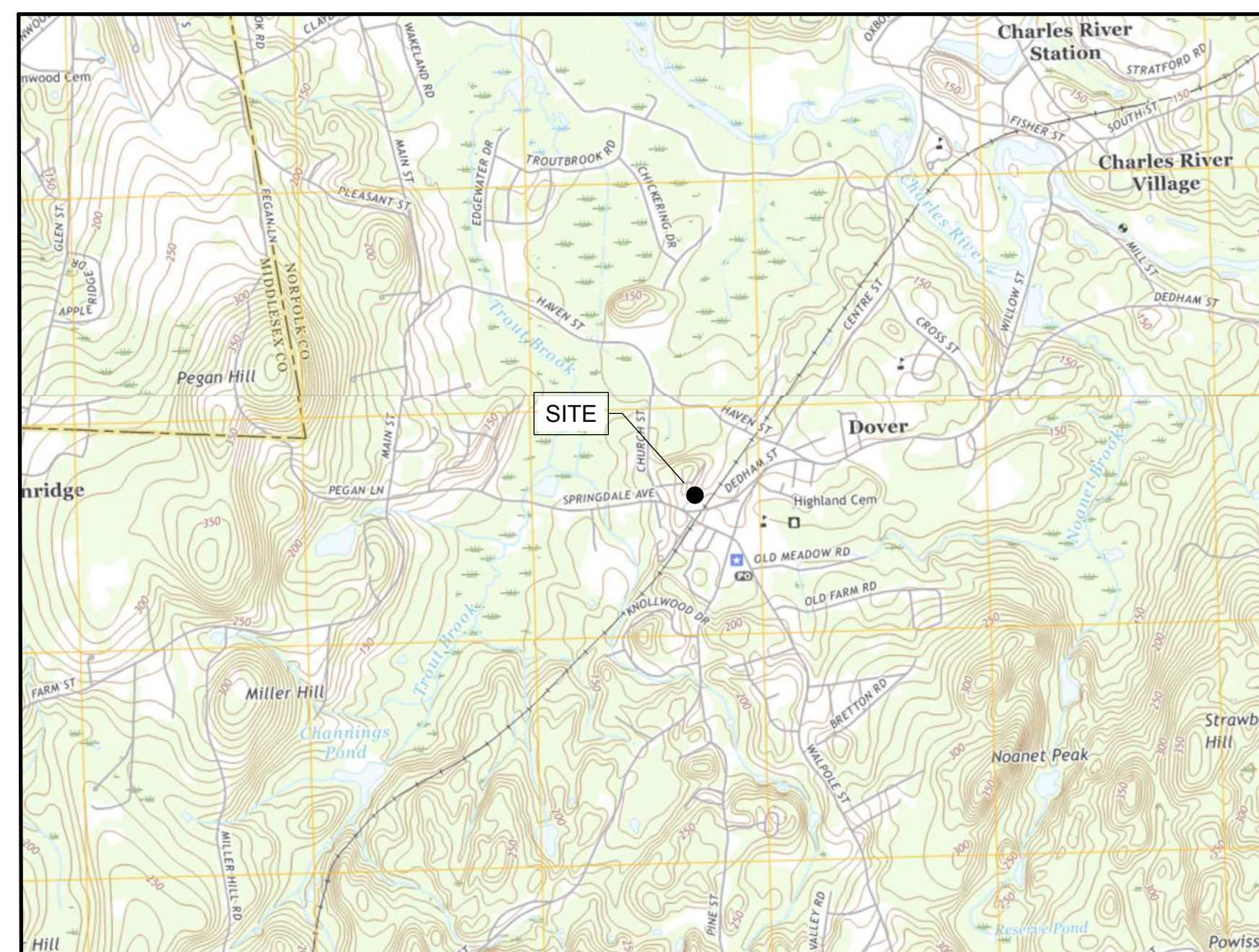
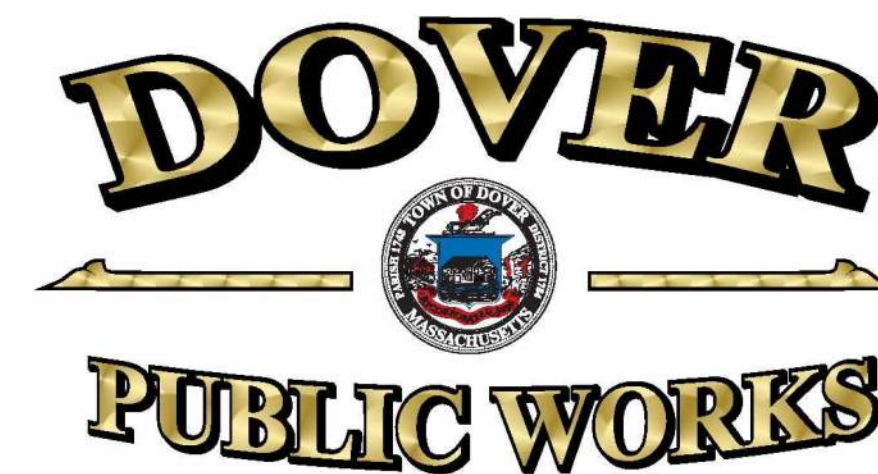


**2 DEDHAM STREET**  
**MAP 11 LOTS 36 & 31G**



USGS LOCUS MAP  
1" = 2000'

<u>SHEET NO.</u>	<u>DRAWING NO.</u>	<u>TITLE</u>
1	C000	COVER
2	C001	GENERAL NOTES & LEGEND
3	C100	OVERALL EXISTING CONDITIONS PLAN
4	C101	EXISTING CONDITIONS PLAN I
5	C102	EXISTING CONDITIONS PLAN II
6	C103	SITE PREPARATION PLAN
7	C104	PROPOSED SITE PLAN
8	C105	PROPOSED FUEL SYSTEM PLAN
9	C501	DETAILS I
10	C502	DETAILS II
11	C503	DETAILS III
12	C504	DETAILS IV
13	C505	DETAILS V
14	EQ501	FUEL SYSTEM LAYOUT
15	EQ502	FUEL SYSTEM DETAILS I
16	EQ503	FUEL SYSTEM DETAILS II
17	EQ504	CANOPY LAYOUT

Weston (&) Sampson<sup>SM</sup>

Weston & Sampson Engineers, Inc.  
55 Walkers Brook Drive, Suite 100, Reading, MA 01867

Project: **TOWN OF DOVER**  
DEPARTMENT OF PUBLIC WORKS  
SITE IMPROVEMENTS  
2 DEDHAM STREET  
DOVER, MA 02030

Weston & Sampson<sup>SM</sup>

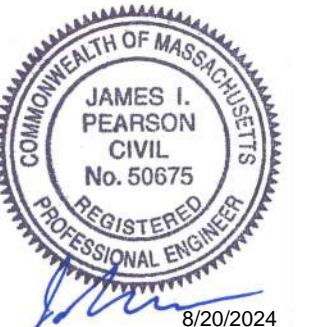
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Consultants:

Revisions:		
No.	Date	Description
3	08/12/24	PERMITTING FUEL SYSTEM DESIGN
2	05/15/24	PER CONSERVATION FEEDBACK
1	04/10/24	LOCAL PERMIT APPLICATIONS

COA:

Seal:



ssued For:

PERMITTING

Scale:

Date: APRIL 2024

Drawn By:

Reviewed By:

Approved By:

W&amp;S Project No.: ENG22-1087

W&amp;S File No.:

Drawing Title:

COVER

Sheet Number:

C000



- EXISTING CONDITIONS INFORMATION IS BASED UPON A SURVEY PERFORMED BY NORFOLK COUNTY ENGINEERING DEPARTMENT, FROM FIELD SURVEY WORK PERFORMED IN EARLY 2024. WETLAND RESOURCE AREA INFORMATION SHOWN ON THESE PLANS IS BASED UPON A FIELD WETLAND DELINEATION PERFORMED BY WESTON & SAMPSON, INC. ON OCTOBER 12, 2023.
2. ALL BIDDERS ARE REQUIRED TO INSPECT THE PROJECT SITE IN ITS ENTIRETY PRIOR TO SUBMITTING THEIR BID, AND BECOME FAMILIAR WITH ALL CONDITIONS AS THEY MAY AFFECT THEIR BID. CONTRACTOR AND SUB-CONTRACTOR SHALL BE FAMILIAR WITH ALL DRAWINGS AND SPECIFICATIONS PRIOR TO COMMENCING THE CONSTRUCTION.
3. LOCATIONS OF ANY UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF SUCH UTILITIES, PROTECTING ALL EXISTING UTILITIES AND REPAIRING ANY DAMAGE DONE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE COORDINATION WITH UTILITY COMPANIES AND PUBLIC AGENCIES AND FOR OBTAINING ALL REQUIRED PERMITS AND PAYING ALL REQUIRED FEES. IN ACCORDANCE WITH M.G.L. CHAPTER 82, SECTION 40, INCLUDING AMENDMENTS, CONTRACTORS SHALL NOTIFY ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES IN WRITING PRIOR TO EXCAVATION. CONTRACTOR SHALL ALSO CALL "DIG SAFE" AT (888) 344-7223 NO LESS THAN 72 HOURS, (EXCLUSIVE OF WEEKENDS AND HOLIDAYS), PRIOR TO SUCH EXCAVATION. DOCUMENTATION OF REQUESTS SHALL BE PROVIDED TO PROJECT REPRESENTATIVE PRIOR TO EXCAVATION WORK.
4. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
5. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY OWNER AT NO ADDITIONAL COST TO THE OWNER.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL DRAWINGS AND SPECIFICATIONS TO DETERMINE THE EXTENT OF EXCAVATION AND DEMOLITION REQUIRED TO RECEIVE SITE IMPROVEMENTS.
7. ANY DISCREPANCIES OR CONFLICTS BETWEEN THE DRAWINGS AND EXISTING CONDITIONS, EXISTING CONDITIONS TO REMAIN, TEMPORARY CONSTRUCTION, PERMANENT CONSTRUCTION AND WORK OF ADJACENT CONTRACTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER BEFORE BEGINNING ITEMS ENCOUNTERED IN EXCAVATION THAT ARE NOT INDICATED ON THE DRAWINGS, BUT ARE VISIBLE ON SURFACE, SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE REMOVED AT NO ADDITIONAL COST TO THE OWNER.
8. ANY ALTERATIONS TO THESE DRAWINGS MADE IN THE FIELD DURING CONSTRUCTION SHALL BE RECORDED BY THE GENERAL CONTRACTOR ON "AS-BUILT" DRAWINGS.
9. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS OUTSIDE THE PROJECT LIMITS, SHALL BE RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR AT NO ADDITIONAL COST AND TO THE SATISFACTION OF THE OWNER.
10. ALL WORK SHOWN ON THE PLANS AS BOLD SHALL REPRESENT PROPOSED WORK. THE TERM "PROPOSED (PROP)" INDICATES WORK TO BE CONSTRUCTED USING NEW MATERIALS OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND RESET (R&R)", OR REMOVE, RELOCATE, RESET, (R,R&R).
11. ALL KNOWN EXISTING STATE, COUNTY AND TOWN LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND ARE INDICATED ON THE PLANS.
12. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT HIS EMPLOYEES, AS WELL AS PUBLIC USERS FROM INJURY DURING THE ENTIRE CONSTRUCTION PERIOD USING ALL NECESSARY SAFEGUARDS, INCLUDING BUT NOT LIMITED TO, THE ERECTION OF TEMPORARY WALKS, STRUCTURES, PROTECTIVE BARRIERS, COVERING, OR FENCES AS NEEDED.
13. THE CONTRACTOR SHALL SUPPLY THE OWNER WITH THE NAME OF THE OSHA "COMPETENT PERSON" PRIOR TO CONSTRUCTION.
14. FILLING OF EXCAVATED AREAS SHALL NOT TAKE PLACE WITHOUT THE PRESENCE OR PERMISSION OF THE OWNER.
15. EXISTING TREES TO REMAIN SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. NO STOCKPILING OF MATERIAL, EQUIPMENT OR VEHICULAR TRAFFIC SHALL BE ALLOWED WITHIN THE Drip LINE OF THESE TREES. NOTHING IS TO BE ATTACHED TO ANY TREE TO REMAIN. WHEN NECESSARY OR AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL ERECT TEMPORARY BARRIERS FOR THE PROTECTION OF EXISTING TREES DURING CONSTRUCTION.
16. TREES AND SHRUBS WITHIN THE LIMITS OF WORK SHALL BE REMOVED ONLY UPON THE APPROVAL OF THE ENGINEER OR AS NOTED ON THE PLANS.
17. NO FILLING SHALL OCCUR AROUND EXISTING TREES TO REMAIN WITHOUT THE APPROVAL OF THE OWNER OR OWNER REPRESENTATIVE.
18. THE CONTRACTOR SHALL REMOVE ALL SURFACE VEGETATION PRIOR TO GRADING THE SITE. TEMPORARY EROSION CONTROL MEASURES SHOWN ON THE DRAWINGS (INCLUDING SILT FENCE AND COMPOSITE FILTER TUBES) SHALL BE INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THESE TEMPORARY EROSION CONTROL MEASURES THROUGHOUT THE PROJECT WHICH COST SHALL BE INCIDENTAL TO THE PROJECT.
19. CONTRACTOR IS RESPONSIBLE FOR STAKING CONSTRUCTION BASELINES IN FIELD. NO CONSTRUCTION WILL BE PERFORMED WITHOUT THE PROPOSED BASELINES AND LAYOUTS APPROVED BY THE ENGINEER.
20. NO FILL SHALL CONTAIN HAZARDOUS MATERIALS.
21. CONTRACTOR SHALL PROVIDE TEMPORARY FENCING AROUND PERIMETER OF WORK AREA (LIMIT OF WORK). FENCE SHALL NOT IMPEDE TRAVEL WAYS.
22. ANY QUANTITIES SHOWN ON PLANS ARE FOR COMPARATIVE BIDDING PURPOSES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE PROJECT SITE TO VERIFY ALL QUANTITIES AND CONDITIONS PRIOR TO SUBMITTING BID.
23. ALL EXISTING DRAINAGE FACILITIES TO REMAIN SHALL BE MAINTAINED FREE OF DEBRIS, SOIL, SEDIMENT, AND FOREIGN MATERIAL AND OPERATIONAL THROUGHOUT THE LIFE OF THE CONTRACT. REMOVE ALL SOIL, SEDIMENT, DEBRIS AND FOREIGN MATERIAL FROM ALL DRAINAGE STRUCTURES, INCLUDING BUT NOT LIMITED TO, DRAINAGE INLETS, MANHOLES AND CATCH BASINS WITHIN THE LIMIT OF WORK AND DRAINAGE STRUCTURES OUTSIDE THE LIMIT OF WORK THAT ARE IMPACTED BY THE WORK FOR THE ENTIRE DURATION OF CONSTRUCTION.
24. CONTRACTOR'S STAGING AREA MUST BE WITHIN THE CONTRACT LIMIT LINE AND IN AREAS APPROVED BY OWNER. ANY OTHER AREAS THAT THE CONTRACTOR MAY WISH TO USE FOR STAGING MUST BE COORDINATED WITH THE OWNER.
25. THE CONTRACTOR SHALL KEEP ALL STREETS, PARKING LOTS AND SIDEWALKS THAT ARE NOT RESTRICTED FROM PUBLIC USE DURING CONSTRUCTION BROOK CLEAN AT ALL TIMES. THE CONTRACTOR SHALL USE ACCEPTABLE METHODS AND MATERIALS TO MAINTAIN ADEQUATE DUST CONTROL THROUGHOUT CONSTRUCTION.
26. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER.
27. CONTRACTOR SHALL DEWATER AS NECESSARY TO PERFORM THE PROPOSED WORK. (SEE SPECIFICATION SECTION 003132 SUBSURFACE DATA).
28. THE LIMIT OF WORK SHALL BE DELINEATED IN THE FIELD PRIOR TO THE START OF SITE CLEARING OR CONSTRUCTION.
29. DEEP PUMP CATCH BASINS AND STORMWATER BASIN SHALL BE CLEANED FOLLOWING CONSTRUCTION AND SHALL FOLLOW THE OPERATION AND MAINTENANCE PLAN THEREAFTER.
30. HAULING OF EARTH MATERIALS TO AND FROM THE SITE SHALL BE RESTRICTED TO THE HOURS SPECIFIED BY THE MUNICIPALITY'S BYLAWS.
31. ANY BOLLERS 3' CY OR SMALLER SHALL BE CONSIDERED UNDOCUMENTED FILL AND SHALL BE DISPOSED OF AT NO ADDITIONAL COST TO THE MUNICIPALITY.
32. WORK ON SATURDAYS SHALL ONLY BE CONDUCTED IF PRIOR WRITTEN PERMISSION IS PROVIDED BY THE OWNER.
33. THE TERM "AS DIRECTED" AS USED IN THE CONTRACT DRAWINGS SHALL BE REPLACED WITH "AS REQUIRED".

1. THE CONTRACTOR SHALL INCLUDE IN THE BID THE COST OF REMOVING ANY EXISTING SITE FEATURES AND APPURTENANCES NECESSARY TO ACCOMPLISH THE CONSTRUCTION OF THE PROPOSED SITE IMPROVEMENTS. THE CONTRACTOR SHALL ALSO INCLUDE IN THE BID THE COST NECESSARY TO RESTORE SUCH ITEMS IF THEY ARE SCHEDULED TO REMAIN AS PART OF THE FINAL SITE IMPROVEMENTS. REFER TO PLANS TO DETERMINE EXCAVATION, DEMOLITION AND TO DETERMINE THE LOCATION OF THE PROPOSED SITE IMPROVEMENTS.
2. THE OWNER RESERVES THE RIGHT TO REVIEW ALL MATERIALS DESIGNATED FOR REMOVAL AND TO RETAIN OWNERSHIP OF SUCH MATERIALS. IF THE OWNER RETAINS ANY MATERIAL, THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE OWNER TO HAVE THOSE MATERIALS REMOVED OFF SITE AT NO ADDITIONAL COST.
3. UNLESS SPECIFICALLY NOTED TO BE SAVED / STOCKPILED (R&S) OR REUSED / RELOCATED (R&R), ALL SITE FEATURES CALLED FOR REMOVAL (REM) SHALL BE REMOVED WITH THEIR FOOTINGS, ATTACHMENTS, BASE MATERIAL, ETC., TRANSPORTED FROM THE SITE TO BE DISPOSED OF IN A LAWFUL MANNER AT AN ACCEPTABLE DISPOSAL SITE AND AT NO COST TO THE OWNER.
4. ALL EXISTING SITE FEATURES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PERIOD. ANY FEATURES DAMAGED DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST.
5. DURING EARTHWORK OPERATIONS, CONTRACTOR SHALL TAKE CARE TO NOT DISTURB EXISTING MATERIALS TO REMAIN, OUTSIDE THE LIMITS OF EXCAVATION AND BACKFILL AND SHALL TAKE WHATEVER MEASURES NECESSARY, AT THE CONTRACTOR'S EXPENSE, TO PREVENT ANY EXCAVATED MATERIAL FROM COLLAPSING. ALL BACKFILL MATERIALS SHALL BE PLACED AND COMPACTED AS SPECIFIED TO THE SUBGRADE REQUIRED FOR THE INSTALLATION OF THE REMAINDER OF THE CONTRACT WORK.
6. IT SHALL BE THE CONTRACTOR'S OPTION, WITH CONCURRENCE OF THE OWNER, TO REUSE EXISTING GRAVEL IF IT MEETS THE REQUIREMENTS OF THE SPECIFICATIONS FOR STRUCTURAL FILL.
7. ALL ITEMS CALLED FOR REMOVAL SHALL BE REMOVED TO FULL DEPTH INCLUDING ALL FOOTINGS, FOUNDATIONS, AND OTHER APPURTENANCES, EXCEPT AS SPECIFICALLY NOTED OTHERWISE.
8. 'CLEAR AND GRUB VEGETATION' SHALL INCLUDE REMOVAL OF GRASS, SHRUBS, AND UNDERBRUSH, REMOVAL OF ROOTS, ROUGH GRADING, INSTALLATION OF LOAM (IF APPLICABLE), FINE GRADING, SEEDING AND TURF ESTABLISHMENT BY THE CONTRACTOR.
9. TREES DESIGNATED FOR REMOVAL SHALL BE TAGGED BY CONTRACTOR AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
10. THE STORAGE OF MATERIALS AND EQUIPMENT WILL BE PERMITTED AT LOCATIONS DESIGNATED BY OWNER OR OWNER'S REPRESENTATIVE. PROTECTION OF STORED MATERIALS AND EQUIPMENT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
11. STRIP & STORE EXISTING TOPSOIL FOR LATER REUSE WHERE APPROPRIATE, AND AS NOTED ON PLAN, WITH APPROPRIATE EROSION AND SEDIMENT CONTROLS.
12. LOAM / TOPSOIL DESIGNATED FOR REUSE AS GENERAL FILL SHALL BE BLENDED WITH SUITABLE BORROW MATERIAL AS SPECIFIED.

THE CONTRACTOR SHALL PROTECT EXISTING TREES TO REMAIN. CONTRACTOR SHALL INSTALL TREE PROTECTION BARRIER AROUND CLEARING UNDERBRUSH AND TAKE DUE CARE TO PREVENT INJURY TO TREES DURING CLEARING OPERATIONS.

1. REFER TO EXISTING CONDITIONS PLANS FOR SURVEY INFORMATION.
2. COORDINATE ALL LAYOUT ACTIVITIES WITH THE SCOPE OF WORK CALLED FOR BY DEMOLITION, GRADING, AND UTILITIES OPERATIONS ENCOMPASSED BY THIS CONTRACT. SET, PROTECT AND REPLACE REFERENCE STAKES AS NECESSARY OR AS REQUIRED BY THE OWNER'S REPRESENTATIVE.
3. ALL WORK SHALL BE PERFORMED BY CONTRACTOR UNLESS SPECIFICALLY INDICATED THAT THE WORK WILL BE PERFORMED BY THE MUNICIPALITY.
4. THE LAYOUT OF SITE AMENITIES AND FENCES MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. SOME ITEMS ARE "NOT IN CONTRACT" (NIC) AND SHOWN FOR REFERENCE ONLY.
5. THE LAYOUT OF ALL NEW PATHWAYS / WALKWAYS AND THE GRADING OF ALL SLOPES AND CROSS SLOPES SHALL CONFORM TO THE COMMONWEALTH OF MASSACHUSETTS RULES AND REGULATIONS FOR HANDICAP ACCESS CMR 521, AND THE AMERICANS WITH DISABILITIES ACT (ADA), TITLE 3. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THOSE REQUIRED.
6. ALL LAYOUT LINES, OFFSETS, OR REFERENCES TO LOCATING OBJECTS ARE EITHER PARALLEL OR PERPENDICULAR UNLESS OTHERWISE DESIGNATED WITH ANGLE OFFSETS NOTED.
7. ALL PROPOSED SITE FEATURES SHALL BE LAID OUT AND STAKED FOR REVIEW AND APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF INSTALLATION. ANY REQUIRED ADJUSTMENTS TO THE LAYOUT SHALL BE UNDERTAKEN AS DIRECTED, AT NO ADDITIONAL COST TO THE OWNER.
8. ALL PROPOSED PAVEMENTS SHALL MEET THE LINE AND GRADE OF EXISTING ADJACENT PAVEMENT SURFACES AND SHALL BE TREATED WITH AN RS-1 TACK COAT AT POINT OF CONNECTION. ALL PATHWAY WIDTHS SHALL BE AS NOTED ON THE LAYOUT AND MATERIALS PLAN.
9. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD MEASUREMENT OF ALL PROPOSED FENCES AND GATES.
11. THE DEPTH OF LOAM BORROW FOR ALL PROPOSED LAWN AREAS SHALL BE 6" MINIMUM. ALL DISTURBED AREAS SHALL BE RESTORED WITH LOAM AND SEED UNLESS OTHERWISE NOTED.
12. ALL REFERENCES TO LOAM AND SEED (L&S) REFER TO HYDROMULCH SEEDED LAWN.
13. REFER TO DETAIL DRAWINGS FOR CONSTRUCTION DETAILS.

3. ALL WORK RELATING TO INSTALLATION, RENOVATION OR MODIFICATION OF WATER, DRAINAGE AND/OR SEWER SERVICES SHALL BE PERFORMED IN ACCORDANCE WITH THE MUNICIPAL BYLAWS AND REGULATIONS.
4. ALL PROPOSED WATER MAIN PIPE SHALL BE INSTALLED WITH POLYETHYLENE ENCASEMENT.
5. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER.
6. ALL GRADING IS TO BE SMOOTH AND CONTINUOUS WHERE PROPOSED GRAVEL SURFACE MEETS EXISTING SURFACE. BLEND THE TWO PAVEMENTS AND ELIMINATE ROUGH SPOTS AND ABRUPT GRADE CHANGES AND MEET LINE AND GRADE OF EXISTING CONDITIONS WITH NEW IMPROVEMENTS.
7. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE (1.5% MINIMUM) AWAY FROM ALL BUILDING FOUNDATIONS AND STRUCTURES.
8. CONTRACTOR SHALL ENSURE ALL AREAS ARE PROPERLY PITCHED TO DRAIN, WITH NO SURFACE WATER PONDING OR PUDDLING.
9. ALL NEW WALKWAYS / ACCESS PATHS MUST CONFORM TO CURRENT AMERICANS WITH DISABILITIES ACT (ADA) REGULATIONS: WALKWAYS SHALL MAINTAIN A CROSS PITCH OF NOT MORE THAN ONE AND A HALF PERCENT (1.5%) AND THE RUNNING SLOPE (PARALLEL TO THE DIRECTION OF TRAVEL) BETWEEN 1% MIN. AND 5% MAX.
10. MINIMUM SLOPE ON ALL WALKWAYS WILL BE 1:100 OR 1% TO PROVIDE POSITIVE DRAINAGE. ANY DISCREPANCIES NOT ALLOWING THIS TO OCCUR SHALL BE REPORTED TO THE OWNER PRIOR TO CONTINUING WORK.
11. ALL UTILITY GRATES, COVERS OR OTHER SURFACE ELEMENTS INTENDED TO BE EXPOSED AT GRADE SHALL BE FLUSH WITH THE ADJACENT FINISHED GRADE AND ADJUSTED TO PROVIDE A SMOOTH TRANSITION AT ALL EDGES.
12. THE CONTRACTOR SHALL SET SUBGRADE ELEVATIONS TO ALLOW FOR POSITIVE DRAINAGE AND PROVIDE EROSION CONTROL DEVICES, STRUCTURES, MATERIALS AND CONSTRUCTION METHODS TO DIRECT SILT MIGRATION AWAY FROM DRAINAGE AND OTHER UTILITY SYSTEMS, PUBLIC/PRIVATE STREETS AND WORK AREAS. CLEAN BASINS REGULARLY AND AT THE END OF THE PROJECT.
13. EXCAVATION REQUIRED WITHIN PROXIMITY OF KNOWN EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
14. WHERE NEW EARTHWORK MEETS EXISTING EARTHWORK, CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY INTO EXISTING, PROVIDING VERTICAL CURVES OR ROUNDS AT ALL TOP AND BOTTOM OF SLOPES.
15. WHERE A SPECIFIC LIMIT OF WORK LINE IS NOT OBVIOUS OR IMPLIED, BLEND GRADES TO EXISTING CONDITIONS WITHIN 5 FEET OF PROPOSED CONTOURS.
16. RESTORE ALL DISTURBED AREAS AND LIMITS OF ALL REMOVALS TO LOAM AND SEED (L&S) UNLESS OTHERWISE NOTED.
17. SEE EARTHWORK SECTION OF SPECIFICATIONS FOR SPECIFIC EXCAVATION AND FILLING PROCEDURES.
18. FOR STRUCTURE REMODELING (REMOD), CONSTRUCTION METHODS SHALL FOLLOW MASSACHUSETTS DOT STANDARD SPEC. LATEST EDITION (SECTION 220).
19. ALL UNDERGROUND CONCRETE STRUCTURES, LOCATED OUTSIDE OF THE BUILDING FOOTPRINT, ASSOCIATED WITH THE DRAINAGE/SEWER/STORMWATER SYSTEMS TO BE COATED WITH BITUMINOUS/TAR WATERPROOFING/DAMP-PROOFING.

