

TENANT IMPROVEMENTS

1785 STATE HIGHWAY 5S
AMSTERDAM, NY 12010



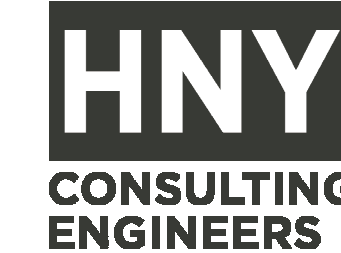
ARCHITECTURE

CIVIL

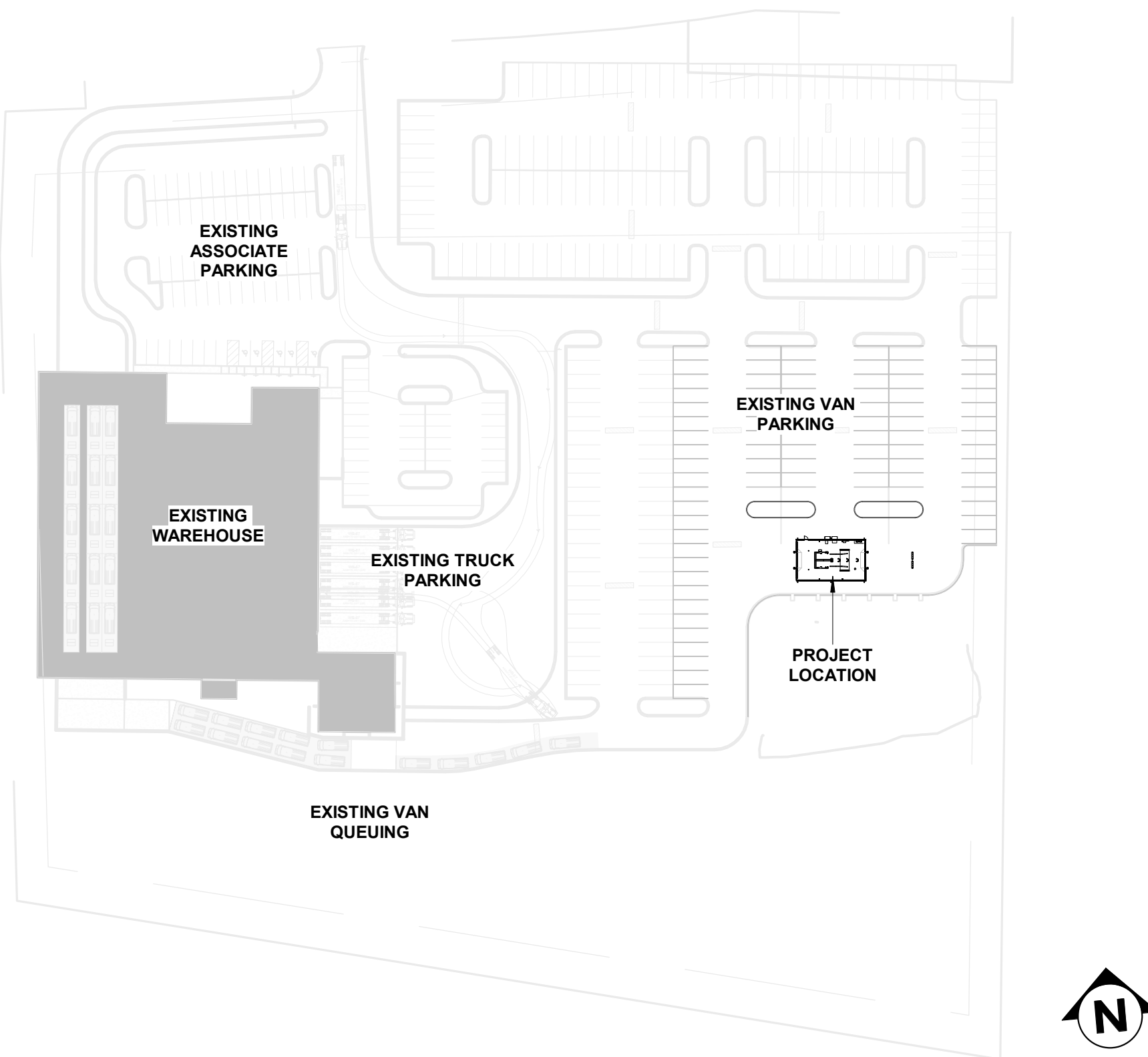
STRUCTURAL

MEP / TELECOMM

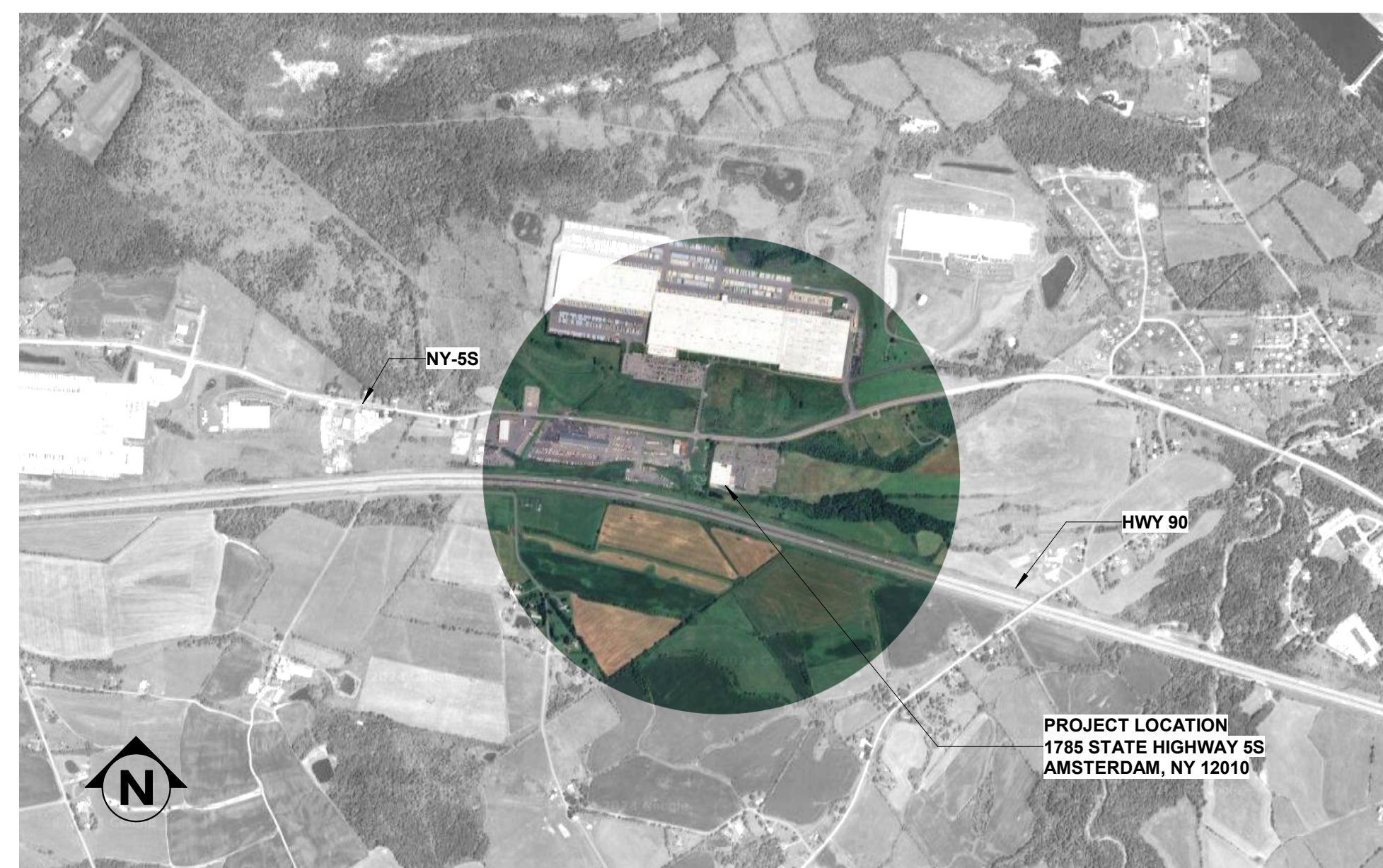
CONSULTANTS



KEY PLAN



VICINITY MAP



GENERAL ABBREVIATIONS

* INCHES	DIA DIAMETER	HVAC HEATING / VENTILATION / AIR CONDITIONING	PLBG PLUMBING PRELIM PRELIMINARY
# NUMBER	DIM DIMENSION	MFC MECHANICAL CONTRACTOR	REQ REQUIRED, REQUIREMENT
& AND	DN DOWN	MFR MANUFACTURER	REV REVISE, REVISION
@ AT	DWG DRAWING	IN INCH	QTY QUANTITY
@ COPYWRITTEN	EA EACH	MC MECHANICAL CONTRACTOR	REQ REQUIRED, REQUIREMENT
* DEGREES	EQ ELECTRICAL CONTRACTOR	MCH MECHANICAL	REV REVISE, REVISION
Ø DIAMETER	EQ EQUAL	MFR MANUFACTURER	REV REVISE, REVISION
Δ DELTA	EX EXISTING	MIN MINIMUM	SF SQUARE FEET, SQUARE FOOT
L ANGLE	EX EXISTING	MISC MISCELLANEOUS	SIM SIMILAR
	EXP EXPANSION	MTD MOUNTED	SPEC SPECIFICATION
	EXT EXTERIOR	NEC NATIONAL ELECTRIC CODE	STD STANDARD
A/C AIR CONDITIONING	FFE FINISHED FLOOR	NFPA NATIONAL FIRE PROTECTION ASSOCIATION	TBD TO BE DETERMINED
AV AUDIO VISUAL	ELEV ELEVATION	NTS NOT TO SCALE	THK THICK, THICKNESS
ADA AMERICANS WITH DISABILITIES	FT FOOT, FEET	OC ON CENTER	UNC UNLESS NOTED OTHERWISE
ACT ABOVE FINISHED FLOOR	FV FIELD VERIFY	OF/CI OWNER FURNISHED, CONTRACTOR INSTALLED	VERT VERTICAL
AUTO AUTOMATIC		OF/OI OWNER FURNISHED, OWNER INSTALLED	W WITH
CF/CI CONTRACTOR FURNISHED / CONTRACTOR INSTALLED	GA GAUGE, GAGE	OPP OPPOSITE	W/O WITHOUT
CF/OI CONTRACTOR FURNISHED / OWNER INSTALLED	GC GENERAL CONTRACTOR	PC PLUMBING CONTRACTOR	WT WEIGHT
CJ CONTROL JOINT	HD HEAVY DUTY		
CL CENTERLINE	HT HEIGHT		
CLG CEILING			
CONT CONTINUOUS, CONTINUATION			
CTJ CONSTRUCTION JOINT			

PROJECT SCOPE

THE PROJECT PROPOSES NEW EQUIPMENT FOR AN AUTOMATIC VEHICLE INSPECTION (AVI) DRIVE-THROUGH TUNNEL IN THE PARKING LOT AREA ASSOCIATED WITH AN EXISTING PARCEL DELIVERY STATION. THE PRIMARY PURPOSE OF THE AVI TUNNEL STRUCTURE IS TO HOUSE AND PROTECT THE AVI EQUIPMENT AND SUPPORTING SYSTEMS THERE ARE NO PROGRAM ROOMS OR OCCUPANTS WITHIN THE TUNNEL.

NO CHANGE OF USE, OCCUPANCY, OR MEANS OF EGRESS IN THE PRIMARY STRUCTURE SHALL RESULT FROM ADDING THIS DETACHED BUILDING IN THE PARKING LOT AREA.

EXISTING MODIFICATIONS

1. MODIFICATIONS TO GRADING, DRAINAGE. SEE CIVIL.

EXISTING BUILDING

1. MODIFICATIONS TO ELECTRICAL FOR EQUIPMENT SUPPORT. SEE MEP.
2. MODIFICATIONS TO TELECOM SYSTEMS. SEE TELECOMM.

DEMOLITION SCOPE

1. REMOVE PORTIONS OF EXISTING ASPHALT
2. REMOVE PORTIONS OF EXISTING STRIPING
3. REMOVE PORTIONS EXISTING PARKING ACCESSORIES

STRUCTURE

1. N/A

NEW WORK SCOPE

1. FILL AND GRADING
2. CURB AND GUTTER
3. SUB-BASE, COMPACTION, ASPHALT PAVING
4. SIGNAGE, DIRECTIONAL

STRUCTURE

1. PRE-ENGINEERED METAL BUILDING
2. AVI VEHICLE SCANNING AND PHOTOGRAPHY EQUIPMENT
3. AVI IT CLOSET
4. DIRECTIONAL MARKINGS AND SLAB STRIPING
5. MANUFACTURED BOLLARDS
6. HVAC, IT CLOSET SUPPORT. SEE MECH.
7. LIGHTING, INTERIOR AND EXTERIOR. SEE ELECTRICAL.
8. SIGNAGE, DIRECTIONAL

REQUIRED VENDORS

1. PRE-ENGINEERED METAL BUILDING SYSTEM. RHINO

DEFERRED SUBMITTALS

1. SIGNAGE PERMIT (DESIGN-BUILD)
2. PRE-ENGINEERED METAL BUILDING SYSTEM

SUBSTITUTIONS PROHIBITED

NO SUBSTITUTIONS ARE ALLOWED ON THE FOLLOWING ITEMS :

1. PRE-ENGINEERED METAL BUILDING SYSTEM

DEVIATIONS NARRATIVE

THE FOLLOWING DESIGN ITEMS ARE DEVIATIONS FROM DESIGN STANDARD BASELINE BASED ON SITE SPECIFIC DECISIONS AND ASSUMPTIONS.

1. **PRE-ENGINEERED METAL BUILDING SYSTEM** - OWNER TEMPLATE DOCUMENTS DISPLAY A CUSTOM FRAMED STEEL STRUCTURE. THIS PROJECT PROPOSES A PRE-ENGINEERED METAL BUILDING SYSTEM WITH DIFFERENT COST, SCHEDULE, DETAILING, DIMENSIONAL, AND LABOR IMPACTS THAN SEEN PER OWNER TEMPLATE DOCUMENTS.
2. **HVAC SYSTEMS** - AT THE TIME OF THIS WRITING, HVAC EQUIPMENT WAS REMOVED FROM OWNER TEMPLATE DOCUMENTS. TO PROTECT AVI EQUIPMENT FROM LOW TEMPERATURES, THIS DESIGN INCLUDES SPACE HEATING AND THERMAL INSULATION.

GENERAL NOTES

SUPPLEMENTAL CONDITIONS

1. REFER TO ALL DRAWINGS SHOWING NEW CONSTRUCTION AND COORDINATE DEMOLITION REQUIRED TO COMPLETE NEW WORK SHOWN.
2. REFER TO MECHANICAL, ELECTRICAL AND STRUCTURAL DRAWINGS FOR SIZE AND LOCATION OF CHASES, WALL AND FLOOR OPENINGS AND RECESSES, ETC IF REQUIRED. GC TO COORDINATE WITH ALL AFFECTED TRADES.
3. THE WORK DELINEATED IN THESE DRAWINGS AND DESCRIBED IN THE SPECIFICATION SHALL CONFORM TO ALL CODES AND STANDARDS THAT HAVE JURISDICTION IN THE STATE AND CITY IN WHICH THE FACILITY IS BEING BUILT.
4. ALL REQUIREMENTS AND REGULATIONS PERTAINING TO ACCESSIBILITY AND OSHA MUST BE INCORPORATED INTO THE WORK EVEN IF NOT LISTED IN THE DRAWINGS AND SPECIFICATIONS.
5. UNLESS OTHERWISE SHOWN OR NOTED, ALL TYPICAL DETAILS SHALL BE USED WHERE APPLICABLE.
6. SAFETY MEASURES: AT ALL TIMES THE GC SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF THE PERSONS AND PROPERTY AND FOR ALL INDEPENDENT ENGINEERING REVIEWS OF THESE CONDITIONS. THE ARCHITECT'S OR ENGINEER'S JOB SITE REVIEW (IF IT OCCURS) IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE GC'S SAFETY MEASURES.
7. CONSTRUCTION WORK WILL NOT BLOCK MEANS OF EGRESS.
8. GC SHALL FURNISH ONE EMPTY (20-YD) DUMPSTER AT PROJECT TURNOVER TO OWNER FOR STORES OF CARDBOARD, TRASH, ETC.
9. ALL PLYWOOD AND MDF USED ON THIS PROJECT SHALL BE FORMALDEHYDE FREE. ALL PAINT, ADHESIVES, SEALANTS AND CAULKS SHALL BE VOC FREE.
11. PROVIDE 1 FIRE EXTINGUISHER PER 11,500 SF OF BUILDING SQUARE FOOTAGE
12. PROVIDE EXIT SIGNS AT ALL EXTERIOR DOORS PLUS ADDITIONAL EXIT SIGNS WHERE DIRECTED BY LOCAL A.H.J.
13. SEE CIVIL AND/OR STRUCTURE FOR ASPHALT/CONCRETE DETAILS.
14. SEE CIVIL FOR SITE SIGNAGE LOCATIONS & DETAILS.

DEMOLITION

1. DEMOLITION DRAWINGS GENERALLY DESCRIBE THOSE PORTIONS OF THE EXISTING CONDITIONS WHICH ARE TO BE REMOVED AND/OR SALVAGED. THESE DRAWINGS DO NOT NECESSARILY DESCRIBE ALL DEMOLITION THAT WILL BE REQUIRED IN ORDER TO CONSTRUCT THE NEW WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION OF ALL PORTIONS OF EXISTING CONDITIONS NECESSARY TO CONSTRUCT AND COORDINATE THE NEW WORK SHOWN ON THE DRAWINGS. IF CONTRACTOR IS UNCERTAIN WHETHER AN EXISTING ELEMENT IS TO BE REMOVED, CONTACT ARCHITECT BEFORE PROCEEDING.
2. DEMOLITION WORK AFFECTING ADJACENT PROPERTY, ADJACENT BUILDINGS, EXISTING TENANTS AND/OR OTHER OCCUPIED PORTIONS OF THE BUILDING MUST BE COORDINATED WITH THE OWNER OR DESIGNATED OWNER'S REPRESENTATIVE. WORK AFFECTING ADJACENT, OCCUPIED AREAS SHALL COMMENCE ONLY WITH PROPER AUTHORIZATION BY THE OWNER.
3. CONTRACTOR TO COORDINATE WITH ARCHITECTURAL, STRUCTURAL AND MEP DOCUMENTS FOR ALL DEMOLITION WORK, INCLUDING OPENINGS AND PENETRATIONS FOR REQUIRED SCOPE OF WORK AND DIMENSIONS PRIOR TO PROCEEDING WITH DEMOLITION WORK.
4. UNLESS OTHERWISE NOTED, NUMERICAL DESIGNATIONS IN THE DEMOLITION DRAWINGS ARE NOT INTENDED TO IMPLY A SEQUENCE OF CONSTRUCTION AND/OR DEMOLITION.
5. CONTRACTOR TO NOTIFY ARCHITECT IF THERE ARE UNFORESEEN STRUCTURAL MEMBERS, MISCELLANEOUS OBJECTS AND/OR UNIDENTIFIED UTILITY LINES ENCOUNTERED DURING DEMOLITION.
6. PROVIDE TEMPORARY SUPPORT OF WORK TO BE CUT/REMOVED.
7. ALL SALVAGE MATERIALS SELECTED BY THE OWNER AND/OR INDICATED IN THE CONTRACT DOCUMENTS FOR SALVAGE FOR REUSE SHALL BE PROTECTED AND STORED IN AN AREA (ON SITE) AS DESIGNATED BY THE OWNER. THE FOLLOWING ITEMS SHALL BE SALVAGED FOR REUSE: LIGHT FIXTURES; EXIT SIGNS; THERMOSTATS; FIRE ALARM DEVICES AND STROBES; MECHANICAL CEILING GRILLES AND DIFFUSERS; FIRE EXTINGUISHERS AND CABINETS; SMOKE DETECTORS; RETURN AIR TRANSFER DUCTS; DOOR HINGERS.
8. WHERE EXISTING MATERIALS ARE TO BE REMOVED, ANY MATERIAL ADHESIVES, ATTACHMENTS OR SUPPORTS ARE TO BE REMOVED AS WELL IN ORDER TO PROVIDE A SUBSTRATE EQUAL IN CONDITION TO A SIMILAR NEW SUBSTRATE. CONTRACTOR IS RESPONSIBLE FOR ANY REQUIRED PREPARATION OF SUBSTRATE IN ORDER TO RECEIVE NEW FINISHES.
9. PROTECT EXISTING CONSTRUCTION DURING DEMOLITION, CUTTING AND PATCHING TO PREVENT DAMAGE. PROVIDE PROTECTION FROM ADVERSE ENVIRONMENTAL CONDITIONS.
10. CONTRACTOR SHALL EXAMINE SURFACES TO BE REMOVED, CUT AND PATCHED FOR CONSIDERATION OF CONDITIONS UNDER WHICH REMOVAL, CUTTING AND PATCHING ARE TO BE PERFORMED.
11. DO NOT REMOVE, CUT AND/OR PATCH OPERATIONAL ELEMENTS AND RELATED COMPONENTS IN A MANNER THAT RESULTS IN REDUCING THEIR CAPACITY TO PERFORM AS INTENDED OR THAT RESULTS IN INCREASED MAINTENANCE OR DECREASED OPERATIONAL LIFE OR SAFETY.
12. DO NOT REMOVE, CUT AND/OR PATCH IN A MANNER THAT RESULTS IN VISUAL EVIDENCE OF CUTTING OR PATCHING. DO NOT REMOVE, CUT AND/OR PATCH COMPONENTS EXPOSED ON THE EXTERIOR OR IN OCCUPIED SPACES IN A MANNER THAT WOULD REDUCE THE BUILDING'S AESTHETIC, FUNCTIONAL QUALITIES. CONSTRUCTION THAT HAS BEEN REMOVED, CUT AND/OR PATCHED IN A VISUALLY UNSATISFACTORY MANNER SHALL BE REMOVED AND REPAIRED.
13. BEFORE PATCHING, CONTRACTOR TO VERIFY COMPATIBILITY WITH AND SUITABILITY OF SUBSTRATES—INCLUDING COMPATIBILITY WITH EXISTING FINISHES OR PRIMERS. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITION HAS BEEN ADDRESSED AND/OR REMEDIATED.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION TO EXISTING BUILDING FEATURES OR ANY OTHER ADJACENT, RELATED PROPERTY.
15. ANY AND ALL DAMAGE DURING DEMOLITION OR CONSTRUCTION BY CONTRACTOR TO EXISTING COMPONENTS OF THE BUILDING AND/OR FINISHES THAT ARE TO REMAIN SHALL BE REPAIRED TO MATCH ADJACENT EXISTING CONSTRUCTION.

SPECIAL INSPECTIONS AND TESTS

1. SPECIAL INSPECTIONS ARE REQUIRED ON NEW CONSTRUCTION AS REQUIRED BY CHAPTER 17 OF THE 2021 IBC.
2. REQUIRED SPECIAL INSPECTIONS SHALL BE PERFORMED BY A TESTING AGENCY APPROVED BY THE A.H.J.

TEMPORARY MEASURES

1. BASED ON THE CONTRACTOR'S MEANS AND METHODS FOR CONSTRUCTION, CONTRACTOR SHALL DETERMINE INTERMEDIATE STAGING AND SEQUENCING OF DEMOLITION, TEMPORARY WORK AND NEW WORK TO ENSURE CONTINUOUS AND SAFE OCCUPANCY OF EXISTING FACILITY—WHILE MAINTAINING NORMAL OPERATIONS. THE CONTRACTOR SHALL PREPARE AND SUBMIT A PHASING AND SEQUENCING PLAN TO THE OWNER PRIOR TO THE START OF CONSTRUCTION.
2. ALL LIFE SAFETY SYSTEMS, EXITING AND TENANT SERVICES ARE TO BE MAINTAINED THROUGHOUT DEMOLITION AND CONSTRUCTION WORK—INCLUDING, BUT NOT LIMITED TO, EGRESS PATHWAYS, FIRE ALARM, FIRE SUPPRESSION, EMERGENCY POWER, MECHANICAL, ELECTRICAL, PLUMBING, SECURITY, BUILDING CONTROL SYSTEM AND BUILDING UTILITY SERVICES/SYSTEMS. IF THE CONTRACTOR PROPOSES TO INTERRUPT ANY OF THESE SYSTEMS, THE CONTRACTOR SHALL PROVIDE NOTICE, OBTAIN APPROVAL, PROVIDE TEMPORARY MEASURES, SECURITY AND/OR FIRE PROTECTION SERVICES DURING THE INTERRUPTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER AND LOCAL JURISDICTION OF CODE ENFORCEMENT.
3. IN PLANNING AND SEQUENCING THE WORK, CONTRACTOR SHALL MAINTAIN AND PROTECT AT ALL TIMES THE CLEAR ACCESS TO AND CAPACITY OF ALL MEANS OF EGRESS FOR THE FACILITY THAT ARE AFFECTED BY DEMOLITION.
4. CONTRACTOR SHALL PROVIDE ALL TEMPORARY CONSTRUCTION NECESSARY TO ACCOMPLISH THE WORK AND AVOID INTERRUPTION TO ANY AND ALL OTHER BUILDING FUNCTIONS, SERVICES AND SYSTEMS THAT MAY BE AFFECTED BY THE DEMOLITION AND/OR CONSTRUCTION.
5. ADDITIONAL CONSTRUCTION OR MAINTENANCE MAY BE ONGOING IN OTHER PARTS OF THE BUILDING.
6. THE CONTRACTOR IS TO COORDINATE HIS WORK WITH THE OWNER'S DESIGNATED REPRESENTATIVE AND WITH OTHER CONSTRUCTION OR MAINTENANCE TEAMS SO AS TO AVOID CONSTRUCTION DELAYS.
7. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH BUILDING SECURITY, BUILDING'S OPERATION MANAGEMENT AND LANDLORD.
8. CONTRACTOR SHALL MAINTAIN PROTECTIVE MEANS TO ELIMINATE ANY WATER INFILTRATION IN ALL AREAS OF DEMOLITION AND CONSTRUCTION.
9. TEMPORARY EXTERIOR ENCLOSURES SHALL BE PROVIDED AS DETERMINED NECESSARY BY CONTRACTOR BASED ON CONTRACTOR'S MEANS AND METHODS FOR CONSTRUCTION. THESE ENCLOSURES SHALL BE SECURE, STRUCTURALLY SOUND, WATERTIGHT AND THERMALLY INSULATED.
10. CONTRACTOR TO PROVIDE TEMPORARY AND CODE COMPLIANT RAMPS AND FLOORING TRANSITIONS TO MAINTAIN SAFE AREAS FOR CIRCULATION OF THE PUBLIC, BARRICADES AND WALKWAYS AS DETERMINED NECESSARY BY CONTRACTOR BASED ON CONTRACTOR'S MEANS AND METHODS FOR CONSTRUCTION ARE TO BE MAINTAINED DURING CONSTRUCTION AND ARE TO PROTECT THE GENERAL PUBLIC'S CIRCULATION PATHS AND EXITING FROM BUILDING DURING DEMOLITION AND CONSTRUCTION.
11. CONTRACTOR SHALL OBTAIN APPROVAL FOR ALL TEMPORARY WALKWAYS/EXITS FROM THE LOCAL JURISDICTION OF CODE ENFORCEMENT. COORDINATE DEMOLITION OF BUILDING ENTRANCES, STRUCTURES AND STOREFRONT SYSTEMS WITH OWNER. PROVIDE NECESSARY BARRICADES AND COVERED ENTRANCE OF AREAS AND/OR ENCLOSED "TUNNEL" STRUCTURES TO ACCOMMODATE NORMAL BUILDING INGRESS AND EGRESS AT ALL TIMES.
12. NOTIFY OWNER (AND/OR OWNER'S DESIGNATED REPRESENTATIVE) PRIOR TO COMMENCEMENT OF ALL ELECTRICAL, MECHANICAL, PLUMBING AND FIRE PROTECTION WORK. OBTAIN OWNER'S AUTHORIZATION ONE (1) WEEK IN ADVANCE FOR ANY DISRUPTION OF SERVICES. IN NO CASE SHALL DISRUPTION OF SERVICES OCCUR IN OWNER-OCCUPIED/TENANT-OCCUPIED AREAS.
13. CONSTRUCTION STAGING AREA TO BE COORDINATED WITH AND APPROVED BY OWNER. CONTRACTOR'S PROPOSED PLAN FOR PARKING OF WORKERS SHALL BE COORDINATED WITH AND APPROVED BY THE OWNER.
14. TEMPORARY INTERIOR BARRIERS SHALL BE MAINTAINED AT ALL TIMES TO PREVENT MIGRATION OF CONTAMINANTS TO OCCUPIED AREAS INCLUDING BUT NOT LIMITED TO DUST, FUMES, SMOKE, ODORS, ETC.

EXISTING BUILDING DRAWINGS

1. IN THE PREPARATION OF THE DRAWINGS, THE ARCHITECT AND ENGINEERS HAVE UTILIZED AND RELIED UPON THE FOLLOWING AVAILABLE INFORMATION:
 - A. ORIGINAL DRAWINGS OF EXISTING SITE DESIGN AS PREPARED BY KIMLEY HORN AND DATED 01/27/2020.
 - B. ORIGINAL DRAWINGS OF BUILDING DESIGN AS PREPARED BY PDMS DESIGN GROUP DATED 06/05/20.
2. CONTRACTOR MAY NOT RELY SOLELY UPON THE COMPLETENESS OF EXISTING DRAWINGS. THE CONTRACTOR IS RESPONSIBLE TO RECONCILE ALL INFORMATION WITH EXISTING BUILDING INFORMATION AS MAY BE MADE AVAILABLE BY THE OWNER (SUCH AS ARCHITECTURAL AND ENGINEERING DRAWINGS) AND THE EXISTING PHYSICAL CONDITIONS ON, OR RELATIVE TO, THE SITE. THE CONTRACTOR SHALL VERIFY THESE CONDITIONS FOR BIDDING AND CONSTRUCTION PURPOSES.
3. CONTRACTOR TO REVIEW THE EXISTING BUILDING DRAWINGS FOR EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION OR DEMOLITION. CONTACT LOCAL UTILITY COMPANIES FOR UTILITY MARKINGS PRIOR TO COMMENCEMENT OF DEMOLITION WORK. REVIEW UTILITY LOCATIONS WITH OWNER'S ENGINEERING STAFF PRIOR TO COMMENCEMENT OF DEMOLITION WORK.

CONTRACT DOCUMENTS

1. DRAWINGS SHALL NOT BE SCALED
2. ON THE DRAWINGS, AREAS THAT ARE OUT OF SCOPE ARE INDICATED WITH A GRAY TONE OR HATCH. ADDITIONAL CONSTRUCTION BEYOND THIS AREA MAY BE REQUIRED TO ADJUST EXISTING CONDITIONS AND/OR EXISTING BUILDING SYSTEMS IN ORDER FOR THE NEW CONSTRUCTION TO BE ACCOMPLISHED. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK NECESSARY TO PERFORM THE NEW CONSTRUCTION WORK DESCRIBED IN THE CONTRACT DOCUMENTS.
3. THREE DIMENSIONAL (3D) VIEWS MAY BE PROVIDED FOR REFERENCE TO ASSIST THE CONTRACTOR IN UNDERSTANDING THE DESIGN CONCEPT FOR CERTAIN COMPONENTS. AS SUCH, THESE VIEWS ARE DIAGRAMMATIC IN NATURE AND ALL INFORMATION FOR CONSTRUCTION MAY NOT BE ILLUSTRATED IN THE PERSPECTIVE VIEW. CLARIFICATIONS AND/OR INTERPRETATIONS RELATING TO PERSPECTIVE VIEWS SHALL BE DIRECTED TO THE ARCHITECT.
4. BUILDING COMPONENTS AND/OR PORTIONS OF SYSTEMS AS MAY BE INDICATED ON THE ARCHITECTURAL DRAWINGS SUCH AS LIGHT FIXTURES, AIR DIFFUSERS/RETURNS, SPRINKLERS AND SPEAKERS, ETC ARE GENERALLY SHOWN TO DENOTE LOCATION AND LAYOUT PATTERN WHERE PLACEMENT IS CRITICAL TO APPEARANCE. THE ARCHITECTURAL DRAWINGS DO NOT REPRESENT COMPLETE SYSTEMS WHICH ARE TO BE PROVIDED. CONTRACTOR TO VERIFY PLACEMENT OF COMPONENTS ACROSS TRADES AND NOTIFY ARCHITECT OF CONFLICTS.
5. "MATCH EXISTING" AND "MATCH ADJACENT" MEANS TO MATCH THE EXISTING OR ADJACENT ITEM INCLUDING MANUFACTURER, FINISH, PRODUCT, CONFIGURATION, AND INSTALLATION WHERE POSSIBLE.
6. ITEMS NOTED AS "TYPICAL" OR "TYP" MEANS TO APPLY TO OTHER, SIMILAR LOCATIONS.
7. ITEMS NOTED AS "SIMILAR" OR "SIM" MEANS THAT A COMPONENT IS SIMILAR IN CHARACTER AND FINISH TO THE REFERENCED DETAIL BUT MAY VARY IN DIMENSION, LOCATION OR ORIENTATION.

MATERIALS, SYSTEMS AND COMPONENTS

1. ALL MATERIALS, SYSTEMS, FINISHES AND COMPONENTS SHALL BE PROVIDED AS INDICATED IN THE CONTRACT DOCUMENTS. PROPOSED SUBSTITUTIONS OF MATERIALS, SYSTEMS COMPONENTS, FINISHES AND/OR PRODUCT SHALL BE SUBMITTED BY THE CONTRACTOR TIMELY WITH THE SEQUENCE OF CONSTRUCTION AND WITH PROPER, DETAILED INFORMATION FOR CONSIDERATION BY THE OWNER AND/OR ARCHITECT. PROPOSED SUBSTITUTIONS MAY ONLY BE INCORPORATED INTO THE WORK IF ACCEPTED BY THE OWNER AND/OR ARCHITECT.
2. CONTRACTOR SHALL PROVIDE ALL SUPPLEMENTAL MATERIAL REQUIRED TO PROPERLY INSTALL, SUPPORT AND BRACE ALL COMPONENTS OF THE WORK.
3. CONTRACTOR SHALL VERIFY AND COORDINATE CONDITIONS AND DIMENSIONS BEFORE FABRICATION OF ANY WORK.
4. ALL FASTENERS AND ATTACHMENTS IN AREAS TO BE OCCUPIED BY THE PUBLIC SHALL BE FULLY CONCEALED FROM VIEW, UNLESS OTHERWISE NOTED.
5. PROVIDE FIRE-RETARDANT WOOD BLOCKING OR STEEL REINFORCING AS REQUIRED IN PARTITIONS AND IN CEILINGS TO SUPPORT MILLWORK, LIGHT FIXTURES, ACCESSORIES, ARTWORK, HARDWARE, HANDRAILS AND/OR OTHER APPLIED FINISH SYSTEMS.

FINISHES

1. CONTRACTOR SHALL PROVIDE MEANS TO LEVEL CONCRETE FLOOR SLABS AND/OR REPAIR ACCESS FLOORING TO RECEIVE NEW FINISH FLOORING IN ALL AREAS WHERE DEMOLITION OF EXISTING TILE, PARTITIONS, CARPETING, ETC CAUSES AND/OR EXPOSES UNEVENNESS IN THE FLOOR OR SLAB.
2. PATCH CONSTRUCTION BY FILLING, PREPARING, REFINISHING, CLOSING UP AND SIMILAR OPERATIONS FOLLOWING PERFORMANCE OF OTHER WORK. PATCH WITH DURABLE SEAMS THAT ARE CONCEALED AND NOT VISIBLE. TEST AND INSPECT PATCHED AREAS AFTER COMPLETION TO VERIFY/DEMONSTRATE INTEGRITY OF INSTALLATION.
3. RESTORE FINISHES OF PATCHED AREAS AND EXTEND FINISH RESTORATION INTO ADJOINING CONSTRUCTION IN A MANNER THAT WILL CONCEAL VISIBLE EVIDENCE OF PATCHING AND REFINISHING.
4. WHERE PATCHING OCCURS IN A PAINTED SURFACE, APPLY PRIMER AND INTERMEDIATE PAINT COATS OVER THE PATCH AND SUPPLY FINAL PAINT COAT OVER THE ENTIRE UNBROKEN SURFACE CONTACTING THE PATCH. PROVIDE ADDITIONAL COATS UNTIL PATCH BLENDS WITH ADJACENT SURFACE.
5. INSTALL FINISH MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED SPECIFICATIONS, ENVIRONMENTAL CONDITIONS, SURFACE PREPARATIONS, ADHESIVES, COMPATIBILITY WITH ADJACENT MATERIALS, BACKINGS, ETC.

SHEET INDEX

NUMBER	NAME	REVISION	
		LATEST	DATE
COVER SHEET			
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CIVIL			
C-0.0	COVER SHEET	REVO	9/3/2024
C-0.1	GENERAL NOTES	REVO	9/3/2024
C-1.0	OVERALL EXISTING CONDITIONS AND REMOVALS PLAN	REVO	9/3/2024
C-1.1	EXISTING CONDITIONS AND REMOVALS PLAN	REVO	9/3/2024
C-2.0	EROSION AND SEDIMENT CONTROL PLAN	REVO	9/3/2024
C-3.0	SITE PLAN	REVO	9/3/2024
C-4.0	STRIPING AND SIGNAGE PLAN	REVO	9/3/2024
C-5.0	GRADING AND DRAINAGE PLAN	REVO	9/3/2024
C-6.0	UTILITY PLAN	REVO	9/3/2024
C-7.0	EROSION AND SEDIMENT CONTROL DETAILS	REVO	9/3/2024
C-7.1	CONSTRUCTION DETAILS	REVO	9/3/2024
C-7.2	CONSTRUCTION DETAILS	REVO	9/3/2024
C-7.3	SIGNAGE DETAILS	REVO	9/3/2024
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S902	STRUCTURAL GENERAL NOTES	REVO	9/3/2024
S003	STRUCTURAL SPECIAL INSPECTION SCHEDULE	REVO	9/3/2024
S101	PEMB STRUCTURAL FOUNDATION PLANS	REVO	9/3/2024
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A-101	FLOOR PLAN, ROOF, SIGNAGE	REVO	9/3/2024
A-102	ELEVATIONS, MATERIALS	REVO	9/3/2024
A-103	RCP, INTERIOR, FINISHES	REVO	9/3/2024
A-104	SECTIONS, DOORS	REVO	9/3/2024
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MECHANICAL			
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M-100	MECHANICAL OVERALL PLAN	REVO	9/3/2024
M-101	MECHANICAL ENLARGED PLAN	REVO	9/3/2024
M-300	MECHANICAL SPECIFICATIONS	REVO	9/3/2024
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E-100	ELECTRICAL OVERALL POWER & LIGHTING PLAN	REVO	9/3/2024
E-101	ELECTRICAL ENLARGED POWER PLAN	REVO	9/3/2024
E-102	ELECTRICAL ENLARGED LIGHTING PLAN	REVO	9/3/2024
E-200	ELECTRICAL ONE-LINE DIAGRAM, PANELBOARD SCHEDULE	REVO	9/3/2024
E-300	ELECTRICAL SPECIFICATIONS	REVO	9/3/2024
E-301	ELECTRICAL SPECIFICATIONS	REVO	9/3/2024
E-400	ENERGY COMPLIANCE FORMS	REVO	9/3/2024
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TELECOMM			
T000	TELECOMM GENERAL NOTES AND LEGENDS	REVO	9/3/2024
T002	TELECOMM CRITERIA	REVO	9/3/2024
T003	TELECOMM RESPONSIBILITY MATRIX	REVO	9/3/2024
T100	TELECOMM PLAN	REVO	9/3/2024
T400	TELECOMM PLAN ENLARGED	REVO	9/3/2024
T600	TELECOMM DETAILS	REVO	9/3/2024
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PROJECT INFO

PROJECT NUMBER: 100-2023-89

PROJECT DATE: 9/3/2024

TENANT IMPROVEMENTS
1785 STATE HIGHWAY 5S
AMSTERDAM, NY 12010

SEALS



REVISIONS

DATE	REVISION
REVO 10/23/2024	ISSUED FOR PLAN REVIEW

SHEET INFO

COVER SHEET
G-001
SHEET ISSUED: 9/10/2024

SITE PLAN AMMENDMENT APPLICATION PLANS

FOR

LAST MILE DELIVERY STATION

1785 STATE HIGHWAY 5S

AMSTERDAM, NY 12010

SITE DATA:

ZONING CLASSIFICATION: COMMERCIAL (C-2)
 LAND USE: DISTRIBUTION CENTER
 JURISDICTION: TOWN OF FLORIDA
 SITE ADDRESS: 1785 STATE HIGHWAY 5S AMSTERDAM, NEW YORK 12010
 TAX MAP NUMBER: 54-1-30
 BUILDING SETBACKS:
 50' FRONT SETBACK
 20' ONE SIDE, 50' COMBINED SETBACK
 30' REAR SETBACK
 0' OR 20' PARKING SETBACK (WHERE PROPERTY ABUTS RESIDENTIAL DEVELOPMENT)
 MAXIMUM LOT COVERAGE: 30%
 LANDSCAPE SETBACKS: 0'
 PARKING SETBACKS: 0'

PARKING SUMMARY TABLE:

USE	PARKING RATIO	SF OR UNITS	PARKING REQUIRED
INDUSTRIAL	1 PER (2) EMPLOYEES AT MAXIMUM WORKING SHIFT*	300 EMPLOYEES	150
FREIGHT TERMINAL	1 PER 1,000 SF GFA*	55,630 SF	56
ADMINISTRATIVE	1 PER 400 SF OF FLOOR SPACE*	6,519 SF	17
TOTAL	N/A	NA	223

* PER TOWN OF FLORIDA, MONTGOMERY COUNTY, NEW YORK ZONING ORDINANCE DATED JULY 17, 2019

	EXISTING PARKING	PROPOSED PARKING
STANDARD (9'X20')	100	100
BARRIER FREE	5	5
TOTAL ASSOCIATE PARKING SPACES	105	105
VAN PARKING SPACES (11'X27')	277	261 (16 STALL LOSS)
TOTAL	382	366

366 STALLS PROVIDED > 223 STALLS REQUIRED

GENERAL NOTES

- THE DESIGN PROFESSIONAL RESPONSIBLE FOR THIS PLAN HAS FAMILIARIZED THEMSELVES WITH ALL CURRENT ADA CRITERIA AND SPECIFICATIONS, AND THE PROPOSED PLAN REFLECTS REQUIRED SITE ELEMENTS. SEE '2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AS PUBLISHED BY THE DEPARTMENT OF JUSTICE (DOJ).
- CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE ENTIRE PROJECT FOR 90 DAYS AFTER ACCEPTANCE OF THE WORK BY OWNERS REPRESENTATIVE. UPON COMPLETION OF THE MAINTENANCE PERIOD THE OWNER WILL ASSUME ALL MAINTENANCE RESPONSIBILITY.

FEMA CLASSIFICATION

PER THE SURVEY PREPARED BY CONTROL POINT ASSOCIATES INC., THIS SITE IS LOCATED WITHIN FLOOD HAZARD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% CHANCE FLOODPLAIN) MAPPED BASED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S (FEMA) FLOOD INSURANCE RATE MAP FOR MONTGOMERY COUNTY, NEW YORK, PANEL 215 OF 385 MAP NUMBER 36057C0215E EFFECTIVE JANUARY 19, 2018.

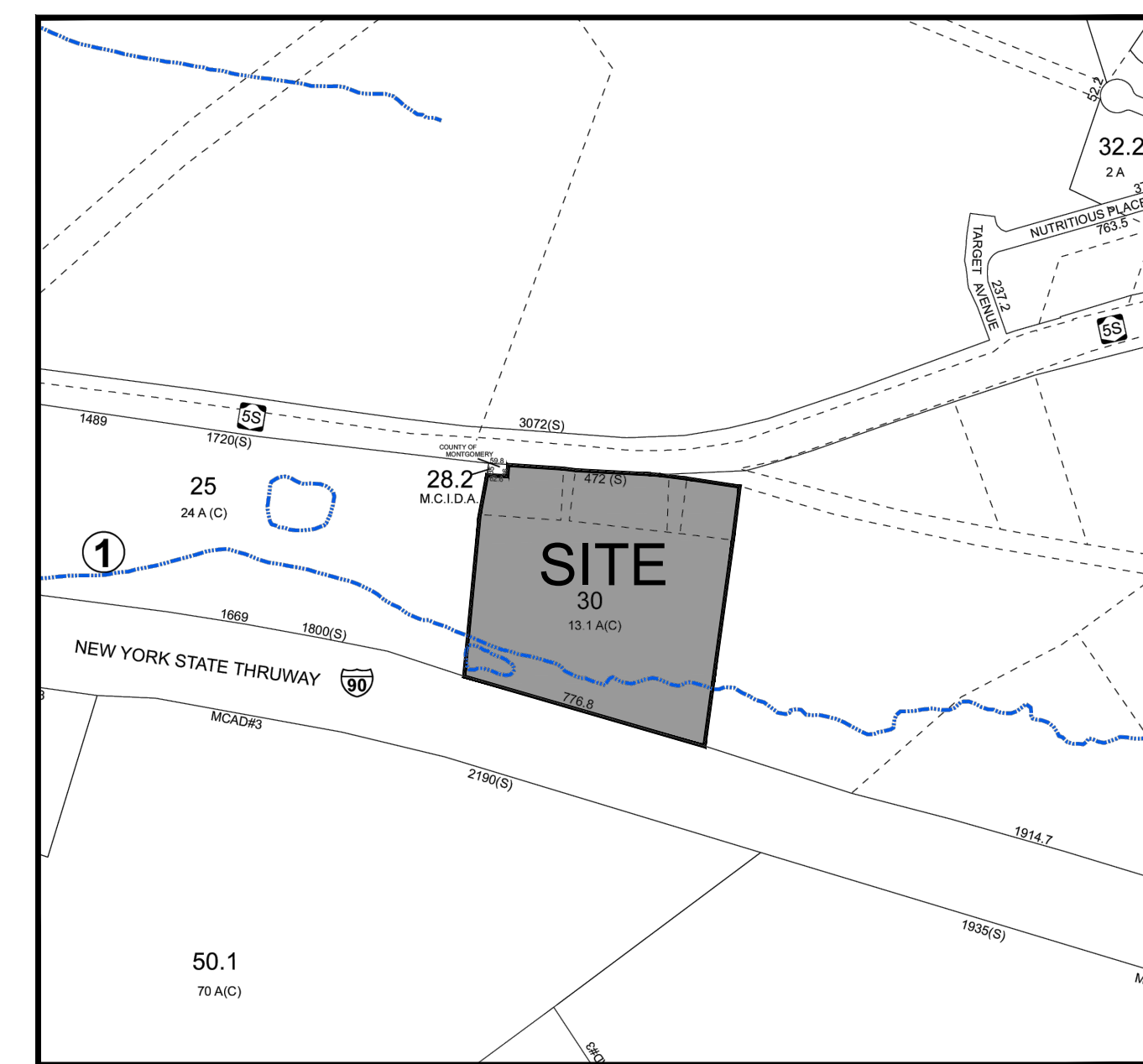
PROJECT SCOPE

THE PROPOSED PROJECT IS THE INSTALLATION OF AN 1,728 SF PRE ENGINEERED METAL BUILDING AUTOMATED VEHICLE INSPECTION FACILITY (AVI). THE EXISTING DISTRIBUTION WAREHOUSE IS TO REMAIN.

SCOPE ON THIS SET IS FOR ASSOCIATED SITE, GRADING, AND DRAINAGE MODIFICATIONS AS INDICATED. ELECTRICAL CONDUIT WILL BE EXTENDED FROM THE BUILDING TO SERVE THE PROPOSED AVI.

LEGAL DESCRIPTION

MONTGOMERY COUNTY TAX MAP 54, BLOCK 1, LOT 30.
 INSTRUMENT NO. 2020-87928



LOCATION MAP

SCALE: 1"=500'



VICINITY MAP

SCALE: 1"=500'



CONTACTS

CIVIL ENGINEER
 KIMLEY-HORN ENGINEERING AND LANDSCAPE ARCHITECTURE OF NEW YORK, P.C.
 60 EAST 42ND STREET
 ONE GRAND CENTRAL PLACE, SUITE 1730
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 ATLANTIC AE
 CONTACT: BETHANY LATHAM
 TEL: (505) 310-7675

SHEET LIST TABLE

Sheet Number	Sheet Title
C-0.0	COVER SHEET
C-0.1	GENERAL NOTES
C-1.0	OVERALL EXISTING CONDITIONS AND REMOVALS PLAN
C-1.1	EXISTING CONDITIONS AND REMOVALS PLAN
C-2.0	EROSION AND SEDIMENT CONTROL PLAN
C-3.0	SITE PLAN
C-4.0	STRIPING AND SIGNAGE PLAN
C-5.0	GRADING AND DRAINAGE PLAN
C-6.0	UTILITY PLAN
C-7.0	EROSION AND SEDIMENT CONTROL DETAILS
C-7.1	CONSTRUCTION DETAILS
C-7.2	STRIPING DETAILS
C-7.3	SIGNAGE DETAILS

CITY APPROVAL



DIG ALERT

THE EXACT LOCATION OF UTILITIES SHOWN IN THIS PLAN SET ARE UNKNOWN. THE CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS AND DEPTHS OF EXISTING UTILITIES (IN CONFLICT WITH PROPOSED IMPROVEMENTS) BY CALLING 811 AT LEAST 2 WORKING DAYS PRIOR TO STARTING ANY EXCAVATION.

Know what's **BELOW**.
 CALL before you dig.

CALL AT LEAST TWO WORKING DAYS BEFORE YOU DIG



ATLANTIC AE

02/2020

CONSULTANTS



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 60 E. 42ND ST. SUITE 1730
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 WWW.KIMLEY-HORN.COM

PROJECT INFO

COVER SHEET

1785 STATE HIGHWAY 5S, AMSTERDAM, NY 12010

SEALS



SHEET REVISIONS

DATE	REVISION

PAPM:	DFL
DRAWN BY:	DSU
JOB NO:	112977006
DATE:	09/05/2024

SHEET INFO

COVER SHEET

C-0.0

GENERAL CONSTRUCTION NOTES

- 1. THE CONTRACTOR AND SUBCONTRACTORS SHOULD BE FAMILIAR WITH ALL STATE AND LOCAL REQUIREMENTS RELATED TO SITE CONSTRUCTION ACTIVITIES PRIOR TO COMMENCING WORK. ALL WORK SHALL CONFORM AS APPLICABLE TO THESE GOVERNING STANDARDS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES. SPECIFICATIONS AND REQUIREMENTS CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED. REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.
3. EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE COMMENCING ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES. NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 72 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION. AN APPROXIMATE LIST OF THE UTILITY COMPANIES WHICH THE CONTRACTOR MUST CALL BEFORE COMMENCING WORK IS PROVIDED ON THE COVER SHEET OF THESE CONSTRUCTION PLANS. THIS LIST SERVES AS A GUIDE ONLY AND IS NOT INTENDED TO LIMIT THE UTILITY COMPANIES WHICH THE CONTRACTOR MAY WISH TO NOTIFY.
5. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT AND SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
7. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER.
8. DURING THE COURSE OF THE WORK, THE CONTRACTOR SHALL MAINTAIN AN ACCURATE RECORD OF ANY AND ALL CHANGES RELATED TO FIELD CONDITIONS, INCLUDING AREAS OF ROCK EXCAVATION. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL FILE WITH THE OWNER A COMPLETE SET OF "AS CONSTRUCTED" DRAWINGS PREPARED BY A NYS LICENSED LAND SURVEYOR SHOWING AND LOCATING ALL FEATURES OF THE WORK AS INSTALLED.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE ENGINEER A CERTIFIED RECORD SURVEY SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF NEW YORK DEPICTING THE ACTUAL FIELD LOCATION OF ALL CONSTRUCTED IMPROVEMENTS THAT ARE REQUIRED BY THE JURISDICTIONAL AGENCIES FOR THE CERTIFICATION PROCESS. ALL SURVEY COSTS WILL BE THE CONTRACTOR'S RESPONSIBILITY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE OF NEW YORK PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED BY THE CONTRACTOR.
11. ANY WELL DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE OWNER WITHIN 24 HOURS AFTER DISCOVERY IS MADE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED. FAILURE TO NOTIFY THE OWNER OF AN IDENTIFIABLE CONFLICT PRIOR TO PROCEEDING WITH INSTALLATION RELIEVES OWNER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.
13. ANY EXISTING UTILITY, WHICH IS TO BE EXTENDED, WHICH IS THE CONNECTION POINT FOR NEW UNDERGROUND UTILITIES, OR WHICH NEW FACILITIES CROSS, SHALL BE EXPOSED BY THE CONTRACTOR PRIOR TO PLACEMENT OF THE NEW UTILITIES. COST OF SUCH EXCAVATION AND SURROUNDING BACKFILL SHALL BE INCLUDED IN THE PRICE PAID FOR THE VARIOUS ITEMS OF WORK. THE ELEVATIONS AND LOCATIONS OF THE EXISTING FACILITIES WILL BE CHECKED BY THE PUBLIC WORKS INSPECTOR AND THE ENGINEER. IF IN THE OPINION OF THE INSPECTOR A CONFLICT EXISTS, THEN THE ENGINEER SHALL MAKE ANY NEEDED GRADING AND OR ALIGNMENT ADJUSTMENTS AND REVISE THE PLANS ACCORDINGLY. ALL GRAVITY FLOW PIPELINES TO BE LAD UPGRADE FROM THE LOWEST POINT STARTING AT THE END OF EXISTING IMPROVEMENTS. THE CONTRACTOR SHALL NOTIFY THE OWNER AT LEAST 24 HOURS PRIOR TO ANY PIPE WHICH IS TO BE PLACED TO BEGIN A FUTURE PHASE OF CONSTRUCTION FOR INVERT VERIFICATION. TOLERANCE SHALL BE IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS.
14. WORK OF THIS CONTRACT IS TO INCLUDE, BUT NOT LIMITED TO, DEMOLITION OF EXISTING BUILDING FOUNDATIONS AND OLD UTILITY SYSTEMS, SITE IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO UTILITIES, UTILITY STRUCTURES, ASPHALT AND CONCRETE PAVEMENT, CONCRETE PAVERS, CONCRETE AND GRANITE CURBING, DRIVEWAY APRONS, CONCRETE AND ASPHALT RAMPS, SIDEWALKS, FENCINGS, RAILINGS, SIGNAGE, SITE LIGHTING, RETAINING WALLS AND MISCELLANEOUS STRUCTURES.
15. HOURS OF CONSTRUCTION ACTIVITY MUST COMPLY WITH THE TOWN OF FLORIDA CODE.
16. PRIOR STARTING CONSTRUCTION ALL ACTIVE UTILITIES SHOULD BE IDENTIFIED, MARKED OUT IN THE FIELD, AND SECURED AS NECESSARY.
17. CONTRACTOR IS ALSO TO FAMILIARIZE HIMSELF WITH THE SUBSURFACE EXPLORATIONS AND GEOTECHNICAL REPORTS APPLICABLE TO THE PROJECT, ASSUMED PROVIDED BY OTHERS.
18. INFORMATION GIVEN IN THE SUBSURFACE EXPLORATIONS AND GEOTECHNICAL ENGINEERING REPORTS WAS OBTAINED FOR USE BY THE OWNER IN EXECUTION OF DESIGN. THE SUBSURFACE CONDITIONS DESCRIBED IN THE REPORTS ARE NOT INTENDED AS REPRESENTATIONS OR WARRANTIES OF ACCURACY. THE SUBSURFACE STRATIGRAPHY SHOWN IN THE REPORTS ARE BASED ON NECESSARY INTERPOLATIONS BETWEEN BORINGS AND MAY OR MAY NOT REPRESENT ACTUAL SUBSURFACE CONDITIONS. THE OWNER WILL NOT BE RESPONSIBLE FOR INTERPRETATIONS OR CONCLUSIONS MADE FROM THE DATA IN THE REPORTS BY THE CONTRACTOR.
19. CONDUCT A PRE-CONSTRUCTION CONFERENCE AT THE PROJECT SITE A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO COMMENCING ANY WORK OF THIS CONTRACT. THE MEETING WILL BE ARRANGED BY THE OWNER UPON NOTIFICATION OF THE CONTRACTOR AND IS TO BE ATTENDED BY REPRESENTATIVES OF THE CONTRACTOR, OWNER, CONSTRUCTION MANAGER, GEOTECHNICAL ENGINEER, SITE/CIVIL ENGINEER AND REPRESENTATIVES OF THE TOWN OF FLORIDA.
20. ADJOINING PROPERTY OWNERS WILL CONTINUE TO OCCUPY THEIR FACILITIES IMMEDIATELY ADJACENT TO THE PROJECT SITE AND DEMOLITION AREAS. THIS CONTRACTOR MUST CONDUCT HIS OPERATIONS IN SUCH A MANNER AND MAKE ANY ARRANGEMENTS NECESSARY SO THAT THE ADJOINING PROPERTY OWNERS USE OF THEIR FACILITIES WILL NOT BE INTERRUPTED DURING THE COURSE OF THE WORK.
21. PROVIDE NOT LESS THAN SEVENTY-TWO (72) HOURS' NOTICE TO THE OWNER AND ADJACENT PROPERTY OWNERS OF ACTIVITIES THAT WILL AFFECT THEIR RESPECTIVE USE OF THEIR PROPERTY.
22. MAINTAIN ACCESS TO EXISTING WALKWAYS, EXITS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES.
23. DO NOT CLOSE OR OBSTRUCT WALKWAYS, EXITS, OR OTHER OCCUPIED OR USED FACILITIES WITHOUT WRITTEN PERMISSION FROM AUTHORITIES HAVING JURISDICTION OR THE AFFECTED PROPERTY OWNER.
24. IT IS NOT EXPECTED THAT HAZARDOUS MATERIALS WILL BE ENCOUNTERED IN THE CONDUCT OF THE WORK. HOWEVER, IF MATERIALS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS ARE ENCOUNTERED, DO NOT DISTURB AND IMMEDIATELY NOTIFY THE OWNER AND CONSTRUCTION MANAGER. HAZARDOUS MATERIALS WILL BE REMOVED BY THE OWNER AND/OR CONTRACTOR UNDER A SEPARATE CONTRACT.
25. REVIEW PROJECT RECORD DOCUMENTS OF EXISTING CONSTRUCTION PROVIDED BY OWNER. OWNER DOES NOT GUARANTEE THAT EXISTING CONDITIONS ARE SAME AS THOSE INDICATED IN PROJECT RECORD DOCUMENTS.
26. THE CONTRACTOR IS RESPONSIBLE FOR ENGAGING A PROFESSIONAL ENGINEER TO PERFORM AN ENGINEERING SURVEY OF THE CONDITION OF ANY REMAINING BUILDING STRUCTURE OR FOUNDATION SYSTEM TO DETERMINE WHETHER REMOVING ANY ELEMENT MIGHT RESULT IN A STRUCTURAL DEFICIENCY OR UNPLANNED COLLAPSE OF ANY PORTION OF THAT STRUCTURE OR ADJACENT STRUCTURES DURING DEMOLITION OPERATIONS.
27. PROVIDE AND MAINTAIN INTERIOR AND EXTERIOR SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND PREVENT UNEXPECTED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED.
28. EXISTING UTILITIES: MAINTAIN ACTIVE UTILITY SERVICES INDICATED TO REMAIN AND PROTECT THEM AGAINST DAMAGE DURING DEMOLITION OPERATIONS.
29. DO NOT INTERRUPT EXISTING UTILITIES SERVING BOTH ON SITE AND OFF SITE ADJACENT OCCUPIED OR OPERATING FACILITIES UNLESS AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
30. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO OWNER AND TO AUTHORITIES HAVING JURISDICTION.
31. PROVIDE AT LEAST SEVENTY-TWO (72) HOURS' NOTICE TO OWNER IF SHUTDOWN OF SERVICE IS REQUIRED DURING CHANGEOVER.
32. TEMPORARY PROTECTION: ERECT TEMPORARY PROTECTION, SUCH AS WALKS, FENCES, RAILINGS, CANOPIES, AND COVERED PASSAGeways, WHERE REQUIRED BY AUTHORITIES HAVING JURISDICTION AND AS INDICATED.
33. PROTECT EXISTING SITE IMPROVEMENTS, APPURTENANCES, AND LANDSCAPING TO REMAIN.
34. PROVIDE TEMPORARY BARRICADES AND OTHER PROTECTION REQUIRED TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN.
35. PROVIDE PROTECTION TO ENSURE SAFE PASSAGE OF PEOPLE AROUND BUILDING DEMOLITION AREA AND TO AND FROM OCCUPIED PORTIONS OF ADJACENT BUILDINGS AND STRUCTURES.
36. PROTECT WALLS, WINDOWS, ROOFS, AND OTHER ADJACENT EXTERIOR CONSTRUCTION THAT ARE TO REMAIN AND THAT ARE EXPOSED TO BUILDING DEMOLITION OPERATIONS OR OTHER CONSTRUCTION ACTIVITY.
37. GENERAL: DEMOLISH ALL ITEMS, AS EITHER INDICATED ON THE PLANS OR ENCOUNTERED IN THE FIELD DURING THE WORK. COMPLETELY USE METHODS REQUIRED TO COMPLETE THE WORK WITHIN LIMITATIONS OF GOVERNING REGULATIONS AND AS FOLLOWS.
38. DO NOT USE CUTTING TORCHES UNTIL WORK AREA IS CLEARED OF FLAMMABLE MATERIALS. MAINTAIN FIRE WATCH AND PORTABLE FIRE-SUPPRESSION DEVICES DURING FLAME-CUTTING OPERATIONS.

- 38. MAINTAIN ADEQUATE VENTILATION WHEN USING CUTTING TORCHES.
39. LOCATE DEMOLITION EQUIPMENT AND REMOVE DEBRIS AND OTHER MATERIALS SO AS NOT TO IMPOSE EXCESSIVE LOADS ON SUPPORTING WALLS, FLOORS, OR FRAMING OF ADJOINING STRUCTURES.
40. ENGINEERING SURVEYS: PERFORM SURVEYS AS THE WORK PROGRESSES TO DETECT HAZARDS THAT MAY RESULT FROM BUILDING DEMOLITION OPERATIONS.
41. SITE ACCESS AND TEMPORARY CONTROLS: CONDUCT DEMOLITION AND DEBRIS-REMOVAL OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, WALKWAYS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.
42. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, WALKWAYS, OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS IF REQUIRED BY AUTHORITIES HAVING JURISDICTION.
43. USE WATER MIST AND OTHER SUITABLE METHODS TO LIMIT SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL-PROTECTION REGULATIONS. DO NOT USE WATER WHEN IT MAY DAMAGE ADJACENT CONSTRUCTION OR CREATE HAZARDOUS OR OBJECTIONABLE CONDITIONS, SUCH AS ICE, FLOODING, AND POLLUTION.
44. REMOVE STRUCTURES AND OTHER SITE IMPROVEMENTS IN ACCORDANCE WITH AUTHORITIES HAVING JURISDICTION.
45. CONCRETE: CUT CONCRETE FULL DEPTH AT JUNCTURES WITH CONSTRUCTION INDICATED TO REMAIN, USING POWER-DRIVEN SAWS. THEN REMOVE CONCRETE BETWEEN SAWS CUTS.
46. MASONRY: CUT MASONRY AT JUNCTURES WITH CONSTRUCTION INDICATED TO REMAIN, USING POWER-DRIVEN SAWS. THEN REMOVE MASONRY BETWEEN SAWS CUTS.
47. CONCRETE SLABS-ON-GRADE: SAW-CUT PERIMETER OF AREA TO BE DEMOLISHED AT JUNCTURES WITH CONSTRUCTION INDICATED TO REMAIN, THEN BREAK UP AND REMOVE.
48. EQUIPMENT: DISCONNECT EQUIPMENT AT NEAREST FITTING CONNECTION TO SERVICES, COMPLETE WITH SERVICE VALVES. REMOVE AS WHOLE UNITS, COMPLETE WITH CONTROLS.
49. BELOW-GRADE CONSTRUCTION: DEMOLISH EXISTING FOUNDATIONS AND FOOTINGS, FOUNDATION WALLS, WALLS, SLABS AND OTHER BELOW-GRADE CONSTRUCTION THAT IS WITHIN TEN (10) FEET OUTSIDE OF FOOTPRINT INDICATED FOR NEW CONSTRUCTION. ABANDON BELOW-GRADE CONSTRUCTION OUTSIDE THIS AREA.
50. REMOVE BELOW-GRADE CONSTRUCTION TO DEPTHS INDICATED ON THE PLANS.
51. EXISTING BELOW GRADE CONSTRUCTION SHOULD BE REMOVED ENTIRELY FROM BELOW PROPOSED FOUNDATIONS AND THEIR ZONES OF INFLUENCE (IF DETERMINED BY LINES EXTENDING AT LEAST ONE (1) FOOT LATERALLY BEYOND FOOTING EDGES FOR EACH VERTICAL FOOT OF DEPTH) AND EXCAVATED TO AT LEAST TWO (2) FEET BELOW PROPOSED CONSTRUCTION SUBGRADE LEVELS ELSEWHERE.
52. FOUNDATION AND SLABS MAY REMAIN IN PLACE BELOW THESE DEPTHS BELOW GROUND SUPPORTED SLABS, PAVEMENTS AND LANDSCAPED AREAS, PROVIDED THEY ARE APPROVED BY THE GEOTECHNICAL ENGINEER AND DO NOT INTERFERE WITH FUTURE CONSTRUCTION (INCLUDING UTILITIES); HOWEVER, IF EXISTING SLAB OR STRUCTURE TO REMAIN SHOULD BE THOROUGHLY BROKEN TO ALLOW VERTICAL DRAINAGE OF WEATHERING WATER.
53. EXISTING UTILITIES: ABANDON EXISTING UTILITIES AND BELOW-GRADE UTILITY STRUCTURES. CUT UTILITIES FLUSH WITH GRADE.
54. EXISTING UTILITIES: DEMOLISH EXISTING UTILITIES AND BELOW-GRADE UTILITY STRUCTURES THAT ARE WITHIN TEN (10) FEET OUTSIDE OF FOOTPRINT INDICATED FOR NEW CONSTRUCTION. ABANDON UTILITIES OUTSIDE THIS AREA.
55. FILL ABANDONED UTILITY STRUCTURES AND PIPING WITH EITHER LEAN CONCRETE OR SATISFACTORY SOIL MATERIALS APPROVED BY THE OWNER OR GEOTECHNICAL ENGINEER.
56. EXISTING UTILITIES: DEMOLISH AND REMOVE EXISTING UTILITIES AND BELOW-GRADE UTILITY STRUCTURES.
57. SITE DRAINAGE: SITE SOILS MAY SOFTEN WHEN EXPOSED TO WATER. EVERY EFFORT MUST BE MADE TO MAINTAIN DRAINAGE OF SURFACE WATER RUNOFF AWAY FROM CONSTRUCTION AREAS AND OPEN EXCAVATIONS BY GRADING AND LIMITING THE EXPOSURE OF EXCAVATIONS AND PREPARED SUBGRADES TO RAINFALL.
58. BELOW-GRADE AREAS: COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM BUILDING DEMOLITION OPERATIONS WITH SATISFACTORY SOIL MATERIALS APPROVED BY THE OWNER AND/OR GEOTECHNICAL ENGINEER.
59. SITE GRADING: UNIFORMLY ROUGH GRADE AREA OF DEMOLISHED CONSTRUCTION TO A SMOOTH SURFACE, FREE FROM IRREGULAR SURFACE CHANGES. PROVIDE A SMOOTH TRANSITION BETWEEN ADJACENT EXISTING GRADES AND NEW GRADES.
60. SEPARATE RECYCLABLE DEMOLISHED MATERIALS FROM OTHER DEMOLISHED MATERIALS TO THE MAXIMUM EXTENT POSSIBLE. SEPARATE RECYCLABLE MATERIALS BY TYPE.
61. PROVIDE CONTAINERS OR OTHER STORAGE METHOD APPROVED BY ARCHITECT FOR CONTROLLING RECYCLABLE MATERIALS UNTIL THEY ARE REMOVED FROM PROJECT SITE.
62. STOCKPILE PROCESSED MATERIALS ON-SITE WITHOUT INTERMIXING WITH OTHER MATERIALS. PLACE, GRADE, AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST.
63. STOCKPILE MATERIALS IN DESIGNATED AREAS SHOWN ON THE PLANS OR AS APPROVED IN THE FIELD BY THE OWNER OR CONSTRUCTION MANAGER.
64. IF RECYCLABLE MATERIAL CANNOT BE USED ON-SITE, THE CONTRACTOR SHALL TRANSPORT THE RECYCLABLE MATERIALS OFF OWNERS PROPERTY AND LEGALLY DISPOSE OF THEM AT NO ADDITIONAL COST TO THE OWNER IN ACCORDANCE WITH THE SWP.
65. DEMOLITION MATERIAL: FREE OF ENVIRONMENTAL CONCERNS, AND APPROVED BY NYSDEC, MAY BE USED AS FILL MATERIAL. PROVIDED THE MATERIAL IS PROPERLY SEGREGATED AND PROCESSED AS FOLLOWS AND APPROVED FOR REUSE ON THE SITE BY THE GEOTECHNICAL ENGINEER.
66. CONCRETE MASONRY MATERIALS SHOULD BE CRUSHED TO A WELL GRADED BLEND WITH A MAXIMUM SIZE OF THREE (3) INCHES IN DIAMETER PER EARTHWORK SPECIFICATIONS.
67. MILLED OR RECYCLED ASPHALT PAVEMENT (RAP) MAY BE REUSED AS GRANULAR BASE MATERIAL FOR PAVEMENTS PROVIDED THAT THE RAP PARTICLE SIZE MEETS THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR GRANULAR BASE AND NO MORE THAN FIFTY (50) PERCENT OF THE PAVEMENT GRANULAR BASE CONTAINS RAP.
68. OTHER ASPHALTIC MATERIALS AND DELETERIOUS BUILDING MATERIALS SUCH AS WOOD, INSULATION, METAL, SHINGLES, ETC. SHOULD NOT BE USED AS GENERAL STRUCTURAL FILL MATERIAL.
69. EXCEPT FOR ITEMS OR MATERIALS INDICATED TO BE RECYCLED, REUSED, SALVAGED, REINSTALLED, OR OTHERWISE INDICATED TO REMAIN OWNERS PROPERTY, REMOVE DEMOLISHED MATERIALS FROM PROJECT SITE AND LEGALLY DISPOSE OF THEM IN AN EPA-APPROVED LANDFILL.
70. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
71. BURNING: ON SITE BURNING OF RUBBISH AND OTHER DEMOLITION DEBRIS WILL NOT BE PERMITTED.
72. DISPOSAL: TRANSPORT DEMOLISHED MATERIALS OFF OWNERS PROPERTY AND PROVIDE FOR THE LEGAL OFF SITE DISPOSAL OF THE MATERIAL IN ACCORDANCE WITH THE SWP.
73. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT, AND DEBRIS CAUSED BY BUILDING DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE BUILDING DEMOLITION OPERATIONS BEGAN.
74. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE OWNER WITH A SURVEY PREPARED BY A NYS LICENSED LAND SURVEYOR SHOWING THE LOCATION AND THE ELEVATIONS TO WHICH THE DEMARCATION BARRIERS IS INSTALLED.
75. THE CONTRACTOR IS TO NOTE THAT THE WORK OF THIS CONTRACT WILL INCLUDE WORK BY OTHERS AND THE CONTRACTOR SHALL COORDINATE HIS WORK AND MAKE EVERY REASONABLE EFFORT TO PERMIT THE EXECUTION OF SUCH WORK BY OTHERS WITHOUT DELAY.
76. IF TEMPORARY UTILITY SERVICES ARE REQUIRED THE CONTRACTOR SHALL SEE TO IT THAT THEY ARE PROVIDED AT NO ADDITIONAL COST TO THE OWNER AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN SUCH TEMPORARY FACILITIES FOR THE DURATION OF THEIR WORK.
77. ALL WORK OF THIS CONTRACT SHALL CONFORM TO THESE CONTRACT DRAWINGS AND SPECIFICATIONS AS WELL AS TO THE APPLICABLE REQUIREMENTS OF THE TOWN OF FLORIDA BUILDING, PUBLIC WORKS, AND FIRE DEPARTMENTS, AS WELL AS THE COORDINATING PUBLIC UTILITY COMPANIES.
78. ALL WORK SHALL COMPLY WITH THE BUILDING CODE OF NEW YORK STATE AND ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL RULES, LAWS, AND REGULATIONS.
79. ALL PROJECT RELATED LINES AND GRADES ARE TO BE ESTABLISHED BY A LICENSED SURVEYOR REGISTERED TO PRACTICE IN THE STATE OF NEW YORK.
80. SIZES OF EXISTING UTILITY LINES ARE TO BE VERIFIED IN THE FIELD BY CAREFUL TEST EXCAVATIONS BY THE CONTRACTOR PRIOR TO STARTING THE WORK. ANY SUBSTANTIVE VARIATIONS FROM THE SURVEY DATA PROVIDED ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER SO THAT APPROPRIATE DESIGN MODIFICATIONS MAY BE MADE.
81. THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE EXISTING DRAINAGE OR UTILITY SYSTEMS WITHIN OR ADJACENT TO THE WORK SHOWN ON THESE DRAWINGS. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL IMMEDIATELY BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE AND TO THE SATISFACTION OF THE OWNER OR UTILITY COMPANY INVOLVED.
82. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL TRADES REQUIRED BY THE CONTRACT WORK AND SHALL OBTAIN ALL REQUIRED BONDS, PERMITS, ETC. REQUIRED FOR THE EXECUTION OF THE WORK AND CONFORM TO THE WORK WITH ALL APPLICABLE CODES, RULES AND REGULATIONS OF THE GOVERNING AGENCIES. THE CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE LAW (CODE RULE 53) SHALL BE RESPONSIBLE FOR NOTIFYING THE APPROPRIATE UTILITY COMPANY OR AGENCY PRIOR TO COMMENCING ANY EXCAVATION WORK AND SHALL NOTIFY THE "CALL BEFORE YOU DIG" HOTLINE @ 1-800-862-7962 PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES.
83. SAFE AND ADEQUATE PEDESTRIAN AND VEHICULAR TRAFFIC FLOW SHALL BE MAINTAINED AT ALL TIMES TO THE ADJACENT BUILDINGS WHILE THE WORK IS PROGRESSING. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL OF THE OWNER A CONSTRUCTION SEQUENCE SCHEDULE AND PLAN FOR PEDESTRIAN AND VEHICULAR TRAFFIC FLOW.
84. ALL UNPAVED AREAS WITHIN THE WORK AREAS AND ALL AREAS DISTURBED DURING CONSTRUCTION ARE TO BE STABILIZED IN ACCORDANCE WITH THE NYSDEC APPROVED STORMWATER POLLUTION PREVENTION PLAN. UNLESS OTHERWISE DIRECTED BY THE OWNER, TURBED AREAS, DISTURBED BY REGRADE AND OTHER WORK OF CONTRACTOR, SHALL BE BROUGHT TO THE PROPER SUBGRADE ELEVATION, TOPSOIL TO A MINIMUM DEPTH OF 4 INCHES SHALL BE PLACED AND LIMING, FERTILIZING AND SEEDING ACCOMPLISHED, AS SPECIFIED. THE CONTRACTOR SHALL WATER AND MAINTAIN SEEDING AREAS UNTIL THEY HAVE BECOME WELL ESTABLISHED.

- 85. EXISTING PAVEMENT WHICH IS TO REMAIN AND WHICH IS REMOVED OR DAMAGED DURING THE CONSTRUCTION WORK OF THIS CONTRACT IS TO BE RESTORED TO ITS ORIGINAL CONDITION.
86. UNLESS OTHERWISE SHOWN HEREON OR DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL MATCH THE MATERIALS, TYPES, THICKNESS AND QUALITY OF EXISTING BITUMINOUS CONCRETE PAVEMENTS, WALKWAYS AND CURBS WITHIN THE PUBLIC RIGHT-OF-WAY WHICH ARE TO BE REPLACED.
87. ASA REFERENCE STANDARD ALL WORK CONTAINED HEREIN SHALL BE GOVERNED BY THE REQUIREMENTS SET FORTH IN THE "STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS" AS PUBLISHED BY THE NYSOT, DESIGN AND CONSTRUCTION DIVISION, DATED JANUARY 2, 2002, INCLUDING ALL LATEST AMENDMENTS THERETO.
88. AT NO TIME, SHALL ANY EXCAVATED AREAS BE LEFT UNATTENDED UNLESS APPROPRIATE MARKING AND BARRICADING IS EMPLOYED.
89. WITH REGARD TO EXISTING UTILITIES TO REMAIN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL EXISTING UTILITY VALVES, MANHOLE FRAMES, COVERS, RNIS, IRMETS AND HYDRANTS TO MEET NEW FINISH GRADE OR AS OTHERWISE REQUIRED TO FUNCTION PROPERLY.
90. CONTRACTOR SHALL REVIEW PLANS FROM SITE PREPARATION AND SITE PACKAGE CONTRACT AND FAMILIARIZE THEMSELVES WITH PREVIOUS SCOPE OF WORK.
91. CONTRACTOR SHALL LIMIT ACTIVITIES IN AREAS OF DEVELOPMENT THAT ARE OCCUPIED.

