.
    s. Battery low-voltage alarm.
    t. Lamp test.
    u. Contacts for local and remote common alarm.
    v. Low-starting air pressure alarm.
    w. Low-starting hydraulic pressure alarm.
    x. Remote manual-stop shutdown device.
    y. Air shutdown damper alarm when used.
    z. Air shutdown damper shutdown device when used.
    aa. Generator overcurrent-protective-device not-closed alarm.

F. Common Remote Panel with Common Audible Alarm: Comply with NFPA 110 requirements for Level 1 systems. Include necessary contacts and terminals in control and monitoring panel. Remote panel shall be powered from the engine generator battery.

G. Remote Alarm Annunciator: Comply with NFPA 99. An LED indicator light labeled with proper alarm conditions shall identify each alarm event, and a common audible signal shall sound for each alarm condition. Silencing switch in face of panel shall silence signal without altering visual indication. Connect so that after an alarm is silenced, clearing of initiating condition will reactivate alarm until silencing switch is reset. Cabinet and faceplate are surface- or flush-mounting type to suit mounting conditions indicated.

    1. Overcrank alarm.
    2. Coolant low-temperature alarm.
    3. High engine temperature pre-alarm.
    4. High engine temperature alarm.

5. Low lube oil pressure alarm.
6. Overspeed alarm.
7. Low-fuel main tank alarm.
8. Low coolant level alarm.
9. Low-cranking voltage alarm.
10. Contacts for local and remote common alarm.
11. Audible-alarm silencing switch.
12. Air shutdown damper when used.
13. Run-Off-Auto switch.
14. Control switch not in automatic position alarm.
15. Fuel tank derangement alarm.
16. Fuel tank high-level shutdown of fuel supply alarm.
17. Lamp test.
18. Low-cranking voltage alarm.
19. Generator overcurrent-protective-device not-closed alarm.

H. Supporting Items: Include sensors, transducers, terminals, relays, and other devices and include wiring required to support specified items. Locate sensors and other supporting items on engine or generator unless otherwise indicated.

## 2.8 GENERATOR OVERCURRENT AND FAULT PROTECTION

A. Generator Disconnect Switch: Molded-case type; 100 percent rated.

1. Trip Rating: Matched to generator output rating.
2. Shunt Trip: Connected to trip switch when signaled by generator protector or by other protective devices.

B. Generator Protector: Microprocessor-based unit shall continuously monitor current level in each phase of generator output, integrate generator heating effect over time, and predict when thermal damage of alternator will occur. When signaled by generator protector or other engine generator protective devices, a shunt-trip device in the generator disconnect switch shall open the switch to disconnect the generator from load circuits. Protector performs the following functions:

1. Initiates a generator overload alarm when generator has operated at an overload equivalent to 110 percent of full-rated load for 60 seconds. Indication for this alarm is integrated with other engine generator malfunction alarms. Contacts shall be available for load shed functions.
2. Under single- or three-phase fault conditions, regulates generator to 300 percent of rated full-load current for up to 10 seconds.
3. As overcurrent heating effect on the generator approaches the thermal damage point of the unit, protector switches the excitation system off, opens the generator disconnect device, and shuts down the engine generator.
4. Senses clearing of a fault by other overcurrent devices and controls recovery of rated voltage to avoid overshoot.

C. Ground-Fault Indication: Comply with NFPA 70 Article 700, "Emergency System" signals for ground fault.

1. Indicate ground fault with other engine generator alarm indications.
2. Trip generator protective device on ground fault.

## 2.9 GENERATOR, EXCITER, AND VOLTAGE REGULATOR

A. Comply with NEMA MG 1.

B. Drive: Generator shaft shall be directly connected to engine shaft. Exciter shall be rotated integrally with generator rotor.

C. Electrical Insulation: Class H.

D. Stator-Winding Leads: Brought out to terminal box to permit future reconnection for other voltages if required.

E. Construction shall prevent mechanical, electrical, and thermal damage due to vibration, overspeed up to 125 percent of rating, and heat during operation at 110 percent of rated capacity.

F. Enclosure: Dripproof.

G. Instrument Transformers: Mounted within generator enclosure.

H. Voltage Regulator: Solid-state type, separate from exciter, providing performance as specified and as required by NFPA 110.

1. Adjusting Rheostat on Control and Monitoring Panel: Provide plus or minus 5 percent adjustment of output-voltage operating band.

I. Strip Heater: Thermostatically controlled unit arranged to maintain stator windings above dew point.

J. Windings: Two-thirds pitch stator winding and fully linked amortisseur winding.

K. Subtransient Reactance: 12 percent, maximum.

## 2.10 OUTDOOR WEATHERPROOF/SOUND ATTENUATED GENERATOR-SET ENCLOSURE

A. Description:

1. Construction: Galvanized-steel, metal-clad, integral structural-steel-framed building erected on concrete foundation. Sound attenuated for 75dBA maximum sound level measured on all four sides of enclosure, at 23 feet (7 meters) with generator running at full load.
2. Structural Design and Anchorage: Comply with ASCE 7 for wind loads.
3. Louvers: Equipped with bird screen and filter arranged to permit air circulation when engine is not running while excluding exterior dust, birds, and rodents.
4. Hinged Doors: With padlocking provisions.
5. Ventilation: Louvers equipped with bird screen and filter arranged to permit air circulation while excluding exterior dust, birds, and rodents.
6. Thermal Insulation: Manufacturer’s standard materials and thickness selected in coordination with space heater to maintain winter interior temperature within operating limits required by engine-generator-set components.
7. Muffler Location: Within enclosure.

B. Engine Cooling Airflow through Enclosure: Maintain temperature rise of system components within required limits when unit operates at 110 percent of rated located for 2 hours with ambient temperature at top of range specified in system service conditions.

1. Louvers: Fixed-engine, cooling-air inlet and discharge. Storm-proof and drainable louvers prevent entry of rain and snow.

C. Interior Lights with Switch: Factory-wired, vaporproof-type fixtures within housing; arranged to illuminate controls and accessible interior. Arrange for external electrical connection.

1. AC lighting system and connection point for operation when remote source is available.
2. DC lighting system for operation when remote source and generator are both unavailable.

D. Convenience Outlets: Factory wired, GFCI. Arrange for external electrical connection.

## 2.11 SOURCE QUALITY CONTROL

A. Prototype Testing: Factory test engine generator using same engine model, constructed of identical or equivalent components and equipped with identical or equivalent accessories.

1. Tests: Comply with NFPA 110, Level 1 Energy Converters and with IEEE 115.

# PART 3 - EXECUTION

## 3.1 INSTALLATION

A. Comply with packaged engine generator manufacturers' written installation and alignment instructions and with NFPA 110.

B. Equipment Mounting:

1. Install packaged engine generators on cast-in-place concrete equipment bases. Comply with requirements for equipment bases and foundations specified in Section 033000 "Cast-in-Place Concrete."
2. Coordinate size and location of concrete bases for packaged engine generators. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified with concrete.

C. Install packaged engine generator to provide access, without removing connections or accessories, for periodic maintenance.

D. Cooling System: Install Schedule 40 black steel piping with welded joints for cooling water piping between engine generator and heat exchanger.

1. Install isolating thimbles where exhaust piping penetrates combustible surfaces. Provide a minimum of 9 inches (225 mm) of clearance from combustibles.
2. Insulate cooling-system piping and components according to requirements in Section 230700 "HVAC Insulation."

E. Drain Piping: Install condensate drain piping to muffler drain outlet with a shutoff valve, stainless-steel flexible connector, and Schedule 40 black steel pipe with welded joints.

F. Electrical Wiring: Install electrical devices furnished by equipment manufacturers but not specified to be factory mounted.

G. Provide full tank for owner after all testing is completed.

## 3.2 CONNECTIONS

A. Piping installation requirements are specified in other Sections. Drawings indicate general arrangement of piping and specialties.

B. Connect fuel, cooling-system, and exhaust-system piping adjacent to packaged engine generator to allow service and maintenance.

C. Connect cooling-system water piping to engine generator and remote radiator with flexible connectors.

D. Connect engine exhaust pipe to engine with flexible connector.

E. Ground equipment according to Section 260526 "Grounding and Bonding for Electrical Systems."

F. Connect wiring according to Section 260519 "Low-Voltage Electrical Power Conductors and Cables." Provide a minimum of one 90-degree bend in flexible conduit routed to the engine generator from a stationary element.

G. Balance single-phase loads to obtain a maximum of 10 percent unbalance between any two phases.

## 3.3 IDENTIFICATION

A. Identify system components according to Section 230553 "Identification for HVAC Piping and Equipment" and Section 260553 "Identification for Electrical Systems."

B. Install a sign indicating the generator neutral is bonded to the main service neutral at the main service location.

## 3.4 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.

B. Testing Agency: Engage a qualified testing agency to perform tests and inspections.

C. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.

D. Perform tests and inspections with the assistance of a factory-authorized service representative.

E. Tests and Inspections:

1. Perform tests recommended by manufacturer and each visual and mechanical inspection and electrical and mechanical test listed in first two subparagraphs below, as specified in NETA ATS. Certify compliance with test parameters.

a. Visual and Mechanical Inspection:

1) Compare equipment nameplate data with Drawings and the Specifications.
2) Inspect physical and mechanical condition.
3) Inspect anchorage, alignment, and grounding.
4) Verify that the unit is clean.

b. Electrical and Mechanical Tests:

1) Perform insulation-resistance tests according to IEEE 43.

a) Machines Larger Than 200 hp (150 kW): Test duration shall be 10 minutes. Calculate polarization index.
b) Machines 200 hp (150 kW) or Less: Test duration shall be one minute. Calculate the dielectric-absorption ratio.

2) Test protective relay devices.
3) Verify phase rotation, phasing, and synchronized operation as required by the application.
4) Functionally test engine shutdown for low oil pressure, overtemperature, overspeed, and other protection features as applicable.
5) Perform vibration test for each main bearing cap.
6) Conduct performance test according to NFPA 110.
7) Verify correct functioning of the governor and regulator.

2. NFPA 110 Acceptance Tests: Perform tests required by NFPA 110 that are additional to those specified here including, but not limited to, single-step full-load pickup test.
3. Battery-Charger Tests: Verify specified rates of charge for both equalizing and float-charging conditions.
4. System Integrity Tests: Methodically verify proper installation, connection, and integrity of each element of engine generator system before and during system operation. Check for air, exhaust, and fluid leaks.
5. Exhaust Emissions Test: Comply with applicable government test criteria.
6. Voltage and Frequency Transient Stability Tests: Use recording oscilloscope to measure voltage and frequency transients for 50 and 100 percent step-load increases and decreases, and verify that performance is as specified.
7. Harmonic-Content Tests: Measure harmonic content of output voltage at 25 and 100 percent of rated linear load. Verify that harmonic content is within specified limits.
8. Noise Level Tests: Measure A-weighted level of noise emanating from engine generator installation, including engine exhaust and cooling-air intake and discharge, at four locations 23 feet (7 m) from edge of the generator enclosure, and compare measured levels with required values.

F. Coordinate tests with tests for transfer switches and run them concurrently.

G. Test instruments shall have been calibrated within the past 12 months, traceable to NIST Calibration Services, and adequate for making positive observation of test results. Make calibration records available for examination on request.

H. Leak Test: After installation, charge exhaust, coolant, and fuel systems and test for leaks. Repair leaks and retest until no leaks exist.

I. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation for generator and associated equipment.

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J. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

K. Remove and replace malfunctioning units and retest/reinspect as specified above.

L. Retest: Correct deficiencies identified by tests and observations, and retest until specified requirements are met.

M. Report results of tests and inspections in writing. Record adjustable relay settings and measured insulation resistances, time delays, and other values and observations. Attach a label or tag to each tested component indicating satisfactory completion of tests.

## 3.5 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain packaged engine generators.

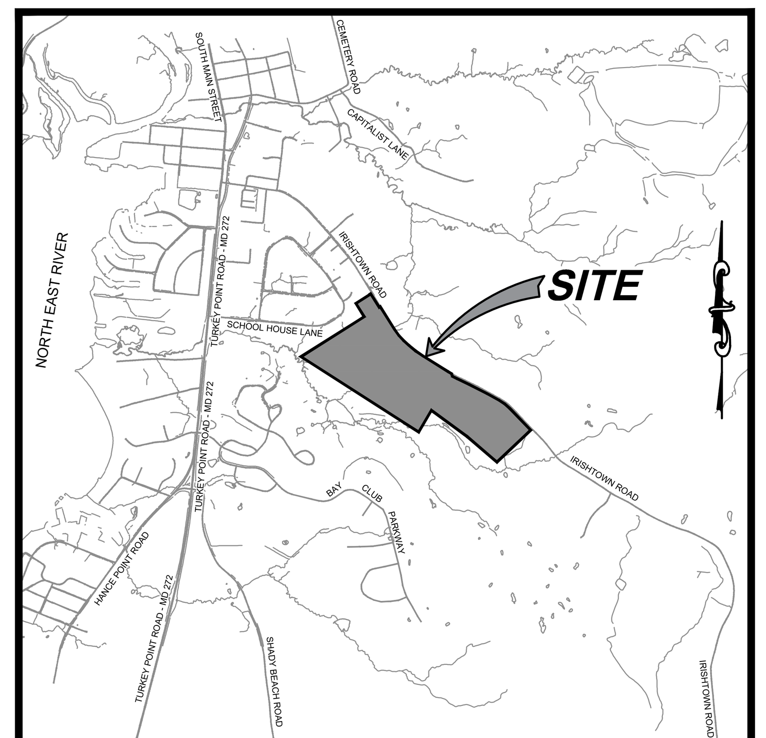
**END OF SECTION 26 32 13.16**

BEFORE YOU DIG CALL
1-800-257-7777 OR DIAL 811

MISS UTILITY — CALL BEFORE YOU DIG

# CIVIL CONSTRUCTION PLANS
FOR
# *NORTH EAST MIDDLE AND HIGH SCHOOLS*
300 IRISHTOWN ROAD, FIFTH ELECTION DISTRICT,
CECIL COUNTY, MARYLAND

## VICINITY MAP




| | |
|---|---|
| VICINITY MAP | SCALE: 1" = 2000' |
| ADC MAP 11, GRID G-13 | TAX MAP 31, GRID 17 |
| | PARCEL 857 |

5 ADD

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Applicant: Grimm + Parker Architects
11720 Beltsville Drive,
Calverton, MD 20705

Primary Contact: Paul Bradshaw, ALEP
(301) 595-1000
pbradshaw@gparch.com

Landowner: Board of Education of Cecil County MD
201 Booth Street,
Elkton, MD 21921

Contact: Charles Simpers, Director of Facilities
(410) 996-5034
ccsimpers@ccps.org

Engineer: McCrone
Daniel Speakman, P.E.
107 Chesapeake Blvd., Suite 104
Upper Chesapeake Corporate Center
Elkton, MD 21921
(410) 398-1550


STATE OF MARYLAND — DANIEL S. SPEAKMAN — NO. 31400 — PROFESSIONAL ENGINEER
2/16/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 31400, Expiration Date: 1-16-2025.*

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| | | |


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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | AS NOTED |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 2683B |

OVERALL CIVIL CONSTRUCTION COVER SHEET
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13
*NORTH EAST MIDDLE AND HIGH SCHOOLS*
FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: O-1


11720 Beltsville Drive
Suite 600
Calverton, MD 20705
Tel: 301.595.1000
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GP #22105

OVERALL CIVIL CONSTRUCTION COVER SHEET
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |
| | |

**O-1**
12/22/2023
BID SET

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February 22, 2024 - 5:03pm User: awhallon Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - COVER SHEET.dwg.........Tab:O-1

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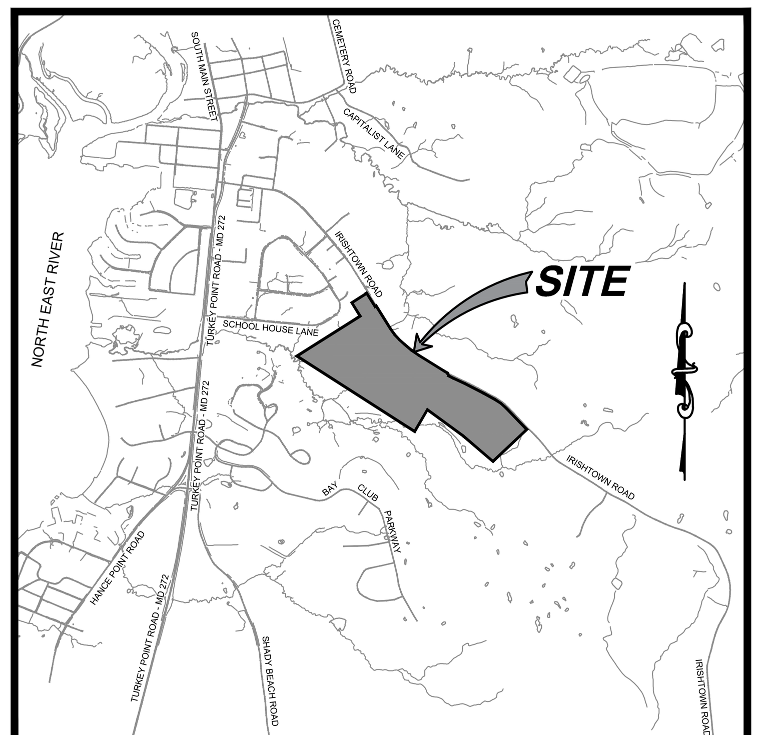
# MAJOR SITE PLAN
FOR
# *NORTH EAST MIDDLE AND HIGH SCHOOLS*
300 IRISHTOWN ROAD, FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND

## GENERAL NOTES

1. The contractor shall coordinate all construction phases with the utility companies involved.
2. The contractor shall notify the following two weeks prior to the start of construction and shall coordinate all construction phases with the utility companies involved.
   - Delmarva Power 410-287-7140
   - Verizon 410-539-9900
   - Miss Utility 800-257-7777
   - MD Dept. of the Environment Sediment Control 410-901-4020
   - Cecil Co. Dept. of Public Works 410-996-5267
3. Contact the MDE Sediment Control Inspector (410-901-4020) and the Cecil County Department of Public Works Construction inspector staff at (410-996-5267) to conduct a pre-construction meeting onsite at least 2 weeks prior to the commencement of any construction activities. Failure to conduct the required pre-construction meeting with Department of Public Works Inspector present may expose the Owner/Developer and/or Contractor to additional work and/or fines or penalties.
4. All construction shall be marked for pedestrian and vehicular traffic.
5. The contractor shall grade all streets within the limits of construction and shall warp paving as necessary to ensure positive drainage in the direction indicated by the arrows shown.
6. The contractor shall adjust all existing utility boxes, manholes, etc., which are to remain, to conform to final grade.
7. All joints abutting existing paving shall be saw cut and asphalt sealant applied.
8. All disturbed areas shall be stabilized in accordance with recommendations shown on the approved erosion and sediment control plan.
9. All materials and methods of construction shall be in strict conformance with the Cecil County Road Code and Standard Specifications and Detail, Cecil County Standard Specifications and Details for Water Mains & Sewer Mains, the Maryland State Highway Administration Book of Standards for Highway & Incidental Structures. Where these specification conflict, the most robust specification shall be followed.
10. These drawings show information obtained from the best available records regarding pipes, conduits, telephone and electric lines, etc., and other structures and conditions which exist along the lines of the work, both at and below the surface of the ground. The owner and Engineer disclaim any responsibility for the accuracy or completeness of said information being shown only for the convenience of the contractor, who must verify the information given to his own satisfaction. If the contractor relies on said information, he does so at his own risk. The giving of this information on the contract drawings will not relieve the contractor of his obligations to support and protect all pipes, conduits, telephone and electric lines and other structures.
11. Contractor to verify location and elevation of all existing utilities and roads prior to the start of any construction. Any discrepancies shall be brought to the attention of the Engineer with proposed modifications needed. Corrections of all discrepancies shall be the responsibility of the contractor.
12. It shall be the contractor's responsibility to protect all installed piping until completion of the project. Pipes with shallow cover are to be protected from damage by construction machinery with adequate temporary cover.
13. The contractor shall take all the necessary precautions to protect all existing utilities. Repair to damaged utilities shall be at the contractor's expense.
14. All borrow excavation shall be a soil or soil aggregate mixture and shall conform to section 916, Maryland State Highway Administration, Standard Specifications for Construction Materials, latest edition.
    14.1. Disposal of fill, including but not limited to earthen soils, rock, rubble, construction debris, woody debris, and trash, shall not be permitted in special flood hazard areas.
15. See Standard No. MD 578.01 "Repairing Pavement Openings for Utility Trenches" of the MDSHA's Standards for Highways and Incidental Structures. The width of the trench shall be in accordance with section 303 of MDSHA's "Standard Specifications for Construction and Materials" July 2008.
16. The contractor shall be responsible for all existing roadway repair including patching.
17. This drawing does not include the necessary components for construction safety. All construction must be done in compliance with the Occupational Safety and Health Act of 1970 and all rules and regulations thereto appurtenant and the Maryland Occupational Safety and Health Administration Standards.
18. Ready-mixed concrete shall be in conformance with "Standard Specifications for Ready-Mixed Concrete", ASTM designation C94 and ACI 614. Portland cement shall conform to ASTM C150 for Type II. All concrete pavement, exterior pads, and sidewalks on this project shall have a minimum compressive strength of 4000 PSI at 28 days.
19. Where excavation is required near existing utility poles, the poles shall be braced and/or relocated. The cost shall be included in the bid.
20. See the latest edition of the "Cecil County Standard Specifications and Details for Water Mains and Sewer Mains" for the list of approved manufacturers.
21. All construction materials and methods to be in accordance with the Cecil County Standard Details and Specifications and as shown on these contract documents.
22. The existence and location of underground utilities or structures are shown in an approximate way only. The contractor shall determine the exact location of all existing utilities and structures before commencing the work.
23. The contractor shall coordinate his work schedule with the owner. The owner shall have final authority on the contractor's work schedule.
24. McCrone and the owner are not responsible for the contractor's utilization of workers, materials, equipment or safety measures in performance of any work on this project. The contractor assumes all responsibility and liability for performing the work correctly and in conformance with all applicable codes and regulations.
25. Should the contractor discover discrepancies between the plans and the actual field conditions encountered, the owner and the engineer shall be notified immediately to arrive at an acceptable resolution.
26. The contractor shall restore all damage to roads, grass areas, sidewalk, paving, curb & gutter and gravel areas upon completion of work at no additional cost to owner and to the satisfaction of the owner.
27. The contractor shall be responsible for avoiding and/or cleaning up dust and mud on all roads due to vehicles arriving and leaving the job site as part of this work.
28. It shall be distinctly understood that failure to mention specifically any work which would normally be required to complete the project shall not relieve the contractor of his responsibility to complete such work.
29. All plugs, caps, tees, and bends, shall be provided with concrete buttresses unless noted otherwise.
30. Water and sewer mains cannot be placed closer than ten feet horizontally as measured edge to edge. Water mains crossing sewer mains shall be laid to provide a minimum vertical distance of eighteen (18) inches between the outside of the water main and the outside of the sewer.
31. When a water main is in close proximity or crosses a sewer main, the water lines shall be placed higher than the sewer lines. If the water line cannot be installed above sewer line, then either the sewer or non-potable line shall be encased in concrete a minimum of ten (10) feet on each side of the main to protect the water supply from possible contamination.
32. All material shall be installed per manufacturer's recommendations.

## VICINITY MAP




| | |
|---|---|
| VICINITY MAP | SCALE: 1" = 2000' |
| ADC MAP 11, GRID G-13 | TAX MAP 31, GRID 17 |
| | PARCEL 857 |

BEFORE YOU DIG CALL
1-800-257-7777 OR DIAL 811

## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| CONTOUR | 45 | 45 |
| SPOT ELEVATION | ×45.5 | 45x5 |
| FLOW ARROW | | |
| BUILDING | | |
| CURB | | |
| WATER | W | W |
| WATER VALVE | | |
| FIRE HYDRANT | | |
| ROOF DRAIN | | RD |
| STORM DRAIN CULVERT | SD | SD |
| UNDERDRAIN | | UD |
| TRENCH DRAIN | | TD |
| STORM DRAIN INLET | | |
| SOIL BOUNDARY | Up VnaB | |
| SANITARY SEWER | SS | SS |
| SANITARY SEWER SERVICE | | SSS |
| SANITARY SEWER CLEANOUT | C/O | C/O |
| SANITARY SEWER MANHOLE | S | S |
| GAS | G | G |
| FIBER OPTIC | F/O | F/O |
| ELEC., TELE., CABLE | OHE | ETC |
| PAVEMENT (HEAVY DUTY) | | |
| PAVEMENT (LIGHT DUTY) | | |
| CONCRETE SIDEWALK | | |
| GRAVEL | | |
| EDGE OF PAVE | | |
| FENCELINE | X | X |
| TREELINE | | |
| TREE | | |
| SIGN | | |
| UTILITY POLE W/ GUY WIRE | | |
| LIMIT OF DISTURBANCE | | LOD |
| SOIL BORING | | |
| SLOPES 15% - 25% | | |
| SLOPES > 25% | | |
| PROPERTY LINE | | |
| BUILDING RESTRICTION LINE | | |

## *SHEET INDEX*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C-2 EXISTING CONDITIONS PLAN (WEST)
C-3 EXISTING CONDITIONS PLAN (EAST)
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C-6 MAJOR SITE PLAN (EAST)
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C-24 SUPPLEMENTAL PLAN VIEWS
C-25 SIGNAGE PLAN (WEST)
~~C-26 SIGNAGE PLAN (EAST)~~
C-27 ENTRANCE IMPROVEMENTS - BID DELINEATION


5 ADD

NOTE: THIS SITE DOES NOT LIE WITHIN THE CHESAPEAKE BAY CRITICAL AREA.

FLOOD CERTIFICATION
THE PROPERTY SHOWN HEREON APPEARS TO BE LOCATED IN ZONE 'X' (AREA OF MINIMAL FLOOD HAZARD), AS SHOWN ON F.I.R.M. COMMUNITY PANEL NO. 24015C0160E DATED MAY 4, 2015.

## *SOILS LEGEND*

| TYPE | SOIL NAME & DESCRIPTION | | HYDROLOGIC GROUP | K FACTOR | HES CRITERIA |
|---|---|---|---|---|---|
| BeB | Beltsville silt loam, 2 to 5 percent slopes | Partially Hydric | C | 0.37 | Yes - K Factor |
| BeC | Beltsville silt loam, 5 to 10 percent slopes | Partially Hydric | C | 0.37 | Yes - K Factor |
| CbD | Chillum silt loam, 10 to 15 percent slopes | Not Hydric | C | - | |
| CfB | Christiana-Sassafras-Urban land complex, 0 to 5 percent slopes | Not Hydric | D | 0.49 | Yes - K Factor |
| CsB | Crosiadore silt loam, 2 to 5 percent slopes | Partially Hydric | C/D | 0.49 | Yes - K Factor |
| HkB | Hambrook-Urban land complex, 0 to 5 percent slopes | Not Hydric | - | - | |
| McA | Marshyhope loam, 0 to 2 percent slopes | Partially Hydric | B/D | 0.37 | Yes - K Factor |
| RmC | Russett-Christiana-Hambrook complex, 5 to 10 percent slopes | Not Hydric | C | 0.28 | |
| RmD | Russett-Christiana-Hambrook complex, 10 to 15 percent slopes | Not Hydric | C | 0.28 | |
| SaD | Sassafras sandy loam, 10 to 15 percent slopes | Partially Hydric | B | 0.37 | Yes - K Factor |
| SaE | Sassafras sandy loam, 15 to 25 percent slopes | Partially Hydric | B | 0.37 | Yes - K Factor |
| VbB | Urban land-Butlertown complex, 0 to 5 percent slopes | Not Hydric | D | - | |
| SOURCE: Latest available data from the USDA Digital Soil Survey | | | | | |

February 22, 2024 - 4:55pm User: awhallon Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ENG.dwg.........Tab:C-1

Applicant: Grimm + Parker Architects
11720 Beltsville Drive,
Calverton, MD 20705

Primary Contact: Paul Bradshaw, ALEP
(301) 595-1000
pbradshaw@gparch.com

Landowner: Board of Education of Cecil County MD
201 Booth Street,
Elkton, MD 21921

Contact: Charles Simpers, Director of Facilities
(410) 996-5034
ccsimpers@ccps.org

Engineer: McCrone
Daniel Speakman, P.E.
107 Chesapeake Blvd., Suite 104
Upper Chesapeake Corporate Center
Elkton, MD 21921
(410) 398-1550

*Approved* *Date*

*Cecil County Department of Land Use and Development Services - Zoning Administrator*

Owner's/Developer's Certification:

I/we hereby certify that all clearing, grading, construction and/or development will be done pursuant to this plan and that any responsible personnel involved in the construction project will have a certification of training at a Maryland Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I hereby authorize the right of entry for periodic on-site evaluation by the Cecil Soil Conservation District or their representatives and the State of Maryland, Department of the Environment, Compliance Inspectors.

I hereby certify that development and/or construction will be done according to this plan of development and plan of erosion and sediment control.

Owner/Developer Signature Date

Printed Name and Title

Engineer's Certification:

I hereby certify that all sediment and erosion control and stormwater management measures shown on this plan have been designed in accordance with both the "2011 MD Standards and Specifications for Soil Erosion and Sediment Control" and the "Cecil County Department of Public Works 2010 Stormwater Management Ordinance" or current revisions thereof.

Signature Date
Daniel Speakman PE 31400
Printed Name MD Registration No.
P.E., R.L.S., or R.L.A. (circle one)

STATE OF MARYLAND DANIEL S. SPEAKMAN NO. 31400 PROFESSIONAL ENGINEER

2/16/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed* Professional Engineer *under the laws of the State of Maryland, License No.* 31400 *, Expiration Date:* 1-16-2025 .

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| | | |

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| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | N/A |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 2683B |

COVER SHEET

300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

*NORTH EAST MIDDLE AND HIGH SCHOOLS*

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: C-1

11720 Beltsville Drive
Suite 600
Calverton, MD 20705
Tel: 301.595.1000
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GP #22105

COVER SHEET

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
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| 4/2/2024 | Addendum 5 |
| | |

**C-1**

12/22/2023
BID SET

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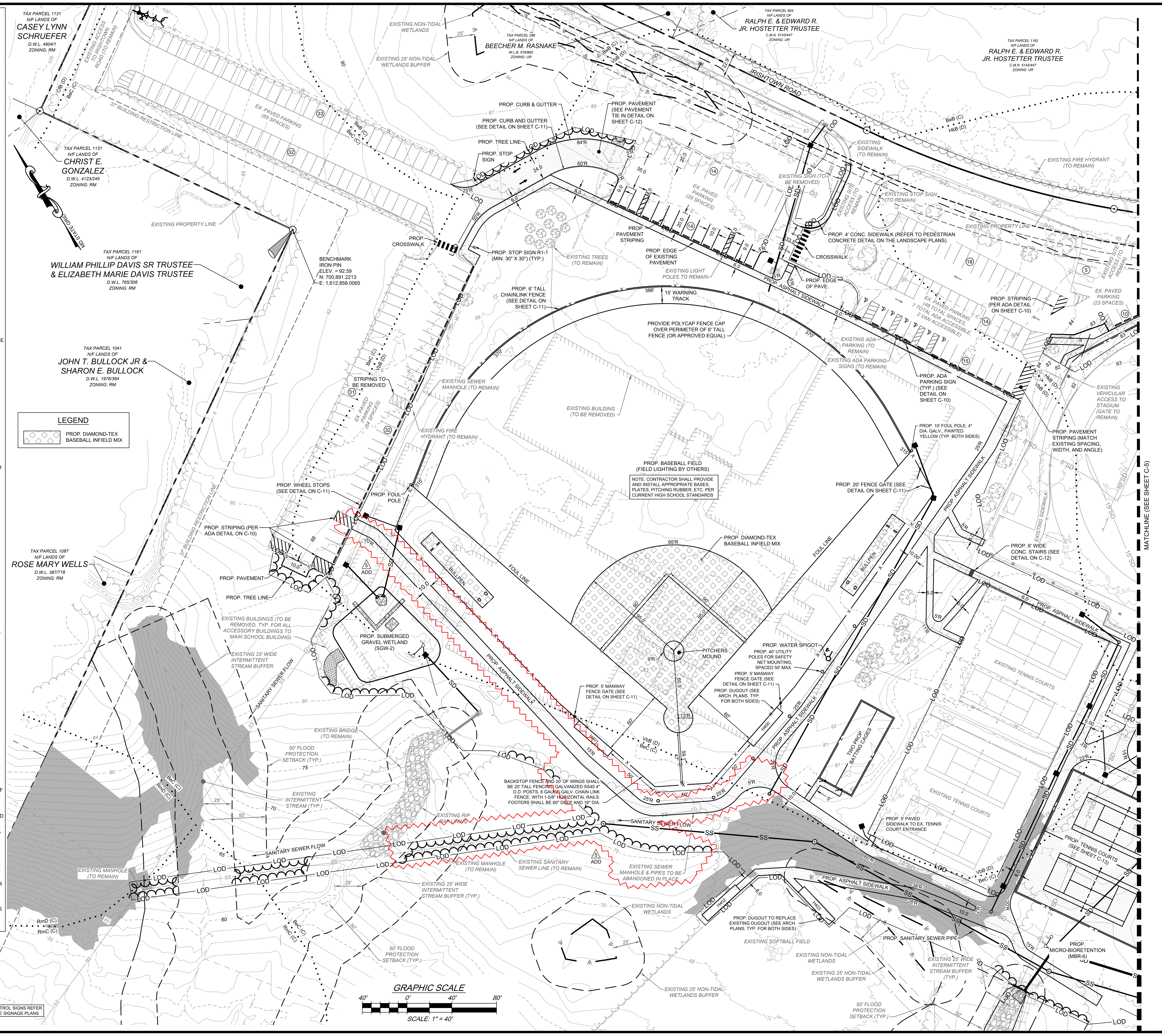
## SITE PLAN NOTES

1. T.M. 31, GRID 17 P. 857 74.0 AC (3,223,440 S.F.)
2. SITE ADDRESS: 300 IRISHTOWN ROAD, NORTH EAST, MD 21901
3. PLAT REFERENCE 1121/87
4. DEED REFERENCE: W.A.S. 218/135
5. ZONING (SITE): RM (HIGH DENSITY RESIDENTIAL DISTRICT)
6. ZONING (ADJOINERS): RM (HIGH DENSITY RESIDENTIAL DISTRICT), OS (OPEN SPACE DISTRICT), NAR (NORTHERN AGRICULTURAL DISTRICT), UR (URBANIZED RESIDENTIAL DISTRICT), AND SPLIT ZONING TO THE SOUTH (CHESAPEAKE CLUB).
7. EXISTING USE: PUBLIC HIGH SCHOOL (PERMITTED USE 4.00.000)
8. PROPOSED USE: PUBLIC MIDDLE AND HIGH SCHOOLS (PERMITTED USE 4.00.000)
9. DEED RESTRICTIONS, REGULATORY APPROVALS, VARIANCES AND DESIGN WAIVERS:
   - DEED RESTRICTIONS FOR THE FOREST RETENTION AREA.
   - A WAIVER REQUEST TO WAIVE THE 20 ACRE GRADING UNIT REQUIREMENT.
   - A VARIANCE FOR DISTURBANCE IN THE 50' FLOOD PROTECTION SETBACK.
10. SETBACKS: 20' FRONT
    10' SIDE* (INCREASED BY 27' PER SECTION 168, SIDE = 37')
    20' REAR* (INCREASED BY 27' PER SECTION 168, REAR = 47')
    * UNLESS OTHERWISE SHOWN
11. MAXIMUM BUILDING HEIGHT = 35 FT IN RM ZONE
    MAXIMUM BUILDING HEIGHT = 75 FT, PER SECTION 168 (5):* OF THE CECIL COUNTY ZONING ORDINANCE:
    *"When permitted in a zone, public or semi public service buildings, hospitals, institutions, or schools may be erected to a height not exceeding 75 feet when the required side and rear yards are each increased by at least one (1) foot for each one (1) foot of additional building height above the height regulations for the zone for which the building is located."*
    "BUILDING HEIGHT (62')" MINUS "MAX. BUILDING HEIGHT (35')" = 27'
12. PROP. MAX BUILDING HEIGHT = 47'-4"
    1. SCHOOL = 61' - 4" TO TOP OF H.S. PENTHOUSE
       47' - 4" TO PARAPET
    2. CONCESSION BUILDING = 14'
    3. PUMP HOUSE BUILDING 1 = 14'
    4. PUMP HOUSE BUILDING 2 = 14'
    5. EXISTING RESTROOM BUILDING = APPROX. 12'
    6. TICKET BOOTH = 14'
13. PROPOSED BUILDING SQUARE FOOTAGE
    1. SCHOOL = 299,500 S.F.
    2. CONCESSION BUILDING = 2,800 S.F.
    3. PUMP HOUSE BUILDING 1 = 850 S.F.
    4. PUMP HOUSE BUILDING 2 = 1,050 S.F.
    5. EXISTING RESTROOM BUILDING = 3,900 S.F.
    6. TICKET BOOTH = 140 S.F.
14. EXISTING IMPERVIOUS LOT COVERAGE = 8.28 AC. (360,742 S.F.) = 11.19%
    PROPOSED IMPERVIOUS LOT COVERAGE = 13.62 AC. (593,175 S.F.) = 18.40 %
    OVERALL TOTAL IMPERVIOUS LOT COVERAGE = 18.32 AC. (798,226 S.F.) = 24.76 %
    DISTURBED AREA = APPROXIMATELY 39.87 AC. (1,736,740 S.F.)
15. WASTE/BYPRODUCTS GENERATED WILL CONSIST OF ORDINARY DEBRIS AND TRASH (PAPER, CAFETERIA WASTE, CARDBOARD BOXES, OFFICE RELATED DEBRIS, ETC.) WHICH WILL BE REMOVED BY PRIVATE HAULER TO LANDFILL. KITCHEN GREASE WILL BE PROCESSED THROUGH A OIL/GRIT SEPARATOR BEFORE ENTERING THE SANITARY SEWER. THE CONCESSION BUILDING WILL NOT BE OUTFITTED WITH A KITCHEN REQUIRING A GREASE TRAP.
16. NUMBER OF STAFF: 205 TOTAL (120 FOR HIGH SCHOOL, 85 FOR MIDDLE SCHOOL
    STATE APPROVED CAPACITY OF STUDENTS:
    1138 HIGH SCHOOL STUDENTS
    891 MIDDLE SCHOOL STUDENTS
    TOTAL NUMBER OF STAFF & STUDENTS = 2,234
17. PARKING REQUIRED (PER SECTION 277 TABLE OF PARKING AND LOADING REQUIREMENTS)
    MIDDLE SCHOOLS: 1 SPACE PER 20 CLASSROOM SEATS --> 891 SEATS --> 45 SPACES
    HIGH SCHOOLS: 1 SPACE PER 10 CLASSROOM SEATS --> 1,138 SEATS --> 114 SPACES
    OR (SINCE AUDITORIUM WILL NOT BE USED CONCURRENTLY WITH SCHOOL OPERATION)
    AUDITORIUM: 1 SPACE PER 3 SEATS --> 1,000 SEATS -->334 SPACES
    TOTAL REQUIRED: 334 SPACES
    TOTAL REQUIRED BY EDUCATIONAL SPECIFICATION: 205 SPACES
18. PARKING PROVIDED = 628 SPACES TOTAL, INCLUDING 20 ADA (11 VAN ACCESSIBLE).
    ADA REQUIRES 13 ACCESSIBLE SPACES (2 VAN ACCESSIBLE SPACES) (PER SECTION 279 TABLE 279.1 OF ADA PARKING REQUIREMENTS).
    - EXISTING SIDE OF SITE AROUND BASEBALL FIELD = 227
    - EAST OF NEW BUILDING (STUDENT LOT) = 165
    - WEST OF NEW BUILDING (STUDENTS & STAFF) = 236
    - BUS SPACES = 34
19. BUFFERYARD NOTES:
    -- NORTH (IRISHTOWN ROAD) PER ZONING CODE IN RM ZONE, NO BUFFERYARD IS REQUIRED (NOT A SUBDIVISION) A LANDSCAPING SCREEN WILL BE PROVIDED, SEE LANDSCAPE ARCHITECTURE PLANS.
    -- EAST / WEST / SOUTH = NOT REQUIRED, SAME ZONING
20. WATER SERVICE BY TOWN OF NORTH EAST
    ESTIMATED AVG. FLOW = 4,570 GPD (ESTIMATED BASED ON HISTORICAL DATA FROM EXISTING MIDDLE AND HIGH SCHOOLS)
    PROPOSED WATER WILL CONNECT TO OFFSITE, TOWN OWNED WATER LINE UNDER IRISHTOWN ROAD.
21. SEWER SERVICE BY CECIL COUNTY
    ESTIMATED AVG. FLOW = 4,570 GPD (ESTIMATED BASED ON HISTORICAL DATA FROM EXISTING MIDDLE AND HIGH SCHOOLS)
    PROPOSED SEWER WILL CONNECT TO EXISTING ONSITE SEWER LINE.
22. THIS PROJECT IS NOT WITHIN THE CHESAPEAKE BAY CRITICAL AREA
23. THE PROPERTY SHOWN HEREON APPEARS TO BE LOCATED INSIDE ZONE "X" (AREAS DETERMINED TO BE OUTSIDE 0.2% ANNUAL CHANCE FLOODPLAIN) AS SHOWN ON F.I.R.M. COMMUNITY PANEL NO. 24015C0160E, DATED MAY 4, 2015.
24. SITE LIGHTING IS PROVIDED BY BUILDING MOUNTED SECURITY LIGHTS, PARKING LOT POLES, WALLPACKS ABOVE DOORWAYS, WALKWAY LIGHTING, AND STADIUM LIGHTING.
25. SOIL BOUNDARIES WERE TAKEN FROM THE WEB SOIL SURVEY.
26. THE ON-SITE STORM DRAINAGE AND STORMWATER MANAGEMENT SYSTEM WILL BE PRIVATELY OWNED AND MAINTAINED
27. ALL SITE ACCESS TO CONFORM TO THE "AMERICANS WITH DISABILITIES STANDARDS FOR ACCESSIBLE DESIGN (ADA STANDARDS)" ENACTED IN 2010 AND THE "MARYLAND ACCESSIBILITY CODE" (COMAR.05.02.02) REVISED IN 2012.
28. REGULATORY APPROVALS REQUIRED:
    - CECIL COUNTY DEPARTMENT OF LAND USE AND DEVELOPMENT SERVICES - DEVELOPMENT PLANS REVIEW DIVISION
    - CECIL SOIL CONSERVATION DISTRICT
    - CECIL COUNTY DEPARTMENT OF LAND USE AND DEVELOPMENT SERVICES - PLANNING & ZONING DIVISION
    - CECIL COUNTY DEPARTMENT OF LAND USE AND DEVELOPMENT SERVICES - DIVISION OF WATER AND SEWER PLANNING
    - TOWN OF NORTH EAST FOR WATER SERVICE
    - MARYLAND DEPARTMENT OF THE ENVIRONMENT
29. ALL DRIVE AISLES AND PARKING SPACES SHALL BE PAVED.
30. SCHOOL BUSES SHALL BE STORED OFFSITE.
31. CURB ALONG FIRE LANES SHALL BE PAINTED YELLOW.
32. THE EXISTING HIGH SCHOOL BUILDINGS WILL BE DEMOLISHED.
33. A FOREST CONSERVATION PLAN FOR THIS PROJECT IS ON FILE WITH THE DIVISION OF PLANNING AND ZONING OF THE CECIL COUNTY DEPARTMENT OF LAND USE AND DEVELOPMENT SERVICES IN FILE FCP # 852. FOREST CONSERVATION WILL BE PROVIDED BY ONSITE RETENTION. AREA TO BE RETAINED = 21.3 AC. APPROX. 25 AC. OF WOODS WILL BE CLEARED FOR CONSTRUCTION.
34. NO OUTDOOR STORAGE IS INTENDED OR PROVIDED. THE SITE UTILIZES SHEDS & ACCESSORY BUILDINGS FOR STORAGE.
35. TWO EXISTING STORMWATER FACILITIES APPROVED IN THE 2017 AS-BUILT PLANS TITLED "FINAL ENVIRONMENTAL SITE DESIGN AND STORMWATER RETROFIT FACILITIES PLAN NORTH EAST HIGH SCHOOL CECIL COUNTY DEPARTMENT OF PUBLIC WORKS CECIL COUNTY, MARYLAND" WILL BE REVISED. THE EXISTING MICRO BIORETENTION FACILITY WILL BE REMOVED DUE TO REMOVAL OF CONTRIBUTING DRAINAGE AREA; THE EXISTING SUBMERGED GRAVEL WETLAND WILL BE REHABILITATED & EXPANDED TO COMPENSATE FOR REMOVED ENVIRONMENTAL SITE DESIGN VOLUME. SEE THE STORMWATER MANAGEMENT REPORT OF THIS PROJECT FOR STORMWATER VOLUME ACCOUNTING.
36. 30' RIGHT OF WAY DEDICATION TO CECIL COUNTY WILL BE PROVIDED PROVIDED ALONG IRISHTOWN ROAD.
37. TOWN OF NORTH EAST WILL REQUIRE A UTILITY EASEMENT AROUND PROPOSED WATER MAINS
38. THE PROJECT WILL BE PHASED. PHASE 1 INCLUDES CONSTRUCTION OF THE NEW MIDDLE SCHOOL BUILDING AND ATHLETIC FIELDS. PHASE 2 INCLUDES CONSTRUCTION OF THE NEW HIGH SCHOOL BUILDING AND CONCESSION BUILDING. PHASE 3 INCLUDES DEMOLITION OF THE EXISTING SCHOOL BUILDINGS AND CONSTRUCTION OF THE BASEBALL FIELD.
39. CONTIGUOUS OFFSITE FORESTED ACREAGE: 650.57 ± A.C.

February 16, 2024 - 3:07pm User: awhallon Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ENG.dwg........Tab:C-4

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2/16/2024
DATE

## REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | SIDEWALK WIDTH INCREASED FROM 6' TO 10' |

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MAJOR SITE PLAN (WEST)

300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: C-4

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MAJOR SITE PLAN (WEST)

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
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| 4/2/2024 | Addendum 5 |

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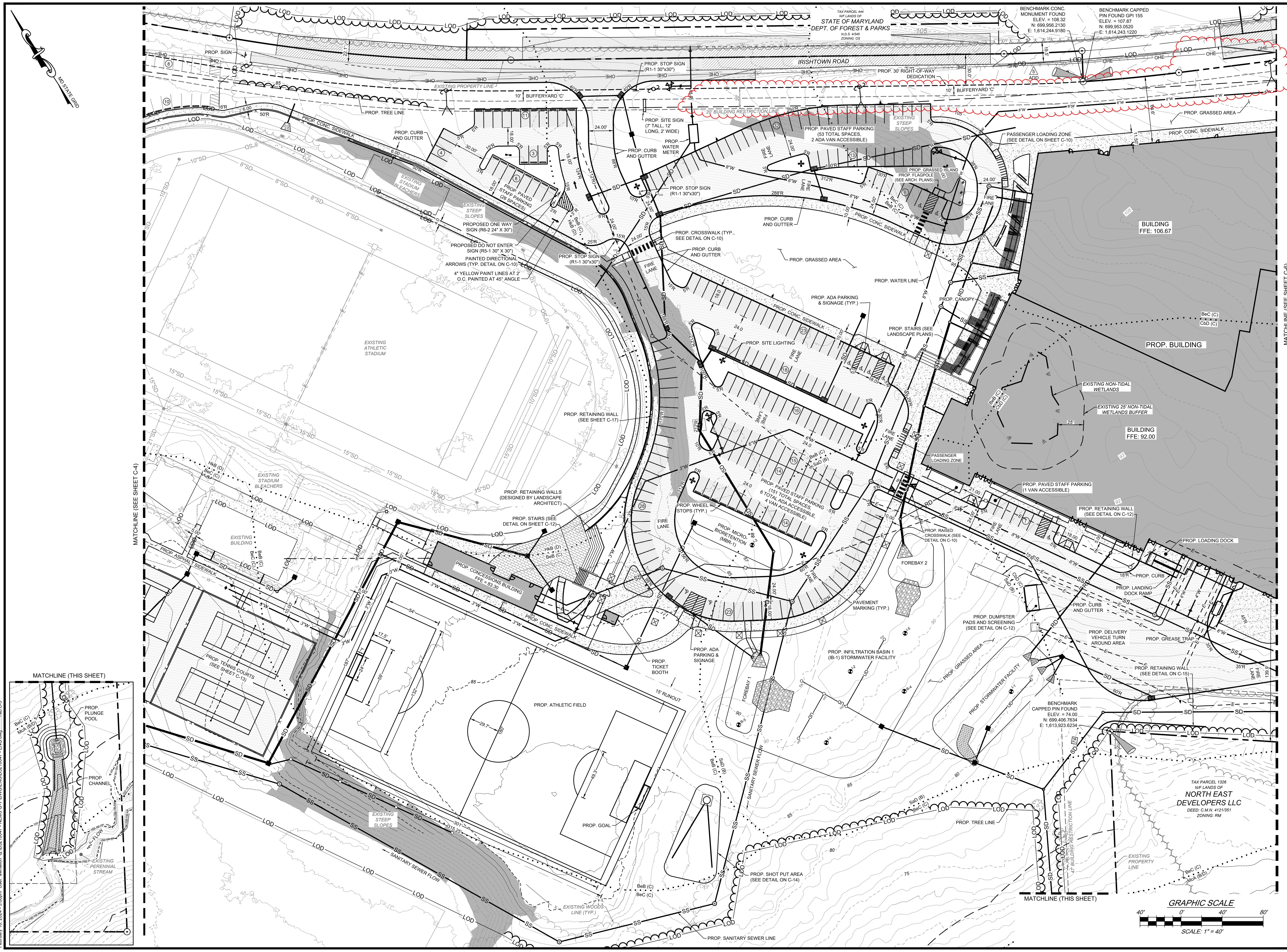


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STATE OF MARYLAND — DANIEL S. SPEAKMAN — NO. 31400 — PROFESSIONAL ENGINEER

2/16/2024
DATE

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## REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | TREE LINE REVISED |

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MAJOR SITE PLAN (CENTER)

300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: C-5

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MAJOR SITE PLAN (CENTER)

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
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| 4/2/2024 | Addendum 5 |
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**C-5**

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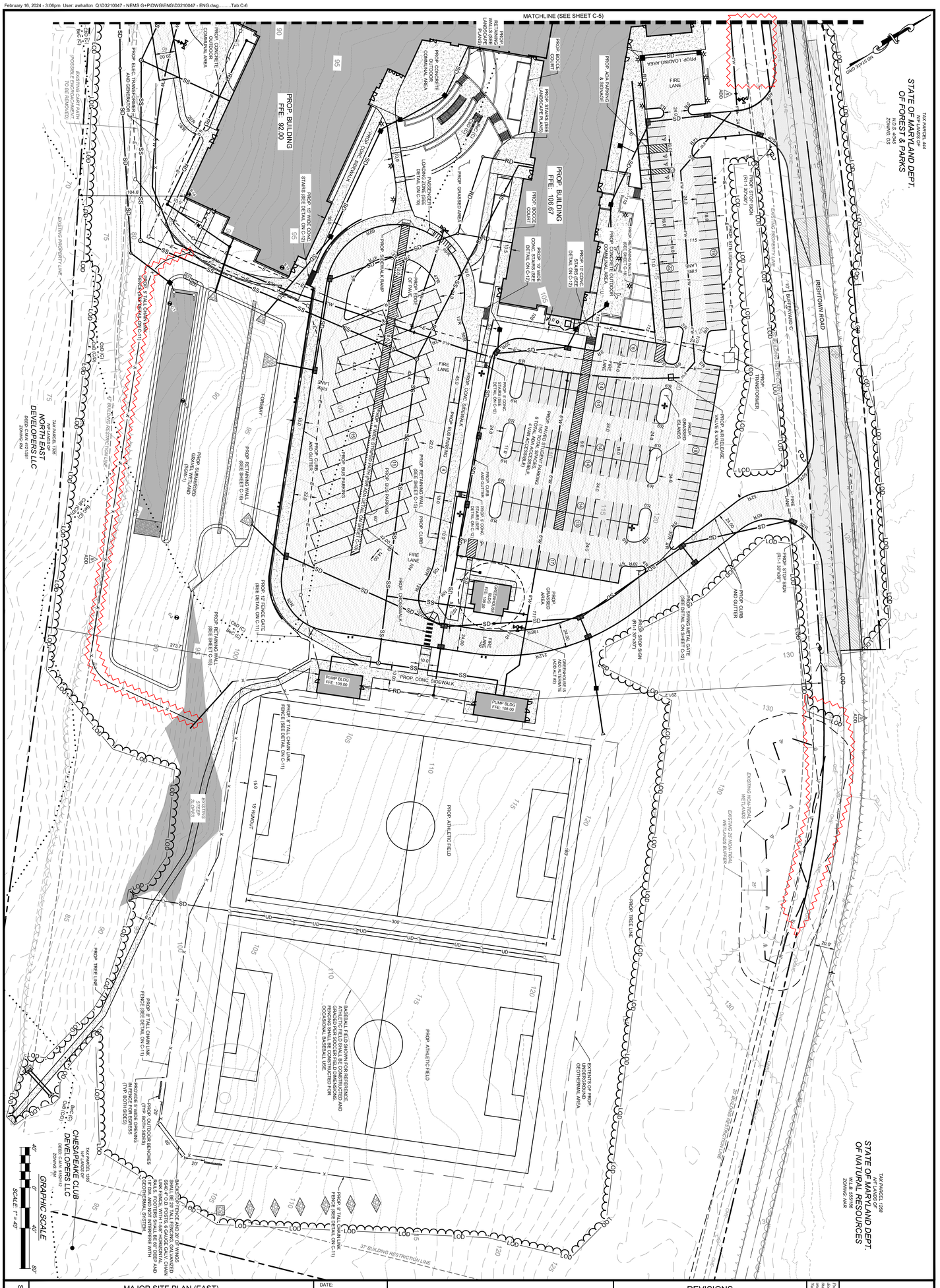


| SHEET NO.: C-6 | MAJOR SITE PLAN (EAST) |
|---|---|
| | 300 IRISHTOWN ROAD, NORTH EAST, MD 21901 |
| | TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13 |
| | *NORTH EAST MIDDLE AND HIGH SCHOOLS* |
| | FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND |
| | PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS |

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| 1 | FEB. 2024 | TREE LINE REVISED, FENCING WRAPPED AROUND SGW-1 |

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STATE OF MARYLAND · DANIEL SPEARS · No. 31868 · PROFESSIONAL ENGINEER

2/16/2024
DATE

| C-6 | MAJOR SITE PLAN (EAST) |
|---|---|
| 12/22/2023 | NORTH EAST MIDDLE / HIGH SCHOOL |
| 80D SET | 300 IRISHTOWN ROAD, NORTH EAST, MD |

| DATE | DESCRIPTION |
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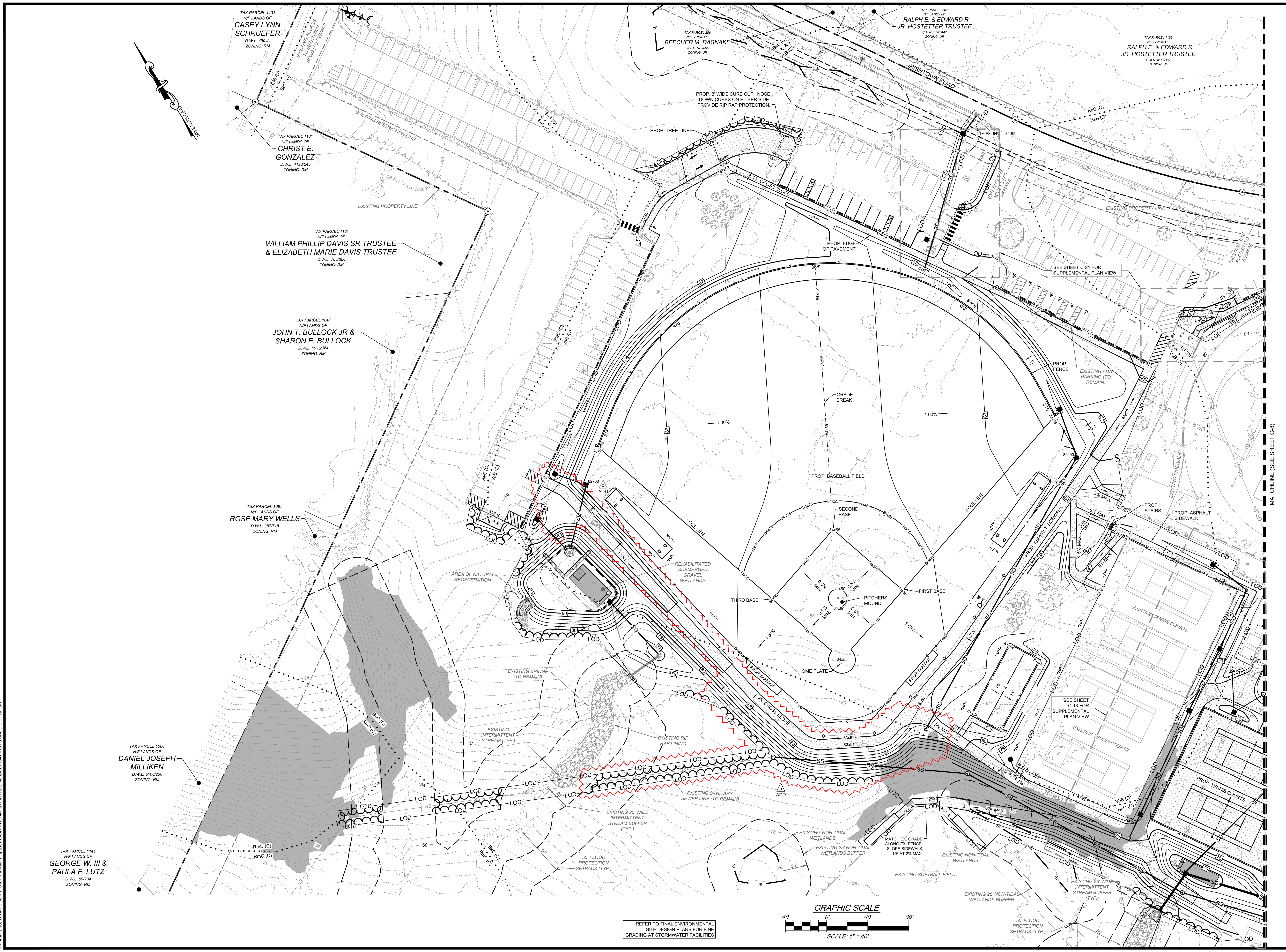


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REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | SIDEWALK WIDTH INCREASED FROM 6' TO 10' |

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| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 2683B |

GRADING PLAN (WEST)

300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

## NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: C-7

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GRADING PLAN (WEST)

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |
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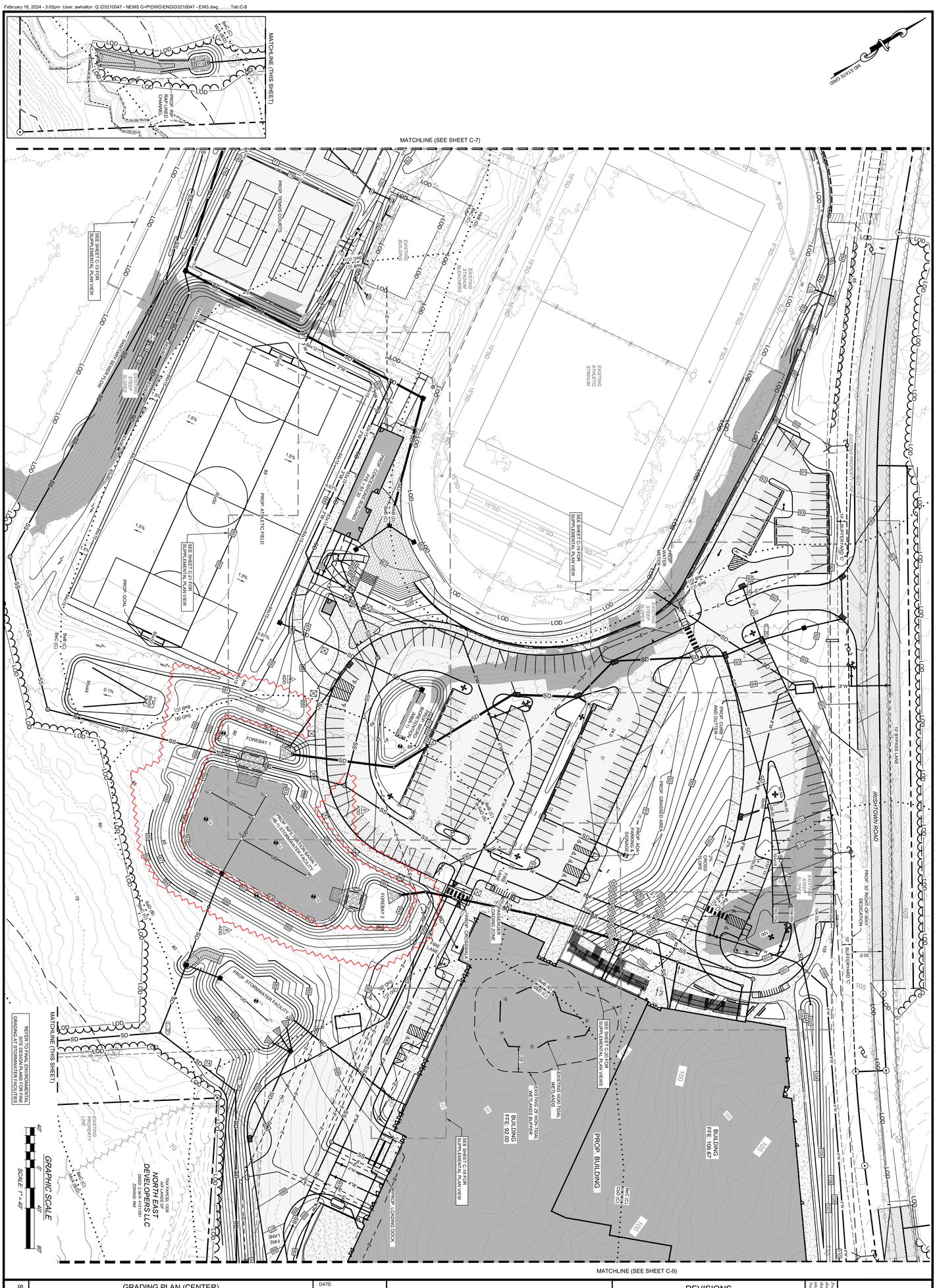


| GRADING PLAN (CENTER) | DATE: NOV. 2022 |
|---|---|
| 300 IRISHTOWN ROAD, NORTH EAST, MD 21901 | JOB NUMBER: D3210047 |
| TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13 | SCALE: 1" = 40' |
| *NORTH EAST MIDDLE AND HIGH SCHOOLS* | DRAWN BY: AJW |
| FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND | DESIGNED BY: AJW |
| PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS | APPROVED BY: DSS |
| | FOLDER REFERENCE: 2683B |

SHEET NO.: C-8

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REVISIONS

| REV. # | DATE | DESCRIPTION |
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| 1 | FEB. 2024 | TREE LINE REVISED, IB-1 GRADING REVISED |

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STATE OF MARYLAND
DANIEL S. SPEAKMAN
NO. 31400
PROFESSIONAL ENGINEER

2/16/2024
DATE

| DATE | DESCRIPTION |
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| 4/2/2024 | Addendum 5 |

GRADING PLAN (CENTER)

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

GP #22105

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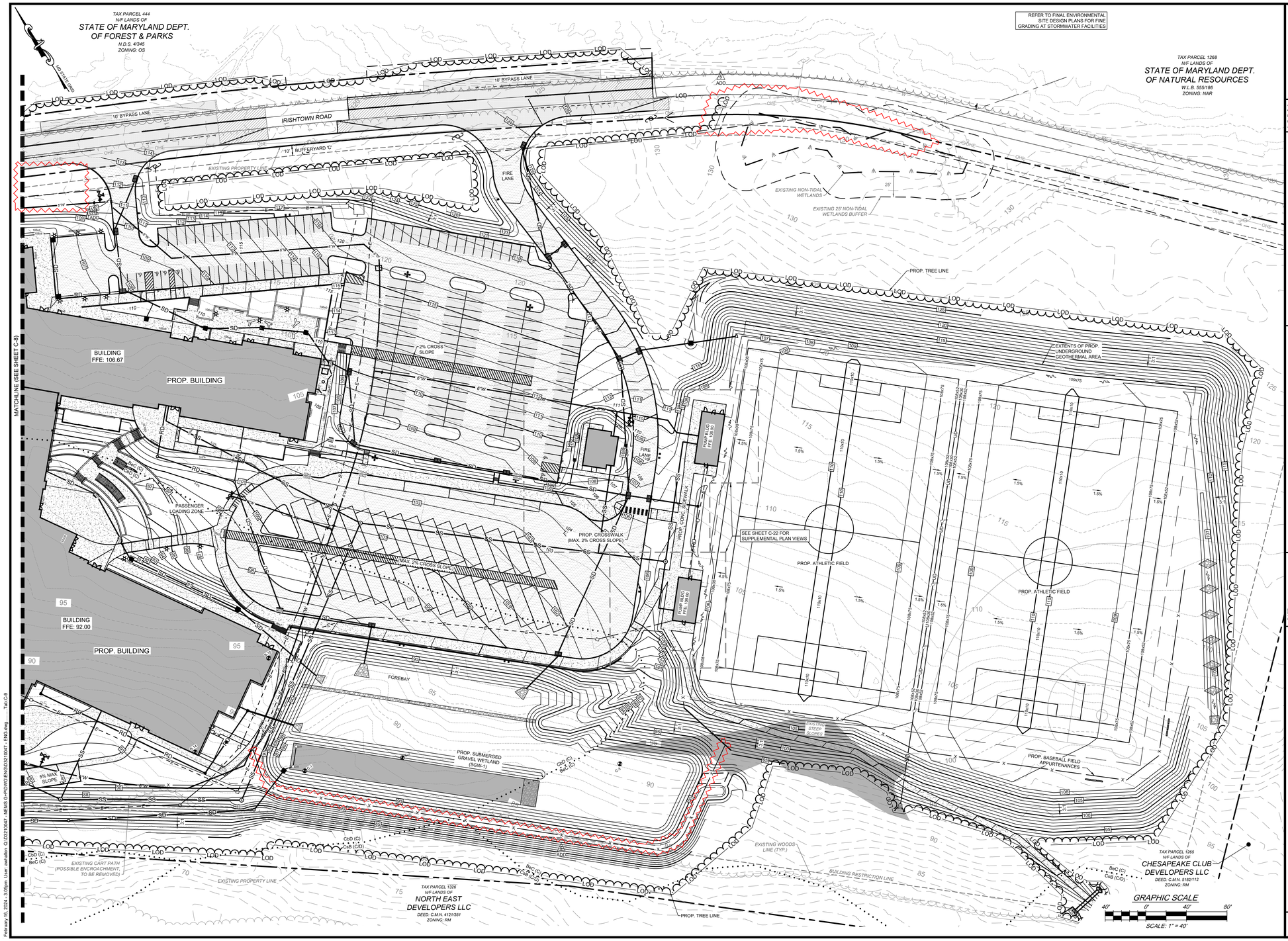


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SEAL
2/16/2024
DATE

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REVISIONS

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SCALE: 1" = 40'
DRAWN BY: AJW
DESIGNED BY: AJW
APPROVED BY: DSS
FOLDER REFERENCE: 2/8/8

GRADING PLAN (EAST)
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857, ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: C-9

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Calverton, MD 20705
Tel: 301.595.1000
www.grimmandparker.com

G+P
GRIMM + PARKER
ARCHITECTS

GP #22105

GRADING PLAN (EAST)
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

C-9
12/22/2023
BID SET

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## PAVEMENT MARKINGS

PART 1 - GENERAL

1.1 SUMMARY

A. Includes But Not Limited To:
1. Furnish material and apply pavement and curb markings as described in Contract Documents.

1.2 REFERENCES

A. Definitions:
1. Reflectorization: Material, treatment or process to enable incident light to be returned in high proportions in the general direction of the light source.

B. Reference Standards:
1. U.S. Department of Transportation Federal Highway Administration:
a. Manual on Uniform Traffic Control Devices (MUTCD).

1.3 QUALITY ASSURANCE

A. Regulatory Agency Sustainability Approvals:
1. Paint crosswalks to conform to ADA Standards and local code requirements.

1.4 FIELD CONDITIONS

A. Ambient Conditions:
1. Apply only on dry surfaces, during favorable weather, and when damage by rain, fog, or condensation not anticipated.
2. Latex Paint:
a. Atmospheric temperature above 50 deg F (10 deg C).
b. When temperature is not anticipated to drop below 50 deg F (10 deg C) during drying period.
3. Alkyd or Chlorinated Rubber Paint:
a. Atmospheric temperature above 40 deg F (4 deg C).
b. When temperature is not anticipated to drop below 40 deg F (4 deg C) during drying period.

PART 2 - PRODUCTS

2.1 MATERIAL

A. Paint:
1. Non-reflectorized.
2. Types:
a. Acrylic Latex for uncured paving.
b. Alkyd or chlorinated rubber for cured paving.
c. Water based latex for sealed paving.
3. Colors:
a. White:
1) Lane lines, edge lines, transverse lines, arrows, words, symbol markings, speed bump markings, parking space markings.
b. Yellow:
1) Cross-hatching in medians, cross hatching in safety zones separating opposing traffic flows, crosswalk stripes, safety markings, centerlines, edge lines along the left edge of a one-way roadway or one way ramp.
c. Blue And White:
1) In parking spaces specifically designated as reserved for the disabled.
d. Red:
1) Fire lanes, no parking zones, special raised pavement markers that are placed to be visible to "wrong-way" drivers.
4. Type Two Acceptable Products:
a. 442XX Traffic Marking Paint by ICI Devoe, Cleveland, OH www.devoepaint.com.
b. Set-Fast Traffic Marking Paint by Sherwin-Williams, Cleveland, OH www.sherwin-williams.com.
c. Equal as approved by Architect before application. See Section 01 6200.

PART 3 - EXECUTION

3.1 PREPARATION

A. Do not apply acrylic latex system until paving has cured seven (7) days minimum. Other paint systems may be applied as per Manufacturer's recommendations.

B. Surfaces shall be dry and free of grease and loose dirt particles. Scrape and wire brush chipped or damaged paint on existing curbs.

C. Perform layout with chalk or lumber crayon only.

3.2 APPLICATION

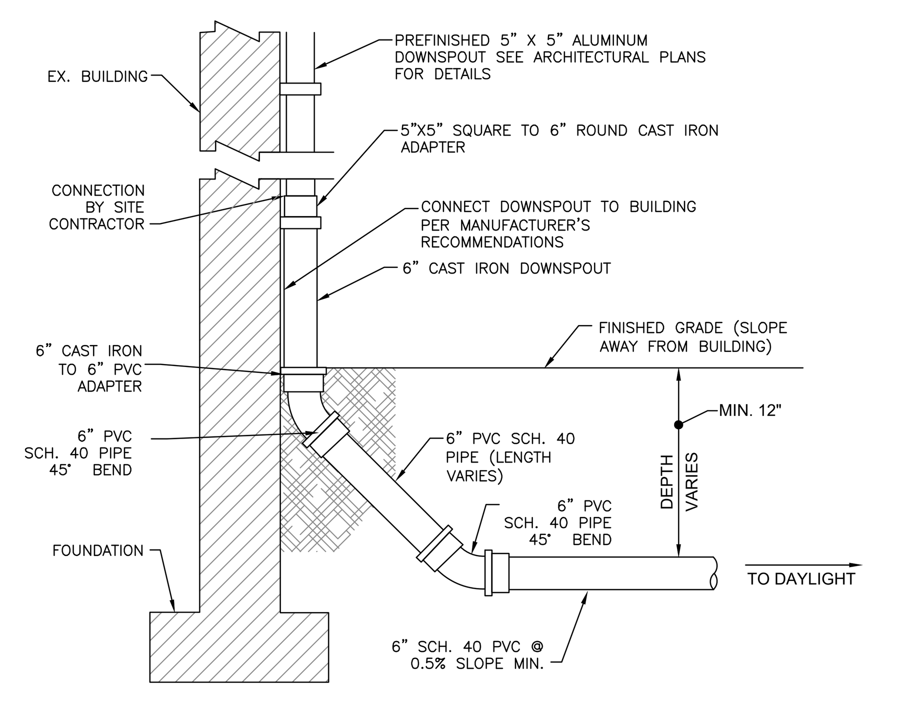
A. Tolerances:
1. General: Make lines parallel, evenly spaced, and with sharply defined edges.
2. Line Widths:
a. Plus or minus 1/4 inch (6 mm) variance on straight segments.
b. Plus or minus 1/2 inch (13 mm) variance on curved alignments.

B. Coverage:
1. Apply a single coat to parking lots which are being re-striped and where no surface treatments are being applied.
2. Apply a single coat to an emulsion seal coat.
3. Apply two (2) coats to a slurry seal coat. Apply a single coat and then wait thirty (30) to forty five (45) days and after ravel sweeping to apply the second coat.
4. Apply two (2) coats to new parking lots and new overlays.
5. Apply each coat at 150 sq ft (14 sq m) per gal.
6. Apply second coat after three (3) hours minimum or when first coat is thoroughly dried, whichever is longer.

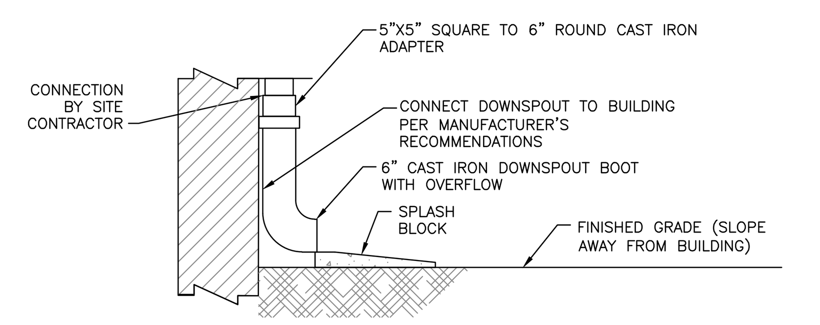
3.3 CLEANING

A. Remove drips, overspray, improper markings, and paint material tracked by traffic by sand blasting, wire brushing, or other method approved by Architect before performance.

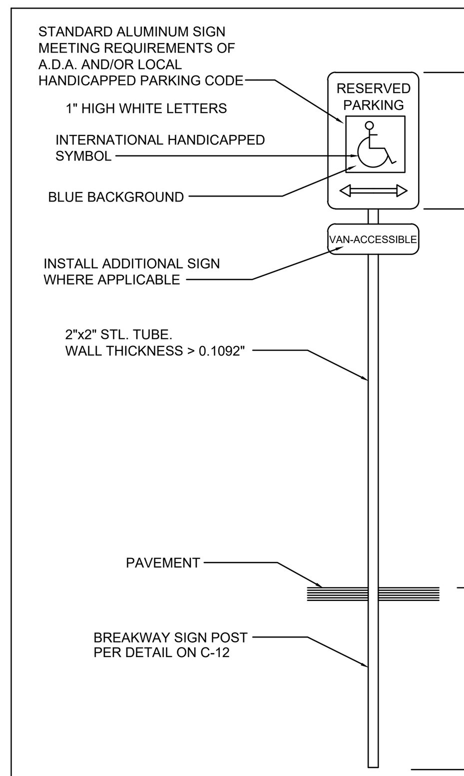
NOTE: ALL PVC PIPE TO BE SCH 40 BELL AND SPIGOT, ALL FITTINGS TO BE GASKETED AND WATERTIGHT. ALL ABOVE GROUND PVC SHALL BE UV STABILIZED. INSTALL PER MANUFACTURER'S RECOMMENDATIONS




DOWNSPOUT CONNECTION
FOR BELOW GRADE CONNECTION
N.T.S.

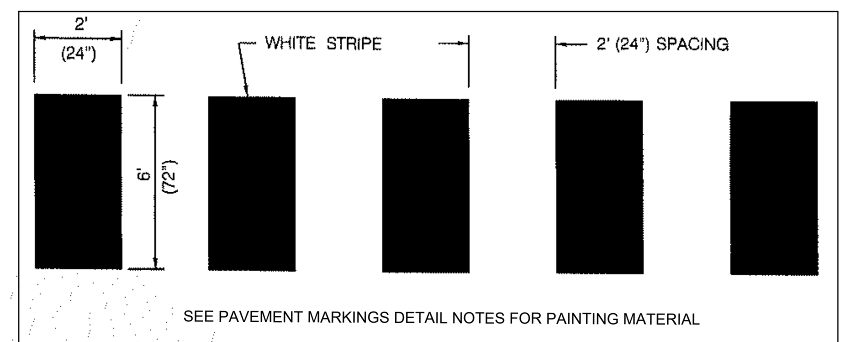



DOWNSPOUT CONNECTION
FOR SPILL TO GRADE DOWNSPOUTS
N.T.S.



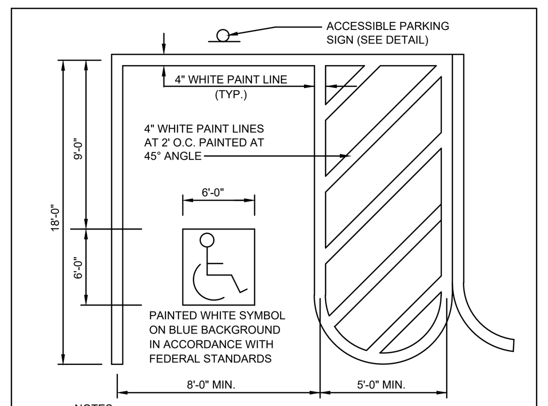

TYP. ACCESSIBLE SPACE SIGN
NOT TO SCALE

NOTE: THESE DETAILS ARE FOR THE EX. STADIUM, RESTROOM BUILDING, PROPOSED CONCESSIONS BUILDING, PUMP HOUSE BUILDINGS, AND GREENHOUSE. DOWNSPOUTS FOR SCHOOL PLAN WILL TIE INTO PROPOSED STORM DRAIN SYSTEM.



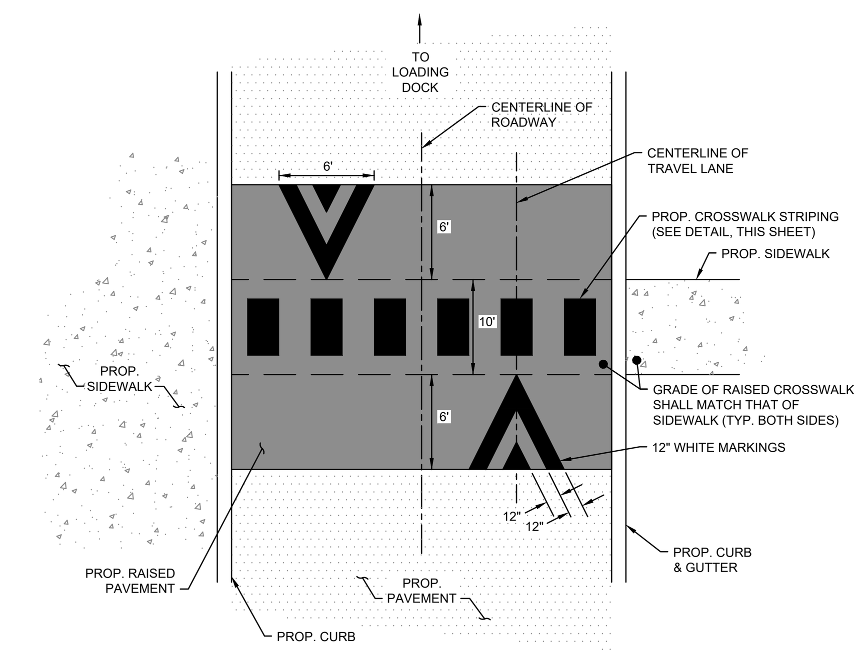

SEE PAVEMENT MARKINGS DETAIL NOTES FOR PAINTING MATERIAL

PEDESTRIAN CROSSWALK DETAIL
NOT TO SCALE



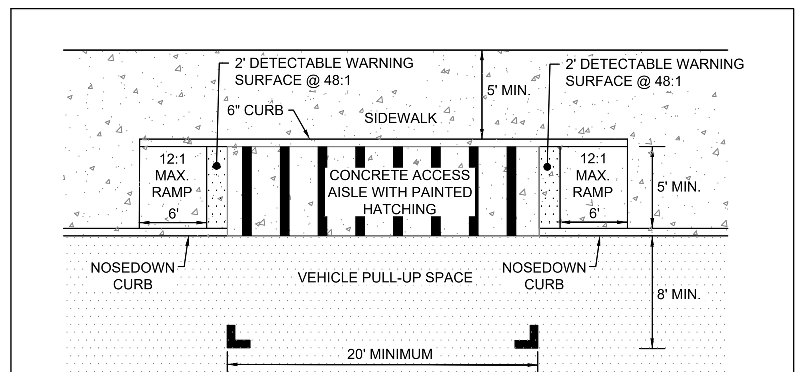

NOTES:
1. ABOVE DETAIL SHOWS MINIMUM DIMENSIONS, SEE SITE PLAN FOR ACCESSIBLE SPACE LOCATION AND ACTUAL DIMENSIONS.
2. PAINTED ISLAND SHALL BE 8'-0" FOR VAN ACCESSIBLE SPACES.
3. APPLY TWO COATS OF PAINT ON ALL SURFACES.
4. SLOPE SHALL NOT EXCEED 2% IN ANY DIRECTION.

ACCESSIBLE PARKING SPACE DETAIL
NOT TO SCALE

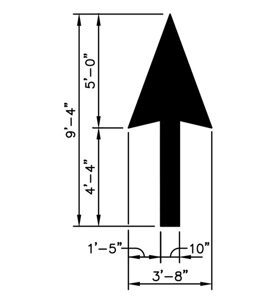



NOTE: THE ONLY RAISED CROSSWALK PROPOSED ON THIS PROJECT IS IN THE SOUTHWEST CORNER OF THE BUILDING LEADING TO THE LOADING DOCK.

RAISED PEDESTRIAN CROSSWALK DETAIL
N.T.S.




PASSENGER LOADING ZONE DETAIL
N.T.S.



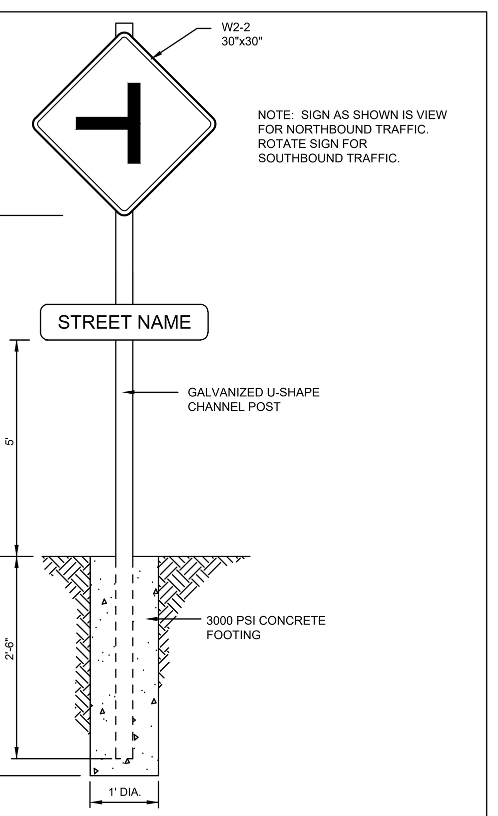

NOTE:
1. ALL PAVEMENT MARKINGS SHALL BE PAINTED.
2. ALL EXISTING PAVING STRIPING SHALL BE RE-STRIPED.

ARROW DETAILS
NOT TO SCALE

5 ADD

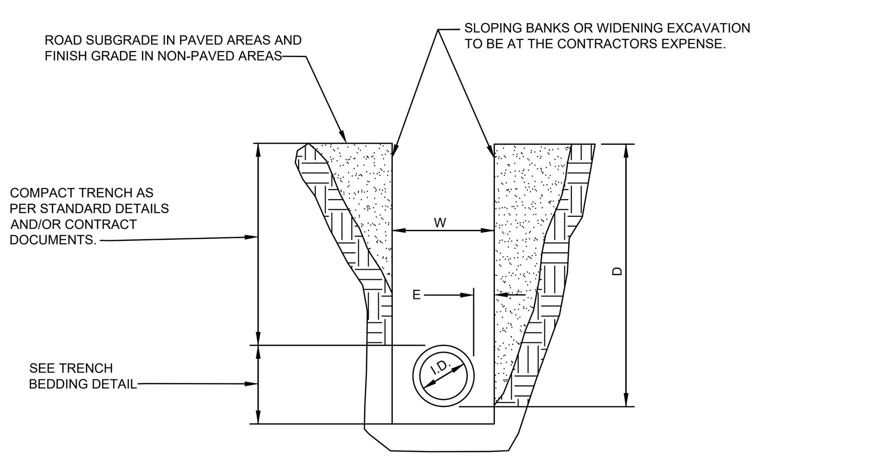
NOTE: ALL EXISTING PAVING STRIPING SHALL BE RE-STRIPED.

5 ADD




NOTE: SIGN AS SHOWN IS VIEW FOR NORTHBOUND TRAFFIC. ROTATE SIGN FOR SOUTHBOUND TRAFFIC.

ADVANCE STREET WARNING SIGN
NOT TO SCALE



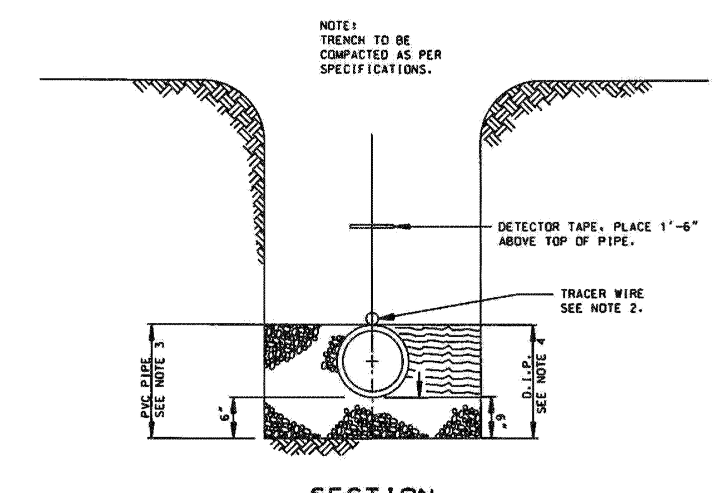

STANDARD TRENCH

| PIPE I.D. (IN.) | W (IN.) 0' < D≤ 5' | W (IN.) 5' < D≤ 15' | W (IN.) 15' < D | PIPE I.D. (IN.) | W (IN.) 0' < D≤ 5' | W (IN.) 5' < D≤ 15' | W (IN.) 15' < D |
|---|---|---|---|---|---|---|---|
| 6 | 36 | 60 | 66 | 18 | 40 | 64 | 70 |
| 8 | 36 | 60 | 66 | 20 | 42 | 66 | 72 |
| 10 | 36 | 60 | 66 | 24 | 46 | 70 | 76 |
| 12 | 36 | 60 | 66 | 27 | 56 | 80 | 86 |
| 15 | 37 | 61 | 67 | 30 | 59 | 83 | 89 |
| 16 | 38 | 62 | 68 | 36 | 66 | 90 | 96 |

NOTES:
1. W = PAYMENT WIDTH FOR CONTINGENT ITEMS IN NORMAL TRENCHES.
2. THE ABOVE CHART PERTAINS TO CAST IRON, DUCTILE IRON AND PVC PIPE. FOR OTHER PIPE MATERIALS THE MAXIMUM TRENCH WIDTH (W) FOR TRENCH DEPTHS UP TO 5'-0" WILL BE O.D. OF BELL +2E (36" MIN.)
- FOR 6" TO 24" PIPE, E = 9"
- FOR 42" TO 72" PIPE, E = 15"
- FOR 27" TO 36" PIPE, E = 12"

ADD 24" TO THE ABOVE CALCULATED "W" FOR TRENCH DEPTHS GREATER THAN 5' - 0" AND LESS THAN 15' - 0". ADD 30" TO THE ABOVE CALCULATED "W" FOR TRENCH DEPTHS GREATER THAN 15' - 0".
3. TRENCHES TO BE SHEETED OR BRACED AS REQUIRED TO MEET ALL GOVERNING SAFETY CODES. ALL ASSOCIATED COST WILL BE BORNE BY THE CONTRACTOR.
4. ROADWAY PATCH/REPAIR SHALL BE MADE TO THE LIMITS NOTED IN THE HIGHWAY PERMIT. STANDARD DETAILS OR CONTRACT DOCUMENTS AS DIRECTED BY THE COUNTY. THE TRENCH WIDTHS ABOVE SHALL BE USED FOR PAVEMENT PAYMENT PURPOSES.

| CECIL COUNTY, MD DEPARTMENT OF PUBLIC WORKS | STANDARD GENERAL DETAILS / TRENCH PAYMENT WIDTHS | ISSUED 4/1/09 REVISED REVISED PLATE G-8 |
|---|---|---|



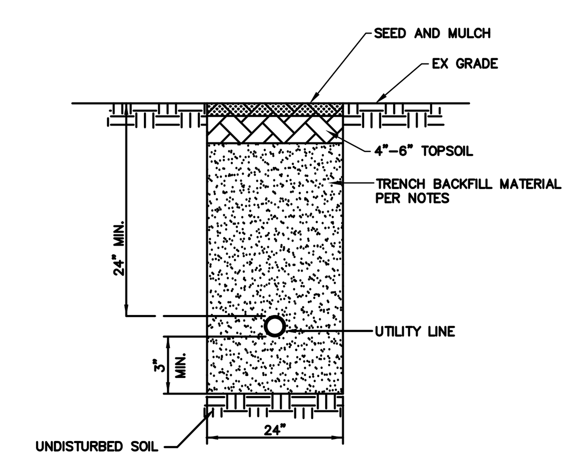

SECTION
NO SCALE

NOTES:
1. UNLESS NOTED OTHERWISE, ALL ROAD REPAIR SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISION OF THE CECIL COUNTY OR MARYLAND STATE ROAD CODE.
2. PROVIDE TRACER WIRE FOR ALL NON-METALLIC WATER MAINS, SEWER FORCE MAINS, AND SERVICES SEE DETAILS W-2, W-13 AND G-14.
3. PVC PIPE: SHALL RECEIVE AASHTO M43, NO.57 AGGREGATE OR COMPACTED SAND THAT MEETS THE MARYLAND SHA REQUIREMENTS FOR FINE AGGREGATE.
4. D.I. PIPE: SHALL BE INSTALLED ON 6" AASHTO M43, NO.57 AGGREGATE AND HAVE APPROVED COMPACTED BACKFILL MATERIAL CONSOLIDATED TO TOP OF PIPE.
5. ALL PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PIPE MANUFACTURER AND COUNTY APPROVAL.
6. PROVIDE CONTINUOUS BEARING FOR FULL LENGTH OF PIPE.

| CECIL COUNTY, MD DEPARTMENT OF PUBLIC WORKS | STANDARD WATER DETAILS / PIPE BEDDING | ISSUED 4/1/09 REVISED REVISED REISSUED PLATE W-1 |
|---|---|---|

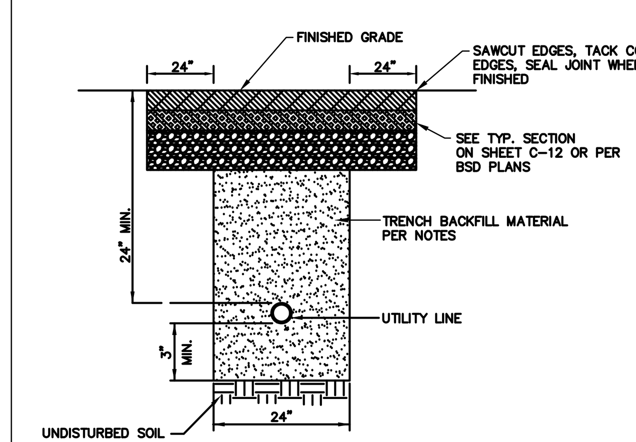
GENERAL NOTES FOR TRENCH RESTORATION:

1. BACKFILL SHALL BE PLACED IN LIFTS NO LESS THAN 4" AND NO GREATER THAN 8 INCHES.
2. PROVIDE JOINT SEALANT WHERE NEW ASPHALT MEETS EXISTING ASPHALT OR CONCRETE.
3. WHERE TRENCH IMPACTS CONCRETE SIDEWALK OR SLAB, RESTORE CONCRETE TO NEAREST EXPANSION OR CONSTRUCTION JOINT. PROVIDE DOWELS EVERY 24" AROUND PERIMETER OF SAWCUT FOR SLAB RESTORATION
4. WHERE TRENCH IMPACTS WITHIN TWO FEET OF AN ADJACENT DISSIMILAR SURFACE, RESTORE TO EDGE OF DISSIMILAR SURFACE.
5. IN LAWN AREAS, TRENCH BACKFILL MATERIAL SHALL BE VIRGIN EXCAVATED TRENCH MATERIAL. COMPACTED TO 90% MODIFIED PROCTOR. WHERE EXCAVATED MATERIAL IS UNSUITABLE FOR COMPACTION DUE TO HIGH MOISTURE CONTENT, ORGANIC MATERIAL OR DEBRIS CONTENT, OR OTHER DELETERIOUS MATERIAL, USE SELECT FILL COMPACTED TO 90% MODIFIED PROCTOR.
6. IN NON-LAWN AREAS, TRENCH BACKFILL MATERIAL SHALL BE SELECT FILL COMPACTED TO 95% MODIFIED PROCTOR. VIRGIN MATERIAL MAY BE UTILIZED IF IT CAN MEET COMPACTION RATE AND IS APPROVED FOR USE BY THE GEOTECHNICAL INSPECTOR.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF UNSUITABLE EXCAVATED MATERIAL ONSITE. CONTRACTOR SHALL COORDINATE DISPOSAL WITH OWNER.
8. IF GROUNDWATER IS ENCOUNTERED IN THE TRENCH, THE CONTRACTOR SHALL DESIGN A METHOD TO DEWATER THE TRENCH THAT DOES NOT IMPACT PREVIOUSLY PLACED BACKFILL MATERIAL OR ADJACENT IMPROVEMENTS. DISCHARGE OF SEDIMENT LADEN WATER IS STRICTLY PROHIBITED. GROUNDWATER SHALL BE DEWATERED WITH THE USE OF A FILTER BAG.
9. REFER TO SECTION 02250 TRENCH EXCAVATION, BACKFILL AND COMPACTION IN THE CECIL COUNTY DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS AND DETAILS FOR WATER MAINS & SEWER MAINS.



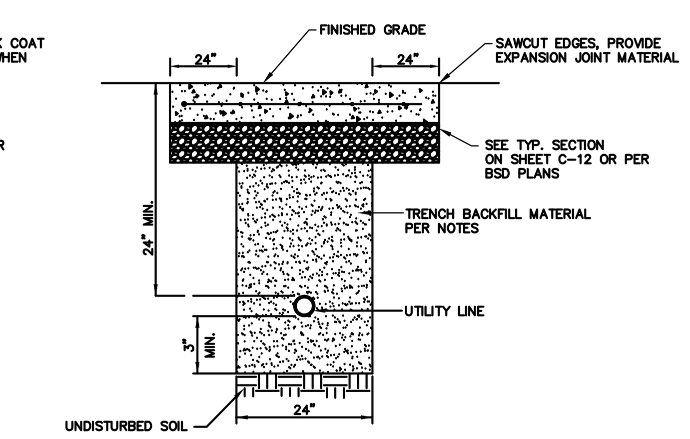

NOTES:
1. SEE GENERAL NOTES FOR TRENCH RESTORATION
2. WIDTH, GRADE, AREA, AND SLOPES SHALL MATCH EXISTING CONDITIONS.

TRENCH RESTORATION (LAWN)
NOT TO SCALE



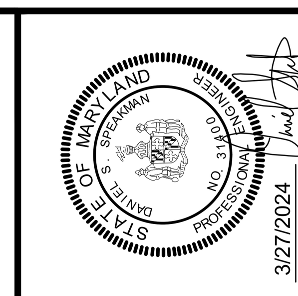

NOTES:
1. SEE GENERAL NOTES FOR TRENCH RESTORATION
2. WIDTH, GRADE, AREA, AND SLOPES SHALL MATCH EXISTING CONDITIONS.

TRENCH RESTORATION (ASPHALT)
NOT TO SCALE




NOTES:
1. SEE GENERAL NOTES FOR TRENCH RESTORATION
2. WIDTH, GRADE, AREA, AND SLOPES SHALL MATCH EXISTING CONDITIONS.

TRENCH RESTORATION (CONCRETE/SIDEWALK)
NOT TO SCALE




3/27/2024
DATE

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 31400, Expiration Date: 1-16-2025.

REVISIONS

| REV. # | DATE | DESCRIPTION |
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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | 1" = 20' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 2683B |

SITE DETAILS

300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: C-10

11720 Beltsville Drive
Suite 600
Calverton, MD 20705
Tel: 301.595.1000
www.grimmandparker.com

GRIMM + PARKER ARCHITECTS

GP #22105

SITE DETAILS

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
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| 4/2/2024 | Addendum 5 |

C-10

12/22/2023
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March 27, 2024 - 2:43pm User: awhallon Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - DETAIL SHEETS.dwg.........Tab:C-10 DETAILS

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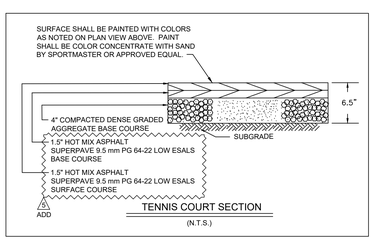
## GRAPHIC SCALE

0' 20' 40' 120'

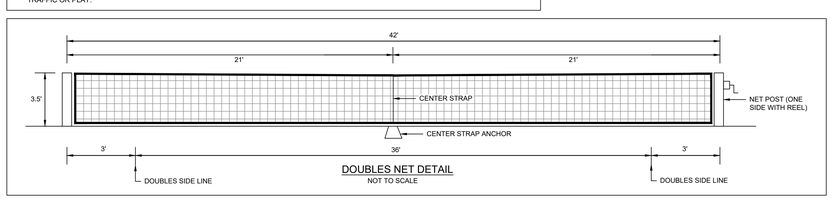
SCALE: 1" = 20'

COLOR CONCENTRATE WITH SAND NOTES
(TAKEN FROM SPORTMASTER TECHNICAL BULLETIN CMT-2)

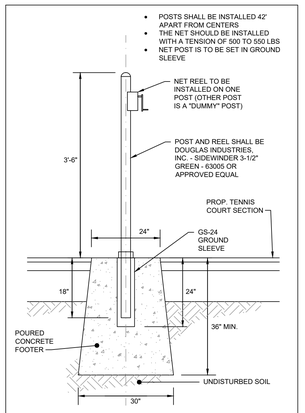
1. PAVEMENT SURFACE MUST BE CLEANED ENTIRELY OF DUST, DIRT, AND ALL LOOSE MATERIALS. REPAIR OF PAVEMENT SURFACE DEFECTS, DEPRESSIONS AND CRACKS MUST BE COMPLETED PRIOR TO APPLICATION. ALL REPAIRS MUST BE FLUSH AND SMOOTH TO ADJOINING SURFACES.
2. NEW ASPHALT SURFACES MUST CURE 14 TO 28 DAYS PRIOR TO APPLICATION. IT IS RECOMMENDED THAT ANY UNCOATED ASPHALT SURFACE RECEIVE ONE OR MORE COAST OF ACRYLIC RESURFACER (TECHNICAL BULLETIN CMT-3) AS REQUIRED BY SURFACE ROUGHNESS AND POROSITY TO PROVIDE A SMOOTH, DENSE UNDERLAYMENT FOR APPLICATION OF COLOR TEXTURE AND FINISH COATS.
3. APPLY MIXED CONCENTRATE WITH SAND WITH SOFT RUBBER SQUEEGEES. ALLOW EACH COAT TO THOROUGHLY DRY BEFORE APPLYING THE NEXT COAT.
4. CONCENTRATE WITH SAND DRIES IN 30 TO 60 MINUTES UNDER OPTIMUM DRYING CONDITIONS. ALLOW 48 HOURS BEFORE ALLOWING FOOT TRAFFIC OR PLAY.




TENNIS COURT SECTION
(N.T.S.)




DOUBLES NET DETAIL
NOT TO SCALE




TENNIS POST AND CONCRETE FOOTER DETAIL
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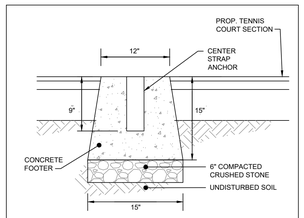
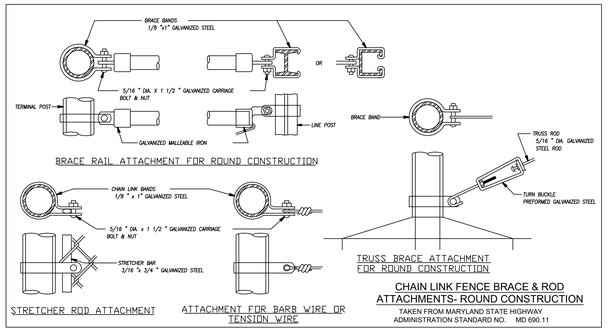
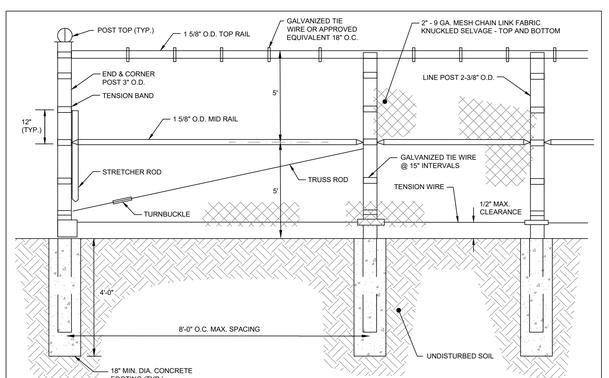



TENNIS NET CENTER STRAP DETAIL
NOT TO SCALE




CHAIN LINK FENCE BRACE & ROD ATTACHMENTS- ROUND CONSTRUCTION
TAKEN FROM MARYLAND STATE HIGHWAY ADMINISTRATION STANDARD NO. MD 690.11




1. ALL FENCING AND HARDWARE SHALL BE GALVANIZED.
2. POSTS SHALL BE SET IN CONCRETE.
3. OPENINGS SHALL NOT ALLOW PASSAGE OF A 4-INCH DIAMETER SPHERE.
4. FASTEN FABRIC TO TENSION WIRE WITH HOG RINGS AT 18" o C/C. HOG RINGS TO BE 12-1/2 GAUGE GALVANIZED STEEL WIRE.
5. MATERIALS TO MEET REQUIREMENTS OF AASHTO M 181.

10' CHAIN LINK TENNIS COURT FENCE
NOT TO SCALE

STATE OF MARYLAND — DAVID A. GRIMM — REGISTERED PROFESSIONAL ENGINEER — NO. 31400

3/27/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed* Professional Engineer *under the laws of the State of Maryland, License No.* 31400 *, Expiration Date:* 1-16-2025

REVISIONS

| REV. # | DATE | DESCRIPTION |
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|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D22/10047 |
| SCALE: | 1" = 20' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 28038 |

TENNIS COURT PLAN AND DETAILS
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857, ADC MAP 11, GRID G-13

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G+P GRIMM + PARKER ARCHITECTS

GP #22105

TENNIS COURT PLAN AND DETAILS

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300 IRISHTOWN ROAD, NORTH EAST, MD

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| 4/2/2024 | Addendum 5 |

**C-13**
12/22/2023
BID SET

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March 27, 2024 - 2:26pm User: awhalen Q:\D22\10047 - NEMS G+P\DWG\ENG\D22\10047 - ATHLETICS SHEETS.dwg Tab: C-13 TENNIS

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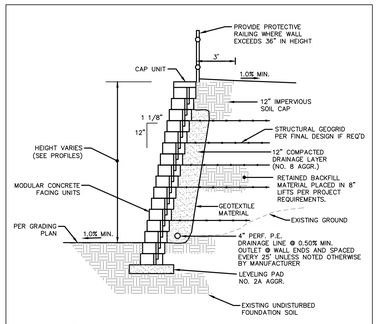


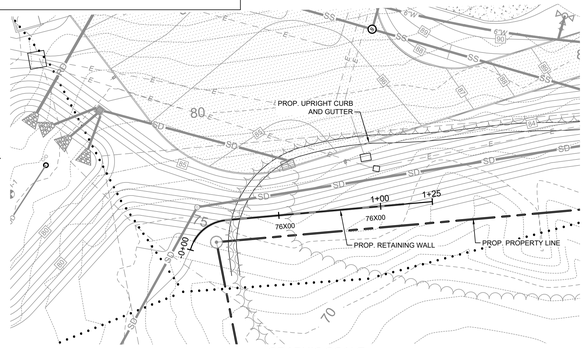

1. THE RETAINING WALL SHALL BE AS MANUFACTURED BY KEYSTONE RETAINING WALL SYSTEMS OR APPROVED EQUAL. WALL UNITS SHALL CONFORM TO ASTM C140 AND CONCRETE MATERIALS SHALL CONFORM TO ASTM C1372.
2. ALL CONSTRUCTION SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS OR INSTALLATION RECOMMENDATIONS.
3. THE CONTRACTOR SHALL PROVIDE STRUCTURAL DESIGN CALCULATIONS FOR THE WALLS OVER 4 FEET IN HEIGHT, SEALED BY A REGISTERED PROFESSIONAL ENGINEER FOR THE OWNER'S REVIEW AND APPROVAL.

*MODULAR RETAINING WALL SYSTEM*

NOT TO SCALE

## SEGMENTAL WALL NOTES FOR WALLS ON THIS SHEET:

1. THE RETAINING WALL SHALL BE AS MANUFACTURED BY KEYSTONE RETAINING WALL SYSTEMS OR APPROVED EQUAL. WALL UNITS SHALL CONFORM TO ASTM C140 AND CONCRETE MATERIALS SHALL CONFORM TO ASTM C1372.
2. ALL WALLS SHALL HAVE 1-1/8" SETBACK, 21" DEPTH AND ASSUME THE ANGLE FOR EARTH PRESSURE CALCULATION IS 30° (SILTY SAND) WITH 3:1 BACKSLOPE, ASSUME 120 LBS/CF SOIL UNIT WEIGHT WITH NO SURCHARGES.
3. TOP SHALL BE STEPPED
4. CAP STONES NOT DEPICTED
5. COLOR= IN ACCORDANCE WITH THE ARCHITECT
6. CONTRACTOR SHALL NOT USE HATCHING SHOWN ON PROFILES FOR BLOCK COUNT
7. AS THE WALLS ON THIS SHEET ARE UNDER 4 FEET IN HEIGHT, THEY DOES NOT REQUIRE SEPARATE STRUCTURAL ENGINEERING. ALL INFORMATION PROVIDED IS TAKEN FROM KEYSTONE RETAINING WALLS LITERATURE. DESIGN IS PER KEYSTONE DESIGN CHARTS FOR GRAVITY WALLS. IT IS THE CONTRACTORS RESPONSIBILITY TO INTERACT WITH THE WALL MANUFACTURER AS NECESSARY TO ENSURE THE STRUCTURAL INTEGRITY OF THE WALL AND APPURTENANT CONSTRUCTION (E.G. SUBGRADE PREPARATION, DRAIN TILE, BACKFILL, ETC.)
8. STRIP VEGETATION AND ORGANIC SOIL FROM WALL ALIGNMENT.
9. BENCH CUT ALL EXCAVATED SLOPES.
10. DO NOT OVER EXCAVATE UNLESS DIRECTED BY SITE SOILS ENGINEER TO REMOVE UNSUITABLE SOILS.
11. SITE SOILS ENGINEER SHALL VERIFY FOUNDATION SOILS AS BEING COMPETENT PER THE DESIGN STANDARDS AND PARAMETERS LISTED IN #2 ABOVE. IF THE SOILS DO NOT MEET THE MINIMUM PARAMETERS , GEOSYNTHETIC REINFORCEMENT DESIGN BY A LICENSED MARYLAND STRUCTURAL ENGINEER WILL BE REQUIRED.
12. LEVELING PAD SHALL AT MINIMUM CONSIST OF CRUSHED GRAVEL 6" THICK MIN.
13. MINIMUM EMBEDMENT OF WALL BELOW FINISHED GRADE SHALL BE 6". COMPACT FILL IN FRONT OF UNITS AT THE SAME TIME FILL BEHIND UNITS IS COMPACTED.
14. DRAINAGE AGGREGATE SHALL BE INSTALLED DIRECTLY BEHIND THE WALL WITHIN 12" OF THE TOP OF THE WALL. DRAINAGE AGGREGATE SHALL NOT EXTEND BELOW FINAL GRADE IN FRONT OF WALL.
15. COMPACTION SHALL BE TO 95% OF MAXIMUM STANDARD PROCTOR DENSITY (ASTM D-698).
16. COMPACTION TESTS SHALL BE TAKEN AS THE WALL IS INSTALLED. THE MINIMUM NUMBER OF TESTS SHALL BE DETERMINED BY THE SITE SOILS ENGINEER.
17. COMPACTION WITHIN 3 FEET OF THE WALL SHALL BE LIMITED TO HAND OPERATED EQUIPMENT.
18. CONTACTOR SHALL DIRECT SURFACE RUNOFF TO AVOID DAMAGING WALL WHILE UNDER CONSTRUCTION.
19. ANY SURFACE DRAINAGE FEATURES, FINISHED GRADING, PAVEMENT, OR TURF SHALL BE INSTALLED IMMEDIATELY AFTER WALL IS COMPLETED.
20. FOLLOW APPLICABLE PROVISIONS OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WRITTEN SPECIFICATIONS.

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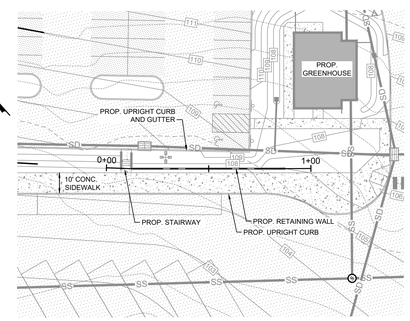
SCALE: 1" = 30'

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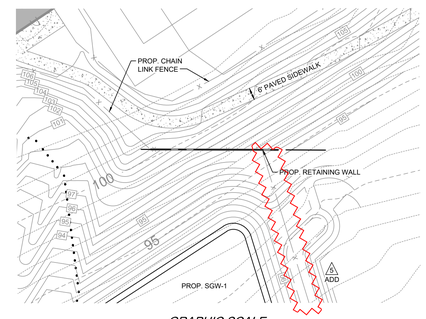


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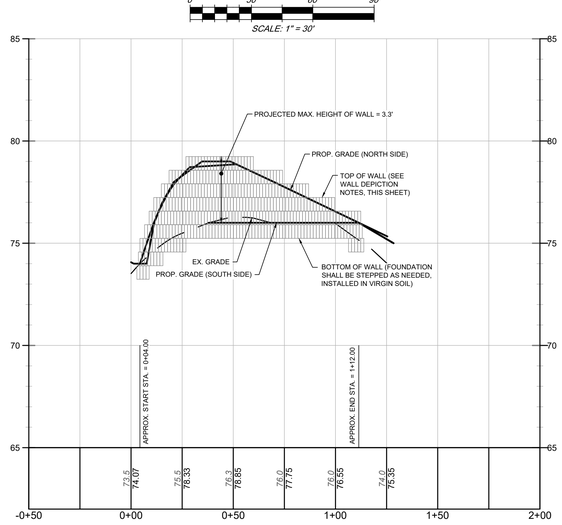
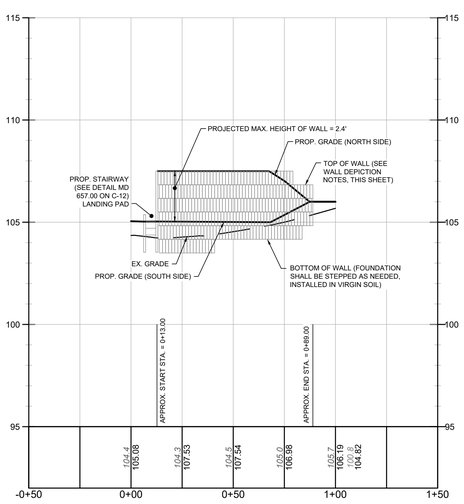



RETAINING WALL PROFILE
SCALE: VERT. : 1" = 3'
HORIZ. : 1" = 30'




RETAINING WALL PROFILE
SCALE: VERT. : 1" = 3'
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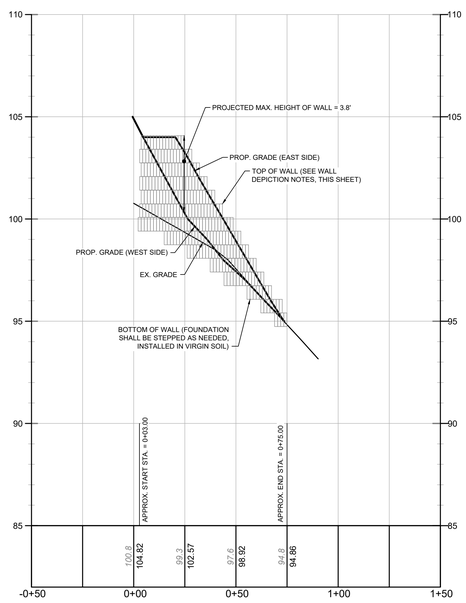


RETAINING WALL PROFILE
SCALE: VERT. : 1" = 3'
HORIZ. : 1" = 30'

STATE OF MARYLAND — PROFESSIONAL ENGINEER — No. 31400 — JAMES A. WIGHT
2/16/2024
DATE

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| SCALE: | 1" = 30' |
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| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 2083B |

RETAINING WALL PLAN AND PROFILES
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

*NORTH EAST MIDDLE AND HIGH SCHOOLS*

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PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: C-15


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RETAINING WALL PLAN AND PROFILES
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300 IRISHTOWN ROAD, NORTH EAST, MD

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**C-15**

12/22/2023
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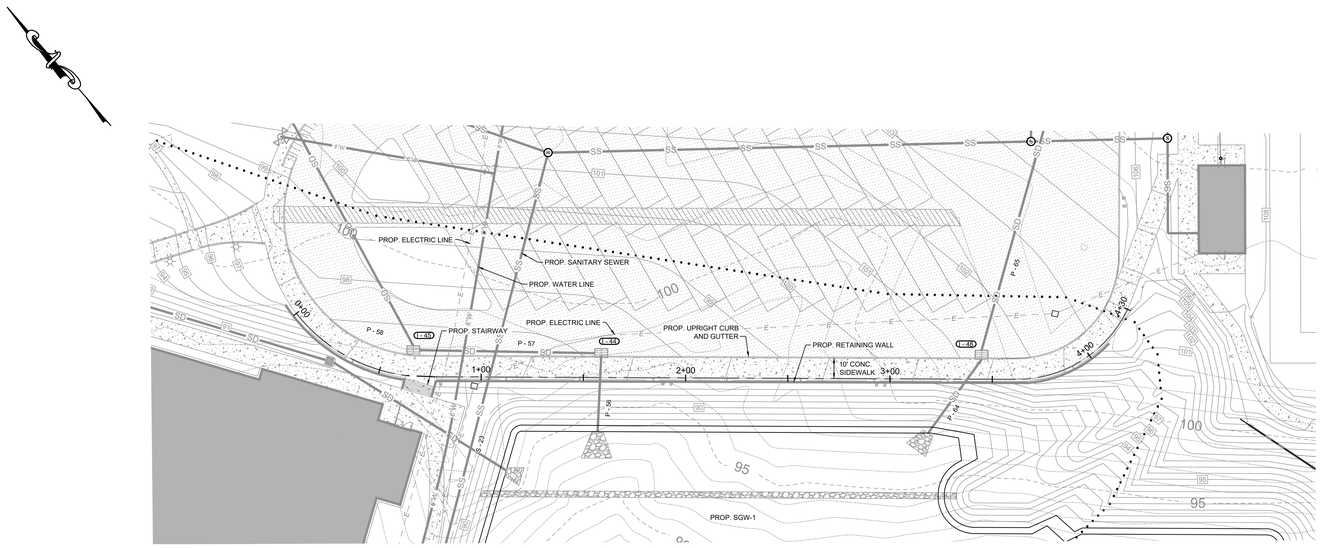
February 16, 2024 - 3:02pm User: awilcox G:\0321\047 - NENS G+P\DWG\ENG\0321047 - RETAINING WALLS.dwg Tab: C-15




GRAPHIC SCALE

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SCALE: 1" = 30'

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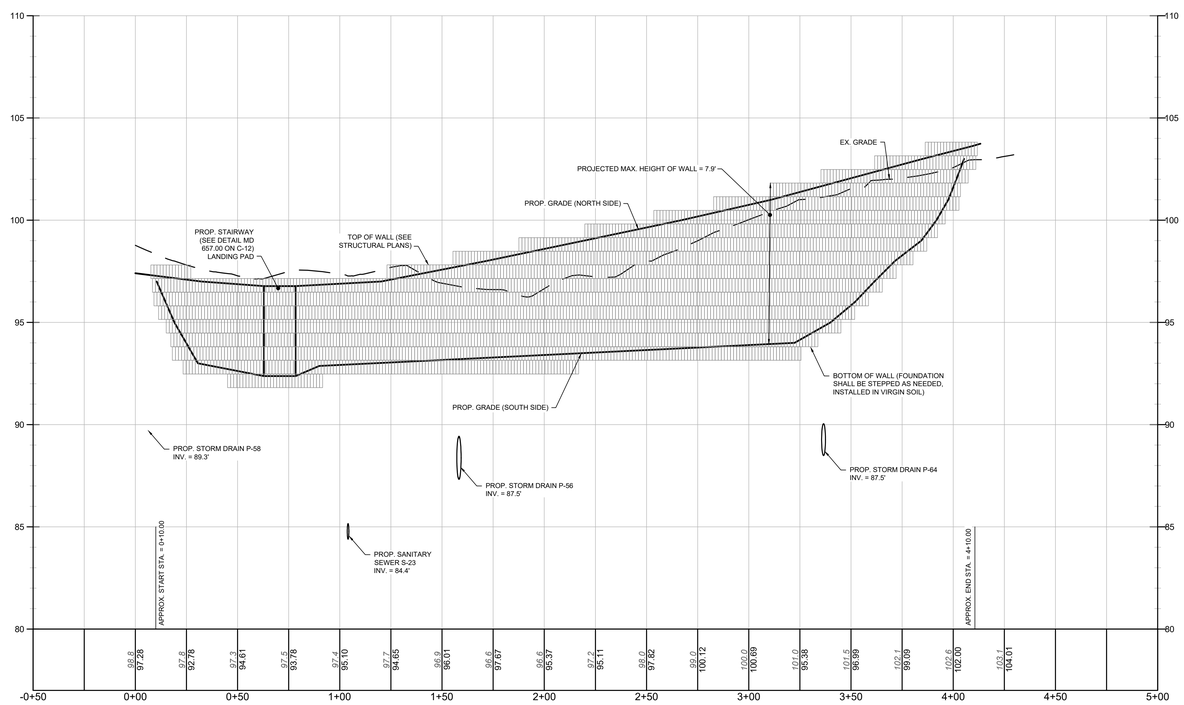


RETAINING WALL PROFILE

SCALE: VERT. : 1" = 3'
HORIZ. : 1" = 30'

NOTE: THIS WALL REQUIRES STRUCTURAL ENGINEERING DESIGN, THEREFORE WALL WILL NOT FOLLOW "MODULAR RETAINING WALL SYSTEM" DETAIL ON C-15, REFER TO STRUCTURAL PLANS.

STATE OF MARYLAND
DANIEL S. SOTOMAN
REGISTERED PROFESSIONAL ENGINEER
2/16/2024
DATE

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| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
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RETAINING WALL PLAN AND PROFILES
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RETAINING WALL PLAN AND PROFILES

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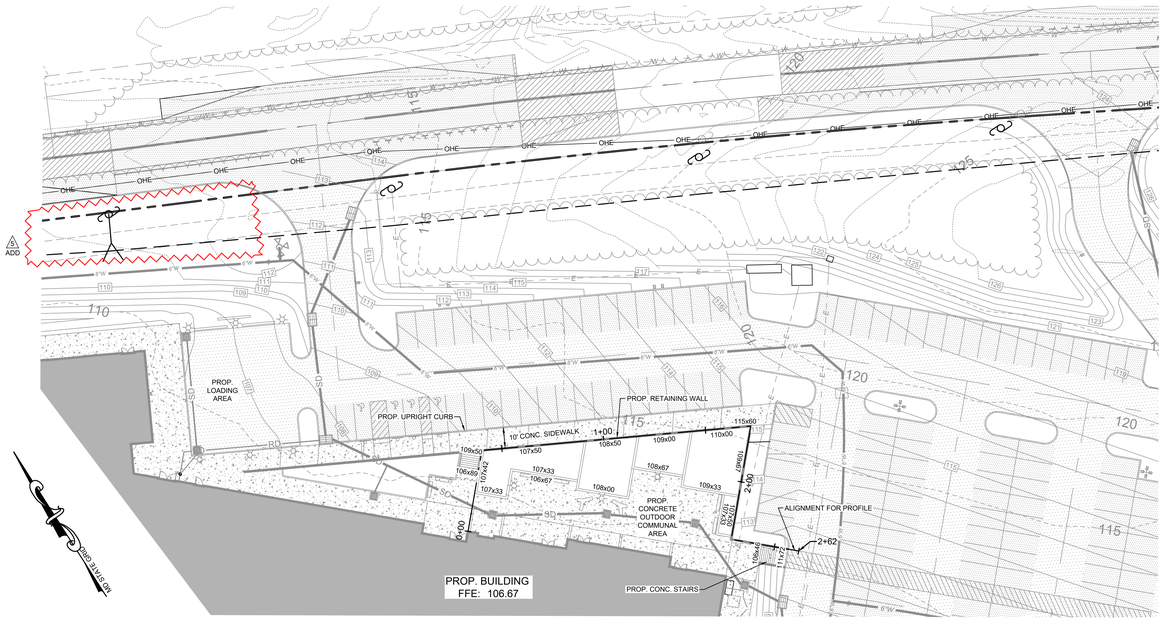
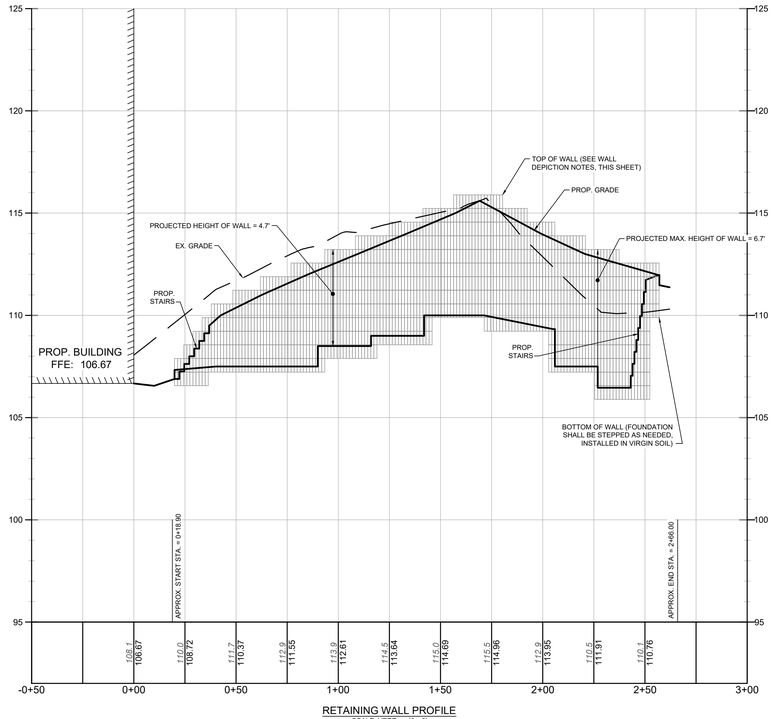



GRAPHIC SCALE

0' 30' 60' 90'

SCALE: 1" = 30'




RETAINING WALL PROFILE

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HORIZ. : 1" = 30'

NOTE: THIS WALL REQUIRES STRUCTURAL ENGINEERING DESIGN, THEREFORE WALL WILL NOT FOLLOW "MODULAR RETAINING WALL SYSTEM" DETAIL ON C-15, REFER TO STRUCTURAL PLANS FOR ENGINEERING DESIGN OF WALL.

