

H:\PROJECTS\NORTHBRIDGE\1139- NORTHBRIDGE- 234 TESSIER LANE\DWG\PERMIT\1139- DEF- SUBDIVISION- REV0.DWG 11-24-25 1:17:04 PM - LAYOUT C-0.0

FOX HOLLOW

DEFINITIVE SUBDIVISION PLAN

TESSIER LANE & FOWLER ROAD

NORTHBRIDGE, MASSACHUSETTS

APPLICANT:

EASTLAND PARTNERS INC.

997 Millbury Street, Worcester, MA 01607
P: 508-647-1919

OWNER:

EKR II TRUST-2024

THOMAS WICKSTROM, TRUSTEE
WICKSTROM MORSE, LLP
ATTORNEY AT LAW
60 CHUCH STREET
WHITINSVILLE, MA01588

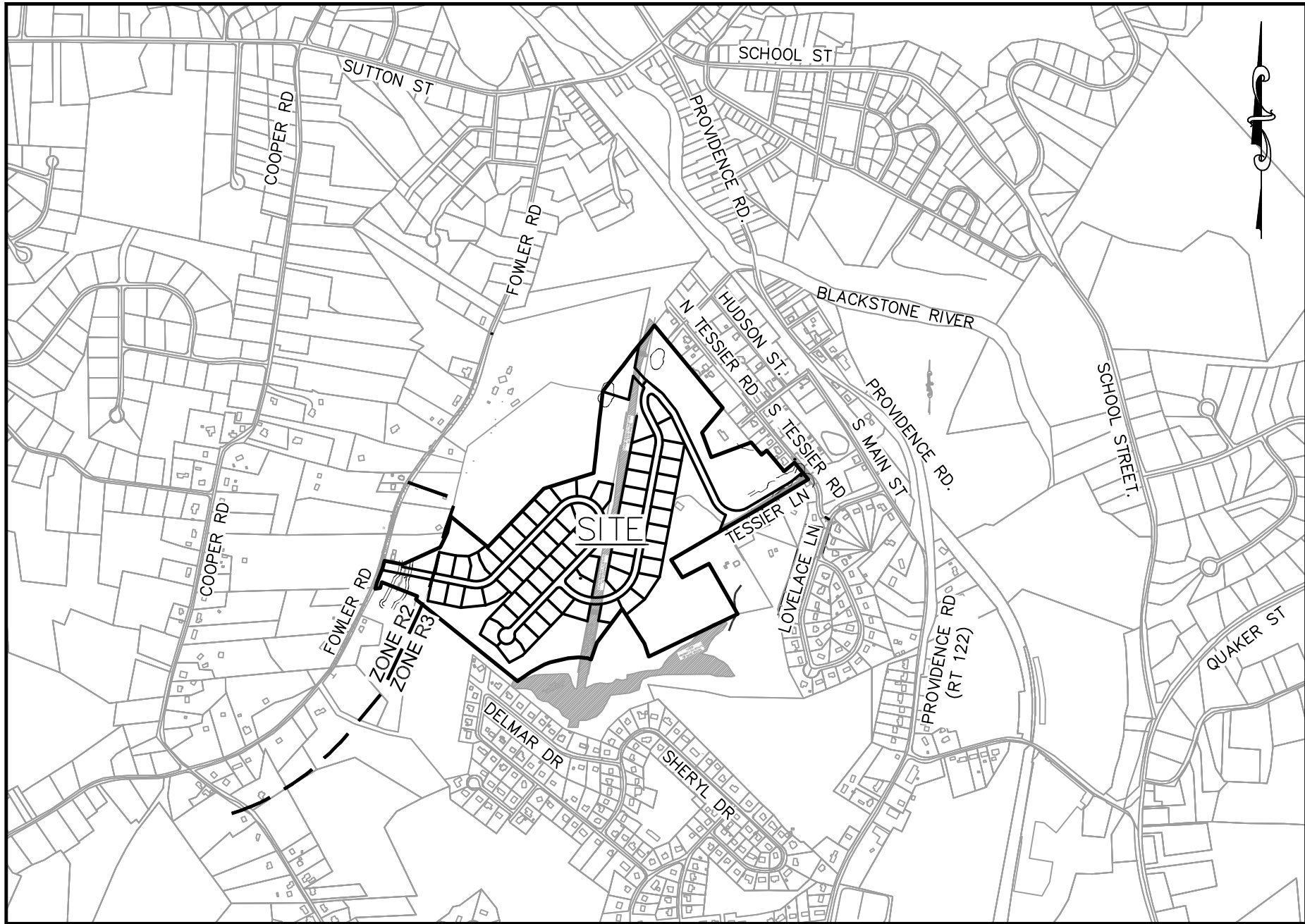
CIVIL ENGINEERING & LAND SURVEYING:

TURNING POINT ENGINEERING

P.O. BOX 757, SUTTON, MA 01590
P: 508-381-1515

OWNERS OF RECORD:	NORTHBRIDGE ASSESSORS INFORMATION:	DEED REFERENCES:	NORTHBRIDGE ZONING INFORMATION:
EKR II TRUST-2024 THOMAS WICKSTROM, TRUSTEE WICKSTROM MORSE, LLP ATTORNEY AT LAW 60 CHURCH STREET WHITINSVILLE, MA 01588	MAP 21, PARCEL 135 TOTAL AREA: 57.70± ACRES MAP 21, PARCEL 139 TOTAL AREA: 12.66± ACRES MAP 21, PARCEL 181 TOTAL AREA: 6.84± ACRES	DB: 71083, PG 118	ZONE: R2 MINIMUM AREA: 20,000 S.F. MINIMUM LOT WIDTH: 125' SETBACKS: FRONT 30'. SIDE 10'. REAR 40' ZONE: R3 MINIMUM AREA: 20,000 S.F. MINIMUM LOT WIDTH: 125' SETBACKS: FRONT 20'. SIDE 10'. REAR 30'

PROPERTY INFORMATION



LOCUS MAP
SCALE: 1" = 1,000'

TOTAL AREA TO BE SUBDIVIDED			
MAP	PARCEL	AREAS SF	AREA AC
21	135	2,513,270	57.6967
21	139	551,392	12.6582
21	181	297,885	6.8385
TOTAL		3,362,547	77.19

TABLE OF TOTAL AREAS

PARCELS	AREA (SF)	AREA (AC)	USE
1.00	47,411.75	1.09	FUTURE
2.00	369,591.20	8.48	RIGHT OF WAY
TOTAL		417,002.95	9.57

OPEN SPACE (OS) PARCELS		
OS#	AREA (SF)	AREA(AC)
1	504,852.58	11.59
2	458,509.66	10.53
3	282,593.14	6.49
4	81,259.17	1.87
5	343,464.23	7.88
TOTAL	1,670,678.78	38.35

TABLES OF PARCEL AREAS

EASEMENT			USE
#	AREA (SF)	AREA(AC)	
A	14,479.00	0.3324	DRAINAGE
B	2,544.50	0.0584	DRAINAGE
C	3,120.06	0.0716	DRAINAGE
D	17,314.30	0.3975	DRAINAGE
E	3,033.30	0.0696	DRAINAGE
F	1,159.95	0.0266	DRAINAGE
G	33,467.60	0.7683	DRAINAGE
H	3,226.38	0.0741	DRAINAGE
I	62,807.28	1.4419	DRAINAGE
J	400.00	0.0092	DRAINAGE
K	30,191.22	0.6931	DRAINAGE
L	57,308.97	1.3156	DRAINAGE
M	16,129.91	0.0370	DRAINAGE
N	1,602.05	0.0368	DRAINAGE
O	46,142.77	1.0593	DRAIN/UTILITY
P	544.22	0.0125	DRAIN/UTILITY
Q	1,356.10	0.0311	DRAIN/UTILITY
R	538.52	0.0124	DRAINAGE
S	257.29	0.0092	DRAINAGE
T	17,449.07	0.4006	DRAINAGE
U	12,526.88	0.2876	DRAINAGE
V	19,3839.56	4.4499	UTILITY NGRID
W	1,987.69	0.0456	SEWER
X	1,750.00	0.0402	SEWER
Y	1,750.00	0.0402	SEWER
Z	4,075.00	0.0935	SEWER
AA	401.92	0.0092	DRAINAGE
BB	401.27	0.0092	DRAINAGE
CC	1158.75	0.02660124	SEWER
TOTAL		518,766.56	11.91

TABLE OF EASEMENT AREAS

LOT	AREA (AC)	AREA (SF)
1	0.46	20000.00
2	0.46	20000.00
3	0.49	21452.00
4	0.49	21514.45
5	0.46	20000.00
6	0.46	20000.00
7	0.46	20000.00
8	0.46	20000.00
9	0.46	20000.00
10	0.47	20327.52
11	0.46	20009.42
12	0.46	20057.88
13	0.46	20000.10
14	0.46	20000.10
15	0.46	20237.56
16	0.46	20000.00
17	0.46	20000.00
18	0.46	20000.00
19	0.47	20317.22
20	0.47	20276.78
21	0.46	20140.20
22	0.47	20307.99
23	0.46	20000.00
24	0.46	20000.00
25	0.47	20269.85
26	0.46	20008.90
27	0.46	20001.70
28	0.46	20001.05
29	0.52	22588.49
30	0.46	20010.04
31	0.46	20000.00
32	0.46	20000.00
33	0.46	20000.00
34	0.46	20000.00
35	0.46	20000.00
36	0.46	20000.00
37	0.46	20157.12
38	0.50	21937.46
39	0.48	21079.02
40	0.48	20717.91
41	0.47	20473.68
42	0.50	21875.00
43	0.50	21875.00
44	0.50	21875.00
45	0.50	21875.00
46	0.50	21875.00
47	0.50	21875.00
48	0.48	20973.90
49	0.46	20000.91
50	0.59	25625.40
51	0.47	20644.87
52	0.49	21267.15
53	0.47	20566.61
54	0.49	21429.07
55	0.46	20000.00
56	0.46	20000.00
57	0.46	20000.00
58	0.46	20000.00
59	0.46	20084.18
60	0.48	21105.09
61	0.46	20031.65
62	0.46	20000.00
TOTAL		1,274,865.27

TABLE OF LOT AREAS

SHEET TITLE	SHEET NUMBER
COVER SHEET	C-1.0
ABBREVIATIONS & LEGEND	C-2.0
PLAN OF LAND 234 TESSIER LANE- 81X	--
EXISTING CONDITIONS	C-3.0
DEFINITIVE SUBDIVISION PLAN INDEX SHEET	C-3.1
DEFINITIVE SUBDIVISION PLANS	C-3.2 - C-3.8
GRADING AND DRAINAGE INDEX PLAN	C-4.0
GRADING AND DRAINAGE PLAN	C-4.1 - C-4.8
SEDIMENT AND EROSION CONTROL INDEX PLAN	C-5.0
EROSION AND SEDIMENT CONTROL PLANS AND DETAILS	C-5.1 - C-5.9
OVERALL WATER SYSTEM LAYOUT PLAN	C-6.0
WATER SYSTEM LAYOUT PLAN	C-6.1-6.7
FOWLER ROAD WATER LINE PLAN	C-6.8-6.9
PROFILE AND UTILITY PLANS	C-7.1- C-7.8
CONSTRUCTION DETAILS	C-8.1- C-8.6
REPLICATION PLAN	C-9.1- C-9.3

DRAWING LIST



TURNING POINT ENGINEERING

CIVIL SITE DESIGN

P.O. Box 757 • Sutton, MA 01590
P:(508) 381-1515 F:(508) 647-0189
www.tpengineer.com

APPROVAL UNDER SUBDIVISION CONTROL LAW
NORTHBRIDGE PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

FOX HOLLOW
DEFINITIVE SUBDIVISION PLAN
TESSIER LANE & FOWLER ROAD
NORTHBRIDGE, MASSACHUSETTS
MAP 21 PARCELS 135, 139 AND 181

PREPARED FOR

Eastland Partners, Inc.
997 Millbury Street
Worcester, MA 01607

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO. TPE-1139

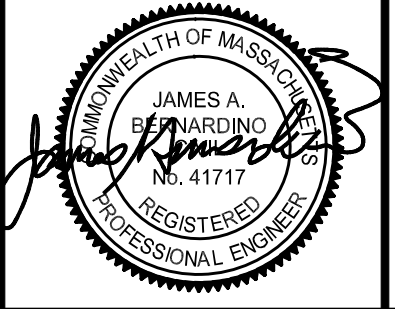
DESIGNED BY JAB, TB

CHECKED BY JAB

DATE NOVEMBER 17, 2025

CAD FILE H:\1139-DEF-Subdivision-REV0.dwg

PLAN NO. L-XXX



P.E.

P.L.S.

SHEET TITLE

COVER SHEET

DRAWING ISSUED FOR:

PERMIT

THIS PLAN IS INTENDED TO SHOW CONSTRUCTION AND MAY NOT SHOW ALL CONSTRUCTION DETAILS AND SPECIFICATIONS FOR THE SHOWN IMPROVEMENTS AND MAY NOT IDENTIFY ALL CONSTRUCTION ITEMS/AREAS OF CONTRACTOR JURISDICTION.

SHEET NO.

C-0.0

GENERAL NOTES

PART 1 – TOPOGRAPHIC AND PROPERTY LINE INFORMATION

1. NOTICE TO CONTRACTOR: THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.

2. PROPERTY LINE AND TOPOGRAPHY:

- EXISTING TOPOGRAPHIC INFORMATION BASED UPON AERIAL TOPOGRAPHIC MAPPING AND ON THE GROUND SURVEY.

3. WETLAND DELINEATION BY B&C ASSOCIATES, ORRAD ISSUED NORTHBIDGE CONSERVATION COMMISSION WRD BK075066 PG126

4. DATUM: NAVD 88

5. COORDINATE SYSTEM: MASSACHUSETTS STATE PLANE 83

6. CONSTRUCTION STAKING CONTROL: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCH MARKS NECESSARY TO PERFORM THE WORK.

7. FLOODPLAIN: THE PROPERTY DOES NOT LIE IN A FLOOD HAZARD AREA OR 100-YEAR FLOODPLAIN ACCORDING TO THE MOST RECENT FLOOD INSURANCE RATE MAP #25027C0792F, EFFECTIVE 6/21/23.

PART 2 – EXECUTION

2.1 DEMOLITION, SEDIMENTATION, AND EROSION CONTROL

A. THE FIRST STAGE INVOLVES ACTIVITIES NEEDED TO ADDRESS STORMWATER MANAGEMENT, EXCAVATING MATERIAL DESIGNATED FOR OFF-SITE REMOVAL OR ON-SITE RELOCATION AND FENCING SELECTED AREAS. STAGE ONE WILL PREPARE SITE FOR CONVENTIONAL CONSTRUCTION.

B. THE SECOND STAGE WILL CONSIST OF ROUTINE CONSTRUCTION INVOLVING BUILDING, PAVING, LANDSCAPING, AND UTILITIES.

C. THERE ARE GENERAL PHASES OF CONSTRUCTION. IN EACH PHASE OF CONSTRUCTION, IMPLEMENT STANDARD EROSION AND SEDIMENT CONTROL PRACTICES PRIOR TO INITIATING EARTH DISTURBING ACTIVITIES, AND MAINTAIN THESE PRACTICES THROUGHOUT THE COURSE OF CONSTRUCTION.

D. DURING DEMOLITION, EXCAVATIONS AS MUCH AS 20 FEET MAY BE REQUIRED FOR THE INSTALLATION OF FOUNDATIONS, RETAINING WALLS, AND UTILITIES. EXCAVATIONS SHALL BE CUT TO A STABLE SLOPE OR BE TEMPORARILY BRACED, DEPENDING ON THE EXCAVATION DEPTHS AND THE ENCOUNTERED SUBSURFACE CONDITIONS. THE CONTRACTOR MAY BE REQUIRED TO SUBMIT EXCAVATION AND SLOPE STABILIZATION METHODS PRIOR TO THE START OF CONSTRUCTION TO THE ENGINEER FOR REVIEW.

E. BASED ON THE COMPOSITION OF SOILS ENCOUNTERED DURING THE EXPLORATION PROGRAM, SITE SOILS ARE GENERALLY CLASSIFIED AS TYPES C, SOILS AS DEFINED BY (USGS) NATIONAL RESOURCES CONSERVATION SERVICE (NRCS), FORMERLY SOIL CONSERVATION SERVICE. TEMPORARY CONSTRUCTION SLOPES SHOULD BE DESIGNED IN STRICT COMPLIANCE WITH THE MOST RECENT GOVERNING REGULATIONS. STOCKPILES SHOULD BE PLACED WELL AWAY FROM THE EDGE OF THE EXCAVATION AND THEIR HEIGHT SHOULD BE CONTROLLED TO PREVENT SURCHARGE TO THE SIDES OF THE EXCAVATION. SURFACE DRAINAGE SHOULD BE CONTROLLED TO AVOID FLOW OF SURFACE WATER INTO THE EXCAVATIONS.

F. CONSTRUCTION SLOPES SHOULD BE REVIEWED FOR MASS MOVEMENT. IF POTENTIAL STABILITY PROBLEMS ARE OBSERVED, WORK SHOULD CEASE AND A GEOTECHNICAL ENGINEER SHOULD BE CONTACTED IMMEDIATELY. THE RESPONSIBILITY FOR EXCAVATION SAFETY AND STABILITY OF TEMPORARY CONSTRUCTION SLOPES SHOULD LIE SOLELY WITH THE CONTRACTOR.

2.2 – TYPICAL PRACTICES TO BE APPLIED TO THE SITE INCLUDE THE FOLLOWING:

A. PRIOR TO EARTH DISTURBANCE IN ANY WORK AREA, INSTALL EROSION CONTROL BARRIERS BETWEEN THE WORK AREA AND THE SURFACE WATER RESOURCE TO WHICH IT DRAINS.

B. DISCHARGE WATER FROM DEWATERING OPERATIONS TO A TEMPORARY SILTATION TRAP OR SEDIMENTATION BASIN.

C. PROVIDE TEMPORARY BERMS AND SWALES TO DIVERT SURFACE WATER AWAY FROM THE AREAS THAT WILL BE EXPOSED BY CONSTRUCTION ACTIVITY TO MINIMIZE THE AMOUNT OF SURFACE WATER COMING INTO CONTACT WITH EXPOSED SOILS. PROVIDE STABLE OUTLETS FOR THESE DEVICES, AND LINE OR VEGETATE THESE DIVERSIONS TO PROVIDE FOR THEIR STABILITY DURING CONSTRUCTION.

D. LIMIT THE EXTENT OF EXPOSED SOILS TO AREAS THAT CAN BE WORKED AND RESTABILIZED WITHIN THE CONSTRUCTION SEASON AND DURING THE SPECIFIC CONSTRUCTION PHASE.

E. WHEN EARTHWORK CONSTRUCTION ACTIVITY IN AN AREA IS COMPLETE, STABILIZE THE AREA WITH A SUITABLE SURFACE AS DESCRIBED BELOW.

F. IN ADDITION TO THESE PRACTICES, FOLLOW THE SPECIAL PRACTICES DESCRIBED BELOW. COMPLY WITH THE DIRECTIONS OF THE APPLICANT'S REPRESENTATIVE TO ADDRESS EROSION AND SEDIMENTATION CONDITIONS THAT MAY ARISE ON A CASE BY CASE BASIS DURING CONSTRUCTION.

G. THE FOLLOWING IS A DESCRIPTION OF MINIMUM CONSTRUCTION REQUIREMENTS AND DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES WITH REGARD TO DETERMINING THE ADEQUACY OF MEANS AND METHODS OF CONSTRUCTION.

2.3 – CONSTRUCTION SEQUENCING

A. SEQUENCING SHALL BE AS SHOWN ON THE PLAN AND AS DICTATED BY THE REQUIREMENTS OF CONSTRUCTION.

2.4 – MAINTENANCE

A. DURING THE PERIOD OF CONSTRUCTION AND/OR UNTIL LONG TERM VEGETATION IS ESTABLISHED:

B. SEEDED AREAS WILL BE FERTILIZED AND RESEEDD AS NECESSARY TO INSURE VEGETATION ESTABLISHMENT.

C. TEMPORARY SEDIMENTATION BASINS WILL BE CHECKED AFTER EACH SIGNIFICANT RAINFALL AND CLEANED AS NEEDED TO RETAIN STORAGE CAPACITY.

D. TEMPORARY DRAINAGE SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY.

E. THE EROSION CONTROL BARRIERS AND OTHER EROSION AND SEDIMENT CONTROL MEASURES/DEVICES SHALL BE INSPECTED, CLEANED, REPLACED AND/OR REPAIRED AS NECESSARY, PERIODICALLY AND AFTER EACH SIGNIFICANT RAINFALL.

F. SWEEP ON-SITE PAVED AREAS AND OFF-SITE STREETS AS NECESSARY TO PREVENT SILT AND DEBRIS ORIGINATING ON-SITE FROM ENTERING CLOSED DRAINAGE SYSTEMS AND/OR ENVIRONMENTALLY SENSITIVE AREAS. WHEN NECESSARY UTILIZE WATER SPRAYING, SURFACE ROUGHENING AND/OR APPLY POLYMERS, SPRAY-ON TACKIFIERS, CHLORIDES AND BARRIERS FOR DUST CONTROL.

2.5 – GENERAL

A. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH (USDA) NATURAL RESOURCES CONSERVATION SERVICE (NRCS, FORMERLY SCS) GUIDELINES AND ALL LOCAL, COUNTY AND MUNICIPAL REGULATIONS.

B. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY SITE WORK OR EARTHWORK OPERATIONS, SHALL BE MAINTAINED DURING CONSTRUCTION, AND SHALL REMAIN IN PLACE UNTIL ALL SITE WORK IS COMPLETE AND GROUNDCOVER IS ESTABLISHED.

C. ALL WORK SHALL BE IN ACCORDANCE WITH THE PERMITS AND APPROVALS ISSUED AND THE CONSTRUCTION SPECIFICATIONS. BLASTING IS PROHIBITED ON THE PROJECT SITE.

D. STOCKPILES SHALL BE SURROUNDED ON THEIR PERIMETERS WITH STAKED STRAW WATTLES AND/OR SILTATION FENCES TO PREVENT AND/OR CONTROL SILTATION AND EROSION.

E. TOPS OF STOCKPILES SHALL BE COVERED IN SUCH A MANNER THAT STORMWATER DOES NOT INFILTRATE THE MATERIALS AND THEREBY RENDER THE SAME UNSUITABLE FOR FILL USE.

F. ALL DISTURBED OR EXPOSED AREAS SHALL BE PERMANENTLY STABILIZED WITHIN FIVE (5) BUSINESS DAYS OF COMPLETION OF CONSTRUCTION OF A GIVEN AREA. EXPOSED AREAS WHERE NO WORK HAS OCCURRED FOR FOURTEEN (14) DAYS SHALL BE TEMPORARILY STABILIZED WITH HYDROSEED OR OTHER APPROVED METHOD.

G. THE LOCATION OF TEMPORARY DRAINAGE SWALES AND SEDIMENTATION TRAPS ARE APPROXIMATE ONLY AND SHALL BE RELOCATED AS REQUIRED AS CONSTRUCTION PROGRESSES.

H. HAYBALE DIKES SHALL BE CONSTRUCTED AT ALL EXISTING & PROPOSED CATCH BASINS LOCATED IN FILL AREAS & SUBJECT TO STORMWATER RUN-OFF FROM PROPOSED FILL AREAS DURING CONSTRUCTION, OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. NO SEDIMENTS SHALL ENTER THE ON-SITE OR OFF-SITE DRAINAGE SYSTEMS AT ANY TIME.

I. CULVERT/PIPE INLETS AND OUTFALLS SHALL BE PROTECTED BY STRAW WATTLE FILTERS UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED.

J. EROSION CONTROLS SHALL BE PERIODICALLY INSPECTED AND REPLACED AS REQUIRED.

K. STABILIZED NON-RIPRAP SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITH EXCELSIOR BLANKETS IF NECESSARY TO PROTECT FROM EROSION.

L. THE CONTRACTOR SHALL KEEP ON SITE AT ALL TIMES ADDITIONAL STRAW WATTLES AND EXTRA SILTATION FENCING FOR INSTALLATION AT THE DIRECTION OF THE OWNER'S REPRESENTATIVE OR LOCAL OFFICIALS TO MITIGATE ANY EMERGENCY CONDITION.

M. DISPOSAL OF ALL DEMOLISHED MATERIALS IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE HAULED OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL MUNICIPAL REQUIREMENTS.