PR.	PROPOSED
EX.	EXISTING
ADJ.	ADJUST
BIT. CONC.	BITUMINOUS CONCRETE
CONC.	CONCRETE (CEMENT CONCRETE)
B	BASELINE
N.T.S.	NOT TO SCALE
B.M.	BENCH MARK
EXIST.	
(OR EX.)	EXISTING
FDN	FOUNDATION
PL	PROPERTY LINE
PVMT	PAVEMENT
REM	REMOVE
R&R	REMOVE AND RESET
R&D	REMOVE AND DISPOSE
SB	STONE BOUND
NIC	NOT IN CONTRACT
FF	FINISHED FLOOR
HMA	HOT MIX ASPHALT
G.C.	GENERAL CONTRACTOR
E.C.	ELECTRICAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
SB/DH	STONE BOUND/ DRILL HOLE
CLF	CHAIN LINK FENCE
TEMP.	TEMPORARY
TYP	TYPICAL
EQ	EQUIPMENT
EP	EDGE OF PAVEMENT
RL	ROOF LEADER
L.O.W.	LIMIT OF WORK
V.F.	VERIFY IN FIELD
TBM	TEMPORARY BENCHMARK
TYP.	ALTERNATE
FES	FLARED END SECTION
VGC	VERTICAL GRANITE CURB

[illegible]

WQU	WATER QUALITY UNIT
CB	CATCH BASIN
CI	CURB INLET
CIP	CAST IRON PIPE
CMF	CORRUGATED METAL PIPE
DI	DUCTILE IRON PIPE
HYD	HYDRANT
INV. ELEV.	INVERT ELEVATION
UP	UTILITY POLE
SMH	SEWER MANHOLE
WG	WATER GATE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
DMH	DRAIN MANHOLE
CI	CAST IRON
OCS	OUTLET CONTROL STRUCTURE
VC	VITRIFIED CLAY PIPE
LP	LIGHT POLE
OHW	OVERHEAD WIRE
UPLP	UTILITY POLE WITH LIGHT
HH	HANDHOLE
GW	GARAGE WASTE
CO	CLEANOUT
LC	LEANING CHAMBER
GV	GATE VALVE
GALV.	GALVANIZED
F&I	FURNISH & INSTALL
BGS	BELOW GRADE SURFACE

ME	MATCH EXISTING
BW	BOTTOM OF WALL
BC	BOTTOM OF CURB
PI	POINT OF INTERSECTION
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PRC	POINT OF REVERSE CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVC	POINT OF VERTICAL CURVATURE
PVT	POINT OF VERTICAL TANGENCY
ELEV	ELEVATION
CC	CENTER OF CURVE
H.P.	HIGH POINT
L.P.	LOW POINT
R	RADIUS OF CURVATURE
STA	STATION
S.S.D.	STOPPING SIGHT DISTANCE
TC	TOP OF CURB
TW	TOP OF WALL

CATCH BASIN  
DOUBLE CATCH BASIN  
CURB -TYPE NOTED  
EDGE OF ROAD  
HANDHOLE (NUMBER AS NOTED)  
SEWER MANHOLE  
DRAINAGE MANHOLE  
GAS GATE  
WATER GATE VALVE  
HYDRANT  
WELL  
LIGHTPOLE  
LIGHT POLE DOUBLE LIGHT  
BORING  
TEST PIT  
DRAIN PIPE  
SEWER LINE  
ELECTRIC DUCT  
TELEPHONE/COMMUNICATIONS  
GARAGE WASTE LINE  
GAS MAIN  
WATER MAIN  
OVERHEAD WIRES  
GUARD RAIL (SIZE AND TYPE NOTED)  
STOCKADE FENCE

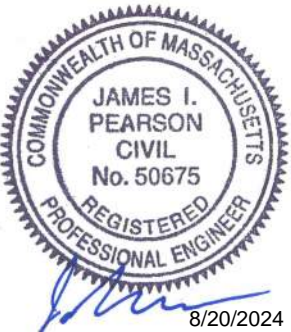
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the 1990s, the number of people in the United States who are 65 years of age or older has increased by 50 percent. The number of people 75 years of age or older has increased by 100 percent. The number of people 85 years of age or older has increased by 200 percent. The number of people 95 years of age or older has increased by 400 percent. The number of people 100 years of age or older has increased by 800 percent. The number of people 105 years of age or older has increased by 1,600 percent. The number of people 110 years of age or older has increased by 3,200 percent. The number of people 115 years of age or older has increased by 6,400 percent. The number of people 120 years of age or older has increased by 12,800 percent. The number of people 125 years of age or older has increased by 25,600 percent. The number of people 130 years of age or older has increased by 51,200 percent. The number of people 135 years of age or older has increased by 102,400 percent. The number of people 140 years of age or older has increased by 204,800 percent. The number of people 145 years of age or older has increased by 409,600 percent. The number of people 150 years of age or older has increased by 819,200 percent. The number of people 155 years of age or older has increased by 1,638,400 percent. The number of people 160 years of age or older has increased by 3,276,800 percent. The number of people 165 years of age or older has increased by 6,553,600 percent. The number of people 170 years of age or older has increased by 13,107,200 percent. The number of people 175 years of age or older has increased by 26,214,400 percent. The number of people 180 years of age or older has increased by 52,428,800 percent. The number of people 185 years of age or older has increased by 104,857,600 percent. The number of people 190 years of age or older has increased by 209,715,200 percent. The number of people 195 years of age or older has increased by 419,430,400 percent. The number of people 200 years of age or older has increased by 838,860,800 percent. The number of people 205 years of age or older has increased by 1,677,721,600 percent. The number of people 210 years of age or older has increased by 3,355,443,200 percent. The number of people 215 years of age or older has increased by 6,710,886,400 percent. The number of people 220 years of age or older has increased by 13,421,772,800 percent. The number of people 225 years of age or older has increased by 26,843,545,600 percent. The number of people 230 years of age or older has increased by 53,687,091,200 percent. The number of people 235 years of age or older has increased by 107,374,182,400 percent. The number of people 240 years of age or older has increased by 214,748,364,800 percent. The number of people 245 years of age or older has increased by 429,496,729,600 percent. The number of people 250 years of age or older has increased by 858,993,459,200 percent. The number of people 255 years of age or older has increased by 1,717,986,918,400 percent. The number of people 260 years of age or older has increased by 3,435,973,836,800 percent. The number of people 265 years of age or older has increased by 6,871,947,673,600 percent. The number of people 270 years of age or older has increased by 13,743,895,347,200 percent. The number of people 275 years of age or older has increased by 27,487,790,694,400 percent. The number of people 280 years of age or older has increased by 54,975,581,388,800 percent. The number of people 285 years of age or older has increased by 109,951,162,777,600 percent. The number of people 290 years of age or older has increased by 219,902,325,555,200 percent. The number of people 295 years of age or older has increased by 439,804,651,110,400 percent. The number of people 300 years of age or older has increased by 879,609,302,220,800 percent. The number of people 305 years of age or older has increased by 1,759,218,604,441,600 percent. The number of people 310 years of age or older has increased by 3,518,437,208,883,200 percent. The number of people 315 years of age or older has increased by 7,036,874,417,766,400 percent. The number of people 320 years of age or older has increased by 14,073,748,835,532,800 percent. The number of people 325 years of age or older has increased by 28,147,497,671,065,600 percent. The number of people 330 years of age or older has increased by 56,294,995,342,131,200 percent. The number of people 335 years of age or older has increased by 112,589,990,684,262,400 percent. The number of people 340 years of age or older has increased by 225,179,981,368,524,800 percent. The number of people 345 years of age or older has increased by 450,359,962,737,049,600 percent. The number of people 350 years of age or older has increased by 900,719,925,474,099,200 percent. The number of people 355 years of age or older has increased by 1,801,439,850,948,198,400 percent. The number of people 360 years of age or older has increased by 3,602,879,701,896,396,800 percent. The number of people 365 years of age or older has increased by 7,205,759,403,792,793,600 percent. The number of people 370 years of age or older has increased by 14,411,518,807,585,587,200 percent. The number of people 375 years of age or older has increased by 28,823,037,615,171,174,400 percent. The number of people 380 years of age or older has increased by 57,646,075,230,342,348,800 percent. The number of people 385 years of age or older has increased by 115,292,150,460,684,697,600 percent. The number of people 390 years of age or older has increased by 230,584,300,921,369,395,200 percent. The number of people 395 years of age or older has increased by 461,168,601,842,738,790,400 percent. The number of people 400 years of age or older has increased by 922,337,203,685,477,580,800 percent. The number of people 405 years of age or older has increased by 1,844,674,407,370,955,161,600 percent. The number of people 410 years of age or older has increased by 3,689,348,814,741,910,323,200 percent. The number of people 415 years of age or older has increased by 7,378,697,629,483,820,646,400 percent. The number of people 420 years of age or older has increased by 14,757,395,258,967,641,292,800 percent. The number of people 425 years of age or older has increased by 29,514,790,517,935,282,585,600 percent. The number of people 430 years of age or older has increased by 59,029,581,035,870,565,171,200 percent. The number of people 435 years of age or older has increased by 118,059,162,071,741,130,342,400 percent. The number of people 440 years of age or older has increased by 236,118,324,143,482,260,684,800 percent. The number of people 445 years of age or older has increased by 472,236,648,286,964,521,369,600 percent. The number of people 450 years of age or older has increased by 944,473,296,573,929,042,739,200 percent. The number of people 455 years of age or older has increased by 1,888,946,593,147,858,085,478,400 percent. The number of people 460 years of age or older has increased by 3,777,893,186,295,716,170,956,800 percent. The number of people 465 years of age or older has increased by 7,555,786,372,591,432,341,913,600 percent. The number of people 470 years of age or older has increased by 15,111,572,745,182,864,683,827,200 percent. The number of people 475 years of age or older has increased by 30,223,145,490,365,729,367,654,400 percent. The number of people 480 years of age or older has increased by 60,446,290,980,731,458,735,308,800 percent. The number of people 485 years of age or older has increased by 120,892,581,961,462,917,470,617,600 percent. The number of people 490 years of age or older has increased by 241,785,163,922,925,834,941,235,200 percent. The number of people 495 years of age or older has increased by 483,570,327,845,851,669,882,470,400 percent. The number of people 500 years of age or older has increased by 967,140,655,691,703,339,764,940,800 percent. The number of people 505 years of age or older has increased by 1,934,281,311,383,406,679,529,881,600 percent. The number of people 510 years of age or older has increased by 3,868,562,622,766,813,359,059,763,200 percent. The number of people 515 years of age or older has increased by 7,737,125,245,533,626,718,119,526,400 percent. The number of people 520 years of age or older has increased by 15,474,250,491,067,253,436,239,052,800 percent. The number of people 525 years of age or older has increased by 30,948,500,982,134,506,872,478,105,600 percent. The number of people 530 years of age or older has increased by 61,897,001,964,269,013,744,956,211,200 percent. The number of people 535 years of age or older has increased by 123,794,003,928,538,027,489,912,422,400 percent. The number of people 540 years of age or older has increased by 247,588,007,857,076,054,979,824,844,800 percent. The number of people 545 years of age or older has increased by 495,176,015,714,152,109,959,649,689,600 percent. The number of people 550 years of age or older has increased by 990,352,031,428,304,219,919,299,379,200 percent. The number of people 555 years of age or older has increased by 1,980,704,062,856,608,439,838,598,758,400 percent. The number of people 560 years of age or older has increased by 3,961,408,125,713,216,879,677,197,516,800 percent. The number of people 565 years of age or older has increased by 7,922,816,251,426,433,759,354,395,033,600 percent. The number of people 570 years of age or older has increased by 15,845,632,502,852,867,518,708,790,067,200 percent. The number of people 575

Revisions:		
No.	Date	Description
3	08/12/24	PERMITTING FUEL SYSTEM DESIGN
2	05/15/24	PER CONSERVATION FEEDBACK
1	04/10/24	LOCAL PERMIT APPLICATIONS

COA:

Seal



Issued For:

## Scale

Date: APRIL 2024

Drawn By:

Reviewed By:

Approved By:

W&amp;S Project No.: ENG22-108

W&amp;S File No.

Drawing Title:

## Sheet Number:

C001

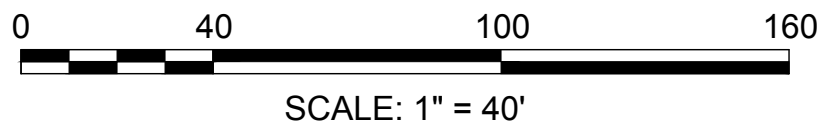
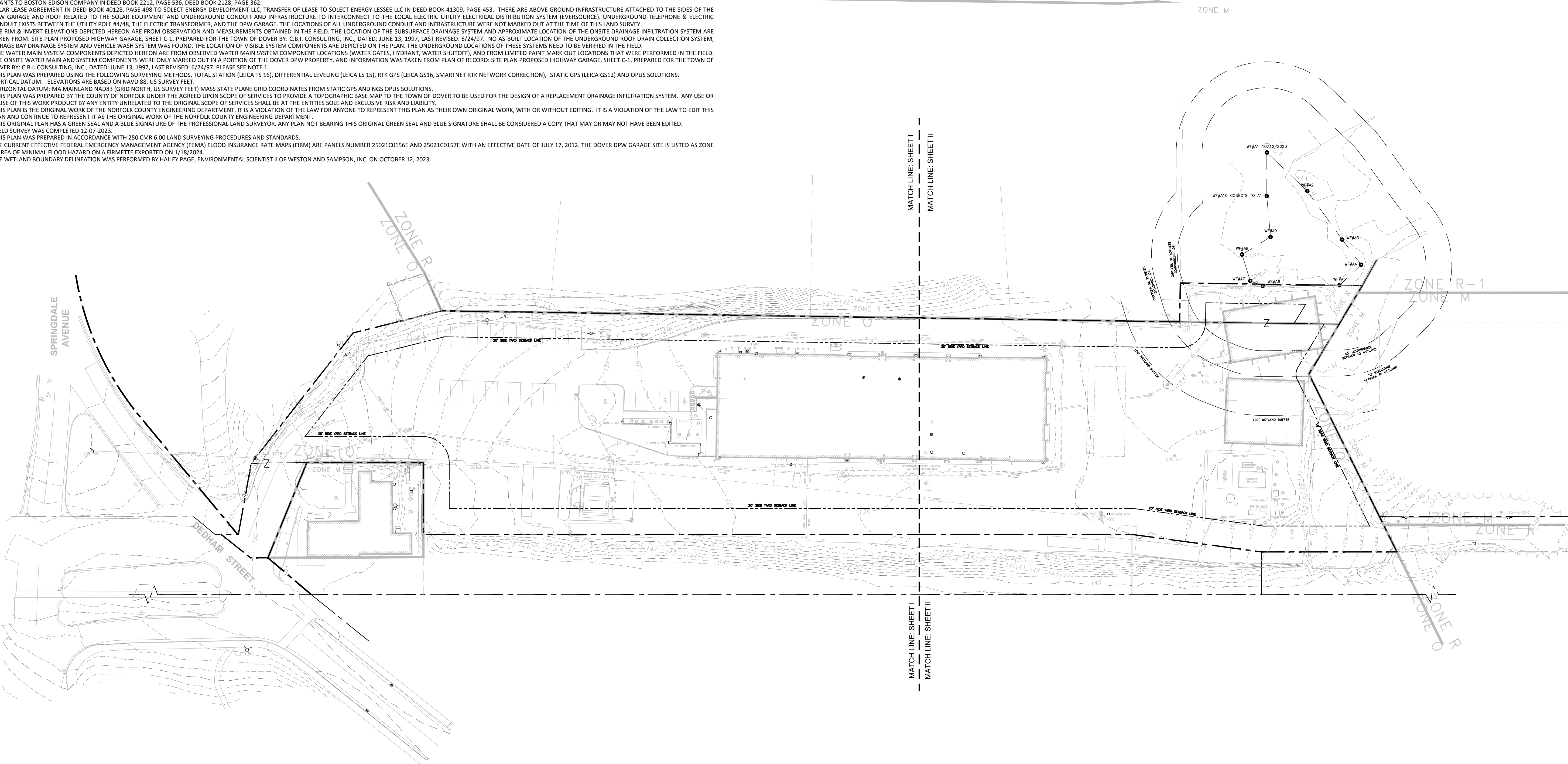


THE EXISTING CONDITIONS INFORMATION SHOWN HEREON IS FROM A PLAN TITLED "EXISTING CONDITIONS TOPOGRAPHIC PLAN - TOWN OF DOVER DPW," PREPARED BY NORFOLK COUNTY ENGINEERING DEPARTMENT, DATED FEBRUARY 2, 2024, AND IS BASED UPON SURVEY WORK PERFORMED ON-SITE IN EARLY 2024. THE EXISTING CONDITIONS SURVEY IS AN INSTRUMENT OF NORFOLK COUNTY ENGINEERING DEPARTMENT. ANY USE OR REUSE OF THIS EXISTING CONDITIONS INFORMATION BY ANY PARTY SHALL BE AT THE USER'S SOLE AND EXCLUSIVE RISK AND LIABILITY, UNLESS WRITTEN AUTHORIZATION IS GIVEN BY NORFOLK COUNTY ENGINEERING DEPARTMENT.

NOTES:

- THE LOCATIONS OF UTILITIES SHOWN HEREON WERE PLOTTED FROM (1) FIELD DATA FURNISHED BY THE TOWN OF DOVER OR THE RESPECTIVE UTILITY OR (2) BY OBSERVATION & LOCATION IN THE FIELD OR (3) FROM DIG SAFE & UTILITY MARK OUT PAINT MARKS OR (4) PLANS OF RECORD. LOCATIONS AND ELEVATIONS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL NOTIFY "DIG SAFE" AT LEAST 72 HOURS PRIOR TO ANY WORK AND DETERMINE THE EXACT LOCATIONS OF UTILITIES IN THE FIELD PER MASSACHUSETTS GENERAL LAW CHAPTER 82 SECTIONS 40A - 40E, AS AMENDED. THIS PLAN MAY OR MAY NOT SHOW ALL THE UTILITIES SERVICING OR EXISTING ON THIS SITE; ABOVE GROUND OR BELOW, IN SERVICE OR ABANDONED, UNRECORDED OR OF RECORD. ANY LABEL IDENTIFYING A UTILITY STRUCTURE IS BASED ON FIELD INSPECTION AND/OR AVAILABLE PLANS AND SHOULD NOT BE CONSIDERED AS A DEFINITIVE DESCRIPTION OF EITHER THE UTILITY OR USAGE OF THE STRUCTURE. WE CANNOT ASSUME RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES THAT ARE OMITTED OR INACCURATELY SHOWN ON SAID PLANS, AS SUB-SURFACE UTILITIES CANNOT BE VERIFIED. CERTAIN UTILITY INFORMATION MAY NOT BE DISCLOSED ON THIS PLAN AS THESE UTILITIES PROHIBIT DISCLOSURE OF UTILITY INFORMATION OR LOCATIONS TO THIRD PARTIES THAT HAVE NOT AGREED TO THAT UTILITY'S DISCLOSURE AGREEMENT.
- THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN AGREEMENT(S), LICENSE(S), EASEMENT(S) THAT MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT VISIBLE USE OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH AGREEMENT(S), LICENSE(S), EASEMENT(S) EXIST.
- APPARENT AREAS OF POSSIBLE ENCROACHMENT LOCATED WITHIN THE RAILROAD RIGHT OF WAY. AT THIS TIME, IT IS UNKNOWN WHETHER THE TOWN OF DOVER HAS AN AGREEMENT, OR A USE LICENSE, OR AN EASEMENT, OR A LEASE AGREEMENT FOR THE AREAS OCCUPIED AND USED BY THE TOWN OF DOVER.
- APPARENT AREAS OF POSSIBLE ENCROACHMENT LOCATED WITHIN THE ABUTTING PROPERTY LISTED AS ASSESSOR MAP 11, LOT 31. IT IS UNKNOWN AT THIS TIME WHETHER THE TOWN OF DOVER HAS AN AGREEMENT, OR A USE LICENSE, OR AN EASEMENT, OR A LEASE AGREEMENT FOR THE DRAINAGE OUTFALL LOCATION. THE NEW DRAINAGE SYSTEM DESIGN COULD MOVE THE DRAINAGE OUTFALL AND CORRESPONDING OUTFALL BASIN AND FLOW DISSIPATOR (BNP) WITHIN THE TOWN OF DOVER DPW PROPERTY.
- THE PREMISES SURVEYED AND SHOWN HEREON MAY BE SUBJECT TO RIGHTS AND EASEMENTS AS CONTAINED IN VARIOUS INSTRUMENTS OF RECORD, THAT MAY BE RECORDED AND/OR UNRECORDED DESCRIBING THE SUBJECT PROPERTY AND OTHER PROPERTIES. TO THE EXTENT THAT SUCH RIGHTS OR EASEMENTS EXIST, THEIR LOCATION AND EXTENT ARE NOT KNOWN AT THIS TIME. THE TOWN OF DOVER HAS NOT SUPPLIED A TITLE REPORT.
- THE CERTIFICATION(S) SHOWN HEREON ARE INTENDED TO MEET MUNICIPAL REQUIREMENTS AND ARE NOT A CERTIFICATION TO TITLE OR OWNERSHIP OF PROPERTY SHOWN. OWNERS OF LOCUS AND ADJOINING PROPERTIES ARE ACCORDING TO CURRENT ASSESSOR'S RECORDS.
- THE APPROXIMATE LOCATION OF THE SUBSURFACE DISPOSAL SYSTEM (SEPTIC SYSTEM) AND SYSTEM COMPONENTS IS TAKEN FROM THE TOWN OF DOVER HIGHWAY GARAGE SEPTIC SYSTEM DESIGN PLANS, PREPARED BY: ROBERT H. HOMER, PE, TOWN OF DOVER TOWN ENGINEER, DATED 3/01/1998. THE OBSERVED SEPTIC MANHOLE THAT WAS LOCATED IN THE FIELD DIFFERS FROM THE DESIGN PLANS AND THERE IS NO VENT STACK APPARENT. AS SUCH THE ACTUAL LOCATIONS OF THE REMAINDER OF THE SYSTEM COMPONENTS MAY DIFFER AS WELL AND NEED TO BE VERIFIED IN THE FIELD.
- THERE ARE EXISTING LEASE AGREEMENTS AND SPECIAL PERMITS THAT CAN BE OBTAINED FROM THE TOWN OF DOVER REGARDING THE ORIGINAL LEASE SITE AND THE RELOCATED LEASE SITE OF THE WIRELESS/MOBILE TELECOMMUNICATION FACILITY FOR THE TOWER COMPLEX, EQUIPMENT SHELTER STRUCTURES, ASSOCIATED INFRASTRUCTURE AND UTILITIES THAT EXIST ON THE SITE. THE MONOPOLE TOWER, EQUIPMENT SHELTER STRUCTURES & INFRASTRUCTURE COMPONENTS AND CONTAINMENT FENCE THAT ARE VISIBLE WERE LOCATED AND ARE DEPICTED HEREON. THE RELOCATED SITE PLAN DEPICTS THE LIMITS OF THE ORIGINAL LEASE AREA AND THE RELOCATED LEASE AREA (50'X50'). THERE ARE EXISTING UTILITIES (TELEPHONE CABINET, METERS, ELECTRIC TRANSFORMER) THAT ARE LOCATED OUTSIDE OF THE RELOCATED LEASE AREA. THE UNDERGROUND UTILITIES ASSOCIATED WITH THE FACILITY (TELECOMMUNICATIONS, COAX, ELECTRIC, ETC.) WERE NOT MARKED OUT AT THE TIME OF THIS LAND SURVEY.
- GRANTS TO BOSTON EDISON COMPANY IN DEED BOOK 2212, PAGE 536, DEED BOOK 2328, PAGE 362.
- SOLAR LEASE AGREEMENT IN DEED BOOK 40128, PAGE 498 TO SOLECT ENERGY DEVELOPMENT LLC, TRANSFER OF LEASE TO SOLECT ENERGY LESSEE LLC IN DEED BOOK 41309, PAGE 453. THERE ARE ABOVE GROUND INFRASTRUCTURE ATTACHED TO THE SIDES OF THE DPW GARAGE AND ROOF RELATED TO THE SOLAR EQUIPMENT AND UNDERGROUND CONDUIT AND INFRASTRUCTURE TO INTERCONNECT TO THE LOCAL ELECTRIC UTILITY ELECTRICAL DISTRIBUTION SYSTEM (EVERSOURCE). UNDERGROUND TELEPHONE & ELECTRIC CONDUIT EXISTS BETWEEN THE UTILITY POLE #4/48, THE ELECTRIC TRANSFORMER, AND THE DPW GARAGE. THE LOCATIONS OF ALL UNDERGROUND CONDUIT AND INFRASTRUCTURE WERE NOT MARKED OUT AT THE TIME OF THIS LAND SURVEY.
- THE RIM & INVERT ELEVATIONS DEPICTED HEREON ARE FROM OBSERVATION AND MEASUREMENTS OBTAINED IN THE FIELD. THE LOCATION OF THE SUBSURFACE DRAINAGE SYSTEM AND APPROXIMATE LOCATION OF THE ONSITE DRAINAGE INFILTRATION SYSTEM ARE TAKEN FROM: SITE PLAN PROPOSED HIGHWAY GARAGE, SHEET C-1, PREPARED FOR THE TOWN OF DOVER BY: C.B.I. CONSULTING, INC., DATED: JUNE 13, 1997, LAST REVISED: 6/24/97. NO AS-BUILT LOCATION OF THE UNDERGROUND ROOF DRAIN COLLECTION SYSTEM, GARAGE BAY DRAINAGE SYSTEM AND VEHICLE WASH SYSTEM WAS FOUND. THE LOCATION OF VISIBLE SYSTEM COMPONENTS ARE DEPICTED ON THE PLAN. THE UNDERGROUND LOCATIONS OF THESE SYSTEMS NEED TO BE VERIFIED IN THE FIELD.
- THE WATER MAIN SYSTEM COMPONENTS DEPICTED HEREON ARE FROM OBSERVED WATER MAIN SYSTEM COMPONENT LOCATIONS (WATER GATES, HYDRANT, WATER SHUTOFF), AND FROM LIMITED PAINT MARK OUT LOCATIONS THAT WERE PERFORMED IN THE FIELD. THE ONSITE WATER MAIN AND SYSTEM COMPONENTS WERE ONLY MARKED OUT IN A PORTION OF THE DOVER DPW PROPERTY, AND INFORMATION WAS TAKEN FROM PLAN OF RECORD: SITE PLAN PROPOSED HIGHWAY GARAGE, SHEET C-1, PREPARED FOR THE TOWN OF DOVER BY: C.B.I. CONSULTING, INC., DATED: JUNE 13, 1997, LAST REVISED: 6/24/97. PLEASE SEE NOTE 1.
- THIS PLAN WAS PREPARED USING THE FOLLOWING SURVEYING METHODS, TOTAL STATION (LEICA TS 16), DIFFERENTIAL LEVELING (LEICA LS 15), RTK GPS (LEICA GS16, SMARTNET RTK NETWORK CORRECTION), STATIC GPS (LEICA GS12) AND OPUS SOLUTIONS.
- VERTICAL DATUM: ELEVATIONS ARE BASED ON NAVD 88, US SURVEY FEET.
- HORIZONTAL DATUM: MA MAINLAND NAD83 (GRID NORTH, US SURVEY FEET) MASS STATE PLANE GRID COORDINATES FROM STATIC GPS AND NGS OPUS SOLUTIONS.
- THIS PLAN WAS PREPARED BY THE COUNTY OF NORFOLK UNDER THE AGREED UPON SCOPE OF SERVICES TO PROVIDE A TOPOGRAPHIC BASE MAP TO THE TOWN OF DOVER TO BE USED FOR THE DESIGN OF A REPLACEMENT DRAINAGE INFILTRATION SYSTEM. ANY USE OR REUSE OF THIS WORK PRODUCT BY ANY ENTITY UNRELATED TO THE ORIGINAL SCOPE OF SERVICES SHALL BE AT THE ENTITIES SOLE AND EXCLUSIVE RISK AND LIABILITY.
- THIS PLAN IS THE ORIGINAL WORK OF THE NORFOLK COUNTY ENGINEERING DEPARTMENT. IT IS A VIOLATION OF THE LAW FOR ANYONE TO REPRESENT THIS PLAN AS THEIR OWN ORIGINAL WORK, WITH OR WITHOUT EDITING. IT IS A VIOLATION OF THE LAW TO EDIT THIS PLAN AND CONTINUE TO REPRESENT IT AS THE ORIGINAL WORK OF THE NORFOLK COUNTY ENGINEERING DEPARTMENT.
- THIS ORIGINAL PLAN HAS A GREEN SEAL AND A BLUE SIGNATURE OF THE PROFESSIONAL LAND SURVEYOR. ANY PLAN NOT BEARING THIS ORIGINAL GREEN SEAL AND BLUE SIGNATURE SHALL BE CONSIDERED A COPY THAT MAY OR MAY NOT HAVE BEEN EDITED.
- FIELD SURVEY WAS COMPLETED 12-07-2023.
- THIS PLAN WAS PREPARED IN ACCORDANCE WITH 250 CMR 6.00 LAND SURVEYING PROCEDURES AND STANDARDS.
- THE CURRENT EFFECTIVE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM) ARE PANELS NUMBER 25021C0156E AND 25021C0157E WITH AN EFFECTIVE DATE OF JULY 17, 2012. THE DOVER DPW GARAGE SITE IS LISTED AS ZONE X AREA OF MINIMAL FLOOD HAZARD ON A FIRMETTE EXPORTED ON 1/18/2024.
- THE WETLAND BOUNDARY DELINEATION WAS PERFORMED BY HAILEY PAGE, ENVIRONMENTAL SCIENTIST II OF WESTON AND SAMPSON, INC. ON OCTOBER 12, 2023.

