

THE KOINONIA ACADEMY SCHOOL ANNEX BUILDING  
PRELIMINARY AND FINAL SITE PLAN APPROVAL

BLOCK: 509 – LOT: 1.0  
1040 PLAINFIELD AVENUE  
CITY OF PLAINFIELD,  
UNION COUNTY, NEW JERSEY, 07060

INDEX OF DRAWINGS

DWG.	TITLE	PREPARED BY
SP-100.00	TITLE SHEET	E2PM
SP-101.00	GENERAL NOTES, MAPS & 200' PROPERTY OWNER'S LIST	E2PM
SP-102.00	EXISTING SITE BUILDINGS	E2PM
SP-103.00	EXISTING CONDITIONS AND DEMOLITION PLAN	E2PM
SP-104.00	PROPOSED NEW BUILDING LOCATION AND REDEVELOPMENT KEY PLAN	E2PM
SP-105.00	AREA 1 - KOINONIA SCHOOL ANNEX	E2PM
SP-106.00	AREA 2 - PLAINFIELD AVENUE ACCESS	E2PM
SP-107.00	STORMWATER MANAGEMENT AND UTILITY PLAN	E2PM
SP-108.00	SITE LIGHTING AND LANDSCAPING PLAN	E2PM
SP-109.00	LIGHTING AND LANDSCAPING NOTES AND DETAILS	E2PM
SP-110.00	TRAFFIC CIRCULATION PLAN	E2PM
SP-111.00	SOIL EROSION AND SEDIMENT CONTROL PLAN	E2PM
C-100.00	SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS	E2PM
C-101.00	CONSTRUCTION DETAILS	E2PM
C-102.00	CONSTRUCTION DETAILS	E2PM
C-103.00	STORMWATER DETAILS	E2PM

PROJECT DESCRIPTION

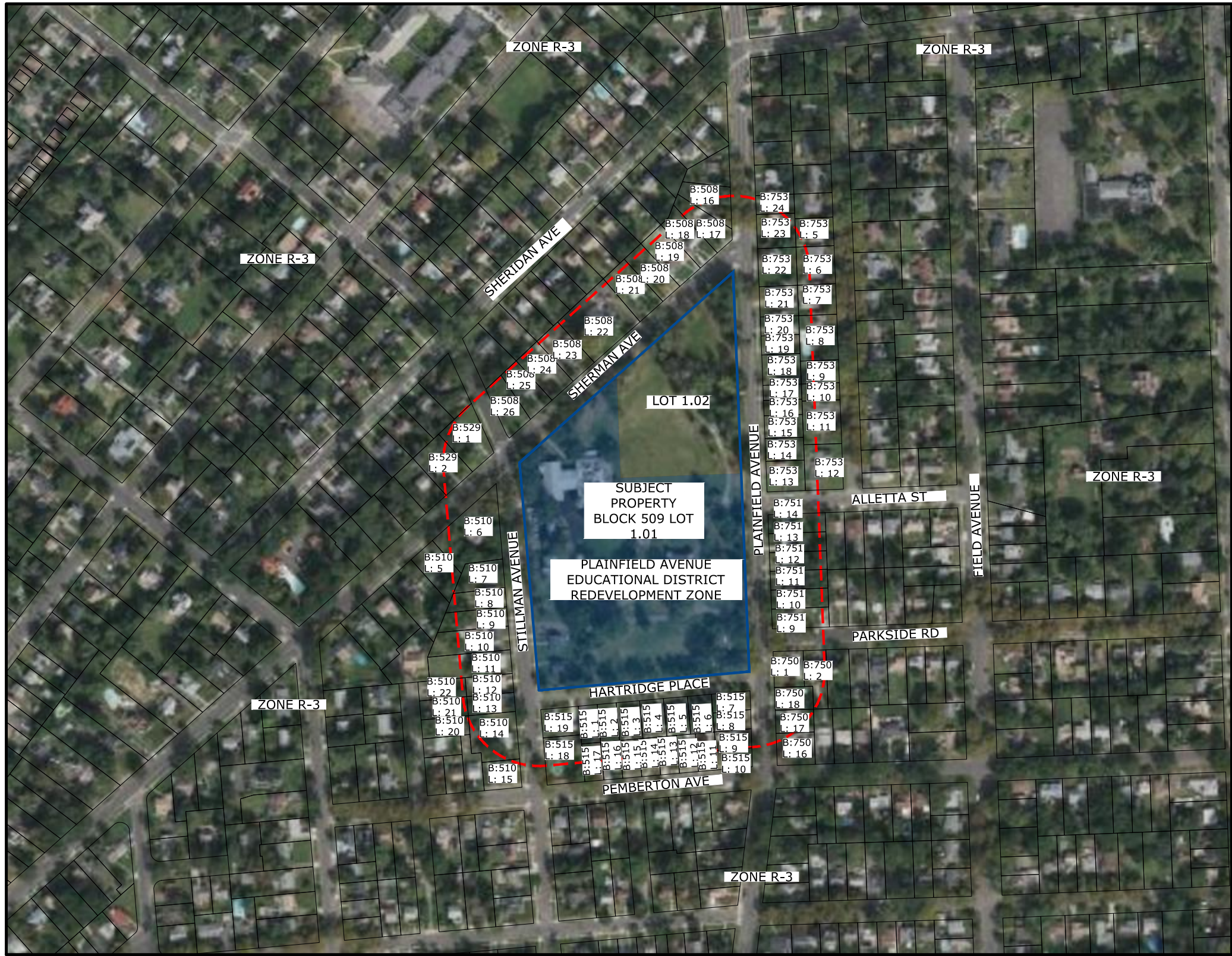
THE PROPOSED PROJECT CONSISTS OF A SINGLE-STORY 10,700 SQUARE FOOT MULTI PURPOSE EDUCATIONAL ANNEX TO THE EXISTING KOINONIA ACADEMY. THE SCHOOL ANNEX WILL CATER TO APPROXIMATELY 200 STUDENTS IN GRADES 1-12 .

A TOTAL OF 8 CLASSROOMS ARE PLANNED. THE SCHOOL ANNEX WILL OPERATE BETWEEN THE HOURS OF 8:00 AM TO 6:00 PM WITH THE AFTER SCHOOL PROGRAM SCHEDULED FOR THE EVENING. THE CHILDREN DROP-OFF WILL OCCUR BETWEEN THE HOURS OF 7:30 AM AND 8:30 AM AND PICK UP WILL BE BETWEEN THE HOURS OF 2:30 PM AND 3:30 PM. THE SCHOOL WILL HAVE A TOTAL OF 12 EMPLOYEES:

- 8 TEACHERS
- 2 ADMINISTRATORS
- 2 MAINTENANCE STAFF

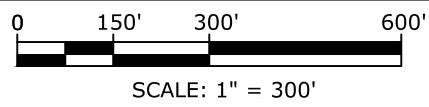
BUS ROUTES AVAILABLE

- NJ TRANSIT ROUTE 819: PISCATAWAY – SOUTH PLANFIELD (PLAINFIELD AVE.)

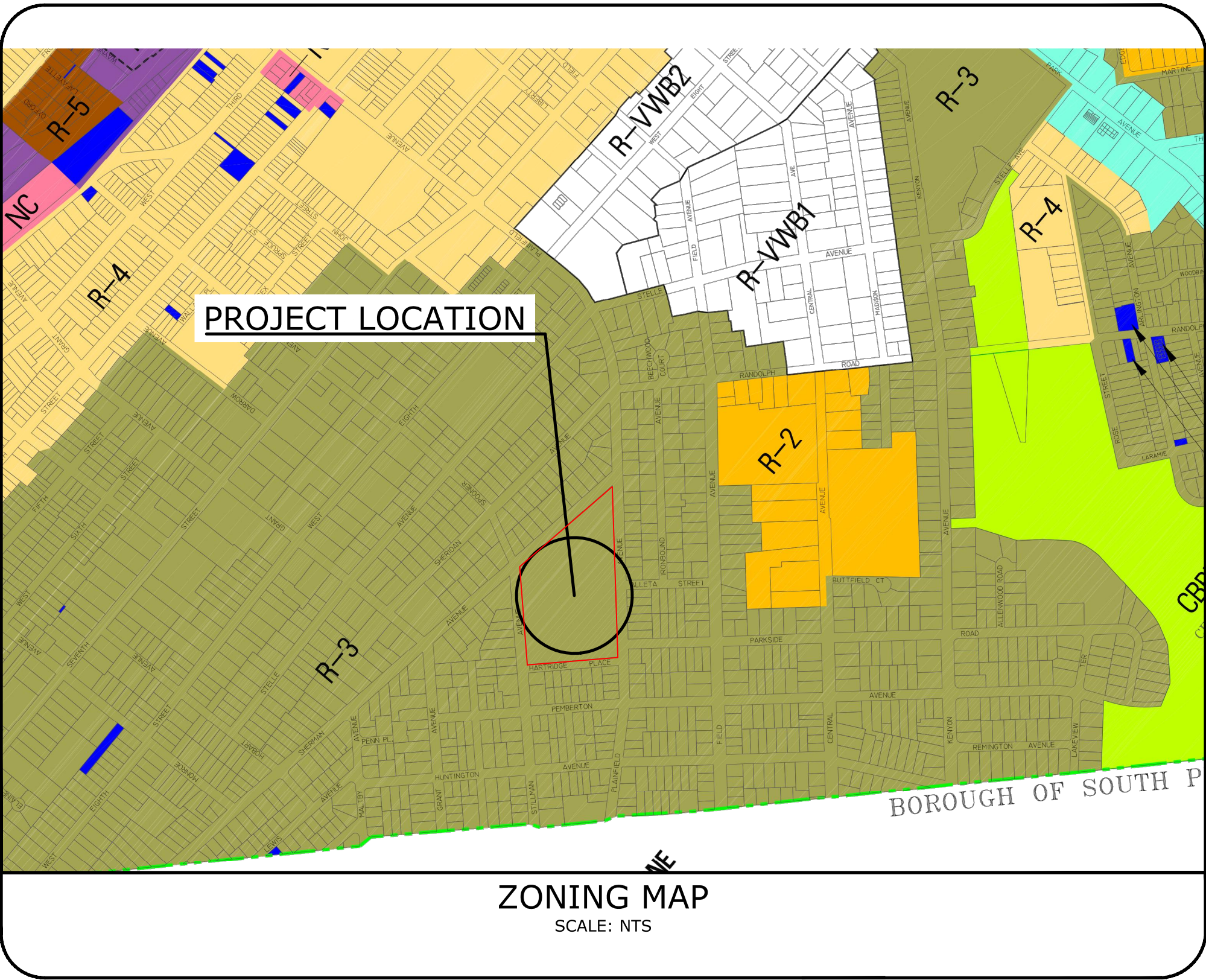


REFERENCE: GOOGLE MAPS

SITE LOCATION MAP



SUBJECT PROPERTY



I CONSENT TO THE FILING OF THESE DRAWINGS WITH THE PLANNING BOARD OF THE CITY OF PLAINFIELD

OWNER:  
**OWNER**

THE KOINONIA ACADEMY  
1040 PLAINFIELD AVENUE  
PLAINFIELD, NJ 07060

APPLICANT:  
J.G. PETRUCCI COMPANY, INC.  
171 STATE ROUTE 173, SUITE 201  
ASBURY, NJ 08802

I HAVE REVIEWED THESE DRAWINGS AND CERTIFY THAT IT MEETS ALL CODES AND ORDINANCES UNDER MY JURISDICTION.

CITY ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED BY THE PLANNING BOARD OF THE CITY OF PLAINFIELD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

SECRETARY \_\_\_\_\_ DATE \_\_\_\_\_

BULK REQUIREMENTS

ZONE R-3 - LOW/MODERATE DENSITY RESIDENTIAL ZONE DISTRICT  
PLAINFIELD AVENUE EDUCATIONAL DISTRICT REDEVELOPMENT ZONE

PROPOSED USE: SCHOOL/CHILD CARE FACILITY

	REDEVELOPMENT ORDINANCE	EXISTING (LOT 1.01)	PROPOSED (LOT 1.01)
MINIMUM LOT AREA	43,560 SF (1 ACRE)	344,596 SF (7.91 ACRES)	344,596 SF (7.91 ACRES)
MINIMUM LOT WIDTH	200 FT	342.3 FT	342.3 FT
MINIMUM SETBACKS			
FRONT	20 FT	14.4 FT (1)	14.4 FT (1)
SIDE (ONE/COMBINED)	10 FT/ 20 FT	NA/NA	30 FT/68.4 FT
REAR	10 FT	NA	NA
MAXIMUM BUILDING COVERAGE	60% (206,854 SF)	9.9% (34,270 SF)	12% (41,452 SF)
MAXIMUM LOT COVERAGE	80% (275,806 SF)	26.3% (90,766 SF)	31.7% (109,185 SF)
MAXIMUM BUILDING HEIGHT (FT)	45 FT	< 45 FT	32.57 FT
MAXIMUM BUILDING STORIES	3 STORIES	2 STORIES	1 STORY

TABLE KEY

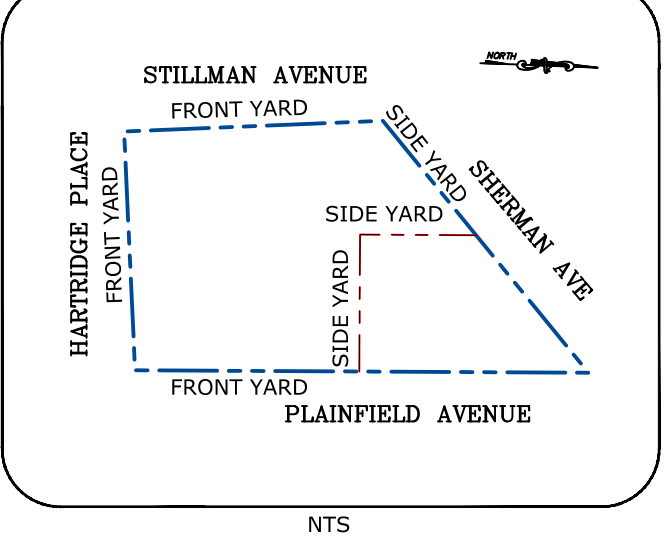
NC	NO CHANGE
NA	NOT APPLICABLE
(1)	PRE-EXISTING NON CONFORMING
(V)	VARIANCE REQUIRED

NOTE: ZONING BULK TABLE IS BASED OFF OF THE NEWLY ADOPTED PLAINFIELD AVENUE EDUCATIONAL DISTRICT REDEVELOPMENT PLAN, DATED JANUARY 20, 2022.

NEW LOT 1.01

TOTAL PROPERTY AREA	344,596 S.F.
TOTAL BUILDING AREA	41,452 S.F.
TOTAL PAVEMENT AREA	67,733 S.F.
TOTAL LANDSCAPE AREA	235,411 S.F.

YARD ORIENTATION



NTS

PROJECTED SANITARY FLOW

UNIT	TOTAL NUMBER OF UNITS	DAILY SEWER FLOW PER NJAC 7:14A-23	TOTAL FLOW
STUDENTS (NO SHOWER OR CAFETERIA)	200	10 GPD/UNIT	2,000 GPD
TOTAL FLOW			2,000 GPD*

\* NO NJDEP TWA PERMIT REQUIRED

PROJECTED WATER DEMAND

UNIT	TOTAL NUMBER OF UNITS	DAILY WATER DEMAND PER NJAC 7:10-12.6	TOTAL FLOW
STUDENTS (NO SHOWER OR CAFETERIA)	200	10 GPD/UNIT	2,000 GPD
TOTAL FLOW			2,000 GPD*

\* NO NJDEP WATER EXTENSION PERMIT REQUIRED

PARKING CALCULATIONS (PER REDEVELOPMENT PLAN)

NEW HIGHSCHOOL ANNEX  
REQUIRED - 1 SPACE PER EMPLOYEE BUT NO LESS THAN 5 SPACES  
NO. OF EMPLOYEES = 12  
TOTAL NO. OF SPACES PROVIDED = 26  
NO. OF HANDICAP SPACES PROVIDED = 4

NO. OF ELECTRIC VEHICLE CHARGING STATIONS = 2

DROP-OFF AREA

17:9-24B REQUIRED: 10 X 25  
PROVIDED: 12 X 107

VARIANCES REQUESTED

NONE

DESIGN WAIVERS

- LIGHTING REQUIREMENTS (17:11-12)  
REQUIRED AVERAGE ILLUMINATION OF PEDESTRIAN WALKWAYS = 0.5 - 1.0 FC  
PROPOSED AVERAGE ILLUMINATION LEVEL OF PEDESTRIAN WALKWAYS = 1.77 FC & 2.58 FC

REQUIRED PERMITS

- SOIL EROSION & SEDIMENT CONTROL PERMIT
- PMUA SANITARY PERMIT
- NJ AMERICAN WATER
- UNION COUNTY PLANNING BOARD

SCHEDULE OF REVISIONS

REV.	DATE	DESCRIPTION OF CHANGES	DRAWN BY	CHK. BY
A	03/02/22	ISSUED FOR TRC MEETING	HB	JF
B	04/04/22	ISSUED FOR SITE PLAN SUBMISSION	HB	JF
C	04/27/22	REVISED PER COMPLETENESS REVIEW	HB	JF

OWNER

THE KOINONIA ACADEMY  
1040 PLAINFIELD AVENUE  
PLAINFIELD, NJ 07060

APPLICANT

J.G. PETRUCCI COMPANY, INC.  
171 STATE ROUTE 173, SUITE 201  
ASBURY, NJ 08802

E 2 PROJECT MANAGEMENT LLC

87 HIBERNIA AVENUE  
ROCKAWAY, N.J. 07866  
PHONE: (973) 299-5200  
FAX: (973) 299-5059  
www.E2PM.com



THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THEREBY APPROPRIATE. THIS DRAWING AND THE DESIGN PARTIALS OR CONSTRUCTION DOCUMENTS ARE PROPRIETARY TO E2 PROJECT MANAGEMENT, LLC AND SHALL NOT BE REPRODUCED, ALTERED OR COPIED WITHOUT WRITTEN PERMISSION. SHALL NOT BE USED IN ANY MANNER DETRIMENTAL TO ITS INTEREST AND SHALL BE RETURNED UPON REQUEST.

N.J. ENGINEERING CERTIFICATE OF  
AUTHORIZATION No. 24GA28118200

I CERTIFY THAT THESE PLANS HAVE BEEN  
PREPARED UNDER MY SUPERVISION

*John Ferrante*  
4/27/22

JOHN FERRANTE, P.E. N.J. NO. 24GE02472000  
REGISTERED PROFESSIONAL ENGINEER

PROJECT NAME

THE KOINONIA ACADEMY  
SCHOOL ANNEX BUILDING  
1040 PLAINFIELD AVENUE  
CITY OF PLAINFIELD,  
UNION COUNTY, NJ

BLOCK 509  
LOT: 1

DRAWING TITLE

TITLE SHEET

CHECKED BY: JF	DRAWN BY: HB
SCALE: AS SHOWN	SHEET NO: 1 OF 16
PROJECT #: P-21-18-39	FIRST ISSUE: 03/02/2022

DRAWING NO.

SP-100.00



M:\PROJECTS\ARE SERVICES\PETRUCCI-E-KOINONIA HIGH SCHOOL ANNEX BUILDING\9.0 DRAWINGS\9.2 E2PM SITE PLAN\KOINONIA ACADEMY DESIGN SET 2-2022.DWG

GENERAL NOTES

- BOUNDARY AND TOPOGRAPHIC INFORMATION AND EXISTING UTILITIES SHOWN HEREON WAS TAKEN FROM A MAP PREPARED BY E2 PROJECT MANAGEMENT, LLC ENTITLED "BOUNDARY SURVEY" FOR BLOCK 112-LOT 9.01, CITY OF PLAINFIELD, UNION COUNTY, NEW JERSEY, DATED 1-11-16.
- CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE EXCAVATING TEST PITS. IF NECESSARY, CONTRACTOR SHALL CALL FOR UTILITY MARK-OUT PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITIES.
- ALL SITE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF PLAINFIELD.
- CONNECTIONS TO EXISTING UTILITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY HAVING JURISDICTION.
- CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF FIELD CONDITIONS OR CONFLICTS THAT WOULD ADVERSELY IMPACT CONSTRUCTION AS PROPOSED ON THE PLANS.
- CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID DAMAGE TO EXISTING IMPROVEMENTS AND VEGETATION INTENDED TO REMAIN.
- ALL EXISTING ONSITE IMPROVEMENTS SHALL BE REMOVED UNLESS NOTED OTHERWISE.
- E2 PROJECT MANAGEMENT LLC ASSUMES NO RESPONSIBILITY FOR THE METHODS, TECHNIQUES OR PROCEDURES OF CONSTRUCTION, FOR SAFETY MEASURES OR PRECAUTIONS RELATED TO CONSTRUCTION, OR ANY FAILURE TO COMPLY WITH APPLICABLE LAWS, REGULATIONS, ORDINANCES OR CODES.
- ANY STRUCTURES TO BE REMOVED SHALL HAVE EXCAVATIONS BACKFILLED WITH STRUCTURAL FILL AND PROPERLY COMPACTED, AS PER PROJECT SPECIFICATIONS.
- PER FEMA MAP 34039C0039F, THE SUBJECT PROPERTY DOES NOT CONTAIN ANY LAND WITHIN A DELINEATED FLOOD HAZARD AREA.
- NO CONSTRUCTION SHALL TAKE PLACE UNTIL A PRE-CONSTRUCTION CONFERENCE HAS BEEN HELD WITH THE TOWNSHIP ENGINEER. SUCH MEETING SHALL INCLUDE SUCH PERSONNEL AS THE TOWNSHIP ENGINEER MAY REQUIRE.
- THE MAXIMUM PERMITTED SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL FOR ALL SITE GRADING.
- ANY DISTURBED AREA THAT WILL BE LEFT EXPOSED FOR MORE THAN THIRTY (30) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREA WILL BE MULCHED WITH STRAW OR THEN HAY AND TACKED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS. SEE SOIL EROSION AND SEDIMENT CONTROL NOTES FOR SEEDING SPECIFICATIONS.

- ALL CONSTRUCTION SHOW HEREIN SHALL CONFORM TO MUNICIPAL/COUNTY STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS AND N.J. DEPT. OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS AMENDED, UNLESS SPECIFICALLY SHOWN OTHERWISE HEREIN. IN CASE OF CONFLICT, THE MORE RESTRICTIVE SHALL GOVERN. CONTRACTOR SHALL NOTIFY DESIGN ENGINEER OF ANY QUESTIONS REGARDING CONFLICTS.
- HANDICAPPED RAMPS AND CURB CUTS WILL BE PROVIDED AT ALL INTERSECTIONS AND PEDESTRIAN CROSSINGS, AS PER DETAILS.
- ANY DAMAGE TO THE RIGHT-OF-WAY MUST BE REPAIRED/INSTALLED TO EQUAL STANDARDS.

UTILITY NOTES

- THE SUBJECT PROPERTY HAS NUMEROUS RESIDENTIAL BUILDINGS. ALL THE HISTORICAL BUILDINGS HAVE BEEN DEMOLISHED. HOWEVER, THE SITE MOST LIKELY HAS SUBSURFACE OBSTRUCTIONS SUCH AS FOUNDATIONS, PITS, SLABS, AND UTILITY LINES. CONTRACTOR SHALL TAKE APPROXIMATE PRECAUTIONS.
- GAS, ELECTRIC, TELEPHONE, WATER AND CABLE LINES MAY BE INSTALLED BY THE RESPECTIVE UTILITY. THE EXACT LOCATION OF EACH MAIN SHALL BE COORDINATED BY THE OWNER/GENERAL CONTRACTOR AND SUBMITTED TO THE DESIGN ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
- ALL NEW UTILITIES SHALL BE INSTALLED UNDERGROUND, EXCEPT WHERE OTHERWISE NOTED.
- EXISTING INLETS SHALL BE RELOCATED AND/OR RESET TO MATCH TO THE NEW CURB LINE WHERE SHOWN.
- ALL PROPOSED ELECTRICAL TRANSFORMERS SHALL BE LOCATED INSIDE A BUILDING OR ON A CONCRETE SLAB AS PER PSEB STANDARDS.
- DESIGN OF ELECTRICAL UTILITIES FROM THE ELECTRICAL POLES TO THE TRANSFORMERS INCLUDING PRIMARY CONDUITS, PULLBOXES, MANHOLES, AND TRANSFORMER VAULTS ARE PENDING PSEB APPROVAL. PSEB APPROVAL WILL BE FOUND ON SEPARATE DRAWINGS FROM THIS SET.
- ALL RCP DRAINAGE PIPE SHALL MEET OR EXCEED THE REQUIREMENTS SPECIFICATION FOR ASTM C76 "STANDARD SPECIFICATION FOR REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE", LATEST VERSION, IN CONFORMANCE WITH THE FOLLOWING.  
-PIPES WITH COVER EQUAL TO OR LESS THAN 3 FT. SHALL BE CLASS IV PIPE  
-PIPES WITH COVER GREATER THAN 3 FT. SHALL BE CLASS III.  
-ALL PIPES SHALL UTILIZE A CLASS C WALL THICKNESS.  
-ALL PIPE REACHES SHALL BE CONSTRUCTED USING THE SAME CLASS AND WALL THICKNESS PIPE.
- ALL CATCH BASINS SHALL BE NIDOT TYPE "A", "B" OR "E".
- CONTRACTOR SHALL COORDINATE FIRE HYDRANT LOCATIONS WITH THE FIRE DEPARTMENT PRIOR TO INSTALLATION. A PLAN OF SAME SHALL BE SUBMITTED TO THE DESIGN ENGINEER.
- SANITARY SEWER MANHOLE RIMS SHALL BE RESET TO PROPOSED NEW PAVEMENT GRADE AS REQUIRED.
- EXISTING WATER VALVE AND GAS VALVE BOXES SHALL BE RESET TO PROPOSED NEW PAVEMENT GRADE AS REQUIRED.
- A MINIMUM HORIZONTAL DISTANCE OF 10 FT OR A MINIMUM OF 18" VERTICAL DISTANCE IS REQUIRED BETWEEN SANITARY SEWER AND POTABLE WATER PIPING. IF EITHER OF THESE DISTANCES CANNOT BE ACHIEVED, THE SANITARY SEWER SHALL BE ENCASED IN CONCRETE AT THE CONFLICT LOCATION. SEE DETAIL NO. 1 ON SHEET C-102.00.
- ALL WATER UTILITY INSTALLATIONS SHALL CONFORM TO THE LATEST AMERICAN WATER WORKS ASSOCIATION SPECIFICATIONS. WATER SYSTEMS SHALL BE INSTALLED PER THE NEW JERSEY PLUMBING CODE AND AS PER THE REQUIREMENTS OF AMERICAN WATER WORKS COMPANY, SHORT HILLS, NEW JERSEY.
- ALL PROPOSED WATER MAINS, LOOPS, AND FIRE AND DOMESTIC WATER SERVICE SIZES SHOWN, WILL BE ADJUSTED AND SIZED BASED UPON THE RESULTS OF FIRE FLOW TESTS AND SUBSEQUENT DESIGN CALCULATIONS TO BE PROVIDED BY OTHERS.
- ALL BUILDINGS WILL BE FIRE PROTECTED WITH FIRE ALARMS, FIRE DEPARTMENT TIE-INS, SPRINKLER SYSTEMS, AND SIAMENSE CONNECTIONS. THE DRAUGHTING STATION WILL BE AS DIRECTED BY THE CITY OF PLAINFIELD FIRE DEPT. ALL CONSTRUCTION WILL BE IN KEEPING WITH ALL APPLICABLE FIRE CODES. FOR DETAILS SEE MECHANICAL ELECTRIC AND PLUMBING PLANS.
- ALL WATER MAINS SHALL CROSS ABOVE SANITARY MAINS. A TYPICAL CROSSING SHOULD PROVIDE 18 INCHES OF CLEARANCE. IF LESS THAN 18 INCHES IS PROVIDED THE CROSSINGS MUST BE CONSTRUCTED AS SHOWN ON THE "WATER MAIN/SANITARY MAIN CROSSING WITH LESS THEN 18" CLEARANCE" DETAIL. WATER MAINS MUST CROSS WITH A MINIMUM 6" CLEARANCE ABOVE SANITARY MAINS.

