Addendum 2

Project: **BRFP NUMBER 2324-03 – TROY SCHOOL DISTRICT 2024 SITE IMPROVEMENTS PAVING PROJECTS**

Bid Due date: **1:00 PM Local Time, Tuesday, November 28, 2023 (REVISED)**

This Addendum is issued as modifications to the RFP previously issued to provide clarifications to the scope of work. This Addendum supersedes the original RFP. This along with the RFP becomes the bid documents.

I. General Information

1. For questions e-mail purchasingoffice@troy.k12.mi.us or through Buildingconnected.com.
2. Addendum #2 dated November 14, 2023, as prepared by PEA Group. (Attached)
3. Advertisement. Revise 2nd paragraph, 3rd sentence. Bids are to be submitted no later than **1:00 PM Local Time Tuesday, November 28, 2023.**
4. Request for Proposal/Bid Package. Page 2, revise article 1.2: DUE DATE FOR PROPOSAL **1:00 PM, Local Time, Tuesday, November 21, 2023**.
5. Request for Proposal/Bid Package. Page 2, revise article 2.1: The Due Date for receipt of Proposals is: **1:00 PM Local Time Tuesday, November 28, 2023.**
6.

END

PEA GROUP

1849 Pond Run
Auburn Hills, MI 48326

844.813.2949
peagroup.com

PROJECT: 2024 Troy School District Site Improvements – Paving Projects

DATE: November 14, 2023

FROM: PEA Group

PEA JOB No.: 23-0262

PURPOSE: Addendum Number 2

The following clarifications/changes have been made to the project plans.

General Comment:

1. "Remove asphalt pavement, typ, aggregate base course to remain" consists of removing the existing pavement, keeping the existing aggregate in place, fine grading and compacting the existing base, with adding aggregate base as needed, to provide a uniform cross-section for proposed pavement.
2. "Remove asphalt pavement and salvage base" consists of removing the existing pavement, cutting and stockpiling the existing aggregate to the proposed cross section, fine grading and compacting the sub-grade, re-install and compact the stockpiled aggregate, with adding aggregate base as needed, to provide a uniform cross-section for proposed pavement.

Sheet C-1.1:

1. Limits of curb removal of the island in the northeast corner of the site have been updated to match sheet C-2.1.

Sheet C-2.1:
Limits of the proposed truncated domes at the ADA curb ramps were defined with a new hatch and linear footage was provided.

Sheet C-2.2:

1. The call out for the butt joint along the southern edge of the project was removed.
2. A "Paving Legend" was added to the sheet to indicate area of 2" Overlay, 4" Asphalt Pavement and 2" Overlay with wedging to match the hatching on the sheet.

Sheet C-3.1:

1. The grading for the ADA ramp on the east side of the western parking lot was updated.

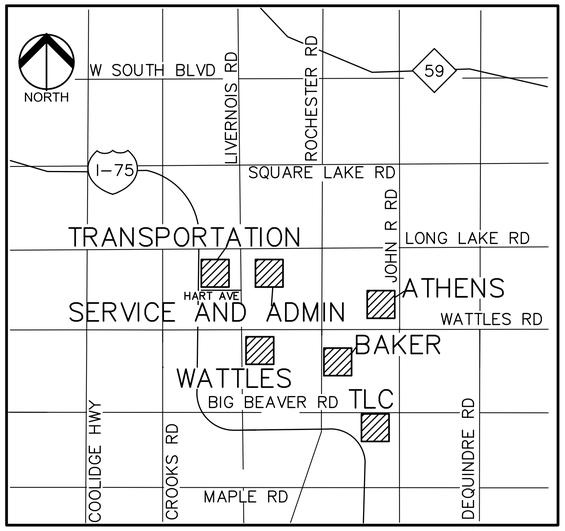
CONSTRUCTION PLANS

TSD 2024 SITE IMPROVEMENTS

PAVING PROJECTS

TROY, OAKLAND COUNTY, MICHIGAN

PERMIT / APPROVAL SUMMARY		
DATE SUBMITTED	DATE APPROVED	PERMIT / APPROVAL
		CITY OF TROY ENGINEERING
		CITY OF TROY SESC



LOCATION MAP
NO SCALE

INDEX OF DRAWINGS	
NUMBER	TITLE
	COVER SHEET
	BAKER MIDDLE SCHOOL
2 C-1.1	TOPOGRAPHIC SURVEY AND DEMOLITION PLAN
C-1.1A	TOPOGRAPHIC SURVEY AND DEMOLITION PLAN
2 C-2.1	ENGINEERING AND DIMENSION PLAN
C-2.1A	ENGINEERING AND DIMENSION PLAN
2 C-3.1	GRADING AND SESC PLAN
C-3.1A	GRADING AND SESC PLAN
	TROY LEARNING CENTER
C-1.2	TOPOGRAPHIC SURVEY AND DEMOLITION PLAN
2 C-2.2	ENGINEERING AND DIMENSION PLAN
C-3.2	GRADING AND SESC PLAN
	TRANSPORTATION CENTER
C-1.3	TOPOGRAPHIC SURVEY AND DEMOLITION PLAN
C-2.3	ENGINEERING AND DIMENSION PLAN
C-3.3	GRADING AND SESC PLAN
	TRANSPORTATION ADMINISTRATION AND SERVICE BUILDING
C-1.4	ADMINISTRATION TOPOGRAPHIC SURVEY AND DEMOLITION PLAN
C-1.5	SERVICE TOPOGRAPHIC SURVEY AND DEMOLITION PLAN
C-2.4	ADMINISTRATION ENGINEERING AND DIMENSION PLAN
C-2.5	SERVICE ENGINEERING AND DIMENSION PLAN
C-3.4	ADMINISTRATION GRADING AND SESC PLAN
C-3.5	SERVICE GRADING AND SESC PLAN
	WATTLES ELEMENTARY SCHOOL
C-2.6	ENGINEERING PLAN
	ATHENS HIGH SCHOOL
C-2.7	ENGINEERING PLAN
	NOTES AND DETAILS
C-4.0	NOTES AND DETAILS
C-4.1	NOTES AND DETAILS
	TROY STANDARD DETAILS
D	SESC DETAILS
E	STORM SEWER DETAILS

DESIGN TEAM

OWNER

TROY SCHOOL DISTRICT
1140 RANKIN DRIVE
TROY, MI 48083
CONTACT: ROB CARSON
PHONE: 248.823.4067
EMAIL: RCARSON@TROY.K12.MI.US

CIVIL ENGINEER

PEA GROUP
1849 POND RUN
AUBURN HILLS, MI 48326
CONTACT: ROBERT ROCHON, P.E.
PHONE: (248) 689-9090 EXT. 1161
FAX: (248) 689-1044
EMAIL: RROCHON@PEAGROUP.COM

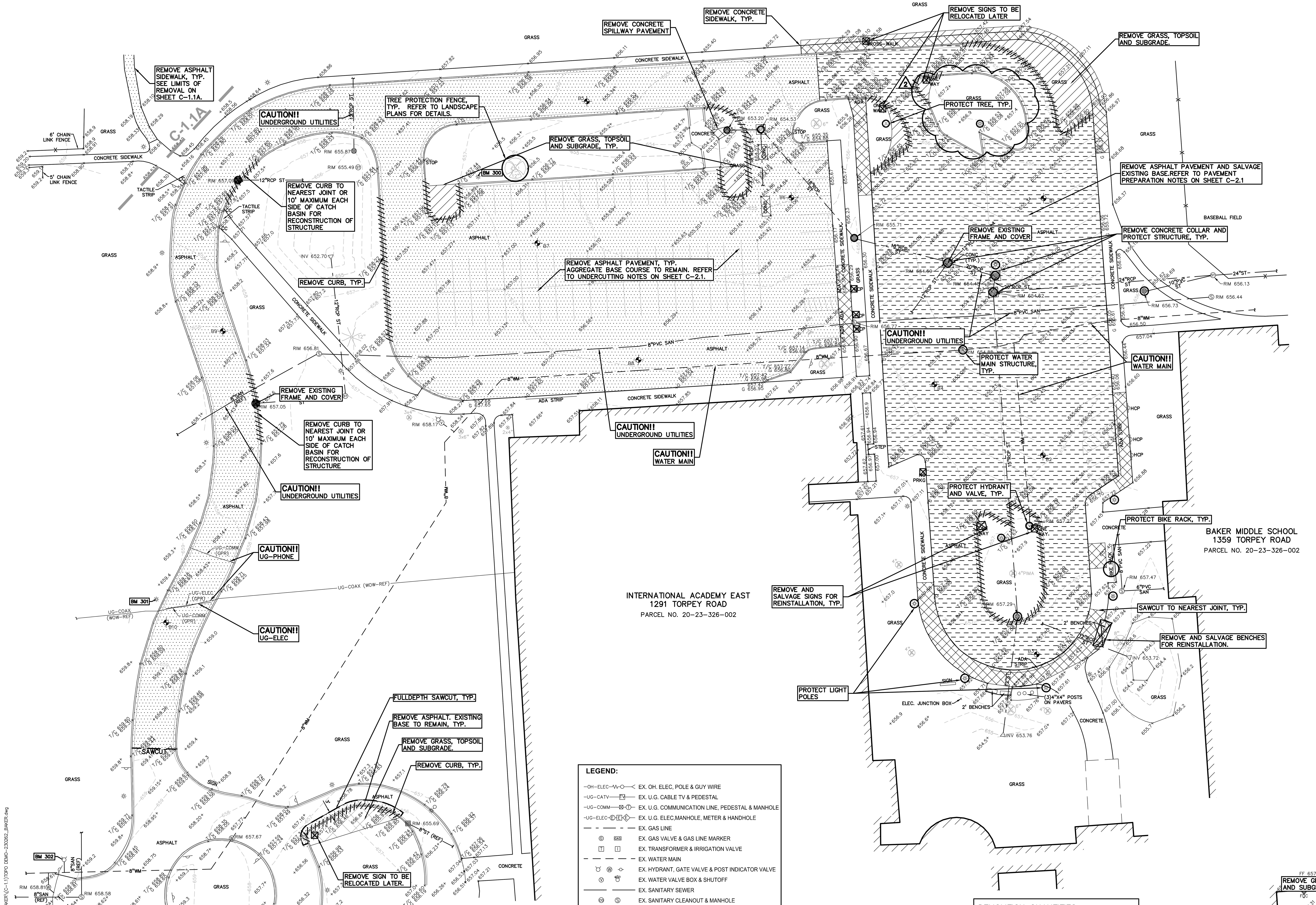
PEA GROUP

REVISIONS	
DESCRIPTION	DATE
ISSUE FOR BID	10/31/2023
2 ADDENDUM #2	11/14/2023

GENERAL DEMOLITION NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT:

1. ALL MATERIAL TO BE REMOVED, WHETHER SPECIFICALLY NOTED IN THE PLANS OR NOT, SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AND DISPOSED OF OFF-SITE IN A LEGAL MANNER. NO ON-SITE BURY OR BURN PITS SHALL BE ALLOWED.
2. ALL DEMOLITION WORK SHALL CONFORM TO ALL LOCAL CODES AND ORDINANCES.
3. STAGING/PHASING OF DEMOLITION AND CONSTRUCTION IS TO BE COORDINATED WITH THE OWNER AND THE CONTRACTOR PRIOR TO CONSTRUCTION.
4. SPECIFIC DEMOLITION ITEMS HAVE BEEN INDICATED ON THE PLANS AS A GUIDE TO THE GENERAL SCOPE OF THE WORK. IT IS THE INTENT THAT THESE ITEMS SHALL BE COMPLETELY REMOVED BY THE CONTRACTOR ABOVE AND BELOW GROUND, UNLESS SPECIFICALLY NOTED OTHERWISE, AND THAT DEMOLITION WILL INCLUDE BUT WILL NOT NECESSARILY BE LIMITED TO THESE ITEMS. CONTRACTOR SHALL VISIT SITE TO VERIFY EXISTING CONDITIONS AND EXTENTS OF THE DEMOLITION THAT WILL BE REQUIRED PRIOR TO SUBMITTING A BID.
5. REMOVE ALL STRUCTURES DESIGNATED FOR REMOVAL ACCORDING TO THE DEMOLITION PLAN. THIS INCLUDES FOUNDATIONS, FOOTINGS, FOUNDATION WALLS, FLOOR SLABS, UNDERGROUND UTILITIES, CONCRETE, ASPHALT, TREES, ETC.
6. THE CONTRACTOR SHALL, AS A MINIMUM, PROVIDE TREE PROTECTION FENCING AROUND EXISTING TREES TO BE SAVED THAT ARE WITHIN 15 FEET OF CONSTRUCTION ACTIVITIES AND AS INDICATED IN THE PLANS OR PER LOCAL AGENCY REQUIREMENTS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN UP, NOISE, DUST CONTROL, STREET SWEEPING AND HOURS OF OPERATION IN ACCORDANCE WITH THE LOCAL CODES.
8. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADES, SIGNAGE, MARKINGS, LIGHTS AND OTHER TRAFFIC CONTROL DEVICES TO PROTECT THE WORK ZONE AND SAFELY MAINTAIN TRAFFIC PER AGENCY REQUIREMENTS AND IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
9. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES TO CONFIRM THAT UTILITY LEADS HAVE BEEN TAKEN OUT OF SERVICE PRIOR TO DEMOLITION.
10. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF SIGNS AND SUPPORTS WITHIN THE WORK AREA, AS NECESSARY TO FACILITATE CONSTRUCTION. SIGNS SHALL BE PROTECTED OR STOCKPILED FOR REUSE AS SPECIFIED IN THE PLANS OR AS REQUIRED BY THE AGENCY OF JURISDICTION. THE CONTRACTOR SHALL REPLACE ANY DAMAGED SIGNS AND SUPPORTS AT NO ADDITIONAL COST TO THE OWNER.
11. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE 811/ONE CALL UTILITY LOCATING CENTER, THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
12. CONTRACTOR SHALL REFER TO THE "REPORT ON GEOTECHNICAL PAVEMENT INVESTIGATION" PREPARED BY G2 CONSULTING GROUP DATED 9/27/23