PAVING, GRADING AND DRAINAGE NOTES

- 1. CONTRACTOR SHALL MAINTAIN GRADES AT ENTRANCES TO PHASE 2 CONSTRUCTION.
2. ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN JURISDICTIONS RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LOCAL OR COUNTY SPECIFICATIONS AND STANDARDS (LATEST EDITION) OR NEW YORK STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND STANDARDS (LATEST EDITION) IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS.
3. ALL UNPAVED AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE REGRADED AND REPAIRED TO EXISTING CONDITION OR BETTER.
4. TRAFFIC CONTROL: ON ALL NYSOT, LOCAL AND COUNTY RIGHTS-OF-WAY SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT/HA) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
5. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL AN ADEQUATE STABILIZATION OCCURS.
6. ALL OPEN AREAS WITHIN THE PROJECT SITE SHALL BE COVERED WITH TOPSOIL AND SEED AS INDICATED ON THE LANDSCAPE PLAN.
7. ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON THE DRAWINGS.
8. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW CUT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.
9. WHERE NEW PAVEMENT MEETS THE EXISTING PAVEMENT, THE CONTRACTOR SHALL SAW CUT THE EXISTING PAVEMENT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND MATCH THE EXISTING PAVEMENT EXISTING WITH THE PROPOSED PAVEMENT UNLESS OTHERWISE INDICATED.
10. THE CONTRACTOR SHALL INSTALL FILTER FABRIC OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.
11. DEWATERING DISCHARGE WILL NOT BE PERMITTED TO DISCHARGE OPEN TO GROUND. IT SHALL BE TREATED AND DISCHARGED INTO THE COUNTRY SEWER PERMIT TO BE COORDINATED BY THE OWNER.
12. STRIP TOPSOIL AND ORGANIC MATTER FROM ALL AREAS OF THE SITE AS REQUIRED. IN SOME CASES TOPSOIL MAY BE STOCKPILED ON SITE FOR PLACEMENT WITHIN LANDSCAPED AREAS BUT ONLY AS DIRECTED BY THE OWNER.
13. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION.
14. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE STABILIZED BY MEANS AND METHODS APPROVED BY THE AUTHORITY HAVING JURISDICTION. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO THE ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE COVERED WITH ROCK OR MULCHED AS SHOWN ON THE LANDSCAPING PLAN.
15. ALL CUT OR FILL SLOPES SHALL BE 3 (HORIZONTAL) : 1 (VERTICAL) OR FLATTER UNLESS OTHERWISE SHOWN.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
17. THE CONTRACTOR SHALL TAKE ALL REQUIRED MEASURES TO CONTROL TURBIDITY, INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF TURBIDITY BARRIERS AT ALL LOCATIONS WHERE THE POSSIBILITY OF TRANSFERRING SUSPENDED SOLIDS INTO THE RECEIVING WATER BODY EXISTS DUE TO THE PROPOSED WORK. TURBIDITY BARRIERS MUST BE MAINTAINED IN EFFECTIVE CONDITION AT ALL LOCATIONS UNTIL CONSTRUCTION IS COMPLETED AND DISTURBED SOIL AREAS ARE STABILIZED THEREAFTER. THE CONTRACTOR MUST REMOVE THE BARRIERS AT NO TIME SHALL THERE BE ANY OFF-SITE DISCHARGE WHICH VIOLATES THE WATER QUALITY STANDARDS OF THE GOVERNING CODE.
18. EXPOSED SLOPES SHOULD BE STABILIZED WITHIN 48 HOURS OF COMPLETING FINAL GRADING, AND AT ANY OTHER TIME AS NECESSARY, TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.
19. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE REQUIRED PERMITS COMPLETE WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY GOVERNING JURISDICTIONS.
20. THE CONTRACTOR SHALL ENSURE THAT ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.
21. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER MANUFACTURER'S RECOMMENDATIONS.

BUILDING AND SAFETY DIVISION NOTES

- 1. FILL TO BE COMPACTED TO NOT LESS THAN 90% OF MAXIMUM DENSITY AS DETERMINED BY A.S.T.M. SOIL COMPACTION TEST D1557.
2. FIELD DENSITY WILL BE DETERMINED BY THE SAND-CONE METHOD A.S.T.M. 1556-07 AND/OR NUCLEAR DENSITY GAUGE METHOD A.S.T.M. 2922-07. IN THE GRANULAR COHESIVE SOILS, FIELD DENSITY MAY BE DETERMINED BY THE DRIVE-CYCLER METHOD D2937 A.S.T.M. PROVIDED NOT LESS THAN 20% OF THE REQUIRED DENSITY TESTS, UNIFORMLY DISTRIBUTED, ARE BY THE SAND-CONE METHOD. THE METHOD OF DETERMINING FIELD DENSITY SHALL BE SHOWN IN THE COMPACTION REPORT. OTHER METHODS MAY BE USED IF RECOMMENDED BY THE SOILS ENGINEER AND APPROVED IN ADVANCE BY THE BUILDING OFFICIAL.
3. NOT LESS THAN ONE FIELD DENSITY TEST WILL BE MADE FOR EACH TWO-FOOT VERTICAL LIFT OF FILL NOR LESS THAN ONE SUCH TEST FOR EACH 1,000 CUBIC YARDS OF MATERIAL PLACED UNLESS OTHERWISE RECOMMENDED BY THE SOILS ENGINEER.
4. NO FILL TO BE PLACED UNTIL STRIPPING OF VEGETATION, REMOVAL OF UNSUITABLE SOILS AND INSTALLATION OF SUBDRAINS (IF ANY) HAS BEEN INSPECTED AND APPROVED BY THE SOILS ENGINEER.
5. NO ROCK OR SIMILAR MATERIAL GREATER THAN 8" IN DIAMETER WILL BE PLACED IN THE FILL UNLESS RECOMMENDATIONS FOR SUCH PLACEMENT HAVE BEEN SUBMITTED BY THE SOILS ENGINEER IN ADVANCE AND APPROVED BY THE BUILDING OFFICIAL.
6. FINISH GRADING WILL BE COMPLETED AND APPROVED BEFORE OCCUPANCY OF BUILDINGS.
7. SEE GRADING PLANS FOR EARTHWORK VOLUMES.
8. FILL SLOPES SHALL NOT BE STEEPER THAN 2:1.
9. DENSITY TESTS WILL BE MADE AT POINTS APPROXIMATELY ONE FOOT BELOW THE FILL SLOPE SURFACE. ONE TEST WILL BE MADE FOR EACH 1,000 SQ. FT. OF SLOPE SURFACE, BUT NOT LESS THAN ONE TEST FOR EACH 10 FT. VERTICAL OF SLOPE HEIGHT UNLESS OTHERWISE RECOMMENDED BY THE SOILS ENGINEER.
10. ALL PADS AT ROUGH GRADING WILL HAVE A MINIMUM SLOPE OF 1 % TOWARDS THE STREET OR DESIGNED DRAINAGE OUTLET.
11. APPROVAL OF THIS PLAN BY THE LOCAL AGENCY DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OR THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE PROTECTION OF ALL UTILITIES WITHIN THE LIMITS OF THIS PROJECT.
12. FILLS SHALL BE BENCHED IN ACCORDANCE WITH APPROVED GEOTECHNICAL REPORT.
13. ALL TRENCH BACKFILLS SHALL BE TESTED AND CERTIFIED BY THE SITE SOILS ENGINEER PER THE GRADING CODE.
14. ALL CUT SLOPES SHALL BE INVESTIGATED BOTH DURING AND AFTER GRADING BY AN ENGINEERING GEOLOGIST TO DETERMINE IF ANY SLOPE STABILITY PROBLEM EXISTS. SHOULD EXCAVATION DISCLOSE ANY GEOLOGICAL HAZARDS OR POTENTIAL GEOLOGICAL HAZARDS, THE ENGINEERING GEOLOGIST SHALL RECOMMEND NECESSARY TREATMENT TO THE BUILDING OFFICIAL FOR APPROVAL.
15. WHERE SUPPORT OR BUTTRESSING OF CUT AND NATURAL SLOPES IS DETERMINED TO BE NECESSARY BY THE ENGINEERING GEOLOGIST AND SOILS ENGINEER, THE SOILS ENGINEER WILL SUBMIT DESIGN, LOCATION AND CALCULATIONS TO THE BUILDING OFFICIAL PRIOR TO CONSTRUCTION. THE ENGINEERING GEOLOGIST AND SOILS ENGINEER WILL INSPECT AND CONTROL THE CONSTRUCTION OF THE BUTTRESSING AND CERTIFY TO THE STABILITY OF THE SLOPE AND ADJACENT STRUCTURES UPON COMPLETION.
17. THE DESIGN CIVIL ENGINEER SHALL BE AVAILABLE DURING GRADING AND CONSTRUCTION FOR CONSULTATION CONCERNING COMPLIANCE WITH THE PLANS, SPECIFICATIONS, AND CODE WITHIN THIS PURVIEW.
18. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE.

MAINTENANCE

- ALL MEASURES STATED ON THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES MAY BE CHECKED BY A QUALIFIED PERSON ON A SCHEDULE THAT MEETS OR EXCEEDS THE GOVERNING REQUIREMENTS, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:
1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETEIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED AND RESEED AS NEEDED.
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
6. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50 CUBIC YARDS/ACRE.
7. ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER.

RECORD DRAWINGS

- 1. WHERE LOCAL JURISDICTIONS REQUIRE RECORD DRAWINGS, THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER AND OWNER COPIES OF A PAVING, GRADING AND DRAINAGE RECORD DRAWING AND A SEPARATE UTILITY RECORD DRAWING, BOTH PREPARED BY A NEW YORK REGISTERED SURVEYOR. THE RECORD DRAWINGS SHALL VERIFY ALL DESIGN INFORMATION INCLUDED ON THE DESIGN PLANS OF THE SAME NAME.
2. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.

PROJECT CLOSEOUT

- 1. CONTRACTOR SHALL PROVIDE THE NECESSARY ITEMS INCLUDING ANY TESTING, REPORTS, OR CERTIFICATION DOCUMENTS REQUIRED BY THE GOVERNING JURISDICTIONS TO PROPERLY CLOSEOUT THE PROJECT BEFORE IT CAN BE DEEMED COMPLETE.

DOCUMENT USE

- 1. THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN ENGINEERING AND LANDSCAPE ARCHITECTURE OF NEW YORK, P.C. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN ENGINEERING AND LANDSCAPE ARCHITECTURE OF NEW YORK, P.C.
2. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
3. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, NYSOT STANDARD SHEETS, MANUFACTURER'S LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.



ATLANTIC AE CONSULTANTS

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PROJECT INFO

GENERAL NOTES

1785 STATE HIGHWAY 5S, AMSTERDAM, NY 12010

SEALS



SHEET REVISIONS

Table with columns for DATE and REVISION. Includes fields for P/PM, DFL, DRAWN BY: DSU, JOB NO.: 112977006, DATE: 09/05/2024.

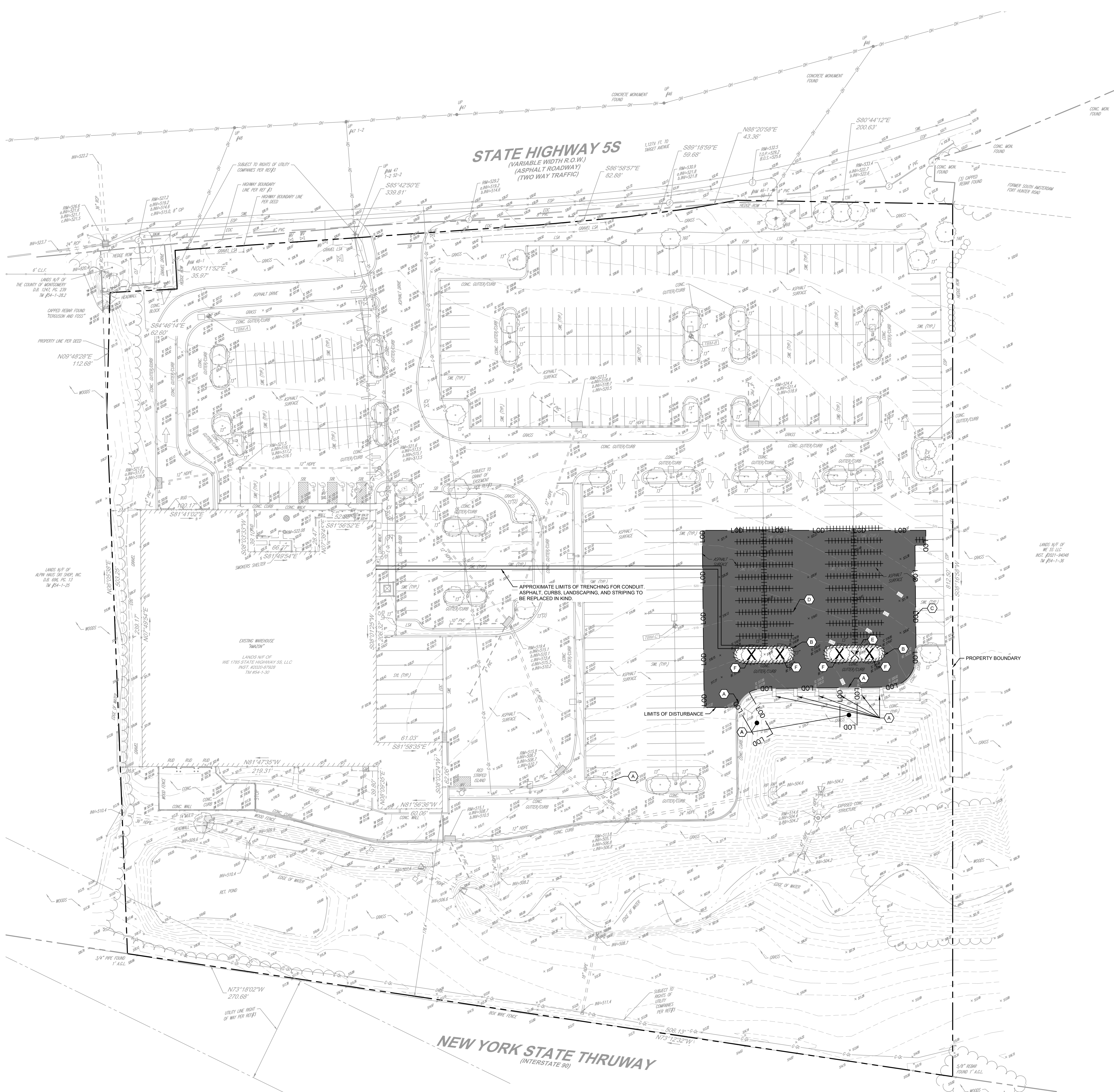
SHEET INFO

GENERAL NOTES

C-0.1

CITY APPROVAL





EXISTING CONDITIONS PLAN LEGEND

---	EXISTING CONTOUR
---	EXISTING SPOT ELEVATION
---	EXIST. TOP OF CURB ELEVATION
---	EXIST. BOTTOM OF CURB ELEVATION
---	EXIST. TOP OF WALL ELEVATION
---	EXIST. BOTTOM OF WALL ELEVATION
---	EXIST. FINISHED FLOOR ELEVATION
---	EXIST. NAVD 88 (BOROUGH SEWER DATUM)
---	INV. NAVD 88 (BOROUGH SEWER DATUM)
---	OVERHEAD WIRES
---	APPROX. LOC. UNDERGROUND FIBER OPTIC LINE
---	APPROX. LOC. UNDERGROUND NATURAL GAS LINE
---	SUBSURFACE UTILITY QUALITY LEVEL C
---	DEPRESSED CURB
---	HYDRANT
---	FIRE DEPARTMENT CONNECTION (F.D.C.)
---	WATER VALVE
---	GAS METER
---	IRRIGATION VALVE
---	CLEAN OUT
---	SANITARY/SEWER MANHOLE
---	CATCH BASINS
---	GUY WIRE
---	UTILITY POLE
---	PAINTED HANDICAPPED
---	PAINTED ARROWS
---	METAL COVERS
---	SIGN
---	BOLLARD
---	AREA LIGHT
---	GROUND FLOOD LIGHT
---	DECIDUOUS TREE & TRUNK SIZE
---	PARKING SPACE COUNT
---	EDGE OF CONC.
---	EDGE OF PAVEMENT
---	STOP BAR
---	SOLID BLUE LINE
---	SOLID WHITE LINE
---	TYPICAL
---	ROLL UP DOOR

REMOVALS PLAN LEGEND

---	PROPERTY LINE
---	LIMITS OF DISTURBANCE (APPROXIMATELY 6.70 ACRES)
A	ITEM TO REMAIN, PROTECT DURING CONSTRUCTION
B	CURB REMOVAL
C	PAVEMENT REMOVAL
D	PAVEMENT STRIPING REMOVAL
E	ITEM TO BE REMOVED AND RELOCATED
F	TREE TO BE REMOVED

- REMOVALS NOTES**
- PROPERTY LINES AND EXISTING CONDITIONS SHOWN ARE BASED ON A SURVEY MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY 1785 STATE HIGHWAY 55" PREPARED BY CONTROL POINT, DATED JUNE 5, 2023.
 - REFERENCE GEOTECHNICAL REPORT ENTITLED "NAME OF GEOTECHNICAL REPORT" PREPARED BY NAME OF GEOTECHNICAL CONSULTANT, DATED MONTH, DAY, YEAR, OR LATEST VERSION.
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 - ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AS SHOWN ON THE ABOVE MENTIONED SURVEY.
 - INLET PROTECTION SILT FENCE, AND TREE PROTECTION FENCE, TO BE INSTALLED PRIOR TO DEMOLITION ACTIVITIES. REFER TO SHEET FIELD FOR EAS PLAN AND SHEET FIELD FOR EAS DETAILS FOR RELATED DETAILS.
 - CONTRACTOR TO SANDBLAST EXISTING STRIPING AND RESTRIPE, TIE IN AS SHOWN ON SHEET C-0.
 - CONTRACTOR TO REMOVE AND REPLACE ASPHALT, CURBING, LANDSCAPING, AND STRIPING THROUGH LIMITS OF TRENCHING. SEE SHEET C-0 FOR ELECTRICAL ROUTING.

CITY APPROVAL

GRAPHIC SCALE IN FEET
0 20 40 80

STATE OF NEW YORK
DAVID LOFRISCO
LICENSED PROFESSIONAL ENGINEER
097162

PAPM: DFL
DRAWN BY: DSU
JOB NO: 112977006
DATE: 09/05/2024

OVERALL EXISTING CONDITIONS AND REMOVALS PLAN
1"=40'

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PROJECT INFO

OVERALL EXISTING CONDITIONS AND REMOVALS PLAN

1785 STATE HIGHWAY 55, AMSTERDAM, NY 12010

SEALS

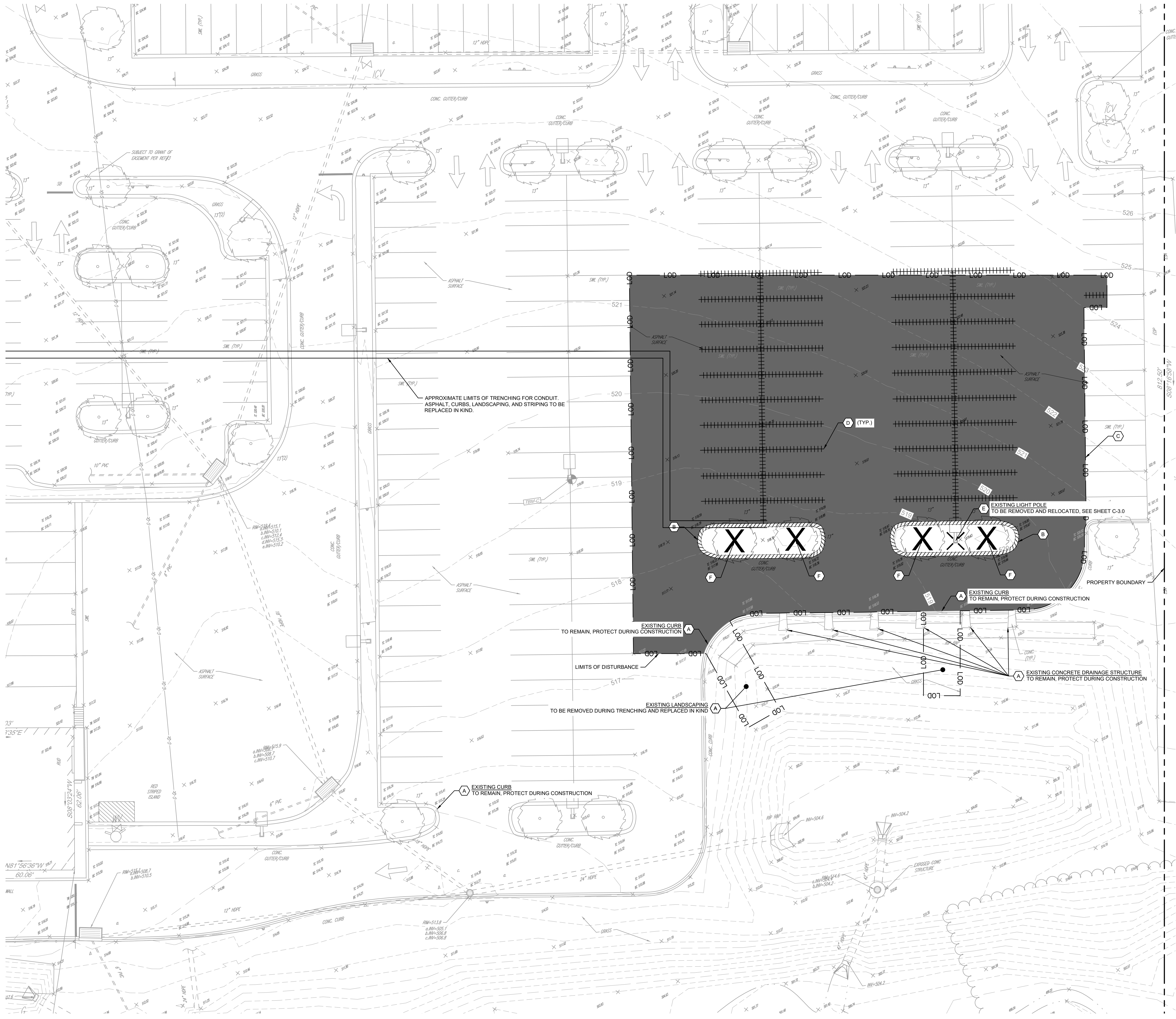
STATE OF NEW YORK
DAVID LOFRISCO
LICENSED PROFESSIONAL ENGINEER
097162

SHEET REVISIONS

DATE	REVISION

SHEET INFO

OVERALL EXISTING CONDITIONS AND REMOVALS PLAN
C-1.0



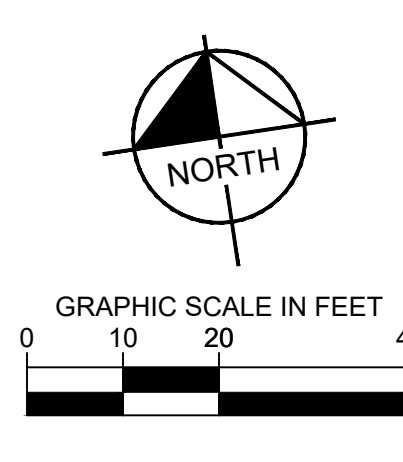
EXISTING CONDITIONS PLAN LEGEND	
— 124 —	EXISTING CONTOUR
— 125 —	EXISTING SPOT ELEVATION
— TC 123.45	EXIST. TOP OF CURB ELEVATION
— BC 123.45	EXIST. BOTTOM OF CURB ELEVATION
— WC 123.45	EXIST. TOP OF WALL ELEVATION
— WC 123.45	EXIST. BOTTOM OF WALL ELEVATION
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— RM=123.00 (124.30)	RM NAVD 88 (BOROUGH SEWER DATUM)
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— OW	OVERHEAD WIRES
— FO	APPROX. LOC. UNDERGROUND FIBER OPTIC LINE
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— C	SUBSURFACE UTILITY QUALITY LEVEL C
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— W	WATER VALVE
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— U	GUY WIRE
— P	UTILITY POLE
— PH	PAINTED HANDICAPPED
— PA	PAINTED ARROWS
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— GL	GROUND FLOOD LIGHT
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— PC	PARKING SPACE COUNT
— EC	EDGE OF CONC.
— EP	EDGE OF PAVEMENT
— SB	STOP BAR
— SL	SOLID BLUE LINE
— SW	SOLID WHITE LINE
— TP	TYPICAL
— RD	ROLL UP DOOR

REMOVALS PLAN LEGEND	
— LOD —	PROPERTY LINE
— LOD —	LIMITS OF DISTURBANCE (APPROXIMATELY 0.70 ACRES)
— A —	ITEM TO REMAIN, PROTECT DURING CONSTRUCTION
— B —	CURB REMOVAL
— C —	PAVEMENT REMOVAL
— D —	PAVEMENT STRIPING REMOVAL
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CITY APPROVAL

DATE	REVISION



EXISTING CONDITIONS AND REMOVALS PLAN
1"=20'



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New York
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60 E. 42ND ST. SUITE 1750
NEW YORK, NY 10165
PHONE: 914-368-8200
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PROJECT INFO

EXISTING CONDITIONS AND REMOVALS PLAN
1785 STATE HIGHWAY 55, AMSTERDAM, NY 12010

SEALS



SHEET REVISIONS

DATE	REVISION

PAPM:	DFL
DRAWN BY:	DSU
JOB NO:	112977006
DATE:	09/05/2024

SHEET INFO

EXISTING CONDITIONS AND REMOVALS PLAN

EROSION AND SEDIMENT CONTROL NOTES

GENERAL NOTES

- A. ALL EASC MEASURES SHALL BE INSTALLED AND MAINTAINED PER NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, DATED NOVEMBER 2016, OR LATEST REVISION THERETO.
- B. THE OWNER/APPLICANT MUST ENSURE THAT TEMPORARY AND PERMANENT SOIL EROSION AND SEDIMENT CONTROL FEATURES ARE DESIGNED, INSTALLED, AND MAINTAINED FOR THE DURATION OF THE PROJECT, IN ORDER TO PREVENT SOIL DISTURBANCES FROM CONSTRUCTION OPERATIONS FROM HAVING A NEGATIVE OR ADVERSE EFFECT TO ADJACENT PROPERTIES.
- C. ANY IMPORTED TOPSOIL SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS FOR QUALITY AND USE.
- D. TEMPORARY SEDIMENT TRAPPING EASC CONTROLS ARE NOT TO BE REMOVED UNTIL PERMANENT STABILIZATION (90% UNIFORM DENSITY OF PERMANENT VEGETATION OR PERMANENT MULCHSTONE) IS ESTABLISHED IN ALL CONTRIBUTORY DRAINAGE AREAS PER THE NOVEMBER 2016 NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, OR LATEST REVISION THERETO.

DESCRIPTION OF WORK

- A. PROVIDE MEANS NECESSARY TO INSTALL, INSPECT AND MAINTAIN, AND REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE DRAWINGS AND AS REQUIRED TO MINIMIZE THE EROSION AND UNSPECIFIED TRANSPORT OF SOIL FROM THE SITE.

QUALITY ASSURANCE

- A. GENERAL
 - 1. INSTALL AND MAINTAIN IN COMPLIANCE WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES. RETAIN A COPY OF THE PROJECT'S NOTICE OF INTENT (NOI), A BRIEF DESCRIPTION OF THE PROJECT, POST IN A PROMINENT PLACE FOR PUBLIC VIEWING, AND A COPY OF THE PROJECT'S STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AT THE CONSTRUCTION SITE FROM THE DATE OF INITIATION OF CONSTRUCTION ACTIVITIES TO THE DATE OF NOTICE OF TERMINATION (NOT) SUBMISSION.
 - 2. INSTALL ALL EROSION AND SEDIMENT MEASURES IN ACCORDANCE WITH THE DRAWINGS OR NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, AUGUST 2005 OR LATEST REVISION THERETO.
 - 3. GRADE AND MAINTAIN SITE AT ALL TIMES SUCH THAT ALL STORMWATER RUNOFF FROM DISTURBED AREAS IS DIVERTED TO SOIL EROSION AND SEDIMENTATION CONTROL FACILITIES.
 - 4. NO CHANGES TO THE SOIL EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE WITHOUT APPROVAL OF THE OWNER'S REPRESENTATIVE.
 - 5. NO MORE THAN 5 ACRES OF SOIL CAN BE DISTURBED AT ANY TIME WITHOUT A 5-ACRE WAIVER ISSUED BY THE NYSDEC AND/OR VILLAGE OF SLEEPY HOLLOW. ALL DISTURBED AREAS SHALL BE PROTECTED BY EROSION AND SEDIMENT CONTROL MEASURES.
 - 6. THE CONTRACTOR SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS RELATING TO THE PREVENTION AND ABATEMENT OF POLLUTION.
- B. PRODUCT DATA
 - 1. SUBMIT MANUFACTURER'S CATALOGUE CUTS, SPECIFICATIONS AND INSTALLATION INSTRUCTIONS FOR SILT FENCES, FILTER FABRICS, EROSION CONTROL BLANKETS, TRASH RACKS, ANTI-SEEP COLLARS, SEDIMENT TRAP RISER AND BARREL PIPES, AND DEWATERING DEVICES TO THE DESIGN ENGINEER FOR REVIEW AND ACCEPTANCE.

WORK SCHEDULE

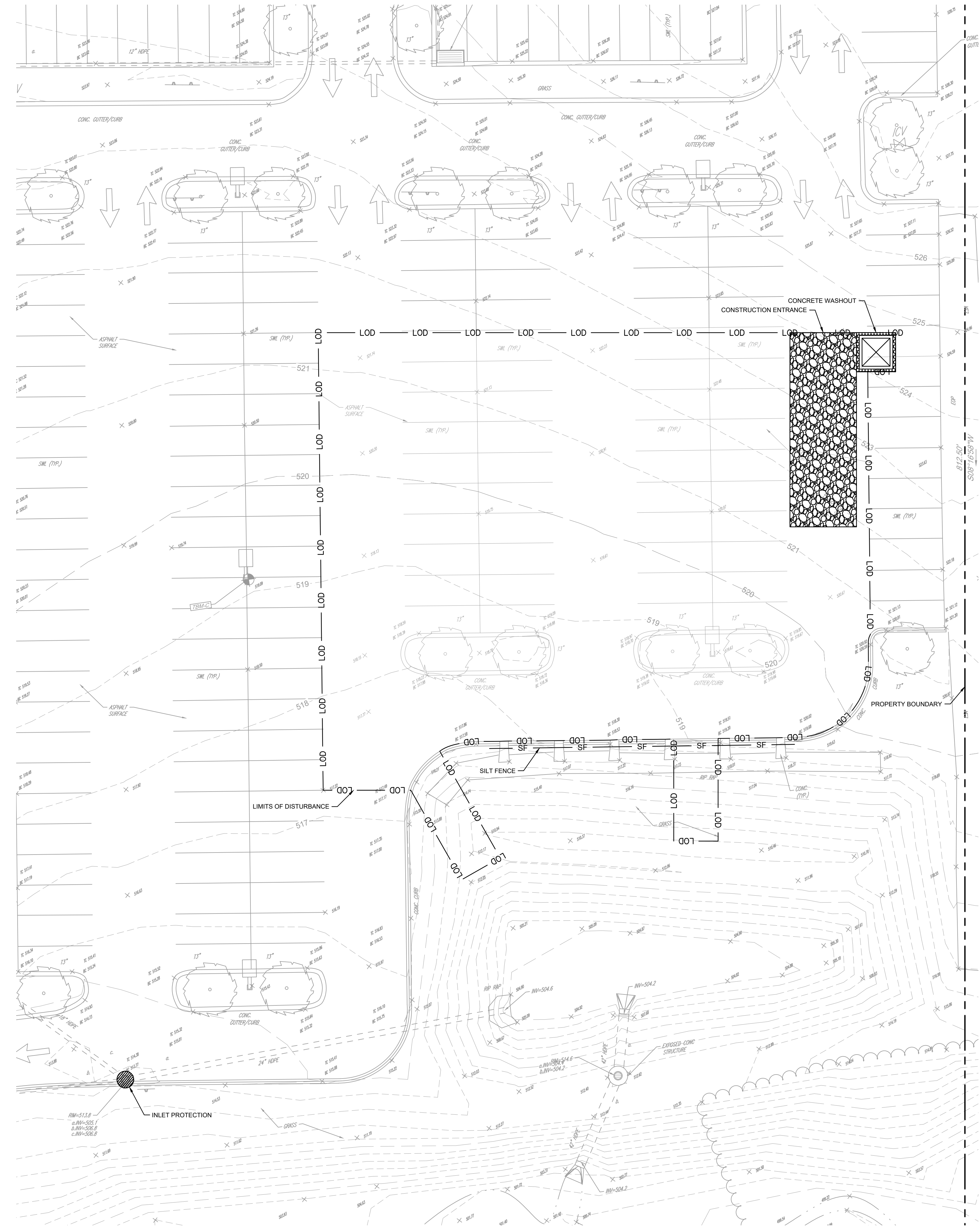
- A. PRE-CONSTRUCTION PHASE
 - 1. INSTALL STABILIZED CONSTRUCTION ENTRANCES.
 - 2. PRIOR TO EARTHWORK OPERATIONS OR THE IMPORTATION OF FILL MATERIAL, INSTALL PERIMETER SILT FENCE AND STABILIZED CONSTRUCTION ENTRANCES.
 - 3. PROTECT EXISTING PIPING TO REMAIN IN PLACE MAINTAINING ELEVATIONS.
 - 4. GRADE OUT TO LOW POINTS AND INSTALL AND MAINTAIN TEMPORARY DEWATERING SYSTEMS AS REQUIRED.
 - 5. CONVERT EXISTING OPEN GRATES ON STORM DRAIN STRUCTURES SHOWN TO REMAIN.
- B. CONSTRUCTION PHASE
 - 1. PROVIDE NECESSARY MEANS TO INSPECT AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES AS REQUIRED TO MINIMIZE THE EROSION AND UNSPECIFIED TRANSPORT OF SOIL AND SEDIMENT UNTIL THE REMOVAL AS SPECIFIED. INSPECT MEASURES DAILY AND WITHIN 24 HOURS OF THE END OF A 0.5 INCH OR GREATER STORM EVENT. STABILIZED AREAS WILL BE INSPECTED UNTIL THE ENTIRE SITE IS STABILIZED. MAINTENANCE SHOULD COMMENCE WITHIN 24 HOURS AND BE COMPLETED WITHIN 5 CALENDAR DAYS OF DETERMINING ITS NEED.
 - 2. PROVIDE NECESSARY DUST CONTROL WITH WATER AND/OR WIND BARRIERS TO MINIMIZE FUGITIVE DUST.
 - 3. KEEP PAVED SURFACES SWEEPED CLEAN AT ALL TIMES.
 - 4. TEMPORARILY STABILIZE AS SPECIFIED AND AS REQUIRED ALL INACTIVE AREAS TO REDUCE DISTURBED AREAS.
 - 5. FOLLOW FINISH GRADING, INSTALL TEMPORARY OR PERMANENT STABILIZATION.
 - 6. IMMEDIATELY FOLLOWING THE INSTALLATION OF CATCH BASIN INLETS, INSTALL INLET PROTECTION.
- C. POST-CONSTRUCTION PHASE
 - 1. STABILIZE WATERSHED AND HAVE OWNER'S REPRESENTATIVE REVIEW AND ACCEPT.
 - 2. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE TO REMAIN IN PLACE PENDING THE START OF PERMANENT CONSTRUCTION ON-SITE OR AS OTHERWISE DIRECTED BY EITHER THE OWNER'S REPRESENTATIVE AND VILLAGE ENGINEER.

PRODUCTS AND EXECUTION

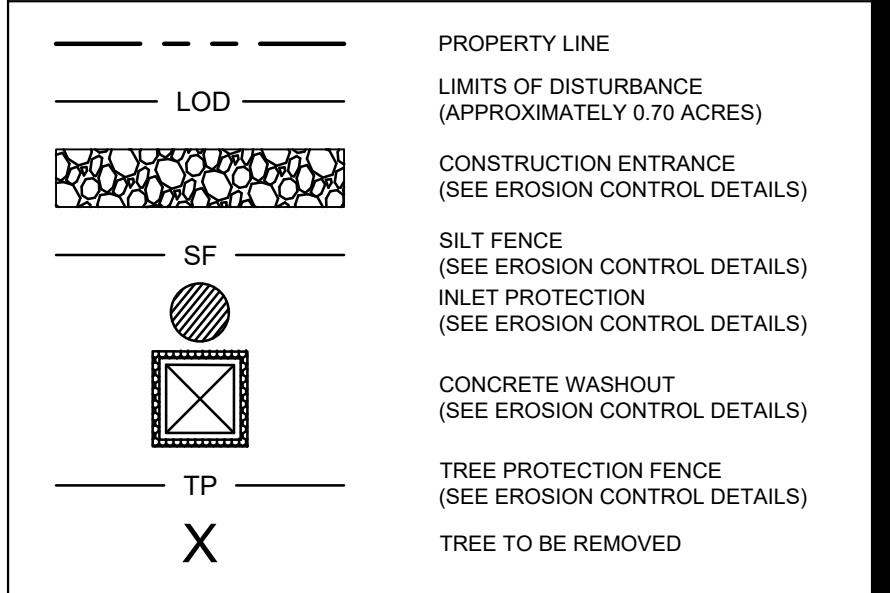
- A. NO PUMPING OR DEWATERING INTO THE EXISTING STORMWATER SEWER MAIN WITHOUT PRE-FILTERING AS APPROVED BY THE VILLAGE ENGINEER.
- B. SILT FENCE: SILT FENCE FABRIC SHALL BE MIRAFI 100X OR APPROVED EQUAL. WOOD POSTS SHALL BE OF SOUND QUALITY HARDWOOD, A MINIMUM 36 INCHES LONG AND TWO INCHES SQUARE. METAL POSTS SHALL BE STANDARD T AND U SECTION WEIGHING NOT LESS THAN ONE POUND PER LINEAR FOOT. WIRE FENCE BACKING SHALL BE A MINIMUM 14-G GAUGE WITH A MAXIMUM SIX INCH MESH OPENING AND SECURELY ATTACHED TO FENCE POSTS.
- C. COIR LOGS: WOOD POSTS SHALL BE OF SOUND QUALITY HARDWOOD, A MINIMUM 36 INCHES LONG AND TWO INCHES SQUARE. METAL POSTS SHALL BE STANDARD T AND U SECTION WEIGHING NOT LESS THAN ONE POUND PER LINEAR FOOT. THERE SHALL BE A MINIMUM OF THREE POSTS FOR EACH LOG LENGTH AND SHALL EXTEND A MINIMUM OF 12 INCHES INTO THE GROUND. THE CONTRACTOR SHALL REMOVE SEDIMENT DEPOSITS WHEN DEPOSITS REACHES HALF THE HEIGHT OF THE COIR LOG.
- D. EROSION CONTROL BLANKETS: EROSION CONTROL BLANKETS SHALL BE ESC-2 BY EAST COAST, OR APPROVED EQUAL.
- E. STABILIZED CONSTRUCTION ENTRANCE: THE FILTER FABRIC SHALL BE MIRAFI 600X OR APPROVED EQUAL. THE CONTRACTOR SHALL KEEP THE ROADWAYS WITHIN THE PROJECT CLEAR OF SOIL AND DEBRIS AND IS RESPONSIBLE FOR ANY STREET CLEANING NECESSARY DURING THE COURSE OF THE PROJECT.
- F. TEMPORARY STABILIZATION:
 - 1. ESTABLISHMENT OF TEMPORARY GRASS COVER: PREPARE SEED BED, SCARIFY IF COMPACTED, REMOVE DEBRIS AND OBSTACLES SUCH AS ROCKS AND TUMPS, AND SEED WITH 24 HOURS. AMEND SOIL, LIME SOIL TO pH OF 6.0 AND FERTILIZE AT A RATE OF 14 LBS. PER 1,000 SF WITH 4-5-10 OR EQUIVALENT FERTILIZERS. WORK AMENDMENTS A MINIMUM OF 4 INCHES INTO SOIL. IF SEEDING IN OCTOBER/NOVEMBER, SEED SHALL BE CERTIFIED ARCTOSTOOK WINTER RYE AT 100 LBS. PER ACRE. OTHERWISE SEED SHALL BE PEGRASS (ANNUAL OR PERENNIAL) AT 90 LBS. PER ACRE.
 - 2. TREAT ALL DISTURBED AREAS WITHIN 500 FEET OF AN INHABITED BUILDING AS NECESSARY TO PROVIDE DUST CONTROL. CONFORM TO ALL STATE AND LOCAL REGULATIONS GOVERNING THESE ACTIVITIES.
- G. CONSTRUCTION VEHICLES: WASH DOWN ALL CONSTRUCTION VEHICLES AND COVER WITH TARPULINS AS NECESSARY TO PREVENT VEHICLE TRANSPORT OF SEDIMENTS OFF-SITE.
- H. PROVIDE MEASURES FOR TRUCK AND TOOL WASH WATER TO BE TREATED PRIOR TO DISCHARGE TO NATURAL AREAS.
- I. NO UNFILTERED DISCHARGE FROM ANY UNSTABILIZED AREAS SHALL BE ALLOWED TO ENTER ANY PERMANENT DRAINAGE OR FILTRATION FACILITIES.

DUST CONTROL

- A. CONSTRUCTION OPERATIONS SHOULD BE SCHEDULED TO MINIMIZE THE AMOUNT OF AREA DISTURBED AT ONE TIME.
- B. BUFFER AREAS OF VEGETATION SHOULD BE LEFT WHERE PRACTICAL.
- C. TEMPORARY OR PERMANENT STABILIZATION MEASURES SHALL BE INSTALLED.
- D. NON-DRIVING AREAS: THESE AREAS USE PRODUCTS AND MATERIALS APPLIED OR PLACED ON SOIL SURFACES TO PREVENT AIRBORNE MIGRATION OF SOIL PARTICLES.
 - 1. VEGETATIVE COVER: FOR DISTURBED AREAS NOT SUBJECT TO TRAFFIC, VEGETATION PROVIDES THE MOST PRACTICAL METHOD OF DUST CONTROL.
 - 2. MULCH OFFERS A FAST EFFECTIVE MEANS OF CONTROLLING DUST. THIS CAN ALSO INCLUDE ROLLED EROSION CONTROL BLANKETS.
- E. DRIVING AREAS: THESE AREAS UTILIZE WATER AND BARRIERS TO PREVENT DUST MOVEMENT FROM THE TRAFFIC SURFACES INTO THE AIR.
 - 1. SPRINKLING: THE SITE MAY BE SPRAYED WITH WATER UNTIL THE SURFACE IS WET. THIS IS ESPECIALLY EFFECTIVE ON PAUL ROADS AND ACCESS ROUTES.
 - 2. BARRIERS: WOVEN GEOTEXTILES CAN BE PLACED ON THE DRIVING SURFACE TO EFFECTIVELY REDUCE DUST THROW AND PARTICLE MIGRATION ON HAUL ROADS. STONE CAL ALSO BE USED FOR CONSTRUCTION ROADS FOR EFFECTIVE DUST CONTROL.
 - 3. WIND BREAK: A SILT FENCE OR SIMILAR BARRIER CAN CONTROL AIR CURRENT AT INTERVALS EQUAL TO TEN TIMES THE BARRIER HEIGHT. PRESERVE EXISTING WIND BARRIER VEGETATION AS MUCH AS PRACTICAL.
- F. MAINTENANCE: MAINTAIN DUST CONTROL MEASURES THROUGH DRY WEATHER PERIODS UNTIL ALL DISTURBED AREAS ARE STABILIZED.



EROSION AND SEDIMENT CONTROL PLAN LEGEND

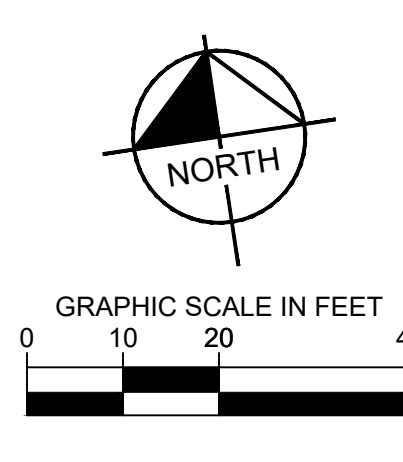


CONSTRUCTION SEQUENCE

1. MOBILIZATION	0.5 WEEK
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE AND INLET PROTECTION ON EXISTING STORM STRUCTURES.	0.5 WEEK
3. PARKING LOT, PAVEMENT, AND PORTIONS OF EXISTING BUILDINGS REMOVAL, SITE CLEARING.	1 MONTH
4. ROUGH GRADING.	1 MONTH
5. INSTALL UTILITIES INCLUDING STORM DRAINAGE, SANITARY SEWER, WATER LINES, TELECOM, ELECTRIC AND GAS LINES. INSTALL INLET PROTECTION ON NEW STORM STRUCTURES.	1 MONTH
6. EXISTING BUILDING RENOVATIONS, CONSTRUCT BUILDING ADDITIONS, BASE PAVEMENT AND CURBING.	12 MONTHS
7. INSTALL TREES, SHRUBS AND PERMANENT SOIL STABILIZATION MEASURES.	2 WEEKS
8. REMOVE CONSTRUCTION ENTRANCE ONCE AREAS ARE STABILIZED WITH STONE AND PRIOR TO INSTALLATION OF BASE COURSE.	1 DAY
9. COLLECT SILT AND SEDIMENT AND PLACE ON SITE. PRIOR TO REMOVAL OF SILT FENCE, REMOVE TEMPORARY DIVERSIONS, SILT AND SEDIMENT FROM SEDIMENT TRAPS, ETC., AND SEED OR STABILIZE ANY RESULTING BARE AREAS PER THE DESIGN PLANS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES, SUCH AS BUT NOT LIMITED TO, VELOCITY DISSIPATORS, LEVEL SPREADERS, SHOULD NOW BE INSTALLED.	2 WEEKS
10. INSTALL FINAL PAVEMENT AND STRIPING.	1 DAY
11. REMOVE SILT FENCE AND INLET PROTECTION.	1 DAY
ESTIMATED TOTAL TIME OF CONSTRUCTION:	-18 MONTHS

THE SEQUENCE OF CONSTRUCTION SHOWN ABOVE IS A GENERAL OVERVIEW AND IS INTENDED TO CONVEY THE GENERAL CONCEPTS OF THE EROSION CONTROL DESIGN AND SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETAILED PHASING AND CONSTRUCTION SEQUENCING NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS INCLUDED IN THESE PLANS. THE CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IMMEDIATELY PRIOR TO AND/OR DURING CONSTRUCTION IF ANY ADDITIONAL INFORMATION ON THE CONSTRUCTION SEQUENCE IS NECESSARY. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION AND ALL OTHER APPLICABLE LAWS.

EROSION AND SEDIMENT CONTROL PLAN
1"=20'



CITY APPROVAL



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SEALS



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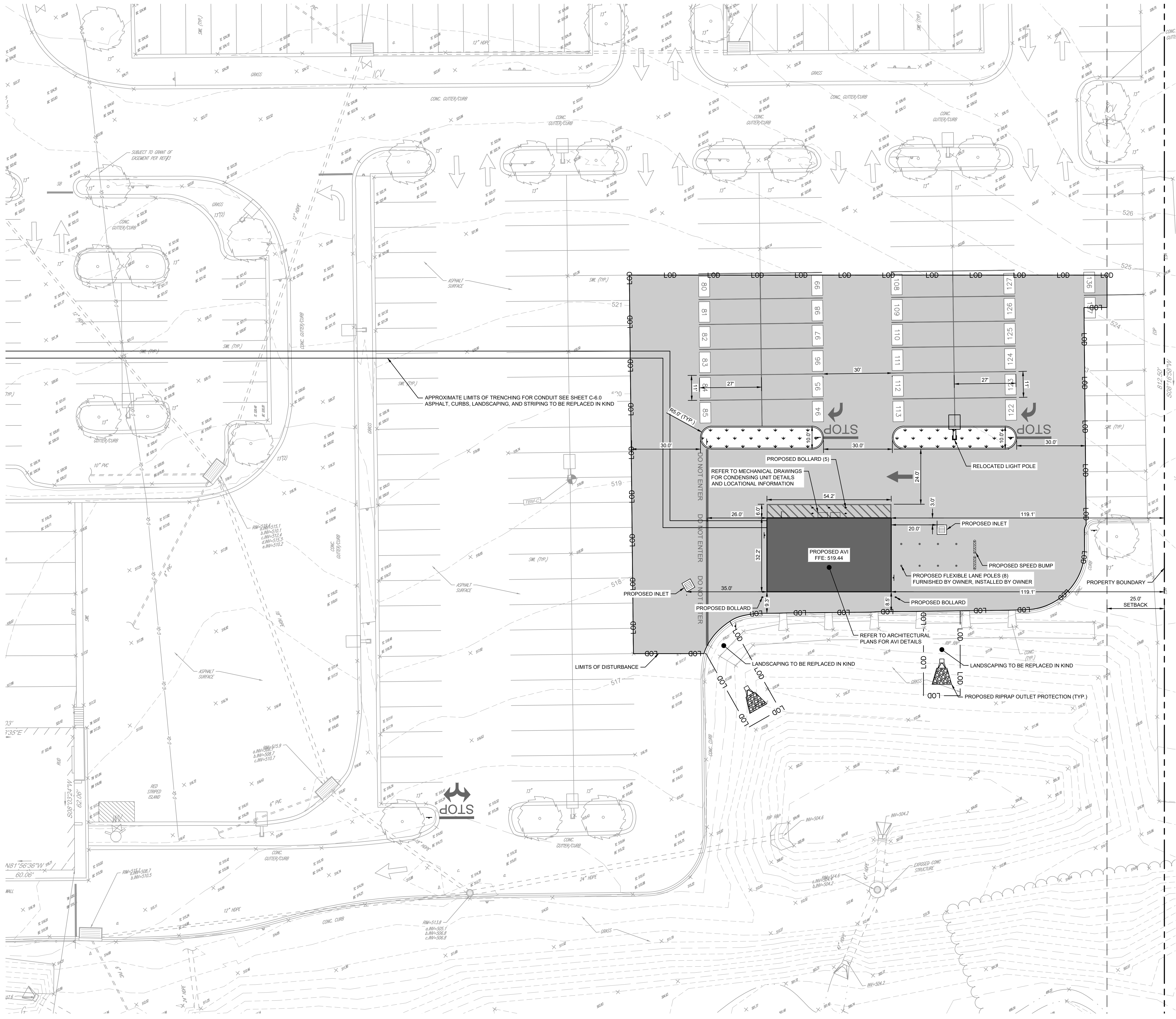
DATE	REVISION

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EROSION AND SEDIMENT CONTROL PLAN

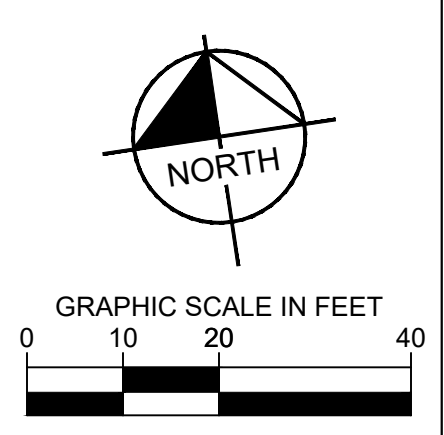
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SITE PLAN LEGEND	
	PROPERTY LINE
	SETBACK LINE
	PROPOSED CURB
	PROPOSED CURB AND GUTTER
	PROPOSED AVI TUNNEL REFER TO PLANS BY OTHERS
	PROPOSED STANDARD DUTY ASPHALT PAVEMENT
	PROPOSED LANDSCAPING BY OTHERS
	PROPOSED SIGN
	PROPOSED FLEXIBLE LANE POLES FURNISHED BY OWNER, INSTALLED BY OWNER
	PROPOSED BOLLARD

- SITE NOTES**
1. ALL DIMENSIONS REFER TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
 2. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
 3. NO NET INCREASE OF IMPERVIOUS AREA IS PROPOSED AS PART OF THIS WORK.
 4. REFER TO ARCHITECTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS AND MATERIALS.

SITE PLAN
1"=20'



CITY APPROVAL



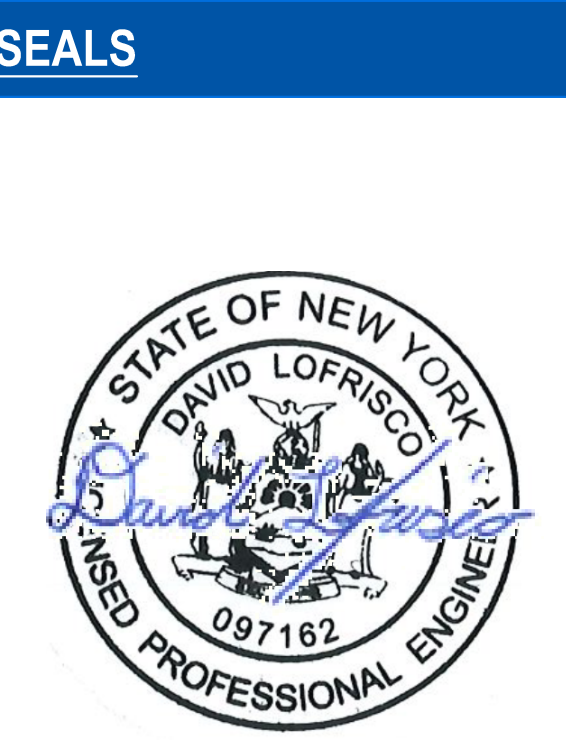
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SITE PLAN

1785 STATE HIGHWAY 5S, AMSTERDAM, NY 12010



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SITE PLAN

C-3.0



ATLANTIC AE

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PROJECT INFO

STRIPING AND SIGNAGE PLAN

1785 STATE HIGHWAY 5S, AMSTERDAM, NY 12010

SEALS



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SHEET INFO

STRIPING AND SIGNAGE PLAN

C-4.0

SITE PLAN LEGEND

---	PROPERTY LINE
- - -	SETBACK LINE
→	PROPOSED SIGN

SIGN FACE LEGEND

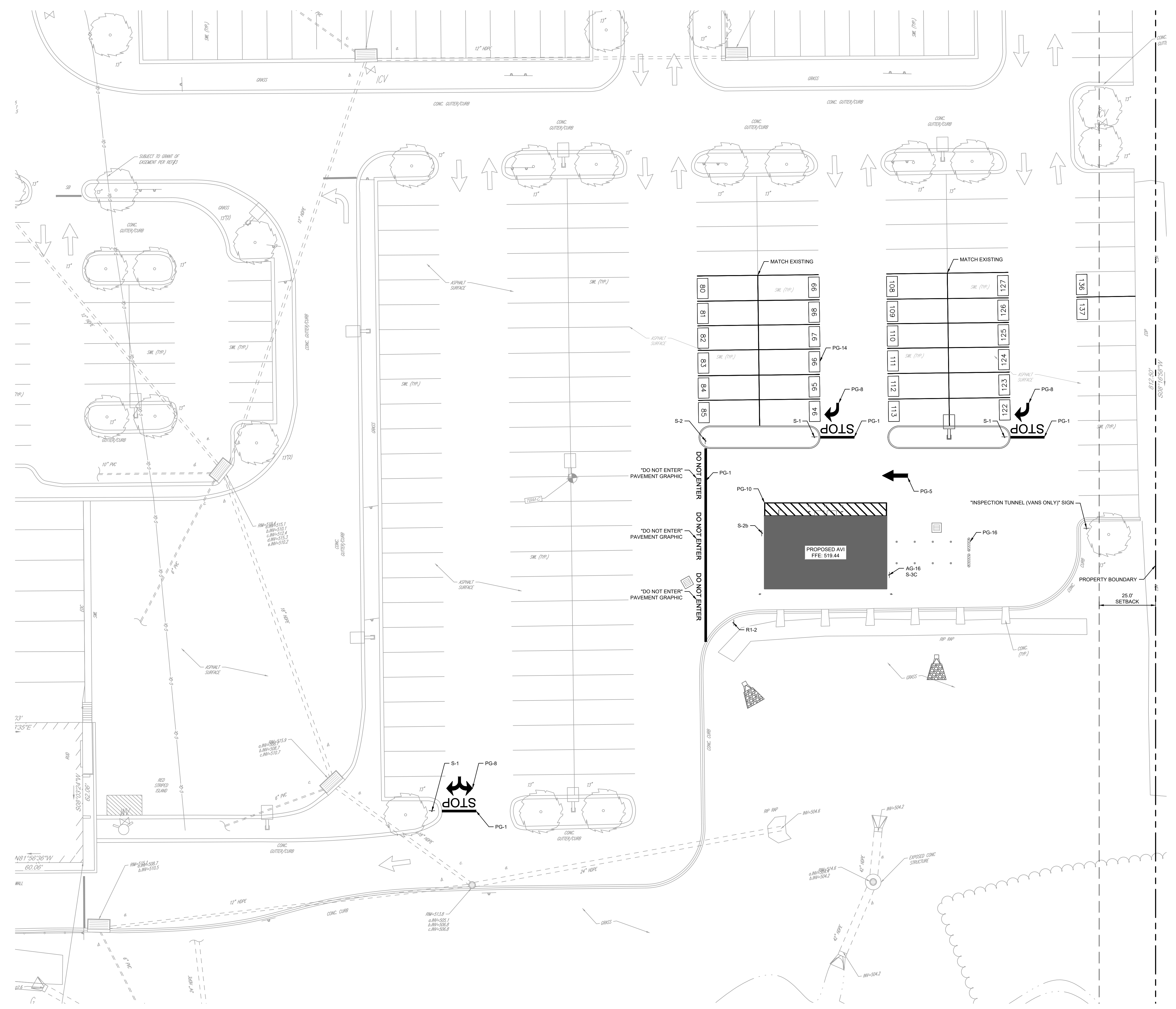
S-1	STOP SIGN
S-2	DO NOT ENTER
S-3	SPEED LIMIT, 5 MPH
S-3 (MOD)	SPEED BUMP WITH 5 MPH PLACARD
S-4	SPEED LIMIT, 10 MPH
S-4 (MOD)	SPEED HUMP WITH 10 MPH PLACARD
S-5(L)	PEDESTRIAN CROSSING, LEFT ARROW
S-5(R)	PEDESTRIAN CROSSING, RIGHT ARROW
S-7(R)	ONE-WAY, RIGHT ARROW
S-13	TRUCKS PROHIBITED
S-14	NO PARKING
S-15	ACCESSIBLE CAR PARKING
S-16	ACCESSIBLE VAN PARKING
S-17	NO TRESPASSING
S-18	ELECTRIC VEHICLE PARKING ONLY
S-19	CLEAN AIR VEHICLE
S-20(R)	MEDIAN SIGN (RIGHT DIRECTIONAL ARROW)
S-32(L)	CHEVRON (LEFT ARROW)
S-32(R)	CHEVRON (RIGHT ARROW)
S-87	NOTICE, SUBJECT TO INSPECTION

TENANT SIGN FACE LEGEND

AS-1	ADDRESS SIGN
AS-2	TRUCKS/VISITOR USHER
AS-4	TRAILER INSPECTION
AS-5	YARD RULES
AS-6	TRUCK ENTRANCE
AS-9	SHIPPING DRIVER ENTRANCE
AS-10	TRACTOR PARKING
AS-12	TRAILERS 3FT FROM WALL
AS-13	NO ENTRANCE
AS-14	NO EXIT
AS-15 (L)	EXIT, LEFT ARROW
AS-15 (R)	EXIT, RIGHT ARROW
AS-15 (S)	EXIT, STRAIGHT ARROW
AS-16	WAYFINDING
AS-22	DROP-OFF AND PICK-UP
AS-25	VENDOR PARKING
AS-26	MUSTER AREA
AS-29	MOTORCYCLE PARKING
AS-30	NON-SMOKING AREA
AS-31	CUSTOMER PARKING
AS-32 (L)	PICK-UP/DROP-OFF, LEFT ARROW
AS-32 (R)	PICK-UP/DROP-OFF, RIGHT ARROW
AS-32 (S)	PICK-UP/DROP-OFF, STRAIGHT ARROW
AS-33	NO IDLING
AS-35	TURN OFF ENGINE
AS-38	TRAILER PARKING SIGN
AS-C#	PARKING LOCATION (AS-B#, AS-R#, AS-G#, AS-P#, AS-Y#, AS-O#)
AS-95	VAN STALL WAYFINDING
AS-96(L)	RESCUE AREA, LEFT ARROW
AS-96(R)	RESCUE AREA, RIGHT ARROW
AS-96(S)	RESCUE AREA, STRAIGHT ARROW
AS-97a	RESCUE SPACE, FIRST SPACE
AS-97b	RESCUE SPACE, ADDITIONAL SPACES

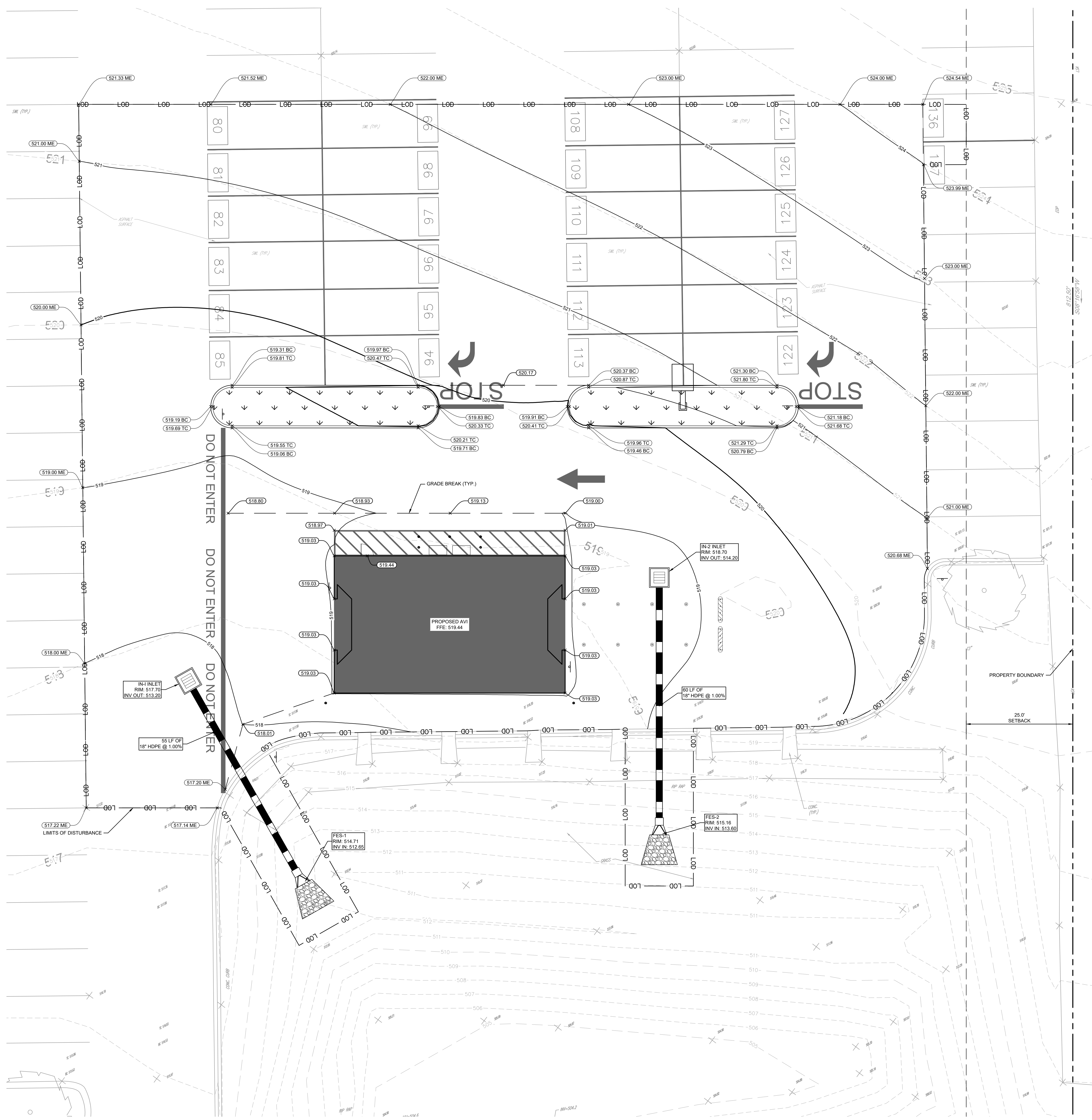
STRIPING (PAVEMENT GRAPHIC) LEGEND

PG-1	STOP BAR
PG-5	STRAIGHT ARROW
PG-6(R)	RIGHT TURN ARROW
PG-8	LEFT OR RIGHT TURN ARROW
PG-15	SPEED HUMP
PG-16	SPEED BUMP



STRIPING AND SIGNAGE PLAN
1"=20'

CITY APPROVAL



GRADING AND DRAINAGE PLAN LEGEND

---	PROPERTY LINE
---	LIMITS OF DISTURBANCE (APPROXIMATELY X.X ACRES)
---	EXISTING CONTOUR
---	PROPOSED CONTOUR
-X.XX	PROPOSED SLOPE
ME XX	MATCH EXISTING GRADE
TC XX	TOP OF CURB GRADE
BC XX	BOTTOM OF CURB GRADE
XX	PROPOSED GRADE SPOT ELEVATION
D	EXISTING STORM SEWER LINE
---	PROPOSED STORM SEWER LINE

- GRADING AND DRAINAGE NOTES**
- PROPERTY LINES AND EXISTING CONDITIONS SHOWN ARE BASED ON A SURVEY MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY 1785 STATE HIGHWAY 5S" PREPARED BY CONTROL POINT ASSOCIATES INC PC, DATED JUNE 5, 2023.
 - REFERENCE GEOTECHNICAL REPORT ENTITLED "GEOTECHNICAL INVESTIGATION FOR PAVEMENT PROPOSED PAVING FOR WAREHOUSE" PREPARED BY WHITSTONE ASSOCIATES INC, DATED OCTOBER 15, 2019, OR LATEST VERSION.
 - EXISTING ELEVATIONS SHOWN ARE GENERALLY IN ACCORDANCE WITH THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
 - CONTRACTOR TO VERIFY ALL EXISTING TOPOGRAPHY AND STRUCTURES ON THE SITE AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING WORK.
 - MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.
 - MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES.



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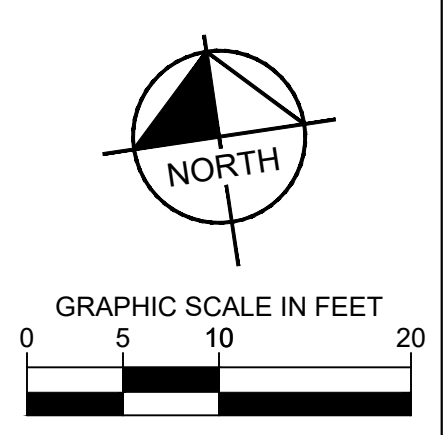
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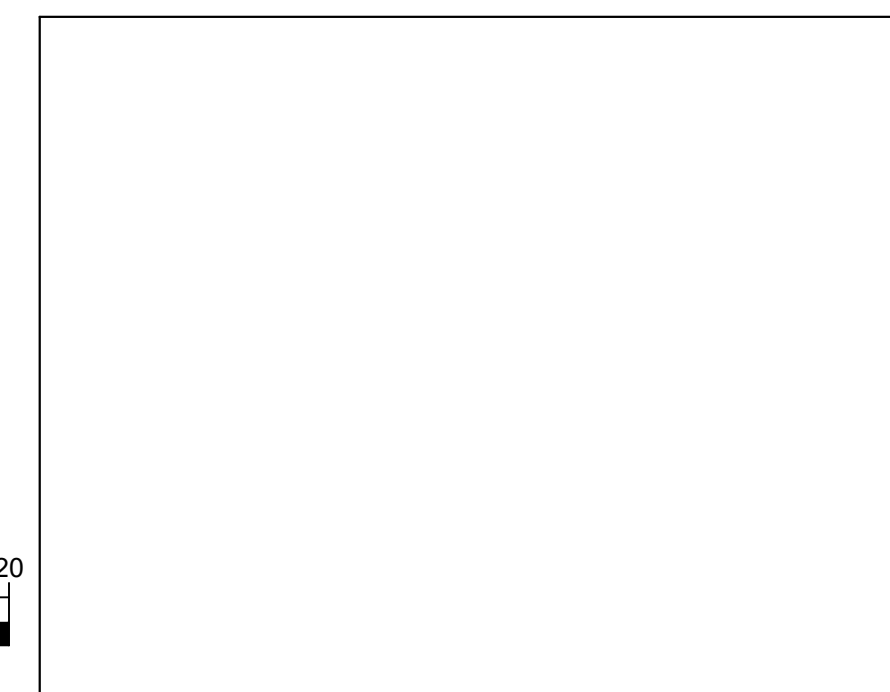
GRADING AND DRAINAGE PLAN

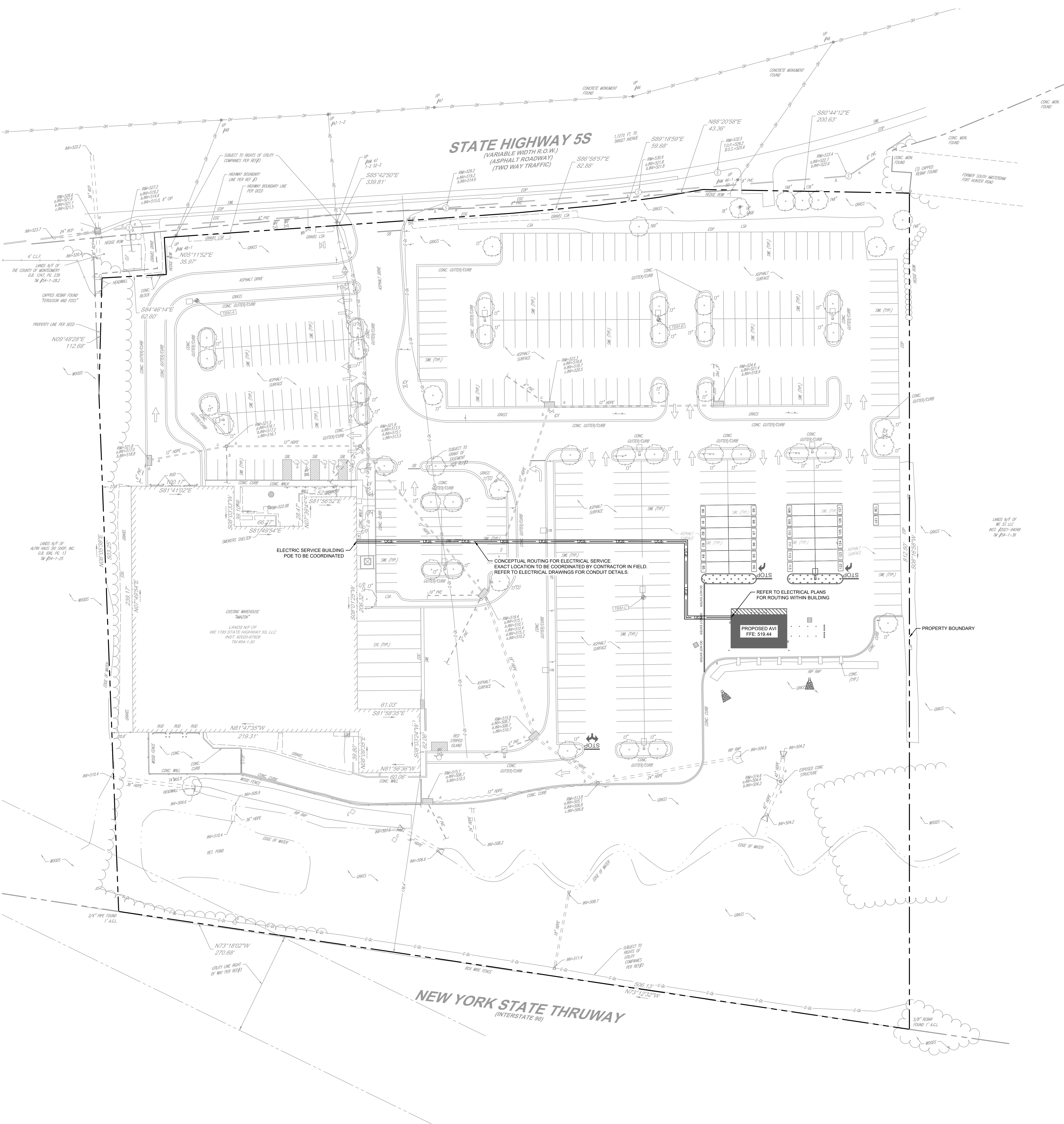
C-5.0

GRADING AND DRAINAGE PLAN
1"=10'



CITY APPROVAL





UTILITY PLAN LEGEND

---	PROPERTY LINE
---	PROPOSED ELECTRIC LINE
---	PROPOSED TRENCH SEE DETAIL ON SHEET C-7.1

- UTILITY NOTES**
1. PROPOSED BUILDING POINT OF ENTRY (POE) TO BE COORDINATED WITH BUILDING MEP.
 2. PROPOSED UTILITY CONNECTIONS TO BE COORDINATED WITH THE AUTHORITY HAVING JURISDICTION & UTILITY PROVIDERS.
 3. UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE CIVIL ENGINEER AT THE TIME OF THE SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE APPLICANT, OWNER, OR THE CIVIL ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE COMMENCING ANY WORK IN THE VICINITY.
 4. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTION TO EXISTING UTILITIES, AND SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.