PLAN REFERENCES:  
PLAN BOOK 218, PLAN 551 OF 1965  
PLAN BOOK 262, PLAN 630 OF 1977  
PLAN BOOK 275, PLAN 485 OF 1979  
PLAN BOOK 391, PLAN 232 OF 1990  
PLAN BOOK 429, PLAN 197 OF 1995  
PLAN BOOK 480, PLAN 646 OF 2000  
PLAN BOOK 578, PLAN 55 OF 2008  
DEED BOOK 3006, PAGE 509, PLAN 647 OF 1951  
DEED BOOK 4200, PAGE 550, PLAN 931 OF 1964  
DEED BOOK 4317, PAGE 243, PLAN 1287 OF 1965  
DEED BOOK 4712, PAGE 700, PLAN 58 OF 1971  
COUNTY COMMISSIONER'S RAILROAD BOOK 32, PLANS 49-54  
PLAN OF LAND IN DOVER, BY SCHOFIELD BROS. DATED APRIL 13, 1954(UNRECORDED)



Project:  
**TOWN OF DOVER**  
DEPARTMENT OF PUBLIC WORKS  
SITE IMPROVEMENTS  
2 DEDHAM STREET  
DOVER, MA 02030



**Weston & Sampson**

Weston & Sampson Engineers, Inc.  
100 Foxborough Boulevard, Suite 250  
Foxborough, MA 02035  
978.532.1900 800.SAMPSON

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Consultants:		

Revisions:		
No.	Date	Description
3	08/12/24	PERMITTING FUEL SYSTEM DESIGN
2	05/15/24	PER CONSERVATION FEEDBACK
1	04/10/24	LOCAL PERMIT APPLICATIONS

COA:



Issued For:  
**PERMITTING**

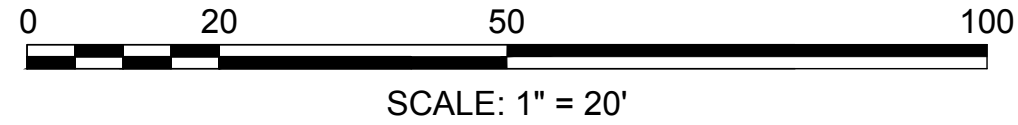
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Date: APRIL 2024  
Drawn By:  
Reviewed By:  
Approved By:  
W&S Project No.: ENG22-1087  
W&S File No.:

Drawing Title:  
**OVERALL EXISTING  
CONDITIONS PLAN**

Sheet Number:  
**C100**





**DOVER**  
PUBLIC WORKS

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Foxborough, MA 02035  
978.532.1900 800.SAMPSON  
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COA:



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Drawn By:  
Reviewed By:  
Approved By:

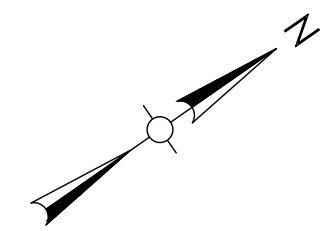
W&S File No.:

EXISTING  
CONDITIONS  
PLAN I

C101



NOTES:  
1. REFER TO SHEET C100 FOR  
EXISTING CONDITIONS PLANS  
NOTES.



Project:  
**TOWN OF DOVER**  
DEPARTMENT OF PUBLIC WORKS  
SITE IMPROVEMENTS  
2 DEDHAM STREET  
DOVER, MA 02030



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Revisions:

No.	Date	Description
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COA:

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**PERMITTING**

Scale:

Date: APRIL 2024

Drawn By:

Reviewed By:

Approved By:

W&S Project No.: ENG22-1087

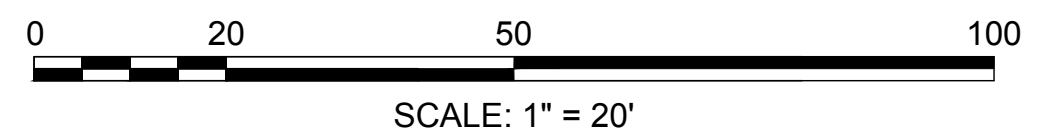
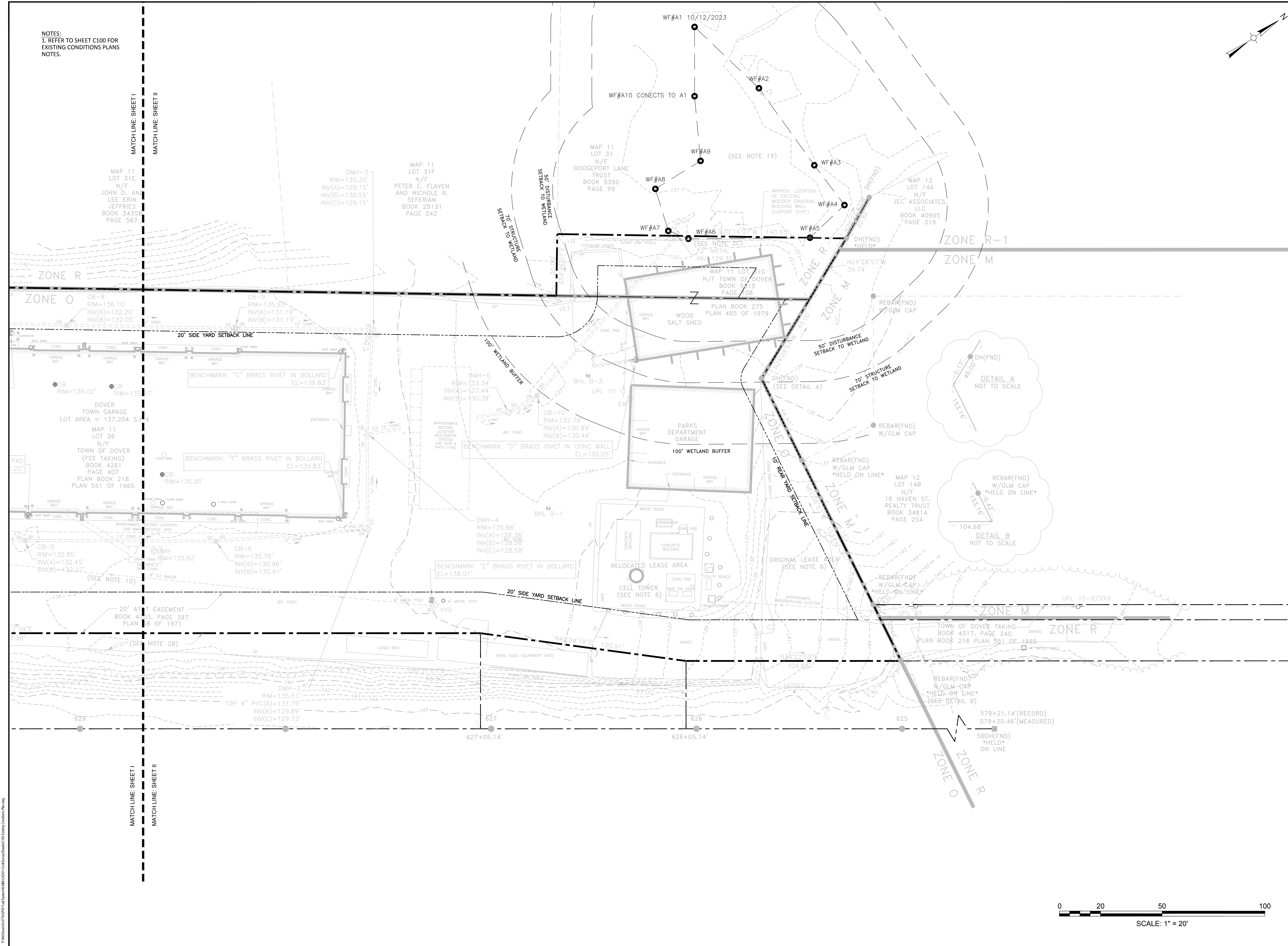
W&S File No.:

Drawing Title:

**EXISTING  
CONDITIONS  
PLAN II**

Sheet Number:

**C102**









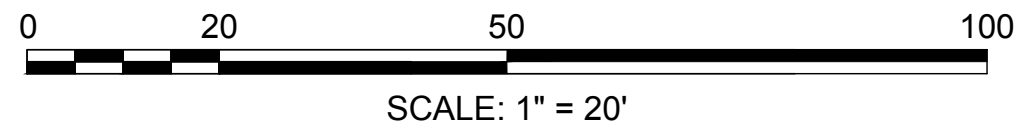
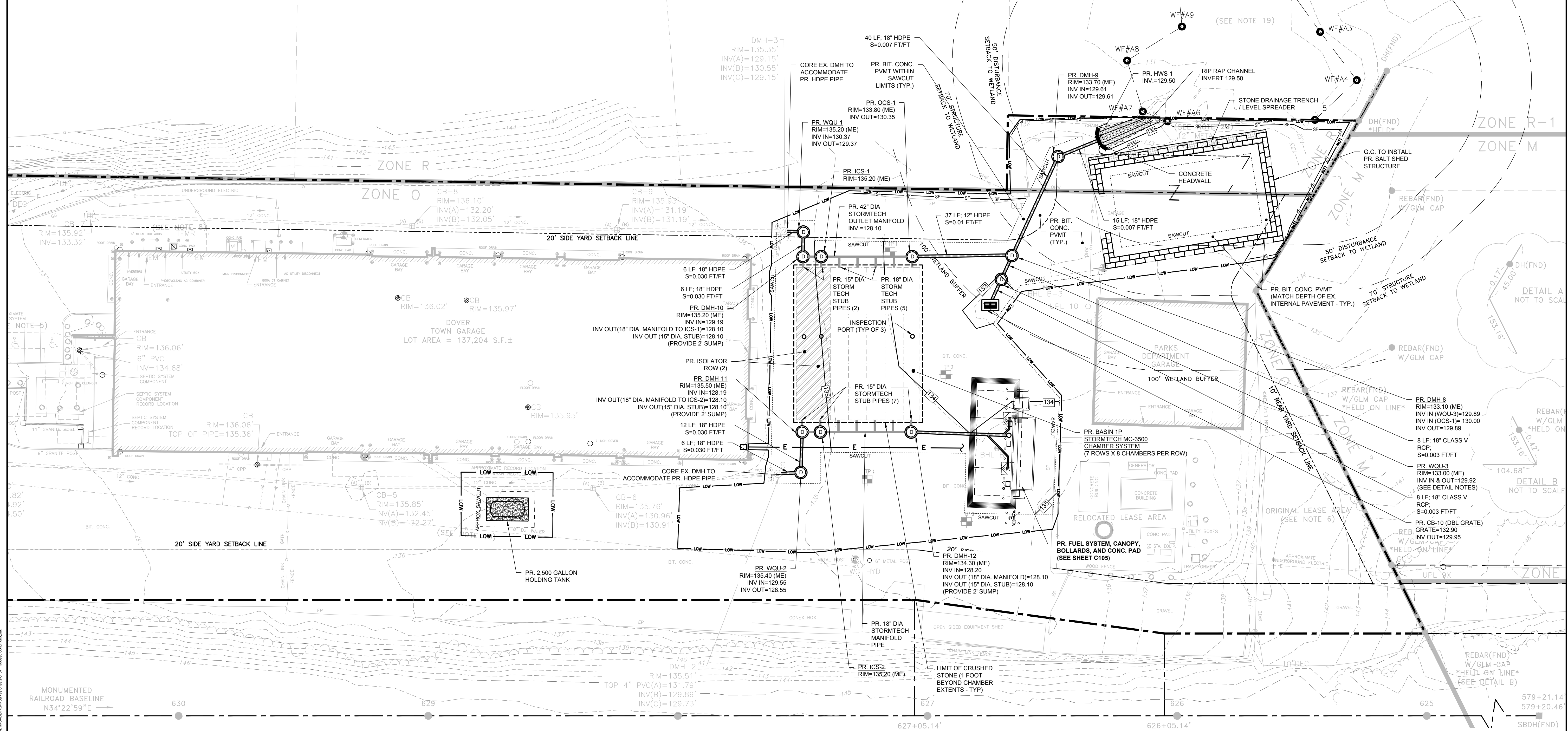
ZONE: OPEN SPACE (O) [1]  
OVERLAY(S): DOVER GROUNDWATER PROTECTION DISTRICT 1 (GW-1)

<u>DIMENSIONAL CONSTRAINT</u>	<u>ZONE O REQUIREMENTS</u>	<u>EXISTING</u>	<u>PROPOSED</u>
MIN. LOT SIZE	N/A	3.1± AC.	NO CHANGE
MIN. LOT FRONTAGE	N/A	-	NO CHANGE
MIN. FRONT YARD SETBACK	40 FT	> 40 FT.	NO CHANGE
MINIMUM SIDE YARD SETBACK	20 FT	8.6± FT.	NO CHANGE
MINIMUM REAR YARD SETBACK	N/A	1.0± FT.	NO CHANGE
	35 FT		
MAXIMUM BUILDING HEIGHT	2.5 STORIES	< 35 FT	32± FT
LOT COVERAGE [2]	40%	20% ±	NO CHANGE

N/A = NOT APPLICABLE

[1] THE EXISTING SALT SHED IN THE REAR OF THE PROPERTY IS LOCATED WITHIN THE SIDE AND REAR SETBACK ZONES. THE SALT SHED IS PARTIALLY LOCATED IN A SMALL LOT (MAP 11, LOT 31G) WHICH IS ZONED SINGLE FAMILY 1/2 ACRE RESIDENTIAL (R).THE CODE ENFORCEMENT OFFICER HAS PROVIDED GUIDANCE ON 2/26/2024 VIA EMAIL STATING THAT HE SEES NO NEED FOR THE PROPOSED SALT SHED WORK TO REQUIRE ZBA APPROVAL.

[2] THE ZONING BYLAWS DO NOT APPEAR TO DEFINE "LOT COVERAGE." THE EXISTING LOT COVERAGE REPORTED WAS CALCULATED AS A PERCENTAGE BY DIVIDING THE AREA OCCUPIED BY BUILDINGS BY THE OVERALL PROPERTY AREA.



project: **TOWN OF DOVER**  
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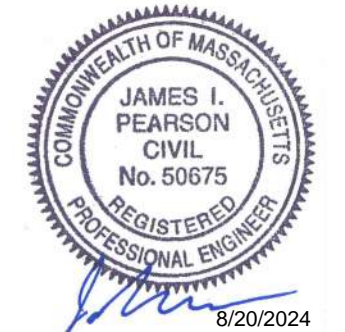
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Consultants:

Revisions:		
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COA:

Seal:



Issued For:

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Scale:

Date: APRIL 2024

Reviewed By

Reviewed E

Approved E

W&amp;S Project No.: ENG22-1087

W&amp;S File No.

Drawing Title

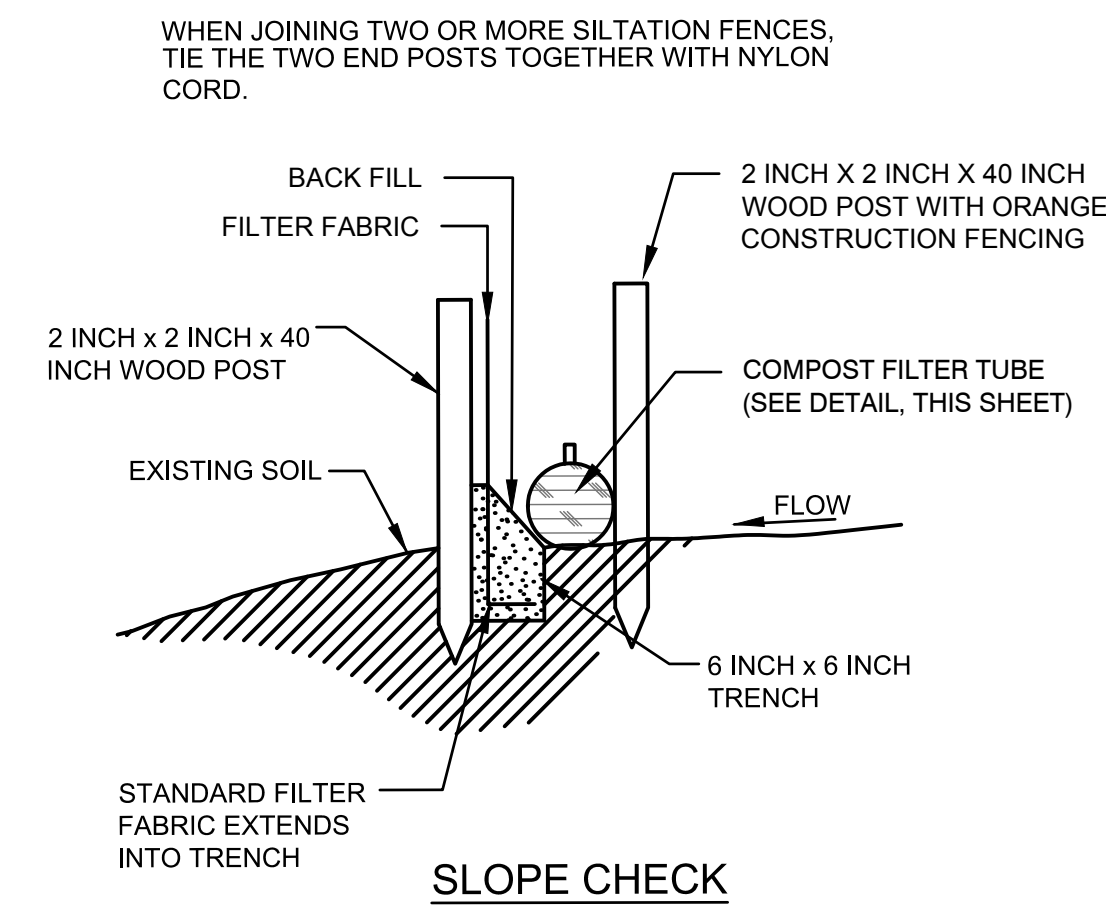
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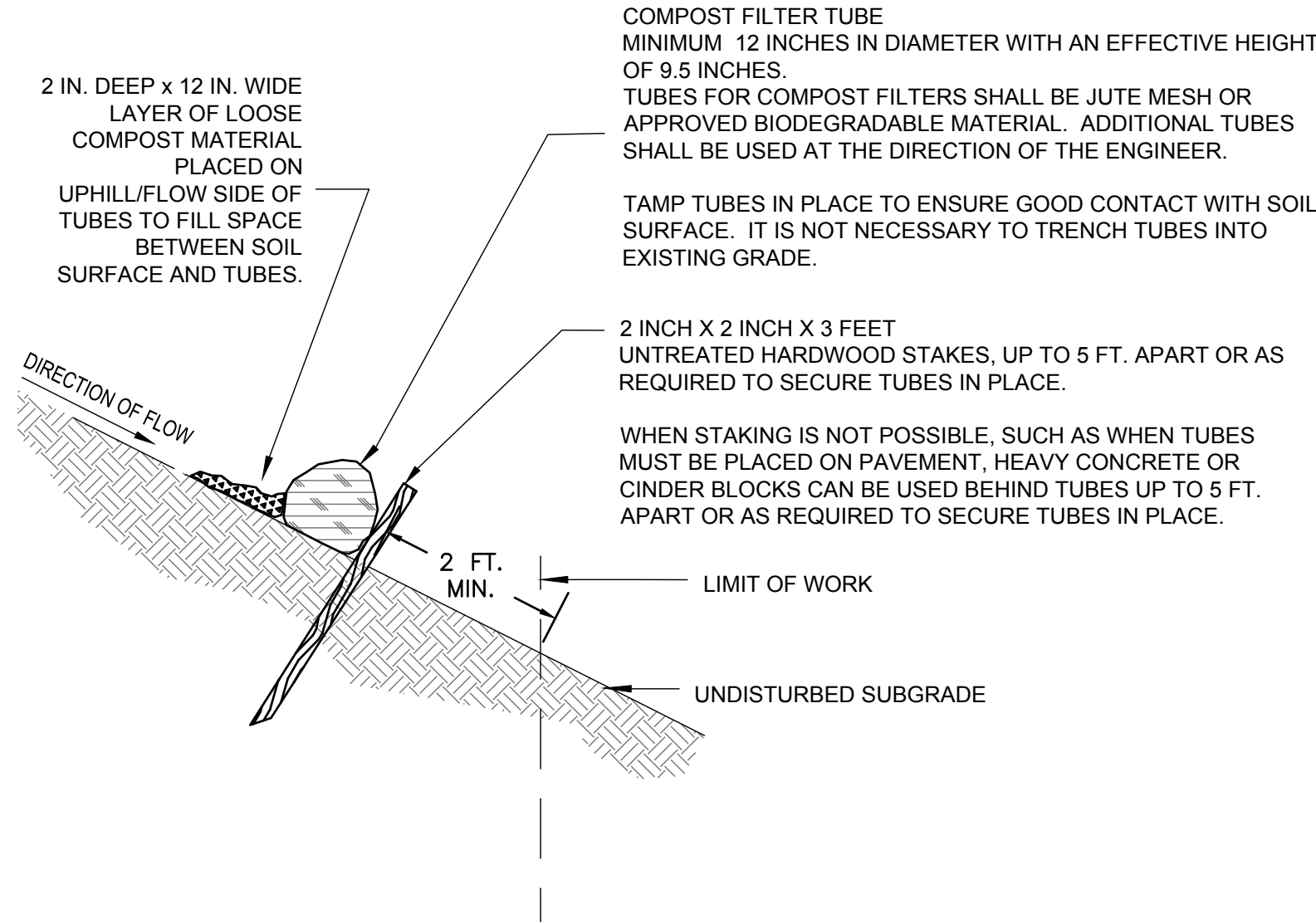




**1 EROSION CONTROL MEASURE: SILT FENCE**  
SCALE: N.T.S.

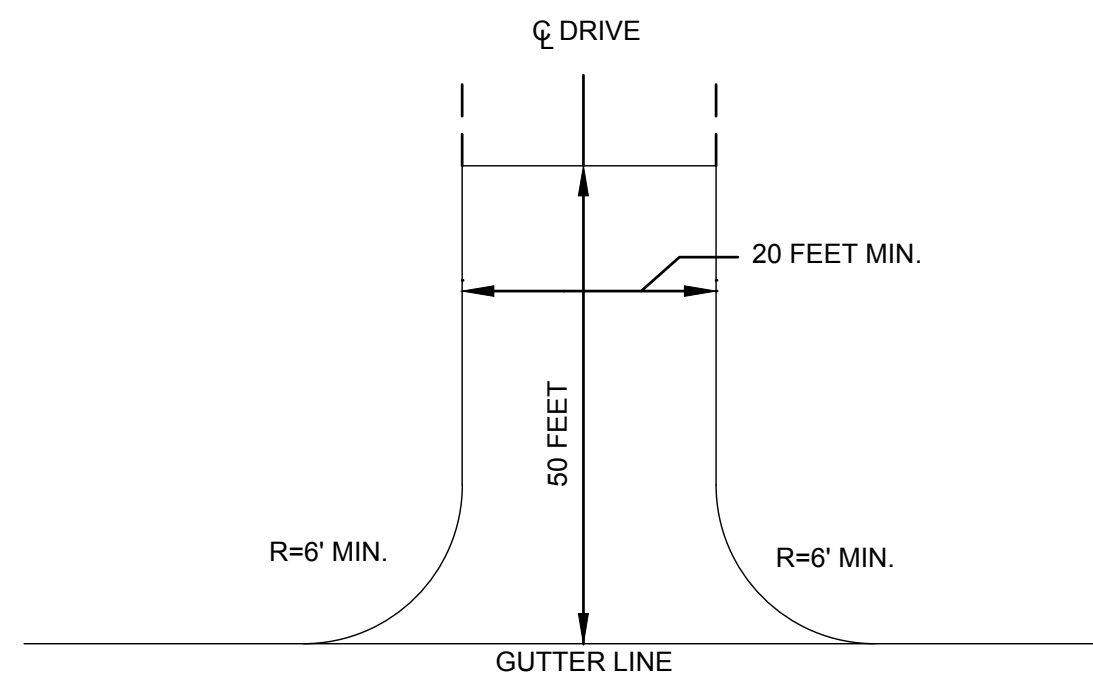
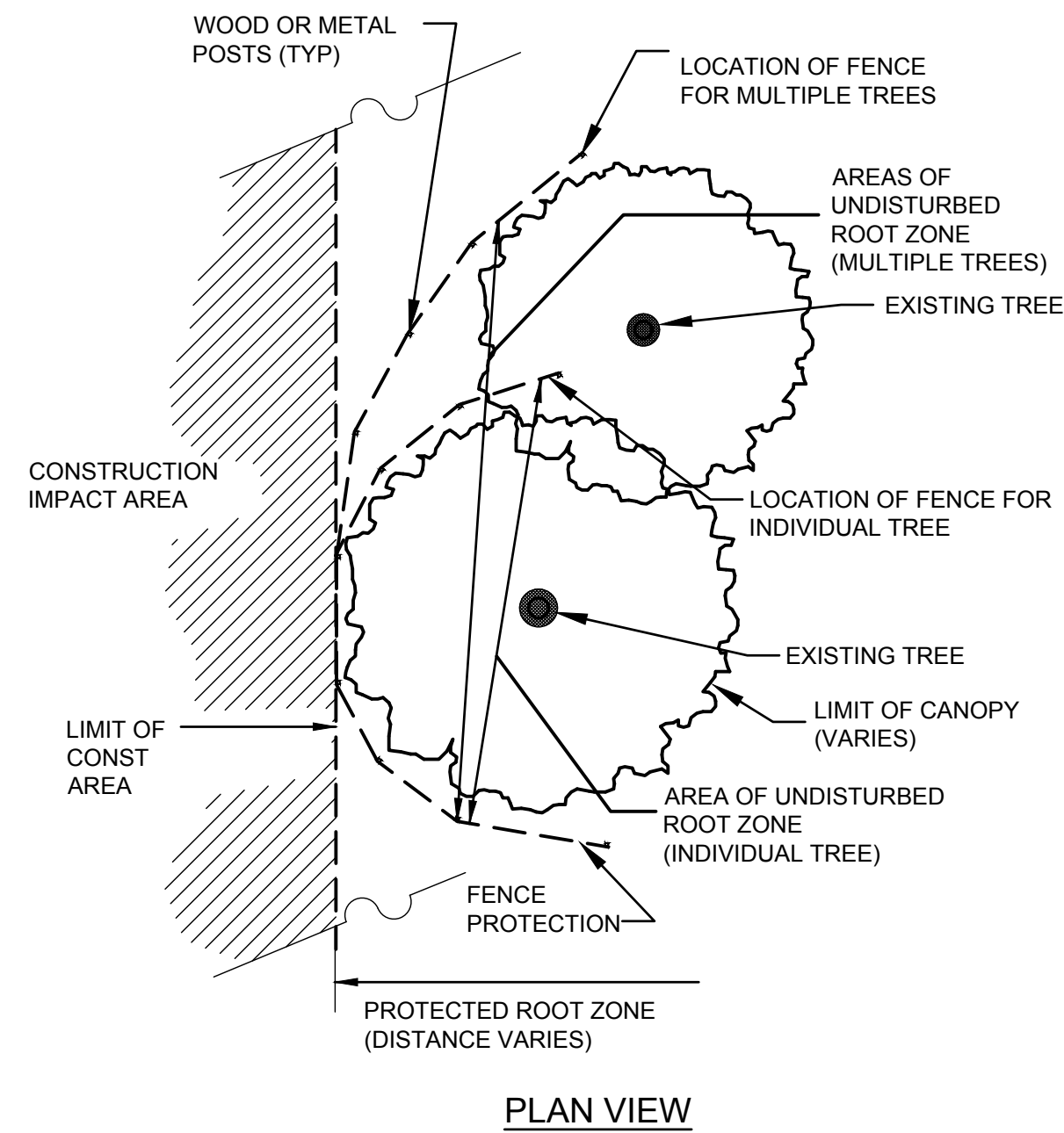
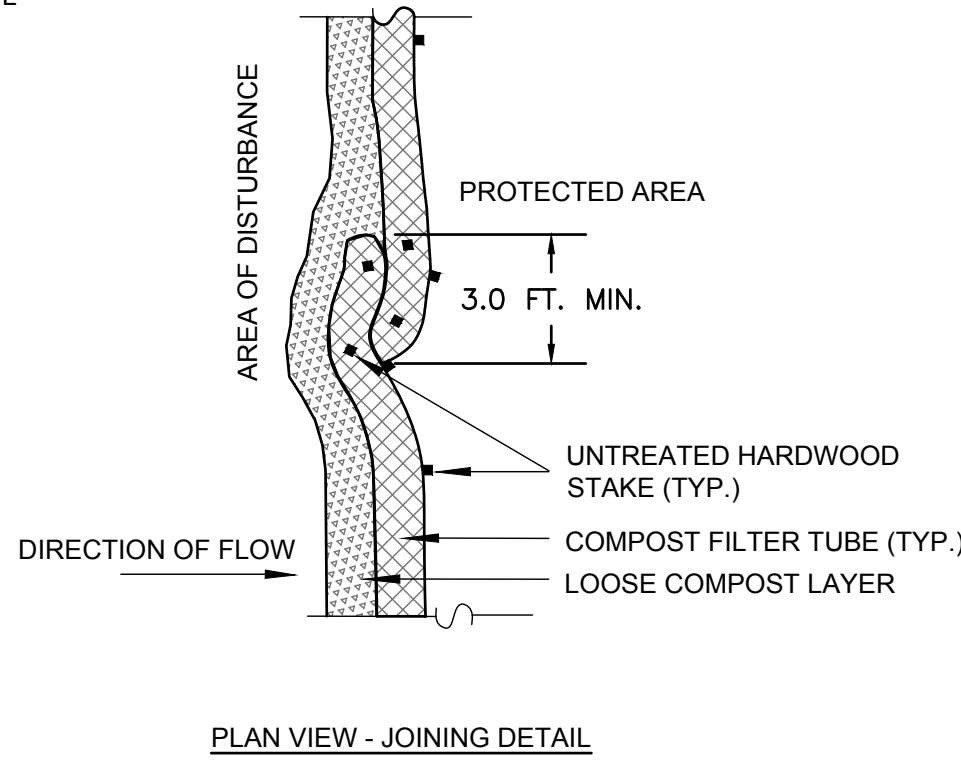
**GENERAL NOTES:**

1. PROVIDE A MINIMUM TUBE DIAMETER OF 12 INCHES FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER OR ADDITIONAL COURSING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
2. INSTALL TUBES ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
3. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
4. CONFIGURE TUBES AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF.
5. MULCH MATERIAL FOR THE FILTER TUBES SHALL BE WEED-FREE STRAW, WOOD EXCELSIOR, COMPOST, OR WOOD CHIPS, OR COIR. STRAW SHALL BE WEED FREE AND DERIVED FROM THRESHING OF GRAIN CROP.