LEGEND:

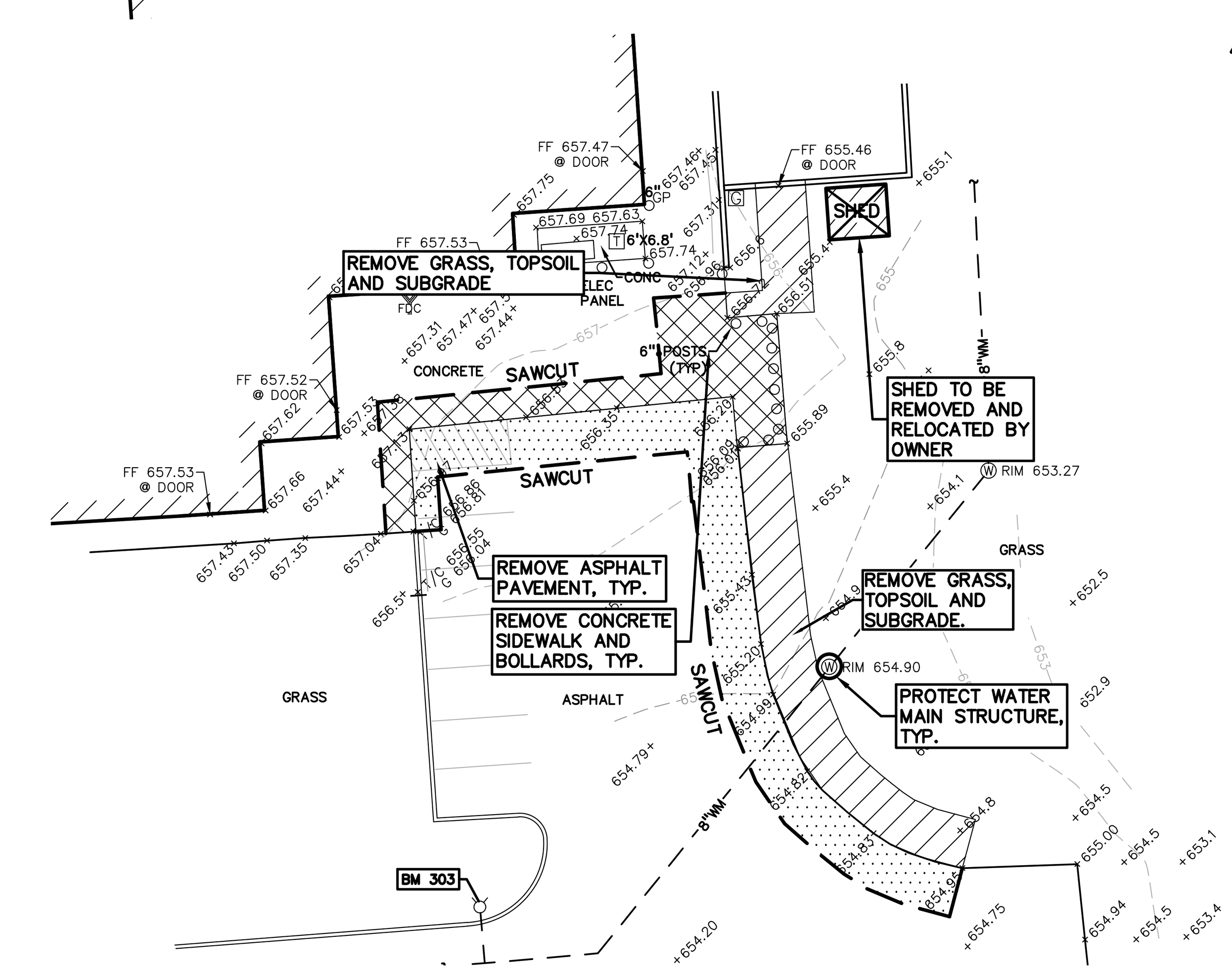
—OH—ELEC—	EX. OH. ELEC, POLE & GUY WIRE
—UG—CATV—	EX. U.G. CABLE TV & PEDESTAL
—UG—COMM—	EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
—UG—ELEC—	EX. U.G. ELEC,MANHOLE, METER & HANDHOLE
	EX. GAS LINE
	EX. GAS VALVE & GAS LINE MARKER
	EX. TRANSFORMER & IRRIGATION VALVE
	EX. WATER MAIN
	EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
	EX. WATER VALVE BOX & SHUTOFF
	EX. SANITARY SEWER
	EX. SANITARY CLEANOUT & MANHOLE
	EX. COMBINED SEWER MANHOLE
	EX. STORM SEWER
	EX. CLEANOUT & MANHOLE
	EX. SQUARE, ROUND & BEEHIVE CATCH BASIN
	EX. YARD DRAIN, U.G. ROOF DRAIN & DOWNSPOUT
	EX. UNIDENTIFIED STRUCTURE
	EX. MAILBOX, SIGN, LIGHTPOLE & GUARD POST
	EX. FENCE
	EX. GUARD RAIL
	EX. DEC. TREE, CONIFEROUS TREE & SHRUB
724	EX. TREE TAG, & TREE LINE
+696.91	EX. SPOT ELEVATION
670	EX. CONTOUR
	EX. WETLAND
	IRON FOUND / SET
	NAIL FOUND / NAIL & CAP SET
	BRASS PLUG SET
	MONUMENT FOUND / SET
	SECTION CORNER FOUND
R M C	RECORDED / MEASURED / CALCULATED

REFERENCE DRAWINGS:
PEA JOB NO. 2018-192

CABLE	WOW CABLE MAP, EMAIL DATED 09/08/2023
WATER MAIN	CITY OF TROY MAP, EMAIL DATED 09/08/2023
SANITARY SEWER	CITY OF TROY MAP, EMAIL DATED 09/08/2023
ELECTRIC	HAVE NOT RECEIVED MAPS AS OF 09/11/2023

DEMOLITION QUANTITIES: 2

REMOVE CURB	738 LF
~~REMOVE ASPHALT:~~	92,310 SF
REMOVE CONCRETE:	5,413 SF
REMOVE BOLLARD	10 EA
SAWCUT PAVEMENT:	453 LF
REMOVE SIGN AND POST:	9 EA
TOPSOIL, GRASS, SOIL REMOVAL	4,625 SF
REMOVE FRAME AND COVER	2 EA



DEMOLITION LEGEND:

ITEM TO BE PROTECTED	⊙
ITEM TO BE REMOVED	⊠
CURB/FENCE REMOVAL	·/////////·
CONCRETE PAVEMENT AND SIDEWALK REMOVAL	▩
AREA OR ITEMS TO BE REMOVED	▨
UTILITY REMOVAL	╳╳╳╳
ABANDON UTILITY	● ● ● ● ● ● ● ● ●
ASPHALT REMOVAL	░
TREE REMOVAL	⊗
SAWCUT LINE	— — —

FLOODPLAIN NOTE:
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AN AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER FLOOD INSURANCE RATE MAP NUMBER 26125C0553G, DATED JANUARY 16, 2009.

S:\PROJECTS\2023\23-0262 2024 TDS SITE IMPROVEMENT PROJECTS\DWG\CONSTRUCTION-PAVING\1_BAKER\(C-1.1)TOPO DEMO-230262_BAKER.dwg

PEA GROUP
t: 844.813.2949
www.peagroup.com

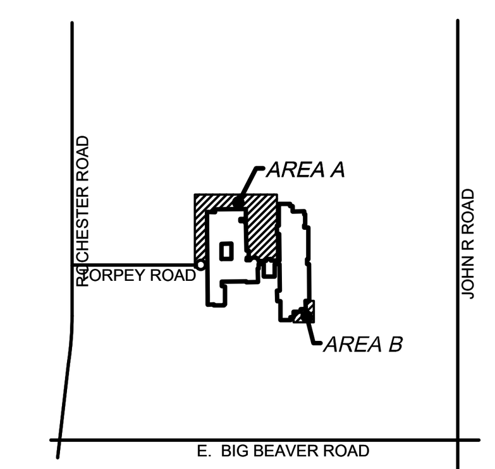
STATE OF MICHIGAN
ROBERT SCOTT KOCHON
License No. 6201046143
LICENSED PROFESSIONAL ENGINEER

NORTH

0 15 30 60
SCALE: 1" = 30'

811 Know what's below. Call before you dig.

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CLIENT
TROY SCHOOLS
1140 RANKIN DRIVE
TROY, MI 48083