UTILITY SERVICE TABLE

SERVICE	SIZE (INCHES)	MATERIALS
SANITARY	TBD	SCH 40 PVC
STORMWATER	TBD	HDPE, RCP
GAS	TBD	K-COPPER
DOMESTIC WATER	TBD	K-COPPER
FIRE WATER	TBD	DUCTILE IRON
ELECTRIC	TBD	SCH 40 PVC SLEEVE

SOIL AND WASTE MANAGEMENT

- SOIL, WASTE, SURFACE WATER, AND GROUNDWATER MANAGEMENT SHALL BE COORDINATED WITH THE APPROVED REMEDIAL ACTION WORK PLAN (RAWP) AND WITH THE SITE LICENSED SITE REMEDIATION PROFESSIONAL (LSRP).
- A SITE SPECIFIC HEALTH AND SAFETY PLAN (HASP) SHALL BE PREPARED, SUBMITTED AND IMPLEMENTED BY CONTRACTOR IN ACCORDANCE WITH RAWP AND IN ACCORDANCE WITH ALL APPLICABLE HEALTH AND SAFETY REQUIREMENTS FOR WORK IN AND WITH CONTAMINATED SOIL AND GROUNDWATER. THE HASP SHALL GOVERN ALL HEALTH AND SAFETY FACETS OF THE PROJECT CONSTRUCTION AND ENCOMPASS THE ACTIVITIES OF ALL PERSONS WHO ENTER THE SITE.
- THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER FOR APPROVAL A SITE SPECIFIC MATERIAL HANDLING PLAN (MHP) IN ACCORDANCE WITH ALL APPLICABLE REGULATORY REQUIREMENTS ASSOCIATED WITH CONTAMINATED SOIL AND GROUNDWATER HANDLING THROUGHOUT THE COURSE OF THE PROJECT AND AS DIRECTED BY THIS SOIL MANAGEMENT PLAN (SMP). THE MHP WILL DESCRIBE:  
> CONTAMINATED SOIL MANAGEMENT, INCLUDING EXCAVATION, STAGING, RE-USE, WASTE CHARACTERIZATION, AND OFF-SITE TRANSPORTATION AND RECYCLING/DISPOSAL;  
> CONTAMINATED GROUNDWATER MANAGEMENT;  
> SOIL EROSION AND SEDIMENT CONTROL;  
> MANAGEMENT OF NON REGULATED WASTE SUCH AS CONSTRUCTION DEMOLITION DEBRIS;  
> IDENTIFICATION OF TRANSPORTERS THAT WILL BE USED TO TRANSPORT EACH WASTE STREAM;  
TO THE RECYCLING OR TSD FACILITY, INCLUDING CERTIFICATIONS DEMONSTRATING THAT EACH TRANSPORTER IS CURRENTLY PERMITTED TO TRANSPORT THE DESIGNATED WASTE STREAM;  
> IDENTIFICATION OF FACILITIES TO BE USED FOR RECYCLING OR DISPOSAL OF WASTE STREAMS;  
AND CERTIFICATIONS DEMONSTRATING THAT EACH FACILITY IS CURRENTLY PERMITTED TO ACCEPT DESIGNATED WASTE STREAM;  
> IDENTIFICATION OF LABORATORIES TO BE USED FOR ANALYZING SAMPLES OF EACH WASTE STREAM AND CERTIFICATIONS DEMONSTRATING THAT EACH LABORATORY IS CURRENTLY CERTIFIED BY THE STATE OF NEW JERSEY AND/OR APPROVED BY THE RECEIVING FACILITY TO PERFORM THE ANALYSES;  
> IDENTIFICATION OF ALL PERMITS/APPROVALS REQUIRED TO EXECUTE THE WORK AS WELL AS THE ASSOCIATED FEES AND LEAD TIME NEEDED TO ACQUIRE THEM;  
> QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES; AND  
METHOD TO BE EMPLOYED DURING THE PROJECT TO DOCUMENT LOCATION AND QUANTITIES OF CONTAMINATED MATERIALS GENERATED, RE-USED AND RECYCLED/DISPOSED.
- THE CONTRACTOR SHALL PROVIDE ALL PERSONNEL, MATERIALS AND EQUIPMENT NEEDED TO PROPERLY STORE EXCAVATED MATERIAL AT THE EXCAVATION AND IN TEMPORARY STOCKPILES. IF NEEDED, ANY TEMPORARY STOCKPILE(S) SHALL BE LOCATED AT AREA(S) SELECTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
- TEMPORARY STOCKPILES OF CONTAMINATED SOIL SHALL ONLY BE PLACED ON DRY AREAS ON A LAYER OF MINIMUM 30 MILLIMETERS THICK HOPE SHEETING OR ENGINEER APPROVED HDPE AND CONTAINED WITH STRAW BALES OR SILT FENCE PLACED CONTINUOUSLY AT THE PERIMETER OF THE TEMPORARY STOCKPILE(S). ALL JOINTS IN THE UNDERLYING HOPE SHEETING SHALL OVERLAP WITH A MINIMUM OF 300 MILLIMETERS AT THE ENDS. THE CONTRACTOR SHALL SEGREGATE MATERIALS OF DIFFERING TYPES AND DEGREES OF CONTAMINATION SO AS TO PREVENT CROSS-CONTAMINATION OF UNCONTAMINATED MATERIAL, PROPERLY LINED AND SEALED ROLL-OFF BINS ARE AN ACCEPTABLE ALTERNATIVE.
- REGULATED CONTAMINATED WASTE SHALL NOT BE STOCKPILED FOR MORE THAN 30 DAYS.
- THE CONTRACTOR SHALL PROVIDE PROTECTION AND ON-GOING MAINTENANCE OF THE TEMPORARY STOCKPILES OF SOIL AND OPEN EXCAVATIONS TO PREVENT THE INFILTRATION OF STORMWATER, MIGRATION OF CONTAMINANTS, DUSTING, EROSION AND UNAUTHORIZED CONTACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THESE PROPER PROTECTION AND MAINTENANCE MEASURES UNTIL COMPLETION OF THE WORK AND ACCEPTANCE BY THE ENGINEER.
- DURING ALL SOIL MANAGEMENT OPERATIONS, THE CONTRACTOR SHALL MONITOR AND RECORD, ON DAILY SOIL TRACKING LOGS, THE SOURCE LOCATION, TYPE, QUANTITY, AND DESTINATION OF MATERIAL EXCAVATED, BACKFILLED, REUSED, TEMPORARILY STOCKPILED, AND RECYCLED OR DISPOSED. THE CONTRACTOR SHALL SUBMIT THE DAILY SOIL TRACKING LOG TO THE ENGINEER FOR EACH WORKDAY. THE DAILY SOIL TRACKING LOG SHALL CONTAIN, AT A MINIMUM, THE FOLLOWING INFORMATION:  
> DATE;  
> NAME(S) AND SIGNATURE(S) OF THE CONTRACTOR REPRESENTATIVE(S) RESPONSIBLE FOR PREPARING THE SOIL TRACKING LOG;  
> LOCATION(S) OF EXCAVATION AND PLACEMENT OF SOIL BY SOIL CATEGORY REFERENCED TO CROSS SECTIONS AND SITE MAP;  
> SOURCE AND QUANTITY OF CONTAMINATED SOIL EXCAVATED BY TYPE, HISTORIC FILL BACKFILLED AND REGULATED WASTE REMOVED;  
> SOURCE AND QUANTITY OF NON REGULATED WASTE REMOVED;  
> SOURCE AND QUANTITY OF CLEAN IMPORTED MATERIAL USED FOR COMMON BACKFILL, BASE MATERIAL BENEATH PAVEMENT AND STRUCTURAL SLABS AND/OR ENGINEERING CONTROL;  
> NET BALANCE SHEET BY SOIL/WASTE CATEGORY AND EXPLANATIONS OF WEIGHT DISCREPANCIES; AND  
> RECORDS OF SAMPLE RESULTS AND ANY SHIPPING MANIFESTS THAT APPLY.
- ALL NEW MATERIALS AND SOIL BROUGHT TO THE SITE MUST BE "CERTIFIED CLEAN" MATERIAL, IN ACCORDANCE WITH NIDEP REQUIREMENTS.
- THE CONTRACTOR'S WORK SHALL INCLUDE THE SAMPLING AND ANALYSES FOR DISPOSAL AND/OR RECYCLING FACILITY APPROVAL OF ALL REGULATED WASTE DESIGNATED BY THE ENGINEER AS EXCESS, UNUSABLE OR UNSUITABLE MATERIAL FOR THE PROJECT. SAMPLING AND ANALYSES SHALL FOLLOW THE REQUIREMENTS OF THE RECEIVING FACILITY AND THE NIDEP GUIDANCE DOCUMENT FOR THE MANAGEMENT OF EXCAVATED SOILS, AS APPLICABLE.
- ALL VEHICLES LEAVING THE SITE WITH REGULATED WASTE SHALL BE INSPECTED BY THE CONTRACTOR TO ENSURE THAT NO EXCESS SOIL ADHERES TO THE WHEELS OR UNDER CARRIAGE OF THE VEHICLES, AND THAT THE VEHICLES ARE PROPERLY LINED, SECURELY COVERED AND EQUIPPED TO PREVENT LEAKAGE OF WATER. IN THE EVENT OF LEAKAGE OF SOIL OR WATER TO THE PUBLIC ROADS, THE CONTRACTOR SHALL IMMEDIATELY CLEAN THE ROAD TO RESTORE IT TO THE ORIGINAL CONDITION AND IMMEDIATELY NOTIFY THE ENGINEER VERBALLY AND PROVIDE A WRITTEN FOLLOW-UP REPORT CITING THE DETAILS.

STORMWATER AND GROUNDWATER MANAGEMENT DURING SOIL EXCAVATION

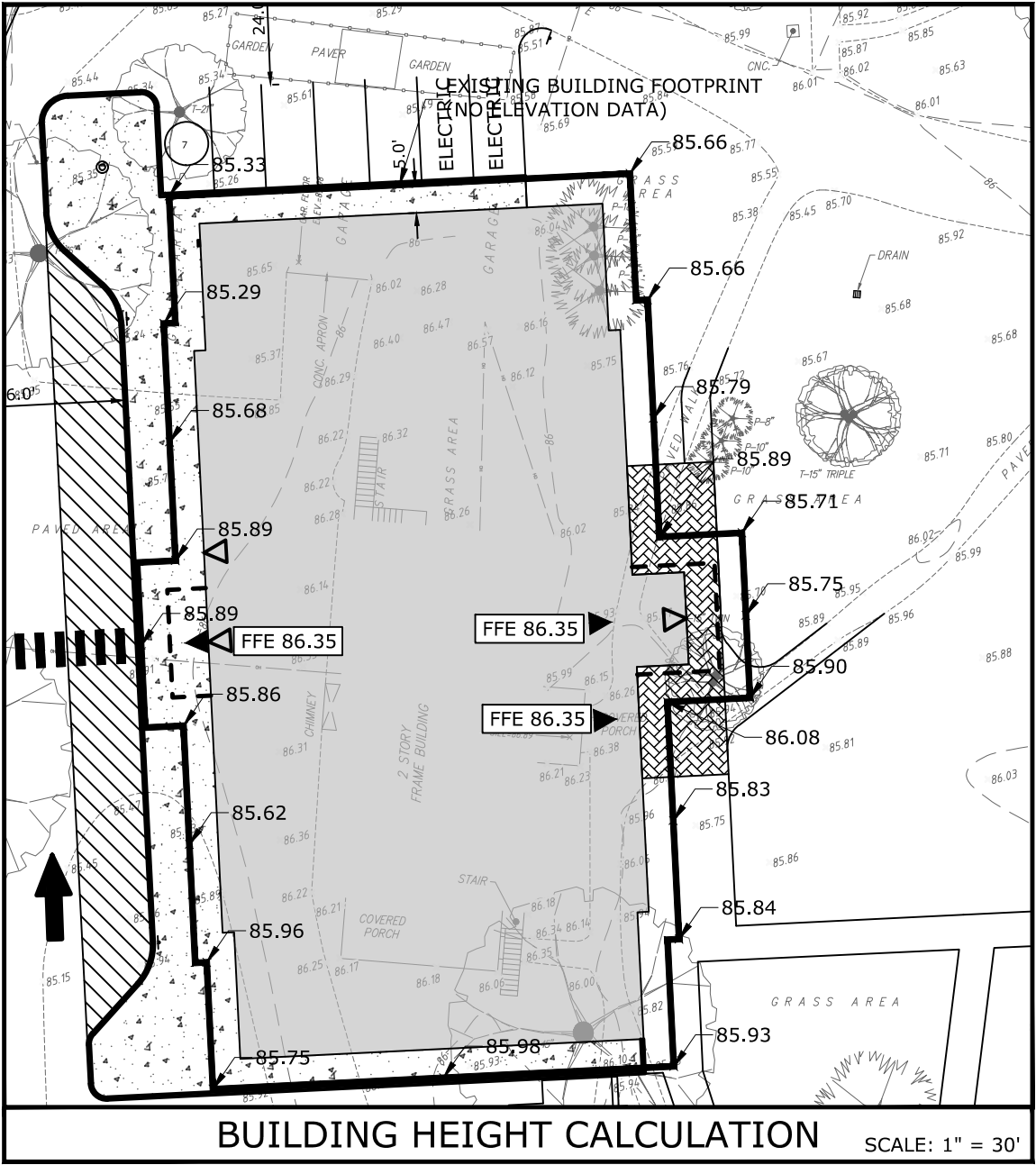
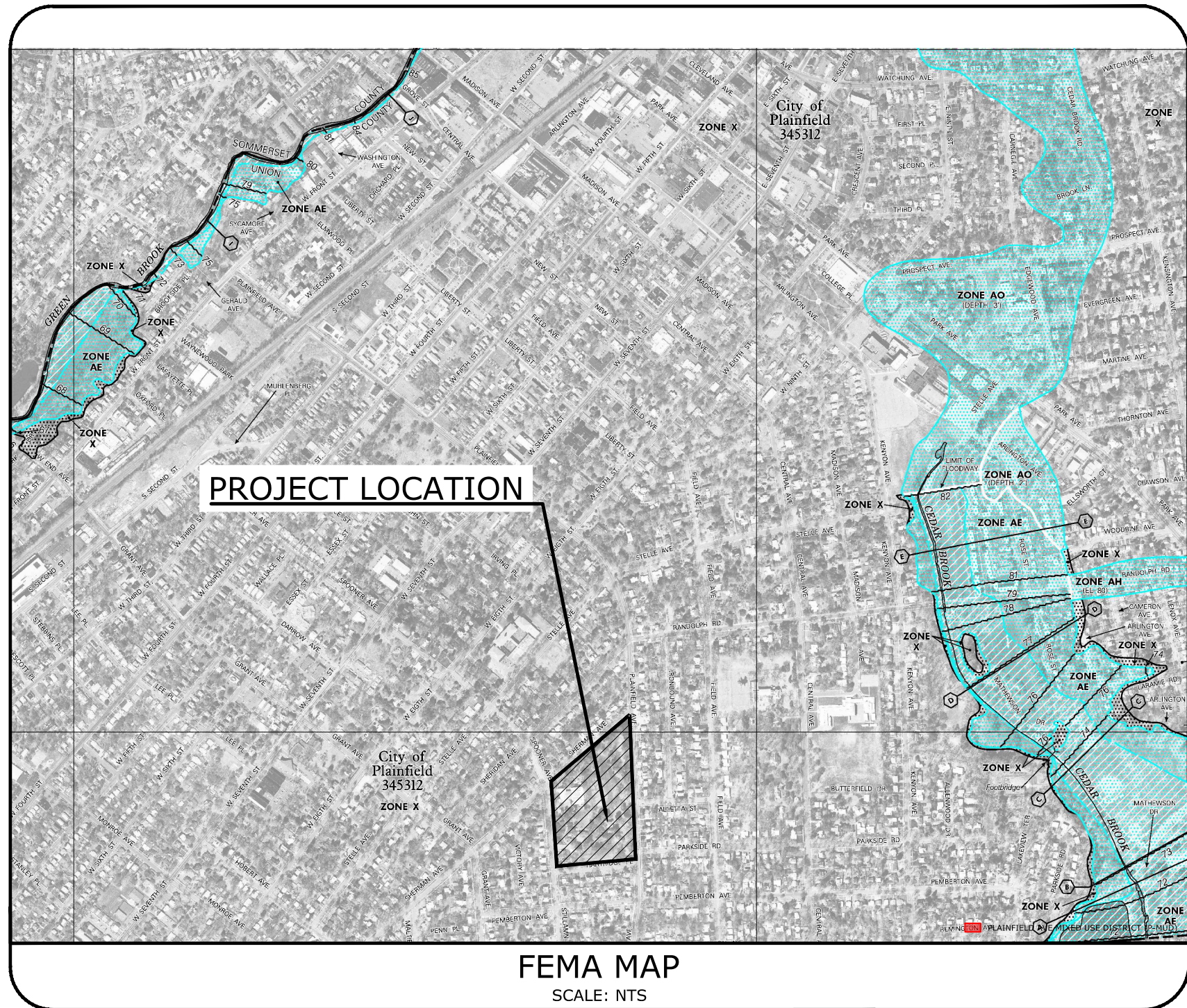
- THE CONTRACTOR SHALL PREPARE AND IMPLEMENT A STORMWATER AND GROUNDWATER MANAGEMENT AND CONTROL PLAN TO MANAGE SURFACE WATER AND GROUNDWATER. THE CONTRACTOR SHALL IDENTIFY ALL REQUIRED PERMITS ON THE MHP AND CONTRACTOR'S PROJECT SCHEDULE ALLOWING ADEQUATE TIME FOR SECURING ALL REQUIRED PERMITS IN TIME FOR CONSTRUCTION.
- THE CONTRACTOR'S PLAN SHALL SPECIFY METHODS AND EQUIPMENT FOR COLLECTING, PUMPING, TREATING AND DISPOSING OF LIQUIDS GENERATED DURING STORM WATER CONTROL AND DEWATERING; MEASURES TO PREVENT STORM WATER RUN-ON AND RUN-OFF; DEWATERING OF EXCAVATIONS; DECONTAMINATING PERSONNEL AND EQUIPMENT; AND STORING FUELS AND CHEMICALS. THE CONTRACTOR'S PLAN SHALL ALSO IDENTIFY THE APPLICABLE PERMITTING, MONITORING AND REPORTING REQUIREMENTS.
- STORM AND GROUND WATERS REMOVED FROM EXCAVATIONS IN AREAS OF POTENTIALLY CONTAMINATED SOILS OR GROUNDWATER SHALL BE PASSED THROUGH A TREATMENT SYSTEM THEN DISCHARGED INTO A INFILTRATION BASIN CONSTRUCTED WITHIN THE PROJECT AREA TO PERCOLATE BACK INTO LOCAL GROUNDWATER. THE BASINS WILL BE CONSTRUCTED WITHIN CLOSE PROXIMITY TO THE EXCAVATIONS AND BE DESIGNED TO PREVENT SPREAD OF CONTAMINATION INTO PREVIOUSLY UNCONTAMINATED MEDIA. THE CONTRACTOR WILL OBTAIN APPROVAL FOR PERCOLATION OF CONTAMINATED GROUNDWATER FROM THE NIDEP VIA AN NIDEP ON-SCENE COORDINATOR DISCHARGE AUTHORITY LETTER. THIS APPROVAL WILL BE ISSUED BASED UPON NIDEP REVIEW AND ACCEPTANCE OF THE CONTRACTOR'S PLAN. AS AN ALTERNATE, EFFLUENT MAY BE DISCHARGED TO THE NORTH HUDSON SEWERAGE AUTHORITY WITH APPROPRIATE PERMITS AND APPROVAL.
- THE CONTRACTOR SHALL MAINTAIN A DAILY LOG DOCUMENTING CONTAMINATED GROUNDWATER AND SURFACE WATER COLLECTION AND HANDLING ACTIVITIES, AND SHALL MAKE THE LOG AVAILABLE TO THE ENGINEER UPON REQUEST. THE LOG SHALL NOTE DAILY WATER REMOVAL, TREATMENT AND DISCHARGE VOLUMES, EFFLUENT SAMPLING ACTIVITIES AND RESULTS (IF REQUIRED), DISCHARGE OR SPILL INCIDENTS, REPORTING ACTIVITIES AND PERTINENT FIELD OBSERVATIONS SUCH AS SHEEN, ODOR, TURBIDITY, AND RUN-ON AND RUN-OFF.

200' PROPERTY OWNER'S LIST

OWNER & ADDRESS REPORT					
BLOCK	LOT	QUAL	CL	PROPERTY OWNER	PROPERTY LOCATION
1000-1100 PLAINFIELD AVE					
508	16		2	BURGESS, ALICIA	1000-24 PLAINFIELD AVE
508	17		2	WOMER, TAYLOR	600-04 SHERMAN AVE
508	18		2	WOMER, TAYLOR	600-08 SHERMAN AVE
508	19		2	WOMER, TAYLOR	610-14 SHERMAN AVE
508	20		2	WOMER, TAYLOR	616-18 SHERMAN AVE
508	21		2	WOMER, TAYLOR	620-26 SHERMAN AVE
508	22		2	WOMER, TAYLOR	628-28 SHERMAN AVE
508	23		2	WOMER, TAYLOR	640-44 SHERMAN AVE
508	24		2	WOMER, TAYLOR	646-50 SHERMAN AVE
508	25		2	WOMER, TAYLOR	652-54 SHERMAN AVE
508	26		2	WOMER, TAYLOR	658-58 SHERMAN AVE
510	5		2	WOMER, TAYLOR	719-23 SHERMAN AVE
510	6		2	WOMER, TAYLOR	701-17 SHERMAN AVE
510	7		2	WOMER, TAYLOR	1120-24 STILLMAN AVE
510	8		2	WOMER, TAYLOR	1126-28 STILLMAN AVE
510	9		2	WOMER, TAYLOR	1130-32 STILLMAN AVE
510	10		2	WOMER, TAYLOR	1134-36 STILLMAN AVE
510	11		2	WOMER, TAYLOR	1138-40 STILLMAN AVE
510	12		2	WOMER, TAYLOR	1142-44 STILLMAN AVE

OWNER & ADDRESS REPORT					
BLOCK	LOT	QUAL	CL	PROPERTY OWNER	PROPERTY LOCATION
1000-1100 PLAINFIELD AVE					
753	10		2	WOMER, TAYLOR	1000-10 IRONBORO AVE
753	11		2	WOMER, TAYLOR	1002-16 IRONBORO AVE
753	12		2	WOMER, TAYLOR	1004-22 IRONBORO AVE
753	13		2	WOMER, TAYLOR	1006-28 IRONBORO AVE
753	14		2	WOMER, TAYLOR	1008-34 IRONBORO AVE
753	15		2	WOMER, TAYLOR	1010-40 IRONBORO AVE
753	16		2	WOMER, TAYLOR	1012-46 IRONBORO AVE
753	17		2	WOMER, TAYLOR	1014-52 IRONBORO AVE
753	18		2	WOMER, TAYLOR	1016-58 IRONBORO AVE
753	19		2	WOMER, TAYLOR	1018-64 IRONBORO AVE
753	20		2	WOMER, TAYLOR	1020-70 IRONBORO AVE
753	21		2	WOMER, TAYLOR	1022-76 IRONBORO AVE
753	22		2	WOMER, TAYLOR	1024-82 IRONBORO AVE
753	23		2	WOMER, TAYLOR	1026-88 IRONBORO AVE
753	24		2	WOMER, TAYLOR	1028-94 IRONBORO AVE

OWNER & ADDRESS REPORT					
BLOCK	LOT	QUAL	CL	PROPERTY OWNER	PROPERTY LOCATION
1142-50 STILLMAN AVE					
510	13		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	14		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	15		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	16		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	17		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	18		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	19		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	20		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	21		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	22		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	23		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	24		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	25		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	26		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	27		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	28		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	29		2	WOMER, TAYLOR	1142-50 STILLMAN AVE
510	30		2	WOMER, TAYLOR	1142-50 STILLMAN AVE



- AVERAGE EXISTING GRADE 5-FEET OFF PROPOSED BUILDING: 85.78
- BUILDING HEIGHT FROM FINISHED FLOOR TO HIGHEST POINT: 32.00 FEET
- TOP OF BUILDING ELEVATION: 118.35
- BUILDING HEIGHT MEASURED FROM AVERAGE EXISTING GRADE: 32.57

SCHEDULE OF REVISIONS

REV.	DATE	DESCRIPTION OF CHANGES	DRAWN	CHK.
A	03/02/22	ISSUED FOR TRC MEETING	HB	JF
B	04/04/22	ISSUED FOR SITE PLAN SUBMISSION	HB	JF
C	04/27/22	REVISED PER COMPLETENESS REVIEW	HB	JF

OWNER

THE KOINONIA ACADEMY  
1040 PLAINFIELD AVENUE  
PLAINFIELD, NJ 07060

APPLICANT

J.G. PETRUCCI COMPANY, INC.  
171 STATE ROUTE 173, SUITE 201  
ASBURY, NJ 08802

E 2 PROJECT MANAGEMENT LLC

87 HIBERNIA AVENUE  
ROCKAWAY, N.J. 07866  
PHONE: (973) 299-5200  
FAX: (973) 299-5059  
www.E2PM.com

N.J. ENGINEERING CERTIFICATE OF  
AUTHORIZATION No. 24GA28118200

I CERTIFY THAT THESE PLANS HAVE BEEN  
PREPARED UNDER MY SUPERVISION

John Ferrante  
4/27/22

JOHN FERRANTE, P.E. N.J. NO. 24GE02472000  
REGISTERED PROFESSIONAL ENGINEER

PROJECT NAME

THE KOINONIA ACADEMY  
SCHOOL ANNEX BUILDING  
1040 PLAINFIELD AVENUE  
CITY OF PLAINFIELD,  
UNION COUNTY, NJ

BLOCK 509  
LOT: 1

DRAWING TITLE

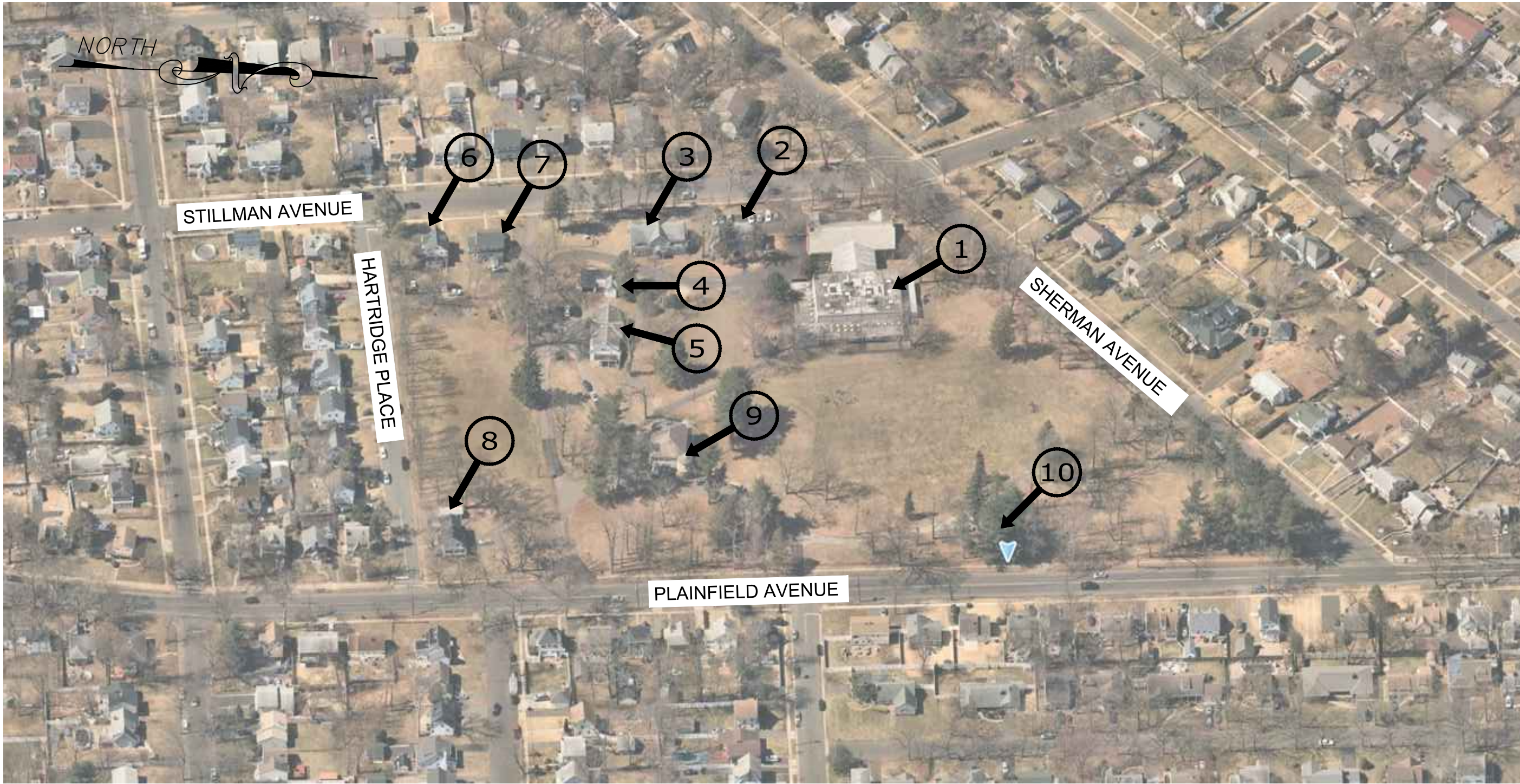
GENERAL NOTES MAPS & 200'  
PROPERTY OWNER'S LIST

CHECKED BY: JF	DRAWN BY: HB
SCALE: AS SHOWN	SHEET NO: 1 OF 16
PROJECT #S: P-21-18-39	FIRST ISSUE: 03/02/2022
DRAWING NO.	

SP-101.00



K:\PROJECTS\A&E SERVICES\PETRUCCI- KOINONIA HIGH SCHOOL ANNEX BUILDING\0.0 DRAWINGS\0.2 E2PM SITE PLAN\K0INONIA ACADEMY DESIGN SET 2-2022.DWG



KEY MAP  
NOT TO SCALE



BUILDING 1



BUILDING 2



BUILDING 3



BUILDING 4 (TO BE DEMOLISHED)



BUILDING 5 (TO BE DEMOLISHED)



BUILDING 6



BUILDING 7



BUILDING 8



BUILDING 9



BUILDING 10 (TO BE DEMOLISHED)

Building List				
BLDG #	Building Name	Condition	Function	Status
1	Main School Building- St. Joseph; School Admin Offices; JP2 Auditorium; Gymnasium;	Two Story Masonry	Classrooms; Gymnasium; Cafeteria	No Change
2	Don Bosco Building	Two Story Frame Building	Classrooms	No Change
3	St. Therese Building	Two Story Frame Building	Classrooms	No Change
4	Storage Building	Two Story Frame Building	Garage	Slated for Demolition
5	Mother Seaton Building	Two Story Frame Building	Storage	Slated for Demolition
6	Residential Building	Two Story Frame Building	Residential	No Change
7	Residential Building	Two Story Frame Building	Residential	No Change
8	Residential Bldg	Two Story Frame Building	Residential	No Change
9	St Francis Bldg/Mansion/POH Offices	Two Story Brick Frame Building	Offices	No Change
10	Residential- Former Gate House	Two Story Frame Building	Residential	Slated for Demolition
11	New High School Annex Building	Single Story (10,000 sq ft)	Classrooms	New Building

SCHEDULE OF REVISIONS				
REV.	DATE	DESCRIPTION OF CHANGES	DRAWN BY	CHK. BY
A	03/02/22	ISSUED FOR TRC MEETING	HB	JF
B	04/04/22	ISSUED FOR SITE PLAN SUBMISSION	HB	JF
C	04/27/22	REVISED PER COMPLETENESS REVIEW	HB	JF

OWNER

THE KOINONIA ACADEMY  
1040 PLAINFIELD AVENUE  
PLAINFIELD, NJ 07060

APPLICANT

J.G. PETRUCCI COMPANY, INC.  
171 STATE ROUTE 173, SUITE 201  
ASBURY, NJ 08802

E 2 PROJECT MANAGEMENT LLC

87 HIBERNIA AVENUE  
ROCKAWAY, N.J. 07866  
PHONE: (973) 299-5200  
FAX: (973) 299-5059  
www.E2PM.com



THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THEREBY APPLICABLE. THIS DRAWING AND THE DESIGN INFORMATION ON CONSTRUCTION ACCORDING ARE HEREBY GIVEN TO THE PROJECT MANAGEMENT LLC AND SHALL NOT BE REPRODUCED, ALTERED OR COPIED WITHOUT WRITTEN PERMISSION. SHALL NOT BE USED IN ANY MANNER DETRIMENTAL TO ITS INTEREST AND SHALL BE RETURNED UPON REQUEST.

N.J. ENGINEERING CERTIFICATE OF  
AUTHORIZATION No. 24GA28118200

I CERTIFY THAT THESE PLANS HAVE BEEN  
PREPARED UNDER MY SUPERVISION

*John Ferrante*  
4/27/22

JOHN FERRANTE, P.E. N.J. NO. 24GE02472000  
REGISTERED PROFESSIONAL ENGINEER

PROJECT NAME

THE KOINONIA ACADEMY  
SCHOOL ANNEX BUILDING  
1040 PLAINFIELD AVENUE  
CITY OF PLAINFIELD,  
UNION COUNTY, NJ

BLOCK 509  
LOT: 1

DRAWING TITLE

EXISTING SITE BUILDINGS

CHECKED BY: JF	DRAWN BY: HB
SCALE: AS SHOWN	SHEET NO: 1 OF 16
PROJECT #: P-21-18-39	FIRST ISSUE: 03/02/2022

DRAWING NO.