STATE OF MARYLAND
DANIEL S. SOTLAMAN
PROFESSIONAL ENGINEER
No. 31400
2/16/2024
DATE

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| APPROVED BY: | DSS |
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RETAINING WALL PLAN AND PROFILES

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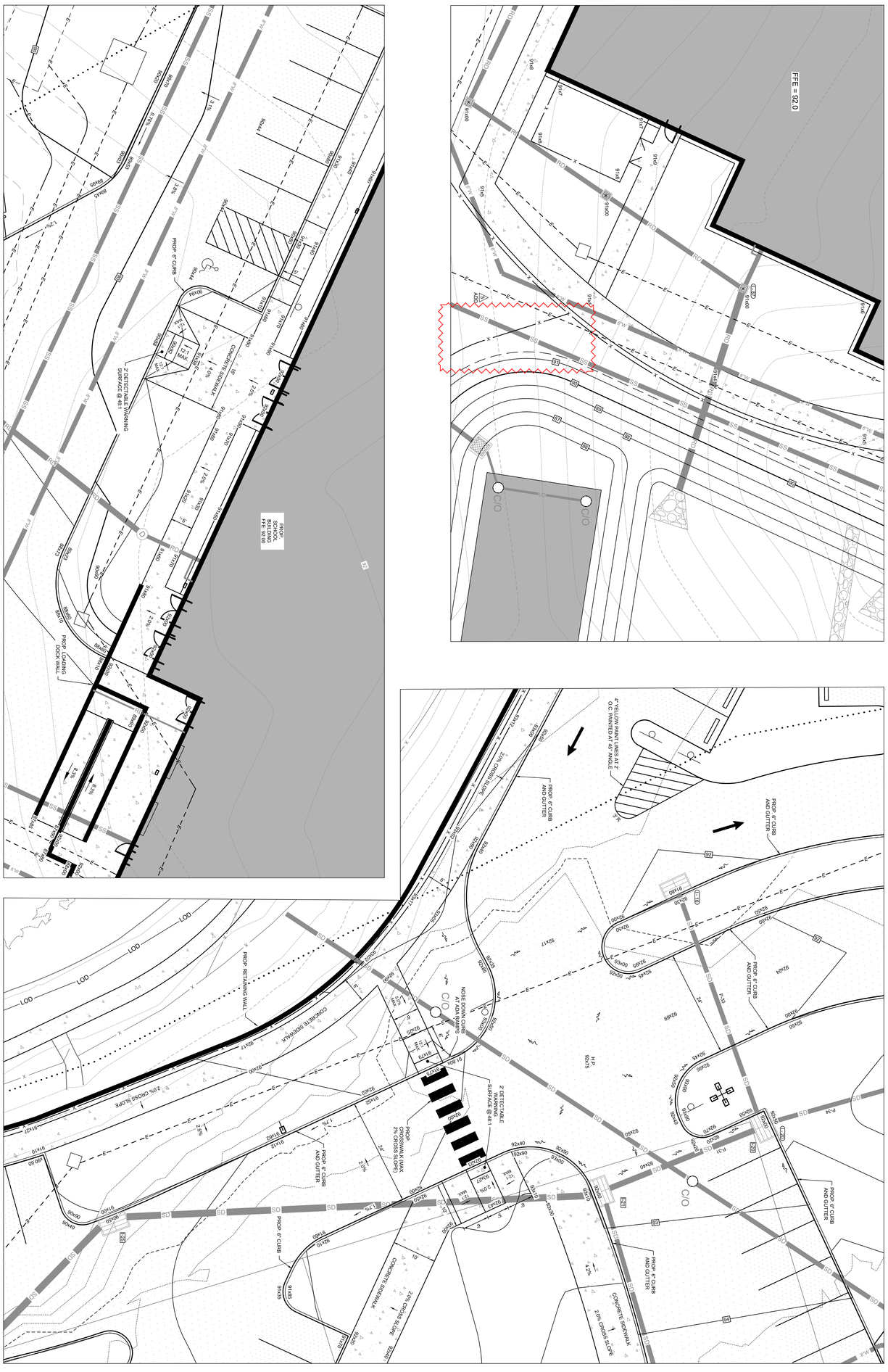


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SUPPLEMENTAL PLAN VIEWS

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DANIEL S. SPERGAN
No. 31400
PROFESSIONAL ENGINEER

2/16/2024
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SUPPLEMENTAL PLAN VIEWS

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NO. 31400
PROFESSIONAL ENGINEER

2/16/2024
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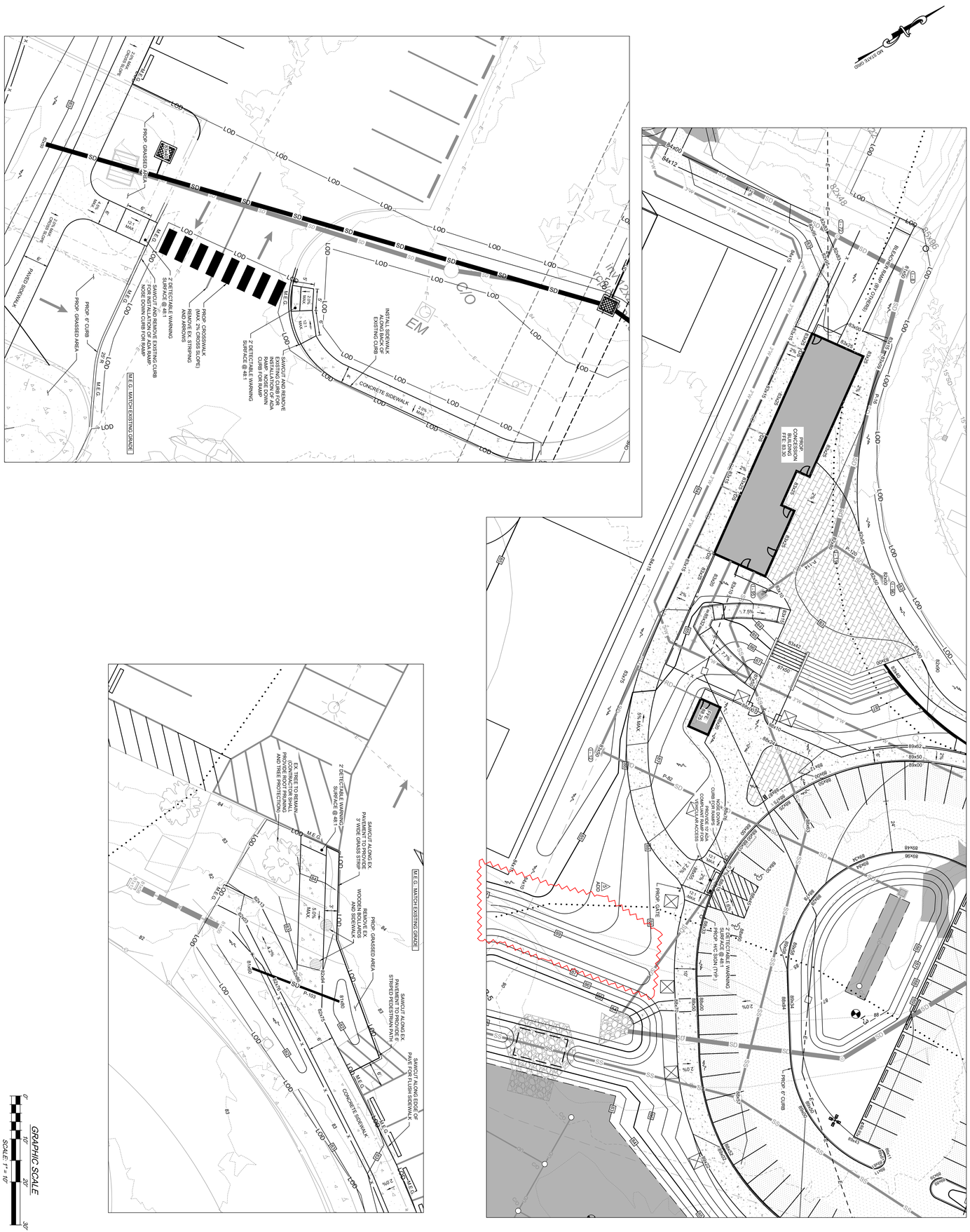


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SUPPLEMENTAL PLAN VIEWS

300 IRISHTOWN ROAD, NORTH EAST, MD 21901
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| DESIGNED BY: | AJW |
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NO. 31400
PROFESSIONAL ENGINEER

2/16/2024
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SUPPLEMENTAL PLAN VIEWS

NORTH EAST MIDDLE / HIGH SCHOOL
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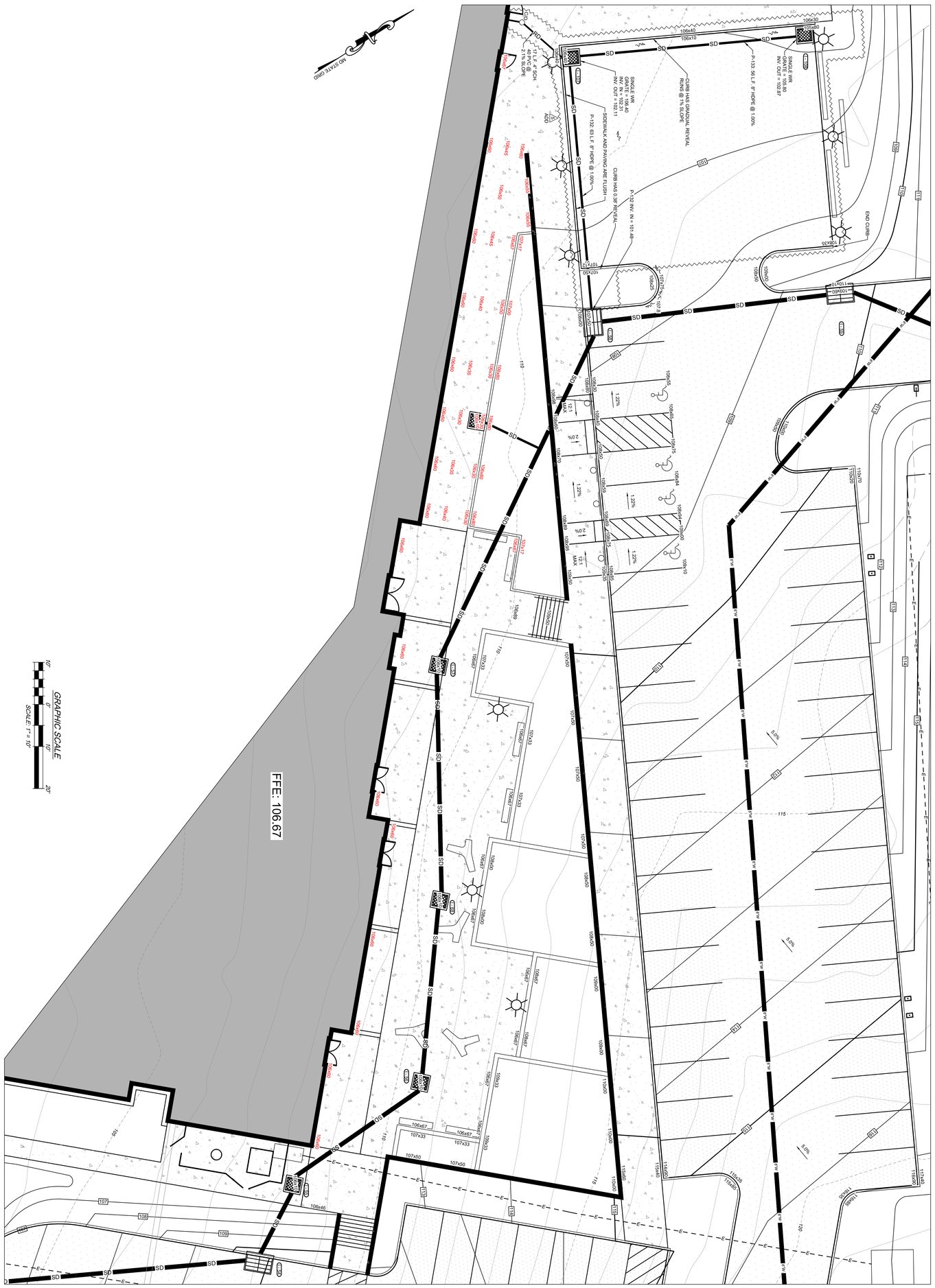


SHEET NO.: C-23

SUPPLEMENTAL PLAN VIEWS

300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

*NORTH EAST MIDDLE AND HIGH SCHOOLS*

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND

PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

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|---|---|---|
| 1 | ADDENDUM 1 | ADDED SPOT ELEVATIONS, LABELS, AND TRM. REMOVED CURB |

*Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 31400 Expiration Date: 1-16-2025*

STATE OF MARYLAND
DANIEL S. SPERMAN
NO. 31400
PROFESSIONAL ENGINEER

3/27/2024
DATE

C-23
12/22/2023
BID SET

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

SUPPLEMENTAL PLAN VIEWS

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

GP #22105

G+P
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ARCHITECTS

11720 Beltsville Drive
Suite 600
Calverton, MD 20705
Tel: 301.595.1000

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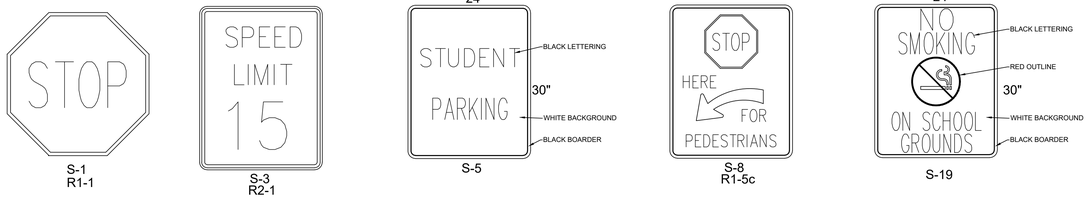
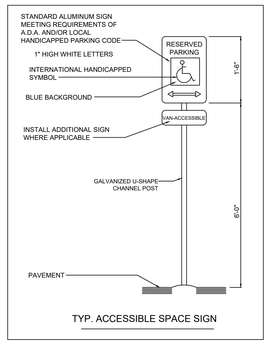
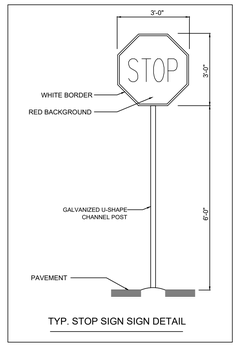
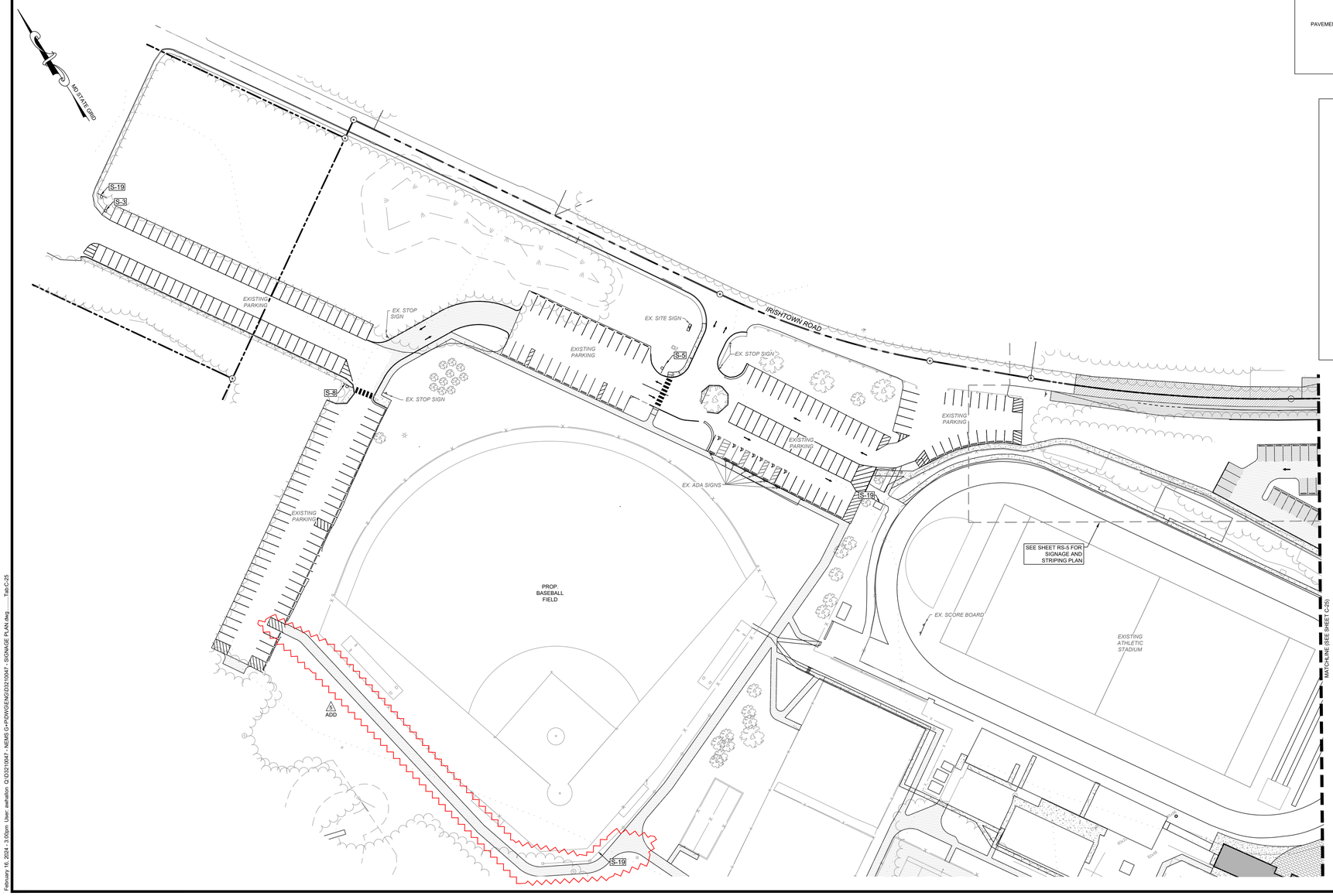



NOTE: SIGN DIMESIONS AND SPECIFICATIONS FOR SIGNS R1-1, R2-1, R1-5C, & R6-1L CAN BE FOUND IN TABLE 2B-1 OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD)




GRAPHIC SCALE
50' 0' 50' 100'
SCALE: 1" = 50'

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 31400, Expiration Date: 1-16-2025

STATE OF MARYLAND — JAMES A. MCCRONE — REGISTERED PROFESSIONAL ENGINEER — No. 31400

2/16/2024
DATE

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | SIDEWALK WIDTH INCREASED FROM 6' TO 10' |

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|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D20210047 |
| SCALE: | 1" = 50' |
| DRAWN BY: | AJM |
| DESIGNED BY: | AJM |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 26838 |

SIGNAGE PLAN (WEST)
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: C-25

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Suite 600
Calverton, MD 20705
Tel: 301.595.1000
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SIGNAGE PLAN (WEST)
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

C-25
12/22/2023
BID SET

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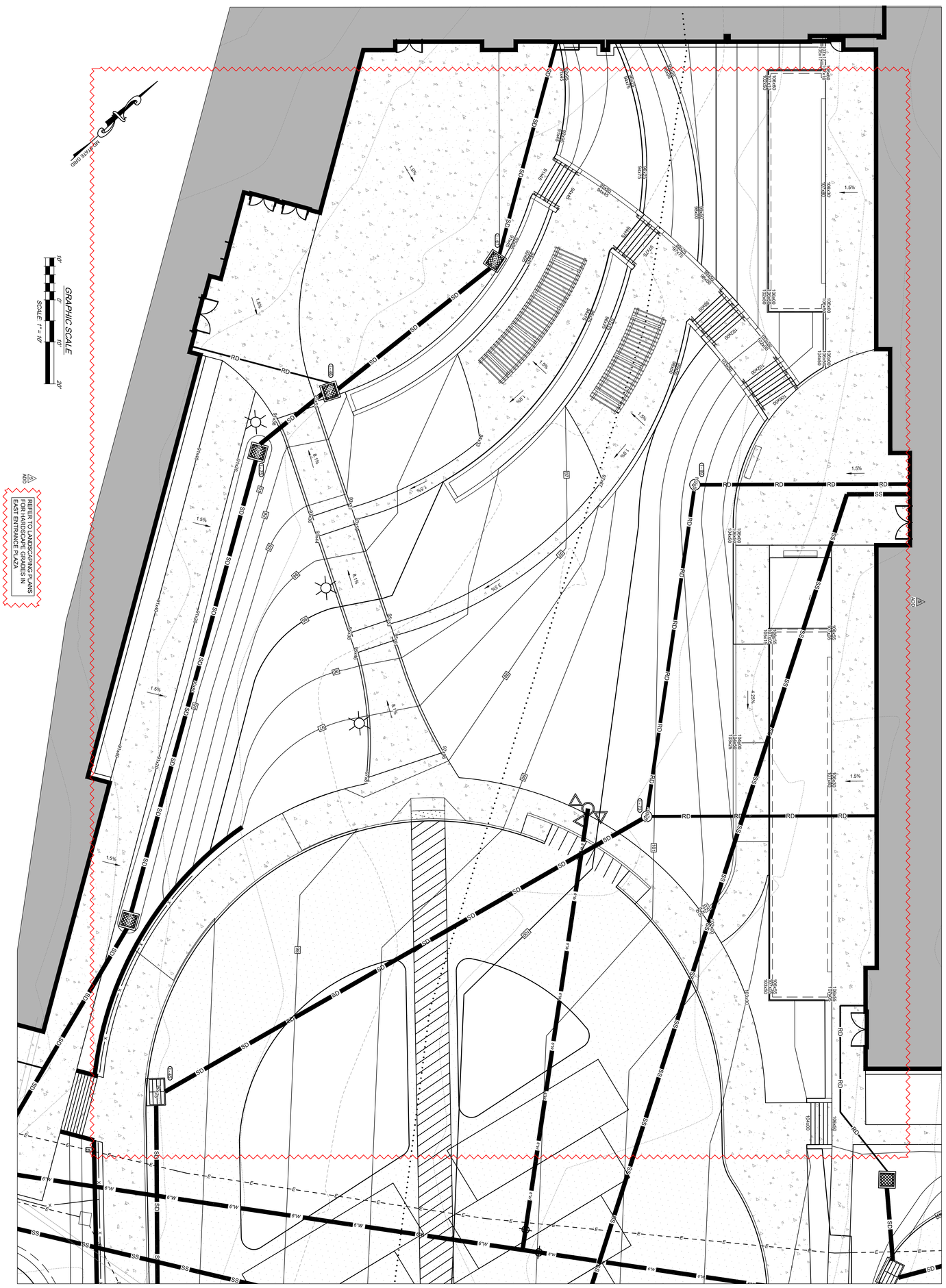
February 16, 2024 - 3:50pm User: aimallon G:\D20210047 - NENS G+P\WORKING\D20210047 - SIGNAGE PLAN.dwg Tab:C-25

February 20, 2024 - 8:54am User: awhallon Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ENG.dwg.....Tab:C-24




SHEET NO.: C-24

SUPPLEMENTAL PLAN VIEWS

300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

*NORTH EAST MIDDLE AND HIGH SCHOOLS*

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND

PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | 1" = 10' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 2683B |

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STATE OF MARYLAND
DANIEL S. SPEAKMAN
NO. 31400
PROFESSIONAL ENGINEER

2/16/2024
DATE

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

SUPPLEMENTAL PLAN VIEWS

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

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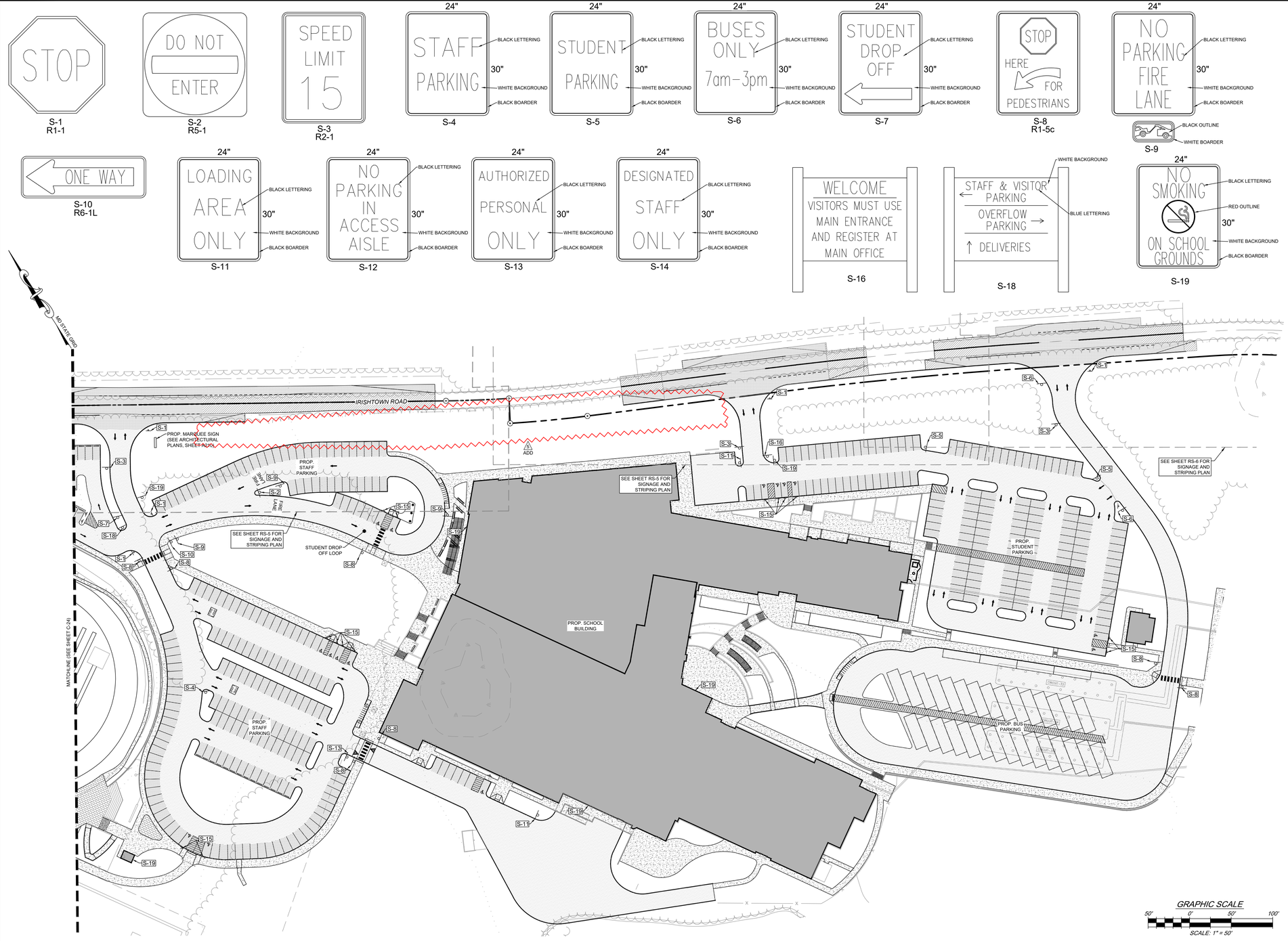


February 16, 2024 - 3:00pm User: ewhelton Q:\D321004\7 - NEMS G+P\DWG\D321004\7 - SIGNAGE PLAN.dwg Tab:C-26

PROFESSIONAL ENGINEER
STATE OF MARYLAND
JAMES A. SHEPHERDSON
No. 31400
2/16/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed* Professional Engineer *under the laws of the State of Maryland, License No.* 31400 *, Expiration Date:* 1-16-2025

REVISIONS

| REV. # | DATE | DESCRIPTION |
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| 1 | FEB. 2024 | PREL LINE REVISED |

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|---|---|
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| SCALE: | 1" = 50' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 28658 |

SIGNAGE PLAN (EAST)
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

*NORTH EAST MIDDLE AND HIGH SCHOOLS*

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: C-26

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SIGNAGE PLAN (EAST)

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

**C-26**

12/22/2023
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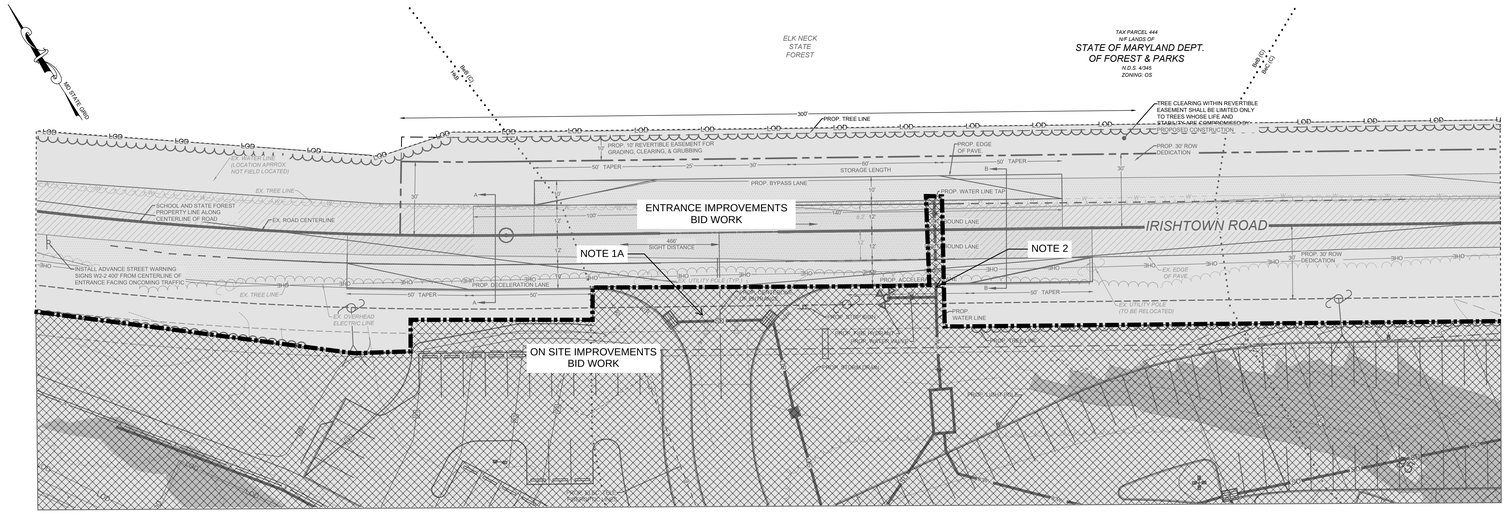
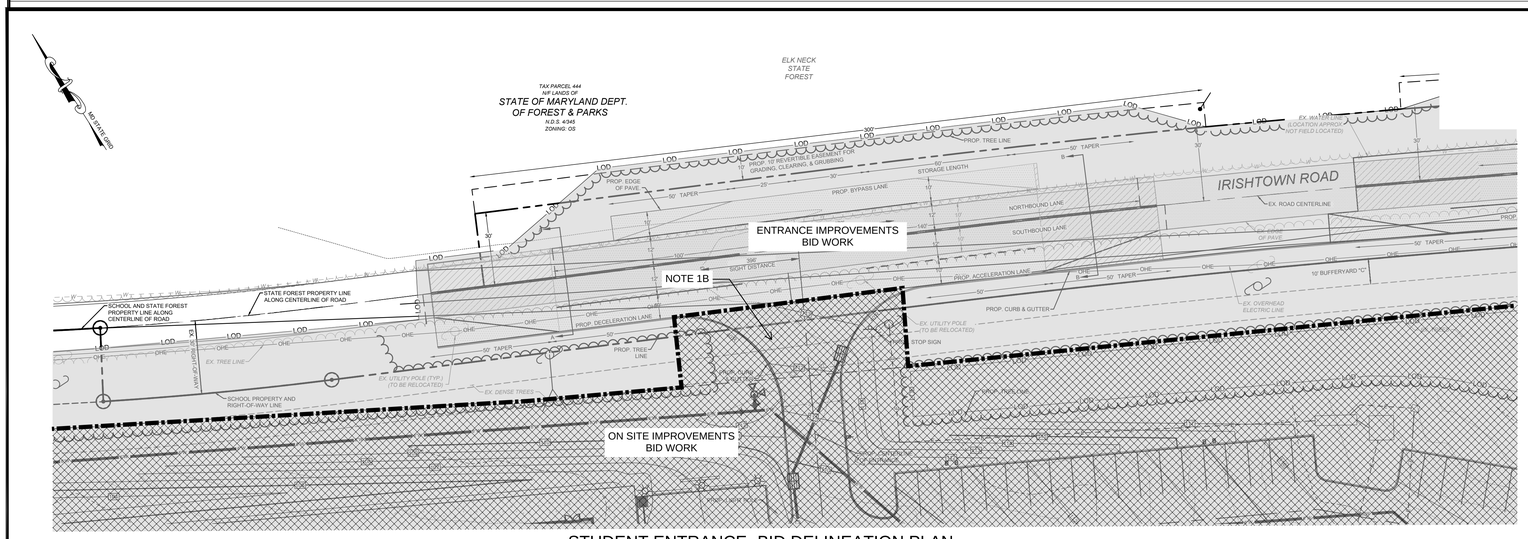
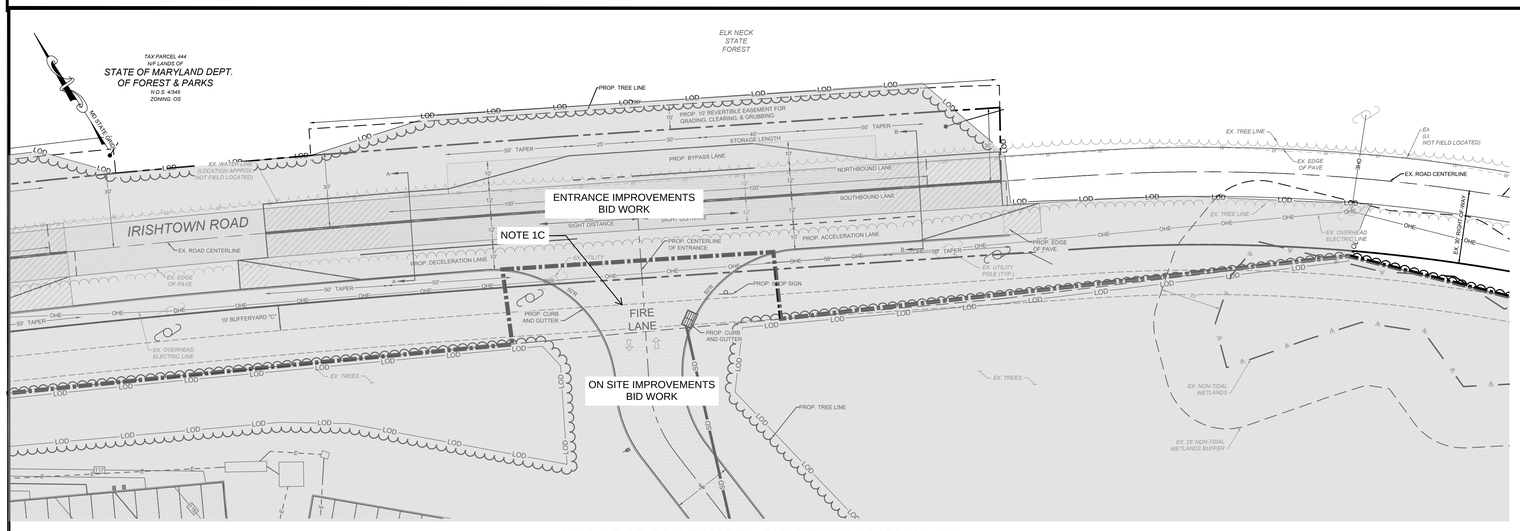



MAIN ENTRANCE - BID DELINEATION PLAN




STUDENT ENTRANCE- BID DELINEATION PLAN




BUS LOOP ENTRANCE - BID DELINEATION PLAN

## BID DELINEATION KEY

- ENTRANCE IMPROVEMENTS BID WORK
- ON SITE IMPROVEMENTS BID WORK
- BID DELINEATION LINE

## NOTES

**TYPICAL NOTES:**

1. DEMARCATION BETWEEN ENTRANCE IMPROVEMENTS AND ON SITE IMPROVEMENT BID WORK IS APPLICABLE TO ALL CIVIL SHEETS

**NUMBERED REMARKS:**

NOTE 1A. STABILIZED CONSTRUCTION ENTRANCE. REFER TO SHEET F-ESD-3.

NOTE 1B. STABILIZED CONSTRUCTION ENTRANCE. REFER TO SHEET F-ESD-4.

NOTE 1C. STABILIZED CONSTRUCTION ENTRANCE. REFER TO SHEET F-ESD-4.

NOTE 2. WATER LINE CONNECTION ACROSS IRISHTOWN ROAD TO BE INCLUDED AS PART OF ONSITE IMPROVEMENTS.

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GP #22105

ENTRANCE IMPROVEMENTS - BID DELINIATION
IRISHTOWN ROAD
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

ADD 5

C-27

12/22/2023
BID SET

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# FINAL ENVIRONMENTAL SITE DESIGN PLAN
FOR
# *NORTH EAST MIDDLE AND HIGH SCHOOLS*
300 IRISHTOWN ROAD, FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND

## GENERAL NOTES

1. The contractor shall coordinate all construction phases with the utility companies involved.
2. The contractor shall notify the following two weeks prior to the start of construction and shall coordinate all construction phases with the utility companies involved.

| | |
|---|---|
| Delmarva Power | 410-287-7140 |
| Verizon | 410-539-9900 |
| Miss Utility | 800-257-7777 |
| MD Dept. of the Environment Sediment Control | 410-901-4020 |
| Cecil Co. Dept. of Public Works | 410-996-5267 |

3. Contact the MDE Sediment Control Inspector (410-901-4020) and the Cecil County Department of Public Works Construction inspector staff at (410-996-5267) to conduct a pre-construction meeting onsite at least 2 weeks prior to the commencement of any construction activities. Failure to conduct the required pre-construction meeting with Department of Public Works Inspector present may expose the Owner/Developer and/or Contractor to additional work and/or fines or penalties.
4. All construction shall be marked for pedestrian and vehicular traffic.
5. The contractor shall grade all streets within the limits of construction and shall warp paving as necessary to ensure positive drainage in the direction indicated by the arrows shown.
6. The contractor shall adjust all existing utility boxes, manholes, etc., which are to remain, to conform to final grade.
7. All joints abutting existing paving shall be saw cut and asphalt sealant applied.
8. All disturbed areas shall be stabilized in accordance with recommendations shown on the approved erosion and sediment control plan.
9. All materials and methods of construction shall be in strict conformance with the Cecil County Road Code and Standard Specifications and Detail, Cecil County Standard Specifications and Details for Water Mains & Sewer Mains, the Maryland State Highway Administration Book of Standards for Highway & Incidental Structures. Where these specification conflict, the most robust specification shall be followed.
10. These drawings show information obtained from the best available records regarding pipes, conduits, telephone and electric lines, etc., and other structures and conditions which exist along the lines of the work, both at and below the surface of the ground. The owner and engineer disclaim any responsibility for the accuracy or completeness of said information being shown only for the convenience of the contractor, who must verify the information given to his own satisfaction. If the contractor relies on said information, he does so at his own risk. The giving of this information on the contract drawings will not relieve the contractor of his obligations to support and protect all pipes, conduits, telephone and electric lines and other structures.
11. Contractor to verify location and elevation of all existing utilities and roads prior to the start of any construction. Any discrepancies shall be brought to the attention of the Engineer with proposed modifications needed. Corrections of all discrepancies shall be the responsibility of the contractor.
12. It shall be the contractor's responsibility to protect all installed piping until completion of the project. Pipes with shallow cover are to be protected from damage by construction machinery with adequate temporary cover.
13. The contractor shall take all the necessary precautions to protect all existing utilities. Repair to damaged utilities shall be at the contractor's expense.
14. All borrow excavation shall be a soil or soil aggregate mixture and shall conform to section 916, Maryland State Highway Administration, Standard Specifications for Construction Materials, latest edition.
   14.1. Disposal of fill, including but not limited to earthen soils, rock, rubble, construction debris, woody debris, and trash, shall not be permitted in special flood hazard areas.
15. See Standard No. MD 578.01 "Repairing Pavement Openings for utility Trenches" of the MDSHA's Standards for Highways and Incidental Structures. The width of the trench shall be in accordance with section 303 of MDSHA's "Standard Specifications for Construction and Materials" July 2008.
16. The contractor shall be responsible for all existing roadway repair including patching.
17. This drawing does not include the necessary components for construction safety. All construction must be done in compliance with the Occupational Safety and Health Act of 1970 and all rules and regulations thereto appurtenant and the Maryland Occupational Safety and Health Administration Standards.
18. Ready-mixed concrete shall be in conformance with "Standard Specifications for Ready-Mixed Concrete", ASTM designation C94 and ACI 614. Portland cement shall conform to ASTM C150 for Type II. All concrete pavement, exterior pads, and sidewalks on this project shall have a minimum compressive strength of 4000 PSI at 28 days.
19. Where excavation is required near existing utility poles, the poles shall be braced and/or relocated. The cost shall be included in the bid.
20. See the latest edition of the "Cecil County Standard Specifications and Details for Water Mains and Sewer Mains" for the list of approved manufacturers.
21. All construction materials and methods to be in accordance with the Cecil County Standard Details and Specifications and as shown on these contract documents.
22. The existence and location of underground utilities or structures are shown in an approximate way only. The contractor shall determine the exact location of all existing utilities and structures before commencing the work.
23. The contractor shall coordinate his work schedule with the owner. The owner shall have final authority on the contractor's work schedule.
24. McCrone and the owner are not responsible for the contractor's utilization of workers, materials, equipment or safety measures in performance of any work on this project. The contractor assumes all responsibility and liability for performing the work correctly and in conformance with all applicable codes and regulations.
25. Should the contractor discover discrepancies between the plans and the actual field conditions encountered, the owner and the engineer shall be notified immediately to arrive at an acceptable resolution.
26. The contractor shall restore all damage to roads, grass areas, sidewalk, paving, curb & gutter and gravel areas upon completion of work at no additional cost to owner and to the satisfaction of the owner.
27. The contractor shall be responsible for avoiding and/or cleaning up dust and mud on all roads due to vehicles arriving and leaving the job site as part of this work.
28. It shall be distinctly understood that failure to mention specifically any work which would normally be required to complete the project shall not relieve the contractor of his responsibility to complete such work.
29. All plugs, caps, tees, and bends, shall be provided with concrete buttresses unless noted otherwise.
30. Water and sewer mains cannot be placed closer than ten feet horizontally as measured edge to edge. Water mains crossing sewer mains shall be laid to provide a minimum vertical distance of eighteen (18) inches between the outside of the water main and the outside of the sewer.
31. When a water main is in close proximity or crosses a sewer main, the water lines shall be placed higher than the sewer of non-potable water lines and the sewer or non-potable line shall be encased in concrete a minimum of ten (10) feet on each side of the main to protect the water supply from possible contamination.
32. All material shall be installed per manufacturer's recommendations.
33. Reinforced concrete pipe shall be Class III unless otherwise noted.

## STANDARD NOTES FOR UTILITY INSTALLATION

1. CALL 'MISS UTILITY' AT 1-800-257-777 48 HOURS PRIOR TO THE START OF WORK.
2. ONLY ENOUGH TRENCH WILL BE EXCAVATED THAT CAN BE BACKFILLED DAILY.
3. EXCAVATED TRENCH MATERIALS SHOULD BE PLACED ON THE HIGH SIDE OF THE TRENCH.
4. IMMEDIATELY FOLLOWING UTILITY INSTALLATION, THE TRENCH SHALL BE BACKFILLED, COMPACTED AND STABILIZED AT THE END OF EACH WORKING DAY. NO MORE TRENCH SHALL BE OPENED THAN CAN BE COMPLETED IN THE SAME DAY.
5. FULL TRENCH COMPACTION IS REQUIRED.
6. MULCHING TO CECIL SOIL CONSERVATION DISTRICT SPECIFICATIONS OF ALL DISTURBED AREAS AND DAILY BACKFILL WILL BE REQUIRED.
7. ANY SEDIMENT CONTROL PRACTICES WHICH ARE DISTURBED DURING UTILITY CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE END OF EACH WORKING DAY.
8. ANY DITCHES OR DRAINAGE WAYS DISTURBED DURING CONSTRUCTION WILL BE RESTORED TO ORIGINAL CONDITION.
9. IF ANY DAMAGE TO THE EXISTING ROAD OCCURS, IT WILL BE REPAIRED IN ACCORDANCE WITH THE CECIL COUNTY ROAD CODE AND STANDARD SPECIFICATIONS AND DETAILS.
10. FOR ALL WORK WITHIN THE PAVEMENT OF A ROAD, REPAIRS MUST BE MADE IN ACCORDANCE WITH THE DETAILS SHOWN ON THE SANITARY SEWER PLANS.
11. ALL PERVIOUS AREAS DISTURBED DURING UTILITY INSTALLATION MUST BE RE-GRADED AND RE-STABILIZED IN ACCORDANCE WITH MD STANDARDS & SPECIFICATIONS AT THE END OF EACH WORK DAY. ALL PERVIOUS AREAS SHALL REMAIN PERVIOUS AND MUST BE RETURNED TO THEIR PREVIOUS OR BETTER CONDITION.
12. ALL IMPERVIOUS AREAS DISTURBED DURING UTILITY INSTALLATION MUST BE RETURNED OR RE-INSTALLED TO THEIR PREVIOUS OR BETTER CONDITION.
13. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING TRAFFIC CONTROL WITH NORTHROP GRUMMAN WHEN INTERNAL ROADWAYS OR PARKING AREAS WILL BE AFFECTED. THERE ARE NOT COUNTY ROADWAY IMPACTS PROPOSED BY THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ERECTING AND MAINTAINING ALL NECESSARY SIGNS, BARRICADES, DETOUR SIGNS, AND WARNING DEVICES REQUIRED TO SAFELY DIRECT TRAFFIC OVER OR AROUND PROPOSED WORK AREA. ALL COSTS ASSOCIATED WITH TRAFFIC CONTROL ARE THE RESPONSIBILITY OF THE CONTRACTOR.
14. ALL APPROPRIATE FEDERAL, STATE, AND LOCAL PERMITS MUST BE OBTAINED PRIOR TO COMMENCEMENT OF AND GROUND DISTURBING ACTIVITIES.

## *SOILS LEGEND*

| TYPE | SOIL NAME & DESCRIPTION | | HYDROLOGIC GROUP | K FACTOR | HES CRITERIA |
|---|---|---|---|---|---|
| BeB | Beltsville silt loam, 2 to 5 percent slopes | Partially Hydric | C | 0.37 | Yes - K Factor |
| BeC | Beltsville silt loam, 5 to 10 percent slopes | Partially Hydric | C | 0.37 | Yes - K Factor |
| CbD | Chillum silt loam, 10 to 15 percent slopes | Not Hydric | C | - | |
| CfB | Christiana-Sassafras-Urban land complex, 0 to 5 percent slopes | Not Hydric | D | 0.49 | Yes - K Factor |
| CsB | Crosiadore silt loam, 2 to 5 percent slopes | Partially Hydric | C/D | 0.49 | Yes - K Factor |
| HkB | Hambrook-Urban land complex, 0 to 5 percent slopes | Not Hydric | - | - | |
| McA | Marshyhope loam, 0 to 2 percent slopes | Partially Hydric | B/D | 0.37 | Yes - K Factor |
| RmC | Russett-Christiana-Hambrook complex, 5 to 10 percent slopes | Not Hydric | C | 0.28 | |
| RmD | Russett-Christiana-Hambrook complex, 10 to 15 percent slopes | Not Hydric | C | 0.28 | |
| SaD | Sassafras sandy loam, 10 to 15 percent slopes | Partially Hydric | B | 0.37 | Yes - K Factor |
| SaE | Sassafras sandy loam, 15 to 25 percent slopes | Partially Hydric | B | 0.37 | Yes - K Factor |
| VbB | Urban land-Butlertown complex, 0 to 5 percent slopes | Not Hydric | D | - | |

SOURCE: Latest available data from the USDA Digital Soil Survey

February 16, 2024 - 2:58pm User: awhallon Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ESD.dwg.........Tab:ESD-1

## OVERALL SEDIMENT CONTROL BMP QUANTITIES

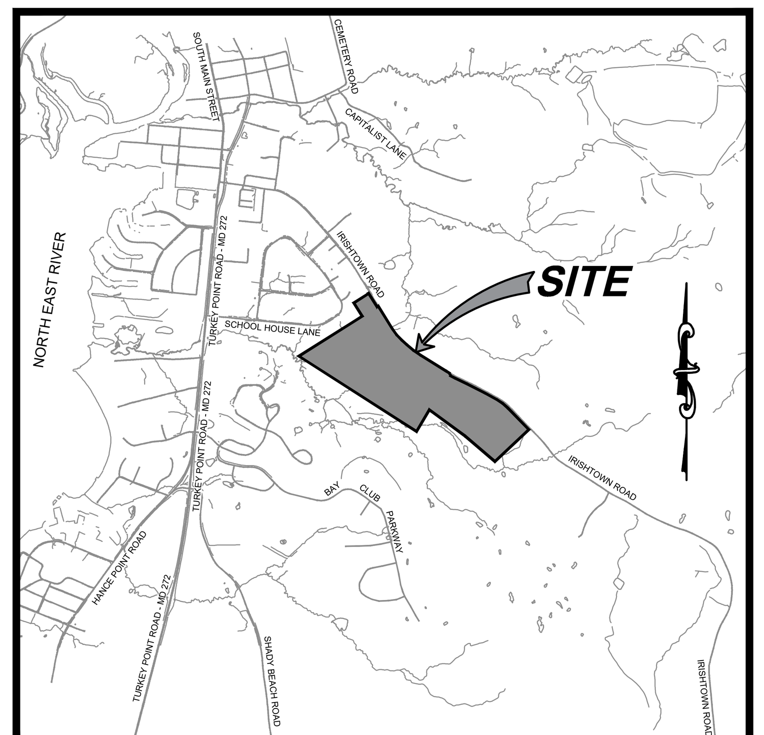
| CONTROLS | QUANTITY |
|---|---|
| STABILIZED CONSTRUCTION ENTRANCE | 5 EA. |
| SILT FENCE | 8,525 L.F. |
| SMART FENCE 42 (SUPER SILT FENCE) | 4,400 L.F. |
| CULVERT INLET PROTECTION | 15 EA. |
| STANDARD INLET PROTECTION | 51 EA. |
| AT-GRADE INLET PROTECTION | 12 EA. |
| COMBINATION INLET PROTECTION | 39 EA. |
| GABION INLET PROTECTION | 4 EA. |
| SEDIMENT BASIN | 2 EA. |

## *SHEET INDEX*


| | | |
|---|---|---|
| F-ESD-1 | COVER SHEET AND GENERAL NOTES | |
| F-ESD-2 | PHASED SEQUENCES OF CONSTRUCTION | |
| F-ESD-3 | EXISTING CONDITIONS PLAN | PH. 1 (WEST) |
| F-ESD-4 | EXISTING CONDITIONS PLAN | PH. 1 (EAST) |
| F-ESD-5 | PROPOSED CONDITIONS PLAN | PH. 1 (WEST) |
| F-ESD-6 | PROPOSED CONDITIONS PLAN | PH. 1 (CENTER) |
| F-ESD-7 | PROPOSED CONDITIONS PLAN | PH. 1 (EAST) |
| F-ESD-8 | INTERMEDIATE CONDITIONS PLAN | PH. 2 (CENTER) |
| F-ESD-9 | INTERMEDIATE CONDITIONS PLAN | PH. 2 (EAST) |
| F-ESD-10 | PROPOSED CONDITIONS PLAN | PH. 2 (CENTER) |
| F-ESD-11 | PROPOSED CONDITIONS PLAN | PH. 2 (EAST) |
| F-ESD-12 | INTERMEDIATE CONDITIONS PLAN | PH. 3 (WEST) |
| F-ESD-13 | PROPOSED CONDITIONS PLAN | PH. 3 (WEST) |
| F-ESD-14 | PROPOSED CONDITIONS PLAN | ESD (WEST) |
| F-ESD-15 | PROPOSED CONDITIONS PLAN | ESD (CENTER) |
| F-ESD-16 | PROPOSED CONDITIONS PLAN | ESD (EAST) |
| F-ESD-17 | SUBMERGED GRAVEL WETLAND (SGW-2) PLAN VIEW & PROFILE | |
| F-ESD-18 | MICROBIORETENTION (MBR-1) PLAN VIEW & PROFILE | |
| F-ESD-19 | MICROBIORETENTION (MBR-2, MBR-3, MBR-4, & MBR-5) PLAN VIEW & PROFILE | |
| F-ESD-20 | MICROBIORETENTION (MBR-2, MBR-3, MBR-4, & MBR-5) AND OUTLET CHANNEL PROFILE | |
| F-ESD-21 | SEDIMENT BASIN (SB-1) PLAN VIEW | |
| F-ESD-22 | INFILTRATION BASIN (IB-1) PLAN VIEW | |
| F-ESD-23 | INFILTRATION BASIN (IB-1) PROFILES | |
| F-ESD-24 | SEDIMENT BASIN (SB-2) PLAN VIEW | |
| F-ESD-25 | SUBMERGED GRAVEL WETLAND (SGW-1) PLAN VIEW | |
| F-ESD-26 | SUBMERGED GRAVEL WETLAND (SGW-1) PROFILES | |
| F-ESD-27 | STORMWATER PRACTICE DETAILS & SPECIFICATIONS | |
| F-ESD-28 | STORM DRAIN PROFILES | |
| F-ESD-29 | STORM DRAIN PROFILES | |
| F-ESD-30 | STORM DRAIN PROFILES | |
| F-ESD-30a | STORM DRAIN PROFILES | |
| F-ESD-30b | STORM DRAIN PROFILES | |
| F-ESD-31 | BORING LOGS | |
| F-ESD-32 | DRAINAGE DETAILS | |
| F-ESD-33 | DRAINAGE DETAILS | |
| F-ESD-34 | EROSION & SEDIMENT CONTROL DETAILS | |
| F-ESD-35 | EROSION & SEDIMENT CONTROL DETAILS | |
| F-ESD-36 | EROSION & SEDIMENT CONTROL DETAILS | |
| F-ESD-37 | VEGETATIVE STABILIZATION NOTES | |
| F-ESD-38 | MICROBIORETENTION (MBR-6) PLAN VIEW & PROFILE | |
| F-ESD-38a | DRAINAGE DETAILS | |
| F-ESD-39 | SWPPP PLAN | |
| F-ESD-40 | EROSION AND SEDIMENT CONTROL PLAN FOR PROPOSED ENTRANCES | |
| F-ESD-41 | ESD LANDSCAPING PLAN - WEST | |
| F-ESD-42 | ESD LANDSCAPING PLAN - CENTER | |
| F-ESD-43 | ESD LANDSCAPING PLAN - EAST | |
| F-ESD-44 | ESD LANDSCAPING PLAN - SCHEDULE AND NOTES | |
| F-ESD-45 | ESD LANDSCAPING PLAN - DETAILS | |
| F-ESD-46 | ESD LANDSCAPING PLAN - MAINTENANCE | |


| UNIFIED SIZING CRITERIA | REQUIRED | PROVIDED |
|---|---|---|
| WATER QUALITY VOLUME (WQv) | 52,605 CF | 3,601 CF: MBR-1<br>10,698 CF: MBR-2, 3, 4 & 5<br>2,809 CF: MBR-6<br>32,037 CF: IB-1<br>59,594 CF: SGW-1<br>1,182 CF: SGW-2<br>109,921 CF TOTAL |
| ENVIRONMENTAL SITE DESIGN VOLUME (ESDv) | 93,110 CF | |
| RECHARGE VOLUME | 76,633 SF OR 6,73 CF | RECHARGE PROVIDED IN MICRO-BIORETENTIONS MBR-2, 3, 4, & 5 AND INFILTRATION BASIN IB-1. TOTAL = 3,604 CF + 27,155 CF = 30,759 CF |
| CHANNEL PROTECTION VOLUME | ESDv TO THE MEP | ESDv TO THE MEP |
| OVERBANK FLOOD PROTECTION VOLUME | ESDv TO THE MEP | ESDv TO THE MEP |

## VICINITY MAP




| | |
|---|---|
| VICINITY MAP | SCALE: 1" = 2000' |
| ADC MAP 11, GRID G-13 | TAX MAP 31, GRID 17 |
| | PARCEL 857 |

BEFORE YOU DIG CALL
1-800-257-7777 OR DIAL 811

## OVERALL SITE ANALYSIS TABLE

| | |
|---|---|
| LOT AREA: | 74.00 AC |
| TOTAL AREA TO BE DISTURBED: | 42.25 AC |
| AREA TO BE VEGETATIVELY STABILIZED: | 28.51 AC |
| IMPERVIOUS AREA: | 13.74 AC |
| EARTHWORK ESTIMATE: | TOPSOIL = 49,500 C.Y. ±<br>CUT = 80,800 C.Y. ±<br>FILL = 108,600 C.Y. ± |

CUT & FILL VOLUMES ARE ESTIMATES FOR REVIEW AGENCY ONLY AND ARE NOT INTENDED FOR BID PURPOSES.

DRAINAGE BASIN # 02130608, # 021306080374 & 021306080376

### FLOOD CERTIFICATION
THE PROPERTY SHOWN HEREON APPEARS TO BE LOCATED IN ZONE 'X' (AREA OF MINIMAL FLOOD HAZARD), AS SHOWN ON F.I.R.M. COMMUNITY PANEL NO. 24015C0160E DATED MAY 4, 2015.

NOTE: THIS SITE DOES NOT LIE WITHIN THE CHESAPEAKE BAY CRITICAL AREA.

| | | | | |
|---|---|---|---|---|
| LATITUDE | = | 39.581922 | = | 39°34'54.9"N |
| LONGITUDE | = | -75.928924 | = | 75°55'44.1"W |

**PONDS MBR-1, MBR-2,3,4,5, MBR-6, AND SGW-2 ARE EXEMPT FROM MD-378 SMALL POND APPROVAL AND QUALIFY TO BE REVIEWED AND APPROVED SOLELY BY LOCAL SWM APPROVING AUTHORITY.**

**POND IB-1 AND SGW-1 QUALIFY AS MD-378 SMALL PONDS AND MAY BE REVIEWED AND APPROVED BY THE CECIL SOIL CONSERVATION DISTRICT IN LIEU OF MDE DAM SAFETY DIVISION.**

## *LEGEND*

| | EXISTING | PROPOSED |
|---|---|---|
| CONTOUR | 210 | 210 |
| SPOT ELEVATION | x210.50 | 210x50 |
| FLOW ARROW | | |
| SOIL BOUNDARY | GnB (C/D) MxB (B) | |
| PROPERTY LINE | | |
| EASEMENT | | |
| FENCELINE | X | X |
| GAS LINE | G | G |
| TELEPHONE LINE | T | T |
| ELECTRIC LINE | E | E |
| STREAM | | |
| STREAM BUFFER | | |
| TC PATH | | |
| DRAINAGE AREA | | |
| STORM DRAIN | SD | SD |
| STORM DRAIN CLEANOUT | | C/O |
| STORM DRAIN INLET | | |
| SANITARY SEWER | SS | SS |
| SANITARY SEPTIC TANK | | ST |
| SANITARY SEWER PUMP | | S |
| WATERLINE | W | W |
| WELL | | W |
| BUILDING | | |
| TREE | | |
| TREELINE | | |
| LIMIT OF DISTURBANCE | | LOD |
| SILT FENCE | | SF |
| SUPER SILT FENCE (OR SMARTFENCE42) | | SSF |
| STABILIZED CONSTRUCTION ENTRANCE | | SCE |
| STONE CHECK DAM | | CD |
| SLOPES 15% - 25% | | |
| SLOPES >25% | | |
| REVISION CLOUD | | |

## SMALL POND APPROVAL
### Cecil Soil Conservation District

Approved Cecil SCD ____ Date

Technical Review Cecil SCD ____ Date

Subject to Re-approval if Pond is not Constructed Within two (2) years of Approval Date.

Note: This approval applies to all 378 Ponds shown on this plan that fall under the review authority of Cecil Soil Conservation District.

### Stormwater Management - As Built Certification:

I hereby certify that the facilities shown on these stormwater management plans have been constructed as shown in red hereon. I also certify that the structural and non-structural "Best Management Practices" as constructed, are in compliance with the approved plans and computations and if applicable, meet the requirements of COMAR 26.17.04.05 and the USDA Natural Resources Conservation Service Maryland Conservation Practice Standard Pond Code 378 (January 2000).

| | |
|---|---|
| Signature | Date |
| Daniel Speakman, PE<br>Printed Name/Title | 31400<br>Professional License No. |
| 107 Chesapeake Blvd., Suite #104<br>Street Address | Professional Engineer<br>License Type |
| Elkton, MD 21921<br>City, State, Zip | |

*Certify means to state or declare a professional opinion based upon onsite inspections and material tests which are conducted during construction. The onsite inspections and material tests are those inspections and tests deemed sufficient and appropriate by commonly accepted engineering standards. Certify does not mean or imply a guarantee by the engineer nor does an engineer's certification relieve any other party from meeting requirements imposed by contract, employment, or other means, including meeting commonly accepted industry practices.

Engineer's Seal

5 ADD

### Professional Certification:

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland.

License No.: ____ Expiration Date: ____

### Geotechnical Certification:

In place testing shall be done by a registered soils engineer or their representative to determine suitability of embankment fill material and to certify compaction is at least 95% of maximum dry density with a moisture content within +/- 2% of the optimum, determined by AASHTO T-99.

"I ____ (Print name), of ____ (Company name)

Certify that the soil(s) used to construct the core at this site is of the type (s):

____

as listed in the Unified Soil Classification System that are appropriate for use in the structural and non-structural "Best Management Practices" as proposed on these plans and meet the "Earth Fill" requirements of the USDA Natural Resources Conservation Service Maryland Conservation Practice Standard Pond Code 378 (January 2000).

### Statement of Determination of MD 378

All stormwater management facilities are to be constructed in accordance with the 2000 Maryland Stomwater Design Manual, Volumes I & II, (Maryland Department of the Environment) and the USDA Natural Resources Conservation Service Maryland Conservation Practice Standard Pond Code 378 (January 2000). These construction drawings are intended to reflect the relevant requirements; however, any lack of specific details on these drawings shall not relieve any of the requirements of these and other relevant codes. The cut-off trench and impervious clay core are required where shown on the approved set of drawings.

| | |
|---|---|
| APPROVED: | CECIL COUNTY DEPARTMENT OF LAND USE AND DEVELOPMENT SERVICES |
| DIRECTOR | DATE |
| APPROVED: | CECIL COUNTY LAND USE DEVELOPMENT SERVICES DIVISION OF DEVELOPMENT PLANS REVIEW |
| CHIEF | DATE |
| APPROVED: | CECIL COUNTY LAND USE AND DEVELOPMENT SERVICES DIVISION OF WATER AND SEWER PLANNING |
| APPROVING AUTHORITY | DATE |

### Owner's/Developer's Certification:

I/We hereby certify that all clearing, grading, construction and/or development will be done pursuant to this plan and that any responsible personnel involved in the construction project will have a certification of training at a Maryland Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I hereby authorize the right of entry for periodic on-site evaluation by the Cecil Soil Conservation District or their representatives and the State of Maryland, Department of the Environment, compliance inspectors.

I/We hereby certify that development and/or construction will be done according to this plan of development and plan of erosion and sediment control.

Owner/Developer Signature ____ Date

Printed Name and Title

### Design Certification:

I hereby certify that all sediment and erosion control measures shown on these plans have been designed in accordance with both the 2011 MD Standards and Specifications for Soil Erosion and Sediment Control or current version thereof.

I also certify that any stormwater management measures shown on these plans have been designed in accordance and the Cecil County Department of Public Works 2010 Stormwater Management Ordinance standards and regulations, Code of Maryland Regulations (COMAR) Title 26.17.04.05, the USDA Natural Resources Conservation Service Maryland Conservation Practice Standard Pond Code 378 (January 2000), and latest version of Maryland Department of Environment Policies and Procedures for Small Pond Approval, as applicable.

Signature ____ Date
Daniel Speakman PE — 31400
Printed Name — MD Registration No. P.E., R.L.S., or R.L.A. (circle one)


| | |
|---|---|
| Applicant: | Grimm + Parker Architects<br>11720 Beltsville Drive,<br>Calverton, MD 20705 |
| Primary Contact: | Paul Bradshaw, ALEP<br>(301) 595-1000<br>pbradshaw@gparch.com |

| | |
|---|---|
| Landowner: | Board of Education of Cecil County MD<br>201 Booth Street,<br>Elkton, MD 21921 |
| Contact: | Charles Simpers, Director of Facilities<br>(410) 996-5034<br>ccsimpers@ccps.org |

| | |
|---|---|
| Engineer: | McCrone<br>Daniel Speakman, P.E.<br>107 Chesapeake Blvd., Suite 104<br>Upper Chesapeake Corporate Center<br>Elkton, MD 21921<br>(410) 398-1550 |


*Reviewed for Cecil S.C.D. and meets **Technical Requirements** for Final Plan Approval*

*Signature ____ Date*
*Plan is valid for 2 years from date of approval*

***Cecil Soil Conservation District***
*Erosion and Sediment Control Plan for Final Plan Approval*

*Approved ____ Date*
*Plan is valid for 2 years from date of approval*

STATE OF MARYLAND — DANIEL S. SPEAKMAN — NO. 31400 — PROFESSIONAL ENGINEER
2/16/2024 DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 31400, Expiration Date: 1-16-2025.*

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | REVISED CERTIFICATION BLOCKS AND UNIFIED SIZING CRITERIA |


McCRONE
ENGINEERS ▪ SURVEYORS ▪ PLANNERS
ANNAPOLIS ▪ CENTREVILLE ▪ ELKTON ▪ SALISBURY ▪ DELAWARE
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UPPER CHESAPEAKE CORPORATE CENTER
ELKTON, MARYLAND 21921
410.398.1550
www.mccrone-engineering.com

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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | AS NOTED |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 2683B |

COVER SHEET AND GENERAL NOTES
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13
*NORTH EAST MIDDLE AND HIGH SCHOOLS*
FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-1


11720 Beltsville Drive
Suite 600
Calverton, MD 20705
Tel: 301.595.1000
www.grimmandparker.com
GRIMM + PARKER ARCHITECTS


GP #22105

COVER SHEET AND GENERAL NOTES
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |
| | |
| | |
| | |
| | |

# F-ESD-1
12/22/2023
BID SET

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## PHASE 1 SEQUENCE OF CONSTRUCTION

See Sheets F-ESD-3 through F-ESD-7.

1. Obtain all required permits.
2. Stake out Limit of Disturbance. (1 day)
3. The contractor shall conduct a pre-construction meeting at the site. The following agencies shall be contacted at least 48 hours in advance of the pre-construction meeting:

| | |
|---|---|
| M.D.E. | (410) 901-4020 |
| DPW Stormwater Inspector | (410) 996-5267 |
| Miss Utility | (800) 257-7777 or 811 |
| McCrone | (410) 398-1550 |
| Town of North East | (410) 287-5880 |
| CCPS Supervisor of Facilities (Ted Lambert) | (410) 287-4653 |
| CCPS Construction Manager (Scott Anderson) | (443) 309-9011 |

Failure to notify the above mentioned parties may expose the Owner/Developer and/or Contractor to additional work. Contractor shall also determine if overhead utility lines are high enough for all expected construction traffic entering and exiting the site. Contractor shall coordinate the raising of overhead wires if needed.

4. Grade and install stabilized construction entrances at Irishtown Road. Construction traffic must use stabilized construction entrances to enter and exit site. Contractor shall install construction fencing as needed within the limit of disturbance to separate the construction area from the occupied school and pedestrian traffic. A safe pathway for pedestrian gates from athletic fields shall be provided for emergency use. Additional fencing and signage shall be required to direct traffic at Owner's discretion. (5 days)
5. Clear and grub for installation of perimeter sediment control measures, install perimeter silt fence and super silt fence. Set up staging area and stockpile area. Install silt fence as needed around staging and stockpile areas. (4 days)

Sanitary Sewer Installation
(May be installed concurrently with other sections and must be coordinated with Owner's school and athletic schedule.)

6. Install perimeter erosion and sediment control measures and clear and grub for new sanitary sewer line. (4 days)
7. Install sanitary sewer from SSMH-0 up to SSMH-8. Provide watertight temporary caps for future pipe connections. Sanitary sewer installation shall be coordinated with School so as to not disrupt the School's athletic program. Installation between SSMH-0 and SSMH-3 will require temporary shut down of the existing stadium restroom building. (2 weeks)
8. Install storm drain pipes P-5, P-13, and P-81 and inlets I-6, I-7 and I-3 with standard inlet protection. Temporarily plug existing catch basin openings for future connections. Grade surface per grading plans. Install new paved pathways for athletic field access. (2 weeks)
9. Stabilize all disturbed areas with 6" topsoil, seed, and mulch. (2 days)

Sediment Basin Installation

10. Clear and grub for installation of Sediment Basins 1 & 2 and temporary Earth Dikes.
11. SSMH-7, SSMH-8, and S-8 pipe must be installed prior to construction of Sediment Basin 1. SSMH-15, SSMH-16, and S-23 pipe must be installed prior to construction of Sediment Basin 2. Contractor may elect to install these manholes and pipes without downstream sewer run installed. Manholes shall be plugged to ensure no water enters or exits system. Plugs shall be removed upon installation of remaining sewer lines.
12. Construct Sediment Basin 1 in accordance with "Sediment Basin SB-1 Sequence of Construction" as seen on sheet F-ESD-21. Construct Sediment Basin 2 in accordance with "Sediment Basin SB-2 Sequence of Construction" as seen on sheet F-ESD-24. Basin construction may run concurrently. (3 weeks)
13. Once Basins are complete and vegetatively stabilized, install Temporary Earth Dikes 1, 2, 3, & 5 from lowest to highest points. Install stabilization and riprap inflow protection as noted on plans and standard details. (5 days)

Geothermal and Athletic Field Construction

14. Clear and grub site within Limit of Disturbance for geothermal installation and athletic field construction. (2 weeks)
15. Strip topsoil and stockpile in area shown. Stockpile shall be temporarily stabilized. (3 days)
16. Install storm drain run from P-64 to P-85. Install riprap outlet protection and catch basin and culvert inlet protections as noted on plans. (1 week)
17. Rough grade geothermal/athletic fields. Install Swale A-A with check dams, and Swale B-B, stabilize per plans. Temporarily stabilize athletic fields. (3 weeks)
18. Rough grade building pads. Begin building construction. (90 days--site work may run concurrently with building construction.)
19. Install geothermal wells and piping per M.E.P. plans.
20. Once onsite utilities (water, sewer, electric) are constructed, make connections to buildings. (3 days)
21. Once M.E.P. approves geothermal installation is complete, fine grade athletic fields and around buildings. (5 days)
22. Install site features associated with athletic fields (fencing, drainage, dugouts, etc.).
23. Stabilize all disturbed areas with 6" topsoil, seed, and mulch. (4 days)

School Building, Parking Lot, Site Construction

24. Clear and grub site within Limit of Disturbance. (2 weeks)
25. Demolish remaining existing site features within Limit of Disturbance per the Demolition Plans. Strip topsoil and stockpile in area shown. Stockpile shall be temporarily stabilized. (3 days)
26. Rough grade side for installation of temporary swales on the north side of the building. Install storm drain runs from I-48 to I-53 and I-31 to I-32. Immediately install riprap outlet protection and catch basin inlet protections. Install culvert inlet protections. Grade temporary swales and stabilized per plans. (3 weeks)
27. Rough grade building pad. Begin building construction. (600 days--site work may run concurrently with building construction) Vertical construction of the building shall not begin until the work area around the building is stabilized with a stone base. This is a requirement by Cecil County.
28. Rough grade roadways and parking lots. (4 weeks)
29. Install remaining Phase 1 sanitary sewer manholes and pipes, rough in laterals to foundation, and install grease trap. (2 weeks)
30. Install remaining storm drain pipes, inlets, and manholes. Install standard inlet protection and riprap outlet protection immediately. Install roof drains that connect to Phase 1 storm drain. Provide watertight caps for future connections. (4 weeks)
31. MBRs 2-5 shall not be installed at this time. Install temporary pipe extensions to daylight and provide temporary swales or pipes to convey runoff to downstream catch basin. Each pipe outfall must have either temporary or permanent outlet stabilization to prevent scouring. Sediment laden water is not permitted to pond in areas of future ESD practices. Contractor shall provide shop drawing for temporary plumbing plan. (2 days)
32. Install water main, bends, tees, fire hydrants, air release valve, and appropriate appurtenances. Provide water tight caps for future connections. (2 weeks)
33. Tap existing water main on Irishtown road and install road crossing. This step shall be coordinated with the school to not interrupt school events or the school day. This step shall be considered flexible based on school and athletics schedule. If possible, work should be completed during summer or other significant duration break to avoid interruptions during school functions. Contractor shall provide and install traffic maintenance signage for lane closure of Irishtown Road. Sawcut, mill, and remove existing pavement for installation and connection to existing water main on northern side of Irishtown Road. Water main work must be complete prior to paving. Install water meter. Refer to Cecil County Department of Public Works Standard Specifications and Details for Water Mains & Sewer Mains for Installation, disinfection, and hydrostatic testing. (5 days)
34. Construct entrances along Irishtown Road. (2 months)
35. Rough grade remaining site. Construct retaining walls. (3 weeks)
36. Fine grade around building pad and for paved areas. (5 days)
37. Install stone base for pavement. (2 days)
38. Begin vertical building construction.
39. Install site curbing. (5 days)
40. Install bituminous base and surface course paving. (5 days)
41. Replace all standard inlet protection in paved areas with at grade inlet protection and combination inlet protection. (1 day)
42. Install concrete and concrete walks. (7 days)
43. Stabilize all disturbed areas with minimum 6" topsoil, seed, and mulch. (4 days)
44. Install landscaping for all vegetated areas. (5 days)
45. Once all areas are stabilized, and with permission of the sediment and erosion control inspector, begin construction of the ESD practices MBR 2-5 in accordance with the construction specifications, details, and per manufacturer's, geotechnical engineer's, and civil engineer's recommendations. Document construction of all ESD practices with photographs and material tickets and schedule inspections as required. Neither Sediment Basin shall be converted to ESD practices until Phase 2 is complete. Contractor is required to maintain both Sediment Basins until conversion. (4 weeks)
46. Once all construction is complete, and with permission of the sediment and erosion control inspector, remove all erosion and sediment controls. (2 days)
47. Provide an as-built survey, geotechnical engineer's report, and professional engineer's or surveyor's certification within 30 days following construction of the facilities.

Note: Duration is an estimated time for sediment control review purposes only.

5 ADD

## PHASE 2 SEQUENCE OF CONSTRUCTION

See Sheets F-ESD-8 through F-ESD-11.

1. Obtain all required permits.
2. Stake out Limit of Disturbance. (1 day)
3. The contractor shall conduct a pre-construction meeting at the site. The following agencies shall be contacted at least 48 hours in advance of the pre-construction meeting:

| | |
|---|---|
| M.D.E. | (410) 901-4020 |
| DPW Stormwater Inspector | (410) 996-5267 |
| Miss Utility | (800) 257-7777 or 811 |
| McCrone | (410) 398-1550 |
| Town of North East | (410) 287-5880 |
| CCPS Supervisor of Facilities (Ted Lambert) | (410) 287-4653 |
| CCPS Construction Manager (Scott Anderson) | (443) 309-9011 |

Failure to notify the above mentioned parties may expose the Owner/Developer and/or Contractor to additional work. Contractor shall also determine if overhead utility lines are high enough for all expected construction traffic entering and exiting the site. Contractor shall coordinate the raising of overhead wires if needed.

Proposed High School

4. Grade and install stabilized construction entrance at Irishtown Road. School building construction traffic must use SCE at student parking lot to enter and exit site. Contractor shall install construction fencing as needed within the limit of disturbance to separate the construction area from the occupied school and pedestrian traffic. Additional fencing and signage may be required to direct traffic. (5 days)
5. Contractor is responsible for maintaining sediment basins and ensuring that they are in proper working conditions. Prior to beginning Phase 2 work, contractor shall ensure the liner is installed properly in Sediment Basin 1 and shall make all necessary repairs.
6. Clear and grub for installation of perimeter sediment control measures, install perimeter silt fence and super silt fence. Set up staging area and stockpile area. Install silt fence as needed around staging and stockpile areas. Construct temporary berm to the north of proposed school building. (4 days)
7. Clear and grub site within Limit of Disturbance. (2 weeks)
8. Demolish any remaining existing site features within Limit of Disturbance per the Demolition Plans. Strip topsoil and stockpile in area shown. Stockpile shall be temporarily stabilized. (3 days)
9. Construction P-39 and I-24, install inlet protection immediately. (5 days)
10. Rough grade building pad. Begin building construction. (600 days--site work may run concurrently with building construction) Vertical construction of the building shall not begin until the work area around the building is stabilized with a stone base. This is a requirement by Cecil County.
11. Rough grade roadways and parking lots that were not graded in Phase 1. (2 weeks)
12. Install remaining Phase 2 sanitary sewer manholes and pipes and rough in laterals to foundation. (1 week)
13. Install storm drain pipes, inlets, and manholes. Install standard inlet protection immediately. Install roof drains that connect to storm drain. (3 weeks)
14. Rough grade remaining site. Construct retaining walls. (3 weeks)
15. Fine grade around building pad and for paved areas. (5 days)
16. Install stone base for pavement. (2 days)
17. Begin vertical building construction.
18. Install site curbing. (5 days)
19. Install bituminous base and surface course paving. (5 days)
20. Replace all standard inlet protection in paved areas with at grade inlet protection and combination inlet protection. (1 day)
21. Install concrete and concrete walks. (7 days)
22. Install Swale C-C and stabilize as noted on plans. Removed temporary berm. (3 days)
23. Stabilize all disturbed areas with minimum 6" topsoil, seed, and mulch. (4 days)
24. Sediment Basin 2 may be converted at this time, see "Conversions of Sediment Basins" below.
25. Install landscaping for all vegetated areas. (5 days)

5 ADD

Proposed Tennis Courts, Athletic Field, and Concession Building
Contractor shall coordinate timing of construction with Owner for this scope. This scope may run concurrent or consecutive to High School construction.

26. Grade and install stabilized construction entrance at Irishtown Road. Concession building, tennis court, and athletic field construction must use SCE near the school's new main entrance to enter and exit site. Contractor shall provide and maintain a safe travel surface to walking students crossing the LOD; contractor shall also prevent construction traffic from crossing this path during arrival and dismissal. Contractor shall install construction fencing as needed within the limit of disturbance to separate the construction area from the occupied school and pedestrian traffic. A safe pathway for pedestrian gates from athletic fields shall be provided for emergency use. Additional fencing and signage will be required to direct traffic. (5 days)
27. Since work in this scope is part of the drainage area of Sediment Basin 1, Contractor is responsible for maintaining sediment basin and ensuring that it is in proper working condition. Prior to beginning this work, contractor shall ensure the liner is installed properly in Sediment Basin 1 and shall make all necessary repairs.
28. Clear and grub for installation of perimeter sediment control measures, install perimeter silt fence and super silt fence. Set up staging area and stockpile area. Install silt fence as needed around staging and stockpile areas. (4 days)
29. Clear and grub site within Limit of Disturbance. (2 weeks)
30. Demolish any existing site features within Limit of Disturbance per the Demolition Plans. Strip topsoil and stockpile in area shown. Stockpile shall be temporarily stabilized. (3 days)
31. Rough grade concession building's pad. Begin building construction. (90 days--site work may run concurrently with building construction) Vertical construction of the building shall not begin until the work area around the building is stabilized with a stone base. This is a requirement by Cecil County.
32. Rough grade roadways and parking lots. (2 weeks)
33. Install sanitary sewer manhole and pipes and rough in lateral to concession building foundation. (1 week)
34. Install storm drain pipes, inlets, and manholes. Connect existing stadium building downspouts to new storm drain. Install standard inlet protection immediately. (3 weeks)
35. Install water line to concessions building and install water line to existing stadium restroom building. Coordinate water line connection with Owner to ensure no disruption to the existing school or stadium events occurs. Cut and cap existing water line from existing school on northwest side of existing tennis courts. (1 week)
36. Rough grade remaining site. Construct retaining walls. (3 weeks)
37. Fine grade around building pad and for paved areas. (5 days)
38. Install stone base for pavement. (2 days)
39. Begin vertical building construction.
40. Construct proposed tennis courts, fencing, and appurtenances. (2 weeks)
41. Fine grade for proposed athletic field. Install site features associated with athletic fields (fencing, drainage features, etc.).
42. Stabilize all disturbed areas with minimum 6" topsoil, seed, and mulch. (4 days)
43. Install site curbing. (5 days)
44. Install bituminous base and surface course paving. (5 days)
45. Replace all standard inlet protection in paved areas with at grade inlet protection and combination inlet protection. (1 day)
46. Install concrete and concrete walks. (7 days)
47. Stabilize all disturbed areas with minimum 6" topsoil, seed, and mulch. (4 days)
48. Once all areas are stabilized, and with permission of the sediment and erosion control inspector, begin construction of the ESD practices MBR-1 and MBR-6 in accordance with the construction specifications, details, and per manufacturer's, geotechnical engineer's, and civil engineer's recommendations. Document construction of all ESD practices with photographs and material tickets and schedule inspections as required. (4 weeks)
49. Sediment Basin 1 may be converted at this time, see "Conversions of Sediment Basins" below
50. Install landscaping for all vegetated areas. (5 days)

5 ADD

5 ADD

Conversion of Sediment Basins

51. Once all areas are stabilized, and with permission of the sediment and erosion control inspector, begin conversion of Sediment Basins into Infiltration Basin and Submerged Gravel Wetland in accordance with the construction specifications, details, individual sequences of construction on sheets F-ESD-22 and F-ESD-25, and per manufacturer's, geotechnical engineer's, and civil engineer's recommendations. Document construction of all ESD practices with photographs and material tickets and schedule inspections as required. (4 weeks)
52. Once all construction is complete, and with permission of the sediment and erosion control inspector, remove all erosion and sediment controls. (2 days)
53. Provide an as-built survey, geotechnical engineer's report, and professional engineer's or surveyor's certification within 30 days following construction of the facilities.

Note: Duration is an estimated time for sediment control review purposes only.

### *BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, AND 100-YEAR FLOODPLAINS*

*1) No excess fill, construction material, or debris shall be stockpiled or stored in nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.*
*2) Place materials in a location and manner which does not adversely impact surface or subsurface water flow into or out of nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.*
*3) Do not use the excavated material as backfill if it contains waste metal products, unsightly debris, toxic material, or any other deleterious substance. If additional backfill is required, use clean material free of waste metal products, unsightly debris, toxic material, or any other deleterious substance.*
*4) Place heavy equipment on mats or suitably operate the equipment to prevent damage to nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.*
*5) Repair and maintain any serviceable structure or fill so there is no permanent loss of nontidal wetlands, nontidal wetland buffers, or waterways, or permanent modification of the 100-year floodplain in excess of that lost under the originally authorized structure or fill.*
*6) Rectify any nontidal wetlands, wetland buffers, waterways, or 100-year floodplain temporarily impacted by any construction.*
*7) All stabilization in the nontidal wetland and nontidal wetland buffer shall consist of the following species: Annual Ryegrass (Lolium multiflorum), Millet (Setaria italica), Barley (Hordeum sp.), Oats (Uniola sp.), and/or Rye (Secale cereale). These species will allow for the stabilization of the site while also allowing for the voluntary revegetation of natural wetland species. Other non-persistent vegetation may be acceptable, but must be approved by the Nontidal Wetlands and Waterways Division. Kentucky 31 fescue shall not be utilized in wetland or buffer areas. The area should be seeded and mulched to reduce erosion after construction activities have been completed.*
*8) After installation has been completed, make post-construction grades and elevations the same as the original grades and elevations in temporarily impacted areas.*
*9) To protect aquatic species, in-stream work is prohibited as determined by the classification of the stream:*

*Use I waters: In-stream work shall not be conducted during the period March 1 through June 15, inclusive, during any year.*
*Use III waters: In-stream work shall not be conducted during the period October 1 through April 30, inclusive, during any year.*
*Use IV waters: In-stream work shall not be conducted during the period March 1 through May 31, inclusive, during any year.*

*10) Stormwater runoff from impervious surfaces shall be controlled to prevent the washing of debris into the waterway.*
*11) Culverts shall be constructed and any riprap placed so as not to obstruct the movement of aquatic species, unless the purpose of the activity is to impound water.*

5 ADD

## PHASE 3 SEQUENCE OF CONSTRUCTION

See Sheets F-ESD-12 and F-ESD-13.

1. Obtain all required permits.
2. Stake out Limit of Disturbance. (1 day)
3. The contractor shall conduct a pre-construction meeting at the site. The following agencies shall be contacted at least 48 hours in advance of the pre-construction meeting:

| | |
|---|---|
| M.D.E. | (410) 901-4020 |
| DPW Stormwater Inspector | (410) 996-5267 |
| Miss Utility | (800) 257-7777 or 811 |
| McCrone | (410) 398-1550 |
| Town of North East | (410) 287-5880 |
| CCPS Supervisor of Facilities (Ted Lambert) | (410) 287-4653 |
| CCPS Construction Manager (Scott Anderson) | (443) 309-9011 |

Failure to notify the above mentioned parties may expose the Owner/Developer and/or Contractor to additional work. Contractor shall also determine if overhead utility lines are high enough for all expected construction traffic entering and exiting the site. Contractor shall coordinate the raising of overhead wires if needed.

4. Grade and install stabilized construction entrance at existing parking lot. Construction traffic must use stabilized construction entrance to enter and exit site. Contractor shall install construction fencing as needed within the limit of disturbance to separate the construction area from the occupied school and pedestrian traffic. Additional fencing and signage may be required to direct traffic. (2 days)
5. Contractor is responsible for ensuring down stream storm drain pipes remain clean from sediment and debris. All existing catch basins and open downspouts shall have inlet protection installed until they are to be removed.
6. Clear and grub for installation of perimeter sediment control measures, install perimeter silt fence and super silt fence. Set up staging area and stockpile area. Install silt fence as needed around staging and stockpile areas. (2 days)
7. Clear and grub site within Limit of Disturbance. (3 days)
8. Demolish existing site features within Limit of Disturbance per the Demolition Plans. Strip topsoil and stockpile in area shown. Stockpile shall be temporarily stabilized. (2 weeks)
9. Raze existing Buildings. Civil Plans do not cover manners and methods for building removal, nor any abatement that may be needed. (4 weeks)
10. Remove/abandon existing underground utilities (water, sewer, and storm drain as noted on Water Plans, Sanitary Sewer Plans, and Environmental Site Design Plans). (2 weeks)
11. Rough grade site and roadway. (2 weeks)
12. Install storm drain pipes and inlets. Install standard inlet protection and rip rap outlet protection immediately. (1 week)
13. Rough grade remaining site. (3 weeks)
14. Fine grade roadway, sidewalks, and athletic field. Install baseball field appurtenances (fences, dugouts, bullpens, batting cages, etc.) (3 weeks)
15. Install stone base for pavement. (2 days)
16. Install site curbing. (5 days)
17. Install bituminous base and surface course paving. (5 days)
18. Install concrete and concrete walks. (7 days)
19. Stabilize all disturbed areas with minimum 6" topsoil, seed, and mulch. (4 days)
20. Install landscaping for all vegetated areas. (5 days)

21. Once all areas are vegetatively stabilized, and with permission of the sediment and erosion control inspector, begin rehabilitation of Submerged Gravel Wetland in accordance with the construction specifications, details, individual sequence of construction on sheet F-ESD-17, and per manufacturer's, geotechnical engineer's, and civil engineer's recommendations. Document construction of all ESD practices with photographs and material tickets and schedule inspections as required. (4 weeks)
22. Once all construction is complete, and with permission of the sediment and erosion control inspector, remove all erosion and sediment controls. (2 days)
23. Provide an as-built survey, geotechnical engineer's report, and professional engineer's or surveyor's certification within 30 days following construction of the facilities.

Note: Duration is an estimated time for sediment control review purposes only.

### SITE ANALYSIS TABLE - PHASE 1

| | |
|---|---|
| TOTAL AREA TO BE DISTURBED: | 31.49 AC |
| AREA TO BE VEGETATIVELY STABILIZED: | 23.45 AC |
| IMPERVIOUS AREA: | 8.04 AC |
| EARTHWORK ESTIMATE: | TOPSOIL = 32,000 C.Y. ±<br>CUT = 63,100 C.Y. ±<br>FILL = 73,100 C.Y. ± |

### PHASE 1 SEDIMENT CONTROL BMP QUANTITIES

| CONTROLS | QUANTITY |
|---|---|
| STABILIZED CONSTRUCTION ENTRANCE | 2 EA. |
| SILT FENCE | 3,575 L.F. |
| SMART FENCE 42 (SUPER SILT FENCE) | 2,275 L.F. |
| CULVERT INLET PROTECTION | 7 EA. |
| STANDARD INLET PROTECTION | 23 EA. |
| AT-GRADE INLET PROTECTION | 2 EA. |
| COMBINATION INLET PROTECTION | 22 EA. |

### SITE ANALYSIS TABLE - PHASE 2

| | |
|---|---|
| TOTAL AREA TO BE DISTURBED: | 14.69 AC |
| AREA TO BE VEGETATIVELY STABILIZED: | 9.53 AC |
| IMPERVIOUS AREA: | 5.16 AC |
| EARTHWORK ESTIMATE: | TOPSOIL = 15,500 C.Y. ±<br>CUT = 7,500 C.Y. ±<br>FILL = 30,100 C.Y. ± |

### PHASE 2 SEDIMENT CONTROL BMP QUANTITIES

| CONTROLS | QUANTITY |
|---|---|
| STABILIZED CONSTRUCTION ENTRANCE | 2 EA. |
| SILT FENCE | 3,700 L.F. |
| SMART FENCE 42 (SUPER SILT FENCE) | 1,675 L.F. |
| CULVERT INLET PROTECTION | 6 EA. |
| STANDARD INLET PROTECTION | 21 EA. |
| AT-GRADE INLET PROTECTION | 10 EA. |
| COMBINATION INLET PROTECTION | 17 EA. |

### SITE ANALYSIS TABLE - PHASE 3

| | |
|---|---|
| TOTAL AREA TO BE DISTURBED: | 6.03 AC |
| AREA TO BE VEGETATIVELY STABILIZED: | 5.43 AC |
| IMPERVIOUS AREA: | 0.60 AC |
| EARTHWORK ESTIMATE: | TOPSOIL = 2,000 C.Y. ±<br>CUT = 10,200 C.Y. ±<br>FILL = 5,400 C.Y. ± |

### PHASE 3 SEDIMENT CONTROL BMP QUANTITIES

| CONTROLS | QUANTITY |
|---|---|
| STABILIZED CONSTRUCTION ENTRANCE | 1 EA. |
| SILT FENCE | 1,250 L.F. |
| SMART FENCE 42 (SUPER SILT FENCE) | 450 L.F. |
| CULVERT INLET PROTECTION | 2 EA. |
| STANDARD INLET PROTECTION | 7 EA. |
| GABION INLET PROTECTION | 4 EA. |

NOTE: CUT & FILL VOLUMES ARE ESTIMATES FOR REVIEW AGENCY ONLY AND ARE NOT INTENDED FOR BID PURPOSES.

February 16, 2024 - 2:58pm User: awhallon Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ESD.dwg.........Tab:ESD-2

STATE OF MARYLAND DANIEL S. SPEAKMAN NO. 31400 PROFESSIONAL ENGINEER

2/16/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 31400, Expiration Date: 1-16-2025.*

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | ADDRESSING CSCD COMMENTS, REVISING P3 SEQUENCE |

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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | AS NOTED |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 2683B |

PHASED SEQUENCES OF CONSTRUCTION

300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

*NORTH EAST MIDDLE AND HIGH SCHOOLS*

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-2

11720 Beltsville Drive
Suite 600
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Tel: 301.595.1000
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GP #22105

PHASED SEQUENCES OF CONSTRUCTION

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |
| | |
| | |
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| | |
| | |

**F-ESD-2**

12/22/2023
BID SET

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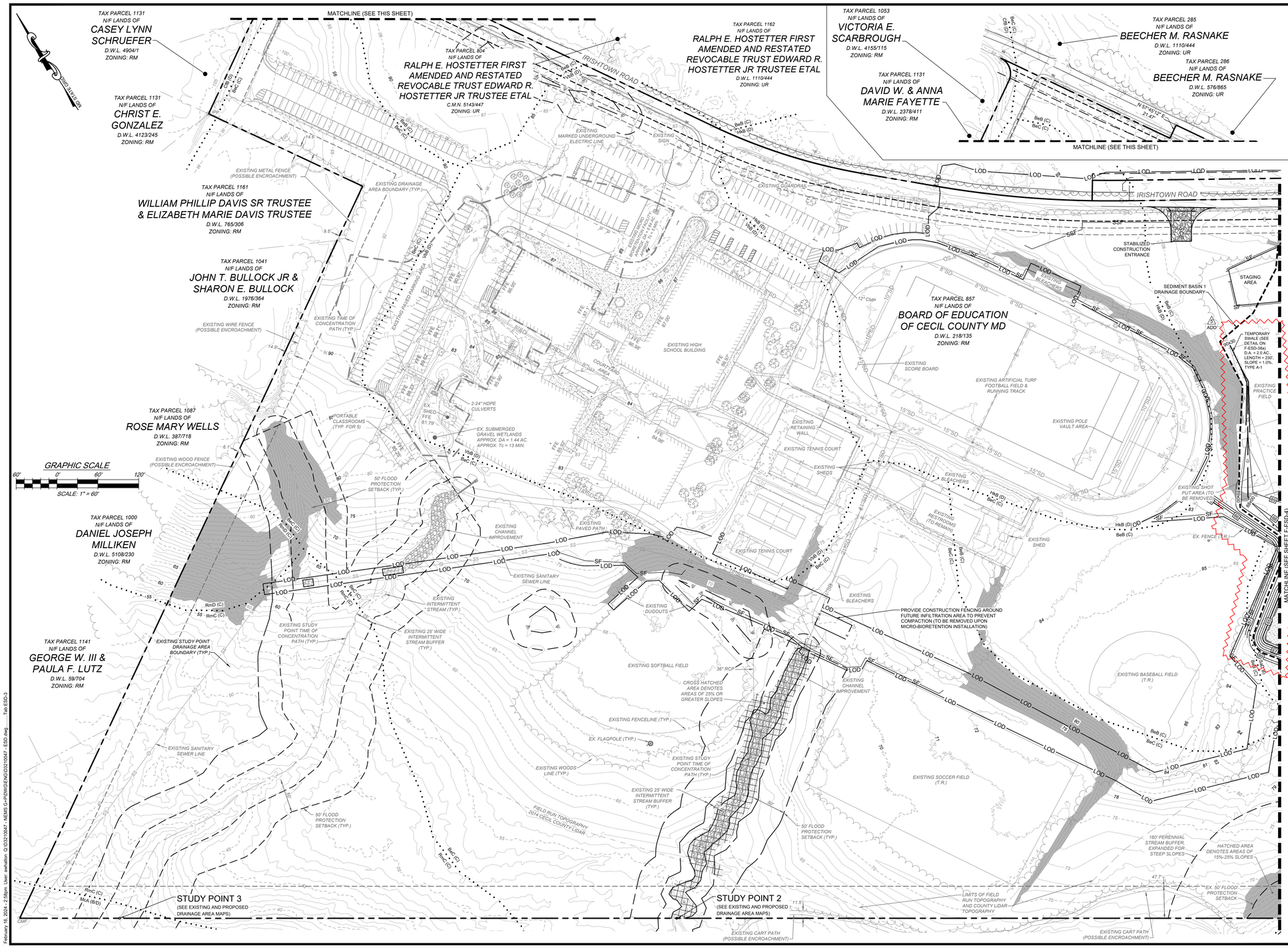


February 16, 2024 - 2:58pm User: evelation Q:\2021\0047 - NEMS G+P\DWG\ENG\20210047 - ESD.dwg Tab:ESD-3

STATE OF MARYLAND
ANTHONY J. PRUSKI
No. 31400
PROFESSIONAL ENGINEER
2/16/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed* Professional Engineer *under the laws of the State of Maryland, License No.* 31400 *, Expiration Date:* 1-16-2025

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | REVISED ISB - GRADING, ADDRESSING CECIL COMMENTS |

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|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D20210047 |
| SCALE: | 1" = 60' |
| DRAWN BY: | AJM |
| DESIGNED BY: | AJM |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 20938 |

EXISTING CONDITIONS PLAN PH. 1 (WEST)
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-3

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EXISTING CONDITIONS PLAN PH. 1 (WEST)

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

**F-ESD-3**

12/22/2023
BID SET

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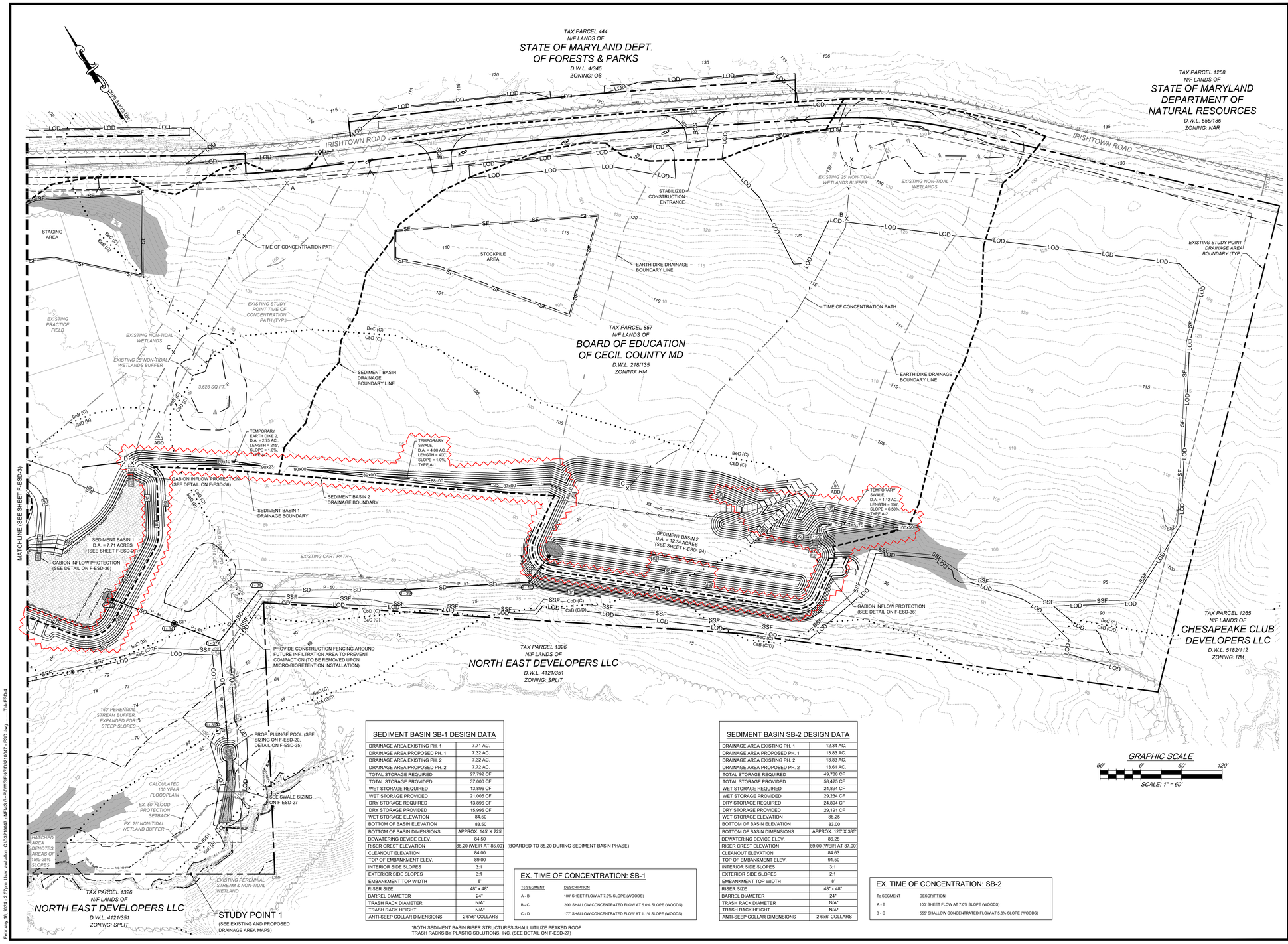


## SEDIMENT BASIN SB-1 DESIGN DATA

| | |
|---|---|
| DRAINAGE AREA EXISTING PH. 1 | 7.71 AC. |
| DRAINAGE AREA PROPOSED PH. 1 | 7.32 AC. |
| DRAINAGE AREA EXISTING PH. 2 | 7.32 AC. |
| DRAINAGE AREA PROPOSED PH. 2 | 7.72 AC. |
| TOTAL STORAGE REQUIRED | 27,792 CF |
| TOTAL STORAGE PROVIDED | 37,000 CF |
| WET STORAGE REQUIRED | 13,896 CF |
| WET STORAGE PROVIDED | 21,005 CF |
| DRY STORAGE REQUIRED | 13,896 CF |
| DRY STORAGE PROVIDED | 15,995 CF |
| WET STORAGE ELEVATION | 84.50 |
| BOTTOM OF BASIN ELEVATION | 83.50 |
| BOTTOM OF BASIN DIMENSIONS | APPROX. 145' X 225' |
| DEWATERING DEVICE ELEV. | 84.50 |
| RISER CREST ELEVATION | 86.20 (WEIR AT 85.00) (BOARDED TO 85.20 DURING SEDIMENT BASIN PHASE) |
| CLEANOUT ELEVATION | 84.00 |
| TOP OF EMBANKMENT ELEV. | 89.00 |
| INTERIOR SIDE SLOPES | 3:1 |
| EXTERIOR SIDE SLOPES | 3:1 |
| EMBANKMENT TOP WIDTH | 8' |
| RISER SIZE | 48" x 48" |
| BARREL DIAMETER | 24" |
| TRASH RACK DIAMETER | N/A* |
| TRASH RACK HEIGHT | N/A* |
| ANTI-SEEP COLLAR DIMENSIONS | 2 6'x6' COLLARS |

## EX. TIME OF CONCENTRATION: SB-1

| To SEGMENT | DESCRIPTION |
|---|---|
| A - B | 100' SHEET FLOW AT 7.0% SLOPE (WOODS) |
| B - C | 200' SHALLOW CONCENTRATED FLOW AT 5.0% SLOPE (WOODS) |
| C - D | 177' SHALLOW CONCENTRATED FLOW AT 1.1% SLOPE (WOODS) |

*BOTH SEDIMENT BASIN RISER STRUCTURES SHALL UTILIZE PEAKED ROOF TRASH RACKS BY PLASTIC SOLUTIONS, INC. (SEE DETAIL ON F-ESD-27)

## SEDIMENT BASIN SB-2 DESIGN DATA

| | |
|---|---|
| DRAINAGE AREA EXISTING PH. 1 | 12.34 AC. |
| DRAINAGE AREA PROPOSED PH. 1 | 13.83 AC. |
| DRAINAGE AREA EXISTING PH. 2 | 13.83 AC. |
| DRAINAGE AREA PROPOSED PH. 2 | 13.61 AC. |
| TOTAL STORAGE REQUIRED | 49,788 CF |
| TOTAL STORAGE PROVIDED | 58,425 CF |
| WET STORAGE REQUIRED | 24,894 CF |
| WET STORAGE PROVIDED | 29,234 CF |
| DRY STORAGE REQUIRED | 24,894 CF |
| DRY STORAGE PROVIDED | 29,191 CF |
| WET STORAGE ELEVATION | 86.25 |
| BOTTOM OF BASIN ELEVATION | 83.00 |
| BOTTOM OF BASIN DIMENSIONS | APPROX. 120' X 385' |
| DEWATERING DEVICE ELEV. | 86.25 |
| RISER CREST ELEVATION | 89.00 (WEIR AT 87.00) |
| CLEANOUT ELEVATION | 84.63 |
| TOP OF EMBANKMENT ELEV. | 91.50 |
| INTERIOR SIDE SLOPES | 3:1 |
| EXTERIOR SIDE SLOPES | 2:1 |
| EMBANKMENT TOP WIDTH | 8' |
| RISER SIZE | 48" x 48" |
| BARREL DIAMETER | 24" |
| TRASH RACK DIAMETER | N/A* |
| TRASH RACK HEIGHT | N/A* |
| ANTI-SEEP COLLAR DIMENSIONS | 2 6'x6' COLLARS |

## EX. TIME OF CONCENTRATION: SB-2

| To SEGMENT | DESCRIPTION |
|---|---|
| A - B | 100' SHEET FLOW AT 7.0% SLOPE (WOODS) |
| B - C | 550' SHALLOW CONCENTRATED FLOW AT 5.8% SLOPE (WOODS) |

2/16/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed* Professional Engineer *under the laws of the State of Maryland, License No.* 31400 *, Expiration Date:* 1-16-2025

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | REVISED SBB + GRADING, ADDRESSING CECO COMMENTS |

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|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D23210047 |
| SCALE: | 1" = 60' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 29038 |

EXISTING CONDITIONS PLAN PH. 1 (EAST)
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-4

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GP #22105

EXISTING CONDITIONS PLAN PH. 1 (EAST)
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

**F-ESD-4**
12/22/2023
BID SET

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February 16, 2024 - 2:07pm User: ashallen O:\D23210047 - NENHS G+P\DWG\ENG\D23210047 - ESD.dwg Tab:ESD-4

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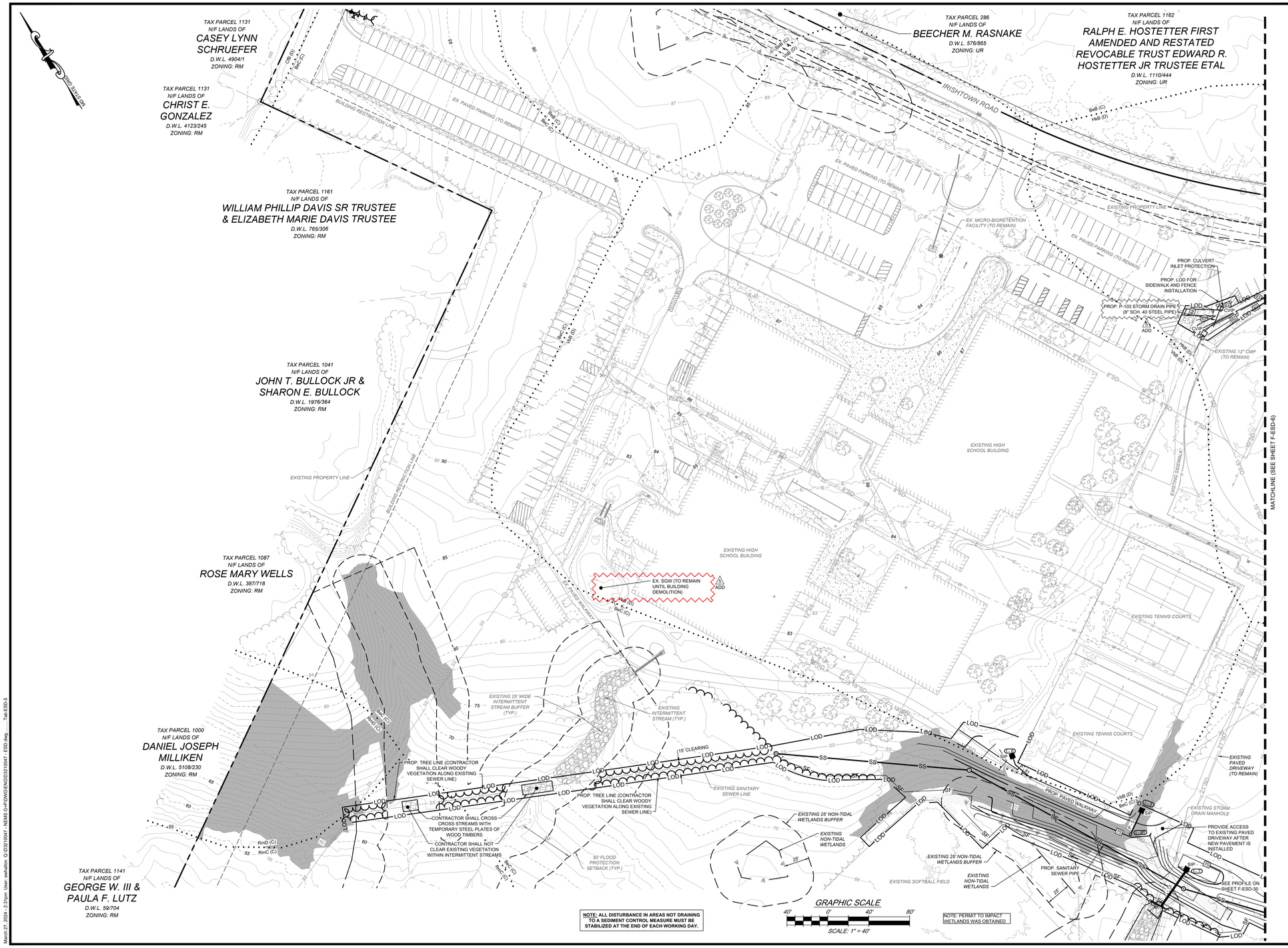


March 27, 2024 - 2:31pm User: avincelli O:\2021\0047 - NCHS G+P\DWG\ENG\2021\0047 - ESD.dwg Tab:ESD-5

STATE OF MARYLAND — REGISTERED PROFESSIONAL ENGINEER — ANTHONY JOSEPH MCCRONE — No. 31400

3/27/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed* Professional Engineer *under the laws of the State of Maryland, License No.* 31400 *, Expiration Date:* 1-16-2025

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | NOTE REVISED ON K. SGW |

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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D20100047 |
| SCALE: | 1" = 40' |
| DRAWN BY: | AJM |
| DESIGNED BY: | AJM |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 20938 |

PROPOSED CONDITIONS PLAN PH. 1 (WEST)
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-5

11720 Beltsville Drive
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GP #22105

PROPOSED CONDITIONS PLAN PH. 1 (WEST)

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

**F-ESD-5**

12/22/2023
BID SET

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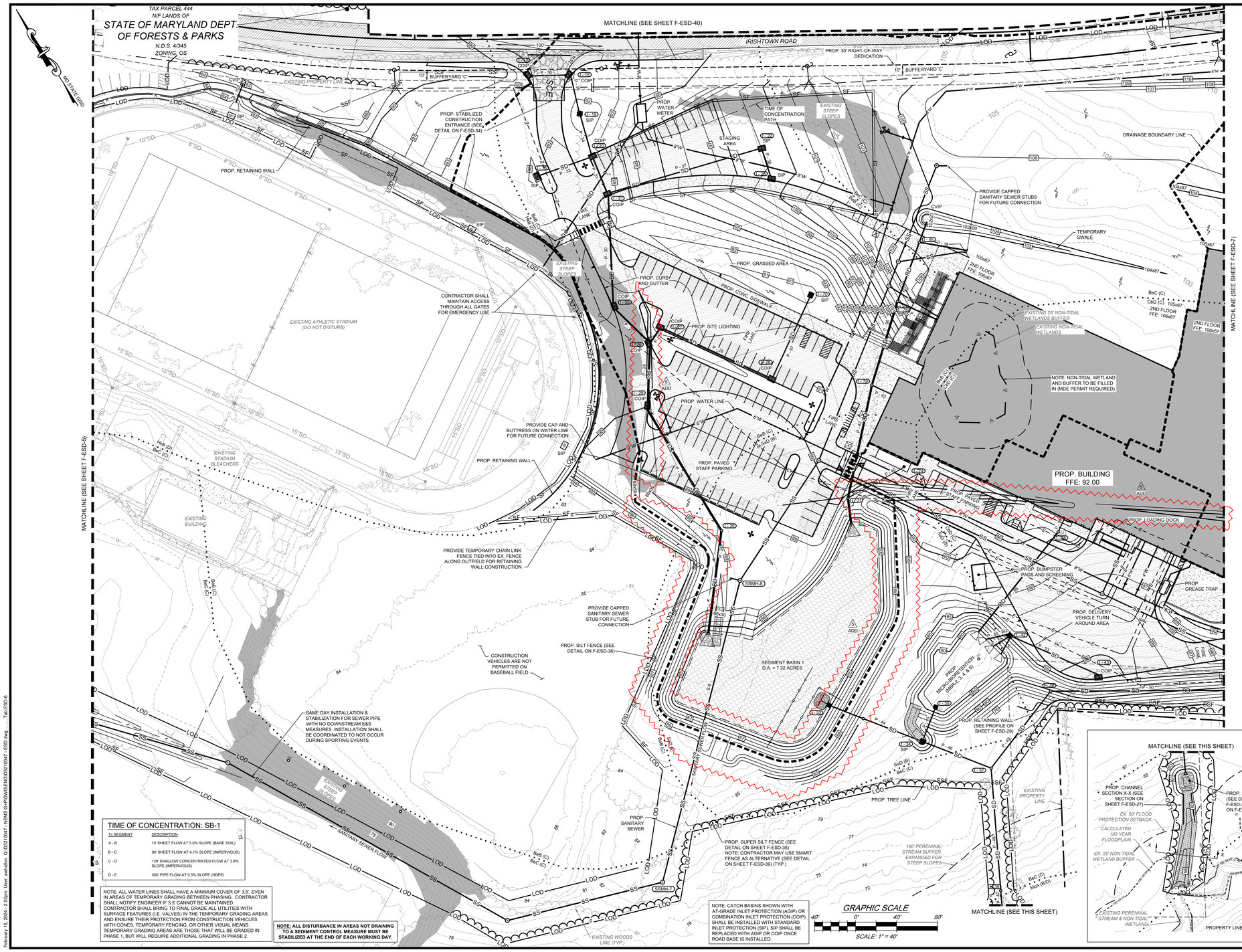


## TIME OF CONCENTRATION: SB-1

| Tc SEGMENT | DESCRIPTION |
|---|---|
| A - B | 10' SHEET FLOW AT 5.0% SLOPE (BARE SOIL) |
| B - C | 90' SHEET FLOW AT 4.1% SLOPE (IMPERVIOUS) |
| C - D | 120' SHALLOW CONCENTRATED FLOW AT 3.8% SLOPE (IMPERVIOUS) |
| D - E | 500' PIPE FLOW AT 0.5% SLOPE (HDPE) |

NOTE: ALL WATER LINES SHALL HAVE A MINIMUM COVER OF 3.5', EVEN IN AREAS OF TEMPORARY GRADING BETWEEN PHASING. CONTRACTOR SHALL NOTIFY ENGINEER IF 3.5' CANNOT BE MAINTAINED. CONTRACTOR SHALL BRING TO FINAL GRADE ALL UTILITIES WITH SURFACE FEATURES (I.E. VALVES) IN THE TEMPORARY GRADING AREAS AND ENSURE THEIR PROTECTION FROM CONSTRUCTION VEHICLES WITH CONES, TEMPORARY FENCING, OR OTHER VISUAL MEANS. TEMPORARY GRADING AREAS ARE THOSE THAT WILL BE GRADED IN PHASE 1, BUT WILL REQUIRE ADDITIONAL GRADING IN PHASE 2.

**NOTE: ALL DISTURBANCE IN AREAS NOT DRAINING TO A SEDIMENT CONTROL MEASURE MUST BE STABILIZED AT THE END OF EACH WORKING DAY.**

NOTE: CATCH BASINS SHOWN WITH AT-GRADE INLET PROTECTION (AGIP) OR COMBINATION INLET PROTECTION (COIP) SHALL BE INSTALLED WITH STANDARD INLET PROTECTION (SIP). SIP SHALL BE REPLACED WITH AGIP OR COIP ONCE ROAD BASE IS INSTALLED.

February 16, 2024 - 2:50pm User: avmatthews G:\2032\10047 - NEMS Es-P\DWG\ENG\2021\0047 - ESD.dwg Tab:ESD-6

STATE OF MARYLAND — ANDREW J. MATTHEWS — No. 31400 — PROFESSIONAL ENGINEER
2/16/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed* Professional Engineer *under the laws of the State of Maryland, License No.* 31400 *, Expiration Date:* 1-16-2025

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | REVISED GB + GRADING |

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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D20100/47 |
| SCALE: | 1" = 40' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 20838 |

PROPOSED CONDITIONS PLAN PH. 1 (CENTER)
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-6

11720 Beltsville Drive
Suite 600
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Tel: 301.595.1000
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GP #22105

PROPOSED CONDITIONS PLAN PH. 1 (CENTER)

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

**F-ESD-6**

12/22/2023
BID SET

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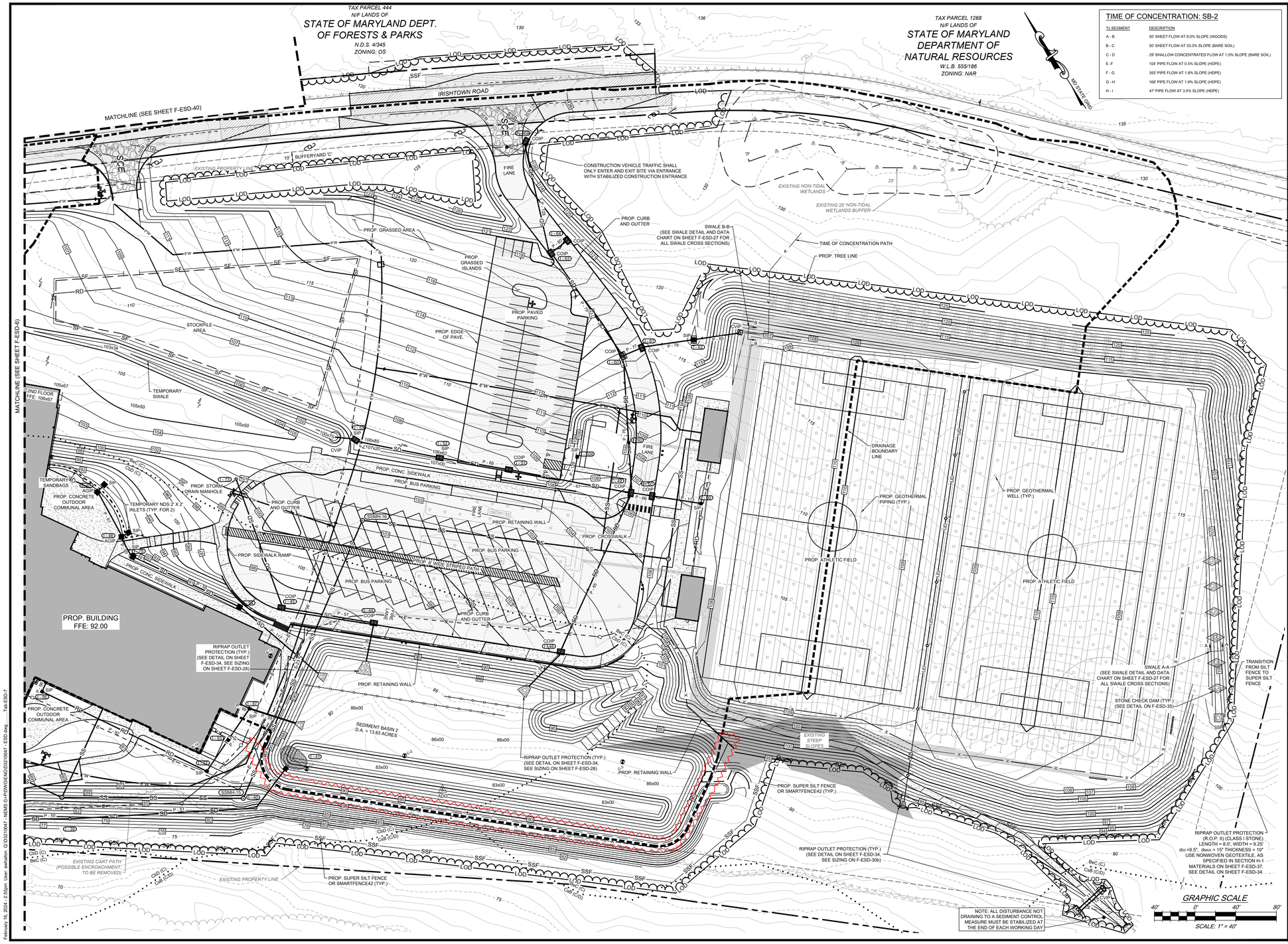


## TIME OF CONCENTRATION: SB-2

| To SEGMENT | DESCRIPTION |
|---|---|
| A - B | 50' SHEET FLOW AT 8.0% SLOPE (WOODS) |
| B - C | 50' SHEET FLOW AT 33.3% SLOPE (BARE SOIL) |
| C - D | 29' SHALLOW CONCENTRATED FLOW AT 1.5% SLOPE (BARE SOIL) |
| E - F | 104' PIPE FLOW AT 0.5% SLOPE (HDPE) |
| F - G | 355' PIPE FLOW AT 1.8% SLOPE (HDPE) |
| G - H | 168' PIPE FLOW AT 1.9% SLOPE (HDPE) |
| H - I | 47' PIPE FLOW AT 3.5% SLOPE (HDPE) |

STATE OF MARYLAND — JAMES A. GRIMM — No. 31400 — PROFESSIONAL ENGINEER

2/16/2024
DATE

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REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | FIRE LANE REVISED, ADDRESSING CSCD COMMENTS |

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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D20150047 |
| SCALE: | 1" = 40' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 20583 |

PROPOSED CONDITIONS PLAN PH. 1 (EAST)
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857, ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-7

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GP #22105

PROPOSED CONDITIONS PLAN PH. 1 (EAST)

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

**F-ESD-7**

12/22/2023
BID SET

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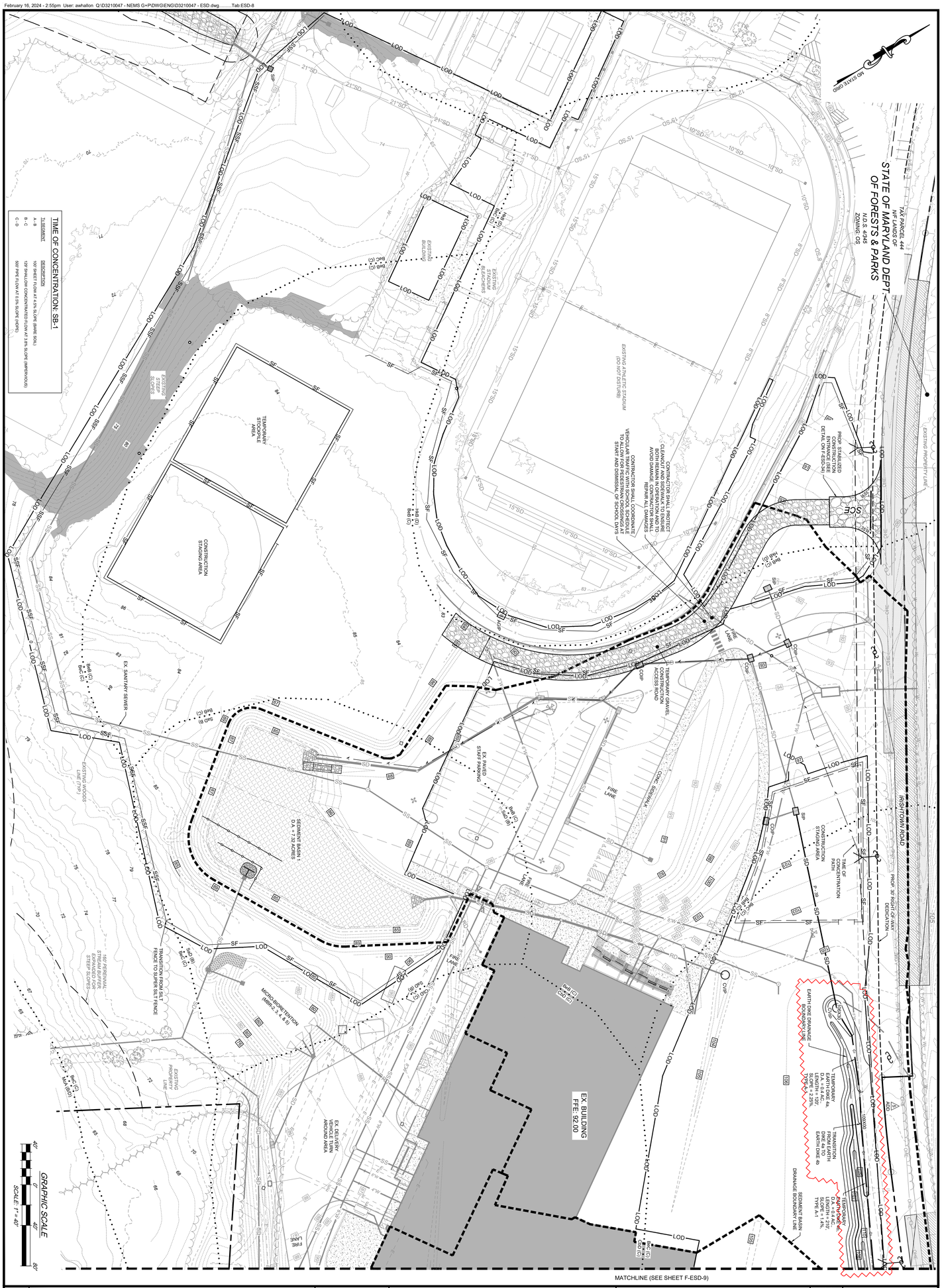
February 16, 2024 - 2:50pm User: aweldon G:\D3\21\047 - NEWS G+P\WORKING\D3\21\047 - ESD.dwg Tab:ESD-7

February 16, 2024 - 2:55pm User: awhallon Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ESD.dwg.....Tab:ESD-8




TIME OF CONCENTRATION: SB-1

| TIME SEGMENT | DESCRIPTION |
|---|---|
| A - B | 100' SHEET FLOW AT 4.5% SLOPE (BARE SOIL) |
| B - C | 100' SHALLOW CONCENTRATED FLOW AT 3.8% SLOPE (IMPERVIOUS) |
| C - D | 500' PIPE FLOW AT 0.5% SLOPE (HDPE) |

SHEET NO.: F-ESD-8

INTERMEDIATE CONDITIONS PLAN PH. 2 (CENTER)

300 IRISHTOWN ROAD, NORTH EAST, MD 21901

TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

*NORTH EAST MIDDLE AND HIGH SCHOOLS*

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND

PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | 1" = 40' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 2683B |

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REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | REVISED SB-1 GRADING, ADDRESSING CSCD COMMENTS |

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STATE OF MARYLAND
DANIEL S. SHEPHARD
NO. 31400
PROFESSIONAL ENGINEER

2/16/2024
DATE

F-ESD-8
12/22/2023
BID SET

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

INTERMEDIATE CONDITIONS PLAN PH. 2 (CENTER)

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

GP #22105

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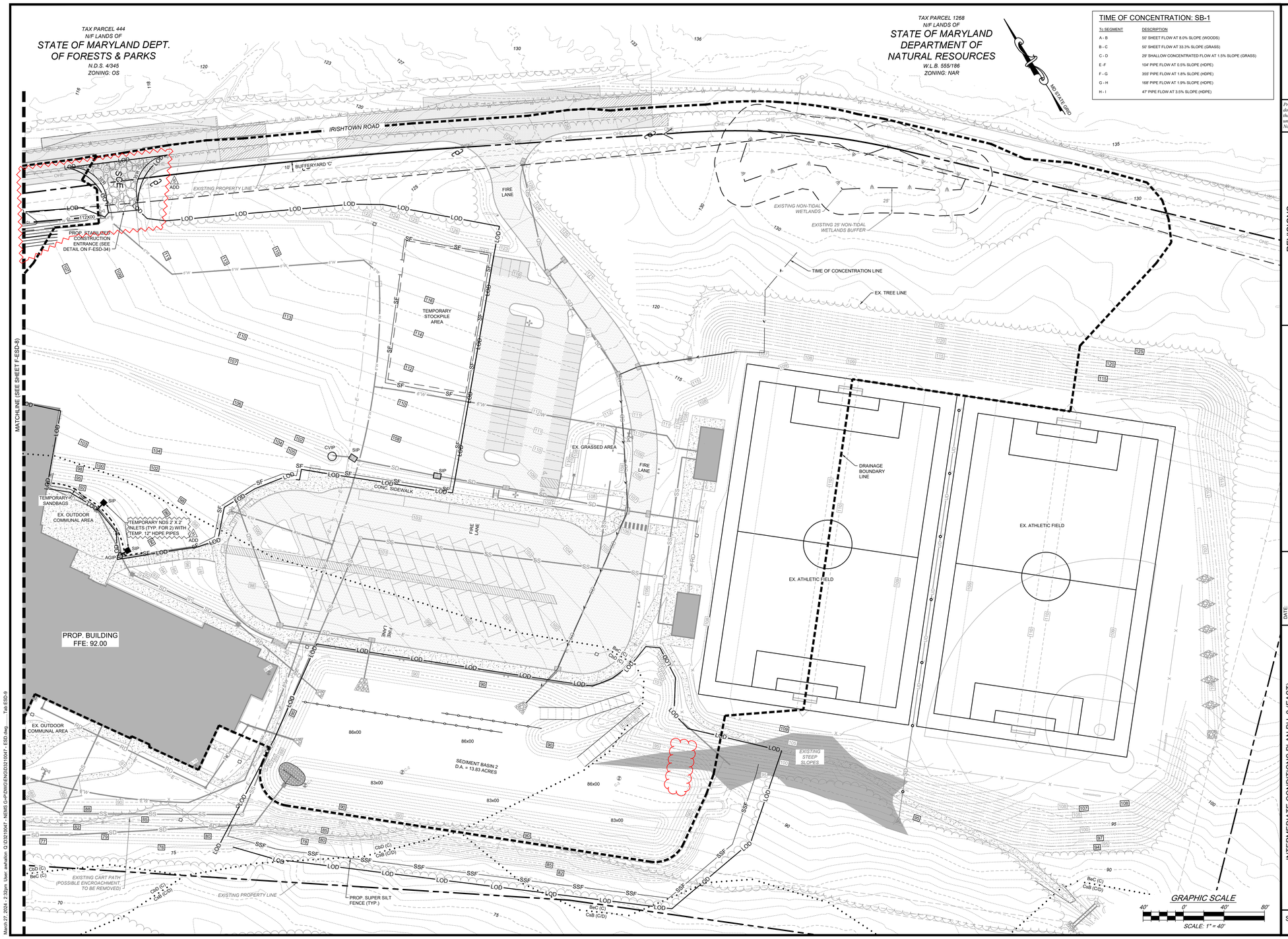


## TIME OF CONCENTRATION: SB-1

| Tc SEGMENT | DESCRIPTION |
|---|---|
| A - B | 50' SHEET FLOW AT 8.0% SLOPE (WOODS) |
| B - C | 50' SHEET FLOW AT 33.3% SLOPE (GRASS) |
| C - D | 29' SHALLOW CONCENTRATED FLOW AT 1.5% SLOPE (GRASS) |
| E - F | 104' PIPE FLOW AT 0.5% SLOPE (HDPE) |
| F - G | 355' PIPE FLOW AT 1.8% SLOPE (HDPE) |
| G - H | 168' PIPE FLOW AT 1.9% SLOPE (HDPE) |
| H - I | 47' PIPE FLOW AT 3.5% SLOPE (HDPE) |

STATE OF MARYLAND
DENIS S. SHEAMAN
PROFESSIONAL ENGINEER
3/27/2024
DATE

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REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | ADDRESSING CSCD COMMENTS |

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DATE: NOV. 2022
JOB NUMBER: D3210047
SCALE: 1" = 40'
DRAWN BY: AJW
DESIGNED BY: AJW
APPROVED BY: DSS
FOLDER REFERENCE: 26838

INTERMEDIATE CONDITIONS PLAN PH. 2 (EAST)
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-9

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INTERMEDIATE CONDITIONS PLAN PH. 2 (EAST)

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

F-ESD-9
12/22/2023
BID SET

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March 27, 2024 - 2:32pm User: awhalton Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ESD.dwg Tab: ESD-9

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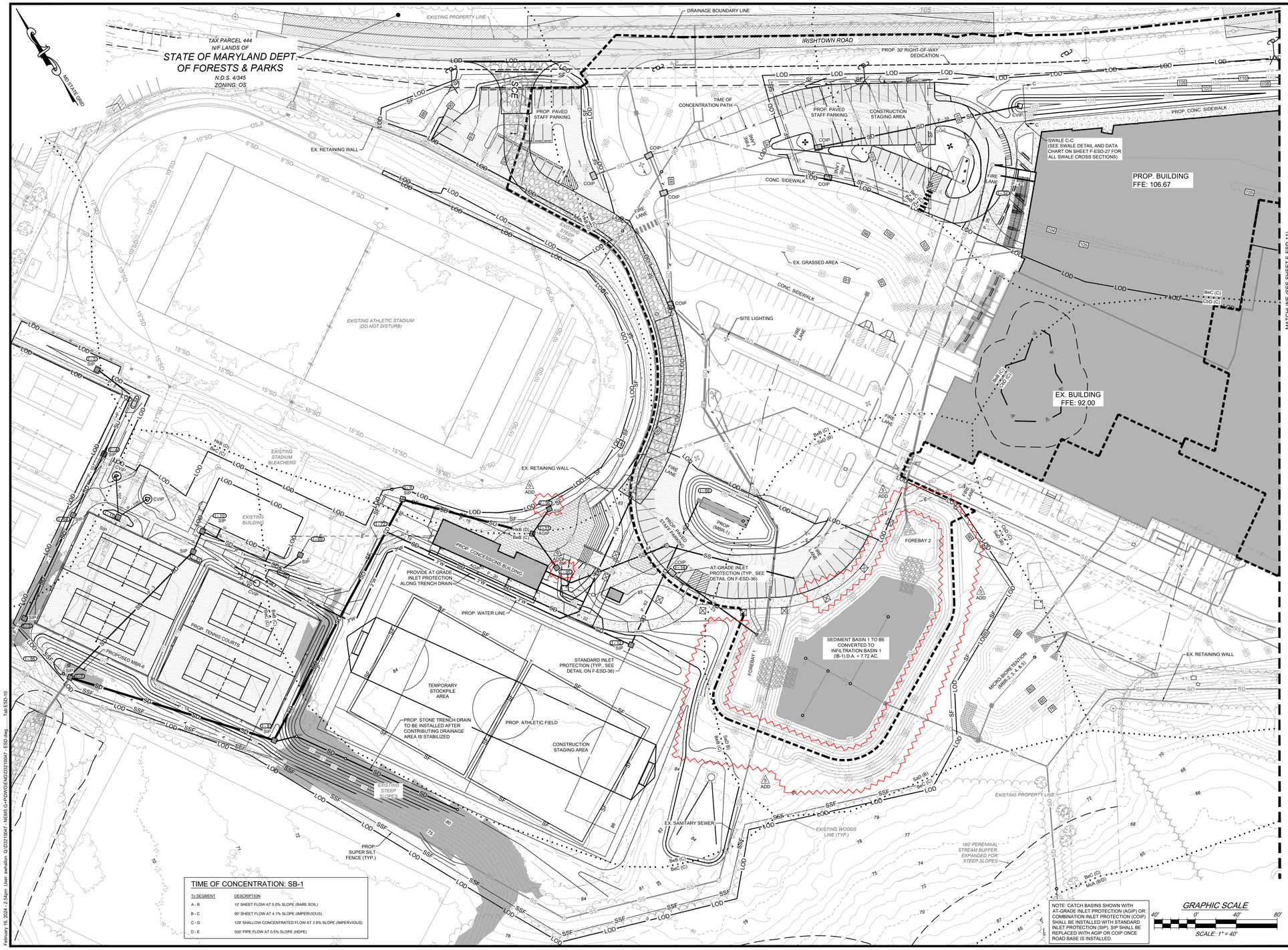


TIME OF CONCENTRATION: SB-1

| Tc SEGMENT | DESCRIPTION |
|---|---|
| A - B | 10' SHEET FLOW AT 5.0% SLOPE (BARE SOIL) |
| B - C | 90' SHEET FLOW AT 4.1% SLOPE (IMPERVIOUS) |
| C - D | 129' SHALLOW CONCENTRATED FLOW AT 3.8% SLOPE (IMPERVIOUS) |
| D - E | 500' PIPE FLOW AT 0.5% SLOPE (HDPE) |

NOTE: CATCH BASINS SHOWN WITH AT-GRADE INLET PROTECTION (AGIP) OR COMBINATION INLET PROTECTION (COIP) SHALL BE INSTALLED WITH STANDARD INLET PROTECTION (SIP). SIP SHALL BE REPLACED WITH AGIP OR COIP ONCE ROAD BASE IS INSTALLED.

