

PROPOSED RETAIL MOTOR FUEL OUTLET SITE RE-DEVELOPMENT PLANS

for

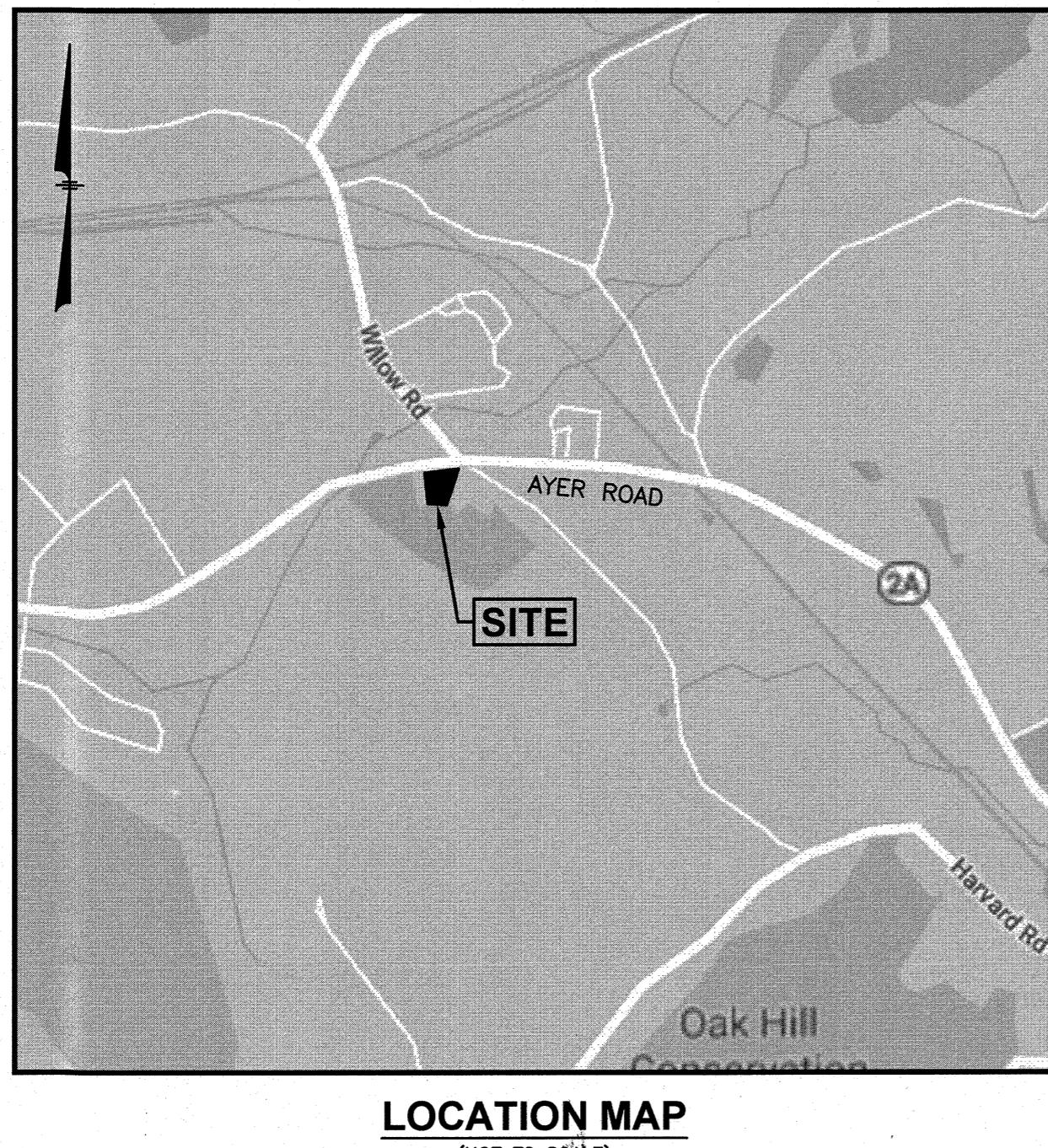
**PARCEL ID: U45-7-0, U45-7-B,
U45-8-A, & U45-11-0**

**254, 256 & 260 AYER ROAD
LITTLETON, MASSACHUSETTS**

**PARCEL ID: 30-16
0 LITTLETON ROAD
AYER, MASSACHUSETTS**

Prepared for:

**ENERGY NORTH GROUP
2 INTERNATIONAL WAY
LAWRENCE, MA 01843**



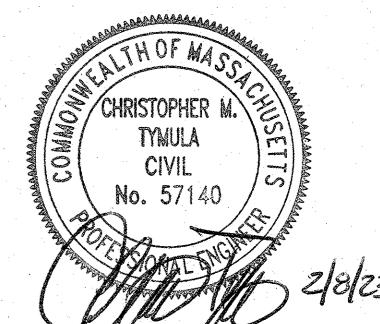
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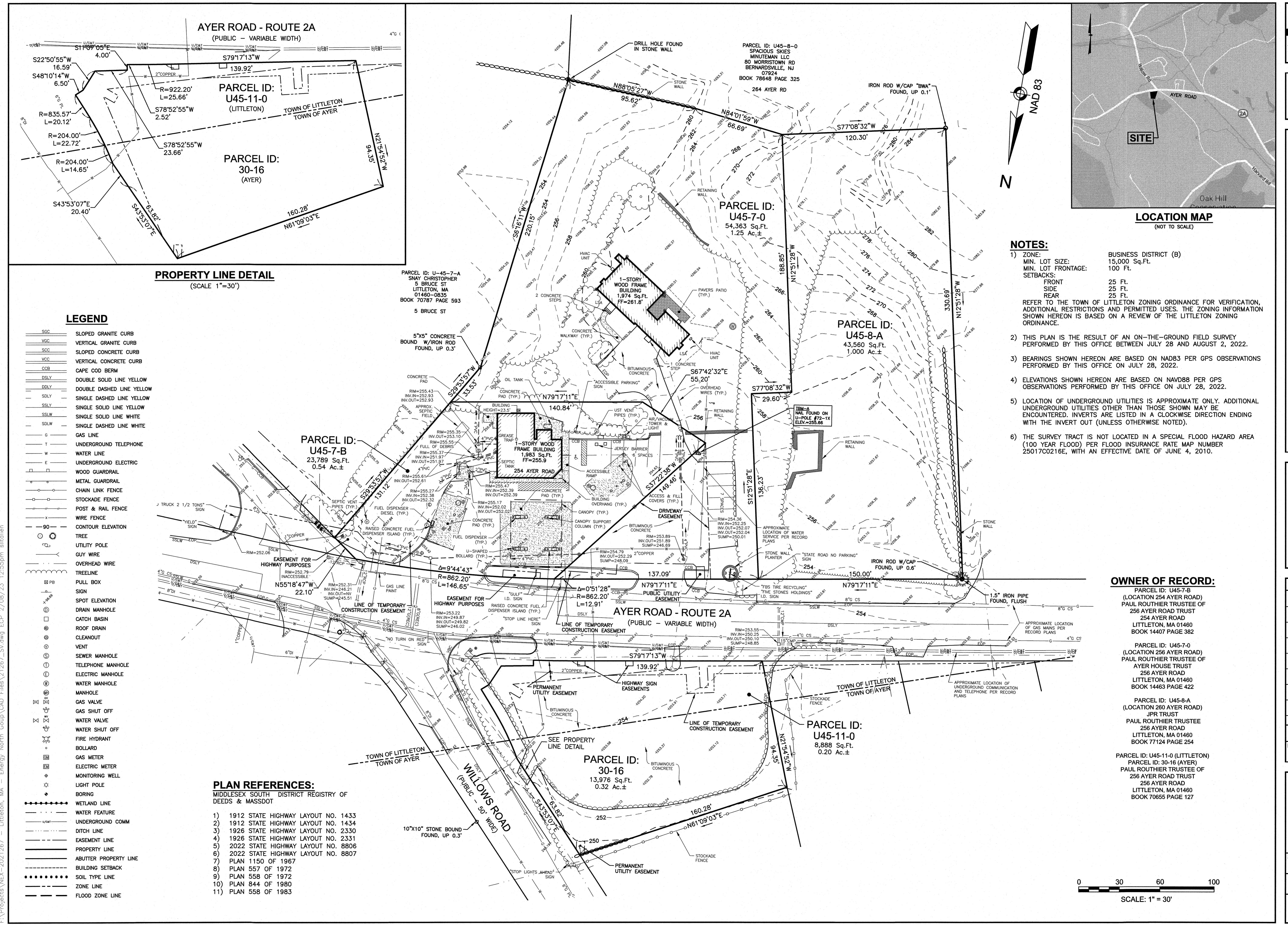
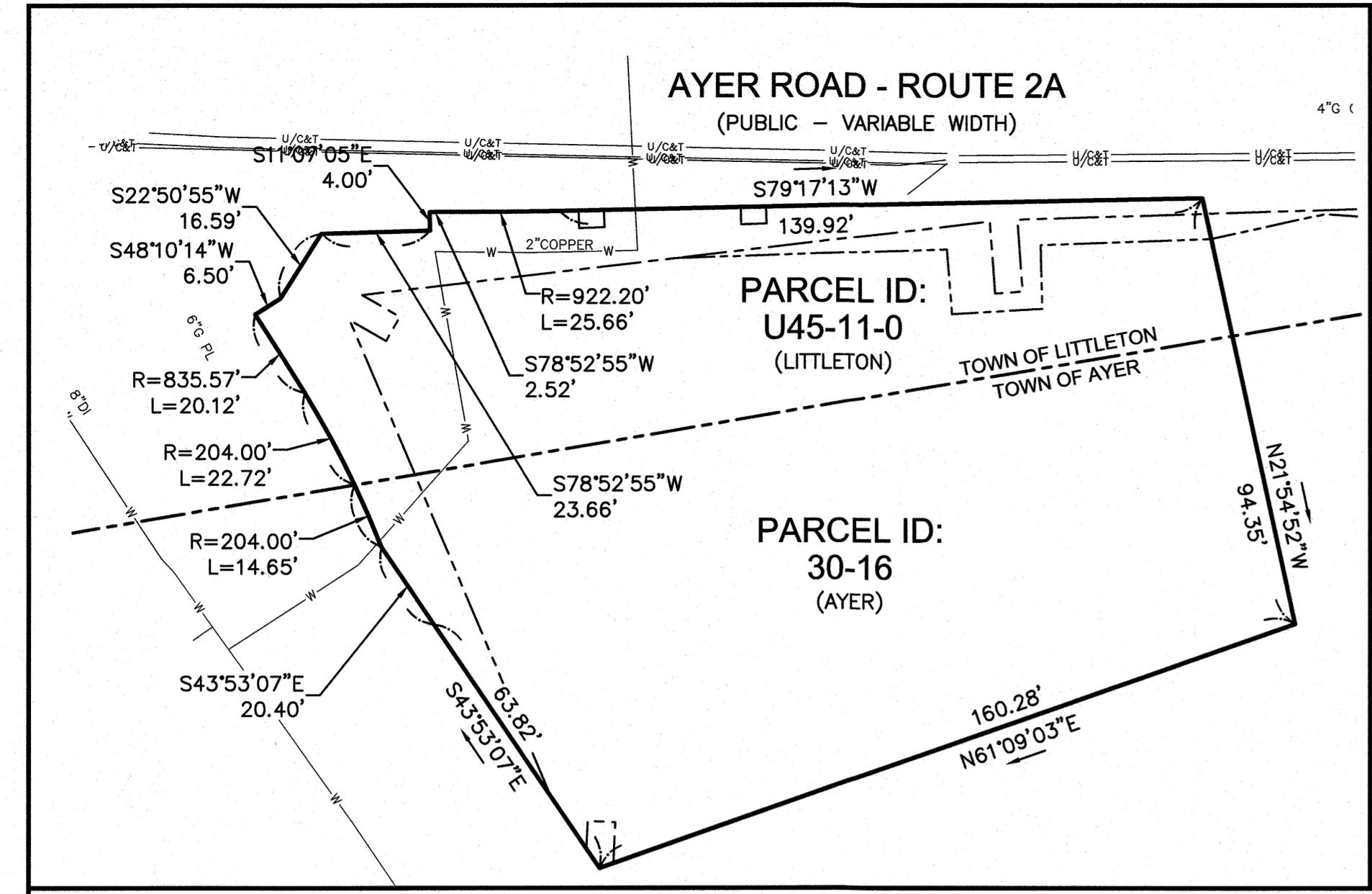
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REVISIONS		
NO.	REVISION	DATE
		FEBRUARY 8, 2023

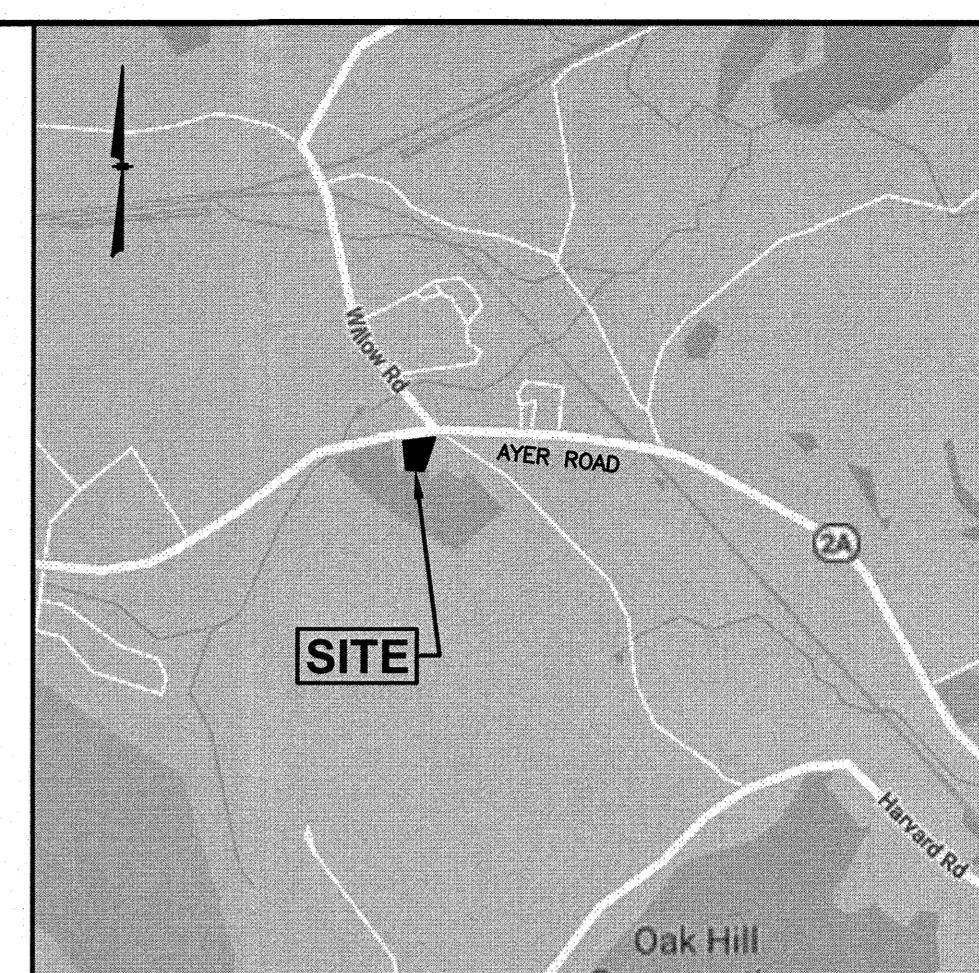
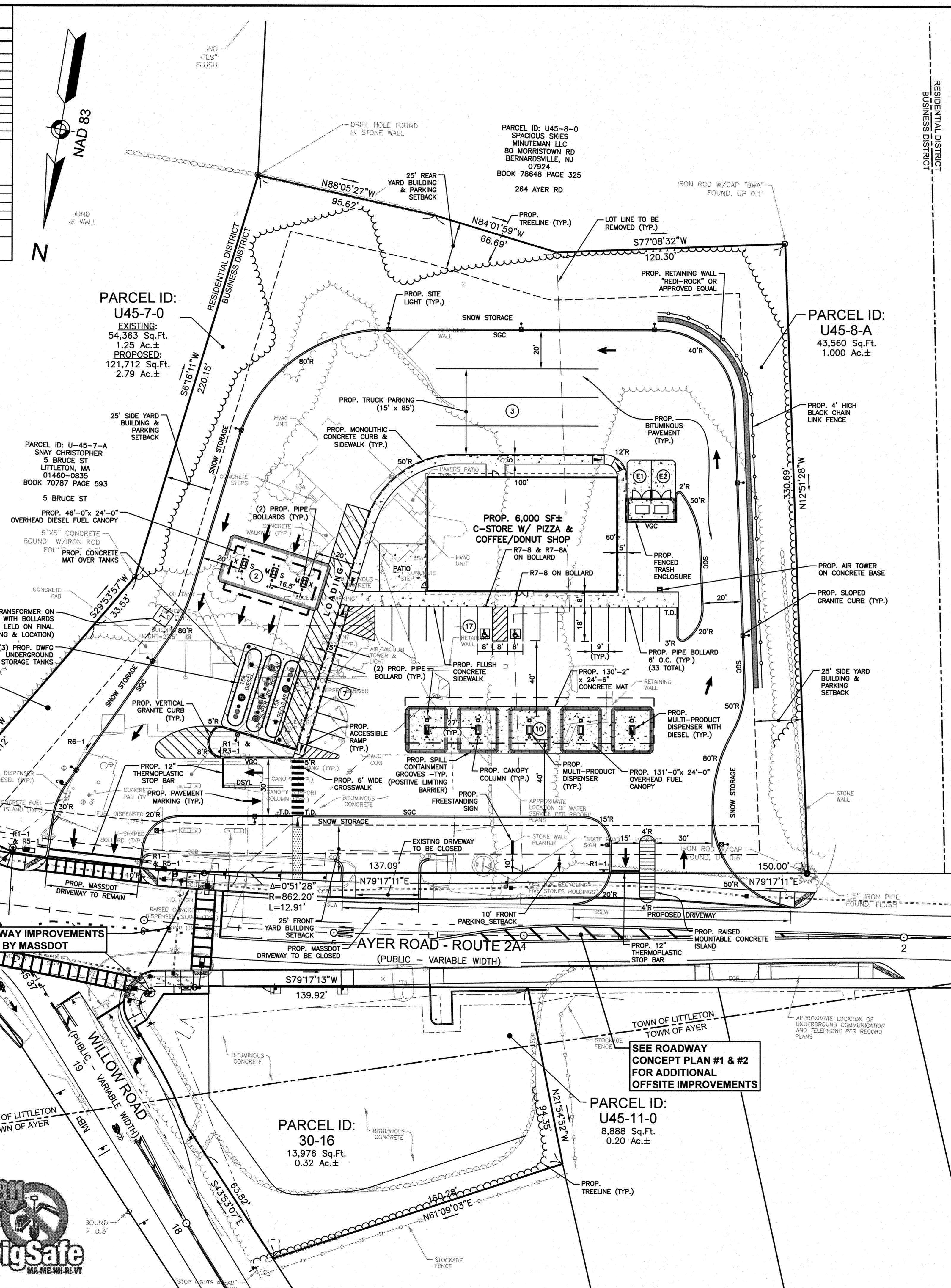
DRAWN/DESIGN BY SJB/CNM CHECKED BY CMT

TITLE SHEET	
SCALE:	NOT TO SCALE
PROJECT NO.	NEX-2021267
1 OF 14	



ZONE: BUSINESS DISTRICT (B) & WATER RESOURCES DISTRICT		
DESCRIPTION	REQUIRED	PROVIDED
MINIMUM LOT AREA Sq. Ft.	15,000 SF	121,712 SF
MINIMUM LOT FRONTAGE	100'	468.75'
MINIMUM FRONT YARD BUILDING SETBACK	25'	68.1' (CANOPY)
MINIMUM SIDE YARD BUILDING SETBACK	25'	46.2' (CANOPY)
MINIMUM REAR YARD BUILDING SETBACK	25'	118.1' (C-STORE)
MINIMUM FRONT PAVEMENT SETBACK	10'	28.7'
MINIMUM PARKING PAVEMENT SETBACK	25'	30'
GASOLINE/OIL FACILITY SETBACK	SERVICE BLDG: 40' FROM STREET LINE GAS PUMP: 10' FROM STREET LINE	68.1' 73.1'
PARKING SPACE DIMENSIONS	NONE	9'x18'
MINIMUM NUMBER PARKING SPACES	RETAIL: 1 SPACE PER 150 SF OF LEASABLE FLOOR AREA $6,000 \text{ SF} \times 1 \text{ SP} / 150 \text{ SF} = 40 \text{ SPACES}$	41 SPACES (INCLUDING 12 SPACES AT FUEL DISPENSERS & 2 EMPLOYEE SPACES)
MAXIMUM FLOOR AREA RATIO (FAR)	0.6	0.05
MAXIMUM IMPERVIOUS COVERAGE	80% (50% IN WATER RESOURCES DISTRICT)	61.0% (74,244 SF/121,712 SF)*
MAXIMUM BUILDING HEIGHT	32'	< 32'
MAXIMUM BUILDING COVERAGE	50%	8.4% (10,248/121,712 SF)
FREESTANDING SIGN AREA, HEIGHT+SETBACK	1 SIGN; 50 SF PRINCIPAL/ 25 SF SECONDARY; 18' MAX. HEIGHT	SEE SIGNAGE SITE PLAN
WALL SIGN AREA	15% OF EXTERIOR SURFACE WALL AREA. NOT TO EXCEED 50 SF; 1 WALL SIGN PER BLDG. FRONTAGE WITH AN ENTRANCE & FACING STREET	SEE SIGNAGE SITE PLAN

SIGN KEY			
SIGN I.D. NUMBER	TEXT/COLOR	SIZE/REMARKS	
R1-1	 STOP R/W	30" x 30" NEW SIGN WITH POST	
R3-1	 B/W/R	24" x 24" NEW SIGN WITH POST	
R5-1	 DO NOT ENTER R/W	30" x 30" NEW SIGN WITH POST	
R6-1	 ONE WAY B/W	36" x 12" NEW SIGN WITH POST	
R7-8	 RESERVED PARKING G/B/W	12" x 18" NEW SIGN WITH POST	
R7-8A	 VAN ACCESSIBLE G/W	6" X 12"	

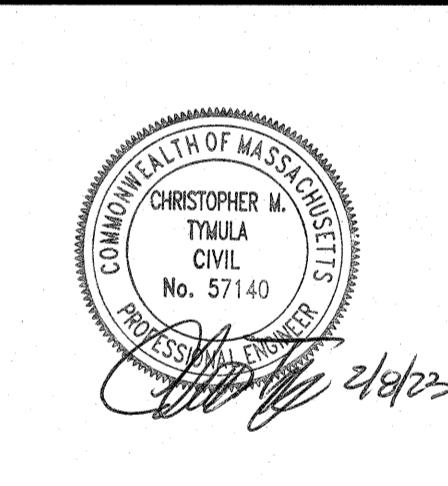


LOCATION MAP

NOTES

- 1) THE PURPOSE OF THIS PLAN IS TO DEMOLISH THE EXISTING RETAIL MOTOR FUEL OUTLET AND COMMERCIAL BUILDING AND CONSTRUCT A NEW RETAIL MOTOR FUEL OUTLET.
- 2) EXISTING BOUNDARY AND PLANIMETRIC INFORMATION AS SHOWN IS THE RESULT OF AN ACTUAL FIELD SURVEY BY THIS OFFICE.
- 3) LITTLETON TAX MAP U45 LOTS 7, 7-B, 8-A, 11
AYER TAX MAP 30 LOT 16
- 4) ZONING DISTRICT: BUSINESS DISTRICT (B) / WATER RESOURCE DISTRICT
- 5) PROPOSED LOT 7-0 AREA (COMBINED) = 121,712 Sq.Ft.
= 2.79 Ac.±
- 6) EXISTING USE: RETAIL MOTOR FUEL OUTLET WITH 1,983 SF C-STORE AND 5 DISPENSERS AND A TIRE RECYCLING BUSINESS.