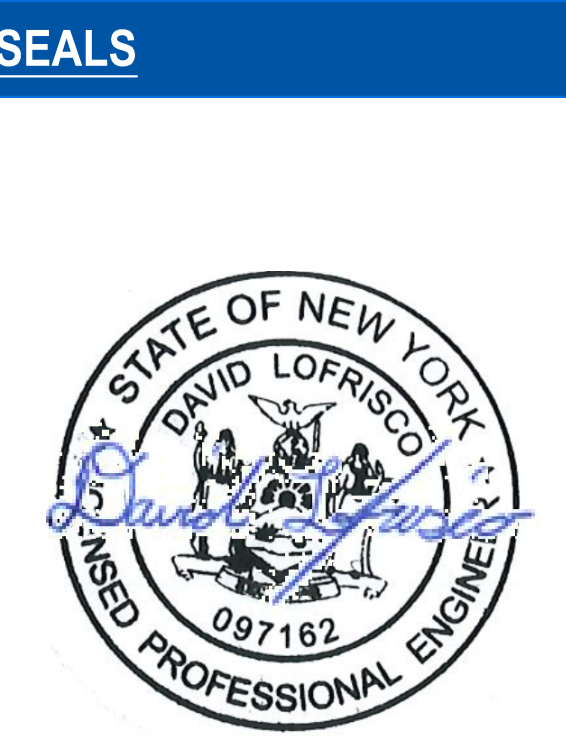
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PROJECT INFO

UTILITY PLAN

1785 STATE HIGHWAY 55, AMSTERDAM, NY 12010



SHEET REVISIONS

DATE	REVISION

PAPM:	DFL
DRAWN BY:	DSU
JOB NO:	112977006
DATE:	09/05/2024

SHEET INFO

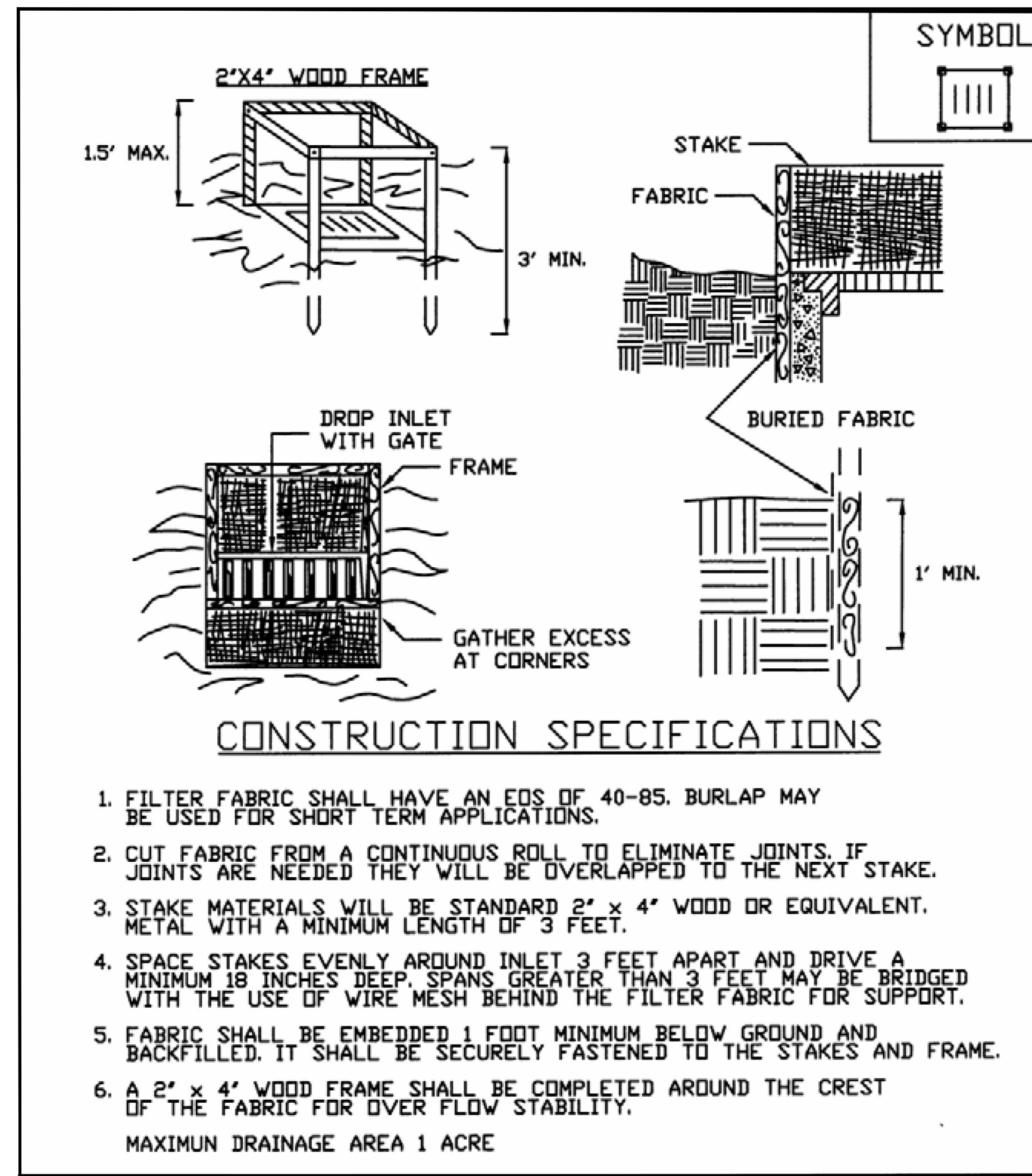
UTILITY PLAN

C-6.0

UTILITY PLAN
1"=40'

CITY APPROVAL

NORTH
GRAPHIC SCALE IN FEET
0 20 40 80

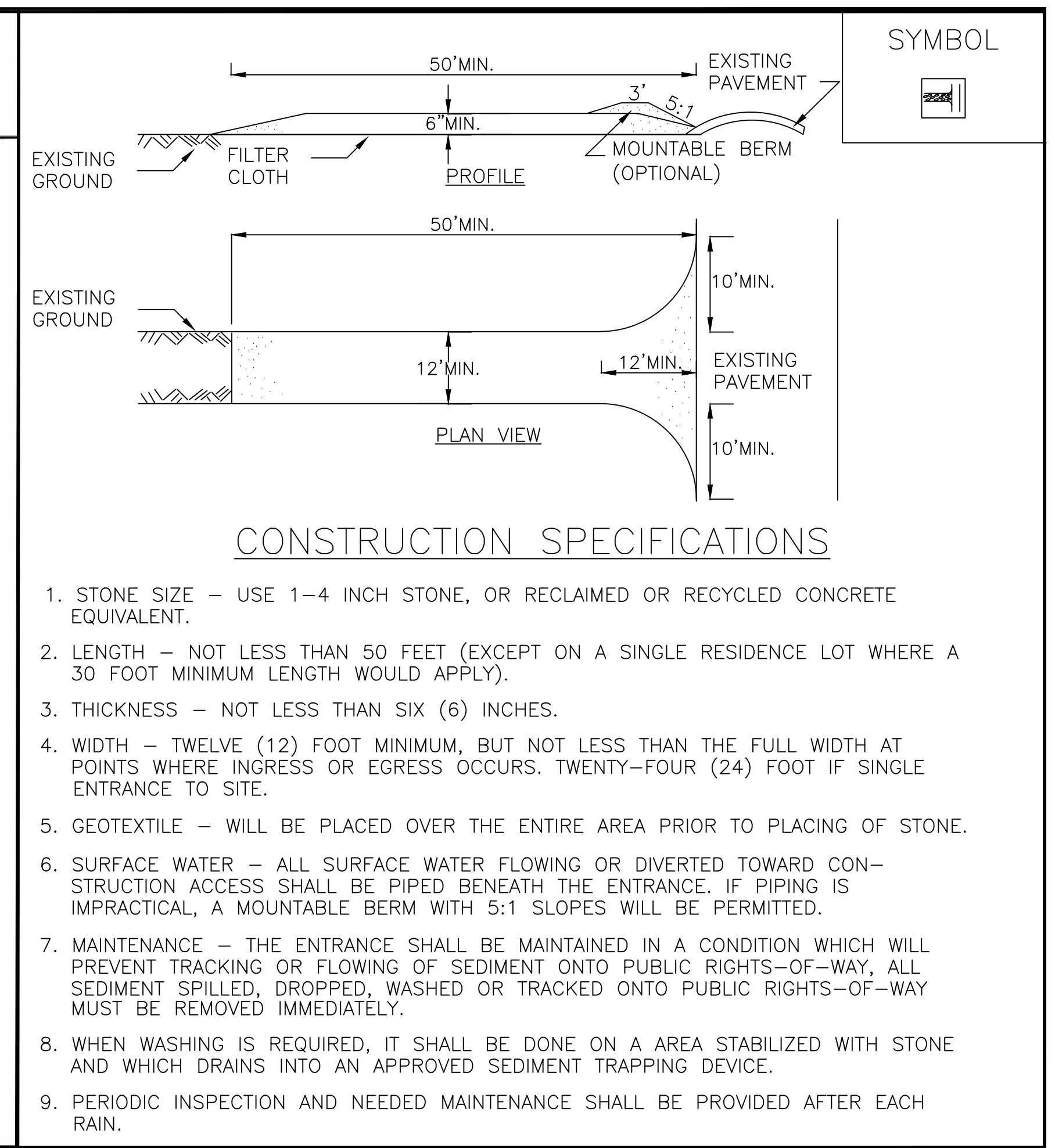


CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN EDS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.
MAXIMUM DRAINAGE AREA 1 ACRE

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

FILTER FABRIC DROP INLET PROTECTION

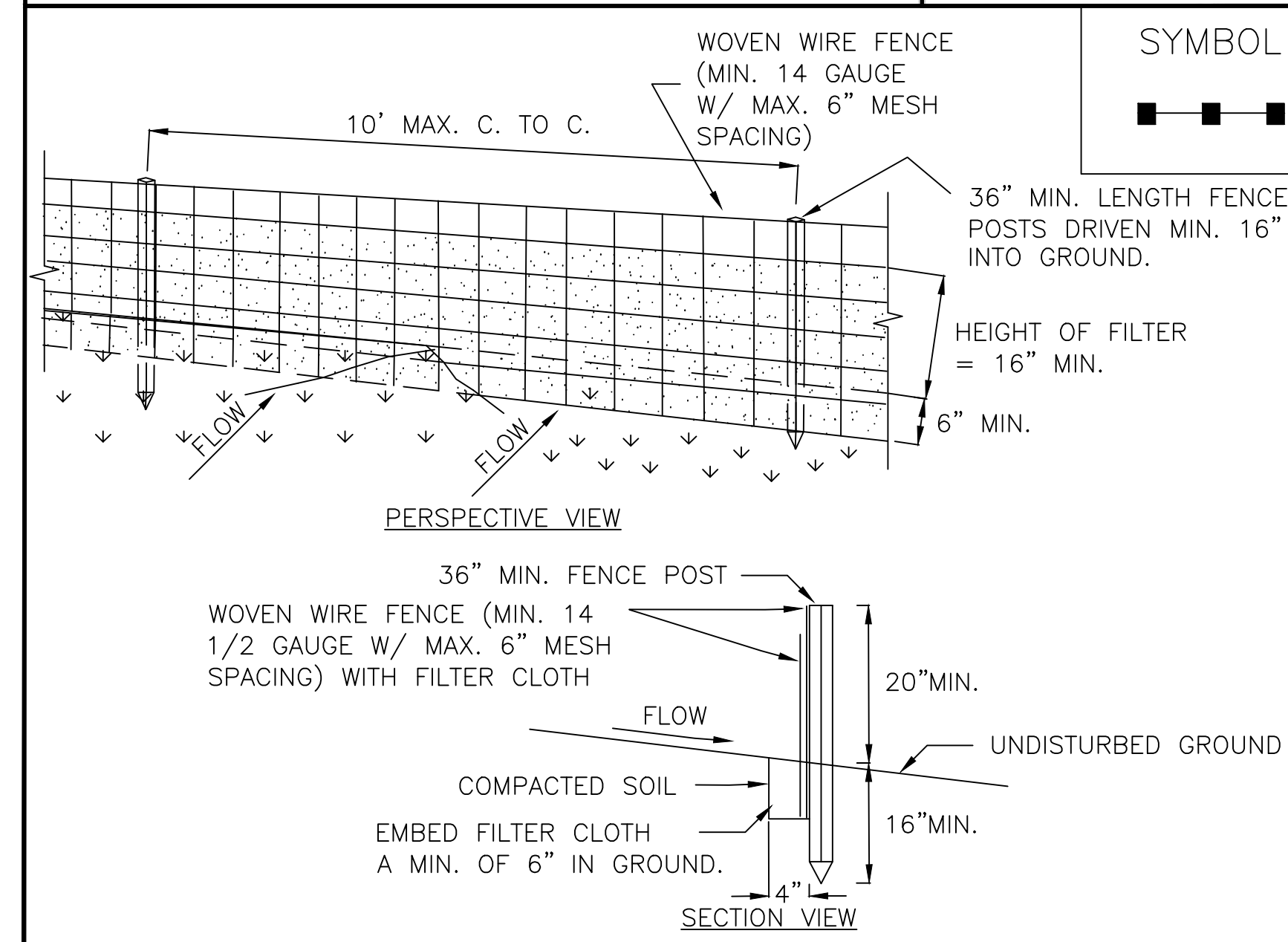


CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ACCESS SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE 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 RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

STABILIZED CONSTRUCTION ACCESS

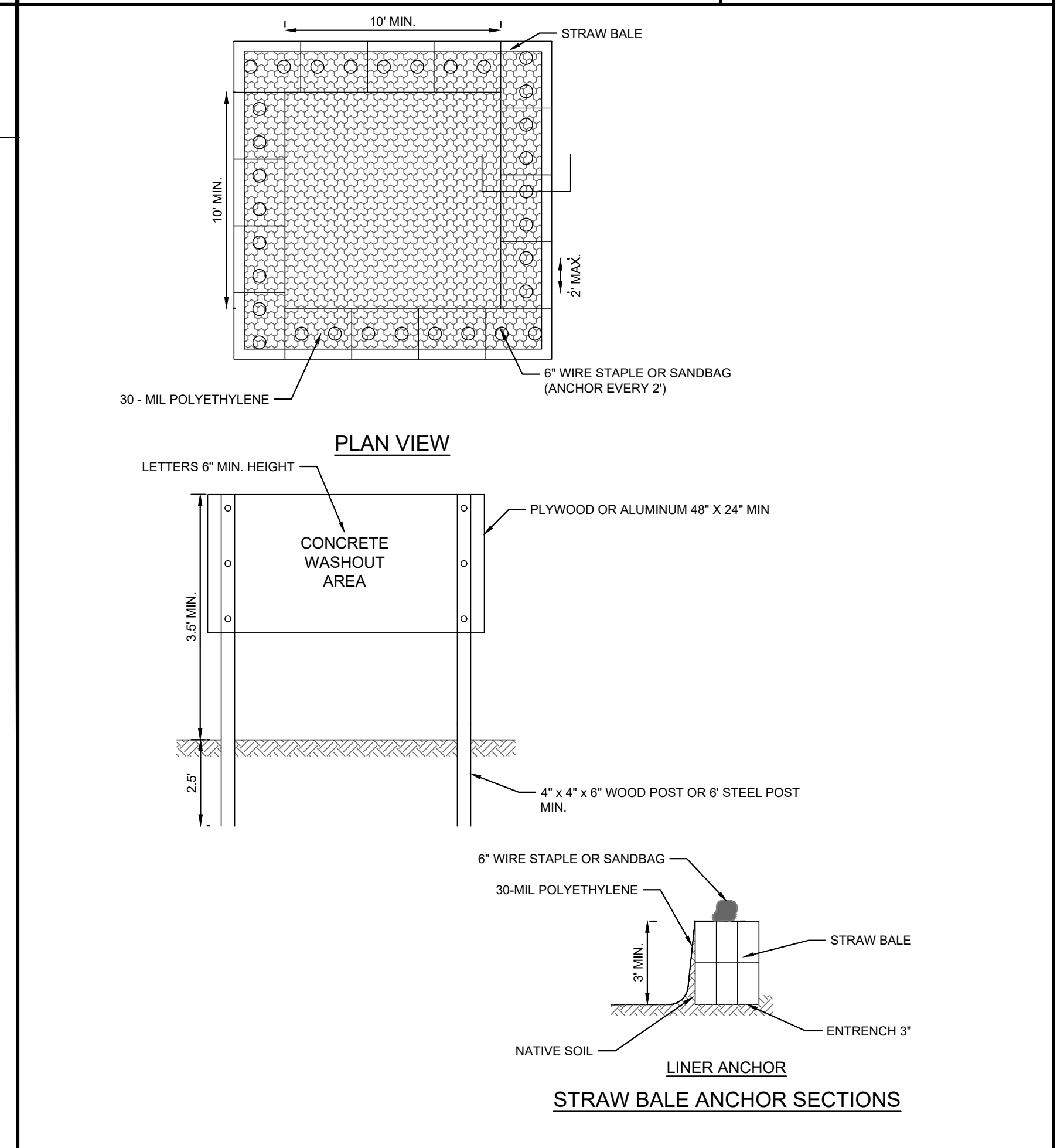


CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

SILT FENCE



SOURCE: NYSDEC SESC BLUE BOOK N.T.S

CONCRETE WASHOUT AREA

CITY APPROVAL



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New York
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PROJECT INFO

EROSION AND SEDIMENT CONTROL DETAILS
1785 STATE HIGHWAY 5S, AMSTERDAM, NY 12010

SEALS



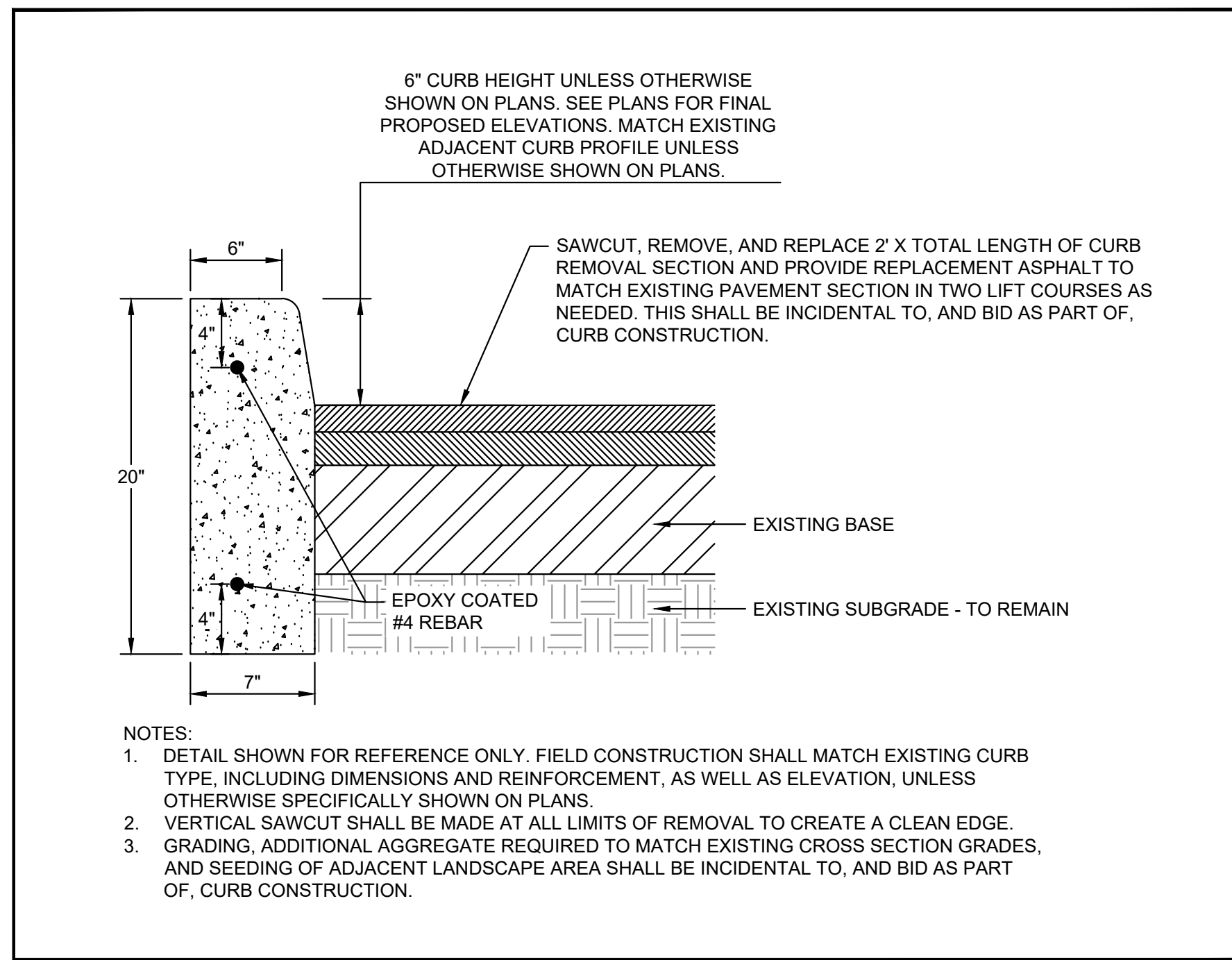
SHEET REVISIONS

DATE	REVISION

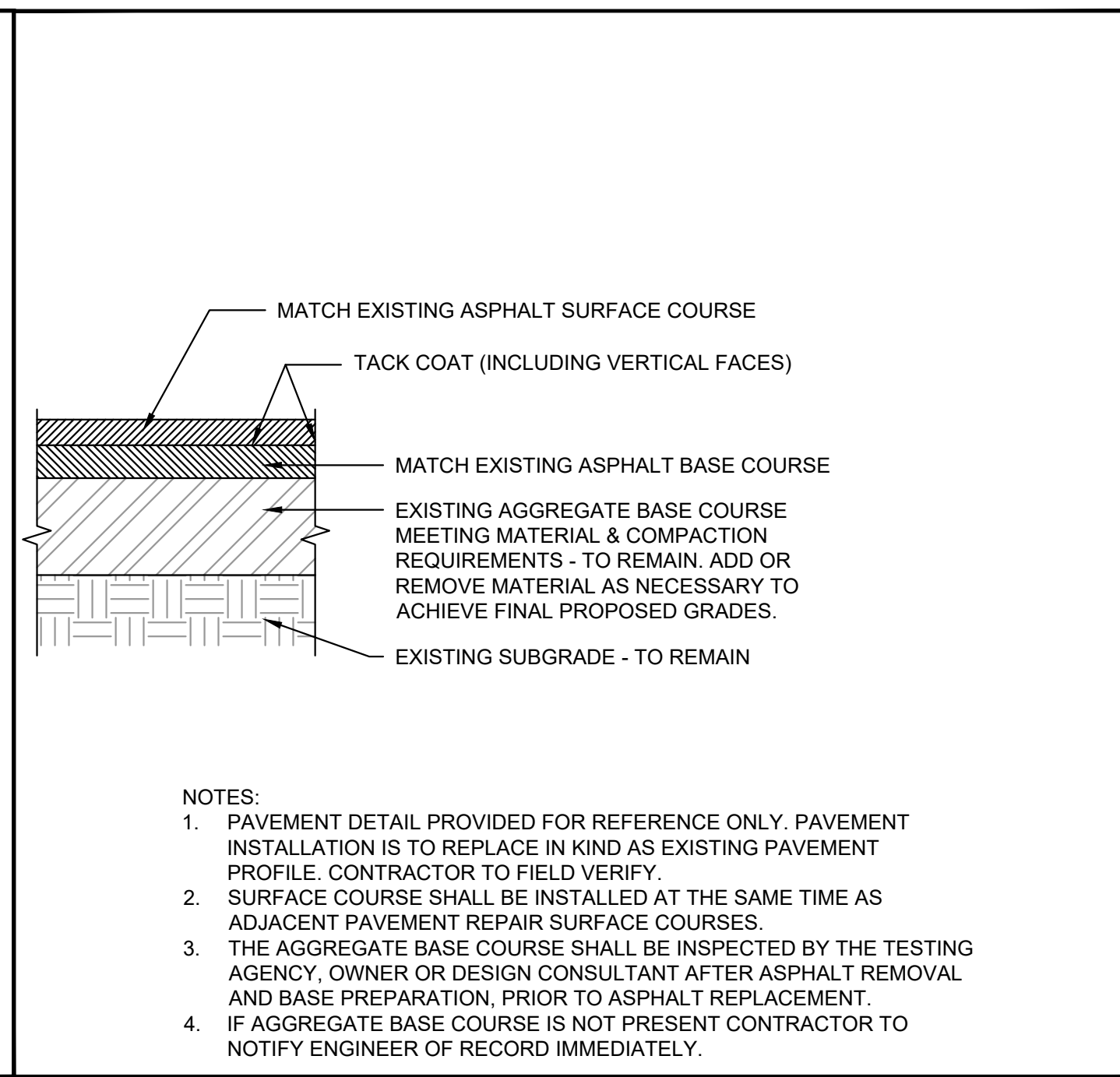
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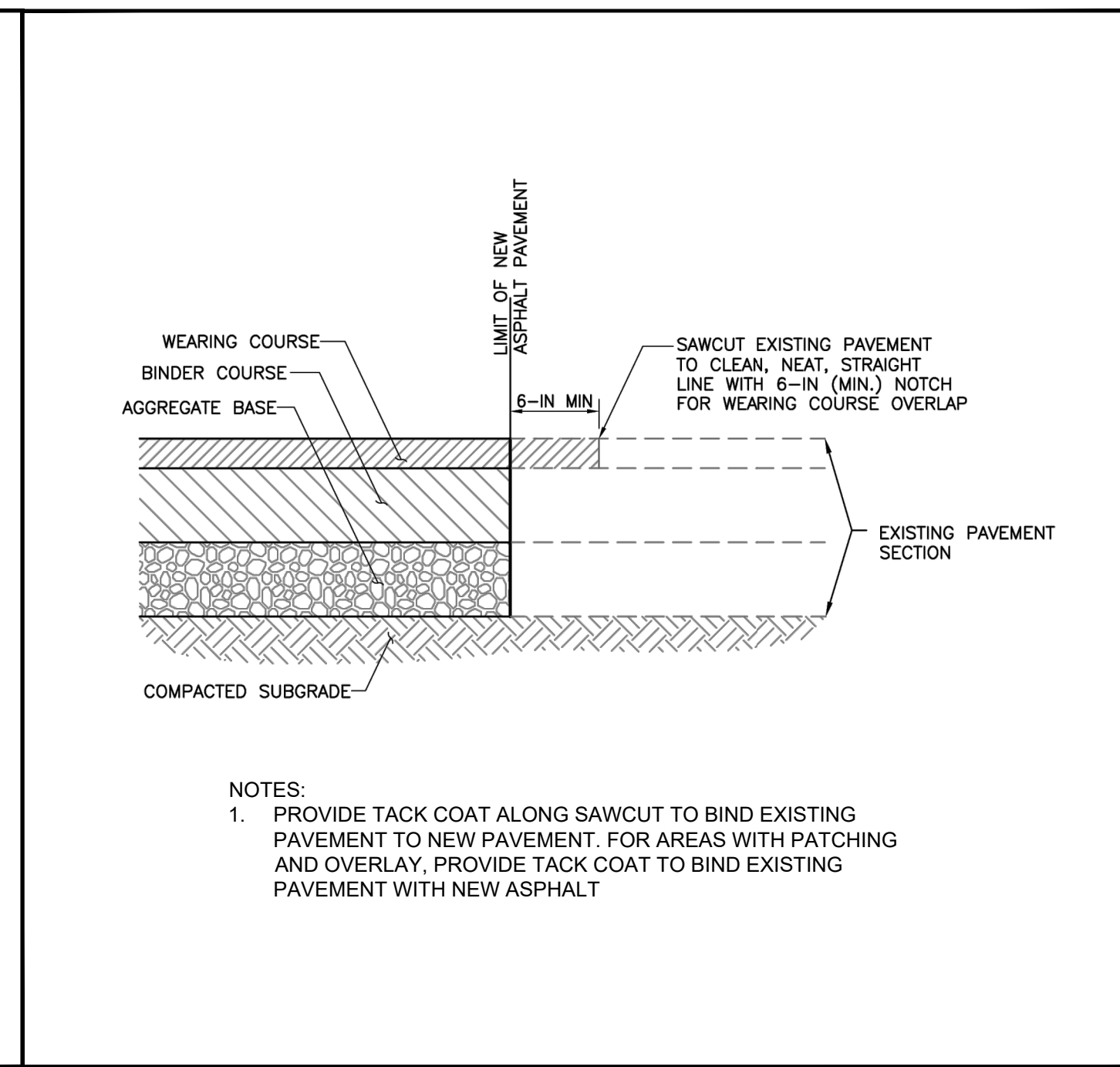
EROSION AND SEDIMENT CONTROL DETAILS
C-7.0



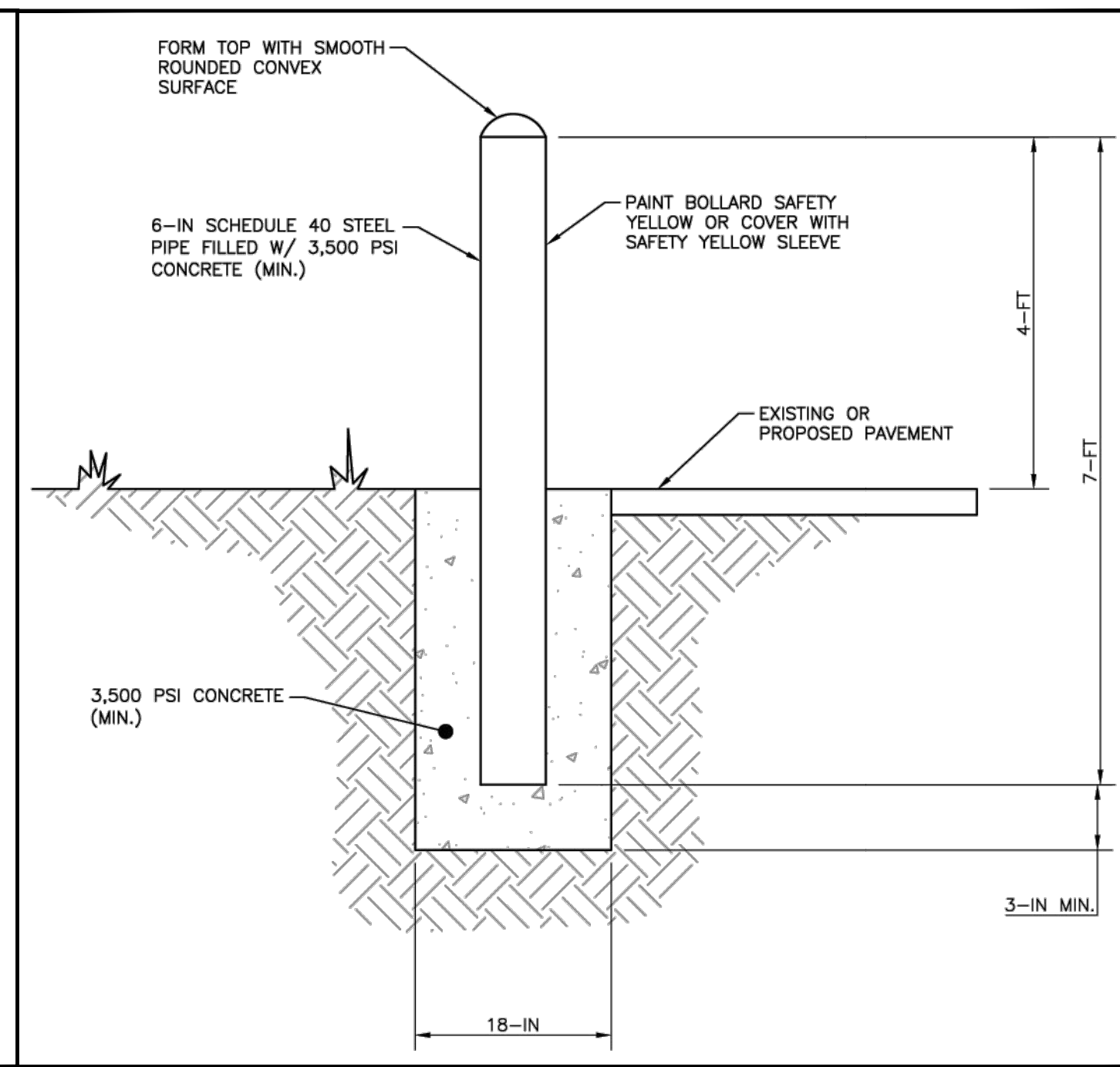
1 ASPHALT PAVEMENT - REMOVE AND REPLACE VERTICAL CURB
N.T.S.



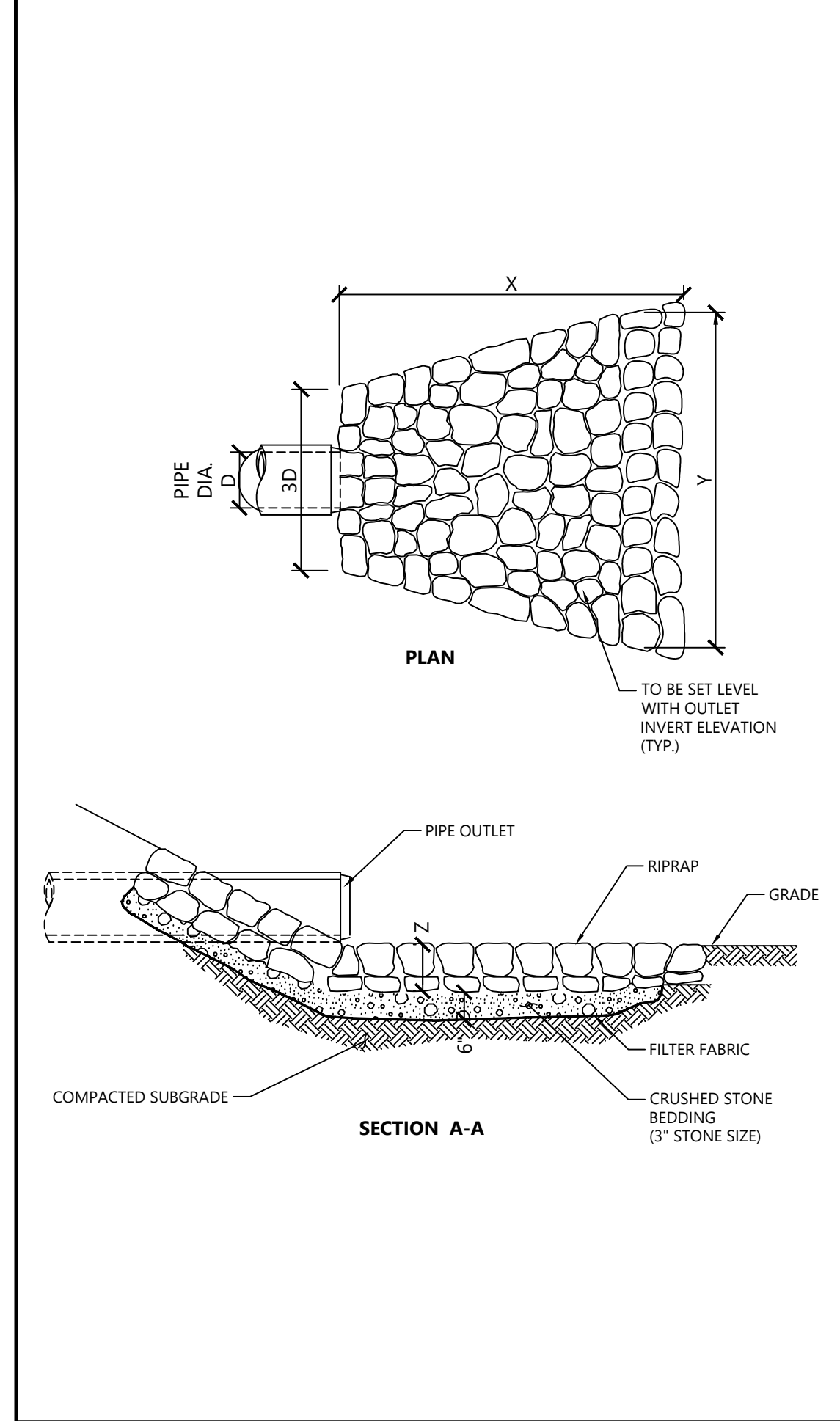
2 ASPHALT PAVEMENT DETAIL - REMOVE, REGRADE, AND REPLACE
N.T.S.



3 PAVEMENT SAWCUT DETAIL
N.T.S.



4 6-IN PIPE BOLLARD DETAIL
N.T.S.



5 RIPRAP OUTLET PROTECTION
N.T.S.

COVER REQUIREMENTS

UTILITY	MINIMUM COVER REQUIRED*
ELECTRIC CONDUITS	3.5-FT
STORM PIPES	2.5-FT

* AS MEASURED FROM TOP OF PIPE TO FINISH GRADE SURFACE

PROPOSED BITUMINOUS WEARING AND BINDER COURSES PER PAVEMENT SECTION DETAIL

PAVEMENT SAWCUT

EXISTING ASPHALT PAVEMENT

PROPOSED AGGREGATE BASE COURSE SHALL MATCH EXISTING

BACKFILL MATERIAL SHALL CONSIST OF APPROVED TRENCH SPOIL PLACED IN MAXIMUM 6-IN THICK, LOOSE LIFTS AND COMPACTED TO A MINIMUM OF 95% OF ITS MAXIMUM DRY DENSITY AND WITHIN ±3% OF ITS OPTIMUM MOISTURE CONTENT AS PER MODIFIED PROCTOR TEST.

UTILITY SERVICE LINE

PIPE BEDDING MATERIAL SHALL CONSIST OF AASHTO NO. 57 CRUSHED LIMESTONE AGGREGATE PLACED IN MAXIMUM 6-IN THICK LOOSE LIFTS AND COMPACTED TO AT LEAST 70% OF ITS RELATIVE DENSITY BELOW THE PIPE MID-POINT. THE BEDDING MATERIAL PLACED ABOVE THE PIPE MID-POINT SHALL CONSIST OF AASHTO NO. 57 CRUSHED LIMESTONE AGGREGATE (PLACED AND COMPACTED TO A POINT OF NON-MOVEMENT BENEATH THE COMPACTING EQUIPMENT).

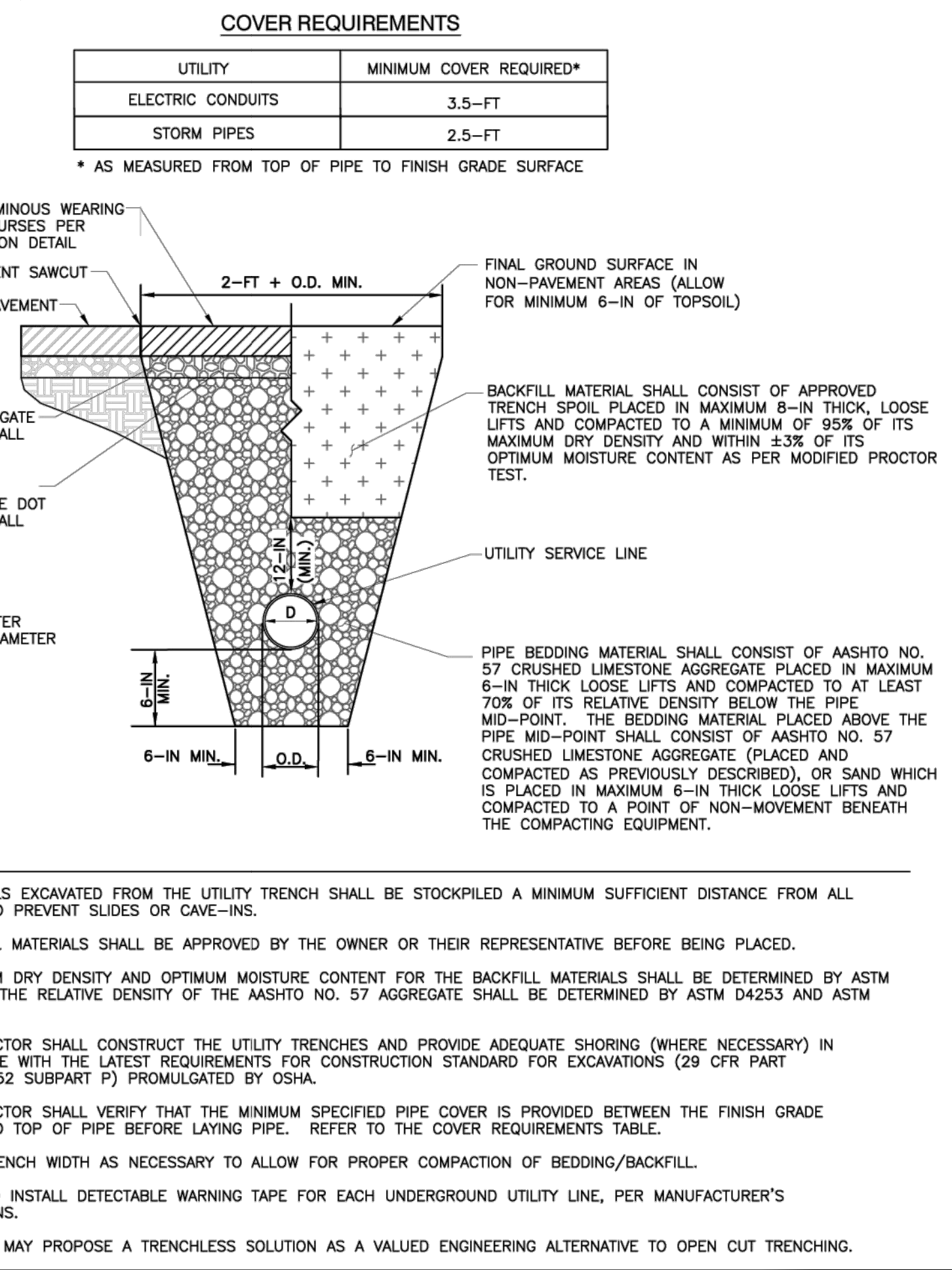
ABBREVIATIONS
D = INSIDE DIAMETER
O.D. = OUTSIDE DIAMETER

NOTES

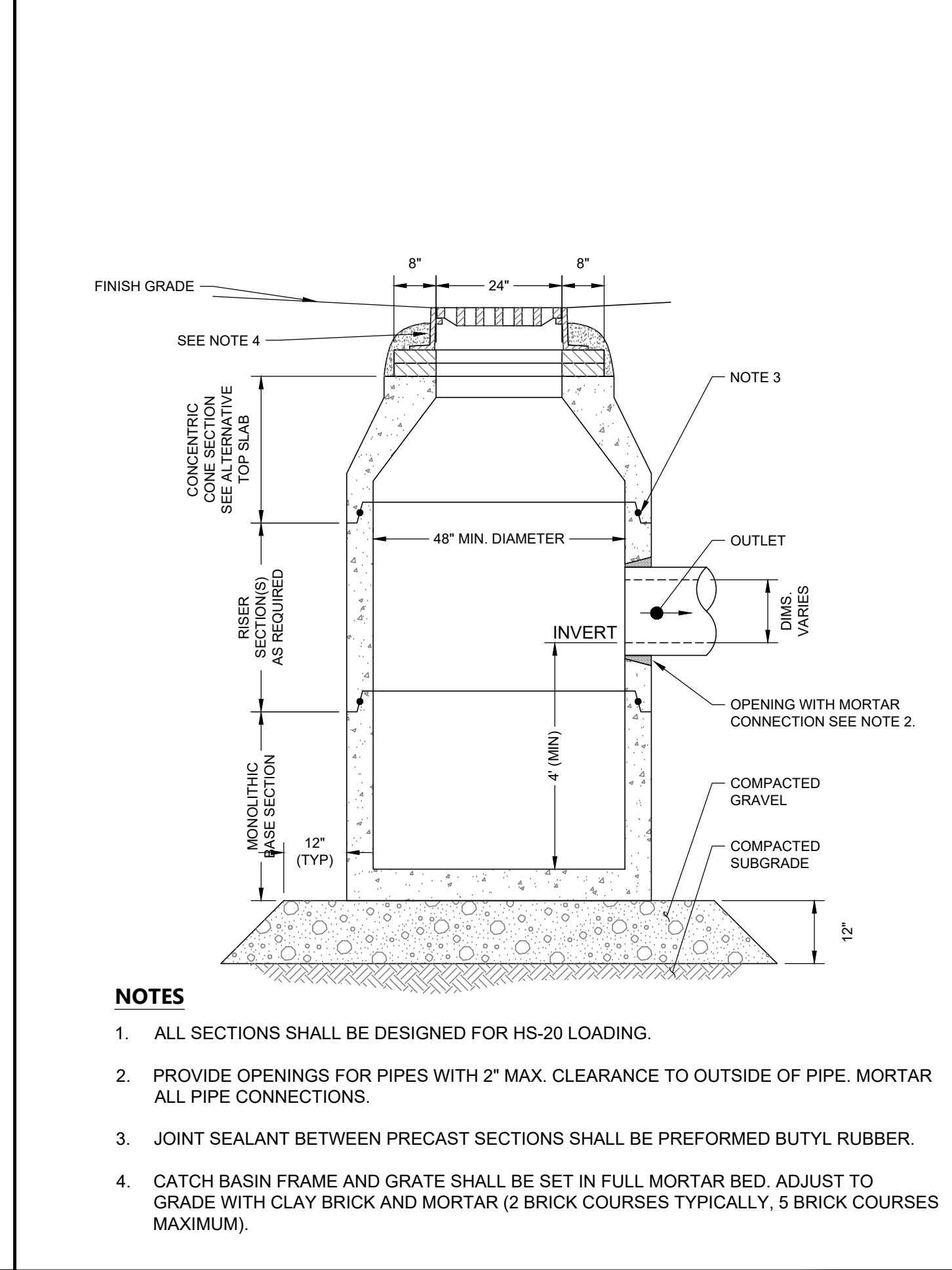
- ALL MATERIALS EXCAVATED FROM THE UTILITY TRENCH SHALL BE STOCKPILED A MINIMUM SUFFICIENT DISTANCE FROM ALL TRENCHES TO PREVENT SLIDES OR CAVE-INS.
- ALL BACKFILL MATERIALS SHALL BE APPROVED BY THE OWNER OR THEIR REPRESENTATIVE BEFORE BEING PLACED.
- THE MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT FOR THE BACKFILL MATERIALS SHALL BE DETERMINED BY ASTM D1557, AND THE RELATIVE DENSITY OF THE AASHTO NO. 57 AGGREGATE SHALL BE DETERMINED BY ASTM D4253 AND ASTM D4254.
- THE CONTRACTOR SHALL CONSTRUCT THE UTILITY TRENCHES AND PROVIDE ADEQUATE SHORING (WHERE NECESSARY) IN CONFORMANCE WITH THE LATEST REQUIREMENTS FOR CONSTRUCTION STANDARD FOR EXCAVATIONS (29 CFR PART 1926.650-652 SUBPART P) PROMULGATED BY OSHA.
- THE CONTRACTOR SHALL VERIFY THAT THE MINIMUM SPECIFIED PIPE COVER IS PROVIDED BETWEEN THE FINISH GRADE SURFACE AND TOP OF PIPE BEFORE LAYING PIPE. REFER TO THE COVER REQUIREMENTS TABLE.
- INCREASE TRENCH WIDTH AS NECESSARY TO ALLOW FOR PROPER COMPACTION OF BEDDING/BACKFILL.
- FURNISH AND INSTALL DETECTABLE WARNING TAPE FOR EACH UNDERGROUND UTILITY LINE, PER MANUFACTURER'S SPECIFICATIONS.
- CONTRACTOR MAY PROPOSE A TRENCHLESS SOLUTION AS A VALUED ENGINEERING ALTERNATIVE TO OPEN CUT TRENCHING.

STRUCTURE	PIPE DIAMETER D _o	100 YEAR FLOW	d50 RIP RAP SIZE	APRON LENGTH L _a
FES 1	18"	8.75 CFS	6"	7'
FES 2	18"	8.75 CFS	6"	7'

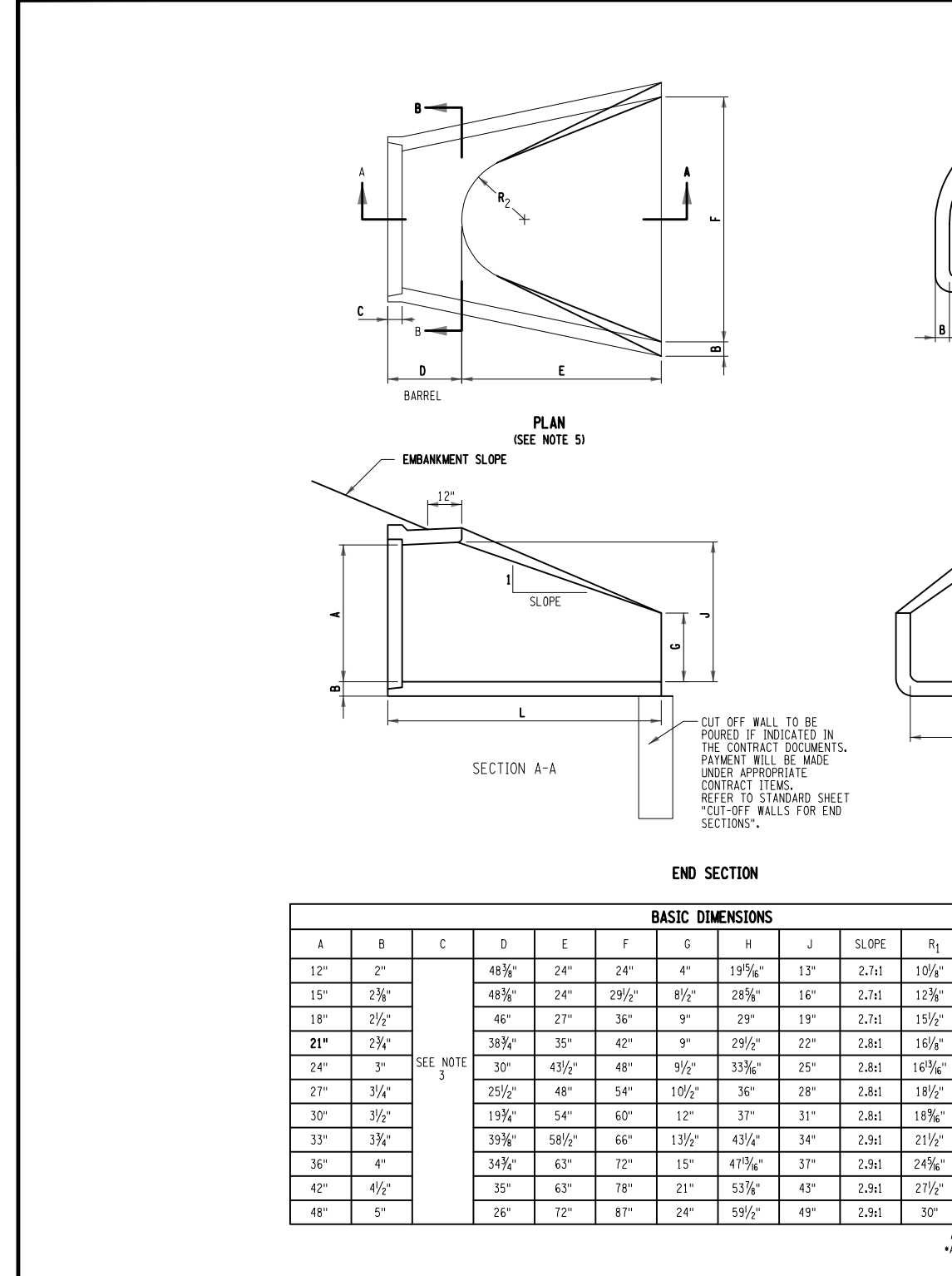
6 RIPRAP OUTFALL SIZING
N.T.S.



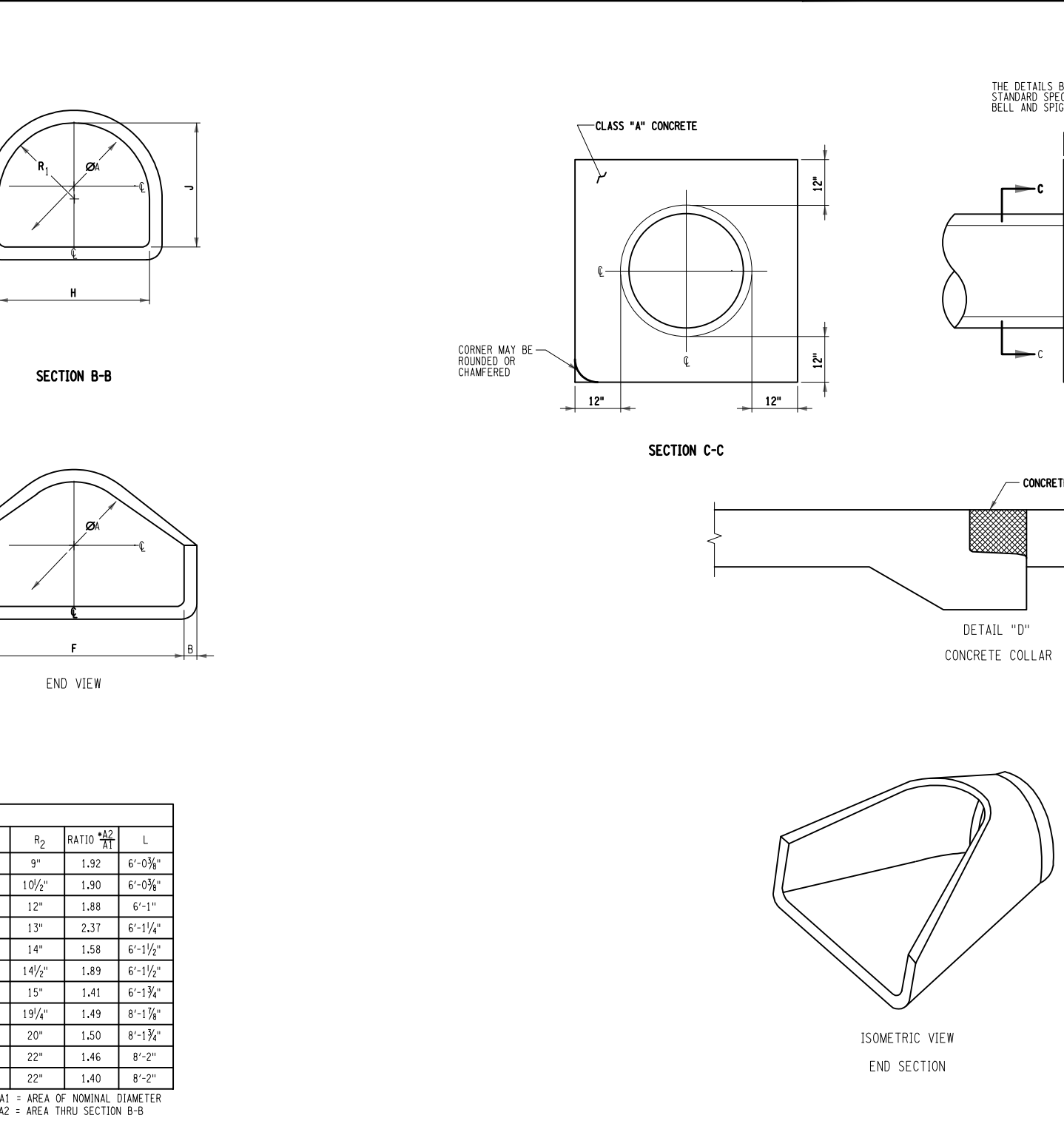
7 TYPICAL UTILITY TRENCH DETAIL
N.T.S.



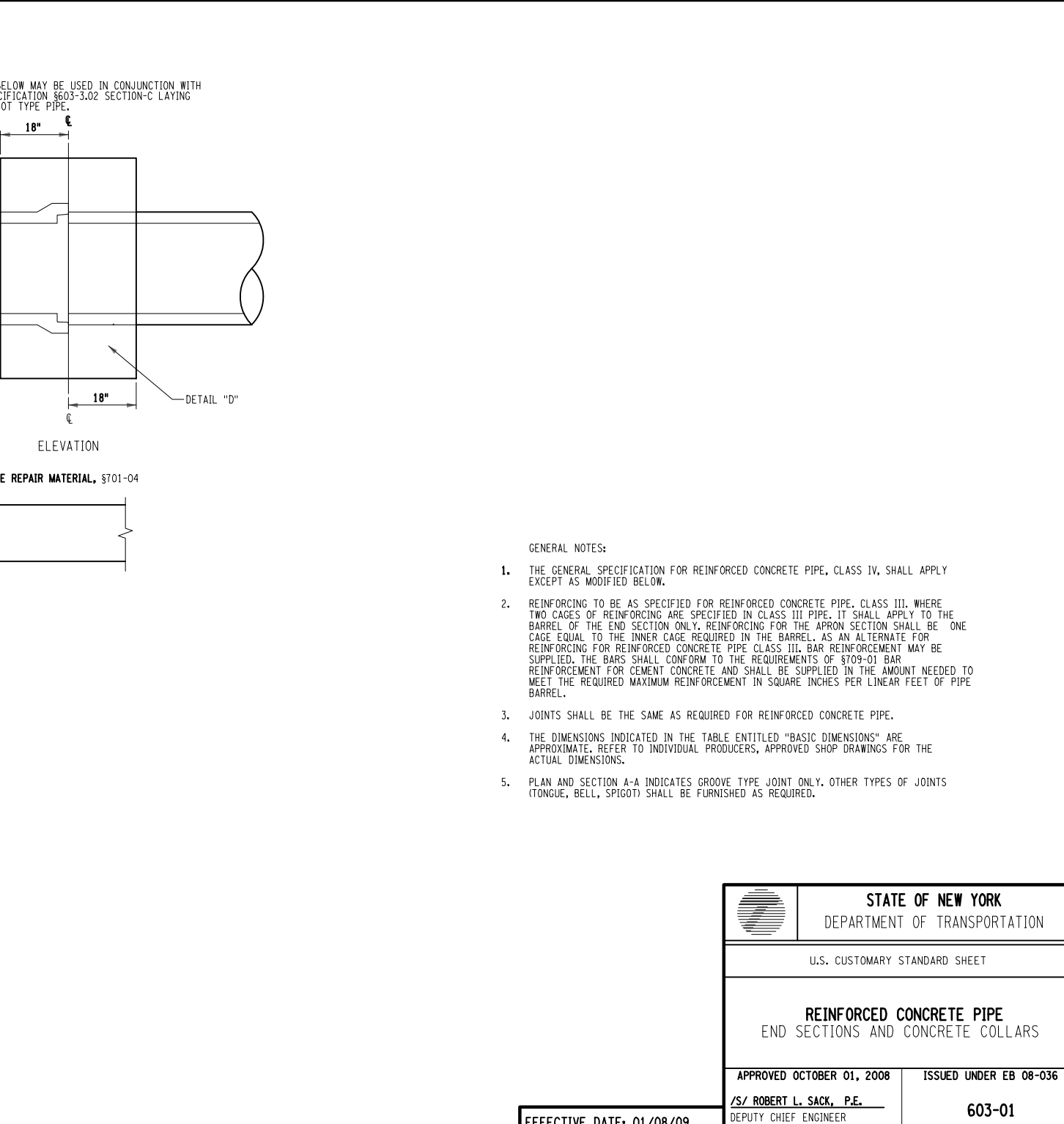
8 TYPICAL INLET DETAIL
N.T.S.



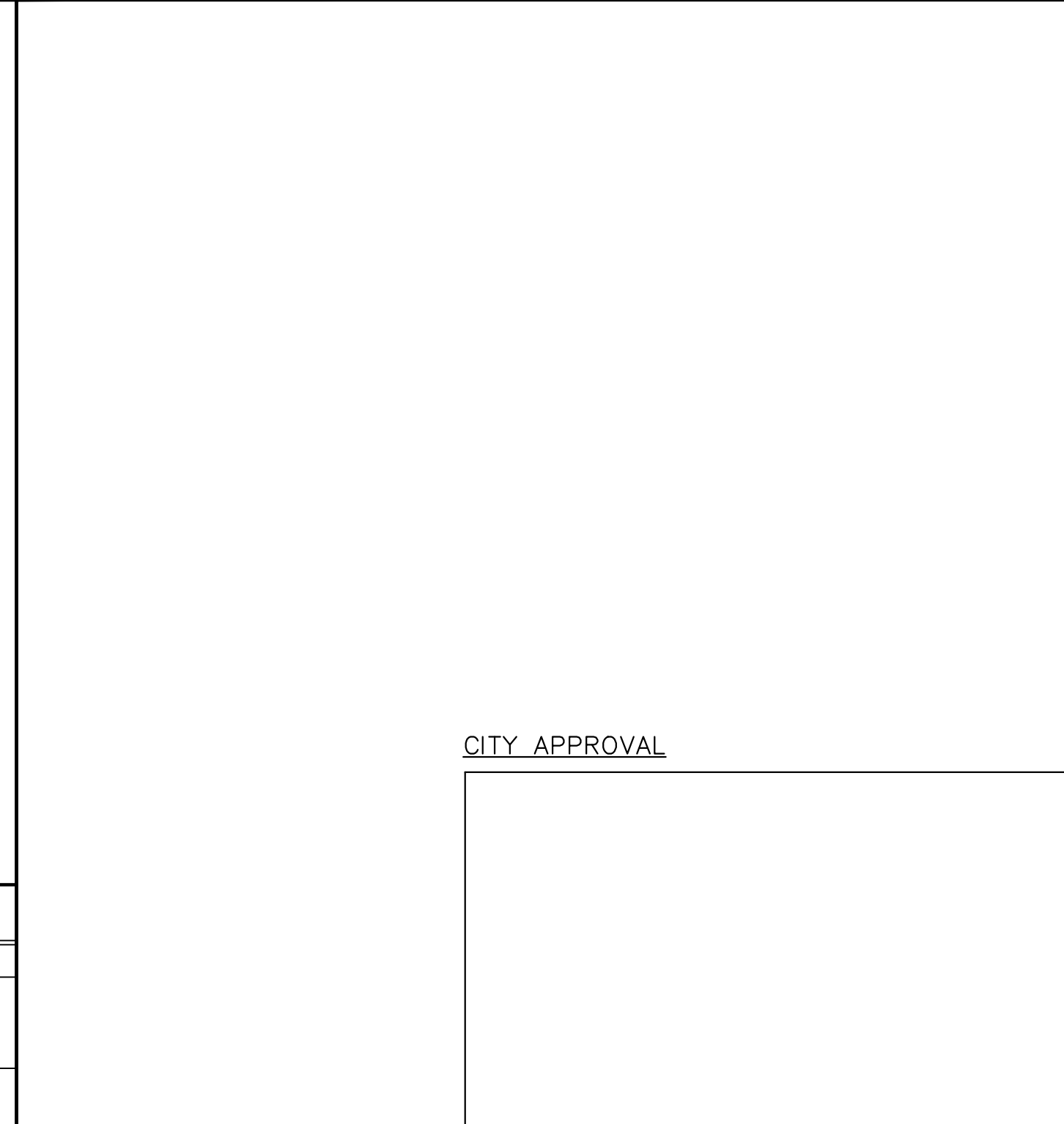
9 TYPICAL FLARED END SECTION
N.T.S.



10 REINFORCED CONCRETE PIPE COLLARS
N.T.S.



11 REINFORCED CONCRETE PIPE COLLARS
N.T.S.



12 REINFORCED CONCRETE PIPE COLLARS
N.T.S.



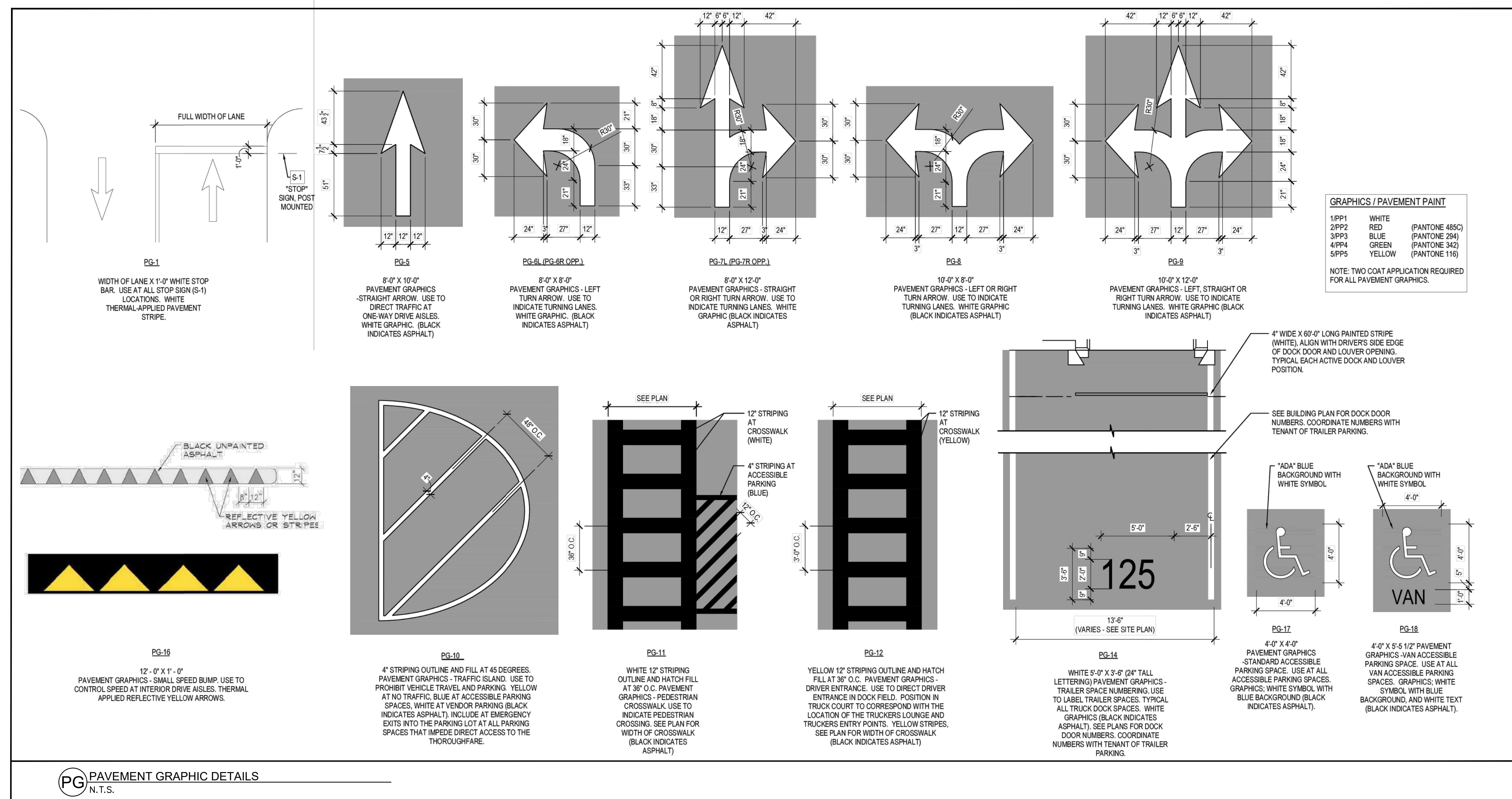
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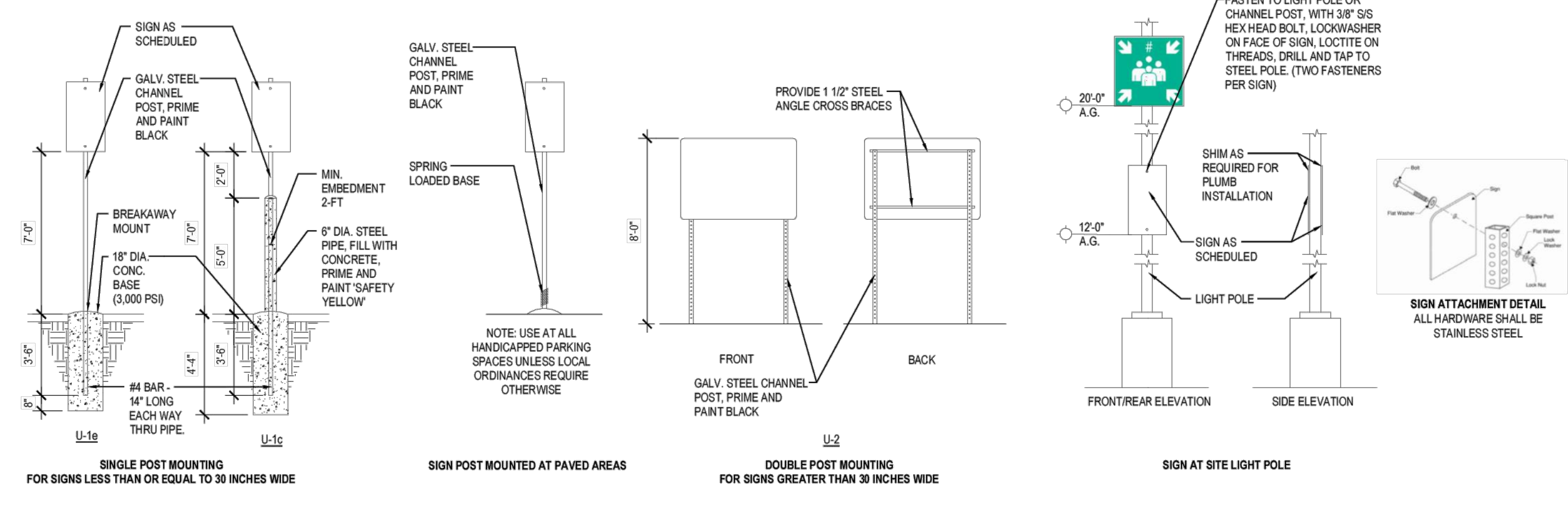
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PG PAVEMENT GRAPHIC DETAILS
N.T.S.

CITY APPROVAL

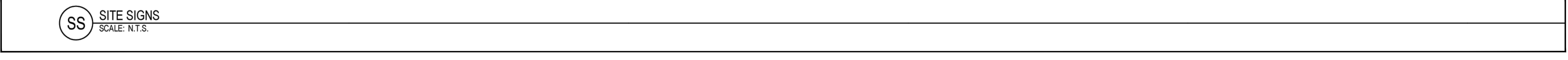
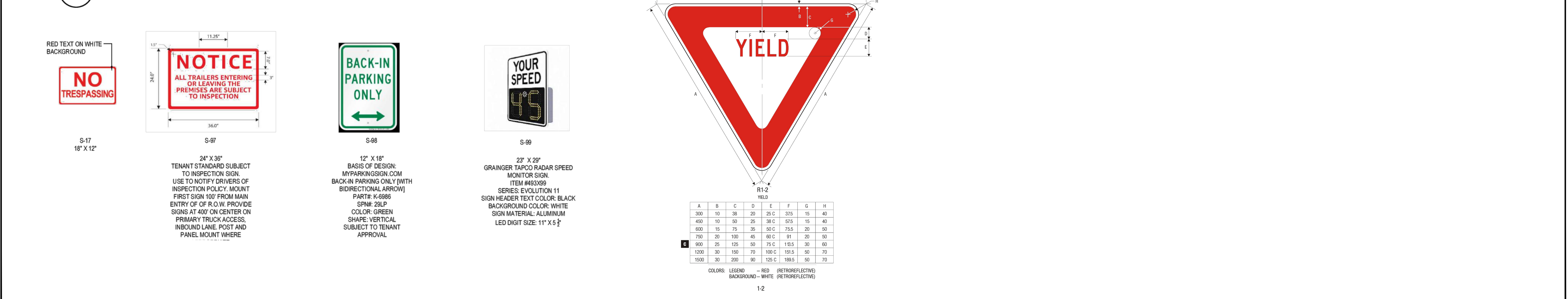
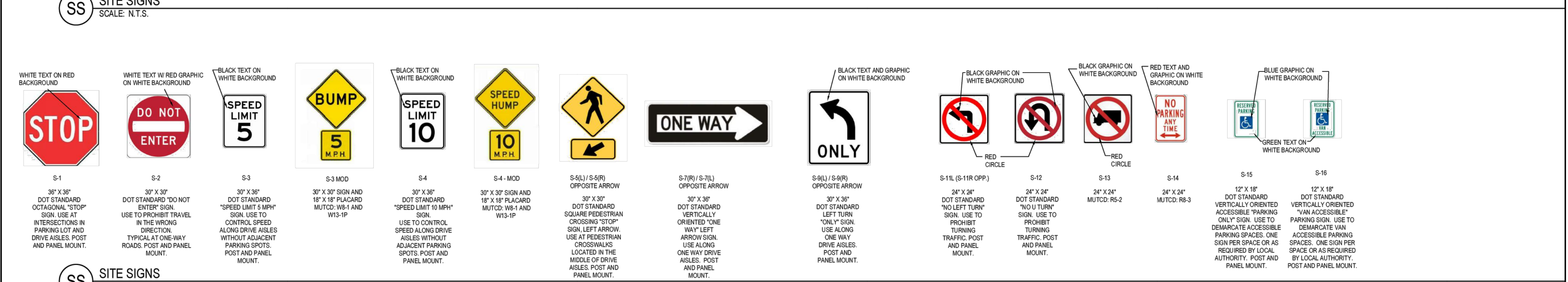
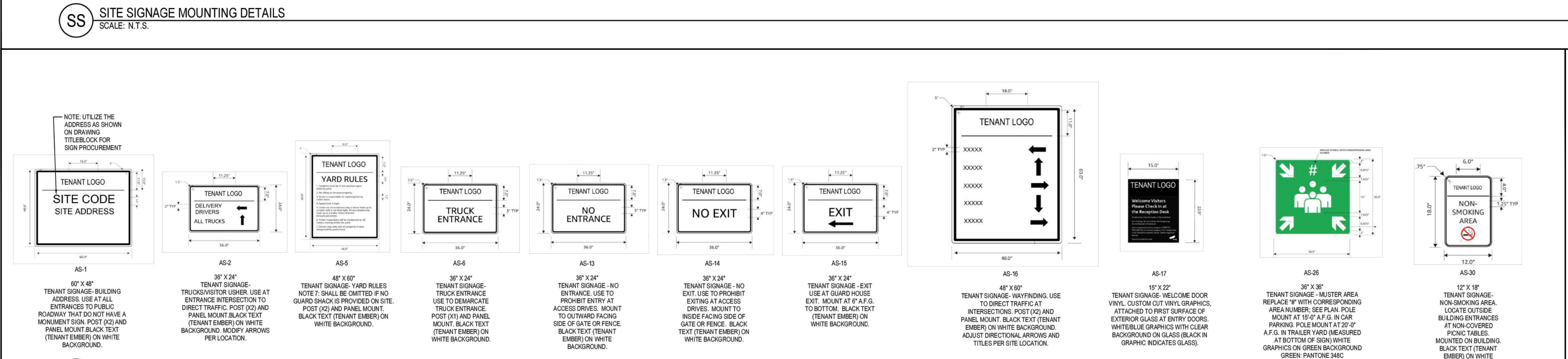


POST AND PANEL SIGNS
MOUNTING U-1e, U-1c, U-2, LIGHT POLE SIGNS

SPECIFICATIONS
THE BELOW REPRESENTS THE MINIMUM STANDARDS FOR THIS PROJECT. MATERIALS SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH THE MORE STRICT REQUIREMENTS OF THOSE SET FORTH BELOW AND LOCAL DOT REGULATIONS.

DESCRIPTION
1. POST AND PANEL SIGNS WITH STANDARD SIZED "MUTCD" AND CUSTOM SIGN FACES.
2. MATERIALS AND CONSTRUCTION
a. SIGNS TO CONSIST OF ALUMINUM SIGN PANEL ON 2" SQUARE STEEL POST.
b. PANEL TO CONFORM TO "MUTCD" SPECIFICATIONS. SOLID ALUMINUM PANEL, 0.080" THICK FOR SINGLE POST MOUNTING. SOLID ALUMINUM PANEL, 0.125" THICK FOR DOUBLE POST MOUNTING. COMPOSITE MATERIALS ARE NOT ACCEPTABLE.
c. POSTS ARE TO BE 2" SQUARE GALVANIZED STEEL, 12 GA. 7/16" PERFORATION ON 1" CENTERS. FOUR SIDES TO BE APPROXIMATELY 1/2" LONG.
d. SUPPORTS ARE TO BE SUFFICIENT FOR SECURE MOUNTING OF SIGN.
e. ALL HARDWARE SHALL BE STAINLESS STEEL. IF ADDITIONAL THICKNESS OF MATERIAL OR ADDITIONAL INTERNAL BRACING IS REQUIRED FOR SECURE INSTALLATION OR TO PROVIDE STABILITY, ALTERATIONS SHALL BE REFLECTED IN SHOP DRAWINGS. WIND LOADING AND DURABILITY SHALL BE TAKEN INTO ACCOUNT IN THE ENGINEERING OF THE SIGN.
f. GRAPHICS AND TYPOGRAPHY SIGN GRAPHICS ARE TO BE HEAVY DUTY 3M REFLECTIVE VINYL.
g. CUSTOM GRAPHICS AND TYPOGRAPHY SIGNS ARE AVAILABLE FROM THE OWNER AS ELECTRONIC FILES. COLORS ARE INDICATED ON THE DESIGN INTENT DRAWINGS. ADDITIONAL COLOR AND FINISH SPECIFICATIONS ARE FOUND IN THE GENERAL SPECIFICATIONS.
3. ALL SIGNS INDICATED "DOT" SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FROM THE FEDERAL HIGHWAY ADMINISTRATION.

INSTALLATION
1. LOCATIONS ARE GENERALLY NOTED ON THE ATTACHED LOCATION THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL INSTALLATION CONDITIONS PRIOR TO FABRICATION.
2. SINGLE POST MOUNTING SHALL BE USED FOR SIGNS WITH A WIDTH OF 30 INCHES OR LESS. MOUNTING U-1e SHALL BE USED FOR SIGNS IN COMPACTED EARTH/GRAVEL OR SIDEWALK. MOUNTING U-1c SHALL BE USED FOR SIGNS IN CONCRETE OR ASPHALT PAVING.
a. TYPICAL SIGN PANEL INSTALLS BOTTOM OF SIGN AT 7'-0" ABOVE FINISHED GRADE. THE POST EXTENDS TO WITHIN 2" OF THE TOP OF THE SIGN PANEL. INSTALLATION SHALL BE PLUMB, LEVEL, AND STRAIGHT.
b. MOUNTING U-1e PROVIDES A 36" MOUNTING TUBE (2 1/4" SQUARE STEEL POST EMBEDDED IN CONCRETE WITH 1" TO 2" ABOVE GRADE). THE SIGN POST SHALL BE INSERTED 6-8 INCHES INTO THE MOUNTING TUBE AND ATTACHED WITH STAINLESS STEEL ANGLE BOLT AND NUT. DOUBLE POST MOUNTING TO BE USED FOR SIGNS WITH A WIDTH OF GREATER THAN 30 INCHES. MOUNTING U-2 PROVIDES TWO POLE SUPPORT SIMILAR TO THE MOUNTING U-1e. ADDITIONALLY, U-2 REQUIRES CROSS BRACING OF STRUCTURAL ANGLE ON THE BACK OF THE SIGN FACE. ALL EXTERIOR SIGNAGE SHALL BE MOUNTED WITH A LOCK WASHER/NUT ASSEMBLY. SEE SIGN ATTACHMENT DETAIL. TOP OF U-2 MOUNTING SIGN SHALL BE AT 8'-0" ABOVE FINISHED GRADE. MOUNTING U-2 PROVIDES A 36" MOUNTING TUBE (2 1/4" SQUARE STEEL POST EMBEDDED IN CONCRETE WITH 1" TO 2" ABOVE GRADE). THE SIGN POST SHALL BE INSERTED 6-8 INCHES INTO THE MOUNTING TUBE AND ATTACHED WITH A STAINLESS STEEL ANGLE BOLT AND NUT. MOUNTING U-2 IN CONCRETE OR ASPHALT PAVING IS DISCOURAGED.
3. THE INSTALLATION METHODS AND DETAILS FOR EACH LOCATION SHALL BE ILLUSTRATED IN THE SUBMITTED SHOP DRAWINGS. FINAL LOCATION WILL BE APPROVED ON THE SITE BY THE TENANT OR HIS REPRESENTATIVE.
4. SIGN POSTS INSTALLED IN COMPACTED EARTH OR SIDEWALK SHALL BE 18" MIN. FROM FACE OF CURB.