February 16, 2024 - 2:54pm User: ashelton G:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ESD.dwg Tab:ESD-10

STATE OF MARYLAND — ANTHONY J. GRIMM — No. 31400 — PROFESSIONAL ENGINEER
2/16/2024
DATE

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REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | REVISED 90-1 GRADING, ADDRESSING CECO COMMENTS |

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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | 1" = 40' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 26838 |

PROPOSED CONDITIONS PLAN PH. 2 (CENTER)
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857, ADC MAP 11, GRID G-13

*NORTH EAST MIDDLE AND HIGH SCHOOLS*

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-10

11720 Baltsville Drive
Suite 600
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GP #22105

PROPOSED CONDITIONS PLAN PH. 2 (CENTER)

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

**F-ESD-10**

12/22/2023
BID SET

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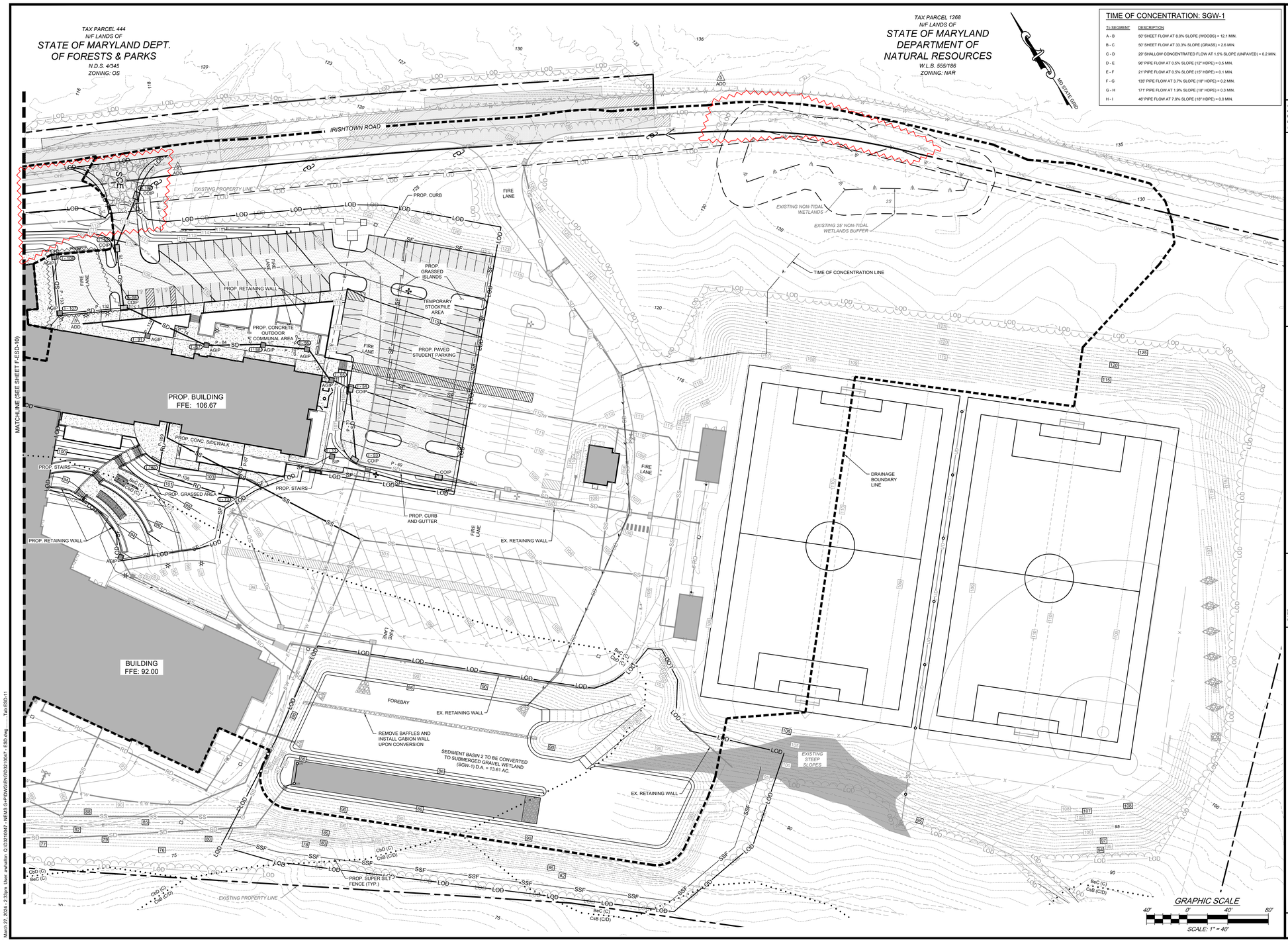


## TIME OF CONCENTRATION: SGW-1

| To SEGMENT | DESCRIPTION |
|---|---|
| A - B | 50' SHEET FLOW AT 8.0% SLOPE (WOODS) = 12.1 MIN. |
| B - C | 50' SHEET FLOW AT 33.3% SLOPE (GRASS) = 2.6 MIN. |
| C - D | 29' SHALLOW CONCENTRATED FLOW AT 1.5% SLOPE (UNPAVED) = 0.2 MIN. |
| D - E | 96' PIPE FLOW AT 0.5% SLOPE (12" HDPE) = 0.5 MIN. |
| E - F | 21' PIPE FLOW AT 0.5% SLOPE (15" HDPE) = 0.1 MIN. |
| F - G | 135' PIPE FLOW AT 3.7% SLOPE (18" HDPE) = 0.2 MIN. |
| G - H | 171' PIPE FLOW AT 1.9% SLOPE (18" HDPE) = 0.3 MIN. |
| H - I | 46' PIPE FLOW AT 7.9% SLOPE (18" HDPE) = 0.0 MIN. |

STATE OF MARYLAND
DANIEL S. SPIEGELMAN
PROFESSIONAL ENGINEER
3/27/2024
DATE

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REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | REVISED TREE LINE, ADDRESSING CSCD COMMENTS |

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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | 1" = 40' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 26838 |

PROPOSED CONDITIONS PLAN PH. 2 (EAST)
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-11

11720 Beltsville Drive
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Calverton, MD 20705
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GP #22105

PROPOSED CONDITIONS PLAN PH. 2 (EAST)

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
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F-ESD-11
12/22/2023
BID SET

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March 27, 2024 - 2:33pm User: awhalton Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ESD.dwg Tab:ESD-11

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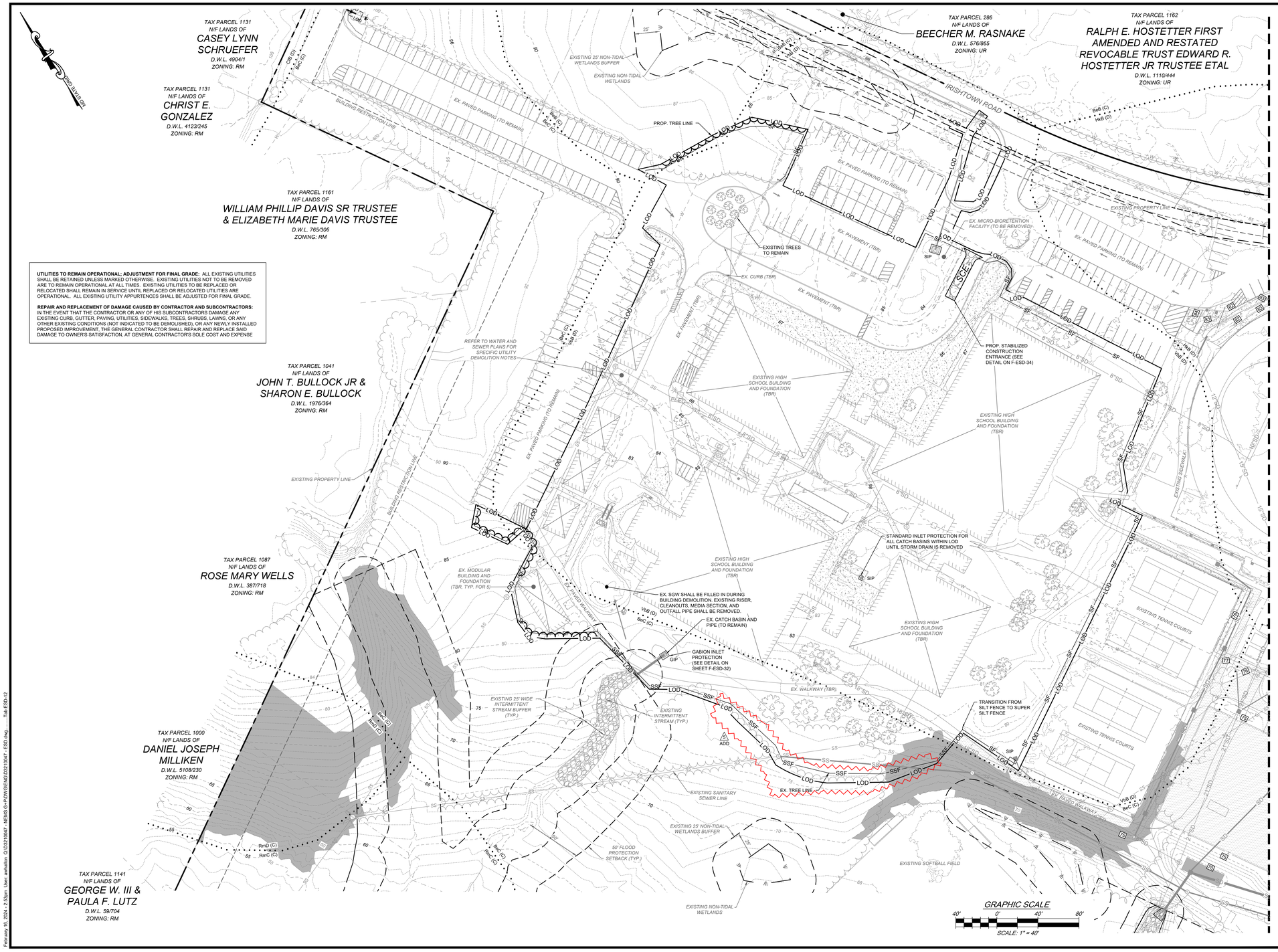


MARYLAND PROFESSIONAL ENGINEER
STATE OF MARYLAND
SURVEYOR
PROFESSIONAL LAND
2/16/2024
DATE

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REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | LOD ADJUSTED FOR INCREASE OF SIDEWALK WIDTH |

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|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | 020/1047 |
| SCALE: | 1" = 40' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 20938 |

INTERMEDIATE CONDITIONS PLAN PH. 3 (WEST)
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-12

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Suite 600
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GP #22105

INTERMEDIATE CONDITIONS PLAN PH. 3 (WEST)

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

**F-ESD-12**

12/22/2023
BID SET

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February 16, 2024 - 2:53pm User: ajwallace Q:\020\1047 - NENE G+P\DWG\ENG\020\1047 - ESD.dwg Tab:ESD-12

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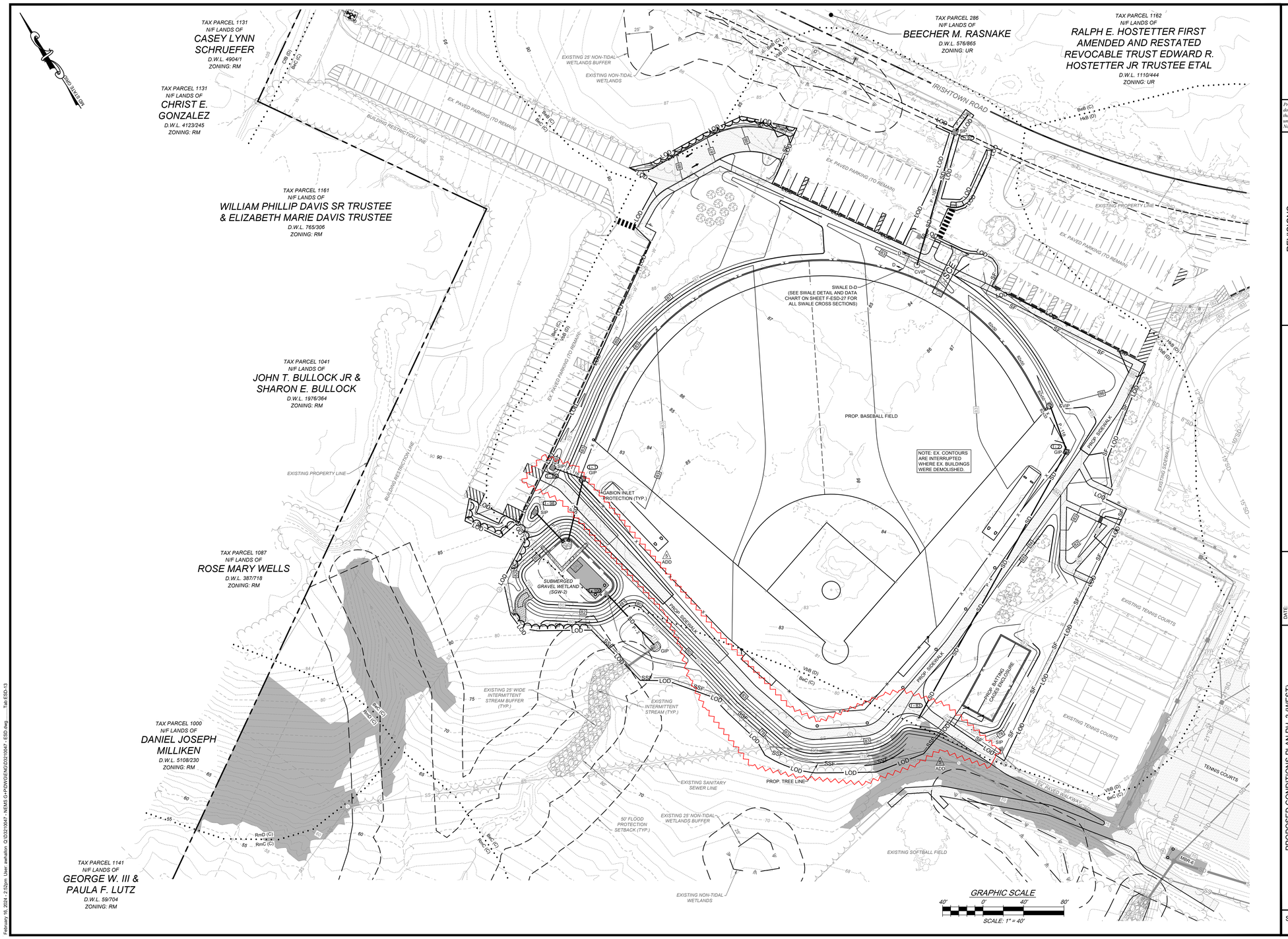


February 16, 2024 - 2:52pm User: evelution Q:\2021\0047 - NEMS G+P\DWG\ENG\2021\0047 - ESD.dwg Tab:ESD-13

STATE OF MARYLAND — EVELYN ANN MCCRONE — No. 31400 — PROFESSIONAL ENGINEER

2/16/2024
DATE

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REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | SIDEWALK WIDTH INCREASED FROM 8' TO 10' |

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|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D20190047 |
| SCALE: | 1" = 40' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 20938 |

PROPOSED CONDITIONS PLAN PH. 3 (WEST)
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-13

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GP #22105

PROPOSED CONDITIONS PLAN PH. 3 (WEST)
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

**F-ESD-13**

12/22/2023
BID SET

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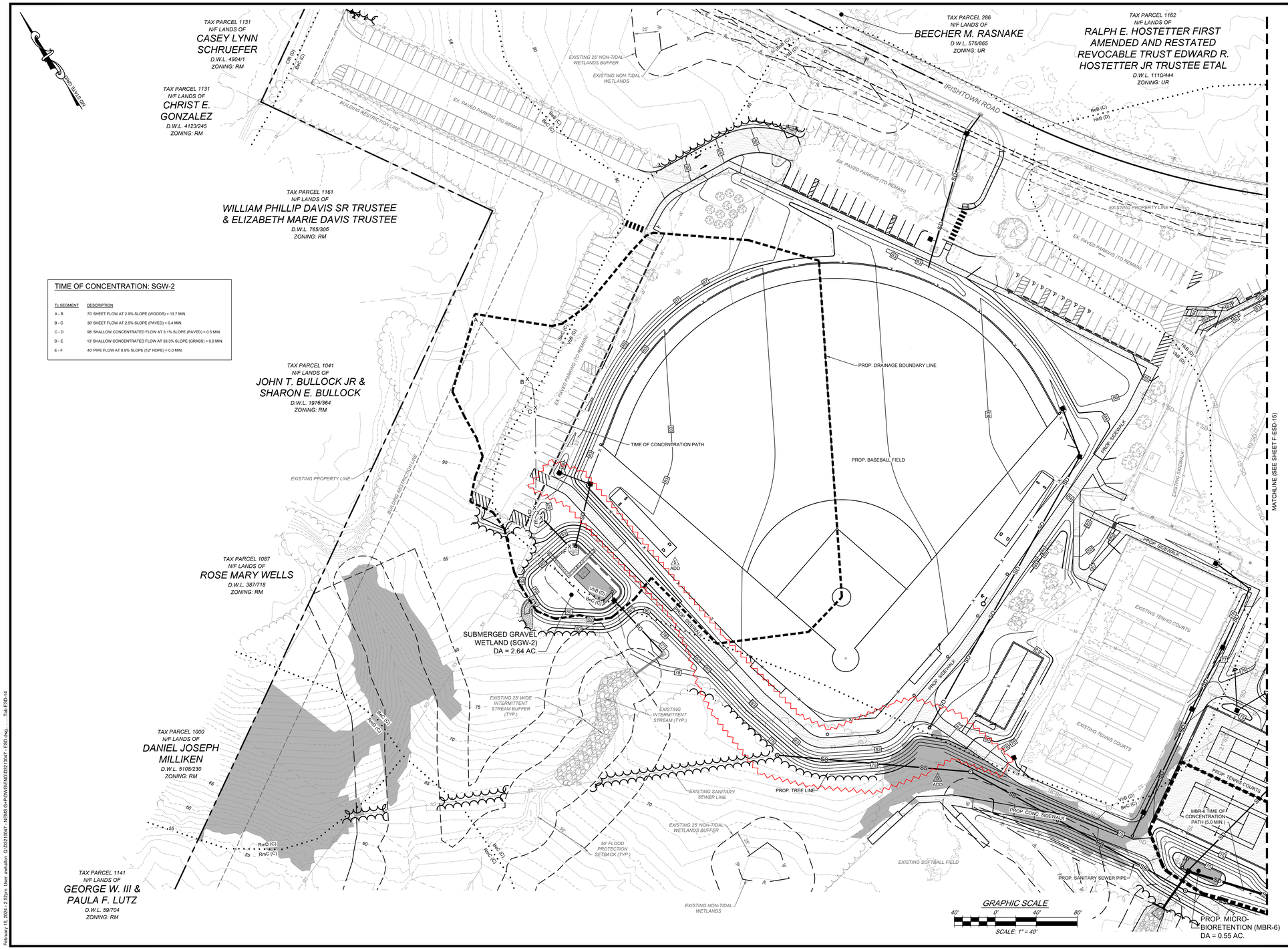


TIME OF CONCENTRATION: SGW-2

| To SEGMENT | DESCRIPTION |
|---|---|
| A - B | 70' SHEET FLOW AT 2.9% SLOPE (WOODS) = 13.7 MIN. |
| B - C | 30' SHEET FLOW AT 2.5% SLOPE (PAVED) = 0.4 MIN. |
| C - D | 98' SHALLOW CONCENTRATED FLOW AT 3.1% SLOPE (PAVED) = 0.5 MIN. |
| D - E | 13' SHALLOW CONCENTRATED FLOW AT 33.3% SLOPE (GRASS) = 0.0 MIN. |
| E - F | 40' PIPE FLOW AT 8.9% SLOPE (12" HDPE) = 0.0 MIN. |

February 16, 2024 - 2:52pm User: evelution Q:\2021\0047 - NENHS G+P\DWG\ENG\2021\0047 - ESD.dwg Tab:ESD-14

STATE OF MARYLAND
EVELYN A. MOLLOY
No. 31400
PROFESSIONAL ENGINEER
2/16/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed* Professional Engineer *under the laws of the State of Maryland, License No.* 31400 *, Expiration Date:* 1-16-2025

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | SIDEWALK WIDTH INCREASED FROM 8' TO 10' |

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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D20190047 |
| SCALE: | 1" = 40' |
| DRAWN BY: | AJM |
| DESIGNED BY: | AJM |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 20938 |

PROPOSED CONDITIONS PLAN ESD (WEST)
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-14

11720 Beltsville Drive
Suite 600
Calverton, MD 20705
Tel: 301.595.1000
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GP #22105

PROPOSED CONDITIONS PLAN ESD (WEST)
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

**F-ESD-14**

12/22/2023
BID SET

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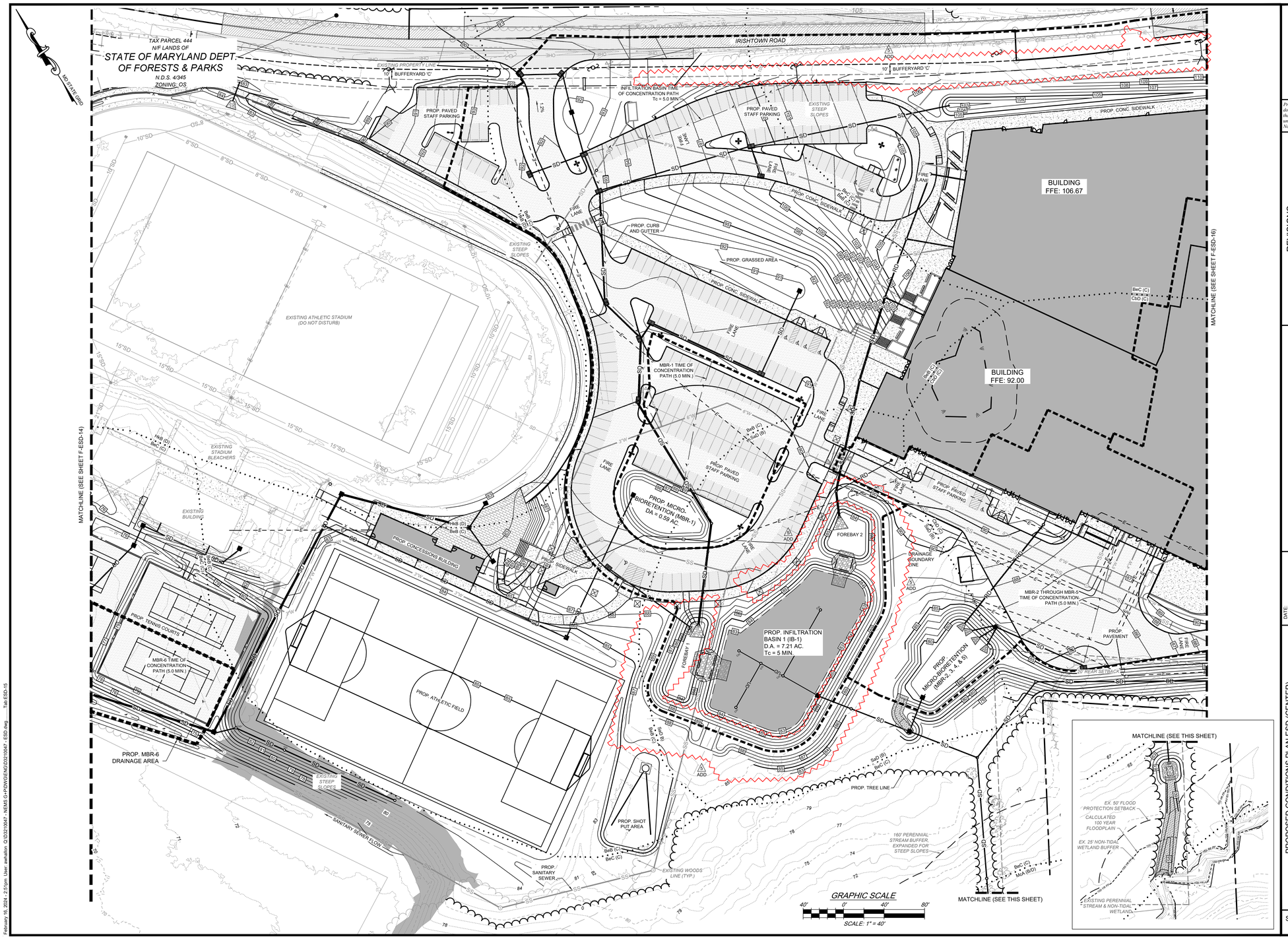


STATE OF MARYLAND
DANIEL S. SPIEGAMAN
PROFESSIONAL ENGINEER
No. 31400
2/16/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed* Professional Engineer *under the laws of the State of Maryland, License No.* 31400 *, Expiration Date:* 1-16-2025

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | REVISED IB-1 GRADING, ADDRESSING CSCD COMMENTS |

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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | 1" = 40' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 26838 |

PROPOSED CONDITIONS PLAN ESD (CENTER)
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-15


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PROPOSED CONDITIONS PLAN ESD (CENTER)
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

F-ESD-15
12/22/2023
BID SET

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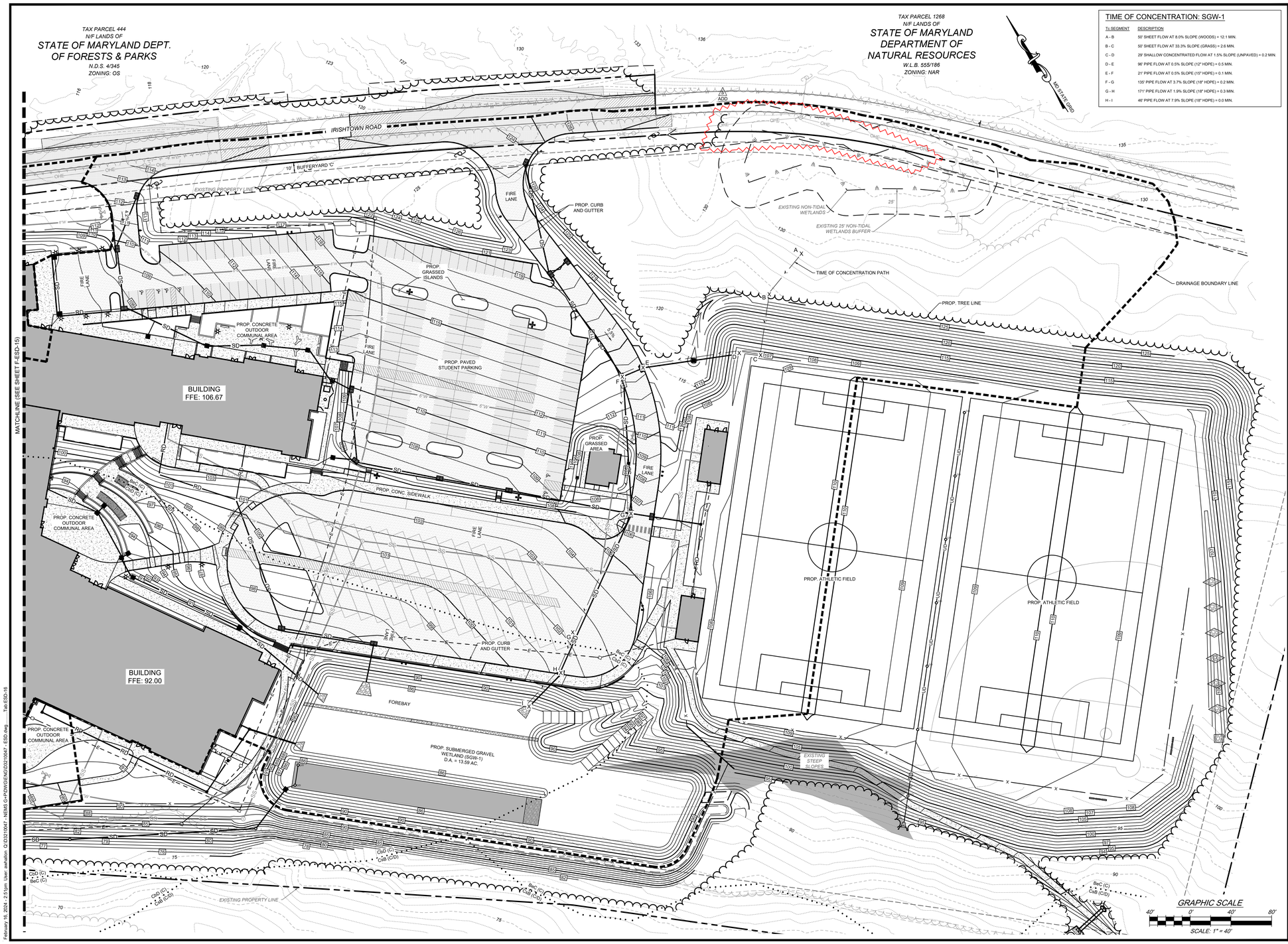


## TIME OF CONCENTRATION: SGW-1

| To SEGMENT | DESCRIPTION |
|---|---|
| A - B | 50' SHEET FLOW AT 8.0% SLOPE (WOODS) = 12.1 MIN. |
| B - C | 50' SHEET FLOW AT 33.3% SLOPE (GRASS) = 2.6 MIN. |
| C - D | 29' SHALLOW CONCENTRATED FLOW AT 1.5% SLOPE (UNPAVED) = 0.2 MIN. |
| D - E | 96' PIPE FLOW AT 0.5% SLOPE (12" HDPE) = 0.5 MIN. |
| E - F | 21' PIPE FLOW AT 0.5% SLOPE (15" HDPE) = 0.1 MIN. |
| F - G | 135' PIPE FLOW AT 3.7% SLOPE (18" HDPE) = 0.2 MIN. |
| G - H | 171' PIPE FLOW AT 1.9% SLOPE (18" HDPE) = 0.3 MIN. |
| H - I | 46' PIPE FLOW AT 7.9% SLOPE (18" HDPE) = 0.0 MIN. |

STATE OF MARYLAND
DANIEL S. SOYLEMAN
PROFESSIONAL ENGINEER
No. 31400

2/16/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed* Professional Engineer *under the laws of the State of Maryland, License No.* 31400 *, Expiration Date:* 1-16-2025

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | TREE LINE REVISED |

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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | 1" = 40' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 26838 |

PROPOSED CONDITIONS PLAN ESD (EAST)
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-16

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GP #22105

PROPOSED CONDITIONS PLAN ESD (EAST)
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

F-ESD-16
12/22/2023
BID SET

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February 16, 2024 - 2:51pm User: awhalton Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ESD.dwg Tab:ESD-16

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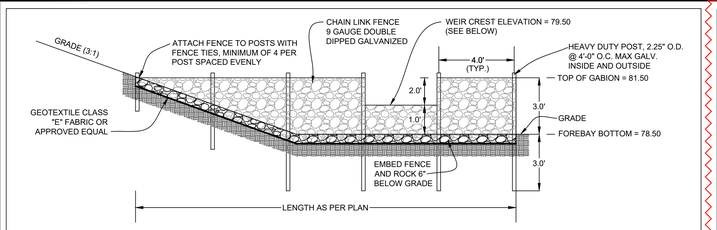
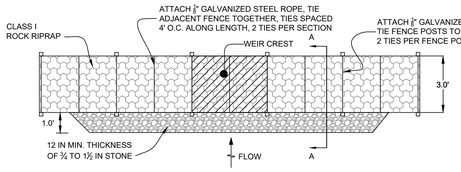
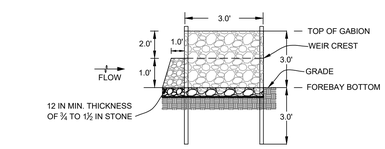



SECTION A-A

# ROCK GABION FOREBAY DETAIL

N.T.S.

## FOREBAY SIZING

SGW-2 FOREBAY VOLUME REQUIRED = 465 CF
SGW-2 FOREBAY VOLUME PROVIDED = 499 CF
FOREBAY BOTTOM EL. = 78.50
WEIR CREST EL. = 79.50

## M-2 SUBMERGED GRAVEL WETLAND SGW-2 SEQUENCE OF CONSTRUCTION

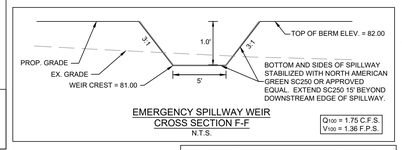
1. Stake out limits of disturbance. (1 day)
2. Notify the M.D.E. sediment control inspector (410) 901-4020 and the Cecil County DPW Inspector (410) 996-5207 at least 48 hours prior to the start of construction or excavation. Note: It is recommended that Submerged Gravel Wetlands construction be observed and documented by Engineer's representative (Civil or Geotechnical). Provide representative with photos documenting construction methods and material tickets. Failure to provide these items will prevent submittal of the As-built, which is required.
3. Install silt fence and super silt fence as shown on plan.
4. Remove existing 8" PVC outfall pipe, existing riser structure, existing underdrain and cleanouts, and existing media area. (2 day)
5. Install proposed riser structure, 12" HDPE culvert and anti-seep collar. (1 day)
6. Excavate soil for submerged gravel wetland and place in temporary stockpile area. Construct embankment with suitable soils. (4 days)
   NOTE: Submerged gravel wetland requires inspections and construction documentation (see sheet this sheet for details.) Failure to provide inspection reports and construciton documentation will result in Cecil County rejecting the As-Built until adequate testing and documentation is provided. McCrone recommends construction observation and documentation by a Geotechnical Engineer.
7. Install liner, stone, and under drain. Cover stone with bridging layer, topsoil, and a layer of mulch. Stone window shall be provided and shall extend the SGW stone to the surface. Mulch shall not cover stone window. (1 day)
8. Install forebay gabion wall. (2 days)
9. Install landscaping in conformance with planting plan. (see Landscaping Plans) (1 day)
10. Permanently stabilize all disturbed areas with 6" topsoil, seed, and mulch. (2 days)
11. After obtaining permission from the sediment control inspector, remove all sediment control measures and stabilize any disturbed areas. A MD licensed surveyor or engineer must survey constructed submerged gravel wetlands and conveyances and submit As-built Plan to CCDPR for review. The as-built survey, plan, geotechnical engineer's report, and professional engineer's or surveyor's certification should be provided within 30 days following construction of the SWM facilities.

Note:
1. Installation shall be in conformance with Appendix B.4 of the Maryland Stormwater Design Manual, Volumes I and II.
2. Installation of ESD practices shall not occur until the contributing drainage area has been completely stabilized and upon approval by inspector.

## MD CODE 378 SMALL POND DETERMINATION

THE M-2 SUBMERGED GRAVEL WETLANDS SHOWN ON THIS PLAN IS EXEMPT FROM SMALL POND APPROVAL DUE TO THE FOLLOWING:

1. THE STORAGE AT THE DESIGN HIGH WATER ELEVATION IS LESS THAN 40,000 CF.
   100 YR STORM ELEVATION = 81.25, STORAGE = 13,031 CF.
2. THE HEIGHT OF THE EMBANKMENTS IS LESS THAN 6 FT.
   MAXIMUM EMBANKMENT HEIGHT = 3.0 FT.




EMERGENCY SPILLWAY WEIR CROSS SECTION F-F

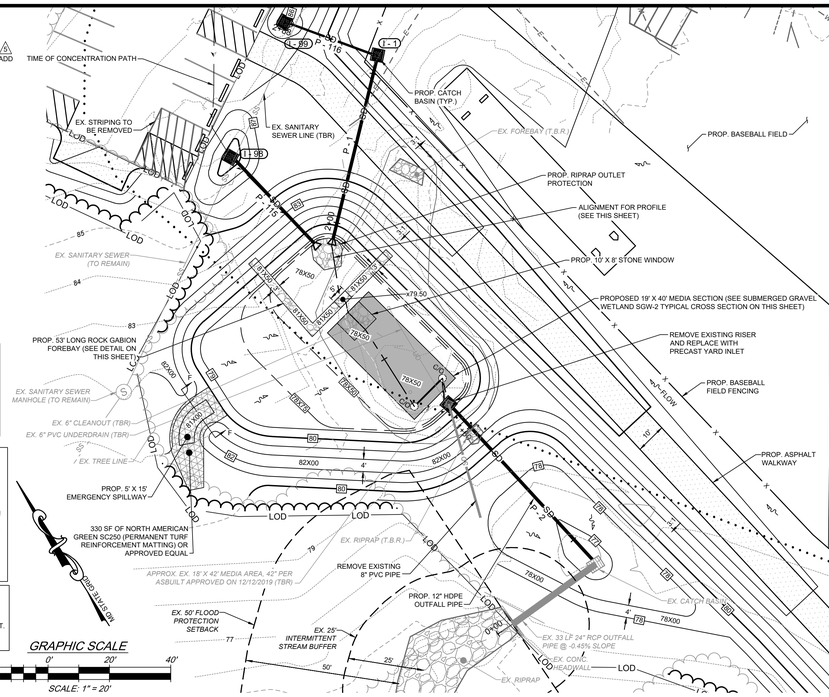
N.T.S.

NOTE: THE PURPOSE OF THIS FACILITY'S RESTORATION AND INCREASED SIZE IS TO COMPENSATE FOR THE VOLUME OF THE EXISTING MICRO-BIORETENTION AND SUBMERGED GRAVEL WETLAND FACILITIES. EXCESS VOLUME WILL BE CREDITED TO THE NEW SCHOOL PROJECT.

TOTAL EX. VOLUME = 3,538 CF

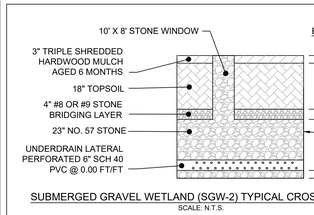
ESD PRACTICES ARE TO BE CONSTRUCTED AFTER CONTRIBUTING DRAINAGE AREAS ARE PERMANENTLY STABILIZED AND UPON APPROVAL BY INSPECTOR.

SEE LANDSCAPING PLANS FOR VEGETATION AND PLANTINGS.




GRAPHIC SCALE

SCALE: 1" = 20'




APPROX. EX. 18' X 42" MEDIA AREA, 42" PER ASBUILT APPROVED ON 12/12/2019 (TO REMAIN)

SUBMERGED GRAVEL WETLAND (SGW-2) TYPICAL CROSS SECTION

SCALE: N.T.S.

## LANDSCAPE LEGEND

- MEDIA AREA (SEE TYPICAL SECTION)
- C/O — 6" CLEANOUT & MONITORING WELL
- 6" PERFORATED UNDERDRAIN
- 78X50 — PROP. SPOT ELEVATION

## SGW-2 DESIGN DATA

1. DRAINAGE AREA = 115,161 SF
2. IMPERVIOUS AREA = 16,911 SF
3. MAXIMUM ESD VOLUME AVAILABLE (Pe = 2.7") = 4,720 CF
4. AREA OF MEDIA = 756 SF
5. DEPTH OF MEDIA = 4.0 FT
6. Pe PROVIDED = 2.7"
7. ESDv PROVIDED = 4,268 CF / 0.75 = 5,691 CF
   *According to the Stormwater Design Manual: For a submerged gravel wetland, "Storage for 75% of ESDv for the entire drainage area contributing to the wetland shall be provided."*
   *ALLOCATED TO REPLACEMENT OF EX. SWM FACILITIES = 3,538 CF*
   ESDv CREDITED = 4,720 - 3,538 = 1,182 CF

## Maintenance Schedule for Submerged Gravel Wetlands

1. Practice shall be inspected at least twice annually - March and September.
2. During the first year of operation, inspection frequency should be after every major storm and poorly established areas revegetated.
3. Sediment accumulation should be removed as necessary.
4. Signs of uneven flow distribution within the wetland may mean that the gravel or underdrain is clogged. The gravel and/or underdrain may need to be removed, cleaned, and replaced.
5. A dense stand of wetland vegetation should be maintained through the life of the facility with plantings replace as needed.
6. Inlets and outlets to each submerged gravel wetland cell should be free from debris to prevent clogging.
7. Erosion at inflow points should be repaired.

## Construction Inspection Schedule for Submerged Gravel Wetlands

Regular inspection shall be made during the following stages of construction:

1. During excavation to subgrade.
2. During placement of backfill of perforated inlet pipe and observation wells.
3. During placement of geotextiles and all filter media.
4. During construction of any appurtenant conveyance systems such as diversion structures, inlets, outlets, and flow distribution structures.
5. Upon completion of final grading and establishment of permanent stabilization, and before allowing runoff to enter the wetland.

Photographs and material tickets/receipts will be required for As-Built approval of facility. Field measurements may be required after excavation to subgrade. Please contact Engineer when practices are to be installed.

**EMBANKMENT CONSTRUCTION NOTES:**

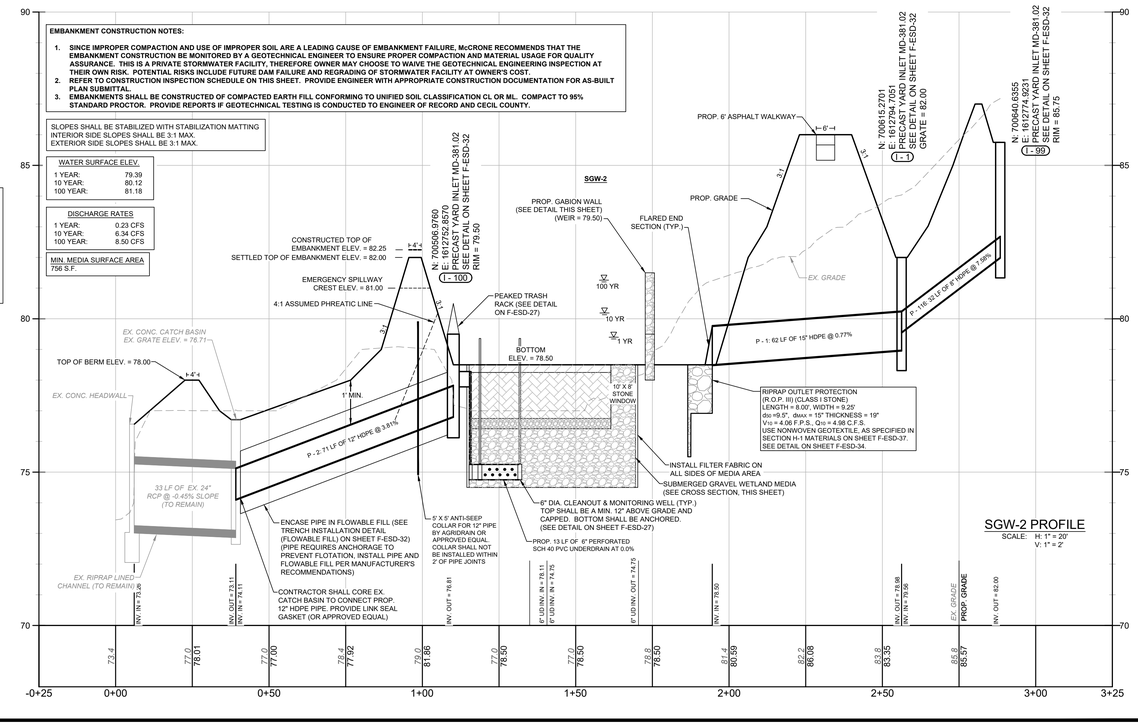
1. **SINCE IMPROPER COMPACTION AND USE OF IMPROPER SOIL ARE A LEADING CAUSE OF EMBANKMENT FAILURE, McCRONE RECOMMENDS THAT THE EMBANKMENT CONSTRUCTION BE MONITORED BY A GEOTECHNICAL ENGINEER TO ENSURE PROPER COMPACTION AND MATERIAL USAGE FOR QUALITY ASSURANCE. THIS IS A PRIVATE STORMWATER FACILITY, THEREFORE OWNER MAY CHOOSE TO WAIVE THE GEOTECHNICAL ENGINEERING INSPECTION AT THEIR OWN RISK. POTENTIAL RISKS INCLUDE FUTURE DAM FAILURE AND REGRADING OF STORMWATER FACILITY AT OWNER'S COST.**
2. **REFER TO CONSTRUCTION INSPECTION SCHEDULE ON THIS SHEET. PROVIDE ENGINEER WITH APPROPRIATE CONSTRUCTION DOCUMENTATION FOR AS-BUILT PLAN SUBMITTAL.**
3. **EMBANKMENTS SHALL BE CONSTRUCTED OF COMPACTED EARTH FILL CONFORMING TO UNIFIED SOIL CLASSIFICATION CL OR ML. COMPACT TO 95% STANDARD PROCTOR. PROVIDE REPORTS IF GEOTECHNICAL TESTING IS CONDUCTED TO ENGINEER OF RECORD AND CECIL COUNTY.**

SLOPES SHALL BE STABILIZED WITH STABILIZATION MATTING
INTERIOR SIDE SLOPES SHALL BE 3:1 MAX.
EXTERIOR SIDE SLOPES SHALL BE 3:1 MAX.

| WATER SURFACE ELEV. | |
|---|---|
| 1 YEAR: | 79.39 |
| 10 YEAR: | 80.12 |
| 100 YEAR: | 81.18 |

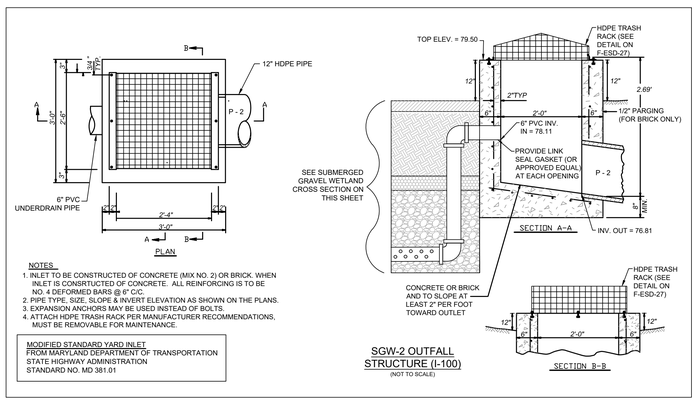
| DISCHARGE RATES | |
|---|---|
| 1 YEAR: | 0.23 CFS |
| 10 YEAR: | 6.34 CFS |
| 100 YEAR: | 8.50 CFS |

MIN. MEDIA SURFACE AREA
756 S.F.




SGW-2 PROFILE

SCALE: H: 1" = 20'
V: 1" = 2'




NOTES:
1. INLET TO BE CONSTRUCTED OF CONCRETE (MIX NO. 2) OR BRICK. WHEN INLET IS CONSRTUCTED OF CONCRETE. ALL REINFORCING IS TO BE NO. 4 DEFORMED BARS @ 6" O/C.
2. PIPE TYPE, SIZE, SLOPE & INVERT ELEVATION AS SHOWN ON THE PLANS.
3. EXPANSION ANCHORS MAY BE USED INSTEAD OF BOLTS.
4. ATTACH HDPE TRASH RACK PER MANUFACTURER RECOMMENDATIONS, MUST BE REMOVABLE FOR MAINTENANCE.

MODIFIED STANDARD YARD INLET
FROM MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
STANDARD NO. MD 381.01

SGW-2 OUTFALL STRUCTURE (I-100)

(NOT TO SCALE)

February 16, 2024 - 2:45pm User: evelsbur Q:\2321047 - NEWS G-P\DWG\ENG\2321047 - ESD PRACTICES.dwg Tab:ESD-17

2/16/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed* Professional Engineer *under the laws of the State of Maryland, License No.* 31400 *, Expiration Date:* 1-16-2025

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | REVISED SGW-2 SEQUENCE OF CONSTRUCTION |

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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D20210047 |
| SCALE: | AS NOTED |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 20838 |

SUBMERGED GRAVEL WETLAND (SGW-2) PLAN VIEW & PROFILE

300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857, ADC MAP 11, GRID G-13

*NORTH EAST MIDDLE AND HIGH SCHOOLS*

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-17

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GP #22105

SUBMERGED GRAVEL WETLAND (SGW-2)
PLAN VIEW & PROFILE
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

**F-ESD-17**

12/22/2023
BID SET

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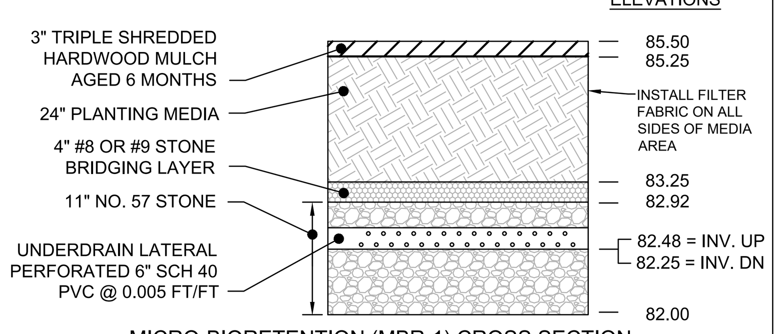
***IF TRIPLE SHREDDED HARDWOOD MULCH CANNOT BE USED, ANOTHER NON-FLOATING ALTERNATIVE LIKE OYSTER SHELLS OR LANDSCAPE GRAVEL SHALL BE USED INSTEAD OF THE MULCH LAYER. IF LANDSCAPE GRAVEL IS BEING USED IT IS RECOMMENDED THAT WHITE OR LIGHT COLORED MATERIAL BE USED TO AVOID "BURNING" THE VEGETATION.




MICRO-BIORETENTION (MBR-1) CROSS SECTION

SCALE: N.T.S.

NOTE: RECHARGE VOLUME IS PROVIDED BELOW UNDERDRAIN

## Construction Inspection Schedule for Micro-Bioretention

Regular inspections shall be made during the following stages of construction:

1. During excavation to subgrade and placement and backfill of underdrain systems.
2. During placement of filter media.
3. During construction of appurtenant conveyance.
4. Upon completion of final grading and establishment of permanent stabilization.

Photographs and material tickets/receipts will be required for As-Built approval of ALL facilities. Field measurements may be required after excavation to subgrade. Please contact Engineer when practices are to be installed.

## Owner Inspection and Maintenance Schedule for Micro-Bioretention Facilities

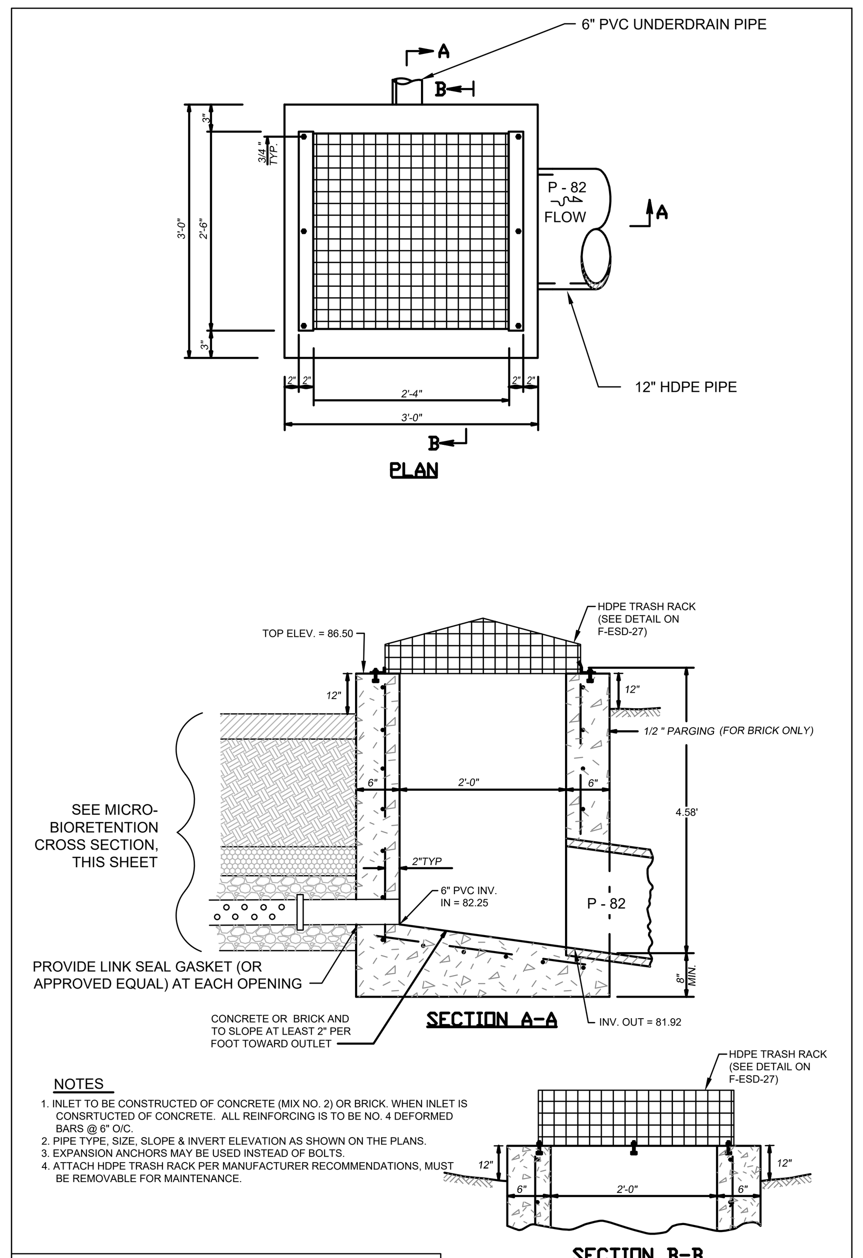
1. Practice shall be inspected at least twice annually - March and September.
2. During the first year of operation, inspection frequency should be after every major storm and poorly established areas revegetated.
3. Remove cap from observation well to determine if facilities are draining properly. If a facility does not completely drain within 48 hours after a rain event or more than 6" of sediment has accumulated, the underdrain pipes may need to be cleaned or the gravel media may need to be excavated and replaced.
4. Sediment accumulation on the surface of the facility should be removed and the top two to three inches of surface layer replaced as needed.
5. The top few inches of the planting soil should be removed and replaced when water ponds for more than 48 hours or there is algal growth on the surface of the facility.
6. If standing water persists after filter media has been maintained, the gravel, soil, and sand may need to be cleaned and/or replaced.
7. Occasional pruning and replacement of dead vegetation is necessary. If specific plants are not surviving, more appropriate species should be used. Watering may be required during prolonged dry periods.

## LANDSCAPE LEGEND

| | |
|---|---|
| (gray box) | MEDIA AREA (SEE TYPICAL SECTION) |
| C/O | 6" CLEANOUT & MONITORING WELL |
| UD | 6" PERFORATED UNDERDRAIN |
| 78X50 | PROP. SPOT ELEVATION |

SEE LANDSCAPING PLANS FOR VEGETATION AND PLANTINGS.

ESD PRACTICES ARE TO BE CONSTRUCTED AFTER CONTRIBUTING DRAINAGE AREAS ARE PERMANENTLY STABILIZED AND UPON APPROVAL BY INSPECTOR.




NOTES
1. INLET TO BE CONSTRUCTED OF CONCRETE (MIX NO. 2) OR BRICK. WHEN INLET IS CONSRTUCTED OF CONCRETE. ALL REINFORCING IS TO BE NO. 4 DEFORMED BARS @ 6" O/C.
2. PIPE TYPE, SIZE, SLOPE & INVERT ELEVATION AS SHOWN ON THE PLANS.
3. EXPANSION ANCHORS MAY BE USED INSTEAD OF BOLTS.
4. ATTACH HDPE TRASH RACK PER MANUFACTURER RECOMMENDATIONS, MUST BE REMOVABLE FOR MAINTENANCE.

MODIFIED STANDARD YARD INLET
FROM MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
STANDARD NO. MD 381.01

MBR-1 OUTFALL STRUCTURE

MD CODE 378 SMALL POND DETERMINATION

THE M-6 MICRO-BIORETENTION SHOWN ON THIS PLAN IS EXEMPT FROM SMALL POND APPROVAL DUE TO THE FOLLOWING:

1. THE STORAGE AT THE DESIGN HIGH WATER ELEVATIONS IS LESS THAN 40,000 CF.
100 YR STORM ELEVATION = 86.84 -> STORAGE = 3,728 CF.

2. THE HEIGHT OF THE EMBANKMENTS IS LESS THAN 6 FT.
MAXIMUM EMBANKMENT HEIGHT = 4.9 FT.

## M-6 MICRO-BIORETENTION MBR-1 SEQUENCE OF CONSTRUCTION

1. Stake out limits of disturbance. (1 day)
2. Notify the M.D.E. sediment control inspector (410) 901-4020 and the Cecil County DPW Inspector (410) 996-5267 at least 48 hours prior to the start of construction or excavation. Note: It is recommended that construction of micro-bioretention be observed and documented by Engineer's representative (Civil or Geotechnical). Provide representative with photos documenting construction methods and material tickets. Failure to provide these items will prevent submittal of the As-built, which is required.
3. Install silt fence and super silt fence as shown on plan.
4. Install riser structure, 12" HDPE culvert, and anti-seep collar as shown on the plans. (1 day)
5. Excavate micro-bioretention facility to subgrade. (2 days)
NOTE: Micro-bioretention facility requires inspections and construction documentation (see sheet this sheet for details.) Failure to provide inspection reports and construciton documentation will result in Cecil County rejecting the As-Built until adequate testing and documentation is provided. McCrone recommends construction observation and documentation by a Geotechnical Engineer.
6. Install filter fabric on sides of media area. (1/2 day)
7. Place bottom stone layer, underdrain, and cleanout. Place stone bridging layer, planting media soil, and cover with layer of mulch. (2 days)
8. Install landscaping in conformance with planting plan. (see Landscaping Plans) (1 day)
9. Permanently stabilize all disturbed areas with 6" topsoil, seed, and mulch. (1 days)
10. After obtaining permission from the sediment control inspector, remove all sediment control measures and stabilize any disturbed areas. A MD licensed surveyor or engineer must survey constructed submerged gravel wetlands and conveyances and submit As-built Plan to CCDPR for review. The as-built survey, plan, geotechnical engineer's report, and professional engineer's or surveyor's certification should be provided within 30 days following construction of the SWM facilities.

Note:
1. Installation shall be in conformance with Appendix B.4 of the Maryland Stormwater Design Manual, Volumes I and II.
2. Installation of ESD practices shall not occur until the contributing drainage area has been completely stabilized and upon approval by inspector.

## MBR-1 DESIGN DATA

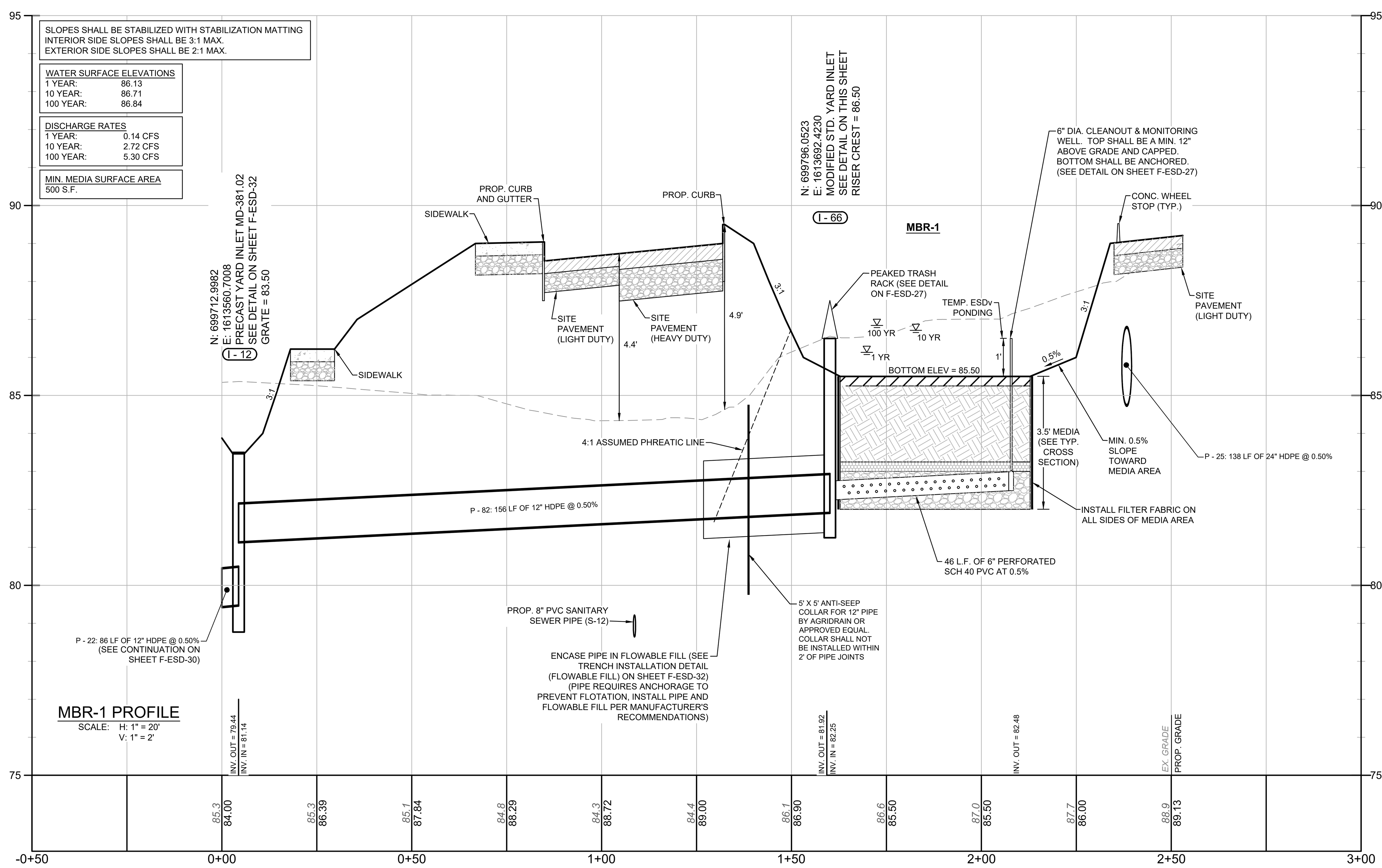
1. DRAINAGE AREA = 25,556 SF
2. IMPERVIOUS AREA = 16,755 SF
3. MAXIMUM ESD VOLUME AVAILABLE (Pe = 2.7") = 3,680 CF
4. AREA OF MEDIA = 500 SF
5. DEPTH OF MEDIA = 3.5 FT
6. Pe PROVIDED = 2.67"
7. ESDv PROVIDED = 2,701 CF / 0.75 = 3,601 CF
*According to the Stormwater Design Manual: "Micro-bioretention practices shall capture and store at least 75% of the ESD."*
ESDv CREDITED = 3,601 CF

SLOPES SHALL BE STABILIZED WITH STABILIZATION MATTING
INTERIOR SIDE SLOPES SHALL BE 3:1 MAX.
EXTERIOR SIDE SLOPES SHALL BE 2:1 MAX.

| WATER SURFACE ELEVATIONS | |
|---|---|
| 1 YEAR: | 86.13 |
| 10 YEAR: | 86.71 |
| 100 YEAR: | 86.84 |

| DISCHARGE RATES | |
|---|---|
| 1 YEAR: | 0.14 CFS |
| 10 YEAR: | 2.72 CFS |
| 100 YEAR: | 5.30 CFS |

MIN. MEDIA SURFACE AREA
500 S.F.




MBR-1 PROFILE
SCALE: H: 1" = 20'
V: 1" = 2'


STATE OF MARYLAND — DANIEL S. SPEAKMAN — NO. 31400 — PROFESSIONAL ENGINEER
2/16/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 31400, Expiration Date: 1-16-2025.*


REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | REVISED IB-1 GRADING |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ELKTON, MARYLAND 21921
410.398.1550
www.mccrone-engineering.com


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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | 1" = 20' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 2683B |

MICROBIORETENTION (MBR-1) PLAN VIEW & PROFILE

300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

# *NORTH EAST MIDDLE AND HIGH SCHOOLS*

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-18


11720 Beltsville Drive
Suite 600
Calverton, MD 20705
Tel: 301.595.1000
www.grimmandparker.com
GRIMM + PARKER ARCHITECTS


GP #22105

MICROBIORETENTION (MBR-1)
PLAN VIEW & PROFILE
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

# F-ESD-18

12/22/2023
BID SET

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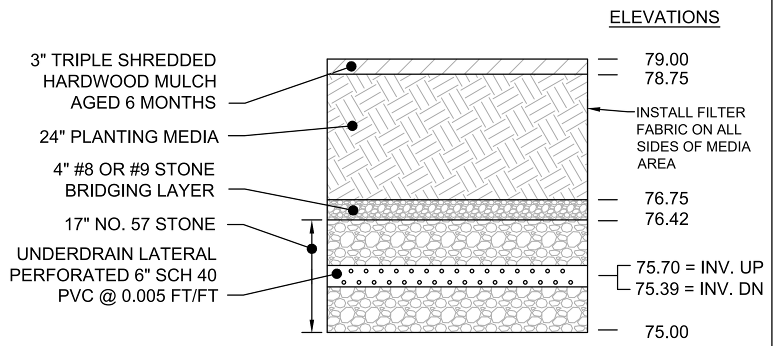
February 16, 2024 - 2:48pm User: awhallon Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ESD PRACTICES.dwg.........Tab:ESD-18

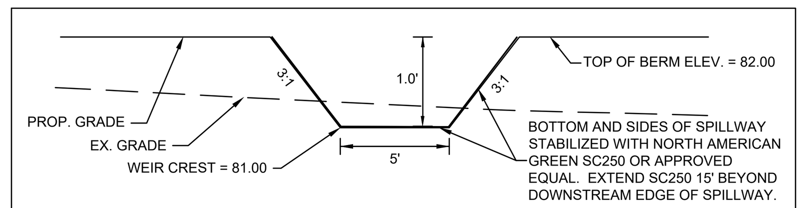
***IF TRIPLE SHREDDED HARDWOOD MULCH CANNOT BE USED, ANOTHER NON-FLOATING ALTERNATIVE LIKE OYSTER SHELLS OR LANDSCAPE GRAVEL SHALL BE USED INSTEAD OF THE MULCH LAYER. IF LANDSCAPE GRAVEL IS BEING USED IT IS RECOMMENDED THAT WHITE OR LIGHT COLORED MATERIAL BE USED TO AVOID "BURNING" THE VEGETATION.




MICRO-BIORETENTION (MBR-2, MBR-3, MBR-4, & MBR-5) CROSS SECTION

SCALE: N.T.S.

NOTE: RECHARGE VOLUME IS PROVIDED BELOW UNDERDRAIN GOOSENECK ELEV. 78.00




GRASSED SPILLWAY WEIR CROSS SECTION J-J

N.T.S.

SEE LANDCAPING PLANS FOR VEGETATION AND PLANTINGS.

## M-6 MICRO-BIORETENTION MBR-2, MBR-3, MBR-4, & MBR-5 SEQUENCE OF CONSTRUCTION

1. Stake out limits of disturbance. (1 day)
2. Notify the M.D.E. sediment control inspector (410) 901-4020 and the Cecil County DPW Inspector (410) 996-5267 at least 48 hours prior to the start of construction or excavation. Note: Construction of micro-bioretentions must be observed and documented by Engineer's representative (Civil or Geotechnical). Provide representative with photos documenting construction methods and material tickets. Failure to provide these items will prevent submittal of the As-built, which is required.
3. Install silt fence and super silt fence as shown on plan.
4. Install riser structure, 18" HDPE culvert, and anti-seep collar as shown on the plans. (1 day)
5. Excavate micro-bioretention facilities to subgrade. Construct embankment with suitable soils. (4 days)
   NOTE: Micro-bioretention facility requires inspections and construction documentation (see sheet this sheet for details.) Failure to provide inspection reports and construciton documentation will result in Cecil County rejecting the As-Built until adequate testing and documentation is provided. McCrone recommends construction observation and documentation by a Geotechnical Engineer.
6. Install filter fabric on sides of facility. (1/2 day)
7. Place bottom stone layer, underdrain, and cleanouts. Place stone bridging layer, planting media soil, and cover with layer of mulch. (2 days)
8. Install landscaping in conformance with planting plan. (see Landscaping Plans) (1 day)
9. Permanently stabilize all disturbed areas with 6" topsoil, seed, and mulch. (1 days)
10. After obtaining permission from the sediment control inspector, remove all sediment control measures and stabilize any disturbed areas. A MD licensed surveyor or engineer must survey constructed submerged gravel wetlands and conveyances and submit As-built Plan to CCDPR for review. The as-built survey, plan, geotechnical engineer's report, and professional engineer's or surveyor's certification should be provided within 30 days following construction of the SWM facilities.

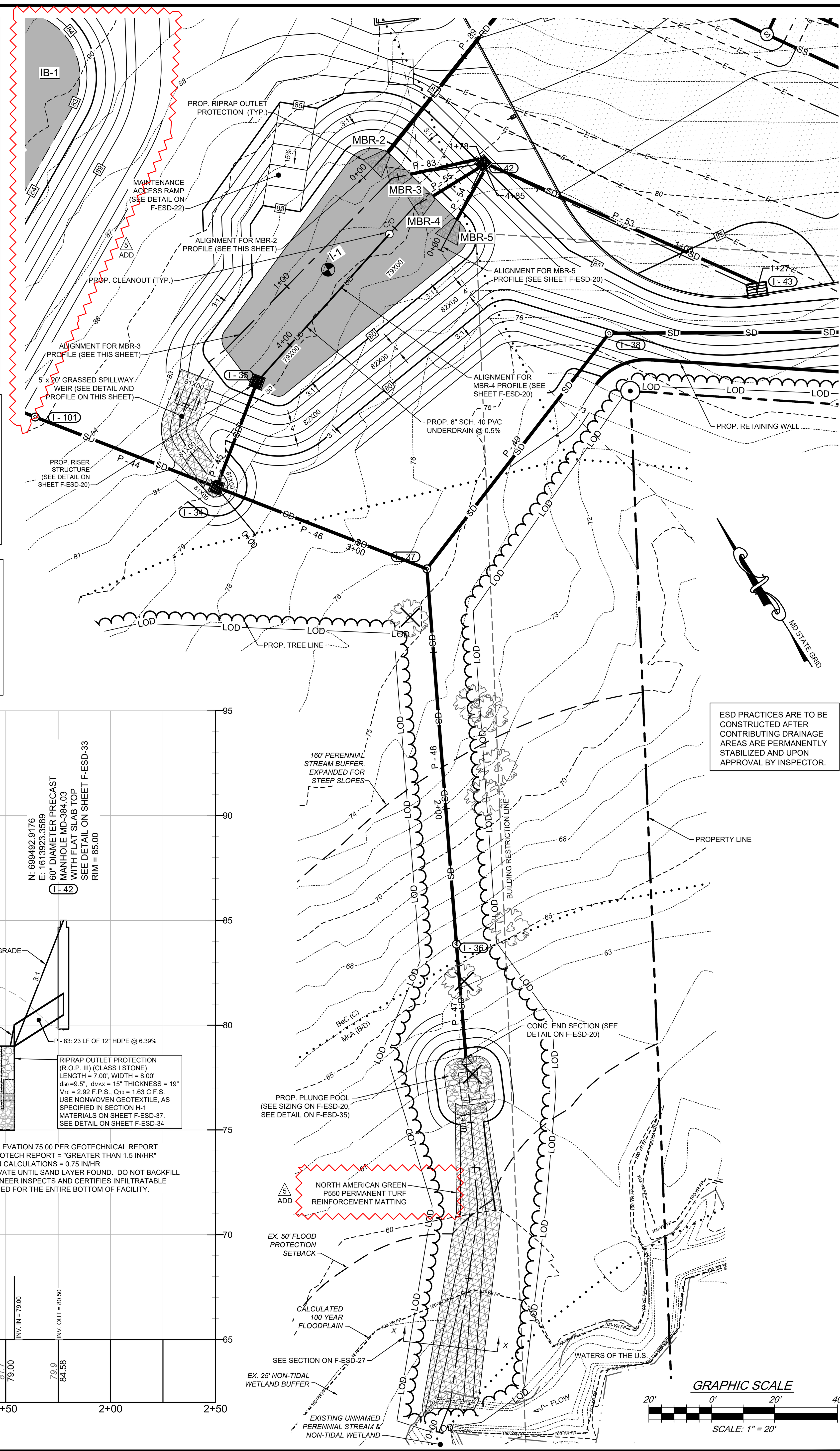
Note:
1. Installation shall be in conformance with Appendix B.4 of the Maryland Stormwater Design Manual, Volumes I and II.
2. Installation of ESD practices shall not occur until the contributing drainage area has been completely stabilized and upon approval by inspector.

## *LANDSCAPE LEGEND*

| | |
|---|---|
| (shaded area) | MEDIA AREA (SEE TYPICAL SECTION) |
| C/O | 6" CLEANOUT & MONITORING WELL |
| —UD— | 6" PERFORATED UNDERDRAIN |
| 78X50 | PROP. SPOT ELEVATION |
| (X) | TREE TO BE REMOVED |

MBR-2, MBR-3, MBR-4 & MBR-5 DESIGN DATA

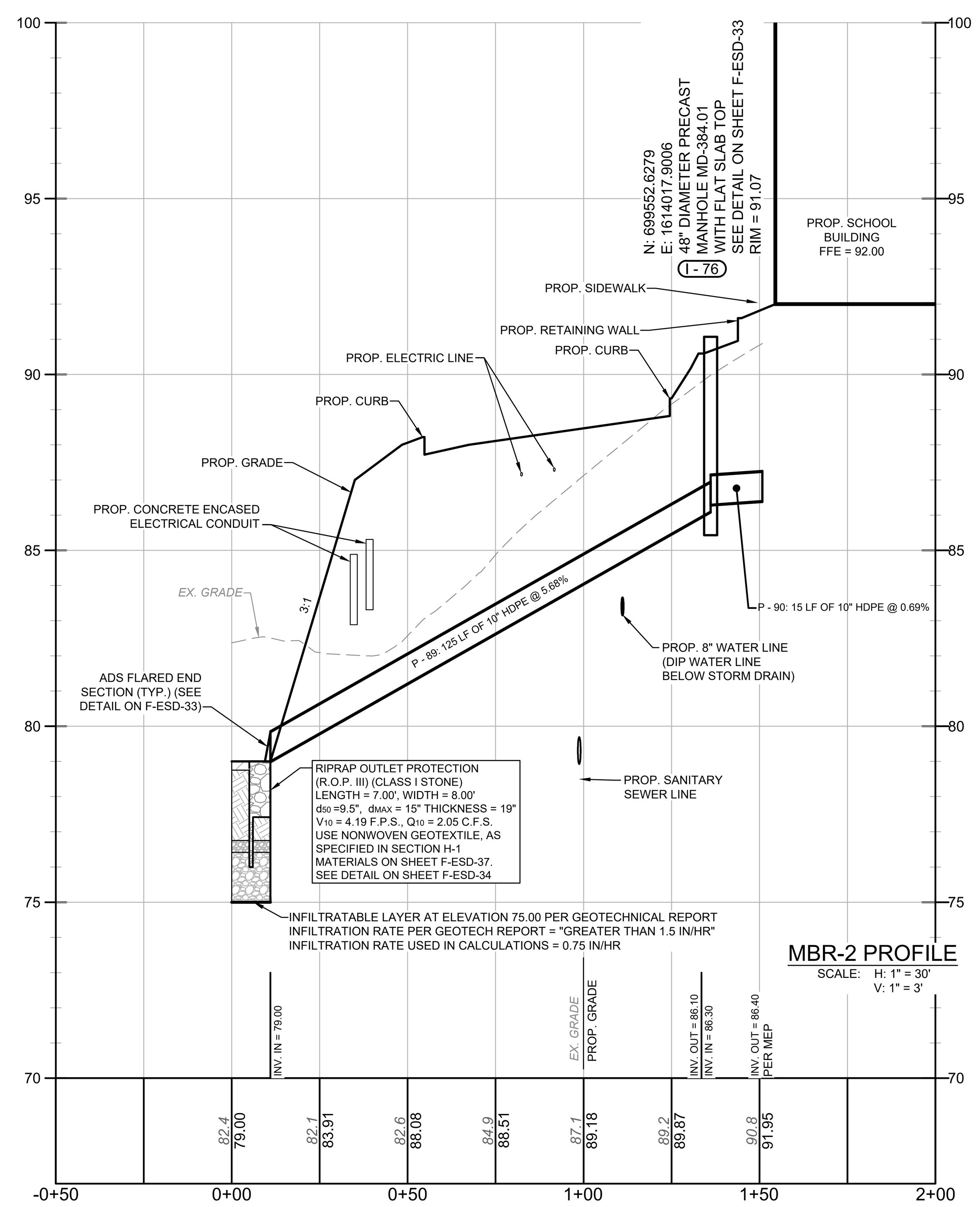
1. DRAINAGE AREA = 75,122 SF
2. IMPERVIOUS AREA = 48,658 SF
3. MAXIMUM ESD VOLUME AVAILABLE (Pe = 2.7") = 10,698 CF
4. AREA OF MEDIA = 3,003 SF
5. DEPTH OF MEDIA = 4.0 FT
6. Pe PROVIDED = 2.70"
7. ESDv PROVIDED = 8,187 CF / 0.75 = 10,916 CF
   *According to the Stormwater Design Manual: "Micro-bioretention practices shall capture and store at least 75% of the ESD."*
   ESDv CREDITED = 10,698 CF




ESD PRACTICES ARE TO BE CONSTRUCTED AFTER CONTRIBUTING DRAINAGE AREAS ARE PERMANENTLY STABILIZED AND UPON APPROVAL BY INSPECTOR.

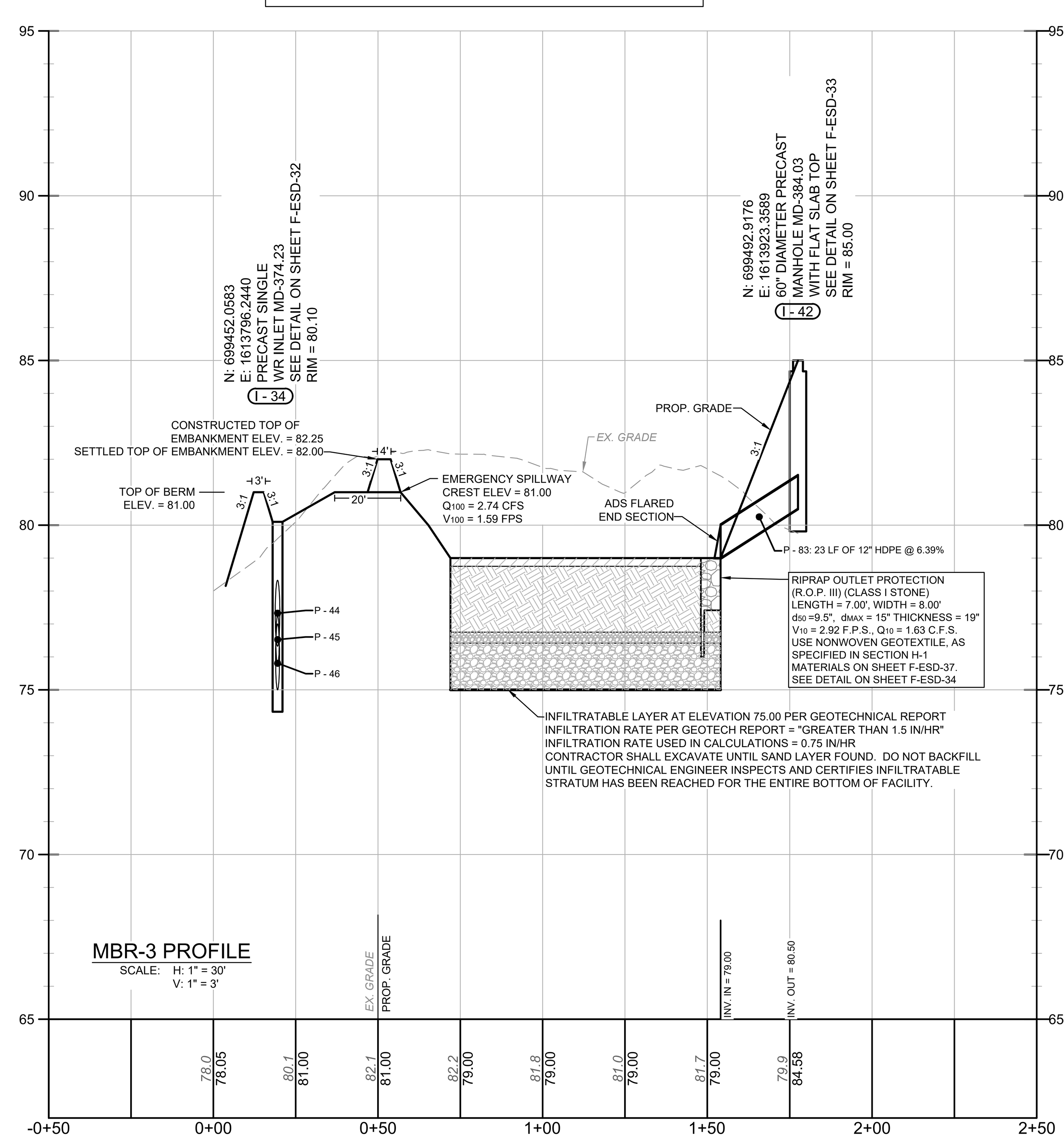
*GRAPHIC SCALE*

*SCALE: 1" = 20'*




MBR-2 PROFILE

SCALE: H: 1" = 30' V: 1" = 3'




MBR-3 PROFILE

SCALE: H: 1" = 30' V: 1" = 3'

February 16, 2024 - 2:47pm User: awhallon Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ESD PRACTICES.dwg........Tab:ESD-19

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 31400, Expiration Date: 1-16-2025.

DATE 2/16/2024

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | REVISED IB-1 GRADING |

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ELKTON, MARYLAND 21921
410.398.1550
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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | AS NOTED |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 2683B |

MICROBIORETENTION (MBR-2, MBR-3, MBR-4 & MBR-5) PLAN VIEW & PROFILE

300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

*NORTH EAST MIDDLE AND HIGH SCHOOLS*

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND

PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-19

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GP #22105

MICROBIORETENTION (MBR-2, MBR-3, MBR-4, & MBR-5) PLAN VIEW & PROFILE

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

# F-ESD-19

12/22/2023
BID SET

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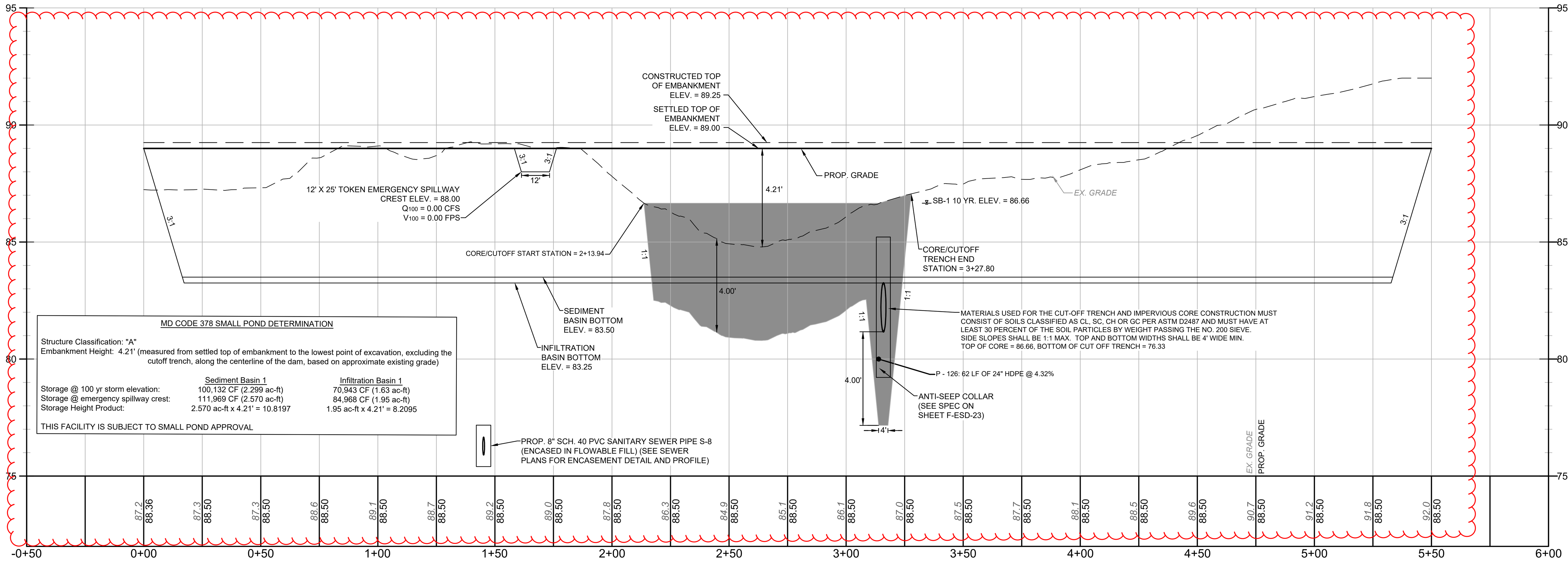



MD CODE 378 SMALL POND DETERMINATION

Structure Classification: "A"
Embankment Height: 4.21' (measured from settled top of embankment to the lowest point of excavation, excluding the cutoff trench, along the centerline of the dam, based on approximate existing grade)

| | Sediment Basin 1 | Infiltration Basin 1 |
|---|---|---|
| Storage @ 100 yr storm elevation: | 100,132 CF (2.299 ac-ft) | 70,943 CF (1.63 ac-ft) |
| Storage @ emergency spillway crest: | 111,969 CF (2.570 ac-ft) | 84,968 CF (1.95 ac-ft) |
| Storage Height Product: | 2.570 ac-ft x 4.21' = 10.8197 | 1.95 ac-ft x 4.21' = 8.2095 |

THIS FACILITY IS SUBJECT TO SMALL POND APPROVAL

## SB-1/IB-1 CENTERLINE OF EMBANKMENT PROFILE
5 ADD
SCALE: H: 1" = 30'
V: 1" = 3'

## EMBANKMENT CONSTRUCTION NOTES:

1. All soils used for construction of the cut-off trench and/or the impervious core, and the outer portions of any embankments shall consist of materials tested and approved by a Geotechnical Engineer. Embankment construction installation must be monitored and documented by a Geotechnical Engineer. Provide reports to engineer of record and Cecil County.
2. All on-site materials to be used for any cut-off trench and or/impervious core construction must be tested prior to their use to verify that they are suitable and meet the project requirements. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed, per geotechnical report.
3. All cut and fill slopes shall be 3:1 or flatter and slopes shall be stabilized with stabilization matting.
4. Materials used for the cut-off trench and impervious core construction must consist of soils classified as CL, SC, CH, or GC per ASTM D2487 and must have at least 30 percent of the soil particles by weight passing the No. 200 sieve.
5. Fill material for the embankment shall consist of soils classified as ML, CL-ML, SM-SC, SC and SM soils, having at least 25 percent by weight passing the No. 200 sieve per ASTM D2487 and have a Liquid Limit and Plasticity Index less than 45 and 20, respectively, which meets the MD-378 requirements. Soil classified as SP-SM or SP should not be considered for use within any planned embankment construction.
6. To facilitate thorough compaction of new fill materials for the required embankment construction, the fill materials should be adequately benched into competent natural soils (See Appendix D of geotechnical report - Attachments, Benching Detail) and the filling operations for the embankment should be extended laterally beyond the planned final grades. Subsequent to compaction of the embankment materials beyond the planned final grades, the overfill materials should be carefully removed to create the proposed slope configuration and maintain the compacted surface.
7. This facility is to be built to the Soil Conservation Service Standards and Specifications for Small Ponds No. 378 and/or the Maryland Department of Natural Resources Water Resources Administration Standards and Specifications for infiltration practices. Lack of presence of specific detail on this plan does not mean that the full requirements of the two above stated standards do not have to be met.

## Construction Inspection Schedule for Sediment Basin

Regular inspections shall be made during the following stages of construction:
1. During excavation to subgrade and placement and backfill of underdrain systems.
2. During construction of appurtenant conveyance.
3. Upon completion of final grading and establishment of permanent stabilization.

Photographs and material tickets/receipts will be required for As-Built approval of facility when it is converted to a stormwater managment facility. Photographs of installation and material tickets shall be supplied to the Engineer for future use during SWM facility as-built. Field measurements may be required after excavation to subgrade. Please contact Engineer when practices are to be installed.

NOTE: SEDIMENT BASIN **SHALL** HAVE IMPERMEABLE LINER
SEE LINER SPECIFICATION ON SHEET F-ESD-22

## DEWATERING STRATEGY

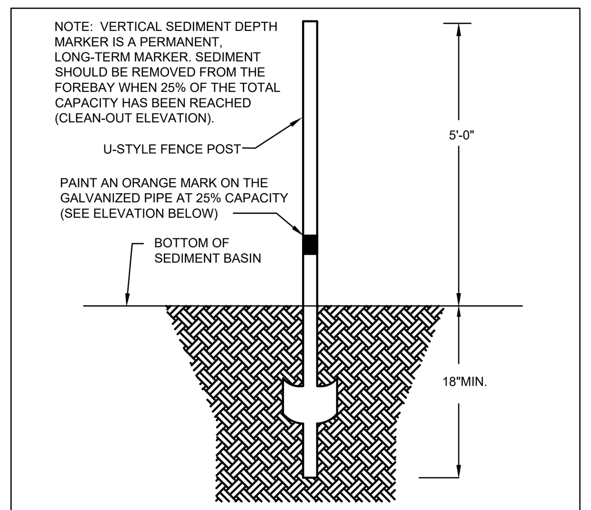
Use of a floating suction hose to pump the cleaner water from the top of the pond. The end of the hose shall have a filter bag attached to the end per Detail F-4 Filter Bag. As the cleaner water is pumped the suction hose will lower and eventually encounter sediment laden water. When this happens the pumping operation will cease. Provisions shall be made to filter water prior to discharge to receiving waters. When floating suction hoses are used, personnel shall be assigned to monitor pumping operations to ensure that sediment pollution is abated. Pumping sediment laden water into waters of the State without filtration is strictly forbidden.

(SEE DEWATERING STRATEGY AND FILTER BAG DETAILS ON SHEET F-ESD-35)

## Sediment Basin SB-1 Sequence of Construction

**Begin construction of sediment basin in accordance with the following sequence:**
1. Contact M.D.E. (410) 901-4020 and Cecil County DPW stormwater management inspector (410) 996-5267 at least 48 hours prior to the initiation of construction activities. A pre-construction meeting will be arranged at the project site. Failure to notify the CCDPW may expose the Owner/Developer to additional work.
2. Install downstream pipe network (P-48, I-37, P-47, I-36, P-46, I-34, P-44, I-101). Install plunge pool, channel X-X, and downstream flared end section. (3 days) (temporarily plug future pipe openings in I-37 and I-34)
3. Strip and stockpile topsoil down to mineral soil (no roots or organic material) from the sediment basin to the stockpile area. (2 days)
4. Install riser structure I-33 and P-126 outfall pipe. Install anti-seep collars. Backfill and compact around barrel and anti-seep collars, making sure that backfill lifts and compaction are done in 4" maximum lifts. All work is to be done in accordance with MD 378 Pond Code construction specifications. (2 days)
5. Install 6" underdrain stub and dewatering device per detail on this sheet (do not install ball valve or permanent underdrain, this will be installed upon conversion to infiltration basin). Install 3/4" stone around and over dewatering device. (1 day)
6. Construct core and embankment to final grade, building up with the proper compaction, using excavated sediment basin material if acceptable (see geotechnical certification.) (2 days)
7. Excavate remainder of the basin. Install liner and clay. (3 days)
8. Install temporary earth dikes and riprap inflow protection. (3 days)
9. Stabilize all disturbed areas with vegetation utilizing the permanent seeding mix. All concentrated inflow points shall be stabilized with riprap. (2 days)

Basin Notes:
1. Installation shall be in accordance with Appendix B.1 of the Maryland Stormwater Design Manual, Volumes I and II (where applicable, as intended future use of facility is infiltration basin). This stormwater feature is not subject to small pond review; however, installation shall be in accordance with Maryland Pond Code 378.

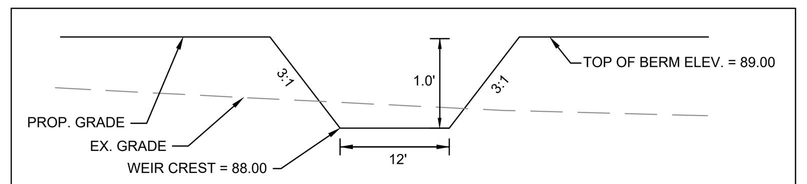



| SEDIMENT BASIN | ORANGE MARK ELEV. | BOTTOM OF BASIN ELEV. |
|---|---|---|
| SB-1 | 84.00 | 83.50 |

VERTICAL SEDIMENT MARKER DETAIL
N.T.S.

| Flow Path Effective Length Calculations (Required Minimum > 207.56 ft) | |
|---|---|
| INFLOW POINT | EFFECTIVE LENGTH (FT) |
| Inflow Point # 1: | Le = L1 + L2 + L3 = 39.3 + 70.2 + 98.6 = 208.1 |
| Inflow Point # 2: | Le = L1 + L2 + L4 = 39.3 + 70.2 + 144.1 = 253.6 |

| Flow Path Length Table | |
|---|---|
| LINE NUMBER | LENGTH (FT) |
| L1 | 39.3 |
| L2 | 70.2 |
| L3 | 98.6 |
| L4 | 144.1 |




SB-1:
$Q_{10}$ = 0.00 C.F.S.
$V_{10}$ = 0.00 F.P.S.

IB-1:
$Q_{100}$ = 0.00 C.F.S.
$V_{100}$ = 0.00 F.P.S.

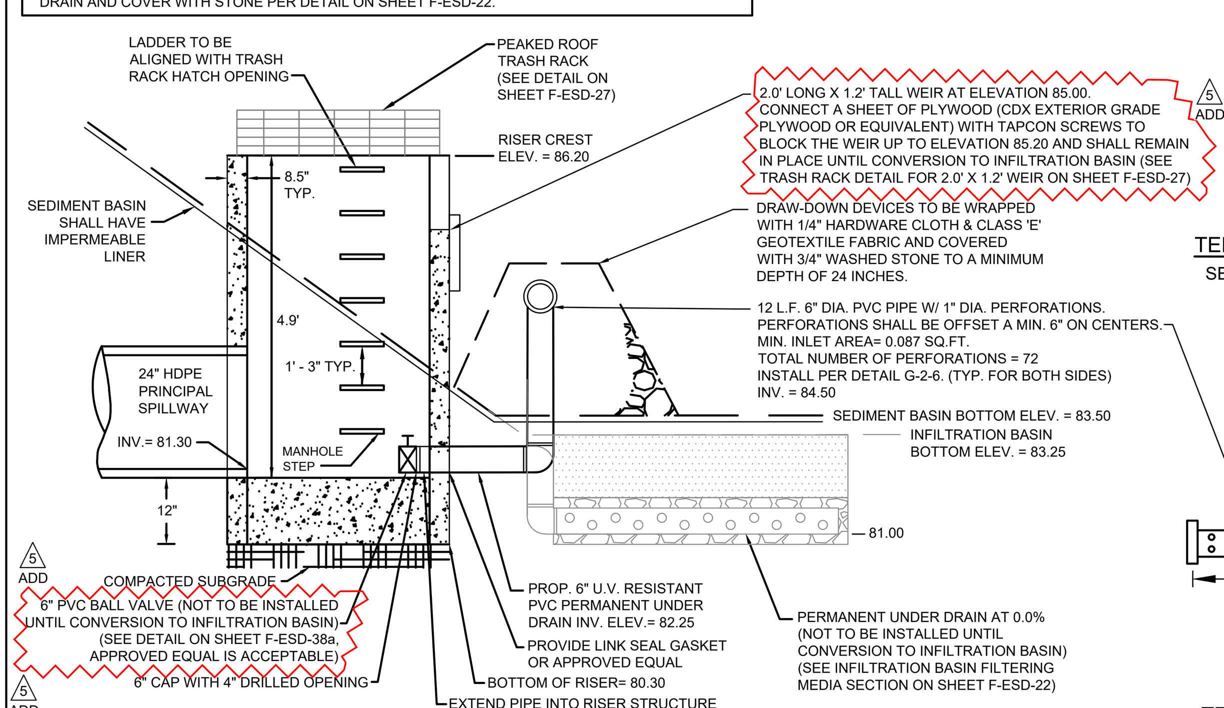
TOKEN EMERGENCY SPILLWAY WEIR - CROSS SECTION G-G
N.T.S.

COMPACTION NOTE:
CONTRACTOR SHALL PREVENT COMPACTION AS BEST AS POSSIBLE IN THE BOTTOM OF THE TRAP/BASIN AT ALL TIMES. IF SOILS BECOME TOO COMPACTED, INFILTRATION WILL BE PREVENTED ONCE FACILITY IS CONVERTED AND AS-BUILT OF FACILITY WILL FAIL. CONTRACTOR IS RESPONSIBLE FOR SOIL AMENDMENTS NEEDED TO ENSURE IB-1 INFILTRATES.

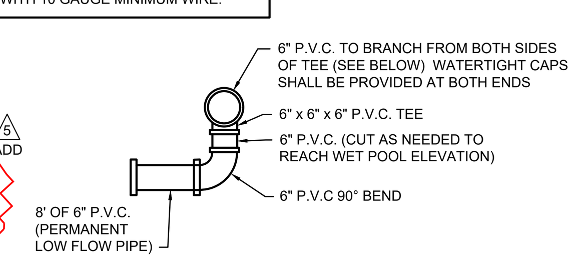
UNDERDRAIN VALVE NOTE:
VALVE SHALL REMAIN CLOSED AFTER BASIN IS CONVERTED TO INFILTRATION BASIN TO PROMOTE INFILTRATION AND TO PREVENT A BYPASS THROUGH UNDERDRAIN. UNDERDRAIN SHALL BE OPENED IN THE EVENT OF BASIN NO LONGER INFILTRATING AND ONLY AS A TEMPORARY MEASURE UNTIL BASIN CAN BE MUCKED OUT, REHABILITATED, AND CAPABLE OF INFILTRATING AGAIN. VALVE SHALL NOT BE INSTALLED UNTIL CONVERSION TO INFILTRATION BASIN.

BASIN CONVERSION NOTE:
UPON CONVERSION FROM SEDIMENT BASIN TO INFILTRATION BASIN, REMOVE PVC FITTINGS, 6" CAP INSIDE STRUCTURE, PERFORATED PIPE, AND STONE FROM POND DRAIN PIPE. MUCK OUT BASIN TO INFILTRATION BASIN BOTTOM ELEVATION. INSTALL CLEAN PERFORATED PIPE TO POND DRAIN AND COVER WITH STONE PER DETAIL ON SHEET F-ESD-22.

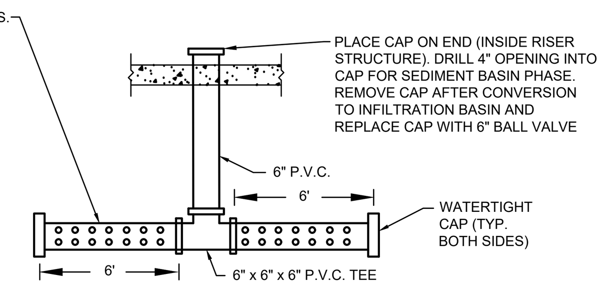
PIPE SUPPORT NOTE:
PROVIDE SUPPORT TO TEMPORARY DRAW DOWN PIPE TO PREVENT SAGGING AND FLOATATION BY STAKING BOTH SIDES OF PIPE WITH 1.5" ANGLE IRON SET 3' MINIMUM INTO THE GROUND THEN JOINING THEM TO THE LOW FLOW PIPE BY WRAPPING WITH 10 GAUGE MINIMUM WIRE.



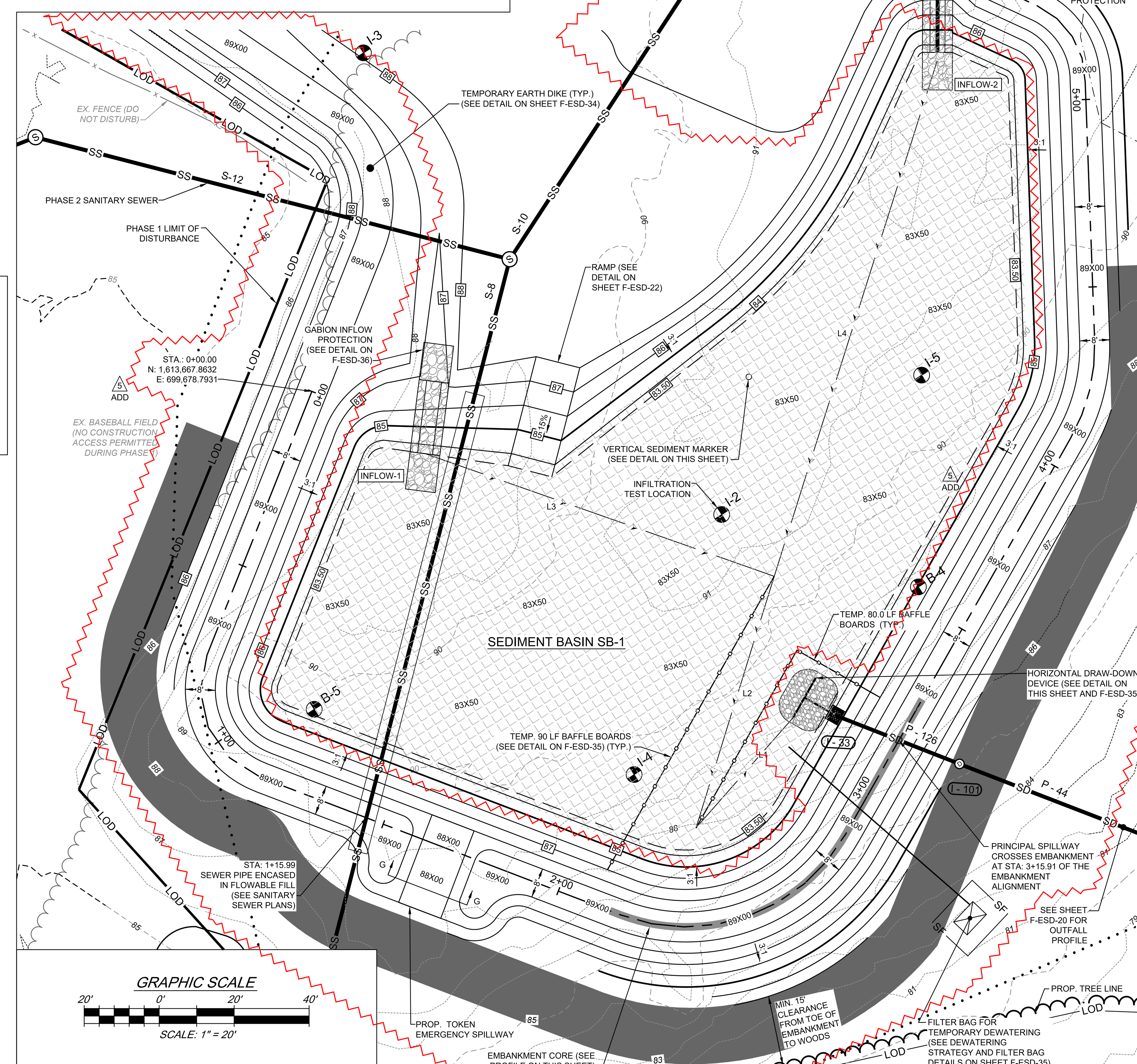

STRUCTURE I-33: MODIFIED PRECAST STANDARD SHALLOW MANHOLE (MD 383.00)
PRINCIPAL SPILLWAY
N.T.S.

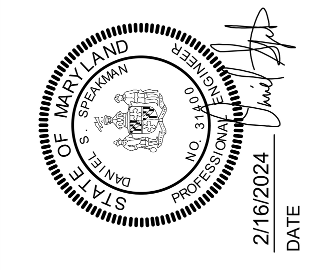



TEMPORARY DRAW DOWN DEVICE ASSEMBLY
SEDIMENT BASIN PRINCIPAL SPILLWAY ATTACHMENT
SIDE VIEW




TEMPORARY DRAW DOWN DEVICE ASSEMBLY
SEDIMENT BASIN PRINCIPAL SPILLWAY ATTACHMENT
PLAN VIEW




2/16/2024
DATE

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 31400, Expiration Date: 1-16-2025.

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | REVISED SB-1 GRADING, ADDRESSING CSCD COMMENTS |

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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | AS NOTED |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 2683B |

SEDIMENT BASIN 1 (SB-1) PLAN VIEW
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-21

11720 Beltsville Drive
Suite 600
Calverton, MD 20705
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G+P GRIMM + PARKER ARCHITECTS

GP #22105

SEDIMENT BASIN (SB-1) PLAN VIEW
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

F-ESD-21
12/22/2023
BID SET

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February 16, 2024 - 2:46pm User: awhallon Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ESD PRACTICES.dwg.........Tab:ESD-21

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## POND SEALING OR LINING - GEOMEMBRANE OR GEOSYNTHETIC CLAY LINER

**TAKEN FROM USDA NATURAL RESOURCES CONSERVATION SERVICES CODE 521**

Design. The structure to be lined must meet all applicable NRCS standards. All inlets, outlets, ramps, and other appurtenances may be installed before, during, or after the liner placement, but must be done in a manner that does not damage or impair the proper operation of the liner.
Design and install the liner in accordance with manufacturer recommendations. The installer or manufacturer must certify that the liner installation meets the material and installation requirements of the plans and specifications.
Follow manufacturer's recommendations with regard to protection from weather and ultraviolet exposure.

| Type | Name | Minimum Thickness | |
|---|---|---|---|
| | | Wastewater (mil) | Clear Water (mil) |
| HDPE | High Density Polyethylene | 60 | 30 |
| LLDPE | Linear Low-Density Polyethylene | 40 | 30 |
| LLDPE-R | Reinforced Linear Low-Density Polyethylene | 36 | 24 |
| PVC | Polyvinyl Chloride | 40 | 30 |
| EPDM | Ethylene Propylene Diene Terpolymer | 45 | 45 |
| FPP | Flexible Polypropylene | 40 | 30 |
| FPP-R | Reinforced Flexible Polypropylene | 36 | 24 |
| PE-R | Reinforced, Slit – Film, Woven Polyethylene | NR | 24 |
| GCL | Geosynthetic Clay Liner | 0.75 lbs./square foot | |

Underliner drainage and venting. Design the drainage and venting system beneath the geomembrane liner based on subsurface conditions such as soil type and groundwater levels. Liners used for waste storage require venting at the top of slope and a drainage system if the invert elevation of the pond is within 2 feet of the seasonal high water table. Hydrostatic pressures from fluctuating groundwater levels or leakage through the liner may cause the liner to float. Gas production and buildup beneath the liner due to the presence of organic material in the soil or leachate leakage through the liner may cause gas to accumulate, resulting in bubbling of the liner. Incorporate a drainage and venting system when conditions exist that may result in floating of the geomembrane liner. Ponds with an underliner drainage system must have a bottom slope of at least 1 percent.

Gas venting. All pond liners with anchor trenches require venting near the top of the side slopes. Design and install venting in accordance to the manufacturer's recommendations, with a spacing not to exceed 20 feet between vents. Investigate the need for additional venting beneath wastewater pond liners as part of the design. If the investigation determines the potential of gas buildup under the liner, the liner must be vented in accordance to the manufacturer's recommendations. Site conditions conducive to gas production include sites which have been subject to long-term seepage of animal waste into the foundation soil, sites with naturally occurring organics in the soil, or fine-grained foundation soils where fluctuating groundwater levels may trap gases present in the soil. If site conditions are determined to be conducive to gas production, the bottom of the liner must include features to allow gas to flow along the bottom and up the side slopes to the liner vents in the crown.

Cushion. Place a cushion layer beneath the liner if the subgrade particles contain sharp angular stones that could damage the liner or if particles greater than 3/8 inch for geomembrane liners and 1/2 inch for GCLs are exposed on the surface. The cushion may be a 10-ounce-per-square-yard or heavier nonwoven geotextile or a layer at least 6 inches thick of soil meeting the particle size and shape requirements of the subgrade. Geotextile cushion material must meet the requirements of the Geosynthetic Research Institute (GRI) Test Method GT12(a). Follow the manufacturer's recommendations for any additional protective measures.

Subgrade preparation. Prepare the subgrade to conform to manufacturer's recommendations. The subgrade materials must be free from sharp, angular stones, and the surface free from oversized particles, or any objects that could damage the liner. If angular particles are present, treat the subgrade by placing a cushion layer between the subgrade and the liner. The subgrade surface must provide a smooth, flat, and unyielding foundation for the liner. No standing water, mud, vegetation, snow, frozen subgrade, or excessive moisture may be present at the time of liner placement.

Liner protection. Protect liners from mechanical damage from all sources, including equipment access points and agitation operations. If pond management plans indicate locations where agitation operations may result in abrasion or other mechanical damage to the liner, provide protective measures. Measures to ensure the integrity of the liner include increasing the liner thickness above the minimum values listed in table 1 or providing protective ramps and aprons at agitation locations. For GCL liners, analyze the wastewater, subgrade soil, and cover soil to ensure that undesirable cation exchange (calcium and magnesium for sodium) will not occur in the GCL.

Anchorage. Anchor the liner to prevent uplift due to wind or slippage down the side slope, in accordance with manufacturer's recommendations.

Penetrations. Install penetrations through the liner in accordance with manufacturer's recommendations. Penetrations associated with waste storage must be watertight.

Cover soil. Cover PVC liners and GCLs with a minimum of 12 inches of soil measured perpendicular to the finished surface. Cover soil may be used on other liners but is not required unless essential for the proper performance, protection, and durability of the installation. Do not use cover soil that contains sharp, angular stones or any objects that could damage the liner. The maximum allowable particle size of soil cover material is 3/8 inch for geomembrane liners and 1/2 inch for GCLs. Use cover materials that are stable against slippage down the slope under all operational and exposure conditions, such as rapid drawdown or saturation by precipitation or snowmelt.
Place cover soil within 24 hours after placement of the liner to minimize the potential for damage from various sources, including precipitation, wind, and ultraviolet light exposure.
Cover soil for GCLs must provide uniform confinement pressure as recommended by the manufacturer. Do not install a drainage layer or venting system beneath a GCL, as they could compromise the liner.

OPERATION AND MAINTENANCE
Prepare a plan for O&M of the liner and structure consistent with the purposes of the type of liner chosen, intended life, safety requirements, and design criteria. Include site-specific information regarding design capacity and liquid level of the structure and repair procedures for liner material. Maintenance activities required for this practice consist of those operations necessary to prevent and repair damage to the geomembrane or GCL. These include, but are not limited to—

- Excluding animals and equipment from the treated area.
- Repairing damage to the liner and restoring the liner and cover to its original thickness and condition.
- Removing roots from trees and large shrubs at first appearance.
- Monitoring leak-detection system.
- Protecting the liner during filling and agitation procedures.

NOTE FOR SEDIMENT BASIN 1 (SB-1) & INFILTRATION BASIN 1 (IB-1): SB-1 SHALL HAVE A BOTTOM ELEVATION OF 83.50. EXCAVATE THE BOTTOM AREA OF THE BASIN TO ELEVATION 82.50, PLACE GEOTEXTILE FABRIC AND 12" OF CLAY LINER. WHEN CONVERTING SB-1 TO IB-1, REMOVE THE 12" CLAY AND GEOTEXTILE. FILL WITH TOPSOIL TO PROPOSED GRADE FOR THE BERMS AND IN THE FOREBAY AREAS. FOR THE BASIN FOOTPRINT AREA, EXCAVATE AN ADDITIONAL 21" TO BRING THE GRADE TO 80.75, THEN PLACE 3" OF #57 STONE AND INSTALL PERMANENT UNDERDRAIN. ADD THE REMAINING 9" OF #57 STONE, THEN ADD 18" OF SAND/SOIL/WOOD CHIP MIX TO BRING THE FACILITY BOTTOM TO ELEVATION 83.25 (SEE INFILTRATION BASIN FILTERIING MEDIA SECTION ON THIS SHEET)

NOTE FOR SEDIMENT BASIN 2 (SB-2) & SUBMERGED GRAVEL WETLAND 1 (SGW-1): SB-2 SHALL NOT HAVE A LINER (NO CLAY LINER FOR SB-2). UPON CONVERSION TO FROM SB-2 TO SGW-1, THE PROPOSED MEDIA AREA MUST HAVE AN IMPERMEABLE LINER ON THE SIDES AND BOTTOM (NO CLAY.

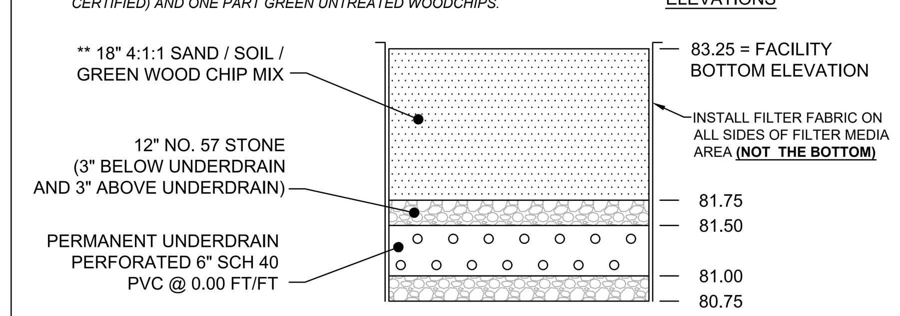
## INFILTRATION BASIN IB-1 SUMMARY

Structure Classification: "A"  BMP Type: I-2 (Infiltration Basin)
Watershed area draining to facility (acres): 7.21 ACRES
Level of management provided: Cpv & 10 YEAR STORM & 100 YEAR STORM
Freeboard: 1.66' @ 100 YEAR STORM FROM TOP OF EMBANKMENT
Maintenance responsibility: PRIVATE
Design Summary:

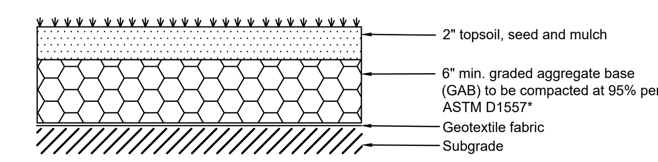
| DESIGN STORM | FACILITY INFLOW (CFS) | FACILITY DISCHARGE (CFS) | WATER SURFACE ELEVATION | STORAGE VOLUME (AC. FT.) |
|---|---|---|---|---|
| 1-YEAR | 19.09 | 0.31 | 85.12 | 0.67 |
| 10-YEAR | 44.75 | 6.70 | 86.09 | 1.06 |
| 100-YEAR | 66.63 | 29.35 | 87.34 | 1.63 |

Cecil County ADC Map No. 11  Grid: G-13
Maryland Grid: North: 699,530  East: 1,613,738
Maryland State Watershed Designation: 021306080374 - Northeast River
Total Project Area: 74.0 ± acres  Project Site "RCN" ______
Maryland Land Use Code: 10-16  Facility Location: X Onsite ______ Offsite
Storage Height Product: 1.95 ac-ft x 4.21' = 8.2095

*** THE SAND/SOIL/WOOD CHIPS LAYER MUST BE MADE OF FOUR PARTS SAND (ASTM C-33); ONE PART LOAM (ENGINEER CERTIFIED) AND ONE PART GREEN UNTREATED WOODCHIPS.*




INFILTRATION BASIN (IB-1) FILTERING MEDIA SECTION
SCALE: N.T.S.




*NOTE: IF 95% COMPACTION IS NOT ACHIEVED TO SUBGRADE, UNDERCUT 8" SOIL & REPLACE WITH MATERIAL AS DETERMINED BY THE GEOTECHNICAL ENGINEER IN THE FIELD THAT WILL ACHIEVE REQUIRED COMPACTION.

PROPOSED MAINTENANCE ACCESS DETAIL
NOT TO SCALE

## IB-1 DESIGN DATA

1. DRAINAGE AREA = 313,887 SF
2. IMPERVIOUS AREA = 199,172 SF
3. MAXIMUM ESD VOLUME AVAILABLE (Pe = 2.7") = 43,864 CF
4. Pe PROVIDED = 1.97"
5. ESDv PROVIDED = 32,037 CF

## INFILTRATION BASIN MAINTENANCE SCHEDULE

1. THE FACILITY SHALL BE INSPECTED TWICE ANNUALLY - MARCH AND SEPTEMBER.
   A) VISUAL INSPECTION OF ALL COMPONENTS.
   B) PHYSICAL INSPECTION OF ANY MOVEABLE PARTS. (ALL REPAIRS SHALL BE MADE IN ACCORDANCE TO THE APPROVED STORMWATER MANAGEMENT PLAN.)
2. VEGETATED COVER SHALL BE MAINTAINED AT ALL TIMES.
3. RILLS ON THE SLOPES OF THE DAM AND WASHED IN THE EARTH SPILLWAY SHALL BE FILLED WITH SUITABLE MATERIAL AND THOROUGHLY COMPACTED. THESE AREAS SHALL BE RESEEDED OR RESODDED, LIMED AND FERTILIZED AS NEEDED.
4. ALL APPURTENANCES SHALL BE KEPT FREE OF TRASH.

## Infiltration Basin IB-1 Sequence of Construction

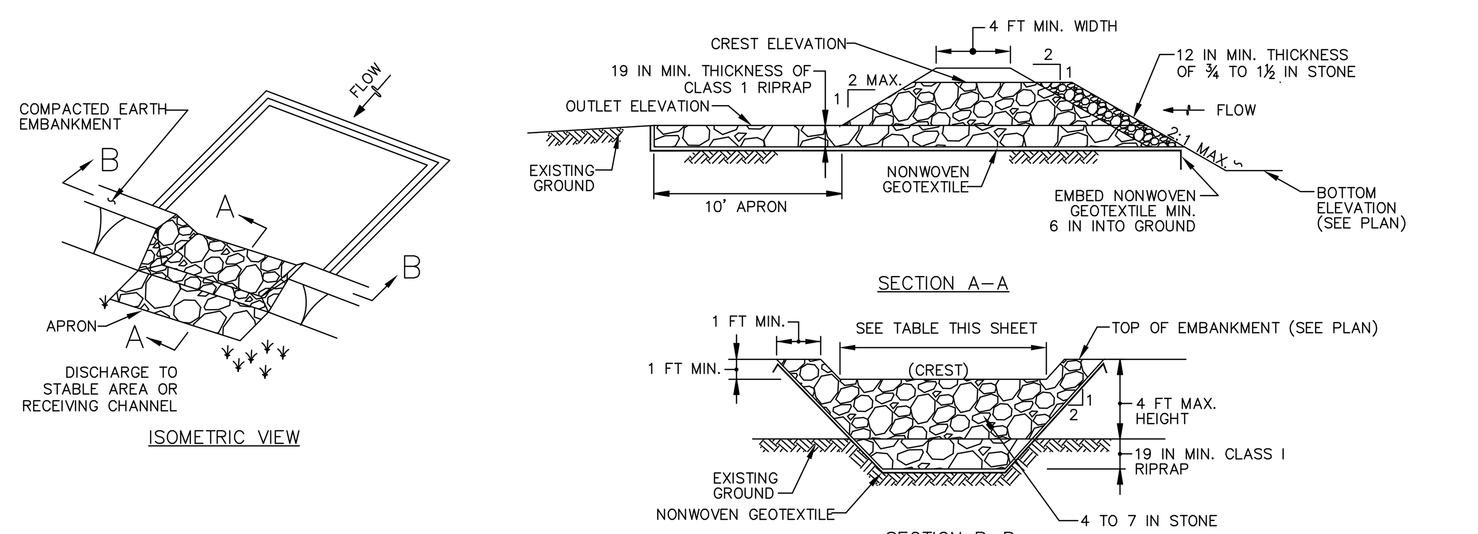
**Conversion of sediment basin to Infiltration basin Facility:**

1. Once site construction is completed, obtain approval of both MDE and CCDPW to convert facility, install filter bag in area with silt fence downstream, install pump discharge hose, and discharge sediment laden water from sediment basin through the filterbag. Sediment laden water will filter through filter bag, and silt fence, prior to exiting site.
2. Muck out basin and excavate to bottom depth. Remove sediment to an approved disposal area.
3. Install forebays and stone weirs.
4. Remove draw down device and install 6" PVC ball valve, permanent underdrain, cleanouts, stone, & filter fabric. Connect underdrain pipe to riser.
5. Stabilize all disturbed areas with 6" topsoil, seed, and mulch. Install landscaping in conformance with the landscaping plan. (1 day)
6. After obtaining permission from the sediment control inspector, remove all sediment control measures and stabilize any disturbed areas.
7. Submit as-built plan to Cecil County Development Plans Review for approval.

Notes:
1. Installation shall be in conformance with Appendix B.1 of the Maryland Stormwater Design Manual, Volumes I and II.
2. Installation of underdrain & stone shall not occur until the contributing drainage area has been completely stabilized.

STONE WEIR OUTFALL TABLE

| ID | LENGTH | BREADTH | ELEVATION |
|---|---|---|---|
| IB-1 FOREBAY 1 WEIR | 23' | 13' | 85.50 |
| IB-2 FOREBAY 2 WEIR | 15' | 13' | 85.50 |



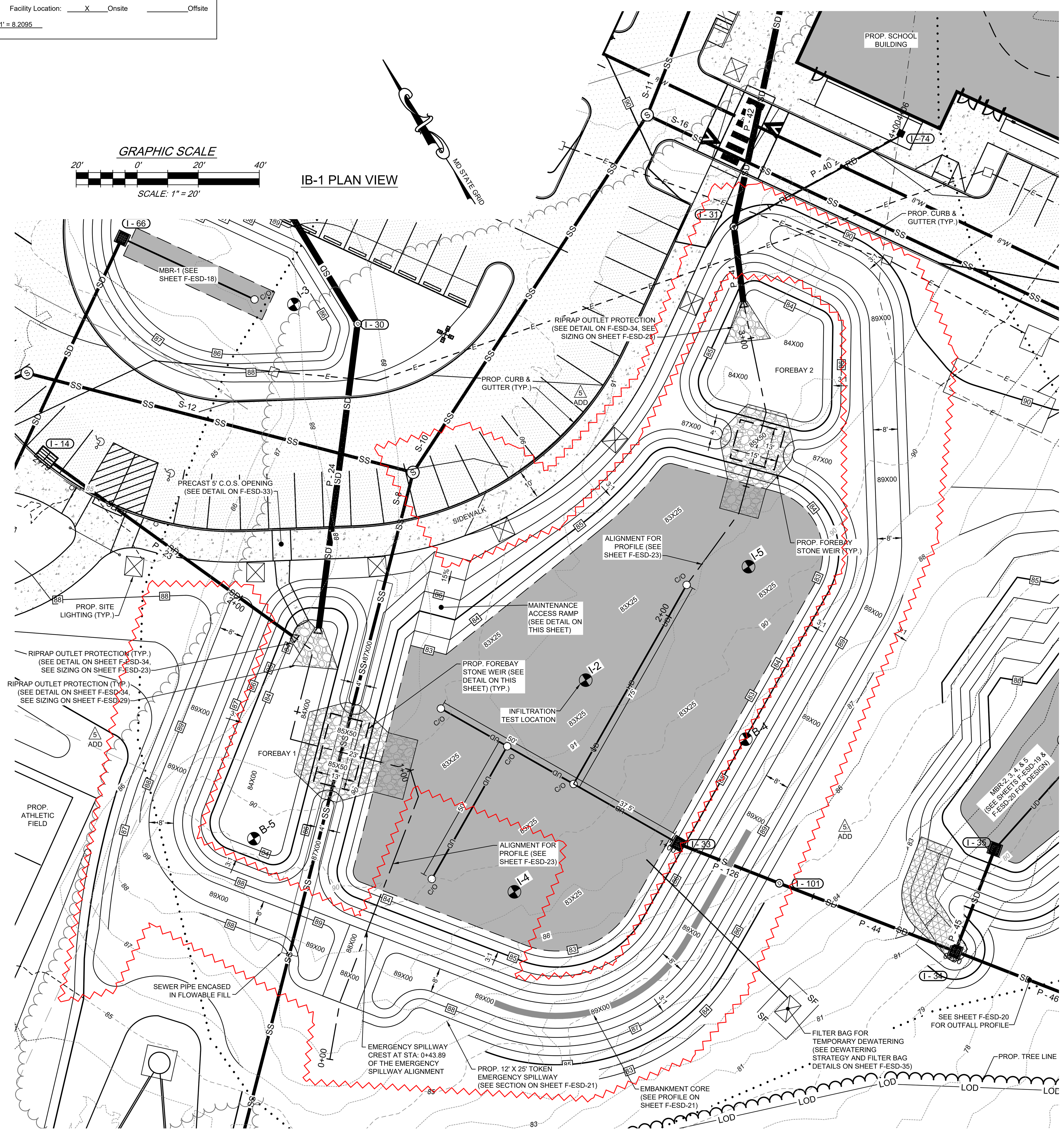

CONSTRUCTION SPECIFICATIONS

1. CLEAR, GRUB, AND STRIP ANY VEGETATION AND ROOT MAT FROM THE AREA UNDER THE EMBANKMENT BOTTOM.
2. USE FILL MATERIAL FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL FOR THE EMBANKMENT.
3. CONSTRUCT TOP OF EMBANKMENT 1 FOOT MINIMUM ABOVE WEIR CREST. COMPACT THE EMBANKMENT BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
4. MAKE ALL CUT AND FILL SLOPES 2:1 OR FLATTER.
5. PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 "MATERIALS" OF *2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL*, OVER THE BOTTOM AND SIDES OF OUTLET AND APRON PRIOR TO PLACEMENT OF RIPRAP. OVERLAP SECTIONS OF GEOTEXTILE AT LEAST 1 FOOT WITH THE SECTION NEARER TO THE SWM FACILITY PLACED ON TOP. EMBED GEOTEXTILE AT LEAST 6 INCHES INTO EXISTING GROUND AT ENTRANCE OF OUTLET CHANNEL.
6. USE CLEAN 4 TO 7 INCH RIPRAP TO CONSTRUCT THE WEIR. USE CLASS I RIPRAP FOR THE APRON. USE OF RECYCLED CONCRETE EQUIVALENT IS ACCEPTABLE.
7. PLACE 1 FOOT OF CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE ON THE UPSTREAM FACE OF THE WEIR.
8. CONSTRUCT AND MAINTAIN THE OUTLET ACCORDING TO APPROVED PLAN, AND IN SUCH A MANNER THAT EROSION AT OR BELOW THE OUTLET DOES NOT OCCUR.
9. STABILIZE THE EMBANKMENT AND INTERIOR SLOPES WITH SEED AND MULCH. STABILIZE POINTS OF CONCENTRATED INFLOW AS SHOWN ON APPROVED PLAN.
10. REMOVE SEDIMENT AND RESTORE FOREBAY TO ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED HALF WAY UP TO STONE CREST ELEVATION. DEPOSIT REMOVED SEDIMENT IN AN APPROVED AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE. KEEP POINTS OF INFLOW AND OUTFLOW AS WELL AS INTERIOR OF THE FOREBAY FREE FROM EROSION, AND REMOVE ACCUMULATED DEBRIS. MAINTAIN EMBANKMENTS TO CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. REMOVE ANY TREES, BRUSH, OR OTHER WOODY VEGETATION GROWING ON EMBANKMENT OR NEAR PRINCIPAL SPILLWAY. MAINTAIN LINE, GRADE, AND CROSS SECTION.

STONE WEIR OUTFALL DETAIL
N.T.S.

GRAPHIC SCALE
20' 0' 20' 40'
SCALE: 1" = 20'

## IB-1 PLAN VIEW




Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 31400, Expiration Date: 1-16-2025.

2/16/2024 DATE

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | REVISED IB-1 GRADING |

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|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | 1" = 20' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 2683B |

INFILTRATION BASIN (IB-1) PLAN VIEW
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

*NORTH EAST MIDDLE AND HIGH SCHOOLS*

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
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SHEET NO.: F-ESD-22

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GP #22105

INFILTRATION BASIN (IB-1) PLAN VIEW
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

**F-ESD-22**

12/22/2023
BID SET

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February 16, 2024 - 2:46pm User: awhallon Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ESD PRACTICES.dwg..........Tab:ESD-22

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## GEOTECHNICAL BOREHOLE LOG

CLIENT: Grimm & Parker Architects | PROJECT NO.: 02:10038-B | BORING NO.: I-04 | SHEET: 1 of 1
PROJECT NAME: North East High School - Storm Water Management | DRILLER/CONTRACTOR: D And S Drilling, Inc.
SITE LOCATION: 300 Irishtown Road, North East, Maryland, 21901
LATITUDE: 39.582639 | LONGITUDE: -75.930831 | STATION: | SURFACE ELEVATION: 88.85

| SAMPLE NUMBER | SAMPLE TYPE | SAMPLE DIST. (IN) | RECOVERY (IN) | BLOWS/6" (N-Value) | WATER CONTENT % |
|---|---|---|---|---|---|
| S-1 | SS | 18 | 18 | 2-5-7 (12) | 12.7 |
| S-2 | SS | 18 | 18 | 5-9-13 (22) | 11.1 |
| S-3 | SS | 18 | 18 | 13-19-25 (44) | 15.0 |
| S-4 | SS | 18 | 18 | 9-11-12 (23) | 10.5 |
| S-5 | SS | 18 | 18 | 4-5-6 (11) | 6.6 |

DESCRIPTION OF MATERIAL:
- Topsoil Thickness[4"]
- (SC) SAND WITH CLAY, trace silt, light brown, moist, stiff
- (SM) SILTY SAND, trace clay, brown to dark red, moist to dry, medium dense to dense to medium dense
- WATER ENCOUNTERED IN BORINGS SUSPECTED TO BE RUNOFF FROM PREVIOUS PRECIPITATION AND SNOW MELT
- END OF BORING AT 15 FT
- Infiltration Pipe Set At 9 FT

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered): Not Encountered | WL (Completion): Not Encountered | WL (Seasonal High Water): | WL (Stabilized): 7
BORING STARTED: Jan 26 2024 | BORING COMPLETED: Jan 26 2024 | CAVE IN DEPTH: 7.5 | HAMMER TYPE: Auto | EQUIPMENT: CME 750 | LOGGED BY: WST | DRILLING METHOD: HSA

## GEOTECHNICAL BOREHOLE LOG

CLIENT: Grimm & Parker Architects | PROJECT NO.: 02:10038-B | BORING NO.: I-05 | SHEET: 1 of 1
PROJECT NAME: North East High School - Storm Water Management | DRILLER/CONTRACTOR: D And S Drilling, Inc.
SITE LOCATION: 300 Irishtown Road, North East, Maryland, 21901
LATITUDE: 39.582692 | LONGITUDE: -75.930402 | STATION: | SURFACE ELEVATION: 89.95

| SAMPLE NUMBER | SAMPLE TYPE | SAMPLE DIST. (IN) | RECOVERY (IN) | BLOWS/6" (N-Value) | WATER CONTENT % |
|---|---|---|---|---|---|
| S-1 | SS | 18 | 18 | 3-5-7 (12) | 19.7 |
| S-2 | SS | 18 | 18 | 12-22-24 (46) | 11.5 |
| S-3 | SS | 18 | 18 | 12-12-12 (24) | 18.1 |
| S-4 | SS | 18 | 18 | 9-13-15 (28) | 11.6 |
| S-5 | SS | 18 | 18 | 14-7-9 (16) | 4.3 |

DESCRIPTION OF MATERIAL:
- Topsoil Thickness[6"]
- (SC) CLAYEY SAND, trace silt, brown, moist, stiff
- (SM) SILTY SAND, trace clay, contains rock fragments, tannish brown to yellowish brown, moist, dense to medium dense
- WATER ENCOUNTERED IN BORINGS SUSPECTED TO BE RUNOFF FROM PREVIOUS PRECIPITATION AND SNOW MELT
- END OF BORING AT 15 FT
- Infiltration Pipe Set At 4 FT

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered): 9 | WL (Completion): 8 | WL (Seasonal High Water): | WL (Stabilized): 7
BORING STARTED: Jan 26 2024 | BORING COMPLETED: Jan 26 2024 | CAVE IN DEPTH: 7.5 | HAMMER TYPE: Auto | EQUIPMENT: CME 750 | LOGGED BY: WST | DRILLING METHOD: HSA

## GEOTECHNICAL BOREHOLE LOG

CLIENT: Grimm & Parker Architects | PROJECT NO.: 02:10038 | BORING NO.: B-04 | SHEET: 1 of 1
PROJECT NAME: New North East High School | DRILLER/CONTRACTOR: D And S Drilling, Inc.
SITE LOCATION: 300 Irishtown Road, North East, Maryland, 21000
NORTHING: | EASTING: | STATION: | SURFACE ELEVATION: 95.13

| SAMPLE NUMBER | SAMPLE TYPE | SAMPLE DIST. (IN) | RECOVERY (IN) | BLOWS/6" | WATER CONTENT % |
|---|---|---|---|---|---|
| S-1 | SS | 18 | 8 | 4-6-8 (14) | |
| S-2 | SS | 18 | 14 | 5-8-14 (22) | 11.1 [57.4%] |
| S-3 | SS | 18 | 10 | 8-14-23 (37) | 0.3 |
| S-4 | SS | 18 | 14 | 10-19-34 (53) | 1.8 |
| S-5 | SS | 18 | 16 | 7-8-11 (19) | |
| S-6 | SS | 18 | 12 | 8-12-15 (27) | |
| S-7 | SS | 18 | 16 | 9-12-18 (30) | |
| S-8 | SS | 18 | 16 | 8-14-17 (31) | |

DESCRIPTION OF MATERIAL:
- Topsoil Thickness[6"]
- (CL/ML) SILTY CLAY WITH SAND
- (SP) MEDIUM TO COARSE SAND WITH GRAVEL, trace silt, reddish brown, moist, dense to very dense
- (SP) SAND, trace gravel, trace silt, yellowish brown, moist, medium dense, [Encountered zones of SILTY CLAY]
- (SM) SILTY FINE SAND, trace gravel, reddish brown, moist, medium dense
- (SP-SM) FINE TO MEDIUM SAND WITH SILT, orangish brown, moist, medium dense
- (CL) LEAN CLAY WITH SAND, trace gravel, reddish gray, moist, hard
- END OF BORING AT 30 FT

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered): | WL (Completion): DRY (Dec 01 2022) | WL (Seasonal High Water): | WL (Stabilized): DRY (Dec 02 2022)
BORING STARTED: Dec 08 2022 | BORING COMPLETED: Dec 16 2022 | CAVE IN DEPTH: 24.9 (Dec 02 2022) | HAMMER TYPE: Auto | EQUIPMENT: CME 550 | LOGGED BY: RMN | DRILLING METHOD: HSA

## GEOTECHNICAL BOREHOLE LOG

CLIENT: Grimm & Parker Architects | PROJECT NO.: 02:10038 | BORING NO.: B-05 | SHEET: 1 of 1
PROJECT NAME: New North East High School | DRILLER/CONTRACTOR: D And S Drilling, Inc.
SITE LOCATION: 300 Irishtown Road, North East, Maryland, 21000
NORTHING: | EASTING: | STATION: | SURFACE ELEVATION: 98.22

| SAMPLE NUMBER | SAMPLE TYPE | SAMPLE DIST. (IN) | RECOVERY (IN) | BLOWS/6" | WATER CONTENT % |
|---|---|---|---|---|---|
| S-1 | SS | 18 | 10 | 6-12-16 (28) | |
| S-2 | SS | 18 | 12 | 11-18-25 (43) | |
| S-3 | SS | 18 | 12 | 12-17-27 (44) | 2.8 |
| S-4 | SS | 18 | 14 | 10-21-19 (40) | 5.9 |
| S-5 | SS | 18 | 15 | 9-15-18 (33) | |
| S-6 | SS | 18 | 16 | 8-13-18 (31) | |
| S-7 | SS | 18 | 15 | 9-19-18 (37) | |
| S-8 | SS | 18 | 18 | 7-9-14 (23) | |

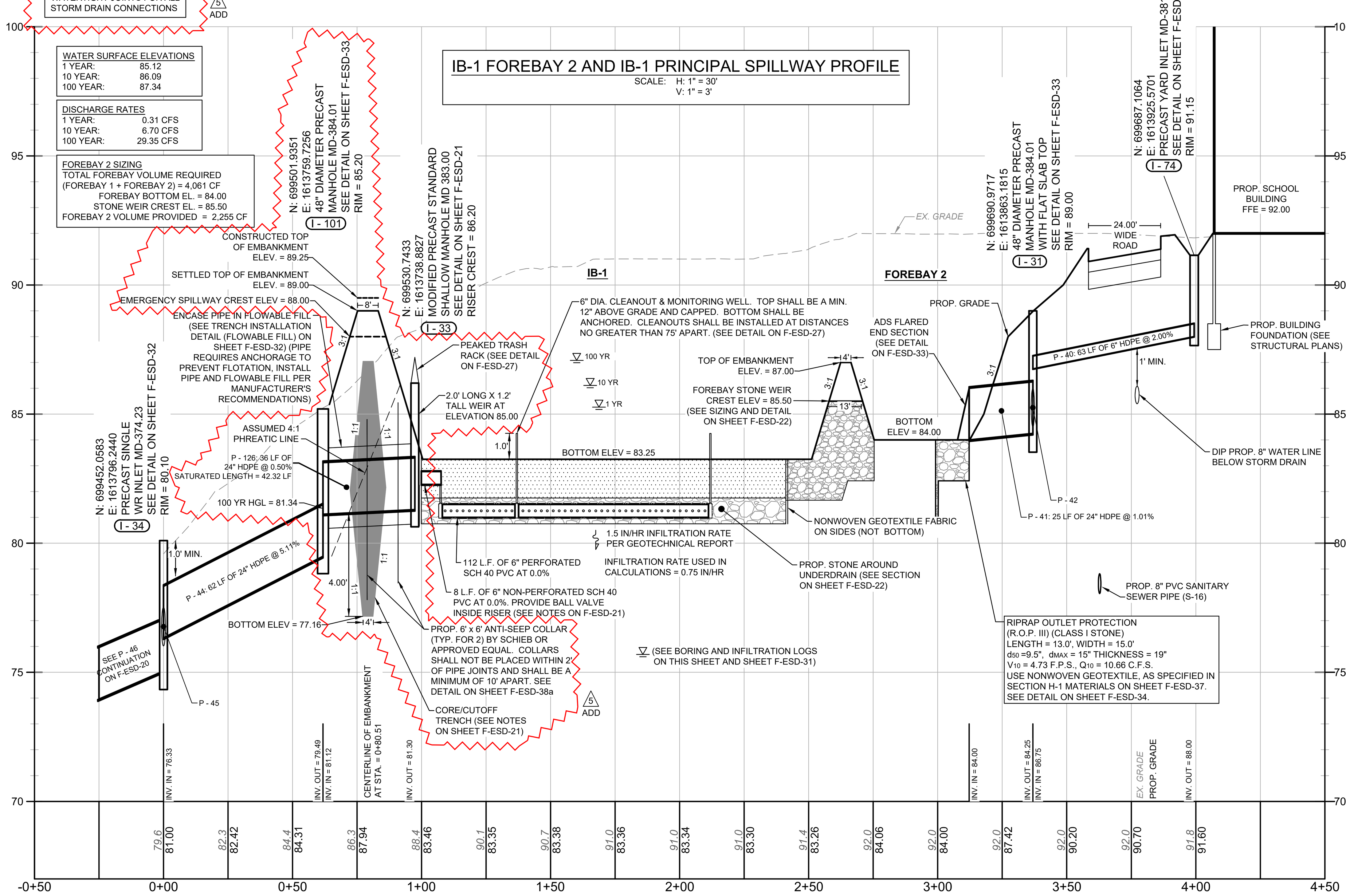
DESCRIPTION OF MATERIAL:
- Topsoil Thickness[7"]
- (SM/SC) SILTY/CLAYEY SAND WITH GRAVEL, brown, moist, medium dense
- (SP) SAND WITH GRAVEL, trace silt, reddish brown, moist, dense
- (SP) FINE TO MEDIUM SAND, trace gravel, trace silt, brown, moist, dense
- (SC) CLAYEY SAND, orangish brown, moist, medium dense
- END OF BORING AT 30 FT

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

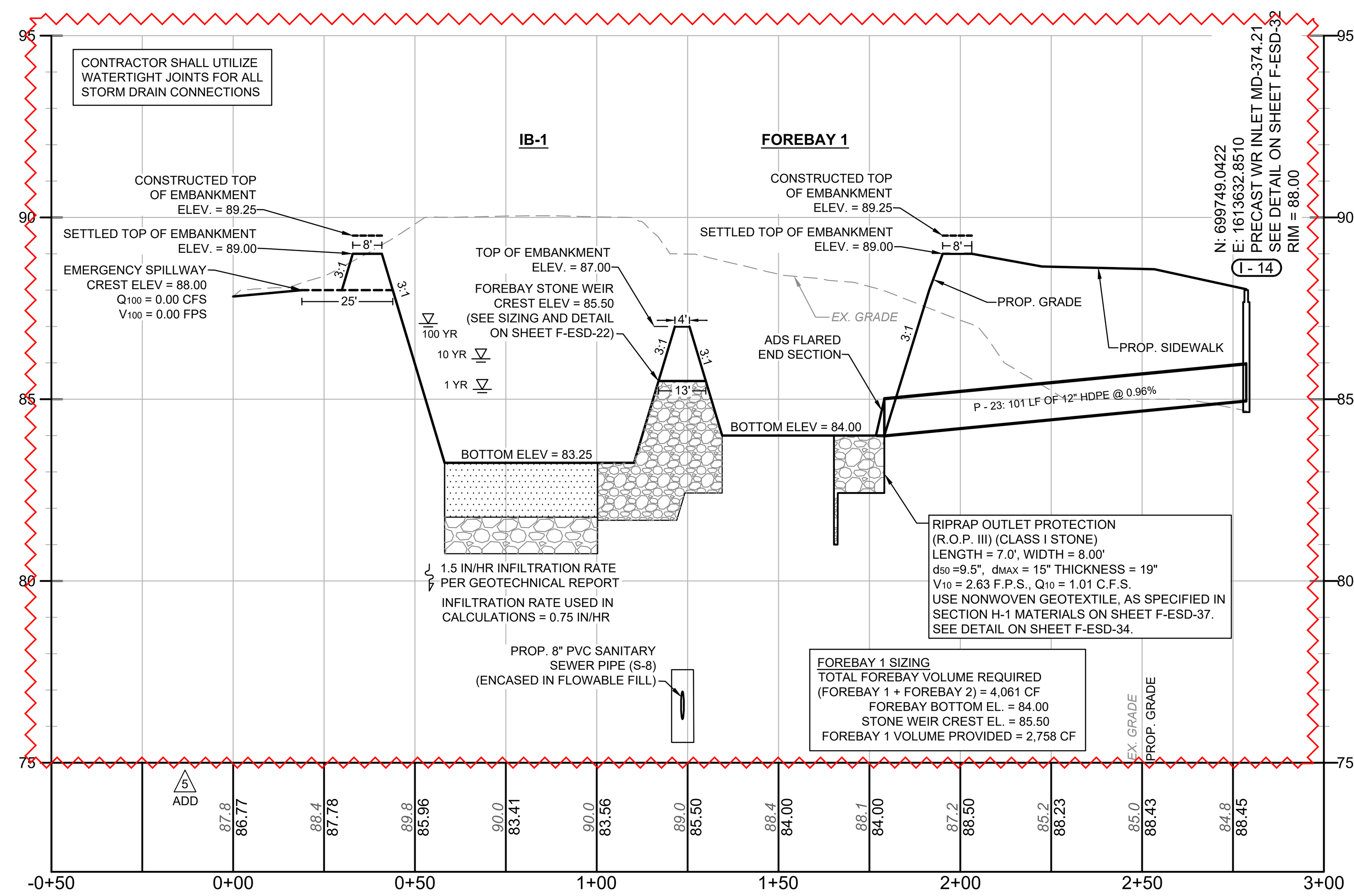
WL (First Encountered): | WL (Completion): DRY (Dec 12 2022) | WL (Seasonal High Water): | WL (Stabilized): DRY (Dec 13 2022)
BORING STARTED: Dec 08 2022 | BORING COMPLETED: Dec 16 2022 | CAVE IN DEPTH: 19.0 (Dec 13 2022) | HAMMER TYPE: Auto | EQUIPMENT: CME 550 | LOGGED BY: RMN | DRILLING METHOD: HSA

5 ADD

CONTRACTOR SHALL UTILIZE WATERTIGHT JOINTS FOR ALL STORM DRAIN CONNECTIONS (5 ADD)




IB-1 FOREBAY 2 AND IB-1 PRINCIPAL SPILLWAY PROFILE
SCALE: H: 1" = 30' V: 1" = 3'




IB-1 FOREBAY 1 & EMERGENCY SPILLWAY PROFILE
SCALE: H: 1" = 30' V: 1" = 3'

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 31400, Expiration Date: 1-16-2025.