PROPOSED USE: RETAIL MOTOR FUEL OUTLET WITH 6,000 SF C-STORE WITH PIZZA & COFFEE/ DONUT SHOP, RETAIL FUEL CANOPY WITH 5 DISPENSERS (10 FUELING POSITIONS) AND A COMMERCIAL DIESEL CANOPY WITH 3 DISPENSERS (2 FUELING POSITIONS).
- 7) ALL BUILDINGS AND SITE CONSTRUCTION SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) OF 1990, AS AMENDED.
- 8) THE LOCATIONS OF EXISTING SUBSURFACE UTILITIES SHOWN ON THIS PLAN WERE COMPILED FROM AVAILABLE RECORD DRAWINGS AND ARE NOT WARRANTED TO BE CORRECT. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING SUBSURFACE UTILITIES PRIOR TO PERFORMING ANY WORK.
- 9) WRITTEN DIMENSIONS ON THIS PLAN TAKE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN THE EVENT OF A CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWINGS AND/OR SPECIFICATIONS, THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR.
- 10) THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIGSAFE 811 PRIOR TO ANY EXCAVATION.
- 11) ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF LITTLETON AND THE STATE OF MASSACHUSETTS.
- 12) THE SURVEY TRACT IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA (100 YEAR FLOOD) PER FLOOD INSURANCE RATE MAP NUMBER 25017C0216E, WITH AN EFFECTIVE DATE OF JUNE 4, 2010.
- 13) ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS AND THE STANDARD CONSTRUCTION DRAWINGS AS SUPPLIED BY THE DEVELOPER.
- 14) A SIGN PERMIT SHALL BE OBTAINED PRIOR TO INSTALLATION.
- 15) PROPOSED SNOW STORAGE AREAS AS SHOWN. ANY EXCESS SNOW TO BE TRUCKED OFF-SITE.
- 16) THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY GREENMAN-PEDERSEN, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR AND/OR ENGINEER AS INCLUDED IN THE PLAN SET DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE AND/OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
- 17) GENERAL CONTRACTOR TO IS RESPONSIBLE FOR OBTAINING A MASSACHUSETTS DEP-AIR QUALITY PERMIT BWP AQ 06 PRIOR TO BUILDING CONSTRUCTION.
- 18) ALL UNDERGROUND STORAGE TANKS, PRODUCT PIPING AND VENT LINES SHALL COMPLY WITH CURRENT STATE AND E.P.A. REGULATIONS.
- 19) SELF-SERVICE APPROVAL IS REQUIRED FROM THE OFFICE OF THE STATE FIRE MARSHAL. SEE APPROVED FIRE SUPPRESSION PLAN FOR LAYOUT OF SPILL CONTAINMENT GROOVES (POSITIVE LINING BARRIER).
- 20) EXISTING IMPERVIOUS COVERAGE = 25,764 SF (21.2%)
PROPOSED IMPERVIOUS COVERAGE = 74,244 SF (61.0%)
PROPOSED UNPAVED AREA = 15,480 SF (13.8%)

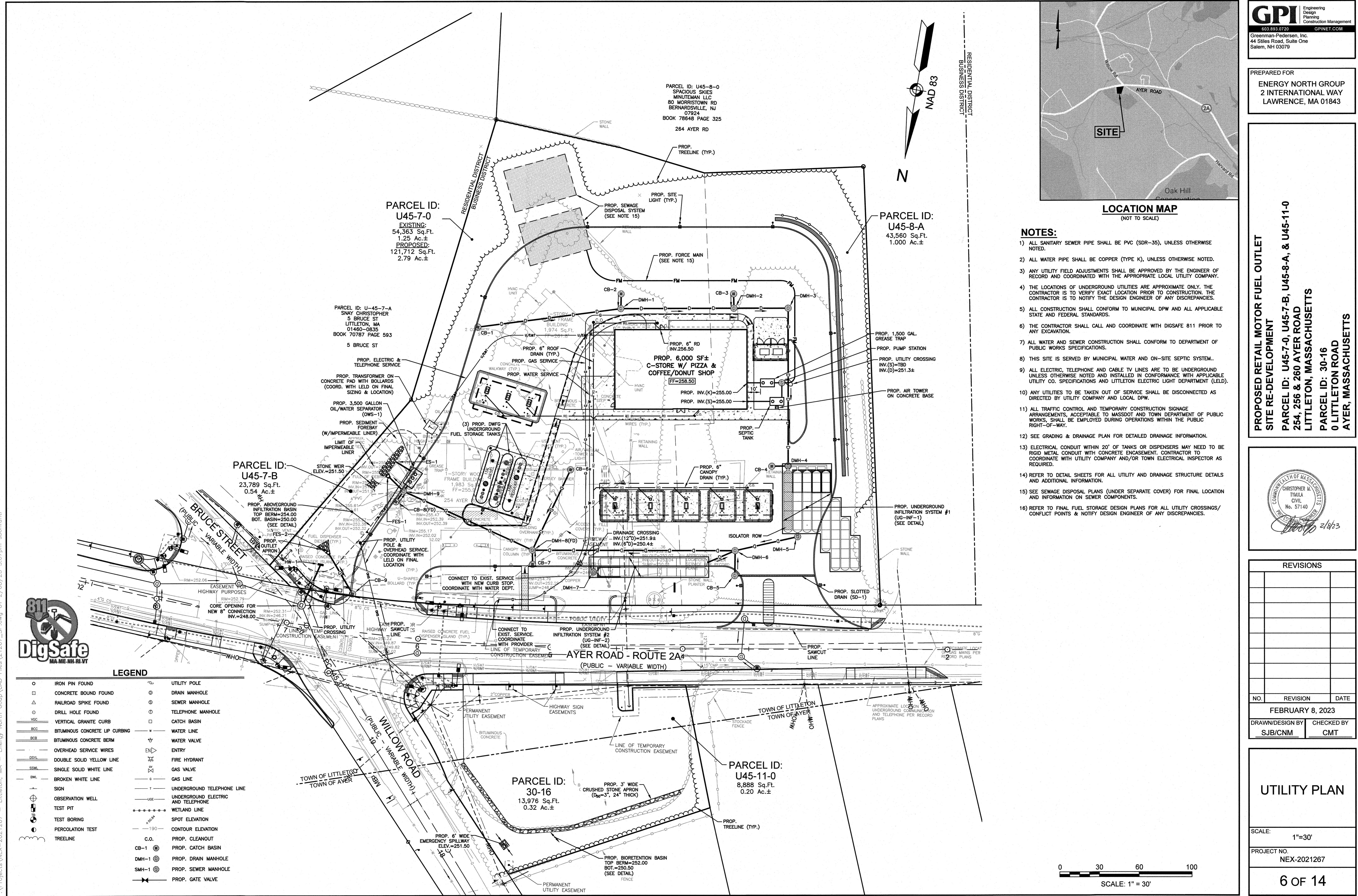


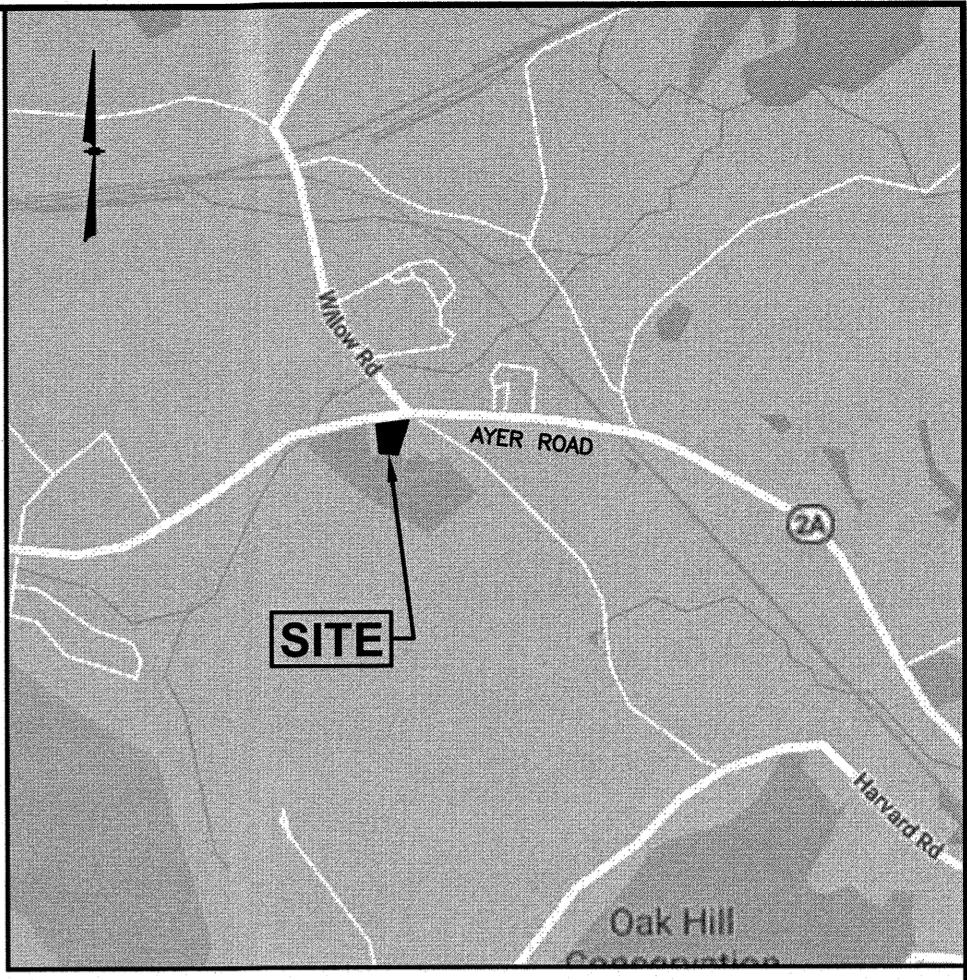
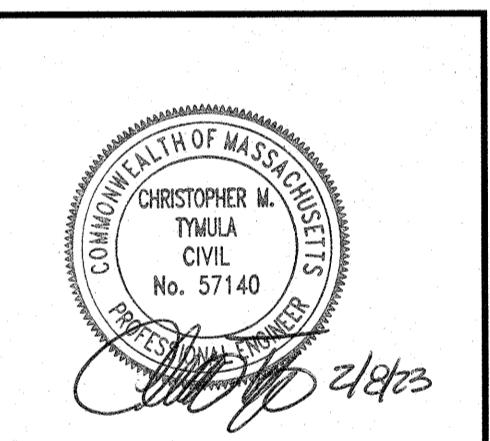
REVISIONS

SITE PLAN

SCALE: 1"=30'
PROJECT NO. NEX-2021267

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LOCATION MAP
(NOT TO SCALE)

**OPERATIONS/MAINTENANCE PLAN FOR
STORMWATER SYSTEM:**

CONSTRUCTION PHASE:
THE BMP'S ASSOCIATED WITH THIS PROJECT WILL BE OWNED BY ENERGY NORTH GROUP WHO WILL BE RESPONSIBLE FOR INSPECTION, OPERATION AND MAINTENANCE.

- 1) THE CONTRACTOR IS TO INSTALL AND MAINTAIN DRAINAGE FACILITIES AS SHOWN ON THE SITE PLANS BY GREENMAN-PEDERSEN, INC.
- 2) PRIOR TO CONSTRUCTION, ALL EROSION/SILT CONTROL DEVICES SHOWN ON ABOVE PLAN ARE TO BE INSTALLED TO PREVENT SITE INTRUSION INTO SURROUNDING AREAS. THIS INCLUDES THE PROVISION TO SET SILT FENCES AT ALL SITES WHICH MAY ERODE IN THE DIRECTION OF ANY OPEN DRAINAGE FACILITIES OR ABUTTING PROPERTY. SUCH PREVENTIVE MEASURES ARE TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS.
- 3) ALL CONSTRUCTION OF DRAINAGE FACILITIES IS TO BE INSPECTED BY INSPECTORS FROM THE CITY OF NEXHOM AND BY AN AUTHORIZED AGENT TO VERIFY CONFORMANCE TO THE DESIGN PLAN.
- 4) THE SEQUENCE OF DRAINAGE CONSTRUCTION SHALL BE AS FOLLOWS:
 - A) CLEAR GRUB, EXCAVATE AREAS FOR DETENTION/INFILTRATION SYSTEMS.
 - B) INSTALL CATCH BASINS, PIPES AND MANHOLES.
- 5) EROSION CONTROLS ARE TO BE INSPECTED AND MAINTAINED ON A DAILY BASIS. UPON DISCOVERY OF SILTATION BUILD-UP IN ANY CATCH BASIN SUMP OR ANY OTHER STRUCTURE, CLEANING SHALL BE PERFORMED WITHIN 24 HOURS.
- 6) ALL EXPOSED SOILS SHALL BE IMMEDIATELY STABILIZED WITH A LAYER OF MULCH HAY.
- 7) UPON INSTALLATION OF CATCH BASINS, INLET PROTECTION - AS DESCRIBED ON AFOREMENTIONED PLAN - SHALL BE INSTALLED AND MAINTAINED UNTIL READY FOR PAVING.
- 8) PRIOR TO CONSTRUCTION OF IMPERVIOUS AREAS, ALL DRAINAGE STRUCTURES AND PIPES SHALL BE INSTALLED AND INSPECTED FOR PROPER FUNCTION. DURING CONSTRUCTION OF OTHER SITE FEATURES, ALL DRAINAGE FACILITIES SHALL BE INSPECTED ON A DAILY BASIS AND CLEANED/REPAIRED IMMEDIATELY UPON DISCOVERY OF SEDIMENT BUILD-UP OR DAMAGE.
- 9) AFTER PAVING IS INSTALLED, THE SITE SHALL BE SWEEP CLEAN ON A MONTHLY BASIS.
- 10) INSPECTIONS ARE TO BE PERFORMED AND INSPECTION LOGS FILLED OUT ON A WEEKLY BASIS FROM THE START OF CONSTRUCTION THROUGH FINAL STABILIZATION. DURING CONSTRUCTION MEANS THE INITIAL STABILIZATION OF SOILS ASSOCIATED WITH CONSTRUCTION. FINAL STABILIZATION MEANS 70% VEGETATIVE GROWTH FOR UNPAVED AREAS.

POST CONSTRUCTION PHASE:
THE OWNER SHALL BE RESPONSIBLE FOR CONTINUED MAINTENANCE OF ALL ON-SITE DRAINAGE STRUCTURES AND SYSTEMS AND SHOULD FOLLOW PROCEDURES CONTAINED IN THE OPERATION AND MAINTENANCE PLAN (OBM).

REGULAR MAINTENANCE IS TO INCLUDE THE FOLLOWING:

- 1) INSPECTION OF ALL DRAINAGE FACILITIES (CATCH BASINS, MANHOLES & DETENTION SYSTEMS) EVERY THREE MONTHS. DURING THE FIRST YEAR OF OPERATION, ALL DRAINAGE FACILITIES SHOULD BE INSPECTED AFTER EVERY STORM, AND 2-3 DAYS AFTERWARD. DURING THESE INSPECTIONS, THE INSPECTOR AS DESIGNATED BY ENERGY NORTH GROUP, SHALL LOOK FOR EVIDENCE OF ANY FAILURE (I.E. EROSION, SILT ACCUMULATION (NEAR INLET AND OUTLET), CATCH BASIN AND IMPERMEABLE LINER DAMAGE, ETC.). A REPORT SHALL BE FILED FOR OWNER INSPECTION AND SUBMITTED TO THE TOWN ENGINEER FOR COMPLIANCE FOR ONE (1) YEAR AFTER THE ISSUANCE OF THE OCCUPANCY PERMIT OR UNTIL DEEMED NECESSARY BY THE TOWN ENGINEER.
- 2) AFTER INSPECTION, IF ANY OF THE ABOVE CONDITIONS EXIST, THE INSPECTOR SHALL NOTIFY THE DEVELOPER, WHO SHALL IMMEDIATELY ARRANGE FOR ALL NECESSARY REPAIRS AND SEDIMENT REMOVAL.
- 3) PARKING AREAS ARE TO BE SWEEP CLEAN EVERY MONTH SPRING THROUGH FALL AND OTHERWISE AS NEEDED (I.E. VISUALLY NOTICEABLE DEBRIS BUILD-UP).
- 4) THE CATCH BASINS AND DRAINAGE SYSTEM ARE TO BE INSPECTED EVERY THREE MONTHS. REMOVE OIL, DEBRIS AND SEDIMENT AFTER INSPECTIONS.
- 5) ALL GRADED SLOPES SHALL BE INSPECTED EVERY SPRING FOR EROSION. UPON DISCOVERY OF ANY FAILURE (I.E. EROSION) LOAM AND SEED SHALL BE PUT IN PLACE AND NURTURED.
- 6) DURING THE WINTER MONTHS, ALL SNOW IS TO BE STORED SUCH THAT SNOWMELT IS CONTROLLED. IN THE EVENT THE AMOUNT OF SNOW EXCEEDS SUCH CAPACITY, IT IS TO BE REMOVED OFF-SITE. THE MINIMUM AMOUNT OF DEICING CHEMICALS NEEDED IS TO BE USED.
- 7) DURING THE SUMMER MONTHS, ALL LANDSCAPE FEATURES ARE TO BE MAINTAINED IN THE MOST POSSIBLE AND CAREFUL FASHION. PESTICIDES OR OTHER CHEMICALS, IF IN QUESTION, MAINTENANCE PERSONNEL SHOULD CHECK WITH THE CONSERVATION COMMISSION. ALL PERSONNEL INVOLVED WITH THE MAINTENANCE OF LANDSCAPING WILL BE INFORMED OF THIS CONDITION.

REVISIONS		
NO.	REVISION	DATE

FEBRUARY 8, 2023

DRAWN/DESIGN BY **SJB/CNM** CHECKED BY **CMT**

**EROSION & SEDIMENT
CONTROL PLAN**

SCALE: 1"=30'
PROJECT NO. NEX-2021267

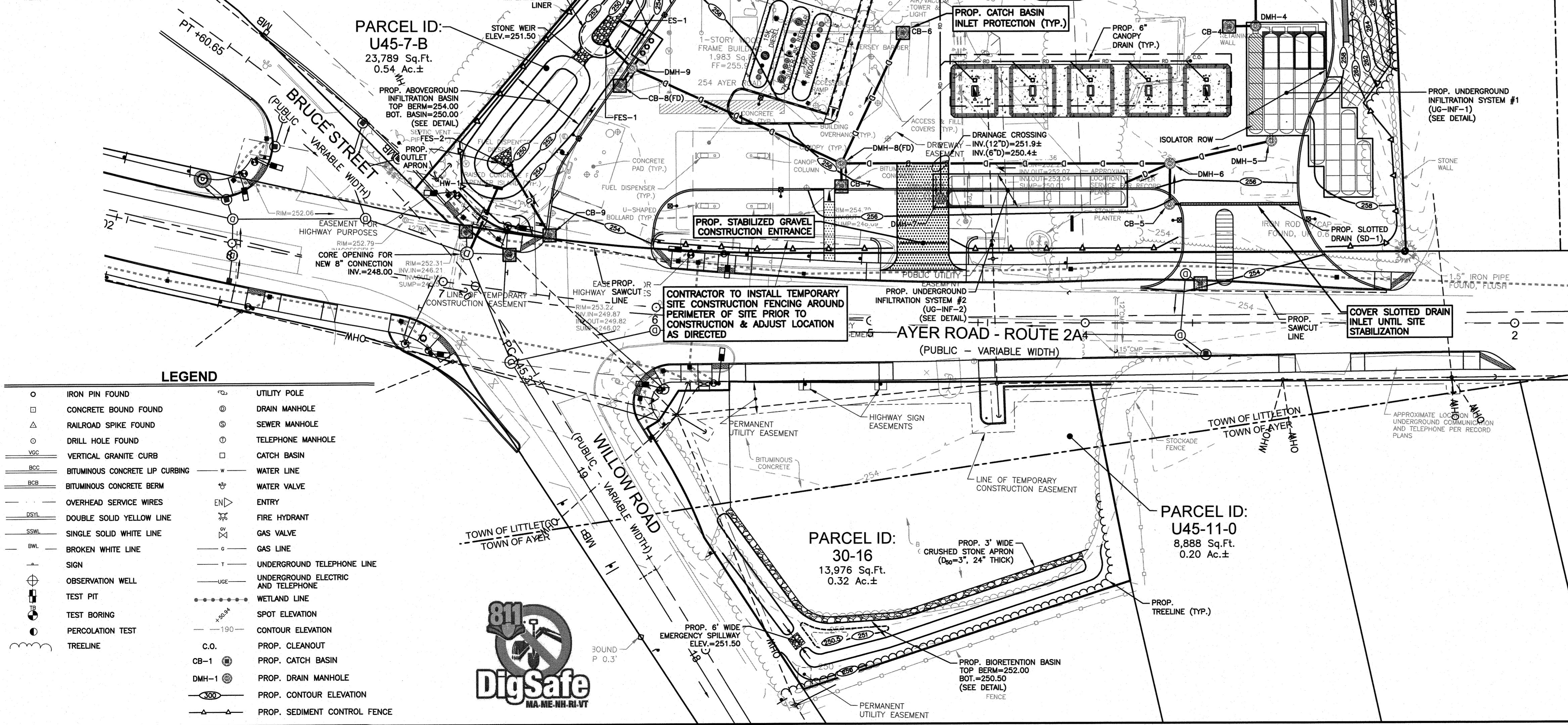
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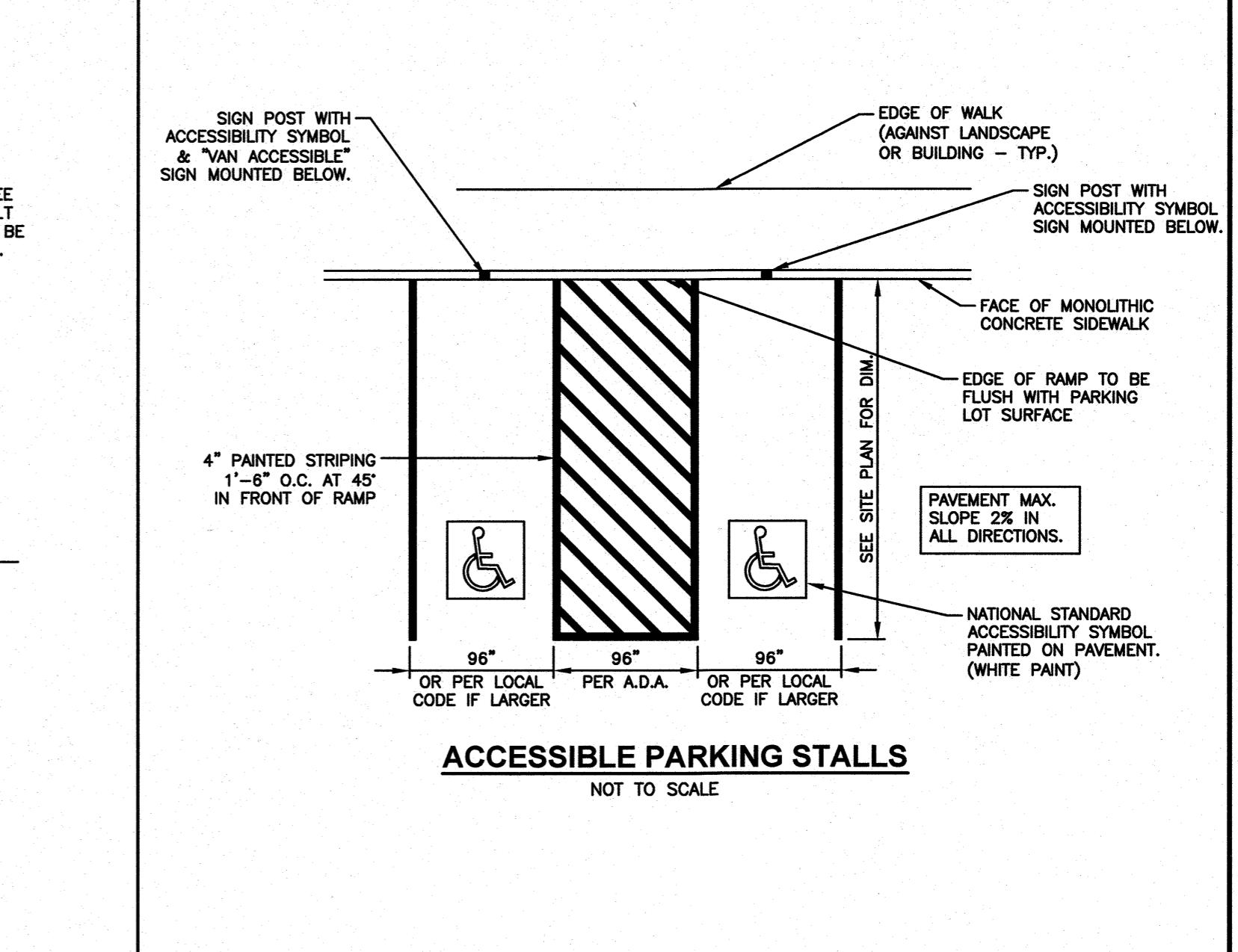
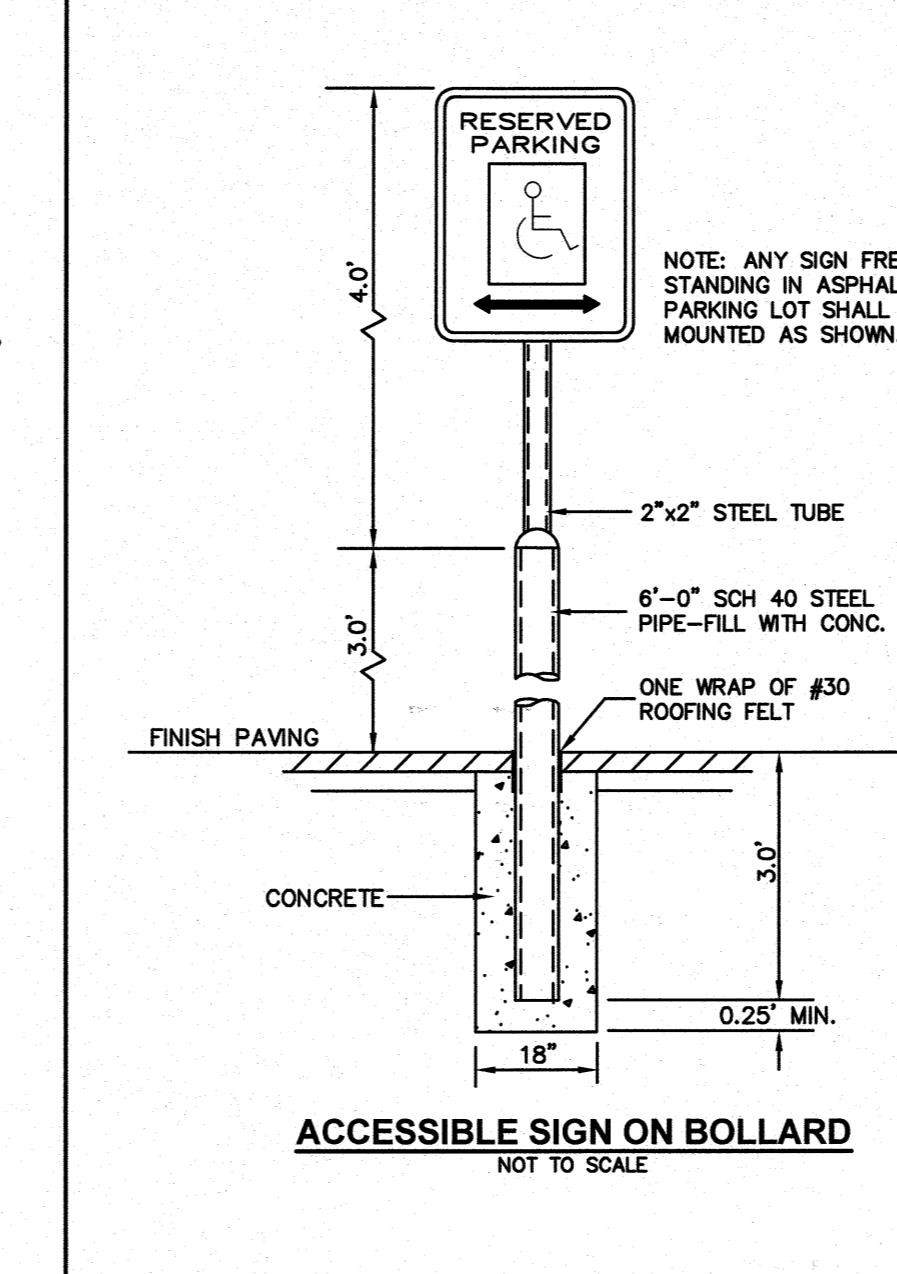
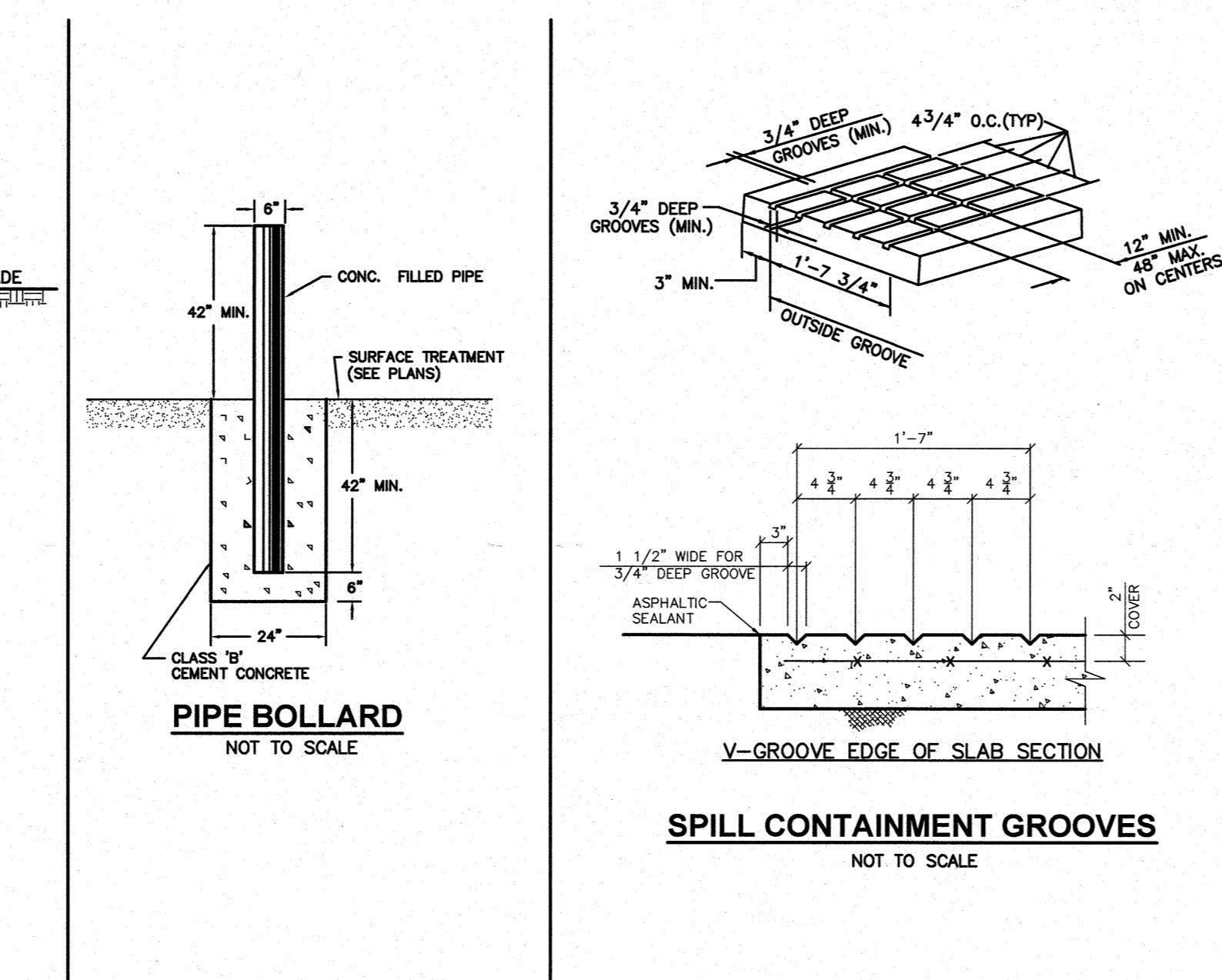
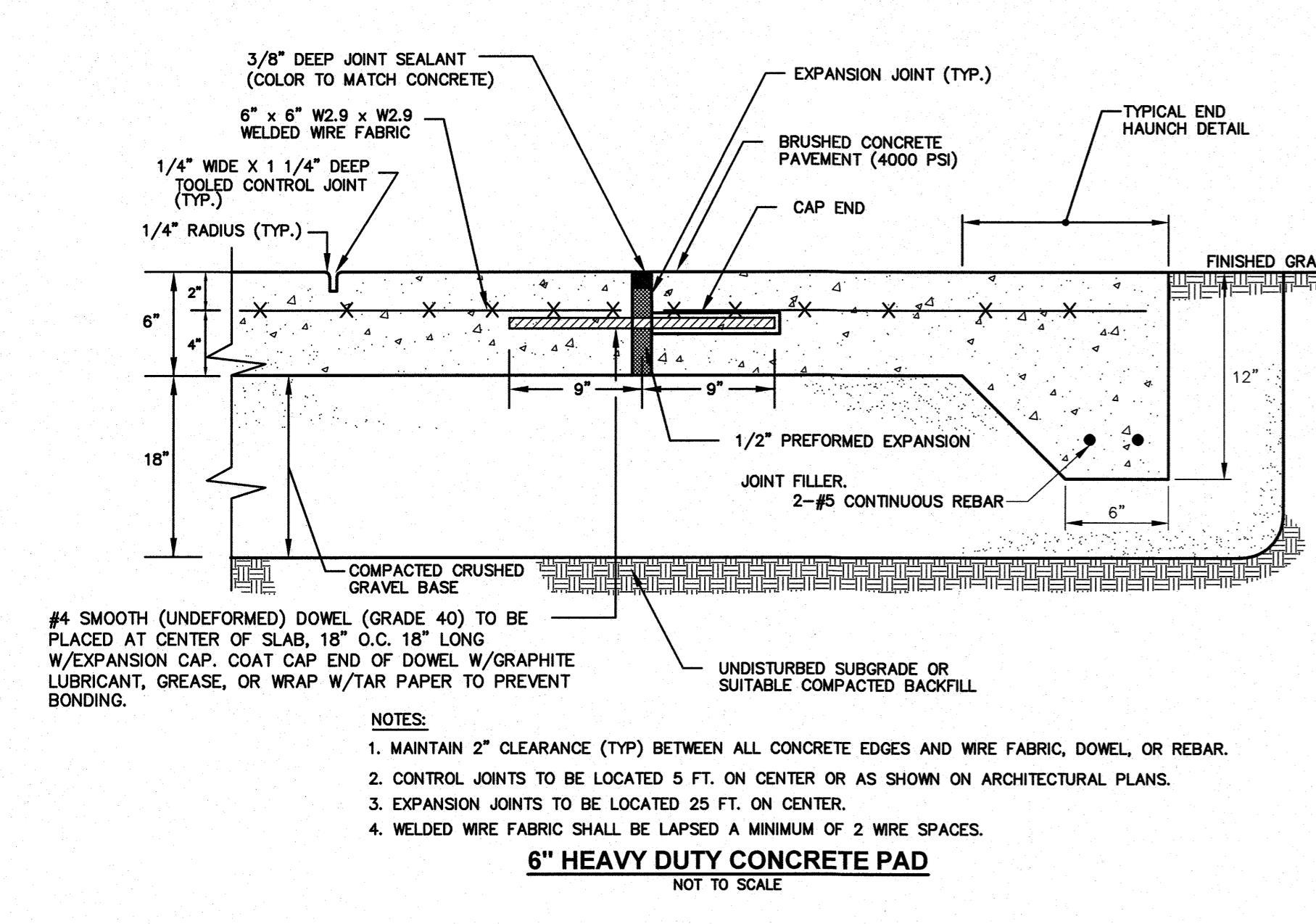
TEMPORARY EROSION CONTROL MEASURES:

