

STATE OF DELAWARE
OMB/DIVISION OF FACILITIES MANAGEMENT
OMB/DFM CONTRACT #MJ4506000006
HI-GRADE EVIDENCE STORAGE BUILDING

17267 S DUPONT HWY

HARRINGTON, DE 19952

DBF PROJECT NO. 0586B053.B01

FOR:

DELAWARE DEPARTMENT OF SAFETY AND HOMELAND SECURITY

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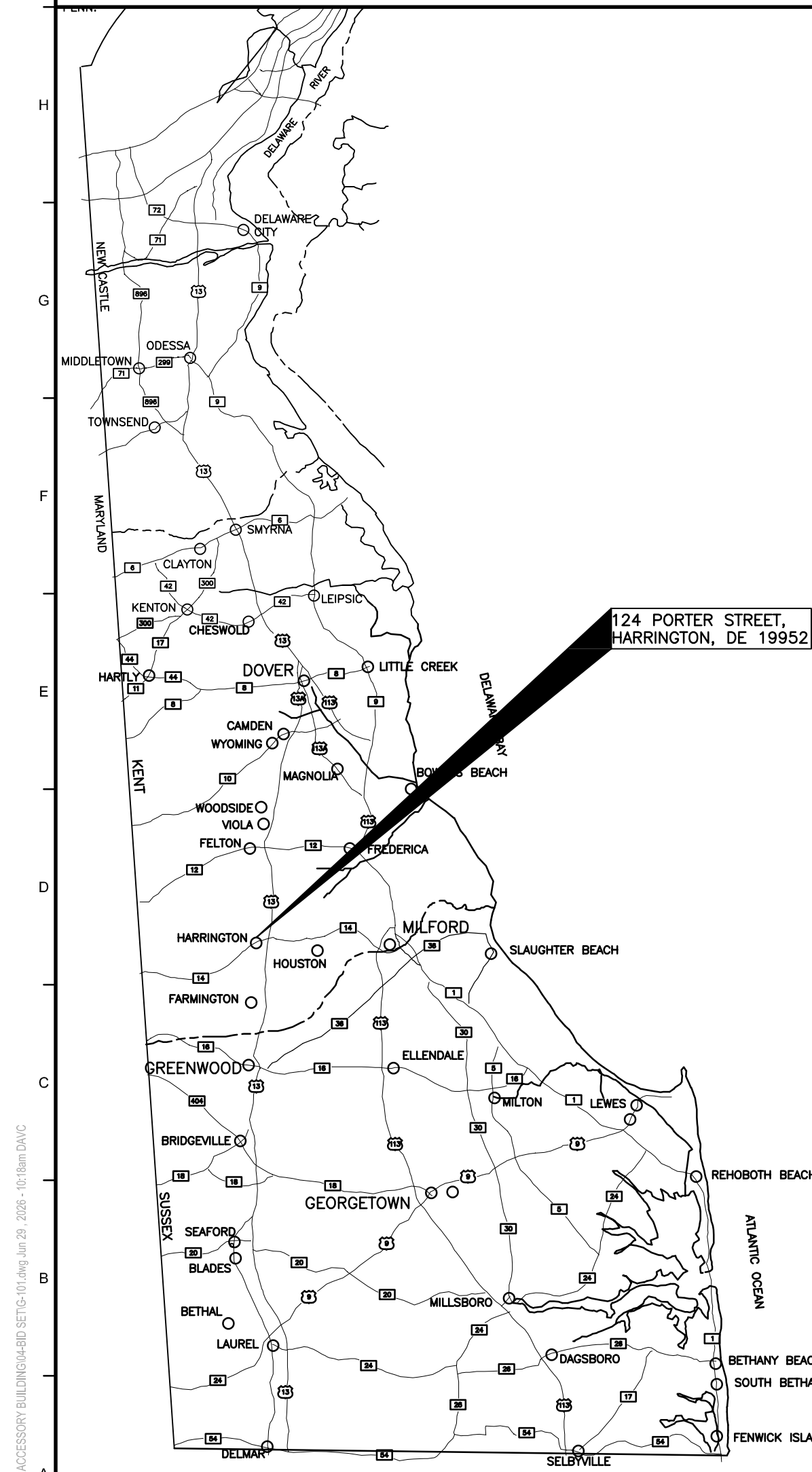
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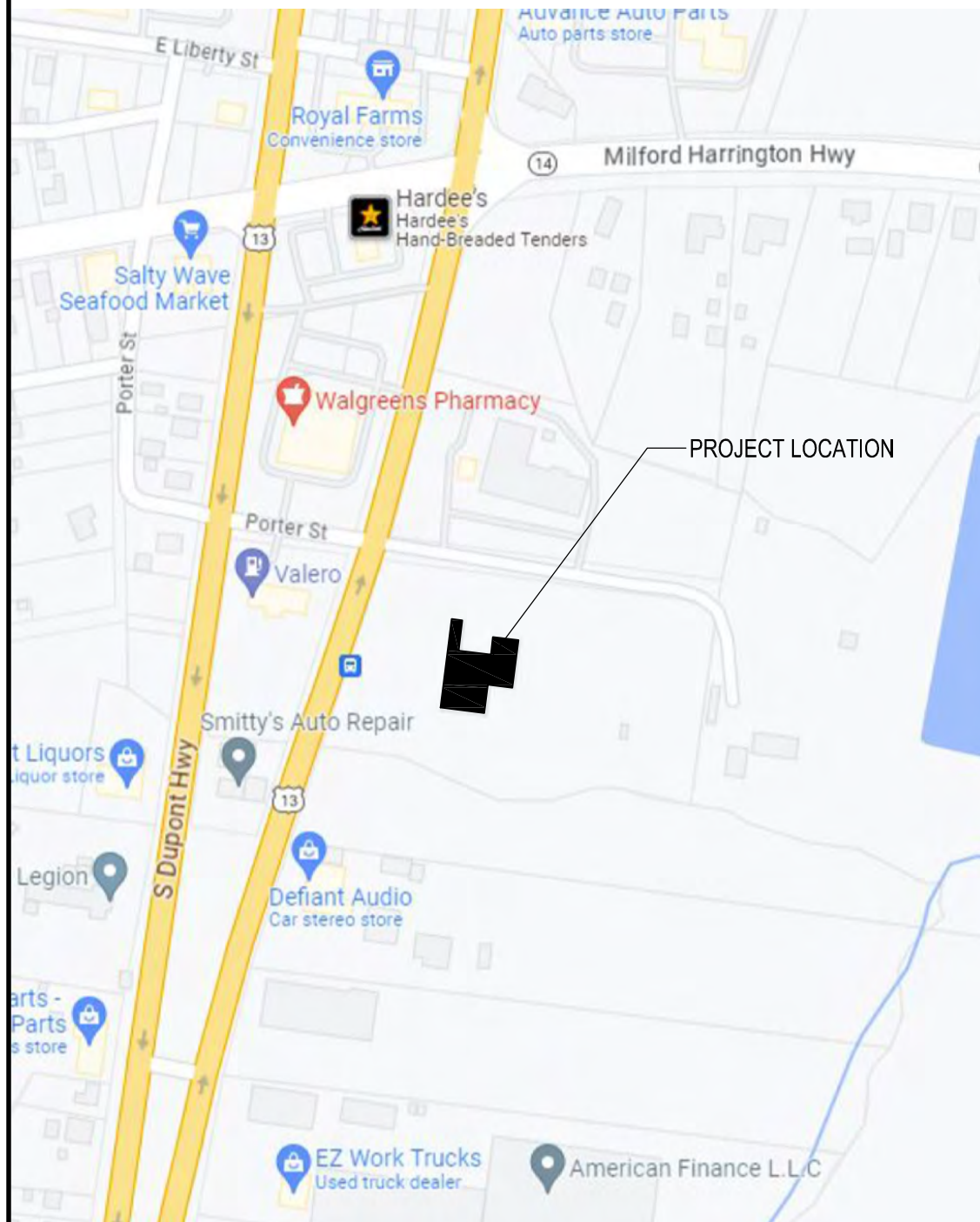
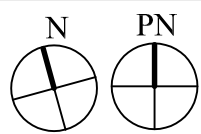
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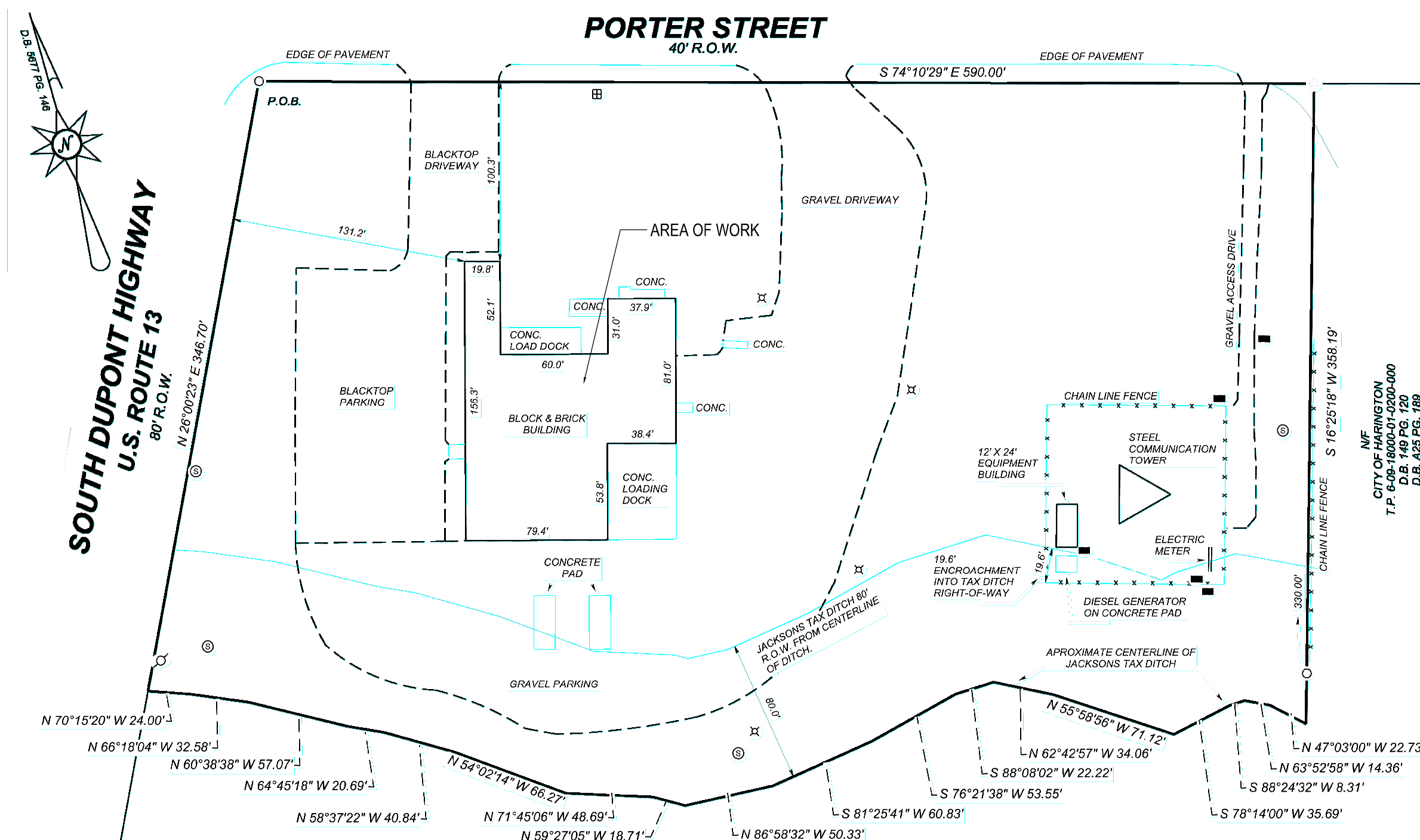
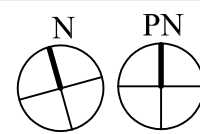
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LOCATION MAP



AREA MAP



SITE MAP

DAVIS
BOWEN &
FRIEDEL, INC.
ARCHITECTS • ENGINEERS • SURVEYORS
HARRINGTON, DELAWARE
BALTIMORE, MARYLAND
410.770.1441

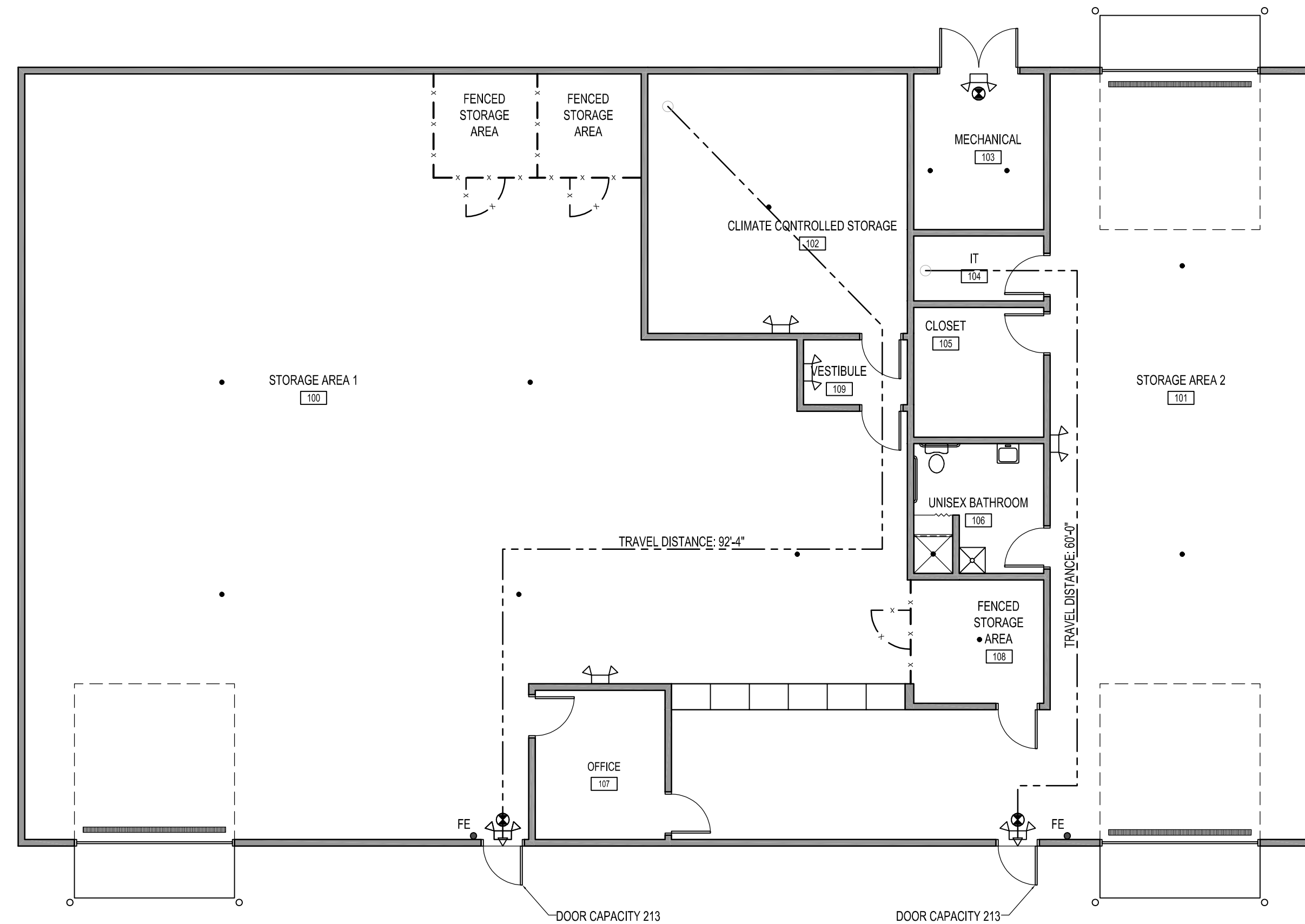
HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

DATE	COMMENTS
2/1/25	150% DESIGN SUBMISSION
8/1/25	60% DESIGN SUBMISSION
10/7/25	FIRE MARSHAL SUBMISSION
2/28/26	90% DESIGN SUBMISSION
	BID SET

Date:	JULY 2026
Scale:	AS NOTED
Dwn.By:	CJD
Proj.No.:	0586B053.B01

COVER SHEET

Dwg.No.:
G-101



G-103

CODE DATA

**DAVIS
BOWEN &
FRIEDEL, INC.**
ARCHITECTS • ENGINEERS • SURVEYORS

BAFTON, MARYLAND
410.770.4744

MILFORD, DELAWARE
302.424.1441

SALISBURY, MARYLAND
410.543.9091

HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

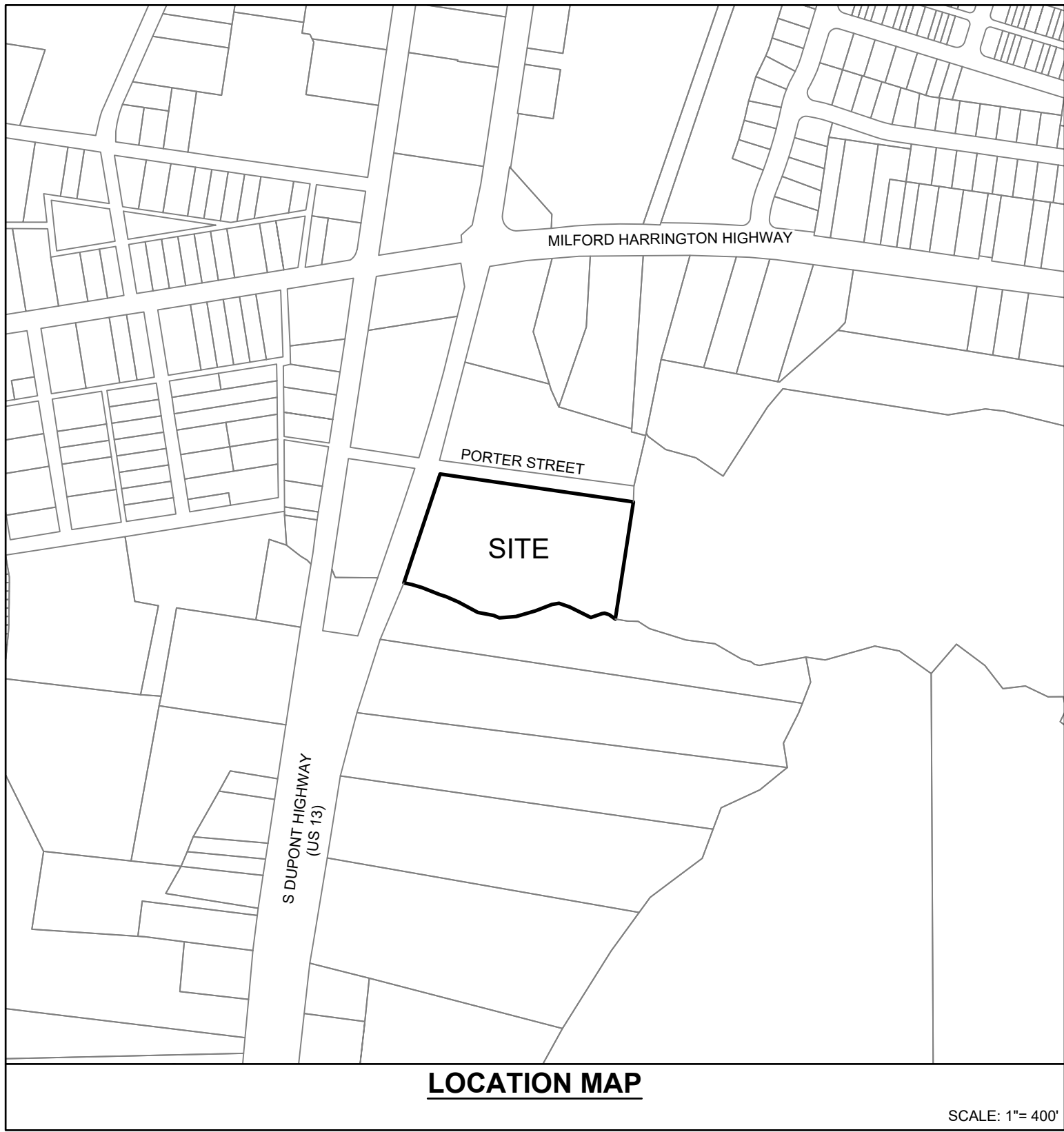
HI - GRADE EVIDENCE STORAGE BLDG.

CITY OF HARRINGTON
MISPILLION HUNDRED
KENT COUNTY, DELAWARE

DBF # 0586B053.B01

AUGUST, 2025

CONSTRUCTION PLANS



ENGINEER'S STATEMENT

I, THE UNDERSIGNED, HEREBY STATE THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

CLIFTON D. MUMFORD
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DELAWARE, 19963

DATE

OWNER'S STATEMENT

I, THE UNDERSIGNED, CERTIFY THAT I AM THE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT MY DIRECTION, AND THAT I ACKNOWLEDGE THE SAME TO BE ACT AND DESIRE THE PLAN TO BE DEVELOPED AS SHOWN IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

JOSEPH SEELY
STATE OF DELAWARE
122 MARTIN LUTHER KING JR BLVD S.
DOVER, DE 19901
302-739-5644
JOSEPH.SEELY@DELAWARE.GOV

DATE

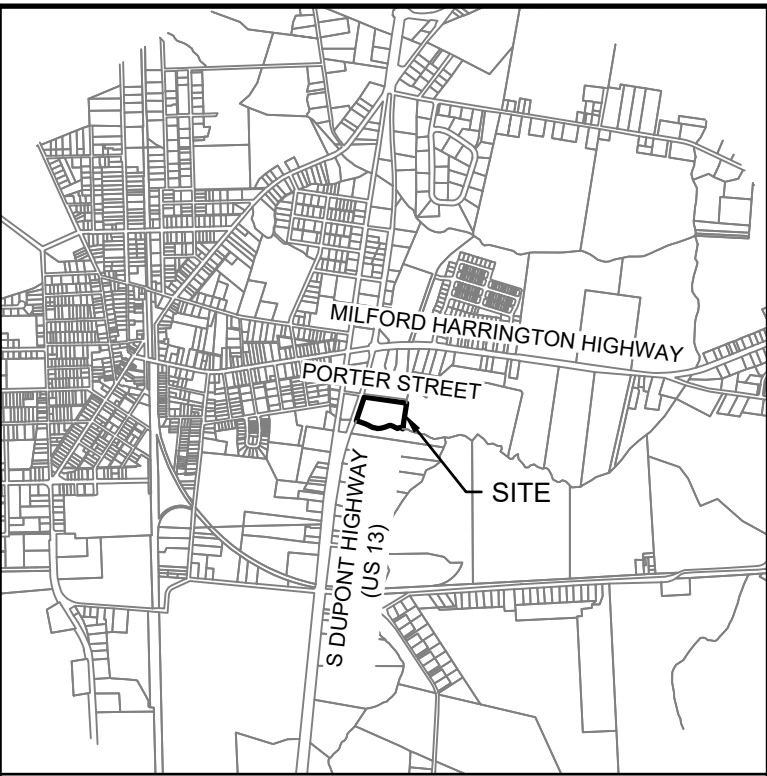
DAVIS
BOWEN &
FRIEDEL, INC.
ARCHITECTS • ENGINEERS • SURVEYORS
MILFORD, DELAWARE
302-739-5644
BALTIMORE, MARYLAND
410-534-7991

HI - GRADE EVIDENCE STORAGE BLDG.
CITY OF HARRINGTON
MISPILLION HUNDRED
KENT COUNTY, DELAWARE

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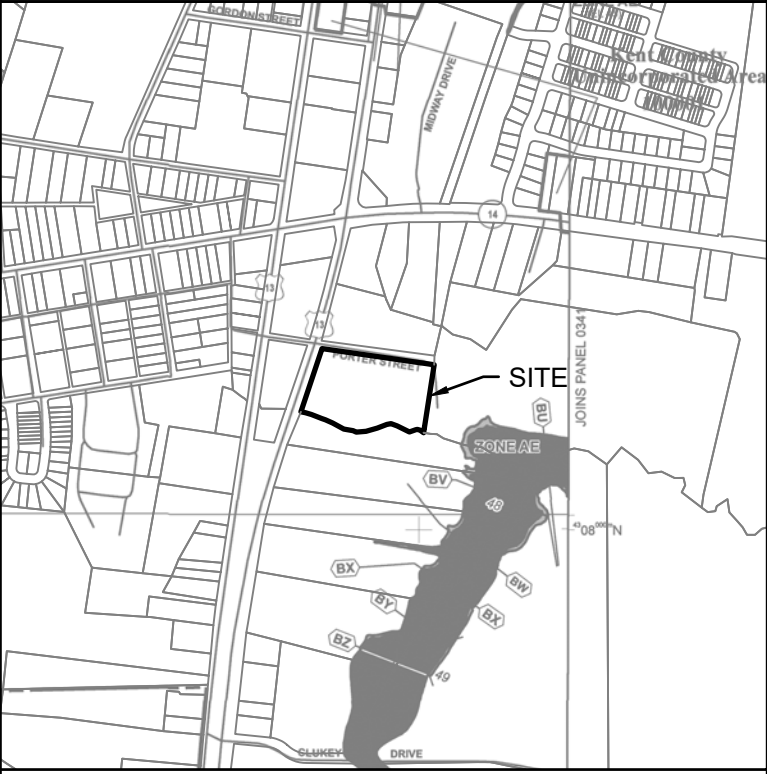
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DATA COLUMN			
	TAX MAP ID	DEED REF.	
1	PARCEL DATA	6-09-18005-01-4700-0001	DB 12225 PG 68
2	DNREC PROJECT #	2025-058	
3	APPROXIMATE PROJECT CENTER	LATITUDE 38.92149	LONGITUDE -75.56619
4	ENGINEER DAVIS, BOWEN & FRIEDEL, INC. 1 PARK AVENUE MILFORD, DE 19963 CLIFTON D. MUMFORD PHONE: (302) 424-1441 EMAIL: cdm@dbfinc.com	OWNER/DEVELOPER STATE OF DELAWARE 122 MARTIN LUTHER KING BLVD S. DOVER, DE 19901 JOSEPH D. SEELY PHONE: (302) 739-5644 EMAIL: JOSEPH.SEELY@DELAWARE.GOV	ARCHITECT DAVIS, BOWEN, & FRIEDEL INC. 1 PARK AVENUE MILFORD DE, 19963 MICHAEL P. BAUMAN PHONE: (302) 424-1441 EMAIL: mpb@dbfinc.com
5	SITE ADDRESS	124 PORTER STREET HARRINGTON DE, 19952	
6	DATUM	HORIZONTAL NAD 83 (DE STATE PLANE)	VERTICAL NAVD 88
7	ZONING	EXISTING M. MANUFACTURING	
8	LAND USE	EXISTING INDUSTRIAL MANUFACTURING	PROPOSED STATE GOVERNMENT
9	UTILITY PROVIDERS	SEWER CITY OF HARRINGTON	WATER CITY OF HARRINGTON ELECTRIC DELMARVA POWER
10	STATE STRATEGIES MAP	INVESTMENT LEVEL AREA :1	
11	POSTED SPEED LIMIT	PORTER ST. 25 MPH (LOCAL 24044)	
12	FLOODPLAIN	THIS PROPERTY IS NOT IMPACTED BY THE 100 YEAR FLOOD PLAN AS DETERMINED BY FEMA PANEL 10001C0337J, DATED JULY 7, 2014	
13	TRANSPORTATION IMPROVEMENT DISTRICT (TID)	THIS PROPERTY IS NOT LOCATED IN A TRANSPORTATION IMPROVEMENT DISTRICT (TID.) DISTANCE TO NEAREST TID: 8.5 MILES (MILFORD TID)	
14	GROUNDWATER RECHARGE	ALL OF THE PROPERTY IS LOCATED IN AN AREA OF GOOD GROUNDWATER RECHARGE POTENTIAL.	
15	WELLHEAD PROTECTION AREA	THE PROPERTY IS NOT LOCATED IN A WELLHEAD PROTECTION AREA.	
16	WETLANDS	THIS PROPERTY IS CONTAINS WETLANDS LOCATED IN THE TAX DITCH ACCORDING TO THE NWI MAP. NO PROPOSED CONSTRUCTION IS SCHEDULED TO IMPACT THIS AREA.	
17	CODE COMPLIANCE	REQUIRED	PROPOSED
	FRONT SETBACK	20 FT	20 FT
	SIDE SETBACK	20 FT	20 FT
	REAR SETBACK	20 FT	20 FT
	MINIMUM LOT WIDTH	100 FT	-
	MINIMUM LOT DEPTH	100 FT	-
	MAXIMUM BUILDING HEIGHT	45 FT	-
18	AREAS	EXISTING	PROPOSED
	GROSS SITE AREA	5.222 AC	5.222 AC
19	PROPOSED LAND USE AREAS		
	IMPERVIOUS	2.194 AC (42%) 95,568 SF	2.049 AC (39%) 89,259 SF
	PERVIOUS	3.028 AC (58%) 131,905 SF	3.173 AC (61%) 138,205 SF
	TOTAL	5.222 AC 227,478 SF	5.222 AC 227,478 SF
20	LIMIT OF DISTURBANCE		
	HI-GRADE BUILDING RENOVATION	DNREC #2025-049	0.50 AC COMPLETED
	EVIDENCE STORAGE BUILDING	DNREC #2025-058	1.27 AC PROPOSED
	TOTAL		1.77 AC



LOCATION MAP

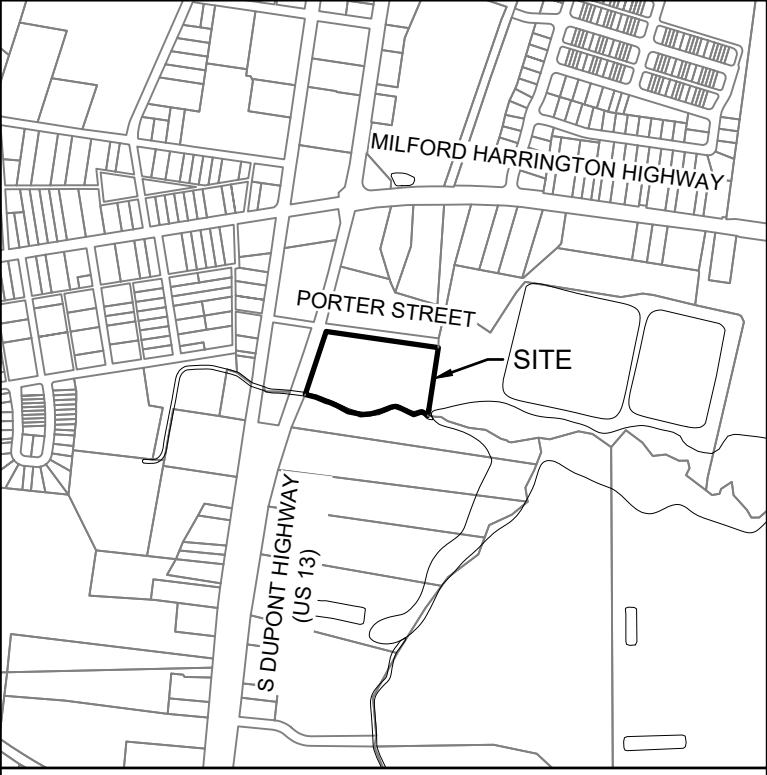
SCALE: 1"=1/2 MILE



FEMA FLOOD MAP

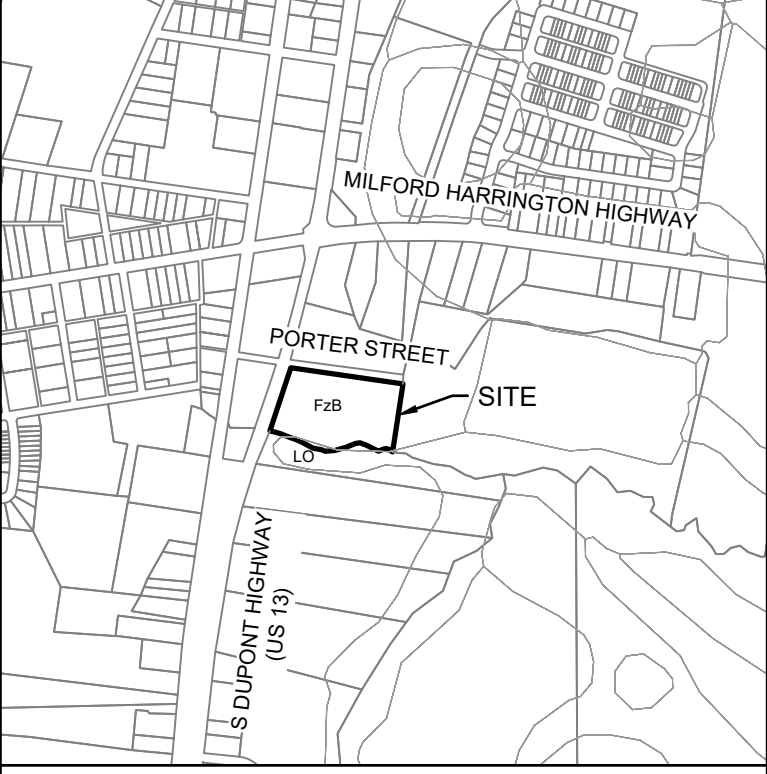
FEMA PANEL 10001C0337J (DATED JULY 7, 2014)

SCALE: 1"=1000'



NWI WETLANDS MAP

SCALE: 1"=1000'

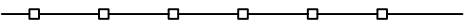


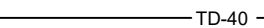
SOILS MAP

SCALE: 1"=1000'

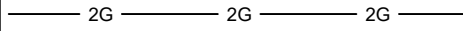
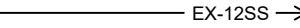
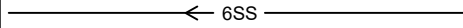
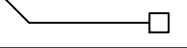
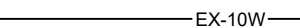
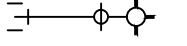
SOILS DATA			
LABEL	SOIL NAME		TYPE
FzB	FALLSINGTON URBAN LAND COMPLEX, 0 TO 5 % SLOPES		B/D
LO	LONGMARSH AND INDIANTOWN SOILS, FREQUENTLY FLOODED		B/D

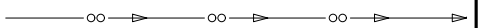
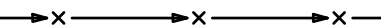


MANMADE ROADSIDE FEATURES			
FEATURE DESCRIPTION	EXISTING	PROPOSED	ID
FENCE - CHAINLINK OR STRANDED			

RIGHT-OF-WAY FEATURES		
FEATURE DESCRIPTION	EXISTING	PROPOSED
BUILDING SETBACK LINE		
PROPERTY LINE		
TAX DITCH RIGHT OF WAY		

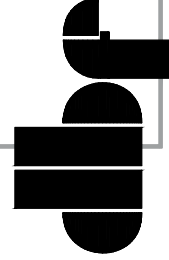
PAVEMENT SECTION(S)		
FEATURE DESCRIPTION	EXISTING	PROPOSED
PAVEMENT		

UTILITY FEATURES		
FEATURE DESCRIPTION	EXISTING	PROPOSED
ELECTRIC - UNDERGROUND		
GAS - UNDERGROUND		
LIGHT POLE		
SANITARY MAIN		
SANITARY SEWER LATERAL AND CLEANOUT		
SANITARY SEWER MANHOLE		
UTILITY POLE GUY WIRE ANCHOR		
UTILITY POLE		
WATER MAIN		
WATER - FIRE HYDRANT		
WATER VALVE		

DRAINAGE FEATURES			
FEATURE DESCRIPTION	EXISTING	PROPOSED	ID
DRAINAGE MANHOLE			
DITCH CENTERLINE			

SURVEY CONTROL & MONUMENTATION		
FEATURE DESCRIPTION	EXISTING	PROPOSED
IRON ROD WITH CAP SET		
CONCRETE MONUMENT		
IRON PIPE FOUND		
IRON ROD FOUND		

HI - GRADE EVIDENCE STORAGE BLDG.
CITY OF HARRINGTON
MISPILLION HUNDRED
KENT COUNTY, DELAWARE



DAVIS
BOWEN &
FRIEDEL, INC.

ARCHITECTS • ENGINEERS • SURVEYORS

MILFORD, DELAWARE
302.421.1411

SALISBURY, MARYLAND
410.770.1441

1	12/27/2025	DNREC COMMENTS
2	2/27/2026	ADD SEPARATE OIL WASTE LINE
3	5/15/2026	DNREC COMMENTS
4	5/22/2026	DNREC COMMENTS
5	6/12/2026	DNREC COMMENTS
6	JULY 2026	BID SET

Date: AUGUST, 2025

Scale: NO SCALE

Dwn.By: BAR

Proj.No.: 0586B053.B01

LEGEND

Dwg.No.: C-002

CIVIL PLAN GENERAL NOTES

- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING TWO WEEKS PRIOR TO THE START OF CONSTRUCTION AND SHALL APPRISE AND COORDINATE DURING ALL PHASES OF CONSTRUCTION:

CITY OF HARRINGTON PUBLIC WORKS 302-453-6918
DAVIS, BOWEN & FRIEDEL, INC. 302-424-1441
KENT CONSERVATION DISTRICT 302-506-5370
DEPARTMENT OF TRANSPORTATION, CENTRAL DISTRICT PERMITS SUPERVISOR 302-760-2424
- CONTRACTOR SHALL PROVIDE STAKEOUT NECESSARY FOR THE INSTALLATION OF UTILITIES, STORM DRAINS, PAVING AND ALL OTHER SITE WORK INCLUDED IN THESE PLANS. ALL STAKEOUT WORK IS TO BE PERFORMED UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF DELAWARE.
- THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY DEVIATION FROM THESE PLANS UNLESS WRITTEN APPROVAL HAS BEEN PROVIDED BY THE ENGINEER.
- ACCORDING TO FEMA FLOOD INVENTORY MAP #10001C0337J, DATED JULY 7, 2014, THE SITE IS NOT IMPACTED BY THE 100 YEAR FLOODPLAIN.

DRAINAGE, GRADING AND SEDIMENT CONTROL GENERAL NOTES

- ALL STORM DRAIN PIPING, INLET, MANHOLE, AND END SECTION INSTALLATION SHALL BE IN ACCORDANCE WITH CITY OF HARRINGTON CONSTRUCTION STANDARDS.
- ALL STORM DRAIN DESIGNATED AS RCP IS TO BE REINFORCED CONCRETE PIPE, MEETING AASHTO M 170 SPECIFICATIONS, STORM DRAIN SEE PIPE SCHEDULE FOR PIPE CLASSIFICATION.
- PIPE SPAN LENGTHS ARE MEASURED FROM C/L OF STRUCTURE TO C/L OF STRUCTURE, WHERE APPLICABLE ARE ROUNDED TO THE NEAREST FOOT.
- ALL SEALS MUST BE WATERTIGHT WITH NON SHRINK GROUT OR RUBBER GASKETS AND CONCRETE STRUCTURES MUST BE PRECAST OR POURED IN PLACE.
- CONTRACTOR SHALL GRADE, TOPSOIL, SEED AND MULCH ALL DISTURBED AREAS OF CONSTRUCTION, INCLUDING PIPE INSTALLATION OR DITCH CONSTRUCTION. EROSION CONTROL MATTING SHALL BE PROVIDED ON ALL SLOPES GREATER THAN 3:1.
- THE CONTRACTOR SHALL PROVIDE SEDIMENT CONTROL MEASURES TO PROTECT STOCKPILE AREAS AND STORAGE AREAS. ALL AREAS USED BY THE CONTRACTOR FOR STAGING OPERATIONS SHALL BE FULLY RESTORED BY THE CONTRACTOR UPON COMPLETION OF THE PROJECT. IF THE STAGING AREA IS PAVED, IT SHALL BE RESTORED TO ITS ORIGINAL CONDITION. IF THE STAGING AREA IS UNPAVED, IT SHALL BE RE-GRADED, TOPSOILED, SEEDED AND MULCHED TO THE SATISFACTION OF THE ENGINEER. ALL COSTS ASSOCIATED WITH RESTORATION OF THE STAGING AREA SHALL BE AT THE CONTRACTOR'S EXPENSE. IF THE ENGINEER DETERMINES THAT A SATISFACTORY STAND OF GRASS DOES NOT EXIST AT THE TIME OF FINAL INSPECTION, ALL COSTS ASSOCIATED WITH RE-ESTABLISHING A SATISFACTORY STAND OF GRASS SHALL BE AT THE CONTRACTOR'S EXPENSE.
- EQUIPMENT AND/OR STOCKPILE MATERIAL SHALL NOT BE STORED IN THE DRIPLINE AREA OF ANY TREE.
- IF THE APPROVED PLAN NEEDS TO BE MODIFIED, ADDITIONAL SEDIMENT AND STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY THE KENT CONSERVATION DISTRICT.
- ADDITIONAL EROSION AND SEDIMENT CONTROL NOTES CAN BE FOUND ON THE EROSION AND SEDIMENT CONTROL PLANS.

DEMOLITION AND SAFETY GENERAL NOTES

- MISS UTILITY OF DELMARVA SHALL BE NOTIFIED THREE CONSECUTIVE WORKING DAYS PRIOR TO EXCAVATION, AT 1-800-282-8555.
- REMOVE TREES, SHRUBS, GRASS AND OTHER VEGETATION, IMPROVEMENTS, OR OBSTRUCTIONS INTERFERING WITH INSTALLATION OF NEW CONSTRUCTION.
- REMOVE EXISTING PAVEMENTS AND BASES AS SHOWN ON THE DRAWINGS. ALL STUMPS, BRUSH, TOPSOIL, AND WASTE MATERIAL GENERATED BY CLEARING/DEMOLITION OPERATIONS SHALL BECOME CONTRACTOR'S PROPERTY AND SHALL BE REMOVED FROM THE SITE FOR SAFE, LEGAL, OFF-SITE DISPOSAL, UNLESS INDICATED OTHERWISE.
- EXISTING UTILITIES ARE SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION. COMPLETENESS OR CORRECTNESS THEREOF IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANIES INVOLVED IN ORDER TO SECURE THE MOST ACCURATE INFORMATION AVAILABLE AS TO UTILITY LOCATION AND ELEVATION. NO CONSTRUCTION AROUND OR ADJACENT TO UTILITIES SHALL BEGIN WITHOUT NOTIFYING THEIR OWNERS AT LEAST 48 HOURS IN ADVANCE. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE AND ANY DAMAGE DONE TO THEM DUE TO HIGHER NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT THE CONTRACTOR'S EXPENSE. TO LOCATE EXISTING UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT MISS UTILITY OF DELMARVA.
- THE CONTRACTOR SHALL REMOVE AND IMMEDIATELY REPLACE, RELOCATE, RESET OR RECONSTRUCT ALL OBSTRUCTIONS IN THE ROAD WAY, INCLUDING, BUT NOT LIMITED TO, MAILBOXES, SIGNS, LANDSCAPING, LIGHTING, PLANTERS, CULVERTS, DRIVEWAYS, PARKING AREAS, CURBS, GUTTERS, FENCES, OR OTHER NATURAL OR MAN-MADE OBSTRUCTIONS. TRAFFIC CONTROL, REGULATORY, WARNING AND INFORMATIONAL SIGNS SHALL REMAIN FUNCTIONAL AND VISIBLE TO THE APPROPRIATE LANES OF TRAFFIC AT ALL TIMES, WITH THEIR RELOCATION KEPT TO A MINIMUM DISTANCE. THE COST SHALL BE INCLUDED IN THE COST OF ITEMS BID.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY AND PROTECTION.
- DELAWARE REGULATIONS PROHIBIT THE BURIAL OF CONSTRUCTION DEMOLITION DEBRIS, INCLUDING TREES AND STUMPS ON CONSTRUCTION SITES. ANY SOLID WASTE FOUND DURING THE EXCAVATION FOR STRUCTURES AND/OR UTILITY LINES ON AND OFF SITE MUST BE REMOVED AND PROPERLY DISCARDED. ANY REMEDIAL ACTION REQUIRED IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM. ADDITIONAL COSTS WILL BE NEGOTIATED WITH THE OWNER.
- DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL WORK MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AS AMENDED AND ALL RULES AND REGULATIONS THERETO APPURTENANT.

INTERNAL PAVING / CONCRETE NOTES

- BITUMINOUS CONCRETE SHALL BE INSTALLED IN ACCORDANCE WITH THE 2025 DdDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION INCLUDING SPECIAL PROVISIONS:

1.1. SECTION 401 FOR PLACEMENT OF TACK COAT AND BITUMINOUS CONCRETE.
1.2. BITUMINOUS CONCRETE SHALL BE FROM A DELDOT APPROVED PLANT.
1.3. BITUMINOUS CONCRETE SHALL NOT BE APPLIED WHEN THE TEMPERATURE IS BELOW 40° F OR ON ANY WET OR FROZEN SURFACE.
- ALL DISTURBED AREAS NOT COVERED WITH IMPERVIOUS MATERIAL, SHALL BE TOPSOILED (6" MINIMUM), FERTILIZED, SEEDED AND MULCHED.
- ALL SIGNING AND MAINTENANCE OF TRAFFIC IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL FOLLOW THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION).
- DESIGN, FABRICATION, AND INSTALLATION OF ALL PERMANENT SIGNING SHALL BE AS OUTLINED IN THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION).
- FOR FINAL PERMANENT PAVEMENT MARKINGS, EPOXY RESIN PAINT SHALL BE REQUIRED FOR LONG LINE STRIPING AND THERMO WILL BE REQUIRED FOR SHORT LINE STRIPING, I.e. SYMBOLS/LEGENDS.
- ALL TRAFFIC CONTROL DEVICES SHALL BE IN NEW OR REFURBISHED CONDITION, SHALL COMPLY WITH THE 2011 DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION), AND SHALL BE NCHRP - 350 APPROVED AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED IN GOOD CONDITION FOR DURATION OF USE.
- BREAKAWAY POSTS SHALL BE USED WHEN INSTALLING ALL SIGNS. DETAIL CAN BE FOUND IN DELDOT'S STANDARD CONSTRUCTION DETAILS.
- PLAN LOCATION AND DIMENSIONS SHALL BE STRICTLY ADHERED TO UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT PAVING IS INSTALLED TO THE ELEVATIONS SHOWN AND THAT NO PONDING OF WATER EXISTS AFTER PAVING IS COMPLETE. PONDING IS DEFINED AS WATER STANDING IN AN AREA MORE THAN 1 HOUR AFTER A RAINFALL EVENT THAT PRODUCES RUNOFF. ELIMINATION OF PONDING WILL BE COMPLETED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- OPEN-CUT TRENCHES AND PROVIDE PAVEMENT RESTORATION IN ACCORDANCE WITH DELDOT STANDARDS AND SPECIFICATIONS.
- CONCRETE SHALL BE PLACED IN ACCORDANCE WITH DELDOT STANDARD SPECIFICATIONS.

CITY OF HARRINGTON PUBLIC WORKS GENERAL NOTES

- THE CONTRACTOR SHALL PROVIDE SEDIMENT CONTROL MEASURES TO PROTECT STOCKPILE AREAS AND STORAGE AREAS. ALL AREAS USED BY THE CONTRACTOR FOR STAGING OPERATIONS SHALL BE FULLY RESTORED BY THE CONTRACTOR UPON COMPLETION OF THE PROJECT. IF THE STAGING AREA IS PAVED, IT SHALL BE RESTORED TO ITS ORIGINAL CONDITION. IF THE STAGING AREA IS UNPAVED, IT SHALL BE RE-GRADED, TOPSOILED, SEEDED AND MULCHED TO THE SATISFACTION OF THE ENGINEER. ALL COSTS ASSOCIATED WITH RESTORATION OF THE STAGING AREA SHALL BE AT THE CONTRACTOR'S EXPENSE. IF THE ENGINEER DETERMINES THAT A SATISFACTORY STAND OF GRASS DOES NOT EXIST AT THE TIME OF FINAL INSPECTION, ALL COSTS ASSOCIATED WITH RE-ESTABLISHING A SATISFACTORY STAND OF GRASS SHALL BE AT THE CONTRACTOR'S EXPENSE. ALL WORK PERFORMED WITHIN STATE JURISDICTIONAL AREAS SHALL BE PERFORMED IN ACCORDANCE WITH STATE STANDARDS.
- EQUIPMENT AND/OR STOCKPILE MATERIAL SHALL NOT BE STORED IN THE DRIPLINE AREA OF ANY TREE.
- THE CONTRACTOR SHALL CONTACT CITY OF HARRINGTON DEPARTMENT OF PUBLIC WORKS AT 302-744-2430 AT LEAST 48 HOURS IN ADVANCE OF STARTING CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT MISS UTILITY OF DELMARVA AT 1-800-282-8555 FOR UTILITY LOCATIONS WITHIN AND SURROUNDING CONSTRUCTION AREAS NOT LESS THAN 3 DAYS BEFORE PERFORMING ANY EXCAVATION.
- THE CONTRACTOR SHALL ESTABLISH BENCHMARK ELEVATION DATUM IN ACCORDANCE WITH CITY OF HARRINGTON DEPARTMENT OF PUBLIC WORKS.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY SEED AND MULCH FOR ALL AREAS WHERE SOIL IS EXPOSED AND SILT FENCE IS NOT SPECIFIED, IN ACCORDANCE WITH KENT CONSERVATION DISTRICT REQUIREMENTS.
- THE CONTRACTOR SHALL MAINTAIN PUBLIC ROADS AND STREETS IN A BROOM SWEEP CONDITION AT ALL TIMES.
- PIPE JOINTS TO BE RESTRAINED ARE SHOWN ON THE DRAWINGS.
- THE CONTRACTOR SHALL USE ONLY NEW MATERIALS, PARTS, AND PRODUCTS. ALL MATERIALS SHALL BE STORED SO AS TO ASSURE THE PRESERVATION OF THEIR QUALITY AND FITNESS FOR THE INTENDED WORK.
- MAINTENANCE OF TRAFFIC - ALL WORK SHALL BE PERFORMED IN A MANNER THAT WILL ENSURE THE LEAST PRACTICABLE OBSTRUCTION TO TRAFFIC CONSISTENT WITH SAFETY AND SHALL COMPLY WITH THE DEPARTMENT MANUAL ENTITLED "DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD)", PART 6". THE MOST CURRENT VERSION OF THIS MANUAL IN EFFECT AT THE TIME OF CONSTRUCTION SHALL BE USED. HEREINAFTER, THIS MANUAL SHALL BE REFERRED TO AS THE "TRAFFIC CONTROL MANUAL". THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER BEFORE THE START OF THE PROJECT.
- ALL UTILITIES PLOTTED ON THE DRAWINGS ARE FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR, PRIOR TO LAYING A RUN OF PIPE OR OTHER INVOLVED CONSTRUCTION, SHALL EXCAVATE WITHIN THE ALIGNMENT AT POINTS OF POSSIBLE CONFLICTS. ANY CONFLICTS SHALL BE COORDINATED BY THE CONTRACTOR WITH THE ENGINEER AND THE UTILITY INVOLVED. THE ENGINEER SHALL DETERMINE THE SOLUTION, EXCAVATING, BACK FILLING AND RESTORATION OF THE TEST HOLES AS REQUIRED FOR UTILITY INVESTIGATIONS SHALL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE UTILITIES AS SHOWN ON THE PLANS.
- CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE EXECUTION OF THIS CONTRACT.
- ALL CONSTRUCTION SHALL BE PERFORMED TO THE SATISFACTION OF THE ENGINEER, CITY OF HARRINGTON DEPARTMENT OF PUBLIC WORKS (DPW), DELAWARE DEPARTMENT OF TRANSPORTATION (DELDOT) AND ALL RESPECTIVE UTILITY OWNERS IN ACCORDANCE WITH ALL APPLICABLE CONTRACT DRAWINGS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY AND PROTECTION IN ACCORDANCE WITH APPLICABLE OSHA REGULATION.
- THE CONTRACTOR SHALL INSTALL THE PROPOSED SANITARY SEWER AND FORCE MAINS WITH A MINIMUM OF 3 FT. OF CLEARANCE FROM OTHER EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR SHALL MAINTAIN A MINIMUM HORIZONTAL CLEARANCE OF 10 FT. BETWEEN WATER MAINS AND SANITARY SEWERS (BOTH EXISTING AND PROPOSED MAINS). IN CASES WHERE THIS MINIMUM HORIZONTAL CLEARANCE IS NOT SHOWN OR FEASIBLE, THE CONTRACTOR MAY INSTALL THE PROPOSED SANITARY SEWER LESS THAN 10 FT. FROM EXISTING WATER LINES, PROVIDED ALL EXISTING WATER MAINS REMAIN ON AN UNDISTURBED EARTH SHELF IN A SEPARATE TRENCH FROM THE PROPOSED SANITARY SEWER MAINS AND THERE IS AT LEAST 18 INCHES OF VERTICAL CLEARANCE WITH THE WATER MAIN HIGHER THAN THE SEWER. IF VERTICAL CLEARANCE BETWEEN PROPOSED SANITARY SEWER AND EXISTING WATER MAINS IS LESS THAN 18 INCHES, THE CONTRACTOR SHALL CONCRETE ENCASE THE SANITARY SEWER PIPING A MINIMUM OF 10 FT. ON EACH SIDE OF THE WATER MAIN CROSSING OR 10 FT. BEYOND THE LIMITS WHERE VERTICAL CLEARANCE IS NOT MAINTAINED.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL MATERIALS FOR APPROVAL TO THE OWNER PRIOR TO COMMENCEMENT OF CONSTRUCTION. ALL MATERIALS ORDERED AND INSTALLED PRIOR TO THE OWNER'S REVIEW AND ACCEPTANCE WILL BE AT THE CONTRACTOR'S RISK.
- THE CONTRACTOR SHALL OPEN ONLY THAT SECTION OF TRENCH OR ACCESS PITS WHICH CAN BE BACKFILLED AND STABILIZED AT THE END OF EACH WORKING DAY. STEEL PLATES SHALL BE USED ON ANY TRENCH OR ACCESS PITS WHICH MUST REMAIN OPEN OVERNIGHT. THIS REQUIREMENT DOES NOT APPLY TO AREAS COMPLETELY CLOSED AND SECURED FROM VEHICULAR OR PEDESTRIAN TRAFFIC.
- "MANHOLE" SHALL INCLUDE PRECAST STRUCTURE, BEDDING, CONNECTION TO EXISTING AND PROPOSED SANITARY PIPING, FRAME AND COVER AND RELATED APPURTENANCES. SEE MANHOLE DETAILS AND APPLICABLE SPECIFICATIONS.
- SANITARY SEWER PIPE AND FITTINGS SHALL BE TYPE PSM, POLYVINYL CHLORIDE (PVC) MATERIAL WITH A MINIMUM CELL CLASSIFICATION OF 12454B AND COMPLYING WITH ASTM D1784, INSIDE NOMINAL DIAMETER AS INDICATED ON THE DRAWINGS; BELL AND SPIGOT STYLE RUBBER RING SEALED ELASTOMERIC LOCKED-IN GASKET JOINT COMPLYING WITH ASTM F477.
- SANITARY SEWER PIPE AND FITTINGS - 4 INCHES THROUGH 15 INCHES: ASTM D3034 and F1336 WITH A MINIMUM WALL THICKNESS OF SDR 35. IF THE PIPE COVER EXCEEDS 15 FEET A MIN. OF PVC SDR 26 SHALL BE USED.
- SANITARY SEWER PIPE AND FITTINGS - 18 INCHES THROUGH 27 INCHES: ASTM F679 and F1336 WITH A MINIMUM WALL THICKNESS OF 1-1.
- SANITARY SEWER FLEXIBLE COUPLINGS SHALL BE RESILIENT, CHEMICAL-RESISTANT, THERMOPLASTIC OR WRC APPROVED EPDM RUBBER COUPLING, TWO SERIES 316 STAINLESS STEEL CLAMPS AND STAINLESS STEEL SCREWS AND HOUSINGS.
- SADDLES SHALL BE PVC CORRECTLY CONTOURED FOR OUTSIDE DIAMETER OF PIPE AND INCORPORATING RING GASKET BELL OUTLET.
- PIPE PLUGS SHALL BE DESIGNED FOR PERMANENT INSTALLATION AND SHALL BE REMOVABLE. OBTAIN PLUGS FOR VARIOUS TYPES OF PIPE USED FROM THE RESPECTIVE PIPE MANUFACTURER.
- ALL PVC SANITARY SEWER AND FORCE MAINS SHALL BE MARKED WITH LOCATOR TAPE, LABELED "SANITARY SEWER", INSTALLED 18" ABOVE THE PIPE.
- FINAL APPROVED SET OF PLANS AND SPECIFICATIONS SHALL BE MAINTAINED ON THE JOB SITE. FAILURE TO COMPLY WITH THIS PROVISION SHALL BE CONSIDERED CAUSE TO STOP THE WORK.
- THE CONTRACTOR SHALL MAINTAIN ONE COMPLETE SET OF CONTRACT DRAWINGS ON WHICH HE SHALL NOTE, IN RED, THE ALIGNMENTS AND INVERTS OF ALL UNDERGROUND UTILITIES ALL A INSTALLED OR ENCOUNTERED DURING THE PROSECUTION OF THE WORK. ALL DISCREPANCIES BETWEEN THE PLAN LOCATIONS AND ELEVATIONS OF BOTH THE EXISTING AND PROPOSED UTILITIES SHALL BE SHOWN ON THE AS-BUILT DRAWINGS TO BE MAINTAINED BY THE CONTRACTOR IN THE FIELD.
- ROUTINE PERIODIC INSPECTIONS DURING CONSTRUCTION WILL BE PROVIDED BY THE OWNER. THESE INSPECTIONS DO NOT RELIEVE THE CONTRACTOR FROM HIS OBLIGATION AND RESPONSIBILITY FOR CONSTRUCTING A SANITARY SEWER SYSTEM IN STRICT ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE OWNER.
- AFTER TESTING IS COMPLETE AND ALL COMPONENTS OF THE SANITARY SEWER SYSTEM ARE DEEMED ACCEPTABLE TO THE OWNER, THE CONTRACTOR SHALL SUBMIT THE AS-BUILT DRAWINGS TO THE OWNER. ANY DISCREPANCIES NOTED DURING THE FINAL INSPECTION SHALL BE CORRECTED BY THE CONTRACTOR WITHIN 30 DAYS.
- THE PROPERTY AND RIGHT OF WAY LINES SHOWN ON THESE DRAWINGS ARE APPROXIMATE, AND ARE NOT BASED ON METES AND BOUNDS FIELD RUN SURVEYS OR PROPERTY RECORDS.
- THE CONTRACTOR SHALL TAKE PRECAUTIONS TO LOCATE PROPERTY LINES AND RIGHT OF WAY LINES PRIOR TO CONSTRUCTION AND AVOID CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY AND/OR RIGHTS OF WAYS WHERE SAID CONSTRUCTION IS PROHIBITED. THE CONTRACTOR MAY CONDUCT CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY PROVIDED HE HAS OBTAINED PRIOR WRITTEN PERMISSION FROM THE PROPERTY OWNER AND HAS SUBMITTED A COPY OF SAID WRITTEN PERMISSION TO THE DIRECTOR OF THE CITY OF HARRINGTON DEPARTMENT OF PUBLIC WORKS.
- ANY REQUIRED EASEMENTS, PERMITS AND APPROVALS SHALL BE ACQUIRED BY THE DEVELOPER PRIOR TO COMMENCEMENT OF SANITARY SEWER CONSTRUCTION.
- STRUCTURES AND/OR THRUST BLOCKING HAVE BEEN DESIGNED BASED ON THE FOLLOWING.

A. A MINIMUM 3,000 PSF PASSIVE SOIL BEARING CAPACITY.
B. A MINIMUM 28 DAY CONCRETE COMPRESSIVE STRENGTH OF 3,500 PSI (EXCEPT FOR PRECAST CONCRETE).
C. TEST PRESSURE (WORKING PLUS SURGE) IS 100 PSI.
D. DEPTH FROM FINISHED GRADE TO TOP OF PIPE ASSUMED TO BE 2.5 FT. OR DEEPER.
E. EXISTING SOIL CONDITIONS ARE NOT SOFT OR ORGANIC.
- DIFFERING SITE CONDITIONS AND/OR DIFFERING MATERIAL PROPERTIES SHALL REQUIRE CITY OF HARRINGTON DPW APPROVAL OF SPECIAL DESIGN DETAILS PREPARED BY THE DESIGN ENGINEER PRIOR TO INITIATING OR RESUMING CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL ALLOW SUFFICIENT TIME FOLLOWING EXCAVATIONS FOR INSPECTION AND EVALUATION OF EXISTING SOIL SUBGRADE CONDITIONS BY THE CONSTRUCTION ENGINEER (AGENT FOR CITY OF HARRINGTON DPW). THE CONSTRUCTION ENGINEER SHALL INSPECT ALL STRUCTURE AND THRUST BLOCKING SUBGRADE AND PIPELINE SUBGRADE FOLLOWING EXCAVATION AND PRIOR TO CONSTRUCTION OF NEW WORK TO CONFIRM DESIGN CONDITIONS ARE MET AND SUBGRADE CONDITIONS ARE SUITABLE FOR CONSTRUCTION. IN THE EVENT THE SOIL BEARING CAPACITY IS LESS THAN THE MINIMUM DESIGN VALUE, THE CONSTRUCTION ENGINEER SHALL CAUSE AFFECTED CONSTRUCTION TO CEASE AND SHALL NOTIFY THE DESIGN ENGINEER FOR RE-DESIGN TO ACCOMMODATE THE REDUCED SOIL BEARING CAPACITY.
- IN THE EVENT THE SUBGRADE CONDITION IS UNSTABLE, DUE TO UNSUITABLE MATERIALS AND/OR GROUNDWATER INFILTRATION/INTRUSION INTO THE SURROUNDING SOILS, AS DETERMINED BY THE CONSTRUCTION ENGINEER, THE CONTRACTOR SHALL, AS DIRECTED BY THE CONSTRUCTION ENGINEER, REMOVE THE UNSUITABLE MATERIAL AND FILL WITH SUITABLE APPROVED GRANULAR FILL MATERIAL.
- PVC PRESSURE SEWER PIPE 12" AND SMALLER NOMINAL PIPE SIZE DIAMETER SHALL CONFORM TO ASTM D2241, PVC 1120 (12454-B); SDR 21.
- DUCTILE IRON PRESSURE SEWER PIPE 3 INCHES TO 12 INCHES NOMINAL PIPE SIZE DIAMETER SHALL CONFORM TO AWWA C151. PRESSURE CLASS 250 PSI; DOUBLE CEMENT MORTAR LINED PER AWWA C104 WITH AN INTERIOR OF PROTECTO 401 LINED-CERAMIC EPOXY COATING, MINIMUM THICKNESS OF 40 MILS.
- DUCTILE IRON PRESSURE SEWER FITTINGS 3 INCHES TO 24 INCHES NOMINAL PIPE SIZE DIAMETER SHALL CONFORM TO AWWA C153. DOUBLE CEMENT MORTAR LINED PER AWWA C104 WITH AN INTERIOR OF PROTECTO 401 LINED-CERAMIC EPOXY COATING, MINIMUM THICKNESS OF 40 MILS.
- RUBBER GASKET JOINTS, LUBRICANTS, GLANDS, BOLTS AND NUTS FOR DUCTILE IRON PRESSURE PIPE AND FITTINGS SHALL CONFORM TO AWWA C111, WITH MECHANICAL JOINTS FOR BURIED FITTINGS AND MECHANICAL OR PUSH-ON JOINTS FOR BURIED PIPING.
- ALL PRESSURE SEWER PIPE JOINTS AND FITTING JOINTS SHALL BE RESTRAINED.
- FLANGED FITTINGS AND PIPE INSIDE STRUCTURES SHALL HAVE EPOXY PRIMED EXTERIOR AND PROTECTO 401 COATING ON THE INTERIOR. ALL FLANGED PIPING SHALL BE SPECIAL THICKNESS CLASS 53.
- CONTRACTOR SHALL AT ALL TIMES MAINTAIN A SAFE AND DRY EXCAVATION. AT A MINIMUM THAT INCLUDES SHEETING AND SHORING FOR TRENCHES IN ACCORDANCE WITH OSHA REGULATIONS AND SUFFICIENT DEWATERING FOR A DRY SUBGRADE.
- ALL MANHOLES THAT HAVE A DIRECT LATERAL CONNECTION SHALL HAVE A 0.2' DROP ACROSS THE FLOW CHANNEL OF THE MANHOLE.