2/16/2024 DATE

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | REVISED EMERGENCY SPILLWAY PROFILE |

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DATE: NOV. 2022
JOB NUMBER: D3210047
SCALE: AS SHOWN
DRAWN BY: AJW
DESIGNED BY: AJW
APPROVED BY: DSS
FOLDER REFERENCE: 2683B

INFILTRATION BASIN (IB-1) PROFILES
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13
*NORTH EAST MIDDLE AND HIGH SCHOOLS*
FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-23

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Tel: 301.595.1000
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G+P GRIMM + PARKER ARCHITECTS

GP #22105

INFILTRATION BASIN (IB-1) PROFILES
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

# F-ESD-23

12/22/2023
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February 16, 2024 - 2:45pm User: awhallon Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ESD PRACTICES.dwg..........Tab:ESD-23

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EMBANKMENT CONSTRUCTION NOTES:

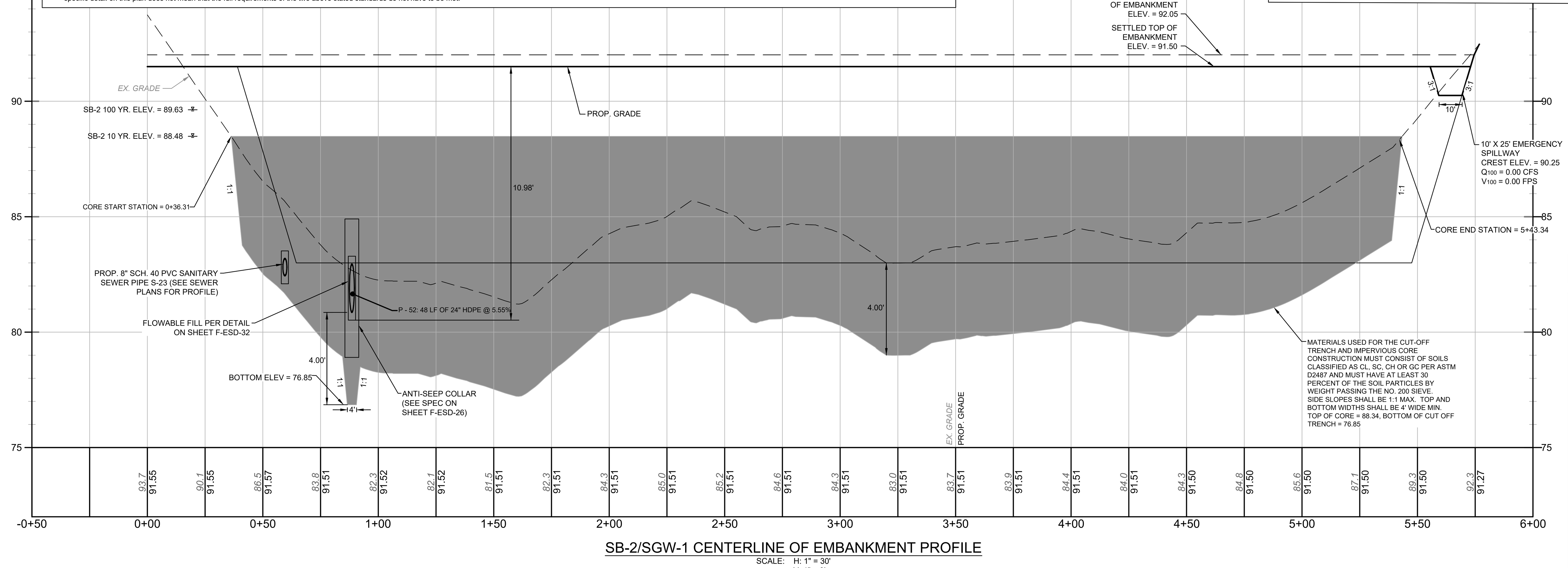
1. All soils used for construction of the cut-off trench and/or the impervious core, and the outer portions of any embankments shall consist of materials tested and approved by a Geotechnical Engineer. Embankment construction installation must be monitored and documented by a Geotechnical Engineer. provide reports to engineer of record and Cecil County.
2. All on-site materials to be used for any cut-of trench and or/impervious core construction must be tested prior to their use to verify that they are suitable and meet the project requirements. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 3:1 or flatter and slopes shall be stabilized with stabilization matting.
4. Materials used for the cut-off trench and impervious core construction must consist of soils classified as CL, SC, CH, or GC per ASTM D2487 and must have at least 30 percent of the soil particles by weight passing the No. 200 sieve.
5. Fill material for the embankment shall consist of soils classified as ML, CL-ML, SM-SC, SC and SM soils, having at least 25 percent by weight passing the No. 200 sieve per ASTM D2487 and have a Liquid Limit and Plasticity Index less than 45 and 20, respectively, which meets the MD-378 requirements. Soil classified as SP-SM or SP should not be considered for use within any planned embankment construction.
6. To facilitate thorough compaction of new fill materials for the required embankment construction, the fill materials should be adequately benched into competent natural soils (See Appendix D - Attachments, Benching Detail) and the filling operations for the embankment should be extended laterally beyond the planned final grades. Subsequent to compaction of the embankment materials beyond the planned final grades, the overfill materials should be carefully removed to create the proposed slope configuration and maintain the compacted surface.
7. This facility is to be built to the Soil Conservation Service Standards and Specifications for Small Ponds No. 378 and/or the Maryland Department of Natural Resources Water Resources Administration Standards and Specifications for infiltration practices. Lack of presence of specific detail on this plan does not mean that the full requirements of the two above stated standards do not have to be met.

MD CODE 378 SMALL POND DETERMINATION

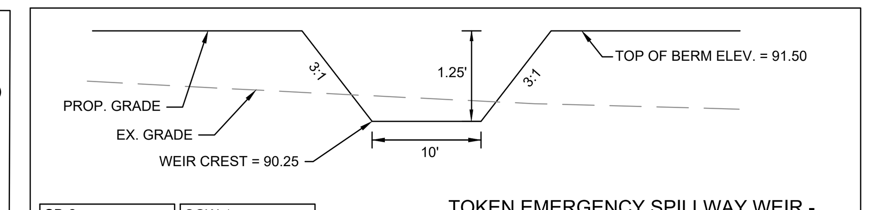
Structure Classification: "A"
Embankment Height: 10.98' (measured from settled top of embankment to the lowest point of excavation, excluding the cutoff trench, along the centerline of the dam, based on approximate existing grade)

| | Sediment Basin 2 | Submerged Gravel Wetland 1 |
|---|---|---|
| Storage @ 100 yr storm elevation: | 159,754 CF (3.667 ac-ft) | 136,814 CF (3.141 ac-ft) |
| Storage @ emergency spillway crest: | 206,070 CF (4.731 ac-ft) | 198,267 CF (4.552 ac-ft) |
| Storage Height Product: | 4.731 ac-ft x 10.98' = 51.9464 | 4.552 ac-ft x 10.98' = 49.9810 |

THIS STRUCTURE IS SUBJECT TO SMALL POND APPROVAL:
This structure is subject to Pond Code 378 due to the following:
1. The storage at the emergency spillway design high water elevation is greater than 40,000 cubic feet and
2. The height of the embankment is greater than six (6) feet.




SB-2/SGW-1 CENTERLINE OF EMBANKMENT PROFILE
SCALE: H: 1" = 30' V: 1" = 3'




| SB-2: | SGW-1: |
|---|---|
| $Q_{100}$ = 0.00 C.F.S. | $Q_{100}$ = 0.00 C.F.S. |
| $V_{100}$ = 0.00 F.P.S. | $V_{100}$ = 0.00 F.P.S. |

TOKEN EMERGENCY SPILLWAY WEIR - CROSS SECTION H-H
N.T.S.

Construction Inspection Schedule for Sediment Basin

Regular inspections shall be made during the following stages of construction:
1. During excavation to subgrade and placement and backfill of underdrain systems.
2. During construction of appurtenant conveyance.
3. Upon completion of final grading and establishment of permanent stabilization.

Photographs and material tickets/receipts will be required for As-Built approval of facility when it is converted to a stormwater managment facility (under separate plans). Photographs of installation and material tickets shall be supplied to the Engineer for future use during SWM facility as-built. Field measurements may be required after excavation to subgrade. Please contact Engineer when practices are to be installed.

DEWATERING STRATEGY

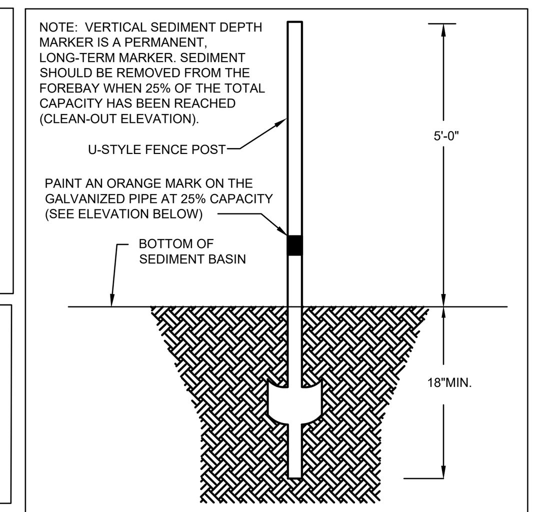
Use of a floating suction hose to pump the cleaner water from the top of the pond. The end of the hose shall have a filter bag attached to the end per Detail F-4 Filter Bag. As the cleaner water is pumped the suction hose will lower and eventually encounter sediment laden water. When this happens the pumping operation will cease. Provisions shall be made to filter water prior to discharge to receiving waters. When floating suction hoses are used, personnel shall be assigned to monitor pumping operations to ensure that sediment pollution is abated. Pumping sediment laden water into waters of the State without filtration is strictly forbidden. (SEE DEWATERING STRATEGY AND FILTER BAG DETAILS ON F-ESD-35)

Sediment Basin SB-2 Sequence of Construction

**Begin construction of sediment basin in accordance with the following sequence:**
1. Contact M.D.E. (410) 901-4020 and Cecil County DPW stormwater management inspector (410) 996-5267 at least 48 hours prior to the initiation of construction activities. A pre-construction meeting will be arranged at the project site. Failure to notify the CCDPW may expose the Owner/Developer to additional work.
2. Install downstream pipe network (I-40, P-51, I-39, P-50, I-38, P-49, I-37, P-48, I-36, P-47). Install plunge pool and downstream flared end section. (3 days)
3. Strip and stockpile topsoil down to mineral soil (no roots or organic material) from the sediment basin to the stockpile area. (2 days)
4. Rough grade sediment basin 2. (1 week)
5. Install riser structure I-41 and P-52 outfall pipe. Install concrete collar and anti-seep collars. Backfill and compact around barrel and anti-seep collars, making sure that backfill lifts and compaction are done in 4" maximum lifts. All work is to be done in accordance with MD 378 Pond Code construction specifications. (2 days)
6. Install 6" underdrain stub and dewatering device per detail on sheet F-ESD-25 (do not install permanent underdrain, this will be installed upon conversion to submerged gravel wetland). Install 3/4" stone around and over dewatering device. (1 day)
7. Construct core and embankment to final grade, building up with the proper compaction, using excavated sediment basin material if acceptable (see geotechnical certification.) (2 days)
8. Excavate remainder of the basin. (3 days)
9. Install temporary earth dikes (3 days)
10. Stabilize all disturbed areas with vegetation utilizing the permanent seeding mix. All concentrated inflow points shall be stabilized with riprap. (2 days)

Basin Notes:
1. Installation shall be in accordance with Appendix B.1 of the Maryland Stormwater Design Manual, Volumes I and II. This stormwater feature is subject to small pond review, and therefore installation shall be in accordance with Maryland Pond Code 378.

NOTE: VERTICAL SEDIMENT DEPTH MARKER IS A PERMANENT, LONG-TERM MARKER. SEDIMENT SHOULD BE REMOVED FROM THE FOREBAY WHEN 25% OF THE TOTAL CAPACITY HAS BEEN REACHED (CLEAN-OUT ELEVATION).




| SEDIMENT BASIN | ORANGE MARK ELEV. | BOTTOM OF BASIN ELEV. |
|---|---|---|
| SB-2 | 84.63 | 83.00 |

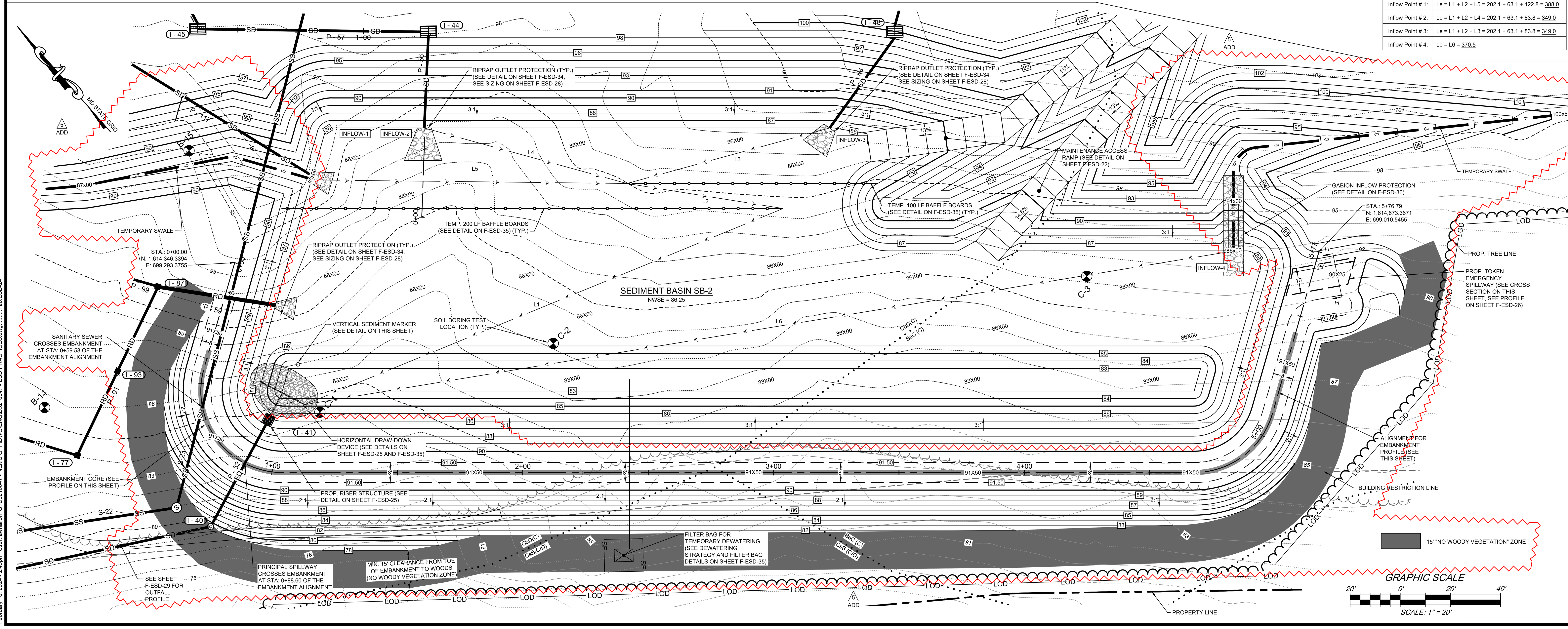
VERTICAL SEDIMENT MARKER DETAIL
N.T.S.

Flow Path Length Table

| LINE NUMBER | LENGTH (FT) |
|---|---|
| L1 | 202.1 |
| L2 | 63.1 |
| L3 | 83.8 |
| L4 | 83.8 |
| L5 | 122.8 |
| L6 | 370.5 |

Flow Path Effective Length Calculations
(Required Minimum > 274.72 ft)

| INFLOW POINT | EFFECTIVE LENGTH (FT) |
|---|---|
| Inflow Point # 1: | Le = L1 + L2 + L5 = 202.1 + 63.1 + 122.8 = 388.0 |
| Inflow Point # 2: | Le = L1 + L2 + L4 = 202.1 + 63.1 + 83.8 = 349.0 |
| Inflow Point # 3: | Le = L1 + L2 + L3 = 202.1 + 63.1 + 83.8 = 349.0 |
| Inflow Point # 4: | Le = L6 = 370.5 |




Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 31400, Expiration Date: 1-16-2025.

2/16/2024
DATE

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | ADDRESSING CSCD COMMENTS |

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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | AS NOTED |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 2683B |

SEDIMENT BASIN (SB-2) PLAN VIEW
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

*NORTH EAST MIDDLE AND HIGH SCHOOLS*

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-24

11720 Beltsville Drive
Suite 600
Calverton, MD 20705
Tel: 301.595.1000
www.grimmandparker.com

GRIMM + PARKER ARCHITECTS

GP #22105

SEDIMENT BASIN (SB-2) PLAN VIEW
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

F-ESD-24
12/22/2023
BID SET

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February 16, 2024 - 2:43pm User: awhallon Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ESD PRACTICES.dwg........Tab:ESD-24

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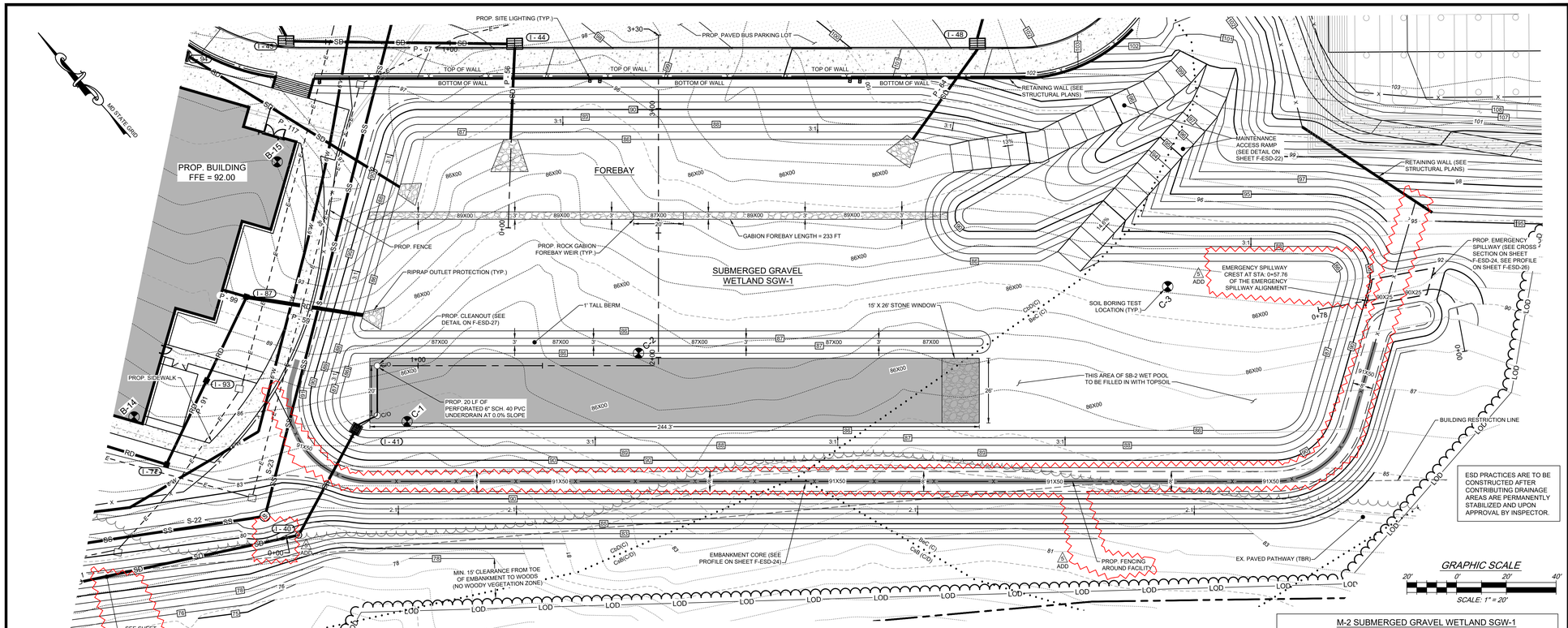



## SUBMERGED GRAVEL WETLAND SGW-1 SUMMARY

Structure Classification: "A"  BMP Type: M-2 (Submerged Gravel Wetland)

Watershed area draining to facility (acres): 13.59 ACRES

Level of management provided: Cpv & 10 YEAR STORM & 100 YEAR STORM

Freeboard: 2.22' @ 100 YEAR STORM FROM TOP OF EMBANKMENT

Maintenance responsibility: PRIVATE

Design Summary:

| DESIGN STORM | FACILITY INFLOW (CFS) | FACILITY DISCHARGE (CFS) | WATER SURFACE ELEVATION | STORAGE VOLUME (AC. FT.) |
|---|---|---|---|---|
| 1-YEAR | 19.01 | 1.19 | 86.83 | 0.90 |
| 10-YEAR | 51.09 | 7.24 | 87.98 | 1.99 |
| 100-YEAR | 93.48 | 26.74 | 89.28 | 3.34 |

Cecil County ADC Map No. 11 Grid: G-13

Maryland Grid: North: 699,238 East: 1,614,315

Maryland State Watershed Designation: 02130608374 - Northeast River

Total Project Area: 74.0 ± acres  Project Site "RCN"

Maryland Land Use Code: 10-16  Facility Location: X Onsite  Offsite

Storage Height Product: 4.552 ac-ft x 10.98' = 49.9810

SEE LANDSCAPING PLANS FOR VEGETATION AND PLANTINGS.

## STORMWATER LEGEND

- MEDIA AREA (SEE TYPICAL SECTION)
- C/O — 6" CLEANOUT & MONITORING WELL
- 6" PERFORATED UNDERDRAIN
- 86X00 — PROP. SPOT ELEVATION

## M-2 SUBMERGED GRAVEL WETLAND SGW-1 SEQUENCE OF CONSTRUCTION

**Conversion of Sediment Basin to Submerged Gravel Wetland Facility:**

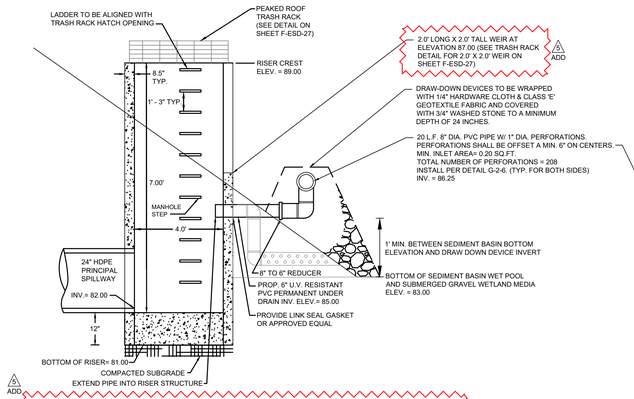
1. Once site construction is completed, obtain approval of both MDE and CCDPW to convert facility, install filter bag in area with silt fence or super silt fence downstream, install pump discharge hose, and discharge sediment laden water from sediment basin through the filterbag. Sediment laden water will filter through filter bag, and silt fence, prior to leaving the project site.
2. Muck out basin and excavate to media bottom depth. Remove sediment to an approved disposal area.
3. Remove temporary draw down device and install permanent underdrain, cleanouts, stone windows, and media section. Connect underdrain pipe to riser.
4. Stabilize all disturbed areas with 6" topsoil, seed, and mulch. Install landscaping in conformance with the landscaping plan. (1 day)
5. After obtaining permission from the sediment control inspector, remove all sediment control measures and stabilize any disturbed areas.
6. Submit as-built plan to Cecil County Land Use and Development Services for approval.

Notes:

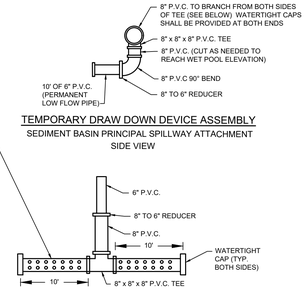
1. Installation shall be in conformance with Maryland Pond Code 378 and with Appendix B.4 of the Maryland Stormwater Design Manual, Volumes I and II.
2. Installation of underdrain & media shall not occur until the contributing drainage area has been completely stabilized.

BASIN CONVERSION NOTE:
UPON CONVERSION FROM SEDIMENT BASIN TO SUBMERGED GRAVEL WETLAND, REMOVE PVC FITTINGS, PERFORATED PIPE, AND STONE FROM POND DRAIN PIPE. MUCK OUT BASIN AND EXCAVATE TO SUBMERGED GRAVEL WETLAND MEDIA BOTTOM ELEVATION. INSTALL SUBMERGED GRAVEL WETLAND PER SEQUENCE OF CONSTRUCTION ON THIS SHEET.

PIPE SUPPORT NOTE:
PROVIDE SUPPORT TO TEMPORARY DRAW DOWN PIPE TO PREVENT SAGGING AND FLOATATION BY STAKING BOTH SIDES OF PIPE WITH 1.5" ANGLE IRON SET 3' MINIMUM INTO THE GROUND THEN JOINING THEM TO THE LOW FLOW PIPE BY WRAPPING WITH 10 GAUGE MINIMUM WIRE.

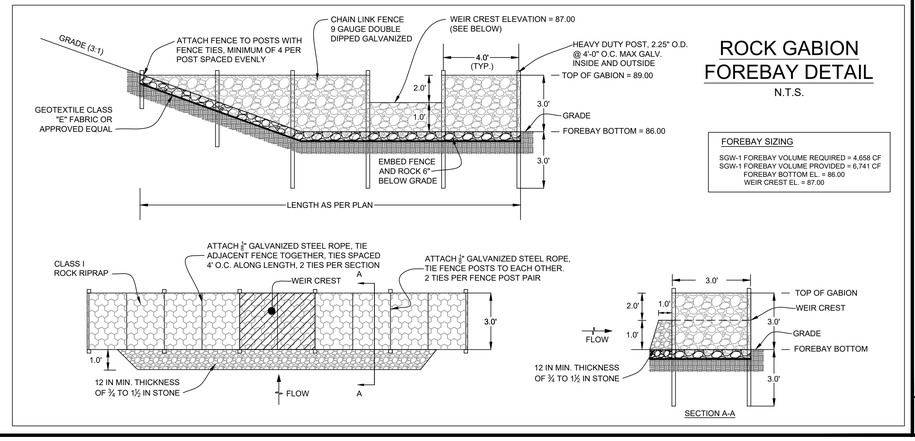



PRINCIPAL SPILLWAY
N.T.S.




TEMPORARY DRAW DOWN DEVICE ASSEMBLY
SEDIMENT BASIN PRINCIPAL SPILLWAY ATTACHMENT SIDE VIEW

TEMPORARY DRAW DOWN DEVICE ASSEMBLY
SEDIMENT BASIN PRINCIPAL SPILLWAY ATTACHMENT PLAN VIEW




## ROCK GABION FOREBAY DETAIL

N.T.S.

### FOREBAY SIZING

SGW-1 FOREBAY VOLUME REQUIRED = 4,658 CF
SGW-1 FOREBAY VOLUME PROVIDED = 6,741 CF
FOREBAY BOTTOM EL. = 86.00
WEIR CREST EL. = 87.00

STATE OF MARYLAND — DAVID A. GRIMM — REGISTERED PROFESSIONAL ENGINEER — No. 31400

2/16/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed* Professional Engineer *under the laws of the State of Maryland, License No.* 31400 *, Expiration Date:* 1-16-2025

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | ADDING UNWAPPED AROUND SGW-1 |

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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D23120047 |
| SCALE: | 1" = 20' |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DBS |
| FOLDER REFERENCE: | 26038 |

SUBMERGED GRAVEL WETLAND (SGW-1) PLAN VIEW
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

*NORTH EAST MIDDLE AND HIGH SCHOOLS*

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
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SHEET NO.: F-ESD-25

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GP #22105

SUBMERGED GRAVEL WETLAND (SGW-1) PLAN VIEW

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

**F-ESD-25**

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February 16, 2024 - 2:42pm User: awhalen G:\D23120047 - NENS G+P\DWG\ENG\D23120047 - ESD PRACTICES.dwg ____Tab:ESD-25

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# POND CODE MD-378 CONSTRUCTION SPECIFICATIONS

These specifications are appropriate to all ponds within the scope of the Standard for practice MD-378. All references to ASTM and AASHTO specifications apply to the most recent version.

## Site Preparation

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1. All trees shall be cleared and grubbed within 15 feet of the toe of the embankment.

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush, and stumps shall be cut approximately level with the ground surface. For dry stormwater management ponds, a minimum of a 25-foot radius around the inlet structure shall be cleared.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

## Earth Fill

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials. Fill material for the center of the embankment, and cut off trench shall conform to Unified Soil Classification GC, SC, CH, or CL and must have at least 30% passing the #200 sieve. Consideration may be given to the use of other materials in the embankment if designed by a geotechnical engineer. Such special designs must have construction supervised by a geotechnical engineer. Materials used in the outer shell of the embankment must have the capability to support vegetation of the quality required to prevent erosion of the embankment.

Placement - Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8 inch thick (before compaction) layers, which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the embankment. The principal spillway must be installed concurrently with fill placement and not excavated into the embankment.

Compaction - The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of heavy equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction shall be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble, yet not be so wet that water can be squeezed out.

When required by the reviewing agency the minimum required density shall not be less than 95% of maximum dry density with a moisture content within ±2% of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99 (Standard Proctor).

Cut Off Trench - The cutoff trench shall be excavated into impervious material along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability.

Embankment Core - The core shall be parallel to the centerline of the embankment as shown on the plans. The top width of the core shall be a minimum of four feet. The height shall extend up to at least the 10 year water elevation or as shown on the plans. The side slopes shall be 1 to 1 or flatter. The core shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability. In addition, the core shall be placed concurrently with the outer shell of the embankment.

## Structure Backfill

Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 24" or greater over the structure or pipe.

Structure backfill may be flowable fill meeting the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 313 as modified. The mixture shall have a 100-200 psi; 28 day unconfined compressive strength. The flowable fill shall have a minimum pH of 4.0 and a minimum resistivity of 2,000 ohm-cm. Material shall be placed such that a minimum of 6" (measured perpendicular to the outside of the pipe) of flowable fill shall be under (bedding), over and, on the sides of the pipe. It only needs to extend up to the spring line for rigid conduits. Average slump of the fill shall be 7" to assure flowability of the material. Adequate measures shall be taken (sand bags, etc.) to prevent floating the pipe. When using flowable fill, all metal pipe shall be bituminous coated. Any adjoining soil fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material shall completely fill all voids adjacent to the flowable fill zone. At no time during the backing operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a structure or pipe unless there is a compacted fill of 24" or greater over the structure or pipe. Backfill material outside the structural backfill (flowable fill) zone shall be of the type and quality conforming to that specified for the core of the embankment or other embankment materials.

## Pipe Conduits

All pipes shall be circular in cross section.

Corrugated Metal Pipe - All of the following criteria shall apply for corrugated metal pipe:

1. Materials - (Polymer Coated steel pipe) - Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.Oi inch (10 mil) on both sides of the pipe. This pipe and its appurtenances shall conform to the requirements of AASHTO Specifications M-245 & M-246 with watertight coupling bands or flanges.

Materials - (Aluminum Coated Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274 with watertight coupling bands or flanges. Aluminum Coated Steel Pipe, when used with flowable fill or when soil and/or water conditions warrant the need for increased durability, shall be fully bituminous coated per requirements of AASHTO Specification M-190 Type A. Any aluminum coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer or two coats of asphalt.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 orM-211 with watertight coupling bands or flanges. Aluminum Pipe, when used with flowable fill or when soil and/or water conditions warrant for increased durability, shall be fully bituminous coated per requirements of AASHTO Specification M-190 Type A. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer or two coats of asphalt. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be between 4 and 9.

2. Coupling bands, anti-seep collars, end sections, etc., must be composed of the same material and coatings as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness.

3. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight. Dimple bands are not considered to be watertight.

All connections shall use a rubber or neoprene gasket when joining pipe sections. The end of each pipe shall be re-rolled an adequate number of corrugations to accommodate the bandwidth. The following type connections are acceptable for pipes less than 24 inches in diameter: flanges on both ends of the pipe with a circular 3/8 inch closed cell neoprene gasket, pre-punched to the flange bolt circle, sandwiched between adjacent flanges; a 12-inch wide standard lap type band with 12-inch wide by 3/8-inch thick closed cell circular neoprene gasket; and a 12-inch wide hugger type band with 0-ring gaskets having a minimum diameter of 1/2 inch greater than the corrugation depth. Pipes 24 inches in diameter and larger shall be connected by a 24 inch long annular corrugated band using a minimum of 4 (four) rods and lugs, 2 on each connecting pipe end. A 24-inch wide by 3/8-inch thick closed cell circular neoprene gasket will be installed with 12 inches on the end of each pipe. Flanged joints with 3/8 inch closed cell gaskets the full width of the flange is also acceptable.

Helically corrugated pipe shall have either continuously welded seams or have lock seams with internal caulking or a neoprene bead.

4. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

5. Backfilling shall conform to "Structure Backfill".

6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Reinforced Concrete Pipe - All of the following criteria shall apply for reinforced concrete pipe:

1. Materials - Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM C-361.

2. Bedding - Reinforced concrete pipe conduits shall be laid in a concrete bedding / cradle for their entire length. This bedding / cradle shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 50% of its outside diameter with a minimum thickness of 6 inches. Where a concrete cradle is not needed for structural reasons, flowable fill may be used as described in the "Structure Backfill" section of this standard. Gravel bedding is not permitted.

3. Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe. The first joint must be located within 4 feet from the riser.

4. Backfilling shall conform to "Structure Backfill".

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Plastic Pipe - The following criteria shall apply for plastic pipe:

1. Materials - PVC pipe shall be PVC- 1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241. Corrugated High Density Polyethylene (HDPE) pipe, couplings and fittings shall conform to the following: 4"-10" inch pipe shall meet the requirements of AASHTO M252 Type S, and 12" through 24" inch shall meet the requirements of AASHTO M294 Type S.

2. Joints and connections to anti-seep collars shall be completely watertight.

3. Bedding -The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

4. Backfilling shall conform to "Structure Backfill".

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Drainage Diaphragms - When a drainage diaphragm is used, a registered professional engineer will supervise the design and construction inspection.

## Concrete

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 414, Mix No. 3.

## Rock Riprap

Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 311. Geotextile shall be placed under all riprap and shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 921.09, Class C.

## Care of Water during Construction

All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works. The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water as required or directed by the engineer for constructing each part of the work. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation at such locations which may require draining the water sumps from which the water shall be pumped.

## Stabilization

All borrow areas shall be graded to provide proper drainage and left in a sightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Natural Resources Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or as shown on the accompanying drawings.

## Erosion and Sediment Control

Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures.

## Operation and Maintenance

An operation and maintenance plan in accordance with Local or State Regulations will be prepared for all ponds. As a minimum, the dam inspection checklist located in Appendix A shall be included as part of the operation and maintenance plan and performed at least annually. Written records of maintenance and major repairs needs to be retained in a file. The issuance of a Maintenance and Repair Permit for any repairs or maintenance that involves the modification of the dam or spillway from its original design and specifications is required. A permit is also required for any repairs or reconstruction that involve a substantial portion of the structure. All indicated repairs are to be made as soon as practical.

NOTE: ALL ESD PRACTICE EMBANKMENTS AND FACILITIES SHALL BE CONSTRUCTED PER POND CODE 378 SPECIFICATIONS, EVEN IF EXEMPT.

5 ADD

Appendix B.4. Construction Specifications for Environmental Site Design Practices * MODIFIED

| Material | Specification | Size | Notes |
|---|---|---|---|
| Plantings | see Appendix A, Table A.4 | n/a | plantings are site-specific |
| Planting soil [2' to 4' deep] | loamy sand (60 - 65%) & compost (35 – 40%) or sandy loam (30%), coarse sand (30%) & compost (40%) | n/a | USDA soil types loamy sand or sandy loam; clay content < 5% **Combined silt and clay content < 21% by weight *** |
| Organic content | Min. 10% by dry weight (ASTM D 2974) | | |
| Mulch | shredded hardwood | | aged 6 months, minimum; no pine or wood chips |
| Pea gravel diaphragm | pea gravel: ASTM-D-448 | NO. 8 OR NO. 9 (1/8" TO 3/8") | |
| Curtain drain | ornamental stone: washed cobbles | stone: 2" to 5" | |
| Geotextile | | n/a | PE Type 1 nonwoven |
| Gravel (underdrains and infiltration berms) | AASHTO M-43 | NO. 57 OR NO. 6 AGGREGATE (3/8" to 3/4") | |
| Underdrain piping | F 758, Type PS 28 or AASHTO M-278 | 4" to 6" rigid schedule 40 PVC or SDR35 | Slotted or perforated pipe; 3/8" perf. @ 6" on center, 4 holes per row; minimum of 3" of gravel over pipes; not necessary underneath pipes. Perforated pipe shall be wrapped with ¼-inch galvanized hardware cloth |
| Poured in place concrete (if required) | MSHA Mix No. 3; f'c = 3500 psi @ 28 days, normal weight, air-entrained; reinforcing to meet ASTM-615-60 | n/a | on-site testing of poured-in-place concrete required: 28 day strength and slump test; all concrete design (cast-in-place or pre-cast) not using previously approved State or local standards requires design drawings sealed and approved by a professional structural engineer licensed in the State of Maryland - design to include meeting ACI Code 350.R/89; vertical loading [H-10 or H-20]; allowable horizontal loading (based on soil pressures); and analysis of potential cracking |
| Sand | AASHTO-M-6 or ASTM-C-33 | 0.02" to 0.04" | Sand substitutions such as Diabase and Graystone (AASHTO) #10 are not acceptable. No calcium carbonated or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand. |

B.4.7 Supp. 1

Excerpt from Appendix B.3. - Table B.3.1

| Material | Specification | Size | Notes |
|---|---|---|---|
| Geotextile fabric | ASTM-D-4833 (puncture strength - 125 lb.) ASTM-D-4632 (Tensile Strength - 300 lb.) | 0.08" thick equivalent opening size of #80 sieve | Must maintain 125 gpm per sq. ft. flow rate. Note: a 4" pea gravel layer may be substituted for geotextiles meant to "separate" sand filter layers. |
| Impermeable liner | ASTM-D-4833 (thickness) ASTM-D-412 (tensile strength 1,100 lb., elongation 200%) ASTM-D-624 (Tear resistance - 150 lb./in) ASTM-D-471 (water adsorption: +8 to -2% mass) | 30 mil thickness | Liner to be ultraviolet resistant. A geotextile fabric should be used to protect the liner from puncture. |

SUBMERGED GRAVEL WETLAND CONSTRUCTION SPECIFICATIONS

All references to ASTM and AASHTO specifications apply to the most recent version.

## Earth Fill

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials. Fill material for the center of the embankment, and cut off trench shall conform to Unified Soil Classification GC, SC, CH, or CL and must have at least 30% passing the #200 sieve. Consideration may be given to the use of other materials in the embankment if designed by a geotechnical engineer. Such special designs must have construction supervised by a geotechnical engineer. Materials used in the outer shell of the embankment must have the capability to support vegetation of the quality required to prevent erosion of the embankment.

Placement - Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8 inch thick (before compaction) layers, which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the embankment. The principal spillway must be installed concurrently with fill placement and not excavated into the embankment.

Compaction - The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of heavy equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble, yet not be so wet that water can be squeezed out.

When required by the reviewing agency the minimum required density shall not be less than 95% of maximum dry density with a moisture content within ±2% of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99 (Standard Proctor).

## Structure Backfill

Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 24" or greater over the structure or pipe.

Structure backfill may be flowable fill meeting the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 313 as modified. The mixture shall have a 100-200 psi; 28 day unconfined compressive strength. The flowable fill shall have a minimum pH of 4.0 and a minimum resistivity of 2,000 ohm-cm. Material shall be placed such that a minimum of 6" (measured perpendicular to the outside of the pipe) of flowable fill shall be under (bedding), over and, on the sides of the pipe. It only needs to extend up to the spring line for rigid conduits. Average slump of the fill shall be 7" to assure flowability of the material. Adequate measures shall be taken (sand bags, etc.) to prevent floating the pipe. When using flowable fill, all metal pipe shall be bituminous coated. Any adjoining soil fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material shall completely fill all voids adjacent to the flowable fill zone. At no time during the backing operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a structure or pipe unless there is a compacted fill of 24" or greater over the structure or pipe. Backfill material outside the structural backfill (flowable fill) zone shall be of the type and quality conforming to that specified for the core of the embankment or other embankment materials.

## Pipe Conduits

All pipes shall be circular in cross section.
Plastic Pipe - The following criteria shall apply for plastic pipe:

1. Materials - PVC pipe shall be PVC- 1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241. Corrugated High Density Polyethylene (HDPE) pipe, couplings and fittings shall conform to the following: 4"-10" inch pipe shall meet the requirements of AASHTO M252 Type S, and 12" through 24" inch shall meet the requirements of AASHTO M294 Type S.

2. Joints and connections to anti-seep collars shall be completely watertight.

3. Bedding -The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

4. Backfilling shall conform to "Structure Backfill".

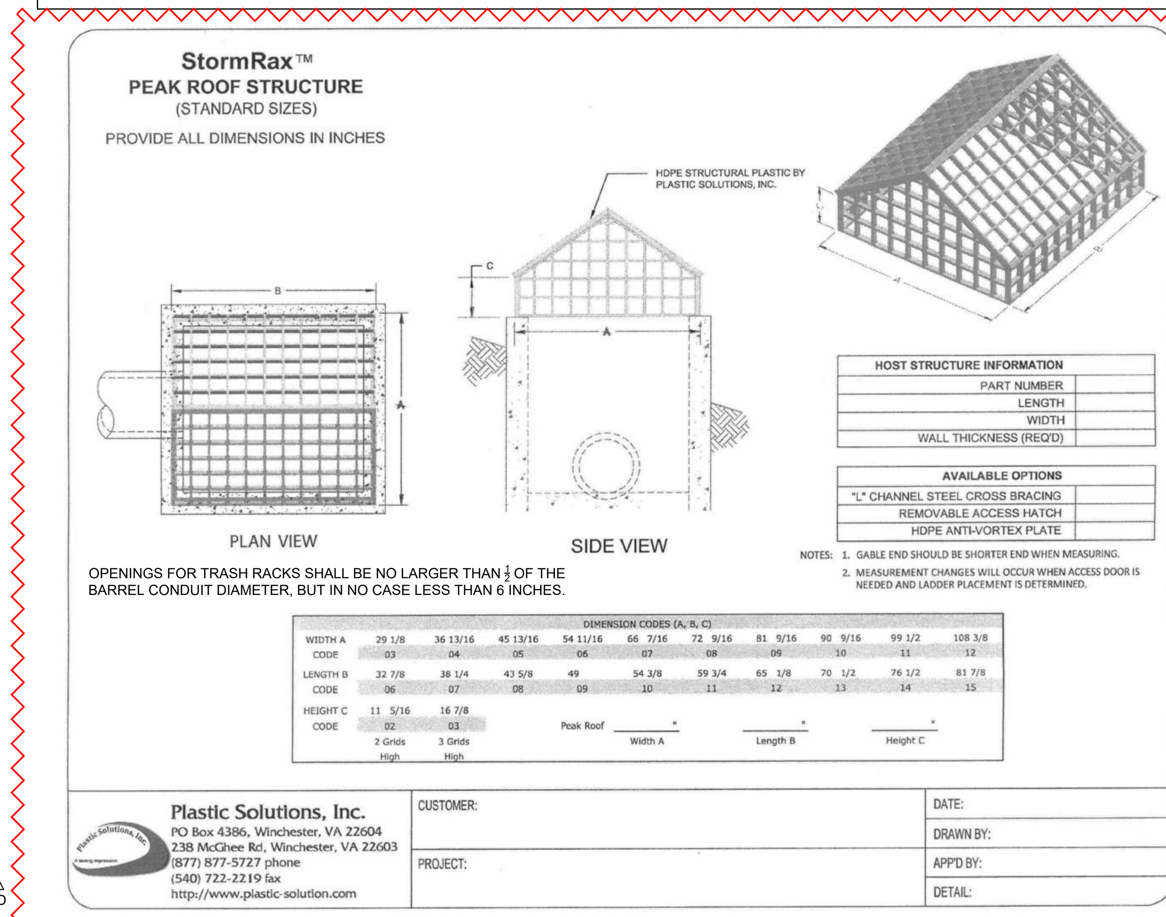
5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

## Concrete

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 414, Mix No. 3.

## Care of Water during Construction

All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works. The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water as required or directed by the engineer for constructing each part of the work. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation at such locations which may require draining the water sumps from which the water shall be pumped.




ALL ESD PRACTICE RISERS SHALL HAVE A TRASH RACK.
USE HDPE PEAK ROOF TRASH RACK BY PLASTIC SOLUTIONS, INC. OR APPROVED EQUAL
**ALL TRASH RACKS SHALL HAVE REMOVABLE ACCESS HATCHES**

FOR MODIFIED MD-381.02 STRUCTURES (FOR MBR-1, MBR-2345, MBR-6, AND SGW-2):
- FOR WIDTH 'A', USE CODE 03: 29 $\frac{1}{8}$"
- FOR LENGTH 'B', USE CODE 06: 32 $\frac{7}{8}$"
- FOR HEIGHT 'C', USE CODE 02: 11 $\frac{5}{16}$"

FOR MODIFIED MD-383.00 STRUCTURES (I-33 FOR IB-1 AND I-41 FOR SGW-1):
- FOR WIDTH 'A', USE CODE 06: 54 $\frac{11}{16}$"
- FOR LENGTH 'B', USE CODE 10: 54 $\frac{3}{8}$"
- FOR HEIGHT 'C', USE CODE 03: 16 $\frac{7}{8}$"

***EXCERPTS FROM APPENDIX B.4 OF THE MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I AND II.***

**B.4.C Specifications for Micro-Bioretention. Rain Gardens, Landscape Infiltration & Infiltration Berms.**

**1. Material Specifications**

The allowable materials to be used in these practices are detailed in Table B.4.1.

**2. Filtering Media or Planting Soil**

The soil shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches. No other materials or substances shall be mixed or dumped within the micro-bioretention practice that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations. The planting soil shall be free of Bermuda grass, Quackgrass, Johnson grass or other noxious weeds as specified under COMAR 15.08.01.05.

The planting soil shall be tested and shall meet the following criteria:
- Soil Component - Loamy Sand or Sandy Loam (USDA Soil Textural Classification)
- Organic Content - Minimum 10% by dry weight (ASTM D 2974). In general, this can be met with a mixture of loamy sand (60%-65%) and compost (35%-40%) or sandy loam (30%), coarse sand (30%), and compost (40%).
- Clay Content - Media shall have a clay content of less than 5% **and silt + clay content < 21%**.
- pH Range - Should be between 5.5-7.0. Amendments (e.g., lime, iron sulfate plus sulfur) may be mixed into the soil to increase or decrease pH.

There shall be at least one soil test per project. Each test shall consist of both the standard soil test for pH, and additional tests of organic matter, and soluble salts. A textural analysis is required from the site stockpiled topsoil. If topsoil is imported, then a texture analysis shall be performed for each location where the topsoil was excavated.

**3. Compaction**

It is very important to minimize compaction of both the base of bioretention practices and the required backfill. When possible, use excavation hoes to remove original soil. If practices are excavated using a loader, the contractor should use wide track or marsh track equipment, or light equipment with turf type tires. Use of equipment with narrow tracks or narrow tires, rubber tires with larges lugs, or high-pressure tires will cause excessive compaction resulting in reduced infiltration rates and is not acceptable. Compaction will significantly contribute to design failure.

Compaction can be alleviated at the base of the bioretention facility by using a primary tilling operation such as a chisel plow, ripper, or subsoiler. These tilling operations are to refracture the soil profile through the 12 inch compaction zone. Substitute methods must be approved by the engineer. Rototillers typically do not till deep enough to reduce the effects of compaction from heavy equipment.

Rototill 2 to 3 inches of sand into the base of the bioretention facility before backfilling the optional sand layer. Pump any ponded water before preparing (rototilling) base.

When backfilling the topsoil over the sand layer, first place 3 to 4 inches of topsoil over the sand, then rototill the sand/topsoil to create a gradation zone. Backfill the remainder of the topsoil to final grade.

When backfilling the bioretention facility, place soil in lifts 12" to 18". Do not use heavy equipment within the bioretention basin. Heavy equipment can be used around the perimeter of the basin to supply soils and sand. Grade bioretention materials with light equipment such as a compact loader or a dozer/loader with marsh tracks.

**4. Plant Material**

Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.2.3.

**5. Plant Installation**

Compost is a better organic material source, is less likely to float, and should be placed in the invert and other low areas. Mulch should be placed in surrounding to a uniform thickness of 2" to 3". Shredded or chipped hardwood mulch is the only accepted mulch. Pine mulch and wood chips will float and move to the perimeter of the bioretention area during a storm event and are not acceptable. Shredded mulch must be well aged (6 to 12 months) for acceptance.

Rootstock of the plant material shall be kept moist during transport and on-site storage. The plant root ball should be planted so 1/8th of the ball is above final grade surface. The diameter of the planting pit shall be at least six inches larger than the diameter of the planting ball. Set and maintain the plant straight during the entire planting process. Thoroughly water ground bed cover after installation.

Trees shall be braced using 2" by 2" stakes only as necessary and for the first growing season only. Stakes are to be equally spaced on the outside of the tree ball.

Grasses and legume seed should be drilled into the soil to a depth of at least one inch. Grass and legume plugs shall be planted following the non-grass ground cover planting specifications.

The topsoil specifications provide enough organic material to adequately supply nutrients from natural cycling. The primary function of the bioretention structure is to improve water quality. Adding fertilizers defeats, or at a minimum, impedes this goal. Only add fertilizer if wood chips are used to amend the soil. Rototill urea fertilizer at a rate of 2 pounds per 1,000 square feet.

**6. Underdrains**

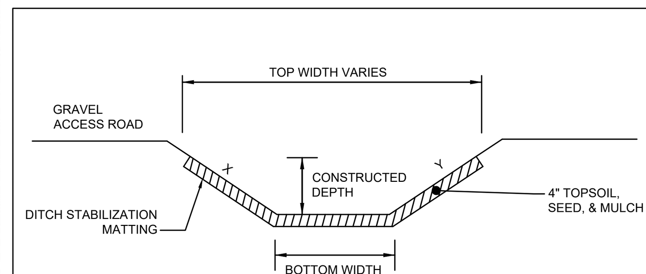
Underdrains should meet the following criteria:

- Pipe- Should be 4" to 6" diameter, slotted or perforated rigid plastic pipe (ASTMF 758, Type PS 28, or AASHTO-M-278) in a gravel layer. The preferred material is slotted, 4" rigid pipe (e.g., PVC or HDPE).
- Perforations - If perforated pipe is used, perforations should be ⅜" diameter located 6" on center with a minimum of four holes per row. Pipe shall be wrapped with a ¼" (No. 4 or 4x4) galvanized hardware cloth.
- Gravel – The gravel layer (No. 57 stone preferred) shall be at least 3" thick above and below the underdrain.
- The main collector pipe shall be at a minimum 0.5% slope.
- A rigid, non-perforated observation well must be provided (one per every 1,0000 square feet) to provide a clean-out port and monitor performance of the filter.
- A 4" layer of pea gravel (⅛" to ⅜" stone) shall be located between the filter media and underdrain to prevent migration of fines into the underdrain. This layer may be considered part of the filter bed when bed thickness exceeds 24".

The main collector pipe for underdrain systems shall be constructed at a minimum slope of 0.5%. Observation wells and/or clean-out pipes must be provided (one minimum per every 1000 square feet of surface area).

**7. Miscellaneous**

These practices may not be constructed until all contributing drainage area has been stabilized.




DESIGN NOTES:
1. DRAINAGE AREA AND FLOW RATES (Q) ARE BASED ON THE FURTHEST DOWNSTREAM SECTION.
2. SHEAR STRESS IS CALCULATED WITH THE 10 YEAR STORM DATA.
3. SWALE DEPTHS VARY BASED ON EXISTING TOPOGRAPHY AND THE SWALE DEPTH IN THE TABLE BELOW IS BASED ON FURTHEST DOWNSTREAM SECTION. CONTRACTOR SHALL LOOK AT CONTOURS TO DETERMINE ACTUAL DEPTH AND GRADING FOR SWALES.

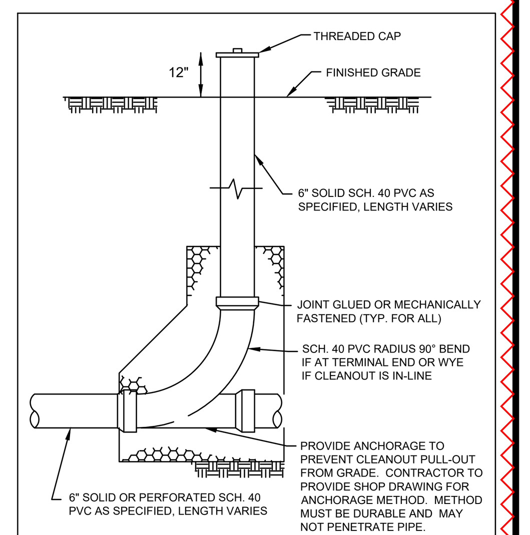
SWALE DETAIL
N.T.S.

| SECTION | DRAINAGE AREA (AC.) | SLOPE (%) | LENGTH (FT.) | $Q_{10}$ (C.F.S.) | $V_{10}$ (F/S) | FLOW DEPTH (FT.) | SHEAR STRESS (PSF)* | X:1 | Y:1 | BOTTOM WIDTH (FT.) | SWALE DEPTH (FT.) | STABILIZATION MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A-A | 1.60 | 0.70 | 308 | 1.60 | 1.37 | 0.30 | 0.14 | 3 | 3 | 3 | 1.00 | TEMP. SOIL STABILIZATION MATTING |
| B-B | 2.70 | 0.60 | 295 | 2.54 | 1.63 | 0.72 | 0.18 | 3 | 3 | 0 | 1.00 | TEMP. SOIL STABILIZATION MATTING |
| C-C | 0.81 | 1.05 | 268 | 2.38 | 1.77 | 0.67 | 0.21 | 3 | 3 | 0 | 1.00 | TEMP. SOIL STABILIZATION MATTING |
| D-D | 0.23 | 1.90 | 158 | 0.39 | 1.06 | 0.11 | 0.12 | 3 | 3 | 3 | 1.00 | TEMP. SOIL STABILIZATION MATTING |
| X-X | 22.4 | 2.50 | 100 | 18.17 | 9.28 | 0.45 | 0.52 | 3 | 3 | 3 | 1.00 | PERM. SOIL STABILIZATION MATTING** |

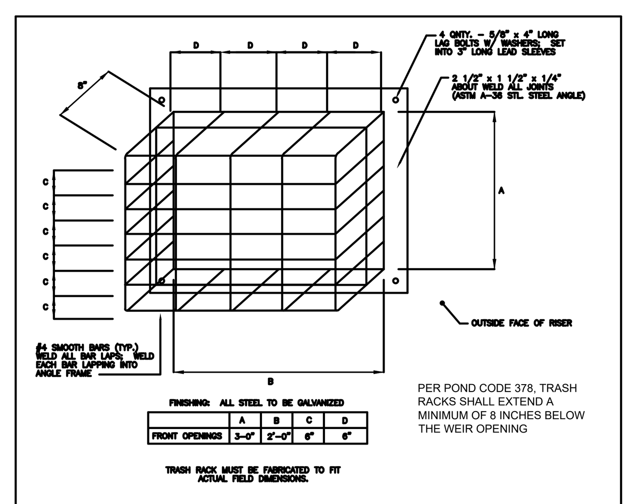
* SHEAR STRESS = (WEIGHT OF WATER) x (SLOPE OF CHANNEL) x (HYDRAULIC RADIUS)
WHERE HYDRAULIC RADIUS = (FLOW AREA) / (WETTED PERIMETER)
** FOR PERMANENT SOIL STABILIZATION MATTING, USE NORTH AMERICAN GREEN P550 PERMANENT TURF REINFORCEMENT MATTING

***SHOP DRAWINGS REQUIRED FOR PRIVATE INFRASTRUCTURE***

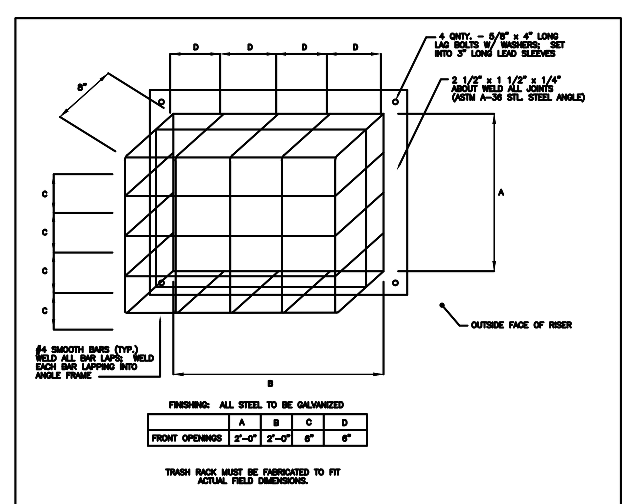
"The contractor shall submit Manufacture Shop Drawings for all components of the private Stormwater Management, Street, Storm Drain, Water, and/or Sanitary Sewer Systems shown hereon. The shop drawings must reflect information as follows: job Name, Component Identification, Project Engineer—of—Record's review and approval, and quantity of each item specific to component identification. Provide design calculations for each component. The Engineer—of Record approved drawings must be sent to Cecil County Department of Public Works, attention Construction inspection Division, at least ten (10) working days prior to the project order date of any comonent. Approved shop drawings must be received by the Contractor prior to ordering of components."




ESD PRACTICE CLEANOUT
N.T.S.




TRASH RACK DETAIL FOR 2' X 2' WEIR OPENING ON STRUCTURE I-41
N.T.S.




TRASH RACK DETAIL FOR 2' X 2' WEIR OPENING ON STRUCTURE I-41
N.T.S.

STATE OF MARYLAND DANIEL S. SPEAKMAN NO. 31400 PROFESSIONAL ENGINEER
2/16/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed* Professional Engineer *under the laws of the State of Maryland, License No.* 31400 *, Expiration Date:* 1-16-2025 .

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | REVISED TRASH RACK DETAILS |

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ELKTON, MARYLAND 21921
410.398.1550
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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D3210047 |
| SCALE: | AS SHOWN |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 2683B |

STORMWATER PRACTICE DETAILS & SPECIFICATIONS

300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

*NORTH EAST MIDDLE AND HIGH SCHOOLS*

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-27

11720 Beltsville Drive
Suite 600
Calverton, MD 20705
Tel: 301.595.1000
www.grimmandparker.com
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GP #22105

STORMWATER PRACTICE DETAILS & SPECIFICATIONS

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

F-ESD-27

12/22/2023
BID SET

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February 16, 2024 - 2:40pm User: awhallon Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - ESD PRACTICES.dwg.........Tab:ESD-27

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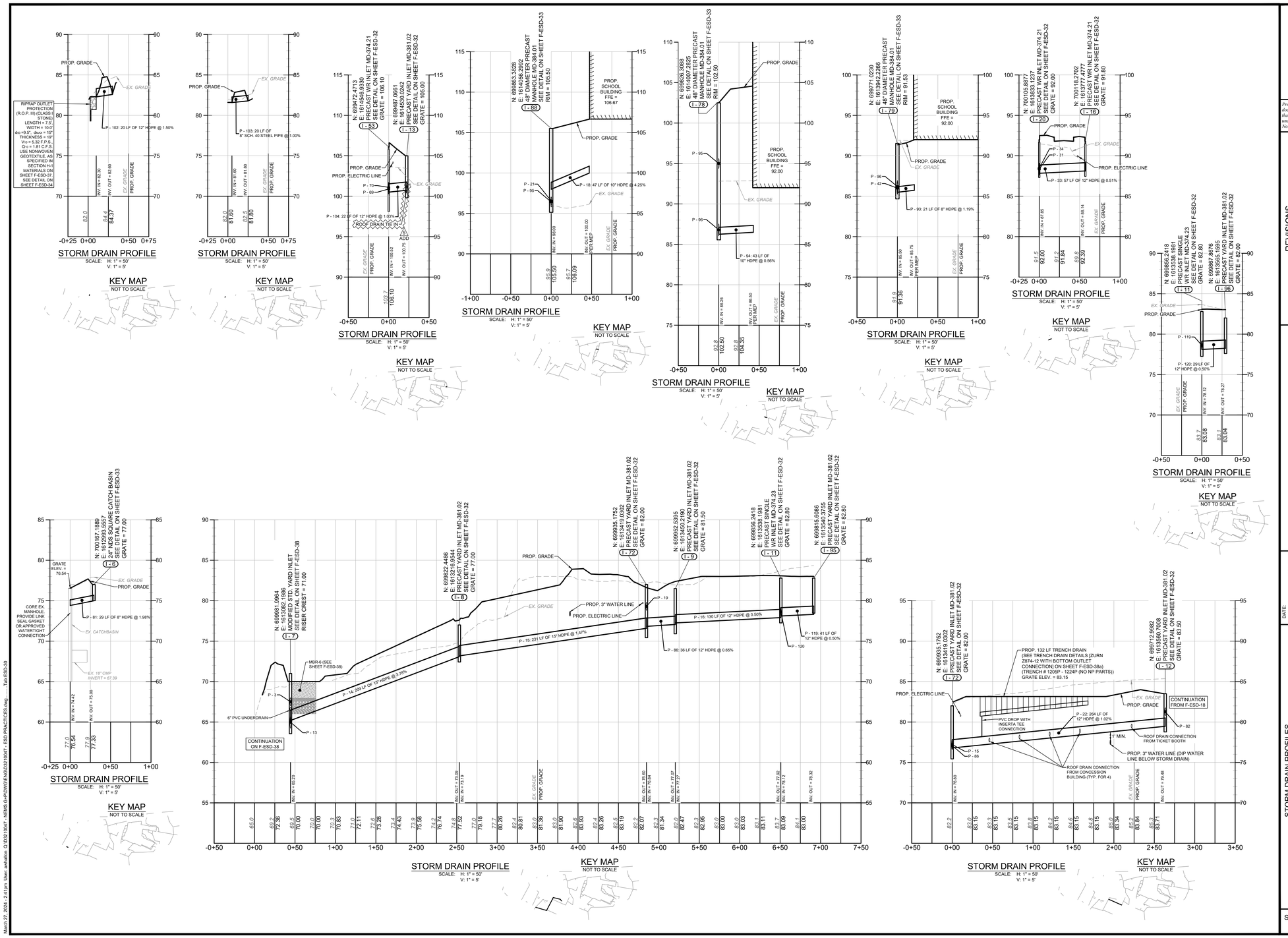


3/27/2024
DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed* Professional Engineer *under the laws of the State of Maryland, License No.* 31400 *, Expiration Date:* 1-16-2025

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|


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| | |
|---|---|
| DATE: | NOV. 2022 |
| JOB NUMBER: | D20150047 |
| SCALE: | AS NOTED |
| DRAWN BY: | AJW |
| DESIGNED BY: | AJW |
| APPROVED BY: | DSS |
| FOLDER REFERENCE: | 20539 |

STORM DRAIN PROFILES
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13

*NORTH EAST MIDDLE AND HIGH SCHOOLS*

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-30


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GP #22105

STORM DRAIN PROFILES
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
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**F-ESD-30**

12/22/2023
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March 27, 2024 - 2:41pm User: awhelton Q:\D20150047 - NEMS G+P\DWG\ENGD\201504 7 - ESD PRACTICES.dwg Tab:ESD-30

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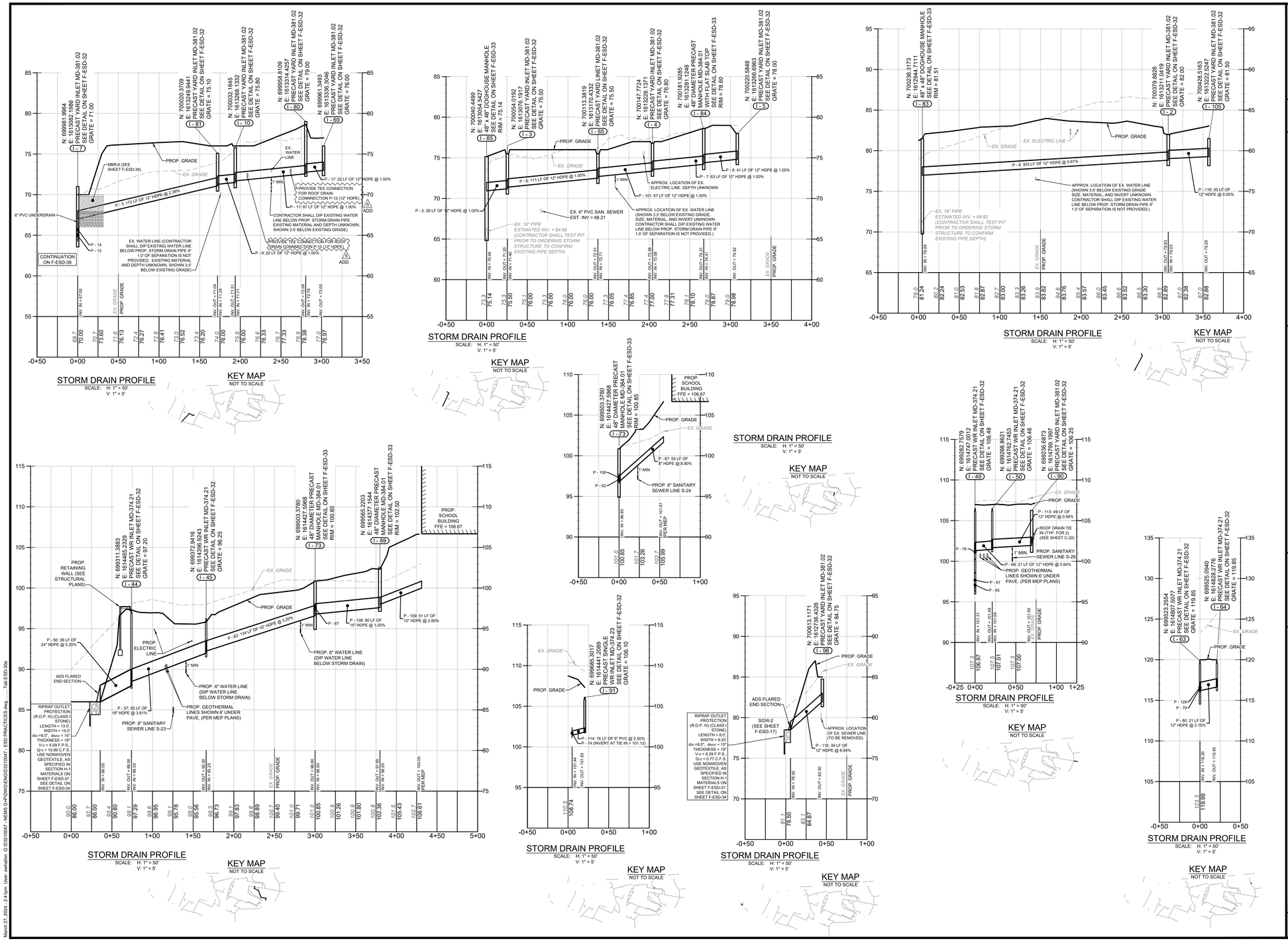


March 27, 2024 - 2:41pm User: avrilallen G:\2021\0047 - NEMS G+P\DWG\ENG\2021\0047 - ESD PRACTICES.dwg ..... Tab:ESD-30a

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Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 31400, Expiration Date: 1-16-2025

3/27/2024
DATE

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| | | |

DATE: NOV. 2022
JOB NUMBER: D3210047
SCALE: AS NOTED
DRAWN BY: AJW
DESIGNED BY: AJW
APPROVED BY: DSS
FOLDER REFERENCE: 26636

STORM DRAIN PROFILES
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857, ADC MAP 11, GRID G-13

# NORTH EAST MIDDLE AND HIGH SCHOOLS

FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-30a

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GP #22105

STORM DRAIN PROFILES
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

F-ESD-30a

12/22/2023
BID SET

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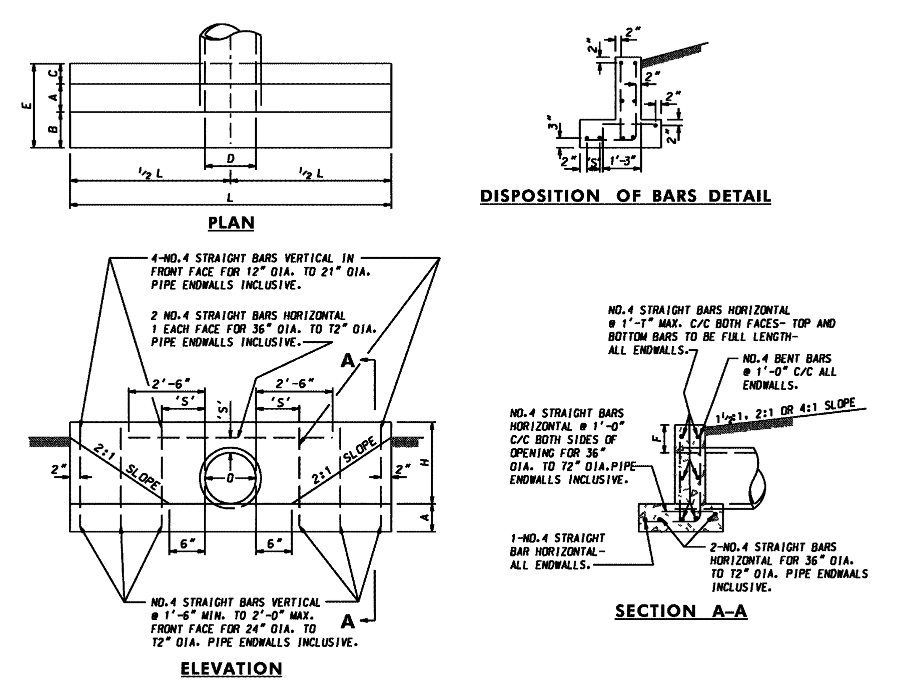



QUANTITIES FOR ESTIMATING PURPOSES ONLY

| OPENING D INCHES | OPENING AREA SQ.FT. | A | B | C | E | F | H | L | CONC. C.Y. | STEEL LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 0.79 | 9" | 6" | 6" | 1'-9" | 9" | 1'-9" | 6'-6" | 0.61 | 41 |
| 15 | 1.23 | 9" | 6" | 6" | 1'-9" | 9" | 2'-0" | 7'-9" | 0.77 | 47 |
| 18 | 1.77 | 9" | 6" | 6" | 1'-9" | 9" | 2'-3" | 9'-0" | 0.95 | 54 |
| 21 | 2.40 | 9" | 6" | 6" | 1'-9" | 9" | 2'-6" | 10'-3" | 1.14 | 70 |
| 24 | 3.14 | 9" | 14" | 6" | 2'-5" | 9" | 2'-9" | 11'-6" | 1.56 | 80 |
| 27 | 3.98 | 9" | 14" | 6" | 2'-5" | 9" | 3'-0" | 12'-10" | 1.82 | 88 |
| 30 | 4.91 | 9" | 14" | 6" | 2'-5" | 12" | 3'-6" | 14'-2" | 2.22 | 98 |
| 33 | 5.94 | 9" | 14" | 6" | 2'-5" | 12" | 3'-9" | 15'-5" | 2.48 | 105 |
| 36 | 7.07 | 12" | 16" | 10" | 3'-2" | 12" | 4'-0" | 16'-8" | 4.16 | 182 |
| 42 | 9.62 | 12" | 16" | 10" | 3'-2" | 12" | 4'-6" | 19'-2" | 5.07 | 206 |
| 48 | 12.57 | 12" | 16" | 10" | 3'-2" | 12" | 5'-0" | 21'-8" | 6.09 | 244 |
| 54 | 15.90 | 12" | 20" | 12" | 3'-8" | 12" | 5'-6" | 24'-2" | 7.62 | 275 |
| 60 | 19.64 | 12" | 20" | 12" | 3'-8" | 12" | 6'-0" | 26'-8" | 8.82 | 304 |
| 72 | 28.27 | 12" | 20" | 12" | 3'-8" | 12" | 7'-0" | 31'-8" | 11.46 | 377 |

**'S' DISTANCES**

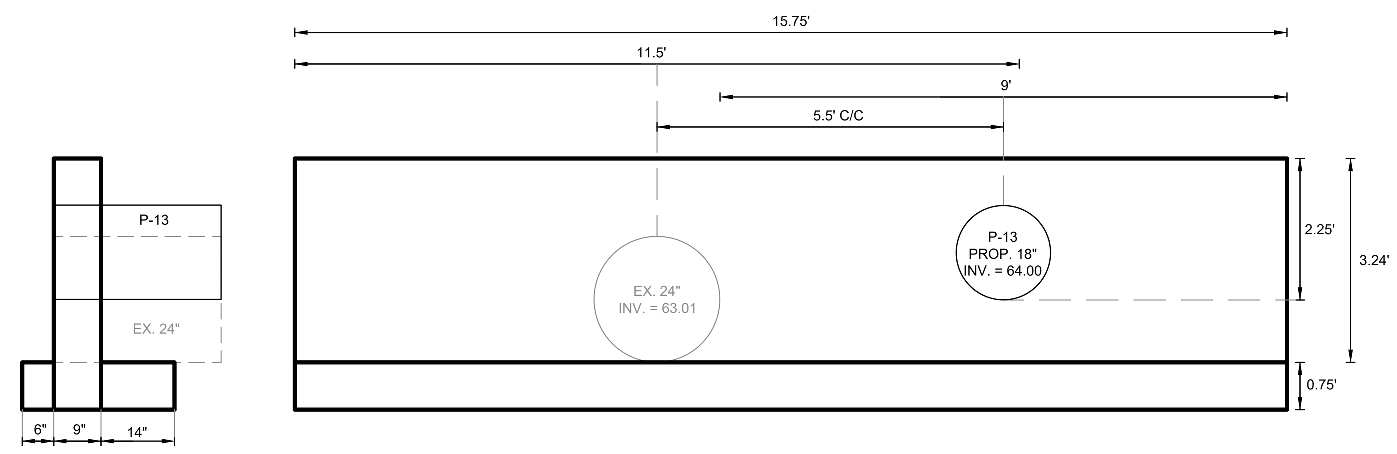
4" FOR 12" DIA. TO 21" DIA. PIPES INCLUSIVE.
6" FOR 24" DIA. TO 36" DIA. PIPES INCUSIVE.
8" FOR 42" DIA. TO 72" DIA. PIPES INCLUSIVE.

**GENERAL NOTES**

SPECIFICATIONS: LATEST S.H.A.
CONCRETE SHALL BE MIX NO.2
REINFORCING: DEFORMED STEEL BARS-NO.4
CHAMFER: ALL EXPOSED EDGES 1"x1" OR AS DIRECTED

SPECIFICATION 305 | CATEGORY CODE ITEMS
APPROVED — DIRECTOR - OFFICE OF HIGHWAY DEVELOPMENT
APPROVAL • SHA REVISIONS: APPROVAL 8-28-86; REVISED 10-1-01
APPROVAL • FEDERAL HIGHWAY ADMINISTRATION: APPROVAL 12-12-86

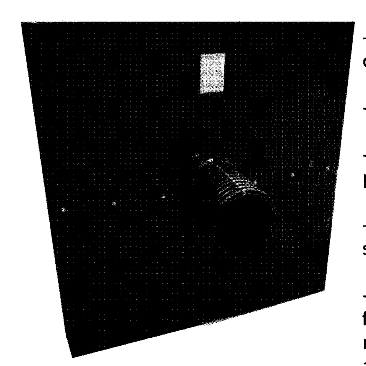
**Maryland Department of Transportation**
**STATE HIGHWAY ADMINISTRATION**
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES
**STANDARD TYPE C ENDWALL METAL OR CONCRETE ROUND PIPE**
STANDARD NO. MD 354.01




TYPE C ENDWALL ELEVATION DETAIL
SCALE: NTS

## Scheib Drainage Products
## 'No-Seep' Antiseep Collar

The collars can be built to fit any kind of pipe up to 48". The three basic sizes are 4' x 4', 5" x 5", and 6' x 6'. Collars are also available in 7' x 7' and 8' x 8'.



- Typ. 18" - 24" from edge of pipe to edge of collar on all four sides
- Stainless steel bands on each side
- The 2 halves overlap 1.5" to allow the pieces to be bolted together
- 3/8" holes allow for adjustment of 1/4" stainless steel bolts (typ. spaced 6" apart)
- The two piece connecting band is made from 1/8" polyethylene and extends a minimun of 3" from the center on each side and is joined to the body with a continuous weld on both sides
- The 'No-Seep' Antiseep collar is constructed from durable 1/4' Polyethylene

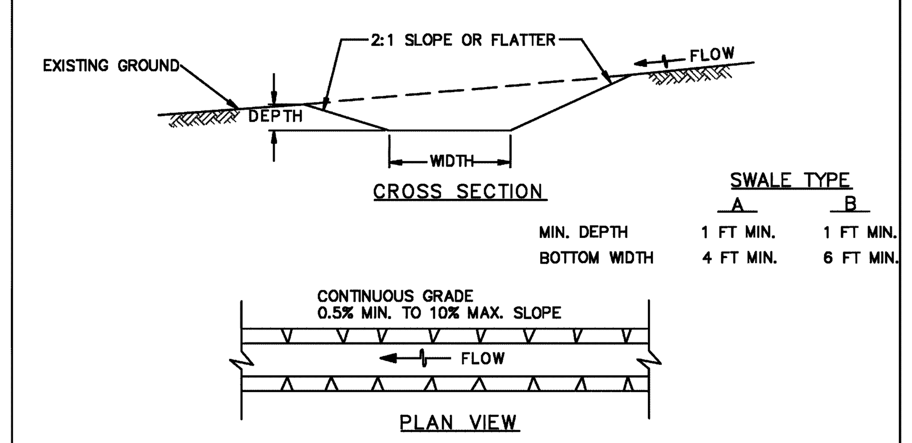
**Installation Instructions**

1. Apply tar or mastic to collar and lay tube on collar.
2. Apply mastic to the top half of the collar and set in place.
3. Line up the red stripes and bolt the two halves together.
4. Install metal bands on split halves of collar.
5. Tighten bolts and bands.
6. Apply mastic as needed to insure a good seal.
7. Backfill and hand tamp.

DRAINAGE SOLUTIONS,INC
www.drainagesolutionsinc.com (317)346-4110

5 ADD

**DETAIL C-2 TEMPORARY SWALE** — STANDARD SYMBOL A-1




| | SWALE TYPE A | SWALE TYPE B |
|---|---|---|
| MIN. DEPTH | 1 FT MIN. | 1 FT MIN. |
| BOTTOM WIDTH | 4 FT MIN. | 6 FT MIN. |

FLOW CHANNEL STABILIZATION

A-1 SEED WITH STRAW MULCH AND TACK. (NOT ALLOWED FOR CLEAR WATER DIVERSION.)
A-2/B-2 SEED WITH SOIL STABILIZATION MATTING OR LINE WITH SOD.
A-3/B-3 4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE PRESSED INTO SOIL A MINIMUM OF 7 INCHES AND FLUSH WITH GROUND.

CONSTRUCTION SPECIFICATIONS

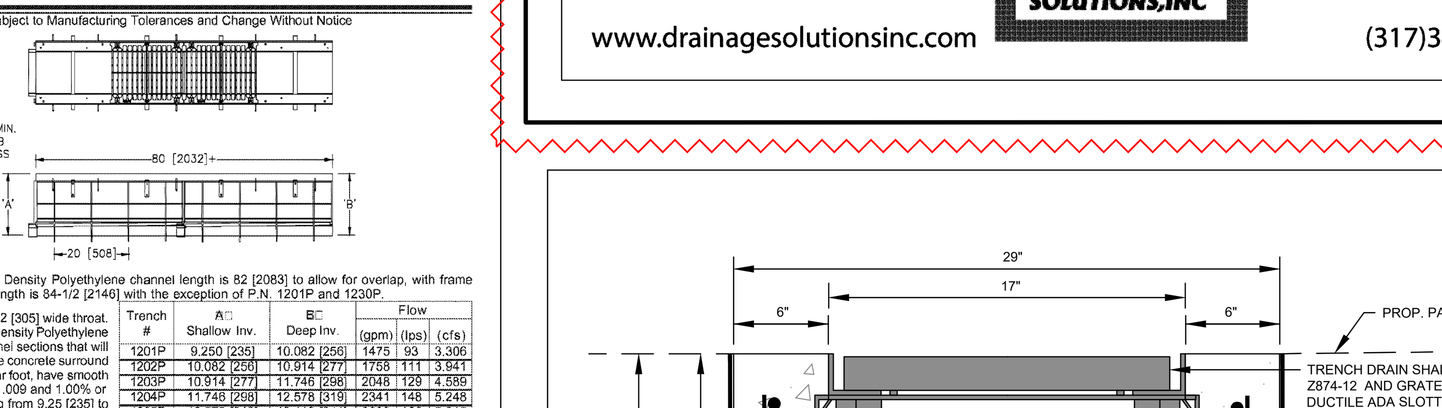
1. REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION OF TEMPORARY SWALE.
2. EXCAVATE OR SHAPE TEMPORARY SWALE TO LINE, GRADE, AND CROSS SECTION AS SPECIFIED. BANK PROJECTIONS OR OTHER IRREGULARITIES ARE NOT ALLOWED.
3. STABILIZE TEMPORARY SWALE WITHIN THREE DAYS OF INSTALLATION. STABILIZE SWALES USED FOR CLEAR WATER DIVERSION WITHIN 24 HOURS OF INSTALLATION.
4. CONSTRUCT FLOW CHANNEL ON AN UNINTERRUPTED, CONTINUOUS GRADE, ADJUSTING THE LOCATION DUE TO FIELD CONDITIONS AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
5. PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLAN.
6. MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND MAINTAIN POSITIVE DRAINAGE. KEEP TEMPORARY SWALE AND POINT OF DISCHARGE FREE OF EROSION, AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.
7. UPON REMOVAL OF TEMPORARY SWALE, GRADE AREA FLUSH WITH EXISTING GROUND. WITHIN 24 HOURS OF REMOVAL STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED ON APPROVED PLAN.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | 2011 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

C.11

5 ADD

ZURN **Z874-12** SPECIFICATION SHEET
12 [305] WIDE THROAT TRENCH DRAIN SYSTEM TAG _______
Dimensional Data (inches and [ mm ]) are Subject to Manufacturing Tolerances and Change Without Notice




+ Actual High Density Polyethylene channel length is 82 [2083] to allow for overlap, with frame attached the length is 84-1/2 [2146] with the exception of P.N. 1201P and 1230P.

ENGINEERING SPECIFICATION: Zurn Z874-12
Channels shall be 80 [2032] long, 17 [432] wide reveal and have a 12 [305] wide throat. Modular channel sections shall be made of 0% water absorbent High Density Polyethylene (HDPE). Shall have a positive mechanical connection between channel sections that will not separate during the installation and shall mechanically lock into the concrete surround every 10 [254]. Channels shall weigh less than 6.6 lbs. [3 kg] per linear foot, have smooth 3.5 [89] radiused self cleaning bottom with a Mannings coefficient of .009 and 1.00% or neutral 0% built-in slope. Channels are available with inverts ranging from 9.25 [235] to 34.21 [869]. Channel shall have all grates locked down. Channels come with clips attached to the frame to accommodate vertical re-bar for positioning and anchoring purposes. Shall be provided with the standard DGC grate, Zurn 16-1/4 [413] wide Ductile Iron Slotted Grate, which locks down to the frame with 4 individual bolt anchors per grate. Ductile Iron conforms to ASTM specification A536-84, Grade 80-55-06. Ductile Iron grate is rated class C per the DIN EN1433 top load classifications. Supplied in 20 [608] nominal lengths with 13/16 [21] wide slots, and 1-3/4 [44] bearing depth. Grate has an open area of 118 sq. in. per ft. [249779 ] sq. mm per meter]. The 1/4 [6] thick Carbon Steel Frame Assembly conforms to ASTM specification A36 with 10 - 4 [102] long concrete anchors per 80 [2032]. The frame is supplied with a powder coated finish. All welds must be performed by a certified welder per ASTM standard AWS D1.1. Frames shall be produced in the USA.

| Trench # | A Shallow Inv. | B Deep Inv. | Flow (gpm) | Flow (lps) | Flow (cfs) |
|---|---|---|---|---|---|
| 1201P | 9.250 [235] | 10.082 [256] | 1475 | 93 | 3.306 |
| 1202P | 10.082 [256] | 10.914 [277] | 1758 | 111 | 3.941 |
| 1203P | 10.914 [277] | 11.746 [298] | 2048 | 129 | 4.589 |
| 1204P | 11.746 [298] | 12.578 [319] | 2341 | 148 | 5.248 |
| 1205P | 12.578 [319] | 13.410 [341] | 2639 | 166 | 5.915 |
| 1205NP | 13.410 [341] | 13.410 [341] | - | - | - |
| 1206P | 13.410 [341] | 14.242 [362] | 2939 | 185 | 6.589 |
| 1207P | 14.242 [362] | 15.074 [383] | 3243 | 205 | 7.268 |
| 1208P | 15.074 [383] | 15.906 [404] | 3548 | 224 | 7.953 |
| 1209P | 15.906 [404] | 16.738 [425] | 3855 | 243 | 8.641 |
| 1210P | 16.738 [425] | 17.570 [446] | 4164 | 263 | 9.333 |
| 1211P | 17.570 [446] | 18.402 [467] | 4474 | 282 | 10.028 |
| 1212P | 18.402 [467] | 19.234 [489] | 4785 | 302 | 10.726 |
| 1213P | 19.234 [489] | 20.066 [510] | 5098 | 322 | 11.426 |
| 1214P | 20.066 [510] | 20.898 [531] | 5411 | 341 | 12.128 |
| 1215P | 20.898 [531] | 21.730 [552] | 5725 | 361 | 12.832 |
| 1215NP | 21.730 [552] | 21.730 [552] | - | - | - |
| 1216P | 21.730 [552] | 22.562 [573] | 6040 | 381 | 13.538 |
| 1217P | 22.562 [573] | 23.394 [594] | 6355 | 401 | 14.244 |
| 1218P | 23.394 [594] | 24.226 [615] | 6671 | 421 | 14.953 |
| 1219P | 24.226 [615] | 25.058 [636] | 6988 | 441 | 15.662 |
| 1220P | 25.058 [636] | 25.890 [658] | 7304 | 461 | 16.372 |
| 1221P | 25.890 [658] | 26.722 [679] | 7622 | 481 | 17.084 |
| 1222P | 26.722 [679] | 27.554 [700] | 7940 | 501 | 17.796 |
| 1223P | 27.554 [700] | 28.386 [721] | 8258 | 521 | 18.509 |
| 1224P | 28.386 [721] | 29.218 [742] | 8576 | 541 | 19.223 |
| 1225P | 29.218 [742] | 30.05 [763] | 8895 | 561 | 19.937 |
| 1225NP | 30.05 [763] | 30.05 [763] | - | - | - |
| 1226P | 30.05 [763] | 30.882 [784] | 9214 | 581 | 20.652 |
| 1227P | 30.882 [784] | 31.714 [806] | 9533 | 601 | 21.367 |
| 1228P | 31.714 [806] | 32.546 [827] | 9852 | 622 | 22.083 |
| 1229P | 32.546 [827] | 33.378 [848] | 10172 | 642 | 22.800 |
| 1230P | 33.378 [848] | 34.210 [869] | 10492 | 662 | 23.517 |

(Neutral channels available for all section numbers)

**PREFIX**
___ Z 80 [2032] High Density Polyethylene Channel, Heavy-Duty Frame with Anchor Studs*

**SUFFIX OPTIONS** (Check/specify appropriate options)

**Adapters**
___ -E1 Closed End Cap
___ -E4 4 [102] No-Hub End Outlet
___ -E6 6 [152] No-Hub End Outlet
___ -E8 8 [203] No-Hub End Outlet
___ -E10 10 [254] No-Hub End Outlet
___ -U4 4 [102] No-Hub Bottom Outlet
___ -U6 6 [152] No-Hub Bottom Outlet
___ -U8 8 [203] No-Hub Bottom Outlet
___ -U12 12 [305] No-Hub Bottom Outlet

**Grate Options (Load Classifications are per DIN EN1433)**
___ -DCC Ductile Iron Solid Cover - Class C
___ -DGC Ductile Iron Slotted Grate - Class C*
___ -DGF Ductile Iron Slotted Grate - Class F
___ -GDC Galvanized Ductile Iron Grate - Class C
___ -GDF Galvanized Ductile Iron Grate - Class F
___ -GG Fiberglass Grate
___ -HPD Heel-Proof Longitudonal Ductile Iron Grate - Class C

**Miscellaneous Options**
___ -RC Rebar Clips (Set of 2)
___ -VP Vandal-Proof Lockdown

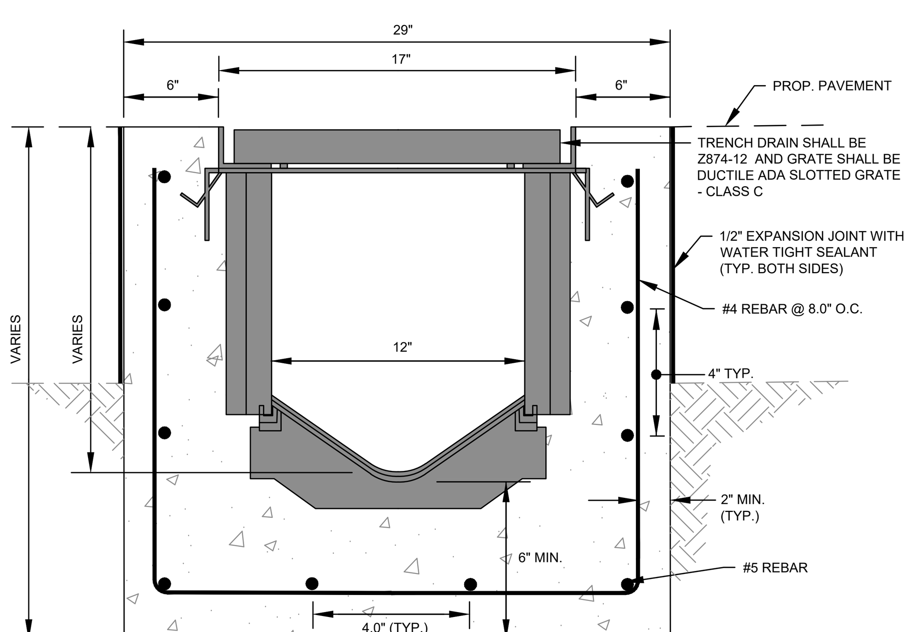
**MADE in the U.S.A. (Load Classifications are per DIN EN1433)**
___ -ADA-USA Meets Americans with Disabilities Act Requirements - Class C
___ -DGC-USA Ductile Iron Slotted Grate - Class C
___ -DGF-USA Ductile Iron Slotted Grate-Class F
___ -GADA-USA Galvanized Ductile ADA Slotted Grate - Class C
___ -GDC-USA Galvanized Ductile Slotted Grate - Class C
___ -GDF-USA Galvanized Ductile Slotted Grate - Class F

**MADE in the U.S.A. Miscellaneous Options**
___ -CBF Black Acid Resistant Coated Frame
___ -DB Bottom Dome Strainer
___ -SF Type 304 Stainless Steel Top Frame

*REGULARLY FURNISHED UNLESS OTHERWISE SPECIFIED

REV. Q DATE: 05/05/11 C.N. NO. 121231
DWG. NO. 64183 PRODUCT NO. Z874-12

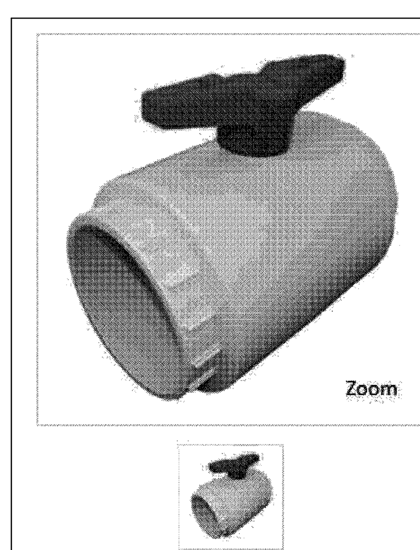
ZURN INDUSTRIES, LLC • SPECIFICATION DRAINAGE OPERATION • 1801 Pittsburgh Ave. • Erie, PA 16514
Phone: 814\455-0921 • Fax: 814\454-7929 • World Wide Web: www.zurn.com
In Canada: ZURN INDUSTRIES LIMITED • 3544 Nashua Drive • Mississauga, Ontario L4V1L2 • Phone: 905\405-8272 Fax: 905\405-1292




NOTES:
1. CONCRETE SHALL BE FIBER REINFORCED, MIN. 4500 PSI @ 28 DAYS.
2. TRENCH DRAIN GRATES MUST BE FASTENED TO TRENCH DRAIN PER MANUFACTURER'S RECOMMENDATIONS.
3. PIPE CONNECTIONS TO TRENCH DRAIN SHALL BE WATERTIGHT.

CAST IN PLACE CONCRETE TRENCH DRAIN WITH GRATE DETAIL
N.T.S.

5 ADD




Please Note: Actual part may differ slightly from image shown

## 6" Flui-PRO PVC Compact Ball Valve- White / Socket (FP-WS-060)

★★★★★ 7 reviews

White PVC compact ball valve with easy-to-operate quarter-turn handle.

Description

This full flow, high performance 6" Flui-PRO compact ball valve (FP-WS-060) is made of white PVC and has socket ends. The compact design allows it to fit in smaller spaces than traditional 6" ball valves. It has a bright red quarter-turn handle that is easy to operate and can be partially opened for easy flow throttling. This compact ball valve can be connected to standard 6" PVC pipe with PVC primer and cement for a watertight seal. Order from PVC Fittings Online today!

- **Size:** 6" x 6"
- **End Types:** Socket
- **Body Material:** White PVC
- **SKU:** FP-WS-060

STATE OF MARYLAND — DANIEL S. SPEAKMAN — NO. 31400 — PROFESSIONAL ENGINEER
2/16/2024 DATE

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 31400, Expiration Date: 1-16-2025.*

REVISIONS

| REV. # | DATE | DESCRIPTION |
|---|---|---|
| 1 | FEB. 2024 | ADDED DETAILS |

McCRONE
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UPPER CHESAPEAKE CORPORATE CENTER
ELKTON, MARYLAND 21921
410.398.1550
www.mccrone-engineering.com
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DATE: NOV. 2022
JOB NUMBER: D3210047
SCALE: AS NOTED
DRAWN BY: AJW
DESIGNED BY: AJW
APPROVED BY: DSS
FOLDER REFERENCE: 2683B

DRAINAGE DETAILS
300 IRISHTOWN ROAD, NORTH EAST, MD 21901
TAX MAP 31, GRID 17, PARCEL 857; ADC MAP 11, GRID G-13
*NORTH EAST MIDDLE AND HIGH SCHOOLS*
FIFTH ELECTION DISTRICT, CECIL COUNTY, MARYLAND
PREPARED FOR: CECIL COUNTY PUBLIC SCHOOLS

SHEET NO.: F-ESD-38a

11720 Beltsville Drive
Suite 600
Calverton, MD 20705
Tel: 301.595.1000
www.grimmandparker.com

G+P GRIMM + PARKER ARCHITECTS
GP #22105

SWPPP PLAN
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/2/2024 | Addendum 5 |

**F-ESD-38a**
12/22/2023
BID SET
© GRIMM AND PARKER ARCHITECTURE, INC.

February 16, 2024 - 2:39pm User: awhallon Q:\D3210047 - NEMS G+P\DWG\ENG\D3210047 - DETAIL SHEETS.dwg.........Tab:ESD-38a DETAILS

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## TYPICAL FINISHES

SPACES NOT LISTED ON THE SCHEDULE TO HAVE THE TYPICAL FINISHES LISTED BELOW:

FLOORS: RSF-1
BASE: RST
WALLS: PTD
CEILING: APC1

GYP. BD. ABOVE H.M. FRAMES AS INDICATED ON SECTIONS. DETAILS TO RECEIVE SAME TOP COATS AS ADJACENT WALLS UNLESS OTHERWISE NOTED.

## WALL KEY

WALLS ON FINISH SCHEDULE ARE DENOTED THUS:

A / B / C / D around AXXX

TYPICAL UNLESS OTHERWISE NOTED.

## FINISH MATERIALS

### FLOORS

| | |
|---|---|
| CONC-1 | CONCRETE WITH HARDENER, BURNISHED, NO COLOR |
| CONC-2 | CONCRETE WITH HARDENER, WITH COLOR STAIN |
| CONC-3 | CONCRETE WITH TRAFFIC COATING |
| CPT | CARPET |
| PT | PORCELAIN TILE |
| RES | RESINOUS FLOORING W/ INTEGRAL BASE |
| RTF | RESILIENT TILE FLOORING |
| RSF-1 | RESILIENT SHEET FLOORING |
| RSF-2 | RESILIENT SHEET FLOORING - KITCHEN |
| RBR-1 | RUBBER FLOORING, TREADS, RISERS, SKIRTINGS |
| SPORT-1 | RUBBER SPORTS FLOOR (WOOD LOOK, AUXILIARY GYM) |
| SPORT-2 | RUBBER SPORTS FLOOR (NON-WOOD LOOK, WEIGHT ROOM) |
| VCTT | RESILIENT CARPET TILE |
| WD-1 | WOOD FLOOR - GYMNASIUM |
| WD-2 | WOOD FLOOR - STAGE |

### BASES

| | |
|---|---|
| NONE | NO BASE |
| PT | PORCELAIN TILE |
| RES | RESINOUS BASE |
| RST | RESILIENT BASE |
| VRB | VENTED RUBBER BASE |
| WD | WOOD BASE |

### CEILINGS

| | |
|---|---|
| APC-1 | ACOUSTIC PANEL CLG. - 2'X4' |
| APC-2 | ACOUSTIC PANEL CLG. - 2'X2' |
| APC-3 | ACOUSTIC PANEL CLG. - 2'X4' |
| APC-4 | ACOUSTIC PANEL CLG. - 2'X2' |
| APC-5 | ACOUSTIC CLG. BAFFLES |
| APC-6 | ACOUSTIC CLG. BAFFLES |
| APC-7 | ACOUSTIC SLAT CEILING |
| EXP | EXPOSED CONSTRUCTION - PAINTED |
| APC-8 | VINYL FACED GYSUM CLG. |
| GYP | GYPSUM BOARD CLG. - PAINTED |

### WALLS

| | |
|---|---|
| CT | CERAMIC TILE |
| GWP | GRAPHIC WALL PANEL |
| PT | PORCELAIN TILE |
| PTD | PAINTED |
| HPC | HIGH PERFORMANCE COATING |
| WP-1 | WALL PROTECTION PANEL |

## TYPICAL NOTES

1. REFER TO FLOOR PLANS, CEILING PLANS, INTERIOR ELEVATIONS, SECTIONS AND DETAILS FOR ADDITIONAL INFORMATION AND EXTENT OF EACH FINISH WHEN MORE THAN ONE FINISH IS INDICATED FOR ANY SPACE.
2. SEE CEILING PLANS FOR HEIGHTS OF CEILINGS AND LOCATIONS AND HEIGHTS OF BULKHEADS, SOFFITS, ETC.
3. PAINT ALL EXPOSED STEEL LADDERS, LINTELS, HUNG PLATES, HAND AND GUARD RAILS, STAIRS AND STRINGERS.
4. PAINT ALL EXPOSED STEEL COLUMNS, TRUSSES, JOISTS, BEAMS, DECK, AND MISCELLANEOUS BRIDGING, ANGLES, PLATES, ETC.
5. INSTALL CERAMIC/PORCELAIN TILE COVE BASE FLUSH WITH FLOOR TILE AND FLUSH WITH CERAMIC/PORCELAIN WALL TILE.
6. FIELD PAINT ALL EXPOSED, NON-FACTORY FINISHED STRUCTURAL AND MEP COMPONENTS.
7. PROVIDE SEALANT AT INTERSECTIONS OF DISSIMILAR MATERIALS, COMPLYING WITH SPECIFICATIONS.
8. REFER TO INTERIOR ELEVATIONS AND SECTIONS AND MATERIAL SCHEDULE FOR ADDITIONAL FINISH INFORMATION. PROVIDE ALL FINISH MATERIALS SHOWN IN PLANS, ELEVATIONS OR SECTIONS AS NOTED OR DEPICTED ON THE DRAWINGS, SCHEDULES, AND SPECIFICATIONS.
9. BRING CONFLICTS TO THE ARCHITECTS ATTENTION DURING THE BIDDING PERIOD FOR CLARIFICATION.
10. WALL AND CEILING FINISHES TO INCLUDE ALL PROJECTIONS, BEAM ENCLOSURES, RECESSES, BULKHEADS, MATERIAL CHANGES, OR OTHER ENCLOSURES.
11. ELECTRICAL OUTLETS, CLOCKS, P.A. SPEAKERS OR OTHER DEVICES SHOWN ON THE ARCHITECTURAL DRAWINGS SERVE TO CALL ATTENTION TO THE PRESENCE OF SUCH DEVICES. NOT ALL DEVICES MAY BE SHOWN ON ARCHITECTURAL DRAWINGS. CONSULT THE OTHER DRAWINGS FOR FURTHER INFORMATION AND ADVISE ARCHITECT OF ANY CONFLICT OF LOCATION OR TYPE OF DEVICES SHOWN. COORDINATE ALL WORK, FINISHES AND DEVICES.
12. PROVIDE MOISTURE RESISTANT GYPSUM BOARD AT TOILET ROOMS, & SERVICE CLOSETS FOR WALLS DESIGNATED AS GYPSUM BOARD WALL TYPES. PROVIDE TILE BACKER BOARD AT WALLS DESIGNATED AS GYPSUM BOARD WALL TYPES WITH TILE FINISH.
13. FIELD PAINT ELECTRICAL PANELS EXCEPT PANELS LOCATED IN ELECTRICAL CLOSETS AND MECHANICAL ROOMS.
14. BRING CONFLICTS BETWEEN THE FINISH SCHEDULES AND MATERIALS SHOWN ON OTHER DRAWINGS (AND/OR SPECIFICATIONS) TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY. IF A CONFLICT EXISTS IN/BETWEEN DRAWINGS (AND/OR SPECIFICATIONS), THE MORE STRINGENT AND MORE COSTLY REQUIREMENT TO APPLY.
15. PAINT COLUMN COVERS TO MATCH ADJACENT WALL PATTERN AND COLOR REGARDLESS OF MATERIAL.
16. RESINOUS FLOORING TO EXTEND WALL TO WALL AND CONTINUE BELOW ANY CASEWORK WITHIN SPACE.
17. ALL RESILIENT FLOORING SHALL EXTEND BELOW CASEWORK AND BE SCRIBED TO WALLS, COLUMNS, FLOOR OUTLETS, AND OTHER APURTENANCES.
18. PROVIDE SOLID SURFACE COUNTERS AT SINK LOCATIONS.
19. AT CLASSROOMS AND ADMINISTRATIVE AREAS, COUNTERTOPS TO BE PLASTIC LAMINATE.
20. AT GWP LOCATIONS, INCLUDE METAL EDGE TRIM, SCHLUTER VINPRO-S, ALL ALL EXPOSED EDGES.
21. WHERE INDICATED AT STAIRS, RTF IS THE STAIR LANDING(S) AND RBR IS THE TREADS & RISERS AT THE STAIRS.

## NUMBERED REMARKS

WHEN SHOWN IN THE REMARKS COLUMN OF THE FINISH SCHEDULE:

1. EXPOSED CONSTRUCTION (STRUCTURE, ROOF DECK, MECHANICAL EQUIPMENT, AND DUCTS) TO BE PAINTED.
2. EXPOSED CONSTRUCTION PAINTED FLAT BLACK.
3. PROVIDE TILE AT FLOOR AND WALLS (FULL HEIGHT) OF SHOWER.
4. SEE INTERIOR ELEVATIONS FOR ACOUSTIC PANEL LOCATIONS.
5. SEE INTERIOR ELEVATIONS FOR WALL SAFETY PADS.
6. PROVIDE WALL PROTECTION WP-1 AT WALL BEHIND MOP SINK. WIDTH OF SURFACING TO MATCH WIDTH OF SINK AND HEIGHT TO EXTEND TO 6" ABOVE FAUCET PIPING CENTERLINE. FOLLOW MANUFACTURERS RECOMMENDATION TO SEAL ALL PANEL BUTT JOINTS AND JOINT TO BASE CONDITION WITH SANITARY SEALANT.
7. SPACE TO RECEIVE STAINED WOOD BASE. COORDINATE WITH AUDTIORIUM DETAILS IN A800 SERIES.
8. SPACE TO RECEIVE ACOUSTICAL PANELS. COORDINATE WITH MATERIAL & ACOUSTICAL PANEL SCHEDULES, SPECS, AND ELEVATIONS.
9. WP-1 TO START AT BASE AND TERMINATE AT 7'-0" AFF.
10. PROVIDE TILE (PT) AT WALLS FULL HEIGHT AT SHOWERS.
11. PROVIDE TILE (CT) FULL HEIGHT AT ALL WET WALLS TO INLCUDE TOILETS, SINKS, DRINKING FOUNTAINS WITH BASE AS SCHEDULED. AT NON WET WALLS IN TOILET AREAS PROVIDE HPC. ALL OTHER AREAS OUTSIDE TOILETING TO RECEIVE PTD.

| RM. NO. | NAME | FLR | BASE | WALLS A | WALLS B | WALLS C | WALLS D | CLG. MATL. | REMARKS | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|
| A01 | VESTIBULE | CPT | RST | PTD | PTD | PTD | PTD | APC-2 | | |
| A02 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ APC-2/GYP | | 5 ADD |
| A03 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A04 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A11 | VESTIBULE | CPT | RST | PTD | PTD | PTD | PTD | EXP | | |
| A12 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | EXP | | |
| A13 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A14 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-2 | | 5 ADD |
| A15 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A16 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A17 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| B01 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-7 | | |
| B02 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | 5 ADD |
| B03 | CORRIDOR | CONC-1 | RST | PTD | PTD | PTD | PTD | APC2 | | |
| B11 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| B22 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C01 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | | 5 ADD |
| C02 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C03 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C11 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-2 | | |
| C12 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C13 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C21 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | | 5 ADD |
| C22 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C23 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| D11 | CORRIDOR | RSF-1 | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| D12 | CORRIDOR | RSF-1 | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | 5 ADD |
| E11 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| E12 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| F10 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | | |
| F11 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ APC-2 | | |
| F21 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ APC-2 | | |
| F31 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ APC-2 | | |
| G11 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ APC-2 | | |
| G21 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ APC-2 | | |
| G31 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ APC-2 | | |
| A001 | AUXILIARY GYM | SPORT-1 | RST | PTD | PTD | PTD | PTD | EXP/ GYP | 1, 5, 4 | |
| A002 | COMMUNITY USE/ STORAGE | RTF | RST | PTD | PTD | PTD | PTD | EXP | | |
| A003 | OFFICIALS/ COMMUNITY SUPPORT | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | | |
| A004 | COMMUNITY PANTRY | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A005 | CHEER MAT STORAGE | RTF | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| A006 | HS GYMNASIUM | WD-1 | VRB | PTD | PTD | PTD | PTD | EXP | 1, 5, 4, 8 | |
| A007 | HS PE STORAGE | RTF | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| A007A | HS PE STORAGE | RTF | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| A008 | HS ATHLETIC STORAGE | RTF | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| A009 | CONCESSIONS | RES | RES | PTD | PTD | PTD | PTD | APC-1 | | |
| A010 | EVENT LAVATORIES | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| A011 | EVENT LAVATORIES | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| A012 | TRAINING ROOM | SPORT-2 | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A013 | HS LOCKER ROOM | RES | RES | PTD | PTD | PTD | PTD | GYP | 10, 11 | |
| A014 | HS PE OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A014A | HS PE TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| A015 | HS PE OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A015A | HS PE TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| A016 | HS LOCKER ROOM | RES | RES | PTD | PTD | PTD | PTD | GYP | 10, 11 | |
| A016A | TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| A017 | FITNESS/ CARDIO ROOM | SPORT-1 | RST | PTD | PTD | PTD | PTD | EXP/ GYP | 1 | |
| A018 | HS WEIGHT ROOM | SPORT-2 | RST | PTD | PTD | PTD | PTD | EXP/ GYP | 1 | |
| A019 | IDF | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| A020 | MS LOCKER ROOM | RES | RES | PTD | PTD | PTD | PTD | GYP | 10, 11 | |
| A020A | TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| A021 | MS PE OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A021A | MS PE TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| A022 | MS LOCKER ROOM | RES | RES | PTD | PTD | PTD | PTD | GYP | 10, 11 | |
| A023 | MS PE OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A023A | MS PE TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| A024 | MS ATHLETIC STORAGE | RTF | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| A025 | MS GYMNASIUM | WD-1 | VRB | PTD | PTD | PTD | PTD | EXP | 1, 4, 8 | |
| A026 | MS PE STORAGE | RTF | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| A027 | MS PE STORAGE | RTF | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| A028 | SERVICE CLOSETS/ EQUIPMENT | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1, 6 | |
| A029 | LAUNDRY | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| A030 | ATHLETIC DIRECTOR | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A031 | MS WEIGHT ROOM | SPORT-1 | RST | PTD | PTD | PTD | PTD | EXP/ GYP | 1 | |
| A031A | WEIGHT ROOM STORAGE | SPORT-1 | RST | PTD | PTD | PTD | PTD | EXP/ GYP | 1 | 5 ADD |
| A101 | LOBBY/ RECEPTION | RTF | RST | PTD | PTD | PTD | PTD | APC-2 | | |
| A102 | GENERAL OFFICE AREA | RTF | RST | PTD | PTD | PTD | PTD | APC-2 | | |
| A103 | CONFERENCE ROOM | VCTT | RST | PTD | PTD | PTD | PTD | APC-2 | | |
| A104 | MS OFFICE WORK AREA | RTF | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | | |
| A105 | MS FACULTY MAILBOXES | RTF | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | | |
| A107 | HS FACULTY MAILBOXES | RTF | RST | PTD | PTD | PTD | PTD | APC-2 | | 5 ADD |
| A108 | CONFERENCE ROOM | VCTT | RST | PTD | PTD | PTD | PTD | APC-2 | | |
| A109 | MS TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| A110 | MS AP OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A111 | MS TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| A112 | MS AP OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A113 | MS PRINCIPAL'S OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A114 | MS AP OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A115 | LUNCHEONETTE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A116 | MS OFFICE AND INSTRUCTIONAL SUPPLY | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A117 | HS PRINCIPAL'S OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A118 | HS AP OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A119 | HS AP OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A120 | MS SECURE RECORDS AND STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A121 | HS AP OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A122 | ELECTRICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| A123 | HS GUIDANCE TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| A124 | HS IEP RECORD ROOM/ GA WORK | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A125 | MS STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A126 | MS GUIDANCE RECORDS ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | 5 ADD |
| A127 | HS GUIDANCE RECEPTION | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A128 | HS CAREER CENTER | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A129 | HS TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| A131 | HS TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| A132 | HS OFFICE AND INSTRUCTIONAL SUPPLY | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A133 | HS SECURE RECORDS AND STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A134 | HS SCHOOL COUNSELOR OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A135 | HS GUIDANCE RECORDS ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A136 | HS SCHOOL COUNSELOR OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A137 | HS SCHOOL COUNSELOR OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A138 | HS SCHOOL COUNSELOR OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A139 | STORAGE - FRESHMAN | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A140 | HS OUTSIDE AGENCY INTERVENTION | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | 5 ADD |
| A141 | HS BUILDING COORDINATOR OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A142 | HS BUILDING COORDINATOR OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A143 | HS PSYCHOLOGIST OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-2 | | |
| A144 | HS INTERIM INSTRUCTIONAL SUPPORT | RTF | RST | PTD | PTD | PTD | PTD | APC1 | | 5 ADD |
| A145 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| A146 | HS CONFERENCE ROOM | VCTT | RST | PTD | PTD | PTD | PTD | APC-2 | | |
| A147 | HS CASE MANAGER OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A150 | HS HEALTH WAITING | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A151 | MS HEALTH WAITING | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A152 | HS TOILET ROOM | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |

| RM. NO. | NAME | FLR | BASE | WALLS A | WALLS B | WALLS C | WALLS D | CLG. MATL. | REMARKS | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|
| A153 | HS TOILET ROOM | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| A154 | HS NURSE OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A155 | HS COT AREA | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A156 | HS TREATMENT EXAM ISOLATION | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A157 | HS STORAGE (LAUNDRY) | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A158 | MS NURSE OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A159 | MS TOILET ROOM | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| A160 | MS COT AREA | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A161 | MS TREATMENT EXAM ISOLATION | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A162 | MS STORAGE (LAUNDRY) | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A163 | HS MODIFIED INSTRUCTIONAL PROGRAM | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| A164 | HS MIP LAVATORY | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | | |
| A165 | MS GUIDANCE RECEPTION | RTF | RST | PTD | PTD | PTD | PTD | APC-2 | | 5 ADD |
| A166 | MS CONFERENCE ROOM | VCTT | RST | PTD | PTD | PTD | PTD | APC-2 | | |
| A167 | MS OUTSIDE AGENCY INTERVENTION | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A168 | MS OUTSIDE AGENCY INTERVENTION | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | 5 ADD |
| A169 | MS SCHOOL COUNSELOR OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A170 | MS BUILDING COORDINATOR OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A171 | MS SCHOOL COUNSELOR OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A172 | MS BUILDING COORDINATOR OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A173 | MS SCHOOL COUNSELOR OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A174 | IDF | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| A174A | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| A175 | MS CONFERENCE ROOM | VCTT | RST | PTD | PTD | PTD | PTD | APC-2 | | |
| A176 | MS GUIDANCE TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| A177 | MS PSYCHOLOGIST OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| A179 | MS STUDENT SUPPORT CENTER | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| B001 | HS CAFETERIA | RSF-1 | RST | PTD | PTD/ GWP | PTD | PTD/ GWP | APC-4/ APC-5/ GYP | 4 | 5 ADD |
| B002 | HS AUXILIARY STORAGE | RTF | RST | PTD | PTD | PTD | PTD | EXP | | |
| B003 | CHAIR STORAGE | RTF | RST | PTD | PTD | PTD | PTD | EXP | | |
| B004 | WOMEN'S TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| B004A | GENDER NEUTRAL TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| B005 | MEN'S TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| B006 | SERVICE AREA | RSF-2 | RSF-2 | WP-1/ HPC | WP-1/ HPC | WP-1/ HPC | WP-1/ HPC | APC-8 | 9 | |
| B007 | MS CAFETERIA | CPT | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | | |
| B008 | GENDER NEUTRAL TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| B009 | GENDER NEUTRAL TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| B010 | MS AUXILIARY STORAGE | RTF | RST | PTD | PTD | PTD | PTD | EXP | | 5 ADD |
| B011 | SERVICE AREA | RSF-2 | RSF-2 | WP-1/ HPC | WP-1/ HPC | WP-1/ HPC | WP-1/ HPC | APC-8 | 9 | |
| B012 | PRODUCTION AREA | RSF-2 | RSF-2 | WP-1/ HPC | WP-1/ HPC | WP-1/ HPC | WP-1/ HPC | APC-8 | 9 | |
| B013 | LOCKER AREA | PT | PT | HPC | HPC | HPC | HPC | APC-1 | | |
| B013A | STAFF TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| B014 | UTILITY AREA | CONC-1 | RST | PTD | PTD | PTD | PTD | APC-1 | 1 | |
| B015 | OFFICE AREA | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| B017 | DISH/POT WASHING AREA | RSF-2 | RSF-2 | WP-1/ HPC | WP-1/ HPC | WP-1/ HPC | WP-1/ HPC | APC-8 | 9 | |
| B018 | DRY STORAGE AREA | RSF-2 | RSF-2 | WP-1/ HPC | WP-1/ HPC | WP-1/ HPC | WP-1/ HPC | APC-8 | 9 | |
| B019 | REFRIGERATED STORAGE AREA | RSF-2 | RSF-2 | N/A | N/A | N/A | N/A | N/A | | |
| B020 | FROZEN STORAGE AREA | RSF-2 | RSF-2 | N/A | N/A | N/A | N/A | N/A | | |
| B021 | RECEIVING AREA | CONC-1 | RST | PTD | PTD | PTD | PTD | APC-1 | 1 | |
| B022 | GROUNDS EQUIPMENT STORAGE | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| B023 | GENERAL STORAGE | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| B024 | MDF | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| B025 | ELECTRICAL EQUIPMENT AREA | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| B026 | STAFF LOCKER | PT | PT | HPC | HPC | HPC | HPC | APC-1 | | |
| B026A | STAFF LAVATORY/ SHOWER | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 3, 11 | |
| B027 | CUSTODIAL OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| B028 | FIRE PUMP ROOM | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| B029 | WATER ROOM | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| B030 | CAN WASH | RES | RES | PTD | PTD | PTD | PTD | EXP | 1 | |
| B101 | MS MODIFIED INSTRUCTIONAL PROGRAM | RTF | RST | PTD | PTD | PTD | PTD | APC1 | | 5 ADD |
| B102 | MS MIP LAVATORY | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | | |
| B103 | MS OT/PT OFFICE/ TREATMENT | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| B104 | READING INTERVENTION (CAS) | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| B105 | MS RISE-C | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| B106 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| B107 | MS INTRO TO TECHNOLOGY | RTF | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| B108 | INTRO TO TECHNOLOGY STORAGE | RTF | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| B109 | VESTIBULE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | 5 ADD |
| B110 | MS LAVATORY | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| B111 | MS SENSORY ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC1 | | 5 ADD |
| B112 | MS TRANSITIONAL CLASSROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| B201 | MEN'S TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| B201A | GENDER NEUTRAL TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| B202 | WOMEN'S TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| B203 | ELEVATOR MACHINE ROOM | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| B204 | HS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| B204A | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| B205 | TEACHER TOILET ROOM | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| B206 | TEACHER DINING/ WORK ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| B207 | HS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| B208 | HS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| B209 | FA SCIENCE PREP ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| B210 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| B211 | HS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| B212 | HS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C001 | MS HEALTH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C002 | READING INTERVENTION (CAS) | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C003 | MS SPEECH PATHOLOGIST OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C004 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C005 | IDF | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| C006 | MS ENGLISH STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C007 | MS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C008 | WOMEN'S TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| C008A | GENDER NEUTRAL TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| C009 | MS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C010 | MEN'S TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| C011 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C012 | MS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C013 | MS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C014 | SCIENCE PREP ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C015 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C016 | MS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C017 | MS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | 8 | 5 ADD |
| C018 | COLLAB | CPT | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | | |
| C019 | TEACHER DINING/ WORK ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C020 | ELECTRICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C021 | MS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C021A | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C022 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C023 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C024 | MS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C025 | TEACHER TOILET ROOM | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| C026 | SERVICE CLOSETS/ EQUIPMENT | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1, 6 | |
| C027 | MS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C028 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C029 | MS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C030 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C031 | MS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C032 | MS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C101 | MS COMPUTER SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |

| RM. NO. | NAME | FLR | BASE | WALLS A | WALLS B | WALLS C | WALLS D | CLG. MATL. | REMARKS | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|
| C101A | TECHNOLOGY STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C102 | READING INTERVENTION (CAS) | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C103 | MS SPEECH PATHOLOGIST OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C104 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C105 | IDF | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| C106 | PARAPROFESSIONAL LOCKER | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C107 | MS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C108 | WOMEN'S TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| C108A | GENDER NEUTRAL TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| C109 | MS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C110 | MEN'S TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| C111 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C112 | MS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C113 | MS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C114 | SCIENCE PREP ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C115 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C116 | MS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C117 | MS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C118 | COLLAB | CPT | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | 8 | |
| C119 | TEACHER DINING/ WORK ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C120 | ELECTRICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C121 | MS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C121A | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C122 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C123 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C124 | MS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C125 | TEACHER TOILET ROOM | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| C126 | SERVICE CLOSETS/ EQUIPMENT | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1, 6 | |
| C127 | MS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C128 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C129 | MS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C130 | MS SOCIAL STUDIES STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C131 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C132 | MS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C133 | MS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C134 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C201 | MS WORLD LANGUAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C202 | READING INTERVENTION (CAS) | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C203 | MS MATH STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C204 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C205 | IDF | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| C206 | MS ESOL | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C207 | MS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C208 | WOMEN'S TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| C208A | GENDER NEUTRAL TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| C209 | MS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C210 | MEN'S TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| C211 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C212 | MS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C213 | MS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C214 | SCIENCE PREP ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C215 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C216 | MS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C217 | MS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C218 | COLLAB | CPT | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | 8 | |
| C219 | TEACHER DINING/ WORK ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| C220 | ELECTRICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C221 | MS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C221A | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C222 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C223 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | | |
| C224 | MS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C225 | TEACHER TOILET ROOM | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| C226 | SERVICE CLOSETS/ EQUIPMENT | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1, 6 | |
| C227 | MS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C228 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C229 | MS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C230 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C231 | MS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C232 | MS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| C233 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| C300 | MECHANICAL PENTHOUSE | CONC-3 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| D101 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| D102 | SERVICE CLOSETS/ EQUIPMENT | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1, 6 | |
| D102A | GENDER NEUTRAL TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| D103 | MS PBIS STORE/ STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| D104 | VESTIBULE | VCTT | RST | PTD | PTD | PTD | PTD | GYP | | |
| D105 | EVENT LAVATORIES | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | | |
| D106 | EVENT LAVATORIES | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | | |
| D107 | HS STUDENT SUPPORT CENTER | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| D108 | MS ART STUDIO | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| D109 | MS ART STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| D111 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| D112 | HS GENERAL ART/ SCULPTURE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| D113 | KILN ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| D114 | IDF | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| D115 | HS ART STUDIO | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| D116 | HS ART STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| D117 | HS PHOTOGRAPHY/ GRAPHIC | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| D118 | HS DIGITAL PHOTOGRAPHY STUDIO | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| D119 | DIGITAL PHOTO STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| D120 | AUDITORIUM | CONC-2/ VCTT | WD | PTD | PTD | PTD | PTD | EXP/ GYP | 2, 4, 7, 8 | |
| D120A | ORCHESTRA PIT | VCTT | WD | PTD | PTD | PTD | PTD | EXP/ GYP | 2, 4, 7, 8 | |
| D121 | STAGE | WD-2 | RST | PTD/ GWP | PTD/ GWP | PTD/ GWP | PTD/ GWP | EXP | 2, 4, 7, 8 | |
| D201 | BALCONY | CONC-2/ VCTT | WD | PTD | PTD | PTD | PTD | EXP/ GYP | 2, 4, 7, 8 | |
| D202 | CONTROL BOOTH | VCTT | RST | PTD | PTD | PTD | PTD | APC1 | | 5 ADD |
| E100 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| E101 | MS VOCAL | RTF | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | 8 | 5 ADD |
| E102 | MS MUSIC OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| E103 | MS CHOIR STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| E104 | MS BAND/ ORCHESTRA | RTF | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | 8 | 5 ADD |
| E105 | MS INSTRUMENT STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| E106 | HS CHOIR STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| E107 | HS KEYBOARD | RTF | RST | PTD/AWP-3 | AWP-3 | PTD/AWP-3 | PTD/AWP-3 | APC1 | 8 | 5 ADD |
| E108A | TEACHER TOILET ROOM | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| E108B | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| E109 | HS VOCAL | RTF | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | 8 | 5 ADD |
| E110 | HS MUSIC OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| E111 | STAGE CONSTRUCTION | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| E112 | HS BAND/ ORCHESTRA | RTF | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | 8 | |
| E113 | HS INSTRUMENT STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| E114 | MARCHING BAND EQUIPMENT | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| E115 | DRESSING ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| E116 | DRESSING ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| EL01 | ELEVATOR | RSF-1 | N/A | N/A | N/A | N/A | N/A | N/A | | |
| EL02 | ELEVATOR | RSF-1 | N/A | N/A | N/A | N/A | N/A | N/A | | |
| EL03 | ELEVATOR | RSF-1 | N/A | N/A | N/A | N/A | N/A | N/A | | |
| F001 | MAIN LIBRARY | CPT/RTF | RST | PTD/AWP-4 | PTD | PTD/AWP-4 | PTD | APC-4/ APC-6/ GYP | 4, 8 | |
| F002 | LARGE GROUP INSTRUCTION | CPT | RST | PTD | PTD | PTD | PTD | APC-4/ APC-6/ GYP | 4, 8 | |
| F003 | WORK ROOM/ STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| F004A | TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| F005 | MULTIMEDIA PRODUCTION/ TV STUDIO | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| F005A | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| F11A | ELEVATOR MACHINE ROOM | CONC-1 | N/A | PTD | PTD | PTD | PTD | EXP | | |
| F11B | DRAMA STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |

| RM. NO. | NAME | FLR | BASE | WALLS A | WALLS B | WALLS C | WALLS D | CLG. MATL. | REMARKS | REVISION |
|---|---|---|---|---|---|---|---|---|---|---|
| F101 | MAIN LIBRARY MEZZANINE | CPT | RST | PTD | PTD | PTD | PTD | APC-4/ APC-6/ GYP | 4, 8 | |
| F102 | LARGE GROUP INSTRUCTION | CPT | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| F103 | LARGE GROUP INSTRUCTION | CPT | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| F104 | TEACHER DINING/ WORK ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| F105 | PARAPROFESSIONAL LOCKER | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| F106 | SERVICE CLOSETS/ EQUIPMENT | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| F107 | HOSPITALITY AND TOURISM MANAGEMENT | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| F107A | PANTRY | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| F108 | TEACHER TOILET ROOM | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| F109 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| F201 | HS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| F201A | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| F202 | HS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| F203 | HS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| F203A | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| F204 | FA READING INTERVENTION (CAS) | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| F205 | FA SPECIAL ED OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| F206 | HS SOCIAL STUDIES STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| F207 | TEACHER DINING/ WORK ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| F208 | TEACHER TOILET ROOM | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| F209 | HS WORLD LANGUAGE STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| F210 | HS ENGLISH STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| F212 | SERVICE CLOSETS/ EQUIPMENT | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1, 6 | |
| F213 | HS WORLD LANGUAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| F214 | HS ESOL | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| F300 | MECHANICAL PENTHOUSE | CONC-3 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| F301 | SERVICE CLOSETS/ EQUIPMENT | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1, 6 | |
| F302 | HS MATH STORAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| F303 | HS CASE MANAGER OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| F304 | HS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| F305 | HS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| F306 | TEACHER DINING/ WORK ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| F307 | READING INTERVENTION (CAS) | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| F308 | TEACHER TOILET ROOM | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| G12 | CORRIDOR | RTF | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | | |
| G102 | IDF | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| G104 | HS TRANSITIONAL CLASSROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G106 | HS SPEECH PATHOLOGIST OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| G107 | READING INTERVENTION (CAS) | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G108 | HS CASE MANAGER OFFICE | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| G109 | HS LAVATORY | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | | |
| G110 | HS SENSORY ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC1 | | 5 ADD |
| G111 | HS TRANSITIONAL CLASSROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G112 | BUSINESS LAB | VCTT | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G113 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| G114 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| G115 | WOMEN'S TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| G115A | GENDER NEUTRAL TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| G116 | MEN'S TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| G117 | BUSINESS LAB | VCTT | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G118 | COLLAB | CPT | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | 8 | |
| G119 | PLTW PRE- ENGINEERING | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G120 | CTE SPECIALIZED STORAGE | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| G121 | ELECTRICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| G122 | TECHNOLOGY PRODUCTION LAB | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| G123 | CTE BUSINESS & GENERAL | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| G124 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| G125 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| G126 | TECHNOLOGY PRODUCTION LAB | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| G127 | PLTW COMPUTER SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G128 | TECHNOLOGY CLASSROOM | CONC-1 | RST | PTD | PTD | PTD | PTD | APC-1/ EXP | 1 | |
| G129 | MECHANICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| G130 | TECHNOLOGY PRODUCTION LAB | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| G200 | IDF | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| G201 | HS WORLD LANGUAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G202 | HS WORLD LANGUAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G203 | HS WORLD LANGUAGE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G204 | HS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G205 | HS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G206 | HS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G207 | HS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G208 | WOMEN'S TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| G208A | GENDER NEUTRAL TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| G209 | MEN'S TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| G210 | COLLAB | CPT | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | 8 | |
| G211 | HS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G211A | ELECTRICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| G212 | HS SOCIAL STUDIES | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G213 | HS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G214 | HS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G215 | HS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G216 | HS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G217 | HS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G218 | HS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G219 | HS ENGLISH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G300 | IDF | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |
| G301 | HS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G302 | HS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G303 | HS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G304 | SCIENCE PREP ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| G305 | HS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G306 | HS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G307 | HS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G308 | WOMEN'S TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| G308A | GENDER NEUTRAL TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| G309 | MEN'S TOILET | PT | RES | CT/ HPC | CT/ HPC | CT/ HPC | CT/ HPC | GYP | 11 | |
| G310 | COLLAB | CPT | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | 8 | |
| G311 | HS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G312 | CHEMISTRY PREP ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| G313 | HS MATH | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G314 | ELECTRICAL | CONC-1 | --- | PTD | PTD | PTD | PTD | EXP | 1 | |
| G315 | HS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G316 | SCIENCE PREP ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| G317 | HS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G318 | HS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G319 | CHEMICAL STORAGE | RES | RES | PTD | PTD | PTD | PTD | APC-1 | | |
| G320 | HS SCIENCE | RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| G321 | PHYSICS PREP ROOM | RTF | RST | PTD | PTD | PTD | PTD | APC-1 | | |
| G400 | MECHANICAL PENTHOUSE | CONC-3 | CONC-3 | PTD | PTD | PTD | PTD | EXP | 1 | |
| ST01 | STAIR 1 | RBR-1/ RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| ST02 | STAIR 2 | RBR-1/ RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| ST03 | STAIR 3 | RBR-1/ RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | 5 ADD |
| ST04 | STAIR 4 | RTF | RST | PTD | PTD | PTD | PTD/ PT | APC-5/ GYP | | |
| ST05 | STAIR 5 | RSF-1 | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | | |
| ST06 | STAIR 6 | RBR-1/ RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| ST07 | STAIR 7 | RBR-1/ RTF | RST | PTD | PTD | PTD | PTD | EXP | | |
| ST08 | STAIR 8 | RBR-1/ RTF | RST | PTD | PTD | PTD | PTD | EXP | | |
| ST09 | STAIR 9 | CPT | RST | PTD | PTD | PTD | PTD | ACP-4/ APC-6/ GYP | | |
| ST10 | STAIR 10 | RBR-1/ RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | 5 ADD |
| ST11 | STAIR 11 | RBR-1/RTF | RST | PTD | PTD | PTD | PTD | APC-2/ GYP | | |
| ST12 | STAIR 12 | RBR-1/ RTF | RST | PTD | PTD | PTD | PTD | APC-1/ GYP | | |
| ST13 | STAIR 13 | CONC-1 | RST | PTD | PTD | PTD | PTD | EXP | 1 | |