- 1) SEDIMENT TRAPS SHALL BE INSTALLED AS REQUIRED. BARRIERS AND TRAPS ARE TO BE MAINTAINED AND CLEANED UNTIL ALL SLOPES HAVE A HEALTHY STAND OF GRASS.
- 2) MULCH SHALL BE MOWINGS OF ACCEPTABLE HERBACEOUS GROWTH, FREE FROM NOXIOUS WEEDS OR WOODY STEM, AND SHALL BE DRY. NO SALT HAY SHALL BE USED.
- 3) FILL MATERIAL SHALL BE FREE FROM STUMPS, WOOD, ROOTS, ETC.
- 4) STOCKPILED MATERIALS SHALL BE PLACED ONLY IN AREAS SHOWN ON THE PLANS. STOCKPILES SHALL BE PROTECTED BY SILTATION FENCE AND SEEDED TO PREVENT EROSION. THESE MEASURES SHALL REMAIN UNTIL ALL MATERIAL HAS BEEN PLACED OR DISPOSED OFF SITE.
- 5) ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED. A MINIMUM OF 6 INCHES OF LOAM SHALL BE INSTALLED WITH NOT LESS THAN ONE POUND OF SEED PER 50 SQUARE YARDS OF AREA.
- 6) SEED MIX SHALL BE EQUAL PARTS OF RED FESCUE (CREEPING), KENTUCKY BLUEGRASS, REDTOP, PERENNIAL RYEGRASS.
- 7) AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED.
- 8) PAVED ROADWAYS AND PARKING LOTS MUST BE KEPT CLEAN AT ALL TIMES. PROVIDE SWEEPING ON A DAILY BASIS OR AS DIRECTED BY THE TOWN.
- 9) ALL CATCH BASIN INLETS WILL BE PROTECTED WITH INLET PROTECTION - SEE DETAIL.
- 10) ALL Dewatering OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTER AREA.

CONSTRUCTION SEQUENCE:

- 1) INSTALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES AS REQUIRED.
- 2) CUT AND STUMP AREAS OF PROPOSED CONSTRUCTION.
- 3) REMOVE AND STOCKPILE TOPSOIL. STOCKPILE SHALL BE SEDED TO PREVENT EROSION.
- 4) CONSTRUCT CLOSED DRAINAGE SYSTEM. PROTECT CULVERT INLETS AND CATCH BASINS WITH SEDIMENTATION BARRIERS.
- 5) PERFORM SITE GRADING, PLACING SILTATION FENCES AS REQUIRED TO CONTROL SOIL EROSION.
- 6) INSTALL UNDERGROUND UTILITIES.
- 7) BEGIN TEMPORARY AND PERMANENT SEEDING AND MULCHING. ALL CUT AND FILL SURFACES SHALL BE SEDED OR MULCHED IMMEDIATELY AFTER THEIR CONSTRUCTION.
- 8) DAILY, OR AS REQUIRED, CONSTRUCT, INSPECT, AND IF NECESSARY, RECONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT FENCES AND SEDIMENT TRAPS INCLUDING MULCH AND SEEDING. REFER TO OPERATOR AND INSPECTOR COPIES OF ALL INSPECTION REPORTS ARE TO BE PROVIDED TO THE CONSERVATION COMMISSION DURING CONSTRUCTION AND AVAILABLE UPON REQUEST AFTER CONSTRUCTION IS COMPLETED.
- 9) BEGIN EXCAVATION FOR AND CONSTRUCTION OF BUILDINGS.
- 10) FINISH PAVING ALL DRIVES AND PARKING AREAS.
- 11) COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- 12) CLEAN OUT DRAINAGE SYSTEM AFTER FINAL PAVING AND SITE STABILIZATION. REFER TO STORMWATER OBM.
- 13) AFTER GRASS HAS BEEN FULLY GERMINATED IN ALL SEDED AREAS, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

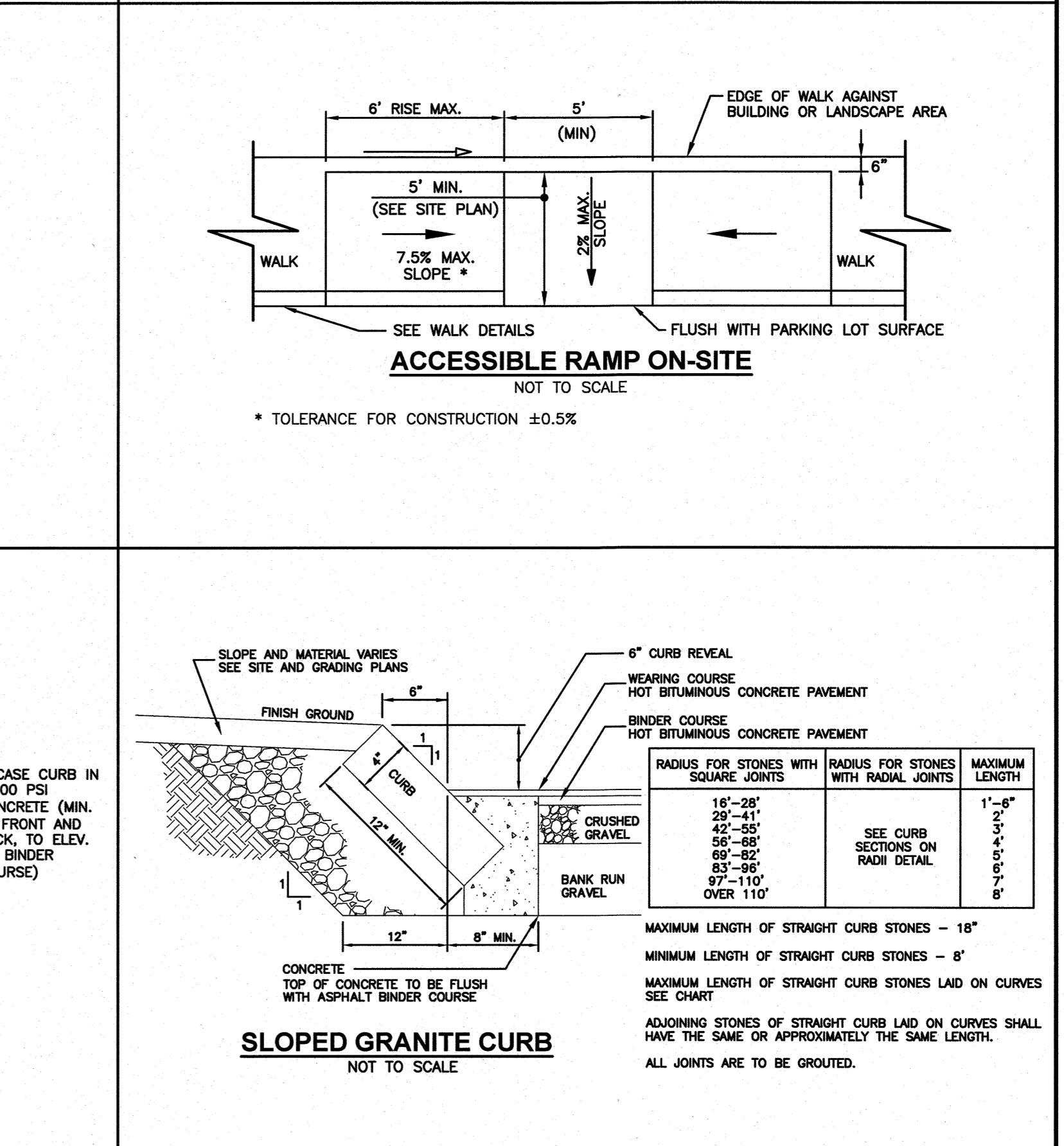
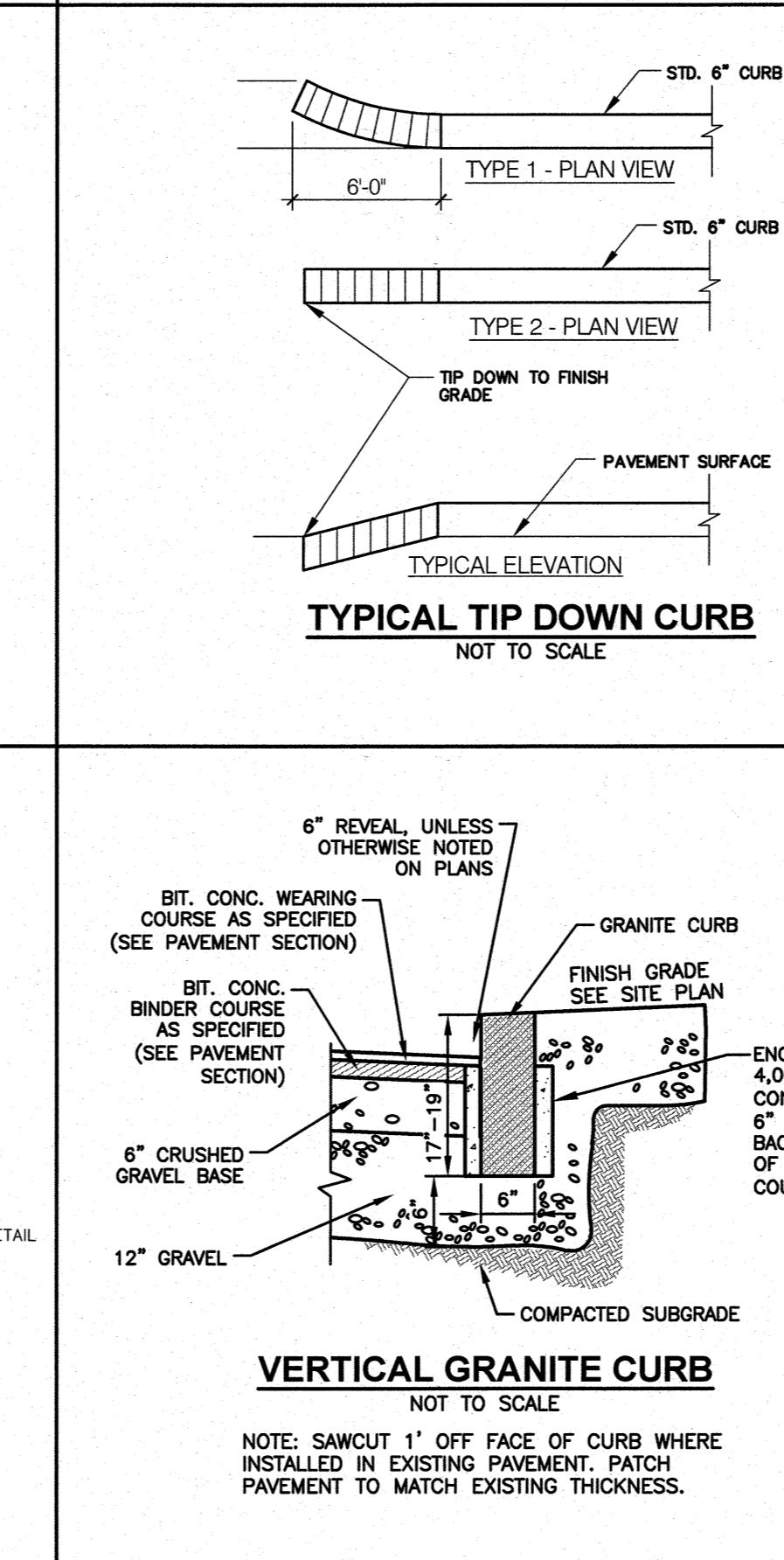
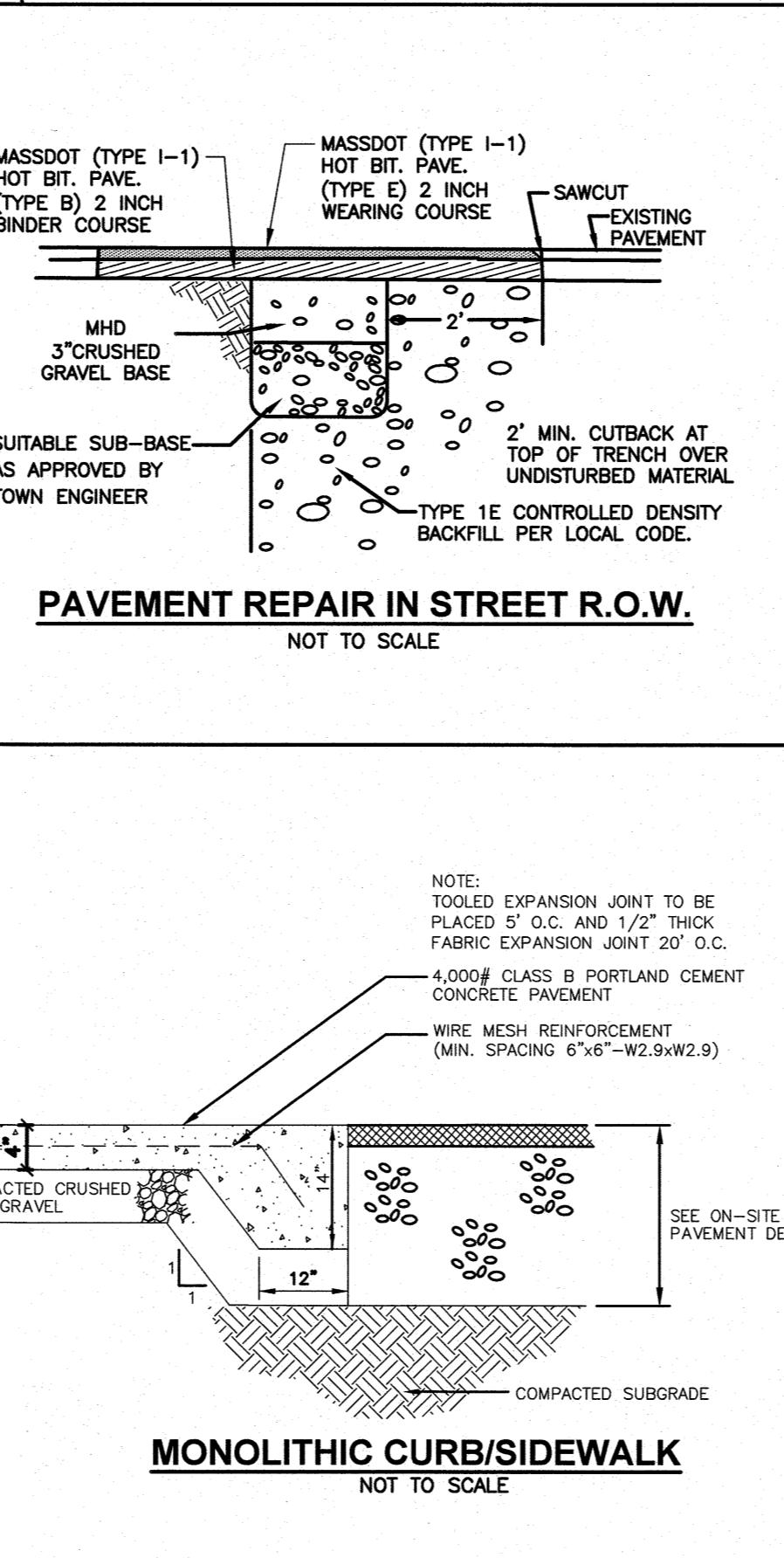
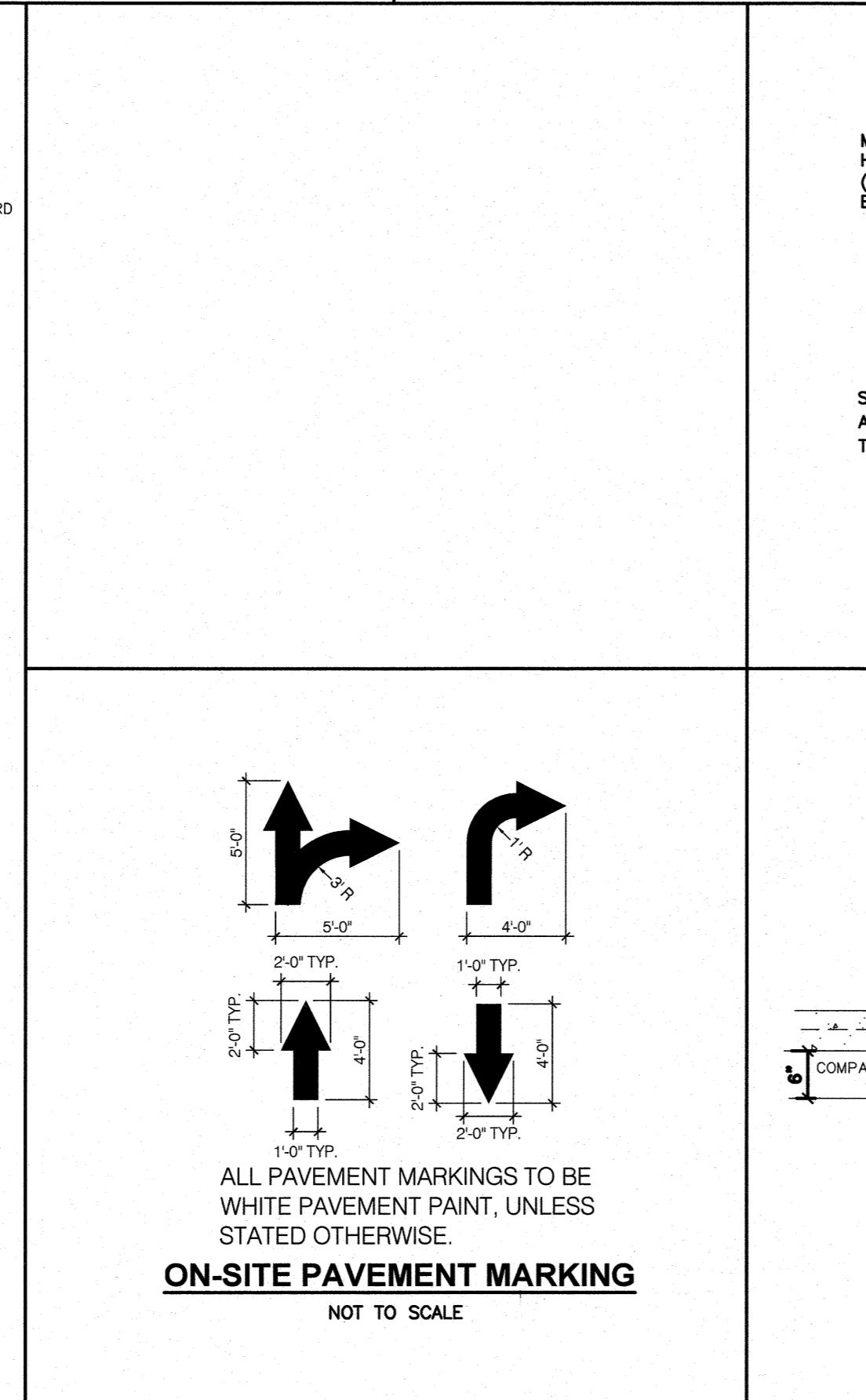
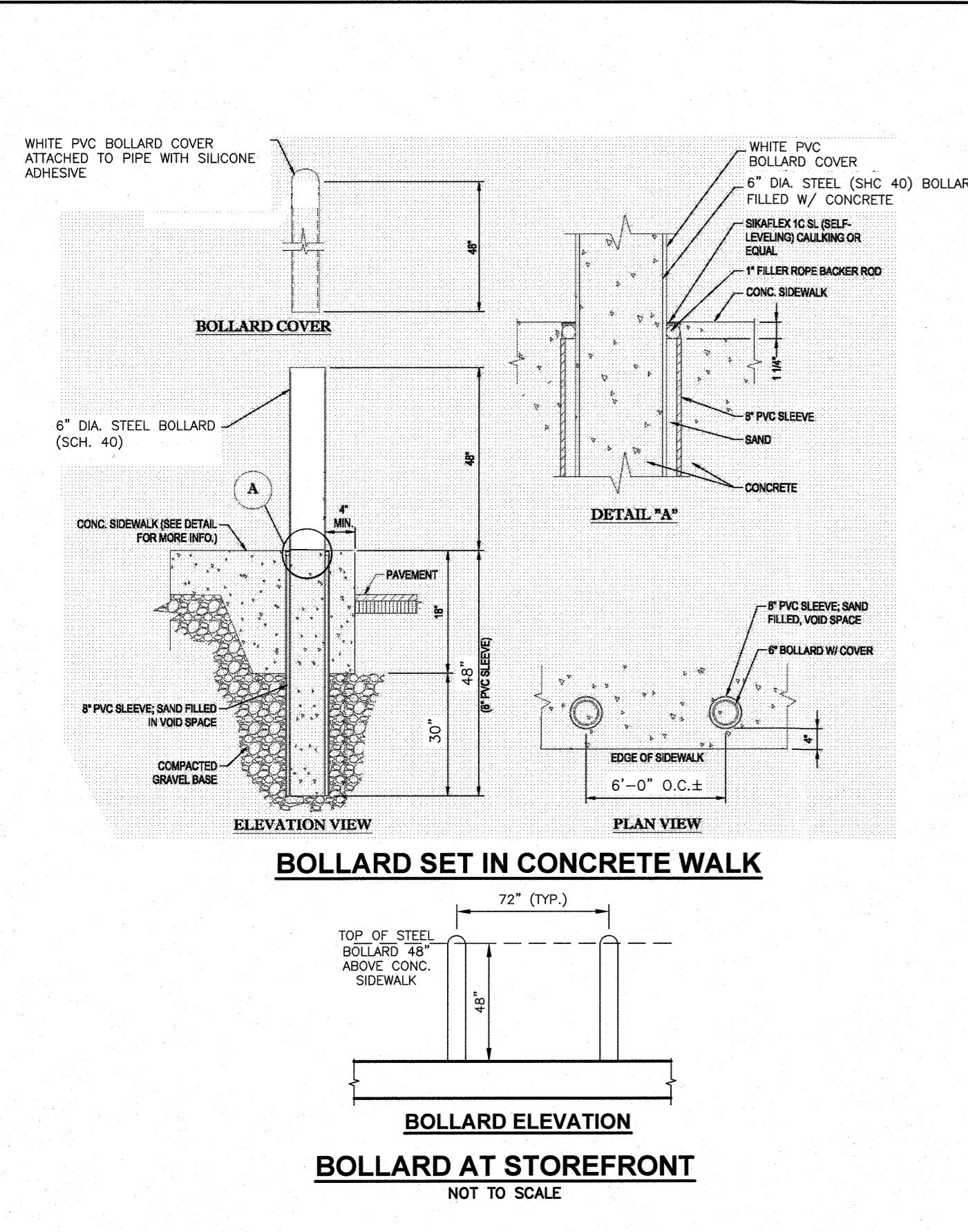