PROVIDE A 3 FT. MINIMUM OVERLAP AT ENDS OF TUBES TO JOIN IN A CONTINUOUS BARRIER AND MINIMIZE UNIMPEDED FLOW. STAKE JOINING TUBES TIGHTLY AGAINST EACH OTHER TO PREVENT UNFILTERED FLOW BETWEEN THE TUBES.

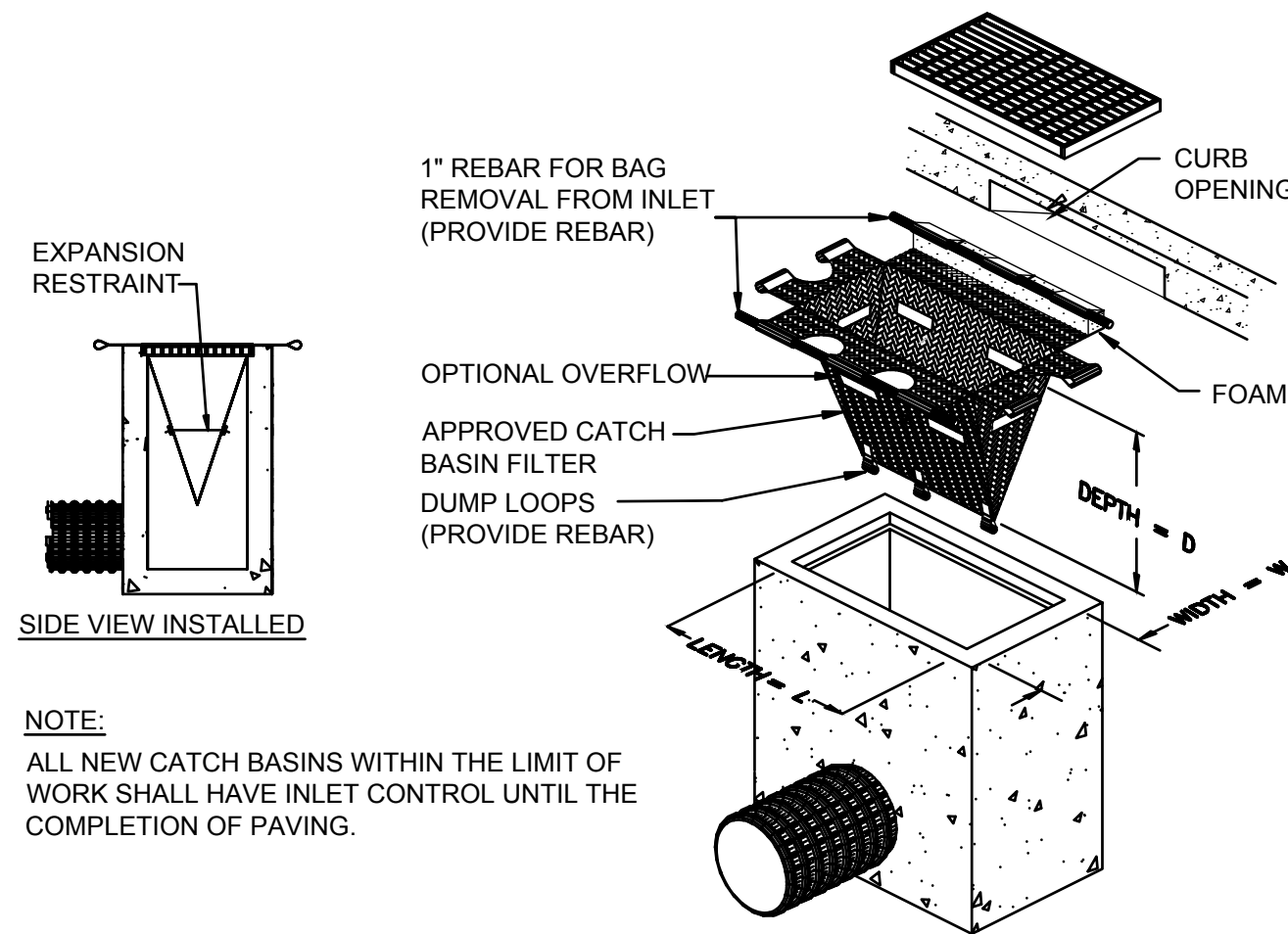
SECURE ENDS OF TUBES WITH STAKES SPACED 18 IN. APART DRIVEN THROUGH TOP OF TUBES.



**NOTES:**

1. AT LEAST ONE CONSTRUCTION ENTRANCE SHALL BE PLACED AT EACH ENTRANCE TO THE SITE, THROUGHOUT CONSTRUCTION ACTIVITIES.
2. THE LOCATION OF THE CONSTRUCTION ENTRANCE(S) SHALL BE APPROVED BY THE OWNER PRIOR TO PLACEMENT.
3. CONSTRUCTION ENTRANCE(S) SHALL CONSIST OF 2" CRUSHED STONE PLACED AT A DEPTH OF A MINIMUM 8 INCHES PLACED OVER GEOTEXTILE FABRIC.
4. CONTRACTOR IS RESPONSIBLE FOR DAILY INSPECTION AND ALL NECESSARY MAINTENANCE OF ALL ENTRANCES.
5. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF SEDIMENTS OR ANY OTHER MATERIALS TRACKED ONTO THE STREET, AS WELL MAINTENANCE OF EROSION CONTROL MEASURES.

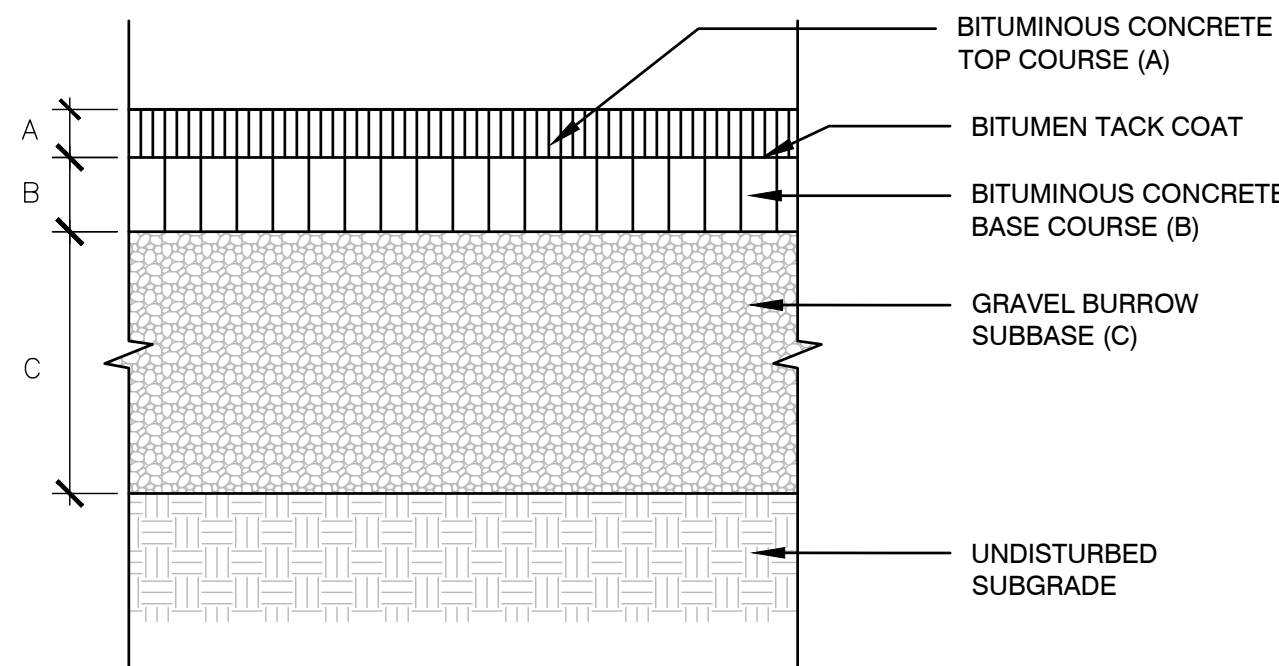
**3 STABILIZED TEMPORARY CONSTRUCTION ENTRANCE**  
SCALE: N.T.S.



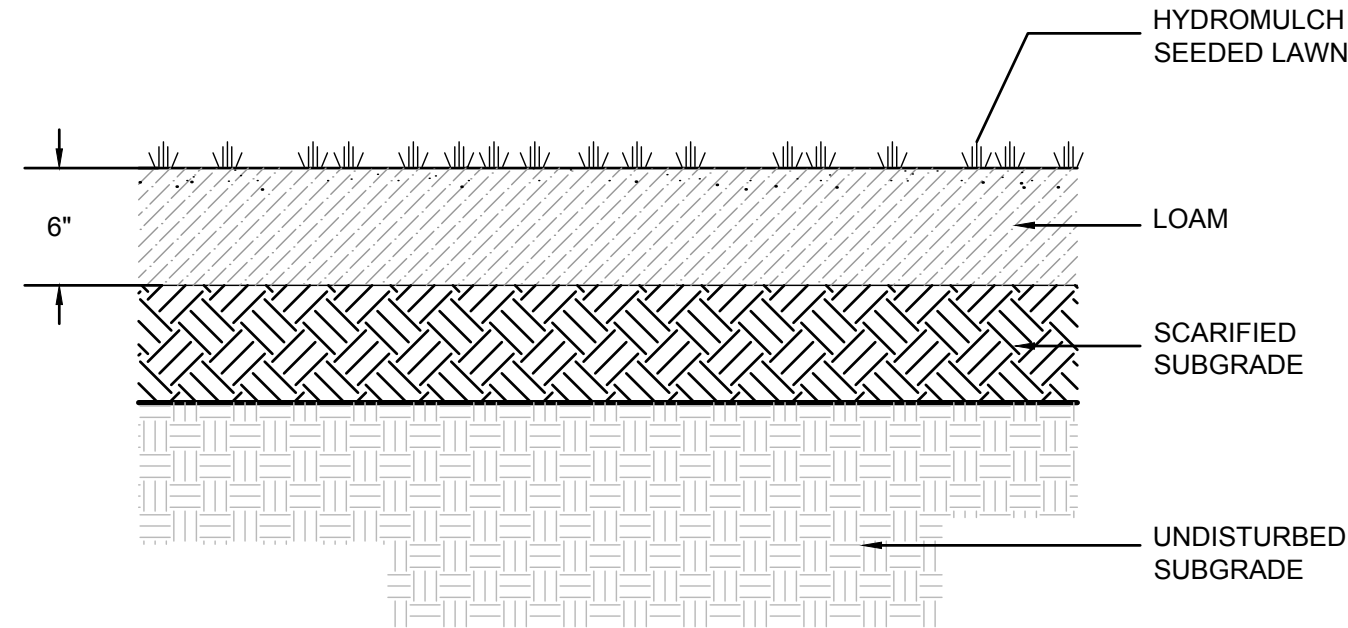
**4 INLET SEDIMENT CONTROL**  
SCALE: N.T.S.

**PAVEMENT DEPTH SCHEDULE**

TOP (A)	BASE (B)	SUBBASE (C)
2.0"	3.0"	14"



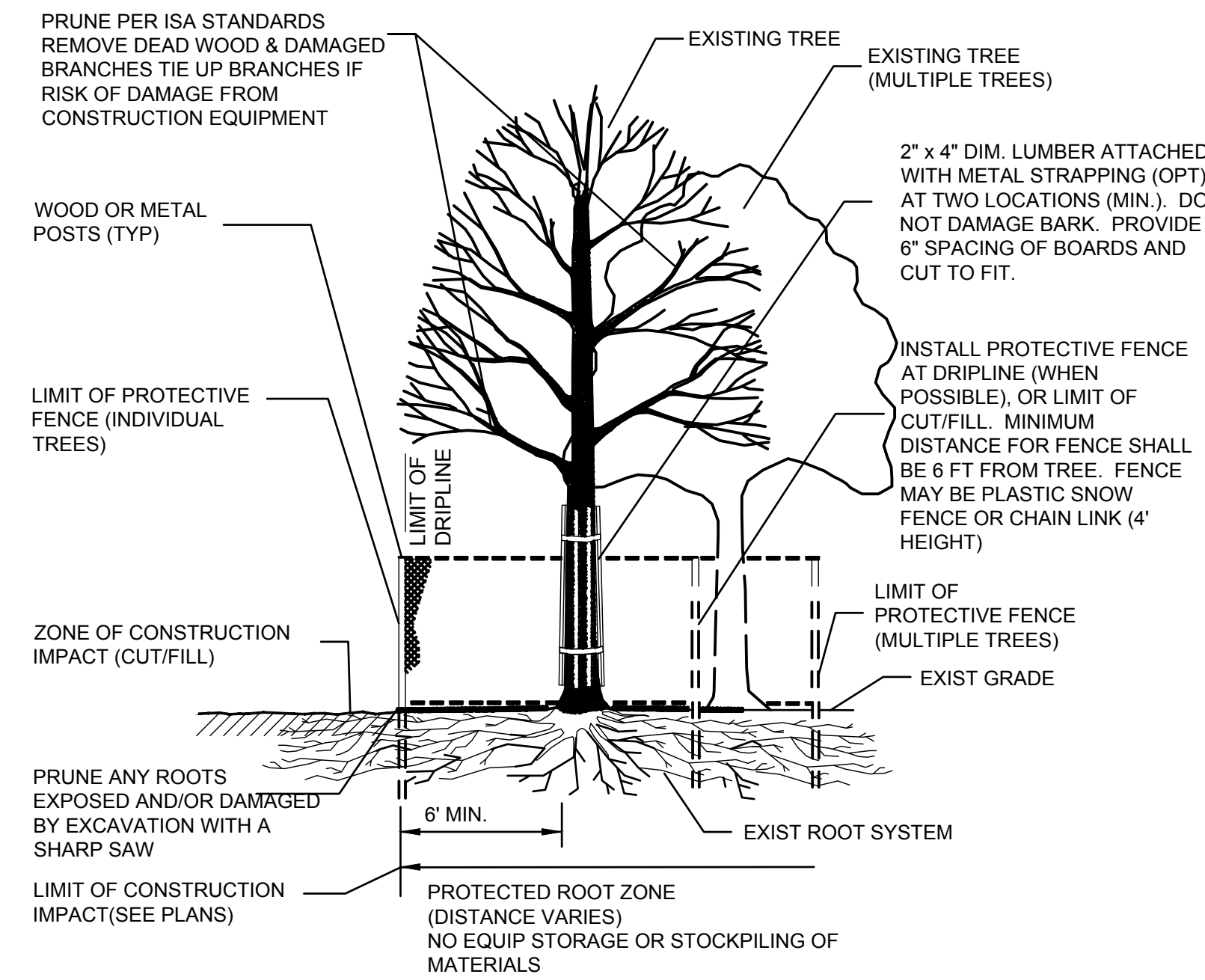
**7 TYPICAL PAVEMENT SECTION**  
SCALE: N.T.S.



**6 LOAM & SEED**  
SCALE: N.T.S.

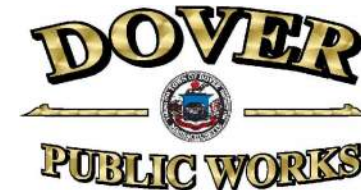
**NOTES:**

1. REFER TO THE SITE LAYOUT & MATERIALS PLAN FOR ADDITIONAL INFORMATION AND LOCATION OF LOAM AND SEED AREAS.



**5 EXISTING TREE PROTECTION**  
SCALE: N.T.S.

Project:  
**TOWN OF DOVER**  
DEPARTMENT OF PUBLIC WORKS  
SITE IMPROVEMENTS  
2 DEDHAM STREET  
DOVER, MA 02030



**Weston & Sampson**

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www.westonandsampson.com

Consultants:

Revisions:

No.	Date	Description
3	08/12/24	PERMITTING FUEL SYSTEM DESIGN
2	05/15/24	PER CONSERVATION FEEDBACK
1	04/10/24	LOCAL PERMIT APPLICATIONS

COA:

Seal:



Issued For:

**PERMITTING**

Scale:

Date: APRIL 2024  
Drawn By:  
Reviewed By:  
Approved By:  
W&S Project No.: ENG22-1087  
W&S File No.:

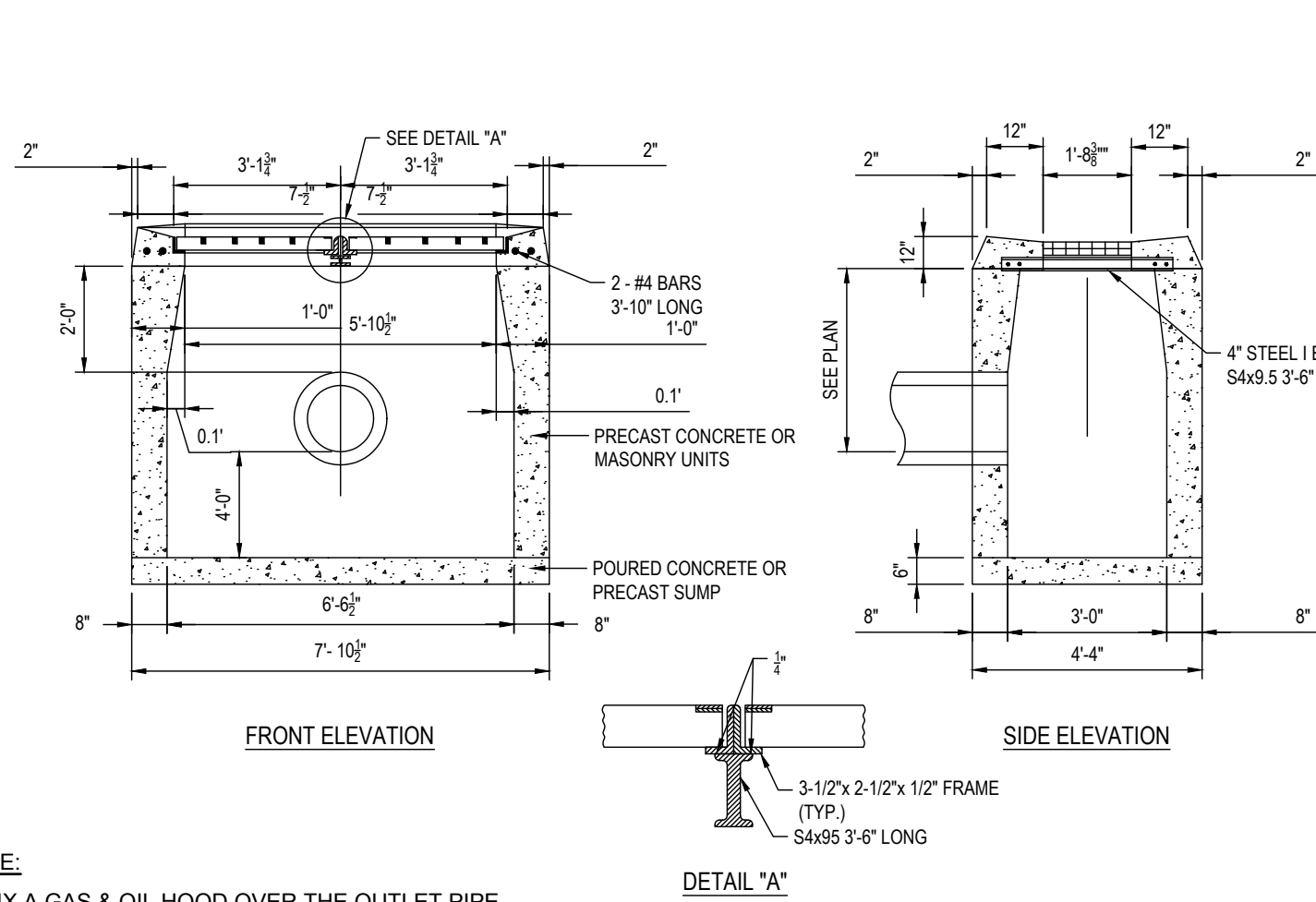
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**DETAILS I**

Sheet Number:

**C501**

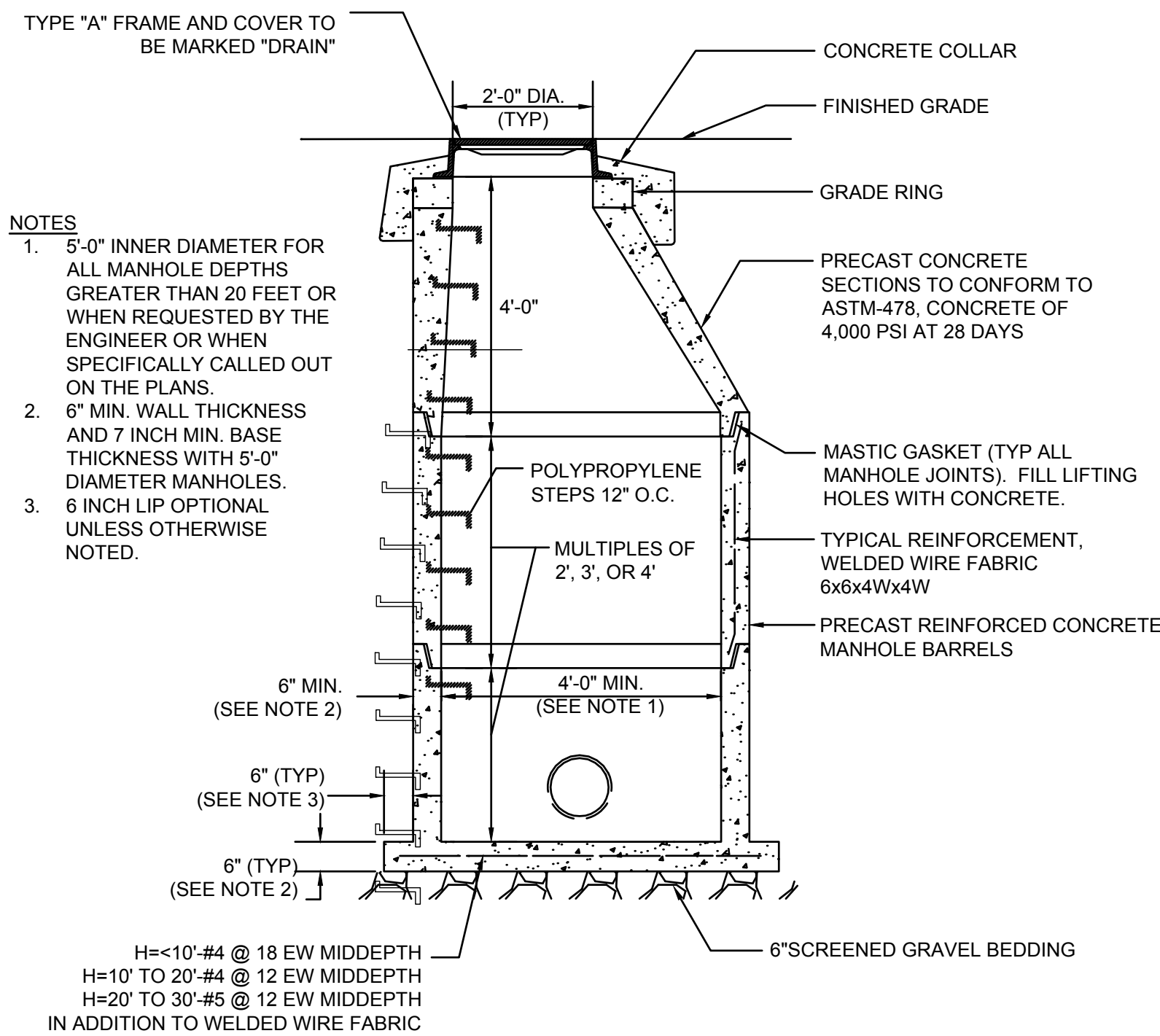




NOTE:  
AFFIX A GAS & OIL HOOD OVER THE OUTLET PIPE

#### 1 DOUBLE GRATE CATCH BASIN (TYPE "C")

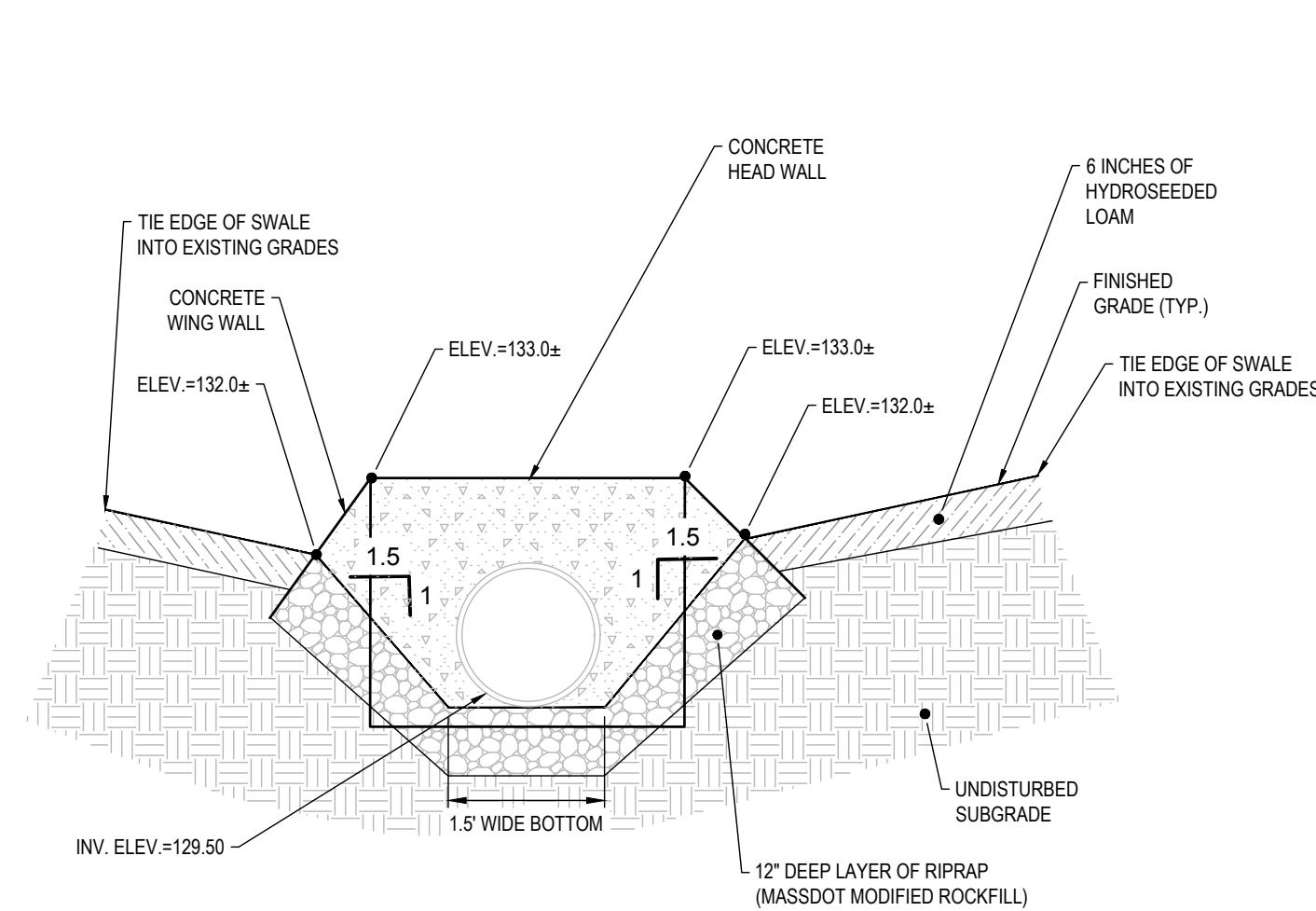
SCALE: N.T.S.