EXISTING UNDERGROUND UTILITIES COORDINATION NOTES:

- THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON PLANS HAS BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER OR THE ARCHITECT/ENGINEER ASSUMES ANY RESPONSIBILITY WHATSOEVER IN RESPECT TO ACCURACY, COMPLETENESS, OR SUFFICIENCY OF THE INFORMATION SHOWN. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED, THAT THE LOCATIONS, SIZE AND TYPE OF MATERIALS OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED DURING CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH UTILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OWNER OF HIS OPERATIONAL PLANS. IN THE EVENT OF AN UNEXPECTED UTILITY INTERFERENCE DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER. ANY SUCH MAINS AND/OR SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED IMMEDIATELY AT HIS EXPENSE.
- PRIOR TO PERFORMING ANY EXCAVATION GREATER THAN 6 INCHES, THE CONTRACTOR SHALL COORDINATE WITH CITY OF HARRINGTON DEPARTMENT OF PUBLIC WORKS AND ALL PRIVATE UTILITY COMPANIES TO DETERMINE THE LOCATION OF UNDERGROUND UTILITY LINES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR COORDINATING WITH ALL ORGANIZATIONS THAT CONTROL EXISTING UNDERGROUND UTILITIES IN THE CONSTRUCTION AREA OR WOULD BE AFFECTED BY CONSTRUCTION WORK AROUND THE EXISTING UTILITIES. ALL EXIST. FMS MUST BE SOFT/DUG/TEST PITTED, WITH KCPWD STAFF PRESENT.
- THE CONTRACTOR SHALL NOT START EXCAVATION UNTIL ALL UTILITY LINE LOCATIONS HAVE BEEN STAKED OR OTHERWISE CLEARLY MARKED AND DOCUMENTATION FURNISHED TO THE OWNER. ALL MARKINGS SHALL BE CONSIDERED APPROXIMATE, AND UTILITIES OTHER THAN THOSE SHOWN SHALL BE CONSIDERED TO EXIST.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEFINITE LOCATION OF EACH UTILITY WITHIN THE WORK AREA. CARE SHOULD BE EXERCISED DURING EXCAVATION WORK TO AVOID DAMAGING OR DISRUPTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING (AT CONTRACTOR'S EXPENSE) DAMAGE TO ANY UTILITY CAUSED BY THE CONTRACTOR'S WORK.
- WHERE EXISTING UNDERGROUND UTILITIES OR OTHER CONSTRUCTION ARE EXPECTED TO BE IN PROXIMITY TO PROPOSED CONSTRUCTION, OR WHEN APPROACHING EXISTING UTILITIES OR STRUCTURES FOR CONNECTIONS, THE CONTRACTOR SHALL DIG TEST PITS TO DETERMINE THE EXACT LOCATION AND INVERTS OF THE EXISTING UTILITY TO ALLOW FOR POSSIBLE CHANGES TO THE PROPOSED UTILITY IN LINE AND/OR GRADE. THE CONTRACTOR SHALL ALSO DIG TEST PITS IN THE LOCATION OF THE PROPOSED CONNECTIONS TO EXISTING UTILITIES AND SHALL MAKE ALL MEASUREMENTS NECESSARY TO ENSURE PROPER CONNECTION. ANY NECESSARY CHANGES IN LINE OR GRADE OF WORK CAUSED BY FAILURE TO TAKE SUCH PRECAUTIONS SHALL BE AT THE EXPENSE OF THE CONTRACTOR.
- WHEN IT IS NECESSARY TO EXCAVATE NEAR OR INTERFERE WITH ANY SEWER LINE, WATER SERVICES, DRAIN PIPE, CATCH BASIN, CULVERT, OR OTHER STRUCTURES, THE CONTRACTOR SHALL MAINTAIN THE SAME IN WORKING ORDER AND SHALL REPAIR AND MAKE GOOD ANY DAMAGE DONE DURING THE PROGRESS OF THE WORK.
- WHERE EXISTING UTILITIES CROSS THE TRENCH EXCAVATION, THEY SHALL BE ADEQUATELY SUPPORTED AND PROTECTED FROM DAMAGE DUE TO CONSTRUCTION. ALL METHODS FOR SUPPORTING AND MAINTAINING THESE UTILITIES SHALL BE SUBJECT TO REVIEW BY OWNER. CARE SHALL BE TAKEN TO ENSURE THAT THE EXISTING UTILITY GRADES AND ALIGNMENT ARE MAINTAINED AND THE PIPE JOINTS ARE NOT DISTURBED. BACKFILL SHALL BE CAREFULLY PLACED AND TAMPED TO PREVENT DAMAGE OR FUTURE SETTLEMENT. ANY DAMAGE OR MISALIGNMENT OF THE UTILITIES DUE TO CONSTRUCTION OR SETTLEMENT SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- ANY UNPROTECTED CABLE (DIRECT BURIED) ENCOUNTERED THAT IS VERIFIED AS NOT ABANDONED IN PLACE SHALL BE PROTECTED. THE UTILITY OWNER MAY DIRECT THE CABLE BE PLACED IN SPLIT DUCT OF APPROPRIATE SIZE AND CONCRETE ENCASED THROUGH THE AREA OF CONSTRUCTION. CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO AVOID HAVING TO CUT AND SPlice DIRECT BURIED CABLE. THE CONTRACTOR SHALL NOTE SPLIT DUCT PORTIONS ON AS-BUILTS.
- ALL EXCAVATED MATERIALS SHALL BE DISPOSED OF OFF COUNTY/STATE PROPERTY. EXCEPT FOR CONTAMINATED SOILS OR LIQUIDS. ALL CONTAMINATED SOILS AND LIQUIDS SHALL BE TRANSPORTED TO AN APPROVED RECEIVING SITE AS DIRECTED BY THE ENGINEER, FOR FINAL DISPOSITION.
- INTERRUPTION OF EXISTING UTILITIES SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR AT THE DIRECTION OF THE UTILITY OWNERS.

POTABLE WATER DISTRIBUTION GENERAL NOTES

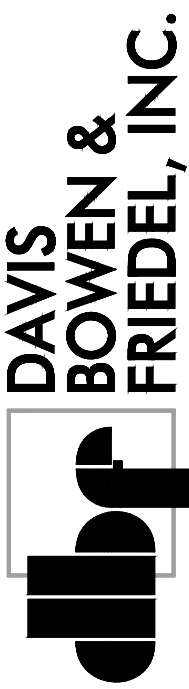
- CONTRACTORS APPROVED AND CONTRACTED BY CITY OF HARRINGTON ARE ONLY PERMITTED TO PERFORM INSTALLATION OF THE WATER DISTRIBUTION SYSTEM.
- CITY OF HARRINGTON OR ITS CONTRACTOR IS RESPONSIBLE FOR ALL WATER INSTALLATION UP TO AND INCLUDING THE CURB STOP.
- ALL WORK MUST BE IN CONFORMANCE WITH CITY OF HARRINGTON STANDARDS AND SPECIFICATIONS.
- ALL WORK MUST BE HYDROSTATICALLY TESTED AND THEN DISINFECTED. CONTRACTOR SHALL SUPPLY ALL MATERIALS TO TEST AND DISINFECT THE SYSTEM. CONTRACTOR IS REQUIRED TO OBTAIN A CERTIFICATE TO OPERATED FROM DHSS OFFICE OF DRINKING WATER.
- ALL AREAS DISTURBED SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. IF ADDITIONAL WORK IS REQUIRED IN THE FUTURE THEN THE AREA SHALL BE STABILIZED IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS.
- WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM SEWER MAINS. WATER CROSSING SEWER MAINS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 18" TO OUTSIDE OF PIPES. IF AN 18" CLEARANCE CANNOT BE OBTAINED, A 10 LINEAR FOOT CONCRETE ENCASEMENT SHALL BE USED ON THE SEWER MAIN.
- WHEN IT IS IMPOSSIBLE TO OBTAIN THE MINIMAL 10 FOOT HORIZONTAL AND/OR 18" SEPARATION BETWEEN WATER MAINS AND SANITARY SEWER, THE OFFICE OF ENGINEERING MUST SPECIFICALLY APPROVE ANY VARIANCE SUPPORTED BY DATA FROM THE DESIGN ENGINEER.
- THE CITY OF HARRINGTON STANDARDS AND SPECIFICATIONS ARE THE AWC STANDARDS/SPECS/PROCEDURES LAST UPDATED ON 06/05/07. COPIES CAN BE OBTAINED FROM CITY OF HARRINGTON.
- THE CONTRACTOR SHALL MAINTAIN ONE COMPLETE SET OF CONTRACT DRAWINGS ON WHICH HE SHALL NOTE, IN RED, THE ALIGNMENTS AND INVERTS OF ALL UNDERGROUND UTILITIES INSTALLED OR ENCOUNTERED DURING THE PROSECUTION OF THE WORK. ALL DISCREPANCIES BETWEEN THE PLAN LOCATIONS AND ELEVATIONS OF BOTH THE EXISTING AND PROPOSED UTILITIES SHALL BE SHOWN ON THE AS-BUILT DRAWINGS TO BE MAINTAINED BY THE CONTRACTOR IN THE FIELD.
- PLAN LOCATIONS AND DIMENSIONS SHALL BE STRICTLY ADHERED TO UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. THE CONTRACTOR SHALL ADJUST WATERLINE LOCATIONS AS REQUIRED TO AVOID CONFLICTS WITH OTHER UTILITIES.
- WATER SERVICE STUBS SHALL NOT BE INSTALLED BY THE CONTRACTOR PRIOR TO THE SUCCESSFUL PRESSURE TESTING OF THE WATER MAINS.
- ALL WATER MAINS SHALL HAVE A 42" MINIMUM BURIAL DEPTH.

HI - GRADE EVIDENCE STORAGE BLDG.

CITY OF HARRINGTON

MISPILLION HUNDRED

KENT COUNTY, DELAWARE



DAVIS
BOWEN &
FRIEDEL, INC.
ARCHITECTS • ENGINEERS • SURVEYORS

MILFORD, DELAWARE 302-770-1441
BALTIMORE, MARYLAND 410-770-1441

DATE	ADDITIONAL COMMENTS
1	12/27/2025
2	2/27/2026
3	5/15/2026
4	5/22/2026
5	6/12/2026
6	JULY 2026

Date:	AUGUST, 2025
Scale:	NO SCALE
Dwn.By:	BAR
Proj.No.:	0586B053.B01

GENERAL
NOTES

Dwg No.:

C-003

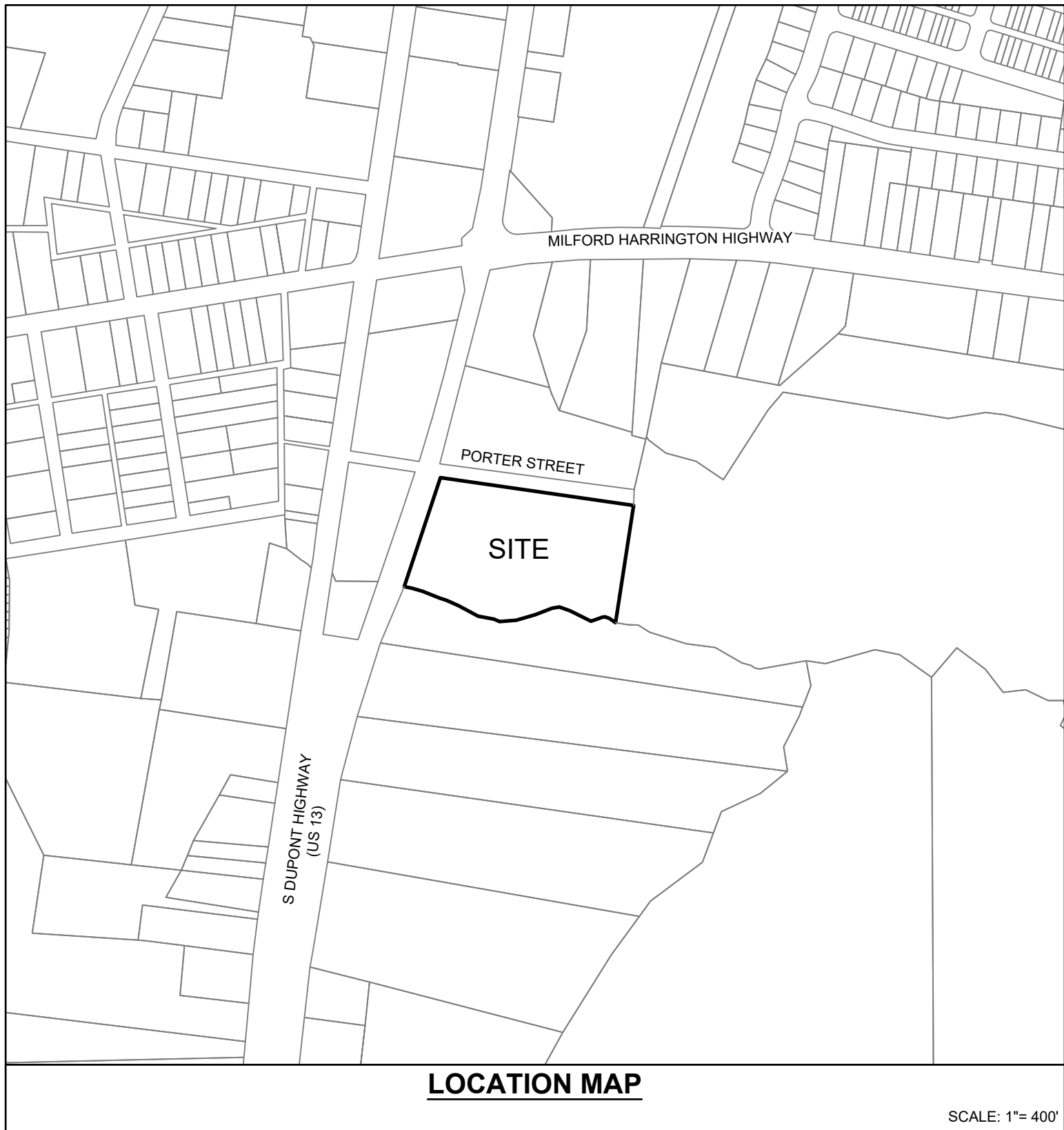
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CITY OF HARRINGTON MISPILLION HUNDRED KENT COUNTY, DELAWARE

DBF # 0586B053.B01

AUGUST, 2025

SITE PLANS



LEGEND

EXISTING		PROPOSED	
RIGHT OF WAY	EX-RW	RIGHT-OF-WAY	RW
EASEMENT	++ ++	EASEMENT	PE
ADJACENT PROPERTY LINE	---	SETBACK	---
CONTOUR	---	SETBACK	33
CATCH BASIN, STORM PIPE	□	CATCH BASIN, STORM PIPE	□
SANITARY SEWER MANHOLE, PIPE	⊙ EX-SS →	WATER MAIN, TEE W/ VALVES, PIPE SIZE	⊕ 6FW
WATER MAIN	EX-10W	FIRE HYDRANT ASSEMBLY	⊕
FIRE HYDRANT ASSEMBLY	⊕	UTILITY POLE	⊕
UTILITY POLE	⊕	SIGN	⊕
SIGN	⊕	FENCE	□ □ □ □
FENCE	X X X	TREE LINE	~~~~~
TREE	⊙	PAVEMENT	▬
TREE LINE	~~~~~	SIDEWALK	▬
PAVEMENT	▬	RIP RAP	▬
		LANDSCAPE BUFFER	30LB



ENGINEER'S STATEMENT

I, THE UNDERSIGNED, HEREBY STATE THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

CLIFTON D. MUMFORD
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DELAWARE, 19963

DATE

OWNER'S STATEMENT

I, THE UNDERSIGNED, CERTIFY THAT I AM THE EQUITABLE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT MY DIRECTION, AND THAT I ACKNOWLEDGE THE SAME TO BE MY ACT AND DESIRE THE PLAN TO BE DEVELOPED AS SHOWN IN ACCORDANCE WITH ALL THE APPLICABLE LAWS AND REGULATIONS.

JOSEPH SEELY
STATE OF DELAWARE
122 MARTIN LUTHER KING JR BLVD S.
DOVER, DE 19901
302-739-5644
JOSEPH.SEELY@DELAWARE.GOV

DATE

HI - GRADE EVIDENCE STORAGE BLDG.

CITY OF HARRINGTON

MISPILLION HUNDRED

KENT COUNTY, DELAWARE

DAVIS
BOWEN &
FRIEDEL, INC.

ARCHITECTS • ENGINEERS • SURVEYORS
MILFORD, DELAWARE
410.343.7971

SITE PLAN TITLE

Dwg No.:

C-101

DATA COLUMN

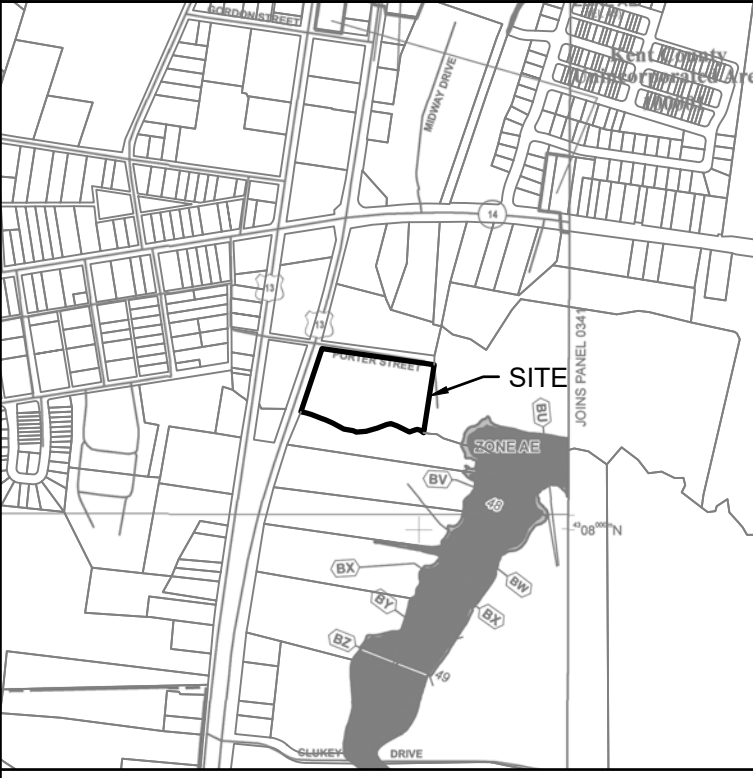
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2	DNREC PROJECT #	2025-058
3	APPROXIMATE PROJECT CENTER	LATITUDE 38.92149 LONGITUDE -75.56619
4	ENGINEER DAVIS, BOWEN & FRIEDEL, INC. 1 PARK AVENUE MILFORD, DE 19963 CLIFTON D. MUMFORD PHONE: (302) 424-1441 EMAIL: cdm@dbflnc.com	OWNER/DEVELOPER STATE OF DELAWARE 122 MARTIN LUTHER KING BLVD S. DOVER, DE 19901 JOSEPH D. SEELY PHONE: (302) 739-5644 EMAIL: JOSEPH.SEELY@DELAWARE.GOV ARCHITECT DAVIS, BOWEN, & FRIEDEL INC. 1 PARK AVENUE MILFORD DE, 19963 MICHAEL P. BAUMAN PHONE: (302) 424-1441 EMAIL: mpb@dbflnc.com
5	SITE ADDRESS	124 PORTER STREET HARRINGTON DE, 19952
6	DATUM	HORIZONTAL NAD 83 (DE STATE PLANE) VERTICAL NAVD 88
7	ZONING	EXISTING M. MANUFACTURING
8	LAND USE	EXISTING INDUSTRIAL MANUFACTURING PROPOSED STATE GOVERNMENT
9	UTILITY PROVIDERS	SEWER CITY OF HARRINGTON WATER CITY OF HARRINGTON ELECTRIC DELMARVA POWER
10	STATE STRATEGIES MAP	INVESTMENT LEVEL AREA :1
11	POSTED SPEED LIMIT	PORTER ST. 25 MPH (LOCAL 24044)
12	FLOODPLAIN	THIS PROPERTY IS NOT IMPACTED BY THE 100 YEAR FLOOD PLAN AS DETERMINED BY FEMA PANEL 10001C0337J, DATED JULY 7, 2014
13	TRANSPORTATION IMPROVEMENT DISTRICT (TID)	THIS PROPERTY IS NOT LOCATED IN A TRANSPORTATION IMPROVEMENT DISTRICT (TID.) DISTANCE TO NEAREST TID: 8.5 MILES (MILFORD TID)
14	GROUNDWATER RECHARGE	ALL OF THE PROPERTY IS LOCATED IN AN AREA OF GOOD GROUNDWATER RECHARGE POTENTIAL.
15	WELLHEAD PROTECTION AREA	THE PROPERTY IS NOT LOCATED IN A WELLHEAD PROTECTION AREA.
16	WETLANDS	THIS PROPERTY IS CONTAINS WETLANDS LOCATED IN THE TAX DITCH ACCORDING TO THE NWI MAP. NO PROPOSED CONSTRUCTION IS SCHEDULED TO IMPACT THIS AREA.
17	CODE COMPLIANCE	REQUIRED PROPOSED
	FRONT SETBACK	20 FT 20 FT
	SIDE SETBACK	20 FT 20 FT
	REAR SETBACK	20 FT 20 FT
	MINIMUM LOT WIDTH	100 FT -
	MINIMUM LOT DEPTH	100 FT -
	MAXIMUM BUILDING HEIGHT	45 FT -
18	AREAS	EXISTING PROPOSED
	GROSS SITE AREA	5.222 AC 5.222 AC
19	PROPOSED LAND USE AREAS	
	IMPERVIOUS	2.194 AC (42%) 95,568 SF 2.049 AC (39%) 89,259 SF
	PERVIOUS	3.028 AC (58%) 131,905 SF 3.173 AC (61%) 136,205 SF
	TOTAL	5.222 AC 5.222 AC 227,478 SF 227,478 SF
20	LIMIT OF DISTURBANCE	
	HI-GRADE BUILDING RENOVATION	DNREC #2025-049 0.50 AC COMPLETED
	EVIDENCE STORAGE BUILDING	DNREC #2025-058 1.27 AC PROPOSED
	TOTAL	1.77 AC

SITE PLANS

SITE PLAN TITLE SHEET	C-101
SITE PLAN	C-102
CONSTRUCTION DETAILS	
CONSTRUCTION DETAILS	C-201

LOCATION MAP

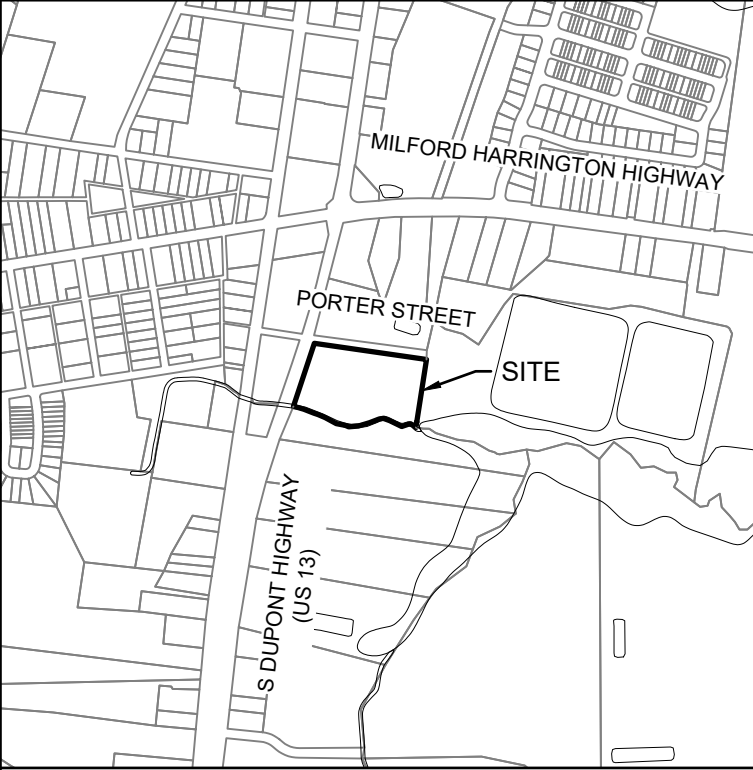
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FEMA FLOOD MAP

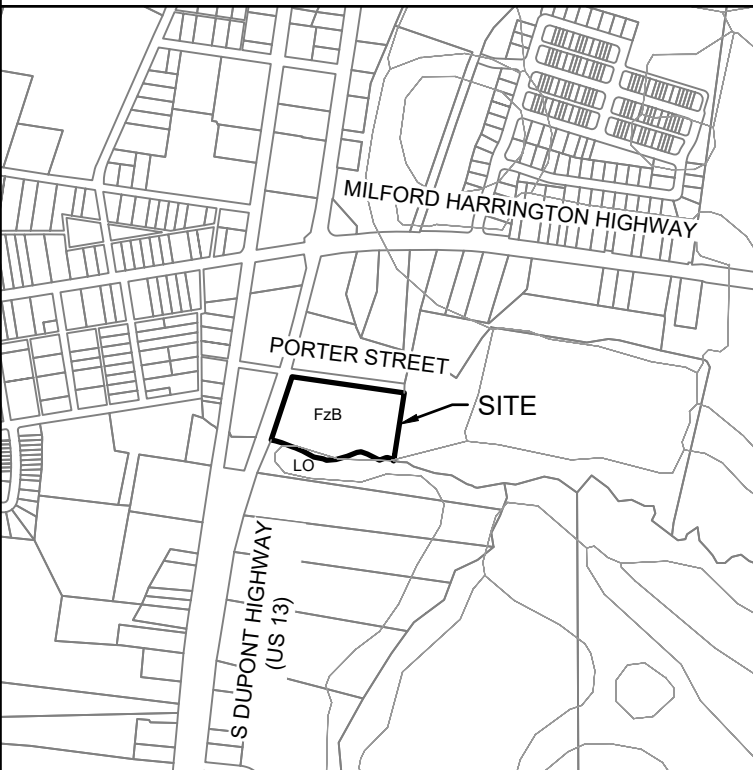
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SCALE: 1"=1000'



NWI WETLANDS MAP

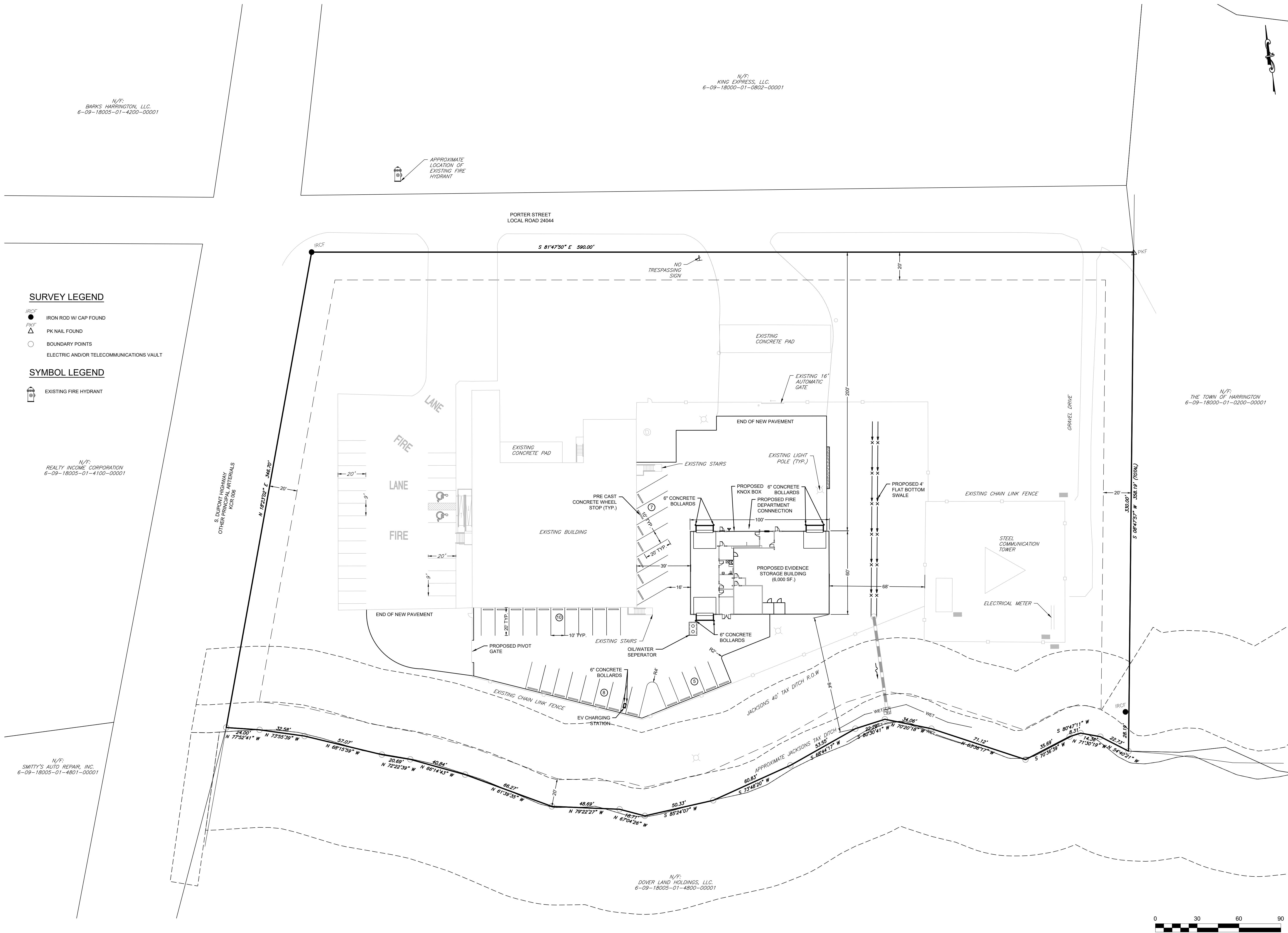
SCALE: 1"=1000'



SOILS MAP

SCALE: 1"=1000'

SOILS DATA		
LABEL	SOIL NAME	TYPE
FzB	FALLSINGTON URBAN LAND COMPLEX, 0 TO 5 % SLOPES	B/D
LO	LONGMARSH AND INDIANTOWN SOILS, FREQUENTLY FLOODED	B/D



SURVEY LEGEND

- IRCF
● IRON ROD W/ CAP FOUND
△ PK NAIL FOUND
○ BOUNDARY POINTS
○ ELECTRIC AND/OR TELECOMMUNICATIONS VAULT

SYMBOL LEGEND

- ⊕ EXISTING FIRE HYDRANT

HI - GRADE EVIDENCE STORAGE BLDG.
CITY OF HARRINGTON
MISPILLION HUNDRED
KENT COUNTY, DELAWARE

DATE	ADDENDA	DNREC COMMENTS
1 12/27/2025	1	DNREC COMMENTS
2 2/27/2026	2	ADD SEPARATE OIL WASTE LINE
3 5/15/2026	3	DNREC COMMENTS
4 5/22/2026	4	DNREC COMMENTS
5 6/12/2026	5	DNREC COMMENTS
6 JULY 2026	6	BID SET

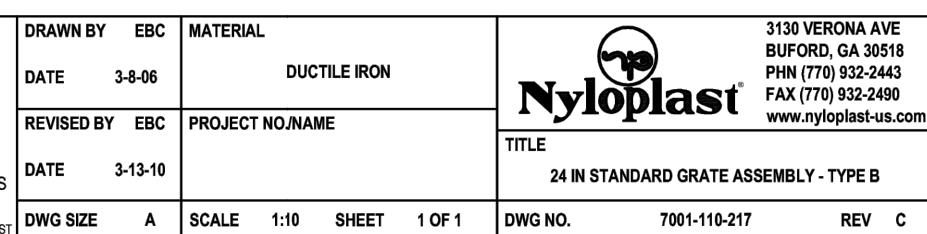
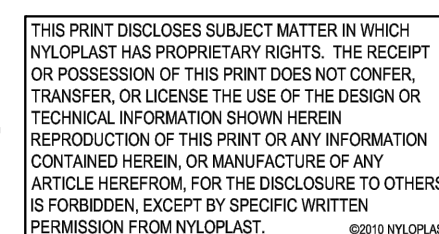
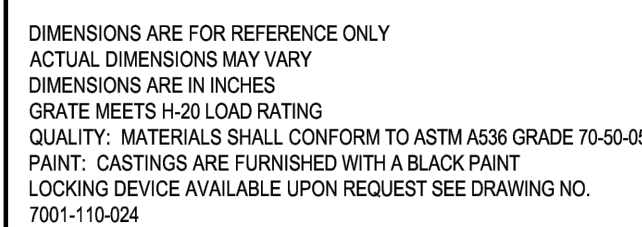
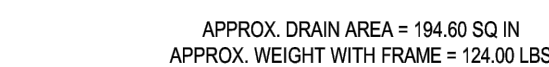
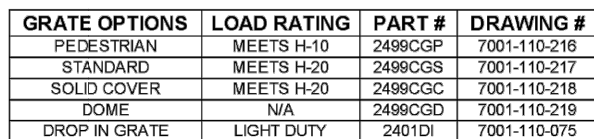
Date: AUGUST, 2025
Scale: 1" = 30'
Dwn.By: BAR
Proj.No.: 0586B053.B01

SITE PLAN

Dwg No.:

C-102

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MILFORD, DELAWARE 302.321.1411

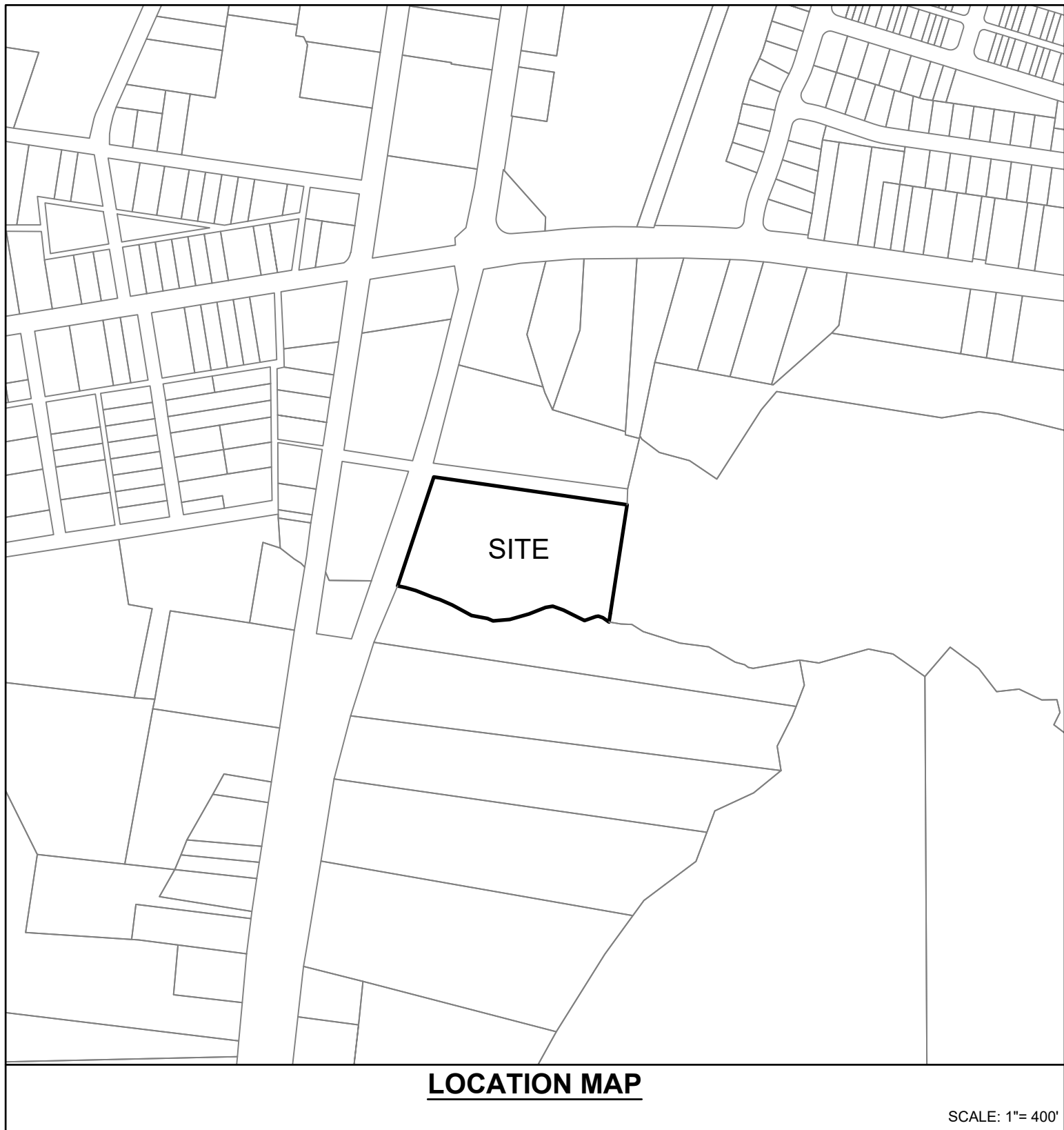


HI - GRADE EVIDENCE STORAGE BLDG.

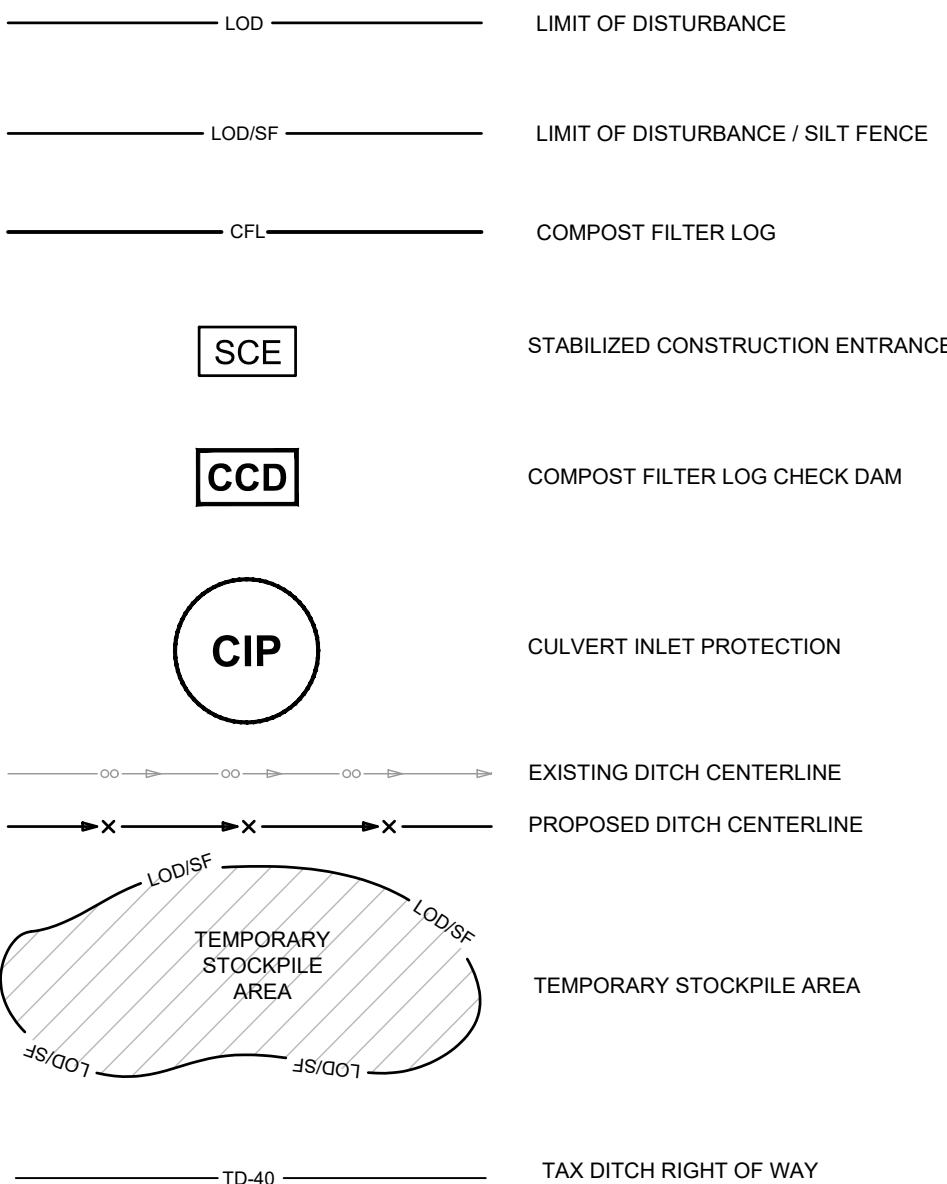
CITY OF HARRINGTON MISPILLION HUNDRED MURDERKILL RIVER WATERSHED KENT COUNTY, DELAWARE

DBF # 0586B053.B01

AUGUST, 2025 SEDIMENT AND STORMWATER MANAGEMENT PLANS



LEGEND



SEDIMENT AND STORMWATER CONSTRUCTION NOTES:

- THE DNREC SEDIMENT AND STORMWATER PROGRAM SHALL BE NOTIFIED IN WRITING 5 DAYS PRIOR TO COMMENCING WITH CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN.
- REVIEW AND/OR APPROVAL OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OR HER RESPONSIBILITIES FOR COMPLIANCE WITH THE REQUIREMENTS OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS, NOR SHALL IT RELIEVE THE CONTRACTOR FROM ERRORS OR OMISSIONS IN THE APPROVED PLAN.
- IF THE APPROVED PLAN NEEDS TO BE MODIFIED, ADDITIONAL SEDIMENT AND STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY DNREC.
- FOLLOWING SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED FOR ALL PERIMETER SEDIMENT CONTROLS, SOIL STOCKPILES, AND ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE WITHIN 14 CALENDAR DAYS UNLESS MORE RESTRICTIVE FEDERAL REQUIREMENTS APPLY.
- ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL COMPLY WITH THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
- AT ANY TIME A DEWATERING OPERATION IS USED, IT SHALL BE PREVIOUSLY APPROVED BY THE AGENCY CONSTRUCTION SITE REVIEWER FOR A NON-EROSIVE POINT OF DISCHARGE, AND A DEWATERING PERMIT SHOULD BE APPROVED BY THE DNREC WELL PERMITTING BRANCH.
- APPROVED PLANS REMAIN VALID FOR 5 YEARS FROM THE DATE OF APPROVAL.
- POST CONSTRUCTION VERIFICATION DOCUMENTS SHALL BE SUBMITTED TO THE DEPARTMENT WITHIN 60-DAYS OF STORMWATER MANAGEMENT FACILITY COMPLETION.
- APPROVAL OF A SEDIMENT AND STORMWATER MANAGEMENT PLAN DOES NOT GRANT OR IMPLY A RIGHT TO DISCHARGE STORMWATER RUNOFF. THE OWNER/DEVELOPER IS RESPONSIBLE FOR ACQUIRING ANY AND ALL AGREEMENTS, EASEMENTS, ETC., NECESSARY TO COMPLY WITH STATE DRAINAGE AND OTHER APPLICABLE LAWS.
- THE NOTICE OF INTENT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER A NPDES GENERAL PERMIT FOR THIS PROJECT IS # 7873. THE PERMITTEE OF RECORD SHALL NOT BE RELIEVED OF THEIR RESPONSIBILITIES UNTIL A NOTICE OF TERMINATION HAS BEEN PROCESSED BY THE DEPARTMENT.
- THE OWNER SHALL BE FAMILIAR WITH ALL ASPECTS OF THE NPDES CONSTRUCTION GENERAL PERMIT.
- THE CONTRACTOR SHALL AT ALL TIMES PROTECT AGAINST SEDIMENT OR DEBRIS LADEN RUNOFF OR WIND FROM LEAVING THE SITE. PERIMETER CONTROLS SHALL BE CHECKED DAILY AND ADJUSTED OR REPAIRED TO FULLY CONTAIN AND CONTROL SEDIMENT FROM LEAVING THE SITE. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED HALF OF THE EFFECTIVE CAPACITY OF THE CONTROL. IN ADDITION, THE CONTRACTOR MAY NEED TO ADJUST OR ALTER MEASURES IN TIMES OF ADVERSE WEATHER CONDITIONS, OR AS DIRECTED BY THE AGENCY CONSTRUCTION SITE REVIEWER.
- BEFORE ANY EARTHWORK OR EXCAVATION TAKES PLACE, THE CONTRACTOR SHOULD CALL MISS UTILITY AT 811 OR 1-800-282-8555 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, TO HAVE ALL EXISTING UTILITIES MARKED ONSITE.
- BEST AVAILABLE TECHNOLOGY (BAT) SHALL BE EMPLOYED TO MANAGE TURBID DISCHARGES IN ACCORDANCE WITH REQUIREMENTS OF 7. DEL. C. CH. 60 AND THE CURRENT DELAWARE CONSTRUCTION GENERAL PERMIT.
- DOCUMENTATION OF SOIL TESTING AND MATERIALS USED FOR TEMPORARY OR PERMANENT STABILIZATION INCLUDING BUT NOT LIMITED TO SOIL TEST RESULTS, SEED TAGS, SOIL AMENDMENT TAGS, ETC. SHALL BE PROVIDED TO THE DEPARTMENT TO VERIFY THAT THE PERMANENT OR TEMPORARY STABILIZATION HAS BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED PLAN.
- WHEN DIRECTED BY THE DEPARTMENT, THE OWNER SHALL ACQUIRE THE SERVICES OF A THIRD PARTY CERTIFIED CONSTRUCTION REVIEWER (CCR) TO PERFORM WEEKLY CONSTRUCTION REVIEWS. SEDIMENT AND STORMWATER MANAGEMENT PLANS APPROVED BY THE DEPARTMENT SHALL HAVE A THIRD PARTY CCR.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND REPAIR ALL EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT PRACTICES DURING CONSTRUCTION AND UTILITY INSTALLATION.
- UNLESS OTHERWISE SPECIFIED, TEMPORARY VEGATIVE STABILIZATION SHALL USE SEED MIX NO. 5 AND PERMANENT VEGATIVE STABILIZATION SHALL USE SEED MIX NO. 7.
- TEMPORARY VEGATIVE COVER, MULCHING AND/OR SPRINKLING WITH WATER SHALL BE THE METHODS USED AS NECESSARY TO CONTROL DUST.
- STABILIZATION MATTING SHALL BE NORTH AMERICAN GREEN SC150BN OR DNREC TYPE SSM-I.
- THE VOLUME OF SPOIL OR BORROW MATERIAL SHOULD BE NEGLIGIBLE.
- STORMWATER MANAGEMENT FACILITIES AND ASSOCIATED INFRASTRUCTURE SHALL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER.

DNREC APPROVAL BLOCK

STORMWATER
MANAGEMENT
PLAN TITLE

Dwg No.:

C-401

ENGINEER'S STATEMENT

I, THE UNDERSIGNED, HEREBY STATE THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, AND THAT I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE COMPLIES WITH THE APPLICABLE STATE AND LOCAL REGULATIONS AND ORDINANCES.

CLIFTON D. MUMFORD, P.E.
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DELAWARE, 19963

DATE

OWNER'S STATEMENT

I, THE UNDERSIGNED, CERTIFY THAT ALL LAND CLEARING, CONSTRUCTION AND DEVELOPMENT SHOULD BE DONE PURSUANT TO THE APPROVED PLAN AND THAT RESPONSIBLE PERSONNEL (I.E. BLUE CARD HOLDER) INVOLVED IN THE LAND DISTURBANCE WILL HAVE A CERTIFICATION OF TRAINING PRIOR TO INITIATION OF THE PROJECT, AT A DNREC SPONSORED OR APPROVED TRAINING COURSE FOR THE CONTROL OF EROSION AND SEDIMENT DURING CONSTRUCTION. IN ADDITION, WE GRANT THE DNREC SEDIMENT AND STORMWATER PROGRAM AND/OR THE RELEVANT DELEGATED AGENCY THE RIGHT TO CONDUCT ONSITE REVIEWS, AND WE UNDERSTAND OUR RESPONSIBILITIES UNDER THE NPDES CONSTRUCTION GENERAL PERMIT, AS REFERENCED ON THIS COVERSHEET.

JOSEPH SEELY
STATE OF DELAWARE
122 MARTIN LUTHER KING JR BLVD S.
DOVER, DE 19901
302-739-5644
JOSEPH.SEELY@DELAWARE.GOV

DATE

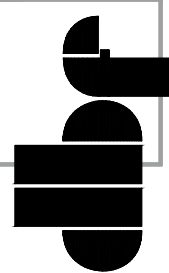
HI - GRADE EVIDENCE STORAGE BLDG.

CITY OF HARRINGTON

MISPILLION HUNDRED

KENT COUNTY, DELAWARE

DAVIS
BOWEN &
FRIEDEL, INC.

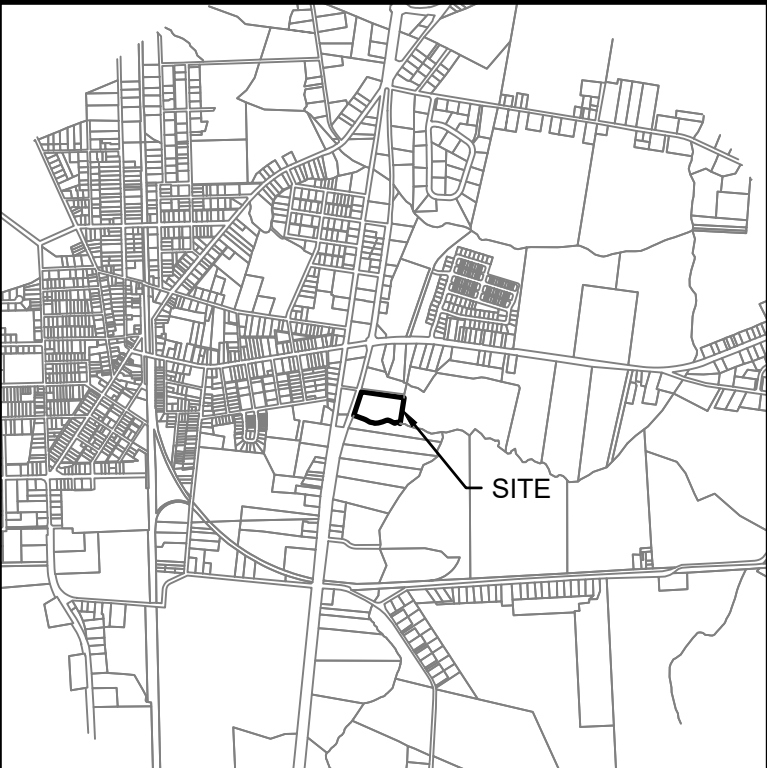


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BALTIMORE, MARYLAND
410-343-7971

DATA COLUMN

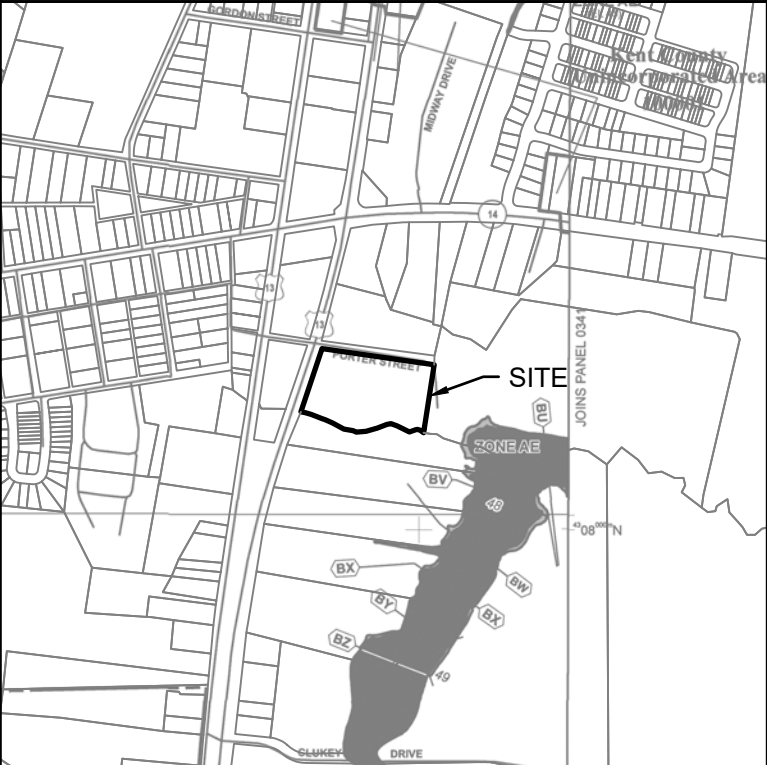
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1. PARCEL DATA	6-09-18005-01-4700-0001	DB 12225 PG 68
2. DNREC PROJECT #	2025-058	
3. APPROXIMATE PROJECT CENTER	LATITUDE 38.92149	LONGITUDE -75.56619
4. ENGINEER DAVIS, BOWEN & FRIEDEL, INC. 1 PARK AVENUE MILFORD, DE 19963 CLIFTON D. MUMFORD PHONE: (302) 424-1441 EMAIL: cdm@dbfinc.com	OWNER/DEVELOPER STATE OF DELAWARE 122 MARTIN LUTHER KING BLVD S. DOVER, DE 19901 JOSEPH D. SEELY PHONE: (302) 739-5644 EMAIL: JOSEPH.SEELY@DELAWARE.GOV	ARCHITECT DAVIS, BOWEN, & FRIEDEL INC. 1 PARK AVENUE MILFORD DE, 19963 MICHAEL P. BAUMANN PHONE: (302) 424-1441 EMAIL: mpb@dbfinc.com
5. SITE ADDRESS	124 PORTER STREET HARRINGTON DE, 19952	
6. DATUM	HORIZONTAL NAD 83 (DE STATE PLANE)	VERTICAL NAVD 88
7. ZONING	EXISTING M, MANUFACTURING	
8. LAND USE	EXISTING INDUSTRIAL MANUFACTURING	PROPOSED STATE GOVERNMENT
9. UTILITY PROVIDERS	SEWER CITY OF HARRINGTON	WATER CITY OF HARRINGTON ELECTRIC DELMARVA POWER
10. STATE STRATEGIES MAP	INVESTMENT LEVEL AREA :1	
11. POSTED SPEED LIMIT	PORTER ST 25 MPH (LOCAL 24044)	
12. FLOODPLAIN	THIS PROPERTY IS NOT IMPACTED BY THE 100 YEAR FLOOD PLAN AS DETERMINED BY FEMA PANEL 10001C0337J, DATED JULY 7, 2014	
13. TRANSPORTATION IMPROVEMENT DISTRICT (TID)	THIS PROPERTY IS NOT LOCATED IN A TRANSPORTATION IMPROVEMENT DISTRICT (TID.) DISTANCE TO NEAREST TID: 8.5 MILES (MILFORD TID)	
14. GROUNDWATER RECHARGE	ALL OF THE PROPERTY IS LOCATED IN AN AREA OF GOOD GROUNDWATER RECHARGE POTENTIAL.	
15. WELLHEAD PROTECTION AREA	THE PROPERTY IS NOT LOCATED IN A WELLHEAD PROTECTION AREA.	
16. WETLANDS	THIS PROPERTY IS CONTAINS WETLANDS LOCATED IN THE TAX DITCH ACCORDING TO THE NWI MAP. NO PROPOSED CONSTRUCTION IS SCHEDULED TO IMPACT THIS AREA.	
17. CODE COMPLIANCE	REQUIRED	PROPOSED
FRONT SETBACK	20 FT	20 FT
SIDE SETBACK	20 FT	20 FT
REAR SETBACK	20 FT	20 FT
MINIMUM LOT WIDTH	100 FT	-
MINIMUM LOT DEPTH	100 FT	-
MAXIMUM BUILDING HEIGHT	45 FT	-
18. AREAS	EXISTING	PROPOSED
GROSS SITE AREA	5.222 AC	5.222 AC
19. PROPOSED LAND USE AREAS		
IMPERVIOUS	2.194 AC (42%) 95,568 SF	2.049 AC (39%) 89,259 SF
PERVIOUS	3.028 AC (58%) 131,905 SF	3.173 AC (61%) 138,205 SF
TOTAL	5.222 AC 227,478 SF	5.222 AC 227,478 SF
20. LIMIT OF DISTURBANCE		
HI-GRADE BUILDING RENOVATION	DNREC #2025-049	0.50 AC COMPLETED
EVIDENCE STORAGE BUILDING	DNREC #2025-058	1.27 AC PROPOSED
TOTAL		1.77 AC

SEDIMENT AND STORMWATER MANAGEMENT PLANS		
STORMWATER MANAGEMENT PLAN TITLE		C-401
PRE-CONSTRUCTION SITE STORMWATER MANAGEMENT PLAN		C-402
CONSTRUCTION SITE STORMWATER MANAGEMENT PLAN		C-403
CONSTRUCTION SITE DETAILS		C-404
CONSTRUCTION SITE DETAILS		C-405
CONSTRUCTION SITE DETAILS		C-406
CONSTRUCTION SITE DETAILS		C-407



LOCATION MAP

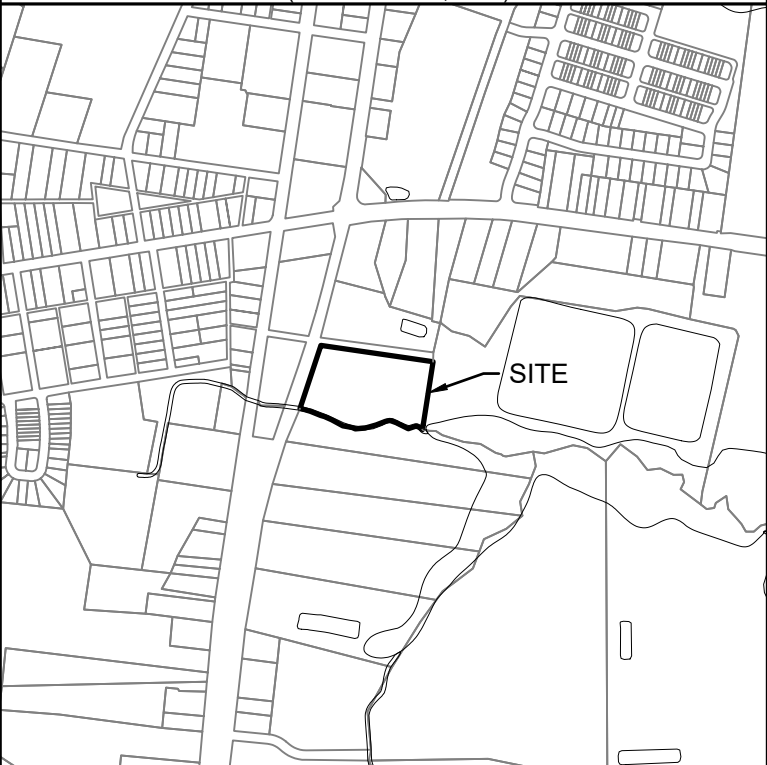
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FEMA FLOOD MAP

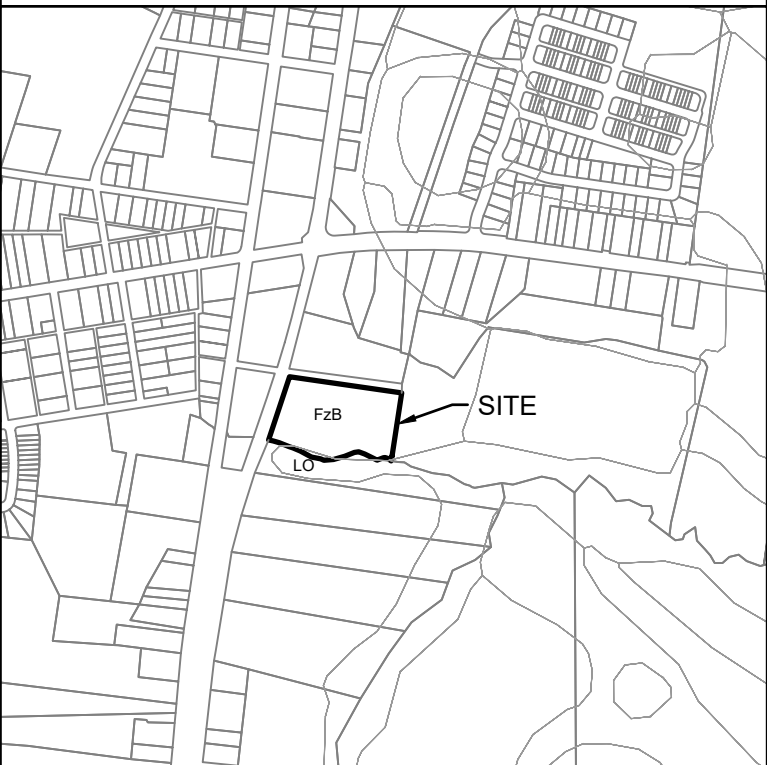
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SCALE: 1"=1000'



NWI WETLANDS MAP

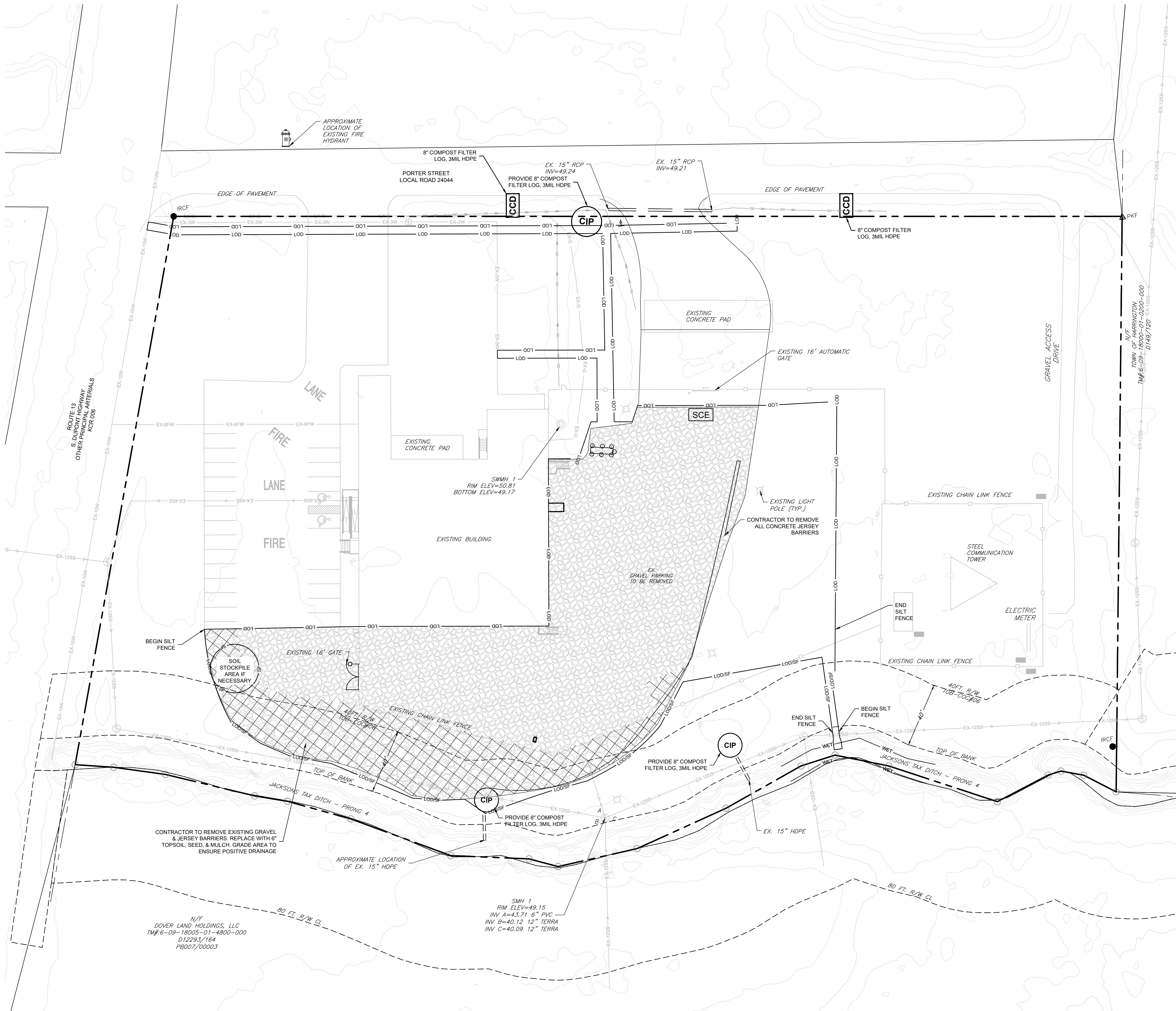
SCALE: 1"=1000'



SOILS MAP

SCALE: 1"=1000'

SOILS DATA		
LABEL	SOIL NAME	TYPE
FzB	FALLSINGTON URBAN LAND COMPLEX, 0 TO 5 % SLOPES	B/D
LO	LONGMARSH AND INDIANTOWN SOILS, FREQUENTLY FLOODED	B/D



- ### SEQUENCE OF CONSTRUCTION
1. NOTIFY THE DNREC SEDIMENT AND STORMWATER PROGRAM IN WRITING AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN.
 2. PRIOR TO ANY CLEARING, INSTALLATION OF SEDIMENT CONTROL MEASURES OR GRADING, A PRE-CONSTRUCTION MEETING MUST BE SCHEDULED AND CONDUCTED WITH THE DNREC CONSTRUCTION SITE REVIEWER. THE LANDOWNER/DEVELOPER, CONTRACTOR, AND CERTIFIED CONSTRUCTION REVIEWER ARE REQUIRED TO BE IN ATTENDANCE AT THE PRE-CONSTRUCTION MEETING; THE DESIGNER IS RECOMMENDED TO ATTEND.
 3. THE CONTRACTOR SHALL CONTACT MISS UTILITY OF DELMARVA AT 1-800-282-8555 FOR UTILITY LOCATIONS WITHIN AND SURROUNDING CONSTRUCTION AREAS NOT LESS THAN 3 DAYS BEFORE PERFORMING ANY EXCAVATION.
 4. INSTALL PERIMETER SILT FENCE AND/OR COMPOST FILTER LOGS. ESTABLISH TEMPORARY STOCKPILE AREA AND SURROUND WITH SILT FENCE OR COMPOST FILTER LOGS.
 5. INSTALL CULVERT INLET PROTECTION ON EXISTING CULVERTS.
 6. ALL PERIMETER CONTROLS ARE TO BE REVIEWED BY THE DNREC CONSTRUCTION SITE REVIEWER AND APPROVED PRIOR TO PROCEEDING WITH FURTHER SITE DISTURBANCE OR CONSTRUCTION.
 7. CONSTRUCTION REVIEWS ARE REQUIRED DURING THE FOLLOWING STAGES OF CONSTRUCTION:
 - 7.1. PRE-CONSTRUCTION MEETING
 - 7.2. INITIAL SITE PREPARATION INCLUDING INSTALLATION OF EROSION AND SEDIMENT CONTROLS
 - 7.3. EXCAVATION AND GRADING TO INTERIM AND FINAL ELEVATIONS
 - 7.4. CONSTRUCTION OF CHECK DAMS
 - 7.5. IMPLEMENTATION OF REQUIRED SITE STABILIZATION AND PLANTING (SEEDING).
 8. THE CONTRACTOR SHALL AT ALL TIMES PROTECT AGAINST SEDIMENT OR DEBRIS LADEN RUNOFF OR WIND FROM LEAVING THE SITE. PERIMETER CONTROLS SHOULD BE CHECKED DAILY AND ADJUSTED AND/OR REPAIRED TO FULLY CONTAIN AND CONTROL SEDIMENTATION ON THE SITE. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED HALF OF THE EFFECTIVE CAPACITY OF THE CONTROL. IN ADDITION, THE CONTRACTOR MAY NEED TO ADJUST OR REPAIR MEASURES IN TIMES OF ADVERSE WEATHER CONDITIONS, OR AS DIRECTED BY THE DNREC CONSTRUCTION SITE REVIEWER.
 9. CONSTRUCT FOUR (4) FOOT FLAT BOTTOM VEGETATED CHANNEL. SEE SHEET C-403 FOR DETAILED SEQUENCE. CCR IS TO MONITOR THE CONSTRUCTION OF THE VEGETATED CHANNEL.
 10. REMOVE GRAVEL PARKING AREAS AND CONCRETE JERSEY BARRIERS. GRADE AREA TO ENSURE POSITIVE DRAINAGE AWAY FROM PARKING LOT. PLACE 6" TOPSOIL, SEED, & MULCH WHERE GRAVEL WAS REMOVED.
 11. ROUGH GRADE FOR NEW PARKING AND BUILDING PAD.
 12. BEGIN BUILDING CONSTRUCTION.
 13. BEGIN INSTALLATION OF UNDERGROUND UTILITIES. COORDINATE WITH CITY OF HARRINGTON AND DELMARVA POWER FOR UTILITY CONNECTIONS.
 14. EXCAVATE TO EXPOSE SEWER STUB. VERIFY ELEVATION OF SEWER STUB IS DEEP ENOUGH TO PROVIDE 2% SLOPE TO BUILDING. CONTACT ENGINEER IF A DISCREPANCY EXISTS. INSTALL SEWER CONNECTION FROM THE EXISTING 6 INCH SEWER STUB.
 15. WET TAP 3 INCH EXISTING WATER LINE WITH 1" SERVICE SADDLE.
 16. WET TAP 10 INCH EXISTING WATER MAIN ALONG ROUTE 13 BY INSTALLING A 10" X 6" TAPPING SLEEVE AND VALVE FOR FIRE WATER SERVICE AND HYDRANT.
 17. CONTACT CHESAPEAKE UTILITIES TO INSTALL GAS CONNECTION FROM SERVICE LINE TO NEW BUILDING.
 18. COORDINATE WITH DELMARVA POWER TO INSTALL ELECTRIC SERVICE TO THE BUILDING.
 19. FINE GRADE PAVED AREAS. INSTALL AGGREGATE BASE COURSE.
 20. INSTALL BASE PAVING IN ROADWAYS.
 21. RESTORE ALL DISTURBED AREAS NOT TO BE COVERED BY IMPERVIOUS SURFACES WITH PERMANENT STABILIZATION IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL NOTES.
 22. STABILIZE ANY REMAINING DISTURBED AREAS IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL NOTES.
 23. UPON STABILIZATION OF ALL DISTURBED AREAS AND COMPLETION OF BUILDING VERTICAL CONSTRUCTION, INSTALL FINAL TOP COAT OF PAVEMENT.
 24. EROSION AND SEDIMENT CONTROL DEVICES SHOULD BE REMOVED ONLY AFTER WORK IN AN AREA HAS BEEN COMPLETED AND STABILIZED, WITH WRITTEN APPROVAL FROM DNREC CONSTRUCTION SITE REVIEWER.
 25. PROJECT CLOSEOUT. NOTE: TERMINATION OF THE CONSTRUCTION GENERAL PERMIT WILL REQUIRE SUBMISSION AND ACCEPTANCE OF THE POST CONSTRUCTION VERIFICATION DOCUMENTS, INCLUDING FINAL STABILIZATION THROUGHOUT THE SITE. ALL ELEMENTS OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN IMPLEMENTED, AND ACCEPTANCE OF THE FINAL OPERATION AND MAINTENANCE PLAN. (THIS PROJECT DOES NOT INCLUDE BMPs THEREFORE NO POST CONSTRUCTION VERIFICATION DOCUMENTS ARE REQUIRED TO BE SUBMITTED.)
 26. UPON COMPLETION AND FINAL STABILIZATION, CONTACT DNREC FOR FINAL INSPECTION AND CLOSEOUT.