N. THE CONTRACTOR SHALL PROTECT AND/OR CAP OFF ALL EXISTING ON-SITE UTILITY SERVICES DESIGNATED AS SUCH ON THESE DRAWINGS.

O. THE LIMIT OF WORK LINE FOR THE AREA TO BE CLEARED AND GRUBBED SHALL BE THE SAME AS THE LIMIT OF WORK LINE NECESSARY FOR GRADING PURPOSES, (I.E., THE GRADING LIMITS AROUND THE PERIMETER OF THE PROJECT AREA).

P. THE AREA OR AREAS OF ENTRANCE AND EXIT TO AND FROM THE SITE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

Q. FOLLOWING THE ADDITION OF A BINDER COURSE, THE CONTRACTOR SHALL SWEEP ALL ON-SITE PAVEMENT, IF NECESSARY, UNTIL ALL SITE CONSTRUCTION IS COMPLETED.

R. THE MATERIALS AND METHODS USED IN THE CONSTRUCTION OF ROADWAYS SHALL CONFORM TO THE REQUIREMENTS OF THE TOWN CONSTRUCTION STANDARDS AND SPECIFICATIONS. WHEN NO CITY SPECIFICATION IS PROVIDED THE MATERIALS AND METHODS USED IN THE CONSTRUCTION OF ROADWAYS SHALL CONFORM TO THE REQUIREMENTS OF "THE COMMONWEALTH OF MASSACHUSETTS, DEPARTMENT OF PUBLIC WORKS, STANDARDS & SPECIFICATIONS FOR HIGHWAYS & BRIDGES," LATEST EDITION.

PART 3 – STORM DRAINS

A. STORM DRAIN PIPING (INDICATED BY LETTER "D") SHALL BE CORRUGATED POLYETHYLENE PIPE (HDPE) AS INDICATED, PER AASHTO M29.4 AND M252 MANUFACTURED WITH HIGH DENSITY POLYETHYLENE PLASTIC. HDPE SHALL BE ADS N-12 PIPE AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC. OR HANCOR HI Q PIPE AS MANUFACTURED BY HANCOR, INC. OR APPROVED EQUAL.

B. STORM DRAIN MANHOLES (INDICATED BY LETTERS "DMH") SHALL BE PRECAST 4', 5' OR 6' DIAMETER CONCRETE PER ASTM C478 (AS CALLED FOR ON DRAWINGS OR FIELD CONDITIONS REQUIRED) WITH RUBBER GASKET JOINTS CONFORMING TO ASTM C443. PIPE TO MANHOLE CONNECTIONS SHALL BE MORTARED PIPE OPENINGS.

C. CATCH BASINS (INDICATED BY LETTERS "CB") SHALL BE PRECAST 4' DIAMETER CONCRETE PER ASTM C478, (ALTERNATE TOP SLAB WHERE NECESSARY) AND RUBBER GASKET JOINTS CONFORMING TO ASTM C443, WITH 4' FOOT SUMPS AND GAS TRAP OUTLET ELBOW. PIPE TO STRUCTURE CONNECTIONS SHALL BE MORTARED PIPE OPENINGS.

D. COORDINATES OF MANHOLES REFER TO CENTERS OF STRUCTURES AND CATCH BASINS REFER TO THE CENTER BACK OF THE FRAME AND GRATE.

E. FLARED END SECTIONS (FES) SHALL BE CORRUGATED POLYETHYLENE PIPE AS INDICATED, MANUFACTURED WITH HIGH DENSITY POLYETHYLENE PLASTIC. HDPE SHALL BE ADS N-12 PIPE AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC. OR HANCOR HI Q PIPE AS MANUFACTURED BY HANCOR, INC. OR APPROVED EQUAL.

PART 4 – UTILITIES

4.1 – WATER DISTRIBUTION AND FIRE PROTECTION

A. WATER MAINS 3" DIA. AND LARGER SHALL HAVE 5'-0" MINIMUM COVER AND SHALL BE CEMENT LINED DUCTILE IRON (CLDI), CLASS 52 MINIMUM, CONFORMING TO AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A21.50, A21.4, A21.10 AND A21.51. JOINTS AT FITTINGS, VALVES AND HYDRANT LATERALS SHALL BE MECHANICAL JOINT PER ANSI A21.11, WITH GASKETS. JOINTS AT OTHER LOCATIONS SHALL BE PUSH-ON TYPE WITH GASKETS PER ANSI A21.11. ALL FITTINGS, VALVES, HYDRANTS AND CAPS SHALL BE CLASS 350 PROVIDED WITH THRUST RESTRAINTS (THRUST BLOCKS AND RETAINING RODS) IN CONFORMANCE WITH THE DETAILS.

B. GENERALLY, WATER MAIN FITTINGS IDENTIFIED ON THIS DRAWING ARE SHOWN FOR INSTALLATION LOCATION PURPOSES. THE CONTRACTOR IS ADVISED THAT NOT ALL FITTINGS AND SUPPLY LINES ARE NOTED, SHOWN, OR INDICATED.

C. ALL HYDRANTS SHALL BE INSTALLED WITH A 6" CLDI LATERAL AND SHALL BE INSTALLED WITH A 6" GATE VALVE, BOX, AND TEE FITTING. ALL HYDRANTS SHALL MEET AND BE INSTALLED IN ACCORDANCE WITH ALL LOCAL MUNICIPAL STANDARDS.

D. ALL WATER MAIN APPURTENANCES, MATERIALS, AND METHODS OF INSTALLATION SHALL MEET OR EXCEED ALL LOCAL MUNICIPAL REQUIREMENTS.

E. PRESSURE AND LEAKAGE TEST, DISINFECTION AND FLUSHING SHALL BE IN ACCORDANCE WITH ALL LOCAL MUNICIPAL STANDARDS AND REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS IN CONNECTIONS WITH UTILITY TESTS, FLUSHING, AND INSPECTIONS AS REQUIRED BY THE LOCAL MUNICIPALITY.

F. EXISTING SERVICES SHALL BE CUT AND A WATERTIGHT PLUG SHALL BE INSTALLED. EXISTING GATE VALVES TO BE ABANDONED SHALL BE PERMANENTLY CLOSED AND CAPPED, AND WATER SERVICES SHOULD BE SHUT OFF AT THE MAIN CORPORATION.

4.2 – UTILITY SEPARATION

A. A MINIMUM 10 FEET CLEAR HORIZONTAL DISTANCE SHALL BE MAINTAINED BETWEEN SANITARY SEWER MAINS AND WATER MAINS. WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET, THE WATER MAIN SHALL BE LAID IN A SEPARATE TRENCH AND THE ELEVATION OF THE CROWN OF THE SEWER SHALL BE AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER MAIN.

A. A MINIMUM OF 18" VERTICAL CLEARANCE SHALL BE MAINTAINED WHERE WATER MAINS CROSS STORM DRAIN LINES. B. WHERE SANITARY SEWERS CROSS WATER MAINS, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST TWO FEET BELOW THE INVERT OF THE WATER MAIN. IF THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THIS REQUIREMENT, THE CONTRACTOR SHALL DO THE FOLLOWING:

THE WATER MAIN SHALL BE RELOCATED TO PROVIDE THIS SEPARATION OR CONSTRUCTED WITH MECHANICAL-JOINT PIPE FOR A DISTANCE OF TEN FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATER MAIN SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. IN ADDITION, THE WATER MAIN SHALL BE ENCASED IN CONCRETE.

C. PRIMARY ELECTRICAL ENCASED CONDUIT MUST BE SEPARATED FROM GAS BY 3' MIN. AND FROM OTHER UTILITIES BY 2' MINIMUM.

D. TELEPHONE AND FIRE ALARM WHICH SHARE THE SAME TRENCH MUST HAVE A 1' VERTICAL SEPARATION.

E. GAS MAINS MUST BE SEPARATED FROM OTHER UTILITIES BY 2' MINIMUM.

4.3 – ELECTRIC AND COMMUNICATIONS

A. INSTALLATION OF COMMUNICATIONS (TELEPHONE, CABLE AND FIRE ALARM) SYSTEMS SHALL BE COORDINATED AND SCHEDULED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANY SERVICING THE PROJECT SITE.

B. COORDINATES REFER TO THE CENTER OF STRUCTURES UNLESS OTHERWISE NOTED OR DETAILED. CONTRACTOR SHALL COORDINATE LIGHT BASE LOCATIONS WITH PROPOSED CURBING AND PARKING LOT STRIPING.

C. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ELECTRICAL SERVICE PRIOR TO ORDERING ANY EQUIPMENT.

PART 5 – PAVEMENT AND CURBING

A. JOINTS BETWEEN NEW BITUMINOUS CONCRETE PAVEMENT AND SAWCUT EXISTING PAVEMENT SHALL BE SEALED WITH BITUMEN AND BACKSANDS.

B. CURBING SHALL BE INSTALLED AS FOLLOWS:

- BITUMINOUS AND/OR MODIFIED CAPE COD BERM ALONG ALL ROADWAYS. REFER TO SUITE PLAN FOR LOCATIONS.
- DIMENSIONS REFER TO FACE OF CURB UNLESS NOTED OTHERWISE.
- ALL LIMITS OF PAVING SHALL BE CURBED UNLESS NOTED OR DETAILED OTHERWISE.

PART 6 – TRAFFIC CONTROL

A. INCLUDING, BUT NOT LIMITED TO, ALL CROSSWALKS, STOP LINES AND LEGENDS.

- LEGENDS SHALL BE PREFORMED PERMANENT PLASTIC. PAVEMENT MARKINGS SHALL BE THERMO PLASTIC (ALKYD). THE MARKINGS, LEGENDS SHALL BE INSTALLED IN ACCORDANCE WITH THE RELEVANT PORTIONS OF MASSACHUSETTS HIGHWAY DEPARTMENT (MHD) STANDARD SPECIFICATIONS. THE CONTRACTOR'S ATTENTION ALSO IS DIRECTED TO THE STANDARD SPECIFICATIONS, FOR REQUIREMENTS REGARDING THE AMBIENT AIR TEMPERATURE AT THE TIME OF APPLICATION.

PART 7 – QUALITY ASSURANCE

A. COMPLY WITH GOVERNING CODES AND REGULATIONS. PROVIDE PRODUCTS FROM ACCEPTABLE MANUFACTURERS. USE EXPERIENCED INSTALLERS. DELIVER, HANDLE, AND STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

B. CONFORM TO CONDITIONS OF APPROVAL ISSUED BY REGULATORY AGENCIES INCLUDING, BUT NOT NECESSARILY LIMITED TO, LOCAL PLANNING BOARD, CONSERVATION COMMISSION, CITY COUNCIL, BOARD OF HEALTH, PUBLIC WORKS / HIGHWAY DEPARTMENT, STATE ENVIRONMENTAL PROTECTION DEPARTMENT, AND U.S. GOVERNMENT, ENVIRONMENTAL PROTECTION AGENCY. WHERE CONDITIONS OF REGULATORY APPROVAL DIFFER FROM REQUIREMENTS CONTAINED HEREIN OR ON THE DRAWINGS, COMPLY WITH THE MORE STRINGENT REQUIREMENT.

PART 8 – INSPECTION AND MAINTENANCE

BITUMINOUS CONCRETE

A. INSPECT ALL CATCH BASINS (CB) AND MANHOLES AT LOCATIONS SHOWN ON SUBDIVISION PLANS. LOOK FOR SETTLING OF PAVEMENT, REPAIR AS REQUIRED. LOOK AT LEVEL OF SAND, SILT IN SUMPS. HAVE SUMPS CLEANED IF OUTLET PIPE IS BLOCKED. VERIFY THAT ELBOW (OIL TRAP) ON PIPE OUTLET IS SECURELY IN PLACE. CLEAN ALL LEAVES, TRASH, AND PINE NEEDLES FROM CB GRATE.

B. LOOK FOR SIGNS OF CRACKING & POTHOLES, REPAIR AS REQUIRED.

C. LOOK FOR SIGNS OF EROSION AT EDGES OF ROADWAY. INSPECT FOR BROKEN CURB. SEVERE EROSION MAY BE CAUSED BY PIPE BLOCKAGE AND RESULTING OVERFLOWS OUT OF CATCH BASINS. REMOVE DRAIN MANHOLE COVERS AND CB GRATES IN AREA AND LOOK FOR BLOCKAGES WHERE SURFACE EROSION IS EVIDENT.

LAWN

A. INSPECT AFTER EACH SIGNIFICANT RAINFALL (1/2" OR MORE) FOR FIRST 6 MONTHS AFTER CONSTRUCTION TO ENSURE SURFACE VEGETATION IS HEALTHY, DISCHARGE DEVICES ARE NOT BLOCKED AND BANKS ARE NOT ERODING. CHECK ALL COMPONENTS AFTER EACH MAJOR STORM (MORE THAN 2" RAINFALL IN 24 HOURS). CLEAN/REPAIR AS REQUIRED.

LANDSCAPING

A. INSPECT FOR DISEASED/DYING TREES, SHRUBS, GROUND COVER, & GRASS; REPLACE AS REQUIRED.

B. INSPECT MULCH BEDS. SUPPLEMENT AS REQUIRED TO PROVIDE THE SPECIFIED MINIMUM DEPTH (LOOSE MEASURE).

RIP RAP (STONE) SLOPE PROTECTION

A. INSPECT STONE SLOPE PROTECTION, CUT EMERGING YOUNG TREES GROWING IN STONES. INSPECT STONE AT PIPE OUTLETS. REMOVE DEBRIS. REPAIR AS REQUIRED.

PART 9 – LANDSCAPING

A. ALL SITE INFORMATION REPRESENTED ON THIS PLAN IS ILLUSTRATIVE, AND MUST BE VERIFIED BY THE CONTRACTOR. WRITTEN SPECIFICATIONS SHALL TAKE PRECEDENCE OVER REPRESENTATIONS ON DRAWINGS.

B. IT IS CONTRACTOR'S RESPONSIBILITY TO BECOME APPRISED OF EXISTING CONDITIONS, UNDERGROUND UTILITIES, AND OVERHEAD UTILITIES. COORDINATION WITH ALL RELEVANT COMPANIES OR AGENCIES, INCLUDING PERMITTING, AFFECTED BY THIS CONSTRUCTION IS CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR IS REQUIRED TO OBTAIN ANY NECESSARY PERMITS REQUIRED FROM LOCAL AUTHORITIES FOR ALL WORK IN THIS CONTRACT.

C. CONTRACTOR SHALL BE RESPONSIBLE FOR ON-SITE SAFETY OF CONSTRUCTION CREW, AND PARTICULARLY OF SAFETY OF PEDESTRIANS DURING PERIOD OF CONSTRUCTION PROJECT.

D. ALL UNUSED MOVEABLE MATERIALS SHALL BE REMOVED FROM THE SITE DAILY, OR STORED IN SUCH A WAY AS TO PRECLUDE LOSS OR VANDALISM. ALL DEBRIS SHALL BE REMOVED, AND ALL WALKS MADE FREE OF OBSTRUCTIONS, AND SITE LEFT IN NEAT, CLEAN CONDITION AT THE CLOSE OF EACH WORK DAY.

E. THE CONTRACTOR SHALL LOCATE AND VERIFY ALL UTILITIES PRIOR TO STARTING WORK. CONTRACTOR TO VERIFY THAT ADEQUATE DRAINAGE EXISTS PRIOR TO PLANTING.

F. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON ALL DRAWINGS. PLANT COUNTS ARE FOR CONVENIENCE ONLY. CONTRACTOR SHALL USE SUFFICIENT PLANT MATERIALS TO FULFILL DESIGN INTENT, BUT IN NO CASE SHALL CONTRACTOR USE FEWER PLANTS THAN LISTED.

G. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE "AMERICAN STANDARD FOR NURSERY STOCK", PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.

H. ALL PLANT MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT AT THE NURSERY AND AT THE SITE. ALL TREES SHALL HAVE A SINGLE LEADER UNLESS SPECIFIED OTHERWISE. NO UN-APPROVED SUBSTITUTIONS WILL BE ACCEPTED. PLANT SPECIES AND CULTIVAR, SIZE AND QUANTITY SHALL NOT CHANGE WITHOUT APPROVAL OF LANDSCAPE ARCHITECT.

I. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS ORIGINAL GRADE BEFORE DIGGING. PLANTS TO BE TRANSPLANTED SHALL BE DUG CAREFULLY, WITH ADEQUATE ROOTBALLS AND PRUNED ACCORDING TO ANA STANDARD PRACTICE. TREES WITH ROOT FLARE COVERED BY MORE THAN 1.5" OF SOIL WILL BE REJECTED PRIOR TO INSTALLATION. SET PLANTS PLUMB.

J. ALL TREES AND SHRUBS SHALL BE BALLED IN BURLAP OR CONTAINERIZED, UNLESS SPECIFIED OTHERWISE. NO ROOT-BOUND CONTAINER GROWN STOCK WILL BE ACCEPTED. ALL PLASTIC ROOT WRAPPING AND METAL WIRE BASKETS SHALL BE CAREFULLY REMOVED AT THE TIME OF PLANTINGS, EXCEPT WIRE THAT IS DIRECTLY UNDER THE ROOTBALLS.

K. CONTRACTOR SHALL PLACE 2" TO 3" OF FINE SHREDDED, AGED 2 YEARS, DARK BROWN PINE BARK MULCH THROUGHOUT THE BED AREAS. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK.

L. FLOOD PLANTS THOROUGHLY ONCE IMMEDIATELY AFTER PLANTING AND TWICE DURING THE FIRST TWENTY-FOUR HOUR PERIOD AFTER PLANTING.

M. DO NOT WRAP TRUNK OF TREE.

N. THE CONTRACTOR SHALL MAINTAIN THE PLANTS FOR A MINIMUM OF 60 DAYS FOLLOWING INSTALLATION, OR LONGER IF WRITTEN BY THE OWNER. BEFORE THE END OF THE 60-DAY PERIOD, THE CONTRACTOR SHALL PROVIDE A WRITTEN MAINTENANCE OUTLINE TO THE OWNERS AND THE CONTRACTOR SHALL BE AVAILABLE TO ANSWER QUESTIONS OR CONCERNS AT THAT TIME.

O. THE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A MINIMUM OF ONE YEAR FROM FINAL ACCEPTANCE BY OWNER/REP. THE CONTRACTOR SHALL REPLACE ANY DEAD MATERIALS AT HIS/HER OWN EXPENSE.

P. GRASS STRIP PREPARATION: REMOVE ALL DEBRIS AND OTHER INORGANIC MATERIALS ON THE PREPARED SUBGRADE, RESHAPE AND DRESS ANY DAMAGED OR ERODED AREA PRIOR TO SPREADING THE LOAM. SCARIFY AND LOOSEN SUBGRADE IN ANY AREAS WHERE COMPACTION MAY HAVE OCCURRED. SPREAD STOCKPILED AND OFF-SITE LOAM ON ALL DISTURBED AREAS TO PRODUCE A DEPTH OF 4". FINE GRADE LOAMED AREAS TO PRODUCE A SMOOTH AND UNBROKEN FINISH GRADE TO THE REQUIRED DEPTH. APPLY A STARTER FERTILIZER (10-20-10) AT A RATE OF 20 LBS. PER 1000 SQUARE FEET AND LIME AT A RATE OF 40 LBS. PER 1000 SQUARE FEET. ONCE SPREAD, THE FERTILIZER AND LIME SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM. THE LOAM SHALL BE ROLLED, AND DEPRESSION SHALL BE TOP DRESSED AND RAKED TO CREATE A SMOOTH SURFACE.

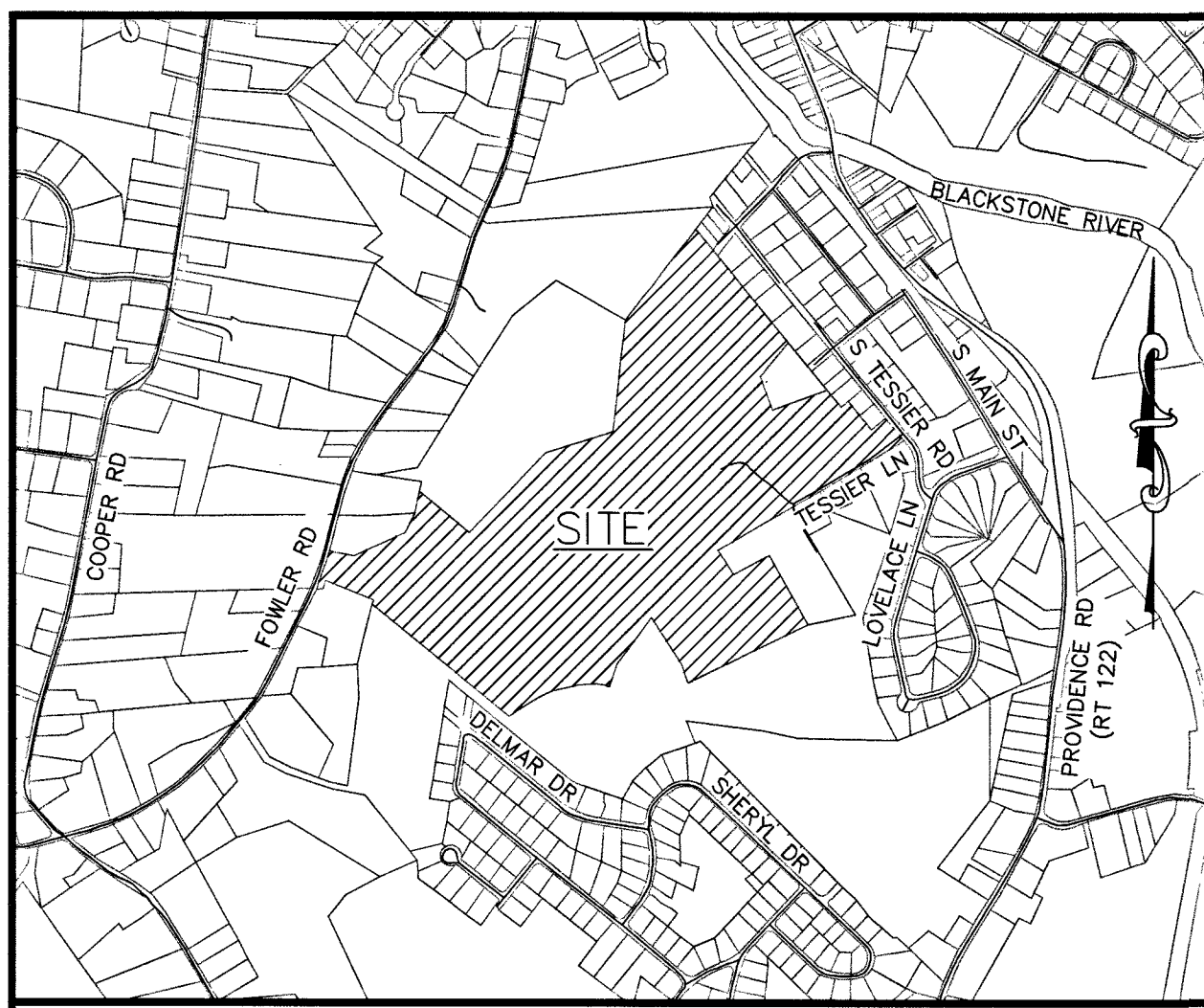
Q. SEEDING: SEEDING SHALL TAKE PLACE BETWEEN MARCH 15 AND MAY 31 OR AUGUST 15 AND OCTOBER 15 ONLY. SEED SHALL BE PURE, LIVE, FRESH SEED FROM COMMERCIAL SOURCES MEETING AND LABELED IN ACCORDANCE WITH STATE AND FEDERAL RULES AND REGULATIONS.

R. SEEDED AREAS SHALL, AT A MINIMUM, INCLUDE ALL AREAS OF THE SITE THAT HAVE BEEN DISTURBED OR ARE BARREN UNLESS OTHERWISE NOTED ON THE PLANS. SEED SHALL BE APPLIED AT A RATE OF 7 LBS. PER 1000 SQUARE FEET.