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GRIMM + PARKER ARCHITECTS

GP #22105

FINISH SCHEDULE

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 04/02/2024 | ADDENDUM 5 |

A304

12/22/2023
BID SET

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| DOOR # | DOOR NOMINAL SIZE WIDTH | HEIGHT | THK. | DOOR TYPE | DOOR MATL | FRAME MATL | FRAME TYPE | SECTIONS JAMB | HEAD | SILL | DOOR LABEL FIRE RATING | HARDWARE SET | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A01A | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW03 | | | | | 449 | 1,2 |
| A001A | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | SCWD | HM | 05 | J6 | H3 | S4 | | 325 | 1,2 |
| A01B | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW03 | | | | | 448 | 1,2 |
| A001B | 3' - 0" | 7' - 0" | 1 3/4" | FG2 | SCWD | HM | 04 | J6 | H3 | S4 | | 612 | 1 |
| A01C | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW03 | | | | | 448 | 1,2 |
| A002 | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H6 | S4 | | 823 | 10,14 |
| A02A | 6' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 05 | J1 | H3 | - | | 220 | 1,6,13 |
| A02B | 3' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 04 | J1 | H3 | - | | 212 | 1,6,13 |
| A03A | 6' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 06 | J1 | H3 | S1 | | 325 | 1,2 |
| A003A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H6 | S4 | | 912 | 1,9,GALVANIZE FRAME |
| A03B | 6' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 06 | J1 | H3 | S1 | | 325 | 1,2 |
| A003B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H6 | S4 | | 911 | 1,9,GALVANIZE FRAME |
| A004 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H6 | S4 | | 713 | |
| A005 | 6' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | | 822 | 1,10 |
| A006A | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW04 | | | S6 | | 445 | 1,2 |
| A006B | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW04 | | | S6 | | 445 | 1,2 |
| A006C | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW04 | | | S6 | | 445 | 1,2 |
| A006D | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H15 | S6 | | 325 | 1,2 |
| A006E | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H15 | S6 | | 835 | 14 |
| A007 | 6' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J6 | H15 | S6 | | 823 | 10,14 |
| A007A | 6' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | | 822 | 1,10,14 |
| A008 | 6' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J6 | H15 | S6 | | 823 | 10,14 |
| A009A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S3 | | 512 | |
| A009B | 4' - 0" | 4' - 0" | 2" | S | | | - | H7/A421 | K7/A421 | - | | 400 | 20 (SMOKE RATED) |
| A010 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| A011 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| A11A | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW30 | | | - | | 446 | 1,2,23 |
| A11B | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW30 | | | - | | 447 | 1,2,22,23 |
| A012 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 16 | J1/J5 | H1 | - | | 515 | |
| A12A | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | SCWD | HM | 01 | J2 | H2 | - | | 320 | 1,2,5 |
| A12B | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | SCWD | HM | 01 | J2 | H2 | - | | 320 | 1,2,5 |
| A13 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 111 | 1 |
| A013A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S3 | | 516 | 1,GALVANIZE FRAME |
| A013B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S3 | | 516 | 1,GALVANIZE FRAME |
| A14 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 111 | 1 |
| A014 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S3 | | 510 | |
| A014A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 112 | 9,GALVANIZE FRAME |
| A015 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S3 | | 510 | |
| A015A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 112 | 9,GALVANIZE FRAME |
| A016A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S3 | | 516 | 1,GALVANIZE FRAME |
| A016B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S3 | | 516 | 1,GALVANIZE FRAME |
| A016C | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9,GALVANIZE FRAME |
| A17 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | S1 | | 511 | 1 |
| A017A | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 521 | 1,10 |
| A017B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 511 | 1 |
| A18 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 111 | 1 |
| A018A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 511 | 1 |
| A018B | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 521 | 1,10 |
| A019 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 815 | 1,14,22,23 |
| A020A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S3 | | 516 | 1,GALVANIZE FRAME |
| A020B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S3 | | 516 | 1,GALVANIZE FRAME |
| A020C | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9,GALVANIZE FRAME |
| A021 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S3 | | 510 | |
| A021A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 112 | 9,GALVANIZE FRAME |
| A022A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S3 | | 516 | 1,GALVANIZE FRAME |
| A022B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S3 | | 516 | 1,GALVANIZE FRAME |
| A023 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S3 | | 510 | |
| A023A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 112 | 9,GALVANIZE FRAME |
| A024 | 6' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | | 822 | 1,10,14 |
| A025A | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H15 | S6 | | 325 | 1,2 |
| A025B | 6' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H14 | S6 | | 325 | 1,2 |
| A025C | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H15 | S6 | | 836 | |
| A026 | 6' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J6 | H15 | S6 | | 824 | 10 |
| A027 | 6' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J6 | H15 | S6 | | 824 | 10 |
| A028 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 812 | 1 |
| A029 | 4' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 814 | 1 |
| A030 | 3' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 02 | J1/J5 | H1 | - | | 513 | 1 |
| A031 | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 521 | 1,10 |
| A031A | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 823 | 10,14, 1" UNDERCUT |
| A101A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 17 | J1/J5 | H1 | S1 | | 819 | 1,22,23,REMOTE RELEASE |
| A101B | 3' - 0" | 7' - 2" | 1 3/4" | F | SCWD | HM | 17 | J1/J5 | H1 | S1 | | 831 | 1,22,23,REMOTE RELEASE |
| A103 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | S1 | | 110 | |
| A108A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | S1 | | 110 | |
| A108B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | S1 | | 110 | |
| A109 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | S4 | | 113 | 1,9 |
| A110 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A111 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | S4 | | 113 | 1,9 |
| A112 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A113 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A114 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A115 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 114 | 1,6 |
| A116 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 810 | |
| A117 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A118 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A119 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A120 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 810 | |
| A121 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A122 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | S1 | | 816 | 1,11 |
| A123 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | S4 | | 113 | 1,9 |
| A124 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 710 | |
| A125 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 810 | |
| A126 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 810 | |
| A127 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 20 | J1/J5 | H1 | S1 | | 511 | 1 |
| A128A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 21 | J1/J5 | H1 | S1 | | 511 | 1 |
| A128B | 3' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 01 | J2 | H2 | S1 | | 710 | |
| A129 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | S4 | | 113 | 1,9 |
| A131 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | S4 | | 113 | 1,9 |
| A132 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 810 | |
| A133 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 810 | |
| A134 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A135 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 810 | |
| A136 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A137 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A138 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A139 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 810 | |
| A140 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | S1 | | 510 | |
| A141 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A142 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A143 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A144A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | S1 | | 515 | |
| A144B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 515 | |
| A145 | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | S1 | | 826 | 10,11,14 |
| A146 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 10 | J2/J5 | H2 | S1 | | 110 | |
| A147 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A150 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 22 | J1/J5 | H1 | S1 | | 511 | 1 |
| A151 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 19 | J1/J5 | H1 | S1 | | 511 | 1 |
| A152 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | S4 | | 112 | 9 |
| A153 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | S4 | | 112 | 9 |
| A154 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 16 | J2/J5 | H2 | - | | 510 | |
| A156 | 3' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 01 | J2 | H2 | - | | 115 | |
| A157 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 810 | |
| A158 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 16 | J2/J5 | H2 | - | | 510 | |
| A159 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | S4 | | 112 | 9 |
| A161 | 3' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 01 | J2 | H2 | - | | 115 | |
| A162 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 810 | |
| A163 | 3' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 01 | J1 | H1 | S1 | | 515 | |
| A164 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9 |
| A165 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 12 | J1/J5 | H1 | - | | 511 | 1 |
| A166 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 10 | J2/J5 | H2 | S1 | | 110 | |
| A167 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | S1 | | 510 | |
| A168 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | S1 | | 510 | |
| A169 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A170 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A171 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A172 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A173 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A174 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | S1 | | 815 | 1,22,23 |
| A174A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | S1 | | 816 | 1,11,14 |
| A175 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 10 | J2/J5 | H2 | S1 | | 110 | |
| A176 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | S4 | | 113 | 1,9 |
| A177 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J2/J5 | H2 | - | | 510 | |
| A179 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 515 | |
| B01A | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW09 | | | - | | 420 | 1,13 |
| B01B | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW09 | | | - | | 420 | 1,13 |
| B002 | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 822 | 1,10 |
| B003 | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 822 | 1,10 |
| B004 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| B004A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9 |
| B005 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| B006 | 22' - 8" | 8' - 0" | 2" | S | | | - | H4/A421 | K4/A421 | S1 | | 400 | 20 (SMOKE RATED) |
| B007A | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | SCWD | HM | 13 | J1/J5 | H3 | S1 | | 325 | 1,2,14 |
| B007B | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | SCWD | HM | 14 | J5 | H3 | S1 | | 328 | 1,2,14 |
| B007C | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | SCWD | HM | 14 | J5 | H3 | S1 | | 328 | 1,2,14 |
| B008 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9 |

| DOOR # | DOOR NOMINAL SIZE WIDTH | HEIGHT | THK. | DOOR TYPE | DOOR MATL | FRAME MATL | FRAME TYPE | SECTIONS JAMB | HEAD | SILL | DOOR LABEL FIRE RATING | HARDWARE SET | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B009 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9 |
| B010 | 6' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | | 823 | 10,14 |
| B11 | 8' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 05 | J1 | H3 | S1 | | 329 | 1,2,5 |
| B011 | 20' - 0" | 8' - 0" | 2" | S | | | - | H4/A421 | K4/A421 | S1 | | 400 | 20 |
| B012 | 4' - 0" | 7' - 0" | 1 3/4" | F | HM | HM | 01 | J1 | H1 | S1 | | 514 | 1 |
| B013 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 211 | 1,13, INCLUDE GRILLE |
| B013A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 112 | 9, INCLUDE GRILLE |
| B014 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 812 | 1, INCLUDE GRILLE |
| B015 | 3' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 03 | J1/J5 | H1 | S1 | | 510 | |
| B017 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 213 | 1,13,14 |
| B017A | 4' - 0" | 4' - 0" | 2" | S | | | - | H7/A421 | K7/A421 | K7/A421 | | 400 | 20 (SMOKE RATED) |
| B017B | 4' - 0" | 4' - 0" | 2" | S | | | - | H7/A421 | K7/A421 | K7/A421 | | 400 | 20 |
| B018 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 713 | |
| B021 | 6' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | S1 | | 522 | 1,5,10 |
| B022 | 6' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | | 822 | 1,10 |
| B023 | 6' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | | 822 | 1.1 |
| B024 | 3' - 0" | 7' - 0" | 1 3/4" | F | HM | HM | 01 | J1 | H1 | - | | 837 | 1,22,23 |
| B025 | 3' - 0" | 7' - 0" | 1 3/4" | F | HM | HM | 01 | J1 | H1 | - | 90 MIN. | 311 | 1,2 |
| B026 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 117 | 1 |
| B026A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 112 | 9,GALVANIZE FRAME |
| B027 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 08 | J1/J5 | H1 | S1 | | 531 | 1 |
| B101 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 515 | 25 |
| B102 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9 |
| B103 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 515 | |
| B104 | 2' - 8" | 7' - 2" | 1 3/4" | F | SCWD | HM | 12 | J1/J5 | H1 | - | | 515 | 25 |
| B105 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| B105A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 515 | |
| B106 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| B107A | 7' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | S1 | | 523 | 10,25 |
| B107B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 515 | 25 |
| B108 | 7' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | | 823 | 10 |
| B109 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 513 | 1 |
| B110 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9 |
| B111 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 515 | |
| B112 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| B201 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,13 |
| B201A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9 |
| B202 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,13 |
| B203 | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | 90 MIN. | 825 | 1,10,11,14 |
| B204 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| B204A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| B205 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 913 | 1,9 |
| B206 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 513 | 1 |
| B207 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| B208A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| B208B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| B209A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 713 | |
| B209B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 713 | |
| B210 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| B211 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| B212A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| B212B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C001 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C01A | 8' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 05 | J1/J7 | H3 | S5 | | 329 | 1,2,5 |
| C01B | 7' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 05 | J1 | H3 | S5 | | 329 | 1,2,5 |
| C002A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 11 | J1/J5 | H1 | - | | 515 | 25 |
| C002B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 11 | J1/J5 | H1 | - | | 515 | 25 |
| C003 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 517 | 1 |
| C004 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C005 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 815 | 1,22,23 |
| C006 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 811 | 1 |
| C007 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C008 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| C008A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9 |
| C009 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C010 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| C011 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C11A | 7' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 05 | J1 | H3 | S5 | | 329 | 1,2,5 |
| C11B | 8' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 05 | J1 | H3 | - | | 329 | 1,2,5 |
| C012 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C013A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C013B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C014 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | 45 MIN. | 511 | 1 |
| C015 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C016A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,14,25 |
| C016B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C017A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C017B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C019 | 3' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 03 | J1/J5 | H1 | - | | 513 | 1 |
| C020A | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 825 | 1,10,11,14 |
| C020B | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 825 | 1,10,11,14 |
| C021 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C21A | 7' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 05 | J1 | H3 | S5 | | 329 | 1,2,5 |
| C021A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C21B | 8' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 05 | J1 | H3 | - | | 329 | 1,2,5 |
| C022 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C023 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C024 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C025 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 913 | 1,9 |
| C026 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 812 | 1 |
| C027 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C028 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C029 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C030 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C031 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C032 | 3' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 01 | J6 | H6 | - | | 515 | 25 |
| C101 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C101A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 810 | 3/4" UNDERCUT |
| C102A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 11 | J1/J5 | H1 | - | | 515 | 25 |
| C102B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 11 | J1/J5 | H1 | - | | 515 | 25 |
| C103 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 517 | 1 |
| C104 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C105 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 815 | 1,22,23 |
| C106 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 517 | 1 |
| C107 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C108 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| C108A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9 |
| C109 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C110 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| C111 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C112 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C113A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C113B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C114 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | 45 MIN. | 511 | 1 |
| C115 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C116A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C116B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C117A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C117B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C119 | 3' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 03 | J1/J5 | H1 | - | | 513 | 1 |
| C120A | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 825 | 1,10,11,14 |
| C120B | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 825 | 1,10,11,14 |
| C121 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C121A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C122 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C123 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C124 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C125 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 913 | 1,9 |
| C126 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 812 | 1 |
| C127 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C128 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C129 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C130 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 812 | 1 |
| C131 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C132 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C133 | 3' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 02 | J6/J5 | H6 | - | | 515 | 25 |
| C134 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C201 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C202A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 11 | J1/J5 | H1 | - | | 515 | 25 |
| C202B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 11 | J1/J5 | H1 | - | | 515 | 25 |
| C203 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 812 | 1 |
| C204 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C205 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 815 | 1,22,23 |
| C206 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 11 | J1/J5 | H1 | - | | 515 | 25 |
| C207 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C208 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| C208A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9 |
| C209 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C210 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| C211 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C212 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C213 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C213A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C214 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | 45 MIN. | 511 | 1 |

## TYPICAL DETAILS

DOORS NOT LISTED ON THE SCHEDULE TO HAVE THE TYPICAL FINISHES LISTED BELOW:

DOOR:
- WIDTH: 3'-0"
- HEIGHT: 7'-0"
- THICKNESS: 1-3/4"
- TYPE: F
- MATERIAL: SCWD
- DOOR LABEL: NONE

FRAME:
- MATERIAL: HM
- TYPE: 1
- JAMB: J1
- HEAD: H1
- SILL: NONE

## TYPICAL DOOR NOTES

1. COORDINATE AND PROVIDE HARDWARE AS DETAILED IN THE SPECIFICATIONS OR, IF NOT SPECIFIED, PROVIDE HARDWARE (OF EQUAL QUALITY TO THAT SPECIFIED, AND MOST SIMILAR IN FUNCTION TO TYPE OF DOOR) REQUIRED FOR DOORS TO OPERATE AND APPEAR AS INTENDED ON DRAWINGS.
2. PROVIDE BRUSHED STAINLESS STEEL KICK PLATES ON PUSH SIDE OF DOORS WITH PUSH BARS OR CLOSER DEVICES. REFER TO HARDWARE SPECIFICATIONS FOR KICK PLATE DIMENSIONS.
3. PROVIDE EXPOSED HARDWARE WITH BRUSHED-IN FINISH AND "SILVER" METALLIC IN COLOR (ALUMINUM, CHROME, OR STEEL).
4. WHEN EXPOSED CLEAR FINISHED WOOD DOORS ARE PAIRED, TAKE CARE TO SELECT MATCHING GRAIN TYPE AND COLOR FOR EACH DOOR IN PAIR.
5. IF CONFLICT EXISTS BETWEEN DOOR RATING AS SCHEDULED AND WALL/PARTITION TYPE FIRE RATING AS SHOWN ON PLANS, PROVIDE DOOR(S) WITH THE GREATER FIRE RATING OF THE TWO.
6. VERIFY ALL DIMENSIONS AND CLEARANCES, AND COORDINATE UNDERCUTTING REQUIRED TO CLEAR ADJACENT FLOOR MATERIALS.
7. IF A DISCREPANCY EXISTS BETWEEN THE DOOR SCHEDULE REMARKS AND THE HARDWARE SCHEDULE IN THE SPECIFICATIONS, PROVIDE THE HARDWARE NEEDED TO MEET THE MORE STRINGENT OF THE REQUIREMENTS.
8. SEE SPECIFICATIONS FOR SCHEDULED HARDWARE SETS.
9. PROVIDE CONTINUOUS WEATHERSTRIPPING AND DOOR BOTTOM SEALS AT EXTERIOR DOORS AS SPECIFIED.

## DOOR UNDERCUTS

PROVIDE THE FOLLOWING UNDERCUTS AT ALL DOORS:

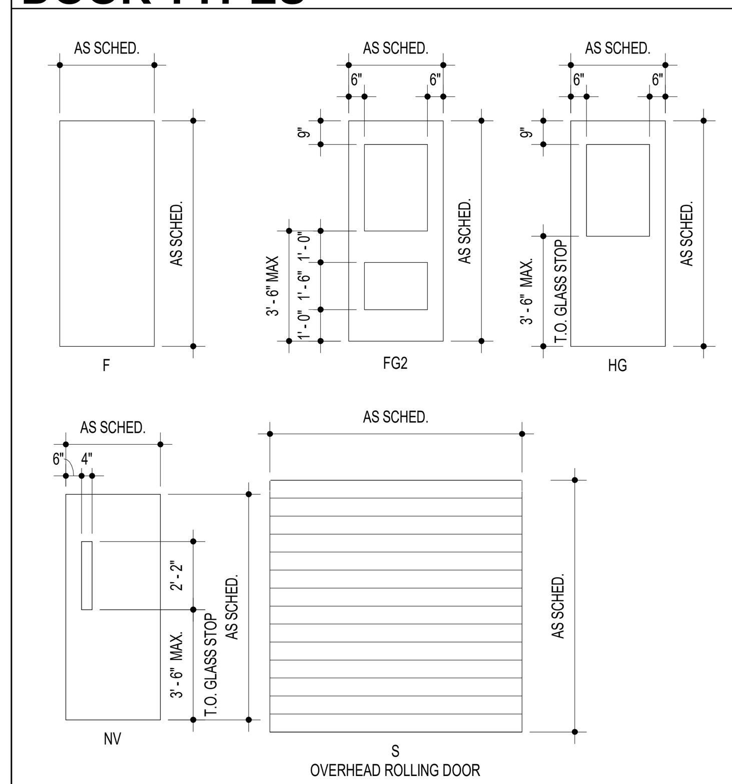
- EXTERIOR DOORS WITH THRESHOLDS: 1/8" ABOVE THERSHOLD HEIGHT
- DOOR WITH AUTOMATIC DOOR BOTTOMS: AMOUNT REQUIRED BY DOOR BOTTOM MFR
- DOORS WITH THRESHOLD AND AUTOMATIC DOOR BOTTOM: HEIGHT OF THRESHOLD AND AMOUNT REQUIRED BY DOOR BOTTOM MFR
- ALL OTHER DOORS: 5/8" ABOVE FINISH FLOOR

## NOTES FOR REMARKS COLUMN

NOTE: NOT ALL NOTES MAY BE USED ON THIS PROJECT. SEE SPECIFICATIONS FOR ADDITIONAL DOOR INFORMATION. REFERENCE SPECIFICATIONS FOR DETAILED HARDWARE REQUIREMENTS.

1. PROVIDE ADA COMPLIANT CLOSER (ONE CLOSER FOR EACH DOOR OF PAIR).
2. PROVIDE PANIC HARDWARE.
3. PROVIDE ALARMED PANIC HARDWARE.
4. PROVIDE ADA AUTOMATIC SWING DOOR OPERATOR WITH PUSH BUTTON CONTROLS AND ASSOCIATED SIGNAGE.
5. PROVIDE DOORS WITH ELECTROMAGNETIC HOLD OPEN DEVICES - CONNECT TO FIRE ALARM SYSTEM TO CLOSE UPON ACTIVATION -- SEE ELECTRICAL DRAWINGS.
6. PROVIDE WITH HOLD OPEN FEATURE IN CLOSER.
7. PROVIDE WEATHERSTRIPPING ON ALL SIDES, TOP AND BOTTOM OF DOOR.
8. PROVIDE DOOR WITH INSULATED CORE.
9. PROVIDE HARDWARE WITH PRIVACY SET.
10. PROVIDE FLUSH BOLTS ON INACTIVE LEAF.
11. PROVIDE SOUND SEALS ON TOP AND SIDES WITH DROP SEAL AT DOOR BOTTOM.
12. PROVIDE SOUND RATED DOOR SYSTEM COMPLETE WITH ALL ASSOCIATED HARDWARE.
13. PROVIDE WITH PUSH / PULL OPERATION.
14. PROVIDE HARDWARE SO DOORS CAN OPEN 180 DEGREES.
15. DOUBLE EGRESS DOOR.
16. INSULATED COILING DOOR.
17. (NOT USED)
18. DOUBLE ACTING DOOR FUNCTION.
19. PROVIDE PACKAGE DOOR SYSTEM.
20. COILING SECURITY GRILLE.
21. PROVIDE WITH MECHANICAL PUSH BUTTON COMBINATION LOCK.
22. PROVIDE WITH CARD READER AND ASSOCIATED HARDWARE.
23. SECURITY SYSTEM DOOR SWITCH AT HM FRAME - COORDINATE WITH ELECTRICAL.
24. PROVIDE WITH MAGNETIC LOCKS AND OPEN RELEASE BUTTON - CONNECT TO FIRE ALARM SYSTEM TO OPEN UPON ACTIVATION - SEE ELECTRICAL DRAWINGS.
25. PROVIDE MIN. STC OF 30.
26. PROVIDE MIN. STC OF 52.

## DOOR TYPES




NOTE: (UNLESS OTHERWISE NOTED)
1. ALL GLASS IN EXTERIOR DOORS TO BE G-10
2. ALL GLASS IN INTERIOR DOORS TO BE G-2
3. ALL GLASS IN RATED DOORS TO BE G-9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GP #22105

DOOR SCHEDULE

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 03/13/2024 | ADDENDUM 1 |
| 04/02/2024 | ADDENDUM 5 |

A306

12/22/2023
BID SET

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| | DOOR | | | | | FRAME | | | | | DOOR LABEL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NOMINAL SIZE | | | | | | | SECTIONS | | | | | |
| DOOR # | WIDTH | HEIGHT | THK. | TYPE | MATL | MATL | TYPE | JAMB | HEAD | SILL | FIRE RATING | HARDWARE SET | REMARKS |
| C215 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C216A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C216B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C217A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C217B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| C219 | 3' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 03 | J1/J5 | H1 | - | | 513 | 1 |
| C220A | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 825 | 1,10,11,14 |
| C220B | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 825 | 1,10,11,14 |
| C221 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C221A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C222 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C223 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C224 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C225 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 913 | 1,9 |
| C226 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 812 | 1 |
| C227 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C228 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C229 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C230 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| C231 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| C232 | 3' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 02 | J6/J5 | H6 | - | | 515 | 25 |
| C233 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| D11 | 8' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | S1 | 90 MIN. | 327 | 1,2,5 |
| D101 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11 |
| D102 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 812 | 1 |
| D102A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9 |
| D103 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 810 | |
| D104A | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 07 | J2/J8 | H2 | - | | 340 | 1,2,6,11,26 |
| D104B | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 07 | J2/J8 | H2 | - | | 340 | 1,2,6,11,26 |
| D105 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| D106 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| D107 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | S1 | | 515 | |
| D108A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | S1 | | 515 | 25 |
| D108B | 4' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 515 | 25 |
| D109 | 4' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 830 | |
| D111 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H6 | S1 | | 816 | 1,11,14 |
| D112A | 4' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 515 | 25 |
| D112B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | S1 | | 515 | 25 |
| D113A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 713 | |
| D113B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 713 | INCLUDE GRILLE |
| D114 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 815 | 1,22,23 |
| D115A | 3' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 02 | J1/J5 | H1 | S1 | | 515 | 25 |
| D115B | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 521 | 1,10,25 |
| D116 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 810 | |
| D117 | 6' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 521 | 1,10,25 |
| D118 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 515 | |
| D119 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 810 | 1/2" UNDERCUT |
| D120A | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 07 | J6/J8 | H15 | S1 | | 341 | 1,2,6,11,26 |
| D120B | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 07 | J6/J8 | H15 | S1 | | 342 | 1,2,6,11,26 |
| D120C | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | 90 MIN. | 343 | 1,2,11,26 |
| D120D | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | 90 MIN. | 343 | 1,2,11,26 |
| D120E | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H15 | S1 | | 221 | 1,11,13,26 |
| D121A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H6 | S1 | | 214 | 1,6,11,13 |
| D121B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H6 | S1 | | 214 | 1,6,11,13 |
| D121C | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H15 | S1 | | 221 | 1,11,13,26 |
| D121D | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H15 | S1 | | 340 | 1,2,6,11,14,26 |
| D202 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 518 | 11 |
| D202A | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 826 | 10,11 |
| D301 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H6 | - | | 816 | 1,11 |
| E11 | 8' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 329 | 1,2,5 |
| E12 | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 325 | 1,2,26 |
| E100 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| E101 | 6' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 01 | J1 | H1 | - | | 340 | 1,2,6,11,26 |
| E102A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 519 | 11 |
| E102B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 519 | 11 |
| E103 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 811 | 1 |
| E104 | 6' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 01 | J1 | H1 | - | | 340 | 1,2,6,11,26 |
| E105A | 4' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 712 | |
| E105B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 713 | |
| E106 | 4' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 814 | 1 |
| E107A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 518 | 11,26 |
| E107B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 518 | 26 |
| E108A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 913 | 1,9 |
| E108B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| E109 | 6' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 01 | J1 | H1 | - | | 340 | 1,2,6,11,26 |
| E110A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 519 | 11 |
| E110B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 519 | 11 |
| E111A | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 524 | 1,10,14 |
| E111B | 8' - 0" | 14' - 0" | 2" | S | | | | | | S1 | | 400 | 20 (SMOKE RATED) |
| E111C | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H6 | S1 | | 524 | 1,10,14 |
| E111D | 8' - 0" | 14' - 0" | 2" | S | | | | | | S1 | 60 MIN. | 400 | 20 |
| E111E | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H15 | S1 | 60 MIN. | 221 | 1,11,13 |
| E112 | 6' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 01 | J1 | H1 | - | | 340 | 1,2,6,11,26 |
| E113 | 6' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 01 | J1 | H1 | - | | 823 | 10 |
| E114 | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 823 | 10,14 |
| E115 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 513 | 1 |
| E116 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 513 | 1 |
| F001A | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | SCWD | HM | 07 | J1/J8 | H1 | S1 | | 325 | 1,2 |
| F001B | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | SCWD | HM | 07 | J1/J8 | H1 | S1 | | 325 | 1,2 |
| F003 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 18 | J1/J5 | H1 | S1 | | 513 | 1 |
| F004A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9 |
| F005 | 4' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 518 | 11 |
| F005A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | S1 | | 816 | 1,11 |
| F11A | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | 90 MIN. | 825 | 1,10,11,14 |
| F11B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 811 | 1 |
| F11C | 8' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 05 | J1 | H3 | S1 | | 327 | 1,2,5 |
| F11D | 7' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 05 | J1 | H3 | S5 | | 329 | 1,2,5 |
| F21A | 7' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 05 | J1 | H3 | S5 | | 329 | 1,2,5 |
| F31 | 4' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | | | | | | 838 | 1,22,23 |
| F101 | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | SCWD | HM | 06 | J1 | H3 | S1 | | 325 | 1,2 |
| F102 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 518 | 11 |
| F103 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 518 | 11 |
| F104 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 513 | 1 |
| F105 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | S5 | | 517 | 1 |
| F106 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 812 | 1 |
| F107A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| F107B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 515 | 25 |
| F107C | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 711 | |
| F108 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S5 | | 913 | 1,9 |
| F109 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| F201 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| F201A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| F202 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| F203 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| F203A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11 |
| F204 | 3' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| F205 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 517 | 1 |
| F206 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 811 | 1 |
| F207 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 513 | 1 |
| F208 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9, 3/4" UNDERCUT |
| F209 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 811 | 1 |
| F210 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 811 | 1 |
| F212 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 812 | 1 |
| F213 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | S5 | | 515 | 25 |
| F214 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 515 | 25 |
| F300 | 4' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 839 | 1,11 |
| F301 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 812 | 1 |
| F302 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 811 | 1,14 |
| F303 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 517 | 1 |
| F304 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| F305 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | S5 | | 515 | 25 |
| F306 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 513 | 1 |
| F307 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 09 | J1/J5 | H1 | - | | 515 | 25 |
| F308 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 913 | 1,9 |
| G11 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 513 | 1 |
| G102 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 815 | 1,22,23 |
| G104 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G106 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 517 | 1 |
| G107 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 515 | 25 |
| G108 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | | 517 | 1 |
| G109 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9 |
| G110 | 3' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 01 | J2/J5 | H2 | - | | 515 | |
| G111 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G112 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | S1 | | 515 | 25 |
| G113 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11 |
| G114 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| G115 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| G115A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9 |
| G116 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| G117 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | S1 | | 515 | 25 |
| G119A | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 523 | 10,25 |
| G119B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G120 | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 822 | 1,10 |
| G121A | 4' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 825 | 1,10,11,14 |

| | DOOR | | | | | FRAME | | | | | DOOR LABEL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NOMINAL SIZE | | | | | | | SECTIONS | | | | | |
| DOOR # | WIDTH | HEIGHT | THK. | TYPE | MATL | MATL | TYPE | JAMB | HEAD | SILL | FIRE RATING | HARDWARE SET | REMARKS |
| G121B | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11 |
| G122 | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 523 | 10,25 |
| G123 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 811 | 1 |
| G124 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| G125 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| G126 | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 523 | 10,25 |
| G127A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G127B | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | | 523 | 10,25 |
| G128A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | S1 | | 515 | 25 |
| G128B | 3' - 0" | 7' - 0" | 1 3/4" | HG | SCWD | HM | 01 | J1 | H1 | - | | 515 | |
| G129 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 816 | 1,11,14 |
| G130 | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 523 | 10,25 |
| G200 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 815 | 1,22,23 |
| G201 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G202 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G203 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G204 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G205 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G206 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G207 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G208 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| G208A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9 |
| G209 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| G211 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G211A | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 825 | 1,10,11,14 |
| G211B | 4' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 825 | 1,10,11,14 |
| G212 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G213 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G214 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G215 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G216 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G217 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G218 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G219 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G300 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 815 | 1,22,23 |
| G301 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G302 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G303A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1 |
| G303B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1 |
| G304A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 713 | |
| G304B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 713 | |
| G305 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G306A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1 |
| G306B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1 |
| G307 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G308 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| G308A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 113 | 1,9 |
| G309 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S4 | | 210 | 1,6,13 |
| G311A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| G311B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| G312A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 713 | |
| G312B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 713 | |
| G313 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | | 515 | 25 |
| G314A | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 825 | 1,10,11,14 |
| G314B | 4' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | | 825 | 1,10,11,14 |
| G315A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| G315B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| G316A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 713 | |
| G316B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 713 | |
| G317A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| G317B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| G318A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 02 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| G318B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| G319 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S3 | 45 MIN. | 811 | 1 |
| G320A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 03 | J1/J5 | H1 | - | 45 MIN. | 511 | 1,25 |
| G321 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J2 | H2 | - | | 713 | |
| ST01A | 7' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J6 | H6 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST01B | 7' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J6 | H6 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST01C | 7' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J6 | H6 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST02A | 8' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J6 | H6 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST02B | 8' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J6 | H6 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST02C | 8' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J6 | H6 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST03A | 8' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | S1 | 90 MIN. | 324 | 1,2,5,14 |
| ST03B | 8' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST03C | 8' - 0" | 7' - 0" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST05 | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | SCWD | HM | 01 | J2 | H2 | - | | 345 | 1,2 |
| ST06A | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 313 | 1,2 |
| ST06B | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 116 | 1 |
| ST06C | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 116 | 1 |
| ST06D | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | 90 MIN. | 314 | 1,2, EXIT ONLY |
| ST07A | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | 90 MIN. | 344 | 1,2,11,26 |
| ST07B | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | 90 MIN. | 343 | 1,2,11 |
| ST07C | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 SIM | 90 MIN. | 816 | 1,11 |
| ST08A | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 344 | 1,2,11,26 |
| ST08B | 6' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | 90 MIN. | 343 | 1,2,11 |
| ST10A | 8' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST10B | 8' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST10C | 8' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 326 | 1,2,5,14, FAIL SAFE/UNLOCK |
| ST11A | 6' - 0" | 7' - 10" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST11B | 6' - 0" | 7' - 10" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST11C | 6' - 0" | 7' - 10" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST11D | 6' - 0" | 7' - 10" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST11E | 6' - 0" | 7' - 10" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST11F | 6' - 0" | 7' - 10" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST11G | 6' - 0" | 7' - 10" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST11J | 6' - 0" | 7' - 10" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST11K | 6' - 0" | 7' - 10" | 1 3/4" | NV | SCWD | HM | 01 | J1 | H1 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST12A | 8' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H6 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST12B | 8' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H6 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST12C | 8' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J6 | H6 | - | 90 MIN. | 324 | 1,2,5,14 |
| ST13 | 3' - 0" | 7' - 0" | 1 3/4" | F | SCWD | HM | 01 | J1 | H1 | S1 | 90 MIN. | 832 | 1 |
| XA01 | 6' - 0" | 7' - 0" | 1 3/4" | NV | HM | HM | 01 | F5/A420 | J5/A420 | A7/420 | | 322 | 1,2,7,8,22,23 |
| XA02 | 6' - 0" | 7' - 0" | 1 3/4" | NV | HM | HM | 01 | F5/A420 SIM | J5/A420 SIM | S7 | | 322 | 1,2,7,8,22,23 |
| XA03 | 6' - 0" | 7' - 0" | 1 3/4" | NV | HM | HM | 01 | F5/A420 SIM | J5/A420 SIM | S7 | | 323 | 1,2,7,8,23 |
| XA04 | 6' - 0" | 7' - 0" | 1 3/4" | NV | HM | HM | 01 | F5/A420 SIM | J5/A420 SIM | S7 | | 322 | 1,2,7,8,22,23 |
| XA05 | 6' - 0" | 7' - 0" | 1 3/4" | NV | HM | HM | 01 | F5/A420 SIM | J5/A420 SIM | S7 | | 323 | 1,2,7,8,23 |
| XA06 | 6' - 0" | 7' - 0" | 1 3/4" | NV | HM | HM | 01 | F5/A420 SIM | J5/A420 SIM | S7 | | 322 | 1,2,7,8,22,23 |
| XA07 | 6' - 0" | 7' - 0" | 1 3/4" | NV | HM | HM | 01 | F5/A420 SIM | J5/A420 SIM | S7 | | 323 | 1,2,7,8,23 |
| XA08 | 3' - 0" | 7' - 0" | 1 3/4" | NV | HM | HM | 01 | F5/A420 SIM | J5/A420 SIM | A7/420 | | 312 | 1,2,7,8,22,23 |
| XA09 | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW02 | CW02/A309 | | A7/420 SIM | | 442 | 1,2,7,22,23 |
| XA10 | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW02 | CW02/A309 | | A7/420 SIM | | 443 | 1,2,7,23 |
| XA11 | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW02 | CW02/A309 | | A7/420 SIM | | 443 | 1,2,7,23 |
| XA12 | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW01 | CW01/A309 | | A7/420 SIM | | 441 | 1,2,7,23,REMOTE RELEASE |
| XA13 | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW01 | CW01/A309 | | A7/420 SIM | | 442 | 1,2,7,22,23 |
| XB01 | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW10B | CW10B/A309 | | A7/420 SIM | | 443 | 1,2,7,23 |
| XB02 | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW10B | CW10B/A309 | | A7/420 SIM | | 442 | 1,2,7,22,23 |
| XB03 | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW07 | CW07/A309 | | A7/420 SIM | | 444 | 1,2,7,22,23 |
| XB04 | 4' - 0" | 7' - 0" | 1 3/4" | F | HM | HM | 01 | F5/A420 | J5/A420 | A7/420 | | 813 | 7,8,23 |
| XB05A | 6' - 0" | 7' - 0" | 1 3/4" | F | HM | HM | 24 | F5/A420 | H3 SIM | A7/420 | | 321 | 1,2,6,7,8,10,22,23 |
| XB06 | 4' - 0" | 7' - 0" | 1 3/4" | F | HM | HM | 23 | F5/A420 | H3 SIM | A7/420 | | 817 | 1,6,7,8,22,23 |
| XB07 | 4' - 0" | 7' - 0" | 1 3/4" | F | HM | HM | 23 | F5/A420 | H3 SIM | A7/420 | | 817 | 1,6,7,8,22,23 |
| XB08 | 3' - 0" | 7' - 0" | 1 3/4" | F | HM | HM | 01 | F5/A420 | J5/A420 | A7/420 | | 818 | 1,7,8,22,23 |
| XB09 | 8' - 0" | 8' - 0" | 2" | S | | | | | | | | 402 | 16,23 |
| XB10 | 8' - 0" | 8' - 0" | 2" | S | | | | | | | | 402 | 16,23 |
| XC01 | 8' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW24A | CW24A/A310 | | A7/420 SIM | | 440 | 1,2,7,22,23 |
| XC02 | 8' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW23A | CW23A/A310 | | A7/420 SIM | | 440 | 1,2,7,22,23 |
| XC04 | 3' - 0" | 7' - 0" | 1 3/4" | NV | HM | HM | 01 | F5/A420 | J5/A420 SIM | A7/420 | | 817 | 1,6,7,8,22,23 |
| XC05 | 8' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW27A | CW27A/A310 | | A7/420 SIM | | 440 | 1,2,7,22,23 |
| XC06 | 7' - 6" | 16' - 0" | 0" | | | | | | | | | 402 | 23, SECTIONAL DOOR |
| XC31 | 3' - 0" | 7' - 0" | 1 3/4" | F | HM | HM | 01 | | | D9/A433 SIM | | 611 | 1,6,7,8,23 |
| XC32 | 3' - 0" | 7' - 0" | 1 3/4" | F | HM | HM | 01 | | | D9/A433 SIM | | 611 | 1,6,7,8,23 |
| XD01 | 3' - 0" | 7' - 0" | 1 3/4" | F | HM | HM | 01 | F5/A420 | J5/A420 | A7/420 | | 817 | 1,6,7,8,22,23 |
| XD02 | 8' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW31 | CW31/A310 | | A7/420 SIM | | 440 | 1,2,7,22,23 |
| XE01 | 3' - 0" | 7' - 0" | 1 3/4" | F | ALUM | ALUM | SF43 | SF43/A311 | | A7/420 SIM | | 431 | 1,2,7,22,23 |
| XE02 | 3' - 0" | 7' - 0" | 1 3/4" | F | ALUM | ALUM | SF42 | SF42/A311 | | A7/420 SIM | | 431 | 1,2,7,22,23 |
| XE03 | 3' - 1" | 7' - 0" | 1 3/4" | F | ALUM | ALUM | SF42 | SF42/A311 | | A7/420 SIM | | 431 | 1,2,7,22,23 |
| XE05 | 6' - 0" | 7' - 0" | 1 3/4" | F | ALUM | ALUM | SF41 | SF41/A311 | | A7/420 SIM | | 444 | 1,2,7,22,23 |
| XE06 | 3' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | SF45 | SF45/A311 | | A7/420 SIM | | 431 | 1,2,7,22,23 |
| XF01 | 6' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW15A | CW15A/A309 | | A7/420 SIM | | 444 | 1,2,7,22,23 |
| XF02 | 3' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW18B | CW18B/A309 | | A7/420 SIM | | 431 | 1,2,7,22,23 |
| XF03 | 8' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW32 | CW32/A310 | | A7/420 SIM | | 440 | 1,2,7,22,23 |
| XG01 | 4' - 0" | 7' - 0" | 1 3/4" | F | ALUM | ALUM | SF40 | SF40/A311 | | A7/420 SIM | | 431 | 1,2,7,22,23 |
| XG02 | 8' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW34A | CW34A/A310 | | A7/420 SIM | | 440 | 1,2,7,22,23 |
| XG03 | 8' - 0" | 10' - 0" | 2" | S | | | | | | | | 402 | 16,23 |
| XG04 | 6' - 0" | 7' - 0" | 1 3/4" | F | ALUM | ALUM | SF40 | SF40/A311 | | A7/420 SIM | | 444 | 1,2,7,22,23 |
| XG05 | 5' - 11" | 7' - 0" | 1 3/4" | F | ALUM | ALUM | SF40 | SF40/A311 | | A7/420 SIM | | 444 | 1,2,7,22,23 |
| XG06 | 5' - 11" | 7' - 0" | 1 3/4" | F | ALUM | ALUM | SF40 | SF40/A311 | | A7/420 SIM | | 444 | 1,2,7,22,23 |
| XG07 | 8' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW23B | CW23B/A310 | | A7/420 SIM | | 440 | 1,2,7,22,23 |
| XG08 | 8' - 0" | 7' - 0" | 1 3/4" | FG2 | ALUM | ALUM | CW28 | CW28/A310 | | A7/420 SIM | | 444 | 1,2,7,22,23 |
| XG41 | 3' - 0" | 7' - 0" | 1 3/4" | F | HM | HM | 01 | | | A9/A433 SIM | | 611 | 1,6,7,8,23 |
| XG42 | 3' - 0" | 7' - 0" | 1 3/4" | F | HM | HM | 01 | | | A9/A433 SIM | | 611 | 1,6,7,8,23 |

## TYPICAL DETAILS

DOORS NOT LISTED ON THE SCHEDULE TO HAVE THE TYPICAL FINISHES LISTED BELOW:

DOOR:
- WIDTH: 3'-0"
- HEIGHT: 7'-0"
- THICKNESS: 1-3/4"
- TYPE: F
- MATERIAL: SCWD
- DOOR LABEL: NONE

FRAME:
- MATERIAL: HM
- TYPE: 1
- JAMB: J1
- HEAD: H1
- SILL: NONE

## TYPICAL DOOR NOTES

1. COORDINATE AND PROVIDE HARDWARE AS DETAILED IN THE SPECIFICATIONS OR, IF NOT SPECIFIED, PROVIDE HARDWARE (OF EQUAL QUALITY TO THAT SPECIFIED, AND MOST SIMILAR IN FUNCTION TO TYPE OF DOOR) REQUIRED FOR DOORS TO OPERATE AND APPEAR AS INTENDED ON DRAWINGS.
2. PROVIDE BRUSHED STAINLESS STEEL KICK PLATES ON PUSH SIDE OF DOORS WITH PUSH BARS OR CLOSER DEVICES. REFER TO HARDWARE SPECIFICATIONS FOR KICK PLATE DIMENSIONS.
3. PROVIDE EXPOSED HARDWARE WITH BRUSHED-IN FINISH AND "SILVER" METALLIC IN COLOR (ALUMINUM, CHROME, OR STEEL).
4. WHEN EXPOSED CLEAR FINISHED WOOD DOORS ARE PAIRED, TAKE CARE TO SELECT MATCHING GRAIN TYPE AND COLOR FOR EACH DOOR IN PAIR.
5. IF CONFLICT EXISTS BETWEEN DOOR RATING AS SCHEDULED AND WALL/PARTITION TYPE FIRE RATING AS SHOWN ON PLANS, PROVIDE DOOR(S) WITH THE GREATER FIRE RATING OF THE TWO.
6. VERIFY ALL DIMENSIONS AND CLEARANCES, AND COORDINATE UNDERCUTTING REQUIRED TO CLEAR ADJACENT FLOOR MATERIALS.
7. IF A DISCREPANCY EXISTS BETWEEN THE DOOR SCHEDULE REMARKS AND THE HARDWARE SCHEDULE IN THE SPECIFICATIONS, PROVIDE THE HARDWARE NEEDED TO MEET THE MORE STRINGENT OF THE REQUIREMENTS.
8. SEE SPECIFICATIONS FOR SCHEDULED HARDWARE SETS.
9. PROVIDE CONTINUOUS WEATHERSTRIPPING AND DOOR BOTTOM SEALS AT EXTERIOR DOORS AS SPECIFIED.

## DOOR UNDERCUTS

PROVIDE THE FOLLOWING UNDERCUTS AT ALL DOORS:

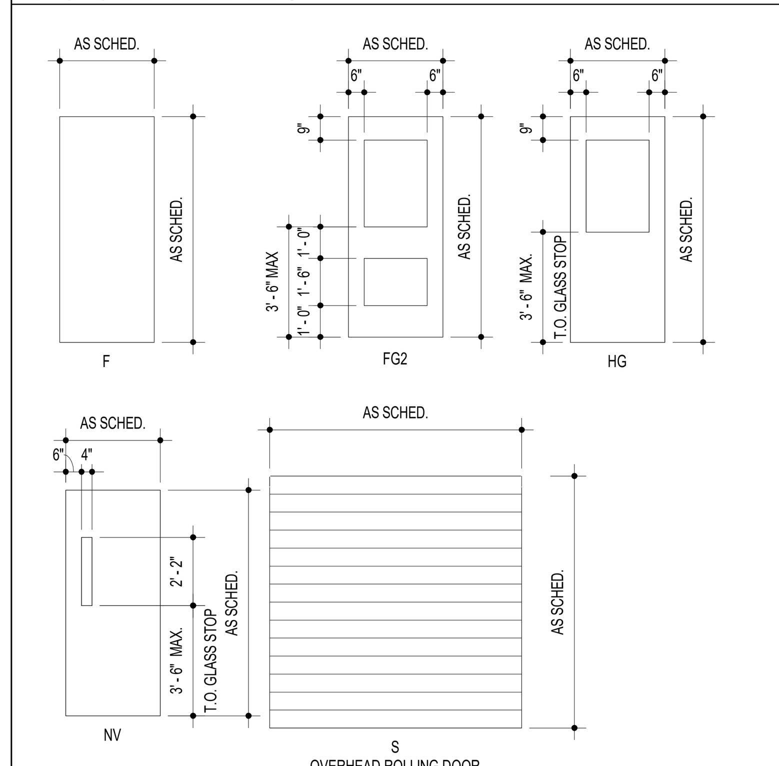
- EXTERIOR DOORS WITH THRESHOLDS: 1/8" ABOVE THERSHOLD HEIGHT
- DOOR WITH AUTOMATIC DOOR BOTTOMS: AMOUNT REQUIRED BY DOOR BOTTOM MFR
- DOORS WITH THRESHOLD AND AUTOMATIC DOOR BOTTOM: HEIGHT OF THRESHOLD AND AMOUNT REQUIRED BY DOOR BOTTOM MFR
- ALL OTHER DOORS: 5/8" ABOVE FINISH FLOOR

## NOTES FOR REMARKS COLUMN

NOTE: NOT ALL NOTES MAY BE USED ON THIS PROJECT. SEE SPECIFICATIONS FOR ADDITIONAL DOOR INFORMATION. REFERENCE SPECIFICATIONS FOR DETAILED HARDWARE REQUIREMENTS.

1. PROVIDE ADA COMPLIANT CLOSER (ONE CLOSER FOR EACH DOOR OF PAIR).
2. PROVIDE PANIC HARDWARE.
3. PROVIDE ALARMED PANIC HARDWARE.
4. PROVIDE ADA AUTOMATIC SWING DOOR OPERATOR WITH PUSH BUTTON CONTROLS AND ASSOCIATED SIGNAGE.
5. PROVIDE DOORS WITH ELECTROMAGNETIC HOLD OPEN DEVICES - CONNECT TO FIRE ALARM SYSTEM TO CLOSE UPON ACTIVATION -- SEE ELECTRICAL DRAWINGS.
6. PROVIDE WITH HOLD OPEN FEATURE IN CLOSER.
7. PROVIDE WEATHERSTRIPPING ON ALL SIDES, TOP AND BOTTOM OF DOOR.
8. PROVIDE DOOR WITH INSULATED CORE.
9. PROVIDE HARDWARE WITH PRIVACY SET.
10. PROVIDE FLUSH BOLTS ON INACTIVE LEAF.
11. PROVIDE SOUND SEALS ON TOP AND SIDES WITH DROP SEAL AT DOOR BOTTOM.
12. PROVIDE SOUND RATED DOOR SYSTEM COMPLETE WITH ALL ASSOCIATED HARDWARE.
13. PROVIDE WITH PUSH / PULL OPERATION.
14. PROVIDE HARDWARE SO DOORS CAN OPEN 180 DEGREES.
15. DOUBLE EGRESS DOOR.
16. INSULATED COILING DOOR.
17. (NOT USED)
18. DOUBLE ACTING DOOR FUNCTION.
19. PROVIDE PACKAGE DOOR SYSTEM.
20. COILING SECURITY GRILLE.
21. PROVIDE WITH MECHANICAL PUSH BUTTON COMBINATION LOCK.
22. PROVIDE WITH CARD READER AND ASSOCIATED HARDWARE.
23. SECURITY SYSTEM DOOR SWITCH AT HM FRAME - COORDINATE WITH ELECTRICAL.
24. PROVIDE WITH MAGNETIC LOCKS AND OPEN RELEASE BUTTON - CONNECT TO FIRE ALARM SYSTEM TO OPEN UPON ACTIVATION - SEE ELECTRICAL DRAWINGS.
25. PROVIDE MIN. STC OF 30.
26. PROVIDE MIN. STC OF 52.

## DOOR TYPES




NOTE: (UNLESS OTHERWISE NOTED)
1. ALL GLASS IN EXTERIOR DOORS TO BE G-10
2. ALL GLASS IN INTERIOR DOORS TO BE G-2
3. ALL GLASS IN RATED DOORS TO BE G-9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Tel: 301.595.1000
www.grimmandparker.com
GRIMM + PARKER ARCHITECTS


GP #22105

DOOR SCHEDULE

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 03/13/2024 | ADDENDUM 1 |
| 03/25/2024 | ADDENDUM 3 |
| 04/02/2024 | ADDENDUM 5 |

A307

12/22/2023
BID SET

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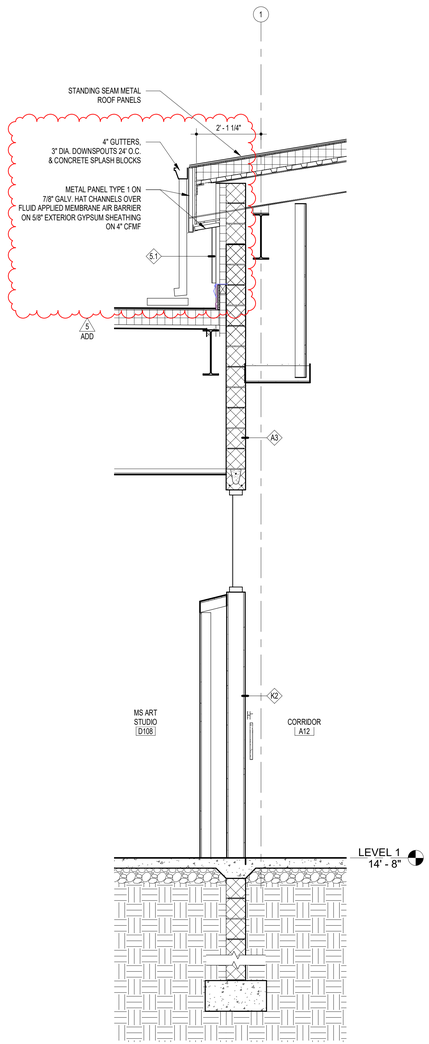
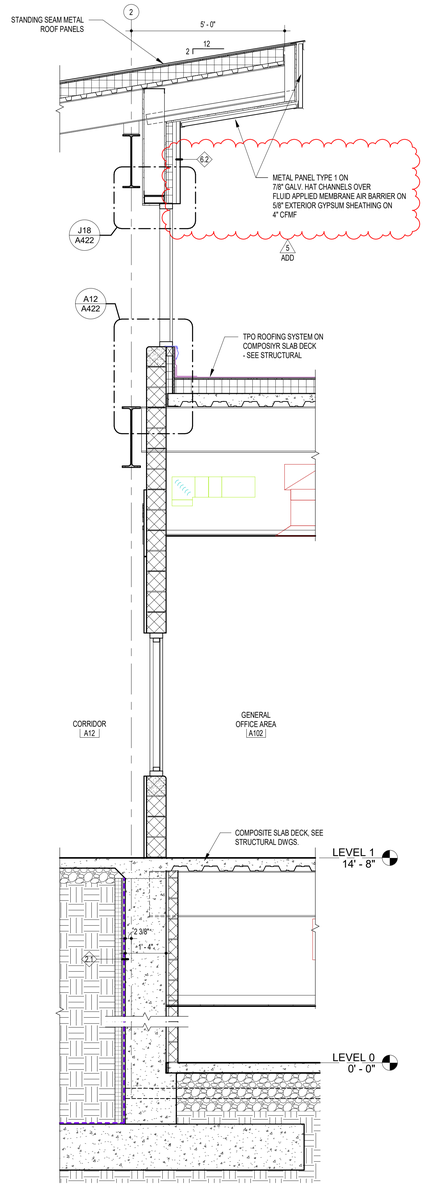
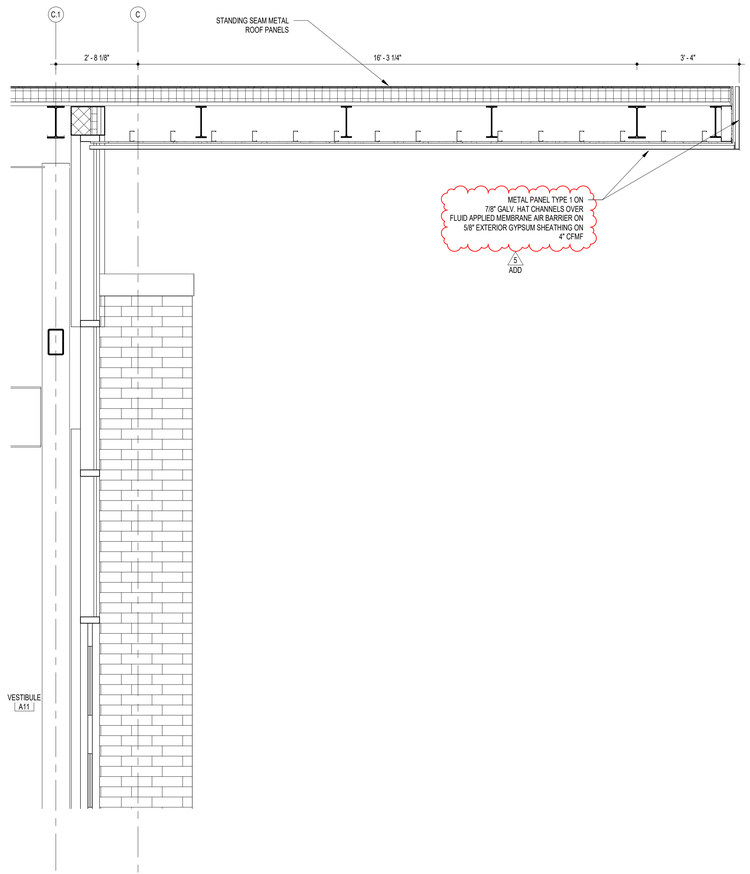



A15 WALL SECTION
1/2" = 1'-0"




A12 WALL SECTION
1/2" = 1'-0"




A6 WALL SECTION
1/2" = 1'-0"

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GRIMM + PARKER ARCHITECTS

GP #22105

WALL SECTIONS

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 04/02/2024 | ADDENDUM 5 |

**A406**

12/22/2023
BID SET

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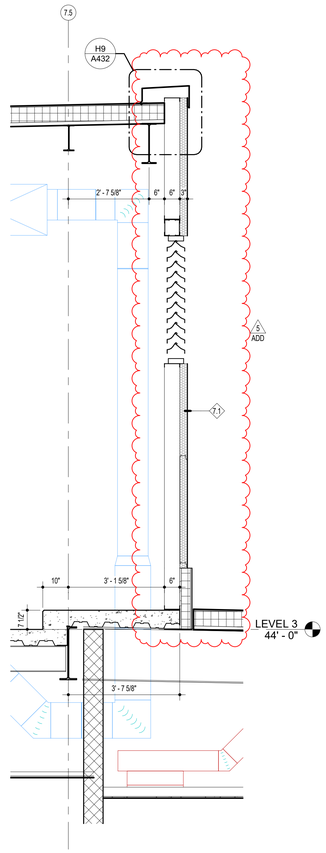
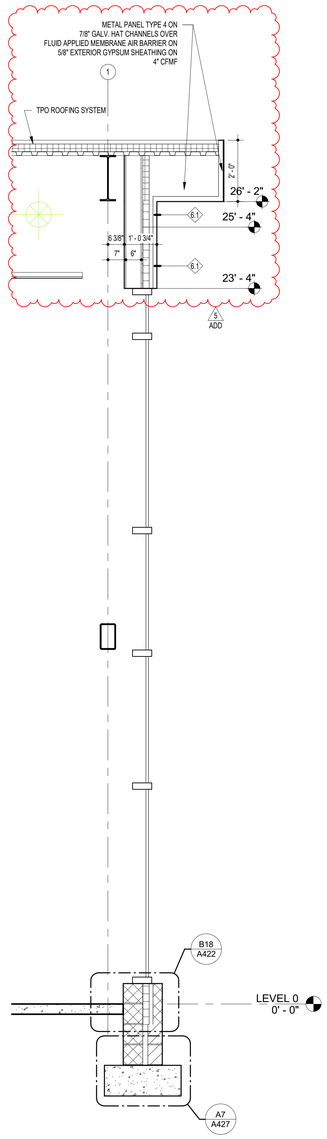
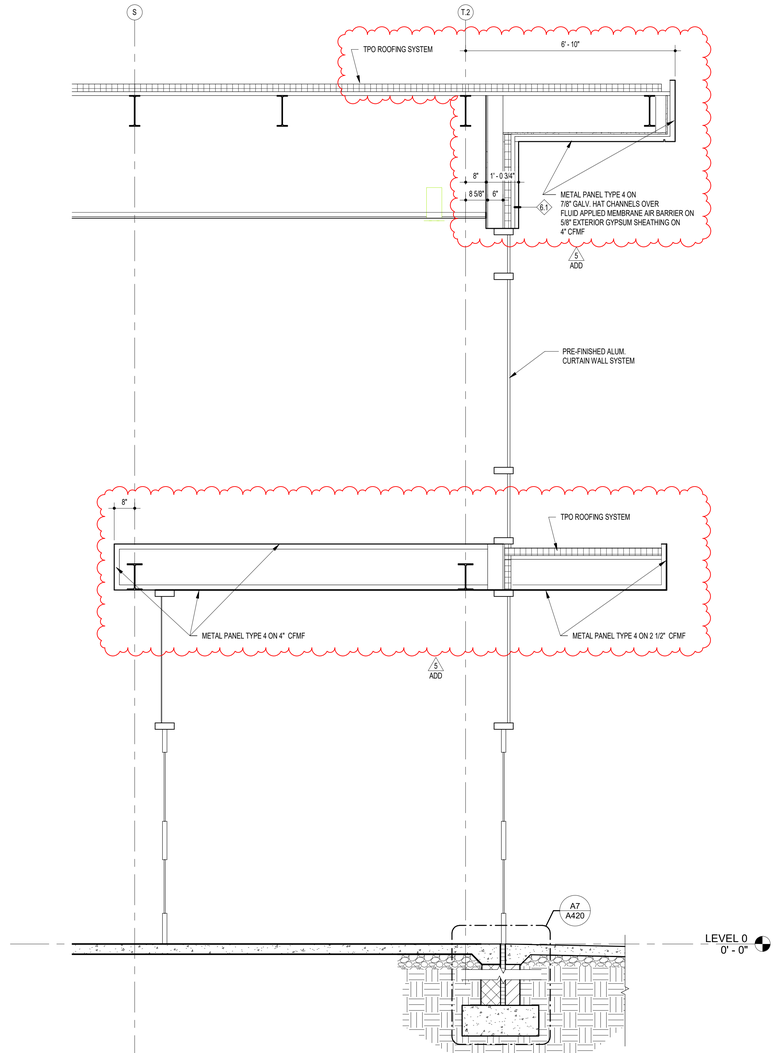



F18 WALL SECTION
1/2" = 1'-0"




A12 WALL SECTION
1/2" = 1'-0"




A3 WALL SECTION
1/2" = 1'-0"

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GRIMM + PARKER
ARCHITECTS

GP #22105

WALL SECTIONS

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 04/02/2024 | ADDENDUM 5 |

**A416**

12/22/2023
BID SET

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## LOCKER SCHEDULE

| ITEM | DESCRIPTION | MANUF. | MANUF. # | DEPTH | HEIGHT | WIDTH | REMARKS |
|---|---|---|---|---|---|---|---|
| LK1 | SINGLE-TIER LOCKER | SEE SPEC. | SEE SPEC. | 1' - 0" | 3' - 0" | 1' - 0" | SEE DETAIL G7/A804 |
| LK2 | DOUBLE-TIER LOCKER | SEE SPEC. | SEE SPEC. | 1' - 0" | 6' - 0" | 1' - 0" | SEE DETAIL A14/A804 & A16/A804 |
| LK3 | DOUBLE-TIER LOCKER | SEE SPEC. | SEE SPEC. | 1' - 0" | 6' - 0" | 1' - 3" | SEE DETAIL A16/A804 |
| LK4 | 5-TIER ATHLETIC LOCKER | SEE SPEC. | SEE SPEC. | 1' - 0" | 5' - 0" | 1' - 0" | SEE DETAIL A16/A804 |
| LK5 | AIR PRO LOCKER | Wenger Corporation | SEE SPEC. | 1' - 2 7/8" | 5' - 10" | 2' - 0" | DOUBLE-TIER NO SEAT, 24"W, GRILLE DOOR, SHOULDER PAD TOPPER |
| LK6 | AIR PRO LOCKER W/ BENCH | Wenger Corporation | SEE SPEC. | | | | DOUBLE-TIER WITH SEAT, 24"W, GRILLE DOOR, SHOULDER PAD TOPPER |
| LK7 | DOUBLE-TIER LOCKER | SEE SPEC. | SEE SPEC. | 1' - 3" | 6' - 0" | 1' - 0" | SEE DETAIL A16/A804 |
| LK8 | 3-TIER LOCKER | SEE SPEC. | SEE SPEC. | 1' - 0" | 6' - 0" | 1' - 0" | SEE DETAIL A16/A804 |

## FURNISHING SCHEDULE - MEDIA CENTER

| ITEM | DESCRIPTION | SIZE (INCHES) W | D | H | MANUF. | MANUF. # | REMARKS |
|---|---|---|---|---|---|---|---|
| L1 | MOBILE BOOKSHELF, DOUBLE - STARTER | 36 | 24 | 36 | MONTEL AETNASTAK | L363624FB | ON CASTERS |
| L3 | BOOKSHELF, SINGLE - STARTER | 36 | 12 | 66 | MONTEL AETNASTAK | L663612FB | |
| L5 | MAGAZINE/PAMPHLET RACK | 36 | 12 | 66 | MONTEL AETNASTAK | LPF66 | |
| L7 | BOOKSHELF, SINGLE - STARTER | 36 | 12 | 36 | MONTEL AETNASTAK | L363612FB | |

## FURNISHING SCHEDULE - METAL SHELVING

| ITEM | DESCRIPTION | SIZE (INCHES) W | D | H | MANUF. | MANUF. # | REMARKS |
|---|---|---|---|---|---|---|---|
| A | OPEN METAL SHELVING | 36 | 12 | 87 | PER SPEC | PER SPEC | |
| B | OPEN METAL SHELVING | 36 | 18 | 87 | PER SPEC | PER SPEC | |
| C | OPEN METAL SHELVING | 36 | 24 | 87 | PER SPEC | PER SPEC | |
| D | OPEN METAL SHELVING | 48 | 18 | 87 | PER SPEC | PER SPEC | |
| E | OPEN METAL SHELVING | 48 | 24 | 87 | PER SPEC | PER SPEC | |
| F | OPEN METAL SHELVING | 48 | 30 | 87 | PER SPEC | PER SPEC | |

## FURNISHING SCHEDULE - MUSIC

| ITEM | DESCRIPTION | SIZE (INCHES) W | D | H | MANUF. | MANUF. # | REMARKS |
|---|---|---|---|---|---|---|---|
| M2 | STANDARD CABINET #2 | 28 | 29 | 86 | WENGER | 2 | |
| M3 | STANDARD CABINET #3 | | | 86 | WENGER | 3 | |
| M4 | STANDARD CABINET #4 | 28 | 29 | 86 | WENGER | 4 | |
| M5 | STANDARD CABINET #5 | 28 | 39 | 86 | WENGER | 5 | |
| M10 | STANDARD CABINET #10 | 28 | 29 | 86 | WENGER | 10 | |
| M11 | STANDARD CABINET #11 | 28 | 39 | 86 | WENGER | 11 | |
| M12 | STANDARD CABINET #12 | 48 | 29 | 86 | WENGER | 12 | |
| M13 | STANDARD CABINET #13 | 14 | 29 | 86 | WENGER | 13 | |
| M15 | STANDARD CABINET #15 | 48 | 29 | 86 | WENGER | 15 | |
| M70 | STANDARD CABINET #70 | 28 | 19 | 86 | WENGER | 70 | ADJUSTABLE SHELF |
| M71 | STANDARD CABINET #71 | 28 | 29 | 86 | WENGER | 71 | ADJUSTABLE SHELF |
| M72 | STANDARD CABINET #72 | 28 | 29 | 86 | WENGER | 72 | ADJUSTABLE SHELF |
| M73 | STANDARD CABINET #73 | 28 | 39 | 86 | WENGER | 73 | ADJUSTABLE SHELF |
| M74 | STANDARD CABINET #74 | 28 | 29 | 86 | WENGER | 74 | ADJUSTABLE SHELF |
| M75 | STANDARD CABINET #75 | 28 | 39 | 86 | WENGER | 75 | ADJUSTABLE SHELF |
| M77 | SHEET MUSIC STORAGE | 16 | 44 | 92 | WENGER | 173G700 | |
| M78 | CHORAL FOLIO CABINET MOBILE | 52 | 18 | 51 | WENGER | 146M024 | 1" SHELF SPACING |
| M79 | INSTRUMENTAL FOLIO CABINET MOBILE | 32 | 18 | 51 | WENGER | 146M032 | 1" SHELF SPACING |
| M80 | SOUNDLOK | 128 | 83 | 90 | WENGER | | W/ VERTICAL AND HORIZONTAL CLOSURES AS NEEDED |

## FURNISHING SCHEDULE - COUNTERTOPS

| ITEM | DESCRIPTION | SIZE (INCHES) D | H | MANUF. | MANUF. # | REMARKS | |
|---|---|---|---|---|---|---|---|
| C1 | 30"H COUNTER TOP W/ 4" BACKSPLASH | 25 | 30 | SEE SPEC | SEE SPEC | SEE DETAIL A11/A804 | |
| C2 | 30"H COUNTER TOP W/ 2" BACKSPLASH | 25 | 30 | SEE SPEC | SEE SPEC | SEE DETAIL A11/A804 | |
| C3 | 42"H COUNTER TOP W/ 2" BACKSPLASH | 25 | 42 | SEE SPEC | SEE SPEC | SEE DETAIL A11/A804 | |
| C4 | 42"H COUNTER TOP | 25 | 42 | SEE SPEC | SEE SPEC | SEE DETAIL D7/A804 | |
| C5 | 42"H COUNTER TOP | 25 | 42 | SEE SPEC | SEE SPEC | SEE DETAIL D7/A804 | |
| C6 | 42"H COUNTER TOP | 25 | 42 | SEE SPEC | SEE SPEC | SEE DETAIL J14/A804 | 3 ADD |
| C7 | BUTCHER BLOCK COUNTER TOP | 25 | 36 | DIVERSIFIED WOODCRAFTS INC. | 247866 | | |
| C8 | 36"H STAINLESS STEEL COUNTER TOP | 25 | 36 | SEE SPEC | SEE SPEC | | |
| C9 | 36"H COUNTER TOP W/ 4" BACKSPLASH | 18 | 36 | SEE SPEC | SEE SPEC | SEE DETAIL A11/A804 | |
| C10 | 30"H COUNTER TOP W/ 2" BACKSPLASH | 24 | 30 | SEE SPEC | SEE SPEC | SEE DETAIL A11/A804 | 3 ADD |

## FURNISHING SCHEDULE - PE EQUIPMENT

| ITEM | DESCRIPTION | MANUF. | MANUF. # | REMARKS |
|---|---|---|---|---|
| P1 | DOUBLE MAT SLING & HOIST | Performance Sports Systems | 4090-B | |
| P2 | CLIMBING WALL | EVERLAST CLIMBING INDUSTRIES, INC. | TRAVERSE WALL SYSTEM | WITH MATS AND MAT LOCKING SYSTEM |
| P3 | MAIN BACKSTOP | Performance Sports Systems | 3103 | W/ #AFRG42 GLASS BACKBOARD |
| P4 | SIDE BACKSTOP | Performance Sports Systems | 3103 | W/ #934 WOOD BACKBOARD |
| P5 | MAIN SCOREBOARD | Daktronics, Inc. | BB-2107 | |
| P6 | SIDE SCOREBOARD | Daktronics, Inc. | BB-2142 | |
| P7 | CHIN UP BAR | Performance Sports Systems | 109 | |
| P8 | BATTING CAGE | Performance Sports Systems | 4080-70 | W/ #4087 NET |
| P9 | ARCHERY NET | Performance Sports Systems | 4020 & 1108 | W/ CARRON HEAVY DUTY ARCHERY NET 51404 |
| P10 | ADA BENCH 42"W x 20"D | SEE SPEC | SEE SPEC | |
| P11 | BENCH 48"W x 12"D | SEE SPEC | SEE SPEC | |
| P12 | GYM DIVIDER CURTAIN | Draper,Inc | SEE SPEC | |
| P13 | BENCH 48"W x 12"D | SEE SPEC | SEE SPEC | |
| P14 | VOLLEYBALL STANDARD | SEE SPEC | SEE SPEC | SEE DETAIL H12/A426 |

## EQUIPMENT SCHEDULE

| ITEM | DESCRIPTION | MANUF. | MANUF. # | REMARKS | |
|---|---|---|---|---|---|
| E1 | REFRIGERATOR - ADA COMPLIANT | GE APPLIANCES | GTE22JSNRSS | LOCKABLE IN NURSE'S OFFICES A154 & A158 | |
| E2 | STUDENT RANGE | GE APPLIANCES | JB480SMSS | | |
| E3 | DISHWASHER | GE APPLIANCES | GDT226SSLSS | | |
| E4 | ATHLETIC WASHER | UNIMAC | UWT085V4 | ELECTRICALLY POWERED | 3 ADD |
| E5 | ATHLETIC DRYER | UNIMAC | UT075EVN | ELECTRICALLY POWERED | 3 ADD |
| E6 | MICROWAVE | | | N.I.C. | |
| E7 | STUDENT RANGE EXHAUST HOOD | GE APPLIANCES | JVX5305SJSS | | |
| E8 | ICE MACHINE | MANITOWOC | URF-0310A | | |
| E9 | STACKED WASHER & DRYER | GE APPLIANCES | GUD27EESNWW | | |
| E10 | UNDER COUNTER REFRIGERATOR | SUMMIT APPLIANCES | AL55 | | |
| E11 | VENDING MACHINE | | | N.I.C. | 3 ADD |
| E12 | INSTRUCTOR'S COOKTOP | SUMMIT APPLIANCES | CR4B30T11B | | |
| E13 | STUDENT ISLAND RANGE EXHAUST HOOD | GE APPLIANCES | JVW5301SJSS | | |
| E14 | INSTRUCTOR'S RANGE EXHAUST HOOD | GE APPLIANCES | PV977NSS | | |
| E15 | MOBILE CHANGER | SMIRTHWAITE MOBI | 3123 C-UL | | |
| E16 | HOYER LIFT | | | N.I.C. | |
| E17 | FUME HOOD | ICIscientific | F-100-48G5 | | |
| E18 | KILN | L&L KILNS | e23T | W/ FURNITURE KIT H-E-K23T/00. VENT-SURE DOWNDRAFT VENT WITH M-V-CNTL/00 VENT CONTROL. | 3 ADD |

## FURNISHING SCHEDULE - GENERAL

| ITEM | DESCRIPTION | SIZE (INCHES) W | D | H | MANUF. | MANUF. # | REMARKS |
|---|---|---|---|---|---|---|---|
| G01 | BASE OPEN SHELVING | 36 | 14 | 25 | STEVENS | 10101 | |
| G02 | BASE OPEN SHELVING | 36 | 24 | 34 | STEVENS | 10101 | |
| G03 | BASE OPEN SHELVING | 42 | 24 | 34 | STEVENS | 10101 | |
| G04 | BASE CABINET - 1 DOOR | 12 | 24 | 34 | STEVENS | 10120 | |
| G07 | BASE CABINET - 2 DOOR | 24 | 24 | 34 | STEVENS | 10129 | |
| G11 | BASE CABINET - 2 DOOR | 36 | 24 | 24 | STEVENS | 10129 | |
| G12 | BASE CABINET - 2 DOOR | 36 | 24 | 34 | STEVENS | 10129 | |
| G13 | BASE CABINET - 2 DOOR | 39 | 24 | 34 | STEVENS | 10129 | |
| G14 | BASE CABINET - 2 DOOR | 42 | 24 | 34 | STEVENS | 10129 | |
| G15 | BASE CABINET - 2 DOOR | 48 | 24 | 34 | STEVENS | 10129 | |
| G16 | BASE CABINET - 3 DRAWER | 15 | 24 | 34 | STEVENS | 10332 | |
| G17 | BASE CABINET - 3 DRAWER | 36 | 24 | 34 | STEVENS | 10332 | |
| G19 | BASE CABINET - 5 DRAWERS | 15 | 24 | 30 | STEVENS | 10392 | |
| G20 | BASE CABINET - 6 DRAWERS | 48 | 30 | 34 | STEVENS | 10404 | NARROW POSTER STORAGE |
| G21 | SINK BASE - ADA | 36 | 24 | 34 | STEVENS | 10576 | |
| G22 | SINK BASE - CLOSED | 36 | 24 | 34 | STEVENS | 10475 | |
| G23 | WALL OPEN SHELVING | 24 | 14 | 30 | STEVENS | 15101 | |
| G24 | WALL OPEN SHELVING | 36 | 14 | 18 | STEVENS | 15101 | |
| G25 | WALL OPEN SHELVING | 36 | 14 | 30 | STEVENS | 15101 | |
| G26 | WALL OPEN SHELVING | 42 | 14 | 30 | STEVENS | 15101 | |
| G27 | WALL OPEN SHELVING | 48 | 14 | 30 | STEVENS | 15101 | |
| G28 | WALL CABINET - 1 DOOR | 15 | 14 | 30 | STEVENS | 15120 | |
| G30 | WALL CABINET - 2 DOOR | 24 | 14 | 30 | STEVENS | 15129 | |
| G31 | WALL CABINET - 2 DOOR | 27 | 14 | 30 | STEVENS | 15129 | |
| G32 | WALL CABINET - 2 DOOR | 30 | 14 | 12 | STEVENS | 15129 | |
| G35 | WALL CABINET - 2 DOOR | 33 | 14 | 30 | STEVENS | 15129 | |
| G36 | WALL CABINET - 2 DOOR | 36 | 14 | 18 | STEVENS | 15129 | |
| G37 | WALL CABINET - 2 DOOR | 36 | 14 | 30 | STEVENS | 15129 | |
| G38 | WALL CABINET - 2 DOOR | 39 | 14 | 18 | STEVENS | 15129 | |
| G39 | WALL CABINET - 2 DOOR | 39 | 14 | 30 | STEVENS | 15129 | |
| G40 | WALL CABINET - 2 DOOR | 42 | 14 | 30 | STEVENS | 15129 | |
| G41 | WALL CABINET - 2 DOOR | 48 | 14 | 30 | STEVENS | 15129 | |
| G42 | TALL OPEN STORAGE | 24 | 24 | 85 | STEVENS | 25101 | |
| G43 | TALL OPEN STORAGE | 36 | 14 | 84 | STEVENS | 25101 | |
| G44 | TALL OPEN STORAGE | 36 | 24 | 85 | STEVENS | 25101 | |
| G45 | TALL OPEN STORAGE | 42 | 24 | 85 | STEVENS | 25101 | |
| G46 | TALL OPEN STORAGE | 48 | 24 | 84 | STEVENS | 25101 | |
| G47 | TALL CABINET - 2 DOOR | 24 | 24 | 84 | STEVENS | 25129 | |
| G49 | TALL CABINET - 2 DOOR | 36 | 24 | 84 | STEVENS | 25129 | |
| G50 | TALL CABINET - 2 DOOR | 48 | 24 | 84 | STEVENS | 25129 | |
| G51 | TEACHER WARDROBE | 24 | 24 | 84 | STEVENS | 25672 | |
| G52 | TEACHER WARDROBE | 36 | 24 | 84 | STEVENS | 25688 | |
| G53 | TALL METAL SHOP CABINET | 24 | 24 | 84 | STEVENS | 25108 | |
| G55 | TALL METAL SHOP CABINET | 36 | 24 | 84 | STEVENS | 25108 | |
| G56 | BASE CABINET - 2 DOOR | 36 | 22 | 35 | DIVERSIFIED WOODCRAFTS INC. | 103-3622M | |
| G57 | TOOL STORAGE CABINET | 48 | 24 | 84 | DIVERSIFIED WOODCRAFTS INC. | TETC-40 | W/ 1/4" PEGBOARD, OUTLETS |
| G58 | CLAY CART PORT | 24 | 24 | 34 | STEVENS | 10683 | W/ MOBILE CLAY CART #10685 |
| G59 | VERTICAL STORAGE | 33 | 30 | 34 | STEVENS | 10515 | |
| G60 | VERTICAL STORAGE | 48 | 30 | 34 | STEVENS | 10517 | |
| G61 | MAILBOX | 48 | 14 | 30 | STEVENS | 15255 | 32 COMPARTMENTS |
| G62 | MAILBOX | 48 | 24 | 34 | STEVENS | 10239 | |
| G64 | DISPLAY CASE - 4'-0"W x 5'-4"H x 1'-0"D | 48 | 12 | 64 | SEE SPEC. | SEE SPEC. | SEE DETAIL A3/A804 |
| G65 | DISPLAY CASE - 4'-0"W x 5'-4"H x 1'-4"D | 48 | 16 | 64 | SEE SPEC. | SEE SPEC. | SEE DETAIL A3/A804 |
| G66 | DISPLAY CASE - 5'-0"W x 5'-4"H x 0'-3"D POSTER | 60 | 3 | 64 | SEE SPEC. | SEE SPEC. | SEE DETAIL A5/A804 |
| G67 | DISPLAY CASE - 5'-0"W x 5'-4"H x 1'-0"D | 60 | 12 | 64 | SEE SPEC. | SEE SPEC. | SEE DETAIL A3/A804 |
| G68 | DISPLAY CASE - 5'-0"W x 5'-4"H x 1'-4"D | 60 | 16 | 64 | SEE SPEC. | SEE SPEC. | SEE DETAIL A3/A804 |
| G69 | DISPLAY CASE - 6'-0"W x 5'-4"H x 1'-4"D | 72 | 16 | 64 | SEE SPEC. | SEE SPEC. | SEE DETAIL A3/A804 |
| G70 | COMBINATION STORAGE - BASE CABINET W/ DRAWERS | 36 | 24 | 34 | STEVENS | 10748 | |
| G71 | DEMONSTRATION ISLAND | 98 | 30 | 36 | STEVENS | 35144 | W/ SINK KIT 35601 |
| G72 | TEACHER DESK EXTENSION | 48 | 30 | 30 | STEVENS | 35161 | |
| G73 | WALL CABINET - 1 DOOR | 12 | 14 | 30 | STEVENS | 15120 | |
| G74 | BASE CABINET - 3 DRAWER | 12 | 24 | 34 | STEVENS | 10332 | |
| G75 | TALL OPEN STORAGE | 30 | 24 | 84 | STEVENS | 10101 | |
| G76 | BASE CABINET - 1 DOOR | 18 | 24 | 34 | STEVENS | 10120 | |
| G77 | WALL CABINET - 1 DOOR | 18 | 14 | 30 | STEVENS | 15120 | |
| G78 | BASE CABINET | 36 | 18 | 30 | STEVENS | 10129 | |
| G79 | BASE CABINET | 30 | 18 | 30 | STEVENS | 10129 | |
| G80 | FILE DRAWER | 15 | 18 | 30 | STEVENS | 10316 | |
| G83 | LUMBER/ PLYWOOD STORAGE RACK | 4 | 3 | 84 | DIVERSIFIED WOODCRAFTS, INC. | LR-1WM | SINGLE UPRIGHT, 5 PIPE ARMS. INSTALL PER MANUFACTURER. |
| G84 | MAGAZINE/PAMPHLET RACK | 36 | 14 | 30 | STEVENS | 22165 | 2 MAGAZINE SHELVES |
| G85 | BASE OPEN SHELVING | 48 | 14 | 25 | STEVENS | 10101 | |
| G86 | SIGNUM TABLE - BASIC ELEMENT | | 40 | 34 | BCI LIBRARIES | B 4021 10G XX | |
| G87 | SIGNUM TABLE - ADD ON ELEMENT | | 40 | 34 | BCI LIBRARIES | B 4021 10A XX | |
| G88 | WORKBENCH WITH WOOD CABINETS | 48 | | 31 | DIVERSIFIED WOODCRAFTS, INC. | WW31C5 | ON CASTERS |
| G89 | WORKBENCH WITH METAL CABINETS | 28 | | 33 | DIVERSIFIED WOODCRAFTS, INC. | WB4-0V | ON CASTERS |
| G91 | WORKBENCH WITH VISES | 64 | 54 | 31 | DIVERSIFIED WOODCRAFTS INC. | WW4-4V | 1 ADD |
| G92 | BASE OPEN SHELVING | 33 | 24 | 34 | STEVENS | 10101 | |
| G93 | PERSPECTIVE DAMP CABINET | 36 | 18 | 84 | DIVERSIFIED WOODCRAFTS, INC. | 9100BL | |
| G94 | PERSPECTIVE DRYING CABINET | 36 | 18 | 84 | DIVERSIFIED WOODCRAFTS, INC. | 9200BL | |

## FURNISHING SCHEDULE - SCIENCE

| ITEM | DESCRIPTION | SIZE (INCHES) W | D | H | MANUF. | MANUF. # | REMARKS |
|---|---|---|---|---|---|---|---|
| S4 | BASE CABINET - 2 DOOR | 30 | 24 | 34 | CAMPBELL RHEA | 3681C | |
| S5 | BASE CABINET - 2 DOOR | 30 | 30 | 34 | CAMPBELL RHEA | 3681C | |
| S6 | BASE CABINET - 2 DOOR | 36 | 24 | 34 | CAMPBELL RHEA | 3681D | |
| S7 | BASE CABINET - 2 DOOR | 36 | 30 | 34 | CAMPBELL RHEA | 3681D | |
| S10 | BASE CABINET - 4 DRAWERS | 24 | 24 | 34 | CAMPBELL RHEA | 3636 | |
| S11 | BASE CABINET - 4 DRAWERS | 24 | 30 | 34 | CAMPBELL RHEA | 3636 | |
| S12 | WALL CABINET - 2 DOOR | 24 | 14 | 24 | CAMPBELL RHEA | 4689 | |
| S13 | WALL CABINET - 2 DOOR | 30 | 14 | 24 | CAMPBELL RHEA | 4693 | |
| S14 | WALL CABINET - 2 DOOR | 36 | 14 | 16 | CAMPBELL RHEA | 4671 | |
| S15 | WALL CABINET - 2 DOOR | 36 | 14 | 24 | CAMPBELL RHEA | 4695 | |
| S16 | WALL CABINET - 2 DOOR | 48 | 14 | 24 | CAMPBELL RHEA | 4699 | |
| S17 | TALL CABINET - 2 DOOR | 30 | 24 | 84 | CAMPBELL RHEA | 5686 | |
| S18 | TALL OPEN STORAGE | 36 | 24 | 84 | CAMPBELL RHEA | 5668 | SHELVING W/ LIP |
| S19 | TALL CABINET - 2 DOOR | 36 | 24 | 84 | CAMPBELL RHEA | 5688 | SHELVING W/ LIP |
| S21 | TOTE TRAY STORAGE | 27 | 24 | 84 | CAMPBELL RHEA | 6350 | |
| S22 | FLAMMABLE STORAGE CABINET | 43 | 18 | 65 | CAMPBELL RHEA | 6778 | |
| S23 | ACID STORAGE CABINET | 43 | 18 | 65 | CAMPBELL RHEA | 6781C | |
| S24 | SINK BASE - ADA | 36 | 24 | 34 | CAMPBELL RHEA | 8760 | |
| S26 | SINK BASE - CLOSED | 36 | 30 | 34 | CAMPBELL RHEA | 2358 | |
| S27 | SAFETY CENTER - ADA | 35 | 22 | 84 | CAMPBELL RHEA | 6774A | |
| S28 | PEGBOARD W/ DRIP TROUGH | | | | CAMPBELL RHEA | 6667B | |
| S29 | GOGGLE CABINET | 24 | 12 | 30 | CAMPBELL RHEA | 6784 | |
| S30 | TEACHER WARDROBE | 36 | 24 | 84 | CAMPBELL RHEA | 6961 | |
| S34 | BASE CABINET - 2 DOOR | 24 | 30 | 36 | CAMPBELL RHEA | 1500 | |
| S35 | BASE CABINET - 2 DOOR | 30 | 30 | 36 | CAMPBELL RHEA | 1504 | |
| S36 | SINK BASE - CLOSED | 36 | 30 | 36 | CAMPBELL RHEA | 2358 | |
| S37 | BASE CABINET - 4 DRAWERS | 24 | 30 | 36 | CAMPBELL RHEA | 1268 | |
| S38 | TEACHER WARDROBE | 24 | 24 | 84 | CAMPBELL RHEA | 5850 | |
| S39 | WALL CABINET - 2 DOOR | 27 | 14 | 24 | CAMPBELL RHEA | 4693 | |
| S40 | TALL CABINET - 2 DOOR | 48 | 24 | 84 | CAMPBELL RHEA | 5692 | SHELVING W/ LIP |
| S41 | INSTRUCTOR DESK | 96 | 30 | 36 | CAMPBELL RHEA | 6016 | |
| S42 | INSTRUCTOR SIDE DESK | 48 | 30 | 30 | CAMPBELL RHEA | 6020 & 6021 | SEE PLANS FOR ORIENTATION |
| S43 | BASE CABINET - 4 DRAWERS | 21 | 24 | 34 | CAMPBELL RHEA | 3635 | |
| S55 | BASE CABINET | 24 | 24 | 34 | CAMPBELL RHEA | 3681E | |
| S56 | BASE CABINET - 4 DRAWERS | 21 | 30 | 36 | CAMPBELL RHEA | 1266 | |
| S57 | PLAIN FRAME W/ 2 LEGS | 24 | 67 | 34 | CAMPBELL RHEA | 6980 | PROVIDE CUSTOM FRAME SIZE PER SCHEDULE |
| S58 | PLAIN FRAME W/ 2 LEGS | 48 | 67 | 34 | CAMPBELL RHEA | 6980 | PROVIDE CUSTOM FRAME SIZE PER SCHEDULE |

5 ADD

# FURNISHING AND EQUIPMENT NOTES

NOTE: NOT ALL ITEMS INDICATED ON SCHEDULE ARE REPRESENTED IN THIS PROJECT.

1. ALL CABINET HEIGHTS INCLUDE COUNTERTOPS. DIMENSIONS ARE TO THE NEAREST INCH.
2. DIVISIONS IN CASEWORK ARE SHOWN FOR CLARITY AND DO NOT REPRESENT BREAKS IN THE COUNTERTOP.
3. PROVIDE CONTINUOUS COUNTERTOP OVER ALL SIMILAR HEIGHT CASEWORK, UNLESS OTHERWISE NOTED.
4. MANUFACTURER AND CATALOG NUMBERS ARE FOR REFERENCE AND ILLUSTRATION PURPOSES ONLY. SEE SPECIFICATION FOR FULL CASEWORK REQUIREMENTS.
5. PROVIDE RESILIENT BASE FOR ALL CASEWORK THAT MEETS THE FLOOR ON FRONT AND EXPOSED SIDES AND BACK.
6. DOTTED LINES INDICATE WALL HUNG CABINETS, DIVISIONS OF BASE CABINETS BELOW THE COUNTERTOP. FURNITURE NOT IN THE CONTRACT OR PROJECTION SCREENS -SEE CASEWORK KEY AND SPECIFICATIONS.
7. ALL CABINETS AND DRAWERS TO HAVE CAM LOCKS EXCEPT FOR SINK BASE CABINETS.
8. ALL EXPOSED SURFACES (EXPOSED TO VIEW FROM ANY PERSPECTIVE) TO BE COVERED WITH LAMINATE.
9. WHERE CASEWORK MEETS A WALL AT ONE OR BOTH ENDS AND JOINT BETWEEN CASEWORK AND WALL EXCEEDS 3/16", PROVIDE FILLER PANEL(S) SCRIBED TO WALL. PROVIDE SEALANT AT JOINTS 3/16" OR LESS INCLUDING BETWEEN FILLER PANEL AND WALL.
10. ALL CABINETS AND DRAWERS IN THE KINDERGARTEN ROOMS TO BE PROVIDED WITH RECESSED HANDLES.
11. ALL COUNTERTOP CORNERS TO BE 1/2" RADIUSED UNLESS OTHERWISE NOTED.
12. PROVIDE ADEQUATE BLOCKING IN STUD WALLS AND AT CMU WALLS FOR WALL-MOUNTED EQUIPMENT AND FURNISHINGS.
13. CONTRACTOR TO FIELD VERIFY ALL CLEAR OPENINGS PRIOR TO MILLWORK OR CASEWORK FABRICATION.
14. MILLWORK AND CASEWORK DRAWINGS ARE DIAGRAMMATIC IN NATURE TO SHOW DESIGN INTENT. ALL WORK TO BE DONE IN ACCORDANCE WITH SPECIFICATIONS. CONSTRUCTION DETAILS ARE TO BE SUBMITTED IN SHOP DRAWINGS AND ARE SUBJECT TO THE APPROVAL OF THE ARCHITECT.

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GP #22105

FURNITURE AND EQUIPMENT SCHEDULES

NORTH EAST MIDDLE / HIGH SCHOOL
300 RISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 03/13/2024 | ADDENDUM 1 |
| 03/25/2024 | ADDENDUM 3 |
| 04/02/2024 | ADDENDUM 5 |

A800

12/22/2023
BID SET

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A18 LEVEL 00 AREA C PARTIAL FURNITURE PLAN
1/8" = 1'-0"

# FURNISHING AND EQUIPMENT NOTES

NOTE: NOT ALL ITEMS INDICATED ON SCHEDULE ARE REPRESENTED IN THIS PROJECT.

1. ALL CABINET HEIGHTS INCLUDE COUNTERTOPS. DIMENSIONS ARE TO THE NEAREST INCH.
2. DIVISIONS IN CASEWORK ARE SHOWN FOR CLARITY AND DO NOT REPRESENT BREAKS IN THE COUNTERTOP.
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7. ALL CABINETS AND DRAWERS TO HAVE CAM LOCKS EXCEPT FOR SINK BASE CABINETS.
8. ALL EXPOSED SURFACES (EXPOSED TO VIEW FROM ANY PERSPECTIVE) TO BE COVERED WITH LAMINATE.
9. WHERE CASEWORK MEETS A WALL AT ONE OR BOTH ENDS AND JOINT BETWEEN CASEWORK AND WALL EXCEEDS 3/16", PROVIDE FILLER PANEL(S) SCRIBED TO WALL. PROVIDE SEALANT AT JOINTS 3/16" OR LESS INCLUDING BETWEEN FILLER PANEL AND WALL.
10. ALL CABINETS AND DRAWERS IN THE KINDERGARTEN ROOMS TO BE PROVIDED WITH RECESSED HANDLES.
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12. PROVIDE ADEQUATE BLOCKING IN STUD WALLS AND AT CMU WALLS FOR WALL-MOUNTED EQUIPMENT AND FURNISHINGS.
13. CONTRACTOR TO FIELD VERIFY ALL CLEAR OPENINGS PRIOR TO MILLWORK OR CASEWORK FABRICATION.
14. MILLWORK AND CASEWORK DRAWINGS ARE DIAGRAMMATIC IN NATURE TO SHOW DESIGN INTENT. ALL WORK TO BE DONE IN ACCORDANCE WITH SPECIFICATIONS. CONSTRUCTION DETAILS ARE TO BE SUBMITTED IN SHOP DRAWINGS AND ARE SUBJECT TO THE APPROVAL OF THE ARCHITECT.

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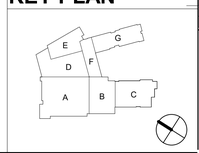
GP #22105

LEVEL 00 AREA C FURNITURE PLAN

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 03/25/2024 | ADDENDUM 3 |
| 04/02/2024 | ADDENDUM 5 |

KEY PLAN

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## FOUNDATION AND SLAB ON GRADE PLAN- AREA F

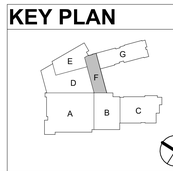
SCALE: 1/8" = 1'-0"

**FOUNDATION AND SLAB ON GRADE NOTES:**

1. SLAB ON GRADE SHALL BE 4" THICK NORMAL WEIGHT CONCRETE (f'c=4000 PSI) REINFORCED WITH 6"x6", W2.1X W2.1 W.W.F. ON 15 MIL VAPOR BARRIER OVER 6" THICK LAYER OF WASHED GRAVEL.
2. TOP OF SLAB ELEVATION SHALL BE 92.00' (DATUM 0.00') UNLESS NOTED OTHERWISE.
3. TOP OF CONCRETE PIER ELEVATION SHALL BE 8" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS [...].
4. TOP OF FOOTING ELEVATION SHALL BE -2'-0" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS (...). FOOTING ELEVATIONS ARE FOR BID PURPOSES ONLY AND MAY HAVE TO BE FIELD ADJUSTED. LOWER FOOTING AS REQUIRED BELOW UTILITY LINES AND INSTALL SLEEVES THROUGH CONCRETE AND MASONRY WALLS.
5. SEE ARCHITECTURAL DRAWINGS FOR DEPRESSED SLAB AREAS.
6. REFER TO ARCHITECTURAL DRAWINGS FOR ALL NON-LOAD BEARING CMU PARTITIONS.

0 4' 8' 16'

## KEY PLAN

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CEI No. 21-0551 Rev1 2022

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GP #22105

FOUNDATION AND SLAB ON GRADE PLAN- AREA F

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 03/25/2024 | ADDENDUM 3 |
| 04/01/2024 | ADDENDUM 5 |

**S100F**

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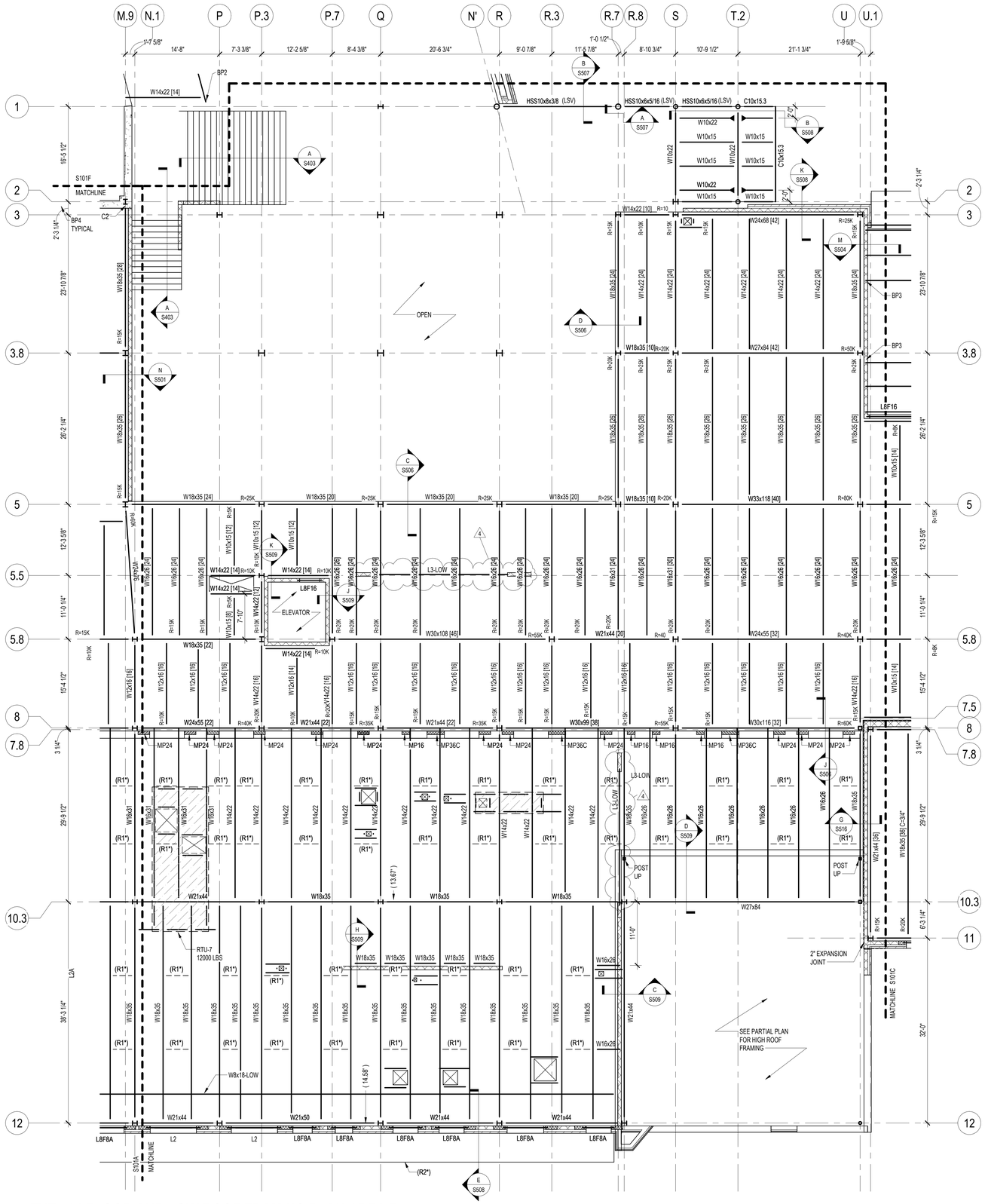



## LEVEL 01 FLOOR AND LOW ROOF FRAMING PLAN AREA B

SCALE: 1/8" = 1'-0"

**ELEVATED FLOOR FRAMING NOTES:**

1. ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (f'c=4000, 110 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL). UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 14.67' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL.
4. [No.] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMILY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=... DENOTES REQUIRED BEAM CAMBER.

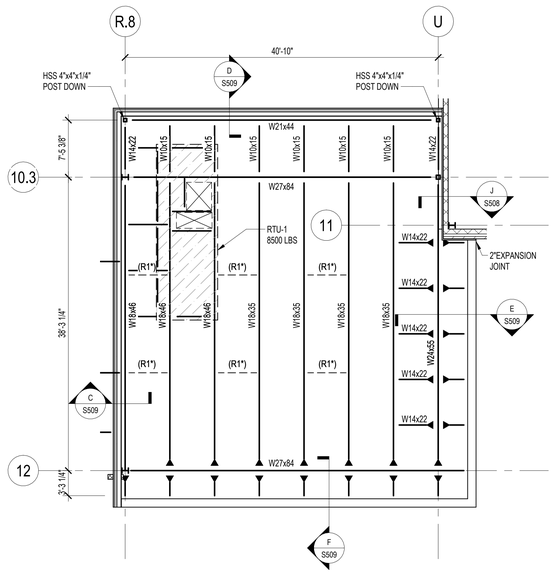
**ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

**ROOF FRAMING KEYED NOTES:**

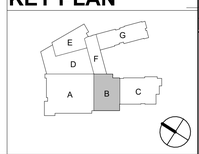
(R1*) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.

(R2*) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.




## HIGH ROOF FRAMING PARTIAL PLAN AREA B

NOT TO SCALE

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GP #22105

LEVEL 01 FLOOR AND LOW ROOF FRAMING PLAN - AREA B

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 04/01/2024 | ADDENDUM 5 |

**S101B**

12/22/2023
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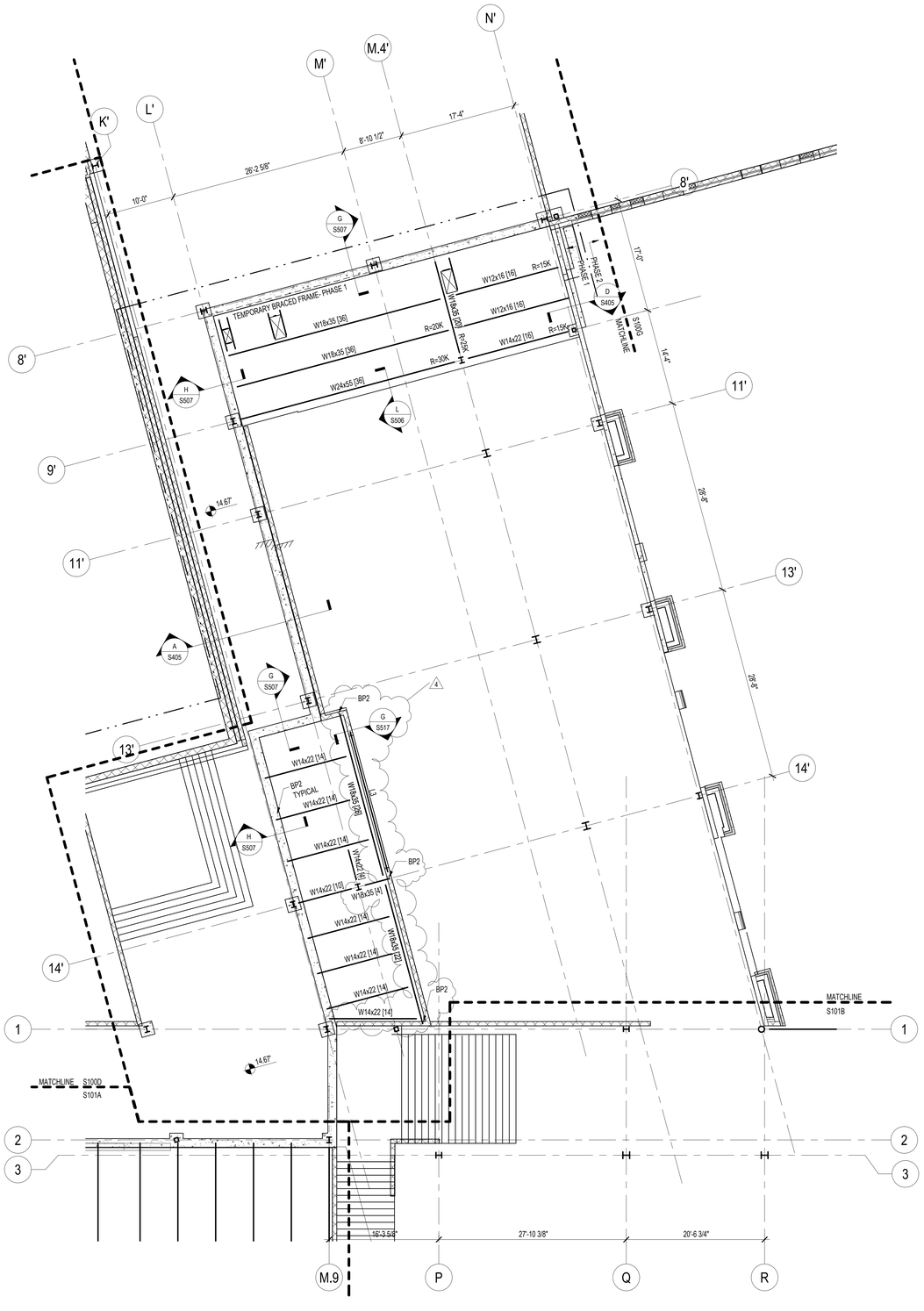



## LEVEL 01 FLOOR FRAMING PLAN AREA F

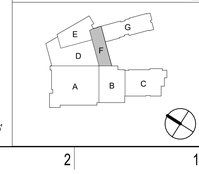
SCALE: 1/8" = 1'-0"

**ELEVATED FLOOR FRAMING NOTES:**

1. ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (f'c'=4000, 110 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL). UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 14.67' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0' OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL.
4. [No.] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMILY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=... DENOTES REQUIRED BEAM CAMBER.

0 4' 8' 16'

**KEY PLAN**

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GP #22105

LEVEL 01 FLOOR FRAMING PLAN - AREA F

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 04/01/2024 | ADDENDUM 5 |

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12/22/2023
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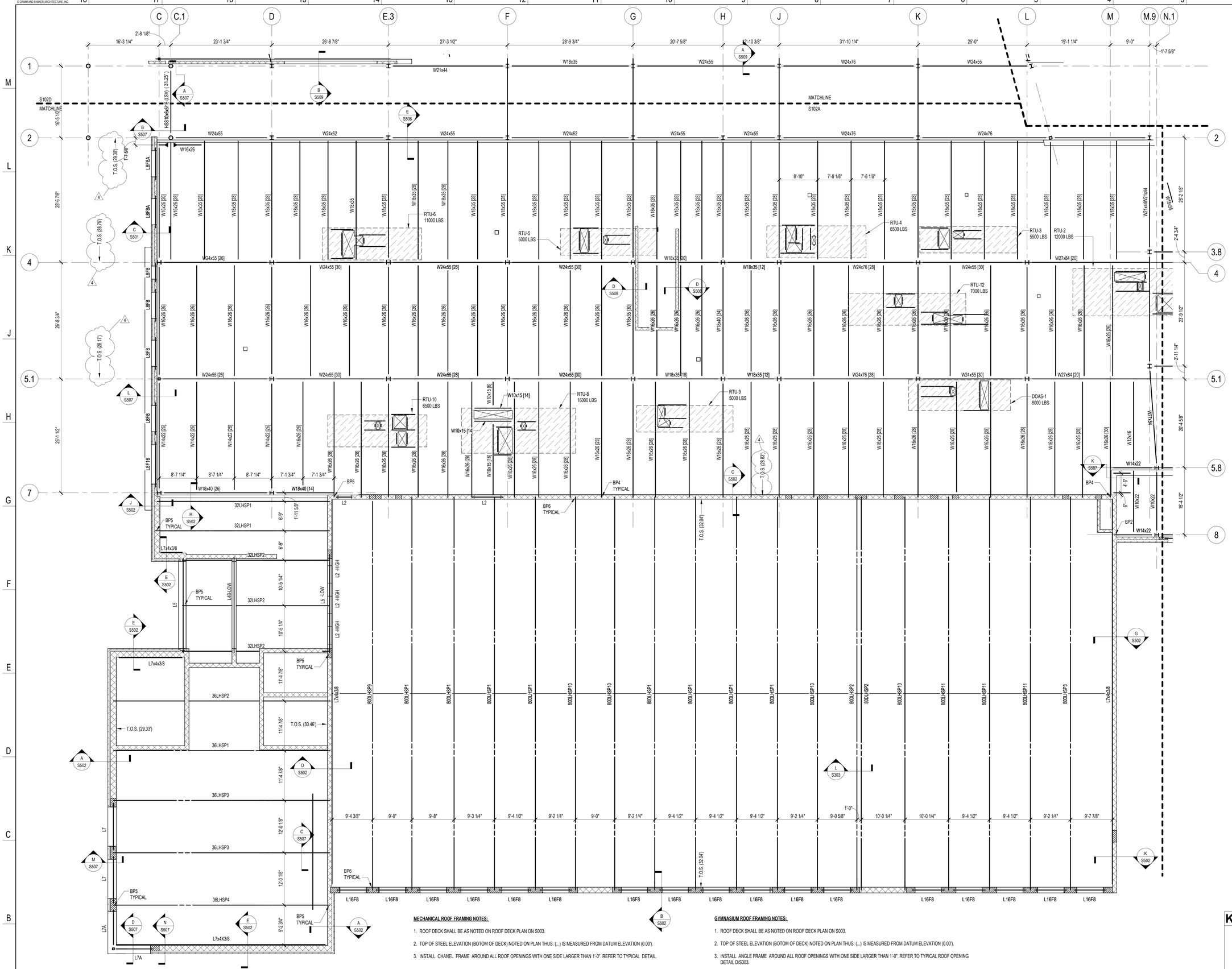



## ROOF FRAMING PLAN AREA A

SCALE: 1/8" = 1'-0"

**MECHANICAL ROOF FRAMING NOTES:**

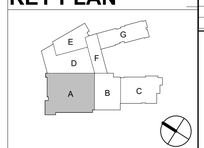
1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00').
3. INSTALL CHANEL FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL DETAIL.

**GYMNASIUM ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00').
3. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
4. ALL DLH SERIES JOIST SHALL HAVE 7 1/2" JOIST SEAT UNLESS NOTED OTHERWISE. ALL LH SERVIES JOIST SHALL HAVE 5" JOIST SEAT UNLESS NOTED OTHERWISE

0 4' 8' 16'

**KEY PLAN**

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GP #22105

ROOF FRAMING PLAN - AREA A

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 04/01/2024 | ADDENDUM 5 |

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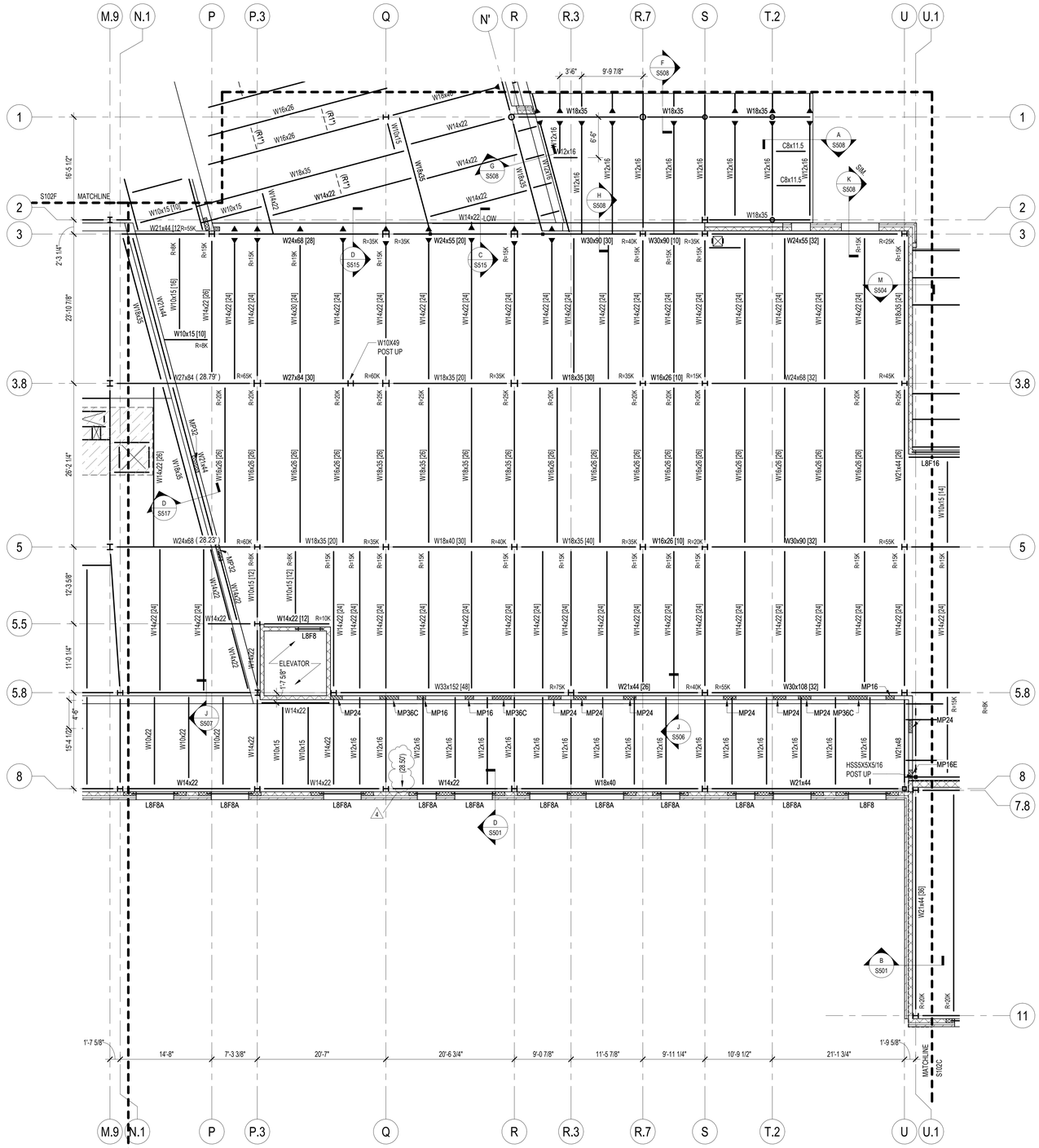



## LEVEL 02 FLOOR AND LOW ROOF FRAMING PLAN AREA B

SCALE: 1/8" = 1'-0"

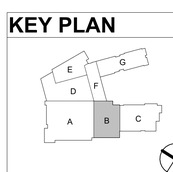
**ELEVATED FLOOR FRAMING NOTES:**

1. ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (f'c'=4000, 110 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL). UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 29.33' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C/S303
4. [No.] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMILY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=... DENOTES REQUIRED BEAM CAMBER.

**ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

**KEY PLAN**




0 4' 8' 16'

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GP #22105

LEVEL 02 FLOOR AND LOW ROOF FRAMING PLAN - AREA B

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 03/25/2024 | ADDENDUM 3 |
| 04/01/2024 | ADDENDUM 5 |

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## LOW ROOF AND AUDITORIUM BALCONY FRAMING PLAN AREA D

SCALE: 1/8" = 1'-0"

**ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

**AUDITORIUM BALCONY KEYED NOTES:**

(E2*) DENOTES MASONRY SHALL BE GROUTED SOLID 16" MINIMUM EACH SIDE OF ANCHOR BOLTS.

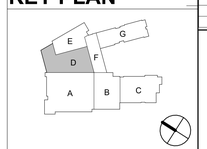
**ROOF FRAMING KEYED NOTES:**

(R1*) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJEACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.

(R2*) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

0 4' 8' 16'

**KEY PLAN**

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LOW ROOF AND AUDITORIUM BALCONY FRAMING PLAN - GP #22105
AREA D
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 04/01/2024 | ADDENDUM 5 |

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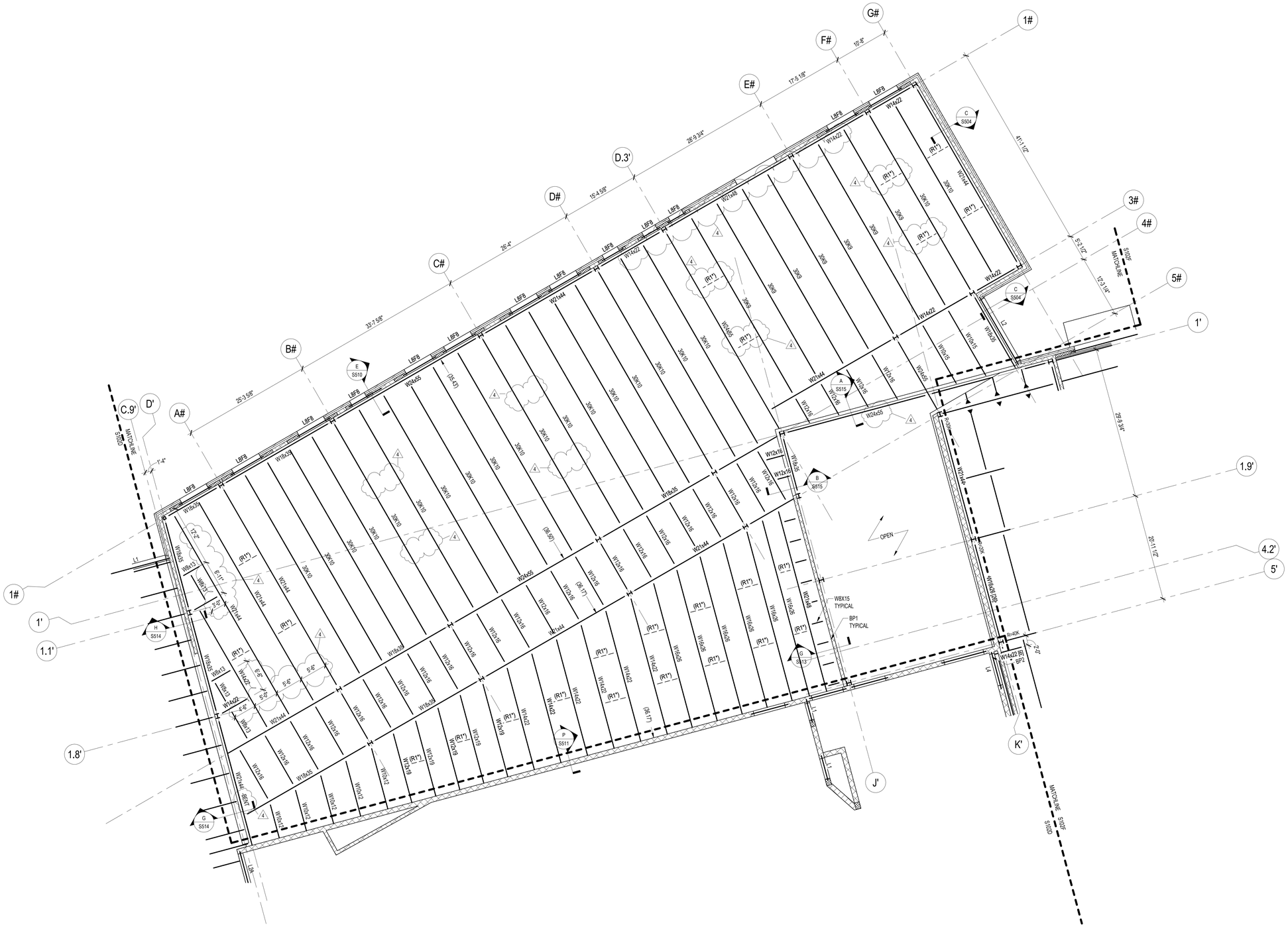



## ROOF FRAMING PLAN AREA E

SCALE: 1/8" = 1'-0"

**ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

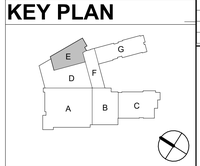
**ROOF FRAMING KEYED NOTES:**

(R1*) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJEACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.

(R2*) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

0 4' 8' 16'

**KEY PLAN**





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GP #22105

ROOF FRAMING PLAN - AREA E

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 04/01/2024 | ADDENDUM 5 |

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## LEVEL 02 FLOOR AND LOW ROOF FRAMING PLAN - AREA F

SCALE: 1/8" = 1'-0"

**ROOF FRAMING NOTES:**

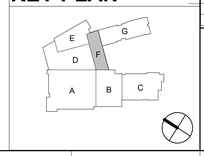
1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

**ELEVATED FLOOR FRAMING NOTES:**

1. ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (f'c'=4000, 110 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL). UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 29.33' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C/S303
4. [No.] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMILY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=... DENOTES REQUIRED BEAM CAMBER.

0 4' 8' 16'

## KEY PLAN

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GP #22105

LEVEL 02 FLOOR AND LOW ROOF FRAMING PLAN - AREA F

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
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| 03/25/2024 | ADDENDUM 3 |
| 04/01/2024 | ADDENDUM 5 |

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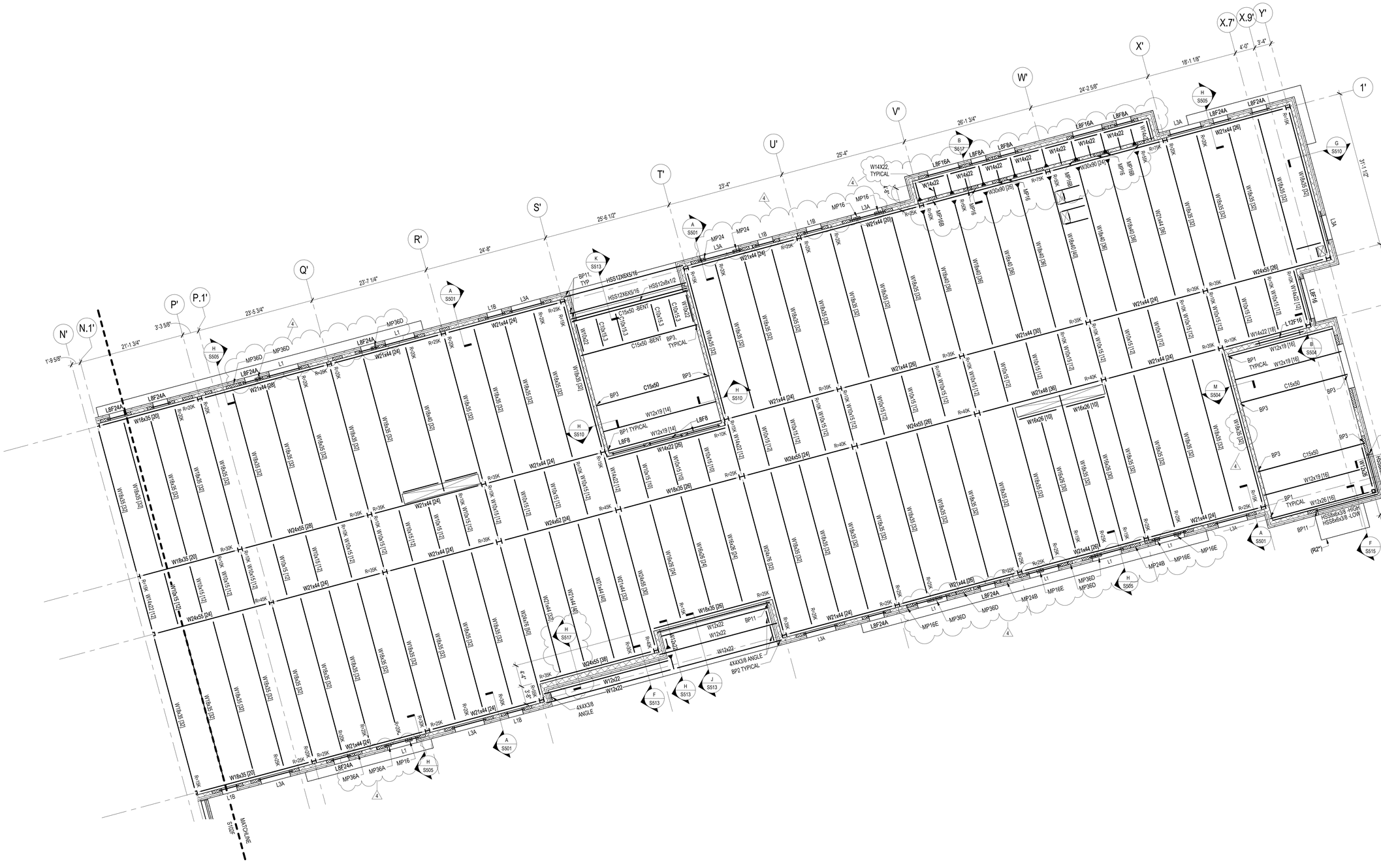



## LEVEL 02 FLOOR FRAMING PLAN AREA G

SCALE: 1/8" = 1'-0"

**ELEVATED FLOOR FRAMING NOTES:**

1. ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (f'c=4000, 110 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL). UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 29.33' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C/S303
4. [No.] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMILY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=... DENOTES REQUIRED BEAM CAMBER.

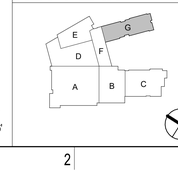
**ROOF FRAMING KEYED NOTES:**

(R1") DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJEACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.