HI - GRADE EVIDENCE STORAGE BLDG.
CITY OF HARRINGTON
MISPILLION HUNDRED
KENT COUNTY, DELAWARE

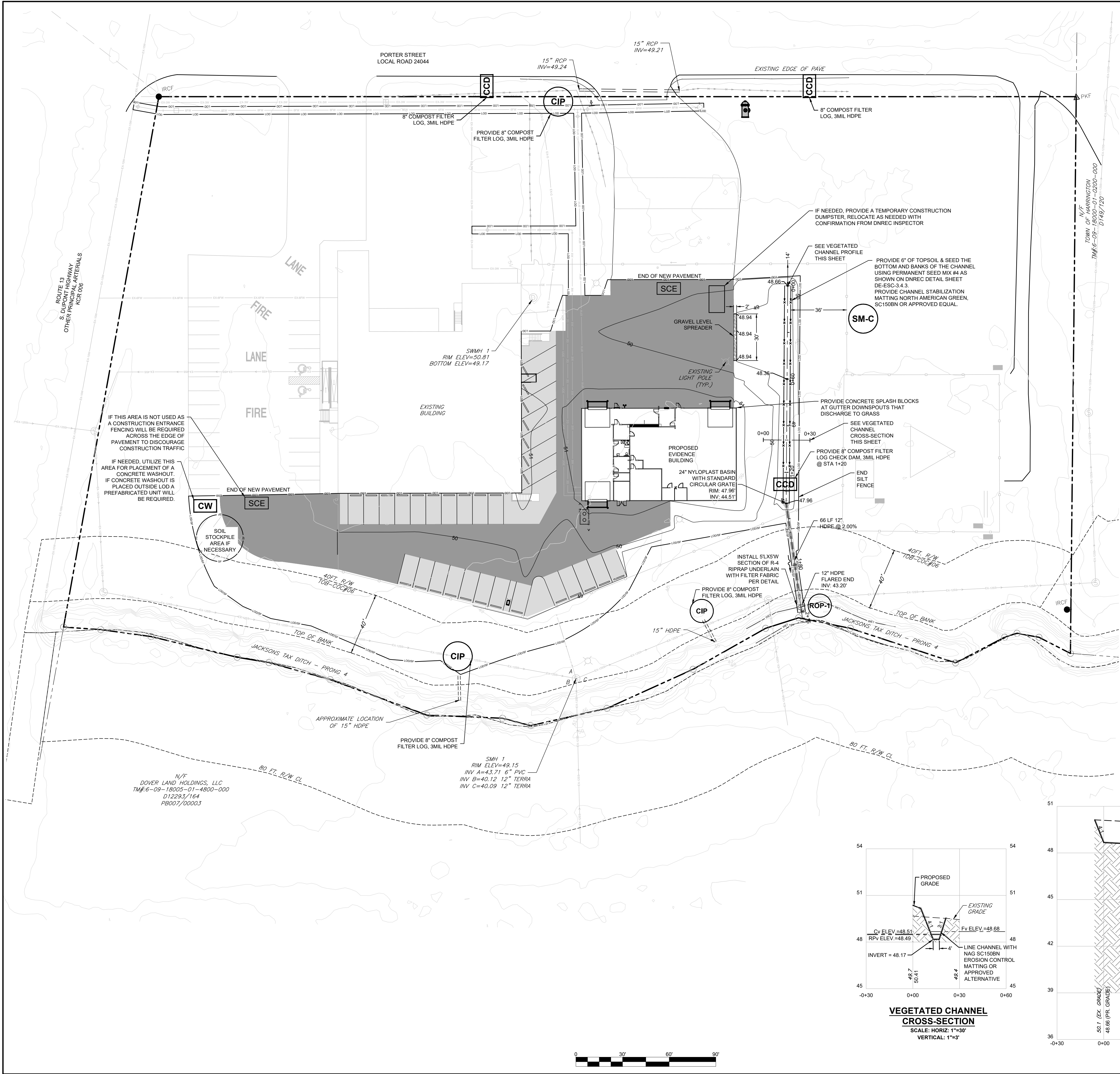
DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS • ENGINEERS • SURVEYORS
BALTIMORE, MARYLAND
410.747.1411
MILFORD, DELAWARE
302.421.1411

APPENDIX	DATE	DNREC COMMENTS
1	12/27/2025	ADD SEPARATE OIL WASTE LINE
2	2/27/2026	DNREC COMMENTS
3	5/15/2026	DNREC COMMENTS
4	5/22/2026	DNREC COMMENTS
5	6/12/2026	DNREC COMMENTS
6	JULY 2026	BID SET

Date: AUGUST, 2025
Scale: 1" = 30'
Dwn.By: BAR
Proj.No.: 0586B053.B01

PRE-CONSTRUCTION SITE STORMWATER MANAGEMENT PLAN

P:\State of Delaware\0586B053 - Hi-Grade\Design\0586B053 - SSM CONSTRUCTION PLAN.dwg Jan 29, 2025 - 8:18am muno



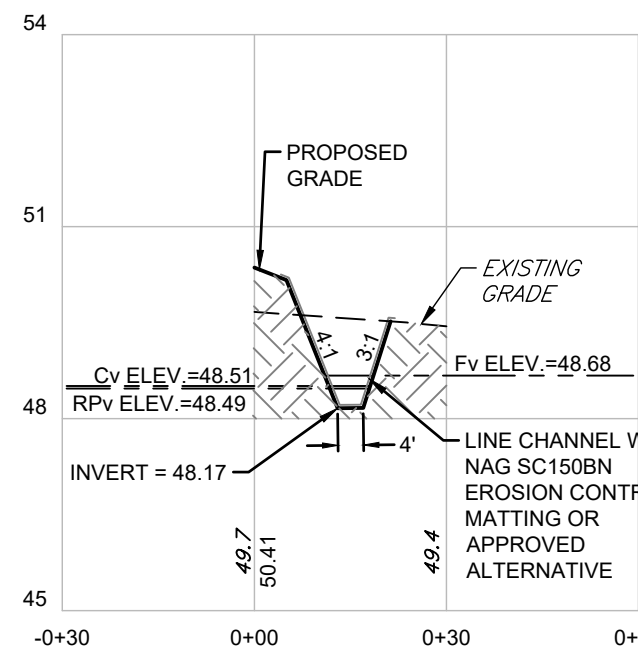
Typical Maintenance Items and Frequency for Vegetated Channels	
Frequency	Maintenace Items
As needed	• Mow vegetated channels during the growing season to maintain minimum grass height of 4".
Quarterly	• Ensure that the contributing drainage area, inlets, and facility surface are clear of debris.
	• Remove accumulated sediment and oil/grease from inlets, pretreatment devices, flow diversion structures, and overflow structures.
	• Repair undercut and eroded areas at inflow and outflow structures.
Annual inspection	• Add reinforcement planting to maintain 90% vegetative cover. Reseed any salt-killed vegetation.
	• Remove any accumulated sand or sediment deposits behind check dams.
	• Inspect upstream and downstream of check dams for evidence of undercutting or erosion and remove trash or blockages at weep holes.
	• Examine channel bottom for evidence of erosion, braiding, excessive ponding, or dead grass.
	• Check inflow points for clogging and remove any sediment.
	• Inspect side slopes and pretreatment areas for evidence of any rill or gully erosion and repair.
	• Look for any bare soil or sediment sources in the contributing drainage aea and stabilize immediately.

VEGETATED CHANNEL GENERAL OPERATION AND MAINTENANCE NOTES

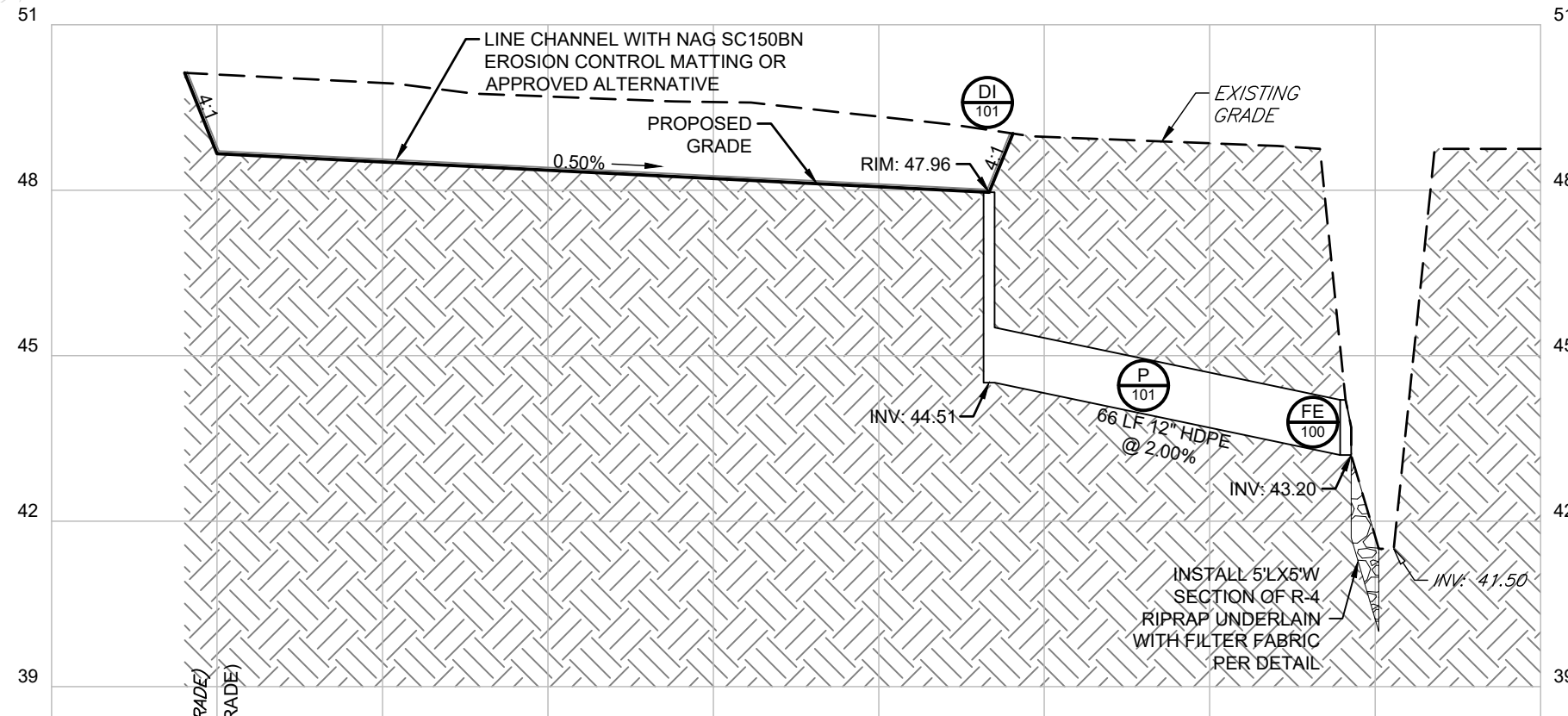
1. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE PERPETUAL OPERATION AND MAINTENANCE OF THE VEGETATED CHANNEL.
2. MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH DNREC SEDIMENT AND STORMWATER REGULATIONS AND ANY APPLICABLE STORMWATER MANAGEMENT PLAN APPROVAL CONDITIONS.
3. RECORDS OF INSPECTIONS AND MAINTENANCE ACTIVITIES SHALL BE RETAINED FOR A MINIMUM OF FIVE (5) YEARS AND MADE AVAILABLE TO DNREC UPON REQUEST.
4. INSPECT THE VEGETATED CHANNEL AT LEAST TWICE PER YEAR (SPRING AND FALL) AND WITHIN 48 HOURS FOLLOWING STORM EVENTS GREATER THAN 1 INCH OF RAINFALL. INSPECTIONS SHALL EVALUATE:
 - 4.1. VEGETATIVE COVER AND HEALTH
 - 4.2. EVIDENCE OF EROSION, RILLS, GULLIES, OR BANK INSTABILITY
 - 4.3. SEDIMENT ACCUMULATION
 - 4.4. BLOCKAGES OR DEBRIS
 - 4.5. STANDING WATER OR POOR DRAINAGE
 - 4.6. CONDITION OF OUTLET STRUCTURES AND CHECK DAMS (IF APPLICABLE)
5. THE DNREC SEDIMENT AND STORMWATER PROGRAM RESERVES THE RIGHT TO ENTER PRIVATE PROPERTY FOR PURPOSES OF PERIODIC SITE REVIEWS.
6. DNREC SHALL BE NOTIFIED WITHIN 30 BUSINESS DAYS IF THE PROPERTY OWNERSHIP IS TRANSFERRED TO A NEW PERSON OR ENTITY.
7. DNREC MAY SEEK ENFORCEMENT ACTION AGAINST ANY OWNER DEEMED NEGLIGENT IN FULFILLING THE OPERATION AND MAINTENANCE REQUIREMENTS OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
8. DNREC SHALL BE CONTACTED IF A CONCERN ARISES REGARDING A STORMWATER MANAGEMENT FACILITY, BEFORE ANY NON-ROUTINE MAINTENANCE, OR IF MODIFICATIONS TO THE FACILITY ARE DESIRED.
9. ACCESS AND SAFETY: MAINTAIN ACCESS FOR INSPECTION AND MAINTENANCE EQUIPMENT. ENSURE SIDE SLOPES REMAIN STABLE AND FREE OF HAZARDOUS CONDITIONS.
10. ANY DESIGN MODIFICATIONS MADE TO THE STORMWATER SYSTEM SHALL REQUIRE THE CREATION OF A NEW POST CONSTRUCTION STORMWATER MANAGEMENT PLAN AND/OR OPERATIONS AND MAINTENANCE PLAN, WITH APPROVAL OF THE PLAN(S) BY THE DNREC STORMWATER SECTION.
11. TREES SHALL NOT BE PLANTED, AND SHALL BE REMOVED IF FOUND GROWING WITHIN THE CHANNEL.
12. IF THE CHANNEL IS EXCAVATED TO REMOVE ACCUMULATED SEDIMENT, THE DISPOSAL AREA SHALL BE PERMANENTLY STABILIZED SO THAT IT DOES NOT RECREATE AN EROSION PROBLEM. ANY MATERIAL TAKEN OFF-SITE SHALL STILL BE UTILIZED OR DISPOSED OF IN AN APPROVED DNREC MANNER.
13. BEFORE ANY EARTHWORK OR EXCAVATION TAKES PLACE, THE CONTRACTOR SHALL CALL MISS UTILITY AT 811 OR 1.800.282.8555 AT LEAST 3 WORKING DAYS PRIOR TO CONSTRUCTION, TO HAVE ALL EXISTING UTILITIES MARKED ON-SITE.
14. REMOVE TRASH AND DEBRIS ON A REGULAR BASIS.
15. STABILIZE APPLICABLE ERODED AREAS WITH REINFORCING EROSION CONTROL PRODUCTS (RCP) OR TURF REINFORCING MATS (TRM), AS REQUIRED. IF RCP IS APPLIED, IT IS RECOMMENDED TO USE TRULY BIODEGRADABLE PRODUCTS TO AID IN MOWING, MAINTENANCE AND DETER WILDLIFE ENTANGLEMENT. THESE PRODUCTS CAN BE RECOGNIZED AS HAVING "BN" FOR BIODETTING OR "B" FOR BIODEGRADABLE.
16. IF TURF COVER IS USED MOW REGULARLY (WEEKLY FROM APRIL TO NOVEMBER) MOW NO LOWER THAN 6" TO MAINTAIN DESIRED DESIGN HEIGHT.
17. FOR NATIVE GRASSES: CUT DOWN STANDING STALKS TO 12 INCHES IN SPRING (MID-MARCH), JUST BEFORE NEW GROWTH EMERGES. SELECTIVELY HAND-APPLY AN APPROPRIATE HERBICIDE WITH A CUT STUMP APPLICATOR OR DIRECT FOLIAR SPRAYS. RESEED AND/OR REPLANT AS NEEDED BASED ON INSPECTION FINDINGS.
18. REMOVE MATERIALS THAT ACCUMULATE ON THE UPSTREAM FACE OF THE CHECK DAMS. REMOVE ALL VEGETATION THAT EXTENDS ROOTS WITHIN THE CHECK DAMS MANUALLY AND APPLY HERBICIDES AS NECESSARY TO ELIMINATE HERBACEOUS SPECIES WITH PERSISTENT ROOTS.
19. REMOVE INVASIVE OR NUISANCE SPECIES AND REPLACE DEAD OR DISEASED VEGETATION PROMPTLY.
20. FERTILIZERS AND PESTICIDES SHALL BE MINIMIZED AND APPLIED ONLY AS NECESSARY IN ACCORDANCE WITH DNREC AND MANUFACTURER GUIDELINES. CONSULT THE DELAWARE DEPARTMENT OF AGRICULTURE FOR LICENSING REQUIREMENTS PERTAINING TO THE APPLICATION OF CHEMICALS.
21. HIRE A PROFESSIONAL IF PONDING IS OBSERVED; IF FACILITY DOES NOT DRAIN WITHIN 48 HOURS; IF REPLACEMENT OF DETERIORATING PIPES OR STRUCTURAL COMPONENTS IS REQUIRED; IF FACILITY RECONSTRUCTION IS REQUIRED; FOR REPAIR OF SEVERE EROSION; FOR AQUATIC VEGETATION CONTROL (CHEMICAL APPLICATION) IF LICENSING REQUIRED BY DE DEPARTMENT OF AGRICULTURE.
22. VEHICULAR TRAFFIC WITHIN THE CHANNEL IS PROHIBITED EXCEPT FOR MAINTENANCE ACTIVITIES.

VEGETATED CHANNEL SEQUENCE OF CONSTRUCTION

1. STRIP TOPSOIL FROM CHANNEL AREA AND STOCKPILE FOR REUSE DURING FINAL GRADING. EXCAVATE AND GRADE THE CHANNEL TO THE DESIGN DIMENSIONS SHOWN ON THE PLANS. KEEP EXCAVATION EQUIPMENT OUT OF THE CHANNEL TO AVOID UNNECESSARY COMPACTION.
2. INSTALL 24" NYLOPLAST YARD BASIN AT THE END OF THE VEGETATED CHANNEL TO THE DESIGN DIMENSIONS SHOWN ON THE PLANS. INSTALL OUTFALL PIPE FROM NYLOPLAST BASIN TO BOTTOM OF JACKSON'S TAX DITCH. INSTALL FLARED END SECTION AND RIP-RAP OUTLET PROTECTIONS AT BOTTOM OF PIPE RUN.
3. FOR FINAL GRADING, PROVIDE 6" OF TOPSOIL & SEED THE BOTTOM AND BANKS OF THE CHANNEL USING PERMANENT SEED MIX #4 AS SHOWN ON DNREC DETAIL SHEET DE-ESC-3.4.3. WATER VEGETATED CHANNEL WEEKLY OR MORE FREQUENTLY DURING EXTREME HEAT OR LIMITED PRECIPITATION UNTIL GRASS IS ESTABLISHED. NINETY PERCENT (90%) VEGETATIVE COVER IS REQUIRED BEFORE PROJECT CLOSEOUT.
4. PLACE EROSION CONTROL BLANKET NORTH AMERICAN GREEN SC150BN OR APPROVED EQUIVALENT ALONG THE CHANNEL BOTTOM AND SIDES AS SPECIFIED ON THE DNREC CHANNEL MATTING DETAIL DE-ESC-3.4.6.2.
5. PLACE 8" DIAMETER 3 MIL HDPE COMPOST FILTER LOGS ALONG THE TOP OF BANK ON THE PROJECT SIDE PER DNREC DETAIL DE-ESC-3.1.7 TO PREVENT SEDIMENT FROM ACCUMULATING IN THE SWALE.
6. PLACE AN 8" DIAMETER 3 MIL HDPE COMPOST FILTER LOG IN THE CHANNEL TO ACT AS A COMPOST CHECK DAM, PER DETAIL DE-ESC-3.3.6.2.
7. CONTACT DNREC FOR FINAL INSPECTION ONCE CHANNEL IS STABILIZED.
8. REMOVE PERIMETER CONTROLS WITH WRITTEN APPROVAL FROM THE DNREC SITE INSPECTOR.
9. CONTACT ENGINEER TO SURVEY VEGETATED CHANNEL AND SUBMIT POST-CONSTRUCTION VERIFICATION DOCUMENTS TO DNREC FOR APPROVAL. THE CONSTRUCTED SLOPE, BOTTOM WIDTH, DEPTH, AND LENGTH OF THE VEGETATED CHANNEL SHALL BE WITHIN 90% OF THE DESIGN.



VEGETATED CHANNEL
CROSS-SECTION
SCALE: HORIZ: 1"=30'
VERTICAL: 1"=3'



VEGETATED CHANNEL PROFILE
SCALE: HORIZ: 1"=30'
VERTICAL: 1"=3'



HI - GRADE EVIDENCE STORAGE BLDG. CITY OF HARRINGTON MISPILLION HUNDRED KENT COUNTY, DELAWARE

DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS • ENGINEERS • SURVEYORS
BALTIMORE, MARYLAND 410.770.1747
SALISBURY, MARYLAND 410.343.7991

APPENDIX		DNREC COMMENTS	ADD SEPARATE OIL WASTE LINE
DATE	1/22/2025		
1	2/27/2025		
2	5/15/2025	DNREC COMMENTS	
3	5/22/2025	DNREC COMMENTS	
4	6/12/2025	DNREC COMMENTS	
5	JULY 2025	DNREC COMMENTS	
6		BID SET	

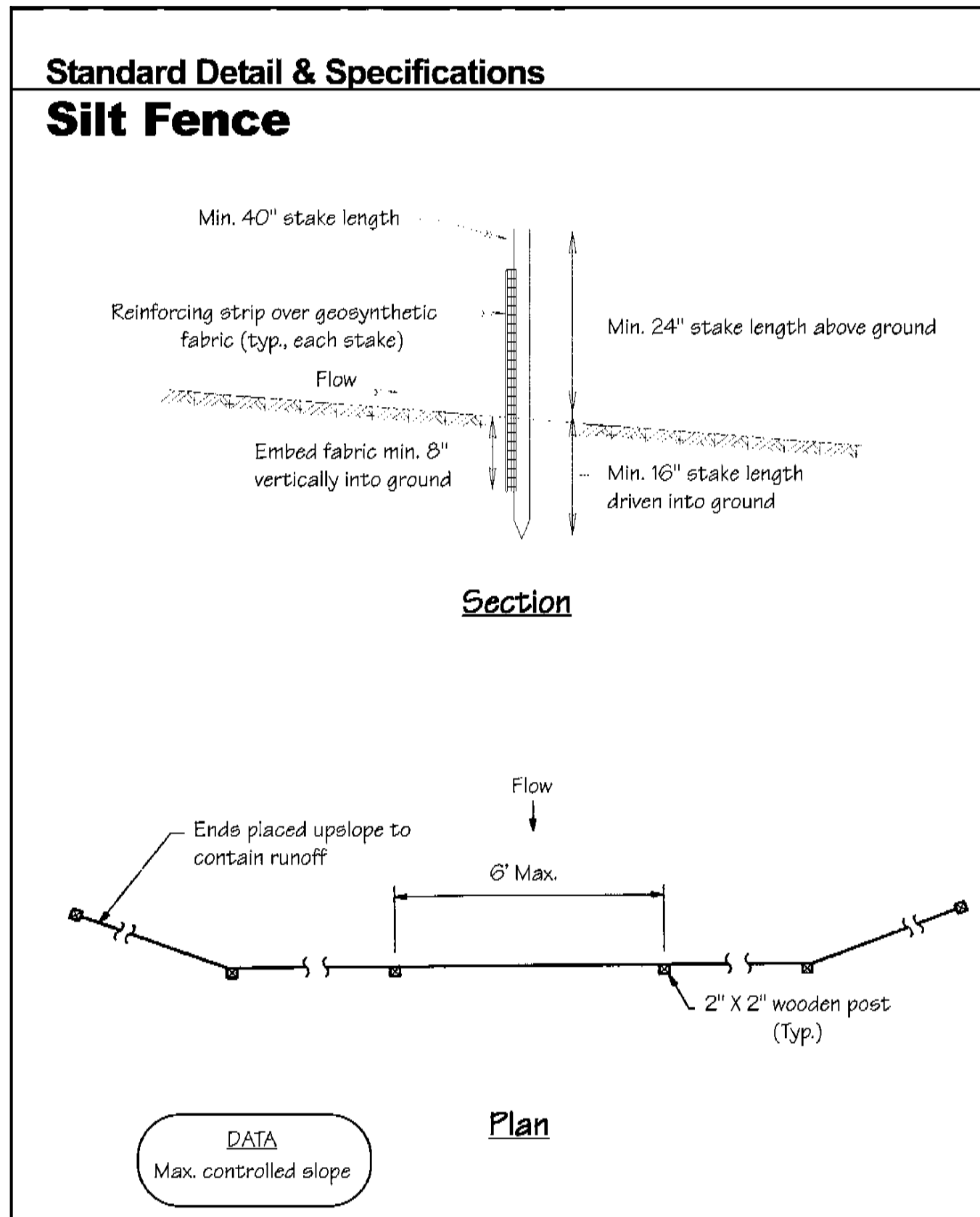
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Scale: 1" = 30'
Dwn.By: BAR
Proj.No.: 0586B053.B01

CONSTRUCTION SITE STORMWATER MANAGEMENT PLAN

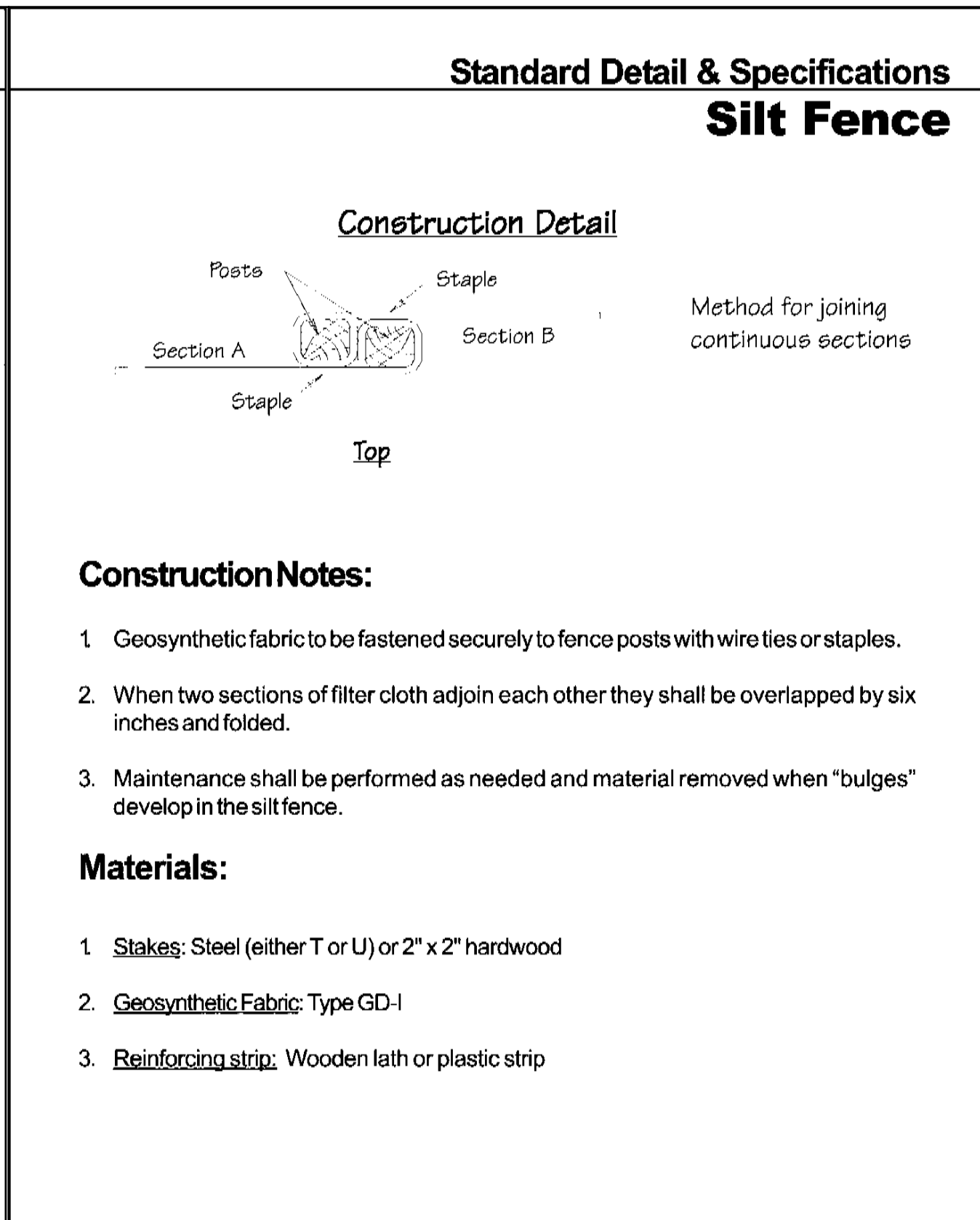
Dwg.No.:

C-403

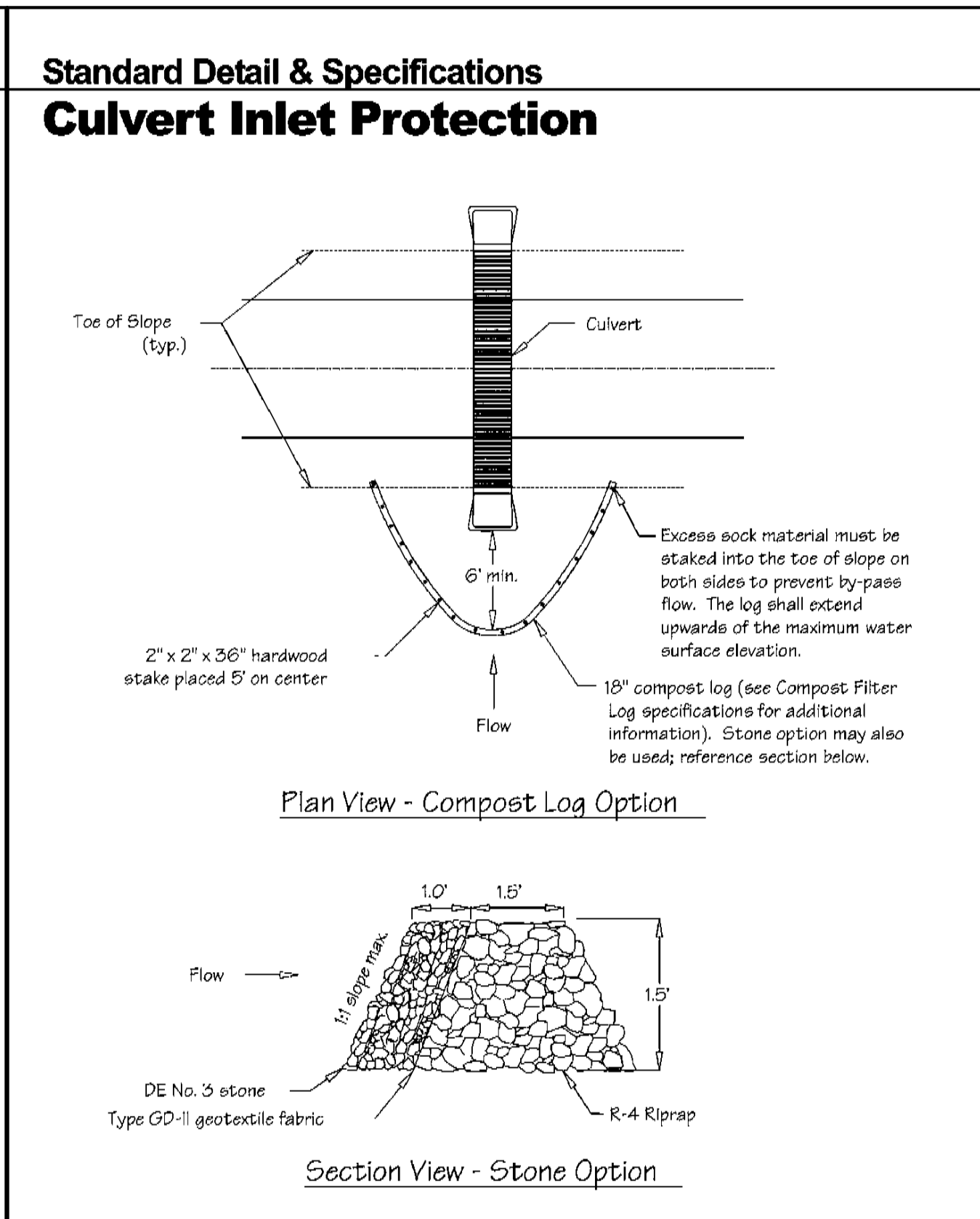
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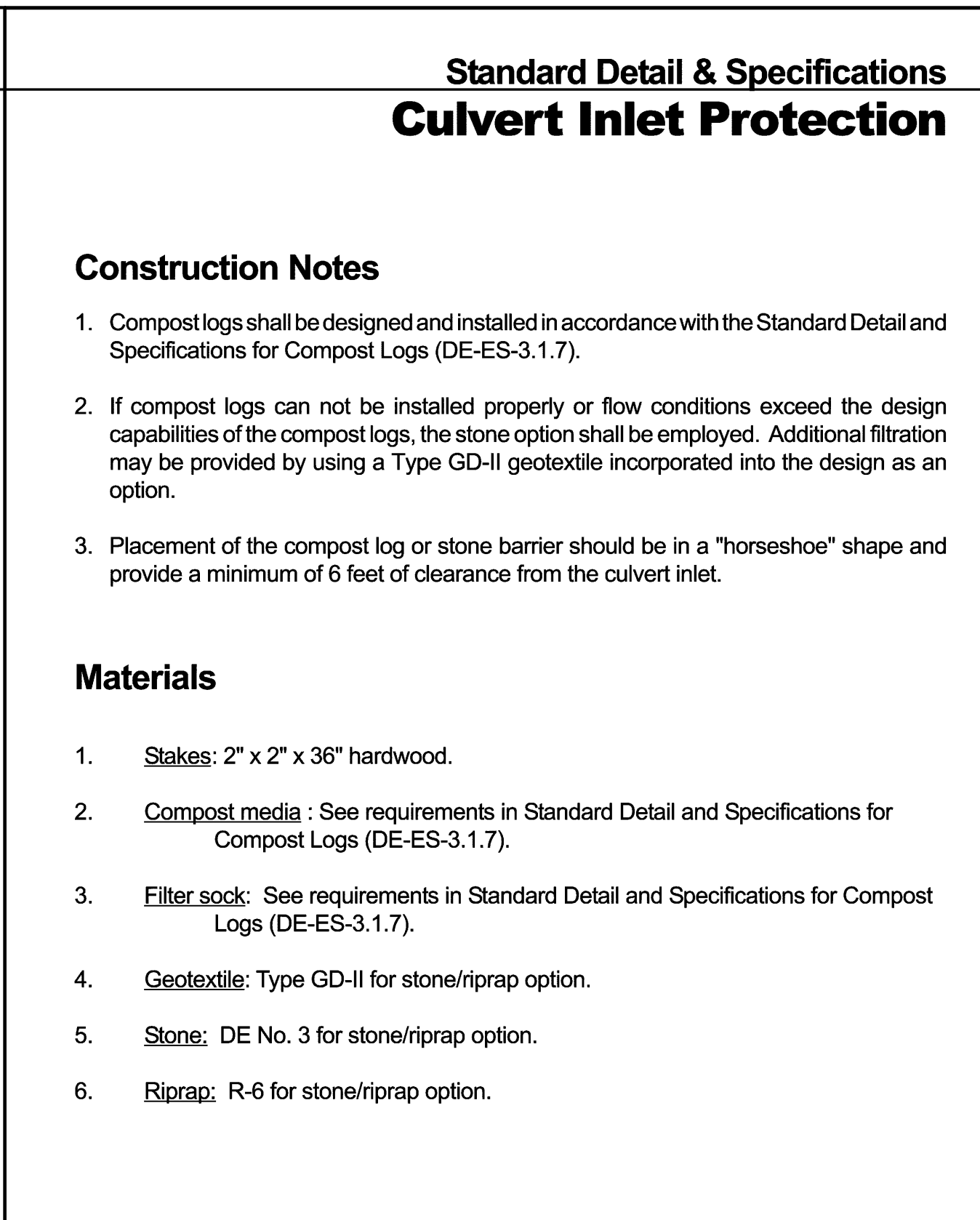
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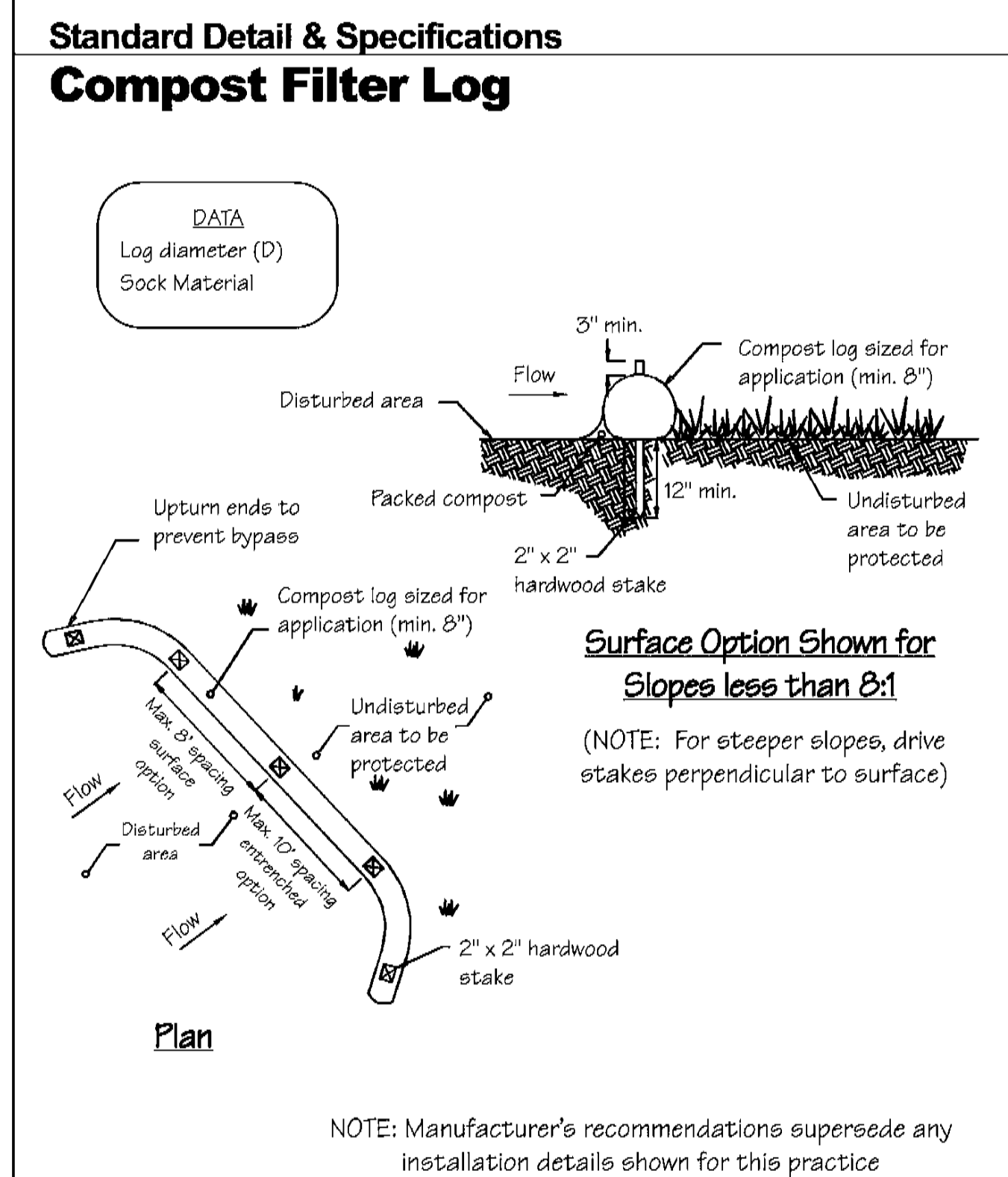
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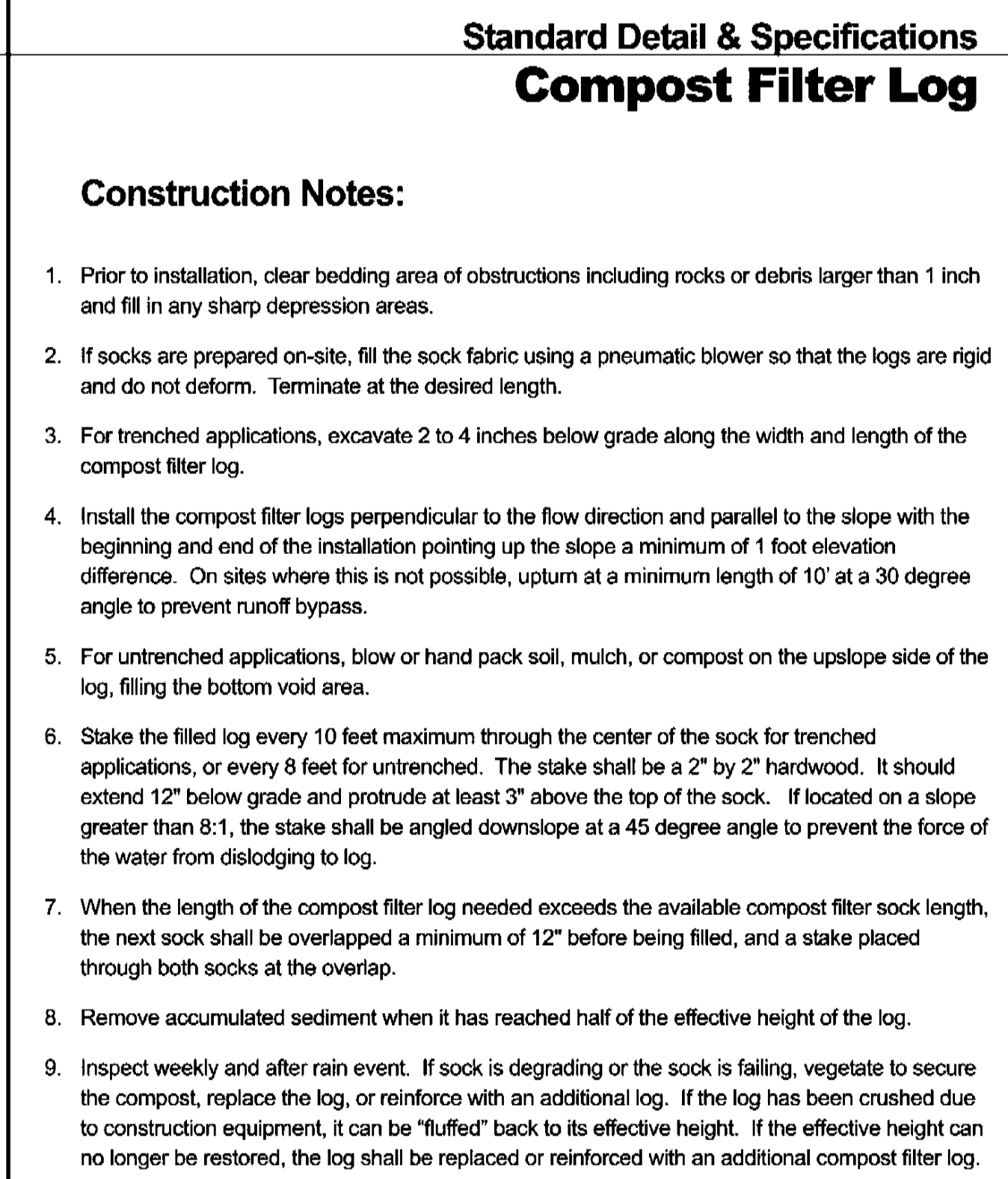
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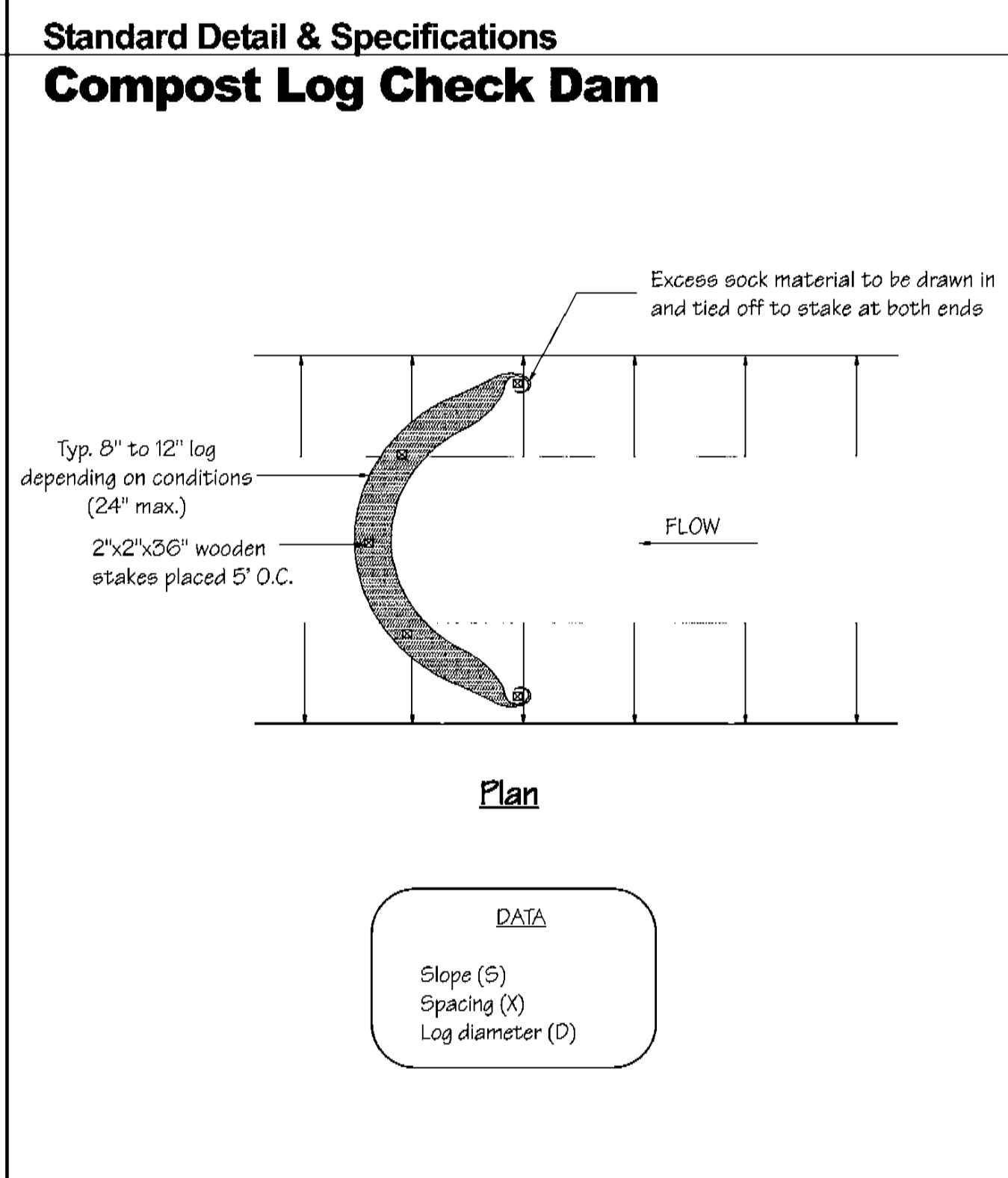
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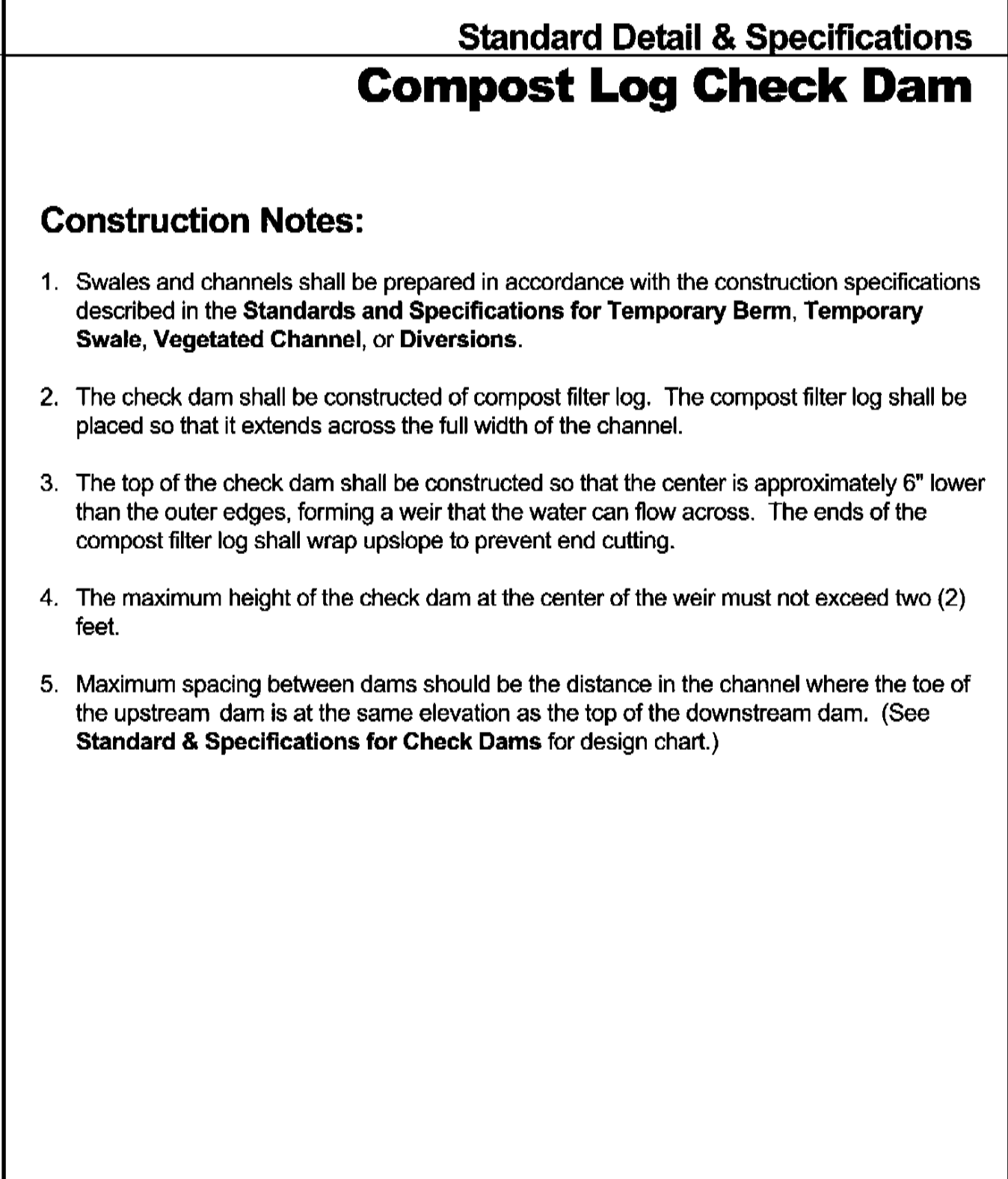
Source: Adapted from MD Sds & Specs for ESC & Filtrexx™ International	Symbol: CFL	Detail No. DE-ESC-3.1.7 Sheet 1 of 2 Effective January 2026
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Source: Adapted from MD Sds & Specs for ESC & Filtrexx™ International	Symbol: CFL	Detail No. DE-ESC-3.1.7 Sheet 2 of 2 Effective January 2026
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Source: Adapted from FILTREXX Technologies	Symbol: CCD	Detail No. DE-ESC-3.3.6.2 Sheet 1 of 2 Effective January 2026
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Source: Adapted from FILTREXX Technologies	Symbol: CCD	Detail No. DE-ESC-3.3.6.2 Sheet 2 of 2 Effective January 2026
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HI - GRADE EVIDENCE STORAGE BLDG.

MISPILLION HUNDRED

CITY OF HARRINGTON

KENT COUNTY, DELAWARE

DAVIS BOWEN & FRIEDEL, INC.

