

HOLTEC OFFICE BUILDING & MAIN OFFICE PARKING EXPANSION

AMENDED SITE PLAN

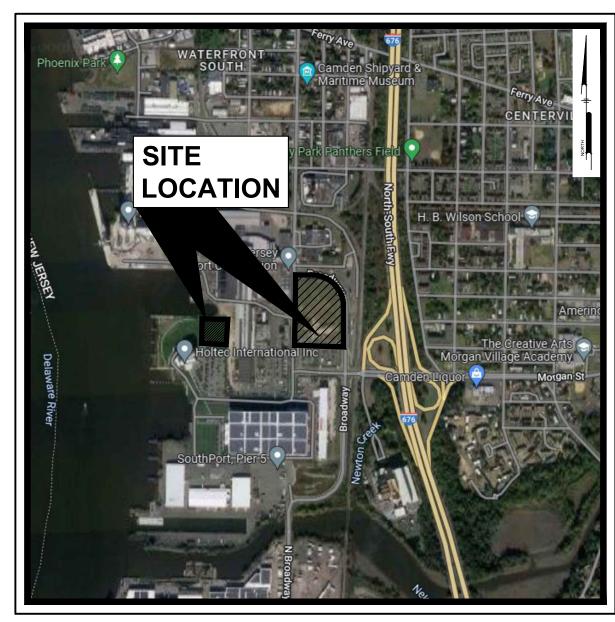
CAMDEN COUNTY, NEW JERSEY

EXISTING: BLOCK 511, LOTS 1, 77 - 94 BLOCK 512, LOTS 33 - 75, 109 & 110, AND 113 - 117 BLOCK 514, LOTS 3 - 6, 9 - 32, 100 - 107, 118, 120, 121, 144 - 155 BLOCK 515, LOTS 1, 3, 4, 4.15, AND 5 - 12 **LEASE AREA: BLOCK 455, LOT 1 BLOCK 515, LOT 1**

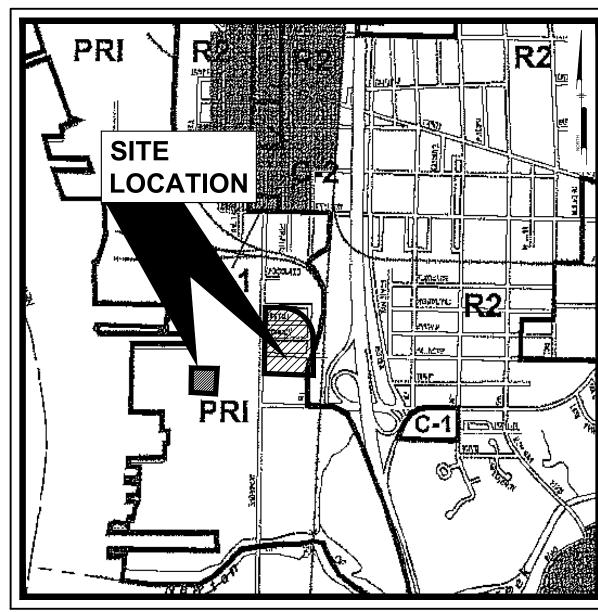
> PREPARED FOR: **APPLICANT**

HOLTEC TECHNOLOGY CENTER, LLC

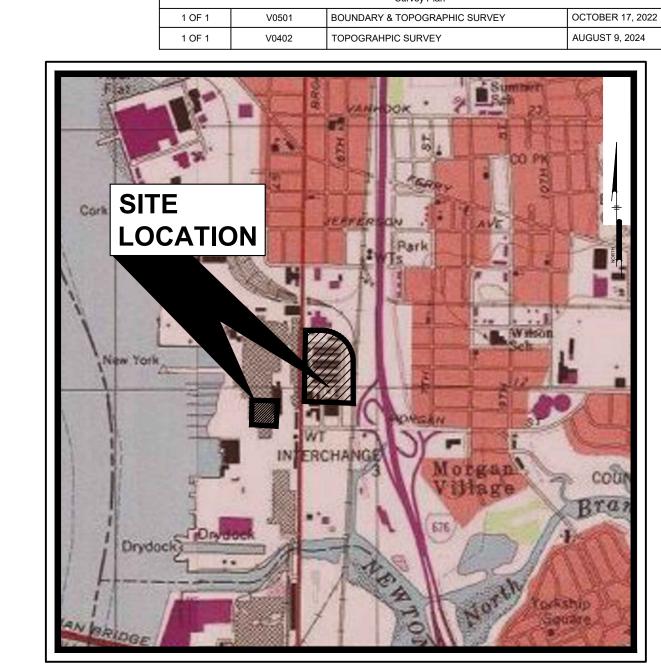
1 HOLTEC BOULEVARD CAMDEN, NEW JERSEY 08104



LOCATION MAP Scale: 1" = 1000'



ZONING MAP Scale: 1" = 1000' [PRI-PORT RELATED INDUSTRIAL]



DRAWING INDEX

COVER SHEET

CS0400

GENERAL NOTES

GENERAL NOTES II

GENERAL DEVELOPMENT PLAN

MAIN OFFICE DEMOLITION PLAN

MAIN OFFICE SITE PLAN

MAIN OFFICE GRADING PLAN

MAIN OFFICE UTILITY PLAN

OFFICE BUILDING DRAINAGE PLAN

OFFICE BUILDING LIGHTING PLAN

MAIN OFFICE LIGHTING PLAN

ROAD PROFILE III, RING ROAD

CONSTRUCTION DETAILS II

CONSTRUCTION DETAILS V

SANITARY SEWER DETAILS

SOIL EROSION & SEDIMENT CONTROL NOTES

SOIL EROSION & SEDIMENT CONTROL DETAILS

OFFICE BUILDING VEHICULAR CIRCULATION PLAN | AUGUST 23, 2024

USGS MAP Scale: 1" = 1000'

UTILITY PROVIDERS

CAMDEN COUNTY M.U.A 1645 FERRY AVENUE

CAMDEN, NJ 08104

540 BROAD STREET

NEWARK, NJ 07101

WILLIAMS TRANSCO

PRINCETOWN, NJ 08540

AMERICAN WATER PO BOX 52747 PHOENIX, AZ 85072

PUBLIC SERVICE GAS CO. 535 W. NICHOLSON ROAD AUDOBON, NJ 08540

COMCAST CABLEVISION 1250 HADDONFIELD-BERLIN ROAD CHERRY HILL, NJ 08034-0404

PUBLIC SERVICE ELECTRIC CO. 300 NEW ALBANY ROAD MOORESTOWN, NJ 08057

NEW JERSEY AMERICAN WATER PO BOX 578 **ALTON, IL 62002** (SERVICING EAST CAMDEN & CRAMER HILL)

CITY OF CAMDEN DEPT. OF PUBLIC ELECTRICAL BUREAU 1056 WRIGHT AVENUE, 2ND FLOOR CAMDEN, NJ 08103

350 NEWTON AVENUE CAMDEN, NJ 08101

LOCATION

TAX MAP Scale: 1" = 1000' [Sheets 8.09 & 8.10]

PREPARED BY:

PENNONI ASSOCIATES INC.



2 Aquarium Drive, Suite 320 Camden, NJ 08103 **T** 856.668.8600

NJ CERTIFICATE OF AUTHORIZATION NO. GA28033300

NEW JERSEY

CALL BEFORE YOU DIG 1-800-272-1000

CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH THE REQUIREMENTS OF THE NEW JERSEY ONE-CALL DAMAGE PREVENTION SYSTEM AS STATED IN THE "UNDERGROUND FACILITY PROTECTION ACT".

THIS MAP IS HEREBY APPROVED BY THE PLANNING BOARD OF THE CITY OF CAMDEN.

BOARD CHAIRMAN

BOARD SECRETARY

BOARD ENGINEER

ZONING OFFICER/ADMINISTRATIVE OFFICER

AUGUST 23, 2024 AUGUST 23, 2024

AUGUST 23, 2024

AUGUST 23, 2024

AUGUST 23, 2024 AUGUST 23, 2024 AUGUST 23, 2024

AUGUST 23, 2024

AUGUST 23, 2024 AUGUST 23, 2024

AUGUST 23, 2024

AUGUST 23, 2024

AUGUST 23, 2024 AUGUST 23, 2024

AUGUST 23, 2024

AUGUST 23,2024

AUGUST 23, 2024

AUGUST 23, 2024 AUGUST 23, 2024

AUGUST 23, 2024

AUGUST 23, 2024

AUGUST 23, 2024

AUGUST 23, 2024

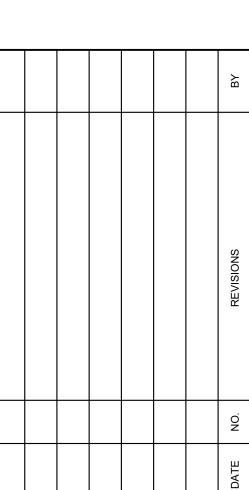
AUGUST 23, 2024

AUGUST 23, 2024

AUGUST 23, 2024

AUGUST 23, 2024

EPH



ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTE TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS (
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHE PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICAT OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SOLE RISK AND WITHOUT LIABILITY OR LEGAL ARISING OUT OF OR RESULTING THEREFROM

USATX2200 AUGUST 23, 2024

CS0001

SURVEY NOTES:

- THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO ANY EASEMENT RESTRICTION AND/OR COVENANTS THAT A CURRENT REPORT OF TITLE, OR COMPLETE SEARCH OF THE PUBLIC RECORD,
- THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE FOLLOWING SOURCES OF INFORMATION -DEEDS OF RECORD
- -AN ACTUAL FIELD SURVEY PERFORMED BY PENNONI ASSOCIATES BLOCK AND LOT NUMBERS REFER TO THE OFFICIAL TAX MAPS OF THE CITY OF CAMDEN, CAMDEN COUNTY, NEW JERSEY, PLATES 8.09, 8.10 & 8.12.
- PLANIMETRIC & TOPOGRAPHIC FEATURES SHOWN ARE TAKEN FROM AN ACTUAL FIELD SURVEY PERFORMED BY PENNONI
- THIS SURVEY IS NOT INTENDED TO GUARANTEE OWNERSHIP
- SURVEY BASED ON N.J.S.P.C.S. NAD '83 (2011) (USFT).

VERTICAL DATUM: NAVD 1988 (GEOID 18B)

- IT IS BEYOND THE SCOPE OF THIS SURVEY TO DETERMINE THE EXISTENCE OR NON-EXISTENCE OF ANY REGULATED ENVIRONMENTAL CONDITION ON OR NEAR THE SUBJECT PARCEL(S). UNDERGROUND EXPLORATIONS WERE NOT CONDUCTED OR UTILIZED DURING THE PREPARATION OF THIS SURVEY. CONCERNED PARTIES SHOULD PURSUE ANY **ENVIRONMENTAL MATTERS SEPARATE AND APART FROM THIS SURVEY**
- IT SHOULD NOT BE ASSUMED THAT ANY COPY OF THIS DRAWING WITHOUT A RAISED IMPRESSION OF THE SURVEYOR'S SEAL IS A TRUE COPY OF THE ORIGINAL AS ISSUED BY THE SURVEYOR.
- THE LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. ALL LOCATIONS ILLUSTRATED ARE BASED UPON UTILITY MARKOUT AND ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD. THE STATE OF NEW JERSEY REQUIRES NOTIFICATION PRIOR TO ANY EXCAVATION BY UTILIZING THE NEW JERSEY ONE-CALL SYSTEM (1-800-272-1000).
- D. THE WORD CERTIFIES (CERTIFY) IN THE CONTEXT OF THE CERTIFICATION ON THIS PLAN SHALL BE DEFINED AS A RENDERING OF A PROFESSIONAL OPINION BASED ON THE FACTS AND INFORMATION AVAILABLE TO THE SIGNATORY AT
- . A SIGNED WAIVER AND DIRECTION NOT TO SET CORNER MARKERS IN ACCORDANCE WITH THE STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS REGULATION (N.J.A.C. 13:40-5.2) HAS BEEN RECEIVED FROM THE
- 12. ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK.
- 13. A CONVERSION FACTOR OF 1.1 FEET IS ADDED TO 1988 NAVD TO OBTAIN 1929 NGVD, FOR EXAMPLE:
- ELEVATION (1988 NAVD) CONVERSION FACTOR ELEVATION (1929NGVD)

- REALIGNMENT OF SOUTH BROADWAY CR551) NEWTON CREEK (MP 31.89) TO WOODLAND AVENUE (MP 32.36), PLAN TITLED "UTILITY COORDINATION PLAN SHEETS UC1 AND UC-2, PREPARED BY T&M ASSOCIATES, DATED MARCH 2, 2015.
- 2. PLAN SET TITLED "HOLTEC TECHNOLOGY CENTER BLOCK 457 LOT 16, P/O BLOCK 455 LOT 1, BLOCKS 511, 512, 514 AND 515, SHEET 1-54 PREPARED BY T&M ASSOCIATES, DATED FEBRUARY 17, 2015.

THE NJDEP GEOWEB DEPICTS MAPPED WETLANDS GREATER THAN 300 FT FROM THE PROJECT SITE.

FLOOD ZONE INFORMATION .:

F-1. BY GRAPHIC PLOTTING ONLY SUBJECT PARCEL AREA IS LOCATED IN ZONE AE (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL FLOODPLAIN) OF THE FLOOD INSURANCE RATE MAP NO. 34007C0036I WHICH BEARS AN EFFECTIVE DATE OF AUGUST 17, 2016. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE AND AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR APPLY FOR A VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMENT

HIGH-VOLTAGE PROXIMITY ACT

THE CONTRACTOR IS NOTIFIED THAT ALL PROVISIONS OF THE HIGH-VOLTAGE PROXIMITY ACT, P.L 1948, c. 249 AS AMENDED THROUGH MAY 20, 1987 SHALL BE STRICTLY ADHERED TO. THE CONTRACTOR SHALL ALSO ADHERE TO ALL PROVISIONS OF PART 1926.550, SUBPART N OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF DECEMBER, 1970. PARTICULAR ATTENTION IS DIRECTED TO THE PROVISIONS OF THE ABOVE ACT REQUIRED WARNING SIGNS, NOTIFICATION TO POWER COMPANY AND RESPONSIBILITY FOR SAFEGUARDS AND ALSO PROHIBITED ACTIVITY.

A COPY OF THE HIGH-VOLTAGE PROXIMITY ACT IS AVAILABLE IN THE OFFICE OF THE COUNTY ENGINEER OR MAY BE OBTAINED FROM THE NEW JERSEY DEPARTMENT OF LABOR, DIVISION OF WORKPLACE STANDARDS, OFFICE OF SAFETY COMPLIANCE, TRENTON, NJ 08625

THE CONTRACTOR, OR HIS REPRESENTATIVE, IS TO DESIGNATE AN INDIVIDUAL RESPONSIBLE FOR CONSTRUCTION SITE SAFETY DURING THE COURSE OF SITE IMPROVEMENTS PURSUANT TO N.J.A.C. 5:23-2.21 (E) OF THE NEW JERSEY UNIFORM CONSTRUCTION CODE AND CFR 1926.32 (F) (OSHA

SITE IMPROVEMENT NOTES

- PRIOR TO STRIPING OF ADA PARKING SPACES, THE LOCATIONS SHALL BE REVIEWED WITH THE
- SIDEWALK CONSTRUCTION SHOWN ON THESE PLANS SHALL MEET ALL REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT OF JULY 2010, TITLE II, TITLE III AND ANY STATE, COUNTY, LOCAL OR OTHER APPLICABLE LAWS.
- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO NJDOT STANDARDS.
- ALL TRAFFIC CONTROL DEVICES, SUCH AS SIGNS AND STRIPING, ARE TO BE INSTALLED AND DESIGNED IN ACCORDANCE WITH THE MOST RECENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES(MUTCD) AND NJDOT STANDARDS
- ALL PAINTED TRAFFIC MARKINGS SUBJECTED TO VEHICLE MOVEMENTS MUST BE HOT EXTRUDED THERMOPLASTIC PAINT WITH GLASS BEADS IN COMPLIANCE WITH THE LATEST NJDOT SPECIFICATIONS.
- ALL PAVEMENT SUBGRADE IS SUBJECT TO THE REVIEW AND APPROVAL OF A GEOTECHNICAL
- ANY EXISTING CURB, SIDEWALK, TREES, LIGHTING FIXTURES, ETC., OUTSIDE OF THE PROJECT LIMIT OR NOTED TO BE MAINTAINED AND PROTECTED THAT IS DAMAGED DURING CONSTRUCTION, SHALL BE REPLACED IN-KIND BY THE CONTRACTOR, TO THE SATISFACTION OF THE OWNER. REPLACEMENT WORK SHALL BE BY THE CONTRACTOR AT NO COST TO THE
- ALL SIDEWALK AND CURB WITHIN THE COUNTY RIGHT-OF-WAY ALONG THE PROPERTY FRONTAGE THAT IS DETERIORATED OR PRESENTS A TRIPPING HAZARD SHALL BE REPLACED UNDER THE DIRECTION OF THE COUNTY ENGINEER OR HIS/HER REPRESENTATIVE.

- A GEOTECHNICAL ENGINEER, PROVIDED BY THE CONTRACTOR, IS REQUIRED TO INSPECT, TEST AND CERTIFY TO THE COMPACTION OF ALL LOAD BEARING FILLS.
- A MINIMUM 2.0% (IN ONE DIRECTION) AND A MAXIMUM SLOPE OF 3:1 SHALL BE PROVIDED IN ALL LAWN AREAS, UNLESS OTHERWISE SHOWN ON THE CONTRACT DRAWINGS. A MINIMUM SLOPE OF 1.0% IS REQUIRED IN ALL PAVED SURFACES, INCLUDING DRIVEWAYS.
- THE CONTRACTOR SHALL INSURE THAT POSITIVE AND ADEQUATE DRAINAGE IS MAINTAINED AT ALL TIMES DURING CONSTRUCTION WITHIN THE PROJECT LIMITS. THIS MAY INCLUDE, BUT NOT BE LIMITED TO, REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED OR REMOVED OR REGRADING AS REQUIRED BY THE ENGINEER, EXCEPT FOR THOSE DRAINAGE ITEMS SHOWN AT SPECIFIC LOCATIONS.
- THE CONTRACTOR SHALL PROVIDE ANY AND ALL EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR IS TO PROVIDE AN EARTHWORK ANALYSIS TO DETERMINED THE TOTAL (EXPORT/IMPORT) OF SOIL REQUIRED.

- G-1. THE LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES SHOWN ON THE CONTRACT DRAWINGS ARE APPROXIMATE AND ARE BASED UPON BEST AVAILABLE INFORMATION PROVIDED TO ENGINEER. THE FOLLOWING SHALL BE PERFORMED:
 - A) VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES WITHIN THE WORK AREA PRIOR
- B) EXERCISE EXTREME CAUTION WHEN WORKING ADJACENT TO EXISTING POWER. COMMUNICATIONS, WATER OR GAS LINES TO PREVENT DAMAGE TO THESE LINES.
- C) IMMEDIATELY REPAIR ANY DAMAGE TO EXISTING UTILITIES IN A MANNER APPROVED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER.

THE ACTUAL NATURE AND EXTENT OF EXISTING CONDITIONS PRIOR TO UNDERTAKING WORK.

G-2. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN SITE EXAMINATION AND DETERMINING

- G-3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND TO TAKE WHATEVER STEPS NECESSARY TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER HAS DILIGENTLY ATTEMPTED TO LOCATE AND INDICATE ALL EXISTING FACILITIES ON THESE PLANS: HOWEVER, THIS INFORMATION IS SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THI LOCATIONS OF UTILITIES SHOWN OR NOT SHOWN. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES FOR EXACT LOCATION OF THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND
- G-4. BEFORE EXCAVATING THE PROJECT AREA THE CONTRACTOR IS TO VERIFY THE LOCATION OF ANY UNDERGROUND UTILITY (GAS MAINS, WATER MAINS, SEWER LINES, TELEPHONE LINES, ETC.) SHOULD ANY UNDERGROUND UTILITY INTERFERE WITH PROJECT CONSTRUCTION THE ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH WORK. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND THE OWNER THREE (3) DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION FOR ACCURATE FIELD LOCATIONS. FOR UTILITY MARKOUT CALL 1-800-272-1000. CERTAIN UTILITIES WITHIN THE PROJECT AREA ARE PRIVATE AND A UTILITY MARKOUT (ONE-CALL) MAY NOT DETECT AND MARK THE LOCATION OF THESE UTILITIES. CONTRACTOR SHALL OBTAIN AN INDEPENDENT MARKOUT COMPANY.

REPLACE ANY AND ALL DAMAGE MADE TO UTILITIES BY THE CONTRACTOR.

- G-5. VERIFY ALL INDICATED CONDITIONS AND DIMENSIONS IN THE FIELD BEFORE PERFORMING ANY WORK. NOTIFY THE ENGINEER OF ANY CONDITIONS OR DIMENSIONS THAT WOULD PREVENT OR HAMPER THE PERFORMANCE OF THE WORK IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS
- G-6. THE CONTRACTOR AND OR ENGINEER SHALL RESOLVE APPARENT CONTRADICTIONS IN CONTRACT DOCUMENTS WITH THE OWNER BEFORE AFFECTED WORK PROCEEDS.
- G-7. DEVIATION FROM THESE PLANS AND NOTES WITHOUT THE PRIOR CONSENT OF THE OWNER, OWNER'S REPRESENTATIVE AND/OR THE DESIGN ENGINEER MAY BE CAUSE FOR THE WORK TO
- G-8. EXISTING SANITARY SEWERS THAT ARE TO REMAIN IN SERVICE SHALL REMAIN IN ACTIVE OPERATION AT ALL TIMES. EXISTING WATER MAINS SHALL REMAIN IN ACTIVE OPERATION EXCEPT AS NECESSARY FOR CONNECTIONS. PROVIDE A MINIMUM OF TWO WEEKS NOTICE TO THE ENGINEER AND OWNER PRIOR TO SERVICE DISRUPTIONS.
- G-9. UTILIZE A MOBILE SWEEPER AND WATER TRUCK DAILY FOR DUST CONTROL ALONG HAUL ROUTES AND IN AREAS MADE AVAILABLE FOR CONSTRUCTION.
- G-10. PREVENT WATER PONDING RESULTING FROM CONSTRUCTION OPERATIONS. PROMPTLY REMOVE ANY PONDED WATER TO THE SATISFACTION OF THE ENGINEER.
- G-11. ALL TOPSOIL SHALL BE STRIPPED, STOCKPILED AND REUSED ON SITE AND MAY NOT BE TRANSPORTED OFF-SITE WITHOUT WRITTEN REQUEST AND RESPONSE FROM THE OWNER
- G-12. CONTRACTOR SHALL WORK TO MINIMIZE EXCESS SOIL GENERATED. IF IT IS NECESSARY TO REMOVE SOIL FROM THE SITE, IT SHOULD BE DISPOSED OF AT A PERMITTED DISPOSAL FACILITY. PROVIDE THE NAME OF THE DISPOSAL FACILITY AND SOIL SAMPLE RESULTS 7 DAYS PRIOR TO HAULING SOIL. COPIES OF ALL BILLS-OF-LADING SHALL BE PROVIDED TO THE ENGINEER WITHIN 24 HOURS OF SOIL LEAVING THE SITE. CONTRACTOR SHALL ASSUME OWNERSHIP/RESPONSIBILITY OF EARTH OR CONCRETE SPOILS AND/OR DEBRIS GENERATED
- G-13. ALL AREAS OUTSIDE THE LIMITS OF CONSTRUCTION WHICH ARE DAMAGED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER AND OWNER
- G-14. VERIFY ALL INDICATED CONDITIONS AND DIMENSIONS IN THE FIELD BEFORE PERFORMING ANY WORK. NOTIFY THE ENGINEER OF ANY CONDITIONS OR DIMENSIONS THAT WOULD PREVENT OR HAMPER THE PERFORMANCE OF THE WORK IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS.
- G-15. UPON COMPLETION OF THE WORK, REMOVE ALL DEBRIS, EQUIPMENT AND UNUSED MATERIALS FROM OWNER PROPERTY AND RESTORE THE AREAS TO THEIR ORIGINAL CONDITION, AS APPROVED BY THE ENGINEER.
- G-16. A GEOTECHNICAL ENGINEER, RETAINED BY THE CONTRACTOR, IS REQUIRED TO INSPECT, TEST AND CERTIFY TO THE COMPACTION OF ALL FILLS.
- G-17. THE CONTRACTOR SHALL PROVIDE ANY AND ALL EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- G-18. SOILS TESTING AND ON-SITE INSPECTION SHALL BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER, RETAINED BY THE CONTRACTOR. THE GEOTECHNICAL ENGINEER SHALL PROVIDE COPIES OF TEST REPORTS TO THE CONTRACTOR, AND THE CONSTRUCTION MANAGER, AND SHALL PROMPTLY NOTIFY THE CONSTRUCTION MANAGER AND THE CONTRACTOR SHOULD WORK PERFORMED BY THE CONTRACTOR FAIL TO MEET THESE
- G-19. THE BOTTOM OF ALL EXCAVATIONS AND COMPACTED EARTHWORK SHALL BE INSPECTED AND APPROVED BY A REGISTERED GEOTECHNICAL ENGINEER RETAINED BY THE CONTRACTOR PRIOR TO PLACING CONCRETE STRUCTURES AND/OR BACKELLING APPROVAL BY THE GEOTECHNICAL ENGINEER IN WRITING SHALL INDICATE THAT THE SOIL IS ADECUATE TO SAFELY SUPPORT A FOUNDATION PRESSURE OF 2 000 PSE EXCAVATION BELOW THE ANTICIPATED BOTTOMS OF CONCRETE STRUCTURES ALONG WITH PLACEMENT OF COMPACTED BACKFILL MAY BE
- G-20. CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES AND FENCING AROUND THE PERIMETER OF THE WORK AREA AND SHALL PROVIDE PROTECTION AGAINST WATER DAMAGE AND SOIL EROSION.
- G-21. ALL TRAFFIC CONTROL DEVICES TO BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION. SIGN POSTS SHALL BE GALVANIZED STEEL AND ALL SIGN MATERIALS SHALL BE MADE OF REFLECTIVE SHEETING ON ALUMINUM BLANKS IN ACCORDANCE WITH NJDOT STANDARD SPECIFICATIONS.
- G-22. ALL DIMENSIONING IS TO CURB OR BUILDING FACE, UNLESS OTHERWISE NOTED.
- G-23. UNLESS OTHERWISE INDICATED, ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2007, OR LATEST EDITION, AS AMENDED AND
- G-24. ALL CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 4,500 PSI, UNLESS OTHERWISE NOTED.
- G-25. THE LOCATION OF SIDEWALK AND CURBS TO BE REPLACED ALONG THE PROPERTY'S FRONTAGE OF BROADWAY SHALL BE DETERMINED BY THE CITY ENGINEER.
- G-26. THE APPLICANT WILL COMPLY WITH THE CITY'S "ORDINANCE ESTABLISHING STANDARDS FOR THE SUBMISSION OF MAPS AND OTHER DOCUMENTS IN A DIGITAL FORMAT "THE APPLICANT SHOULD BE AWARE THAT FINAL SIGNATURES OF APPROVAL AND BUILDING PERMITS WILL NOT BE ISSUED UNTIL THE REQUIRED INFORMATION IS RECEIVED.
- G-27. DURING CONSTRUCTION, NOISE LEVELS SHALL ADHERE TO THE FOLLOWING LIMITS AS MEASURED AT ANY RESIDENTIAL PROPERTY:
- 50 DECIBELS (10PM TO 7AM) 65 DECIBELS (7AM TO 10PM)

DEMOLITION NOTES:

- D-1. DEMOLITION WILL BEGIN UPON RECEIPT OF ALL NECESSARY APPROVALS AND PERMITS FROM ALL APPLICABLE GOVERNMENTAL AGENCIES AND AFTER ALL UTILITIES HAVE BEEN DEACTIVATED / DISCONNECTED. CONTRACTOR SHALL CONTACT UNDERGROUND UTILITIES AS PER NEW JERSEY ONE CALL LAW NOT LESS THAN FIVE (5) DAYS NOR MORE THAN TEN (10) WORKING DAYS BEFORE COMMENCING WITH DEMOLITION.
- D-2. ALL DEMOLITION WORK SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT NFPA 241 AND OSHA STANDARDS, LATEST EDITION.
- D-3. CONTRACTOR SHALL NOTIFY APPROPRIATE UTILITY PURVEYOR, OWNER AND THE ENGINEER 72 HRS. PRIOR TO INITIATING UTILITY REMOVAL AND/OR ABANDONMENT.
- D-4. PRIOR TO START OF DEMOLITION, THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH EACH UTILITY AND THE OWNER TO THE WORK RELATIVE TO THEIR FACILITIES WITHIN THE LIMITS OF DEMOLITION AREA. THE CONTRACTOR SHALL ENSURE THAT ALL UTILITIES WHETHER SHOWN OR NOT ARE INACTIVE OR DE-ENERGIZED PRIOR TO DEMOLITION.
- D-5. REMOVE ALL SANITARY SEWER, STORM SEWER, TELEPHONE AND CABLE SERVICES AND CONDUITS WITHIN THE LIMIT OF DEMOLITION UNLESS OTHERWISE NOTED. ALL WATER SERVICE CONNECTIONS SHALL BE CUT AND CAPPED. STORM INLETS AND ASSOCIATED PIPING SHALL REMAIN IN-PLACE.
- D-6. ALL SANITARY SEWER CONVEYANCE FACILITIES, WHICH ARE TO BE ABANDONED, SHALL BE EMPTIED OF WASTES AND EITHER REMOVED OR ABANDONED IN-PLACE IN A MANNER WHICH IS ACCEPTABLE TO THE OWNER AND ENGINEER.
- D-7. COORDINATE WITH PSE&G FOR GAS LINE REMOVAL.
- D-8. BACKFILL ALL VOIDS CREATED BY REMOVALS, INCLUDING, BUT NOT LIMITED TO THE FOLLOWING: FOUNDATIONS, MANHOLES, INLETS, SITE PIPING, VALVES, CONDUITS, CLEANOUTS, AND TREE ROOT REMOVALS. BACKFILL WITH STRUCTURAL FILL IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS.
- D-9. CRUSHING OF MATERIALS WILL BE PERMITTED ONSITE WITHIN THE DESIGNATED WORK AREA ONLY, AND THE PROCESS SHALL BE FIRST REVIEWED AND APPROVED BY THE ENGINEER.
- D-10. RECYCLED MATERIALS MAY BE USED AS BACKFILL IF THE MATERIAL MEETS ALL THE REQUIREMENTS ESTABLISHED IN THE PROJECT SPECIFICATIONS AND ON THE CONTRACT
- D-11. WHERE A PIPE BEING REMOVED IS CONNECTED TO AN EXISTING STRUCTURE, EITHER REMOVE THE PIPE AND FILL THE WALL OPENING WITH CONCRETE. OR CUT THE PIPE WITHOUT PERCUSSION NOT MORE THAN 6" FROM THE OUTSIDE FACE OF THE STRUCTURE AND FILL THE REMAINING LENGTH OF PIPE WITH CONCRETE.
- D-12. THE CONTRACTOR SHALL MAINTAIN AND PROTECT ALL EXISTING PAVING, CURBING, CONCRETE, BRICK AND SITE AMENITIES NOT CALLED OUT TO BE REMOVED. ANY EXISTING CURB, SIDEWALK, PAVEMENT, LANDSCAPING, LIGHTING OR OTHER SITE AMENITIES THAT ARE TO BE MAINTAINED AND PROTECTED AND ARE DAMAGED DURING DEMOLITION OR OTHER CONSTRUCTION RELATED ACTIVITIES, SHALL BE REPLACED PROMPTLY BY THE CONTRACTOR AT NO COST TO THE OWNER.
- D-13. PROTECTION OF FIRE HYDRANTS SHALL BE COORDINATED WITH THE CITY.
- D-14. WATER WILL BE AVAILABLE ONSITE VIA EXISTING HYDRANTS. CONTRACTOR TO COORDINATE
- D-15. ELECTRICAL UTILITIES SHALL BE DISCONNECTED PRIOR TO BEGINNING ANY DEMOLITION WORK. DEMOLITION SHALL INCLUDE THE REMOVAL OF BURIED AND EXPOSED CONDUIT IN THE AREA DESIGNATED FOR DEMOLITION. SEALING ENDS OF ALL BURIED CONDUIT ABANDONED IN PLACE AND REMOVING ALL POWER AND CONTROL WIRING BETWEEN THE DEMOLISHED FACILITY AND THE TERMINAL JUNCTION BOX, CIRCUIT BREAKER, OR METER CONTROL CENTER SUPPLYING POWER TO THE FACILITY.
- D-16. ALL MATERIAL BROUGHT ON SITE SHALL BE CLEAN FILL, SAMPLED, AND ANALYZED WITH STANDARD NJDEP QUALITY ASSURANCE STANDARDS AND PRACTICES AT A MINIMUM, AS SPECIFIED IN N.J.A.C. 7:26E, TO FULLY CHARACTERIZE THE CONTAMINANTS IN THE LATEST SOIL CLEANUP CRITERIA SCC). THE CONTRACTOR SHALL SUBMIT TO THE OWNER WRITTEN DOCUMENTATION FROM A LABORATORY CERTIFIED IN NEW JERSEY ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM (ELCP) AND IN ACCORDANCE WITH N.J.A.C. 7:18 PRIOR TO PLACEMENT OF THE MATERIAL ON SITE. THE MATERIAL MUST NOT CONTAIN CONTAMINANTS ABOVE THE MOST RESTRICTIVE DIRECT CONTACT OR IMPACT TO GROUNDWATER (IGW) SCC.
- D-17. ALL DEMOLITION MATERIAL AND DEBRIS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. NO ON-SITE BURIAL IS PERMITTED. A SOIL REMOVAL PERMIT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- D-18. ALL ACTIVE CONSTRUCTION SITES AND LOCATIONS SHALL BE PROVIDED WITH NON-COMBUSTIBLE REFUSE CONTAINER(S) IN SUCH NUMBERS AS SHALL BE NECESSARY TO CONTAIN ALL COMBUSTIBLE REFUSE GENERATED BY THE CONSTRUCTION ACTIVITIES
- D-19. ALL COMBUSTIBLE REFUSE, RUBBISH AND DEBRIS SHALL BE COLLECTED AND DEPOSITED IN THE CONTAINER(S) ON A DAILY BASIS. REFUSE CONTAINER(S) SHALL BE LOCATED A MINIMUM OF TWENTY (20) FEET AWAY FROM ANY BUILDING, STRUCTURE, LOT LINE OR COMBUSTIBLE MATERIAL STORAGE LOCATION
- EXTINGUISHERS HAVING A RATING OF AT LEAST 10-A, 60-BC SHALL BE PROVIDED, AND SHALL BE MAINTAINED IN A LOCATION APPROVED BY THE FIRE OFFICIAL. PERSONNEL NORMALLY ON THE CONSTRUCTION SITE SHALL BE INSTRUCTED IN THE USE OF THE FIRE EXTINGUISHERS PROVIDED D-21. THE CONTRACTOR SHALL CONDUCT DEMOLITION OPERATIONS AND REMOVAL OF DEBRIS TO

ENSURE MINIMAL INTERFERENCE WITH ROADS, WALKS AND OTHER ADJACENT OCCUPIED OR

OF MATERIALS OR EQUIPMENT SHALL BE PROMPTLY REPAIRED/REPLACED AT NO COST TO

D-20. WHILE CONSTRUCTION ACTIVITIES ARE IN PROGRESS, AT LEAST FOUR(4) PORTABLE FIRE

- USED FACILITIES. THE AREAS OF DEMOLITION SHALL BE PROTECTED TO ENSURE THE SAFE PASSAGE OF PEDESTRIANS AS SHOWN ON THE CONTRACT DRAWINGS. D-22. NO DISTURBANCES NOR PLACEMENT OF MATERIALS SHALL BE PERMITTED BEYOND THE PROJECT LIMIT LINES WITHOUT WRITTEN CONSENT OF THE PROPERTY OWNER(S) INVOLVED. DAMAGE CAUSED TO ADJACENT FACILITIES BY DEMOLITIONS OPERATIONS AND/OR STORAGE
- D-23. DEMOLITION EQUIPMENT AND VEHICLES SHALL STAGE WITHIN PAVED DRIVEWAYS, PARKING LOTS AND WITHIN THE AREA OF EXISTING BUILDING FOOTPRINT TO MINIMIZE SOIL DISTURBANCES DURING DEMOLITION PROCESS.
- D-24. TO THE MAXIMUM EXTENT FEASIBLE, REMOVAL AND/OR ABANDONMENT OF ANY EXISTING SEWER SERVICE/MAIN AND WATER SERVICE/MAIN SHALL BE PERFORMED AT/NEAR THE CONNECTING MAINS TO MINIMIZE ACTIVE SECTIONS IN THE PUBLIC RIGHT-OF-WAY. ALL DISCONNECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF CAMDEN REQUIREMENTS
- D-25. WATER MAINS AND SEWER/COMBINED SEWER MAINS NOTED TO BE ABANDONED IN-PLACE SHALL BE CUT AND CAPPED AND FILLED WITH NJDOT CONTROLLED LOW STRENGTH MATERIAL ("FLOWABLE FILL").
- D-26. THE CITY OWNS AND OPERATES THE WATER AND SEWER SYSTEM, AND PSE&G OWNS AND OPERATES THE ELECTRIC AND GAS. CONTRACTOR SHALL COORDINATE WITH EACH UTILITY. PURVEYOR REGARDING PROPOSED WORK IMPACTING THEIR UTILITIES.

UTILITY NOTES:

- 1. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS AT NO COST TO THE OWNER INCLUDING, BUT NOT LIMITED TO, A ROAD OPENING PERMIT FROM THE CITY, COUNTY & STATE.
- 2. COVER OVER ALL WATER MAINS & FIRE SERVICES SHALL BE 4'-0" MINIMUM.
- 3. THE CONTRACTOR SHALL NOTIFY THE LOCAL ELECTRIC COMPANY IN ADVANCE OF

CONSTRUCTION FOR TEMPORARY SUPPORT OF UTILITY POLES.

- 4. THE CONTRACTOR SHALL COMPLY WITH ALL STANDARDS SET FORTH BY THE LOCAL M.U.A. &
- 5. THE LOCATION AND/OR DEPTHS OF EXISTING UTILITIES ARE APPROXIMATE & MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- 6. ALL TRENCHES WILL BE BACKFILLED BY COMPACTION IN EIGHT (8) INCH LAYERS COMPACTED TO 95% DENSITY IN STRICT ACCORDANCE WITH THE TRENCH DETAILS & SPECIFICATIONS. 7. NO MATERIAL SHALL BE PLACED OR DISTURBED BEYOND THE PROPERTY LINE OF RIGHT-OF-WAY

RESPONSIBILITY TO PERFORM THE WORK IN ACCORDANCE WITH THE PLAN, SPECIFICATIONS AND

8. INSPECTION OF, OR FAILURE TO INSPECT ANY MATERIALS OR WORKMANSHIP BY THE ENGINEER FOR THE M.U.A. SHALL IN NO WAY RELIEVE THE CONTRACTOR OF THE

WITHOUT WRITTEN PERMISSION OF THE PROPERTY OWNERS DIRECTLY INVOLVED.

- 9. WHENEVER THE TRENCH BOTTOM DOES NOT AFFORD SUFFICIENT BEARING STRENGTH TO SUSTAIN THE WEIGHT OF THE PIPE & SUPERIMPOSED LOADS, THE TRENCH BOTTOM SHALL BE OVER-EXCAVATED & STABILIZED WITH SIX (6) INCHES MINIMUM THICK LAYERS OF CRUSHED
- TONE, AS DIRECTED BY THE ENGINEER. 10. ALL GENERAL CONSTRUCTION MATERIALS, TESTING & METHODS OF INSTALLATION SHALL BE
- 11. THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM VARIOUS SOURCES & ARE SHOWN FOR DESIGN & ESTIMATED PURPOSED ONLY. ACTUAL LOCATIONS OF UTILITIES SHALL BE FIELD VERIFIED. ANY DISCREPANCIES OR APPARENT CONFLICTS SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER FOR REMEDIATION.

SUBJECT TO THE APPROVAL OF THE M.U.A. & THE ENGINEER.

THE WORK AND CONNECTION.

- 12. CONCRETE ENCASEMENT SHALL BE PROVIDED FOR ALL PIPE/UTILITY CROSSING WHERE LESS THAN EIGHTEEN INCHES OF CLEARANCE WILL RESULT, SUBJECT TO THE REQUIREMENTS OF THE
- 13. EXISTING UTILITIES INCLUDING VALVE BOXES, CLEAN OUTS, CURB STOPS, MANHOLES, ETC., SHALL BE ADJUSTED TO MATCH PROPOSED FINISHED GRADE. STORM DRAINAGE STRUCTURES SHALL NOT BE ADJUSTED UNLESS SPECIFICALLY CALLED FOR.
- 14. THE CONTRACTORS ARE ADVISED THAT ANY REQUIRED UNDERGROUND UTILITY RELOCATION'S INCLUDING GAS MAINS AND SERVICES, WATER MAINS AND SERVICES, SEWER MAINS AND SERVICES, ELECTRIC AND TELEPHONE LINES SHALL BE COMPLETED AT NO COST TO THE OWNER UNLESS SPECIFICALLY NOTED OTHERWISE.
- 15. LOCATION OF ALL ELECTRICAL EQUIPMENT, CIRCUITS, AND INSTALLED ELECTRICAL APPLIANCES IN A MANNER WHICH WILL ASSURE THAT THEY ARE NOT SUBJECT TO INUNDATION AND FLOODING. 16. INLET PIPE OPENINGS SHALL BE SEALED WITH NON-SHRINK DRY-PACKED GROUT OR APPROVED
- 17. INSTALLATION OF ALL WATER AND SEWER MAINS AND WATER AND SEWER SERVICES MUST
- 18. THE CITY ENGINEER, AND AMERICAN WATER ENTERPRISES SHALL BE GIVEN 48 HOURS ADVANCE NOTICE OF SANITARY SEWER/WATER MAIN WORK AND THE REPRESENTATIVES MUST WITNESS
- 19. ALL EXISTING WATER SERVICE LINES TO BE ABANDONED SHALL BE CUT AND CAPPED AT THE MAIN, IN ACCORDANCE WITH CAPITAL IMPROVEMENTS AND PROJECT MANAGEMENT (CIP) STANDARDS, AND INSPECTED WITHIN 24 HOURS AFTER INSTALLATION OF NEW TAP.
- 20. ALL JOINTS AND FITTINGS SHALL BE SPECIFIED IN THE CITY ORDINANCE WATER MAIN STANDARD.
- 21. CONTRACTOR IS REQUIRED TO SUBMIT RECORD DRAWINGS IN ACCORDANCE WITH THE ORDINANCE FOR WATER SERVICE LINES AND SEWER LATERALS.
- 22. ALL SEWER INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE PROCEDURE MANUAL OF THE CITY OF CAMDEN.
- 23. ALL METER INSTALLATIONS IN METER PIT OR VAULT SHALL BE PRE-APPROVED BY CIP AND HAVE PROPER ACCESS OPENINGS FOR METER READING AND REPLACEMENT.
- 24. UPON COMPLETION OF THE WATER/SEWER INSTALLATION, THE APPLICANT SHALL SUBMIT THREE (3) SETS OF "AS BUILT" PLANS TO THE CIP AND AMERICAN WATER ENTERPRISES. THE CIP WILL AUTHORIZE SUPPLY WATER UPON ACCEPTANCE OF THE "AS BUILT" DRAWINGS. SUBMISSIONS OF RECORD DRAWINGS IS REQUIRED IN ACCORDANCE WITH ORDINANCE FOR WATER SERVICE LINES AND SEWER LATERALS.
- 25. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL TELEVISE THE SEWER MAIN WHERE CONNECTION IS PROPOSED. THE CCTV SHALL BE TAKEN FROM THE TERMINAL MANHOLE TO THE FIRST MANHOLE EASTERLY OF THE PROPOSED CONNECTION POINT. COST TO BE INCLUDED IN THE COST FOR CONSTRUCTING THE SEWER SERVICE LATERAL.
- 27. SELECT FILL FOR WATER/SEWER TRENCH INSTALLATION SHALL BE DENSE GRADED AGGREGATE

ALL REINFORCED CONCRETE PIPE SHALL BE CLASS III, UNLESS OTHERWISE NOTE.