PROJECT TITLE
BAKER MIDDLE SCHOOL
1359 TORPEY ROAD
CITY OF TROY, OAKLAND COUNTY, MICHIGAN

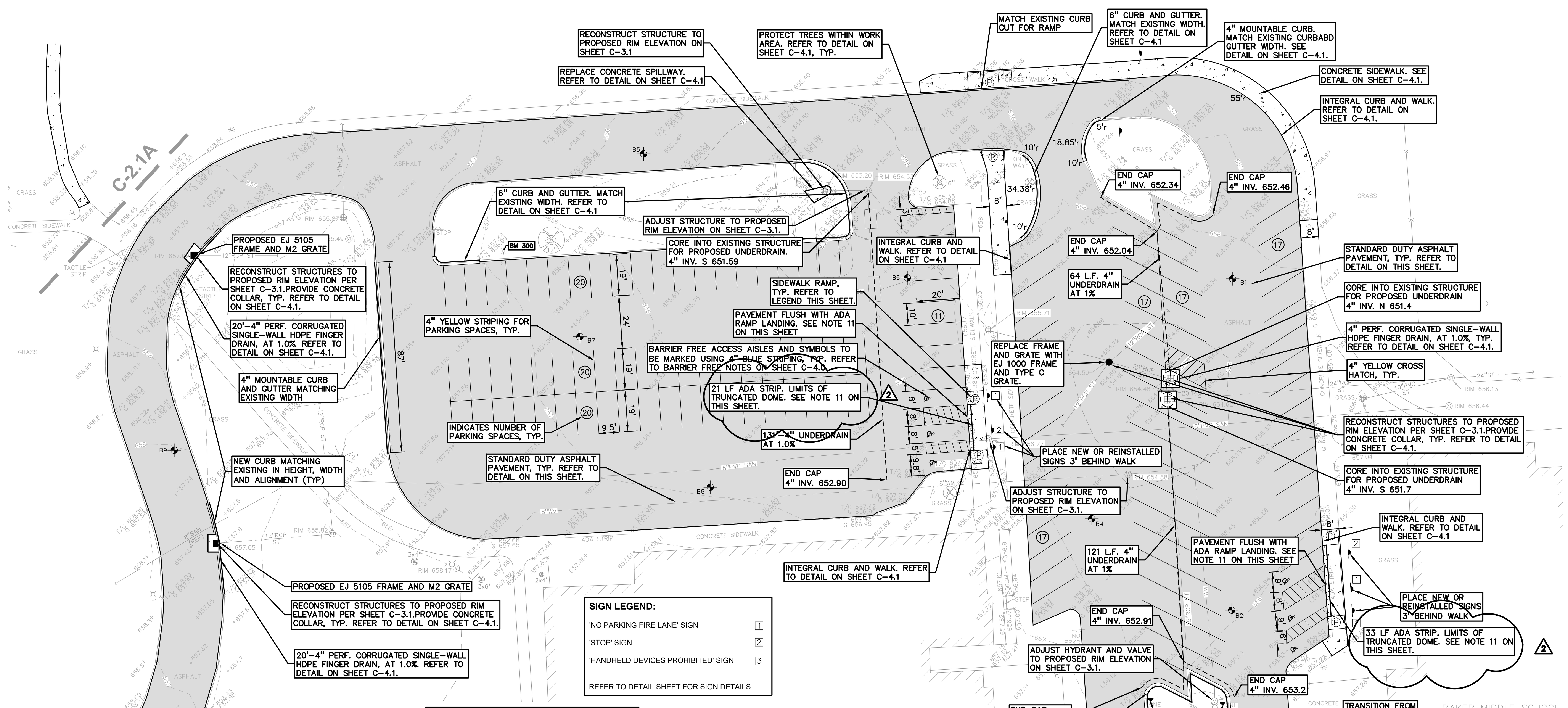
REVISIONS
2 ADDENDUM #2 : 11-14-23

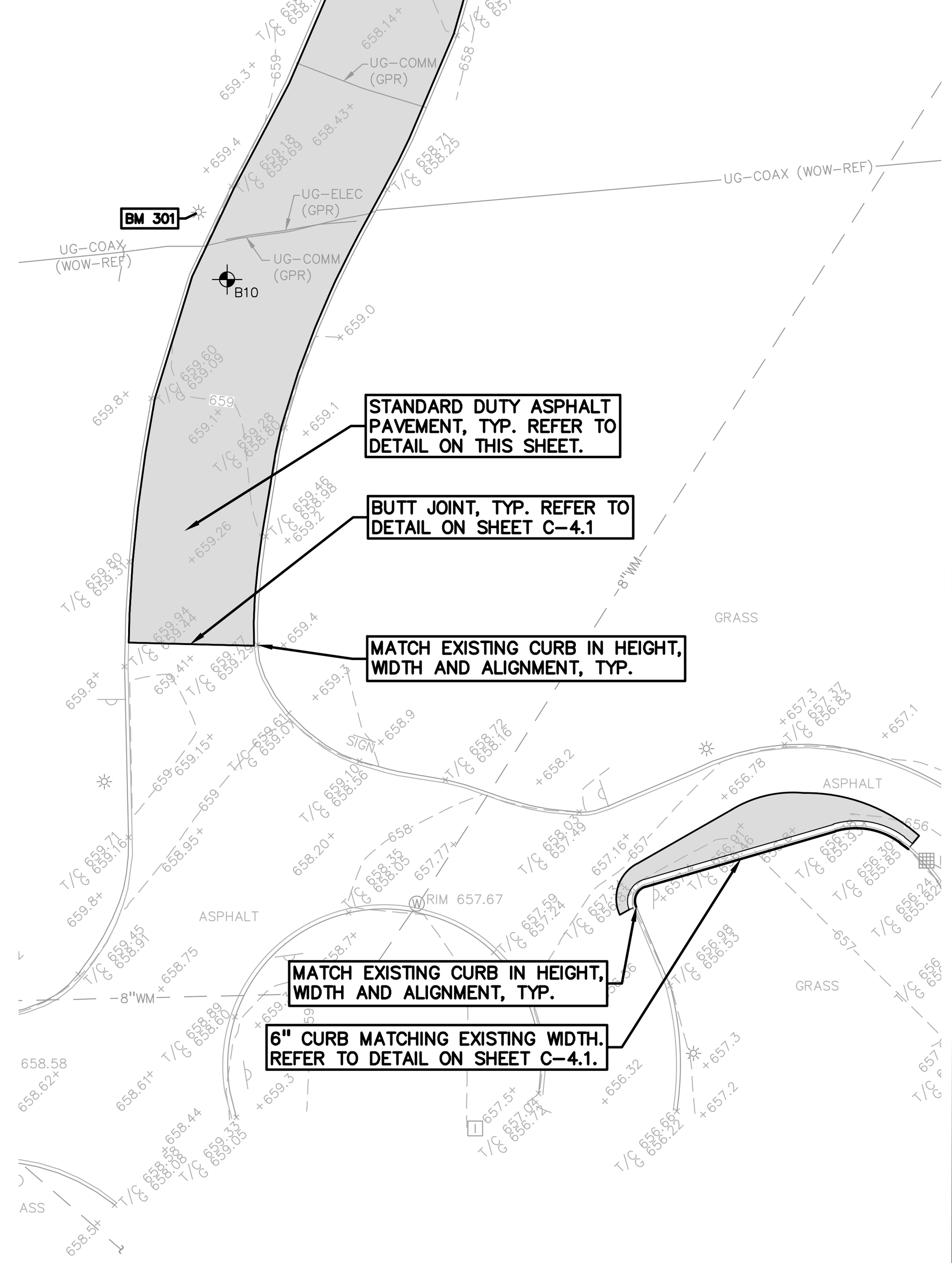
ORIGINAL ISSUE DATE:
OCTOBER 31, 2023

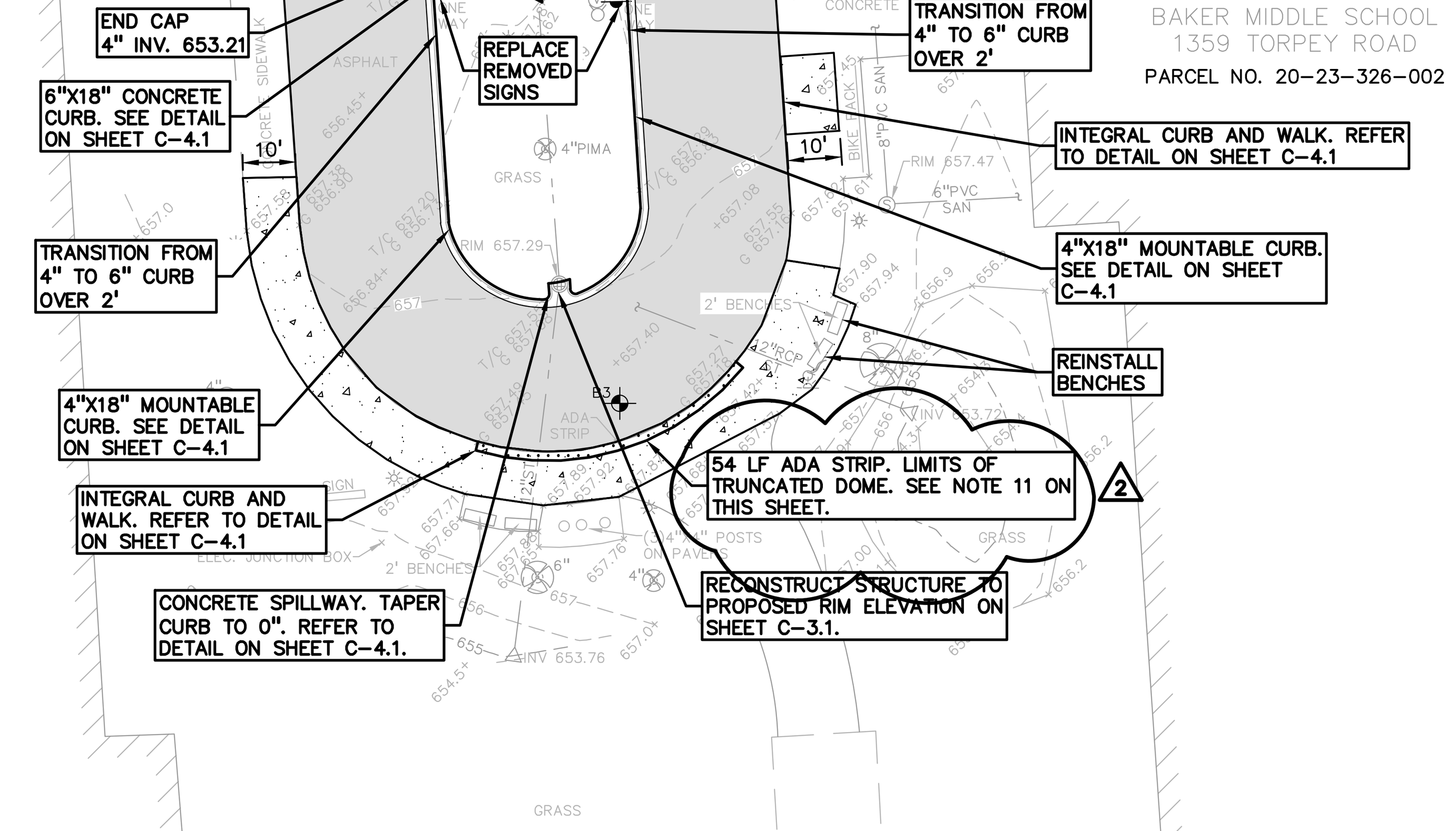
DRAWING TITLE
TOPO AND DEMOLITION PLAN

PEA JOB NO.	2023-0262
P.M.	RR
DN.	RR
DES.	RM

DRAWING NUMBER:
C-1.1







SIGN LEGEND:

'NO PARKING FIRE LANE' SIGN	1
'STOP' SIGN	2
'HANDHELD DEVICES PROHIBITED' SIGN	3

REFER TO DETAIL SHEET FOR SIGN DETAILS

NOTES:

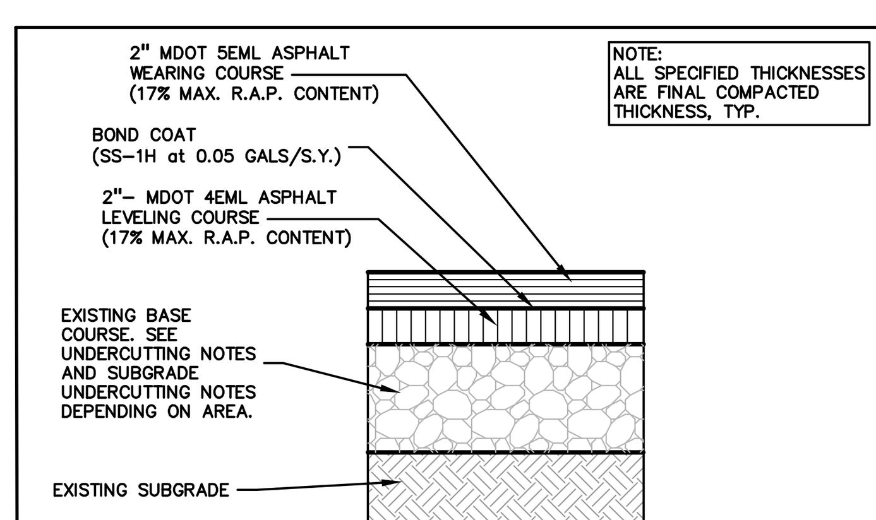
1. CONTRACTOR TO VERIFY ALL QUANTITIES SHOWN ON THE PLANS. ANY DEVIATIONS TO THE PLAN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF THE SCHOOL DISTRICT AND PEA GROUP, IN WRITING PER THE BID PACKAGE, FOR VERIFICATION PRIOR TO BIDDING.
2. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, CENTER OF MANHOLE/CATCH BASIN UNLESS OTHERWISE NOTED.
3. DOWEL INTO EXISTING CURB AND GUTTER 9" WITH EPOXY COATED #4 BAR CONTINUOUS BETWEEN EXISTING AND PROPOSED CURBING.
4. CONTRACTOR TO REPLACE PLAYSCAPE AREA STRIPING IN KIND IN REGARDS TO LAYOUT, WIDTH, COLOR (TYP.) (2 COATS).
5. REFER TO NOTES AND DETAIL SHEET FOR ON SITE PAVING DETAILS.
6. CONTRACTOR TO FIELD VERIFY ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION INCLUDING BUT NOT LIMITED TO: SITE LIGHTING, FIBER LINES, ETC.
7. CONTRACTOR TO REMOVE AND REPLACE SIGNS AND POSTS PER DETAIL ON SHEET C-4.0. ALL SIGNS AND ANY POSTS IN GOOD CONDITION SHALL BE RETURNED TO THE OWNER. ALL POSTS DAMAGED OR OTHERWISE NOT IN A USABLE CONDITION SHALL BE DISPOSED OF AT NO ADDITIONAL COST TO THE OWNER.
8. FOR THE SIX (6) CATCH BASINS AND MANHOLES, LOCATED IN THE WORK AREA; BIDDERS ARE TO INCLUDE RECONSTRUCTION OF THESE STRUCTURES (GREATER THAN 12-INCHES IN DEPTH FROM THE RIM ELEVATION OF REPAIR WORK) IN THE BASE BID. THE SUCCESSFUL BIDDER WILL BE PAID FOR REPAIRING EACH STRUCTURE BASED ON THE ACTUAL DEPTH OF REPAIR WITH EITHER STRUCTURAL ADJUSTMENT (WITHIN TOP 12-INCHES OF RIM ELEVATION) OR STRUCTURAL RECONSTRUCTION (GREATER THAN 12-INCHES IN DEPTH) PER THE UNIT PRICES PROVIDED IN THE BID PACKAGE AND THE SCOPE OF WORK DETERMINED AND APPROVED PRIOR TO THE WORK COMMENCING. REPLASTERING OF THE ENTIRE STRUCTURE SHALL BE INCLUDED IN THE UNIT PRICE FOR BOTH STRUCTURAL ADJUSTMENT AND STRUCTURAL RECONSTRUCTION.
9. ALL PROPOSED ADA RAMPS SHALL HAVE TRUNCATED DOMES. PLASTIC OR METAL STYLE DOMES ARE BOTH ACCEPTABLE.
10. A THICKENED EDGE OF ASPHALT PER THE DETAIL ON SHEET C-4.1 OF THE PLANS SHALL BE LOCATED WHERE CALLED FOR IN THE PLAN. BIDDERS SHALL INCREASE THE QUANTITIES FOR THIS ITEM ACCORDINGLY IN THE BASE BID.
11. BIDDERS ARE TO ASSUME THAT ALL STOOPS WILL BE REPLACED WITH A FROST SLAB PER THE PLANS. IF DURING CONSTRUCTION IT IS DETERMINED THAT THE EXISTING STOOP IS A FROST SLAB THEN IT WILL REMAIN IN PLACE AND THE SCHOOL BOARD WILL BE CREDITED PER THE UNIT PRICE PROVIDED IN THE BID PACKAGE.