ARCHITECTS • ENGINEERS • SURVEYORS

SALESBURG, MARYLAND
410.770.1441

DATE	APPENDIX	DNREC COMMENTS	ADD SEPARATE OIL WASTE LINE
12/27/2025	1	DNREC COMMENTS	
2/27/2026	2	DNREC COMMENTS	
5/15/2026	3	DNREC COMMENTS	
5/22/2026	4	DNREC COMMENTS	
6/12/2026	5	DNREC COMMENTS	
JULY 2026	6	BID SET	

Date: AUGUST, 2025

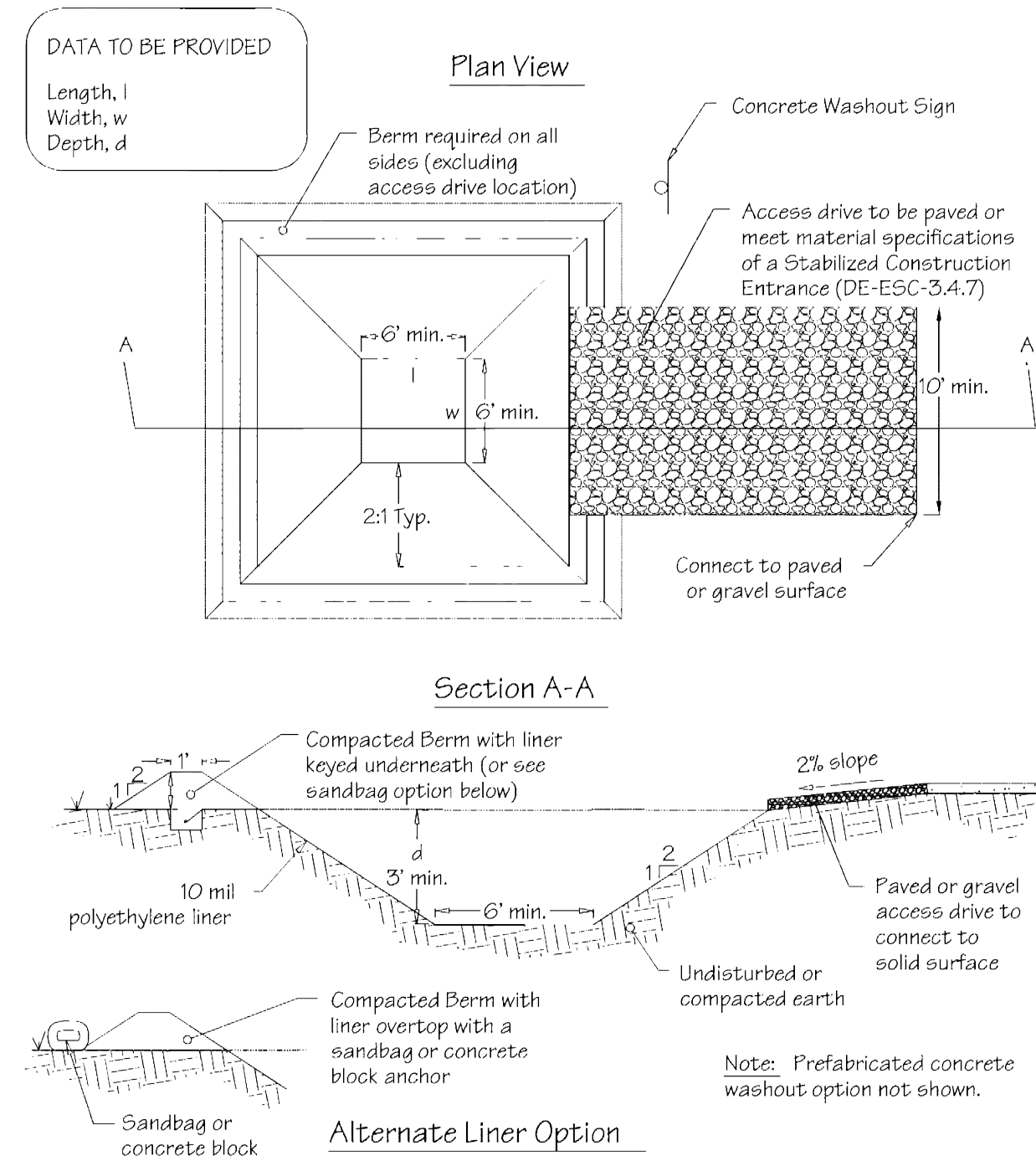
Scale: 1" = 30'

Dwn.By: BAR

Proj.No.: 0586B053.B01

CONSTRUCTION SITE DETAILS

Dwg No.:
C-404

Standard Detail & Specifications			Standard Detail & Specifications			Standard Detail & Specifications			Standard Detail & Specifications																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Topsoiling			Topsoiling			Concrete Washout			Concrete Washout																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Construction Notes:			Construction Notes (cont.)						Construction Notes:																																																																																																																																																																																																																																																																																																																																																																																																																																																		
1. Site Preparation (Where Topsoil is to be added)			a. Materials - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand or other soil as approved by an agronomist or soil scientist. It shall not have a mixture of contrasting textured subsoil and contain no more than 5 percent by volume of cinders, stones, slag, coarse fragment, gravel, sticks, roots, trash or other extraneous materials larger than 1-1/2 inches in diameter. Topsoil must be free of plants or plant parts of bermudagrass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistles, or others as specified. All topsoil shall be tested by a reputable laboratory for organic matter content, pH and soluble salts. A pH of 6.0 to 7.5 and an organic content of not less than 1.5 percent by weight is required. If pH value is less than 6.0 lime shall be applied and incorporated with the topsoil to adjust the pH to 6.5 or higher. Topsoil containing soluble salts greater than 500 parts per million shall not be used.						1. Locate washout area a minimum of 50 feet from open channels, stormdrain inlets, wetlands or waterbodies.																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Note: When topsoiling, maintain needed erosion and sediment control practices such as diversions, grade stabilization structures, berms, dikes, waterways and sediment basins.			Note: No sod or seed shall be placed on soil which has been treated with soil sterilant or chemicals used for weed control until sufficient time has elapsed to permit dissipation of toxic materials.						2. Locate washout area so that it is accessible to concrete equipment (service with a minimum 10 foot wide gravel accessway), but so it is not in a highly active construction area causing accidental damage.																																																																																																																																																																																																																																																																																																																																																																																																																																																		
a. Grading - Grades on the areas to be topsoiled which have been previously established shall be maintained.			b. Grading - The topsoil shall be uniformly distributed and compacted to a minimum of four (4) inches. Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets. Topsoil shall not be placed while in a frozen or muddy condition, when the subgrade is excessively wet, or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.						3. Minimum dimensions for prefabricated units are 4 feet by 4 feet by 1 foot deep with a minimum 4mil polyethylene plastic liner. Minimum dimensions for constructed concrete washout areas are 6 feet by 6 feet by 3 feet deep, with a minimum 10mil polyethylene liner, 2:1 side slopes, and a 1 foot high by 1 foot wide compacted fill berm.																																																																																																																																																																																																																																																																																																																																																																																																																																																		
b. Liming - Where the topsoil is either highly acid or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet). Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.			Note: Topsoil substitutes or amendments as approved by a qualified agronomist or soil scientist, may be used in lieu of natural topsoil. Compost material used to improve the percentage of organic matter shall be provided by a certified supplier.						4. The liner must be free of tears or holes and placed over smooth surfaces to prevent puncturing. For excavated washouts, anchor the liner underneath the berm or overlap with sandbags or concrete blocks to hold in place.																																																																																																																																																																																																																																																																																																																																																																																																																																																		
c. Tilling - After the areas to be topsoiled have been brought to grade, and immediately prior to dumping and spreading the topsoil, the subgrade shall be loosened by discing or by scarifying to a depth of a least 3 inches to permit bonding of the topsoil to the subsoil. Pack by passing a bulldozer up and down over the entire surface area of the slope to create horizontal erosion check slots to prevent topsoil from sliding down the slope.			Compost amendments that are intended to meet specific post-construction stormwater management goals shall further meet the requirements of Appendix 3.06.2 Post Construction Stormwater Management BMP Standards and Specifications, Section 14.0 Soil Amendments.						5. Provide a sign designating the washout area, and for large construction sites, provide signs throughout directing traffic to its location.																																																																																																																																																																																																																																																																																																																																																																																																																																																		
2. Topsoil Material and Application									6. Allow washed out concrete mixture to harden through evaporation of the wastewater. Once the facility has reached 75 percent of its capacity, remove the hardened concrete by reusing the broken aggregate onsite, recycling, or disposing of offsite. The hardened material can be buried on site with minimum of 1 foot of clean, compacted fill.																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Note: Topsoil salvaged from the existing site may often be used but it should meet the same standards as set forth in these specifications. The depth of topsoil to be salvaged shall be no more than the depth described as a representative profile for that particular soil type as described in the soil survey published by USDA-SCS in cooperation with Delaware Agricultural Experimental Station.									7. Apply a new liner before reusing the station for additional washouts after maintenance has occurred.																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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<table><tr><th colspan="12">TEMPORARY SEEDING BY RATES, DEPTHS AND DATES</th></tr><tr><th rowspan="2">Mix #</th><th rowspan="2">Species²</th><th colspan="2" rowspan="2">Seeding Rate</th><th colspan="8">Optimum Seeding Dates¹</th></tr><tr><th colspan="4">O = Optimum Planting Period</th><th colspan="4">A = Acceptable Planting Period</th></tr><tr><th></th><th></th><th></th><th></th><th colspan="2">Coastal Plain</th><th colspan="2">Piedmont</th><th colspan="2">All</th><th colspan="2"></th></tr><tr><th></th><th></th><th>lb/Ac⁴</th><th>lb/1000 sq.ft.</th><th>2/1-4/30</th><th>5/1-8/14</th><th>8/15-10/31</th><th>3/1-4/30</th><th>5/1-8/14</th><th>8/15-10/31</th><th>10/31-2/1</th><th></th></tr><tr><td>1</td><td>Barley</td><td>125</td><td>4</td><td>O</td><td>A</td><td>O</td><td>O</td><td>A</td><td>O</td><td></td><td>1-2 inches 2-3" sandy soils</td></tr><tr><td>2</td><td>Oats</td><td>125</td><td>4</td><td>O</td><td>A</td><td>A</td><td>O</td><td>A</td><td>A</td><td></td><td>1-2 inches 2-3" sandy soils</td></tr><tr><td>3</td><td>Rye</td><td>125</td><td>4</td><td>O</td><td>A</td><td>O</td><td>O</td><td>A</td><td>O</td><td>A</td><td>1-2 inches 2-3" sandy soils</td></tr><tr><td>4</td><td>Perennial Ryegrass</td><td>125</td><td>4</td><td>O</td><td>A</td><td>O</td><td>O</td><td>A</td><td>O</td><td></td><td>0.5 inches 1-2" sandy soils</td></tr><tr><td>5</td><td>Annual Ryegrass</td><td>125</td><td>4</td><td>O</td><td>A</td><td>O</td><td>O</td><td>A</td><td>O</td><td>A</td><td>0.5 inches 1-2" sandy soils</td></tr><tr><td>6</td><td>Winter Wheat</td><td>125</td><td>4</td><td>O</td><td>A</td><td>O</td><td>O</td><td>A</td><td>O</td><td>A</td><td>1-2 inches 2-3" sandy soils</td></tr><tr><td>7</td><td>Foxtail Millet</td><td>30 PLS</td><td>0.7</td><td></td><td>O</td><td></td><td></td><td>O</td><td></td><td></td><td>0.5 inches 1-2" sandy soils</td></tr><tr><td>8</td><td>Pearl Millet</td><td>20 PLS</td><td>0.5</td><td></td><td>O</td><td></td><td></td><td>O</td><td></td><td></td><td>0.5 inches 1-2" sandy soils</td></tr></table> 1. Winter seeding requires 3 tons per acre of straw mulch for proper stabilization. 2. May be planted throughout summer if soil moisture is adequate or seeded area can be irrigated. 3. Applicable on slopes 3:1 or less. 4. Use varieties currently recommended for Delaware. Contact a County Extension Office for information. 5. Warm season grasses such as Millet may be used between 5/1 and 9/1 if desired. Seed at 3-5 lbs. per acre. Good on low fertility and acid areas. Seed after frost through summer at a depth of 0.5". NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.			TEMPORARY SEEDING BY RATES, DEPTHS AND DATES												Mix #	Species ²	Seeding Rate		Optimum Seeding Dates ¹								O = Optimum Planting Period				A = Acceptable Planting Period								Coastal Plain		Piedmont		All						lb/Ac ⁴	lb/1000 sq.ft.	2/1-4/30	5/1-8/14	8/15-10/31	3/1-4/30	5/1-8/14	8/15-10/31	10/31-2/1		1	Barley	125	4	O	A	O	O	A	O		1-2 inches 2-3" sandy soils	2	Oats	125	4	O	A	A	O	A	A		1-2 inches 2-3" sandy soils	3	Rye	125	4	O	A	O	O	A	O	A	1-2 inches 2-3" sandy soils	4	Perennial Ryegrass	125	4	O	A	O	O	A	O		0.5 inches 1-2" sandy soils	5	Annual Ryegrass	125	4	O	A	O	O	A	O	A	0.5 inches 1-2" sandy soils	6	Winter Wheat	125	4	O	A	O	O	A	O	A	1-2 inches 2-3" sandy soils	7	Foxtail Millet	30 PLS	0.7		O			O			0.5 inches 1-2" sandy soils	8	Pearl Millet	20 PLS	0.5		O			O			0.5 inches 1-2" sandy soils	<table><tr><th colspan="12">PERMANENT SEEDING AND SEEDING DATES</th></tr><tr><th colspan="2" rowspan="2">Seeding Mixtures</th><th colspan="2" rowspan="2">Seeding Rate¹</th><th colspan="8">Optimum Seeding Dates²</th></tr><tr><th colspan="4">O = Optimum Planting Period</th><th colspan="4">A = Acceptable Planting Period</th></tr><tr><th>Mix No.</th><th>Certified Seed³</th><th>lb/Ac</th><th>lb/1000 sq.ft.</th><th>2/1-4/30</th><th>5/1-8/14</th><th>8/15-10/31</th><th>3/1-4/30</th><th>5/1-8/14</th><th>8/15-10/31</th><th>10/31-2/1</th><th>Remarks</th></tr><tr><td>1</td><td>Tall Fescue Canada Wild Rye</td><td>140 10</td><td>3.2 0.23</td><td>A</td><td>O</td><td>A</td><td>A</td><td>O</td><td>A</td><td>O</td><td>Good erosion control mix. Tolerant of low fertility soils. Good for droughty sites</td></tr><tr><td>2</td><td>Deertongue Sheep Fescue White Clover</td><td>30 30 10</td><td>0.69 0.69 0.35</td><td>A</td><td>O</td><td>A</td><td>A</td><td>O</td><td>A</td><td></td><td>Good erosion control mix. Tolerant of low fertility soils. Legume that fixes atmospheric N into soil</td></tr><tr><td>3</td><td>Tall Fescue (Turf-type) or Strong Creeping Red Fescue or Perennial Ryegrass plus Flaropa⁵</td><td>50 50 50 15</td><td>1.15 1.15 1.15 0.34</td><td>O</td><td>A⁴</td><td>O</td><td>O</td><td>A⁴</td><td>O</td><td></td><td>Good erosion control mix. Tall Fescue for droughty conditions. Creeping Red Fescue for heavy shade. Flaropa to suppress woody vegetation.</td></tr><tr><td>4</td><td>Strong Creeping Red Fescue Kentucky Bluegrass Perennial Ryegrass or Redtop plus White Clover⁵</td><td>100 70 15 5</td><td>2.3 1.61 0.35 0.11</td><td>O</td><td>A⁴</td><td>O</td><td>O</td><td>A⁴</td><td>O</td><td></td><td>Suitable waterway mix. Canada Bluegrass more drought tolerant. Use Redtop for increased drought tolerance.</td></tr><tr><td>5</td><td>Switchgrass^{6,7} or Coastal Paragrass Big Bluestem Little Bluestem Indian Grass</td><td>100 70 5 5</td><td>0.23 0.23 0.11 0.1</td><td></td><td>O</td><td></td><td></td><td>O</td><td></td><td></td><td>Native warm-season mixture. Tolerant of low fertility soils. Drought tolerant. Poor shade tolerance. N fertilizer discouraged - weeds</td></tr><tr><td>6</td><td>Tall Fescue (Turf-type) (Blend of 3 cultivars)</td><td>150</td><td>3.5</td><td>O</td><td>A⁴</td><td>O</td><td>O</td><td>A⁴</td><td>O</td><td></td><td>Managed filter strip for nutrient uptake.</td></tr><tr><td>7</td><td>Tall Fescue Ky. Bluegrass (Blend) Perennial Ryegrass</td><td>150 30 20</td><td>3.5 0.46 0.46</td><td>O</td><td>A⁴</td><td>O</td><td>O</td><td>A⁴</td><td>O</td><td></td><td>Three cultivars of Kentucky Bluegrass. Traffic tolerant.</td></tr><tr><td>8</td><td>Big Bluestem⁷ Indian Grass⁷ Little Bluestem⁷ Creeping Red Fescue plus one of: Partridge Pea Bush Clover Wild Indigo Showy Tick-Trefoil</td><td>10 10 8 30 5 3 3 2</td><td>0.23 0.23 0.18 0.69 0.11 0.07 0.07 0.05</td><td>O</td><td>A⁴</td><td></td><td>O</td><td>A⁴</td><td></td><td></td><td>All species are native. Indian Grass and Bluestem have fully seeds. Plant with a specialized native seed drill. Creeping Red Fescue will provide erosion protection while the warm season grasses get established.</td></tr></table> NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.			PERMANENT SEEDING AND SEEDING DATES												Seeding Mixtures		Seeding Rate ¹		Optimum Seeding Dates ²								O = Optimum Planting Period				A = Acceptable Planting Period				Mix No.	Certified Seed ³	lb/Ac	lb/1000 sq.ft.	2/1-4/30	5/1-8/14	8/15-10/31	3/1-4/30	5/1-8/14	8/15-10/31	10/31-2/1	Remarks	1	Tall Fescue Canada Wild Rye	140 10	3.2 0.23	A	O	A	A	O	A	O	Good erosion control mix. Tolerant of low fertility soils. Good for droughty sites	2	Deertongue Sheep Fescue White Clover	30 30 10	0.69 0.69 0.35	A	O	A	A	O	A		Good erosion control mix. Tolerant of low fertility soils. Legume that fixes atmospheric N into soil	3	Tall Fescue (Turf-type) or Strong Creeping Red Fescue or Perennial Ryegrass plus Flaropa ⁵	50 50 50 15	1.15 1.15 1.15 0.34	O	A ⁴	O	O	A ⁴	O		Good erosion control mix. Tall Fescue for droughty conditions. Creeping Red Fescue for heavy shade. 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Traffic tolerant.	8	Big Bluestem ⁷ Indian Grass ⁷ Little Bluestem ⁷ Creeping Red Fescue plus one of: Partridge Pea Bush Clover Wild Indigo Showy Tick-Trefoil	10 10 8 30 5 3 3 2	0.23 0.23 0.18 0.69 0.11 0.07 0.07 0.05	O	A ⁴		O	A ⁴			All species are native. Indian Grass and Bluestem have fully seeds. Plant with a specialized native seed drill. 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Well drained soils, full sun.</td></tr><tr><td>12</td><td>Tall Fescue Perennial Ryegrass Sheep Fescue</td><td>100 25 25</td><td>2.3 0.57 0.57</td><td>O</td><td>A⁴</td><td>O</td><td>O</td><td>A⁴</td><td>O</td><td></td><td>Moderate value, low maintenance, traffic tolerant.</td></tr><tr><td>13</td><td>Creeping Red Fescue Chewings Fescue Rough Bluegrass Kentucky Bluegrass</td><td>50 50 20 20</td><td>1.15 1.15 0.4 0.4</td><td>O</td><td>A⁴</td><td>O</td><td>O</td><td>A⁴</td><td>O</td><td></td><td>Shade tolerant, moderate traffic tolerance, moderate maintenance.</td></tr><tr><td>14</td><td>Creeping Red Fescue Rough Bluegrass or Chewings Fescue</td><td>50 90</td><td>1.15 2.1</td><td>O</td><td>A⁴</td><td>O</td><td>O</td><td>A⁴</td><td>O</td><td></td><td>Shade tolerant, moisture tolerant.</td></tr><tr><td>15</td><td>K-31 Tall Fescue</td><td>150</td><td>3.5</td><td>O</td><td>A⁴</td><td>O</td><td>O</td><td>A⁴</td><td>O</td><td></td><td>Monoculture, but performs well alone in lawns. Discouraged.</td></tr></table> 1. When hydroseeding is the chosen method of application, the total rate of seed should be increased by 25%. 2. Winter seeding requires 3 tons per acre of straw mulch. Planting dates listed above are average for Delaware. These dates may require adjustment to reflect local conditions. 3. All seed shall meet the minimum purity and minimum germination percentages recommended by the Delaware Department of Agriculture. The maximum % of weed seeds shall be in accordance with Chapter 15, Title 3 of the Delaware Code. 4. Turf-type species may be planted throughout summer if soil moisture is adequate or seeded area can be irrigated. 5. It is recommended that all leguminous seed be inoculated. 6. Warm season grass mix and Switchgrass cannot be mowed more than 4 times per year. 7. Warm season grasses require a soil temperature of at least 50 degrees in order to germinate and will remain dormant until then. NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.			PERMANENT SEEDING AND SEEDING DATES (cont.)												Seeding Mixtures		Seeding Rate ¹		Optimum Seeding Dates ²								O = Optimum Planting Period				A = Acceptable Planting Period				Mix No.	Certified Seed ³	lb/Ac	lb/1000 sq.ft.	2/1-4/30	5/1-8/14	8/15-10/31	3/1-4/30	5/1-8/14	8/15-10/31	10/31-2/1	Remarks	9	Redtop Creeping Bentgrass Sheep Fescue Rough Bluegrass	75 35 30 45	1.72 0.8 0.69 1	O	A ⁴	O	O	A ⁴	O		Quick stabilization of disturbed sites and waterways	10	Switchgrass ⁶	10	0.23	A		O	A		O		Good erosion control, wildlife cover and wetland revegetation.	Residential Lawns												11	Tall Fescue Perennial Ryegrass Kentucky Bluegrass Blend	100 25 30	2.3 0.57 0.69	O	A ⁴	O	O	A ⁴	O		High value, high maintenance, light traffic, irrigation necessary. 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The seedbed should be well prepared, loose, uniform, and free of large clods, rocks, and other objectionable material. The soil surface should not be compacted or crusted. 3. Soil Amendments a. Lime - Apply liming materials based on the recommendations of a soil test in accordance with the approved nutrient management plan. If a nutrient management plan is not required, apply dolomitic limestone at the rate of 1 to 2 tons per acre. Apply limestone uniformly and incorporate into the top 4 to 6 inches of soil. b. Fertilizer - Apply fertilizer based on the recommendations of a soil test in accordance with the approved nutrient management plan. If a nutrient management plan is not required, apply a formulation of 10-10-10 at the rate of 600 pounds per acre. Apply fertilizer uniformly and incorporate into the top 4 to 6 inches of soils. 4. Seeding a. For temporary stabilization, select a mixture from Sheet 1. For a permanent stabilization, select a mixture from Sheet 2 or Sheet 3 depending on the conditions. Alternative seed mixes may be used with prior approval from the Department or Delegated Agency. b. Apply seed uniformly with a broadcast seeder, drill, cultipacker seeder or hydroseeder. All seed will be applied at the recommended rate and planting depth. c. Seed that has been broadcast should be covered by raking or dragging and then lightly tamped into place using a roller or cultipacker. If hydroseeding is used and the seed and fertilizer is mixed, they will be mixed on site and the seeding shall be done immediately and without interruption. 5. Mulching All mulching shall be done in accordance with detail DE-ESC-3.4.5.		
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5	Switchgrass ^{6,7} or Coastal Paragrass Big Bluestem Little Bluestem Indian Grass	100 70 5 5	0.23 0.23 0.11 0.1		O			O			Native warm-season mixture. Tolerant of low fertility soils. Drought tolerant. Poor shade tolerance. N fertilizer discouraged - weeds																																																																																																																																																																																																																																																																																																																																																																																																																																																
6	Tall Fescue (Turf-type) (Blend of 3 cultivars)	150	3.5	O	A ⁴	O	O	A ⁴	O		Managed filter strip for nutrient uptake.																																																																																																																																																																																																																																																																																																																																																																																																																																																
7	Tall Fescue Ky. Bluegrass (Blend) Perennial Ryegrass	150 30 20	3.5 0.46 0.46	O	A ⁴	O	O	A ⁴	O		Three cultivars of Kentucky Bluegrass. Traffic tolerant.																																																																																																																																																																																																																																																																																																																																																																																																																																																
8	Big Bluestem ⁷ Indian Grass ⁷ Little Bluestem ⁷ Creeping Red Fescue plus one of: Partridge Pea Bush Clover Wild Indigo Showy Tick-Trefoil	10 10 8 30 5 3 3 2	0.23 0.23 0.18 0.69 0.11 0.07 0.07 0.05	O	A ⁴		O	A ⁴			All species are native. Indian Grass and Bluestem have fully seeds. Plant with a specialized native seed drill. Creeping Red Fescue will provide erosion protection while the warm season grasses get established.																																																																																																																																																																																																																																																																																																																																																																																																																																																
PERMANENT SEEDING AND SEEDING DATES (cont.)																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Seeding Mixtures		Seeding Rate ¹		Optimum Seeding Dates ²																																																																																																																																																																																																																																																																																																																																																																																																																																																							
				O = Optimum Planting Period				A = Acceptable Planting Period																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Mix No.	Certified Seed ³	lb/Ac	lb/1000 sq.ft.	2/1-4/30	5/1-8/14	8/15-10/31	3/1-4/30	5/1-8/14	8/15-10/31	10/31-2/1	Remarks																																																																																																																																																																																																																																																																																																																																																																																																																																																
9	Redtop Creeping Bentgrass Sheep Fescue Rough Bluegrass	75 35 30 45	1.72 0.8 0.69 1	O	A ⁴	O	O	A ⁴	O		Quick stabilization of disturbed sites and waterways																																																																																																																																																																																																																																																																																																																																																																																																																																																
10	Switchgrass ⁶	10	0.23	A		O	A		O		Good erosion control, wildlife cover and wetland revegetation.																																																																																																																																																																																																																																																																																																																																																																																																																																																
Residential Lawns																																																																																																																																																																																																																																																																																																																																																																																																																																																											
11	Tall Fescue Perennial Ryegrass Kentucky Bluegrass Blend	100 25 30	2.3 0.57 0.69	O	A ⁴	O	O	A ⁴	O		High value, high maintenance, light traffic, irrigation necessary. Well drained soils, full sun.																																																																																																																																																																																																																																																																																																																																																																																																																																																
12	Tall Fescue Perennial Ryegrass Sheep Fescue	100 25 25	2.3 0.57 0.57	O	A ⁴	O	O	A ⁴	O		Moderate value, low maintenance, traffic tolerant.																																																																																																																																																																																																																																																																																																																																																																																																																																																
13	Creeping Red Fescue Chewings Fescue Rough Bluegrass Kentucky Bluegrass	50 50 20 20	1.15 1.15 0.4 0.4	O	A ⁴	O	O	A ⁴	O		Shade tolerant, moderate traffic tolerance, moderate maintenance.																																																																																																																																																																																																																																																																																																																																																																																																																																																
14	Creeping Red Fescue Rough Bluegrass or Chewings Fescue	50 90	1.15 2.1	O	A ⁴	O	O	A ⁴	O		Shade tolerant, moisture tolerant.																																																																																																																																																																																																																																																																																																																																																																																																																																																
15	K-31 Tall Fescue	150	3.5	O	A ⁴	O	O	A ⁴	O		Monoculture, but performs well alone in lawns. Discouraged.																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Delaware ESC Handbook		DE-ESC-3.4.3 Sheet 1 of 4 Effective January 2026	Delaware ESC Handbook		DE-ESC-3.4.3 Sheet 2 of 4 Effective January 2026	Delaware ESC Handbook		DE-ESC-3.4.3 Sheet 3 of 4 Effective January 2026	Delaware ESC Handbook		DE-ESC-3.4.3 Sheet 4 of 4 Effective January 2026																																																																																																																																																																																																																																																																																																																																																																																																																																																

Standard Detail & Specifications

Mulching

1. Materials and Amounts

a. *Straw* - Straw shall be unrotted small grain straw applied at the rate of 1-1/2 to 2 tons per acre, or 70 to 90 pounds (two bales) per 1,000 square feet. Mulch materials shall be relatively free of weeds and shall be free of noxious weeds such as; thistles, Johnsongrass, and quackgrass. Spread mulch uniformly by hand or mechanically. For uniform distribution of hand spread mulch, divide area into approximately 1,000 square feet sections and place 70-90 pounds (two bales) of mulch in each section.

b. *Wood chips* - Apply at the rate of approximately 6 tons per acre or 275 pounds per 1,000 square feet when available and when feasible. These are particularly well suited for utility and road rights-of-way. If wood chips are used, increase the application rate of nitrogen fertilizer by 20 pounds of N per acre (200 pounds of 10-10-10 or 66 pounds of 30-0-0 per acre).

c. *Hydraulically applied mulch* -The following conditions apply to hydraulically applied mulch:

i. Definitions:

a. Wood fiber mulch shall consist of specially prepared wood that has been processed to a uniform state, is packaged for sale as a hydraulic mulch for use with hydraulic seeding equipment, and consists of a minimum of 70% virgin or recycled wood fiber combined with 30% paper fiber and additives.

b. Blended fiber mulch shall consist of any hydraulic mulch that contains greater than 30% paper fiber. The paper component must consist of specially prepared paper that has been processed to a uniform fibrous state and is packaged for sale as a hydraulic mulch for use with hydraulic seeding equipment.

c. A bonded fiber matrix (BFM) consists of long strand, specially prepared wood fibers that have been processed to a uniform state held together by a water resistant bonding agent. BFMs shall contain no paper (cellulose) mulch but may contain small percentages of synthetic fibers to enhance performance.

d. Refer to **Figure 3.4.5a** for conditions and limitations of use for each of the above categories of hydraulic mulch.

ii. All components of the hydraulically applied mulches shall be pre-packaged by the manufacturer to assure material performance. Field mixing of the mulch components is acceptable, but must be done per manufacturers recommendations to ensure the proper results.

iii. Hydraulic mulches shall be applied with a viable seed and at manufacturer's recommended rates. Increased rates may be necessary based on site conditions.

iv. Hydraulically applied mulches and additives shall be mixed according to manufacturers recommendations.

iv. Materials within this category shall only be used when hydraulically applied mulch has been specified for use on the approved Sediment and Stormwater Plan, or supplemental approval from the plan approval agency has been obtained in writing for a specific area.

Source:

Delaware ESC Handbook & FiltrexTM International

Symbol:

Detail No.

DE-ESC-3.4.5

Sheet 1 of 3

Effective January 2026

Standard Detail & Specifications

Mulching

v. Application:

a. Apply product to geotechnically stable slopes that have been designed and constructed to divert runoff away from the face of the slope.

b. Do not apply to saturated soils, or if precipitation is anticipated within 24-48 hours.

c. During the spring (March 1 to May 31) and fall (September 1 to November 30) seasons, hydraulic mulches may be applied in a one-step process where all components are mixed together in single-tank loads. It is recommended that the product be applied from opposing directions to achieve optimum soil coverage.

d. During the summer (June 1 to August 31) and winter (December 1 to February 28) seasons, the following two-step process is required:

Step One - Mix and apply seed and soil amendments with a small amount of mulch for visual metering.

Step Two - Mix and apply mulch at manufacturers recommended rates over freshly seeded surfaces. Apply from opposing directions to achieve optimum soil coverage.

e. Minimum curing temperature is 40° F (4° C). The best results and more rapid curing are achieved at temperatures exceeding 60° F (15° C). Curing times may be accelerated in high temperature, low humidity conditions on dry soils.

vi. Recommended application rates are for informational purposes only. Conformance with this standard and specification shall be performance-based and requires **100% soil coverage**. Any areas with bare soil showing shall be top dressed until full coverage is achieved.

d. *Compost blanket (CB)* - Loosely applied with a pneumatic blower so that a 1" compost blanket uniformly covers the **soil with 100% coverage**. This application can be used with seed to promote germination by applying the approved seed mix directly into the loosely blown compost. The compost blanket performs best on slopes less than 2:1 and requires no mulch anchoring.

2. **Anchoring mulch** - Mulch must be anchored immediately to minimize loss by wind or water. This may be done by one of the following methods, depending upon size of area, erosion hazard, and cost.

a. *Crimping* - A crimper is a tractor drawn implement designed to punch and anchor mulch into the top two (2) inches of soil. This practice affords maximum erosion control but is limited to flatter slopes where equipment can operate safely. On sloping land, crimping should be done on the contour whenever possible.

b. *Tracking* - Tracking is the process of cutting mulch (usually straw) into the soil using a bulldozer or other equipment that runs on cleated tracks. Tracking is used primarily on slopes 3:1 or steeper and should be done up and down the slope with cleat marks running across the slope.

c. *Liquid mulch binders* - Applications of liquid mulch binders should be heavier at edges, in valleys, and at crests of banks and other areas where the mulch will be moved by wind or water. All other areas should have a uniform application of binder. The use of synthetic binders is the preferred method of mulch binding and should be applied at the rates recommended by the manufacturer.

d. *Paper fiber* - The fiber binder shall be applied at a net dry weight of 750 lbs/ac. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons.

e. *Nettings* - Biodegradable nettings may be used to secure straw mulch. Install and secure according to the manufacturer's recommendations. Photodegradable or synthetic nettings are not acceptable.

Source:

Delaware ESC Handbook & FiltrexTM International

Symbol:

Detail No.

DE-ESC-3.4.5

Sheet 2 of 3

Effective January 2026

Standard Detail & Specifications

Mulching

MULCHING MATERIAL SELECTION GUIDE

	Sept. 1 to Nov. 30	June 1 to Aug. 31	March 1 to May 31	Dec. 1 to Feb. 28/29	Type of Mulch / App. Rate*	Percent Slope
Wash rack (optional)	OK	OK	OK	OK	Wash rack (optional)	Less than 2%
DE #3 Stone	OK	OK	OK	OK	Wood Fiber @ 1000 lbs/ac. min.	2% to 15%
	OK	OK	OK	OK	BFM @ 1000 lbs/ac. min.	16% to 19.5%
	OK	OK	OK	OK	Straw @ 2 tons/ac. min.	20% to 24.5%
	OK	OK	OK	OK	1" Compost Blanket (CB)	25% to 35%
	OK	OK	OK	OK	Stabilization Matting**	35% and up
	OK	OK	OK	OK	Wood Fiber @ 2000 lbs/ac. min.	
	OK	OK	OK	OK	BFM @ 2000 lbs/ac. min.	
	OK	OK	OK	OK	Straw @ 2 tons/ac. min.	
	OK	OK	OK	OK	1" Compost Blanket (CB)	
	OK	OK	OK	OK	Stabilization Matting**	
	OK	OK	OK	OK	Wood Fiber @ 3500-4000 lbs/ac. min.	
	OK	OK	OK	OK	BFM @ 3500-4000 lbs/ac. min.	
	OK	OK	OK	OK	Straw @ 2 tons/ac. min.	
	OK	OK	OK	OK	1" Compost Blanket (CB)	
	OK	OK	OK	OK	Stabilization Matting**	
	OK	OK	OK	OK	Wood Fiber @ 2500-3000 lbs/ac. min.	
	OK	OK	OK	OK	BFM @ 2500-3000 lbs/ac. min.	
	OK	OK	OK	OK	Straw @ 2 tons/ac. min.	
	OK	OK	OK	OK	1" Compost Blanket (CB)	
	OK	OK	OK	OK	Stabilization Matting**	
	OK	OK	OK	OK	Wood Fiber @ 1000-1500 lbs/ac. min.	
	OK	OK	OK	OK	BFM @ 1000-1500 lbs/ac. min.	
	OK	OK	OK	OK	Straw @ 2 tons/ac. min.	
	OK	OK	OK	OK	1" Compost Blanket (CB)	
	OK	OK	OK	OK	Stabilization Matting**	

* Note: Manufacturer Recommended Rates for informational purposes only. Performance standard requires 100% soil coverage.

** Note: Stabilization Matting must be applied in accordance with Section 3.4.6 of the Delaware ESC Handbook.

*** Note: Straw: Stable to use during this time period.

xxx - Not acceptable to use during this time period.

All application rates are minimums

Source:

Delaware ESC Handbook & FiltrexTM International

Symbol:

Detail No.

DE-ESC-3.4.5

Sheet 3 of 3

Effective January 2026

Standard Detail & Specifications

Stabilized Construction Entrance

Plan

Profile

Section A-A (Std.)

Source:

Adapted from VA ESC Handbook

Symbol:

SCE

Detail No.

DE-ESC-3.4.7

Sheet 1 of 2

Effective January 2026

Standard Detail & Specifications

Stabilization Matting - Channel

Perspective

CRITICAL POINTS

A. Overlaps and seams

B. Projected waterline

C. Channel bottom/side slope vertices

Note: Horizontal staple spacing should be altered if necessary to allow staples to secure the critical points along the channel surface.

Use manufacturer's recommendations for stapling patterns for channel installations.

Source:

Adapted from North American Green, Inc.

Symbol:

SM-C

Detail No.

DE-ESC-3.4.6.2

Sheet 1 of 3

Effective January 2026

Standard Detail & Specifications

Stabilization Matting - Channel

Construction Notes:

1. Prepare soil before installing matting, including application of lime, fertilizer, and seed.

2. Begin at the top of the channel by anchoring the mat in a 6" deep X 6" wide trench. Backfill and compact the trench after stapling.

3. Roll center mat in direction of water flow on bottom of channel.

4. Place mats end over end (shingle style) with a 6" overlap, use a double row of staggered staples 4" apart to secure mats.

5. Full Length edge of mats at top of side slopes must be anchored in 6" deep X 6" wide trench; backfill and compact the trench after stapling.

6. Mats on side slopes must be overlapped 4" over the center mat and stapled.

7. In high flow channel applications, a staple check slot is recommended at 30 to 40 foot intervals. Use a row of staples 4" apart over entire width of the channel. Place a second row 4" below the first row in a staggered pattern.

8. The terminal end of the mats must be anchored in a 6" X 6" wide trench. Backfill and compact the trench after stapling.

Source:

Adapted from North American Green, Inc.

Symbol:

SM-C

Detail No.

DE-ESC-3.4.6.2

Sheet 2 of 3

Effective January 2026

Standard Detail & Specifications

Stabilization Matting - Channel

0.7 Staples per Sq. Yd.

1.2 Staples per Sq. Yd.

1.75 Staples per Sq. Yd.

3.5 Staples per Sq. Yd.

3.75 Staples per Sq. Yd.

NOTE: These patterns are provided for general guidance only. They shall not be used as a substitute for manufacturer's recommendations.

Stapling Patterns

Source:

Adapted from North American Green, Inc.

Symbol:

SM-C

Detail No.

DE-ESC-3.4.6.2

Sheet 3 of 3

Effective January 2026

Standard Detail & Specifications

Stabilized Construction Entrance

Equipment wheel track + 2'

Metal bars set in reinforced conc. (traffic bearing grates, timber mats or other approved equiv. may be substituted)

Provide space for drainage

Section A-A (Opt.)

Construction Notes:

1. **Stone size** - Use DE #3 stone.

2. **Length** - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).

3. **Thickness** - Not less than size (6) inches.

4. **Width** - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.

5. **Geotextile** - Type GS-1; placed over the entire area prior to placing of stone.

6. **Surface Water** - All surface water flowing or diverted toward construction entrances shall be piped across 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. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.

8. **Washing** - Vehicle wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.

9. **Inspection** - Periodic inspection and needed maintenance shall be provided after each rain.

Source:

Adapted from VA ESC Handbook

Symbol:

SCE

Detail No.

DE-ESC-3.4.7

Sheet 2 of 2

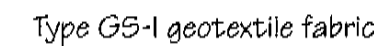
Effective January 2026

Standard Detail & Specifications Construction Site Pollution Prevention Delaware NPDES Discharge Permit General Permit for Discharge of Stormwater from Construction Activities ((Project Name)) ((NOI Permit Number)) ((Agency Plan Approval ID)) ((Contact Name & Number for Additional Site Information)) ((Contact Name & Number to Obtain Copy of Approved Plan)) If you observe indicators of stormwater pollutants in the discharge or in the receiving waterbody, call the DNREC Spill Notification 24 HR Hotline at 1-800-662-8802 Example Construction General Permit (CGP) Signage NOTES: 1. Minimum sign size 2' x 2' 2. Minimum text size 1" 3. Sign must be posted at a safe, publicly accessible location close to construction site 4. Sign must be visible from the public road nearest the active construction site 5. Signs posted within a DelDOT or other public road right-of-way (ROW) must be in accordance with all local and/or State requirements in regards to safety, location, orientation, etc.			Standard Detail & Specifications Construction Site Pollution Prevention 1) Equipment and Vehicle Fueling and Maintenance a. Minimize spills and leaks of fuels and oils. i. Fuel only in marked areas a minimum of 50 feet away from drains and watercourses. Use automatic shut-off nozzles and do not top off tanks. Provide lighting if fueling at night. ii. Use berms or other barriers around fueling, maintenance, and parking areas to prevent stormwater from running through and to contain spills. Use drip pans during maintenance. iii. Take equipment and vehicles to off-site facilities for maintenance when possible. iv. Check vehicles and equipment daily for leaks. Repair immediately or remove from site. v. Clean up any spills right away. Do not hose them down. b. Keep absorbent materials and spill kits on site, especially in fueling and storage areas. c. Dispose of or recycle used oil, fluids, lubricants, and cleanup materials according to manufacturer instructions and all local, state, and federal regulations. 2) Equipment and Vehicle Washing a. Minimize discharge of pollutants from wash water. i. Use off-site commercial wash facilities when possible. ii. If washing on-site, use high-pressure water without detergents in a contained area with an impervious berm. iii. Dispose of concrete washout water only in designated washout areas for hardening and proper disposal. b. Do not discharge soaps, solvents, or detergents. c. Store soaps, detergents, and solvents under cover (e.g., plastic sheeting, temporary roofs) or use another effective method to prevent contact with stormwater. 3) Storage, Handling, and Disposal of Building Products, Materials, and Waste a. Minimize exposure of materials, products, and waste to rain, stormwater, and wind. b. Building materials and products: i. Cover materials (e.g., plastic sheeting, tarp, or roof) to prevent contact with rain and stormwater. Final building materials and products intended for outdoor use do not require cover. ii. Secure materials (e.g., tarp, mesh, or lidded dumpster) to protect from wind.
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Riprap Outlet Protection - 1



NOTE: Depress centerline of apron slightly to prevent edge-cutting



NOTE: Key into exist. gnd

Section A-A

DATA

Pipe diameter (D_o)
 Apron length (L_a)
 Apron width (W)
 Riprap size (R No.)
 Riprap thickness (T)

$$(T_w < 0.5 D_o)$$

Source:

Adapted from
MD Stds. & Specs. for ESC

Symbol:

(ROP-1)

Detail No.	
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DE-ESC-3.3.10.1
Sheet 1 of 2
Effective January 202

Riprap Outlet Protection - 1

1. The subgrade for the riprap shall be prepared to the required lines and grades as shown on the plan. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.
2. The riprap shall conform to the grading limits as shown on the plan.
3. Filter cloth shall be protected from punching, cutting or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of cloth over the damaged area. All connecting joints should overlap a minimum of 1 ft. If the damage is extensive, replace the entire filter cloth.
4. Stone for the riprap or gabion outlets may be placed by equipment. Riprap shall be placed in a manner to prevent damage to the filter cloth. Hand placement will be required to the extent necessary to prevent damage to the conduits, structures, etc.

Source:

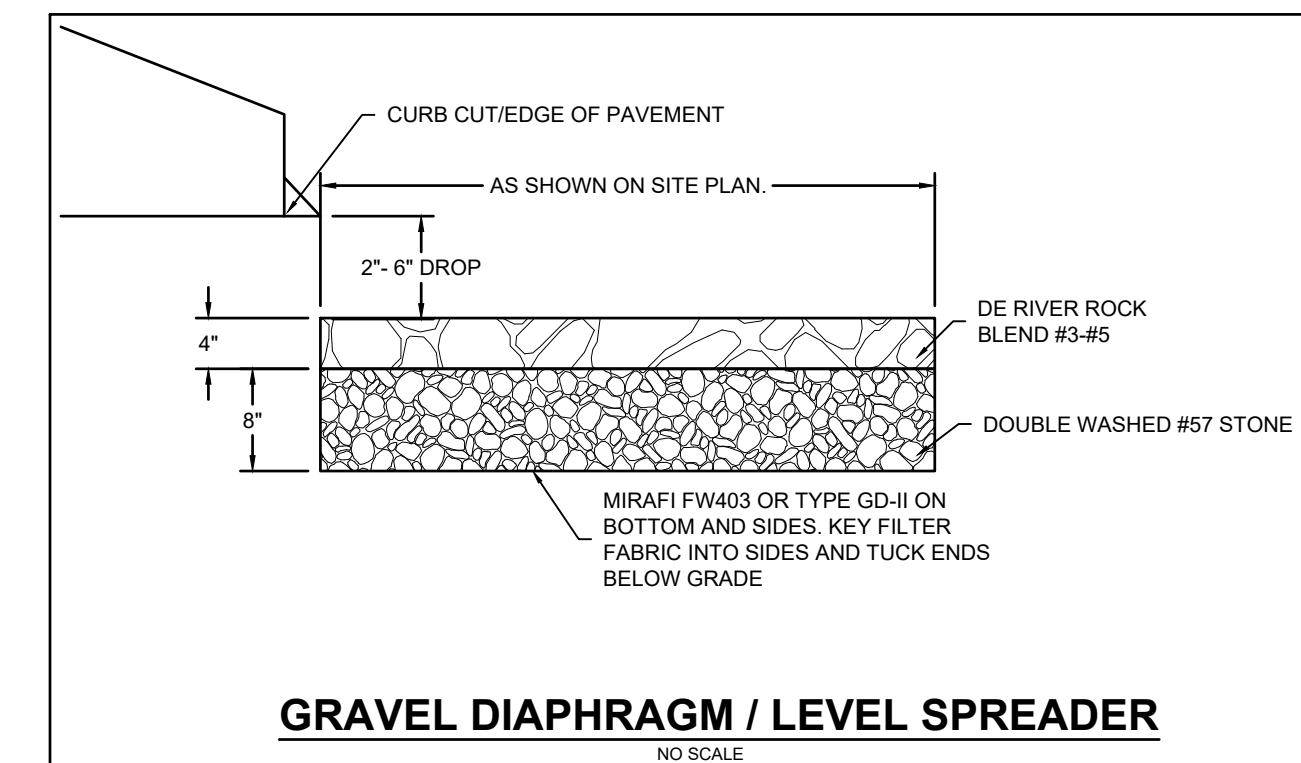
Adapted from
MD Stds. & Specs. for ESC

Symbol:

(ROP-1)

Detail No.	
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DE-ESC-3.3.10.1
Sheet 2 of 2
Effective January 2026



GRAVEL DIAPHRAGM / LEVEL SPREADER

NO SCALE

HI - GRADE EVIDENCE STORAGE BLDG.
MISPILLION HUNDRED
CITY OF HARRINGTON
KENT COUNTY, DELAWARE

dbf

**DAVIS
BOWEN &
FRIEDEL, INC.**

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410.543.9091

	DATE	ADDENDA
1	1/27/2026	DNREC COMMENTS
2	2/27/2026	ADD SEPARATE OIL WASTE LINE
3	5/19/2026	DNREC COMMENTS
4	5/22/2026	DNREC COMMENTS
5	6/12/2026	DNREC COMMENTS
6	JULY 2026	BID SET

Date: AUGUST, 2025

Scale: 1" = 30'

Dwn.By:	BAR
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Proj.No.:	0586B053.B01
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CONSTRUCTION SITE DETAILS

Dwg.No.:

C-408

UTILITY NOTES

- A POSSIBLE DEFLECTION IN LIEU OF FITTINGS IS ACCEPTABLE. IF THE PIPE IS DEFLECTED, A MAXIMUM 1" AXIAL JOINT DEFLECTION IS PERMITTED AS WELL AS 1" MAXIMUM LONGITUDINAL PIPE DEFLECTION FOR A TOTAL OF 2" MAXIMUM DEFLECTION. THE JOINT MUST BE RESTRAINED IF THE PIPE IS TO BE LONGITUDINALLY DEFLECTED.
- COORDINATE BUILDING SEWER VERTICAL AND HORIZONTAL LOCATIONS WITH THE ARCHITECTURAL PLANS.
- COORDINATE WITH THE CITY OF HARRINGTON PUBLIC WORKS BEFORE MAKING SEWER & WATER CONNECTION. ALL SEWER AND WATER CONSTRUCTION TO BE PER HARRINGTON STANDARDS AND SPECS.
- SEE SEWER AND WATER NOTES ON SHEET C-003.
- EXISTING SEWER AND WATER LOCATIONS TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR BY TEST PITTING UTILITIES.
- TWO (2) INCH SERVICE LINE TO BE SCHEDULE 80 PVC THREADED PIPE OR SDR-9 COPPER POLYETHYLENE TUBING.
- TAPPING SLEEVE FOR SERVICE LINE TO BE FORD SERIES FR5202 STAINLESS STEEL WITH TWO-INCH CC THREAD.
- PROPOSED SEWER PIPE, SEWER CLEANOUTS, WATER SERVICE, & FIRE WATER SERVICE ARE SUBJECT TO CHANGE BASED ON FIELD CONDITIONS.
- BURIAL DEPTHS FOR SEWERS LATERALS AND WATER SERVICES TO FOLLOW CITY OF HARRINGTON STANDARDS AND SPECIFICATIONS.
- TYPICAL APPLICATIONS PER THE DELAWARE MUTCD SHALL BE INCORPORATED TO ACHIEVE REQUIRED TEMPORARY TRAFFIC CONTROL AND SAFETY REQUIREMENTS.
- THIS PROJECT IS SUBJECT TO THE FOLLOWING TYPICAL APPLICATION UNLESS DIRECTED OTHERWISE BY THE DELDOT DISTRICT OF SAFETY OFFICER: TYPICAL APPLICATION 3A: "WORK ON THE SHOULDER OF A MULTI-LANE, DIVIDED HIGHWAY (TA-3A)" SHALL BE USED FOR THIS PROJECT. TYPICAL APPLICATION 3: "WORK ON THE SHOULDER OF A TWO-LANE ROAD (TA-3)".
- A DELDOT UTILITY PERMIT IS REQUIRED FOR UTILITY WORK WITHIN THE RIGHT-OF-WAY. CONTACT DELDOT M&O CENTRAL DISTRICT PUBLIC WORKS TO OBTAIN UTILITY PERMIT (302) 760-2424

SURVEY LEGEND

- IRCF
IRON ROD W/ CAP FOUND
- PKF
PK NAIL FOUND
- BOUNDARY POINTS

SYMBOL LEGEND

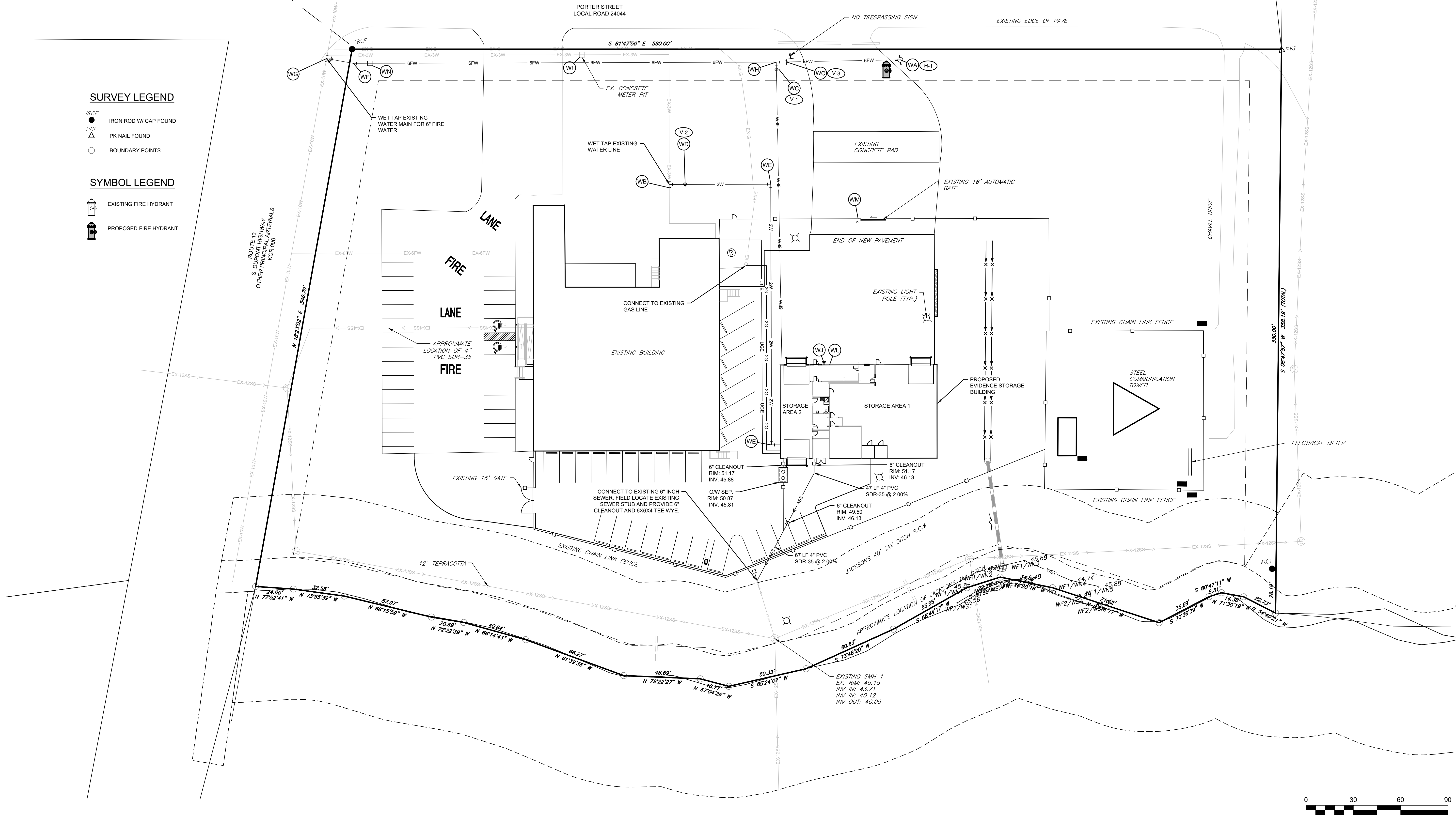
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT

FIRE PROTECTION NOTES

- ALL FIRE LANES, FIRE HYDRANTS, AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS.
- WATER PROVIDER: CITY OF HARRINGTON
- PROPOSED BUILDING CONSTRUCTION: 2A
- INTENDED USE: GOVERNMENT
- MAXIMUM HEIGHT OF BUILDING: 45 FEET
- PROPOSED BUILDING WILL BE PROTECTED BY AUTOMATIC SPRINKLERS.
- ALL FIRE HYDRANTS TO BE AMERICAN DARLING MODEL B-62-B
- LOCK BOX REQUIRED. CONTACT LOCAL FIRE CHIEF FOR ORDERING INFORMATION AND LOCATION OF BOX ON THE BUILDING.
- SIREN OPERATED SENSORS, SOS 12 WITH SIGN OR APPROVED EQUIVALENT, TO BE INSTALLED ON THE GATES FOR EMERGENCY ACCESS.

KEY LEGEND

LABEL	DESCRIPTION
WA	PROPOSED FIRE HYDRANT ASSEMBLY
WB	PROPOSED 2" TAPPING SADDLE & CORP STOP
WC	PROPOSED 6" WATER VALVE
WD	PROPOSED 2" WATER VALVE
WE	PROPOSED 90° BEND
WF	PROPOSED 11.25° BEND
WG	PROPOSED 10" X 6" TAPPING SLEEVE & VALVE
WH	PROPOSED 6" TEE
WI	EXISTING 3" METER
WJ	PROPOSED FIRE DEPARTMENT CONNECTIONS W/ FIRE CONNECTION SIGN
WK	PROPOSED UTILITY CROSSING
WL	PROPOSED KNOX BOX
WM	EMERGENCY GATE OPENER WITH SIGN (SOS 12)
WN	PROPOSED FIRE LINE BACK FLOW PREVENTER



HI - GRADE EVIDENCE STORAGE BLDG.
CITY OF HARRINGTON
MISPILLION HUNDRED
KENT COUNTY, DELAWARE

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MILFORD, DELAWARE
BALTIMORE, MARYLAND
302.747.1411
410.354.7991

DATE	ADDENDUM	DESCRIPTION
12/27/2025	1	DNREC COMMENTS
2/27/2026	2	ADD SEPARATE OIL WASTE LINE
5/15/2026	3	DNREC COMMENTS
5/22/2026	4	DNREC COMMENTS
6/12/2026	5	DNREC COMMENTS
JULY 2026	6	BID SET

Date: AUGUST, 2025

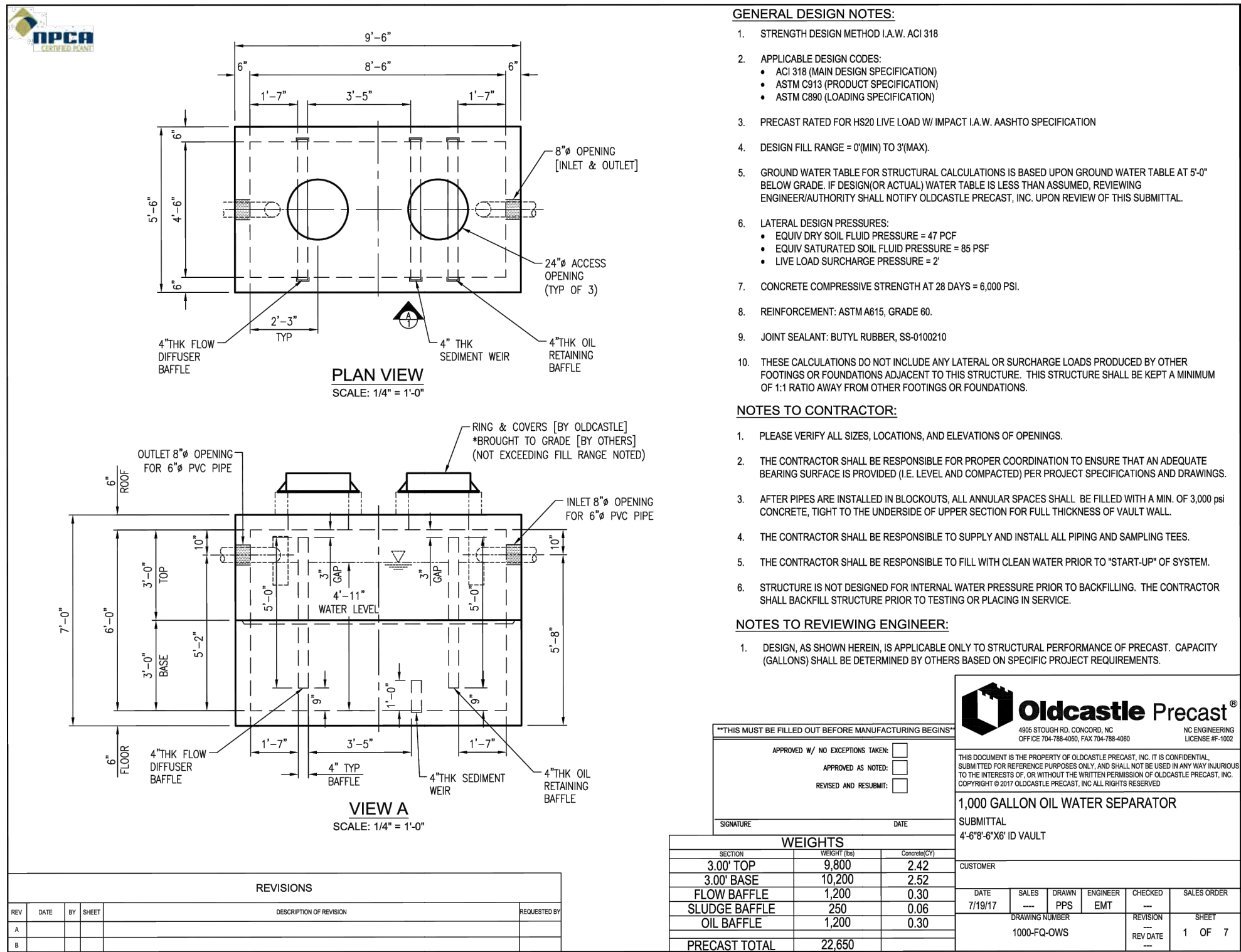
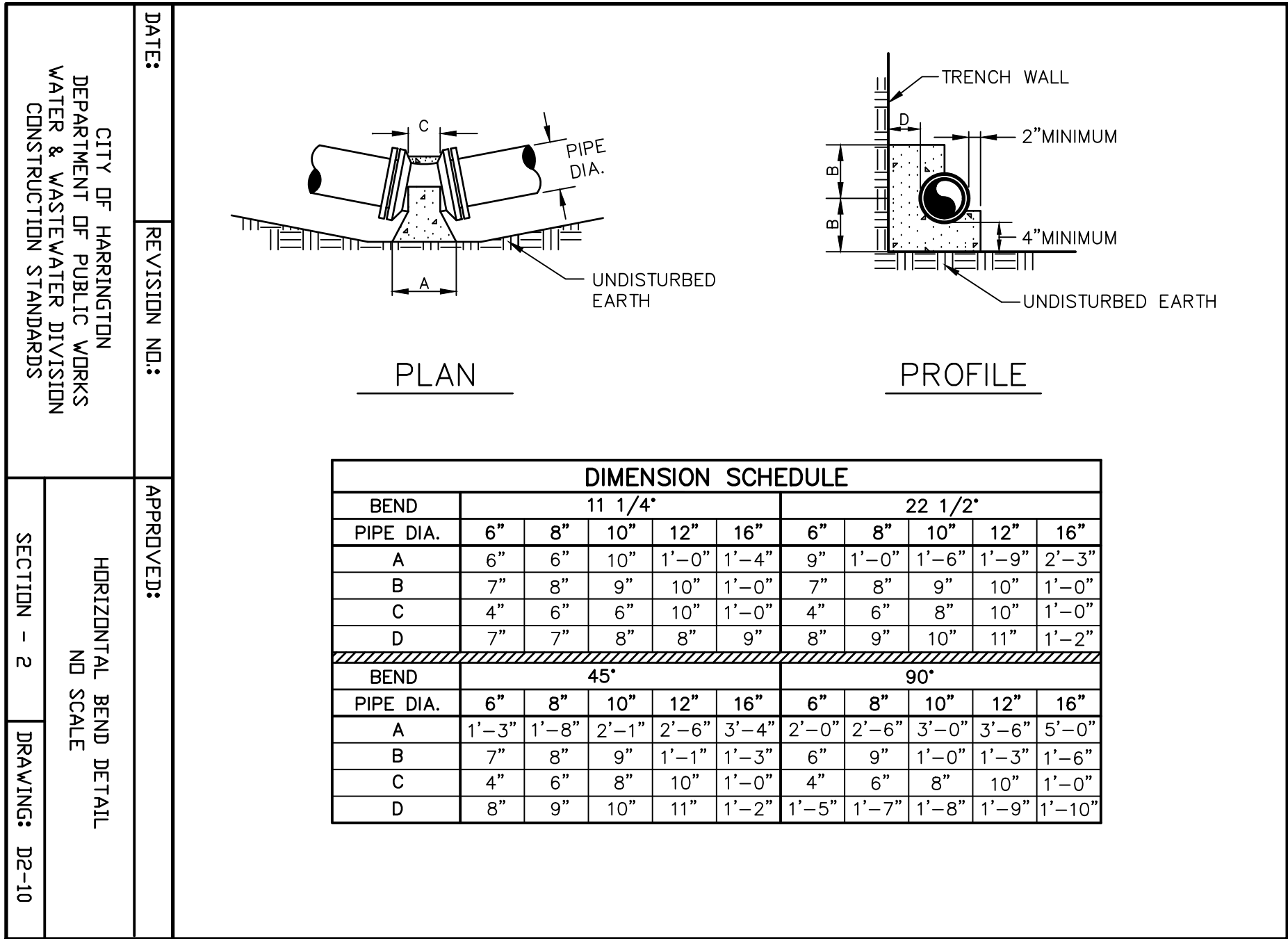
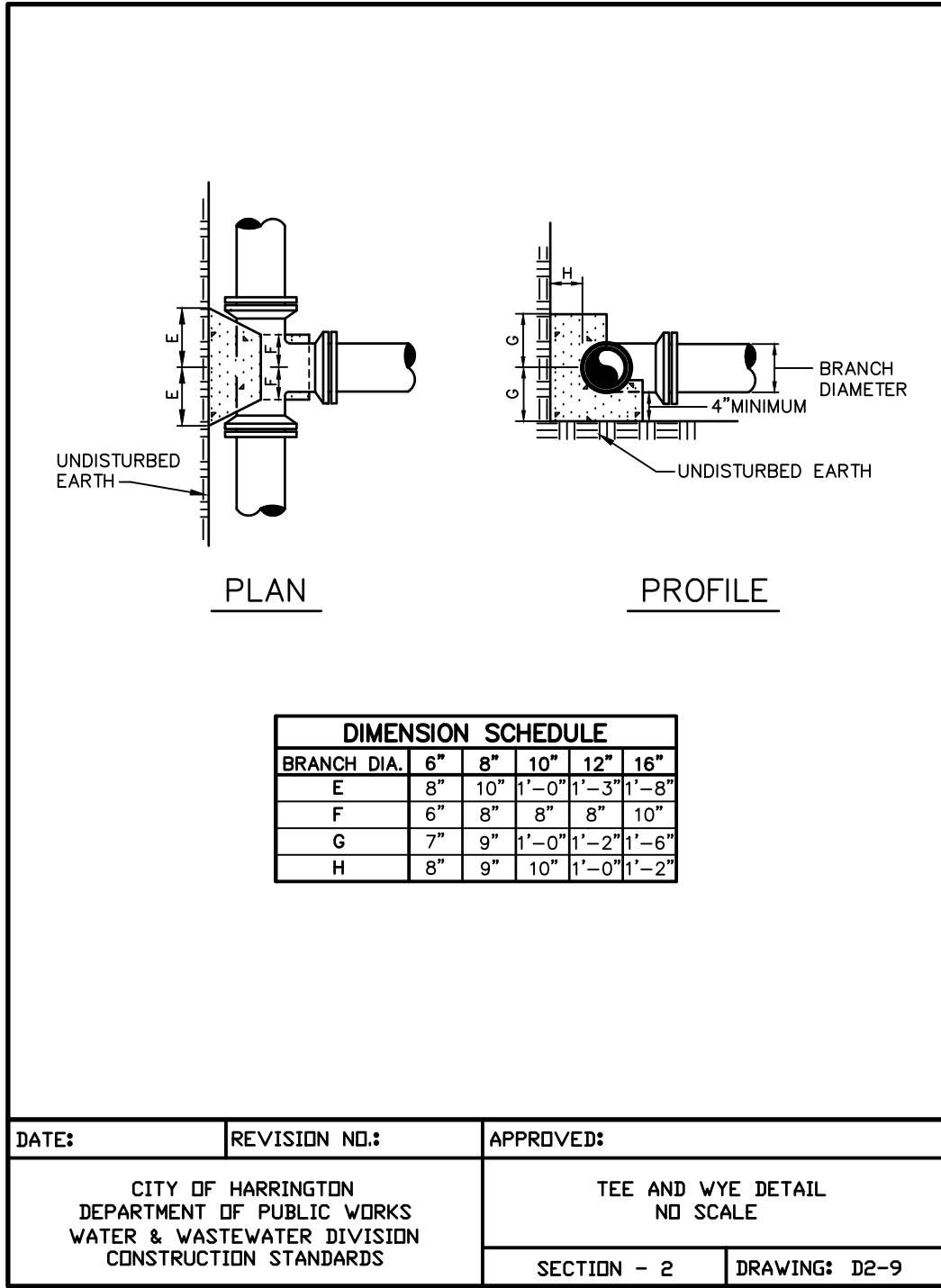
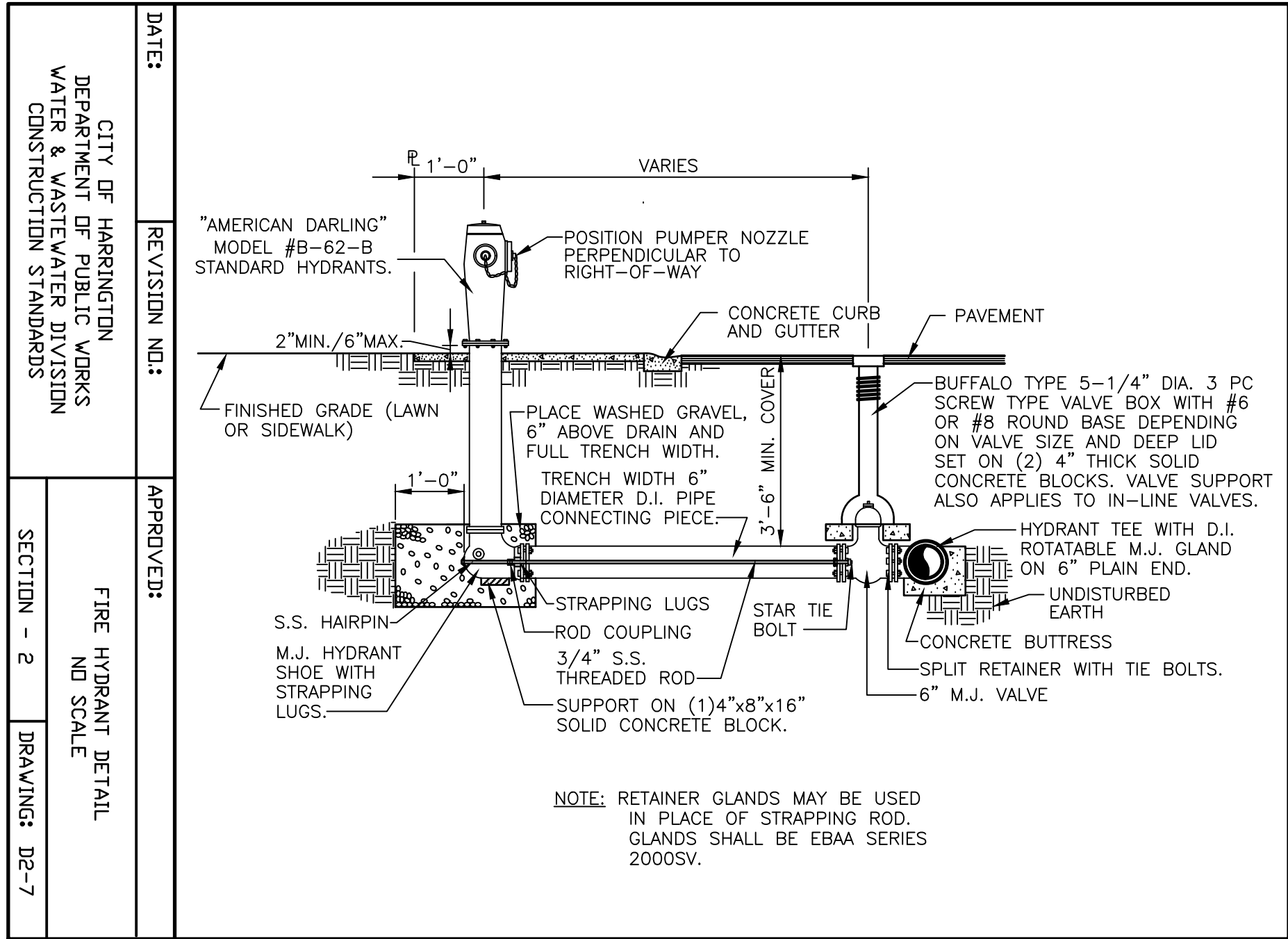
Scale: 1" = 30'

Dwn.By: BAR

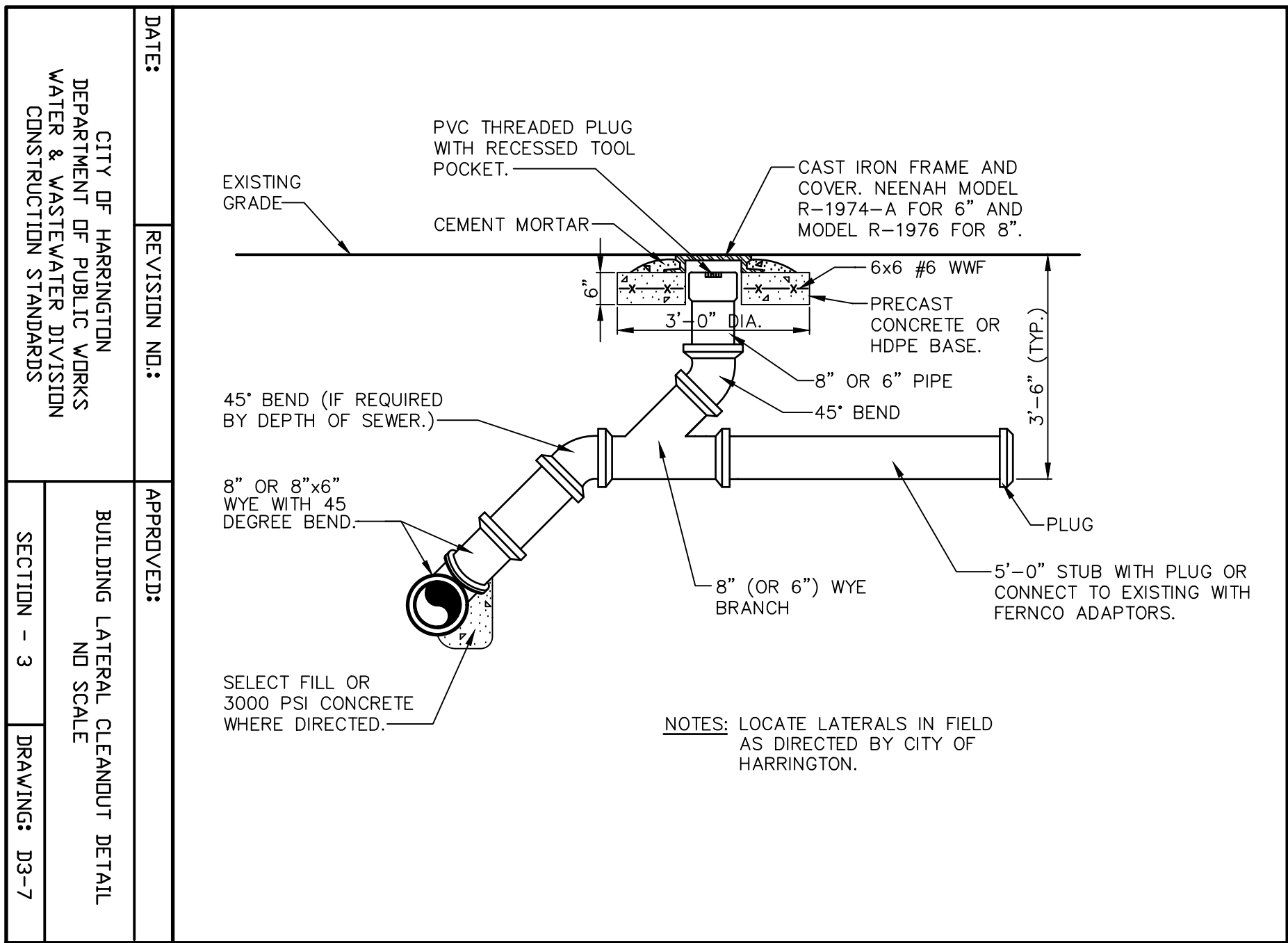
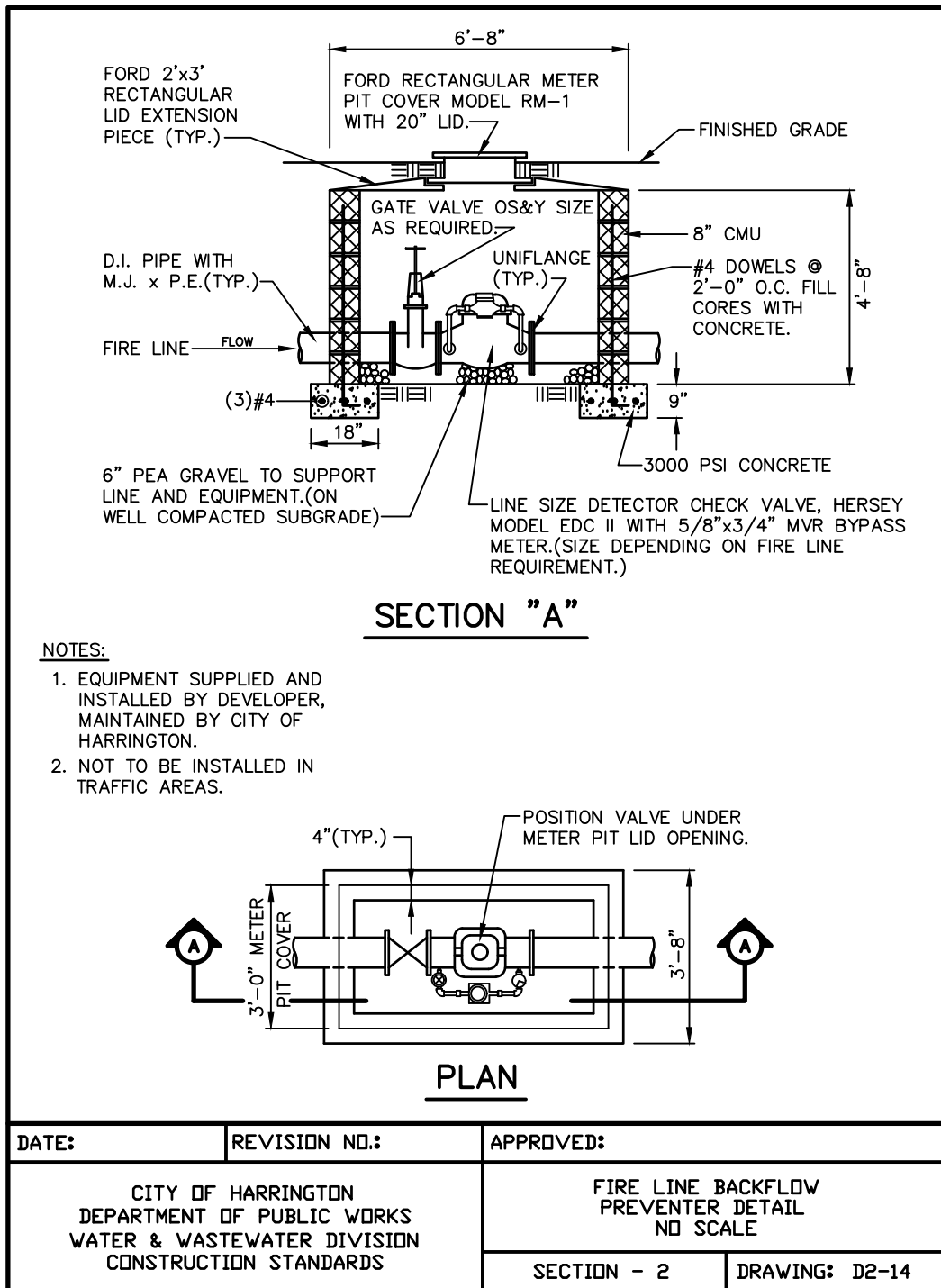
Proj.No.: 0586B053.B01

UTILITY PLAN

Dwg No.:
C-501



NOTE: APPROVED EQUIVALENT OIL WATER SEPARATOR MAY BE SUBMITTED TO THE CITY OF HARRINGTON AND THE ENGINEER FOR USE.