SP-102.00



M:\PROJECTS\ARB SERVICES\PETRUCCIE- KOINONIA HIGH SCHOOL ANNEX BUILDING\9.2 E2PM SITE PLAN\Koinonia Academy Design Set 2-2022.dwg

DEMOLITION NOTES

- DURING SITE DEMOLITION AND REPAIRS, THE FOLLOWING FEATURES SHALL REMAIN UNLESS SPECIFIED:
  - EXISTING CURBS
  - EXISTING SIDEWALKS
  - EXISTING TREES (SIDEWALK)
  - EXISTING LIGHT POLES WITHIN R.O.W.
  - EXISTING UTILITY POLES WITHIN R.O.W.
  - EXISTING UNDERGROUND UTILITIES
  - EXISTING STREET SIGNS
- SURVEY EXISTING BUILDINGS FOR HAZARDOUS WASTE. REMOVE ALL HAZARDOUS WASTE AND SOLID WASTE PRIOR TO DEMOLITION PER STATE AND FEDERAL RULES AND REGULATIONS.
- INSTALL ANTI-VERMIN MEASURES 30 DAYS PRIOR TO DEMOLITION.
- ALL EXISTING ADA RAMPS AT EACH STREET CORNER SHALL NOT BE DEMOLISHED.
- ALL EXISTING U/G UTILITIES ENTERING THE SITE SHALL BE RE-LOCATED OR REMOVED PRIOR TO ANY DEMOLITION.
- ALL EXISTING MANHOLES, VALVE BOXES, UTILITY ACCESS, CATCH BASINS ETC. SHALL BE PROTECTED AND NOT DAMAGED. RESET THE TOP OF RIMS AS NOTED ON PLANS.
- ALL CATCH BASINS AND MANHOLES SHOWN ON THIS DRAWING SHALL BE CLEANED OUT.
- EXISTING FIRE HYDRANTS SHALL BE PROTECTED AND MAINTAINED ACTIVE THROUGHOUT THE DEMOLITION AND CONSTRUCTION OF THE PROJECT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL U/G OBSTRUCTIONS AND DISPOSING OF ALL EXCAVATED SOILS AND SPOILS.
- ALL DAMAGED PUBLIC PROPERTY, INCLUDING BUT NOT LIMITED TO, CURBING, LIGHT POLES, LANDSCAPING, ETC. TO BE PROTECTED DURING DEMOLITION AND CONSTRUCTION.
- ANY DAMAGE TO THE PUBLIC RIGHT OF WAY MUST BE REPAIRED/INSTALLED TO EQUAL STANDARDS.
- PEDESTRIAN ACCESS ALONG PUBLIC STREETS TO BE MAINTAINED AT ALL TIMES.
- APPLICANT AND PLANNING DIVISION SHALL COORDINATE WITH PSEG FOR THE REMOVAL OF FLOODLIGHTS MOUNTED ON TWO (2) UTILITY POLES ON WEST THIRD STREET.
- EXISTING LATERALS SHALL BE CAPPED AND ABANDONED IN PLACE PER PMUA REGULATIONS. LATERAL CAPPING MUST BE OBSSESSED BY PMUA STAFF.

EXISTING TREE PROTECTION & REMOVAL NOTES

- EXISTING TREES THAT ARE TO REMAIN SHALL BE PROTECTED.
- EXISTING TREES SHALL BE TRIMMED BACK AS NEEDED.

CONSTRUCTION SAFETY

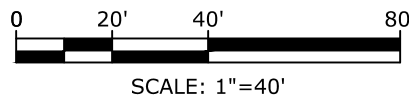
- CONTRACTOR SHALL IMPLEMENT A SIDEWALK PROTECTION PLAN TO SAFEGUARD THE PEDESTRIANS.
- ANY SIDEWALK CLOSURES DURING CONSTRUCTION SHALL BE COORDINATED WITH THE CITY, COUNTY AND STATE AS REQUIRED.

SOIL EROSION CONTROL NOTES

- REFERENCE SITE PLAN DRAWING SP-111.00 AND C-100.00.



TOTAL AREA OF DISTURBANCE = 81,300 SF ±  
TOTAL NUMBER OF TREES TO BE REMOVED = 34



SCHEDULE OF REVISIONS

REV.	DATE	DESCRIPTION OF CHANGES	DRAWN BY	CHK. BY
A	03/02/22	ISSUED FOR TRC MEETING	HB	JF
B	04/04/22	ISSUED FOR SITE PLAN SUBMISSION	HB	JF
C	04/27/22	REVISED PER COMPLETENESS REVIEW	HB	JF

OWNER

THE KOINONIA ACADEMY  
1040 PLAINFIELD AVENUE  
PLAINFIELD, NJ 07060

APPLICANT

J.G. PETRUCCI COMPANY, INC.  
171 STATE ROUTE 173, SUITE 201  
ASBURY, NJ 08802

E 2 PROJECT MANAGEMENT LLC

87 HIBERNIA AVENUE  
ROCKAWAY, N.J. 07866  
PHONE: (973) 299-5200  
FAX: (973) 299-5059  
www.E2PM.com



THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THEREBY APPURTENANT. THIS DRAWING AND THE DESIGN FEATURES OR CONSTRUCTION CONDITIONS ARE PROPRIETARY TO E2 PROJECT MANAGEMENT, LLC AND SHALL NOT BE REPRODUCED, ALTERED OR COPIED WITHOUT WRITTEN PERMISSION. SHALL NOT BE USED IN ANY MANNER DETRIMENTAL TO ITS INTEREST AND SHALL BE RETURNED UPON REQUEST.

N.J. ENGINEERING CERTIFICATE OF  
AUTHORIZATION No. 24GA28118200

I CERTIFY THAT THESE PLANS HAVE BEEN  
PREPARED UNDER MY SUPERVISION

*John Ferrante*  
4/27/22

JOHN FERRANTE, P.E. N.J. NO. 24GE02472000  
REGISTERED PROFESSIONAL ENGINEER

PROJECT NAME

THE KOINONIA ACADEMY  
SCHOOL ANNEX BUILDING  
1040 PLAINFIELD AVENUE  
CITY OF PLAINFIELD,  
UNION COUNTY, NJ

BLOCK 509  
LOT: 1

DRAWING TITLE

EXISTING CONDITIONS AND  
DEMOLITION PLAN

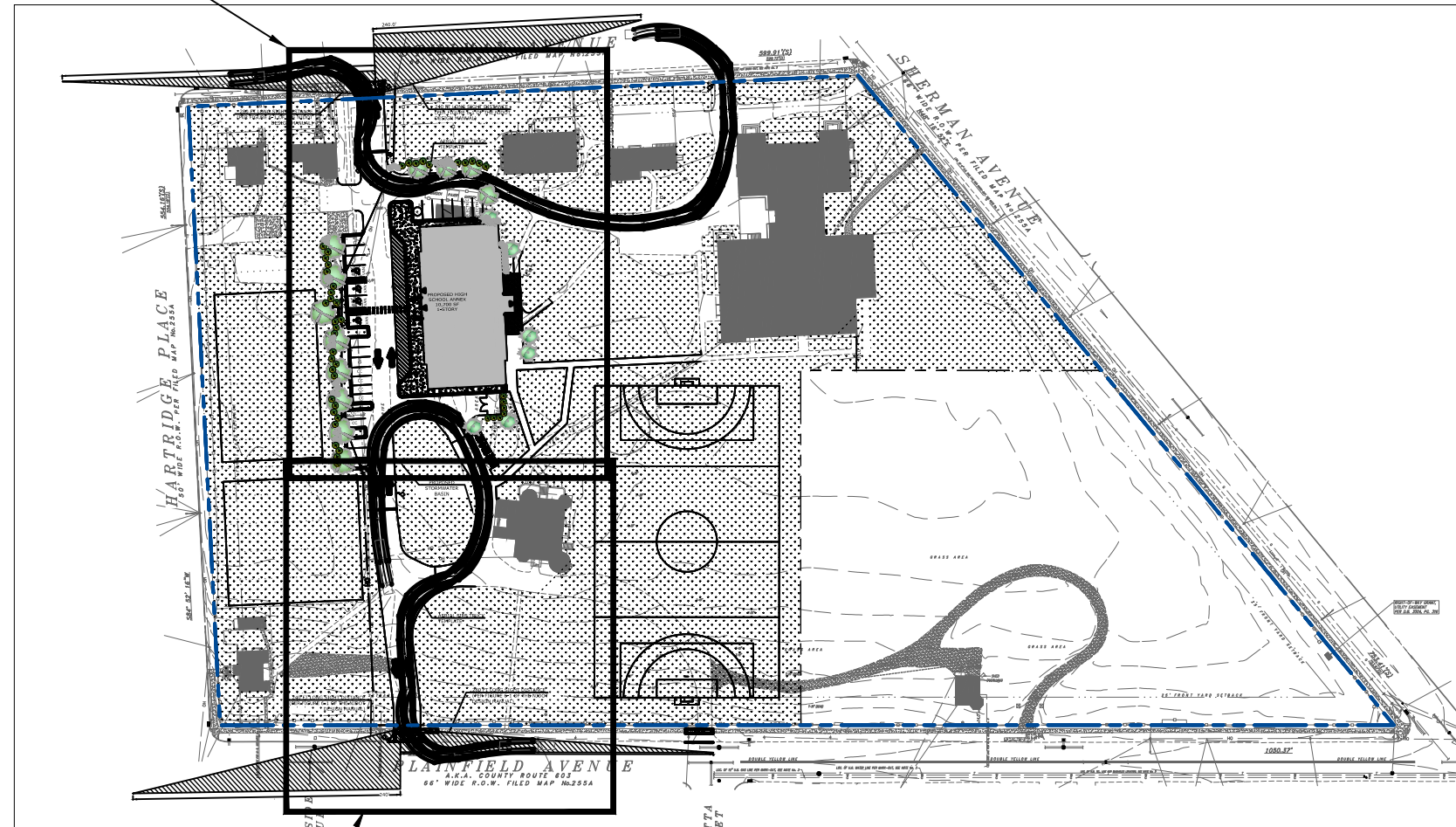
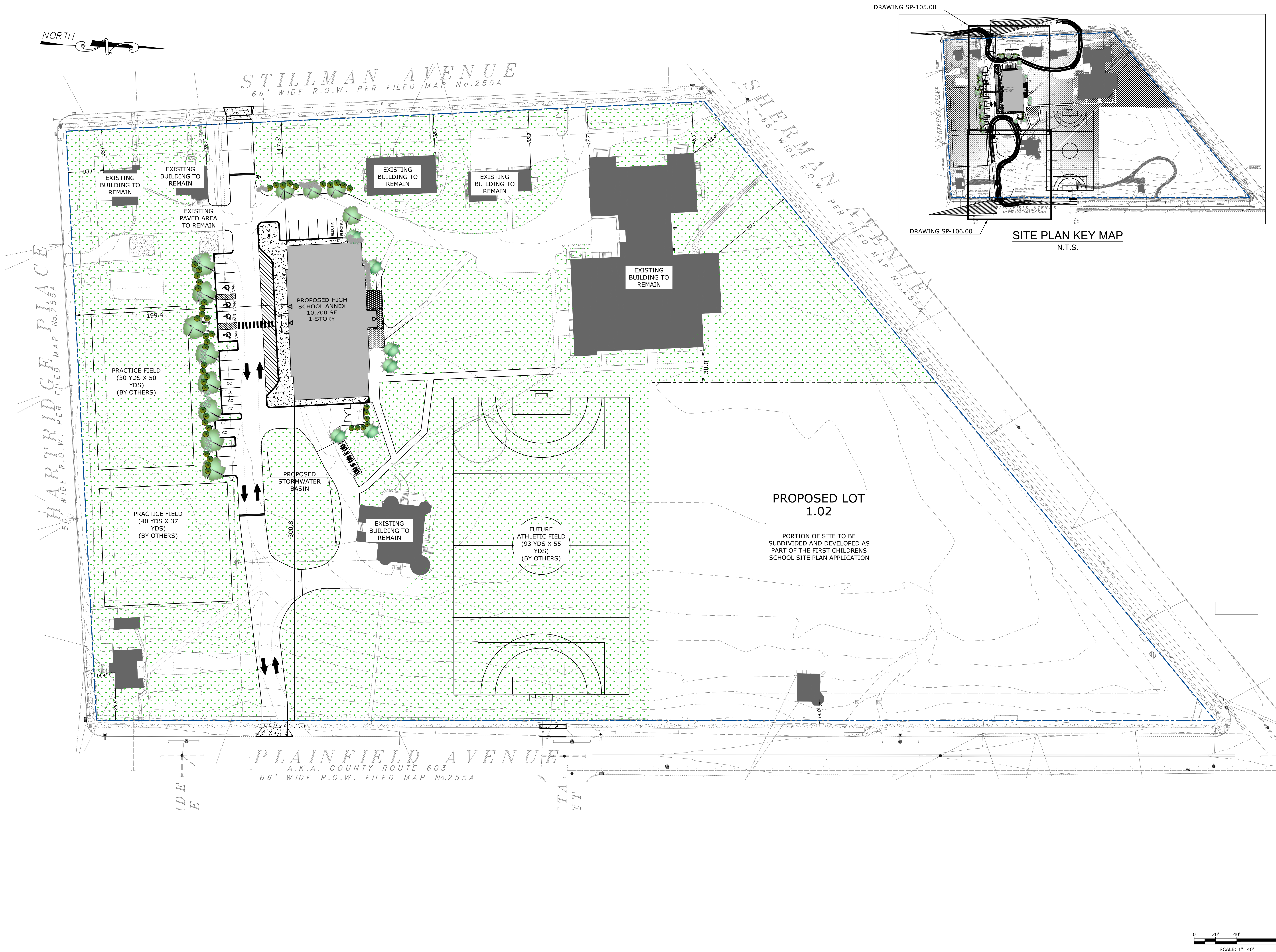
CHECKED BY: JF	DRAWN BY: HB
SCALE: AS SHOWN	SHEET NO: 1 OF 16
PROJECT #: P-21-18-39	FIRST ISSUE: 03/02/2022

DRAWING NO.

SP-103.00



M:\PROJECTS\A&E SERVICES\PETRUCCI- KOINONIA HIGH SCHOOL ANNEX BUILDING\9.0 DRAWINGS\9.2 E2PM SITE PLAN\Koinonia Academy Design Set 2-2022.DWG



SITE PLAN KEY MAP  
N.T.S.

SCHEDULE OF REVISIONS				
REV.	DATE	DESCRIPTION OF CHANGES	DRAWN BY	CHK. BY
A	03/02/22	ISSUED FOR TRC MEETING	HB	JF
B	04/04/22	ISSUED FOR SITE PLAN SUBMISSION	HB	JF
C	04/27/22	REVISED PER COMPLETENESS REVIEW	HB	JF

**OWNER**  
  
THE KOINONIA ACADEMY  
1040 PLAINFIELD AVENUE  
PLAINFIELD, NJ 07060

**APPLICANT**  
  
J.G. PETRUCCI COMPANY, INC.  
171 STATE ROUTE 173, SUITE 201  
ASBURY, NJ 08802

**E 2 PROJECT MANAGEMENT LLC**  
  
87 HIBERNIA AVENUE  
ROCKAWAY, N.J. 07866  
PHONE: (973) 299-5200  
FAX: (973) 299-5059  
www.E2PM.com

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THEREBY APPLICABLE. THIS DRAWING AND THE DESIGN THEREON OR CONSTRUCTION THEREON ARE PROVIDED TO THE PROJECT MANAGER, LLC AND SHALL NOT BE REPRODUCED, ALTERED OR COPIED WITHOUT WRITTEN PERMISSION. SHALL NOT BE USED IN ANY MANNER DETRIMENTAL TO ITS INTEREST AND SHALL BE RETURNED UPON REQUEST.

N.J. ENGINEERING CERTIFICATE OF  
AUTHORIZATION No. 24GA28118200

I CERTIFY THAT THESE PLANS HAVE BEEN  
PREPARED UNDER MY SUPERVISION

*John Ferrante*  
4/27/22

JOHN FERRANTE, P.E. N.J. NO. 24GE02472000  
REGISTERED PROFESSIONAL ENGINEER

PROJECT NAME

THE KOINONIA ACADEMY  
SCHOOL ANNEX BUILDING  
1040 PLAINFIELD AVENUE  
CITY OF PLAINFIELD,  
UNION COUNTY, NJ

BLOCK 509  
LOT: 1

DRAWING TITLE

PROPOSED NEW BUILDING  
LOCATION AND REDEVELOPMENT  
KEY PLAN

CHECKED BY: JF	DRAWN BY: HB
SCALE: AS SHOWN	SHEET NO: 1 OF 16
PROJECT #: P-21-18-39	FIRST ISSUE: 03/02/2022

DRAWING NO.

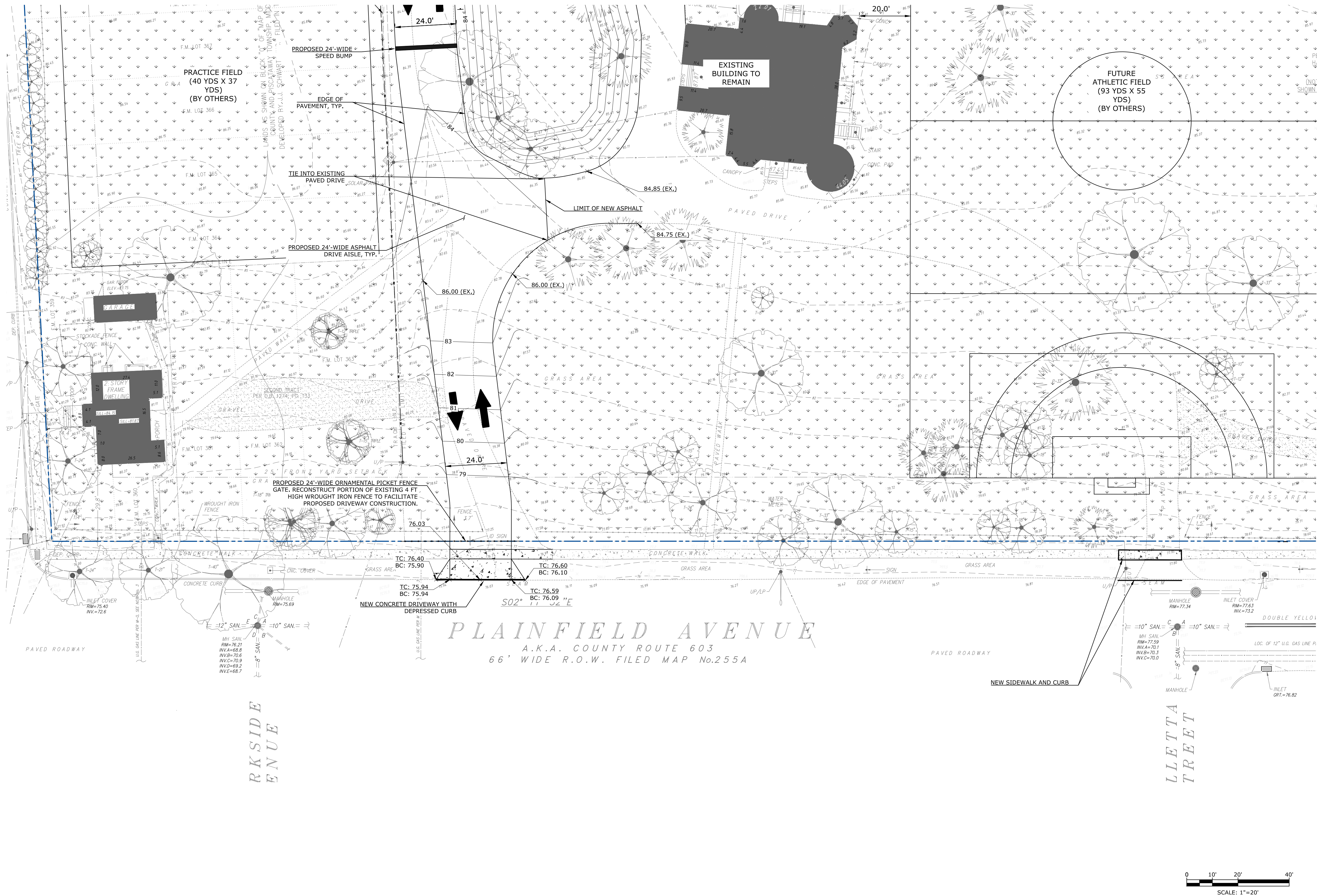
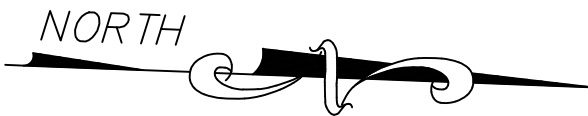
SP-104.00







M:\PROJECTS\ARE SERVICES\RETRUCTIVE- KOINONIA HIGH SCHOOL ANNEX BUILDING\9.0 DRAWINGS\9.2 E2PM SITE PLAN\Koinonia Academy Design Set 2-2022.DWG



SCHEDULE OF REVISIONS

REV.	DATE	DESCRIPTION OF CHANGES	DRAWN BY	CHK. BY
A	03/02/22	ISSUED FOR TRC MEETING	HB	JF
B	04/04/22	ISSUED FOR SITE PLAN SUBMISSION	HB	JF
C	04/27/22	REVISED PER COMPLETENESS REVIEW	HB	JF

OWNER

THE KOINONIA ACADEMY  
1040 PLAINFIELD AVENUE  
PLAINFIELD, NJ 07060

APPLICANT

J.G. PETRUCCI COMPANY, INC.  
171 STATE ROUTE 173, SUITE 201  
ASBURY, NJ 08802

E 2 PROJECT MANAGEMENT LLC

87 HIBERNIA AVENUE  
ROCKAWAY, N.J. 07866  
PHONE: (973) 299-5200  
FAX: (973) 299-1059  
www.E2PM.com



THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THEREBY APPROPRIATE. THIS DRAWING AND THE DESIGN FEATURES OR CONSTRUCTION DETAILS ARE PROPRIETARY TO E2 PROJECT MANAGEMENT, LLC AND SHALL NOT BE REPRODUCED, ALTERED OR COPIED WITHOUT WRITTEN PERMISSION. SHALL NOT BE USED IN ANY MANNER DETRIMENTAL TO ITS INTEREST AND SHALL BE RETURNED UPON REQUEST.

N.J. ENGINEERING CERTIFICATE OF AUTHORIZATION No. 24GA28118200

I CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION

*John Ferrante*  
4/27/22

JOHN FERRANTE, P.E. N.J. NO. 24GE02472000  
REGISTERED PROFESSIONAL ENGINEER

PROJECT NAME

THE KOINONIA ACADEMY  
SCHOOL ANNEX BUILDING  
1040 PLAINFIELD AVENUE  
CITY OF PLAINFIELD,  
UNION COUNTY, NJ

BLOCK 509  
LOT: 1

DRAWING TITLE

AREA 2 - PLAINFIELD AVENUE  
ACCESS

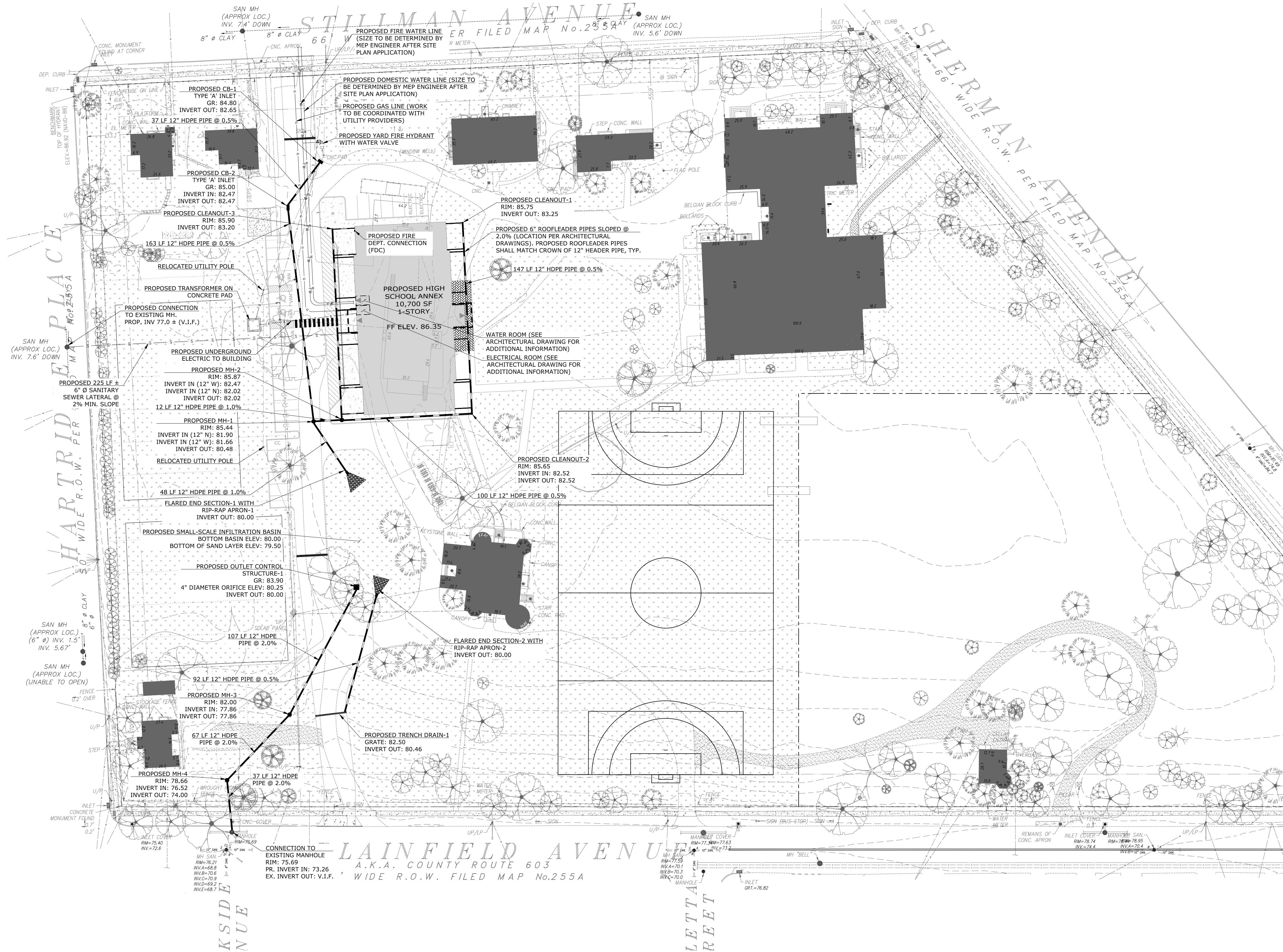
CHECKED BY: JF	DRAWN BY: HB
SCALE: AS SHOWN	SHEET NO: 1 OF 16
PROJECT #: P-21-18-39	FIRST ISSUE: 03/02/2022

DRAWING NO.

SP-106.00



M:\PROJECTS\A&E SERVICES\PETRUCCIE- KOINONIA HIGH SCHOOL ANNEX BUILDING\9.0 DRAWINGS\9.2 E2PM SITE PLAN\Koinonia Academy Design Set 2-2022.dwg



SCHEDULE OF REVISIONS

REV.	DATE	DESCRIPTION OF CHANGES	DRAWN BY	CHK. BY
A	03/02/22	ISSUED FOR TRC MEETING	HB	JF
B	04/04/22	ISSUED FOR SITE PLAN SUBMISSION	HB	JF
C	04/27/22	REVISED PER COMPLETENESS REVIEW	HB	JF

OWNER

THE KOINONIA ACADEMY  
1040 PLAINFIELD AVENUE  
PLAINFIELD, NJ 07060

APPLICANT

J.G. PETRUCCI COMPANY, INC.  
171 STATE ROUTE 173, SUITE 201  
ASBURY, NJ 08802

E 2 PROJECT MANAGEMENT LLC

87 HIBERNIA AVENUE  
ROCKAWAY, N.J. 07866  
PHONE: (973) 299-5200  
FAX: (973) 299-5059  
www.E2PM.com



THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THEREBY APPLICABLE. THIS DRAWING AND THE DESIGN FEATURES OR OPERATIONAL CONDITIONS ARE PROPRIETARY TO E2 PROJECT MANAGEMENT, LLC AND SHALL NOT BE REPRODUCED, ALTERED OR COPIED WITHOUT WRITTEN PERMISSION. SHALL NOT BE USED IN ANY MANNER DETRIMENTAL TO ITS INTEREST AND SHALL BE RETURNED UPON REQUEST.

N.J. ENGINEERING CERTIFICATE OF  
AUTHORIZATION No. 24GA28118200

I CERTIFY THAT THESE PLANS HAVE BEEN  
PREPARED UNDER MY SUPERVISION

*John Ferrante*  
4/27/22

JOHN FERRANTE, P.E. N.J. NO. 24GE02472000  
REGISTERED PROFESSIONAL ENGINEER

PROJECT NAME

THE KOINONIA ACADEMY  
SCHOOL ANNEX BUILDING  
1040 PLAINFIELD AVENUE  
CITY OF PLAINFIELD,  
UNION COUNTY, NJ

BLOCK 509  
LOT: 1

DRAWING TITLE

STORMWATER MANAGEMENT  
AND UTILITY PLAN

CHECKED BY: JF	DRAWN BY: HB
SCALE: AS SHOWN	SHEET NO: 1 OF 16
PROJECT #: P-21-18-39	FIRST ISSUE: 03/02/2022

DRAWING NO.

SP-107.00



M:\PROJECTS\ARE SERVICES\PETRUCCIE-KOINONIA HIGH SCHOOL ANNEX BUILDING\9.0 DRAWINGS\9.2 E2PM SITE PLAN\KONIONIA ACADEMY DESIGN SET 2-2022.DWG



Calculation Summary										
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Description	PtSpclr	PtSpclb
CalcPts_1 Parking	Illuminance	Fc	1.72	5.3	0.4	4.30	13.25	Readings taken @ 0'-0" AFG	10	10
CalcPts_2 Sidewalk	Illuminance	Fc	1.77	6.2	0.3	5.90	20.67	Readings taken @ 0'-0" AFG	4	4
CalcPts_2 Sidewalk_1	Illuminance	Fc	2.91	7.9	0.4	7.28	19.75	Readings taken @ 0'-0" AFG	4	4

Luminaire Schedule										
Symbol	Tag	Qty	Label	Arrangement	Lum. Lumens	LLF	Description	Lum. Watts	Total Watts	BUG Rating
●	G	15	BLED12Y	Single	1109	1,000	BLED12Y (42_ SQUARE BOLLARD W_LED @ 90-DEGREES)	11.8	177	B1-U0-G1
●	F	4	BLED24Y	Single	2174	1,000	BLED24Y (42_ ROUND BOLLARD)	22.8	91.2	B2-U0-G2
●	A	6	ALED4T50Y	Single	6790	1,000	ALED4T50Y (TYPE IV)	51.4	308.4	B1-U0-G2
●	B	2	ALED3T50Y	Single	6377	1,000	ALED3T50Y (TYPE III)	53.5	107	B1-U0-G2
●	C	3	ALED2T50Y	Single	6873	1,000	ALED2T50Y (TYPE II)	52.2	156.6	B1-U0-G2
○	D	4	cbr12835unw	Single	1062	1,000	6 in recessed downlight	10.6	42.4	N.A.
■	E	5	SLIM12YD10	Single	1810	0,500	SLIM12Y_D10	14.1	70.5	B1-U0-G0

Expanded Luminaire Location Summary						
LumNo	Tag	X	Y	Z (HEIGHT)	Orient	Tilt
1	B	513571.857	644146.491	20	95.117	0
2	A	513664.086	644137.424	20	95.117	0
3	A	513590.665	644255.256	20	5.002	0
4	E	513677.058	644207.969	10	275.101	0
5	E	513757.294	644214.991	10	275.102	0
6	E	513783.866	644279.458	10	5.201	0
7	E	513788.699	644224.163	10	5.002	0
8	C	513946.834	644177.477	20	99.059	0
9	C	514051.738	644193.478	20	99.059	0
10	C	513844.172	644280.338	20	299.54	0
11	B	513965.942	644260.127	20	214.196	0
12	D	513701.907	644296.7	10	0	0
13	D	513717.146	644298.276	10	190.043	0
14	D	513710.74	644206.032	10	0	0
15	D	513724.43	644206.895	10	190.005	0
16	A	513798.739	644149.362	20	95.117	0
17	G	513760.41	644325.932	3.5	142.054	0
18	G	513765.569	644360.858	3.5	140.776	0
19	G	513777.795	644341.284	3.5	41.554	0
20	G	513809.052	644338.961	3.5	22.012	0
21	F	513831.248	644317.4	3.5	293.653	0
22	G	513801.953	644305.945	3.5	247.898	0
23	G	513762.425	644390.031	3.5	141.475	0
24	G	513760.11	644419.674	3.5	141.713	0
25	G	513757.292	644450.45	3.5	136.864	0
26	G	513713.79	644323.656	3.5	174.485	0
27	G	513696.652	644342.076	3.5	176.254	0
28	G	513675.614	644359.161	3.5	182.31	0
29	G	513657.038	644375.671	3.5	185.05	0
30	G	513638.325	644310.966	3.5	197.363	0
31	G	513660.534	644302.214	3.5	199.276	0
32	F	513770.687	644300.522	3.5	238.377	0
33	G	513854.05	644295.999	3.5	358.081	0
34	F	513740.835	644303.964	3.5	238.377	0
35	F	513682.665	644296.914	3.5	238.377	0
36	A	513732.291	644143.78	20	95.117	0
37	A	513883.299	644147.162	20	95.117	0
38	A	513595.828	644196.429	20	5.002	0
39	E	513786.225	644252.426	10	5.201	0
Total Quantity: 39						

## LIGHTING REQUIREMENTS

(SECTION 17:11-12)

PARKING LOTS 1.0 - 2.5 FC AVERAGE ILLUMINATION

LOADING AREAS 3.0 - 5.0 FC AVERAGE ILLUMINATION

PEDESTRIAN WALKWAYS 0.5 - 1.0 FC AVERAGE ILLUMINATION

### NOTES:

\* The light loss factor (LLF) is a product of many variables, only lamp lumen depreciation (LLD) has been applied to the calculated results unless otherwise noted. The LLD is the result (quotient) of mean lumens / initial lumens per lamp manufacturers' specifications.