- NOTES
- 5'-0" INNER DIAMETER FOR ALL MANHOLE DEPTHS GREATER THAN 20 FEET OR WHEN REQUESTED BY THE ENGINEER OR WHEN SPECIFICALLY CALLED OUT ON THE PLANS.
  - 6" MIN. WALL THICKNESS AND 7 INCH MIN. BASE THICKNESS WITH 5'-0" DIAMETER MANHOLES. 6 INCH LIP OPTIONAL UNLESS OTHERWISE NOTED.
  - 6" MIN. (SEE NOTE 2)
  - 6" (TYP) (SEE NOTE 3)
  - 6" (TYP) (SEE NOTE 2)

#### 2 PRECAST CONCRETE MANHOLE

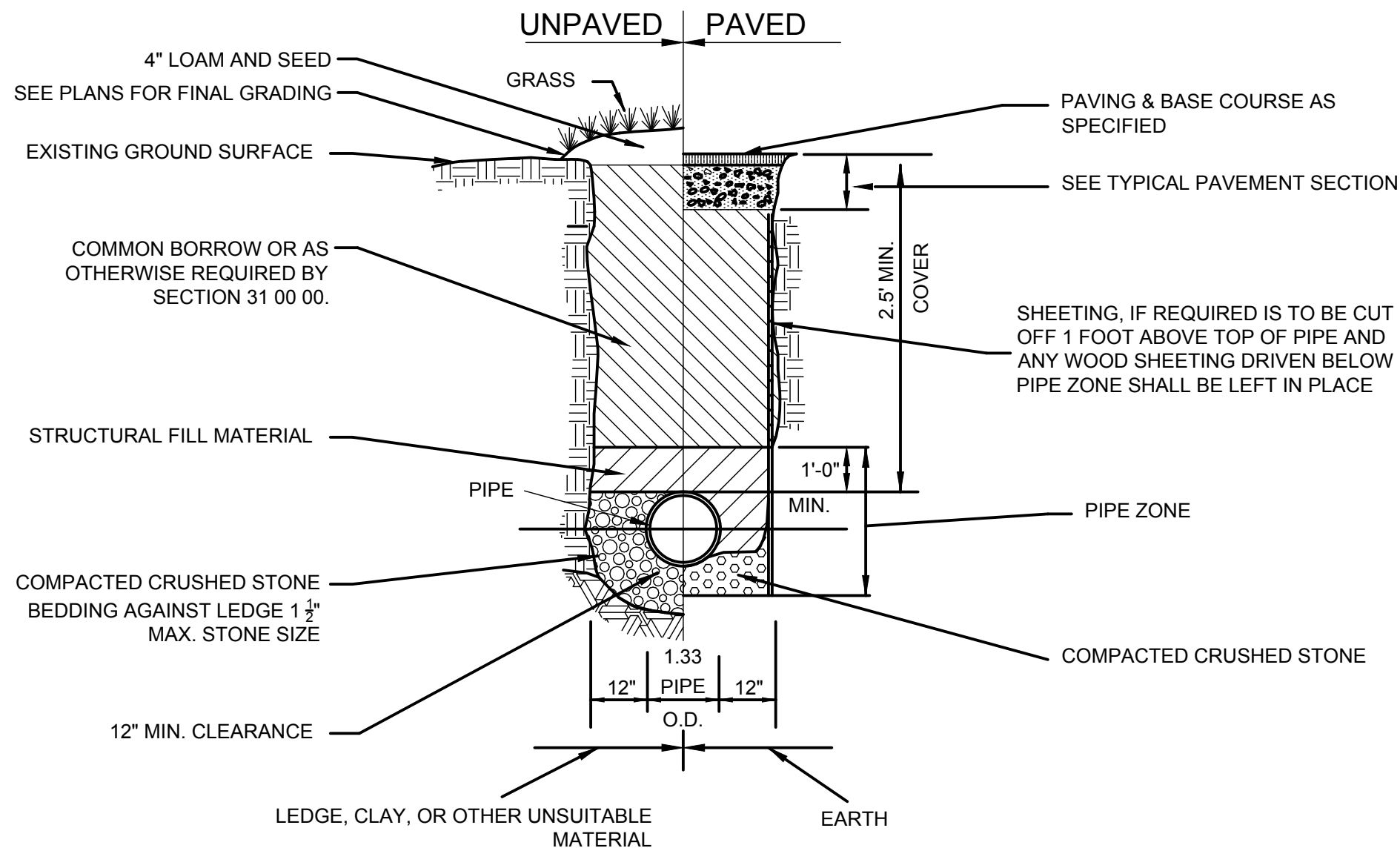
SCALE: N.T.S.



- NOTE:
- MAX 1.5H:1V RIPRAP SLOPE, MAX 2H:1V EARTHEN SIDE SLOPES
  - AS DESCRIBED IN SPECIFICATION 33 42 16.13, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE HEADWALL FOR REVIEW BEFORE FABRICATION BEGINS. THE CONTRACTOR AND ITS SUPPLIER ARE RESPONSIBLE FOR THE STRUCTURAL INTEGRITY OF THE HEADWALL. THE DESIGN SHALL BE PREPARED AND STAMPED BY A PROFESSIONAL STRUCTURAL OR CIVIL ENGINEER REGISTERED IN MA.

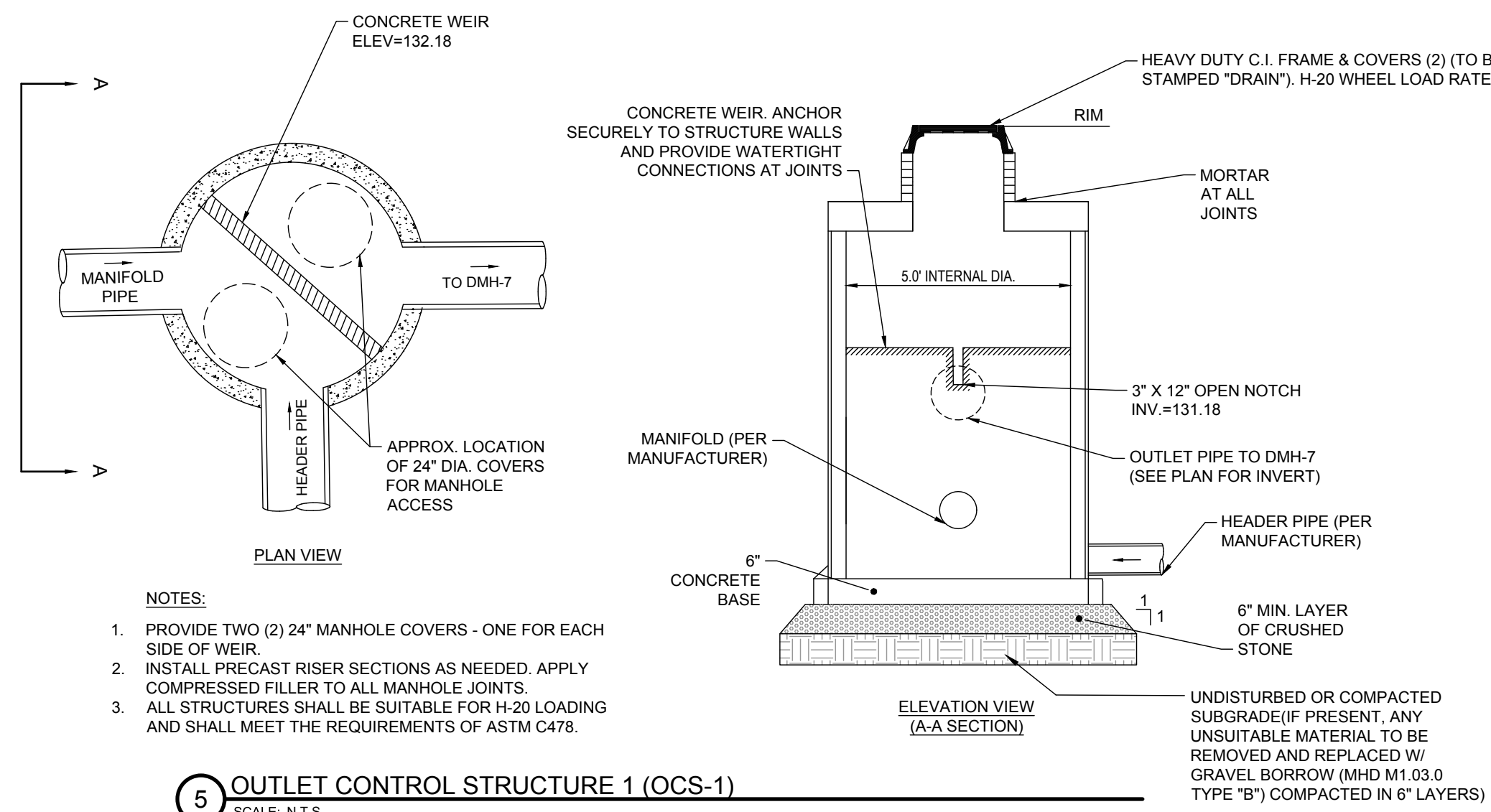
#### 3 HEAD WALL & RIPRAP OUTFALL CROSS SECTION

SCALE: N.T.S.



#### 4 TYPICAL STORM DRAIN TRENCH DETAIL

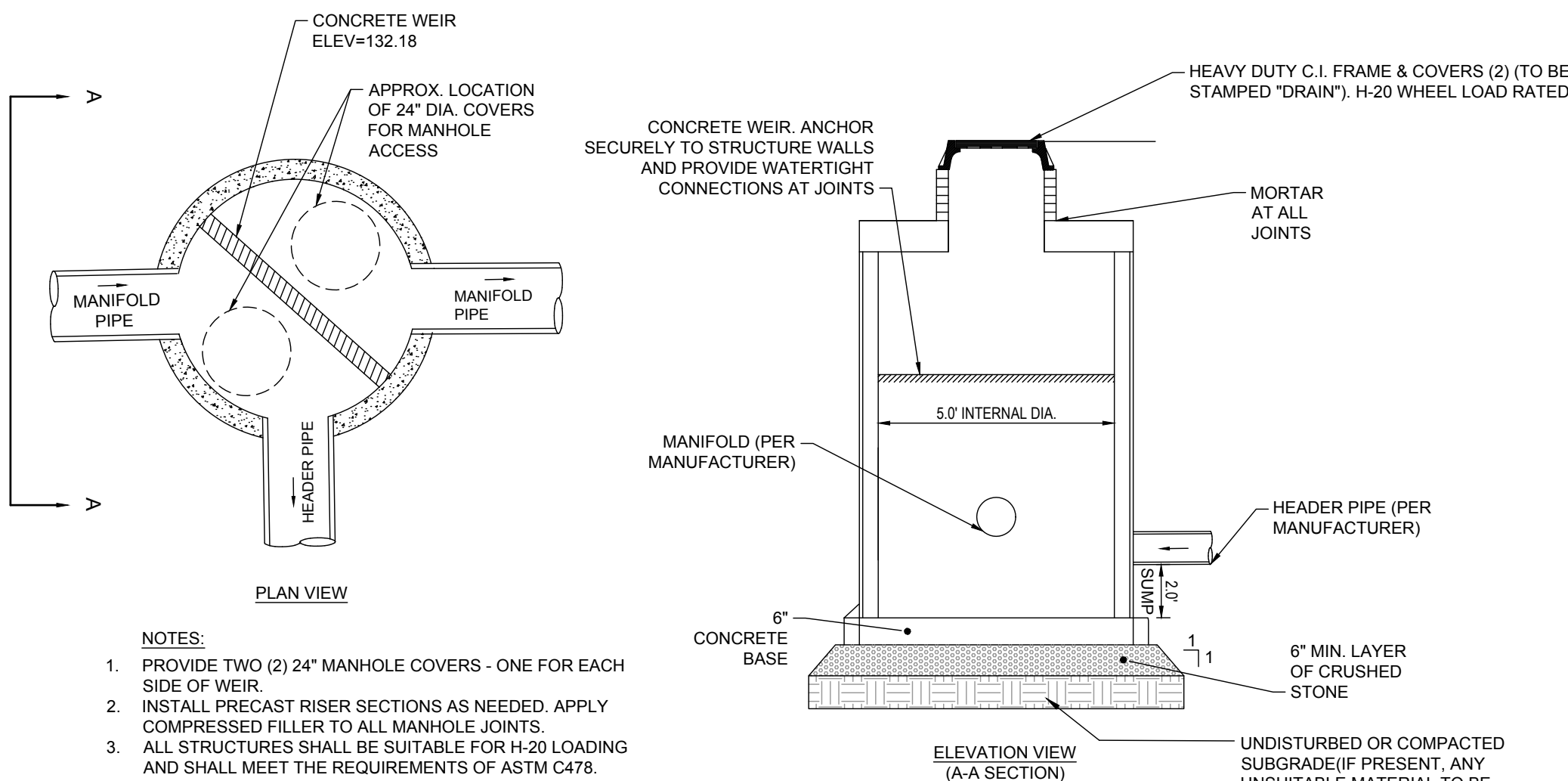
SCALE: N.T.S.



- NOTES:
- PROVIDE TWO (2) 24" MANHOLE COVERS - ONE FOR EACH SIDE OF WEIR.
  - INSTALL PRECAST RISER SECTIONS AS NEEDED. APPLY COMPRESSED FILLER TO ALL MANHOLE JOINTS.
  - ALL STRUCTURES SHALL BE SUITABLE FOR H-20 LOADING AND SHALL MEET THE REQUIREMENTS OF ASTM C478.

#### 5 OUTLET CONTROL STRUCTURE 1 (OCS-1)

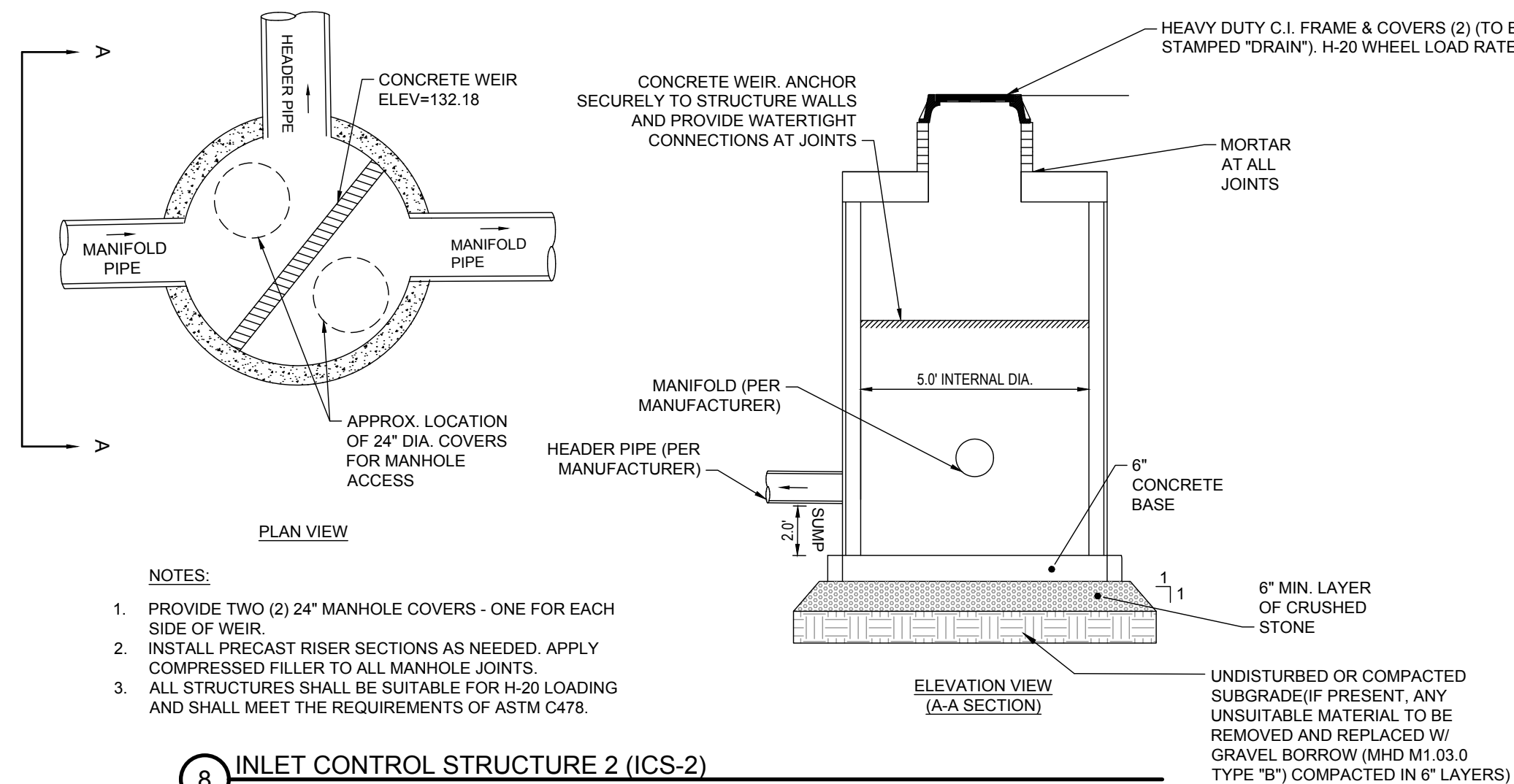
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- NOTES:
- PROVIDE TWO (2) 24" MANHOLE COVERS - ONE FOR EACH SIDE OF WEIR.
  - INSTALL PRECAST RISER SECTIONS AS NEEDED. APPLY COMPRESSED FILLER TO ALL MANHOLE JOINTS.
  - ALL STRUCTURES SHALL BE SUITABLE FOR H-20 LOADING AND SHALL MEET THE REQUIREMENTS OF ASTM C478.

#### 7 INLET CONTROL STRUCTURE 1 (ICS-1)

SCALE: N.T.S.



- NOTES:
- PROVIDE TWO (2) 24" MANHOLE COVERS - ONE FOR EACH SIDE OF WEIR.
  - INSTALL PRECAST RISER SECTIONS AS NEEDED. APPLY COMPRESSED FILLER TO ALL MANHOLE JOINTS.
  - ALL STRUCTURES SHALL BE SUITABLE FOR H-20 LOADING AND SHALL MEET THE REQUIREMENTS OF ASTM C478.

#### 8 INLET CONTROL STRUCTURE 2 (ICS-2)

SCALE: N.T.S.

Project:  
**TOWN OF DOVER**  
DEPARTMENT OF PUBLIC WORKS  
SITE IMPROVEMENTS  
2 DEDHAM STREET  
DOVER, MA 02030



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W&S Project No.: ENG22-1087  
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Drawing Title:

**DETAILS II**

Sheet Number:

**C502**



MC-3500 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
- TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT<sup>2</sup>%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
- THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
  - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
  - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

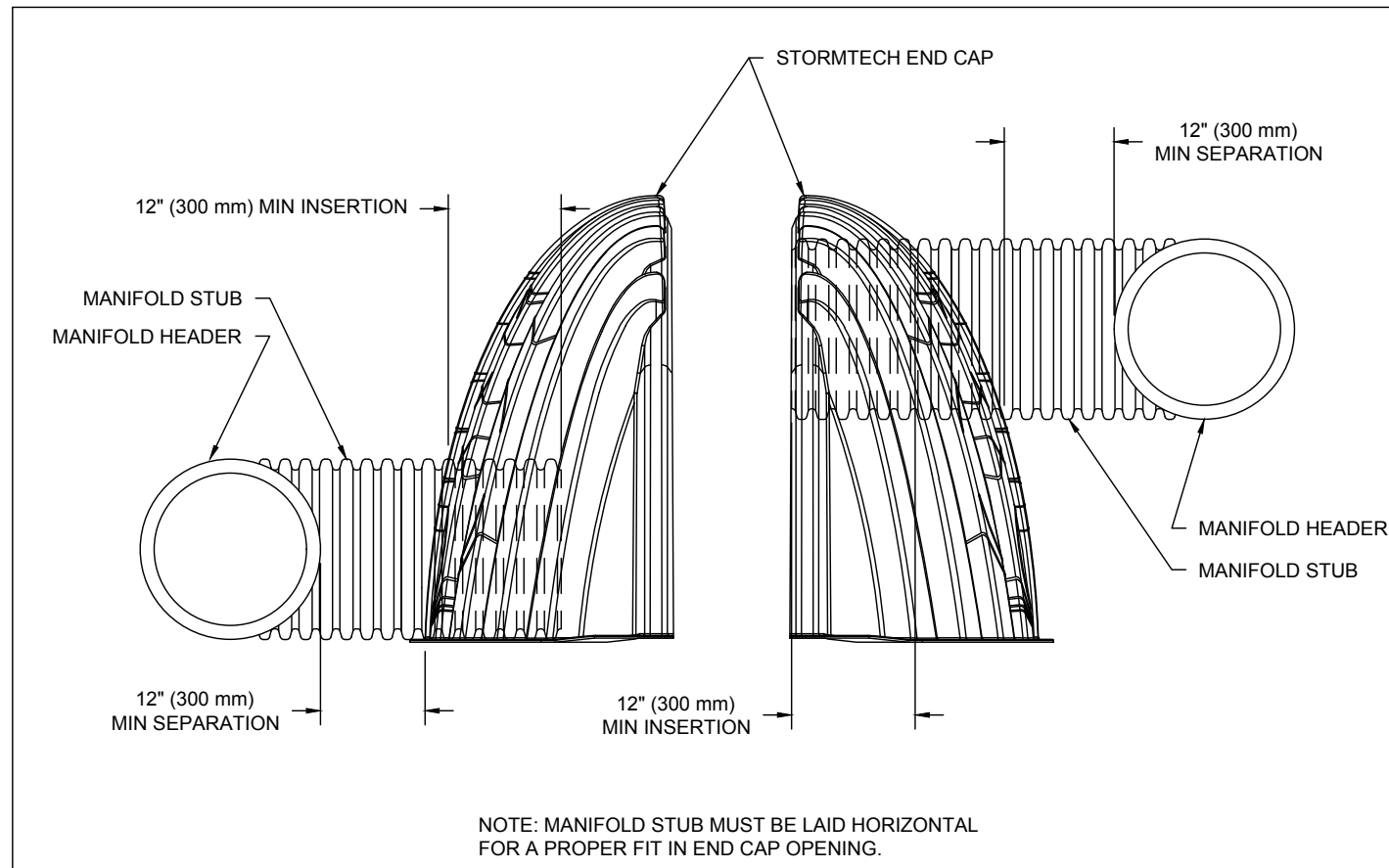
1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
- STONESHOOTER LOCATED OFF THE CHAMBER BED.
  - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
  - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

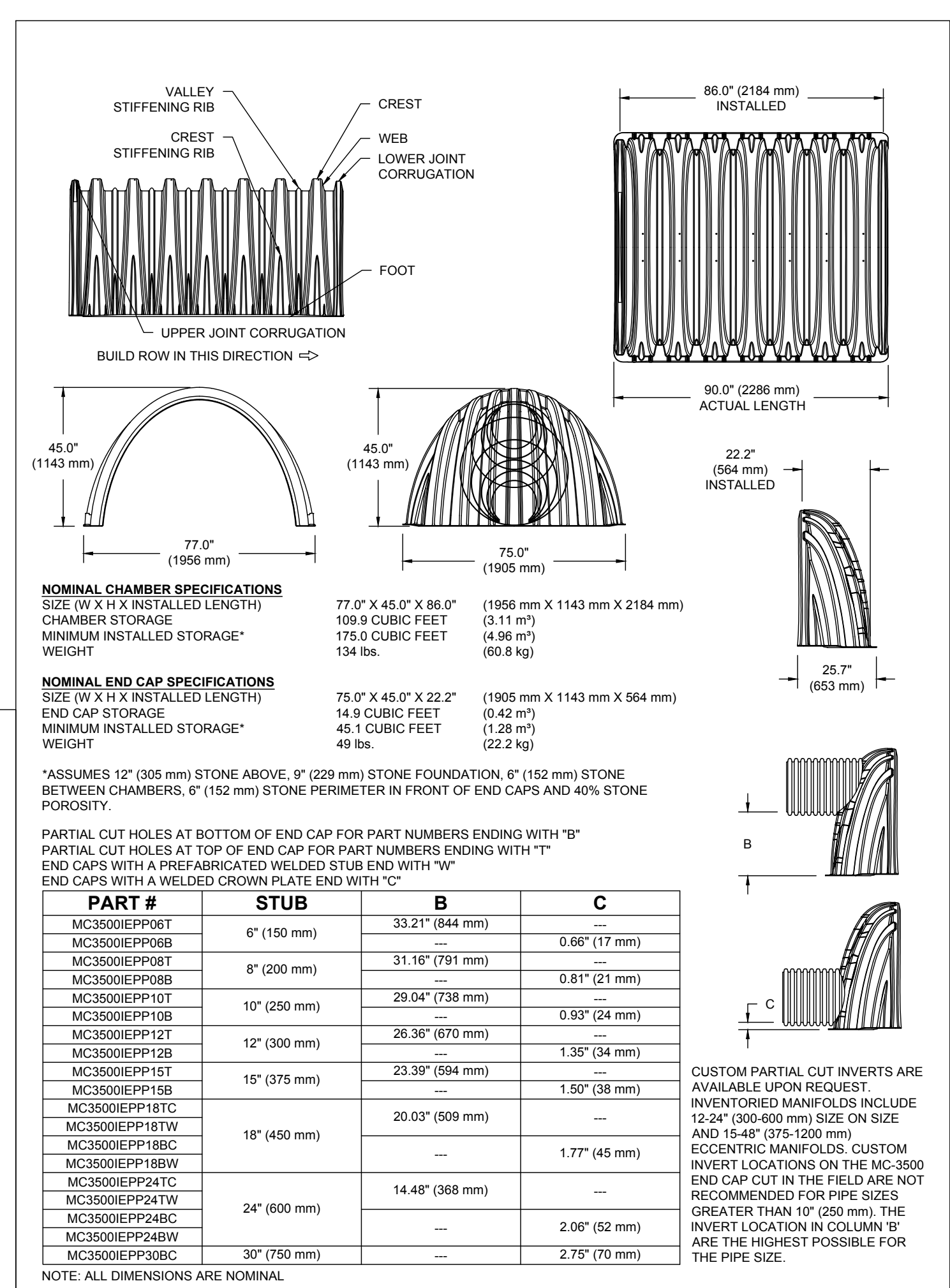
1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
- NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
  - NO RUBBER Tired LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
  - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH TECHNICAL WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



5 MC-SERIES END CAP INSERTION DETAIL



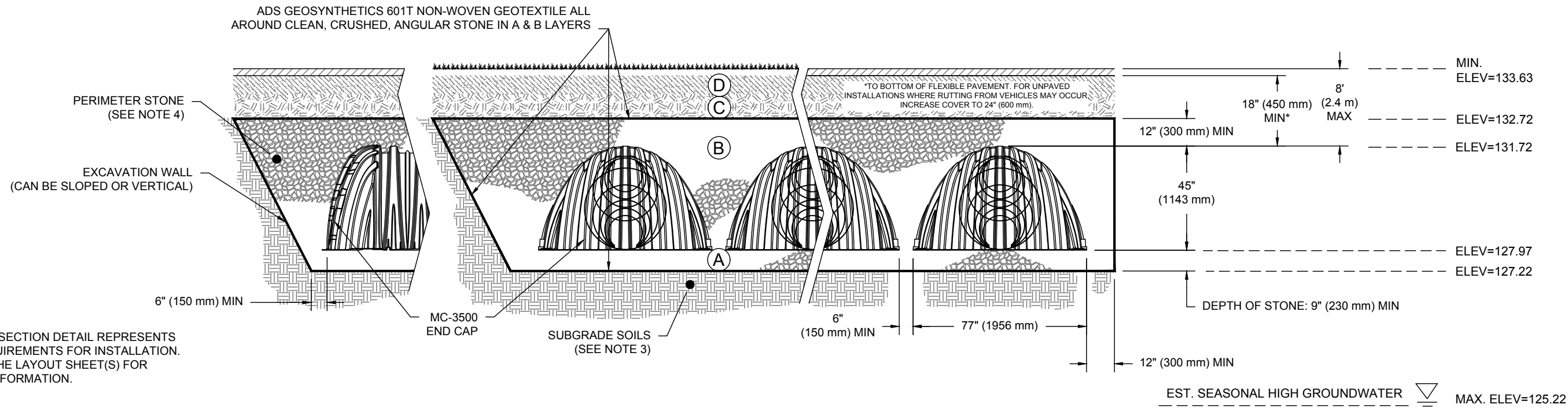
2 MC-3500 TECHNICAL SPECIFICATIONS

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	<b>FINAL FILL:</b> FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	<b>INITIAL FILL:</b> FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE.  AASHTO M145 <sup>1</sup> A-1, A-2.4, A-3  OR  AASHTO M43 <sup>2</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 18" (450 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	<b>EMBEDMENT STONE:</b> FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE <sup>3</sup>  AASHTO M43 <sup>2</sup> 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	<b>FOUNDATION STONE:</b> FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE <sup>3</sup>  AASHTO M43 <sup>2</sup> 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>2,3</sup>

PLEASE NOTE:

- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
- STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) MAX LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
- WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
- WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".