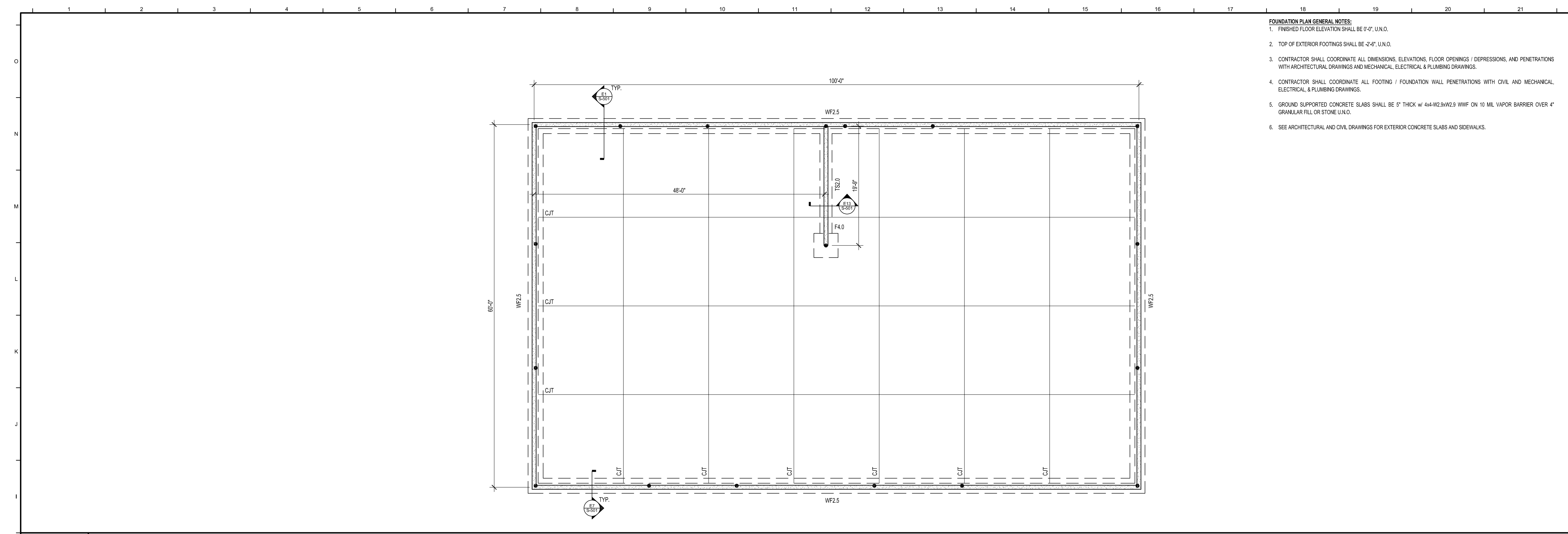


DATE	ADDENDUM	DNREC COMMENTS
1	12/27/2025	ADD SEPARATE OIL WASTE LINE
2	2/27/2026	DNREC COMMENTS
3	5/15/2026	DNREC COMMENTS
4	5/22/2026	DNREC COMMENTS
5	6/12/2026	DNREC COMMENTS
6	JULY 2026	BID SET

Date: AUGUST, 2025
Scale: NO SCALE
Dwn.By: BAR
Proj.No.: 0586B053.B01

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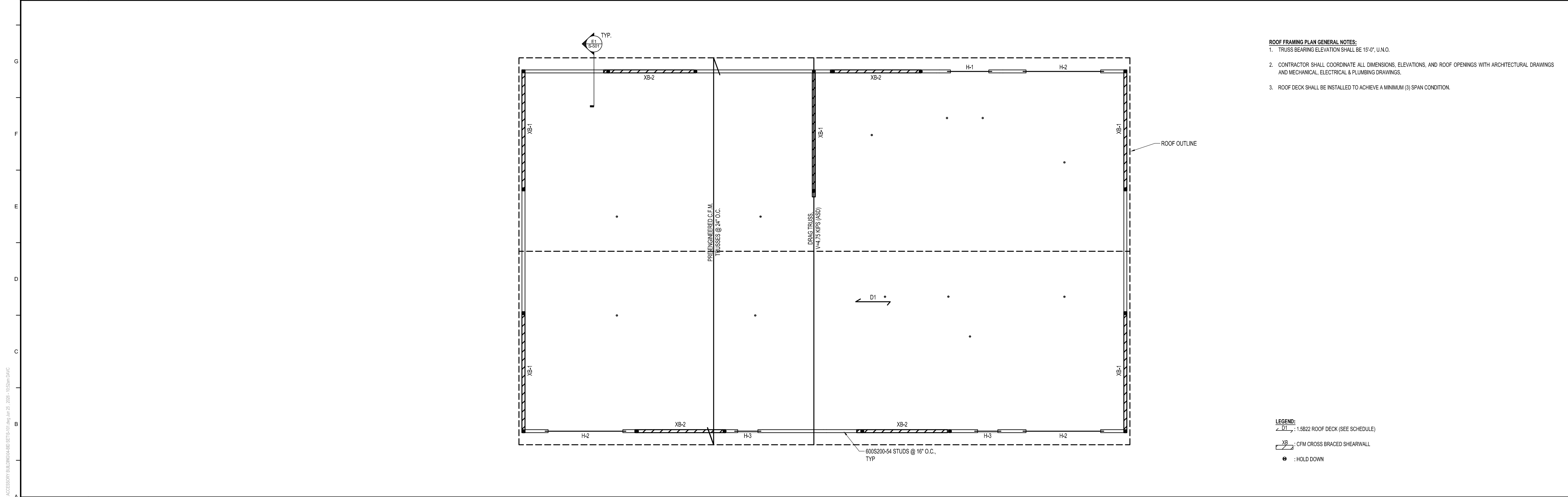
R:\068803.B01-HIGHGRADE ACCESSORY BUILDING\CAD BETS-01.dwg, Jun 25, 2024 - 10:20am DAVIS



- FOUNDATION PLAN GENERAL NOTES:**
1. FINISHED FLOOR ELEVATION SHALL BE 0'-0", U.N.O.
 2. TOP OF EXTERIOR FOOTINGS SHALL BE -2'-0", U.N.O.
 3. CONTRACTOR SHALL COORDINATE ALL DIMENSIONS, ELEVATIONS, FLOOR OPENINGS / DEPRESSIONS, AND PENETRATIONS WITH ARCHITECTURAL DRAWINGS AND MECHANICAL, ELECTRICAL & PLUMBING DRAWINGS.
 4. CONTRACTOR SHALL COORDINATE ALL FOOTING / FOUNDATION WALL PENETRATIONS WITH CIVIL AND MECHANICAL, ELECTRICAL, & PLUMBING DRAWINGS.
 5. GROUND SUPPORTED CONCRETE SLABS SHALL BE 5" THICK w/ 4x4-W2.8xW2.9 WWF ON 10 MIL VAPOR BARRIER OVER 4" GRANULAR FILL OR STONE U.N.O.
 6. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR EXTERIOR CONCRETE SLABS AND SIDEWALKS.

H1 FOUNDATION PLAN

1/8"=1'-0"



- ROOF FRAMING PLAN GENERAL NOTES:**
1. TRUSS BEARING ELEVATION SHALL BE 15'-0", U.N.O.
 2. CONTRACTOR SHALL COORDINATE ALL DIMENSIONS, ELEVATIONS, AND ROOF OPENINGS WITH ARCHITECTURAL DRAWINGS AND MECHANICAL, ELECTRICAL & PLUMBING DRAWINGS.
 3. ROOF DECK SHALL BE INSTALLED TO ACHIEVE A MINIMUM (3) SPAN CONDITION.

- LEGEND:**
- 1.5822 ROOF DECK (SEE SCHEDULE)
 - CFM CROSS BRACED SHEARWALL
 - HOLD DOWN

A1 ROOF FRAMING PLAN

1/8"=1'-0"

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BALTIMORE, MARYLAND 410.770.4744

HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

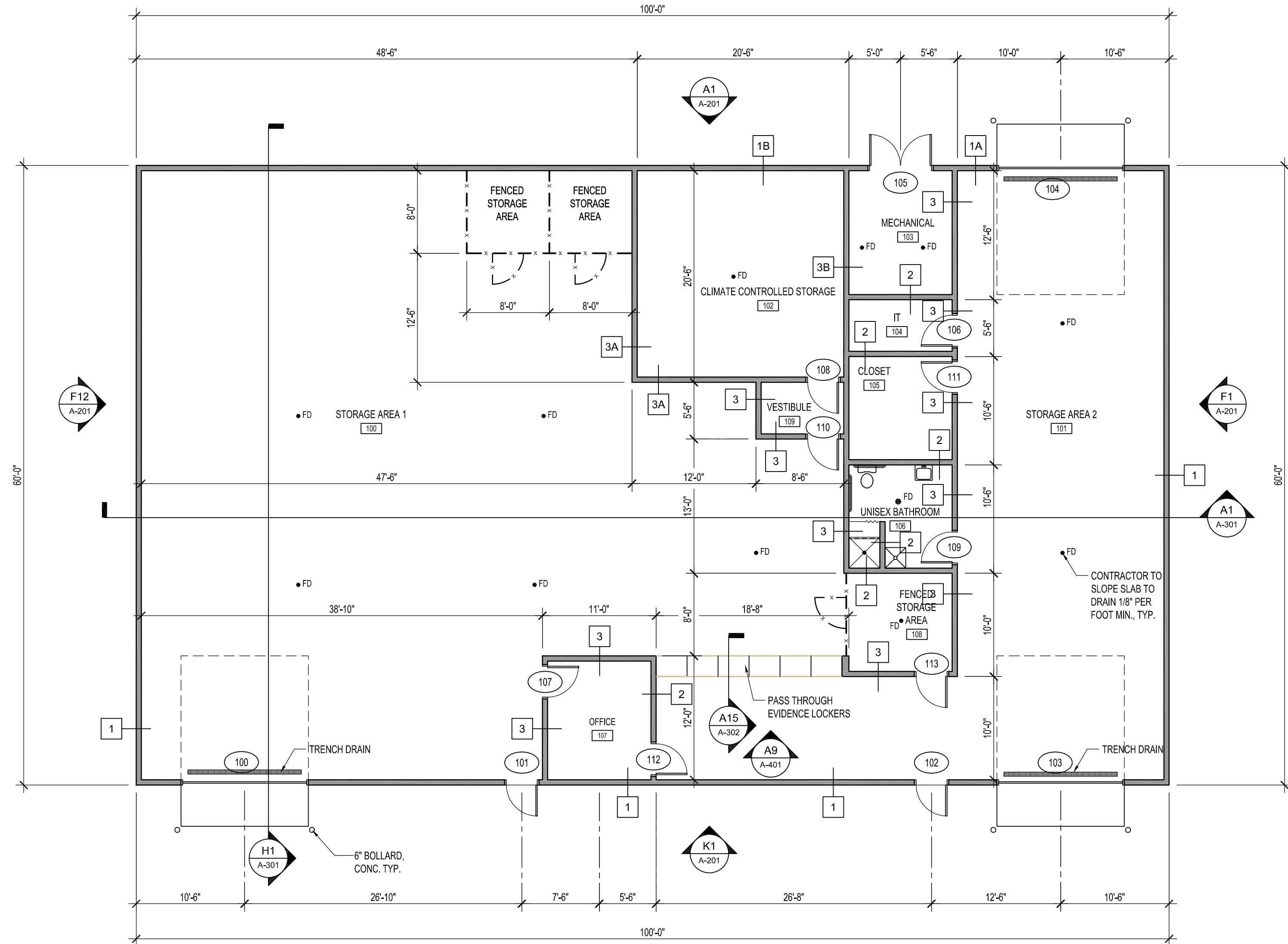
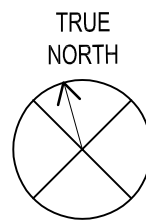
DATE	COMMENTS
2/13/25	150% DESIGN SUBMISSION
8/14/25	60% DESIGN SUBMISSION
10/07/25	FIRE MARSHAL SUBMISSION
2/28/26	80% DESIGN SUBMISSION
	BD SET

Date:	JULY 2026
Scale:	AS NOTED
Dwn.By:	CJD
Proj.No.:	0586B053.B01

FOUNDATION AND ROOF FRAMING PLAN

Dwg.No.:
S-101

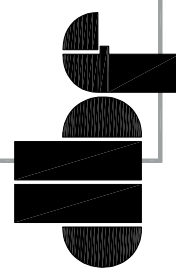
R:\0688053.B01 - HI-GRADE ACCESSORY BUILDING\DWG SET\A-101.dwg, Jun 23, 2025 - 1:55pm DAVIS



A1

NEW WORK FLOOR PLAN

1/8"=1'-0"



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MILFORD, DELAWARE 302.424.1441
SALISBURY, MARYLAND 410.343.7971

HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

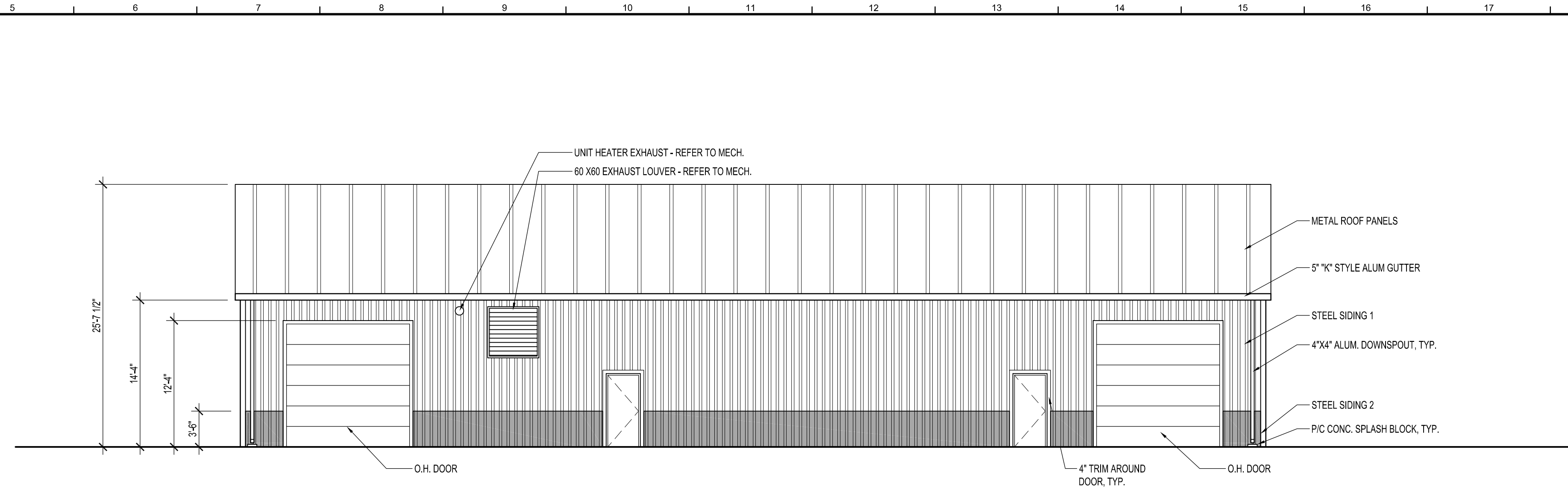
DATE	COMMENTS
2/13/25	150% DESIGN SUBMISSION
8/14/25	60% DESIGN SUBMISSION
10/07/25	FIRE MARSHAL SUBMISSION
2/28/26	90% DESIGN SUBMISSION
	BID SET

Date: JULY 2026
Scale: AS NOTED
Dwn.By: CJD
Proj.No.: 0586B053.B01

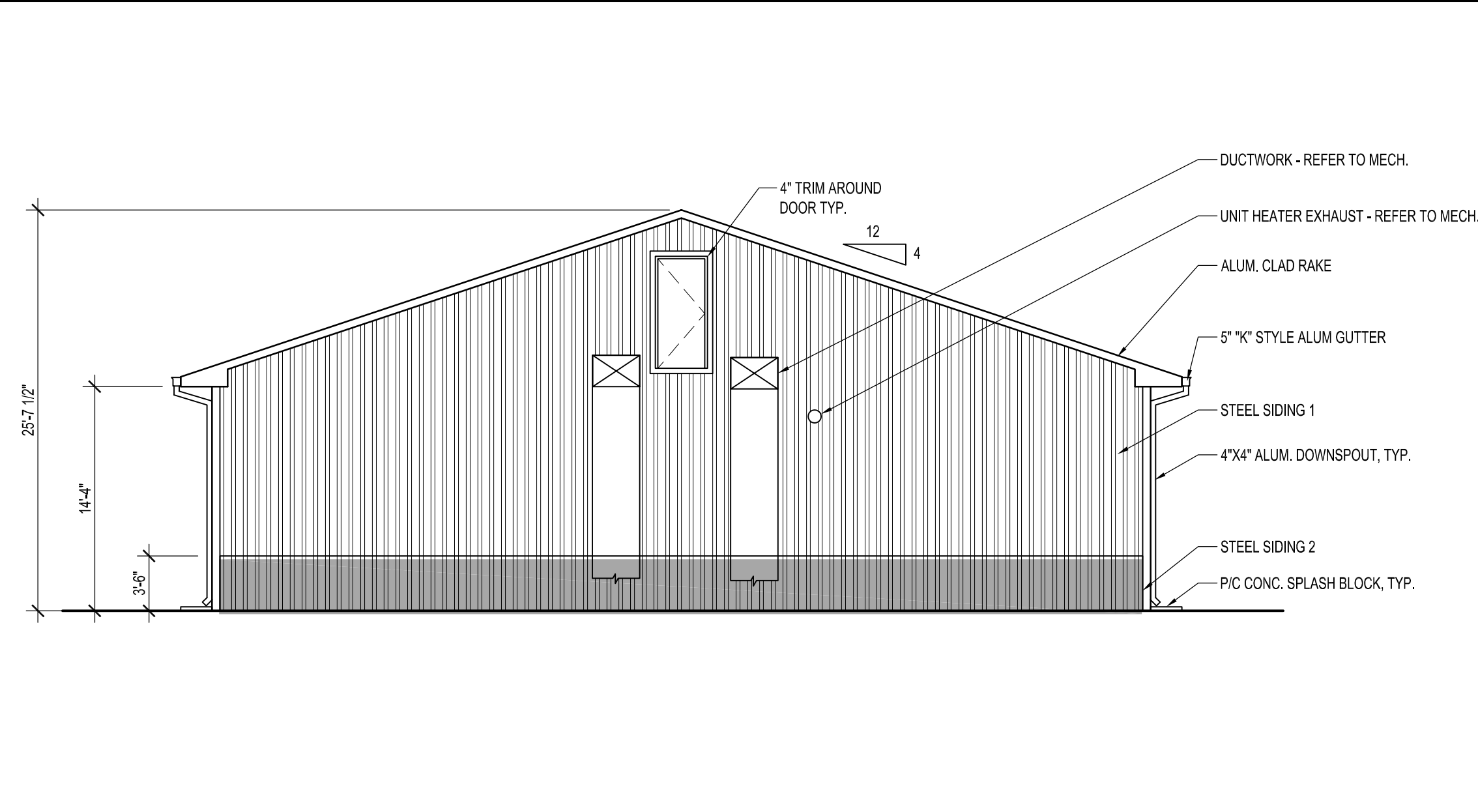
**NEW WORK
FLOOR PLAN**

Dwg.No.:

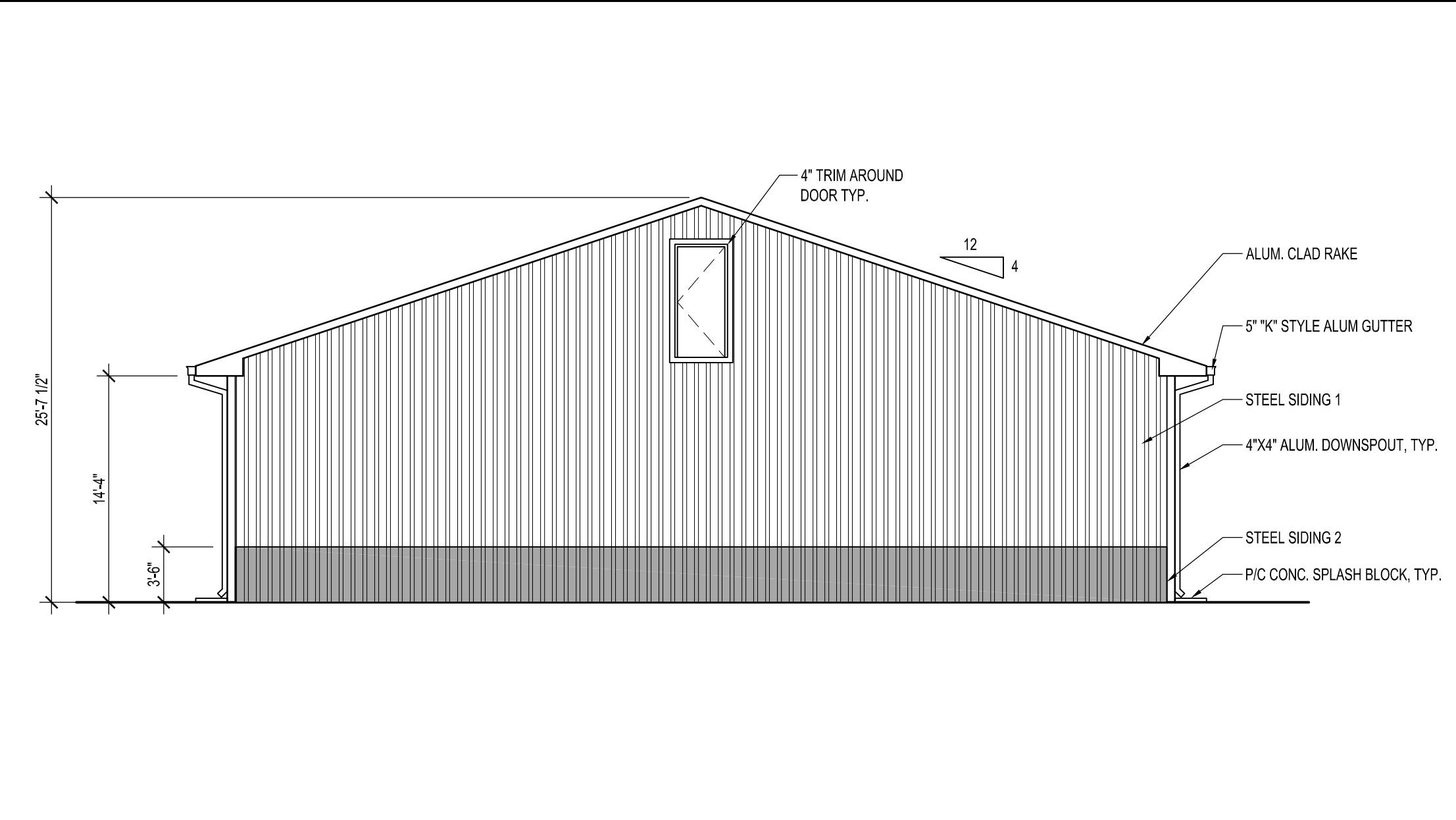
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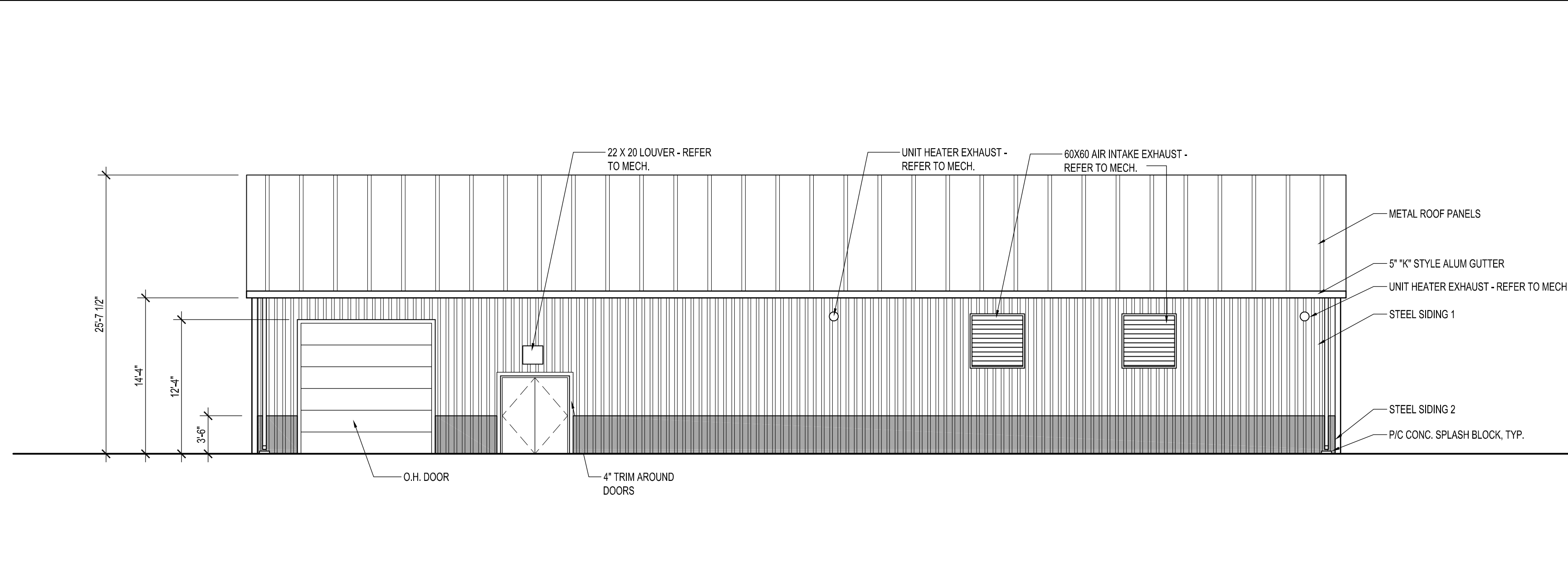
1/8"=1'-0"



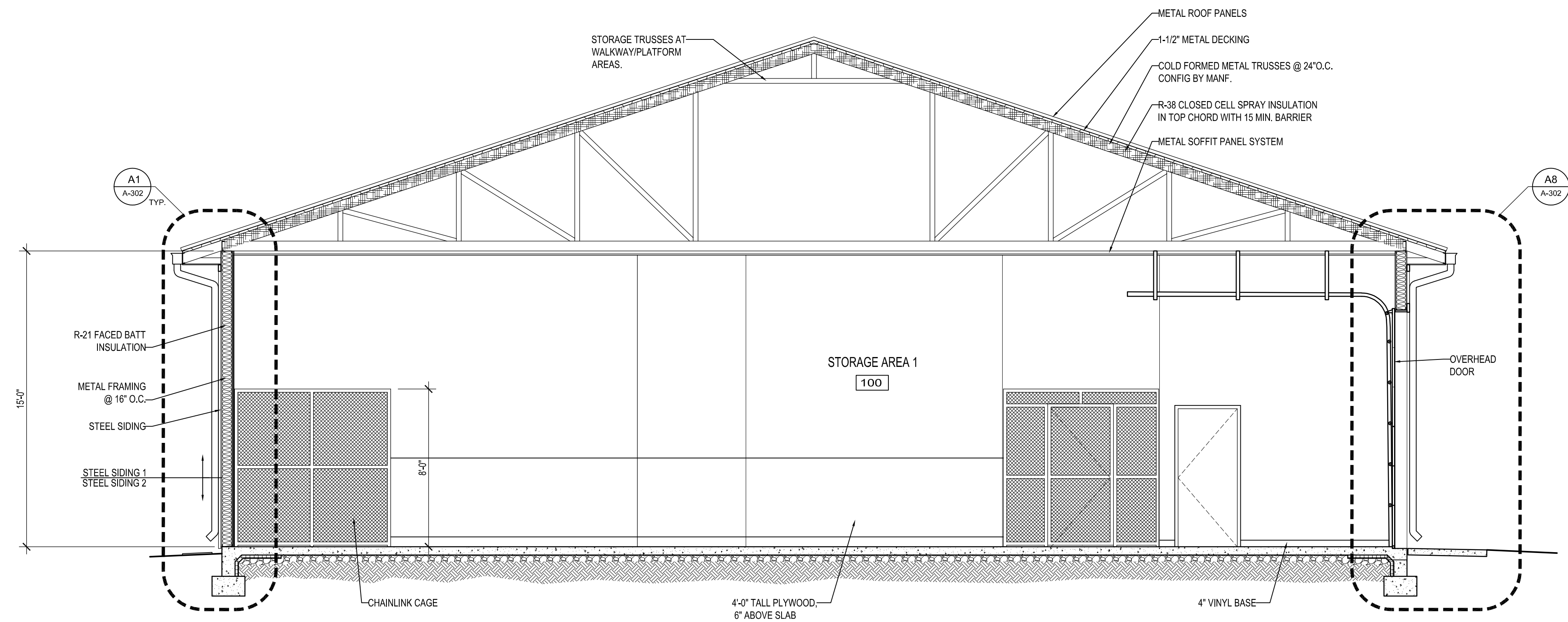
1/8"=1'-0"



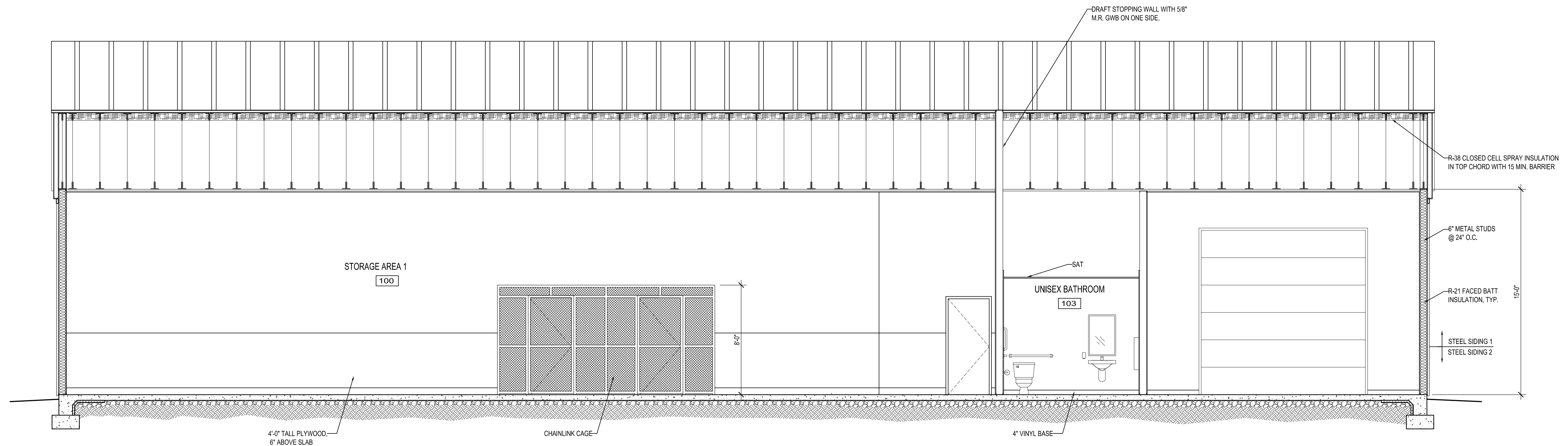
1/8"=1'-0"



1/8"=1'-0"



H1	BUILDING SECTION
----	------------------

$$1/4"=1'-0"$$


A1	BUILDING SECTION
----	------------------

1/4"=1'-0"

HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

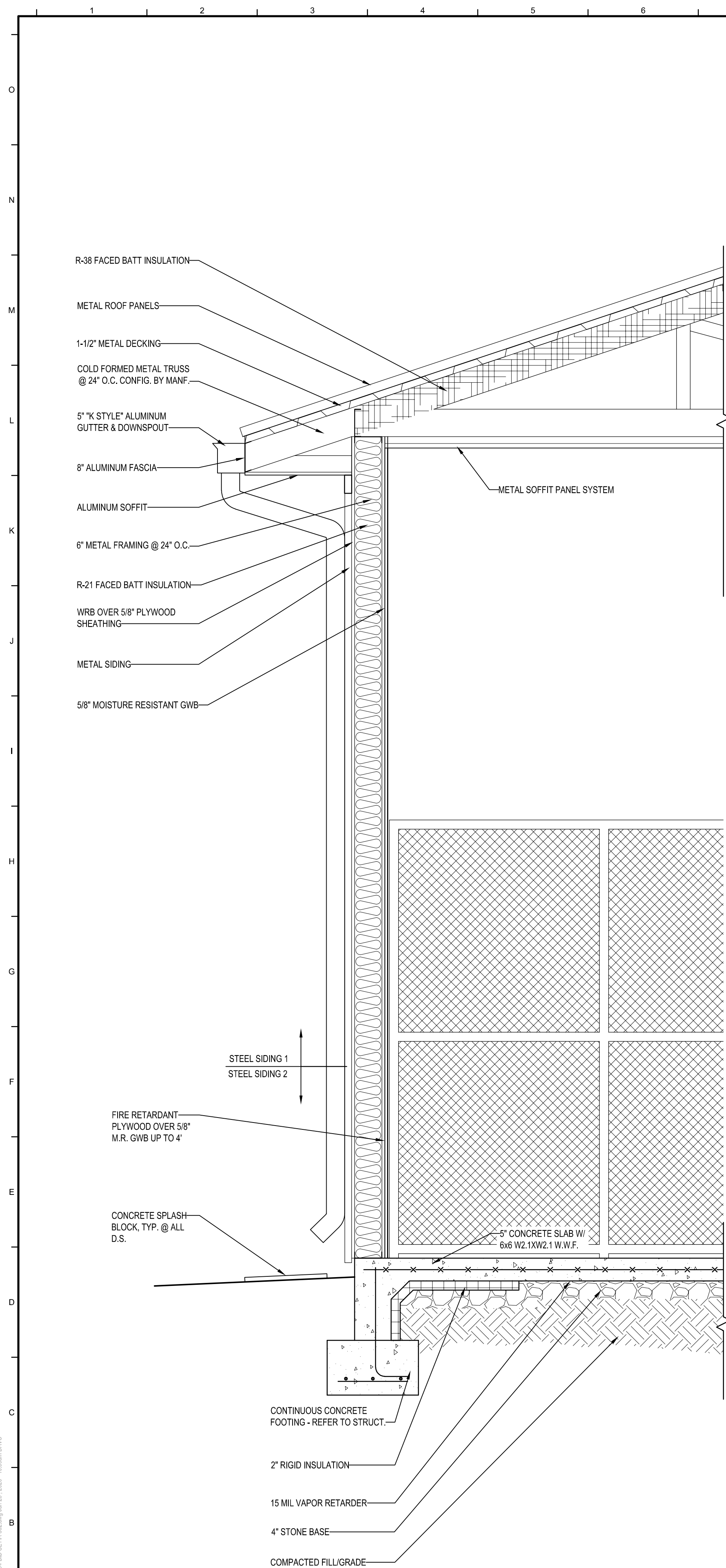
1500% DESIGN SUBMISSION	2/13/25	
60% DESIGN SUBMISSION	8/14/25	
FIRE MARSHAL SUBMISSION	10/07/25	
95% DESIGN SUBMISSION	2/26/26	
BID SET		

Rate:	JULY 2026
Scale:	AS NOTED
Drawn By:	CJD
Proj.No.:	0586B053.B01

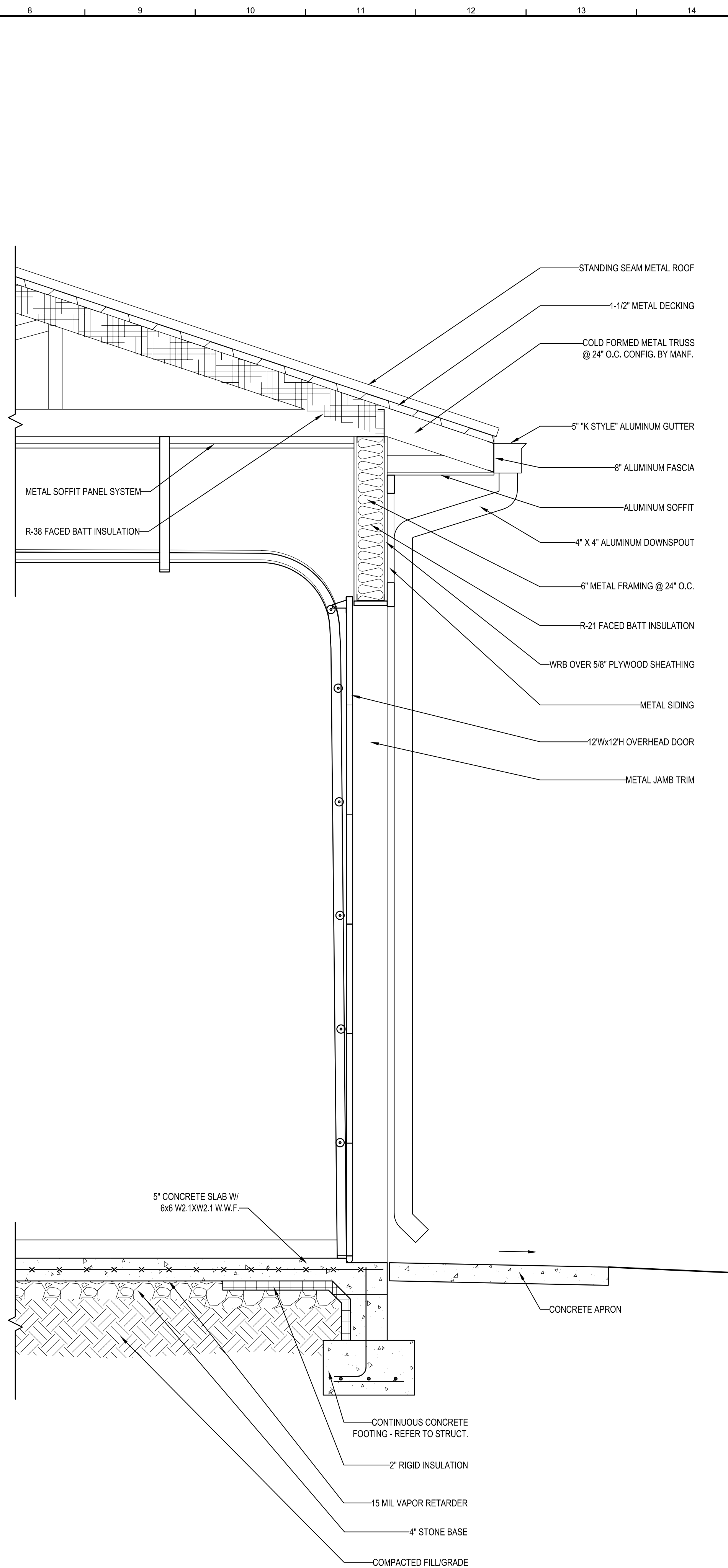
BUILDING SECTIONS

hwg.No.:

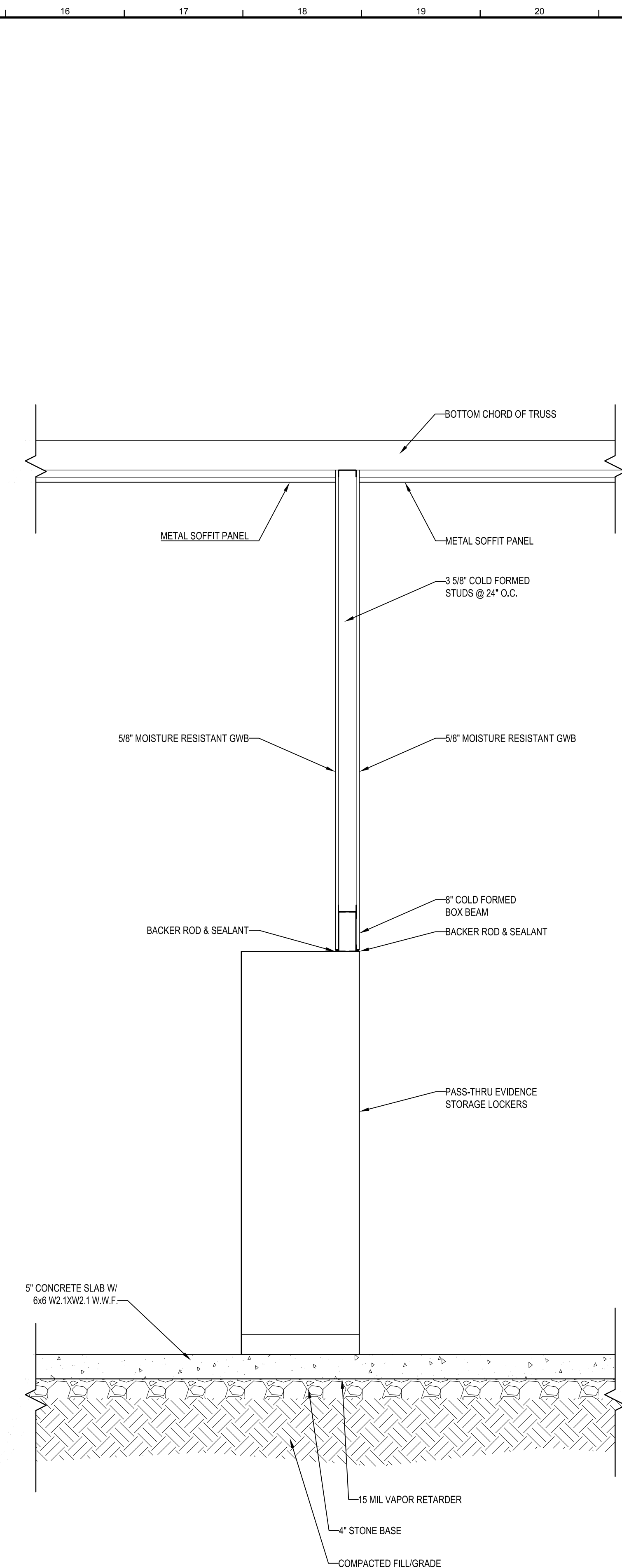
A-301



A1	TYPICAL WALL SECTION
----	----------------------

$$3/4'' = 1'-0''$$


A8 WALL SECTION @ OVERHEAD DOOR

$$3/4"=1'-0"$$


A15 | SECTION @ EVIDENCE LOCKERS

$$3/4"=1'-0"$$

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BOWEN &
FRIEDEL, INC.**

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MILFORD, DELAWARE
302.424.1441

SALISBURY, MARYLAND
410.543.9091

HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

OMB/DFM PROJECT NO: MJ4506000006

DATE	COMMENTS
2/15/25	15% OF DESIGN SUBMISSION
8/14/25	60% DESIGN SUBMISSION
10/7/25	FIRE MARSHAL SUBMISSION
2/22/26	90% DESIGN SUBMISSION
	BID SET

Date: JUL 11 Y 2026

Scale: AS NOTED

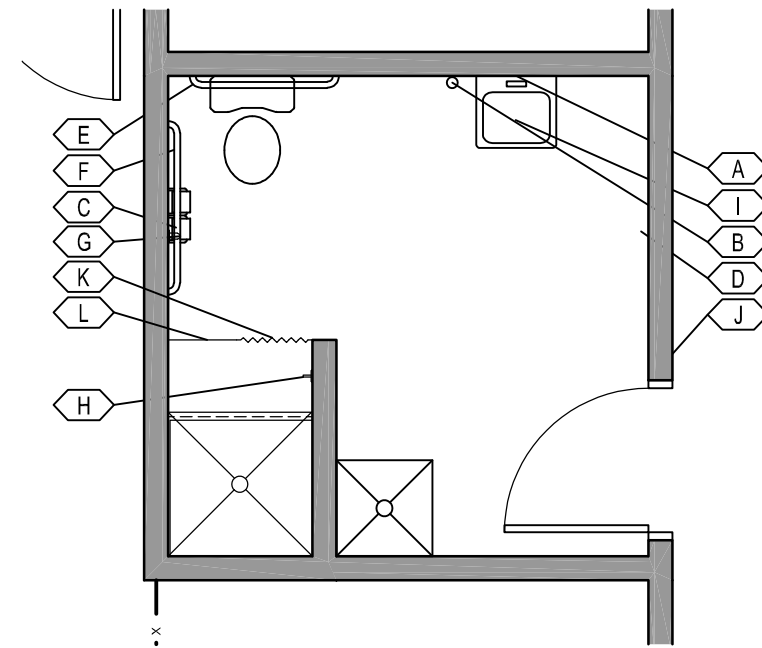
Dwn.By: CJD

Proj.No.:	0586B053.B
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WALL SECTIONS

Dwg.No.	
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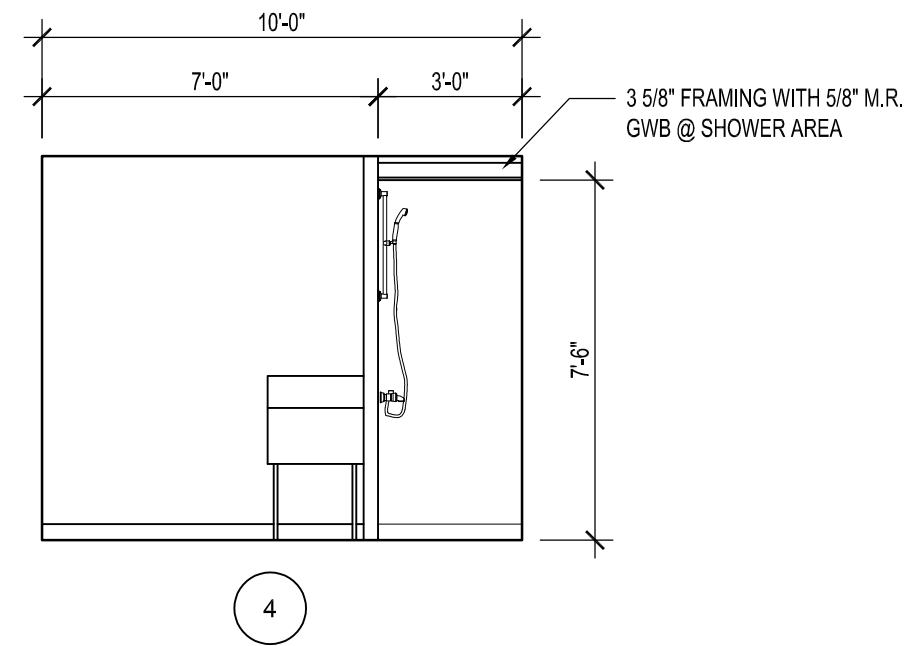
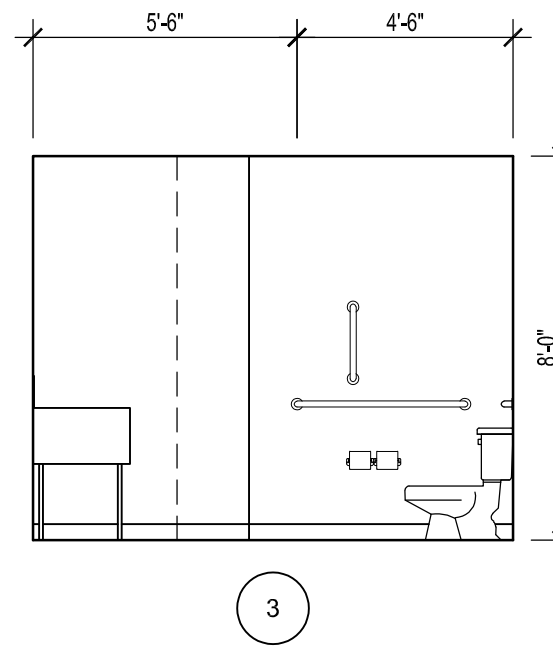
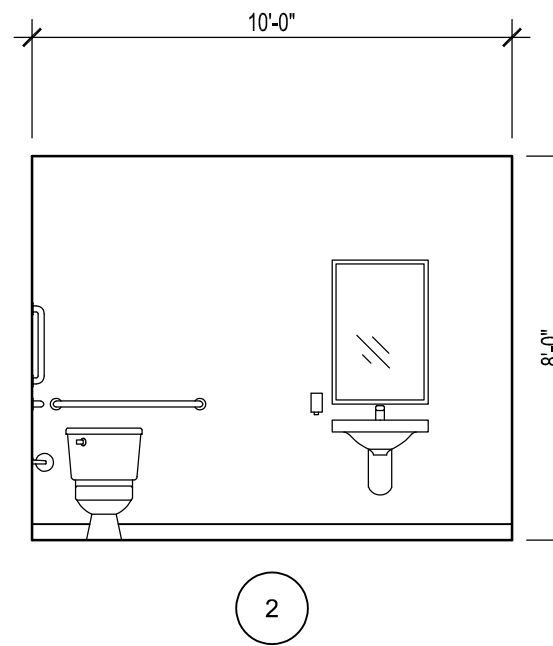
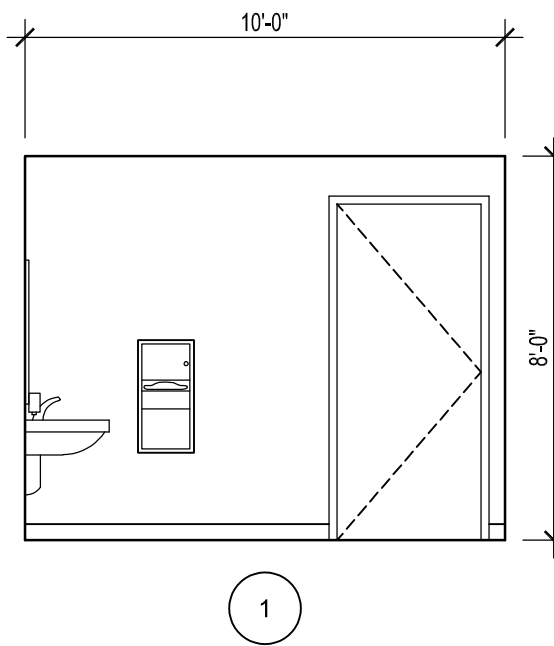
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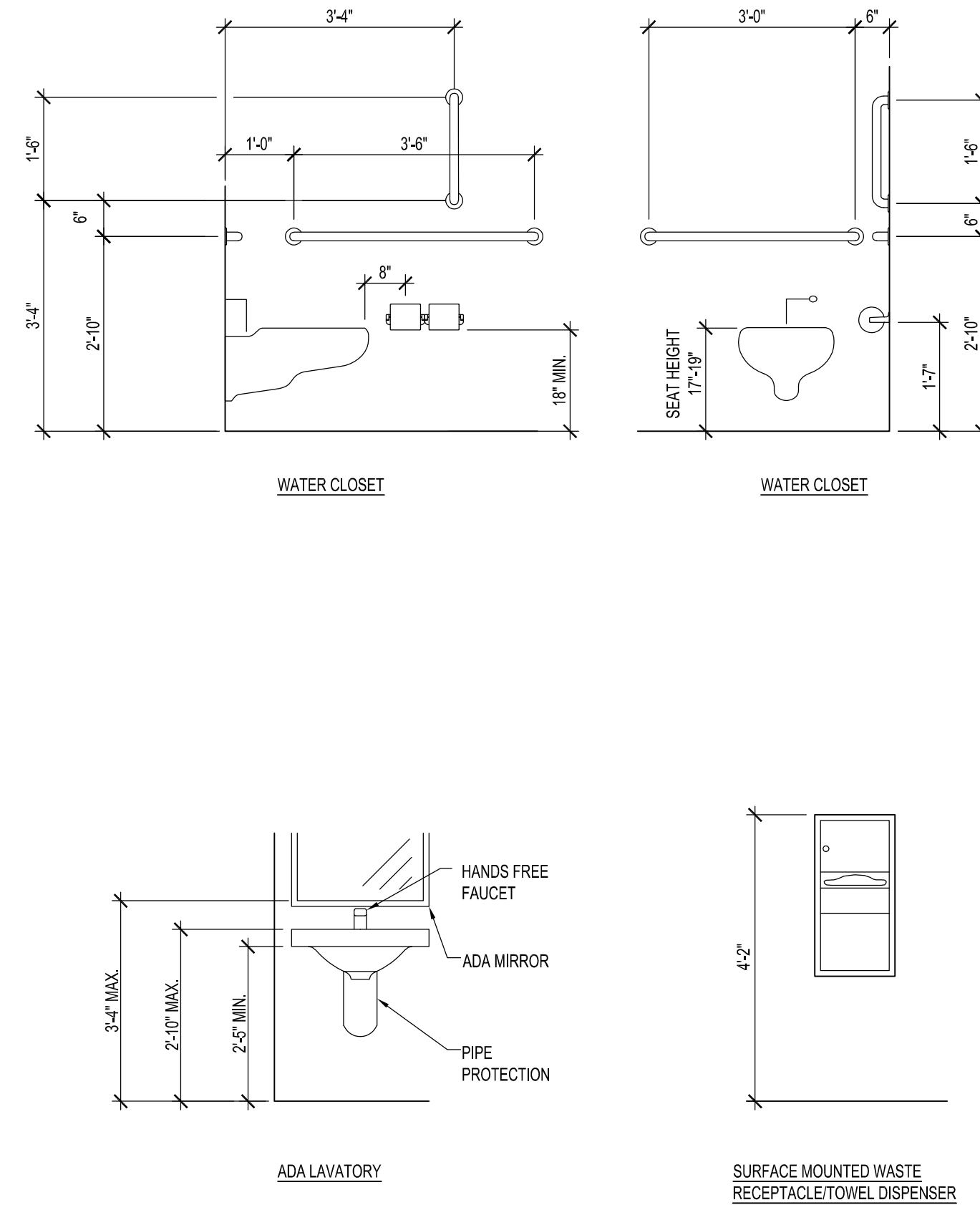
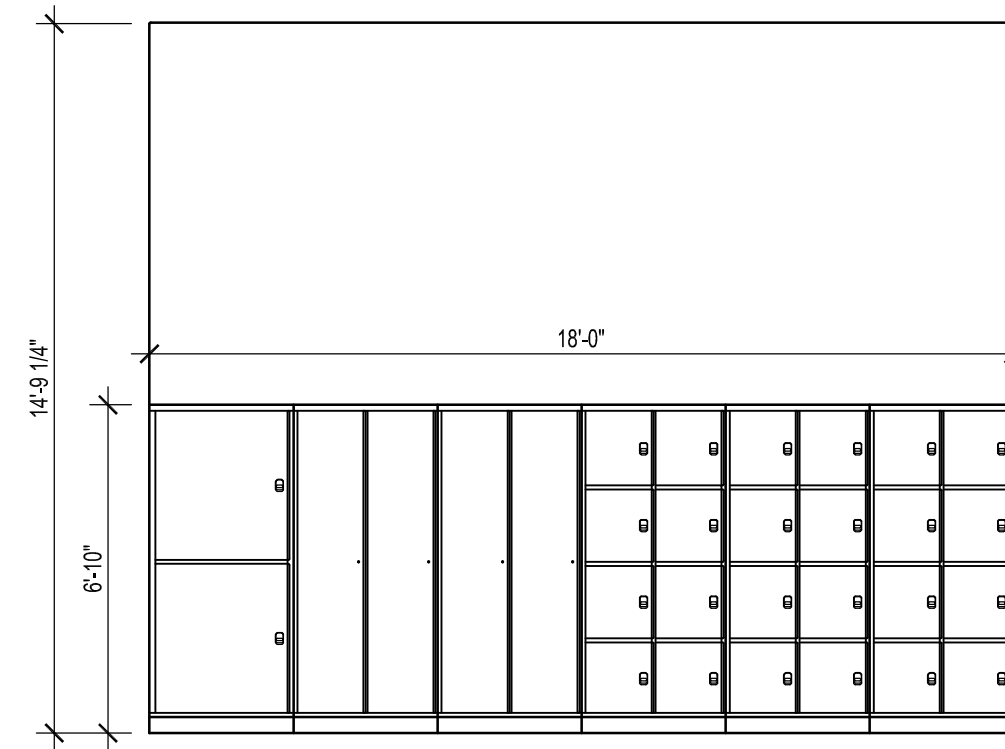
TOILET ACCESSORIES SCHEDULE		
DES.	DESCRIPTION	MOUNTING HT. TOP = TOP CL = CENTERLINE BT = BOTTOM
A	24" X 36" COMPLIANT MIRROR	40" (BT)
B	SOAP DISPENSER	40" (CL)
C	TOILET TISSUE HOLDER	19" (CL)
D	SURFACE MOUNTED TOWEL DISPENSER/WASTE RECEPTACLE	50" (TOP)
E	36" HANDRAIL	35" (CL)
F	42" HANDRAIL	35" (CL)
G	18" HANDRAIL	40" (BT)
H	TOWEL HOOKS	48" (CLR)
I	UNDER LAVATORY PIPE PROTECTION	-
J	TACTILE RESTROOM SIGNAGE	48" (BT)
K	SHOWER CURTAIN	-
L	SHOWER ROD	75" (TOP)

L13	UNISEX BATHROOM ACCESSORIES PLAN
-----	----------------------------------

L18	ACCESSORY SCHEDULE
-----	--------------------

$$1/4'' = 1' - 0''$$
$$1/4"=1'-0"$$


HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

$$1/4'' = 1' - 0''$$


A15	TYPICAL ADA MOUNTING HEIGHTS
-----	------------------------------

1/4"=1'-0'

$$1/2'' = 1' - 0''$$

Dwg.No.:

A-401

[illegible]

Date: 11/11/2026

Scale: AS NOTED

Dwn.By: CID

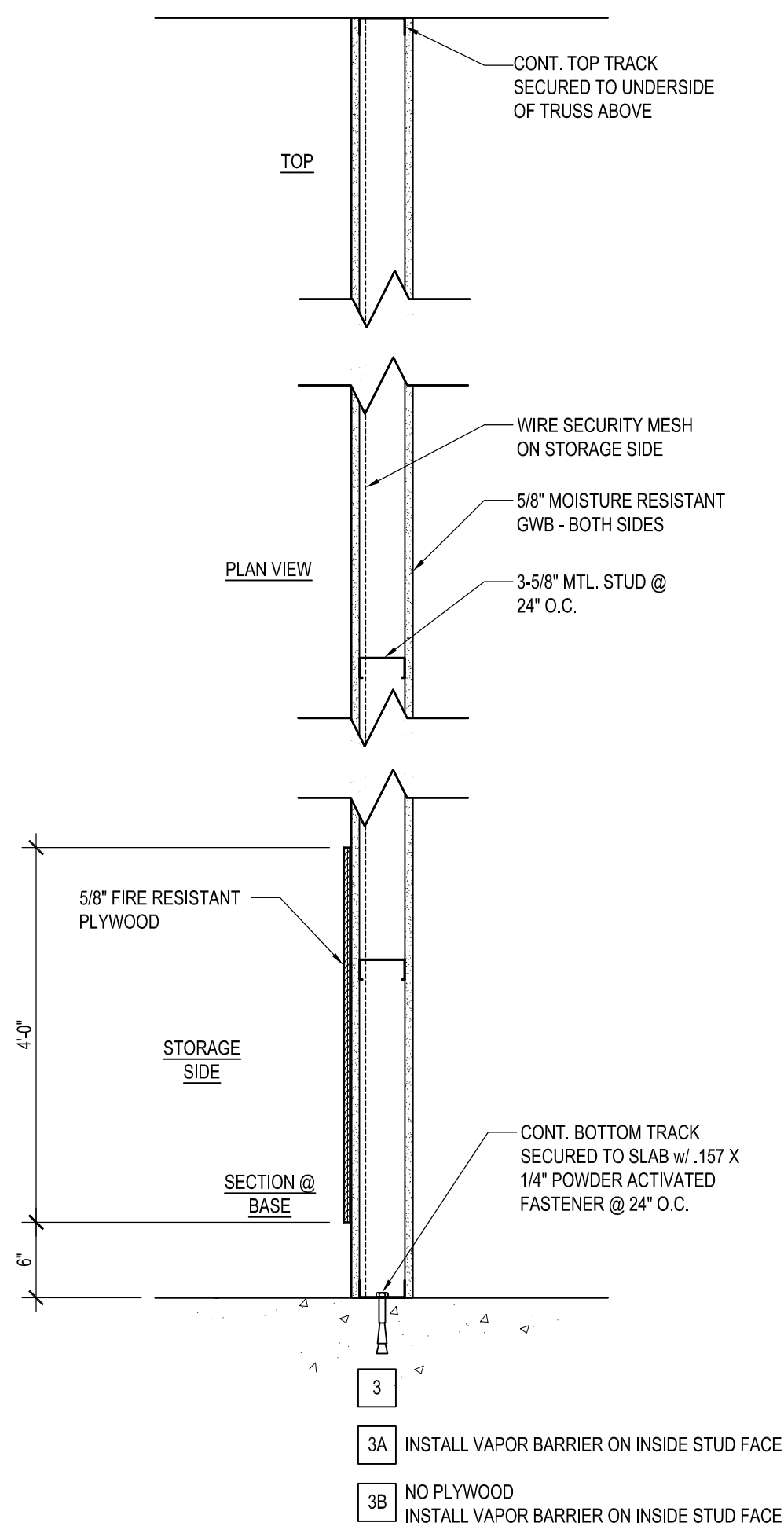
Proj.No.:	0586B053.B01
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ENLARGED
TOILET PLAN,
ACCESSORY
PLAN AND
ELEVATIONS



NO.	Name	FLR	Base	Walls				Clg	HT	NOTES
				N	S	E	W			
100	STORAGE AREA 1	EPOXY	INT	PNT-1	PNT-1	PNT-1	PNT-1	MTL	14'-9 1/2"	
101	STORAGE AREA 2	EPOXY	INT	PNT-1	PNT-1	PNT-1	PNT-1	MTL	14'-9 1/2"	
102	CLIMATE CONTROLLED STORAGE	EPOXY	INT	PNT-1	PNT-1	PNT-1	PNT-1	MTL	14'-9 1/2"	
103	MECHANICAL	EPOXY	INT	PNT-1	PNT-1	PNT-1	PNT-1	MTL	14'-9 1/2"	
104	IT	EPOXY	INT	PNT-1	PNT-1	PNT-1	PNT-1	MTL	8'-6"	
105	CLOSET	EPOXY	INT	PNT-1	PNT-1	PNT-1	PNT-1	MTL	14'-9 1/2"	
106	UNISEX BATHROOM	EPOXY	INT	PNT-1	PNT-1	PNT-1	PNT-1	SAT	8'-0"	
107	OFFICE	EPOXY	INT	PNT-1	PNT-1	PNT-1	PNT-1	SAT	8'-6"	
108	FENCED STORAGE AREA	EPOXY	INT	PNT-1	PNT-1	PNT-1	PNT-1	MTL	14'-9 1/2"	
109	VESTIBULE	EPOXY	INT	PNT-1	PNT-1	PNT-1	PNT-1	MTL	14'-9 1/2"	

ROOM FINISH SCHEDULE



HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

DATE	COMMENTS
21/02/25	150% DESIGN SUBMISSION
21/02/25	60% DESIGN SUBMISSION
10/07/25	FINAL WARDHALL SUBMISSION
22/02/26	60% DESIGN SUBMISSION
	BUDGET

Date:

Scale:

Drawn By:

Proj. No.:

JULY 2026

AS NOTED

CJD

0586B053.B01

SCHEDULES AND DOOR TYPES AND FRAMES AND WALL TYPES

Dwg.No.