- 1-5. IN ACCORDANCE WITH THE SPECIFICATION SUBSECTION 901.08 OF THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION AND CONFORM TO THE TABLE IN SECTION 577-229.H OF THE ORDINANCE.
- 28. AIR RELEASE VALVE SHALL BE INSTALLED AT HIGH POINTS OF THE WATER MAIN.
- 29. THRUST BLOCKS AND RESTRAINTS SHALL BE INSTALLED AT ALL BENDS AND FITTINGS. THRUST BLOCKS SHALL HAVE TWENTY EIGHT (28) DAY STRENGTH OF 4,000 PSI.
- 30. STORM INLETS WHICH ARE CONNECTED DIRECTLY TO CITY COMBINED SEWERS MUST BE FURNISHED WITH A SUMP AND TRAP PER CITY STANDARD DETAILS.
- 31. A DROP MANHOLE CONNECTION SHALL BE USED WHERE THERE IS A DIFFERENCE IN ELEVATION OF TWO (2) FEET OR GREATER. CONTRACTOR TO REFER TO CITY DETAILS.
- 32. ALL RCP SHALL BE LINED ON THE INTERIOR WITH A COAT TAR EPOXY SEAL COAT WITH A MINIMUM OF FOUR (4) MILS IN THICKNESS (DFT).
- 33. ALL PIPE SHALL BE MANUFACTURED AND SUPPLIED WITHOUT LIFTING HOLES.
- 34. ALL EXISTING WATER/SEWER SERVICE NOT PROPOSED FOR RE-USE SHALL BE PROPERLY ABANDONED IN ACCORDANCE WITH CITY REQUIREMENTS

35. THE INSTALLATION OF ALL WATER/SEWER MAINS AND SERVICES SHALL COMPLY WITH CITY

- 36. SUBMISSION OF RECORD DRAWINGS IS REQUIRED IN ACCORDANCE WITH ORDINANCE FOR WATER
- SERVICES, LINES AND SEWER LATERALS. 37. ALL WATER PIPES, FITTINGS, AND VALVES SHALL BE DISINFECTED IN ACCORDANCE WITH
- AWWA REQUIREMENTS. 38. ALL METERS SHALL BE ADEQUATELY RESTRAINED WITH METAL BRACKETS FASTENED TO THE FLOOR OR WALL OR OTHER APPROVED MEANS SUCH AS UNIFLANGES WHERE INTERNAL PIPE PRESSURE AND FLOW WARRANT SUCH RESTRAINTS. METERS, DETECTOR CHECKS, AND VALVES MAY BE SEATED ON CONCRETE BLOCK AND TAPERED SHIMS TO PROVIDE ADEQUATE SUPPORT. METERS SHALL BE INSTALLED APPROXIMATELY 36" ABOVE
- 39. AFTER OBTAINING THE REQUIRED PERMITS (STREET OPENING, TAP, AND METER) THE APPLICANT SHALL CALL THE AUTHORIZED AGENT REPRESENTING CIP TO SCHEDULE THE TAP AT THE CONTRACTOR'S OWN COST. THE EXCAVATION SHALL BE COMPLETED TWENTY-FOUR (24) HOURS PRIOR TO THE SCHEDULED TAP, AND VERIFIED BY CIP OR IT'S AUTHORIZED AGENT BEFORE THE TAP WILL BE INSTALLED. EXCAVATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH OSHA REQUIREMENTS FOR SHEETING AND SAFETY
- 40. THE TAPPING SLEEVE SHALL PASS PRESSURE TESTING BASED ON AWWA STANDARDS

BEFORE TAP IS MADE.

CONNECTION(S)

- 41 TAPPING GATES SHALL BE FURNISHED OPEN RIGHT. ALL TAPPING AND CURB VALVES. SHALL BE DOUBLE DISC GATE VALVES AND MEET AWWA STANDARDS, THE WET TAP UP TO 12 INCHES SHALL BE PERFORMED BY THE AUTHORIZED AGENT REPRESENTING CIP
- 42. IF A STREET OPENING IS NECESSARY FOR BROADWAY, THIS APPLICATION WOULD BE SUBJECT TO THE STREET OPENING PERMIT ORDINANCE OF THE CITY. THE CITY ENGINEER SHOULD BE CONTACTED CONCERNING THE APPLICATION AND FEE INVOLVED
- BE REQUIRED FOR A ROAD OPENING ON BROADWAY (CR 551). 44. ALL NEW MANHOLES AND CATCH BASINS SHALL HAVE TWO COATS OF AN EXTERIOR COATING OF CARBOLINE COAL TAR EPOXY 300M OR APPROVED EQUAL. ALL FLEXIBLE CONNECTIONS SHALL BE

43. A ROAD/SIDEWALK OPENING PERMIT FROM THE CAMDEN COUNTY HIGHWAY DEPARTMENT WOULD

45. ALL NEW INLET CIRCULAR CONNECTIONS SHALL BE SEALED WITH A FLEXIBLE SEAL ASSEMBLY SUCH AS G3-FLEXIBLE CONNECTOR BY A-LOK PRODUCTS, INC. OR APPROVED EQUAL.

A-LOK FLEXIBLE CONNECTOR BY A-LOK PRODUCTS OR APPROVED EQUAL.

- 46. THE APPLICANT SHALL SUBMIT AN APPLICATION AND PAY THE APPLICABLE FEES FOR WATER SERVICE, SEWER CONNECTION, AND INSPECTION PERMITS.
- 47. INFILTRATION/EXFILTRATION TESTING AND PIPE ALIGNMENT TESTING SHALL BE PERFORMED ON ALL NEW SEWERS (RCP AND PVC) PRIOR TO ACCEPTANCE AND/OR DEDICATION.

THE WATER MAIN, AND BY-PASSING OF THE SEWER IN ORDER TO MAKE A PROPOSED

NO COST TO THE CITY. THE APPLICANT SHALL OWN, MAINTAIN AND OPERATE ALL WATER/SEWER SERVICES BEYOND THE RIGHT-OF-WAY 49. THE APPLICANT SHALL BE RESPONSIBLE FOR ALL COST RELATED TO ANY REQUIRED ISOLATION OF

48. IT SHALL BE THE RESPONSIBILITY OF THE APPLICANT TO RELOCATE ALL INMPACTED UTILITIES AT

SITE INFORMATION:

PROJECT LOCATION: 2360 SOUTH BROADWAY CITY OF CAMDEN, CAMDEN COUNTY, NEW JERSEY 08104 TAX MAP SHEETS: 8.09, 8.10 BLOCK 511, LOTS 1, 77 - 94

BLOCK 512, LOTS 33 - 75, 109 & 110, AND 113 - 117 BLOCK 514, LOTS 3 - 6, 9 - 32, 100 - 107, 118, 120, 121, 144 - 155 BLOCK 515, LOTS 1, 3, 4, 4.15, AND 5 - 12 SJPC LEASE AREA: BLOCK 455, LOT 1 BLOCK 515, LOT 1

SOUTH JERSEY PORT CORPORATION 2ND AND BECKETT STREET CAMDEN, NJ 08103

<u>APPLICANT</u> HOLTEC TECHNOLOGY CENTER, LLC 1 HOLTEC BOULEVARD CAMDEN, NJ 08104 CHRIS BIEBERBACH C.BIEBERBACH@HOLTEC.COM

PENNONI ASSOCIATES INC. 2 AQUARIUM DRIVE, SUITE 320 CAMDEN, NJ 08103 JOSEPH J. RADAY, P.E., CME EMAIL: JRADAY@PENNONI.COM

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATE ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENT TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHE PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL XPOSURE TO PENNONI ASSOCIATE; AND OWNER SH NDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATI FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES

ARISING OUT OF OR RESULTING THEREFROM.

PROJECT USATX2200 AUGUST 23, 2024 RAWING SCALE N.T.S.

DRAWN BY

PPROVED BY

ENVIRONMENTAL NOTES:

- E-1. ALL MATERIAL BROUGHT ON SITE SHALL BE CERTIFIED CLEAN FILL, SAMPLED, AND ANALYZED IN ACCORDANCE WITH STANDARD NJDEP QUALITY ASSURANCE STANDARDS AND PRACTICES AT A MINIMUM, AS SPECIFIED IN N.J.A.C. 7:26E, TO FULLY CHARACTERIZE THE CONTAMINANTS IN THE LATEST SOIL CLEANUP CRITERIA (SCC). THE CONTRACTOR SHALL SUBMIT TO THE OWNER WRITTEN DOCUMENTATION FROM A LABORATORY CERTIFIED IN NEW JERSEY ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM (ELCP) AND IN ACCORDANCE WITH N.J.A.C. 7:18 PRIOR TO PLACEMENT OF THE MATERIAL ON SITE. THE MATERIAL MUST NOT CONTAIN CONTAMINANTS ABOVE THE MOST RESTRICTIVE DIRECT CONTACT OR IMPACT TO GROUNDWATER (IGW) SCC.
- E-2 DEWATERING ACTIVITIES SHALL BE CONDUCTED PURSUANT TO CCMUA AND/OR NJDEP PERMITTING OBTAINED BY THE CONTRACTOR. ALL PERMIT FEES ARE TO BE PAID BY CONTRACTOR, INCLUDED IN BID, AND AT NO ADDITIONAL COST TO THE OWNER.
- E-3 ABANDONMENT OF EXISTING MONITORING WELLS SHALL BE COORDINATED WITH THE ENGINEER (IF
- E-4 AS PART OF THE CONSTRUCTION OF RUTGERS FIELD, AN ENGINEERED CAP WILL BE INSTALLED. THIS SITE WAS PREVIOUSLY CAPPED. SINCE A PORTION OF THE HARD SURFACE ON THE SITE (CONCRETE WALKWAYS AND PAVEMENT) WILL BE REMOVED, THE REMOVED SECTIONS NEED TO BE CAPPED. CONTRACTOR HAS 2 OPTIONS FOR ACCOMPLISHING THIS CAP. ALL VEGETATED COVERED AREAS WILL HAVE A MINIMUM THICKNESS OF 2 FEET OR GREATER, OR A MINIMUM THICKNESS OF ONE FOOT OVERLAYING A GEOTEXTILE FABRIC BARRIER. THIS INCLUDES IF OVER EXCAVATION IS REQUIRED TO ACCOMPLISH REQUIRED CAP. ALL WORK IS TO BE INCLUDED IN THE COST OF CONTRACTORS BID. NO CHANGE ORDERS WILL BE APPROVED NOR ACCEPTED BY OWNER.
- E-5 "CLEAN FILL" DEFINITION: "MATERIAL TO BE USED IN A REMEDIAL ACTION THAT MEETS ALL SOIL REMEDIATION STANDARDS, SITE-SPECIFIC ALTERNATIVE STANDARDS, OR SITE-SPECIFIC INTERIM STANDARDS, DOES NOT CONTAIN EXTRANEOUS DEBRIS OR SOLID WASTE, AND DOES NOT CONTAIN FREE LIQUIDS. THIS ALSO INCLUDES ANY MATERIAL THAT MEETS ALL CRITERIA OR ACTION LEVELS FOR CONTAMINANTS WITHOUT STANDARDS." (N.J.A.C. 7:26E-1.8).
- E-6 THE PRESENCE OF UNCLASSIFIED FILL MATERIALS SHALL BE DOCUMENTED AND ALL LOCAL/STATE/FEDERAL REGULATIONS WILL BE FOLLOWED.
- E-7 CONSTRUCTION STAGING ACTIVITIES (INCLUDING THE STORAGE OF EQUIPMENT/VEHICLES/MATERIALS) ARE PROHIBITED IN ENVIRONMENTALLY SENSITIVE AREAS. IF THE CONTRACTOR WISHES TO USE THESE AREAS OR ACCESS THESE AREAS FOR ANY REASON, ALL APPROPRIATE PERMITS/APPROVALS MUST BE OBTAINED PRIOR TO SUCH USE.
- E-8 BEST MANAGEMENT PRACTICES (SUCH AS THE INSTALLATION OF SILT FENCE, INLET PROTECTION AND PERIODIC CLEAN OUT OF DEBRIS) WILL BE UTILIZED DURING CONSTRUCTION TO PREVENT SEDIMENT AND DEBRIS FROM ENTERING STORMWATER INLETS AND ENVIRONMENTALLY SENSITIVE AREAS. ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
- E-9 CONTRACTOR TO REFER TO NJ SOIL EROSION STANDARDS/REQUIREMENTS FOR IMPLEMENTING STANDARD MEASURES FOR MINIMIZATION OF CONSTRUCTION-RELATED NOISE AND AIR QUALITY
- E-10 ANY EXCESS SOILS RELATED TO PROJECT CONSTRUCTION NEEDS TO BE STOCKPILED, SAMPLED, AND DISPOSED OF IN ACCORDANCE WITH NJDEP RULES AND REGULATIONS.
- E-11 VEGETATED COVERED AREAS WILL HAVE A MINIMUM THICKNESS OF ONE FOOT OVERLYING A GEOTEXTILE FABRIC BARRIER.
- $\hbox{E-12} \ \ \hbox{FOR EACH TYPE AND SOURCE OF IMPORTED CLEAN FILL DERIVED OR ORIGINATED FROM A VIRGIN}$ SOURCE OR QUARRY, LABORATORY ANALYTICAL DATA FROM ONE SAMPLE COLLECTED WITHIN THE LAST YEAR AND DOCUMENTATION OF CLEAN FILL IS TO BE PROVIDED (AT THE DISCRETION OF THE LSRP, A SAMPLE MAY NOT BE REQUIRED TO ESTABLISH THE NATURE OF THE CLEAN FILL). THE SAMPLE MUST BE ANALYZED FOR FULL TCL/TAL SUITE, HEXAVALENT CHROMIUM, AND EPH BY AN NJDEP-CERTIFIED LABORATORY WITH METHOD DETECTION LEVELS THAT ALLOW A COMPARISON TO AN APPLICABLE REMEDIATION STANDARD, IN ACCORDANCE WITH THE NJDEP FILL MATERIAL GUIDANCE (http://www.state.nj.us/dep/srp/guidance/#fill_srp). IN ADDITION, IF ANY SAMPLE RESULT EXCEEDS THE NJDEP DEFAULT IGWSL, SYNTHETIC PRECIPITATION LEACHING PROCEDURE (SPLP DATA MUST BE PROVIDED FOR THOSE COMPOUNDS TO SUPPORT THAT CLEAN FILL WILL NOT IMPACT GROUND WATER. IN ADDITION, THE VIRGIN SOURCE OR QUARRY SUPPLIER MUST PROVIDE A WRITTEN CERTIFICATION IDENTIFYING THE SOURCE LOCATION OF THE MATERIAL AND THAT THE FILL MEETS THE CLEAN FILL DEFINITION AT N.J.A.C. 7:26E-1.8.
- E-13 FOR IMPORTED CLEAN FILL ORIGINATING FROM SOURCES OTHER THAN A VIRGIN SOURCE OR QUARRY, ADDITIONAL SAMPLING WILL BE REQUIRED. FOR EACH TYPE OF CLEAN FILL PER SOURCE, SOIL SAMPLES MUST BE COLLECTED AT A FREQUENCY OF ONE SAMPLE PER 20 CY FOR THE FIRST 100 CY OF SOIL, ONE SAMPLE FOR EACH ADDITIONAL 100 CY UP TO 1,000 CY, AND ONE SAMPLE FOR EVERY ADDITIONAL 1,000 CY. AN ALTERNATIVE SAMPLING FREQUENCY MAY BE USED BASED ON THE DISCRETION OF THE LSRP WHO WILL RELY ON MULTIPLE LINES OF EVIDENCE WHEN EVALUATING CLEAN FILL QUALITY. THE SAME ANALYTICAL PARAMETERS AND WRITTEN CERTIFICATION REQUIRED FOR VIRGIN SOURCES OR QUARRIES APPLIES TO THESE OTHER SOURCES OF CLEAN FILL.
- E-14 ALTERNATE FILL WILL NOT BE USED AS PART OF THE ENGINEERED CAP FOR THIS PROJECT.
- E-15 CONSTRUCTION IS SCHEDULED TO START NO SOONER THAN 60 DAYS AFTER SUBMISSION OF THIS RAWP TO THE NJDEP IN ACCORDANCE WITH THE TRSR AT N.J.A.C. 7:26E-5.5(A). CONSTRUCTION IS ANTICIPATED BEING COMPLETED WITHIN 8 MONTHS FROM ISSUANCE OF NOTICE TO PROCEED.
- E-16 PUBLIC NOTIFICATION WILL BE MADE AT LEAST 14 DAYS PRIOR TO START OF WORK IN ACCORDANCE WITH N.J.A.C. 7:26C-1.7. A SIGN WILL BE PLACED AT THE SITE AND ASSOCIATED DOCUMENTATION WILL BE SENT TO THE CAMDEN COUNTY CLERK AND THE CAMDEN COUNTY HEALTH OFFICER.
- E-17 PENNONI (LSRP) WILL BE OWNER'S REPRESENTATIVE TO MONITOR ALL "ENVIRONMENTAL ACTIVITIES" DURING CONSTRUCTION.

CITY OF CAMDEN STORMWATER REQUIREMENTS:

- 1. TO THE EXTENT PERMITTED BY LAW. THE CITY WILL AT ALL REASONABLE TIMES HAVE A RIGHT OF INGRESS AND EGRESS OVER THE EASEMENT AREA AND THE RIGHT TO ENTER THE EASEMENT AREA VA ANY ROAD OR PARKING LOT LOCATED WITHIN ANY COMMON AREA OWNED BY THE GRANTOR TO INSPECT THE SYSTEM LOCATED IN THE EASEMENT AREA;
- 2. EXCEPT IN THE CASE OF AN EMERGENCY, THE CITY WILL PROVIDE NOT LESS THAN SEVEN (7) DAYS PRIOR NOTICE TO THE PERFORMING ANY INSPECTION OR MONITOR OF THE SYSTEM IN ACCORDANCE WITH APPROVED PLAN. THE APPLICANT AGREES THAT THE FAILURE TO TIMELY OBJECT AFTER RECEIVING NOTICE FROM THE CITY CONSTITUTES CONSENT TO INSPECTION OF THE PROPERTY WITHIN THE TIMEFRAME SPECIFIED IN THE NOTICE.
- 3. IF, AFTER REASONABLE NOTICE BY THE CITY. THE APPLICANT FAILS TO MAINTAIN THE SYSTEM IN ACCORDANCE WITH THE APPROVED MANUAL AND THE MAINTENANCE PLAN, THE CITY MAY PERFORM ANY MAINTENANCE NEEDED TO CORRECT A CONDITION THAT IMPACTS THE EFFECTIVENESS OF ROUTINE MAINTENANCE AND OPERATIONS OF THE SYSTEM AND COLLECT ANY COSTS INCURRED AS A RESULT FROM EACH OWNER OF THE SYSTEM AND IN THE SAME MANNER AS REAL PROPERTY TAXES ARE COLLECTED. IN ADDITION, THE CITY MAY SEEK REIMBURSEMENT UNDER ANY OTHER METHOD LEGALLY AVAILABLE TO COLLECT DEBTS OWED,
- 4. THE APPLICANT AGREES TO INDEMNIFY AND SAVE THE CITY HARMLESS FROM ANY AND ALL CLAIMS FOR DIRECT DAMAGES TO PERSONS OR PROPERTY ARISING FROM INSPECTIONS PERFORMED BY THE CITY.

DIVISION OF CAPITAL IMPROVEMENTS & PROJECT MANAGEMENT (CIP) CONSTRUCTION GENERAL NOTES (IF REQUIRED:

- ALL CONSTRUCTION, MATERIALS, RESTORATIONS AND METHODS OF INSTALLATION IN CITY ROADS SHALL BE SUBJECT TO THE REQUIREMENTS AND APPROVAL OF THE MUNICIPALITY.
- SANITARY SEWER CONSTRUCTION, MATERIALS AND TESTING SHALL BE SUBJECT TO THE
- APPROVAL OF AN INSPECTION BY THE CITY ENGINEER AND SUBJECT TO GT* 3. ALL SANITARY SEWERS SHALL BE CONSTRUCTED WITH CLASS "C* MODIFIED BEDDING UNLESS
- 4. WHEREVER THE TRENCH BOTTOM DOES NOT AFFORD SUFFICIENT BEARING STRENGTH TO SUSTAIN THE WEIGHT OF THE PIPE AND SUPERIMPOSED LOADS, IT SHALL BE OVER EXCAVATED ND STABILIZED WITH A LAYER OF CRUSHED STONE.
- 5. THE CONTRACTOR SHALL CONSTRUCT TEST PITS AS REQUIRED TO VERIFY THE LOCATION AND THE DEPTH OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND PROPOSED FACILITIES
- 6. CONTRACTOR EFFORTS SHALL BE MADE TO RETAIN EXISTING TREES, VEGETATION AND NATURAL CHARACTERISTICS OF THE TRACT.
- 7. THE CONTRACTOR SHALL PAY ALL STREET/SIDEWALK OPENING FEES AND GIVE NOTICES NECESSARY FOR AND INCIDENTAL TO THE DUE AND LAWFUL EXECUTION OF THE WORK.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES. THE
- CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES BEFORE EXCAVATION. NO MATERIALS SHALL BE PLACED NO ANY DISTURBANCE PERMITTED BEYOND THE PROJECT PROPERTY LINE WITHOUT THE WRITTEN PERMISSION OF THE PROPERTY OWNER DIRECTLY
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING, PAVING, TOPSOILING, SODDING, FERTILIZING AND SEEDING ALL AREAS DISTURBED BY HIS ACTIVITIES.
- 11. ROAD PAYMENT, REPLACEMENT, AND ALL RESTORATION IN COUNTY ROADS SHALL MEET THE REQUIREMENTS OF THE COUNTY ENGINEER.
- 12. INSPECTION OF, OR FAILURE TO INSPECT ANY MATERIALS OR WORKMANSHIP BY STATE, COUNTY OR TOWNSHIP OFFICIALS SHALL IN NO WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES TO PERFORM THE WORK IN ACCORDANCE WITH APPLICABLE PLANS,
- 13. PRIOR TO CONSTRUCTION, ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE APPROVED BY THE SOIL CONSERVATION DISTRICT IN COMPLIANCE WITH CHAPTER 251 OR THE PUBLIC LAWS OF 1975. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE UNTIL CONSTRUCTION IS COMPLETED OR THE AREA IS STABILIZED IN ACCORDANCE WITH THE SOIL CONSERVATION DISTRICT'S RECOMMENDATIONS.
- 14. ALL SEWER INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE PROCEDURES MANUAL OF THE CITY OF CAMDEN.
- 15. THRUST BLOCKS ARE TO BE INSTALLED AT ALL FORCE MAIN BENDS.
- 16. SANITARY SEWER LATERALS SHALL NOT BE CONNECTED DIRECTLY INTO MANHOLES. AN EXCEPTION TO THIS RULE MAY BE MADE FOR COMMERCIAL OR INDUSTRIAL USERS AT THE DECISION OF THE CITY. DOMESTIC LATERAL CONNECTIONS SHALL BE MADE A MINIMUM TWO FEET AWAY FROM MANHOLE AND NOT INTO JOINT OF MAIN.
- 17. THE APPLICANT/OWNER IS AWARE AND AGREES THAT THE REVIEW BY THE CITY AND CITY ENGINEER IS BASED UPON THE BEST INFORMATION AVAILABLE AND IN NO WAY DOES IT GUARANTEE THE EXISTENCE OF, OR NON EXISTENCE OF SANITARY SEWER AND FORCE MAINS. AND/OR APPURTENANCES. IT IS THE RESPONSIBILITY OF THE APPLICANT/OWNER TO VERIFY THE LOCATION OF SUCH MAINS/APPURTENANCES.
- 18. THE CONNECTION TO THE EXISTING CITY MANHOLE MUST BE MADE WITH A CORING MACHINE
- AND WITNESSED BY THE CITY ENGINEER. 19. AN A-LOCK SEAL SHOULD BE USED AT THE PIPE PENETRATION. ONLY IN THE CASE THAT AN
- A-LOCK IS NOT POSSIBLE, THE ANNULAR SPACE SHOULD BE FILLED WITH NON-SHRINK GROUT. 20. WHEN POSSIBLE THE NEW BENCH CHANNEL SHOULD BE MADE WITH THE CORING MACHINE; OTHERWISE, THE BENCH CHANNEL SHOULD BE CAREFULLY SAWCUT OR HILTI CUT TO
- ACCOMMODATE THE NEW SEWER CONNECTION. 21. CHANNEL RECONSTRUCTION CEMENT SHALL BE SPEED-CRETE AS MANUFACTURED BY TAMMS. INC, FORMED PORTLAND CEMENT CONCRETE OF 4,000 PSI COMPRESSION STRENGTH. ANY
- SUBSTITUTES MUST BE APPROVED BY THE CITY. 22. MANHOLE INTERIOR WALLS AND BENCHES SHALL BE PATCHED WITH CEMENTITIOUS PATCHING/PLUGGING COMPOUNDS AS MANUFACTURED BY TAMMS INC, OR APPROVED EQUAL.
- 23. A PIPE JOINT SHOULD BE PROVIDED WITHIN FOUR FEET OF THE MANHOLE CONNECTION TO ALLOW FOR DIFFERENTIAL SETTLEMENT. 24. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGES TO THE MANHOLE, THE SEWER OR
- THE ADJACENT PROPERTY DUE TO CONNECTION CONSTRUCTION. 25. THE CITY ENGINEER MUST BE GIVEN 48 HOURS ADVANCE NOTICE OF SANITARY SEWER MAIN WORK AND A CITY ENGINEER REPRESENTATIVE MUST BE PRESENT TO WITNESS THE
- 26. A WATER CAPACITY FEE SHALL BE ASSESSED (BASED ON DIAMETER OF WATER SERVICE) FOR ANY CONNECTION TO A CITY OWNED WATER MAIN. APPLICANT IS RESPONSIBLE FOR CONFIRMING

UTILITY OWNER(S) PRIOR TO COMMENCEMENT OF WORK ON SAID UTILITY.

ELECTRICAL SPECIFICATIONS:

- 1. DEFINITION: UNLESS OTHERWISE NOTED. ALL WORK SPECIFIED HEREIN OR NOTED ON ELECTRICAL DRAWINGS, SHALL BE BY THE ELECTRICAL CONTRACTOR. ALL REFERENCES TO "CONTRACTOR" OR "THIS CONTRACTOR" ON ELECTRICAL DRAWINGS ARE ADDRESSED TO THE ELECTRICAL CONTRACTOR. THE TERM "PROVIDE" WHENEVER ENCOUNTERED ON DRAWINGS OR IN THESE SPECIFICATIONS, SHALL MEAN "FURNISH AND INSTALL."
- 2. EXAMINATION OF DRAWINGS: CONTRACTOR SHALL COORDINATE HIS WORK WITH THE DRAWINGS OF ALL OTHER TRADES FOR EXACT DIMENSIONS, CLEARANCES AND ROUGHING-IN LOCATIONS. CONTRACTOR SHALL COOPERATE WITH ALL OTHER TRADES IN ORDER TO MAKE MINOR FIELD ADJUSTMENTS TO ACCOMMODATE THE WORK OF OTHERS.
- 3. EXAMINATION OF PREMISES: BEFORE SUBMITTING HIS BID, CONTRACTOR SHALL VISIT THE SITE AND EXAMINE ALL CONDITIONS ON WHICH HIS WORK IS IN ANY WAY DEPENDENT FOR THE BEST WORKMANSHIP AND OPERATION ACCORDING TO THE INTENT OF SPECIFICATIONS AND DRAWINGS. HE SHALL REPORT TO THE ENGINEER ANY CONDITION WHICH MIGHT PREVENT HIM FROM INSTALLING HIS EQUIPMENT IN THE MANNER INTENDED.
- 4. CODES AND STANDARDS: ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE, ALL APPLICABLE CODES, SPECIFICATIONS, LOCAL ORDINANCES. INDUSTRY STANDARDS, UTILITY COMPANY REGULATIONS AND FIRE INSURANCE CARRIER'S
- 5. FEES AND PERMITS: THE ELECTRICAL CONTRACTOR SHALL PAY FOR AND OBTAIN ALL PERMITS, CERTIFICATES, INSPECTION FEES, AND INSTALLATION FEES AS REQUIRED.
- 6. PROTECTION OF PERSONS AND PROPERTY: THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH HIS WORK.
- 7. SCOPE OF WORK: CONSISTS OF PROVIDING COMPLETE ELECTRICAL SYSTEMS AS SHOWN ON DRAWINGS AND SPECIFIED HEREIN. CONTRACTOR SHALL PROVIDE ALL SUPERVISION, LABOR, MATERIALS, EQUIPMENT, MACHINERY, AND ANY AND ALL OTHER ITEMS NECESSARY TO COMPLETE THE SYSTEMS. SCOPE, IN GENERAL, SHALL CONSIST OF, BUT NOT BE LIMITED TO THE FOLLOWING:
- A. PROVIDE POLE MOUNTED LIGHTING FIXTURES. B. PROVIDE NEW JUNCTION BOXES.
- 8. SHOP DRAWINGS: THIS CONTRACTOR SHALL FURNISH THE ENGINEER TWO SETS OF COMPLETE SHOP DRAWINGS, CATALOG CUTS, WIRING DIAGRAMS AND ASSOCIATED DATA, FOR ALL MAJOR ELEMENTS OF THE ELECTRICAL WORK FOR REVIEW, CHECKING AND APPROVAL, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
- A. POLE MOUNTED LIGHT FIXTURES MANHOLE STRUCTURES AS REQUIRED BY PSE&G SPECIFICATIONS **PVC CONDUIT**
- 9. MATERIALS: ALL MATERIALS FURNISHED BY THIS CONTRACTOR, SHALL BE NEW AND BEAR THE LABEL OR LISTING OF A NATIONALLY RECOGNIZED INDEPENDENT TESTING LABORATORY.
- 10. EXISTING SERVICES: EXISTING SERVICES SHALL BE MAINTAINED AND NO INTERRUPTIONS SHALL BE CAUSED. DAY OR NIGHT WITHOUT THE OWNER'S CONSENT. CONTRACTOR SHALL NOTE THAT OPERATIONS MUST CONTINUE DURING THE LIFE OF THIS CONTRACT AND ALL NECESSARY TEMPORARY CONNECTIONS REQUIRED TO ALLOW SUCH OPERATION SHALL BE INCLUDED. ANY REQUIRED INTERRUPTION IN POWER SHALL BE SCHEDULED WITH THE OWNER IN WRITING A MINIMUM OF 7 DAYS IN ADVANCE. NO INTERRUPTION IN POWER SHALL BE CAUSED WITHOUT THE OWNER'S WRITTEN CONSENT.
- 11. GROUNDING: SHALL BE IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE ARTICLE 250. PROVIDE GROUND WIRES AS REQUIRED AND RESIZE CONDUIT IF NECESSARY.
- 12. AS-BUILT DRAWINGS: CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF ALL DEVIATIONS IN WORK AS ACTUALLY INSTALLED FROM WORK INDICATED ON THE DRAWINGS. UPON COMPLETION OF THE PROJECT, TWO (2) COMPLETE SETS OF MARKED-UP PRINTS SHALL BE
- 13. GUARANTEE: CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP TO BE FREE FROM DEFECTS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE BY THE OWNER. CONTRACTOR SHALL MAKE GOOD AT NO EXPENSE TO THE OWNER, ANY DEFECTS DUE TO FAULTY MATERIALS OR WORKMANSHIP, AND SHALL RESTORE ANY DISTURBED ADJACENT WORK TO ITS ORIGINAL CONDITION IN THE PERFORMANCE OF THE GUARANTEE.
- 14. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE GENERAL ARRANGEMENT OF THE VARIOUS SYSTEMS AND APPROXIMATE LOCATIONS OF THE EQUIPMENT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THAT THERE IS ADEQUATE SPACE AT THE LOCATIONS INDICATED FOR ALL EQUIPMENT PRIOR TO INSTALLATION OF SAME. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL DIMENSIONS IN THE FIELD, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. LIGHTING NOTES:
- 1. POLES AND LUMINAIRES SHALL HAVE FACTORY APPLIED FINISH; COMPONENTS SHALL BE SHIPPED WITH PROTECTIVE WRAPPING.
- 2. PROVIDE ONE-QUART OF PAINT TO CLIENT FOR TOUCH-UP.
- 3. PERFORM ALL WORK IN ACCORDANCE WITH THE LATEST EDITION OF THe NATIONAL ELECTRICAL CODE, ALL REGULATIONS AND CODES OF ALL JURISDICTIONAL AUTHORITIES.
- 4. ALL EQUIPMENT SHALL BE LISTED BY UNDERWRITERS LABORATORIES INC. AND SHALL BEAR THE U.L. LABEL. PROVIDE ONLY NEW UNDAMAGED EQUIPMENT.
- THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF OTHER CONTRACTORS
- 6. THE ELECTRICAL PLANS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE GENERAL ARRANGEMENT OF THE VARIOUS SYSTEMS AND APPROXIMATE LOCATIONS OF THE EQUIPMENT. THE CONTRACTOR SHALL DETERMINE THAT THERE IS ADEQUATE SPACE AT THE LOCATIONS INDICATED FOR ALL EQUIPMENT PRIOR TO INSTALLATION OF SAME. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 7. CONTRACTOR SHALL INSTALL POLES AND ATTACH LUMINAIRES PER MANUFACTURER'S
- 8. CONTRACTOR SHALL TEST ELECTRIC SERVICE AND VERIFY THAT ALL CONNECTIONS WERE
- WIRING OF EXTERIOR BRANCH CIRCUITS SHALL BE TYPE XHHW. WIRING OF INTERIOR BRANCH CIRCUITS SHALL BE TYPE THHW/THHN. WIRES SHALL BE COPPER AND SHALL BE MIN. #12AWG, 600V, 75°C. ALL RACEWAYS ARE SHOWN DIAGRAMMATICALLY, EXACT LOCATION TO BE
- 10. ALL CONDUIT WHERE EXPOSED OUTSIDE SHALL BE RIGID GALVANIZED STEEL. ALL CONDUIT BELOW GRADE SHALL BE DIRECT BURIAL PVC CONDUIT WITH RGS ELBOWS AND STUB UPS. ENCASE CONDUIT IN CONCRETE AROUND UNDER ROADWAY.
- 11. ALL SPLICES AND CABLE TAPS SHALL BE RAYCHEM 3M DBR/Y-6 OR APPROVED EQUAL. 12. CONTRACTOR SHALL PROVIDE ALL PERMITS AND ARRANGE FOR ALL REQUIRED INSPECTIONS.
- 13. CONTRACTOR SHALL VERIFY ALL VOLTAGES.

LOCATIONS WITH OWNER AND ENGINEER.

- 14. ALL FIXTURES SHALL BE ORDERED WITH THE APPROPRIATE BALLASTS AND/OR DRIVERS THAT
- 15. IF ADDITIONAL JUNCTION BOXES ARE REQUIRED FOR PULL AND PER CODE, COORDINATE

AX MAP: SHEET 8, BLOCK 511, 512 & 514 - LOT ONING DISTRICT (ORDINANCE): PRI-PORT RELATED INDUSTRIAL ROJECT LOCATION: 2360 S. BROADWAY, CAMDEN, CAMDEN COUNTY, NJ

PROPOSED USE: 2 STORY OFFICE BUILDING (51,586 GFA) AND POLE BARN (2,065 SF)

[CITY ORDINANCE] [PRI - PORT RELATED INDUSTRIAL]						
CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE		
870-107-F	PERMITTED USES	OFFICES, OFFICE BUILDING AND OFFICE COMPLEX	OFFICE BUILDING	С		
870-107-D	PERMITTED USES	WHOLESALING OF GOODS AND SERVICES, INCLUDING WAREHOUSING OR STORAGE OF GOODS	POLE BARN	С		
				•		

		STURAGE OF GOODS						
AREA AND BULK REGULATIONS FOR ZONE PRI - PORT RELATED INDUSTRIAL [CITY ORDINANCE]								
CODE REF	STANDARD	REQUIRED/PERMITTED	EXISTING	PROPOSED [BLOCK 514, LOT 3.01]	CONFORMAN			
870-111	MIN. LOT AREA	40,000 SF	1,304 SF [BLOCK 512, LOT 34]	326,349 SF	С			
870-111	MIN. LOT WIDTH	200 FT	81.50 FT [BLOCK 512, LOT 54]	899.4 FT	С			
870-111	MAX. BUILDING COVERAGE	90%	NA	8.7% [28,250SF]	С			
870-111	MAX. LOT IMPERVIOUS COVERAGE	100%	35.6% [44,332 SF] [LOT 4.12, BLOCK 515]	52.0% [169,800 SF]	С			
870-111	MIN. FRONT YARD SETBACK	25 FT	NA	169.1 FT [31.61 FT POLE BARN]	С			
870-111	MIN. SIDE YARD	20 FT	NA	229.7 FT	С			
870-111	MIN. REAR YARD	30 FT	NA	110.5 FT	С			
870-111	MAX. BUILDING HT.	5-STORIES OR 75 FT	NA	2 STORIES [31.25 FT]	С			

PARKING MINIMUM REQUIREMENTS [CITY ORDINANCE]						
CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE		
870-230 [F]	MIN. PARKING SPACES [OFFICE] 1 SPACE EVERY 300 SF OF GROSS FLOOR AREA	172 SPACES [51,586 GFA]	182 SPACES	С		
870-231 [C]	MIN. LOADING SPACE [>10,000 SF FLOOR AREA]	1 SPACE	NA	NC		
ADA	MIN. HANDICAPPED PARKING SPACES [76 TO 100 SPACES]	4 SPACES	9 SPACES	С		

CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE			
870-230 [Z]	MIN. BICYCLE SPACES [10% OF FIRST 100 SPACES, PLUS 2% OF ANY THEREAFTER]	13 SPACES	14 SPACES	С			
870-230 [AA]	MIN. SIDEWALK WIDTH ADJACENT TO PARKING LOTS	6 FT	6 FT	С			
PARKING AND LOADING DESIGN STANDARDS [CITY ORDINANCE]							
CODE DEE	OTANDADD	DECUIDED/DEDMITTED		0011505441105			

CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE
870-231 [B.1.A]	MIN. STANDARD CAR SPACE DIMENSIONS [90°]	9 FT X 18 FT	9 FT X 18 FT	С
870-231 [B.1.A]	MIN. STANDARD AISLE WIDTH [90°; 2-WAY]	24 FT	24 FT	С
870-231 [C.2]	MIN. OFF STREET LOADING BERTH	12 FT WIDE, 50 FT LONG AND 14 FT HIGH	NA	NA
870-231 [C.2]	MIN. OFF STREET PARKING AND LOADING AREA SETBACK FROM RIGHT-OF-WAY	5 FT	19.5 FT	С

VEHICULAR CIRCULATION [CITY ORDINANCE]						
CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE		
870-235 [A.6]	MIN. DRIVEWAY SETBACK FROM AN INTERSECTION	50 FT	376.5 FT	С		
870-235 [A.7]	MIN. DRIVEWAY SETBACK FROM ANY SIDE YARD	10 FT	10.5 FT	С		
870-235 [A.8]	MIN. DRIVEWAY DISTANCE TO CROSSWALK	25 FT	342.9 FT	С		

SIDEWALK AND PATHWAYS [CITY ORDINANCE]							
CODE REF STANDARD REQUIRED/PERMITTED PROPOSED CONFOR					RMANCE		
870-241 [C]	MIN. SIDEWALK WIDTH	5 FT	5 FT		С		
	LI	GHTING [CITY ORDINANCE]					
CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE			
870-243	MIN. LEVEL OF LIGHTING				1		

DE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE
70-243 \.15.a.]	MIN. LEVEL OF LIGHTING ALONG WALKWAY NOT PART OF A PARKING LOT	0.5 FC	0.8 FC	С
70-243 \.15.a.]	MAX. LEVEL OF LIGHTING ALONG WALKWAY NOT PART OF A PARKING LOT	1.0 FC	6.2 FC	NC
70-243 A.15.b]	MIN. FIXTURE HT. FOR WALKWAY	25 FT	30 FT	NC
70-243 [C.3]	MAX. FIXTURE HT. ABOVE GRADE	25 FT	30 FT	NC
70-243 [D.2]	MIN. LEVEL OF LIGHTING PARKING LOT	0.25 FC	1.2 FC	С
70-243 [D.2]	AVG. LEVEL OF LIGHTING PARKING LOT	0.5 FC TO 2.0 FC	2.2	NC
70-243 [D.2]	MAX. LEVEL OF LIGHTING PARKING LOT	3.0 FC 5.0 FC [DIRECTLY UNDER FIXTURE]	2.9	С
70-243 [D.3]	MIN. LEVEL OF LIGHTING AT ANY INGRESS OR EGRESS PORTION OF PARKING LOT	1.0 FC	2.1	С