CITY APPROVAL

ATLANTIC AE
CONSULTANTS

Kimley Horn
New York

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PROJECT INFO

SIGNAGE DETAILS

1785 STATE HIGHWAY 5S, AMSTERDAM, NY 12010

SEALS



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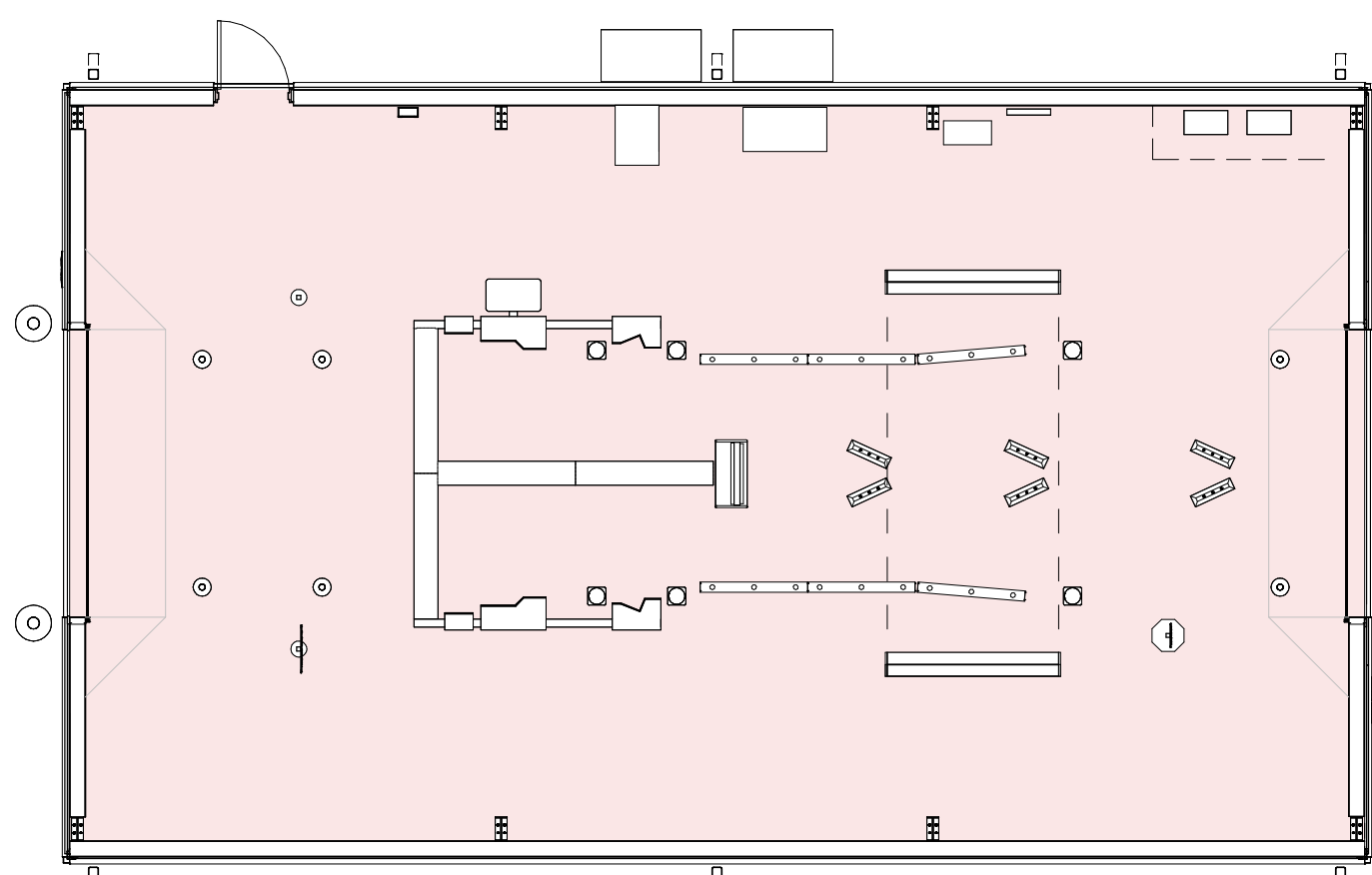
SIGNAGE DETAILS

C-7.3

AREA CLASSIFICATION - IBC 2018																	
NUMBER	NAME	CODE	CLASS GROUP NAME	DESCRIPTION	SPRINKLER SYSTEM	AREA (GROSS)	MAXIMUM ALLOWABLE AREA								Δ		
							1A	1B	2A	2B	3A	3B	4	5A		5B	
L1	1	Area	S-2	STORAGE	BUILDINGS USED FOR THE STORAGE OF NON-COMBUSTIBLE MATERIALS SUCH AS PRODUCTS ON WOODEN PALLETES.	NS	1,728.00 SF	1,000,000.00 SF	79,000.00 SF	39,000.00 SF	26,000.00 SF	39,000.00 SF	104,000.00 SF	38,500.00 SF	21,000.00 SF	13,500.00 SF	-24,272.00 SF
Grand total: 1							1,728.00 SF										

BUILDING CODE ANALYSIS

PROJECT CODE INFORMATION				
2020	BUILDING CODE OF NEW YORK STATE (IBC 2018)			
2020	NYS PLUMBING CODE (IPC 2018)			
2020	NYS MECHANICAL CODE (IMC 2018)			
2020	NYS ENERGY CODE (IECC 2018)			
2017	NYS ELECTRICAL CODE (NFPA 70, 2017)			
2009	NYS ACCESSIBILITY CODE (A117.1, 2009)			
2020	FIRE CODE OF NYS (FC 2018)			
OCCUPANCY GROUP				
OCCUPANCY	GROUP	NOTES		CODE SECTION
STORAGE	S-2	UNOCCUPIED EQUIPMENT BUILDING		301
BUILDING LIMITATIONS AND AREAS				
GROUP	LIMIT	NOTES		CODE SECTION
BUILDING HEIGHT	55'-0"	PROPOSED: 19' - 6"		504.3
NUMBER OF STORIES	3	PROPOSED: 1		504.4
CONSTRUCTION TYPE				
TYPE	ELEMENT	RATING	NOTES	CODE SECTION
2B	STRUCTURAL FRAME	0		TABLE 601
	BEARING WALLS (EXT)	0		
	BEARING WALLS (INT)	0		
	NON-BEARING WALLS (EXT)	0		TABLE 602
	NON-BEARING WALLS (INT)	0		TABLE 601
	FLOOR CONSTRUCTION	0		
	ROOF CONSTRUCTION	0		
COLUMNS, GIRDERS, TRUSSES AND FRAMING	0			
MEANS OF EGRESS				
EGRESS ELEMENT	REQUIRED	PROVIDED	NOTES	CODE SECTION
STAIRWAY WIDTH FACTOR	N/A	N/A		TABLE 1005.3.1
OTHER EGRESS COMPONENTS	.15" PER OCC	.15" PER OCC		TABLE 1005.3.2
COMMON PATH OF TRAVEL	N/A	N/A		TABLE 1006.2.1
DEAD-END CORRIDOR LENGTH	N/A	N/A	SEE LIFE SAFETY SHEET	1020.4
NUMBER OF EXITS	1	1		TABLE 1006.3.1
MAX TRAVEL DISTANCE	200'	79'		TABLE 1017.2
FIRE PROTECTION SYSTEMS				
ELEMENT	REQUIRED	PROVIDED	NOTES	CODE SECTION
SPRINKLER SYSTEM	NO	NO		903.2.9
PORT. FIRE EXTINGUISHER	YES	YES		906.1
FIRE ALARM AND DETECTION	YES	YES		907.2
REQUIRED PLUMBING FIXTURES				
PLUMBING FIXTURES	REQUIRED	PROVIDED	NOTES	CODE SECTION
ALL FIXTURES	NO	NO		TABLE 403.1



IBC 2021 AREA CLASSIFICATION

3 AREA CLASSIFICATION - IBC 2021
 A-001 1/8"=1'-0"
 U NS

ENERGY CODE ANALYSIS (IECC 2018)

2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) W NY AMENDMENTS		
6A	CLIMATE ZONE	C301.1
MEET LOW-ENERGY BUILDING EXCEPTION?	NO	C402.1.1
MEET EQUIPMENT BUILDING EXCEPTION?	NO	C402.1.2
ENVELOPE		
OPAQUE THERMAL ENVELOPE INSULATION COMPONENT MINIMUM REQUIREMENTS, U-VALUE METHOD		COMMENTS
ROOF		
METAL BUILDINGS	R-25 + R-11 LS	WITH THERMAL SPACER
WALLS		
METAL BUILDINGS	R-13 + R-13ci	
WALLS, BELOW GRADE		
BELOW-GRADE WALL	R-7.5ci	TABLE C402.1.3
FLOORS		
MASS	R-12.5ci	
SLAB-ON-GRADE FLOORS		
UNHEATED SLAB	R-10 for 24" below	
OPAQUE DOORS		
NONSWINGING	R-4.75	

TRAVEL DISTANCE

NAME	PATH	LENGTH
P01		71'

OCCUPANT CALCULATIONS (IBC 2018)

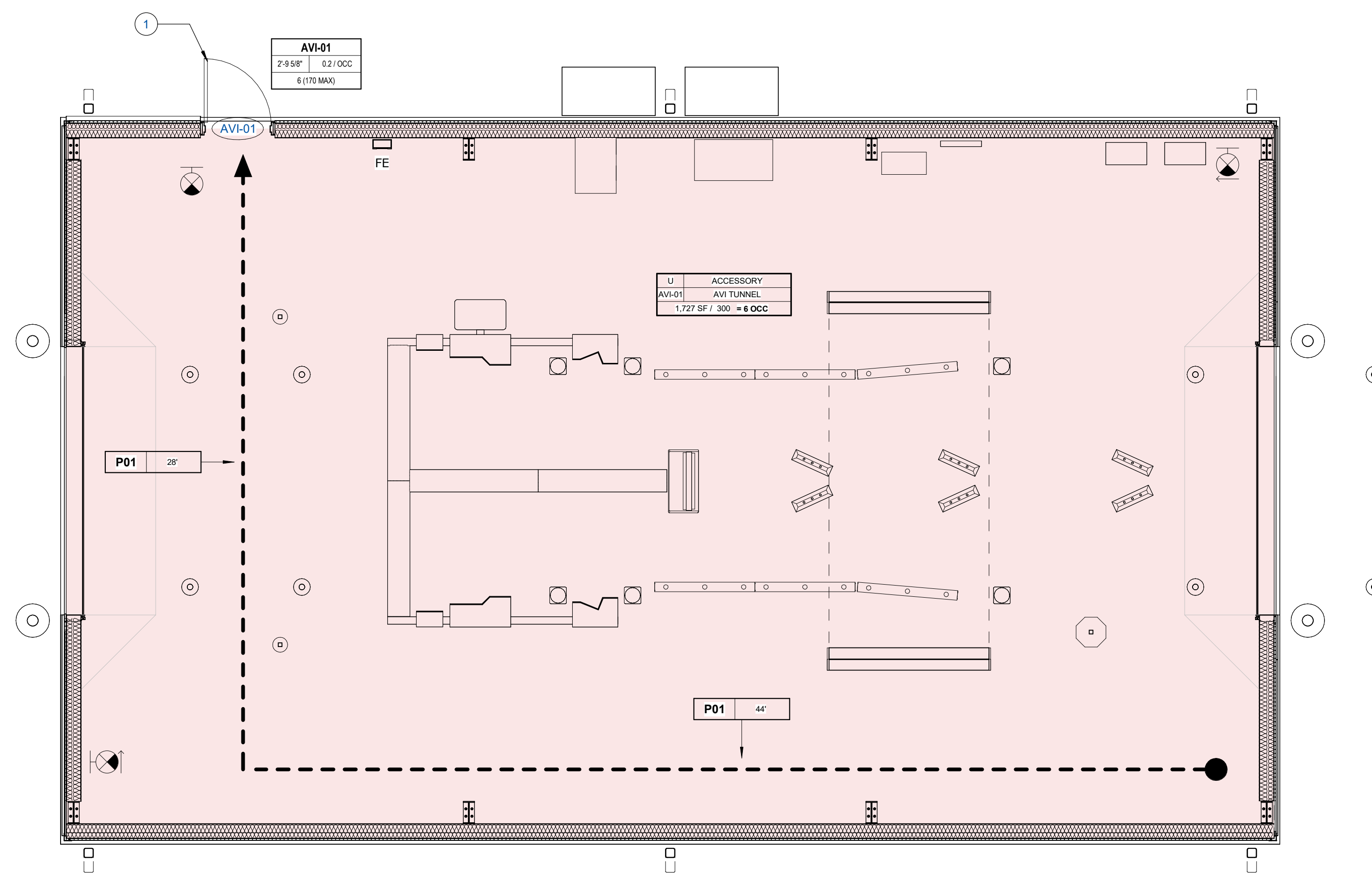
NUMBER	NAME	FUNCTION	ROOM	DESCRIPTION	AREA	FACTOR	CALCULATIONS		
							RULE	IS NET?	OCCUPANTS
T.O.S.									
AVI-01	AVI TUNNEL	ACCESSORY	ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM		1,727.17 SF	300	GROSS	No	6
Grand total: 1						1,727.17 SF			6

GENERAL NOTES - EGRESS AND LIFE SAFETY

- FACILITY NOTES**
- IT IS ASSUMED THAT, SHOULD A PEDESTRIAN BE REQUIRED TO COMPLETE THIS PATH OF TRAVEL, THE AVI TUNNEL WILL BE CLOSED TO VEHICULAR TRAFFIC. AT NO POINT SHOULD PEDESTRIAN AND VEHICULAR TRAFFIC COLLIDE IN THE OPERATION OF THIS BUILDING.
- EXIT DOORS**
- EXIT DOORS SHALL BE OPERABLE WITHOUT SPECIAL KNOWLEDGE, EFFORT OR THE USE OF A SPECIAL KEY OR LATCH
 - EXIT DOORS SHALL SWING IN THE DIRECTION OF TRAVEL WHEN SERVING AN OCCUPANT LOAD OF 50 OR MORE.
 - UNLATCHING FORCE OF PANIC HARDWARE SHALL NOT EXCEED 15 POUNDS WHEN APPLIED IN THE DIRECTION OF TRAVEL.
 - MEANS OF EGRESS SHALL BE ILLUMINATED AT ANYTIME THE BUILDING IS OCCUPIED WITH LIGHT HAVING AN INTENSITY OF NOT LESS THAN ONE FOOT CANDLE AT WALKING SURFACE LEVEL. EXIT ILLUMINATION FIXTURES SHALL BE ON A SEPARATE NIGHT LIGHT CIRCUIT WITH BATTERY BACK-UP. EXIT ILLUMINATION SHALL BE PROVIDED FOR NOT LESS THAN 90 MINUTES VIA STORAGE BATTERIES, OR ON-SITE GENERATOR.
 - CORRIDORS SHALL BE MAINTAINED WITH A MINIMUM CLEAR WIDTH OF 44" AND 7'-0" MINIMUM HEIGHT.
 - EXIT DOORS SHALL BE MINIMUM OF 32" CLEAR WIDTH & MAXIMUM 48" WIDE LEAF. MINIMUM 6'-8" DOOR HEIGHT.
 - DOORS IN ANY POSITION SHALL NOT REDUCE THE REQUIRED CORRIDOR EXIT WIDTH BY MORE THAN HALF.
- EXIT SIGNAGE**
- MAIN EXIT DOORS WITHOUT PANIC HARDWARE SHALL HAVE A SIGN WITH LETTERS ON A CONTRASTING BACKGROUND STATING "THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED"
 - EXIT ACCESS HAS BEEN BASED UPON PROGRAM INFORMATION PROVIDED TO THE ARCHITECT BY THE INTENDED OCCUPANT OF THIS SPACE. ARCHITECT SHALL NOT BE HELD RESPONSIBLE FOR ANY CONSEQUENCES WHICH MAY RESULT FROM NOT BE CHANGE OF USE OR OCCUPANT LOAD AFTER PROJECT COMPLETION.
 - TACTILE EXIT SIGNAGE SHALL BE REQUIRED. TACTILE SIGNS SHALL BE MATTE FINISH, WITH CHARACTERS THAT CONTRAST WITH THE BACKGROUND. SUBMIT SIGN SAMPLE TO ARCHITECT FOR APPROVAL. FINISHES: 1/4" P95 BACKPAINTED ACRYLIC PAINT, MANUFACTURER, COLOR, COLOR (ROWMARK APPLIQUE WITH CLASSIC RASTER BRILLE). PROVIDE SIGNS AT THE FOLLOWING LOCATIONS:
 - EACH GRADE-LEVEL EXTERIOR EXIT DOOR SHALL BE IDENTIFIED BY A TACTILE SIGN WITH THE WORD "EXIT"
 - SIGNAGE SHALL BE LOCATED AT LATCH SIDE OF SINGLE DOOR AND RIGHT SIDE OF DOUBLE DOORS FROM DIRECTION OF EGRESS.
 - SIGNAGE AND TACTILE FLOOR DESIGNATIONS SHALL BE LOCATED AT EACH STAIR IDENTIFYING EACH STAIR BY NAME OR NUMBER.
 - EXIT SIGNAGE SHALL BE INTERNALLY ILLUMINATED AT ALL TIMES WITH EMERGENCY ELECTRICAL BACK-UP POWER.
 - EXIT SIGN ILLUMINATION SHALL NOT BE LESS THAN 5 FOOT CANDLES. EXIT SIGNS SHALL HAVE TWO POWER SOURCES, ONE FROM THE PREMISES WIRING SYSTEM, THE OTHER BATTERIES.
 - FINAL PLACEMENT OF EXIT SIGNS IS SUBJECT TO APPROVAL AND MODIFICATION OF THE FIRE DEPARTMENT FIELD INSPECTOR.
 - EXTERIOR LANDINGS AT ALL EXIT DOORS SHALL BE LEVEL WITH A SLOPE OF 2% MAX.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	(08 1113) EXTERIOR HM SINGLE DOOR. SEE DOOR SCHEDULE



IBC 2021 SPACE FUNCTION

2 LIFE SAFETY PLAN - IBC 2021
 A-001 1/8"=1'-0"
 ACCESSORY



CONSULTANTS

PROJECT INFO

TENANT IMPROVEMENTS
 1785 STATE HIGHWAY 5S
 AMSTERDAM, NY 12010

SEALS



REVISIONS

DATE	REVISION
REV0 09/3/2024	ISSUED FOR PLAN REVIEW

PM:	BL
PA:	AE
PROJECT NUMBER:	100-2023-89
PROJECT DATE:	9/3/2024

SHEET INFO

LIFE SAFETY
A-001



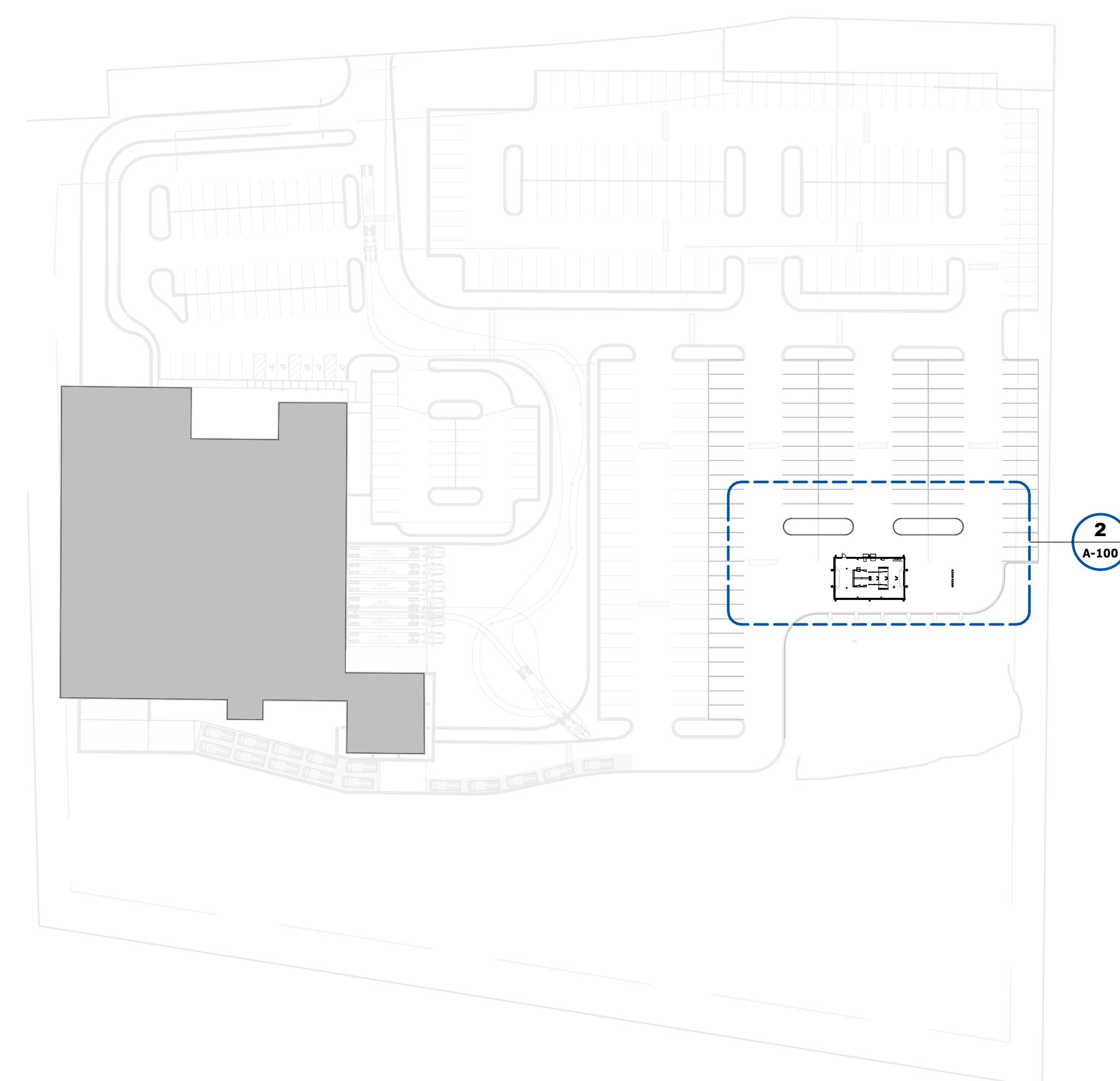
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 LONGWOOD, FL 32750
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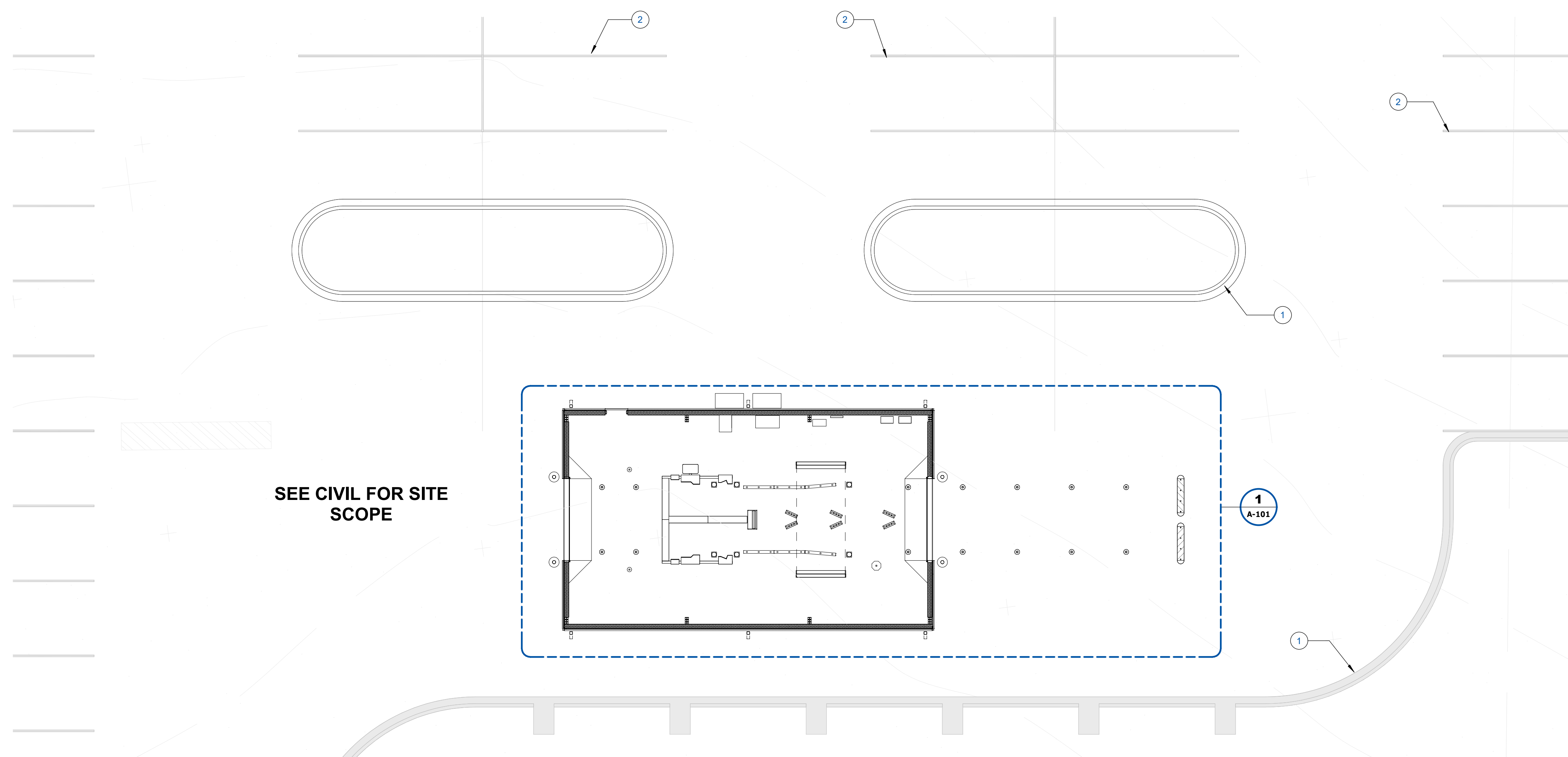
PROJECT INFO

TENANT IMPROVEMENTS
 1785 STATE HIGHWAY 5S
 AMSTERDAM, NY 12010

KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
1	(32 1613) CONCRETE CURB, SEE CIVIL
2	EXISTING VAN PARKING STALL TO REMAIN



1 SITE PLAN
 A-100 1"=80'0"



2 ENLARGED SITE PLAN
 A-100 1"=16'0"

SEE CIVIL FOR SITE SCOPE

SEALS



REVISIONS

DATE	REVISION
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SHEET INFO

ARCHITECTURAL SITE PLAN
A-100



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SEALS



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SHEET INFO

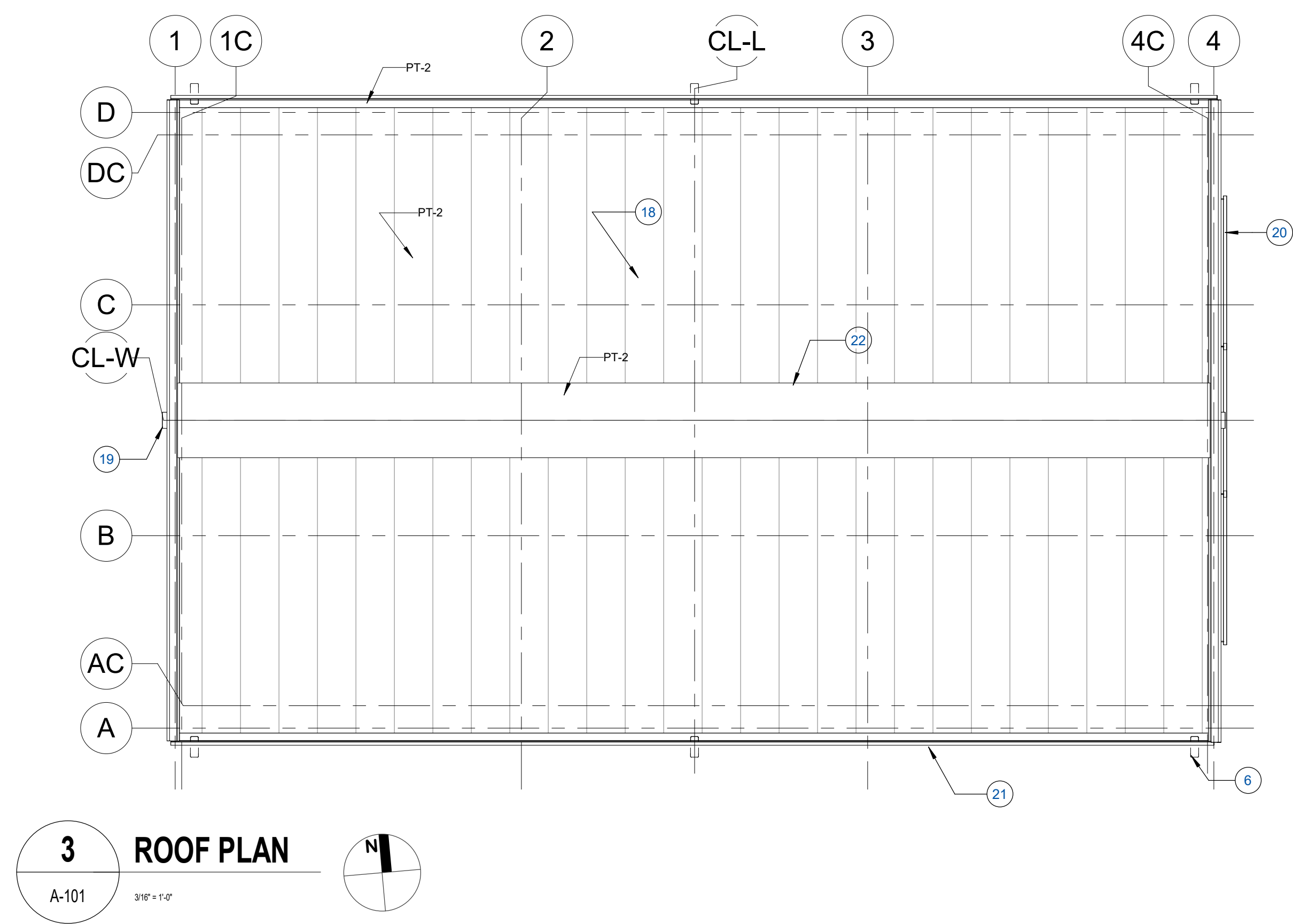
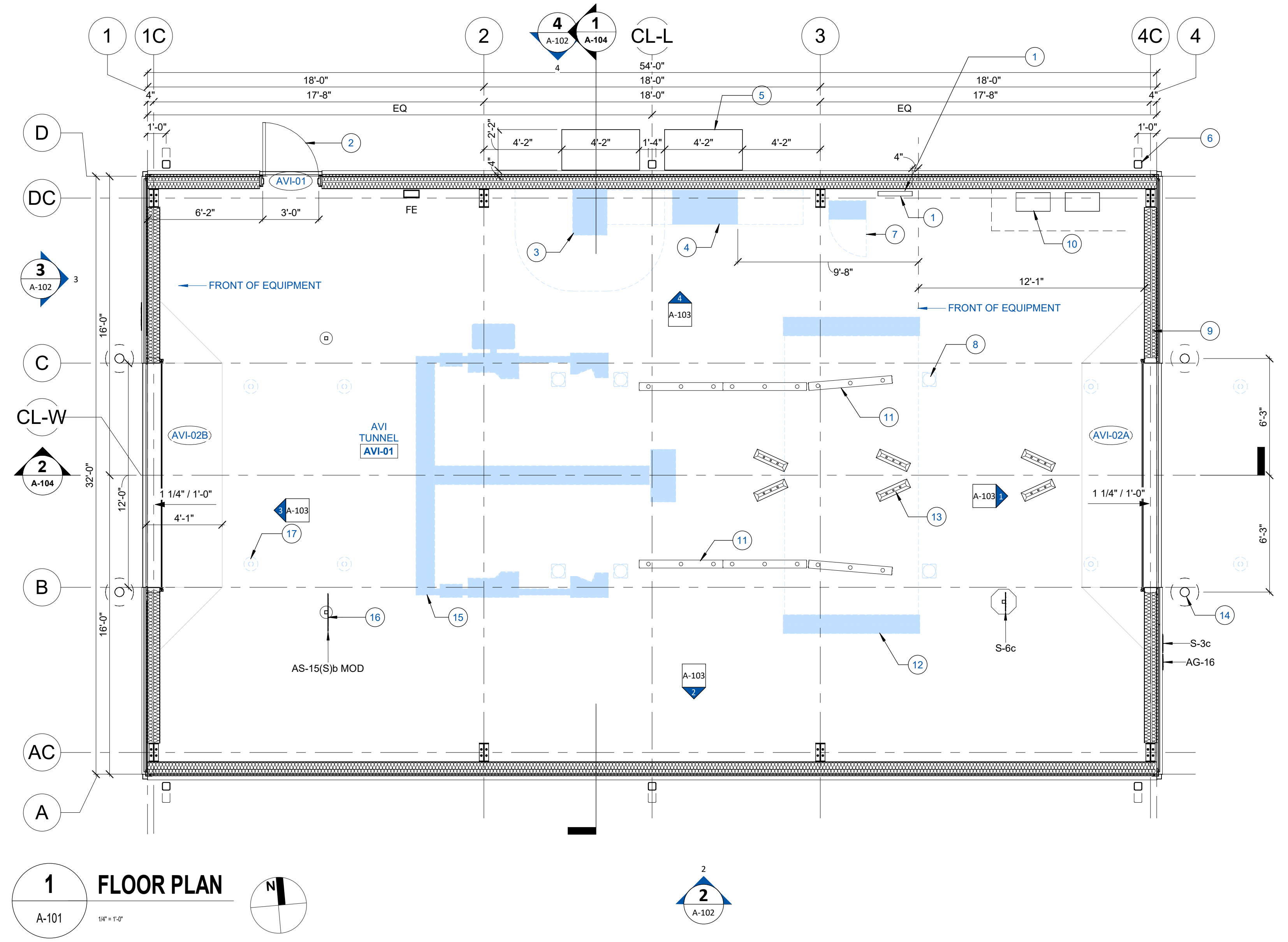
FLOOR PLAN, ROOF,
SIGNAGE
A-101

SHEET ISSUED: 9/10/2024

SIGNAGE SCHEDULE		
TYPE MARK	TYPE NAME	PREVIEW
AG-16	CARBON MONOXIDE	
AS-15(S)b	EXIT STRAIGHT	
AS-15(S)b MOD	DO NOT BACK UP (3" LETTERING)	
AS-64	VINYL GRAPHIC SIGNAGE	
S-2b	DO NOT ENTER	
S-3c	SPEED LIMIT 5	
S-6c	SPEED RANGE TUNNEL ONLY 5-7 MPH	

SCOPE RESPONSIBILITY LEGEND

	CP CI		OP CI
	CP OI		OP OI



EXTERIOR MATERIAL SCHEDULE					
MARK	NAME	BASIS OF DESIGN (BOD)			APPLICATION
		MANUF	MODEL	COLOR	
DIV 09					
PT-1	DOOR PANEL	SHERWIN WILLIAMS	EXTERIOR PAINT	SW 7063 NEBULOUS WHITE	EXTERIOR AND INTERIOR FACE OF GARAGE DOOR PANEL
PT-2	ROOF AND WALL TRIM	SHERWIN WILLIAMS	EXTERIOR PAINT	SW 7066 GRAY MATTERS	EXTERIOR FACE OF ROOF PANELS, EXTERIOR WALL TRIM
PT-3	WALL ACCENT	SHERWIN WILLIAMS	EXTERIOR PAINT	PANTONE 2995C	EXTERIOR FACE OF WALL PANELS PER ELEVATIONS.
PT-4	WALL PRIMARY	SHERWIN WILLIAMS	EXTERIOR PAINT	SW 7650 ELLIE GRAY	EXTERIOR FACE OF WALL PANELS PER ELEVATIONS.

AVI EQUIPMENT RESPONSIBILITY MATRIX									
NAME	DESIGN TEAM	DESIGNED BY				PROVIDED BY		INSTALLED BY	
		CONTRACTOR	OWNER	OTHERS	CONTRACTOR	OWNER	CONTRACTOR	OWNER	
DIVISION 11									
UVEYE ATLAS TUNNEL	No	No	Yes	No	No	Yes	No	Yes	
UVEYE CABLE PROTECTION MATS	No	No	Yes	No	No	Yes	No	Yes	
UVEYE CAMERA REAR	No	No	Yes	No	No	Yes	No	Yes	
UVEYE CAMERA MID	No	No	Yes	No	No	Yes	No	Yes	
UVEYE CAMERA FRONT	No	No	Yes	No	No	Yes	No	Yes	
UVEYE CONTROL CABINET	No	No	Yes	No	No	Yes	No	Yes	
UVEYE SERVER CABINET	No	No	Yes	No	No	Yes	No	Yes	
UVEYE GROUND BOX CONDUIT	No	No	Yes	No	No	Yes	No	Yes	
UVEYE HELIOS SCANNER	No	No	Yes	No	No	Yes	No	Yes	
DIVISION 27									
IDF	No	No	Yes	No	No	Yes	No	Yes	
DIVISION 32									
CURB BARRIER	No	No	No	Yes	Yes	No	Yes	No	
PARKING STOP, RUBBER, 22"	No	No	No	Yes	Yes	No	Yes	No	
SPEED BUMP, REMOVABLE, 2 1/4" H X 72" L	No	No	No	Yes	Yes	No	Yes	No	
CONCRETE INFILLED STEEL BOLLARD	No	No	No	Yes	Yes	No	Yes	No	
POLYMER SHELL BOLLARD, 33"	No	No	No	Yes	Yes	No	No	Yes	
FLEXIBLE LANE DELINEATOR, 36"	No	No	No	Yes	Yes	No	No	Yes	

KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
1	(26 2416) PANELBOARD, SEE ELECTRICAL
2	(08 1113) EXTERIOR HM SINGLE DOOR, SEE DOOR SCHEDULE
3	(27 2213) IDF EQUIPMENT
4	(11 1100) UVEYE EQUIPMENT CABINET
5	(03 3100) CONCRETE SLAB ON GRADE, SEE STRUCTURAL
6	(07 7123) PREFINISHED METAL DOWNSPOUT
7	(11 1100) ATLAS CONTROL CABINET.
8	(32 3913) 33" TALL METAL BOLLARD W POLYMER SHELL, ASAFE IFLEX HEAVY DUTY
9	(07 2116) FIBERGLASS BATT INSULATION FOR METAL BUILDINGS
10	(11 1100) CONDENSING UNIT
11	(32 1613) CURB BARRIER
12	(11 1100) UVEYE ATLAS SCANNING TUNNEL
13	(32 1716) REMOVABLE HEAVY DUTY, RUBBER SPEED BUMPS
14	(32 3913) 6" DIA. CONCRETE FILLED SCHEDULE 40 STEEL PIPE BOLLARD, 7'-0" LONG WITH 3'-0" EMBEDMENT INTO CONCRETE FOOTING. BOLLARD TO EXTEND 4'-0" ABOVE FINISHED FLOORGRADE. FILL BOLLARDS WITH 5,000 PSI CONCRETE AND FORM TOP WITH SMOOTH ROUNDED CONVEX SURFACE. PRIME AND PAINT SAFETY YELLOW- SEE STRUCT. DWGS
15	(11 1100) UVEYE SCANNING EQUIPMENT.
16	(10 1400) SIGNAGE, SEE CIVIL.
17	(32 3913) FLEXIBLE LANE POLES
18	(07 4113) FORMED METAL ROOF PANELS
19	
20	
21	(07 7123) PRE-FINISHED METAL GUTTER
22	(07 4113) PRE-FINISHED METAL RIDGE CAP.



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PROJECT INFO

TENANT IMPROVEMENTS
1785 STATE HIGHWAY 5S
AMSTERDAM, NY 12010

SEALS



REVISIONS

DATE	REVISION
REV0 10/3/2024	ISSUED FOR PLAN REVIEW

PM:	BL
PA:	AE
PROJECT NUMBER:	100-2023-89
PROJECT DATE:	9/3/2024

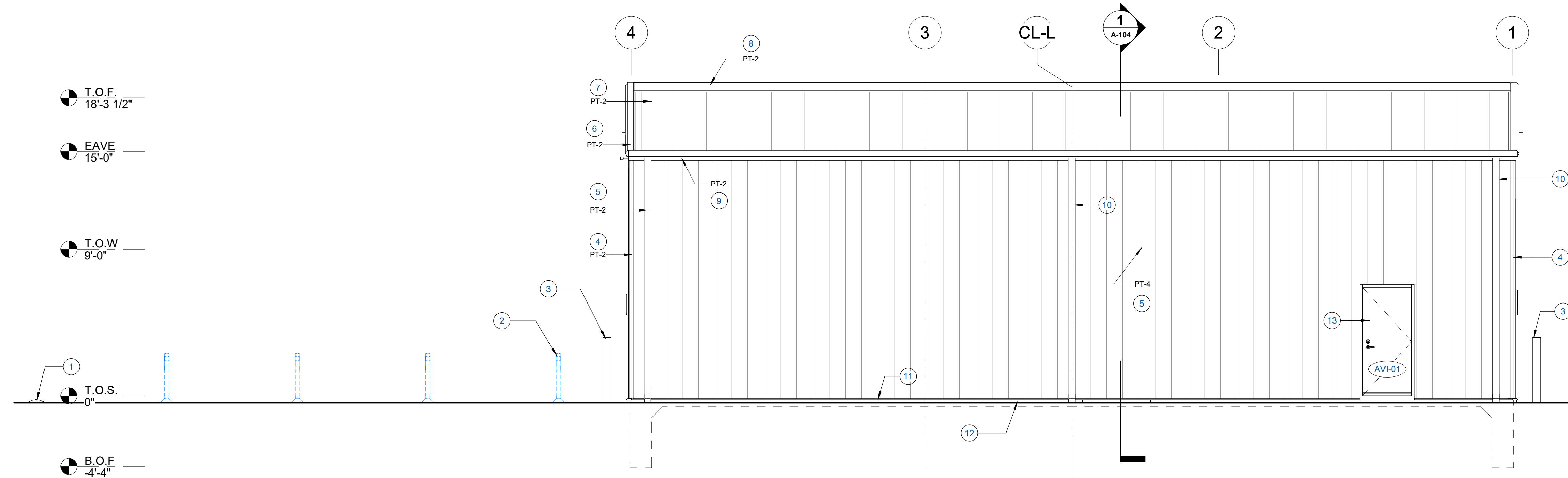
SHEET INFO

ELEVATIONS, MATERIALS
A-102

SHEET ISSUED: 9/10/2024

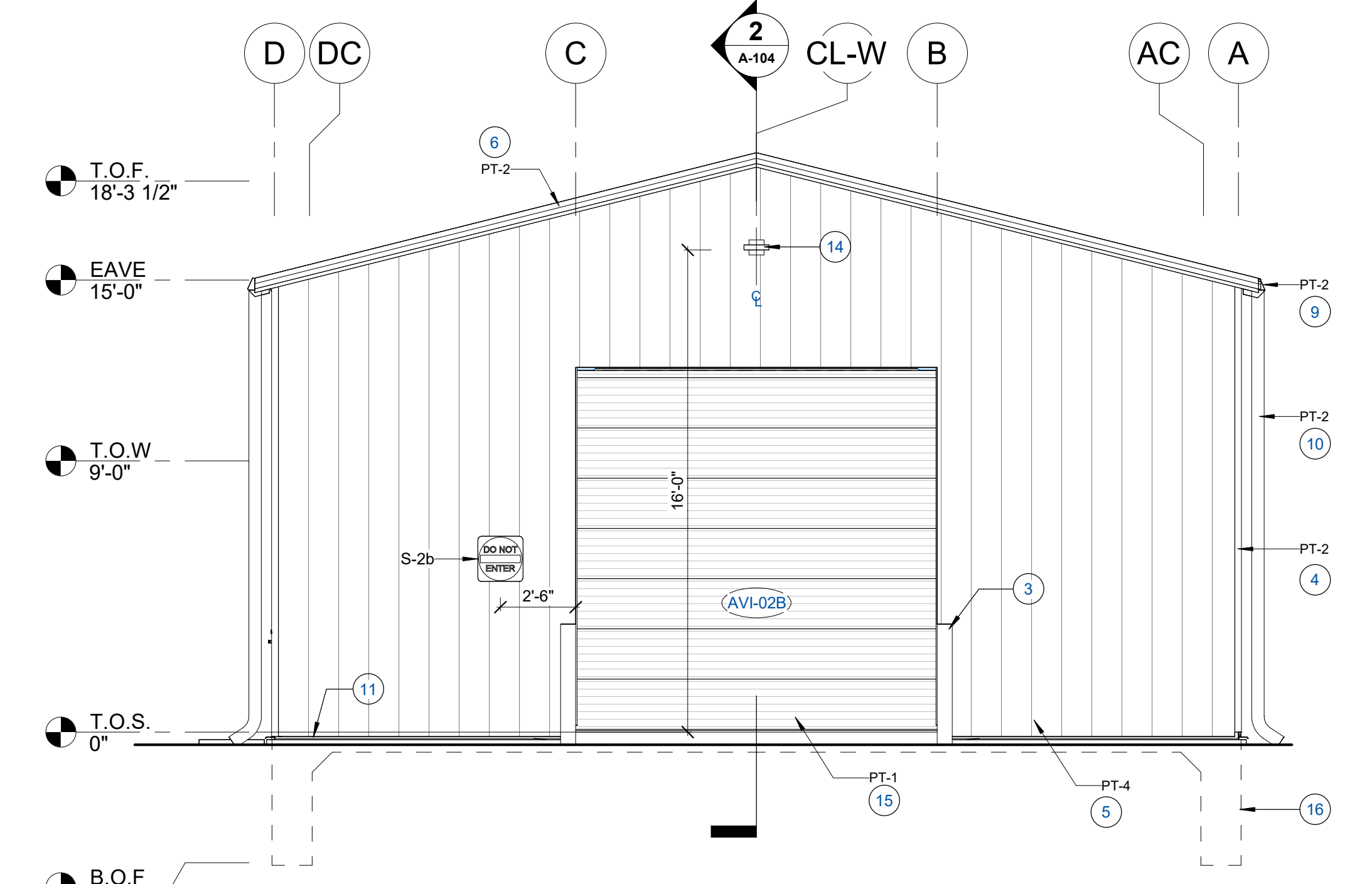
EXTERIOR MATERIAL SCHEDULE					
MARK	NAME	BASIS OF DESIGN (BOD)			APPLICATION
		MANUF	MODEL	COLOR	
DIV 09					
PT-1	DOOR PANEL	SHERWIN WILLIAMS	EXTERIOR PAINT	SW 7063 NEBULOUS WHITE	EXTERIOR AND INTERIOR FACE OF GARAGE DOOR PANEL
PT-2	ROOF AND WALL TRIM	SHERWIN WILLIAMS	EXTERIOR PAINT	SW 7066 GRAY MATTERS	EXTERIOR FACE OF ROOF PANELS, EXTERIOR WALL TRIM
PT-3	WALL ACCENT	SHERWIN WILLIAMS	EXTERIOR PAINT	PANTONE 2995C	EXTERIOR FACE OF WALL PANELS PER ELEVATIONS.
PT-4	WALL PRIMARY	SHERWIN WILLIAMS	EXTERIOR PAINT	SW 7050 ELLIE GRAY	EXTERIOR FACE OF WALL PANELS PER ELEVATIONS.

KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
1	(32 1716) REMOVABLE HEAVY DUTY, RUBBER SPEED BUMPS
2	(32 3913) FLEXIBLE LANE POLES
3	(32 3913) 6" DIA. CONCRETE FILLED SCHEDULE 40 STEEL PIPE BOLLARD, 7'-0" LONG WITH 3'-0" EMBEDMENT INTO CONCRETE FOOTING. BOLLARD TO EXTEND 4'-0" ABOVE FINISHED FLOOR/GRADE. FILL BOLLARDS WITH 3,000 PSI CONCRETE AND FORM TOP WITH SMOOTH ROUNDED CONVEX SURFACE. PRIME AND PAINT SAFETY YELLOW. SEE STRUCT. DWGS
4	(07 4213) METAL PANEL TRIM
5	(07 4213) FORMED METAL WALL PANELS
6	(13 3419) PRE-FINISHED METAL RAKE TRIM
7	(07 4113) FORMED METAL ROOF PANELS
8	(07 4113) PRE-FINISHED METAL RIDGE CAP
9	(07 7123) PRE-FINISHED METAL GUTTER
10	(07 7123) PRE-FINISHED METAL DOWNSPOUT
11	(07 4213) BASE DRIP FLASHING
12	(03 3100) CONCRETE SLAB ON GRADE. SEE STRUCTURAL
13	(08 1113) EXTERIOR HM SINGLE DOOR. SEE DOOR SCHEDULE
14	
15	(08 3323) MANUAL PULL OVERHEAD COILING DOOR. SEE DOOR SCHEDULE.
16	(03 3100) CONTINUOUS REINFORCED CONCRETE FOUNDATION. SEE STRUCTURAL.
17	



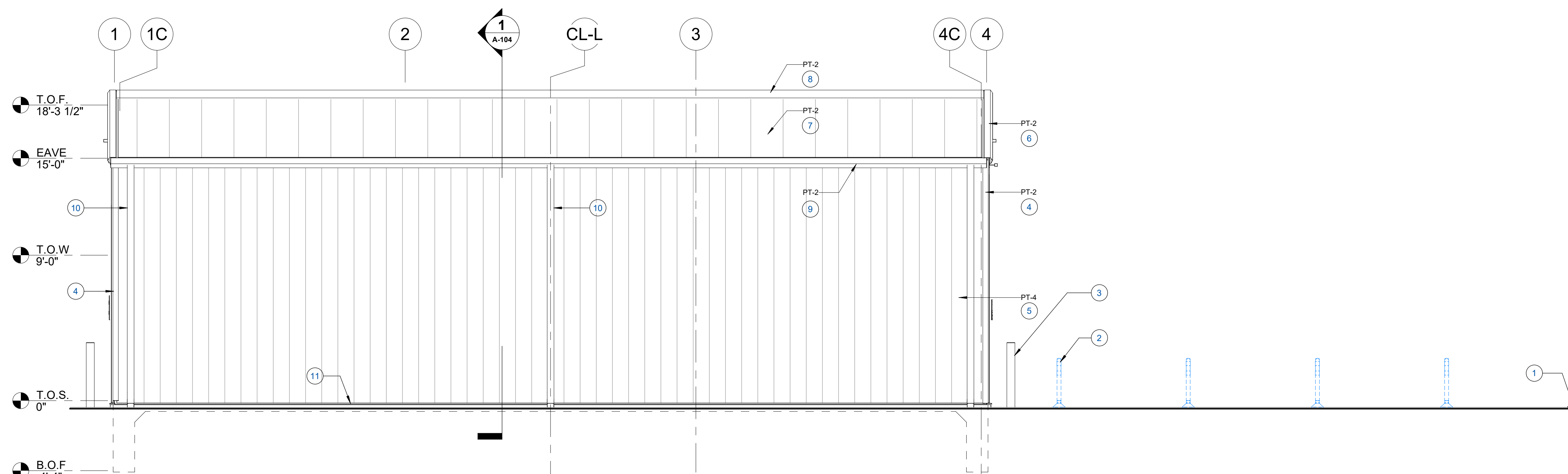
4 RIGHT ELEVATION

A-102 1/8"=1'-0"



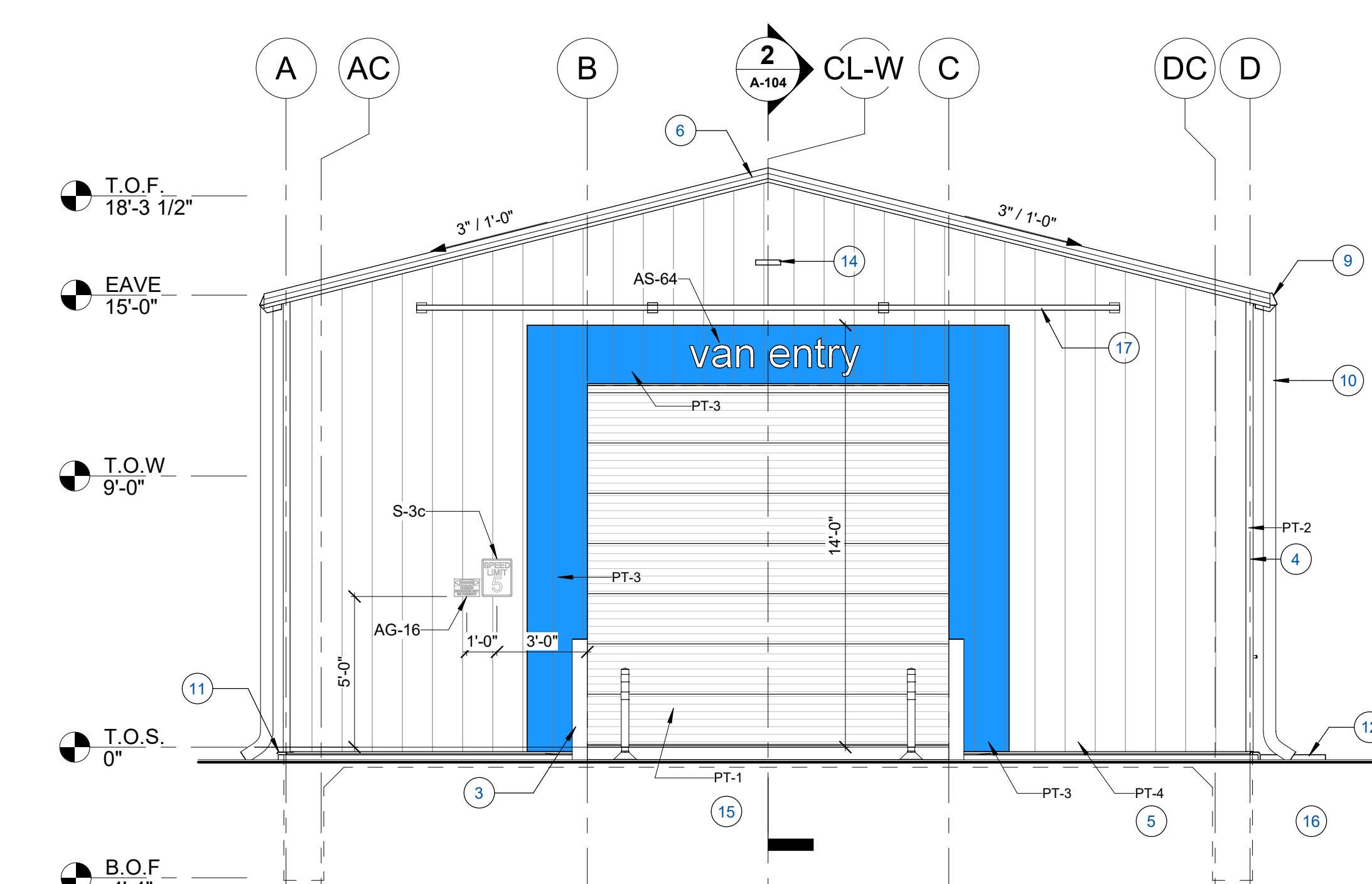
3 REAR ELEVATION

A-102 1/8"=1'-0"



2 LEFT ELEVATION

A-102 1/8"=1'-0"



1 FRONT ELEVATION

A-102 1/8"=1'-0"



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PROJECT INFO

TENANT IMPROVEMENTS
1785 STATE HIGHWAY 5S
AMSTERDAM, NY 12010

SEALS



REVISIONS

DATE	REVISION
REV 0	19/3/2024 ISSUED FOR PLAN REVIEW

PM:	BL
PA:	AE
PROJECT NUMBER:	100-2023-89
PROJECT DATE:	9/3/2024

SHEET INFO

RCP, INTERIOR, FINISHES
A-103

SHEET ISSUED: 9/10/2024

INTERIOR MATERIAL SCHEDULE

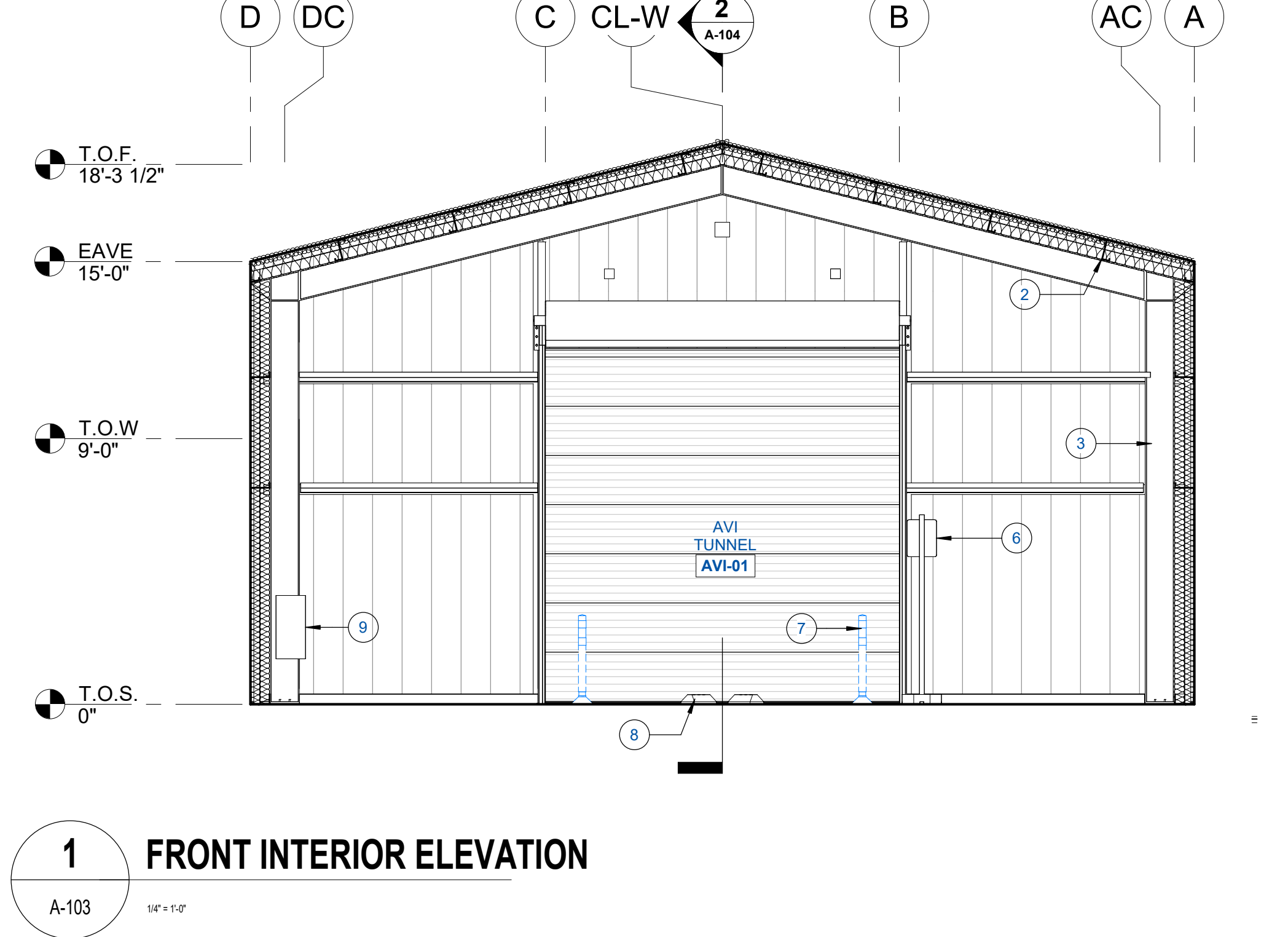
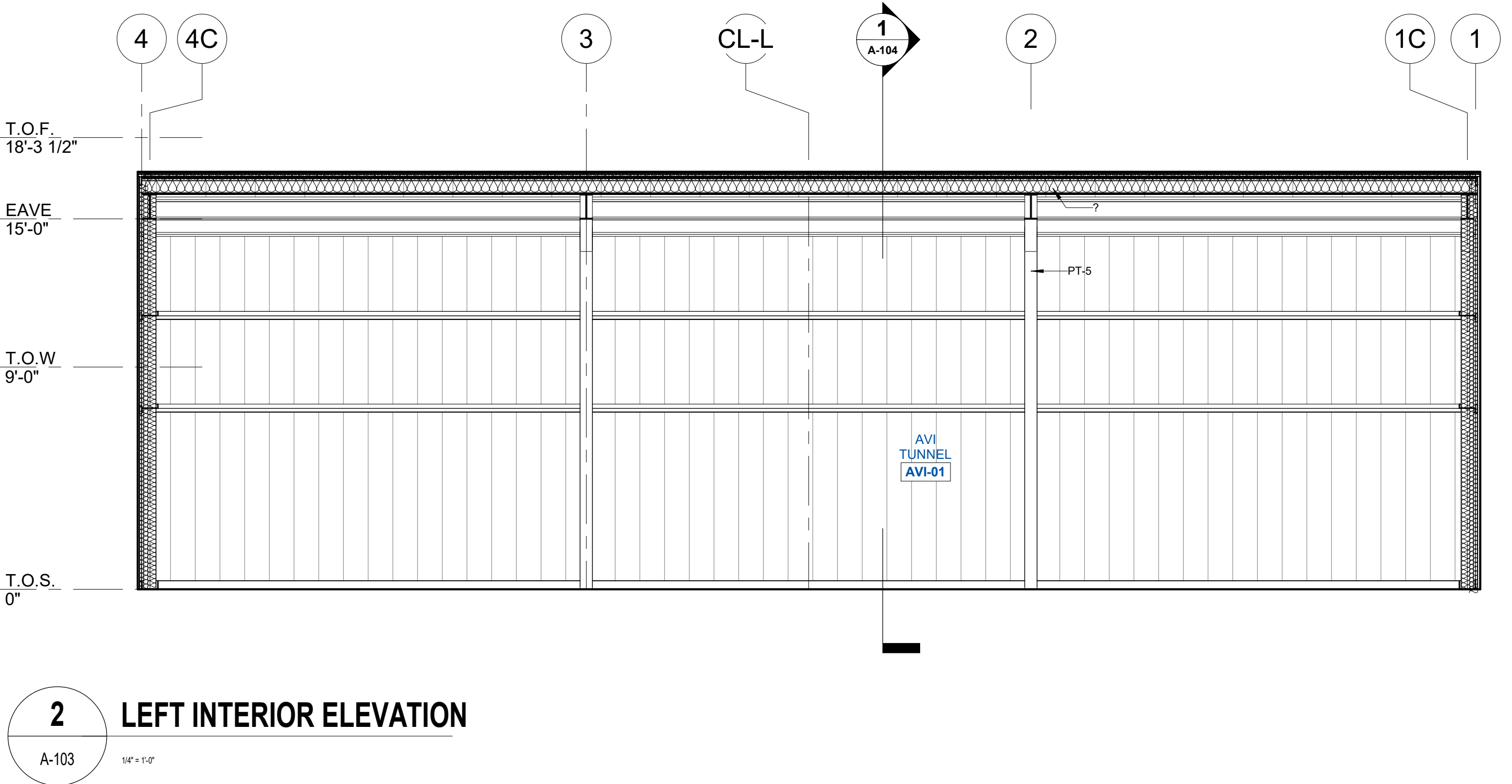
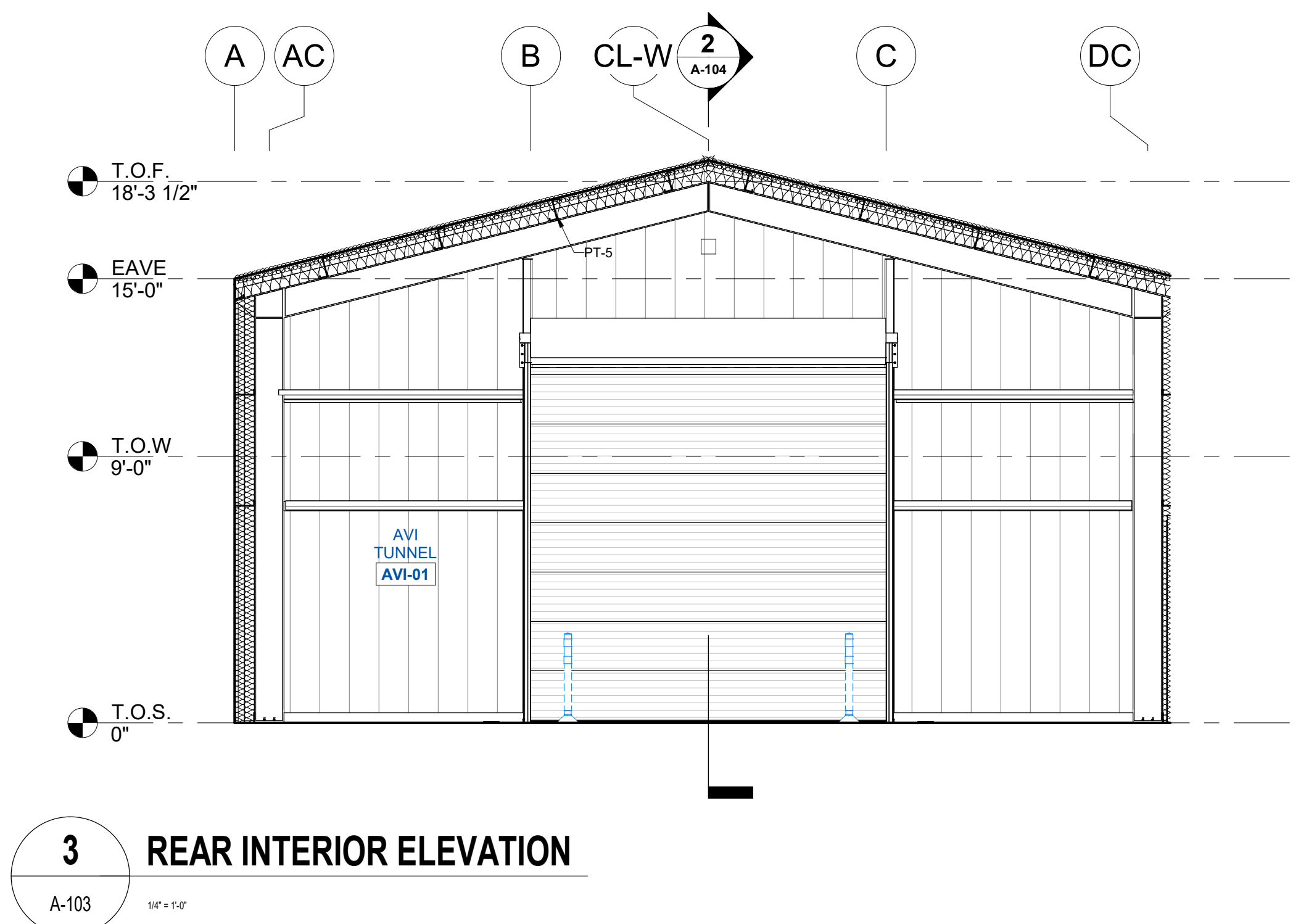
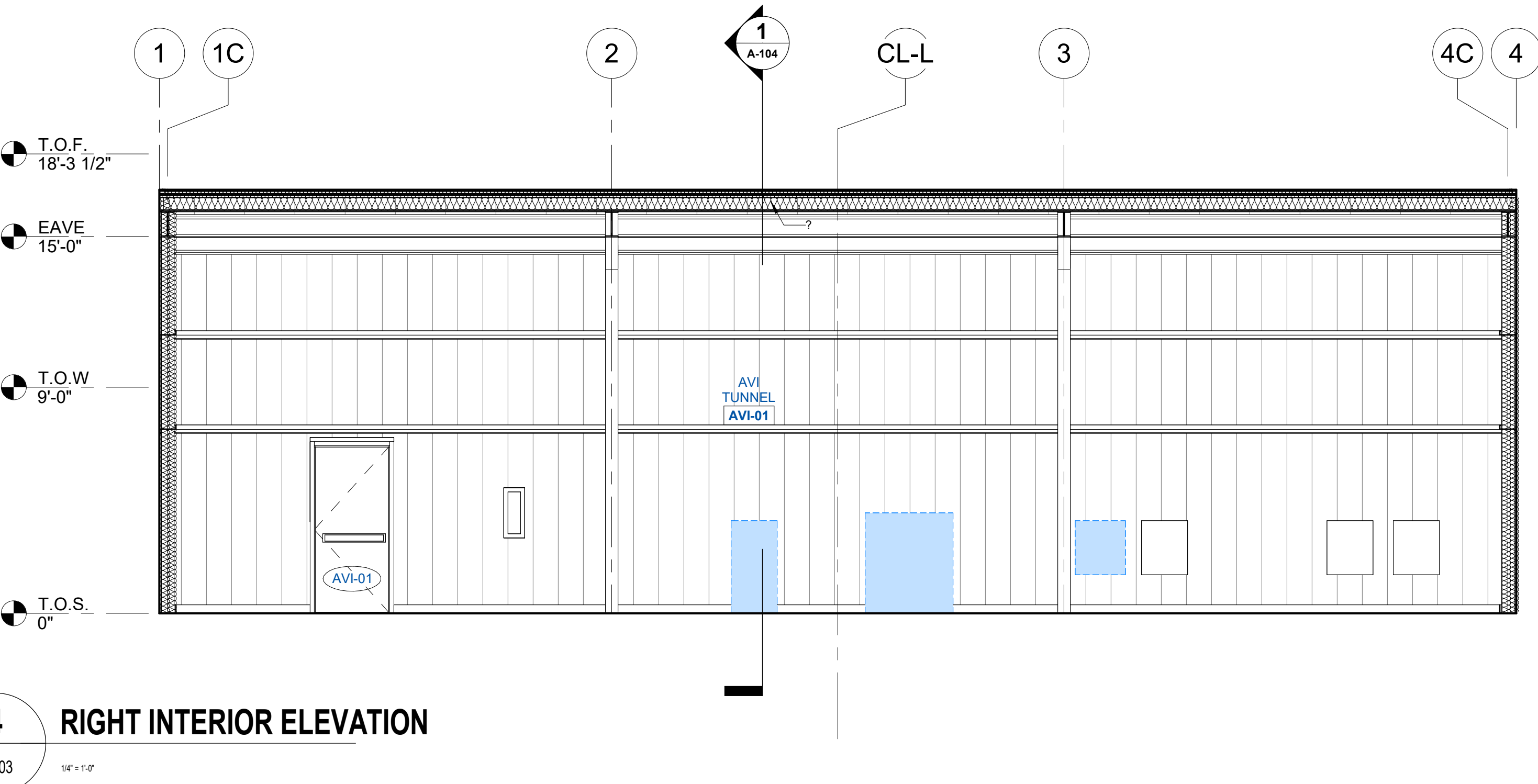
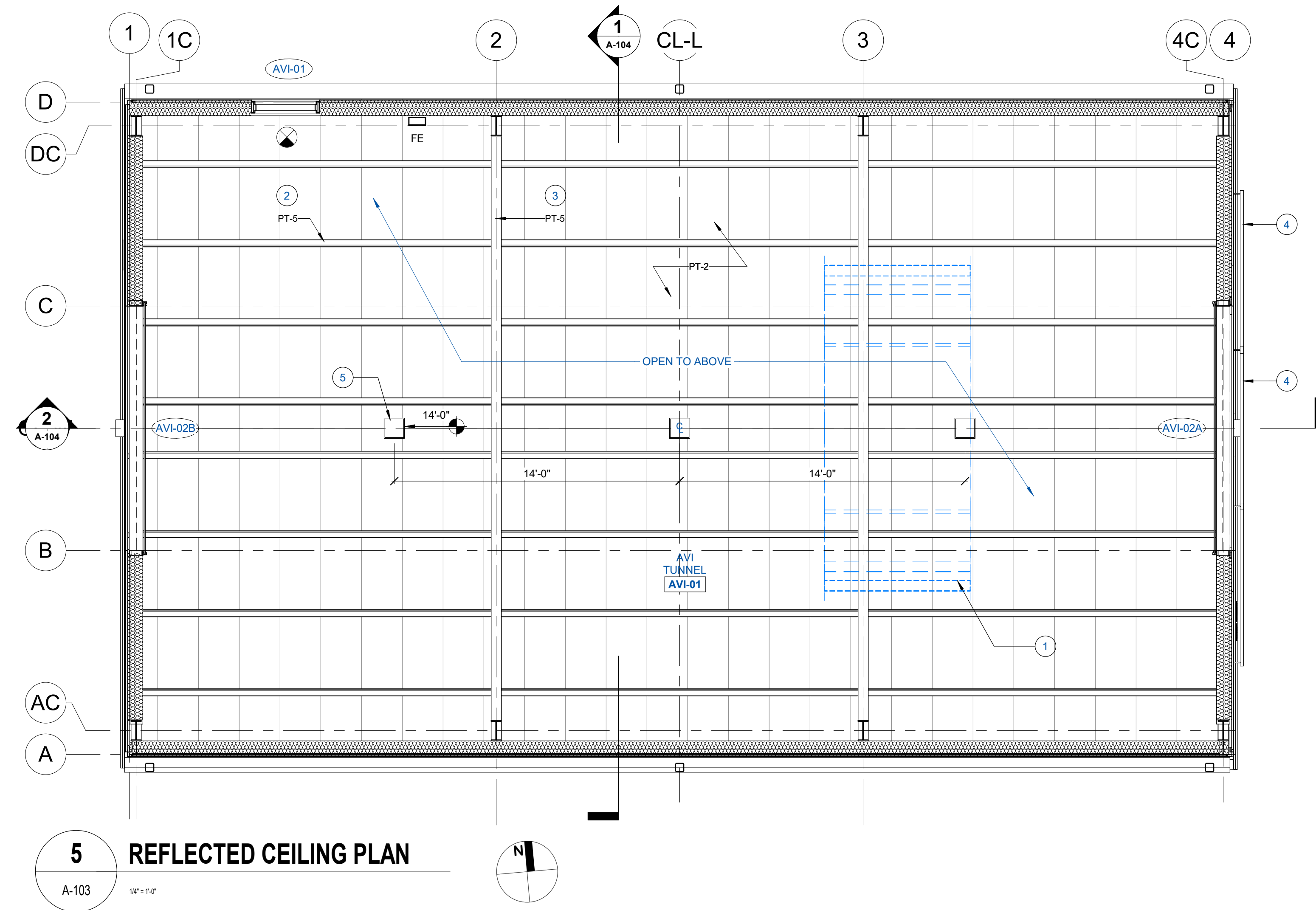
MARK	NAME	BASIS OF DESIGN (BOD)				APPLICATION
		MANUF	MODEL	COLOR	IMAGE	
DIV 09						
PT-5	INTERIOR STRUCTURE	BENJAMIN MOORE	INTERIOR PAINT	SW 2121-70 CHANTILLY LACE		INTERIOR FACE OF PEMB STRUCTURE

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	(11 1100) UVEVE ATLAS SCANNING TUNNEL
2	(13 3419) METAL ROOF PURLINS. SEE STRUCTURAL
3	(13 3419) PRE-ENGINEERED METAL BENT GIRDER. SEE STRUCTURAL
4	
5	SUSPENDED LIGHT FIXTURE. SEE ELECTRICAL
6	(10 1400) SIGNAGE. SEE CIVIL
7	(32 3913) FLEXIBLE LANE POLES
8	(32 1713) 22" RUBBER PARKING STOPS
9	(11 1100) CONDENSING UNIT

SCOPE RESPONSIBILITY LEGEND

	CP CI		OP CI
	CP OI		OP OI



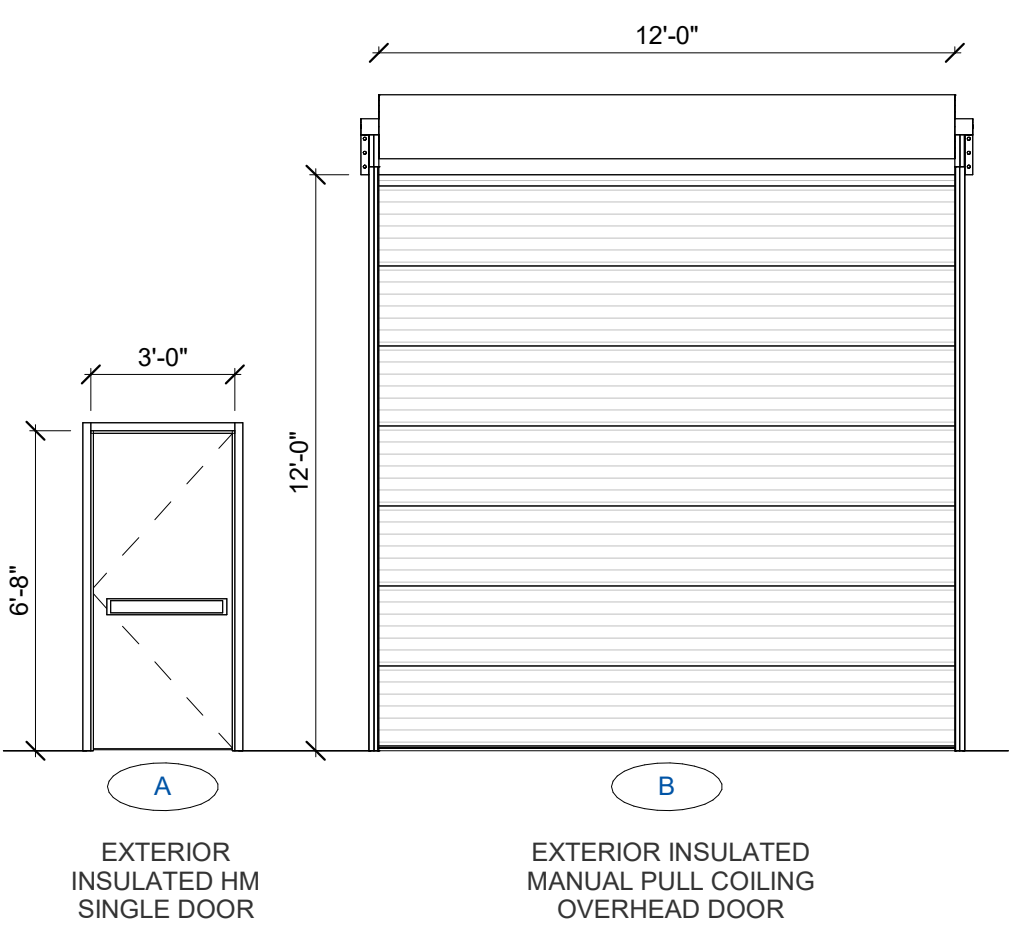
MARK	TYPE	PANEL		FRAME			EGRESS?	FIRE RATING	HARDWARE	CARD READER?	HEAD	JAMB	THRESH	COMMENTS		
		WIDTH	HEIGHT	MATERIAL	FINISH	TYPE									MATERIAL	FINISH
AVI-01	A	3'-0"	6'-8"	HM, INSULATED	PAINT	F1	HM	PAINT	Yes	0	SET: 09	Yes	MANUF.	MANUF.	MANUF.	SEE ENERGY CODE ANALYSIS FOR MIN R-VALUE.
AVI-02A	B	12'-0"	12'-0"	STEEL, INSULATED	PAINT	F2	STEEL	PAINT	No	0		No	MANUF.	MANUF.	MANUF.	WEATHERSEAL CLOSURE AT PANEL THRESHOLD. SEE ENERGY CODE ANALYSIS FOR MIN R-VALUE.
AVI-02B	B	12'-0"	12'-0"	STEEL, INSULATED	PAINT	F2	STEEL	PAINT	No	0		No	MANUF.	MANUF.	MANUF.	WEATHERSEAL CLOSURE AT PANEL THRESHOLD. SEE ENERGY CODE ANALYSIS FOR MIN R-VALUE.

HARDWARE SET | 09

DOORS: GUARDHOUSE DOOR ACCESS CONTROLLED - HOLLOW METAL
DESCRIPTION: SHELL EXTERIOR DOOR
FUNCTION: ELECTRIFIED LEVER MORTISE LOCK, FAIL SECURE, INTEGRATED REQUEST TO EXIT.

3	HINGE, HEAVY WEIGHT	4A3386 NRP	US32D	MK
1	ELEC MORTISE LOCK (FAIL SECURE)	RX 70 8271-24 LNP	US32D	SA
1	PERMANENT KEYPAD CORE	BY OTHERS	626	OT
1	SURFACE CLOSER	(P7)500	689	NO
1	KICK PLATE (PUSH SIDE)	K1050, 10" H X 2" LDW CSK	US32D	RO
1	THRESHOLD	273X3AFG		PE
1	RAIN GUARD	346C		PE
1	GASKETING (HEAD)	2893AV		PE
2	GASKETING (JAMBS)	2903AV		PE
1	DOOR BOTTOM	2188DCFG		PE
1	DOOR POSITION SWITCH	BY SECURITY CONTRACTOR		OT
2	CARD READER	BY SECURITY CONTRACTOR		OT
1	SURFACE ARMORED DOOR CORD	KEEDEK K-0L38A		KK
1	ELECTROLYNX HARNESS	QC-C1500(P)		MK
1	POWER SUPPLY	BY SECURITY CONTRACTOR		OT
1	WIRING AND RISER DIAGRAM	BY HARDWARE SUPPLIER AS REQUIRED		

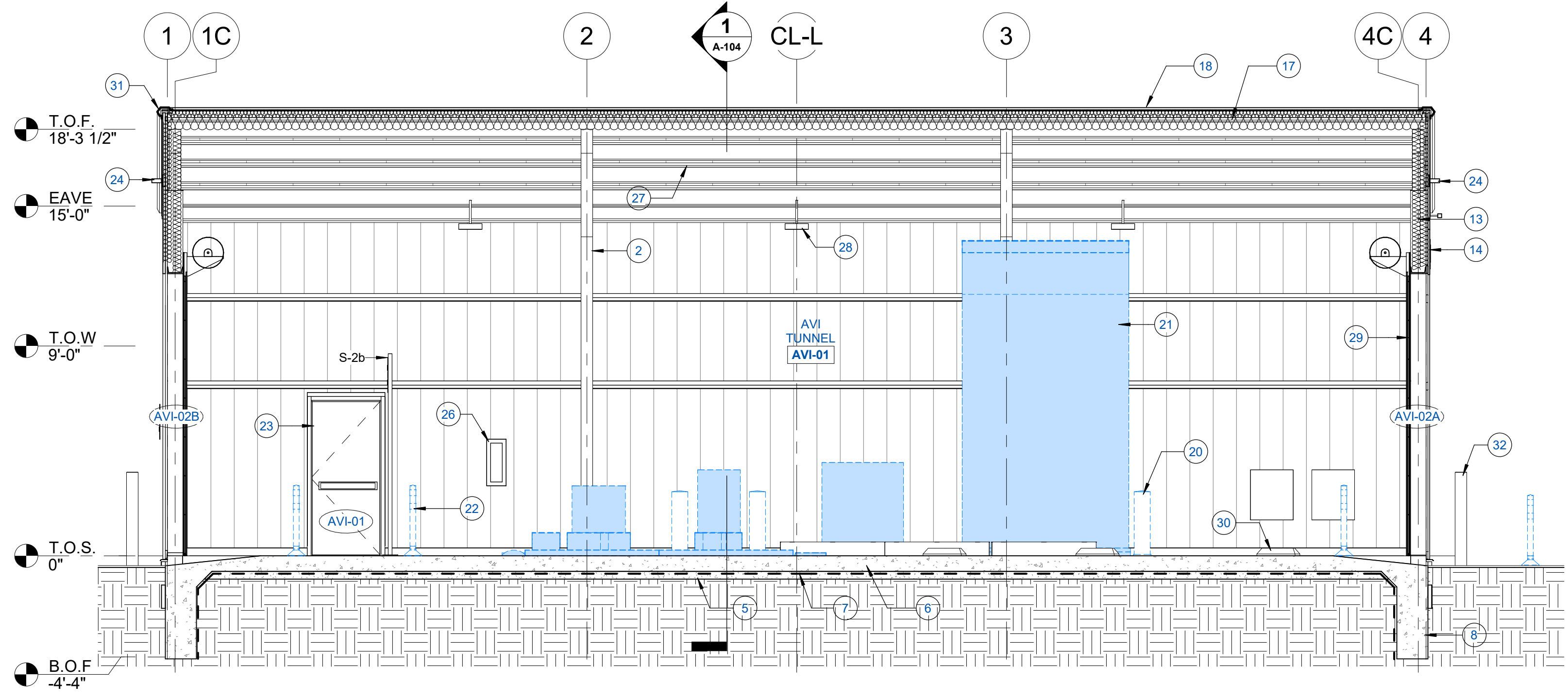
NOTE: ACCESS BY AUTHORIZED CARD CREDENTIAL. ALWAYS FREE EGRESS. CARD READER, POWER SUPPLY, AND DOOR POSITION SWITCH TO BE PROVIDED BY SECURITY CONTRACTOR. PROVIDE TESTED AND APPROVED HARDWARE FOR HURRICAN AND WINDSTORM CODE COMPLIANT OPENINGS WHERE PROJECT IS SUBJECT TO THOSE CONSTRUCTION CODES.