FLOODPLAIN NOTE:
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AN AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER FLOOD INSURANCE RATE MAP NUMBER 26125C0553G, DATED JANUARY 16, 2009.

\\peainc\pea\PROJECTS\2023\23-0262 2024 TDS SITE IMPROVEMENT PROJECTS\DWG\CONSTRUCTION-PAVING\1_BAKER\(C-2.1)DIM ENG-230262_BAKER.dwg

UTILITY LEGEND:

—OH—ELEC—	EX. OH. ELEC, POLE & GUY WIRE
—UG—CATV—	EX. U.G. CABLE TV & PEDESTAL
—UG—COMM—	EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
—UG—ELEC—	EX. U.G. ELEC,MANHOLE, METER & HANDHOLE
	EX. GAS LINE
GAS	EX. GAS VALVE & GAS LINE MARKER
	EX. TRANSFORMER & IRRIGATION VALVE
	EX. WATER MAIN
	EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
	EX. WATER VALVE BOX & SHUTOFF
	EX. SANITARY SEWER
	EX. SANITARY CLEANOUT & MANHOLE
	EX. COMBINED SEWER MANHOLE
	EX. STORM SEWER
	EX. CLEANOUT & MANHOLE
	EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
Y.D.	EX. YARD DRAIN & ROOF DRAIN
	EX. UNIDENTIFIED STRUCTURE
	PROPOSED WATER MAIN
	PROPOSED HYDRANT AND GATE VALVE
	PROPOSED TAPPING SLEEVE, VALVE & WELL
	PROPOSED POST INDICATOR VALVE
	PROPOSED SANITARY SEWER
C.O. ●	PROPOSED SANITARY CLEANOUT & MANHOLE
	PROPOSED STORM SEWER
C.O. ●	PROPOSED STORM SEWER CLEANOUT & MANHOLE
■ Y.D.	PROPOSED CATCH BASIN, INLET & YARD DRAIN



STANDARD DUTY ASPHALT ON EXISTING AGGREGATE BASE REMAINING IN PLACE DETAIL

NOT TO SCALE

ASPHALT MATERIAL NOTES:
HOT-MIX ASPHALT MIXTURES UTILIZING RECYCLED ASPHALT PAVEMENT (RAP) MUST MEET MDOT SPECIAL PROVISION 12SP501(E). THE BINDER GRADE FOR THIS WORK IS PG64-22. IF ASPHALT MIXES CONTAINING RAP ARE TO BE SUPPLIED FOR THIS PROJECT, THE ASPHALT BINDER MUST BE REVISED PER MDOT 'TIER 1' OR 'TIER 2' REQUIREMENTS (RAP CONTENT UP TO 17% MAXIMUM). TIER 3 MIXES ARE NOT ACCEPTABLE ON THIS PROJECT. AN ASPHALT MIX DESIGN FOR ALL SPECIFIED MIXES SHOULD BE FORWARDED TO PEA INC. FOR REVIEW PRIOR TO CONSTRUCTION

PAVING QUANTITIES:

6" CONCRETE CURB AND GUTTER	303 LF
4" MOUNTABLE CURB	223 LF
4" CONCRETE SIDEWALK	5,628 SF
INTEGRAL CURB AND WALK	3,554 SF
4" ASPHALT PAVEMENT	95,293 SF
AGGREGATE BASE PREPARATION	38,382 SF
BUTT JOINT	98 LF
8" CONCRETE PAVEMENT	260 SF
GUARD POSTS	11 EA
CONCRETE COLLAR	4 EA.
SIGN AND POST REINSTALLATION	9 EA.
SUBGRADE UNDERCUT ALLOWANCE	1,468 CYD
SUBGRADE UNDERCUT DRAIN TILE (4") ALLOWANCE	1,000 LF

ENGINEERING QUANTITIES:

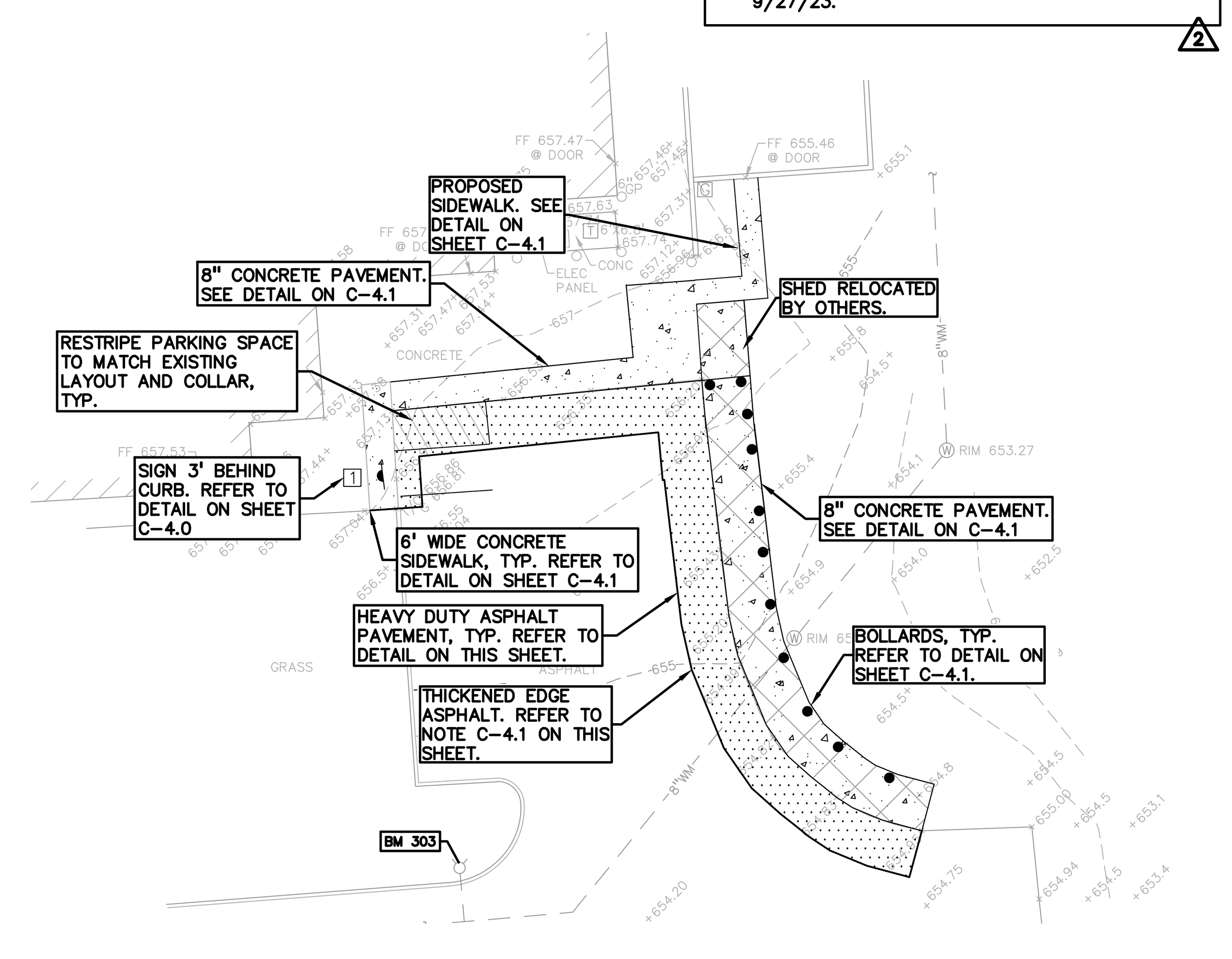
ADJUST/RECONSTRUCT STORM STRUCTURE	11 EA
4" HDPE PERF. UNDERDRAIN	566 LF

UNDERCUTTING NOTES: WEST PARKING LOT

1. AS PART OF THE PAVEMENT REMOVAL AND EARTHWORK PAY ITEMS REMOVE THE EXISTING AGGREGATE BASE AND REMOVE TO ALLOW FOR THE PROPOSED THICKNESS OF ASPHALT PAVEMENT TO BE PLACED. ANY EXISTING BASE MATERIAL REMOVED BELOW THIS ELEVATION WILL BE CONSIDERED PART OF THE SUBGRADE UNDERCUTTING PAY ITEM.
2. THE EXISTING BASE BEING REMOVED FOR THE PLACEMENT OF THE ASPHALT COULD BE STOCKPILED AND REUSED FOR UNDERCUTS IF DEEMED ACCEPTABLE BY THE QUALIFIED ENGINEERING TECHNICIAN ON SITE.
3. SUBGRADE UNDERCUT SHALL BE EVALUATED BY A QUALIFIED ENGINEERING TECHNICIAN TO DETERMINE IF SUBGRADE STABILIZATION IS NECESSARY. UNDERCUT EXCAVATIONS SHALL BE BACKFILLED WITH MDOT 21AA DENSE GRADED AGGREGATE PLACED IN AN ENGINEERED MANNER. LIFT THICKNESS SHALL NOT EXCEED 9 INCHES. BACKFILLING BACK TO THE TOP OF AGGREGATE BASE ELEVATION SHALL BE INCLUDED IN THE SUBGRADE UNDERCUTTING PAY ITEM. THE USE OF TRI-AXIAL GEOGRID MAY BE USED TO REDUCE UNDERCUT DEPTHS, AS APPROVED BY THE DISTRICT AND PER THE UNIT PRICE PROVIDED WITH THE CONTRACTORS BID.
4. ALL ENGINEERED FILL SHALL BE COMPACTED TO A DENSITY OF AT LEAST 95 PERCENT OF THE MAXIMUM DENSITY DETERMINED BY THE MODIFIED PROCTOR (ASTM D1557) METHOD OF TESTING. ALL ENGINEERED FILL MATERIAL SHALL BE PLACED AND COMPACTED AT APPROXIMATELY THE OPTIMUM MOISTURE CONTENT. FROZEN MATERIAL SHALL NOT BE USED AS FILL, NOR SHOULD FILL BE PLACED ON A FROZEN SUBGRADE.
5. THE QUANTITY FOR "SUBGRADE UNDERCUT" FOR EACH SITE SHALL BE INCLUDED IN THE BASE BID. THIS ITEM IS CONSIDERED AN ALLOWANCE AND FINAL PAYMENT WILL BE BASED ON THE ACTUAL VOLUME OF COMPACTED IN PLACE STONE PER THE UNIT PRICE PROVIDED IN THE BID PACKAGE.
6. SUBGRADE UNDERCUT DRAIN TILE SHALL BE EVALUATED BY A QUALIFIED ENGINEERING TECHNICIAN TO DETERMINE IF SUBGRADE STABILIZATION IS NECESSARY. DRAIN TILE SHALL BE PLACED WITHIN ANY UNDERCUT AREA AND CONNECTED TO THE CLOSEST CATCH BASIN TO PREVENT GROUNDWATER FROM POOLING WITHIN THE GRANULAR SOILS IN UNDERCUTS AND CREATING "BATHTUBS" IN THE COHESIVE SOILS.
7. THE QUANTITY FOR "SUBGRADE UNDERCUT DRAIN TILE (4")" FOR EACH SITE SHALL BE INCLUDED IN THE BASE BID. THIS ITEM IS CONSIDERED AN ALLOWANCE AND FINAL PAYMENT WILL BE BASED ON THE ACTUAL FOOTAGE OF COMPACTED IN PLACE STONE PER THE UNIT PRICE PROVIDED IN THE BID PACKAGE.
8. THE IMPORTING, ADDING, FINE GRADING AND COMPACTING ADDITIONAL PAVEMENT AGGREGATE BASE MATERIAL (MDOT 21AA CRUSHED LIMESTONE) REQUIRED TO ACHIEVE THE PROPOSED TOP OF BASE ELEVATIONS AND PRIOR TO PLACING THE ASPHALT PAVEMENT WILL BE EVALUATED BY A QUALIFIED ENGINEERING TECHNICIAN TO DETERMINE THE VOLUME OF ADDITIONAL MATERIAL REQUIRED PER THE PROJECT PLANS.
9. THE QUANTITY FOR "ADD AGGREGATE TO EXISTING BASE" FOR EACH SITE SHALL BE INCLUDED IN THE BASE BID. THIS ITEM IS CONSIDERED AN ALLOWANCE AND FINAL PAYMENT WILL BE BASED ON THE ACTUAL VOLUME OF COMPACTED IN PLACE STONE PER THE UNIT PRICE PROVIDED IN THE BID PACKAGE.
10. CONTRACTOR SHALL REFER TO THE "REPORT ON GEOTECHNICAL PAVEMENT INVESTIGATION" PREPARED BY G2 CONSULTING GROUP DATED 9/27/23.