	LANDSCAPING AND BUFFERING [CITY ORDINANCE]					
CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE		
870-244 (A.3.F)	MIN. BUFFER WIDTH [SIDE YARD & REAR YARD ADJACENT TO RESIDENTIAL ZONE]	5 FT	NA	NA		
870-244 (C.6)	FOUNDATION PLANTINGS REQUIRED ALONG ALL BUILDING ELEVATIONS	REQUIRED	PROVIDED	С		
577-244 (F.3)	MINIMUM NUMBER OF TREES	39	22	NC		
870-244 (D.2.A)	MAX. STREET TREE SPACING O.C.	40 FT	40 FT	С		
SOLID WASTE AND RECYCLING [CITY ORDINANCE]						
CODE REF	STANDARD	REQUIRED/PERMITTED	PROPOSED	CONFORMANCE		
870-255	RECYCLING AND REFUSE			_		

|--|

CODE REF	STANDARD	REQUIRED/PERMITTED	EXISTING	PROPOSED	CONFORMAN
870-253 [C-2]	FLASHING, BLINKING, TWINKLING, ROTATING, ANIMATION, MOVING SIGNS	NOT PERMITTED	NA	TBD	TBD
870-253 [P-11-a]	WALL SIGNS	MAX. ONE WALL SIGN FOR EACH PRINCIPAL BUILDING EXCEPT WHERE BUILDING ABUTS TWO OR MORE STREETS, ONE ADDITIONAL SIGN SHALL BE PERMITTED	NA	TBD	TBD
870-253 [P-11-b]	WALL SIGN AREA	GROSS WALL SIGN SURFACE AREA SHALL NOT EXCEED 3% OF BUILDING WALL OR 100 SF, WHICHEVER IS SMALLER	NA	TBD	TBD
870-253 [P-11-e]	WALL SIGN PROJECTION	WALL SIGN SHALL NOT PROJECT MORE THAN 18" FROM WALL FACE	NA	TBD	TBD
870-253 [P-11-f]	WALL SIGN HEIGHT	WALL SIGN SHALL NOT PROJECT HIGHER THAN PARAPET LINE OF WALL OR 20 FT. AS MEASURE FROM BASE OF BLDG. WHICHEVER IS LOWER	NA	TBD	TBD
870-253 [P-12-a]	FREESTANDING SIGNS	MAX. ONE FREESTANDING SIGN FOR EACH PRINCIPAL USE	NA	TBD	TBD
870-253 [P-12-b]	FREESTANDING SIGN AREA	GROSS AREA OF FREESTANDING SIGN SHALL NOT EXCEED 100 FT.	NA	TBD	TBD
870-253 [P-12-c]	FREESTANDING SIGN LOCATION	FREESTANDING SIGN CAN BE LOCATED WITHIN ANY YARD BUT SHALL NOT EXTEND OVER ANY LOT LINE OR WITHIN 15 FT. OF ANY POINT OF VEHICULAR ACCESS FROM A ZONING LOT TO A ROADWAY	NA	TBD	TBD
870-253 [P-12-d]	FREESTANDING SIGN HEIGHT	A FREESTANDING SIGN SHALL NOT PROJECT HIGHER THAN 20 FT. AS MEASURED FROM BASE OF SIGN	NA	TBD	TBD

FENCES AND WALLS [CITY ORDINANCE]							
CODE REF	STANDARD	REQUIRED/PERMITTED	EXISTING	PROPOSED	CONFORMANCE		
870-197 [A]	SOLID FENCE LOCATION	NO SOLID FENCE SHALL BE ERECTED FROM THE FRONT OF A BUILDING LINE FORWARD	NA	TRASH ENCLOSURE	NC		
870-197 [F]	FENCE HEIGHT	A FENCE NOT MORE THAN 6 FT. IN HEIGHT SHALL BE PERMITTED ALONG THE REAR LOT LINE AND ALONG THE SIDE LOT LINE TO THE FRONT BUILDING LINE. A FENCE NOT MORE 4 FT. TALL IS PERMITTED ALONG THE SIDE LOT LINE FROM FRONT BUILDING LINE TO THE FRONT LOT LINE AND ALONG THE FRONT LOT LINE	NA	6 FT ALONG ALL LOT LINES	NC		

C = CONFORMS NC = NON CONFORMING NA = NOT APPLICABLE TBD = TO BE DETERMINED

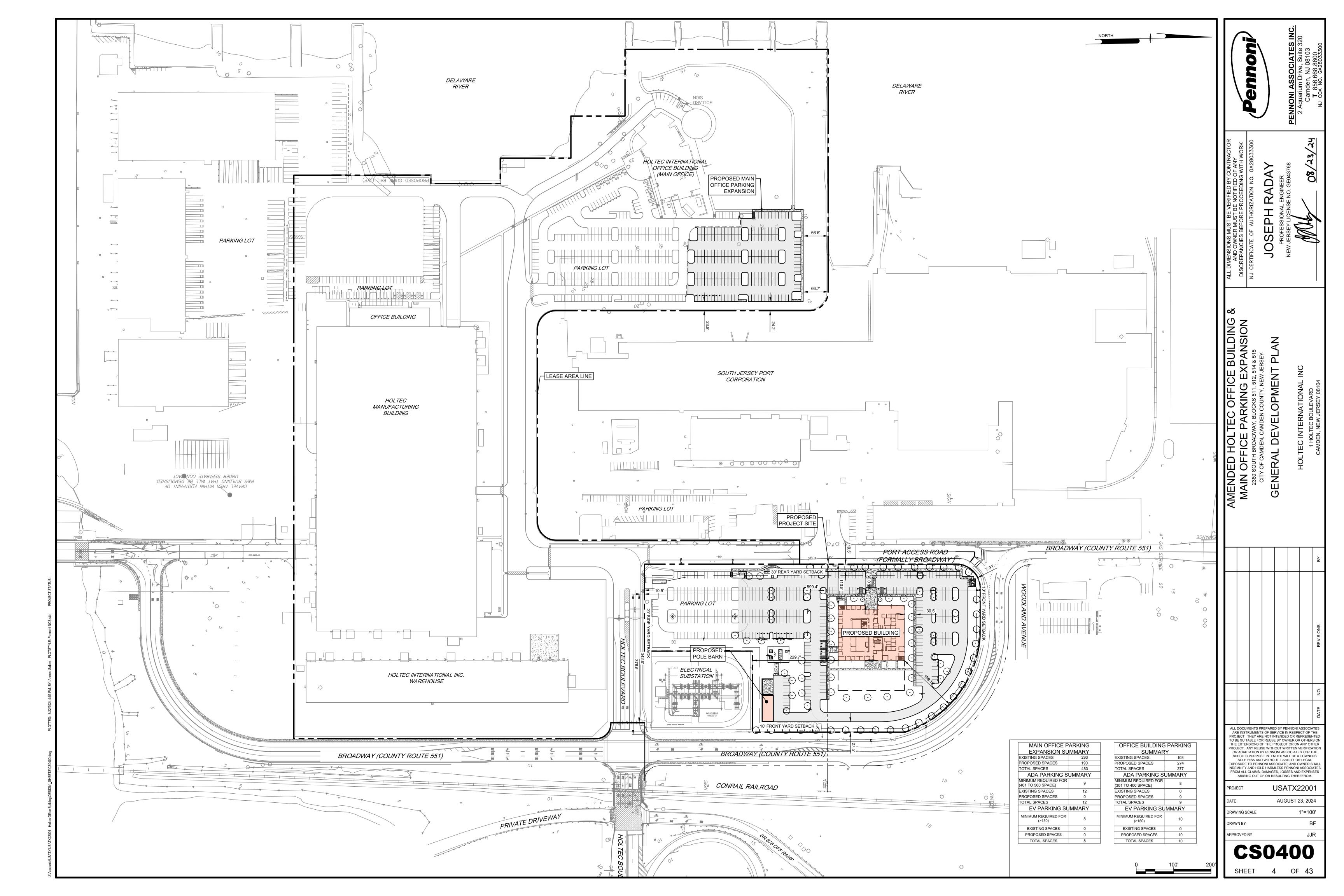
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE ROJECT. THEY ARE NOT INTENDED OR REPRESENT TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS (THE EXTENSIONS OF THE PROJECT OR ON ANY OTHE

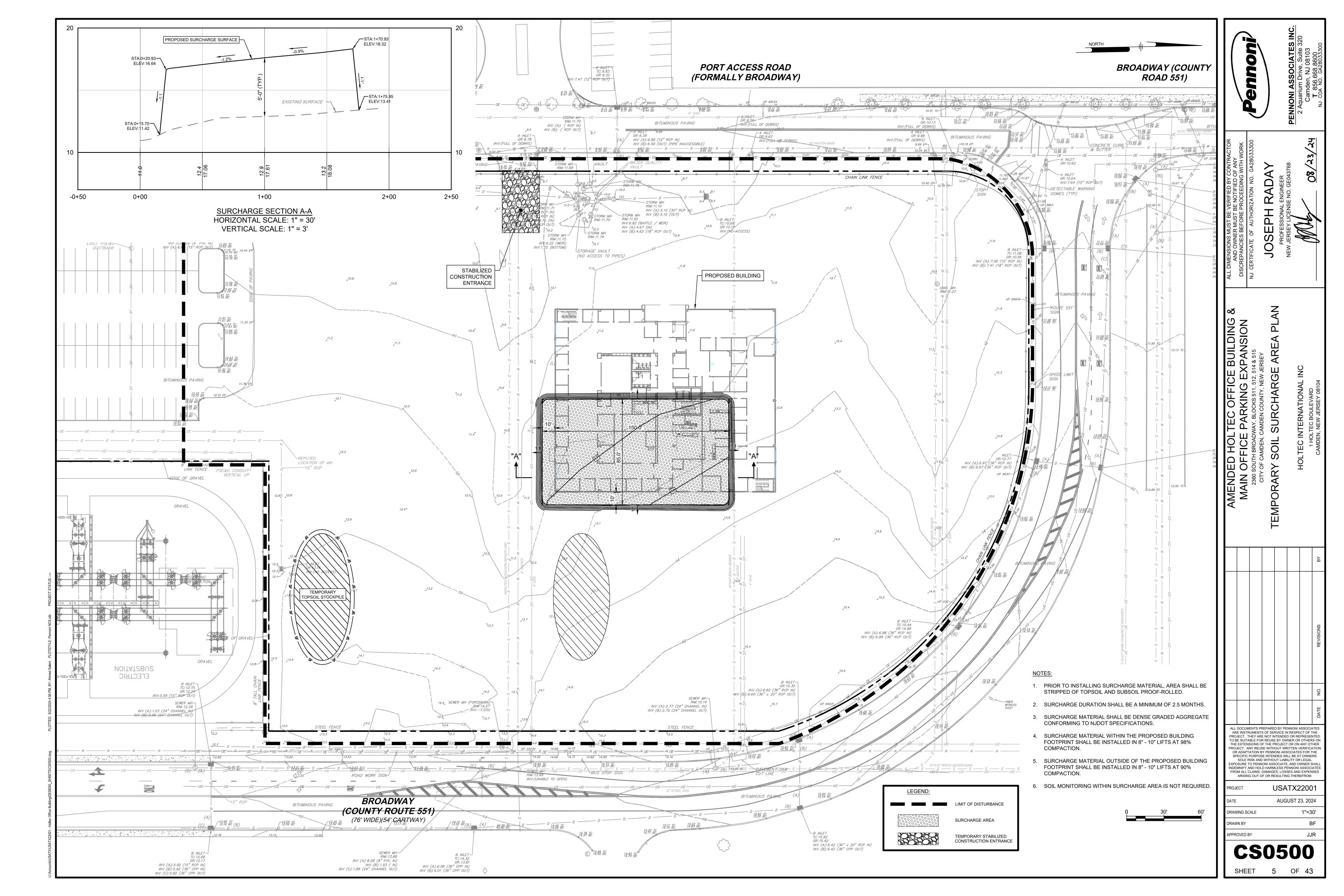
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL XPOSURE TO PENNONI ASSOCIATE; AND OWNER SHA IDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATI FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM. USATX22001 AUGUST 23, 2024

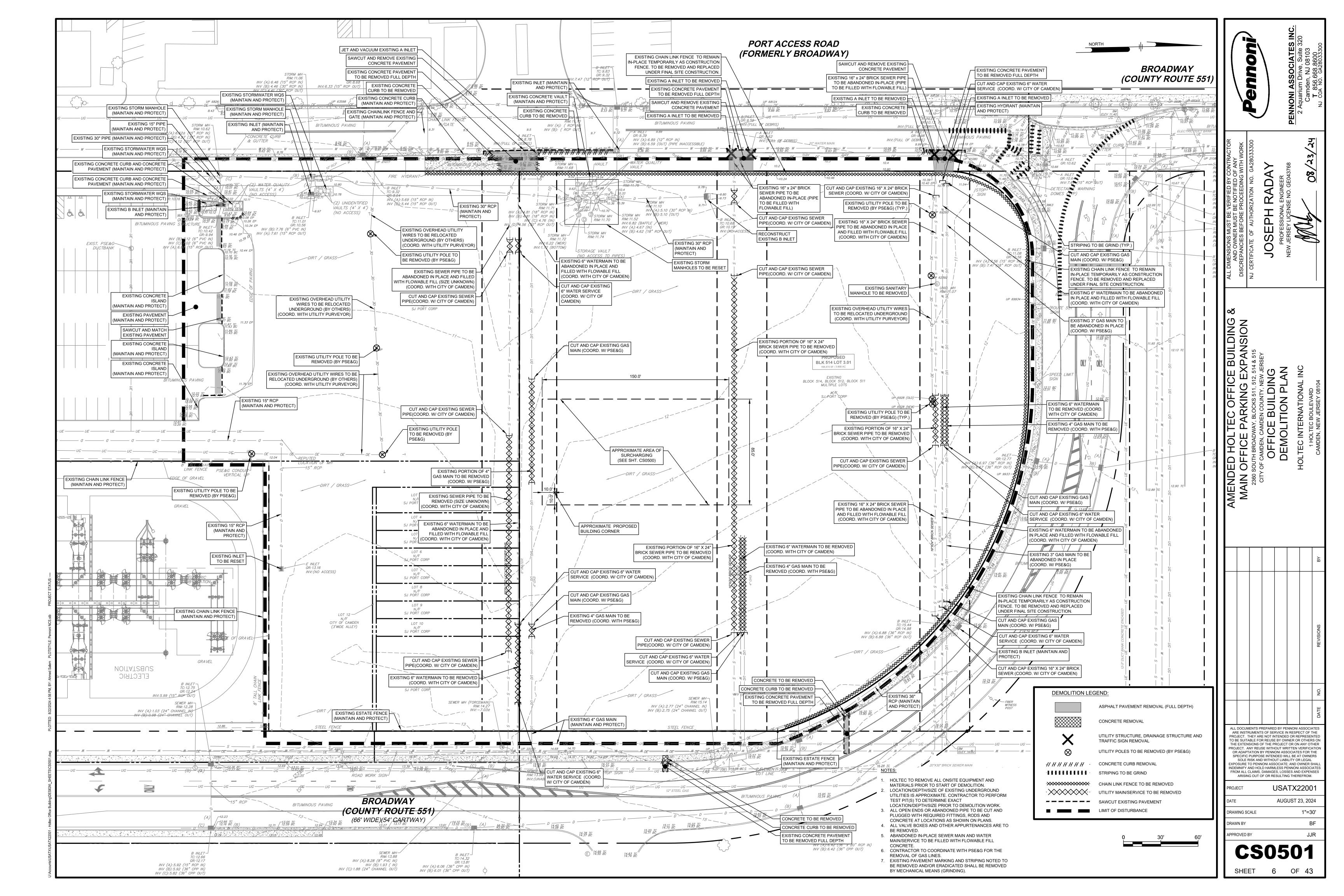
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION

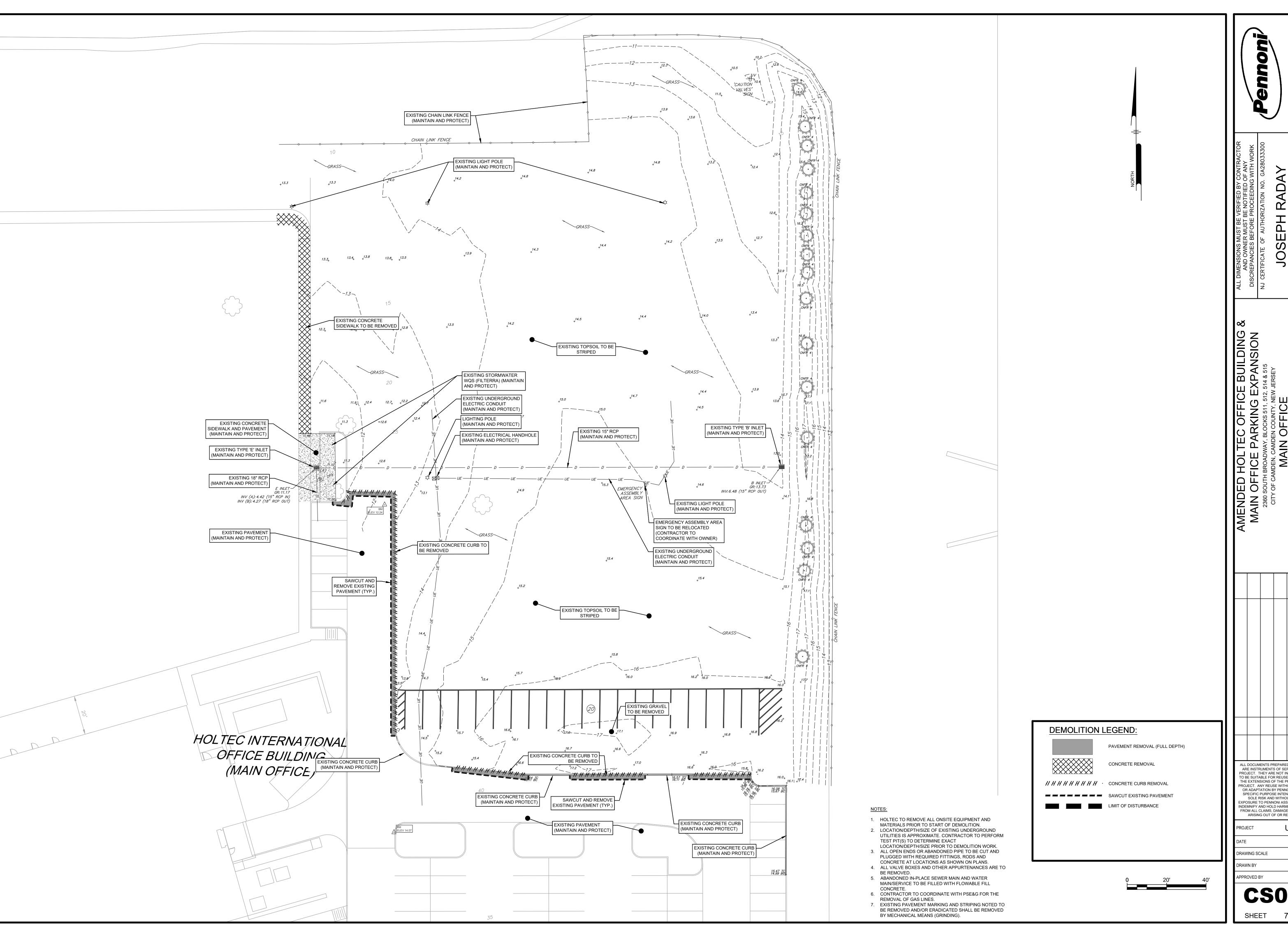
RAWING SCALE

DRAWN BY





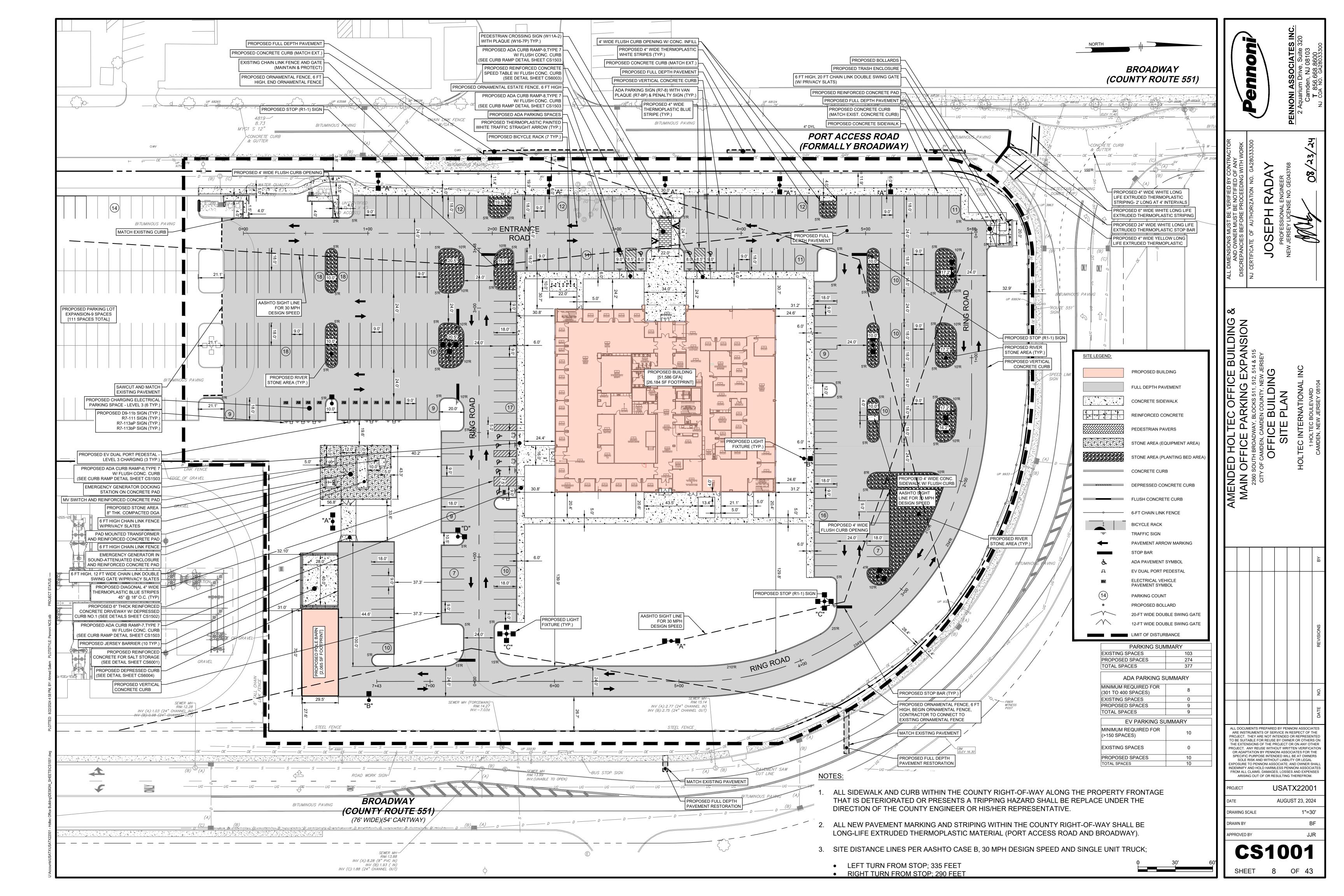


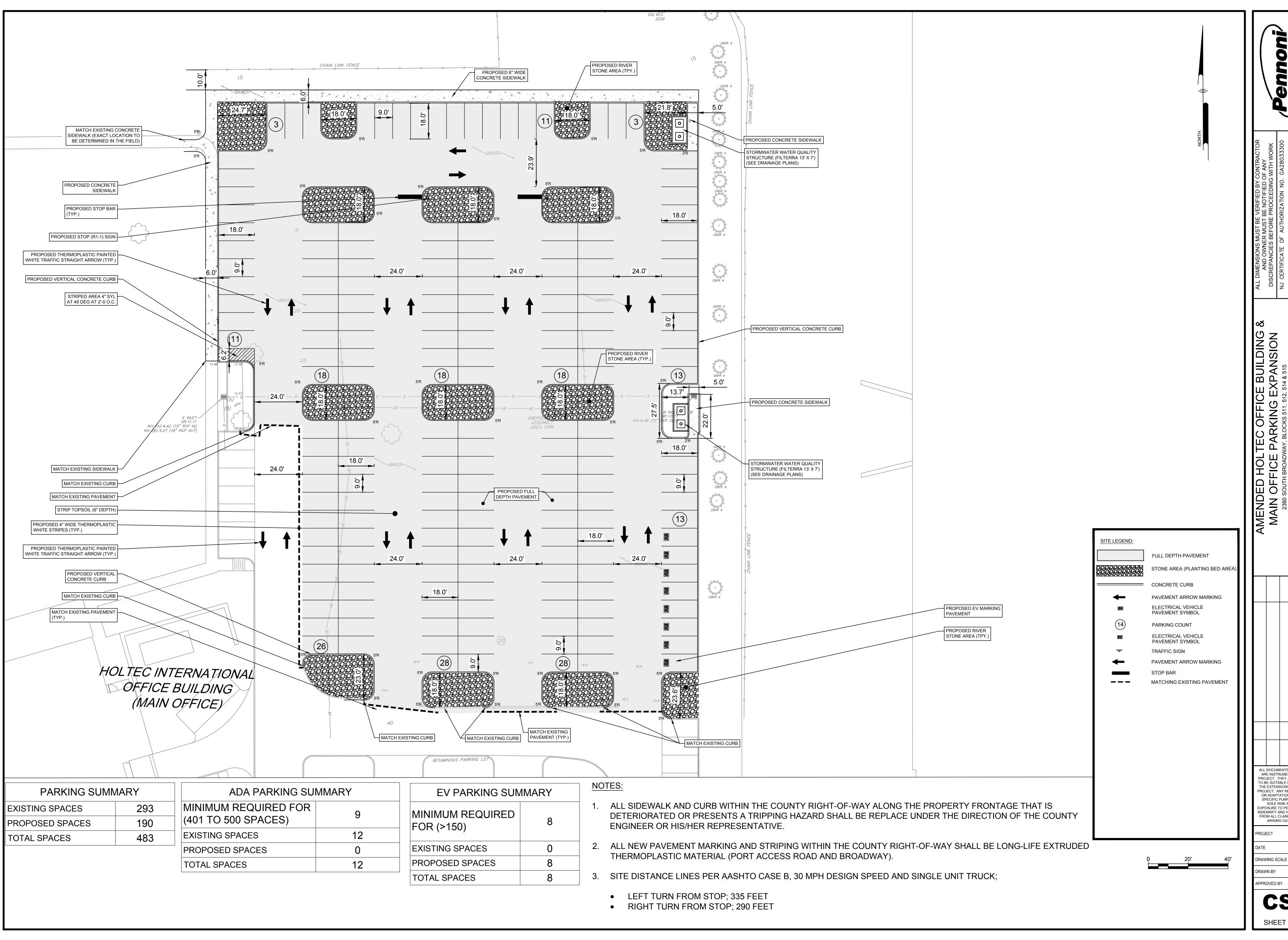


ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL XPOSURE TO PENNONI ASSOCIATE; AND OWNER SHA

INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM. USATX22001

AUGUST 23, 2024



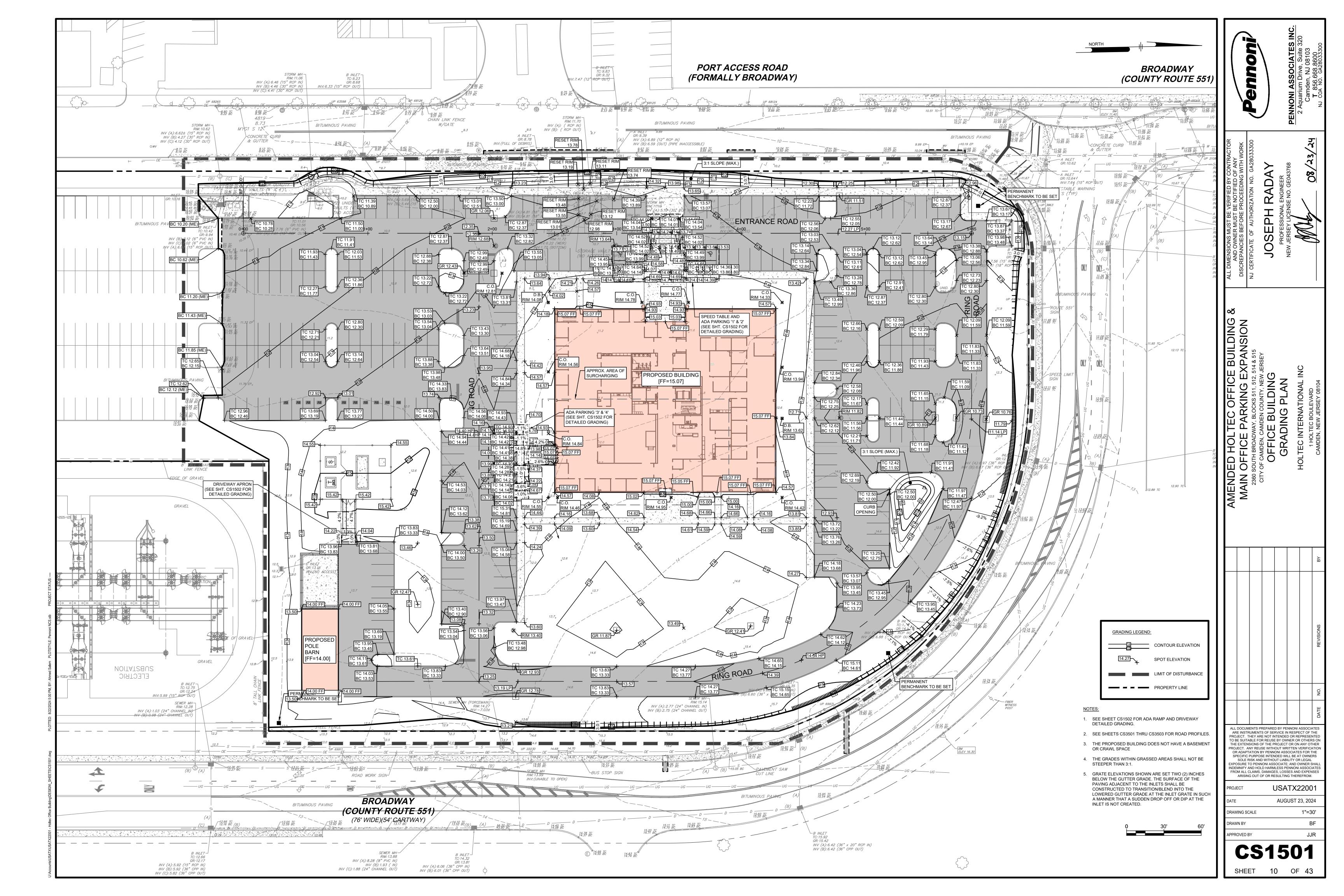


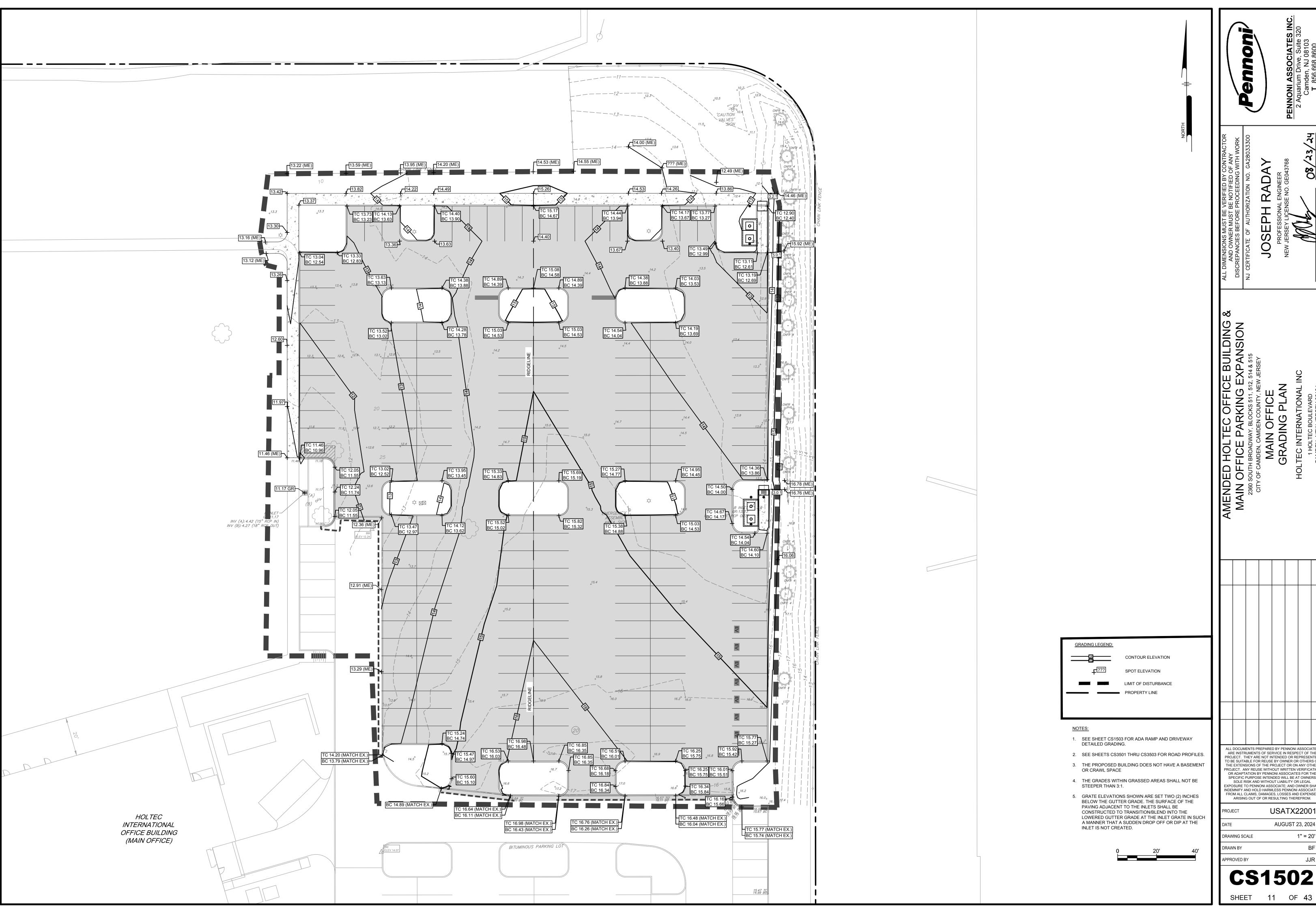
PH

ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTE TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL DEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATI

ARISING OUT OF OR RESULTING THEREFROM. USATX2200° AUGUST 23, 2024

CS1002

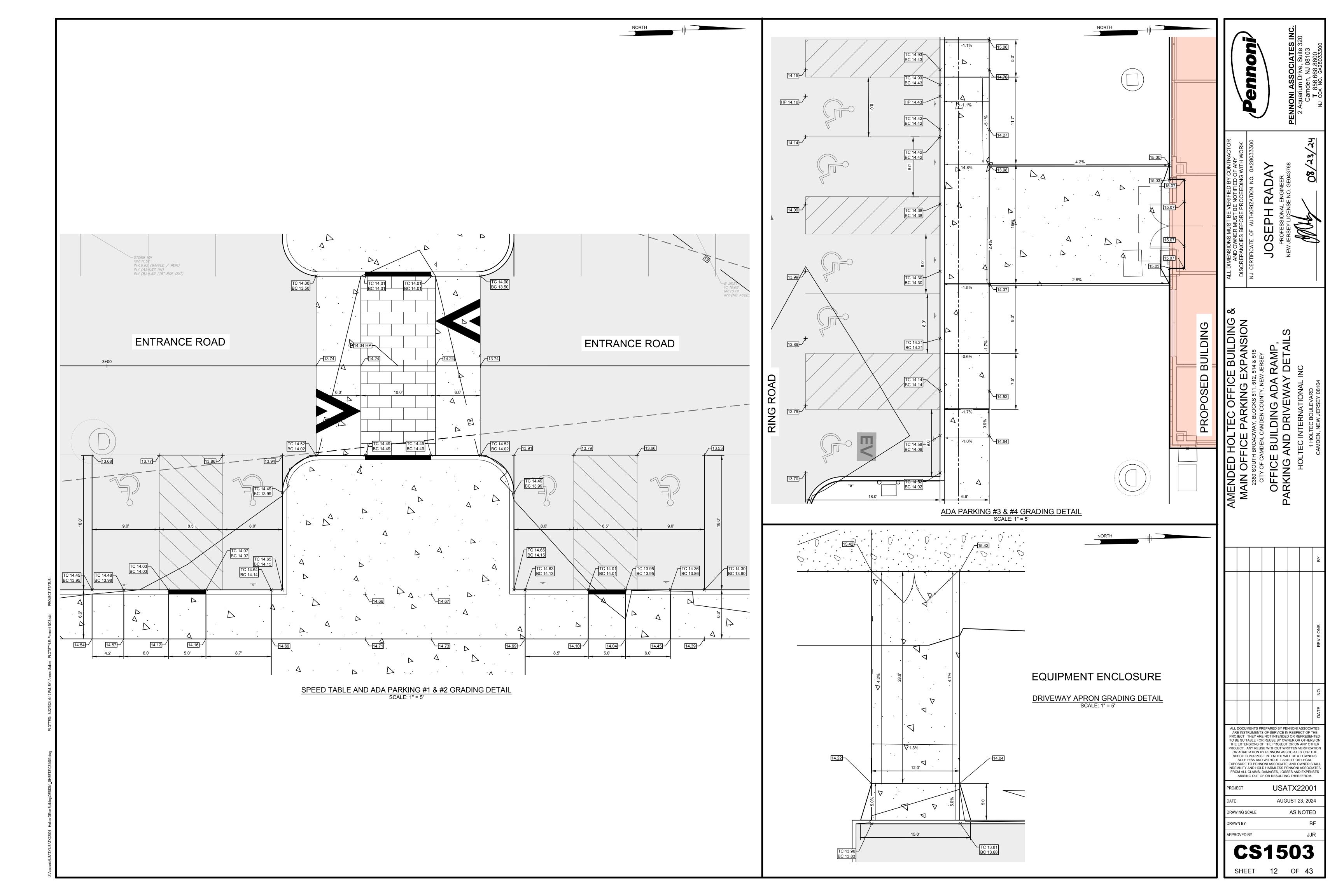


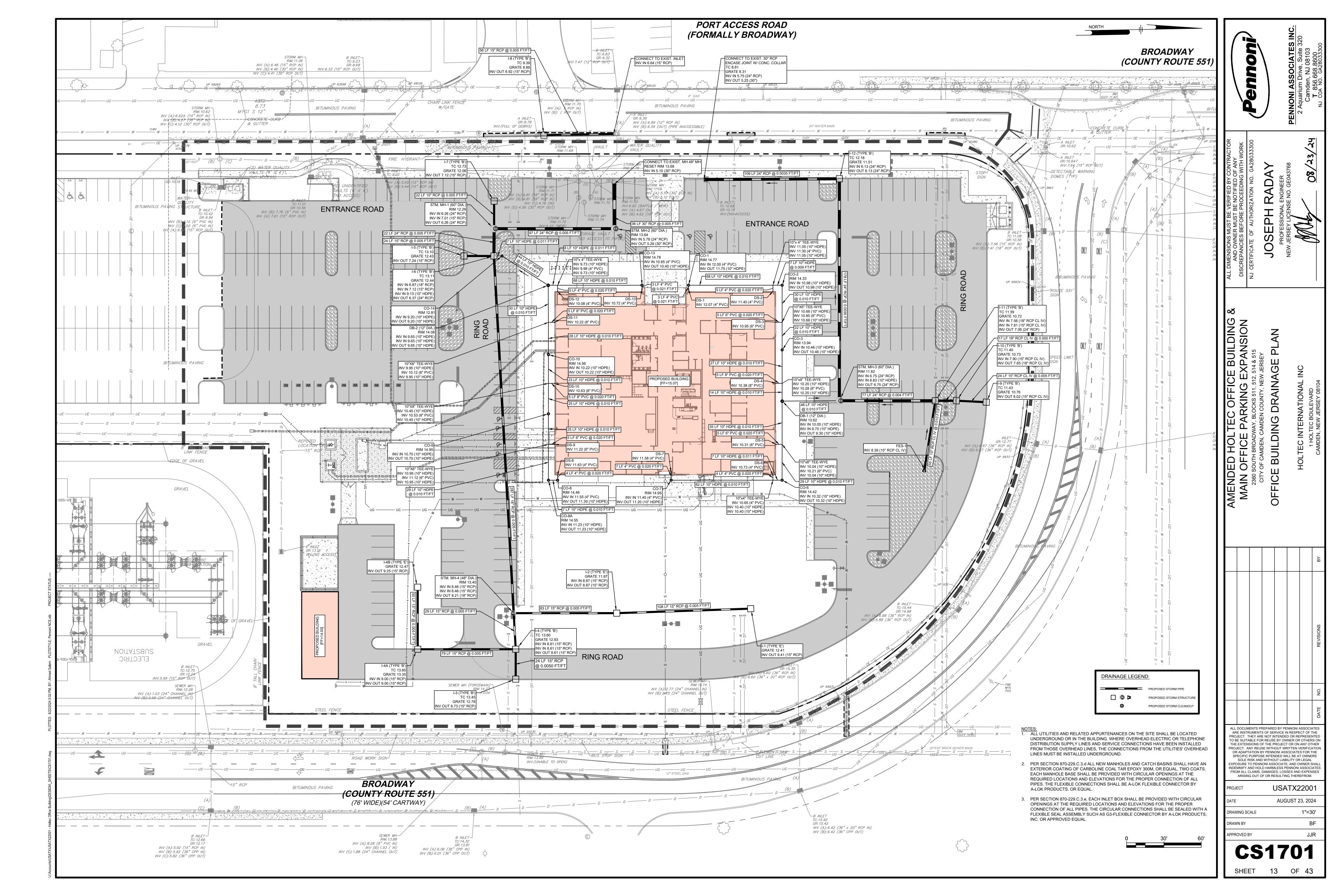


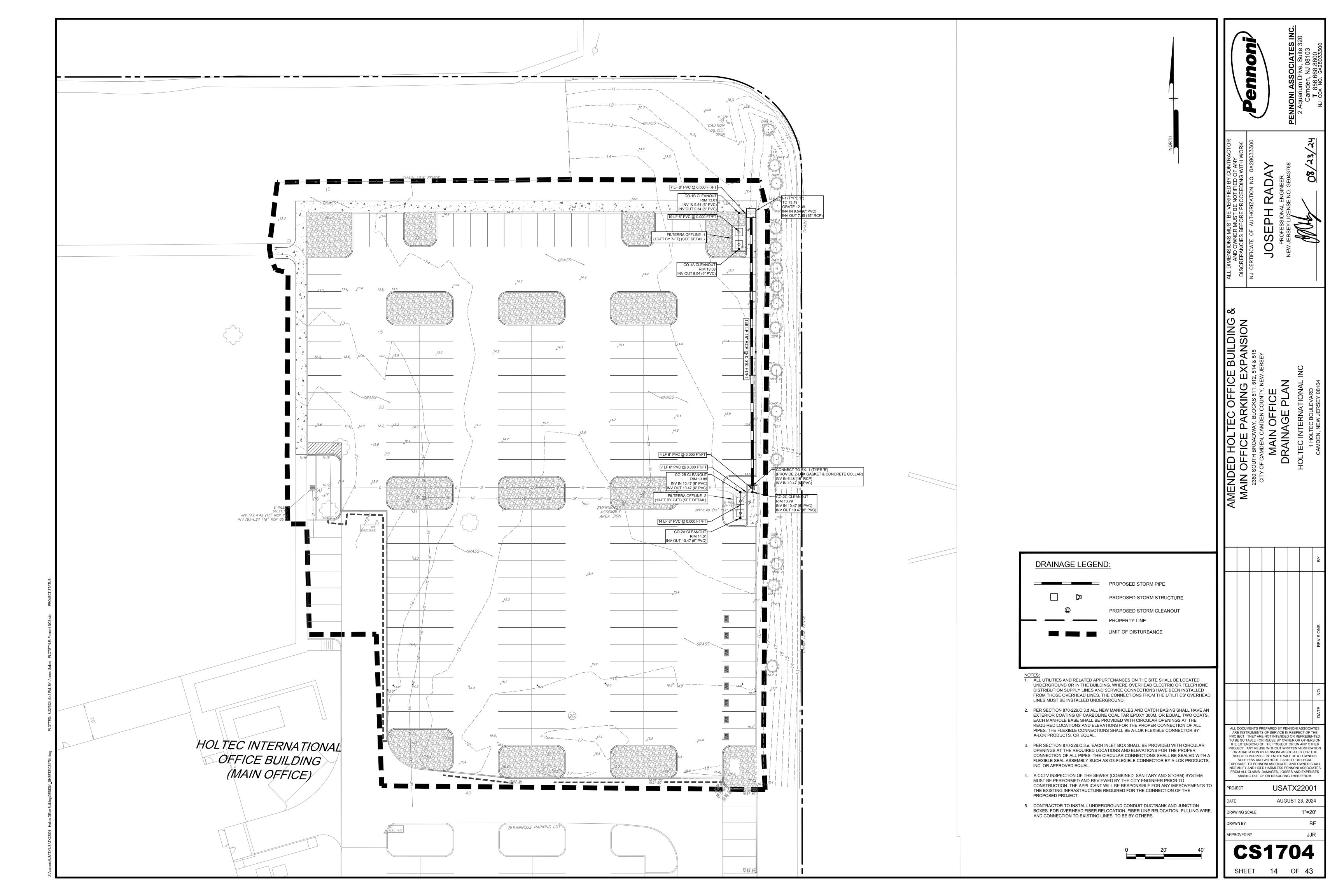
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED

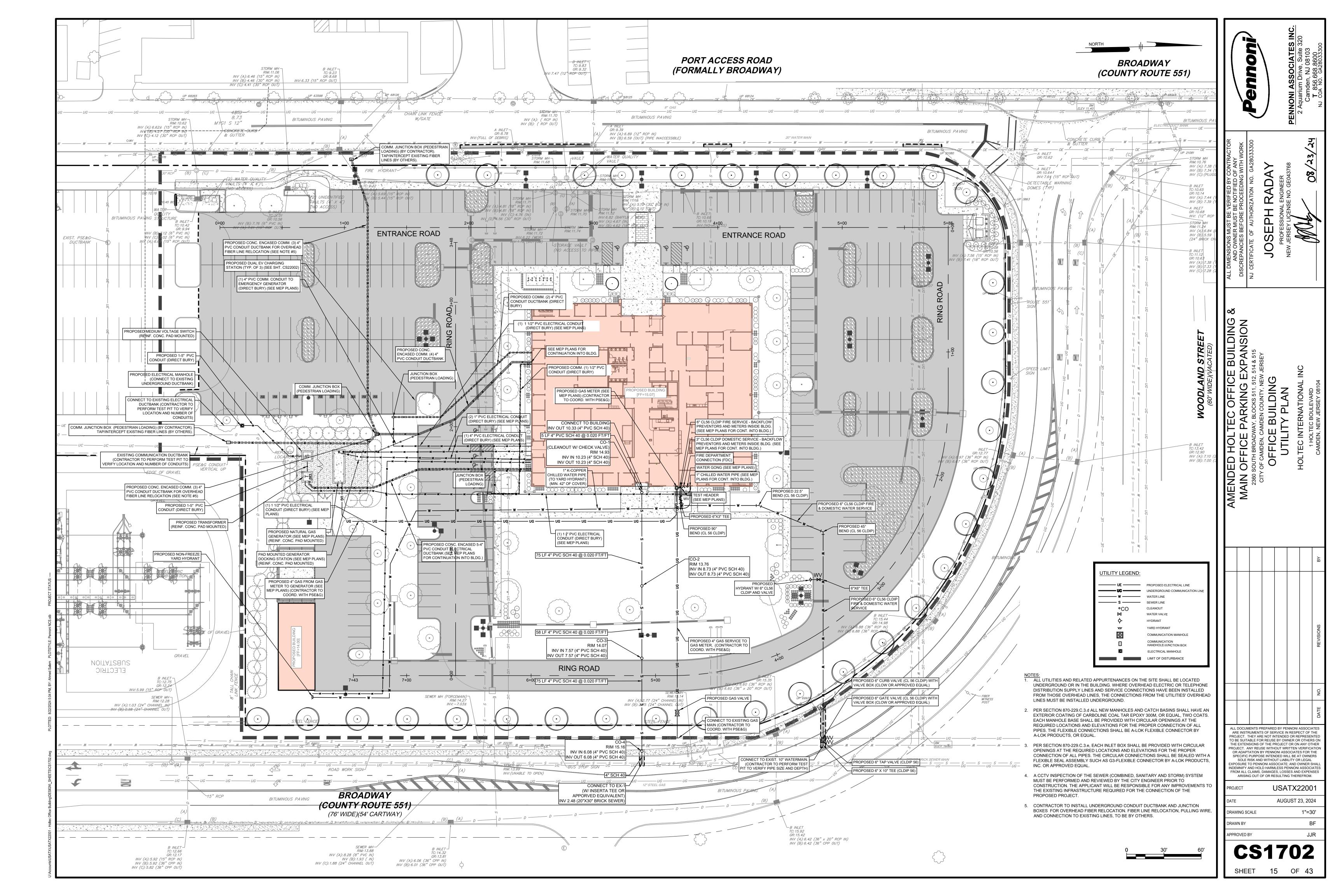
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATE; AND OWNER SHAL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

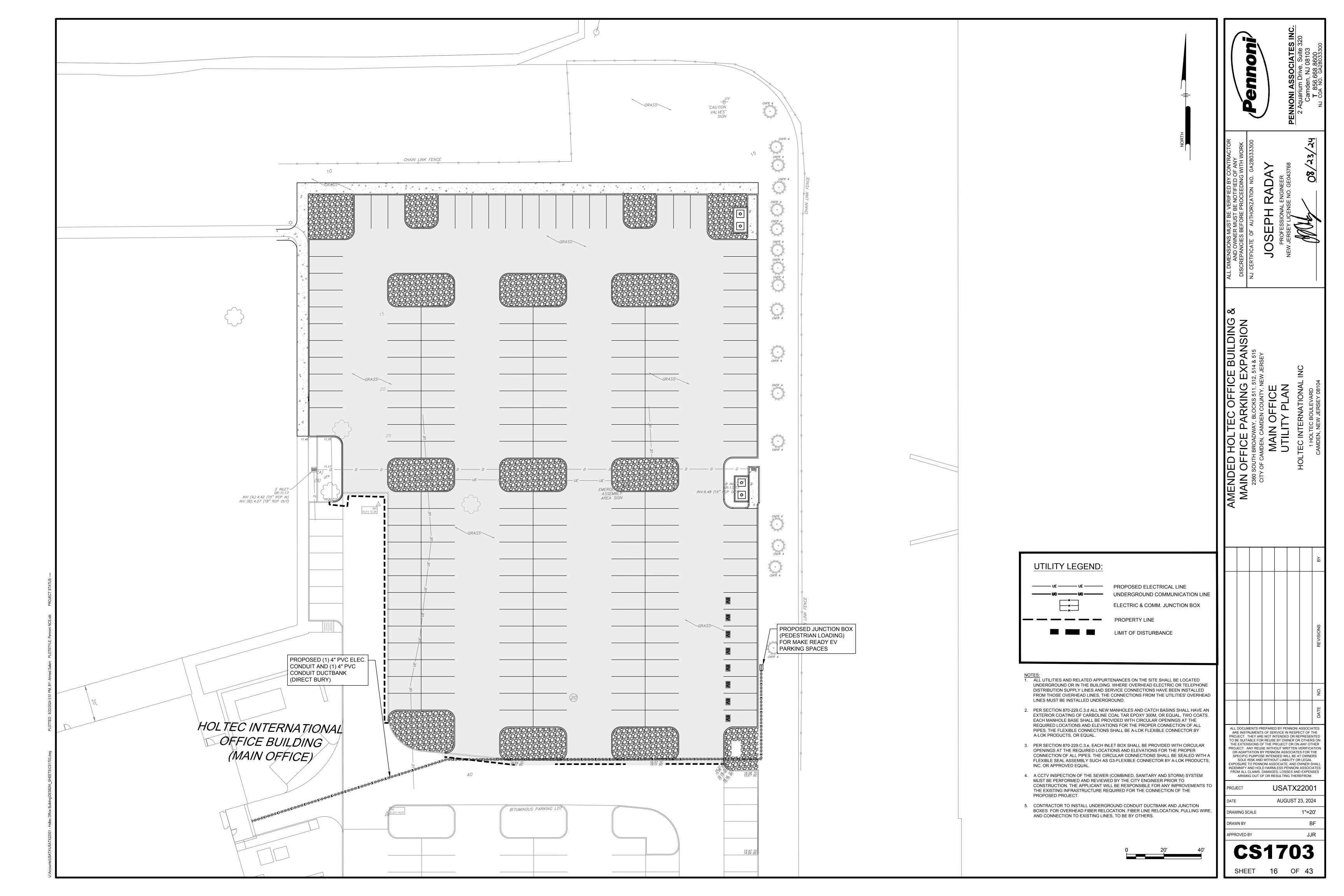
USATX22001 AUGUST 23, 2024 1" = 20'

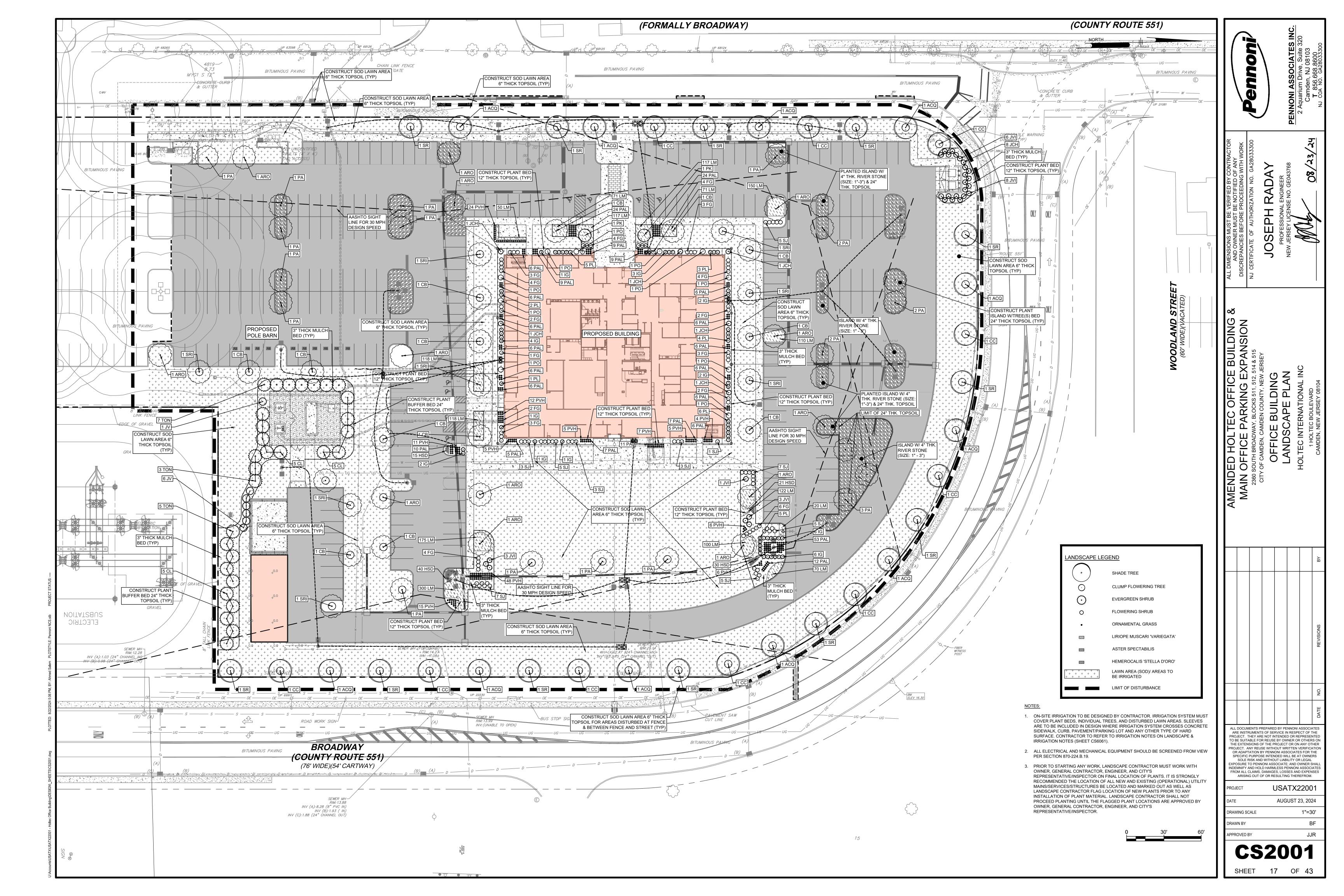


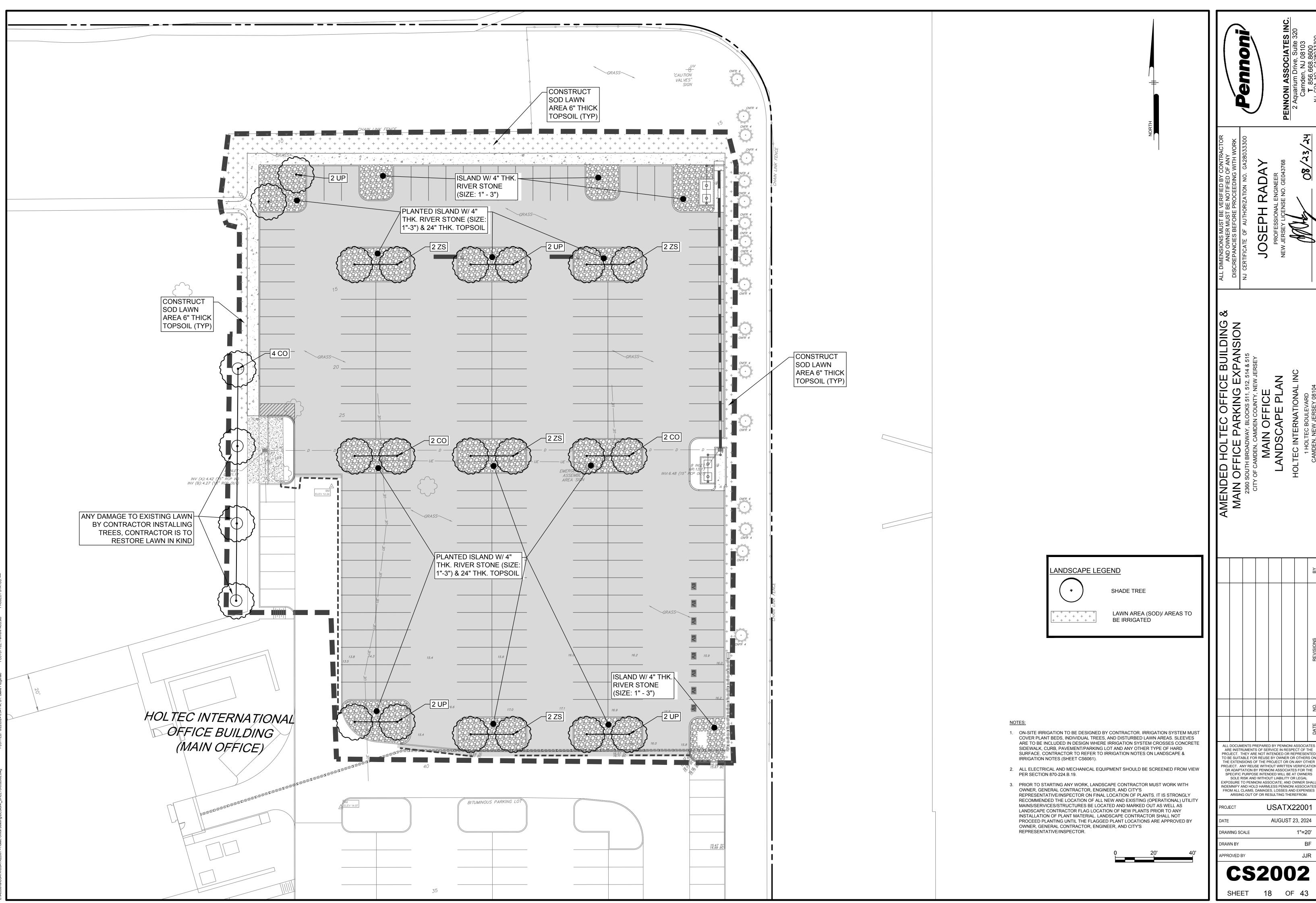






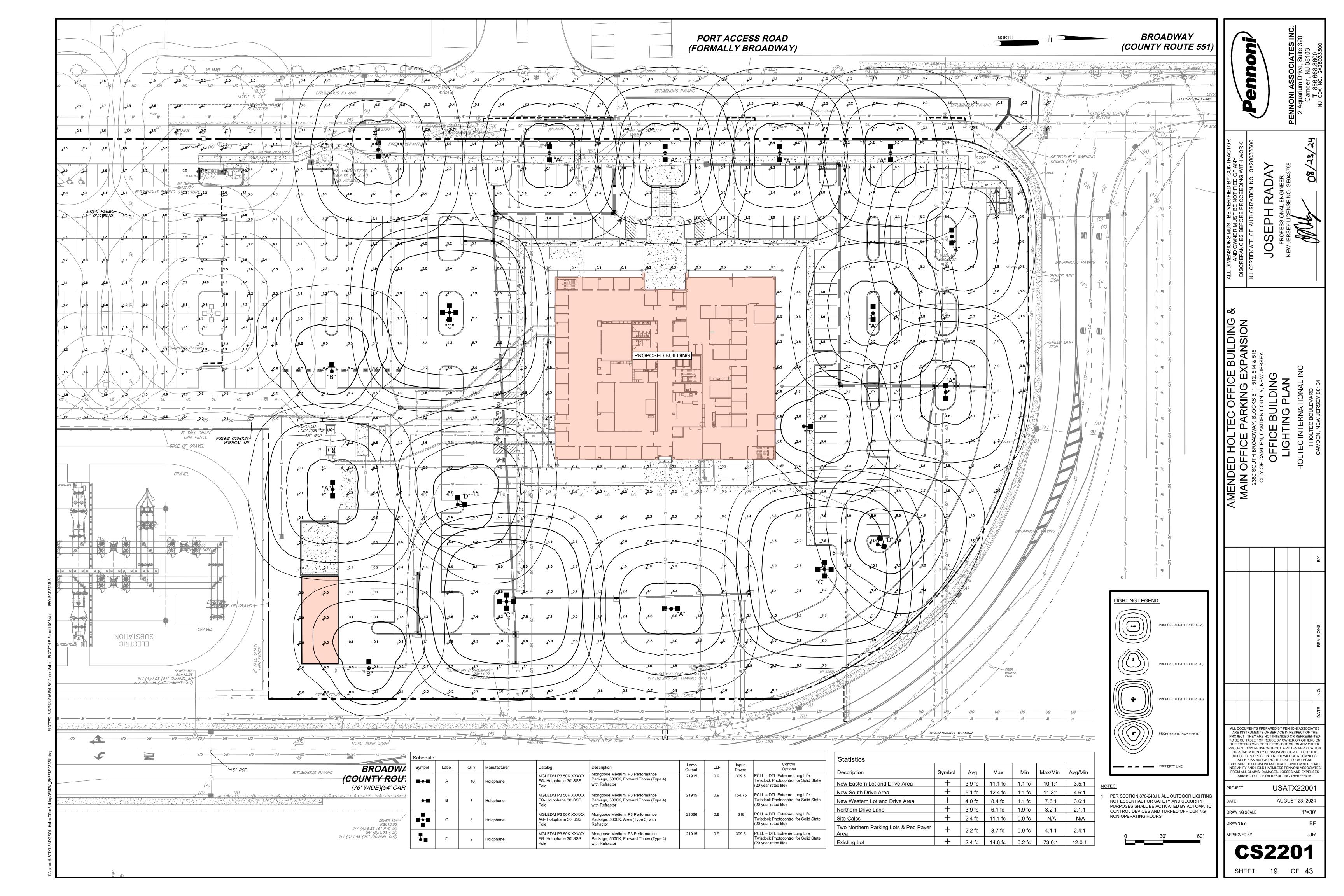


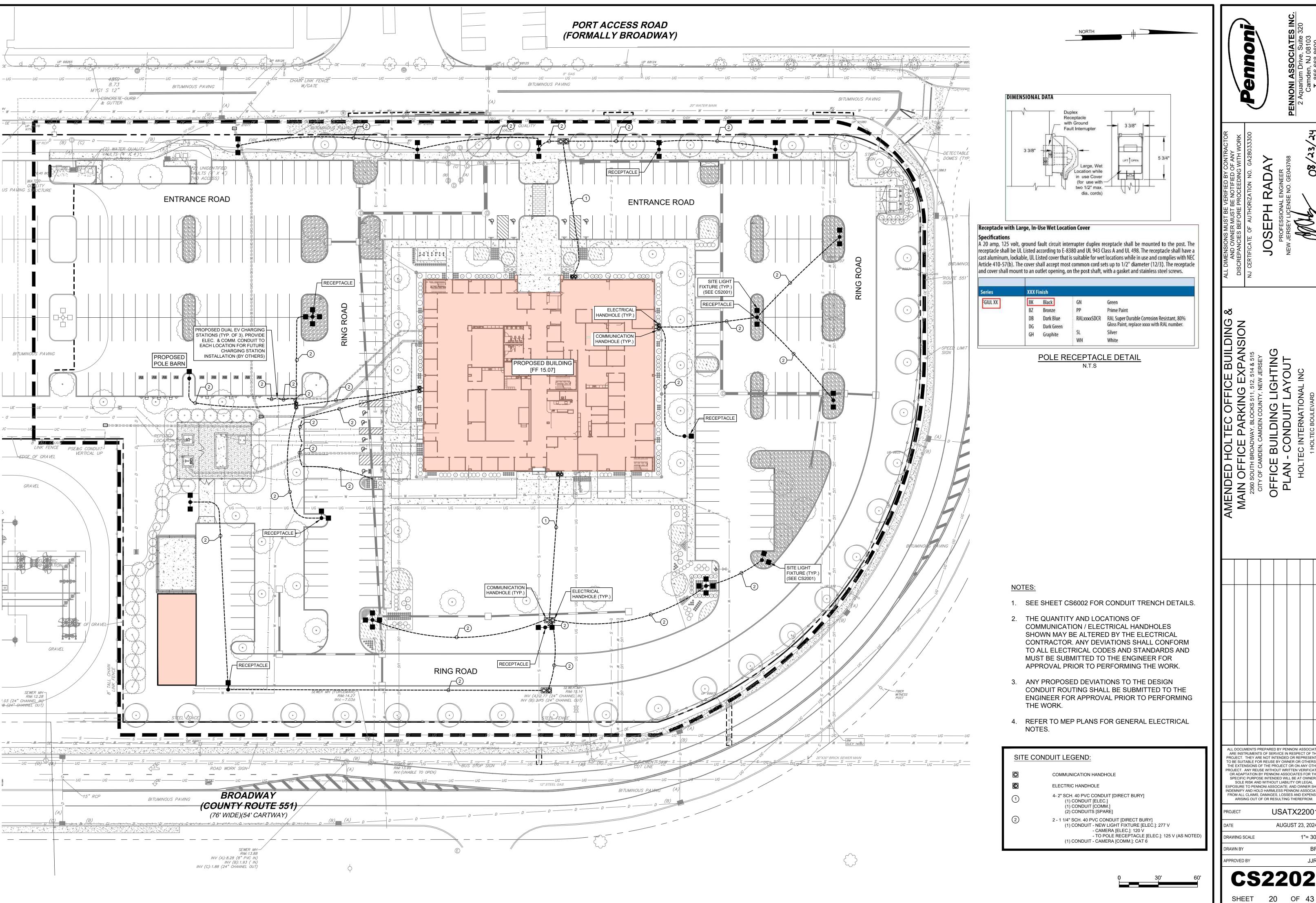




ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL XPOSURE TO PENNONI ASSOCIATE; AND OWNER SHA

> USATX22001 AUGUST 23, 2024



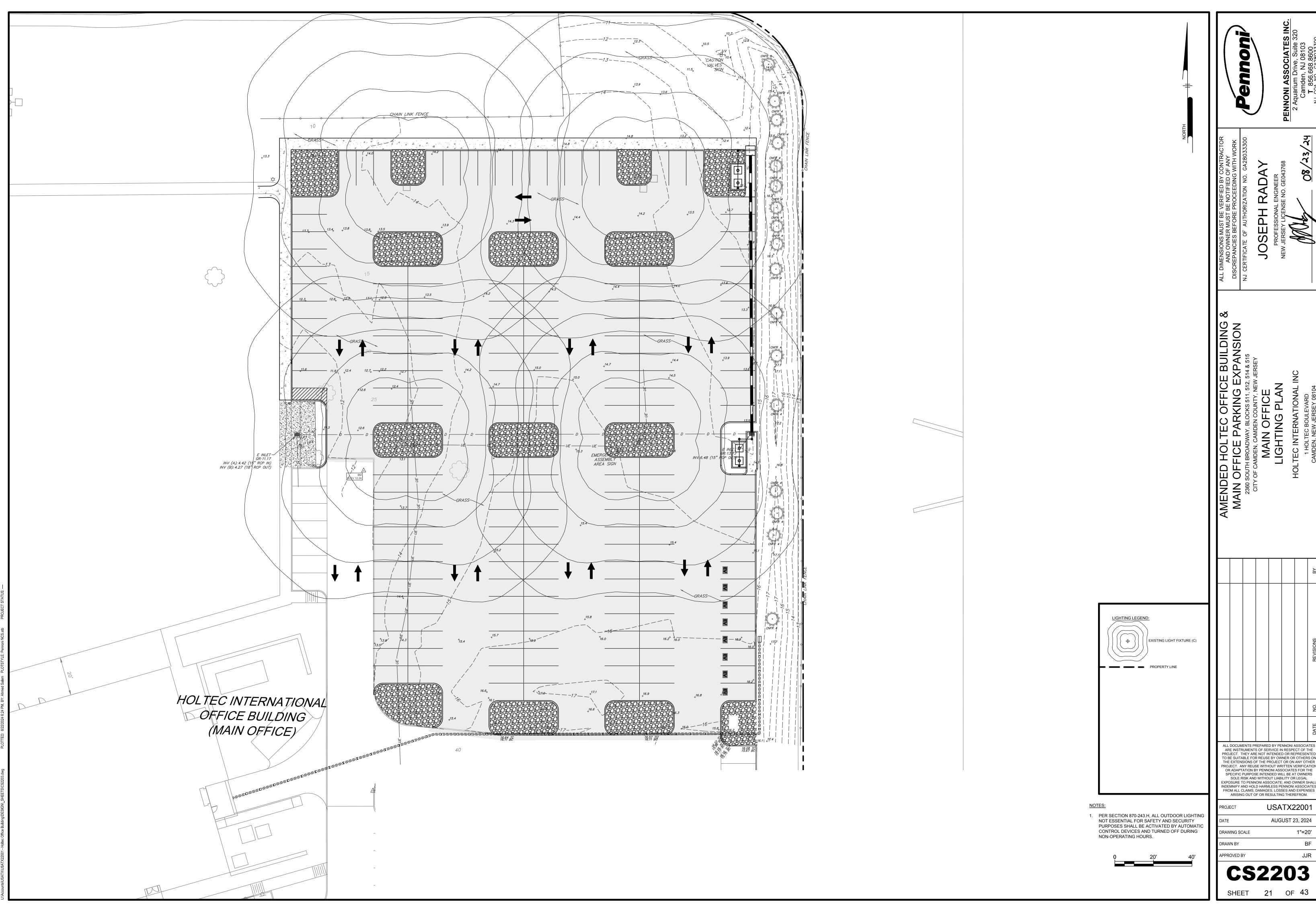


JOSEPH

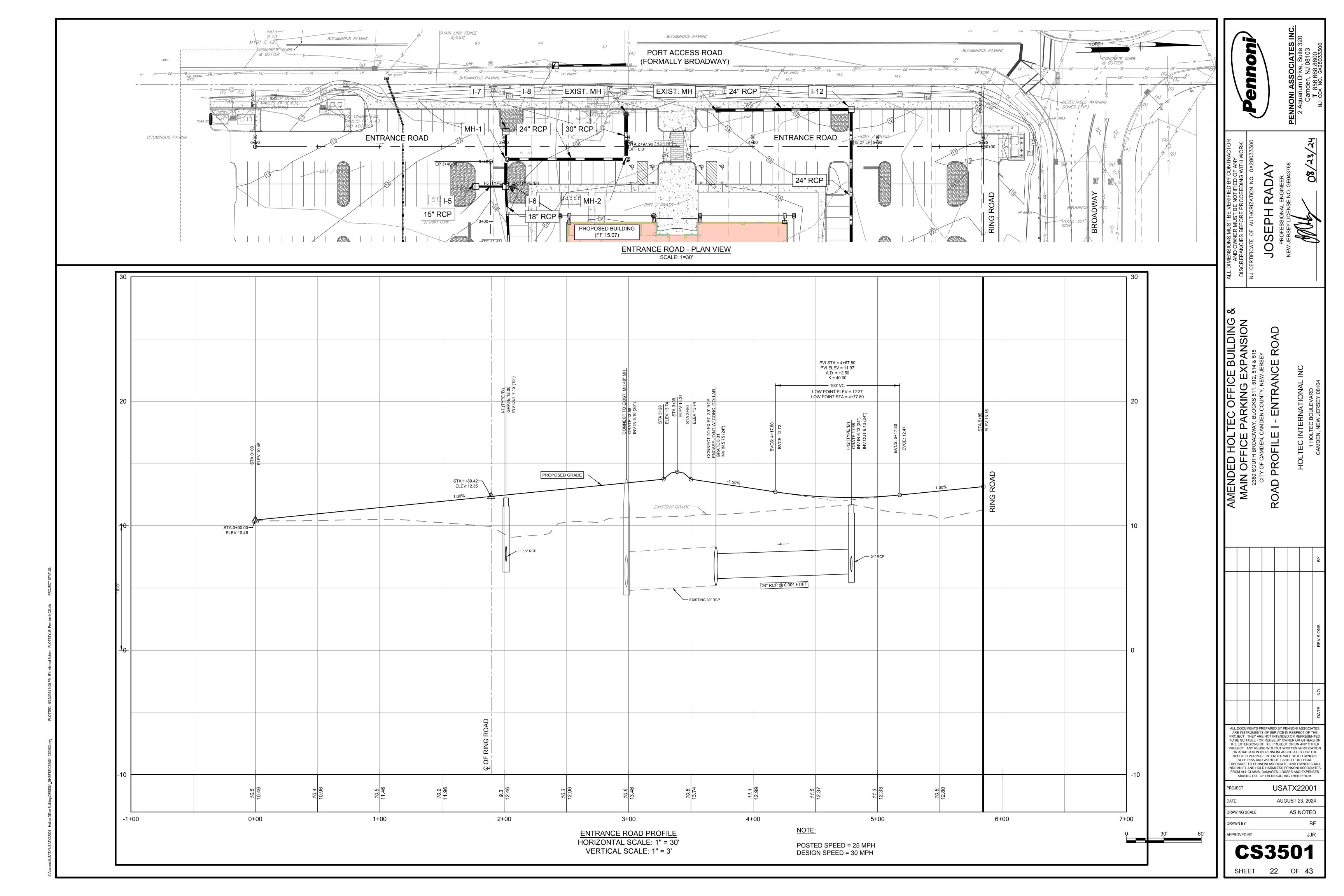
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED

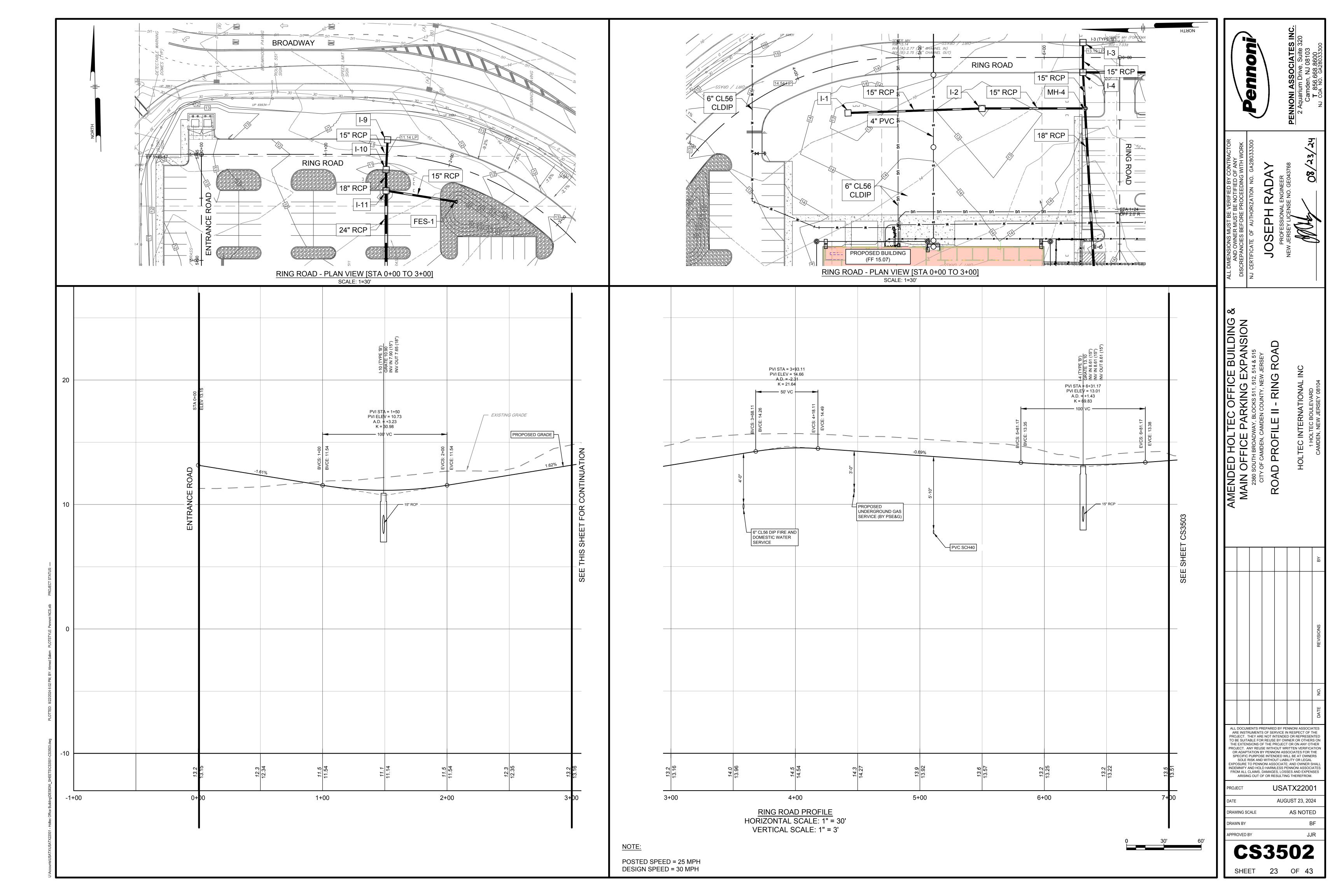
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL POSURE TO PENNONI ASSOCIATE; AND OWNER SHA NDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

> USATX22007 AUGUST 23, 2024

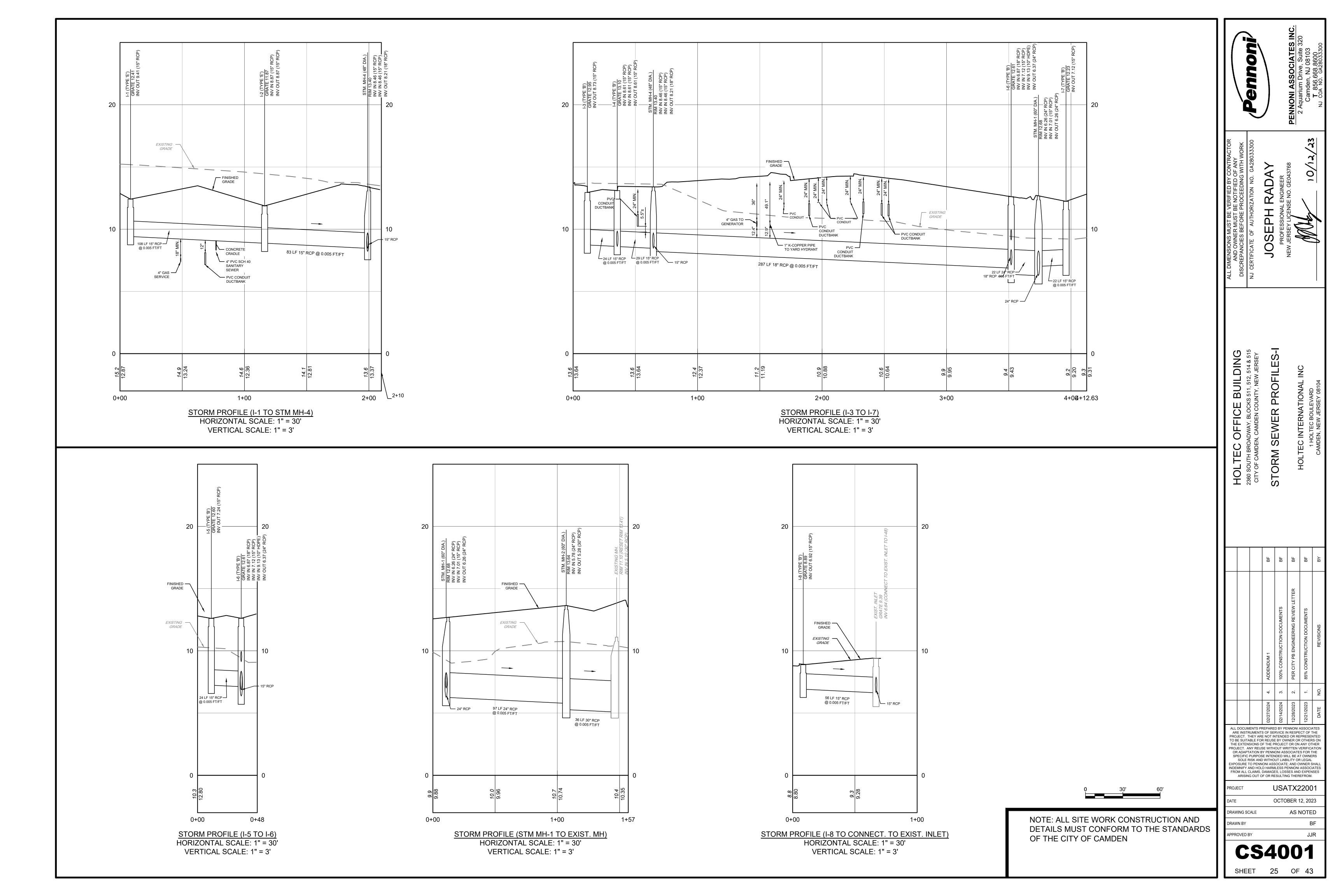


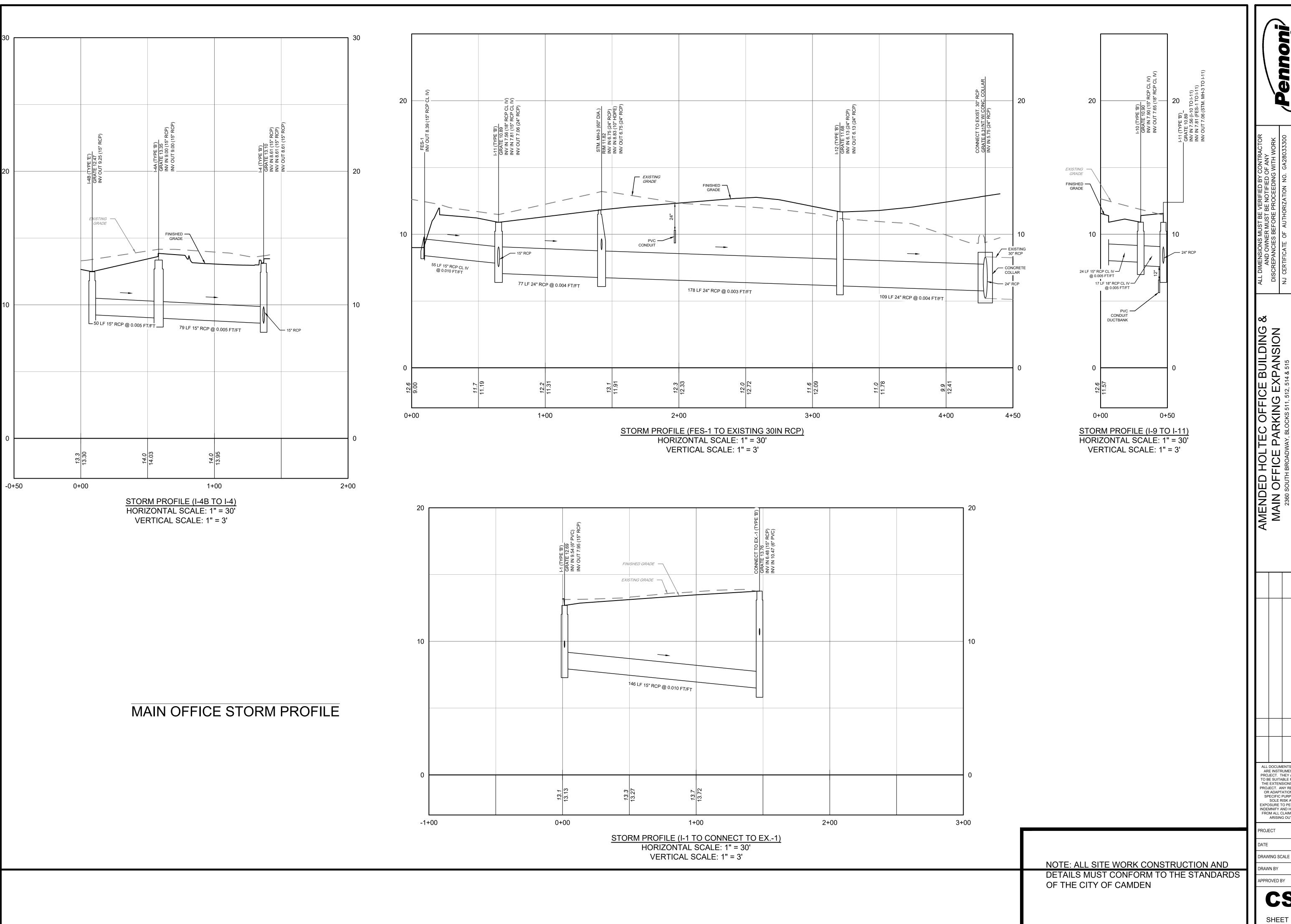
USATX22001 AUGUST 23, 2024

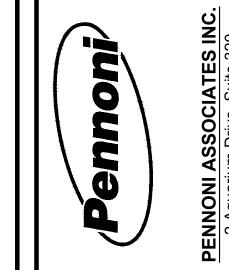












JOSEPH RADAY

PROFILES-II AMENDED HOLTEC C
MAIN OFFICE PARK
2360 SOUTH BROADWAY, BLOCK
CITY OF CAMDEN, CAMDEN COL

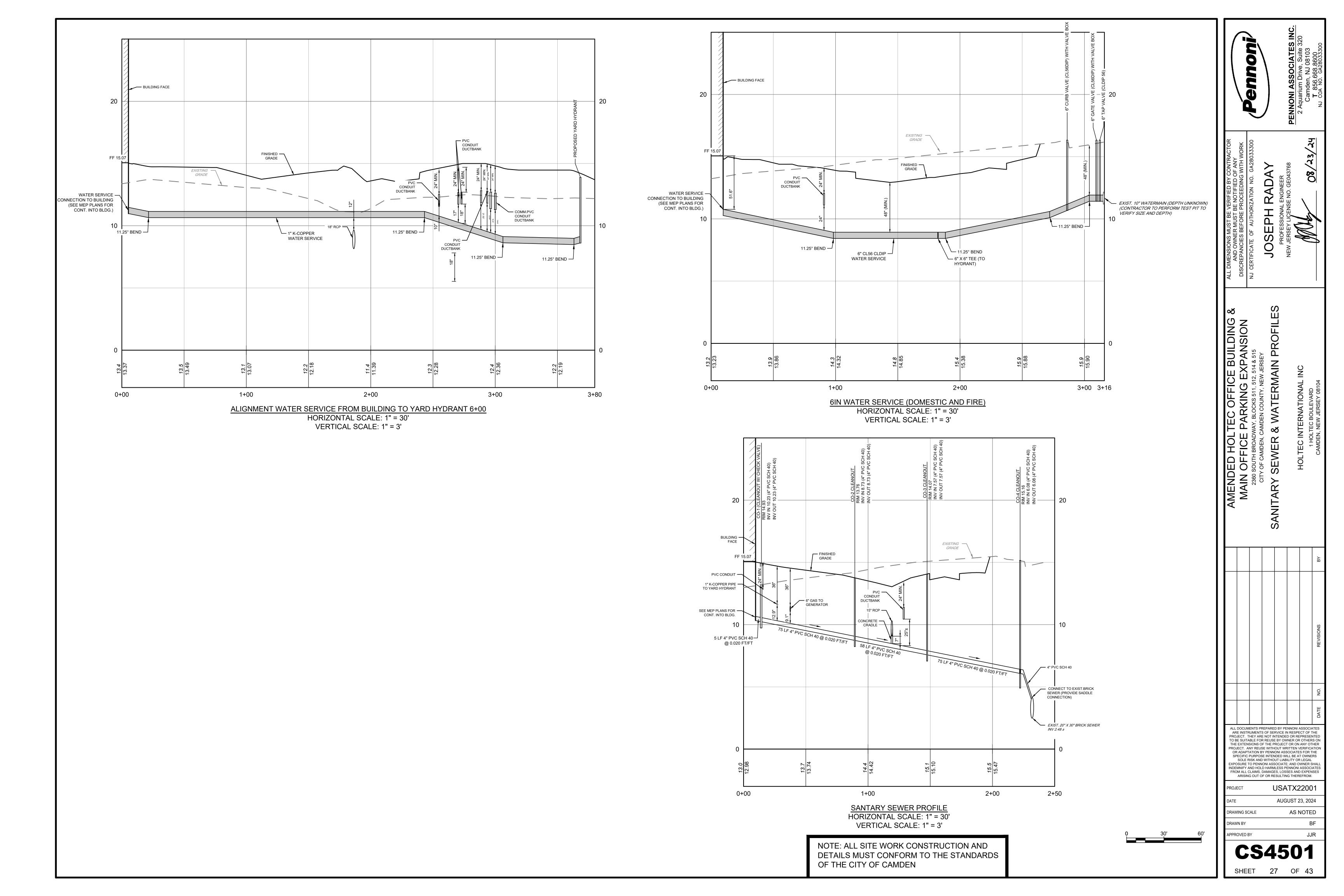
> ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED

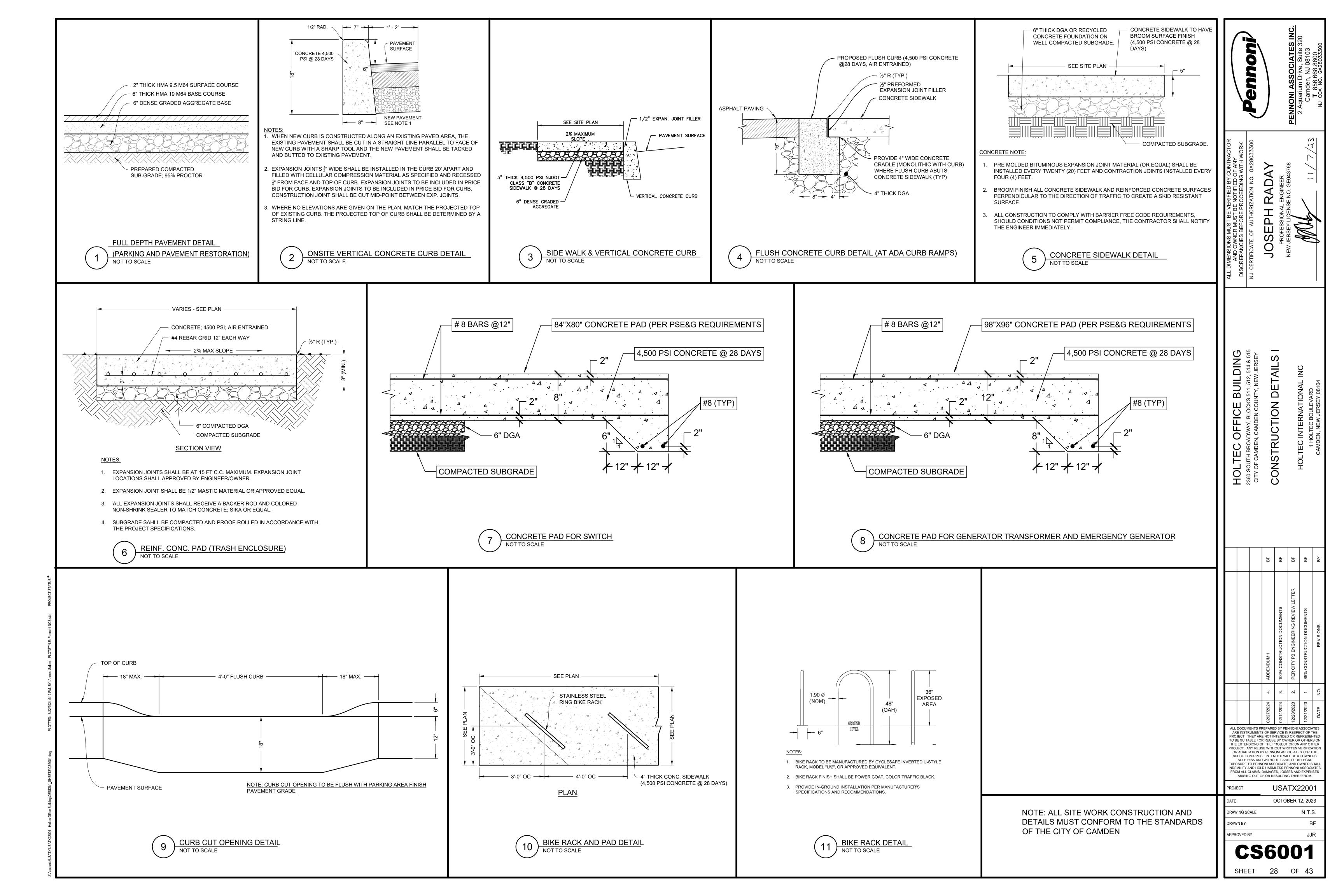
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

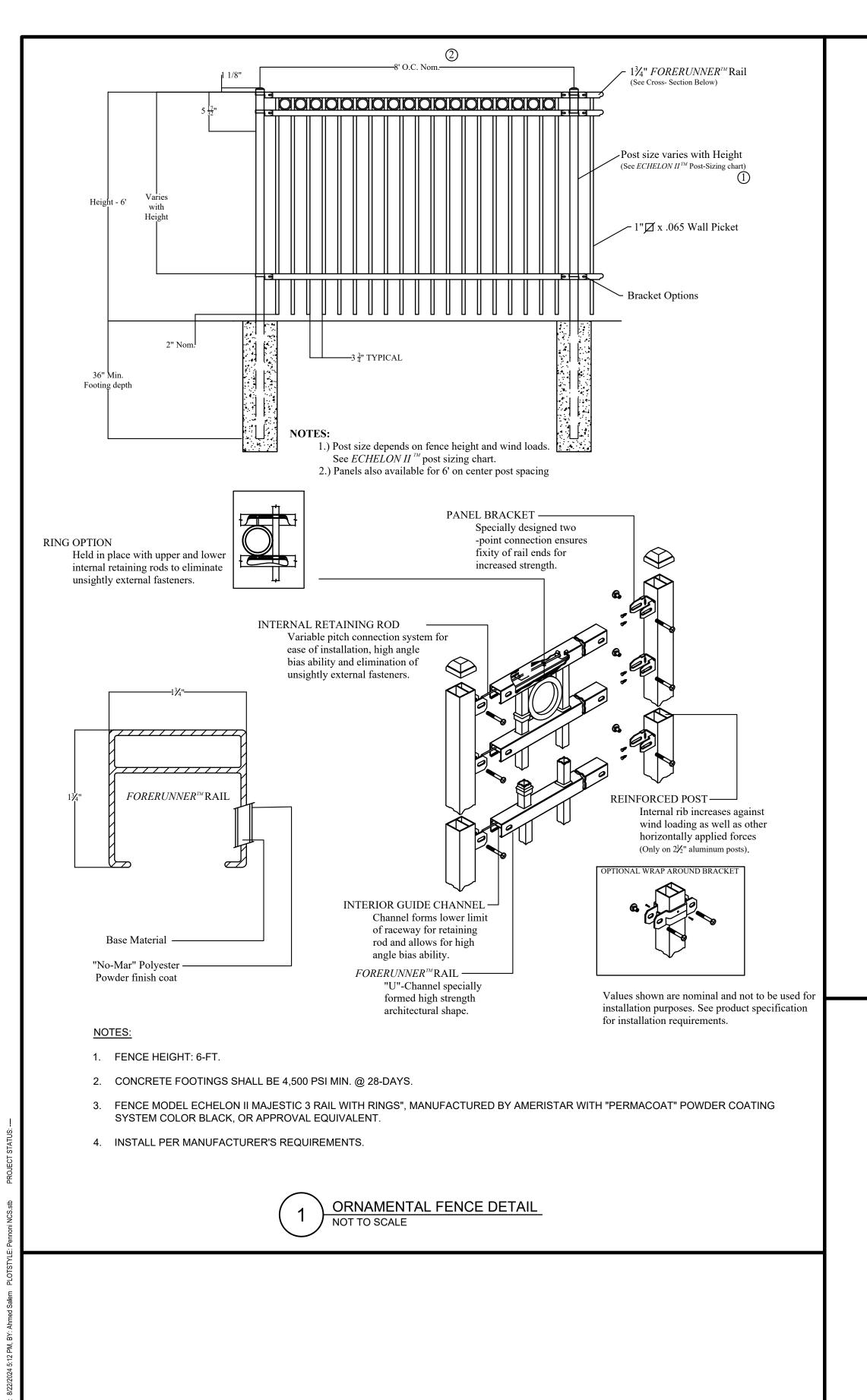
USATX22007 AUGUST 23, 2024 AS NOTED

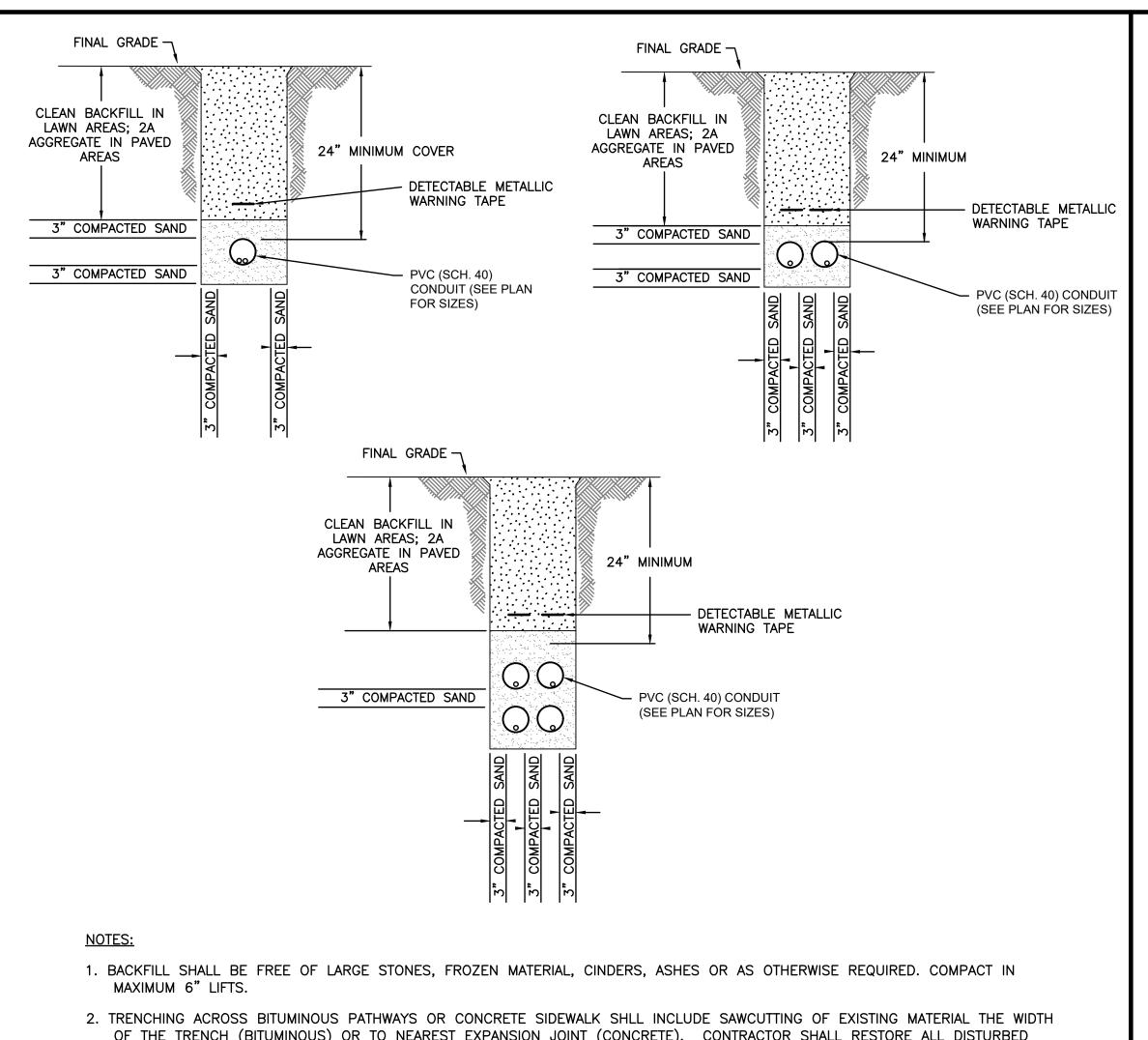
CS4002

SHEET 26 OF 43



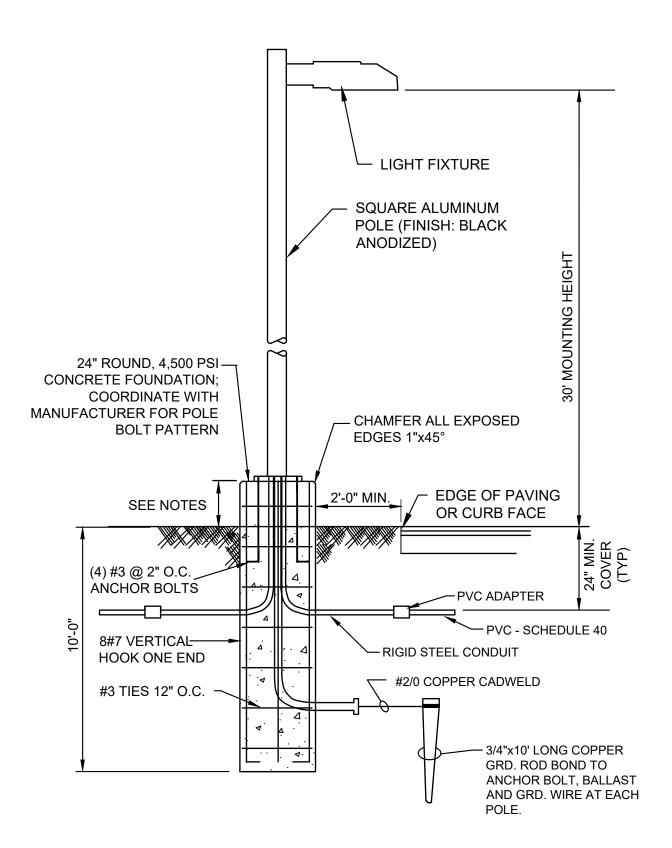






- 2. TRENCHING ACROSS BITUMINOUS PATHWAYS OR CONCRETE SIDEWALK SHLL INCLUDE SAWCUTTING OF EXISTING MATERIAL THE WIDT OF THE TRENCH (BITUMINOUS) OR TO NEAREST EXPANSION JOINT (CONCRETE). CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO THEIR ORIGINAL CONDITION WITH MATERIAL IN KIND. CONTRACTOR SHALL SEAL ALL BITUMINOUS JOINTS WITH AC-20 AND PROVIDE APPROPRIATE EXPANSION MATERIAL AT CONCRETE JOINTS.
- 3. ALL SIGNAL / COMMUNICATION WORK SHALL BE COMPLETED BY OTHERS.

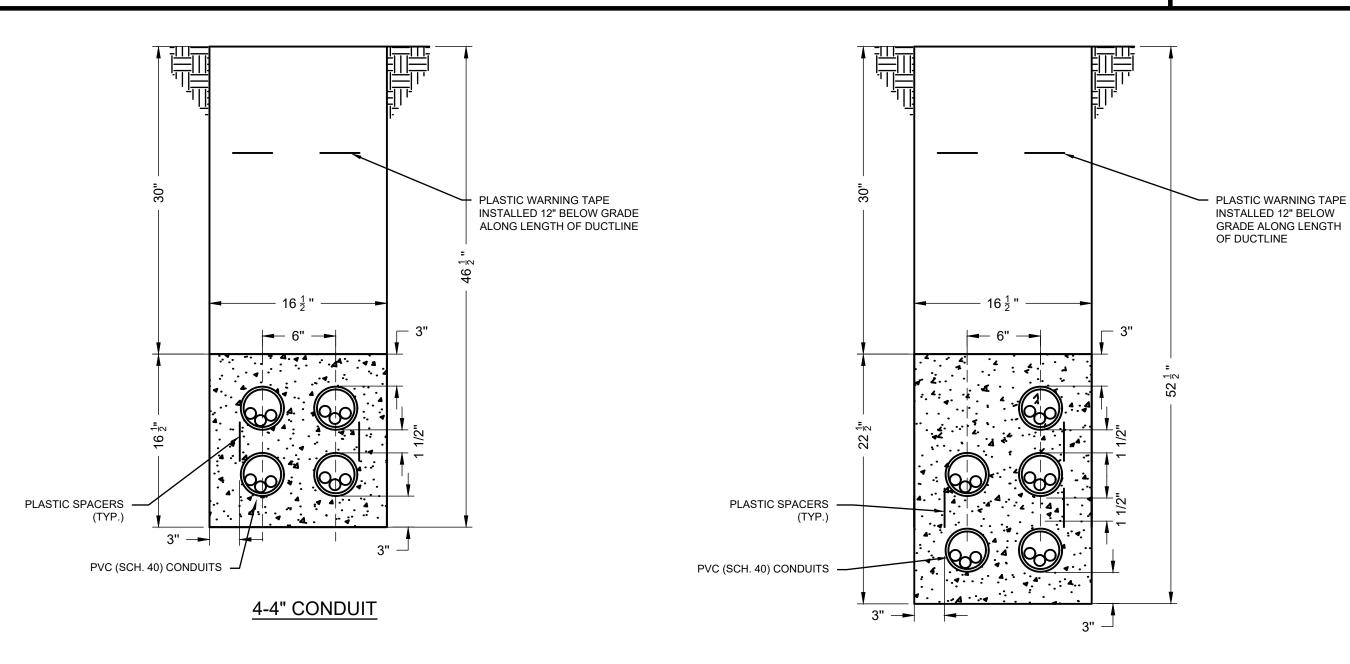
2 TYPICAL CONDUIT TRENCH DETAILS [DIRECT BURY]
NOT TO SCALE



NOTES:

- LIGHT POLE, LIGHT FIXTURE, AND OTHER TYPE OF REQUIRED BRACKETS; COLOR BLACK.
- 2. CONTRACTOR IS REQUIRED TO COORDINATE WITH MANUFACTURER ON BOLT PATTERN, TYPE OF BOLTS IN FOUNDATION, AND POLE.
- 3. ALL WORK TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 4. SET TOP OF FOOTING 1" ABOVE FINISHED GRADE IN SIDEWALK AREAS, 6" ABOVE FINISHED GRADE IN LAWN AREAS, AND 3' ABOVE FINISHED GRADE IN PAVED BARKING AREAS.

3 LIGHT POLE FOUNDATION DETAIL NOT TO SCALE



NOTES:

- CONCRETE ENCASEMENT SHALL BE 1500 PSI CONCRETE.
- 2. BACKFILL SHALL BE FREE OF LARGE STONES, FROZEN MATERIALS, CINDERS, ASHES OR AS OTHERWISE REQUIRED.
- 3. PLASTIC SPACERS SHALL BE USED TO ENSURE PROPER SPACING OF CONDUIT.
- 4. CONDUIT LABELED P.V.C. SCHEDULE 40 IS POLYVINYL CHLORIDE CONDUIT HEAVYWALL NEMA TC-6 WITHOUT CONCRETE ENCASEMENT.
- 5. CONDUIT LINE LABELED P.V.C. IS POLYVINYL CHLORIDE CONDUIT TYPE DB NEMA TC-6.
- 6. CONTRACTOR SHALL INSTALL PULLSTRINGS IN ALL CONDUIT. PULLSTRING MUST HAVE A 210-LB TENSILE STRENGTH AND POLYPROPYLENE CONSTRUCTION.

5-4" CONDUIT

4 CONCRETE ENCASED DUCTBANK
NOT TO SCALE

NOTE: ALL SITE WORK CONSTRUCTION AND DETAILS MUST CONFORM TO THE STANDARDS OF THE CITY OF CAMDEN

Pennoni

PENNONI ASSOCIATES IN 2 Aquarium Drive, Suite 320 Camden, NJ 08103

ICATE OF AUTHORIZATION NO. GA28033300

OSEPH RADAY

PROFESSIONAL ENGINEER

EW JERSEY LICENSE NO. GE043768

11/7/23

ETAILS II

BUILI

CONSTRUCTION DETAIL
HOLTEC INTERNATIONAL INC

 1024
 4. ADDENDUM 1
 BF

 1024
 3. 100% CONSTRUCTION DOCUMENTS
 BF

 1023
 2. PER CITY PB ENGINEERING REVIEW LETTER
 BF

 1023
 1. 85% CONSTRUCTION DOCUMENTS
 BF

 E
 NO.
 REVISIONS
 BY

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTE TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATE; AND OWNER SHAI INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATE FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES

USATX22001

OCTOBER 12, 2023

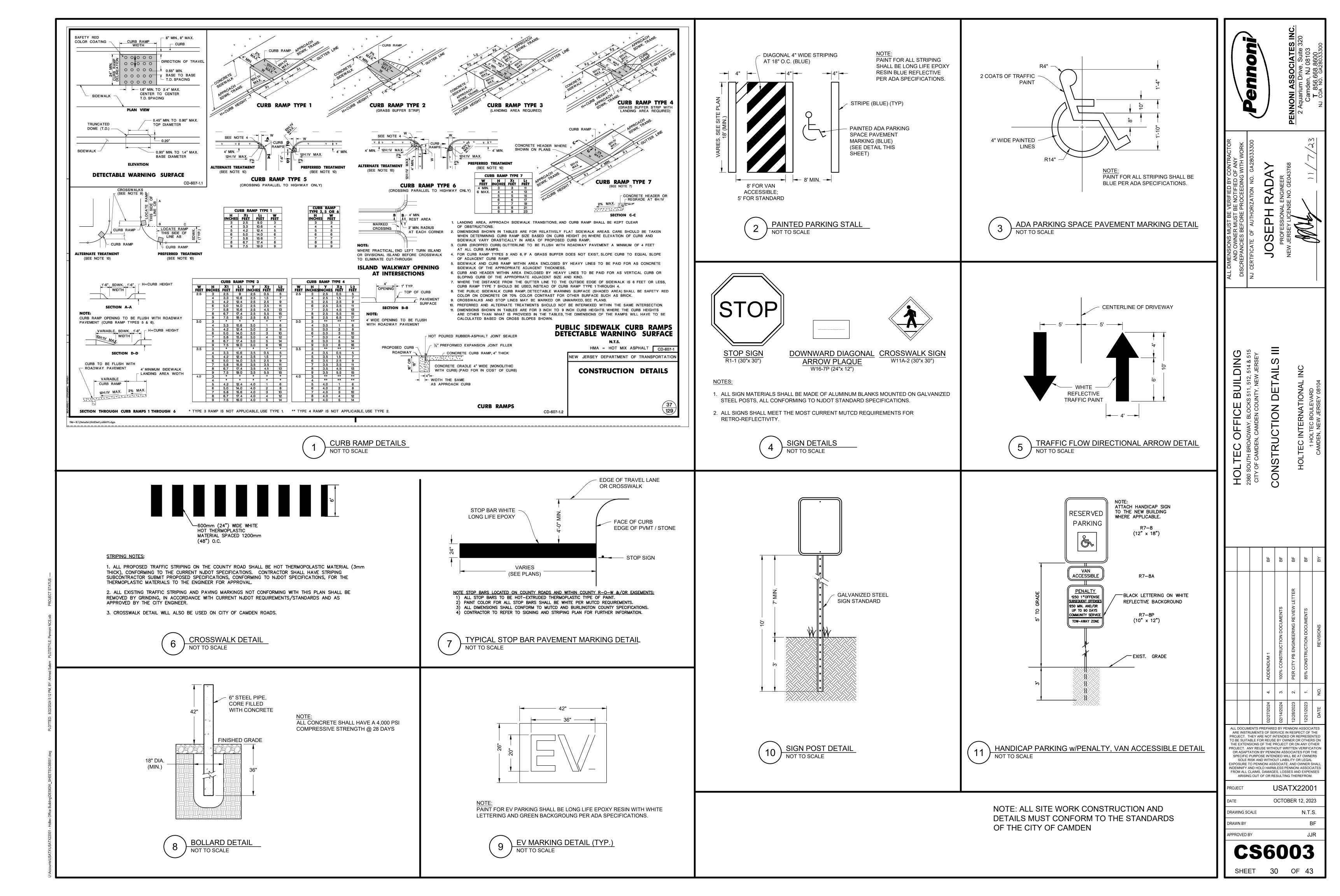
ARISING OUT OF OR RESULTING THEREFROM.

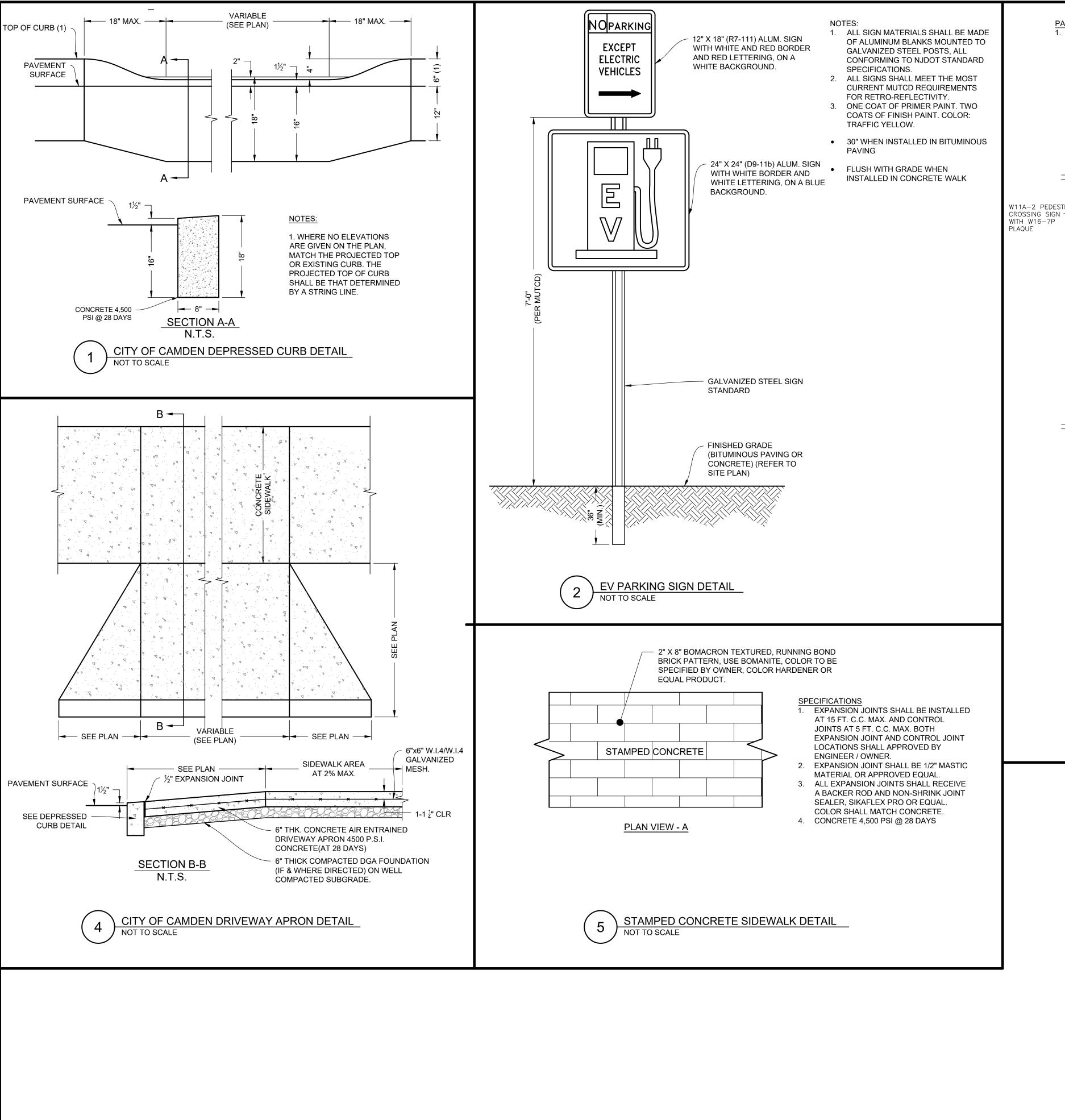
DRAWING SCALE N.T.S.

DRAWN BY BF

CS6002

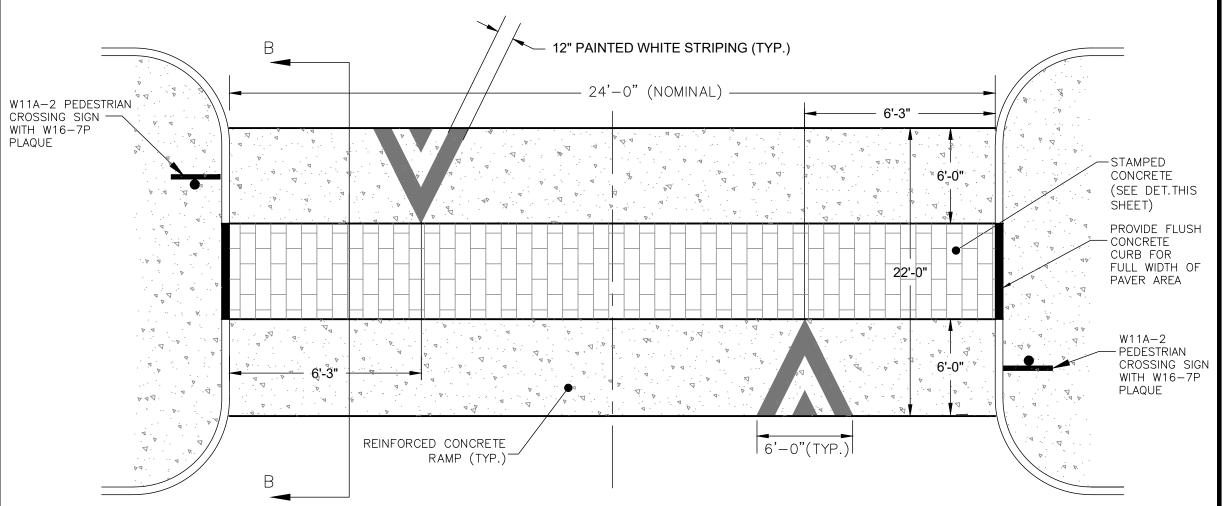
SHEET 29 OF 43

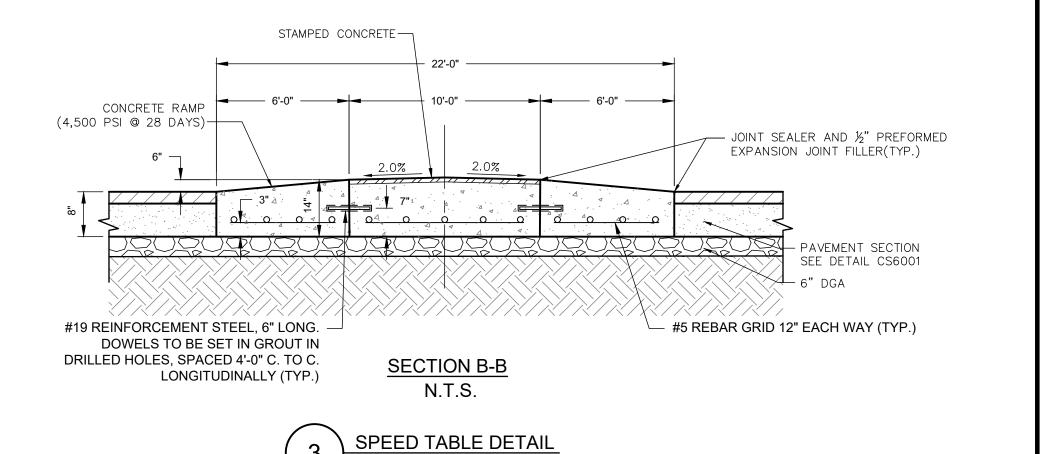




PAVEMENT MARKING NOTES:

1. MARKINGS SHALL BE HOT EXTRUDED
THERMOPLASTIC CONFORMING TO AASHTO
M249 WITH A MINIMUM THICKNESS OF 90 MILS.
USE BEADS CONFORMING TO AASHTO M247,
TYPE 1, WITH A MOISTURE RESISTANT
COATING. SUBMIT CERTIFICATIONS OF
COMPLIANCE THAT GLASS BEADS DO NOT
CONTAIN MORE THAN 200 PPM OF LEAD, 200
PPM OF ANTIMONY, OR 100 PPM OF ARSENIC.





NOT TO SCALE

HOLTEC OFFICE BUILDING
2360 SOUTH BROADWAY, BLOCKS 511, 512, 514 & 515
CITY OF CAMDEN, CAMDEN COUNTY, NEW JERSEY
CONSTRUCTION DETAILS IV

JOSEPH

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATE; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

DATE OCTOBER 12, 2023
DRAWING SCALE N.T.S.

DRAWN BY

APPROVED BY

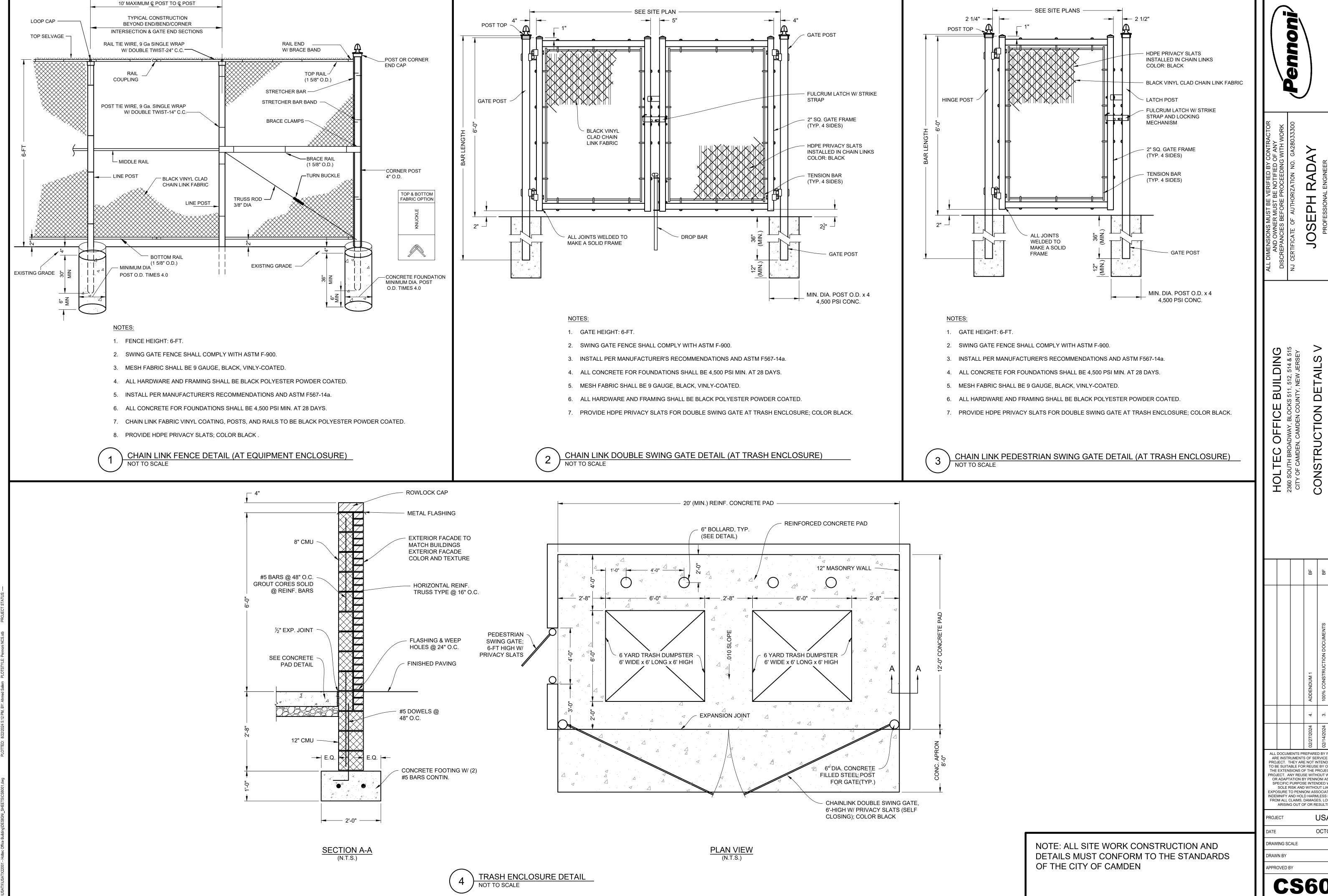
NOTE: ALL SITE WORK CONSTRUCTION AND

OF THE CITY OF CAMDEN

DETAILS MUST CONFORM TO THE STANDARDS

CS6004

SHEET 31 OF 43



RAD,

JOSEPH

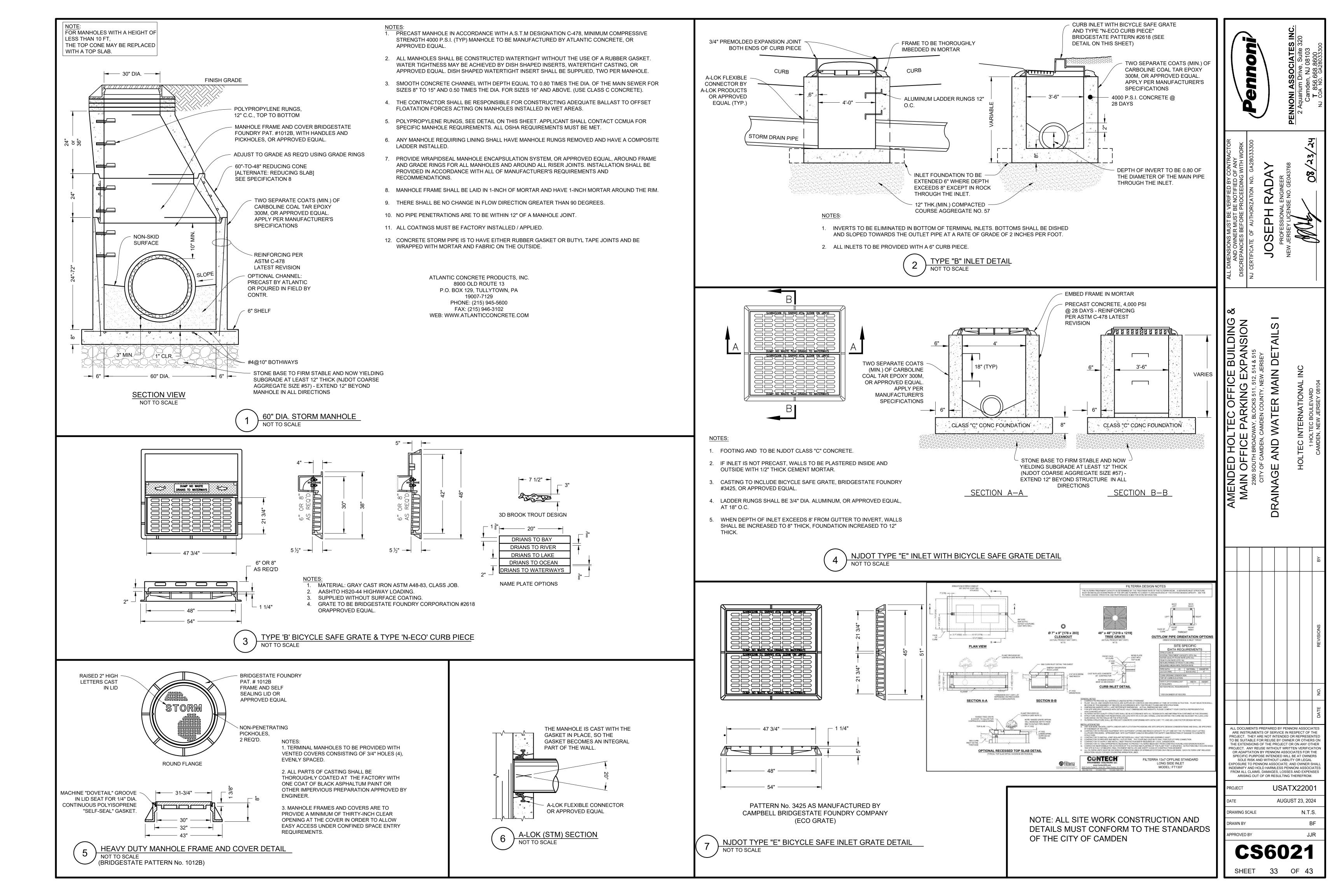
NOL

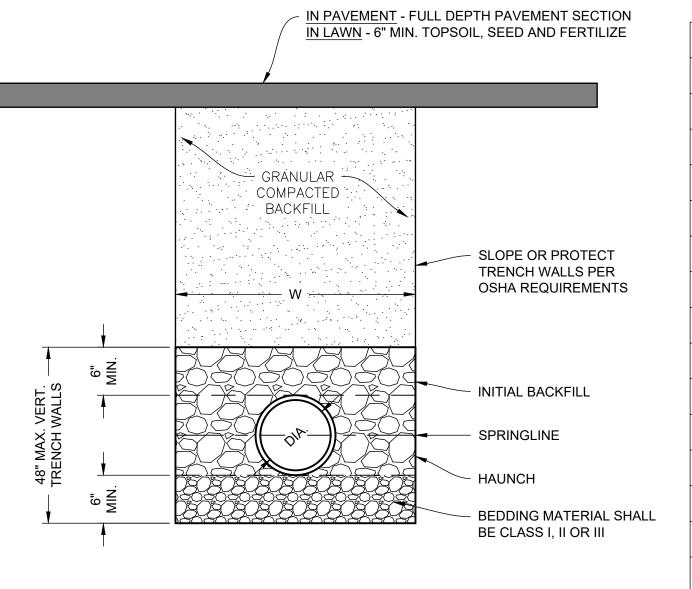
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS OF THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL XPOSURE TO PENNONI ASSOCIATE; AND OWNER SHA NDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATE FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

> USATX22007 OCTOBER 12, 2023 N.T.S.