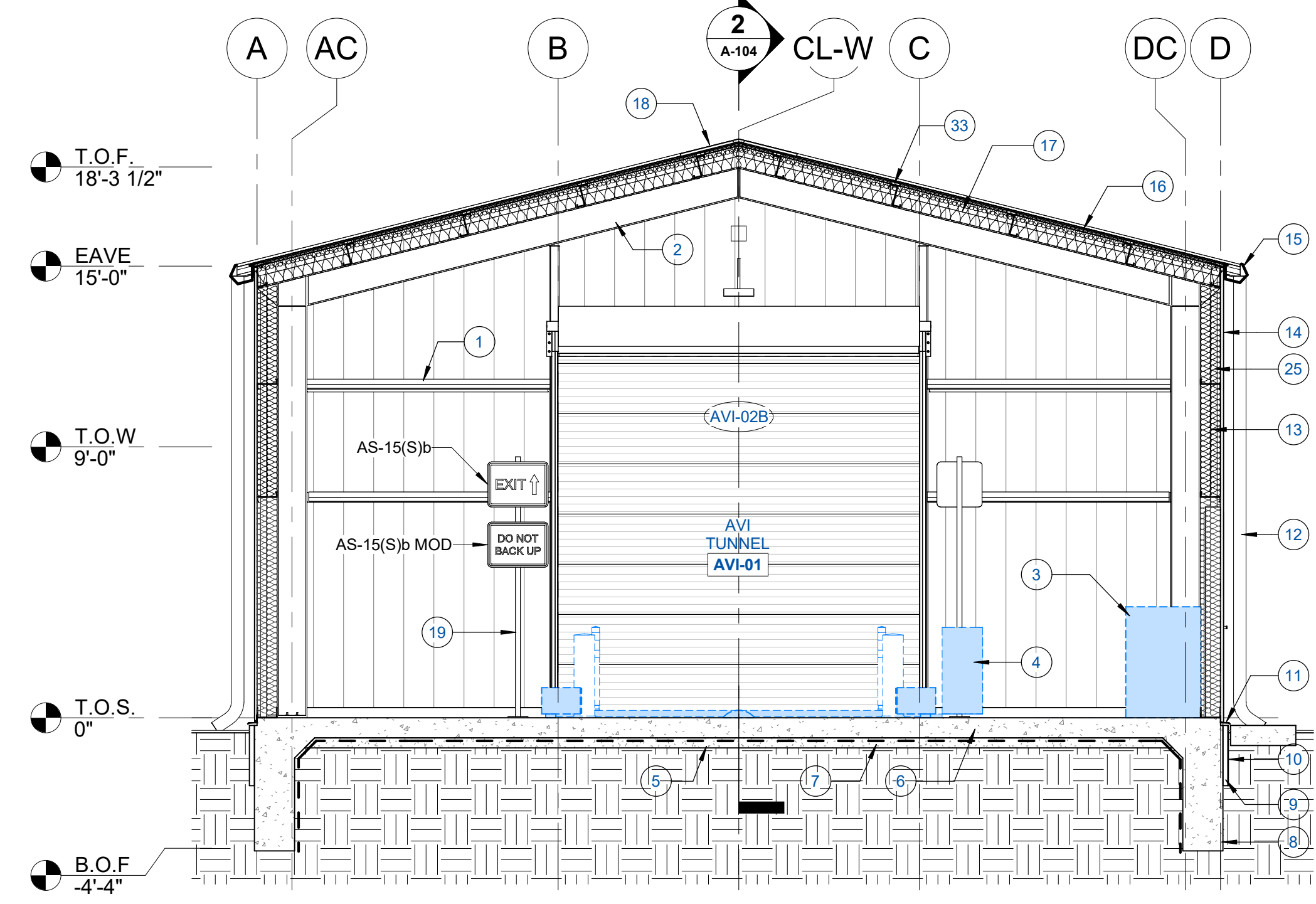
CONSULTANTS

PROJECT INFO

TENANT IMPROVEMENTS
 1785 STATE HIGHWAY 5S
 AMSTERDAM, NY 12010



2 LONG SECTION
 A-104 1/8" = 1'-0"



1 CROSS SECTION
 A-104 1/8" = 1'-0"

KEY VALUE	KEYNOTE TEXT
1	(13 3419) METAL SIDEWALL GIRT. SEE STRUCTURAL.
2	(13 3419) PRE-ENGINEERED METAL BENT GIRDER. SEE STRUCTURAL.
3	(27 2213) IDF EQUIPMENT.
4	(11 1100) LUYEYE SCANNING EQUIPMENT.
5	(31 2323) COMPACTED FILL. SEE CIVIL AND GEO-TECH.
6	(03 3100) CONCRETE SLAB ON GRADE. SEE STRUCTURAL.
7	(07 2816) BELOW GRADE VAPOR RETARDER.
8	(03 3100) CONTINUOUS REINFORCED CONCRETE FOUNDATION. SEE STRUCTURAL.
9	(07 2113) 2" RIGID INSULATION (MIN R-10).
10	(07 4243) COMPOSITE FOUNDATION PROTECTION PANELS. GROUND BREAKER BY NUDDO OR EQUAL.
11	(07 4213) BASE DRIP FLASHING.
12	(07 7123) PREFINISHED METAL DOWNSPOUT.
13	(07 2116) FIBERGLASS BATT INSULATION FOR METAL BUILDINGS.
14	(07 4213) FORMED METAL WALL PANELS.
15	(07 7123) PRE-FINISHED METAL GUTTER.
16	(07 4113) FORMED METAL ROOF PANELS.
17	(07 2116) R-25 + R-11 LS FIBERGLASS BATT INSULATION FOR METAL BUILDINGS.
18	(07 4113) PRE-FINISHED METAL RIDGE CAP.
19	(10 1400) SIGNAGE. SEE CIVIL.
20	(32 3913) 33" TALL METAL BOLLARD W POLYMER SHELL. ASAFE I/FLEX HEAVY DUTY.
21	(11 1100) LUYEYE ATLAS SCANNING TUNNEL.
22	(32 3913) FLEXIBLE LANE POLES.
23	(08 1113) EXTERIOR HM SINGLE DOOR. SEE DOOR SCHEDULE.
24	
25	(07 2116) R-13 + R-13 CI FIBERGLASS BATT INSULATION FOR METAL BUILDINGS.
26	(10 4416) SURFACE-MOUNTED FIRE EXTINGUISHER CABINET.
27	(13 3419) METAL ROOF PURLINS. SEE STRUCTURAL.
28	SUSPENDED LIGHT FIXTURE. SEE ELECTRICAL.
29	(08 3323) MANUAL PULL OVERHEAD COILING DOOR. SEE DOOR SCHEDULE.
30	(32 1716) REMOVABLE HEAVY DUTY, RUBBER SPEED BUMPS.
31	(13 3419) PRE-FINISHED METAL RAKE TRIM.
32	(32 3913) 6" DIA. CONCRETE FILLED SCHEDULE 40 STEEL PIPE BOLLARD, 7'-0" LONG WITH 3'-0" EMBEDED INTO CONCRETE FOOTING. BOLLARD TO EXTEND 4'-0" ABOVE FINISHED FLOOR/GRADE. FILL BOLLARDS WITH 3,000 PSI CONCRETE AND FORM TOP WITH SMOOTH ROUNDED CONVEX SURFACE. PRIME AND PAINT SAFETY YELLOW-SEE STRUCT. DWGS.
33	(07 2200) THERMAL SPACER TYP.

SCOPE RESPONSIBILITY LEGEND	
 CP CI	 OP CI
 CP OI	 OP OI

SEALS



REVISIONS

DATE	REVISION
REV 01 9/3/2024	ISSUED FOR PLAN REVIEW

PM:	BL
PA:	AE
PROJECT NUMBER:	100-2023-89
PROJECT DATE:	9/3/2024

SHEET INFO

SECTIONS, DOORS
A-104



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CONSULTANTS



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 2450002344

PROJECT INFO

TENANT IMPROVEMENTS
 1785 STATE HIGHWAY 5S
 AMSTERDAM, NY 12010

SEALS



08/30/2024

REVISIONS

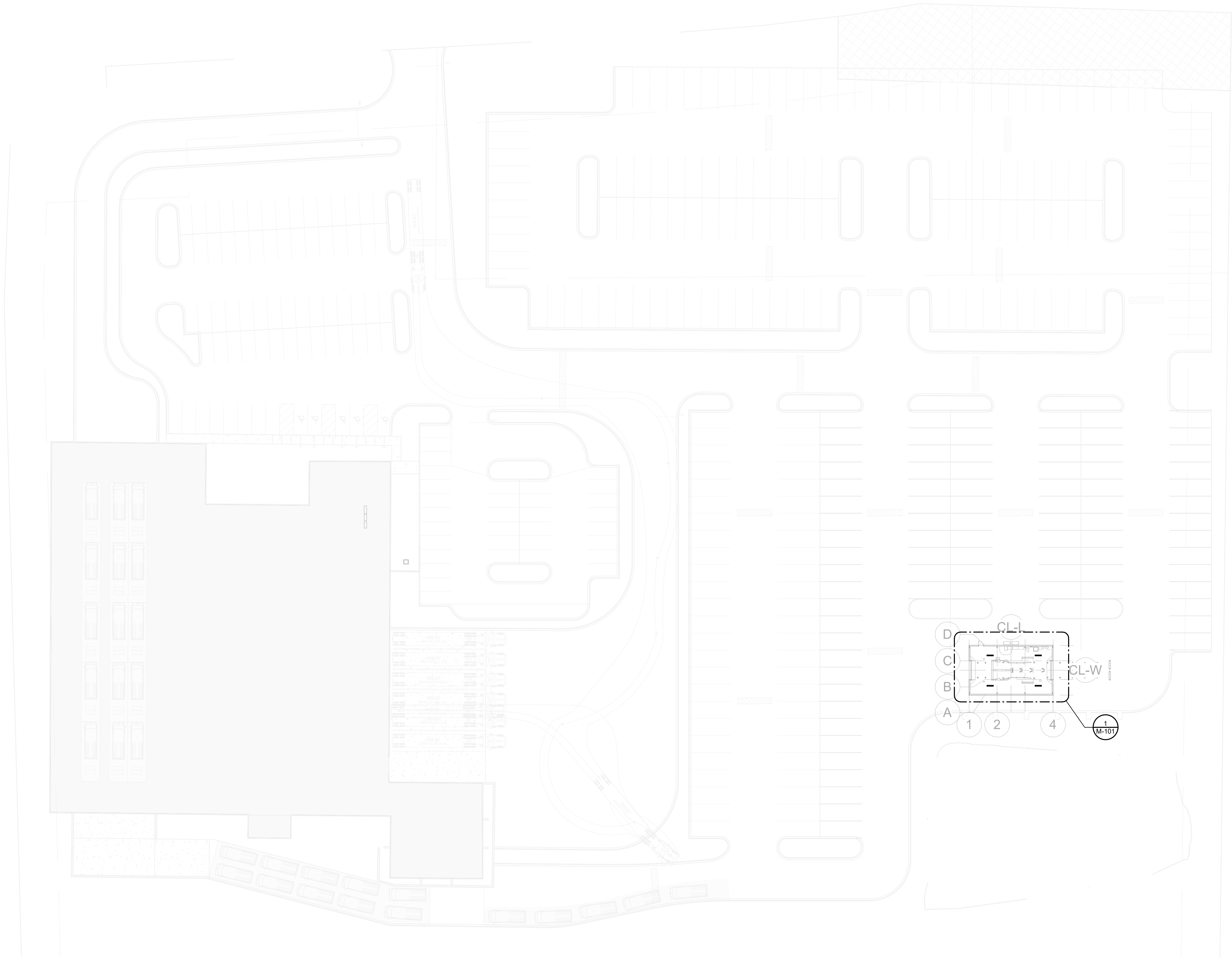
DATE	REVISION

PM:	BRM
PA:	BRM
PROJECT NUMBER:	100-2023-89
PROJECT DATE:	9/3/2024

SHEET INFO

MECHANICAL OVERALL
 PLAN
M-100

SHEET ISSUED: 08/12/24



MECHANICAL PLAN
 1/32" = 1'-0"

TO THE BEST OF MY KNOWLEDGE, BELIEF, AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 NEW YORK STATE ENERGY CODE.
 SEAN O. EISLER

BUILDING DEPARTMENT FILING NOTE:
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NOTE:
 EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL DRAWINGS & SITE VISITS AND MAY NOT REFLECT EXACT AS-BUILT CONDITIONS. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BIDS. CAREFULLY COORDINATE NEW WORK AND DEMOLITION WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.

SPECIAL INSPECTIONS
 OWNER SHALL SUBCONTRACT WITH A NEW YORK STATE REGISTERED SPECIAL INSPECTION AGENCY TO PERFORM THE REQUIRED SPECIAL INSPECTIONS FOR THE MECHANICAL, PLUMBING AND FIRE PROTECTION SYSTEMS AS REQUIRED BY THE NEW YORK CITY BUILDING CODE. OWNER SHALL PAY AN EXPEDITER TO FILE ALL REQUIRED FORMS.

NEW YORK ALTERATION WARNING STATEMENT:
 IT IS A VIOLATION OF THE NEW YORK EDUCATION LAW, ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS THE INDIVIDUAL IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

SEAN O. EISLER



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PROJECT INFO

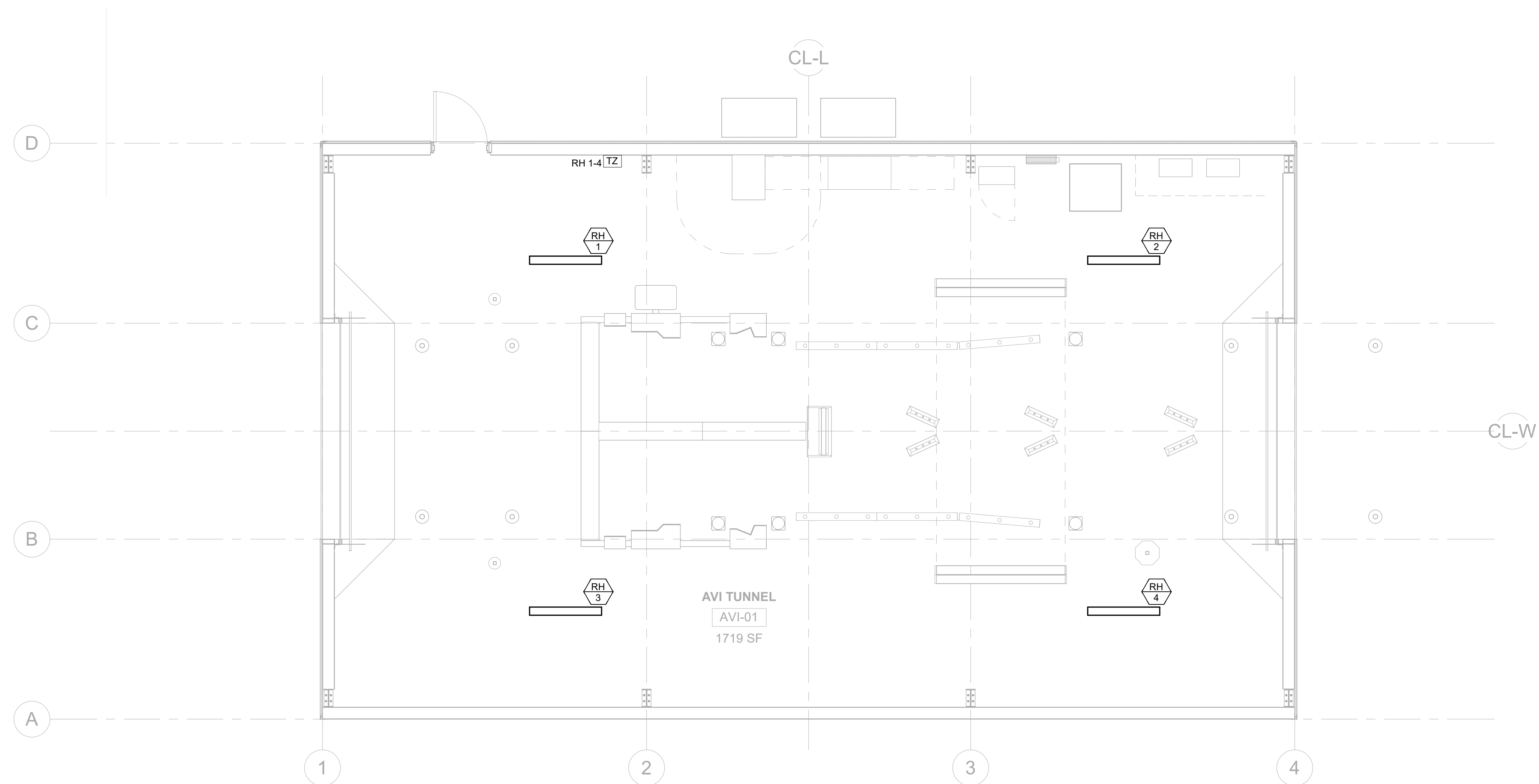
TENANT IMPROVEMENTS
1785 STATE HIGHWAY 5S
AMSTERDAM, NY 12010

RADIANT INFRARED HEATER SCHEDULE (ELECTRIC)

MARK	MANUFACTURER	MODEL	MOUNTING TYPE	SIZE (L' x W') (IN)	HEAT (BTU/H)	HEAT (KW)	V/PH	AMPS	WEIGHT (LBS)	NOTES
RH 1	INDEECO	STS-U48-6478V	SUSPENDED	48 X 5.5	22000.0	6.4	208 V / 1PH	23	38	A-F
RH 2	INDEECO	STS-U48-6478V	SUSPENDED	48 X 5.5	22000.0	6.4	208 V / 1PH	23	38	A-F
RH 3	INDEECO	STS-U48-6478V	SUSPENDED	48 X 5.5	22000.0	6.4	208 V / 1PH	23	38	A-F
RH 4	INDEECO	STS-U48-6478V	SUSPENDED	48 X 5.5	22000.0	6.4	208 V / 1PH	23	38	A-F

MODEL NUMBERS SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND MODEL NUMBERS ONLY. REVIEW THE COMPLETE DESCRIPTION, NOTES AND SPECIFICATIONS TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE MANUFACTURERS LISTED ARE THE BASIS FOR THE DESIGN.

- NOTES:
 A. MOUNT HEATERS AT MINIMUM OF 12' AFF.
 B. PROVIDE UNIT WITH CEILING MOUNTING ACCESSORIES. INSTALL VERTICALLY.
 C. MAINTAIN RECOMMENDED CLEARANCES AS INDICATED BY THE MANUFACTURER.
 D. PROVIDE FACTORY MOUNTED DISCONNECT INSTALLED ON SERVICE SIDE OF UNIT.
 F. PROVIDE WALL MOUNTED TZ SWITCH FOR MANUAL ON / OFF CONTROL FOR MULTIPLE UNITS.



1 MECHANICAL PLAN - ENLARGED AVI TUNNEL
1/4" = 1'-0"

SEALS



08/30/2024

REVISIONS

DATE	REVISION

PM:	BRM
PA:	BRM
PROJECT NUMBER:	100-2023-89
PROJECT DATE:	9/3/2024

SHEET INFO

MECHANICAL ENLARGED PLAN
M-101

SHEET ISSUED: 08/12/24

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PROJECT INFO

TENANT IMPROVEMENTS
1785 STATE HIGHWAY 5S
AMSTERDAM, NY 12010

SEALS



08/30/2024

REVISIONS

DATE	REVISION

PM	BRM

PA	BRM

PROJECT NUMBER	100-2023-89
PROJECT DATE	9/3/2024

SHEET INFO

MECHANICAL SPECIFICATIONS
M-300

SHEET ISSUED:	08/12/24

3. TEMPERATURE CONTROLS

A. GENERAL REQUIREMENTS

Provide a complete temperature control system including control panels, controllers, control power transformers, thermostats, sensors, time switches, override timers, actuators, relays, and wiring as required to control the systems as specified on the drawings.

Submit shop drawings of equipment provided for temperature control. Submit operation and maintenance data, including trouble-shooting maintenance guide, step-by-step procedures indexed for each controller and thermostat function, inspection period, cleaning methods and materials, and calibration tolerances.

Provide integrated wiring diagrams showing interconnections between field-installed equipment and package wiring furnished with the HVAC equipment. Control wiring shall be sized to accommodate the voltage drop associated with the distance between the control device and the controller.

Provide supervision and on-job checkout service as required to ensure that installation and operation of the temperature control system meets requirements of the drawings, specifications, and sequences of operation. The system shall be guaranteed for a period of one year following the acceptance of the system by the Architect/Engineer. Correct defects occurring during this period at no additional cost to the Owner.

Install control devices with top of device at 48 inches AFF to meet ADA requirements unless otherwise noted on the plans.

Provide control panels listed according to UL 508A and NEMA rated according to its installation location. Provide common keying for all panels.

C. WIRING

Provide electrical and control wiring as specified under the section "Electrical Wiring"

4. COMMISSIONING

Provide commissioning that verifies and documents the commissioned building systems have been designed, installed, and function according to the owner's project requirements, construction documents, and to minimum code requirements. Retain the services of a third-party registered design professional or approved agency that is regularly engaged in conducting commissioning to develop a commissioning plan, supporting documentation, and reports. Refer to the latest adopted edition of the applicable energy code for more information. Complete all related commissioning requirements prior to final inspections. Submit final TAB report and final commissioning report to the Engineer and Owner within 90 days of the date of receipt of the certificate of occupancy.

ASHRAE 90.1 Commissioning Requirements: Test control systems to ensure the control elements are calibrated, adjusted, and in proper working condition. Commission systems according to ASHRAE Guideline 1.1 "HVAC&R Technical Requirements for the Commissioning Process", most current edition.

IECC Commissioning Requirements: Provide commissioning of all mechanical systems included in the scope of work, except for packaged equipment not equipped with an economizer. Packaged equipment includes unitary air conditioners and conditioning units, unitary air-cooled and water-cooled heat pumps, and packaged terminal air conditioning units. Contract the third-party registered design professional or approved agency to develop a commissioning plan, preliminary commissioning report, and final commissioning report.

Commissioning plan shall include the following:

- Narrative description of activities and personnel required during commissioning.
- List of equipment and systems to be tested with description of tests to be performed.
- List of functions to be tested, including calibration and economizer controls.
- List of conditions under which the tests shall be performed.
- List of measurable criteria for performance.

Submit a copy of the preliminary commissioning report to the AHJ. Preliminary commissioning report shall include the following:

- Results of preliminary functional performance tests. Organize equipment and components specified by other Divisions in separate sections for independent review.
- List of functional performance testing procedures used during commissioning, including measurable criteria for test acceptance.
- Completed Commissioning Compliance Checklist. Refer to energy code for the form.
- Itemization of deficiencies found during testing that have not been corrected at the time of preliminary commissioning report preparation.
- List of deferred tests that cannot be performed at the time of preliminary commissioning report preparation because of climatic conditions.
- List of climatic conditions required for the performance of the deferred tests.

Final commissioning report shall include the following:

- Results of final functional performance tests. Organize equipment and components specified by other Divisions in separate sections for independent review.
- List of functional performance testing procedures used during commissioning, including measurable criteria for test acceptance.
- Itemization of resolved deficiencies found during preliminary commissioning.
- List of deferred tests that cannot be performed at the time of final commissioning report preparation because of climatic conditions.

Conduct functional performance tests on equipment, controls, and economizers. Functional performance tests shall demonstrate the following:

- The operation, function, and maintenance serviceability for each commissioned equipment, component, and system is confirmed according to the approved plans and specifications.
- The sequence of operations, including modes, backup modes (if applicable), alarms, and mode of operation upon a loss of power and restoration of power for each control device, equipment, component, and system.
- Control devices, components, equipment, and systems are calibrated, adjusted, and operate in accordance with the approved plans and specifications.
- Air economizers operated in accordance with manufacturer's specifications and specified sequence of operation.

4. ALTERNATES

A. DESCRIPTION

Refer to the architectural portion of the specification for list of alternates. Applicable sections of the base specifications shall apply to all work required by the alternate unless otherwise specified. Determine whether or not and how each alternate affects work. Include labor, materials, equipment, and transportation services necessary for and incidental to the completion of work under each particular alternate. Furnish separate price for each alternate applicable to work, stating the amount to be added or deducted from the base bid.

END OF SECTION 23

P. WARRANTIES

Warrant each system and each element thereof against all defects due to faulty workmanship, design, or material for a period of 12 months from date of Substantial Completion, unless specific items are noted to carry a longer warranty in the construction documents or manufacturer's standard warranty exceeds 12 months. Remedy all defects, occurring within the warranty period(s), as stated in the General Conditions and Division 01.

Warranties shall include labor and material, including travel expenses. Make repairs or replacements without any additional costs to the Owner, and to the satisfaction of the Owner, Architect, and Engineer.

Perform the remedial work promptly, upon written notice from the Engineer or Owner.

At the time of Substantial Completion, deliver to the Owner all warranties, in writing and properly executed, including term limits for warranties extending beyond the one year period and any actions the Owner must take in order to maintain warranty status. Each warranty instrument shall be addressed to the Owner and state the commencement date and term.

2. GENERAL MATERIALS AND INSTALLATION

A. BUILDING OPERATION

Comply with the schedule of operations as outlined in the architectural portions of this specification. Accomplish work requiring interruption of building operation at a time when the building is not in operation and only with written approval of building Owner and/or tenant. Coordinate interruption of building operation with the Owner and/or tenant a minimum of seven (7) days in advance of work.

B. COINCIDENTAL DAMAGE

Repair streets, sidewalks, drives, paving, walls, finishes, and other facilities damaged in the course of the work. Repair materials shall match existing construction. Repair work shall meet all requirements of the Owner, local authorities having jurisdiction, and meet the satisfaction of the Architect.

C. ROUGH-IN

Coordinate without delay all roughing-in with other divisions. Conceal piping, conduit, and rough-in except in unfinished areas and where otherwise shown.

D. STRUCTURALSUPPORT SYSTEMS

Structural steel used for support of equipment, ductwork and piping shall be new, clean, and conform to ASTM Designation A-36.

Support mechanical components from the building structure. Do not support mechanical components from ceilings, other mechanical or electrical components, and other non-structural elements.

E. FIRESTOPPING

Sealants and accessories shall have fire-resistance ratings indicated, as established by testing in identical assemblies in accordance with UL 2079 or ASTM E 814, or other NRTL acceptable to AHJ.

Manufacturers: Hilli, RectoSeal, Specified Technologies Inc., United States Gypsum Company, or 3M corp.

Through and Membrane Penetration Firestopping Systems Product Schedule: Provide UL listing, location, wall or floor rating, and installation drawing for each penetration fire stop system.

Where project conditions require modification to qualified testing and inspecting agency's illustrations for a particular firestopping product, submit illustration, with modifications marked, approved by penetration firestopping manufacturer's fire-protection engineer as an engineering judgment or equivalent fire-resistance-rated assembly. Include qualifications data for testing agency.

F. MOTORS AND STARTERS

Provide motors and starting equipment where not furnished with the equipment package. Motors shall have copper windings, Class B insulation, and standard squirrel cage with starting torque characteristics suitable for the equipment served. Motors controlled by variable frequency drives shall be rated for voltage peaks and minimum rise times in accordance with NEMA MG 1, Part 31 and is coordinated with other trades. Manufacturer product literature shall include shop drawings, product data, performance sheets, samples and other submittals required by this division. Highlight, mark, list, or indicate the materials, performance criteria, and accessories that are being proposed. Each motor shall be checked for proper rotation after electrical connection has been completed. Provide drip-proof enclosure for locations protected from weather and not in air stream of fan, and totally enclosed fan cooled enclosures for motors exposed to weather. Motors shall be manufactured by Century, General Electric, Louis Allis, Westinghouse, or approved equal.

Provide every motor, except fractional horsepower single phase motors with an approved type of "built-in" thermal overload protection, with a motor starter. Each starter shall be provided with overload heaters sized to the motor rating, and every three phase motor starter shall have overload heaters in each phase. Ambient compensated heaters shall be installed wherever necessary. Unless noted otherwise, motor starters shall be furnished by the Division 23 Contractor for installation and connection by the Division 26 Contractor. Starters shall be Allen-Bradley, Clark, Furnas, Square D, or approved equal.

G. ELECTRICAL WIRING

High voltage wiring is defined as 50 Volts or higher. Low voltage wiring is defined as less than 50 Volts. Line voltage wiring shall be provided by Division 26. Line voltage control and interlock wiring for mechanical systems shall also be provided by Division 26. Low voltage control wiring shall be provided by Division 23. Furnish wiring diagrams to Division 26 as required for proper equipment hookup. Coordinate with Division 26 the actual wire sizing amps for mechanical equipment (from the equipment nameplate) to ensure proper installation.

Provide power and communication wiring with transient protection in accordance with IEEE C62.41.2. All control and interlock wiring shall comply with the NEC. Control wiring shall be sized to support the voltage drop associated with the distance between the control device and the controller. Control wiring not installed in conduit shall be UL rated for plenum installation. All NEC Class 1 (line voltage) wiring shall be UL listed in approved raceway according to the NEC and Division 26 requirements. Maximum allowable voltage for control wiring shall be 120 V. All low-voltage wiring shall meet NEC Class 2 requirements. Low-voltage power circuits shall be sub-fused when required to meet Class 2 current limit.

Conduit for Control Wiring: EMT with compression fittings, cold rolled steel, zinc coated or zinc-coated rigid steel with threaded connections.

Pull and Junction Boxes: Size according to number, size, and position of entering raceway as required by National Electrical Codes. Enclosure type shall be suited to location.

Install wiring parallel to building lines wherever possible. Conceal all control wiring in finished rooms. Do not install Class 1 wiring in raceway containing Class 1 wiring. Boxes and panels containing high voltage wiring may be used for low-voltage wiring except for the purpose of interfacing the two wires (e.g., relays and transformers). All wire-to-device and wire-to-wire connections shall be made at a terminal block or terminal strip. All runs of communication wiring shall be unspliced length when that length is commercially available. Verify the integrity of the entire network following the cable installation. Use appropriate test measures for each particular cable. Label all wiring and cabling at each end within 2 inches of termination with the controller termination number. Label control devices used in the system with permanent labels using the identifiers that match the record documents.

H. VIBRATION ISOLATION

Provide vibration isolation equipment and materials by a single manufacturer. If type and deflection for specific equipment is not specified within the contract documents, reference ASHRAE Handbook "HVAC Applications" or provide per manufacturer's recommendations. Approved manufacturers include Caldyn, Kinetics Noise Control, Mason Industries, Inc., Vibration Eliminator Co., Inc., Vibration Mounting and Controls, or Vibro-Acoustics, provided their systems are in compliance with the specified design and performance requirements.

General Requirements: Select vibration isolators by the weight distribution to produce uniform deflection. Vibration isolators shall have either known un-deflected heights or calibration markings so that, after adjustment, the static deflection can be verified, thus determining that the load is within the proper range of the isolator. Isolators shall operate in the linear portion of their load versus deflection curves. Spring isolators shall have 50 percent excess capacity without becoming coil bound. Coar vibration isolators with factory-applied paint. Coar vibration isolators exposed to weather and other corrosive environments with factory-applied corrosion resistance protection. Install and adjust vibration isolators in accordance with manufacturers written instructions.

Isolator Types:

- Type WP (Waffle Pads): Provide 5/16 inch thick neoprene pads ribbed or waffled on both sides. Manufacture pads with bridge bearing quality neoprene and select for a maximum diameter of 50 and designed for 15 percent strain, with a static deflection of 0.05 inches. Incorporate steel load-spreading plates where required between the equipment and the neoprene pad to provide selected deflection. If the isolator is bolted to the structure, install a neoprene mounting sleeve under the bolt head between the steel washer and the base plate to prevent metal to metal contact. Provide Mason Industries Type W or equal.
- Type DDNM (Double Deflecting Neoprene Mounts): Provide laterally stable, double deflecting, neoprene encapsulated mount with bolt holes for attachment to supporting structure. Select for a maximum diameter of 50 and design for 15 percent strain, with a static deflection of 0.4 inches. Provide Mason Industries Type ND or equal.
- Type NR (Neoprene Bushing): Provide neoprene, rubber-in-shear bushings for lightweight (less than 100 pounds), suspended equipment supported from structure with all thread rod and angle iron or Unistrut. Select for a maximum diameter of 50 and designed for 15 percent strain, with a static deflection of 0.15 inches. Provide Mason Industries Type HMIB or equal.

I. IDENTIFICATION

Provide manufacturer's standard pre-printed, semi-rigid snap-on or permanent adhesive, pressure-sensitive vinyl pipe markers. Color code pipe markers to comply with ANSI A13.1.

3. HVAC EQUIPMENT

A. ELECTRIC INFRA-RED RADIANT HEATERS

Provide electric infrared radiant heaters as scheduled on the drawings, or equal by AmbiRad, Chromalox, King Electric, Marked, Denko, or Raywall, complete with painted-steel housing with anodized-aluminum reflector and baked enamel finish. Provide radiation pattern as scheduled, with a beam angle of 30, 60, or 90 degree symmetrical, or 90 degree asymmetrical pattern. Heating elements shall be quartz lamp with coiled tungsten-wire enclosed in clear quartz tube, nickel-chromium-wire enclosed in quartz tube, or nickel-chromium-wire embedded in magnesium oxide powder and enclosed in metal sheath. Provide with manufacturer standard thermostat with all required contactors, relays and control transformers. Provide with tilt adjust mounting bracket and manufacturer standard supports for suspending of units from above. Install units with sufficient clearance from adjacent construction, piping, ductwork, and other obstructions to allow for service and maintenance, maintaining all manufacturer required clearances. Verify operation of each unit by measuring input voltage and current simultaneously for a period of ten minutes of continuous operation.

H. PROTECTION OF EQUIPMENT AND MATERIALS

Store and protect from damage equipment and materials delivered to job site. For materials and equipment susceptible to changing weather conditions, dampness, or temperature variations, store inside in conditioned spaces. For materials and equipment not susceptible to these conditions, cover with waterproof, tear-resistant, heavy tarp or polyethylene plastic as required to protect from plaster, dust, dirt, paint, water, or physical damage. Replace insulation that has become wet at any time during construction. Drying the insulation is not acceptable. Seal any tears or joints of internal fiberglass insulation. Equipment and material damaged by construction activities shall be rejected and Contractor shall furnish new equipment and material of a like kind at his own expense.

Keep premises broom clean of foreign material created during work performed under this contract. Piping, equipment, etc. shall have a neat and clean appearance at the termination of the work. Remove debris from ceiling/return air plenum, including dust.

Plug, seal, or cap open ends of ductwork and piping systems while stored and installed during construction when not in use to prevent the entrance of debris into the systems. Remove temporary protection prior to starting equipment and turning the system over to the owner.

I. SUBSTITUTIONS

Materials, products, equipment, and systems described in the Bidding Documents establish a standard of required function, dimension, appearance and quality to be met by the proposed substitution. The base bid shall include only the products from manufacturers specifically named in the drawings and specifications. To request a substitution, request the Substitution Request Form from the Architect or Engineer. Complete and send the Substitution Request Form for each material, product, equipment, or system that is proposed to be substituted. The burden of proof of the merit of the proposed substitution is upon the proposer.

Unless stated otherwise in writing to the Engineer by the Contractor, Contractor warrants to the Engineer, Architect, and Owner the following:

- Proposed substitution has been fully investigated and determined to meet or exceed the specified Work in all respects unless stated otherwise in the substitution request.
- Proposed substitution is consistent with the Contract Documents and will produce indicated results, including functional clearances, maintenance service, and sourcing of replacement parts.
- Proposed substitution has received necessary approvals of authorities having jurisdiction.
- Same warranty will be furnished for proposed substitution as for specified Work.
- If accepted substitution fails to perform as required, Contractor shall replace substitute material or system with that originally specified and bear costs incurred thereby.
- Coordination, installation and changes in the Work as necessary for accepted substitution will be complete in all respects.

No substitutions will be considered unless the Substitution Request Form is completed and attached with the appropriate substitution documentation. No substitution will be considered prior to receipt of bids unless written request for approval to bid has been received by the Engineer at least ten (10) calendar days prior to the date for receipt of bids.

If the proposed substitution is approved prior to receipt of bids, such approval will be stated in an addendum. Bidders shall not rely upon approvals made in any other way. Verbal approval will not be given. No substitutions will be considered after the contract is awarded unless specifically provided in the contract documents.

J. SUBMITTALS

Assemble and submit for review shop drawings, material lists, manufacturer product literature for equipment to be furnished, and items requiring coordination between contractors under this contract. Provide submittals in sufficient detail so as to demonstrate compliance with these contract documents and the design concept. Prior to transmitting submittals, verify that the equipment submitted is mutually compatible and suitable for the intended use, will fit the available space, and maintain manufacturer recommended service clearances. If the size of equipment furnished makes necessary any change in location or configuration, submit a shop drawing showing the proposed layout.

Transmit submittals as early as required to support the project schedule. Allow for two weeks Engineer review time, plus follow-up mailing time via the Architect, plus a duplication of this time for resubmittal, if required. Only resubmit those sections requested for resubmittal.

Submittals shall contain the project name, applicable specification section, submittal date, equipment identification acronym as used on the drawings, and the Contractor's stamp. The stamp shall certify that the submittal has been checked by the Contractor, complies with the drawings and specifications, and is coordinated with other trades. Manufacturer product literature shall include shop drawings, product data, performance sheets, samples and other submittals required by this division. Highlight, mark, list, or indicate the materials, performance criteria, and accessories that are being proposed. Each motor shall be checked for proper rotation after electrical connection has been completed and returned without review.

Submittals and shop drawings shall not contain the firm name, logo, seal, or signature of the Engineer. They shall not be copies of the work product of the Engineer. If the Contractor desires to use elements of such product, refer to paragraph "Electronic Drawing Files" for procedures to be used.

Separate submittals according to individual specification sections. Illegible submittals will be rejected and returned without review. Catalog data shall be properly identified, indexed and tabbed. A hard copy format or a single PDF file for each specification section is acceptable. Each item or submittal shall be clearly marked and accessories indicated. Label the catalog data with the equipment identification acronym or number as used on the drawings and include performance curves, capacities, sizes, weights, materials, finishes, wiring diagrams, electrical requirements and deviations from specified equipment or materials. For equipment with motor starters or VFDs, include short circuit current ratings. Mark out inapplicable items. Shop drawings will be returned without review if the above mentioned requirements are not met.

Provide the quantity of submittals required by Division 01. If not indicated and hard-copy sets are provided by Division 23, furnish wiring diagrams to Division 26 as required for proper equipment submittals for this project. For electronic submittals, Contractor shall submit the documents in accordance with the procedures specified in Division 01. Contractor shall notify the Architect and Engineer that the submittals have been posted. If electronic submittal procedures are not defined in Division 01, Contractor shall include the website, user name, and password information needed to access the submittals. For submittals sent by e-mail, Contractor shall copy the designated representatives of the Architect and Engineer. Contractor shall allow for the Engineer review time as specified above in the construction schedule. Contractor shall submit only the documents required to purchase the materials and/or equipment in the electronic submittal.

The checking and subsequent acceptance of submittals by the Engineer and/or Architect shall not relieve the Contractor from responsibility for deviations from the drawings and specifications, errors in dimensions, details, size of members, or quantities, omissions of components or fittings; coordination of electrical requirements; and not coordinating items with actual building conditions and adjacent work. Proceed with the procurement and installation of equipment only after receiving approved shop drawings relating to each item.

K. ELECTRONIC DRAWING FILES

In preparation of shop drawings or record drawings, Contractor may, at his option, obtain electronic drawing files in AutoCAD or DXF format on CD-ROM disk, DVD disk, flash drive or direct download, as desired, from the Engineer for a shipping and handling fee of \$200 for a drawing set up to 12 sheets and \$15 per sheet for each additional sheet. Contact the Architect for written authorization and Engineer for the necessary release agreement form and to specify shipping method and drawing file format. In addition to payment, the written authorization from the Architect and release agreement form from the Engineer must be received before electronic drawing files will be sent.

L. RECORD DRAWINGS (AS-BUILT DRAWINGS)

During progress of the work in this division, Contractor shall maintain an accurate record of all changes made during the installation of the system. Upon completion of the work, accurately transfer all record information to three identical sets of the approved shop drawings. Insert one set into each copy of the manual described below.

See Division 01 and General Conditions for additional information.

M. OPERATION AND MAINTENANCE INSTRUCTIONS

During the course of construction, collect and compile a complete brochure of equipment furnished and installed on this project. Include operational and maintenance instructions, manufacturer's catalog sheets, wiring diagrams, parts lists, approved submittals and shop drawings, warranties, and descriptive literature as furnished by the equipment manufacturer. Include an inside cover sheet that lists the project name, date, Owner, Architect, Engineer, General Contractor, Sub-Contractor, and an index of contents.

Submit three copies of literature bound in approved binders with index and tabs separating equipment types to the Architect, for Engineer's review, at the termination of the work. Paper clips, staples, rubber bands, loose-leaf binding, and mailing envelopes are not considered approved binders. Final approval of systems installed under this contract shall be withheld until this equipment brochure is received and deemed complete by the Architect and Engineer. Instruct workmen to save required literature shipped with the equipment itself for inclusion in this brochure.

Include Record Drawings as described above.

Refer to Division 01 for acceptance of electronic manuals for this project. For electronic manuals, refer to paragraph "Submittals" for requirements.

N. SPARE PARTS

Furnish to Owner, with receipt, the following spare parts for the equipment furnished for this project:

- One set of spare filters of each type required for each unit. In addition to the spare set of filters, install new filters prior to testing, adjusting, and balancing work and before turning system over to Owner.
- Furnish one complete set of belts for each fan.
- Furnish three operating keys for each type of air outlet and inlet that require them.

O. TRAINING

At a time mutually agreed upon between the Owner and Contractor, provide the services of a factory trained and authorized representative to train Owner's designated personnel on the operation and maintenance of the equipment provided for this project.

Provide training to include, but not be limited to, an overview of the system and/or equipment as it relates to the facility as a whole, operation and maintenance procedures and schedules related to startup and shutdown, troubleshooting, servicing, preventive maintenance and appropriate operator intervention, and review of data included in the operation and maintenance manuals.

Submit a certification letter to the Architect stating that the Owner's designated representative has been trained as specified herein. Letter shall include date, time, attendees and subject of training. The Contractor and the Owner's representative shall sign the certification letter indicating agreement that the training has been provided.

Schedule training with Owner with at least 7 days advance notice.

Division 23: HEATING, VENTILATING, AND AIR CONDITIONING

1. GENERAL INSTRUCTIONS

A. GENERAL REQUIREMENTS

All requirements under Division 01 and the general and supplementary conditions of these specifications apply to this section and division. Where the requirements of this section and division exceed those of Division 01, this section and division take precedence. Become thoroughly familiar with all its contents as to requirements that affect this division, section, or both. Work required under this division includes all material, equipment, appliances, transportation, services, and labor required to complete the entire system as required on the drawings and specifications, or reasonably inferred to be necessary to facilitate the function of each system as implied by the design and the equipment specified.

The specifications and drawings for the project are complementary, and any portion of work described in one shall be provided as if described in both. In the event of discrepancies, notify the Engineer and request clarification prior to proceeding with the work involved.

Drawings are graphic representations of the work upon which the contract is based. They show the materials and their relationship to one another, including sizes, shapes, locations, and connections. They convey the scope of work, indicating the intended general arrangement of the systems without showing all of the exact details as to elevations, offsets, control lines, and other installation requirements. Use the drawings as a guide when laying out the work and to verify that materials and equipment will fit into the designated spaces, and which when installed per manufacturers' requirements, will ensure a complete, coordinated, satisfactory, and properly operating system.

B. DEFINITIONS

Division: References contained in this specification follow the numbering system defined in the Construction Specifications Institute (CSI) MasterFormat 2004 Edition. Specification Divisions 01 through 13 provided with this project may reference the CSI MasterFormat 1995 Edition. The corresponding division references between the 2004 Edition and 1995 Edition are as follows:

2004 Edition	1995 Edition
1. Division 21 – Fire Suppression	Division 15
2. Division 22 – Plumbing	Division 15
3. Division 23 – HVAC	Division 15
4. Division 26 – Electrical	Division 16
5. Division 27 – Communications	Division 16
6. Division 28 – Electronic Safety and Security	Division 16

Furnish: "to supply and deliver to the project site, ready for unloading, unpacking, assembly, installation and similar operations."

Install: "to perform all operations at the project site including, but not limited to, the actual unloading, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, testing, commissioning, starting up and similar operations, complete, and ready for the intended use."

Provide: "to furnish and install."

Furnished by Owner (or Owner-Furnished) or Furnished by Others: "an item furnished by the Owner or under other divisions or contracts, and installed under the requirements of this division, complete and ready for intended use, including all items and services incidental to the work necessary for proper installation and operation. Include the installation under the warranty required by this division."

Engineer: Where referenced in this division, "Engineer" is the Engineer of Record and the Design Professional for the work under this division, and is a consultant to, and an authorized representative of the Architect, as defined in the General and/or Supplementary Conditions. When used in this division, Engineer means increased involvement by and obligations to the Engineer, in addition to involvement by and obligations to the Architect.

AHJ: The local code and/or inspection agency (Authority) Having Jurisdiction over the work.

NRTL: Nationally recognized testing laboratory, as defined and listed by OSHA in 29 CFR 1910.7 (e.g., UL, ETL, CSA), and acceptable to the AHJ over this project. Nationally recognized testing laboratories and standards listed are used only to represent the characteristics required and are not intended to restrict the use of other NRTLs that are acceptable to the AHJ and standards that meet the specified criteria.

Substitution: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor. Substitutions include Value Engineering proposals.

- Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
- Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.

The terms "approved equal



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PROJECT INFO

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1785 STATE HIGHWAY 5S
AMSTERDAM, NY 12010

SEALS



08/30/2024

REVISIONS

DATE	REVISION
0	19/3/2024 ISSUED FOR PLAN REVIEW

SHEET INFO

PM	BRM
PA	SL
PROJECT NUMBER	100-2023-89
PROJECT DATE	9/3/2024

ELECTRICAL LEGEND & GENERAL NOTES

E-000

ELECTRICAL SYMBOLS

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBREVIATIONS ARE USED. V4.02

STANDARD MOUNTING HEIGHTS	ANNOTATION	LIGHTING	BOXES, LIGHTING CONTROL & WIRING DEVICES	ELECTRICAL ONE-LINE & RISER DIAGRAM
AUDIBLE APPLIANCE (CENTERLINE) ALARM (TOP OF DEVICE) ANNUNCIATOR PANEL (TOP OF DISPLAY) CONTROLS (TOP OF DEVICE) DATA WALL OUTLET EXIT SIGN (WALL MOUNTED) FIRE ALARM ANNUNCIATOR PANEL (TOP OF DISPLAY) FIRE ALARM BELL (EXTERIOR) (CENTERLINE) FIRE ALARM CONTROL PANEL/UNIT (TOP OF DISPLAY) INTERCOM (TOP OF DEVICE) PULL STATION (TOP OF DEVICE) RECEPTACLE (BOTTOM OF DEVICE) RECEPTACLE (ABOVE COUNTER) 4" ABOVE BACKSPASH/COUNTER, 40" MAX RECEPTACLE (CLOCK) (CENTERLINE) RECEPTACLE (EQUIPMENT ROOMS) (TOP OF DEVICE) RECEPTACLE (EXTERIOR) RECEPTACLE (GARAGES) REMOTE INDICATING LIGHT (EQUIPMENT ROOMS) (TOP OF DEVICE) REMOTE INDICATING LIGHT (FINISHED AREAS) SAFETY SWITCH (TOP OF DEVICE) STARTER (TOP OF DEVICE) SWITCH (TOP OF DEVICE) TELEPHONE WALL OUTLET (TOP OF DEVICE) TELECOMMUNICATIONS BACKBOARD TELEVISION OUTLET VISIBLE APPLIANCE (CENTERLINE)	PLAN NOTE CALLOUT MECHANICAL OR FIRE PROTECTION PLAN NOTE CALLOUT PLUMBING PLAN NOTE CALLOUT ELECTRICAL OR FIRE ALARM PLAN NOTE CALLOUT TECHNOLOGY PLAN NOTE CALLOUT PLUMBING EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED, UNO). REFER TO PLUMBING FIXTURE OR EQUIPMENT SCHEDULES EQUIPMENT DESIGNATION (OWNER FURNISHED, CONTRACTOR INSTALLED, UNO) MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED, UNO) CONNECTION POINT OF NEW WORK TO EXISTING DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER SECTION CUT DESIGNATION DEDICATED EQUIPMENT ACCESS TILE ACCESS PANEL	LIGHT FIXTURE a = LOWER CASE LETTER IS SWITCH IDENTIFIER A = UPPER CASE LETTER INDICATES LIGHT FIXTURE TYPE [OS] = INTEGRAL OCCUPANCY SENSOR = WALL MOUNT = ARROW INDICATED AIMING DIRECTION LIGHT FIXTURE CIRCUITED AS A NIGHT LIGHT (NL) EMERGENCY LIGHT FIXTURE WITH EMERGENCY LIGHTING BATTERY PACK OR CONNECTED TO EMERGENCY SOURCE NIGHT LIGHT/EMERGENCY LIGHT FIXTURE WITH EMERGENCY BATTERY PACK OR CONNECTED TO EMERGENCY SOURCE LIGHT FIXTURE WITH DUAL BALLASTS CIRCUITED SEPARATELY (SHADING IMPLIES EMERGENCY LIGHT FIXTURE) LIGHTING TRACK (# INDICATES RELAY NUMBER) MIRROR LIGHTS EXTERIOR PARKING LOT LIGHT FIXTURE EXTERIOR PEDESTRIAN POST TOP LIGHT FIXTURE EXTERIOR LIT BOLLARD LIGHT EXIT SIGN - CEILING / WALL MOUNTED, ARROWS AS INDICATED, FACE HATCHED EMERGENCY LIGHTING LIGHT EQUIPMENT WITH BATTERY PACK - CEILING/WALL MOUNTED AFA (AREA FOR EVACUATION ASSISTANCE) SIGN - CEILING/WALL MOUNTED, ARROWS AS INDICATED REFER TO LIGHT FIXTURE SCHEDULE FOR MORE INFORMATION	SWITCH LETTER DESIGNATIONS AS FOLLOWS: BLANK = SINGLE POLE 2 = TWO POLE 3 = THREE-WAY 4 = FOUR-WAY D = DIMMER F = FAN SPEED CONTROL FH = FRACTIONAL HORSEPOWER MANUAL CONTROLLER FM = FACTORY FURNISHED AND MOUNTED H = INTEGRAL HORSEPOWER MANUAL CONTROLLER K = KEYS LW = LOW VOLTAGE / DIGITAL M = MANUAL MOTOR STARTER DISCONNECT OS# = OCCUPANCY SENSOR P = SPST PILOT LIGHT WP = WEATHER PROOF 30/3R = AMPERES/POLES/NEMA ENCLOSURE RATING # = REFER TO LIGHTING CONTROL DEVICE SCHEDULE AUTOMATIC LOAD CONTROL RELAY BRANCH CIRCUIT TRANSFER SWITCH CEILING / WALL MOUNTED OCCUPANCY SENSOR (# INDICATES TYPE PER SCHEDULE) MIRROR LIGHTS CORNER 90 DEGREE SENSING ONE-DIRECTION SENSING, CEILING/WALL MOUNT CEILING MOUNT, TWO-DIRECTION SENSING CEILING MOUNT, FOUR-DIRECTION SENSING CONTACTOR (SIZE, COIL VOLTAGE AND NUMBER OF POLES AS INDICATED) TRACK-MOUNTED CURRENT LIMITER (## INDICATES AMPERAGE) DAYLIGHT SENSOR (# INDICATES TYPE PER SCHEDULE) LIGHTING CONTROLS PROCESSOR AND/OR EQUIPMENT POWER PACK (# INDICATES TYPE PER SCHEDULE) PHOTOELECTRIC SWITCH ROOM CONTROLLER (# INDICATES TYPE PER SCHEDULE) TIME SWITCH SIMPLEX RECEPTACLE - NEMA 5-20R, UNO DUPLICATE RECEPTACLE - NEMA 5-20R, UNO DOUBLE DUPLICATE RECEPTACLE - NEMA 5-20R, UNO SPECIAL RECEPTACLE - NEMA TYPE AS NOTED TWIST-LOCK TYPE RECEPTACLE BLANK FACE GFCI FEED THROUGH DEVICE GFCI TYPE RECEPTACLE* AUTOMATICALLY CONTROLLED SIMPLEX RECEPTACLE SPLIT-WIRED DUPLICATE RECEPTACLE* HALF AUTOMATICALLY CONTROLLED AUTOMATICALLY CONTROLLED DUPLICATE RECEPTACLE* DOUBLE DUPLICATE RECEPTACLE WITH BOTH DUPLICATES AUTOMATICALLY CONTROLLED EMERGENCY RECEPTACLE* RECEPTACLE INSTALLED ABOVE COUNTER OR BACKSPASH* RECEPTACLE INSTALLED VIA DROP CORD* RECEPTACLE INSTALLED IN HORIZONTAL ORIENTATION* ADDITIONAL RECEPTACLE LETTER DESIGNATIONS AS FOLLOWS: CH = CLOCK HANGER TYPE G = RCPT PROTECTED BY GFCI CIRCUIT BREAKER OR UPSTREAM GFCI DEVICE IG = ISOLATED GROUND S = MANUALLY SWITCHED SP / TVSS = SURGE PROTECTION TR = TAMPER RESISTANT TV = TELEVISION USB = USB/DUPLICATION WP = WEATHER PROOF COVER WR = WEATHER RESISTANT MULTI-OUTLET ASSEMBLY TELEPHONE OUTLET DATA OUTLET MULTI-SERVICE OUTLET, TELEPHONE AND DATA MULTI-SERVICE POWER POLE WITH TELEPHONE, DATA AND POWER OUTLETS A = TYPE, REFER TO PLANS, SCHEDULES AND SPECIFICATIONS FLOOR BOX WITH TELEPHONE, DATA AND/OR POWER OUTLETS A = TYPE, REFER TO PLANS, SCHEDULES AND SPECIFICATIONS POKE THROUGH, A = TYPE, REFER TO PLANS, SCHEDULES AND SPECIFICATIONS THERMOSTAT JUNCTION/OUTLET BOX, MOUNTING AS NOTED OR DETAILED SYMBOL DEMONSTRATED WITH DUPLEX RECEPTACLE. WHEN USED IN COMBINATION WITH OTHER DEVICES MEANING IS SIMILAR FOR THOSE DEVICE TYPES. REFER TO LIGHTING CONTROL DEVICE SCHEDULE FOR MORE INFORMATION	SWITCH (RATING AND POLES AS INDICATED) DRAWOUT CIRCUIT BREAKER (RATINGS, POLES, TRIP SIZE AND BREAKER TYPE AS INDICATED) FUUSED SWITCH (RATING, POLES, FUSE SIZE AND TYPE AS INDICATED) COMBINATION FUUSED SWITCH/STARTER (RATING, POLES, FUSE SIZE, FUSE TYPE, NEMA STARTER SIZE, NEMA ENCLOSURE TYPE AS INDICATED) CIRCUIT BREAKER (RATING, POLES, TRIP SIZE AND BREAKER TYPE AS INDICATED) COMBINATION CIRCUIT BREAKER/STARTER (RATING, POLES, TRIP SIZE, BREAKER TYPE, NEMA STARTER SIZE, NEMA ENCLOSURE TYPE AS INDICATED) CIRCUIT BREAKER TRIP FUNCTIONS L = LONG TIME S = SHORT TIME I = INSTANTANEOUS G = GROUND FAULT PANELBOARD, SINGLE OR MULTI-SECTION (REFER TO SCHEDULES) ISOLATED POWER PANELBOARD W/ INTEGRAL TRANSFORMER (REFER TO SCHEDULES) TRANSFORMER (TYPE AND RATINGS AS INDICATED) SHIELDED TRANSFORMER (TYPE AND RATINGS AS INDICATED) TRANSFER SWITCH (RATINGS AS INDICATED) ATS = AUTOMATIC TRANSFER SWITCH MTS = MANUAL TRANSFER SWITCH NTS = NON-AUTOMATIC TRANSFER SWITCH TRANSFER SWITCH WITH BYPASS (RATINGS AS INDICATED) GENERATOR (RATINGS AS INDICATED) INDICATES CONNECTION TO GROUNDING ELECTRODE SYSTEM IF GENERATOR IS CONNECTED AS A SEPARATELY DERIVED SOURCE SWITCHGEAR, SWITCHBOARD AND/OR DISTRIBUTION PANELBOARD (TYPE, RATING, DEVICES AND ACCESSORIES AS INDICATED) AMMETER SWITCH VOLTMETER SWITCH AMMETER (RANGE AS SPECIFIED OR REQUIRED) VOLTMETER (RANGE AS SPECIFIED OR REQUIRED) COMBINATION DIGITAL VOLT METER/AMMETER UTILITY METER (AS REQUIRED BY UTILITY) WATT-HOUR METER, "D" DENOTES DEMAND REGISTER, "15" DENOTES MINUTES OF DEMAND INTERVAL CURRENT TRANSFORMER RATING AS SPECIFIED OR REQUIRED POTENTIAL TRANSFORMER RATING AS SPECIFIED OR REQUIRED ENERGY-REDUCING MAINTENANCE SWITCH GROUND FAULT RELAY PHASE FAILURE RELAY PHASE ROTATION MONITOR RELAY KIRK-KEY INTERLOCK (# INDICATES KEY PAIR) SHUNT TRIP SURGE-PROTECTIVE DEVICE VARIABLE FREQUENCY DEVICE GROUND CONNECTION GROUND CONNECTION WITH TEST WELL GROUND ROD LIGHTNING ARRESTER CAPACITOR CONTACT (OPEN OR CLOSED) HEATER MOTOR BLOCK LOAD KW OR KVA FAULT POINT REFERENCED IN SHORT CIRCUIT CURRENT AND VOLTAGE DROP SPREADSHEET
ABBREVIATIONS	CIRCUITING & WIRING	POWER EQUIPMENT	SIGNALING	
AF AMPERE FUSE SIZE AFC ABOVE FINISHED CEILING AFF ABOVE FINISHED FLOOR AFB ABOVE FINISHED GRADE AH AUTHORITY HAVING JURISDICTION AHU AIR HANDLING UNIT AIC AMPERE INTERRUPTING CAPACITY AS AMPERE SWITCH SIZE AT AMPERE TRIP SETTING ATS AUTOMATIC TRANSFER SWITCH AV AUDIO VISUAL BAS BUILDING AUTOMATION SYSTEM BESS BATTERY ENERGY STORAGE SYSTEM BKR BREAKER C CAT CATV CABLE TELEVISION SYSTEM CCTV CLOSED CIRCUIT TELEVISION CD CANDELA CCT CIRCUIT CODE APPLICABLE CODE CT ADOPTED BY JURISDICTION CTR CURRENT TRANSFORMER CTR CENTER CTRL CONTROL/CONTROLLED CVD CUMULATIVE VOLTAGE DROP D/DEM DEMOLITION DDPT DOUBLE-POLE, DOUBLE-THROW DPST DOUBLE-POLE, SINGLE-THROW E/ET/RE EXISTING TO REMAIN EC ELECTRICAL CONTRACTOR EF EXHAUST FAN EM EMERGENCY EMS ENERGY MANAGEMENT SYSTEM ELV ELECTRONIC LOW-VOLTAGE ENERGY-REDUCING MAINTENANCE SWITCH EV ELECTRIC VEHICLE EWC ELECTRIC WATER COOLER FAFP FIRE ALARM ANNUNCIATOR PANEL FACP FIRE ALARM CONTROL PANEL FCA AVAILABLE FCU FAN COIL UNIT FF FINISHED FLOOR FLA FULL LOAD AMPS FLR FLOOR GC GENERAL CONTRACTOR GEC GROUNDING ELECTRODE CONDUCTOR GES GROUNDING ELECTRODE SYSTEM GFR GROUND FAULT RELAY G ISOLATED GROUND ISC SHORT CIRCUIT CURRENT JB/BOX JUNCTION BOX LF LINEAR FEET LRA LOCKED ROTOR AMPS LTGLTS LIGHTING LIGHTS MAJ MAKE-UP AIR UNIT MAX MAXIMUM MCA MINIMUM CIRCUIT AMPACITY	HOMERUN TO PANELBOARD, INFORMATION AT ARROWS ARE CIRCUIT NUMBERS AND PANELBOARD FOR TERMINATION, REFER TO PANELBOARD SCHEDULES FOR BRANCH CIRCUIT CONDUCTOR SIZES. INDICATES RELAY NUMBER CIRCUIT CONTINUATION OR PARTIAL CIRCUIT CONDUIT CONCEALED CONDUIT CONCEALED (EMERGENCY) CONDUIT IN/UNDER FLOOR/GROUND CONSTRUCTION EXPOSED CONDUIT EXPOSED CONDUIT (EMERGENCY) FLEXIBLE CONDUIT CONDUIT TURNING DOWN CONDUIT TURNING UP CONNECTION POINT OR EQUIPMENT TERMINATION EQUIPMENT TERMINATION WHERE TICK MARKS ARE SHOWN, THE FOLLOWING SHALL GOVERN: SWITCHING HOT (PHASE) CONDUCTORS (SHOWN TRAILING NEUTRAL) NEUTRAL (GROUNDED) CONDUCTOR UNSWITCHED HOT (PHASE) CONDUCTORS (SHOWN LEADING NEUTRAL) NOTE: HASH MARKS INDICATE QUANTITY OF CONDUCTORS EQUIPMENT GROUNDING CONDUCTOR IN CONDUIT (GREEN INSULATION OR BARE) ISOLATED GROUNDING CONDUCTOR IN CONDUIT (GREEN INSULATION WITH YELLOW TRACER) WHERE TICK MARKS ARE NOT SHOWN, THE FOLLOWING SHALL GOVERN: # OF POLES HOT (PHASE) NEUTRAL (GROUNDED) GROUNDING** 1P (1) (1) UNO (1) 2P (2) (1) UNO (1) 3P (3) (1) UNO (1) * PROVIDE ADDITIONAL CONDUCTORS THROUGH ENTIRE CIRCUIT (SWITCHED, UNSWITCHED/DEM, ETC.) AS INDICATED THROUGHOUT CONSTRUCTION DOCUMENTS AND AS REQUIRED FOR A COMPLETE AND WORKING SYSTEM. ** REFER TO SPECIFICATIONS FOR LIMITATIONS ON SHARING NEUTRAL (GROUNDED) CONDUCTORS, DO NOT CIRCUIT AS A MULTI-WIRE BRANCH CIRCUIT, UNO. *** PROVIDE ADDITIONAL ISOLATED GROUNDING CONDUCTORS WHERE INDICATED. REFER TO SPECIFICATIONS, PLANS, NOTES, WIRING AND CONTROL DIAGRAMS FOR ADDITIONAL CIRCUITING REQUIREMENTS.	ELECTRICAL PANELBOARD (SURFACE OR FLUSH MOUNT) ELECTRICAL CABINET (SURFACE OR FLUSH MOUNT), TYPE AS NOTED PLYWOOD TERMINAL BOARD FOR TELEPHONE SYSTEM, UNO, SIZE AS NOTED ELECTRICAL EQUIPMENT ON HOUSEKEEPING PAD TRANSFORMER DISCONNECT SWITCH, 200/3/150/3R = AMPERES/POLE/FUSE/NEMA ENCLOSURE RATING CB = CIRCUIT BREAKER (200/3/CB) FM = FACTORY FURNISHED AND MOUNTED NF = NON-FUSED OL = SIZE INDICATED ON ONE-LINE DIAGRAM NO VALUE FOR NEMA ENCLOSURE = NEMA 1 COMBINATION DISCONNECT (SAFETY) SWITCH AND MOTOR STARTER 30/3/15/1/3R = AMPERES/POLE/FUSE/NEMA STARTER SIZE/NEMA ENCLOSURE RATING CB = CIRCUIT BREAKER (30/3/CB/1) FM = FACTORY FURNISHED AND MOUNTED NF = NON-FUSED NO VALUE FOR NEMA ENCLOSURE = NEMA 1 MAGNETIC MOTOR STARTER, NEMA SIZE AS NOTED, 3-POLE, UNO VARIABLE FREQUENCY DRIVE INDICATING LIGHT EMERGENCY POWER OFF BUTTON STOP-START PUSH BUTTON CONTROL STATION HAND-OFF-AUTO PUSH BUTTON CONTROL STATION MUSHROOM-TYPE PUSH BUTTON OVER-HEAD PADDLE FAN SIGNALING BELL SIGNALING BUZZER LV TRANSFORMER NURSE CALL (HOSPITAL) CODE BLUE PUSHBUTTON STATION BED RECEPTACLE DUTY STATION STAFF EMERGENCY ASSIST STATION PATIENT EMERGENCY PULL CORD STATION INTERCOM NURSE CALL KEY SWITCH NURSE CALL BEDSIDE STATION - SINGLE PATIENT NURSE CALL BEDSIDE STATION - DOUBLE PATIENT NURSE CALL VISUAL ANNUNCIATOR PANEL STAFF STATION (NORMAL, EMERGENCY & CODE BLUE) NURSE CALL MASTER STATION DOME LIGHT - CEILING MOUNTED, B = BUZZER DOME LIGHT - WALL MOUNTED, B = BUZZER ZONE DOME LIGHT, B = BUZZER	CODE BLUE PUSHBUTTON STATION BED RECEPTACLE DUTY STATION STAFF EMERGENCY ASSIST STATION PATIENT EMERGENCY PULL CORD STATION INTERCOM NURSE CALL KEY SWITCH NURSE CALL BEDSIDE STATION - SINGLE PATIENT NURSE CALL BEDSIDE STATION - DOUBLE PATIENT NURSE CALL VISUAL ANNUNCIATOR PANEL STAFF STATION (NORMAL, EMERGENCY & CODE BLUE) NURSE CALL MASTER STATION DOME LIGHT - CEILING MOUNTED, B = BUZZER DOME LIGHT - WALL MOUNTED, B = BUZZER ZONE DOME LIGHT, B = BUZZER	
LINETYPE LEGEND	HATCHING LEGEND			
THROUGHOUT THE DRAWINGS DIFFERENT LINETYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS EXISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF NEW WORK AND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTURE. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR. PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASING DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE GANE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE, ETC.	ENLARGED PLAN NOT IN SCOPE (NIS)			
EXISTING DEMOLISH NEW FUTURE * APPLIES TO COLOR PLOTS ONLY	ARTICLE 700 OR LIFE SAFETY ARTICLE 701 OR CRITICAL / EQUIPMENT BRANCH ARTICLE 702 OR OPTIONAL			

AVI ELECTRICAL DEMO NOTES:

- A. ALL EXISTING DEVICES AND/OR CIRCUITS SHOWN ARE INDICATED ONLY FOR INFORMATION PURPOSES. VISIT THE SITE AND VERIFY ALL CONDITIONS AS THEY EXIST AND REMOVE, RELOCATE, AND/OR REWORK ELECTRICAL EQUIPMENT OR CIRCUITS NECESSARY FOR A COMPLETE REWIRING SYSTEM.
 - B. FAILURE TO FAMILIARIZE WITH THE SITE WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR PERFORMING ALL WORK NECESSARY TO PROVIDE A WORKMANLIKE INSTALLATION.
 - C. ALL WORK SHALL CONFORM TO THE APPLICABLE PROVISIONS OF THE ADOPTED ELECTRICAL CODE.
 - D. NOTIFY BUILDING OPERATIONS MANAGER (7) BUSINESS DAYS IN ADVANCE OF ALL INTERRUPTIONS TO THE EXISTING BUILDING SERVICES.
 - E. MAINTAIN ACCURATE RECORDS OF MODIFICATIONS PRIVATELY TO THE CONTRACTOR'S RECORDS. DELIVER ALL "RECORD" DRAWINGS TO OWNER INDICATING SUCH CHANGES.
 - F. DISCONNECT AND LABEL ABANDONED FEEDERS AND CIRCUITS.
 - G. WHERE NEW WORK INTERFERES WITH CIRCUITS IN ROOMS OTHERWISE UNDISTURBED, EXISTING CIRCUITS SHALL BE REWORKED AS REQUIRED TO MAINTAIN SERVICE.
 - H. REMOVE ALL UNUSED EQUIPMENT, FIXTURES AND PANELS FROM THE SITE, UNLESS NOTED OTHERWISE.
 - I. COORDINATE ROUTING OF CONDUITS AND LOCATIONS OF EQUIPMENT WITH OTHER TRADES TO AVOID CONFLICTS.
 - J. PROVIDE BLANK COVER PLATES WHERE DEVICES (WITH CONCEALED DEVICES) ARE REMOVED LEAVING EXPOSED BACKBOXES AFTER THE FINAL SURFACE IS APPLIED.
 - K. VERIFY THE LOCATION AND CONDITION OF ALL EXISTING UTILITIES AND PROTECT DURING THE COURSE OF THEIR WORK. EXISTING UTILITIES BUILDING MATERIALS AND ANY ASSOCIATED ITEMS WHICH ARE DAMAGED BY CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE (IN A TIMELY MANNER) AND TO THE OWNER'S APPROVAL.
 - L. REMOVE ALL ROMEK, BX, AND OTHER FLEXIBLE CONDUIT OR CABLE SYSTEMS AND EXPOSED WIRING FROM ALL ABANDONED CIRCUITS.
 - M. PROVIDE TEMPORARY CONNECTIONS TO MAINTAIN POWER TO BRANCH AND FEEDER CIRCUITS. A PERMANENT PANEL IS INSTALLED TO RECONNECT THE EXISTING REMAINING CIRCUITS.
 - N. COORDINATE THE REMOVAL OF ALL MECHANICAL AND PLUMBING EQUIPMENT AND REMOVE ALL ELECTRICAL POWER AND CONTROL CIRCUITS FOR EQUIPMENT BEING REMOVED, WHERE EXISTING EQUIPMENT IS BEING REPLACED WITH THE NEW EQUIPMENT OR RELOCATED EQUIPMENT. CONTRACTOR MAY REUSE THE EXISTING CONDUIT AND ROUGH-IN LOCATIONS IF POSSIBLE, BUT NEW CONDUCTORS SHALL BE PROVIDED.
 - O. WHERE EQUIPMENT IS REMOVED FROM OR RELOCATED TO A LOCATION WHICH PENETRATES A FIRE-RATED STRUCTURE, PROVIDE APPROPRIATE FIRE STOPPING MATERIALS TO MAINTAIN THE FIRE RATING OF THE STRUCTURE.
- AVI ELECTRICAL REMODEL NOTES**
- A. ALL EXISTING EQUIPMENT, WIRING DEVICES, LIGHTS, CONDUIT, WIRING, CIRCUITING, ETC. NOT DISTURBED BY NEW CONSTRUCTION WORK SHALL BE MAINTAINED AND UNMANGED. THESE DEVICES, IF SHOWN, ARE SHOWN FOR INFORMATION PURPOSES ONLY. VISIT THE JOB SITE TO VERIFY ALL EXISTING CONDITIONS AND FAMILIARIZE THEMSELVES WITH ALL WORK TO BE DONE AT THE JOB SITE. FAILURE TO DO SO SHALL NOT RELIEVE CONTRACTOR OF THE RESPONSIBILITY FOR PERFORMING ALL WORK NECESSARY TO PROVIDE A WORKMANLIKE INSTALLATION.
 - B. EXISTING SERVICES (ELECTRICAL, FIRE ALARM, ETC.) SHALL NOT BE INTERRUPTED WITHOUT PRIOR SCHEDULING OF SUCH OUTAGES WITH THE OWNER, ARCHITECT, AND ALL OTHER PARTIES INVOLVED.
 - C. MAINTAIN ACCURATE RECORDS OF ALL MODIFICATIONS TO EXISTING SYSTEMS WHICH ARE TO REMAIN. DELIVER ALL "RECORD" DRAWINGS TO THE OWNER INDICATING SUCH CHANGES.
 - D. DISCONNECT AND LABEL ABANDONED FEEDERS AND CIRCUITS.
 - E. REMOVE ALL EXPOSED CONDUITS, CONDUITS ABOVE LAY-IN CEILINGS, OR EQUIPMENT WHICH IS ABANDONED.
 - F. WHERE NEW WORK INTERFERES WITH CIRCUITS IN ROOMS OTHERWISE UNDISTURBED, EXISTING CIRCUITS SHALL BE REWORKED AS REQUIRED TO MAINTAIN SERVICE.
 - G. ALL EQUIPMENT, FIXTURES, PANELBOARDS, CONDUIT AND WIRING THAT ARE REMOVED SHALL BE REMOVED FROM THE JOB SITE, UNLESS DIRECTED OTHERWISE BY THE ARCHITECT OR OWNER'S REPRESENTATIVE.
 - H. EXISTING ROUGH-IN BOXES AND CONDUIT MAY BE UTILIZED IF THEY ARE OF PROPER SIZE AND IN SUITABLE LOCATION(S) FOR NEW CONSTRUCTION. DEVICES AND WIRING SHALL BE NEW.
 - I. CIRCUIT ROUTINGS SHOWN IN REMODELED AREAS MAY BE MODIFIED TO SUIT FIELD CONDITIONS, KEEP DEVICES AND/OR FIXTURE CIRCUITS APPROXIMATELY AS INDICATED TO LIMIT VOLTAGE DROP OF FEEDER AND BRANCH CIRCUITS.
 - J. VERIFY THE LOCATION AND CONDITION OF ALL EXISTING UTILITIES AND PROTECT DURING THE COURSE OF THEIR WORK. EXISTING UTILITIES, BUILDING MATERIALS AND ANY ASSOCIATED ITEMS WHICH ARE DAMAGED BY CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE (IN A TIMELY MANNER) AND TO THE OWNER'S APPROVAL.
 - K. COORDINATE THE REMOVAL OR RELOCATION OF ALL MECHANICAL AND PLUMBING EQUIPMENT, DISCONNECT AND REMOVE ALL ELECTRICAL POWER AND CONTROL CIRCUITS FOR EQUIPMENT BEING REMOVED OR RELOCATED. EXISTING CONDUIT AND ROUGH-IN MAY BE USED FOR RELOCATED OR NEW EQUIPMENT, ALL CONDUCTORS SHALL BE NEW.
 - L. REMOVE ALL EXISTING DATA, TELEPHONE, FIRE ALARM CABLEING AND ANY OTHER LOW VOLTAGE WIRING THAT ARE NOT TO BE USED.
 - M. DESIGN IS BASED ON FIELD INFORMATION, AS-BUILT DRAWINGS AND OWNER FURNISHED INFORMATION. VERIFY ACCURACY OF ALL EXISTING CONDITIONS. IN CASE OF DISCREPANCY, PROVIDE ALL NECESSARY CONDUIT, WIRE, BOXES, FITTINGS, ETC. FOR A COMPLETE OPERATING ELECTRICAL SYSTEM. ENTIRE INSTALLATION TO COMPLY WITH SPECIFICATIONS AND ADOPTED ELECTRICAL CODE.

