TS&E BID DOCUMENTS

FOR

WINDERMERE ELEMENTARY SCHOOL 2 ABBOTT ROAD ELLINGTON, CONNECTICUT 06029 TOWN OF ELLINGTON

STATE PROJECT NO. 048---0060 RNV
PHASE 3 OF 3

PROJECT MANUAL

Prepared by:
Drummey Rosane Anderson, Inc
225 Oakland Road, Studio 205
South Windsor, CT 06074

Consulting Engineering Services 811 Middle Road Middletown, CT 06457

May 6, 2024









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LEGAL NOTICE - INVITATION TO BIDDERS

TECHNOLOGY SYSTEMS AND EQUIPMENT

WINDERMERE ELEMENTARY SCHOOL

2 Abbott Road

ELLINGTON, CONNECTICUT 06029

Sealed Bids for delivery and installation of technology systems and equipment for the **Windermere Elementary School**, State Project **048-0060 RNV** will be sent to:

Town of Ellington
Ms. Tiffany Pignataro, CPA, MBA, Finance Officer, Treasurer
Ellington Town Hall, Finance Office
55 Main Street
Ellington, CT 06029

until **2PM** prevailing time, on **Tuesday**, **September 10**, **2024**, at which time they will be publicly opened and read. The work consists of the following categories:

Section 11 70 00 Technology Equipment:

- Laptop Charging Carts
- Avaya Phone System
- Network Switching and Equipment
- Displays and Projectors
- Documents Cameras
- Computers, Monitors, Docking Stations, and Equipment

The invitation to bid, and information for bidders, are posted to CT Source and Town of Ellington website www.ellington-ct.gov/bids/rfps

No bid will be accepted after the time set for the opening of Bids and no Bidder may withdraw his Bid until 90 days after bid opening. The Town reserves the right to amend or terminate this Invitation to Bidders, waive any informality, omission, or technical defect in the Bid Form, and to reject any or all bids or to accept the bid deemed most satisfactory to the Town of Ellington, if it is in the public interest to do so.

Questions concerning this FF&E / TS&E Procurement shall be directed via email to Steve Somwaru at ssomwaru@ceseng.com and copied to Greg Smolley at gsmolley@draws.com until noon on Wednesday, September 4, 2024, questions posted after that date and time will not be answered. An Addendum shall be posted by 2pm on Friday, September 6, 2024. Bidders shall be responsible to check the websites for any Addendum.

INFORMATION & INSTRUCTION TO BIDDERS

Questions concerning this TS&E Procurement shall be directed via email Steve Somwaru at ssomwaru@ceseng.com and copied to Greg Smolley at gsmolley@draws.com until noon on Wednesday, September 4, 2024, questions posted after that date and time will not be answered. An Addendum shall be posted by 2pm on Friday, September 6 2024. Bidders shall be responsible to check the websites for any Addendum.

OWNER Town of Ellington

Ms. Tiffany Pignataro, CPA, MBA, Finance

Officer, Treasurer

Ellington Town Hall, Finance Office

55 Main Street Ellington, CT 06029

OWNER'S REPRESENTATIVE Arcadis U.S., Inc.

Stephanie Gras, Associate Project Manager

213 Court Street, Suite 700 Middletown, CT 06547

PROJECT SITE LOCATION Windermere Elementary School

2 Abbott Road Ellington, CT 06029

CONSTRUCTION MANAGER O & G Building Group

112 Wall Street Torrington, CT 06790

ARCHITECT Drummey Rosane Anderson, Inc.

Gregory J. Smolley, AIA, APA, REFP, LEED

225 Oakland Road, Studio 205 South Windsor, CT 06074

ENGINEER Consulting Engineering Services

Mattew Couceiro 811 Middle Road Middletown, CT 06547

DRAWINGS

As listed in the index at the front of this document, prepared by Drummey Rosane Anderson Architects, Inc., and Consulting Engineering Services, Inc.

1. SPECIFICATIONS

The Specific Section(s) being quoted by Contractor and all other Specifications for the Project as prepared by the Architect or Engineer and included herein.

2. DEFINITIONS

Plan and Specification reference to "Contractor" means the Subcontractor performing work under that specific Specification Section.

The contracts, plans, specifications and this Invitation to Bid are considered to be complimentary and a single package. Information contained in one area or aspect is considered to be applicable throughout the entirety of the package. Conflicts between different portions of the package are to taken as requiring provision of the more expensive item or service, unless otherwise directed or clarified through an Addendum or Supplementary Instruction.

Specification reference to "provide" means to furnish and install unless otherwise noted.

3. <u>BID FORM</u>

Bid to be itemized by Category unless otherwise noted, in the format enclosed herein, with no escalation clauses allowed.

Bidders shall also fill in prices for each item on the attached Itemized Category Summary Sheets. Substitutions, "or Equals", if applicable shall be noted by Bidder. **Itemized Category Summary Sheets and the Bid Form must be submitted in duplicate.**

The Owner may elect to award a purchase order to other than the lowest bidder if it is considered to be in the best interest of the Owner. After review of all factors, terms and conditions, including price, the purchasing authority of the Town of Ellington reserves the right to reject any and all bids, or any part thereof, or waive defects in same, or accept any proposal deemed to be in the best interest of the Town of Ellington. Under no circumstances will the Owner be responsible for the cost of preparing any bid or proposal.

Pricing for Items purchased as additional to the original quantity will be provided at the lowest price offered within the bid, with no allowance for escalation or other costs.

4. BID DELIVERY AND DUE DATE

Quotations are to be furnished in a sealed envelope delivered to:

Town of Ellington

Ms. Tiffany Pignataro, CPA, MBA, Finance Officer, Treasurer Ellington Town Hall, Finance Office

55 Main Street

Ellington, CT 06029

with Bidder's name written on the outside of the envelope.

The envelope should also be marked "Windermere Elementary School, Project No. 22117.00, State Project No. 048-0060 RNV, TS&E Bid". The bid category(ies) must also be clearly designated on the envelope.

A. Bids are to be delivered no later than 2pm on Tuesday, September 10, 2024.

5. <u>TERMS OF PAYMENT</u>

For each Installation Phase the Contractor shall notify Owner, Architect, and Engineer two (2) days in advance of completion of the installation of their product. Contractor shall prepare and submit a room-by-room listing of items delivered and installed, a punchlist of items that have been provided but require adjustment or repair, as well as a listing of any items that have not yet been provided or installed which are part of the Installation Phase.

Owner, Architect, and Engineer (as appropriate) shall arrange to visit the project site to review installation and confirm completeness of the Contractor's Installation Listing, Punchlist, and missing item inventory.

Upon acceptance by the Owner of the Contractor's submitted lists and items that have been installed, the Contractor shall submit a payment requisition reflecting the items deemed complete and acceptable to the Owner.

Payment requisitions are reviewed and acted upon at the Building Committee's monthly meeting. Upon approval by the Building Committee payment will be made to the Contractor with thirty (30) days.

6. SCHEDULE

Contractor shall notify Owner ten (10) days in advance of delivery. Time is of the essence of the Contract. Completion of Work included in the Invitation in accordance with the Project Schedule is absolutely essential to the use and occupancy of the Project for the Owner's operations. Contractor is to include in its quotations all costs, extra crews, equipment, warehousing, etc. as required to meet schedule.

Equipment is to be delivered and installed:

Network switching and associated materials and equipment is to be delivered not later than October 10, 2024.

Phase I to be delivered and installed beginning November 25, 2024. All equipment of this phase must be delivered, installed and acceptable to the Owner not later than December 20, 2024.

Phase 2 is scheduled to be delivered and installed, beginning August 24, 2025 with completion not later than August 30, 2025. No storage, mobilization, transportation, or fees of any type will be acceptable to the Owner or Contractor or supplier accommodating this schedule.

Phase 3 is scheduled to be delivered and installed, beginning December 1, 2025 with completion not later than December 15, 2025. No storage, mobilization, transportation, or fees of any type will be acceptable to the Owner or Contractor or supplier accommodating this schedule.

The selected Vendor(s) shall set forth a detailed schedule, including deliveries and field installation as proposed to meet schedule. Such schedule shall be compatible with Construction Project Schedule. Contractor shall notify Owner ten (10) days in advance of delivery. As a major part of bid analysis, each Bidder may be asked to describe in detail how it would furnish and install its portion of the Project, schedule, manpower, deliveries, etc. This would be done shortly after receipt of bids.

If Contractor is behind schedule through fault of no one but itself, it shall add manpower and/or work overtime as required by **Owner** in order to regain schedule. No compensation for such overtime or added manpower will be made. If Contractor is required by **Owner** to work overtime for the convenience of the Project, such overtime premium costs will be compensated except that no overhead or profit will be allowed on the premium portion of these costs.

Questions concerning this TS&E Procurement shall be directed via email to Steve Somwaru at ssomwaru@ceseng.com and copied to Greg Smolley at gsmolley@draws.com until noon on Wednesday, September 4, 2024, questions posted after that date and time will not be answered. An Addendum shall be posted by 2pm on Friday, September 6, 2024. Bidders shall be responsible to check the websites for any Addendum.

7. COORDINATION AND JURISDICTION

The Contractor shall coordinate its work with that of other trades at all times.

8. PARKING AND ACCESS

Parking of workers', supervisors', or management employees' cars will be allowed on the site only in designated areas (except with the specific approval of **Construction Manager** and Owner in advance). Trucks will be allowed on the actual project site only to make deliveries of material, tools, or equipment and must then leave promptly unless being used as a tool of the trade.

No storage of material or product will be allowed on-site, whether in vehicles, trucks, trailers, storage containers, within the building or in any other manner, unless prior approval from the Construction Manager, Architect, or Owner's Representative has been received.

9. OTHER OPERATIONS

Vendor shall do all things necessary to keep noise, vibration and disruption to an absolute minimum.

All work to be done inside the **Windermere Elementary School** or in adjacent areas is to be coordinated and approved in advance with the Owner and **Construction Manager**. The operations of the school or construction of the project is not to be disrupted or affected.

10. CLEAN UP

At the end of each workday, clean up and removal of rubbish is the responsibility of the Contractor. The Contractor shall be responsible for proper disposal of all packing and crating materials off---site. Cooperation among Subcontractors is required and expected regarding cleaning of general litter. Buildings are to be kept clean at all times and failure of the Vendor in this regard will result in back charges from the Owner for cleaning. Vendor shall broom-clean area where they have been working.