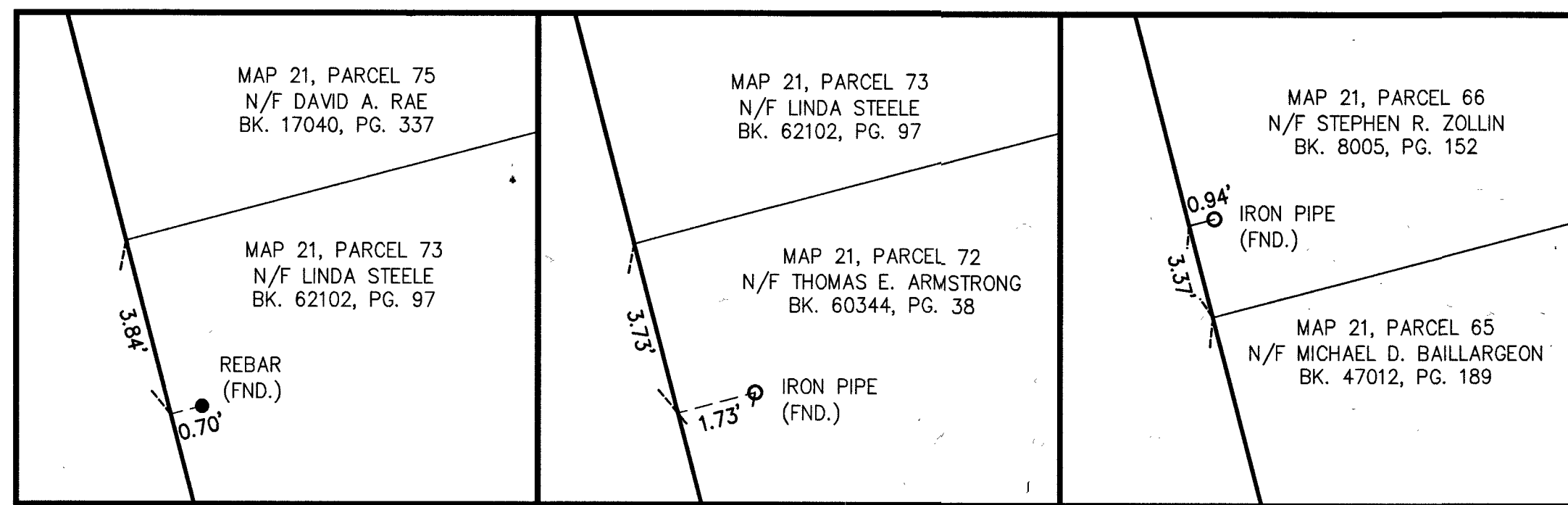
TYPICAL LEGEND		
EXISTING		PROPOSED
_____	PROPERTY LINE	_____
_____	EASEMENT LINE	_____
=====	TOWN LINE	=====
_____	MATCH LINE	_____
_____	BUILDING SETBACK	_____
_____	CENTERLINE	_____
○○○○○○○○○○	STONEWALL	○○○○○○○○○○
—X— —X—	BARBED WIRE FENCE	_____
—○— —○—	CHAIN LINK FENCE	—○— —○—
—□— —□—	STOCKADE FENCE	—□— —□—
_____	GRAVEL ROAD	_____
EOP _____	EDGE OF PAVEMENT	EOP _____
OCB _____	CURB SEE ABBREVIATIONS	OCB _____
=====	EROSION CONTROL BARRIER	=====
~~~~~	TREELINE	~~~~~
×100.5	SPOT ELEVATION	×100.5
—100—	INDEX CONTOUR	—100—
—102—	INTERMEDIATE CONTOUR	—102—
_____	INTERMITTANT STREAM	_____
_____	EDGE OF SHORELINE	_____
---D---D---	STORM DRAIN PIPE, FLARED END & RIP-RAP APPROX.	---D---D---
---D---D---	STORM DRAIN W/ HEADWALL	---D---D---
—RD—	ROOF DRAIN	—RD—
—FD—	FOUNDATION DRAIN	—FD—
—OHW—	OVERHEAD WIRE	—OHW—
—E—	UNDERGROUND ELECTRIC	—E—
—T—	UNDERGROUND TELEPHONE	—T—
—G—	GAS	—G—
—W—	WATER MAIN	—W—
—WS—	WATER SERVICE	—WS—
—S—	SEWER LINE	—S—
—FM—	FORCE MAIN	—FM—
☆	LIGHT POLE	☆
○ _U UP#	UTILITY POLE	○ _U UP#
● _B	BOLLARD	● _B
—T—	STREET OR TRAFFIC SIGN	—T—
♿	HANDICAP PARKING SPACE	♿
(36)	NUMBER OF PARKING SPACES	(36)
⇒	TRAFFIC FLOW	⇒
ⓔ	ELECTRIC MANHOLE	ⓔ
ⓓ	TELEPHONE MANHOLE	ⓓ
Ⓢ	SEWER MANHOLE	Ⓢ
ⓓ	DRAIN MANHOLE	ⓓ
□	CATCH BASIN	□
□	DOUBLE GRATE CATCH BASIN	□
⌘	GAS GATE VALVE	⌘
⌘	WATER GATE VALVE	⌘
⌘	HYDRANT	⌘
⌘	DOMESTIC WELL	⌘
⌘	DEEP SOIL OBSERVATION HOLE	⌘
⌘	PERCOLATION TEST	⌘
⌘	ELEVATION BENCHMARK	⌘
_____	WETLAND FILL AREA	_____
_____	WETLAND REPLICATION AREA	_____

TYPICAL ABBREVIATIONS			
KEY	DESCRIPTION	KEY	DESCRIPTION
N/F	NOW OR FORMERLY	W.C.H.B.	WORCESTER COUNTY HIGHWAY BOUND
BK.	BOOK	BIT.	BITUMINOUS
PG.	PAGE	CONC.	CONCRETE
P.B.	PLAN BOOK	CCB	CAPE COD BERM
PL	PLAN	BCC	BITUMINOUS CONCRETE CURB
BC	BOTTOM OF CURB	VGC	VERTICAL GRANITE CURB
TC	TOP OF CURB	SGC	SLOPED GRANITE CURB
BW	BOTTOM OF WALL	PCC	PRECAST CONCRETE CURB
TW	TOP OF WALL	HDPE	HIGH DENSITY POLYETHYLENE PIPE
EXIST.	EXISTING	CLDI	CEMENT LINUT DUCTILE IRON
PROP.	PROPOSED	RCP	REINFORCED CONCRETE PIPE
TBM	TEMPORARY BENCHMARK	PVC	POLYVINYL CHLORIDE PIPE
TEMP.	TEMPORARY	INV.	INVERT
N.T.S.	NOT TO SCALE	FES	FLARED END SECTION
TYP.	TYPICAL	OCS	OUTLET CONTROL STRUCTURE
ELEV.	ELEVATION	DMH	DRAIN MANHOLE
BLDG.	BUILDING	CB	CATCH BASIN
BSMT.	BASEMENT	DCB	DOUBLE CATCH BASIN
F.F.E.	FINISHED FLOOR ELEVATION	SMH	SEWER MANHOLE
TOC	TOP OF CONCRETE	CO	CLEANOUT
GAR.	GARAGE	HYD	HYDRANT
TBR	TO BE REMOVED	CO	CLEANOUT
FND	FOUND	O.C.	ON CENTER
D.H.	DRILL HOLE	R=	RADIUS
I.P.	IRON PIPE	S=	SLOPE
I.R.	IRON ROD	H/C	HANDICAP
S.B.	STONE BOUND	UP	UTILITY POLE
W.C.H.B.	WORCESTER COUNTY HIGHWAY BOUND	WF	WETLAND FLAG





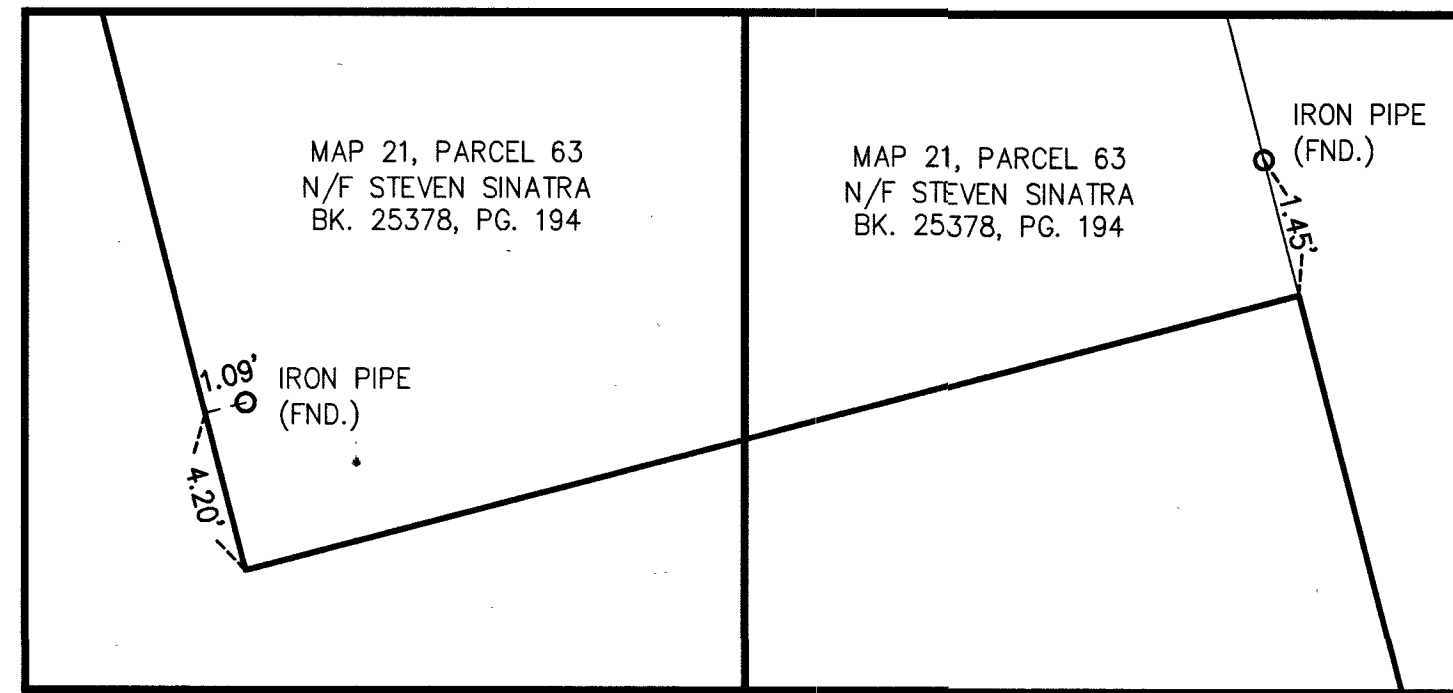
LOCUS MAP  
NOT TO SCALE



DETAIL 1  
NOT TO SCALE

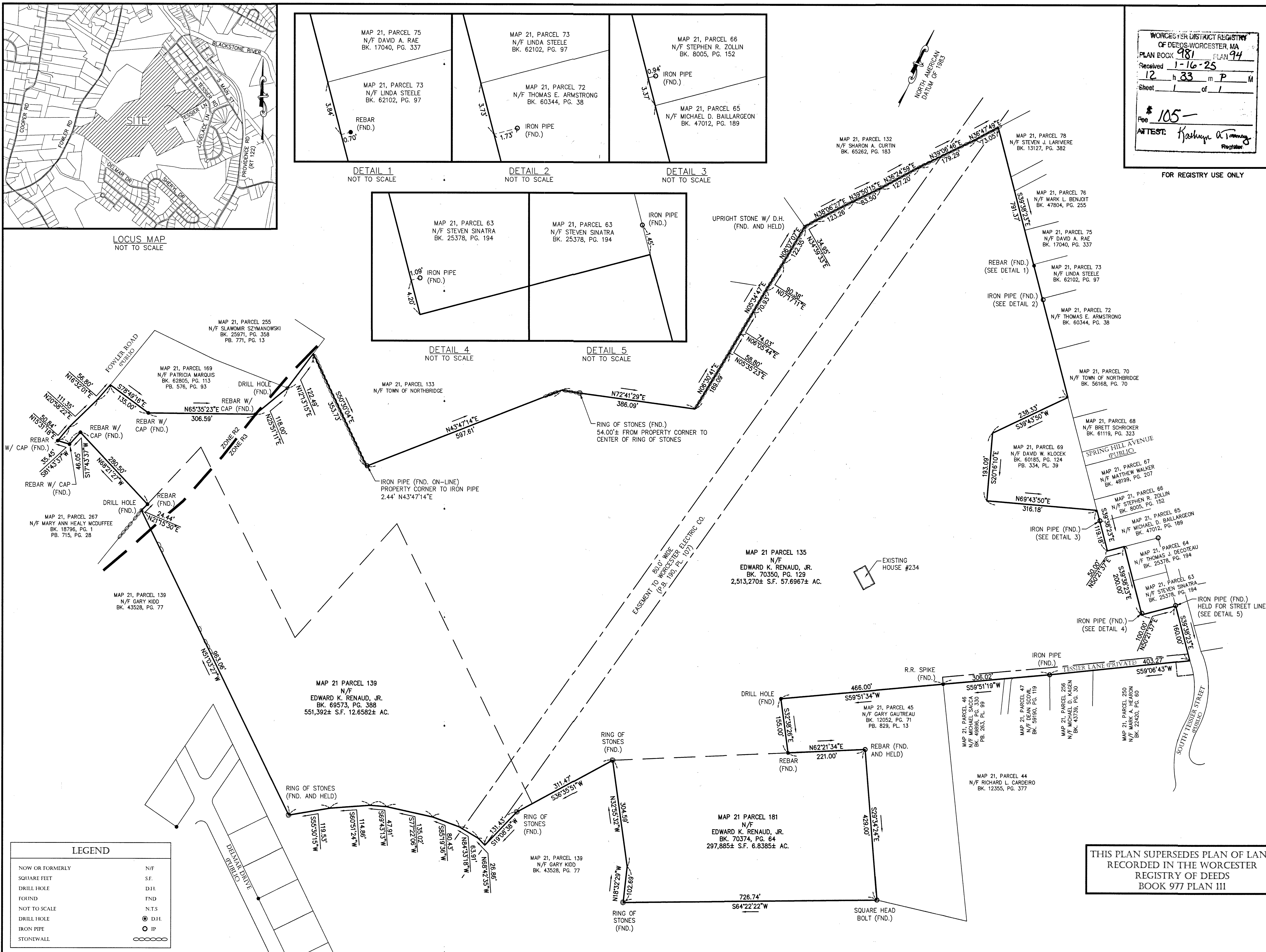
DETAIL 2  
NOT TO SCALE

DETAIL 3  
NOT TO SCALE



DETAIL 4  
NOT TO SCALE

DETAIL 5  
NOT TO SCALE



WORCESTER DISTRICT REGISTRY  
OF DEEDS-WORCESTER, MA  
PLAN BOOK 981 PLAN 94  
Received 1-16-25  
Sheet 1 of 1  
Fee \$ 105-  
ATTEST: Katherine A. Tammey  
Register

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www.tpecivil.com

OWNER OF RECORD:  
EDWARD K. RENAUD, JR.  
134 LINWOOD AVENUE  
WHITINSVILLE, MA 01588

NORTHBRIDGE ASSESSORS INFORMATION:  
MAP 21, PARCEL 135, 139 & 181

NORTHBRIDGE ZONING INFORMATION:  
ZONE: R2 DISTRICT  
MINIMUM AREA: 20,000 S.F.  
MINIMUM FRONTAGE: 125'  
SETBACKS: FRONT 30', SIDE 10', REAR 40'

ZONE: R3 DISTRICT  
MINIMUM AREA: 20,000 S.F.  
MINIMUM FRONTAGE: 125'  
SETBACKS: FRONT 20', SIDE 10', REAR 30'

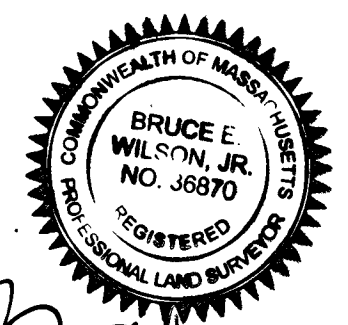
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DB: 70374, PG. 64  
DB: 69573, PG. 388

PLAN REFERENCES:  
PB: 27, PG. 65  
PB: 190, PG. 107  
PB: 263, PG. 94  
PB: 334, PG. 39  
PB: 576, PG. 93  
PB: 603, PG. 72  
PB: 715, PG. 28  
PB: 753, PG. 80  
PB: 757, PG. 39  
PB: 771, PG. 13  
PB: 826, PG. 13

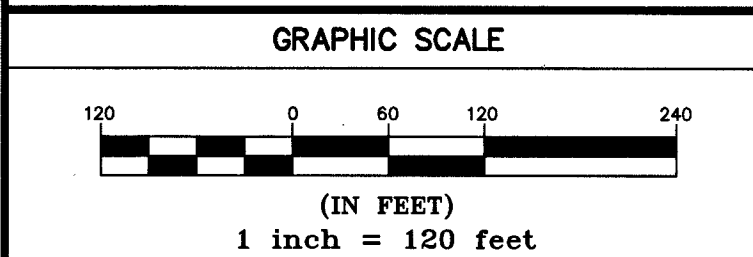
THIS PLAN HAS BEEN PREPARED IN CONFORMITY WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS IN THE COMMONWEALTH OF MASSACHUSETTS AND IN COMPLIANCE WITH THE RULES AND REGULATIONS FOR THE PRACTICE OF LAND SURVEYING IN THE COMMONWEALTH OF MASSACHUSETTS.