DRAWING SCALE

CS6005 SHEET 32 OF 43





RECOMMENDED MIN.	MIN. TRENCH
PIPE DIAMETER (DIA.)	WIDTH (W)
4"	21'
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56'
36'	64"
42"	72"
48"	80"
54"	88"
60"	96"

TYPICAL HDPE PIPE TRENCHING DETAIL

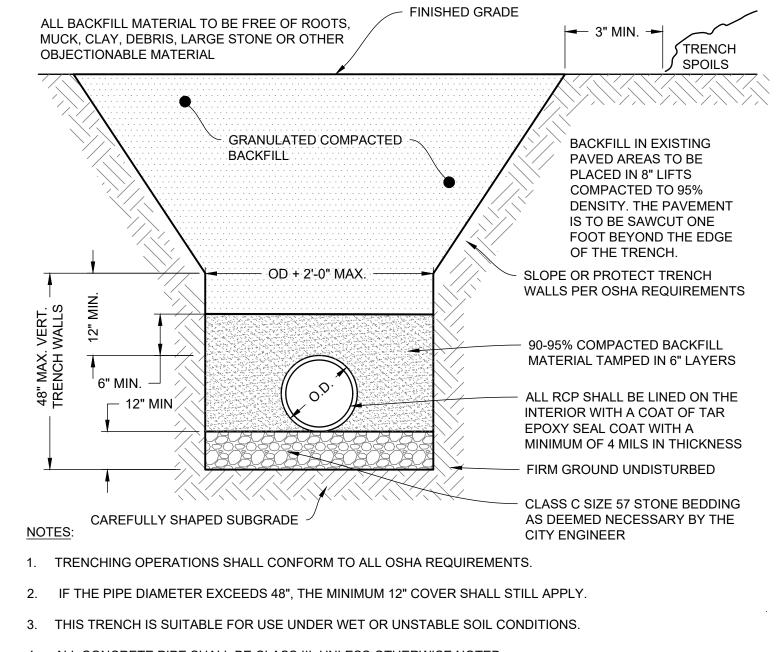
NOT TO SCALE

NOTES:

- 1. TRENCHING OPERATIONS SHALL CONFORM TO ALL OSHA REQUIREMENTS IF THE PIPE DIAMETER EXCEEDS 48", THE MINIMUM 12" COVER SHALL STILL APPLY. THIS TRENCH IS SUITABLE FOR USE UNDER WET OR UNSTABLE SOIL CONDITIONS.
- 2. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF ASTM D2321 AND PER MANUFACTURER'S SPECIFICATIONS. 3. MEASURES SHOULD BE TAKEN TO PREVENT
- WHEN REQUIRED. 4. WHERE THE TRENCH BOTTOM IS DETERMINED TO BE UNSUITABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE

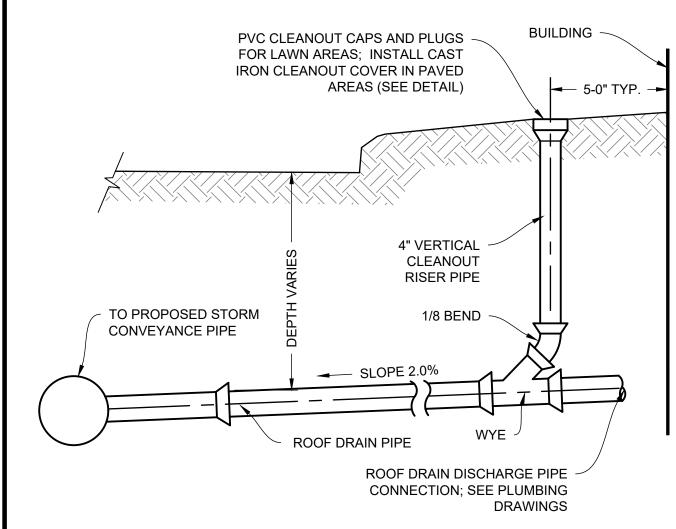
MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL,

- ENGINEER. 5. INITIAL BACKFILL SHALL BE SUITABLE MATERIAL CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE.
- 6. MINIMUM COVER, IN NON-TRAFFIC APPLICATIONS (GRASS AND LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE UNLESS OTHERWISE NOTED. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF THE PIPE TO TOP OF PAVEMENT.
- 7. HDPE PIPE TO BE SOLID PIPE.

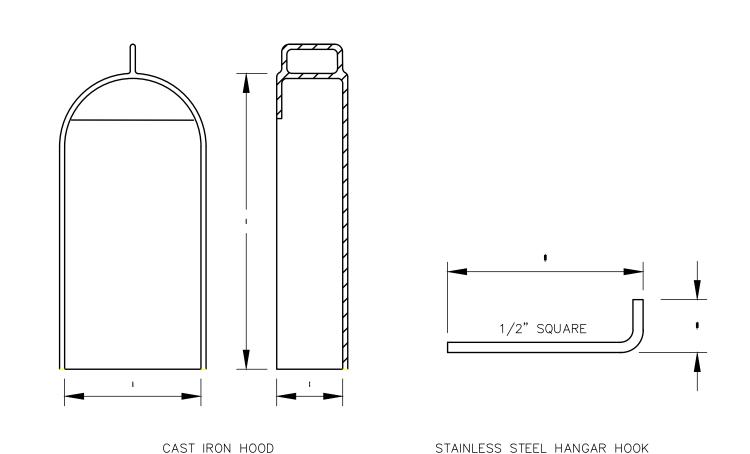


4. ALL CONCRETE PIPE SHALL BE CLASS III, UNLESS OTHERWISE NOTED.





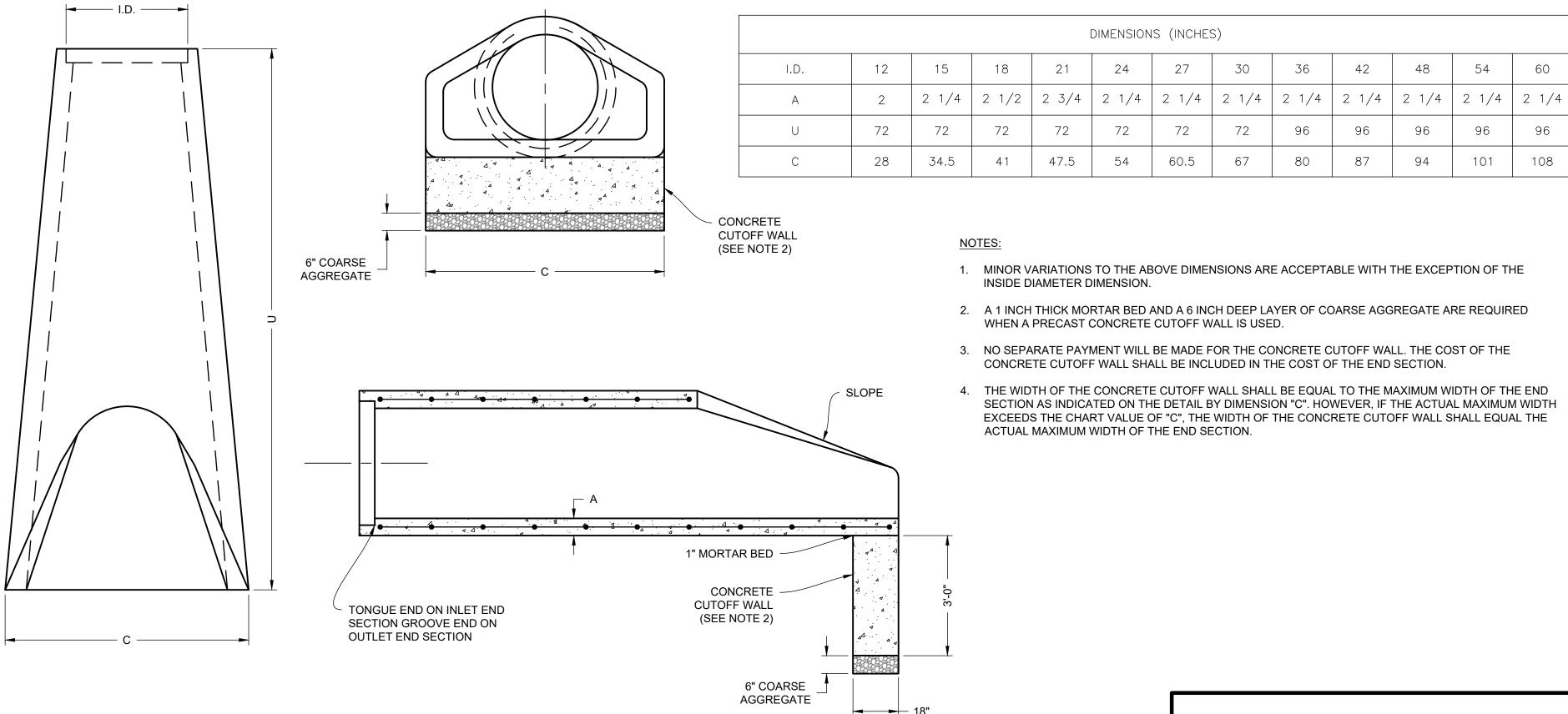
STORM SEWER (ROOF DRAIN) CLEANOUT DETAIL



- 1	PATTERN	DIMENS	PIPE		
	NUMBER	А	В	С	SIZE
	2560 2561 2562 2563 2564	9 1/2 11 1/2 13 1/4 15 3/4 18	16 20 1/2 23 1/2 26 27	4 3/4 5 1/2 6 1/2 7 1/2 9	6 8 10 12 15
	2565 2566	20 25 1 /4	27	10	18

NOTE: COST FOR TRAP TO BE INCLUDED IN THE BID ITEM COST FOR THE MANHOLE AND/OR INLET.





CONCRETE PIPE END SECTION DETAIL

72	72	72	72	72	72	96	96	96	96	96
34.5	41	47.5	54	60.5	67	80	87	94	101	108

30

36

42

54

48

DIMENSIONS (INCHES)

24

- 1. MINOR VARIATIONS TO THE ABOVE DIMENSIONS ARE ACCEPTABLE WITH THE EXCEPTION OF THE INSIDE DIAMETER DIMENSION.
- 2. A 1 INCH THICK MORTAR BED AND A 6 INCH DEEP LAYER OF COARSE AGGREGATE ARE REQUIRED WHEN A PRECAST CONCRETE CUTOFF WALL IS USED.
- 3. NO SEPARATE PAYMENT WILL BE MADE FOR THE CONCRETE CUTOFF WALL. THE COST OF THE CONCRETE CUTOFF WALL SHALL BE INCLUDED IN THE COST OF THE END SECTION.
- 4. THE WIDTH OF THE CONCRETE CUTOFF WALL SHALL BE EQUAL TO THE MAXIMUM WIDTH OF THE END SECTION AS INDICATED ON THE DETAIL BY DIMENSION "C". HOWEVER, IF THE ACTUAL MAXIMUM WIDTH EXCEEDS THE CHART VALUE OF "C", THE WIDTH OF THE CONCRETE CUTOFF WALL SHALL EQUAL THE ACTUAL MAXIMUM WIDTH OF THE END SECTION.

NOTE: ALL SITE WORK CONSTRUCTION AND DETAILS MUST CONFORM TO THE STANDARDS OF THE CITY OF CAMDEN

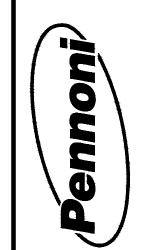


표 S

Ш AND

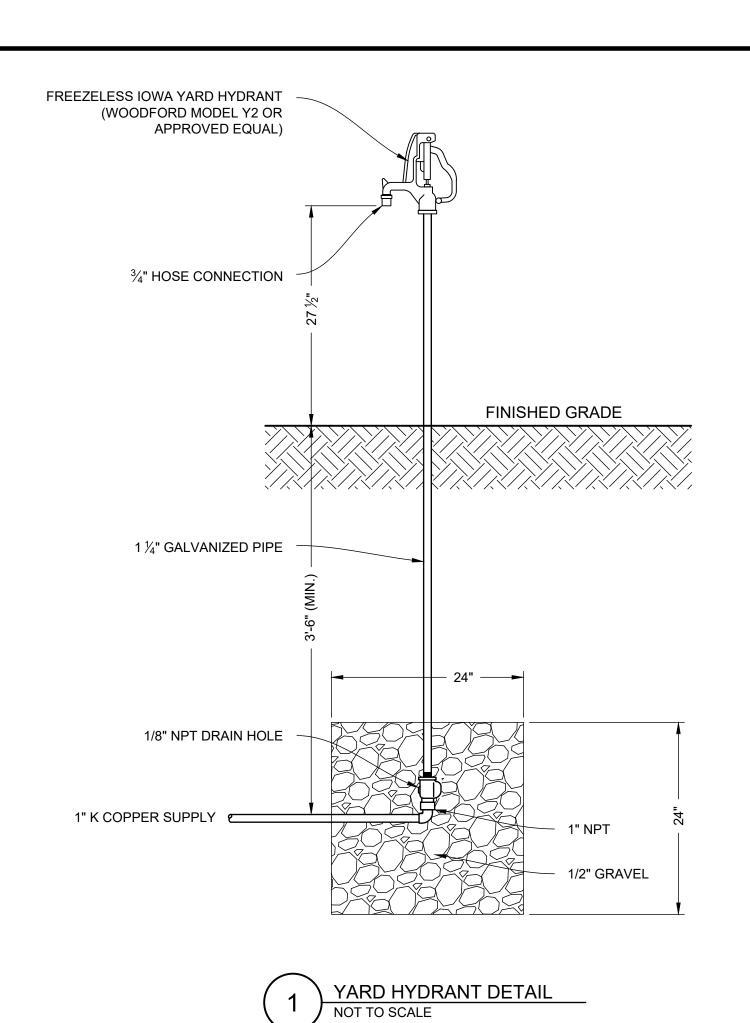
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTE

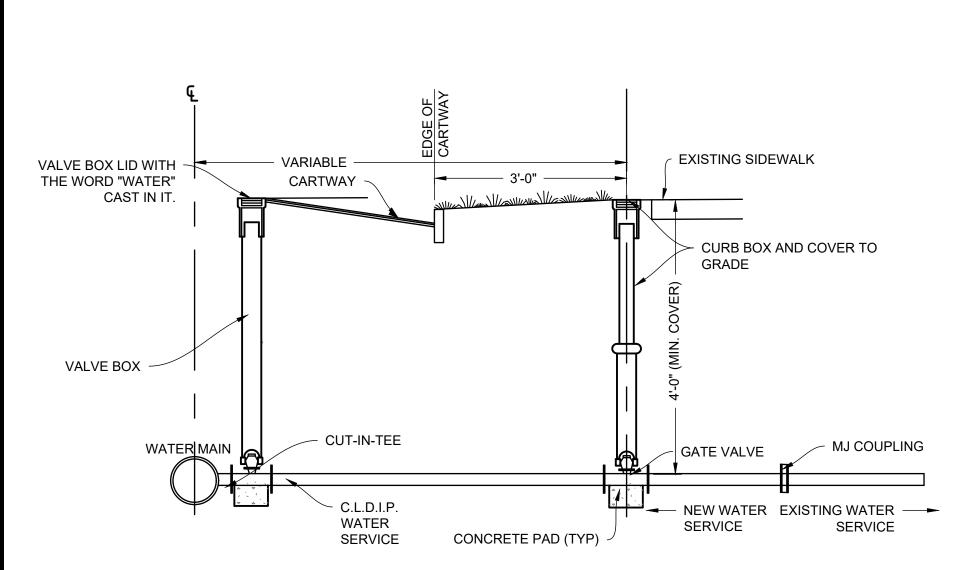
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL XPOSURE TO PENNONI ASSOCIATE; AND OWNER SHA INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES

ARISING OUT OF OR RESULTING THEREFROM. PROJECT USATX22007 AUGUST 23, 2024 DRAWING SCALE N.T.S. DRAWN BY

CS6022

SHEET 34 OF 43

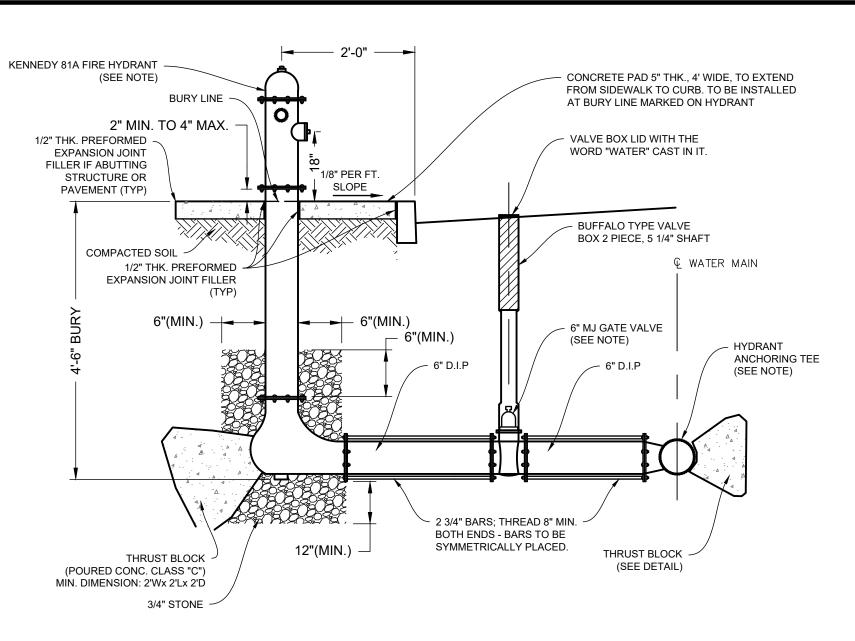




NOTES:

- 1. CONTRACTOR SHALL PROVIDE ALL NECESSARY PIPING, FITTINGS, ADAPTERS, ETC. TO MAKE CONNECTION TO NEW WATER SERVICE LINES. ALL TAPPING SLEEVES 2" AND LARGER SHALL BE SOLID DUCTILE IRON SUCH AS MUELLER H-615 TAPPING SLEEVE OR APPROVED EQUAL. THE TAPPING SLEEVE SHALL PASS PRESSURE TESTING BASED ON AWWA STANDARDS BEFORE TAP IS MADE.
- 2. CONTRACTOR SHALL PROVIDE CUT-IN-TEE AND GATE VALVES FOR WATER SERVICE CONNECTION.
- 3. ALL PIPE AND FITTINGS ABOVE GRADE SHALL BE FLANGE ENDS.
- 4. EXISTING WATER SERVICES TO BE ABANDONED IN PLACE SHALL BE CUT, PLUGGED AS CLOSE TO THE WATER MAIN AS POSSIBLE AND FREE OF LEAKS.
- 5. VALVES TO BE DOUBLE DISK GATE VALVES PER AWWA STANDARDS.

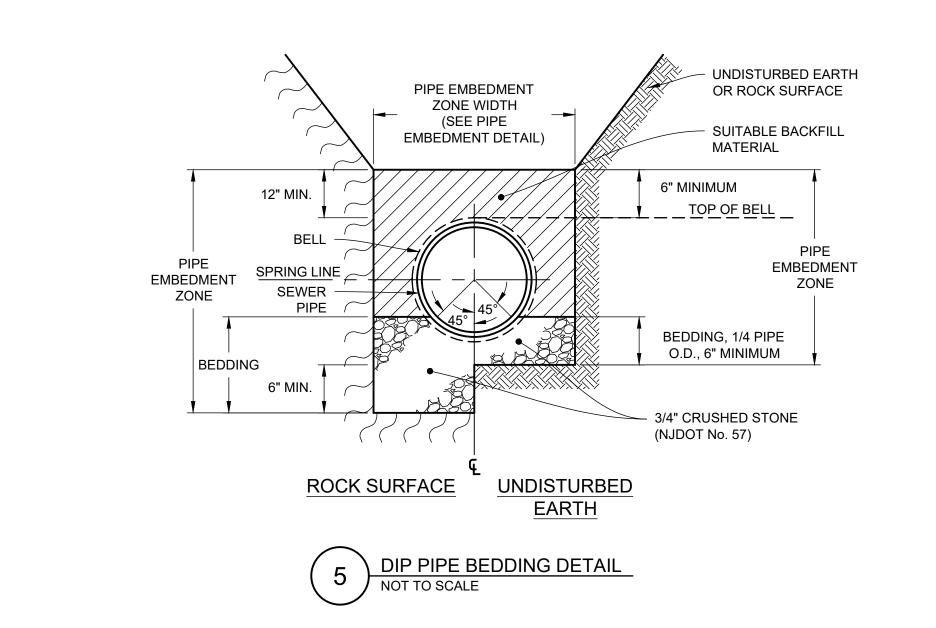


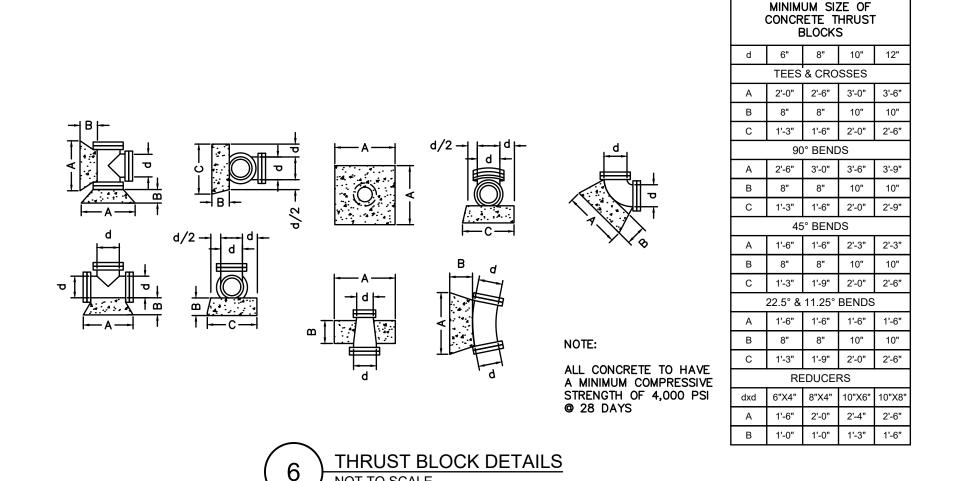


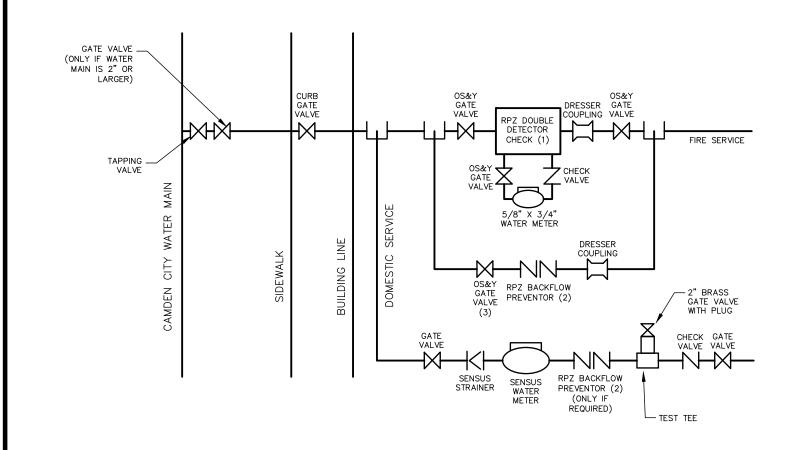
FIRE HYDRANT NOTES:

- 1. THE INLET HUB, GATE VALVE AND HYDRANT TEE SHALL BE RODDED TOGETHER WITH CONTINUOUS THREADED RODS (ALL THREAD M.J.), SOCKET CLAMPS, WASHERS AND CORPORATION EYE BOLTS TO PREVENT HYDRANT FROM BLOWING OFF.
- 2. CONTRACTOR SHALL INSURE THAT THE FIRE HYDRANT THREADS CONFORM TO LOCAL FIRE COMPANY'S STANDARDS.
- 3. ALL FIRE HYDRANTS SHALL OPEN BY TURNING LEFT (COUNTERCLOCKWISE). THE OPERATING NUT AND OUTLET NOZZLE CAP NUTS SHALL BE PENTAGON, MEASURING 1 $\frac{1}{2}$ " FROM POINT TO FLAT AT BASE. HYDRANTS SHALL BE PRIME COATED AND PAINTED IN ACCORDANCE WITH ANSI/SWWA STANDARD SPECIFICATIONS, FINISH PAINTED CONFORMING TO THE STANDARDS OF THE CITY OF CAMDEN.









NOTES:

1. A BACKFLOW PREVENTER MUST BE PROVIDED FOR ALL PROPOSED FIRE SERVICE LINES. FOR A REGULAR FIRE SUPPRESSION SYSTEM (COMBINED SERVICE LINE LARGER THAN 2"), A COMBINED REDUCED PRESSUYRE DETECTOR ASSEMBLY (AMES 5000 SS, AMES 5000 RPDA OR WATT 9098 RPDA*) SHALL BE INSTALLED ON THE MAIN FIRE SERVICE LINE AND A REDUCED PRESSURE BACKFLOW PREVENTER ON THE BYPASS (AMES 4000 SS OR WATT 909*). ON THE LIMITED FIRE SUPPRESSION SYSTEM (COMBINED SERVICE LINE 1.5" OR 2"), A FIRE LINE DETECTOR CHECK WITH A SINGLE CHECK VALVE (AMES 1000 DCV*) SHALL BE INSTALLED ON THE MAIN FIRE LINE AND A REDUCED PRESSURE BACKFLOW PREVENTER (AMES 4000 SS OR WATT 909*) SGALL BE INSTALLED DOWNSTREA OF THE BYPASS. ALL REGULAR FIRE SUPPRESSION SYSTEMS MUST HAVE OS&Y VALVES, HOWEVER, LIMITED FIRE SUPPRESSION SYSTEMS MAY USE BALL VALVES (VICTAULIC SERIES 728 FIRELOCK*) INSTED OF OS&Y VALVES. THE FIRE UNIT SHALL BE FURNISHED WITHA \(\frac{5}{8} \) INCH X \(\frac{3}{4} \) INCH METERED BYPASS. THE APPLICANT SHALL APPLY FOR AND REGISTER ALL RPZ WITH NJDEP.

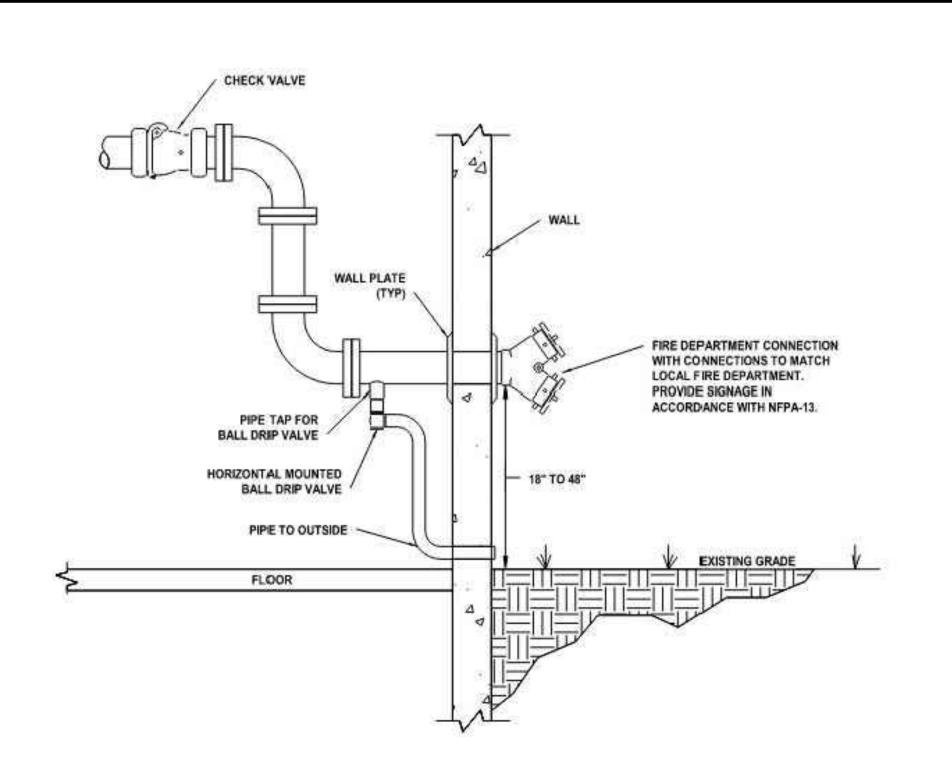
2. ALL METER SIZE 2 INCHES THROUGH 6 INCHES SHALL BE SINGLE COMPOUND METERS AND ALL METERS 8 INCHES AND LARGER SHALL BE DUPLEX COMPOUND MANIFOLD METERS.

3. ALL METERS SHALL BE ADEQUATELY RESTRAINED WITH METAL BRACKETS FASTENED TO THE FLOOR OR WALL OR OTHER APPROVED MEANS SUCH AS UNIFLANGES WHERE INTERNAL PIPE PRESSURE AND FLOW WARRANT SUCH RESTRAINTS. METERS, DETECTOR CHECKS, AND VALVES MAY BE SEATED ON CONCRETE BLOCK AND TAPERED SHIMS TO PROVIDE ADEQUATE SUPPORT. METERS SHALL BE INSTALLED APPROXIMATELY 36" ABOVE FLOOR GRADE.

4. REFER TO CITY OF CAMDEN DETAILS.

CAMDEN CITY REQUIREMENTS FOR FIRE AND

3 DOMESTIC WATER LINE AND METER INSTALLATIONS
NOT TO SCALE



7 FIRE DEPARTMENT CONNECTION NOT TO SCALE

NOTE: ALL SITE WORK CONSTRUCTION AND DETAILS MUST CONFORM TO THE STANDARDS OF THE CITY OF CAMDEN

Pennoni

E OF AUTHORIZATION NO. GA28033300

SEPH RADAY

ROFESSIONAL ENGINEER
ERSEY LICENSE NO. GE043768

JOSEPH RAL

SERVICENSE NO. G

NEW JERSEY LICENSE NO. G

SOUTH BROADWAY, BLOCKS 511, 512, 514 & 515
OF CAMDEN, CAMDEN COUNTY, NEW JERSEY

WATER DETAILS I

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES

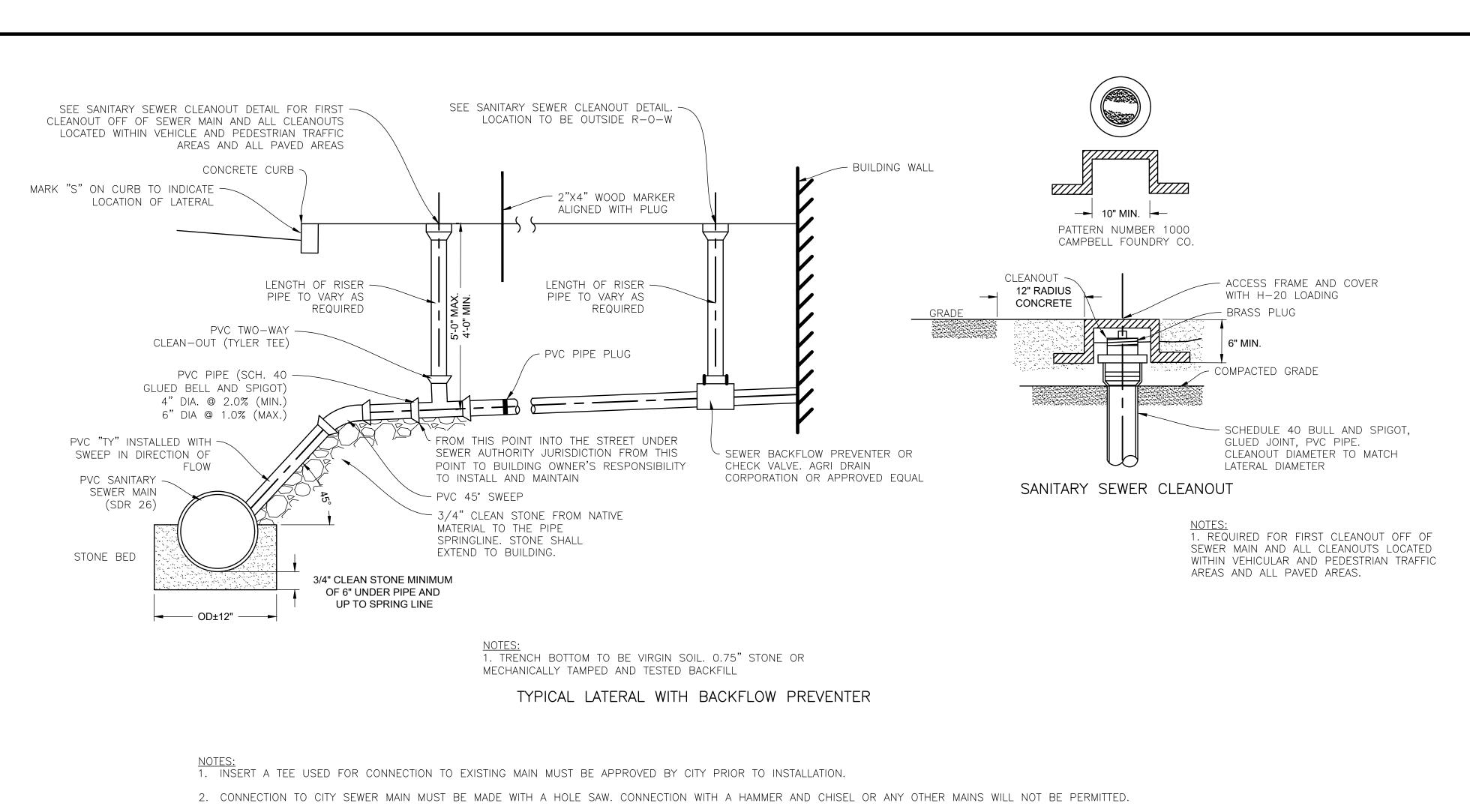
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTE TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHEF PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATIC OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATE; AND OWNER SHAI INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATE FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

DATE AUGUST 23, 2024
DRAWING SCALE AS NOTED

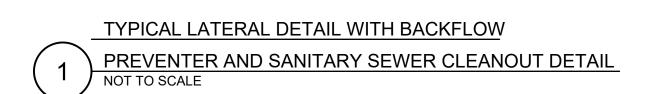
DRAWN BY E

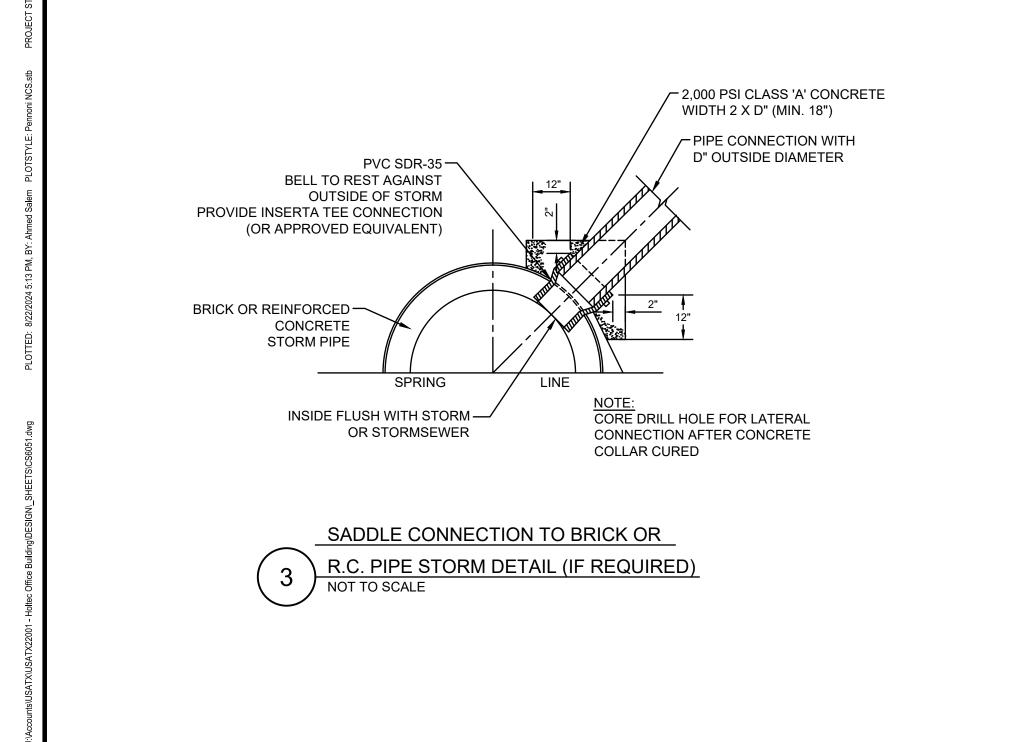
CS6041

SHEET 35 OF 43



- 3. CLEANOUT SHALL BE LOCATED BETWEEN CURB AND SIDEWALK, OR A MAXIMUM OF 2' FROM CURB. ELEVATION OF TOP OF CLEANOUT SHALL BE LEVEL WITH THE HIGHER OF CURB OR GRADE. NO CELANOUTS LOCATED IN PAVED AREAS.
- 4. 3' MIN. COVER FROM FINISHED GRADE TO TOP OF SERVICE DUCTILE IRON PIPE. IN AREAS NOT SUBJECT TO VEHICULAR TRAFFIC IS REQUIRED IN AREAS WITH 3' COVER.
- 5. ALL CLEANOUTS ALONG LATERAL TO HAVE BRASS PLUGS OF SAME SIZE AS LATERALS.
- 6. ALL LATERALS MUST BE STRAIGHT RUNS.
- 7. LATERAL SIZE MUST BE 4" MINIMUM.





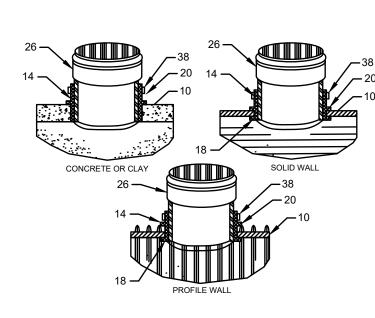


FIG. 10 MAINLINE PIPE ALL WHERE BRANCH LINE IS CONNECTED. FIG. 14 COMPLETE RUBBER SLEEVE CONSISTING OF C-443 SPECIFICATIONS. FIG. 18 RUBBER SEGMENT WHICH IS MOLDED INTO THE RUBBER SLEEVE. THIS PREVENTS SNAP OUT ON THE INSIDE OF THE DRILLED HOLE (PLASTIC PIPE ONLY) AND HELPS HOLD THE FITTING IN PLACE, NOT CREATING THE SEAL. FIG. 20 RUBBER SEGMENT WHICH IS MOLDED INTO THE RUBBER SLEEVE. THIS PREVENTS THE RUBBER SLEEVE FROM GOING THROUGH THE DRILLED HOLE WHEN PVC HUB IS BEING DRIVEN INTO THE RUBBER SLEEVE. FIG. 26 SDR-35 PVC HUB (ASTM D-3034 SEWER PIPE) WHICH IS DRIVEN INTO THE CENTER OF THE RUBBER SLEEVE AFTER THE RUBBER SLEEVE IS IN THE HOLE. FIG. 38 STAINLESS STEEL BAND, PUT ON ABOVE

FIG. 20 IS AN ADDED PRECAUTION.

NOTE: AIR TIGHT SEAL IS ACCOMPLISHED WHEN

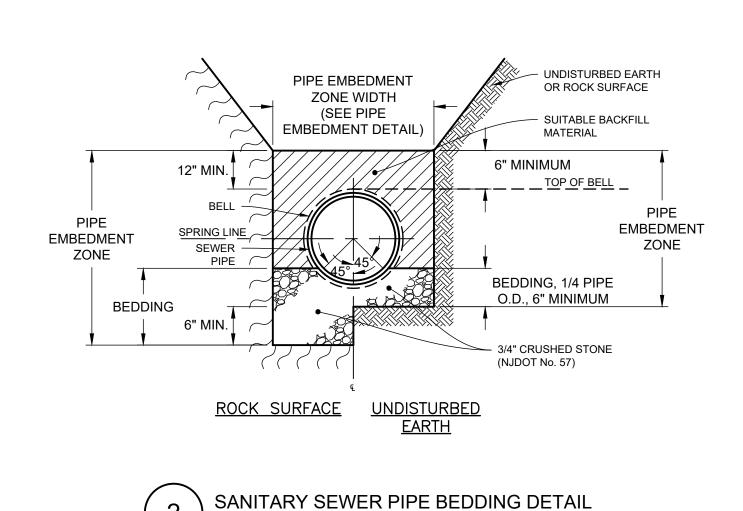
SLEEVE (NO. 14) CAUSING THE RUBBER SLEEVE

TO COMPRESS BETWEEN PIPE WALL (NO. 10) AND

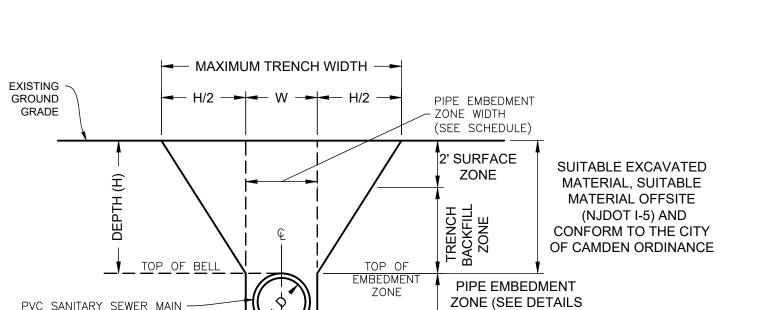
PVC HUB (NO. 26) IS DRIVEN INTO RUBBER

PVC HUB (NO. 26).