\* Illumination values shown (in footcandles) are the predicted results for planes of calculation either horizontal, vertical or inclined as designated in the calculation summary. Meter orientation is normal to the plane of calculation.

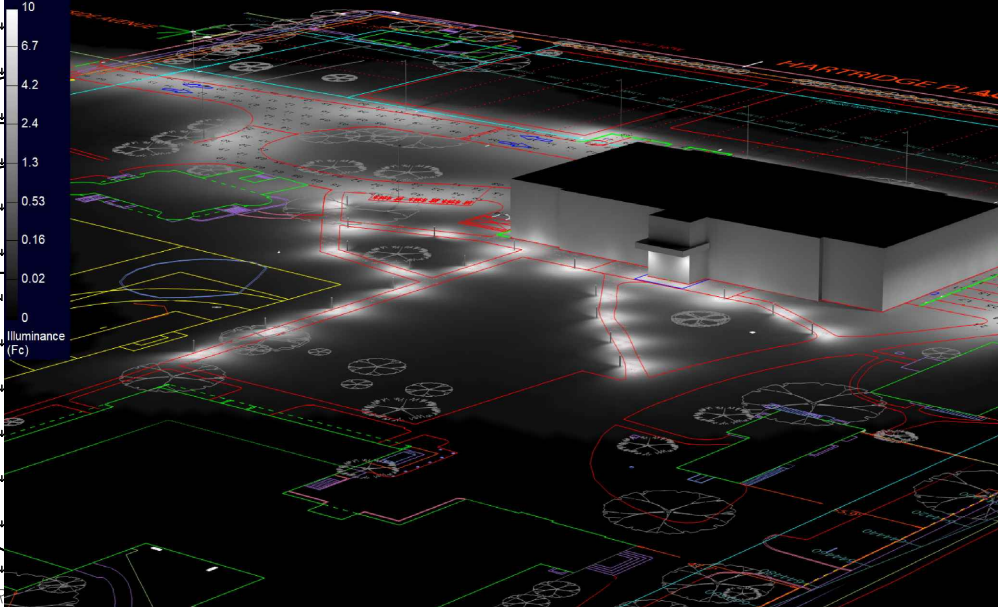
\* The calculated results of this lighting simulation represent an anticipated prediction of system performance. Actual measured results may vary from the anticipated performance and are subject to means and methods which are beyond the control of RAB Lighting Inc.

\* Mounting height determination is job site specific, our lighting simulations assume a mounting height (insertion point of the luminaire symbol) to be taken at the top of the symbol for ceiling mounted luminaires and at the bottom of the symbol for all other luminaire mounting configurations.

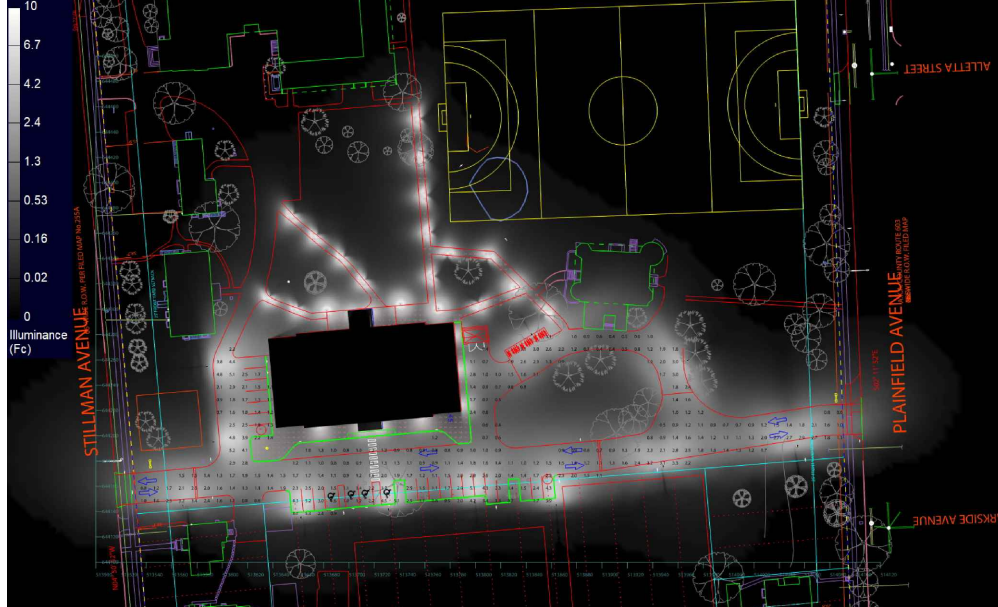
\* It is the Owner's responsibility to confirm the suitability of the existing or proposed poles and bases to support the proposed fixtures, based on the weight and EPA of the proposed fixtures and the owner's site soil conditions and wind zone. It is recommended that a professional engineer licensed to practice in the state the site is located be engaged to assist in this determination.

\* The landscape material shown herein is conceptual, and is not intended to be an accurate representation of any particular plant, shrub, bush, or tree, as these materials are living objects, and subject to constant change. The conceptual objects shown are for illustrative purposes only. The actual illumination values measured in the field will vary.

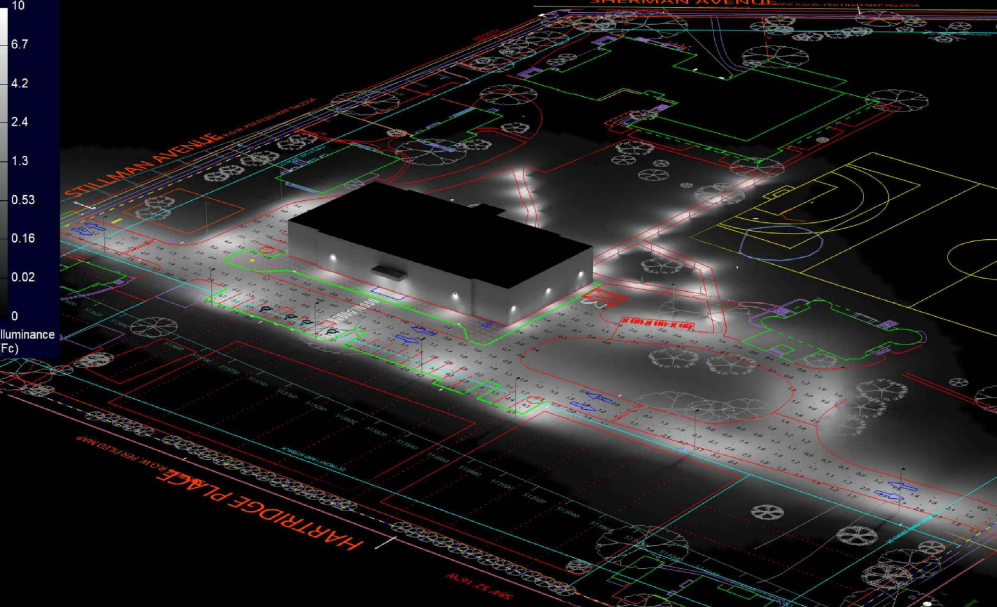
\* Photometric model elements such as buildings, rooms, plants, furnishings or any architectural details which impact the dispersion of light must be detailed by the customer documents for inclusion in the RAB lighting design model. RAB is not responsible for any inaccuracies caused by incomplete information on the part of the customer, and reserves the right to use best judgement when translating customer requests into photometric studies.



NORTHWEST SIDE ISOMETRIC



PLAN VIEW



SOUTHEAST SIDE ISOMETRIC

## LIGHTING RENDERINGS

### PLANT LIST

Key	Quantity	Common Name	Scientific Name	Size/Root	Spacing/Notes
Shade / Ornamental Trees					
Ar	4	October Glory Red Maple	Acer rubrum 'October Glory'	3.5" Cal. Min. / B&B	Spaced as Shown
Bn	7	Dura-Heat River Birch	Betula nigra 'BNMTF'	2.5-3.0" Cal. / B&B	Spaced as Shown
Tc	8	'Chancellor' Linden	Tilia cordata 'Chancellor'	3.5" Cal. Min. / B&B	Spaced as Shown
Shrubs					
Axg	14	Little Richard Abelia	Abelia x grandiflora 'Little Richard'	#3 Cont.	Spaced as Shown
Fg	26	Dwarf Fothergilla	Fothergilla gardenii	#3 Cont.	Spaced as Shown
Hq	24	Oakleaf Hydrangea	Hydrangea quercifolia	#3 Cont.	Spaced as Shown
Ic'S'	7	Steeds Japanese Holly	Ilex crenata 'Steeds'	4.0-4.5' / B&B	Spaced as Shown
S'LP'	6	Little Princess Spirea	Spirea 'Little Princess'		Spaced as Shown
Vp'SS'	14	Summer Snowflake Doublefile Viburnum	Viburnum plicatum 'Summer Snowflake'	3-4' / B&B	Spaced as Shown

### WATERING SCHEDULE

Maintenance Item	Schedule	Rate	Inspection Requirement	Maintenance Requirement
Watering	Weekly - Early Morning	Minimum One (1) Inch	Weekly - During First Growing Season or Until Vegetation Becomes Established. Inspect for Dry Soils, Wilted Vegetation.	Increase Watering Frequency / Rate to Maintain Soil Moisture and Plant Vigor.

SCHEDULE OF REVISIONS				
REV.	DATE	DESCRIPTION OF CHANGES	DRAWN BY	CHK. BY
A	03/02/22	ISSUED FOR TRC MEETING	HB	JF
B	04/04/22	ISSUED FOR SITE PLAN SUBMISSION	HB	JF
C	04/27/22	REVISED PER COMPLETENESS REVIEW	HB	JF

OWNER	
THE KOINONIA ACADEMY 1040 PLAINFIELD AVENUE PLAINFIELD, NJ 07060	
APPLICANT	
J.G. PETRUCCI COMPANY, INC. 171 STATE ROUTE 173, SUITE 201 ASBURY, NJ 08802	

E 2 PROJECT MANAGEMENT LLC	
87 HIBERNIA AVENUE ROCKAWAY, N.J. 07866 PHONE: (973) 299-5200 FAX: (973) 299-5059 www.E2PM.com	

N.J. ENGINEERING CERTIFICATE OF AUTHORIZATION No. 24GA28118200	
I CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION	

John Ferrante 4/27/22	
JOHN FERRANTE, P.E. N.J. NO. 24GE02472000 REGISTERED PROFESSIONAL ENGINEER	

PROJECT NAME	
THE KOINONIA ACADEMY SCHOOL ANNEX BUILDING 1040 PLAINFIELD AVENUE CITY OF PLAINFIELD, UNION COUNTY, NJ	

BLOCK 509 LOT: 1	
---------------------	--

DRAWING TITLE	
SITE LIGHTING AND LANDSCAPING P LAN	

CHECKED BY: JF	DRAWN BY: HB
SCALE: AS SHOWN	SHEET NO: 1 OF 16
PROJECT #: P-21-18-39	FIRST ISSUE: 03/02/2022
DRAWING NO.	

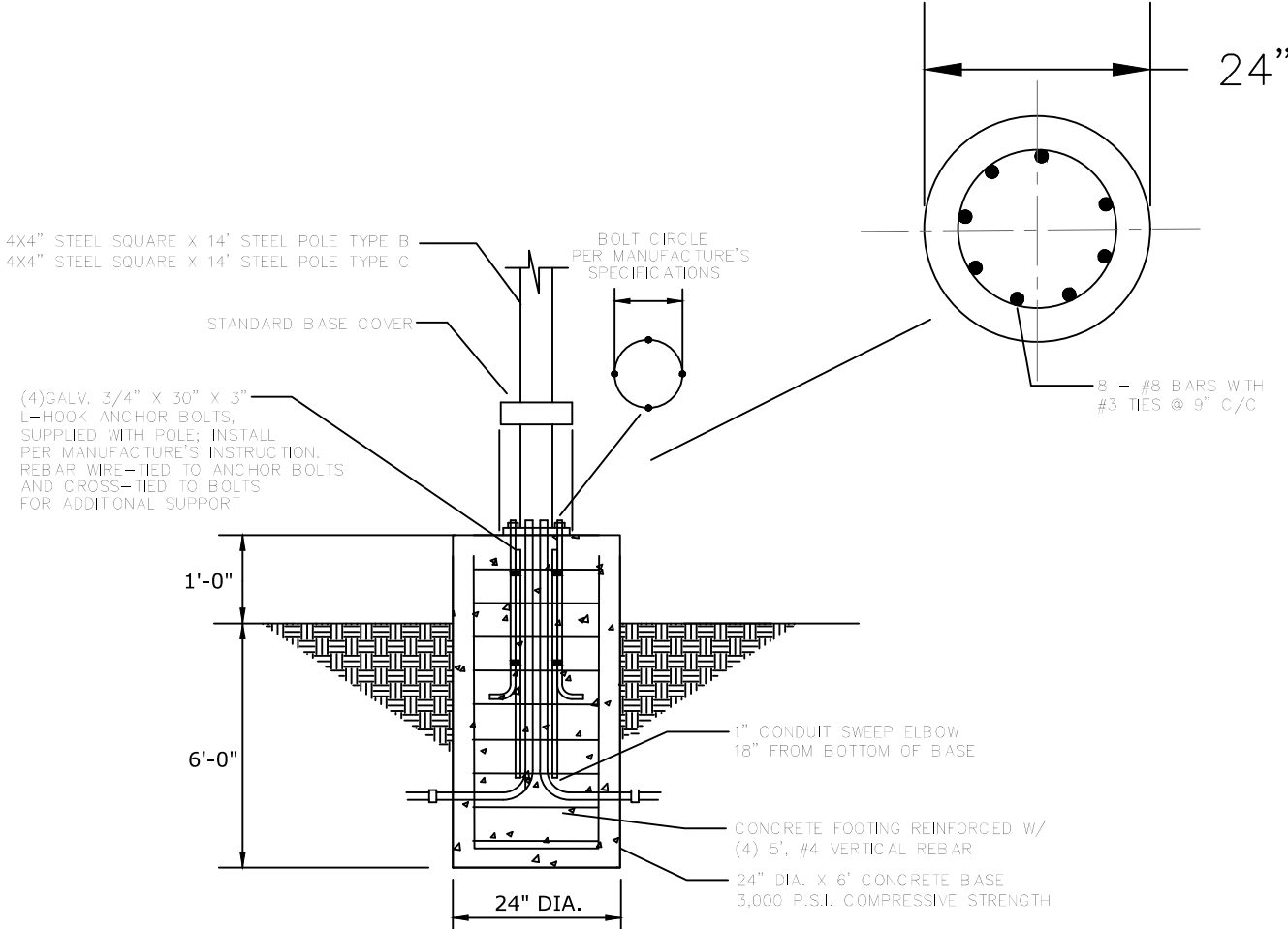
SP-108.00



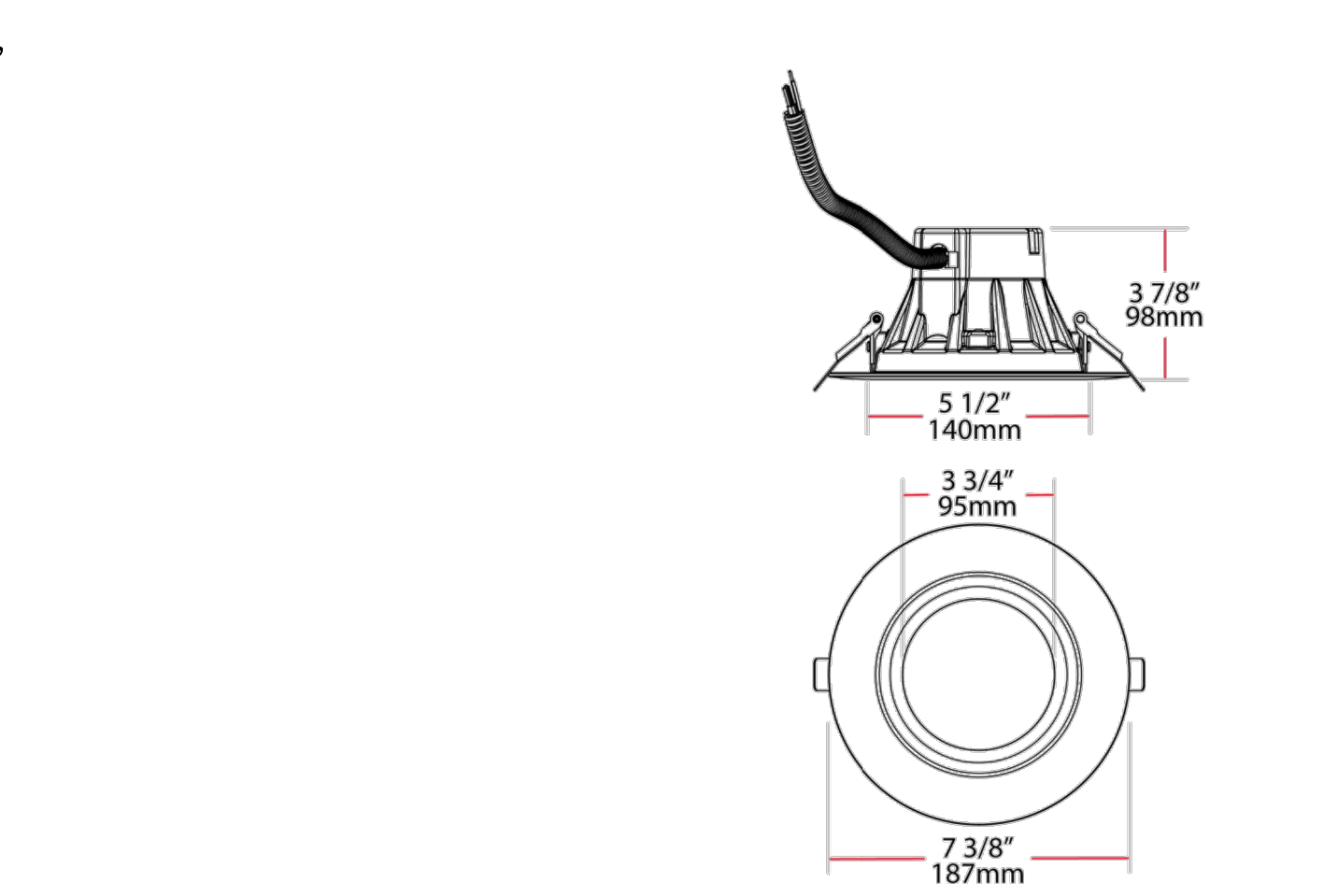
M:\PROJECTS\A&E SERVICES\PROJECTS\K- KOINONIA HIGH SCHOOL ANNEX BUILDING\9.0 DRAWINGS\9.2 E2PM SITE PLAN\Koinonia Academy Design SET 2-2022.DWG

PLANTING NOTES:

- THE LANDSCAPE PLAN IS TO BE USED FOR LANDSCAPING PURPOSES ONLY. THE CONTRACTOR SHOULD EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR EXACT LOCATIONS OF UTILITIES, DRAINS, ETC., AND NOTIFY THE OWNER ABOUT ANY DISCREPANCIES BEFORE STARTING WORK.
- ALL PLANT MATERIALS USED SHALL BE TRUE TO NAME AND SIZE IN CONFORMITY WITH THE CURRENT EDITION OF THE AMERICAN STANDARD OF NURSERY STOCK, AND SHALL BE SPECIES OR THEIR SPECIES OF VARIETY. ALL PLANTS SHALL HAVE NORMAL, WELL-DEVELOPED BRANCHES AND VIGOROUS ROOT SYSTEMS. THEY SHALL BE SOUND, HEALTHY, VIGOROUS, FREE FROM DEFECTS, DISFIGURING KNOTS, ABRASIONS OF THE BARK, SUN SCALD INJURIES, PLANT DISEASES, INSECT EGGS, BORERS, AND ALL OTHER FORMS OF INFECTION. ALL PLANTS SHALL BE NURSERY-GROWN, UTILITIES.
- THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGE TO EXISTING CAUSED BY ANY PERSON, VEHICLE, EQUIPMENT, OR TOOLS RELATED TO THE EXECUTION OF THIS CONTRACT.
- EXCAVATION NEAR EXISTING UTILITIES TO BE CAREFULLY PERFORMED BY HAND.
- ALL PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AS IT GRADE AT THE NURSERY, BORE TO EXISTING
- IN THE EVENT THAT PLANTING DISCREPANCIES OR MATERIAL OMISSIONS OCCUR IN THE PLANT MATERIALS LIST, THE LANDSCAPING PLAN SHALL GOVERN.
- ALL PLANT MATERIAL IS TO BE GUARANTEED FOR A PERIOD OF TWELVE MONTHS FROM TIME OF FINAL ACCEPTANCE OF THE PROJECT OR AS REGULATED BY THE APPROVING AUTHORITY. IF ANY PLANTS ARE DEAD OR IN AN UNHEALTHY CONDITION BEFORE FINAL ACCEPTANCE OF THE PROJECT, THE LANDSCAPE CONTRACTOR SHALL REPLACE THEM AT HIS EXPENSE.
- ANY SUBSTITUTIONS OF PLANT MATERIAL WITH REGARDS TO SIZE, SPECIES, VARIETY, ETC., SHALL BE SUBJECT TO APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT AND THE TOWNSHIP.
- PLANTS SHALL ONLY BE INSTALLED WHEN THE SOIL IS FROST FREE.
- UNDER NO CIRCUMSTANCES SHOULD THE MAIN LEADER OF AN EVERGREEN TREE BE TOPPED.
- ALL DISTURBED AREAS TO BE TOPSOILED 5" THICK, FERTILIZED, SEEDED, AND MULCHED WITH SLT HAY. TOPSOIL SHALL BE NATURAL FRIABLE, FERTILE SOIL CHARACTERISTIC OF PRODUCTIVE SOIL IN THE VICINITY. IT SHALL BE FREE OF LUMPS OF CLAY, STONES, ROOTS, AND OTHER FOREIGN MATTER.
- CUT AND REMOVE BURLAP FROM TOP ONE-THIRD OF BALL. ALL PLASTIC MATERIAL, SYNTHETIC BURLAP AND STRING OR CONTAINERS SHALL BE REMOVED AT THE TIME OF PLANTING. THE WIRE BASKETS AND PLASTIC LINERS OF CONTAINER-GROWN TREES AND SHRUBS MUST BE COMPLETELY REMOVED. NO CONTAINER-GROWN MATERIAL WILL BE ACCEPTED IF IT IS ROOT BOUND.
- THE DEPTH OF PLANT PITS SHALL BE INCREASED BY 12" THROUGH THE ADDITION OF LOOSE AGGREGATE (3/4" TO 1 1/2" DIAMETER) WHEREVER POOR DRAINAGE OCCURS OR WHERE DIRECTED BY THE PROJECT LANDSCAPE ARCHITECT.
- GUY WIRES SHALL BE LOCATED SO THAT THEY WILL NOT PULL CROTCH APART. GUY WIRES TO SECOND BRANCH (MINIMUM ONE-THIRD HEIGHT OF TREE). USE TWO GUYS PER TREE UNLESS OTHERWISE INDICATED. TREE STAKES AND GUY WIRES SHALL BE REMOVED AFTER ONE GROWING SEASON.
- PLANTS PLANTED IN ROWS SHALL BE MATCHED SPECIMENS AND BE UNIFORM IN SIZE AND FORM.
- PLANTING BACKFILL MIXTURE SHALL CONSIST OF ONE PART TOPSOIL, ONE PART NATIVE SOIL AND ONE PART PEAT MOSS. NOTE THAT PLANTING MIXTURE MAY CHANGE BASED UPON SOIL CONDITIONS.
- MULCH, 4" IN DEPTH, SHALL BE EITHER WOOD CHIPS, PINE BARK, OR SHREDDED RETARDANT HARDWOOD BARK NOT EXCEEDING 2" IN GREATEST DIMENSION. A WEED BARRIER SHALL BE USED IN ALL NON GRASSSED AREA.
- ALL PLANT MATERIAL SHALL BE GIVEN A MINIMUM OF 5 GALLONS OF WATER AT THE TIME OF INSTALLATION AND SHALL BE WATERED AT INTERVALS DURING ESTABLISHMENT TO THE INSTALLATION OF THE PLANT MATERIAL. ENSURE ADAPTATION TO THE SITE. PRIOR TO IT TO FULLY THE CONTRACTOR SHALL FILL EACH PLANTING PIT WITH WATER AND ALLOW PERCOLATE INTO THE GROUND PRIOR TO PLACEMENT OF THE PLANT.
- THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY PERCOLATION PROBLEMS PRIOR TO INSTALLATION.
- PREFERRED PLANTING TIME PERIODS ARE FROM SEPTEMBER 1 TO DECEMBER 20 OR MARCH 20 TO MAY 31. NO PLANTING SHALL BE EXECUTED DURING ABNORMALLY HOT WEATHER OR WHEN THE GROUND IS FROZEN.
- THE CONTRACTOR SHALL REMOVE ALL DAMAGED BRANCHES AND NURSERY TAGS AT THE TIME OF INSTALLATION.
- SLOW RELEASE FERTILIZER TABLETS OR PACKETS OF 20-10-5 COMPOSITION SHALL BE ADDED TO ALL PLANTING PITS AT THE FOLLOWING RATIOS: 1 PER SHRUB, 2 PER DECIDUOUS OR EVERGREEN TREES UP TO 2" IN CALIPER AND 3 FOR DECIDUOUS AND EVERGREEN TREES ABOVE 2" IN CALIPER.



1  
SP-109 LIGHT POLE FOUNDATION SCALE: N.T.S.



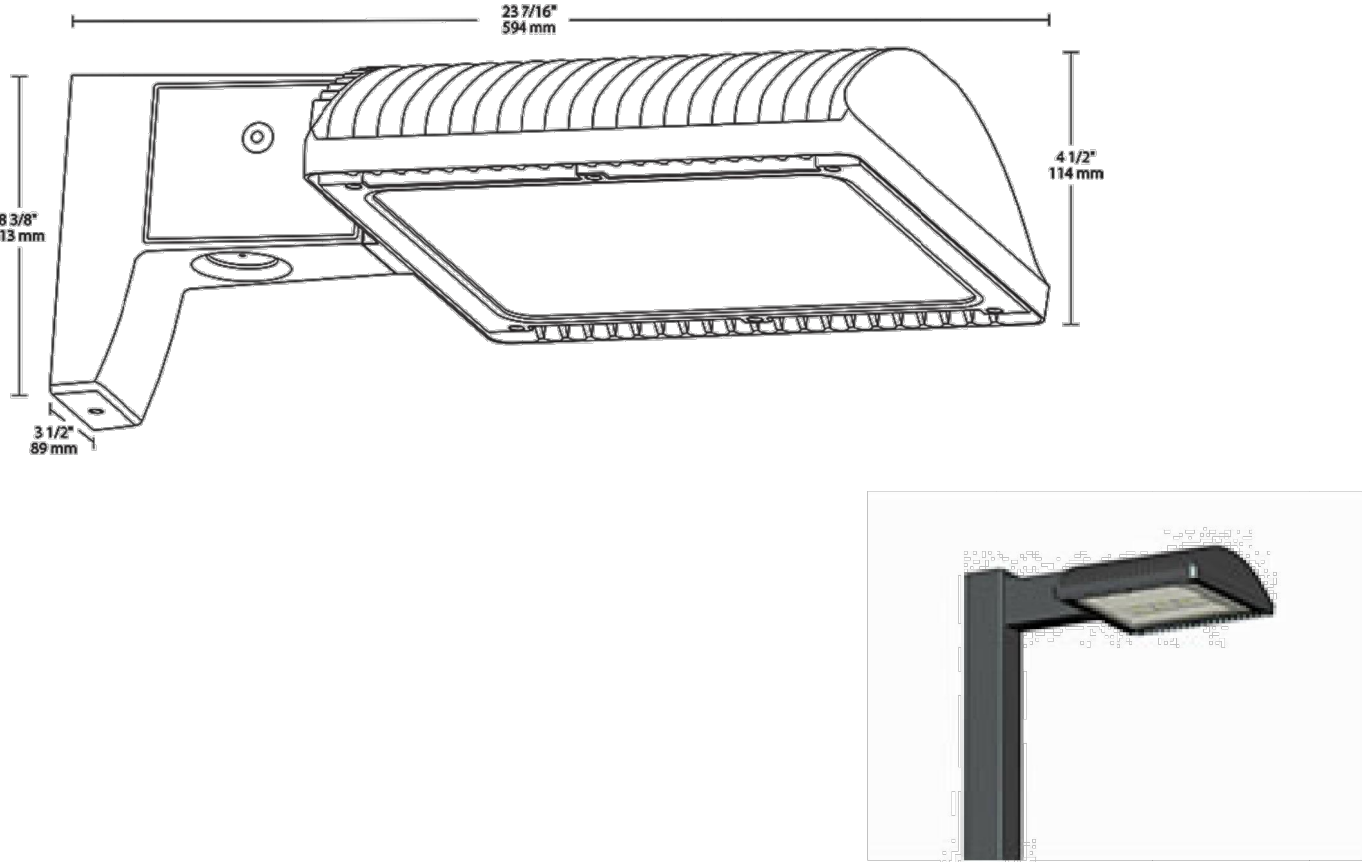
2  
SP-109 LIGHTING FIXTURE C6R12835UNVW SCALE: N.T.S.