THIS CERTIFICATION IS INTENDED TO MEET THE REQUIREMENTS OF THE REGISTRY OF DEEDS AND IS NOT A CERTIFICATION OF TITLE OR OWNERSHIP OF THE LAND DEPICTED HEREON.

I HEREBY CERTIFY THAT THE PROPERTY LINES SHOWN ON THIS PLAN ARE THE LINES DIVIDING EXISTING OWNERSHIPS, AND THE LINES OF THE STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED, AND THAT NO NEW LINES FOR DIVISION OF EXISTING OWNERSHIP OR NEW WAYS ARE SHOWN.



1-23-25



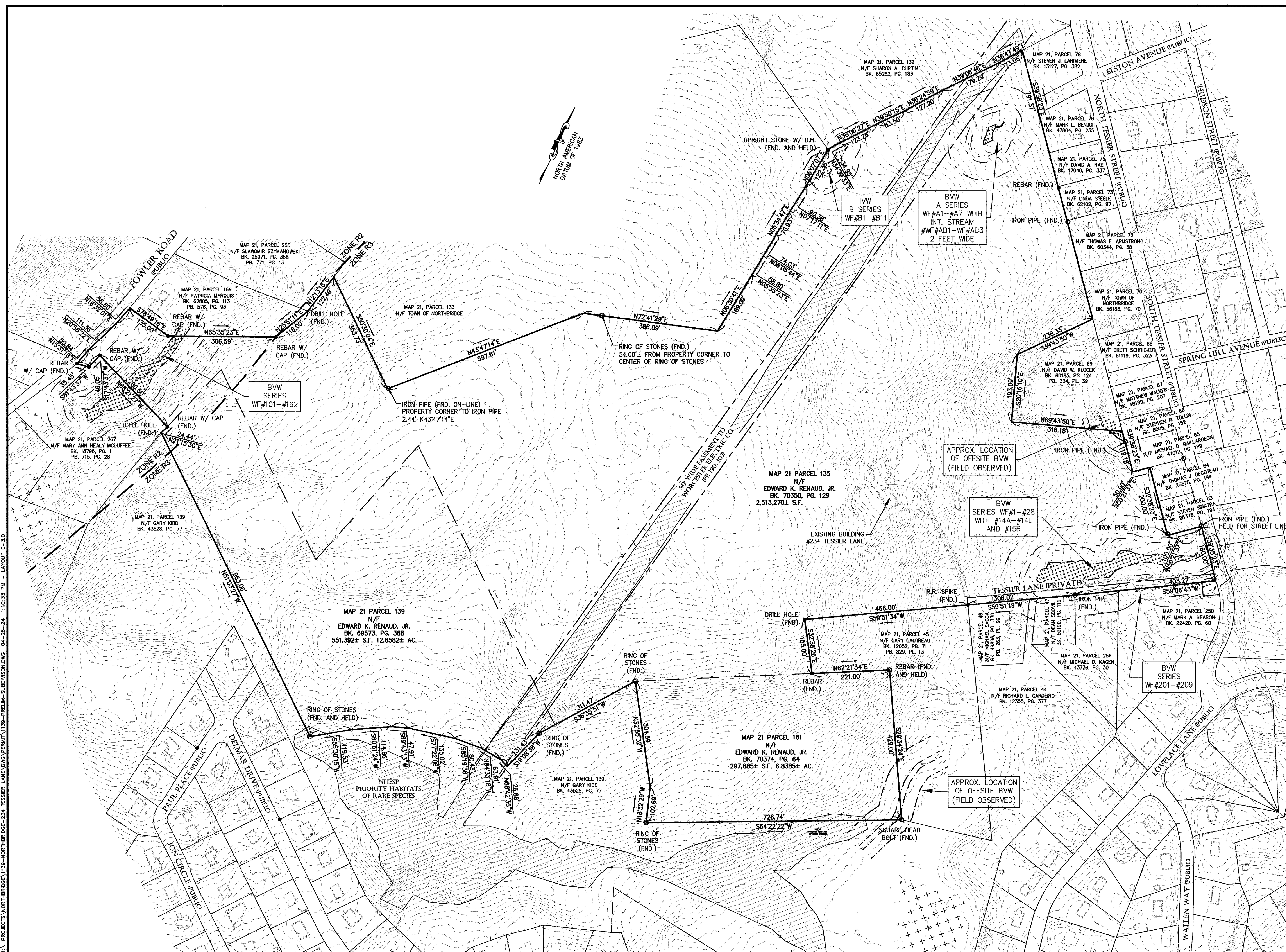
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DRAWN BY	AB, IP
CHECKED BY	BW
DATE	APRIL 24, 2024
DATE-revised	JANUARY 13, 2025
PROJECT NO.	TPE-1139
PLAN NO.	L-433

PLAN OF LAND  
OF  
234 TESSIER LANE  
IN  
NORTHBRIDGE, MA  
OWNED BY  
EDWARD K. RENAUD, JR.

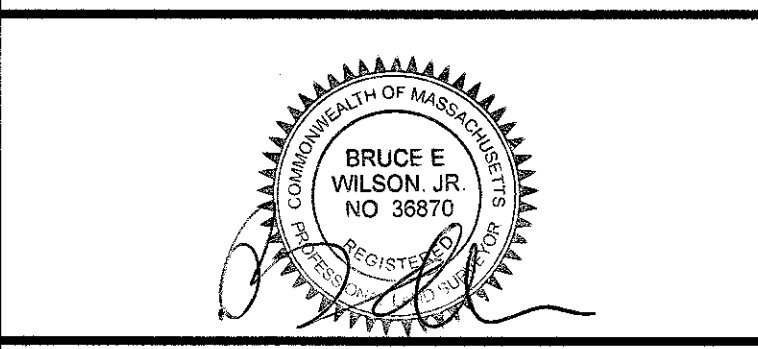
THIS PLAN SUPERSEDES PLAN OF LAND  
RECORDED IN THE WORCESTER  
REGISTRY OF DEEDS  
BOOK 977 PLAN 111



H:\PROJECTS\NORTHBRIDGE\1139-NORTHBRIDGE-234 TESSIER LANE\DWG\PRELIM-SUBDIVISION.DWG 04-28-24 1:10:33 PM - LAYOUT C-3.0



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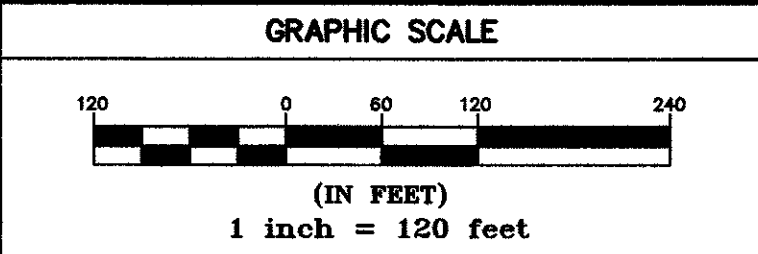
APPROVAL UNDER SITE PLAN REVIEW.  
NORTHBRIDGE PLANNING BOARD  
BEING A MAJORITY  
  
APPROVAL DATE: _____  
ENDORSEMENT DATE: _____

**FOX HOLLOW**  
PRELIMINARY SUBDIVISION PLAN  
TESSIER LANE & FOWLER ROAD  
NORTHBRIDGE, MASSACHUSETTS

PROJECT NAME  
PREPARED FOR  
Eastland Partners, Inc.  
987 Millbury Street  
Worcester, MA 01607

REVISIONS		DESCRIPTION	
REV.	DATE		

PROJECT NO.	TPE-1139
DESIGNED BY	IP, JAB
CHECKED BY	JAB
DATE	APRIL 4, 2024
CAD FILE	H:\1139...DWG\PERMIT\1139.DWG
PLAN NO.	L-434



SHEET TITLE

EXISTING CONDITIONS

DRAWING ISSUED FOR: ☒ PERMIT

SHEET NO.

C-3.0

THIS PLAN IS INTENDED TO SHOW CONSTRUCTION AND MAY NOT SHOW ALL CONSTRUCTION DETAILS AND SPECIFICATIONS FOR THE SHOWN IMPROVEMENTS AND MAY NOT IDENTIFY ALL CONSTRUCTION ITEMS/AREAS OF CONTRACTOR JURISDICTION.



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MAP 21, PARCEL 255  
359 FOWLER ROAD  
N/F SLAWOMIR SZYMANOWSKI  
BK. 25971, PG. 358  
PB. 771, PG. 13

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SEE SHEET C-3.3



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APPROVAL UNDER SUBDIVISION CONTROL LAW  
NORTHBRIDGE PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE:

ENDORSEMENT D

**FOX HOLLOW  
DEFINITIVE SUBDIVISION PLAN  
TESSIER LANE & FOWLER ROAD  
NORTHBRIDGE, MASSACHUSETTS  
MAP 21 PARCELS 135, 139 AND 181**

**PREPARED FOR**

Eastland Partners, Inc.  
997 Millbury Street  
Morrocco, MA 01607

Eastland

[illegible]

GRAPHIC SCALE



(IN FEET)  
inch = 40 feet

**SHEET TITLE**

DEFINITIVE  
SUBDIVISION PLAN

RECORDABLE SHEET 1 OF 8

SHEET NO.

C-3.2

RECORDABLE PLAN 2 OF 8



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NORTH AMERICAN  
DATUM OF 1983

**TURNING POINT ENGINEERING**

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APPROVAL UNDER SUBDIVISION CONTROL LAW  
NORTHBRIDGE PLANNING BOARD

## BEING A MAJORITY

APPROVAL DATE: _____  
ENDORSEMENT DATE: _____

**FOX HOLLOW  
DEFINITIVE SUBDIVISION PLAN**

TESSIER LANE & FOWLER ROAD  
NORTHBRIDGE, MASSACHUSETTS

MAP 21 PARCELS 135, 139 AND 181

**PREPARED FOR**

Eastland Partners, Inc.  
997 Millbury Street  
Worcester, MA 01607

Eastland

[illegible]

GRAPHIC SCALE



(IN FEET)

inch = 40 feet

SHEET TITLE

DEFINITIVE  
SUBDIVISION PLAN

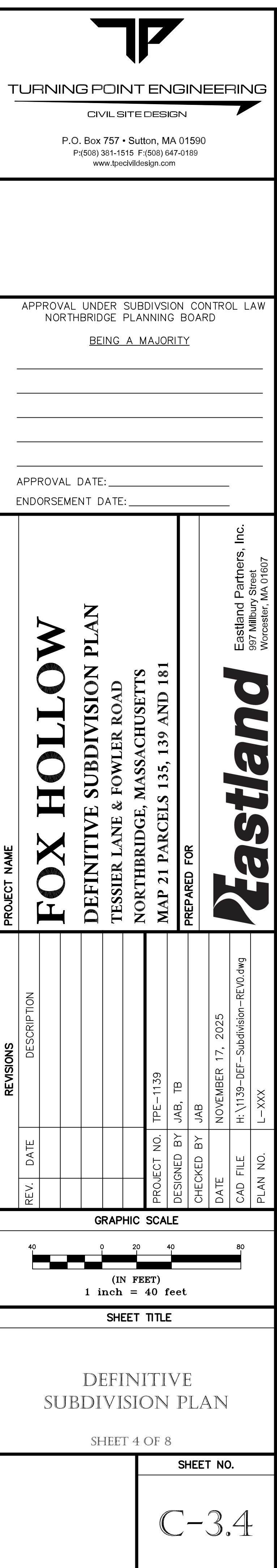
SHEET 3 OF 8

SHEET NO.

C-3.3

RECORDABLE PLAN 3 OF 8

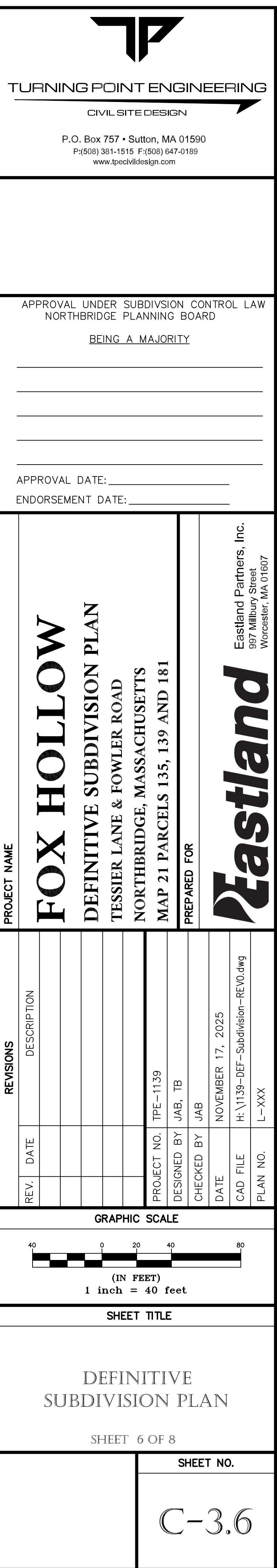




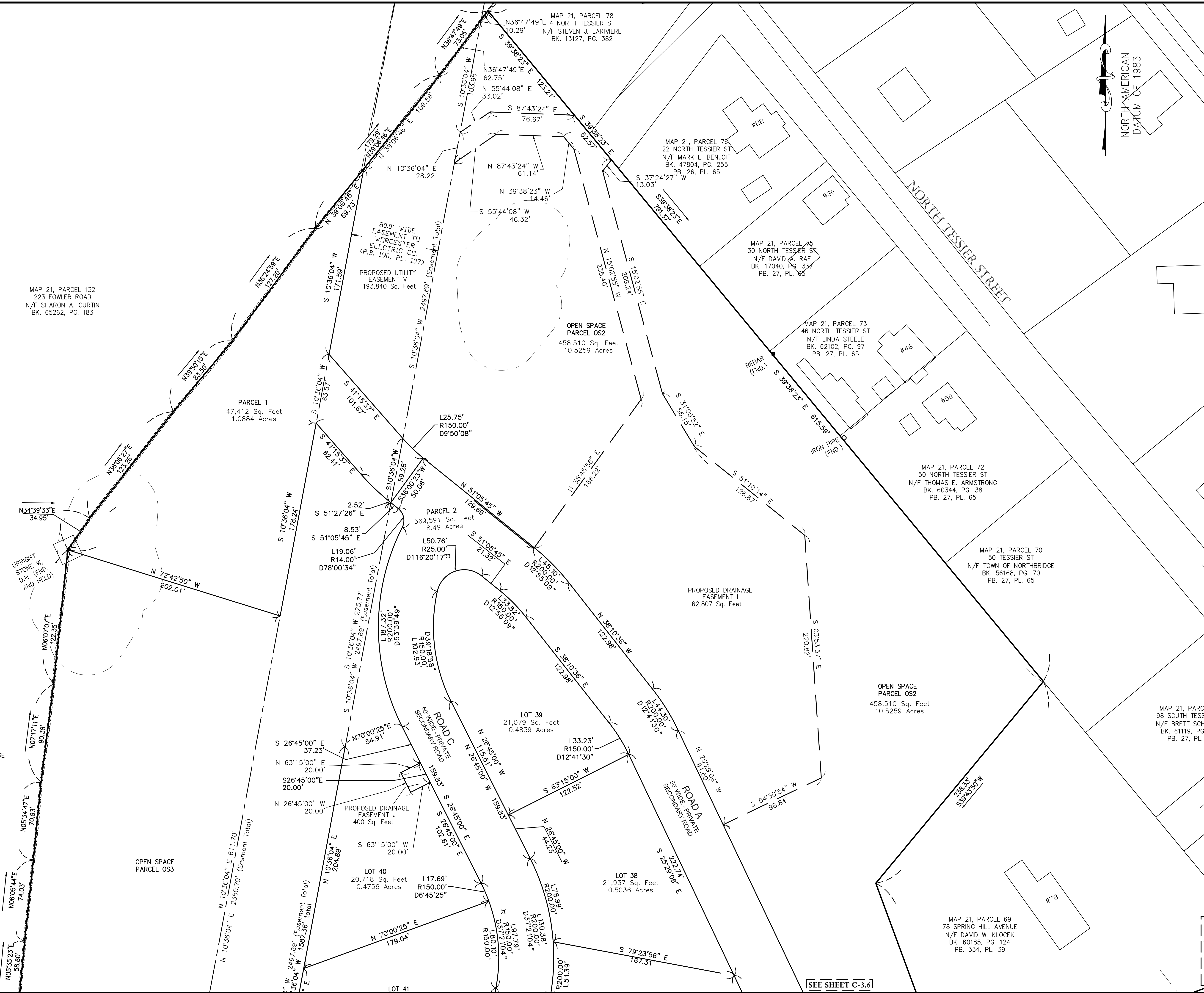






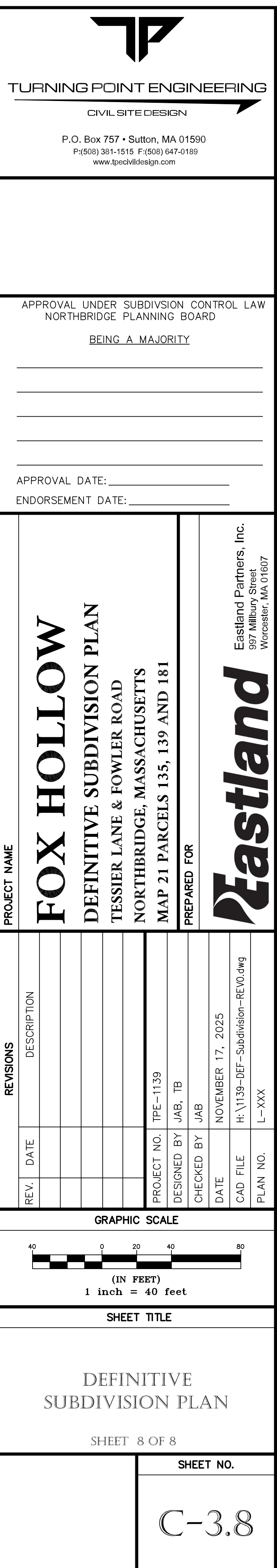




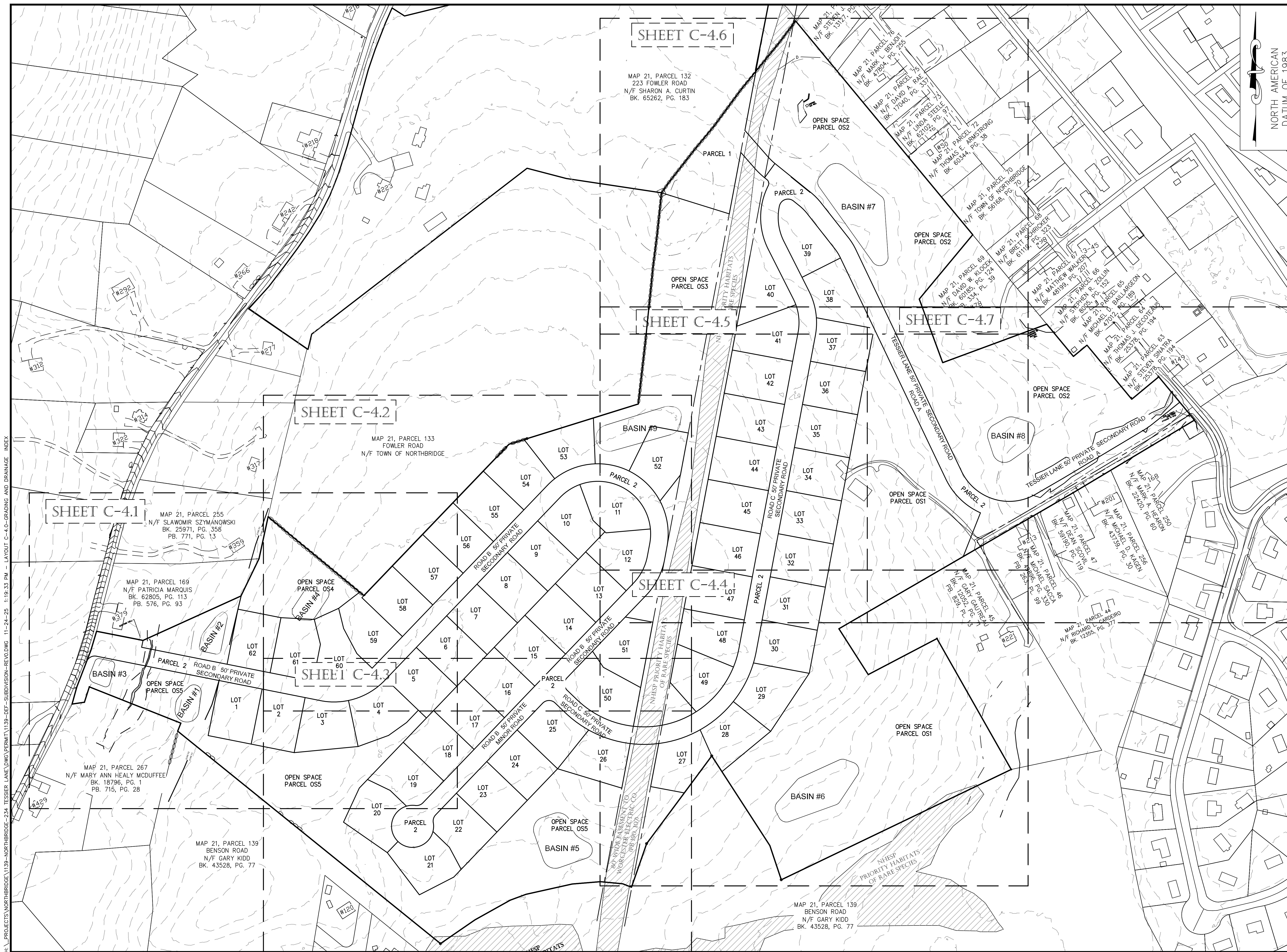


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APPROVAL UNDER SUBDIVISION CONTROL LAW NORTHBRIDGE PLANNING BOARD																																					
<u>BEING A MAJORITY</u>																																					
APPROVAL DATE: _____																																					