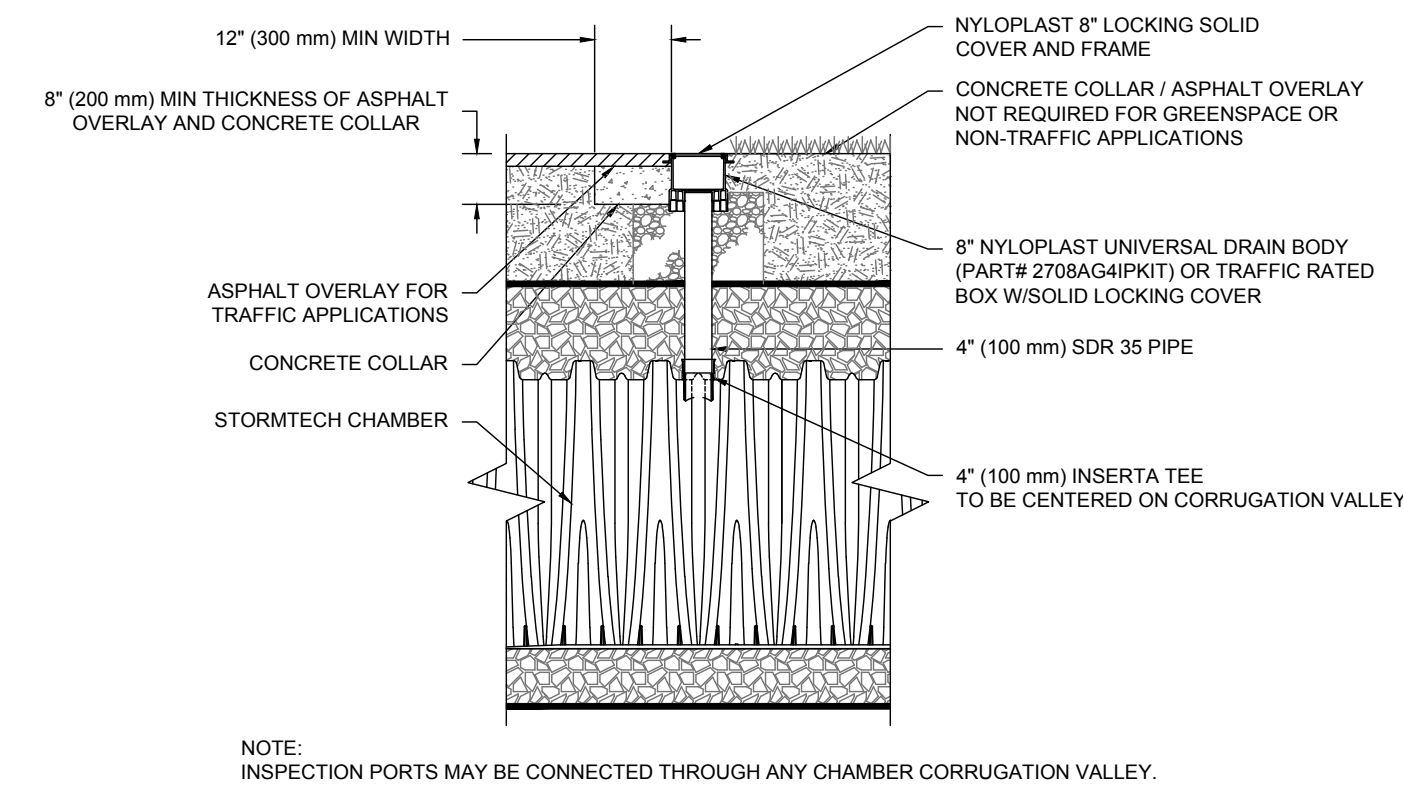


NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
- TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT<sup>2</sup>%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

3 MC-3500 CROSS SECTION DETAIL

1 MC-3500 ISOLATOR ROW PLUS DETAIL



INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
- REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
- REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
  - MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
  - FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
  - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
  - VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

4 4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)

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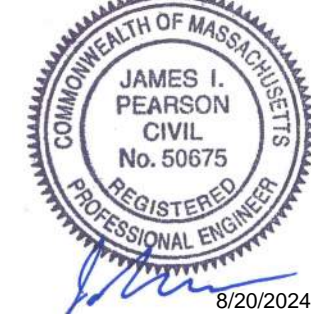
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Revisions:

No.	Date	Description
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2	05/15/24	PER CONSERVATION FEEDBACK
3	04/10/24	LOCAL PERMIT APPLICATIONS

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Seal:



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Drawing Title:

**DETAILS III**

Sheet Number:

**C503**











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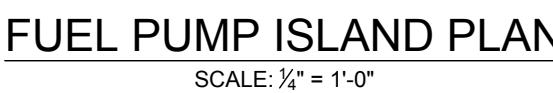
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Drawing Title:

FUEL SYSTEM  
LAYOUT

Sheet Number:

EQ501



## C.J. CONTROL JOINT

1. PLANS ARE SCHEMATIC AND SHOW THE GENERAL LAYOUT OF THE FUEL SYSTEM ONLY AND NOT ALL FUEL SYSTEM COMPONENTS ARE SHOWN. THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, MATERIALS, LABOR, ETC, INCLUDING PIPING, VALVES, WIRING, AND ALL OTHER APPURTENANCES AS NEEDED IN ORDER TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.
2. CONCRETE SLAB PITCH SHALL BE AS SHOWN ON THE CIVIL DRAWINGS.
3. FINAL LOCATIONS TO BE APPROVED BY THE ENGINEER FOR TANK MOUNTED HIGH LEVEL ALARMS, EXTINGUISHERS, EMERGENCY PUMP SHUTOFF SWITCHES, AND STANCHION.
4. BOLLARDS SHALL BE BOLTED TO THE CONCRETE FUEL PAD WHERE THERE IS CONFLICT WITH THE CANOPY FOOTERS. INSTALL BOLLARDS ACCORDING TO DETAIL WHEN POSSIBLE, IN COORDINATION WITH THE ENGINEERS.
5. SEAL CONTROL JOINT PENETRATIONS THROUGH POSITIVE LIMITING BARRIER WITH PETROLEUM RESISTANT SEALANT (SIKA DUOFLEX 5050 PRIMER) AS WELL AS ALL PENETRATIONS THROUGH THE FUELING PAD.
6. ALL PROPOSED CANOPY DRAINS SHALL DRAIN TO PROPOSED STORMWATER STRUCTURES VIA UNDERGROUND PIPING AS SHOWN ON THE CIVIL DRAWINGS.
7. 14'-6" MINIMUM CLEARANCE SHALL BE MAINTAINED BETWEEN THE CANOPY FASCIA BOTTOM AND THE FUELING PAD.
8. SUBMERSIBLE PUMPS AND TANK VENTS SHALL BE MOUNTED OUTSIDE THE LIMITS OF THE CANOPY FASCIA. TANK VENTS SHALL EXTEND TO 12' ABOVE THE SURROUNDING FUELING PAD GRADE.

3. THE SAFE FILL LEVEL SHALL BE 90% OF THE TANK VOLUME, THE AUDIBLE AND VISUAL ALARM SHALL BE ACTIVATED AT THIS LEVEL. THE OVERTURN PREVENTION VALVE SHALL BE ACTIVATED AT 95% OF THE TANK VOLUME. INSTALLER SHALL VERIFY THAT THE 95% SHUTOFF VALVE FULLY STOPS FLOW AT THE SPECIFIED LEVEL.
3. VALVES, GAUGES, SENSORS, PIPES AND PUMPS ARE SHOWN AT APPROXIMATE LOCATIONS. THESE SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATION.
4. THE INSTALLER SHALL VERIFY THAT THE TANK IS TESTED BY THE MANUFACTURER. IF TANK IS DELIVERED TO THE SITE UNDER VACUUM AND MAINTAINS ITS VACUUM THROUGH FINAL PLACEMENT, IT SHALL BE CONSIDERED SUCCESSFULLY TESTED. IF NOT, THE INSTALLER SHALL TEST THE TANK PER NFPA 30 CHAPTER 21.5. TANKS AND INTERSTITIAL SPACE SHALL BE TESTED FOR TIGHTNESS BY POSITIVE AIR PRESSURE OR HYDROSTATICALLY AT PRESSURE BETWEEN 3 AND 5 PSI FOR A MINIMUM OF 1.0 HOUR WITHOUT MEASURABLE LOSS. THE CONTRACTOR SHALL DOCUMENT THE RESULTS OF THE FUEL TANK TIGHTNESS TEST AND SUBMIT CERTIFICATION TO THE OWNER AND ENGINEER CONFIRMING THAT THE PIPING HAS PASSED THE TIGHTNESS TEST, FOR RECORD-KEEPING PURPOSES.
5. PIPING SHALL BE TESTED AFTER INSTALLATION. PIPING SHALL BE TESTED PER NFPA 30 CHAPTER 27.7. PIPING SHALL BE TESTED PNEUMATICALLY AT 110% OF THE MAXIMUM ANTICIPATED PRESSURE. THE MAXIMUM PRESSURE OF PIPE SYSTEM PRODUCED AT THE PUMP IS APPROXIMATELY 31 PSI, TEST PRESSURE SHALL BE 110% OF 31 PSI OR 34 PSI, THE TEST PRESSURE SHALL BE MAINTAINED WHILE A COMPLETE VISUAL INSPECTION OF ALL JOINTS AND CONNECTIONS IS CONDUCTED. THE TEST SHALL BE MAINTAINED FOR A MINIMUM OF 10 MINUTES WITHOUT MEASURABLE LOSS. THE CONTRACTOR SHALL DOCUMENT THE RESULTS OF THE FUEL PIPE TIGHTNESS TEST AND SUBMIT CERTIFICATION TO THE OWNER AND ENGINEER CONFIRMING THAT THE PIPING HAS PASSED THE TIGHTNESS TEST, FOR RECORD-KEEPING PURPOSES.
6. THE TANK AND PIPING SHALL HAVE PROTECTIVE COATINGS AS SPECIFIED IN NFPA 30.
7. THE TANK, PIPING AND ASSOCIATED EQUIPMENT SHALL BE DESIGNED, INSTALLED AND OPERATED TO PREVENT ELECTROSTATIC IGNITION PER THE REQUIREMENTS OF NFPA 30 CHAPTER 6.5.4. TANK, PIPING AND ASSOCIATED EQUIPMENT SHALL BE GROUNDED AND TESTED FOR CONTINUITY PRIOR TO BEING PLACED INTO OPERATION.
8. WARNING SIGN(S) SHALL BE CONSPICUOUSLY POSTED IN THE DISPENSING AREA STATING THE FOLLOWING (DIMENSION OF SIGN TO BE DETERMINED. LETTERHEAD SHALL BE MINIMUM OF 1" HIGH):

IT IS UNLAWFUL AND DANGEROUS TO DISPENSE FUEL INTO UNAPPROVED CONTAINERS.

NO SMOKING.

STOP MOTOR.

NO FILLING OF PORTABLE CONTAINERS IN OR ON A MOTOR VEHICLE.

PLACE CONTAINER ON GROUND BEFORE FILLING.

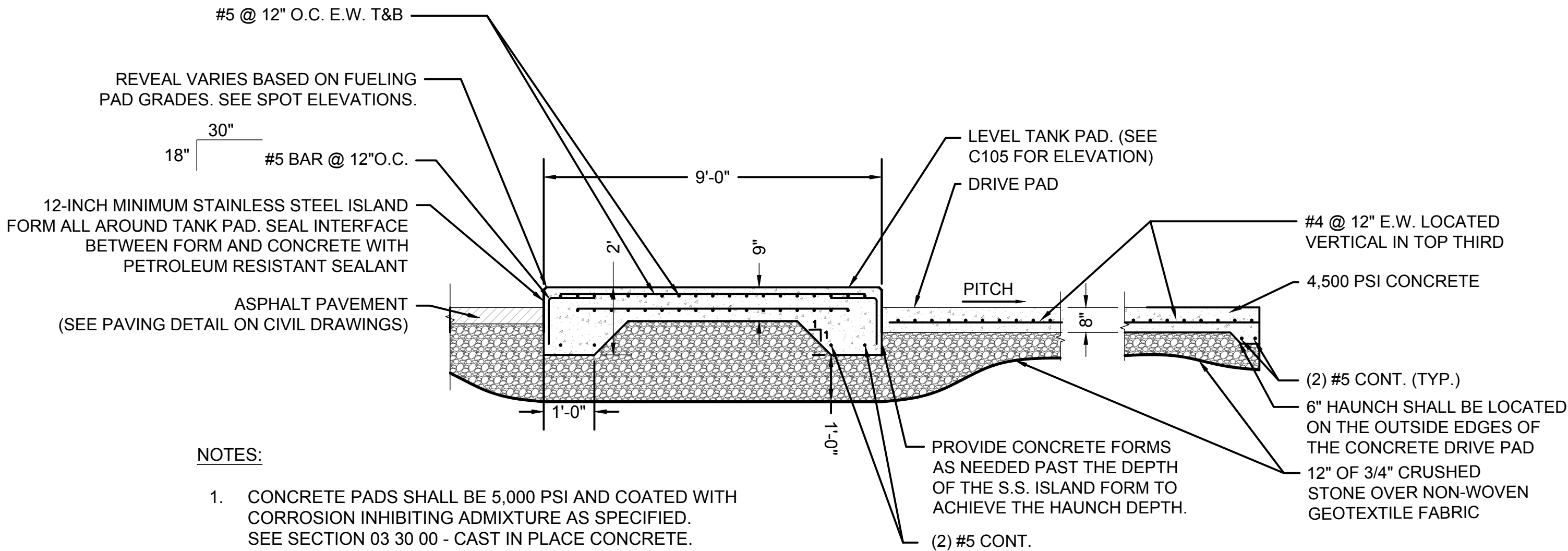
DISCHARGE YOUR STATIC ELECTRICITY BEFORE FUELING BY TOUCHING A METAL SURFACE AWAY FROM THE NOZZLE.

DO NOT RE-ENTER YOUR VEHICLE WHILE FUEL IS PUMPING.

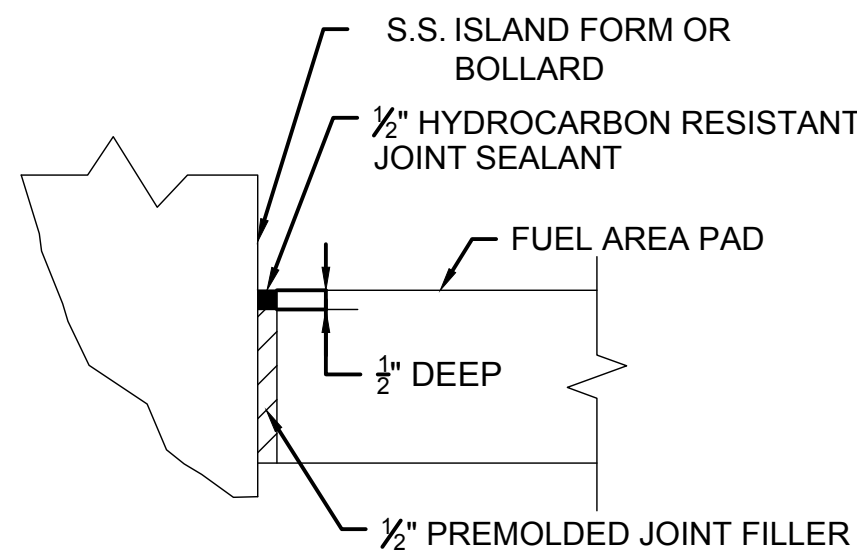
IF A FIRE STARTS, DO NOT REMOVE NOZZLE - BACK AWAY IMMEDIATELY.

DO NOT ALLOW INDIVIDUALS UNDER LICENSED AGE TO USE THE PUMP.

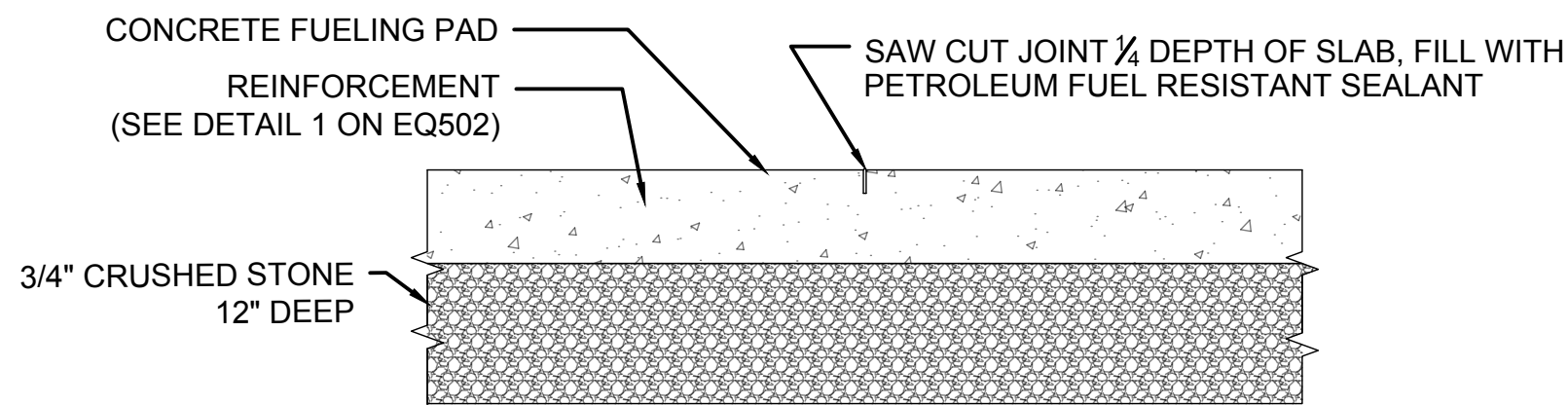




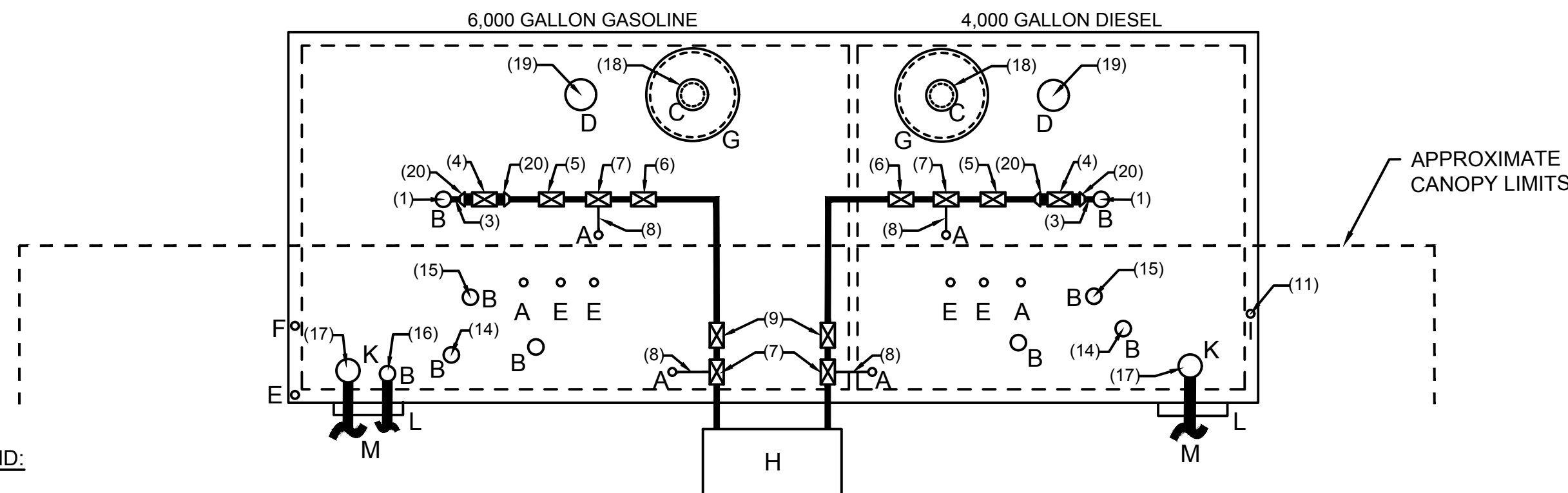
1 CONCRETE TANK AND DRIVE PAD SECTION  
SCALE: N.T.S.



4 ISOLATION JOINT DETAIL  
SCALE: N.T.S.



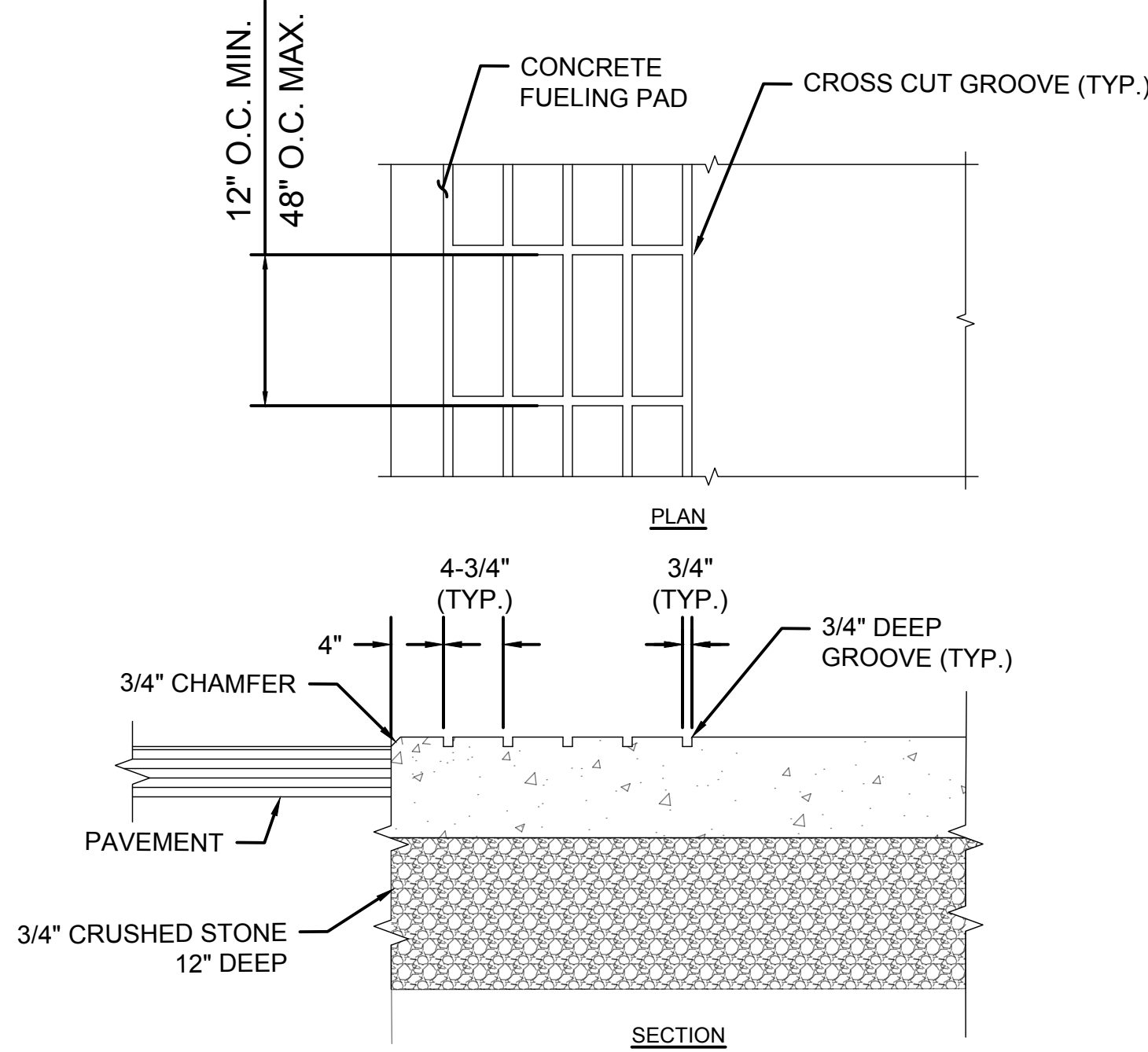
5 CONTROL JOINT (C.J.)  
SCALE: N.T.S.



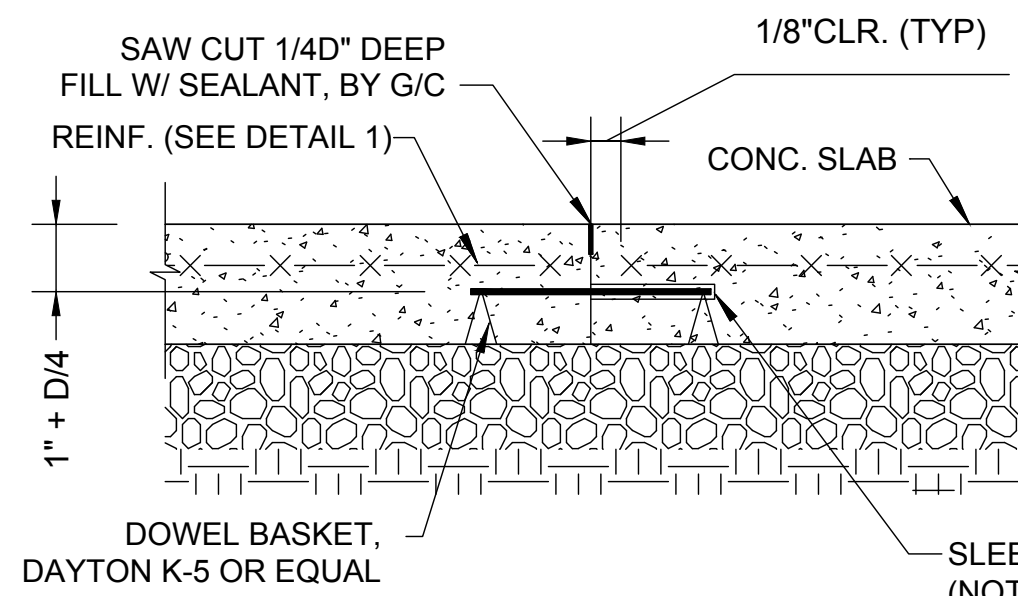
NOTES:

- SEE CONSTRUCTION NOTES ON EQ501 FOR ADDITIONAL INFORMATION/REQUIREMENTS.
- FINAL TANK FITTING LAYOUT AND QUANTITY TO BE ADJUSTED AS NEEDED AND CONFIRMED DURING THE SUBMITTAL PROCESS TO MEET THE DESIGN LAYOUT AND TO MEET MANUFACTURER AND CODE REQUIREMENTS.
- TANK TOP PIPING SUPPORT BRACKETS (NOT SHOWN) SHALL BE INCLUDED TO SUPPORT DISPENSER PIPING AS NEEDED.
- CONTRACTOR SHALL SUPPLY AND INSTALL ALL VALVES, FITTINGS, PIPING, AND EQUIPMENT AS NEEDED TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.
- MANUFACTURERS AND MODEL NUMBERS LISTED ARE NOT INTENDED TO LIMIT COMPETITION OR TO LIMIT THE EQUIPMENT TO ANY SPECIFIC MANUFACTURER. THE MAKE AND MODEL NUMBERS LISTED ARE LISTED TO SET A MINIMUM STANDARD OF QUALITY. ADDITIONAL ACCEPTABLE MANUFACTURERS ABLE TO MEET THE SPECIFIED REQUIREMENTS AND QUALITY MAY BE APPROVED BY THE ENGINEER.

7 RECTANGULAR SPLIT TANK SCHEMATIC LAYOUT  
SCALE: N.T.S.



2 POSITIVE LIMITING BARRIER DETAIL  
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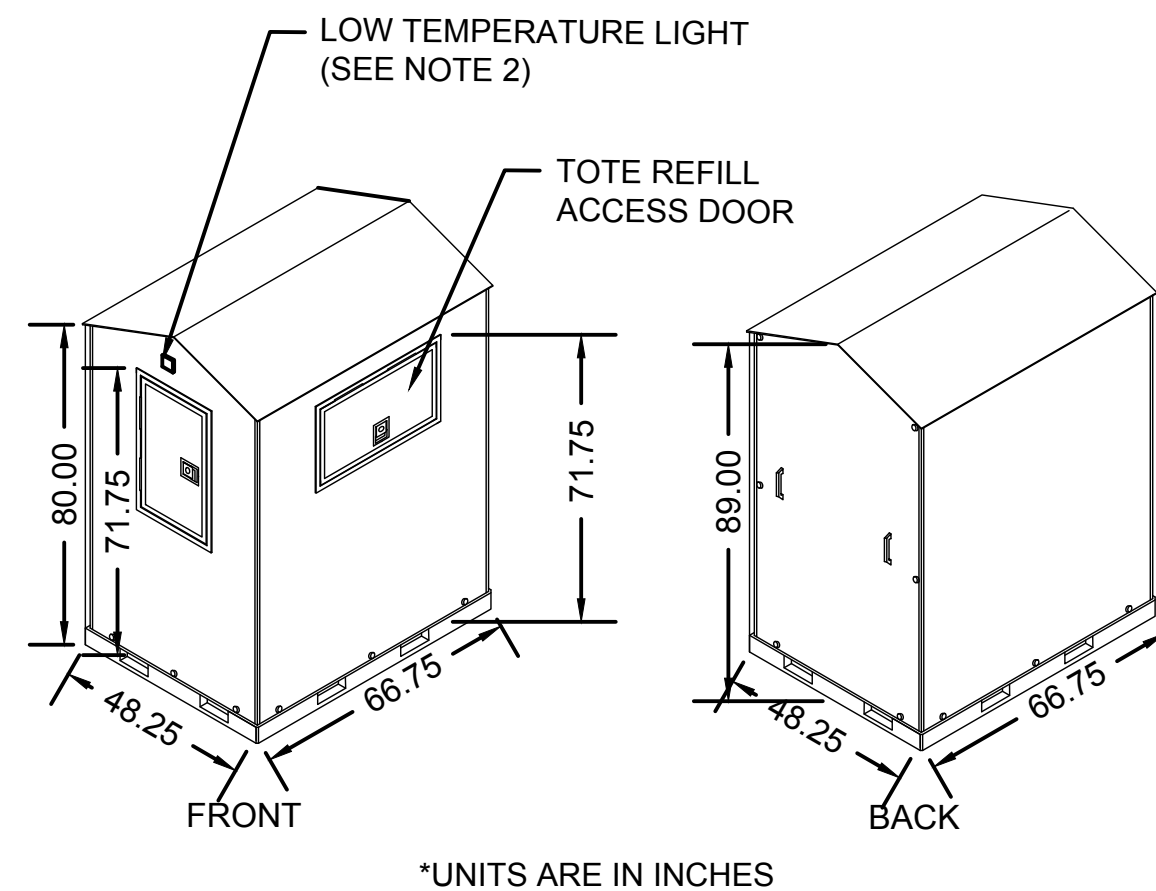


6 TYPICAL CONSTRUCTION JOINT DETAIL  
SCALE: N.T.S.

CONSTRUCTION JOINT (C.J.)			
SLAB THICKNESS, IN.	MIN. DOWEL LENGTH (L), IN.	MAXIMUM DOWEL SPACING, IN.	DOWEL DIAMETER AND TYPE
LESS THAN 6	N/A	N/A	N/A
8 TO AND INCLUDING 12	16	12	1" BAR

NOTE(S):

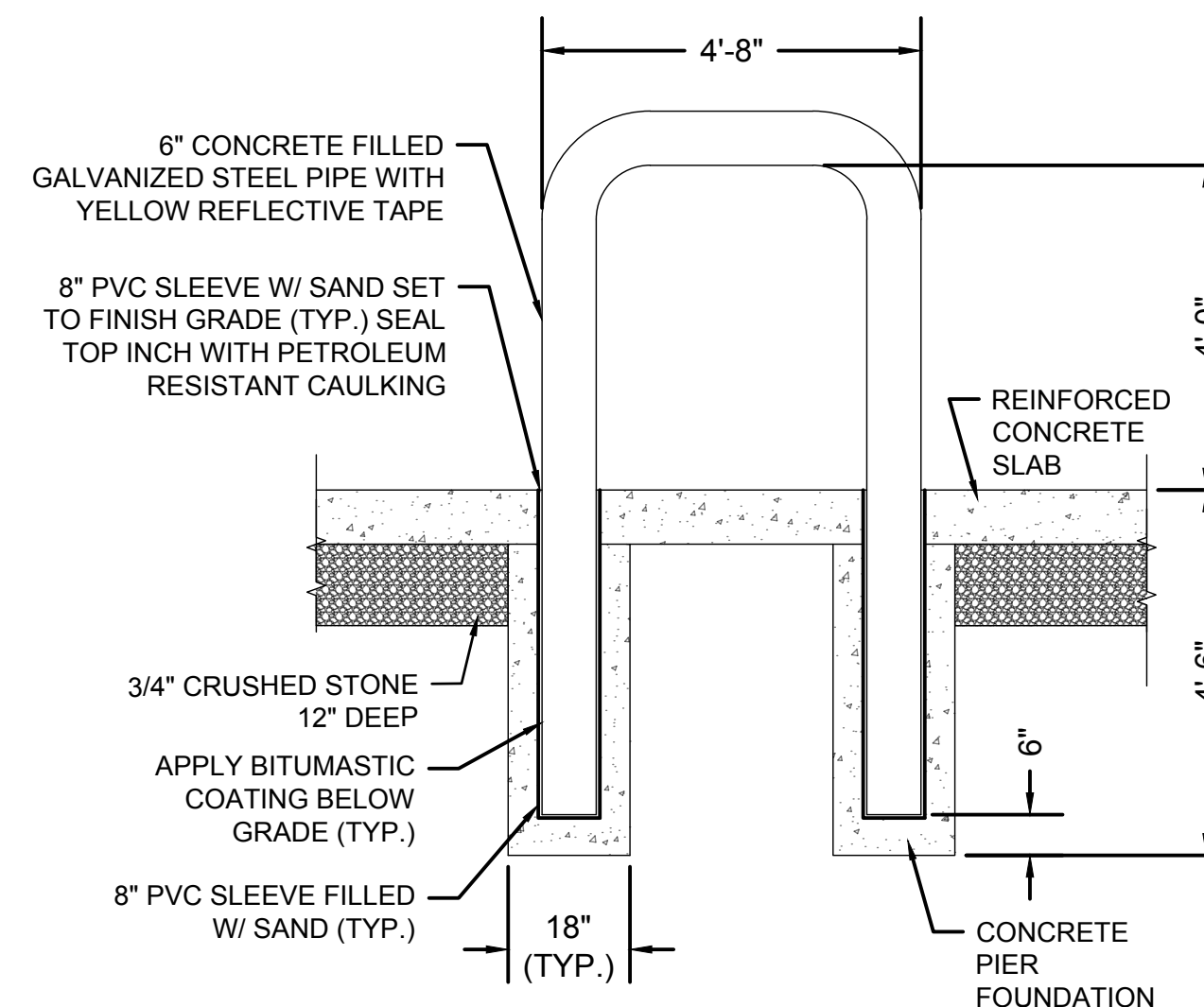
- ALL DOWELS SHALL BE STRAIGHT, SMOOTH AND FREE FROM BURRS AT THE ENDS
- ONE-HALF OF EACH DOWEL SHALL BE OILED OR OTHERWISE TREATED TO PREVENT BONDING WITH THE CONCRETE.
- CONTRACTOR SHALL SECURELY SUPPORT DOWELS BY MEANS OF DOWEL BASKETS TO PREVENT ANY DISPLACEMENT OF THE DOWELS DURING CONCRETE PLACEMENT.
- PUNCTURES IN THE VAPOR BARRIER MUST BE SEALED. ENGINEER SHALL INSPECT THE CONDITION OF THE VAPOR BARRIER BEFORE PLACING CONCRETE.
- STOP REINFORCING 2" FROM EACH SIDE OF CONSTRUCTION/CONTROL JOINT.