ELECTRICAL GENERAL NOTES:

- A. IN ADDITION TO SURFACE RACEWAY AND/OR FLOOR MOUNTED OUTLET BOXES AND POWER POLES INDICATED ON ELECTRICAL DRAWINGS, THE ELECTRICAL CONTRACTOR WILL PROVIDE ALL CABLE TRAY AND FLUSH MOUNTED OUTLET BOXES/BACK BOXES AND ASSOCIATED CONDUIT FOR ALL TELECOMMUNICATIONS OUTLETS (INCLUDING MASTER CLOCK/SOUND SYSTEMS, CATV/VIDEO SYSTEMS, AND SECURITY SYSTEMS) ON THE PROJECT. THE CONTRACTOR WILL REFERENCE THE TELECOMMUNICATIONS AND SECURITY DRAWINGS (T DRAWINGS) FOR CABLE TRAY AND OUTLET DEVICE LOCATION AND ALL INSTALLATION DETAILS SHOWN ON THE "T" AND "S" DRAWINGS. THE CONTRACTOR WILL ALSO REFERENCE THE TELECOMMUNICATIONS CONTRACTOR TELECOMMUNICATIONS DRAWINGS FOR EMBEDDED CONDUIT REQUIRED FOR IN-FLOOR BOXES THAT ARE SHOWN ON THE "T" DRAWINGS, AND THE CONTRACTOR WILL PROVIDE THE EMBEDDED CONDUIT AS SHOWN ON THE "T" DRAWINGS.
 - B. THE FOLLOWING WILL BE PROVIDED BY THE ELECTRICAL CONTRACTOR FOR PROJECTS WHERE THE TELECOM CONTRACT IS UNDER ELECTRICAL. WHERE THE TELECOM AND ELECTRICAL CONTRACTS ARE SEPARATE THE FOLLOWING WILL BE PROVIDED BY THE TELECOMMUNICATIONS CONTRACTOR: TELECOMMUNICATIONS STRUCTURED CABLEING SYSTEMS, TELECOMMUNICATIONS OUTLET DEVICES/FACEPLATES/JACKS, DATA NETWORK SYSTEMS PRIVATELY TO THE CONTRACTOR'S RECORDS. DELIVER ALL "RECORD" DRAWINGS TO OWNER INDICATING SUCH CHANGES.
 - C. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE LOCATIONS OF THE FOLLOWING:
a. ALL FIRE RATED PARTITIONS AND BUILDING EXPANSION JOINTS.
b. MOUNTING HEIGHTS OF EQUIPMENT.
D. REFER TO APPROPRIATE VENDORS APPROVED DIMENSIONED LAOUT DRAWINGS FOR THE LOCATIONS OF THE FOLLOWING:
a. CONDUIT CONNECTIONS TO AVI EQUIPMENT.
 - E. CONTRACTOR SHALL COORDINATE WITH SITE SPECIFIC LOCAL REQUIREMENTS FOR SEISMIC BRACING OF ELECTRICAL EQUIPMENT AND CONDUITS.
- ELECTRICAL OPEN DESIGN ITEMS:**
- A. I.T. PACKAGE (FINAL VBI CAMERA LOCATIONS, AR CHARGER LOCATIONS, AR WORKSTATION/GATE LOCATIONS, IDF LOCATIONS, ETC.)
 - B. SECURITY PACKAGE (SMALL BUSINESS SWITCH SBS LOCATIONS, AR PANELS, ETC.)
- SPECIAL SYSTEMS SUPPLEMENTAL SPECIFICATIONS:**
- A. PROVIDE NECESSARY BOXES AND CONDUIT FOR MECHANICAL SYSTEM CONTROL DEVICES. THIS INCLUDES BUT IS NOT LIMITED TO MAIN CONTROL PANELS, THERMOSTATS, HUMIDISTATS, AC SOLENOIDS, HEAT RECLAIM WIRING, AHU CONTROL WIRING, DUCT FURNACE CONTROL WIRING, TIMERS, AND SIMILAR EQUIPMENT. PROVIDE BOX, ALL FIRE RATED PARTITIONS AND BUILDING EXPANSION JOINTS, ALL WIRING WITHIN WALLS AND SIMILAR UNACCESSIBLE LOCATIONS. PROVIDE CONTROL AND INTERLOCK WIRING WHEN NOT PROVIDED BY OTHER TRADES. COORDINATE REQUIREMENTS WITH EQUIPMENT SUPPLIERS AND OTHER TRADES PRIOR TO ROUGH-IN.
 - B. PROVIDE LINE VOLTAGE WIRING AND MAKE FINAL CONNECTIONS TO ALL DUCT-MOUNTED SMOKE DETECTORS, FIRE/SMOKE AND SMOKE DAMPERS WHERE APPLICABLE. COORDINATE REQUIREMENTS WITH OTHER TRADES PRIOR TO INSTALLATION.
 - C. PROVIDE BOXES AND CONDUITS FOR THE FIRE PROTECTION SYSTEM LOW VOLTAGE WIRING AS REQUIRED. THIS INCLUDES EXPOSED WIRING LESS THAN 96" AFF. AT A MINIMUM, PROVIDE [3x4] CONDUIT, UNLESS NOTED OTHERWISE. COORDINATE REQUIREMENTS AND LOCATIONS WITH SYSTEM INSTALLER AND FIRE ALARM SPECIFICATIONS.
 - D. AT A MINIMUM, PROVIDE EXTRA DEEP DOUBLE GANG COMMUNICATION OUTLET BOXES, (FLUSH MOUNTED WHEREVER PRACTICABLE), WITH SINGLE-GANG PLASTER RING AND [1"] CONDUIT SUBBED-UP CONCEALED TO ACCESSIBLE CEILING SPACE, UNLESS NOTED OTHERWISE. PROVIDE SURFACE MOUNTED DATA BOXES WITHIN CABINETS, AND SELECT OTHER LOCATIONS AS INDICATED ON THE DRAWINGS. COORDINATE TELEPHONE/DATA BOX AND CONDUIT LOCATIONS AND SIZES WITH OWNER AND OTHER TRADES PRIOR TO ROUGH-IN.
 - E. PROVIDE NYLON BUSHINGS FOR ALL COMMUNICATIONS AND LOW VOLTAGE WIRING CONDUITS AND SLEEVES, UNLESS NOTED OTHERWISE.
- COMMISSIONING/FUNCTIONAL TESTING:**
- CONTRACTOR'S BID SHALL INCLUDE PROVISIONS TO PROVIDE ALL SERVICES RELATED TO THE CODE REQUIRED BUILDING SYSTEMS COMMISSIONING INCLUDING A COMMISSIONING PLAN, FUNCTIONAL TESTING, AND RELATED DOCUMENTATION, REPORTS AND OWNER TRAINING. THIS INCLUDES RETAINING THE SERVICES OF A 3RD PARTY REGISTERED DESIGN PROFESSIONAL OR APPROVED AGENCY. REFER TO THE LATEST ADOPTED EDITION OF THE APPLICABLE ENERGY CODE FOR MORE INFORMATION. CONTRACTOR SHALL COMPLETE ALL RELATED COMMISSIONING REQUIREMENTS PRIOR TO FINAL INSPECTIONS IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS, CODE AND MANUFACTURER'S INSTRUCTIONS.
- APPLICABLE ELECTRICAL CODES:**
- NOTE: PROJECT IS DESIGNED IN COMPLIANCE WITH THE FOLLOWING CODES. THIS IS NOT AN EXHAUSTIVE LIST. PROJECT SHALL COMPLY WITH ALL APPLICABLE CODES, REPORTS AND OWNER TRAINING. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- ELECTRICAL CODE: 2017 NATIONAL ELECTRICAL CODE, (NFPA 70)
BUILDING CODE: 2020 BUILDING CODE OF NYS
ENERGY CODE: 2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NYS

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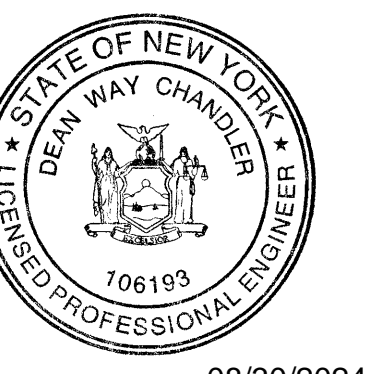


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PROJECT INFO

TENANT IMPROVEMENTS
1785 STATE HIGHWAY 5S
AMSTERDAM, NY 12010

SEALS



08/30/2024

REVISIONS

DATE	REVISION
0 09/3/2024	ISSUED FOR PLAN REVIEW

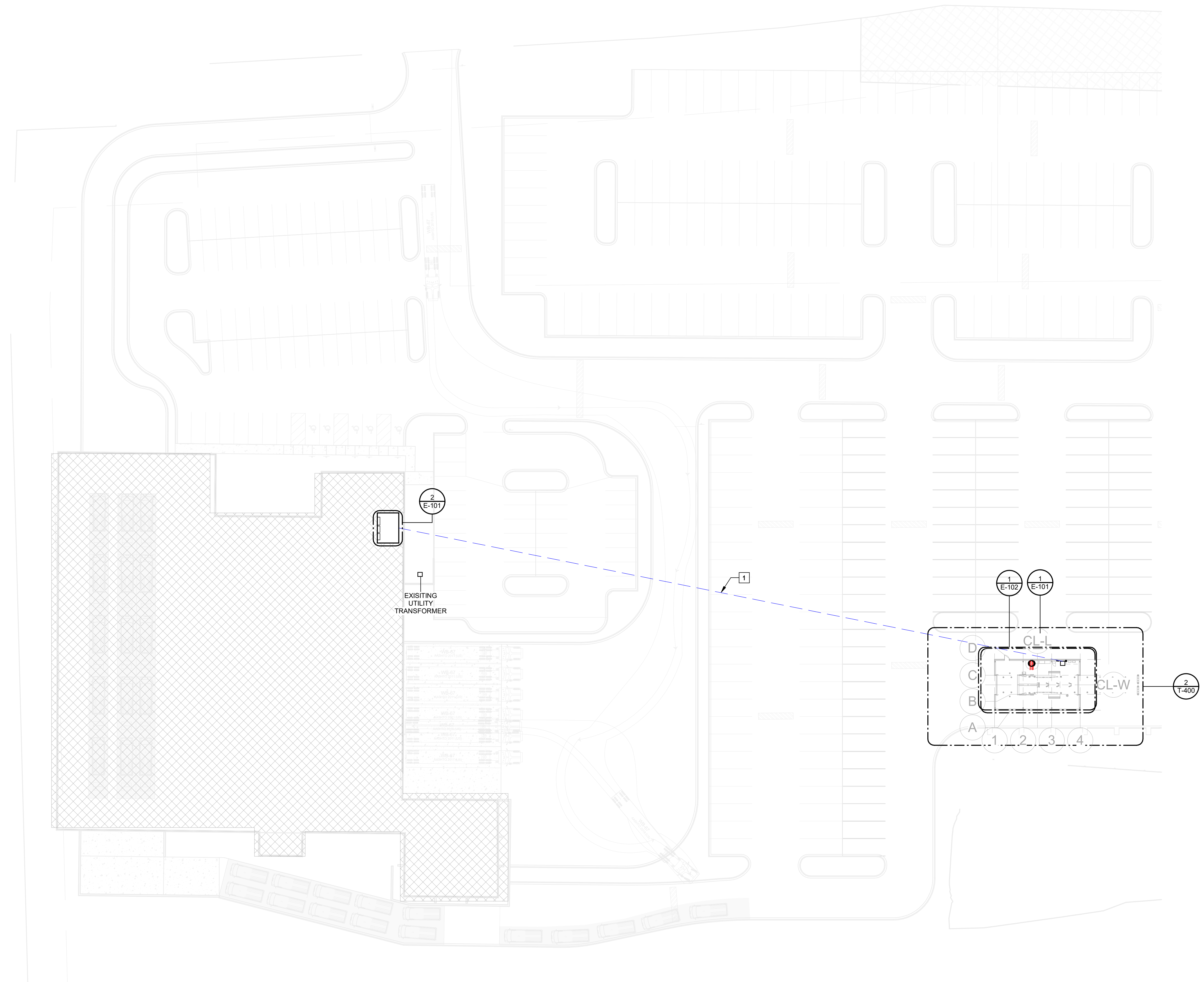
PM:	BRM
PA:	SL
PROJECT NUMBER:	100-2023-89
PROJECT DATE:	9/3/2024

SHEET INFO

ELECTRICAL OVERALL
POWER & LIGHTING PLAN
E-100

SHEET ISSUED: 12/15/23

- ELECTRICAL PLAN NOTES:**
1 UNDERGROUND ELECTRICAL CONDUIT. COORDINATE FINAL ROUTING OF UNDERGROUND ELECTRICAL CONDUIT WITH ALL TRADES AS NECESSARY.



① ELECTRICAL POWER PLAN
1/32" = 1'-0"

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DEAN W. CHANDLER

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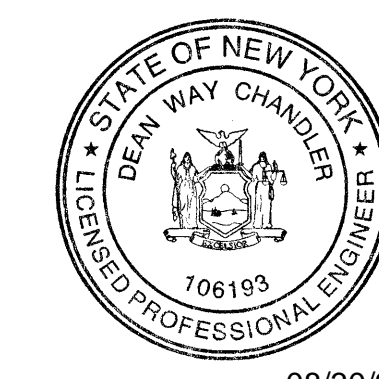
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08/30/2024

REVISIONS

DATE	REVISION
0	10/3/2024 ISSUED FOR PLAN REVIEW

PM:	BRM
PA:	SL
PROJECT NUMBER:	100-2023-89
PROJECT DATE:	9/3/2024

SHEET INFO

ELECTRICAL ENLARGED
POWER PLAN
E-101

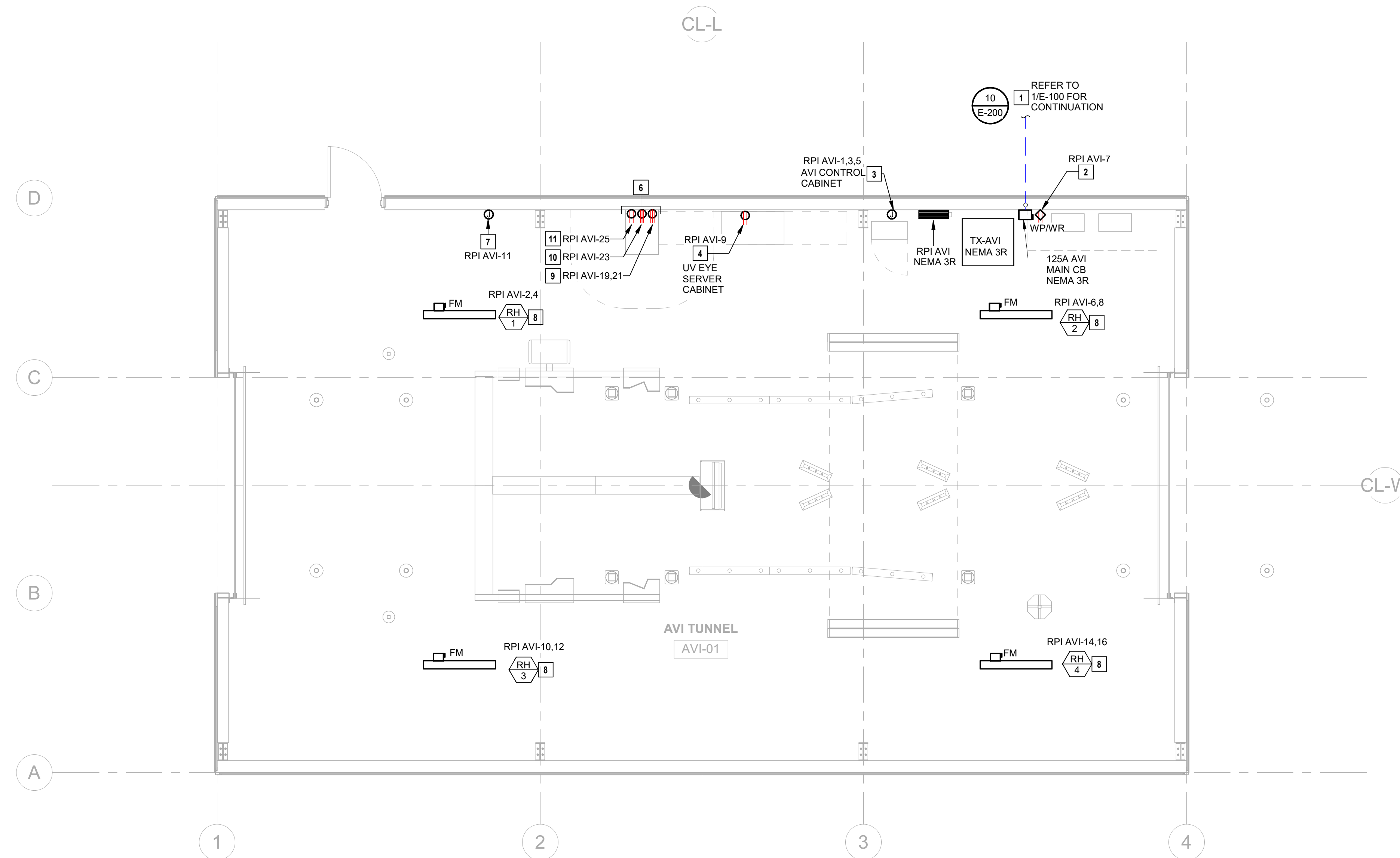
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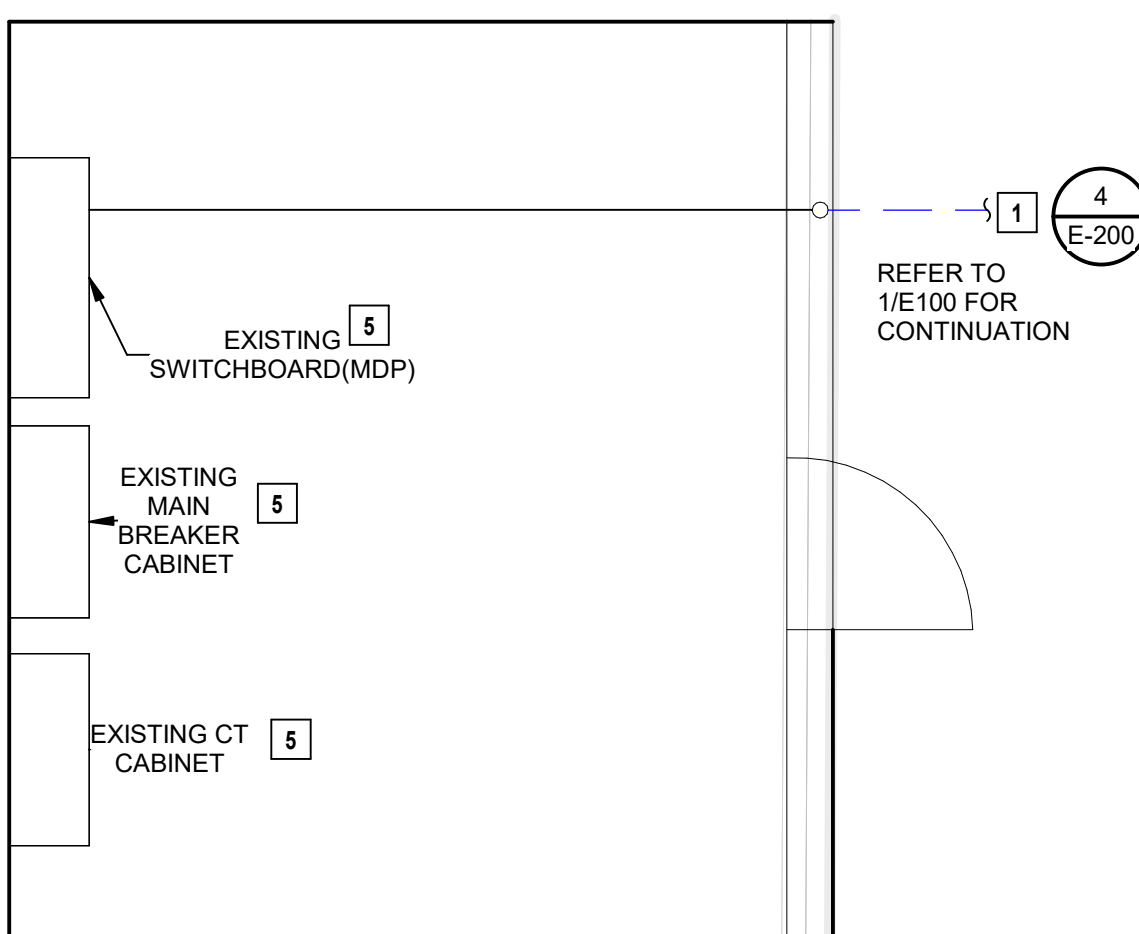
- NEW 480V FEEDER TO AVI BUILDING MAIN CIRCUIT BREAKER. ROUTE FEEDER THROUGH WALL AND THEN UNDERGROUND TO MAIN BUILDING, TIGHT TO STRUCTURE ABOVE. COORDINATE ROUTING WITH AMAZON PROJECT MANAGER. RE: ONE-LINE DIAGRAM.
- CODE REQUIRED EQUIPMENT SERVICE RECEPTACLE. LOCATE IN THE SAME ROOM OR AREA AND WITHIN 25' OF NEARBY HVAC, REFRIGERATION OR ELECTRICAL EQUIPMENT. THE RECEPTACLE IS NOT PERMITTED TO BE ON THE LOAD SIDE OF THE EQUIPMENT'S BRANCH-CIRCUIT DISCONNECTING MEANS.
- AVI EQUIPMENT CONTROL CABINET POWER. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH EQUIPMENT PROVIDER.
- 120V, 20A DUPLEX RECEPTACLE FOR UV EYE CABINET POWER. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.
- EXACT LOCATION OF SHOWN EXISTING ELECTRICAL EQUIPMENT IS NOT ACCURATE AND SHOWN FOR REFERENCE ONLY.
- TELECOMMUNICATIONS BACKBONE AND IDF ENCLOSURE. PROVIDE HANDLE TIE-ON BREAKER AND DEDICATED CIRCUIT IN PANEL RP-AVI. PROVIDE (4) 5/8" CONDUITS FROM ENCLOSURE TO 460MM BELOW ROOF STRUCTURE. PROVIDE EQUIPMENT GROUND WITH #6 AWG BONDING STRAP TO TGB LOCATED IN DEMARC ROOM. VERIFY EXACT LOCATION AND ELECTRICAL REQUIREMENTS WITH SECURITY SYSTEM VENDOR AND TELECOM DRAWINGS PRIOR TO INSTALLATION.
- 120V, 20A CIRCUIT JUNCTION BOX MOUNTED ON BACKBOARD. MOUNTING HEIGHT AND EXACT LOCATION TO BE COORDINATED ON SITE WITH SECURITY EQUIPMENT INSTALLER.
- INTEGRAL DISCONNECT IS PROVIDED WITH MECHANICAL EQUIPMENT UNLESS NOTED OTHERWISE. COORDINATE FINAL LOCATION AND ANY ADDITIONAL REQUIREMENTS WITH THE MECHANICAL CONTRACTOR.
- PROVIDE A SINGLE-PHASE 208V 30AMP DEDICATED CIRCUIT. THIS WILL BE INSTALLED INTO A JUNCTION BOX WITH AN L6-30R INSIDE THE IDF ENCLOSURE.
- PROVIDE A SINGLE-PHASE 120V 30AMP DEDICATED CIRCUIT. THIS WILL BE INSTALLED INTO A JUNCTION BOX WITH A SINGLE NEMA L5-30 RECEPTACLE PER CIRCUIT INSIDE THE IDF ENCLOSURE ON THE SIDE WITH THE HVAC CUTOFF. AC UNITS COME WITH POWER CABLES FROM MANUFACTURER.
- PROVIDE A 120V DUPLEX NEMA 5-20 RECEPTACLE INSIDE THE ENCLOSURE FOR CONVENIENCE POWER.

GENERAL NOTES:

- REFER TO DETAIL 3/E2.00 AND 4/E.200 FOR CONDUIT PENETRATION DETAILS.
- ALL CONDUIT PENETRATIONS THROUGH WALL MUST BE SEALED, SLEEVED, AND PROPERLY SUPPORTED ON EACH SIDE OF THE WALL.
- ALL OUTLET LOCATIONS SHOWN IN PLAN ARE APPROXIMATE. FINAL LOCATIONS TO BE DETERMINED IN FIELD WITH OWNER.
- FLOOR MOUNTED 75 KVA TRANSFORMER COORDINATE EXACT LOCATION WITH CLIENT PRIOR TO INSTALLATION. TRANSFORMERS LOCATED OUTSIDE OF THE LINE OF SIGHT OF THE DISCONNECT SHALL BE SUPPLIED BY A LOCKABLE CIRCUIT BREAKER. ADJUST FEEDER SIZES TO CONTEND WITH VOLTAGE DROP AS NECESSARY.
- ALL ELECTRICAL EQUIPMENT AND DEVICES LOCATED IN "AVI TUNNEL - 101" TO BE WET LOCATION RATED.
- ALL SECURITY CABLING TO BE INSTALLED IN CONDUIT UP TO A MINIMUM OF 10' AFF. CABLING ROUTED ABOVE 10' AFF MAY BE ROUTED FREE AIR (UTILIZING J-HOOKS, CABLE SADDLES ETC.) OR BE ROUTED VIA BASKET TRAY SYSTEM. COORDINATE ALL SECURITY CONDUIT ROUTING WITH LV DRAWINGS.
- COORDINATE EXACT LOCATION LOW VOLTAGE CABLE ENTRIES WITH TELECOMMUNICATIONS DRAWINGS.



1 ELECTRICAL POWER PLAN - ENLARGED AVI TUNNEL
1/4" = 1'-0"



2 ELECTRICAL POWER PLAN - ENLARGED ELECTRICAL ROOM
1/4" = 1'-0"

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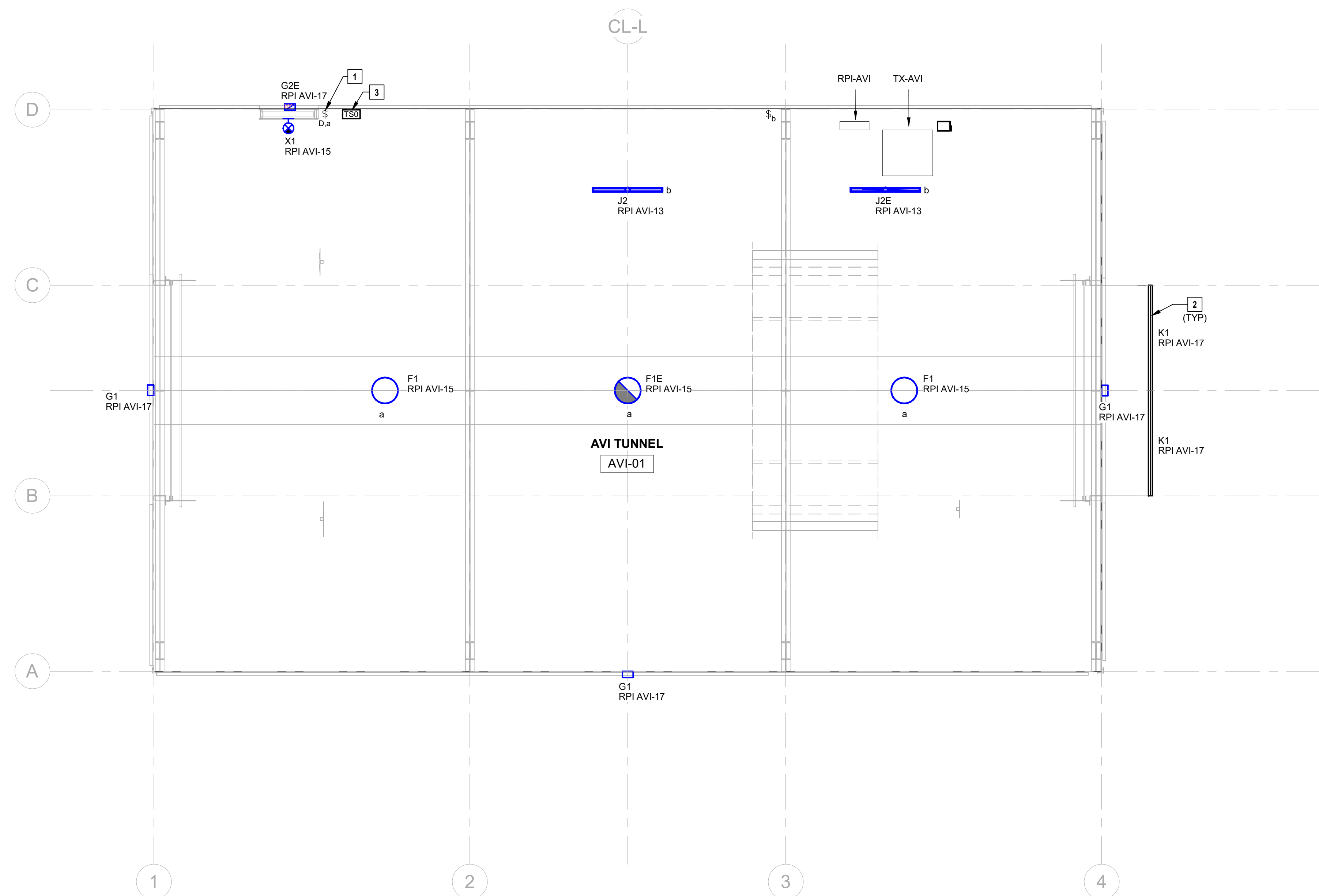
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ELECTRICAL PLAN NOTES:

- DIMMER SWITCH TO BE MULTI-LEVEL DIMMING. NORMAL OPERATION LEVEL TO BE SET AT 25% OUTPUT. MAINTENANCE LEVEL TO BE SET AT 100% OUTPUT.
- PROVIDE EXTERIOR LED STRIP FACADE LIGHTING FOR VAN ENTRY ILLUMINATION. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL DRAWING.
- PROVIDE TWO-CHANNEL ASTRONOMICAL TIMESWITCH FOR CONTROL OF AVI LIGHTING. CHANNEL 1 TO CONTROL INTERIOR LIGHTS; CHANNEL 2 TO CONTROL EXTERIOR LIGHTS. REFER SPECIFICATIONS FOR MORE INFORMATION. COORDINATE PROGRAMMING WITH AVI CONSTRUCTION MANAGER.

GENERAL NOTES:

- ACCESS TO AND CLEARANCES AROUND ELECTRICAL EQUIPMENT SHALL CONFORM TO N.E.C. ARTICLES 110. CONSULT ENGINEERS WHERE SPACE APPEARS INADEQUATE DUE TO ARCHITECTURAL CHANGES, EQUIPMENT LAYOUT CHANGES, OR FIELD CONDITIONS. DO NOT COVER, OBSCURE OR BLOCK ACCESS TO EQUIPMENT, DATA PLATES, ACCESS PANELS, OR MAINTENANCE AREAS WITH THE ELECTRICAL WORK.
- THIS DRAWING SHOWS EQUIPMENT LOCATIONS ONLY. COORDINATE CONDUIT ROUTE IN FIELD WITH OTHER TRADES, EQUIPMENT, AND OWNER. VERIFY EXACT LOCATION AND MOUNTING HEIGHTS WITH OWNER & ARCHITECT PRIOR TO INSTALLATION.
- COORDINATE WITH IT SECURITY & UVEVE PLANS FOR FINAL LOCATIONS OF ALL DEVICES AND EQUIPMENT.
- COORDINATE ELECTRICAL REQUIREMENTS OF ALL OWNER PROVIDED EQUIPMENT WITH ACTUAL EQUIPMENT PRIOR TO INSTALLATION. THIS DESIGN ASSUMES A LOW VOLTAGE LIGHTING CONTROL SYSTEM IS PROVIDED.
- ALL LIGHTING CONTROLS SHALL BE PROVIDED BY A SINGLE MANUFACTURER AND ALL CONTROLS SHALL BE COMPATIBLE WITH THE LIGHTING FIXTURE PROVIDED.
- CONTRACTOR SHALL COORDINATE WITH LIGHTING CONTROL MANUFACTURER TO PROVIDE A COMPLETE AND FUNCTIONING SYSTEM. ALL REQUIRED: POWER PADS, INTERCONNECTION WIRING, AND RELATED COMPONENTS, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL COORDINATE DIMMING PROTOCOL (0-10V, DALI, PHASE DIMMING, ETC.) OF LIGHTING FIXTURES PROVIDED WITH LIGHTING CONTROLS VENDOR TO ENSURE COMPATIBILITY.
- CONTRACTOR'S MANUFACTURER WILL ENSURE THAT THEIR BEST SENSING PROTOCOL (ULTRASONIC, INFRARED, MICROWAVE, ETC.) AND EITHER SINGLE OR DUAL TECHNOLOGY DEVICES ARE PROVIDED FOR EACH SPACE TYPE.
- CONTRACTOR SHALL HAVE THEIR MANUFACTURER PROVIDE SHOP DRAWINGS WITH DETAILED INFORMATION SHOWING ALL REQUIRED LIGHTING CONTROL COMPONENTS AND INTERCONNECTIONS NECESSARY FOR THEIR SYSTEM TO FUNCTION AS DESCRIBED IN THE DRAWINGS AND SPECIFICATIONS. THESE DRAWINGS WILL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. AND ANY REQUIRED CHANGES WILL BE CORRECTED AT NO ADDITIONAL COST TO THE OWNER.
- WALL SWITCH QUANTITY AND LOCATION HAVE BEEN NOTED ON THE LIGHTING PLANS. REFER TO LIGHTING CONTROLS SYMBOLS LEGEND FOR EACH TYPE OF SWITCH REQUIRED (DIMMING, KEYPAD, THREE-WAY, FOUR-WAY, OCCUPANCY SENSING, ETC.).



1 ELECTRICAL LIGHTING PLAN - ENLARGED AVI TUNNEL
1/4" = 1'-0"

LIGHT FIXTURE SCHEDULE

TYPE	MANUFACTURER	SERIES / MODEL	SOURCE				DIMMING TYPE	VOLTAGE	INPUT WATTS	INPUT VA	DESCRIPTION	NOTES	
			QTY	TYPE	CRI	CCCT							LUMENS
J2	COOPER-METALUX	4SNLED-LD5-30SLLW-UNV-L840-CD1-U	1	LED	80	4000K	5496	--	120	22	23	SUSPENDED LED FIXTURE WITH NOMINAL 48" LONG BY 3" WIDE BY 3 1/16" TALL COLD ROLLED STEEL HOUSING, FROSTED LENS, UL DAMP RATING, INTEGRAL DRIVER, AND A FINISH SELECTED BY ARCHITECT.	
J2E	COOPER-METALUX	4SNLED-LD5-30SLLW-UNV-L840-CD1-U-EL14W	1	LED	80	4000K	5496	--	120	22	34	SAME AS TYPE 'J2' EXCEPT WITH A MINIMUM 10 WATT INTEGRAL 90 MINUTE EMERGENCY BATTERY WITH SELF-DIAGNOSTICS.	
F1E	ACUITY - LITHONIA	VCPG1-LED-V4-P6-49K-80CRI-T5W-MVOLT-PM-DMG-DOBXD-E8WC	1	LED	80	4000K	13760	--	120	108	138	SAME AS TYPE 'F1' EXCEPT WITH A MINIMUM 14 WATT INTEGRAL 90 MINUTE EMERGENCY BATTERY	
F1	ACUITY - LITHONIA	VCPG1-LED-V4-P6-49K-80CRI-T5W-MVOLT-PM-DMG-DOBXD	1	LED	80	4000K	13760	--	120	108.0	114	12" PENDANT STEM MOUNTED LED FIXTURE FOR CANOPY WITH NOMINAL 19" DIAMETER BY 3/4" TALL HOUSING, TYPE 5 ROUND DISTRIBUTION, IP68 RATING, INTEGRAL DRIVER, WITH A DARK BRONZE FINISH.	1
K1	ELLIPTIPAR	S175-R08G-H-02-M-00-0-840-00-C	1	LED	80	4000K	3121	--	120	29	31	EXTERIOR LED WALL MOUNTED FIXTURE AT 14'-6" AFF WITH NOMINAL 97" LENGTH BY 4 1/16" IN WIDTH AND HEIGHT, DIE CAST ALUMINUM HOUSING, ASYMMETRIC OPTIC SHIELDING, UL WET LOCATION RATING, INTEGRAL DRIVER, AND A FINISH SELECTED BY ARCHITECT.	2
G1	ACUITY - LITHONIA	DSXW2 SERIES OR APPROVED EQUAL	1	LED	70	4000K	6954	0-10V	120	71	75	EXTERIOR LED WALL MOUNTED FIXTURE AT 16" AFF WITH NOMINAL 18 1/2" WIDE BY 10" DEEP BY 8 3/8" TALL, DIE CAST ALUMINUM HOUSING, ACRYLIC LENS TYPE 2 MEDIUM DISTRIBUTION, IP65 RATING, INTEGRAL DRIVER, AND A FINISH SELECTED BY ARCHITECT.	
G2E	ACUITY - LITHONIA	DSXW1 SERIES OR APPROVED EQUAL	1	LED	70	4000K	6865	0-10V	120	71.0	75	EXTERIOR LED WALL MOUNTED FIXTURE AT 16" AFF WITH NOMINAL 13 3/4" WIDE BY 10" DEEP BY 8 3/8" TALL, DIE CAST ALUMINUM HOUSING, ACRYLIC LENS TYPE 2 MEDIUM DISTRIBUTION, IP65 RATING, INTEGRAL DRIVER AND INTEGRAL EMERGENCY BATTERY BACKUP DRIVER AND FINISH SELECTED BY ARCHITECT.	
X1	EVENLITE	EVENLITE RAZOR SERIES; ISOLITE, PATHWAY, SURE-LITES TFX, BARRON LIGHTING, OR APPROVED EQUAL.	1	LED	--	--	--	--	120	2.0	2.1	EXIT SIGN WITH NOMINAL 12" W BY 8 1/2" H BY 1/2" D HOUSING, UL DAMP RATING, AND AN INTEGRAL DRIVER.	

GENERAL NOTES:
A. REFER TO LIGHT FIXTURE SCHEDULE GENERAL NOTES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

NOTES:
1. COORDINATE DIMMING METHODOLOGY PRIOR TO ORDERING.
2. COORDINATE OPTIONAL MOUNTING TO PROVIDE 3-18" CANTILEVERS AND END CAPS PRIOR TO ORDERING.

R2Lv24.2

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SPECIAL INSPECTIONS
OWNER SHALL SUBCONTRACT WITH A NEW YORK STATE REGISTERED SPECIAL INSPECTION AGENCY TO PERFORM THE REQUIRED SPECIAL INSPECTIONS FOR THE MECHANICAL, PLUMBING AND FIRE PROTECTION SYSTEMS AS REQUIRED BY THE NEW YORK CITY BUILDING CODE. OWNER SHALL PAY AN EXPEDITER TO FILE ALL REQUIRED FORMS.

NEW YORK ALTERATION WARNING STATEMENT:
IT IS A VIOLATION OF THE NEW YORK EDUCATION LAW, ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS THE INDIVIDUAL IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE SEAL OF AN ENGINEER IS ALTERED. THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.
SHEET ISSUED: 9/3/2024

SEALS



08/30/2024

REVISIONS

DATE	REVISION
0	19/3/2024 ISSUED FOR PLAN REVIEW

PM:	BRM
PA:	SL
PROJECT NUMBER:	100-2023-89
PROJECT DATE:	9/3/2024

SHEET INFO

ELECTRICAL ENLARGED LIGHTING PLAN
E-102

SHEET ISSUED: 9/3/2024



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CONSULTANTS



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2450002344

PROJECT INFO

TENANT IMPROVEMENTS
1785 STATE HIGHWAY 5S
AMSTERDAM, NY 12010

SEALS



08/30/2024

REVISIONS

Table with 2 columns: DATE, REVISION

SHEET INFO

Table with 2 columns: PM, BRM

Table with 2 columns: PROJECT NUMBER, 100-2023-89

Table with 2 columns: PROJECT DATE, 9/3/2024

ELECTRICAL ONE-LINE DIAGRAM, PANELBOARD SCHEDULES, & DETAILS

E-200

SHEET ISSUED: 12/15/23

FEEDER SCHEDULE:

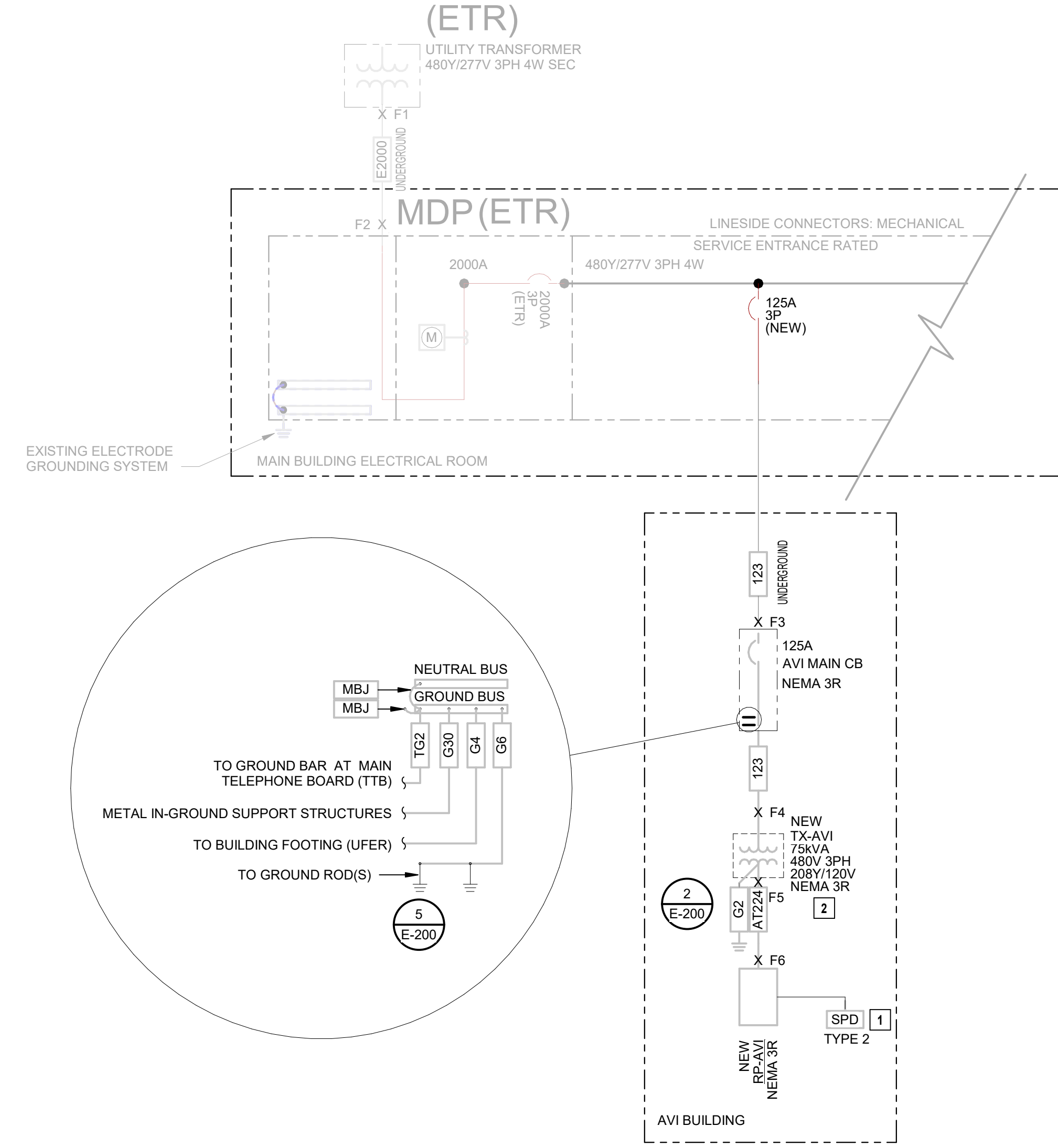
Table with 2 columns: FEEDER TAG, FEEDER DESCRIPTION

ELECTRICAL PLAN NOTES:

- 1. LOCATE SPD ADJACENT TO PANELBOARD AND USE SHORTEST AND STRAIGHTEST LENGTH OF CONNECTION WIRING AS PRACTICABLE. LOCATE SPD SO THAT THE CONDUIT PENETRATES PANELBOARD ENCLOSURE NEAR NEUTRAL BUS AND SEAL CONDUIT WITH FIRE STOP. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. CONTRACTOR SHALL MEASURE THE VOLTAGE ON THE SECONDARY SIDE OF THE TRANSFORMER AND ADJUST THE TRANSFORMER TAP SETTINGS TO 2.5% FOR VOLTAGE DROP ON THE SECONDARY SIDE OF THE TRANSFORMER.

ONE-LINE DIAGRAM GENERAL NOTES:

- A. THE INFORMATION SHOWN IN THE SHORT-CIRCUIT AND VOLTAGE DROP CALCULATION SCHEDULES SHALL BE SHOWN FOR CALCULATION PURPOSES ONLY. CONTRACTOR SHALL NOT USE THE CONDUIT TYPES, SIZES, QUANTITIES OR LENGTHS FOR TAKEOFFS OR BIDDING PURPOSES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY CONFLICTS BETWEEN THIS SCHEDULE AND OTHER PORTIONS OF THE CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL NOTIFY ENGINEER OF AS-BUILT CONDITIONS THAT CONSTITUTE A CHANGE FROM WHAT IS SHOWN BELOW. THIS INCLUDES CONDUIT LENGTHS DIFFERING BY MORE THAN 10%.
B. REFER TO THE SHORT-CIRCUIT AND VOLTAGE DROP CALCULATIONS TABLE. AVAILABLE FAULT CURRENT INFORMATION IS LISTED UNDER THE "FAULT CURRENT" COLUMN. VOLTAGE DROP VALUES ARE LISTED UNDER THE "CUMULATIVE VOLTAGE DROP" COLUMN. THE AIC/SCCR RATINGS OF THE EQUIPMENT SHALL NOT BE LESS THAN THE AVAILABLE 3-PHASE SYMMETRICAL FAULT CURRENT. ALL SERIES RATED EQUIPMENT SHALL BE PROPERLY LISTED AND LABELED PER CODE.
C. FEEDER NUMBER DESIGNATIONS PRECEDED BY "E" INDICATE THAT THE CONDUCTORS ARE EXISTING AND ARE ASSUMED TO BE SIZED AS INDICATED. CONTRACTOR SHALL NOTIFY ENGINEER IF CONDUCTORS ARE SMALLER THAN INDICATED.
D. FEEDER SIZES ARE BASED ON COPPER (CU) THHN/THWN-2 INSULATION, UNLESS NOTED OTHERWISE. NUMBER DESIGNATIONS PRECEDED BY "A" INDICATE THAT THE SIZE IS BASED ON ALUMINUM (AL) WIRE. AL CONDUCTOR SIZES ARE BASED ON XHHW-2 INSULATION, UNLESS NOTED OTHERWISE. AL WIRE MAY BE SUBSTITUTED FOR CU FEEDERS AS ALLOWED BY CODE. SPECIFICATIONS AND OWNER, UNLESS NOTED OTHERWISE, AT CONTRACTOR'S OPTION, CU WIRE MAY BE SUBSTITUTED FOR AL, UNLESS NOTED OTHERWISE. ALL CONDUCTOR SIZES ARE BASED ON 75 DEG C RATED TERMINATIONS, UNLESS NOTED OTHERWISE. CONDUIT SIZES SHOWN ARE APPROPRIATE FOR SCHEDULE 40 PVC, EMT, GRS, IMC AND RMC. ADJUST SIZE AS NEEDED FOR OTHER RACEWAY TYPES. FOR ANY OTHER CONDITIONS MODIFY SIZES PER CODE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
E. BRANCH CIRCUIT SIZES ARE BASED ON COPPER (CU) THHN/THWN-2 INSULATION, UNLESS NOTED OTHERWISE. CONDUIT SIZES SHOWN ARE APPROPRIATE FOR SCHEDULE 40 PVC, EMT, GRS, IMC AND RMC. ADJUST SIZE AS NEEDED FOR OTHER RACEWAY TYPES. ALL CONDUCTOR SIZES ARE BASED ON 60 DEG C RATED TERMINATIONS, UNLESS NOTED OTHERWISE. FOR ANY OTHER CONDITIONS MODIFY SIZES PER CODE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
F. INSTALL FEEDERS OVERHEAD AS HIGH AS PRACTICABLE AND ORTHOGONALLY ALIGNED BUILDING STRUCTURE, UNLESS NOTED OTHERWISE. COORDINATE FINAL ROUTING WITH OTHER TRADES.
G. PROVIDE A PERMANENT LABEL ON FRONT OF EQUIPMENT ENCLOSURE. REFER TO SPECIFICATIONS FOR LABEL REQUIREMENTS. LABEL SHALL READ AS FOLLOWS (INCLUDE RESPECTIVE NAMES IN BLANKS): SERVICE EQUIPMENT LABEL. LINE 1: NOMINAL VOLTAGE AND FREQUENCY IN HERTZ LINE 2: SERVICE EQUIPMENT BUS RATINGS IN AMPS LINE 3: SCCR OF SERVICE EQUIPMENT IN MIPIS LINE 4: MAXIMUM AVAILABLE FAULT CURRENT IN AMPS LINE 5: DATE CALCULATED.
EXAMPLE: 208Y/120V, 60HZ 800A SCCR = 65,000A MAXIMUM AVAILABLE FAULT CURRENT = 58,672A CALCULATED: 01/01/2018
PANELBOARD/SWITCHBOARD LABEL: LINE 1: PANELBOARD " " SUPPLIED BY UPSTREAM LINE 2: PANELBOARD/SWITCHBOARD " " LOCATED IN " " LINE 3: SCCR OF SERVICE EQUIPMENT IN MIPIS LINE 4: TRANSFORMER " " SUPPLIES DOWNSTREAM LINE 5: PANELBOARD(S) " "
TRANSFORMERS LABEL: LINE 1: TRANSFORMER " " SUPPLIED BY UPSTREAM LINE 2: PANELBOARD/SWITCHBOARD " " LOCATED IN " " LINE 3: TRANSFORMER " " SUPPLIES DOWNSTREAM LINE 4: TRANSFORMER " " SUPPLIES DOWNSTREAM LINE 5: PANELBOARD(S) " "



ELECTRIC UTILITY CONTACT NOTE:

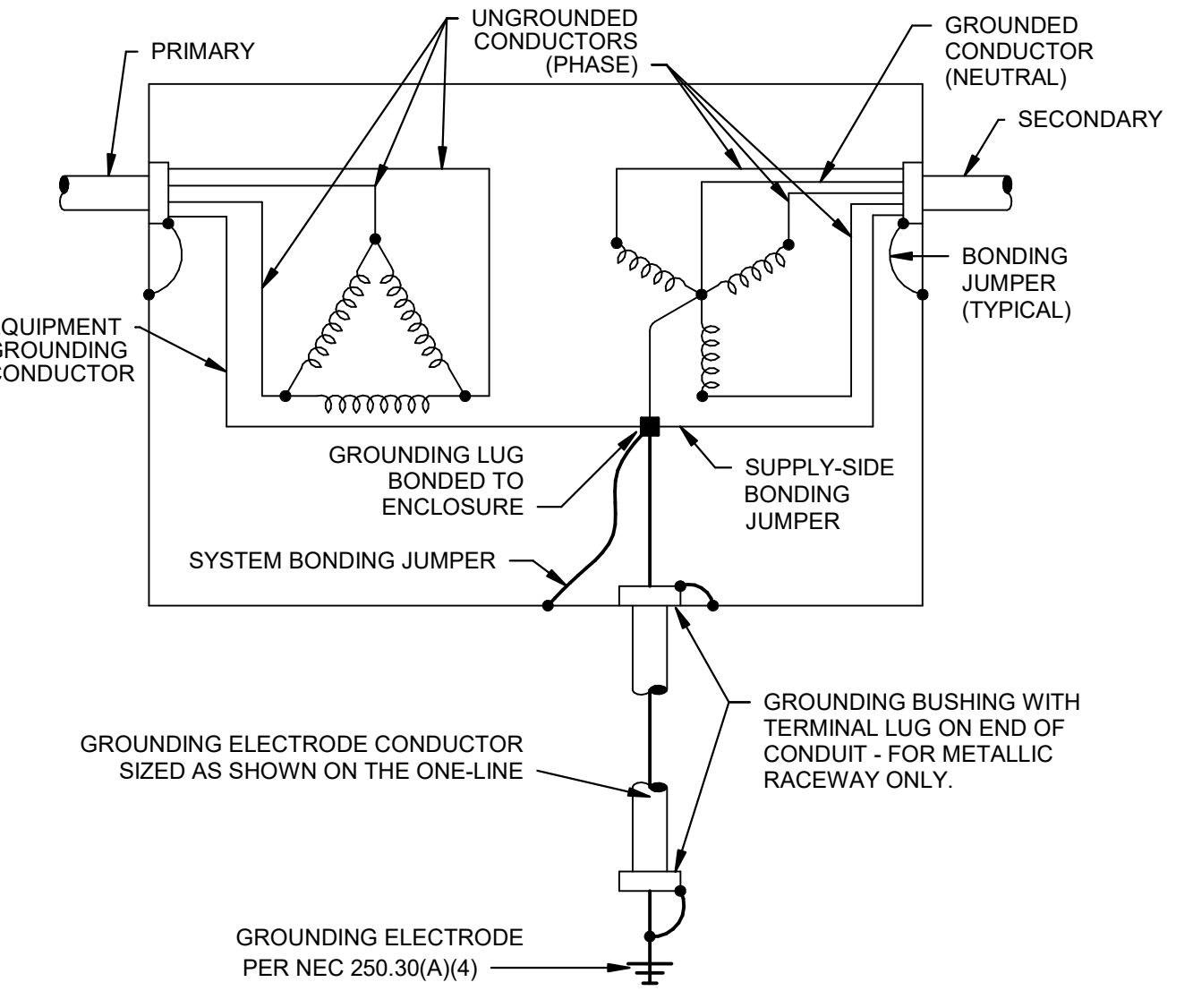
UTILITY COMPANY: PECO
UTILITY CONTACT (CUSTOMER SERVICE): 1-800-494-4000

FAULT CURRENT GENERAL NOTE (ESTIMATED VALUE):

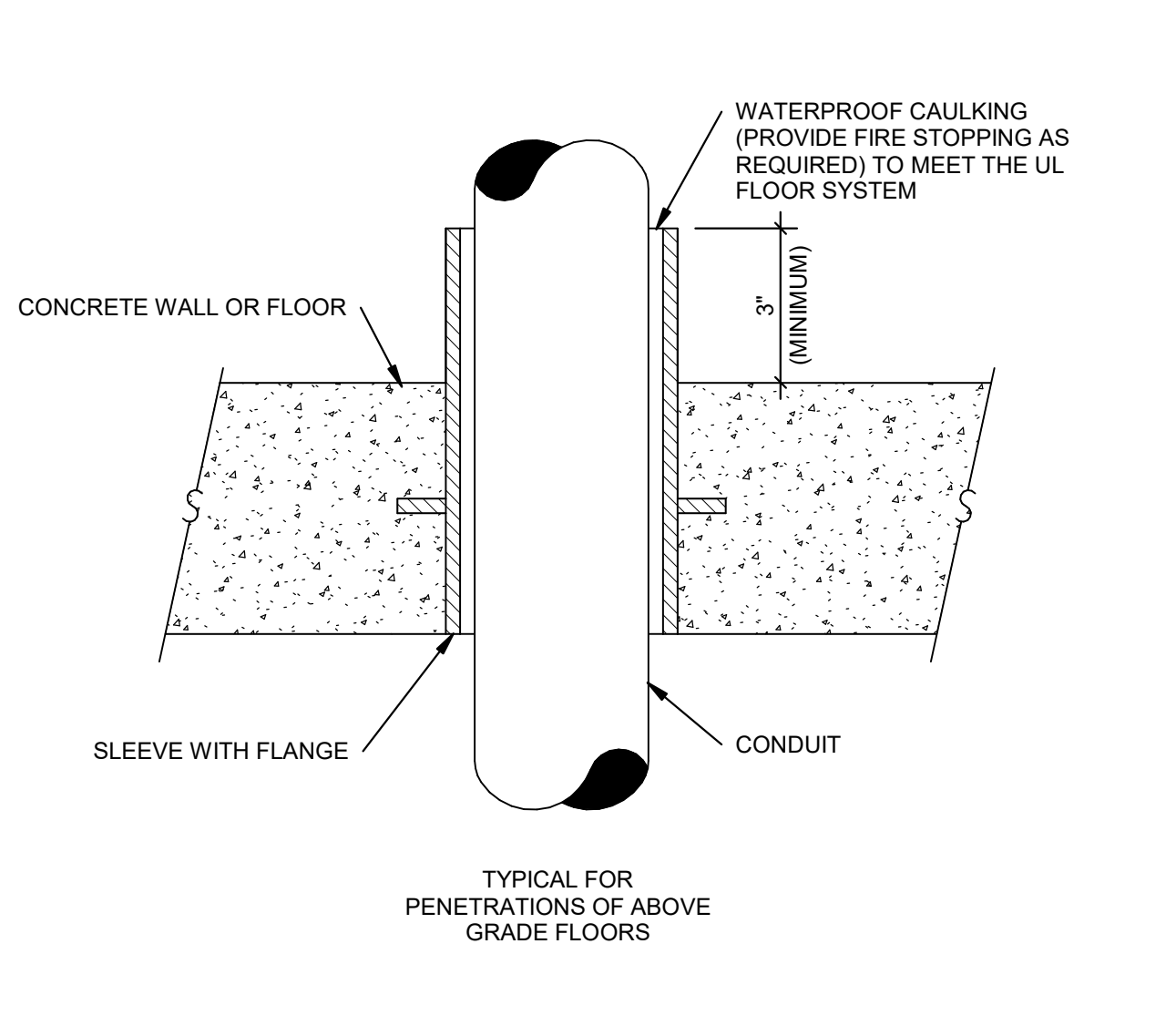
THE MAXIMUM AVAILABLE 3-PHASE SYMMETRICAL FAULT CURRENT VALUE AT THE UTILITY TRANSFORMER SECONDARY POINT OF SERVICE COULD NOT BE DETERMINED AT THE TIME OF THIS SUBMITTAL. THE ESTIMATED WORST CASE VALUE OF 28,672A IS BASED ON AN INFINITE BUS CALCULATION AT THE UTILITY TRANSFORMER. CONTRACTOR SHALL VERIFY ACTUAL AVAILABLE FAULT CURRENT VALUE WITH UTILITY. NOTIFY ENGINEER IF ACTUAL VALUE EXCEEDS ESTIMATED CALCULATED VALUE. ESTIMATED DESIGN VALUE IS BASED ON THE FOLLOWING:
UTILITY TRANSFORMER SECONDARY VOLTAGE: 480Y/277V, 3Ø, 4W
UTILITY TRANSFORMER SIZE: 750KVA, Z=3.5%

PANELBOARD LEGEND

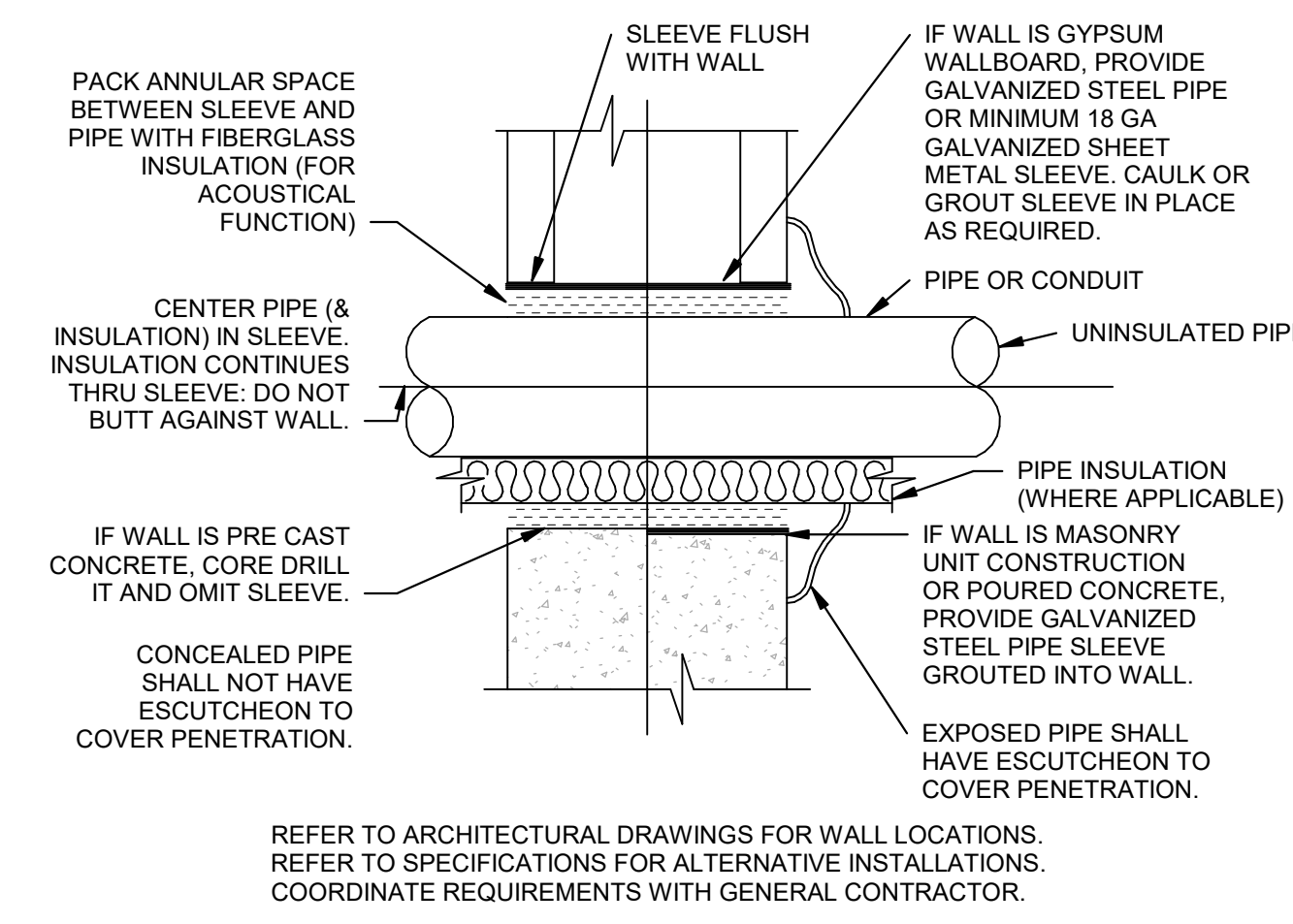
Table with 2 columns: ABBREVIATIONS, V1.00. Lists various electrical symbols and their meanings.



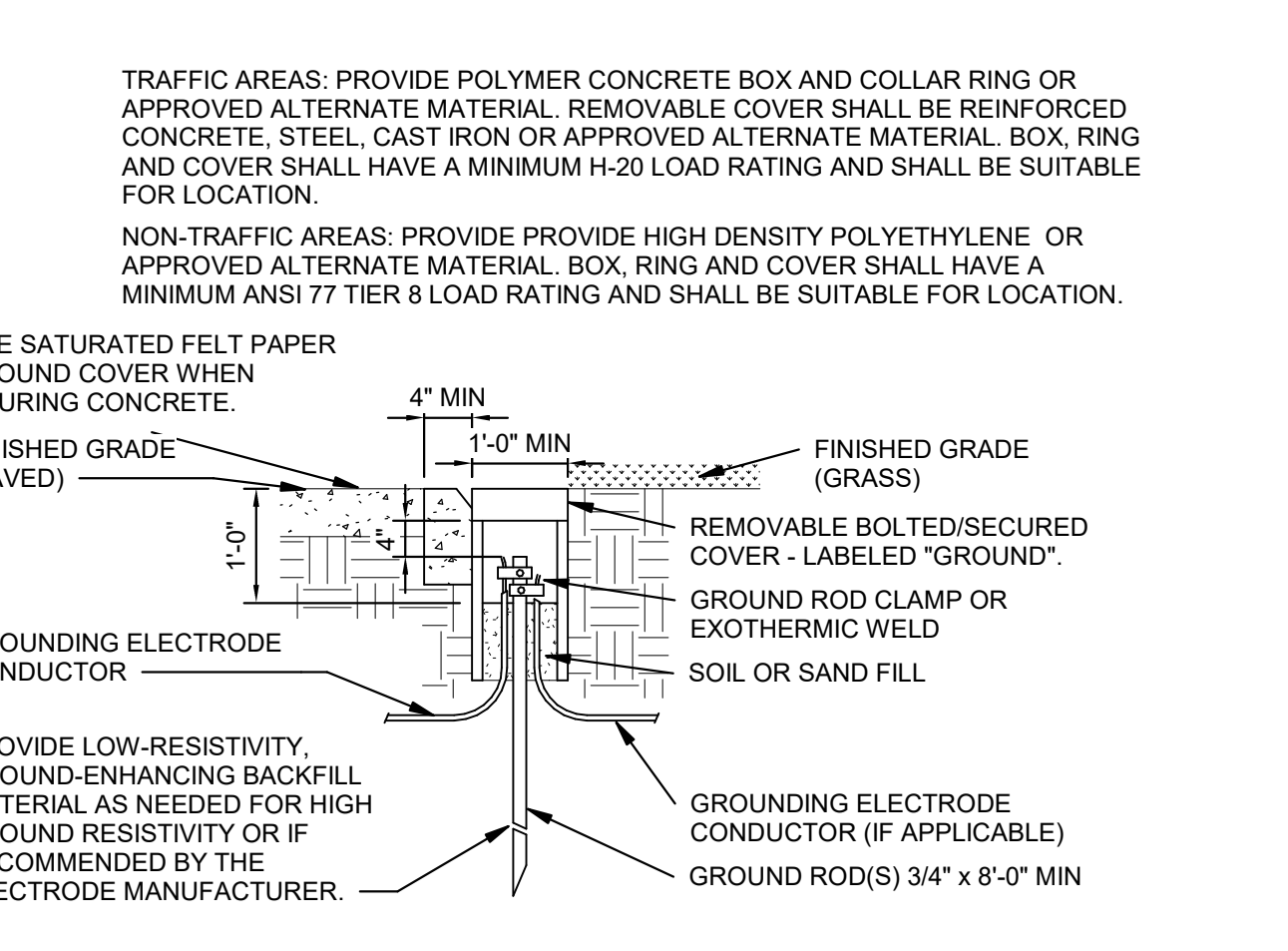
2 DRY TYPE TRANSFORMER GROUNDING NTS



3 CONDUIT PENETRATION OF CONCRETE FLOOR NTS

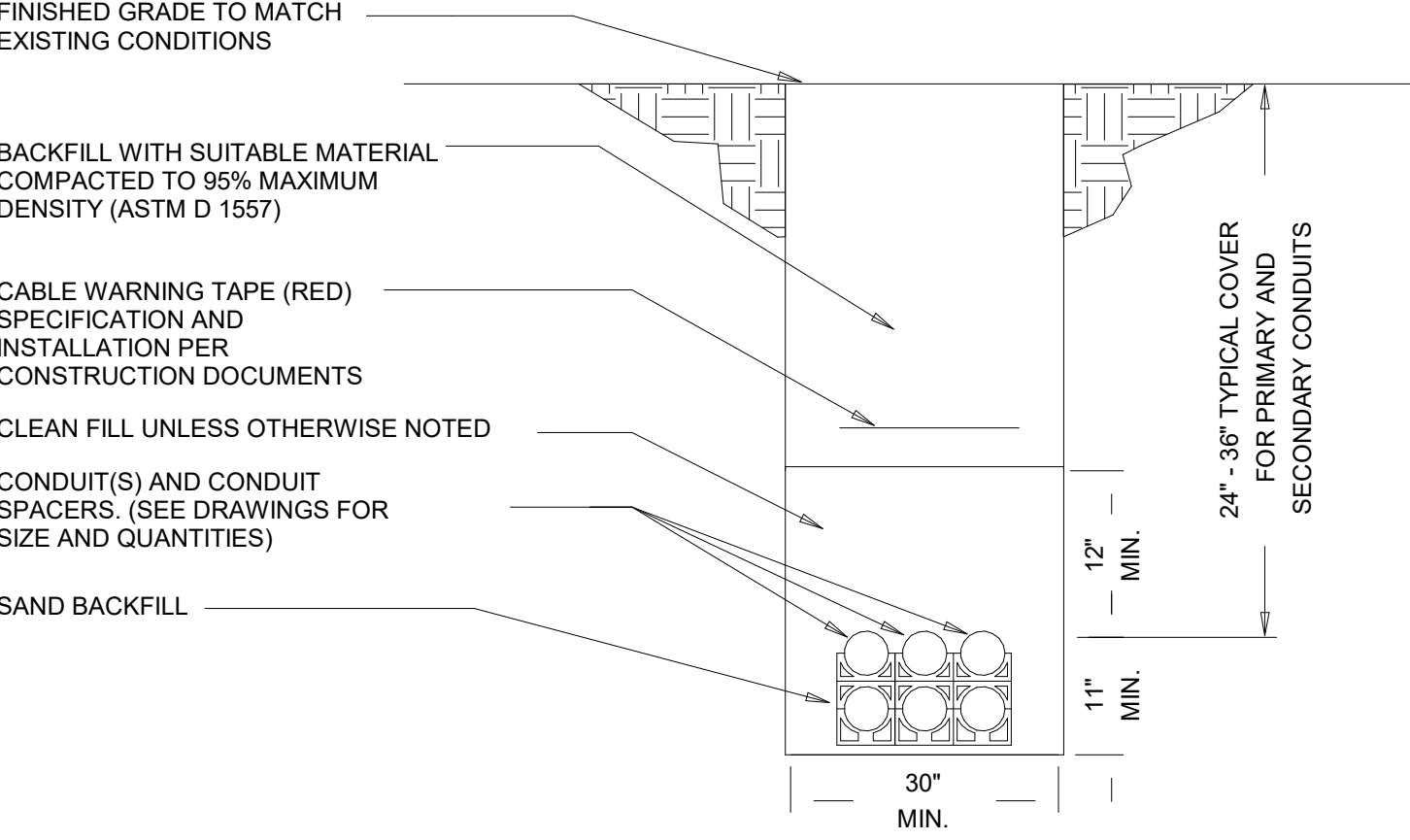


4 CONDUIT PENETRATION THRU NON-FIREWALL NTS



5 GROUNDING TEST WELL INSTALLATION NTS

Table with multiple columns: OKT NO., DESCRIPTION, LOAD TYPE, WIRE SIZE, PHASE, BKR AMP SIZE, NOTES, LOAD TYPE, DESCRIPTION, OKT NO., LINE-SIDE LUGS, MECHANICAL. Includes a summary table for TOTAL LOAD (VA) and TOTAL AMPS.



- 1. THE CLEAN FILL SHALL PASS THROUGH A 3/8" MESH SCREEN AND SHALL NOT CONTAIN SHARP STONES. OTHER BACKFILL SHALL NOT CONTAIN ASHES, CINDERS, SHELLS, FROZEN MATERIAL, LOOSE DEBRIS OR STONES LARGER THAN 2" IN MAXIMUM DIMENSION.
2. WHERE EXISTING UTILITIES ARE LIKELY TO BE ENCOUNTERED, CONTRACTOR SHALL HAND DIG AND PROTECT EXISTING UTILITIES.
3. PROVIDE SEPARATION OF CONDUITS OF DIFFERENT SYSTEMS (I.E., ELECTRIC, CATV & TELEPHONE) PER UTILITY COMPANY REQUIREMENTS. COORDINATE ROUTING OF CONDUITS WITH OTHER TRADES TO MAINTAIN REQUIRED SEPARATION WITH GAS, WATER, ETC., SERVICES.
4. TRENCH SHALL MEET CONSTRUCTION DOCUMENTS.
5. PROVIDE CONDUIT SPACERS 5" O.C. ALL ELBOWS SHALL BE INDEPENDENTLY SUPPORTED.

Short-Circuit and Voltage Drop Calculations

Table with columns: Fault Point (#), Bus/Feeder Description, Source Point, Phase, Source Isc (amps), Conduit Type/TX, Material, Quantity of Parallel Sets and Bus/Phase & Neutral Size, Conductor 'C' Value, Busway 'C' Value, L-L Voltage (E), Circuit Length (L), Load Power Factor (pf), Circuit Load (Ampereage), Resistance (R), Reactance (X), Arcross (pf), Degree Rise, kVA, New Xstr Z, Existing Xstr Z, Secondary Voltage, Tap Setting, I, M, Fault Current (amps), Voltage Drop (VVD), Cumulative Voltage Drop (%VVD), Fault Point (#). Includes calculations for VOLTAGE DROP (3Ø) and VOLTAGE DROP (1Ø).

TO THE BEST OF MY KNOWLEDGE, BELIEF, AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 NEW YORK STATE ENERGY CODE.

BUILDING DEPARTMENT FILING NOTE: THIS PLAN IS APPROVED ONLY FOR THE WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

NOTE: EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL DRAWINGS & SITE VISITS AND MAY NOT REFLECT EXACT AS-BUILT CONDITIONS. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BIDS. CAREFULLY COORDINATE NEW WORK AND DEMOLITION WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.

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DEAN W. CHANDLER

12/15/23



ATLANTIC-EE, LLC
571 W. CHURCH AVE
LONGWOOD, FL 32750
TEL: (866) 462-8623

CONSULTANTS

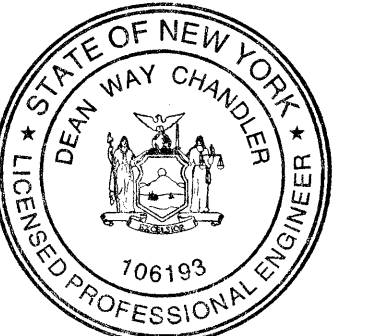


HNY CONSULTING ENGINEERS
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WWW.HNY.COM
240000244

PROJECT INFO

TENANT IMPROVEMENTS
1785 STATE HIGHWAY 5S
AMSTERDAM, NY 12010

SEALS



08/30/2024

REVISIONS

Table with 2 columns: DATE, REVISION

SHEET INFO

Table with 2 columns: PROJECT NUMBER, PROJECT DATE

ELECTRICAL SPECIFICATIONS

E-300

Table with 2 columns: PM, BRM

Table with 2 columns: PA, SL

Table with 2 columns: PROJECT NUMBER, PROJECT DATE

SHEET INFO

Table with 2 columns: PROJECT NUMBER, PROJECT DATE

ELECTRICAL SPECIFICATIONS

E-300

Table with 2 columns: PROJECT NUMBER, PROJECT DATE

Table with 2 columns: SHEET ISSUED, 12/15/23

C. UNDERGROUND RACEWAY USE:

Provide GRS installed below grade with a corrosion-resistant bonded-plastic or approved mastic coating. This shall include the 90-degree elbow below grade and the entire vertical transition to above grade.

RNC conduit may be used underground where permitted by local code and where not specifically restricted by these documents. When used, provide plastic-coated GRS, as specified above, for all bends greater than 90-degree elbows below grade and the entire vertical risers for transitions from below to above grade or above slab.

All site electrical conduits shall be 1" minimum, unless noted otherwise.

A. EQUIPMENT CONNECTIONS

Use FMC for final connection to each motor, transformer, and any device that would otherwise transmit motion, vibration, or noise. Use LFMC where exposed to liquids, vapors, or sunlight. Provide all FMC and LFMC with an insulated grounded conductor.

Use only metal raceways for all power provided from the output of variable frequency drives to their respective motors.

B. BUSHINGS AND LOCKNUTS

Rigidly terminate conduits entering steel metal enclosures to the enclosure with a bushing and locknut on the inside and a locknut or an approved hub on the outside. Conduit shall enter the enclosure squarely.

Provide bushings and locknuts made of galvanized malleable iron with sharp, clean-cut threads.

Where EMT enters a box, provide approved EMT compression connectors.

Use insulated, grounding, or combination bushings wherever connection is subject to vibration and/or moisture, or when required by NFPA 70.

Provide nylon bushings for all communications and low voltage wiring conduits and sleeves, unless noted otherwise.

3 CONDUCTORS AND CABLES

A. GENERAL CONDUCTOR AND CABLE REQUIREMENTS

Annealed (soft) copper complying with ICEA S-95-658/NEMA WC70 and UL standards 44 or 83 as applicable.

Aluminum conductor option:

1. Compact stranded, aluminum alloy (AA-8000 series), complying with ICEA S-95-658/NEMA WC70; No. 10 AWG or larger only.

2. Terminators: Tinned, compression (mechanical) type only; NRTL-listed for copper and aluminum conductors at 75 degrees C minimum.

3. Increase the raceway size as required, at no additional cost to the Owner, to accommodate the increased size of the aluminum Conductors.

4. Aluminum conductor size shall meet or exceed the ampere rating of the scheduled conductor conductors at 75 degrees Celsius.

5. Option applies only for the following feeders or services No. 2 AWG and larger (based on copper conductors):

a. Service entrance conductors.

b. Feeders to switchboards.

c. Feeders to panelboards. Exception: Apartment unit load center feeder conductors shall be copper.

d. Feeders to motor control centers.

e. Feeders to transformers.

f. Feeders to electrical enclosures terminate within equipment that utilizes compression connections, use hydraulic-compression type connectors with a zinc base, anti-oxidizing compound. Use compression tools of the type that will not release unless the correct pressure has been applied.

7. Measure the temperature of all aluminum conductors at all splices and terminations. Make each test under typical loading load conditions after the building is occupied and in operation for a minimum of two weeks. Replace all joints or splices indicating excessive heating.

8. Take measurements with a non-contact type infrared thermometer, with target size not exceeding one inch at five feet and an accuracy of two percent or better. Submit the meter specifications and calibration date with the test results.

9. Aluminum Conductor Manufacturer: General Cable or approved equal.

Conductor Insulation Types: 90-degree C-rated, Type THHN/THWN-2 or XHHW-2 complying with ICEA S-95-658/NEMA WC70.

Sizes of conductors and cables indicated or specified are in American Wire Gage (AWG - Brown and Sharpe).

All feeder and branch circuit conductors No. 8 AWG and larger: Stranded.

All conductors, No. 10 AWG and smaller: Solid copper.

All Branch Circuit Wiring: Not smaller than No. 12 AWG. If no conductor size is indicated on the Drawings for a branch circuit, provide conductors and conduit sized per NFPA 70 and based on the indicated branch circuit overcurrent protective device (OCPD) rating and number of poles. Where no circuit size (i.e., conductors and OCPD) is indicated on the drawings for a branch circuit, provide three No. 12 AWG conductors, in 3/4-inch raceway, and a 20A circuit breaker.

Control Wiring: Stranded copper conductors, 600V insulation, of the proper type, size, and number as required to accomplish specified function. Minimum size: No. 14 AWG, unless noted otherwise.

Flexible Cords and Cables: Stranded copper conductors for all, unless noted otherwise.

Special Purpose Conductors And Cables, Such As Low Voltage Control And Shielded Instrument Wiring: As recommended by the system equipment manufacturer unless indicated otherwise.

Copper Conductor Manufacturers: Alan Wire, Carrowire, Colonial Wire & Cable, Encore Wire, General Cable, Northern Cables, Okonite, or Southwire.

Connections: Apply a zinc based anti-oxidizing compound to connections. Do not use terminals on wiring devices to feed through to the next device.

A. CONDUCTORS AND CABLES INSTALLATION

Install all wiring in approved raceway and enclosures, except where specified or indicated for low-voltage wiring, where specified or indicated for direct-buried cables, or where type MC cable is indicated or specified as acceptable.

Install all conductors and cables in raceways continuous without joints or splices. Splice or tap only in approved boxes and enclosures with approved solderless connectors, or crimp connectors and terminal blocks for control wiring, and keep to the minimum required. Insulate all splices, taps, and joints as required by codes.

All materials used to terminate, splice, or tap conductors: designed for, properly sized for, and NRTL listed for the specific application and conductors involved, and installed in strict accordance with the manufacturer's recommendations, using the manufacturer's recommended tools.

Where wiring is indicated as installed, but the connection is indicated "FUTURE" or "BY OTHER DIVISION, TRADES, OR CONTRACTORS"; leave a minimum 3-foot "pigtail" at the box, tape the ends of the conductors, and cover the box.

In general, the direction of branch circuit "home run" routing is indicated on the drawings, complete with circuit numbers and panelboard designation. Continue all such "home run" wiring to the designated panelboard, as though "circuit runs" were indicated in their entirety.

Common or shared neutrals are not allowed unless shown on the drawings to be used or specifically noted to be allowed.

Where multi-wire branch circuits (i.e., shared neutral) are allowed, they shall be provided with a means that will simultaneously disconnect all ungrounded conductors at the point the branch conductors and terminal blocks for control wiring, and keep to the minimum required. Insulate all splices, taps, and joints as required by codes.

All materials used to terminate, splice, or tap conductors: designed for, properly sized for, and NRTL listed for the specific application and conductors involved, and installed in strict accordance with the manufacturer's recommendations, using the manufacturer's recommended tools.

Where wiring is indicated as installed, but the connection is indicated "FUTURE" or "BY OTHER DIVISION, TRADES, OR CONTRACTORS"; leave a minimum 3-foot "pigtail" at the box, tape the ends of the conductors, and cover the box.

In general, the direction of branch circuit "home run" routing is indicated on the drawings, complete with circuit numbers and panelboard designation. Continue all such "home run" wiring to the designated panelboard, as though "circuit runs" were indicated in their entirety.

Normal or Non-Essential circuits:

1. Maximum of 16 conductors in a single raceway. For up to eight conductors in a raceway, minimum raceway size: 3/4-inch. For greater than eight conductors, minimum raceway size: 1-inch. Do not install any other type of circuit in this raceway.