PAVEMENT PREPARATION NOTES: EAST PARKING LOT

1. PAVEMENT PREPARATION SHALL FOLLOW THE PROCESS SUMMERIZED BELOW:
   - 1.1. REMOVE AND STOCKPILE THE EXISTING AGGREGATE BASE FOR RE-USE IN THE PAVEMENT OPERATION. EXCAVATE THE EXISTING BASE UP TO 2-INCHES ABOVE THE SUBGRADE TO REDUCE THE CHANCE FOR CONTAMINATION. ALL AGGREGATE 2 INCHES AND LESS ABOVE THE SUBGRADE IS TO BE REMOVED AND HAULED OFF WITH NEW AGGREGATE BEING PLACED BACK TO THE EXISTING ELEVATION AS PART OF THE SUBGRADE UNDERCUTTING PAY ITEM.
   - 1.2. PROOFROLL EXISTING BASE AND SUBGRADE PER PLANS, SPECS, AND GEOTECH REPORT.
   - 1.3. DETERMINE AREAS THAT FAIL THE PROOFROLL. SUBGRADE UNDERCUTS SHALL BE EVALUATED BY A QUALIFIED ENGINEERING TECHNICIAN TO DETERMINE IF SUBGRADE STABILIZATION IS NECESSARY. DRAIN TILE SHALL BE PLACED WITHIN ANY UNDERCUT AREA AND CONNECTED TO THE CLOSEST CATCH BASIN TO PREVENT GROUNDWATER FROM POOLING WITHIN THE GRANULAR SOILS IN UNDERCUTS AND CREATING "BATHTUBS" IN THE COHESIVE SOILS.
   - 1.4. TO MINIMIZE SUBGRADE INSTABILITY AND UNDERCUTS, THE SUBGRADE SHALL NOT BE LEFT EXPOSED TO PRECIPITATION AND CONSTRUCTION OPERATIONS AND SHOULD BE PERFORMED DURING THE SUMMER MONTHS TO ENSURE DRY, WARM, WEATHER. ADDITIONALLY, THE SUBGRADE MAY BECOME UNSTABLE UNDER REPEATED LOADING OF CONSTRUCTION TRAFFIC; THEREFORE, CONSTRUCTION EQUIPMENT SHOULD BE LIMITED ON THE EXPOSED SUBGRADE.
   - 1.5. BACKFILL THE INITIAL PORTION OF THE UNDERCUT WITH THE SALVAGED AGGREGATE BASE AND THEN COMPLETE THE BACKFILL PROCESS WITH IMPORTED MDOT 21AA CRUSHED LIMESTONE AGGREGATE PER THE PLANS, SPECS AND GEOTECH REPORT.
2. SUBGRADE UNDERCUT SHALL BE EVALUATED BY A QUALIFIED ENGINEERING TECHNICIAN TO DETERMINE IF SUBGRADE STABILIZATION IS NECESSARY. UNDERCUT EXCAVATIONS SHALL BE BACKFILLED WITH MDOT 21AA DENSE GRADED AGGREGATE PLACED IN AN ENGINEERED MANNER. LIFT THICKNESS SHALL NOT EXCEED 9 INCHES. THE USE OF TRI-AXIAL GEOGRID MAY BE USED TO REDUCE UNDERCUT DEPTHS, AS APPROVED BY THE DISTRICT AND PER THE UNIT PRICE PROVIDED WITH THE CONTRACTORS BID.
3. ALL ENGINEERED FILL SHALL BE COMPACTED TO A DENSITY OF AT LEAST 95 PERCENT OF THE MAXIMUM DENSITY DETERMINED BY THE MODIFIED PROCTOR (ASTM D1557) METHOD OF TESTING. ALL ENGINEERED FILL MATERIAL SHALL BE PLACED AND COMPACTED AT APPROXIMATELY THE OPTIMUM MOIUSTURE CONTENT. FROZEN MATERIAL SHALL NOT BE USED AS FILL, NOR SHOULD FILL BE PLACED ON A FROZEN SUBGRADE.
4. THE QUANTITY FOR "SUBGRADE UNDERCUT" FOR EACH SITE SHALL BE INCLUDED IN THE BASE BID. THIS ITEM IS CONSIDERED AN ALLOWANCE AND FINAL PAYMENT WILL BE BASED ON THE ACTUAL VOLUME OF COMPACTED IN PLACE STONE PER THE UNIT PRICE PROVIDED IN THE BID PACKAGE.
5. SUBGRADE UNDERCUT DRAIN TILE SHALL BE EVALUATED BY A QUALIFIED ENGINEERING TECHNICIAN TO DETERMINE IF SUBGRADE STABILIZATION IS NECESSARY. DRAIN TILE SHALL BE PLACED WITHIN ANY UNDERCUT AREA AND CONNECTED TO THE CLOSEST CATCH BASIN TO PREVENT GROUNDWATER FROM POOLING WITHIN THE GRANULAR SOILS IN UNDERCUTS AND CREATING "BATHTUBS" IN THE COHESIVE SOILS.
6. THE QUANTITY FOR "SUBGRADE UNDERCUT DRAIN TILE (4")" FOR EACH SITE SHALL BE INCLUDED IN THE BASE BID. THIS ITEM IS CONSIDERED AN ALLOWANCE AND FINAL PAYMENT WILL BE BASED ON THE ACTUAL FOOTAGE OF COMPACTED IN PLACE STONE PER THE UNIT PRICE PROVIDED IN THE BID PACKAGE.
7. THE IMPORTING, ADDING, FINE GRADING AND COMPACTING ADDITIONAL PAVEMENT AGGREGATE BASE MATERIAL (MDOT 21AA CRUSHED LIMESTONE) REQUIRED TO ACHIEVE THE PROPOSED TOP OF BASE ELEVATIONS AND PRIOR TO PLACING THE ASPHALT PAVEMENT WILL BE EVALUATED BY A QULIFIED ENGINEERING TECHNICIAN TO DETERMINE THE VOLUME OF ADDITIONAL MATERIAL REQUIRED PER THE PROJECT PLANS.
8. THE QUANTITY FOR "ADD AGGREGATE TO EXISTING BASE" FOR EACH SITE SHALL BE INCLUDED IN THE BASE BID. THIS ITEM IS CONSIDERED AN ALLOWANCE AND FINAL PAYMENT WILL BE BASED ON THE ACTUAL VOLUME OF COMPACTED IN PLACE STONE PER THE UNIT PRICE PROVIDED IN THE BID PACKAGE.
9. CONTRACTOR SHALL REFER TO THE "REPORT ON GEOTECHNICAL PAVEMENT INVESTIGATION" PREPARED BY G2 CONSULTING GROUP DATED 9/27/23.



PEA GROUP
t: 844.813.2949
www.peagroup.com

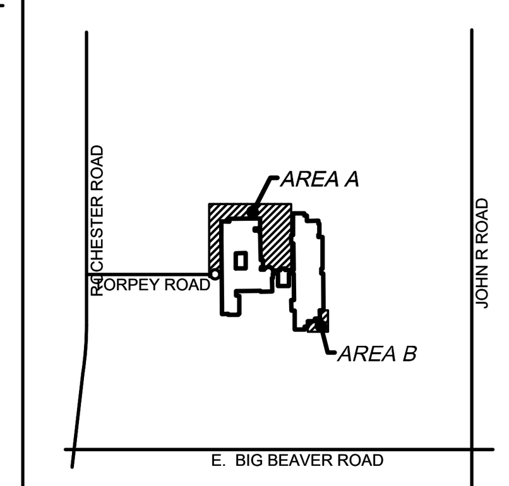
STATE OF MICHIGAN
ROBERT SCOTT KOCHON
License No. 6201046143
LICENSED PROFESSIONAL ENGINEER

NORTH

0 15 30 60
SCALE: 1" = 30'

811 Know what's below. Call before you dig.

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CLIENT
TROY SCHOOLS
1140 RANKIN DRIVE
TROY, MI 48083

PROJECT TITLE
BAKER MIDDLE SCHOOL
1359 TORPEY ROAD
CITY OF TROY, OAKLAND COUNTY, MICHIGAN

REVISIONS
ADDENDUM #2 : 11-14-23

ORIGINAL ISSUE DATE:
OCTOBER 31, 2023

DRAWING TITLE
ENGINEERING AND DIMENSION PLAN

PEA JOB NO.	2023-0262
P.M.	RR
DN.	RR
DES.	RM

DRAWING NUMBER:
C-2.1

UNDERCUTTING NOTES:

1. AS PART OF THE PAVEMENT REMOVAL AND EARTHWORK PAY ITEMS REMOVE THE EXISTING AGGREGATE BASE AND REMOVE TO ALLOW FOR THE PROPOSED THICKNESS OF ASPHALT PAVEMENT TO BE PLACED. ANY EXISTING BASE MATERIAL REMOVED BELOW THIS ELEVATION WILL BE CONSIDERED PART OF THE SUBGRADE UNDERCUTTING PAY ITEM.
2. THE EXISTING BASE BEING REMOVED FOR THE PLACEMENT OF THE ASPHALT COULD BE STOCKPILED AND REUSED FOR UNDERCUTS IF DEEMED ACCEPTABLE BY THE QUALIFIED ENGINEERING TECHNICIAN ON SITE.
3. SUBGRADE UNDERCUT SHALL BE EVALUATED BY A QUALIFIED ENGINEERING TECHNICIAN TO DETERMINE IF SUBGRADE STABILIZATION IS NECESSARY. UNDERCUT EXCAVATIONS SHALL BE BACKFILLED WITH MDOT 21AA DENSE GRADED AGGREGATE PLACED IN AN ENGINEERED MANNER. LIFT THICKNESS SHALL NOT EXCEED 9 INCHES. BACKFILLING BACK TO THE TOP OF AGGREGATE BASE ELEVATION SHALL BE INCLUDED IN THE SUBGRADE UNDERCUTTING PAY ITEM. THE USE OF TRI-AXIAL GEOGRID MAY BE USED TO REDUCE UNDERCUT DEPTHS, AS APPROVED BY THE DISTRICT AND PER THE UNIT PRICE PROVIDED WITH THE CONTRACTORS BID.
4. ALL ENGINEERED FILL SHALL BE COMPACTED TO A DENSITY OF AT LEAST 95 PERCENT OF THE MAXIMUM DENSITY DETERMINED BY THE MODIFIED PROCTOR (ASTM D1557) METHOD OF TESTING. ALL ENGINEERED FILL MATERIAL SHALL BE PLACED AND COMPACTED AT APPROXIMATELY THE OPTIMUM MOISTURE CONTENT. FROZEN MATERIAL SHALL NOT BE USED AS FILL, NOR SHOULD FILL BE PLACED ON A FROZEN SUBGRADE.
5. THE QUANTITY FOR "SUBGRADE UNDERCUT" FOR EACH SITE SHALL BE INCLUDED IN THE BASE BID. THIS ITEM IS CONSIDERED AN ALLOWANCE AND FINAL PAYMENT WILL BE BASED ON THE ACTUAL VOLUME OF COMPACTED IN PLACE STONE PER THE UNIT PRICE PROVIDED IN THE BID PACKAGE.
6. SUBGRADE UNDERCUT DRAIN TILE SHALL BE EVALUATED BY A QUALIFIED ENGINEERING TECHNICIAN TO DETERMINE IF SUBGRADE STABILIZATION IS NECESSARY. DRAIN TILE SHALL BE PLACED WITHIN ANY UNDERCUT AREA AND CONNECTED TO THE CLOSEST CATCH BASIN TO PREVENT GROUNDWATER FROM POOLING WITHIN THE GRANULAR SOILS IN UNDERCUTS AND CREATING "BATHTUBS" IN THE COHESIVE SOILS.
7. THE QUANTITY FOR "SUBGRADE UNDERCUT DRAIN TILE (4")" FOR EACH SITE SHALL BE INCLUDED IN THE BASE BID. THIS ITEM IS CONSIDERED AN ALLOWANCE AND FINAL PAYMENT WILL BE BASED ON THE ACTUAL FOOTAGE OF COMPACTED IN PLACE STONE PER THE UNIT PRICE PROVIDED IN THE BID PACKAGE.
8. THE IMPORTING, ADDING, FINE GRADING AND COMPACTING ADDITIONAL PAVEMENT AGGREGATE BASE MATERIAL (MDOT 21AA CRUSHED LIMESTONE) REQUIRED TO ACHIEVE THE PROPOSED TOP OF BASE ELEVATIONS AND PRIOR TO PLACING THE ASPHALT PAVEMENT WILL BE EVALUATED BY A QUALIFIED ENGINEERING TECHNICIAN TO DETERMINE THE VOLUME OF ADDITIONAL MATERIAL REQUIRED PER THE PROJECT PLANS.
9. THE QUANTITY FOR "ADD AGGREGATE TO EXISTING BASE" FOR EACH SITE SHALL BE INCLUDED IN THE BASE BID. THIS ITEM IS CONSIDERED AN ALLOWANCE AND FINAL PAYMENT WILL BE BASED ON THE ACTUAL VOLUME OF COMPACTED IN PLACE STONE PER THE UNIT PRICE PROVIDED IN THE BID PACKAGE.
10. CONTRACTOR SHALL REFER TO THE "REPORT ON GEOTECHNICAL PAVEMENT INVESTIGATION" PREPARED BY G2 CONSULTING GROUP DATED 9/27/23.