NOTES:

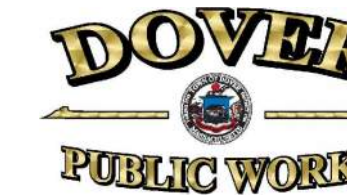
- REFER TO SPECIFICATION SECTION 33 22 13 DIESEL EXHAUST FLUID STORAGE AND DISPENSING SYSTEM FOR ADDITIONAL REQUIREMENTS.
- LOW TEMPERATURE LIGHT SHALL BE LOCATED SO IT IS VISIBLE FROM THE MAINTENANCE GARAGE

8 HEATED DEF TOTE STORAGE CABINET  
SCALE: N.T.S.



9 "U" BUMPER DETAIL  
SCALE: N.T.S.

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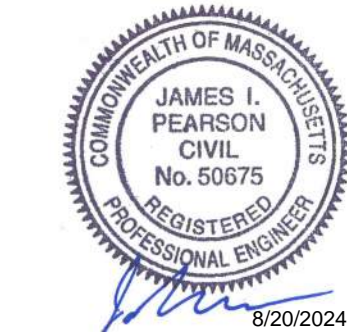
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2		
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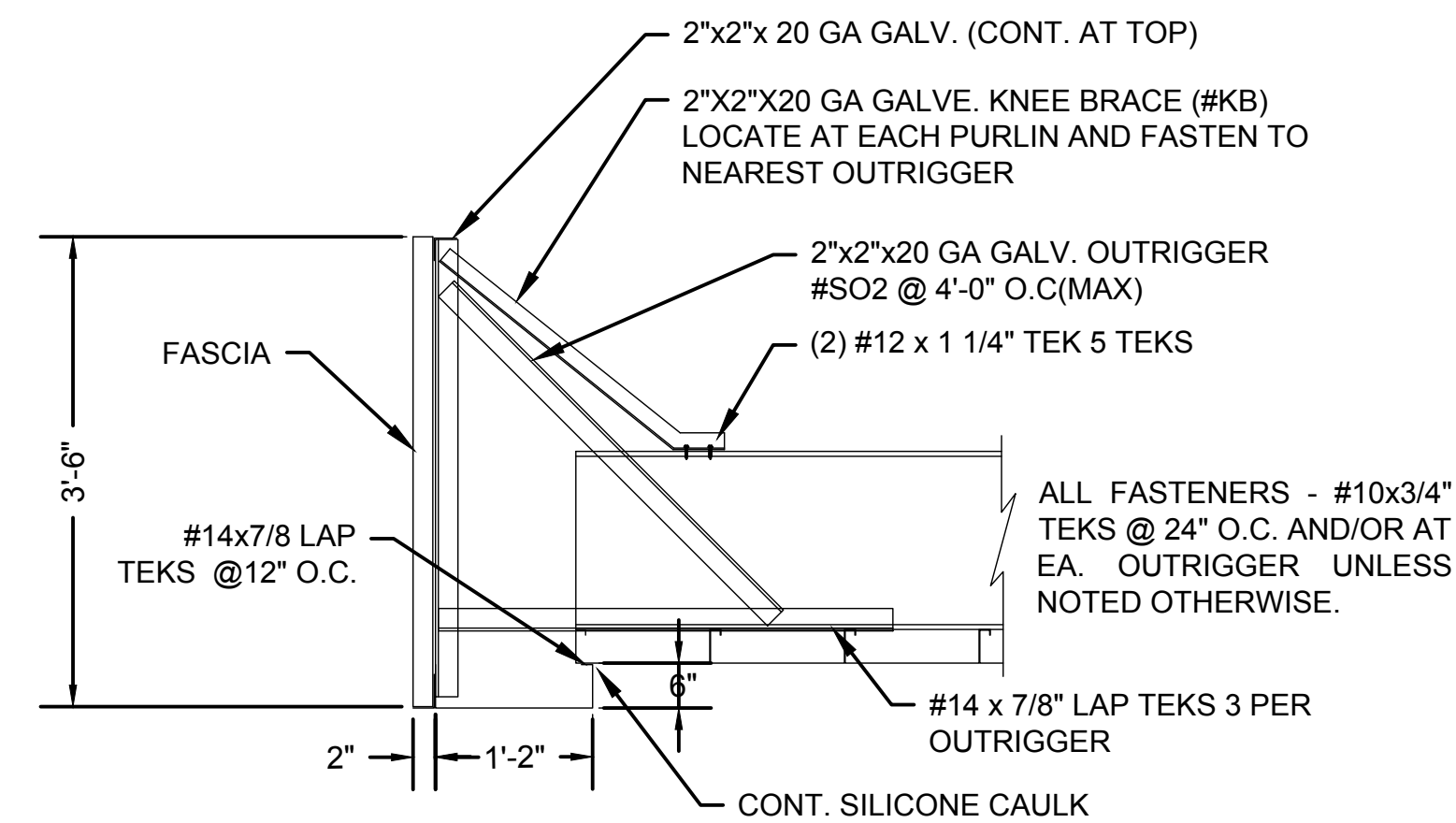
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DETAILS I

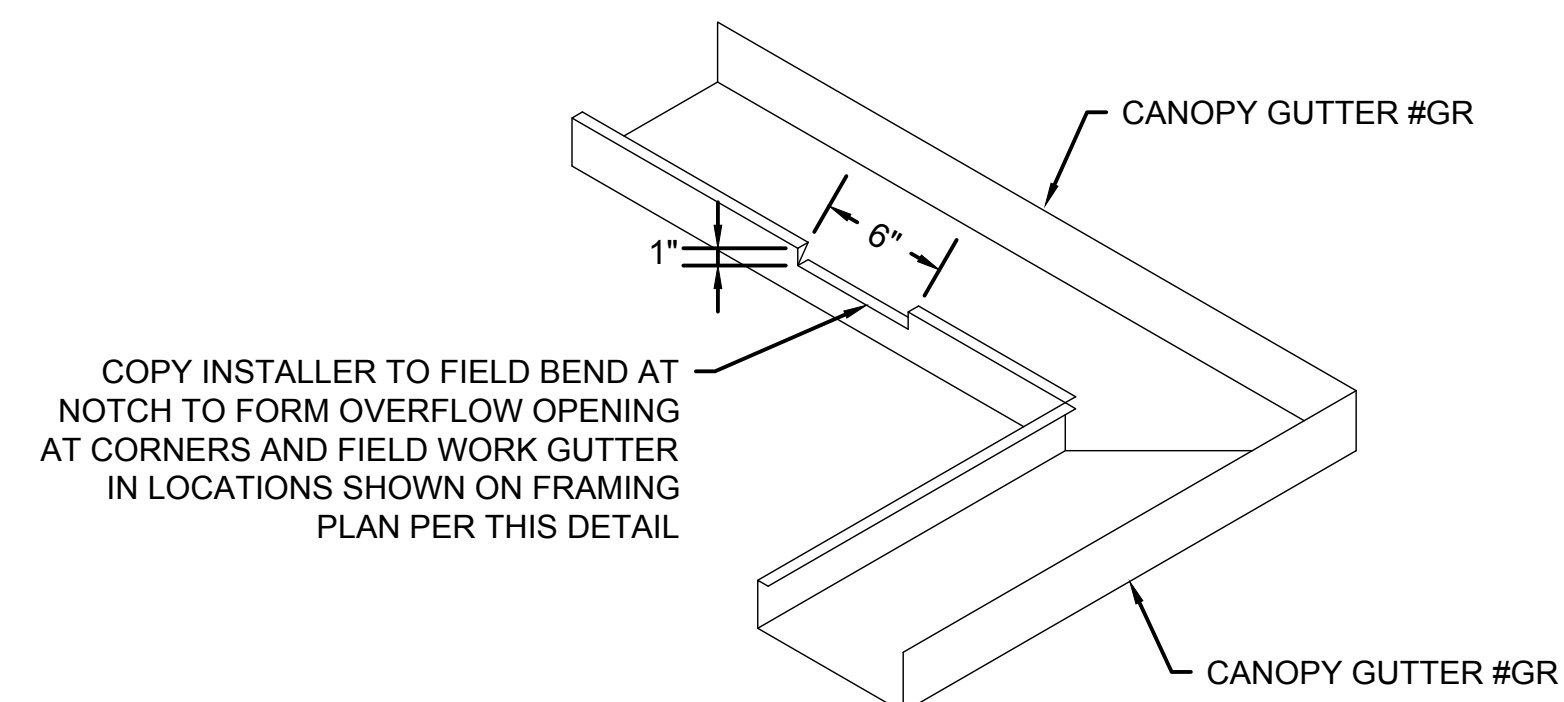
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EQ502



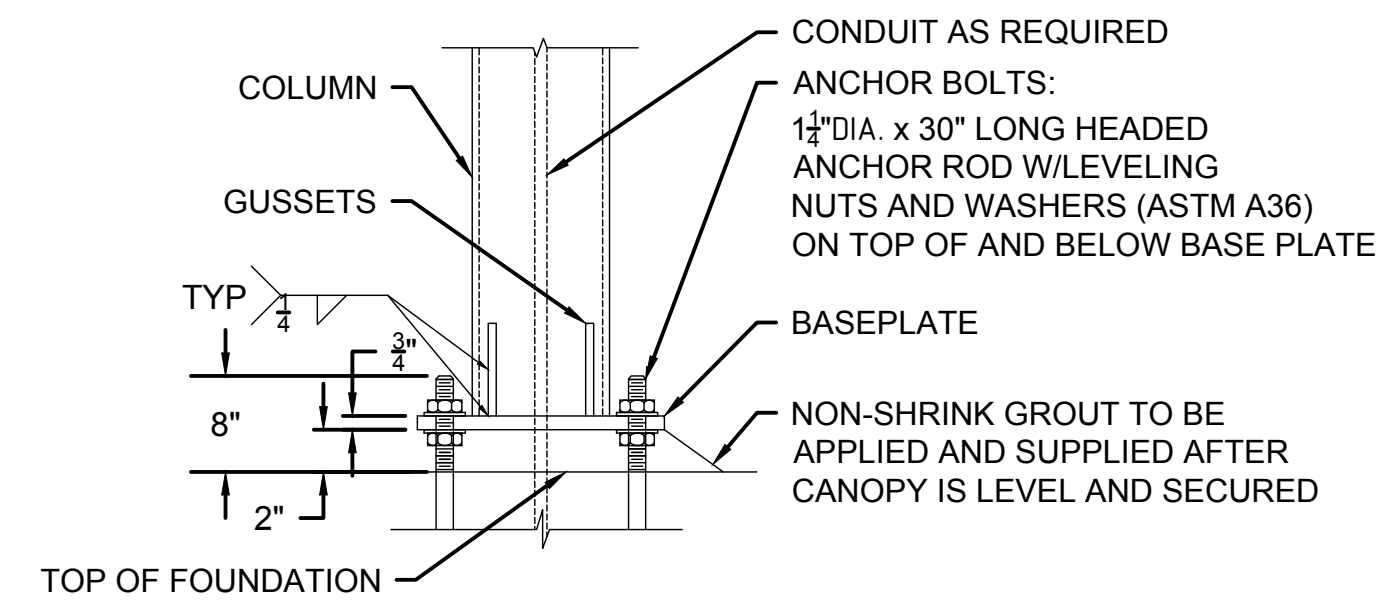


1 FASCIA SECTION  
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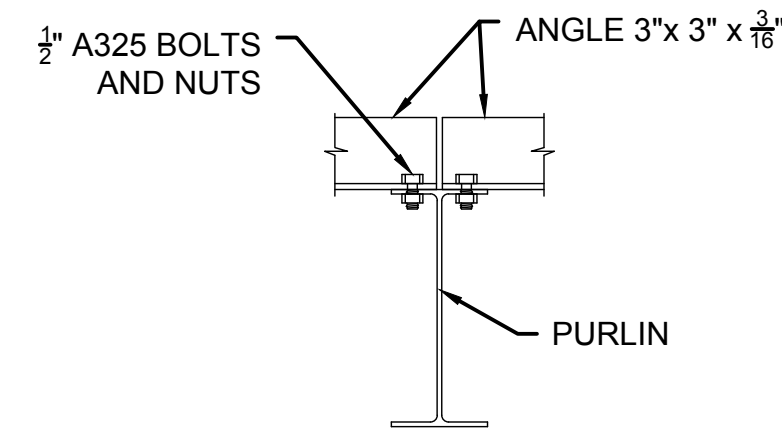


## 2 SECONDARY DRAIN OVERFLOW DETAIL

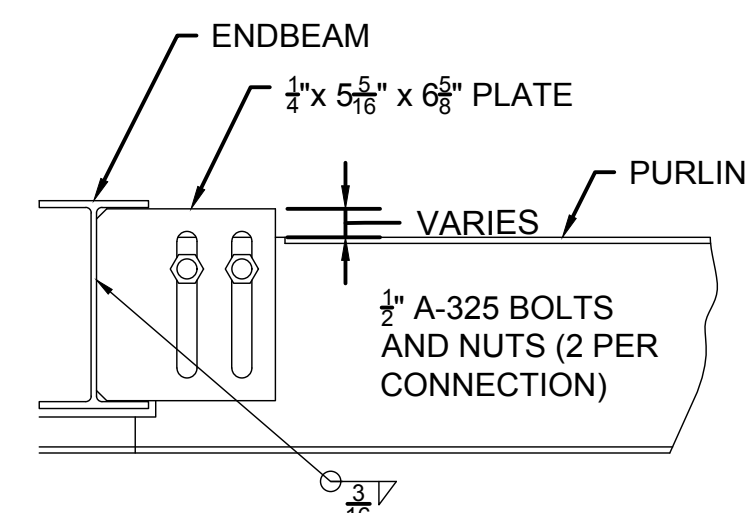
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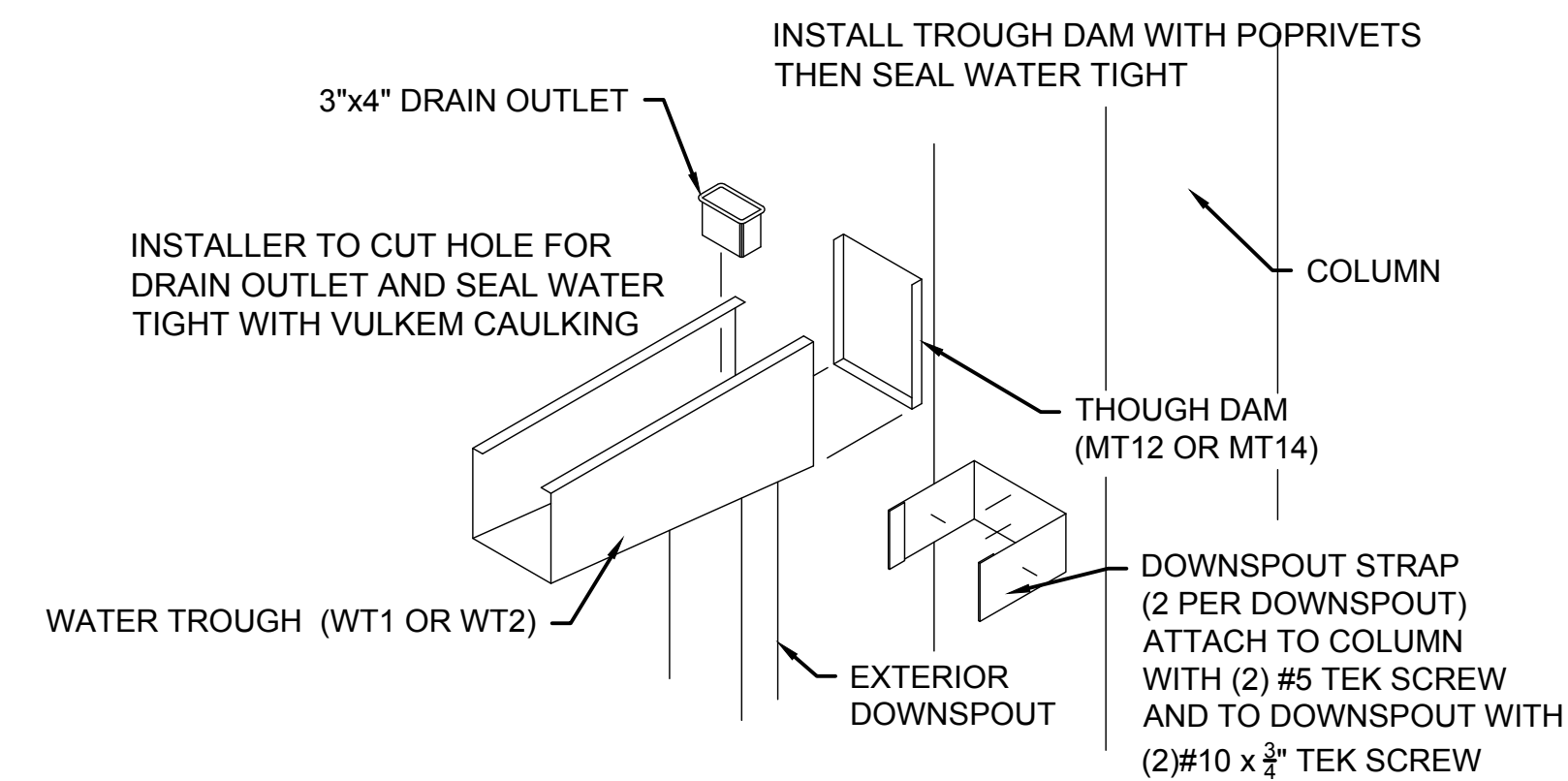
3 BASE PLATE DETAIL (TYP. ALL COLUMNS)  
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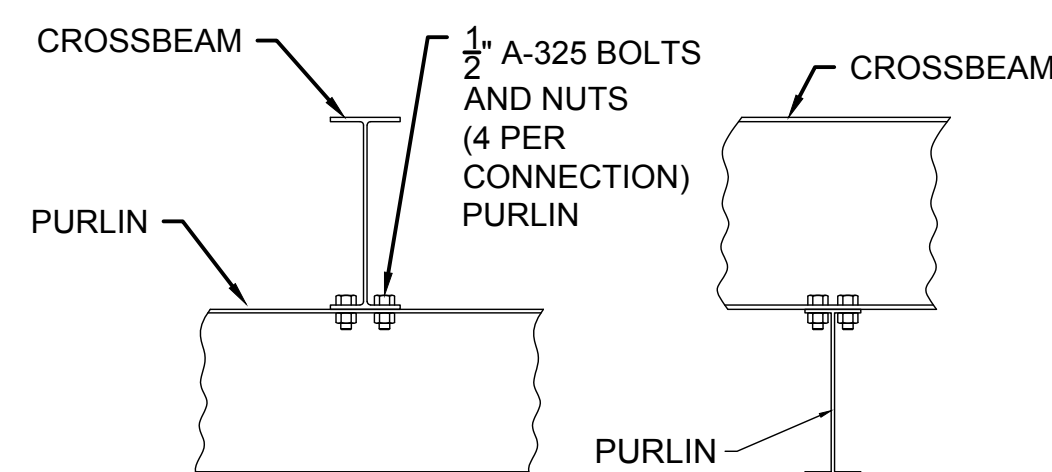
#### 4 ANGLE LATERAL BRACING



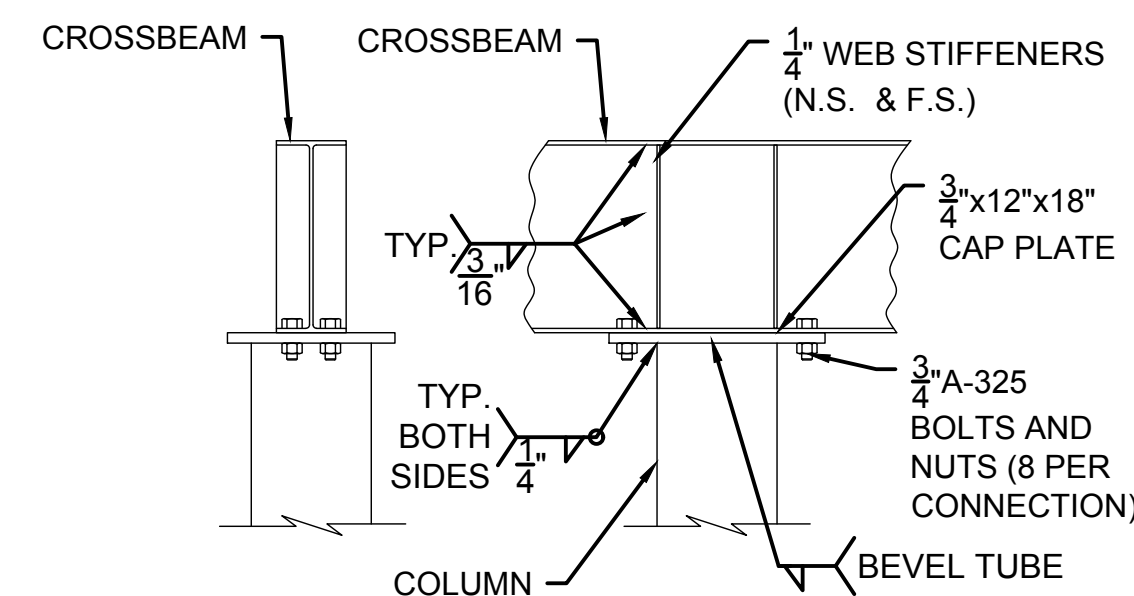
5 ANGLE LATERAL BRACING  
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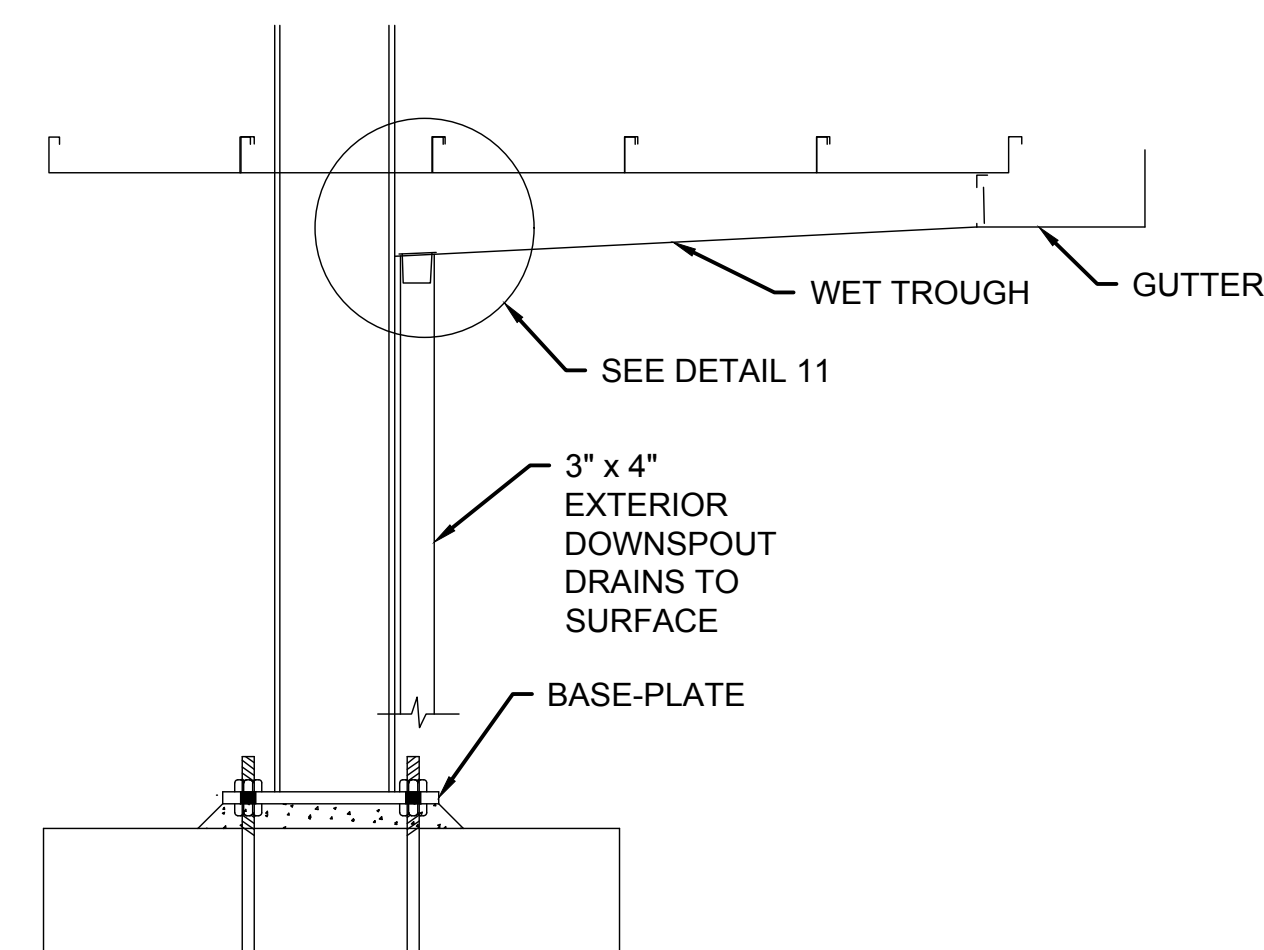
6 WET TROUGH DETAIL  
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**7 CROSSBEAM TO PURLIN CONNECTION**  
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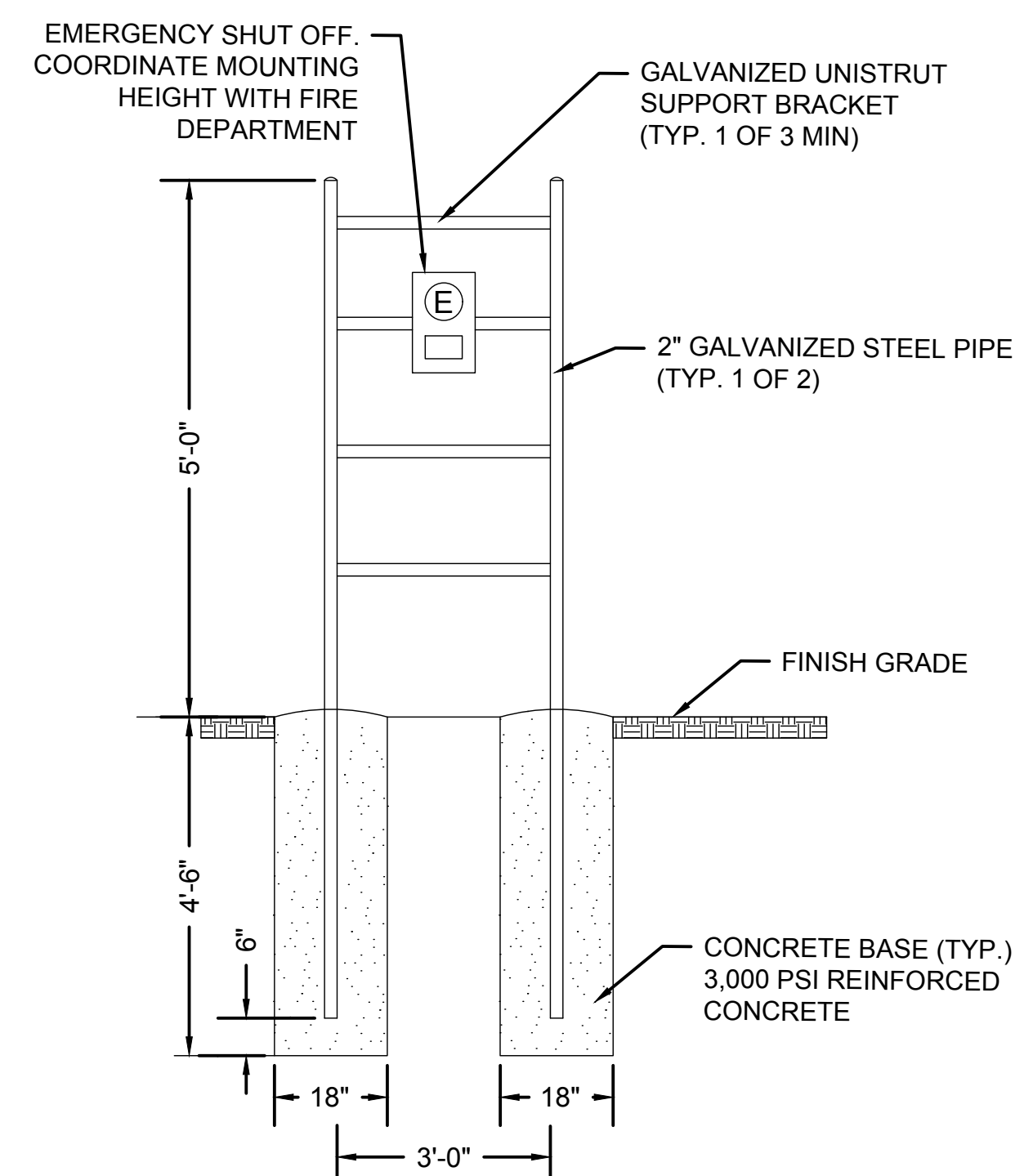