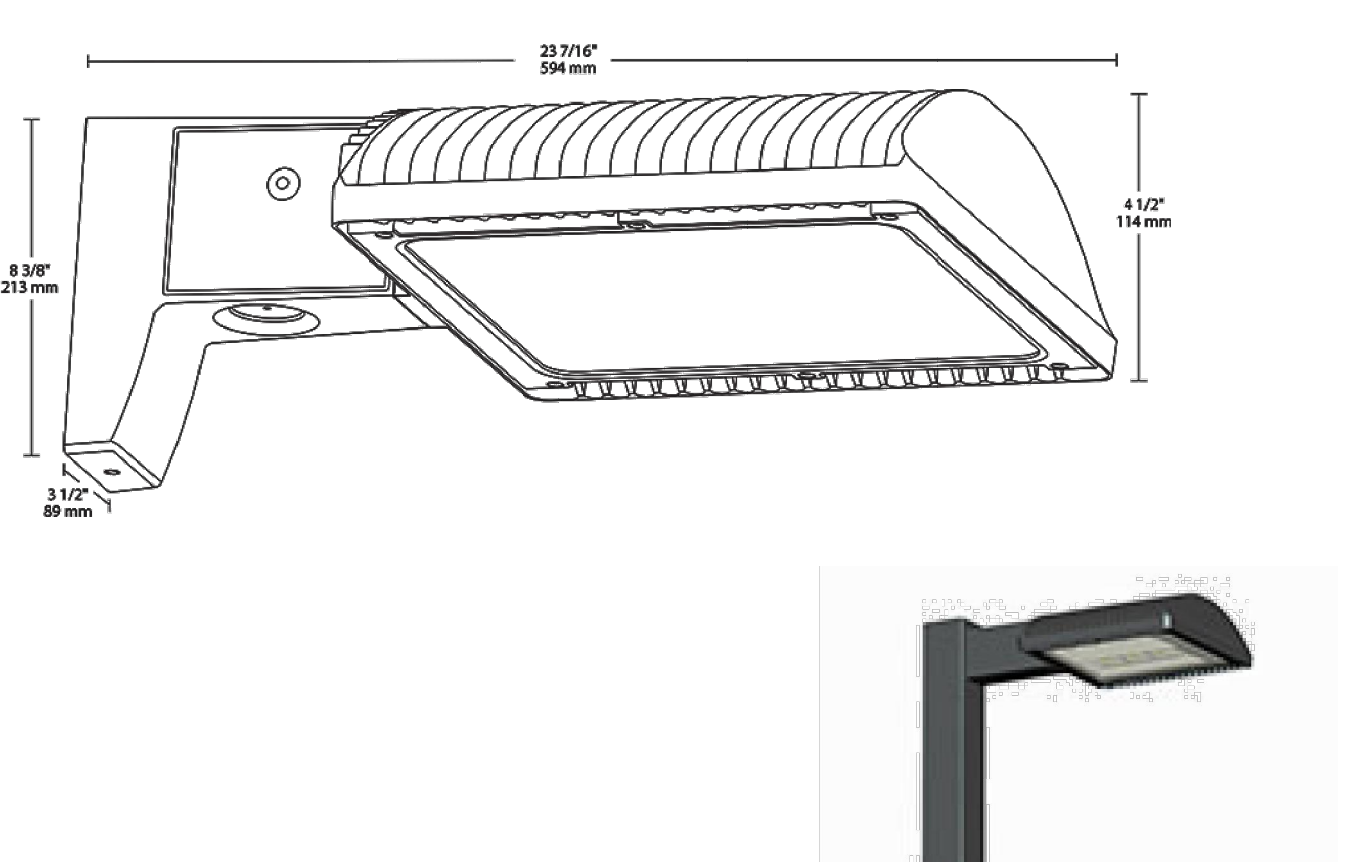
3  
SP-109 LIGHT POLE DETAIL SCALE: N.T.S.

GENERAL RANGE OF SOIL MODIFICATIONS AND VOLUMES FOR VARIOUS SOIL CONDITIONS

POSTCONSTRUCTION SOIL CONDITION	MIN. WIDTH PREPARED SOIL FOR TREES (X)	TYPE OF PREPARATION
GOOD SOIL (NOT PREVIOUSLY GRADED OR COMPACTED, TOPSOIL LAYER INTACT)	6 FT. OR TWICE THE WIDTH OF THE ROOT BALL, WHICHEVER IS GREATER	LOOSEN THE EXISTING SOILS TO THE WIDTHS AND DEPTHS SHOWN ON PLANTING DETAILS.
COMPACTED SOIL (NOT PREVIOUSLY GRADED, TOPSOIL LAYER DISTURBED BUT NOT ELIMINATED)	15 FT.	LOOSEN THE EXISTING SOILS TO THE WIDTHS AND DEPTHS SHOWN ON PLANTING DETAILS; ADD COMPOSTED ORGANIC MATTER TO BRING THE CONTENT UP TO 5% DRY WEIGHT.
GRADED SUBSOILS AND CLEAN FILLS WITH CLAY CONTENT BETWEEN 5 AND 25 %	20 FT.	MINIMUM TREATMENT: LOOSEN EXISTING SOILS TO WIDTHS AND DEPTHS SHOWN, ADD COMPOSTED ORGANIC MATTER TO BRING ORGANIC CONTENT UP TO 5% DRY WEIGHT. OPTIMUM TREATMENT: REMOVE TOP 8 TO 10 IN. OF THE EXISTING MATERIAL, LOOSEN EXISTING SOILS TO THE WIDTHS AND DEPTHS SHOWN IN THE PLANTING DETAILS, ADD 8-10 IN. OF LOAM TOPSOIL.
POOR QUALITY FILLS, HEAVY CLAY SOILS, SOILS CONTAMINATED WITH RUBBLE OR TOXIC MATERIAL	20 FT.	REMOVE EXISTING SOILS TO THE WIDTHS AND DEPTHS SHOWN, REPLACE WITH LOAM AND TOPSOIL.



4  
SP-109 LIGHTING FIXTURE ALED2T50Y SCALE: N.T.S.

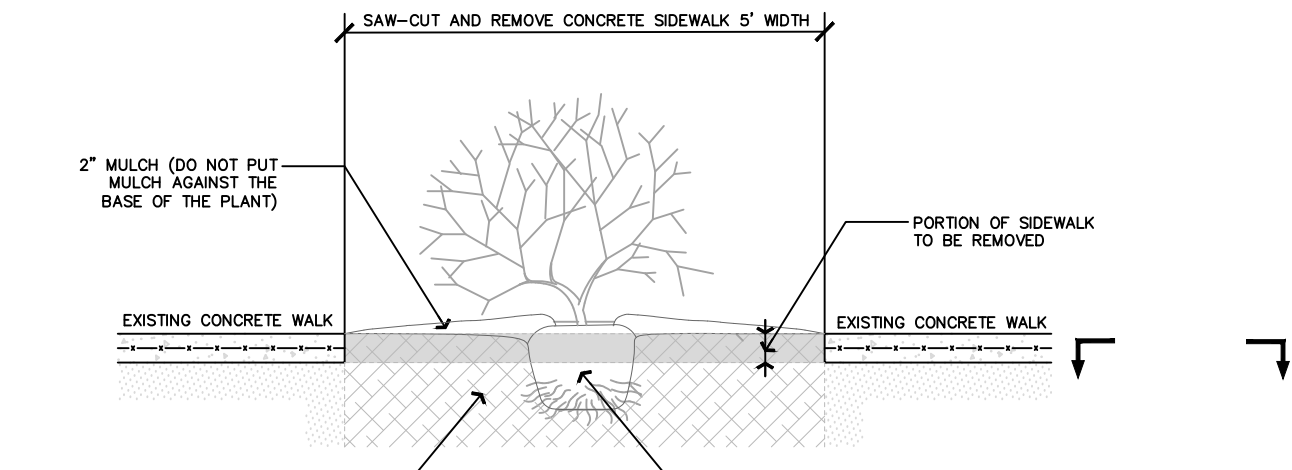


5  
SP-109 LIGHTING FIXTURE ALED3T50Y SCALE: N.T.S.

STANDARD ROOT BALL SIZES FOR NURSERY-GROWN SHADE TREES

CALIPER* (IN.)	HEIGHT RANGE (FT.-IN.)	MAX. HEIGHT (FT)	MIN. BALL DIA. (IN.)	MIN. BALL DEPTH (IN.)
1/4	5-6	8	12	9
1/2	6-8	10	14	10 1/2
3/4	8-10	11	16	12
1	8-10	12	18	13 1/2
1 1/2	10-12	14	20	13 1/2
1 3/4	10-12	14	22	14 1/2
2	12-14	16	24	16
2 1/2	12-14	16	28	18 1/2
3	14-16	18	32	19 1/2
3 1/2	14-16	18	36	23
4	16-18	22	42	25
5	18-20	26	54	32 1/2

\* UP TO AND INCLUDING THE 4-IN. CALIPER SIZE, THE CALIPER MEASUREMENT INDICATES THE DIAMETER OF THE TRUNK 6 IN. ABOVE GROUND LEVEL. FOR LARGER SIZES, THE CALIPER MEASUREMENT IS TAKEN 12 IN. ABOVE GROUND LEVEL.



8  
SP-109 SHRUB PLANTING DETAIL SCALE: N.T.S.

NOTES:

- SEE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1, FOR COMPLETE LIST OF NURSERY STANDARDS FOR OTHER TYPES AND SIZES OF TREES AND SHRUBS.
- SEE INTERNATIONAL SOCIETY OF ARCHITECTURE'S "PRINCIPLES AND PRACTICES OF PLANTING TREES AND SHRUBS," 1997

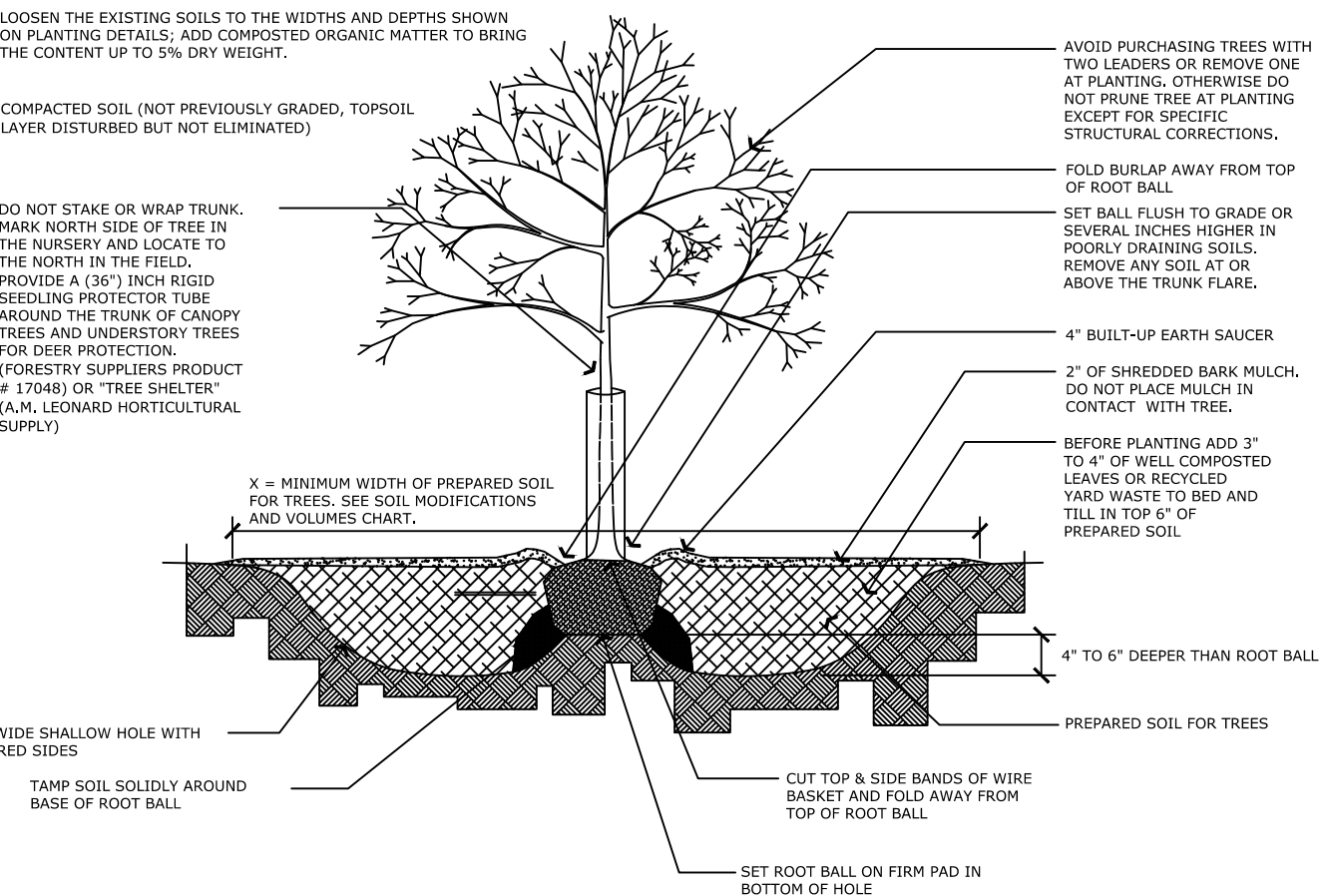
SOIL IMPROVEMENT

THE QUALITY OF SOIL AVAILABLE FOR PLANTING VARIES WIDELY FROM SITE TO SITE, ESPECIALLY AFTER CONSTRUCTION ACTIVITY HAS OCCURRED. THE NATURE OF CONSTRUCTION RESULTS IN COMPACTION, FILLING, CONTAMINATION, AND GRADING OF THE ORIGINAL SOIL ON A SITE, RAPIDLY MAKING IT USELESS FOR PLANTING. PREVIOUS HUMAN ACTIVITY AT A SITE CAN ALSO AFFECT THE ABILITY OF THE SOIL TO SUPPORT PLANTS.

DURING THE DESIGN PHASE, ASSUMPTIONS MUST BE MADE REGARDING THE PROBABLE CONDITION OF THE SOIL AFTER CONSTRUCTION IS COMPLETE. THE HEALTH OF EXISTING OR REMAINING SOIL DETERMINES WHAT TYPES OF SOIL PREPARATION WILL BE REQUIRED AND THE VOLUME OF SOIL TO BE PREPARED. CONDITIONS WILL VARY FROM LOCATION TO LOCATION WITHIN A PROJECT, AND DETAILS MUST BE CONDITION-SPECIFIC. FOR LARGE PROJECTS OR EXTREME CONDITIONS, IT IS USEFUL TO CONSULT AN EXPERT EXPERIENCED IN MODIFYING PLANTING SOILS AT URBAN SITES.

NOTES:

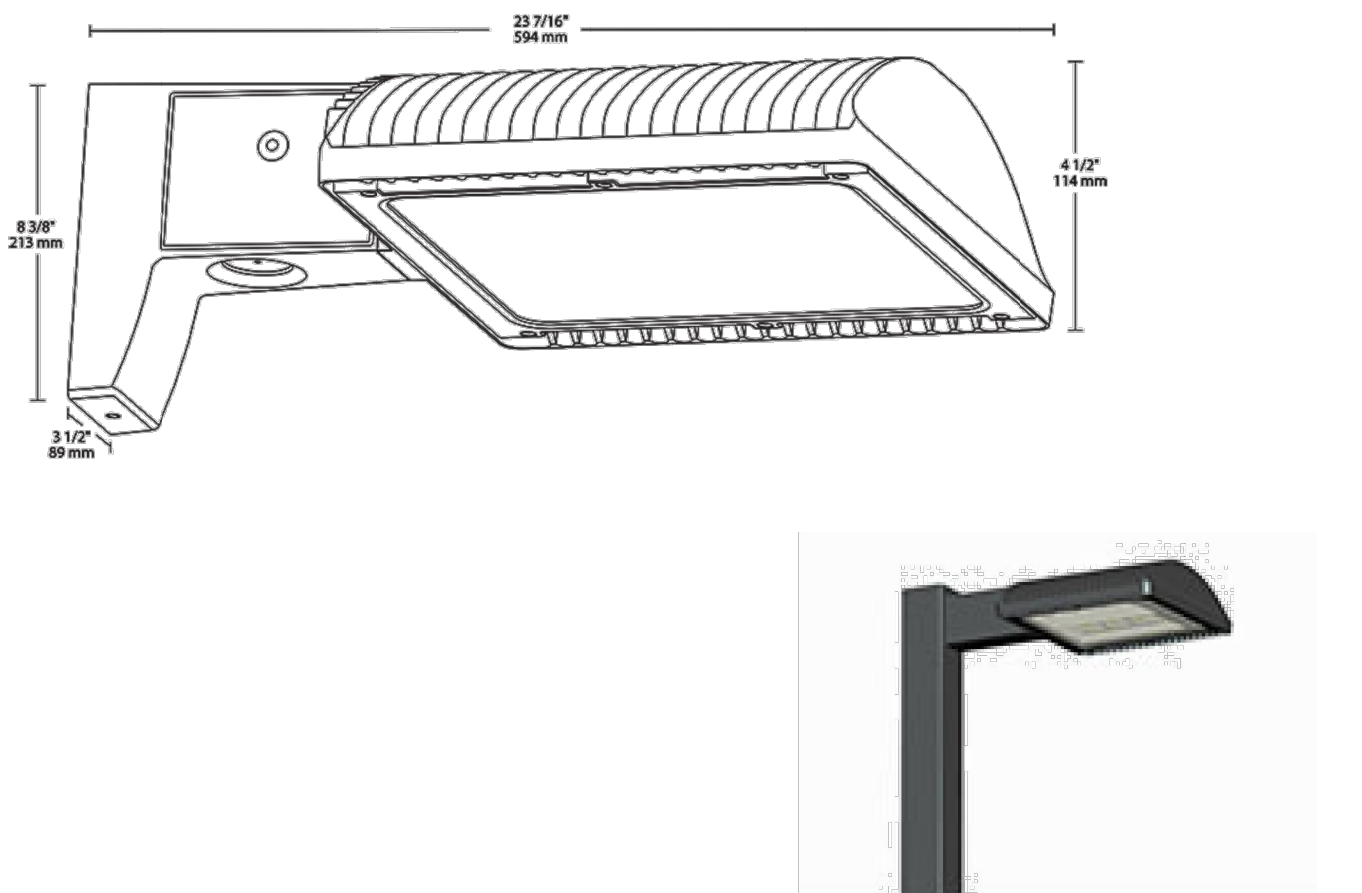
- IF SITE OR DESIGN CONSTRAINTS PROHIBIT USE OF THE DIMENSIONS SHOWN IN THE PLANTING DETAILS, FOLLOW THE GUIDELINES FOR PLANTING IN URBAN AREAS.
- WHENEVER POSSIBLE THE SOIL IMPROVEMENT AREA SHOULD BE CONNECTED FROM TREE TO TREE.
- ALWAYS TEST SOIL FOR PH AND NUTRIENT LEVELS AND ADJUST THESE AS REQUIRED.
- LOOSEN SOIL WITH A BACKHOE OR OTHER LARGE COARSE-TILING EQUIPMENT WHEN POSSIBLE. TILING THAT PRODUCES LARGE, COARSE CRUMBS OF SOIL IS PREFERABLE TO TILING THAT RESULTS IN FINE GRAINING UNIFORM IN TEXTURE.
- THE BOTTOM OF PLANTING SOIL EXCAVATIONS SHOULD BE ROUGH TO AVOID MATTING OF SOIL LAYERS AS NEW SOIL IS ADDED. IT IS PREFERABLE TO FILL THE FIRST LIFT (2 TO 3 IN.) OF PLANTING SOIL INTO THE SUBSOIL.



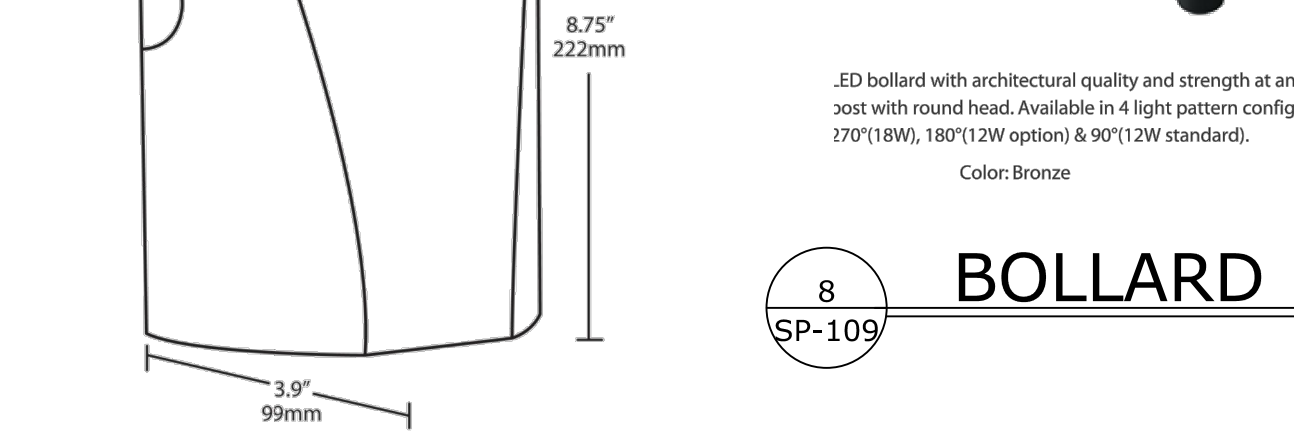
NOTES:

- FOR CONTAINER-GROWN TREES USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL, THEN CUT OR PULL AWAY ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.
- INCORPORATE COMMERCIALY PREPARED MYCORRHIZAE SPORES IN THE SOIL IMMEDIATELY AROUND THE ROOT BALL AT RATE SPECIFIED BY THE MANUFACTURER.
- PRIOR TO INSTALLATION CONFIRM THE SOILS WILL DRAIN PROPERLY. IF NECESSARY PROVIDE PROPER DRAINAGE.
- THOROUGHLY SOAK THE ROOT BALL AND THE ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
- THE PLANTING PROCESS IS SIMILAR FOR DECIDUOUS

9  
SP-109 TREE PLANTING DETAIL SCALE: N.T.S.



6  
SP-109 LIGHTING FIXTURE ALED4T50Y SCALE: N.T.S.



7  
SP-109 LIGHTING FIXTURE SLIM12YD10 SCALE: N.T.S.

SCHEDULE OF REVISIONS

REV.	DATE	DESCRIPTION OF CHANGES	DRAWN BY	CHK. BY
A	03/02/22	ISSUED FOR TRC MEETING	HB	JF
B	04/04/22	ISSUED FOR SITE PLAN SUBMISSION	HB	JF
C	04/27/22	REVISED PER COMPLETENESS REVIEW	HB	JF

OWNER

THE KOINONIA ACADEMY  
1040 PLAINFIELD AVENUE  
PLAINFIELD, NJ 07060

APPLICANT

J.G. PETRUCCI COMPANY, INC.  
171 STATE ROUTE 173, SUITE 201  
ASBURY, NJ 08802

E 2 PROJECT MANAGEMENT LLC

87 HIBERNIA AVENUE  
ROCKAWAY, N.J. 07866  
PHONE: (973) 299-5200  
FAX: (973) 299-1059  
www.E2PM.com



THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THEREOF APPLICABLE. THIS DRAWING AND THE DESIGN HEREON OR CONSTRUCTION ACCORDING ARE PROPRIETARY TO E2PM PROJECT MANAGEMENT, LLC AND SHALL NOT BE REPRODUCED, ALTERED OR COPIED WITHOUT WRITTEN PERMISSION. SHALL NOT BE USED IN ANY MANNER DETRIMENTAL TO ITS INTEREST AND SHALL BE RETURNED UPON REQUEST.

N.J. ENGINEERING CERTIFICATE OF AUTHORIZATION No. 24GA28118200

I CERTIFY THAT THESE PLANS HAVE BEEN  
PREPARED UNDER MY SUPERVISION

*John Ferrante*  
4/27/22

JOHN FERRANTE, P.E. N.J. NO. 24GE02472000  
REGISTERED PROFESSIONAL ENGINEER

PROJECT NAME

THE KOINONIA ACADEMY  
SCHOOL ANNEX BUILDING  
1040 PLAINFIELD AVENUE  
CITY OF PLAINFIELD,  
UNION COUNTY, NJ

BLOCK 509  
LOT: 1

DRAWING TITLE

LIGHTING AND LANDSCAPING  
NOTES AND DETAILS

CHECKED BY: JF

SCALE: AS SHOWN

PROJECT NO: P-21-18-39

DRAWING NO.

DRAWN BY: HB

SHEET NO: 1 OF 16

FIRST ISSUE: 03/02/2022

SP-109.00



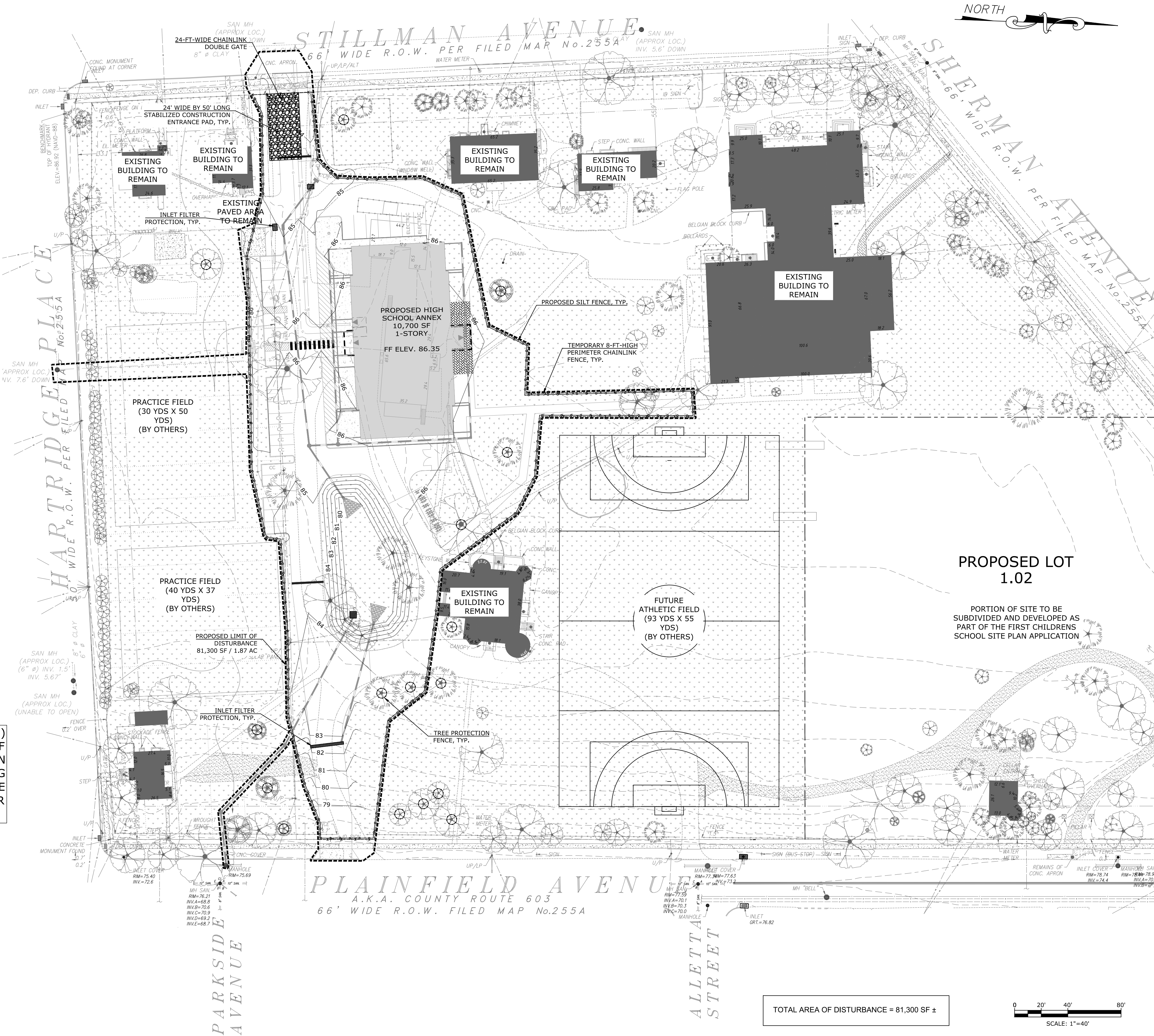




SOMERSET-UNION SOIL CONSERVATION DISTRICT SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING 48 HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY.
2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
3. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 30 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO NJ STATE STANDARDS
4. PERMANENT VEGETATION SHALL BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH WILL BE USED FOR PROTECTION UNTIL SEEDING IS ESTABLISHED
5. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NJ STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
6. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS OR PRELIMINARY GRADING.
7. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING ALL CRITICAL AREAS SUBJECT TO EROSION (I.E.: STEEP SLOPES, ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO THE NJ STATE STANDARDS.
8. ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (I.E.: SLOPES GREATER THAN 3:1)
9. TRAFFIC CONTROL STANDARDS REQUIRE THE INSTALLATION OF A 50'X30'X6"PAD OF 1 1/2" OR 2" STONE, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
10. AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
11. IN THAT NJSA 4:24-39 ET SEQ., REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES, ALL SITE WORK FOR SITE PLANS AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS, WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.
12. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
13. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT NJ STATE SOIL EROSION & SEDIMENT CONTROL STANDARDS.
14. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES IN OWNERSHIP.
15. MULCHING TO THE NJ STANDARDS IS REQUIRED FOR OBTAINING A CONDITIONAL REPORT OF COMPLIANCE. CONDITIONALS ARE ONLY ISSUED WHEN THE SEASON PROHIBITS SEEDING.
16. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT ROADS CLEAN DURING LIFE OF CONSTRUCTION PROJECT.
17. THE DEVELOPER SHALL BE RESPONSIBLE FOR REMEDIATING ANY EROSION OR SEDIMENT PROBLEMS THAT ARISE AS A RESULT OF ONGOING CONSTRUCTION AT THE REQUEST OF THE SOMERSET-UNION SOIL CONSERVATION DISTRICT.
18. HYDRO SEEDING IS A TWO- STEP PROCESS. THE FIRST STEP INCLUDES SEED, FERTILIZER, LIME, ETC., ALONG WITH MINIMAL AMOUNTS OF MULCH TO PROMOTE CONSISTENCY, GOOD SEED TO SOIL CONTACT, AND GIVE A VISUAL INDICATION OF COVERAGE. UPON COMPLETION OF SEEDING OPERATION, HYDRO-MULCH SHOULD BE APPLIED AT A RATE OF 1500 LBS. PER ACRE IN SECOND STEP. THE USE OF HYDRO-MULCH, AS OPPOSED TO STRAW, IS LIMITED TO OPTIMUM SEEDING DATES AS LISTED IN THE NJ STANDARDS.
19. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SOIL TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING.

THE PROJECT IS LOCATED WITHIN A METROPOLITAN PLANNING AREA (PA1) AND URBAN ENTERPRISE ZONE. AS SUCH, PER NEW JERSEY DEPARTMENT OF AGRICULTURE STATE SOIL CONSERVATION COMMITTEE TECHNICAL BULLETIN 2018-2.0, THE PROJECT IS EXEMPT FROM THE STANDARD FOR LAND GRADING (REVISED 2017) WHICH CONTAINS PROVISIONS FOR MEASURES TO IMPROVE SOIL QUALITY ON CONSTRUCTION SITES THROUGH TESTING AND/OR REMEDIATION OF EXCESSIVELY COMPACTED SOIL.