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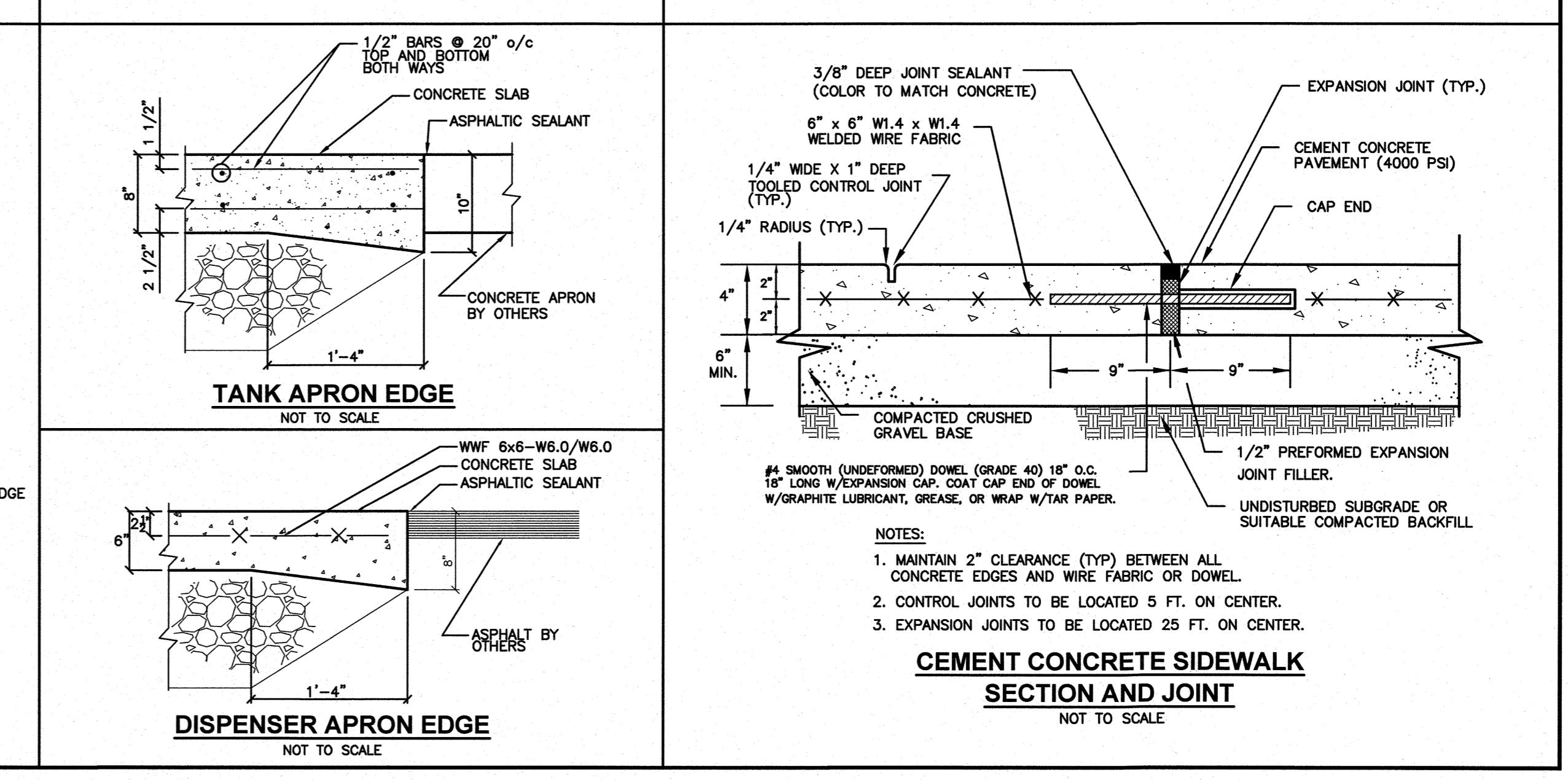
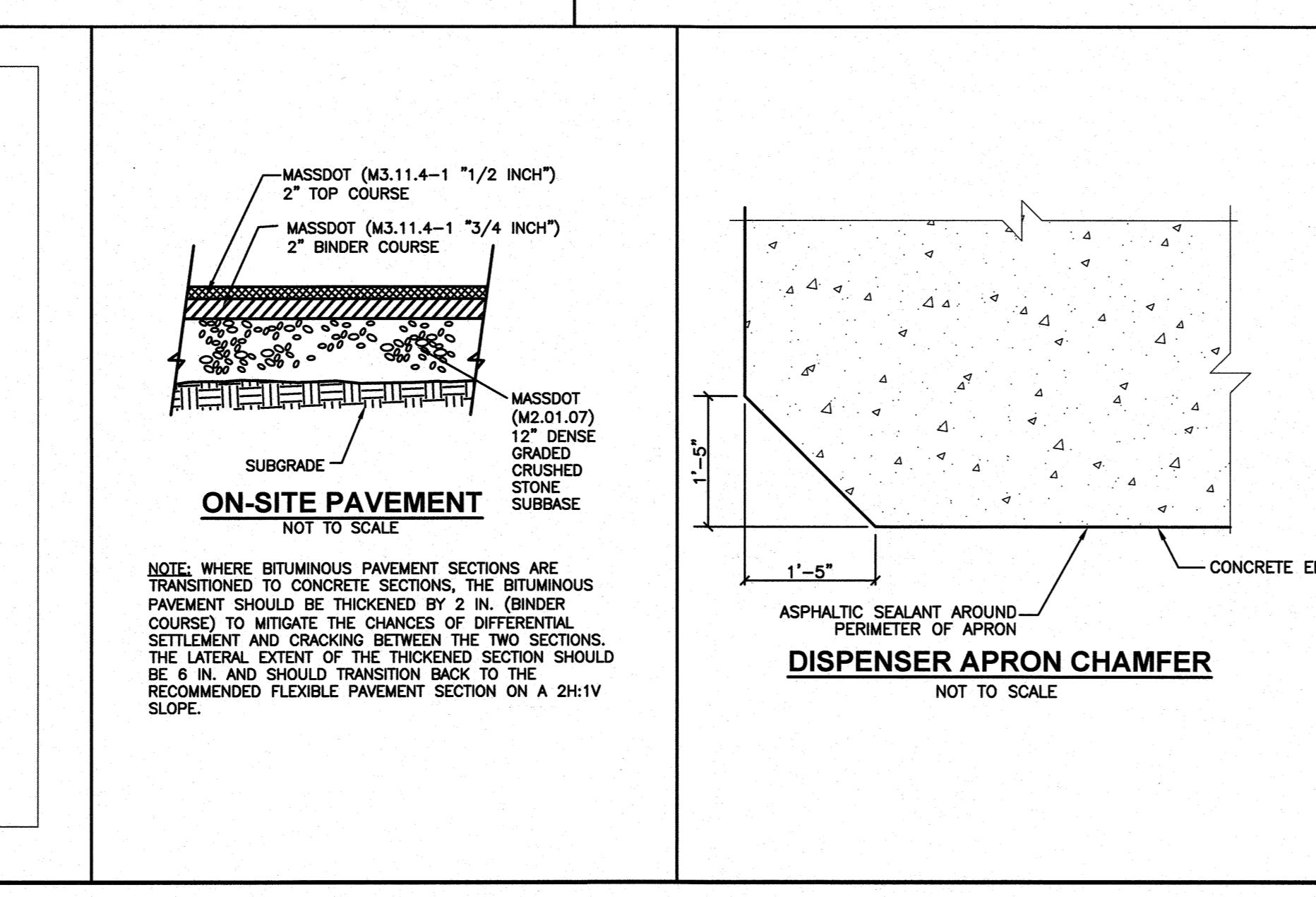
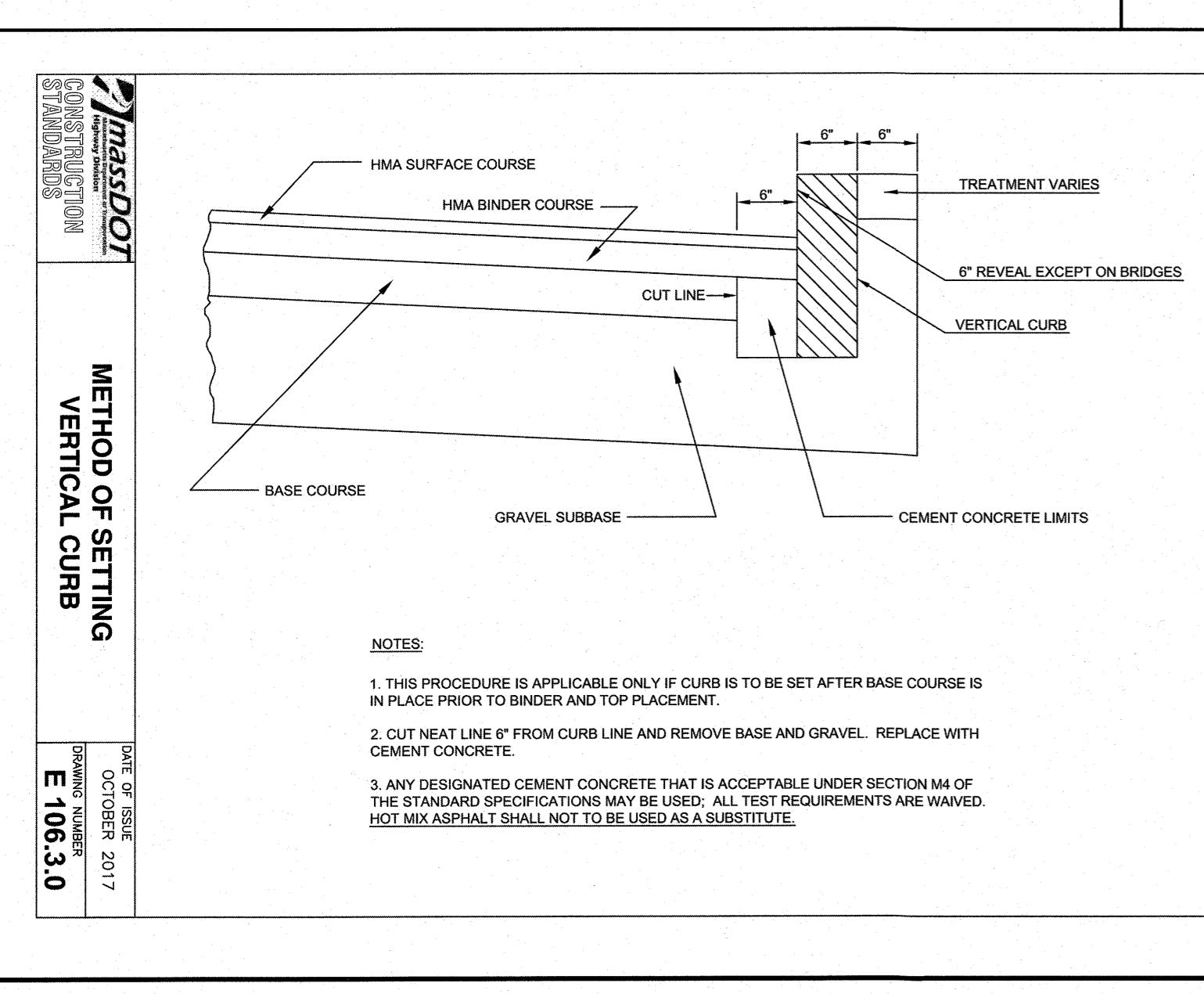
ENERGY NORTH GROUP
2 INTERNATIONAL WAY
LAWRENCE, MA 01843

PROPOSED RETAIL MOTOR FUEL OUTLET
SITE RE-DEVELOPMENT

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254, 256 & 260 AYER ROAD
LITTLETON, MASSACHUSETTS

PARCEL ID: 30-16
0 LITTLETON ROAD
AYER, MASSACHUSETTS

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER M.
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No. 57140
PROFESSIONAL ENGINEER
2/8/23



DETAIL SHEET

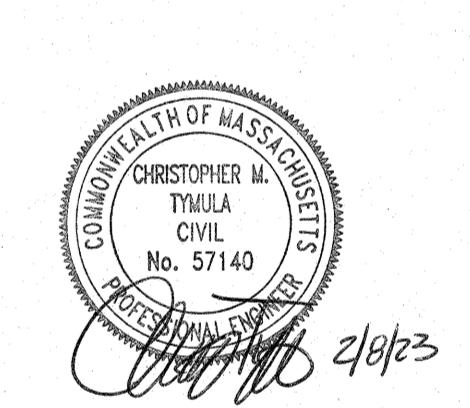
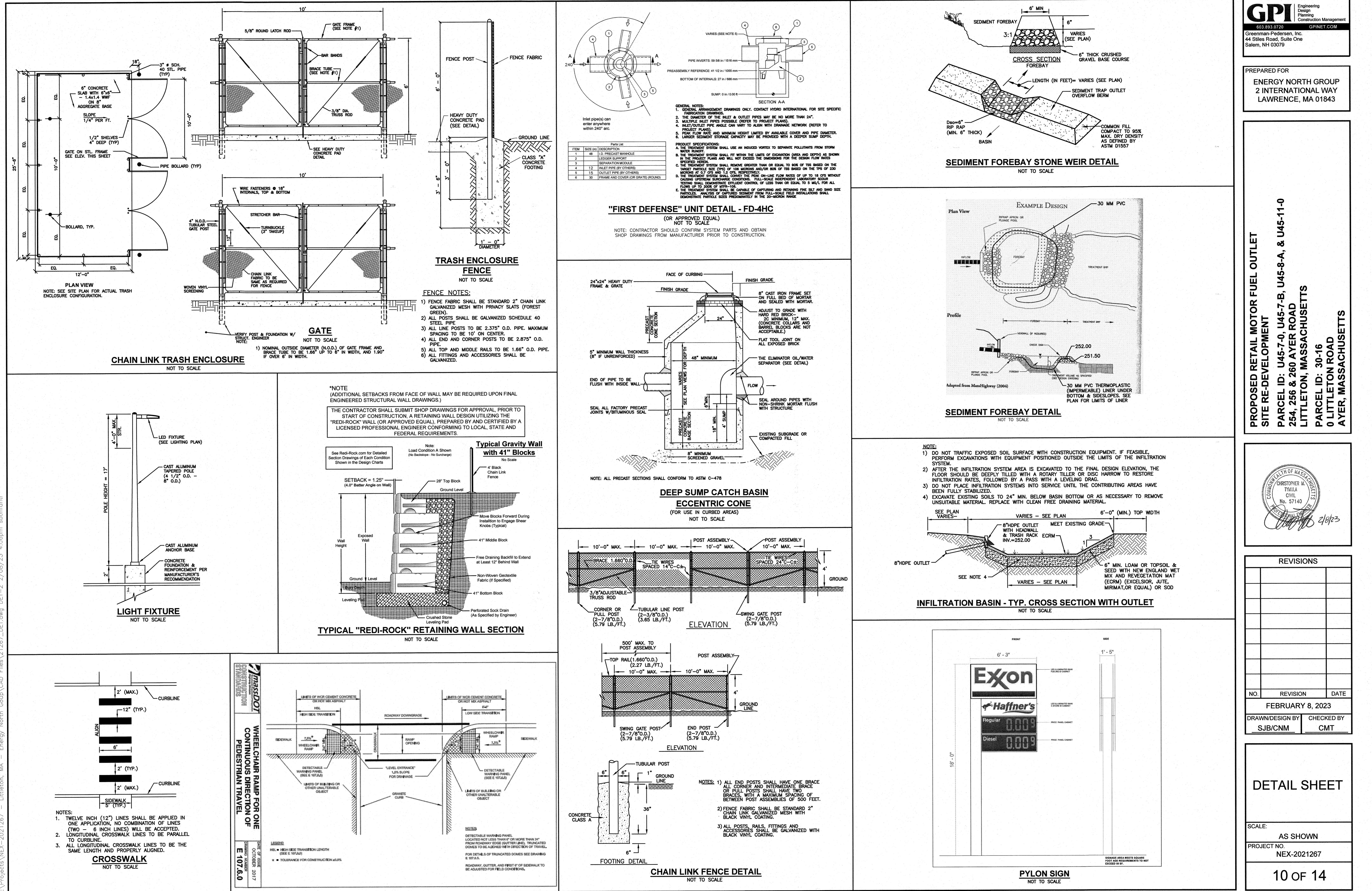
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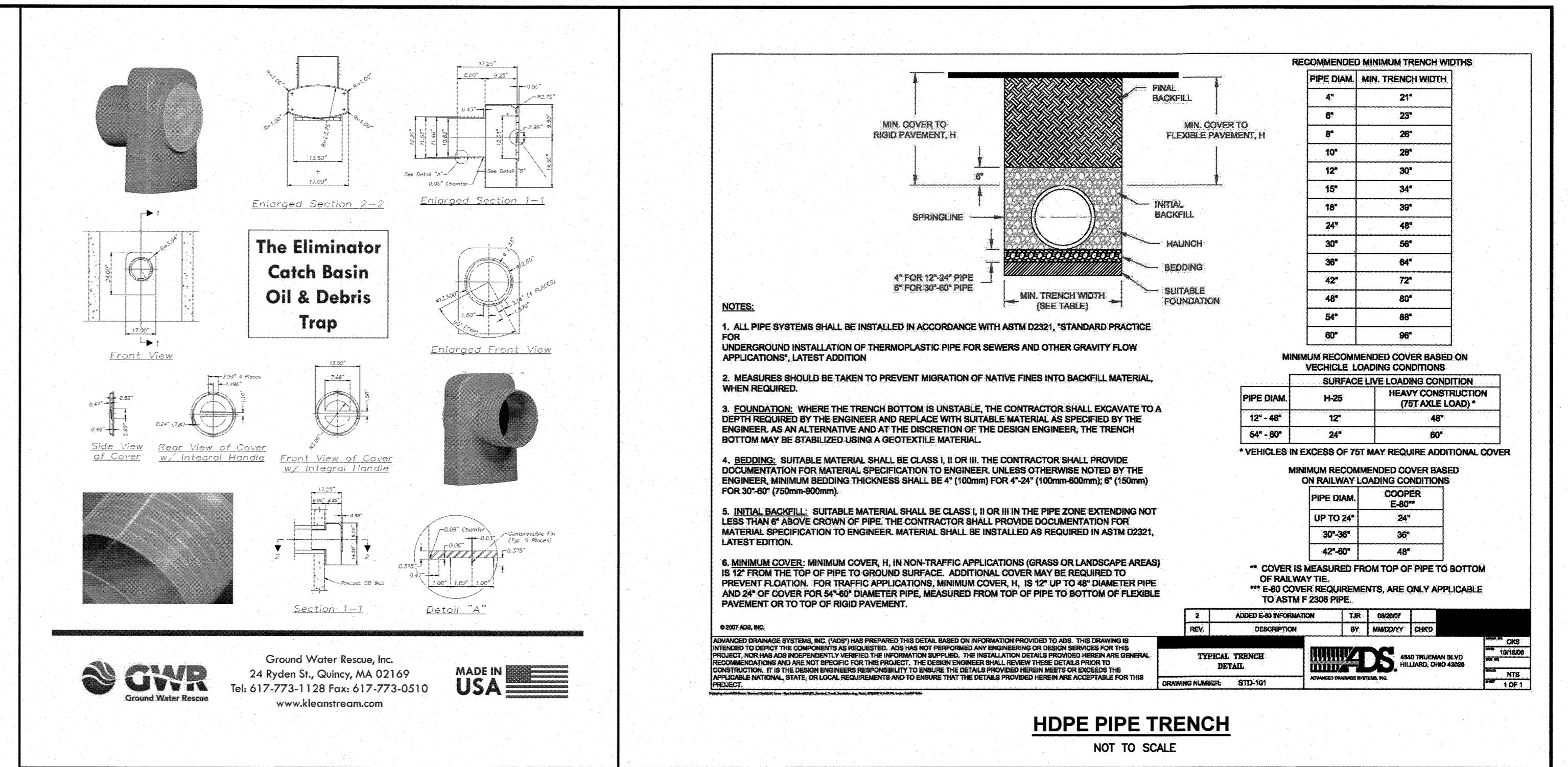
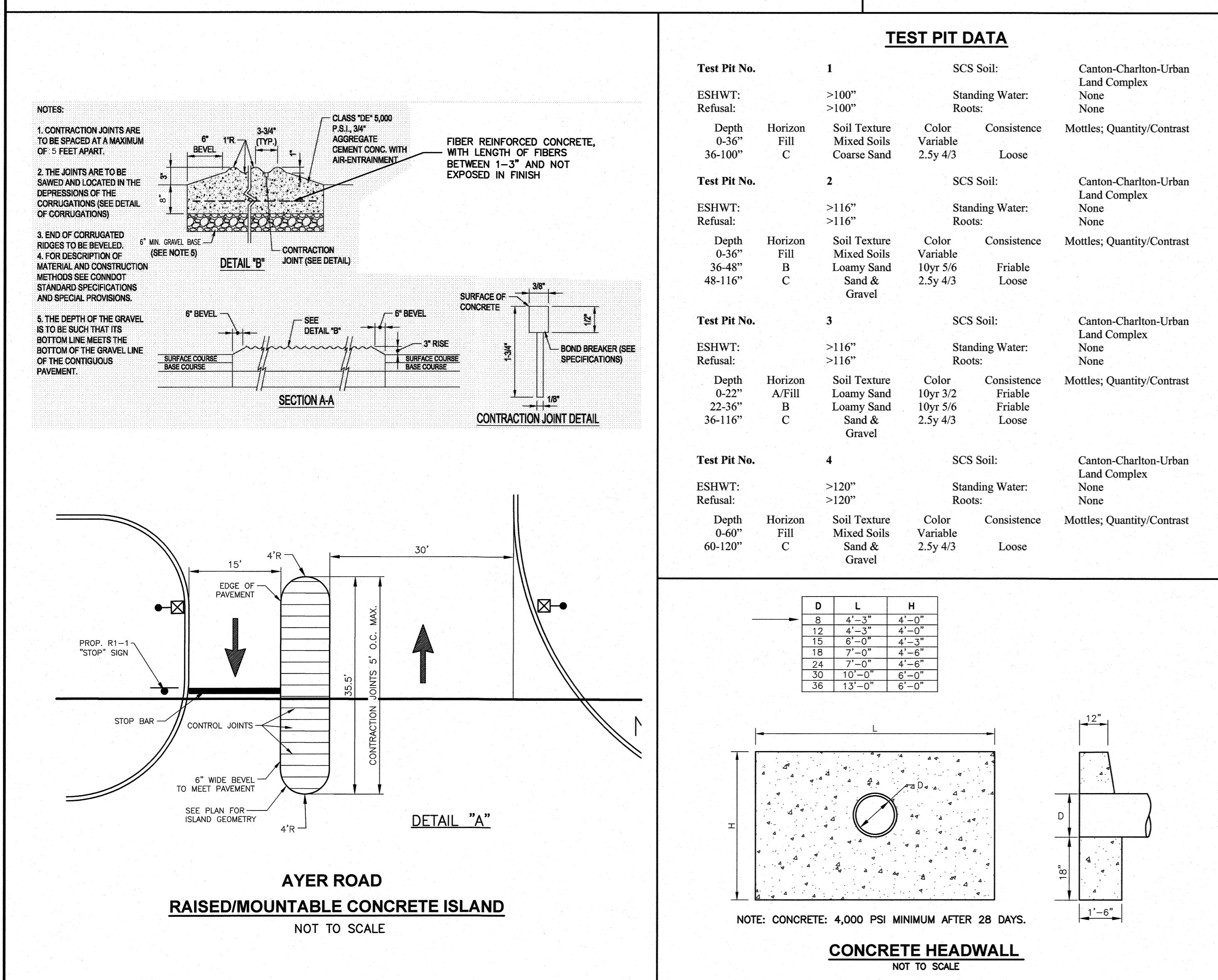
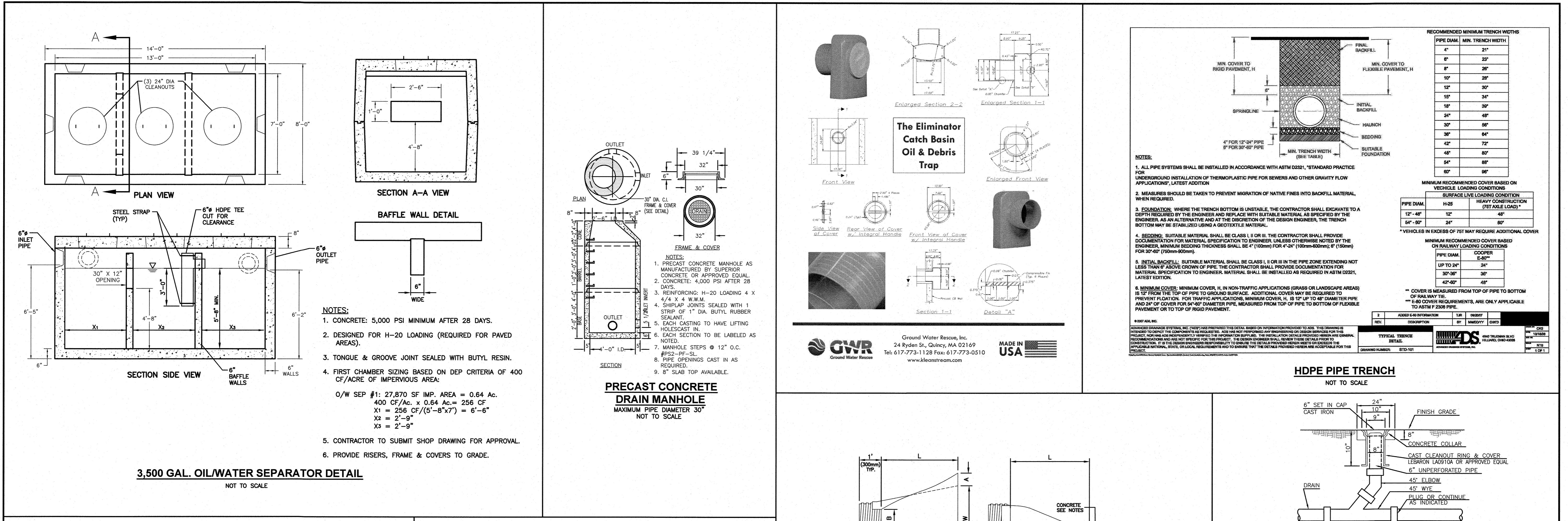
AS SHOWN