INSERTA TEE CONNECTION DETAILS (OR APPROVED EQUIVALENT) NOT TO SCALE



NOT TO SCALE



FOR VARIOUS PIPE MATERIALS)

PIPE EMBEDMENT ZONE WIDTH SCHEDULE

INSIDE DIA. OF PIPE (D)	4", 6", 8", 10", 12"	15"	18"	21"	24"	27"
EMBEDMENT ZONE WIDTH (W)	3'-0"	3'-6"	3'-6"	4'-0"	4'-0"	4'-6"

TRENCH EXCAVATION AND BACKFILL NOTES:

PVC SANITARY SEWER MAIN ---

1. THE MAXIMUM DRY DENSITIES SHALL BE DETERMINED IN ACCORDANCE WITH ASTM DESIGNATION D1557. THE MINIMUM PERCENTAGE OF COMPACTION TO BE ACHIEVED BY THE CONTRACTOR IN THE VARIOUS ZONES IS AS FOLLOWS:

<u>PIPE MATERIAL</u> INITIAL COMPACTION SURFACE ZONE: TRENCH BACKFILL ZONE: 90% PIPE EMBEDMENT ZONE: 95%

THE MINIMUM COMPACTION IN EMBANKMENT SHALL BE 90%

- 2. THE PIPE EMBEDMENT ZONE WIDTH AND THE MAXIMUM TRENCH WIDTH SHALL NOT EXCEED THE PERMISSABLE WIDTHS SHOWN. IF PERMISSABLE WIDTH IS EXCEEDED, THE PIPE SHALL BE INSTALLED IN A HIGHER CLASS BEDDING THAN SHOWN ON THE DRAWINGS OR THE SPECIFIED PIPE SHALL BE REPLACED WITH PIPE OF GREATER CRUSHING STRENGTH OR BOTH, TO ACHIEVE SUITABLE CONDITIONS.
- 3. SUITABLE MATERIAL FROM EXCAVATIONS SHALL BE FREE OBJECTIONABLE QUANTITIES OF ORGANIC MATTER, CLAYS, TREES, STUMPS, FROZEN MATERIAL, RUBBLE, REFUSE, CINDERS, ROCK AND OTHER MATERIALS CONSIDERED DELETERIOUS BY THE AUTHORITY AND SHALL NOT HAVE FINES IN EXCESS OF 10 PERCENT PASSING THE NO. 200 SIEVE NOR STONE OR GRAVEL LARGER THAN 2 INCHES.
- 4. FOR PIPE MATERIALS OTHER THAN PVC, PIPE EMBEDMENT ZONE MAY BE INCREASED BY 6 INCHES.



NOTE: ALL SITE WORK CONSTRUCTION AND DETAILS MUST CONFORM TO THE STANDARDS OF THE CITY OF CAMDEN

RAD, \Box JOS

> Ш

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATE ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE

PROJECT. THEY ARE NOT INTENDED OR REPRESENT TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHE PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL XPOSURE TO PENNONI ASSOCIATE; AND OWNER SHA NDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATE FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

PROJECT USATX22007 AUGUST 23, 2024 DRAWING SCALE AS NOTED

DRAWN BY

PPROVED BY

CS6051

SHEET 36 OF 43

LANDSCAPE NOTES:

- 1. ALL PROPOSED PLANT MATERIAL NOT SURVIVING FOR A PERIOD OF TWO (2) YEARS FROM THE DATE OF FINAL INSPECTION SHALL BE REPLACE WITH THE EQUIVALENT SIZE AND SPECIE AND AT NO ADDITIONAL COST TO THE OWNER, MAINTENANCE SHALL BE PERFORMED TO INSURE THE PROPOSED PLANTS HAVE A HEALTHY/VIGOROUS GROWTH PERIOD. IF THE PROPOSED PLANT HAS A BROKEN AND/OR DAMAGE LEADER WILL CONSTITUTE EITHER A FULL REPLACEMENT OF THE TREE OR GIVEN AN EXTENDED ONE (1) YEAR GUARANTEE PENDING ON THE CITY'S REPRESENTATIVES DECISION. ANY PROPOSED PLANT THAT IS 25% DEAD OR MORE SHALL BE REPLACED IF THE TWO (2) YEAR MAINTENANCE PERIOD AND GIVEN AN EXTENDED TIME PERIOD OF ANOTHER TWO (2) YEAR MAINTENANCE PERIOD.WHERE IT IS NECESSARY TO REPLACE PLANT MATERIAL, THE LANDSCAPE ARCHITECT/ENGINEER OR OWNER SHALL INFORM THE CONTRACTOR THEREOF BEFORE SUCH REPLACEMENTS MADE. THE CONTRACTOR SHALL PERIODICALLY VISIT THE SITE AT HIS DISCRETION DURING THE TWO YEAR GUARANTEE PERIOD AND ADVISE THE OWNER, IN WRITING, OF ANY CONDITIONS WHICH APPEAR TO IMPACT. THE CONTRACTOR SHALL MAINTAIN ALL PLANTING BY WATERING, FERTILIZING. DISEASE CONTROL. PRUNING, WEEDING, ETC. SO AS TO KEEP THE COMPLETED WORK AND/OR INCOMPLETE WORK IN A CLEAN AND NEAT CONDITION AT ALL TIMES.
- 2. THE CONTRACTOR SHALL NOTIFY OWNER AND LANDSCAPE ARCHITECT /ENGINEER UPON COMPLETION OF GUARANTEE PERIOD AND REQUEST A FINAL REVIEW PRIOR TO ACCEPTANCE OF WORK SHOULD ANY PORTION OF THE WORK BE UNACCEPTABLE, CONTRACTOR SHALL MAKE ALL WORK ACCEPTABLE AND REQUEST RE-REVIEW BY OWNER AND LANDSCAPE ARCHITECT/ENGINEER. CONTRACTOR WILL BE NOTIFIED BY LETTER OF ACCEPTANCE WITHIN FIVE (5) DAYS AFTER INSPECTION OR FIVE (5) DAYS AFTER RE-REVIEW SHOULD THE LATTER BE NECESSARY.
- 3. THE GATOR BAGS ARE TO BE INSTALLED ON EACH NEW TREE AND GUARANTEE FOR ONE YEAR. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO CHECK THE GATOR BAG FOR WATER AND /OR IF PERCOLATION IS OCCURRING AROUND THE TREE. PERCOLATION IS NOT OCCURRING, THEN THE CONTRACTOR IS TO CLEAN THE GATOR BAGS OR REPLACE IT WITH A NEW ONE. IF ANY TREE INSTALLED LOOKS STRESSED OUT AND/OR IS A REPLACEMENT TREE, THE GATOR BAG MUST RECEIVE ANOTHER YEAR FROM THE TIME OF INSTALLATION WITH THE ORIGINAL GUARANTEE STILL IN PLACE ANY GATOR BAGS FOUND DEFICIENT AND/OR LOST/STOLEN MUST BE REPLACED/PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER AND/OR CITY. CONTRACTOR IS TO REMOVE THE GATOR BAGS EVERY SIXTY (60) DAYS AND PLACE BACK ON EVERY SEVEN (7) DAYS. THE CONTRACTOR CAN REMOVE THE GATOR BAGS DURING THE WINTER MONTHS UNLESS THE TEMPERATURE GOES ABOVE 55 DEGREES FAHRENHEIT FOR A PERIOD OF THREE STRAIGHT DAYS OR MORE.
- 4. ALL DISTURBED AREAS TO BE GRASS ARE TO RECEIVE SCREENED CLEAN TOPSOIL, FINE GRADED, SEEDED, AND MULCHED PRIOR TO INSTALLATION, THE CONTRACTOR. MUST SUBMIT SHOP DRAWINGS FOR BOTH EROSION CONTROL MULCH BLANKET AND SEED MIX TO THE LANDSCAPE ARCHITECT/ENGINEER FOR APPROVAL. REFER TO PROJECT SPECIFICATIONS FOR FURTHER INFORMATION REGARDING EACH ITEM.
- 5. ALL PLANT LOCATIONS SHALL BE STAKED IN THE FIELD AND LOCATIONS APPROVED BY LANDSCAPE ARCHITECT/OR ENGINEER PRIOR TO PLANTING.
- 6. TOPSOIL WITH A QUALITY ORGANIC SOIL AMENDMENT SHALL BE USED FOR ALL PLANTING AND SEEDING OPERATIONS.
- 7. INSTALL 24" MINIMUM TOPSOIL MIXTURE IN THREE BEDS; 12" MINIMUM TOPSOIL MIXTURE IN PERENNIAL, GROUNDCOVER, SHRUB AND EVERGREEN BEDS. 6" OF TOPSOIL MIXTURE ARE TO REMAIN ON ALL DISTURBED AREAS TO RECEIVE SEED.
- 8. NOTIFY ALL UTILITY COMPANIES AND LOCATE ALL UTILITIES PRIOR TO EXCAVATING PLANT PITS. PLANT LOCATIONS MAY BE ADJUSTED IN THE FIELD TO AVOID INTERFERENCE WITH UNDERGROUND UTILITIES.
- 9. SHOULD ANY DISCREPANCY ARISE BETWEEN THE PLANTING PLAN AND THE PLANTING SCHEDULE, THE CONTRACTOR IS RESPONSIBLE FOR THE QUANTITIES SHOWN ON THE LANDSCAPE PLAN.
- 10. ALL PLANT MATERIAL SHALL BE OF NURSERY STOCK QUALITY AS DEFINED BY THE AMERICAN ASSOCIATION OF NURSERYMAN STANDARDS AND SHALL BE FIRST QUALITY NURSERY GROWN STOCK FREE OF DISEASE AND OBJECTIONABLE DISFIGUREMENTS AND PLANTED IN CONFORMANCE WITH SOUND NURSERY PRACTICE AND APPLICABLE CITY STANDARDS
- 11. ALL NON-BIODEGRADABLE ROOT WRAPPING TO BE REMOVED COMPLETELY BEFORE PLANTING.
- 12. ALL TREES SHALL BE BALLED AND BULLAPED, NURSERY GROWN STOCK.
- 13. ALL PLANT MATERIAL AND LAWNS SHALL BE PLANTED WITHIN THE RECOMMENDED SEASONAL TIME PERIODS AS PRESCRIBED BY ACCEPTED HORTICULTURAL PRACTICE. REFER TO CONSTRUCTION SPECIFICATIONS FOR RECOMMENDED PLANTING TIMES. FALL DIGGING AND TRANSPLANT HAZARD TREE SPECIES (OAKS,ETC.) SHALL ONLY BE DUG AND PLANTED IN SPRING.
- 14. ALL PLANT MATERIAL SHALL BE APPROVED UPON ARRIVAL TO THE SITE BY LANDSCAPE ARCHITECT OR ENGINEER, UNLESS OTHERWISE NOTIFIED.
- 15. PROPOSED PLANT MATERIAL MAY BE SUBSTITUTED BY SIMILAR PLANTS PRIOR TO INSTALLATION, SUBJECT TO APPROVAL BY THE ENGINEER.
- 16. A TEMPORARY FENCE, SUCH AS SNOW FENCE, SHALL BE ERECTED AT THE PERIMETER OF THE DRIPLINE OF ALL EXISTING VEGETATION INDICATED TO REMAIN. PRIOR TO EXCAVATION, CONSTRUCTION OR SITE WORK. THIS FENCE SHALL BE REMOVED ONLY AT THE TIME OF COMPLETION OF ALL CONSTRUCTION AND FINAL GRADING. COST TO BE INCLUDED IN ASSOCIATED BID ITEMS.
- 17. EXISTING TREES TO BE RELOCATED SHALL BE HANDLED ACCORDING TO ACCEPTABLE HORTICULTURE PRACTICE.
- 18. ALL DISTURBED AREAS NOT SHOWN AS PLANTED OR LAWN SHALL BE TOPSOILED AND SEEDED OR RETURNED TO THEIR ORIGINAL STATE BEFORE DISTURBANCE AS DIRECTED BY THE ENGINEER.
- 19. ALL AREAS NOT RELATED TO THE PROPOSED DEVELOPMENT SHALL REMAIN IN THEIR NATURAL STATE. DISTURBANCE OF EXISTING VEGETATION SHALL BE LIMITED TO WORK AREA AND AS DEFINED ON DWGS.
- 20. ADDITIONAL LANDSCAPING APPROVED BY THE ENGINEER SHALL BE PROVIDED BY THE APPLICANT TO REPLACE ANY VEGETATION IN ADVERTENTLY REMOVED OUTSIDE THE LIMIT OF DISTURBANCE LINE AS SHOWN ON THE APPROVED GRADING PLAN DURING CONSTRUCTION.
- 21. PROPOSED TREES SHALL NOT BE PLANTED WITHIN EASEMENTS, DRIVEWAYS AND SITE TRIANGLES. THEREFORE, THE TREE LOCATIONS SHALL BE APPROXIMATE AND SHALL BE ADJUSTED IN THE FIELD AS REQUIRED.
- 22. ALL SHADE TREES IN PEDESTRIAN WALKS AREAS SHALL HAVE AN INITIAL LIMBS PRUNED STARTING AT A MINIMUM OF 7 FT. ABOVE FINISHED GRADE.
- 23. MULCH THICKNESS MUST BE SHREDDED HARDWOOD BARK AND TO FOLLOW VARIOUS PLANTING DETAILS ON SHEET CS6061. NO DYE MULCH IS ACCEPTABLE. SEE CONSTRUCTION SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 24. PLANTS ARRANGED IN CONTINUOUS GROUPINGS SHALL BE SET IN MULCHED BEDS. THIS INCLUDES ANY PLANTS SPACED 7 FT O.C. OR CLOSER. ANY STREET TREES MUST FOLLOW TREE PIT DETAIL FOR STREET TREE PIT REQUIREMENTS.
- 25. ALL PLANTING DEBRIS SHALL BE REMOVED FROM THE PROPERTY.
- 26. ANY LIVE TREE WHICH IS SUBSTANTIALLY DAMAGED AS A RESULT OF GRADING OR GENERAL CONSTRUCTION MUST BE REMOVED AND REPLACED WITH ANOTHER TREE OR TREES AS APPROVED BY THE ENGINEER.
- 27. TREE REMOVAL FROM ANY SLOPE OR ENVIRONMENTALLY SENSITIVE AREA IS PROHIBITED IF IT WILL CONTRIBUTE, IN THE OPINION OF THE ENGINEER, TO EXTRA RUNOFF OF SURFACE WATER ONTO ADJOINING PROPERTY AND EROSION AND SILTING, UNLESS OTHER MEANS APPROVED BY THE ENGINEER ARE PROVIDED TO PREVENT RUNOFF AND EROSION.
- 28. NO HEALTHY TREE THAT IS SPECIAL BY VIRTUE OF HISTORY, UNUSUAL SIZE, OR AGE OR OF RARE SPECIES, SHALL BE REMOVED EXCEPT AS MAY BE REQUIRED FOR PROTECTION OF PUBLIC HEALTH, SAFETY AND WELFARE.
- 29. SELECTED EXISTING HEALTHY TREES SIX (6) INCHES IN CALIPER OR LESS MEASURED FOUR (4) FEET ABOVE THE GROUND SHALL BE RELOCATED ON-SITE UNDER THE DIRECTION AND APPROVAL OF THE ENGINEER.
- 30. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF PLANTING. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT AND REGULAR GROWTH OF PLANTS. CONTRACTOR TO REFER TO CONSTRUCTION SPECIFICATIONS.
- 31. SEED ALL DISTURBED AREAS WITH REQUIRED SEED MIX (CONTRACTOR TO REFER TO CONSTRUCTION SPECIFICATIONS).
- 32. TREES SHOULD BE PLANTED A MIN. OF FIVE (5) FEET FROM SIDEWALKS UNLESS IN TREE PITS.
- 33. GUY WIRES AND STAKES WILL ONLY BE UTILIZED IF CONDITIONS MERIT AND WILL BE REMOVED BY THE CONTRACTOR AT THE END OF THE GUARANTEE PERIOD.
- 34. CONTRACTOR MUST REVIEW CONSTRUCTION SPECIFICATIONS FOR ADDITIONAL INFORMATION ON PLANTING PLANTS.

LANDSCAPE MAINTENANCE NOTES:

THE OWNERS OF THE COMPANY AND THEIR AGENTS OR ASSIGNS SHALL BE RESPONSIBLE FOR THE INSTALLATION, PRESERVATION AND MAINTENANCE OF ALL PLANTING AND PHYSICAL FEATURES SHOWN ON THE PLANS. ANY AND ALL PLANT MATERIAL THAT DIES OR FAILS TO THRIVE SHALL BE IMMEDIATELY REPLACED WITH LIKE SPECIES. THE OWNERS SHALL BE RESPONSIBLE FOR ANNUAL MAINTENANCE OF SITE VEGETATION TO INCLUDE BUT NOT BE LIMITED TO:

- 1. <u>FERTILIZER</u>: MOW LAWN FERTILIZE TWICE PER YEAR.
 MEADOW DO NOT FERTILIZE THE AREAS
 RAIN GARDEN DO NOT FERTILIZE THE AREAS
- 2. <u>PRUNING</u>: PRUNING SHALL BE LIMITED OR REMOVAL OF DEAD WOOD OR BRANCHES FOR TREES OR FOR SIGHT DIFFERENCES/SAFETY REASONS. PRUNING OF SHRUBS AND TREES SHALL BE LIMITED TO THE PRUNING NECESSARY TO MAINTAIN THE NATURAL SHAPE OF THE PLANT EXCEPT FOR SHEARED HEDGES.
- 3. <u>PEST CONTROL</u>: PRE-EMERGENT WEED CONTROL FOR MOWN LAWNS AND SHRUB BEDS MAY BE APPLIED IN FEBRUARY. CHEMICAL TREATMENT FOR INSECT INFESTATION AND DISEASE MAY BE APPLIED AND SHALL BE SPECIFIC TO THE
- 4. MULCHING: MULCHING SHALL BE MAINTAINED AT A DEPTH OF 3" IN PLANT BEDS AND AROUND BASE OF TREES.
- 5. MOWING: MOWN LAWN SEED MIX SHALL BE MOWN AT REGULAR INTERVALS THROUGHOUT THE GROWING SEASON. GRASS HEIGHT SHOULD NOT EXCEED 3 INCHES. MOWER BLADES SHALL BE SET AT 2-1/2 INCHES UNLESS OTHERWISE DIRECTED.

MEADOW SEED MIX AREAS FIRST YEAR MAINTENANCE CONSISTS OF OBSERVATION OF THE DESIRED SPECIES GROWTH AND WEED COMPETITION WHEN MAKING MAINTENANCE DECISIONS. WHEN UNDESIRABLE VEGETATION REACHES 12"—18" TALL, MOW TO NO LESS THAN 6" HIGH (WITH A MOWER OR WEED EATER) TO PREVENT THE WEEDS FROM DEVELOPING SEED. GENERALLY, NATIVE PLANTS WILL GROW MORE EXTENSIVE ROOT SYSTEMS THAN TOPS IN THE FIRST YEAR; THEREFORE, MOWING TO 6"—8" HIGH WILL NOT CAUSE HARM. THIS PRACTICE ALLOWS SUNLIGHT TO REACH DESIRED SPECIES. DO NOT MOW WITH A LAWN MOWER, AS MOWING TOO CLOSE ENCOURAGES WEEDY GRASS SPECIES. PROVIDE IRRIGATION DURING PERIODS OF DRY WEATHER IS NEEDED FOR PROPER GERMINATION. MAINTAIN 1" OF WATER PER WEEK THROUGHOUT THE GROWING SEASON. SECOND YEAR MAINTENANCE OF THESE AREAS CONSISTS OF REMOVING UNDESIRED VEGETATION AND MOWING ONCE, CLOSE TO THE GROUND, IN EARLY SPRING. THIS ALLOWS YOUNG NATIVE PLANTS TO EMERGE AND UNDESIRABLE VEGETATION AND PREVENTING A BUILD—UP OF DEAD VEGETATION KNOWN AS "THATCH". THATCH WILL KEEP THE MEADOW AREAS FROM BEING HEALTHY AND DIVERSE. DEPENDING ON THE RATE OF THATCH BUILD—UP, MOW TO THE GROUND AND RAKE OFF THE RESIDUAL VEGETATION BEFORE SPRING GREEN—UP (APRIL), EVERY THREE TO FIVE YEARS.

- 6.PLANT PROTECTION: AVOID EXCESS INTRUSION INTO THE ROOT ZONE AREA OF ESTABLISHED PLANTINGS.
- 7. WATERING: UNLESS STATED OTHERWISE IN THESE DOCUMENTS, PROVIDE APPROXIMATELY 1—INCH OF RAINFALL/WATER PER WEEK THROUGHOUT THE GROWING SEASON FOR THE FIRST YEAR.

PERENNIAL AND GROUNDCOVER MAINTENANCE

- 1. WEED CONTROL CAN BE A PROBLEM UNTIL THE GROUNDCOVERS/ PERENNIALS HAVE SPREAD AND FILLED IN THE AREA. CONTROL OF PERSISTENT, PERENNIAL WEEDS, SUCH AS BERMUDAGRASS AND NUTGRASS SHOULD BE ACHIEVED BEFORE PLANTING. USE A NONSELECTIVE HERBICIDE, SUCH AS ROUNDUP. A MULCH APPLIED AFTER PLANTING AND REPLENISHED AS NEEDED TO MAINTAIN A DEPTH OF 3 INCHES WILL REDUCE THE NEED TO WEED BY HAND. PRE-EMERGENCE HERBICIDES CAN BE USED ON MANY TYPES OF GROUNDCOVER TO AID WEED CONTROL; READ THE LABEL CAREFULLY BEFORE APPLYING. AS THE GROUNDCOVER FILLS IN WEEDS WILL BECOME LESS OF A PROBLEM BECAUSE OF THE SHADED SOIL. SOME HAND WEEDING WILL MOST LIKELY BE NEEDED.
- 2. FOR BIORETANTION/RAINGARDEN PEST CONTROL:
 ONLY USE NJDEP APPROVED WEED CONTROL CHEMICALS, CHEMICAL TREATMENT FOR INSECTS INFESTATION
 AND DISEASE CAN BE USED IN THE BIORETANTION/RAINGARDENS PRIOR TO INSTALLING ANY CHEMICALS,
 CONTRACTOR MUST GET APPROVAL FROM CITY. GENERALLY, CONTRACTOR IS REQUIRED TO PULL
 WEEDS/INVASIVE WEED SPECIES (INCLUDING ROOTS) BY HAND FOR THREE (3) GROWING SEASONS / YEARS.
 AFTER YEAR THREE (3) PULLING WEEDS IS TO CONTINUE AS REQUIRED UNDER MAINTENACE CONTRACT
 WITH OWNER.
- 3.FERTILIZER MOST GROUND COVERS WILL BENEFIT FROM AN APPLICATION OF FERTILIZER IN LATE WINTER TO EARLY SPRING. USE 2 TO 4 POUNDS OF A COMPLETE FERTILIZER PER 1,000 SQUARE FEET. WATER OR BRUSH FERTILIZER OFF THE FOLIAGE AFTER BROADCASTING.

SEEDING NOTES:

- 1. SEED ALL AREAS DISTURBED BY CONSTRUCTION NOT OTHERWISE CONTAINING PLANTING BEDS, SIDEWALKS, BUILDINGS, ETC.
- 2. BEFORE SEEDING, CONTRACTOR SHALL PROVIDE SOIL TESTS AND INCORPORATE NECESSARY SOIL AMENDMENTS PER SOIL TEST RECOMMENDATIONS.
- 3. PERFORM ALL FINISH GRADING, WITHIN AREAS OF DISTURBANCE, NECESSARY TO BRING SITE TO REQUIRED FINISHED ELEVATIONS. FINISH GRADING SHALL CONSIST OF PREPARING SUBGRADE AND SPREADING TOPSOIL READY FOR SEEDING OPERATIONS.
- 4. TOPSOIL SHALL BE UNIFORMLY SPREAD IN DISTURBED AREAS WITH BLADE GRADER, OR BY ANY OTHER APPROVED METHOD, TO A MINIMUM DEPTH OF 6 INCHES TO PERMIT 1 INCH OF SETTLEMENT. CORRECT ANY SURFACE IRREGULARITIES TO PREVENT FORMATION OF LOW SPOTS AND POCKETS THAT WOULD RETAIN WATER. PRIOR TO FINE GRADING, REMOVE ALL EXISTING ANNUAL TYPE VEGETATION.
- 5. SOW SEED AT THE RECOMMENDED SEEDING RATE AS SHOWN IN THE SEEDING MIX SCHEDULE.
- 6. SEED SHALL BE APPLIED APRIL 15TH THRU MAY 31ST OR AUGUST 17TH THRU OCTOBER 15TH.
- 7. AFTER SEEDING APPLICATION, WOOD CELLULOSE FIBER SHALL BE APPLIED HYDRAULICALLY AT A NET RATE DRY WEIGHT OF 1,500 LBS PER ACRE OR AT RATES RECOMMENDED BY THE MANUFACTURER. MULCH ALL SEEDED AREAS WITH CLEAN STRAW.
- 8. ON ALL SLOPES 3:1 OR GREATER, USE AN ORGANIC SOIL STABILIZER SUCH AS 'CON-TACK' OR EQUAL AT THE RATE OF 25 LBS PER 1,000 GALLONS OR AT RATES RECOMMENDED BY THE MANUFACTURER.
- 9. KEEP NEWLY SEEDED GRASS AREAS MOISTENED DURING SEED GERMINATION AND UNTIL THE GRASS COVERS AT LEAST 75% OF THE SEEDED AREAS TO A HEIGHT OF 2 TO 3 INCHES.
- 10. ALL AREAS AND SPOTS, WHICH DO NOT SHOW A PROMPT CATCH OF GRASS, SHALL THEN BE RE-SEEDED, AND THE OPERATION REPEATED UNTIL COMPLETE COVERAGE IS OBTAINED.

IRRIGATION NOTES

- 1. ALL ON-SITE IRRIGATION TO BE DESIGNED BY CONTRACTOR. CONTRACTOR TO SUBMIT SHOP DRAWING WITH LAYOUT TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- 2. CONTRACTOR IS RESPONSIBLE FOR COMPLETE WATER COVERAGE IN ALL WATERING AREAS OF PARK (INCLUDES ALL PLANT BEDS, TREES, AND DISTURBED LAWN AREAS). CONTRACTOR IS TO COORDINATE WORK WITH THE OWNER AND ENGINEER TO DETERMINE THE EXACT PIPE ROUTING AND PLACEMENT OF ALL COMPONENTS ON SITE. THIS INCLUDES ALL PLACEMENT OF VALVES. CONTRACTOR IS TO COORDINATE IRRIGATION WORK WITH ANY EXISTING AND PROPOSED UTILITIES. COST TO BE INCLUDED IN THE LUMP SUM BID COST FOR AN IRRIGATION SYSTEM.
- 3. ALL MAIN PIPING SHALL BE SDR 21 CLASS 200 PVC PIPE.
- 4. ALL ZONE PIPING SHALL BE SDR 21 CLASS 200 PVC PIPE.
- 5. ALL PIPE AND WIRE UNDER HARD SURFACES MUST BE INSTALLED IN A PVC SCH 40 PIPE SLEEVES. ALL PIPE SLEEVES ARE TO BE 2 TIMES THE OD OF THE PIPE TO BE SLEEVED. ALL WIRE SLEEVES MUST BE A MINIMUM OF 4-INCH OD PIPE. ALL SLEEVES TO EXTEND 18" PAST CURBS, STEPS, PAVEMENT, SIDEWALK, AND/OR HARD SURFACES SLEEVED. ALL SLEEVES ARE TO HAVE 6" LEVEL CLEAN SAND BEDDING.
- 6. ALL T7P SPRINKLERS USE #12 NOZZLE OR APPROVED EQUAL AT A MINIMUM.
- 7. ALL ZONES WITH FULL CIRCLE SPRINKLERS RUN TWICE AS LONG AS PART CIRCLE ZONES.
- 8. IRRIGATION CONTROL SYSTEM IS TO BE INSTALLED IN THE MECHANICAL ROOM OF BUILDING. COST TO BE INCLUDED IN THE LUMP SUM BID COST FOR THE IRRIGATION SYSTEM.

9. <u>DESIGN REQUIREMENTS:</u>

- THE CONTRACTOR MUST BE CIC CERTIFIED TO INSTALL IRRIGATION IN THE STATE OF NEW JERSEY
- THE CONTRACTOR MUST SUPPLY A RECORD DRAWING WITH CID STAMP CERTIFIED IN LATEST A-CAD VERSION
- THE CONTRACTOR MUST SUPPLY A IRRIGATION SCHEDULE BY A CID COMMERCIAL IRRIGATION TO BE REVIEWED BY OWNER'S AGENT
- THE CONTRACTOR TO USE GATE VALVES PER SIZE OF IRRIGATION PIPES IN THE IRRIGATION SYSTEM DESIGN.
- THE CONTRACTOR TO USE 1" QUICK COUPLER VALVES IN THE IRRIGATION SYSTEM DESIGN.
- ALL PLANTING BEDS ARE TO RECEIVE DRIP IRRIGATION.
- WEATHERTRAK TWO WIRE CONTROLLER OF APPROVED EQUAL IS TO BE INSTALLED IN A CONTROL BOX WITH A CAPABILITY TO HOLD A LOCK. LOCK TO BE PROVIDED BY CONTRACTOR. CONTROLLER IS TO BE LOCATED INSIDE THE CHAIN LINK ENCLOSURE.
- CONTRACTOR TO PROVIDE A BACKFLOW PREVENTOR AND A HOTBOX.
- ALL UNDERGROUND, WATER BOXES ARE TO BE INSTALLED IN A TAMPER PROOF BOX.
- WEATHERTRAK SURGE DEVICE WITH GROUND ROAD AND CADWELD CLAMPS OR APPROVED EQUAL. SURGE DEVICES NOT TO EXCEED 500 FEET ON ANY LEG OF DECODER WIRE.
- 14/2 DECODER WIRE WITH 4 FOOT LOOP AT EACH VALVE
- CONTRACTOR SHALL RUN A MINIMUM OF 2 WIRE LEGS AND USE PAIGE LEG SPLICES AT ALL SPLICE TEE LOCATIONS.
- CONTRACTOR SHALL SUBMIT SHOP DRAWING OF IRRIGATION ALONG WITH 2 WIRE LEG RUNS TO ENGINEER FOR REVIEW AND APPROVALS.

Pennoni

2 Aquarium Drive, Suite 320 Camden, NJ 08103

CERTIFICATE OF AUTHORIZATION NO. GA280333

JOSEPH RADAY

PROFESSIONAL ENGINEER

NEW JERSEY LICENSE NO. GE043768

OS/23/

HOLTEC OFFICE BUILDI
FICE PARKING EXPANSI
BROADWAY, BLOCKS 511, 512, 514 & 515
AMDEN, CAMDEN COUNTY, NEW JERSEY
E AND IRRIGATION NOTE
TEC INTERNATIONAL INC

MENDI MAIN (

E NO. REVISIONS BY

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATE:
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE
PROJECT. THEY ARE NOT INTENDED OR REPRESENTE
TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O
THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER
PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATIC
OR ADAPTATION BY PENNONI ASSOCIATES FOR THE
SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL
EXPOSURE TO PENNONI ASSOCIATE; AND OWNER SHAI
INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATE
FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES
ARISING OUT OF OR RESULTING THEREFROM.

DATE USATX22001

AUGUST 23, 2024

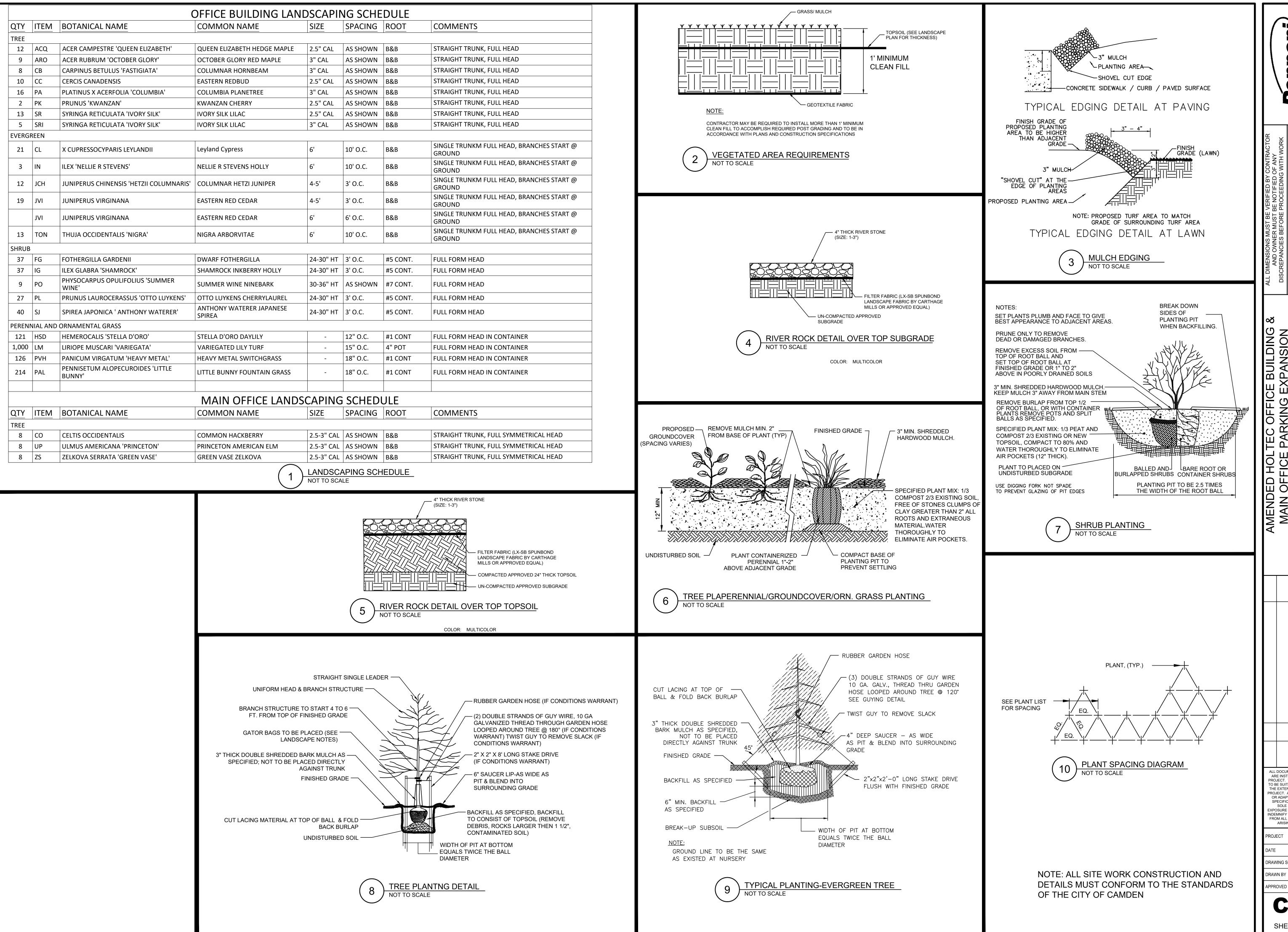
N.T.S.

DRAWN BY

DRAWING SCALE

CCCAA

SHEET 37 OF 43



RA A \Box S

0

N

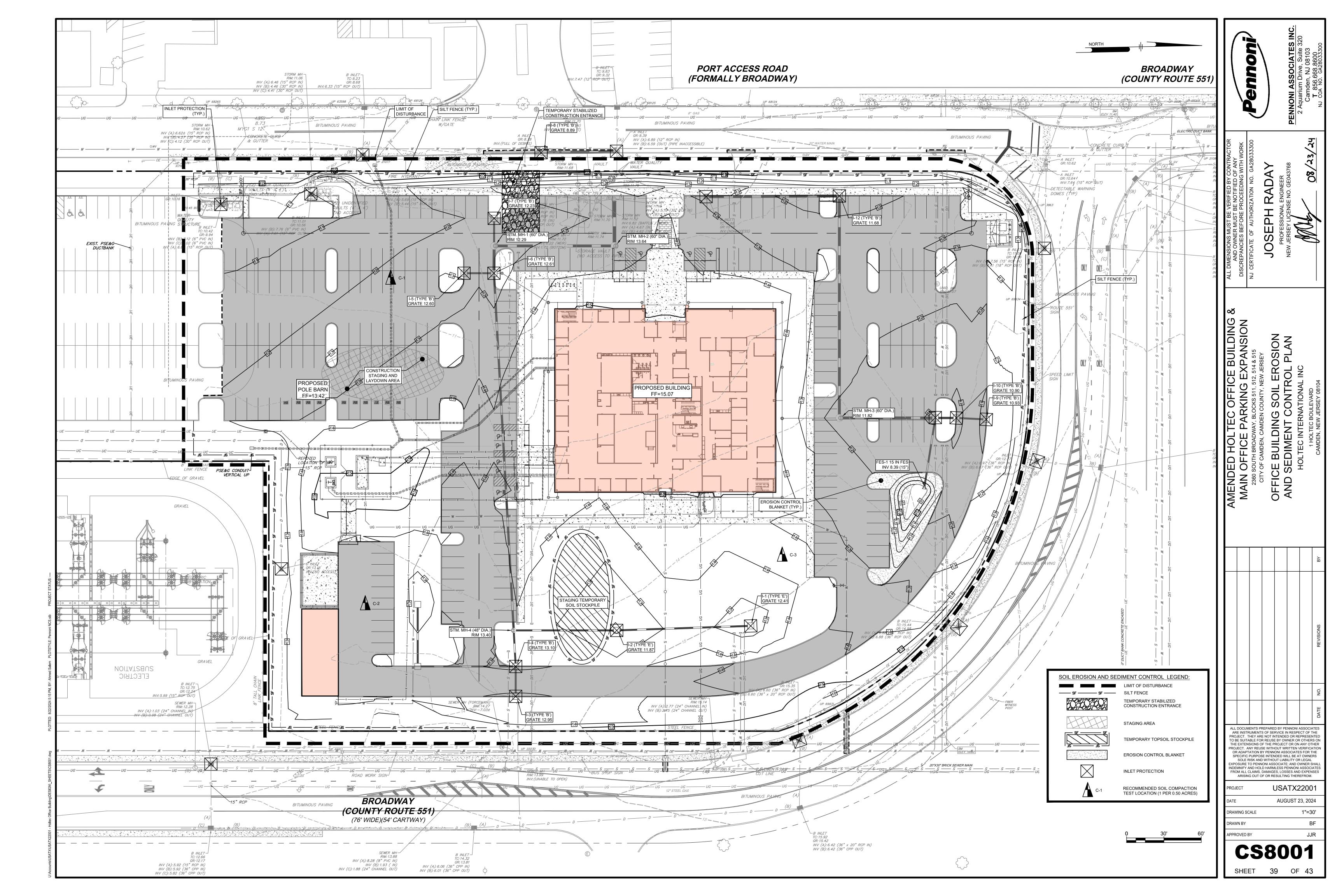
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATE

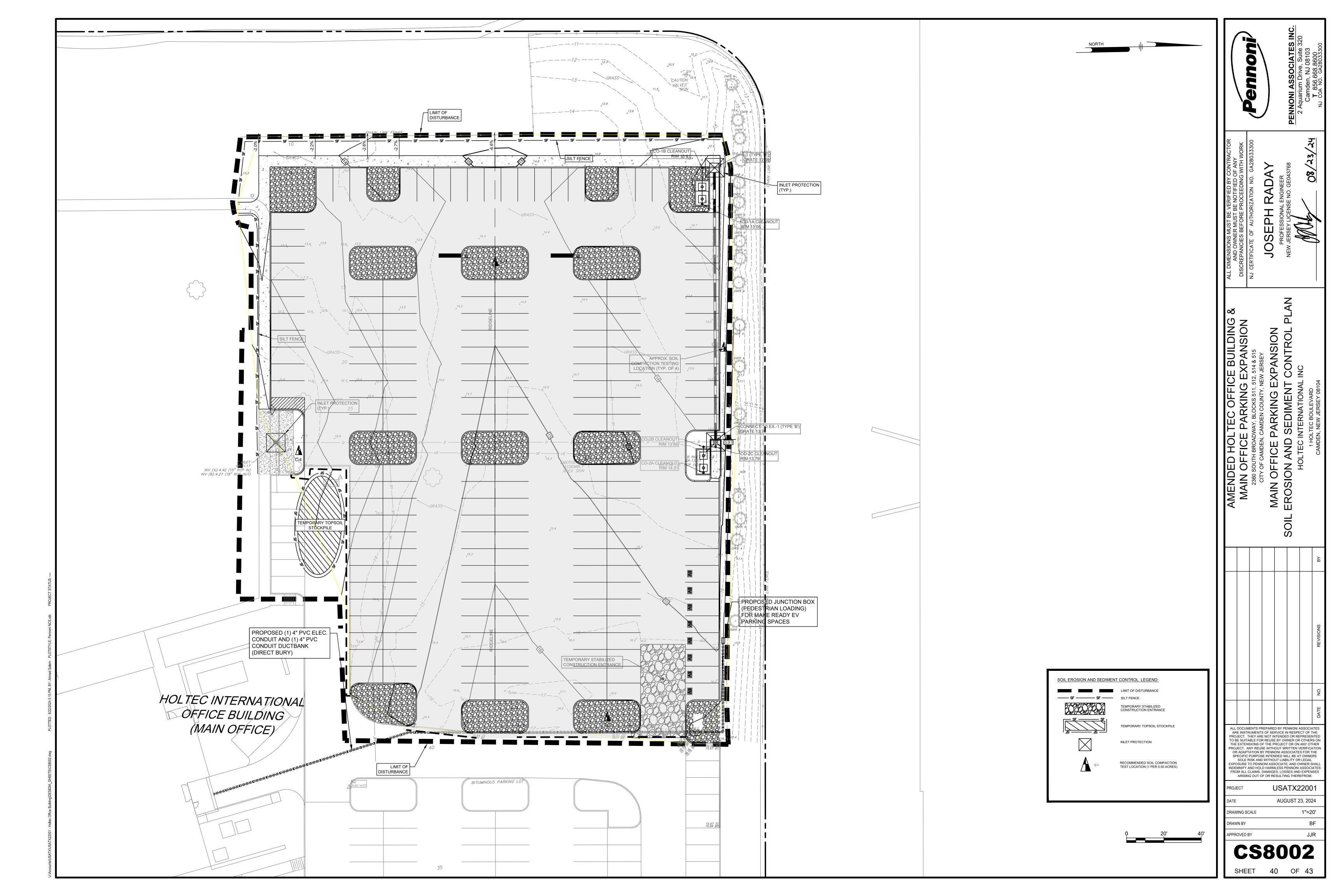
ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENT TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHE PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL POSURE TO PENNONI ASSOCIATE; AND OWNER SHA IDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATI FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

USATX2200 AUGUST 23, 2024 DRAWING SCALE N.T.S

PPROVED BY **CS6062**

SHEET 38 OF 43





2. SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON THIS PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.

3. APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND/OR THE AREA IS STABILIZED.

4. THE CONTRACTOR SHALL PERFORM ALL WORK, FURNISH ALL MATERIALS AND INSTALL ALL MEASURES REQUIRED TO REASONABLY CONTROL SOIL EROSION RESULTING FROM CONSTRUCTION OPERATIONS AND PREVENT EXCESSIVE FLOW OF SEDIMENT FROM THE CONSTRUCTION SITE.