8 CROSSBEAM TO COLUMN CONNECTION  
SCALE: N.T.S.



**NOTE:**  
NOT ALL FOUNDATION COMPONENTS SHOWN FOR CLARITY.  
SEE DETAIL ON EQ504

9 EXTERIOR DRAIN DETAIL  
SCALE: N.T.S.



10 EMERGENCY SWITCH SUPPORT DETAIL  
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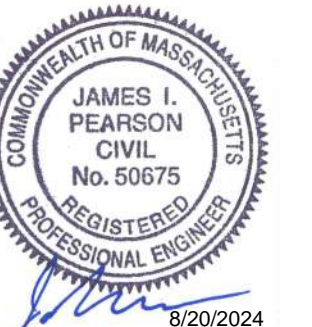
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## FUEL SYSTEM DETAILS II

Sheet Number:

EQ503



GENERAL NOTES:

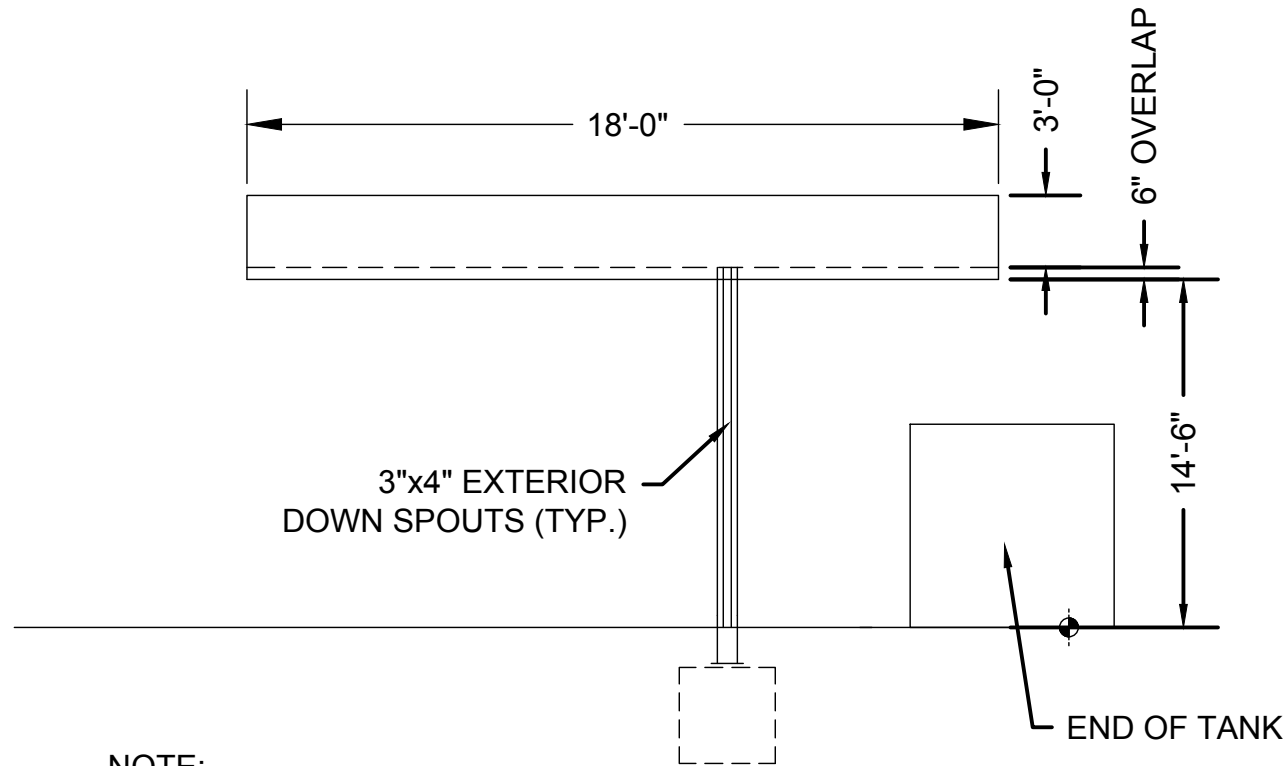
- CANOPY SYSTEM SHOWN IS DIAGRAMMATIC ONLY AND NOT ALL COMPONENTS ARE SHOWN. THE CANOPY AND FOUNDATION SHALL BE DESIGNED AND STAMPED BY A MA LICENSED STRUCTURAL ENGINEER AS SPECIFIED. CANOPY COMPONENTS SHOWN SHALL BE MODIFIED AS NEEDED PER MANUFACTURER REQUIREMENTS.
- CANOPY SHALL BE DESIGNED/CONSTRUCTED TO DRAIN RUN-OFF TO STORMWATER SYSTEM. SEE CIVIL PLANS.
- CANOPY SHALL BE COATED/PAINTED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS AS SPECIFIED. PAINT COLOR CHOSEN BY TOWN.
- ALL DRAWINGS NOT TO SCALE UNLESS OTHERWISE NOTED.

FOOTING NOTES:

- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FOOTING AND ANCHOR BOLT INSTALLATION.
- ALL FOOTINGS SHALL BE CAST NATIVE, INORGANIC SOIL OR COMPACTED STRUCTURAL FILL TO BE PROVIDED AND INSTALLED BY THE CONTRACTOR. FOOTING SIZE BASED ON CANOPY MANUFACTURER'S/STRUCTURAL ENGINEER'S RECOMMENDATIONS AND SUBGRADES SHALL BE PREPARED AS REQUIRED BY SPECIFICATION SECTION 31 00 00, EARTHWORK WITH AN ALLOWABLE BEARING PRESSURE OF 3,000 PSF. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL SOIL PARAMETERS.
- FOOTING CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.
- TOPS OF ALL FOOTINGS ARE ASSUMED TO BE AT SAME ELEVATION. GENERAL CONTRACTOR SHALL PROVIDE BURIAL DEPTH FROM HIGH GRADE UNDER CANOPY. WHERE TOPS OF FOOTINGS ARE AT DIFFERENT ELEVATIONS, THE GENERAL CONTRACTOR SHALL PROVIDE THE CANOPY MANUFACTURER WITH ALL FOOTING AND GRADE ELEVATIONS PRIOR TO CANOPY FABRICATION. VARIATIONS FROM DESIGN ELEVATIONS MAY RESULT IN INADEQUATE CLEARANCE AND UNDER SIZED FOOTINGS.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING NON-SHRINK GROUT UNDER ALL COLUMN BASES AFTER CANOPY IS LEVELED AND SECURED.
- THE FUEL ISLAND AND DRIVE MAT CONCRETE IS INDEPENDENT OF THE CANOPY FOOTINGS.
- ANCHOR BOLTS SHALL BE PLACED IN ACCORDANCE WITH CANOPY MANUFACTURER REQUIREMENTS. TEMPLATES SHALL BE USED TO ENSURE PROPER PLACEMENT OF ANCHOR BOLTS. ANCHOR BOLTS ARE TO BE INSTALLED SUCH THAT A MINIMUM OF 8" OF THREAD IS EXPOSED ABOVE TOP OF FOOTING. BOTTOM OF THREADS SHALL NOT END MORE THAN 3/4" ABOVE TOP OF FOOTER.
- ANY DISCREPANCIES BETWEEN THE ABOVE NOTES AND LOCAL BUILDING CODE REQUIREMENTS SHALL BE REPORTED TO THE CANOPY MANUFACTURER IMMEDIATELY. COMMENCEMENT OF FOOTING INSTALLATION SHALL INDICATE THAT THE ABOVE NOTE MEETS LOCAL BUILDING CODE REQUIREMENTS.
- FOOTER DIMENSIONS/INFORMATION SHOWN IS THE MINIMUM REQUIREMENT AND SHALL BE VERIFIED/MODIFIED AS NEEDED BY CANOPY MANUFACTURER.
- FOOTER DEPTH SHOWN SHALL BE EXTENDED AS NEEDED BELOW LOCAL FROST DEPTH IN ACCORDANCE WITH STATE BUILDING CODES. ANCHOR BOLTS SHALL BE PROTECTED FROM CORROSION IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.

CANOPY STEEL NOTES

- DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE LATEST SPECIFICATIONS. DESIGN, FABRICATION AND ERECTION OF COLD FORMED STEEL SECTIONS SHALL CONFORM TO THE LATEST AISI SPECIFICATIONS. ALL CANOPY COMPONENTS SHALL BE COATED WITH A CORROSION RESISTANT COATING SUITABLE FOR OUTDOOR USE.
- STRUCTURAL MATERIALS:  
WIDE FLANGE SECTIONS - ASTM A992 OR A572 GRADE 50 (Fy = 50 KSI)  
ANGLES / CHANNELS - ASTM A36 (Fy = 36 KSI)  
HOLLOW STRUCTURAL SECTIONS (TUBE) - ASTM A500 GRADE B (Fy = 46 KSI)  
PIPE SECTIONS - ASTM A53, GRADE B (Fy = 35 KSI)  
PLATE - ASTM A36 (Fy = 36 KSI)  
ROOF DECK - ASTM A653, GRADE 40 (Fy = 40 KSI), GALVANIZED (G60) WITH BAKED ENAMEL FINISH  
STEEL OUTRIGGERS - ASTM A653 GR. CS (Fy = 25 KSI), GALVANIZED (G90) PER ASTM 924  
STRUCTURAL BOLTS - ASTM A325  
ANCHOR BOLTS - ASTM F1554 GR. 36; ASTM A36; OR ASTM A307 MATERIAL (Fy = 36 KSI)
- WELDING OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH LATEST ANSI / AWS D1.1
- FIELD CONNECTIONS SHALL BE BOLTED CONNECTIONS UNLESS SPECIFIED ON DRAWING.
- ALL STRUCTURAL BOLTED CONNECTIONS SHALL USE ASTM A325 BOLTS. BOLTED JOINTS SHALL BE TIGHTENED TO SNUG TIGHT PER LATEST RCSC SPECIFICATION.
- STRUCTURAL STEEL SHALL BE SHOP COATED WITH RED-OXIDE RUST INHIBITIVE PRIMER. THE GENERAL CONTRACTOR SHALL PAINT THE CANOPY, INCLUDING BUT NOT LIMITED TO STEEL COLUMNS, CANOPY FRAMING AND EXPOSED STEEL.
- DESIGN LOADS PER LOCAL BUILDING CODE REQUIREMENTS.

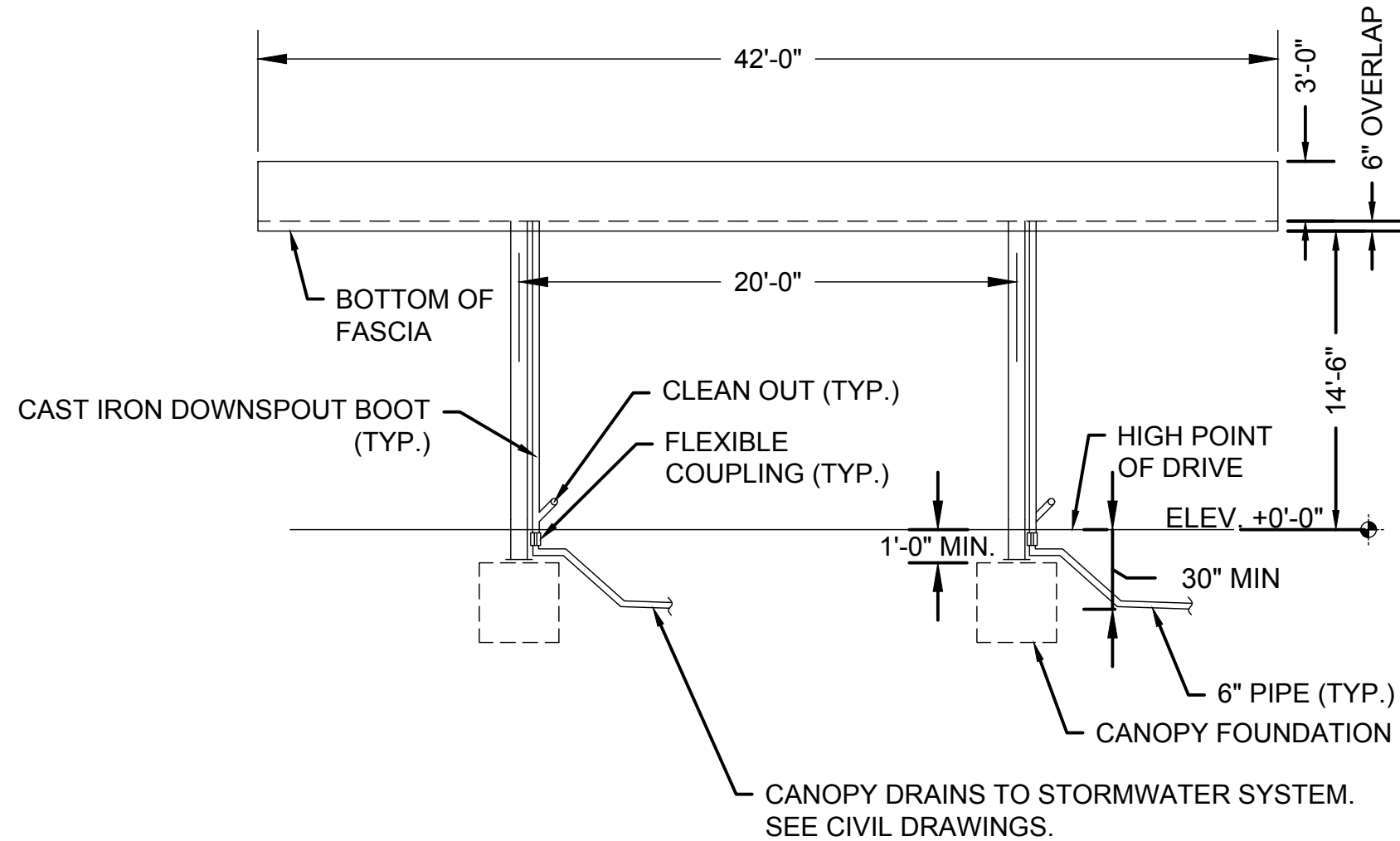


NOTE:

- FLUSH-MOUNTED LIGHTING TO BE INSTALLED IN THE CANOPY DECKING TO ILLUMINATE THE FUELING PAD AREA.

1 END ELEVATION

SCALE: N.T.S.

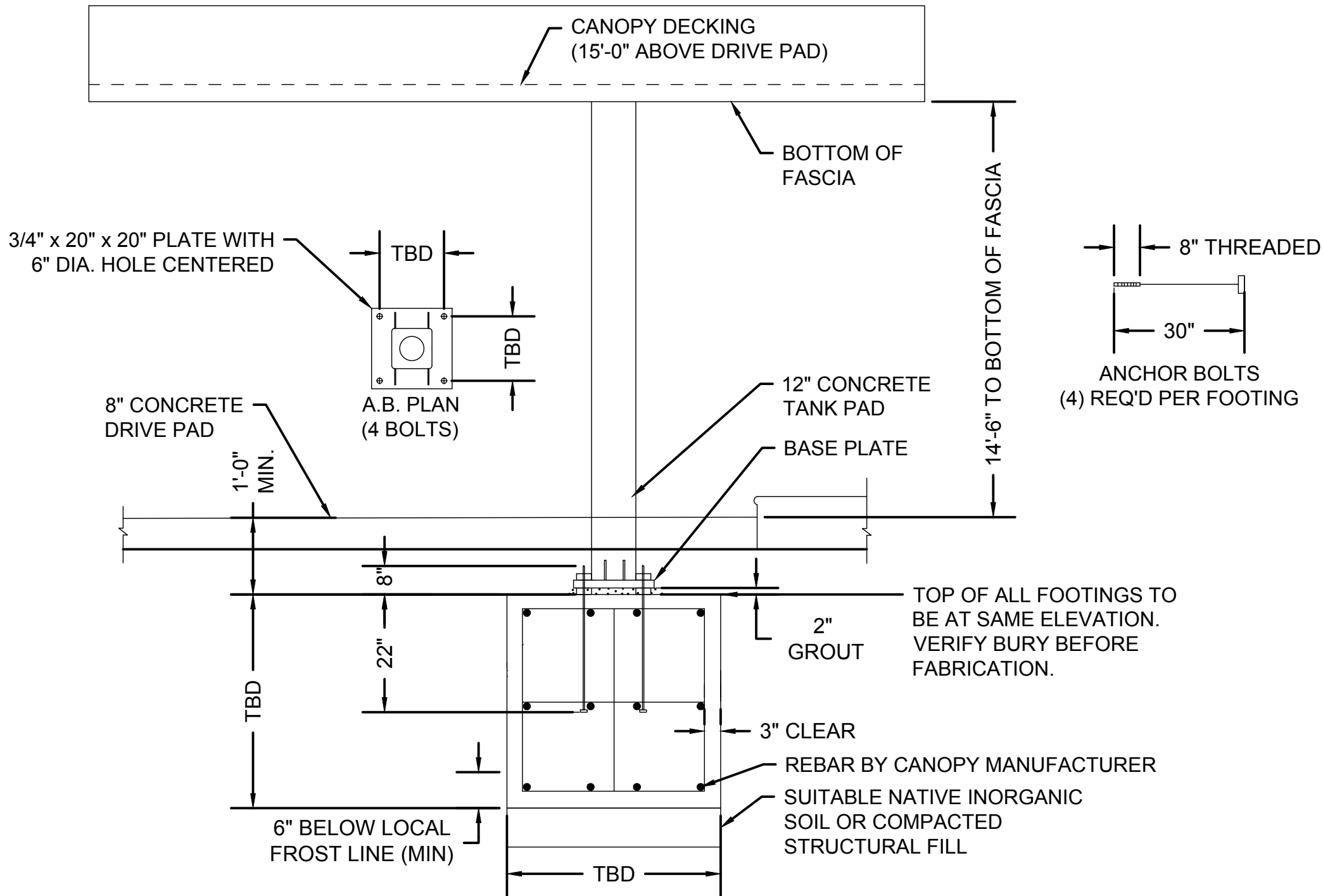


NOTE:

- FLUSH-MOUNTED LIGHTING TO BE INSTALLED IN THE CANOPY DECKING TO ILLUMINATE THE FUELING PAD AREA.

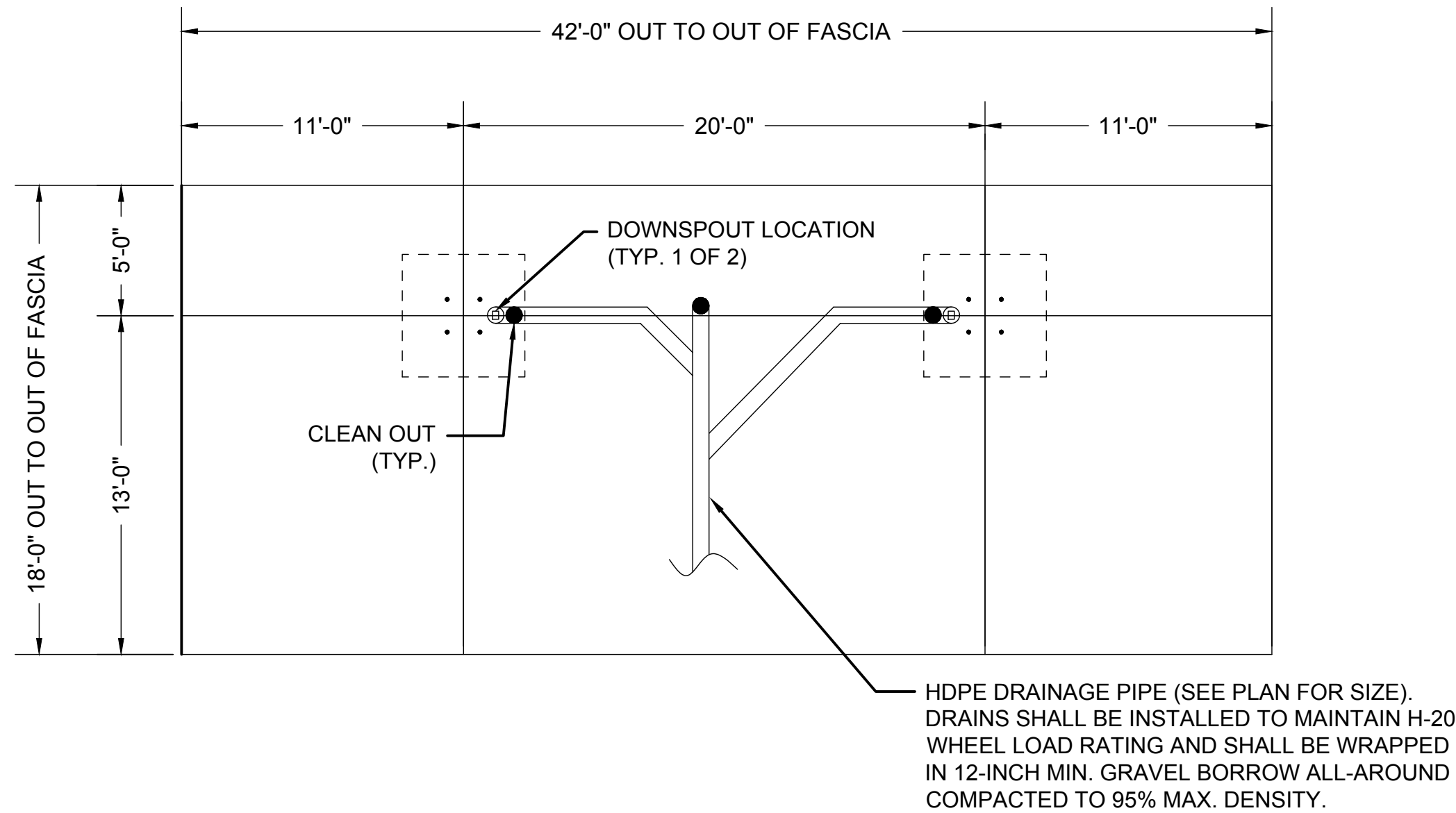
2 SIDE ELEVATION

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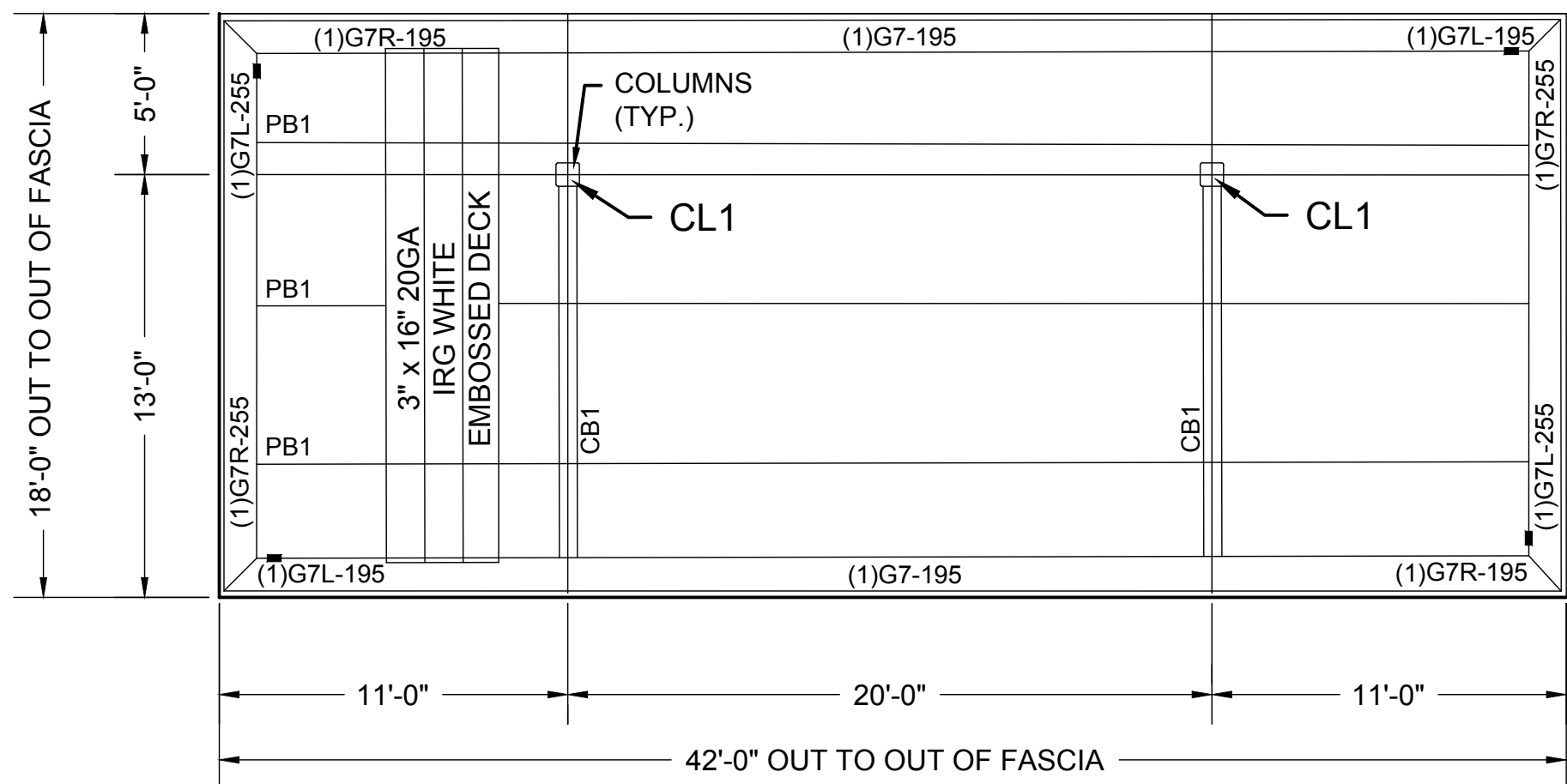
3 FOUNDATION DETAIL

SCALE: N.T.S.



4 FOUNDATION PLAN

SCALE: N.T.S.



5 CANOPY PLAN

SCALE: N.T.S.

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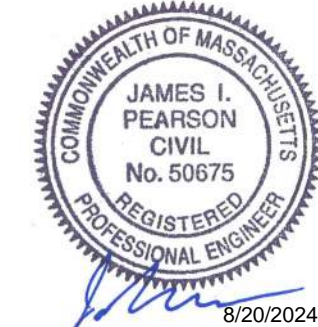
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No.	Date	Description
3	08/12/24	PERMITTING FUEL SYSTEM DESIGN
2	05/15/24	PER CONSERVATION FEEDBACK
1	04/10/24	LOCAL PERMIT APPLICATIONS

COA:

Seal:



Issued For:

**PERMITTING**

Scale:

Date: APRIL 2024

Drawn By:

Reviewed By:

Approved By:

W&S Project No.: ENG22-1087

W&S File No.:

Drawing Title:

**CANOPY  
LAYOUT**

Sheet Number:

**EQ504**