(R2") DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

0 4' 8' 16'

### KEY PLAN

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LEVEL 02 FLOOR FRAMING PLAN - AREA G

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 03/25/2024 | ADDENDUM 3 |
| 04/01/2024 | ADDENDUM 5 |

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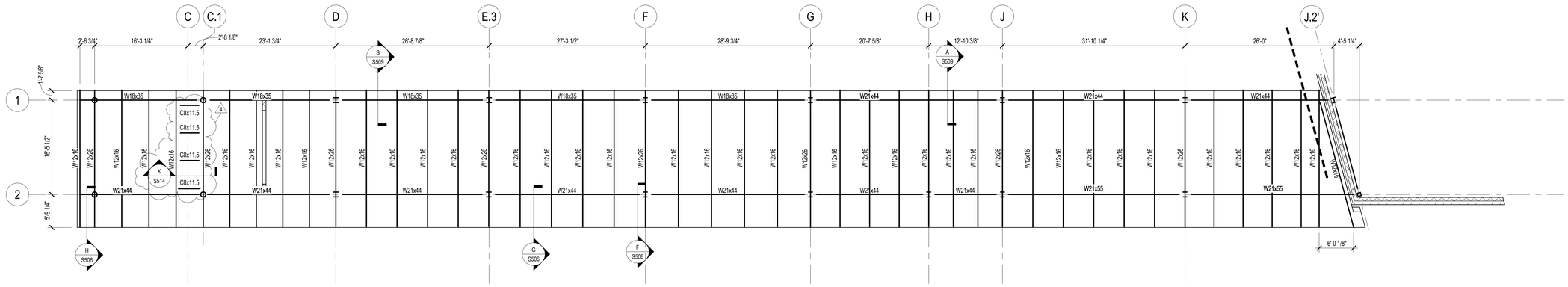



## HIGH ROOF FRAMING PLAN AREA A

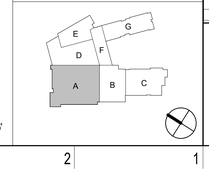
SCALE: 1/8" = 1'-0"

**ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

0 4' 8' 16'

### KEY PLAN

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GP #22105

HIGH ROOF FRAMING PLAN- AREA A

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 04/01/2024 | ADDENDUM 5 |

**S103A**

12/22/2023
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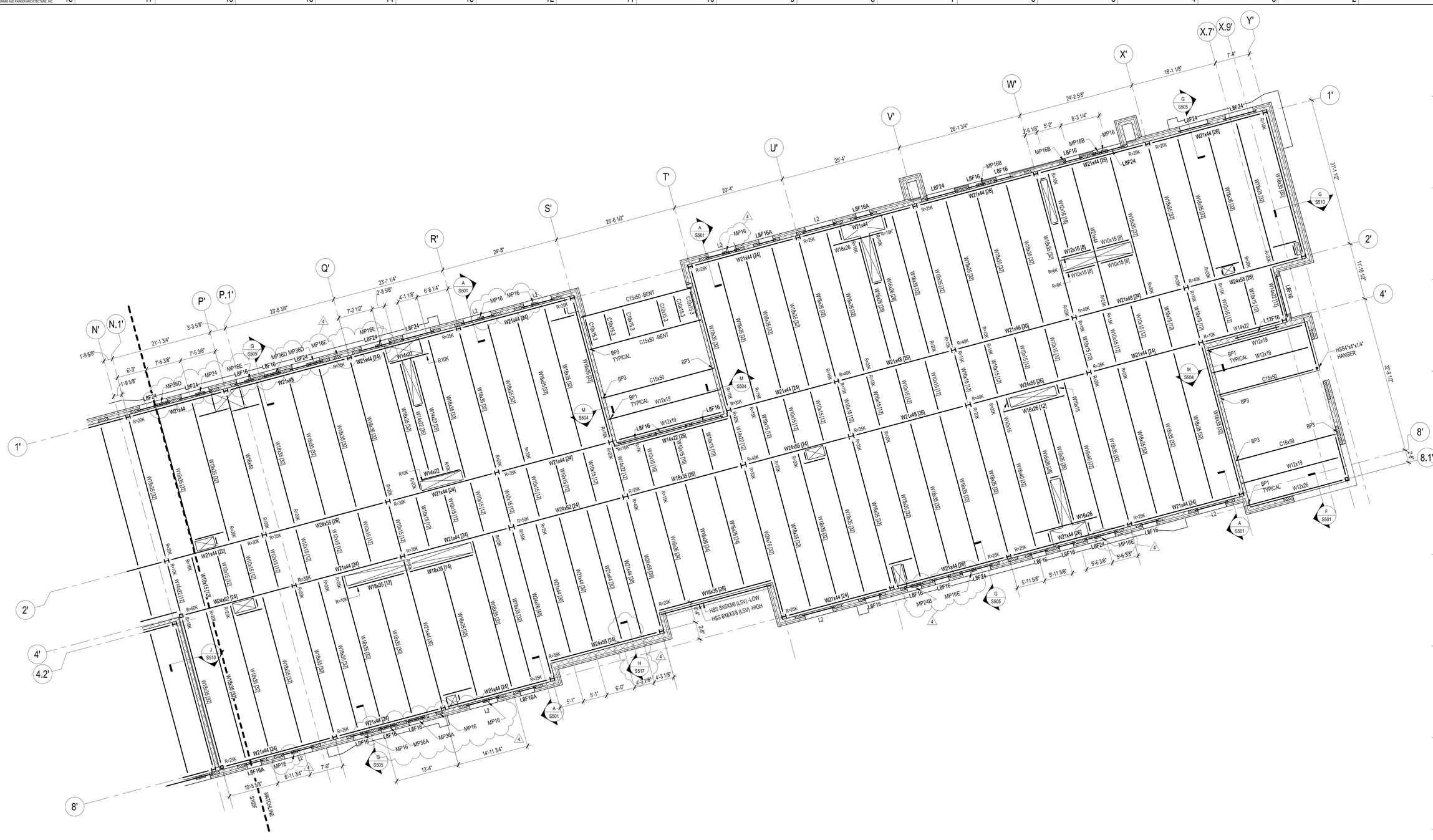


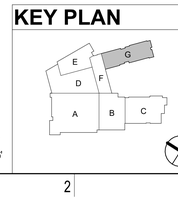

## LEVEL 03 FLOOR FRAMING PLAN - AREA G

SCALE: 1/8" = 1'-0"

**ELEVATED FLOOR FRAMING NOTES:**

1. ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (f'c'=4000, 110 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL). UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 44.00' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C/S303
4. [No.] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMILY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=... DENOTES REQUIRED BEAM CAMBER.

### KEY PLAN




0 4' 8' 16'

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GP #22105

LEVEL 03 FLOOR FRAMING PLAN - AREA G

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 03/25/2024 | ADDENDUM 3 |
| 04/01/2024 | ADDENDUM 5 |

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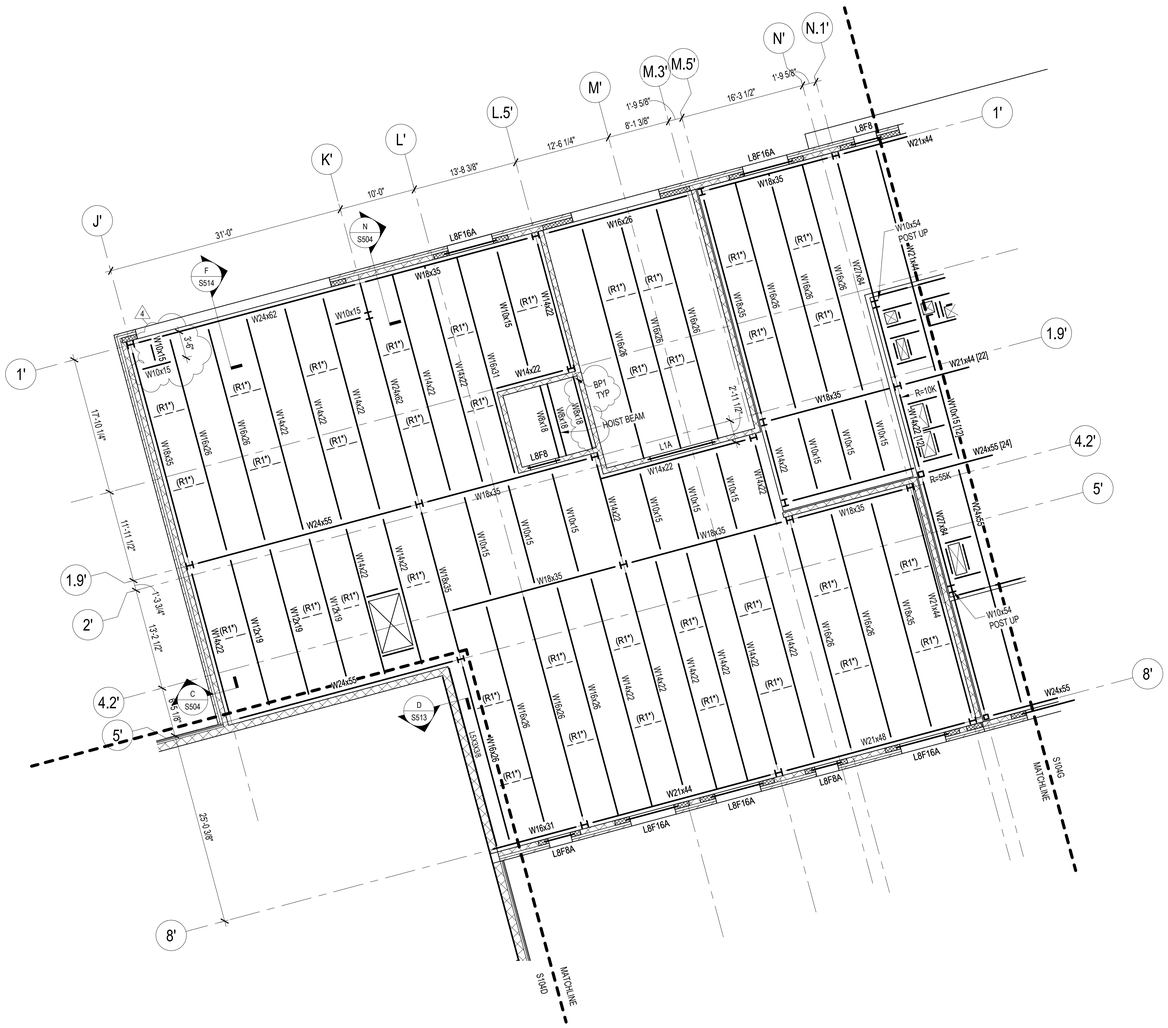



## ROOF FRAMING PARTIAL PLAN - AREA E

SCALE: 1/8" = 1'-0"

**ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

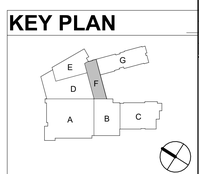
**ROOF FRAMING KEYED NOTES:**

(R1*) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJEACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.

(R2*) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

0 4' 8' 16'

## KEY PLAN

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ROOF FRAMING PLAN - AREA F

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

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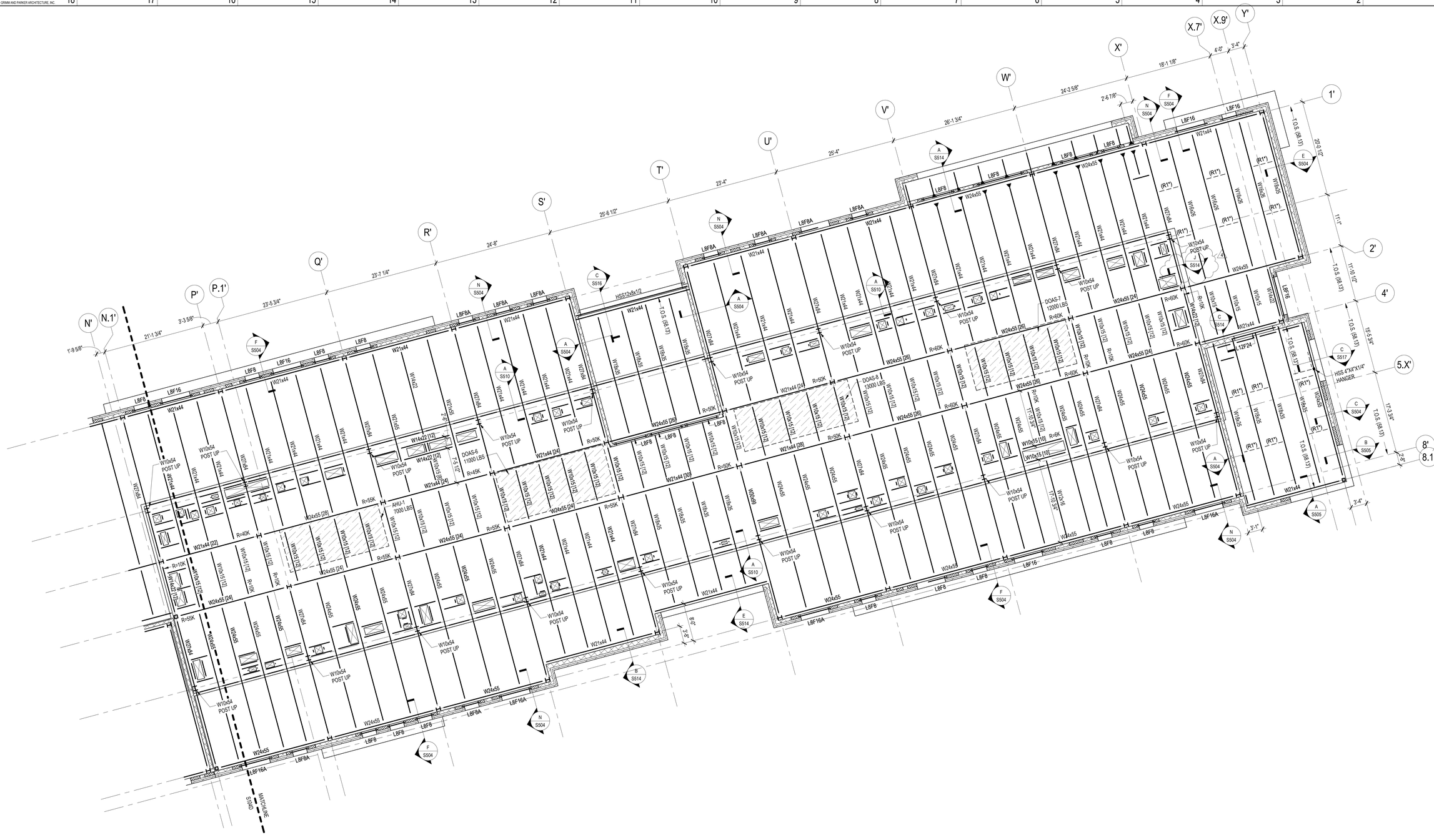



## PENTHOUSE FLOOR AND ROOF FRAMING PLAN AREA G

SCALE: 1/8" = 1'-0"

**ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

**ROOF FRAMING KEYED NOTES:**

(R1*) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJEACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.

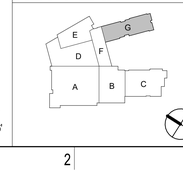
(R2*) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

**PENTHOUSE FLOOR FRAMING NOTES:**

1. ELEVATED SLAB SHALL BE 4 1/2" THICK NORMAL WEIGHT CONCRETE (fc'=4000, 145 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 18 GAGE GALVANIZED COMPOSITE METAL DECK (6 1/2" TOTAL). UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 58.67' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 6 1/2" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2:#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1-0" x 1'-0' OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C/S303
4. [No.] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMILY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=... DENOTES REQUIRED BEAM CAMBER.

0 4' 8' 16'

**KEY PLAN**

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GP #22105

ROOF AND PENTHOUSE FLOOR FRAMING PLAN - AREA G

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
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| 04/01/2024 | ADDENDUM 5 |

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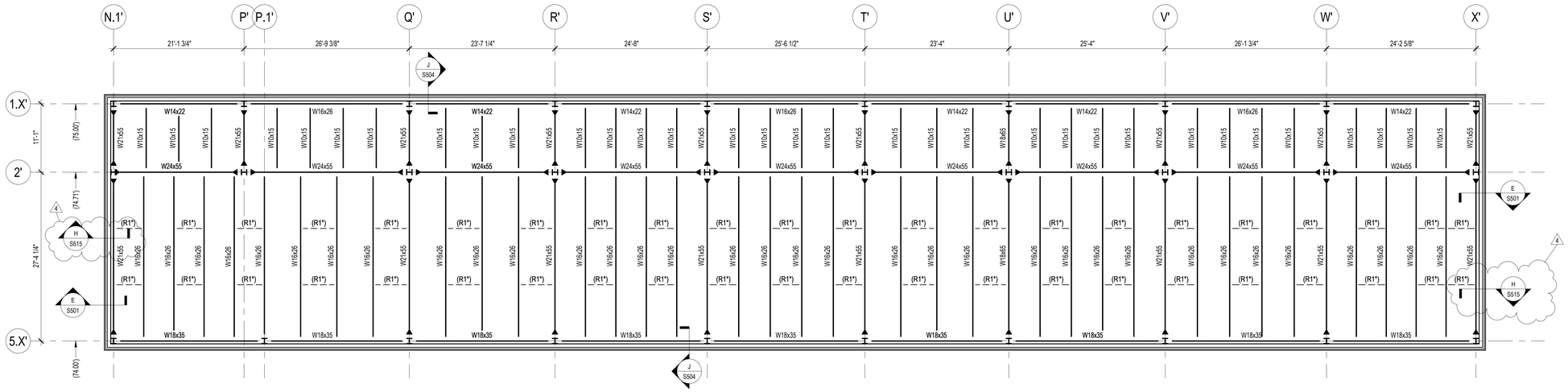
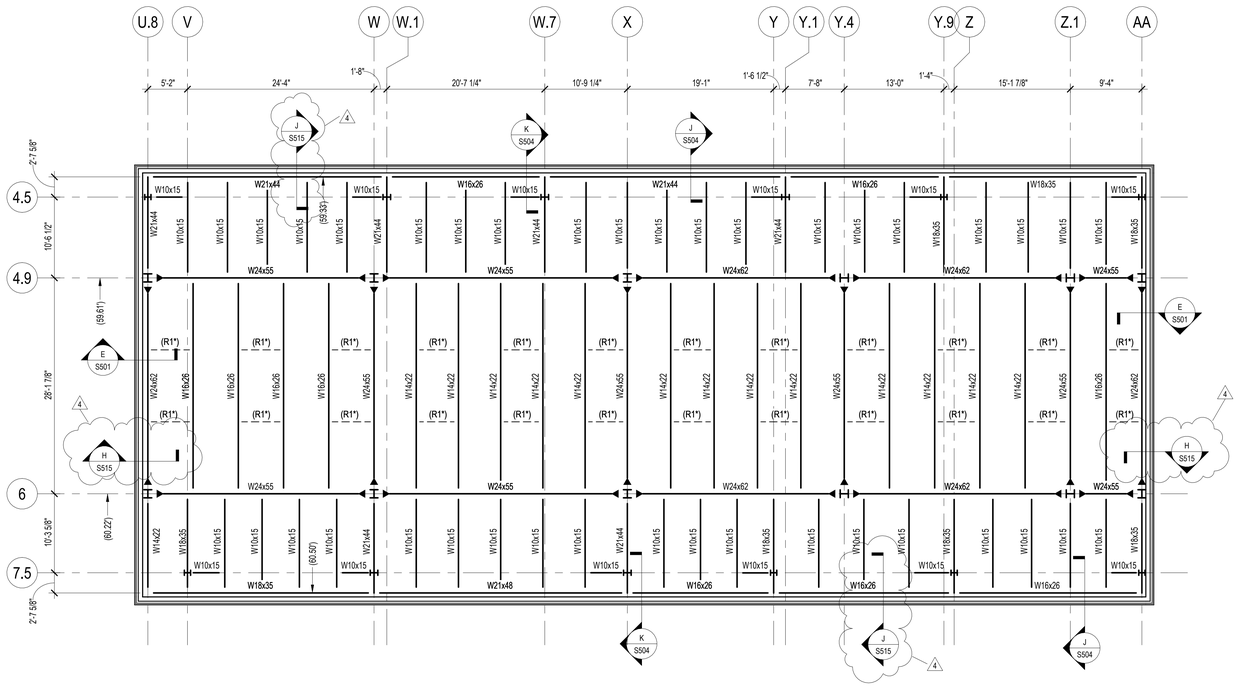



## PENTHOUSE ROOF FRAMING PLAN - AREA G

SCALE: 1/8" = 1'-0"




## PENTHOUSE ROOF FRAMING PLAN - AREA C

SCALE: 1/8" = 1'-0"

**ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

**ROOF FRAMING KEYED NOTES:**

(R1*) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJEACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.

(R2*) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

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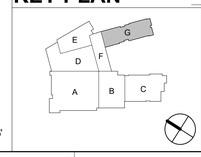
## KEY PLAN

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PENTHOUSE ROOF FRAMING PLANS - AREA C & G

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 04/01/2024 | ADDENDUM 5 |

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# MASONRY SHEAR WALL SCHEDULE

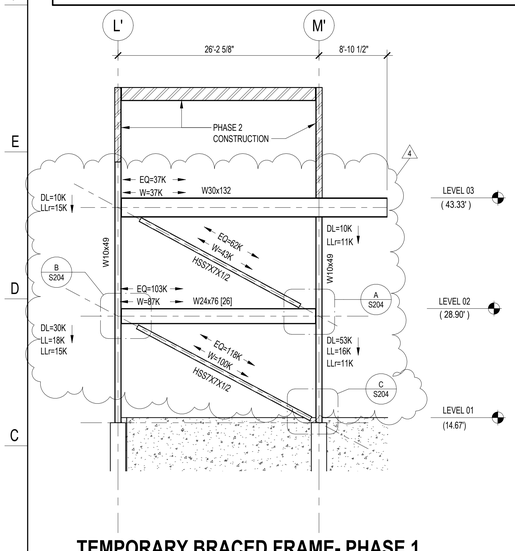
| MARK | WIDTH | VERTICAL REINFORCEMENT | | | | HORIZONTAL REINFORCEMENT | | | | END ELEMENTS | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LEVEL 00 TO LEVEL 01 | LEVEL 01 TO LEVEL 02 | LEVEL 02 TO LEVEL 03 | LEVEL 03 TO LEVEL 04 | LEVEL 00 TO LEVEL 01 | LEVEL 01 TO LEVEL 02 | LEVEL 02 TO LEVEL 03 | LEVEL 03 TO LEVEL 04 | THICKNESS | LENGTH | REINFORCEMENT | |
| SW-B-1 | 8" CMU | #6 AT 8" o.c. | #6 AT 16" o.c. | #6 AT 32o.c. | | 8"x8" BOND BEAM AT 48" o.c. | 8"x8" BOND BEAM AT 48" o.c. | 8"x8" BOND BEAM AT 48" o.c. | | | | | |
| SW-B-2 | 8" CMU | #6 AT 8" o.c. | #6 AT 16" o.c. | #6 AT 32o.c. | | 8"x8" BOND BEAM AT 48" o.c. | 8"x8" BOND BEAM AT 48" o.c. | 8"x8" BOND BEAM AT 48" o.c. | | | | | |
| SW-B-3 | 8" CMU | #5 AT 48" o.c. | | | | | | | | | | | |
| SW-B-4 | 8" CMU | #6 AT 8" o.c. | #6 AT 8" o.c. | #6 AT 24o.c. | | 8"x8" BOND BEAM AT 48" o.c. | 8"x8" BOND BEAM AT 48" o.c. | 8"x8" BOND BEAM AT 48" o.c. | | | | | |
| SW-B-A | 8" CMU | #5 AT 48" o.c. | | | | | | | | | | | |
| SW-B-B | 8" CMU | #6 AT 8" o.c. | #6 AT 16" o.c. | #6 AT 32o.c. | | 8"x8" BOND BEAM AT 48" o.c. | 8"x8" BOND BEAM AT 48" o.c. | 8"x8" BOND BEAM AT 48" o.c. | | | | | |
| SW-B-D | 8" CMU | #6 AT 8" o.c. | #6 AT 16" o.c. | #6 AT 32o.c. | | | | | | | | | |
| | | | | | | | | | | | | | |
| SW-D-1 | 8" CMU | | #5 AT 24" o.c. | | | | | | | | | | |
| SW-D-2 | 12" CMU | | #6 AT 16" o.c. EACH FACE | #6 AT 16" o.c. EACH FACE | #6 AT 16" o.c. EACH FACE | | | | | | | | |
| SW-D-3 | 12" CMU | | #6 AT 16" o.c. EACH FACE | #6 AT 16" o.c. EACH FACE | #6 AT 16" o.c. EACH FACE | | | | | | | | |
| SW-D-A | 8" CMU | | #5 AT 16" o.c. | | | | | | | | | | |
| SW-D-B | 12" CMU | | #6 AT 8" o.c. EACH FACE | #6 AT 16" o.c. EACH FACE | #6 AT 16" o.c. EACH FACE | | | | | | | | WALL SHALL BE GROUTED 100% SOLID FULL HEIGHT |
| SW-D-C | 12" CMU | | #6 AT 16" o.c. EACH FACE | #6 AT 32" o.c. EACH FACE | #6 AT 32" o.c. EACH FACE | | | | | | | | |
| SW-E-1 | 8" CMU | | #6 AT 24" o.c. | | | | | | | | | | |
| SW-E-A | 8" CMU | | #6 AT 24" o.c. | | | | | | | | | | |
| SW-E-B | 8" CMU | | #6 AT 24" o.c. | | | | | | | | | | |
| SW-F-1 | 8" CMU | | #5 AT 8" o.c. | #5 AT 16" o.c. | #5 AT 32" o.c. | | | | | | | | |
| SW-F-A | 8" CMU | | #6 AT 8" o.c. | #6 AT 16" o.c. | #6 AT 32" o.c. | | | | | | | | |

**NOTES:**

1. ALL BOND BEAMS SHALL BE REINFORCED WITH 2-#5 CONTINUOUS HORIZONTAL BARS UNLESS NOTED OTHERWISE.
2. NO MEP PENETRATION ARE PERMITTED THROUGH SHEAR WALLS WITHOUT THE APPROVAL OF THE EOR.
3. PENETRATION SHALL NOT BE LOCATED AT HORIZONTAL BOND BEAMS.
4. FLANGE ELEMENTS AND THIER CORRESPONDING SHEAR WALLS SHALL HAVE INTERLOCKING BLOCKS. FLANGES AND THEIR REINFORCMENT SHALL EXTEND FULL HEIGHT. CONTROL OR CONSTRUCTION JOINTS ARE NOT PERMITED THROUGHOUT THE LENGTH OF THE FLANGE ELEMENT.

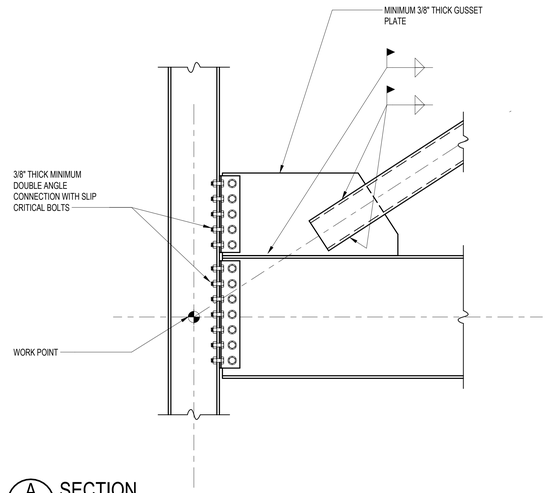
**KEYED NOTES:**

(1.) DENOTES THAT ALL VERTICAL BARS SHALL BE SPLICED WITH ZAP SCREWLOK "SL" SERIES BY BAR SPLICE PORDUCTS, INC. OR EQUIVALENT MECHANICAL COUPLER. LAP SPLICES ARE NOT PERMITTED.

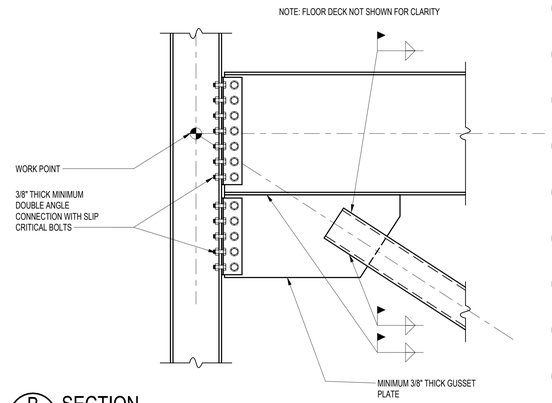



## TEMPORARY BRACED FRAME- PHASE 1

NOT TO SCALE




A S204 SECTION
NOT TO SCALE

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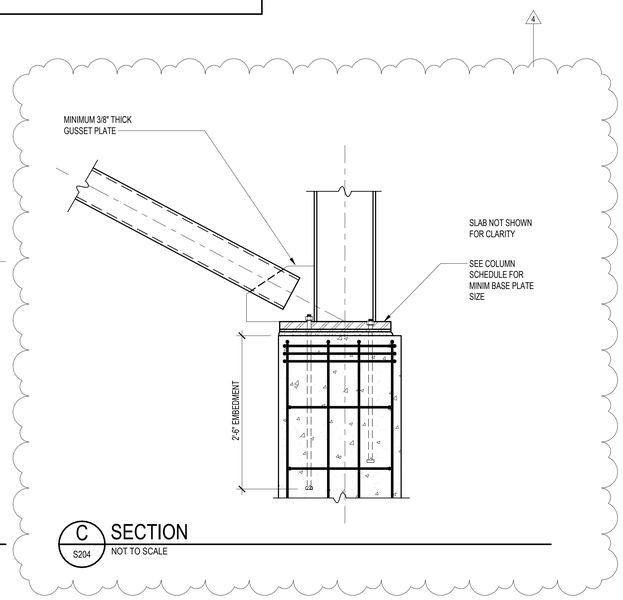
NOT TO SCALE




C S204 SECTION
NOT TO SCALE

**LATERAL BRACED FREAME NOTES:**

1. ALL LATERAL LOAD FRAME CONNECTIONS SHALL BE DESIGNED BY THE STEEL FABRICATOR USING UNIFORM FORCE METHODS AND ALLOWABLE STRESS DESIGN. DESIGN METHOD MUST NOT INDUCE MOMENTS TO THE MEMBERS OF THE BRACE. SHOP DRAWINGS AND CALCULATIONS FOR EACH JOINT SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MARYLAND AND SHALL BE SUBMITTED FOR REVIEW.
2. BRACES ARE TEMPORARY AND SHALL REMAIN IN PLACE UNTIL ALL STRUCTURAL SYSTEMS IN AREAS D,E,AND F, FOR PHASE 2 HAVE BEEN COMPLETED. GUSSET PLATE CONNECTIONS SHALL BE REMOVED FROM COLUMNS AND BEAMS. SURFACE AT REMOVED STEEL COMPONENTS SHALL BE GROUND SMOOTH. PROVIDE FINISH TO REPAIRED STEEL AS REQUIRED (PAINT, SPRAY FIREPROOF, ETC.)
3. LOADS SHOWN ON THE FRAME ELEVATIONS ARE PERMITTED TO BE REDUCED BY THE APPROPRIATE ASD LOAD COMBINATION FACTORS (0.6WL, 0.7E, ETC.).
4. WELD SIZE BETWEEN GUSSET PLATE AND DIAGONAL BRACE SHALL BE INCREASED BY 1/16" MINIMUM ABOVE THAT REQUIRED BY ANALAYSIS TO ACCOUNT FOR DIFFERENCE BETWEEN PLATE THICKNESS AND WIDTH OF SLOT IN TUBE.
5. CONNECTIONS SHALL USE A325-SC BOLTS

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GRIMM + PARKER
ARCHITECTS

GP #22105

SHEAR WALL SCHEDULE AND TEMPORARY BRACED FRAME
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 04/01/2024 | ADDENDUM 5 |

**S204**

12/22/2023
BID SET

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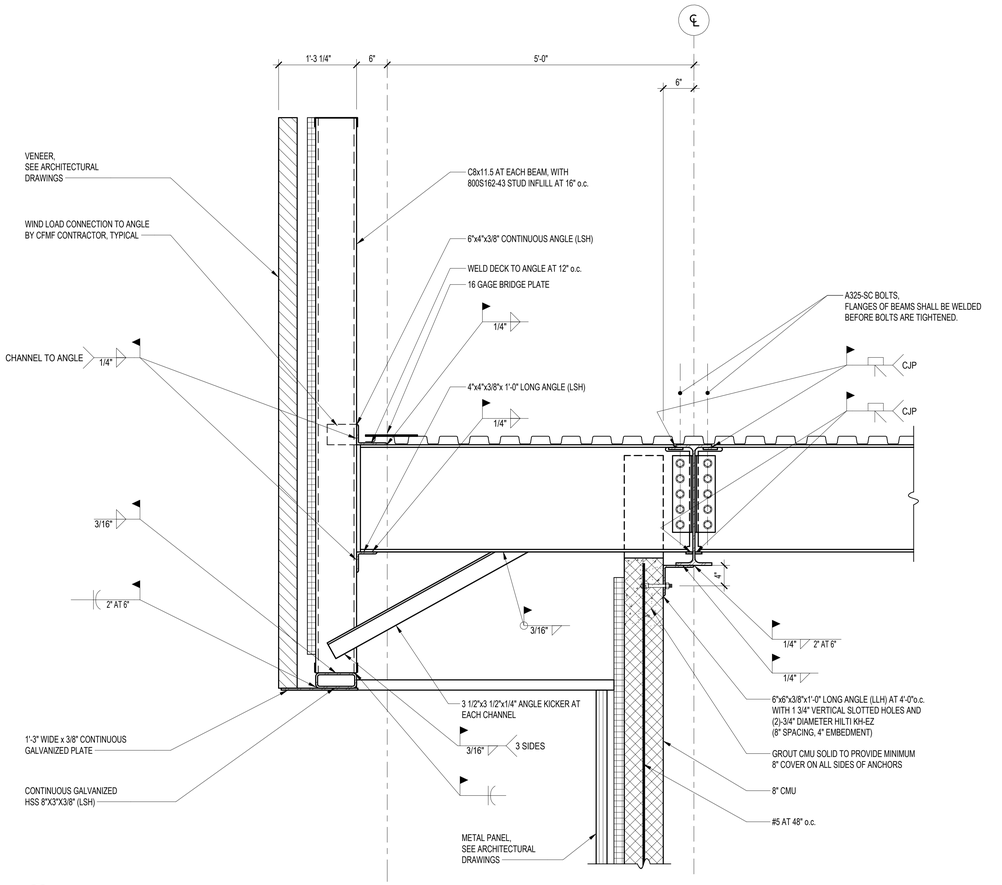
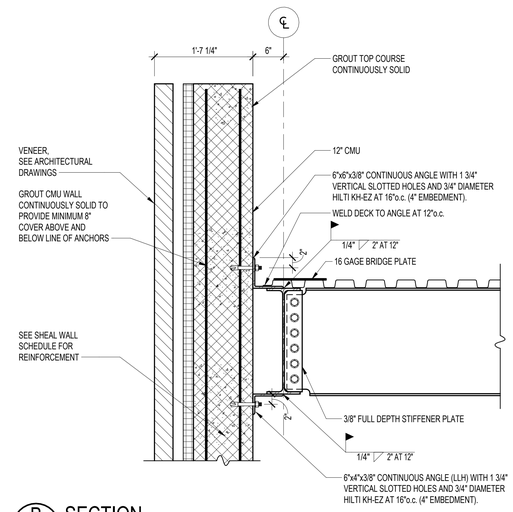



A SECTION
S514 SCALE: 1" = 1'-0"

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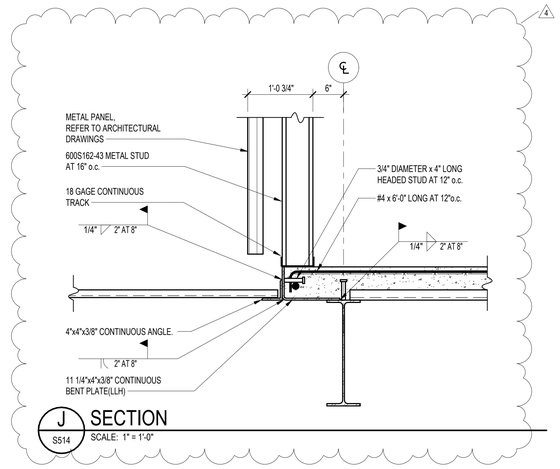


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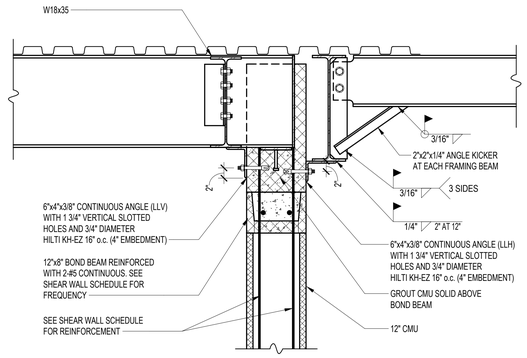


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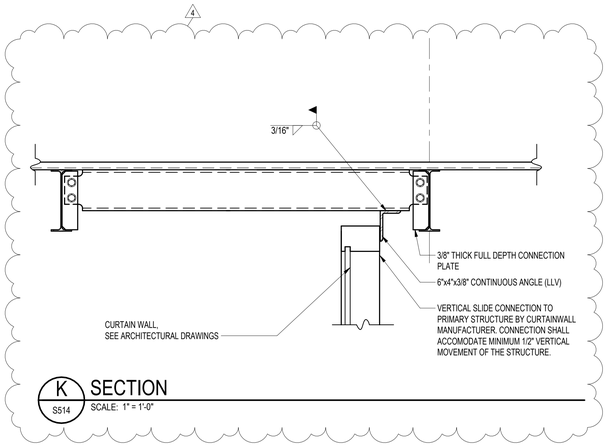


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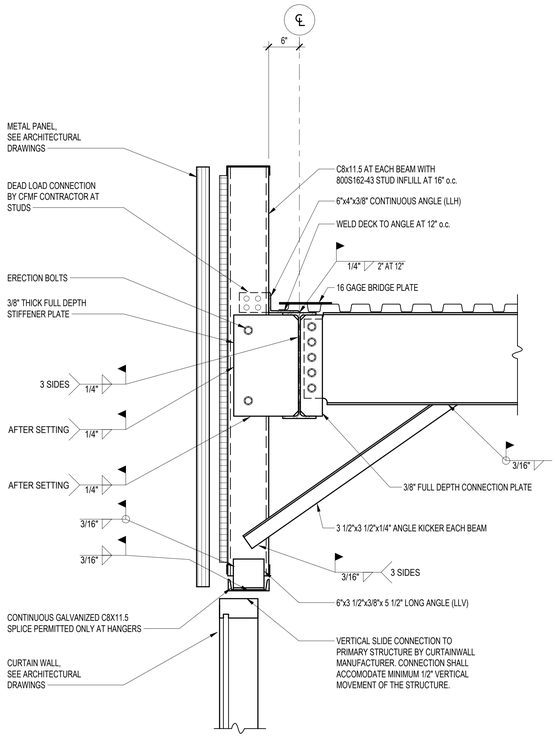


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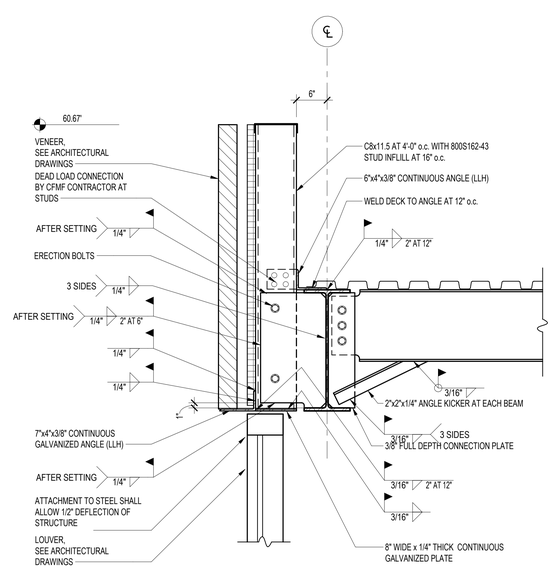


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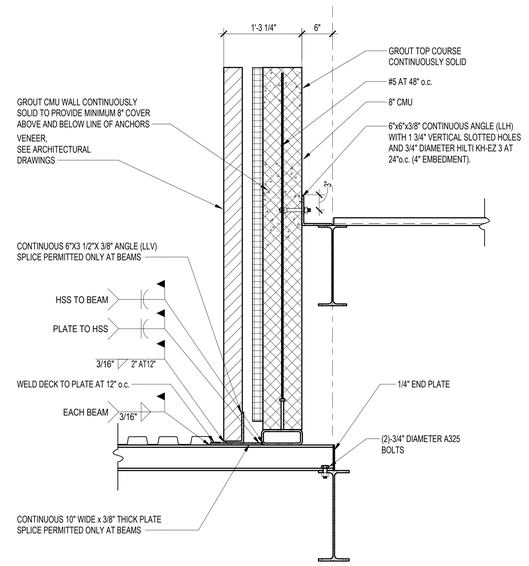


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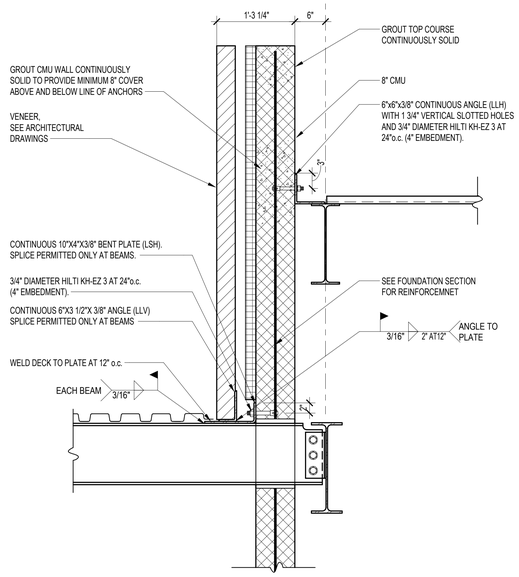


H SECTION
S514 SCALE: 1" = 1'-0"

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CEI No. 21-001 Rev1 2020

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Professional Certification
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GP #22105

SECTIONS
NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 04/01/2024 | ADDENDUM 5 |

S514
12/22/2023
BID SET

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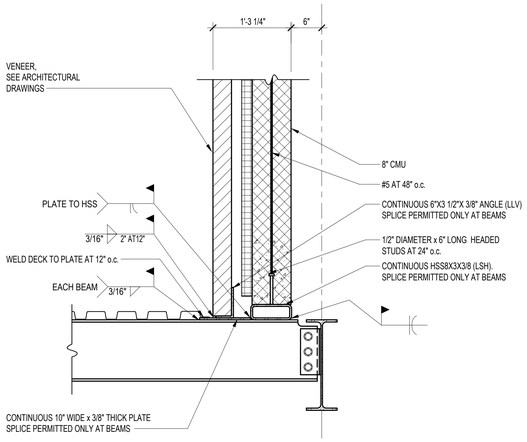


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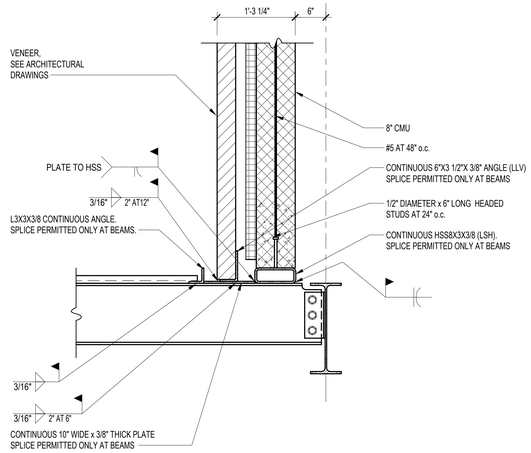


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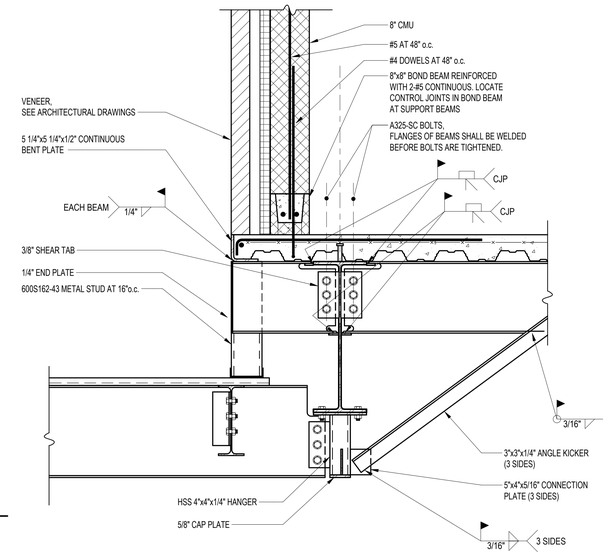


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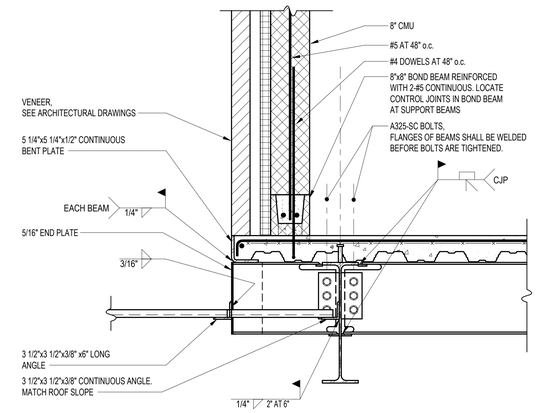


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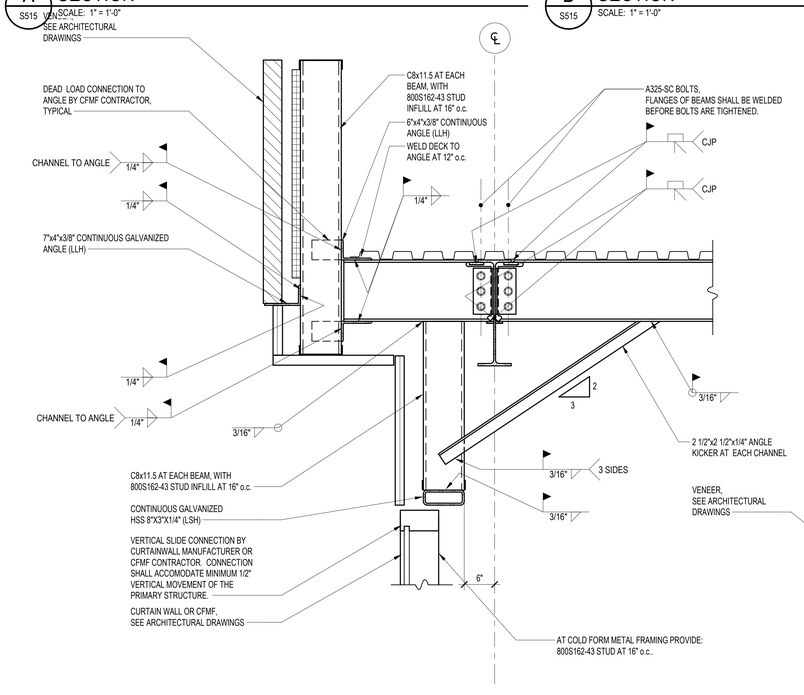


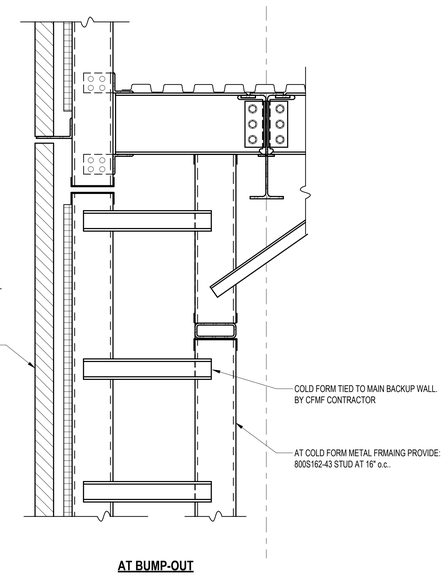


**AT BUMP-OUT**

E S515 SECTION
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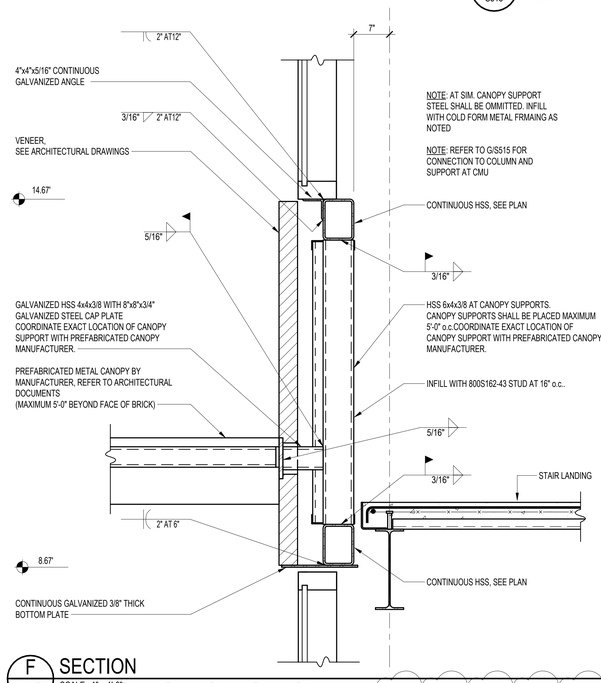



NOTE: AT SIM. CANOPY SUPPORT STEEL SHALL BE OMMITTED. INFILL WITH COLD FORM METAL FRMAING AS NOTED

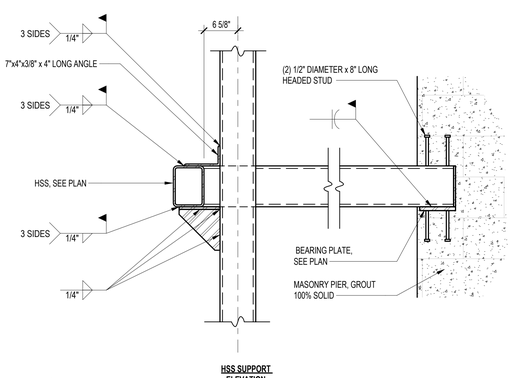
NOTE: REFER TO G/S515 FOR CONNECTION TO COLUMN AND SUPPORT AT CMU

CONTINUOUS HSS, SEE PLAN

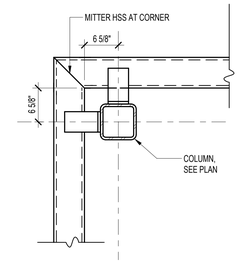
HSS 6x4x3/8 AT CANOPY SUPPORTS. CANOPY SUPPORTS SHALL BE PLACED MAXIMUM 5'-0" o.c.COORDINATE EXACT LOCATION OF CANOPY SUPPORT WITH PREFABRICATED CANOPY MANUFACTURER.

INFILL WITH 800S162-43 STUD AT 16" o.c..

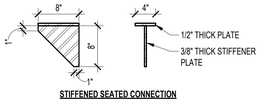
F S515 SECTION
SCALE: 1" = 1'-0"




**HSS SUPPORT ELEVATION**

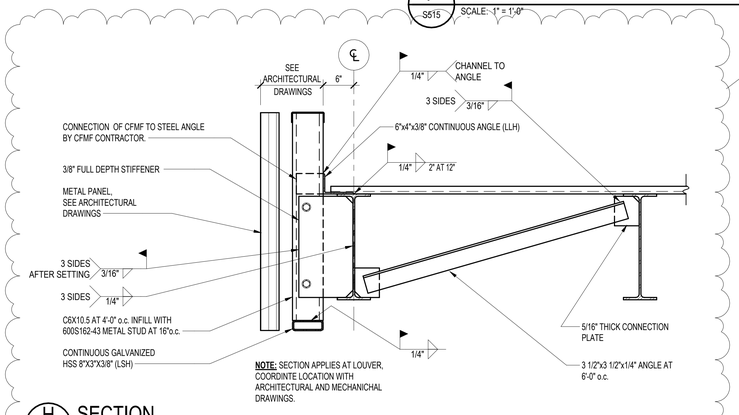



**HSS SUPPORT PLAN**



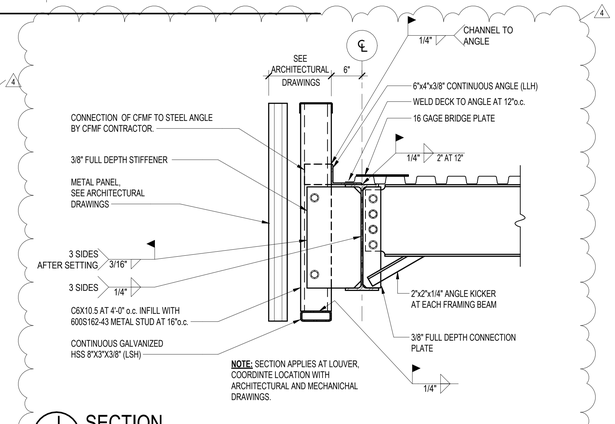

**STIFFENED SEATED CONNECTION**

G S515 SECTION
SCALE: 1" = 1'-0"




**NOTE:** SECTION APPLIES AT LOUVER, COORDINTE LOCATION WITH ARCHITECTURAL AND MECHANICHAL DRAWINGS.

H S515 SECTION
SCALE: 1" = 1'-0"




**NOTE:** SECTION APPLIES AT LOUVER, COORDINTE LOCATION WITH ARCHITECTURAL AND MECHANICHAL DRAWINGS.

J S515 SECTION
SCALE: 1" = 1'-0"

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GRIMM + PARKER
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GP #22105

SECTIONS

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 04/01/2024 | ADDENDUM 5 |

S515

12/22/2023
BID SET

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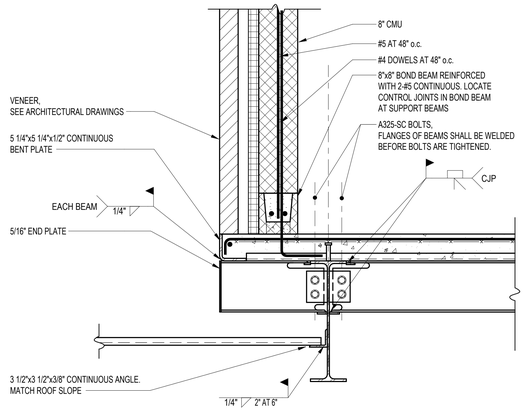


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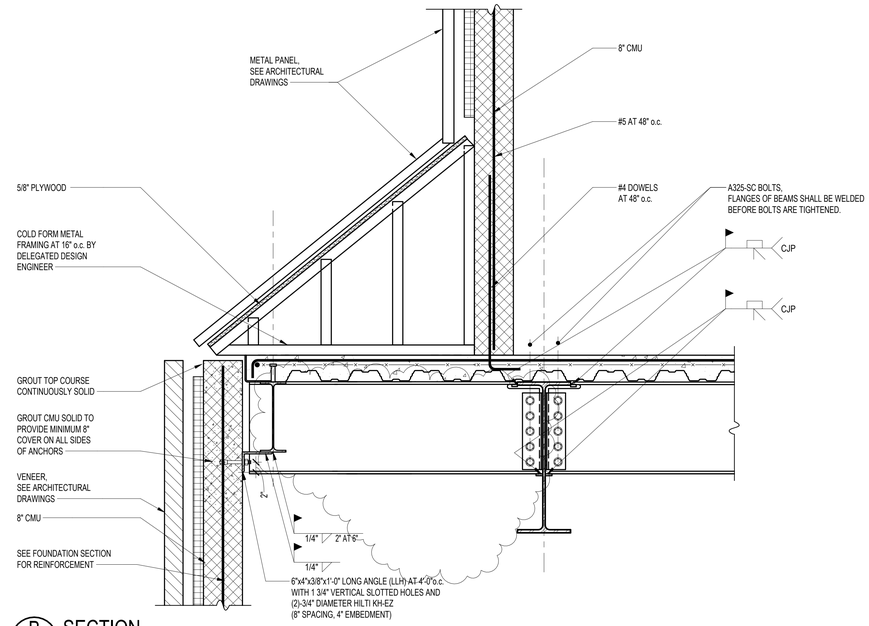


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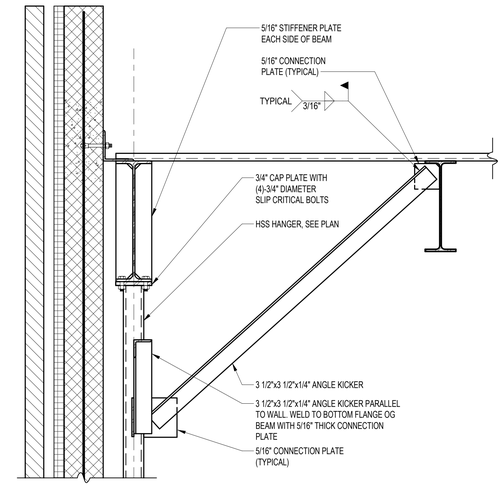


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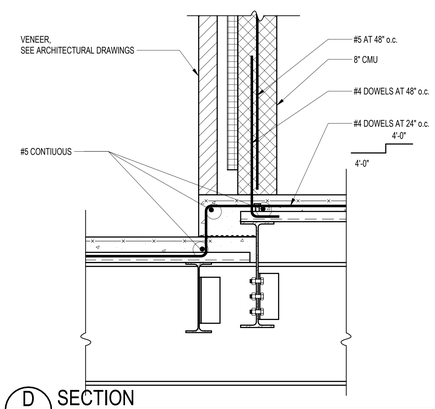


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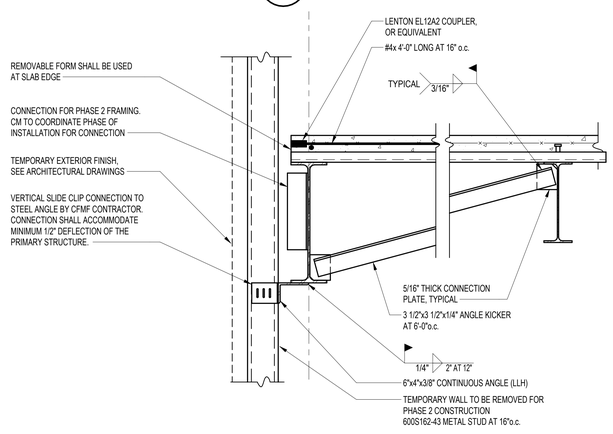
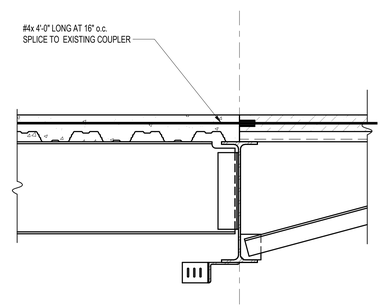



PHASE 1




PHASE 2

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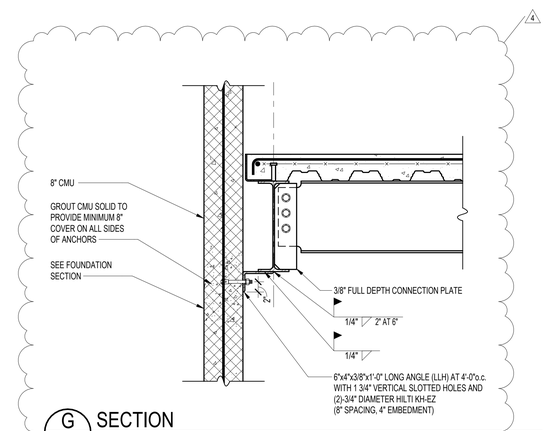


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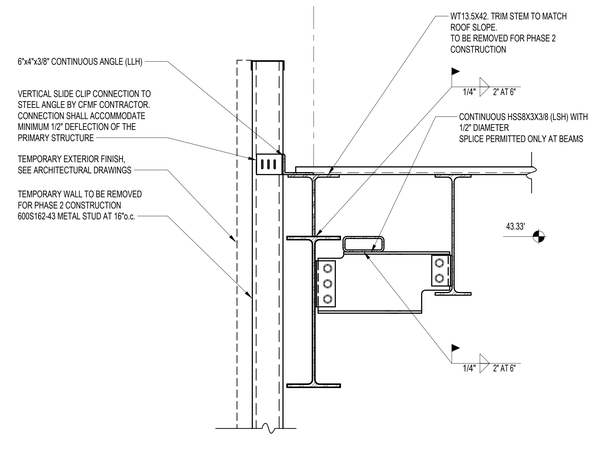
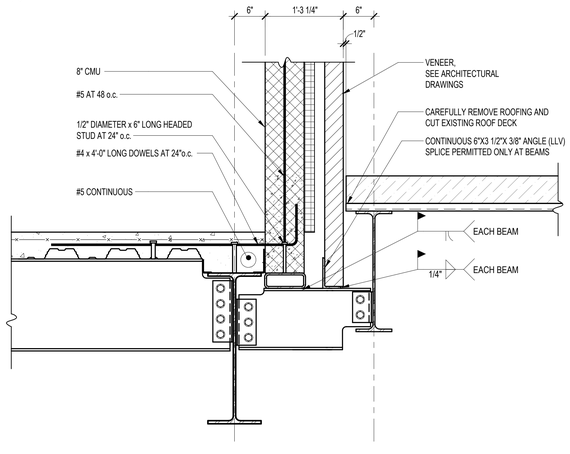



PHASE 1

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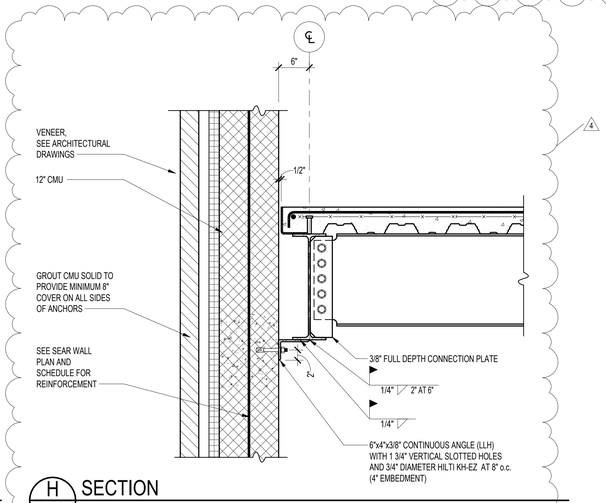


H S517 SECTION
SCALE: 1" = 1'-0"

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CEI No. 21-091 Rev1 2022

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GP #22105

SECTIONS

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 03/25/2024 | ADDENDUM 3 |
| 04/01/2024 | ADDENDUM 5 |

S517
03/22/2024
BID SET

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## GENERAL NOTES: (MECHANICAL)

### GENERAL NOTES AND CONDITIONS:

1. COORDINATE ALL WORK BETWEEN ALL DISCIPLINES.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES, REGULATIONS, AND REQUIREMENTS OF ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT.
3. THE INTENT OF THESE DRAWINGS IS FOR THE CONTRACTOR TO PROVIDE ALL LABOR, MATERIAL, FINISHES, EQUIPMENT, INSTALLATION, AND SERVICES NECESSARY FOR AND INCIDENTAL WITH THE WORK, TO PROVIDE THE OWNER WITH A COMPLETE PROJECT INCLUSIVE OF ALL SYSTEMS.
4. PRIOR TO INITIATING ANY PORTION OF THE WORK, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND COORDINATE ALL PORTIONS OF THE CONTRACT DOCUMENTS RELATING TO THAT PORTION OF THE WORK AND AFFECTING ADJOINING PORTIONS. IF DISCREPANCIES EXIST, THEY SHALL BE REPORTED TO THE CONSTRUCTION MANAGER FOR CLARIFICATION AND/OR RESOLUTION BEFORE COMMENCING SUCH WORK.
5. BY SUBMITTING A BID PROPOSAL THE CONTRACTOR CERTIFIES THAT THEY HAVE VISITED THE SITE AND UNDERSTAND THE COMPLETE SCOPE OF WORK, WHICH IS INCLUDED IN THE PROPOSAL.
6. DEFINITIONS: "PROVIDE" MEANS "FURNISH AND INSTALL". "VERIFY" MEANS "VERIFY IN THE FIELD AND COORDINATE DIMENSIONS AND DISCREPANCIES".
7. THESE NOTES AND OTHER NOTES ON THE DRAWINGS ARE DIRECTIONS FOR THE CONTRACTOR'S PERFORMANCE, UNLESS NOTED OTHERWISE (U.N.O.). FOR EXAMPLE, THE VERB "INSTALL" MEANS "CONTRACTOR SHALL INSTALL", "RELOCATE" MEANS "CONTRACTOR SHALL RELOCATE", ETC.
8. UNLESS NOTED OTHERWISE, NUMBERED DIMENSIONS SHOWN ON DRAWINGS TAKE PRECEDENCE OVER SCALED DRAWINGS. DETAIL DRAWINGS TAKE PRECEDENCE OVER GENERAL DRAWINGS. IF CONFLICTS EXIST ON THE DRAWINGS, THEN THE MORE STRINGENT REQUIREMENT SHALL APPLY. FINAL INTERPRETATION SHALL BE MADE BY THE ENGINEER.
9. SAMPLES AND SHOP DRAWINGS MUST BE SUBMITTED BY THE CONTRACTOR TO THE CONSTRUCTION MANAGER FOR REVIEW AND PROCESSING BEFORE THE PURCHASE OR FABRICATION OF ANY MATERIALS.
10. DURING THE WORK, ANY CONDITION DISCOVERED THAT CAUSES CONFLICT WITH THE INTENDED DESIGN MUST BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
11. CONTRACTOR SHALL STAGE WORK IN SUCH A WAY AT TO ENSURE SAFE EMERGENCY EGRESS AT ALL TIMES.
12. EXCEPT FOR PREFINISHED SURFACES, ALL ITEMS DISTURBED OR DAMAGED BY WORK SHALL BE REFINISHED TO MATCH SURROUNDING AREA OR FINISHED AS INDICATED.
13. ALL PENETRATIONS IN WALLS AND CEILING SURFACES SHALL BE PATCHED AND FIRE STOPPED.
14. ANY ALTERATION TO THE STRUCTURE (I.E. CORE DRILLING CONCRETE, ETC.) SHALL BE COORDINATED WITH THE GENERAL TRADES CONTRACTOR.
15. UNLESS OTHERWISE INDICATED, ALL PIPING, CONDUIT, DUCTWORK, AND SIMILAR SERVICES SHALL BE CONCEALED.
16. GENERAL NOTES, THOSE FOUND ON THIS SHEET, APPLY TO ALL DRAWINGS RELATED TO THIS PROJECT.
17. DRAWING NOTES SPECIFICALLY REFER TO ITEMS NOTED WITH NUMBER OR LETTER DESIGNATIONS ON THE RESPECTIVE DRAWING WHERE THE DESIGNATIONS ARE SHOWN.
18. ALL INSULATED EXTERIOR PIPING SYSTEM SHALL BE PROVIDED WITH ALUMINUM JACKETING.
19. THE GEOTHERMAL CONTRACTOR SHALL HAVE TEN (10) YEARS EXPERIENCE IN SIMILAR SIZE PROJECT, DRILLING TECHNIQUES AND BE SPECIALIZED IN AND CERTIFIED FOR GEOTHERMAL INSTALLATION.
20. ALL KITCHEN HOOD/RANGE HOOD EXHAUST DUCTWORK SHALL BE STAINLESS STEEL WITH WELDED JOINTS AND 2 HOUR FIRE WRAP.
21. ALL DISHWASHER EXHAUST DUCTWORK SHALL BE STAINLESS STEEL WITH WELDED JOINTS.
22. ALL DRYER VENT DUCTWORK SHALL BE ALUMINUM OR STAINLESS STEEL WITH SMOOTH INTERIOR (I.E. NO SCREWS ETC).
23. PROVIDE MANUAL VOLUME FOR EACH AIR DEVICE (SUPPLY, RETURN, RELIEF, EXHAUST) WHICH IS INDICATED TO HAVE A SPECIFIC AIRFLOW (CFM).
24. PROVIDE INSULATED STAND-OFFS FOR ALL MANUAL VOLUME DAMPERS INSTALLED IN INSULATED DUCT SYSTEMS.
25. PROVIDE LIQUID LEVEL OVERFLOW SENSORS IN ALL UNIT CONDENSATE DRAIN PANS. INTERLOCK TO DEENERGIZE UNIT AND ALARM THROUGH THE EMS.
26. ALL TRANSFER AIR DUCTS SHALL BE SINGLE WALL SOUND LINED (NO INNER GALVANIZED LINER). ALL OTHER SOUND LINED DUCTS EXCEPT FOR DIFFUSER PLENUM BOXES SHALL BE DOUBLE WALL TYPE WITH PERFORATED GALVANIZED INNER LINER.
27. ALL EXPOSED DUCTWORK SHALL BE PAINT GRADE TYPE WITH SELF SEALING JOINTS (I.E. NOT FLANGED) UNLESS NOTED OTHERWISE.
28. USE RADIUS ELBOW WHEREVER POSSIBLE. USE 90° MITERED ELBOWS WHERE RADIUS ELBOWS CAN'T BE USED.
29. COORDINATE DUCTWORK AND DIFFUSER LOCATIONS WITH ALL CEILING DEVICES.
30. ALL ROOF MOUNTED EXHAUST FANS AND INTAKE VENTS SHALL BE PROVIDED WITH MOTOR OPERATED DAMPERS (MOD'S-ATC) EXCEPT FOR KITCHEN HOOD/RANGE HOOD EXHAUST FANS.
31. PROVIDE DOUBLE WALL INSULATED BLANK OFF PANELS BEHIND UNUSED PORTION OF LOUVERS.
32. ALL EXPOSED CABINETS (CABINET UNIT HEATERS, CONVECTORS ETC), BRICK VENTS, LOUVERS ETC SHALL BE PROVIDED WITH A CUSTOM COLOR AS SELECTED BY THE ARCHITECT.
33. PROVIDE FLANGE/ESCUTCHEON AROUND EXPOSED DUCTS PENETRATING WALLS.
34. WHERE DUCT RUNNOUTS ARE EXPOSED TO VIEW, UTILIZE RIGID DUCTWORK IN LEU OF FLEXIBLE TYPE.
35. ALL ROOF CURBS FOR FANS, VENTS AND UNITS SHALL BE A MINIMUM OF 18" ABOVE FINISHED ROOF AND TOP OF CURB SHALL BE LEVEL.
36. LOCATE ALL ROOF MOUNTED EQUIPMENT WHICH REQUIRES SERVICING A MINIMUM OF 10 FEET FROM THE EDGE OF THE ROOF UNLESS THERE IS MIN 42" HIGH PARAPET.
37. COORDINATE LOCATION OF ALL INTAKE VENTS AND WALL LOUVERS TO BE A MINIMUM OF 15 FEET FROM PLUMBING, VENTS, EXHAUST VENTS, EXHAUST FANS ETC.
38. ALL WALL MOUNTED SENSORS SHALL BE PROVIDED WITH PROTECTIVE METAL GUARDS OR CAGES.
39. PROVIDE INSULATION STAND OFFS FOR VOLUME DAMPRS LOCATED IN EXTERNALLY INSULATED DUCTWORK. PROVIDE LAGGING AND STEM EXTENSIONS FOR DEVICES LOCATED IN INSULATED PIPING SYSTEMS.
40. ALL HEAT RECOVERY WHEELS SHALL UTILIZE A MOLECULAR SIEVE DESICCANT AND BE PROVIDED WITH VARIABLE SPEED DRIVES FOR MODULATING CONTROL.
41. DUCT DETECTORS SHALL BE FURNISHED BY THE FIRE ALARM CONTRACTOR AND INSTALLED BY THE MECHANICAL CONTRACTOR. THE ATC CONTRACTOR SHALL HARD WIRE INTERLOCK TO THE AHU AND THE FIRE ALARM CONTRACTOR SHALL INTERLOCK WITH THE FIRE ALARM.
42. ALL OPEN END DUCTS SHALL BE PROVIDED WITH ½" X ½" MESH BIRD SCREEN.
43. THE CONTRACTOR IS RESPONSIBLE FOR ALL REFRIGERANT ROUTING, SIZING, ACCESSORIES AND INSTALLATION IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
44. COORDINATE ALL DUCTWORK ROUTING REQUIREMENTS, LOCATIONS, SIZES, ETC WITH PRE ENGINEERED FRAMING SYSTEM, AND JOIST MANUFACTURER PRIOR TO FABRICATION OF THE STRUCTURAL SYSTEM.
45. FOR STRUCTURAL MEMBERS NEAR FUNCTIONAL LOUVERS, NOTCH PLENUM BOXES AROUND STRUCTURE TO MAXIMIZE CONTINUOUS OPEN AIR OF PLENUM BOXES CONNECTED TO LOUVERS.
46. WHERE CONFLICTS EXIST IN PIPE SIZES/DUCT SIZES AND OR REQUIREMENTS THE BASIS OF THE BID SHALL BE BASED ON THE LARGER SIZE OR MORE STRINGENT REQUIREMENT.
47. RESTORE, CLEAN, PAINT ALL MATERIALS TO LIKE NEW CONDITIONS PRIOR TO FINAL FIELD REPORT.
48. ALL HYDRONIC VALVES LOCATED IN INSULATED PIPING SYSTEMS SHALL BE PROVIDED WITH REMOVABLE/REUSABLE INSULATION COVERS.
49. CONTRACTOR SHALL PROVIDE OFFSETS SUCH THAT STRAIGHT PIPING LENGTHS SHALL NOT EXCEED 100'-0". 5 ADD

## GENERAL NOTES: (MECHANICAL)

### GENERAL CONSTRUCTION NOTES:

1. LEAVE SPACE CLEAN ON COMPLETION, INCLUDING THE CLEANING OF GLASS, DOORS, FRAMES, FLOORS, GRILLES, LIGHT LENSES, ETC.
2. REFER TO STRUCTURAL DRAWINGS FOR TYPICAL PENETRATION/OPENING/INFILL DETAILS.
3. IT IS THE INTENT OF THESE DRAWINGS FOR ALL DISCIPLINES AND SPECIFICATIONS TO PRODUCE A COMPLETE PROJECT. IN ALL CASES THE DRAWINGS AND SPECIFICATIONS MUST BE REVIEWED, PRICED, ESTIMATED, AND CONSTRUCTED IN THEIR ENTIRETY. THE DRAWINGS ARE COMPLEMENTARY TO ONE ANOTHER AND THE SPECIFICATIONS. ANYTHING SHOWN OR IMPLIED ON ANY ONE DRAWING MUST BE PROVIDED, INSTALLED AND CONNECTED AS THOUGH IT WAS SHOWN ON ALL DRAWINGS AND INCLUDED IN THE ORIGINAL PRICING. NO REQUEST FOR ADDITIONAL COST OR CHANGE ORDER WILL BE ACCEPTED BY THE OWNER FROM ANY CONTRACTOR, SUPPLIER, OR INSTALLER THAT RESULTS FROM A FAILURE TO THOROUGHLY REVIEW ALL DRAWINGS AND SPECIFICATIONS, COORDINATE WITH OTHER TRADES, OR THOROUGHLY INSPECT THE SITE TO DETERMINE ALL EXISTING CONDITIONS.
4. IF AN ASSUMED OR ACTUAL CONFLICT IS DISCOVERED IN THE CONTRACT DOCUMENTS, THE MORE EXPENSIVE OR HIGHER QUALITY OPTION (AS DETERMINED BY THE ARCHITECT/ENGINEER) SHALL BE ASSUMED TO APPLY UNLESS DIRECTED OTHERWISE BY THE ARCHITECT/ENGINEER.
5. THE CONTRACTOR IS REQUIRED TO VISIT THE SITE, FAMILIARIZE THEMSELVES WITH THE LOCAL CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED AND AS ARE NECESSARY FOR CONSTRUCTION, AND CORRELATE THEIR OBSERVATIONS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. IT IS ASSUMED THAT THE CONTRACTOR HAS OBTAINED, BEFORE AWARD OF THE CONTRACT, CLARIFICATION OF ALL QUESTIONS AS TO THE INTENT OF THE CONTRACT DOCUMENTS AND OF ASSUMED OR ACTUAL CONFLICT BETWEEN TWO OR MORE ITEMS IN CONTRACT DOCUMENTS. SHOULD THE CONTRACTOR FAIL TO OBTAIN SUCH CLARIFICATION, THE ARCHITECT/ENGINEER SHALL DIRECT WORK TO PROCEED BY THE METHOD INDICATED, SPECIFIED OR REQUIRED BY CONTRACT DOCUMENTS WHICH WILL PRODUCE THE BEST RESULTS, AS JUDGED BY THE ARCHITECT/ENGINEER. SUCH DIRECTION BY THE ARCHITECT/ENGINEER SHALL NOT ENTITLE THE CONTRACTOR TO ANY CLAIM FOR EXTRA COST.
6. IF ACTUAL FIELD CONDITIONS VARY FROM WHAT IS SHOWN OR ASSUMED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR IS REQUIRED TO PROMPTLY NOTIFY THE ARCHITECT/ENGINEER AND RECEIVE DIRECTION PRIOR TO PROCEEDING WITH THE WORK AFFECTED BY THE ACTUAL FIELD CONDITION.

## HVAC SYSTEM SUMMARY

HEATING
10°F OUTSIDE AIR TEMPERATURE. 70° INDOOR AIR TEMPERATURE.

900,000 BTU – BUILDING HEAT LOSS

3,477,600 BTU – VENTILATION LOAD (WITH HEAT RECOVERY)

4,377,600 BTU – TOTAL HEATING LOAD

4,377,600 BTU – EARTH HX CAPACITY

COOLING
95°F DB/78°F WB OUTDOOR AIR TEMPERATURE
75°F DB/50% RH INDOOR AIR TEMPERATURE

6,540,000 BTU – BUILDING HEAT GAIN

4,860,000 BTU – VENTILATION LOAD (WITH HEAT RECOVERY)

11,400,000 BTU – BLOCK COOLING LOAD

950 TONS – BLOCK COOLING LOAD

11,400,000 BTU – TOTAL COOLING LOAD

11,400,000 BTU – EARTH HX CAPACITY

## MECHANICAL LEGEND

| SYMBOL | ABBREV | DEFINITION |
|---|---|---|
| | SA | SUPPLY AIR DUCT UP, DOWN |
| | RA | RETURN AIR DUCT UP, DOWN |
| | EA | EXHAUST AIR DUCT UP, DOWN |
| | OA | OUTSIDE AIR DUCT UP, DOWN |
| | | RECT. TO ROUND TRANSITION |
| | | FLEXIBLE CONNECTION (DUCTWORK) |
| | | FLEXIBLE DUCT |
| | VD | MANUAL VOLUME DAMPER |
| | FD | FIRE DAMPER |
| | MOD | MOTOR OPERATED DAMPER |
| | SD | SMOKE DAMPER |
| | CD | COMBINATION FIRE/SMOKE DAMPER |
| | SL | ACOUSTICAL DUCT LINING |
| | | DUCT TRANSITION |
| R | | CHANGE IN ELEVATION RISE (R); DROP (D) |
| AMS | AMS | AIR MONITORING STATION |
| | | SOUND ATTENUATOR |
| DD | DD | DUCT SMOKE DETECTOR |
| | | ELBOW W/TURNING VANES |
| | | RADIUS ELBOW |
| AIR FLOW | | RETURN AIR REGISTER W/BOOT |
| T | T'STAT | THERMOSTAT |
| | | GATE VALVE |
| | | GLOBE VALVE |
| | | BALL VALVE |
| | | BALANCING VALVE |
| | | MULTI-PURPOSE VALVE |
| | | CHECK VALVE |
| | | BUTTERFLY VALVE |
| | | 3-WAY MODULATING VALVE (ATC) |
| | | 2-WAY MODULATING VALVE (ATC) |
| | PRV | PRESSURE REDUCING VALVE |
| | | NEEDLE VALVE |
| | | PRESSURE RELIEF OR SAFETY VALVE |
| | HED | HOSE END DRAIN VALVE |
| | | STRAINER W/HOSE END DRAIN VALVE & CAP |
| | | COMBINATION BALANCING/SHUT-OFF VALVE |
| | | AUTOMATIC AIR VENT |
| | | MANUAL AIR VENT |
| | | FLOW METER FITTING |
| | | UNION |
| | | FLANGE |
| | | CONCENTRIC REDUCER |
| | | ECCENTRIC REDUCER |
| | | FLEXIBLE CONNECTION (PIPING) |
| | | THERMOMETER |
| | | PRESSURE GAUGE W/NEEDLE VALVE |
| T | | TEMPERATURE SENSOR |
| | | PIPE ALIGNMENT GUIDE |
| | | PIPE ANCHOR |
| | | AUTOMATIC FLOW REGULATING VALVE |
| | | PIPE-TURN DOWN |
| | | PIPE-TURN UP |
| | | PIPE-TURN DOWN (DOUBLE LINE PIPE) |
| | | PIPE-TURN UP (DOUBLE LINE PIPE) |
| | | PIPE TEE UP |
| | | PIPE TEE DOWN |
| | | END CAP |
| | | DIRECTION OF FLOW |
| # | | DRAWING NOTE DESIGNATION |
| # | | AIR DEVICE DESIGNATION |
| # | | EQUIPMENT BOX DESIGNATION |
| RL | RL | REFRIGERANT LIQUID |
| RS | RS | REFRIGERANT SUCTION |

| SYMBOL | ABBREV | DEFINITION |
|---|---|---|
| | AD | ACCESS DOOR |
| | AFF | ABOVE FINISHED FLOOR |
| | AFPF | AIRFOIL PLENUM FAN |
| | AHU | AIR HANDLING UNIT |
| | AMS | AIR MONITORING STATION |
| | AP | ACCESS PANEL |
| | APD | AIR PRESSURE DROP |
| | ATC | AUTOMATIC TEMPERATURE CONTROL |
| | BBR | BASEBOARD RADIATION |
| | BHP | BOILER HORSEPOWER |
| | BHP | BRAKE HORSEPOWER |
| | BTU | BRITISH THERMAL UNIT |
| | C | CLOSED |
| | CAP | CAPACITY |
| | CAV | CONSTANT AIR VOLUME |
| | CFM | CUBIC FEET PER MINUTE |
| COND | CC/COND | CONDENSATE DRAINLINE |
| | CONV | CONVECTOR |
| | CW | DOMESTIC COLD WATER |
| | CUH | CABINET UNIT HEATER |
| | DB | DRY BULB |
| | DB | DECIBEL |
| ø | DIA | DIAMETER |
| | DIFF | DIFFUSER |
| | DWG | DRAWING |
| | EAT | ENTERING AIR TEMPERATURE |
| | EF | EXHAUST FAN |
| | EFF | EFFICIENCY |
| | ELECT. CHAR. | ELECTRICAL CHARACTERISTICS |
| | EMS | ENERGY MANAGEMENT SYSTEM |
| | ERV | ENERGY RECOVERY VENTILATOR |
| | ESP | EXTERNAL STATIC PRESSURE |
| | EX | EXISTING |
| | EXH | EXHAUST |
| | ETR | EXISTING TO REMAIN |
| | E/W | EACH WAY |
| | EWT | ENTERING WATER TEMPERATURE |
| | F | FAN |
| | °F | DEGREES FAHRENHEIT |
| | FCU | FAN COIL UNIT |
| | FPM | FEET PER MINUTE |
| | FT $H_2O$ | FEET WATER GAUGE |
| | FTR | FINNED TUBE RADIATION |
| | FZ | FREEZESTAT |
| G | G | NATURAL GAS |
| | GPM | GALLONS PER MINUTE |
| | HT | HEIGHT |
| HPWS | HPWS | HEAT PUMP WATER SUPPLY |
| HPWR | HPWR | HEAT PUMP WATER RETURN |
| | HW(x°) | DOMESTIC HOT WATER (TEMP.) |
| | HWR(x°) | DOMESTIC HOT WATER RECIRC. (TEMP.) |
| | HWG | HOT WATER GENERATOR |
| | HZ | HERTZ |
| | IN $H_2O$ | INCHES WATER GAUGE |
| | KW | KILOWATT |
| | LAT | LEAVING AIR TEMPERATURE |
| | LBS | POUNDS |
| | LF | LINEAR FOOT |
| | LWT | LEAVING WATER TEMPERATURE |
| | MAX | MAXIMUM |
| | MBH | BTU PER HOUR (THOUSAND) |
| | MIN | MINIMUM |
| | NC | NOISE CRITERIA |
| | N.C. | NORMALLY CLOSED |
| | No. | NUMBER |
| | N.O. | NORMALLY OPEN |
| | OAF | OUTSIDE AIR FAN |
| | O/C | ON CENTER |
| | OED | OPEN END DUCT |
| | P | PUMP |
| | PA | PRIMARY AIR |
| | PD | PRESSURE DROP |
| | PSI | POUNDS PER SQUARE INCH |
| | RAF | RETURN AIR FAN |
| | REG | REGISTER |
| | REQ'D | REQUIRED |
| | RPM | REVOLUTIONS PER MINUTE |
| | RX | REMOVE EXISTING |
| | SAF | SUPPLY AIR FAN |
| SAN | SAN | SANITARY |
| | SB | STAND-BY |
| | SENS | SENSIBLE |
| SP | SP | SPRINKLER PIPING |
| | SP | STATIC PRESSURE |
| | SQ | SQUARE |
| | STD | STANDARD |
| | SWT | SUPPLY WATER TEMPERATURE |
| | TEMP | TEMPERATURE |
| | TONS | TONS OF REFRIGERATION |
| | V | VENT |
| | V | VOLTS |
| | VEL | VELOCITY |
| | VSD | VARIABLE SPEED DRIVE |
| | W/ | WITH |
| | WB | WET BULB |
| | WG | WATER GAUGE |
| | WPD | WATER PRESSURE DROP |
| | ΔT | TEMPERATURE DIFFERENCE |
| | % | PERCENT |
| | Φ | ELECTRICAL PHASE |

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED

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GP #22105

MECHANICAL LEGEND & ABBREVIATION

NORTH EAST MIDDLE/HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 3/25/2024 | ADDENDUM #3 |
| 4/02/2024 | ADDENDUM #5 |

M001

12/22/2023
BID SET

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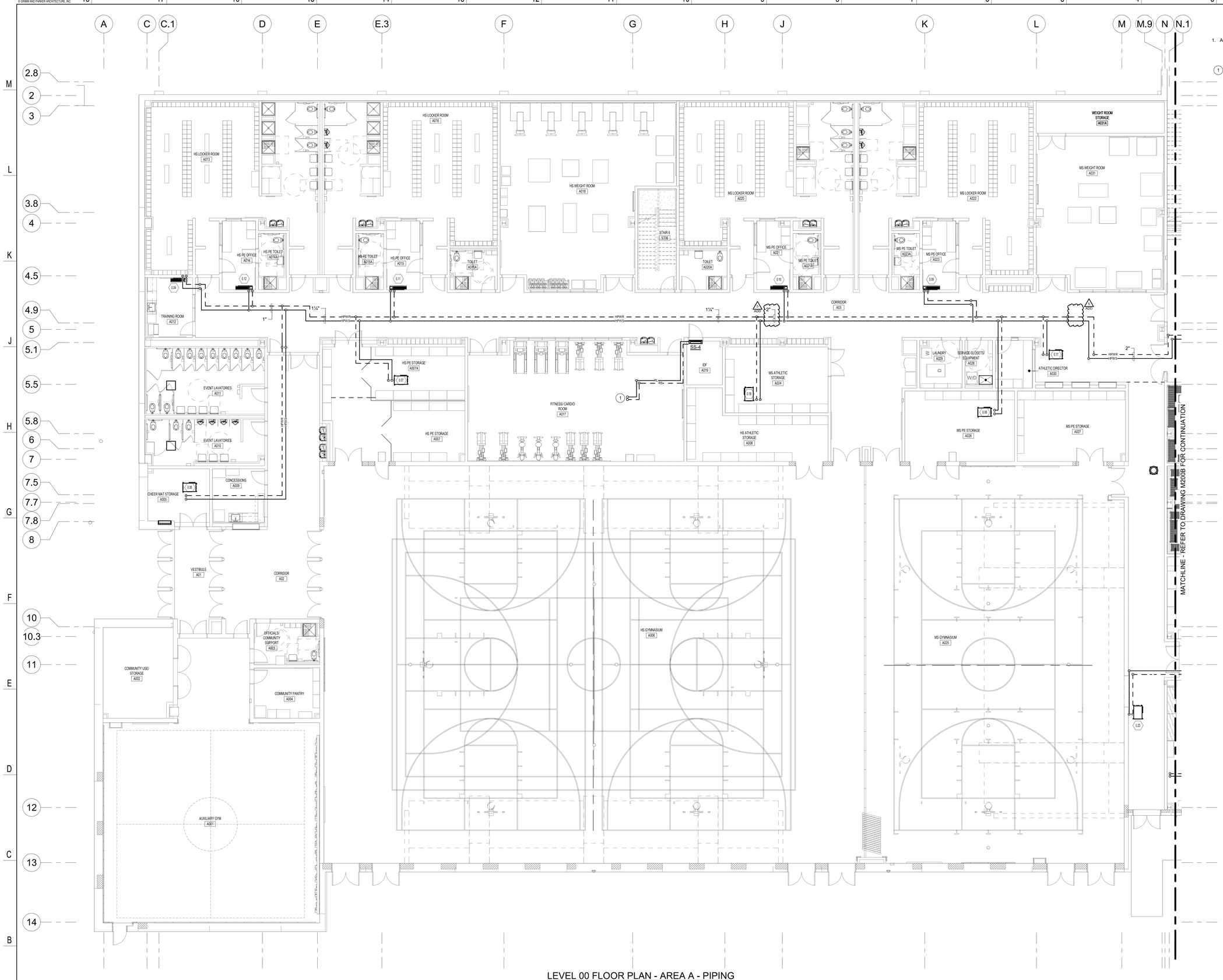
## GENERAL NOTES:

1. ALL WORK IN THIS AREA IS DONE UNDER PHASE 1.

## DRAWING NOTES:

1. REFRIGERANT PIPING UP



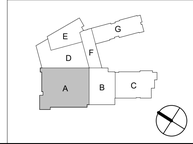

LEVEL 00 FLOOR PLAN - AREA A - PIPING

1/8" = 1'-0"

SCALE: 1/8" = 1'-0"

8 0 8 16

## KEY PLAN

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GP #22105

LEVEL 00 AREA A PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

**M200A**

12/22/2023
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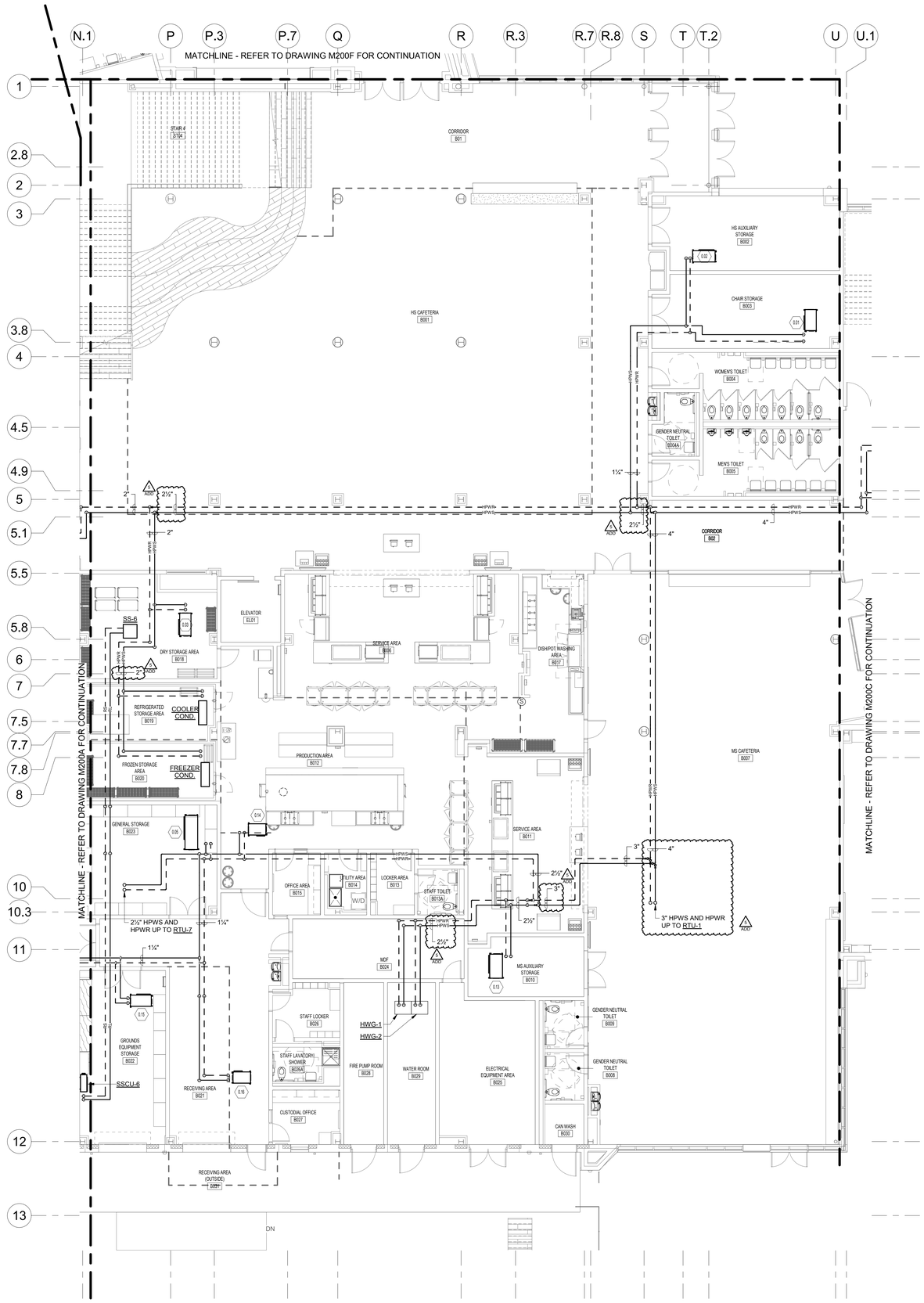
## GENERAL NOTES:

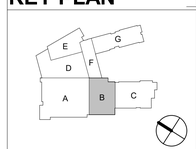
1. ALL WORK IN THIS AREA IS DONE UNDER PHASE 1.




LEVEL 00 FLOOR PLAN - AREA B - PIPING
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

**KEY PLAN**

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LEVEL 00 AREA B PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

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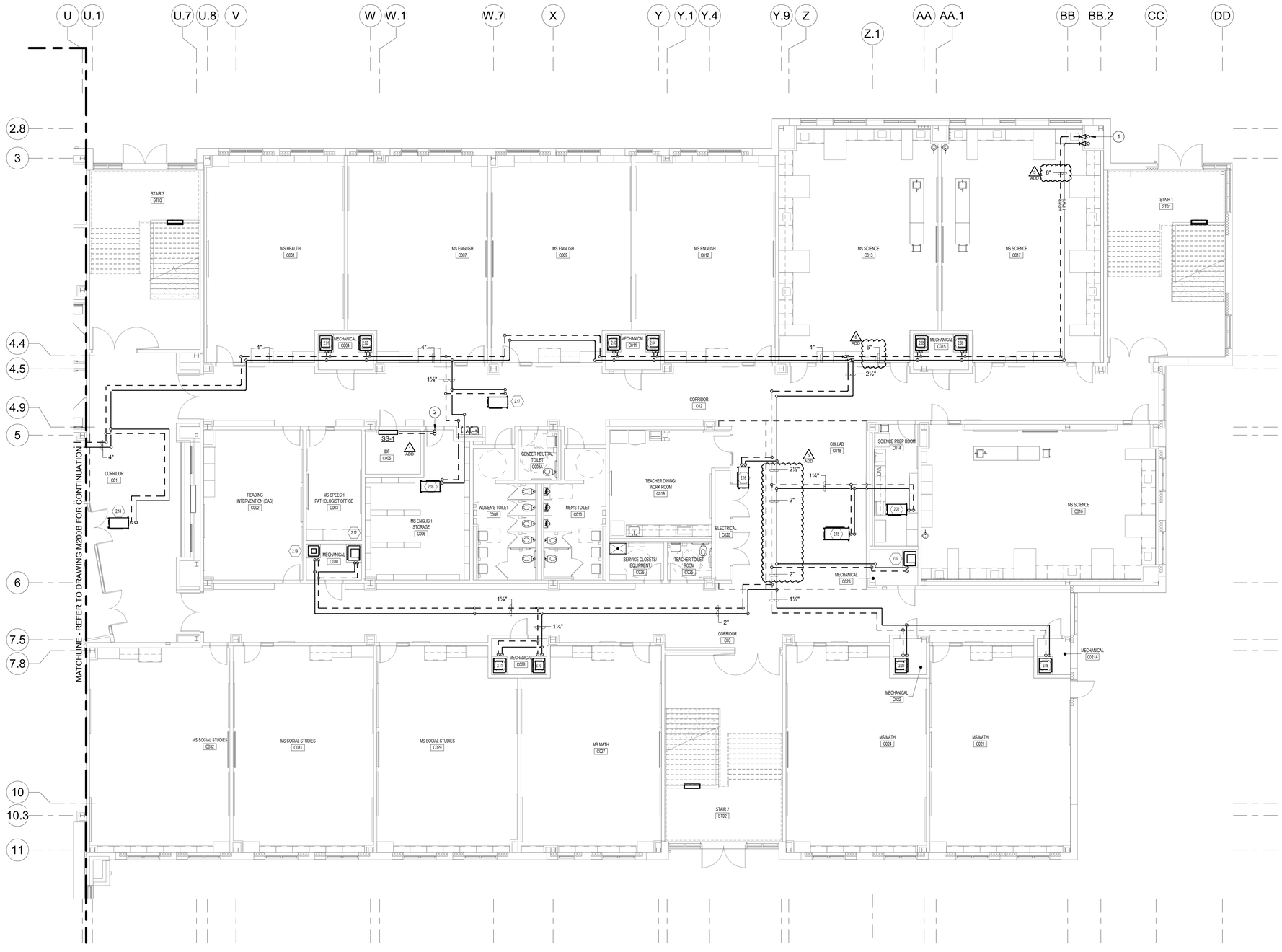
## GENERAL NOTES:

1. ALL WORK IN THIS AREA IS DONE UNDER PHASE 1.

## DRAWING NOTES:

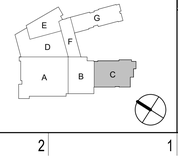
1. 10"ø HPWS AND HPWR PIPING UP TO LEVEL 01 AND 10" HPWS AND HPWR DN TO THROUGH SLAB TO PUMP ROOM.
2. REFRIGERANT PIPING UP.




LEVEL 00 FLOOR PLAN - AREA C - PIPING
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

## KEY PLAN





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LEVEL 00 AREA C PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 3/13/2024 | ADDENDUM #1 |
| 4/02/2024 | ADDENDUM #5 |

M200C
12/22/2023
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## GENERAL NOTES:

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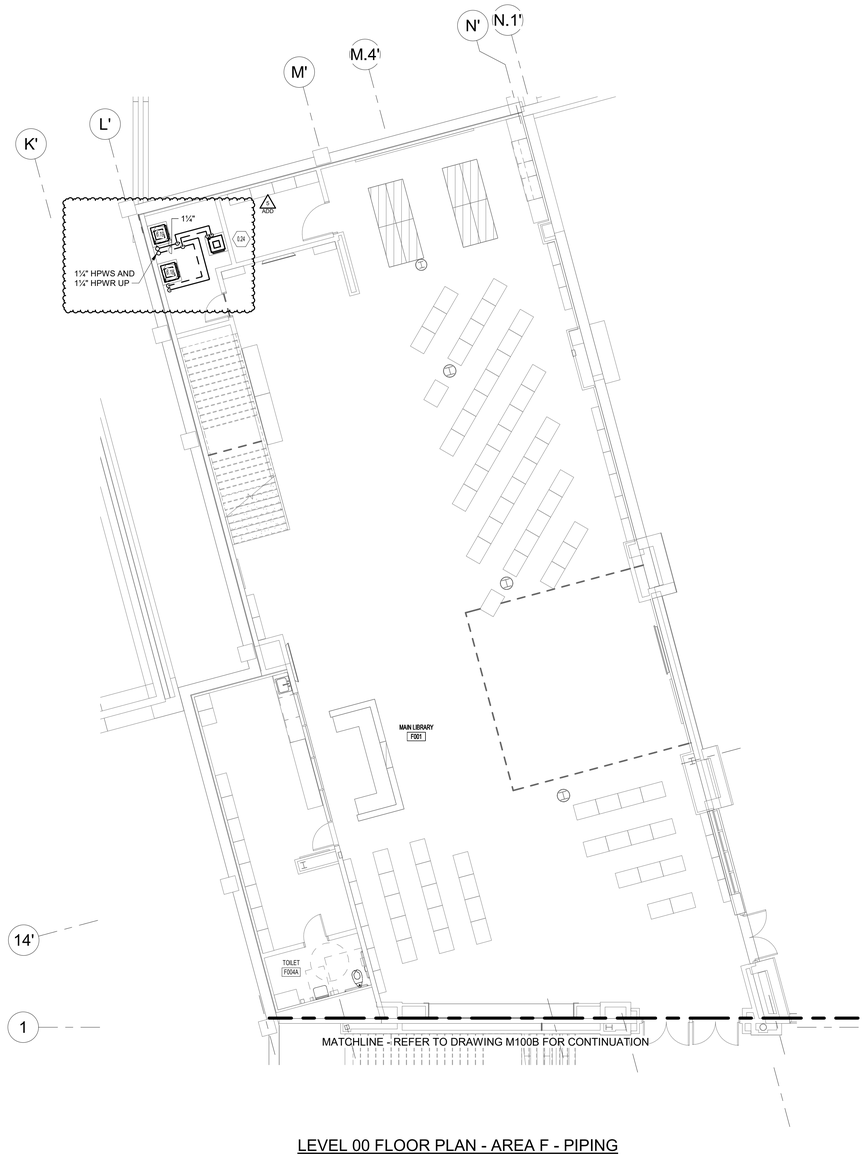
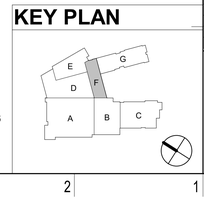



LEVEL 00 FLOOR PLAN - AREA F - PIPING
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

**KEY PLAN**

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GP #22105

LEVEL 00 AREA F PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

**M200F**

12/22/2023
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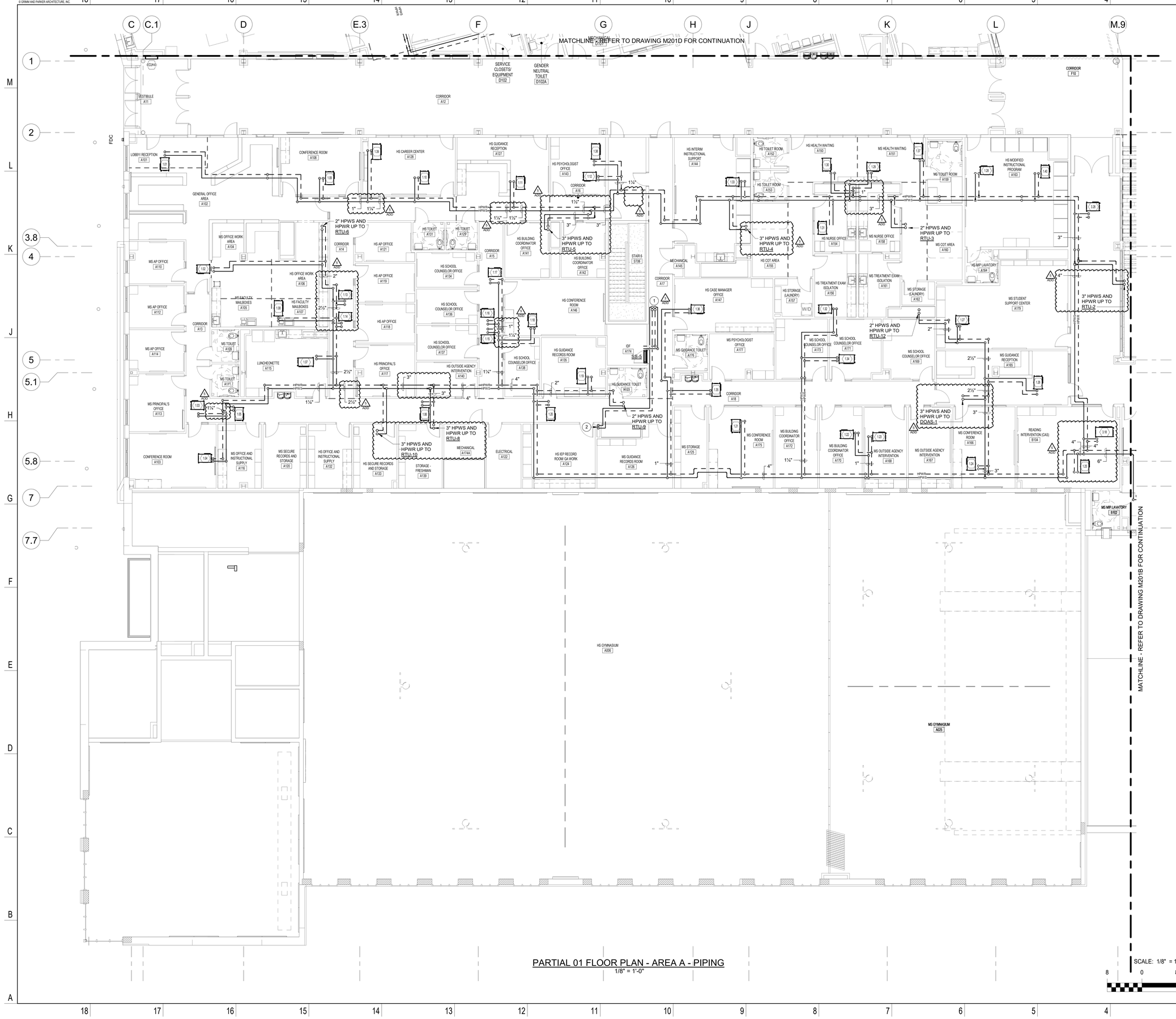



PARTIAL 01 FLOOR PLAN - AREA A - PIPING
1/8" = 1'-0"

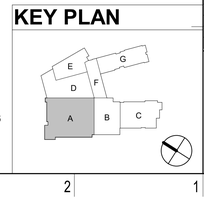
## GENERAL NOTES:

1. ALL WORK IN THIS AREA IS DONE UNDER PHASE 1.

## DRAWING NOTES:

1. REFRIGERANT PIPING UP
2. REFRIGERANT PIPING DN

**KEY PLAN**

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GRIMM + PARKER ARCHITECTS

GP #22105

LEVEL 01 AREA A PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 3/25/2024 | ADDENDUM #3 |
| 4/02/2024 | ADDENDUM #5 |

**M201A**

12/22/2023
BID SET

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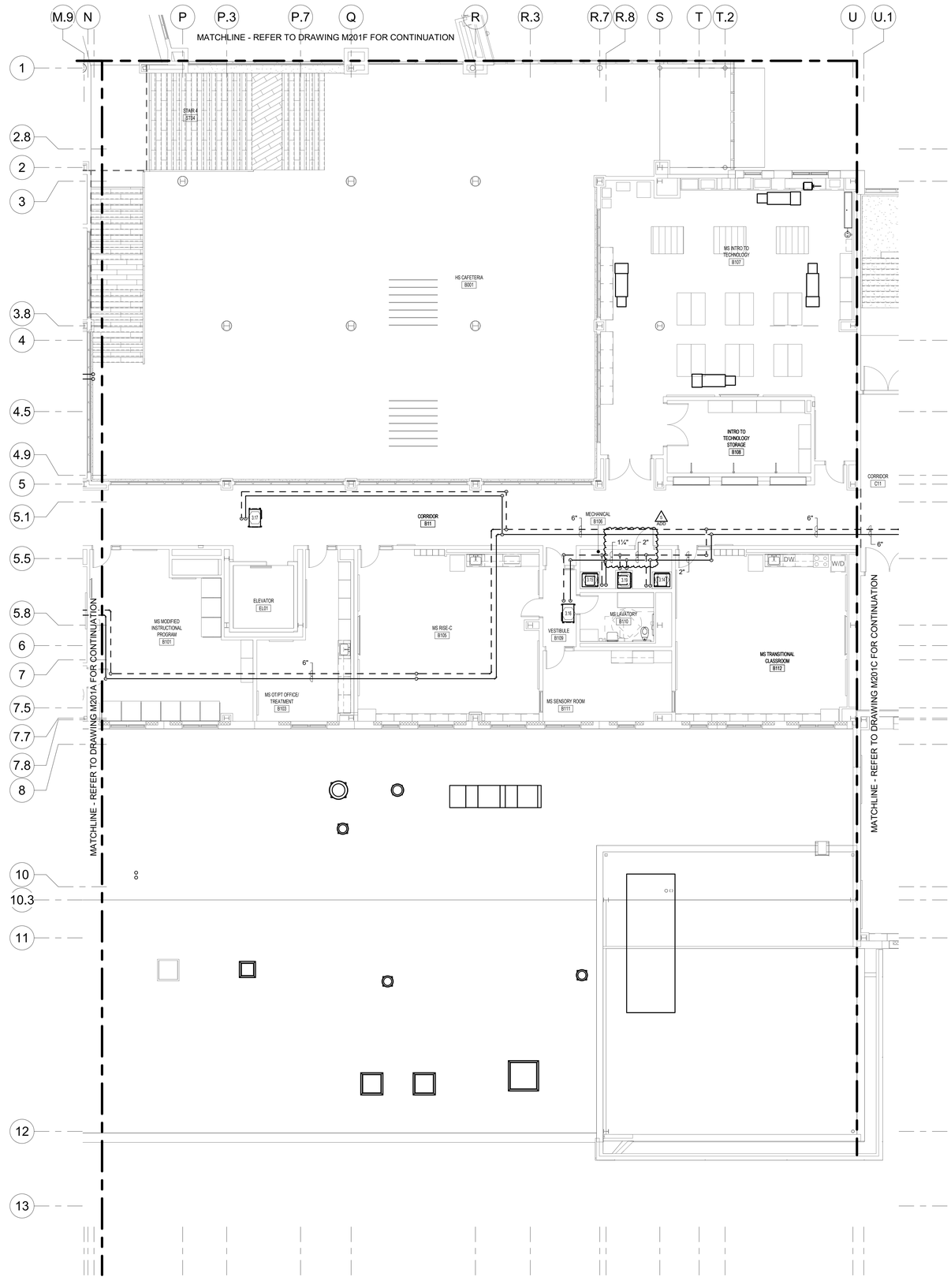
## GENERAL NOTES:

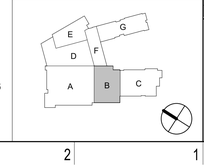
1. ALL WORK IN THIS AREA IS DONE UNDER PHASE 1.




PARTIAL 01 FLOOR PLAN - AREA B - PIPING
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"

KEY PLAN

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GRIMM + PARKER ARCHITECTS

GP #22105

LEVEL 01 AREA B PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

# M201B

12/22/2023
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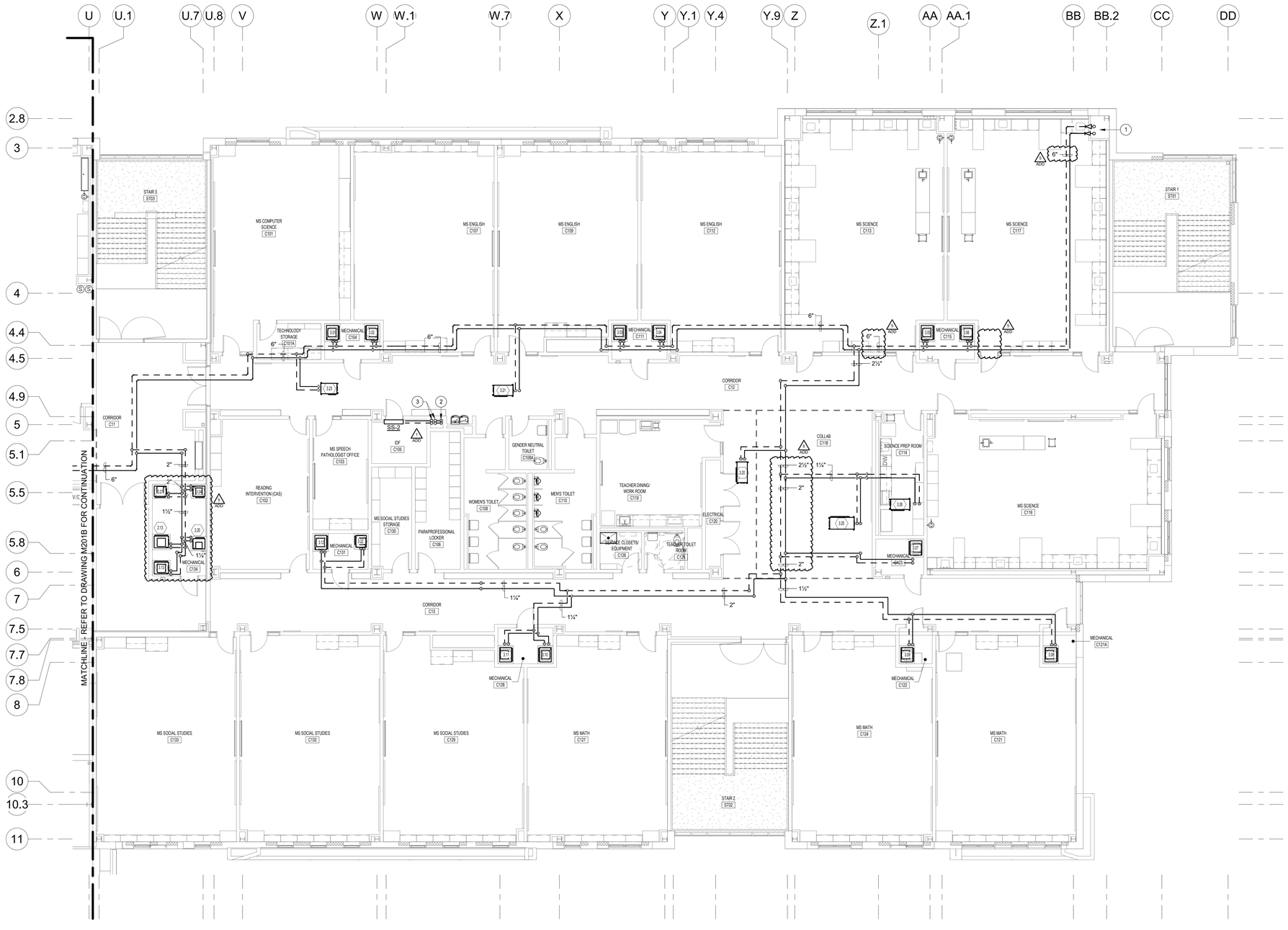
## GENERAL NOTES:

1. ALL WORK IN THIS AREA IS DONE UNDER PHASE 1.

## DRAWING NOTES:

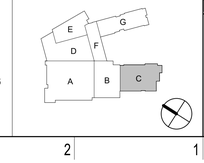
1. 6"ø HPWS AND HPWR PIPING UP TO LEVEL 02. AND 10"ø HPWS AND HPWR PIPING DN TO LEVEL 00.
2. REFRIGERANT PIPING DN.
3. REFRIGERANT PIPING UP.




PARTIAL 01 FLOOR PLAN - AREA C - PIPING
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

## KEY PLAN

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LEVEL 01 AREA C PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 3/13/2024 | ADDENDUM #1 |
| 4/02/2024 | ADDENDUM #5 |

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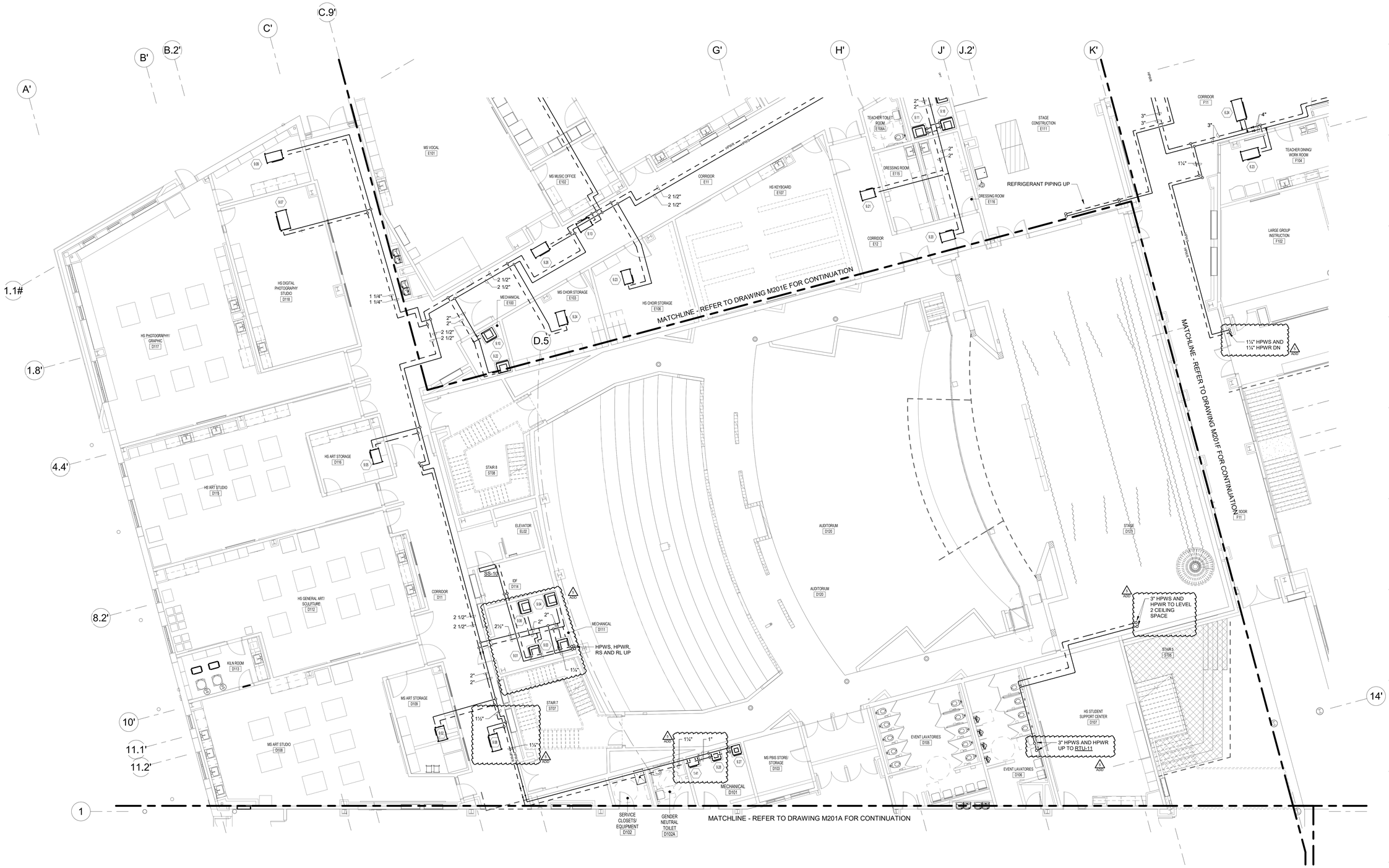
## GENERAL NOTES:

1. ALL WORK IN THIS AREA IS DONE UNDER PHASE 2.



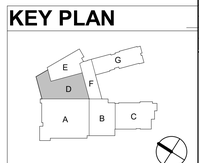

## PARTIAL 01 FLOOR PLAN - AREA D - PIPING

1/8" = 1'-0"

SCALE: 1/8" = 1'-0"

8 0 8 16

## KEY PLAN

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GP #22105

LEVEL 01 AREA D PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

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## GENERAL NOTES:

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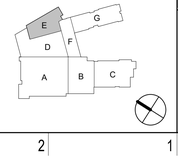
PARTIAL 01 FLOOR PLAN - AREA E - PIPING
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

## KEY PLAN





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LEVEL 01 AREA E PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

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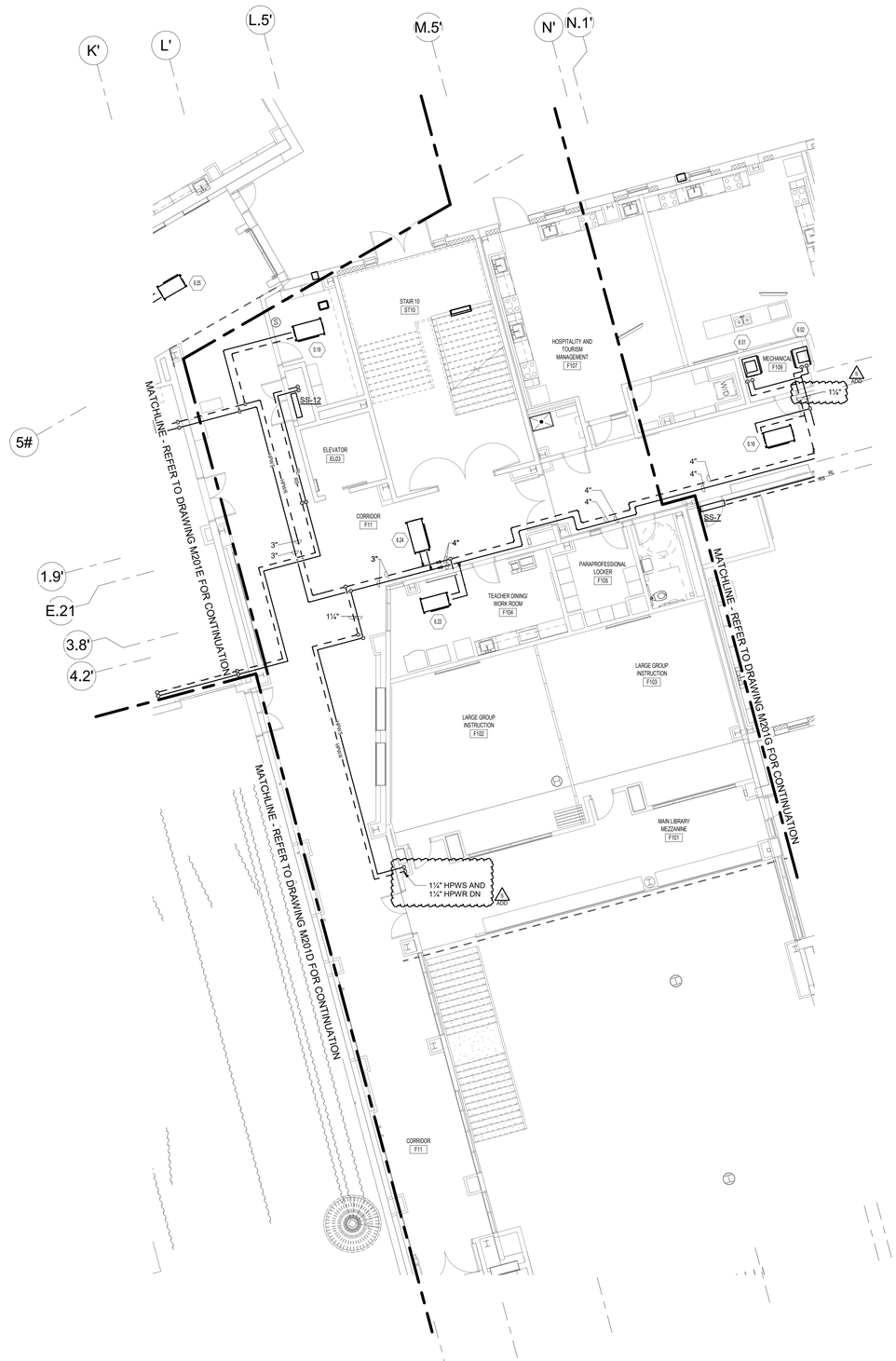
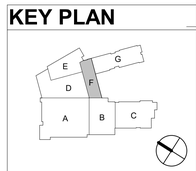



PARTIAL 01 FLOOR PLAN - AREA F - PIPING
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

## KEY PLAN

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LEVEL 01 AREA F PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

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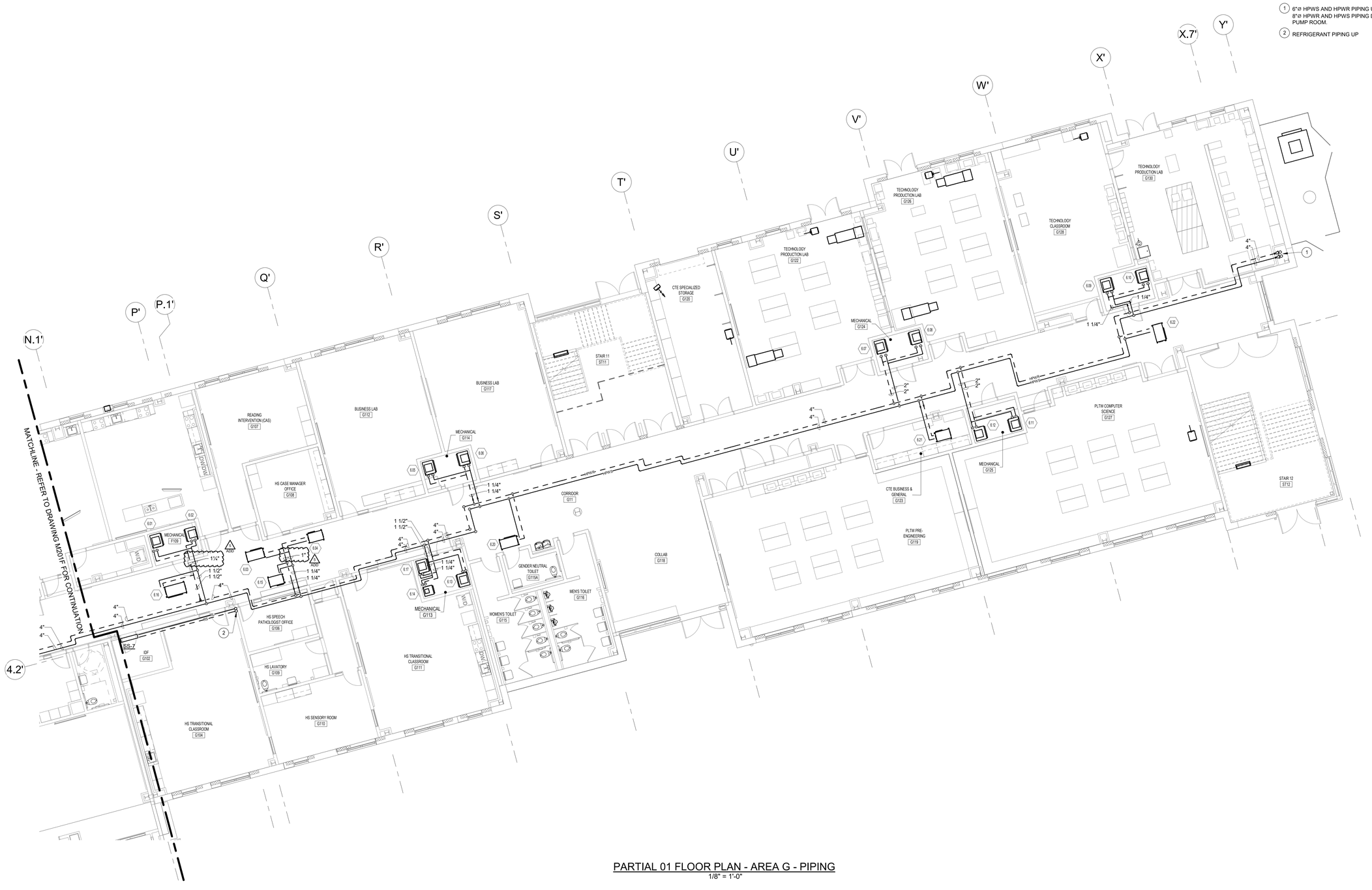
## GENERAL NOTES:

1. ALL WORK IN THIS AREA IS DONE UNDER PHASE 2.

## DRAWING NOTES:

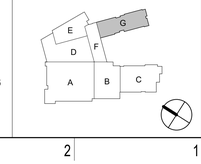
1. 6"ø HPWS AND HPWR PIPING UP TO LEVEL 02. AND 8"ø HPWR AND HPWS PIPING DN THROUGH SLAB TO PUMP ROOM.
2. REFRIGERANT PIPING UP




PARTIAL 01 FLOOR PLAN - AREA G - PIPING
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

**KEY PLAN**

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LEVEL 01 AREA G PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
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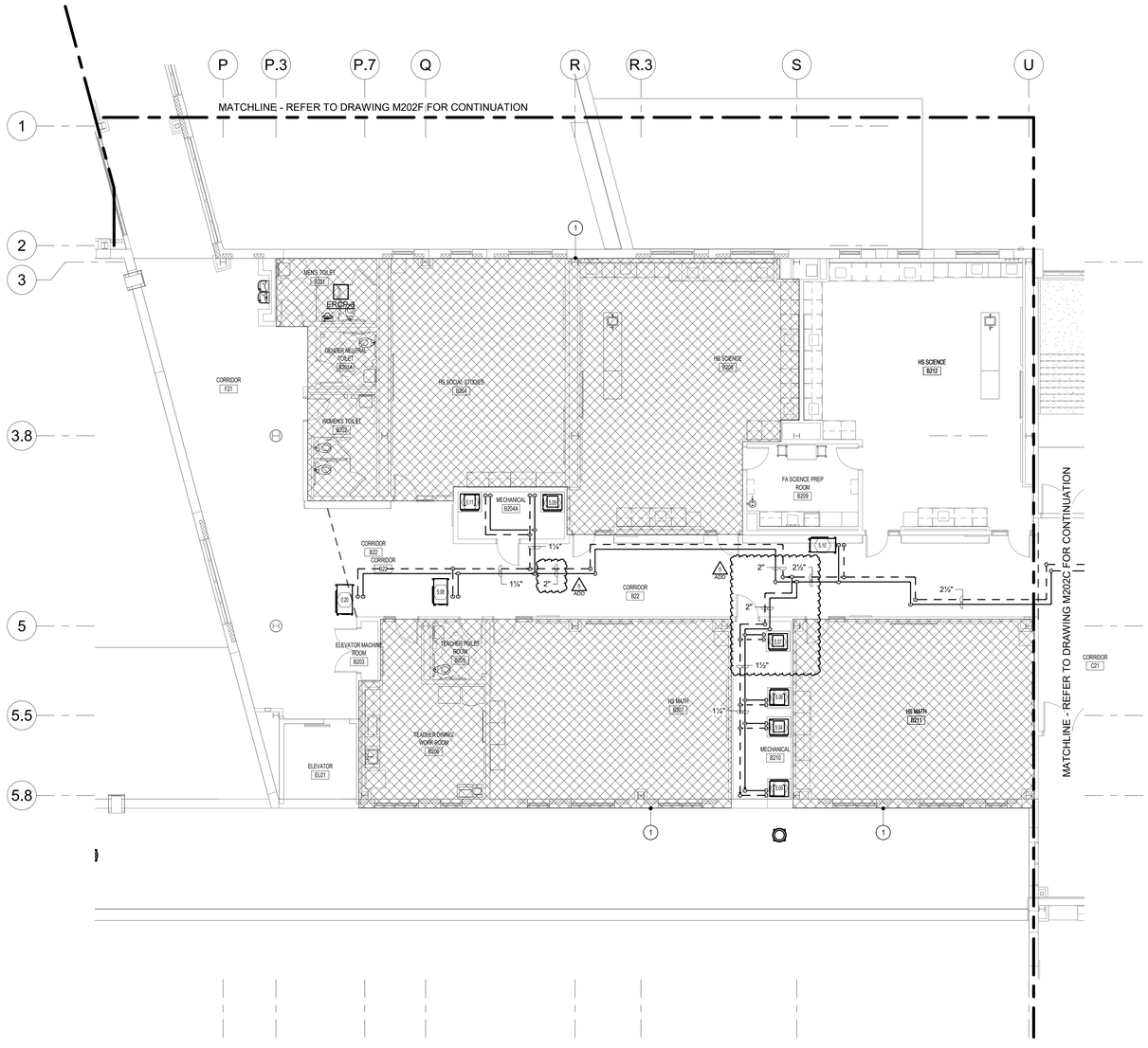
## GENERAL NOTES:

1. ALL WORK IN THIS AREA IS DONE UNDER PHASE 1.

## DRAWING NOTES:

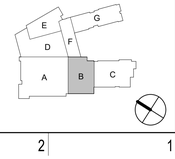
1. SPACES ARE NOT OCCUPIED UNTIL COMPLETION OF PHASE 2. PROVIDE MAIN PIPING AND ALL ASSOCIATED WORK TO THIS AREA UNDER PHASE 1.




PARTIAL 02 FLOOR PLAN - AREA B - PIPING
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

## KEY PLAN





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LEVEL 02 AREA B PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
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| 4/02/2024 | ADDENDUM #5 |

M202B
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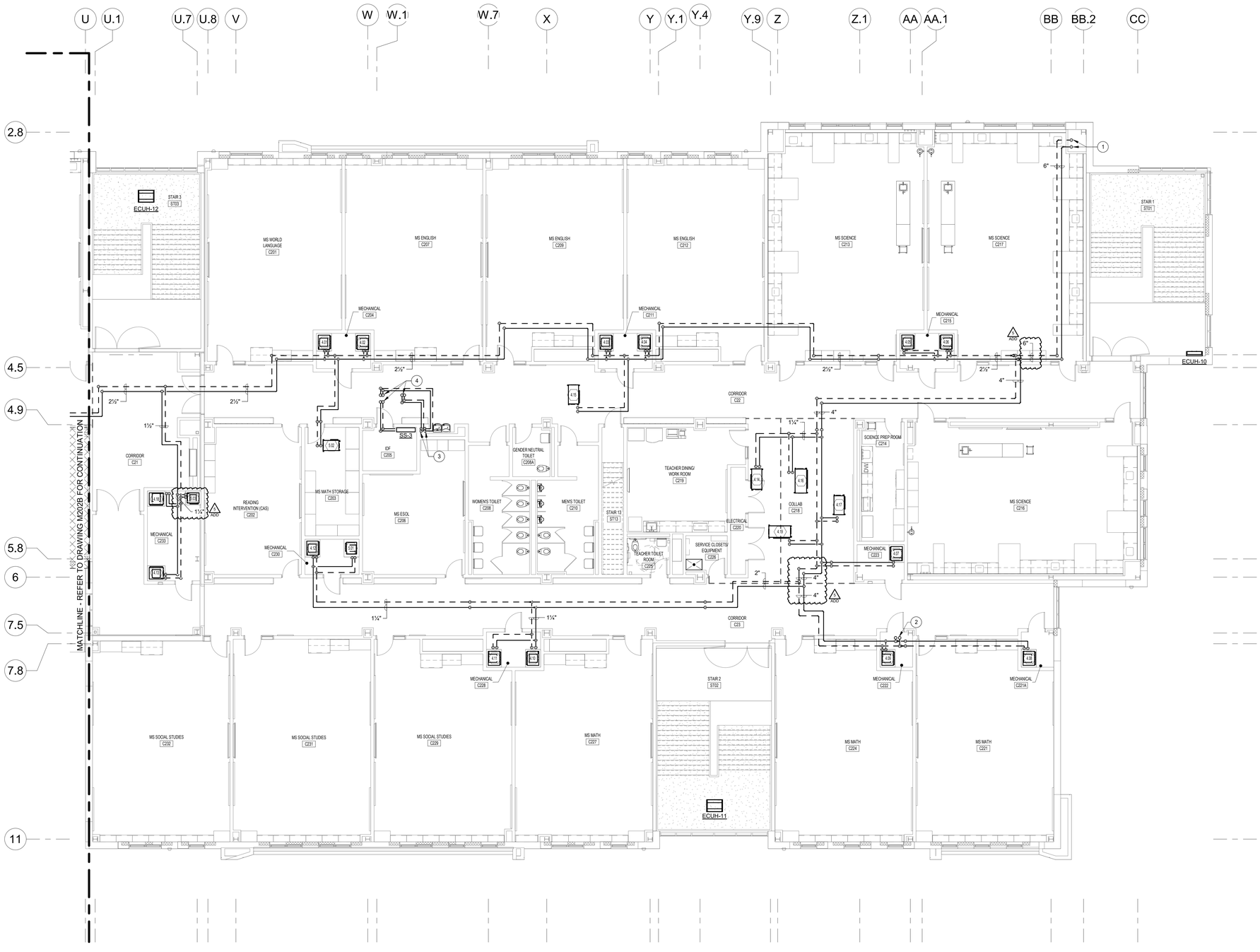
## GENERAL NOTES:

1. ALL WORK IN THIS AREA IS DONE UNDER PHASE 1.

## DRAWING NOTES:

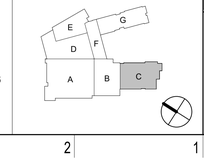
1. 6"ø HPWS AND HPWR PIPING DN TO LEVEL 01.
2. 4"ø HPWS AND HPWR PIPING UP TO MS PENTHOUSE.
3. REFRIGERANT PIPING DN.
4. REFRIGERANT PIPING UP.