ENDORSEMENT DATE: _____																																					
<b>PROJECT NAME</b>	<b>FOX HOLLOW</b>  <b>DEFINITIVE SUBDIVISION PLAN</b>  TESSIER LANE &amp; FOWLER ROAD  NORTHBRIDGE, MASSACHUSETTS  MAP 21 PARCELS 135, 139 AND 181    PREPARED FOR																																				
<b>Eastland Partners, Inc.</b> 997 Millbury Street Worcester, MA 01607  Eastland																																					
<b>REVISIONS</b>	<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 10%;">REV.</th><th style="width: 10%;">DATE</th><th style="width: 80%;">DESCRIPTION</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"><tbody><tr><td style="width: 15%;">PROJECT NO.</td><td>TPE-1139</td></tr><tr><td>DESIGNED BY</td><td>JAB, TB</td></tr><tr><td>CHECKED BY</td><td>JAB</td></tr><tr><td>DATE</td><td>NOVEMBER 17, 2025</td></tr><tr><td>CAD FILE</td><td>H:\1139-DEF-Subdivision-REV0.dwg</td></tr><tr><td>PLAN NO.</td><td>L-XXX</td></tr></tbody></table>	REV.	DATE	DESCRIPTION																						PROJECT NO.	TPE-1139	DESIGNED BY	JAB, TB	CHECKED BY	JAB	DATE	NOVEMBER 17, 2025	CAD FILE	H:\1139-DEF-Subdivision-REV0.dwg	PLAN NO.	L-XXX
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<span>40</span><span>0</span><span>20</span><span>40</span><span>60</span>  (IN FEET) 1 inch = 40 feet																																					
<b>SHEET TITLE</b>																																					
<b>DEFINITIVE</b>   <b>SUBDIVISION PLAN</b>   SHEET 7 OF 8																																					
SEE SHEET C-3.8	<b>SHEET NO.</b>   C-3.7																																				







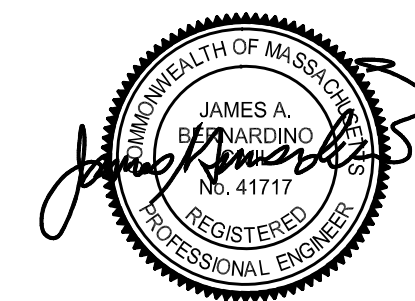


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NORTHBRIDGE PLANNING BOARD

BEING A MAJORITY

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_____

APPROVAL DATE: _____

ENDORSEMENT DATE: _____

PROJECT NAME

**FOX HOLLOW**

**DEFINITIVE SUBDIVISION PLAN**

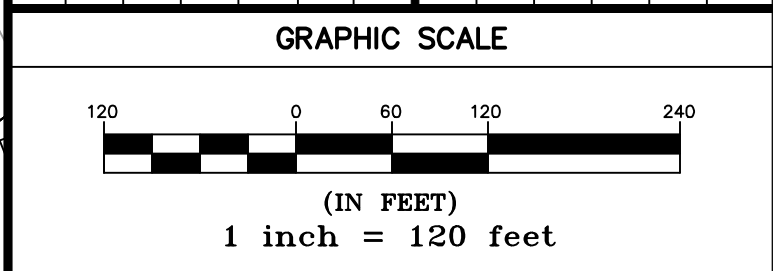
**TESSIER LANE & FOWLER ROAD**

**NORTHBIDGE, MASSACHUSETTS**

**MAP 21 PARCELS 135, 139 AND 181**

**PREPARED FOR**

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[illegible]

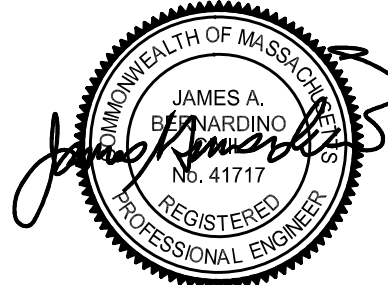
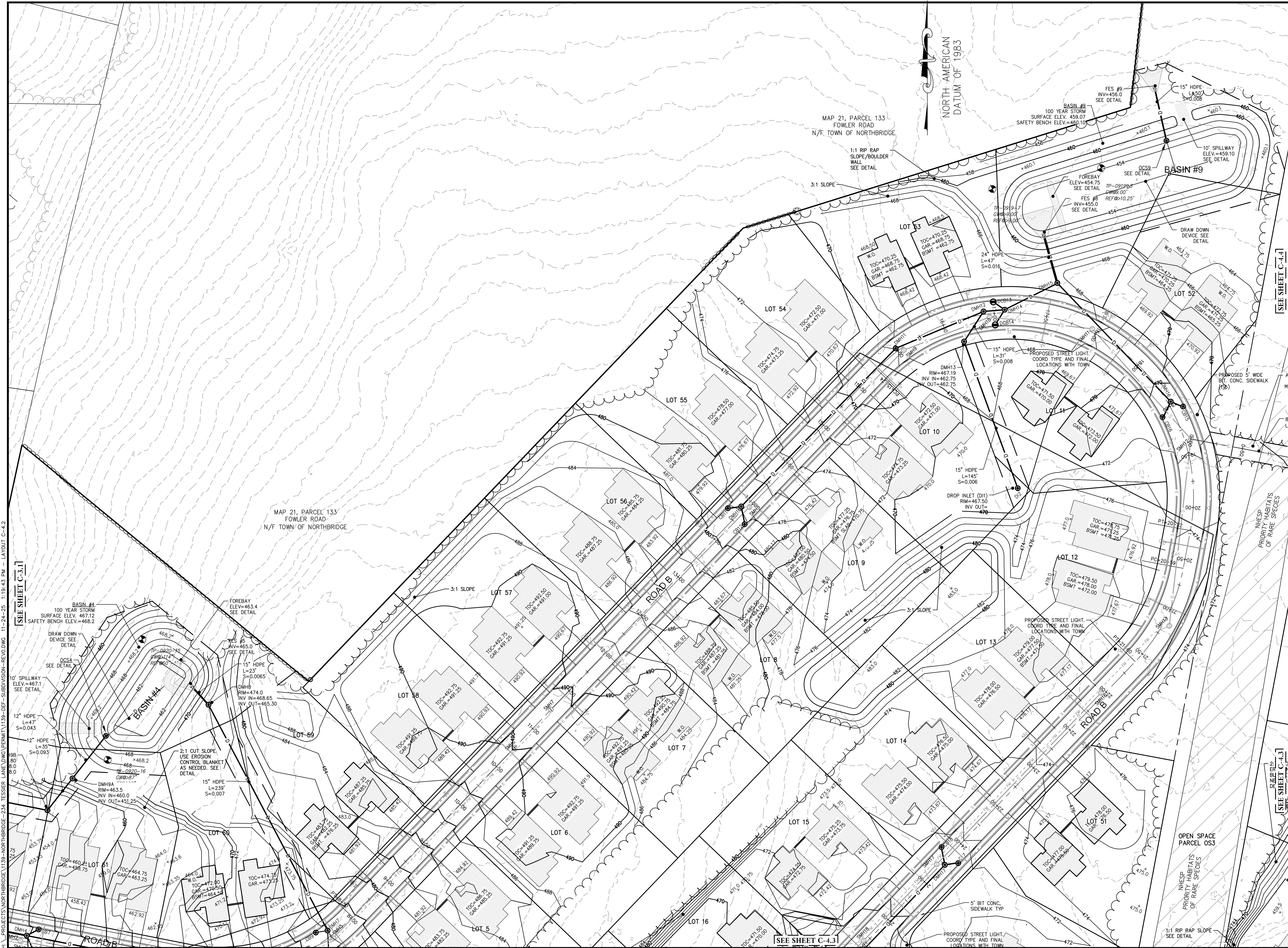
SHEET TITLE	
GRADING AND DRAINAGE INDEX PLAN	

<b><u>DRAWING ISSUED FOR:</u></b>   <input checked="" type="checkbox"/> PERMIT   THIS PLAN IS INTENDED TO SHOW CONSTRUCTIBILITY AND MAY NOT SHOW ALL CONSTRUCTION DETAILS AND SPECIFICATIONS FOR THE SHOWN IMPROVEMENTS AND MAY NOT IDENTIFY ALL CONSTRUCTION ITEMS/AREAS OF CONTRACTOR JURISDICTION.	<b><u>SHEET NO.</u></b>
	C-4.0









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**DEFINITIVE SUBDIVISION PLAN**  
TESSIER LANE & FOWLER ROAD  
NORTHBRIDGE, MASSACHUSETTS  
MAP 21 PARCELS 135, 139 AND 181

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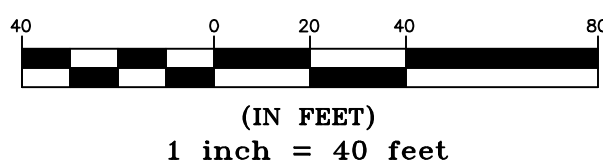
PROJECT NAME

REVISIONS

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PLAN NO. L-XXX

GRAPHIC SCALE



SHEET TITLE

**GRADING & DRAINAGE  
PLAN**

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JURISDICTION.

SHEET NO.

**C-4.2**









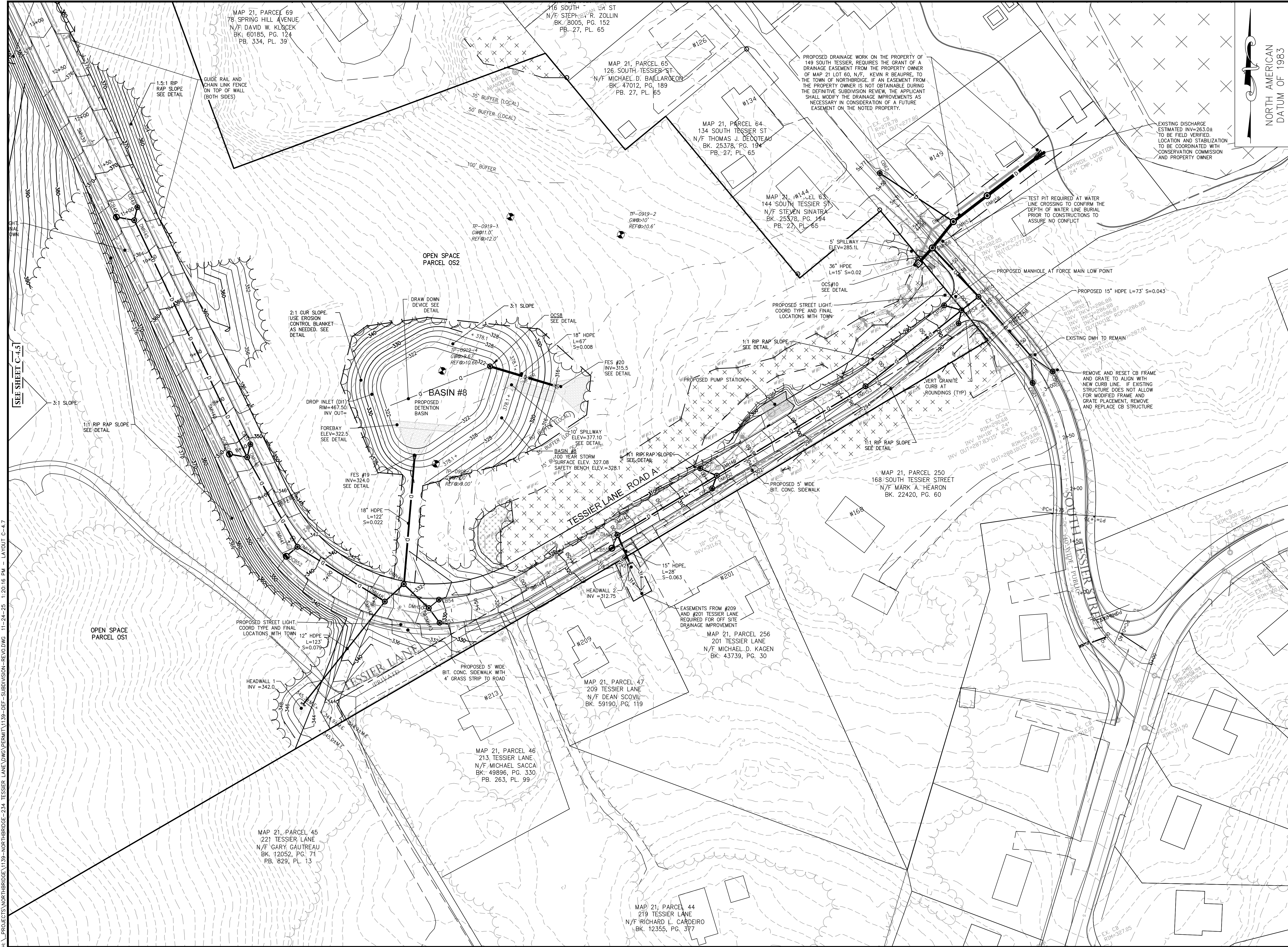














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REGISTERED PROFESSIONAL ENGINEER  
NO. 41717  
STATE OF MASSACHUSETTS

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TESSIER LANE & FOWLER ROAD  
NORTHBRIDGE, MASSACHUSETTS  
MAP 21 PARCELS 135, 139 AND 181

PREPARED FOR

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PLAN NO. L-XXX

GRAPHIC SCALE



(IN FEET)  
1 inch = 40 feet

SHEET TITLE

GRADING & DRAINAGE  
PLAN

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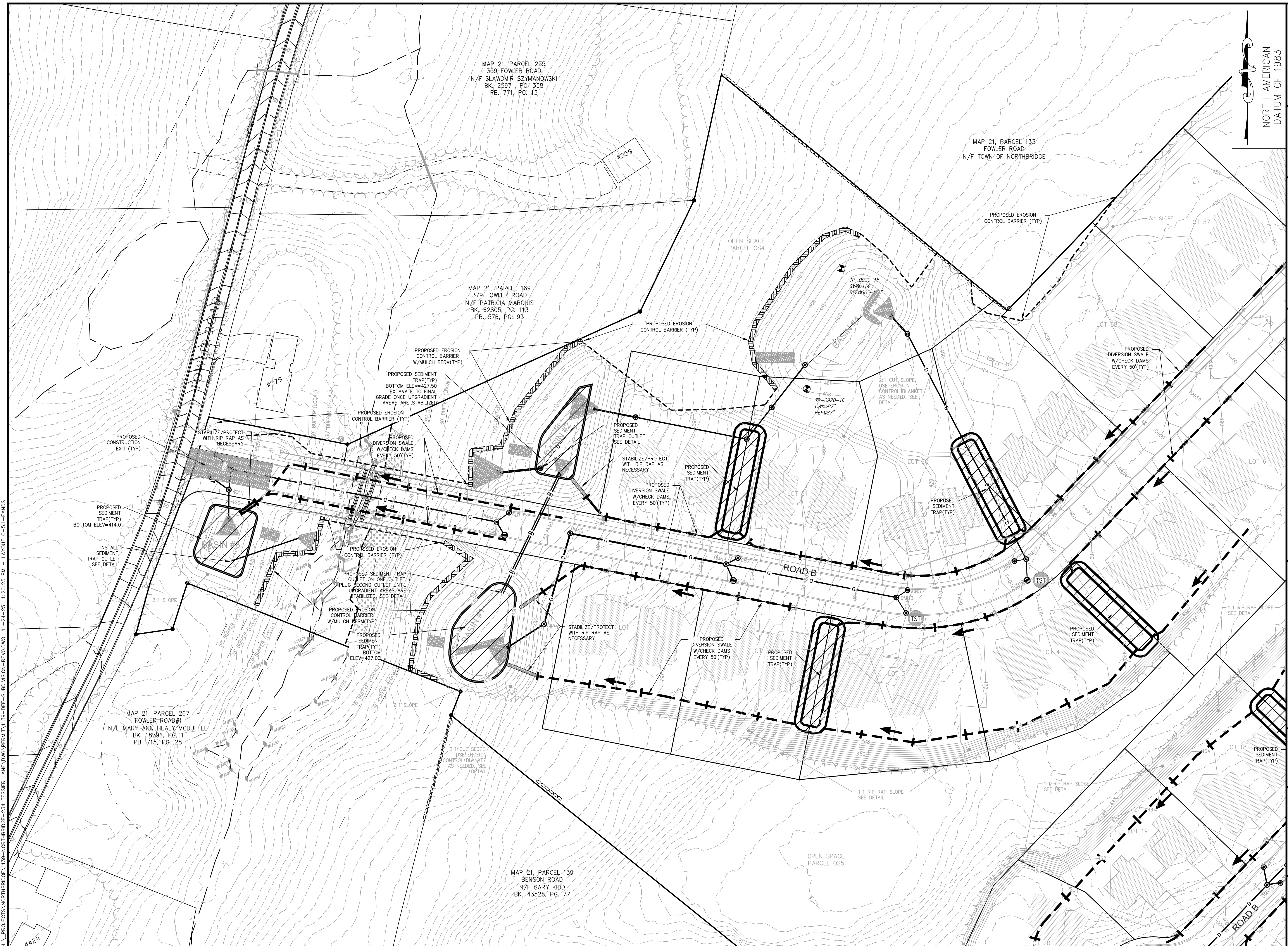
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C-4.7







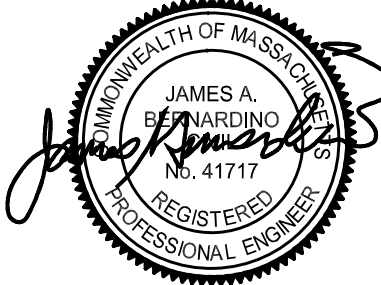


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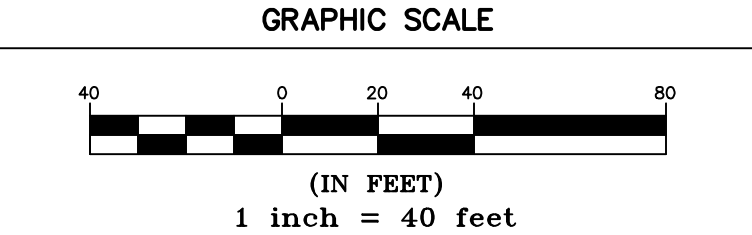
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NORTHBRIDGE, MASSACHUSETTS  
MAP 21 PARCELS 135, 139 AND 181

**Eastland**

Eastland Partners, Inc.  
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Worcester, MA 01607