SCHEDULE OF REVISIONS

REV.	DATE	DESCRIPTION OF CHANGES	DRAWN BY	CHK. BY
A	03/02/22	ISSUED FOR TRC MEETING	HB	JF
B	04/04/22	ISSUED FOR SITE PLAN SUBMISSION	HB	JF
C	04/27/22	REVISED PER COMPLETENESS REVIEW	HB	JF

OWNER

THE KOINONIA ACADEMY  
1040 PLAINFIELD AVENUE  
PLAINFIELD, NJ 07060

APPLICANT

J.G. PETRUCCI COMPANY, INC.  
171 STATE ROUTE 173, SUITE 201  
ASBURY, NJ 08802

E 2 PROJECT MANAGEMENT LLC

87 HIBERNIA AVENUE  
ROCKAWAY, N.J. 07866  
PHONE: (973) 299-5200  
FAX: (973) 299-5059  
www.E2PM.com



THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THEREBY APPLICABLE. THIS DRAWING AND THE DESIGN INFORMATION ON CONSTRUCTION DOCUMENTS ARE PROPRIETARY TO E2 PROJECT MANAGEMENT, LLC AND SHALL NOT BE REPRODUCED, ALTERED OR COPIED WITHOUT WRITTEN PERMISSION. SHALL NOT BE USED IN ANY MANNER DETRIMENTAL TO ITS INTEREST AND SHALL BE RETURNED UPON REQUEST.

N.J. ENGINEERING CERTIFICATE OF AUTHORIZATION No. 24GA28118200

I CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION

John Ferrante  
4/27/22

JOHN FERRANTE, P.E. N.J. NO. 24GE02472000  
REGISTERED PROFESSIONAL ENGINEER

PROJECT NAME

THE KOINONIA ACADEMY  
SCHOOL ANNEX BUILDING  
1040 PLAINFIELD AVENUE  
CITY OF PLAINFIELD,  
UNION COUNTY, NJ

BLOCK 509  
LOT: 1

DRAWING TITLE

SOIL EROSION AND SEDIMENT  
CONTROL PLAN

CHECKED BY: JF	DRAWN BY: HB
SCALE: AS SHOWN	SHEET NO: 1 OF 16
PROJECT #: P-21-18-39	FIRST ISSUE: 03/02/2022

DRAWING NO.

SP-111.00



M:\PROJECTS\ARE SERVICES\PETRUCCIE- KOINONIA HIGH SCHOOL ANNEX BUILDING\9.0.2 E2PM SITE PLAN\KONIONIA ACADEMY DESIGN SET 2-2022.DWG

PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

SITE PREPARATION

- GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.
- IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING .
- TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE, A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.
- INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

SEEDBED PREPARATION

- UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES (HTTP://NJAES.RUTGERS.EDU/COUNTY/). FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING.
- WORK LINE AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH 4-1 STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY JANUARY 2014 A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.
- HIGH ACID PRODUCING SOIL. SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED REPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.

SEEDING

- SELECT A MIXTURE FROM TABLE 4-3 OR USE A MIXTURE RECOMMENDED BY RUTGERS COOPERATIVE EXTENSION OR NATURAL RESOURCES CONSERVATION SERVICE WHICH IS APPROVED BY THE SOIL CONSERVATION DISTRICT. SEED GERMINATION SHALL HAVE BEEN TESTED WITHIN 12 MONTHS OF THE PLANTING DATE. NO SEED SHALL BE ACCEPTED WITH A GERMINATION TEST DATE MORE THAN 12 MONTHS OLD UNLESS RETESTED.
  - SEEDING RATES SPECIFIED ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO A REPORT OF COMPLIANCE INSPECTION. THESE RATES APPLY TO ALL METHODS OF SEEDING, ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVERAGE WITH THE SPECIFIED SEED MIXTURE FOR THE SEEDBED AREA AND MOWED ONCE. WARM-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT HIGH TEMPERATURES, GENERALLY 85°F AND ABOVE. SEE TABLE 4-3 MIXTURES 1 TO 7. PLANTING= RATES FOR WARM-SEASON GRASSES SHALL BE THE AMOUNT OF PURE LIVE SEED (PLS) AS DETERMINED BY GERMINATION TESTING RESULTS.
  - COOL-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT TEMPERATURES BELOW 85°F. MANY GRASSES BECOME ACTIVE AT 65°F SEE TABLE 4-3. MIXTURES 8-20. ADJUSTMENT OF PLANTING RATES TO COMPENSATE FOR THE AMOUNT OF PLS IS NOT REQUIRED FOR COOL SEASON GRASSES.
- CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER, EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS. SEED SHALL BE INCORPORATED INTO THE SOIL WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE-TEXTURED SOIL.
- AFTER SEEDING, FIRING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.
- HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK, OR TRAILER-MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORTFIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION 4-MULCHING BELOW). HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. WHEN POOR SEED TO SOIL CONTACT OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH.

PERMANENT VEGETATIVE MIXTURES, PLANTING RATES AND PLANTING DATES											
SEED MIXTURE	PLANTING RATES		PLANTING DATES								REMARKS
			O - OPTIMAL PLANTING PERIOD				A - ACCEPTABLE PLANTING PERIOD				
			PLANT HARDINESS ZONE								
	ZONE 5B, 6A		ZONE 6B		ZONE 7A, 7B		ZONE 7A, 7B				
LBS/ ACRE	LBS/1000 SQ.FT.	3/15 - 5/31	6/1 - 7/31	8/1 - 10/1	3/1 - 4/30	5/1 - 8/15	8/15 - 10/15	2/1 - 5/1	5/1 - 8/15	MAINTENANCE LEVEL	
WARM SEASON MIXTURE #4											
SWITCHGRASS	10	.25									C-D NATIVE WARM SEASON MIXTURE
BIG BLUESTEM	5	.10									
LITTLE BLUESTEM	5	.10									
SAND LOVEGRASS	4	.10									
COSTAL PANICGRASS	10	.20									
COOL SEASON MIXTURE #7											
STRONG CREEPING RED FESCUE	130	3									B-D SUITABLE WATERWAY MIX CANADA BLUEGRASS MORE DROUGHT TOLERANT USE REDTOP FOR INCREASED DROUGHT TOLERANCE
KENTUCKY BLUEGRASS	50	1									
PERENNIAL RYEGRASS OR REDTOP	20	.60	A	A	O	A	A	O	A	O	
	10	.25									
PLUS WHITE CLOVER	5	.10									

DUST CONTROL METHODS:

THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST: MULCHES - SEE STANDARD OF STABILIZATION WITH MULCHES VEGETATIVE COVER - SEE TEMPORARY AND PERMANENT VEGETATIVE COVER STANDARDS SPRAY ON ADHESIVES - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

DUST CONTROL MATERIAL			
MATERIAL	WATER DELUSION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300
POLYACRYLAMIDE (PAM)- SPRAY ON			
POLYACRYLAMIDE (PAM)- DRY SPRAY			
ACIDULATED SOY BEAN SOAP-STICK	NONE	COARSE SPRAY	1200

TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL - TYPE PLOWS ABOUT 12 INCHES APART AND SPRING-TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE DESIRED EFFECT.

SPRINKLING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET.

BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, BALES OF HAY OR SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.

CALCIUM CHLORIDE - SHALL BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. IF USED ON STEEPER SLOPES, THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS OR ACCUMULATION AREAS.

STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

SITE PREPARATION

- GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING (19-1 OF STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY).
- INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42 IN STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
- IMMEDIATELY PRIOR TO SEEDING THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.)

SEEDBED PREPARATION

- APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES (HTTP://NJAES.RUTGERS.EDU/COUNTY/). FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES.
- WORK LINE AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.
- INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED IN ACCORDANCE WITH THE ABOVE.
- SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, PAGE 1-1 IN THE STANDARD FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.

SEEDING

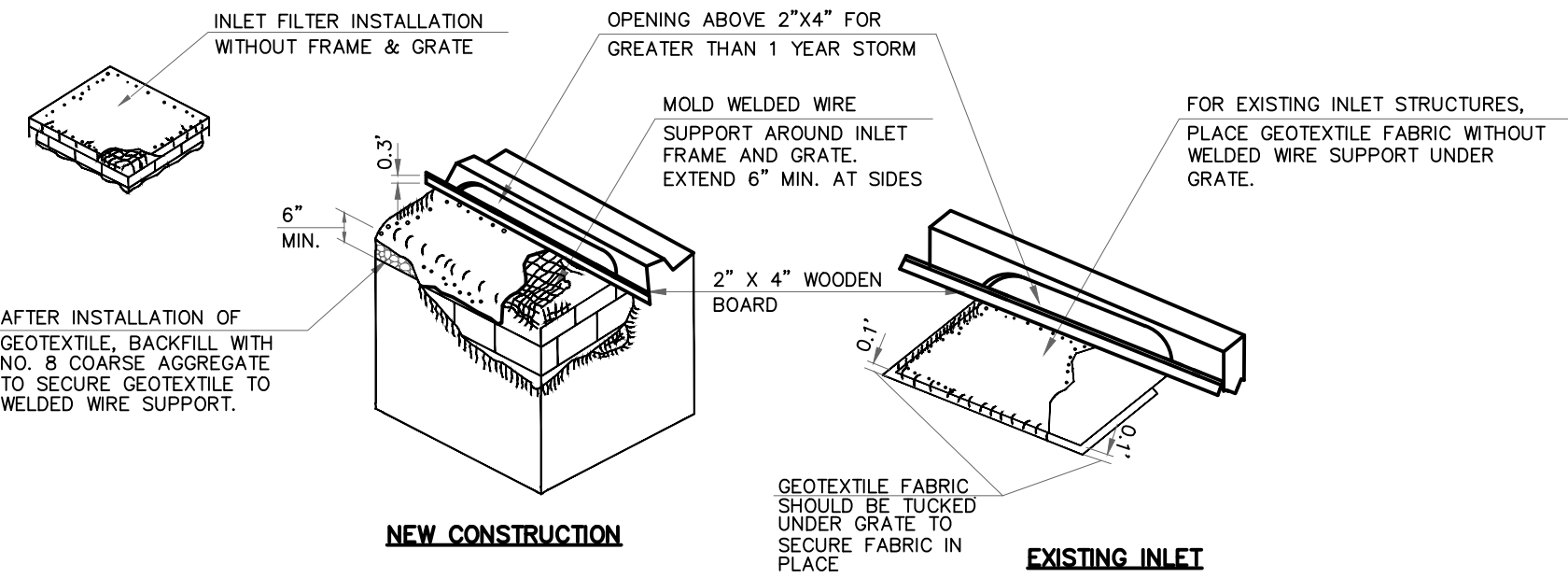
- SELECT SEED FROM RECOMMENDATIONS IN TABLE 7-2 SHOWN BELOW.
- CONVENTIONAL SEEDING: APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER, EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS. SEED SHALL BE INCORPORATED INTO THE SOIL TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE-TEXTURED SOIL.
- HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK, OR TRAILER-MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION 4-MULCHING BELOW). HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. POOR SEED TO SOIL CONTACT OCCURS REDUCING SEED GERMINATION AND GROWTH. HYDROSEEDING MAY BE USED FOR AREAS TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH ROCKS, STUMPS, ETC.
- AFTER SEEDING, FIRING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

MULCHING

- MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT. STRAW OR HAY: UNKNOTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT) THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHED FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.
- APPLICATION: SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET TACKS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.
- ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF HTE AREA, STEEPNESS OF SLOPE, AND COSTS:
  1. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRIS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
  2. MULCH NETTINGS. STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOVED.
  3. CRIMPER (MULCH ANCHORING TOOL). A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
  4. LIQUID MULCH BINDERS MAY BE USED TO ANCHOR HAY OR STRAW MULCH.
    - 4.1. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.
    - 4.2. USE ONE OF THE FOLLOWING:
      - 4.2.1. ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOXIC EFFECT OR IMPEDED GROWTH OF TURFGRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.
      - 4.2.2. SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCLIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING, AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.
    - 4.3. WOOD-FIBERED OR PAPER-FIBER MULCH. SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE PROJECT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. THIS MULCH SHALL NOT BE MIXED IN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.
    - 4.4. PELLETIZED LIGN, COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS AND COLORING AGENTS, THE DRY PELLETS, WHEN APPLIED TO A SEEDBED AREA NAD WATERED, FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS/1000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS. SEEDBED AREAS WHERE WEED-SEED FREE MULCH IS DESIRED OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE. APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

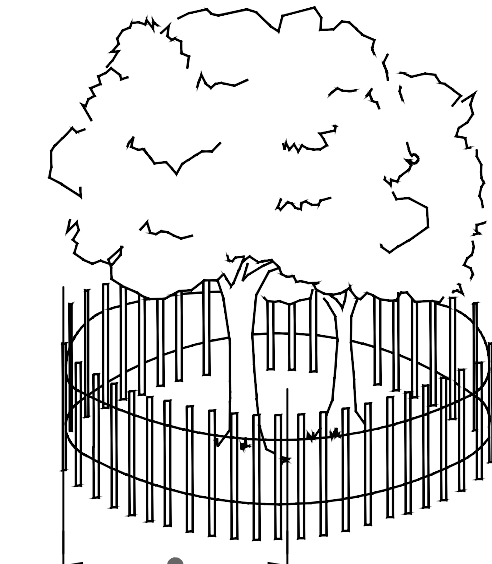
PERMANENT VEGETATIVE MIXTURES, PLANTING RATES AND PLANTING DATES											
SEED MIXTURE	SEEDING RATES (1)		OPTIMUM SEEDING DATE (2) BASED ON PLANT HARDINESS ZONE (3)							OPTIMUM SEED DEPTH (INCHES) (4)	
			PLANT HARDINESS ZONE								
	LBS/ACRE	LBS/1000 SQ.FT.	ZONE 5B, 6S	ZONE 6B			ZONE 7A, 7B				
COOL SEASON GRASSES											
1. PERENNIAL RYEGRASS	100	1.0	3/15-6/1 & 8/1-9/15	3/15-5/15 & 8/15-10/1	2/15-5/1 & 8/15-10/15						0.5
2. SPRING OATS	86	2.0	3/15-6/1 & 8/1-9/15	3/1-5/15 & 8/15-10/1	2/15-5/1 & 8/15-10/15						1.0
3. WINTER BARLEY	96	2.2	8/1-9/15	8/15-10/1	28/15-10/15						1.0
4. ANNUAL RYEGRASS	100	1.0	3/15-6/1 & 8/1-9/15	3/15-6/1 & 8/1-9/15	2/15-5/1 & 8/15-10/15						0.5
5. WINTER CEREAL RYE	112	2.8	8/1-11/1	8/1-11/15	8/1-12/15						1.0
WARM SEASON GRASSES											
6. PEARL MILLET	20	0.5	6/1-8/1	5/15-8/15	5/1-9/1						1.0
7. MILLET (GERMAN OR HUNGARIAN)	30	0.7	6/1-8/1	5/15-8/15	5/1-9/1						1.0

- SEEDING RATE FOR WARM SEASON GRASS. SELECTIONS 5" SHALL BE ADJUSTED TO REFLECT THE AMOUNT OF PURE LIVE SEED (PLS) AS DETERMINED BY A GERMINATION TEST RESULT. NO ADJUSTMENT IS REQUIRED FOR COOL SEASON GRASSES.
- MAY BE PLANTED THROUGHOUT SUMMER IF SOIL MOISTURE IS ADEQUATE OR SEED AREA CAN BE IRRIGATED.
- PLANT HARDINESS ZONE (SEE FIGURE 7-1). PG 7-4 OF THE STANDARDS FOR EROSION AND SEDIMENT CONTROL IN NEW JERSEY
- Twice the depth for sandy soils.



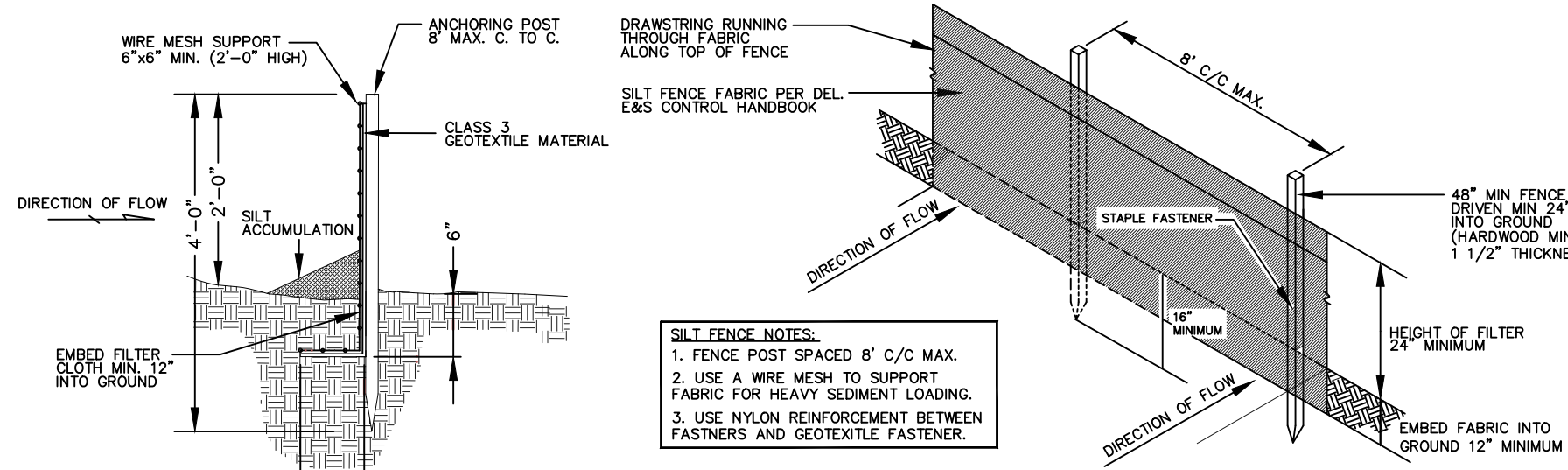
B-TYPE INLET FILTER

N.T.S.



TREE PROTECTION FENCE

N.T.S.



TYPICAL SILT FENCE

N.T.S.

SEQUENCE OF CONSTRUCTION

	DAYS
1. INSTALL FILTER FABRIC FENCING, INLET PROTECTION AND GRAVEL TRACKING BLANKET	2
2. REMOVE TREES, LIGHT POLES, FENCING, ON-SITE CURBING AND SIDEWALK - CLEAN AND GRUB SITE	14
3. STRIP TOPSOIL AND STOCKPILE	2
4. ROUGH GRADE SITE	60
5. CONSTRUCT STORMWATER MANAGEMENT SYSTEM	45
6. BUILDING CONSTRUCTION & SITE IMPROVEMENTS	240
7. UTILITY CONSTRUCTION	30
8. FINAL SITE GRADING	30
9. GRADE OUT TOPSOIL, PERMANENT SEEDING AND PLANTING	7
10. REMOVE ALL TEMPORARY SOIL EROSION MEASURES	1

John Ferrante  
4/4/2022

JOHN FERRANTE, P.E. N.J. NO. 24GE02472000  
REGISTERED PROFESSIONAL ENGINEER

THE KOINONIA ACADEMY  
SCHOOL ANNEX BUILDING  
1040 PLAINFIELD AVENUE  
CITY OF PLAINFIELD,  
UNION COUNTY, NJ

BLOCK 509  
LOT: 1

SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

CHECKED BY: JF

DRAWN BY: HB

SCALE: AS SHOWN

SHEET NO: 1 OF 16

PROJECT #: P-21-18-39

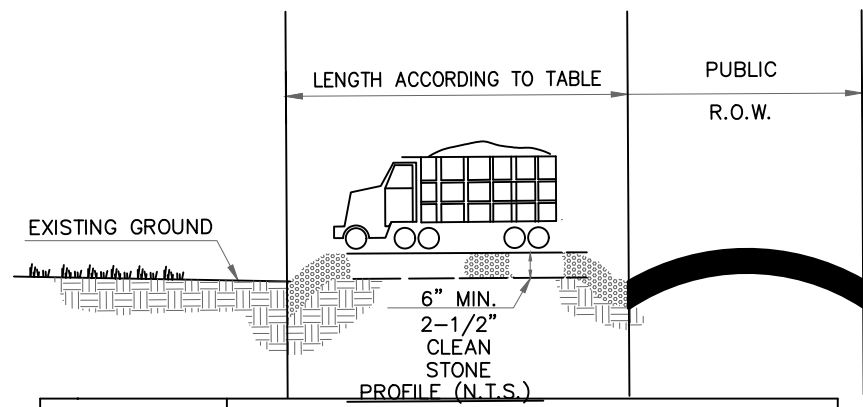
FIRST ISSUE: 03/02/2022

DRAWING NO.

C-100.00

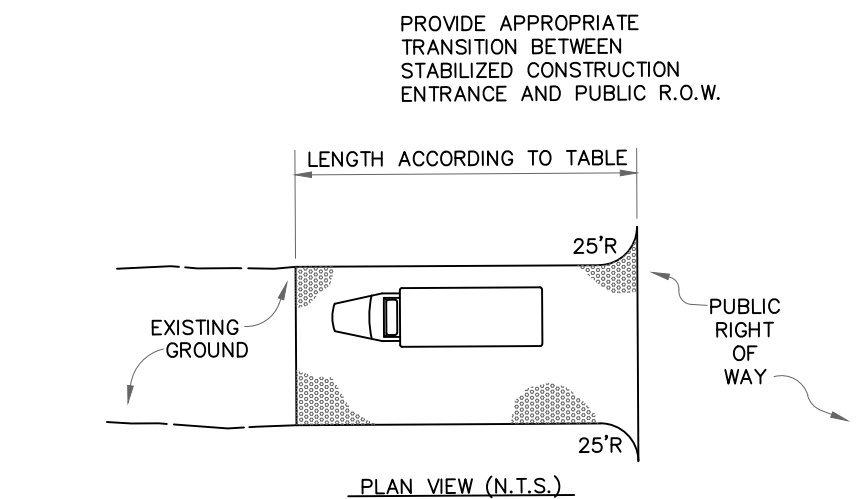
TYPICAL STOCKPILE CONSTRUCTION

N.T.S.



PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COURSE GRAINED SOILS	FINE GRAINED SOILS
0 TO 2%	50 FT	100 FT
2% TO 5%	100 FT	200 FT
>5%	ENTIRE SURFACE STABILIZED WITH FABC BASE COURSE <sup>1</sup>	

1. AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY.

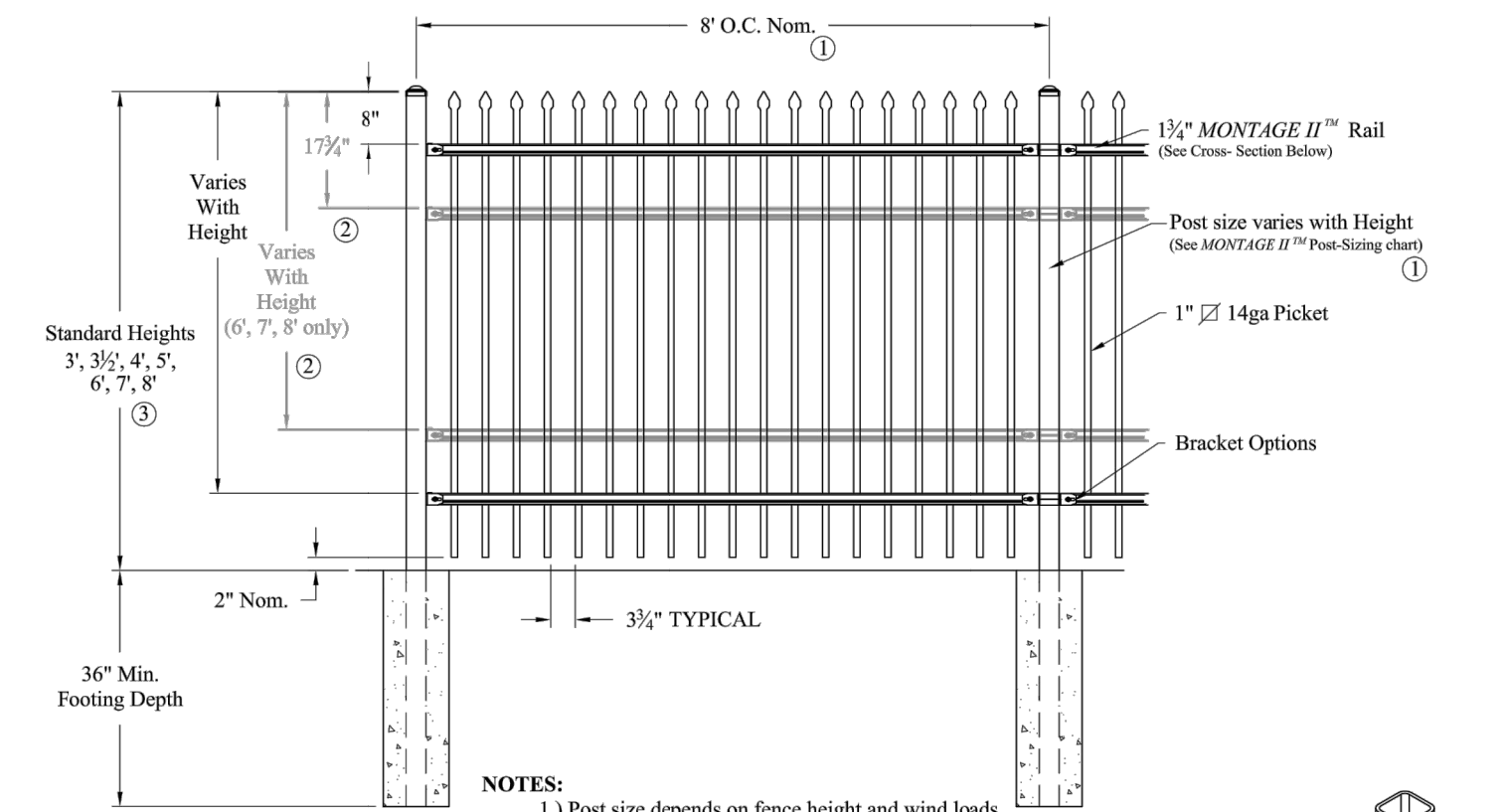


TEMPORARY STABILIZED CONSTRUCTION ENTRANCE

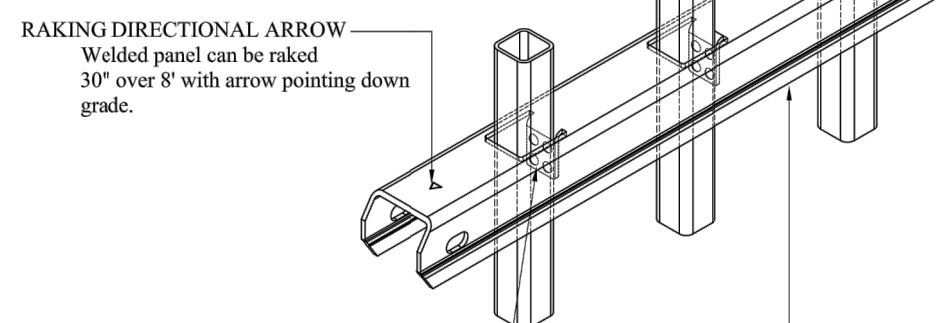
N.T.S.



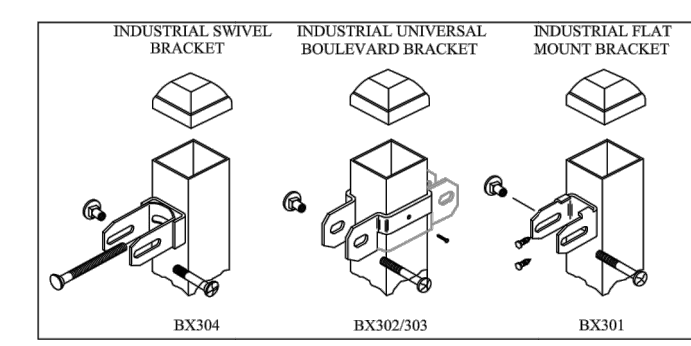
M:\PROJECTS\A&E SERVICES\PETRUCCIE- KOINONIA HIGH SCHOOL ANNEX BUILDING\9.0 DRAWINGS\9.2 E2PM SITE PLAN\K0INONIA ACADEMY DESIGN SET 2-2022.DWG



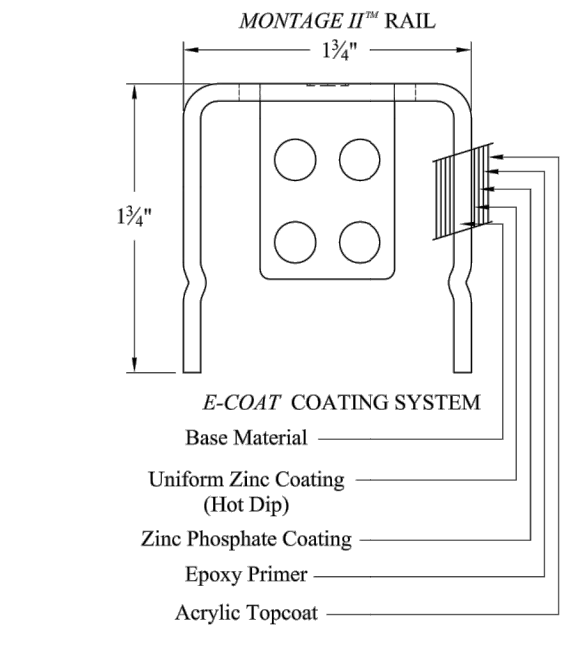
- NOTES:
- 1.) Post size depends on fence height and wind loads. See *MONTAGE II™* specifications for post sizing chart.
  - 2.) Third & Forth rail optional.
  - 3.) Available in Flush Bottom.



PROFUSION™ WELDING PROCESS  
No exposed welds.  
Good Neighbor profile - Same appearance on both sides.



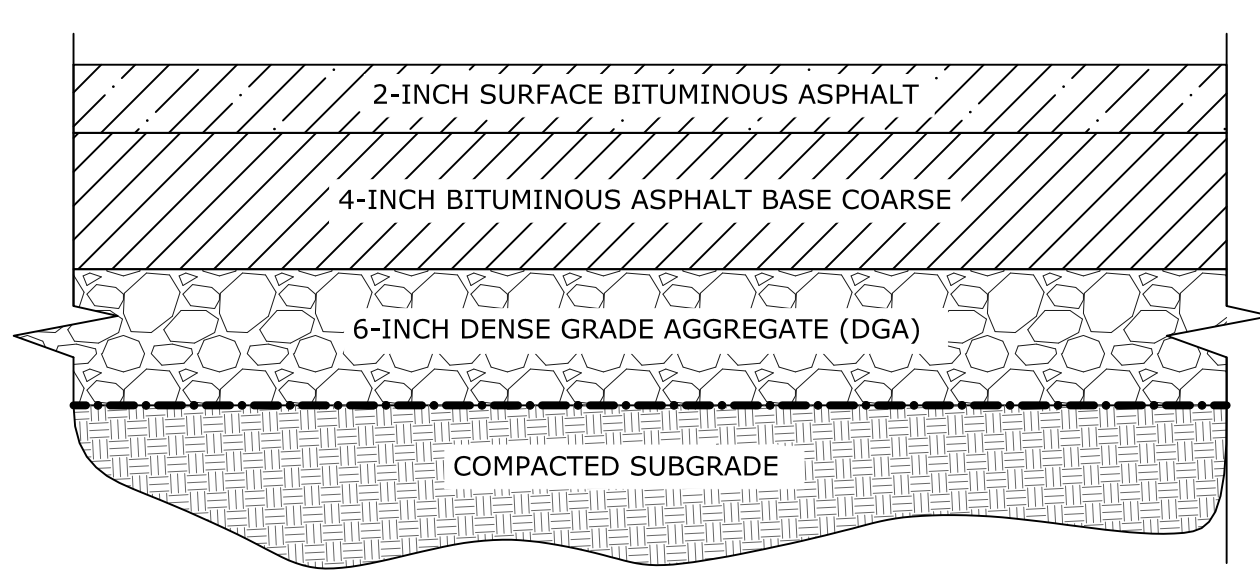
Values shown are nominal and not to be used for installation purposes. See product specification for installation requirements.