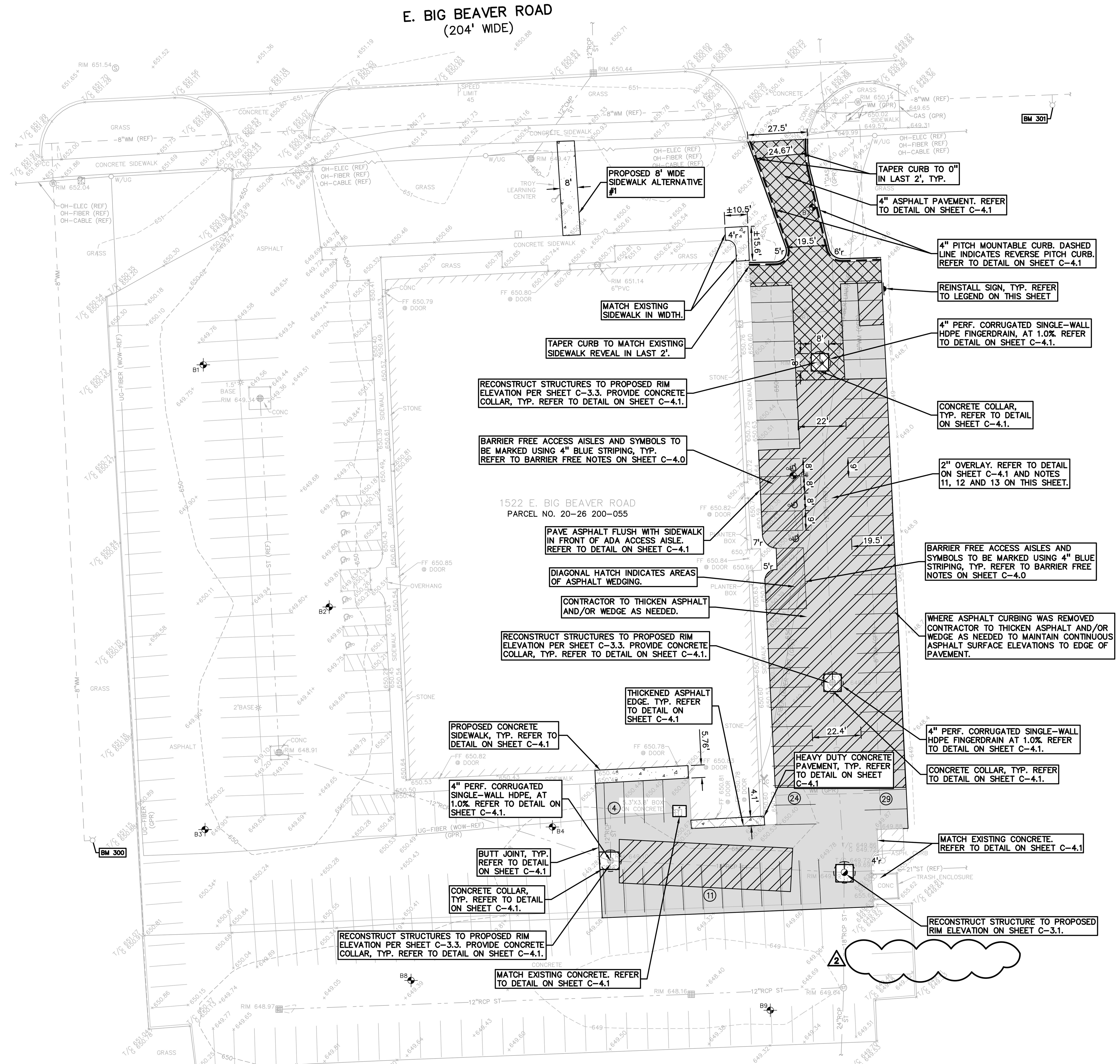
FLOODPLAIN NOTE:
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AN AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER FLOOD INSURANCE RATE MAP NUMBER 26125C0553G, DATED JANUARY 16, 2009.

S:\PROJECTS\2023\23-0262 2024 TDS SITE IMPROVEMENT PROJECTS\DWG\CONSTRUCTION-PAVING\5_TROY LEARNING CENTER\(C-2.2)ENG-DIM-23-0262-TLC.dwg

2

PAVING LEGEND:

▨	▨	▨	ASPHALT PAVEMENT
2" OVERLAY	STANDARD DUTY ASPHALT	2" OVERLAY WITH WEDGING	



PAVING QUANTITIES:

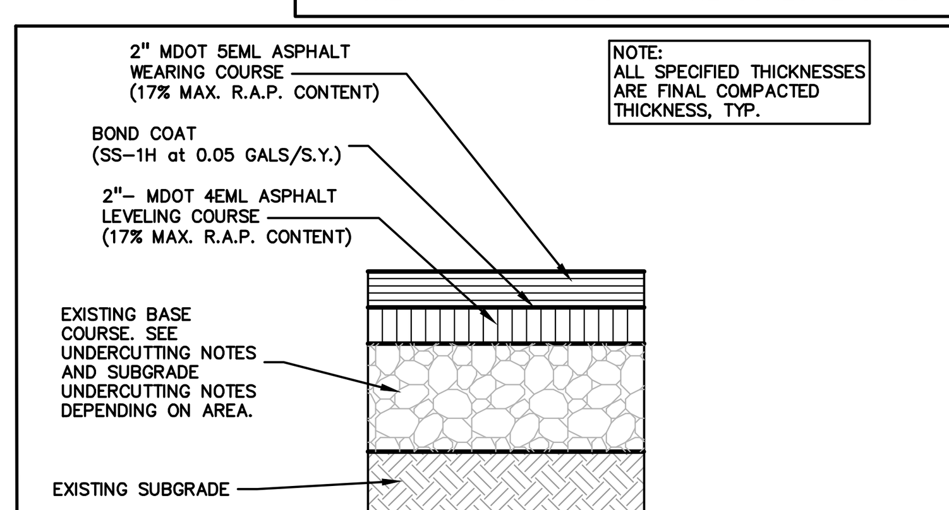
8' WIDE CONCRETE SIDEWALK	369 SF
CONCRETE SIDEWALK	504 SF
4" ASPHALT PAVEMENT	2,800 SF
2" OVERLAY	20,132 SF
8" CONCRETE PAVEMENT	227 SF
4" MOUNTABLE CURB AND GUTTER	150 LF
SIGN AND POST	1 EA.
SUBGRADE UNDERCUT ALLOWANCE	205 CY
SUBGRADE UNDERCUT DRAIN TILE (4") ALLOWANCE	300 LF

ENGINEERING QUANTITIES:

RECONSTRUCT STRUCTURE	4 EA
4" HDPE PERF. UNDERDRAIN	160 LF

SUBGRADE UNDERCUTTING NOTES:

1. TO MINIMIZE SUBGRADE INSTABILITY AND UNDERCUTS, THE SUBGRADE SHALL NOT BE LEFT EXPOSED TO PRECIPITATION AND CONSTRUCTION OPERATIONS AND SHOULD BE PERFORMED DURING THE SUMMER MONTHS TO ENSURE DRY, WARM, WEATHER. ADDITIONALLY, THE SUBGRADE MAY BECOME UNSTABLE UNDER REPEATED LOADING OF CONSTRUCTION TRAFFIC; THEREFORE, CONSTRUCTION EQUIPMENT SHOULD BE LIMITED ON THE EXPOSED SUBGRADE.
2. SUBGRADE UNDERCUT SHALL BE EVALUATED BY A QUALIFIED ENGINEERING TECHNICIAN TO DETERMINE IF SUBGRADE STABILIZATION IS NECESSARY. UNDERCUT EXCAVATIONS SHALL BE BACKFILLED WITH MDOT 21AA DENSE GRADED AGGREGATE PLACED IN AN ENGINEERED MANNER. LIFT THICKNESS SHALL NOT EXCEED 9 INCHES. THE USE OF TRI-AXIAL GEOGRID MAY BE USED TO REDUCE UNDERCUT DEPTHS, AS APPROVED BY THE DISTRICT AND PER THE UNIT PRICE PROVIDED WITH THE CONTRACTORS BID.
3. ALL ENGINEERED FILL SHALL BE COMPACTED TO A DENSITY OF AT LEAST 95 PERCENT OF THE MAXIMUM DENSITY DETERMINED BY THE MODIFIED PROCTOR (ASTM D1557) METHOD OF TESTING. ALL ENGINEERED FILL MATERIAL SHALL BE PLACED AND COMPACTED AT APPROXIMATELY THE OPTIMUM MOIUSTURE CONTENT. FROZEN MATERIAL SHALL NOT BE USED AS FILL, NOR SHOULD FILL BE PLACED ON A FROZEN SUBGRADE.
4. SUBGRADE UNDERCUT DRAIN TILE SHALL BE EVALUATED BY A QUALIFIED ENGINEERING TECHNICIAN TO DETERMINE IF SUBGRADE STABILIZATION IS NECESSARY. DRAIN TILE SHALL BE PLACED WITHIN ANY UNDERCUT AREA AND CONNECTED TO THE CLOSEST CATCH BASIN TO PREVENT GROUNDWATER FROM POOLING WITHIN THE GRANULAR SOILS IN UNDERCUTS AND CREATING "BATHTUBS" IN THE COHESIVE SOILS.



STANDARD DUTY ASPHALT ON EXISTING AGGREGATE BASE REMAINING IN PLACE DETAIL

NOT TO SCALE

ASPHALT MATERIAL NOTES:
HOT-MIX ASPHALT MIXTURES UTILIZING RECYCLED ASPHALT PAVEMENT (RAP) MUST MEET MDOT SPECIAL PROVISION 12SP501(E). THE BINDER GRADE FOR THIS WORK IS PG64-22. IF ASPHALT MIXES CONTAINING RAP ARE TO BE SUPPLIED FOR THIS PROJECT, THE ASPHALT BINDER MUST BE REVISED PER MDOT 'TIER 1' OR 'TIER 2' REQUIREMENTS (RAP CONTENT UP TO 17% MAXIMUM). TIER 3 MIXES ARE NOT ACCEPTABLE ON THIS PROJECT. AN ASPHALT MIX DESIGN FOR ALL SPECIFIED MIXES SHOULD BE FORWARDED TO PEA INC. FOR REVIEW PRIOR TO CONSTRUCTION

SIGN LEGEND:

'NO PARKING FIRE LANE' SIGN	1
'STOP' SIGN	2
'BARRIER FREE PARKING' SIGN	3
'VAN ACCESSIBLE' SIGN	4
'CROSSWALK' SIGN	5
'DO NOT ENTER' SIGN	6
'SIDEWALK ENDS' SIGN	7
'NO PARKING LOADING ZONE' SIGN	8

REFER TO DETAIL SHEET FOR SIGN DETAILS

SIDEWALK RAMP LEGEND:

SIDEWALK RAMP 'TYPE R'	Ⓡ
SIDEWALK RAMP 'TYPE F'	Ⓕ
SIDEWALK RAMP 'TYPE P'	Ⓟ
SIDEWALK RAMP 'TYPE C'	Ⓒ
SIDEWALK RAMP 'TYPE D'	Ⓓ
CURB DROP ONLY	ⓧ

REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

BID ALTERNATE #1:

1. REMOVE EXISTING GRASS, TOPSOIL AND SUBGRADE IN ORDER TO RE-GRADE AND RESTORE THE GRASS AREA NORTH OF THE BUILDING BETWEEN THE TWO DRIVE APPROACHES TO ELIMINATE THE BERMS AREA AS INDICATED IN SHEETS C-1.2 AND C-3.2 OF THE CONSTRUCTION PLANS AND PER THE PROJECT SPECIFICATIONS.
2. PLACE A NEW CONCRETE SIDEWALK FROM THE EXISTING WALK ON NORTH SIDE OF THE BUILDING TO THE EXISTING WALK ALONG BIG BEAVER AS INDICATED ON SHEETS C-1.2, C-2.2, C-3.2 AND C-4.1 OF THE CONSTRUCTION PLANS AND PER THE PROJECT SPECIFICATIONS.