PARTIAL 02 FLOOR PLAN - AREA C - PIPING
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

## KEY PLAN

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GP #22105

LEVEL 02 AREA C PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

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## GENERAL NOTES:

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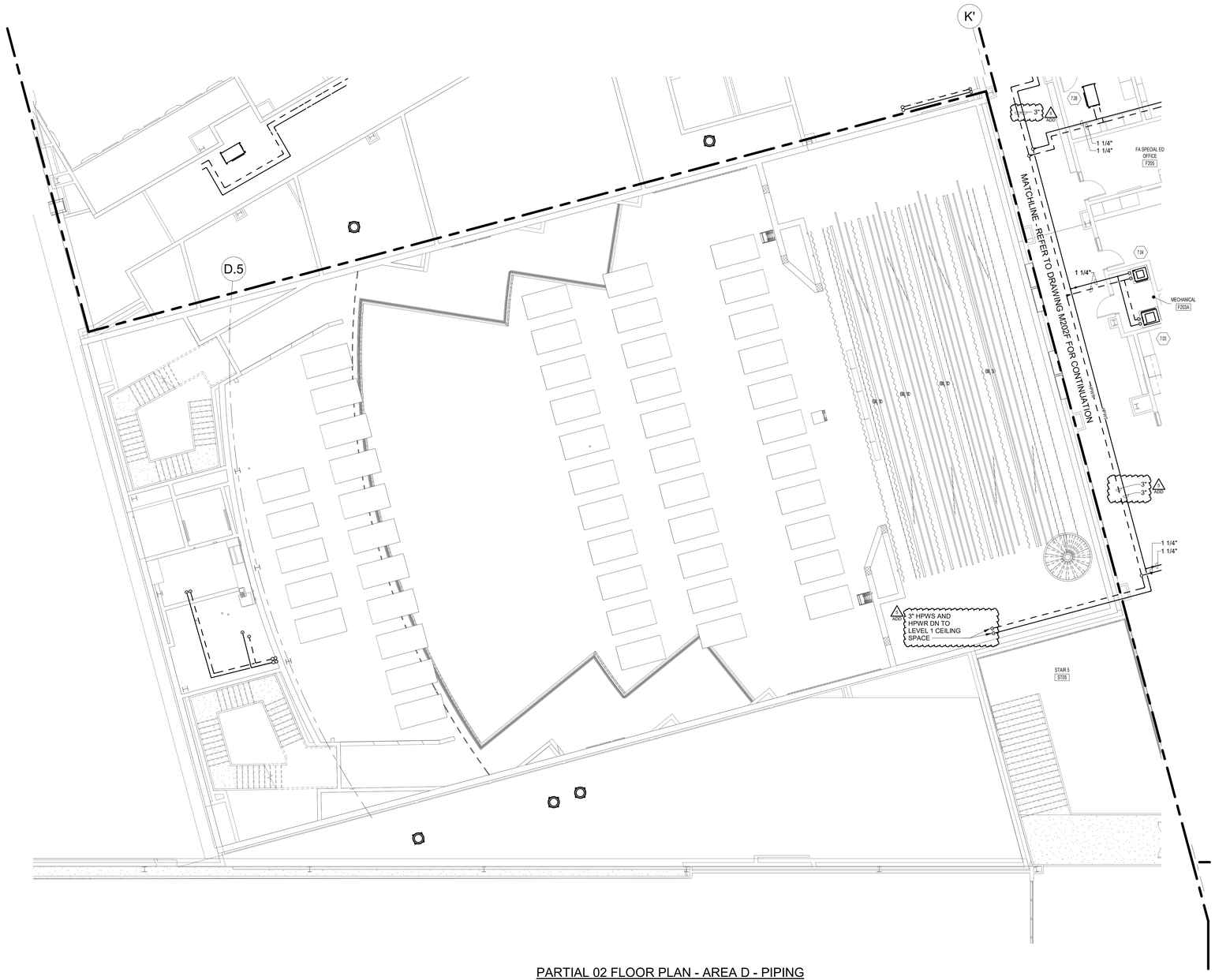
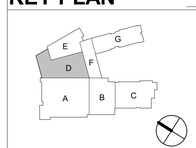



PARTIAL 02 FLOOR PLAN - AREA D - PIPING
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

## KEY PLAN

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ARCHITECTS

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300 IRISHTOWN ROAD, NORTH EAST, MD

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## GENERAL NOTES:

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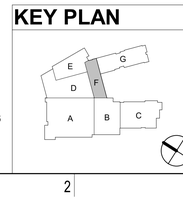
## PARTIAL 02 FLOOR PLAN - AREA F - PIPING

1/8" = 1'-0"

SCALE: 1/8" = 1'-0"

8 0 8 16

### KEY PLAN

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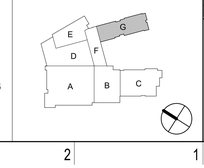
## DRAWING NOTES:

1. 6"ø HPWS AND HPWR PIPING UP TO LEVEL 03 AND DN TO LEVEL 01.
2. REFRIGERANT PIPING UP AND DN
3. REFRIGERANT PIPING UP

PARTIAL 02 FLOOR PLAN - AREA G - PIPING
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

## KEY PLAN

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GP #22105

LEVEL 02 AREA G PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

# M202G

12/22/2023
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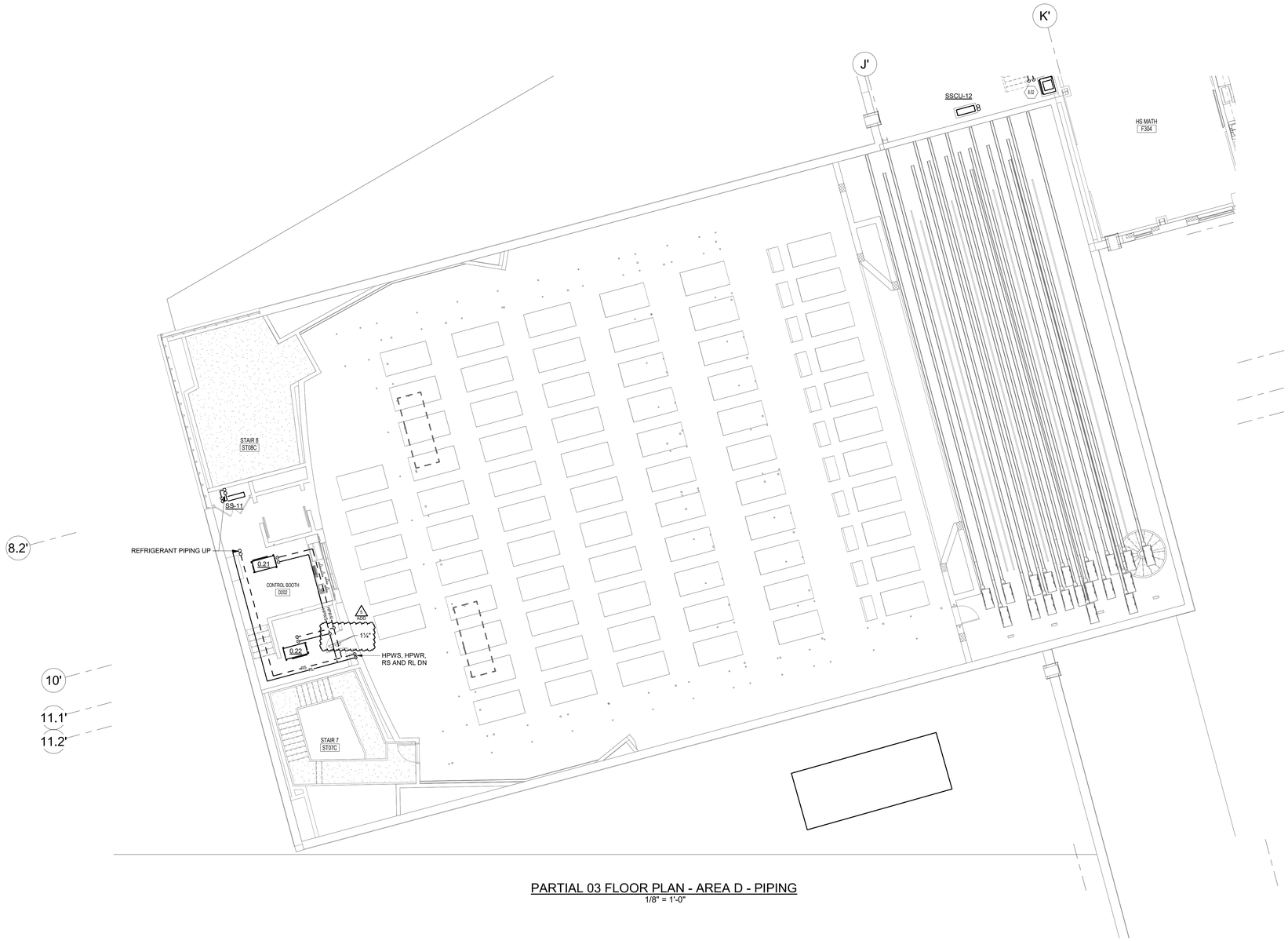
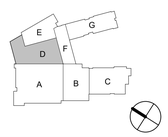



PARTIAL 03 FLOOR PLAN - AREA D - PIPING
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

## KEY PLAN





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LEVEL 03 AREA D PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
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M203D
12/22/2023
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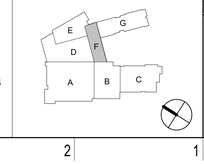
PARTIAL 03 FLOOR PLAN - AREA F - PIPING
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

**KEY PLAN**

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LEVEL 03 AREA F PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
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| 4/02/2024 | ADDENDUM #5 |

**M203F**

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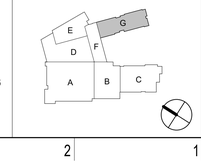
## DRAWING NOTES:

1. 6"ø HPWS AND HPWR PIPING DN TO LEVEL 02.
2. 6"ø HPWS AND HPWR PIPING UP TO PENTHOUSE LEVEL.
3. REFRIGERANT PIPING DN
4. REFRIGERANT PIPING UP

PARTIAL 03 FLOOR PLAN - AREA G - PIPING
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

## KEY PLAN

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LEVEL 03 AREA G PARTIAL FLOOR PLAN - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

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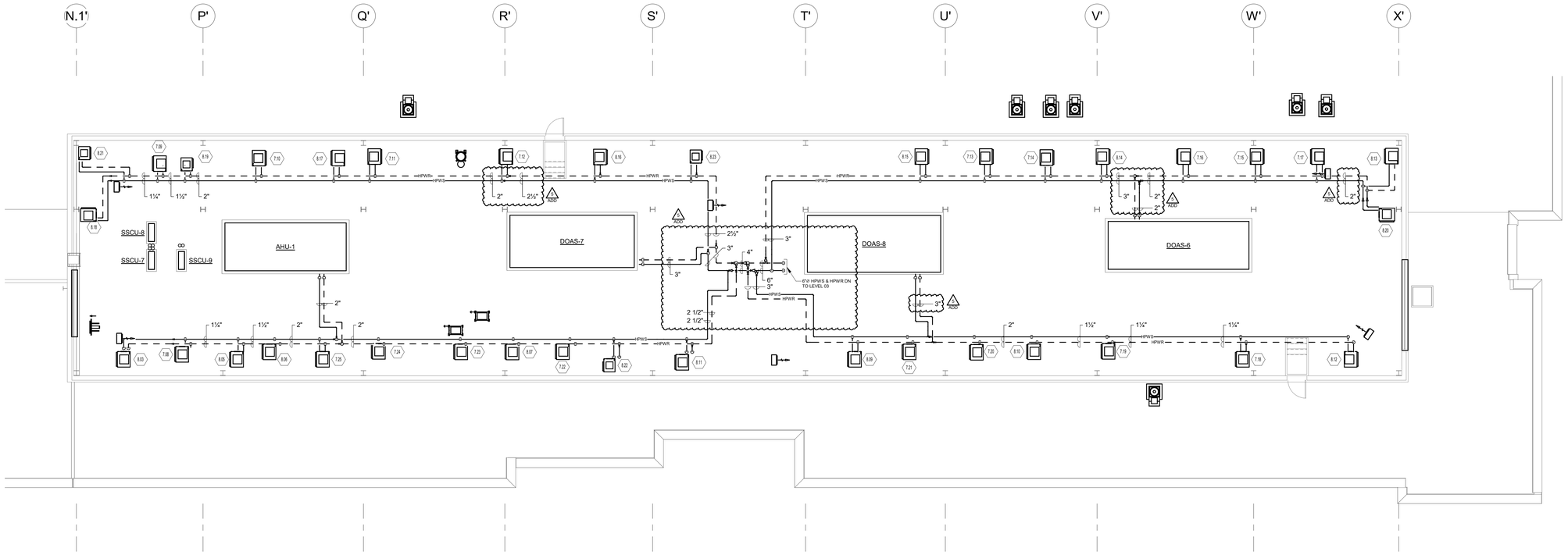
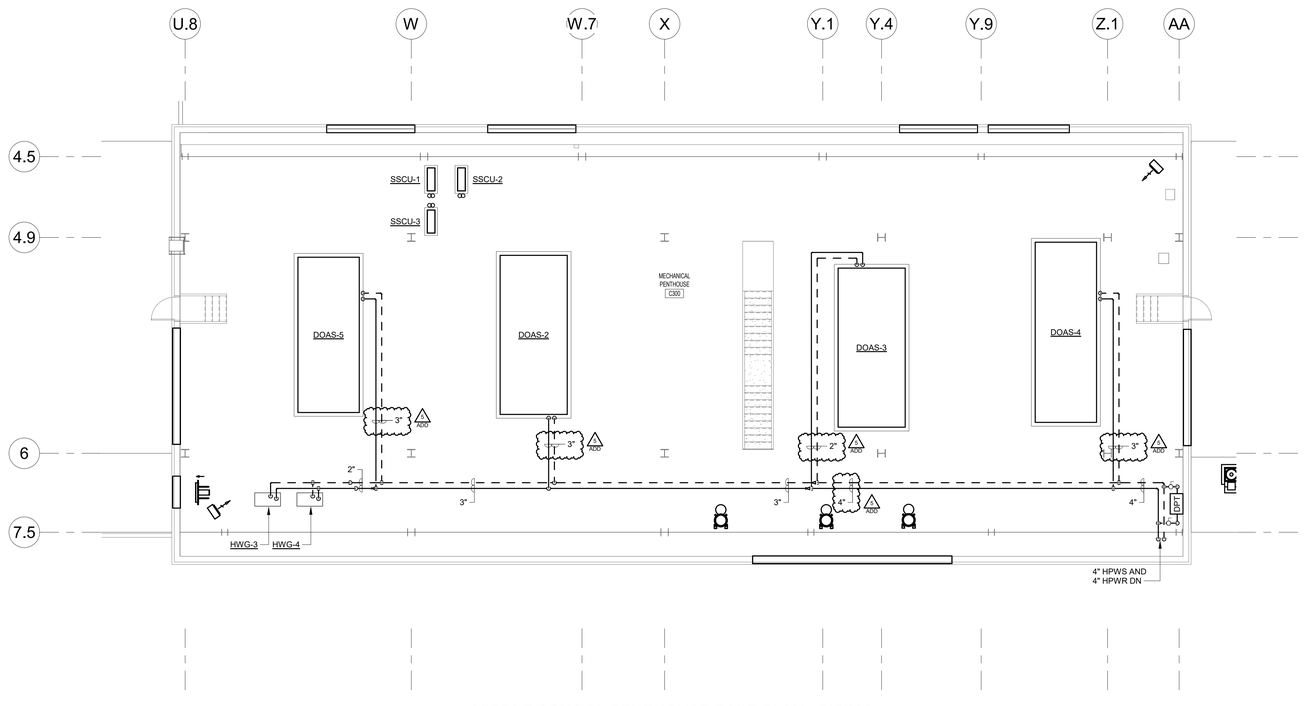



HS PENTHOUSE - PIPING
1/8" = 1'-0"

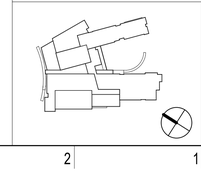



MIDDLE SCHOOL PENTHOUSE PART PLAN - PIPING
1/8" = 1'-0"

SCALE: 1/4" = 1'-0"

4 0 4 8

## KEY PLAN



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PENTHOUSES - PIPING

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

# M204

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## KITCHEN NOTES: (PLUMBING)

1. ALL OUTLETS AND CONNECTIONS SHOWN RELATE TO FOOD SERVICE FIXTURES AND EQUIPMENT ONLY. SEE ARCHITECTURAL/ENGINEERING PLANS FOR ADDITIONAL PLUMBING REQUIREMENTS.
2. THIS PLUMBING PLAN IS INTENDED TO SHOW ROUGH-IN LOCATIONS AND HEIGHTS, CONNECTION SIZES, POSITIONS, HEIGHTS AND LOAD REQUIREMENTS. DIMENSIONS SHOWN ARE FROM FINISHED FLOORS AND FINISHED WALLS. VERIFY WALL PARTITION LOCATIONS WITH ARCHITECTURAL DRAWINGS.
3. FINAL CONNECTIONS TO ALL EQUIPMENT SHALL BE BY PLUMBING CONTRACTOR INCLUDING REQUIRED MATERIALS SUCH AS, STOPS, VALVES, FILTERS, TRAPS, CHECK VALVES, PIPING, TUBING, ETC. TO ASSURE PROPER OPERATION ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND LOCAL CODES.
4. PLUMBING CONTRACTOR (P.C.), OR EQUIVALENT, SHALL FURNISH AND INSTALL THE FOLLOWING:
   - A. ALL WATER, WASTE, AND GAS SERVICE TO POINT OF ROUGH-IN AS SHOWN ON PLAN. ROUGH-IN OUTLETS TO STUB 4" OUT OF WALLS AT HEIGHT INDICATED FROM FINISHED FLOOR TO CENTERLINE OF OUTLET. FLOOR ROUGH-INS TO STUB UP 2" ABOVE FINISHED FLOOR OR CURBS. ALL FLOOR OPENINGS/PENETRATIONS ARE TO BE SEALED WATERTIGHT.
   - B. PRESSURE REDUCING AND/OR REGULATING VALVES FOR DISHWASHERS, BOOSTER HEATERS, OR AS OTHERWISE NOTED IN ALL FOOD SERVICE AREAS.
   - C. ALL FLOOR SINKS, COMPLETE WITH TOP GRATES INDICATED, AND REMOVABLE SEDIMENT BUCKETS SET FLUSH WITH FINISH FLOOR, UNLESS NOTED.
   - D. ALL WASTE LINES, DIRECT OR INDIRECT, EXCEPT AS NOTED. MINIMUM DIAMETER OF LINE SHALL BE AS INDICATED ON PLAN REGARDLESS OF CONNECTION SIZE, AND SHALL BE PITCHED DOWNWARD. MAINTAIN DRAIN LINES AS HIGH AS POSSIBLE ABOVE FLOOR FOR SANITATION AND AND CLEANING. ALL WASTE LINES SHALL HAVE ADEQUATE CLEAN-OUT PROVISIONS.
   - E. INDIRECT WASTE LINES FOR WALK-IN COOLER/FREEZER BLOWER COILS SHALL BE PITCHED 3/4" PER FOOT OF HORIZONTAL RUN, BE HEAT TRACED AND INSULATED AND TERMINATE WITH A P-TRAP OVER FLOOR SINK OR APPROVED RECEPTOR WITH VACUUM BREAK AS REQUIRED BY LOCAL CODE.
   - F. ALL REQUIRED GREASE TRAPS, OUTSIDE THE BUILDING WHERE POSSIBLE; OTHERWISE BELOW OR SET FLUSH WITH FINISHED FLOOR.
   - G. INSTALL FIRE CONTROL GAS SHUT-OFF VALVES FOR HOODS AND UTILITY RACEWAY PER LOCAL CODES. (IF GAS COOKING EQUIPMENT IS SPECIFIED.) PROVIDE SOLENOID VALVE MANUAL SHUT-OFF VALVE SWITCH BY EXIT DOOR AND INTERLOCK TO GAS SOLENOID VALVE TO SHUT DOWN ALL GAS SERVING THE KITCHEN.
   - H. VACUUM BREAKERS, AS REQUIRED, EXCEPT FOR DISHWASHERS AND DISPOSERS, AS SUPPLIED BY KITCHEN EQUIPMENT CONTRACTOR.
   - I. ALL WASTE LINE FOR HOT & COLD FOOD COUNTER SHALL BE OF COPPER PIPE TO DISCHARGE INDIRECTLY TO THE NEAREST FLOOR SINK WITH 1" AIR GAP.
5. PLUMBING CONTRACTOR (P.C.), OR EQUIVALENT, SHALL INTERCONNECT DISHWASHING MACHINE WITH BOOSTER HEATER, AND WATER-TYPE VENTILATORS WITH CONTROL PANELS AS PER MANUFACTURER'S INSTRUCTIONS, WHEN APPLICABLE AND NOTED.
6. ALL VENT PIPES SHALL BE CONCEALED IN WALLS OR COLUMN CHASES. USE LOOP VENTS FOR ISLAND FIXTURES.
7. ALL EXPOSED PIPING AND FITTINGS IN KITCHEN AREAS SHALL BE CHROME-PLATED OR STAINLESS STEEL.
8. ALL LINES ROUTED THROUGH EQUIPMENT SHALL NOT INTERFERE WITH INTENDED USE OF, OR SERVICING OF EQUIPMENT.
9. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION, REQUIREMENTS AND NOTES.
10. ALL UNDERGROUND SANITARY LINES SHALL BE CAST IRON. ALL ABOVE GROUND SANITARY, VENT AND STORM LINES SHALL BE SOLDERED COPPER OR PVC WITH SOLVENT CEMENT JOINTS AS APPROVED FOR USE BY THE LOCAL AUTHORITIES HAVING JURISDICTION.

## PLUMBING NOTES:

1. COORDINATE WORK BETWEEN ALL DISCIPLINES.
2. CONDENSATE FROM MECHANICAL EQUIPMENT COILS SHALL BE PIPED TO THE STORM DRAIN SYSTEM PIPING UNLESS OTHERWISE INDICATED ON DRAWINGS.
3. REFER TO SECTIONS ON ARCHITECTURAL AND MECHANICAL DRAWINGS FOR PIPE ROUTING THROUGH THE FACILITY.
4. COORDINATE PLUMBING PIPING ENCLOSURES WITH ARCHITECTURAL DRAWINGS PRIOR TO SETTING PIPING BELOW SLABS.
5. COORDINATE ALL FLOOR, SINK AND TRENCH DRAIN LOCATIONS WITH MECHANICAL EQUIPMENT PLACEMENT PRIOR TO SETTING SUCH DRAINS. DRAINS SHALL BE LOCATED AS CLOSE TO EQUIPMENT DRAIN POINTS AS POSSIBLE.
6. PROVIDE SHUTOFF VALVES IN DOMESTIC WATER SYSTEM BRANCH LINES SERVING TWO OR MORE FIXTURES.
7. INSTALL PIPING SO VALVES ARE ACCESSIBLE. ALL SHUT-OFF VALVES SHALL BE BALL TYPE ONLY.
8. WHERE HOT AND COLD WATER PIPING DROPS INTO PIPE CHASE, THE SIZE SHOWN FOR THE PIPE DROPS SHALL BE USED TO THE LAST FIXTURE.
9. ITEMS SUCH AS ACCESS DOORS, RISE AND DROPS IN PIPING, ETC., ARE INDICATED ON THE DRAWINGS FOR CLARITY OR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS. THE CONTRACTOR IS RESPONSIBLE FOR THESE ITEMS AS REQUIRED ELSEWHERE IN THE CONTRACT DOCUMENTS.
10. ALL PLUMBING FIXTURES SHALL HAVE A MINIMUM AIR GAP FROM THE LOWEST END OF A POTABLE WATER OUTLET TO THE FLOOD RIM OR LINE OF THE FIXTURE INTO WHICH IT DISCHARGES. THE AIR GAP SHALL BE A MINIMUM OF TWICE THE EFFECTIVE OPENING OF A POTABLE WATER OUTLET UNLESS THE OUTLET IS A DISTANCE LESS THAN 3 TIMES THE EFFECTIVE OPENING AWAY FROM A WALL OR SIMILAR VERTICAL SURFACE IN WHICH CASE THE MINIMUM REQUIRED AIR GAP SHALL BE 3 TIMES THE EFFECTIVE OPENING OF THE OUTLET.
11. FIXTURES SUBJECT TO INTERMITTENT OR CONTINUOUS PRESSURE BACK-SIPHONAGE SHALL BE PROVIDED WITH A BACKFLOW PREVENTION DEVICE, (ASSE PER AHJ).
12. FIXTURES WHICH DISCHARGE INDIRECTLY INTO A FLOOR DRAIN OR FLOOR SINK SHALL DISCHARGE WITH AN AIR GAP EQUAL TO TWICE THE DIAMETER OF THE FIXTURE DISCHARGE PIPE.
13. INSULATE ALL HORIZONTAL SECTIONS OF STORM WATER AND STORM WATER OVERFLOW PIPING.
14. COORDINATE SETTING AND ELEVATION OF KITCHEN FLOOR SINKS AND DRAINS WITH LOCAL PLUMBING INSPECTOR.
15. ALL PIPING NOT INDICATED IN CHASES SHALL BE LOCATED ABOVE CEILING AS HIGH AS POSSIBLE. COORDINATE ROUTING OF PIPING WITH OTHER DISCIPLINES.
16. PROVIDE SINK TAILPIECE WITH DISHWASHER DRAIN CONNECTION AND PROVIDE HOT WATER SUPPLY CONNECTION TO DISHWASHER AT REQUIRED LOCATIONS AS INDICATED PER ARCHITECTURAL DRAWINGS. INSTALL PLUMBING UTILITIES AS REQUIRED PER MANUFACTURERS RECOMMENDATIONS.
17. PROVIDE WATER HAMMER ARRESTORS WHERE QUICK CLOSING VALVES (FLUSH VALVES, SOLENOID VALVES, ETC.) ARE INSTALLED. INSTALLATION AND QUANTITY SHALL BE PER CONTRACT DRAWINGS AND PDI RECOMMENDATIONS. WATER HAMMER ARRESTORS SHALL BE ACCESSIBLE FOR MAINTENANCE.
18. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR PROTECTING ALL DRAINS DURING THE CONSTRUCTION AND RETURNING THEM FREE FLOWING AND IN WORKING CONDITION. CONTRACTOR SHALL GUARANTEE ALL DRAINS FOR AT LEAST 90 DAYS AFTER FINAL COMPLETION OF THE BUILDING.
19. IF SITE WORK PIPING IS INSTALLED AT THE SAME TIME PLUMBING CONTRACTOR IS INSTALLING PIPING, THE PLUMBING CONTRACTOR SHALL MAKE THE CONNECTION TO THE SITE PLUMBING.
20. AFTER PRESSURE TESTS ARE COMPLETE ALL SANITARY AND STORM WATER PIPING 3" AND LARGER LOCATED UNDER SLAB WILL NEED TO BE VIDEOTAPED BY A THIRD PARTY TO THE FIRST MANHOLE OR CLEAN-OUT LOCATED OUTSIDE OF THE BUILDING.
21. VANDAL PROOF CAPS SHALL BE PROVIDED FOR TO ALL SANITARY VENTS. PROVIDE ODOR HOG VENT TERMINATIONS FOR VENTS LOCATED WITHIN 25 FEET OF OUTSIDE AIR INTAKE VENTS/HOODS/LOUVERS.
22. ROOF DRAINS SHALL HAVE VANDAL PROOF DOMES.
23. ALL DOMESTIC WATER PIPING, VALVES, TANKS ETC IN ITS ENTIRETY SHALL BE NSF 61 CERTIFIED AND COMPLY WITH HB 372 LEAD FREE REQUIREMENTS.
24. ALL ADA ACCESSIBLE SINKS AND LAVS SHALL UTILIZE OFFSET DRAIN PIPING AND ALL EXPOSED PIPING SHALL BE PROVIDED WITH PRE MANUFACTURED INSULATION KITS.
25. PROVIDE TRAP PRIMING LINES OR TRAP SEALS FOR ALL FLOOR DRAINS.
26. PROVIDE CLEANOUTS WHERE REQUIRED BY CODE AND WHERE INDICATED ON THE DRAWINGS.
27. ALL VENTS THROUGH ROOF SHALL BE 4".
28. CONTRACTOR SHALL PROVIDE OFFSETS SUCH THAT STRAIGHT PIPING LENGTHS SHALL NOT EXCEED 100'-0". 5 ADD

## LEGEND

### SYMBOLS

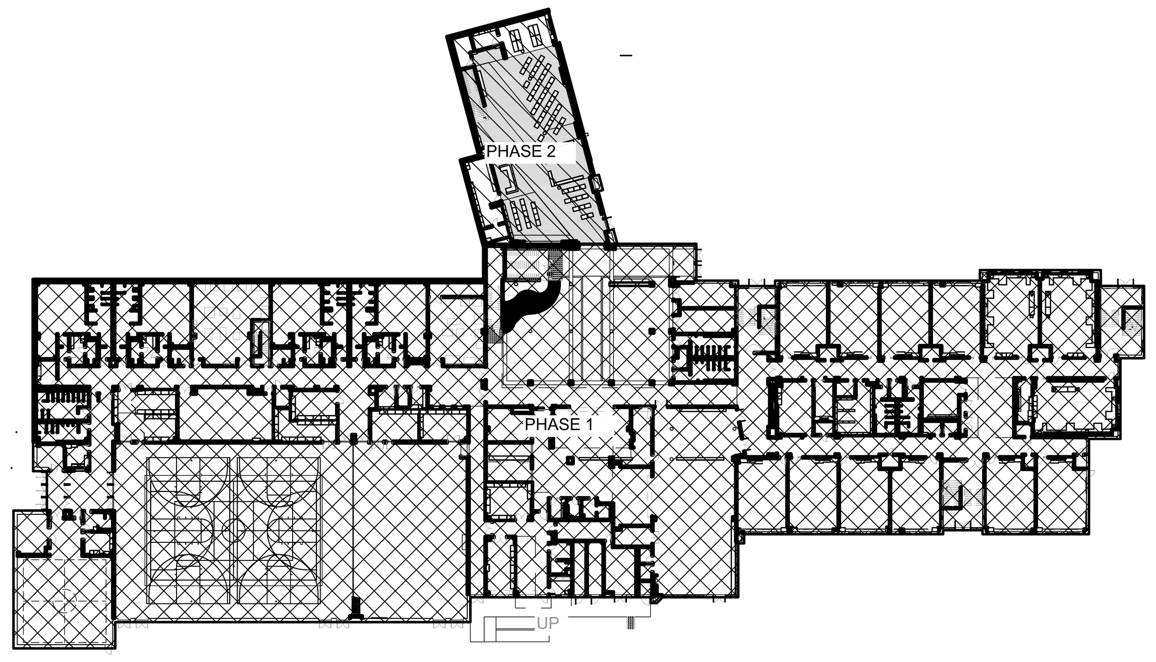
| SYMBOL | DEFINITION |
|---|---|
| | DOMESTIC COLD WATER |
| | DOMESTIC HOT WATER |
| | DOMESTIC HOT WATER RETURN |
| F | FIRE LINE |
| SP | SPRINKLER LINE |
| SAN | SANITARY |
| V | VENT |
| SW | STORM WATER |
| OF | OVERFLOW (STORM WATER) |
| PD | PUMPED DISCHARGE |
| CD | CONDENSATE DRAIN |
| /// | FOUNDATION DRAIN |
| AW | ACID RESISTANT WASTE |
| AV | ACID RESISTANT VENT |
| G | NATURAL GAS |
| | BALL VALVE |
| | PIPING BELOW GRADE OR SLAB |
| | BUTTERFLY VALVE |
| | UNION |
| | GATE VALVE |
| | GLOBE VALVE |
| | BALANCING VALVE |
| | PLUG VALVE |
| | REDUCED PRESS. BACKFLOW PREVENTER |
| | PRESSURE REDUCING VALVE |
| | CHECK VALVE |
| | DOUBLE DETECTOR CHECK VALVE |
| | BACKWATER VALVE |
| | FLOOR CLEANOUT |
| | WALL CLEANOUT |
| | PIPE UP |
| | PIPE UP & DOWN |
| | PIPE DOWN |
| | SIGHT GLASS |
| | FLOAT VALVE |
| | FLOOR DRAIN |
| | FLOOR DRAIN WITH TRAP PRIMER |
| | FLOOR SINK |
| (#) | ROOF DRAIN (W/ SQ.FT INDICATED) |
| | TRAP (ELEVATION) |
| | VENT THROUGH ROOF (ELEVATION) |
| | VENT THROUGH ROOF (PLAN) |
| | MIXING VALVE |
| | METER (FLUID OR GAS) |
| " | INCHES |
| ' | FEET |
| | HOSE BIBB (PLAN) |
| | NON-FREEZE WALL HYDRANT |
| | HOSE BIBB (ELEV.) |
| | HOSE END DRAIN |
| TS | OUTSIDE STEM & YOKE VALVE |
| TS | NON-RISING STEM & YOKE |
| FS | FLOW SWITCH |
| TS | TAMPER SWITCH |
| PS | PRESSURE SWITCH |
| | FIRE DEPT HOSE CONNECTION |
| FS | FLOOR CONTROL VALVE ASSEMBLY |
| | 'Y' STRAINER |
| | WATER HAMMER ARRESTOR |
| | ACCESS PANEL |
| | POINT OF CONN. TO SITE UTILITIES |
| | SQUARE FOOTAGE |
| | DUPLEX GAS OUTLET |
| | ECCENTRIC REDUCER |
| | CONCENTRIC REDUCER |
| | FLEXIBLE CONNECTION |
| | CAPPED PIPE |
| | BLIND FLANGE |
| | MANUAL AIR VENT |
| | AUTOMATIC AIR VENT |
| | BLOW DOWN VALVE (W/HOSE END) |
| | PRESSURE/TEMP. RELIEF VALVE |
| ΔP | PRESSURE DIFFERENCE |
| ΔT | TEMPERATURE DIFFERENCE |
| | CENTER LINE |
| | THERMOMETER |
| | PRESSURE GAUGE W/ NEEDLE VALVE |
| Ø | DIAMETER (OR ELECTRICAL PHASE) |
| | BACK WATER VALVE W/ ACCESS COVER |
| | SOLENOID VALVE |
| % | SLOPE OF PIPE (WITH % OF SLOPE SHOWN) |
| | DIRECTION OF FLOW |
| | FUNNEL CONNECTION @ FLOOR DRAIN |
| S-A-1 | SANITARY/WATER RISER DESIGNATION |

NOTE: NOT ALL SYMBOLS MAY BE USED.

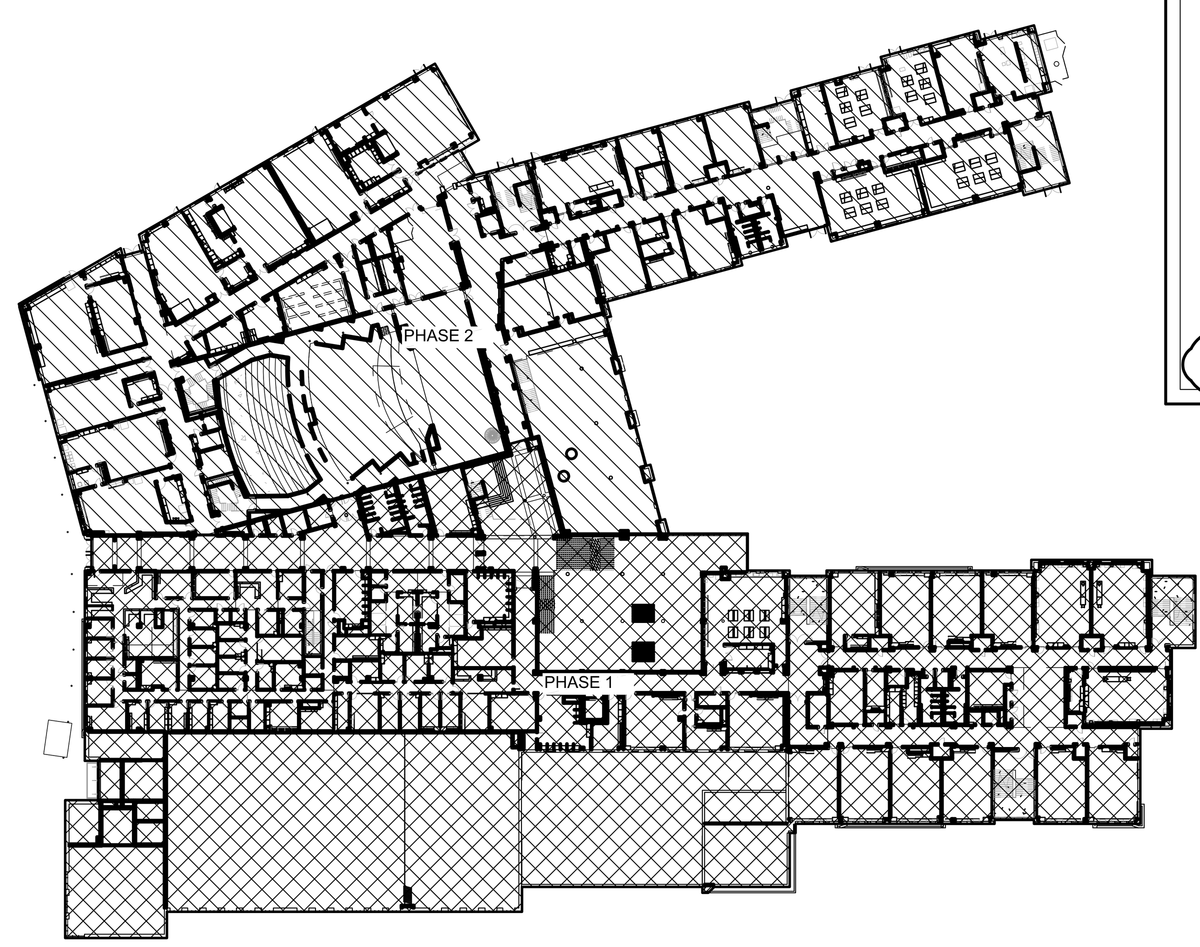
### ABBREVIATIONS

| ABBREV. | DEFINITION |
|---|---|
| 140° | 140° DOMESTIC HOT WATER |
| 140°R | 140° DOMESTIC HOT WATER RETURN |
| AAV | AUTOMATIC AIR VENT |
| ABV | ABOVE |
| AD | AREA DRAIN |
| AFF | ABOVE FINISHED FLOOR |
| ANC | ANCHOR |
| AP | ACCESS PANEL |
| APPROX | APPROXIMATE |
| AQ | AQUASTAT |
| AV | ACID VENT |
| AW | ACID WASTE |
| BDV | BLOW DOWN VALVE |
| BF | BLIND FLANGE |
| BFP | BACKFLOW PREVENTER |
| BHP | BRAKE HORSEPOWER |
| BOP | BOTTOM OF PIPE |
| BOTT | BOTTOM |
| BTU | BRITISH THERMAL UNIT |
| BTUH | BRITISH THERMAL UNIT PER HOUR |
| BWV | BACK WATER VALVE W/ ACCESS COVER |
| CAP | CAPACITY |
| CD, COND | CONDENSATE DRAIN |
| CI | CAST IRON |
| CLG | CEILING |
| CO | CLEANOUT |
| CONN | CONNECT |
| CONC | CONCRETE |
| CU FT | CUBIC FEET |
| CW | COLD WATER |
| CX | CONNECT TO EXISTING |
| DDC | DOUBLE DETECTOR CHECK VALVE |
| DFU | DRAINAGE FIXTURE UNITS |
| DIA | DIAMETER |
| DISH | DISCHARGE |
| DN | PIPE DOWN |
| DS | DOWN SPOUT W/BOOT |
| DST | DEEP SEAL TRAP |
| DWG | DRAWING |
| ELEC | ELECTRIC |
| ELEV | ELEVATION |
| EWT | ENTERING WATER TEMPERATURE |
| EX | EXISTING |
| F | FIRE LINE |
| FC | FUNNEL CONNECTION @ FD |
| FCO | FLOOR CLEANOUT |
| FCVA | FLOOR CONTROL VALVE ASSEMBLY |
| FD | FLOOR DRAIN |
| FDV | FIRE DEPT. HOSE CONNECTION |
| FS | FLOW SWITCH |
| F.S. | FLOOR SINK |
| FT | FEET |
| FT.HD | FEET OF HEAD |
| G | GAS |
| GA | GAUGE |
| GALV | GALVANIZED |
| GPM | GALLONS PER MINUTE |
| HB | HOSE BIBB |
| HED | HOSE END DRAIN |
| HOR | HORIZONTAL |
| HP | HORSEPOWER |
| HT | HEAT TRAP |
| HW | HOT WATER (140°F) |
| HWR | HOT WATER RETURN (140°F) |
| HYD | HYDRAULIC |
| IN | INCHES |
| I.E. | INVERT ELEVATION |
| IW | INDIRECT WASTE |
| LOC | LIMIT OF CONTRACT |
| MAV | MANUAL AIR VENT |
| NFGH | NON-FREEZE GROUND HYDRANT |
| NFWH | NON-FREEZE WALL HYDRANT |
| NRS | NON-RISING STEM & YOKE |
| OF | OVERFLOW |
| OHD | OPEN HUB DRAIN |
| O,S,&Y | OUTSIDE STEM & YOKE VALVE |
| P | PRESSURE |
| PCOND | PUMPED CONDENSATE |
| PD | PUMPED DISCHARGE |
| PH | PIPE HANGER |
| PRV | PRESSURE REDUCING VALVE |
| PS | PRESSURE SWITCH |
| PSAN | PUMPED SANITARY |
| PSC | PUMPED STEAM CONDENSATE |
| RD | ROOF DRAIN |
| RL | RAIN LEADER |
| SAN, S | SANITARY |
| SC | STEAM CONDENSATE |
| SCH | SCHEDULE |
| SP | SPRINKLER LINE |
| STD | STANDARD |
| SW | STORM WATER |
| T | TEMPERATURE |
| TD | TRENCH DRAIN |
| TS | TAMPER SWITCH |
| TW | TEMPERED WATER |
| TWR | TEMPERED WATER RETURN |
| UP | PIPE UP |
| UP&DN | PIPE UP & DN |
| V | VENT |
| VB | VACUUM BREAKER |
| VTR | VENT THROUGH ROOF |
| WCO | WALL CLEANOUT |
| WHA | WATER HAMMER ARRESTOR |
| WSFU | WATER SUPPLY FIXTURE UNITS |
| TD | TRENCH DRAIN |

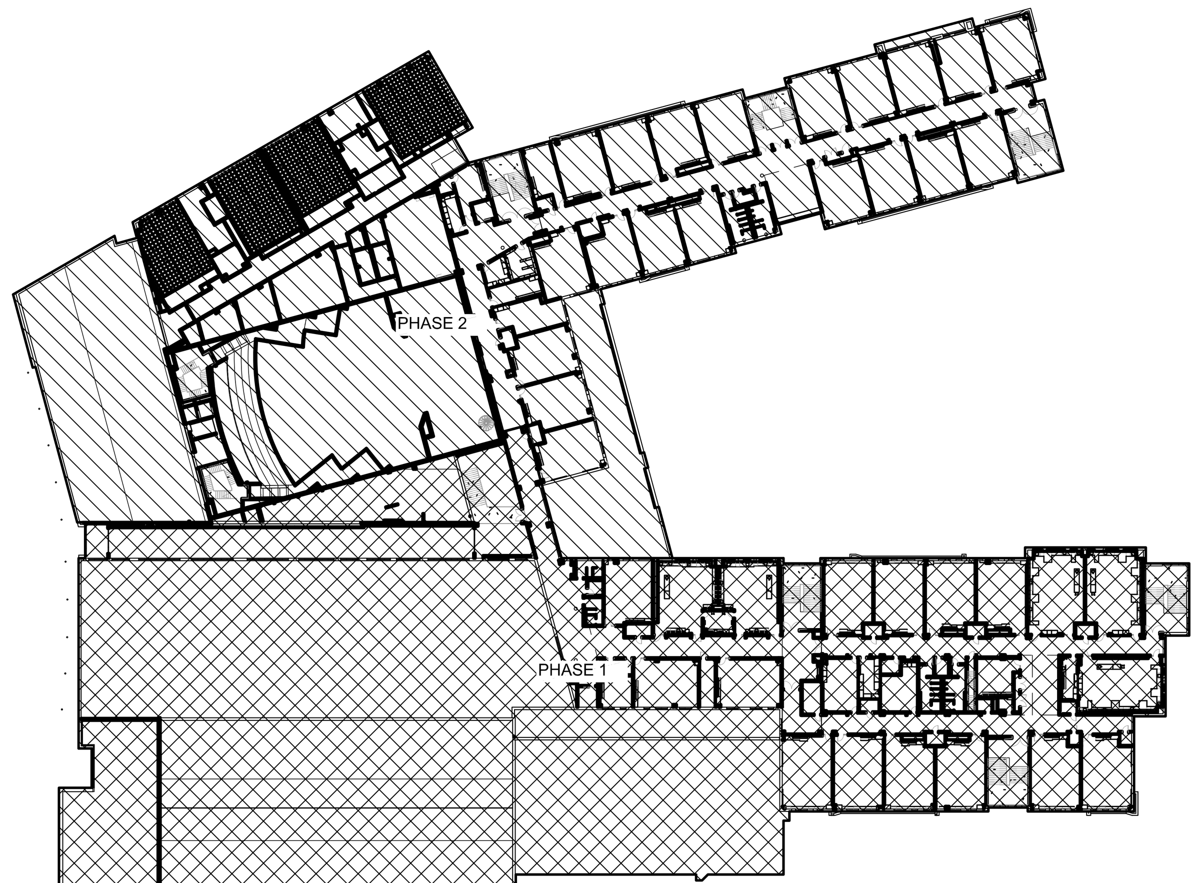
NOTE: NOT ALL ABBREVIATIONS MAY BE USED.



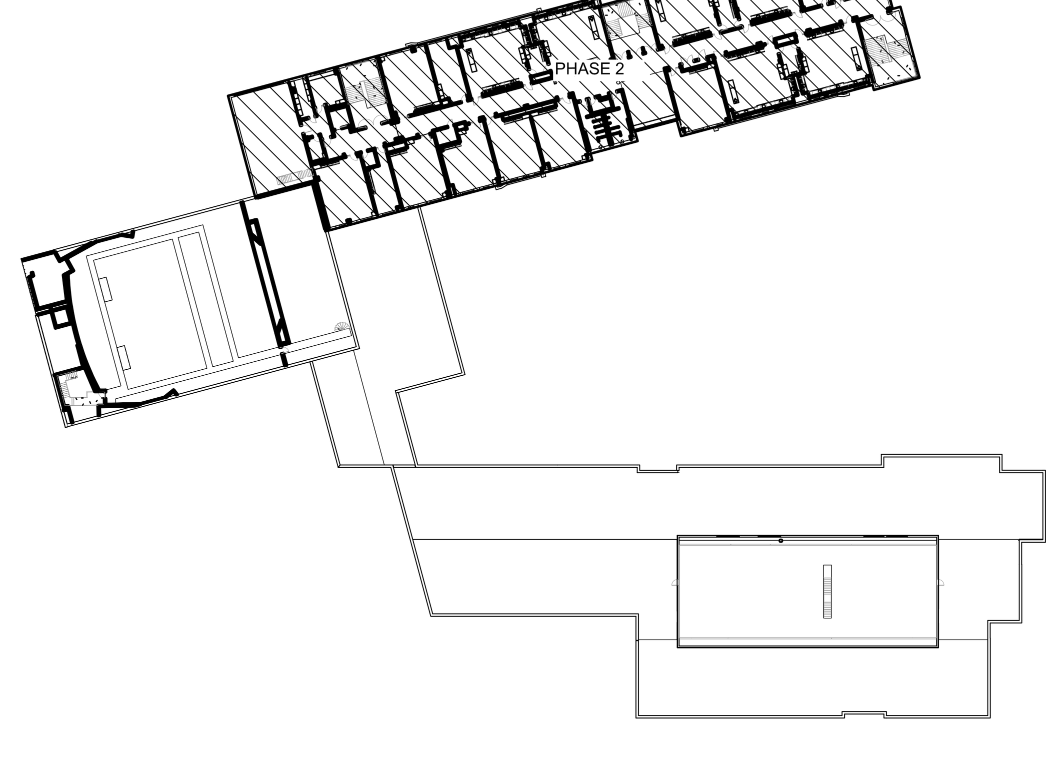

LEVEL 00 – PHASING PLAN
SCALE: NONE




LEVEL 01 – PHASING PLAN
SCALE: NONE




LEVEL 02 – PHASING PLAN
SCALE: NONE




LEVEL 03 – PHASING PLAN
SCALE: NONE

## PLUMBING SYSTEM SUMMARY

PLUMBING FIXTURES

556 TOTAL PLUMBING FIXTURES – 1834 TOTAL SAN FIXTURE UNITS:

- 162 WATER CLOSETS – 976 FIXTURE UNITS
- 37 URINALS – 148 FIXTURE UNITS
- 136 LAVATORIES – 204 FIXTURE UNITS
- 10 SERVICE SINKS – 40 FIXTURE UNITS
- 201 STANDARD SINKS – 402 FIXTURE UNITS
- 28 WATER COOLERS – 14 FIXTURE UNITS
- 16 SHOWERS – 24 FIXTURE UNITS
- 7 HAND SINKS – 14 FIXTURE UNITS
- 1 CAN WASH – 3 FIXTURE UNITS
- 1 POT SINK – 6 FIXTURE UNITS
- 2 VEG. PREP SINK – 3 FIXTURE UNITS

DOMESTIC WATER DEMAND

DOMESTIC HOT WATER DEMAND – 116.6 GPM OR 6,996 GPH

DOMESTIC COLD WATER DEMAND – 666.3 GPM OR 39,978 GPH

TOTAL DOMESTIC WATER DEMAND – 683.4 GPM OR 41,004 GPH

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PLUMBING GENERAL NOTES AND LEGEND

NORTH EAST MIDDLE/HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

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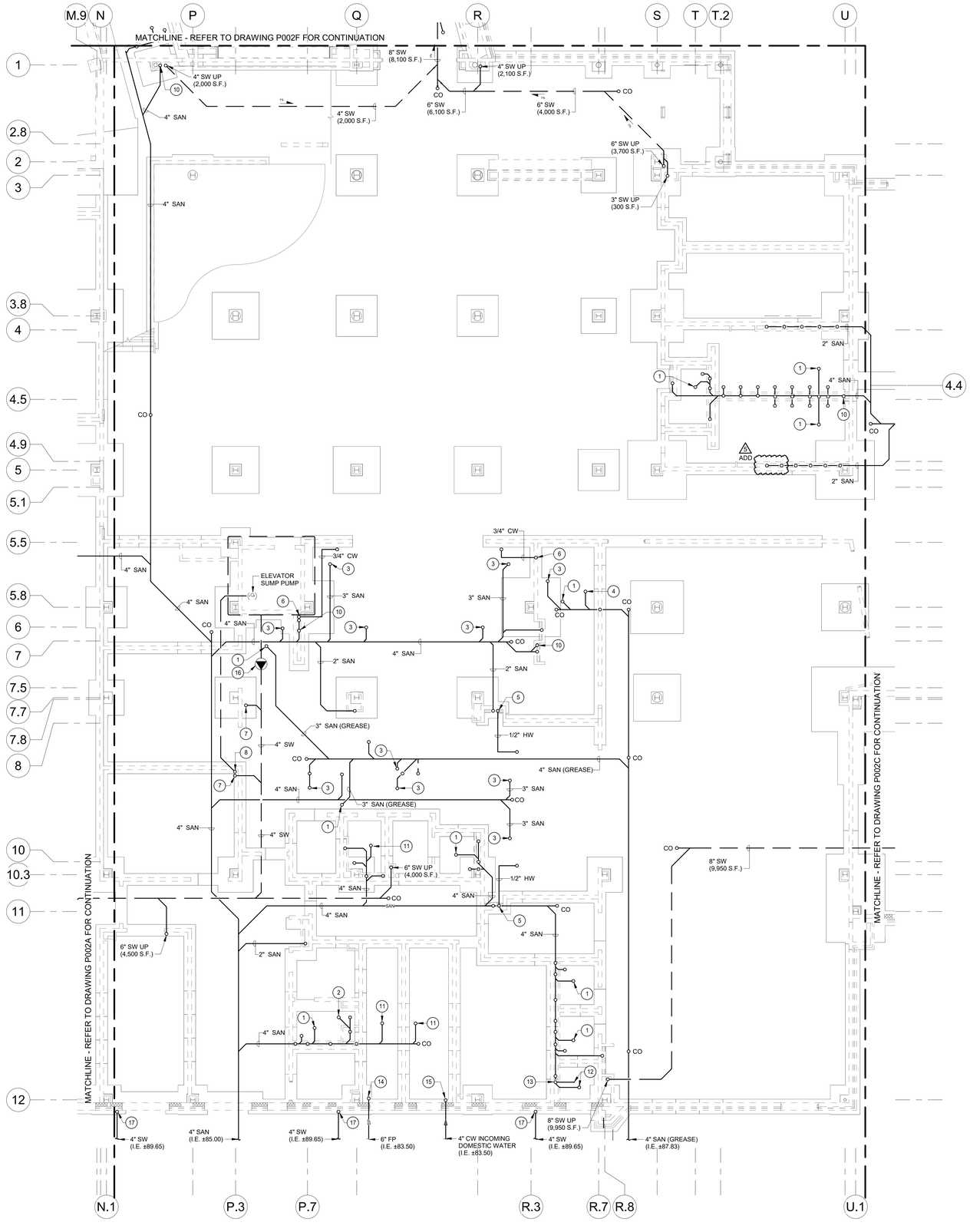



PARTIAL FOUNDATION PLAN - AREA B
1/8" = 1'-0"

## GENERAL NOTES:

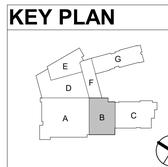
1. REFER TO RISER DIAGRAMS FOR ADDITIONAL INFORMATION
2. REFER TO KITCHEN DRAWINGS FOR ADDITIONAL INFORMATION
3. ALL WORK IN THIS AREA IS UNDER PHASE 1

## DRAWING NOTES:

1. 3" SAN UP TO FD-B
2. 2" SAN UP TO TD
3. 3" SAN UP TO FS
4. 4" SAN UP TO FS
5. ½" HW UP
6. ¾" CW UP
7. 3" SW UP TO OHD
8. ELEVATOR SUMP PUMP DISCHARGE UP TO OHD
9. 3" SW UP TO STANDPIPE WITH BACKWATER VALVE
10. 4" SAN UP
11. 4" SAN UP TO FD-A
12. 4" SAN AND ¾" HW TO CAN WASH
13. ¾" HW UP
14. 6" FP UP. REFER TO FIRE PROTECTION DRAWINGS FOR CONTINUATION
15. 4" CW UP REFER TO DRAWING P100B FOR CONTINUATION.
16. BACKWATER VALVE
17. DOWNSPOUT TO CAST IRON BOOT

SCALE: 1/8" = 1'-0"
8 0 8 16

KEY PLAN

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AREA B PARTIAL FOUNDATION PLAN

NORTH EAST MIDDLE / HIGH SCHOOL
2881 PANCOAST AVENUE, ASTON, PA 19014

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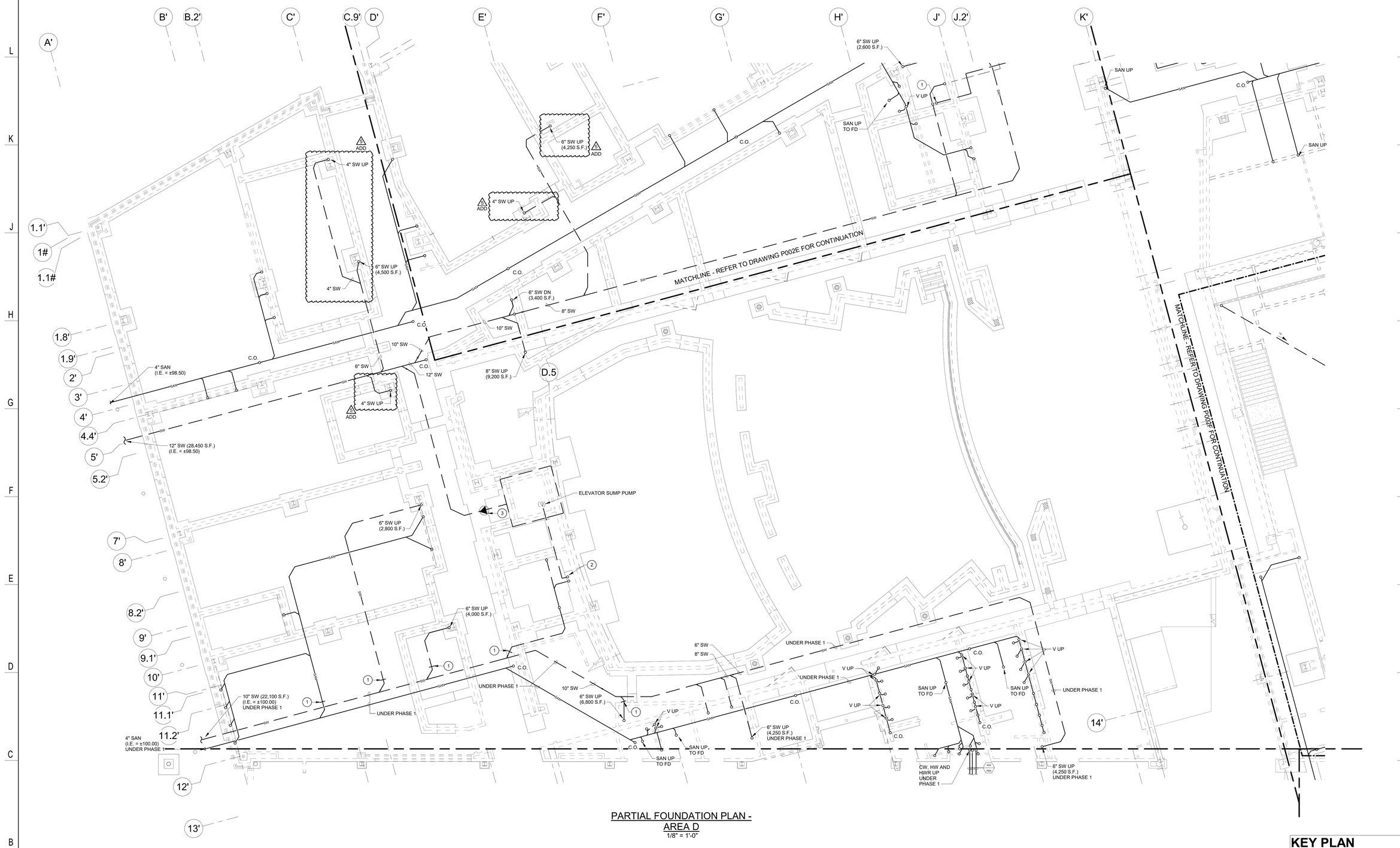
## GENERAL NOTES:

1. REFER TO RISER DIAGRAMS FOR ADDITIONAL INFORMATION
2. ALL WORK IN THIS AREA IS UNDER PHASE 2

## DRAWING NOTES:

1. PROVIDE CAPPED CONNECTION UNDER PHASE 1. UNDER PHASE 2 CONTINUE PIPING AND MAKE FINAL CONNECTIONS.
2. ELEVATOR SUMP PUMP DISCHARGE UP TO OHD.
3. BACKWATER VALVE.



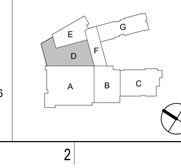

## PARTIAL FOUNDATION PLAN - AREA D

1/8" = 1'-0"

SCALE: 1/8" = 1'-0"

8 0 8 16

## KEY PLAN

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# AREA D PARTIAL FOUNDATION PLAN

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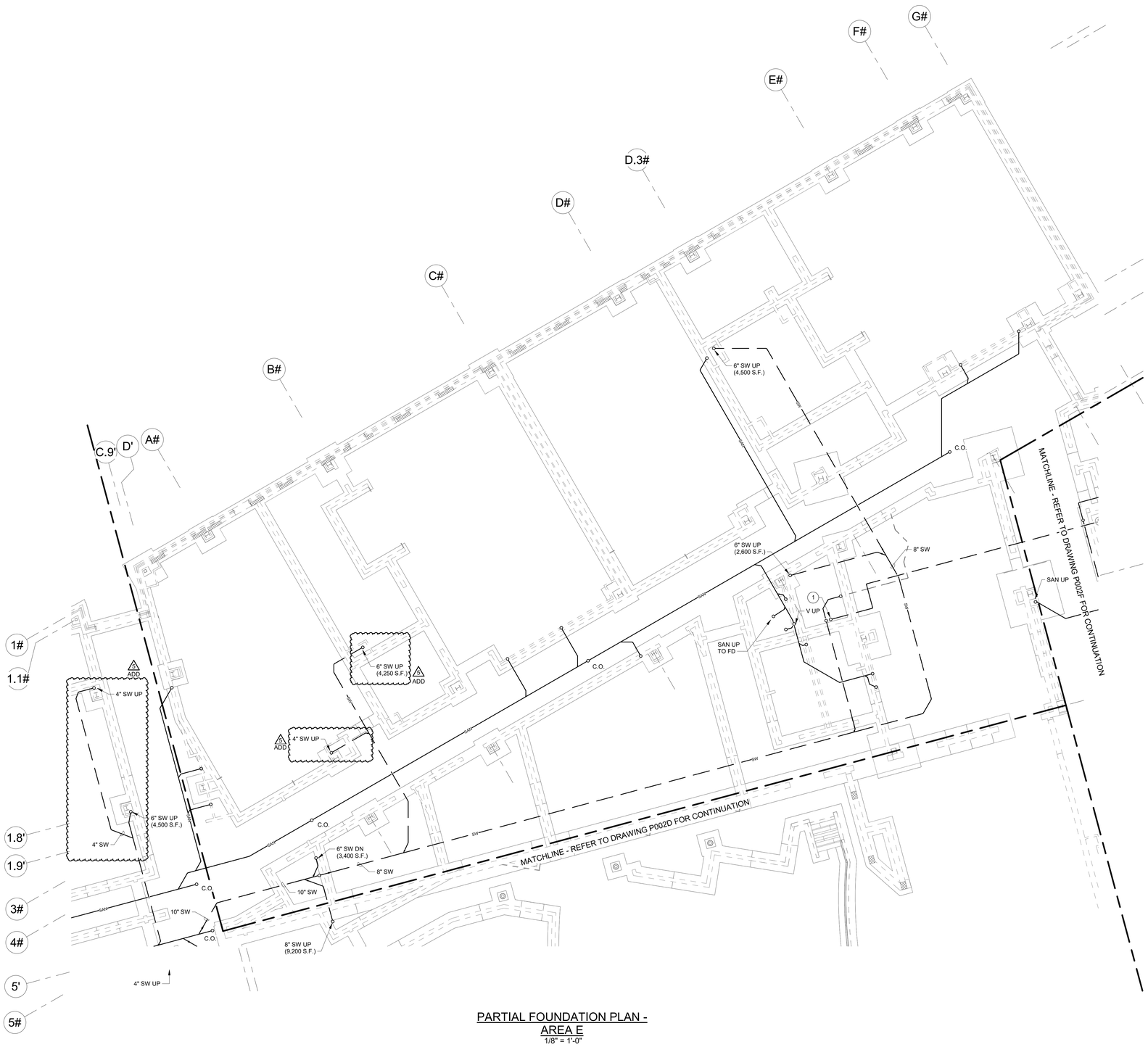
## GENERAL NOTES:

1. REFER TO RISER DIAGRAMS FOR ADDITIONAL INFORMATION
2. ALL WORK IN THIS AREA IS UNDER PHASE 2

## DRAWING NOTES:

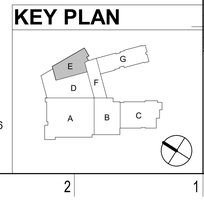
1. ELEVATOR SUMP PUMP DISCHARGE UP TO OHD.




PARTIAL FOUNDATION PLAN - AREA E
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

## KEY PLAN

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AREA E PARTIAL FOUNDATION PLAN

NORTH EAST MIDDLE / HIGH SCHOOL
2881 PANCOAST AVENUE, ASTON, PA 19014

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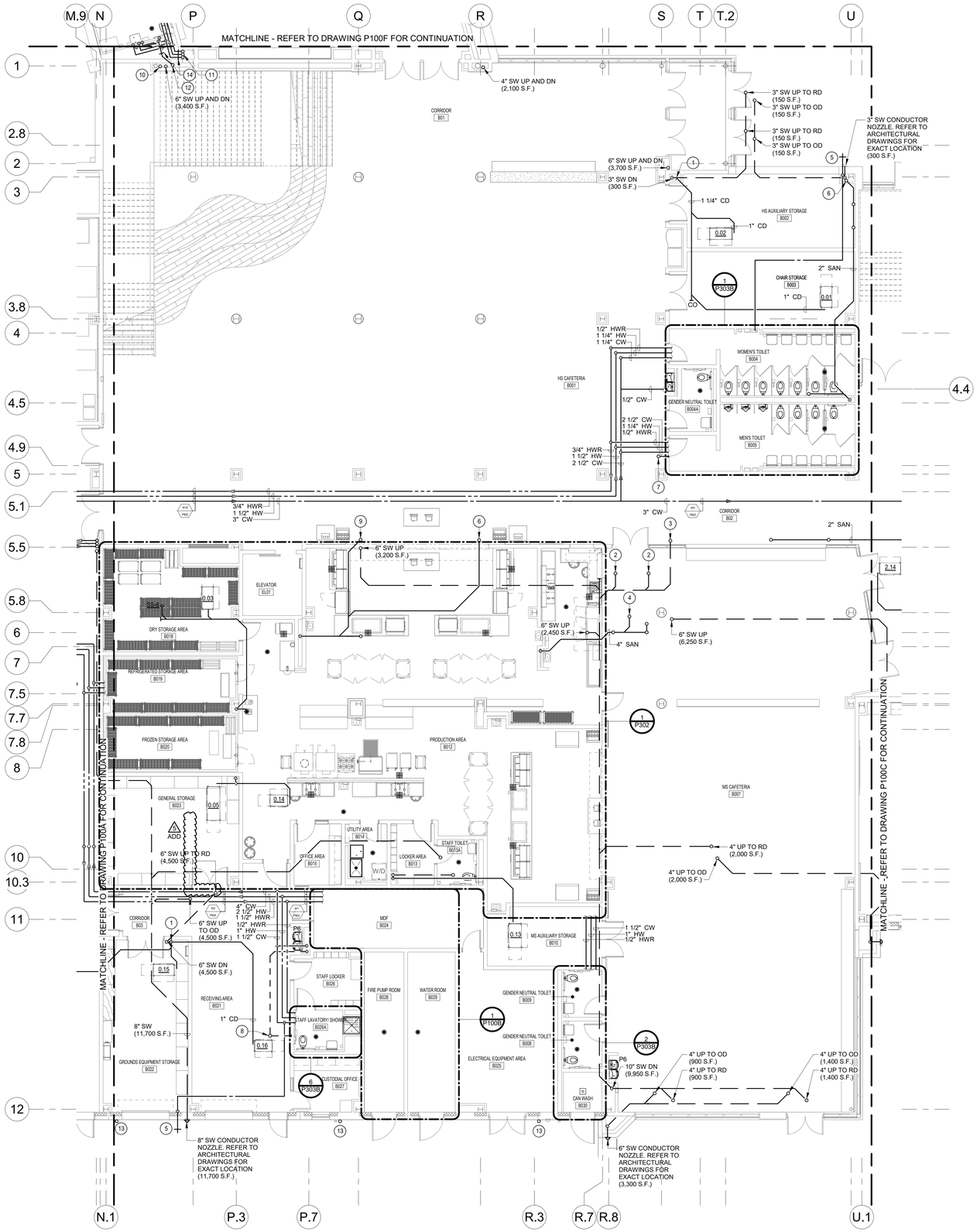
## GENERAL NOTES:

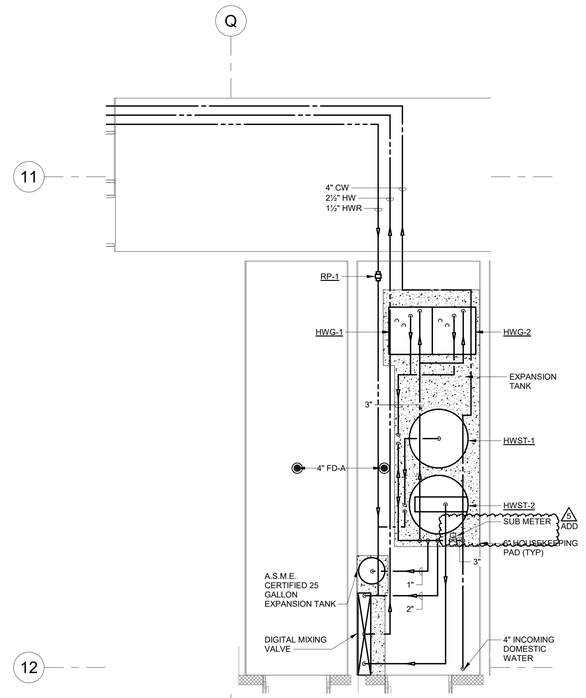
1. REFER TO RISER DIAGRAMS FOR ADDITIONAL INFORMATION
2. ALL WORK IN THIS AREA IS UNDER PHASE 1
3. EXTEND ALL MECHANICAL UNIT CONDESNATE DRAINS TO THE NEAREST OHD.

## DRAWING NOTES:

1. 1½" CD DN TO 3" SW STANDPIPE WITH BACKWATER VALVE
2. 3" SW UP TO OHD
3. 4" SW UP
4. 3" SAN UP TO FD
5. ¾" NFWH
6. 2" SAN UP
7. 3" V UP
8. 4" VTR
9. 4" SAN UP
10. 4" SAN UP AND DN
11. 1¼" CW, 1" HW AND ½" HWR UP.
12. 2" V UP
13. DOWNSPOUT DN TO CAST IRON BOOT.
14. PROVIDE VALVE AND CAPPED CONNECTION UNDER PHASE 1. COMPLETE RUNOUTS AND CONNECTIONS TO FIXTURES UNDER PHASE 2.




PARTIAL 00 FLOOR PLAN - AREA B
1/8" = 1'-0"

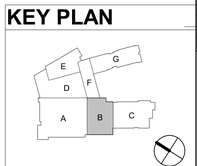



B024 PART PLAN
1/4" = 1'-0"

SCALE: 1/4" = 1'-0"

SCALE: 1/8" = 1'-0"

## KEY PLAN

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LEVEL 00 AREA B PARTIAL FLOOR PLAN

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## GENERAL NOTES:

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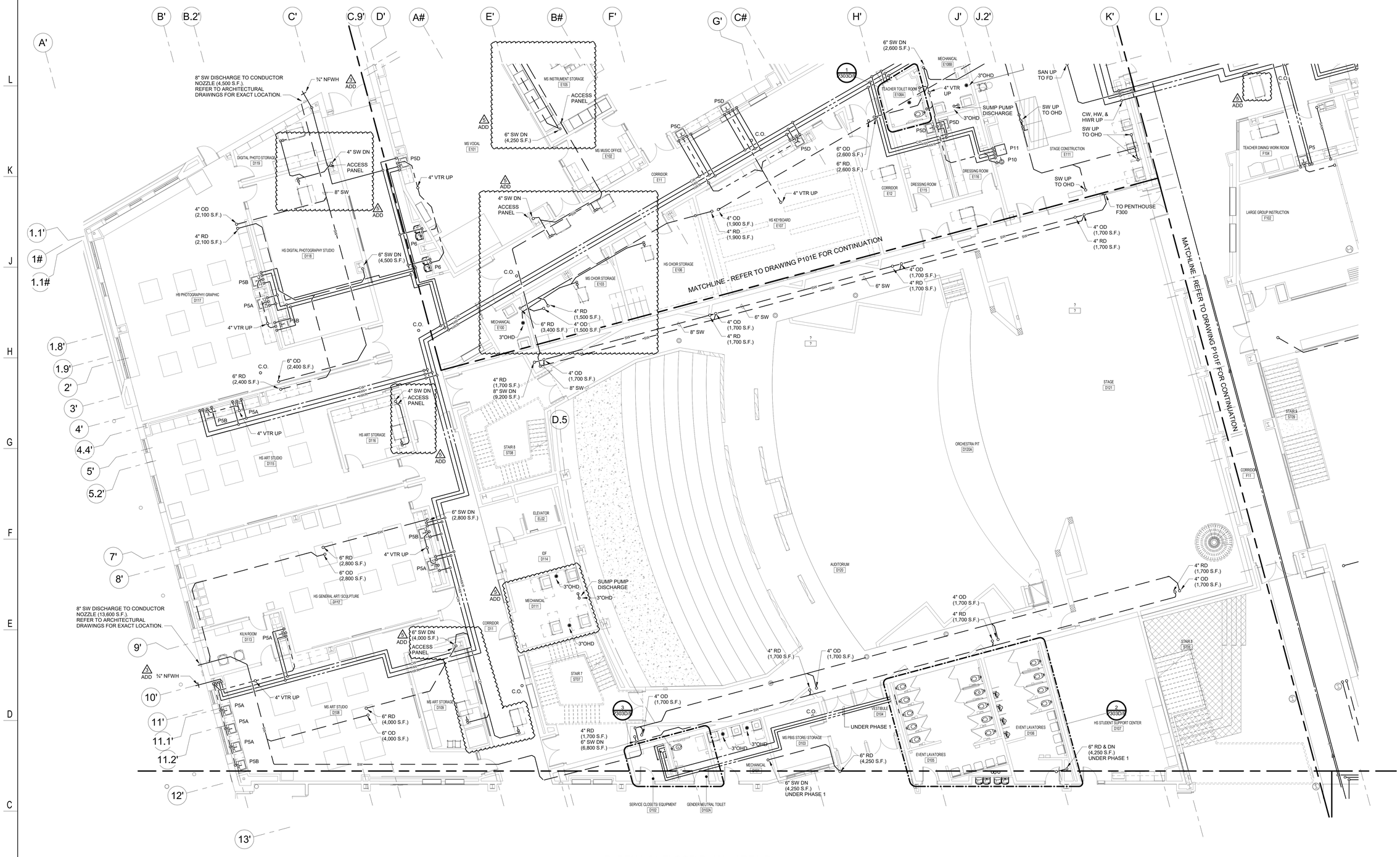
2. ALL WORK IN THIS AREA IS UNDER PHASE 2.
3. EXTEND ALL MECHANICAL UNIT CONDESNATE DRAINS TO THE NEAREST OHD.



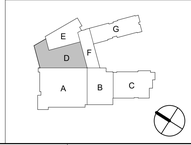

PARTIAL 01 FLOOR PLAN - AREA D

1/8" = 1'-0"

SCALE: 1/8" = 1'-0"

8 0 8 16

## KEY PLAN

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LEVEL 01 AREA D PARTIAL FLOOR PLAN

NORTH EAST MIDDLE / HIGH SCHOOL
2881 PANCOAST AVENUE, ASTON, PA 19014

| DATE | DESCRIPTION |
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## GENERAL NOTES:

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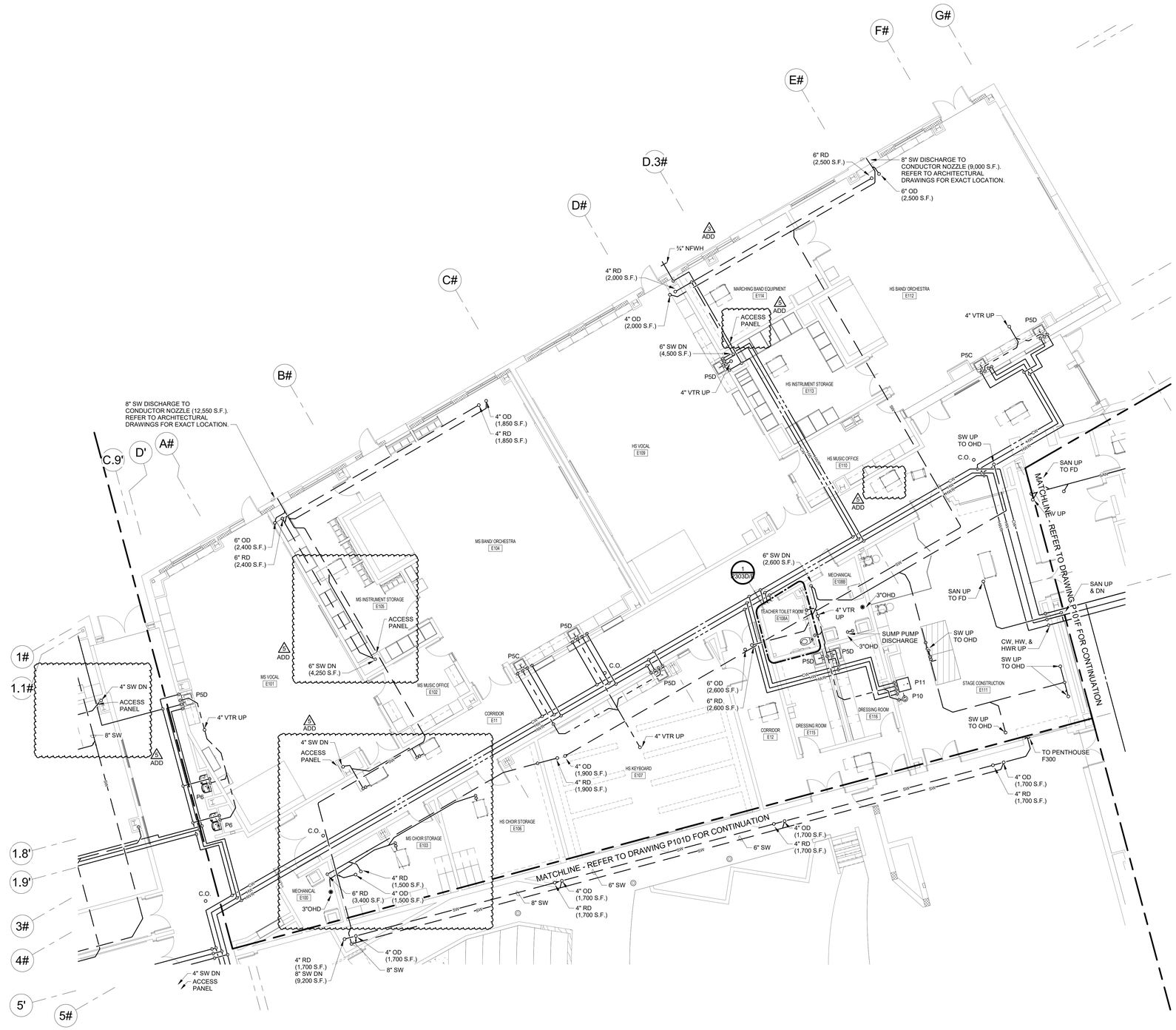
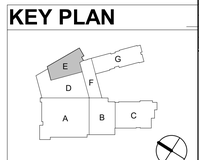
2. ALL WORK IN THIS AREA IS UNDER PHASE 2.
3. EXTEND ALL MECHANICAL UNIT CONDESNATE DRAINS TO THE NEAREST OHD.




PARTIAL 01 FLOOR PLAN - AREA E
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

## KEY PLAN

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LEVEL 01 AREA E PARTIAL FLOOR PLAN

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2881 PANCOAST AVENUE, ASTON, PA 19014

| DATE | DESCRIPTION |
|---|---|
| 3/25/2024 | ADDENDUM #3 |
| 4/02/2024 | ADDENDUM #5 |

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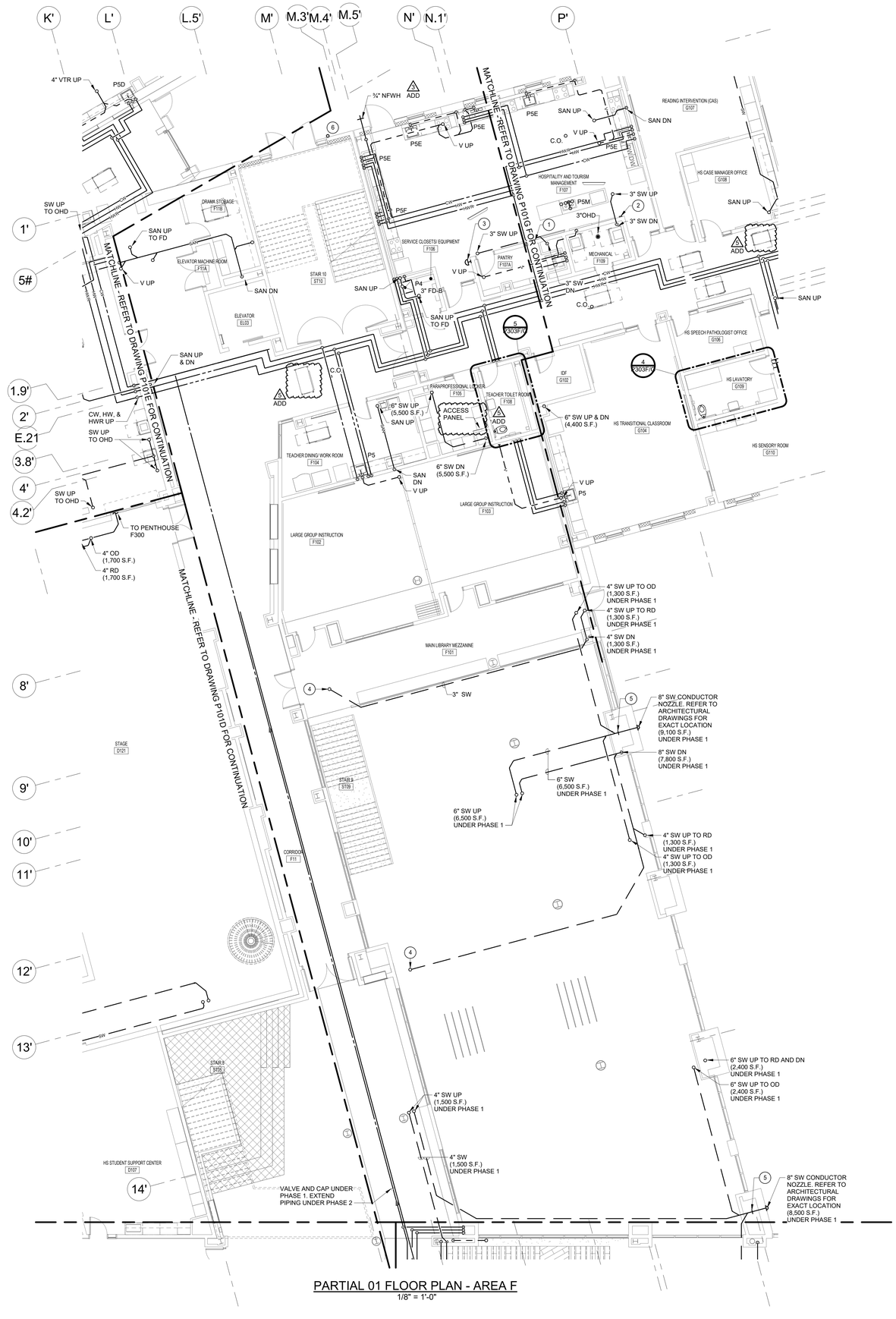



PARTIAL 01 FLOOR PLAN - AREA F
1/8" = 1'-0"

## GENERAL NOTES:

1. REFER TO RISER DIAGRAMS FOR ADDITIONAL INFORMATION
2. ALL WORK IN THIS AREA IS UNDER PHASE 2
3. EXTEND ALL MECHANICAL UNIT CONDESNATE DRAINS TO THE NEAREST OHD.

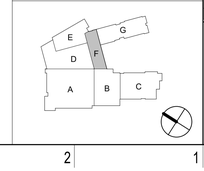
## DRAWING NOTES:

1. TRANSITION TO SOFT COPPER.
2. UTILITY SHUT-OFF PANEL.
3. REMOTE EMERGENCY SHUT-OFF BUTTON.
4. 3" SW UP TO OHD. PROVIDE CAPPED CONNECTION UNDER PHASE 1. EXTEND PIPING TO OHD UNDER PHASE 2
5. PROVIDE STAINLESS STEEL BIRD SCREEN UNDER PHASE 1. UNDER PHASE 2 CONTINUE PIPING AND CONNECT TO SW CONDUCTOR NOZZLE.
6. DOWNSPOUT DN TO CAST IRON BOOT.

SCALE: 1/8" = 1'-0"

8 0 8 16

## KEY PLAN

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GRIMM + PARKER ARCHITECTS

GP #22105

LEVEL 01 AREA F PARTIAL FLOOR PLAN

NORTH EAST MIDDLE / HIGH SCHOOL
2881 PANCOAST AVENUE, ASTON, PA 19014

| DATE | DESCRIPTION |
|---|---|
| 3/25/2024 | ADDENDUM #3 |
| 4/02/2024 | ADDENDUM #5 |

**P101F**

12/22/2023
BID SET

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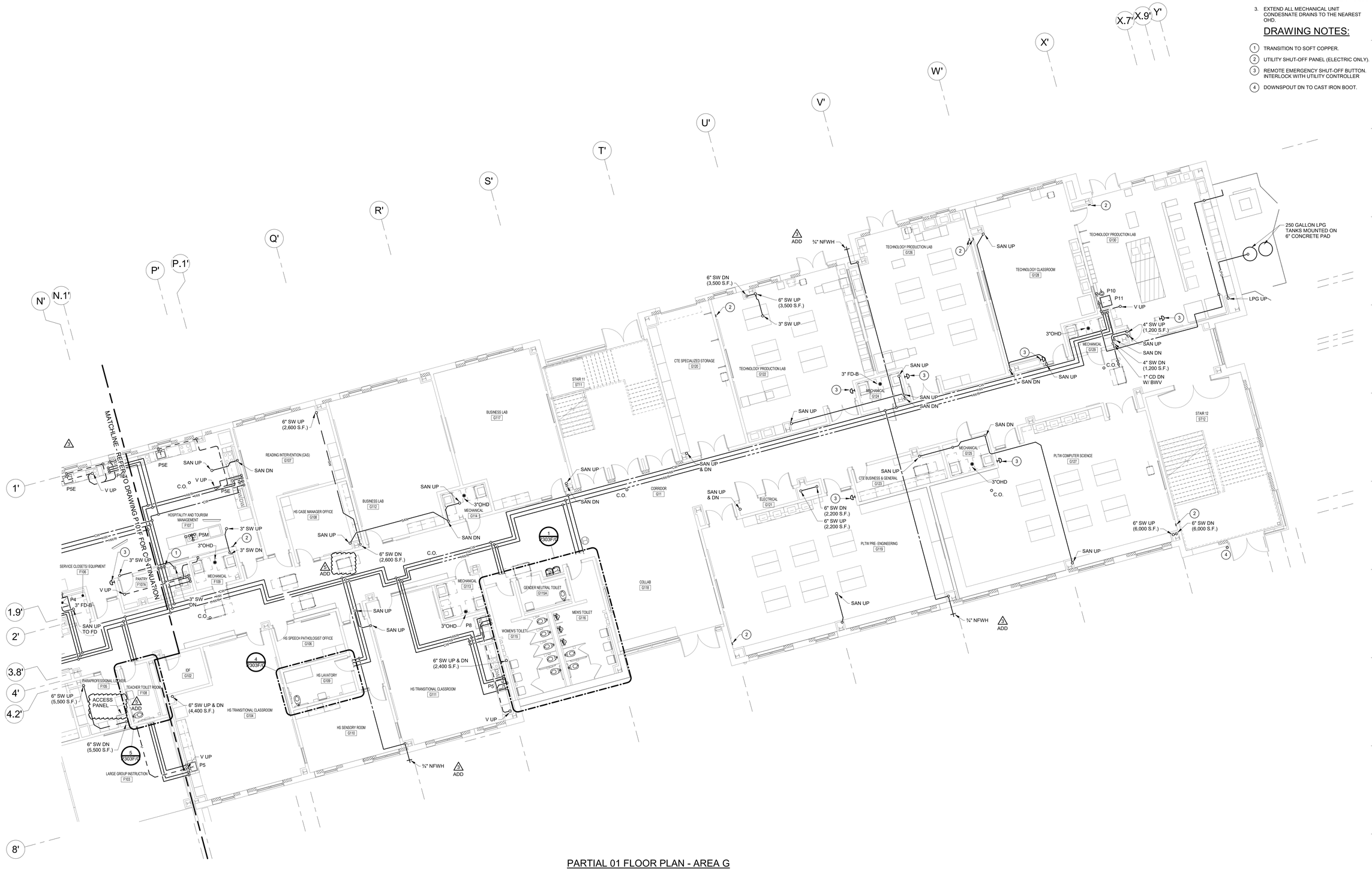
## GENERAL NOTES:

1. REFER TO RISER DIAGRAMS FOR ADDITIONAL INFORMATION
2. ALL WORK IN THIS AREA IS UNDER PHASE 2
3. EXTEND ALL MECHANICAL UNIT CONDESNATE DRAINS TO THE NEAREST OHD.

## DRAWING NOTES:

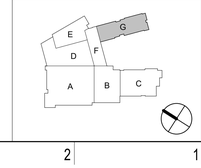
1. TRANSITION TO SOFT COPPER.
2. UTILITY SHUT-OFF PANEL (ELECTRIC ONLY).
3. REMOTE EMERGENCY SHUT-OFF BUTTON. INTERLOCK WITH UTILITY CONTROLLER
4. DOWNSPOUT DN TO CAST IRON BOOT.




PARTIAL 01 FLOOR PLAN - AREA G
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

## KEY PLAN

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GP #22105

LEVEL 01 AREA G PARTIAL FLOOR PLAN

NORTH EAST MIDDLE / HIGH SCHOOL
2881 PANCOAST AVENUE, ASTON, PA 19014

| DATE | DESCRIPTION |
|---|---|
| 3/25/2024 | ADDENDUM #3 |
| 4/02/2024 | ADDENDUM #5 |

**P101G**

12/22/2023
BID SET

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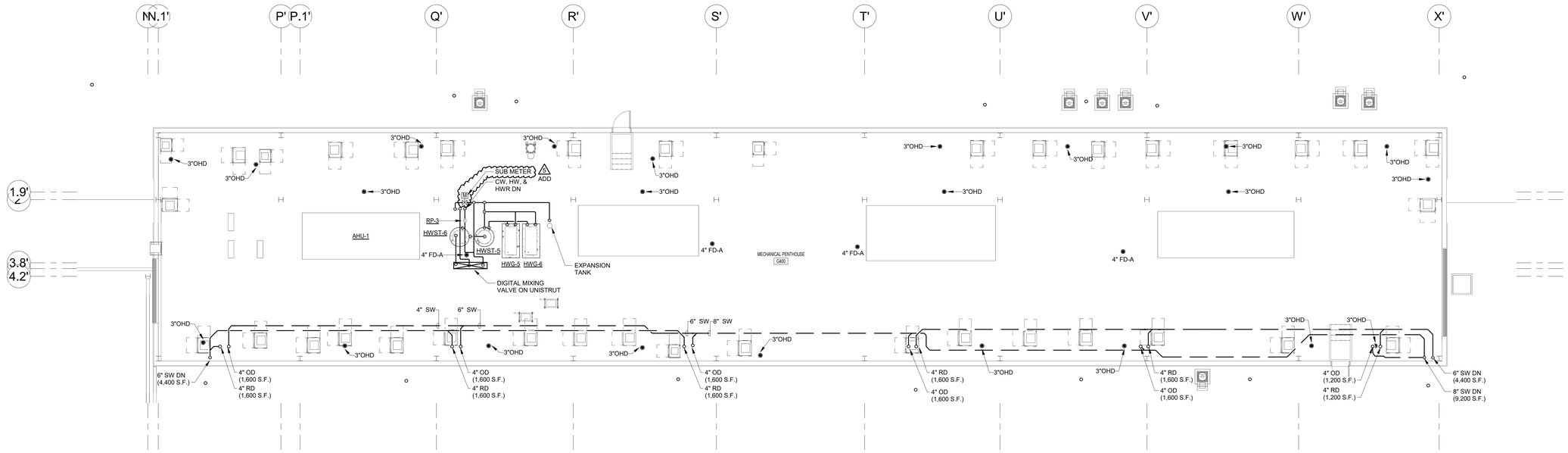
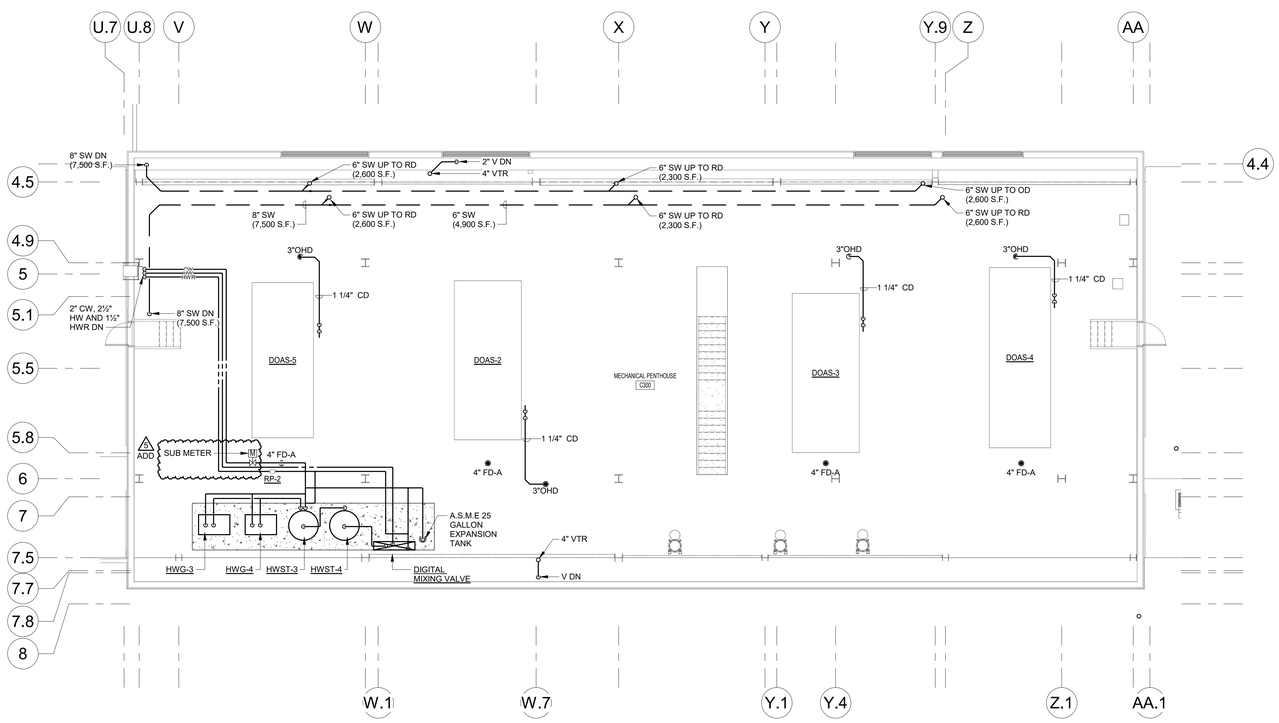
## GENERAL NOTES:

1. REFER TO MECHANICAL DRAWINGS FOR ALL MECHANICAL EQUIPMENT.
2. REFER TO RISER DIAGRAMS FOR MORE INFORMATION.



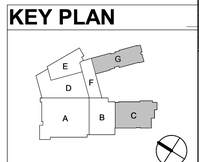

HIGH SCHOOL PENTHOUSE
1/8" = 1'-0"




MIDDLE SCHOOL PENTHOUSE
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

KEY PLAN

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GP #22105

PENTHOUSE AREA C & G PART PLANS

NORTH EAST MIDDLE / HIGH SCHOOL
2881 PANCOAST AVENUE, ASTON, PA 19014

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

**P301**

12/22/2023
BID SET

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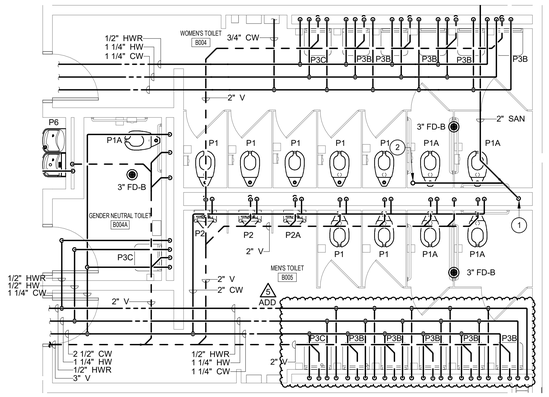
## GENERAL NOTES:

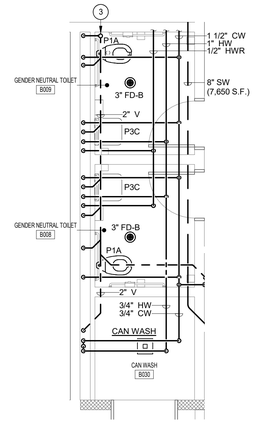
1. REFER TO RISER DIAGRAMS FOR ADDITIONAL INFORMATION
2. ALL WORK IN THIS AREA IS UNDER PHASE 1

## DRAWING NOTES:

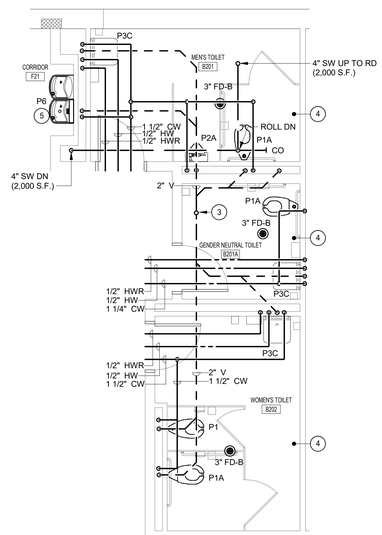
1. 4" SAN DN
2. 3" SAN UP
3. 4" VTR
4. SPACES ARE NOT OCCUPIED UNTIL COMPLETION OF PHASE 2. PROVIDE MAIN CW, HW, HWR, SAN AND VENT PIPING AND ALL ASSOCIATED WORK UNDER PHASE 1. VALVE AND CAP ALL PIPING FOR PHASE 2. COMPLETE RUNOUTS AND CONNECTIONS TO FIXTURES UNDER PHASE 2. ALL STORM WATER PIPING SHALL BE INSTALLED UNDER PHASE 1
5. PROVIDE P6 UNDER PHASE 1



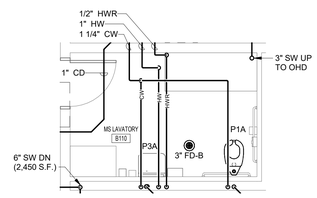

1 P303B B004, B004A AND B005 PART PLAN
1/4" = 1'-0"



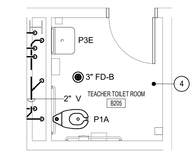

2 P303B B008, B009, AND B030 PART PLAN
1/4" = 1'-0"



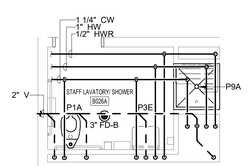

3 P303B B201, B201A, AND B202 PART PLAN
1/4" = 1'-0"



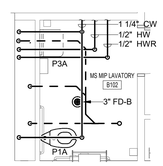

4 P303B B110 PART PLAN
1/4" = 1'-0"




5 P303B B205 PART PLAN
1/4" = 1'-0"




6 P303B B026A PART PLAN
1/4" = 1'-0"




7 P303B B102 PART PLAN
1/4" = 1'-0"

SCALE: 1/4" = 1'-0"

4 0 4 8

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GP #22105

TOILET ROOM PART PLANS - AREA B

NORTH EAST MIDDLE / HIGH SCHOOL
2881 PANCOAST AVENUE, ASTON, PA 19014

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

**P303B**

12/22/2023
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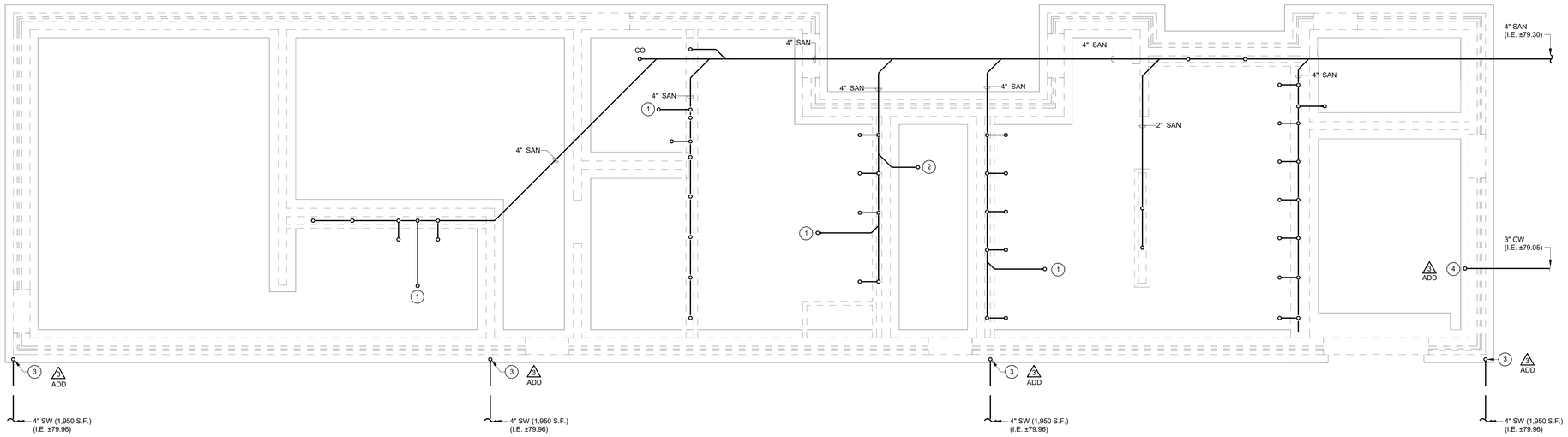
## GENERAL NOTES:

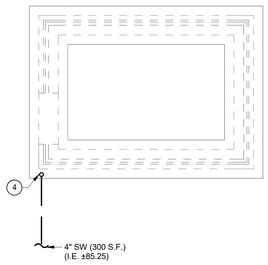
1. REFER TO RISER DIAGRAMS FOR ADDITIONAL INFORMATION
2. REFER TO CIVIL DRAWINGS FOR CONTINUATION OF ALL UTILITIES.

## DRAWING NOTES:

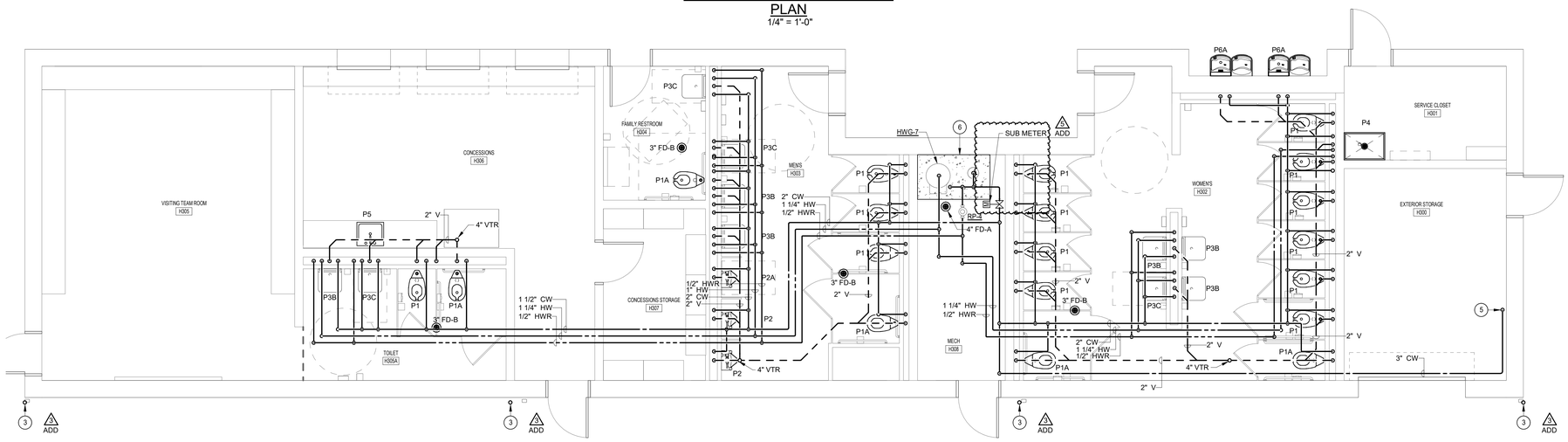
1. 3" SAN UP TO FD-B
2. 4" SAN UP TO FD
3. DOWNSPOUT TO CAST IRON BOOT. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION
4. 3" CW UP
5. 3" CW DN
6. 6" HOUSEKEEPING PAD



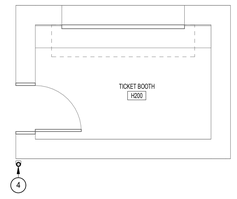

CONCESSIONS - FOUNDATION PLAN
1/4" = 1'-0"




TICKET BOOTH - FOUNDATION PLAN
1/4" = 1'-0"




CONCESSIONS - PART PLAN
1/4" = 1'-0"




TICKET BOOTH - PART PLAN
1/4" = 1'-0"

ROOF PLAN - CONCESSIONS
1/4" = 1'-0"

SCALE: 1/4" = 1'-0"

4 0 4 8

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GP #22105

OUTBUILDINGS - CONCESSIONS AND TICKET BOOTH

NORTH EAST MIDDLE / HIGH SCHOOL
2881 PANCOAST AVENUE, ASTON, PA 19014

| DATE | DESCRIPTION |
|---|---|
| 3/25/2024 | ADDENDUM #3 |
| 4/02/2024 | ADDENDUM #5 |

**P401**

12/22/2023
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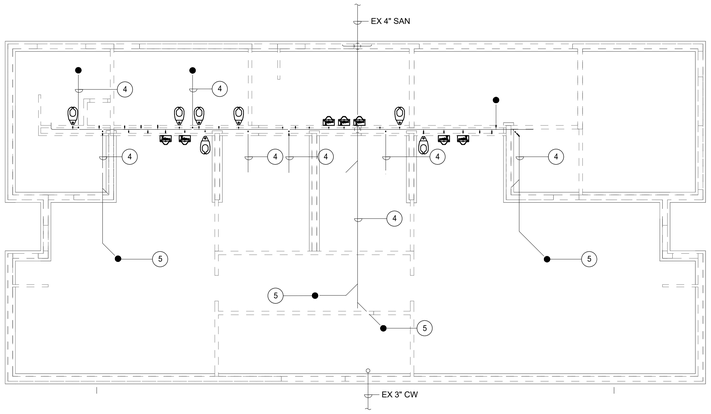
## GENERAL NOTES:

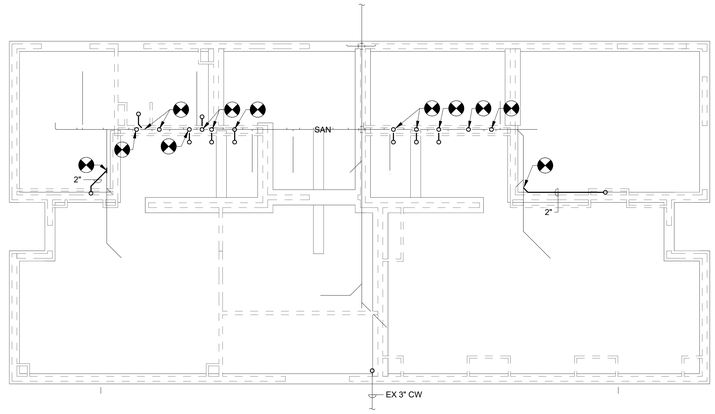
1. PATCH ALL HOLES, PENETRATIONS, ETC. (IN WALLS FLOORS, ROOF, ETC.) TO MATCH EXISTING MATERIALS, FINISHES ETC. AND PAINT TO MATCH EXISTING.
2. REFER TO MECHANICAL DRAWINGS FOR ALL MECHANICAL EQUIPMENT.
3. WHERE PIPING IS INDICATED TO BE REMOVED, REMOVE PIPING IN ITS ENTIRETY. THE CONTRACTOR SHALL USE CAUTION WHEN REMOVING BELOW SLAB PIPING TO ENSURE THERE ARE NOT CONFLICTS WITH EXISTING STRUCTURAL FOOTERS, ELECTRICAL AND PLUMBING TO REMAIN.
4. WHERE PIPING IS INDICATED TO BE REMOVED AND NOT REUSED DURING NEW WORK CONSTRUCTION, PIPING SHALL BE CAPPED/PLUGGED AND SLAB PATCHED/REPAIRED TO MATCH EXISTING.
5. CUT AND CAP ABANDONED UNDERSLAB SANITARY AND VENT PIPING AT ACTIVE MAIN. EXTEND UP AND PROVIDE FLOOR CLEANOUT AT ACTIVE SANITARY LINE.
6. REFER TO CIVIL DRAWINGS FOR CONTINUATION OF ALL UTILITIES

## DRAWING NOTES:

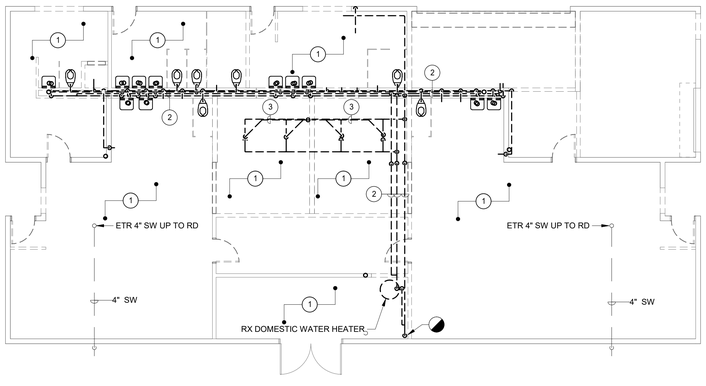
1. RX. ALL EXISTING PLUMBING FIXTURES (TOILETS, SINKS, FLOOR DRAINS, EMERGENCY PLUMBING FIXTURES, ETC.) AND ALL ASSOCIATED PIPING, VALVES, HANGERS, SUPPORTS, INSULATION, ETC IN THEIR ENTIRETY. CUT AND CAP EX SANITARY PIPING BELOW FLOOR AND ABANDON IN PLACE.
2. RX. DOMESTIC WATER PIPING, VALVING, INSULATION, HANGERS, ETC AND ALL ASSOCIATED WORK IN ITS ENTIRETY.
3. RX. VENT PIPING, SUPPORTS, HANGERS, ETC IN ITS ENTIRETY.
4. ABANDON EXISTING SANITARY PIPING BELOW SLAB.
5. RX. FD AND ALL ASSOCIATED WORK IN ITS ENTIRETY.
6. 6" HOUSEKEEPING PAD



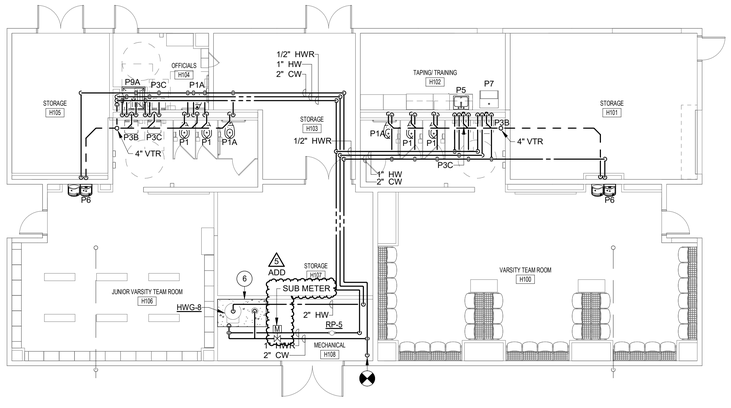

FOUNDATION - FIELDHOUSE - DEMO
1/8" = 1'-0"




FIELDHOUSE - FOUNDATION PLAN
1/8" = 1'-0"




LEVEL 00 - FIELDHOUSE - DEMO
1/8" = 1'-0"




FIELDHOUSE - PLAN
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

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GP #22105

OUTBUILDINGS - ATHLETICS BUILDINGS

NORTH EAST MIDDLE / HIGH SCHOOL
2881 PANCOAST AVENUE, ASTON, PA 19014

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

**P402**

12/22/2023
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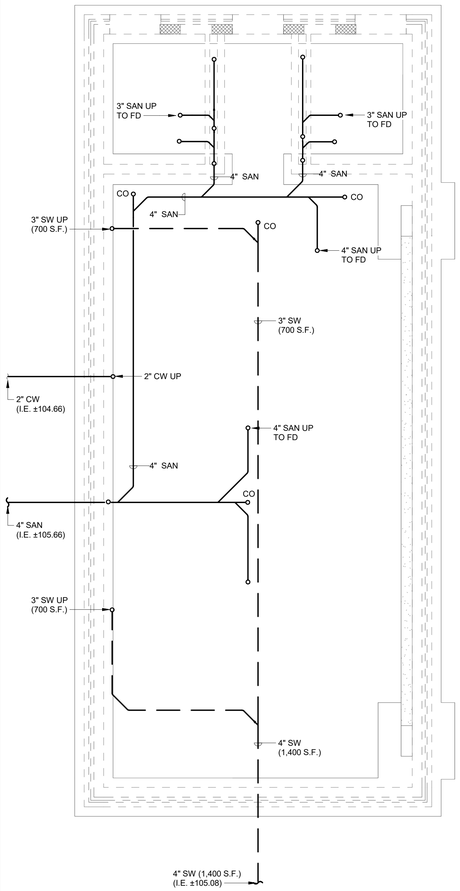
## GENERAL NOTES:

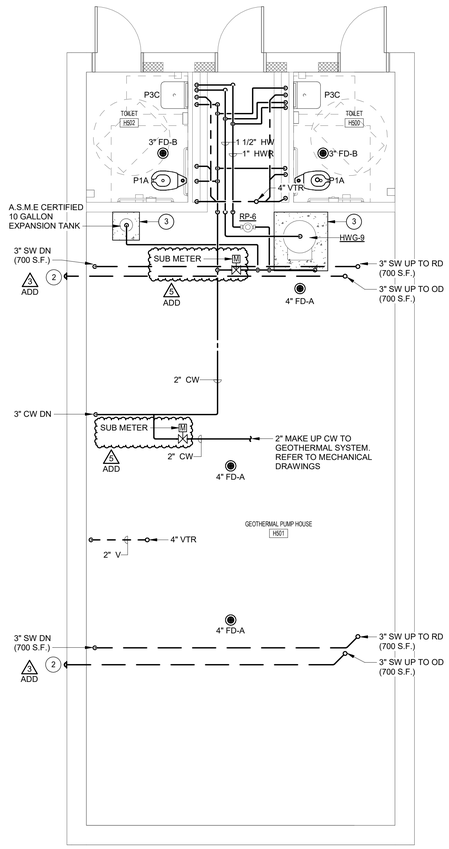
1. REFER TO RISER DIAGRAMS FOR ADDITIONAL INFORMATION
2. REFER TO CIVIL DRAWINGS FOR CONTINUATION OF ALL UTILITIES.

## DRAWING NOTES:

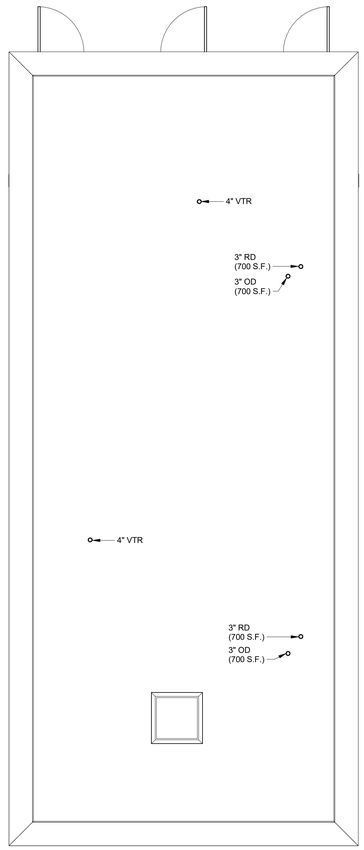
1. 3" SW CONDUCTOR NOZZLE. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION (700 S.F.)
2. 3" SW CONDUCTOR NOZZLE. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION (600 S.F.)
3. 6" HOUSEKEEPING PAD



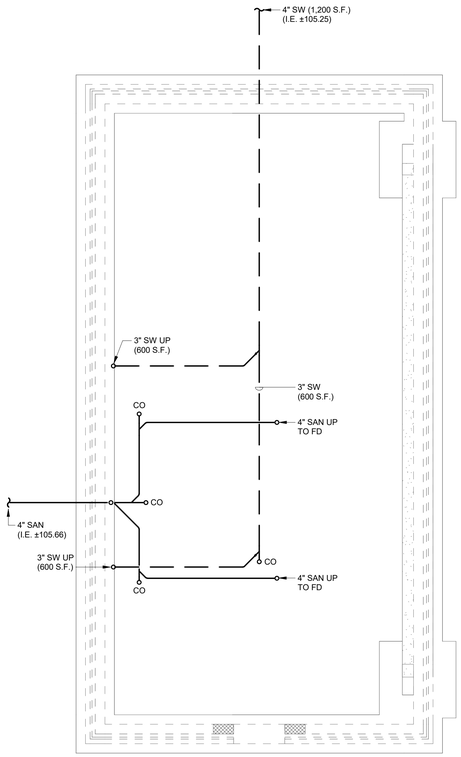

GEOTHERMAL BUILDING NORTH - FOUNDATION PLAN
1/4" = 1'-0"



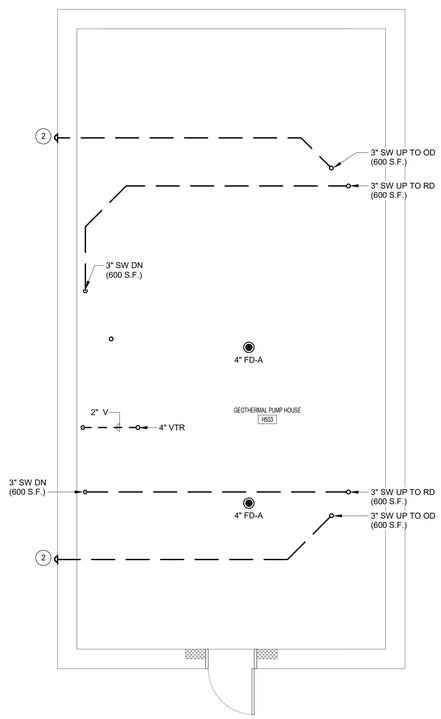

GEOTHERMAL BUILDING NORTH - PLAN
1/4" = 1'-0"



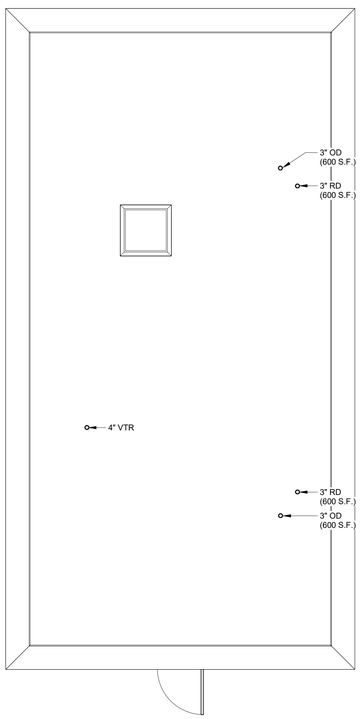

ROOF PLAN - GEOTHERMAL BUILDING NORTH
1/4" = 1'-0"




GEOTHERMAL BUILDING SOUTH - FOUNDATION PLAN
1/4" = 1'-0"




GEOTHERMAL BUILDING SOUTH -PLAN
1/4" = 1'-0"




ROOF PLAN - GEOTHERMAL BUILDING SOUTH
1/4" = 1'-0"

SCALE: 1/4" = 1'-0"

4 0 4 8

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GEOTHERMAL PUMP ROOMS

NORTH EAST MIDDLE / HIGH SCHOOL
2881 PANCOAST AVENUE, ASTON, PA 19014

| DATE | DESCRIPTION |
|---|---|
| 3/25/2024 | ADDENDUM #3 |
| 4/02/2024 | ADDENDUM #5 |

**P403**

12/22/2023
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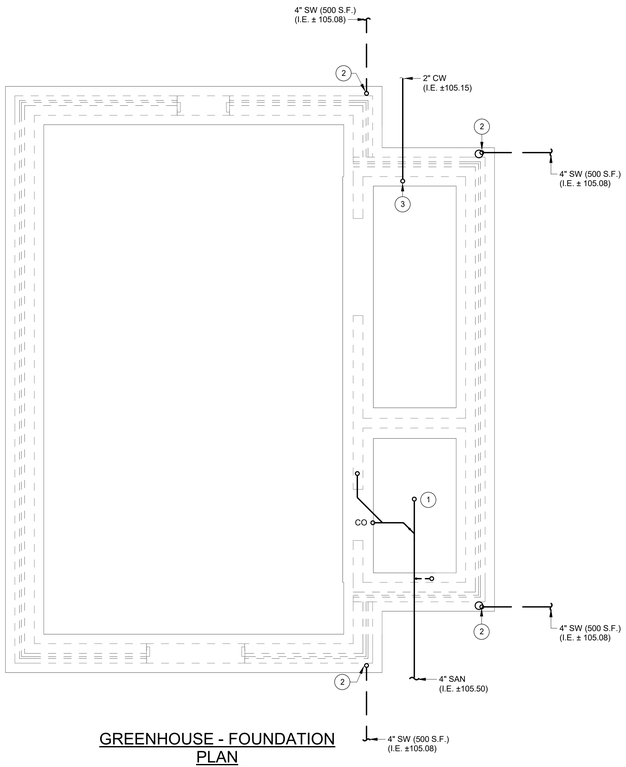
## GENERAL NOTES:

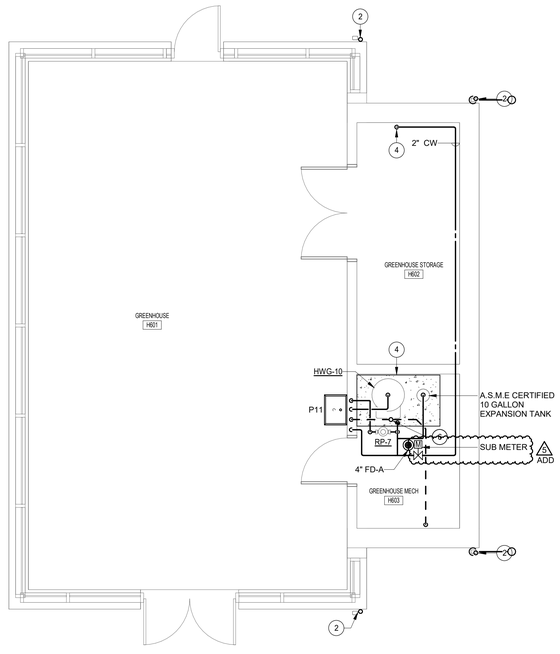
1. ALL WORK IS UNDER ADD ALTERNATE No.2
2. REFER TO RISER DIAGRAMS FOR ADDITIONAL INFORMATION
3. REFER TO CIVIL DRAWINGS FOR CONTINUATION OF ALL UTILITIES.

## DRAWING NOTES:

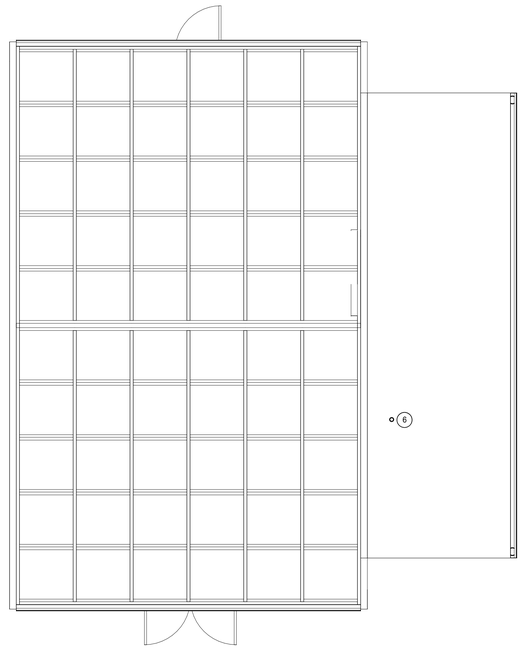
1. 4" SAN UP TO FD
2. DOWNSPOUT TO CAST IRON BOOT, REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION
3. 2" CW UP
4. 2" CW DN
5. 6" HOUSEKEEPING PAD
6. 4" VTR




GREENHOUSE - FOUNDATION PLAN
1/4" = 1'-0"




GREENHOUSE
1/4" = 1'-0"



ROOF PLAN - GREENHOUSE
1/4" = 1'-0"

SCALE: 1/4" = 1'-0"
4 0 4 8

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GREENHOUSE - ADD ALTERNATE No.2

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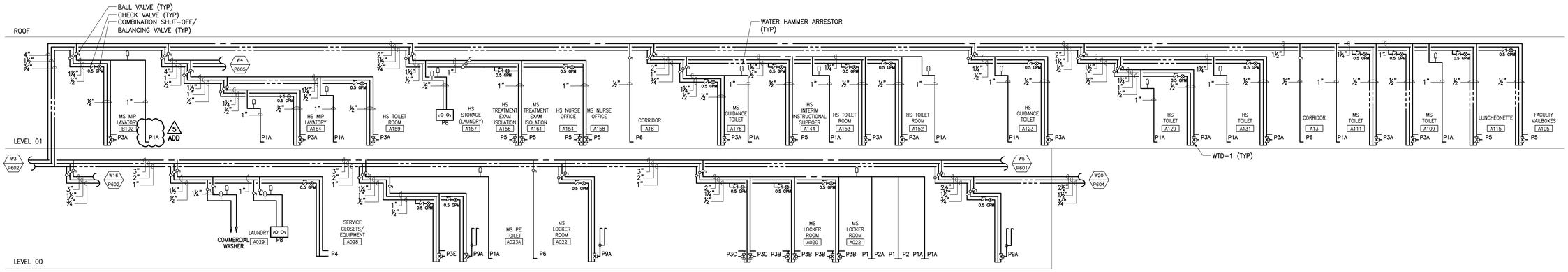
## GENERAL NOTES:

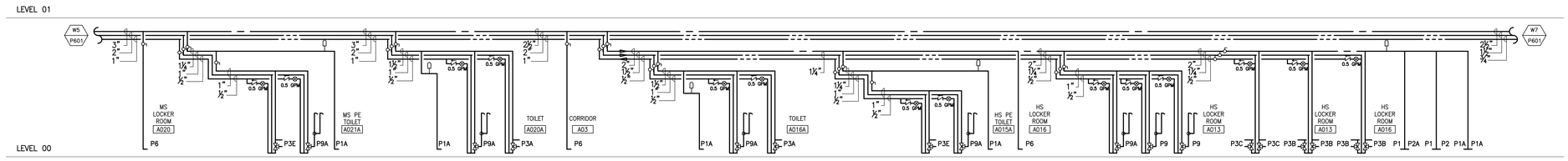
1. MANUAL AIR VENTS SHALL BE INSTALLED AT HIGH POINT(S) OF DOMESTIC WATER SYSTEM(S).