A-601

NOTES (CONT.)

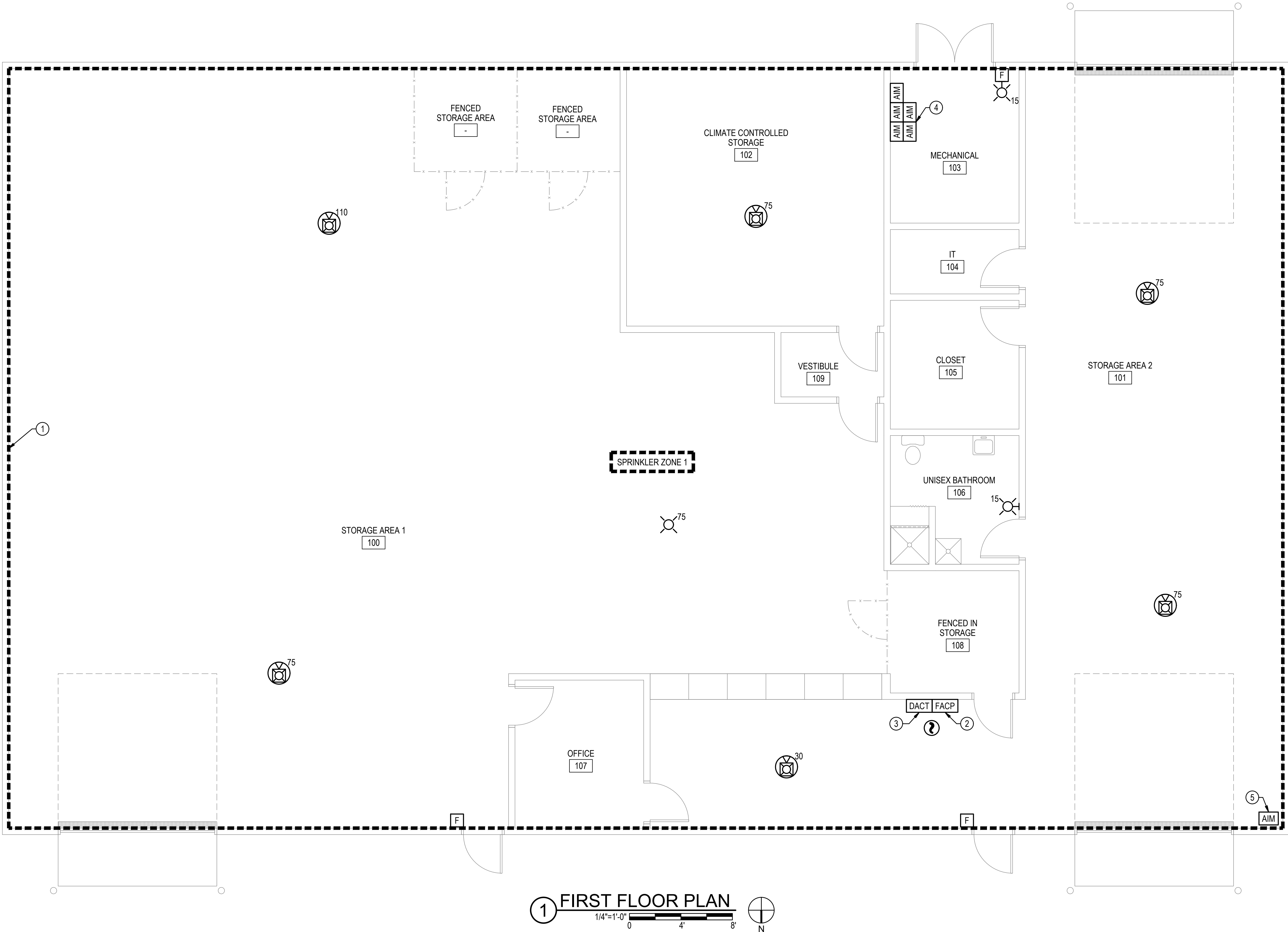
4. PROVIDE MONITOR MODULES FOR SPRINKLER SYSTEM FLOW SWITCH (1) AND TAMPER SWITCHES (4). TAMPER SWITCH FOR BACKFLOW PREVENTER FORWARD FLOW TEST HEADER TO MONITOR NORMALLY-CLOSED POSITION.
5. PROVIDE MONITOR MODULE FOR SPRINKLER SYSTEM TAMPER SWITCH.

NOTES

1. PROVIDE FIRE ALARM NOTIFICATION THROUGHOUT IN ACCORDANCE WITH NFPA 72.
2. PROVIDE ADDRESSABLE FIRE ALARM CONTROL PANEL.
3. PROVIDE DIGITAL FIRE ALARM TRANSMITTER TO SEND FIRE ALARM SIGNALS TO THE FIRE DEPARTMENT.

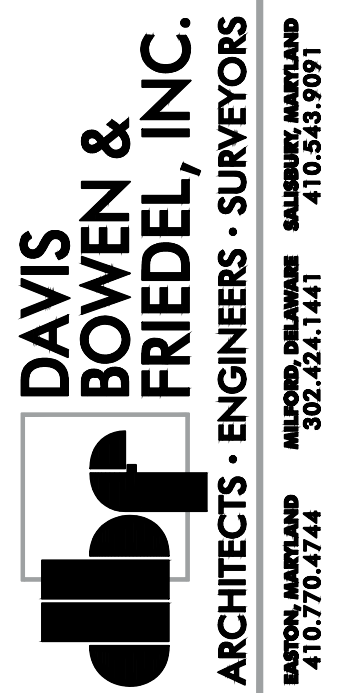
GENERAL NOTES

- G1. ALL WORK SHALL BE NEW AND PROVIDED UNDER THIS CONTRACT UNLESS SPECIFICALLY MARKED "EXISTING", "EXIST", OR "E".
- G2. VERIFY LOCATION AND DIMENSIONS OF EXISTING EQUIPMENT AND COORDINATE ALL WORK PRIOR TO THE START OF CONSTRUCTION.



1 FIRST FLOOR PLAN

1/4"=1'-0"



HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

DATE	COMMENTS
2/13/25	150% DESIGN SUBMISSION
8/14/25	60% DESIGN SUBMISSION
10/07/25	FIRE MARSHAL SUBMISSION
12/02/25	80% DESIGN SUBMISSION
6/25/26	BD SET

Date: JULY 2026
Scale: AS NOTED
Dwn.By: ML
Proj.No.: 0586B053.B01

FIRST FLOOR PLAN

Dwg.No.: FA101

F:\PROJECTS\2016 DBF\2016.25 High Grade Evidence Storage Bldg\CAD\2016.25_FAS01.dwg Jun 25, 2026 - 3:20pm Glinn



G1. ALL WORK SHALL BE NEW AND PROVIDED UNDER THIS CONTRACT UNLESS SPECIFICALLY MARKED "EXISTING", "EXIST.", OR "E)".

G2. VERIFY LOCATION AND DIMENSIONS OF EXISTING EQUIPMENT AND COORDINATE ALL WORK PRIOR TO THE START OF CONSTRUCTION

OMB/DFM PROJECT NO: MJ4506000006

HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952

[illegible]

Dwg.No.:
FA501

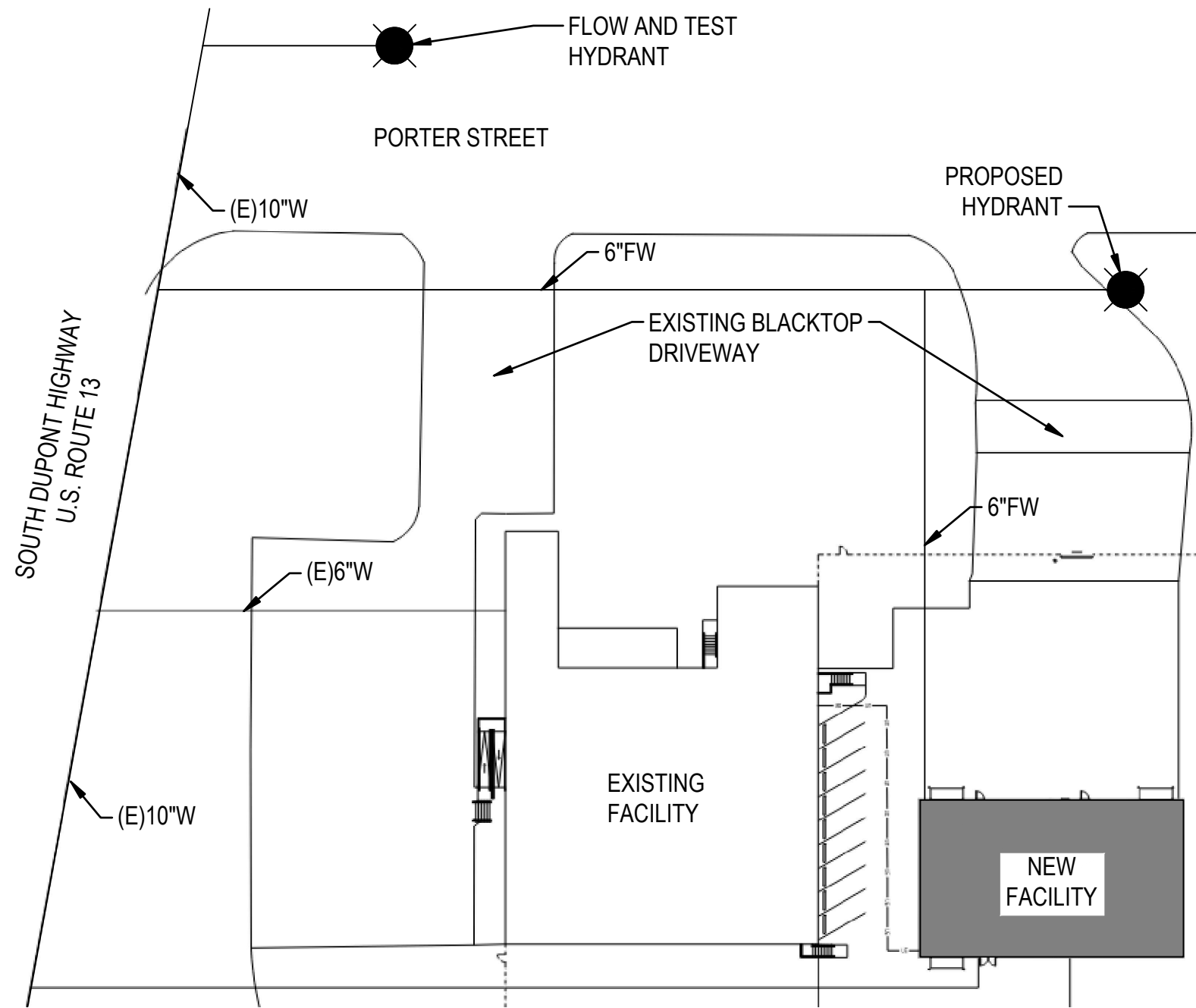
ABBREVIATIONS

A	AMPERES.
AC	ABOVE CEILING
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
ATC	ACOUSTIC TILE CEILING
AWG	AMERICAN WIRE GAUGE
CA	CLEAN AGENT
CL	CEILING LEVEL
CONT.	CONTINUED
D	DRAIN
DN	DOWN
ELEV.	ELEVATOR
EMT	ELECTRICAL METALLIC TUBING
ETR	EXISTING TO REMAIN
(E)	EXISTING
F	FIRE LINE
FDC	FIRE DEPARTMENT CONNECTION
FH	FIRE HYDRANT
FHV	2-1/2" FIRE HOSE VALVE
FW	UNDERGROUND FIRE WATER LINE
N.I.C.	NOT IN CONTRACT
PA	PRE-ACTION
(R)	RELOCATE
SP	SPRINKLER PIPING
TYP.	TYPICAL
W	UNDERGROUND WATER LINE
ZCA	SPRINKLER ZONE CONTROL ASSEMBLY

WATER FLOW TEST REPORT

FIRE HYDRANT FLOW TEST REPORT			
		DATE	2/14/2025
LOCATION	Porter St & DuPont Hwy		
TESTED BY	Bear Industries, Inc.	TIME	
PURPOSE	Hi-Grade Building Renovation		
HYDRANT INFORMATION			
FLOW HYDRANT #		Test Hydrant #	
OUTLET DIAMETER		INCHES	
STATIC PRESSURE	58	PSI	
RESIDUAL PRESSURE	55	PSI	
COEFFICIENT			
TOTAL FLOW	1061	GPM	

WATER FLOW TEST MAP



SYMBOLS

	LIGHT HAZARD DISCHARGE DENSITY REMOTE AREA	0.1 GPM/SF 1500 SF
	ORDINARY HAZARD GROUP 1 DISCHARGE DENSITY REMOTE AREA	0.15 GPM/SF 1500 SF
	MODIFICATION OF THE SPRINKLER SYSTEM IN THIS AREA IS NOT IN CONTRACT (N.I.C.)	
	AREA OF WORK / SPRINKLER ZONE	
	WATERFLOW SWITCH	
	TAMPER SWITCH	
	ELECTRIC WATERFLOW ALARM BELL	
	ZONE CONTROL ASSEMBLY	
	DOUBLE CHECK BACKFLOW PREVENTER	
	FIRE HYDRANT	
	FIRE SUPPRESSION PIPE	
	GATE VALVE	
	GLOBE VALVE	
	SWING CHECK VALVE	
	OS&Y VALVE	
	BALL VALVE	
	BUTTERFLY VALVE	
	BACKFLOW PREVENTER	
	PIPE TURN UP	
	PIPE TURN DOWN	
	CONCENTRIC PIPE REDUCER	
	ECCENTRIC PIPE REDUCER	
	PIPE CAP	
	SPRINKLER RISER	
	EXISTING SPRINKLER	
	UPRIGHT SPRINKLER	
	PENDENT SPRINKLER	
	SIDEWALL SPRINKLER	

GENERAL SYMBOLS

FLOOR PLAN AND DETAIL TITLES:	
	UNIQUE PLAN OR DETAIL NUMBER ON THIS DRAWING
	NAME OF PLAN OR DETAIL
	NORTH ARROW
	ALL DRAWINGS WHERE THIS DETAIL IS REFERENCED FROM
	GRAPHIC SCALE OF THIS PLAN OR DETAIL
2-PART REFERENCE DETAIL IDENTIFICATION:	
	NUMBER INDICATES DETAIL/SECTION
	SHEET NUMBER WHERE DETAIL/SECTION IS DRAWN
SECTION IDENTIFICATION	
	NUMBER INDICATES SECTION
	INDICATES DIRECTION OF CUTTING PLANE
	SHEET NUMBER WHERE SECTION IS DRAWN
NORTH ARROW	
	ARROW INDICATES TRUE NORTH AND/OR PROJECT NORTH.
	COLUMN LINE NUMBER
	REVISION CLOUD WITH REVISION NUMBER DESIGNATION
	BREAKLINE
	MATCHLINE DESIGNATION
	EXISTING
	POINT OF CONNECTION TO EXISTING
	POINT OF TERMINATION OF REMOVAL
	NOTE NUMBER
	ROOM NUMBER

FIRE SUPPRESSION REQUIREMENTS

- A DIRECT NOTE SUCH AS "PROVIDE" OR "MODIFY" INDICATES THAT THE FIRE SPRINKLER CONTRACTOR IS TO PROVIDE THE EQUIPMENT, MODIFY THE SYSTEM, ETC. COORDINATE INTERFACE WITH GENERAL CONTRACTOR AND ALL OTHER DISCIPLINES AND TRADES.
- PROVIDE A COMPLETE AUTOMATIC WET-PIPE SPRINKLER SYSTEM DESIGNED AND INSTALLED PER 700 DELAWARE STATE FIRE PREVENTION COMMISSION AND AND NFPA 13 2019 EDITION CRITERIA.
- UNLESS OTHERWISE NOTED BY HATCHING, PROVIDE SPRINKLER SYSTEM DESIGN IN ACCORDANCE WITH ORDINARY HAZARD GROUP 1 CRITERIA.
- DESIGN SPRINKLER SYSTEM BASED UPON HYDRAULIC CALCULATIONS. PROVIDE RECENT WATER FLOW TEST FOR BASIS OF HYDRAULIC CALCULATIONS.
- PROVIDE WHITE CONCEALED QUICK RESPONSE SPRINKLERS IN AREAS WITH FINISHED CEILINGS. PROVIDE BRASS UPRIGHT QUICK RESPONSE SPRINKLERS IN AREAS WITHOUT FINISHED CEILINGS. PROVIDE A MINIMUM SPRINKLER TEMPERATURE OF 155 FAHRENHEIT FOR ORDINARY TEMPERATURE SPRINKLERS.
- PROVIDE SPRINKLERS IN CENTER OF ACOUSTIC CEILING TILES.
- PROVIDE BLACK STEEL SPRINKLER PIPE. PIPE MUST BE MINIMUM SCHEDULE 10. SCHEDULE 10 PIPE MUST NOT BE THREADED. THREADED PIPE MUST BE SCHEDULE 40.
- DO NOT PROVIDE SPRINKLER VALVES ABOVE HARD CEILINGS. DO NOT PROVIDE SPRINKLERS BELOW RAISED FLOOR. PROVIDE IDENTIFICATION SIGNAGE FOR ALL VALVES LOCATED ABOVE SUSPENDED CEILINGS.

6. PROVIDE CHECK VALVE ON VERTICAL PIPE SUPPLYING FIRE DEPARTMENT CONNECTION.
7. 6-INCH INCOMING FIRE WATER SUPPLY. SEE CIVIL SHEET C-501 FOR CONTINUATION.
8. PROVIDE ISOLATION VALVE AND 6X4 REDUCER ON INCOMING WATER LINE INSIDE BUILDING.

3. PROVIDE FIRE DEPARTMENT CONNECTION. COORDINATE TO PROVIDE SIGNAGE AND FITTINGS IN ACCORDANCE WITH LOCAL FIRE DEPARTMENT REQUIREMENTS. PROVIDE SPLASH BLOCK.
4. PROVIDE SIDEWALL SPRINKLER PROTECTION BELOW OVERHEAD DOOR
5. PROVIDE EXTERIOR ELECTRIC WATERFLOW ALARM BELL AT LOCATION OF FIRE DEPARTMENT CONNECTION.

1. PROVIDE SPRINKLER PROTECTION THROUGHOUT IN ACCORDANCE WITH NFPA 13. ROUTE SPRINKLER PIPING ABOVE CEILINGS. COORDINATE SPRINKLER ROUTING WITH STRUCTURE AND MECHANICAL DUCTWORK/EQUIPMENT.
2. PROVIDE BACKFLOW PREVENTER TEST HEADER AND SPRINKLER SYSTEM MAIN DRAIN TERMINATION. PROVIDE SPLASH BLOCK.

G1. ALL WORK SHALL BE NEW AND PROVIDED UNDER THIS CONTRACT UNLESS SPECIFICALLY MARKED "EXISTING", "EXIST", OR "(E)".

G2. VERIFY LOCATION AND DIMENSIONS OF EXISTING EQUIPMENT AND COORDINATE ALL WORK PRIOR TO THE START OF CONSTRUCTION.



HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

[illegible]

Date:	JULY 2026
Re:	AS NOTED
By:	ML
No.:	0586B053.B01

FIRST FLOOR
PLAN

No.:
FX101



G1. ALL WORK ON THIS DRAWING SHALL BE NEW AND PROVIDED UNDER THIS CONTRACT UNLESS SPECIFICALLY MARKED "EXISTING", "EXIST", OR "E)".

G2. VERIFY LOCATION AND DIMENSIONS OF EXISTING EQUIPMENT AND COORDINATE ALL WORK PRIOR TO THE START OF CONSTRUCTION.

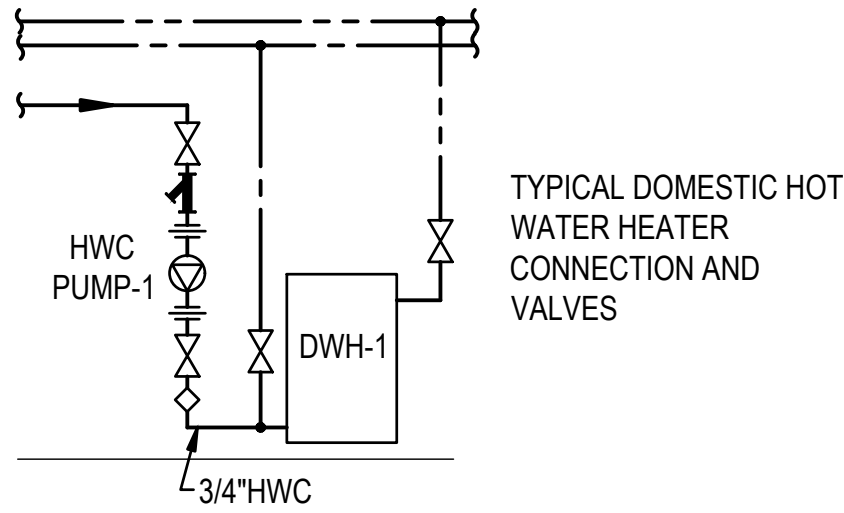
1. 4-INCH INCOMING WATER LINE. SEE FX101 FOR CONTINUATION. COORDINATE VERTICAL DROP LOCATION WITH MECHANICAL EQUIPMENT WITHIN THE ROOM AND ABOVE CEILING.
2. PROVIDE 4-INCH DOUBLE-CHECK BACKFLOW PREVENTER.
3. PROVIDE 4-INCH NORMALLY-CLOSED BUTTERFLY VALVE.
4. PROVIDE TWO (2) HOSE CONNECTION BACKFLOW PREVENTER FORWARD FLOW TEST HEAD.
5. PROVIDE 4-INCH SPRINKLER RISER INCLUDING BUTTERFLY VALVE AND RISER CHECK VALVE WITH MAIN DRAIN AND TEST CONNECTION. ROUTE DRAIN DIRECTLY TO EXTERIOR.
6. PROVIDE 4-INCH TO SPRINKLER SYSTEM. SEE FX101 FOR CONTINUATION. COORDINATE VERTICAL DROP LOCATION WITH MECHANICAL EQUIPMENT WITHIN THE ROOM AND ABOVE CEILING.
7. COORDINATE WITH MECHANICAL CONTRACTOR FOR INSTALLATION OF HUMIDIFIER AND SPRINKLER PIPING IN CO-HABITED SPACE. REFER TO SHEETS M-101 AND M-301 FOR ADDITIONAL DETAILS.

HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

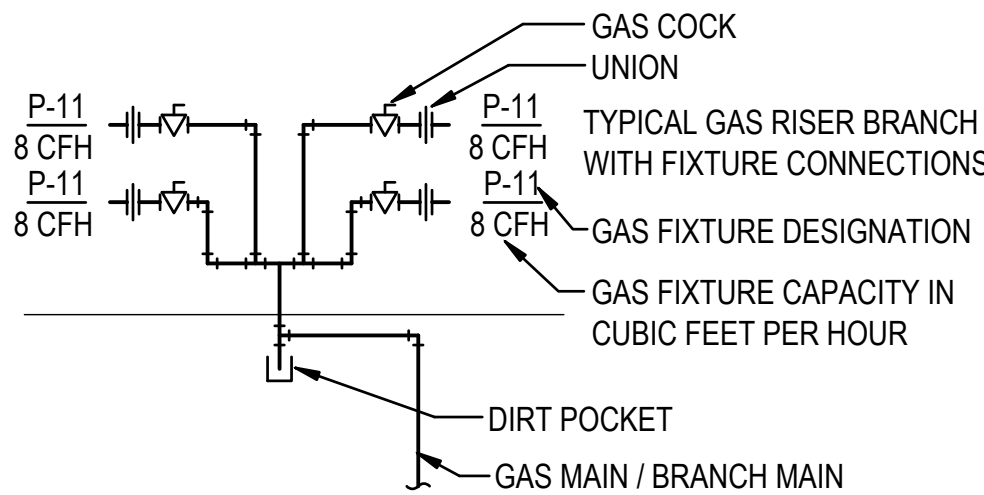
Date:	JULY 2026
Scale:	AS NOTED
Dwn.By:	ML
Proj.No.:	0586B053.B01

PLUMBING RISER DIAGRAMS CONT.

DOMESTIC WATER RISER DIAGRAMS



GAS RISER DIAGRAMS

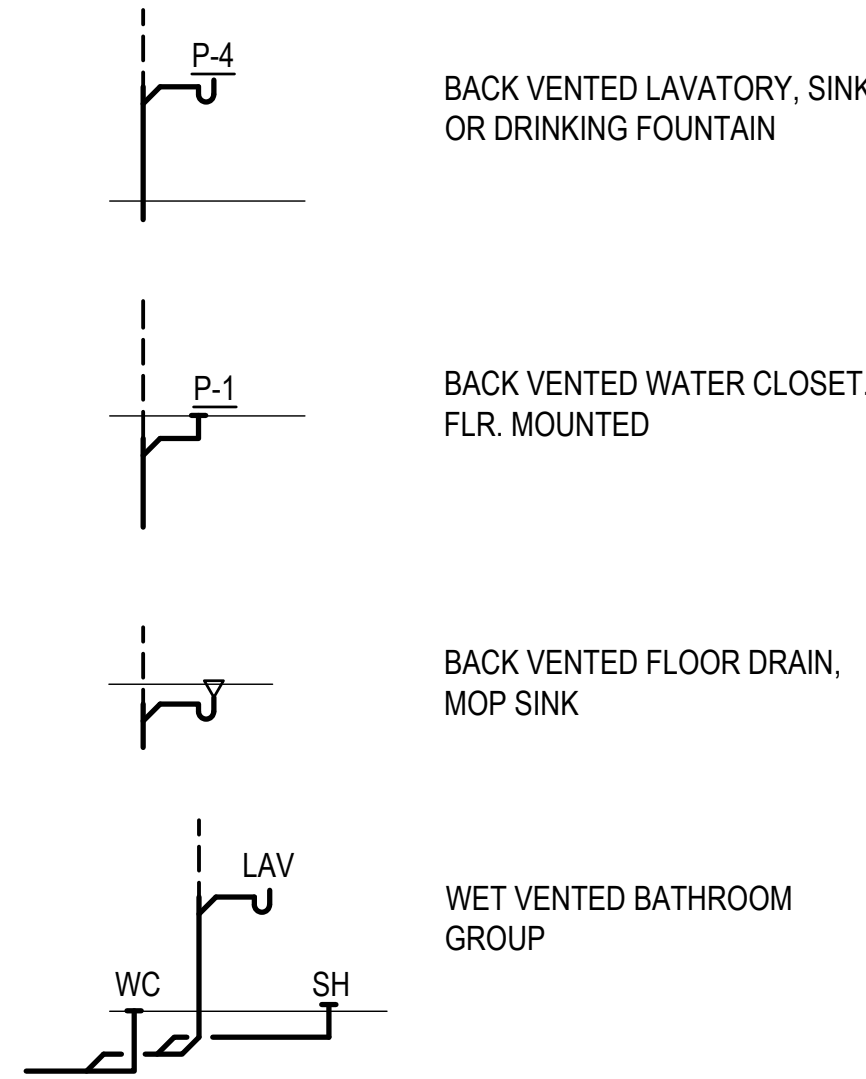


ABBREVIATIONS CONT.

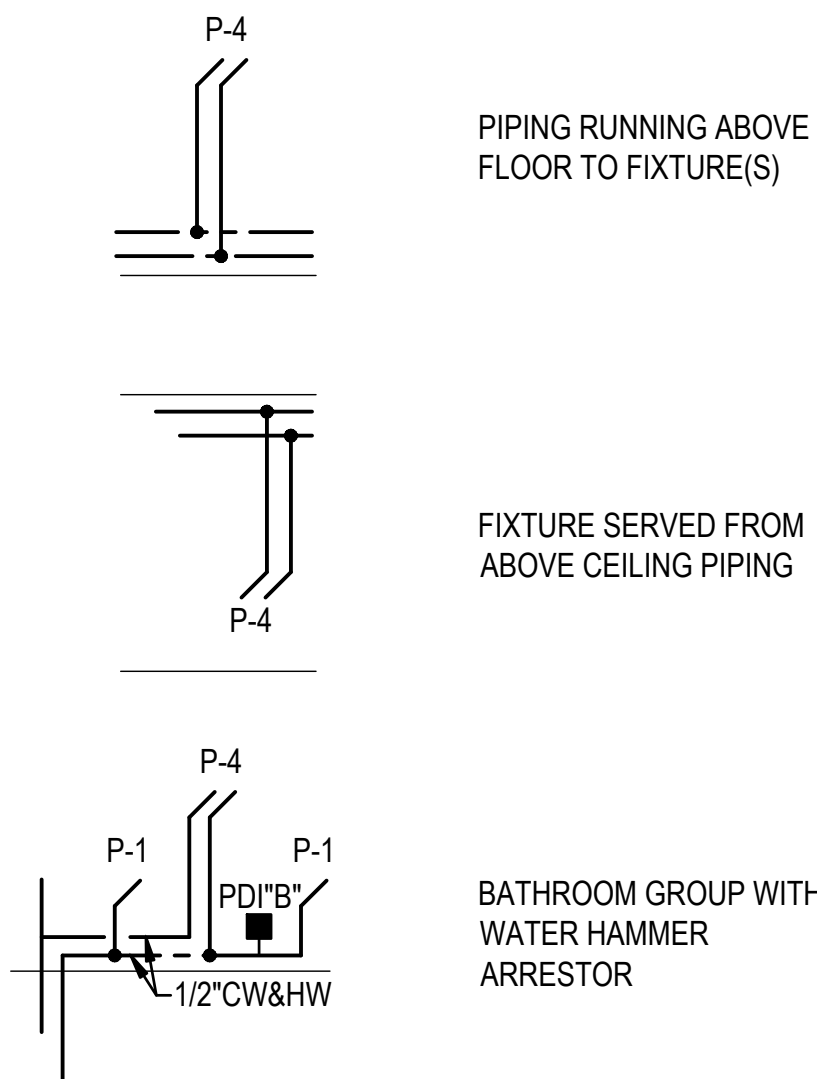
P.D.	PRESSURE DROP
PRV	PRESSURE RELIEF VALVE
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH ABSOLUTE
PVC	POLYVINYL CHLORIDE
R.D.	ROOF DRAIN
RLA	RUNNING LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
SAN	SANITARY
S.S.	STAINLESS STEEL
TMV	THERMOSTATIC MIXING VALVE
TYP.	TYPICAL
V	VENT/VOLTS
VTR	VENT THRU ROOF
W	WASTE / WIDTH
W/	WITH
W.C.	WATERCOLUMN
WC	WATER CLOSET
W.C.O.	WALL CLEANOUT
W.G.	WATER GAUGE
W.H.	WALL HYDRANT, NON-FREEZE
WHA	WATER HAMMER ARRESTOR

PLUMBING RISER DIAGRAMS

SANITARY RISER DIAGRAMS

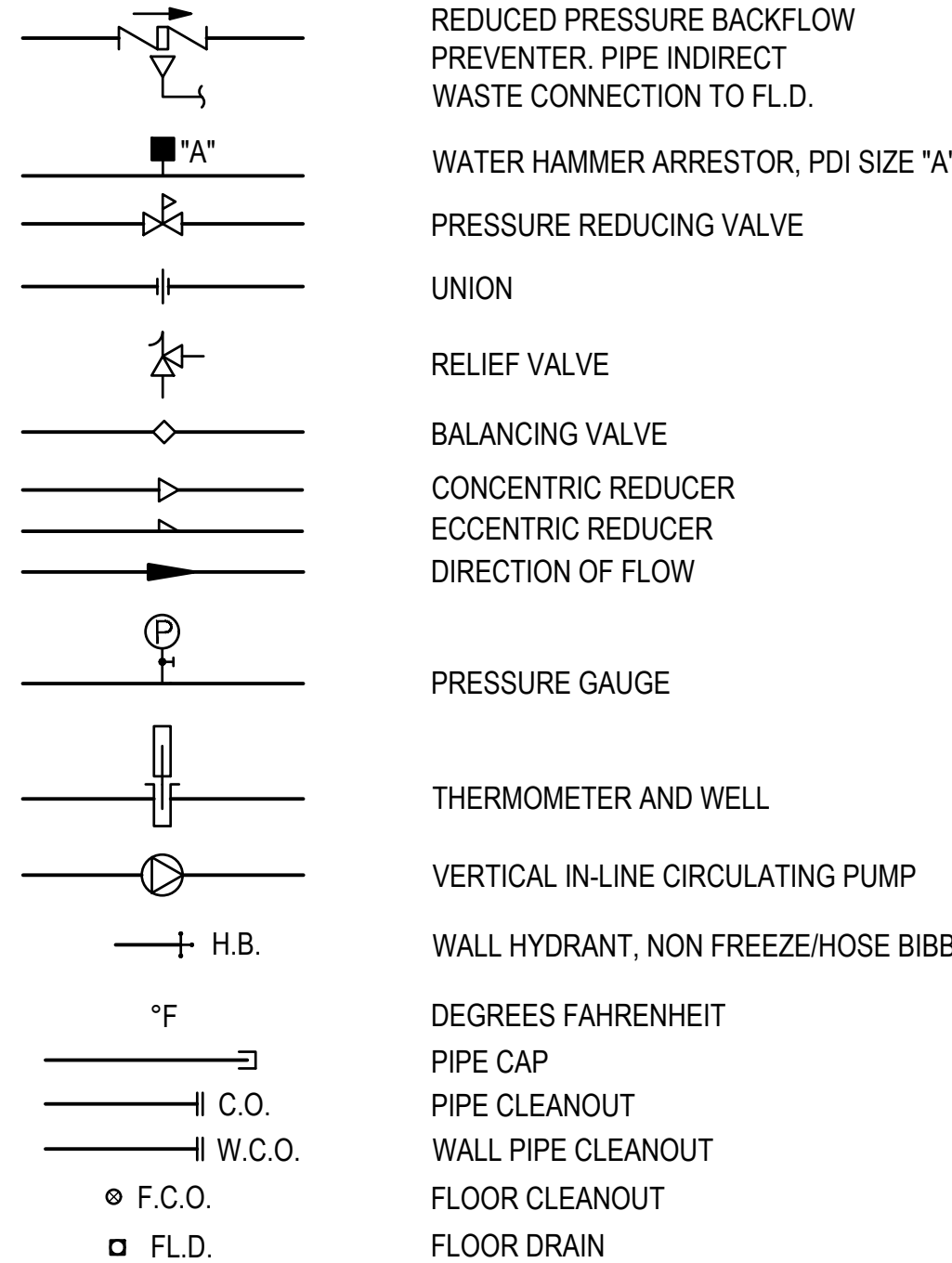


DOMESTIC WATER RISER DIAGRAMS



PLUMBING SYMBOLS CONT.

PIPING

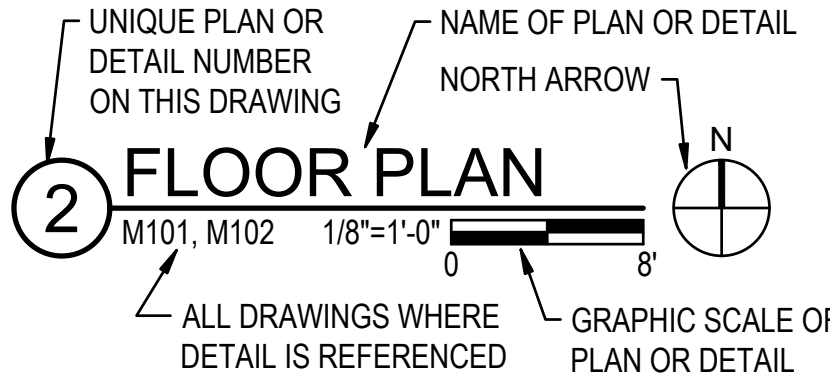


ABBREVIATIONS

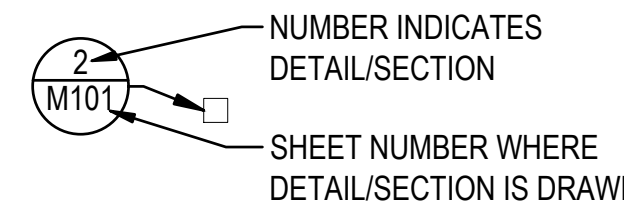
ABV.	ABOVE
A.F.F.	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
A.P.	ACCESS PANEL
B.E.	BOTTOM ELEVATION
BFP	REDUCED PRESSURE BACKFLOW PREVENTOR
BSMT.	BASEMENT
BHP	BRAKE HORSEPOWER
BTU	BRITISH THERMAL UNITS
BTUH	BRITISH THERMAL UNITS PER HOUR
C	COMMON
CFH	CUBIC FEET PER HOUR
CIRC.	CIRCULATING
C.O.	CLEANOUT
CONC.	CONCRETE
CW	DOMESTIC COLD WATER
D	DRAIN
D.B.	DRY BULB
DIA.	DIAMETER
DN.	DOWN
DWH	DOMESTIC WATER HEATER
(E)	EXISTING
ENT.	ENTERING
E.W.T.	ENTERING WATER TEMPERATURE
EXIST.	EXISTING
°F	DEGREES FAHRENHEIT
F.C.O.	FLOOR CLEANOUT
FLA.	FULL LOAD AMPS
FL.D.	FLOOR DRAIN
FLR.	FLOOR
FT.	FEET
GAL.	GALLON
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HP	HORSEPOWER
HR.	HOUR
HW	DOMESTIC HOT WATER
HWC	DOMESTIC HOT WATER CIRCULATING
HZ	HERTZ
INV.	INVERT
IN.	INCH(ES)
L	LENGTH
LAV	LAVATORY
LBS.	POUNDS
L.W.T.	LEAVING WATER TEMPERATURE
M.A.V.	MANUAL AIR VENT
MAX.	MAXIMUM
M.B.H.	THOUSANDS BTUH
MECH.	MECHANICAL
MIN.	MINIMUM
N.C.	NORMALLY CLOSED
NFSS	NON FUSED SAFETY SWITCH
N.O.	NORMALLY OPEN
O.C.	ON CENTER

GENERAL SYMBOLS

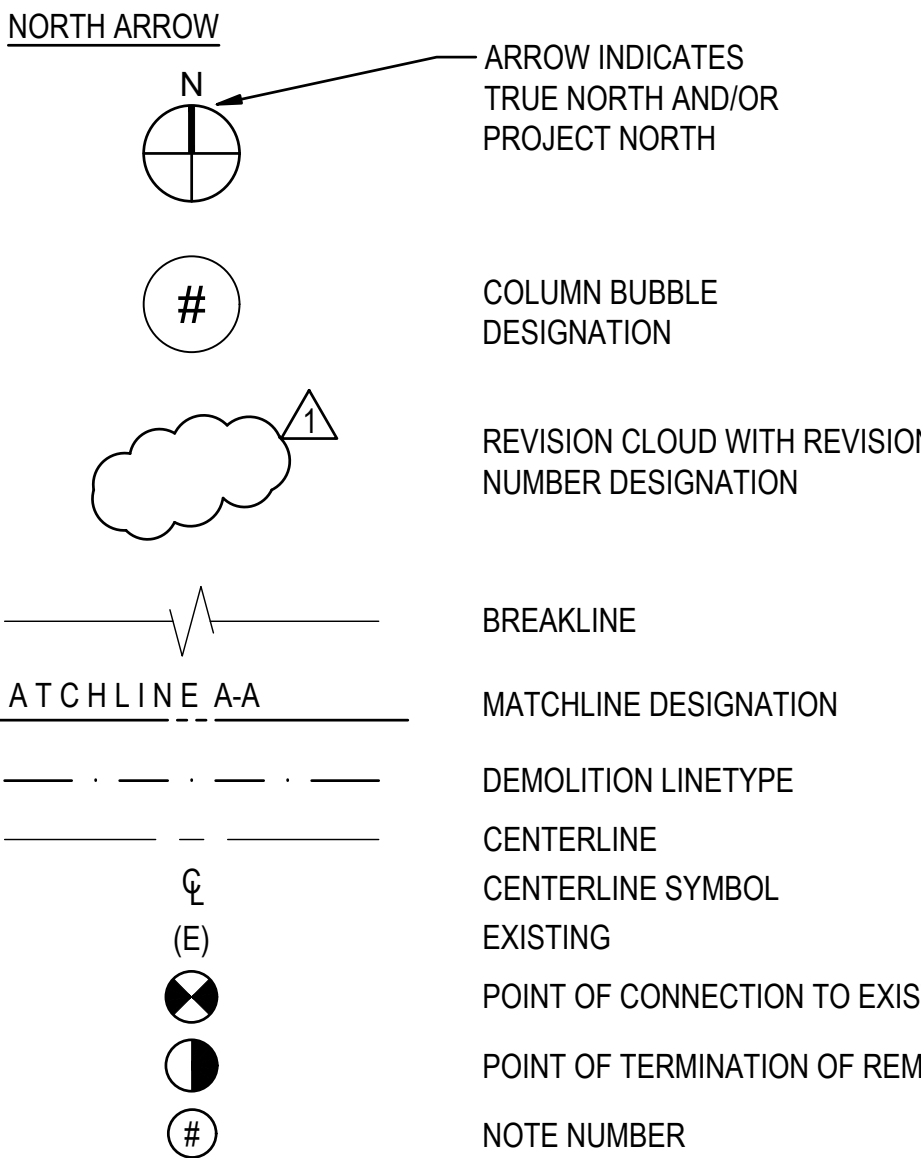
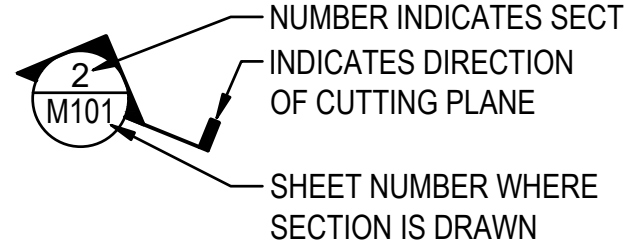
FLOOR PLAN AND DETAIL TITLES:



2-PART REFERENCE DETAIL IDENTIFICATION:

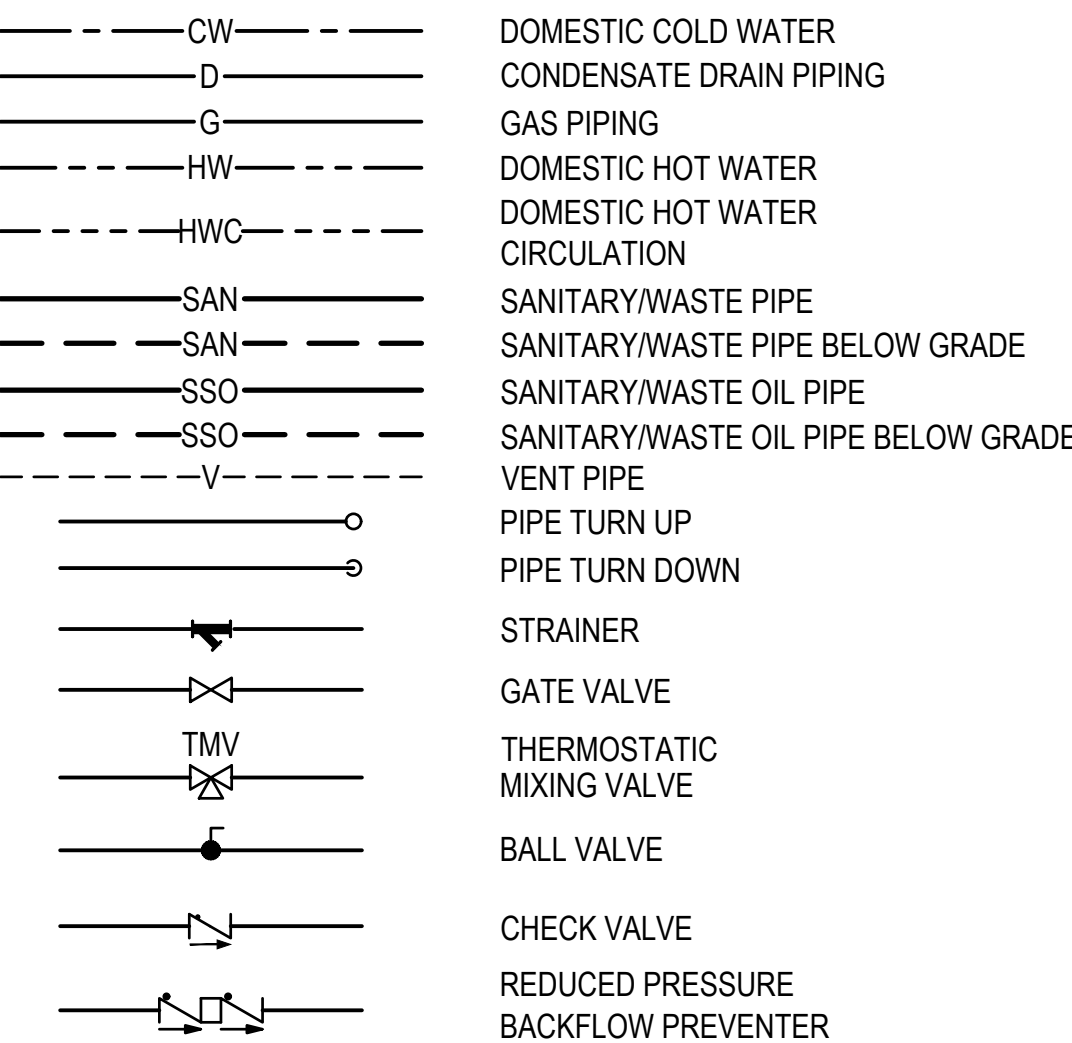


SECTION IDENTIFICATION



PLUMBING SYMBOLS

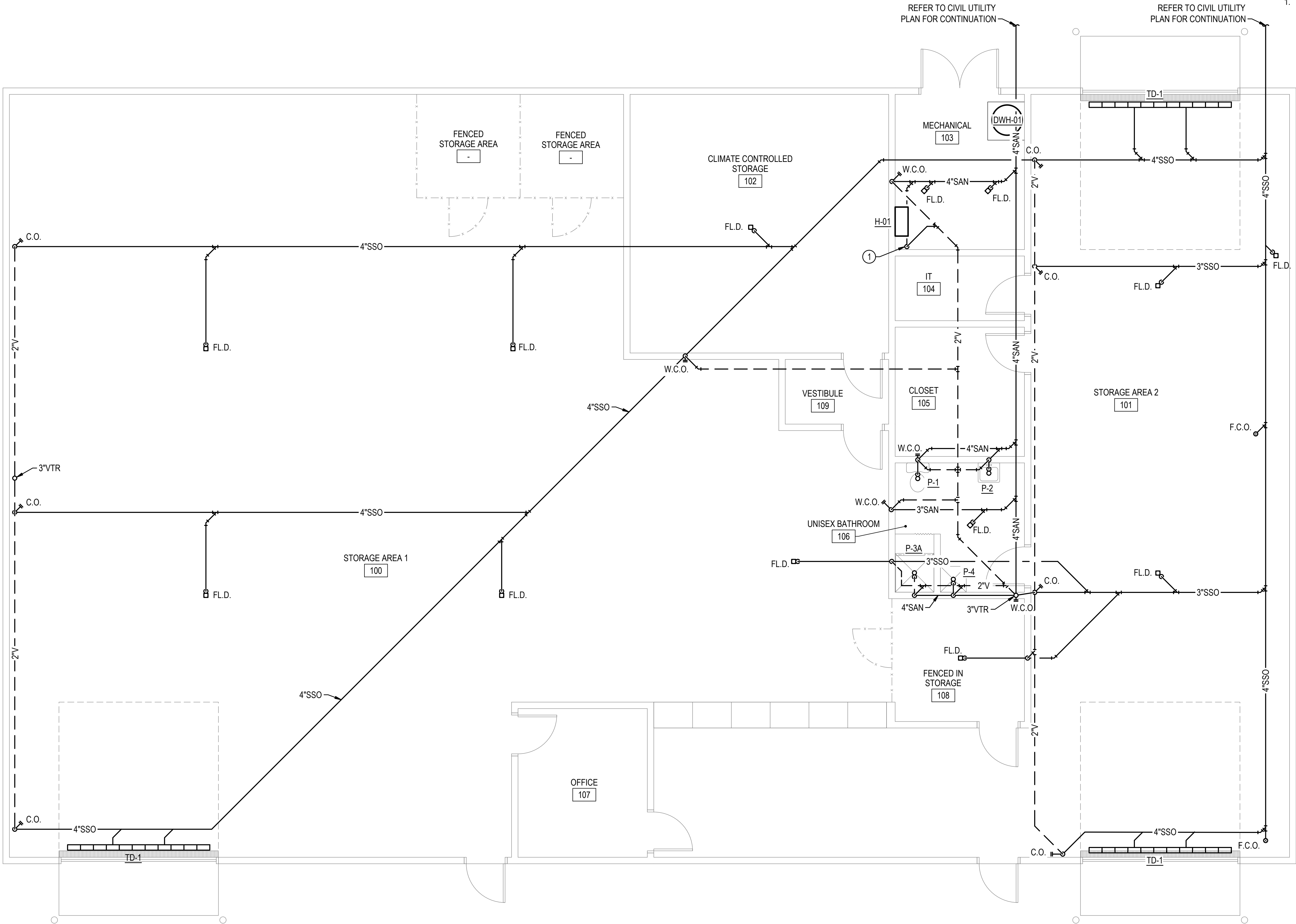
PIPING



DATE	COMMENTS
2/1/25	150% DESIGN SUBMISSION
8/14/25	80% DESIGN SUBMISSION
10/07/25	FIRE MARSHAL SUBMISSION
2/28/26	80% DESIGN SUBMISSION
6/25/26	BID SET

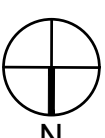
Date:	JULY 2026
Scale:	AS NOTED
Dwn.By:	JHG
Proj.No.:	0586B053.B01

SYMBOLS AND ABBREVIATIONS



1 FIRST FLOOR PLAN - SANITARY & VENT

1/4"=1'-0"

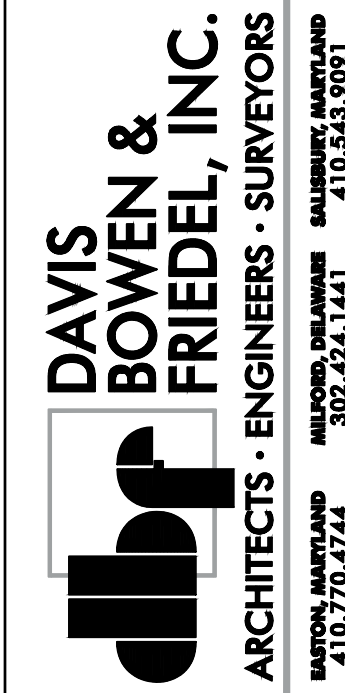


GENERAL NOTES

- G1. ALL WORK SHALL BE NEW AND PROVIDED UNDER THIS CONTRACT UNLESS SPECIFICALLY MARKED "EXISTING", "EXIST", OR "E".
- G2. ALL SANITARY PIPING SHOWN ON PLANS IS LOCATED BELOW SLAB, ON GRADE UNLESS OTHERWISE INDICATED.
- G3. COORDINATE UTILITY SHUTDOWN WITH OWNER A MINIMUM OF 2-WEEKS IN ADVANCE.

NOTES

1. PROVIDE SANITARY STANDPIPE WITH SANITARY TEE AND AIR GAP FITTING FOR HUMIDIFIER CONDENSATE DISCHARGE.



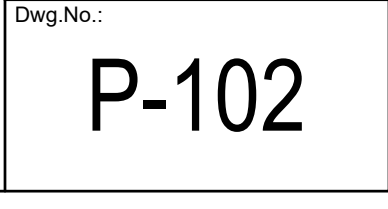
HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

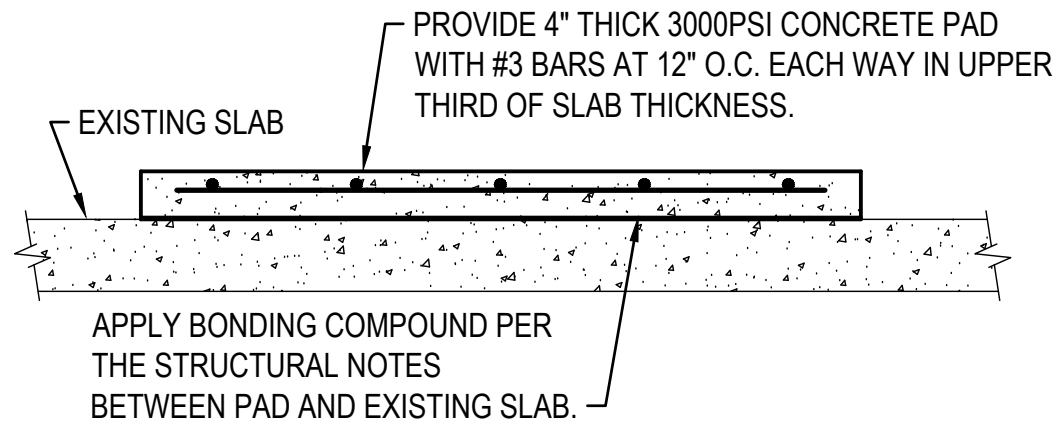
DATE	COMMENTS
2/13/25	150% DESIGN SUBMISSION
8/14/25	60% DESIGN SUBMISSION
10/07/25	FIRE MARSHAL SUBMISSION
2/28/26	90% DESIGN SUBMISSION
6/25/26	BD SET

Date: JULY 2026
Scale: AS NOTED
Dwn.By: JHG
Proj.No.: 0586B053.B01

FIRST FLOOR
PLAN - SAN

Dwg.No.:
P-101





STRUCTURAL NOTES

CAST IN PLACE CONCRETE CONSTRUCTION: PROVIDE CONCRETE CONFORMING TO ALL REQUIREMENTS OF ACI 301-99, ACI 318-02 AND THE ACI DETAILING MANUAL. PROVIDE CONCRETE CONSTRUCTION CONFORMING TO THE FOLLOWING CRITERIA:

STRUCTURE TYPE	MINIMUM ULTIMATE COMPRESSIVE STRENGTH @ 28 DAYS F'c (PSI)	MAXIMUM WATER/CEMENT RATIO	ENTRAINED AIR RANGE (%)
EQUIPMENT PAD	3,000	0.55	2-4%

PROVIDE CEMENT CONFORMING WITH ASTM C 150, TYPE 1. USE DRINKABLE WATER. PROVIDE AGGREGATE CONFORMING WITH ASTM C 33. PROVIDE CONCRETE ADMIXTURES CONTAINING NO MORE THAN 0.1 PERCENT CHLORIDE IONS. PROVIDE AIR ENTRAINING ADMIXTURE CONFORMING TO ASTM C 260. USE 3 INCH MAXIMUM SLUMP. PROVIDE A WATER BASED EPOXY RESIN/PORTLAND CEMENT BONDING AGENT SUCH AS SIKA ARMATEC 110 OR EQUIVALENT. PROVIDE SURFACE PREPARATION AND PRODUCT APPLICATION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. APPLY A SMOOTH TROWEL FINISH TO THE TOP OF THE EQUIPMENT PAD.

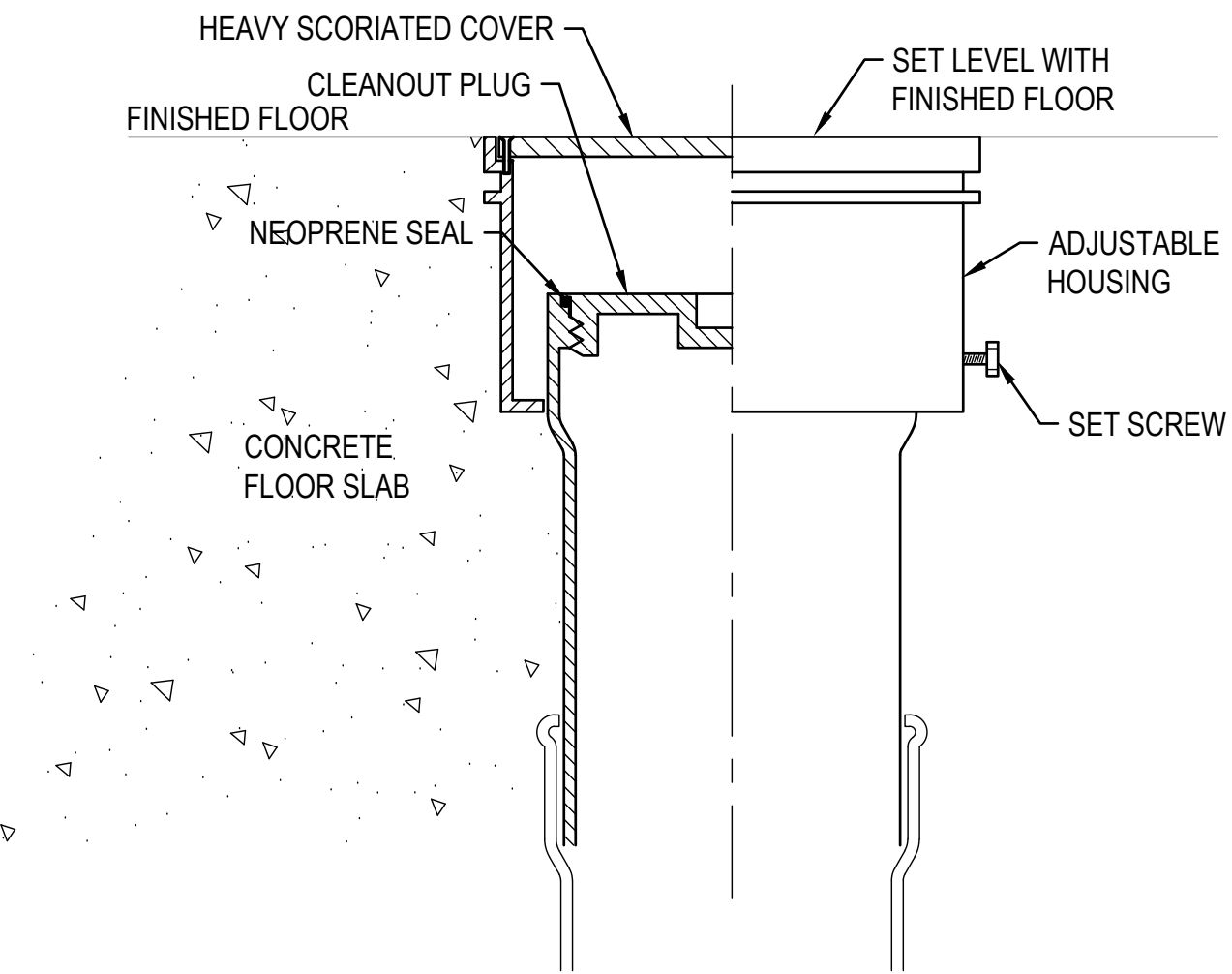
CONCRETE REINFORCEMENT: PROVIDE HIGH STRENGTH NEW BILLET DEFORMED STEEL REINFORCEMENT CONFORMING TO ASTM A615, GRADE 60. PROVIDE DETAILS OF STEEL REINFORCEMENT CONFORMING TO ACI 318-89 AND CRSI STANDARDS. PROVIDE A MINIMUM OF 1 INCH CONCRETE PROTECTION FOR STEEL REINFORCEMENT OF CAST-IN-PLACE CONCRETE.

CONTRACTOR: FIELD VERIFY ALL DIMENSIONS OF EXISTING CONSTRUCTION. IF DEVIATIONS ARE FOUND, PROVIDE A WRITTEN REPORT TO THE CONTRACTING OFFICER.