11. <u>INSURANCE</u>

The Vendor shall purchase from and maintain in a company or companies lawfully authorized to do business in the jurisdiction where the project is located. This insurance will protect the Vendor and Owner from claims set forth below which may arise out of or result from the Vendor's operation and completed operations under the Contract:

- 1. Claims under workers' compensation, disability and similar employee benefits;
- 2. Claims for damages because of bodily injury, occupational sickness or death of the Vendor's employee;
- 3. Claims for damages because of bodily injury, occupational sickness or death other than Vendor's employee;
- 4. Claims for damages insured by usual personal injury liability;
- 5. Claims for damages, other than the work itself, because of destruction of property, including loss of that tangible property;
- 6. Claims for damages of bodily injury or death from use/ownership/maintenance of Motor Vehicle;
- Claims for bodily injury/death/property damage from the completed work;
- 8. Claims for product liability and complete work insurance.
- 9. Workers Compensation Insurance:
 - Per Connecticut Statute Commercial General Liability Insurance (1993 Form or equivalent)
 - \$1,000,000 per occurrence and/or aggregate
 - Include personal injury, bodily injury, property damage, product/completed operations, contractual liability
 - Delete all explosion, collapse and underground exclusions, if applicable
 - Per contract/project aggregate desirable
- 10. Motor Vehicle Liability Insurance:
 - \$1,000,000 per occurrence for bodily injury and property damage
 - Includes owned, non-owned and/or aggregate
 - Professional Liability Insurance (if applicable)
 - \$1,000,000 per claim and/or aggregate Umbrella/Excess Liability
 - \$1,000,000 per occurrence and/or aggregate

- 11. Note! All General Contractors are responsible for assuring that all of its subcontractors have similar coverage and limits.
 - The Town will rely upon the General Contractor to obtain these assurances as it cannot do so. General Requirements:
- 12. Insurer must have an A. M. Best rating of at least A-/VII and be licensed to do business in Connecticut
- 13. All policies must have a 30 day advance written notice requirement with any such notice to be sent to Tiffany Pignataro, Ellington Finance Officer, P.O. Box 187, Ellington, CT 06029
- 14. Certificates of Insurance must be presented at or before signing of any contract.
- 15. The Town of Ellington and such other town agency as may be appropriate shall be named as an additional insured on each policy.

The Contractor shall provide insurance coverage for portions of any equipment or items stored off---site after written approval of the Owner at the value established in the approval and also for portions of any equipment or items in transit.

12. PROTECTION AGAINST LOSS AND DAMAGE

The Vendor shall protect and secure its materials and equipment against loss, including theft. The Construction Manager will not accept any claim for alleged theft. Contractor will protect its work from damage until its work is complete for the entire project.

13. <u>COST BREAKDOWNS</u>

Owner will require certain cost breakdowns for budget purposes. Provide unit costs as outlined in the Schedule of Furniture Items. Also, Contractor's billing Schedule of Values shall be submitted to the Owner in advance of first requisition for approval.

14. SUBSTITUTIONS (OR EQUALS)

Bidders may submit proposals for substitutions. Substitutes will be considered. The specified items are the items the Owner desires to procure; therefore, the bidder will be responsible for proving the proposed substitution is equal or superior to specified item. Substitutes must be filled in for each item on the attached Furniture Specifications and Itemized Category Summary Sheets. If the Bidder proposes to provide substitutes, the Bidder shall submit a photograph, finish selection samples, and written specifications and warranties of the proposed substitution with the Bid. If requested the bidder shall provide samples.

15. NO BID ITEMS

If a Contractor fails to bid on all items listed in a category of the Itemized Category Summary Sheets, his bid may be disqualified. Contractors may bid on one category, or on more than one category (combined bid), but partial bids in a category may be rejected.

16. SALES TAX

This project is exempt from Connecticut Sales Tax.

17. REQUIREMENTS/ADDITIONAL INSTRUCTIONS

Items purchased through open bids will be procured through Town Purchase Orders and will be subject to all contractual requirements of said Purchase Orders.

18. PRICING HOLD

Owner reserves the right to purchase additional items at the bid cost with no increase to freight or escalation of cost up to 12 months after final payment is sent to Vendor.

SECTION 11 70 00

TECHNOLOGY

EQUIPMENT

PART 1 GENERAL

1.1 DESCRIPTION

A. Where items are repeated in other Sections of the Specifications, it is merely intended to qualify or to call particular attention to them. It is not intended that any other parts of the specifications shall be assumed to be omitted if not repeated therein. This Section applies equally and specifically to all Contractors supplying labor and/or equipment and/or materials. Where conflicts exist between the drawings and the specifications or between this section of the specifications and other sections, the more stringent or higher cost option shall apply.

1.2 INTENT

- A. This contract is for all labor, materials and equipment required for installation. The system shall be complete and finished in all respects, tested and ready for operation. Work shall include calibration of equipment with factory settings. All materials, equipment and apparatus shall be new and of first-class quality.
- B. Any apparatus, appliance, material or work not shown on drawings but mentioned in the specifications, or vice versa, or any incidental accessories necessary to make the work complete and perfect in all respects and ready for operation as determined by good trade practice even if not particularly specified, shall be furnished, delivered and installed under their respective Divisions without any additional expense to the Owner.
- C. Minor details not usually shown or specified but necessary for proper installation and operation shall be included in the work as though they were hereinafter shown or specified.
- D. Work under each Section shall include giving written notice to the Owner and Engineer of any materials or apparatus believed inadequate or unsuitable; in violation of laws, ordinances, rules or regulations of authorities having jurisdiction; and any necessary items of work omitted. In the absence of such written notice, it is mutually agreed that work under each Section has included the cost of all required items for the accepted, satisfactory functioning of the entire system without extra compensation.
- E. Wherever a particular piece of equipment, device or material is specifically

indicated on the Drawings by model number, type, series or other means, that specification shall take precedence over equipment or materials specified herein. For example: If a particular switch is specified on the Drawings, its specification takes precedence over switch specified herein.

1.3 DEFINITIONS

- A. Word "Subcontractor" means specifically the subcontractor working under this Division. Other Contractors are specifically designated "Plumbing Subcontractor", "General Contractor" and so on. Note: Take care to ascertain limits of responsibility for connecting equipment which requires connections by two or more trades.
- B. Word "install" shall mean set in place complete with all mounting facilities and connections as necessary ready for normal use or service.
- C. Words "furnish" or "supply" shall mean purchase, deliver to, and off-load at the job site, all ready to be installed including where appropriate all necessary interim storage and protection.
- D. Word "provide" shall mean furnish (or supply) and install as necessary.
- E. Word "finished" refers to all rooms and areas scheduled to be painted in Room Finish Schedule on the drawings. All rooms and areas not covered in Schedule, including underground tunnels and areas above ceilings shall be considered not finished, unless otherwise noted.
 - F. No Exceptions Taken reviewed and determined to be in general conformance with contract documents.
 - G. Words "approved equal" mean any product which in the opinion of the Engineer is equal in quality, arrangement, appearance, and performance to the product specified.
 - H. Word "wiring" shall mean cable assembly, raceway, conductors, fittings and any other necessary accessories to make a complete wiring system. Word "product" shall mean any item of equipment, material, fixture, apparatus, appliance or accessory installed under this Division.
 - I. Substitutions: Requests for changes in products, materials, equipment, and methods of construction required by Contract Documents proposed by the Contractor after award of the Contract are considered requests for "substitutions."
 - J. Indicated: The term "indicated" refers to graphic representations, notes, or schedules on the Drawings, other paragraphs or schedules in the Specifications, and similar requirements in the Contract Documents. Where terms such as "shown," "noted," "scheduled," and "specified" are used, it is to help the reader locate the reference: no limitation on location is intended.

- K. Directed: Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean "directed by the Engineer," "requested by the Engineer," and similar phrases.
- L. Approve: The term "approved," where used in conjunction with the Engineer's action on the Contractor's submittals, applications, and requests, is limited to the Engineer's duties and responsibilities as stated in General and Supplementary Conditions.
- M. Regulation: The term "Regulations" includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.
- N. Remove: The term "remove" means "to disconnect from its present position, remove from the premises and to dispose of in a legal manner."
- O. Standard Product Warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.
- P. Special Warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

1.4 DRAWINGS

- A. Drawings are diagrammatic and indicate the general arrangement of systems and work included in the Contract. Consult the Architectural Drawings and Details for exact location of fixtures and equipment; where same are not definitely located, obtain this information from the Architect. (Do not scale the drawings)
- B. Work under each Section shall closely follow Drawings in layout of work; check Drawings of other Divisions to verify spaces in which work will be installed. Maintain maximum headroom; where space conditions appear inadequate, Owner and Engineer shall be notified before proceeding with installations.
- C. The Owner may, without extra charge, make reasonable modifications in the layout as needed to prevent conflict with work of other trades and/or for proper execution of the work.
- D. Where variances occur between the Drawings and Specifications or within either of the Documents, the item or arrangement of better quality, higher rating, or higher value shall be included in the Contract price. The Owner and Engineer shall decide on the item and the manner in which the work shall be installed.

1.5 SURVEYS AND MEASUREMENTS

- A. Before submitting his Bid, the Contractors shall visit the site and become thoroughly familiar with all existing conditions under which his work will be installed. This Contract includes all modifications of existing systems required for the installation of new equipment. This Contract includes all necessary offsets, transitions and modifications required to install all new equipment in existing spaces. All new and existing equipment and systems shall be fully operational under this Contract before the job is considered complete. The Contractors shall be held responsible for any assumptions he makes, any omissions or errors he makes as a result of his failure to become fully familiar with the existing conditions at the site and the Contract Documents.
- B. The Contractor shall base all measurements, both horizontal and vertical, from established bench marks. All work shall agree with these established lines and levels. Verify all measurements at the site and check the correctness of same as related to the work.
- C. Should the Contractor discover any discrepancies between actual measurements and those indicated which prevent following good practice or which interfere with the intent of the Drawings and Specifications, the Engineer will be notified and work will not proceed until instructions from the Engineer are received.

1.6 PERMITS AND FEES

A. The Contractor shall give all necessary notices, obtain all permits; and pay all Government and State sales taxes and fees where applicable, and other costs, file all necessary Drawings, prepare all documents and obtain all necessary approvals of all

Governmental and State departments having jurisdiction, obtain all required certificates of inspection for his work, and deliver a copy to the Owner and Engineer before request for acceptance and final payment for the work.

1.7 TERMS OF PAYMENT

A. Contractor shall notify Owner ten (10) days in advance of delivery. A five percent (5%) retainer will be withheld by Owner until fifty percent (50%) of Contractor's work is complete and billed at which time (if Work is satisfactory to Owner and Architect and with the consent of Contractor's surety, if any) no further retainer will be withheld on subsequent bills; the intent being to withhold five percent (5%) of the total Contract price, as amended, at the time of completion of Contractor's work. Retainer will be withheld until occupancy and acceptance of building and satisfactory completion of Contractor's work including all punch list items and submissions of all required record documents and guarantees. In certain cases, Owner may consider early release or reduction of retainer upon written request of Contractor and if Consent of Surety is provided.

1.8 SCHEDULE

A. Time is of the essence of the Contract. Completion of Work included in the Invitation in accordance with the Project Schedule is absolutely essential to the TECHNOLOGY EQUIPMENT

use and occupancy of the Project for the Owner's operations. Contractor is to include in its quotations all costs, extra crews, equipment, warehousing, etc. as required to meet schedule.

B. Technology equipment is to be delivered and installed as delineated in the Information to Bidders Section of this document.