ANY DISTURBED AREA THAT IS TO BE LEFT EXPOSED FOR MORE THAN THIRTY (30) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND FERTILIZATION IN ACCORDANCE WITH THE NEW JERSEY STANDARDS AND THEIR RATES SHOULD BE INCLUDED IN THE NARRATIVE. II THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREAS WILL BE MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS (I.E. PEG AND TWINE, MULCH NETTING OR LIQUID MULCH BINDER).

6. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO PROVIDE CONFIRMATION OF LIME, FERTILIZER AND SEED APPLICATION AND RATES OF APPLICATION AT THE REQUEST OF THE CAMDEN SOIL CONSERVATION DISTRICT.

7. ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH AT A RATE OF 2 TONS PER ACRE ACCORDING TO THE NEW JERSEY STANDARDS IMMEDIATELY FOLLOWING ROUGH GRADING.

8. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL

9. ALL SEDIMENTATION STRUCTURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS AND AFTER EVERY STORM EVENT.

10 A CRUSHED STONE TIRE CLEANING PAD WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS EXISTS. THE STABILIZED PAD WILL BE INSTALLED ACCORDING TO THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS.

11. ALL DRIVEWAYS MUST BE STABILIZED WITH 2-1/2" CRUSHED STONE OR SUBBASE PRIOR TO INDIVIDUAL LOT CONSTRUCTION.

12. PAVED AREAS MUST BE KEPT CLEAN AT ALL TIMES.

13. ALL CATCH BASIN INLETS WILL BE PROTECTED ACCORDING TO THE CERTIFIED PLAN.

14. ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED, AS REQUIRED BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.

15. ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTER AREA. THE SEDIMENT FILTER SHOULD BE COMPOSED OF A SUITABLE SEDIMENT FILTER FABRIC. (SEE DETAIL). THE BASIN MUST BE DEWATERED TO NORMAL POOL WITHIN 10 DAYS OF THE DESIGN STORM.

16. NJSA 4:24-39, ET SEQ. REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE ALL PROVISIONS OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES. ALL SITE WORK FOR THE PROJECT MUST BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE A PREREQUISITE TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.

17. MULCHING IS REQUIRED ON ALL SEEDED AREAS TO INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED TO PROMOTE EARLIER VEGETATION COVER.

18. OFFSITE SEDIMENT DISTURBANCE MAY REQUIRE ADDITIONAL CONTROL MEASURES TO BE DETERMINED BY THE EROSION CONTROL INSPECTOR.

19. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE MAINTAINED ON THE PROJECT SITE DURING CONSTRUCTION.

20. THE CAMDEN SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED 72 HOURS PRIOR TO ANY LAND DISTURBANCE.

21. ANY CONVEYANCE OF THIS PROJECT PRIOR TO ITS COMPLETION WILL TRANSFER FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CERTIFIED PLAN TO ANY SUBSEQUENT OWNERS.

22. IMMEDIATELY AFTER THE COMPLETION OF STRIPPING AND STOCKPILING OF TOPSOIL, THE STOCKPILE MUST BE STABILIZED ACCORDING TO THE STANDARD FOR TEMPORARY VEGETATIVE COVER. STABILIZE TOPSOIL STOCKPILE WITH STRAW MULCH FOR PROTECTION IF THE SEASON DOES NOT PERMIT THE APPLICATION AND ESTABLISHMENT OF TEMPORARY SEEDING. ALL SOIL STOCKPILES ARE NOT TO BE LOCATED WITHIN FIFTY (50) FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY AND THE BASE MUST BE PROTECTED WITH A SEDIMENT

23. ANY CHANGES TO THE SITE PLAN WILL REQUIRE THE SUBMISSION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN TO THE CAMDEN SOIL CONSERVATION DISTRICT. THE REVISED PLAN MUST BE IN ACCORDANCE WITH THE CURRENT NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL.

24. METHODS FOR THE MANAGEMENT OF HIGH ACID PRODUCING SOILS SHALL BE IN ACCORDANCE WITH THE STANDARDS. HIGH ACID PRODUCING SOILS ARE THOSE FOUND TO CONTAIN IRON SULFIDES OR HAVE A PH OF 4 OR LESS

25. TEMPORARY AND PERMANENT SEEDING MEASURES MUST BE APPLIED ACCORDING TO THE NEW JERSEY STANDARDS. AND MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS (I.E. PEG AND TWINE, MULCH NETTING OR LIQUID MULCH BINDER).

26. MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT BE CONSTRUCTED STEEPER THAN 3:1 UNLESS OTHERWISE APPROVED BY THE DISTRICT.

27. DUST IS TO BE CONTROLLED BY AN APPROVED METHOD ACCORDING TO THE NEW JERSEY STANDARDS AND MAY INCLUDE WATERING WITH A SOLUTION OF CALCIUM CHLORIDE AND WATER.

28. ADJOINING PROPERTIES SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS ON THE PROPOSED SITE.

29. USE STAGED CONSTRUCTION METHODS TO MINIMIZE EXPOSED SURFACES, WHERE APPLICABLE.

30. ALL VEGETATIVE MATERIAL SHALL BE SELECTED IN ACCORDANCE WITH AMERICAN STANDARDS FOR NURSERY STOCK OF THE AMERICAN ASSOCIATION OF THE NURSERYMAN AND IN ACCORDANCE WITH THE NEW JERSEY STANDARDS.

31. NATURAL VEGETATION AND SPECIES SHALL BE RETAINED WHERE SPECIFIED ON THE LANDSCAPING PLAN.

32. THE SOIL EROSION INSPECTOR MAY REQUIRE ADDITIONAL SOIL EROSION MEASURES TO BE INSTALLED, AS DIRECTED BY THE DISTRICT INSPECTOR.

33. CONTRACTOR SHALL REMOVE ALL WASHED, TRACKED OR SPILLED SEDIMENTS ON

STANDARD FOR TEMPORARY VEGETATIVE **COVER FOR SOIL STABILIZATION:**

ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER ON SOILS EXPOSED FOR PERIODS OF TWO TO 6 MONTHS WHICH ARE NOT BEING GRADED, NOT UNDER ACTIVE CONSTRUCTION OR NOT SCHEDULED FOR PERMANENT SEEDING WITHIN 60 DAYS.

TO TEMPORARILY STABILIZE THE SOIL AND REDUCE DAMAGE FROM WIND AND WATER EROSION UNTIL PERMANENT STABILIZATION IS ACCOMPLISHED.

WATER QUALITY ENHANCEMENT

PAVED ROADWAY SURFACES IMMEDIATELY.

PROVIDES TEMPORARY PROTECTION AGAINST THE IMPACTS OF WIND AND RAIN, SLOWS THE OVERLAND MOVEMENT OF STORMWATER RUNOFF, INCREASES INFILTRATION AND RETAINS SOIL AND NUTRIENTS ON SITE, PROTECTING STREAMS OR OTHER STORMWATER

ON EXPOSED SOILS THAT HAVE THE POTENTIAL FOR CAUSING OFF-SITE ENVIRONMENTAL

METHODS AND MATERIALS

A. 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 STANDARDS FOR LAND GRADING, P. 19-1.

B. 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.

C. 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.).

2. SEEDBED PREPARATION

A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS THOSE OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS CO-OPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 PONDS 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. APPLY LIMESTONE AT THE RATE OF 2 TONS/ACRE UNLESS 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. TABLE BELOW IS A GENERAL GUIDELINE FOR LIMESTONE APPLICATION.

SOIL TEXTURE	TONS/ACRE	LBS./1,000 S.F.
CLAY, CLAY LOAM, AND HIGH ORGANIC SOIL	3	135
SANDY LOAM, LOAM, SILT LOAM	2	90
LOAMY SAND, SAND	1	45

PULVERIZED DOLOMITIC LIMESTONE IS PREFERRED FOR MOST SOILS SOUTH OF THE NEW

B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM SEEDBED IS PREPARED.

C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AS ABOVE.

D. SOILS HIGH ON SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, PG. 1-1 OF THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.

A. SELECT SEED FROM RECOMMENDATIONS IN TABLE

		IG RATES 1* DUNDS)	OPTIN BASED ON	OPTIMUM SEED DEPTH 4*		
SEED TYPES	PER ACRE	PER 1,000 SQ. FT.	ZONE 5	ZONE 6	ZONE 7	(INCHES)
COOL SEASON GRASSES						
PERENNIAL RYEGRASS	170	4.0	3/15 - 6/1 & 8/1 - 9/15	3/1 - 5/15 & 8/15 - 10/1	2/15 - 5/1 & 8/15 - 10/15	0.5
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
WINTER BARLEY	96	2.2	8/1 - 9/15	8/15 - 10/1	8/15 - 10/15	1.0
WINTER CEREAL RYE	112	2.8	8/1 - 11/1	8/1 - 11/15	8/1 - 12/15	1.0
WARM SEASON GRASSES						
PEARL MILLET	20	0.5	6/1 - 8/1	5/15 - 8/15	5/1 - 9/1	1.0
MILLET (GERMAN OR HUNGARIAN	30	0.7	6/1 - 8/1	5/15 - 8/15	5/1 - 9/1	1.0
WEEPING LOVEGRASS	5	0.2	6/1 - 8/1	5/15 - 8/15	5/1 - 9/1	0.25

1* SEEDING RATE FOR WARM SEASON GRASS, SHALL BE ADJUSTED TO REFLECT THE

AMOUNT OF PURE LINE SEED (PLS) AS DETERMINED BY A GERMINATION TEST RESULT. NO ADJUSTMENT IS REQUIRED FOR COOL SEASON GRASSES. 2* MAY BE PLANTED THROUGHOUT SUMMER IF SOIL MOISTURE IS ADEQUATE OR CAN BE

3* PLANT HARDINESS ZONE (SEE BELOW)

ZONE 5B (-10 TO -15) PORTIONS OF SUSSEX AND WARREN COUNTIES

4* TWICE THE DEPTH FOR SANDY SOILS

<u>ZONE 6A (-5 TO -10)</u> PORTIONS OF SUSSEX, WARREN, PASSAIC, MORRIS, SOMERSET AND HUNTERDON COUNTIES.

PORTIONS OR BERGEN, CAMDEN, ESSEX AND GLOUCESTER, HUNTERDON, MERCER, MIDDLESEX, HUDSON, MONMOUTH, OCEAN, BURLINGTON, MORRIS, PASSAIC, SOMERSET, UNION, ATLANTIC, CUMBERLAND, AND CAPE MAY COUNTIES.

PORTIONS OF CAMDEN, GLOUCESTER, SALEM, CUMBERLAND, CAPE MAY, ATLANTIC, BURLINGTON, OCEAN, AND MONMOUTH COUNTIES. ZONE 7B (10 TO 5) PORTIONS OF CAPEMAY, ATLANTIC, OCEAN AND MONMOUTH COUNTIES.

B. 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.

C. 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. 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

D. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDING EMERGENCE, THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

4. 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.

A. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, OR SALT HAY TO BE 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 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 ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

SPREAD UNIFORMLY BY HAND MECHANICALLY SO THAT APPROXIMATELY 85% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

ANCHORING SHOULD 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 THE AREA, STEEPNESS OF SLOPES, AND COSTS. PEG AND TWINE - DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE OIL 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 CRISS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND

MULCH NETTINGS - STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.

EACH PEG WITH TWO OR MORE ROUND TURNS.

<u>CRIMPER (MULCH ANCHORING TOOL)</u> - 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

4. LIQUID MULCH-BINDERS - MAY BE USED TO ANCHOR SALT HAY OR STRAW MULCHES.

a. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH. IN VALLEYS, AND AT CRESTS OF BANKS. REMAINDER OF AREA SHOULD BE UNIFORM IN APPEARANCE.

b. USE ONE OF THE FOLLOWING:

(1) EMULSIFIED ASPHALT - (SS-1, CSS-1, CMS-2, MS-2, RS-1, RS-2, CRS-1, AND CRS-2). APPLY 0.04 GAL./SQ. YD. OR 194 GAL./ACRE ON FLAT SLOPES LESS THAN 8 FEET HIGH. ON SLOPES 8 FEET OR MORE HIGH, USE 0.075 GAL./SQ. YD. OR 363 GAL./ACRE. THESE MATERIALS MAY BE DIFFICULT TO APPLY UNIFORMLY AND WILL DISCOLOR SURFACES

(2) 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 PHYTOTOXIC EFFECT OR IMPEDE 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

(3) SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE 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.

B. WOOD-FIBER OR PAPER-FIBER MULCH. SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS. USED AT THE RATE OF 1 500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE PRODUCT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. THIS MULCH SHALL NOT BE MIXED IN THE TANK WITH THE SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

C. PELLETIZED MULCH. 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 SEEDED AREA AND WATERED, FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS RATE OF 60-75 LBS/1 000 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, SEEDED 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 PELLETIZE MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE

STANDARD FOR PERMANENT VEGETATIVE **COVER FOR SOIL STABILIZATION:**

ESTABLISHMENT OF PERMANENT VEGETATIVE COVER ON EXPOSED SOILS WHERE PERENNIAL VEGETATION IS NEEDED FOR LONG TERM PROTECTION.

TO PERMANENTLY STABILIZE THE SOIL, ASSURING CONSERVATION OF SOIL AND WATER, AND TO ENHANCE THE ENVIRONMENT.

WATER QUALITY ENHANCEMENT

SLOWS THE OVERLAND MOVEMENT OF STORMWATER RUNOFF, INCREASES INFILTRATION AND RETAINS SOIL AND NUTRIENTS ON SITE, PROTECTING STREAMS OR OTHER STORMWATER CONVEYANCES.

WHERE APPLICABLE

ON EXPOSED SOILS THAT HAVE A POTENTIAL FOR CAUSING OFF-SITE ENVIRONMENTAL

METHODS AND MATERIALS

1. SITE PREPARATION

A. 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 STANDARDS FOR LAND GRADING, P. 19-1.

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.

C. 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.)

2. SEED BED PREPARATION

A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS THOSE OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS CO-OPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 PONDS 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. APPLY LIMESTONE IN ACCORDANCE WITH THE TABLE BELOW AND THE RESULTS OF SOIL TESTING. 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. TABLE BELOW IS A GENERAL GUIDELINE FOR LIMESTONE APPLICATION RATES.

SOIL TEXTURE	TONS/ACRE	LBS./1,000 S.F.
CLAY, CLAY LOAM, AND HIGH ORGANIC SOIL	3	135
SANDY LOAM, LOAM, SILT LOAM	2	90
LOAMY SAND, SAND	1	45

PULVERIZED DOLOMITIC LIMESTONE IS PREFERRED FOR MOST SOILS SOUTH OF THE NEW BRUNSWICK-TRENTON LINE.

- B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC. SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM SEEDBED IS
- C. 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.)
- D. 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 5 OR MORE BEFORE INITIATING SEEDBED PREPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS.

A. SEED MIX SHALL BE AS FOLLOWS

TYPE 'A-3' SEED MIXTURE - TO BE PLANTED FROM 2/1 - 4/30 AND FROM 8/15 - 10/30.

KIND OF SEED	MINIMUM PURITY-%	MINIMUM GERMINATION-%	% OF TOTAL WEIGHT MIXTURE	PLANTING RATE POUNDS/ACRE
TALL FESCUE (REBEL OR FALCON)	95	80	70	120
KENTUCKY BLUEGRASS (KENBLUE, SOUTH DAKOTA OR PARK)	85	75	10	20
CHEWINGS FESCUE (HIGHLIGHT OR JAMESTOWN)	95	85	10	40
PERENNIAL RYEGRASS (LINN)	98	85	10	20

B. 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.

C. 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. 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

AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

FOLLOW SAME STANDARDS AS LISTED UNDER TEMPORARY VEGETATIVE COVER FOR STABILIZATION.

IRRIGATION (WHERE FEASIBLE)

IF SOIL MOISTURE IS DEFICIENT, AND MULCH IS NOT USED, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER (A MINIMUM OF $\frac{1}{4}$ INCH TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED). THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.

SINCE SLOW RELEASE NITROGEN FERTILIZER (WATER INSOLUBLE IS PRESCRIBED IN SECTION II.A. SEEDBED WHERE GRASS NITROGEN DEFICIENCY EXISTS TO THE EXTENT THAT TURF FAILURE MAY DEVELOP. IN THAT INSTANCE, TOPDRESS WITH 10-10-10 OR EQUIVALENT AT 400 POUNDS PER 1,000 SQ. FT.

7. ESTABLISHING PERMANENT VEGETATIVE STABILIZATION

THE QUALITY OF PERMANENT VEGETATION RESTS WITH THE CONTRACTOR. THE TIMING OF SEEDING, PREPARING THE SEEDBED, APPLYING NUTRIENTS, MULCH AND OTHER MANAGEMENT ARE ESSENTIAL. THE SEED APPLICATION RATE IS REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN APPLICATION RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO REQUESTING A REPORT OF COMPLIANCE FROM THE DISTRICT. THIS RATE APPLIES TO ALL METHODS OF SEEDING. ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVER (OF THE SEEDED SPECIES) AND MOWED ONCE.

SEQUENCE OF CONSTRUCTION:

<u>IT</u>	<u>EM</u>	DURATION
1.	MOBILIZE AND CLEARLY DEFINE LIMITS OF CLEARING WITH FLAGGING. WORK SHALL BE LIMITED TO AREAS SPECIFICALLY SHOWN ON PLANS.	1 DAY
2.	INSTALL SILT FENCE DOWNSTREAM OF ALL DEMOLITION AREAS.	2 DAYS
3.	INSTALL ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL BMP'S AS DETAILED ON APPROVED PLANS.	2 DAYS
4.	BEGIN SITE DEMOLITION AS SHOWN ON SHEET CS0501. THE USE OF TEMPORARY BMP'S WILL NEED TO BE IMPLEMENTED AS SITE CONDITIONS WARRANT.	1 WEEK
5.	COMPLETE ALL SITE CLEARING, GRUBBING AND STRIPPING AND STOCKPILE AND STABILIZATION OF TOPSOIL. CLEAR AND EXCAVATE STORMWATER MANAGEMENT AREAS.	1 WEEK
6.	CONSTRUCT STORMWATER MANAGEMENT AREAS. STABILIZE SLOPED AREAS USING EROSION CONTROL MATTING AND SEEDING.	1 WEEK
7.	PERFORM ROUGH GRADING. IMMEDIATELY STABILIZE GRADED AREAS THAT WILL NOT BE DISTURBED AGAIN WITH TOPSOIL, PERMANENT SEEDING AND MULCH OR EROSION CONTROL BLANKETS PER PLANS.	4 WEEKS
8.	INSTALL STORMWATER CONVEYANCE PIPE AND INLETS AND INLET PROTECTION.	2 WEEKS
9.	INSTALL BUILDING FOUNDATIONS.	2 MONTHS
10.	INSTALL UTILITY SERVICES AND STRUCTURES.	4 WEEKS
11.	BUILDING CONSTRUCTION (ONGOING)	8 MONTHS
12.	CONSTRUCT CONCRETE CURBING, PADS AND SIDEWALKS.	6 WEEKS
13.	INSTALL SITE LIGHTING CONCRETE BASES, CONDUIT AND PANEL BOX/PAD.	2 WEEKS
14.	INSTALL STONE BASE FOR ASPHALT PAVEMENT AND ASPHALT BASE COURSE.	1 WEEK
15.	INSTALL FENCING AND SITE FURNITURE.	1 WEEK
16.	INSTALL ASPHALT WEARING COURSE.	1 WEEK
17.	INSTALL ALL LANDSCAPE MATERIAL AND RE-SPREAD TOPSOIL AND PROVIDE PERMANENT VEGETATIVE STABILIZATION OF ALL EXPOSED AREAS IN ACCORDANCE WITH SPECIFICATIONS HEREON.	2 WEEKS
18.	DEWATER AND REMOVE ANY SEDIMENT COLLECTED IN STORMWATER MANAGEMENT AREAS, SPREAD ON SITE AND STABILIZE.	1 WEEK
19.	AFTER VEGETATIVE COVER HAS BEEN ESTABLISHED TO THE SATISFACTION OF THE DISTRICT INSPECTOR, REMOVE TEMPORARY SOIL EROSION AND SEDIMENT CONTROL BMP'S.	3 DAYS



 \bigcirc \Box ഗ

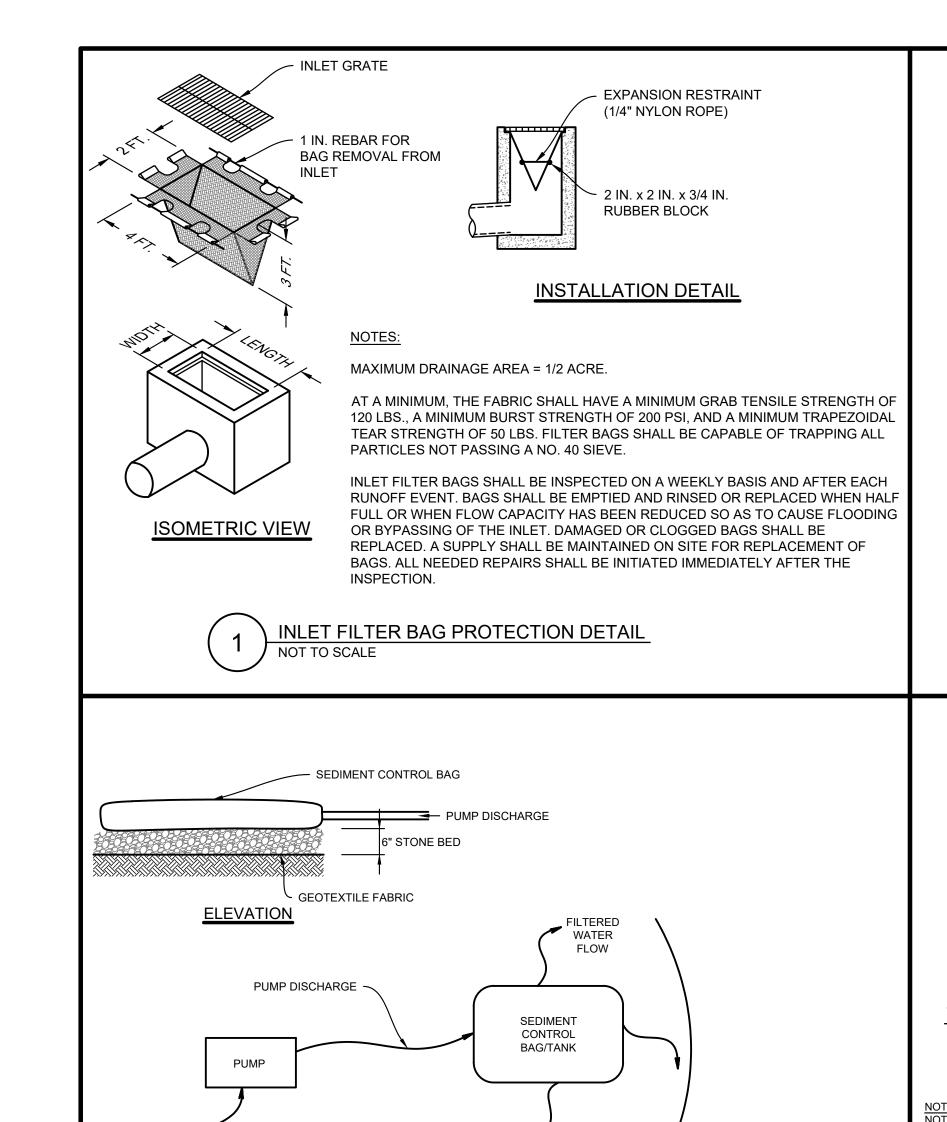
0

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATE ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESEN TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS O THE EXTENSIONS OF THE PROJECT OR ON ANY OTHE PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL XPOSURE TO PENNONI ASSOCIATE; AND OWNER SH NDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATI FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSE ARISING OUT OF OR RESULTING THEREFROM.

PROJECT USATX2200 AUGUST 23, 2024 DRAWING SCALE N.T.S.

PPROVED BY

DRAWN BY



SILT FENCE -

NOTES:

1. BAG MUST BE LOCATED AWAY FROM RECEIVING

AREAS, AND/OR CONSTRUCTION ACTIVITIES.

2. BAGS MUST BE INSTALLED PER MANUFACTURER'S

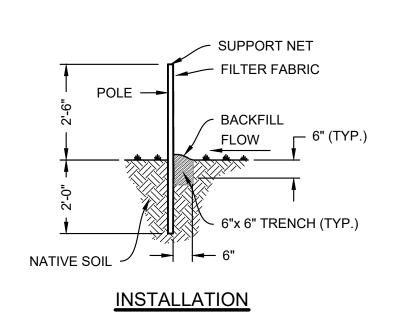
4. BAGS MUST BE DISPOSED OF ACCORDING TO

MANUFACTURER'S INSTRUCTIONS.

RECOMMENDATIONS.

3. BAGS MAY NOT BE REUSED.

WATERS, OTHER ENVIRONMENTALLY SENSITIVE



JOINING SECTION - PLAN VIEW

SECTION 'B

COUPLER

IOINING SECTION - ELEVATION

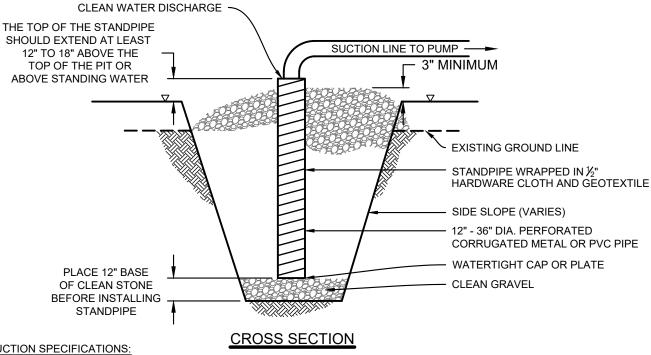
THE FABRIC MUST BE SECURELY FASTENED TO THE POSTS USING A SYSTEM CONSISTING OF METAL FASTENERS (NAILS OR STAPLES) AND A HIGH STRENGTH REINFORCEMENT MATERIAL (NYLON WEBBING, GROMMETS, WASHERS, ETC.) PLACED BETWEEN THE FASTENER AND THE GEOTEXTILE FABRIC.

SILT FENCE TO BE USED ON SITE SHALL BE "ENVIROFENCE" PRECONSTRUCTED SILT FENCE OR EQUAL

SPECIFICATIONS ARE: LENGTH: 100 FT. FABRIC WIDTH: 3 FT. POLE LENGTH: 4.5 FT. POLE SPACING: 7.7 FT. INSTALLED HEIGHT: 2.5 FT. SEDIMENT FABRIC: MIRAFI 100.

6" MIN. VISIBLE MARK

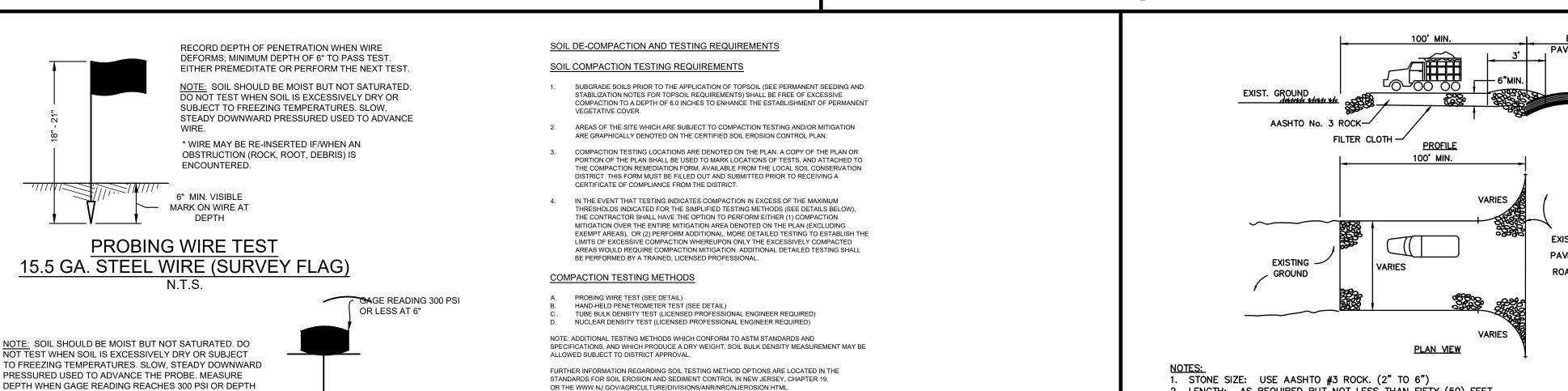
ON SHAFT AT DEPTH



CONSTRUCTION SPECIFICATIONS:

- 1. PIT DIMENSIONS ARE VARIABLE WITH THE MINIMUM DIAMETER BEING 2 TIMES THE STANDPIPE DIAMETER.
- 2. THE STANDPIPE SHOULD BE CONSTRUCTED BY PERFORATING A 12" TO 24" DIAMETER CORRUGATED OR PVC PIPE. THEN WRAPPING WITH ½" HARDWARE CLOTH AND GEOTEXTILE FABRIC. THE PERFORATIONS HALL BE ½" x 6" SLITS OR 1" DIAMETER
- 3. A BASE OF FILTER MATERIAL CONSISTING OF CLEAN GRAVEL OR ASTM C33 STONE SHOULD BE PLACED IN THE PIT TO A DEPTH OF 12". AFTER INSTALLING THE STANDPIPE, THE PIT SURROUNDING THE STANDPIPE SHOULD THEN BE BACKFILLED WITH THE
- 4. THE STANDPIPE SHOULD EXTEND 12" TO 18" ABOVE THE LIP OF THE PIT OR THE RISER CREST ELEVATION (BASIN DEWATERING ONLY) AND THE FILTER MATERIAL SHOULD EXTEND 3" MINIMUM ABOVE THE ANTICIPATED STANDING WATER ELEVATION.





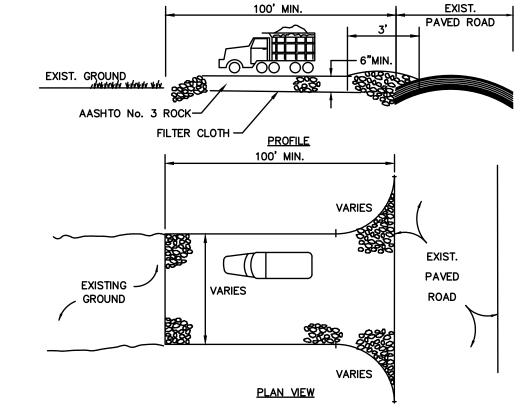
(SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) OR SIMILAR) IS PROPOSED AS PART OF THE PROCEDURES FOR SOIL COMPACTION MITIGATION PROCEDURES SHALL BE USED TO MITIGATE EXCESSIVE SOIL COMPACTION PRIOR TO PLACEMENT OF

SOIL COMPACTION TESTING IS NOT REQUIRED IF/WHEN SUBSOIL COMPACTION REMEDIATION

TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATIVE COVER. MINIMUM DEPTH) WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.). IN THE ALTERNATIVE, ANOTHER METHOD AS SPECIFIED BY A NEW JERSEY CENSED PROFESSIONAL ENGINEER MAYBE SUBSTITUTED SUBJECT TO DISTRICT APPROVAL

SOIL COMPACTION MITIGATION VERIFICATION FORM

THE CONTRACTOR MUST COMPLETE AND SUBMIT A SOIL RESTORATION SELF-CERTIFICATION FORM TO THE CAMDEN COUNTY SOIL CONSERVATION DISTRICT (CCSCD) FOR REVIEW AND APPROVAL. CONTRACTOR SHALL PROVIDE A COPY OF CCSCD APPROVAL TO ENGINEER FOR RECORDS.



- 2. LENGTH: AS REQUIRED BUT NOT LESS THAN FIFTY (50) FEET. THICKNESS: NOT LESS THAN SIX (6) INCHES. WIDTH: TWENTYFIVE (25) FEET MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINT WHERE
- INGRESS OR EGRESS OCCURS. FILTER CLOTH: WILL BE PLACED OVER ENTIRE AREA PRIOR TO PLACING OF STONES. SURFACE WATER: ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION
- ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED. 7. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONES AS CONDITIONS DEMAND AND REPAIR AND/OR
- CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY. 8. VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED IT SHALL BE DONE ON AN APPROVED SEDIMENT TRAPPING DEVICE. INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH



ACID-PRODUCING SOIL NOTES

EXCAVATION

AREA

USE TURBIDITY BARRIER IF

NEAR RECEIVING WATERS

DISCHARGE MUST BE

LIMIT THE EXCAVATION AREA AND EXPOSURE TIME WHEN HIGH ACID-PRODUCING SOILS ARE ENCOUNTERED.

SEDIMENT CONTROL BAG

TOPSOIL STRIPPED FROM THE SITE SHALL BE STORED SEPARATELY FROM TEMPORARILY STOCKPILED HIGH ACID-PRODUCING SOILS.

PLAN VIEW

- STOCKPILES OF HIGH ACID-PRODUCING SOIL SHOULD BE LOCATED ON LEVEL LAND TO MINIMIZE ITS MOVEMENT, ESPECIALLY WHEN THIS MATERIAL HAS A HIGH CLAY CONTENT.
- TEMPORARILY STOCKPILED HIGH ACID-PRODUCING SOIL MATERIAL TO BE STORED MORE THAN 48 HOURS SHOULD BE COVERED WITH PROPERLY ANCHORED, HEAVY 8. GRADE SHEETS OF POLYETHYLENE WHERE POSSIBLE. IF NOT POSSIBLE, STOCKPILES SHALL BE COVERED WITH A MINIMUM OF 3 TO 6 INCHES OF WOOD CHIPS TO MINIMIZE EROSION OF THE STOCKPILE. SILT FENCE SHALL BE INSTALLED AT THE TOE OF THE SLOPE TO CONTAIN MOVEMENT OF THE STOCKPILED MATERIAL. TOPSOIL SHALL NOT BE APPLIED TO THE STOCKPILES TO PREVENT TOPSOIL CONTAMINATION WITH HIGH ACID-PRODUCING SOIL.
- HIGH ACID-PRODUCING SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE (INCLUDING BORROW FROM CUTS OR DREDGED SEDIMENT) SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS PER ACRE (OR 450 POUNDS PER 1,000 SQUARE FEET OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12 INCHES OF SETTLED SOIL WITH A PH OF 5.0 OR MORE EXCEPT AS FOLLOWS:
- a. AREAS WHERE TREES OR SHRUBS ARE TO BE PLANTED SHALL BE COVERED WITH A MINIMUM OF 24 INCHES OF SOIL WITH A PH OR 5 OR MORE
- b. DISPOSAL AREAS SHALL NOT BE LOCATED WITHIN 24 INCHES OF ANY SURFACE OF A SLOPE OR BANK, SUCH AS BERMS, STREAM BANKS, DITCHES, AND OTHERS, TO PREVENT POTENTIAL LATERAL LEACHING DAMAGES.

EQUIPMENT USED FOR MOVEMENT OF HIGH ACID-PRODUCING SOILS SHOULD BE CLEANED AT THE END OF EACH DAY TO PREVENT SPREADING OF HIGH ACID-PRODUCING SOIL MATERIALS TO OTHER PARTS OF THE SITE, INTO STREAMS OR STORMWATER CONVEYANCES, AND TO PROTECT MACHINERY FROM ACCELERATED RUSTING.

* PENETROMETER MAY BE RE-INSERTED IF/WHEN AN

OBSTRUCTION (ROCK, ROOT, DEBRIS) IS ENCOUNTERED.

USE CORRECT SIZE TIP -

FOR SOIL TYPE

HANDHELD SOIL PENETROMETER TEST

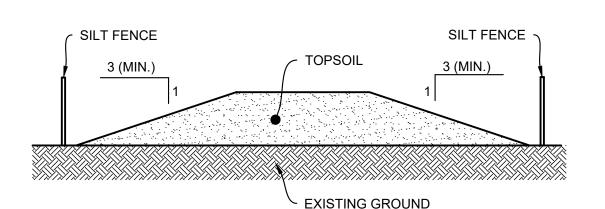
- NON-VEGETATIVE EROSION CONTROL PRACTICES (STONE TRACKING PADS, STRATEGICALLY PLACED LIMESTONE CHECK DAM, SEDIMENT BARRIER, WOOD CHIPS) SHOULD BE INSTALLED TO LIMIT THE MOVEMENT OF HIGH ACID-PRODUCING SOILS FROM, AROUND, OR OFF THE SITE.
- FOLLOWING BURIAL OR REMOVAL OF HIGH ACID-PRODUCING SOIL, TOPSOILING AND SEEDING OF THE SITE (SEE TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION, PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION, AND TOPSOILING), MONITORING MUST CONTINUE FOR A MINIMUM OF 6 MONTHS TO ENSURE THERE IS ADEQUATE STABILIZATION AND THAT NO HIGH ACID-PRODUCING SOIL PROBLEMS EMERGE. IF PROBLEMS STILL EXIST, THE AFFECTED AREA MUST BE TREATED AS INDICATED ABOVE TO CORRECT THE PROBLEM.



SOILS MAP

SOILS LEGEND

SOIL MAP UNIT SYMBOL	SOIL MAP UNIT NAME				
UR	Urban Land, 96.7 percent slope				
WATER	Water, 3.3 percent slopes				



1. TOPSOIL STOCKPILE SHALL BE SURROUNDED BY SILT FENCE.

2. STOCKPILE SHALL RECEIVE TEMPORARY VEGETATIVE STABILIZATION IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY IMMEDIATELY AFTER COMPLETION OF STOCKPILE.



NOTE: ALL SITE WORK CONSTRUCTION AND DETAILS MUST CONFORM TO THE STANDARDS OF THE CITY OF CAMDEN

THIS PLAN IS FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY

Д

S

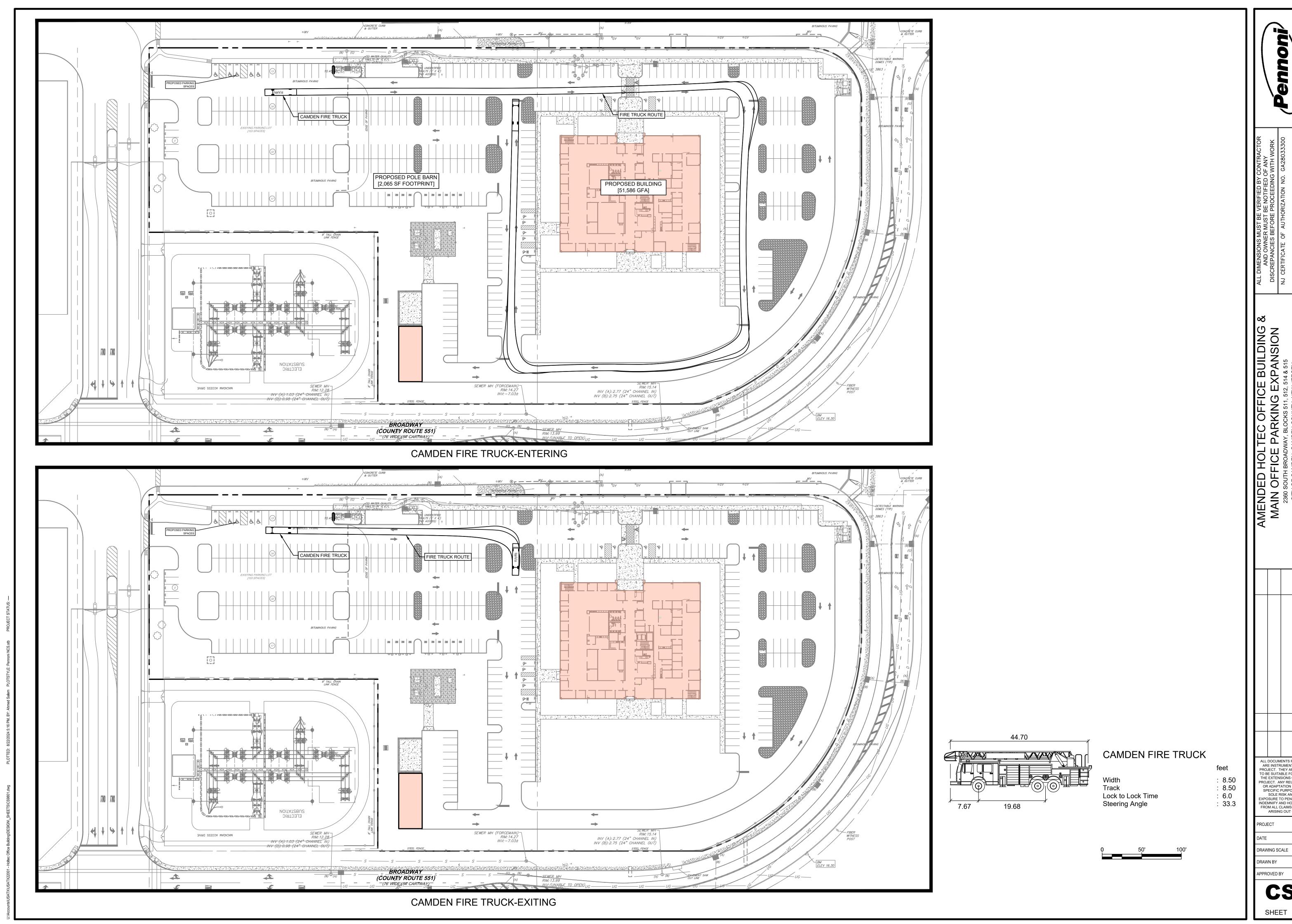
0

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTE TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS (THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL IDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATI

FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSE ARISING OUT OF OR RESULTING THEREFROM. PROJECT USATX2200 AUGUST 23, 2024

RAWING SCALE AS NOTED DRAWN BY

CS8502



JOSEPH ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS
SOLE RISK AND WITHOUT LIABILITY OR LEGAL XPOSURE TO PENNONI ASSOCIATE; AND OWNER SHA INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM. USATX22007 AUGUST 23, 2024

CS9801

SHEET 43 OF 43