DETAIL 6 CONCRETE PAD

P-102, P-501

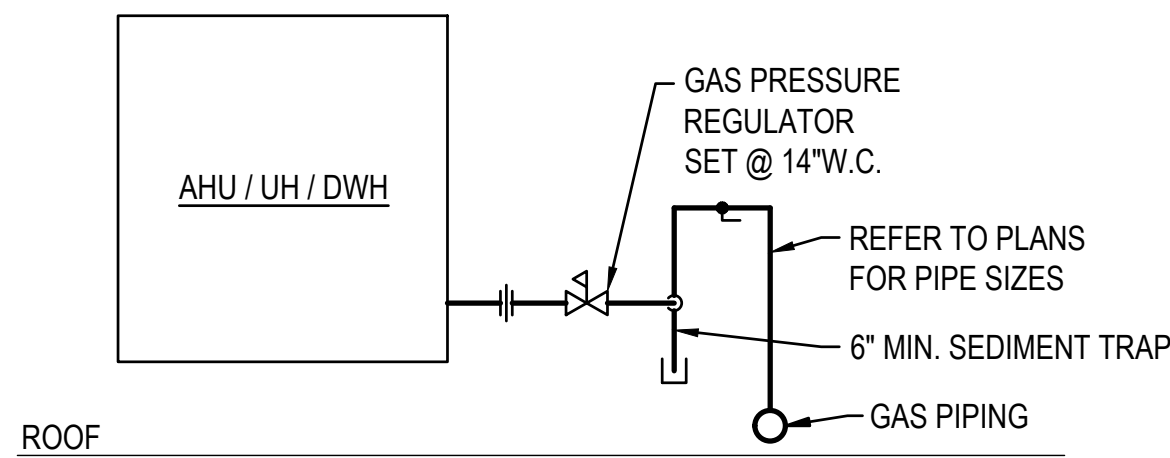
NO SCALE



DETAIL 7 FLOOR CLEANOUT

P-101

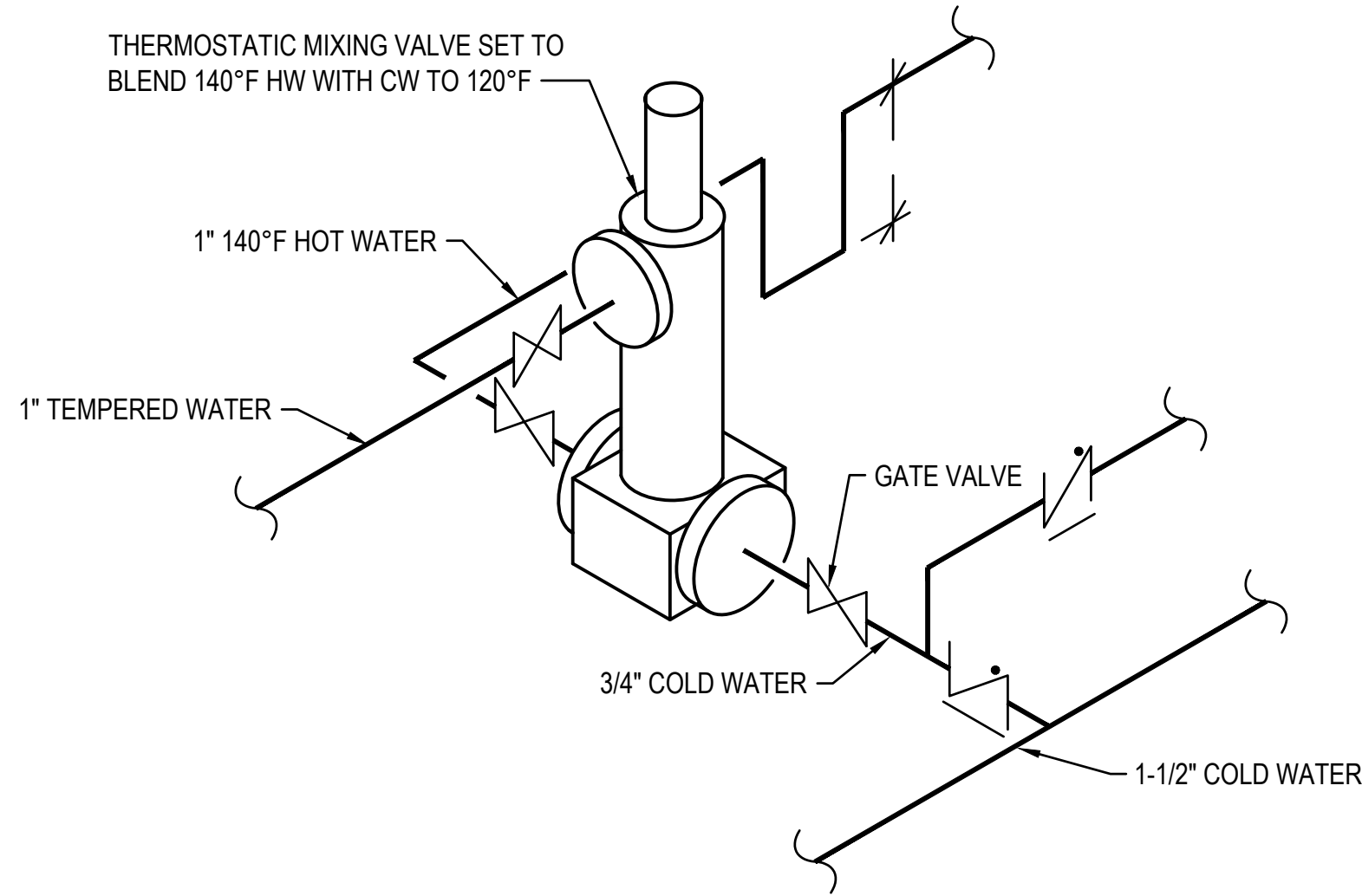
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DETAIL 9 EQUIPMENT GAS PIPING

P-102

NO SCALE

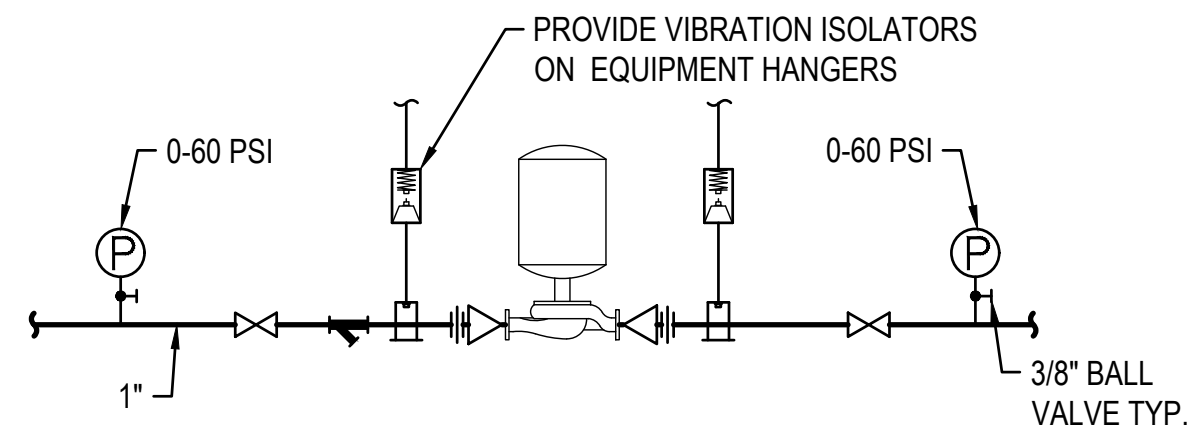


THERMOSTATIC MIXING VALVE						
MARK	ASSE RATING	MAX. PRESSURE DROP		MIN. FLOW GPM	OUTLET SETPOINT °F	MIN. COLD WATER BYPASS GPM
		PSI	GPM			
TMV-1	1017	5.0	15	1.0	120	1.0

DETAIL 3 THERMOSTATIC MIXING VALVE

P-102, P-501, P-602

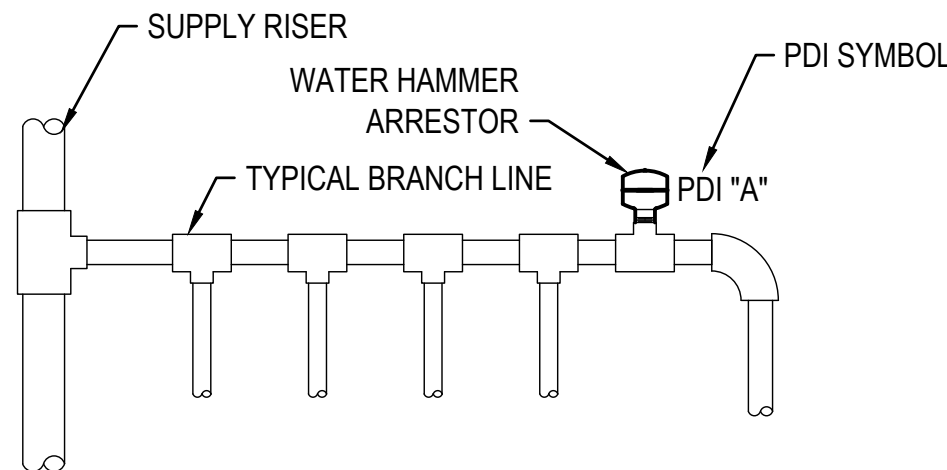
NO SCALE



DETAIL 4 VERTICAL IN-LINE PUMP

P-102, P-501, P-601, P-602

NO SCALE



DETAIL 5 WATER HAMMER ARRESTOR

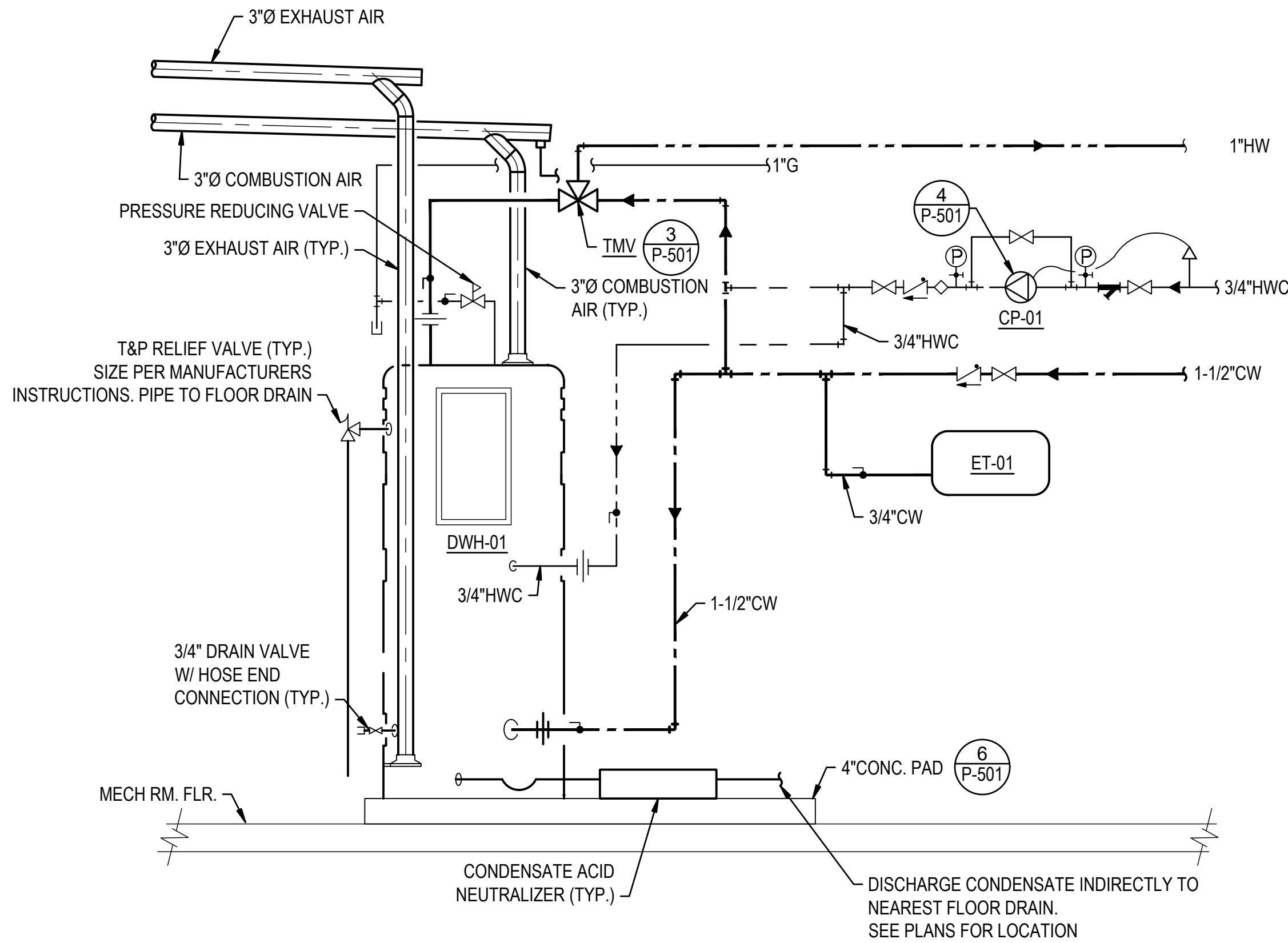
P-102, P-602

NO SCALE

NOTES:

- PREFERRED INSTALL WATER HAMMER ARRESTORS AT THE END OF BRANCH LINE BETWEEN THE LAST TWO FIXTURES SERVED.
- ONE WATER HAMMER ARRESTOR PER 20' LINE, AND ANOTHER FOR BRANCHES OVER 20' IN LENGTH.
- THE SUM OF FIXTURE UNIT RATING OF UNITS OVER 20' IN LENGTH SHALL BE EQUAL TO OR GREATER THAN THE DEMAND OF THE BRANCHES.

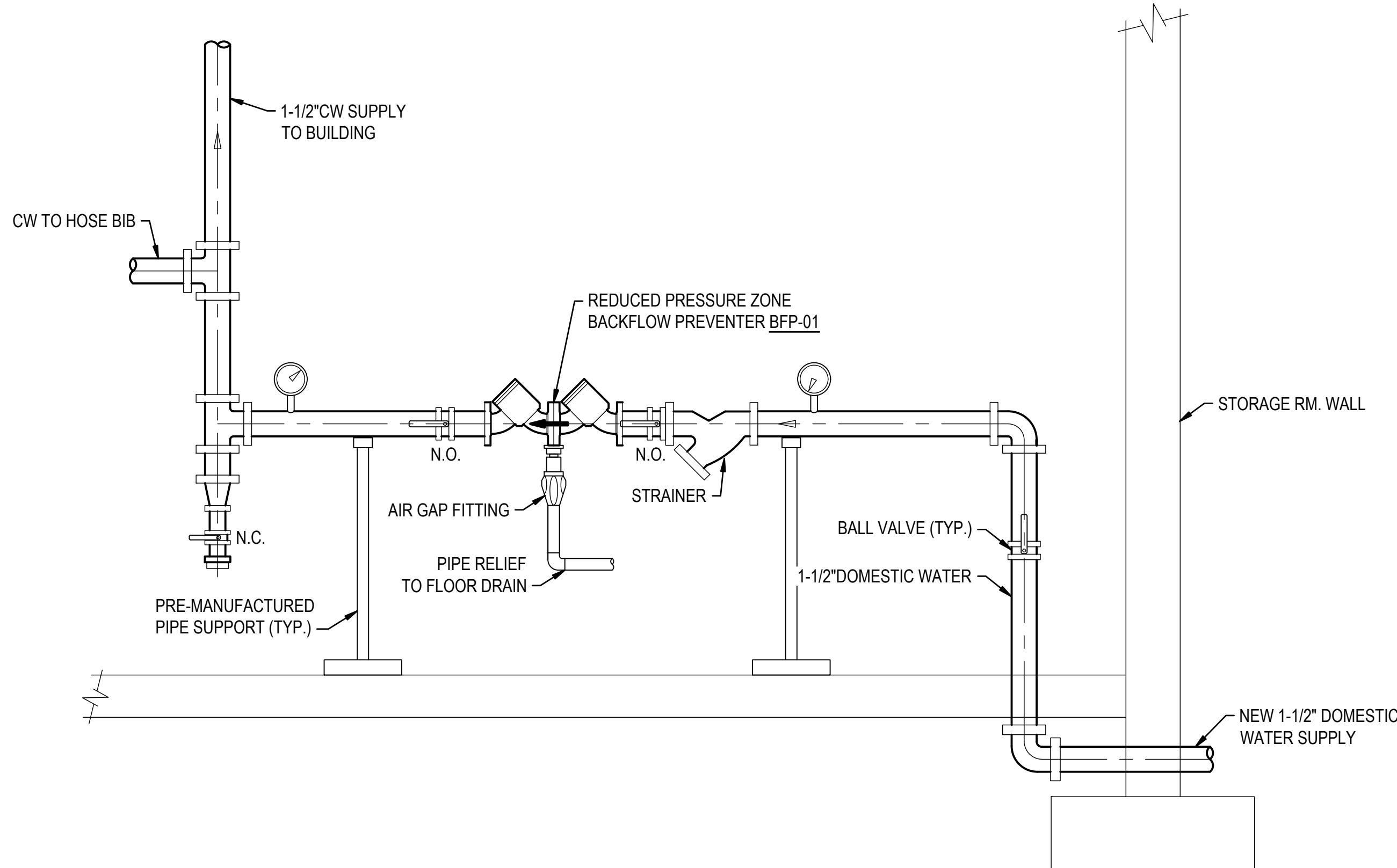
WATER HAMMER ARRESTOR SCHEDULE						
PDI SYMBOL	A	B	C	D	E	F
FIXTURE UNIT RATING	1-11	12-32	33-60	61-113	114-154	155-330



DETAIL 1 DOMESTIC WATER HEATER GAS-FIRED

P-101, P-601

NOT TO SCALE



DETAIL 2 INCOMING WATER SERVICE

P-102

NOT TO SCALE

DATE	COMMENTS
2/1/25	150% DESIGN SUBMISSION
8/1/25	80% DESIGN SUBMISSION
10/7/25	FIRE MARSHAL SUBMISSION
2/28/26	90% DESIGN SUBMISSION
6/25/26	BID SET

Date: JULY 2026

Scale: AS NOTED

Dwn.By: JHG

Proj.No.: 0586B053.B01

DETAILS

Dwg.No.:

P-501

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

[A] PLUMBING FIXTURE SCHEDULE

UNIT NO.	FIXTURE	CONNECTION SIZE, INCHES				REMARKS
		W	V	CW	HW	
P-1	WATER CLOSET	4"	2"	1"	-	ADA COMPLIANT, WHITE VITREOUS CHINA, FLOOR-MOUNTED, BOTTOM OUTLET, HIGH-EFFICIENCY, ELONGATED BOWL, PRESSURE-ASSISTED 1.28-GPF FLUSH, TANK-TYPE TOILET. PROVIDE WITH WHITE, HEAVY DUTY, ELONGATED, OPEN FRONT, TOILET SEAT LESS COVER. BASIS OF DESIGN: SLOAN WETS-8029 TOILET.
P-2	LAVATORY	2"	1-1/2"	3/4"	-	WALL HUNG, LEDGEBACK, VITREOUS CHINA LAVATORY WITH SINGLE CENTER FAUCET HOLE. PROVIDE WITH 0.5 GPM, DOUBLE INFRARED SENSOR-ACTIVATED ELECTRONIC FAUCET, SOLAR POWERED WITH BATTERY BACK-UP, AND INTEGRAL SIDE MIXER. BASIS OF DESIGN: SLOAN SS-3106 LAVATORY AND SLOAN BASYS EFX-375 FAUCET.
P-3	SHOWER	1-1/2"	1-1/4"	1/2"	1/2"	PROVIDE ADA COMPLIANT TERRAZZO SHOWER RECEPTOR WITH WALL MOUNTED, POLISHED CHROME THERMOSTATIC AND PRESSURE BALANCED SHOWER VALVE WITH WALL MOUNTED, 2.5 GPM, POLISHED CHROME HANDSHOWER WITH 5' CHROME SHOWER HOSE AND WALL MOUNTED 2.5 GPM SHOWERHEAD. BASIS OF DESIGN: FIAT MODEL ADAWN3636 RECEPTOR, SPEAKMAN SM-3060 SHOWER COMBINATION.
P-4	MOP SINK	2"	2"	1/2"	1/2"	36"x36"x10"DEEP, FLOOR MOUNTED, MOLDED STONE MOP SERVICE BASIN. PROVIDE WITH EXPOSED, YOKE WALL MOUNTED, 2.2 GPM, CAST BRASS, VANDAL RESISTANT FAUCET WITH HOLD AND MOP HOOKS. BASIS OF DESIGN: FIAT MODEL 26EFS MOP SINK AND FIAT MODEL 830-AA FAUCET.
FL.D.	FLOOR DRAIN	3"	-	-	-	CAST IRON BODY WITH 6"Ø NICKEL BRONZE STRAINER AND BARRIER TRAP SEAL DEVICE. BASIS OF DESIGN: WATTS FD-100-A DRAIN AND ZURN Z1072 TRAP SEAL.
TD-1	TRENCH DRAIN	4"	-	-	-	10" WIDE HIGH CAPACITY PRE-SLOPED FIBERGLASS TRENCH DRAIN SYSTEM. BASIS OF DESIGN: JAY R. SMITH MANUFACTURING COMPANY.

NOTES

- A. INSTALL ALL FIXTURES AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. PROVIDE PIPING CONNECTIONS PER FIXTURE CONNECTION SCHEDULE.
- B. ALL ADA RIM MOUNTING HEIGHTS IN ACCORDANCE WITH IPC AND ABAAS REQUIREMENTS.

DOMESTIC WATER HEATER SCHEDULE

DESIG.	TANK CAP. (GAL.)	MIN. RECOVERY GPH @ 100°F RISE	MIN. INPUT RATING (MBH)	SET POINT ("F)	CONNECTION SIZE, INCHES				ELECTRICAL		LOCATION	BASIS OF DESIGN	NOTES
					G	V	CW	HW	AMPS	V/PH/Hz			
DWH-01	60	225	200.0	140	3/4"	-	1-1/2"	1"	-	115/1/60	MER	BRADFORD WHITE MODEL EF60T-199E-3N(A)	A B C D E F

NOTES

- A. NATURAL GAS: 4.5"W.C. MIN. & 14.0"W.C. MAX.
- B. PROVIDE EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- C. REFER TO DETAIL 1 ON SHEET P-601 FOR INSTALLATION.
- D. PROVIDE EQUIPMENT WITH MANUFACTURER'S RECOMMENDED CONCENTRIC VENT KIT TERMINATION.
- E. EQUIPMENT THERMAL EFFICIENCY: MINIMUM 95%.
- F. PROVIDE EQUIPMENT WITH CONDENSATE NEUTRALIZER KIT.

CIRCULATING PUMP SCHEDULE

DESIG.	TANK TYPE	FLUID	GPM	HEAD (FT. W.G.)	RPM	MOTOR (HP)	ELECTRICAL (V/PH/Hz)	SERVICE	LOCATION	BASIS OF DESIGN	NOTES
	A										
CP-01	IL	WATER	2.0	10	3300	1/6	115/1/60	DOMESTIC WATER	MER	BELL & GOSSETT PL-36	B C

NOTES

- A. IL: IN-LINE CIRCULATOR.
- B. PROVIDE EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- C. REFER TO DETAIL 1 ON SHEET P-501 FOR INSTALLATION.

EXPANSION TANK SCHEDULE

DESIG.	TANK VOL. (GAL.)	ACCEPTANCE VOL. (GAL.)	INITIAL CHARGE (PSIG)	TANK SIZE (IN.ØxIN.H)	SERVICE	LOCATION	BASIS OF DESIGN	NOTES
ET-01	7.0	2.0	22.0	12x18	DOMESTIC WATER	MECHANICAL 113	AMITROL ST-12C-DD	A B

NOTES

- A. PROVIDE EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- B. PROVIDE 3/4" DRAIN, VALVE, HOSE CONNECTION AND CAP.

BACKFLOW PREVENTER SCHEDULE

DESIG.	GPM	MAX. P.D. (PSI)	SIZE (IN.)	SERVICE	LOCATION	BASIS OF DESIGN	NOTES
BFP-01	25	12.0	1"	INCOMING DOM. WATER	101 - STORAGE AREA 2	WATTS MODEL LF009	A B

NOTES

- A. PROVIDE EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- B. TYPE: REDUCED PRESSURE ASSEMBLY.

DATE	COMMENTS
2/13/25	150% DESIGN SUBMISSION
8/14/25	80% DESIGN SUBMISSION
10/07/25	FIRE MARSHAL SUBMISSION
2/28/26	80% DESIGN SUBMISSION
6/25/26	BID SET

Date: JULY 2026
Scale: AS NOTED
Dwn.By: JHG
Proj.No.: 0586B053.B01

SCHEDULES

Dwg.No.:
P-601

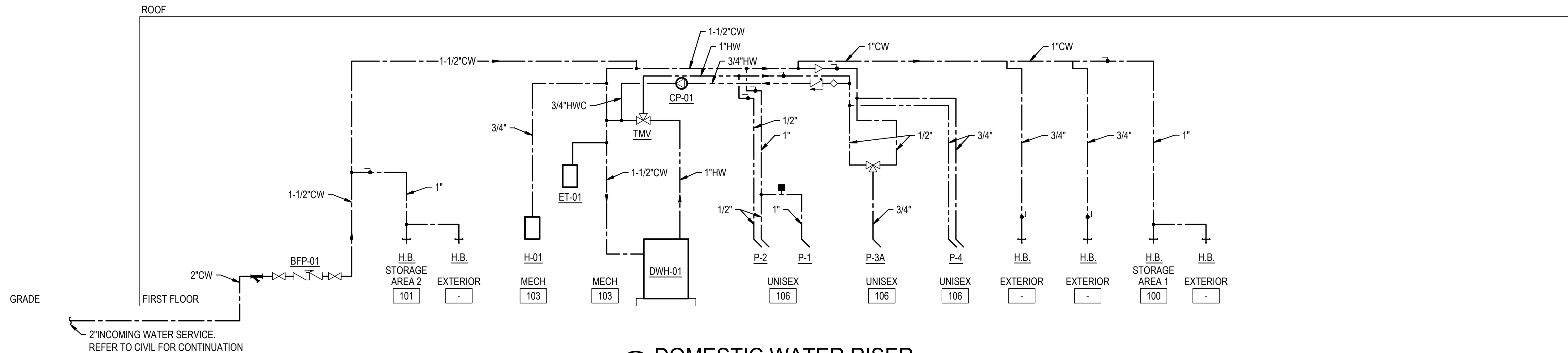
DATE	COMMENTS
11/09/23	15%/30% DESIGN SUBMISSION
01/10/24	60% DESIGN SUBMISSION
02/19/24	A&B SUBMISSION
02/23/24	FIRE MARSHAL SUBMISSION
04/09/24	FIRE MARSHAL COMMENTS
05/10/24	99% DESIGN SUBMISSION
07/19/24	BID DRAWINGS
09/24/24	CONSTRUCTION SET DRAWINGS

Date:	SEPTEMBER 24, 2024
Scale:	AS NOTED
Dwn.By:	CJL
Proj.No.:	0586B053.A01

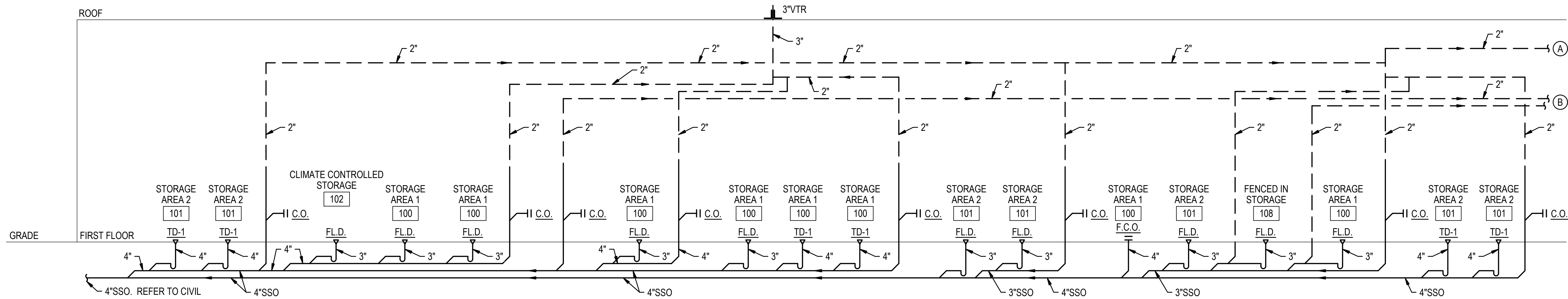
RISER
DIAGRAMS

Dwg No.:

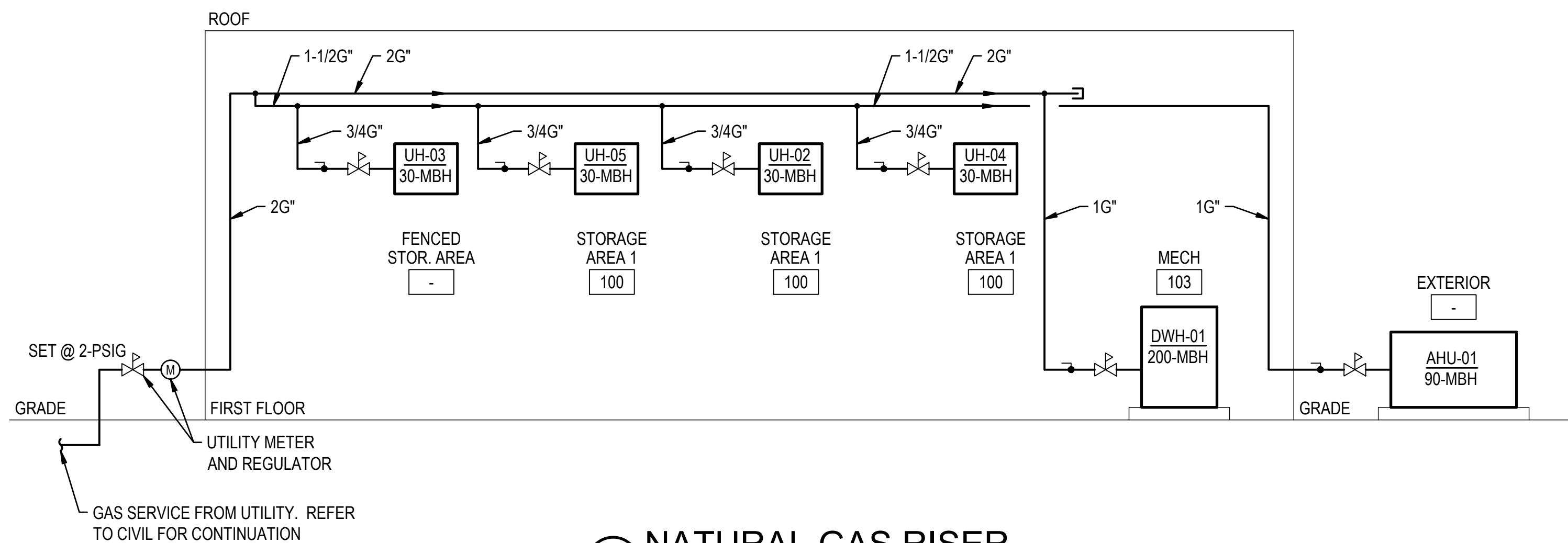
P-602



① DOMESTIC WATER RISER
NO SCALE



② SANITARY OIL & VENT RISER
NO SCALE



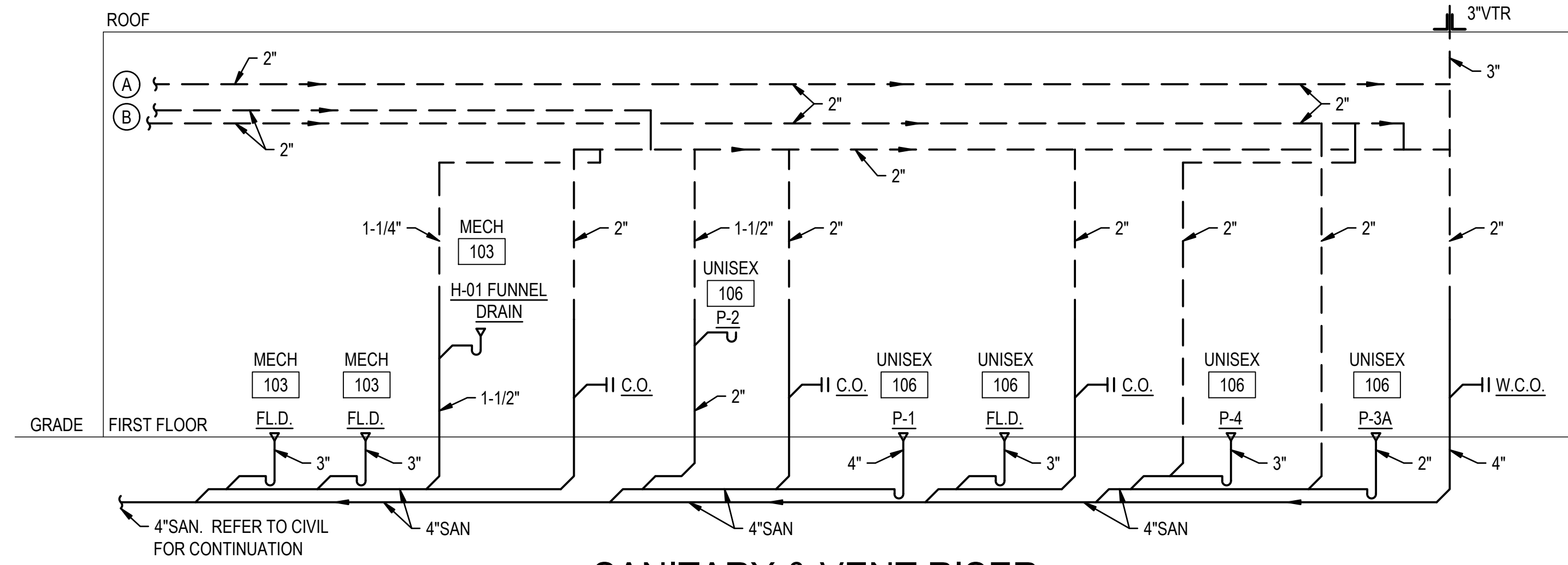
④ NATURAL GAS RISER
NO SCALE

DESIGN BASED ON IFGC-2024, TABLE 402.4(5)

2\"/>

DESIGN BASED ON IFGC-2024, TABLE 402.4(5)

1-1/2\"/>



② SANITARY & VENT RISER
NO SCALE

GENERAL SYMBOLS

DOMESTIC HOT WATER

OMB/DFM PROJECT NO: MJ4506000006

M-001

1. SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS.
2. RUN DUCTWORK IN ATTIC SPACE ABOVE.
3. PROVIDE WITH HEX CONTROLLER FOR BALANCING. SEE DETAIL 2 ON SHEET M-501 FOR ADDITIONAL INFORMATION. CONFIRM OPERATION PRIOR TO ENCLOSING THE CEILING.
4. REFER TO DETAIL 6/M-502 FOR ADDITIONAL INFORMATION.
5. PROVIDE SUPPORT BACKING FOR DUCT HANGERS. REFER TO STRUCTURAL FOR ADDITIONAL DETAILS.



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BOWEN &
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914.543.9091

HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

COMMENTS
15/30% DESIGN SUBMISSION
30% DESIGN SUBMISSION
FIRE MARSHAL SUBMISSION
90% DESIGN SUBMISSION
910 SET

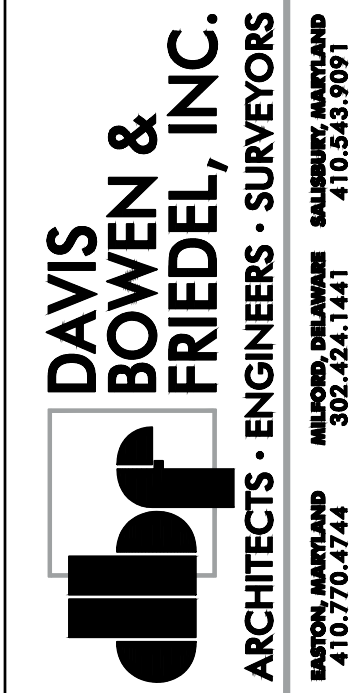
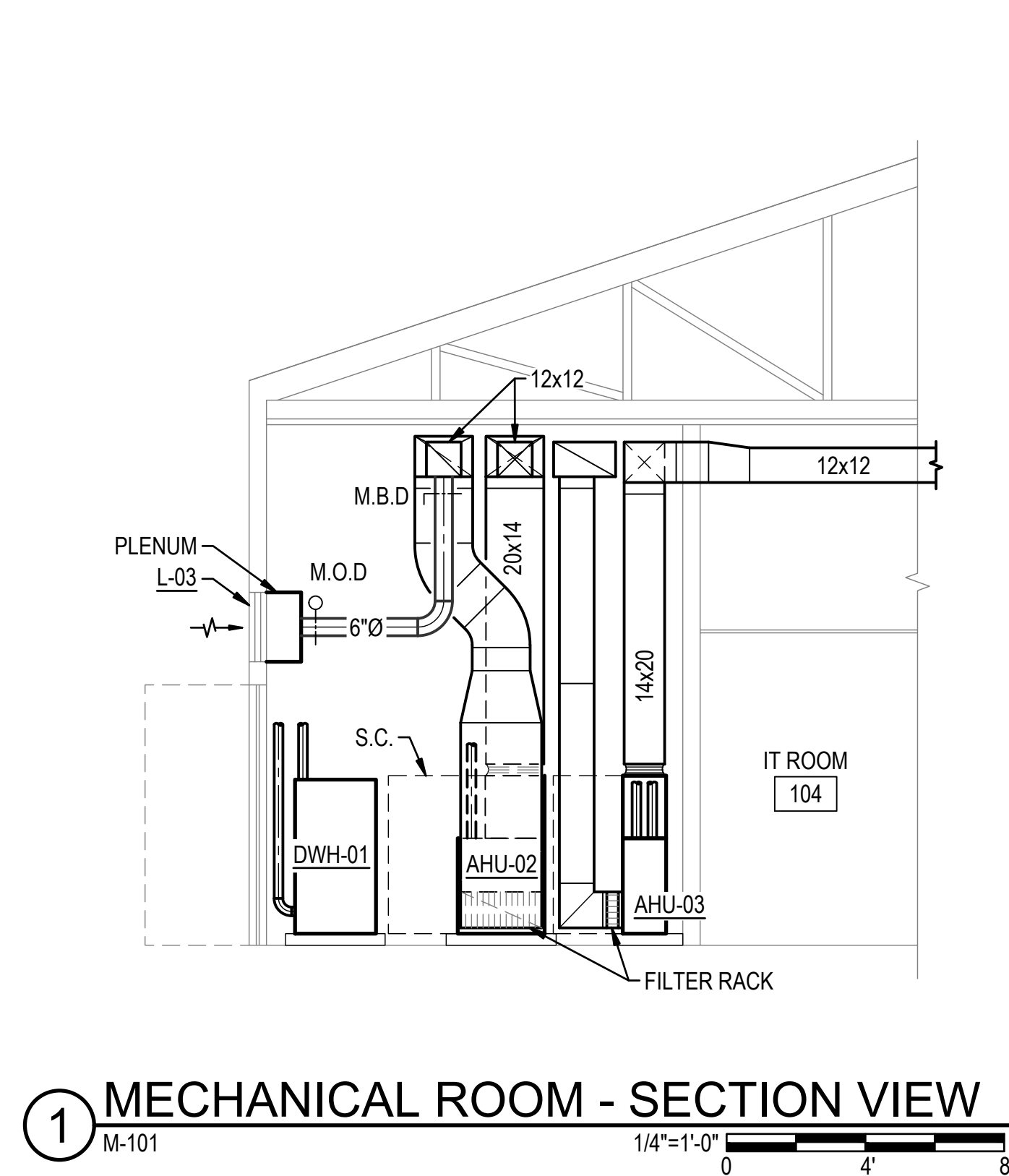
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FIRST FLOOR
PLAN

Dwg.No.

M-101

F:\PROJECTS\2016 DBF\2016.25 High Grade Evidence Storage Bldg\CAD\2016.25_M-301.dwg Jun 25 2026 - 3:22pm GMT



HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ450600006

DATE	COMMENTS
2/13/25	1500% DESIGN SUBMISSION
8/14/25	60% DESIGN SUBMISSION
10/07/25	FIRE MARSHAL SUBMISSION
2/26/26	90% DESIGN SUBMISSION
6/25/26	BID SET

Date: JULY 2026

Scale: AS NOTED

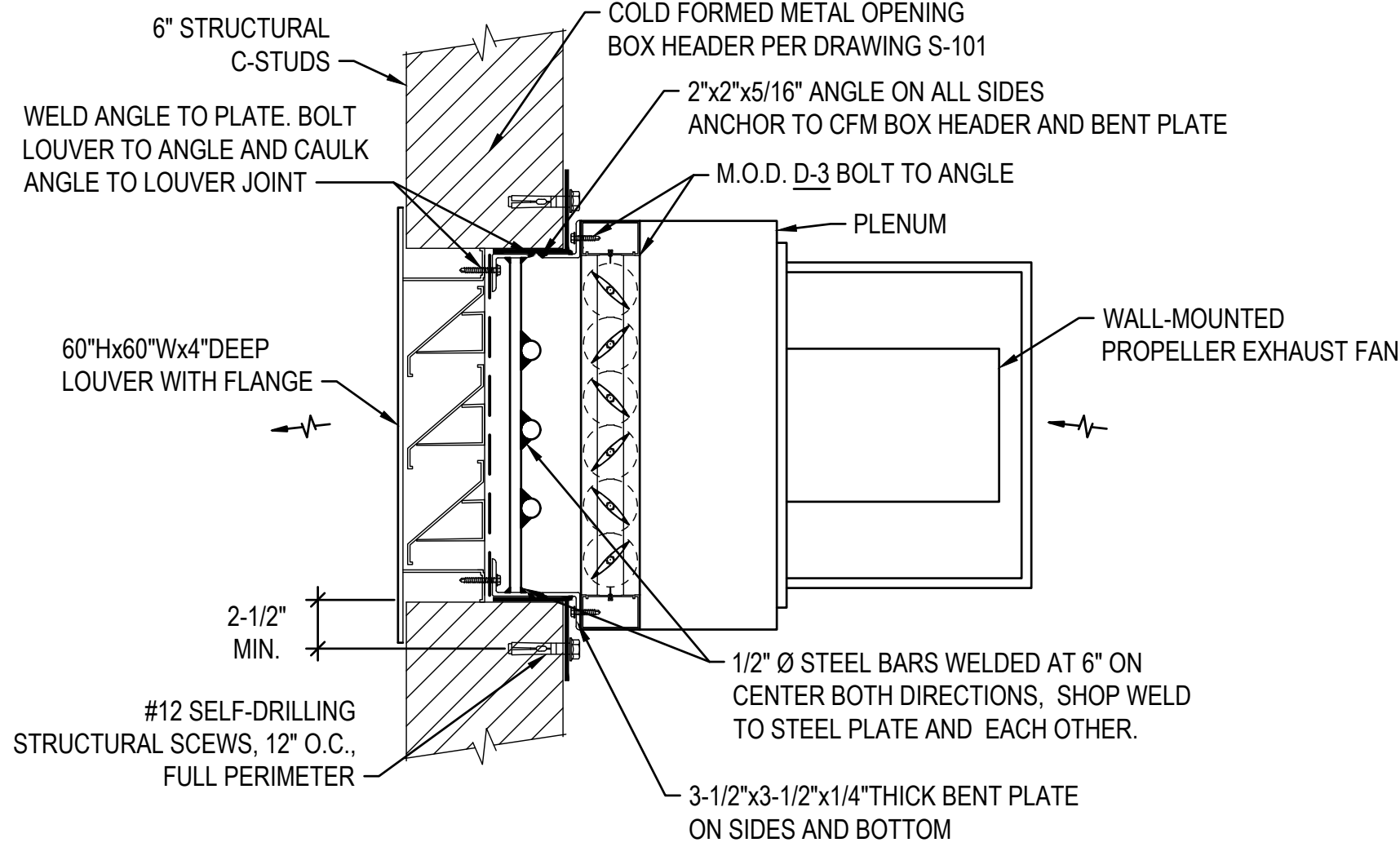
Dwn.By: JHG

Proj.No.:	0586B053.B01
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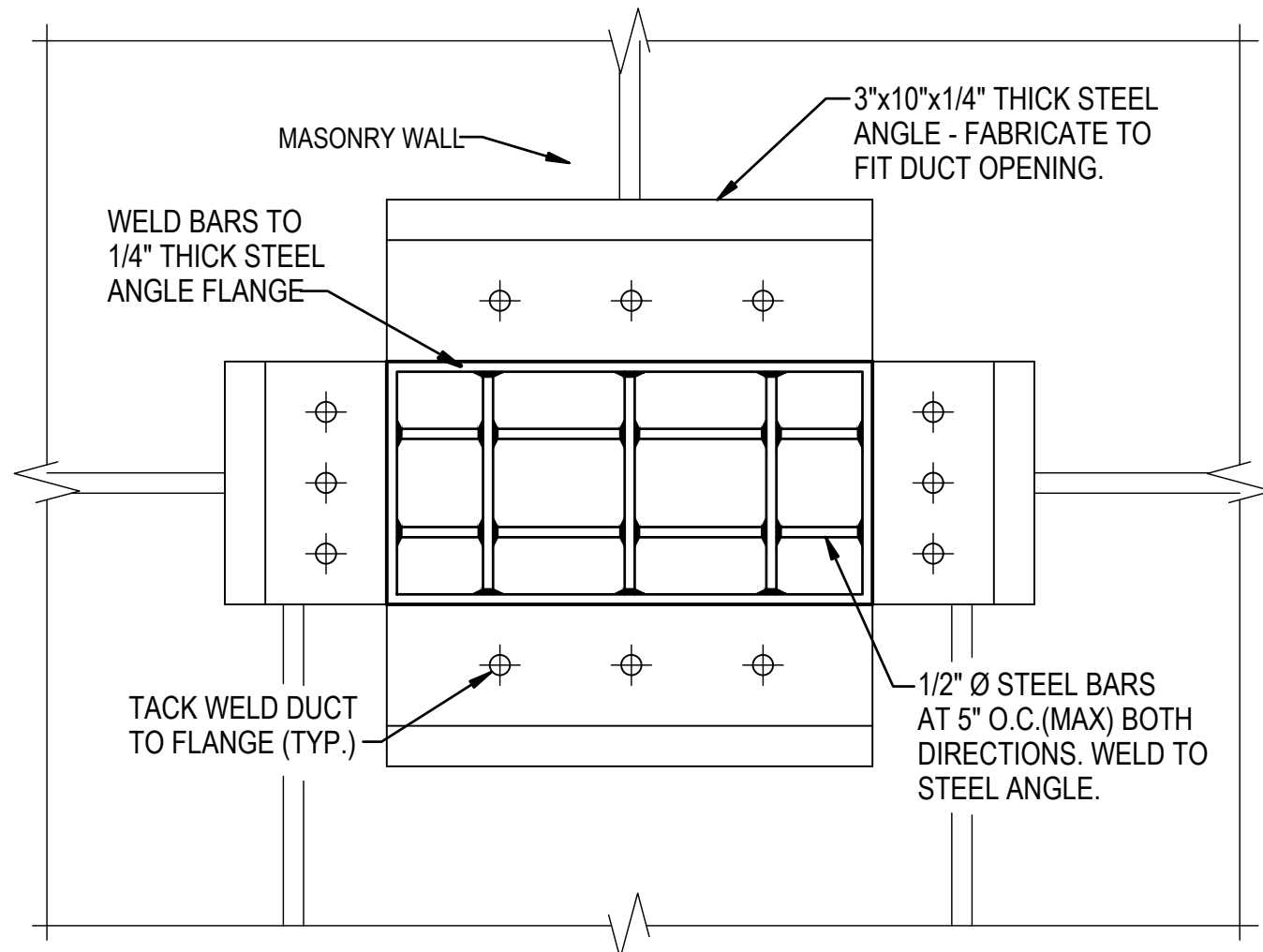
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Dwg.No.	
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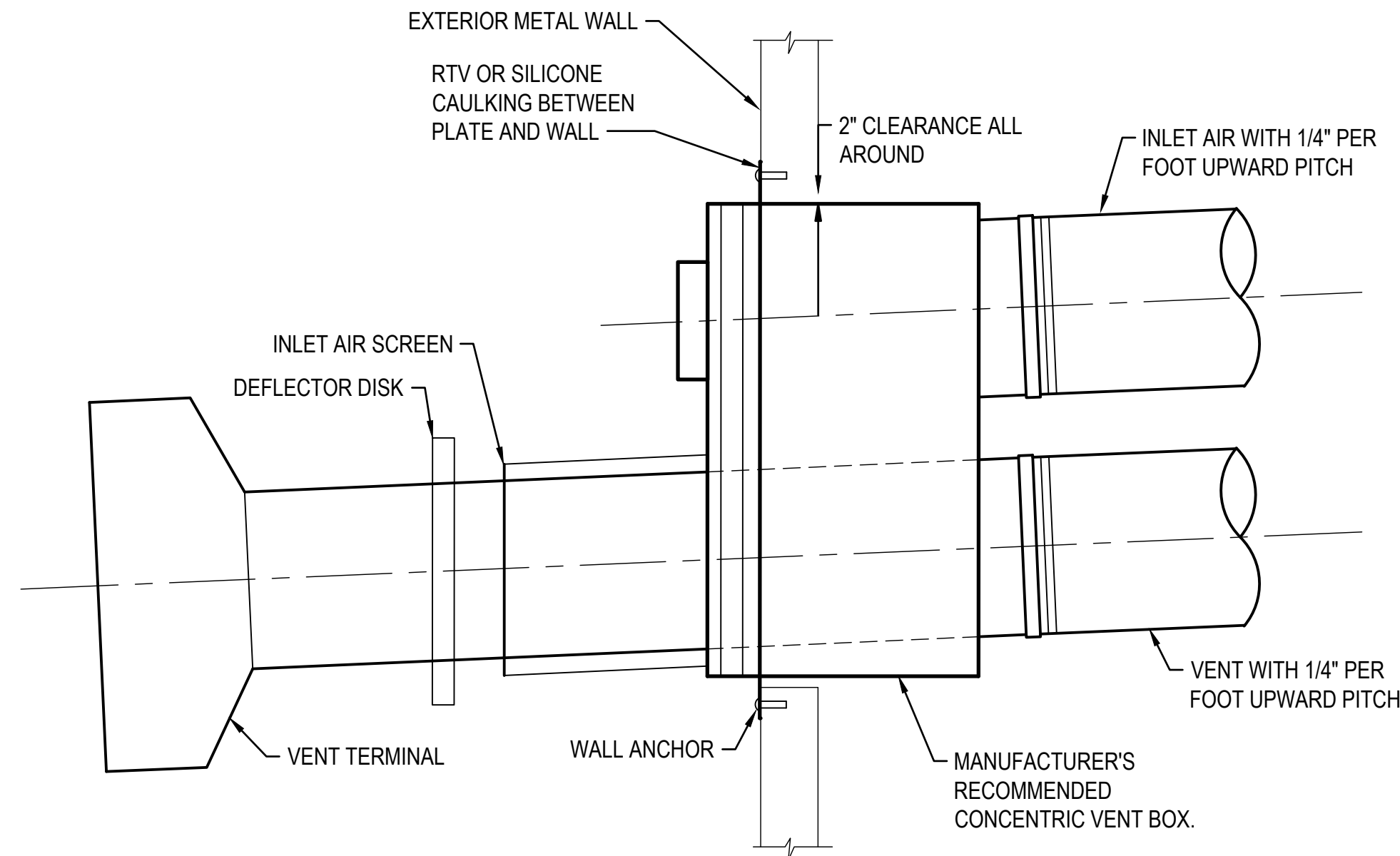
M-301



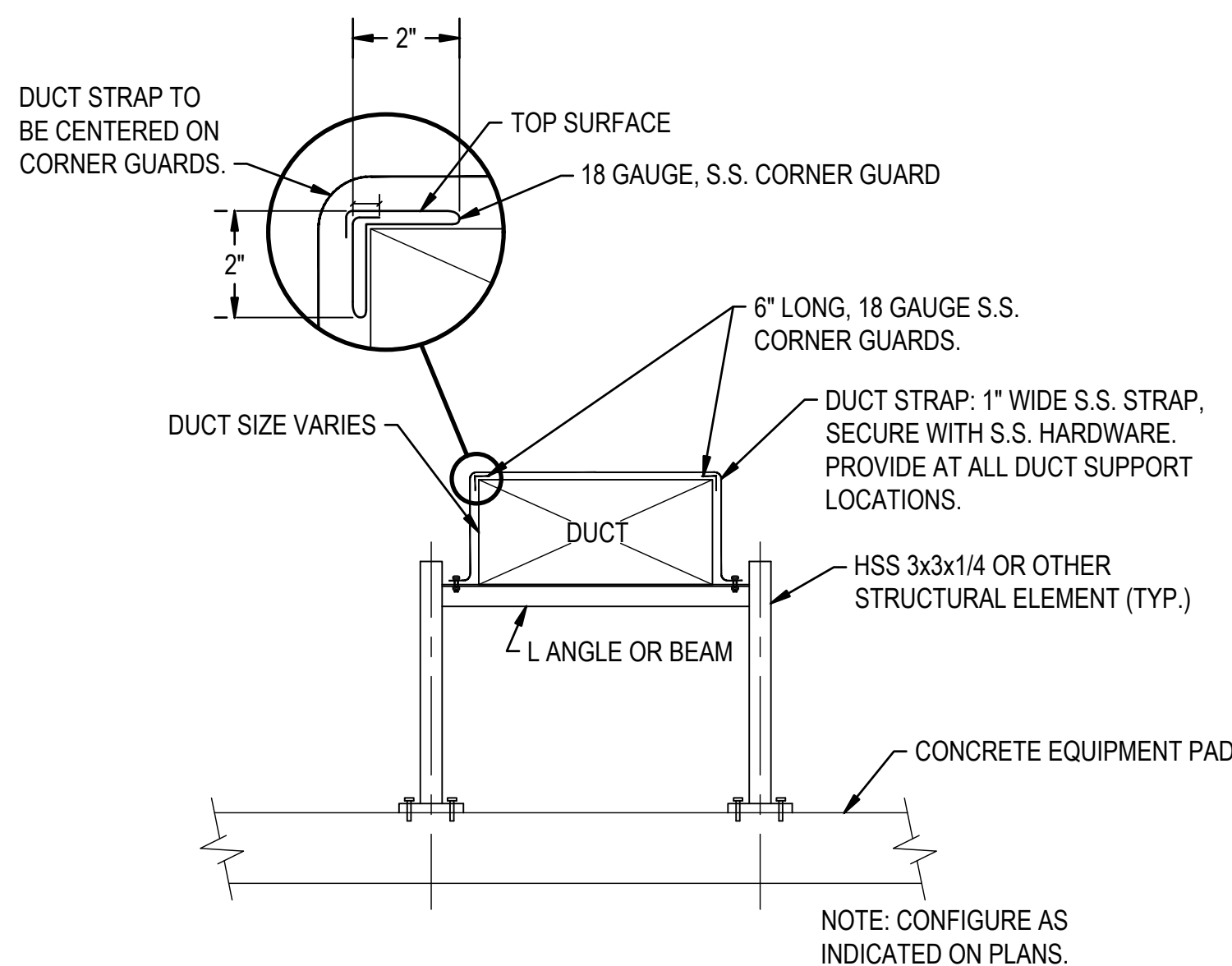
DETAIL
5 LOUVER WITH MAN BAR BARRIER AND EXHAUST FAN
M-101 NO SCALE



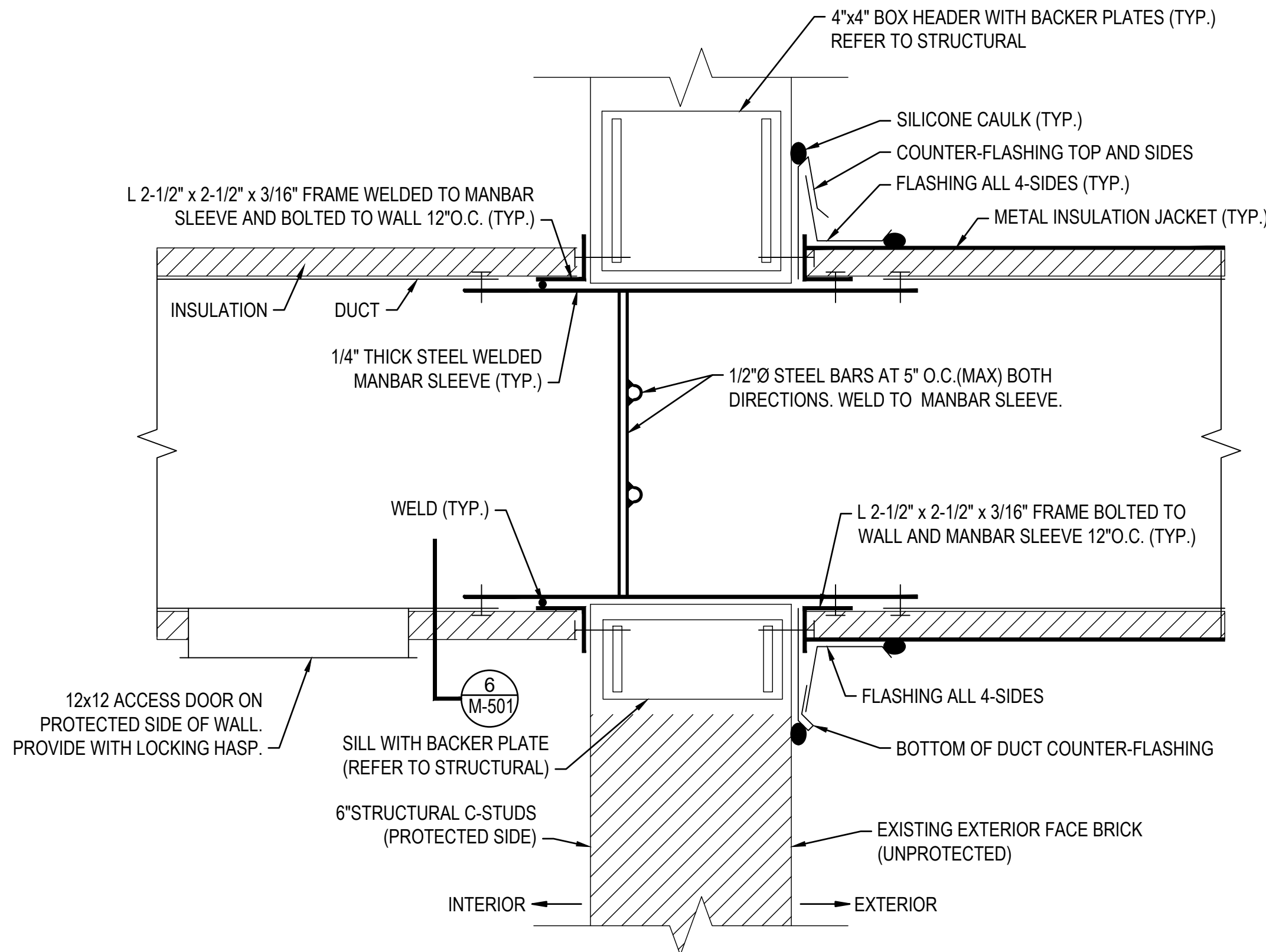
DETAIL
3 DUCT SECURITY BARS
M-101, M-301 NO SCALE



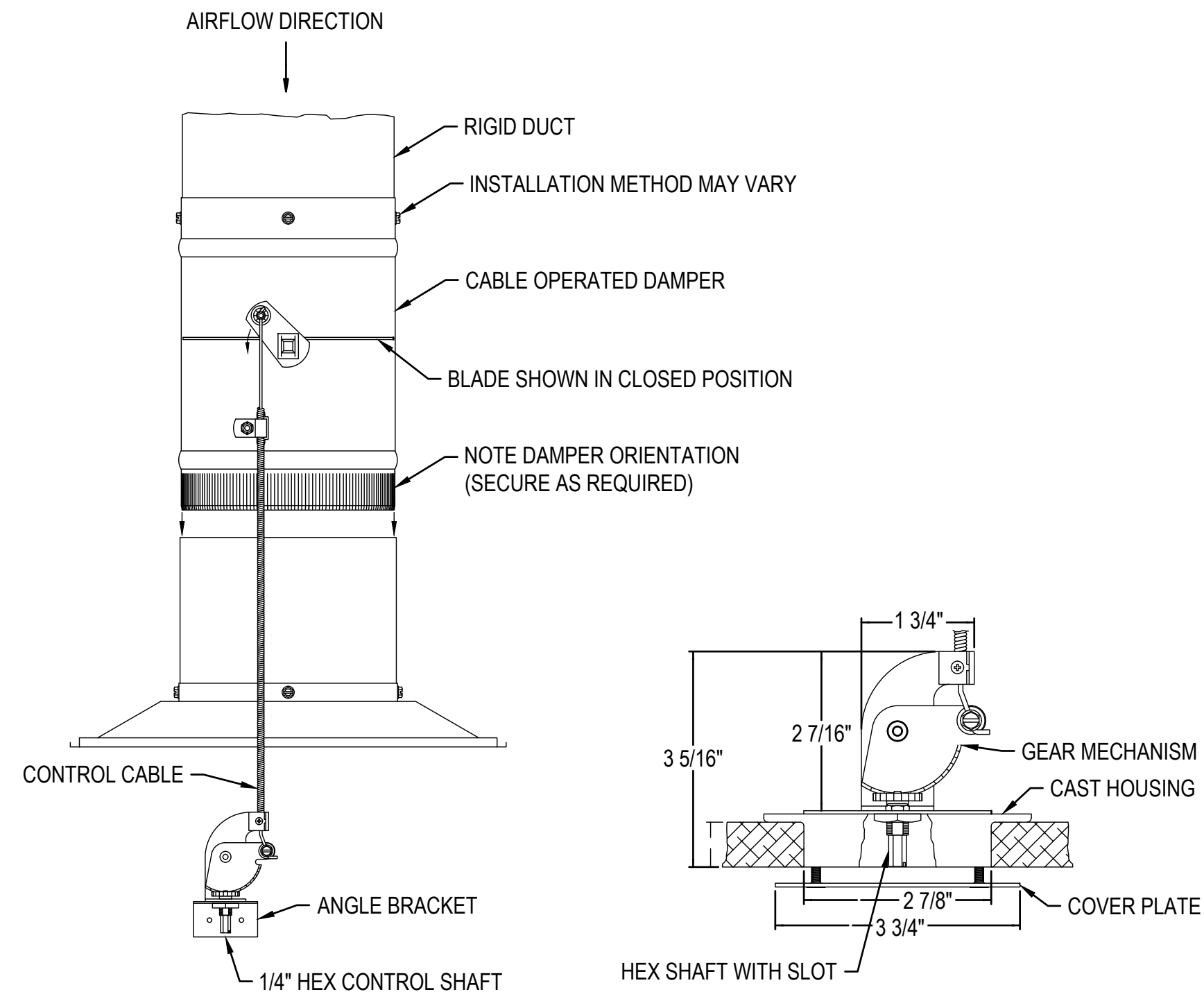
DETAIL - GAS UNIT HEATER
1 HORIZONTAL VENT BOX
M-101, M-601 NO SCALE



DETAIL
6 DUCTWORK SUPPORT
M-101, M-301 NO SCALE



DETAIL
4 AHU-01 DUCTWORK MAN BAR BARRIER
M-101, M-301 NO SCALE



DETAIL
2 CEILING GRILLE INSTALLATION
M-601 NO SCALE

DATE	COMMENTS
2/1/25	150% DESIGN SUBMISSION
8/1/25	80% DESIGN SUBMISSION
10/7/25	FIRE MARSHAL SUBMISSION
2/28/26	90% DESIGN SUBMISSION
6/25/26	BID SET

Date:	JULY 2026
Scale:	AS NOTED
Dwn.By:	JHG
Proj.No.:	0586B053.B01



STRUCTURE TYPE	MINIMUM ULTIMATE COMPRESSIVE STRENGTH @ 28 DAYS F _c (PSI)	MAXIMUM WATER/CEMENT RATIO	ENTRAINED AIR RANGE (%)
EQUIPMENT PAD	3,000	0.55	2-4%

OFFICIAL
DETAIL
6 CONCRETE PAD
M-101
NO SCALE



HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

COMMENTS
1500% DESIGN SUBMISSION
60% DESIGN SUBMISSION
FIRE MARSHAL SUBMISSION
99% DESIGN SUBMISSION
BID SET

Proj.No.:	0586B053.B01
-----------	--------------

M-502

HUMIDIFIER SCHEDULE

UNIT NO.	ASSOCIATED AHU	CAPACITY (LBS/HR)	ELEC. DATA (V/PH/HZ)	AMPS	NOTES
H-01	AHU-02	10.0	208/1/60	-	A B
NOTES					
A. 10 PSIG STEAM. PROVIDE 304 STAINLESS STEEL CONSTRUCTION FOR ALL TUBES, AND HEADERS PIPING, AND ACCESSORIES.					
B. PROVIDE UNIT WITH DOMESTIC WATER FILTER WITH MICRON EFFICIENCY IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.					