HEAVY INDUSTRIAL STRENGTH WELDED STEEL PANEL  
PRE-ASSEMBLED

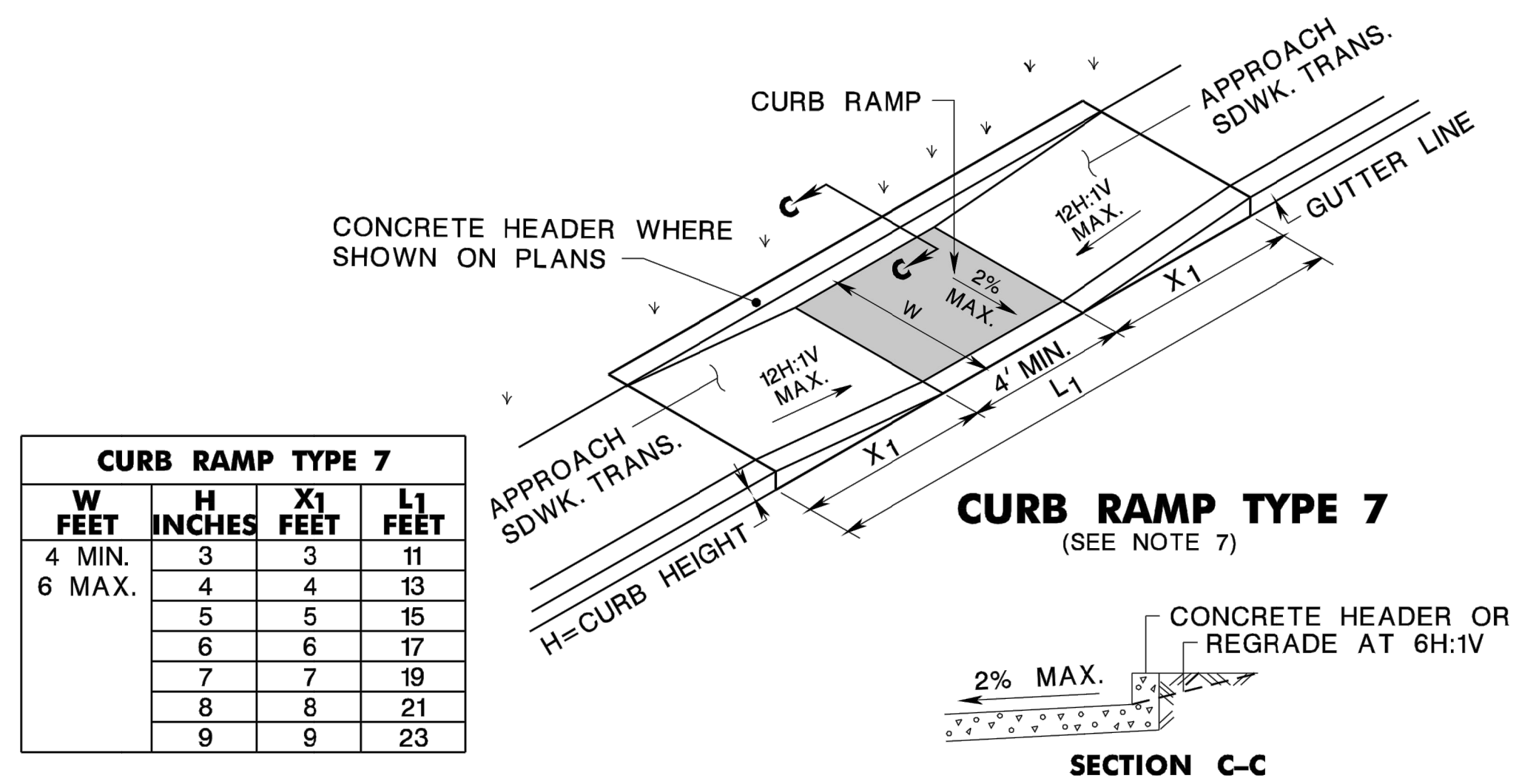
## 1 ORNAMENTAL PICKET FENCE & GATE

C-101 SCALE: N.T.S.



## 4 ASPHALT PAVEMENT

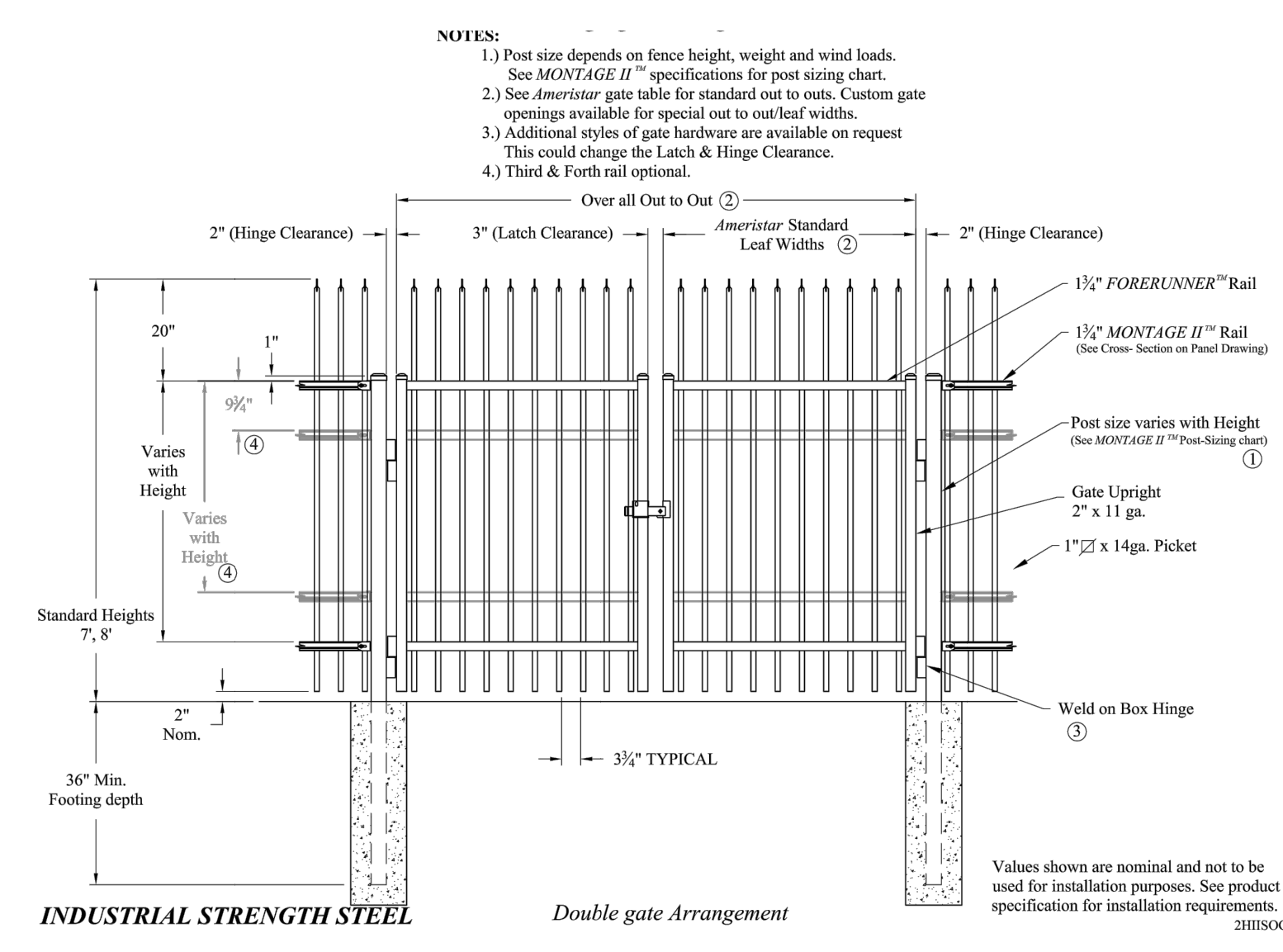
C-101 SCALE: N.T.S.



CURB RAMP TYPE 7				
W FEET	H INCHES	X1 FEET	L1 FEET	
4 MIN.	3	3	11	
6 MAX.	4	4	13	
	5	5	15	
	6	6	17	
	7	7	19	
	8	8	21	
	9	9	23	

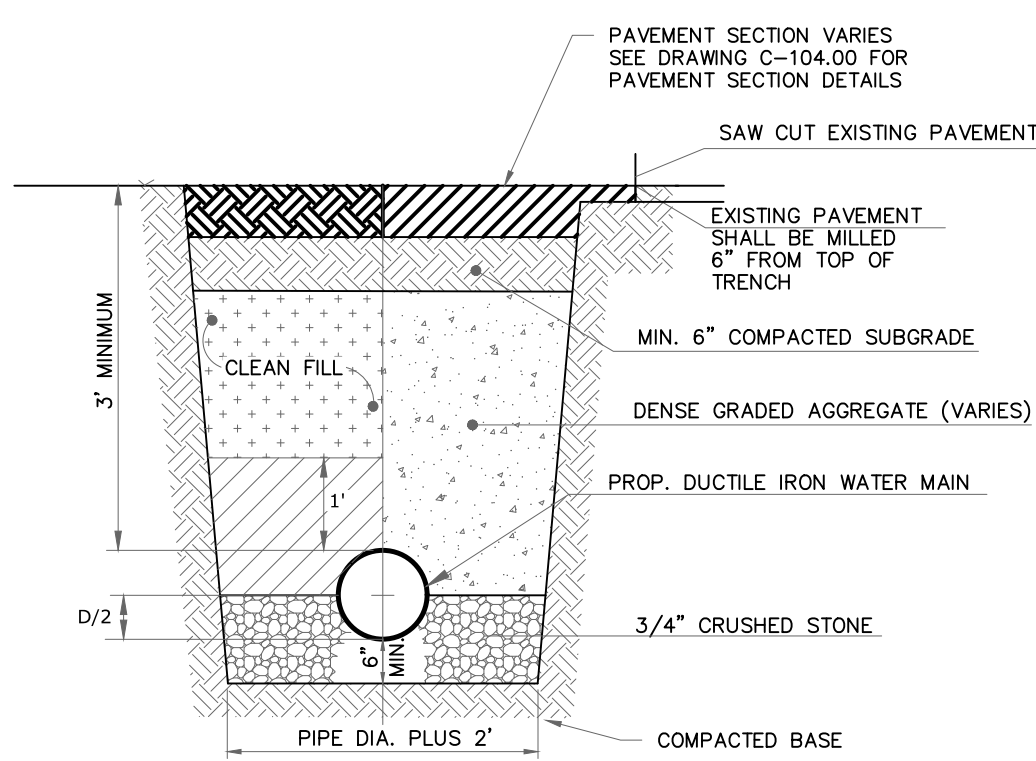
## 8 NJDOT ADA CURB RAMP TYPE 7

C-101 SCALE: N.T.S.



## 2 ORNAMENTAL PICKET FENCE GATE

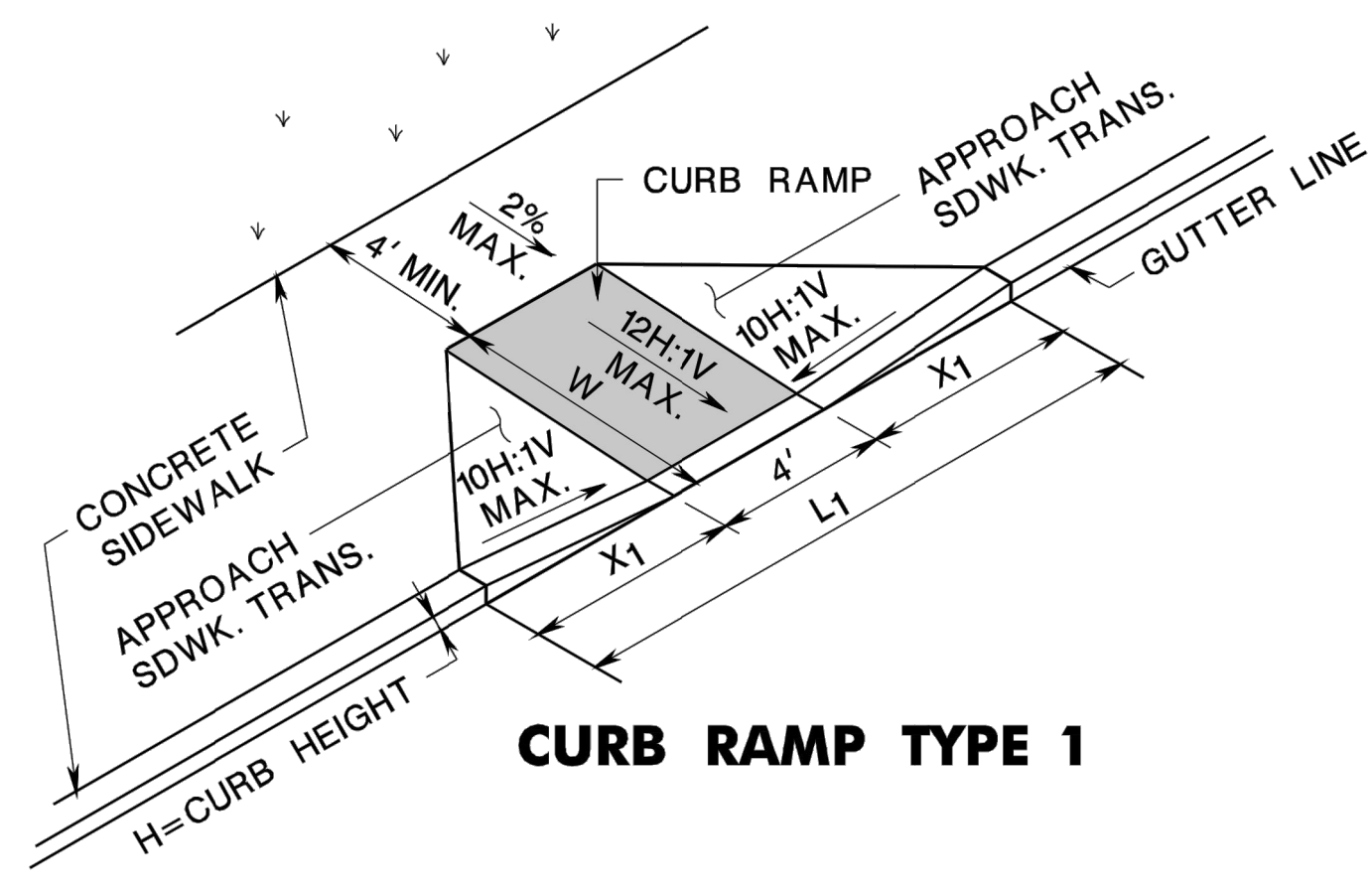
C-101 SCALE: N.T.S.



1. LIMITS OF TRENCH TO BE CUT TO A NEAT EDGE AND TACK-COATED WITH EMULSIFIED ASPHALT.
2. IN AREAS WITH WET OR UNSTABLE BOTTOMS USE 3/4" CLEAN BROKEN STONE TO STABILIZE TRENCH BOTTOM TO SOLID, STABLE FOUNDATION.
3. CONTRACTOR SHALL REPAIR ANY SETTLED AREAS WITH STABILIZED BASE AFTER A SIX MONTH PERIOD OR ONE WINTER SEASON TO ENSURE NEW PAVEMENT SURFACE REMAINS FLUSH WITH EXISTING PAVEMENT.
4. REFER TO DRAWING C-104.00 FOR PAVEMENT THICKNESS

## 5 PIPE TRENCH

C-101 SCALE: N.T.S.

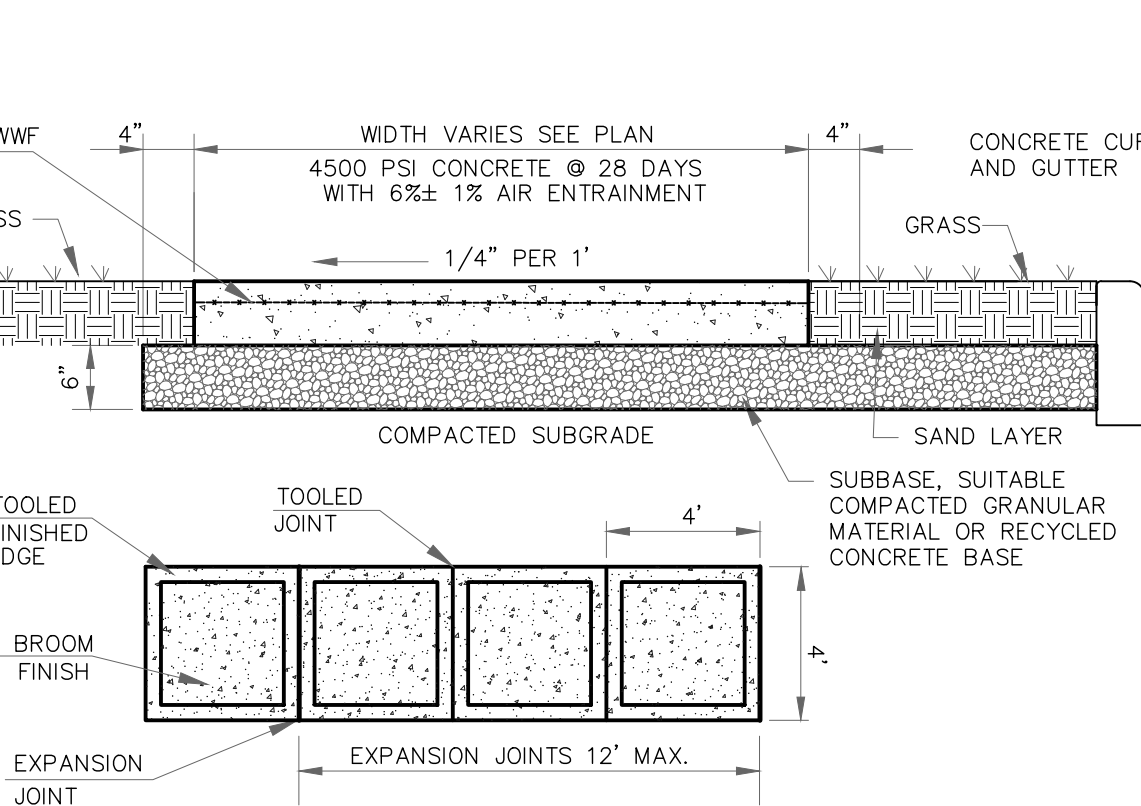
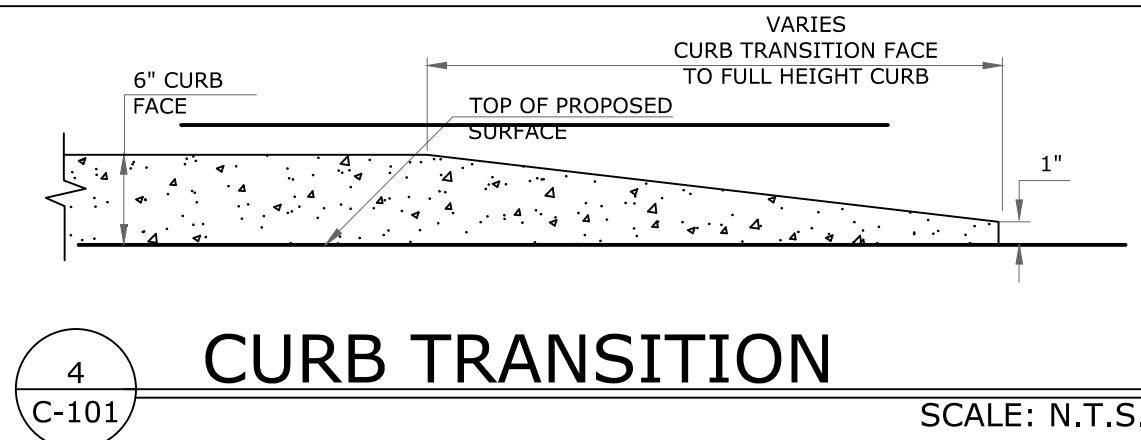


## 6 NJDOT ADA CURB RAMP TYP 1

C-101 SCALE: N.T.S.

### NJDOT ACCESSIBLE CURB RAMP NOTES

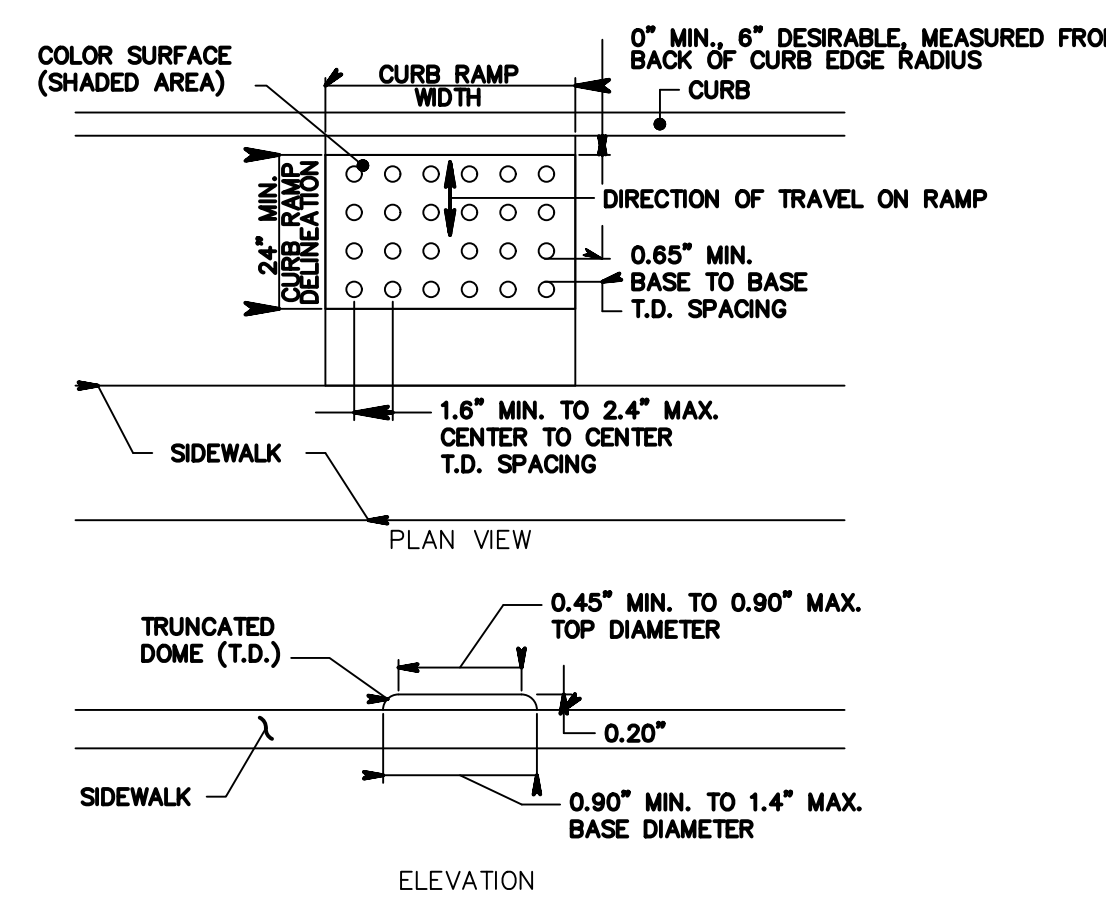
1. LANDING AREA, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP SHALL BE KEPT CLEAR OF OBSTRUCTIONS.
2. DIMENSIONS SHOWN IN TABLES ARE FOR RELATIVELY FLAT SIDEWALK AREAS. CARE SHOULD BE TAKEN WHEN DETERMINING CURB RAMP SIZE BASED ON CURB HEIGHT (H) WHERE ELEVATION OF CURB AND SIDEWALK VARY DRASTICALLY IN AREA OF PROPOSED CURB RAMP.
3. CURB (DROPPED CURB) GUTTERLINE TO BE FLUSH WITH ROADWAY PAVEMENT A MINIMUM OF 4 FEET AT ALL CURB RAMPS.
4. FOR CURB RAMP TYPES 5 AND 6, IF A GRASS BUFFER DOES NOT EXIST, SLOPE CURB TO EQUAL SLOPE OF ADJACENT CURB RAMP.
5. SIDEWALK AND CURB RAMP WITHIN AREA ENCLOSED BY HEAVY LINES TO BE PAID FOR AS CONCRETE SIDEWALK OF THE APPROPRIATE ADJACENT THICKNESS.
6. CURB AND HEADER WITHIN AREA ENCLOSED BY HEAVY LINES TO BE PAID FOR AS VERTICAL CURB OR SLOPING CURB OF THE APPROPRIATE ADJACENT SIZE AND KIND.
7. WHERE THE DISTANCE FROM THE GUTTER LINE TO THE OUTSIDE EDGE OF SIDEWALK IS 6 FEET OR LESS, CURB RAMP TYPE 7 SHOULD BE USED, INSTEAD OF CURB RAMP TYPE 1 THROUGH 4.
8. CROSSWALKS AND STOP LINES MAY BE MARKED OR UNMARKED, SEE PLANS.
9. PREFERRED AND ALTERNATE TREATMENTS SHOULD NOT BE INTERMIXED WITHIN THE SAME INTERSECTION.
10. DIMENSIONS SHOWN IN TABLES ARE FOR 3 INCH TO 9 INCH CURB HEIGHTS. WHERE THE CURB HEIGHTS ARE OTHER THAN WHAT IS PROVIDED IN THE TABLES, THE DIMENSIONS OF THE RAMPS WILL HAVE TO BE CALCULATED BASED ON CROSS SLOPES SHOWN.



1. ANY CONCRETE PLACED BETWEEN NOVEMBER 15 AND APRIL 1 MUST CONFORM TO ARTICLES 501.11 AND 501.17 OF THE N.J.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1989 EDITION, USING 2% CALCIUM CHLORIDE, HOT WATER, COVERED W/SALT HAY.
2. WHERE SIDEWALK ABUTS CURBING, INSTALL EXPANSION JOINT BETWEEN CURB AND SIDEWALK ALONG ENTIRE LENGTH.
3. SLUMP TEST: 3"- 4".
4. EXPANSION JOINTS EVERY 12'; CONSTRUCTION JOINTS EVERY 4' AT A DEPTH OF 1/4 THICKNESS OF CONCRETE.
5. ALL SIDEWALK MUST BE SPRAYED WITH WHITE PIGMENTED CURING COMPOUND AFTER BROOM FINISHING.

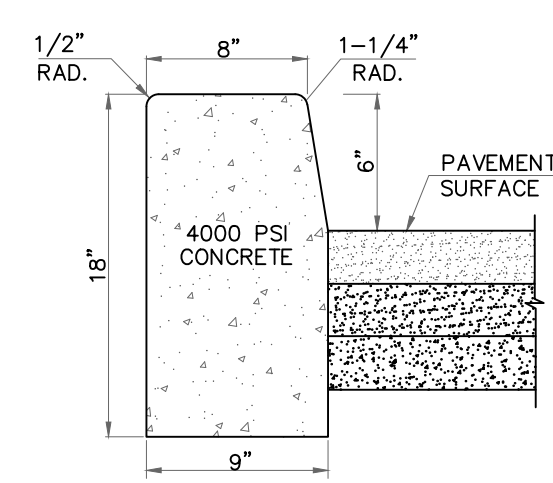
## 3 CONCRETE SIDEWALK

C-101 SCALE: N.T.S.



## 7 DETECTABLE WARNING SURFACE

C-101 SCALE: N.T.S.



## 9 CONCRETE CURB

C-101 SCALE: N.T.S.

TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 20'-0" APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS-IMPREGNATED FIBER JOINT FILLER, COMPLYING WITH THE REQUIREMENT OF A.A.S.H.T.O. SPEC. M-123, RECESSED 1/4" IN FROM FRONT FACE AND TOP OF CURB. EXPANSION JOINTS THRU AND ADJACENT TO THE CURB SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CURB.

SCHEDULE OF REVISIONS				
REV.	DATE	DESCRIPTION OF CHANGES	DRAWN BY	CHK. BY
A	03/02/22	ISSUED FOR TRC MEETING	HB	JF
B	04/04/22	ISSUED FOR SITE PLAN SUBMISSION	HB	JF

OWNER  
THE KOINONIA ACADEMY  
1040 PLAINFIELD AVENUE  
PLAINFIELD, NJ 07060

APPLICANT  
J.G. PETRUCCI COMPANY, INC.  
171 STATE ROUTE 173, SUITE 201  
ASBURY, NJ 08802

E 2 PROJECT MANAGEMENT LLC  
87 HIBERNIA AVENUE  
ROCKAWAY, N.J. 07866  
PHONE: (973) 299-5200  
FAX: (973) 299-5059  
www.E2PM.com

N.J. ENGINEERING CERTIFICATE OF AUTHORIZATION No. 24GA28118200  
I CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION

John Ferrante  
4/4/2022  
JOHN FERRANTE, P.E. N.J. NO. 24GE02472000  
REGISTERED PROFESSIONAL ENGINEER

PROJECT NAME  
THE KOINONIA ACADEMY  
SCHOOL ANNEX BUILDING  
1040 PLAINFIELD AVENUE  
CITY OF PLAINFIELD,  
UNION COUNTY, NJ

BLOCK 509  
LOT: 1

DRAWING TITLE  
CONSTRUCTION DETAILS

CHECKED BY: JF	DRAWN BY: HB
SCALE: AS SHOWN	SHEET NO: 1 OF 16
PROJECT #: P-21-18-39	FIRST ISSUE: 03/02/2022

DRAWING NO.