LEGEND:

▨ STD DUTY	▨ HEAVY DUTY	▨ R.O.W. ONLY	CONCRETE PAVEMENT
▨ STD DUTY	▨ HEAVY DUTY	▨ DEEP STRENGTH	ASPHALT PAVEMENT
▨			GRAVEL
▨			WETLAND

CONCRETE CURB AND GUTTER
REVERSE GUTTER PAN
SETBACK LINE
SIGN
LIGHTPOLE
FENCE
GUARD RAIL

NOTES:

1. CONTRACTOR TO VERIFY ALL QUANTITIES SHOWN ON THE PLANS. ANY DEVIATIONS TO THE PLAN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF THE SCHOOL DISTRICT AND PEA GROUP, IN WRITING PER THE BID PACKAGE, FOR VERIFICATION PRIOR TO BIDDING.
2. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, CENTER OF MANHOLE/CATCH BASIN UNLESS OTHERWISE NOTED.
3. DOWEL INTO EXISTING CURB AND GUTTER 9" WITH EPOXY COATED #4 BAR CONTINUOUS BETWEEN EXISTING AND PROPOSED CURBING.
4. THE SIDEWALK THRU THE DRIVE APPROACH SHALL BE REMOVED, STRAIGHTENED, ALIGNED AND REPLACED BY THE CONTRACTOR TO MATCH EXISTING ALIGNMENT OF OF 8' WALK ON EITHER SIDE OF APPROACH. THE NEW SIDEWALK SHALL BE STRAIGHT WITH NO BENDS OR CURVES THAT EXTEND THROUGH DRIVE APPROACH.
5. CONTRACTOR TO FIELD VERIFY ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION INCLUDING BUT NOT LIMITED TO: SITE LIGHTING, FIBER LINES, ETC.
6. REFER TO NOTES AND DETAIL SHEET FOR ON SITE PAVING DETAILS.
7. CONTRACTOR TO REMOVE AND REPLACE SIGNS AND POSTS PER DETAILS ON SHEET C-4.0. ALL SIGNS AND ANY POSTS IN GOOD CONDITION SHALL BE RETURNED TO THE OWNER. ALL POSTED DAMAGED OR IN OTHERWISE POOR CONDITION, SHALL BE DISPOSED OF AT NO ADDITONAL COST TO THE OWNER.
8. FOR THE THREE (3) CATCH BASINS IN THE WORK AREA; BIDDERS ARE TO INCLUDE RECONSTRUCTION OF THESE STRUCTURES (GREATER THAN 12-INCHES IN DEPTH FROM THE RIM ELEVATION OF REPAIR WORK) IN THE BASE BID. THE SUCCESSFUL BIDDER WILL BE PAID FOR REPAIRING EACH STRUCTURE BASED ON THE ACTUAL DEPTH OF REPAIR WITH EITHER STRUCTURAL ADJUSTMENT (WITHIN TOP 12-INCHES OF RIM ELEVATION) OR STRUCTURAL RECONSTRUCTION (GREATER THAN 12-INCHES IN DEPTH) PER THE UNIT PRICES PROVIDED IN THE BID PACKAGE AND THE SCOPE OF WORK DETERMINED AND APPROVED PRIOR TO THE WORK COMMENCING. REPLASTERING OF THE ENTIRE STRUCTURE SHALL BE INCLUDED IN THE UNIT PRICE FOR BOTH STRUCTURAL ADJUSTMENT AND STRUCTURAL RECONSTRUCTION.
9. A THICKENED EDGE OF ASPHALT PER THE DETAIL ON SHEET C-4.1 OF THE PLANS SHALL BE LOCATED WHERE CALLED FOR IN THE PLAN. BIDDERS SHALL INCREASE THE QUANTITIES FOR THIS ITEM ACCORDINGLY IN THE BASE BID.
10. ALL PROPOSED ADA RAMPS SHALL HAVE TRUNCATED DOMES. PLASTIC OR METAL STYLE DOMES ARE BOTH ACCEPTABLE.
11. FOR FULL DEPTH PATCHES, THE BITUMINOUS CONCRETE SHOULD BE SAW-CUT A MINIMUM 2 FEEL LATERALLY FROM THE DISTRESSED AREA TO BE REMOVED. THE UNDERLYING AGGREGATE SHOULD BE PROOF COMPACTED WITH A VIBRATORY ROLLED AND AREAS THAT REMAIN UNSTABLE SHOULD BE UNDERCUT AND REPLACED WITH MDOT 21AA AGGREGATE. THE BITUMINOUS CONCRETE SECTION WITHIN FULL DEPTH PATCH AREAS MATCH THE REMOVED PAVEMENT THICKNESS AND CONSIST OF MDOT 4EML OR 5EML BITUMINOUS CONCRETE LEVELING COURSE. PRIOR TO PLACING THE FULL-DEPTH PATCH, A TACK COAT SHOULD BE APPLIED TO THE SIDES OF THE SAW-CUT PAVEMENT. ADDITIONALLY, AFTER MILLING AND FULL DEPTH PATCHING, AS REQUIRED, A BITUMINOUS TACK COAT MUST BE PLACED PRIOR TO PLACEMENT OF THE OVERLAY. 2
12. SURFACE COURSE SHALL BE PLACED ACROSS THE FUTURE PAVEMENT AREA AT THE SAME TIME.
13. CONTRACTOR TO REPLACE AREAS OF ASPHALT PAVEMENT SURROUNDING CONCRETE COLLARS WITH FULL DEPTH ASPHALT PAVEMENT AND BASE AS NEEDED. COST NOT TO BE PAID SEPARATELY BUT INCLUDED IN THE PAY ITEM OF THE CONTRACT.
14. CONTRACTOR SHALL REFER TO THE "REPORT ON GEOTECHNICAL PAVEMENT INVESTIGATION" PREPARED BY G2 CONSULTING GROUP DATED 10/10/23

FLOODPLAIN NOTE:
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 26125C0561G, DATED 01/16/2009.

PEA GROUP
t: 844.813.2949
www.peagroup.com

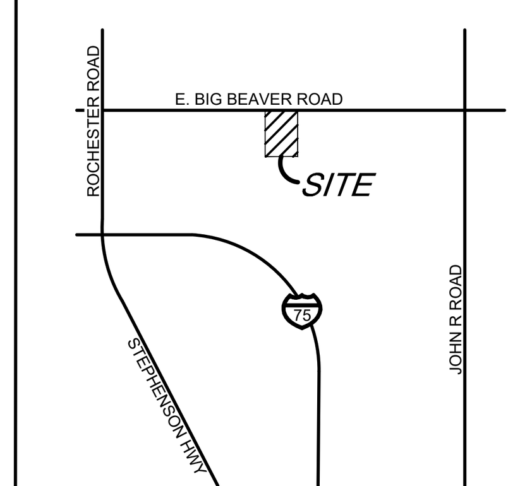
STATE OF MICHIGAN
ROBERT SCOTT ROCHON
License No. 6201046143
LICENSED PROFESSIONAL ENGINEER

NORTH

0 15 30 60
SCALE: 1" = 30'

811 Know what's below. Call before you dig.

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CLIENT
TROY SCHOOLS
1140 RANKIN DRIVE
TROY, MI 48083

PROJECT TITLE
TROY CONTINUING EDUCATION
1522 E. BIG BEAVER ROAD
CITY OF TROY, OAKLAND COUNTY, MICHIGAN

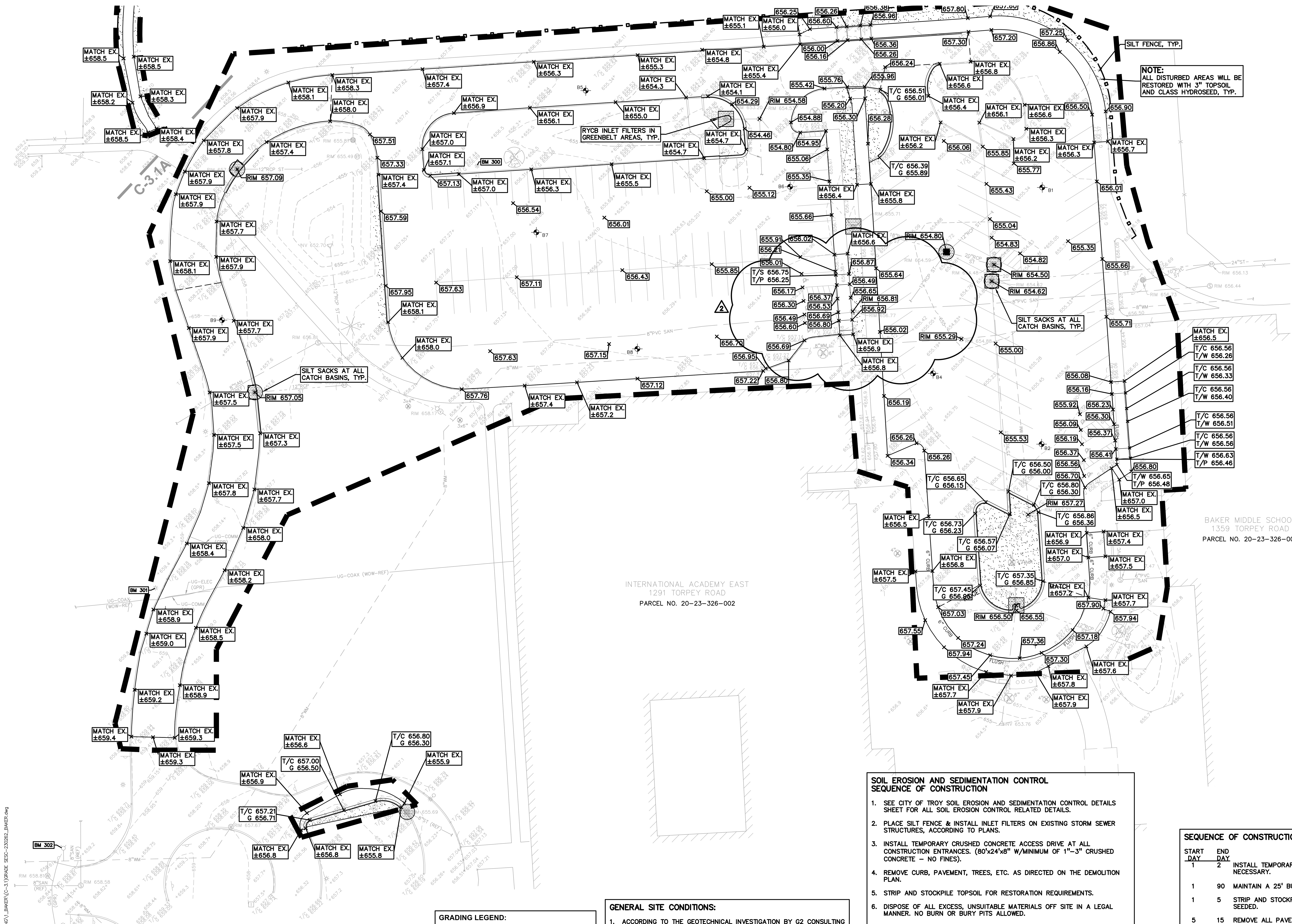
REVISIONS
ADDENDUM #2 : 11-14-23

ORIGINAL ISSUE DATE:
OCTOBER 31, 2023

DRAWING TITLE
DIMENSION AND PAVING PLAN

PEA JOB NO.	2023-0262
P.M.	RR
DN.	RR
DES.	RM

DRAWING NUMBER:
C-2.2



SYMBOLS: EROSION CONTROL:

- (SP-2) SILT FENCE
- (SI-2A) LOW POINT INLET FILTER
- (SI-3) RYCB INLET FILTER
- (SP-9) TEMPORARY STONE ACCESS DRIVE
- (E-9) EROSION CONTROL BLANKET
- TEMPORARY SEED AND MULCH

REFER TO THE TROY SOIL EROSION AND SEDIMENTATION CONTROL DETAILS SHEET FOR ALL DEVICE DETAILS.