ELECTRIC UNIT HEATER SCHEDULE

UNIT NO.	TYPE	AIRFLOW (CFM)	FLA	MOTOR (HP)	HEATING CAP. (KW)	ELEC. DATA (V/PH/HZ)	AREA SERVED	BASIS OF DESIGN	NOTES
EUH-01	EUH	400	11.1	0.03	3	200/1/60	MER	REZNOR MODEL EUH	
BB-01	BB	40	-	-	0.3	115/1/60	RESTROOM 103	REZNOR MODEL EBHB	
NOTES									
A EUH - ELECTRIC UNIT HEATER BB - BASEBOARD									

DEHUMIDIFER PDH-01 & PDH-02:

CAPACITY: MINIMUM 500 PPM FROM AIRSTREAM; 506 PINTS PER DAY @ 80°F/60% RH

AIRFLOW:1,350 - 1,500 CFM NOMINAL (0.0" W.G.)

OPERATING RANGE: 56°F - 95°F

ELECTRICAL: 208V, 1-PHASE; MCA=19A; MOP=30A

POWER CONSUMPTION: APPROX. 2,700 WATTS

CONTROLS: EXTERNAL 24VAC CONTROL

INTEGRATION: BACNET-COMPATIBLE INTERFACE (CONTRACTOR-PROVIDED IF NOT INTEGRAL)

REFRIGERANT: R454B; 4LB 8 OZ CHARGE (FACTORY SEALED)

AIR FILTRATION: MERV-13, 18"x20"x2" (QTY 2)

CONDENSATE: 3/4"NPT DRAIN CONNECTION; PROVIDE TRAP PER MANUFACTURER REQUIREMENTS.

CONSTRUCTION: FULLY PACKAGED UNIT WITH INTEGRAL COMPRESSOR, COILS, FAN, FILTER RACK, AND ELECTRICAL ENCLOSURE.

INSTALLATION: SUSPENDED; PROVIDE VIBRATION ISOLATION; MAINTAIN REQUIRED CLEARANCES PER MANUFACTURER RECOMMENDATIONS.

STANDARD FEATURES: AUTO RESTART AFTER POWER LOSS. LOW AMP DRAW DESIGN. HIGH EFFICIENCY M-CoRR TECHNOLOGY (MANUFACTURER FEATURE)

ACCESSORIES: EXTERNAL HUMIDISTAT CONTROL.

LOUVER SCHEDULE

UNIT NO.	DESCRIPTION	FACE SIZE WxH (IN)	FREE AREA (FT²)	AIRFLOW (CFM)	MAX P.D (IN. W.G)	B.O.D.	NOTE
L-01	DRAINABLE BLADE	60x60	10	8000	.03	GREENHECK MODEL EHH	A B
L-02	DRAINABLE BLADE	60x60	10	4000	.10	GREENHECK MODEL EHH	A B
L-03	DRAINABLE BLADE	22x20	1	200	.03	GREENHECK MODEL EHH	A
NOTES							
A. COLOR AND FINISH TO BE COORDINATED WITH THE ARCHITECT.							
B. PROVIDE WITH WELDED STEEL MANBAR ASSEMBLY.							

PACKAGED AIR HANDLING UNIT SCHEDULE

UNIT NO.	TOTAL SUPPLY (CFM)	OUTDOOR AIR (CFM)	SUPPLY FAN							DX COOLING				HOT GAS REHEAT		GAS HEATING						FILTERS			LOCATION	AREA SERVED	NOTES						
			TYPE	E.S.P. (IN W.G.)	T.S.P. (IN W.G.)	RPM	BHP MAX.	MOTOR H.P.	ELEC. (V/PH/Hz)	TOTAL CAP. (MBH)	SENS. CAP. (MBH)	E.A.T. (°F)		L.A.T. (°F)		E.A.T. (°F)	L.A.T. (°F)	FUEL TYPE	EFFICIENCY (%)	INPUT (MBH)	OUTPUT (MBH)	E.A.T. (°F)	L.A.T. (°F)	MAX. P.D. (IN. W.G.)				MERV					
												D.B.	W.B.	D.B.	W.B.									D.B.					W.B.	D.B.	W.B.	INITIAL	FINAL
AHU-01	1500	300	AF	1.75	5.0	1596	2.4	2.4	200/3/60	45.0	33.8	80.8	66.4	55.0	54.9	55.0	54.9	75.0	NATURAL GAS	80.0	87.5	70.0	56.0	98.0	0.75	1.50	8 & 13	EXTERIOR	STORAGE AREA 2	B C			
NOTES																																	
A. AF = DOUBLE WIDTH, DOUBLE INLET AIR FOIL WHEEL FC = FORWARD CURVE IL = INLINE FAN																																	
C. INSTALL PER DETAILS 1/M-502 AND 2/M-502.																																	
B. PROVIDE PREMIUM EFFICIENCY MOTOR AND VARIABLE FREQUENCY DRIVE.																																	

SPLIT SYSTEM AIR HANDLING UNIT SCHEDULE

UNIT NO.	TOTAL SUPPLY (CFM)	OUTDOOR AIR (CFM)	SUPPLY FAN				DX COOLING				HOT GAS REHEAT		GAS HEATING						FILTERS			LOCATION	AREA SERVED	NOTES					
			TYPE	E.S.P. (IN W.G.)	MOTOR H.P.	ELEC. (V/PH/Hz)	TOTAL CAP. (MBH)	SENS. CAP. (MBH)	E.A.T. (°F)		L.A.T. (°F)		E.A.T. (°F)	L.A.T. (°F)	FUEL TYPE	EFFICIENCY (%)	INPUT (MBH)	OUTPUT (MBH)	E.A.T. (°F)	L.A.T. (°F)	MAX. P.D. (IN. W.G.)				MERV				
									D.B.	W.B.	D.B.	W.B.									D.B.					W.B.	D.B.	INITIAL	FINAL
AHU-02	625	100	AF	0.60	0.5	115/1/60	15.4	13.2	82.0	67.5	58.0	57.8	58.0	57.8	75.0	NATURAL GAS	80.0	21.0	16.5	47.0	86.0	0.75	1.50	8 & 13	MER	STORAGE 1	B C		
AHU-03	625	100	AF	0.60	0.5	115/1/60	13.5	11.4	81.9	67.3	57.0	56.8	-	-	-	NATURAL GAS	80.0	15.0	12.0	57.0	77.0	0.75	1.50	8 & 13	MER	STORAGE 2 & OFFICE	B		
NOTES																													
A. AF = DOUBLE WIDTH, DOUBLE INLET AIR FOIL WHEEL FC = FORWARD CURVE IL = INLINE FAN																													
C. PROVIDE HOT GAS REHEAT COIL ATTACHMENT AT DISCHARGE OF UNIT.																													
B. PROVIDE ECM MOTOR.																													

CONDENSING UNIT SCHEDULE

UNIT NO.	COOLING CAPACITY (MBH)	ELECTRICAL DATA		LOCATION	BASIS OF DESIGN	NOTES			
		VOLTS/PH/HZ	MCA						
CU-02	15.4	200/1/60	9.3	EXTERIOR	FRASER JOHNSTON XC618E2S11		A		
CU-03	13.5	200/1/60	9.3	EXTERIOR	FRASER JOHNSTON XC618E2S11		A		
NOTES:									
A. BASED ON 80°F-D.B./67°F-W.B. INDOOR AIR AND 95°F-D.B./75°F-W.B. OUTDOOR AIR.									

FAN SCHEDULE

UNIT NO.	TYPE	AIRFLOW (CFM)	T.S.P. (IN. W.G.)	RPM	BHP MAX.	ELEC. DATA (V/PH/HZ)	SERVICE	LOCATION	NOTES
EF-01	FC	200	0.5	1078	0.07	115/1/60	STORAGE 1	MER	
EF-02	FC	150	1.0	1693	0.08	115/1/60	RESTROOM 103 & STORAGE 111	MER	
EF-03	PROP	8000	0.5	1160	1.32	200/3/60	STORAGE 100	STORAGE 100	
NOTES									
A. PROP = PROPELLER FC = FORWARD CURVE									

AIR DEVICE SCHEDULE

SYMBOL	DESIG.	AIRFLOW (CFM)	NECK SIZE (INCHES)	OVERALL SIZE (INCHES)	MAX. S.P. DROP (IN. W.G.)	MAX. N.C.	HORIZONTAL THROW @ 100 FPM	FACE	TYPE	NOTES
⊠	SG-1	50-175	8	24x24	0.06	25	2	FLUSH FACE	4-WAY BLOW	C
		180-350	10	24x24	0.06	25	4	FLUSH FACE	4-WAY BLOW	C
		355-500	12	24x24	0.06	25	5	FLUSH FACE	4-WAY BLOW	C
◻	RG-1	5-175	6	24x24	0.06	30	-	FLUSH FACE	-	B C
		180-400	10	24x24	0.06	30	-	FLUSH FACE	-	B C
		405-600	12	24x24	0.06	30	-	FLUSH FACE	-	B C
⊠	EG-1	50-200	6	12x12	0.06	30	-	FLUSH FACE	-	
NOTES										
A. ALL DUCTED RETURN GRILLES.										
C. PROVIDE WITH CABLE OPERATED DAMPER. INSTALL PER DETAIL 2/M-501.										
B. ALL AIR DEVICES TO BE PAINTED. COORDINATE EXACT PAINT COLOR WITH OWNER.										

DUCTLESS HEAT PUMP INDOOR UNIT SCHEDULE

UNIT NO.	AIRFLOW (CFM)	E.S.P. (IN W.G.)	MOTOR (W)	ELEC. V/Ø/HZ	SOUND RATING	COOLING		SEER	SERVICE	REMARKS				
						ENT. AIR TEMP. °F					RATED CAP. (MBH)			
						D.B.	W.B.							
HP-01	600	0.1	39	200/1/60	43	78.0	64.9	18.1	18	IT ROOM	A	B	C	D
NOTES:														
A. DX COIL, R-32 REFRIGERANT														
C. BASIS OF DESIGN: DAIKIN MODEL FTXC18AXVJU.														
B. PROVIDE UNIT MOUNTED CONTROL PANEL WITH REMOTE THERMOSTAT AND PERMANENT WASHABLE ELECTROSTATIC FILTER. PROVIDE UNIT ETL OR UL LISTED IN ACCORDANCE WITH ARI STANDARDS 210, 240.														
D. INSTALL PER DETAIL 4/M-502.														

HEAT PUMP CONDENSING UNIT SCHEDULE

UNIT NO.	SERVES	COOLING CAPACITY (MBH) [A]	HEATING CAPACITY (MBH) [B]	ELECTRICAL DATA		SEER	LOCATION	REMARKS	
				VOLTS/PH/HZ	MCA				[C]
HPU-01	IT ROOM	MATCH TO HP-01	MATCH TO HP-01	200/1/60	16.3	18	EXTERIOR		[C]
NOTES:									
A. BASED ON 80°F-D.B./67°F-W.B. INDOOR AIR AND 95°F-D.B./75°F-W.B. OUTDOOR AIR.									
C. BASIS OF DESIGN: DAIKIN MODEL RXC18AXVJU.									
B. BASED ON 70°F-D.B./60°F-W.B. INDOOR AIR AND 47°F-D.B./43°F-W.B. OUTDOOR AIR.									



SEQUENCE OF OPERATIONS

FLOW DIAGRAM

SEQUENCE OF OPERATIONS

AHU-01 ②

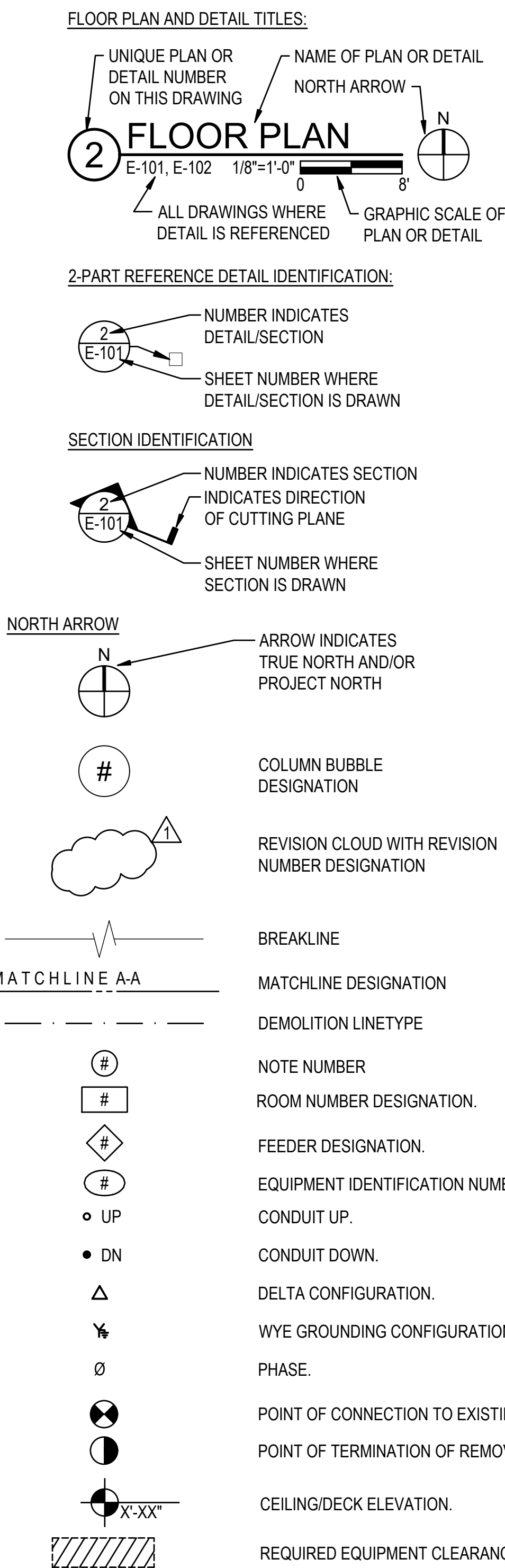
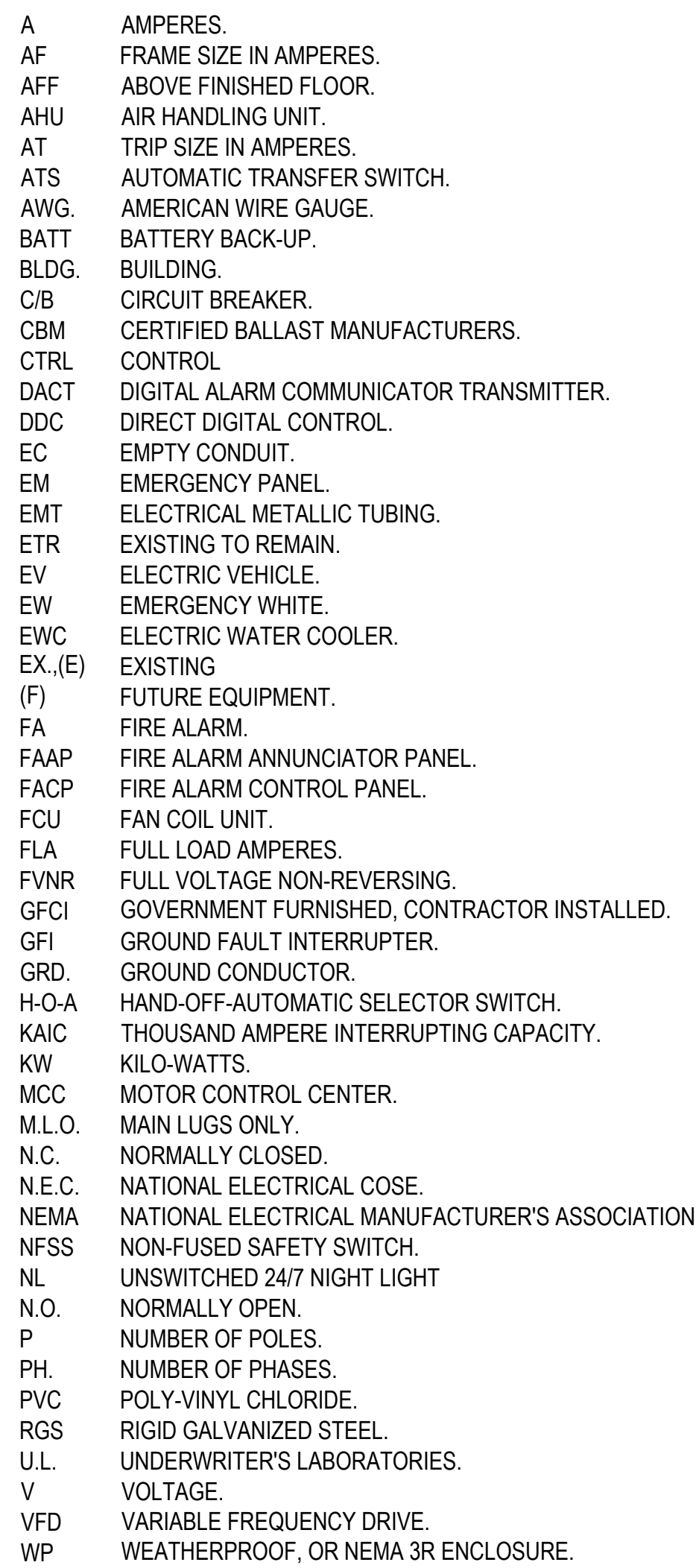
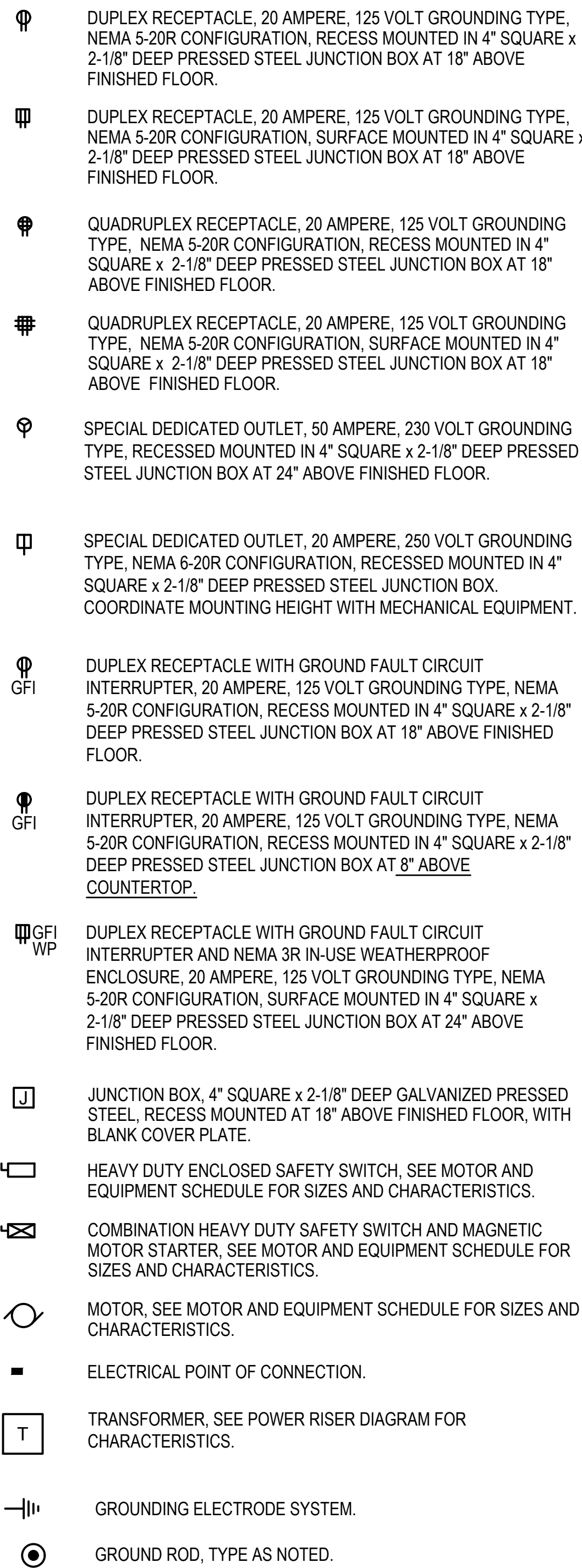
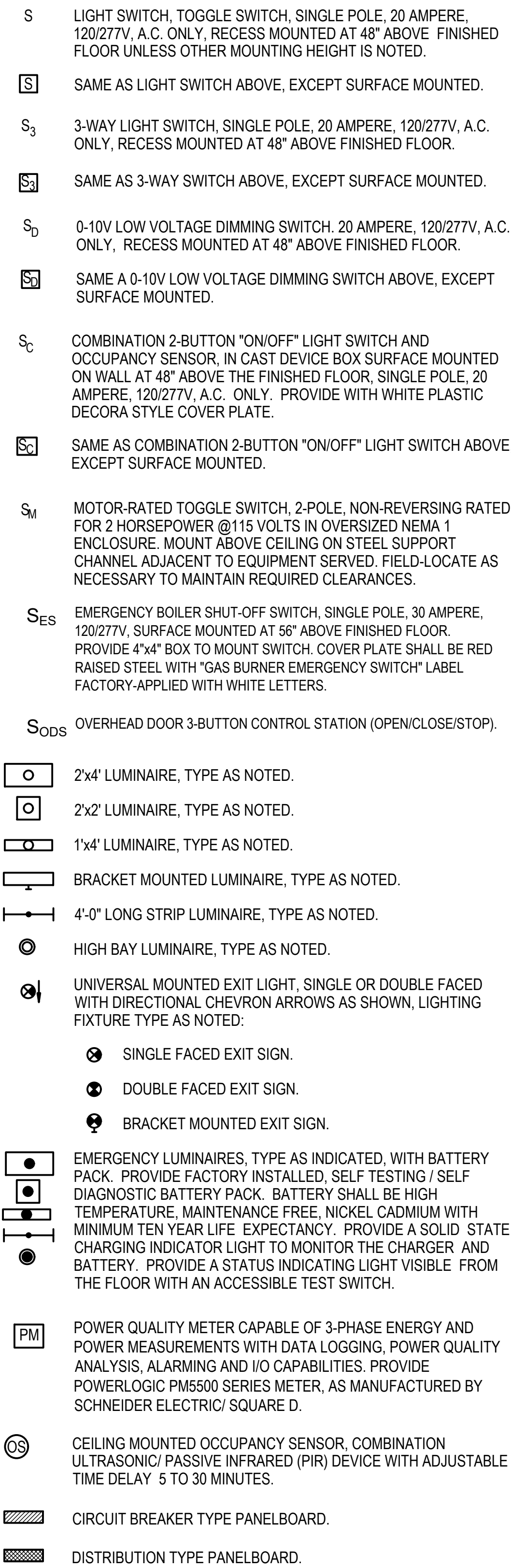
Date:	JULY 2026
Scale:	AS NOTED
Dwn.By:	JHG
Proj.No.:	0586B053.B01

CONTROLS

Dwg.No.	
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M-702

GENERAL SYMBOLS



**DAVIS
BOWEN &
FRIEDEL, INC.**

ARCHITECTS • ENGINEERS • SURVEYORS

BAITON, MARYLAND
410.770.4744

MILFORD, DELAWARE
302.424.1441

BALTIMORE, MARYLAND
410.543.9991

HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ450600006

COMMENTS
1500% DESIGN SUBMISSION
60% DESIGN SUBMISSION
FIRE MARSHAL SUBMISSION
99% DESIGN SUBMISSION
BID SET

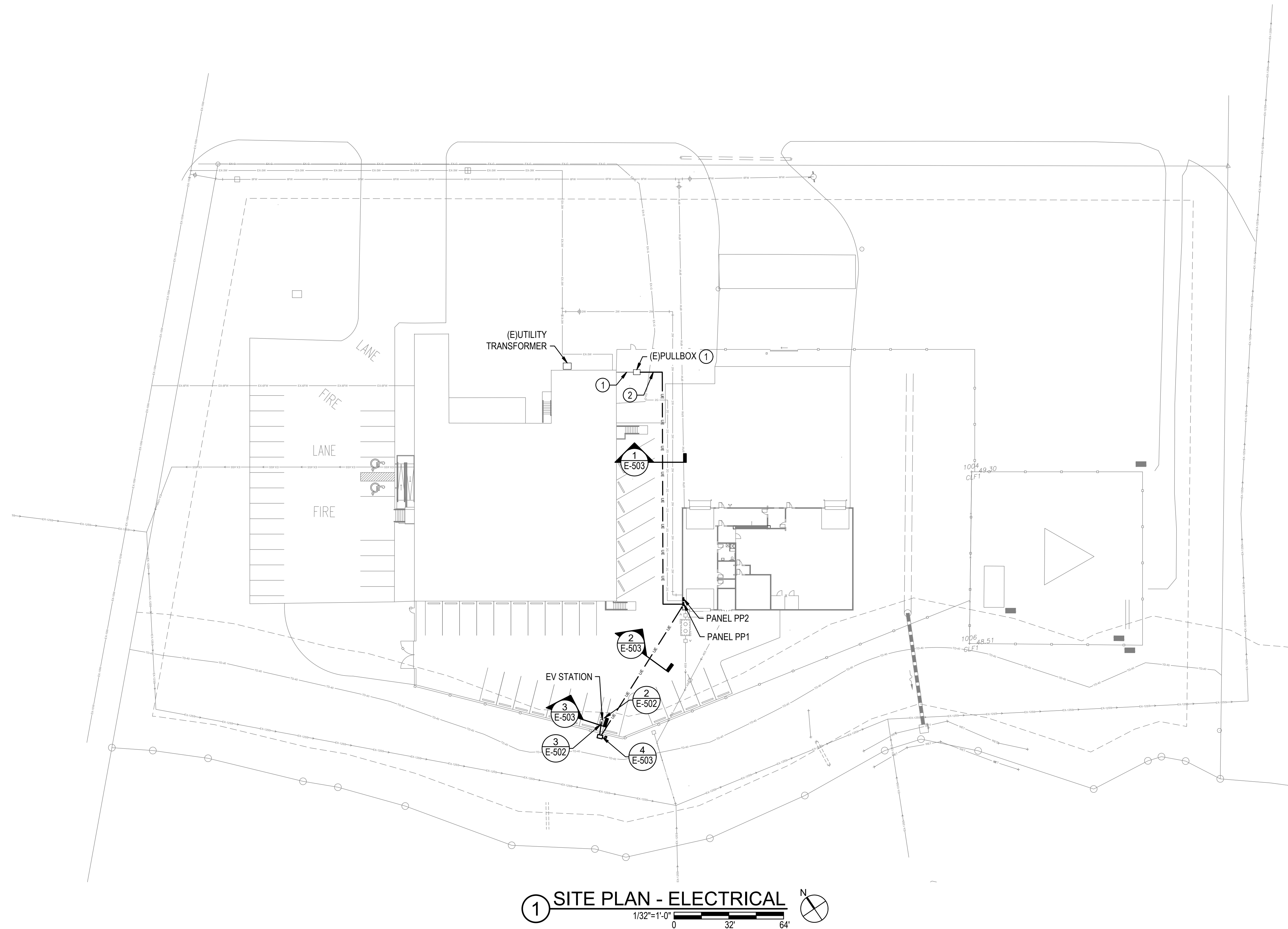
DATE	2/13/25	8/14/25	10/07/25	2/28/26	6/25/26				
Date:	JULY 2026								
Scale:	AS NOTED								
Dwn.By:	JHS								
Proj.No.:	0586B053.B01								

SYMBOLS AND ABBREVIATIONS

Dwg.No.:

E-001

1. WORK FURNISHED UNDER SEPARATE CONTRACT.
2. PROVIDE (1) 3" DIRECT-BURIED PVC CONDUIT FROM PULLBOX TO EVIDENCE STORAGE BUILDING. FIELD ROUTE CONDUITS AT 30" BELOW GRADE.



**DAVIS
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ARCHITECTS • ENGINEERS • SURVEYORS

ARTIST

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**SALISBURY, MARYLAND
410.543.9091**

HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

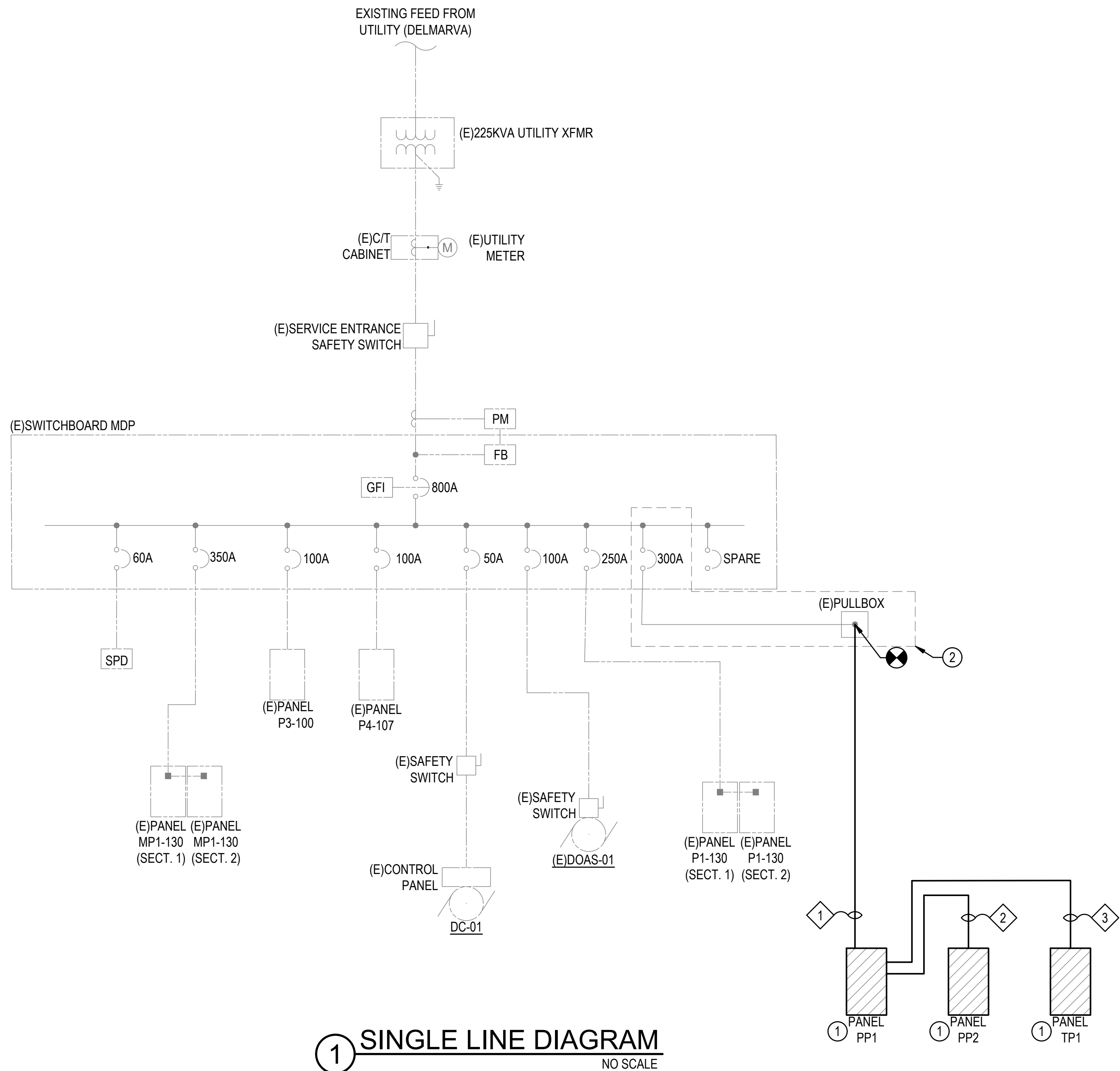
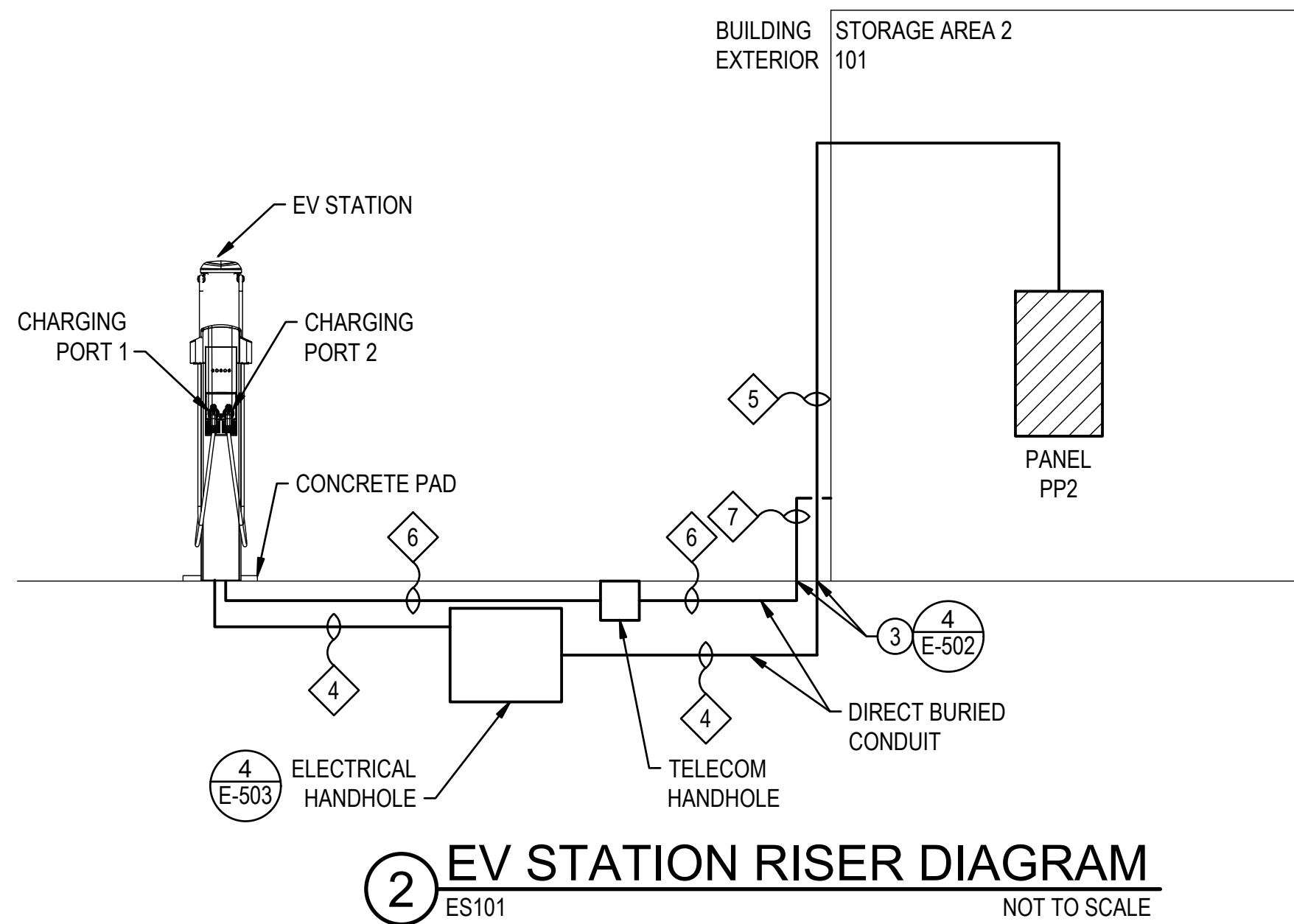
	DATE	COMMENTS
	2/13/25	1500% DESIGN SUBMISSION
	8/14/25	60% DESIGN SUBMISSION
	10/07/25	FIRE MARSHAL SUBMISSION
	2/26/26	90% DESIGN SUBMISSION
	6/25/26	BUD SET

Date:	JULY 2026
Scale:	AS NOTED
Dwn.By:	JHS
Proj.No.:	0586B053.B01

SITE PLAN -
ELECTRICAL

Dwg.No.:
ES101

FEEDER SCHEDULE							
TAG					CONDUIT(S)		REMARKS
	SET(S)	QUANTITY	SIZE	GROUND	SIZE	TYPE	
1	1	4	350 MCM	#2	3"	PVC	
2	1	4	#1/0 AWG	#6	1-1/2"	EMT	
3	1	4	#1 AWG	#8	1-1/4"	EMT	
4	1	4	#6 AWG	#10	1-1/2"	PVC	
5	1	4	#6 AWG	#10	1-1/2"	RGS	
6	-	-	-	-	1"	PVC	PROVIDE PULLSTRING FOR TELECOM CABLING
7	-	-	-	-	1"	RGS	PROVIDE PULLSTRING FOR TELECOM CABLING



GENERAL NOTES

NOTES

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BAITON, MARYLAND
410.770.4744

MILFORD, DELAWARE
302.424.1441

SALESMEN, MARYLAND
410.543.9091

HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

	DATE	COMMENTS
	2/19/25	150% DESIGN SUBMISSION
	8/14/25	60% DESIGN SUBMISSION
	10/07/25	FIRE MARSHAL SUBMISSION
	2/26/26	99% DESIGN SUBMISSION
	6/25/26	BID SET

Date:	JULY 2026
Scale:	AS NOTED
Dwn.By:	JHS
Proj.No.:	0586B053.B01

SINGLE LINE

Dwg.No.:
E-501



G1. ALL WORK SHALL BE NEW AND PROVIDED UNDER THIS CONTRACT UNLESS SPECIFICALLY MARKED "EXISTING", "EXIST", OR "(E)".

G2. VERIFY LOCATION AND DIMENSIONS OF EXISTING EQUIPMENT AND COORDINATE ALL WORK PRIOR TO THE START OF CONSTRUCTION.

dbf

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FRIEDEL, INC.**

ARCHITECTS • ENGINEERS • SURVEYORS

MARLBOROUGH, MASSACHUSETTS
410-770-1744

HARTFORD, CONNECTICUT
860-234-1411

GALVESTON, TEXAS AND
DALLAS, TEXAS
410-543-9091

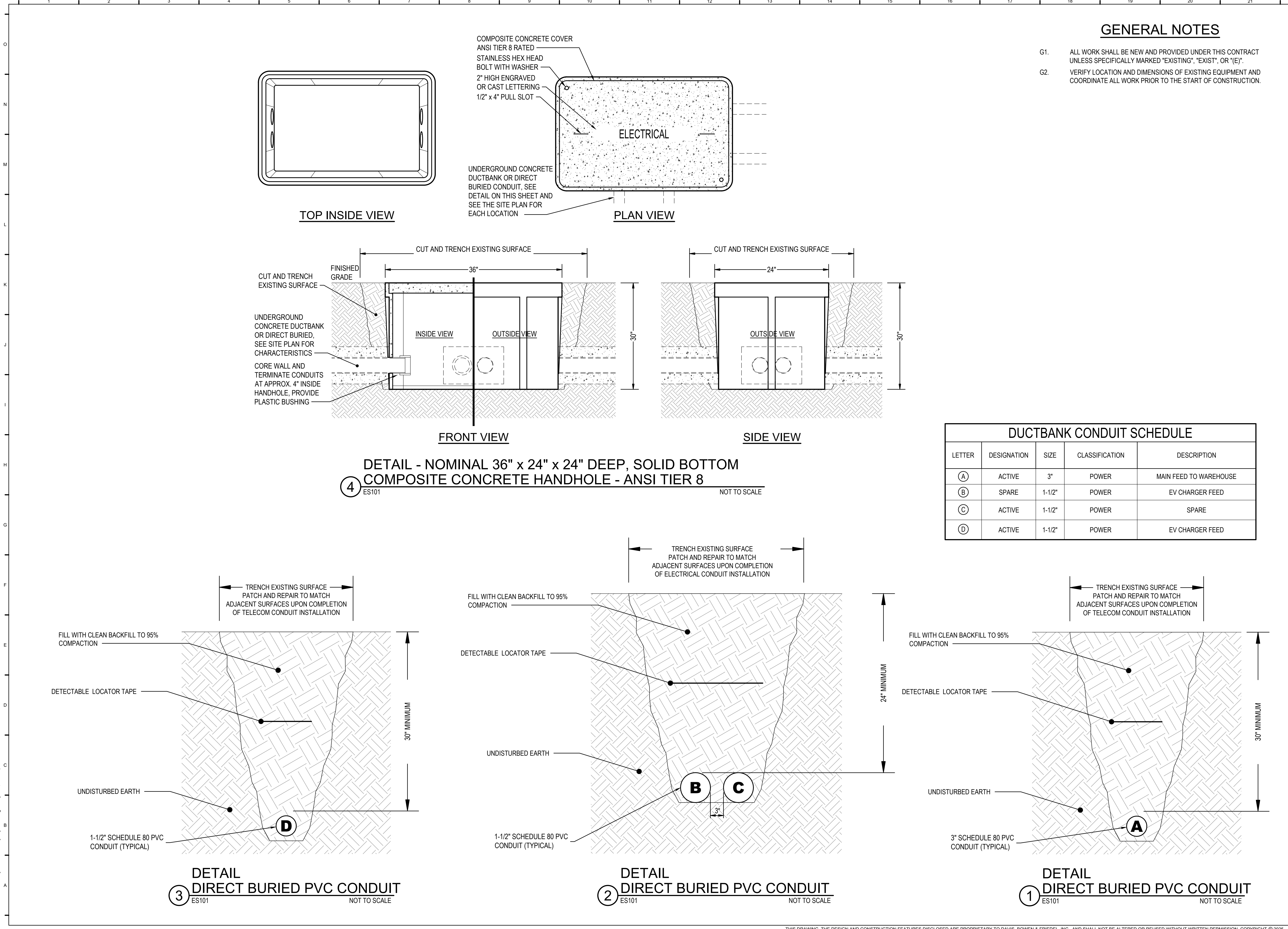
HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

Date:	JULY 2026
Scale:	AS NOTED
Dwn.By:	
Proj.No.:	0586B053.B01

DETAILS

No.:

E-502



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MOTOR AND EQUIPMENT SCHEDULE															
EQUIPMENT NAME	HP	KW	RATED VOLT.	PHASE	FLA	MOTOR CONTROLLER 2		FEEDER				LOCAL SWITCH			REMARKS
						TYPE	LOCAL CONTROL	WIRE			CONDUIT	TYPE 1	FRAME SIZE	POLES	
								NO.	SIZE	GRD.					
HP-01			200	1Ø	9.3	SEE MECHANICAL		2	#12	#12	3/4"	NFSS	30	2	
HPU-01			200	1Ø	0.3	SEE MECHANICAL		2	#12	#12	3/4"	NFSS	30	2	NEMA 3R
EUH-01		3	200	1Ø	16.9	SEE MECHANICAL		2	#12	#12	3/4"	MRT	20	2	
EF-01			115	1Ø	4.1	SEE MECHANICAL		2	#12	#12	3/4"	MRT	20	1	
EF-02			115	1Ø	1.5	SEE MECHANICAL		2	#12	#12	3/4"	MRT	20	1	
EF-03			115	1Ø	.46	SEE MECHANICAL		2	#12	#12	3/4"	MRT	20	1	
EF-04			200	3Ø	6.9	SEE MECHANICAL		3	#12	#12	3/4"	CMB	20	3	
AHU-01			200	3Ø	19.2	SEE MECHANICAL		3	#10	#10	3/4"	NFSS	30	3	
AHU-02			115	1Ø	6.6	SEE MECHANICAL		2	#12	#12	3/4"	MRT	30	1	
CU-02			200	1Ø	7.4	SEE MECHANICAL		2	#12	#12	3/4"	NFSS	30	2	NEMA 3R
AHU-03			115	1Ø	6.6	SEE MECHANICAL		2	#12	#12	3/4"	MRT	30	1	
CU-03			200	1Ø	7.4	SEE MECHANICAL		2	#12	#12	3/4"	NFSS	30	2	NEMA 3R
CP-01	1/6		115	1Ø	4.4	SEE MECHANICAL		2	#12	#12	3/4"	MRT	20	1	
UH-02			115	1Ø	1.9	SEE MECHANICAL		2	#12	#12	3/4"	MRT	20	1	
UH-03			115	1Ø	1.9	SEE MECHANICAL		2	#12	#12	3/4"	MRT	20	1	
UH-04			115	1Ø	1.9	SEE MECHANICAL		2	#12	#12	3/4"	MRT	20	1	
UH-05			115	1Ø	1.9	SEE MECHANICAL		2	#12	#12	3/4"	MRT	20	1	
BB-01		0.3	115	1Ø	2.5	SEE MECHANICAL		2	#12	#12	3/4"	MRT	20	1	
H-01			208	1Ø	18.0	SEE MECHANICAL		2	#10	#10	3/4"	MRT	30	1	
DWH-01			115	1Ø	4.0	SEE MECHANICAL		2	#12	#12	3/4"	MRT	20	1	
PDH-01			208	1Ø	11.0	SEE MECHANICAL		2	#12	#12	3/4"	CRD	-	2	
PDH-02			208	1Ø	11.0	SEE MECHANICAL		2	#12	#12	3/4"	CRD	-	2	
NOTES:															
1 MRT - MOTOR-RATED TOGGLE SWITCH NFSS - NON-FUSED SAFETY SWITCH CRD - CORD-AND-PLUG CMB - COMBINATION MOTOR STARTER/DISCONNECT INT - INTEGRAL WITH MOTOR CONTROLLER															
2 SEE MECHANICAL DRAWINGS FOR AUXILIARY CONTACT REQUIREMENTS.															

① PANEL 'TP1' SCHEDULE																
MAIN BUS SIZE (AMPS): 100			INTERRUPT. RATING (KAIC): 10			NEUTRAL BUS SIZE: 100%			MOUNTING TYPE: SURFACE							
MAIN BUS MATERIAL: COPPER			VOLTAGE: 120 / 208			SECTION NO.: 1 OF 1			LOCATION: STORAGE AREA 2 - 101							
MAIN CIRCUIT BREAKER (AMPS): 100			PHASE: 3		WIRE: 4		ENCLOSURE TYPE: NEMA 3R			BOLT-ON BRANCH CIRCUIT BREAKERS						
CKT NO.	DESCRIPTION	LOAD TYPE	LOAD (KVA)	BREAKER					BREAKER		LOAD (KVA)	LOAD TYPE	DESCRIPTION	CKT NO.		
				AMPS	POLES				POLES	AMPS						
1	HP/HPU-01 ②	M	0.91	15	2	A			1	20	0.36	R	RECEPT - IT RM 114	2		
3		M	0.91							B	1	20	0.72	R	RECEPT - IT RM 114	4
5	RECEPT - IT RM 114	R	0.18	20	1			C	1	20	0.18	N	HVAC CONTROL PANEL	6		
7	SPARE	N	0.00	20	1	A			1	20	0.00	N	SPARE	8		
9	SPARE	N	0.00	20	1		B		1	20	0.00	N	SPARE	10		
11	SPARE	N	0.00	20	1			C	1	20	0.00	N	SPARE	12		
13	SPARE	N	0.00	20	1	A			2	20	0.00	N	SPARE	14		
15	SPARE	N	0.00	20	1		B			20	0.00	N	SPARE	16		
17	SPARE	N	0.00	20	1			C	1	20	0.00	N	SPARE	18		
19	SPARE	N	0.00	20	1	A			1	20	0.00	N	SPARE	20		
21	SPARE	N	0.00	20	1		B		1	20	0.00	N	SPARE	22		
23	SPARE	N	0.00	20	1			C	1	20	0.00	N	SPARE	24		
25	SPARE	N	0.00	20	1	A			1	20	0.00	N	SPARE	26		
27	SPARE	N	0.00	20	1		B		1	20	0.00	N	SPARE	28		
29	SPARE	N	0.00	20	1			C	1	20	0.00	N	SPARE	30		
CONNECTED LOAD PER PHASE (KVA) =									1.3	1.6	0.4	TOTAL CONNECTED LOAD =			3.3 KVA	9.1 AMPS
(AMPS) =									10.6	13.6	3.0	TOTAL DEMAND LOAD =			3.7 KVA	10.3 AMPS

LOAD TYPES: C = CONTINUOUS, R = RECEPTACLE, M = MOTOR, N = NON-CONTINUOUS

① PANEL 'PP1' SCHEDULE																
MAIN BUS SIZE (AMPS): 400			INTERRUPT. RATING (KAIC): 10			NEUTRAL BUS SIZE: 100%			MOUNTING TYPE: SURFACE							
MAIN BUS MATERIAL: COPPER			VOLTAGE: 120 / 208			SECTION NO.: 1 OF 1			LOCATION: STORAGE AREA 2 - 101							
MAIN CIRCUIT BREAKER (AMPS): 300			PHASE: 3	WIRE: 4	ENCLOSURE TYPE: NEMA 3R			BOLT-ON BRANCH CIRCUIT BREAKERS								
CKT NO.	DESCRIPTION	LOAD TYPE	LOAD (KVA)	BREAKER		LOAD			LOAD TYPE	DESCRIPTION	CKT NO.					
				AMPS	POLES	POLES	AMPS	LOAD (KVA)								
1	EUH-01 ②	C	1.11	15	2	A			1	15	0.47	M	EF-01 ②	2		
3		C	1.11					B			1	15	0.17	M	EF-02 ②	4
5	H-01 ②	C	1.80	25	2				C	1	20	0.51	M	CP-01	6	
7		C	1.80					A			1	15	0.05	M	EF-03 ②	8
9	AHU-01 ②	M	2.21	30	3				B				0.67	M		10
11		M	2.21							C	2	20	0.67	M	CU-02 ②	12
13		M	2.21					A					0.67	M		14
15		C	13.95							B	2	20	0.67	M	CU-03 ②	16
17	PANEL PP2	C	12.42	100	3								1.04	M		18
19		C	8.92					A			3	20	1.04	M	OVERHEAD DOOR 101	20
21	OVERHEAD DOOR 101	M	3.60	20	3				B				1.04	M		22
23		M	3.60							C	2	50	4.10	R	SIMULATOR RECEPTACLE	24
25		M	3.60					A					4.10	R		26
27	UH-02 & 03 ②	C	0.44	15	1				B	1	20	1.13	M	AHU-03 ②	28	
29		M	1.04							C	1	20	0.44	C	UH-04, UH-05 ②	30
31	OVERHEAD DOOR 100	M	1.04	20	3				A				0.80	M		32
33		M	1.04							B	3	20	0.80	M	EF-04 ②	34
35		C	1.27							C			0.80	M		36
37	PANEL TP1	C	1.63	100	3				A	1	20	0.18	C	DWH-01 ②	38	
39		C	0.36							B	1	20	0.29	C	BB-01 ②	40
41	AHU-02 ②	M	1.13	20	1					C	1	20	0.00	N	SPACE	42
43	SPACE	N	0.00	20	1				A		1	20	0.00	N	SPACE	44
45	SPACE	N	0.00	--	1				B		1	20	0.00	N	SPACE	46
47	SPACE	N	0.00	--	1					C	1	--	0.00	N	SPACE	48
49	SPACE	N	0.00	--	1				A		1	--	0.00	N	SPACE	50
51	SPACE	N	0.00	--	1				B		1	--	0.00	N	SPACE	52
53	SPACE	N	0.00	--	1					C	1	--	0.00	N	SPACE	54
CONNECTED LOAD PER PHASE (KVA) =						28.7	27.5	31.0	TOTAL CONNECTED LOAD =							
(AMPS) =						239.6	228.9	258.5	TOTAL DEMAND LOAD =							
									86.1 KVA						239.2 AMPS	
									100.2 KVA						278.4 AMPS	

LOAD TYPES: C = CONTINUOUS, R = RECEPTACLE, M = MOTOR, N = NON-CONTINUOUS

① PANEL 'PP2' SCHEDULE														
MAIN BUS SIZE (AMPS): 225			INTERRUPT. RATING (KAIC): 10			NEUTRAL BUS SIZE: 100%			MOUNTING TYPE: SURFACE					
MAIN BUS MATERIAL: COPPER			VOLTAGE: 120 / 208			SECTION NO.: 1 OF 1			LOCATION: STORAGE AREA 2 - 101					
MAIN CIRCUIT BREAKER (AMPS): 150			PHASE: 3	WIRE: 4	ENCLOSURE TYPE: NEMA 3R			BOLT-ON BRANCH CIRCUIT BREAKERS						
CKT NO.	DESCRIPTION	LOAD TYPE	LOAD (KVA)	BREAKER		BREAKER		LOAD (KVA)	LOAD TYPE	DESCRIPTION		CKT NO.		
				AMPS	POLES	POLES	AMPS							
1	STOR. RM. 101,108 LTG.	C	0.66	20	1	A		1	20	0.50	C	STORAGE 101 LTG.	2	
3	MECH RM. 113 LTG.	C	0.12	20	1		B	1	20	0.07	C	IT RM. 104 LTG.	4	
5	OFFICE 107 LTG.	C	0.07	20	1			C	1	20	0.11	C	BATHROOM 106 LTG.	6
7	STOR. RM. 107,110 LTG.	C	0.75	20	1	A		1	20	0.66	C	STORAGE 100 LTG.	8	
9	EXTERIOR LIGHTS	C	0.19	20	1		B	1	20	0.66	C	STORAGE 100 LTG.	10	
11	EXTERIOR LIGHTS	C	0.19	20	1			C	1	20	0.10	C	EXIT LIGHTING	12
13	PDH-01	C	1.30	20	2	A		2	20	1.30	C	PDH-02	14	
15		C	1.30							1.30	C		16	
17	FIRE ALARM CTRL PANEL	N	0.18	20	1			C	1	20	0.18	N	DACT PANEL	18
19	SPARE	N	0.00	20	1	A		50	4.10	R	SIMULATOR RECEPTACLE	20		
21	EXTERIOR REC.	R	0.36	20	1		B			1		4.10	R	22
23	OFFICE 107 REC.	R	0.90	20	1			C	1	20	0.72	R	MECH. ROOM REC.	24
25	GENERAL AREA REC.	R	0.72	20	1	A		1	20	0.72	R	GENERAL AREA REC.	26	
27	EV CHARGER - PORT 1	N	3.24	40	2		B	1	20	1.08	R	REST RM. 103 & AREA REC.	28	
29		N	3.24								C		3.24	N
31	SPARE	N	0.00	20	1	A		2	20	3.24	N	EV CHARGER - PORT 2	32	
33	SPARE	N	0.00	20	1		B			1	20		0.00	N
35	SPARE	N	0.00	20	1			C	1	20	0.00	N	SPARE	36
37	SPACE	N	0.00	--	1	A		1	--	0.00	N	SPACE	38	
39	SPACE	N	0.00	--	1		B	1	--	0.00	N	SPACE	40	
41	SPACE	N	0.00	--	1			C	1	--	0.00	N	SPACE	42
CONNECTED LOAD PER PHASE (kva) = 13.9								12.4	8.9	TOTAL CONNECTED LOAD =		35.3 KVA	98.0	AMPS
(AMPS) = 116.2								103.5	74.4	TOTAL DEMAND LOAD =		36.3 KVA	100.7	AMPS



LUMINAIRE TYPE

LUMINAIRE TYPE 

VERSAL MOUNT, THERMOPLASTIC E
DE (LED) TYPE WITH RED PLASTIC D



LUMINAIRE TYPE

GENERAL:	WALL-MOUNTED 2'-0" LENSED LED BRACKET/WRAP AROUND LUMINAIRE. SUITABLE FOR DAMP LOCATIONS.
HOUSING:	HEAVY GAUGE COLD ROLLED STEEL HOUSING AND LED PAN. POLYCARBONATE INJECTION MOLDED END CAPS. PROFILE EXTRUDED ACRYLIC DIFFUSER.
LENS:	CONTOURED FROSTED ACRYLIC LENS MINIMIZES PENETRATION OF DUST, INSECTS, AND OTHER DEBRIS INTO THE LAMP COMPARTMENT.
DRIVER:	0-10V DIMMABLE DRIVER; HIGH EFFICIENCY, U.L. LISTED, RATED FOR 120/277 VOLT OPERATION
LAMPS:	1800 LUMEN OUTPUT, 4000K COLOR TEMPERATURE, MINIMUM CRI OF 80.
MOUNTING HEIGHT:	MOUNT 6" ABOVE MIRROR.
BASIS OF DESIGN:	LITHONIA LIGHTING - WL2 18L GZ10 LP840



LUMINAIRE TYPE

LUMINAIRE TYPE 

GENERAL:	RECESSED LED DOWNLIGHT, 6" APERTURE. SUITABLE FOR WET LOCATIONS.
HOUSING:	ALUMINUM DIE CAST WITH HIGH-GLOSS BAKED WHITE ENAMEL FINISH.
LENS:	PRESSED-IN DIFFUSE LENS.
DRIVER:	ELECTRONIC DIMMABLE DRIVER; HIGH EFFICIENCY, U.L. LISTED, RATED FOR 120V-277 VOLT OPERATION.
LEDS:	2000 LUMEN OUTPUT, 4000K COLOR TEMPERATURE, MINIMUM CRI OF 80, MINIMUM 70% LUMEN MAINTENANCE AT 50,000 HOURS
BASIS OF DESIGN:	LITHONIA LIGHTING LDN6-40/20-L06AR-LSS-MVOLT-GZ10



GENERAL:	WALL MOUNTED LED LUMINAIRE FOR OUTDOOR LOCATIONS WITH WIRE GUARD AND INTEGRAL PHOTOCCELL.
HOUSING:	TWO-PIECE DIE-CAST ALUMINUM HOUSING WITH INTEGRAL HEAT SINK FINS.
LENSES:	PRECISION-MOLDED ACRYLIC LENSES PROVIDE MULTIPLE PHOTOMETRIC DISTRIBUTIONS.
DRIVER:	RATED FOR 120V-277V OPERATION, HIGH POWER FACTOR, 0 DEGREE STARTING. SOUND RATED, U.L. LISTED
LAMPS:	LED 4,000 NOMINAL LUMENS (MINIMUM)
BASIS OF DESIGN:	LITHONIA LIGHTING - DSXW2-LED-20C-530-40K-T3M-MVOLT-PE-DBLXD
MOUNTING HEIGHT:	13'-6" AFF



LUMINAIRE TYPE

LUMINAIRE TYPE 

LUMINAIRE TYPE 

GENERAL: RECESSED 2'X2' FLAT-PANEL LED.

ALL OTHER CHARACTERISTICS SAME AS TYPE 'B' ABOVE, EXCEPT WITH 6000 LUMEN PACKAGE

BASIS OF DESIGN: LITHONIA LIGHTING - CPX-2X2-AL07-80CRI-SWW7-SWL-MVOLT

HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
OMB/DFM PROJECT NO: MJ4506000006

	DATE
	2/13/25
	8/14/25
	10/07/25
	2/26/26
	6/25/26

Scale: AS NOTED

Proj.No.:	0586D052 D
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LIGHTING SCHEDULE

Dwg.No.:

F:\PROJECTS\2016 DBF\2016.25 High Grade Evidence Storage Bldg\CAD\2016.25 T-001.dwg Jun 25 2026 - 3:25pm Glinn

SYMBOLS

— EMT CONDUIT.

—(E)— EXISTING CONDUIT AND CONDUCTORS TO REMAIN.

— FO — FIBER OPTIC CABLE.

▼ DATA OUTLET, 4-11/16" SQUARE x 2-1/8" DEEP GALVANIZED PRESSED STEEL, RECESSED MOUNTED AT 18" ABOVE FINISHED FLOOR, WITH BLANK COVER PLATE. PROVIDE EMPTY 1" CONDUIT WITH NYLON PULL STRING CONCEALED IN WALL UP TO ABOVE SUSPENDED TILE CEILING FOR FUTURE USE.

▼ SAME DATA OUTLET ABOVE, EXCEPT SURFACE MOUNTED AND EMPTY 1" CONDUIT WITH NYLON PULL STRING SURFACE MOUNTED ON WALL UP TO ABOVE SUSPENDED TILE CEILING FOR FUTURE USE.

▼ WIRELESS TELECOMMUNICATIONS OUTLET, 4-11/16" SQUARE X 2-1/8" DEEP GALVANIZED PRESSED STEEL, CEILING MOUNTED.

FLOOR PLAN

2 T-102, T-103 1/8"=1'-0"

0

ALL DRAWINGS WHERE
DETAIL IS REFERENCED

SECTION IDENTIFICATION

ARROW INDICATES TRUE NORTH
AND/OR PROJECT NORTH

NORTH ARROW

14 FEEDER DESIGNATION.

1234 ROOM NUMBER DESIGNATION

(2) COLUMN LINE NUMBER

 DRAWING REVISION NUMBER.

C CENTER LINE

☐ UP CONDUIT UP.

● DN CONDUIT DOWN.

— — BREAKLINE



DATE	COMMENTS
21/3/25	15.0% DESIGN SUBMISSION
8/4/25	60% DESIGN SUBMISSION
10/7/25	FEE MARSHAL SUBMISSION
2/8/26	99% DESIGN SUBMISSION
6/2/26	BID SET

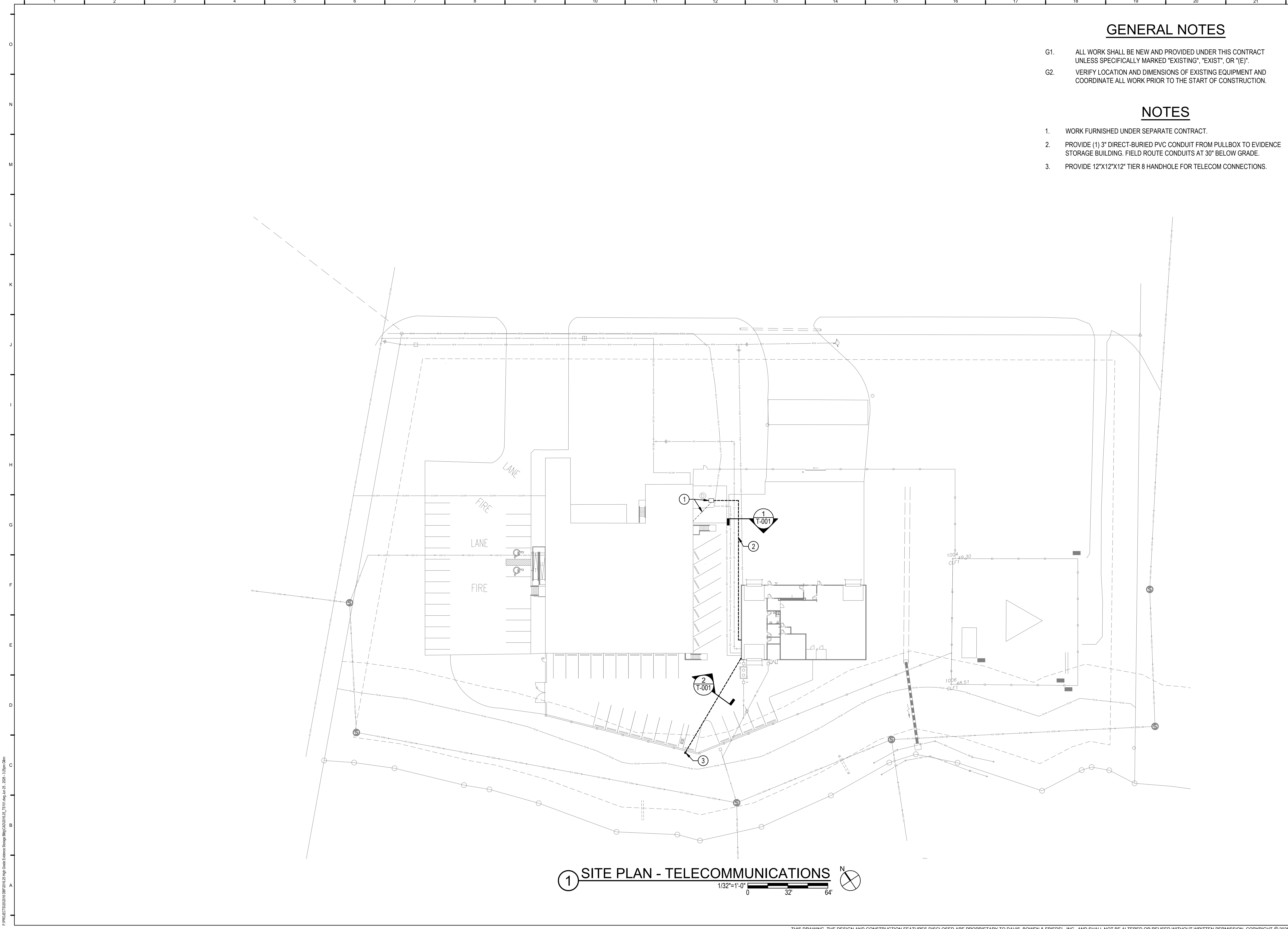
Date:	JULY 2026
Scale:	AS NOTED
Dwn By:	EMP
Proj No.:	0586B053.B01

SYMBOLS AND ABBREVIATIONS

Dwg No.:	
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Dwg.No.:

T-001



G1.	ALL WORK SHALL BE NEW AND PROVIDED UNDER THIS CONTRACT UNLESS SPECIFICALLY MARKED "EXISTING", "EXIST", OR "(E)".
G2.	VERIFY LOCATION AND DIMENSIONS OF EXISTING EQUIPMENT AND COORDINATE ALL WORK PRIOR TO THE START OF CONSTRUCTION.



HI-GRADE - EVIDENCE STORAGE BLDG.
17257 S DUPONT HWY, HARRINGTON, DE 19952
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FIRST FLOOR
PLAN -
TELECOMM

Dwg.No.:
T-101