- C. The selected Contractor(s) shall set forth a detailed schedule, including deliveries and field installation as proposed to meet schedule. Such schedule shall be compatible with Construction Project Schedule. Contractor shall notify Owner ten (10) days in advance of delivery. As a major part of bid analysis, each Bidder may be asked to describe in detail how it would furnish and install its portion of the Project, schedule, manpower, deliveries, etc. This would be done shortly after receipt of bids.
- D. If Contractor is behind schedule through fault of no one but itself, it shall add manpower and/or work overtime as required by Construction Manager in order to regain schedule. No compensation for such overtime or added manpower will be made. If Contractor is required by Construction Manager to work overtime for the convenience of the Project, such overtime premium costs will be compensated except that no overhead or profit will be allowed on the premium portion of these costs. Note that Contractor will be required to purchase and submit for approval all critical materials and equipment immediately and that at some time during the schedule subcontractor may be required to perform work out of normal sequence.
- E. Subcontractors whose work normally is coordinated with others should make themselves aware of others' work scope.

1.9 SITE VISIT

A. The Contractor acknowledges that prior to furnishing a proposal for the Work, it has visited the site and is familiar with conditions at the site and in the locality where the Work is to be performed which could affect its work. Selected contractor may be required to attend a pre-installation meeting.

1.10 SCAFFOLDING, STAGING AND HOISTING

- A. Contractor shall obtain required permits for, and provide scaffolds, staging and other similar raised platforms required to access and execute the Work of this trade.
 - 1. Scaffolding and staging required for use by the Contractor shall be furnished, erected, maintained in a safe condition, and dismantled when no longer required, by the trade requiring such scaffolding and staging.
 - 2. Enclose all exterior scaffolding or staging outside of the construction fence with 8 foot height plywood enclosure at the end of each work day to prohibit unauthorized access to the scaffolding or staging.
 - 3. Portable ladders and mobile platforms of all required heights shall also be provided.
- B. Contractor shall obtain required permits for, and provide all hoisting machinery, rigging devices, crane services, and lift equipment required to access and execute the work of this trade.

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C. All hoisting machinery, rigging devices, crane services, and lift equipment shall be furnished, installed, operated, maintained in safe conditions, and dismantled when no longer required, by the trade requiring such equipment or service.

1.11 CLEAN UP

A. At the end of each work day, clean up and removal of rubbish is the responsibility of the Contractor. The Contractor shall be responsible for proper disposal of all packing and crating materials off-site. Cooperation among Subcontractors is required and expected regarding cleaning of general litter. Buildings are to be kept clean at all times and failure of the Vendor in this regard will result in back charges from the Construction Manager for cleaning. Vendor shall broom clean area where they have been working.

1.12 CUTTING AND PATCHING

A. The Contractor shall perform all cutting and patching under jurisdiction of its trade(s). Also, if cutting and patching are required as a result of Contractor's failure in the performance of the Work, the Contractor shall be responsible for the corrective cutting and patching at no cost to the Construction Manager.

1.13 PROTECTION AGAINST LOSS AND DAMAGE

A. The Contractor shall protect and secure its materials and equipment against loss, including theft. The Construction Manager will not accept any claim for alleged theft. Contractor will protect its work from damage until its work is complete for the entire project.

1.14 SALES TAX

A. This project is exempt from Connecticut Sales Tax.

1.15 OVERHEAD AND PROFIT

A. The maximum allowable overhead and profit percentage for an approved Change Order Proposal is 15%.

1.16 SUBMITTALS

A. Product Data: Provide manufacturer's standard catalog pages and data sheets for all products specified herein. Include detailed information on equipment construction, dimensions, ratings, finishes, mounting requirements, listings, service conditions, performance, installed accessories, and compatibility; include model number nomenclature clearly marked with all proposed features.

- B. Submittals shall include a complete "Bill of Material". This shall include all components required to complete an operational system. Each item shall include the following:
 - 1. Quantity of device(s)
 - 2. Manufacturer's current model number
 - Manufacturer's name
 - 4. Item description
 - 5. Accessories required for a complete and operational installation
- C. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.
 - Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination. The Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- D. Processing: Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for resubmittals.
 - Allow two weeks for initial review. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. The Engineer will promptly advise the Contractor when a submittal being processed must be delayed for coordination.
 - 2. If an intermediate submittal is necessary, process the same as the initial submittal.
 - 3. Allow two weeks for reprocessing each submittal.
 - 4. No extension of Contract Time will be authorized because of failure to transmit submittals to the Engineer sufficiently in advance of the Work to permit processing.

- E. Submittal Preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.
 - 1. Include the following information on the label for processing and recording action taken.
 - a. Project name.
 - b. Date.
 - Name and address of Engineer.
 - Name and address of Contractor.
 - e. Name and address of subcontractor.
 - f. Name and address of supplier.
 - g. Name of manufacturer.
 - h. Number and title of appropriate Specification Section.
 - i. Drawing number and detail references, as appropriate.
 - F. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from Contractor to Engineer using a transmittal form. Submittals received from sources other than the Contractor will be returned without action. On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.
 - G. Except for submittals for record, information or similar purposes, where action and return is required or requested, the Engineer will review each submittal, mark to indicate action taken, and return promptly. Compliance with specified characteristics is the Contractor's responsibility.
 - H. Action Stamp: The Engineer will stamp each submittal with a uniform, self-explanatory action stamp. The stamp will be appropriately marked, to indicate the action taken.

1.17 WORKMANSHIP

- A. Service Support: The equipment items shall be supported by service organizations which are reasonably convenient to the equipment installation in order to render satisfactory service to the equipment on a regular and emergency basis during the warranty period of the contract.
- B. Modification of References: In each of the publications referred to herein, consider the advisory provisions to be mandatory, as though the word, "shall" had been substituted for "should" wherever it appears.

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- C. The Contractor shall furnish the services of an experienced superintendent who shall be constantly in charge of the installation of the work together with all skilled workmen, journeymen, electricians, helpers and laborers required to unload, transfer, erect, connect, adjust, start, operate and test each system.
- D. Unless otherwise specifically indicated on the Drawings or Specifications, all equipment and materials shall be installed with the acceptance of the Engineer and in accordance with the recommendations of the manufacturer. This includes the performance of such tests as the manufacturer recommends.
- E. All labor for installation of technology equipment systems shall be performed by experienced, skilled tradesmen under the supervision of a licensed journeyman foreman. All work shall be of a quality consistent with good trade practice and shall be installed in a neat, workmanlike manner. The Engineer reserves the right to reject any work which, in his opinion, has been installed in a substandard, dangerous or unserviceable manner. The Contractor shall replace said work in a satisfactory manner at no extra cost to the Owner.

1.18 PROTECTION OF MATERIALS AND EQUIPMENT

- A. Work under each Section shall include protecting the work and material of all other Sections from damage by work or workmen and shall include making good all damage thus caused.
- B. The Contractor shall be responsible for work and equipment until the facility has been accepted by the Owner. Protect work against theft, injury or damage and carefully store material and equipment received on site which is not immediately installed. Close open ends of work with temporary covers or plugs during construction to prevent entry of foreign material.
- C. Work under each Section includes receiving, unloading, uncrating, storing, protecting, setting in place and completely connecting equipment supplied under each Section. Work under each Section shall also include exercising special care in handling and protecting equipment and fixtures, and shall include the cost of replacing any of the equipment and fixtures which are missing or damaged.
- D. Equipment and material stored on the job site shall be protected from the weather, vehicles, dirt and/or damage by workmen or machinery. Insure that all technology or absorbent equipment or material is protected from moisture during storage.

1.19 ADJUSTING AND TESTING

A. After all the equipment and accessories to be furnished are in place, they shall be put in final adjustment and subjected to such operating tests so as to assure the Engineer that they are in proper adjustment and in satisfactory, permanent operating condition.

B. Where requested by the Engineer or specified in the contract documents, a factory- trained service representative shall inspect the installation and assist in the initial startup and adjustment to the equipment. The period of these services shall be for such time as necessary to secure proper installation and adjustments. After the equipment is placed in permanent operation, the service representative shall supervise the initial operation of the equipment and instruct the personnel responsible for operation and maintenance of the equipment. The service representative shall notify the Contractor in writing that the equipment was installed according to manufacturer's recommendations and is operating as intended by the manufacturer. Factory start-up reports shall be included in the operation and maintenance manuals under the appropriate equipment section.

1.20 OPERATING AND MAINTENANCE

- A. Upon completion of all work and tests, the Contractor shall furnish the necessary skilled labor and helpers for operating his system and equipment for a period specified under each applicable Section of this Division. During this period, he shall fully instruct the Owner or the Owner's representative in the operation, adjustment and maintenance of all equipment furnished. The Contractor shall give at least seven (7) day notice to the Owner and the Engineer in advance of this period.
- B. The Contractor shall include the maintenance schedule for the principal items of equipment furnished under this Division.
- C. The Contractor shall physically demonstrate procedures for all routine maintenance of all equipment furnished under each respective Section to assure accessibility to all devices.
- D. An authorized manufacturer's representative shall attest in writing that the equipment has been properly installed prior to startup of any major equipment. At a minimum, the following equipment will require this inspection: emergency generator, fire alarm system, paging systems, etc. These letters will be bound into the operating and maintenance books.
- E. Refer to individual trade Sections for any other particular requirements related to operating instructions.
- F. Demonstration shall be recorded on USB flash drive turned over to the Owner.

1.21 OPERATING AND MAINTENANCE MANUALS

- A. Prepare operating and maintenance manuals in accordance with the requirements of Division 1 and as follows.
- B. The Contractor shall prepare **TWO (2)** copies of a complete maintenance and operating instructions manual, bound in booklet form. Organize operating and maintenance data into suitable sets of manageable size. Bind properly indexed data in individual heavy- duty, 3-ring, vinyl-covered binders, with pocket folders

each binder.			

for folded sheet information. Mark appropriate identification on front and spine of

TECHNOLOGY EQUIPMENT

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- C. The Contractor shall prepare <u>FIVE (5)</u> digital copies of a complete maintenance and operating instructions manual in PDF form, stored on a portable USB- drive. Each section shall be a separate PDF file on the drive, labeled in an organized and easily identifiable manner.
- D. Manual shall include the following:
 - 1. Description of function, normal operating characteristics and limitations, performance curves, engineering data and tests, and complete nomenclature and commercial numbers of replacement parts.
 - 2. Manufacturer's printed operating procedures to include start-up, break-in, and routine and normal operating instructions; regulation, control, stopping, shutdown, and emergency instructions; and summer and winter operating instructions.
 - 3. Maintenance procedures for routine preventative maintenance and troubleshooting; disassembly, repair, and reassembly; aligning and adjusting instructions.
 - 4. Spare parts list.
 - Copies of warranties.
 - 6. Wiring diagrams.
 - 7. Recommended "turn around" cycles.
 - 8. Inspection procedures.
 - 9. Shop Drawings and Product Data.
- E. Include in the manual, a tabulated equipment schedule for all equipment. Schedule shall include pertinent data such as: make, model number, serial number, voltage, normal operating current, belt size, filter quantities and sizes, bearing number, etc. Schedule shall include maintenance to be done and frequency.
- F. Maintenance and instruction manuals shall be submitted to the Owner at the same time as the seven (7) day notice is given prior to the instruction period.