2. Minimum wire size for all conductors in this raceway: No. 10 AWG.

3. Only 15A and 20A branch circuit homeruns may be combined into one raceway.

GFCI circuits:

1. Do not use multi-conductor circuits, with a shared neutral, for any GFCI circuit breaker or receptacle circuit.

For branch circuits fed from GFCI circuit breakers, limit the one-way conductor length to 100 feet between the panelboard and the most remote receptacle or load on the GFCI circuit.

Properly identify all terminal blocks and wire terminals for control wiring with vinyl stick-on markers or equivalent. Provide Engineer with a list of proposed identifying numbers for review prior to installing markers.

Provide an equipment-grounding conductor or bonding jumper, as applicable, in all feeders and branch circuits, sized in accordance with NFPA 70 Tables 250.66 or 250.122, as applicable, unless indicated as larger on the drawings.

Voltage drop in branch circuits shall not exceed 3 percent.

When all conductors are installed in the proper color to match color code system in the table below unless there is a color system in use in the facility, utility or enforced by local amendments, in which case the colors are to match the system as indicated on the drawings, set forth by the A.H.U. utility or facility management. In larger sizes where properly colored insulation is not available, use vinyl plastic electrical tape of the appropriate color around each conductor at all termination points, junctions, and pull boxes.

Unless noted otherwise, all other raceway may be EMT where approved by local code. Use compression type fittings for EMT, with all fittings NRTL listed for the environment in which they are used. Unless noted otherwise, set-screw type fittings are not allowed.

L. EQUIPMENT FURNISHED BY OTHERS

Provide necessary equipment and accessories that are not provided by the equipment supplier or Owner to complete installation of equipment furnished by others in locations as indicated on the drawings, specified herein, or both. Equipment and accessories not provided by the equipment supplier may include, but not be limited to, flexible cords and plugs as required for proper operation of the complete system, in accordance with the manufacturers' instructions.

Contractor shall be responsible for correct rough-in dimensions, and verify them with Architect and/or equipment supplier prior to rough-in and service installations.

M. SYSTEM TESTING AND ADJUSTING

Adjust, align, and test all installation equipment on this project provided under this division and all electrical equipment furnished by others for electrical or wiring under this division for proper operation.

Test all systems and equipment according to the requirements in NETA ATS (latest edition) and all additional requirements specified in following sections.

Maintain the following on the project premises at all times: a true RMS reading voltmeter, a true RMS reading ammeter, and a megohmmeter insulation resistance tester. Provide test reading readings as requested or as required by the Engineer.

N. EQUIPMENT IDENTIFICATION

Provide equipment identification nameplates on all switchboards, panelboards, electrical equipment enclosures, access doors, transformers, disconnect switches, enclosed circuit breakers, motor starters, feeder devices in switchboards, distribution panelboards, and motor control centers and where indicated on the drawings.

Nameplates: 1. Engraved, contrasting color, three-layer, laminated plastic, indicating the name of the equipment, load, or circuit as ammeter; and a megohmmeter insulation resistance tester. Provide test reading readings as requested or as required by the Engineer.

2. Field-applied permanent epoxy adhesive, compatible with the equipment finish.

3. Self-adhering, with a permanent waterproof adhesive.

4. Attached with stainless steel screws and hardware.

Attachment method shall be acceptable to the manufacturers of the equipment to which the nameplates are being applied.

Nameplate Color:

1. Black background with white letters for Normal Power;

2. Red background with white letters for Emergency Power.

3. Letter height: 1/8-1/2-inch minimum as indicated on the Drawings.

O. SYSTEM START UP

Perform the following prior to starting up the electrical systems:

1. Check all components and devices and lubricate items accordingly.

2. Tighten screws and bolts for connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.

3. Adjust taps on each transformer for rated secondary voltage when the transformer is at minimum load.

4. Check and record building's service entrance voltage, grounding conditions, grounding resistance, and proper phasing.

5. Replace all burned-out lamps and lamps used for temporary construction lighting in permanent light fixtures.

6. Balance all single-phase loads at each panelboard, redistributing branch circuit connections until balance is achieved. Do not type up final panelboard directories until all re-balancing and redistribution of circuits are complete.

7. Turn on all loads in an attempt to maximize the load on the panel and take ampere readings on each of the phases before redistributing circuits and balancing the panel.

8. After all systems have been inspected and adjusted, confirm all operating features required by the drawings and specifications and make final adjustments as necessary.

Division 26: BASIC ELECTRICAL MATERIALS AND METHODS

1 RACEWAYS

A. METALLIC CONDUIT AND TUBING

Electrical Metallic Tubing (EMT), Couplings, and Fittings (EMT): ANSI C80.3, UL 797. Only steel products allowed.

Flexible Metal Conduit (FMC): Zinc-coated steel or aluminum, UL 1. Reduced-wall FMC is not allowed.

Intermediate Metal Conduit (IMC): Hot-dip Galvanized Rigid Steel Conduit, ANSI C80.6, UL 1242.

Liquidtight Flexible Metal Conduit (LFMC): Flexible steel conduit with PVC jacket, UL 360; Fittings: NEMA FB 1.

Rigid Metal Conduit (RMC):

1. Hot-dip Galvanized Rigid Steel Conduit (GRS): ANSI C80.1, UL 6.

2. Rigid Aluminum Conduit (RAC): ANSI C80.5, UL 6A.

Plastic-Coated IMC, RMC, and Fittings: NEMA RN 1, NRTL listed. Coating thickness of 0.04 inches minimum.

IMC and RMC Fittings: NEMA FB 1, compatible with conduit type and material, NRTL listed.

Manufacturers: AFC Cable, Aflnex, Anamet Electrical, Electri-Flex, Indatek, Manhatan/CDT/Cole-Flex, O-Z/Gedney, Republic Wire, Type International, Western Tube and Conduit, or Wheatland Tube.

B. NON-METALLIC CONDUIT AND TUBING

Rigid Nonmetallic Conduit (RNC): Schedule 40 PVC, 90 deg C rated, NEMA TC-2, UL 651

Fittings: NEMA TC 3, TC 6; UL 651, compatible with conduit/tubing type and material, NRTL listed.

2 RACEWAY INSTALLATION

A. GENERAL RACEWAY INSTALLATION REQUIREMENTS

Install raceways parallel and perpendicular to building lines.

Install raceways to requirements of structure, to requirements of all other work on the project, and to clear all openings, depressions, pipes, ducts, reinforcing steel, and other immovable obstacles.

Install raceways set in forms for concrete structure in such a manner that installation will not affect the strength of the structure.

Except where approved in writing by the Engineer, install no raceways in a slab-on-grade. Locate raceway below granular fill below slabs-on-grade.

Install raceways a minimum of 36" below bottom of slab/paving/grade where practicable.

Install raceways continuous between connections to outlets, boxes, and cabinets with a minimum possible number of bends and not more than the equivalent of four 90-degree bends between connections. Use manufactured elbows for 45- and 90-degree bends, unless approved by the Engineer in advance. Make other bends smooth, even and without flattening raceway or flaking galvanizing or enamel. Radii of bends shall be as long as possible and never shorter than the corresponding trade elbow.

Conceal raceways from view unless noted or approved otherwise.

Route raceways serving rooftop equipment inside equipment curb and minimize roof penetrations and exterior raceway runs. Support raceway from structure, do not support from the roof decking. Maintain 2" spacing between the raceway and roof deck to prevent roofing screws from penetrating raceway. Do not route raceways across skylights or other roof penetrations.

Route all exposed non-flexible raceways light to structure, parallel to building lines in strut or cable tray where practicable. Install raceways plumb/level where exposed to view.

Use long radius elbows for all underground installations, where necessary, or where otherwise indicated.

Securely fasten raceways in place with approved straps, hangers, and steel supports as required. Attach raceway supports to the building structure. Hang single raceways for feeders with malleable split ring hangers with rod and turnbuckle suspension from ceiling structure spaced not over 10 feet apart in construction above. Clamp groups of horizontal feeder raceways to steel channels that are suspended from inserts spaced not over 10 feet apart in construction above. Securely damp vertical feeder raceways to structural steel members attached to structure. Install cable clamps for support of vertical feeders where required. Add raceway supports within 12 inches of all bends, on both sides of the bends. Do not support raceways from suspended ceiling components.

Ream raceway ends, thoroughly clean raceways before installation, and keep clean after installation. Plug or cover openings and boxes as required to keep raceways clear during construction and fish all raceways clear of obstructions before pulling conductor through. Provide raceways of ample size for pulling of wires, not smaller than code requirements and not less than 1/2-inch in size, unless indicated otherwise on Drawings. Homeruns containing more than one branch circuit shall not be less than 3/4-inch in size.

Protect all raceway installations against damage during construction. Repair all raceways damaged or moved out of line after rough-in to meet Engineer's approval without additional cost to the Owner.

Align and install true and plumb all raceway terminations at panelboards, switchboards, motor control equipment, and junction boxes.

Install approved expansion/deflection rings where raceways pass through (if embedded) or across (if exposed) expansion joints, and when using RNC or RAC in exposed environments in accordance with NFPA 70 and expansion/contractor properties of RNC or RAC.

Install a pull wire in each empty raceway that is left for installation of conductors or cables under other divisions or contracts. Use polypropylene or monofilament plastic line with not less than 200-lb tensile strength. Leave at least 24 inches of slack at each end of pull wire.

Terminate all conduit stub-ups with nylon bushings.

Make all joints and connections in a manner that will ensure mechanical strength and electrical continuity.

Coordinate raceway routing and installation with other trades prior to rough-in and installation.

B. ABOVE GROUND RACEWAY USE:

Install all circular raceways concealed above suspended ceilings or concealed in wall or floors wherever possible except where otherwise indicated. Provide GRS for all conduits exposed to weather or other hazardous conditions.

Unless noted otherwise, all other raceway may be EMT where approved by local code. Use compression type fittings for EMT, with all fittings NRTL listed for the environment in which they are used. Unless noted otherwise, set-screw type fittings are not allowed.

2 GENERAL MATERIALS AND INSTALLATION

A. BUILDING OPERATION

Comply with the schedule of operations as outlined in the architectural portions of this specification. Building shall be in operation during normal workday hours. Accomplish work requiring interruption of building operation at a time when the building is not in operation and only with written approval of building Owner and/or tenant. Coordinate interruption of building operation with the Owner and/or tenant a minimum of seven (7) days in advance of work.

B. EXISTING EQUIPMENT REUSE AND REMOVAL

Provide all demolition of existing electrical systems and new electrical system modifications required because of building remodeling, as noted on the Drawings, or necessary for proper operation and new construction. Remove all abandoned cables and wiring and conduit above accessible ceilings and ventilation shafts.

Notify Architect, Engineer and Owner immediately of any dangerous conditions that exist on the job site, as they are discovered, before demolition, during selective demolition or before remodel work begins.

Remove all existing wiring, light fixtures, exposed conduits, and other electrical installations not reused prior to substantial completion of the work.

Existing raceways may be reused if their points of terminations are suitable; if they are clean inside with no evidence of rust or burrs; if free from cracks, flattened sections, or sharp bends; and if suitably located for use with other trades or installations. Carefully "fish" all existing conduits reused under this contract to remove all debris and obstructions, and swab until all moisture is removed.

Cut, patch, and repair where required for new electrical installations, and patch and repair all surface damage resulting from this work. Cut flush with the floor and plug and both ends raceways stubbed above the floor and not used at substantial completion of the work.

Relocate all existing electrical systems required to be in operation at substantial completion of the contract, if required, as a result of work included under this contract, even if not specifically indicated in the drawings or specifications.

Existing service entrance conductors and feeder conductors may be reused if all of the following conditions are met:

- 1. Conductor sizes meet or exceed the sizes specified on the drawings.
- 2. Conductor insulation is in good or better condition.
- 3. Conductor insulation is the correct type for the conditions.

C. EXCAVATION AND BACKFILLING

Perform excavation and backfill required for installation of underground work under this contract. Trenches shall be of sufficient width. Crib or brace trenches to prevent cave-in or settlement. Do not excavate trenches close to columns and walls of new building without prior consultation with the Architect. Use pumping equipment if required to keep trenches free of water. Backfill trenches in maximum 8-inch layers of well tamped dry earth in a manner to prevent future settlement.

Excavation as specified herein shall be classified as common excavation. Common excavation shall comprise the satisfactory removal and disposition of material of whatever substances and of every description encountered, including rock, if any, within the limits of the work as specified and shown on the drawings. Excavation shall be performed to the lines and grades indicated on the drawings. Dispose of excavated materials that are considered unsuitable for backfill, and surplus of excavated material, which is not required for backfill, all to the satisfaction of the Engineer.

D. CONSIDERED DAMAGE

Avoid damaging streets, sidewalks, drives, paving, walls, finishes, and other facilities, including equipment, light fixtures, and devices that are existing to remain, new or reused. Repair all damage caused in the course of this work, all on extra cost to the Owner. Repair or replace any existing damaged or recalled electrical equipment, light fixtures, wiring devices and related circuitry and restore all electrical systems to proper working order. Repair materials shall match existing construction. Repair materials shall generally match existing construction. Repair work shall meet all requirements of the Owner, local authorities having jurisdiction, and meet the satisfaction of the Architect. Repair work shall be thoroughly first class and be free from any defects. Conform to requirements of Division 02 of these specifications.

E. CUTTING AND PATCHING

Conform to the requirements in Division 01. Cut walls, floors, ceilings, and other portions of the facility as required to install work under this division. Obtain permission of the Architect prior to cutting. Do not cut or disturb structural members without prior approval from the Architect. Cut holes as small as possible. Patch walls, floors, and other portions of the facility as required by work under this division. Patching shall match the original material and construction including fire ratings, if applicable. Repair and refinish areas disturbed by work to the condition of adjoining surfaces in a manner satisfactory to the Architect.

F. ROUGH-IN

Coordinate without delay all roughing-in with other divisions. Conceal all conduit and raceways except in unfinished areas and where otherwise indicated on the drawings.

G. CONCRETE BASES

Provide concrete bases (e.g., housekeeping pads) for equipment where indicated on the drawings and as specified herein. Concrete bases shall have chamfered edges. Size of base shall be a minimum of 4 inches greater than the footprint of the equipment that it is supporting and shall have a minimum height of 3-1/2 inches.

Construct equipment bases of a minimum 28-day, 4000-psi concrete conforming to American Concrete Institute Standard Building Code for Reinforced Concrete (ACI 318) and the latest applicable recommendations of the ACI standard practice guide for equipment foundations conforming to ASTM C 150 Type 1, aggregate conforming to ASTM C33, and potable water. Exposed exterior concrete shall contain 5 to 7 percent air entrainment.

Unless otherwise specified or shown on the structural drawings, reinforce equipment bases with No. 4 reinforcing bars conforming to ASTM A615 or 6x8 - W2.9 x W2.9 welded wire mesh conforming to ASTM A185. Place reinforcing bars 24 inches on center with a minimum of two bars each direction.

Provide galvanized anchor bolts for equipment placed on concrete bases or on concrete slabs. Anchor bolts size, number, and placement shall be as recommended by the manufacturer of the equipment.

H. SUPPORT SYSTEMS

Steel Slotted Support Systems (Slotted Channel): Comply with MFMA-3, factory-fabricated components for field assembly; 12-gauge, 1-5/8-inch by 1-5/8-inch.

Finishes: 1. Metallic Coatings: Hot-dip galvanized after fabrication and applied according to MFMA-3.

2. Nonmetallic Coatings: Manufacturer's standard PVC, polyurethane or polyester coating applied according to MFMA-3.

3. Painted Coatings: Manufacturer's standard painted coating applied according to MFMA-3.

4. Stainless Steel: Type 304, per ASTM A240.

Aluminum Slotted Support Systems (Slotted Channel): Comply with MFMA-3, Type 6063-T6, per ASTM B221; factory-fabricated components for field assembly; 12-gauge, 1-5/8-inch by 1-5/8-inch.



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PROJECT INFO

TENANT IMPROVEMENTS

1785 STATE HIGHWAY 5S
AMSTERDAM, NY 12010

SEALS



08/30/2024

REVISIONS

DATE	REVISION
0 / 09/3/2024	ISSUED FOR PLAN REVIEW

SHEET INFO

ELECTRICAL SPECIFICATIONS
E-301

SHEET ISSUED: 12/15/23

C. EMERGENCY LIGHTING UNITS AND EXIT SIGNS

Description: Self-contained units complying with UL 924 [CSA C22.1 No. 141].

General: All emergency lights and exit signs with integral battery back-up shall be connected to a separate unswitched branch circuit with all other controls and conductors, unless noted otherwise. Exit signs shall not be switched. Refer to manufacturer's written instructions for proper installation and testing. Allow battery to charge for a minimum of 48 hours before light level is tested. In order to prevent battery damage, do not turn off power for extended periods of time after emergency light has been powered.

Battery: Sealed, maintenance-free, lead-acid type. The batteries shall be of suitable rating and capacity to supply and maintain at not less than 87-1/2 percent of the nominal battery voltage for the total lamp load associated with the unit for a period of at least 1-1/2 hours [2 hours], or the unit equipment shall supply and maintain not less than 60 percent of the initial emergency illumination for a period of at least 1-1/2 hours [2 hours].

Charger: Fully automatic, solid-state type with sealed transformer relay.

Operation: Relay automatically turns lamp on when power supply circuit voltage drops to 80 percent of nominal voltage or below. Material furnished shall be of the best quality and voltage approaches deep-discharge level. When normal voltage is restored, relay disconnects lamps from battery, and battery is automatically recharged and floated on charger.

Test Push Button: Push-to-test type, in unit housing, simulates loss of normal power, and demonstrates unit operability.

LED Indicator Light: Indicates normal power. Normal glow indicates trickle charge, and bright glow indicates charging at end of discharge cycle.

Wire Guard: Heavy-chrome-plated wire guard protects lamp heads or fixtures.

D. EXTERIOR AREA LIGHTING

Provide all components of the outdoor lighting system, including pole assemblies as detailed on the drawings and as described below. All material furnished shall be of the best quality and workmanship, and the manufacturer may be required to furnish satisfactory evidence of the ability to supply the material in accordance with the drawings and specifications.

Poles and light fixtures shall be as noted on the drawings. If Contractor desires to substitute other than the specified manufacturer(s), refer to Article "Substitutions" in this division, for requirements. No alternate manufacturers will be considered for approval without the prior submittal.

Furnish all poles with hand holes and no less than four high-strength steel anchor bolts for pole mounting. Each anchor bolt shall be threaded at the top, fitted with hexagon nuts, and shall have an "L" bend on the bottom of the bolt. All anchor bolts and nuts shall be hot-dip galvanized. All other small hardware including nuts, washers, slims, etc.) shall be galvanized. Provide pole finishes as noted on the drawings.

E. DIMMABLE LIGHT FIXTURES

For dimmable light fixtures provide both control and power wiring between light fixture and control device and between light fixture and power source. Quantity of low voltage and line voltage wiring and wire type shall be per manufacturer's recommendations. Coordinate light fixture and control device dimming types for compatibility.

16 MISCELLANEOUS ELECTRICAL

A. WIRING OF MECHANICAL EQUIPMENT

Provide all raceways and power wiring for all Division 23 equipment requiring electrical connections, including but not limited to pumps, water heaters, and HVAC equipment, and all line-voltage control and interlock wiring not provided under Division 23. Connect per manufacturer's wiring diagrams. Coordinate with Division 23 for disconnects and variable frequency drives (VFD) furnished with equipment, and provide all disconnect switches and final connections as required. If VFD is separate or does not have an integral disconnect feature, provide disconnect switch with auxiliary contact such that motor will be turned off if switch is off, provide VFD cable, Batten or equivalent for connection of VFD to motor when required. After installing wiring, verify that each motor load has the correct phase rotation.

Verify the actual "Maximum Overcurrent Protection" (MOPP) device ratings and "Minimum Circuit Ampacity" (MCA) conductor sizing for mechanical equipment from the equipment nameplate. Base electrical installations on actual required ampereages, which may vary somewhat from the conductor and equipment sizes shown on the drawings; however, in no case, reduce the size of conductors indicated on the drawings without authorization from the Engineer. Provide properly sized electrical wiring and equipment without extra cost to the Owner. Notify the Engineer of all changes required in the electrical installation due to equipment variances so that the effects on feeders, branch circuits, panelboards, fuses and circuit breakers can be checked prior to purchasing and installation. Be responsible for coordinating with Division 23 to verify the actual ampacities and correct sizes of all conductors and overcurrent protective devices for all equipment, and correct overload heaters for all motors, when starters are provided under Division 26.

B. TIME SWITCHES

Manufacturers: Intermatic, Paragon, or Tork.

Time switches: Electronic digital [Mechanical] astronomical, type as indicated, with manual bypass switch, NEMA enclosure suitable for the environment installed; number and types of contacts, sequence, and voltage as indicated on the drawings, or as required, based on the time switch function and the number of branch circuits or contactors controlled. Provide wiring to photocells, contactors, relays or other control points as required.

ELECTRICAL CONTROL POWER AND LOW VOLTAGE WIRING

Provide input/output control wiring as required for interlock between equipment and for communication between equipment and control devices. RTD wiring shall be three-wire or four-wire twisted, shielded, minimum number 22 gauge. Other analog inputs shall be a minimum of number 22 gauge, twisted, shielded. Binary control wiring shall be a minimum of number 22 gauge, twisted, shielded. Binary input wiring shall be a minimum of number 22 gauge. Thermistors shall be equipped with the manufacturer's calibrated lead wiring. 120V control wiring shall be #14 THHN in 3/4 inch conduit. Provide for 20 percent fill extra wire in each conduit. Splices in shielded cables shall consist of terminations and the use of shielded cable couplers that maintain the integrity of the shielding. Terminations shall be in accessible locations. Cables shall be harnessed with cable ties as specified herein. Conduit for control wiring, control cable and transmission cable shall be electrical metallic tubing (EMT) with compression fittings, cold rolled steel, zinc coated or zinc-coated rigid steel with threaded connections.

Relays other than those associated with digital output cards shall be general purpose, enclosed plug-in type with 8-pin octal plug and protected by a heat and shock resistant duct cover. Number of contacts and operational function shall be as required. Solid State Relays (SSR) for input/output isolation shall be greater than 10⁶ ohms with a breakdown voltage of 1500V root mean square or greater at 60 Hz. The contact life shall be 10 x 10⁶ of operations or greater. The ambient temperature range of SSRs shall be -20 to +140F. Input impedance shall not be less than 500 ohms. Relays shall be rated for the application. Operating and release time shall be for 100 milliseconds or less. Transient suppression shall be provided as an integral part of the relay.

Contactors shall be of the single coil, electrically operated, mechanically held type. Positive locking shall be obtained without the use of hooks, latches, or semi-permanent magnets. Contactor shall be double-break, silver-to-silver type protected by arcing contacts. The number of contacts and rating shall be selected for the application. Operating and release times shall be 100 milliseconds or less. Contactors shall be equipped with coil transient suppression devices.

Type of Device	Hubbell	Pass & Seymour	Leviton	Cooper Wiring Devices
Duplex Receptacle	BR20	Duplex Receptacles - Commercial Grade CR20	CR20	CR20
GFCI Receptacle	GF20LA	Other Receptacles 2095	7899-4H	VGF20
Single Pole Switch	DS120	Switches - Commercial Grade CSB1-20	CSB1-20	CSB120
Double Pole Switch	DS220	Switches - Commercial Grade CSB2-20	CSB2-20	CSB220

G. DRY-TYPE TRANSFORMERS

Transformers: General purpose, NRTL listed/labeled. Comply with NEMA ST 20 and UL 1561.

Insulation Class: For three-phase transformers less than 15 kVA and all single-phase, 185 degrees C. NRTL-component-recognized insulation system with a maximum of 115 degrees C rise above a 40 degree C ambient temperature; for three-phase transformers 15 kVA and larger, 220 degrees C. NRTL-component-recognized insulation system with a maximum of 150 degree C rise above a 40 degree C ambient temperature. NRTL-component-recognized insulation system replaces the UL 1446 insulation rating system that used letters.

Phases, Voltages, and Sizes: As indicated on the drawings.

Sound Level: Not exceeding 3 dBA less than NEMA ST 20 standards for the sizes indicated when factory tested according to IEEE C57.12.91.

Full-Capacity Primary Taps: For three-phase below 25 kVA and all single-phase, one 5 percent tap above and one 5 percent tap below; 25 kVA to 500 kVA, six 2.5 percent taps (2 above, 4 below); above 500 kVA, four 2.5 percent (2 above, 2 below).

Transformer Core and Coil Assemblies: Mounted on integral vibration-absorbing pads.

Transformers 75 kVA and larger shall be floor mounted unless indicated otherwise. Transformers 45 kVA and smaller may be wall mounted where wall construction is suitable for the load. Floor mounted transformers shall be securely bolted to a 4 inch square keeping pad with vibration isolation pads. Wall mounted or suspended transformers shall have a means of isolating vibration from the support. Wall mounts must be by same manufacturer as and provided with transformer.

Transformers up through 1000 kVA shall be mounted on elastomeric vibration isolation pads. Pad shall be constructed of neoprene, rubber, glass fiber, or a combination thereof. Pads shall be "ribbed" or "waffled" in texture. Pads shall be selected for smallest diameter (hardness), preferably less than 50. Deflection of pad shall be 0.25 inches static minimum. Stack pads until the desired deflection is achieved.

Make final conduit connections to transformers with flexible conduit, with at least 6 inches of slack in all directions. Minimum flexible conduit length shall be 2 feet.

Transformer Enclosures: Removable front cover, core and coil encapsulated within resin compound, drip-proof, fabricated of heavy gauge sheet steel construction. Dry locations: Ventilated, NEMA 250 Type 2, Damp or wet locations: Ventilated with weather shields, NEMA 250 Type 3R. Corrosive locations: Totally enclosed, non-ventilated, NEMA 250 Type 4X, stainless steel.

Provide energy-efficient transformers complying with federal regulation 10 CFR 431.192 through 431.198 requirements.

K-rated transformers shall be provided as indicated on the drawings and be listed for 115 degree C rise.

Manufacturers: ABB, ACME, Eaton, Siemens, Hammond, Sola/Heli-Duty, or Square D.

A. LABELING OF SERVICE EQUIPMENT, PANELBOARDS, SWITCHBOARDS & TRANSFORMERS

Provide a permanent label to front of equipment enclosure. Label shall read as follows (include relevant names in blanks).

Service Equipment Label:

LINE 1: NOMINAL VOLTAGE AND FREQUENCY IN HERTZ
LINE 2: SERVICE EQUIPMENT BUS RATING IN AMPS
LINE 3: SCORE OF SERVICE EQUIPMENT IN AMPS
LINE 4: MAXIMUM AVAILABLE FAULT CURRENT IN AMPS
LINE 5: DATE CALCULATED

EXAMPLE:
208Y/120V, 60HZ
800A
SCCR = 65,000A
MAX AVAILABLE FAULT CURRENT = 58,815A
CALCULATED: 01/01/2018

Panelboard/Switchboard Label:

LINE 1: PANELBOARD DESIGNATION
LINE 2: VOLTAGE, PHASE, WIRES, AMPS
LINE 3: FED FROM " "

EXAMPLES:
H1A
480Y/277V, 3PH, 4W, 200A
FED FROM MDB

L1A
208Y/120V, 3PH, 4W, 225A
FED FROM H1A VIA XFMR T1

Transformer Label:

LINE 1: TRANSFORMER DESIGNATION
LINE 2: FED FROM " "
LINE 3: SUPPLIES " "

EXAMPLE:
T1
FED FROM H1A
SUPPLIES H1A

Disconnect Switch Label:

LINE 1: DESIGNATION OF EQUIPMENT SERVED BY DISCONNECT
LINE 2: VOLTAGE, PHASE, WIRES, AMPS
LINE 3: FED FROM " "

EXAMPLE:
WATER HEATER WH1
480V, 3PH, 3W, 100A
FED FROM MDB

15 LIGHT FIXTURES, LAMPS AND BALLASTS

A. LIGHT FIXTURE LOCATIONS

Light fixtures shown on the drawings represent general arrangements only. Refer to architectural drawings for more exact locations. Coordinate location with all other trades before installation to avoid conflicts. Coordinate light fixture locations in mechanical rooms with final installed piping and ductwork layouts.

B. LIGHT FIXTURES

Provide light fixtures as scheduled on drawings, including all lamps, all necessary accessories, material and labor to securely hang, clean, and make light fixtures completely ready for use. Light fixture model numbers scheduled on the drawings show only the manufacturer, grade, and style of light fixtures required. Provide all hangers, supports, and miscellaneous hardware required to install light fixtures, proper trim to fit each ceiling condition actually encountered, and additional tie wires connected to structure to conform to seismic requirements where required by the applicable building code.

Packaging of light fixtures will not be allowed. Only those luminaires listed in the Light Fixture Schedule or approved in accordance with substitutions of these specifications will be accepted. Where the Light Fixture Schedule indicates an allowance for a specific light fixture, the price is a Contractor price. Include all additional costs for freight, lamps, and installation of light fixture and lamps.

Install linear light fixtures hung in continuous rows on channel struts specifically designed for this purpose.

Install all light fixtures located in areas without ceilings immediately below the roof-framing members, or suspended from chain hangers suitable in length to provide the indicated mounting height.

Through-wiring of recessed light fixtures in suspended ceilings is not permitted. Connect each light fixture by a whip to a junction box. Provide cable whips of sufficient lengths to allow for relocating each light fixture within a 5-foot radius of its installed location, but not exceeding 6 feet in unsupported lengths.

Light fixtures near or in contact with insulation shall comply with code for such. Maintain minimum 3" working clearance between non-IC rated light fixture housings and insulation on all adjacent ductwork, piping, walls and ceilings.

14 DISTRIBUTION AND CONTROL EQUIPMENT

A. SERVICE ENTRANCE AND POWER DISTRIBUTION SWITCHBOARDS:1600A AND LARGER

Service entrance and power distribution switchboards must conform with the requirements of the local codes and serving utility, manufactured according to current requirements of UL 891, "Dead-front Switchboards" NRTL listed and permanently labeled for service entrance use when applicable, short circuit interrupting and bracing rating as shown on the drawings.

Main [lugs][circuit breaker][used switch] and feeder [circuit breakers][used switches] as indicated on the drawings.

Integral ground fault relays and operators, self-powered, where indicated or required by NFPA 70 [CSA C22.1 and C22.2].

Contained in a single factory-assembled dead-front enclosure with front accessible connections to incoming mains and outgoing feeder [switches][circuit breakers].

Circuit Breakers: Bolt-on, thermal magnetic, "quick-make quick-break" type; toggle switching mechanism to provide manual and automatic operation; and automatic tripping clearly indicated by a neutral handle position in-between the "on" and "off" positions.

Fused Switches: Quick-make, quick-break, and fusible; fuse clips or provisions for bolt-in fuses as appropriate for the fuses specified; interlocked covers and a card holder for circuit identification.

Manufacturers: Square D QED type or approved equal by Eaton, ABB or Siemens.

A. LIGHTING AND APPLIANCE PANELBOARDS

Panelboards: Complete with bolt-on thermal magnetic, molded case circuit breakers assembled in a dead-front finished cabinet containing a typewritten card directory indicating exactly what each circuit breaker controls; fully-rated and with the integrated short circuit current ratings indicated on the drawings. Plug-in type breakers will not be acceptable. All two- and three-pole breakers: Common trip type.

1. Type SWD Circuit Breakers: Use when breaker serves as a switch for 120V or 277V lighting circuits.
2. GFCI Circuit Breakers: Class A ground-fault protection (6-mA trip) for personnel protection. Use as indicated on drawings.
3. Ground-Fault Equipment Protection (GFEF) Circuit Breakers: Class B ground-fault protection (30-mA trip). Use as indicated on drawings.
4. Handle Clamp: Loose attachment for holding circuit breaker handle in "on" position. Use for all circuits containing emergency lighting loads, fire alarm loads, and as indicated on drawings. Breakers serving fire alarm loads must have a permanently-affixed red label stating "FA" in white letters adjacent to the circuit breaker.
5. Handle padlocking device: fixed attachment for locking circuit breaker handle in "on" or "off" position. Use as indicated on drawings.

Manufacturers: Square D Type NQ or NF (as applicable, based on voltage and ampere ratings and required short-circuit interrupting ratings as scheduled on the drawings) or approved equal by Eaton, ABB, or Siemens.

Provide properly sized lugs for all equipment, circuit breakers, and other electrical devices to accommodate installed conductors. A larger frame, oversized lugs or non-standard product may be required in some instances. Utilize pin adapters only if necessary and only as allowed by manufacturer and AHJ.

For recessed panelboards, (4) 1" conduits with pull strings shall be provided from each panel up to accessible ceiling space and be capped and labeled for future use.

B. CIRCUIT BREAKERS IN EXISTING PANELBOARDS/SWITCHBOARDS

Remove new circuit breakers for installation in existing panelboards/switchboards, of the same manufacturer and type as the existing panelboard/switchboard circuit breakers. Short circuit current interrupting rating of any new breaker shall be the larger of the existing panel rating or the available fault current indicated on the drawings.

C. WORK ON EXISTING DISTRIBUTION EQUIPMENT

Provide new, typewritten card directory for distribution equipment (including but not limited to load centers, panelboards, switchboards and switchgear) where changes occur under this scope of work. Indicate exact loads served by each existing circuit breaker or switch.

D. DISCONNECT (SAFETY) SWITCHES

Disconnect (Safety) Switches: Heavy-duty, fused or non-fused (as indicated on drawings or required) NEMA KSI, externally operated, visible-blade safety switches; NEMA enclosure type as indicated on the drawings or suitable for the environment in which installed, based on fusible switch and fuse sizes indicated, include Class R, J, or L fuse provisions as applicable.

Where indicated, provide fusible switches permanently labeled as suitable for use as service entrance equipment, with integral and separate neutral and ground assemblies, suitable for the sizes of conductors indicated. Do not double-lug any terminations not specifically listed as suitable for more than one conductor.

Provide switches where not furnished with the starting equipment, at all other points required by NFPA 70, and where indicated on the drawings.

Manufacturers: Eaton, ABB, Siemens, or Square D.

E. SURGE-PROTECTIVE DEVICES (SPD)

Provide SPD labeled in accordance with the latest editions of UL 1283 and 1449, including the highest fault current of Section 37.3 (NRTL Recognized for SPD integral to panelboard) that meets or exceeds the following criteria:

Maximum surge current capability (single pulse rating) per phase:

1. Service entrance switchboards; switchgear: 240kA.
2. Distribution panelboards; panelboards used for service entrance & MCC: 120kA.
3. Branch Panelboards: 80kA (non-modular is acceptable).

SPD shall have a minimum EMIRFI filtering of 50dB at 100kHz.

Indicators: The SPD shall use LED indicators that provide indication of suppression component failure in all protection modes including N-G, as well as optically isolated NiC dry contacts for remote monitoring.

Follow manufacturer's installation instructions for externally mounted SPD, with lead lengths as short (less than 18 inches) and straight as possible and gently twisted together.

Switchboard, Switchgear, Panelboard, and MCC internally mounted SPD: Factory installed and NRTL labeled by and at the facility of the electrical distribution equipment manufacturer.

Externally mounted SPD (only allowed where noted on the construction documents): Install with conductors as short and straight as possible. Twist the SPD input conductors together to reduce input conductor inductance. Follow the SPD manufacturer's recommended installation practices and comply with all applicable codes.

Warranty: The manufacturer shall provide a minimum full five year parts, labor, and travel warranty from date of substantial completion against any part failure, excluding breakers, when installed in compliance with manufacturer's written instructions, NRTL listing requirements, and all applicable national or local electrical codes. Manufacturer shall make available local, national field engineering service support. Where direct factory employed service engineers are not locally available, travel time from the factory or nearest dispatch center shall be stated.

Thoroughly factory test the specified system before shipment. Testing of each system shall include, but shall not be limited to, quality control checks, dielectric voltage withstand tests at twice rated voltage plus 1000V per NRTL requirements, and operational and calibration tests.

Manufacturers: ABB USA, AC Data Solutions, APT, Atlantic Scientific, Current Technology, Danaher Power Solutions, Eaton, G.E., Intermatic, Lea International, Leviton, Liebert, Northern Technologies, Siemens, Square D, or Surge Suppression Incorporated.

F. FUSES

Provide each circuit and set of fuse clips throughout the work with sizes and types as required or indicated. All fuses larger than 600A, Class L, similar to type KRP-C Bussmann Low Peak or equal. Fuses used to protect motors: UL Class RK5, Bussmann Fuselink or equal. Fuses used to protect all other electrical equipment: UL Class RK1, dual element, Bussmann LPS/LPN or equal. All fused devices shall be labeled as to type and size of fuse equipment.

Furnish three spare fuses of each size and type used on the project (except for main switch fuses, furnish one spare), neatly contained in a properly labeled cabinet.

Where arc energy reduction is required, fuse manufacturer shall provide documentation indicating clearing time for fuses to meet the requirements of the code.

Manufacturers: Eaton, Mersen, or Littelfuse.

System Voltage:

240V and under, including 208Y/120, 120/240, 120/208, and 240D/120 systems.

- Phase A: Black.
- Phase B: Orange.
- Phase C: Blue.
- Neutral: White.
- Equipment Ground: Green.
- Isolated Ground: Green with yellow stripe.

480V and 480Y/277V:

- Phase A: Brown
- Phase B: Orange
- Phase C: Yellow
- Neutral: Gray
- Equipment ground: green.

4. JUNCTION BOXES, PULL BOXES, CABINETS, AND WIREWAYS

Provide junction boxes, pull boxes, cabinets, and wireways wherever necessary for proper installation of various electrical systems according to NFPA 70 and where indicated on the drawings. Size as required for the specific function or as required by NFPA 70, whichever is larger. Construction shall be of a NEMA design suitable for the environment installed.

Junction boxes installed behind wall cases and in or on other store fixtures, except where otherwise specified, shall be 4 inches square or larger with galvanized covers.

Horizontally mount junction boxes under center fixtures (and cases), handy boxes or 4-inch square boxes with tops of boxes not more than 3-1/2 inches above the floor. Size junction boxes to adequately contain all required conductors and splices.

5. OUTLET BOXES

All outlets including light fixture, switch, receptacle, and similar outlets: galvanized steel knockout boxes, suitable in design to the purpose they serve and the space they occupy. Size as required for the specific function or as required by NFPA 70, whichever is larger. Set all outlet boxes in walls, columns, floors, or ceilings so they are flush with the finished surface, accurately set, and rigidly secured in position. Provide plaster rings, extension rings and/or masonry rings as required for flush mounting. Provide approved cast outlet boxes with hubs and weatherproof covers in all areas subject to damp, wet, or harsh conditions.

Manufacturers: Appleton, Cooper, Erkon Electrical, Hoffman, Killark Electric, O-2/Gadney, Raco, Rabroy Industries, Scott Fetzer, Spring City Electrical, Thomas and Betts, Waker Systems, or Woodhead.

6. OUTLET LOCATIONS

Coordinate locations of outlet boxes. Outlets are only approximately located on the small scale drawings. Use great care in the actual location by consulting the various large scale detailed drawings used by other division trades, and by securing definite locations from the Architect.

7. MOUNTING HEIGHTS

Unless noted otherwise, install wiring devices vertically aligned at height indicated on construction drawings.

8. RECEPTACLES

Where indicated otherwise, install vertically with the ground slot mounted at the top.

Unless installed horizontally, install with the neutral slot mounted at the top.

Above counter: mount vertically aligned.

Mechanical and electrical equipment rooms and janitors closets: mount vertically aligned.

Garages: mount vertically aligned.

Weatherproof exterior receptacles: horizontally aligned.

GFCI receptacles: Same as general receptacles.

Isolated ground receptacles: Same as general receptacles.

SPD receptacles: Same as general receptacles.

Clock Receptacles: 84 inches above finished floor.

Concrete Block Walls: As long as ADA requirements are maintained, dimensions above may be adjusted slightly as required to compensate for variable joint dimensions such that bottom or top of boxes, as applicable, are at block joints.

9. SWITCHES

General: All switches shall be mounted at the same height throughout the project unless noted otherwise.

Above Counters: Same as for receptacles.

Concrete Block Walls: As long as ADA requirements are maintained, dimensions above may be adjusted slightly as required to compensate for variable joint dimensions, such that bottom or top of boxes, as applicable, are at block joints.

Walls with Wainscoting: 6 inches minimum above wainscoting, but not exceeding 48 inches above finished floor.

<

COMcheck Software Version COMcheckWeb
Interior Lighting Compliance Certificate

Project Information
Energy Code: 2020 New York State Energy Conservation Construction Code
Project Title: DAB4
Project Type: New Construction

Construction Site: Owner/Agent: Designer/Contractor:

Additional Efficiency Package(s)
Credits: 1.0 Required 0.0 Proposed

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts
1-AVI TUNNEL SPACE (Warehouse Storage:Smaller, Hand-Carried Items)	1740	0.69	1201
Total Allowed Watts =			1201

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Watt. (C X D)	E
1-AVI TUNNEL SPACE (Warehouse Storage:Smaller, Hand-Carried Items)				
LED: I: LED FIXTURE: Other:	1	1	22	22
LED: F1: LED FIXTURE: Other:	1	3	29	87
Total Proposed Watts =			109	

Interior Lighting PASSES: Design 91% better than code

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2020 New York State Energy Conservation Construction Code requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Michael Kyriacou - Electrical Designer *Michael Kyriacou* 8/30/2024
Name - Title Signature Date

Project Title: DAB4 Report date: 08/29/24
Data filename: Data filename: Page 1 of 6

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.2 [EL22] ¹	Spaces required to have light, individual controls that allow the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern => 50 percent.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.1 [EL18] ¹	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, warehouse storage areas, and other spaces =<= 300 sq ft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.2.1 [EL19] ¹	Occupancy sensors control function in warehouses: In warehouses, the lighting in aisles and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.2.1 [EL20] ¹	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces =>= 300 sq ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas =<= 600 sq ft. within the space, 2) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 3) are configured so that general lighting power in each control zone is reduced by =>= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.2.2 [EL21] ¹	Each area not served by occupancy sensors (per C405.2.1) have time-switch controls and functions detailed in sections C405.2.2.1 and C405.2.2.2.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Project Title: DAB4 Report date: 08/29/24
Data filename: Data filename: Page 4 of 6

COMcheck Software Version COMcheckWeb
Exterior Lighting Compliance Certificate

Project Information
Energy Code: 2020 New York State Energy Conservation Construction Code
Project Title: DAB4
Project Type: New Construction
Exterior Lighting Zone: 3 (Other (LZ3))

Construction Site: Owner/Agent: Designer/Contractor:

Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
EXTERIOR PERIMETER OF AVI TUNNEL (Walkway < 10 feet wide)	175 ft of	0.6	Yes	105
Total Tradable Watts (a) =				105
Total Allowed Watts =				105
Total Allowed Supplemental Watts (b) =				500

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 500 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Watt. (C X D)	E
EXTERIOR PERIMETER OF AVI TUNNEL (Walkway < 10 feet wide, 175 ft. of walkway length): Tradable Wattage				
LED: G1: LED WALL MOUNTED FIXTURE: Other:	1	6	75	300
LED: K1: LED WALL MOUNTED FIXTURE: Other:	1	2	29	58
Total Tradable Proposed Watts =			358	

Exterior Lighting PASSES: Design 41% better than code

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2020 New York State Energy Conservation Construction Code requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Michael Kyriacou - Electrical Designer *Michael Kyriacou* 8/30/2024
Name - Title Signature Date

Project Title: DAB4 Report date: 08/29/24
Data filename: Data filename: Page 2 of 6

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3 [EL23] ¹	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3.2 [EL23] ²	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.2.4 [EL24] ¹	Separate lighting control devices for specific uses installed per approved lighting plans.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.4 [EL27] ¹	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.5 [EL28] ¹	Manual controls required by the energy code are in a location with ready access to occupants and located where the controlled lights are visible, or identify the area served and their status.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.6 [EL30] ¹	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.3 [EL6] ¹	Exit signs do not exceed 5 watts per face.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

Project Title: DAB4 Report date: 08/29/24
Data filename: Data filename: Page 5 of 6

COMcheck Software Version COMcheckWeb
Inspection Checklist

Energy Code: 2020 New York State Energy Conservation Construction Code

Requirements: 100.0% were addressed directly in the COMcheck software
Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C103.2 [PR6] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

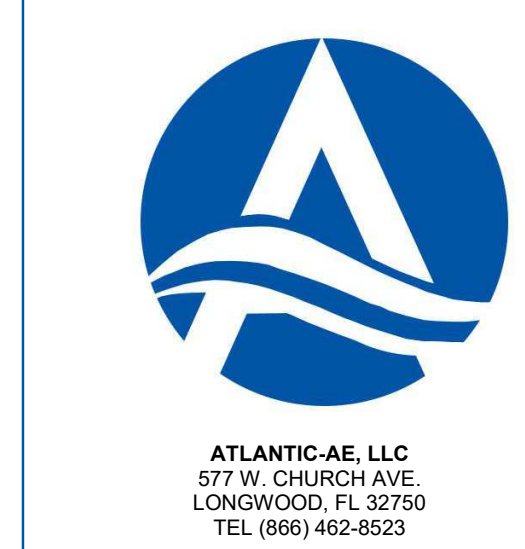
1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: DAB4 Report date: 08/29/24
Data filename: Data filename: Page 3 of 6

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C403.3 [F117] ¹	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.4.1 [F118] ¹	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Interior Lighting fixture schedule for values.
C405.5.1 [F119] ¹	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Exterior Lighting fixture schedule for values.
C408.2.5 [F116] ¹	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.3 [F13] ¹	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

Project Title: DAB4 Report date: 08/29/24
Data filename: Data filename: Page 6 of 6



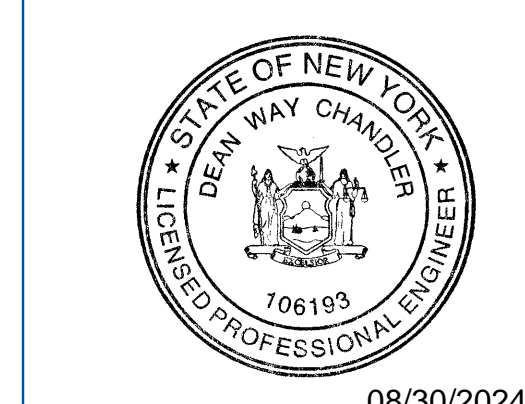
CONSULTANTS

HNY CONSULTING ENGINEERS
240 WEST 37TH STREET, 3RD FLOOR
NEW YORK, NY 10018
TEL: 212-413-8400
www.hnyeng.com
2450002344

PROJECT INFO

TENANT IMPROVEMENTS
1785 STATE HIGHWAY 5S
AMSTERDAM, NY 12010

SEALS



08/30/2024

REVISIONS

DATE	REVISION
0 19/3/2024	ISSUED FOR PLAN REVIEW

PM:	BRM
PA:	SL
PROJECT NUMBER:	100-2023-89
PROJECT DATE:	9/3/2024

SHEET INFO

ENERGY COMPLIANCE FORMS
E-400

SHEET ISSUED: 12/15/23

TO THE BEST OF MY KNOWLEDGE, BELIEF, AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 NEW YORK STATE ENERGY CODE.
DEAN W. CHANDLER

BUILDING DEPARTMENT FILING NOTE:
THIS PLAN IS APPROVED ONLY FOR THE WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

NOTE:
EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL DRAWINGS & SITE VISITS AND MAY NOT REFLECT EXACT AS-BUILT CONDITIONS. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BIDS. CAREFULLY COORDINATE NEW WORK AND DEMOLITION WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.

SPECIAL INSPECTIONS
OWNER SHALL SUBCONTRACT WITH A NEW YORK STATE REGISTERED SPECIAL INSPECTION AGENCY TO PERFORM THE REQUIRED SPECIAL INSPECTIONS FOR THE MECHANICAL, PLUMBING AND FIRE PROTECTION SYSTEMS AS REQUIRED BY THE NEW YORK CITY BUILDING CODE. OWNER SHALL PAY AN EXPEDITER TO FILE ALL REQUIRED FORMS.

NEW YORK ALTERATION WARNING STATEMENT:
IT IS A VIOLATION OF THE NEW YORK EDUCATION LAW, ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS THE INDIVIDUAL IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE SEAL OF AN ENGINEER IS ALTERED. THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



ATLANTIC AE, LLC
67 W. CHURCH AVE.
LONGWOOD, FL 32750
TEL: (866) 462-8623

CONSULTANTS

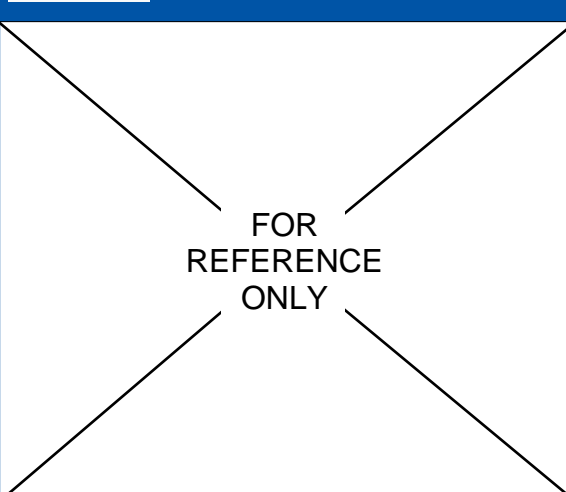


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SEALS



REVISIONS

DATE	REVISION
0	10/3/2024 ISSUED FOR PLAN REVIEW

PM:	BRM
PA:	NV
PROJECT NUMBER:	100-2023-89
PROJECT DATE:	9/3/2024

SHEET INFO

TELECOM GENERAL NOTES AND LEGENDS
T-000

SHEET ISSUED:

TELECOMMUNICATIONS / VIDEO SURVEILLANCE

ANNOTATION

- ① TECHNOLOGY PLAN CALLOUT
- 1 EQUIPMENT DESIGNATION (OWNER FURNISHED, CONTRACTOR INSTALLED)
- CONNECTION POINT OF NEW WORK TO EXISTING
- 1 T1 DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER, LOWER NUMBER INDICATES SHEET NUMBER
- SECTION CUT DESIGNATION

LINETYPE LEGEND

THROUGHOUT THE DRAWINGS DIFFERENT LINE-TYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS EXISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF THE NEW WORK AND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTURE. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR.

PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASES DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE, ETC.

EXISTING _____ NEW _____
DEMOLISH - - - - - FUTURE - - - - -

STANDARD MOUNTING HEIGHTS

TELECOM BACKBOARD (BOTTOM OF BACKBOARD)	6"
LADDER RACK IN TELECOM ROOMS (BOTTOM OF DEVICE)	90"
CABLE TRAY / CONDUIT AFC (BOTTOM OF PATHWAY)	3"(MIN)
LIGHT FIXTURE IN TELECOM ROOMS (BOTTOM OF DEVICE)	108"(MIN)
TELEPHONE WALL OUTLET (CENTERLINE)	48"
DATA WALL OUTLET SAME AS ADJACENT DEVICE, UNO	
TELEVISION OUTLET REFER TO ARCH DRAWINGS	
TMGB/TGB (CENTERLINE)	84"
WALL CLOCK (CENTERLINE)	+120"

NOTE: USE THE DEFAULT MOUNTING HEIGHTS SHOWN ABOVE UNO IN THE CONSTRUCTION DOCUMENTS. MOUNTING HEIGHTS LISTED ARE ABOVE FINISHED FLOOR (AFF) OR ABOVE FINISHED GRADE (AFG) TO BOTTOM OF OUTLET BOX. ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH CURRENT ADA AND LOCAL REQUIREMENTS.

SECURITY CAMERA SYSTEM LEGEND

- CAMERA, WALL MOUNTED, DOME
- CAMERA, WALL MOUNTED, PTZ (PAN, TILT, ZOOM)
- CAMERA, 360° PANORAMIC - X = HEIGHT OR CLG (CEILING)
- CAMERA, CEILING MOUNTED, DOME
- CAMERA, CEILING MOUNTED, PTZ (PAN, TILT, ZOOM)
- CAMERA, EXTERIOR, CORNER MOUNTED, DOME
- CAMERA, EXTERIOR, CORNER MOUNTED, PTZ (PAN, TILT, ZOOM)

TELECOMMUNICATIONS EQUIPMENT

- TMGB/TGB - PLAN VIEW
- FIRE RESISTANT 3/4" PLYWOOD BACKBOARD
- EQUIPMENT RACK/ENCLOSURE

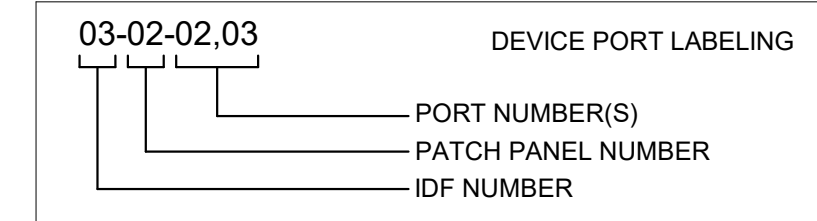
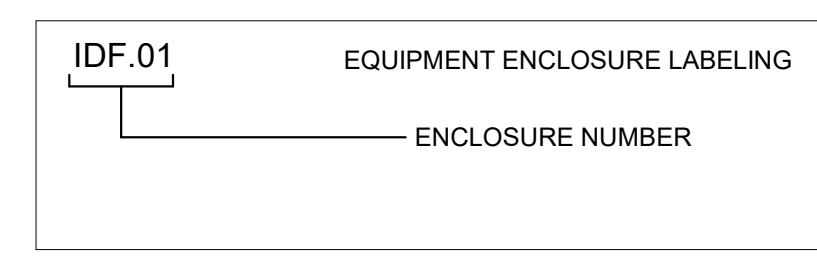
TELECOMMUNICATIONS

- DATA DEVICE PROVIDE (#) CAT 6 MODULES AND CABLE WITH GRAY JACKET COLOR ROUTED TO SERVING IDF/TB. PROVIDE RED OR BLUE CABLE LABEL SHEATH TAG CORRESPONDING WITH DESIGNATED PATCH PANEL. TERMINATE OTHER END IN ASSOCIATED IDF/TB. "# INDICATES QUANTITY OF CAT 6 MODULES/CABLES. PROVIDE (1) CAT 6 MODULES/CABLES IF "# IS BLANK. REFER TO DETAIL 1 & 2 ON SHEET T500 FOR ADDITIONAL INFORMATION.
- POTS LINE DEVICE PROVIDE (#) CAT 6 MODULES AND CABLE WITH GRAY JACKET COLOR ROUTED TO SERVING IDF/TB. PROVIDE RED OR BLUE CABLE LABEL SHEATH TAG CORRESPONDING WITH DESIGNATED PATCH PANEL. TERMINATE OTHER END IN ASSOCIATED IDF/TB. "# INDICATES QUANTITY OF CAT 6 MODULES/CABLES. PROVIDE (1) CAT 6 MODULES/CABLES IF "# IS BLANK. REFER TO DETAIL 1 & 2 ON SHEET T500 FOR ADDITIONAL INFORMATION.
- DATA CEILING DEVICE PROVIDE (#) CAT 6 MODULES AND CABLE WITH GRAY JACKET COLOR ROUTED TO SERVING IDF/TB. PROVIDE RED OR BLUE CABLE LABEL SHEATH TAG CORRESPONDING WITH DESIGNATED PATCH PANEL. TERMINATE OTHER END IN ASSOCIATED IDF/TB. "# INDICATES QUANTITY OF CAT 6 MODULES/CABLES. PROVIDE (1) CAT 6 MODULES/CABLES IF "# IS BLANK. REFER TO DETAIL 1 & 2 ON SHEET T500 FOR ADDITIONAL INFORMATION.
- DATA FLOOR DEVICE PROVIDE (#) CAT 6 MODULES AND CABLE WITH GRAY JACKET COLOR ROUTED TO SERVING IDF/TB. PROVIDE RED OR BLUE CABLE LABEL SHEATH TAG CORRESPONDING WITH DESIGNATED PATCH PANEL. TERMINATE OTHER END IN ASSOCIATED IDF/TB. "# INDICATES QUANTITY OF CAT 6 MODULES/CABLES. PROVIDE (1) CAT 6 MODULES/CABLES IF "# IS BLANK. REFER TO DETAIL 1 & 2 ON SHEET T500 FOR ADDITIONAL INFORMATION.

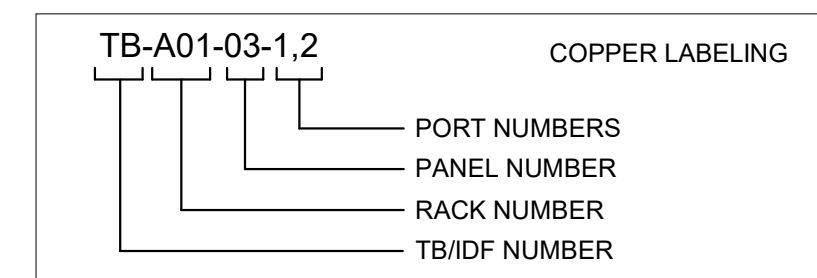
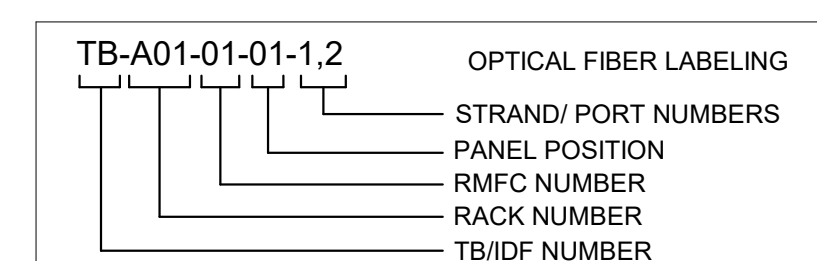
RISER DIAGRAMS

- FIBER OPTIC CROSS CONNECT
- COPPER UTP CROSS CONNECT
- 110-TYPE PROTECTOR BLOCK
- PATCH PANEL PATCH PANEL
- TGB TELECOM GROUND BAR (TGB)
- TMGB TELECOM MAIN GROUND BAR (TMGB)
- TELECOMMUNICATIONS BACKBONE CABLING (REFER TO RISER DIAGRAM FOR MORE INFORMATION)

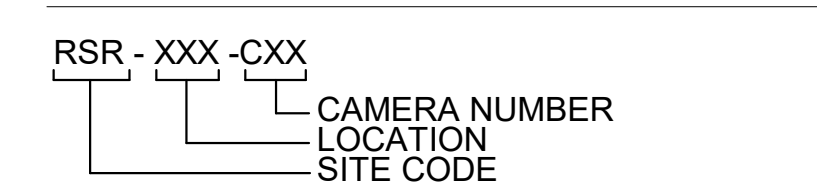
IDF LABELING SCHEME



BACKBONE LABELING SCHEME



SECURITY CAMERA SYSTEM LABELING SCHEME



RACEWAYS AND BOXES

- WIRE MESH CABLE TRAY (W="WIDTH, "H"=HEIGHT)
- VERTICAL CABLE TRAY
- LADDER RACK
- UNDERGROUND CONDUIT
- CONDUIT
- CONDUIT CONTINUATION
- CONDUIT CAPPED
- CONDUIT TURNING DOWN
- CONDUIT TURNING UP
- CABLE SUPPORTS OR J-HOOKS
- CONDUIT SLEEVE ("Q"=QUANTITY, "D"=CONDUIT DIAMETER)
- UL FIRESTOP SYSTEM ASSEMBLY
- PULL BOX ("L"=LENGTH, "W"=WIDTH, "H"=HEIGHT)
- SPLICE
- POWER POLE (FLOOR TO CEILING, UNO)

ABBREVIATIONS

- A AMPERE
- ABV ABOVE
- AC AIR CONDITIONING
- ACP ACCESS CONTROL PANEL
- AFF ABOVE FINISHED FLOOR
- AG ABOVE GROUND
- AHJ AUTHORITY HAVING JURISDICTION
- ANSI AMERICAN NATIONAL STANDARDS INSTITUTE
- AV AUDIO VISUAL
- AWG AMERICAN WIRE GAUGE
- BAS BUILDING AUTOMATION SYSTEM
- BLDG BUILDING
- C CONDUIT
- CAB CABINET
- CAT CATEGORY
- CATV COMMUNITY ANTENNA TELEVISION
- CCTV CLOSED CIRCUIT TELEVISION
- CFI CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
- CLG CEILING
- CP CONSOLIDATION POINT
- CP COPPER
- CVD CONVERGED VOICE DATA
- (D) DEMOLITION
- DEMARC DEMARCATION POINT
- DSL DIGITAL SUBSCRIBER LINE
- (E) EXISTING
- ENT ENTRANCE FACILITY
- EMF ELECTRICAL METALLIC TUBING
- ENCL ENCLOSURE
- EPO EMERGENCY POWER OFF EQUIPMENT ROOM
- FACP FIRE ALARM CONTROL PANEL FURNISHED BY OWNER / OTHERS
- FBO FURNISHED BY OWNER, INSTALLED BY CONTRACTOR
- FOIC FURNISHED BY OWNER, INSTALLED BY OWNER
- FOIO
- HC HORIZONTAL CROSS-CONNECT
- HCM HORIZONTAL CABLE MANAGEMENT
- IC INTERMEDIATE CROSS-CONNECT
- IDF INTERMEDIATE DISTRIBUTION FRAME
- IG ISOLATED GROUND
- IP INTERNET PROTOCOL
- ISDN INTEGRATED SERVICES DIGITAL NETWORK
- ISO INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
- JBOX JUNCTION BOX
- LAN LOCAL AREA NETWORK
- LOMMF LASER OPTIMIZED MULTIMODE FIBER
- MAC MEDIA ACCESS CONTROL
- MAN METROPOLITAN AREA NETWORK
- MAX MAXIMUM
- MC MAIN CROSS-CONNECT
- MH MANHOLE
- MIN MINIMUM
- MM MULTIMODE
- MPLS MULTIPROTOCOL LABEL SWITCHING
- MPOE MAIN POINT OF ENTRANCE
- MPOP MAIN POINT OF PRESENCE MOUNTED
- MTD MOUNTED
- (N) NEW
- NEC NATIONAL ELECTRICAL CODE
- NESC NATIONAL ELECTRICAL SAFETY CODE
- NIC NOT IN CONTRACT
- NVR NETWORK VIDEO RECORDER
- OFI OPTICAL FIBER CABLE
- OFCI OWNER FURNISHED, CONTRACTOR INSTALLED
- OFIO OWNER FURNISHED, OWNER INSTALLED
- OGBM OUT OF BAND MANAGEMENT
- OSP OUTSIDE PLANT
- PBX PRIVATE BRANCH EXCHANGE
- PDU POWER DISTRIBUTION POINT
- POE POWER OVER ETHERNET
- POTS PLAIN OLD TELEPHONE SERVICE
- PP PATCH PANEL
- PSN PUBLIC SWITCHED TELEPHONE NETWORK
- PVC POLYVINYL CHLORIDE
- RCPT RECEPTACLE
- RMFC RACK MOUNT FIBER CABINET RACK UNIT
- RJU RACK UNIT
- SIP SESSION INITIATION PROTOCOL
- SM SINGLEMODE
- SMFC SURFACE MOUNT FIBER CABINET
- SMR SURFACE METAL RACEWAY
- SP SERVICE PROVIDER
- STP SHIELDED TWISTED PAIR
- SW SWITCH
- TB TENNISBALL
- TBB TELECOMMUNICATIONS BONDING BACKBONE
- TB TELECOMMUNICATIONS
- TGB TELECOMMUNICATIONS GROUND BAR
- TIB TELECOMMUNICATIONS INDUSTRY ASSOCIATION
- TM TIME MANAGEMENT CLOCK
- TMGB TELECOMMUNICATIONS MAIN GROUND BAR
- TR TELECOMMUNICATIONS ROOM
- TYP TYPICAL
- UNO UNLESS OTHERWISE NOTED
- UPS UNINTERRUPTIBLE POWER SUPPLY
- UTP UNSHIELDED TWISTED PAIR
- V VOLTS
- VCM VERTICAL CABLE MANAGEMENT
- VMS VIDEO MANAGEMENT SYSTEM
- VPN VIRTUAL PRIVATE NETWORK
- WAN WIDE AREA NETWORK
- WAP WIRELESS ACCESS POINT
- WLAN WIRELESS LOCAL AREA NETWORK
- WP WEATHERPROOF

GENERAL NOTES

- PERFORM ALL WORK IN ACCORDANCE WITH APPLICABLE CODES AS AMENDED BY LOCAL AUTHORITY HAVING JURISDICTION.
- READ THE DESIGN CRITERIA ON SHEET T001, SPECIFICATIONS AND REVIEW ALL DIVISIONS OF WORK. COORDINATE THIS WORK WITH ALL OTHER DIVISIONS OF WORK AND ALL SUBCONTRACTORS.
- ALL PATHWAYS, CONDUITS, AND RACEWAY ARE SHOWN SCHEMATICALLY. PRIOR TO INSTALLATION, OBSERVE EXISTING CONDITIONS AND COORDINATE EXACT LOCATIONS WITH OTHER TRADES. REVIEW ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS AND SPECIFICATIONS PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION OF ANY WORK.
- BACKBONE FIBER OPTIC AND HORIZONTAL CABLING PATHWAYS OVER 25 CABLES SHALL BE COORDINATED WITH WAREHOUSE FLOOR EQUIPMENT TO ALLOW FUTURE ACCESSIBILITY. ROUTE ALONG AISLES AND WALKWAY EASILY ACCESSIBLE VIA SCISSOR LIFT. DO NOT ROUTE ABOVE SHELVING AND PERMANENTLY FIXED FLOOR EQUIPMENT.
- ALL FIRE RATED WALL / FLOOR ASSEMBLIES PENETRATED FOR TELECOMMUNICATIONS CABLING PATHWAYS SHALL BE FIRE STOPPED WITH APPROVED FIRE STOP SYSTEMS. ALL FIRE STOP SYSTEMS SHALL BE INSTALLED AS DIRECTED BY THE MANUFACTURER AND AS SPECIFIED IN DIVISION 07. RE-ENTERABLE ASSEMBLIES SHALL BE USED FOR CABLE TRAY PATHWAYS. BACKBONE PATHWAYS, AND HORIZONTAL CABLE BUNDLES 25 CABLES OR GREATER, FIRESTOPPED CONDUIT SLEEVES SHALL BE USED FOR ALL FIRE RATED WALL PENETRATIONS.
- ALL DATA CATEGORY 6 CABLES SHALL BE ROUTED TO THEIR ASSIGNED IDF. CABLES SHALL BE TERMINATED ON RACK MOUNTED 48-PORT PATCH PANELS IN ENCLOSURES. PROVIDE GRAY CABLES WITH RED OR BLUE CABLE LABEL SHEATH TAG CORRESPONDING WITH DESIGNATED PATCH PANEL. CONFIRM EXACT ROUGH-IN LOCATION AND CABLING DISTANCE PRIOR TO START OF INSTALLATION.
- ALL POTS LINE CATEGORY 6 CABLES SHALL BE ROUTED CONTINUOUS FROM THE DEMARCATION BACKBOARD TO DEVICE LOCATION. TERMINATE CABLING ON WALL MOUNT FIBER CABINET AT THE DEMARCATION BACKBOARD. COMPLETE ALL ASSOCIATED CROSS-CONNECTS TO THE SERVICE PROVIDER POINT-OF-PRESENCE. MID LINE SPLICES SHALL NOT BE PERMITTED. PROVIDE CABLE WITH GRAY JACKET COLOR FOR POTS LINES. CONFIRM EXACT ROUGH-IN LOCATION AND CABLING DISTANCE PRIOR TO START OF INSTALLATION.
- ELECTRICAL CONTRACTOR SHALL PROVIDE ALL ROUGH-IN AND PATHWAYS TO SUPPORT TELECOMMUNICATIONS SYSTEMS. THIS INCLUDES BUT IS NOT LIMITED TO CONDUIT, OUTLET BOXES, JUNCTION BOXES, RACEWAY SYSTEMS, AND PENETRATIONS.
- MAINTAIN A MINIMUM SPACING OF 12" FROM ELECTRICAL FEEDERS AND BRANCH CIRCUIT WIRING AND 12" FROM AUXILIARY SYSTEM CABLING. MINIMUM SPACING FROM ELECTRICAL APPARATUS SUCH AS MOTOR DRIVEN EQUIPMENT AND TRANSFORMERS SHALL BE 6'-0". MINIMUM SPACING FROM MEDIUM VOLTAGE ELECTRICAL FEEDERS SHALL BE 10'-0".
- CABLING SHALL BE SUPPORTED USING OPEN METHOD J-HOOKS AND CABLE SADDLES IN ACCESSIBLE AREAS. CABLE SUPPORTS SHALL BE SPACED A MAXIMUM OF 5'-0" APART. CABLING PATHWAYS CONSISTING OF QUANTITY (25) CABLES OR LESS MAY USE 2" J-HOOKS. CABLING PATHWAYS CONSISTING OF QUANTITY (25) TO QUANTITY (225) CABLES SHALL USE CABLE SADDLES. BUNDLES MAY NOT EXCEED SUPPORT DEVICES MAXIMUM CABLE FILL RATINGS.
- BACKBONE CABLING AND HORIZONTAL CABLING MAY NOT SHARE CABLING SUPPORTS. REFER TO DETAIL 1 AND 2 ON SHEET T501 FOR ADDITIONAL INFORMATION.
- CABLING SUPPORT PATHWAYS SHALL ROUTE ABOVE WALKWAYS AND PARALLEL WITH SHELVING ROWS. CABLING SHALL NOT ROUTE PERPENDICULAR ABOVE SHELVING. REFER TO DETAIL 4 ON SHEET T501 FOR ADDITIONAL INFORMATION.
- ALL TELECOMMUNICATIONS DEVICES MOUNT TO WALLS, STRUCTURAL COLUMNS, OR STRUT SUPPORTS UNLESS OTHERWISE NOTED. PROVIDE DIAL GANG OUTLET BOX AND (1) 1/2" FROM OUTLET BOX UP TO STRUCTURE. PROVIDE SWEEPING 90 DEGREE BENDS AT STRUCTURE TO OPEN CABLING PATHWAY.
- PROVIDE 10'-0" CABLING SERVICE LOOP AT STRUCTURE FOR ALL CABLING TYPES. REFER TO DETAILS 1, 2, 3, AND 5 ON SHEET T503 FOR ADDITIONAL INFORMATION.
- CONDUIT ROUTING FOR WAP AND CAMERA LOCATIONS UNDER THE CANOPY AREA SHALL BE INSTALLED USING CONTRACTOR MEANS AND METHODS.

TELECOMMUNICATIONS SHEET INDEX

SHEET NUMBER	SHEET NAME
T-000	TELECOM GENERAL NOTES AND LEGENDS
T-002	TELECOM CRITERIA
T-003	TELECOM RESPONSIBILITY MATRIX
T-100	TELECOM PLAN
T-400	TELECOM PLAN - ENLARGED
T-600	TELECOM DETAILS
TOTAL SHEETS: 6	

TO THE BEST OF MY KNOWLEDGE, BELIEF, AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 NEW YORK STATE ENERGY CODE.

BUILDING DEPARTMENT FILING NOTE: THIS PLAN IS APPROVED ONLY FOR THE WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

NOTE: EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL DRAWINGS & SITE VISITS AND MAY NOT REFLECT EXACT AS-BUILT CONDITIONS. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BIDS. CAREFULLY COORDINATE NEW WORK AND DEMOLITION WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.

SPECIAL INSPECTIONS: OWNER SHALL SUBCONTRACT WITH A NEW YORK STATE REGISTERED SPECIAL INSPECTION AGENCY TO PERFORM THE REQUIRED SPECIAL INSPECTIONS FOR THE MECHANICAL, PLUMBING AND FIRE PROTECTION SYSTEMS AS REQUIRED BY THE NEW YORK CITY BUILDING CODE. OWNER SHALL PAY AN EXPEDITER TO FILE ALL REQUIRED FORMS.

NEW YORK ALTERATION WARNING STATEMENT: IT IS A VIOLATION OF THE NEW YORK EDUCATION LAW, ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS THE INDIVIDUAL IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE SEAL OF AN ENGINEER IS ALTERED. THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



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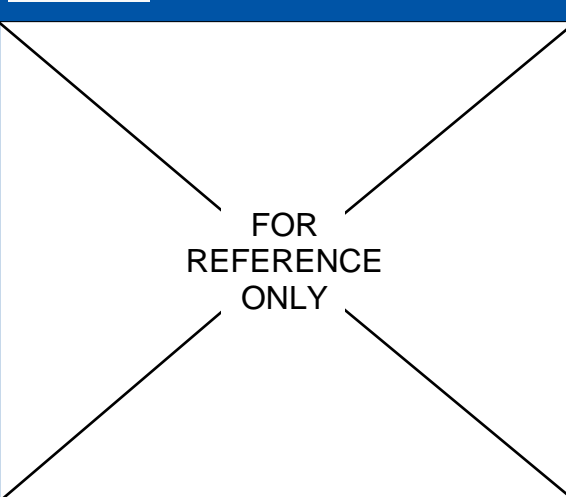
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PROJECT INFO

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SEALS



REVISIONS

DATE	REVISION
0	10/3/2024 ISSUED FOR PLAN REVIEW

PM:	BRM
PA:	NV
PROJECT NUMBER:	100-2023-89
PROJECT DATE:	9/3/2024

SHEET INFO

TELECOM CRITERIA
T-002

SHEET ISSUED:

1. GENERAL CRITERIA

1.1. PROVIDE TELECOMMUNICATIONS CONNECTIVITY AND CABLING INFRASTRUCTURE TO SUPPORT ANALOG POTS LINES, STANDARD NETWORK, WIRELESS NETWORK AND IP-COCT NETWORK CONNECTIONS. THESE REQUIREMENTS, SCOPE OF WORK AND QUANTITY OF DEVICES SHALL VARY BASED UPON THE SIZE AND LOCATION OF THE FACILITY. THIS SHALL INCLUDE ALL INSTALLATION, TERMINATIONS, TESTING, START-UP, ADJUSTING AND HORIZONTAL CABLING, BLANKS IN THE COLOR BLACK SHALL BE USED TO POPULATE ANY UNUSED PATCH PANEL FRAME POSITION.

1.2. PERFORM ALL WORK IN ACCORDANCE WITH APPLICABLE CODES AS AMENDED BY LOCAL AUTHORITY HAVING JURISDICTION.

2. CODES AND STANDARDS

- 2.1. CONTRACTOR SHALL MEET THE FOLLOWING CODES, STANDARDS AND GUIDELINES (LATEST EDITIONS):
 - NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
 - UNDERWRITERS LABORATORIES (UL)
 - OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)
 - AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
 - AMERICAN SOCIETY OF TESTING MATERIALS (ASTM)
 - RULES AND REGULATIONS OF PUBLIC UTILITIES AND MUNICIPAL DEPARTMENTS AFFECTED BY CONNECTION OF SERVICES
 - OTHER NATIONAL STANDARDS AND CODES WHERE APPLICABLE
 - ANSITIA-568 "COMMERCIAL BUILDING TELECOMMUNICATIONS CABLING STANDARD"
 - ANSITIA-569 "COMMERCIAL BUILDING STANDARD FOR TELECOMMUNICATIONS PATHWAYS AND SPACES"
 - TIA-526 "STANDARD TEST PROCEDURES FOR FIBER OPTIC SYSTEMS"
 - TIA TSB 140 - "ADDITIONAL GUIDELINES FOR FIELD-TESTING LENGTH, LOSS AND POLARITY OF OPTICAL FIBER CABLING SYSTEMS"
 - ANSITIA-606 "ADMINISTRATIVE STANDARD FOR COMMERCIAL TELECOMMUNICATIONS INFRASTRUCTURE"
 - ANSITIA-607 "GENERIC TELECOMMUNICATIONS BONDING AND GROUNDING FOR CUSTOMER PREMISES"
 - ANSITIA-758 - "CUSTOMER-OWNED OUTSIDE PLANT TELECOMMUNICATIONS CABLING STANDARD"
 - ANSITIA-882 "BUILDING AUTOMATION SYSTEMS AND WIRELESS CONNECTIONS"
 - INTERNATIONAL STANDARD ORGANIZATION (ISO); ISO/IEC-11801 "TELECOMMUNICATIONS STANDARD MODEL FOR INFORMATION TECHNOLOGY"
 - INTERNATIONAL STANDARD ORGANIZATION (ISO); ISO/IEC-14763 "TELECOMMUNICATIONS INFRASTRUCTURE PLANNING, INSTALLATION AND TESTING"

3. APPROVED MANUFACTURES AND TECHNICAL QUALIFICATIONS

- 3.1. PROVIDE ALL WARRANTIES AS REQUIRED BETWEEN THE GENERAL CONSTRUCTION CONTRACT AND THE MINIMUM REQUIREMENTS OF THE TELECOMMUNICATIONS INFRASTRUCTURE.
- 3.2. THE TELECOMMUNICATIONS CONTRACTOR SHALL BE CERTIFIED AND IN GOOD STANDING WITH ALL APPROVED MANUFACTURERS.
- 3.3. THE TELECOMMUNICATIONS CONTRACTOR SHALL BE ABLE TO PROVIDE A MINIMUM 20-YEAR EXTENDED PRODUCT AND APPLICATIONS ASSURANCE INFRASTRUCTURE WARRANTY. PROVIDE THE STRUCTURED CABLING WARRANTY DOCUMENTATION FOR BOTH COPPER AND OPTICAL FIBER CABLING INFRASTRUCTURE PER THE MANUFACTURER'S WARRANTY PROGRAM. ADHERE TO THE MANUFACTURER'S WARRANTY PROGRAM REQUIREMENTS FOR MINIMUM LEVELS OF CERTIFIED TECHNICIANS AND PROJECT DOCUMENTATION TO BE SUBMITTED INCLUDING TEST REPORTS.

4. CONSTRUCTION REQUIREMENTS

- 4.1. PROVIDE A REPORT TO AMAZON IT REPRESENTATIVES IDENTIFYING THE MAC ADDRESSES IN A SCHEDULE SUMMARY. IN ADDITION, A RECORD DRAWING SET AND ASSOCIATED SCHEDULE SUMMARY IDENTIFYING THE MAC ADDRESS FOR EACH WIRELESS ACCESS POINT SHALL BE SUBMITTED TO AMAZON IT PRIOR TO THE COMPLETION OF THE PROJECT. PRIOR TO THE START OF THE INSTALLATION, COORDINATE THE EXACT FORMAT AND DISTRIBUTION LIST WITH THE AMAZON IT REPRESENTATIVE.
- 4.2. SUBMIT A QUALITY ASSURANCE PLAN PRIOR TO THE START OF THE INSTALLATION THAT CORRESPONDS TO THE PROJECT MILESTONES. THE QUALITY ASSURANCE PLAN SHALL BE IN CONFORMANCE WITH THE MANUFACTURER'S WARRANTY REQUIREMENTS.