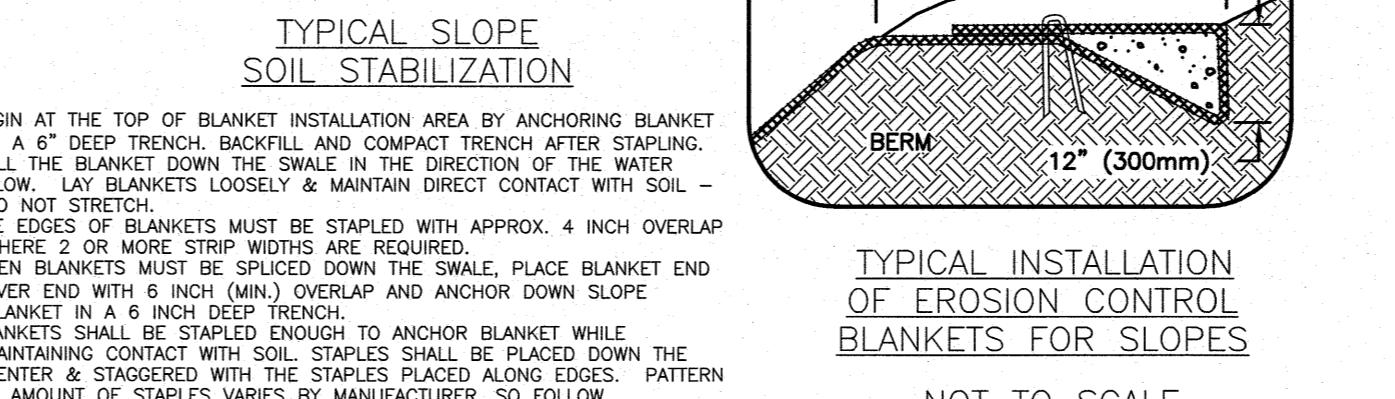
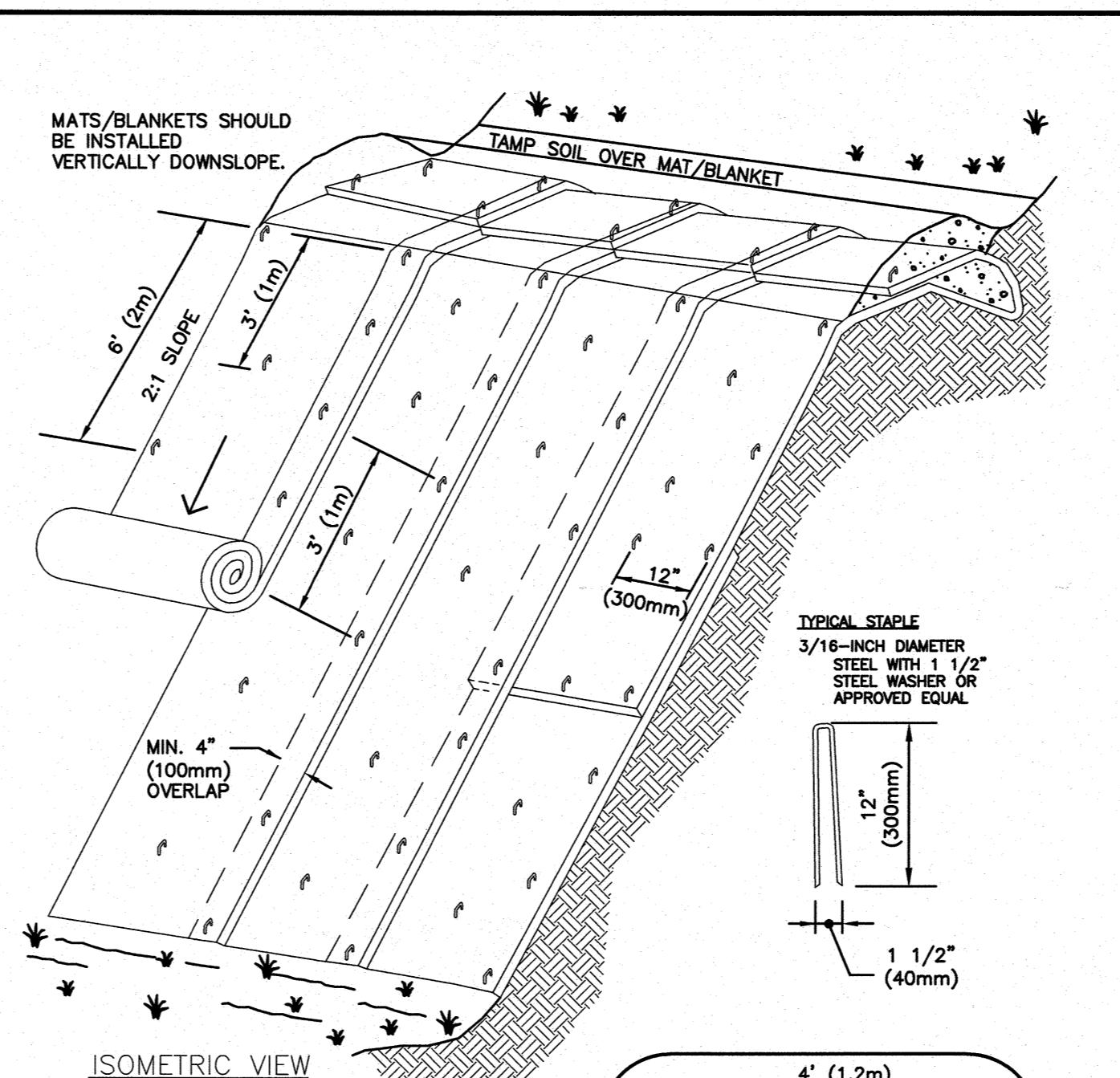
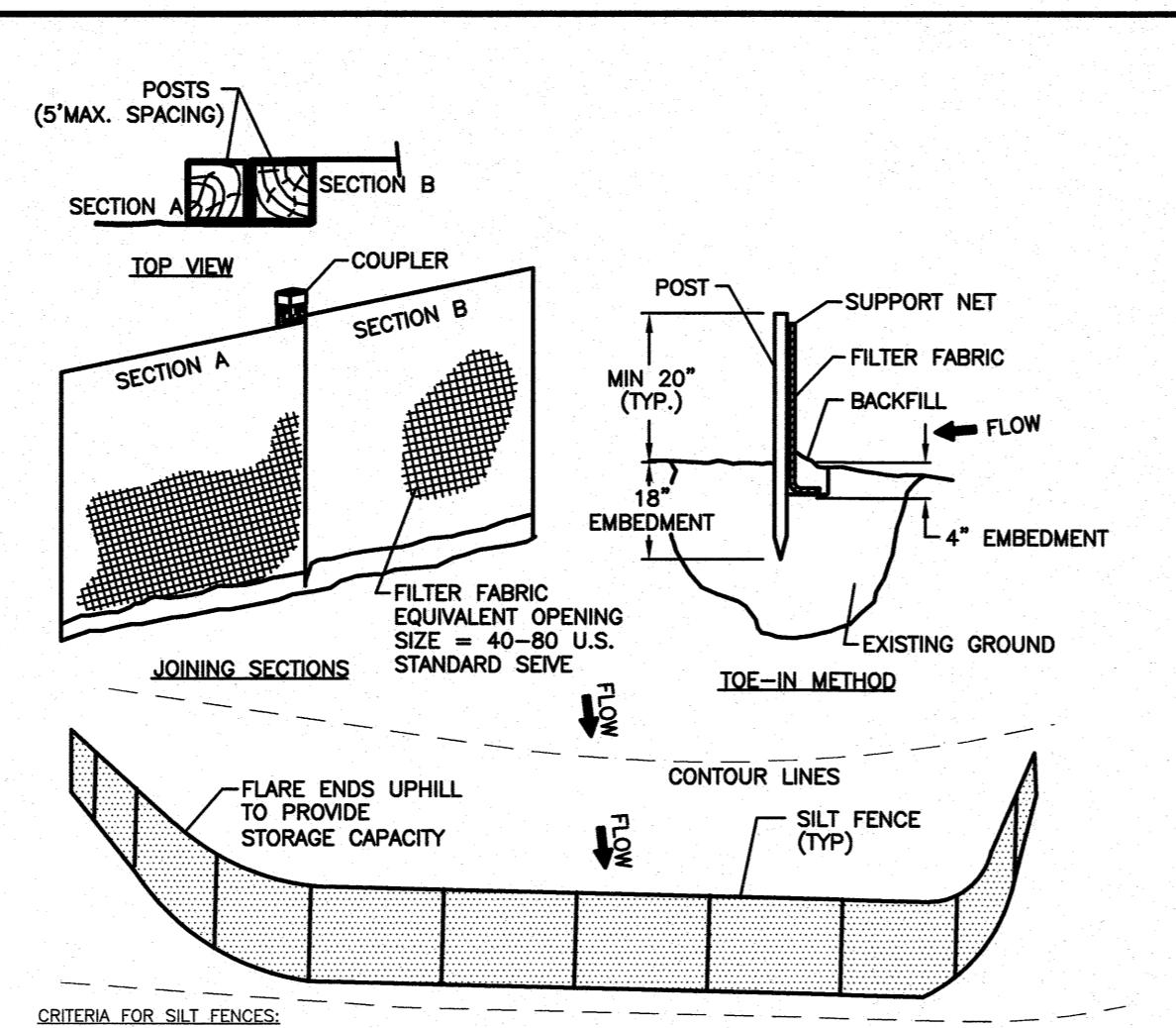
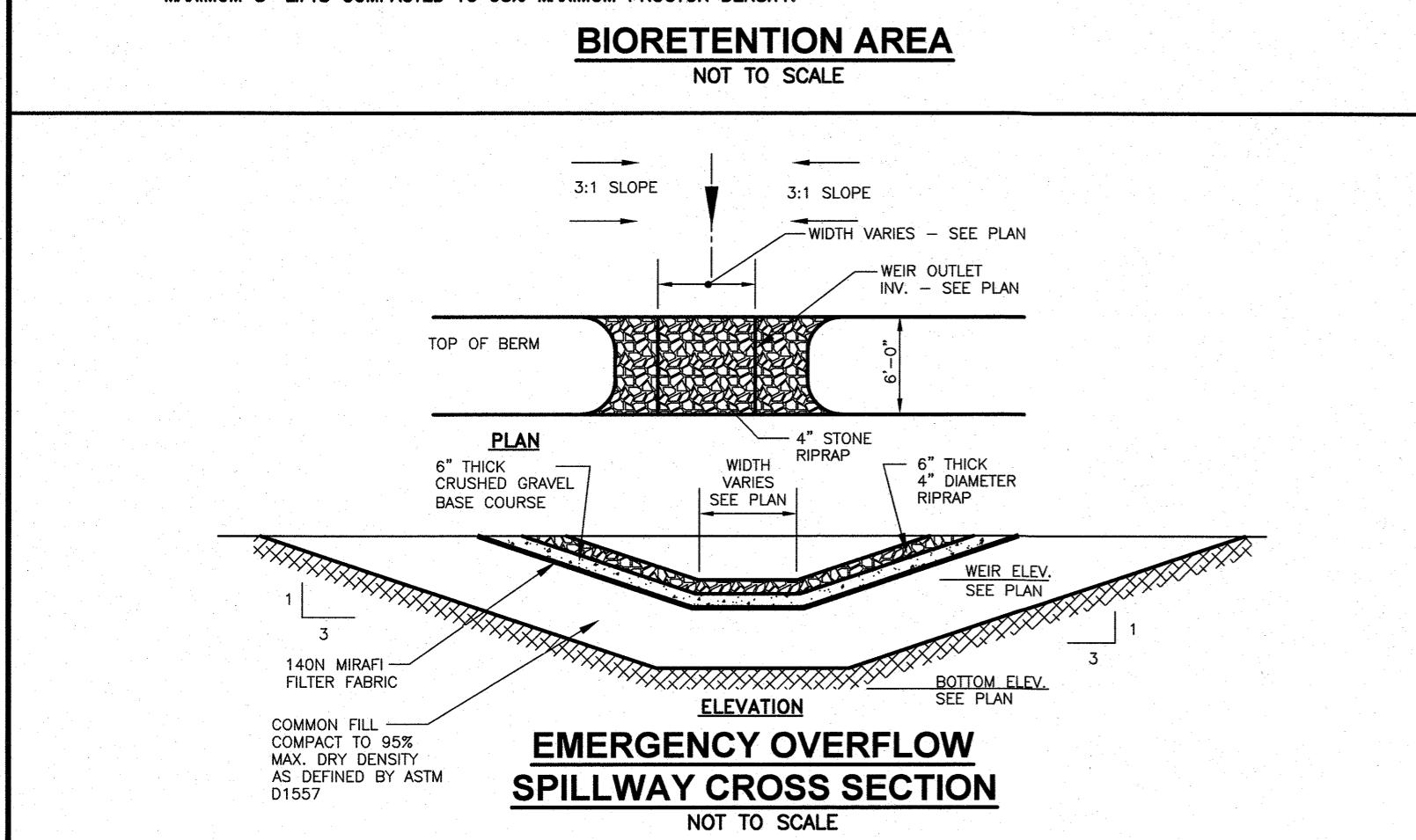
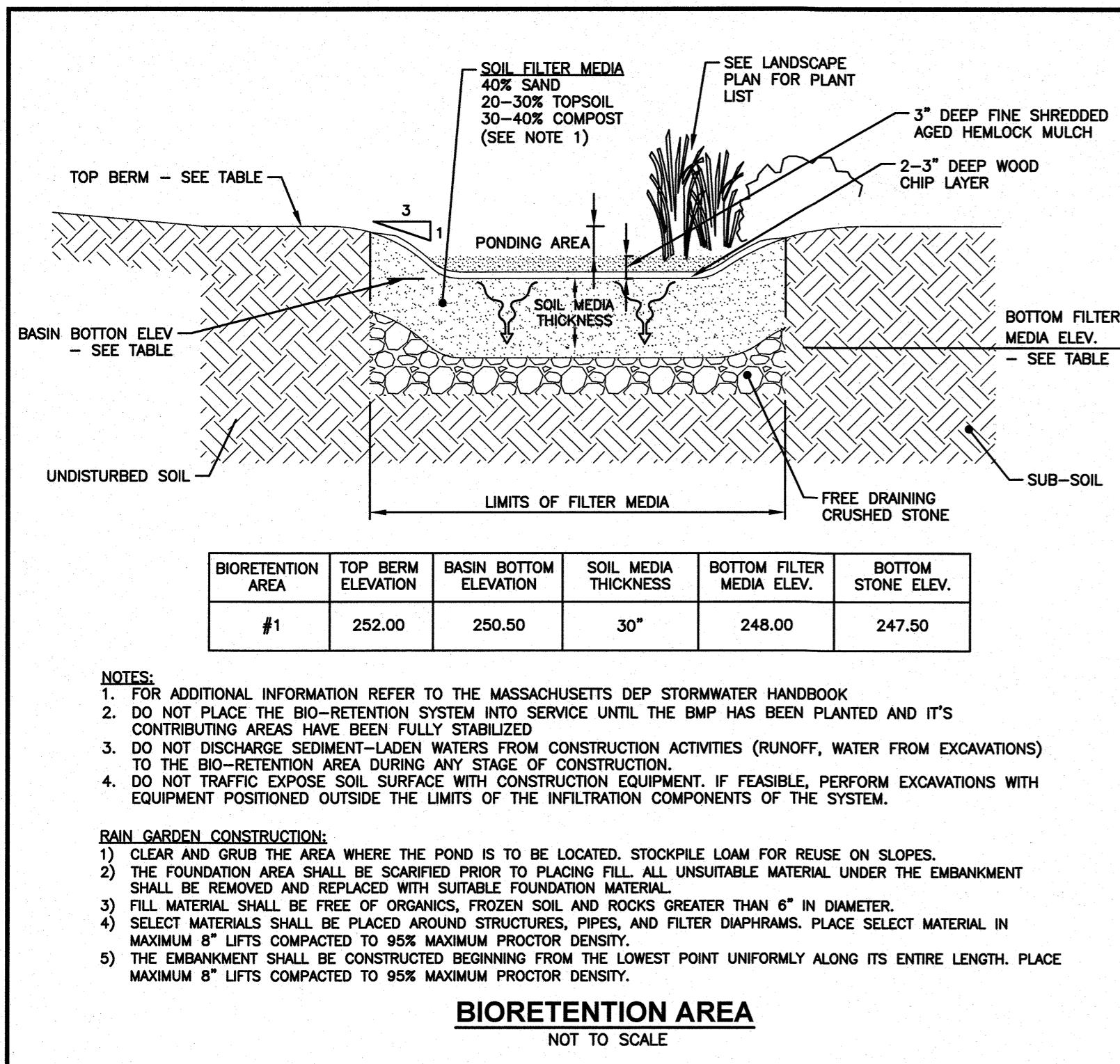
PROJECT NO.

NEX-2021267

9 OF 14



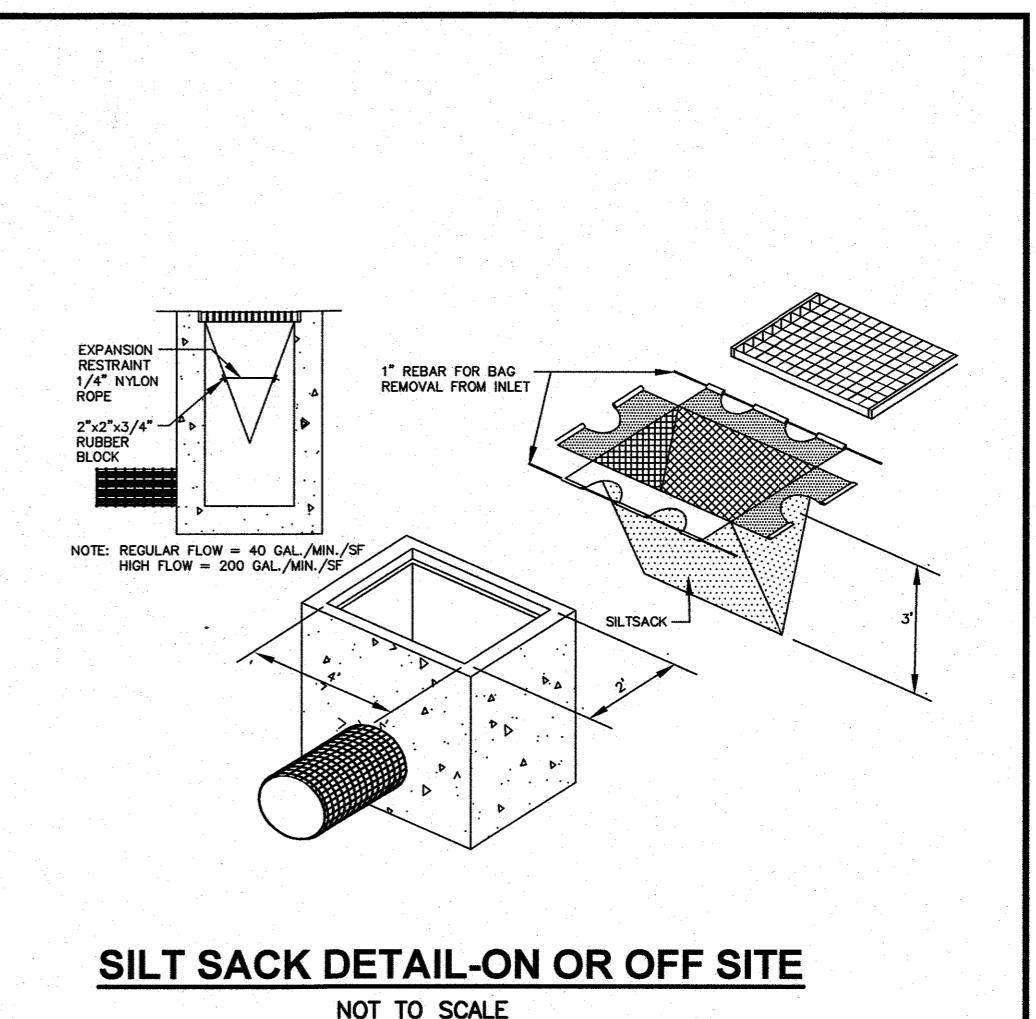




NOTE: DO NOT USE PRODUCTS THAT CONTAIN WELDED PLASTIC OR THAT ARE "PHOTODEGRADABLE". USE PRODUCTS WITH BIODEGRADABLE NETTING AND NATURAL FIBER MATERIAL (I.E. STRAW OR COCONUT FIBER).

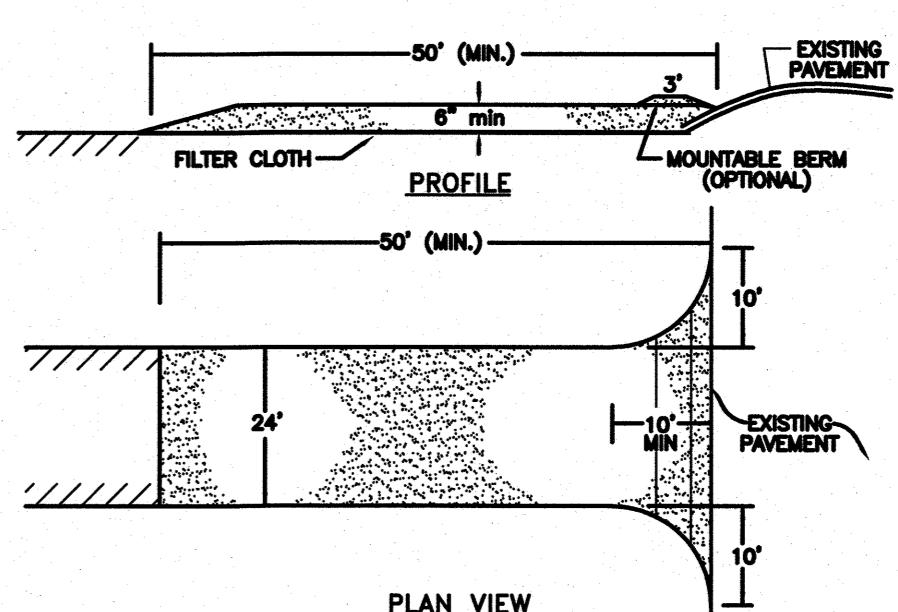
BLANKET SLOPE PROTECTION FOR EROSION CONTROL

NOT TO SCALE



SILT SACK DETAIL-ON OR OFF SITE

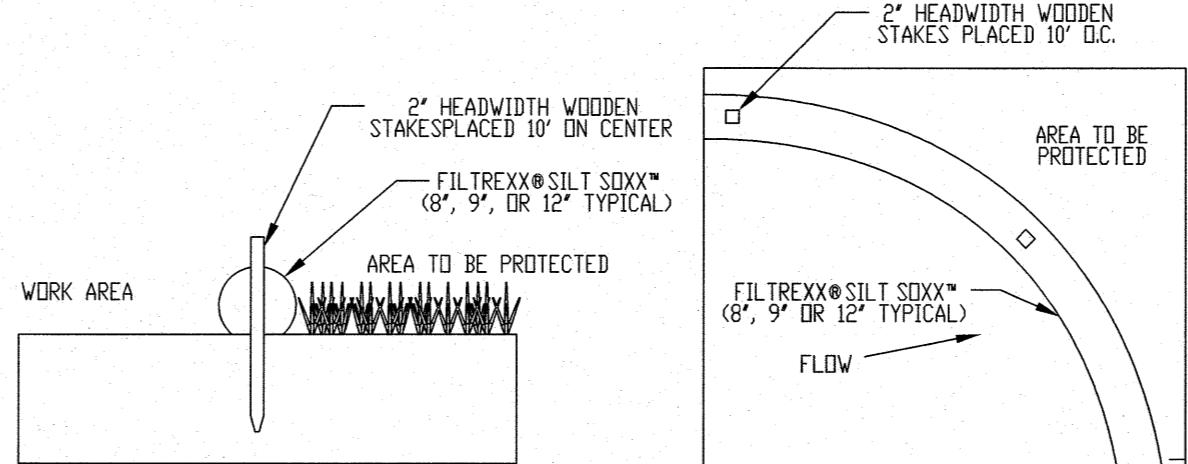
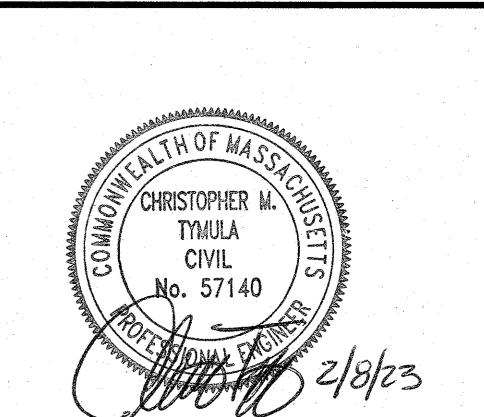
NOT TO SCALE



1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM WOULD APPLY.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OCCURS OR 10 FEET, WHICH EVER IS GREATER.
5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BEHIND THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ON PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING AND ADDITIONAL FILTER CLOTH AS CONDITIONS WARRANT AND REPAIR AND CLOSURE OF ANY MEASURES USED TO TRAP SEDIMENT, IF SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED PROMPTLY.
8. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS IN AN APPROVED SEDIMENT TRAPPING DEVICE.