1.22 ACCEPTANCES

- A. The equipment, materials, workmanship, design and arrangement of all work installed under this Section shall be subject to the review of the Engineer.
- B. Within 30 days after the awarding of a Contract, the Contractor shall submit to the Engineer, for review, a list of manufacturers of equipment proposed for the work under this Section. The intent to use the exact makes specified does not relieve the Contractor of the responsibility of submitting such a list.
- C. If extensive or unacceptable delivery time is expected on a particular item of TECHNOLOGY EQUIPMENT

equipment specified, the Contractor shall notify the Owner and Engineer, in writing, within 30 days of the awarding of the Contract. In such instances, deviations may be made pending acceptance by the Engineer or the Owner's representative.

- D. Where any specific material, process or method of construction or manufactured article is specified by reference to the catalog number of a manufacturer, the Specifications are to be used as a guide and are not intended to take precedence over the basic duty and performance specified or noted on the Drawings. In all cases, the Contractor shall verify the duty specified with the specific characteristics of the equipment offered for review. Equipment characteristics are to be used as mandatory requirements where the Contractor proposes to use an acceptable equivalent.
- E. If material or equipment is installed before it is reviewed and/or approved, the Contractor shall be liable for its removal and replacement at no extra charge to the Owner if, in the opinion of the Engineer, the material or equipment does not meet the intent of, or standard of quality implied by, the Drawings and Specifications.
- F. Failure on the part of the Engineer to reject shop drawings or to reject work in progress shall not be interpreted as acceptance of work not in conformance with the Drawings and/or Specifications. Work not in conformance with the Drawings and/or Specifications shall be corrected whenever it is discovered.

1.23 WARRANTIES AND BONDS

- A. Warranty durations have been defined below and shall be provided for the entire building and shall commence on a single date for all the building systems which shall be the Owner determined date of Substantial Completion. Manufacturer's warranties shall not start until the date of Substantial Completion. The contractor shall include in their base bid any additional cost for extending manufacturer's warranties until the date of Substantial Completion. In general, the warranties shall not be less than the following:
 - Twelve (12) months minimum industry standard on all systems specified within this Section, unless noted otherwise on individual Item Data Sheets.
- B. The following general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturers standard warranties on products and special warranties are to be included:
 - 1. General close-out requirements included in Section "Project Close-out."
 - Specific requirements for warranties for the Work and products and installation that are specified to be warranted, are included in the individual Sections of this Division.
 - 3. Certifications and other commitments and agreements for continuing

services to Owner are specified elsewhere in the Contract Documents.

C. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

D. Separate Prime Contracts: Each prime Contractor is responsible for warranties related to its own Contract.

1.24 WARRANTY REQUIREMENTS

- A. Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.
- B. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- D. Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, right and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, orremedies.
- E. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.
- F. The Owner reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.
- G. Submit written warranties to the Engineer prior to the date certified for Substantial Completion. If the Engineer's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Engineer.
- H. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Engineer within fifteen days of completion of that designated portion of the Work.
- I. When a special warranty is required to be executed by the Contractor, or the Contractor and a subcontractor, supplier or manufacturer, prepare a written TECHNOLOGY EQUIPMENT

document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner through the Engineer for approval prior to final execution.

- J. Form of Submittal: At Final Completion compile two copies of each required warranty and bond properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Item Data Sheets.
- K. Include warranty documentation in PDF form within the digital operating and maintenance manuals. Group each warranty document into the associated PDF for the warrantied piece of equipment or system.

1.25 GUARANTEES

- A. The Contractor shall guarantee all material and workmanship under these Specifications and the Contract for a period of one (1) year from the date of final acceptance by Owner. During this guarantee period, all defects developing through faulty equipment, materials or workmanship shall be corrected or replaced immediately by this Contractor without expense to the Owner. Such repairs or replacements shall be made to the Engineers satisfaction.
- B. Contractor shall provide name, address, and phone number of all contractors and subcontractors and associated equipment they provided.

1.26 PROJECT CLOSE-OUT

- A. Contractor shall submit annual maintenance proposal to the Architect/Engineer for review and approval as part of the close out documents.
- B. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications and similar documents.
- C. Deliver tools, spare parts, extra stock, and similaritems.
- D. Complete start-up testing of systems, and instruction of the Owner's operating and maintenance personnel. Discontinue or change over and remove temporary facilities from the site, along with construction tools, mock-ups, and similar elements.
- E. Complete final clean up.
- F. Inspection Procedures: On receipt of a request for inspection, the Engineer will either proceed with inspection or advise the Contractor of unfilled requirements. The Engineer will prepare the Certificate of Substantial Completion following inspection, or advise the Contractor of construction that must be completed or corrected before the certificate will be issued.
 - 1. The Engineer will repeat inspection when requested and assured that the Work has been substantially completed.

2. Results of the completed inspection will form the basis of requirements for final acceptance.

1.27 DEMONSTRATION ANDTRAINING

A. Training of Owner Personnel:

- 1. Contractor shall be responsible for training coordination and scheduling and ultimately to ensure that training is completed.
- 2. Training shall be of sufficient length to allow the trained staff to train their peers and to demonstrate the training sessions were effective.
- Training as required throughout these specifications shall be videotaped.
 Hire the services of a Professional Videographer. Videotaping via handheld devices is not acceptable.
- 4. Duration of Training: Electrical Contractor shall provide training on each piece of equipment according to the following schedule:

System	No. of People	Hours/Per	Media to be Provided	Item(s) – Refer to attached equipment spreadsheet
Wireless Access	Min. 1	Min. 4	Manual and Video	AP-1A, AP-1B, AP-1C, AP-1D, AP-1E, AP-1F, AP-2A, AP-2B AP-3
Audio Video – Classroom and Conference Rooms	Min. 2	Min. 8	Manual and Video	AV-1A, AV-1B, AV-2A, AV-2B, AV-3A, AV-3B, AV-3C, AV-3D, AV-3E, AV-4A, AC-4B, AV-4C, AV-4D, AV-4E, AV-4F, AV-5, AV-6, AV-7A, AV-7B, AV-7C, AV-8A, AV-8B, PJ-1, PJ-2,
Workstations	Min. 1	Min. 4	Manual and Video	CB-1, CH-1, IP-1A, IP-1B, PC-1A, PC-1B, PC-1C, PC-1D, PC-1E, PC-2A, PC-2B, PC-2C, PC-3A, PC-3B, PC-3C, PC-3D, PC-4A, PC-4B, PC-4C
Network Equipment	Min. 1	Min. 8	Manual and Video	LAN-1, LAN-2, LAN-3, LAN-4, LAN-5, LAN-6, LAN-7, LAN-8, LAN-9, LAN-10, UPS-1, UPS-2
Phone System	Min. 2	Min. 8	Manual and Video	PH-1, PH-2, PH-3, PH-4, PH-5, , VO-1, VO-2, VO-3, VO-4, VO-5, VO-6, VO-7, VO-8
PRINTERS	Min. 2	Min. 4	Manual and Video	PR-1, PR-2, PR-3
Server	Min. 1	Min. 8	Manual and Video	SVR-1

B. Training shall be provided for fundamental preventative maintenance, service, cleaning, and troubleshooting. All training materials (agenda, hand-outs, etc.) shall be submitted to the Owner for review and approval at least two weeks in advance of scheduled training. Training materials shall be digital (x5 copies via thumb drive) and hard copy (x2 copies) format.

PART 2 PRODUCTS

2.1 See attached technology equipment bid forms.

PART 3 EXECUTION

3.1 See attached Construction Dates Plan.

END OF SECTION

CURRENT PREVAILING WAGE RATES

IN COMPLIANCE WITH SECTION 31-53 OF THE CONNECTICUT GENERAL STATUTES (C.G.S.)

SHALL BE INSERTED

PRIOR TO RELEASE FOR BIDDING

ANNUAL ADJUSTMENT OF WAGE RATES

WILL BE AS REQUIRED

PER C.G.S. SECTION 31-55a

WINDERMERE ELEMENTARY SCHOOL PRODUCT LIST FOR BID-PHONES

ITEM ID	MANUFACTURER	DESCRIPTION	MODEL NUMBER	Quantity	Unit Price	Total Price
PH-1	Avaya	Desk Phone for Offices/Classrooms	IX J159	89		
PH-2	Avaya	Wall Mount	700513631	89		
PH-3	Avaya	Conference Room Desk Phone	B159	1		
PH-4	Avaya	Desk Phone for Admin Use	J179	24		
PH-5	Avaya	Licenses		100		
PH-6		Phone System Install Service	INSTALL	1		
		UniFi Security Gateway - (2) Gigabit Combination RJ45/SFP Ports - INCLUDED AS PART OF VOICE SYSTEM OVERLAY SERVICES				
VO-1	Ubiquiti	(NON-PERPETUAL LICENSE)	USG-PRO-4	11		
		UniFi 48-Port Voice System Switch - (40) GbE, 802.3at PoE+ RJ45 ports - (8) GbE, 802.3bt PoE++ RJ45 ports - (4) 10G SFP+ ports (1) USP RPS DC input - INCLUDED AS PART OF VOICE SYSTEM OVERLAY SERVICES (NON-				
VO-2	Ubiquiti	PERPETUAL LICENSE)	USW-PRO-48-POE	4		
VO 2		UniFi 16-Port Voice System Switch - (8) GbE, 802.3at PoE+ RJ45 ports - (8) GbE RJ45 ports - (2) 1G SFP ports - INCLUDED AS PART OF VOICE SYSTEM OVERLAY SERVICES (NON-	LICW 46 DOE			
VO-3	Ubiquiti	PERPETUAL LICENSE)	USW-16-POE	2		
VO-4	INSTALL	Overhead Paging Zone - Part of newVoice IP Unified Communications as a Service offering. (NON-PERPETUAL LICENSE)	UCAAS PRO	2		

ITEM ID	MANUFACTURER	DESCRIPTION	MODEL NUMBER	Quantity	Unit Price	Total Price
		Enhanced 911 Direct Inward Dialing - Part of				
		newVoice IP Unified Communications as a				
VO-5	INSTALL		UCAAS PRO	1		
VO 0	INTOTALL	control one migr (troit i Erii Eriot L'Erio Erio Erio Erio Erio Erio Erio Erio	00/4/01/10	1		
		Premium Seat with Unlimited Calling, Online				
		Management, Call Manager, Intercom, Call				
		Park, Group Participation, Line State				
		Monitoring, Video Collarboration Support,				
		Outlook Integration and other Premium				
		Features - Part of newVoice IP Unified				
		Communications as a Service offering. (NON-				
VO-6	INSTALL	PERPETUAL LICENSE)	UCAAS PRO	100		
		Standard Voicemail Feature - Part of newVoice				
		IP Unified Communications as a Service				
VO-7	INSTALL	offering. (NON-PERPETUAL LICENSE)	UCAAS PRO	100		
		Enhanced 911 Direct Inward Dialing (Per Seat				
		Service) - Part of newVoice IP Unified				
		Communications as a Service offering. (NON-				
VO-8	INSTALL	PERPETUAL LICENSE)	UCAAS PRO	100		