EROSION CONTROL QUANTITIES:

SILT FENCE	600 LF
R.Y.C.B. INLET FILTER	3 EA.
LOW POINT INLET FILTER	6 EA.
LAWN RESTORATION	632 SY

NOTE:

1. PER THE "SOIL EROSION AND SEDIMENTATION CONTROL SEQUENCE OF CONSTRUCTION" NOTES THE SUCCESSFUL BIDDER TO THE CLEAN THE STORM SEWER. THIS CLEANING SHALL INCLUDE CLEANING OUT THE STRUCTURES AND ENTIRE SEWER RUNS BETWEEN STRUCTURES USING HYDRAULICALLY PROPELLED, HIGH-VELOCITY JET, OR MECHANICALLY POWERED EQUIPMENT. SELECTION OF THE EQUIPMENT USED SHALL BE BASED ON THE CONDITIONS OF LINES AT THE TIME THE WORK COMMENCES. THE EQUIPMENT AND METHODS SELECTED SHALL BE SATISFACTORY TO THE SCHOOL DISTRICT'S REPRESENTATIVE. THE EQUIPMENT SHALL BE CAPABLE OF REMOVING DIRT, GREASE, ROCKS, SAND, AND OTHER MATERIALS AND OBSTRUCTIONS FROM THE SEWER LINES AND MANHOLES. IF CLEANING OF AN ENTIRE SECTION CANNOT BE SUCCESSFULLY PERFORMED FROM ONE MANHOLE, THE EQUIPMENT SHALL BE SET UP ON THE OTHER MANHOLE AND CLEANING AGAIN ATTEMPTED. IF, AGAIN, SUCCESSFUL CLEANING CANNOT BE PERFORMED OR THE EQUIPMENT FAILS TO TRAVERSE THE ENTIRE MANHOLE SECTION, IT WILL BE ASSUMED THAT A MAJOR BLOCKAGE EXISTS AND THE CLEANING EFFORT SHALL BE ABANDONED.
2. PER THE PROJECT SPECIFICATIONS; PRIOR TO THE PLACEMENT OF TOPSOIL THE SUCCESSFUL BIDDER TO SCHEDULE AN INSPECTION BY THE SCHOOL DISTRICT OR PEA GROUP TO CONFIRM THAT THE GRADE IS AT THE PROPER ELEVATION WHERE THE MINIMUM DEPTH OF TOPSOIL CAN BE PLACED THROUGHOUT THE AREA.
3. CONTRACTOR TO FIELD VERIFY ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION INCLUDING BUT NOT LIMITED TO: SITE LIGHTING, FIBER LINES, ETC.

SOIL EROSION MAINTENANCE SCHEDULE AND NOTES:

1. THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY:

   ROB CARSON
   TROY SCHOOL DISTRICT
   1140 RANKIN
   TROY, OAKLAND COUNTY, MICHIGAN
   248-823-4067

2. IF ANY DAMAGE HAS OCCURRED AS A RESULT OF STORM WATER DISCHARGE FROM THE SITE, THE FOLLOWING STEPS SHALL BE IMPLEMENTED.
3. ANY DEBRIS OR DIRT ON ANY PAVED AREA RESULTING FROM CONSTRUCTION TRAFFIC SHALL BE CLEANED IN A PROMPT MANNER BY THE CONTRACTOR. THE CONSTRUCTION DRIVE SHALL BE CLEANED AT THE END OF EACH DAY.
4. ALL DIRT AND MUD TRACKED ONTO PAVED AREAS SHALL BE REMOVED BY THE CONTRACTOR DAILY BY SCRAPING. STREET SWEEPING IS REQUIRED WEEKLY.
5. SILT FENCE MAINTENANCE SHALL INCLUDE THE REMOVAL OF ANY BUILT UP SEDIMENT WHEN THE SEDIMENT HEIGHT ACCUMULATES TO 1/3 TO 1/2 OF THE HEIGHT OF THE FENCE. THE CONTRACTOR IS RESPONSIBLE TO REMOVE, REPLACE, RETRENCH OR REBACKFILL THE SILTATION FENCE SHOULD IT FALL OR BE DAMAGED DURING CONSTRUCTION.
6. INLET FILTER MAINTENANCE SHALL INCLUDE THE REMOVAL OF ANY ACCUMULATED SILT OR OTHER DEBRIS. THE REMOVAL OF SILT SHOULD BE WITH THE USE OF A STIFF BRISTLE BROOM OR SQUARE POINT SHOVEL. IF INLET FILTERS CAN NOT BE CLEANED OR ARE DAMAGED, THEN THE FABRIC MUST BE REPLACED.
7. CONTRACTOR TO PROVIDE WATER TRUCK TO WATER DOWN THE SITE ON A DAILY BASIS AS REQUIRED TO MAINTAIN DUST CONTROL.
8. IF HIGH GROUNDWATER IS ANTICIPATED OR ENCOUNTERED DURING CONSTRUCTION A DEWATERING PLAN MUST BE SUBMITTED TO THE CITY ENGINEERING DIVISION FOR REVIEW.

GRADING LEGEND:

- +696.91 — EXISTING SPOT ELEVATION
- 622.50 — PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.
- 670 — EXISTING CONTOUR
- 922 — PROPOSED CONTOUR
- PROPOSED REVERSE GUTTER PAN
- PROPOSED RIDGE LINE
- PROPOSED SWALE/DITCH

ABBREVIATIONS

T/C = TOP OF CURB	G = GUTTER GRADE
T/P = TOP OF PAVEMENT	FF = FINISH FLOOR
T/S = TOP OF SIDEWALK	FG = FINISH GRADE
T/W = TOP OF WALL	RIM = RIM ELEVATION
B/W = BOTTOM OF WALL	

REFER TO GRADING NOTES ON SHEET C-4.0.

GENERAL SITE CONDITIONS:

1. ACCORDING TO THE GEOTECHNICAL INVESTIGATION BY G2 CONSULTING GROUP, LLC DATED SEPTEMBER 27, 2023, THE SITE CONSISTS OF THE FOLLOWING SOIL TYPES:

   CLAYEY SAND, SAND AND GRAVELLY SAND

2. TOTAL DISTURBED AREA = ±4.12 ACRES
3. N.P.D.E.S. NOTICE OF COVERAGE IS REQUIRED

EARTHWORK BALANCING NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

SOIL EROSION AND SEDIMENTATION CONTROL SEQUENCE OF CONSTRUCTION

1. SEE CITY OF TROY SOIL EROSION AND SEDIMENTATION CONTROL DETAILS SHEET FOR ALL SOIL EROSION CONTROL RELATED DETAILS.
2. PLACE SILT FENCE & INSTALL INLET FILTERS ON EXISTING STORM SEWER STRUCTURES, ACCORDING TO PLANS.
3. INSTALL TEMPORARY CRUSHED CONCRETE ACCESS DRIVE AT ALL CONSTRUCTION ENTRANCES. (80'x24'x8" W/MINIMUM OF 1"-3" CRUSHED CONCRETE – NO FINES).
4. REMOVE CURB, PAVEMENT, TREES, ETC. AS DIRECTED ON THE DEMOLITION PLAN.
5. STRIP AND STOCKPILE TOPSOIL FOR RESTORATION REQUIREMENTS.
6. DISPOSE OF ALL EXCESS, UNSUITABLE MATERIALS OFF SITE IN A LEGAL MANNER. NO BURN OR BURY PITS ALLOWED.
7. UNSUITABLE MATERIALS CONSIST OF, BUT ARE NOT NECESSARILY LIMITED TO THE FOLLOWING: CONCRETE, ASPHALT, TREES, BRUSH, STUMPS, ROOTS, OR OTHER MISCELLANEOUS DEBRIS OR TRASH.
8. MASS GRADE THE SITE IN ACCORDANCE WITH THE PLANS.
9. INSTALL SEED, MULCH AND EROSION CONTROL BLANKETS AS SHOWN ON THE PLAN WITHIN 5 DAYS OF COMPLETION OF MASS GRADING OR WHENEVER DISTURBED AREAS WILL REMAIN UNCHANGED FOR 30 DAYS OR GREATER. 3-4" TOPSOIL WILL BE USED WHERE VEGETATION IS REQUIRED.
10. COMPLETE ROUGH GRADING OF SITE AND INSTALL UTILITIES. PLACE INLET FILTERS AT ALL INLETS AND CATCH BASINS, AS SHOWN.
11. FINISH GRADE AND PAVE SITE AS PROPOSED TO DRAIN TO STORM SEWER SYSTEM. REPAIR INLET FILTERS AS REQUIRED.
12. APPLY TOPSOIL, SEED AND MULCH/SOD TO ALL DISTURBED AREAS UPON COMPLETION OF GRADING. THE CONTRACTOR SHALL STAGE CONSTRUCTION ACTIVITIES IN ORDER TO MINIMIZE THE EXPOSURE OF UNSTABILIZED AREAS.
13. CLEAN PAVEMENT AND STORM SEWERS. REMOVE SILT FENCE, AND INLET FILTERS ONCE VEGETATION HAS BEEN ESTABLISHED.
14. CLEAN DETENTION BASIN AND OVERFLOW SPILLWAYS AND REPAIR RIPRAP AS NECESSARY.
15. ALL DIRT AND MUD TRACKED ONTO PUBLIC ROADS SHALL BE REMOVED DAILY.
16. STREET CATCH BASINS TO BE PERIODICALLY CLEANED AND FILTER CLOTH CHANGED AND MAINTAINED.

SEQUENCE OF CONSTRUCTION:

START DAY	END DAY	
1	2	INSTALL TEMPORARY SOIL EROSION CONTROL MEASURES, SILT FENCES, INLET PROTECTION, ETC. AS NECESSARY.
1	90	MAINTAIN A 25' BUFFER OF VEGETATION AROUND PERIMETER OF SITE WHERE POSSIBLE.
1	5	STRIP AND STOCKPILE TOPSOIL AS REQUIRED RESTORATION. ALL STOCKPILES MUST BE GRADED AND SEEDED.
5	15	REMOVE ALL PAVEMENT, CURB, UTILITIES, ETC. AS REQUIRED TO INSTALL THE PROPOSED WORK AS SHOWN ON THE TOPOGRAPHIC SURVEY AND DEMOLITION PLAN.
10	15	DISPOSE OF ALL EXCESS/UNSUITABLE MATERIALS OFF SITE IN A LEGAL MANNER. NO ON-SITE BURN OR BURY PITS ALLOWED.
30	40	ROUGH GRADE SITE. SEED AND MULCH BLANKETS MUST BE INSTALLED AS SHOWN WITHIN 5 DAYS OF FINAL GRADE. REPAIR AND/OR RE-INSTALL ANY TEMPORARY SOIL EROSION CONTROL MEASURES THAT WERE DAMAGED DURING GRADING OPERATIONS.
15	90	TEMPORARY SEEDING MUST BE PROVIDED IN AREAS NOT TO BE WORKED ON FOR 15 DAYS OR LONGER.
40	50	FINE GRADE SITE AND PREPARE FOR SITE PAVING OPERATIONS.
50	80	INSTALL ALL PAVEMENT, SIDEWALKS, CURBING AS PROPOSED. IF PERMANENT LANDSCAPING IS NOT TO BE INSTALLED SOON AFTER PAVING IS COMPLETE, ALL AREAS WITHIN 20 FEET OF BACK OF CURB MUST BE TEMPORARILY SEEDED. REPAIR INLET PROTECTION, SILT FENCE AND ANY OTHER DAMAGED SOIL EROSION CONTROL MEASURES AS NECESSARY.
80	89	FINAL GRADE, REDISTRIBUTE STOCKPILED TOPSOIL, ESTABLISH VEGETATION AND INSTALL ALL PERMANENT LANDSCAPING IN ALL DISTURBED AREAS NOT BUILT.
88	90	CLEAN PAVEMENT AND REMOVE ALL TEMPORARY SOIL EROSION CONTROL MEASURES. RE-ESTABLISH VEGETATION AS REQUIRED.
90	90	REMOVE SEDIMENTATION CONTROLS ONCE ENTIRE SITE HAS BEEN PERMANENTLY STABILIZED.

FLOODPLAIN NOTE:

BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AN AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER FLOOD INSURANCE RATE MAP NUMBER 26125C0553G, DATED JANUARY 16, 2009.

\\peainc\pea\PROJECTS\2023\23-0262 2024 TDS SITE IMPROVEMENT PROJECTS\DWG\CONSTRUCTION-PAVING\1_BAKER\(C-3.1)GRADE SESC-230262_BAKER.dwg

PEA GROUP
t: 844.813.2949
www.peagroup.com

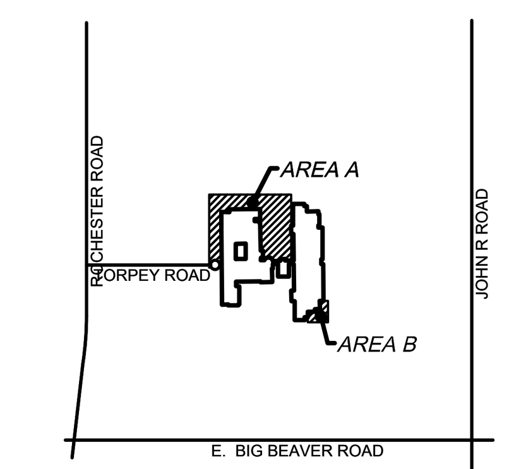
STATE OF MICHIGAN – ROBERT SCOTT KOCHON – License No. 6201046143 – LICENSED PROFESSIONAL ENGINEER

NORTH

SCALE: 1" = 30' (0, 15, 30, 60)

811 Know what's below. Call before you dig.

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CLIENT
TROY SCHOOLS
1140 RANKIN DRIVE
TROY, MI 48083

PROJECT TITLE
BAKER MIDDLE SCHOOL
1359 TORPEY ROAD
CITY OF TROY, OAKLAND COUNTY, MICHIGAN

REVISIONS
ADDENDUM #2 : 11-14-23

ORIGINAL ISSUE DATE:
OCTOBER 31, 2023

DRAWING TITLE
GRADING AND SESC PLAN

PEA JOB NO.	2023-0262
P.M.	RR
DN.	RR
DES.	RM

DRAWING NUMBER:
C-3.1