[illegible]

SHEET TITLE

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EROSION AND  
SEDIMENT CONTROL  
PLAN

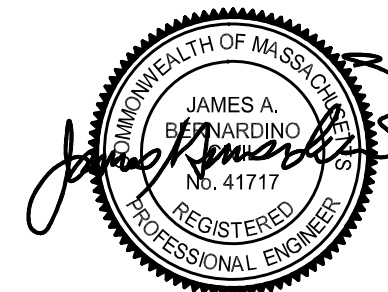
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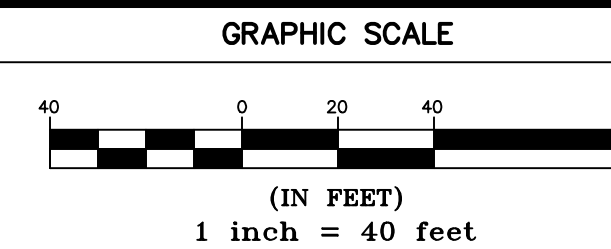
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NORTHBRIDGE, MASSACHUSETTS  
MAP 21 PARCELS 135, 139 AND 181

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[illegible]

SHEET TITLE

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SEDIMENT CONTROL  
PLAN

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SHEET NO.

C-5.2

















A circular professional engineer seal for the Commonwealth of Massachusetts. The outer ring contains the text "COMMONWEALTH OF MASSACHUSETTS" at the top and "REGISTERED PROFESSIONAL ENGINEER" at the bottom. The center of the seal contains the name "JAMES A. BERNARDINO" and the number "No. 41717". A handwritten signature, "James A. Bernardino", is written across the seal.

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ENDORSEMENT DATE: _____

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REVISIONS			
REV.	DATE	DESCRIPTION	
PROJECT NO.		TPE-1139	
DESIGNED BY		JAB, TB	
CHECKED BY		JAB	
DATE		NOVEMBER 17, 2025	
CAD FILE		H:\1139-DEF-Subdivision-REV0.dwg	
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C-5.6













- [1] USE AS NEEDED TO STABILIZE 2:1 AND 3:1 SLOPES
- [2] SLOPE SURFACE SHALL BE FREE OF ROCK, CLODS, STICKS AND GRASS, MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT
- [3] APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS
- [4] LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH
- [5] MATS/BLANKETS SHOULD BE INSTALLED VERTICALLY DOWNSLOPE
- [6] TAMP SOIL OVER MAT/BLANKET

①

2



## SECTION

③



- [1] TO BE SILTSTACK BY ATLANTIC CONSTRUCTION FABRICS, INC., OR APPROVED EQUAL.
- [2] TO BE INSTALLED IMMEDIATELY FOLLOWING THE INSTALLATION OF CATCH BASIN STRUCTURE AND REMAIN UNTIL FINISH COURSE IS PLACED.
- [3] FILTER BAG SHALL BE MAINTAINED AND CLEANED AS NEEDED.

4



## PLAN

5



STOCKPILE TO BE LOCATED IN AN AREA WHICH PROVIDES MAXIMUM PROTECTION AGAINST EROSION TOWARDS SENSITIVE AREAS

CONTINUOUS STAKED STRAW WATTLE  
PLACED AROUND ENTIRETY OF STOCKPILE

⑥



UNDISTURBED NATURAL SOIL OR  
SUBGRADE COMPACTED TO 95%  
MAXIMUM DRY DENSITY (MODIFIED  
PROCTOR) PER ASTM D1557

## ROC



PRECAST CONCRETE OUTLET. IF NOT USED, MATCH SIZE, INVERT AND CONNECT RISER PIPE TO PROPOSED BASIN OUTLET CULVERT

SEDIMENT

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**FOX HOLLOW**

**DEFINITIVE SUBDIVISION PLAN**

**TESSIER LANE & FOWLER ROAD**

**NORTHRIDGE, MASSACHUSETTS**

**MAP 21 PARCELS 135, 139 AND 181**

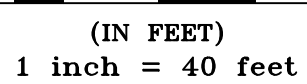
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[illegible]

GRAPHIC SCALE



SHEET TITLE

## EROSION AND SEDIMENT CONTROL DETAILS

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C-5.9





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DEFINITIVE SUBDIVISION PLAN**

**DEFINITIVE SUBDIVISION PLAN**  
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**NORTHBRIDGE, MASSACHUSETTS**  
**MAP 21 PARCELS 135, 139 AND 181**

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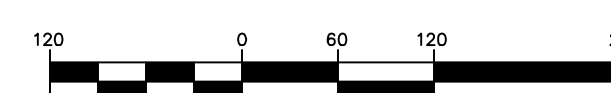


<b>REVISIONS</b>		
<b>REV.</b>	<b>DATE</b>	<b>DESCRIPTION</b>

<b>PROJECT NO.</b>	TPE-1139
<b>DESIGNED BY</b>	JAB, TB
<b>CHECKED BY</b>	JAB
<b>DATE</b>	NOVEMBER 17, 2025
<b>CAD FILE</b>	H:\1139-DET-Subdivision-REV0.dwg
<b>PLAN NO.</b>	L-XXX

GRAPHIC SCALE



(IN FEET)

1 inch = 120 feet

**SHEET TITLE**

## OVERALL WATER SYSTEM LAYOUT PLAN

DRAWING ISSUED FOR:

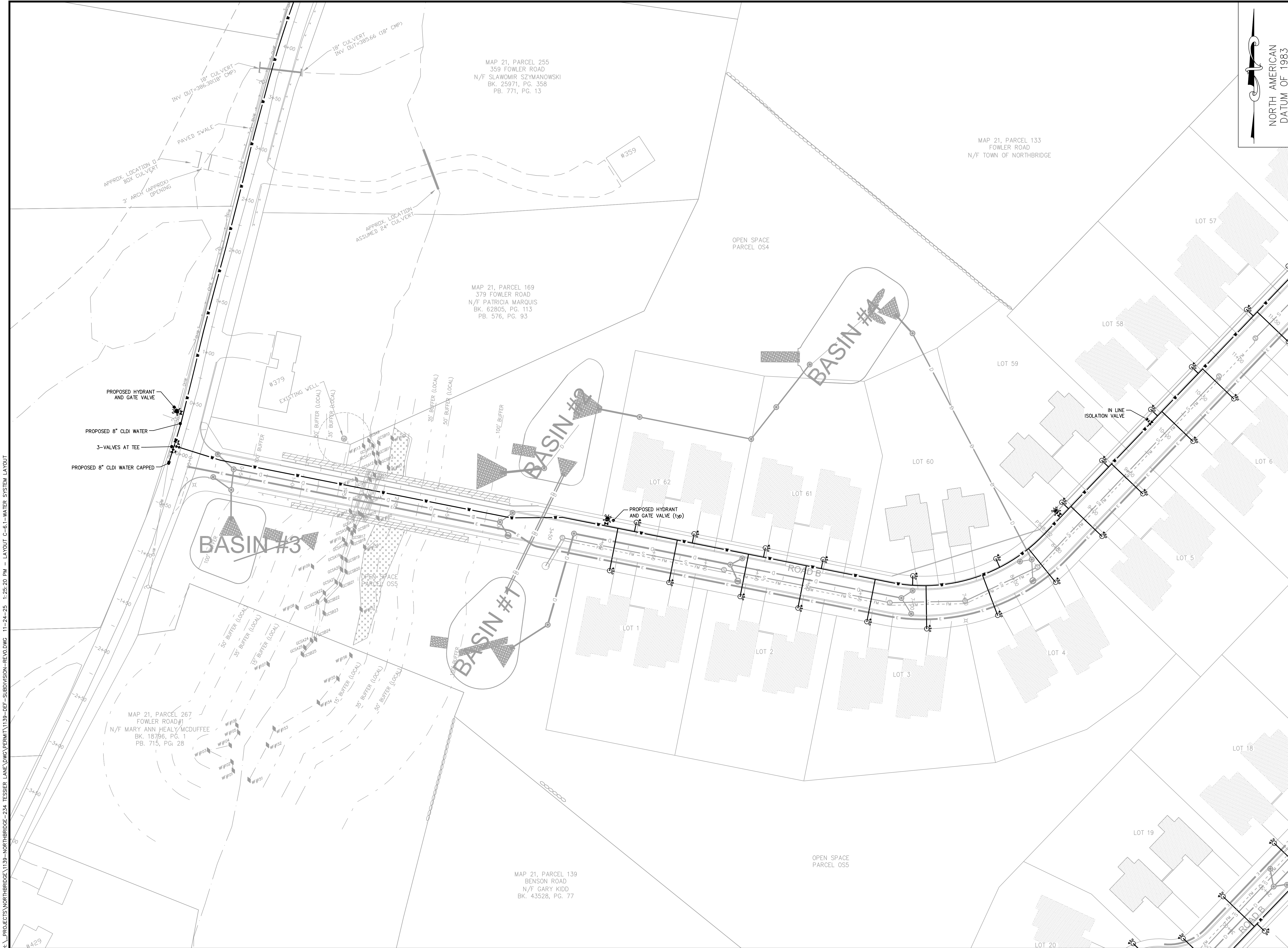
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SHEET NO.

C-6.0



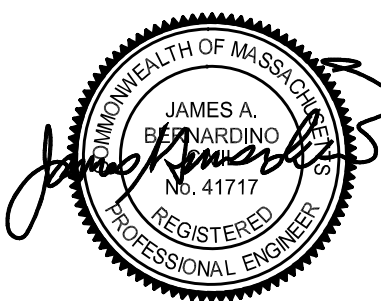


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**TESSIER LANE & FOWLER ROAD**

**NORTHBRIDGE, MASSACHUSETTS**

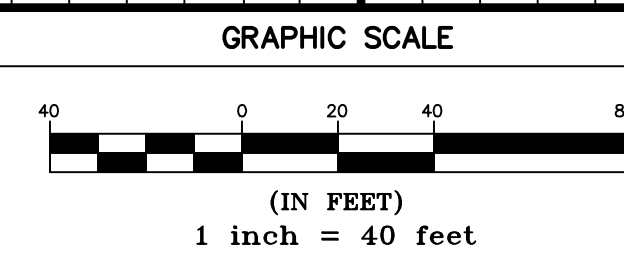
**MAP 21 PARCELS 135, 139 AND 181**

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CAD FILE	H:\1139-DDF-Subdivision-REV0.dwg				