5. EQUIPMENT ENCLOSURE AND RACKS

- 5.1. THE TELECOMMUNICATIONS CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE TELECOMMUNICATIONS CONNECTIVITY AND CABLING THAT WILL RESIDE AND TERMINATE IN DEMARC, TB AND IDF ENCLOSURES INCLUDING ALL ASSOCIATED OPTICAL FIBER ADAPTER PANELS AND BLANKS, CATEGORY 6 MODULES AND BLANKS, CONSUMABLES AND APPURTENANCES TO COMPLETE THE ENCLOSURE FOR ACTIVATION.
- 5.2. A MINIMUM OF 3'-0" WORKING CLEARANCE SHALL BE PROVIDED AROUND THE ENCLOSURE. THE WORKING CLEARANCES SHALL BEGIN AT THE FRONT AND REAR DOORS OF THE ENCLOSURE. THE WORKING CLEARANCE SPACE IS REQUIRED TO PROVIDE ACCESS TO THE FRONT AND BACK OF ACTIVE NETWORK ELECTRONICS EQUIPMENT AND TO ENSURE ADEQUATE CLEARANCE FROM ROUTINE TRAFFIC WITHIN THE OPERATIONAL SPACE OF THE DELIVERY STATION. WORKING CLEARANCE IS ALSO REQUIRED FOR CABLE TRANSITIONING FROM CONDUIT INTO THE SPACE FROM BELOW GRADE AND ABOVE THE CEILING. WHEN AN TB IS LOCATED IN AN OFFICE TENANT SPACE A MINIMUM OF 3'-0" WORKING CLEARANCE IS PREFERRED ON ALL SIDES AND SHALL BE PROVIDED ON THE FRONT AND REAR DOOR SIDES OF THE ENCLOSURE.
- 5.3. ENCLOSURES WILL BE OWNER FURNISHED AND CONTRACTOR INSTALLED. THE OWNER WILL BE RESPONSIBLE FOR POSITIONING THE TB ENCLOSURE. THE GENERAL OR ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR COLUMN OR WALL MOUNTING THE TELECOMMUNICATIONS PULL BOX PROVIDING THE PATHWAYS, POWER RECEPTACLES AND GROUNDING AND BONDING OF THE INFRASTRUCTURE. BOTH ENCLOSURES SHALL BE SEISMICALLY BRACED TO MEET THE REQUIRED SEISMIC ZONE RATINGS PER CODE. THE TELECOMMUNICATIONS CONTRACTOR WILL VERIFY THAT THE INSTALLATION OF THE ENCLOSURE AND/OR PULL BOX ARE COMPLIANT WITH INDUSTRY STANDARDS PRIOR TO PROCEEDING WITH THEIR INSTALLATION.

5.4. THE PATCH PANEL FRAMES SHALL BE DESIGNATED AS EITHER "RED" OR "BLUE" AND THE CORRESPONDING HORIZONTAL CABLING INFRASTRUCTURE SHALL TERMINATE ON ITS COLOR DESIGNATED PATCH PANEL. THE PATCH PANEL AND ETHERNET SWITCH ELEVATION WILL CONSIST OF WIRELESS CONNECTIONS FIRST FOLLOWED BY STANDARD NETWORK CONNECTIONS.

5.5. LABELING AND IDENTIFICATION SHALL BE PROVIDED IN ACCORDANCE WITH AMAZON IT STANDARDS UTILIZING PHENOLIC NAMEPLATES AT THE TOP OF EACH ENCLOSURE. FOR THE IDF ENCLOSURE NUMBER ASSIGNMENT, THE ADMINISTRATIVE OFFICE SPACE WILL ALWAYS BE AT THE TOP OF THE BUILDING, REGARDLESS OF DIRECTION. ONCE THIS IS ESTABLISHED, STARTING AT THE RIGHT HAND CORNER OF THE FACILITY, LABEL FROM RIGHT TO LEFT AND FROM THE TOP UTMOST COLUMN TO THE BOTTOM LOWER COLUMN.

5.6. WHERE PLYWOOD IS USED TO MOUNT TELECOMMUNICATIONS EQUIPMENT IN THE DEMARCATION ROOM AND TO WALL MOUNT AN TB PULL BOX SHALL UTILIZE 3/4-INCH A-C GRADE PLYWOOD THAT HAVE BEEN PAINTED ON BOTH SIDES WITH PRIMER AND TWO COATS OF WHITE FIRE RETARDANT PAINT, AND MOUNTED WITH THE A GRADE SIDE EXPOSED. IF FIRE RETARDANT PLYWOOD BACKBOARDS ARE UTILIZED, THEY SHALL BE PAINTED WHITE. THE FIRE SEAL SHALL BE LEFT EXPOSED.

6. GROUNDING AND BONDING

6.1. THE GROUNDING AND BONDING CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH THE APPLICABLE COUNTRY ELECTRICAL CODES: NATIONAL ELECTRICAL CODE (NEC), INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) AND ANSITIA-607-D (TELECOMMUNICATIONS BONDING AND GROUNDING).

6.2. THE GENERAL OR ELECTRICAL CONTRACTOR INSTALLING THE ENCLOSURES SHALL INDIVIDUALLY GROUND EACH ENCLOSURE AND SHALL PROVIDE A TELECOMMUNICATIONS GROUNDING CONNECTION FOR THE OWNER POSITIONED TB ENCLOSURE.

6.3. THE TELECOMMUNICATIONS CONTRACTOR SHALL PROVIDE CONFIRMATION THAT THE GROUNDING AND BONDING OF ALL TELECOMMUNICATIONS ENCLOSURES HAS BEEN COMPLETED. PROVIDE THE GROUNDING AND BONDING OF THE ARMORED OPTICAL FIBER CABLE PER THE MANUFACTURER'S RECOMMENDED PROCEDURES.

7. TELECOMMUNICATIONS INTRABUILDING BACKBONE

7.1. THE BACKBONE INFRASTRUCTURE FOR THE TB TO IDF NETWORKS CONNECTIONS SHALL CONSIST OF OPTICAL FIBER CONNECTIVE AND CABLING. OPTICAL FIBER CABLING SHALL CONSIST OF 12-FIBER SINGLEMODE OPTICAL FIBER CABLE JACKET IN THE COLOR YELLOW.

7.2. OPTICAL FIBER CABLING TERMINATIONS SHALL BE PROVIDED UTILIZING LC/UPC CONNECTORS OR PIGTAILS FOR SINGLEMODE TERMINATIONS. SINGLEMODE CONNECTORS SHALL BE UNICAM TYPE CONNECTORS WITH A WORST CASE LOSS CERTIFIED BY THE MANUFACTURER OF 0.3 DB.

7.3. FIBER ADAPTER PANELS SHALL BE 6-DUPLEX LC/UPC CONNECTOR TYPES ONLY.

7.4. ALL OPTICAL FIBER STRANDS SHALL BE TERMINATED. NO UN-TERMINATED OPTICAL FIBER STRANDS SHALL BE PERMITTED.

7.5. PROVIDE BLANK PANELS FOR ANY UNUSED POSITIONS IN THE RACK MOUNT FIBER CHASSIS HOUSINGS.

7.6. SERVICE LOOPS SHALL BE 25'-0" IN LENGTH AT THE IDF END AND 10'-0" AT THE TB ENCLOSURE END.

7.7. SERVICE LOOPS SHALL NOT BE POSITIONED AS TO PROVIDE ANY OBSTRUCTION TO EQUIPMENT ENCLOSURES, CABLING PATHWAYS AND TERMINATIONS.

11. PATCH PANELS

11.1. PATCH PANEL FRAMES SHALL BE UTILIZED IN LIEU OF STANDARD 24-PORT OR 48-PORT PATCH PANELS. THE PATCH PANEL FRAMES SHALL BE ABLE TO HOLD (48) CATEGORY 6 RJ45, 8P9C, TS698, 110 TYPE IDC CONNECTIONS MODULES AND SHALL BE 2 RACK UNITS. EACH PATCH PANEL FRAME SHALL BE POPULATED WITH CATEGORY 6 MODULES, IN THE COLOR BLACK, AS REQUIRED TO SUPPORT THE HORIZONTAL CABLING. BLANKS IN THE COLOR BLACK SHALL BE USED TO POPULATE ANY UNUSED PATCH PANEL FRAME POSITION.

11.2. THE PATCH PANEL FRAME LOCATED IN THE IN THE IDF ALSO HAS A SPECIAL SILK SCREEN NUMBERING SCHEME WHERE THE PORT NUMBERS ARE IN AN UP-DOWN COLUMN FORMAT VERSUS TRADITIONAL METHODS BEING IN A ROW OF PORTS 1 THRU 24 AND A SECOND ROW OF PORTS 25 THRU 48. AMAZON REQUIRES THIS FORMAT TO MATCH THE ETHERNET SWITCH PORT LAYOUT FOR CONTINUITY AND CONSISTENCY OF THE PATCHING INTERCONNECTS.

11.3. THE REQUIREMENT IS FOR THE LABELING TO BE MANUFACTURED VERSUS PROVIDING ADDITIONAL FIELD INSTALLED LABELING DURING THE INSTALLATION.

11.4. THE PATCH PANEL FRAMES SHALL BE DESIGNATED AS EITHER "RED" OR "BLUE" AND THE CORRESPONDING HORIZONTAL CABLING INFRASTRUCTURE SHALL TERMINATE ON ITS COLOR DESIGNATED PATCH PANEL LAYOUT

12. COPPER HORIZONTAL CABLING

12.1. HORIZONTAL CABLING SHALL BE CATEGORY 6, 4 PAIR, UNSHIELDED TWISTED PAIR CABLING PROVIDING A PERMANENT LINK CONNECTION BETWEEN THE WORKSTATION MODULE, WIRELESS ACCESS POINT AND PATCH PANEL TERMINATION IN THE IDF.

12.2. THE ADMINISTRATIVE VOICE (POTS LINE) CABLING SHALL BE CATEGORY 6, 4 PAIR, UNSHIELDED TWISTED PAIR CABLING PROVIDING A PERMANENT LINK CONNECTION BETWEEN THE WORKSTATION MODULE AND PATCH PANEL TERMINATION IN THE DEMARCATION ROOM.

12.3. ALL NETWORK HORIZONTAL AND ADMINISTRATIVE VOICE (POTS LINE) CABLING JACKET COLOR SHALL BE GRAY.

12.4. CABLING INSTALLED WITHIN ABOVE GRADE CONDUIT PATHWAYS SHALL BE RISER RATED AND CABLING INSTALLED IN OPEN CABLING METHODS OR BASKET TRAY SHALL BE EITHER RISER RATED OR PLENUM RATED DEPENDING UPON THE HVAC SYSTEM DESIGN FOR RETURN AIR PLENUMS. IN THE EMEA REGION, THE CABLE JACKET RATING IS TYPICALLY IEC 80332 LOW SMOKE ZERO HALOGEN (LSZH). IN THE APAC REGION IT IS TYPICALLY IEC 80332 PVC RATED. PROVIDE CONFIRMATION OF THE CABLE JACKET TYPE TO MEET ALL CODE REQUIREMENTS.

12.5. CABLING INSTALLED WITHIN THE SLAB OR BELOW GRADE SHALL UTILIZE CABLING THAT IS APPROVED FOR USE IN OUTDOOR WET APPLICATIONS.

12.6. AT WORKSTATION DEVICE LOCATIONS, PROVIDE 10'-0" SERVICE LOOPS COILED AND LOCATED AT CEILING HEIGHT FOR THE FLOOR LEVEL THE DEVICE ORIGINATES ON.

13. COPPER AND OPTICAL FIBER PATCH CORDS

13.1. THE TELECOMMUNICATIONS CONTRACTOR SHALL FURNISH AND INSTALL THE COPPER AND OPTICAL FIBER PATCH CORDS FOR SUPPORTING ALL NETWORK INTERCONNECTS WITHIN THE IDF ENCLOSURES IN ADDITION TO INTERCONNECTS AND CROSS-CONNECTS RELATING TO THE SECURITY ACCESS CONTROL PANEL, SECURITY INTRUSION DETECTION PANEL AND CIRCUIT EXTENSIONS AND POTS LINES IN THE DEMARCATION ROOM.

13.2. WITHIN THE IDF ENCLOSURE 6" CATEGORY 6 PATCH CORDS IN THE COLOR "RED" OR "BLUE" SHALL BE PROVIDED FOR THE COLOR DESIGNATED PATCH PANEL TO ACCESS SWITCH INTERCONNECTS. PATCH CORD QUANTITIES SHALL BE DETERMINED BY THE HORIZONTAL CABLING INFRASTRUCTURE REQUIREMENTS.

13.3. WITHIN THE IDF ENCLOSURE (2) CATEGORY 6 PATCH CORDS IN THE COLOR "GREEN" SHALL BE PROVIDED FOR CONSOLE NETWORK MANAGEMENT INTERCONNECTS.

13.4. WITHIN THE IDF ENCLOSURE (2) LC/UPC TO LC/UPC DUPLEX SINGLEMODE OPTICAL FIBER PATCH CABLES SHALL BE PROVIDED FOR ACCESS SWITCH TO OPTICAL FIBER BACKBONE INTERCONNECTS

13.5. AMAZON SHALL FURNISH AND INSTALL THE COPPER AND OPTICAL FIBER PATCH CORDS FOR SUPPORTING ALL NETWORK INTERCONNECTS WITHIN THE TB NETWORK IN ADDITION TO ALL WORKSTATION DEVICES.

14. LABELING AND IDENTIFICATION

14.1. LABELING AND IDENTIFICATION SHALL BE PROVIDED IN ACCORDANCE WITH AMAZON STANDARDS FOR ALL DEMARCATION CABLING, HORIZONTAL CABLING, BACKBONE CABLING, WORKSTATION DEVICES, PATCH PANELS AND TELECOMMUNICATIONS SPACES. PROVIDE A LAMINATED TERMINATION SCHEDULE LOCATED ON THE INSIDE DOOR OF THE TB, IDF AND DEMARC ENCLOSURE(S).

14.2. HORIZONTAL CABLING SHALL BE LABELED AT EACH END WITH A SHEATH TAG DESIGNATING ITS COLOR CODED "RED" OR "BLUE" TERMINATION DESIGNATION.

14.3. WORKSTATION DEVICE LABELING SHALL BE COMPLETED ON A CONTINUOUS BASIS AS THE DEVICES ARE TERMINATED. WORKSTATION DEVICE LABELING SHALL NOT BE CONDUCTED SIMULTANEOUSLY AT THE COMPLETION OF THE PROJECT AS AMAZON REQUIRES AN UNDERSTANDING OF THE PORT IDENTIFICATION FOR NETWORK ACTIVATION.

14.4. COPPER AND OPTICAL FIBER MARKER TAGS SHALL BE PROVIDED AT ALL SERVICE LOOPS, PULL BOXES AND WITHIN THE DEMARCATION ROOM.

15. CONDUIT PATHWAYS

15.1. CONDUITS SHALL NOT BE INSTALLED BELOW GRADE UNLESS TO PROVIDE PATHWAY TO A FLOOR BOX. MODULAR FURNITURE FEED POINT FOR A CLUSTER OF MODULAR FURNITURE WORKSTATIONS WITHIN AN OPEN OFFICE ENVIRONMENT OR A DEVICE LOCATED WITHIN CASEWORK NOT LOCATED ADJACENT TO A WALL. CONDUITS SHALL ROUTE UP TO THE NEAREST INTERIOR PARTITION WALL AND THE CONDUIT SHALL BE EXTENDED UP THROUGH THE WALL AND STUBBED INTO THE CEILING AREA.

15.2. CONDUITS ROUTING TO FLOOR BOXES SHALL BE A MINIMUM OF 1-1/4 INCH IN DIAMETER. PROVIDE A SPARE 1-1/4 INCH CONDUIT TO EACH FLOOR BOX WHERE FLOOR BOXES ARE NOT BEING UTILIZED TO SERVE MODULAR FURNITURE WORKSTATIONS.

15.3. CONDUITS ROUTED ABOVE GRADE FOR HORIZONTAL CABLING SHALL BE ELECTRICAL METALLIC TUBING (EMT) UNLESS NOTED OTHERWISE IN THE BUILDING DESIGN CRITERIA.

15.4. CONDUITS SERVING EACH WORKSTATION DEVICE SHALL BE DEDICATED TO THAT DEVICE AND SHALL NOT BE DAISY CHAINED TOGETHER.

15.5. JUNCTION BOXES SHALL BE UTILIZED AS A PULL POINT FOR MULTIPLE SMALLER CONDUITS TO CONSOLIDATE. TERMINATE AND TRANSITION INTO LARGER CONDUITS FOR ROUTING OF CABLING INFRASTRUCTURE. DIRECTIONAL CHANGES SHALL OCCUR BEFORE ENTERING OR AFTER EXITING A JUNCTION BOX. JUNCTION BOXES SHALL NOT BE UTILIZED FOR MAKING DIRECTIONAL ROUTING CHANGES FOR CABLING INSIDE THE JUNCTION BOX.

15.6. CONDUIT SWEEPS AND PULL BOXES SHALL BE UTILIZED AS A PULL POINT BETWEEN A CONDUIT PATHWAY WHEN MORE THAN (2) 90-DEGREE BENDS ARE REQUIRED.

15.7. JUNCTION BOXES AND PULL BOXES SHALL BE SIZED PER ANSITIA STANDARDS. CONDUITS SHALL BE SIZED FOR 40% FILL RATIO CAPACITY WHEREVER POSSIBLE. CONDUIT PATHWAYS MAY BE ROUTED DIAGONALLY THROUGH THE STRUCTURAL TRUSSES TO MAINTAIN HORIZONTAL CONDUIT DISTANCE REQUIREMENTS WHEN PRE-APPROVED BY AMAZON FC IT.

16. WALL AND CEILING PENETRATIONS

16.1. PENETRATIONS THROUGH FIRE RATED WALLS SHALL UTILIZE PRE-MANUFACTURED FIRE RATED SLEEVES WITH INTUMESCENT MATERIALS OR CONDUIT SLEEVES WITH FIRESTOPPING PUTTY OR PILLOWS. COORDINATE ALL PENETRATION AND SLEEVING REQUIREMENTS THRU WALLS THAT SHALL REQUIRE THERMAL EXPANSION JOINTS WITH THE STRUCTURAL ENGINEER FOR THE APPROPRIATE LOCATIONS AND PATHWAY APPROACH.

17. OPEN CABLING PATHWAYS

17.1. MOST LOCATIONS CONSIST PRIMARILY OF AREAS OPEN TO STRUCTURE WITH NO CEILING FOR THE GROUND LEVEL AND MEZZANINE LEVELS. WITHIN THE OPEN OFFICE AND SUPPORT SPACES LOCATED IN VARIOUS AREAS OF THE BUILDING, LAY-IN CEILINGS ARE PROVIDED. HORIZONTAL CABLING WILL BE ROUTED PRIMARILY UTILIZING OPEN CABLING METHODS VIA J-HOOKS AND CABLE SADDLE BAGS ON DEDICATED HANGER SUPPORTS OR STRUCTURAL BEAM CLAMPS.

17.2. HORIZONTAL CABLING AND BACKBONE CABLING SHALL BE ROUTED IN SEPARATE J-HOOK OR CABLE SADDLE BAGS. HORIZONTAL CABLING PATHWAYS SHALL ADHERE TO THE CLEARANCE AND SEPARATION REQUIREMENTS FOR ELECTROMAGNETIC INTERFERENCE (EMI), AND FOR ELECTRICAL POWER CIRCUITS, LIGHTNING PROTECTION SYSTEM CONDUCTORS, LIGHTING FIXTURES, MOTORS, TRANSFORMERS, PANELBOARDS AND SWITCHBOARDS AS DEFINED WITHIN THE ANSITIA STANDARDS. THESE DISTANCE REQUIREMENTS SHALL BE STRICTLY ENFORCED.

17.3. OPEN CABLING METHODS SHALL HAVE A MAXIMUM DISTANCE SEPARATION BETWEEN SUPPORT SPANS OF 5'-0".

17.4. WHERE CABLING CROSSES MECHANICAL DUCT WORK, FIRE SPRINKLER PIPING, ELECTRICAL RACEWAYS AND OTHER SYSTEMS, DISTANCE SEPARATIONS SHALL BE REDUCED TO ENSURE THE CABLING DOES NOT REST ON THESE SYSTEMS INFRASTRUCTURE.

18. TESTING AND PROJECT CLOSEOUT DOCUMENTATION

18.1. CONTINUITY AND WIREMAP TESTING SHALL BE PROVIDED FOR ALL CATEGORY 6 INTRABUILDING AND DEMARCATION CIRCUIT EXTENSION COPPER CABLING.

18.2. OPTICAL FIBER ATTENUATION TESTING SHALL BE PROVIDED FOR ALL INTRABUILDING OPTICAL FIBER BACKBONE AND DEMARCATION CIRCUIT EXTENSION CABLING.

18.3. COPPER AND OPTICAL FIBER CABLING TEST REPORTS SHALL BE PROVIDED IN BOTH ELECTRONIC PDF AND NATIVE FORMATS, AND ACCORDING TO THE NUMBER OF COPIES REQUIRED WITHIN THE PROJECT CLOSEOUT REQUIREMENTS.

18.4. COPPER AND OPTICAL FIBER CABLING TEST REPORTS SHALL BE PROVIDED A MAXIMUM OF SEVEN (7) DAYS AFTER THE TURNOVER DATE OF EACH SECTION OR PHASE OF THE FACILITY.

18.5. TESTING OF ALL COPPER AND OPTICAL FIBER CONNECTIVITY AND CABLING INFRASTRUCTURE SHALL ADHERE TO ANSITIA STANDARDS. PERFORMANCE REQUIREMENTS SHALL BE MORE STRINGENT THAN THE MAXIMUM ATTENUATION LOSS LEVELS DEFINED WITH THE ANSITIA STANDARDS. OPTICAL FIBER CABLING LOSS SHALL BE CALCULATED BASED UPON THE TOTAL DISTANCE OF EACH SEGMENT. OPTICAL FIBER CONNECTORS SHALL BE BASED UPON THE MAXIMUM LOSS VALUE OF 0.3 DB.

TO THE BEST OF MY KNOWLEDGE, BELIEF, AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 NEW YORK STATE ENERGY CODE.	BUILDING DEPARTMENT FILING NOTE: THIS PLAN IS APPROVED ONLY FOR THE WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.	NOTE: EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL DRAWINGS & SITE VISITS AND MAY NOT REFLECT EXACT AS-BUILT CONDITIONS. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BIDS. CAREFULLY COORDINATE NEW WORK AND DEMOLITION WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.	SPECIAL INSPECTIONS OWNER SHALL SUBCONTRACT WITH A NEW YORK STATE REGISTERED SPECIAL INSPECTION AGENCY TO PERFORM THE REQUIRED SPECIAL INSPECTIONS FOR THE MECHANICAL, PLUMBING AND FIRE PROTECTION SYSTEMS AS REQUIRED BY THE NEW YORK CITY BUILDING CODE. OWNER SHALL PAY AN EXPEDITER TO FILE ALL REQUIRED FORMS.	NEW YORK ALTERATION WARNING STATEMENT: IT IS A VIOLATION OF THE NEW YORK EDUCATION LAW, ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS THE INDIVIDUAL IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE SEAL OF AN ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.
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CONSULTANTS

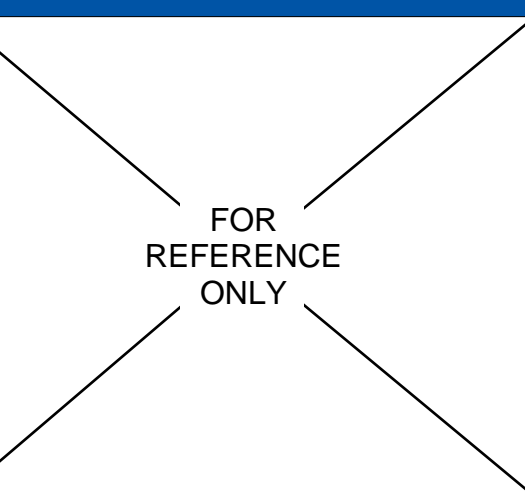


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PROJECT INFO

TENANT IMPROVEMENTS
 1785 STATE HIGHWAY 5S
 AMSTERDAM, NY 12010

SEALS



REVISIONS

DATE	REVISION
0 19/3/2024	ISSUED FOR PLAN REVIEW

PM:	BRM
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SHEET INFO

TELECOM RESPONSIBILITY MATRIX
T-003

SHEET ISSUED:

TELECOM RESPONSIBILITY MATRIX

System ID	Component ID	Description	Furnished and installed by General Contractor	Furnished by Amazon and Installed by General Contractor	Furnished and Installed by Telecom Contractor	Furnished by Amazon and Installed by Telecom Contractor	Furnished and Installed by Security Vendor	Furnished by Amazon and Installed by Security Vendor	Furnished and Installed by M/E vendor (or sub-trades)	Furnished and Installed by Amazon
Telecommunications Pathway Infrastructure										
1	0									
1	0.01	Device rough-in and containment horizontal cabling	x							
1	0.02	Device rough-in and containment for CATV/broadband ceiling	x							
1	0.03	M/E cabling conduit rough-in	x							
Telecommunication IDF Enclosure & Room Construction										
2	0									
2	0.01	HVAC Cooling Equipment	x							
2	0.02	Equipment rack IDF room(s)			x					
2	0.03	Main Electrical supply power for UPS unit and general purpose power receptacles	x							
2	0.04	IT grounding & bonding infrastructure	x							
2	0.05	Telecommunications connectivity and cabling			x					
2	0.06	Optical fiber and copper patch panels								x
2	0.07	Network equipment, licensing and programming								x
Telecommunications Backbone Cabling Infrastructure										
3	0									
3	0.01	Optical fiber backbone connectivity and cabling			x					
4	0.02	Electrical IT equipment and general purpose power receptacles	x							
4	0.03	Coaxial Cabling to support the CATV Broad band system			x					
4	0.04	Category 6 connectivity and cabling supporting Amazon network connections			x					
4	0.05	Category 6 cabling to support IP-CCTV Cameras (interior & exterior)			x					
Security - Intrusion Detection and Electronic Access Control System										
5	0									
5	0.01	Security conduit rough-in (including back-box and conduit rough-in)	x							
5	0.02	Security access control device cabling and terminations					x			
5	0.03	Security Devices (Horns, Door Contacts, Motion Detectors)					x			
5	0.04	Access Control Devices (Card Readers)					x			
5	0.05	Access Control Panels					x			
5	0.06	Battery Back-up for access control panels					x			
5	0.07	Door Hardware (Electric locks, power transfer hinges, handles, etc.)	x							
5	0.08	Programming and configuration of security software								x
5	0.09	Testing and Commissioning with Amazon SIG								
Video Surveillance / IP-CCTV										
6	0									
6	0.01	Device Rough-in and conduit pathway	x							
6	0.02	Remote Ethernet switched to support IP-CCTV cameras				x				
6	0.03	Power receptacles for Remote Ethernet switches for IP-CCTV cameras	x							
6	0.04	Category 6 connectivity & cabling from remote Ethernet switches to IP-CCTV cameras			x					
6	0.05	Interior IP-CCTV Cameras						x		
6	0.06	Exterior IP-CCTV Cameras						x		
6	0.01	Physical server and storage						x		
6	0.08	IP-CCTV Programming Matrix						x		
6	0.09	VMS Software, Camera licensing								x
6	0.1	IP-CCTV camera provisioning and focusing								
6	0.11	Testing and Commissioning with Amazon SIG					x			x

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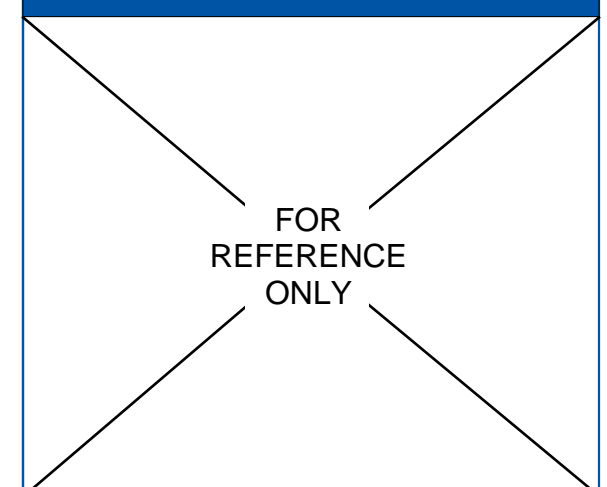


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SHEET INFO

TELECOM PLAN
T-100

SHEET ISSUED:



1 TELECOMMUNICATIONS OVERALL PLAN
1/32" = 1'-0"

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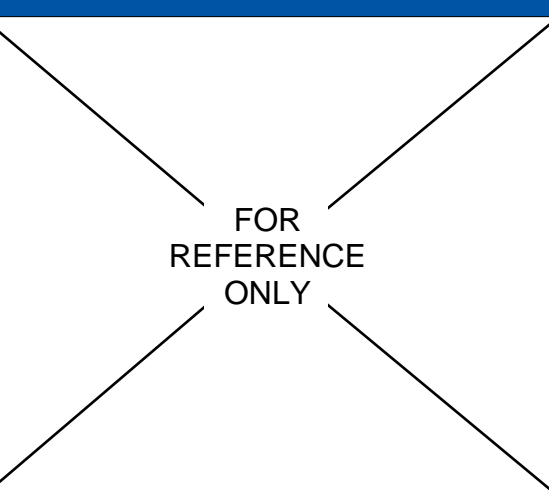


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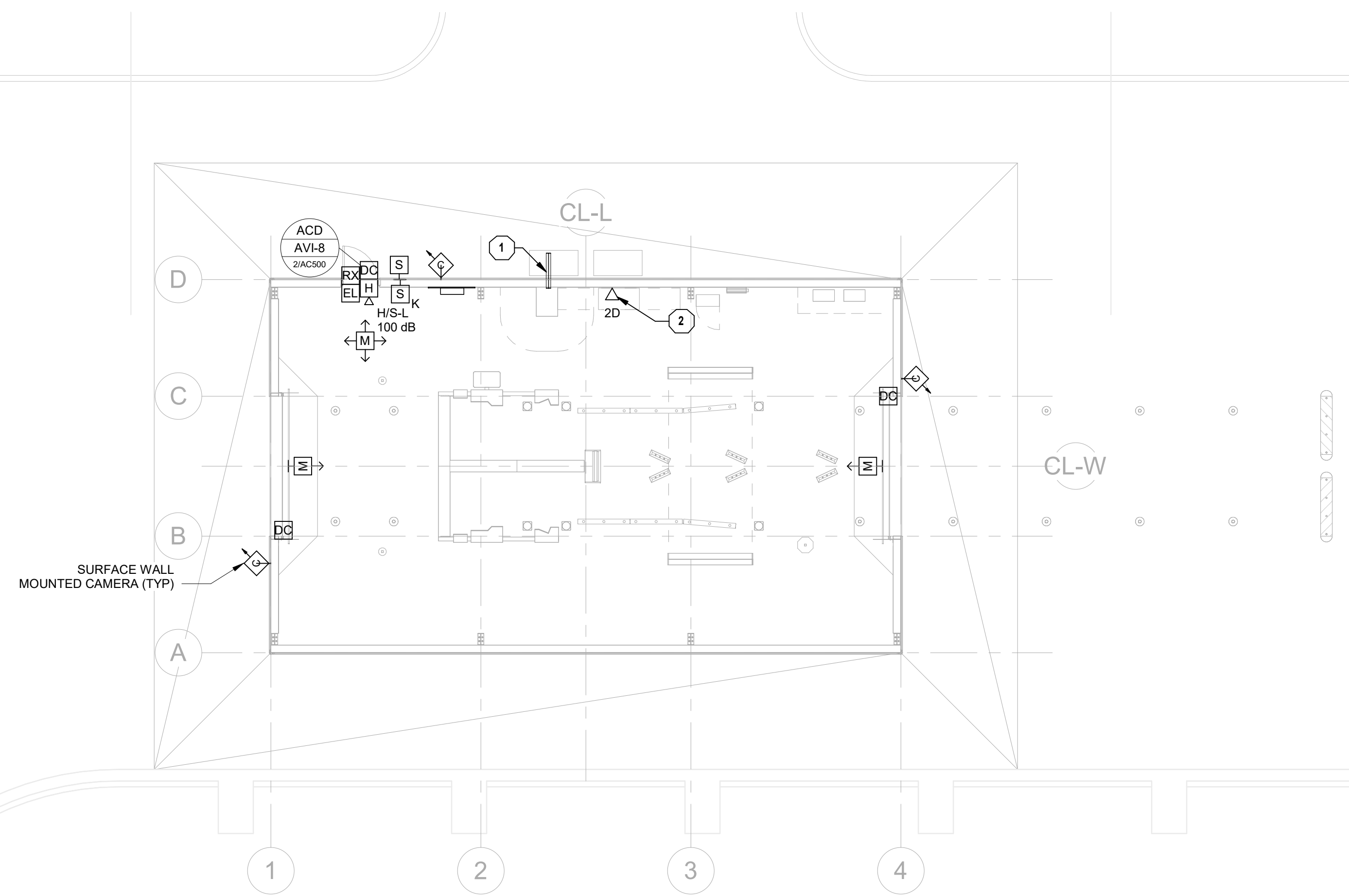
SHEET INFO

TELECOM PLAN - ENLARGED
T-400

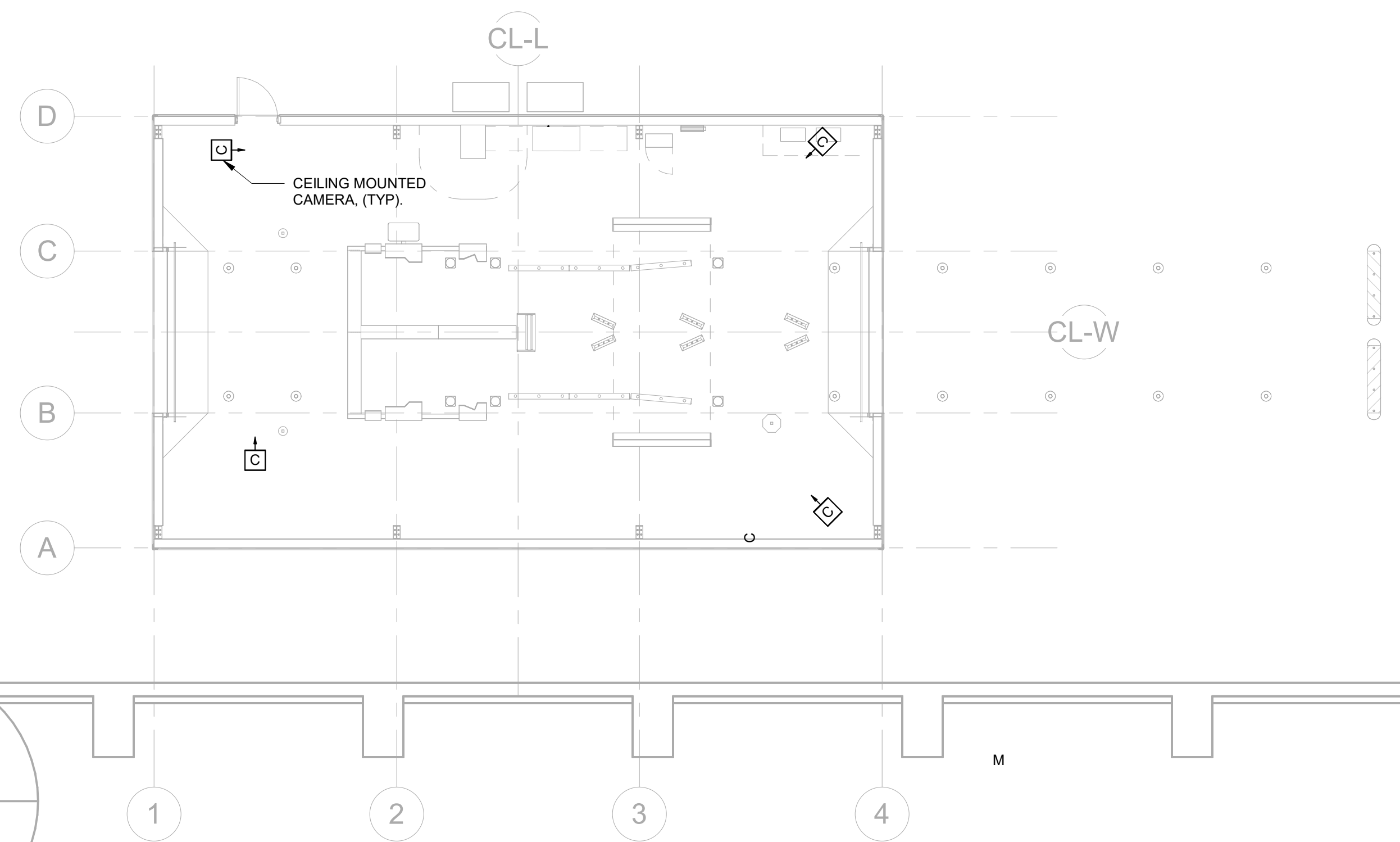
SHEET ISSUED: 06/24/24

TELECOMMUNICATIONS PLAN NOTES:

- (2) 2" CONDUITS FOR AVI IDF. FROM WAREHOUSE TENNISBALL FOR TELECOM BACKBONE CABLING. CONFIRM LOCATION BEFORE INSTALL. SEE DETAIL 5 E-200 FOR FURTHER INFORMATION.
- DATA TO AVI CABINET SHALL BE ROUTED FROM IDF LOCATED IN TUNNEL.



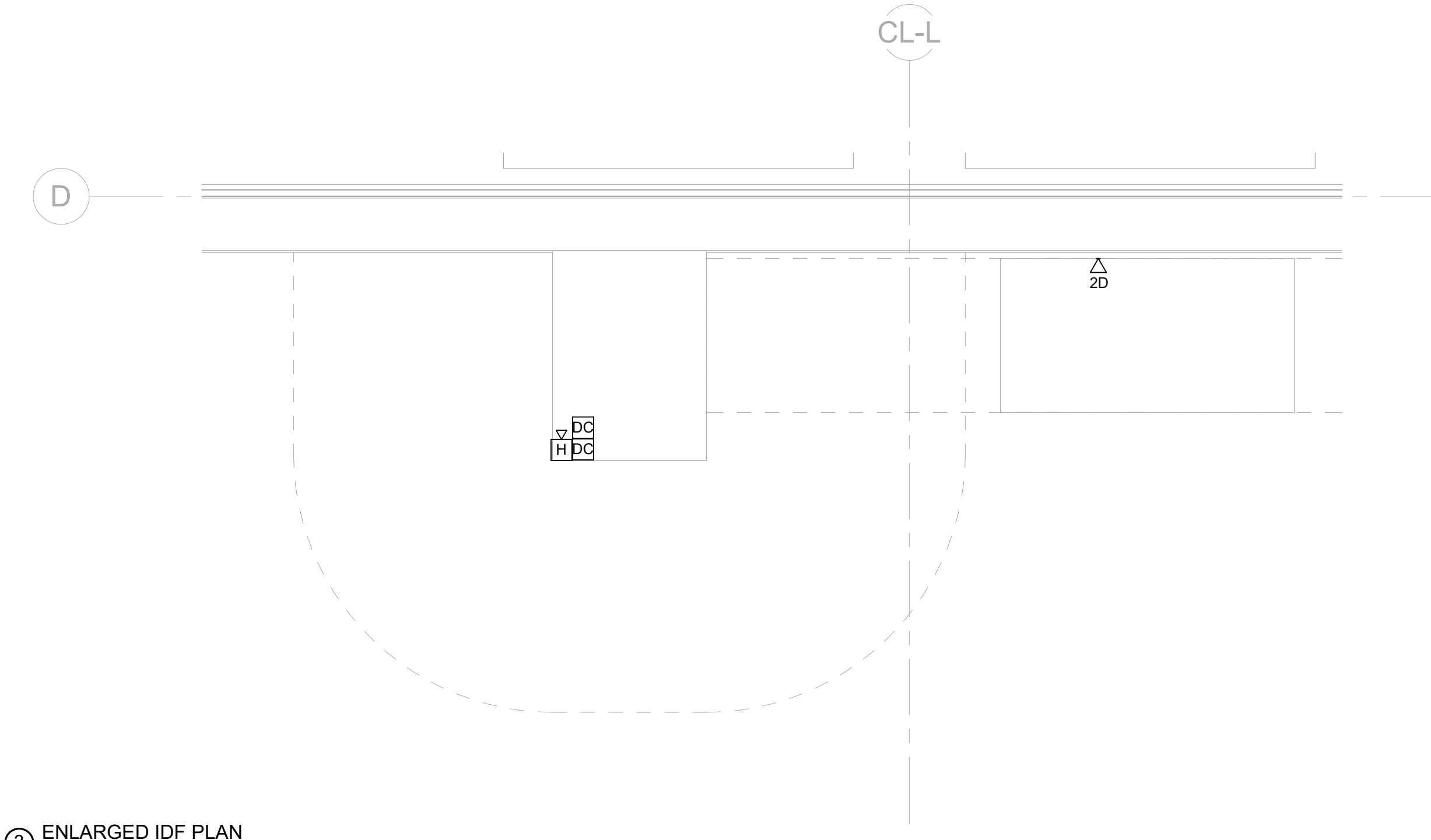
1 TECHNOLOGY FLOORPLAN - ENLARGED AVI TUNNEL
1/8" = 1'-0"



2 TECHNOLOGY CEILING PLAN - ENLARGED AVI TUNNEL
1/8" = 1'-0"

VIDEO SURVEILLANCE DEVICE ROUGH IN SCHEDULE									
SYMBOL	DESCRIPTION	MOUNTING HEIGHT	CABLE TYPE	QTY	BACK BOX		MUD RING	QTY	CONDUIT
					SIZE	TERMINATION LOCATION			
C	CAMERA, CEILING MOUNTED, DOME	CEILING	CATEGORY 6, 4PR UTP PLENUM CABLE, BY TELECOM CONTRACTOR	1	DOUBLE GANG	DOUBLE GANG	-	-	-
C	CAMERA, EXTERIOR, DOME	PER PLAN	CATEGORY 6, 4PR UTP PLENUM CABLE, BY TELECOM CONTRACTOR	1	-	-	1	3/4"	PER MANUFACTURER/ DETAILS

SECURITY DEVICE ROUGH IN SCHEDULE									
SYMBOL	DESCRIPTION	MOUNTING HEIGHT	CABLE TYPE	QTY	BACK BOX		MUD RING	QTY	CONDUIT
					SIZE	TERMINATION LOCATION			
S	CARD READER	44" AFF	18AWG-6C OA SHIELD	1	DOUBLE GANG	SINGLE GANG	1	3/4"	J-BOX IN ACCESSIBLE CEILING, UON
DC	DOOR CONTACT	DOOR FRAME	22AWG-2C	-	SEE DETAIL	-	1	3/4"	J-BOX IN ACCESSIBLE CEILING, UON
DC	DOOR CONTACT - OVERHEAD	DOOR FRAME	22AWG-4C	-	SEE DETAIL	-	1	3/4"	J-BOX IN ACCESSIBLE CEILING, UON
RX	REQUEST TO EXIT	-	22AWG-4C	-	SEE DETAIL	-	-	-	-
EL	ELECTRIC LOCK (BY OTHERS)	-	16AWG-2C	1	-	-	1	3/4"	J-BOX IN ACCESSIBLE CEILING, UON
S K	TOUGH SCREEN KEYPAD	54" AFF	18AWG-2C	1	DOUBLE GANG	SINGLE GANG	1	3/4"	J-BOX IN ACCESSIBLE CEILING, UON
H DB	LOCAL ALARM HORN STROBE	90" AFF OR 6" ABOVE DOOR	18AWG-2C	1	DOUBLE GANG	SINGLE GANG	1	3/4"	J-BOX IN ACCESSIBLE CEILING, UON
M	MOTION DETECTOR	90" AFF OR 6" ABOVE DOOR	22AWG-4C	1	SINGLE GANG	SINGLE GANG	1	3/4"	ACCESSIBLE CEILING, UON
M	MOTION DETECTOR	CEILING	22AWG-4C	-	-	-	-	3/4"	-



3 ENLARGED IDF PLAN
3/4" = 1'-0"

TO THE BEST OF MY KNOWLEDGE, BELIEF, AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 NEW YORK STATE ENERGY CODE.
DEAN W. CHANDLER

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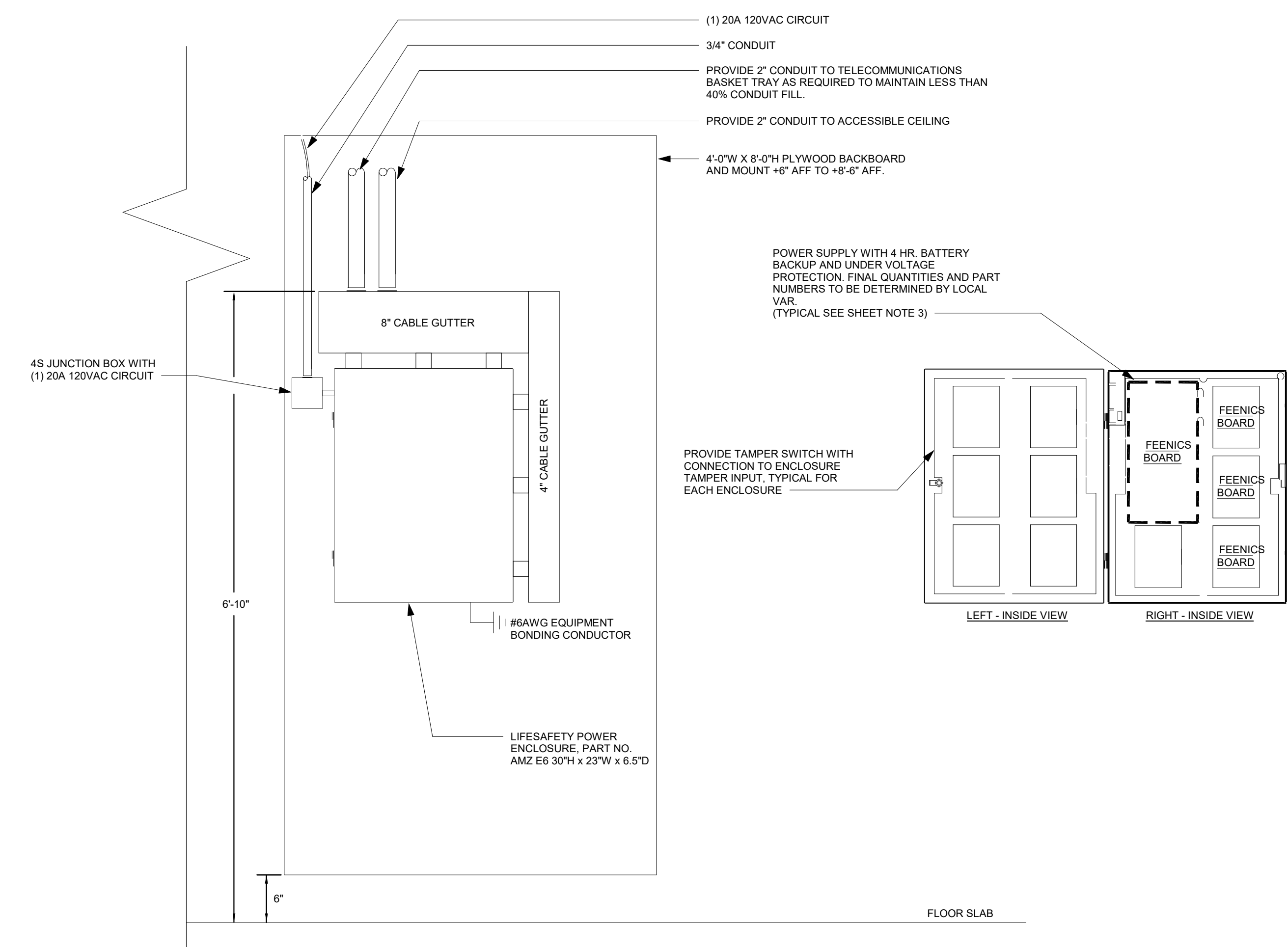
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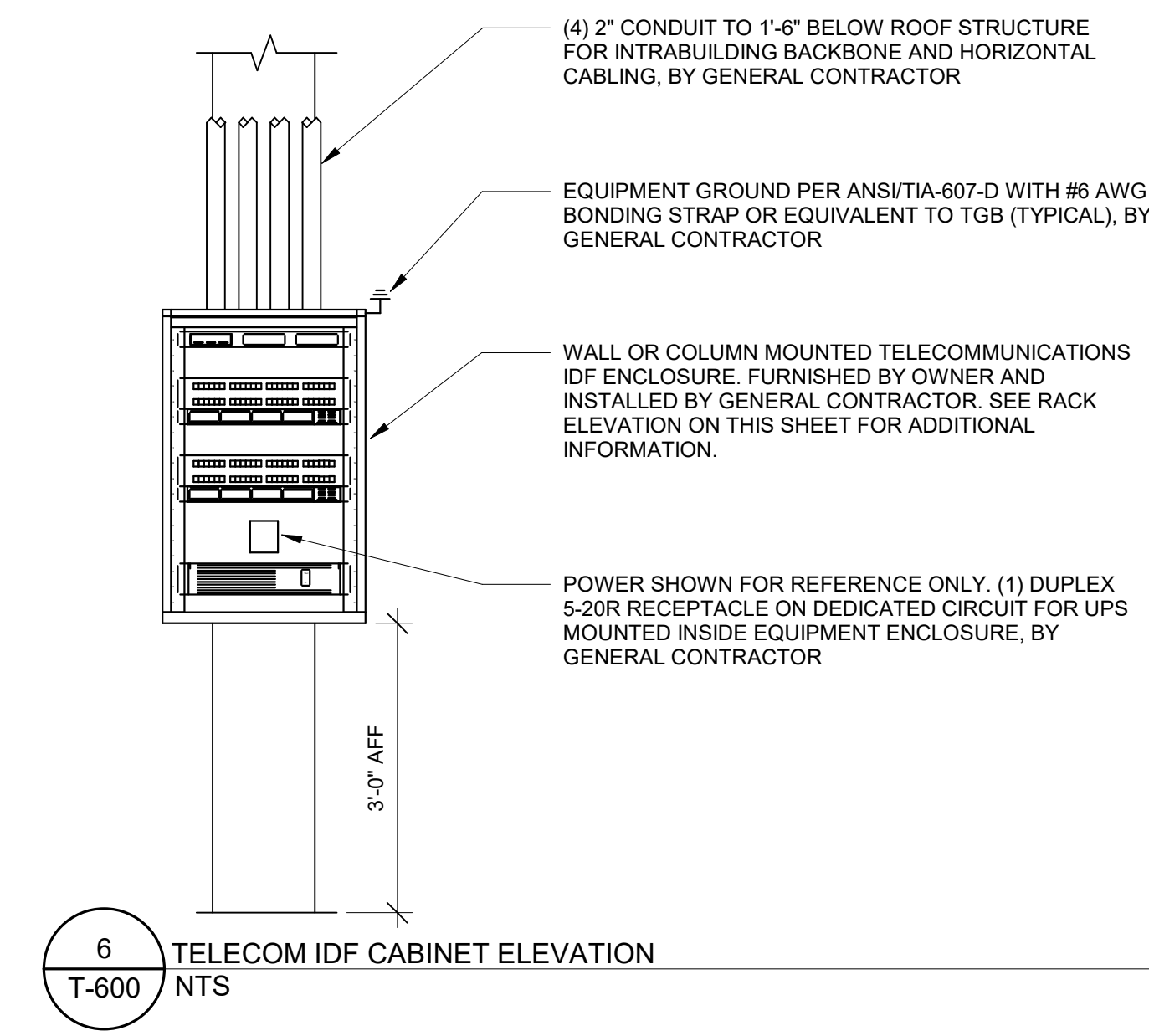
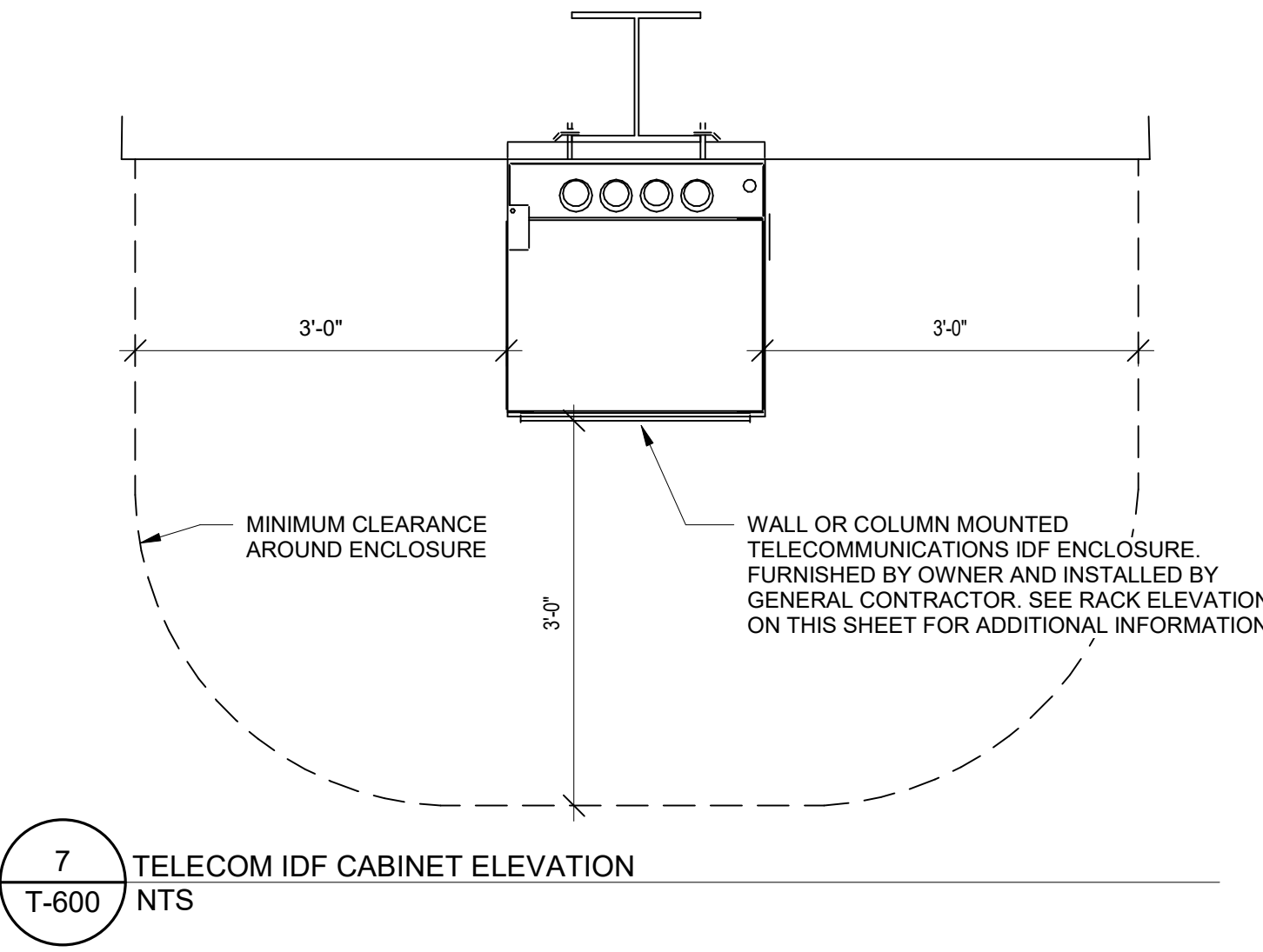
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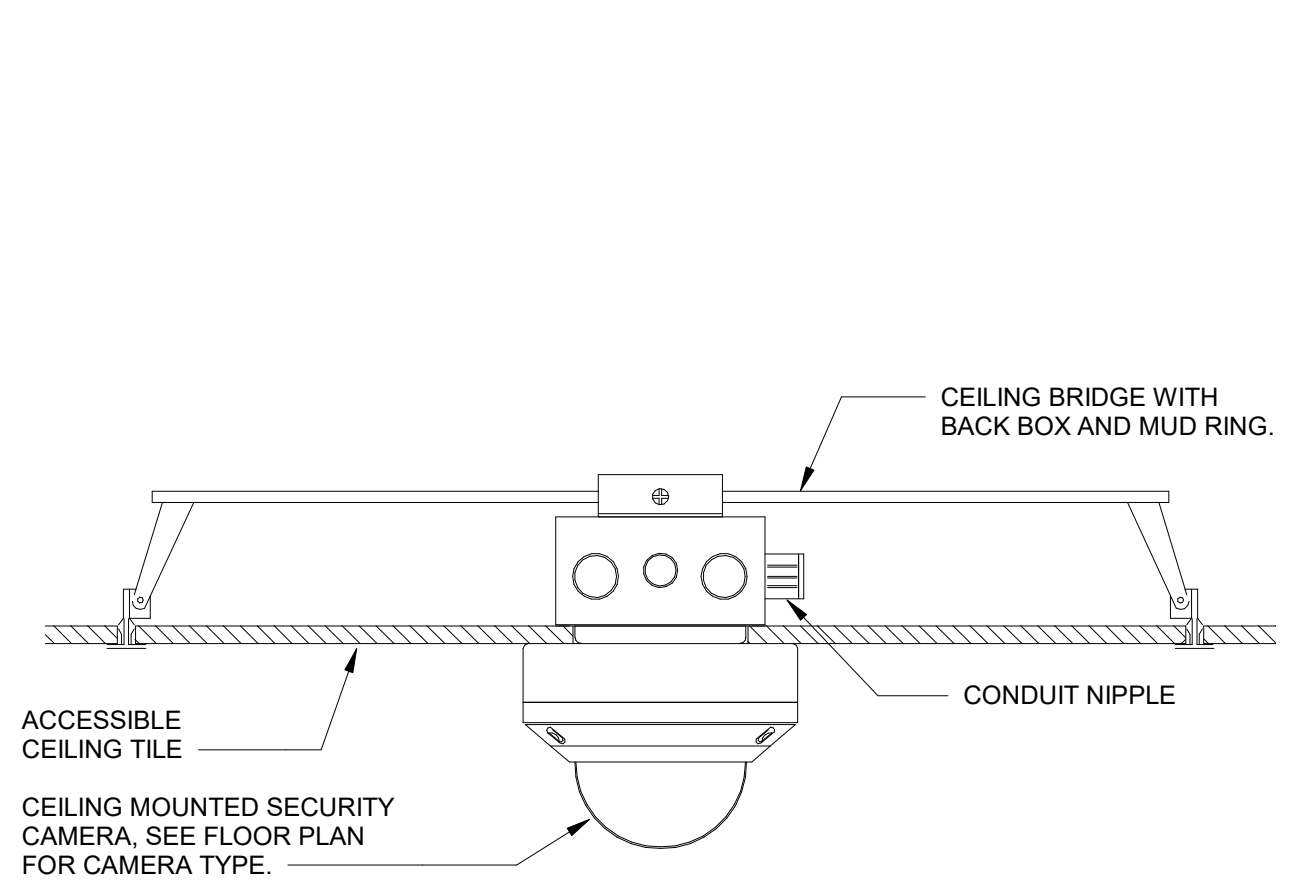
TENANT IMPROVEMENTS
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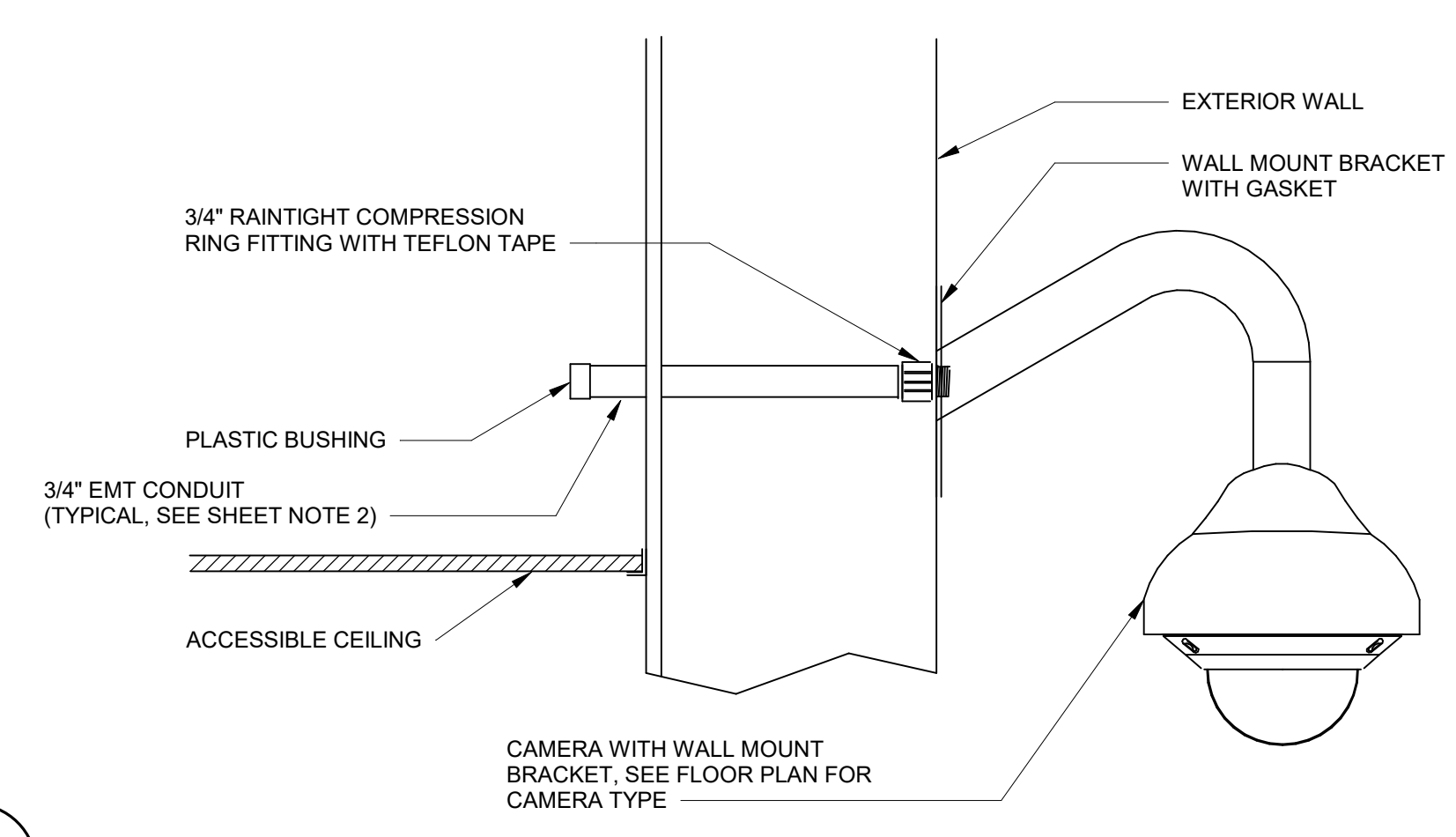
1. BACKUP BATTERIES SHALL BE PROVIDED AT THE BOTTOM WITHIN EACH ENCLOSURE. BATTERIES SHALL BE SIZED TO PROVIDE 4-HOUR BATTERY BACKUP RUNTIME FOR ALL CONNECTED SECURITY DEVICES. AMZ E6 ENCLOSURES REQUIRE BATTERIES NO LARGER THAN 12V 9AH.



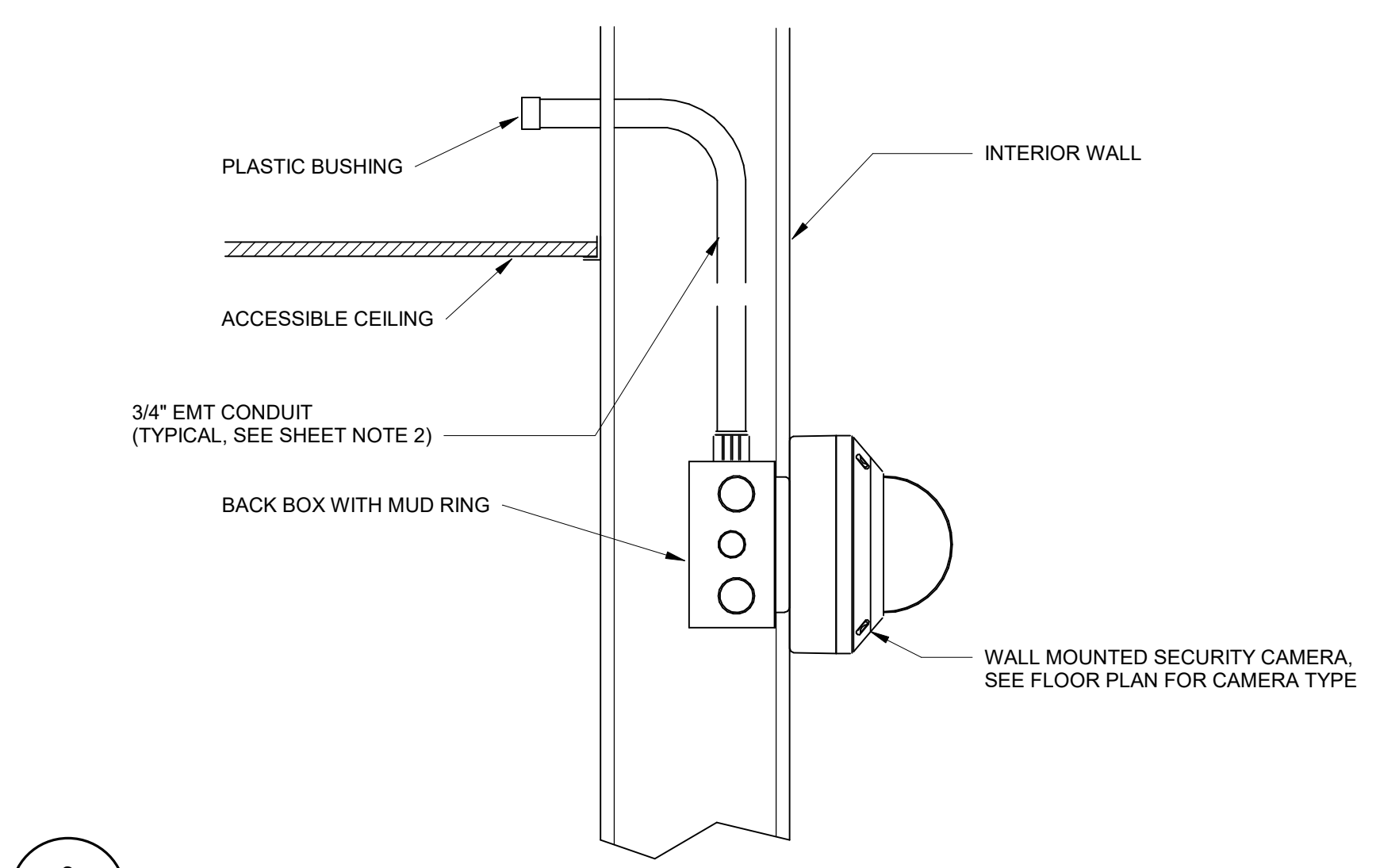
8 ACCESS CONTROL PANEL HEADEND ACP WALL ELEVATION - TYPICAL
T-600 NTS



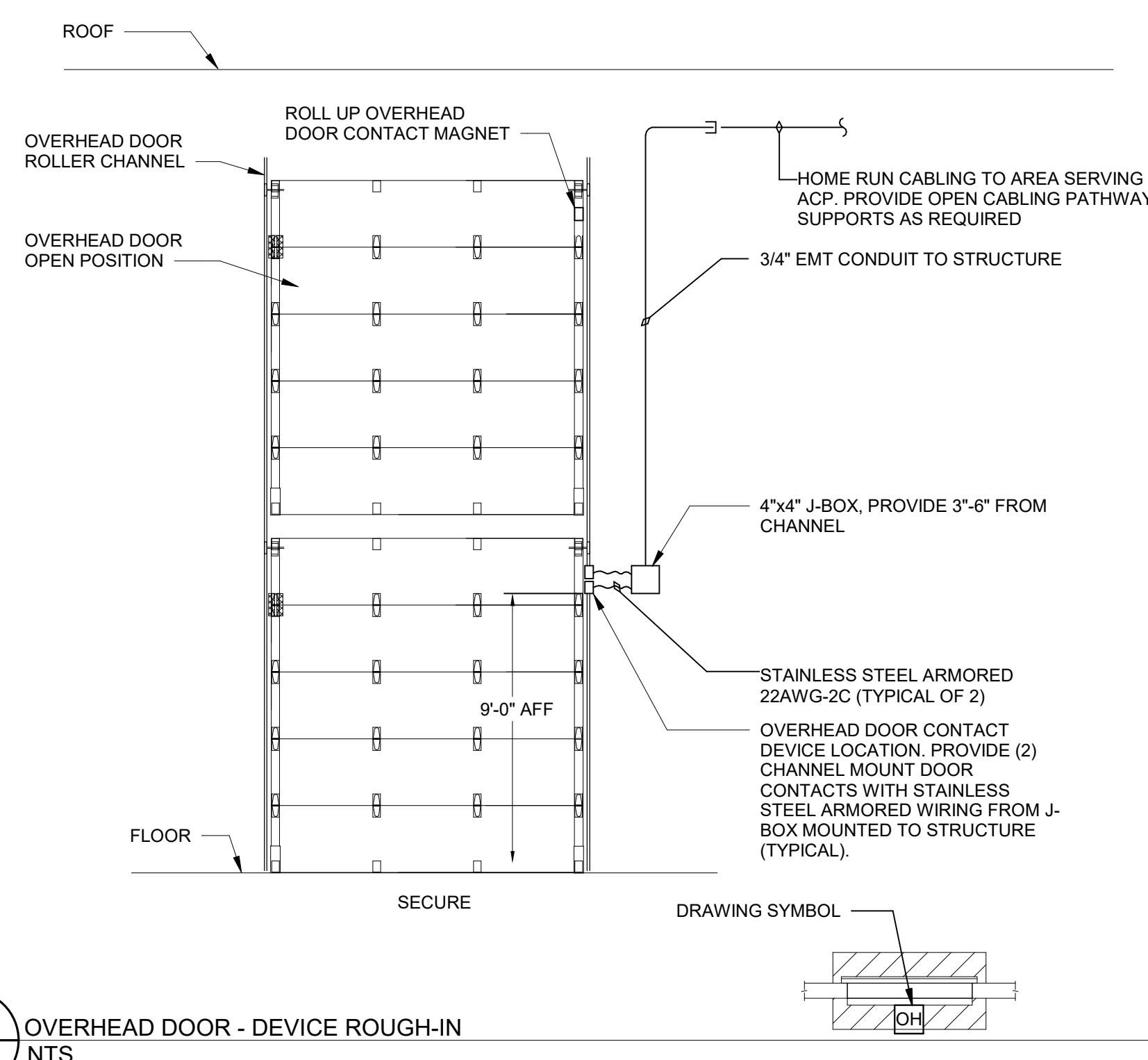
5 INTERIOR CEILING MOUNT CAMERA (ALT MOUNTING OPTION)
T-600 NTS



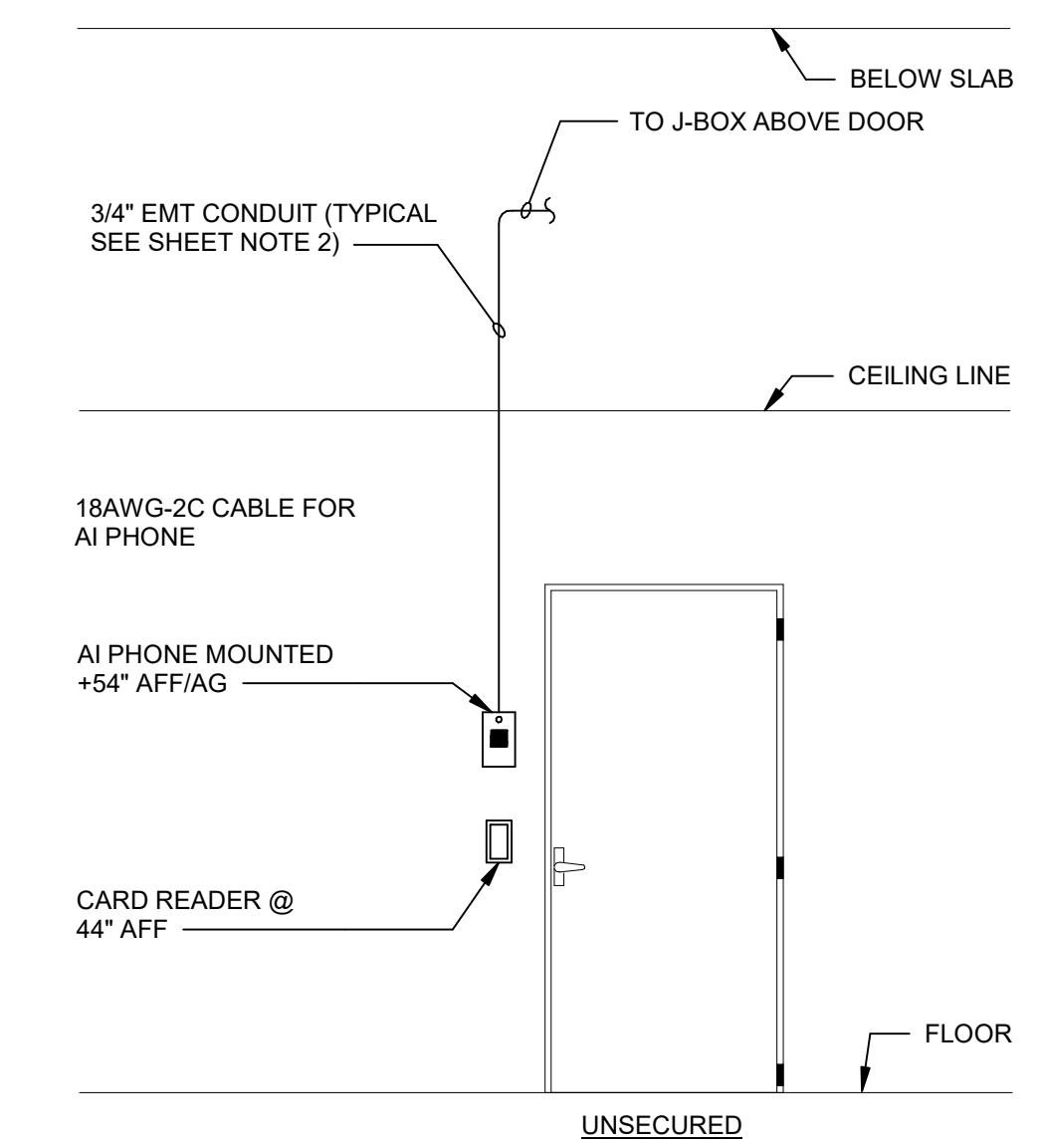
4 EXTERIOR WALL MOUNT CAMERA W/ BRACKET
T-600 NTS



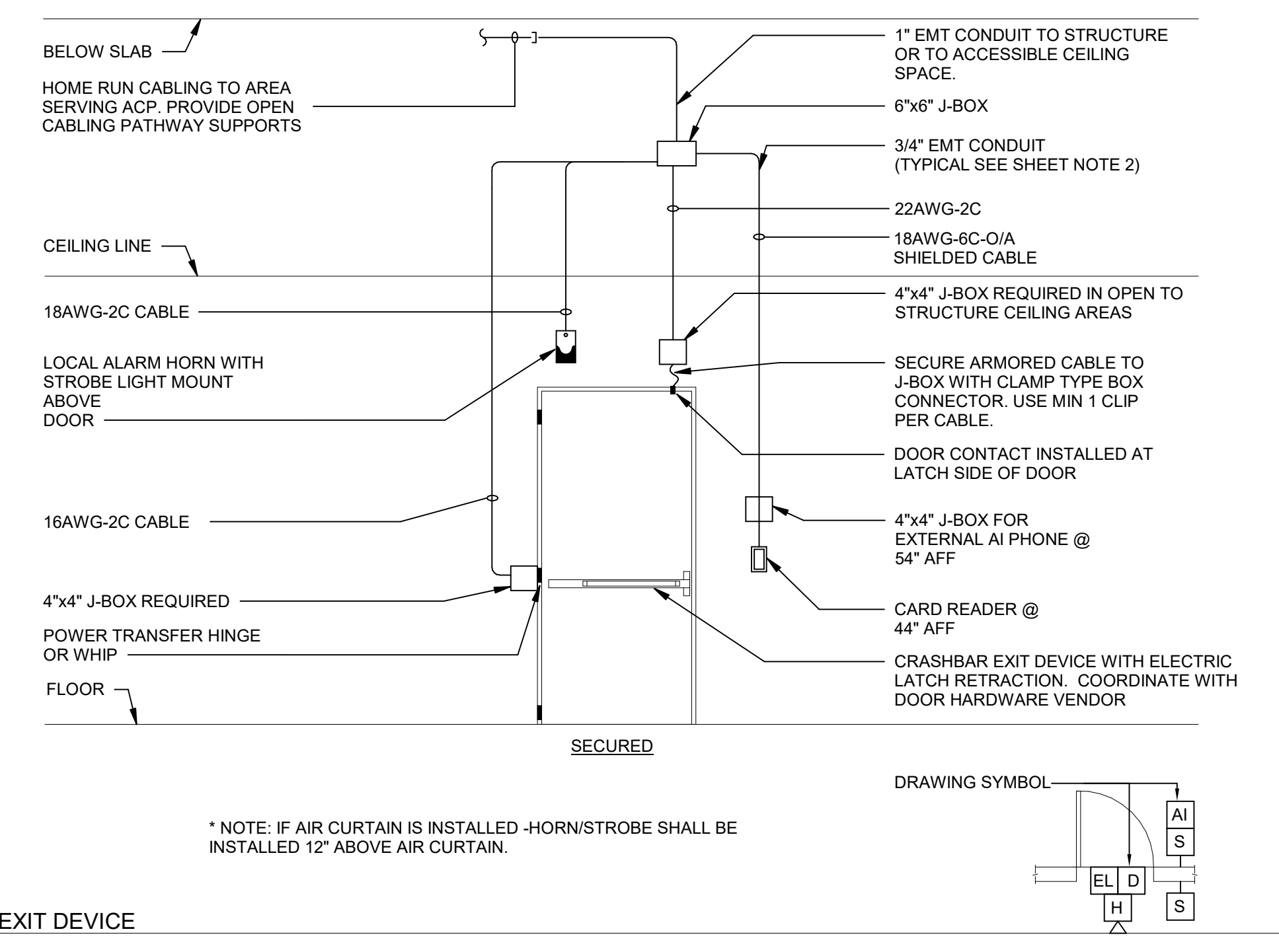
3 INTERIOR WALL MOUNT CAMERA
T-600 NTS



2 OVERHEAD DOOR - DEVICE ROUGH-IN
T-600 NTS



1 SINGLE DOOR - TRAILER DOCK RELEASE (TDR) - CARD-IN / CARD-OUT WITH EXIT DEVICE
T-600 NTS



SEALS

FOR REFERENCE ONLY

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SHEET INFO

TELECOM DETAILS
T-600

SHEET ISSUED:

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