WINDERMERE ELEMENTARY SCHOOL PRODUCT LIST FOR BID-NETWORK EQUIPMENT

			T		1	
ITEM ID	MANUFACTURER	DESCRIPTION	MODEL NUMBER	Quantity	Unit Price	Total Price
LAN-1	Hewlett Packard / Aruba	Transceiver Module (Single Mode)	J4859D	1	\$ -	
LAN-2	Hewlett Packard / Aruba	Transceiver Module (Multi Mode)	J9150D	15	\$ -	
LAN-3	Hewlett Packard	Gigabit Switch Chassis - 6-Bay	J9821A	2	\$ -	
LAN-4	Hewlett Packard	Gigabit Switch Chassis - 12-Bay	J9822A	5	\$ -	
LAN-5	Hewlett Packard / Aruba	Gigabit Switch Power Supply	J9829A#ABA	16	\$ -	
LAN-6	Hewlett Packard	Expansion Module 10/100/1000BT	J9986A	34	\$ -	
LAN-7	Hewlett Packard	Expansion Module SFP+	J9990A	6	\$ -	
LAN-8	Hewlett Packard	48-port Managed Switch	JL256A#ABA	4	\$ -	
LAN-9	Hewlett Packard	Direct Attach Copper Cable	J9281D	2	\$ -	
LAN-10	APC	Netbotz Rack Monitor	NBRK0750	4	\$ -	
UPS-1	APC	UPS Unit (Rack Mounted)	SMT2200RM2U	8	\$ -	
UPS-2	APC	UPS Network Card	AP9640	8	\$ -	
AP-1A	HP/Aruba	Wireless Access Point	R2H29A	91	\$ -	
AP-1B	HP/Aruba	AP Mounting Bracket	R3J16A	7	\$ -	
AP-1C	HP/Aruba	AP Installation	INSTALL	91		
AP-1D	HP/Aruba	AP License	JW619AAE	91	\$ -	
AP-1E	HP/Aruba	AP Airwave Remote Management	JW605AAE	91	\$ -	
AP-1F	Patch Cord	3ft	27191	91		
AP-2A	HP/Aruba	Wireless Access Point (High Output)	Q9H63A	6	\$ -	
AP-2B	HP/Aruba	AP Mounting Bracket 10 Pack	Q9G69A	9	\$ -	
AP-2C	HP/Aruba	AP Installation	INSTALL	6		
AP-2D	HP/Aruba	AP License	JW619AAE	6	\$ -	
AP-2E	HP/Aruba	AP Airwave Remote Management	JW605AAE	6	\$ -	
AP-2F	Patch Cord	3ft	27191	6		
AP-3	HP/Aruba	Wireless Access Controller	JW744A	1	\$ -	
AP-4	Oberon	AP Indoor Enclosure	1015-C	6	\$ -	
AP-5	Oberon	AP Outdoor Enclosure	1024-00	5	\$ -	
AP-6	Oberon	AP Pole Mounting Kit	39-POLE	1	\$ -	
SVR-1	Hewlett Packard / Aruba	Proliant Gen10 Server Build	41223766	1	\$ -	

WINDERMERE ELEMENTARY SCHOOL PRODUCT LIST FOR BID-DISPLAYS-AV

ITEM ID	MANUFACTURER	DESCRIPTION	MODEL NUMBER	Quantity	Unit Price	Total Price
AV-1A	View Sonic	Interactive Display - 86" + TV Mount + WiFi	IFP8650	50		
		Certified installation for classroom/ 86" interactive				
		touchscreen displays. Installation shall include, but not				
		be limited to license, mounting, cable connections,				
		integration with Bose & Extron A/V system (where				
		applicable), programming, presets, setup, fine tuning,				
AV-1B	View Sonic	and Owner training and demonstrations.	INSTALL	50		
AV-1C	Chief	WALL BOX	PAC115	50		
AV-2A	View Sonic	Interactive Display - 65" Display	IFP6550	10		
		Certified installation for classroom/ 65" interactive				
		touchscreen displays. Installation shall include, but not				
		be limited to license, mounting, cable connections,				
		integration with Bose & Extron A/V system (where				
		applicable), programming, presets, setup, fine tuning,				
AV-2B	View Sonic	and Owner training and demonstrations.	INSTALL	10		
AV-2C	Chief	WALL BOX	PAC115	10		
AV-3A	Samsung	55" Digital Signage Display	HG55NJ690YF	5		
AV-3B	Peerless	MOUNTING BRACKET FOR DISPLAYS	SF650P	5		
		ViewSonic NMP760 Chromebox - Celeron 5205U 1.9 GHz	-			
AV-3C	Viewsonic	8 GB - SSD 64 GB	NMP760	5		
		Google Chrome™ Management Console License for				
		Educational Use. Access to Google's web-managed				
AV-3D	Google	system for Chrome OS™. Perpetual License.	CROSSWDISGRT	5		
		Certified installation for digital signage displays.				
		Installation shall include, but not be limited to, mounting,				
		cable connections, integration with building network,				
		programming, presets, setup, fine tuning, and Owner				
AV-3E	INSTALL	training and demonstrations.	INSTALL	5		

ITEM ID	MANUFACTURER	DESCRIPTION	MODEL NUMBER	Quantity	Unit Price	Total Price
AV-4A	Hewlett Packard	HP Z4 G5 Tower Workstation - Windows 11 Pro - Intel® Xeon® processor 3.1ghz; 32GB Memory, 512GB Solid State Drive, RTX A4000 16GB Graphics, USB Wired Keyboard, USB Wired Mouse, SD Card Reader.	805L9UT#ABA	1		
		Wireless-Lavalier-Microphone-System with 2 Transmitter/1 Receiver Kit, 50m Transmission Range Real- time Monitoring for Camera DSLR Camcorder Recorder				
AV-4B	Synco	PC 2-Pack Dimmable 5600K USB LED Video Light with	G2(A2)	1		
AV-4D	Neewer	Adjustable Tripod Stand and Color Filters for Tabletop/Low-Angle Shooting	10095736	1		
AV-4E	Blackmagic	ATEM Production Studio 4K Live Switche Input/Output up to 1080p60 10-Bit 4:2:2	SWATEMPSW04K	1		
		81" Tripod, Aluminum Camera Tripod for DSLR, Compact Travel Tripod Monopod 360° Panorama Ball Head with 2				
AV-4F	Jolican	Quick Release Plates Lenovo Slim DVD Burner DB65 - DVD±RW (±R DL) drive -	H80-BLACK 888015471	50		
AV-6	Lenovo	USB 2.0 - external	000010471			
AL-1	HearLink Plus	HearLink PLUS Bluetooth Assistive Listening Audio and TV Transmitter	BT5805A	8		
AV-8A	Samsung	70" 4k LED Display	QN70Q60DAFXZA	1		
AV-8B	Samsung	SmartMount Universal Flat Wall Mount for 39" to 75" Digital Signage Displays	SF650P	1		
PJ-1	Epson	3LCD Laser Projector with 4K Enhancement - 7000 lumens EB-PU1007W w/ mount	V11HA34920	4		
PJ-2	Epson	Epson ELPLU04 - Short-throw zoom lens - 14.8 mm - 17.7 mm w/ mount	V12H004U04	4		
		Certified installation for Projectors. Installation shall include, but not be limited to, mounting, cable connections, integration with Extron system (where applicable), programming, presets, setup, fine tuning, and Owner training and demonstrations.				
PJ-3	INSTALL		INSTALL	8		
AV-WG	INSTALL INCLUDING WHITE GLOVE	INSTALL W/ WHITE GLOVE + WARRANTY		65		

WINDERMERE ELEMENTARY SCHOOL PRODUCT LIST FOR BID-COMPUTERS

ITEM ID	MANUFACTURER	DESCRIPTION	MODEL NUMBER	Quantity	Unit Price	Total Price
AV-4A	Hewlett Packard	Video Prod Lab - Computer	35233367	1		
AV-6	Hewlett Packard	DVD Burner/Player	F2B56UT	50		
KVM-1	Star Tech	2port hybrid USB-A/C & HDMI switcher	SV221HUC4K	2		
		HP Elite Mini 800 G9 Desktop PC. Micro-PC with				
MP-1	HP	soft Codec	86Y54UT#ABA	1		
PC-1A	Lenovo	Faculty Think Pad	21HD0087US	79		
		ThinkPad Universal USB-C Dock - docking station -				
PC-1B	Lenovo	USB-C - HDMI, 2 x DP - 1GbE	40AY0090US	79		
PC-1C	Dell	24 "Desktop Monitor	8DJ9G	158		
PC-1D	Lenovo	ThinkPad Essential 16-inch Backpack (Eco)	4X41C12468	79		
PC-1E	Lenovo	Wireless Keyboard and Mouse	4X30H56796	79		
PC-2A	Lenovo	ThinkPad USB C Docking Station	40AY0090US	79		
PC-3A	HP	HP Elite Mini 800 G9	86Y54UT#ABA	1		
PR-1	Hewlett Packard	Heavy Duty Color Printer	7ZU78A#BGJ	3		
PR-2	Hewlett Packard	Light Duty Color Printer	W1Y44A#BGJ	2		
PR-3	Hewlett Packard	Medium Duty B&W Printer	W1A53A#BGJ	4		
PR-4	Hewlett Packard	Copier/Scanner/Fax/Printer	W1A80A#BGJ	2		
PR-5	Hewlett Packard	Large Format Printer	5HB09A#B1K	1		

WINDERMERE ELEMENTARY SCHOOL PRODUCT LIST FOR BID-CAMERAS

ITEM ID	MANUFACTURER	DESCRIPTION	MODEL NUMBER	Quantity	Unit Price	Total Price
		DC-13 Document Camera - document camera				
AV-5	Epson	- with 2 years Epson Road Service program	V12H757020	50		
		VIXIA HF G70 UHD 4K Camcorder: 3840 x				
		2160 Video - Canon 21MP Full HD CMOS				
AV-4C	Canon	Sensor	5734C002	1		

WINDERMERE ELEMENTARY SCHOOL PRODUCT LIST FOR BID-CABLES

ITEM ID	MANUFACTURER	DESCRIPTION	MODEL NUMBER	Quantity	Unit Price	Total Price
		35ft (10.7m) C2G Performance Series High				
		Speed HDMI® Cable - 4K 30Hz In-Wall, CMG				
		(FT4) Rated - Provide with HDMI Female				
AV-7A	C2G	Connector in 2-Gang Faceplate at Source End.	C2G10388	60		
AV-7A	G26	Connector in 2-Gang raceptate at Source Linu.	C2010300	00		
		39.3ft (12m) USB 2.0 A/B Active Cable (Center				
		Booster Format) (39.4ft) - Provide with USB-A				
		2.0 Female Connector in 2-Gang Faceplate at				
AV-7B	C2G	Source End.	C2G38998	60		
		30 FOOT SUPERSPEED 5GBPS USB-C 3.2				
		OPTICAL CABLE WITH 4K/30 VIDEO AND 60 W				
		POWER DELIVERY- Provide with USB-C				
		Female Connector in 2-Gang Faceplate at				
AV-7C	C2G	Source End.	26-741-30	60		

WINDERMERE ELEMENTARY SCHOOL PRODUCT LIST FOR BID - CHARGING CARTS

ITEM ID	MANUFACTURER	DESCRIPTION	MODEL NUMBER	Quantity	Unit Price	Total Price
CH-1	Anywhere Cart	Charging Station - 16 port	AC-COMP-16	88		

Workstations

PC-1 = Items PC-1A thru PC-1E PC-1A=Teacher Laptop

PC-1B= Docking Station PC-1C= Dual Monitor

PC-1D=Carrying Case PC-1E=Keyboard/Mouse

PC-2 = Items PC-2A thru PC-2C PC-2A= Docking Station

PC-2B= Dual Monitor PC-2C=Keyboard/Mouse

PC-3 = Items PC-3A thru PC-3E PC-3A=Administrative Laptop PC-3B= Docking Station PC-3C= Dual Monitor PC-3D=Carrying Case PC-3E=Keyboard/Mouse PC-4 = Items PC-4A thru PC-4C PC-4A= Docking Station PC-4B= Dual Monitor

CB-1 = Student Chromebook

PC-4C=Keyboard/Mouse

IP-1 = Items IP-1A & IP-1B IP-1A= Student Tablet IP-1B= Carrying Case

CH-1 = Charging Cart MP-1 = Micro PC KVM-1 = Monitor

Audio-Video

AV-1= Items AV-1A & AV-1B AV-1A=75" Interactive Display AV-1B=Certified Installation AV-2= Items AV-2A & AV-2B AV-2A=65" Interactive Display AV-2B=Certified Installation AV-3= Items AV-3A thru AV-3F AV-3A=55" Digital Signage AV-3B=Mounting Bracket AV-3C=Media Player AV-3D=Chrome License AV-3E=Certified Installation

AV-3F= HDMI Cable AV-4 = Camera for Video Prod.