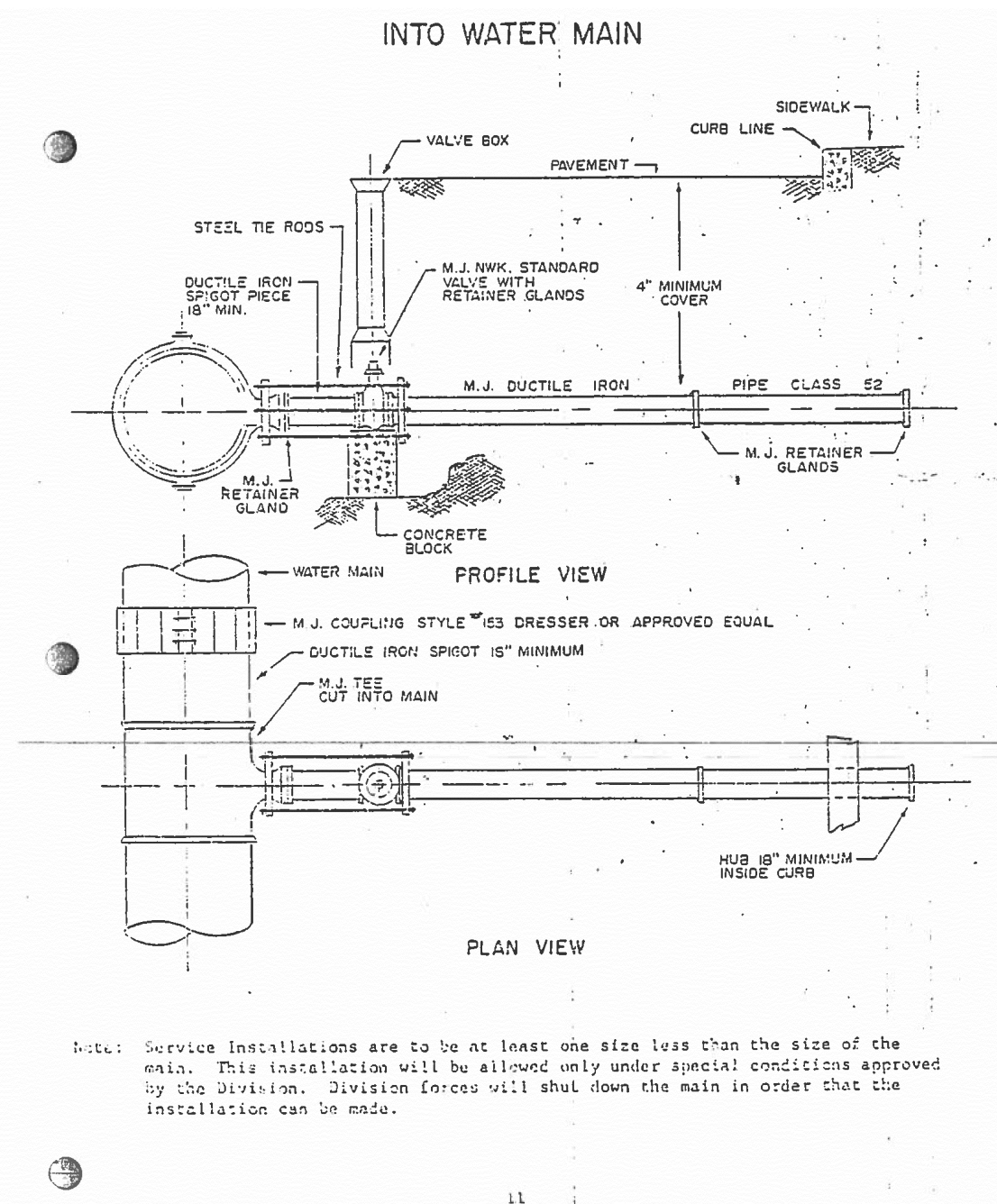
# C-101.00



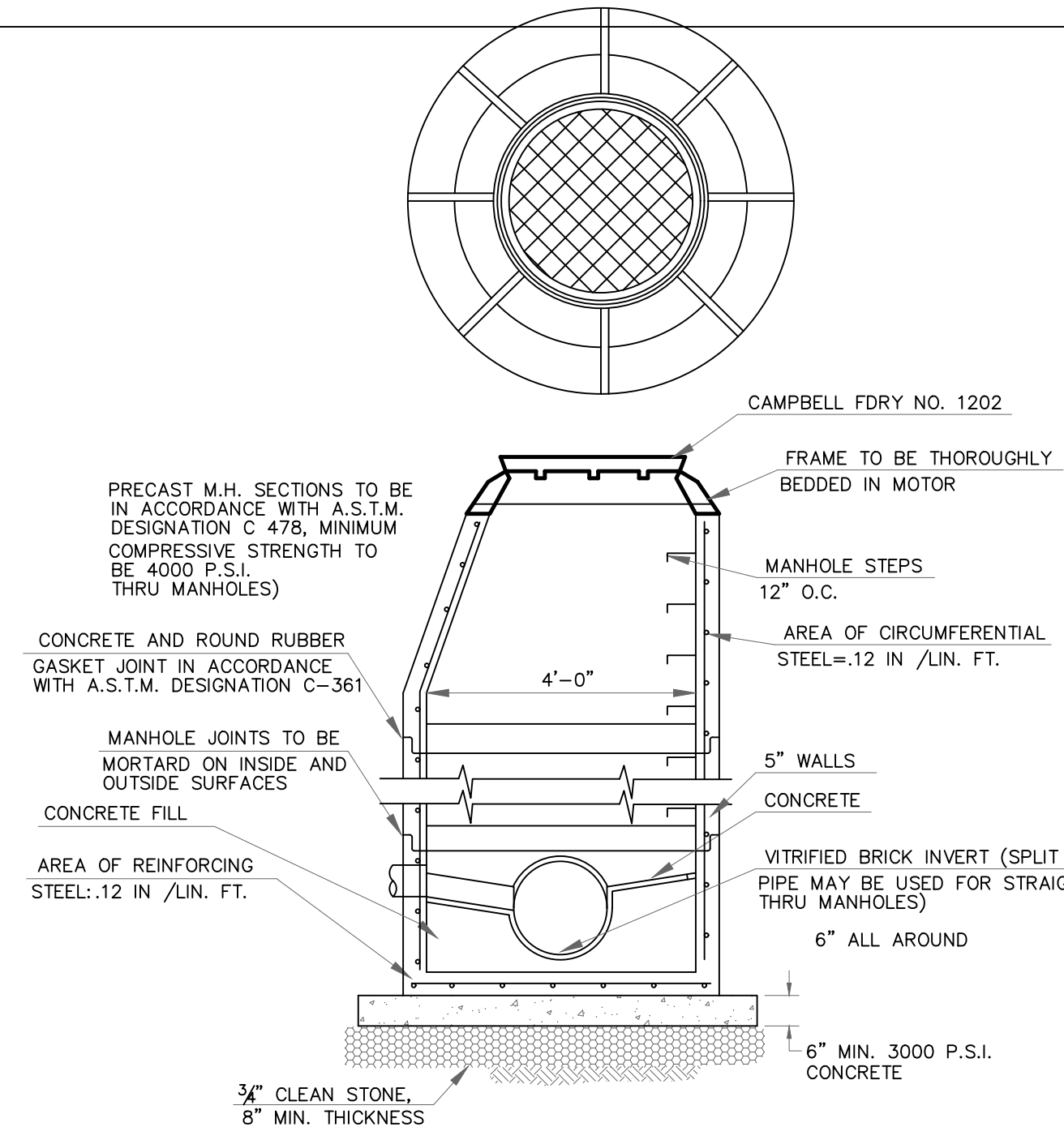




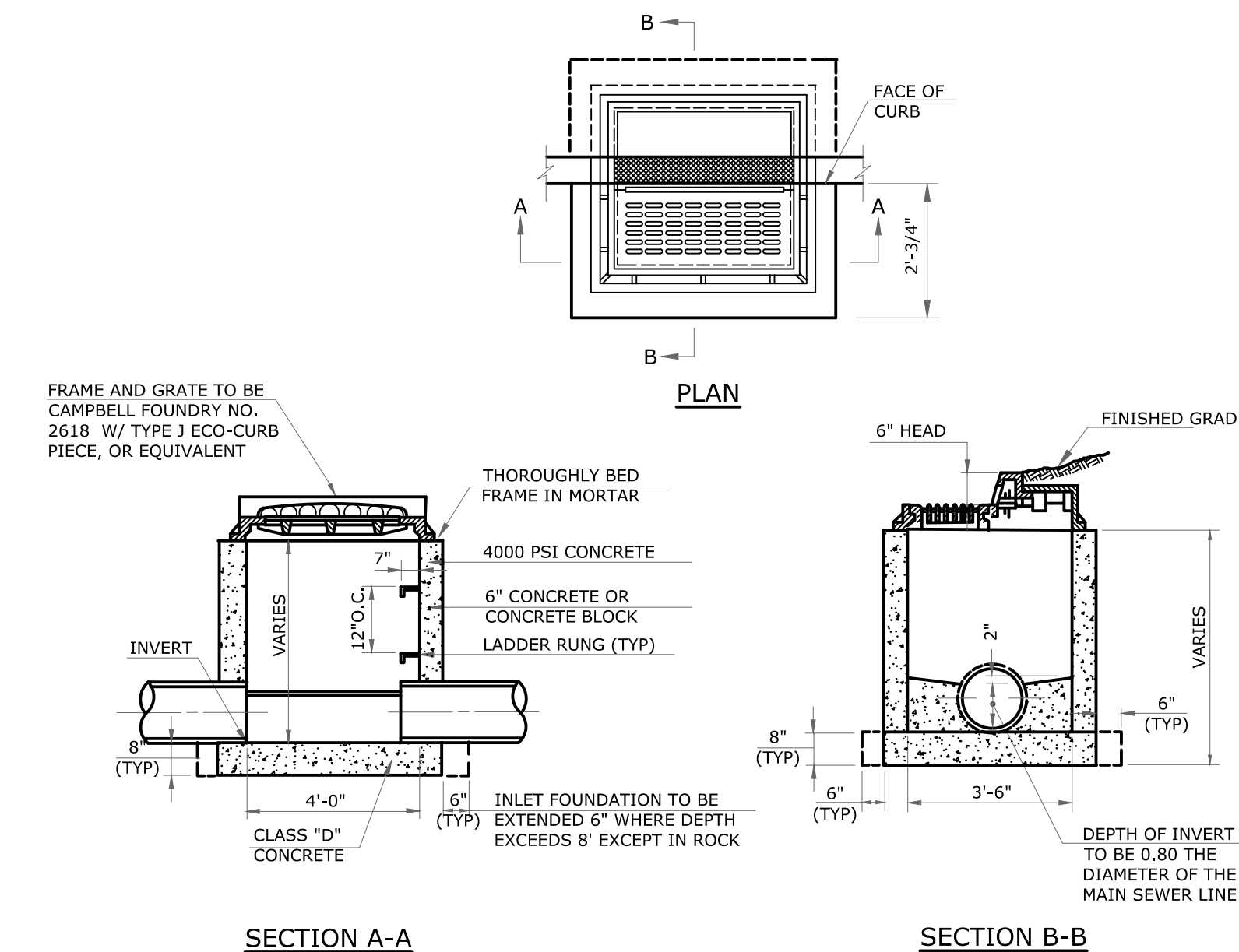
M:\PROJECTS\A&E SERVICES\PETRUCCIE- KOINONIA HIGH SCHOOL ANNEX BUILDING\9.0 DRAWINGS\9.2 E2PM SITE PLAN\Koinonia Academy Design Set 2-2022.DWG



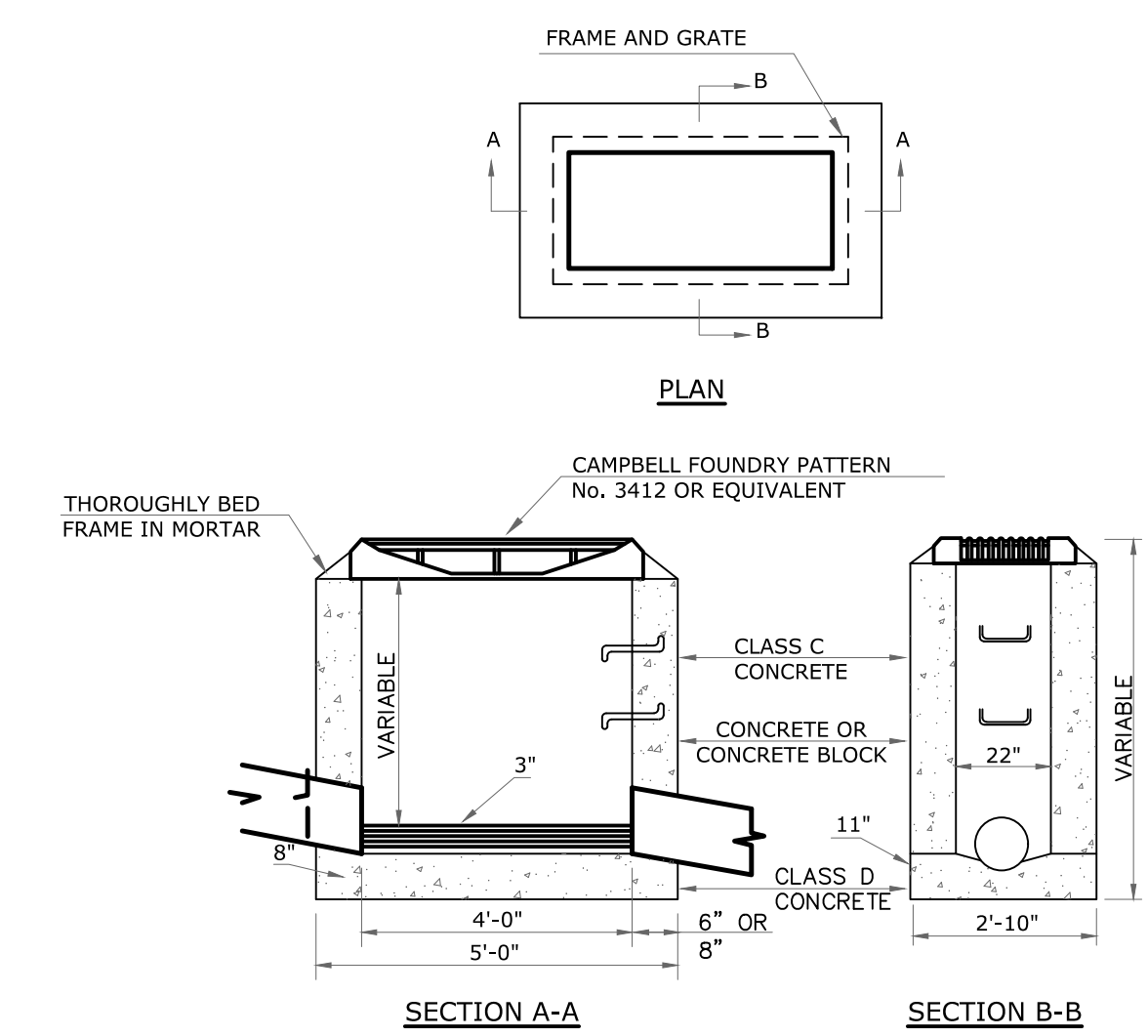
1 WATER MAIN TAP  
C-103 SCALE: N.T.S.



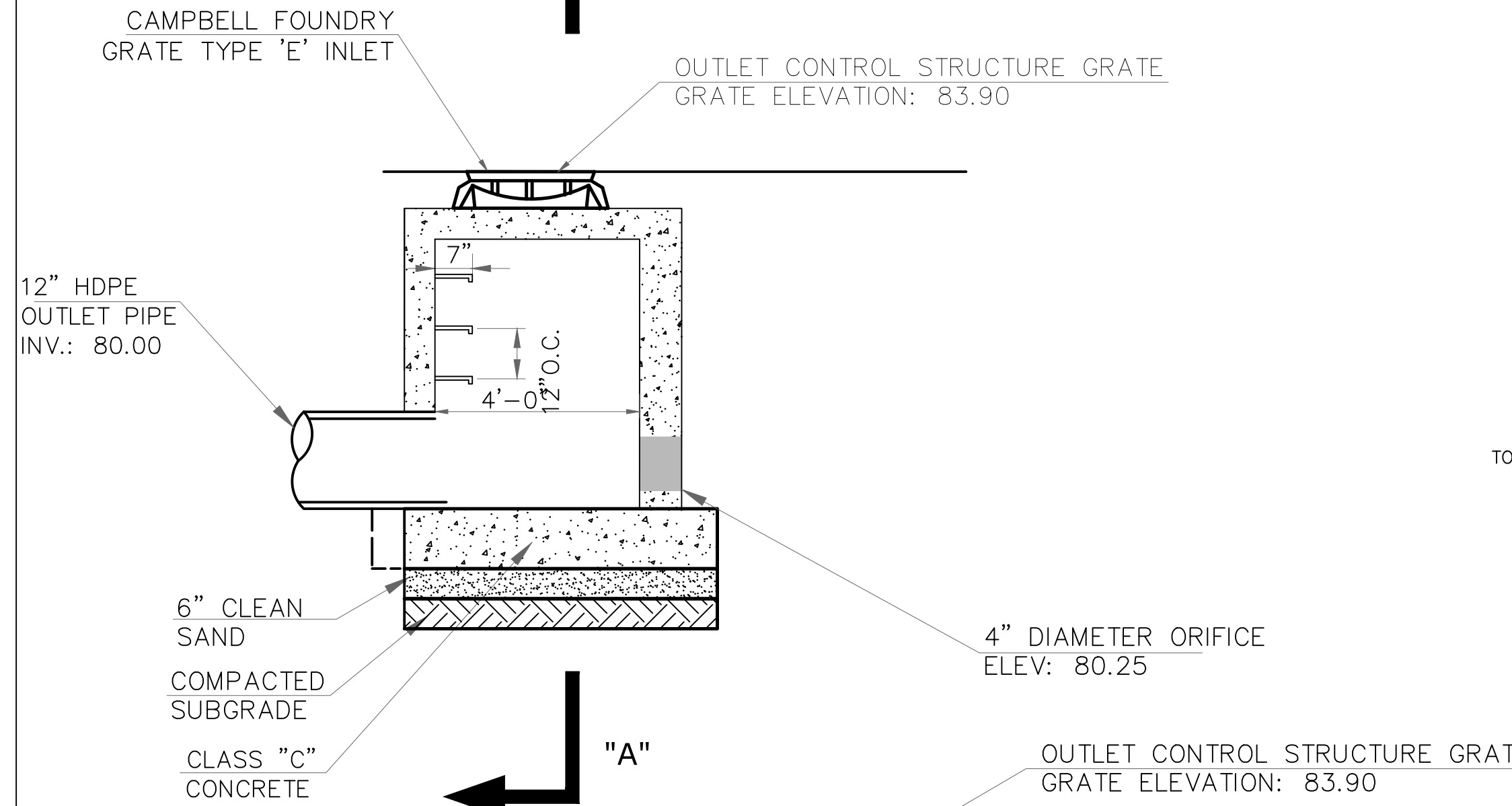
2 STORM DRAINAGE MANHOLE  
C-103 SCALE: N.T.S.



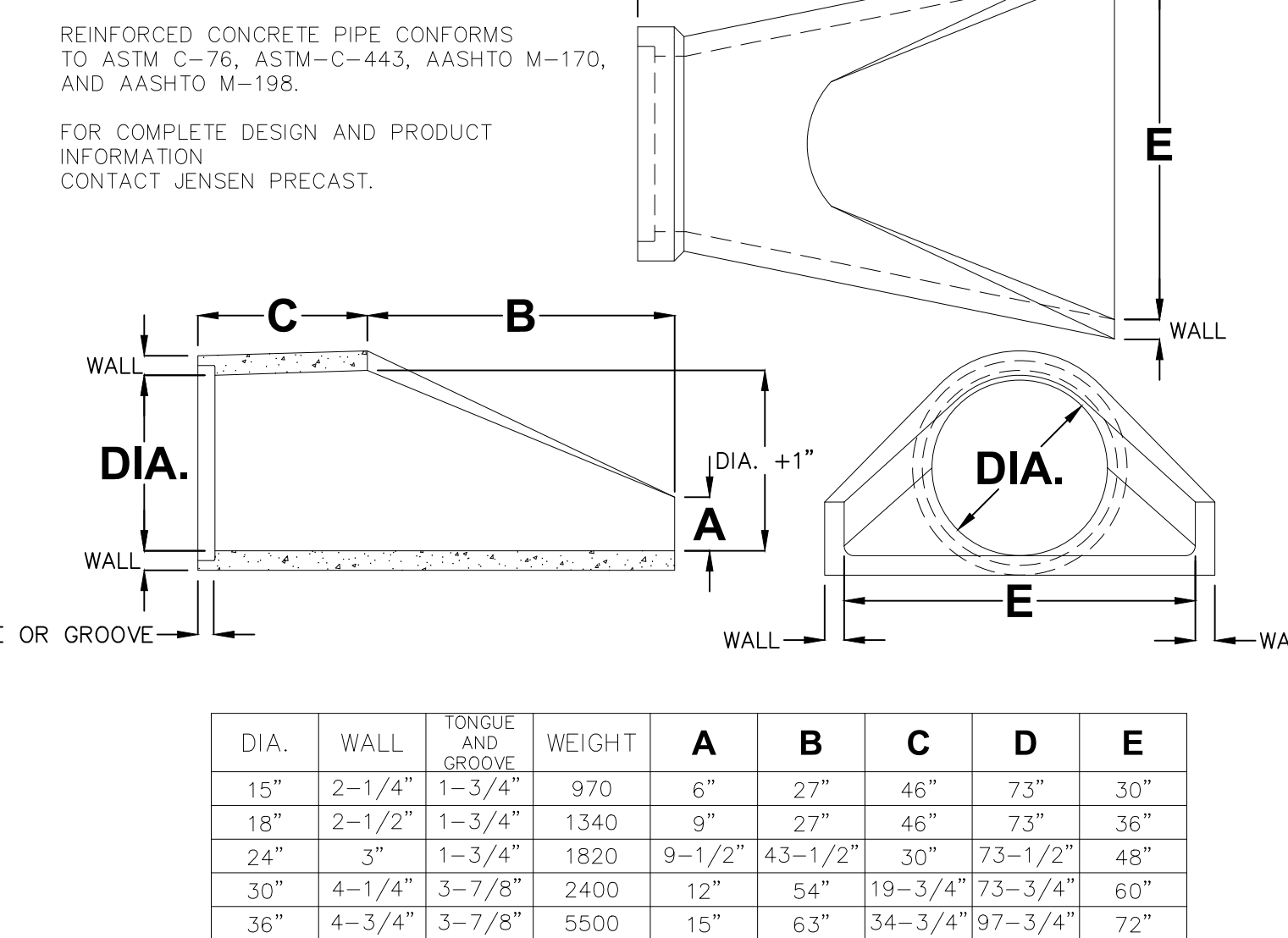
3 TYPE 'B' INLET  
C-103 SCALE: N.T.S.



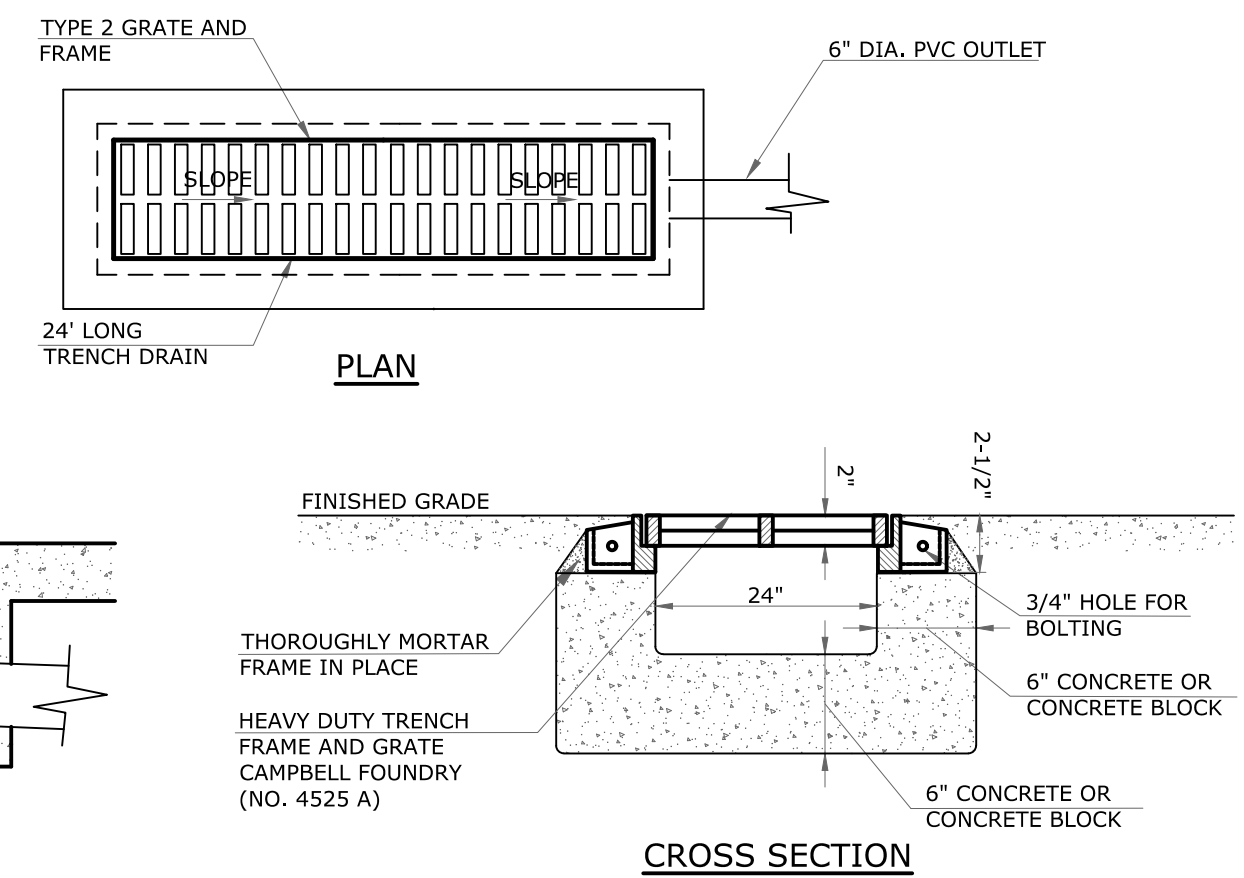
4 TYPE 'A' INLET  
C-103 SCALE: N.T.S.



5 OUTLET CONTROL STRUCTURE-1  
C-103 SCALE: N.T.S.



6 REINFORCED CONCRETE FLARED END SECTION  
C-103 SCALE: N.T.S.

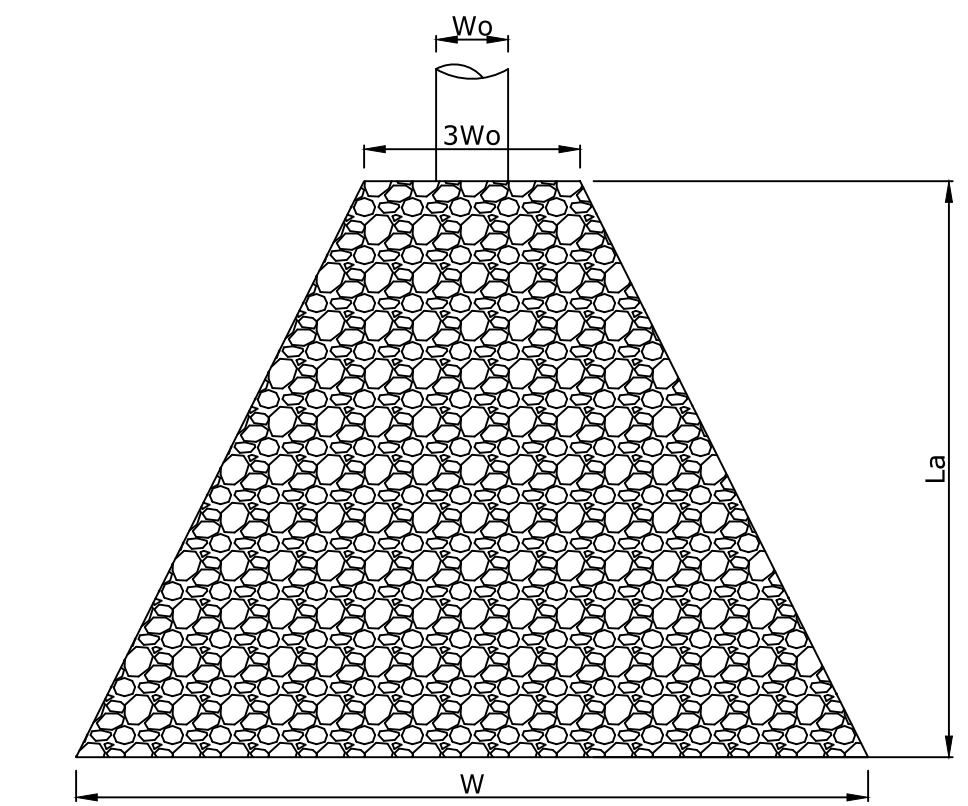


7 TRENCH DRAIN  
C-103 SCALE: N.T.S.

SECTION A-A

CONDUIT OUTLET PROTECT LOCATION	LENGTH OF STONE REQUIRED					
	Wo	3Wo	Lo	W	d50	THICKNESS
RIP-RAP APRON-1	1.0'	3.0'	12.1'	15.1'	4.7"	14.2"
RIP-RAP APRON-1	1.0'	3.0'	9.6'	12.6'	1.9"	5.7"

- RIP-RAP DIMENSIONS WERE CALCULATED IN ACCORDANCE WITH CHAPTERS 12 AND 22 OF THE NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL MANUAL.
- RIP-RAP THICKNESS BASED ON NO GEOTEXTILE LINER. IF GEOTEXTILE LINER IS PROPOSED BELOW RIP-RAP, THICKNESS CAN BE REDUCED TO TWO TIMES THE d50 SIZE.
- FIFTY PERCENT BY WEIGHT OF RIP-RAP MIXTURE SHALL BE SMALLER THAN THE MEDIAN SIZE STONE DESIGNATED AS d50 ABOVE. THE LARGEST STONE SIZE IN THE MIXTURE SHALL BE 1.5 TIMES THE d50 SIZE. THE RIP-RAP SHALL BE REASONABLY WELL GRADED.



8 RIP-RAP APRON  
C-103 SCALE: N.T.S.

SCHEDULE OF REVISIONS

REV.	DATE	DESCRIPTION OF CHANGES	DRAWN BY	CHK. BY
A	03/02/22	ISSUED FOR TRC MEETING	HB	JF
B	04/04/22	ISSUED FOR SITE PLAN SUBMISSION	HB	JF

OWNER

THE KOINONIA ACADEMY  
1040 PLAINFIELD AVENUE  
PLAINFIELD, NJ 07060

APPLICANT

J.G. PETRUCCI COMPANY, INC.  
171 STATE ROUTE 173, SUITE 201  
ASBURY, NJ 08802

E 2 PROJECT MANAGEMENT LLC

87 HIBERNIA AVENUE  
ROCKAWAY, N.J. 07866  
PHONE: (973) 299-5200  
FAX: (973) 299-5059  
www.e2pm.com

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS PERTAINING THEREUNTO. THE DRAWING AND THE DESIGN FEATURES OR CONSTRUCTION DISCLOSED ARE PROPRIETARY TO E2 PROJECT MANAGEMENT LLC AND SHALL NOT BE REPRODUCED, ALTERED OR COPIED WITHOUT WRITTEN PERMISSION. SHALL NOT BE USED IN ANY MANNER DETRIMENTAL TO ITS INTEREST AND SHALL BE RETURNED UPON REQUEST.

N.J. ENGINEERING CERTIFICATE OF AUTHORIZATION No. 24GA28118200

I CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION

*John Ferrante*  
4/4/2022

JOHN FERRANTE, P.E. N.J. NO. 24GE02472000  
REGISTERED PROFESSIONAL ENGINEER

PROJECT NAME

THE KOINONIA ACADEMY  
SCHOOL ANNEX BUILDING  
1040 PLAINFIELD AVENUE  
CITY OF PLAINFIELD,  
UNION COUNTY, NJ

BLOCK 509  
LOT: 1

DRAWING TITLE

STORMWATER DETAILS

CHECKED BY: JF	DRAWN BY: HB
SCALE: AS SHOWN	SHEET NO: OF 16
PROJECT #: P-21-18-39	FIRST ISSUE: 03/02/2022

DRAWING NO.

C-103.00