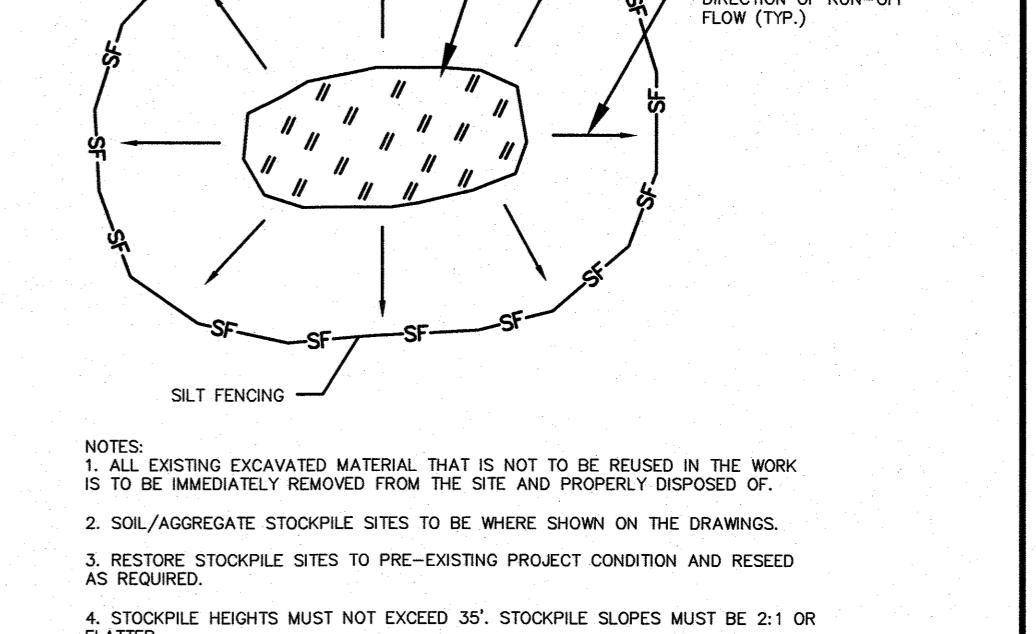
STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE



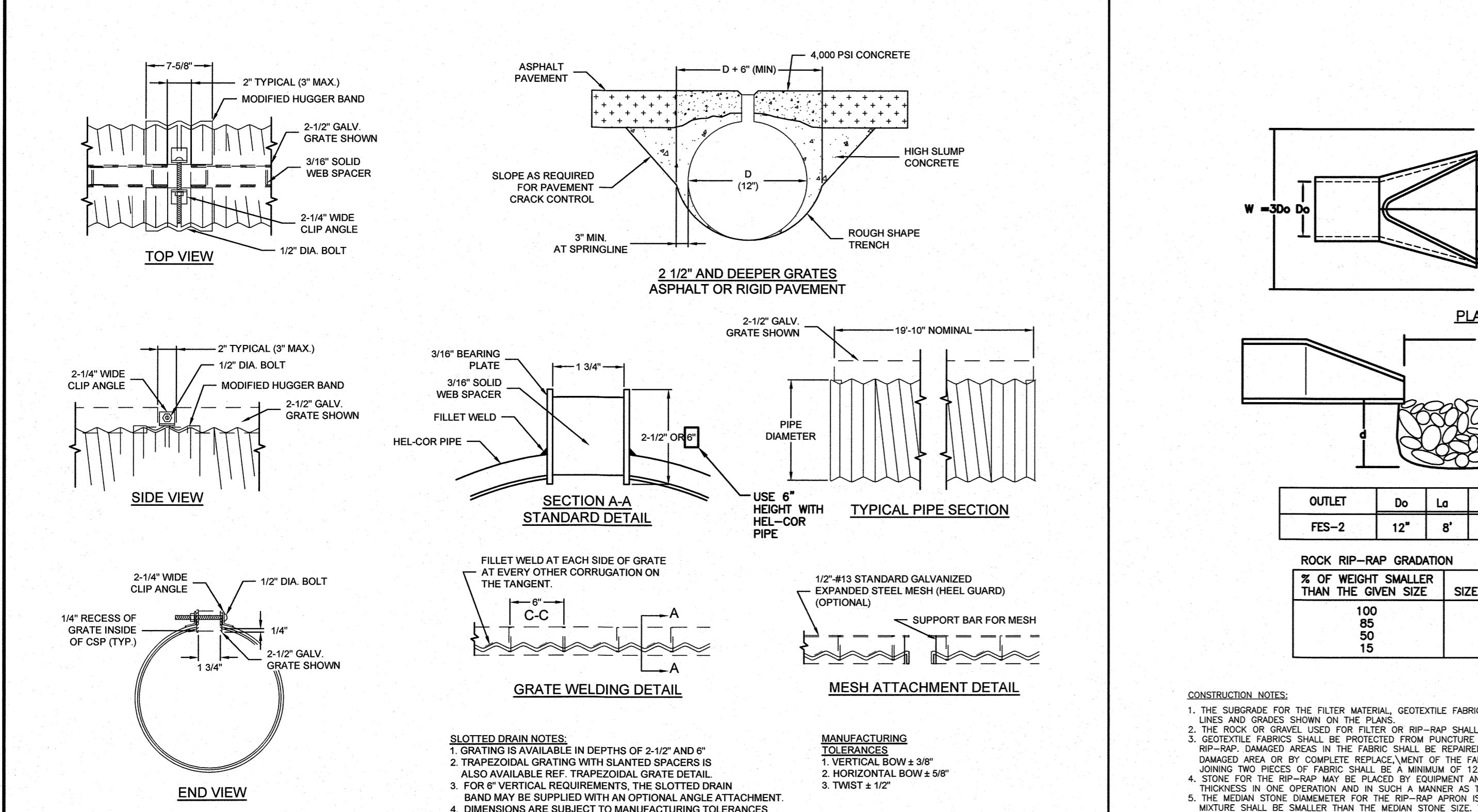
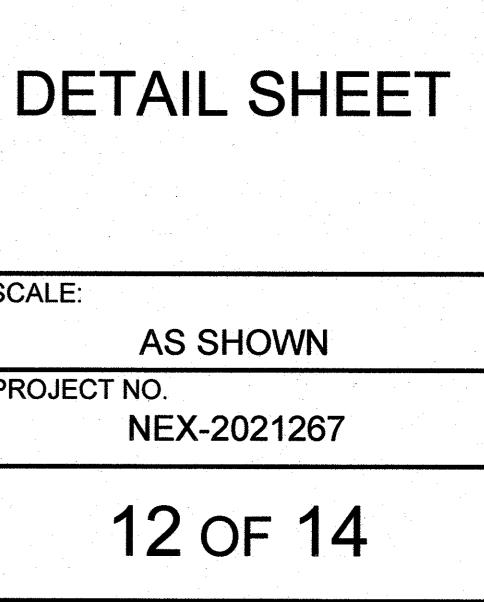
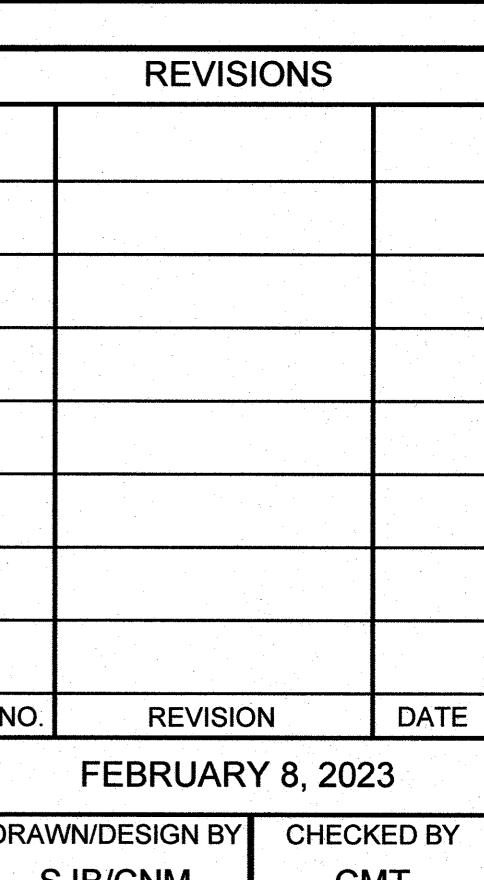
NOTES:

1. The Contractor shall remove sediment at the base of the up-slope side of the sediment control when accumulation has reached 1/2 of the effective height of the sediment control, or as directed by the Engineer. Alternatively, a new sediment control can be placed on top of the existing sediment control behind the original one creating more sediment storage capacity without soil disturbance.
2. Sediment control shall be maintained until disturbed area above the device has been permanently stabilized and construction activity has ceased.
3. The Filter-Media® will be dispensed on site once disturbed area has been permanently stabilized, construction activity has ceased, or as determined by the Engineer.
4. Sediment control shall be maintained until disturbed area above the device has been permanently stabilized and construction activity has ceased.
5. For long-term sediment and pollution control applications, sediment control can be seeded at the time of installation to create a vegetative filtering system for prolonged and increased sediment removal.
6. If the sediment control has been damaged, it shall be repaired, or replaced if beyond repair.



MATERIALS STOCKPILE

NOT TO SCALE

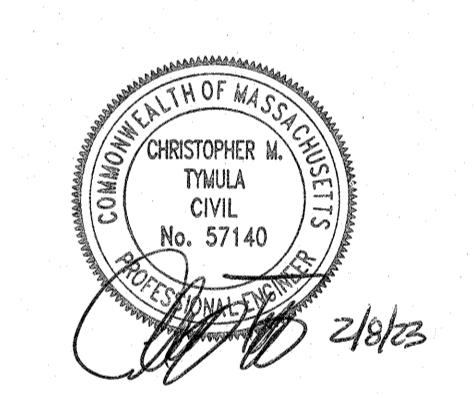


FILTREXX® SILT SOXX™

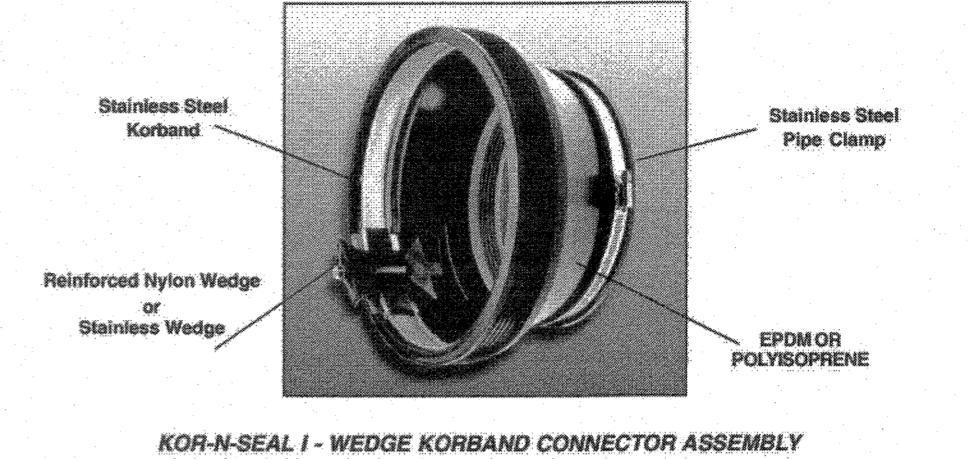
NOT TO SCALE

PREPARED FOR
ENERGY NORTH GROUP
2 INTERNATIONAL WAY
LAWRENCE, MA 01843

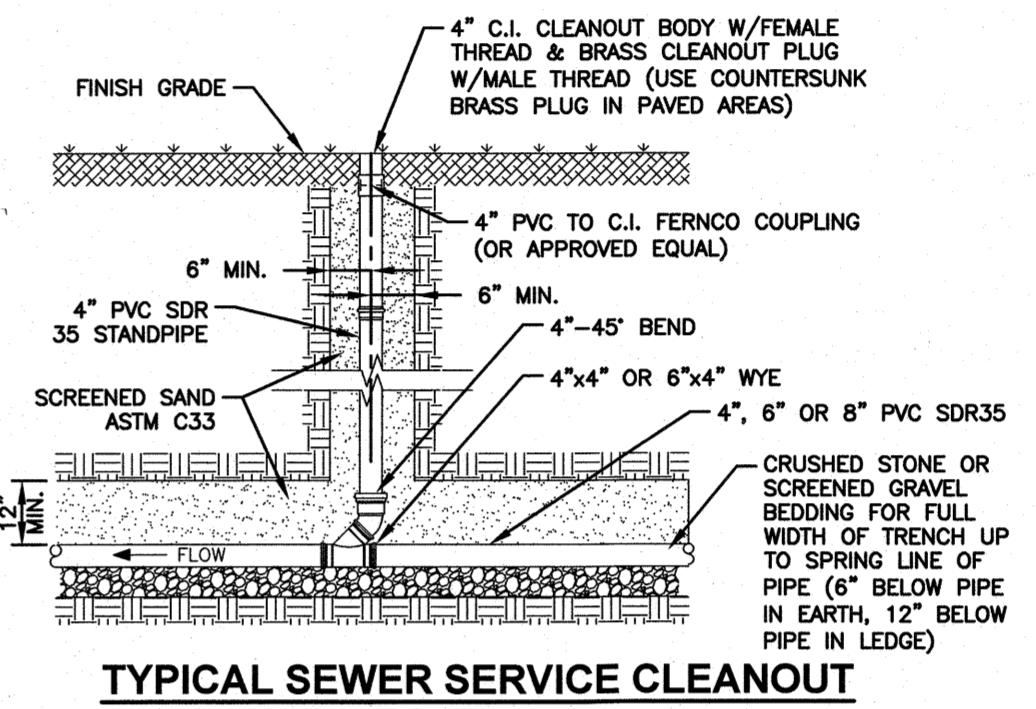
PROPOSED RETAIL MOTOR FUEL OUTLET
SITE RE-DEVELOPMENT
PARCEL ID: U45-7-0, U45-7-B, U45-8-A, & U45-11-0
254, 256 & 260 AYER ROAD
LITTLETON, MASSACHUSETTS
PARCEL ID: 30-16
0 LITTLETON ROAD
AYER, MASSACHUSETTS