AV-5 = Document Camera AV-6 = DVD Player AV-7 = Items AV-7A thru AV-7C

AV-7A= HDMI Cable AV-7B= USB A-B Cable AV-7C= USB C Cable

AV-8 = Conference room display PS-1 = Projector Screen

PJ-1 = Projector PJ-2 = Projector Lens

Wireless Networking

AP-1 = Items AP-1A thru AP-1F:

AP-1A=Standard Access Point AP-1B=Mounting Bracket

AP-1C=Install

AP-1D=License AP-1E=Airwave Management

AP-1F=Patch Cord AP-2 = Item AP-2A thru AP-2F

AP-2A=Higher Output Access Point AP-2B=Indoor Enclosure

AP-2C=Install

AP-2D=License AP-2E=Airwave Management AP-2F=Patch Cord

AP-3 = Controller

VOIP/ Phones (One-Time Purchases)

PH-1 = Desk Mtd. Handset

PH-2 = Wall Mtd. Handset

PH-3 = Conference Handset

PH-4 = Admin Handset

PH-5 = Audio Alerter

Printers

PR-1 = Copier/Scanner/Fax PR-2 = Large Format Printer

PR-3 = 3D Printer

CODE COMPLIANCE NOTES

In order to meet the needs of persons with disabilities, when applicable, all fixtures, furnishing and equipment items shall comply with:

· Current Connecticut State Building Code including 2009 ICC/ANSI

· Section 504 of the rehabilitation act 1973 including current **ADA Standards for Accessible Design** and Section 504 Regulations; and

· American with Disabilities Act Title II, including the current ADA Standards for Accessible Design and ADA Regulations.

Accessible knee and toe clearance shall comply with current ADA Standards for Accessible Design, Section 306.

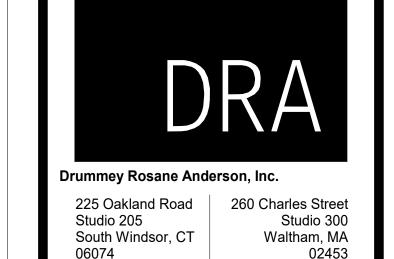
Compliance with the current Connecticut State Fire Safety Code and current O.S.H.A. – Title 29/Labor is also required.

The items shall include, but are not limited to fixtures, furnishings and equipment, workstations (including built-ins), shop equipment, etc.

SECURE ATTACHMENT NOTE

To ensure proper attachment of fixtures, furnishings & equipment items, including technology items, where "Items" are attached to wall, ceiling, overhead structure, floor and/or furniture component, Contractor shall provide information adequate for architect to verify those items are attached securely and per manufacturer's recommendations. Architects review may be implemented during submittal process.

Contractor shall provide struts, hangers, fasteners, safety harnesses, channels, bolts, screws, rods, etc. to securely attach items to existing structure as required to meet field conditions and meet applicable codes.



Tel: 860.644.8300

WINDERMERE ELEMENTARY SCHOOL

Planning | Architecture | Interior Design

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ELLINGTON, CT



STATE PROJECT NO. 048-0060 RNV **REVISION SUBMISSIONS** NO. DESCRIPTION DATE

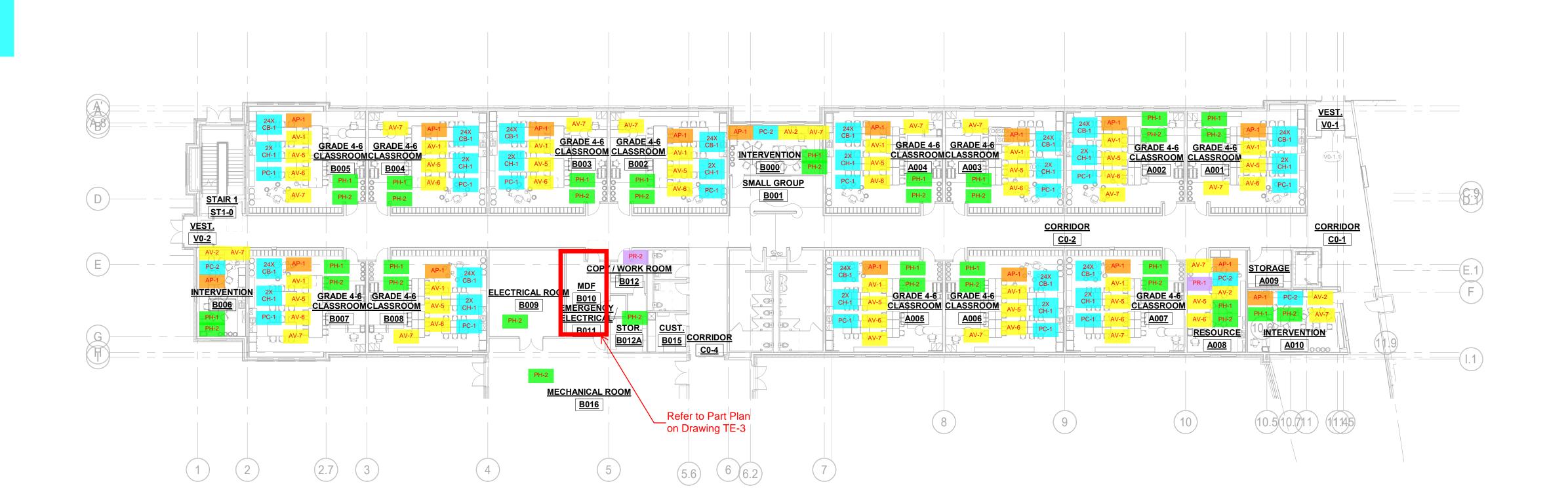
KEY PLAN

MAGNETIC NORTH 🦱

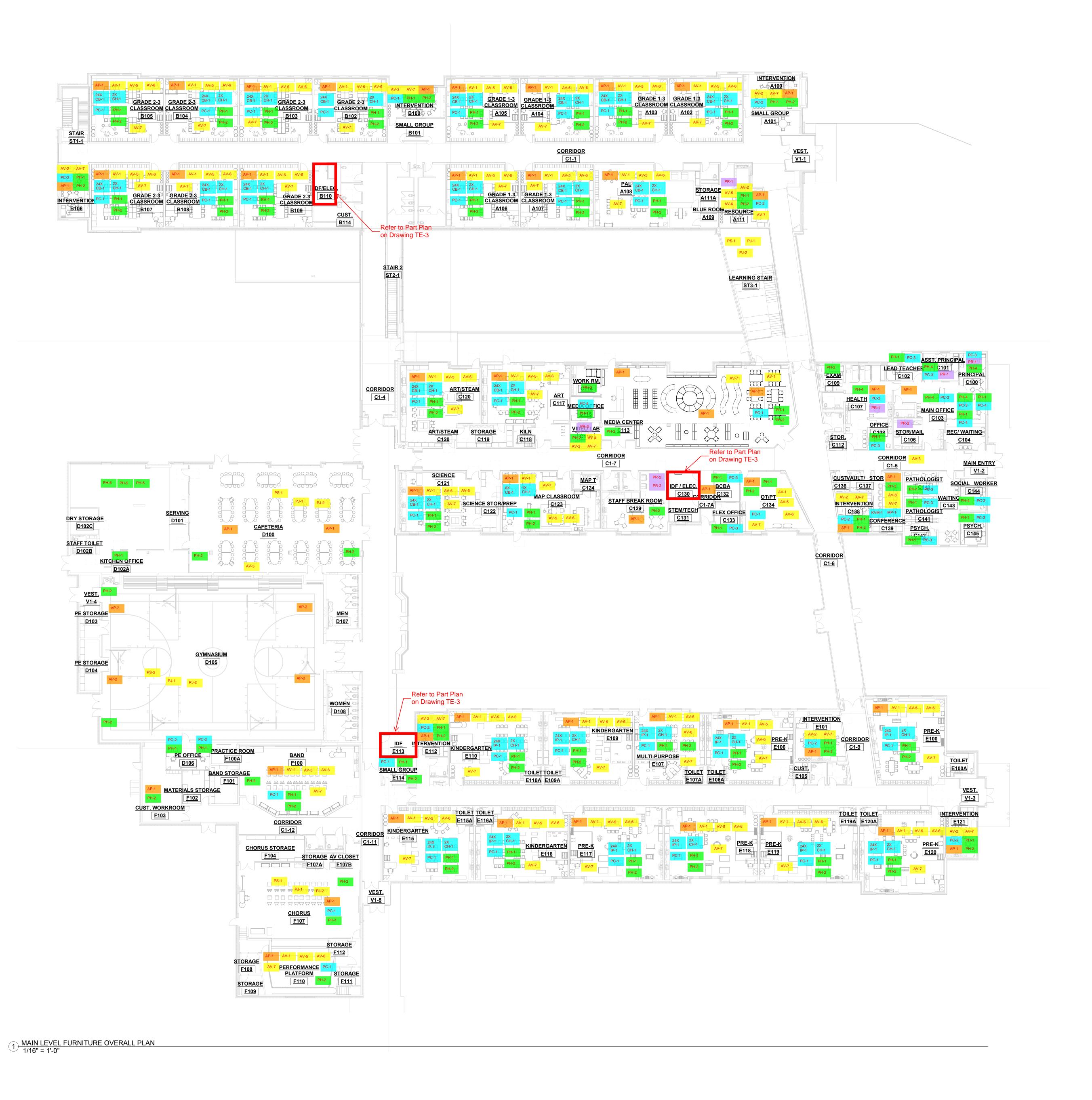
LOWER LEVEL OVERALL TECHNOLOGY PLAN

Job No.: 2022572.00-K1 05/01/2024

TE-1



1 LOWER LEVEL OVERALL FURNITURE PLAN 1/16" = 1'-0"





Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
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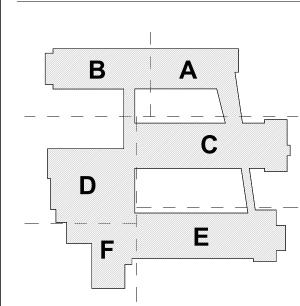