## DRAWING NOTES:

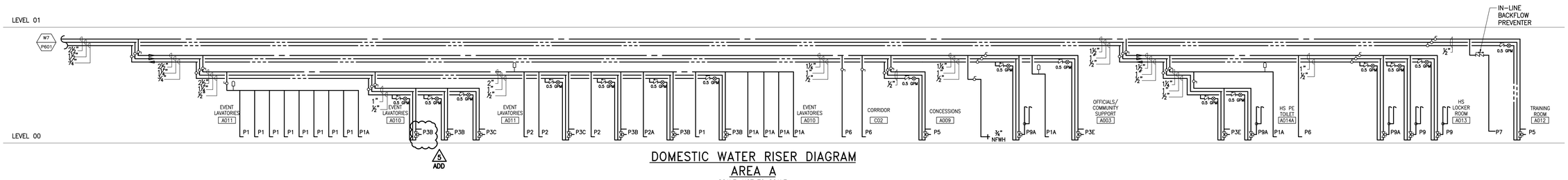
1. PROVIDE DISHWASHER WATER CONNECTION TO ADJACENT SINK




DOMESTIC WATER RISER DIAGRAM
AREA A
SCALE: NOT TO SCALE




DOMESTIC WATER RISER DIAGRAM
AREA A
SCALE: NOT TO SCALE




DOMESTIC WATER RISER DIAGRAM
AREA A
SCALE: NOT TO SCALE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GP #22105

DOMESTIC WATER RISER DIAGRAMS - AREA A
NORTH EAST MIDDLE/HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
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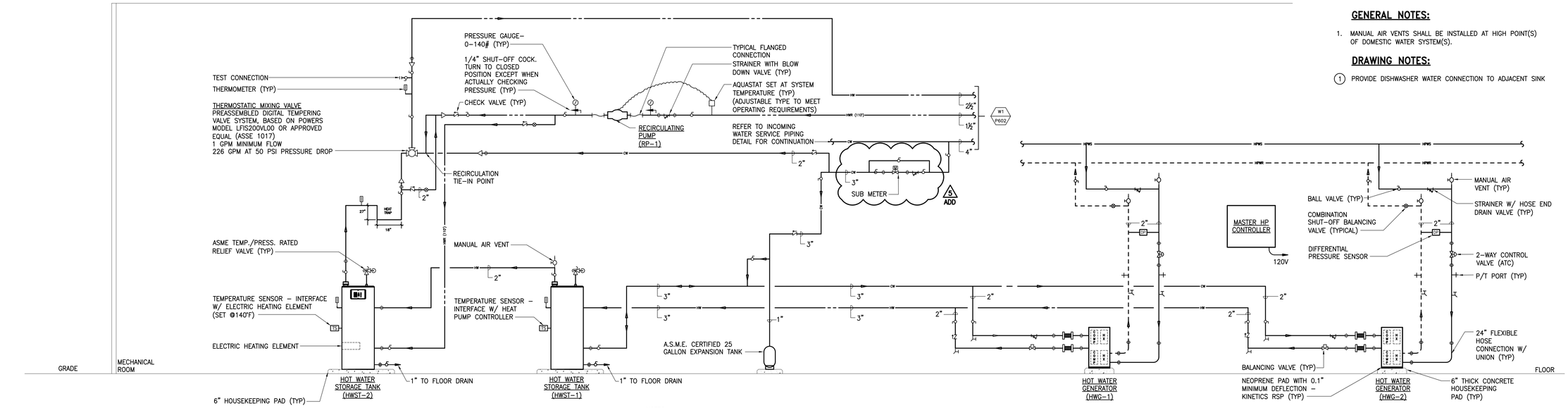
## GENERAL NOTES:

1. MANUAL AIR VENTS SHALL BE INSTALLED AT HIGH POINT(S) OF DOMESTIC WATER SYSTEM(S).

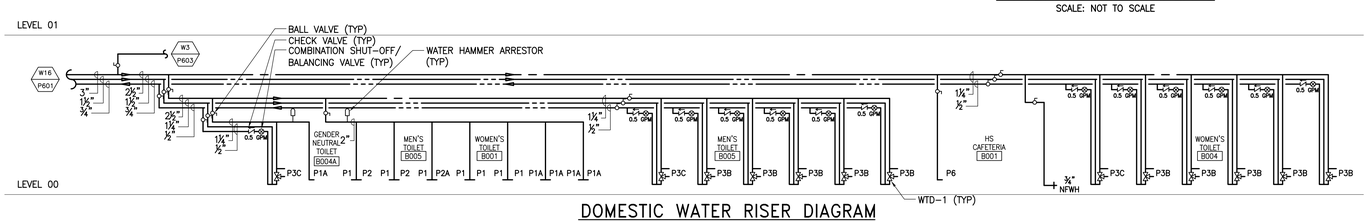
## DRAWING NOTES:

1. PROVIDE DISHWASHER WATER CONNECTION TO ADJACENT SINK

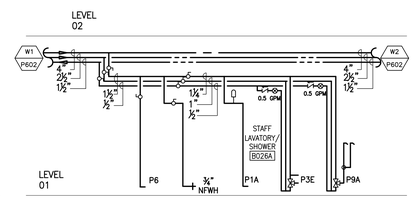



NOTES:
1. REFER TO DOMESTIC WATER RISER DIAGRAMS FOR CONTINUATION TO BUILDING AND KITCHEN
2. REFER TO MECHANICAL EQUIPMENT ROOM FOR ADDITIONAL INFORMATION

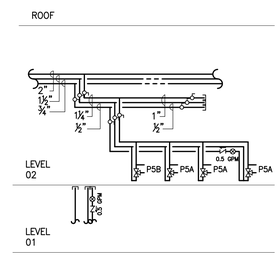
## DOMESTIC WATER RISER DIAGRAM
## WATER ROOM – AREA B
SCALE: NOT TO SCALE



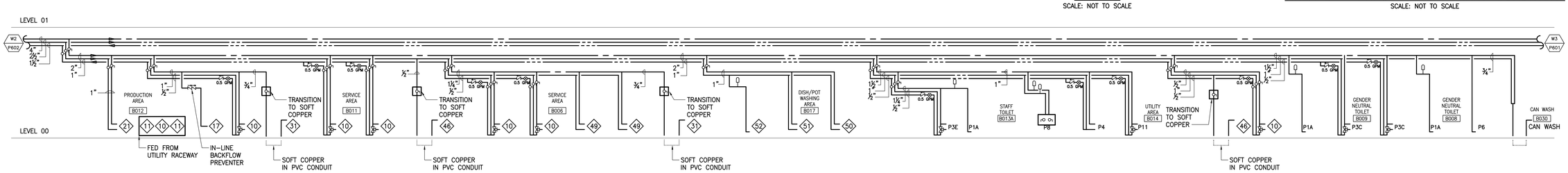

## DOMESTIC WATER RISER DIAGRAM
## AREA B
SCALE: NOT TO SCALE



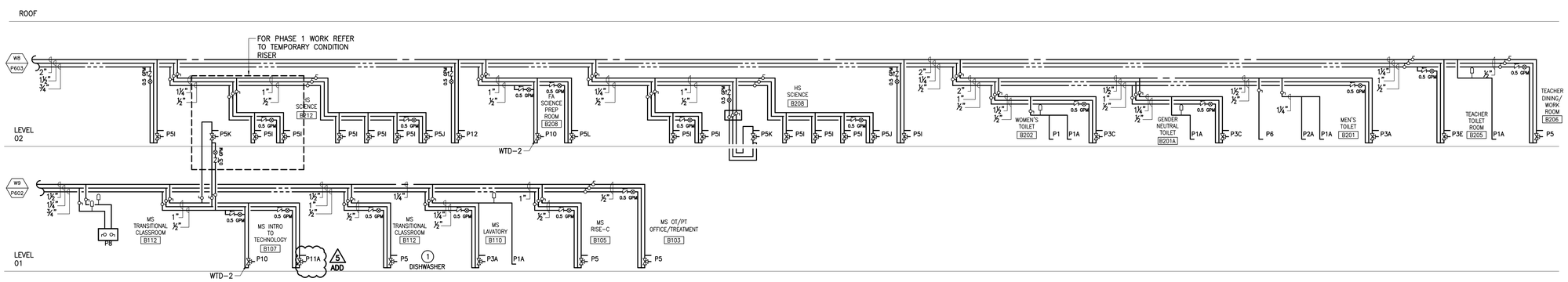

## DOMESTIC WATER RISER DIAGRAM
## AREA B
SCALE: NOT TO SCALE




## DOMESTIC WATER RISER DIAGRAM
## AREA B – PHASE 1 TEMPORARY CONDITIONS
SCALE: NOT TO SCALE




## DOMESTIC WATER RISER DIAGRAM
## AREA B
SCALE: NOT TO SCALE




## DOMESTIC WATER RISER DIAGRAM
## AREA B
SCALE: NOT TO SCALE

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GP #22105

DOMESTIC WATER RISER DIAGRAMS - AREA B
NORTH EAST MIDDLE/HIGH SCHOOL
300 RIGHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
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**P602**

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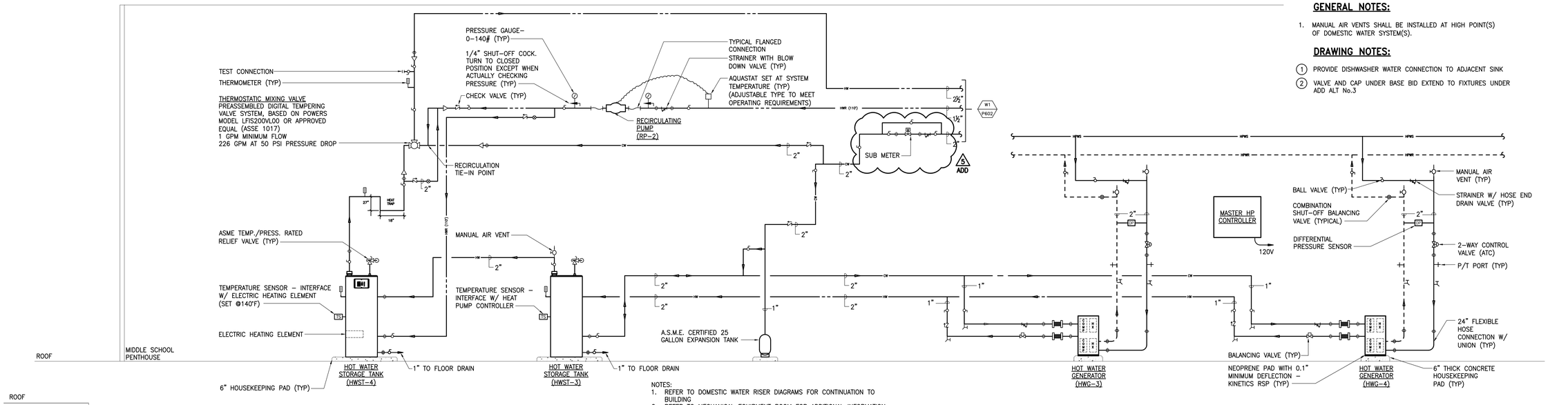
## GENERAL NOTES:

1. MANUAL AIR VENTS SHALL BE INSTALLED AT HIGH POINT(S) OF DOMESTIC WATER SYSTEM(S).

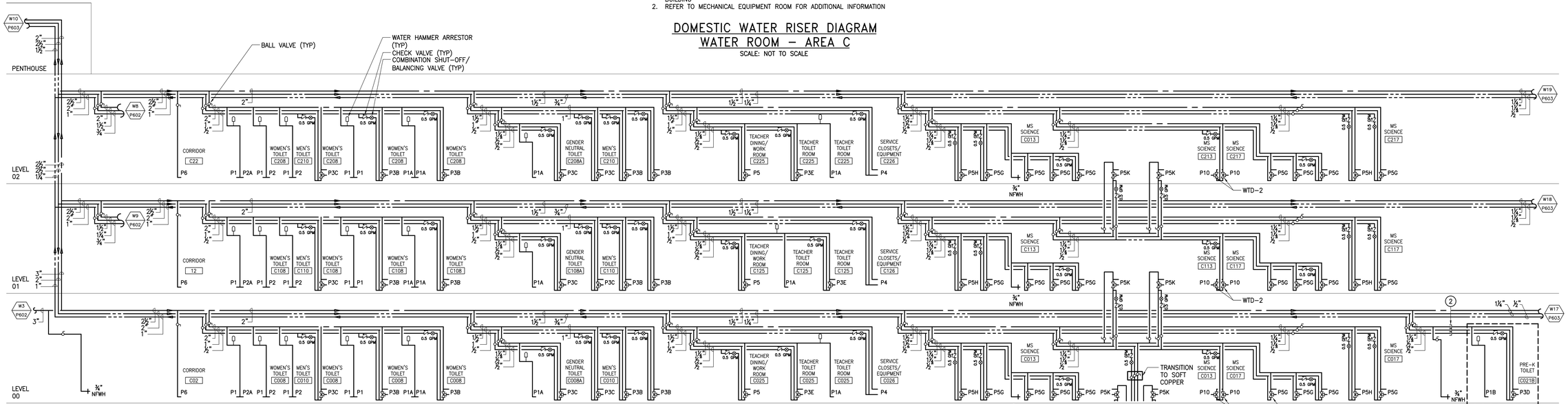
## DRAWING NOTES:

1. PROVIDE DISHWASHER WATER CONNECTION TO ADJACENT SINK
2. VALVE AND CAP UNDER BASE BID EXTEND TO FIXTURES UNDER ADD ALT No.3

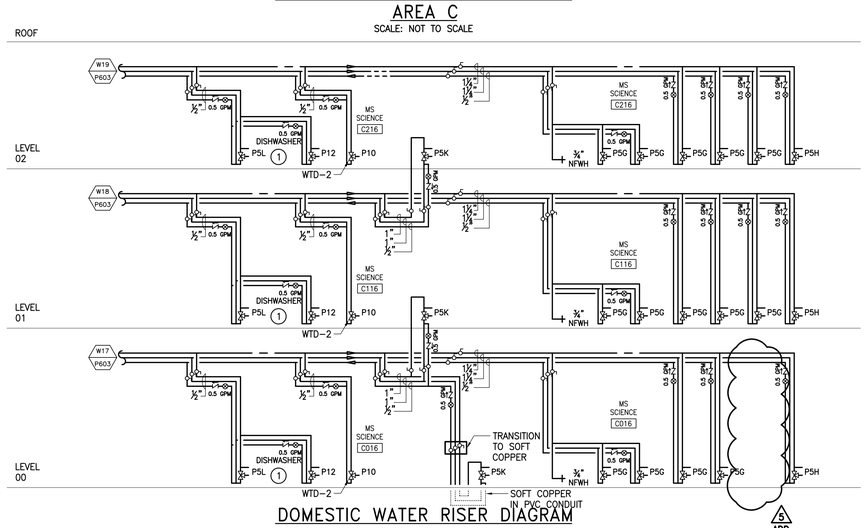



NOTES:
1. REFER TO DOMESTIC WATER RISER DIAGRAMS FOR CONTINUATION TO BUILDING
2. REFER TO MECHANICAL EQUIPMENT ROOM FOR ADDITIONAL INFORMATION

## DOMESTIC WATER RISER DIAGRAM
## WATER ROOM – AREA C
SCALE: NOT TO SCALE




## DOMESTIC WATER RISER DIAGRAM
## AREA C
SCALE: NOT TO SCALE




## DOMESTIC WATER RISER DIAGRAM
## AREA C
SCALE: NOT TO SCALE

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GP #22105

DOMESTIC WATER RISER DIAGRAMS - AREA C
NORTH EAST MIDDLE/HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

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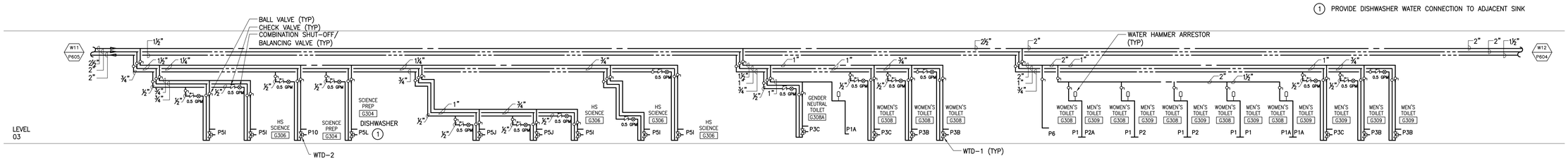
## GENERAL NOTES:

1. MANUAL AIR VENTS SHALL BE INSTALLED AT HIGH POINT(S) OF DOMESTIC WATER SYSTEM(S).

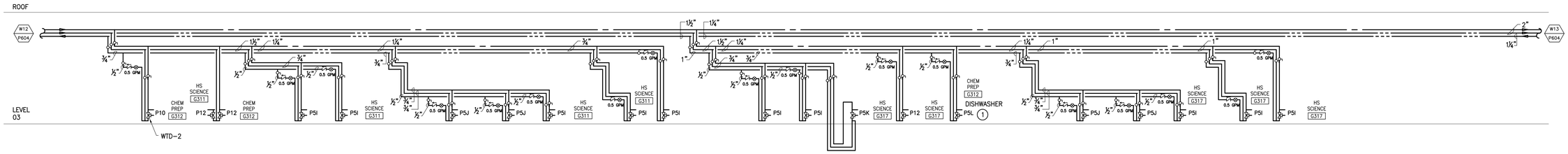
## DRAWING NOTES:

1. PROVIDE DISHWASHER WATER CONNECTION TO ADJACENT SINK



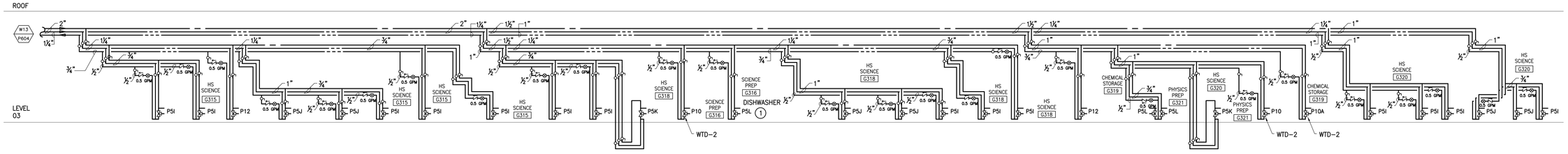

DOMESTIC WATER RISER DIAGRAM – AREA G CONTINUED

SCALE: NOT TO SCALE



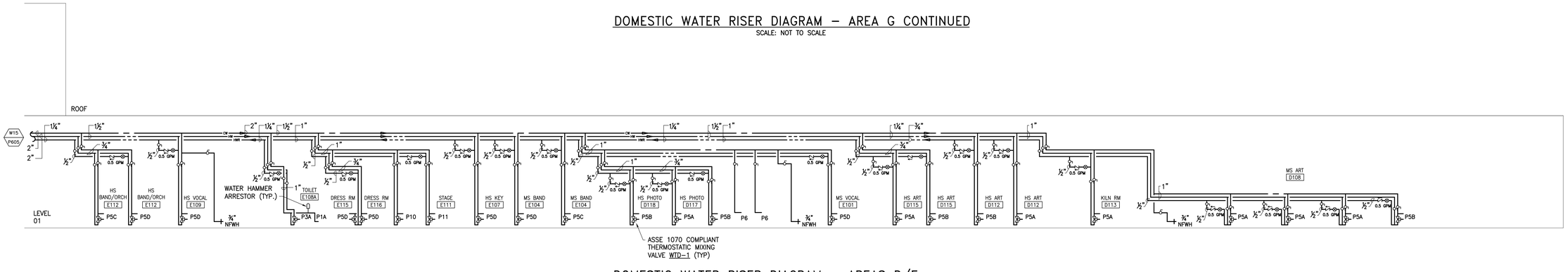

DOMESTIC WATER RISER DIAGRAM – AREA G CONTINUED

SCALE: NOT TO SCALE



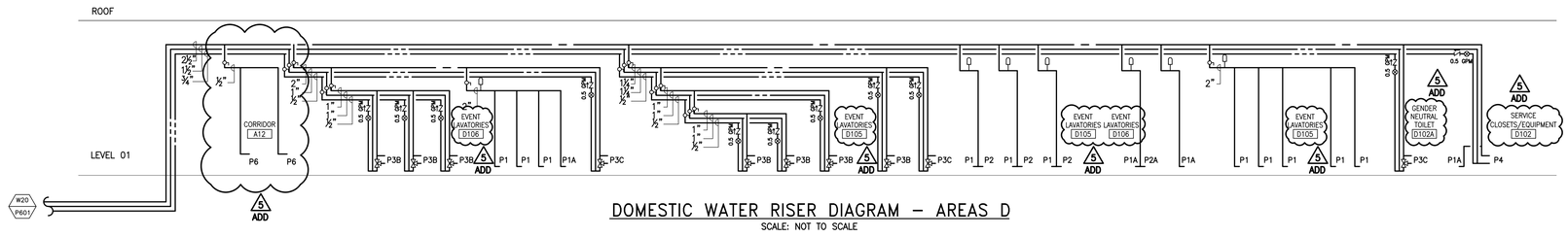

DOMESTIC WATER RISER DIAGRAM – AREA G CONTINUED

SCALE: NOT TO SCALE




DOMESTIC WATER RISER DIAGRAM – AREAS D/E

SCALE: NOT TO SCALE




DOMESTIC WATER RISER DIAGRAM – AREAS D

SCALE: NOT TO SCALE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DOMESTIC WATER RISER DIAGRAMS - AREA D/E/G

NORTH EAST MIDDLE/HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

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**P604**

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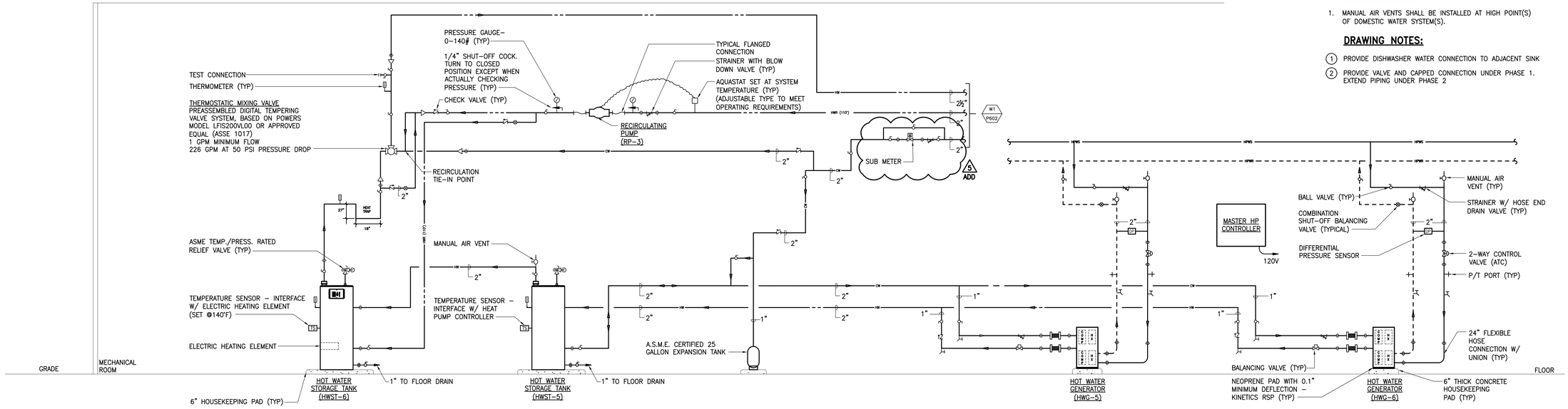
## GENERAL NOTES:

1. MANUAL AIR VENTS SHALL BE INSTALLED AT HIGH POINT(S) OF DOMESTIC WATER SYSTEM(S).

## DRAWING NOTES:

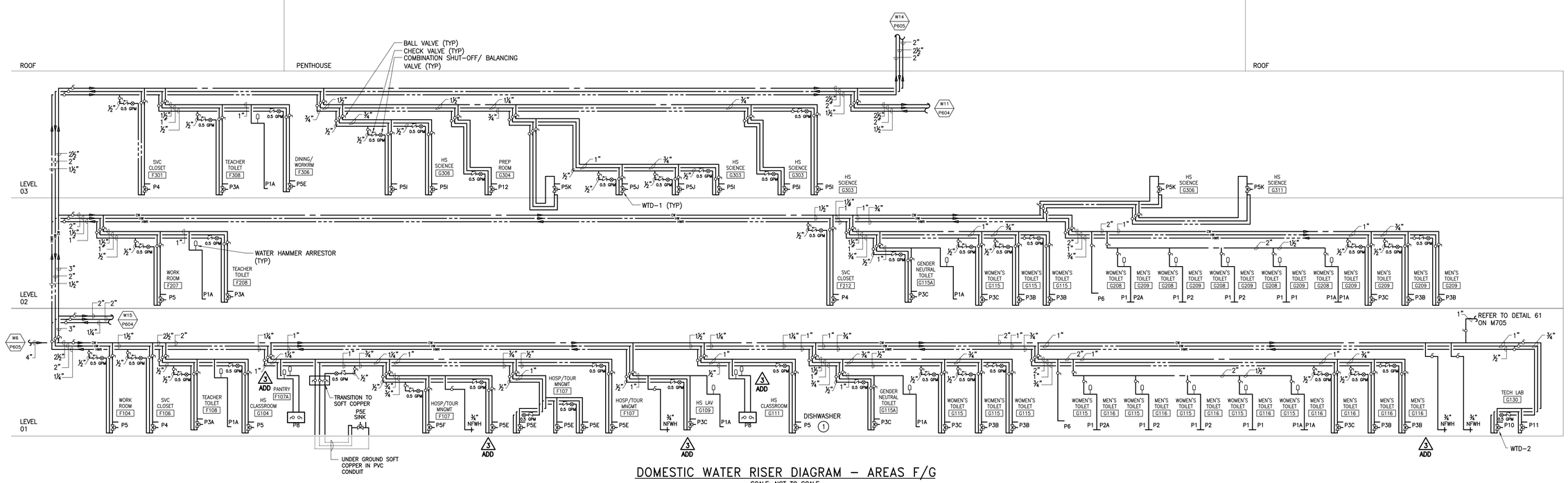
1. PROVIDE DISHWASHER WATER CONNECTION TO ADJACENT SINK
2. PROVIDE VALVE AND CAPPED CONNECTION UNDER PHASE 1. EXTEND PIPING UNDER PHASE 2




NOTES:
1. REFER TO DOMESTIC WATER RISER DIAGRAMS FOR CONTINUATION TO BUILDING AND KITCHEN
2. REFER TO HIGH SCHOOL PENTHOUSE FOR ADDITIONAL INFORMATION

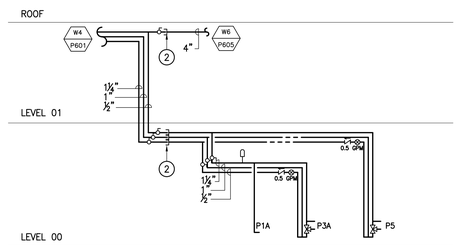
## DOMESTIC WATER RISER DIAGRAM HIGH SCHOOL PENTHOUSE

SCALE: NOT TO SCALE




## DOMESTIC WATER RISER DIAGRAM – AREAS F/G

SCALE: NOT TO SCALE




## DOMESTIC WATER RISER DIAGRAM AREA F

SCALE: NOT TO SCALE

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NORTH EAST MIDDLE/HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

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| 4/02/2024 | ADDENDUM #5 |

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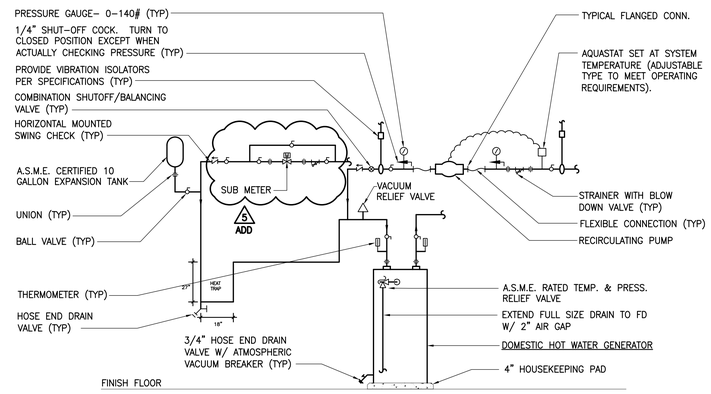
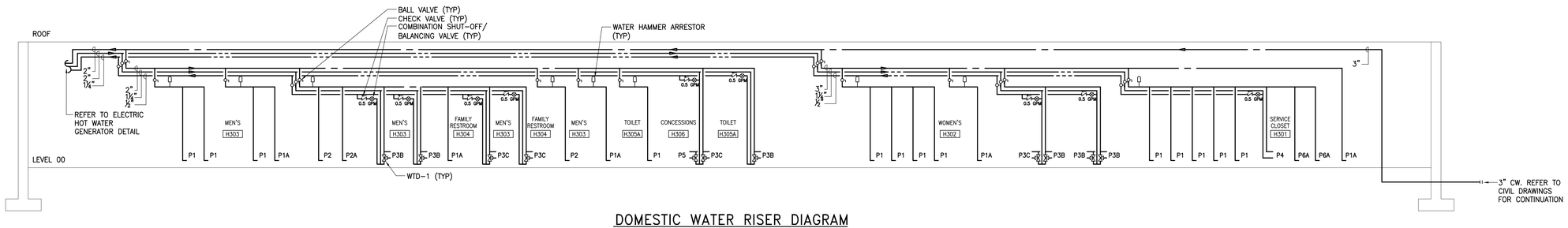
## GENERAL NOTES:

1. MANUAL AIR VENTS SHALL BE INSTALLED AT HIGH POINT(S) OF DOMESTIC WATER SYSTEM(S).



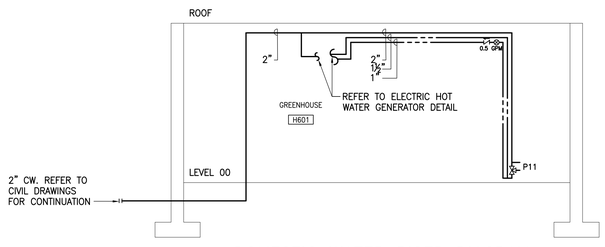

## ELECTRIC HOT WATER GENERATOR DETAIL

SCALE: NOT TO SCALE




## DOMESTIC WATER RISER DIAGRAM CONCESSIONS

SCALE: NOT TO SCALE




## DOMESTIC WATER RISER DIAGRAM GREENHOUSE – ADD ALTERNATE No.2

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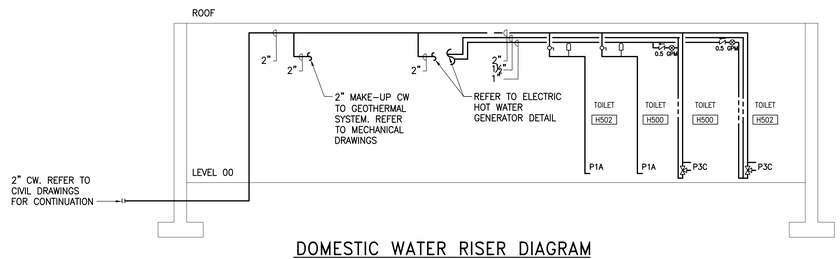
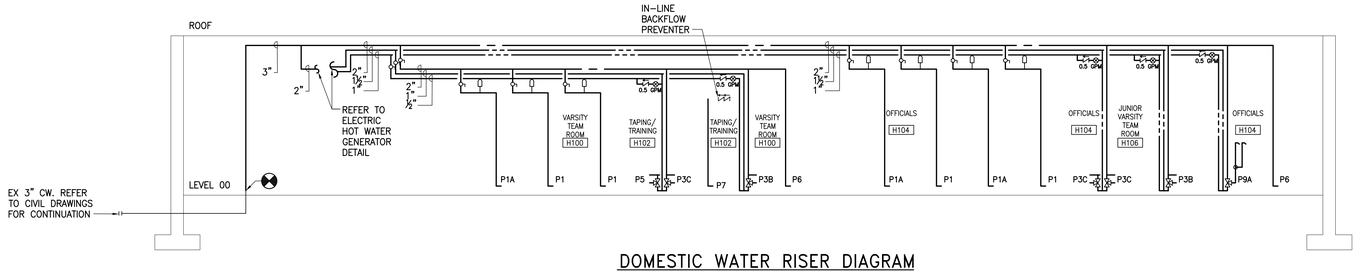



## DOMESTIC WATER RISER DIAGRAM GEOTHERMAL BUILDING NORTH

SCALE: NOT TO SCALE




## DOMESTIC WATER RISER DIAGRAM FIELD HOUSE

SCALE: NOT TO SCALE

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GP #22105

DOMESTIC WATER RISER DIAGRAMS - OUTBUILDING
NORTH EAST MIDDLE/HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

**P606**

12/22/2023
BID SET

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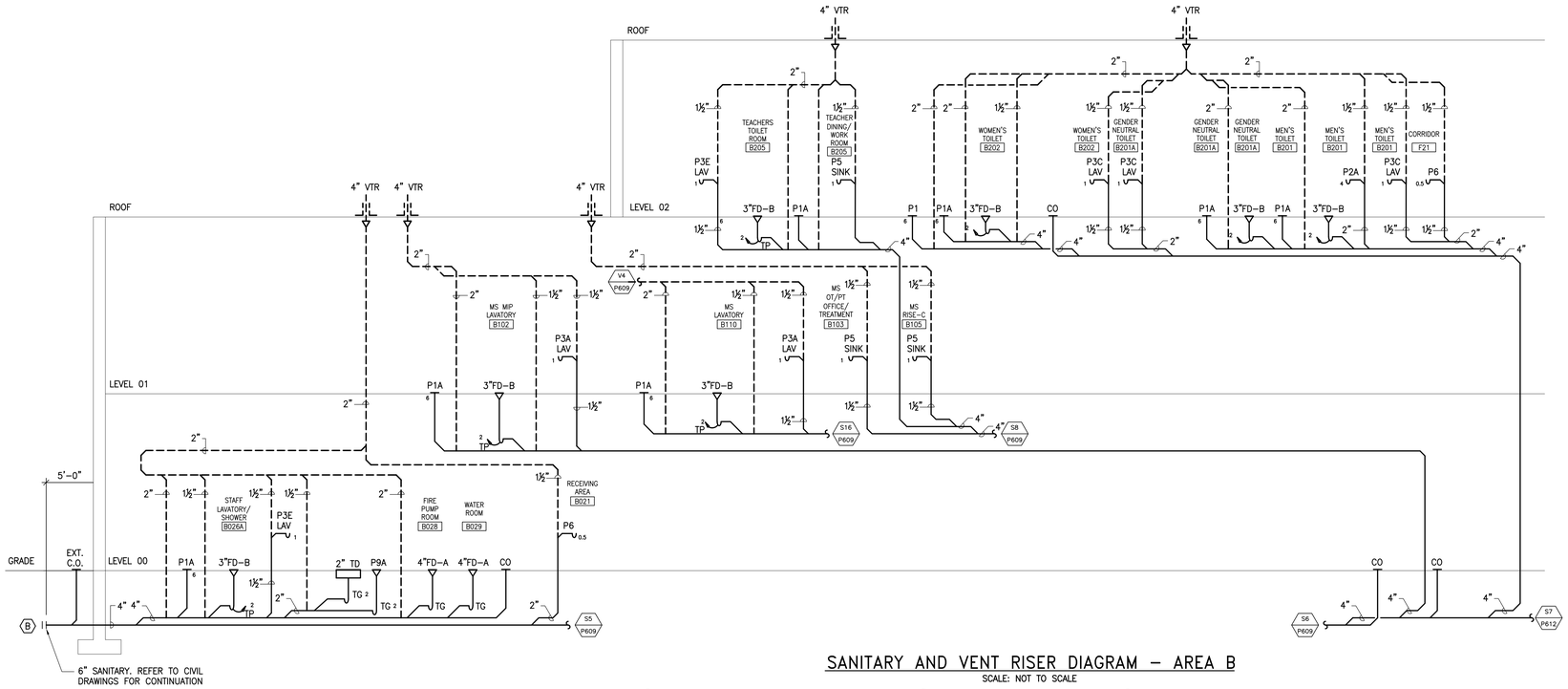
## GENERAL NOTES:

1. MANUAL AIR VENTS SHALL BE INSTALLED AT HIGH POINT(S) OF DOMESTIC WATER SYSTEM(S).

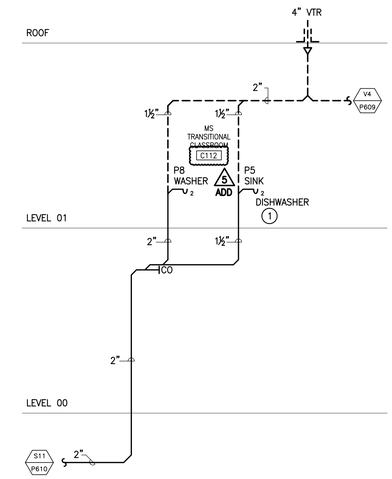
## DRAWING NOTES:

1. CONNECT DISHCHARGE HOSE TO SINK DRAIN.



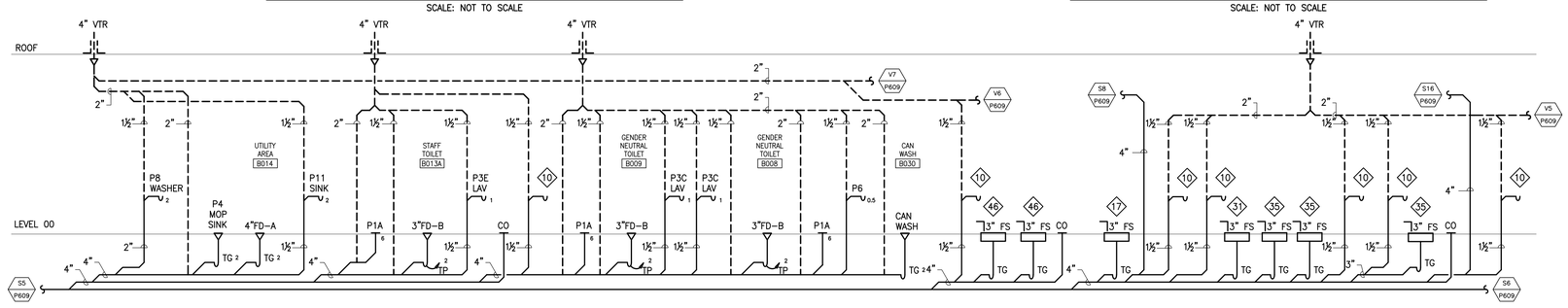

SANITARY AND VENT RISER DIAGRAM – AREA B

SCALE: NOT TO SCALE



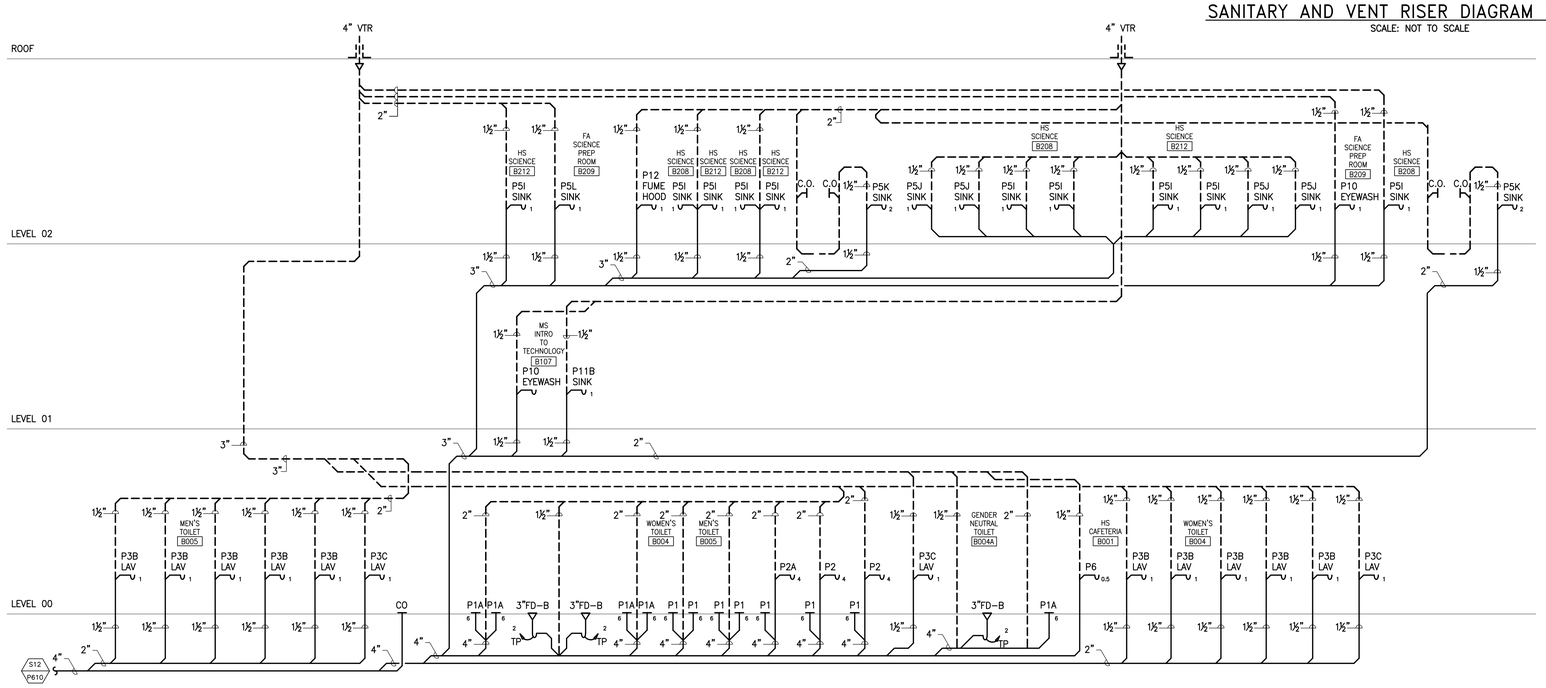

SANITARY AND VENT RISER DIAGRAM – AREA B

SCALE: NOT TO SCALE



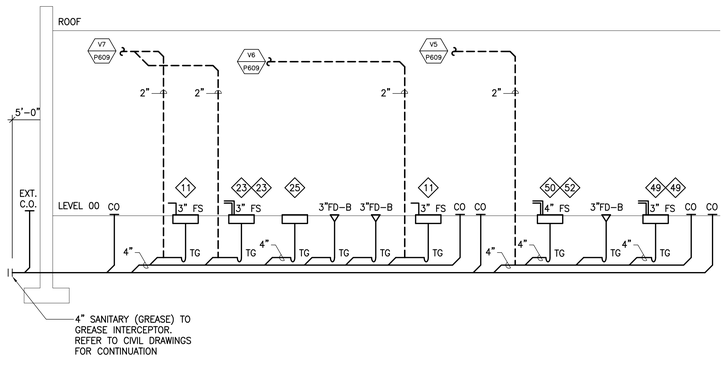

SANITARY AND VENT RISER DIAGRAM – AREA B

SCALE: NOT TO SCALE




SANITARY AND VENT RISER DIAGRAM – AREA B

SCALE: NOT TO SCALE




SANITARY (GREASE) RISER DIAGRAM – AREA B KITCHEN

SCALE: NOT TO SCALE

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SANITARY & VENT RISER DIAGRAMS - AREA B

NORTH EAST MIDDLE/HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

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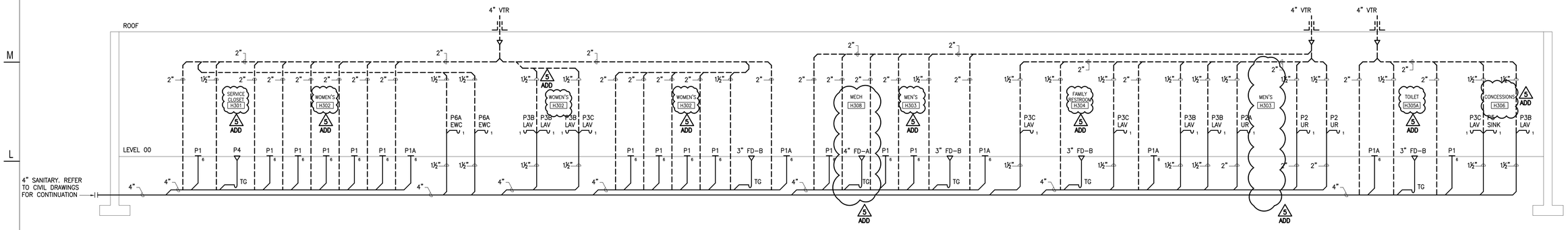
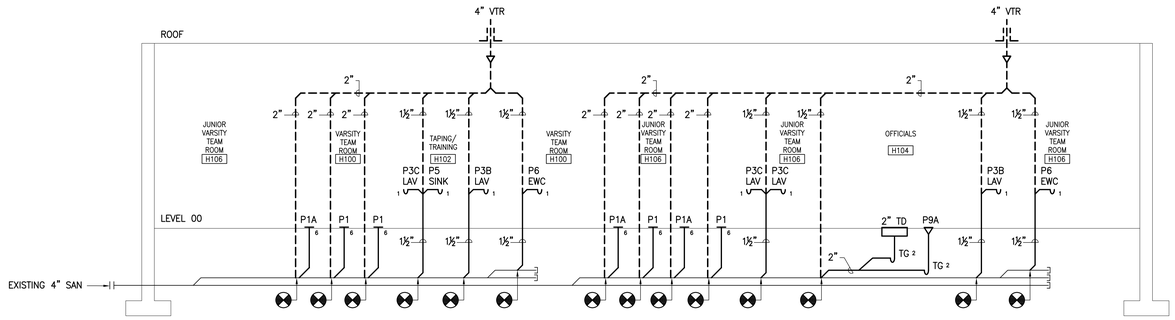
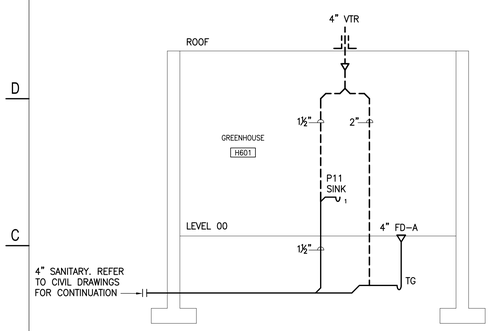


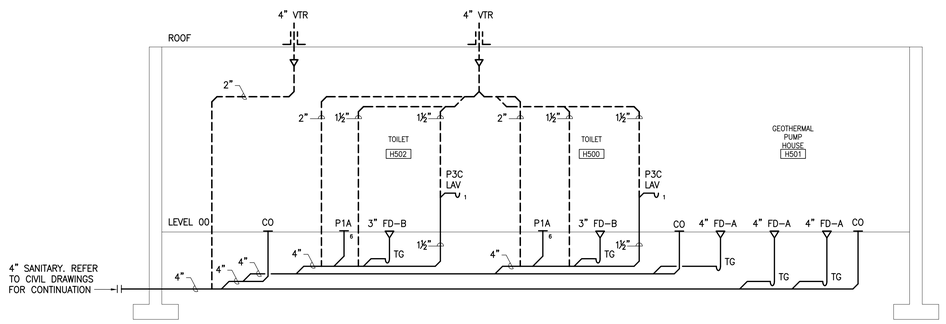

SANITARY RISER DIAGRAM – CONCESSIONS
SCALE: NOT TO SCALE



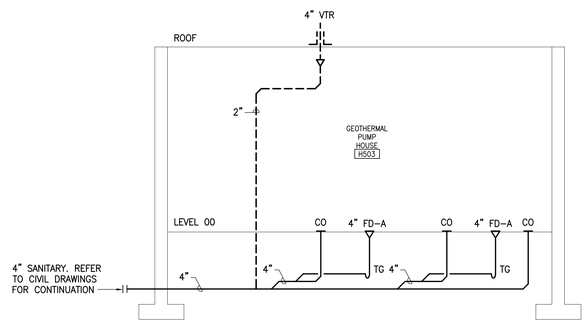

SANITARY RISER DIAGRAM – ATHLETICS BUILDING
SCALE: NOT TO SCALE




SANITARY RISER DIAGRAM – GREENHOUSE
SCALE: NOT TO SCALE




SANITARY RISER DIAGRAM – GEOTHERMAL BUILDING NORTH
SCALE: NOT TO SCALE




SANITARY RISER DIAGRAM – GEOTHERMAL BUILDING SOUTH
SCALE: NOT TO SCALE

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GP #22105

SANITARY & VENT RISER DIAGRAMS - OUTBUILDINGS
NORTH EAST MIDDLE/HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

P614
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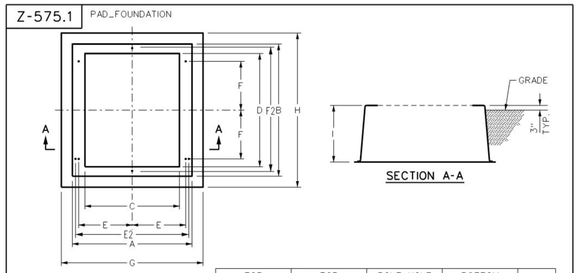
## Z-575.1 PAD_FOUNDATION

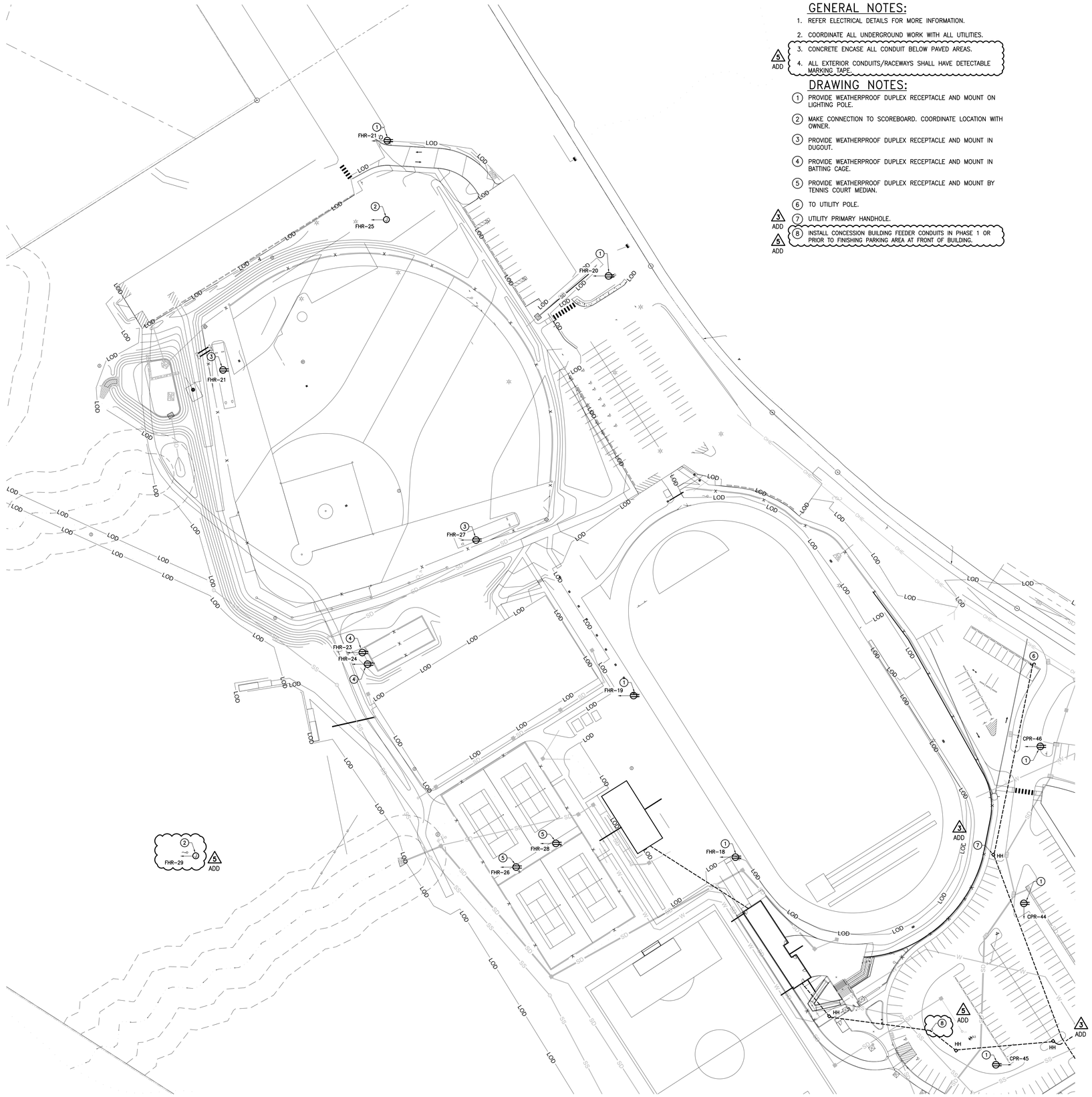



| CU CODE | STOCK NO. | TOP SURFACE A | TOP SURFACE B | TOP OPENING C | TOP OPENING D | BOLT HOLE LOCATIONS E/E2 | BOLT HOLE LOCATIONS F/F2 | BOTTOM FLANGE G | BOTTOM FLANGE H | DEPTH I |
|---|---|---|---|---|---|---|---|---|---|---|
| BOXPAD-A-S | 0107-5399 | 76 | 84 | 60 | 72 | 31 | 38.5 | 90 | 98 | 36 |
| BOXPAD-B-S | 0107-7874 | 67 | 61 | 59 | 51 | 30.75 | 26.5 | 83 | 77 | 36 |

NOTES:
1. All boxpads have 1/2" floating nuts embedded in the bolt holes.
2. Will accommodate pad mount transformers thru 167kVA.
3. Best fit for larger 167kVA pad mount transformers and other large equipment.

## UTILITY PRIMARY HANDHOLE

3 ADD




## GENERAL NOTES:

1. REFER ELECTRICAL DETAILS FOR MORE INFORMATION.
2. COORDINATE ALL UNDERGROUND WORK WITH ALL UTILITIES.
3. CONCRETE ENCASE ALL CONDUIT BELOW PAVED AREAS. (5 ADD)
4. ALL EXTERIOR CONDUITS/RACEWAYS SHALL HAVE DETECTABLE MARKING TAPE.

## DRAWING NOTES:

1. PROVIDE WEATHERPROOF DUPLEX RECEPTACLE AND MOUNT ON LIGHTING POLE.
2. MAKE CONNECTION TO SCOREBOARD. COORDINATE LOCATION WITH OWNER.
3. PROVIDE WEATHERPROOF DUPLEX RECEPTACLE AND MOUNT IN DUGOUT.
4. PROVIDE WEATHERPROOF DUPLEX RECEPTACLE AND MOUNT IN BATTING CAGE.
5. PROVIDE WEATHERPROOF DUPLEX RECEPTACLE AND MOUNT BY TENNIS COURT MEDIAN.
6. TO UTILITY POLE.
7. UTILITY PRIMARY HANDHOLE. (3 ADD)
8. INSTALL CONCESSION BUILDING FEEDER CONDUITS IN PHASE 1 OR PRIOR TO FINISHING PARKING AREA AT FRONT OF BUILDING. (5 ADD)

SCALE: 1" = 50'-0"

50 0 50 100

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GP #22105

SITE PLAN - ELECTRICAL - WEST

NORTH EAST MIDDLE/HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 3/13/2024 | ADDENDUM #1 |
| 3/25/2024 | ADDENDUM #3 |
| 4/02/2024 | ADDENDUM #5 |

E002

12/22/2023
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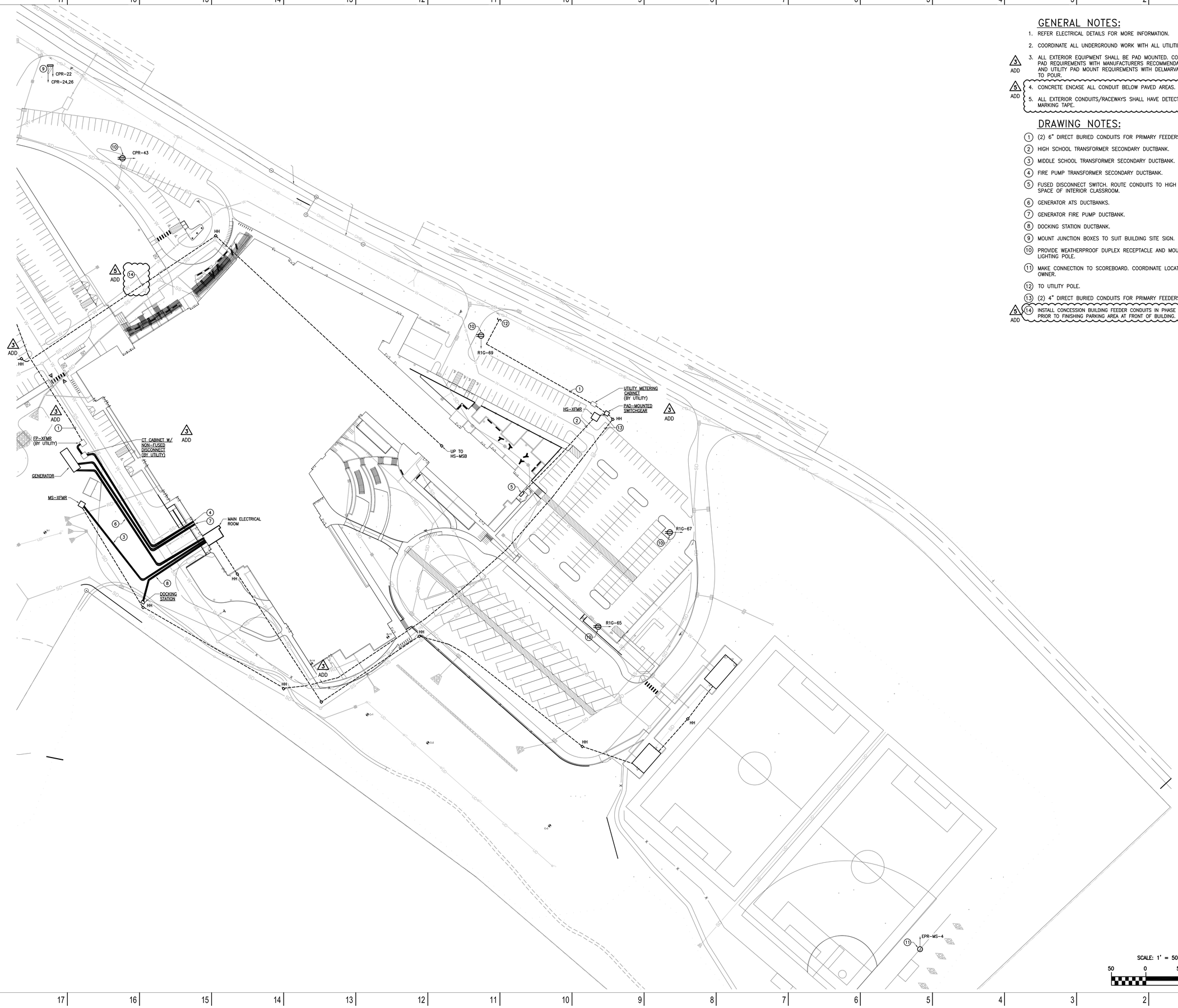


## GENERAL NOTES:

1. REFER ELECTRICAL DETAILS FOR MORE INFORMATION.
2. COORDINATE ALL UNDERGROUND WORK WITH ALL UTILITIES.
3. ALL EXTERIOR EQUIPMENT SHALL BE PAD MOUNTED. COORDINATE PAD REQUIREMENTS WITH MANUFACTURERS RECOMMENDATIONS AND UTILITY PAD MOUNT REQUIREMENTS WITH DELMARVA PRIOR TO POUR. (3 ADD)
4. CONCRETE ENCASE ALL CONDUIT BELOW PAVED AREAS. (5 ADD)
5. ALL EXTERIOR CONDUITS/RACEWAYS SHALL HAVE DETECTABLE MARKING TAPE.

## DRAWING NOTES:

1. (2) 6" DIRECT BURIED CONDUITS FOR PRIMARY FEEDERS.
2. HIGH SCHOOL TRANSFORMER SECONDARY DUCTBANK.
3. MIDDLE SCHOOL TRANSFORMER SECONDARY DUCTBANK.
4. FIRE PUMP TRANSFORMER SECONDARY DUCTBANK.
5. FUSED DISCONNECT SWITCH. ROUTE CONDUITS TO HIGH CEILING SPACE OF INTERIOR CLASSROOM.
6. GENERATOR ATS DUCTBANKS.
7. GENERATOR FIRE PUMP DUCTBANK.
8. DOCKING STATION DUCTBANK.
9. MOUNT JUNCTION BOXES TO SUIT BUILDING SITE SIGN.
10. PROVIDE WEATHERPROOF DUPLEX RECEPTACLE AND MOUNT ON LIGHTING POLE.
11. MAKE CONNECTION TO SCOREBOARD. COORDINATE LOCATION WITH OWNER.
12. TO UTILITY POLE.
13. (2) 4" DIRECT BURIED CONDUITS FOR PRIMARY FEEDERS.
14. INSTALL CONCESSION BUILDING FEEDER CONDUITS IN PHASE 1 OR PRIOR TO FINISHING PARKING AREA AT FRONT OF BUILDING. (5 ADD)


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GP #22105

# SITE PLAN - ELECTRICAL - EAST

NORTH EAST MIDDLE/HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 3/13/2024 | ADDENDUM #1 |
| 3/25/2024 | ADDENDUM #3 |
| 4/02/2024 | ADDENDUM #5 |

E003

12/22/2023
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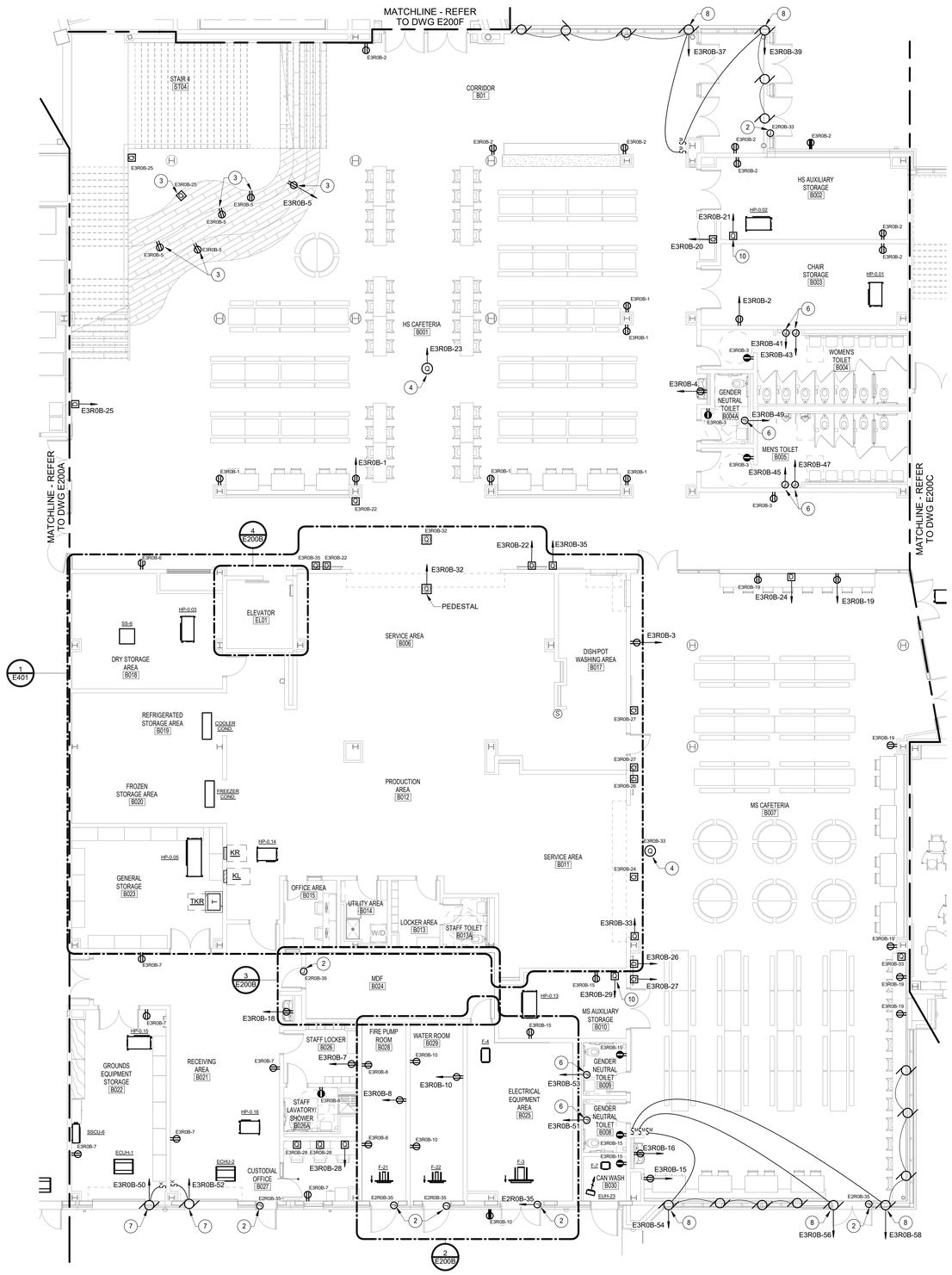


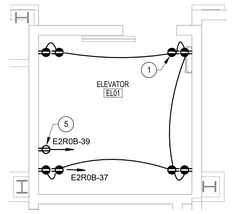

LEVEL 00 AREA B PARTIAL FLOOR PLAN - POWER
1/8" = 1'-0"

## GENERAL NOTES:

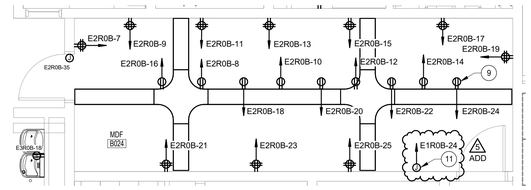
1. REFER TO MECHANICAL EQUIPMENT SCHEDULES FOR MORE INFORMATION.

## DRAWING NOTES:

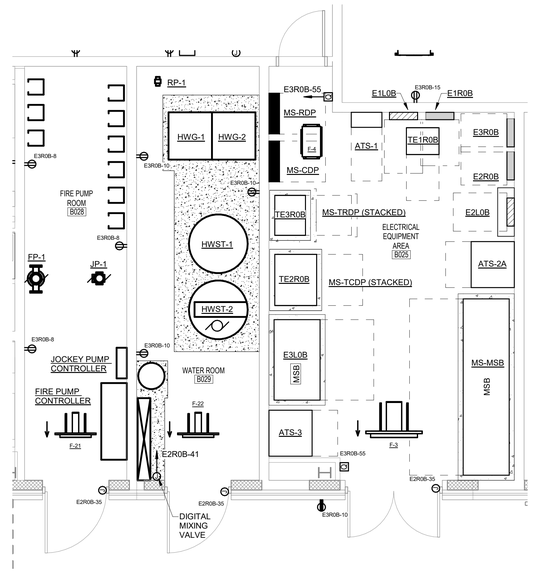
1. GFI/WP RECEPTACLE SHALL BE MOUNTED 2'-6" ABOVE BOTTOM OF ELEVATOR PIT AND 2'6" BELOW TOP OF ELEVATOR SHAFT (TYPICAL).
2. ACCESS CONTROL POWER SUPPLY.
3. MOUNT IN FACE OF RISER. 3/4" CONDUIT TO ACCESSIBLE CEILING FOR POWER.
4. COORDINATE PROJECTOR LOCATION WITH TECHNOLOGY AND ARCHITECTURAL DRAWINGS.
5. MOUNT TO SUIT ELEVATOR SUMP PUMP.
6. MOUNT TO SUIT HAND DRYERS.
7. INSULATED ROLLING DOOR. MAKE ALL CONNECTIONS AS REQUIRED. COORDINATE SWITCH LOCATION WITH OWNER.
8. MOTORIZED WINDOW SHADES. MAKE ALL CONNECTIONS AS REQUIRED. COORDINATE SWITCH LOCATION WITH OWNER.
9. L5-20R (TYPICAL FOR DUPLEX RECEPTACLES IN THIS ROOM).
10. MOUNT TO SUIT SOUND SYSTEM.
11. MOUNT TO SUIT FIRE ALARM CONTROL PANEL. (ADD)




4 E200B ENLARGED ELEVATOR EL01 PLAN
1/4" = 1'-0"




3 E200B ENLARGED MDF ROOM B024
1/4" = 1'-0"

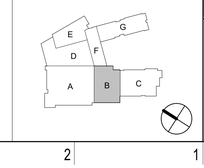



2 E200B ELECTRICAL, WATER, AND FIRE PUMP ROOMS
1/4" = 1'-0"

SCALE: 1/4" = 1'-0"

SCALE: 1/8" = 1'-0"

## KEY PLAN

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GP #22105

LEVEL 00 AREA B PARTIAL FLOOR PLAN - POWER

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

**E200B**

12/22/2023
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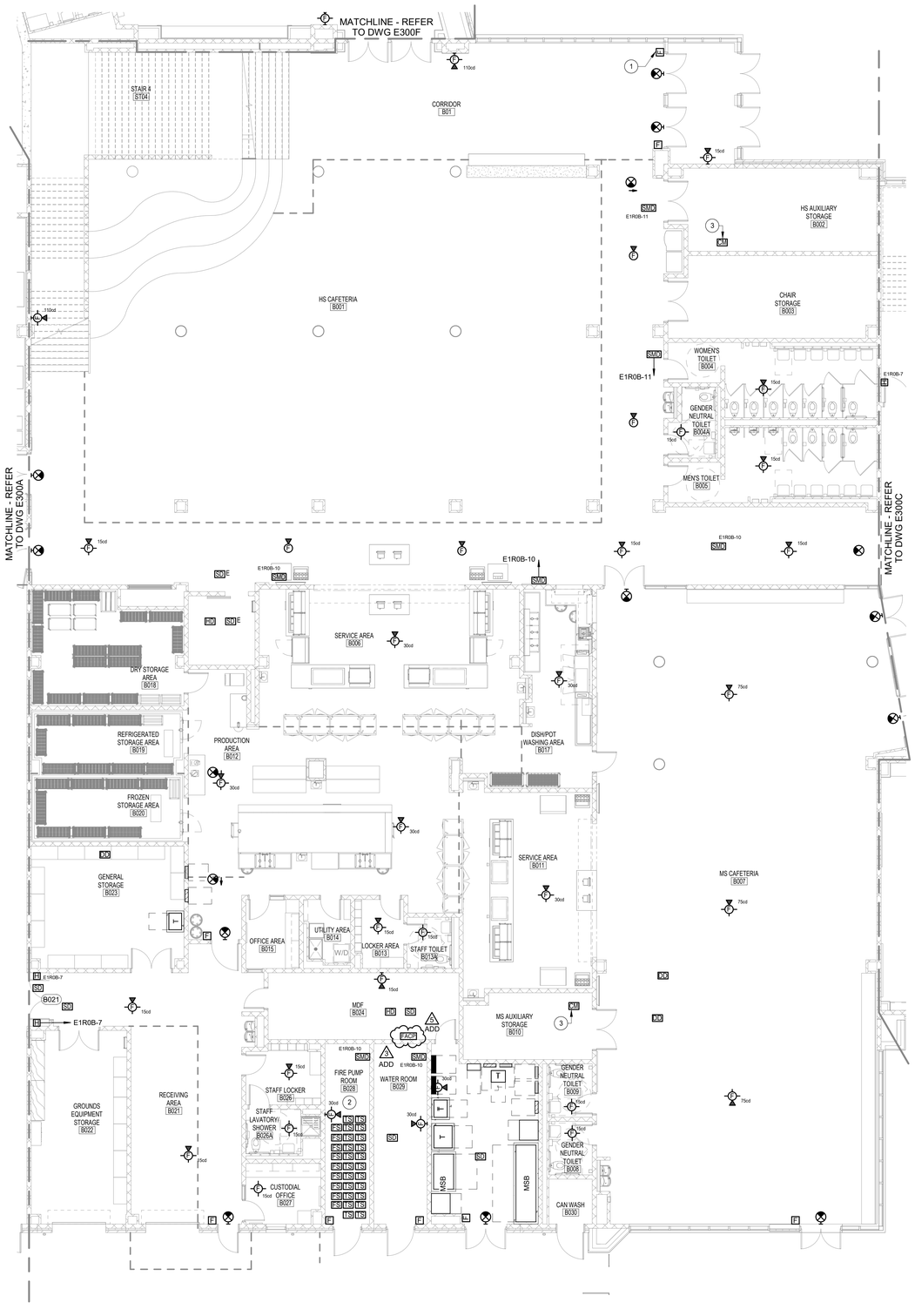
## DRAWING NOTES:

1. MOUNT ON MULLION.
2. COORDINATE QUANTITY AND LOCATION OF TAMPER AND FLOW SWITCHES IN THIS ROOM WITH FIRE PROTECTION CONTRACTOR.
3. PROVIDE CONTROL MODULE TO SHUNT SOUND SYSTEM.

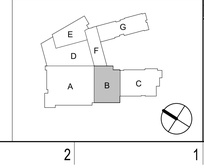



LEVEL 00 AREA B PARTIAL FLOOR PLAN - FIRE ALARM
1/8" = 1'-0"

SCALE: 1/8" = 1'-0"

8 0 8 16

## KEY PLAN

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G+P GRIMM + PARKER ARCHITECTS

GP #22105

LEVEL 00 AREA B PARTIAL FLOOR PLAN - FIRE ALARM

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 3/25/2024 | ADDENDUM #3 |
| 4/02/2024 | ADDENDUM #5 |

# E300B

12/22/2023
BID SET

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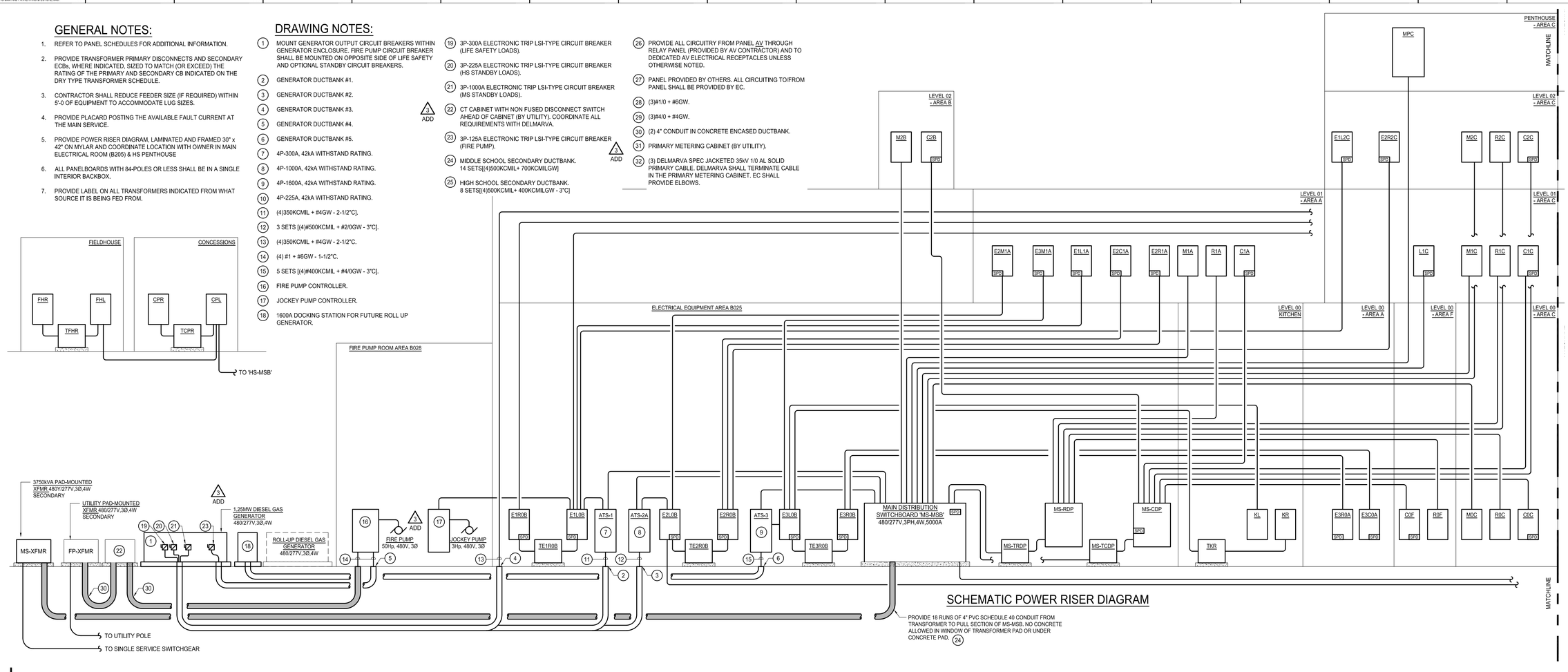
## GENERAL NOTES:

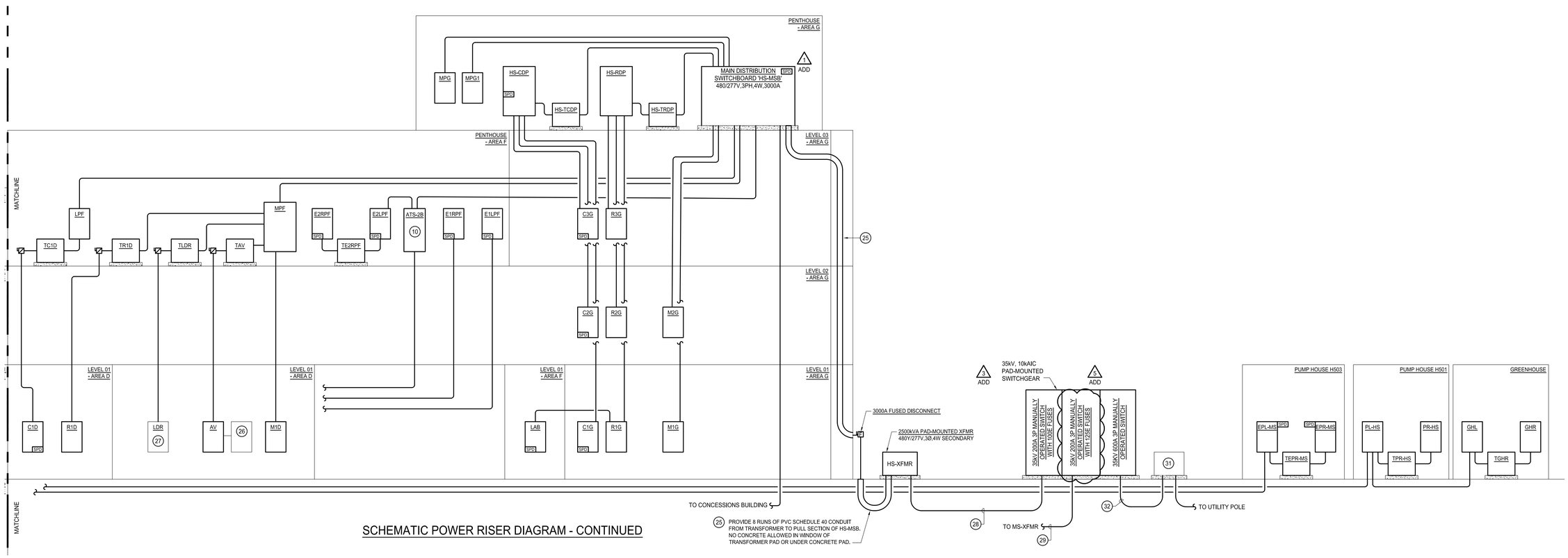
1. REFER TO PANEL SCHEDULES FOR ADDITIONAL INFORMATION.
2. PROVIDE TRANSFORMER PRIMARY DISCONNECTS AND SECONDARY ECBs, WHERE INDICATED, SIZED TO MATCH (OR EXCEED) THE RATING OF THE PRIMARY AND SECONDARY CB INDICATED ON THE DRY TYPE TRANSFORMER SCHEDULE.
3. CONTRACTOR SHALL REDUCE FEEDER SIZE (IF REQUIRED) WITHIN 5'-0 OF EQUIPMENT TO ACCOMMODATE LUG SIZES.
4. PROVIDE PLACARD POSTING THE AVAILABLE FAULT CURRENT AT THE MAIN SERVICE.
5. PROVIDE POWER RISER DIAGRAM, LAMINATED AND FRAMED 30" x 42" ON MYLAR AND COORDINATE LOCATION WITH OWNER IN MAIN ELECTRICAL ROOM (B205) & HS PENTHOUSE
6. ALL PANELBOARDS WITH 84-POLES OR LESS SHALL BE IN A SINGLE INTERIOR BACKBOX.
7. PROVIDE LABEL ON ALL TRANSFORMERS INDICATED FROM WHAT SOURCE IT IS BEING FED FROM.

## DRAWING NOTES:

1. MOUNT GENERATOR OUTPUT CIRCUIT BREAKERS WITHIN GENERATOR ENCLOSURE. FIRE PUMP CIRCUIT BREAKER SHALL BE MOUNTED ON OPPOSITE SIDE OF LIFE SAFETY AND OPTIONAL STANDBY CIRCUIT BREAKERS.
2. GENERATOR DUCTBANK #1.
3. GENERATOR DUCTBANK #2.
4. GENERATOR DUCTBANK #3.
5. GENERATOR DUCTBANK #4.
6. GENERATOR DUCTBANK #5.
7. 4P-300A, 42kA WITHSTAND RATING.
8. 4P-1000A, 42kA WITHSTAND RATING.
9. 4P-1600A, 42kA WITHSTAND RATING.
10. 4P-225A, 42kA WITHSTAND RATING.
11. (4)350KCMIL + #4GW - 2-1/2"C].
12. 3 SETS [(4)#500KCMIL + #2/0GW - 3"C].
13. (4)350KCMIL + #4GW - 2-1/2"C.
14. (4) #1 + #6GW - 1-1/2"C.
15. 5 SETS [(4)#400KCMIL + #4/0GW - 3"C].
16. FIRE PUMP CONTROLLER.
17. JOCKEY PUMP CONTROLLER.
18. 1600A DOCKING STATION FOR FUTURE ROLL UP GENERATOR.
19. 3P-300A ELECTRONIC TRIP LSI-TYPE CIRCUIT BREAKER (LIFE SAFETY LOADS).
20. 3P-225A ELECTRONIC TRIP LSI-TYPE CIRCUIT BREAKER (HS STANDBY LOADS).
21. 3P-1000A ELECTRONIC TRIP LSI-TYPE CIRCUIT BREAKER (MS STANDBY LOADS).
22. CT CABINET WITH NON FUSED DISCONNECT SWITCH AHEAD OF CABINET (BY UTILITY). COORDINATE ALL REQUIREMENTS WITH DELMARVA.
23. 3P-125A ELECTRONIC TRIP LSI-TYPE CIRCUIT BREAKER (FIRE PUMP).
24. MIDDLE SCHOOL SECONDARY DUCTBANK. 14 SETS[(4)500KCMIL+ 700KCMILGW]
25. HIGH SCHOOL SECONDARY DUCTBANK. 8 SETS[(4)500KCMIL+ 400KCMILGW - 3"C]
26. PROVIDE ALL CIRCUITRY FROM PANEL AV THROUGH RELAY PANEL (PROVIDED BY AV CONTRACTOR) AND TO DEDICATED AV ELECTRICAL RECEPTACLES UNLESS OTHERWISE NOTED.
27. PANEL PROVIDED BY OTHERS. ALL CIRCUITING TO/FROM PANEL SHALL BE PROVIDED BY EC.
28. (3)#1/0 + #6GW.
29. (3)#4/0 + #4GW.
30. (2) 4" CONDUIT IN CONCRETE ENCASED DUCTBANK.
31. PRIMARY METERING CABINET (BY UTILITY).
32. (3) DELMARVA SPEC JACKETED 35kV 1/0 AL SOLID PRIMARY CABLE. DELMARVA SHALL TERMINATE CABLE IN THE PRIMARY METERING CABINET. EC SHALL PROVIDE ELBOWS.




SCHEMATIC POWER RISER DIAGRAM




SCHEMATIC POWER RISER DIAGRAM - CONTINUED

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GP #22105

SCHEMATIC POWER RISER DIAGRAM

NORTH EAST MIDDLE/HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 3/13/2024 | ADDENDUM #1 |
| 3/25/2024 | ADDENDUM #3 |
| 4/02/2024 | ADDENDUM #5 |

**E601**

12/22/2023
BID SET

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## Branch Panel: CPL

**LOCATION:** MECH H308
**SUPPLY FROM:** HS-MSB
**MOUNTING:** Surface
**VOLTAGE:** 480/277 Wye
**PHASE:** 3
**WIRES:** 4
**A.I.C. RATING:** 22kAIC
**MAINS RATING:** 600 A
**MCB RATING:** 600 A
**NEUTRAL RATING:** 100%

**Notes:**
* PROVIDE PHOTOCELL AND TIME CLOCK CONTROL.

| CKT | CIRCUIT | WIRE SIZE | P | CB | A | | B | | C | | CB | P | WIRE SIZE | CIRCUIT | CKT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CPL-1 | | | | | 1.7 kVA | 2.1 kVA | | | | | 20 A | 1 | (3)#12 + #12GW - 3/4"C | Ltg. - Events Bldg Interior Lighting | CPL-2 |
| CPL-3 | EUH-16 | (3)#12 + #12GW - 3/4"C | 3 | 15 A | | | 1.7 kVA | 0.3 kVA | | | 20 A | 1 | (3)#12 + #12GW - 3/4"C | Ltg. - Events Bldg Wall Packs * | CPL-4 |
| CPL-5 | | | | | | | | | 1.7 kVA | 1.0 kVA | | | | | CPL-6 |
| CPL-7 | | | | | 2.5 kVA | 1.0 kVA | | | | | 20 A | 3 | (3)#12 + #12GW - 3/4"C | EUH-22 | CPL-8 |
| CPL-9 | EHC-1 | (3)#12 + #12GW - 3/4"C | 3 | 20 A | | | 2.5 kVA | 1.0 kVA | | | | | | | CPL-10 |
| CPL-11 | | | | | | | | | 2.5 kVA | 4.2 kVA | | | | | CPL-12 |
| CPL-13 | | | | | 3.3 kVA | 4.2 kVA | | | | | 20 A | 3 | (3)#12 + #12GW - 3/4"C | HWG-7 | CPL-14 |
| CPL-15 | EHC-2, EHC-3 | (3)#12 + #12GW - 3/4"C | 3 | 20 A | | | 3.3 kVA | 4.2 kVA | | | | | | | CPL-16 |
| CPL-17 | | | | | | | | | 3.3 kVA | 0.0 kVA | 20 A | 1 | -- | SPARE | CPL-18 |
| CPL-19 | | | | | 0.0 kVA | 0.0 kVA | | | | | 20 A | 1 | -- | SPARE | CPL-20 |
| CPL-21 | SPARE | -- | 3 | 20 A | | | 0.0 kVA | 0.0 kVA | | | 20 A | 1 | -- | SPARE | CPL-22 |
| CPL-23 | | | | | | | | | 0.0 kVA | 0.0 kVA | 20 A | 1 | -- | SPARE | CPL-24 |
| CPL-25 | | | | | 0.0 kVA | 0.0 kVA | | | | | 20 A | 1 | -- | SPARE | CPL-26 |
| CPL-27 | SPARE | -- | 3 | 20 A | | | 0.0 kVA | 0.0 kVA | | | 20 A | 1 | -- | SPARE | CPL-28 |
| CPL-29 | | | | | | | | | 0.0 kVA | | | | | | CPL-30 |
| CPL-31 | | | | | | | | | | | | | | | CPL-32 |
| CPL-33 | | | | | | | | | | | | | | | CPL-34 |
| CPL-35 | | | | | | | | | | | | | | | CPL-36 |
| CPL-37 | | | | | 7.8 kVA | 79.3 kVA | | | | | | | | | CPL-38 |
| CPL-39 | PANEL CPR (VIA XFMR TCPR) | REFER TO XFMR SCHEDULE | 3 | 60 A | | | 9.5 kVA | 84.7 kVA | | | 400 A | 3 | 2 SETS[(4)250KCMIL + #1GW - 2-1/2"C) [AL] | PANEL FHL | CPL-40 |
| CPL-41 | | | | | | | | | 8.9 kVA | 83.7... | | | | | CPL-42 |
| | | **Total Connected Load:** | 314.2... | | 101.8 kVA | | 107.1 kVA | | 105.2 kVA | | | | | | |

**Legend:**

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | ESTIMATED DEMAND | PANELBOARD TOTALS | |
|---|---|---|---|---|---|
| REC - | 11.6 kVA | 93.10% | 10.8 kVA | **Total Conn. Load:** | 314.2 kVA |
| MECHANICAL - | 123.3 kVA | 100.00% | 123.3 kVA | **Total Est. Demand:** | 313.4 kVA |
| LTG. - | 4.5 kVA | 100.00% | 4.5 kVA | **Total Conn.:** | 378 A |
| EQUIPMENT - | 4.3 kVA | 100.00% | 4.3 kVA | **Total Est. Demand.:** | 377 A |

## Branch Panel: FHL

**LOCATION:** MECHANICAL H108
**SUPPLY FROM:** CPL
**MOUNTING:** Surface
**VOLTAGE:** 480/277 Wye
**PHASE:** 3
**WIRES:** 4
**A.I.C. RATING:** 22K
**MAINS RATING:** 400 A
**MCB RATING:** 400 A
**NEUTRAL RATING:** 100%

**Notes:**
* PROVIDE PHOTOCELL AND TIME CLOCK CONTROL

| CKT | CIRCUIT | WIRE SIZE | P | CB | A | | B | | C | | CB | P | WIRE SIZE | CIRCUIT | CKT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FHL-1 | | | | | 3.3 kVA | 1.7 kVA | | | | | | | | | FHL-2 |
| FHL-3 | EUH-17 | (3)#12 + #12GW - 3/4"C | 3 | 20 A | | | 3.3 kVA | 1.7 kVA | | | 15 A | 3 | (3)#12 + #12GW - 3/4"C | EUH-18 | FHL-4 |
| FHL-5 | | | | | | | | | 3.3 kVA | 1.7 kVA | | | | | FHL-6 |
| FHL-7 | | | | | 2.0 kVA | 1.7 kVA | | | | | | | | | FHL-8 |
| FHL-9 | EUH-19, EUH-20 | (3)#12 + #12GW - 3/4"C | 3 | 15 A | | | 2.0 kVA | 1.7 kVA | | | 15 A | 3 | (3)#12 + #12GW - 3/4"C | EUH-21 | FHL-10 |
| FHL-11 | | | | | | | | | 2.0 kVA | 1.7 kVA | | | | | FHL-12 |
| FHL-13 | | | | | 4.2 kVA | 13.0 kVA | | | | | | | | | FHL-14 |
| FHL-15 | HWG-8 | (3)#12 + #12GW - 3/4"C | 3 | 20 A | | | 4.2 kVA | 14.3 kVA | | | 90 A | 3 | REFER TO XFMR SCHEDULE | PANEL FHR (VIA XFMR TFHR) | FHL-16 |
| FHL-17 | | | | | | | | | 4.2 kVA | 16.4... | | | | | FHL-18 |
| FHL-19 | BASEBALL FIELD POLE No. 1 | (2)#6 + #6GW - 1-1/2"C | 2 | 20 A | 3.0 kVA | 3.0 kVA | | | | | 20 A | 2 | (2)#6 + #6GW - 1-1/2"C | BASEBALL FIELD POLE No. 2 | FHL-20 |
| FHL-21 | | | | | | | 3.0 kVA | 3.0 kVA | | | | | | | FHL-22 |
| FHL-23 | BASEBALL FIELD POLE No. 3 | (2)#6 + #6GW - 1-1/2"C | 2 | 20 A | | | | | 3.0 kVA | 3.0 kVA | 20 A | 2 | (2)#6 + #6GW - 1-1/2"C | BASEBALL FIELD POLE No. 4 | FHL-24 |
| FHL-25 | | | | | 3.0 kVA | 3.0 kVA | | | | | | | | | FHL-26 |
| FHL-27 | BASEBALL FIELD POLE No. 5 | (2)#6 + #6GW - 1-1/2"C | 2 | 20 A | | | 3.0 kVA | 3.0 kVA | | | 20 A | 2 | (2)#6 + #6GW - 1-1/2"C | BASEBALL FIELD POLE No. 6 | FHL-28 |
| FHL-29 | | | | | | | | | 3.0 kVA | 3.0 kVA | | | | | FHL-30 |
| FHL-31 | SOFTBALL FIELD POLE No. 1 | (2)#6 + #6GW - 1-1/2"C | 2 | 20 A | 1.5 kVA | 1.5 kVA | | | | | 20 A | 2 | (2)#6 + #6GW - 1-1/2"C | SOFTBALL FIELD POLE No. 2 | FHL-32 |
| FHL-33 | | | | | | | 1.5 kVA | 1.5 kVA | | | | | | | FHL-34 |
| FHL-35 | SOFTBALL FIELD POLE No. 3 | (2)#6 + #6GW - 1-1/2"C | 2 | 20 A | | | | | 1.5 kVA | 1.5 kVA | 20 A | 2 | (2)#6 + #6GW - 1-1/2"C | SOFTBALL FIELD POLE No. 4 | FHL-36 |
| FHL-37 | | | | | 1.5 kVA | 1.5 kVA | | | | | | | | | FHL-38 |
| FHL-39 | | | | | | | 3.3 kVA | 4.2 kVA | | | | | | | FHL-40 |
| FHL-41 | EHC-4 | (3)#12 + #12GW - 3/4"C | 3 | 20 A | | | | | 3.3 kVA | 4.2 kVA | 20 A | 3 | (3)#12 + #12GW - 3/4"C | EHC-5, EHC-6 | FHL-42 |
| FHL-43 | | | | | 3.3 kVA | 4.2 kVA | | | | | | | | | FHL-44 |
| FHL-45 | LTG. - FIELD HOUSE | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 2.9 kVA | 0.4 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | LTG. - FIELD HOUSE EXTERIOR * | FHL-46 |
| FHL-47 | | | | | | | | | | | | | | | FHL-48 |
| FHL-49 | | | | | | | | | | | | | | | FHL-50 |
| FHL-51 | | | | | | | | | | | | | | | FHL-52 |
| FHL-53 | | | | | | | | | | | | | | | FHL-54 |
| FHL-55 | SPACE | -- | 1 | -- | -- | -- | | | | | -- | 1 | -- | SPACE | FHL-56 |
| FHL-57 | EXISTING CIRCUIT | -- | 1 | 20 A | | | 2.0 kVA | 2.0 kVA | | | 20 A | 1 | -- | EXISTING CIRCUIT | FHL-58 |
| FHL-59 | EXISTING CIRCUIT | -- | 1 | 20 A | | | | | 2.0 kVA | 2.0 kVA | 20 A | 1 | -- | EXISTING CIRCUIT | FHL-60 |
| FHL-61 | | | | | 2.0 kVA | 3.0 kVA | | | | | | | | | FHL-62 |
| FHL-63 | EXISTING CIRCUIT | -- | 3 | 20 A | | | 2.0 kVA | 3.0 kVA | | | 50 A | 3 | -- | EXISTING CIRCUIT | FHL-64 |
| FHL-65 | | | | | | | | | 2.0 kVA | 3.0 kVA | | | | | FHL-66 |
| FHL-67 | | | | | 2.0 kVA | 4.0 kVA | | | | | | | | | FHL-68 |
| FHL-69 | EXISTING CIRCUIT | -- | 3 | 30 A | | | 2.0 kVA | 4.0 kVA | | | 100 A | 3 | -- | RTU | FHL-70 |
| FHL-71 | | | | | | | | | 2.0 kVA | 4.0 kVA | | | | | FHL-72 |
| FHL-73 | | | | | 4.0 kVA | -- | | | | | -- | 1 | -- | SPACE | FHL-74 |
| FHL-75 | WATER HEATER | -- | 3 | 100 A | | | 4.0 kVA | -- | | | -- | 1 | -- | SPACE | FHL-76 |
| FHL-77 | | | | | | | | | 4.0 kVA | -- | -- | 1 | -- | SPACE | FHL-78 |
| FHL-79 | | | | | 3.0 kVA | 3.0 kVA | | | | | | | | | FHL-80 |
| FHL-81 | IRISHTOWN | -- | 3 | 30 A | | | 3.0 kVA | 3.0 kVA | | | 30 A | 3 | -- | BASEBALL | FHL-82 |
| FHL-83 | | | | | | | | | 3.0 kVA | 3.0 kVA | | | | | FHL-84 |
| FHL-85 | | | | | 2.0 kVA | 2.0 kVA | | | | | | | | | FHL-86 |
| FHL-87 | PRACTICE FOOTBALL FIELD | -- | 3 | 30 A | | | 2.0 kVA | 2.0 kVA | | | 30 A | 3 | -- | TENNIS COURT | FHL-88 |
| FHL-89 | | | | | | | | | 2.0 kVA | 2.0 kVA | | | | | FHL-90 |
| FHL-91 | | | | | 1.0 kVA | 2.0 kVA | | | | | | | | | FHL-92 |
| FHL-93 | PARKING LOT | -- | 3 | 20 A | | | 1.0 kVA | 2.0 kVA | | | 20 A | 3 | -- | EXISTING CIRCUIT | FHL-94 |
| FHL-95 | | | | | | | | | 1.0 kVA | 2.0 kVA | | | | | FHL-96 |
| FHL-97 | | | | | | | | | | | | | | | FHL-98 |
| FHL-99 | | | | | | | | | | | | | | | FHL-100 |
| FHL-101 | | | | | | | | | | | | | | | FHL-102 |
| FHL-103 | | | | | | | | | | | | | | | FHL-104 |
| FHL-105 | | | | | | | | | | | | | | | FHL-106 |
| FHL-107 | | | | | | | | | | | | | | | FHL-108 |
| FHL-109 | | | | | | | | | | | | | | | FHL-110 |
| FHL-111 | | | | | | | | | | | | | | | FHL-112 |
| | | **Total Connected Load:** | 247.7... | | 79.3 kVA | | 84.7 kVA | | 83.7 kVA | | | | | | |

**Legend:**

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | ESTIMATED DEMAND | PANELBOARD TOTALS | |
|---|---|---|---|---|---|
| REC - | 5.2 kVA | 100.00% | 5.2 kVA | **Total Conn. Load:** | 247.7 kVA |
| MECHANICAL - | 67.0 kVA | 100.00% | 67.0 kVA | **Total Est. Demand:** | 247.7 kVA |
| LTG. - | 2.9 kVA | 100.00% | 2.9 kVA | **Total Conn.:** | 298 A |
| EQUIPMENT - | 2.9 kVA | 100.00% | 2.9 kVA | **Total Est. Demand.:** | 298 A |

## Branch Panel: CPR

**LOCATION:** MECH H308
**SUPPLY FROM:** TCPR
**MOUNTING:** Surface
**VOLTAGE:** 120/208 Wye
**PHASE:** 3
**WIRES:** 4
**A.I.C. RATING:** 10kAIC
**MAINS RATING:** 100 A
**MCB RATING:** 100 A
**NEUTRAL RATING:** 100%

**Notes:**
*PROVIDE GFI-TYPE BREAKER

| CKT | CIRCUIT | WIRE SIZE | P | CB | A | | B | | C | | CB | P | WIRE SIZE | CIRCUIT | CKT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CPR-1 | REC - VISITING TEAM ROOM | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 0.8 kVA | 0.2 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | EWC - CONCESSIONS* | CPR-2 |
| CPR-3 | REC - CONCESSIONS H306 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 1.4 kVA | 0.2 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | EWC - CONCESSIONS* | CPR-4 |
| CPR-5 | REC - CONCESSIONS H306 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.4 kVA | 1.4 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - GENERAL | CPR-6 |
| CPR-7 | REC - CONCESSIONS H306 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 0.2 kVA | 0.8 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - GENERAL | CPR-8 |
| CPR-9 | REC - TICKET BOOTH H200 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 1.0 kVA | 0.5 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | F-55, F-56 | CPR-10 |
| CPR-11 | ERCP-10 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.5 kVA | 0.3 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | ERCP-6 | CPR-12 |
| CPR-13 | ERCP-11 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 0.5 kVA | 0.3 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | ERCP-7 | CPR-14 |
| CPR-15 | ERCP-12 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 0.5 kVA | 0.3 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | ERCP-8 | CPR-16 |
| CPR-17 | ERCP-13 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.5 kVA | 0.5 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | ERCP-9 | CPR-18 |
| CPR-19 | ERCP-14 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 0.5 kVA | 0.2 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | RP-4 | CPR-20 |
| CPR-21 | ERCP-15 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 0.5 kVA | 0.2 kVA | | | 20 A | 1 | (2)#6 + #10GW - 1"C | SITE SIGN | CPR-22 |
| CPR-23 | ERCP-16 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.5 kVA | 0.1 kVA | 20 A | 2 | (2)#6 + #10GW - 1"C | SITE SIGN | CPR-24 |
| CPR-25 | ERCP-17 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 0.5 kVA | 0.1 kVA | | | | | | | | | CPR-26 |
| CPR-27 | ERCP-18 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 0.5 kVA | 0.9 kVA | | | | | | | CPR-28 |
| CPR-29 | ERCP-19 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.5 kVA | 0.9 kVA | 15 A | 3 | (3)#12 + #12GW - 3/4"C | ERV-1 | CPR-30 |
| CPR-31 | ERCP-20 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 0.5 kVA | 0.9 kVA | | | | | | | | | CPR-32 |
| CPR-33 | ERCP-21 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 0.5 kVA | 1.3 kVA | | | | | | | CPR-34 |
| CPR-35 | ERCP-22 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.5 kVA | 1.3 kVA | 20 A | 3 | (3)#12 + #12GW - 3/4"C | EWH-1 | CPR-36 |
| CPR-37 | ERCP-23 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 0.5 kVA | 1.3 kVA | | | | | | | | | CPR-38 |
| CPR-39 | ERCP-24 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 0.5 kVA | 0.7 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | F-65 | CPR-40 |
| CPR-41 | ERCP-25 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.5 kVA | 0.7 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | F-66 | CPR-42 |
| CPR-43 | REC ON SITE POLE | (2)#8 + #10GW - 1"C | 1 | 20 A | 0.2 kVA | 0.2 kVA | | | | | 20 A | 1 | (2)#8 + #10GW - 1"C | REC ON SITE POLE | CPR-44 |
| CPR-45 | REC ON SITE POLE | (2)#8 + #10GW - 1"C | 1 | 20 A | | | 0.2 kVA | 0.2 kVA | | | 20 A | 1 | (2)#6 + #10GW - 1"C | REC ON SITE POLE | CPR-46 |
| CPR-47 | ERV-1 LIGHTS/REC | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.2 kVA | 0.0 kVA | 20 A | 1 | -- | SPARE | CPR-48 |
| CPR-49 | SPARE | -- | 1 | 20 A | 0.0 kVA | 0.0 kVA | | | | | 20 A | 1 | -- | SPARE | CPR-50 |
| CPR-51 | SPARE | -- | 1 | 20 A | | | 0.0 kVA | 0.0 kVA | | | 20 A | 1 | -- | SPARE | CPR-52 |
| CPR-53 | SPARE | -- | 1 | 20 A | | | | | 0.0 kVA | 0.0 kVA | 20 A | 1 | -- | SPARE | CPR-54 |
| CPR-55 | SPARE | -- | 1 | 20 A | 0.0 kVA | 0.0 kVA | | | | | 20 A | 1 | -- | SPARE | CPR-56 |
| CPR-57 | SPARE | -- | 1 | 20 A | | | 0.0 kVA | | | | | | | | CPR-58 |
| CPR-59 | | | | | | | | | | | | | | | CPR-60 |
| CPR-61 | | | | | | | | | | | | | | | CPR-62 |
| CPR-63 | | | | | | | | | | | | | | | CPR-64 |
| CPR-65 | | | | | | | | | | | | | | | CPR-66 |
| | | **Total Connected Load:** | 26.2... | | 7.8 kVA | | 9.5 kVA | | 8.9 kVA | | | | | | |

**Legend:**

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | ESTIMATED DEMAND | PANELBOARD TOTALS | |
|---|---|---|---|---|---|
| REC - | 6.4 kVA | 100.00% | 6.4 kVA | **Total Conn. Load:** | 26.2 kVA |
| MECHANICAL - | 18.4 kVA | 100.00% | 18.4 kVA | **Total Est. Demand:** | 26.2 kVA |
| LTG. - | 0.0 kVA | 0.00% | 0.0 kVA | **Total Conn.:** | 73 A |
| EQUIPMENT - | 1.4 kVA | 100.00% | 1.4 kVA | **Total Est. Demand.:** | 73 A |

## Branch Panel: FHR

**LOCATION:** MECHANICAL H108
**SUPPLY FROM:** TFHR
**MOUNTING:** Surface
**VOLTAGE:** 120/208 Wye
**PHASE:** 3
**WIRES:** 4
**A.I.C. RATING:** 10kAIC
**MAINS RATING:** 150 A
**MCB RATING:** 150 A
**NEUTRAL RATING:** 100%

**Notes:**
*PROVIDE GFCI BREAKER

| CKT | CIRCUIT | WIRE SIZE | P | CB | A | | B | | C | | CB | P | WIRE SIZE | CIRCUIT | CKT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FHR-1 | REC - VARSITY/STORAGE | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 1.4 kVA | 0.2 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | EWC - VARSITY H100* | FHR-2 |
| FHR-3 | REC - TAPING/TRAINING H102 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 0.8 kVA | 0.2 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | EWC - JUNIOR VARSITY H100* | FHR-4 |
| FHR-5 | REC - UNDERCOUNTER FRIDGE | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.2 kVA | 1.0 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - STORAGE/OFFICIALS RR | FHR-6 |
| FHR-7 | REC - ICE MAKER | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 0.2 kVA | 0.8 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | JUNIOR VARSITY/STORAGE | FHR-8 |
| FHR-9 | REC - FIELDHOUSE | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 0.4 kVA | 0.2 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | F-57 | FHR-10 |
| FHR-11 | ERCP-26 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.5 kVA | 0.2 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | RP-5 | FHR-12 |
| FHR-13 | | | | | 1.2 kVA | 0.7 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | F-68 | FHR-14 |
| FHR-15 | ERV-2 | (3)#12 + #12GW - 3/4"C | 3 | 15 A | | | 1.2 kVA | 0.7 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | F-69 | FHR-16 |
| FHR-17 | | | | | | | | | 1.2 kVA | 0.2 kVA | 20 A | 1 | (2)#8 + #10GW - 1"C | REC ON SITE POLE | FHR-18 |
| FHR-19 | REC ON SITE POLE | (2)#8 + #10GW - 1"C | 1 | 20 A | 0.2 kVA | 0.2 kVA | | | | | 20 A | 1 | (2)#6 + #10GW - 1"C | REC ON SITE POLE | FHR-20 |
| FHR-21 | REC ON SITE POLE | (2)#6 + #10GW - 1"C | 1 | 20 A | | | 0.2 kVA | 0.2 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | EQUIPMENT - STORAGE-1 H107-1 | FHR-22 |
| FHR-23 | REC - BATTING CAGE | (2)#8 + #10GW - 1"C | 1 | 20 A | | | | | 0.2 kVA | 0.2 kVA | 20 A | 1 | (2)#8 + #10GW - 1"C | REC - BATTING CAGE | FHR-24 |
| FHR-25 | SCOREBOARD | (2)#6 + #10GW - 1"C | 1 | 20 A | 0.2 kVA | 0.2 kVA | | | | | 20 A | 1 | (2)#8 + #10GW - 1"C | REC - TENNIS COURTS | FHR-26 |
| FHR-27 | PITCHING MACHINE | (2)#8 + #10GW - 1"C | 1 | 20 A | | | 0.2 kVA | 0.2 kVA | | | 20 A | 1 | (2)#8 + #10GW - 1"C | REC - TENNIS COURTS | FHR-28 |
| FHR-29 | SCOREBOARD | (2)#6 + #10GW - 1"C | 1 | 20 A | | | | | 0.7 kVA | | | | | | FHR-30 |
| FHR-31 | | | | | | | | | | | | | | | FHR-32 |
| FHR-33 | | | | | | | | | | | | | | | FHR-34 |
| FHR-35 | | | | | | | | | | | | | | | FHR-36 |
| FHR-37 | | | | | | | | | | | | | | | FHR-38 |
| FHR-39 | | | | | | | | | | | | | | | FHR-40 |
| FHR-41 | | | | | | | | | | | | | | | FHR-42 |
| FHR-43 | | | | | | | | | | | | | | | FHR-44 |
| FHR-45 | | | | | | | | | | | | | | | FHR-46 |
| FHR-47 | | | | | | | | | | 1.0 kVA | 20 A | 1 | -- | FIELD OUTLET | FHR-48 |
| FHR-49 | EXISTING CIRCUIT | -- | 1 | 20 A | 0.6 kVA | 0.7 kVA | | | | | 20 A | 1 | -- | EXISTING CIRCUIT | FHR-50 |
| FHR-51 | EXISTING CIRCUIT | -- | 1 | 20 A | | | 0.5 kVA | 0.8 kVA | | | 20 A | 1 | -- | EXISTING CIRCUIT | FHR-52 |
| FHR-53 | EXISTING CIRCUIT | -- | 1 | 20 A | | | | | 0.4 kVA | 0.7 kVA | 20 A | 1 | -- | EXISTING CIRCUIT | FHR-54 |
| FHR-55 | EXISTING CIRCUIT | -- | 1 | 20 A | 0.8 kVA | 0.8 kVA | | | | | 20 A | 1 | -- | EXISTING CIRCUIT | FHR-56 |
| FHR-57 | EXISTING CIRCUIT | -- | 1 | 20 A | | | 1.0 kVA | 1.0 kVA | | | 20 A | 1 | -- | EXISTING CIRCUIT | FHR-58 |
| FHR-59 | EXISTING CIRCUIT | -- | 1 | 20 A | | | | | 1.0 kVA | 1.0 kVA | 20 A | 1 | -- | EXISTING CIRCUIT | FHR-60 |
| FHR-61 | EXISTING CIRCUIT | -- | 1 | 20 A | 0.8 kVA | 0.4 kVA | | | | | 20 A | 1 | -- | EXISTING CIRCUIT | FHR-62 |
| FHR-63 | EXISTING CIRCUIT | -- | 1 | 20 A | | | 0.5 kVA | 0.7 kVA | | | 20 A | 1 | -- | EXISTING CIRCUIT | FHR-64 |
| FHR-65 | EXISTING CIRCUIT | -- | 1 | 20 A | | | | | 1.0 kVA | 1.0 kVA | 50 A | 2 | -- | EXISTING CIRCUIT | FHR-66 |
| FHR-67 | EXISTING CIRCUIT | -- | 1 | 20 A | 1.0 kVA | 1.0 kVA | | | | | | | | | FHR-68 |
| FHR-69 | EXISTING CIRCUIT | -- | 2 | 20 A | | | 1.0 kVA | 0.8 kVA | | | 20 A | 2 | -- | EXISTING CIRCUIT | FHR-70 |
| FHR-71 | | | | | | | | | 1.0 kVA | 0.8 kVA | | | | | FHR-72 |
| FHR-73 | EXISTING CIRCUIT | -- | 2 | 50 A | 0.6 kVA | 1.0 kVA | | | | | 20 A | 2 | -- | EXISTING CIRCUIT | FHR-74 |
| FHR-75 | | | | | | | 0.6 kVA | 1.0 kVA | | | | | | | FHR-76 |
| FHR-77 | EXISTING CIRCUIT | -- | 2 | 20 A | | | | | 1.0 kVA | 1.0 kVA | 30 A | 2 | -- | EXISTING CIRCUIT | FHR-78 |
| FHR-79 | | | | | 0.0 kVA | 0.0 kVA | | | | | | | | | FHR-80 |
| FHR-81 | EXISTING CIRCUIT | -- | 2 | 30 A | | | 1.0 kVA | 1.0 kVA | | | 30 A | 2 | -- | CONCERT TEMP ELEC | FHR-82 |
| FHR-83 | | | | | | | | | 1.0 kVA | 1.0 kVA | | | | | FHR-84 |
| | | **Total Connected Load:** | 43.7... | | 13.0 kVA | | 14.3 kVA | | 16.4 kVA | | | | | | |

**Legend:**

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | ESTIMATED DEMAND | PANELBOARD TOTALS | |
|---|---|---|---|---|---|
| REC - | 5.2 kVA | 100.00% | 5.2 kVA | **Total Conn. Load:** | 43.7 kVA |
| MECHANICAL - | 6.1 kVA | 100.00% | 6.1 kVA | **Total Est. Demand:** | 43.7 kVA |
| LTG. - | 0.0 kVA | 0.00% | 0.0 kVA | **Total Conn.:** | 121 A |
| EQUIPMENT - | 2.9 kVA | 100.00% | 2.9 kVA | **Total Est. Demand.:** | 121 A |

| | |
|---|---|
| CPL | CPR |
| FHL | FHR |

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PANEL SCHEDULES

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 4/02/2024 | ADDENDUM #5 |

E707
12/22/2023
BID SET

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## Fuse Panel: E1R0B

**LOCATION:** ELECTRICAL EQUIPMENT AREA...
**SUPPLY FROM:** TE1R0B
**MOUNTING:** Surface
**VOLTAGE:** 120/208 Wye
**PHASE:** 3
**WIRES:** 4
**A.I.C. RATING:** 22kAIC
**MAINS RATING:** 100 A
**MCB RATING:** 100 A
**NEUTRAL RATING:** 100%

**Notes:**

| CKT | CIRCUIT | WIRE SIZE | P | CB | A | | B | | C | | CB | P | WIRE SIZE | CIRCUIT | CKT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E1R0B-1 | FIRE PROTECTION SYSTEM (17) | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 2.6 kVA | 3.3 kVA | | | | | | | | | E1R0B-2 |
| E1R0B-3 | NAC PANEL A112 | (2)#10 + #10GW - 3/4"C | 1 | 20 A | | | 0.2 kVA | 3.6 kVA | | | 50 A | 3 | (4)#4 + #8GW - 1-1/4"C | PANEL E1RPF | E1R0B-4 |
| E1R0B-5 | NAC PANEL A112 | (2)#10 + #10GW - 3/4"C | 1 | 20 A | | | | | 0.2 kVA | 2.9 kVA | | | | | E1R0B-6 |
| E1R0B-7 | DOOR HOLD OPENS | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 0.1 kVA | 0.1 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | DOOR HOLD OPENS | E1R0B-8 |
| E1R0B-9 | DOOR HOLD OPENS | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 0.1 kVA | 0.5 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | SMDs | E1R0B-10 |
| E1R0B-11 | SMDs | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.5 kVA | 0.3 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | SMDs | E1R0B-12 |
| E1R0B-13 | SMDs | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 0.3 kVA | 0.1 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | DOOR HOLD OPENS | E1R0B-14 |
| E1R0B-15 | OTHER CORRIDOR C21 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 0.1 kVA | 0.0 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | OTHER | E1R0B-16 |
| E1R0B-17 | SMDs | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.3 kVA | 0.3 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | SMDs | E1R0B-18 |
| E1R0B-19 | SMDs | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 0.3 kVA | 0.2 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | NAC PANEL | E1R0B-20 |
| E1R0B-21 | NAC PANEL | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 0.2 kVA | 0.4 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | SMOKE DAMPERS | E1R0B-22 |
| E1R0B-23 | SMOKE DAMPERS | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.3 kVA | 0.2 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | FIRE ALARM CONTROL PANEL | E1R0B-24 △2 ADD |
| E1R0B-25 | SPARE | -- | 1 | 20 A | 0.0 kVA | 0.0 kVA | | | | | 20 A | 1 | -- | SPARE | E1R0B-26 |
| E1R0B-27 | SPARE | -- | 1 | 20 A | | | 0.0 kVA | 0.0 kVA | | | 20 A | 1 | -- | SPARE | E1R0B-28 |
| E1R0B-29 | SPARE | -- | 1 | 20 A | | | | | 0.0 kVA | 0.0 kVA | 20 A | 1 | -- | SPARE | E1R0B-30 |
| E1R0B-31 | SPARE | -- | 1 | 20 A | 0.0 kVA | | | | | | | | | | E1R0B-32 |
| E1R0B-33 | | | | | | | | | | | | | | | E1R0B-34 |
| E1R0B-35 | | | | | | | | | | | | | | | E1R0B-36 |
| E1R0B-37 | | | | | | 0.1 kVA | | | | | | | | | E1R0B-38 |
| E1R0B-39 | | | | | | | | 0.1 kVA | | | 30 A | 3 | (4)#10 + #10GW - 3/4"C | SPD | E1R0B-40 |
| E1R0B-41 | | | | | | | | | | 0.1 kVA | | | | | E1R0B-42 |
| | | **Total Connected Load:** | 17.1... | | 7.0 kVA | | 5.1 kVA | | 5.1 kVA | | | | | | |

**Legend:**

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | ESTIMATED DEMAND | PANELBOARD TOTALS | |
|---|---|---|---|---|---|
| REC - | 0.0 kVA | 0.00% | 0.0 kVA | **Total Conn. Load:** | 17.1 kVA |
| MECHANICAL - | 0.0 kVA | 0.00% | 0.0 kVA | **Total Est. Demand:** | 17.1 kVA |
| LTG. - | 7.2 kVA | 100.00% | 7.2 kVA | **Total Conn.:** | 48 A |
| EQUIPMENT - | 4.0 kVA | 100.00% | 4.0 kVA | **Total Est. Demand.:** | 48 A |

## Fuse Panel: E1RPF

**LOCATION:** MECHANICAL PENTHOUSE F300
**SUPPLY FROM:** E1R0B
**MOUNTING:** Surface
**VOLTAGE:** 120/208 Wye
**PHASE:** 3
**WIRES:** 4
**A.I.C. RATING:** 22KAIC
**MAINS RATING:** 100 A
**MCB RATING:** 50 A
**NEUTRAL RATING:** 100%

**Notes:**

| CKT | CIRCUIT | WIRE SIZE | P | CB | A | | B | | C | | CB | P | WIRE SIZE | CIRCUIT | CKT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E1RPF-1 | eLTG. - Auditorium | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 0.4 kVA | 0.4 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | eLTG. - Auditorium | E1RPF-2 |
| E1RPF-3 | eLTG. - Auditorium | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 1.4 kVA | 1.6 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | eLTG. - Auditorium | E1RPF-4 |
| E1RPF-5 | eLTG. - Auditorium | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 1.5 kVA | 0.8 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | eLTG. - Auditorium (Stage) | E1RPF-6 |
| E1RPF-7 | eLTG. - Catwalk | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 0.5 kVA | 1.1 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | eLTG. - Auditorium (Stage) | E1RPF-8 |
| E1RPF-9 | DOOR HOLD OPENS | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 0.1 kVA | 0.1 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | DOOR HOLD OPENS | E1RPF-10 |
| E1RPF-11 | DOOR HOLD OPENS | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.1 kVA | 0.1 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | DOOR HOLD OPENS | E1RPF-12 |
| E1RPF-13 | SMDs | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 0.5 kVA | 0.0 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | DOOR HOLD OPENS | E1RPF-14 |
| E1RPF-15 | DOOR HOLD OPENS | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 0.1 kVA | 0.2 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | NAC PANEL | E1RPF-16 |
| E1RPF-17 | NAC PANEL | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.2 kVA | 0.3 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | SMOKE DAMPERS | E1RPF-18 |
| E1RPF-19 | SMOKE DAMPERS | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 0.3 kVA | 0.0 kVA | | | | | 20 A | 1 | -- | SPARE | E1RPF-20 |
| E1RPF-21 | SPARE | -- | 1 | 20 A | | | 0.0 kVA | 0.0 kVA | | | 20 A | 1 | -- | SPARE | E1RPF-22 |
| E1RPF-23 | SPARE | -- | 1 | 20 A | | | | | 0.0 kVA | 0.0 kVA | 20 A | 1 | -- | SPARE | E1RPF-24 |
| E1RPF-25 | SPARE | -- | 1 | 20 A | 0.0 kVA | 0.0 kVA | | | | | 20 A | 1 | -- | SPARE | E1RPF-26 |
| E1RPF-27 | SPARE | -- | 1 | 20 A | | | 0.0 kVA | 0.0 kVA | | | 20 A | 1 | -- | SPARE | E1RPF-28 |
| E1RPF-29 | SPARE | -- | 1 | 20 A | | | | | 0.0 kVA | 0.0 kVA | 20 A | 1 | -- | SPARE | E1RPF-30 |
| E1RPF-31 | | | | | | | | | | | | | | | E1RPF-32 |
| E1RPF-33 | | | | | | | | | | | | | | | E1RPF-34 |
| E1RPF-35 | | | | | | | | | | | | | | | E1RPF-36 |
| E1RPF-37 | | | | | | 0.1 kVA | | | | | | | | | E1RPF-38 |
| E1RPF-39 | | | | | | | | 0.1 kVA | | | 30 A | 3 | (4)#10 + #10GW - 3/4"C | SPD | E1RPF-40 |
| E1RPF-41 | | | | | | | | | | 0.1 kVA | | | | | E1RPF-42 |
| | | **Total Connected Load:** | 9.8 kVA | | 3.3 kVA | | 3.6 kVA | | 2.9 kVA | | | | | | |

**Legend:**

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | ESTIMATED DEMAND | PANELBOARD TOTALS | |
|---|---|---|---|---|---|
| REC - | 0.0 kVA | 0.00% | 0.0 kVA | **Total Conn. Load:** | 9.8 kVA |
| MECHANICAL - | 0.0 kVA | 0.00% | 0.0 kVA | **Total Est. Demand:** | 9.8 kVA |
| LTG. - | 7.2 kVA | 100.00% | 7.2 kVA | **Total Conn.:** | 27 A |
| EQUIPMENT - | 0.4 kVA | 100.00% | 0.4 kVA | **Total Est. Demand.:** | 27 A |

## Branch Panel: E2C1A

**LOCATION:** ELECTRICAL A122
**SUPPLY FROM:** E2R0B
**MOUNTING:** Surface
**VOLTAGE:** 120/208 Wye
**PHASE:** 3
**WIRES:** 4
**A.I.C. RATING:** 22kAIC
**MAINS RATING:** 150 A
**MCB RATING:** 125 A
**NEUTRAL RATING:** 100%

**Notes:**

| CKT | CIRCUIT | WIRE SIZE | P | CB | A | | B | | C | | CB | P | WIRE SIZE | CIRCUIT | CKT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E2C1A-1 | REC - GEN OFFICE AREA A102 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 1.2 kVA | 1.2 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - MS AP OFFICE A110 | E2C1A-2 |
| E2C1A-3 | REC - GEN OFFICE AREA A102 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 0.8 kVA | 1.2 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - MS AP OFFICE A112 | E2C1A-4 |
| E2C1A-5 | REC - GEN OFFICE AREA A102 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.8 kVA | 1.2 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - MS AP OFFICE A114 | E2C1A-6 |
| E2C1A-7 | REC - GEN OFFICE AREA A102 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 1.0 kVA | 1.2 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - MS OFF WORK AREA A104 | E2C1A-8 |
| E2C1A-9 | REC - GEN OFFICE AREA A102 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 0.4 kVA | 0.6 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - MS OFF WORK AREA A104 | E2C1A-10 |
| E2C1A-11 | REC - MS PRINCIPAL OFFICE A113 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 1.6 kVA | 1.0 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - HS COPIER A107 | E2C1A-12 |
| E2C1A-13 | REC - CONFERENCE ROOM A108 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 1.2 kVA | 1.0 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - MS COPIER A105 | E2C1A-14 |
| E2C1A-15 | REC - CONFERENCE ROOM A108 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 1.2 kVA | 0.8 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - LUNCHEONETTE A115 | E2C1A-16 |
| E2C1A-17 | REC - HS CONF ROOM A146 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 1.2 kVA | 1.4 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - HS PRINCIPAL OFFICE A117 | E2C1A-18 |
| E2C1A-19 | REC - HS CONF ROOM A146 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 1.2 kVA | 1.0 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - HS AP OFFICE A118 | E2C1A-20 |
| E2C1A-21 | REC - HS NURSE OFFICE A154 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 1.2 kVA | 1.0 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - HS AP OFFICE A121 | E2C1A-22 |
| E2C1A-23 | REC - HS TREAT EXAM ISO A156 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 1.0 kVA | | | | | | E2C1A-24 |
| E2C1A-25 | REC - MS NURSE OFFICE A158 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 1.2 kVA | 1.0 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - HS AP OFFICE A119 | E2C1A-26 |
| E2C1A-27 | | | | | | | | 1.2 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - HS STUD SUPP CNTR D107 | E2C1A-28 |
| E2C1A-29 | REC - HS TREAT EXAM ISO A161 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 1.0 kVA | 2.0 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - HS STUD SUPP CNTR D107 | E2C1A-30 |
| E2C1A-31 | | | | | | 0.8 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - MS PBIS STORE/STG A178 | E2C1A-32 |
| E2C1A-33 | REC - IDF A174 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 1.0 kVA | 0.4 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | RECEPTACLE IDF D114 | E2C1A-34 |
| E2C1A-35 | REC - IDF A174 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 1.0 kVA | 0.4 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | RECEPTACLE IDF D114 | E2C1A-36 |
| E2C1A-37 | REC - IDF A174 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 1.0 kVA | 0.4 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | RECEPTACLE IDF D114 | E2C1A-38 |
| E2C1A-39 | REC - IDF D114 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 0.2 kVA | 0.4 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | RECEPTACLE IDF D114 | E2C1A-40 |
| E2C1A-41 | REC - IDF D114 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.2 kVA | 0.4 kVA | 20 A | 1 | (2)#12 + #12GW - 3/4"C | RECEPTACLE IDF D114 | E2C1A-42 |
| E2C1A-43 | REC - IDF D114 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 0.2 kVA | 0.4 kVA | | | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - IDF A174 | E2C1A-44 |
| E2C1A-45 | REC - IDF A174 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | 0.4 kVA | 0.4 kVA | | | 20 A | 1 | (2)#12 + #12GW - 3/4"C | REC - IDF A174 | E2C1A-46 |
| E2C1A-47 | REC - IDF A174 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | | | | | 0.4 kVA | 0.0 kVA | 20 A | 1 | -- | SPARE | E2C1A-48 |
| E2C1A-49 | REC - CORRIDOR A12 | (2)#12 + #12GW - 3/4"C | 1 | 20 A | 1.2 kVA | 0.0 kVA | | | | | 20 A | 1 | -- | SPARE | E2C1A-50 |
| E2C1A-51 | | | | | | | | 0.0 kVA | | | 20 A | 1 | -- | SPARE | E2C1A-52 |
| E2C1A-53 | | | | | | | | | | 0.0 kVA | 20 A | 1 | -- | SPARE | E2C1A-54 |
| E2C1A-55 | | | | | | 0.0 kVA | | | | | 20 A | 1 | -- | SPARE | E2C1A-56 |
| E2C1A-57 | | | | | | | | | | | | | | | E2C1A-58 |
| E2C1A-59 | | | | | | | | | | | | | | | E2C1A-60 |
| E2C1A-61 | | | | | | 0.1 kVA | | | | | | | | | E2C1A-62 |
| E2C1A-63 | | | | | | | | 0.1 kVA | | | 30 A | 3 | (4)#10 + #10GW - 3/4"C | SPD | E2C1A-64 |
| E2C1A-65 | | | | | | | | | | 0.1 kVA | | | | | E2C1A-66 |
| | | **Total Connected Load:** | 40.3... | | 15.3 kVA | | 11.3 kVA | | 13.7 kVA | | | | | | |

**Legend:**

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | ESTIMATED DEMAND | PANELBOARD TOTALS | |
|---|---|---|---|---|---|
| REC - | 37.2 kVA | 63.44% | 23.6 kVA | **Total Conn. Load:** | 40.3 kVA |
| MECHANICAL - | 0.0 kVA | 0.00% | 0.0 kVA | **Total Est. Demand:** | 26.7 kVA |
| LTG. - | 0.0 kVA | 0.00% | 0.0 kVA | **Total Conn.:** | 112 A |
| EQUIPMENT - | 0.0 kVA | 0.00% | 0.0 kVA | **Total Est. Demand.:** | 74 A |

## Branch Panel: E2L0B

**LOCATION:** ELECTRICAL EQUIPMENT AREA...
**SUPPLY FROM:** ATS-2A
**MOUNTING:** Surface
**VOLTAGE:** 480/277 Wye
**PHASE:** 3
**WIRES:** 4
**A.I.C. RATING:** 65kAIC
**MAINS RATING:** 1000 A
**MCB RATING:** 1000 A
**NEUTRAL RATING:** 100%

**Notes:**
*SHUNT TRIP TYPE BREAKER

| CKT | CIRCUIT | WIRE SIZE | P | CB | A | | B | | C | | CB | P | WIRE SIZE | CIRCUIT | CKT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E2L0B-1 | | | | | 2.7 kVA | 27.4 kVA | | | | | | | | | E2L0B-2 |
| E2L0B-3 | HP-0.13 | (3)#12 + #12GW - 3/4"C | 3 | 15 A | | | 2.7 kVA | 28.7 kVA | | | 150 A | 3 | (4)#4/0 + #2GW - 2"C [AL] | PANEL E2M1A | E2L0B-4 |
| E2L0B-5 | | | | | | | | | 2.7 kVA | 27.2... | | | | | E2L0B-6 |
| E2L0B-7 | | | | | 25.5... | 25.5 kVA | | | | | | | | | E2L0B-8 |
| E2L0B-9 | HWG-1 | (3)#1 + #6GW - 1-1/2"C | 3 | 125 A | | | 25.5 kVA | 25.5 kVA | | | 125 A | 3 | (3)#1 + #6GW - 1-1/2"C | HWG-2 | E2L0B-10 |
| E2L0B-11 | | | | | | | | | 25.5 kVA | 25.5... | | | | | E2L0B-12 |
| E2L0B-13 | | | | | 10.3... | 49.5 kVA | | | | | | | | | E2L0B-14 |
| E2L0B-15 | HWST-2 | (3)#6 + #10GW - 3/4"C | 3 | 50 A | | | 10.3 kVA | 48.3 kVA | | | 300 A | 3 | 2 SETS [(4)250KCMIL + #1GW - 2-1/2"C) [AL] | PANEL EPL-MS | E2L0B-16 |
| E2L0B-17 | | | | | | | | | 10.3 kVA | 47.3... | | | | | E2L0B-18 |
| E2L0B-19 | | | | | 57.3... | 0.6 kVA | | | | | | | | | E2L0B-20 |
| E2L0B-21 | PANEL E2R0B (VIA XFMR TE2R0B) | REFER TO XFMR SCHEDULE | 3 | 400 A | | | 56.7 kVA | 0.6 kVA | | | 15 A | 3 | (3)#12 + #12GW - 3/4"C | RP-1 | E2L0B-22 |
| E2L0B-23 | | | | | | | | | 60.1 kVA | 0.6 kVA | | | | | E2L0B-24 |
| E2L0B-25 | | | | | 5.5 kVA | 2.8 kVA | | | | | | | | | E2L0B-26 |
| E2L0B-27 | *ELEVATOR EL01 | (4)#10 + #10GW - 3/4"C | 3 | 25 A | | | 5.5 kVA | 2.8 kVA | | | 15 A | 3 | (3)#12 + #12GW - 3/4"C | HP-0.20 | E2L0B-28 |
| E2L0B-29 | | | | | | | | | 5.5 kVA | 2.8 kVA | | | | | E2L0B-30 |
| E2L0B-31 | DEDICATED GENERATOR CIRCUIT | -- | 1 | 20 A | 0.0 kVA | 0.0 kVA | | | | | | | | | E2L0B-32 △2 ADD |
| E2L0B-33 | DEDICATED GENERATOR CIRCUIT | -- | 1 | 20 A | | | 0.0 kVA | 0.0 kVA | | | 20 A | 3 | -- | DEDICATED GENERATOR CIRCUIT | E2L0B-34 |
| E2L0B-35 | SPARE | -- | 1 | 20 A | | | | | 0.0 kVA | 0.0 kVA | | | | | E2L0B-36 |
| E2L0B-37 | SPARE | -- | 1 | 20 A | 0.0 kVA | 0.1 kVA | | | | | | | | | E2L0B-38 |
| E2L0B-39 | | | | | | | | 0.1 kVA | | | 30 A | 3 | (4)#10 + #10GW - 3/4"C | SPD | E2L0B-40 |
| E2L0B-41 | | | | | | | | | | 0.1 kVA | | | | | E2L0B-42 |
| | | **Total Connected Load:** | 621.3... | | 207.1 kVA | | 206.6 kVA | | 207.6 kVA | | | | | | |

**Legend:**

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | ESTIMATED DEMAND | PANELBOARD TOTALS | |
|---|---|---|---|---|---|
| REC - | 103.6 kVA | 54.83% | 56.8 kVA | **Total Conn. Load:** | 621.3 kVA |
| MECHANICAL - | 445.1 kVA | 100.00% | 445.1 kVA | **Total Est. Demand:** | 574.5 kVA |
| LTG. - | 0.2 kVA | 100.00% | 0.2 kVA | **Total Conn.:** | 747 A |
| EQUIPMENT - | 66.0 kVA | 100.00% | 66.0 kVA | **Total Est. Demand.:** | 691 A |

## Branch Panel: E2LPF

**LOCATION:** MECHANICAL PENTHOUSE F300
**SUPPLY FROM:** ATS-2B
**MOUNTING:** Surface
**VOLTAGE:** 480/277 Wye
**PHASE:** 3
**WIRES:** 4
**A.I.C. RATING:** 22kAIC
**MAINS RATING:** 225 A
**MCB RATING:** 225 A
**NEUTRAL RATING:** 100%

**Notes:**

| CKT | CIRCUIT | WIRE SIZE | P | CB | A | | B | | C | | CB | P | WIRE SIZE | CIRCUIT | CKT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E2LPF-1 | | | | | 2.8 kVA | 0.0 kVA | | | | | 20 A | 1 | -- | SPARE | E2LPF-2 |
| E2LPF-3 | HP-0.19 | (3)#12 + #12GW - 3/4"C | 3 | 15 A | | | 2.8 kVA | 0.0 kVA | | | 20 A | 1 | -- | SPARE | E2LPF-4 |
| E2LPF-5 | | | | | | | | | 2.8 kVA | 0.0 kVA | 20 A | 1 | -- | SPARE | E2LPF-6 |
| E2LPF-7 | | | | | | 0.0 kVA | | | | | 20 A | 1 | -- | SPARE | E2LPF-8 |
| E2LPF-9 | | | | | | | | 0.0 kVA | | | 20 A | 1 | -- | SPARE | E2LPF-10 |
| E2LPF-11 | | | | | | | | | | | | | | | E2LPF-12 |
| E2LPF-13 | | | | | | | | | | | | | | | E2LPF-14 |
| E2LPF-15 | | | | | | | | | | | | | | | E2LPF-16 |
| E2LPF-17 | | | | | | | | | | | | | | | E2LPF-18 |
| E2LPF-19 | | | | | | | | | | | | | | | E2LPF-20 |
| E2LPF-21 | | | | | | | | | | | | | | | E2LPF-22 |
| E2LPF-23 | | | | | | | | | | | | | | | E2LPF-24 |
| E2LPF-25 | | | | | 18.6... | 0.1 kVA | | | | | | | | | E2LPF-26 |
| E2LPF-27 | PANEL E2RFP (VIA XFMR TE2RFP) | REFER TO XFMR SCHEDULE | 3 | 150 A | | | 19.4 kVA | 0.1 kVA | | | 30 A | 3 | (4)#10 + #10GW - 3/4"C | SPD | E2LPF-28 |
| E2LPF-29 | | | | | | | | | 16.4 kVA | 0.1 kVA | | | | | E2LPF-30 |
| | | **Total Connected Load:** | 63.0... | | 21.5 kVA | | 22.3 kVA | | 19.3 kVA | | | | | | |

**Legend:**

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | ESTIMATED DEMAND | PANELBOARD TOTALS | |
|---|---|---|---|---|---|
| REC - | 14.8 kVA | 83.78% | 12.4 kVA | **Total Conn. Load:** | 63.0 kVA |
| MECHANICAL - | 28.9 kVA | 100.00% | 28.9 kVA | **Total Est. Demand:** | 60.6 kVA |
| LTG. - | 0.0 kVA | 0.00% | 0.0 kVA | **Total Conn.:** | 76 A |
| EQUIPMENT - | 18.7 kVA | 100.00% | 18.7 kVA | **Total Est. Demand.:** | 73 A |

E1R0B
E1RPF
E2L0B
E2C1A
E2LPF

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GP #22105

PANEL SCHEDULES

NORTH EAST MIDDLE / HIGH SCHOOL
300 IRISHTOWN ROAD, NORTH EAST, MD

| DATE | DESCRIPTION |
|---|---|
| 3/25/2024 | ADDENDUM #3 |
| 4/02/2024 | ADDENDUM #5 |

**E716**

12/22/2023
BID SET

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