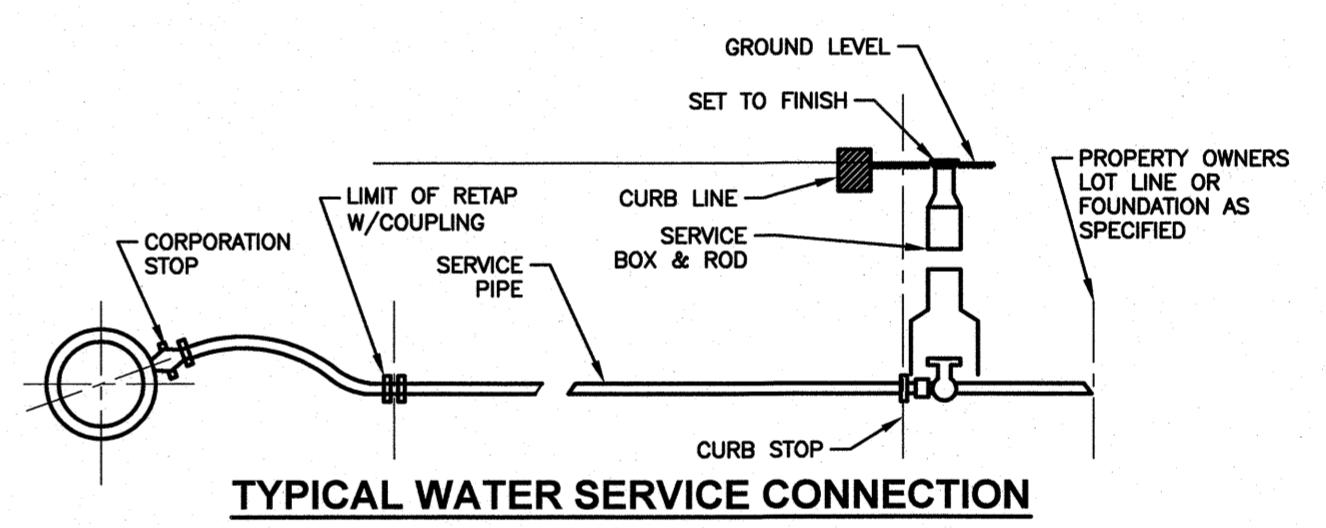
KOR-N-SEAL® I & II
FLEXIBLE PIPE-TO-MANHOLE CONNECTORS
SPECIFICATION SHEET



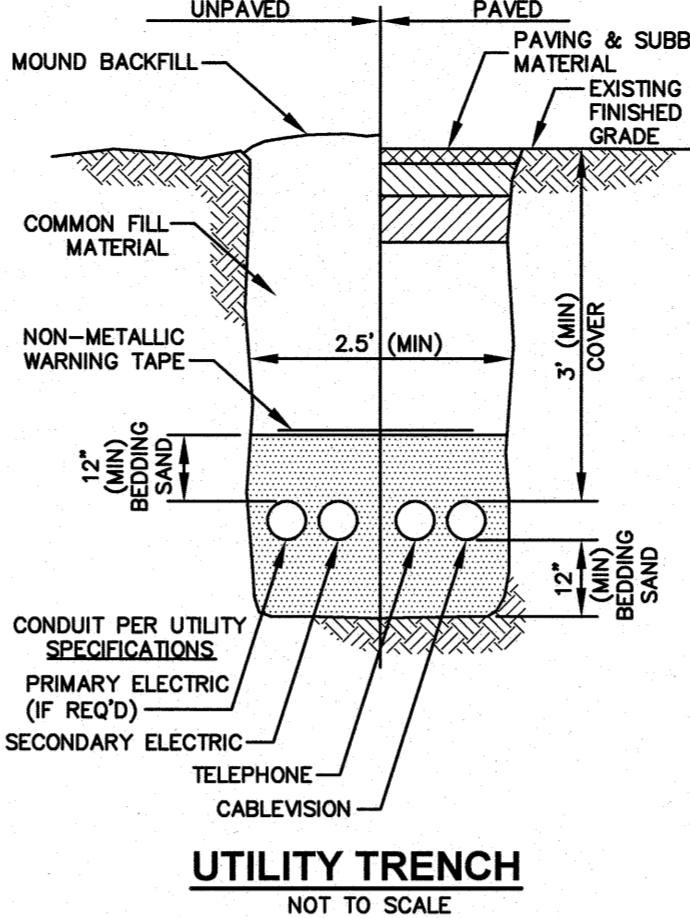
KOR-N-SEAL
NOT TO SCALE



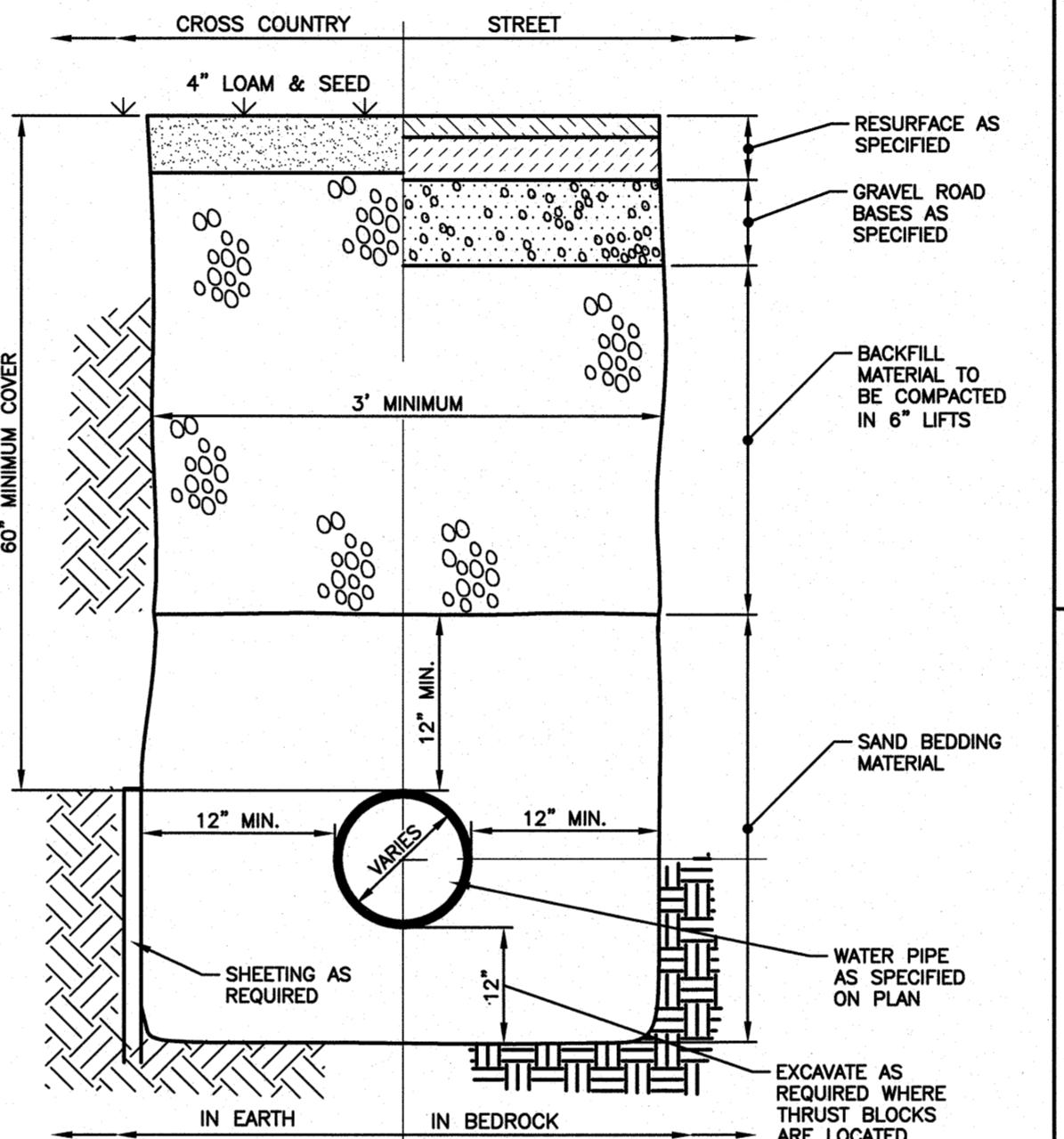
TYPICAL SEWER SERVICE CLEANOUT
NOT TO SCALE



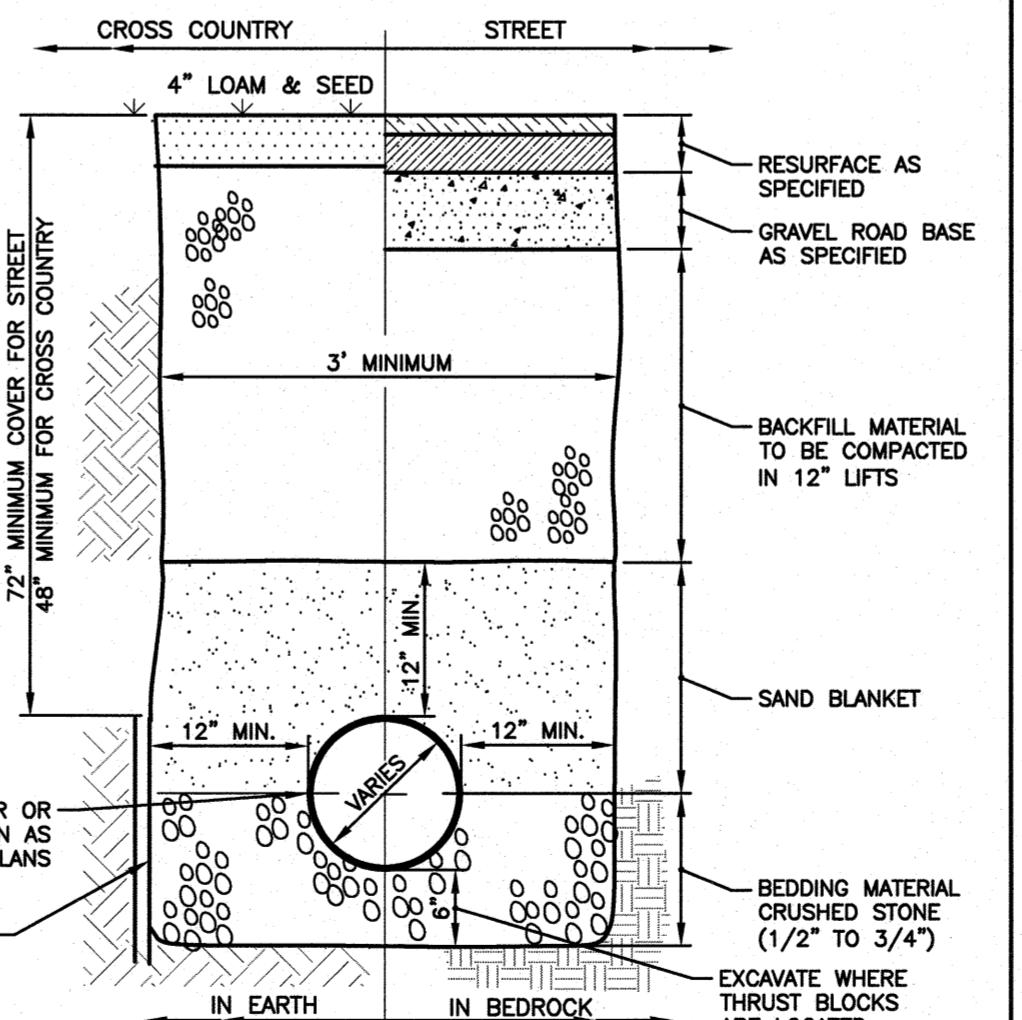
TYPICAL WATER SERVICE CONNECTION
NOT TO SCALE



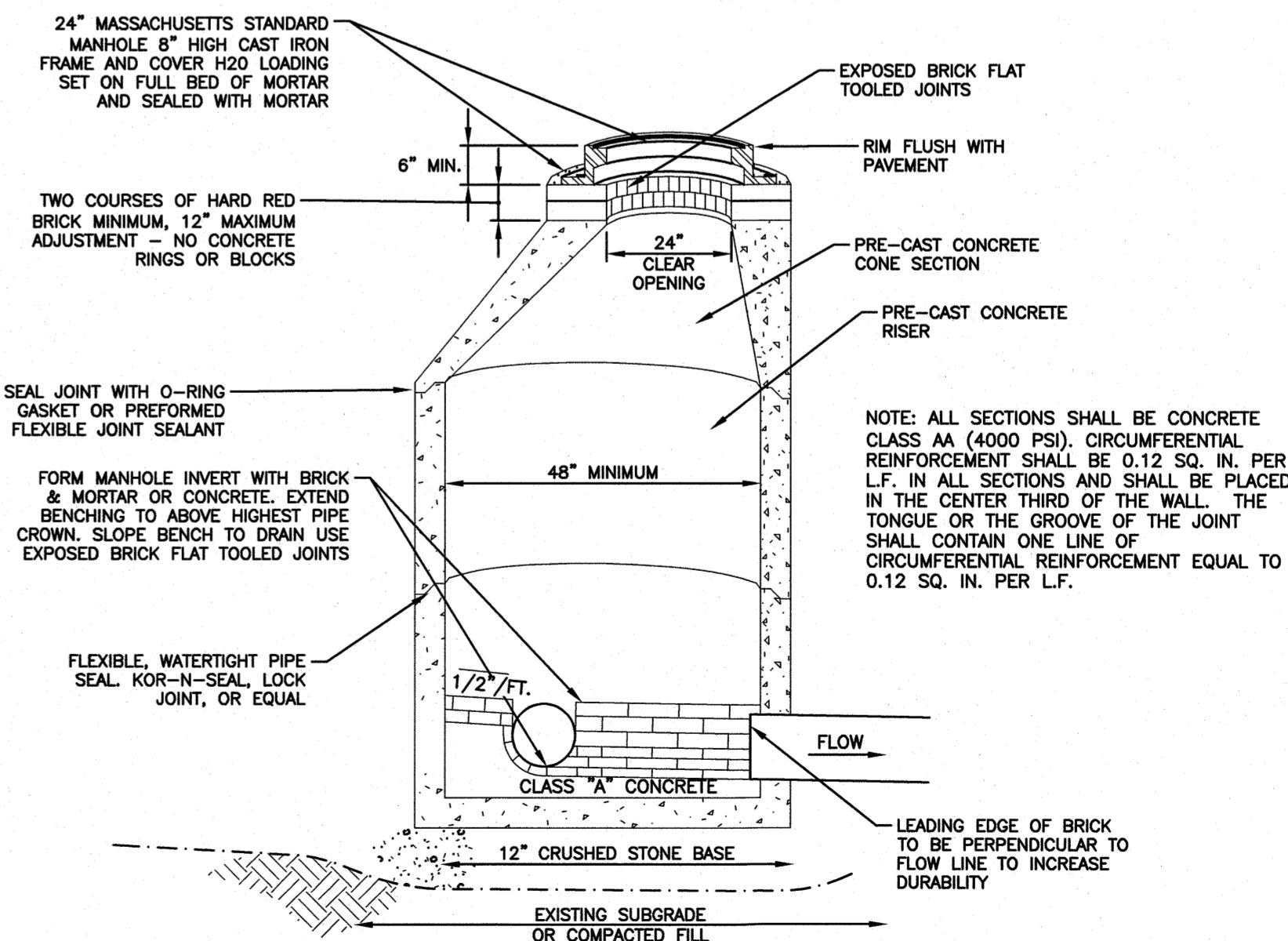
UTILITY TRENCH
NOT TO SCALE



TYPICAL TRENCH SECTION
FOR WATER SERVICE
NOT TO SCALE



TYPICAL TRENCH SECTION FOR
SANITARY SEWER SERVICE
NOT TO SCALE

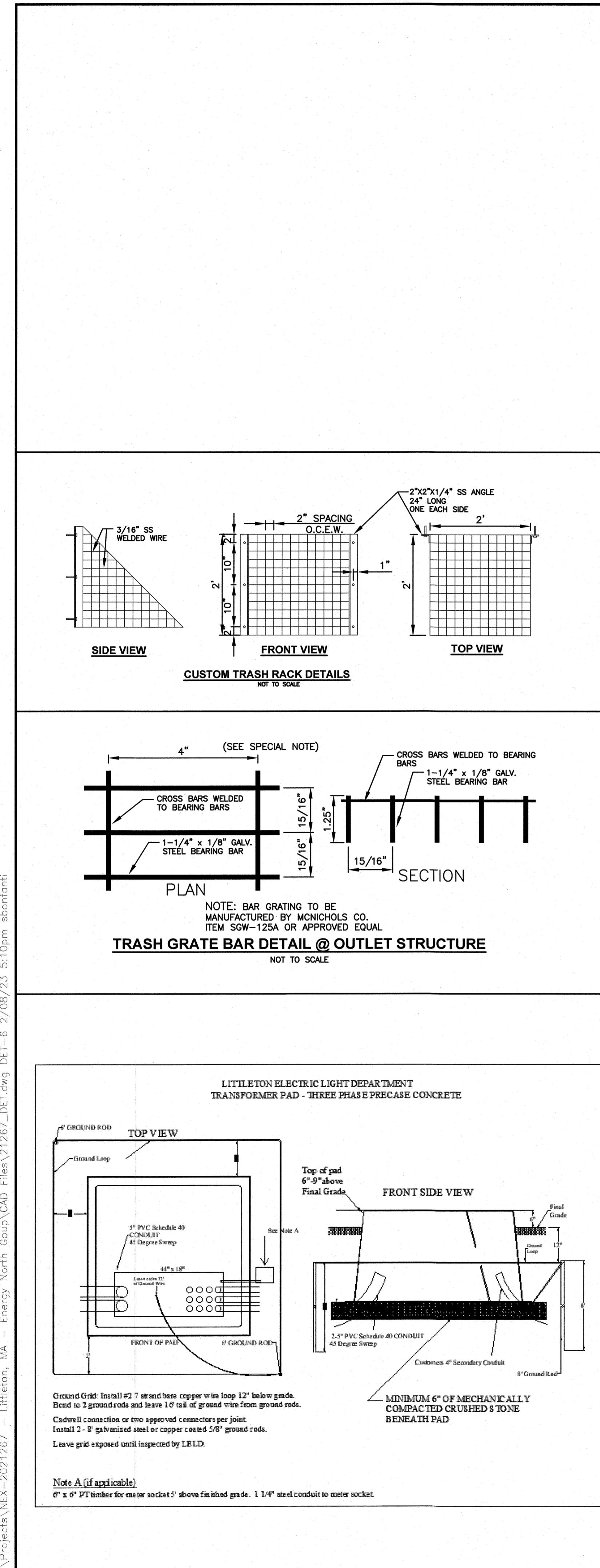


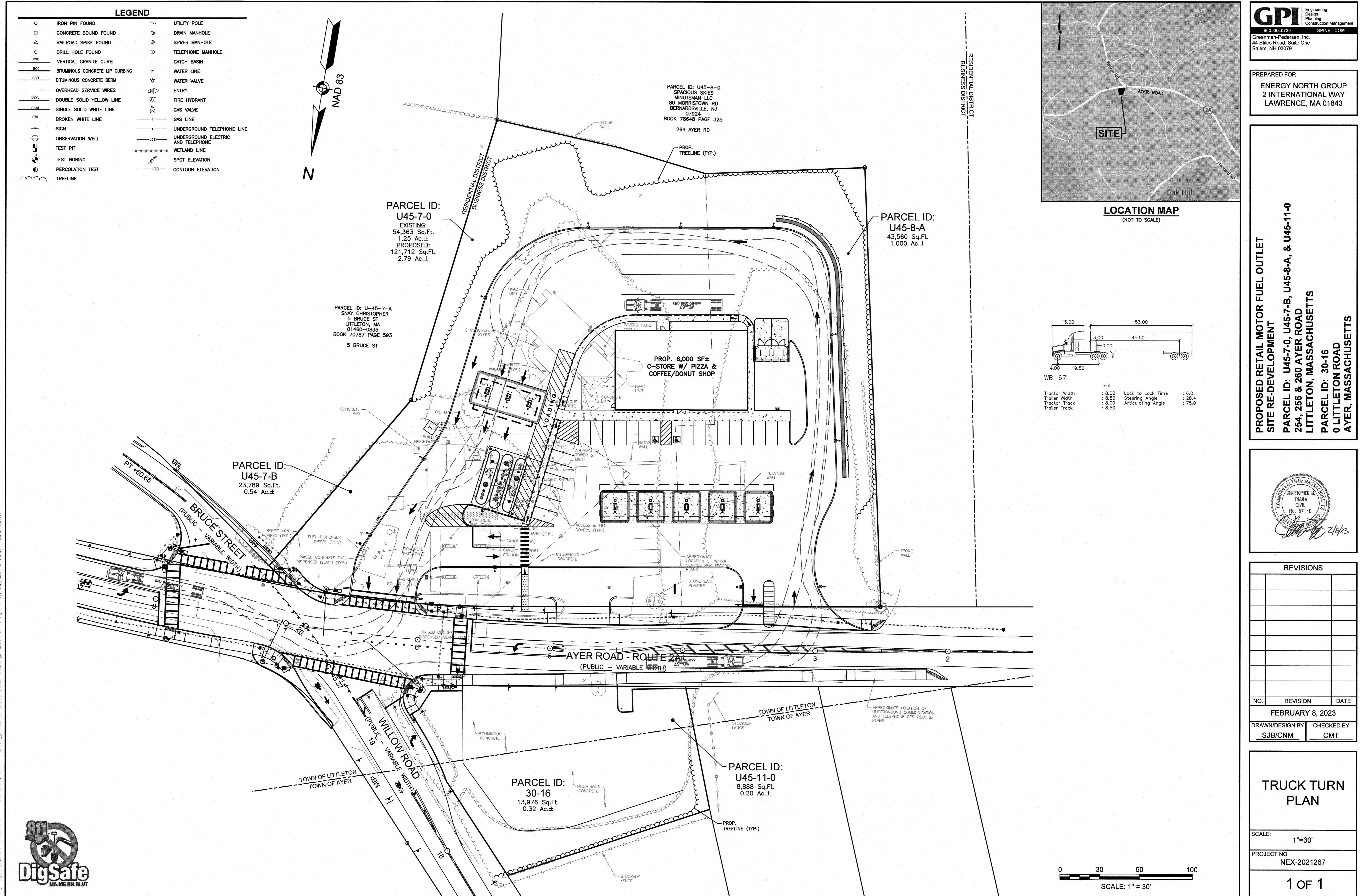
SEWER MANHOLE
NOT TO SCALE

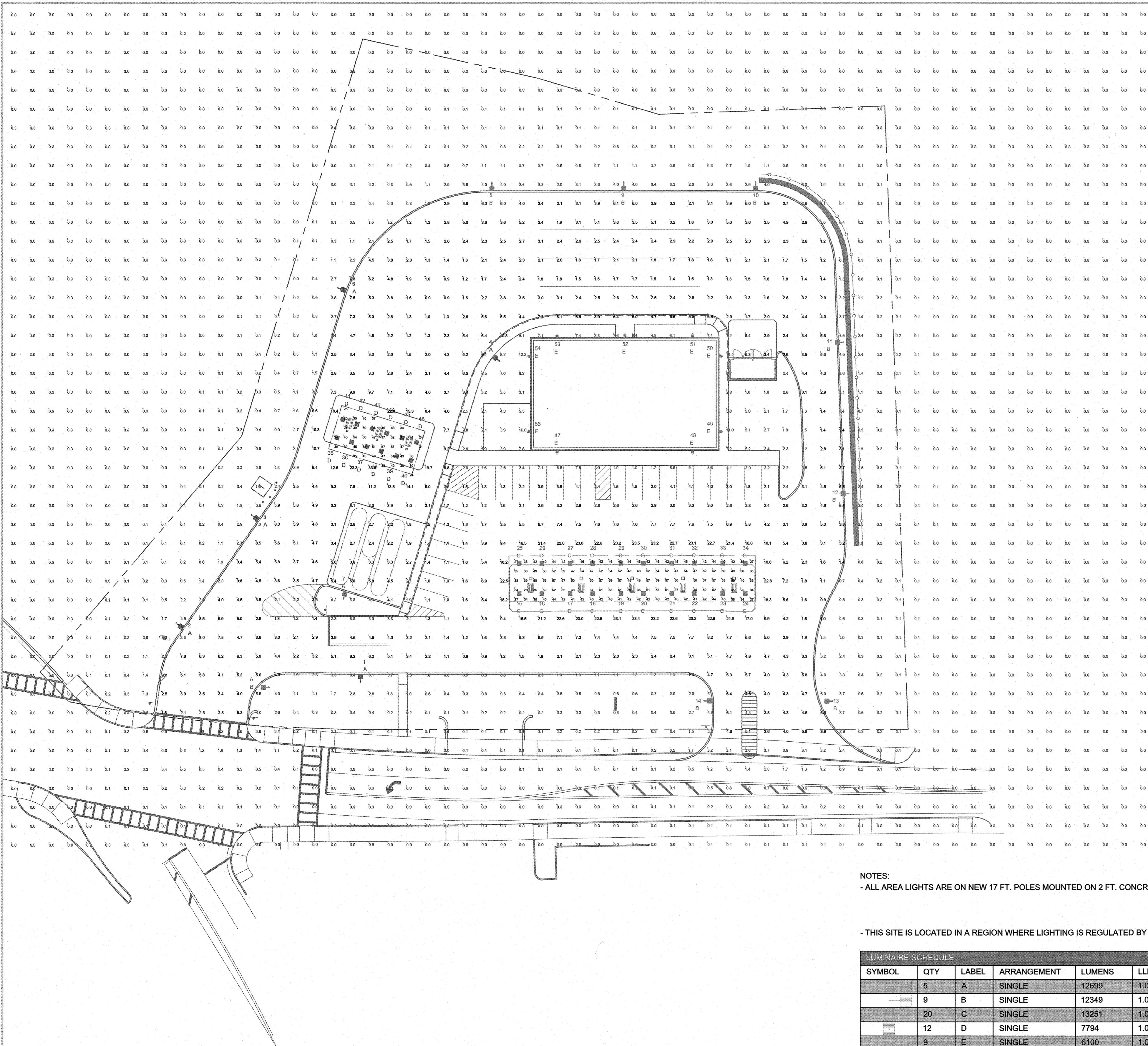
REVISIONS		
NO.	REVISION	DATE
		FEBRUARY 8, 2023
DRAWN/DESIGN BY	CHECKED BY	
SJB/CNM	CMT	

DETAIL SHEET

SCALE:
AS SHOWN
PROJECT NO.:
NEX-2021267







NOTES:

- ALL AREA LIGHTS ARE ON NEW 17 FT. POLES MOUNTED ON 2 FT. CONCRETE BASES.

- THIS SITE IS LOCATED IN A REGION WHERE LIGHTING IS REGULATED BY LOCAL ORDINANCES.

LUMINAIRE SCHEDULE

SYMBOL	QTY	LABEL	ARRANGEMENT	LUMENS	LLF	BUG RATING	WATTS/LUMINAIRE	TOTAL WATTS	MANUFACTURER	CATALOG LOGIC
5	1	A	SINGLE	12699	1.030	B2-U0-G2	104	520	CREE, INC.	OSQ-ML-B-DA-XX + OSQM-B-16L-57K7-3M-UL-NM-XX-Q9 + OSQ-BLSMF
9	1	B	SINGLE	12349	1.030	B2-U0-G2	104	936	CREE, INC.	OSQ-ML-B-DA-XX + OSQM-B-16L-57K7-4M-UL-NM-XX-Q9 + OSQ-BLSMF
20	1	C	SINGLE	13251	1.030	B3-U0-G1	134	2680	CREE, INC.	CAN-304-SL-RS-06-E-UL-XX-700-57K
12	1	D	SINGLE	7794	1.030	B3-U0-G1	69	828	CREE, INC.	CAN-304-SL-RS-06-E-UL-XX-350-57K
9	1	E	SINGLE	6100	1.030	B2-U0-G2	47	423	CREE, INC.	XSPW-B-WM-4ME-6L-57K-UL-XX

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SCALE: 1" = 30'
 LAYOUT BY: RCF
 DWG SIZE: D
 DATE: 02/06/2023

PROJECT NAME:
ENERGY NORTH
LITTLETON, MA
 DRAWING NUMBER:
RL-8621-S1

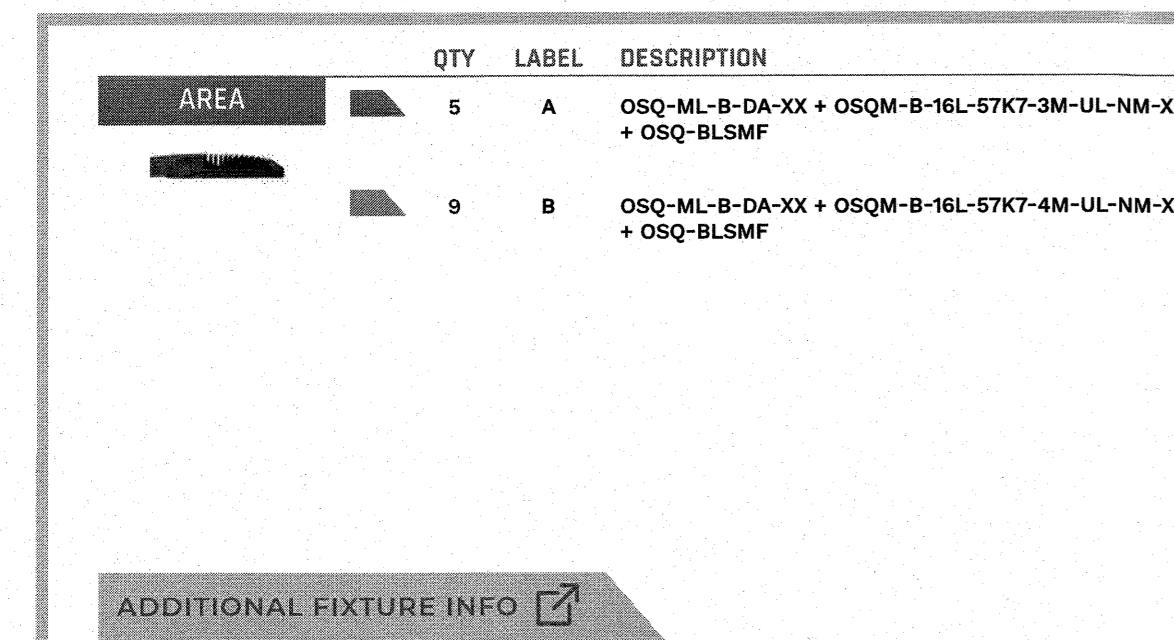


1340 Kemper Meadow Dr, Forest Park, OH 45240
 513-574-9500 | redleonard.com

LUMINAIRE LOCATION SUMMARY		
LUM NO.	LABEL	MTG. HT.
1	A	19
2	A	19
3	A	19
4	A	19
5	A	19
6	B	19
7	B	19
8	B	19
9	B	19
10	B	19
11	B	19
12	B	19
13	B	19
14	B	19
15	C	16
16	C	16
17	C	16
18	C	16
19	C	16
20	C	16
21	C	16
22	C	16
23	C	16
24	C	16
25	C	16
26	C	16
27	C	16
28	C	16
29	C	16
30	C	16
31	C	16
32	C	16
33	C	16
34	C	16
35	D	16
36	D	16
37	D	16
38	D	16
39	D	16
40	D	16
41	D	16
42	D	16
43	D	16
44	D	16
45	D	16
46	D	16
47	E	10
48	E	10
49	E	10
50	E	10
51	E	10
52	E	10
53	E	10
54	E	10
55	E	10

FOOTCANDLE LEVELS CALCULATED AT GRADE USING INITIAL LUMEN VALUES

LABEL	Avg	Max	Min	Avg/Min	Max/Min
PAVED AREA	5.02	33.6	0.8	6.28	42.00
UNDEFINED AREA	0.44	12.2	0.0	N.A.	N.A.
UNDER CANOPY_DIESEL	40.33	57	20	2.02	2.85
UNDER CANOPY_GAS	45.02	59	25	1.80	2.36



ADDITIONAL FIXTURE INFO

OSQ Series

OSQ™ LED Area/Road Luminaire featuring Cree TrueWhite® Technology - Medium & Large

Product Description

The OSQ™ Area/Road luminaire family's simple square design, rugged cast aluminum with integrated weatherproof LED driver compartment, versatile mounting configurations offer simple installation, the OSQ™ Area/Road luminaire family is the perfect choice for your next outdoor lighting application, providing even, quality illumination. The 6L lumens package is a cost-effective upgrade for HID applications up to 750 Watts, and the 30L lumens package is a cost-effective upgrade for HID applications up to 1000 Watts.

The 6L lumens package is a cost-effective upgrade for HID applications up to 750 Watts, and the 30L lumens package is a cost-effective upgrade for HID applications up to 1000 Watts.

Applications: Parking lots, walkways, campuses, park/leisure, office complexes, malls, and grocery.

Performance Summary

Meets Cree TrueWhite® Technology on 5000K Luminaire

Non-Certified Product - Cree TrueWhite® Technology

Assembled in the USA by Cree Lighting from US and imported parts

Initial Delivered Lumens: 4,000 - 10,000

Beam Angle: 120°

Color: 5000K, 4000K, 3000K, 2700K

CCT: 3000K, 4000K, 5000K, 5700K

Limited Warranty: 10 years on luminaire/10 years on Colorlast DeltaColor® finish

Notes: (3) 3 years on luminaire/10 years on Colorlast DeltaColor® finish/10 years on luminaire

Ordering Information

Any luminaire with the following options must be ordered separately:

Example: OSQ-6-A-40K-XX-01-2007-204-12 -N4-04

Note: Luminaire must be ordered separately

OSQ-6-A-40K-XX-01-2007-204-12 -N4-04

OSQ-6-A-40K-XX-01-2007

Material Takeoff_Exterior					
Material: Mark	Material: Description	Material: Manufacturer	Material: Model	Material: Mat_Color	Material: Comments
CS01	CULTURED STONE	WESTLAKE	COUNTRY LEDGESTONE		INSTALL DRY STACK ONLY
FC01	FIBER CEMENT CLAPBOARD SIDING		4" EXPOSURE	COBBLESTONE	FACTORY FINISH
FC02	5/16" FIBER CEMENT PANEL SIDING			NAVAJO BEIGE	FACTORY FINISH; WITH ALUM. VERTICAL JOINTS. PAINT JOINTS TO MATCH PANEL.
FC03	5/4X6 FIBER CEMENT TRIM			ARCTIC WHITE	FACTORY FINISH
FT01	30" x 30" FLOOR TILE	ADESSI	DISTRICT GRAY PORCELAIN TILE		GROUT: MAPEI #47 ULTRACOLOR PLUS FA - CHARCOAL. WHERE WALL TILE OCCURS G.C. TO PROVIDE AND INSTALL SHCLUTER COVE BASE.
PVC01	SCREEN FENCE	CERTAINTEED	BREEZEWOOD SELECT CEDAR	WEATHERED BLEND	
SH01	ASPHALT ROOFING SHINGLE			WEATHERWOOD	

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON A SPECIFIC SITE AT LITTLETON, State CONTEMPORANEOUSLY WITH ITS ISSUE DATE ON 02/06/23, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

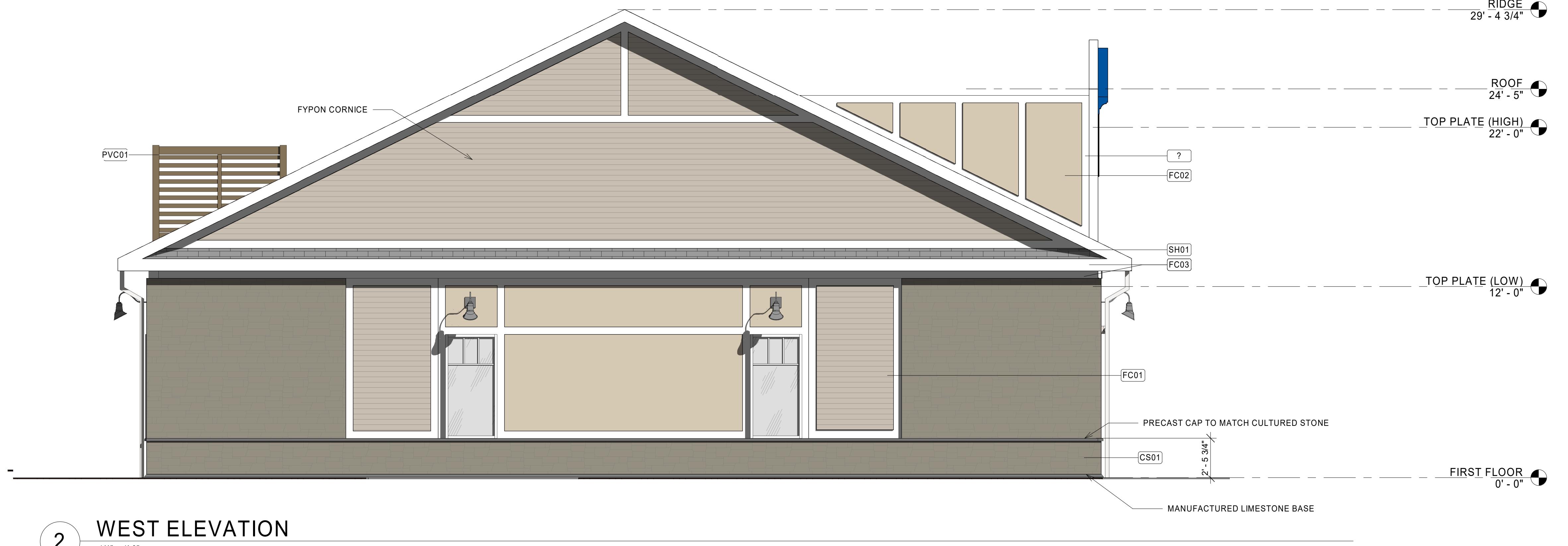
ENERGY NORTH - HAFFNERS LITTLETON, MA

ENERGY LITTLE

CHECKED BY: JE
DRAWN BY: L
DOCUMENT DATE: 02/06/2018

ELEVATIONS

SHEET:
A-200



WEST ELEVATION

1/4" = 1'-0"

1/4" = 1'-0"

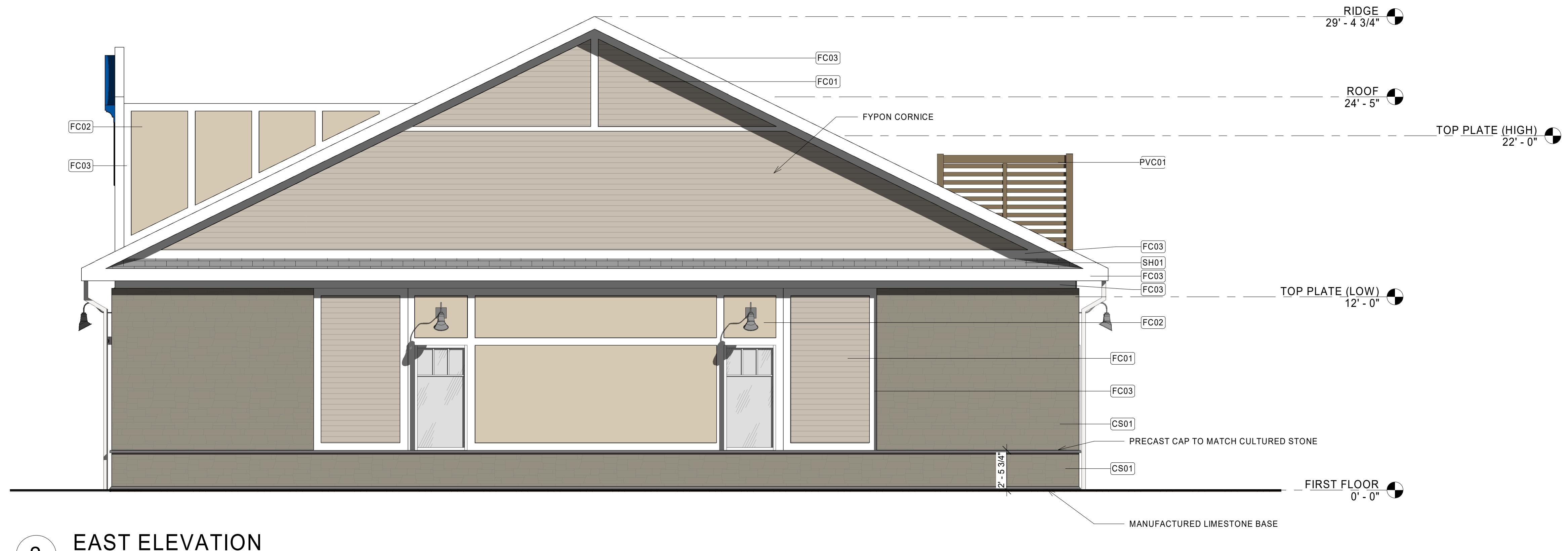


1 SOUTH ELEVATION

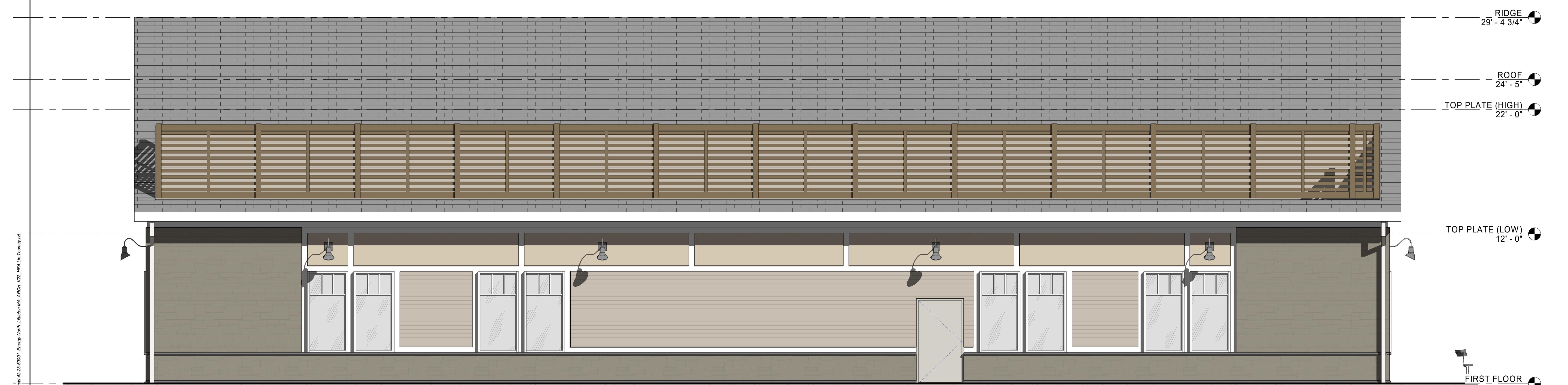
1/4" = 1'-0"

114 - 1-0

Material Takeoff_Exterior					
Material: Mark	Material: Description	Material: Manufacturer	Material: Model	Material: Mat_Color	Material: Comments
CS01	CULTURED STONE	WESTLAKE	COUNTRY LEDGESTONE		INSTALL DRY STACK ONLY
FC01	FIBER CEMENT CLAPBOARD SIDING		4" EXPOSURE	COBBLESTONE	FACTORY FINISH
FC02	5/16" FIBER CEMENT PANEL SIDING			NAVAJO BEIGE	FACTORY FINISH; WITH ALUM. VERTICAL JOINTS. PAINT JOINTS TO MATCH PANEL.
FC03	5/4X6 FIBER CEMENT TRIM			ARCTIC WHITE	FACTORY FINISH
FT01	30" x 30" FLOOR TILE	ADESSI	DISTRICT GRAY PORCELAIN TILE		GROUT: MAPEI #47 ULTRACOLOR PLUS FA - CHARCOAL. WHERE WALL TILE OCCURS G.C. TO PROVIDE AND INSTALL SHCLUTER COVE BASE.
PVC01	SCREEN FENCE	CERTAINTEED	BREEZEWOOD SELECT CEDAR	WEATHERED BLEND	
SH01	ASPHALT ROOFING SHINGLE			WEATHERWOOD	