STATE PROJECT NO. 048-0060 RNV

REVISION SUBMISSIONS

NO. DESCRIPTION

DATI



PROJECT NORTH

PROJECT NORTH

MAGNETIC
NORTH

MAIN LEVEL
OVERALL
TECHNOLOGY
PLAN

Scale: 1/16" = 1'-0"

Job No.: 2022572.00-K1

Drawn By: SJS

Date: 05/01/2024

TE-2

Networking Equipment & UPS's
LAN-1= Transceiver (Single Mode)
LAN-2= Transceiver (Multi-Mode)
LAN-3= Switch Chassis (6 Bay)
LAN-4= Switch Chassis (12 Bay)
LAN-5= Switch Chassis Power Supply
LAN-6= Exp. Module 10/100/1000BT
LAN-7= Exp. Module SFP+
LAN-8= 48-port Managed Switch
LAN-9= Direct Attach Copper Cable
UPS-1= UPS Unit (Rack Mounted)

Wireless Networking

AP-1 = Items AP-1A thru AP-1F: AP-1A=Standard Access Point

AP-1B=Mounting Bracket

AP-1C=Install

AP-1D=License

AP-1E=Airwave Management

AP-1F=Patch Cord

AP-2 = Item AP-2A thru AP-2F: AP-2A=Higher Output Access Point

AP-2B=Indoor Enclosure

AP-2C=Install

AP-2D=License

AP-2E=Airwave Management

AP-2F=Patch Cord

AP-3 = Controller

VOIP/ Phones (One-Time Purchases)

PH-1 = Desk Mtd. Handset

PH-2 = Wall Mtd. Handset

PH-3 = Conference Handset PH-4 = Admin Handset

PH-5 = Audio Alerter

PH-6 = INSTALL

VOIP System (Non-Perpetual Costs)

VO-1= VOIP Security Gateway

VO-2= VOIP 48-Port Switch VO-3= VOIP 16-Port Switch

VO-4= PA Zoning

VO-5= E911 DID (Location)

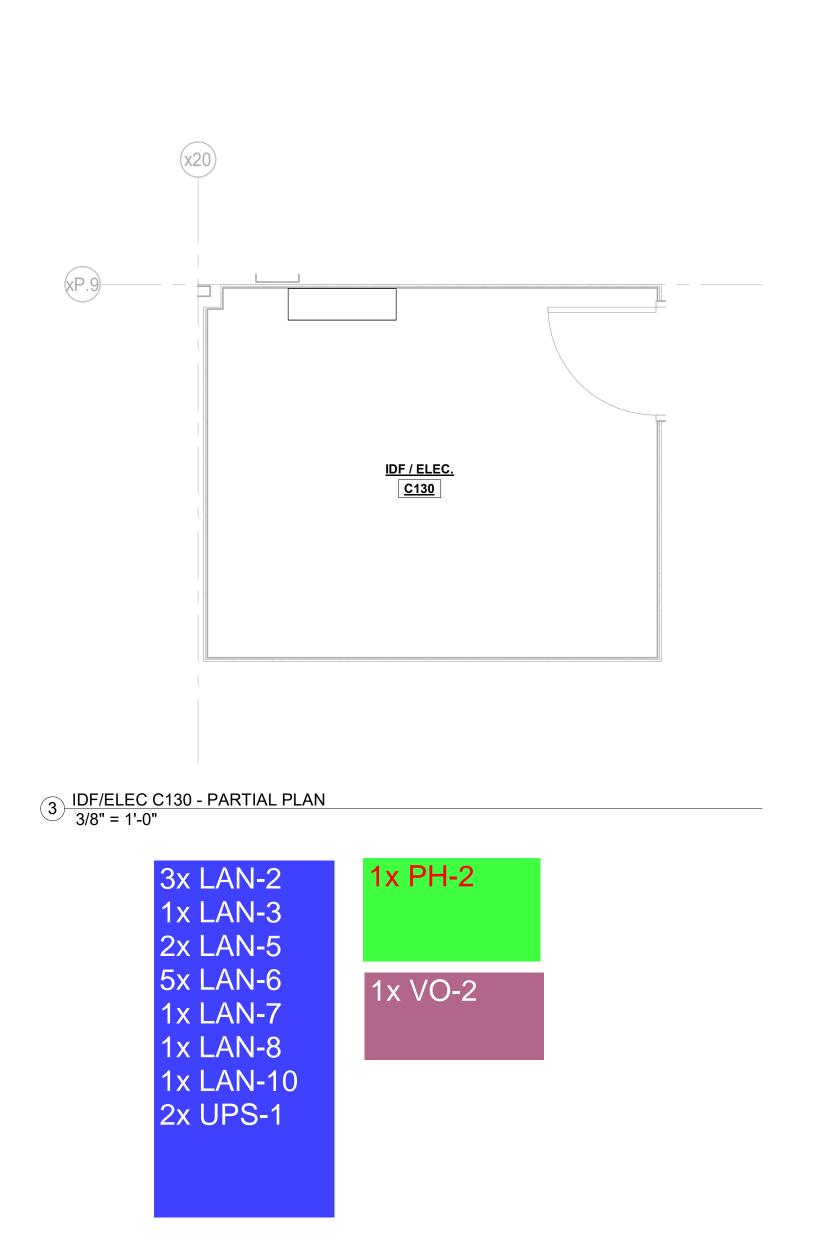
VO-6= Premium Seat

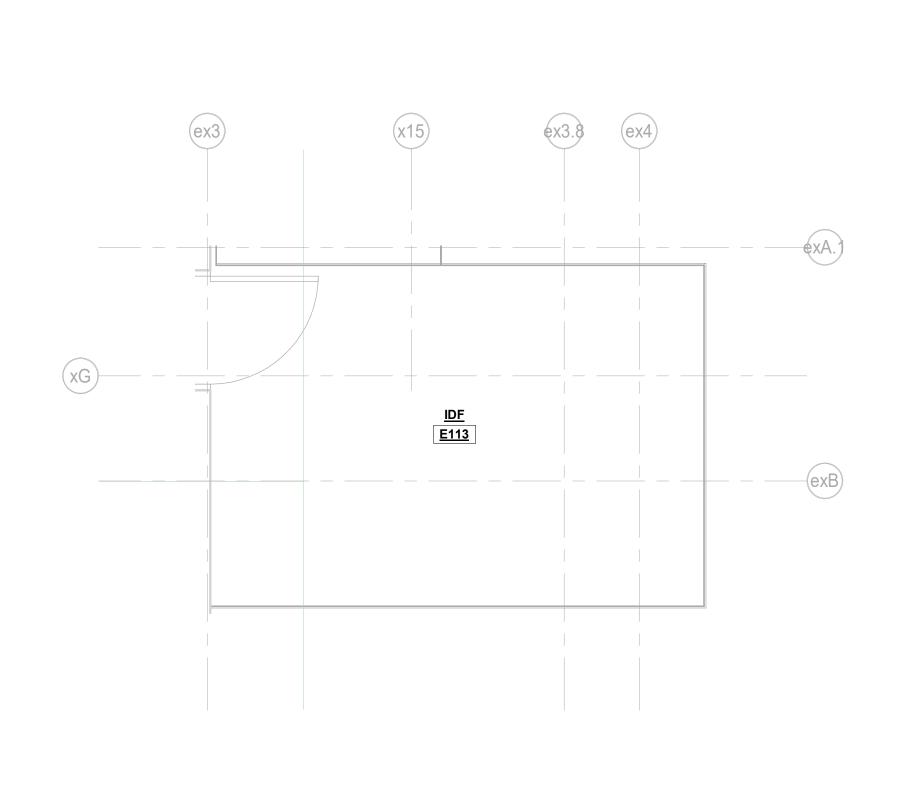
VO-7= Standard Voicemail

VO-8= E911 DID (Per Seat Service)