PLAN NO.	L-XXX				



SHEET TITLE

WATER SYSTEM  
LAYOUT PLAN

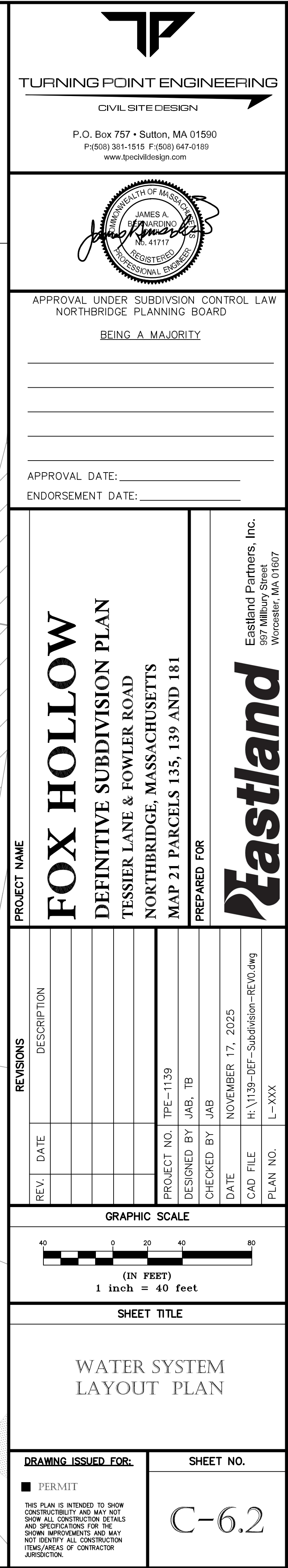
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C-6.1











H:\PROJECTS\NORTHBRIDGE\1139- NORTHBRIDGE- 234 TESSIER LANE\DWG\PERMIT\1139- DEF-SUBDIVISION- REV0.DWG 11-24-25 1:25:27 PM - LAYOUT C-6.4-WATER



MAP 21, PARCEL 45  
221 TESSIER LANE  
N/F GARY GAUTREAU  
BK. 12052, PG. 71  
PB. 829, PL. 13

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CHECKED BY JAB

DATE NOVEMBER 17, 2025

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PLAN NO. L-XXX

GRAPHIC SCALE



(IN FEET)  
1 inch = 40 feet

SHEET TITLE

WATER SYSTEM  
LAYOUT PLAN

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SHEET NO.

C-6.4

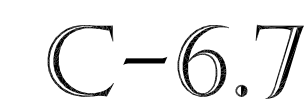




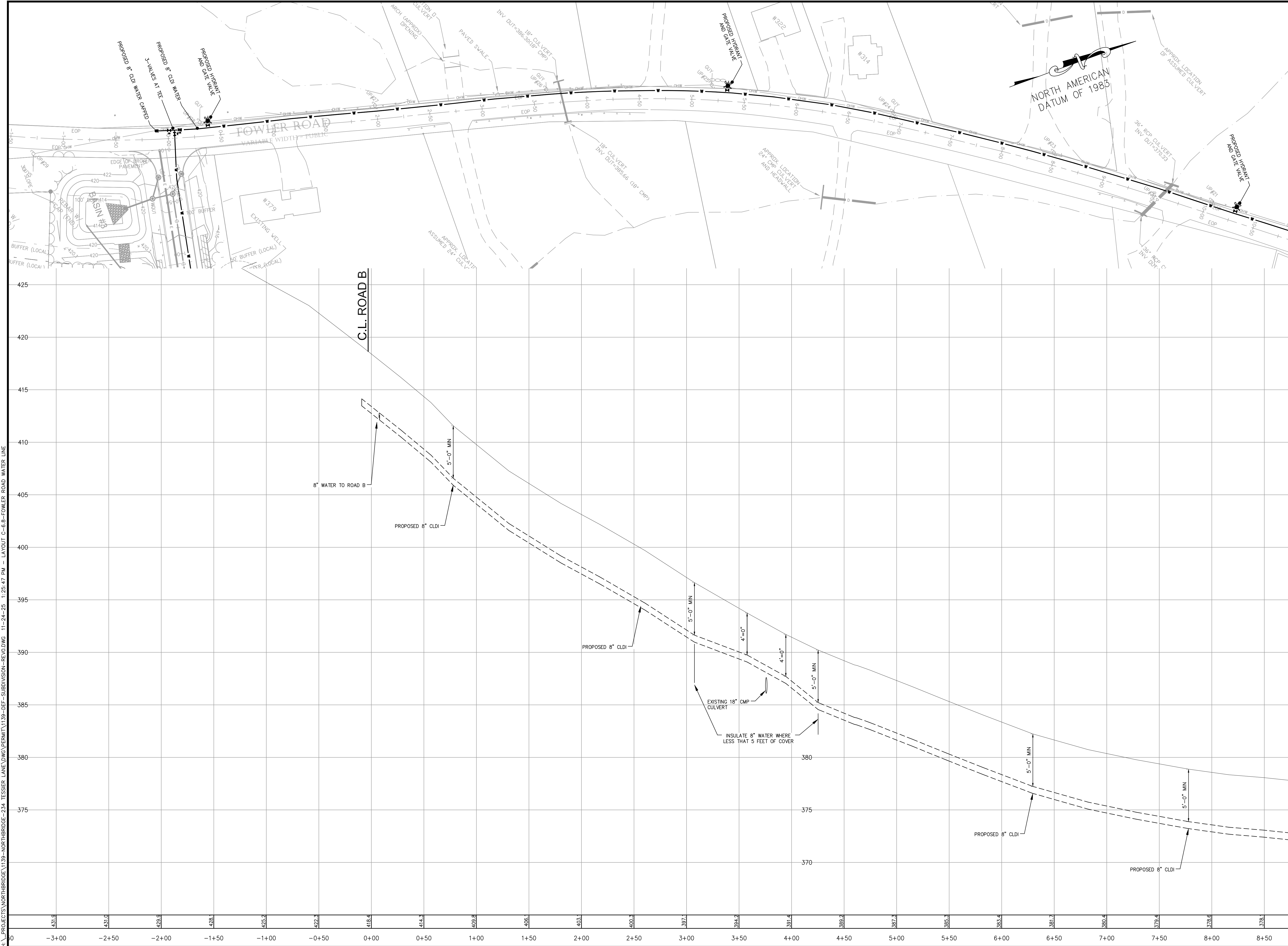












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MAP 21 PARCELS 135, 139 AND 181

**REVISIONS**

REV.	DATE	DESCRIPTION

**GRAPHIC SCALE**

(IN FEET)  
1 inch = 40 feet

**SHEET TITLE**

**FOWLER ROAD WATER LINE PLAN**

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**SHEET NO.**

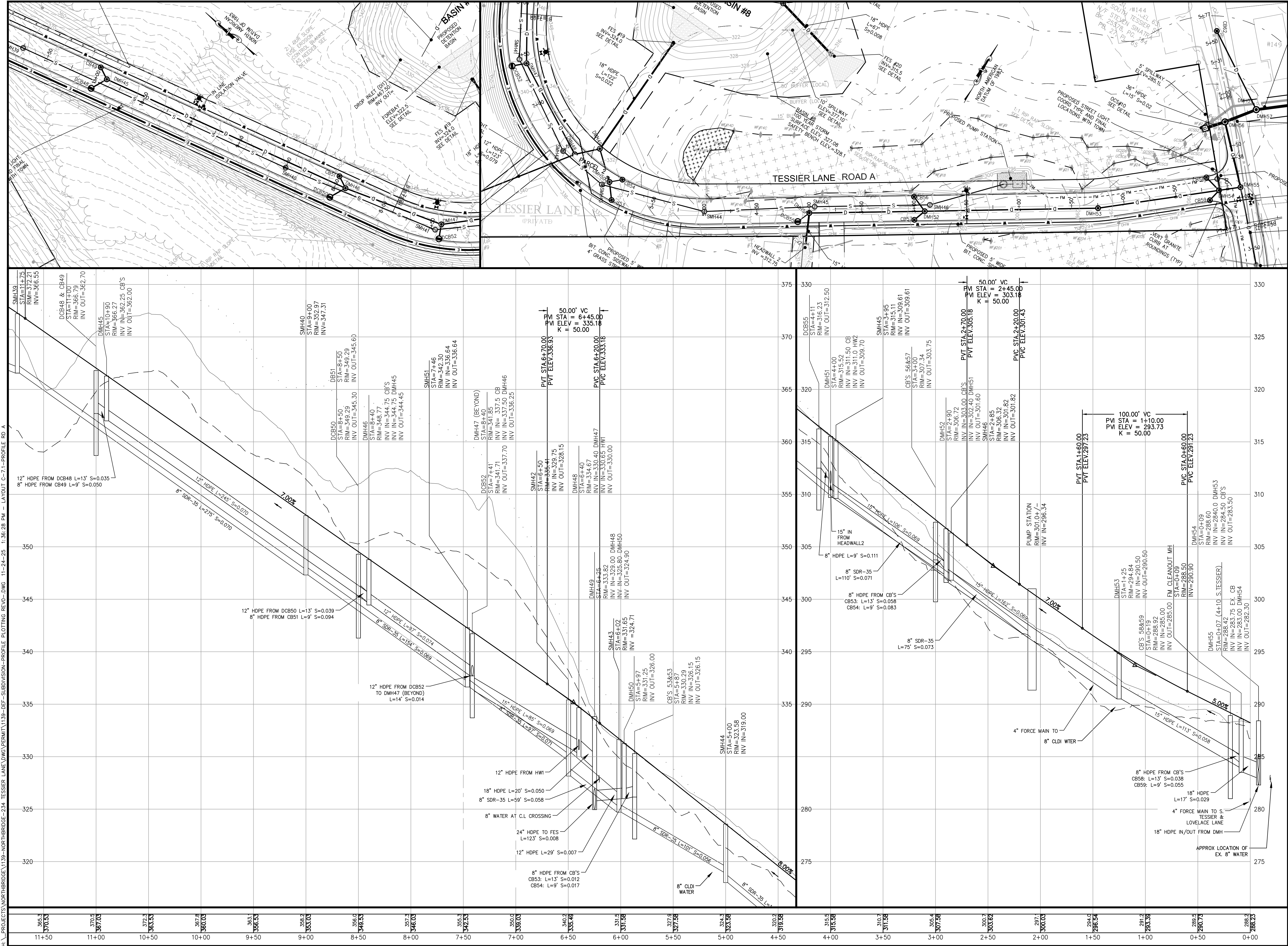
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NORTHBRIDGE, MASSACHUSETTS

REVISIONS

REV.	DATE	DESCRIPTION

GRAPHIC SCALE

40 0 20 40 80  
(IN FEET)  
1 inch = 40 feet

SHEET TITLE

ROAD PROFILE AND  
UTILITY PLAN  
TESSIER LANE  
0+00 TO 11+50

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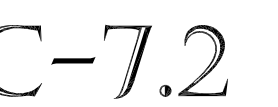
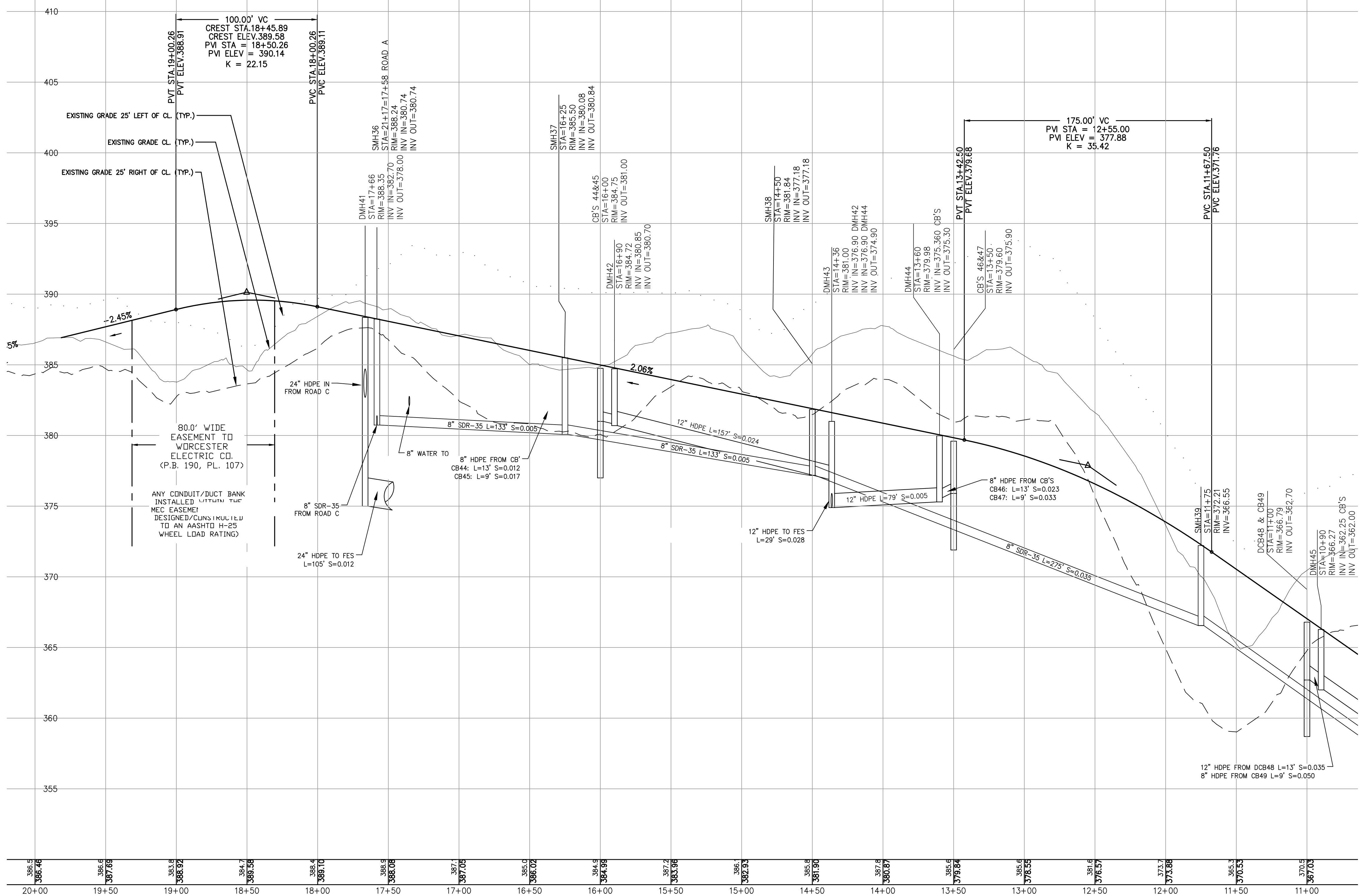
SHEET NO.

**C-7.1**

PREPARED FOR

Eastland Partners, Inc.  
997 Millbury Street  
Worcester, MA 01607





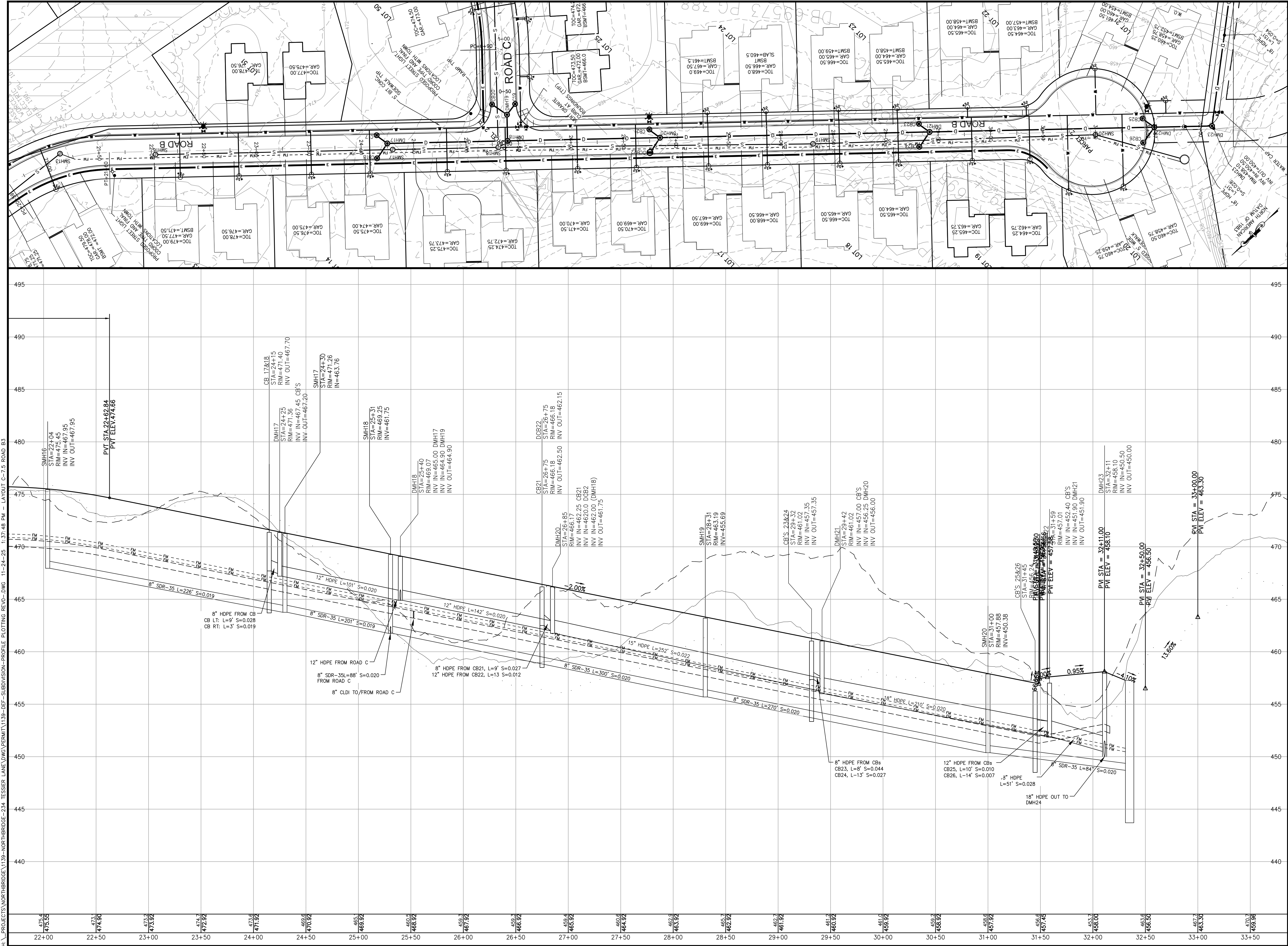














TURNING POINT ENGINEERING

CIVIL SITE DESIGN

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APPROVAL UNDER SUBDIVISION CONTROL LAW  
NORTHBRIDGE PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____  
ENDORSEMENT DATE: _____

PROJECT NAME

**FOX HOLLOW**

**DEFINITIVE SUBDIVISION PLAN**

**TESSIER LANE & FOWLER ROAD**

**NORTHBRIDGE, MASSACHUSETTS**

PREPARED FOR

**Eastland**

Eastland Partners, Inc.  
997 Millbury Street  
Worcester, MA 01607

REV.	DATE	DESCRIPTION

PROJECT NO. TPE-1139  
DESIGNED BY JAB, TB  
CHECKED BY JAB  
DATE OCTOBER 6, 2025  
CAD FILE H:\1139-DEF-Subdivision-REV0.dwg  
PLAN NO. L-XXX

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)  
1 inch = 40 feet

SHEET TITLE

**ROAD PROFILE AND  
UTILITY PLAN  
ROAD B  
11+50 TO 32+00**

DRAWING ISSUED FOR:

■ PERMIT

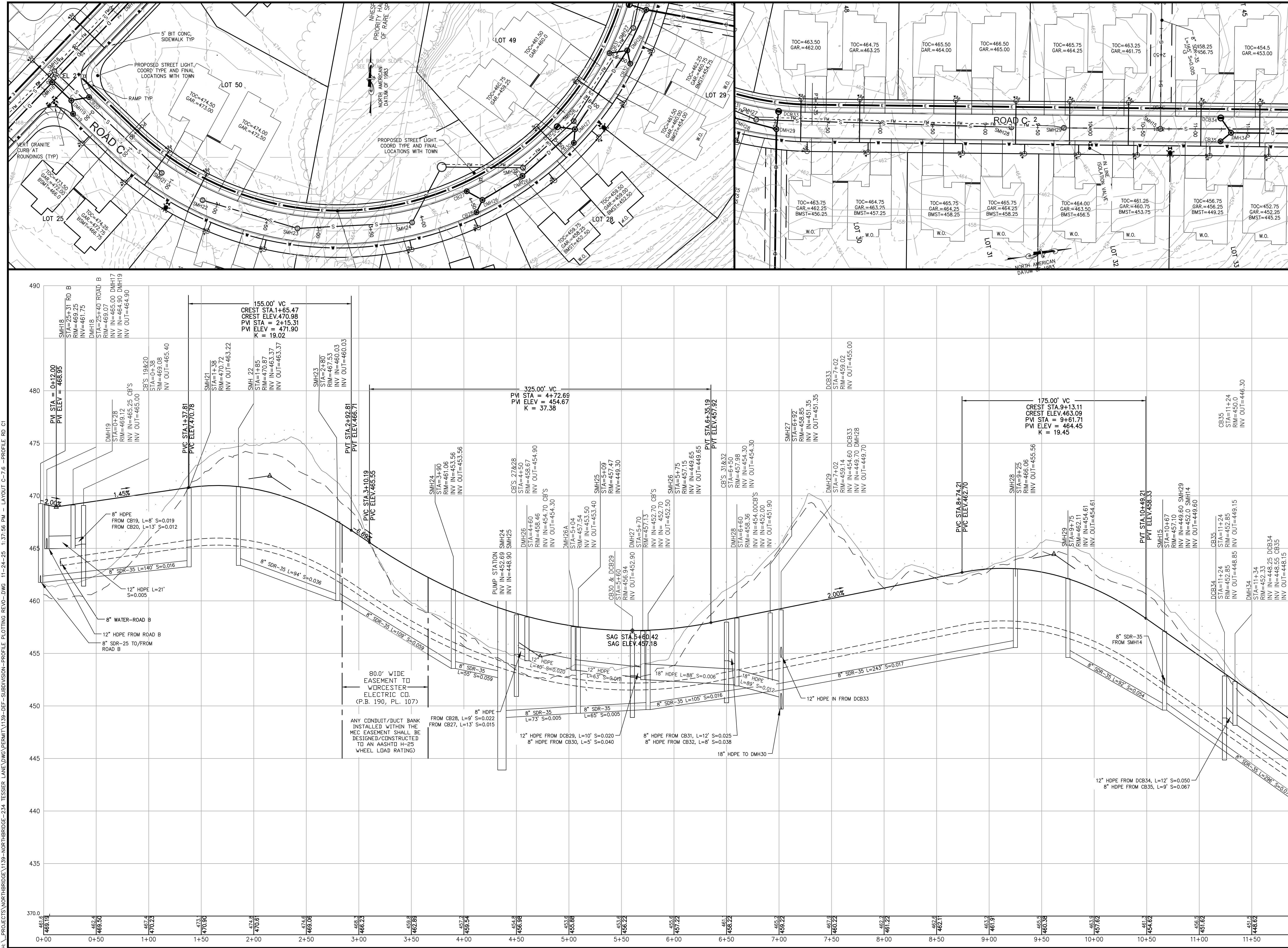
THIS PLAN IS INTENDED TO SHOW  
CONSTRUCTION AND MAY NOT  
SHOW ALL CONSTRUCTION DETAILS  
AND SPECIFICATIONS FOR THE  
SHOWN IMPROVEMENTS AND MAY  
NOT IDENTIFY ALL CONSTRUCTION  
ITEMS/AREAS OF CONTRACTOR  
JURISDICTION.

SHEET NO.

**C-7.5**



H:\PROJECTS\NORTHBRIDGE\1139 - NORTHBRIDGE - 234 TESSER LANE\DWG\PERMIT\1139 - DEF - SUBDIVISION - PROFILE PLOTTING REV0 - DWG 11-24-25 1:37:56 PM - LAYOUT C-7.6 - PROFILE RD C1



APPROVAL UNDER SUBDIVISION CONTROL LAW  
NORTHBRIDGE PLANNING BOARD  
BEING A MAJORITY

APPROVAL DATE: _____  
ENDORSEMENT DATE: _____

**FOX HOLLOW**  
DEFINITIVE SUBDIVISION PLAN  
TESSER LANE & FOWLER ROAD  
NORTHBRIDGE, MASSACHUSETTS

PROJECT NAME

REVISIONS

DESCRIPTION

REV.

DATE

PROJECT NO.

DESIGNED BY

CHECKED BY

DATE

CAD FILE

PLAN NO.

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PERMIT  
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AND SPECIFICATIONS FOR THE  
SHOWN IMPROVEMENTS AND MAY  
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ITEMS/AREAS OF CONTRACTOR  
JURISDICTION.

SHEET NO.

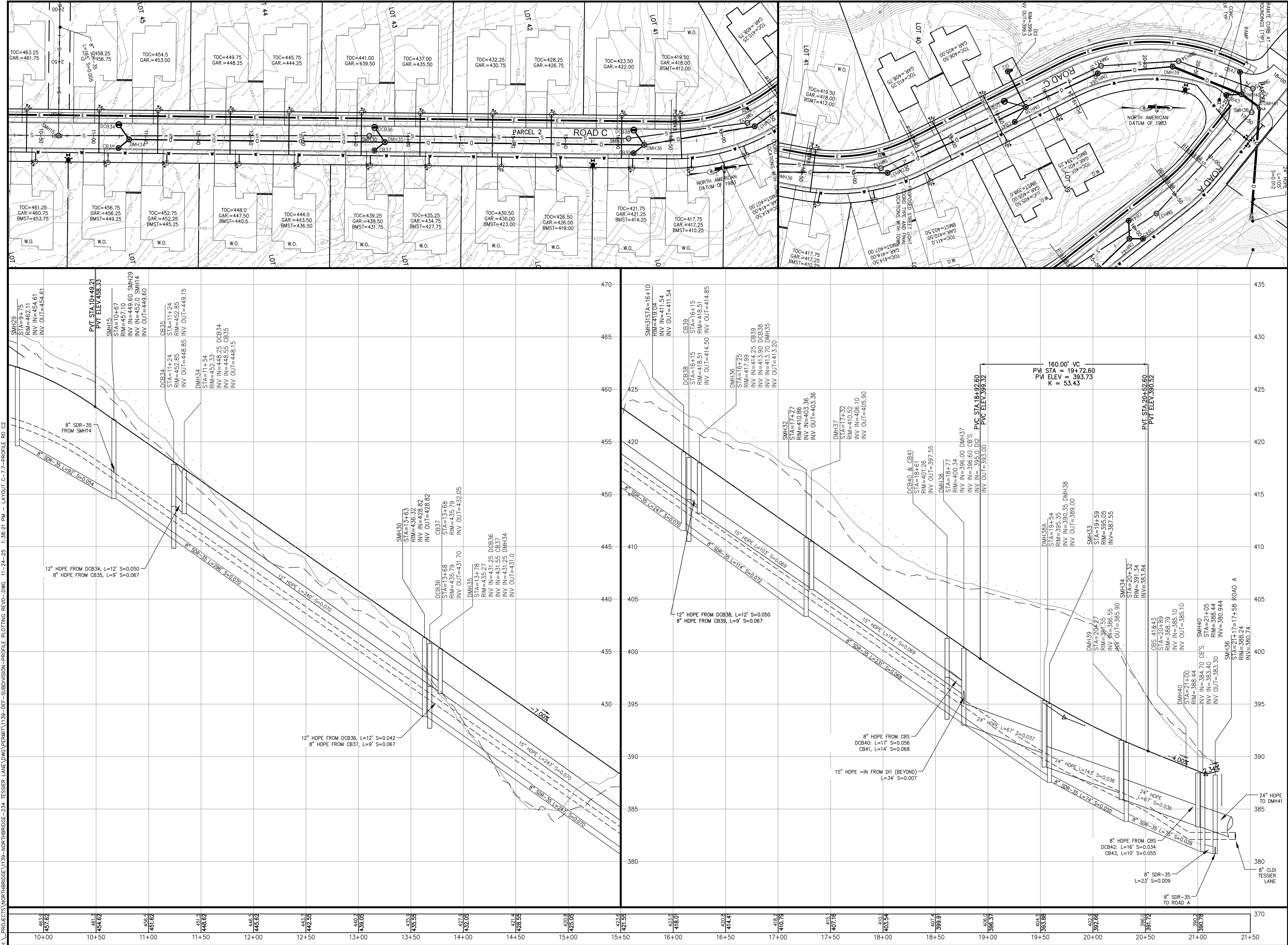
C-7.6

Eastland Partners, Inc.  
997 Millbury Street  
Worcester, MA 01607

**Eastland**

PREPARED FOR





H:\PROJECTS\NORTHBRIDGE\1139 - NORTHBRIDGE - 234 TESSER LANE\DWG\PERMIT\1139 - DEF - SUBDIVISION - PROFILE PLOTTING REV0 - DWG 11-24-25 1:38:21 PM - LAYOUT C-7.7 - PROFILE RD C2



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BEING A MAJORITY