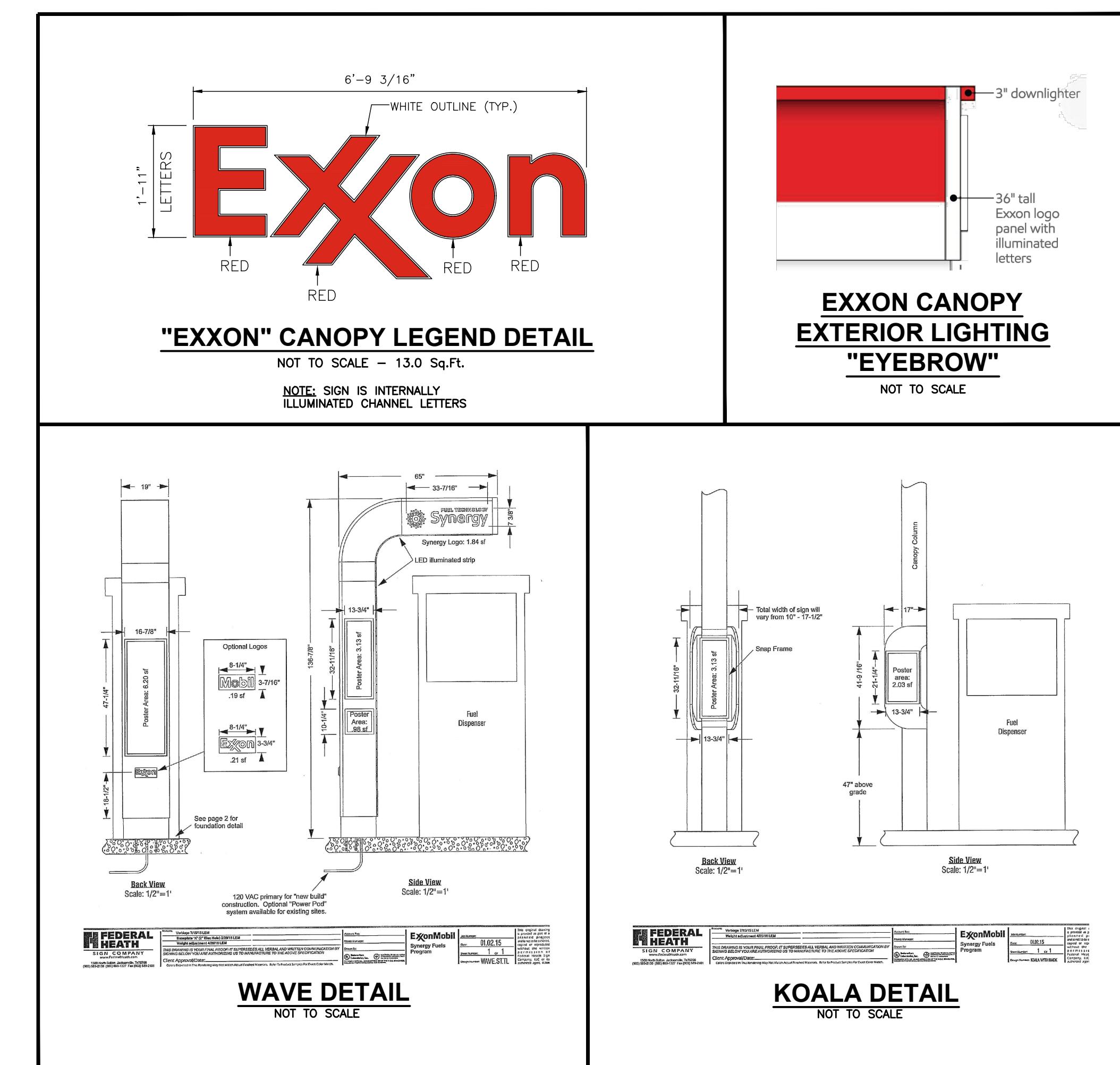
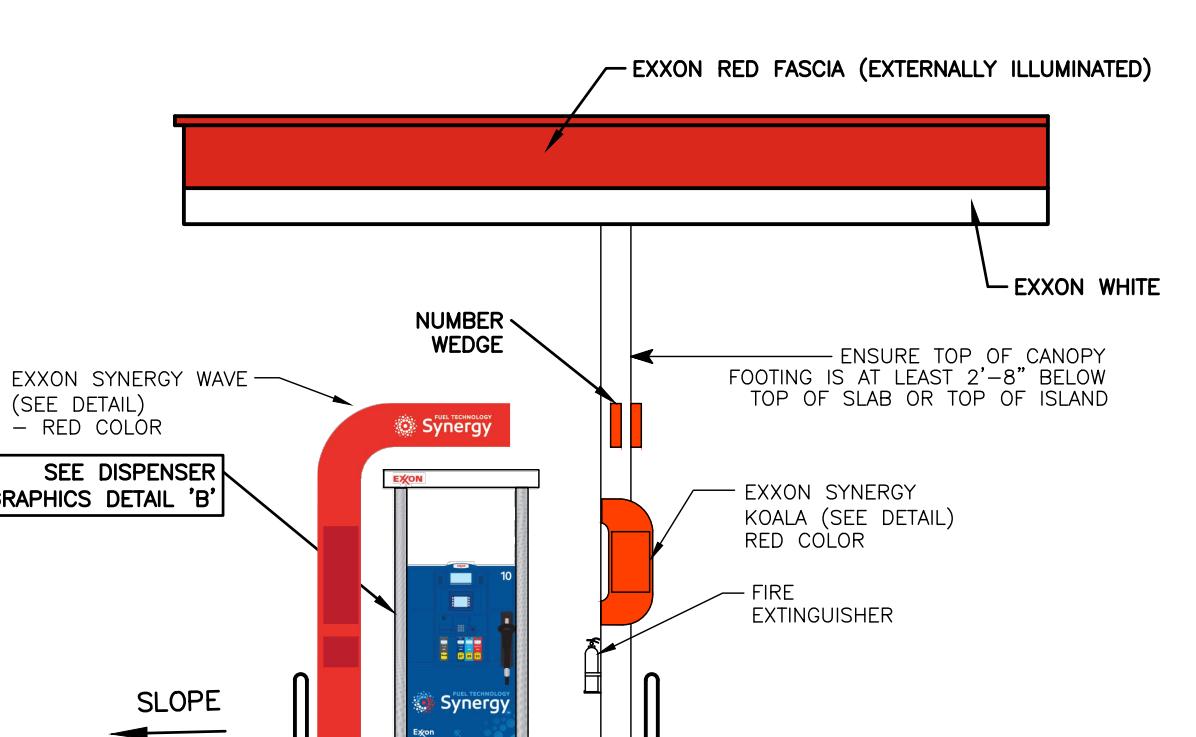
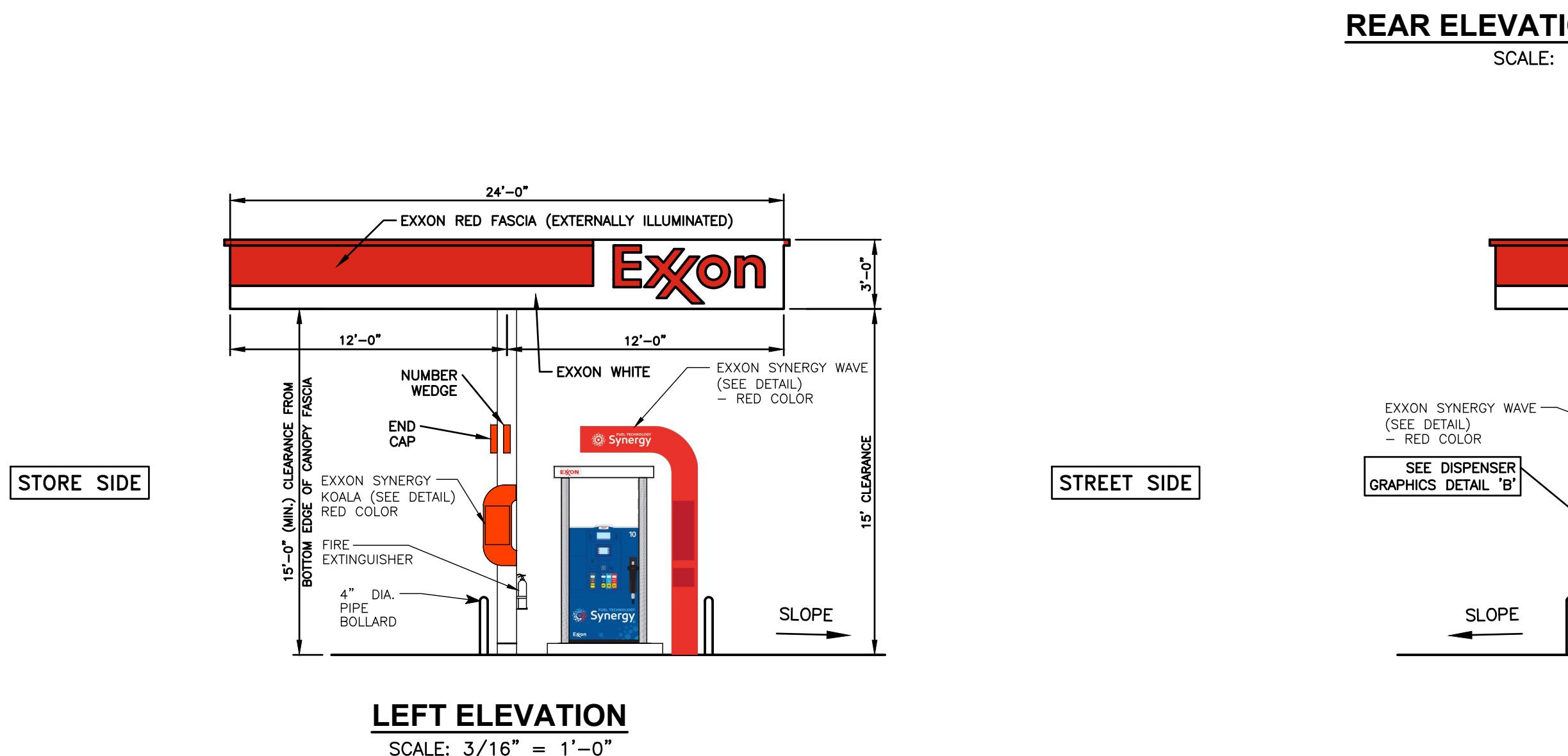
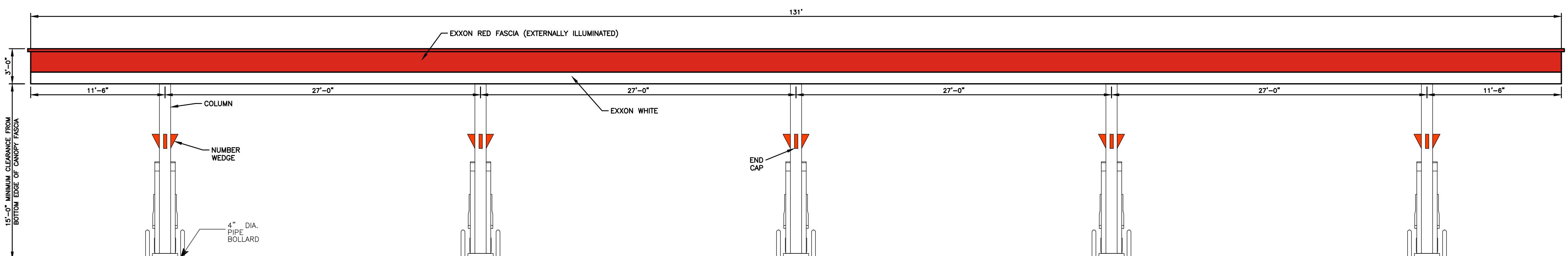
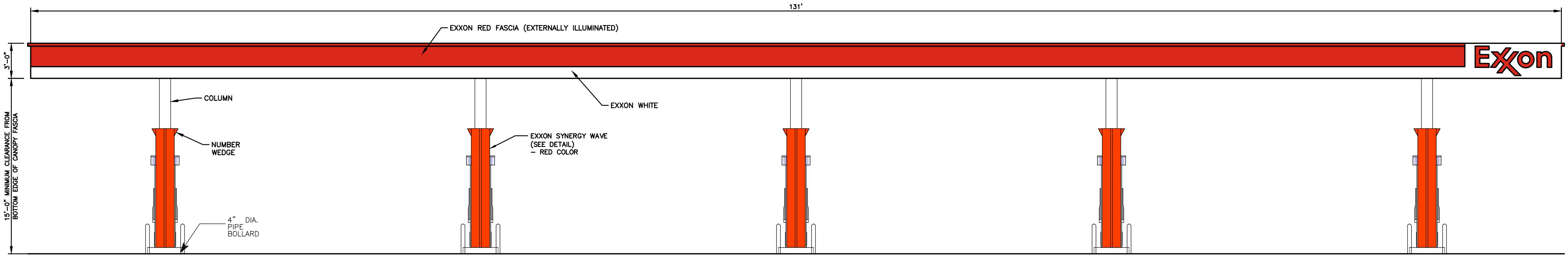
EAST ELEVATION



1 NORTH ELEVATION

NOT FOR CONSTRUCTION

ELEVATIONS

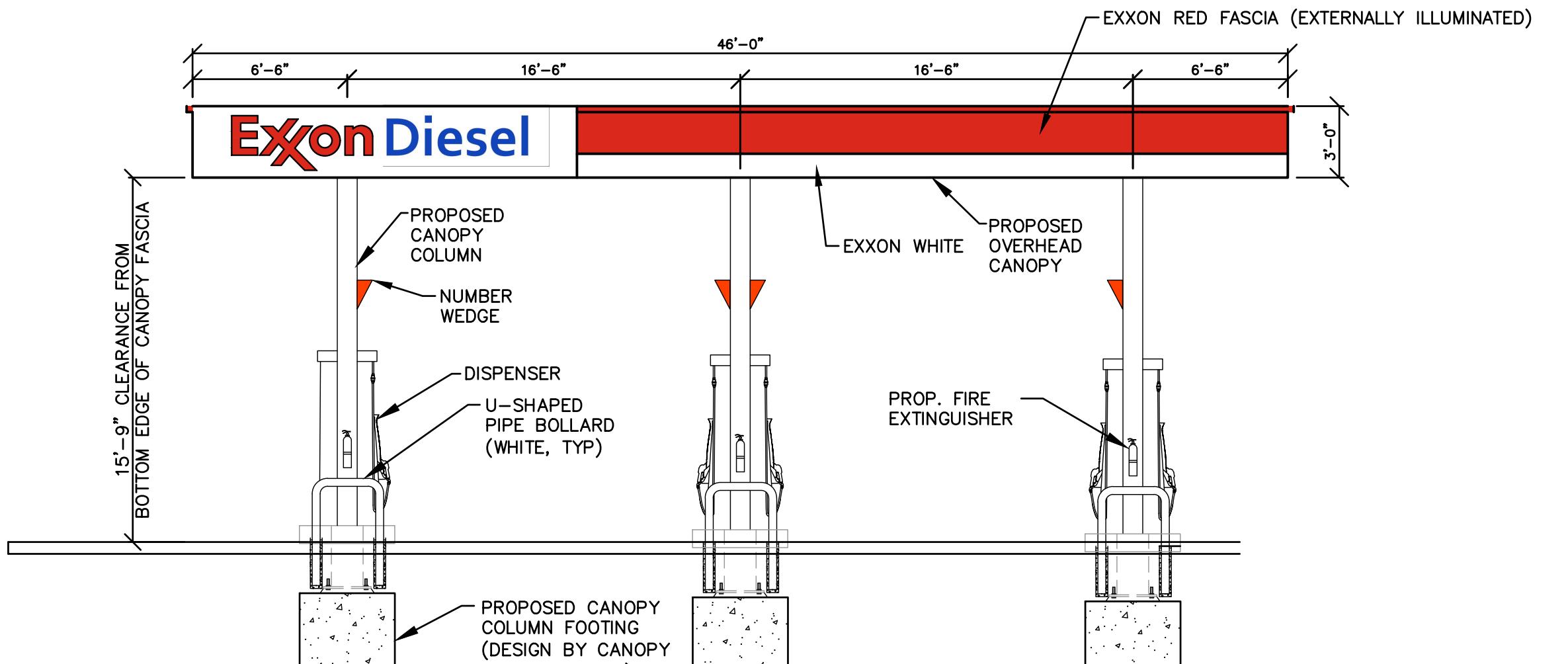


NO.	REVISION	DATE
		FEBRUARY 8, 2023

DRAWN/DESIGN BY SJB/CNM CHECKED BY CMT

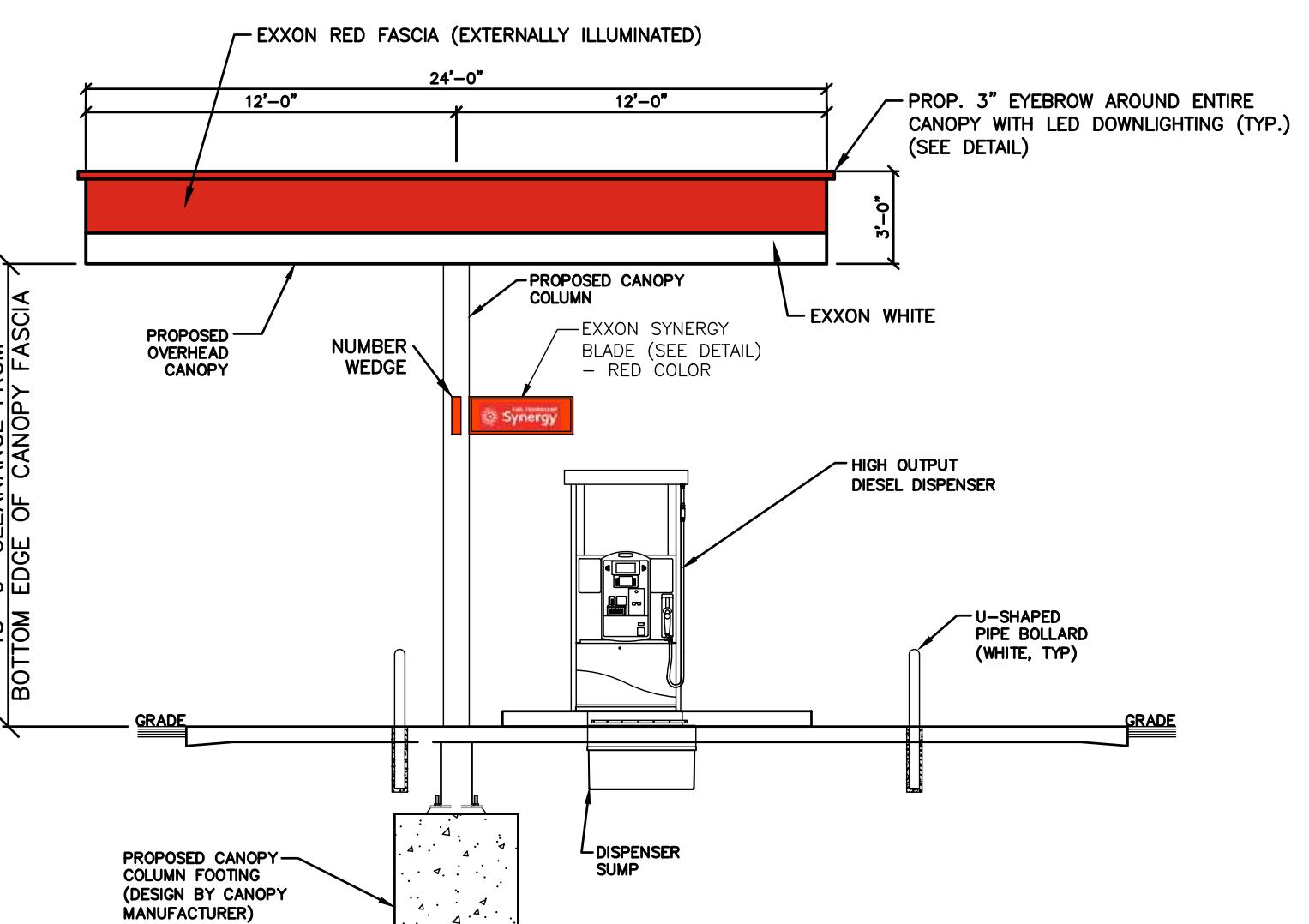
RETAIL FUEL CANOPY ELEVATIONS	
SCALE:	3/16"=1'-0"
PROJECT NO.	NEX-2021267

PREPARED FOR
ENERGY NORTH GROUP
2 INTERNATIONAL WAY
LAWRENCE, MA 01843



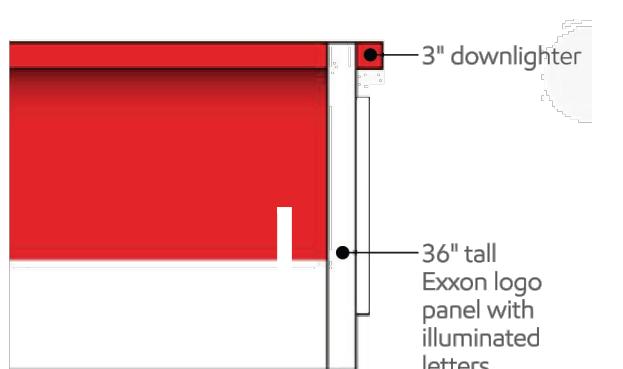
FRONT ELEVATION - ROUTE 2A

SCALE: 3/16" = 1'-0"



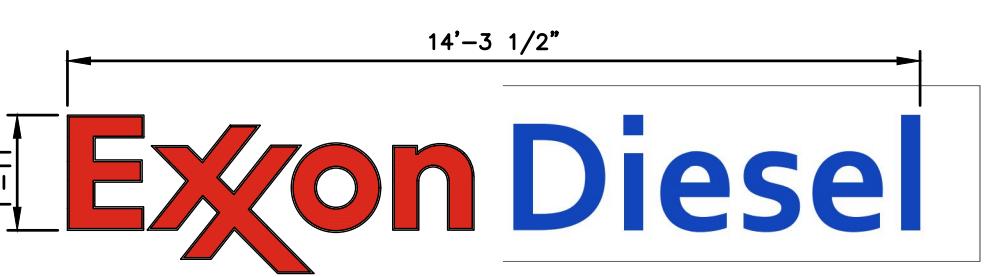
RIGHT ELEVATION - STORE SIDE

SCALE: 3/16" = 1'-0"



EXXON CANOPY
EXTERIOR LIGHTING
"EYEBROW"

TO SCALE



"EXXON DIESEL" CANOPY LEGEND DETAIL

NOT TO SCALE - 26.2 Sq.Ft.

NOTE: SIGN IS INTERNALLY
ILLUMINATED CHANNEL LETTERS

COMMERCIAL DIESEL CANOPY ELEVATIONS

SCALE: 3/16"=1'-0"

PROJECT NO.
NEX-2021267

2 OF 2

Exxon

SIGNAGE AREA = 11.57SF

Exxon Diesel

SIGNAGE AREA = REF CIVIL

5 SD- FUEL CANOPY SIGN



6 SD- DIESEL FUEL CANOPY SIGN

D1

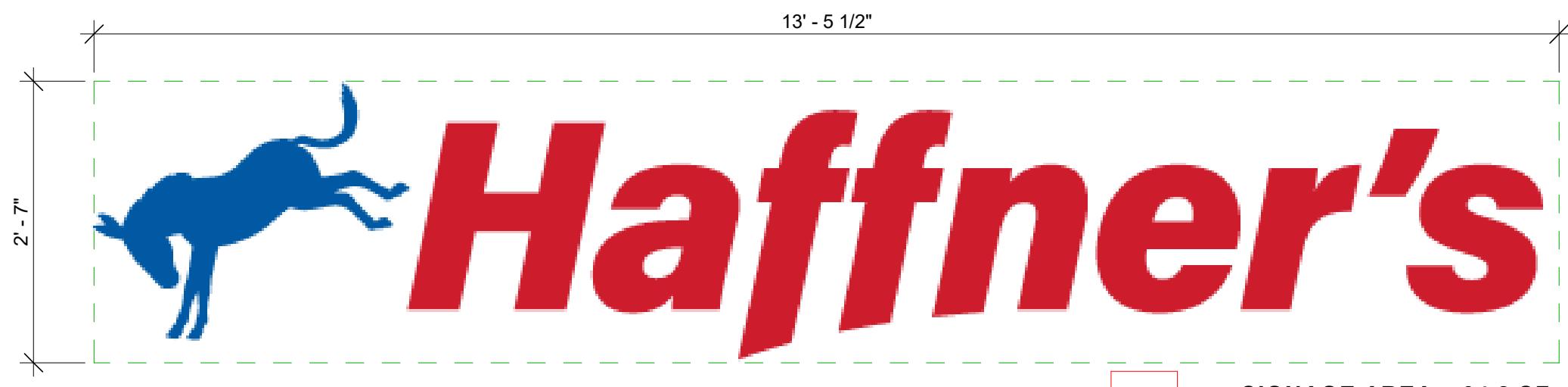
4 CRACK'D SIGNAGE

3/4" = 1'-0"



3 SALS PIZZA SIGNAGE

3/4" = 1'-0"



2 HAFFNERS BUILDING SIGNAGE

3/4" = 1'-0"

EXTERIOR SIGN SCHEDULE	
A	INT. ILLUM. HAFFNERS CHANNEL LETTER SET
B	INT. ILLUM. SALS PIZZA LOGO
C	INT. ILLUM. CRACK'D SIGNAGE
D	INT. ILLUM. FUEL CANOPY CHANNEL LETTERS
D1	INT. ILLUM. DIESEL FUEL CANOPY CHANNEL LETTERS
E	18' HIGH PYLON SIGN

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STIPULATION FOR REUSE
THIS DRAWING WAS PREPARED FOR
USE ON A SPECIFIC SITE AT
CONTEMPORANEOUS WITH ITS ISSUE
TO BE USED ON A SITE AT A LATER TIME
SUITABLE FOR USE ON A DIFFERENT
PROJECT SITE OR AT A LATER TIME.
OR EXAMPLE OF ANOTHER PROJECT
WHERE THE SIGNAGE IS RELOCATED
LEADS TO THE SIGNAGE BEING RELOCATED
REPRODUCTION OF THIS DRAWING FOR
REUSE ON ANOTHER PROJECT SITE
IS PROHIBITED AND MAY
BE CONTRARY TO
THE LAW.

ENERGY NORTH -
HAFFNERS
LITTLETON, MA
JOB NUMBER: 42-23-50001

ISSUE BLOCK		
1 SD SET	02/06/23	

CHECKED BY: HEW
DRAWN BY: LT
DOCUMENT DATE: 02/06/23

NOT FOR CONSTRUCTION

SIGNAGE SITE PLAN
A-000

1 SIGNAGE SITE PLAN
1" = 20'-0"

**256 AYER ROAD (ROUTE 2A)
LITTLETON, MASSACHUSETTS**

REVISION

REVISIONS		
NO.	REVISION	DATE
	11-02-22	

ROADWAY CONCEPT #1

SCALE: 1"=20'
NEX-2021267
1 OF 2

PREPARED FOR
ENERGY NORTH GROUP
2 INTERNATIONAL WAY
LAWRENCE, MA

256 AYER ROAD (ROUTE 2A) LITTLETON, MASSACHUSETTS

REVISIONS		
NO.	REVISION	DATE
		11-02-22
DRAWN/DESIGN BY		CHECKED BY
DIP		FMR

ROADWAY CONCERT #2

SCALE:
1"=20'

NEX-2021267

2 OF 2