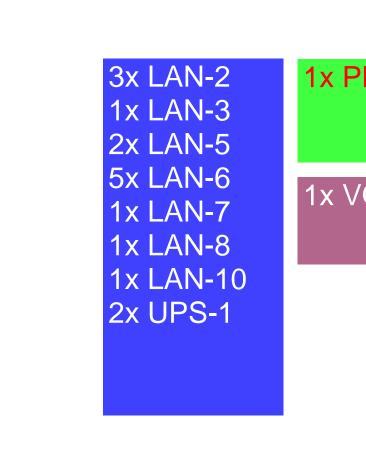
Servers

SVR-1 = Proliant Gen11 Server consisting of all parts listed in specs





4 IDF E113 - PARTIAL PLAN 3/8" = 1'-0"



3x LAN-2

1x LAN-3

2x LAN-5

5x LAN-6

1x LAN-7

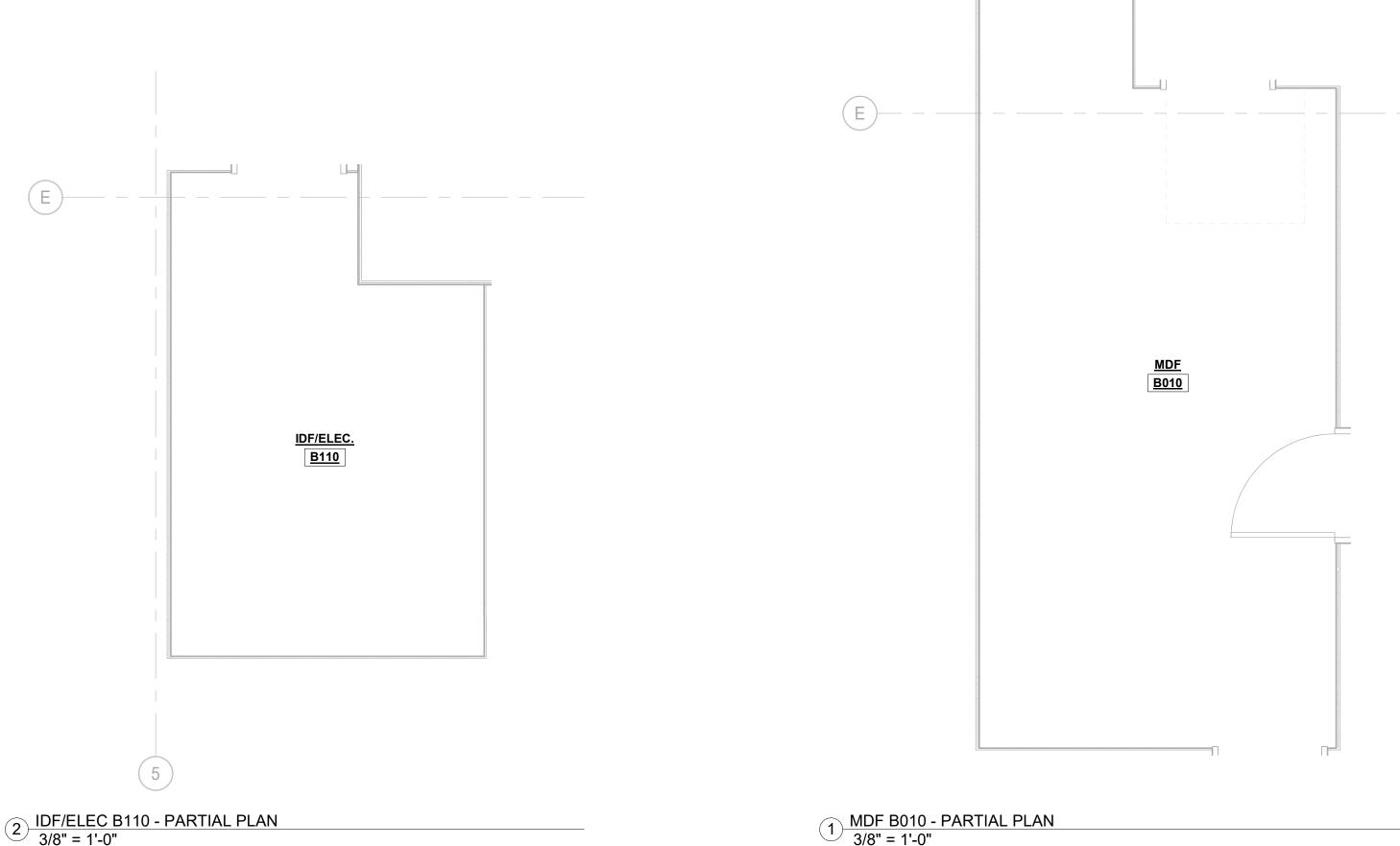
1x LAN-8

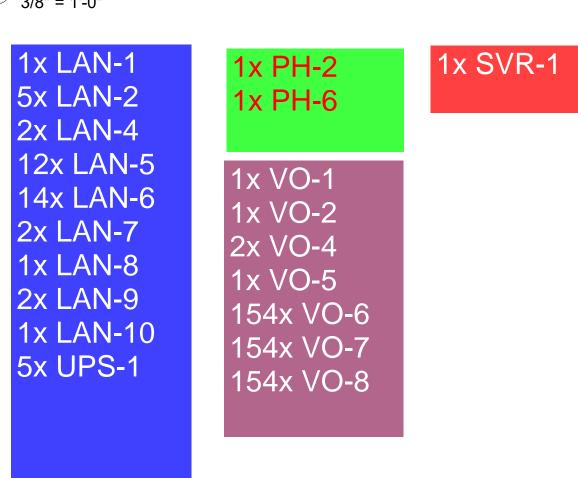
2x UPS-1

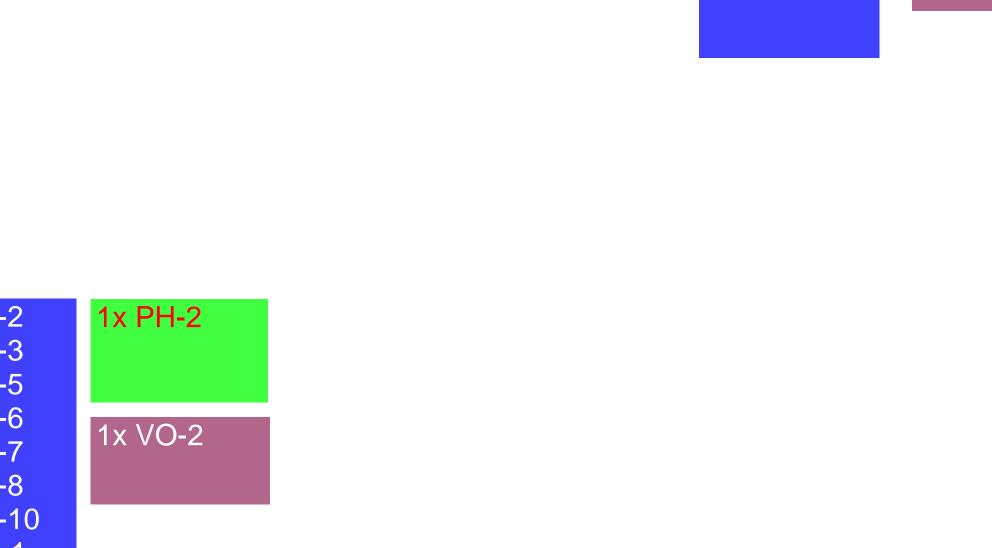
1x LAN -10

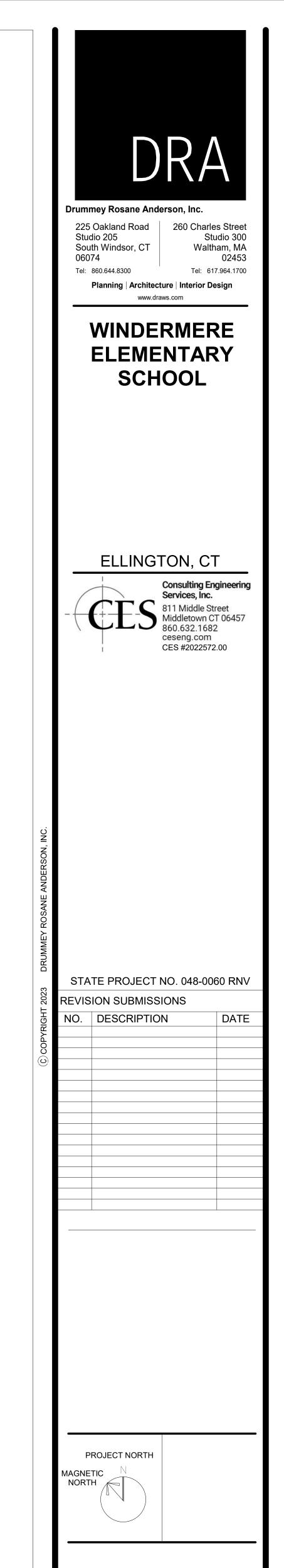
1x PH-2

1x VO-2









ENLARGED PLANS - IT ROOMS

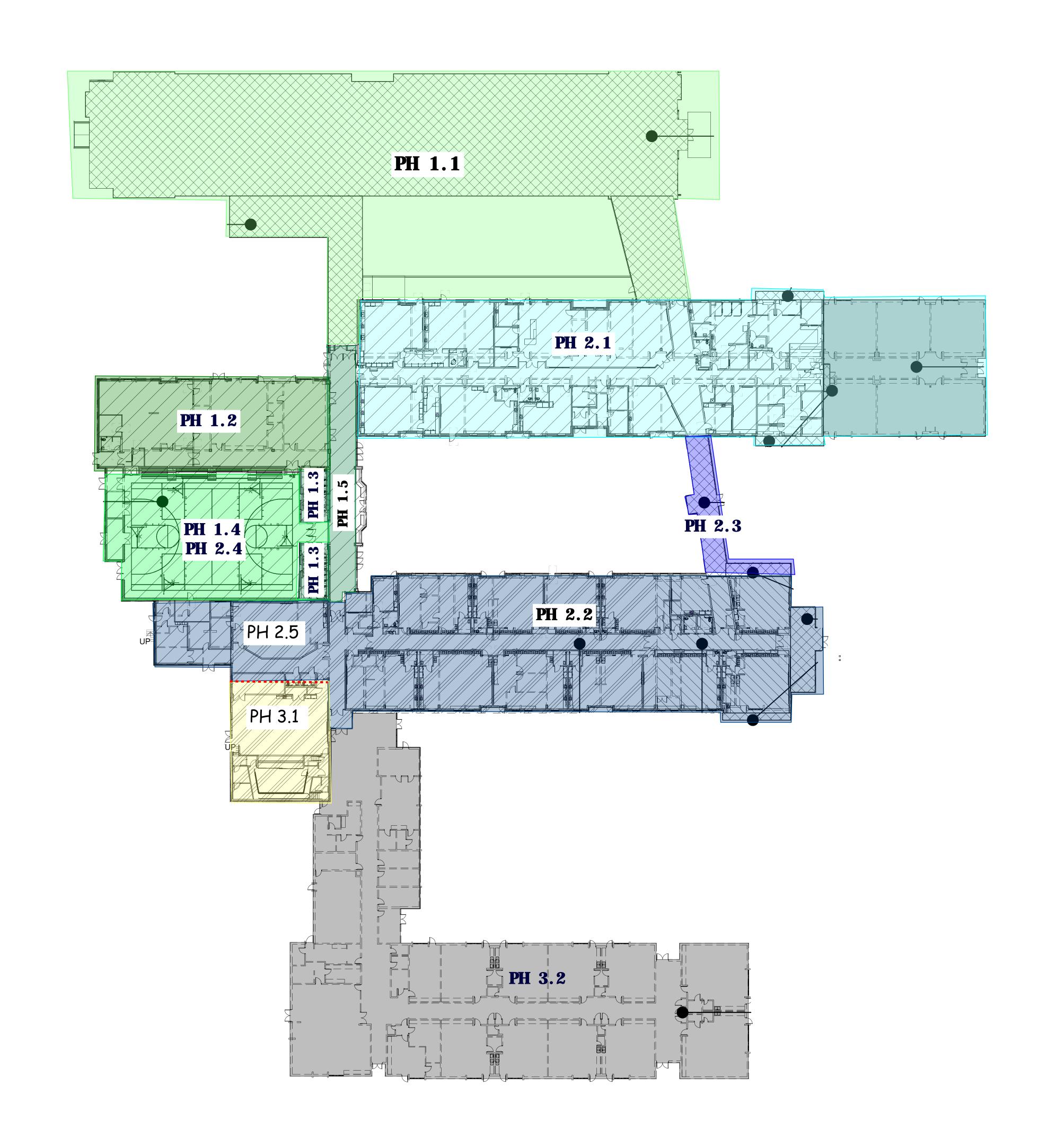
Scale: 3/8" = 1'-0"

Job No.: 2022572.00-K1

Drawn By: SJS

Date: 05/01/2024

TE-3



Phase 1 November 2023 - December 2024

PH 1.2 - Area D1 (Kitchen/Cafe) -

Phase 2 December 2024 - August 2025

PH 2.3 - Area C&E (Connector) -

PH 2.2 - Area E (Pre-K, K) -

Phase 3 March 2025 - October 2025

PH 2.1 - Area C (Medi-Ctr, Admin) -

PH 2.4 - Area D1 (Gymnasium '25) -

PH 2.5 - Area F2 (Band, PE Office) -

Phase 3.1 - Area F3 (Chorus, Stage) -

Vestibule V1-5 Canopy

Phase 3.2 - Demolition South Bldg -

PH 1.3 - Area D3 (Toilet Rm Gym) -

PH 1.4 - Area D2 (Gymnasium '24) -

PH 1.1 - Area A & B (New Addition) - 15Dec23-21Dec24

PH 1.5 - Area D4 (NS Corridor, Roof) - 14June24-21Aug24

27June24-21Dec24

27June24-28Aug24

24Dec24-22Aug25

23Dec24- 22Aug25

21Apr25 - 21Aug25

16June 25 - 08 Aug 25

06Jan25-22Aug25

25Aug25 - 28Nov25

25June 25 - 310ct 25

27June24-20ct24