APPROVAL DATE: _____  
ENDORSEMENT DATE: _____

PROJECT NAME

# FOX HOLLOW

DEFINITIVE SUBDIVISION PLAN  
TESSER LANE & FOWLER ROAD  
NORTHBRIDGE, MASSACHUSETTS

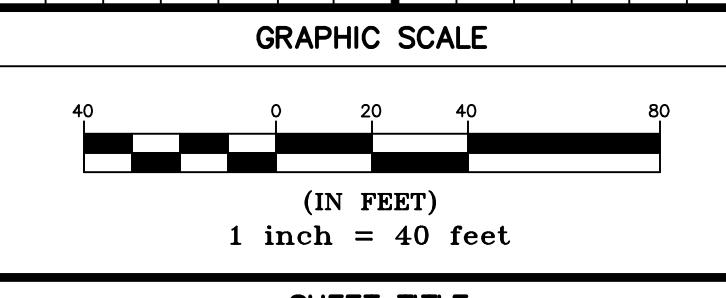
PREPARED FOR



Eastland Partners, Inc.  
997 Military Street  
Worcester, MA 01617

REVISIONS		DESCRIPTION	
REV.	DATE		

PROJECT NO.	TPE-1139
DESIGNED BY	JAB, TB
CHECKED BY	JAB
DATE	OCTOBER 6, 2025
CAD FILE	H:\1139-DEF-Subdivision-REV0.dwg
PLAN NO.	L-XXX



SHEET TITLE

## ROAD PROFILE AND UTILITY PLAN ROAD C 11+50 TO 21+50

DRAWING ISSUED FOR:

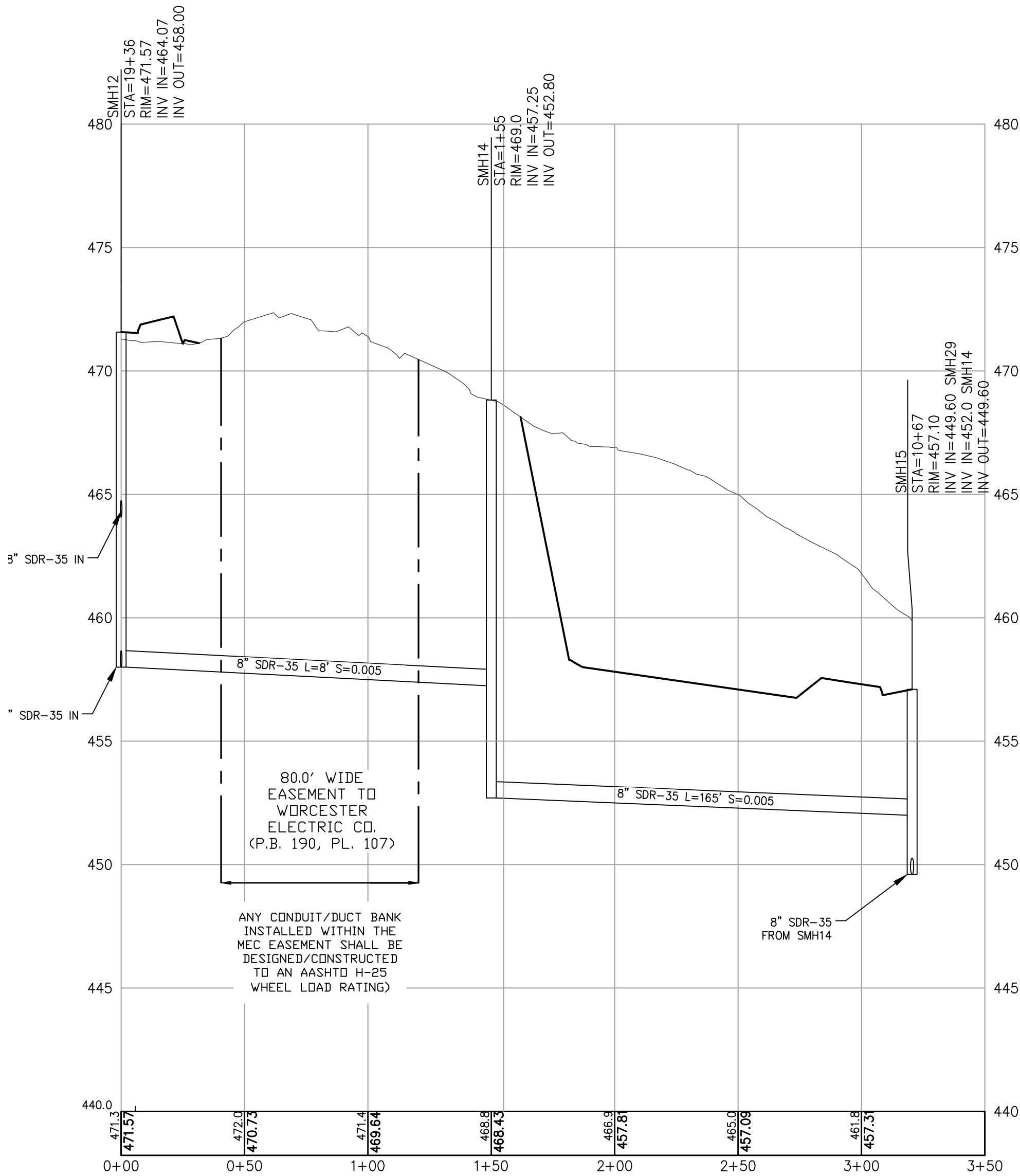
■ PERMIT

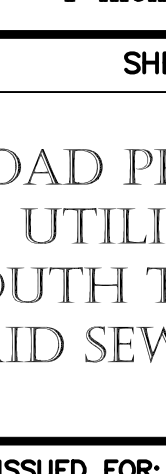
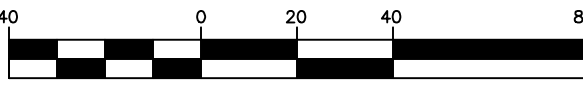
THIS PLAN IS INTENDED TO SHOW  
CONSTRUCTIBILITY AND MAY NOT  
SHOW ALL CONSTRUCTION DETAILS  
AND SPECIFICATIONS FOR THE  
SHOWN IMPROVEMENTS AND MAY  
NOT IDENTIFY ALL CONSTRUCTION  
ITEMS/AREAS OF CONTRACTOR  
JURISDICTION.

SHEET NO.

# C-7.7

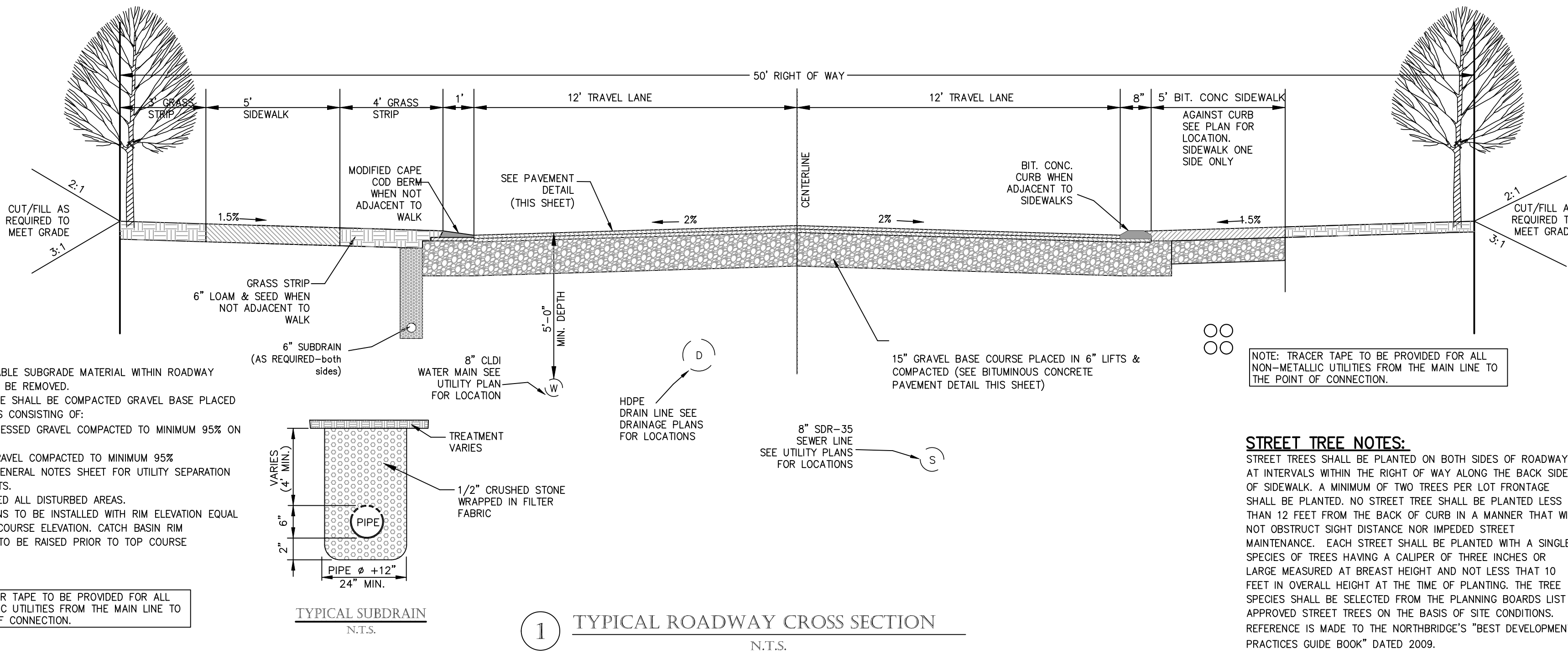




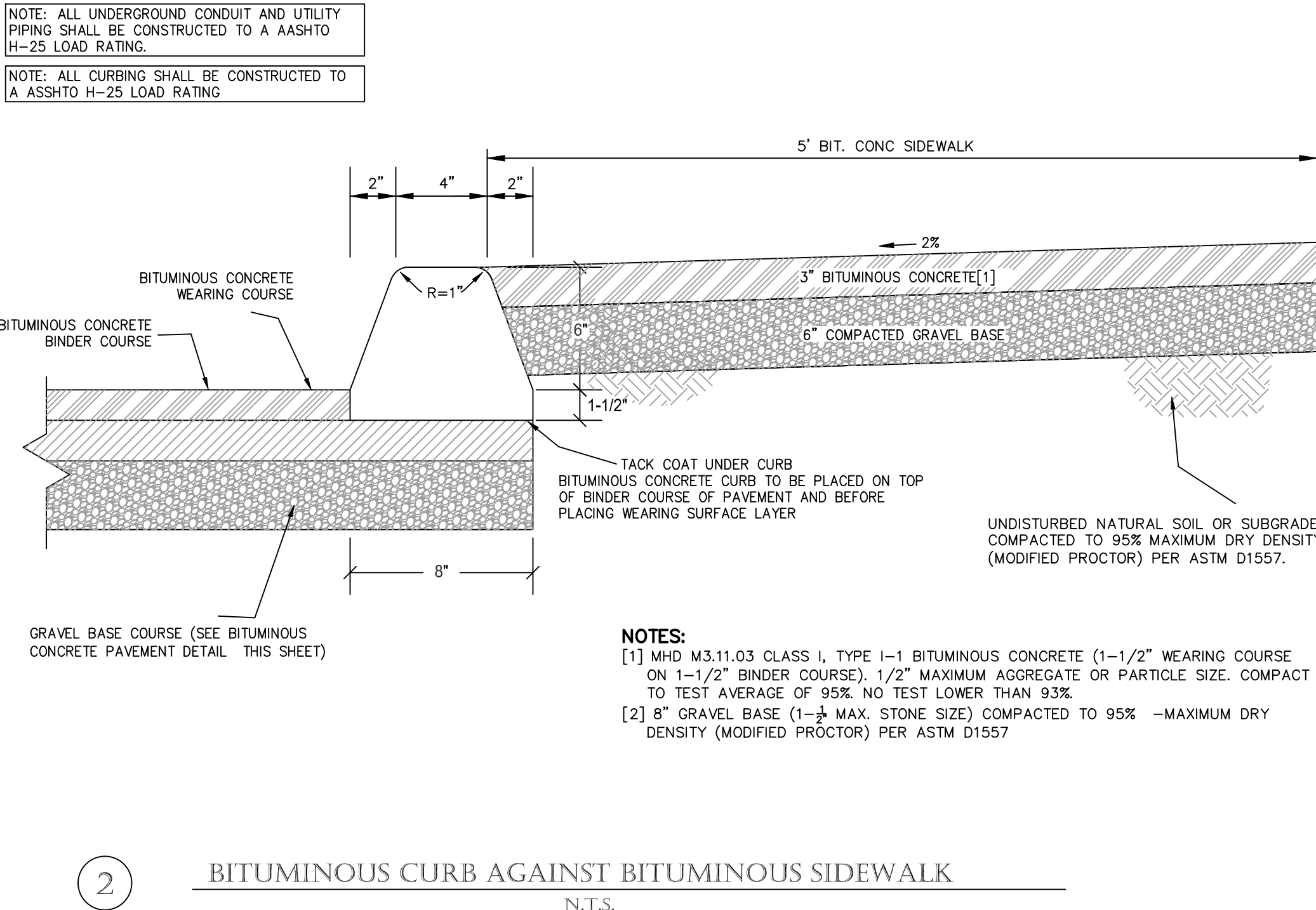
 <b>TURNING POINT ENGINEERING</b> CIVIL SITE DESIGN  P.O. Box 757 • Sutton, MA 01590 P:(508) 381-1515 F:(508) 647-0189 www.tpecivilsdesign.com		NORTH AMERICAN DATUM OF 1983	
APPROVAL UNDER SUBDIVISION CONTROL LAW NORTHBRIDGE PLANNING BOARD			
<u>BEING A MAJORITY</u>			
APPROVAL DATE: _____			
ENDORSEMENT DATE: _____			
<b>PROJECT NAME</b>  <b>FOX HOLLOW</b> <b>DEFINITIVE SUBDIVISION PLAN</b> <b>TESSIER LANE &amp; FOWLER ROAD</b> <b>NORTHBRIDGE, MASSACHUSETTS</b>		<b>PREPARED FOR</b>   <b>Eastland Partners, Inc.</b> 997 Millbury Street Worcester, MA 01607	
<b>REVISIONS</b>			
REV.	DATE	DESCRIPTION	
PROJECT NO.		TPE-1139	
DESIGNED BY		JAB, TB	
CHECKED BY		JAB	
DATE		OCTOBER 6, 2025	
CAD FILE		H:\1139-DEF-Subdivision-REV0.dwg	
PLAN NO.		L-XXX	
<b>GRAPHIC SCALE</b>			
 (IN FEET) 1 inch = 40 feet			
<b>SHEET TITLE</b>			
<b>ROAD PROFILE AND UTILITY PLAN SOUTH TESSIER AND NGRID SEWER CROSSING</b>			
<b>DRAWING ISSUED FOR:</b>		<b>SHEET NO.</b>	
■ PERMIT  THIS PLAN IS INTENDED TO SHOW CONSTRUCTIBILITY AND MAY NOT SHOW ALL CONSTRUCTION DETAILS AND SPECIFICATIONS FOR THE SHOWN IMPROVEMENTS AND MAY NOT IDENTIFY ALL CONSTRUCTION ITEMS/AREAS OF CONTRACTOR JURISDICTION.		<b>C-7.8</b>	



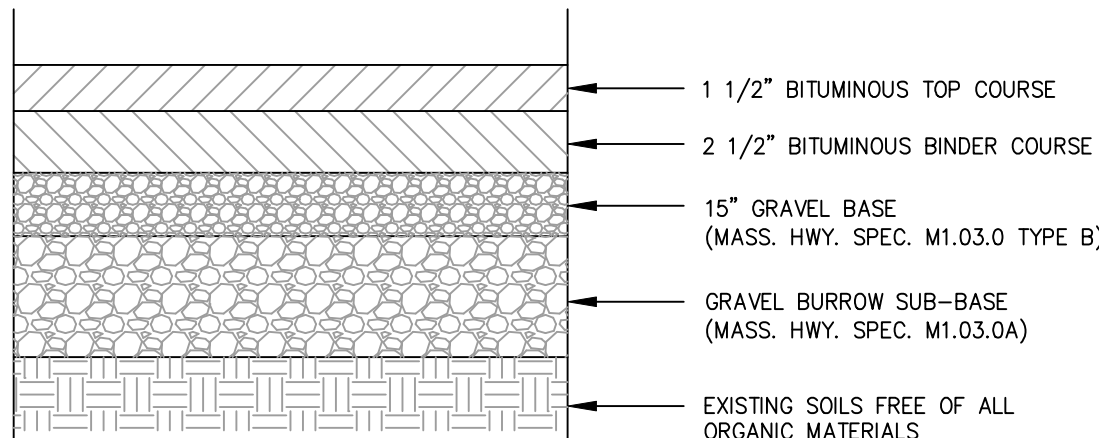
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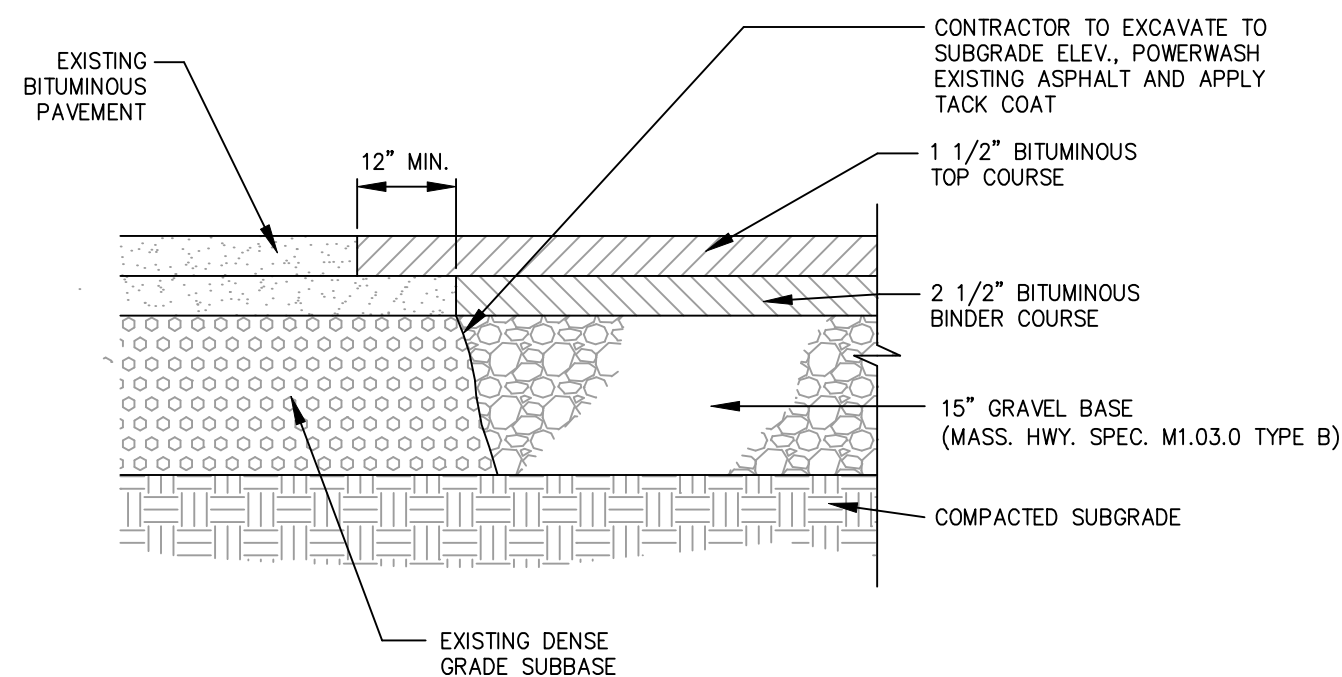
1 TYPICAL ROADWAY CROSS SECTION  
N.T.S.



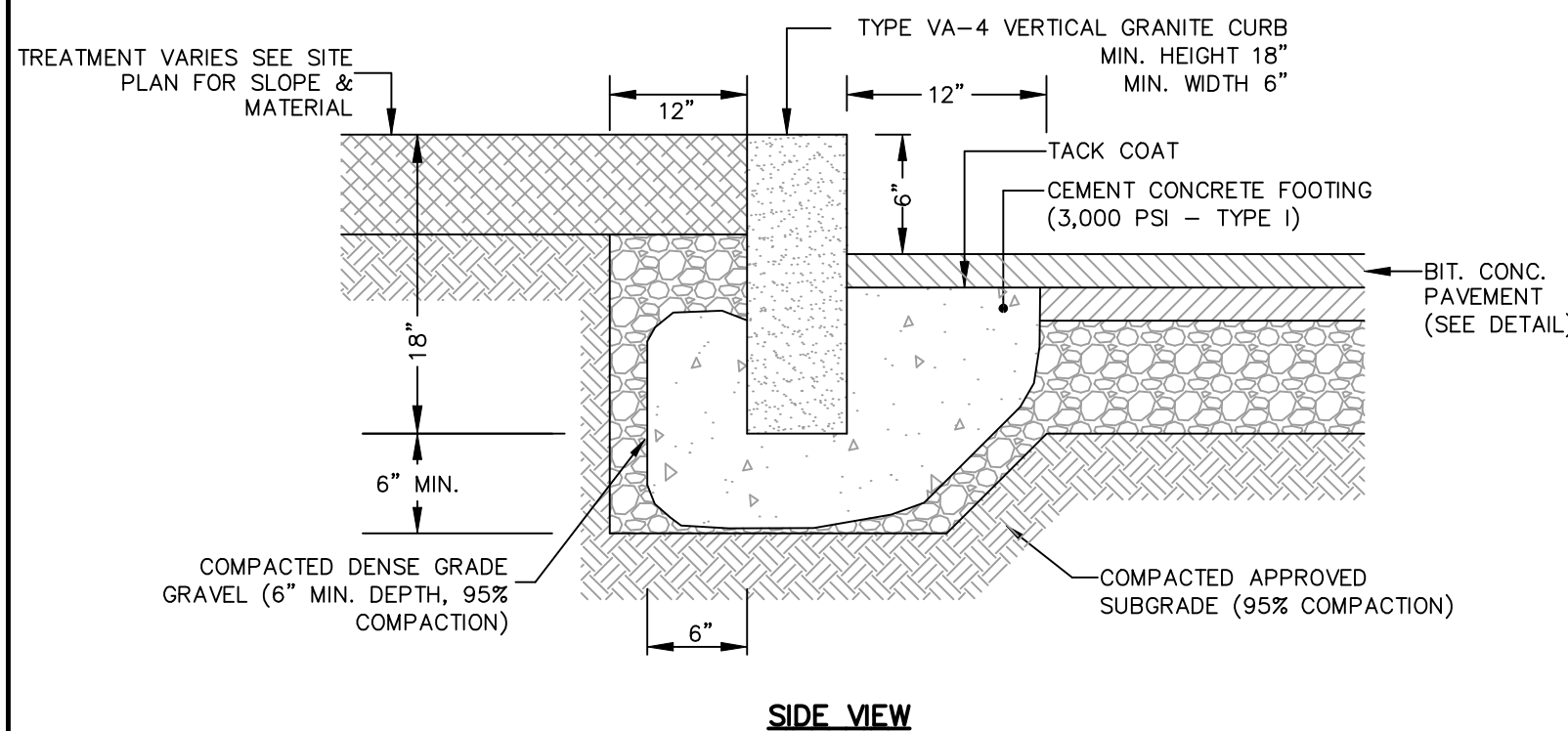
2 BITUMINOUS CURB AGAINST BITUMINOUS SIDEWALK  
N.T.S.



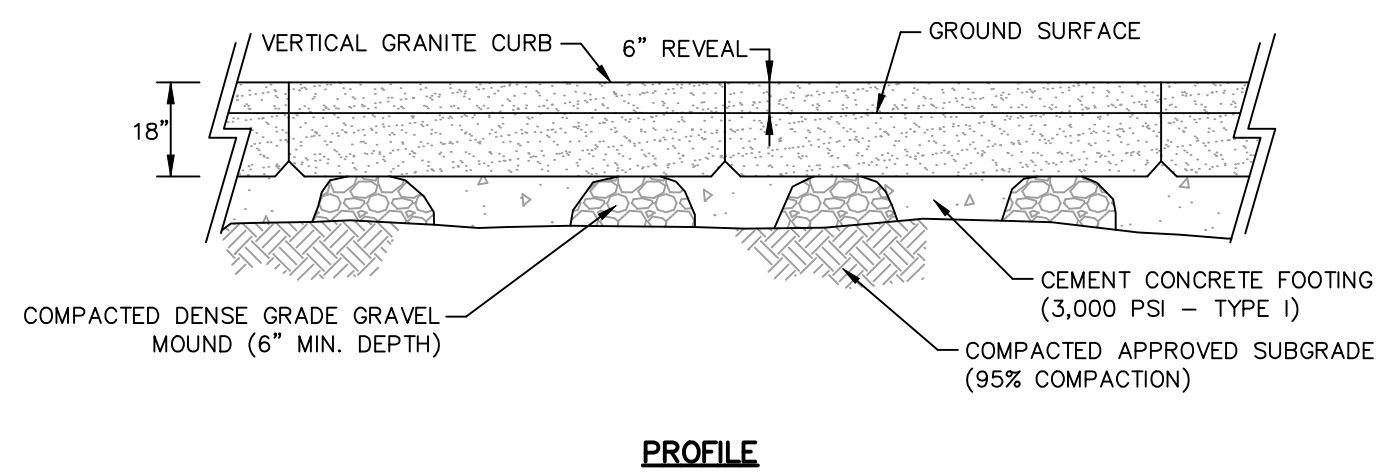
3 BITUMINOUS CONCRETE PAVEMENT (ROADWAY)  
N.T.S.



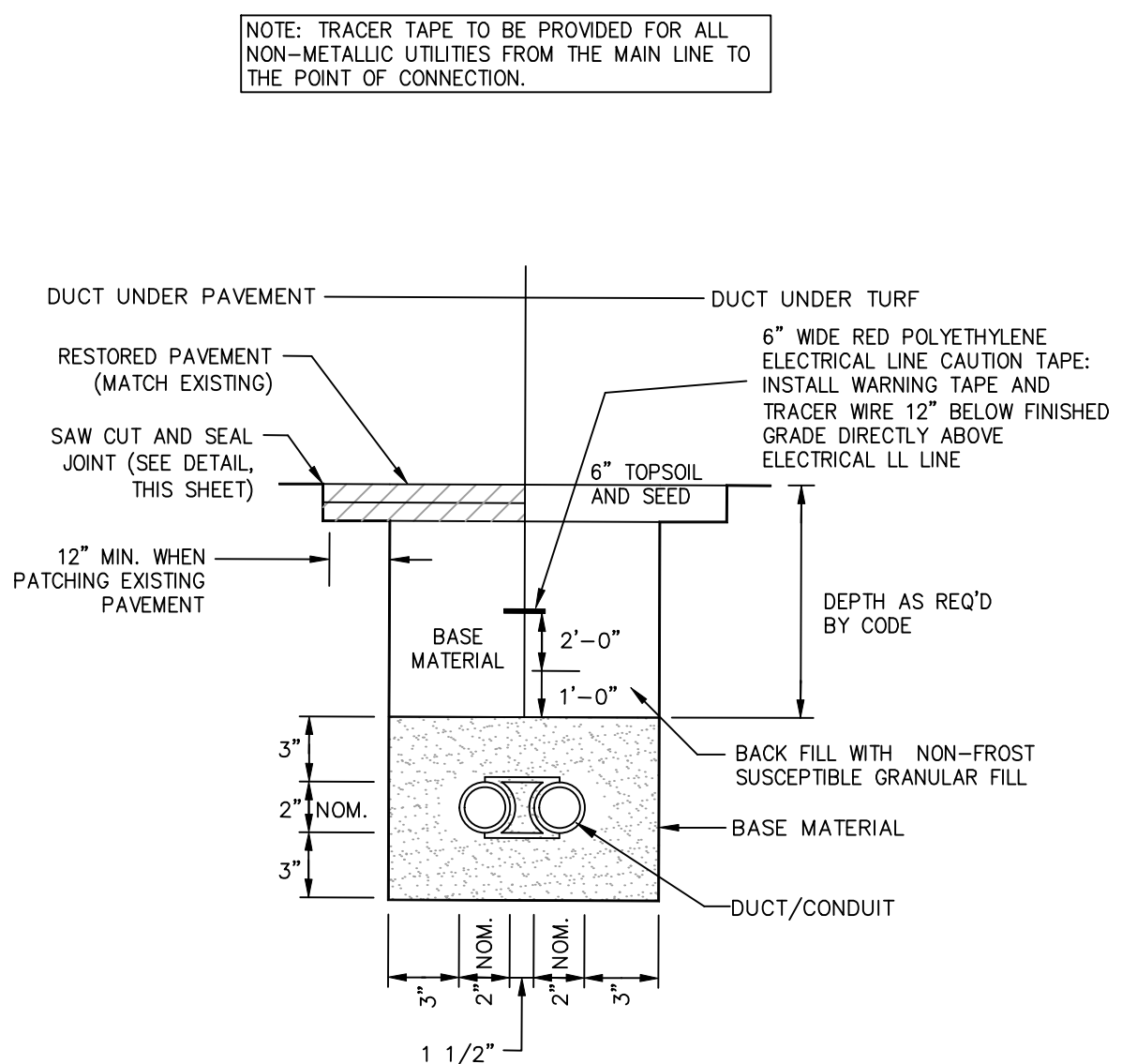
4 PAVEMENT JOINTING  
N.T.S.



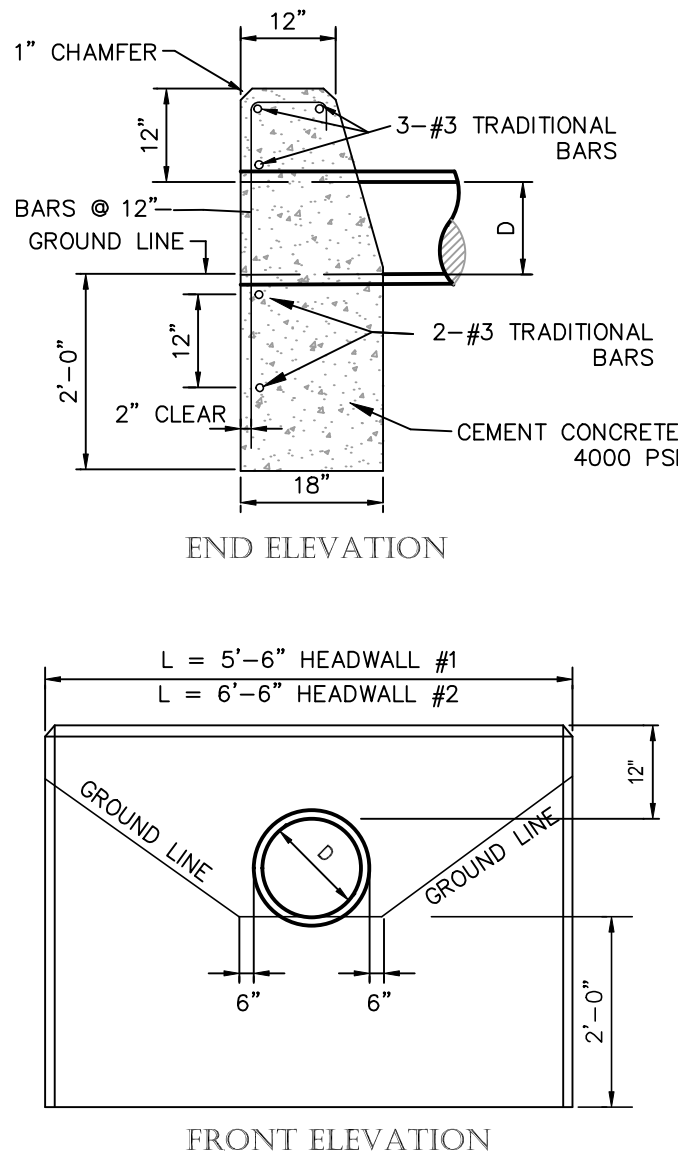
5 VERTICAL GRANITE CURB (VGC)  
N.T.S.



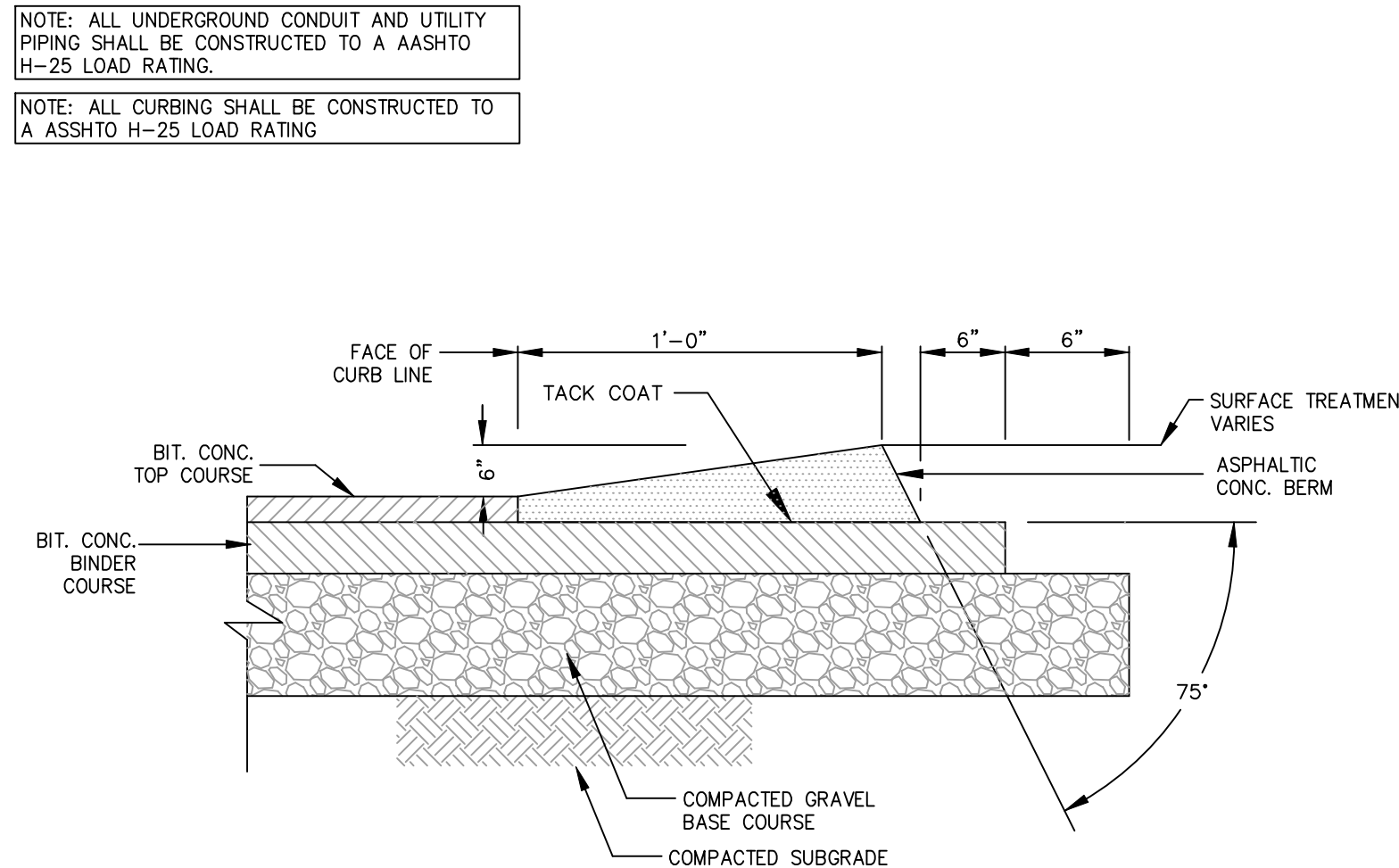
PROFILE



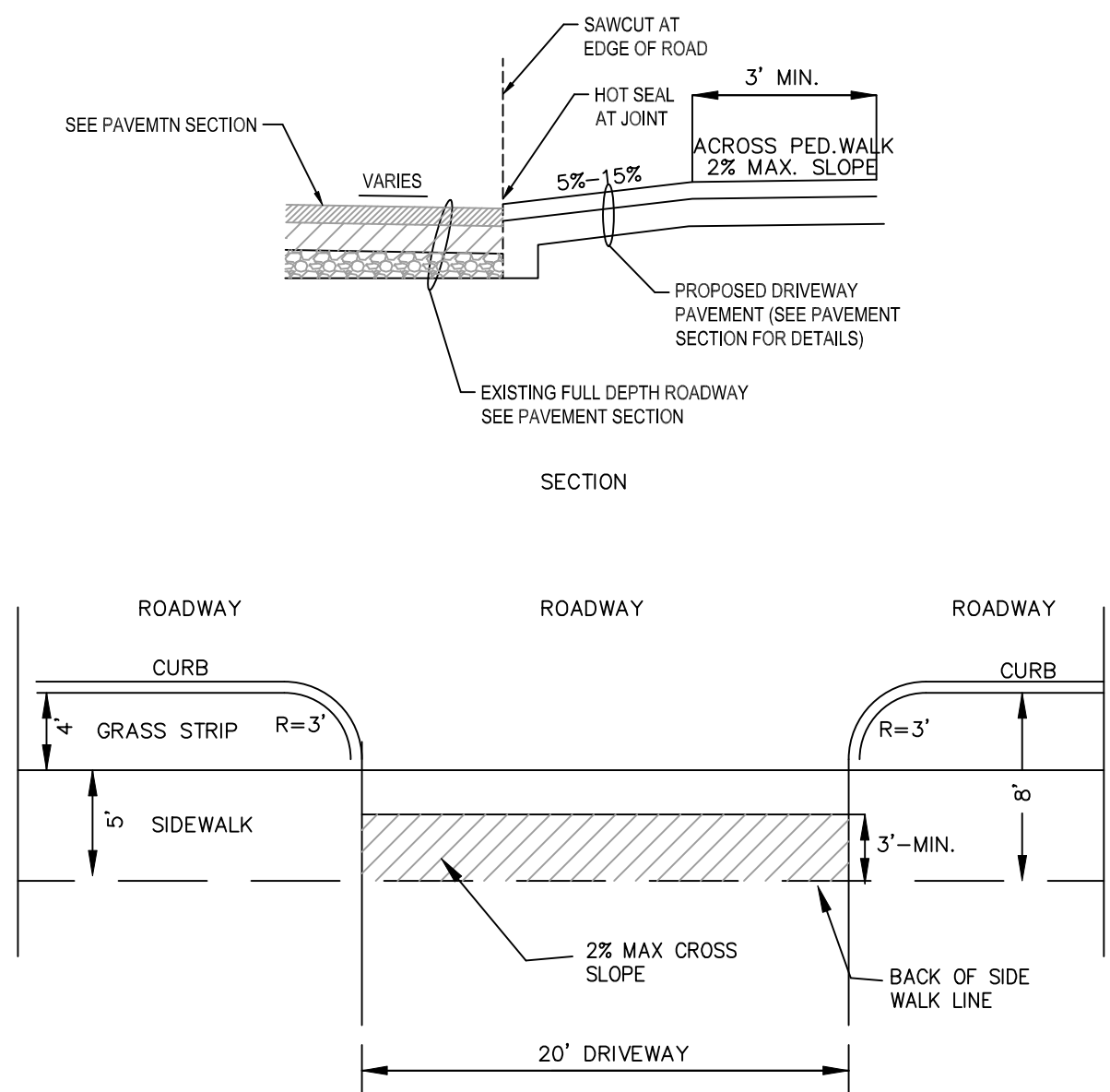
6 UNENCASED DUCT/CONDUIT  
N.T.S.



7 HEADWALL  
N.T.S.



8 MODIFIED ASPHALTIC CAPE COD BERM (CCB)  
N.T.S.



9 SIDEWALK THRU DRIVEWAYS WITH CURB RETURNS  
N.T.S.

APPROVAL UNDER SUBDIVISION CONTROL LAW  
NORTHBRIDGE PLANNING BOARD  
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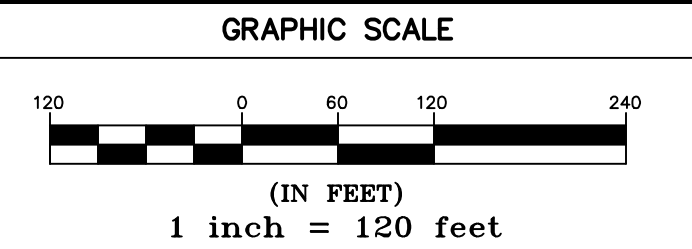
APPROVAL DATE: _____  
ENDORSEMENT DATE: _____

**FOX HOLLOW**  
DEFINITIVE SUBDIVISION PLAN  
TESSER LANE & FOWLER ROAD  
NORTHBRIDGE, MASSACHUSETTS

PREPARED FOR  
**Eastland**  
Eastland Partners, Inc.  
987 Millbury Street  
Worcester, MA 01607

REVISIONS		DESCRIPTION	
REV.	DATE		

PROJECT NO. TPE-1139  
DESIGNED BY JAB, TB  
CHECKED BY JAB  
DATE NOVEMBER 17, 2025  
CAD FILE H:\1139-DEF-Subdivision-REV0.dwg  
PLAN NO. L-XXX



**CONSTRUCTION DETAILS**

DRAWING ISSUED FOR:  
■ PERMIT  
THIS PLAN IS INTENDED TO SHOW CONSTRUCTION DETAILS AND SPECIFICATIONS FOR THE SHOWN IMPROVEMENTS AND MAY NOT IDENTIFY ALL CONSTRUCTION ITEMS/AREAS OF CONTRACTOR JURISDICTION.

SHEET NO.  
**C-8.1**





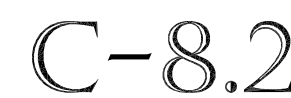
3	ACCESSIBLE CURB RAMPS (AR)
	N.T.S.



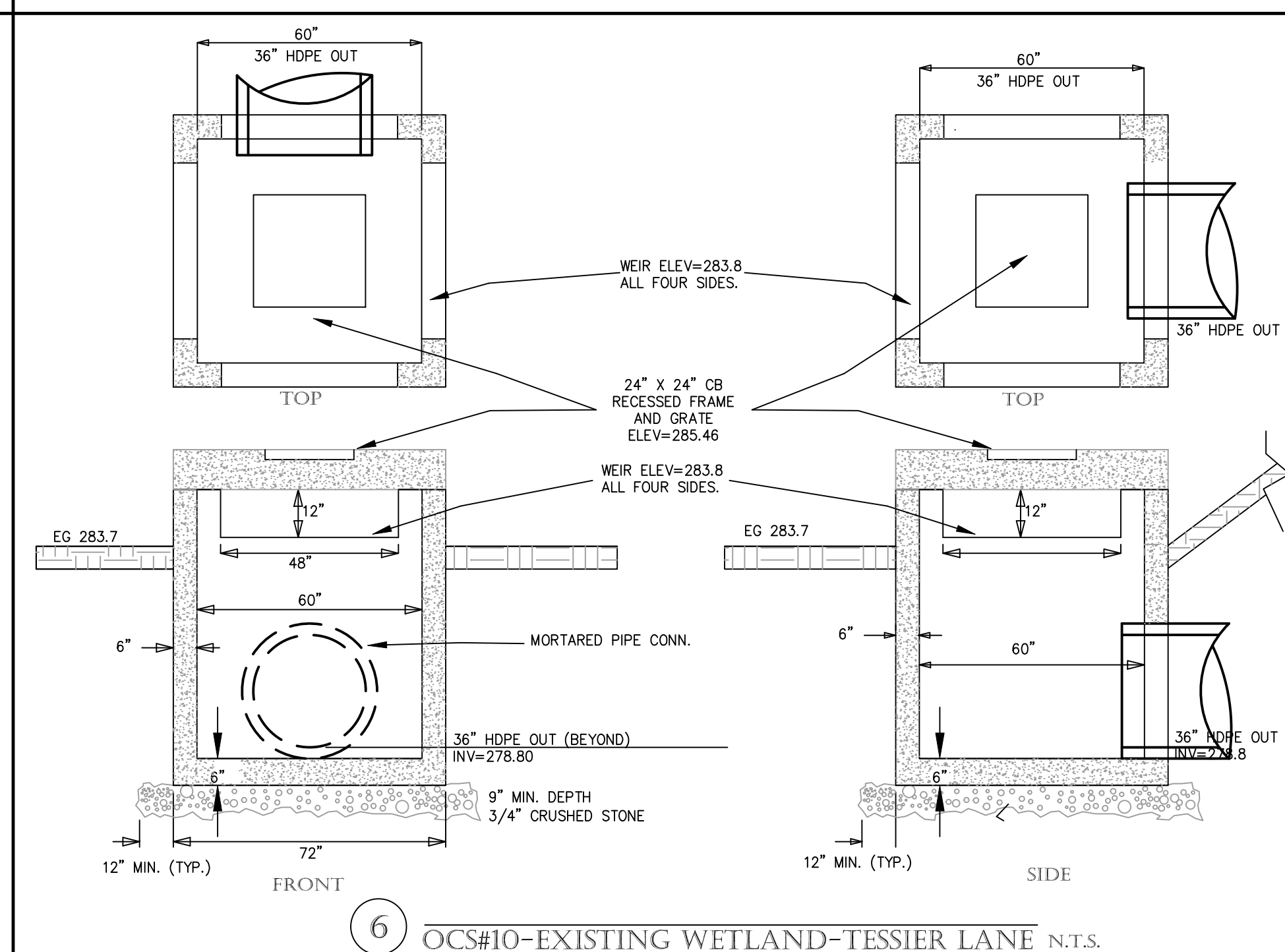
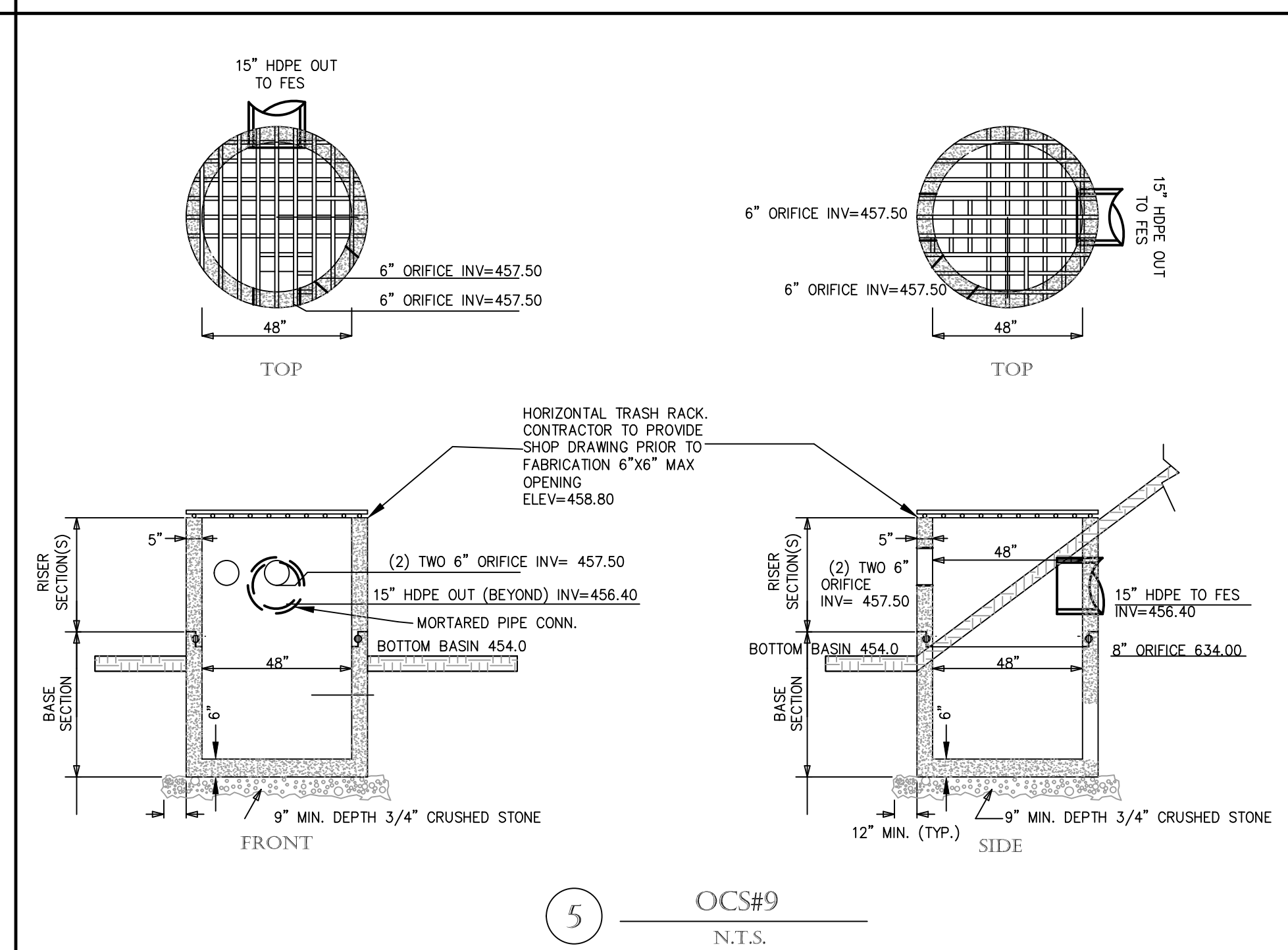
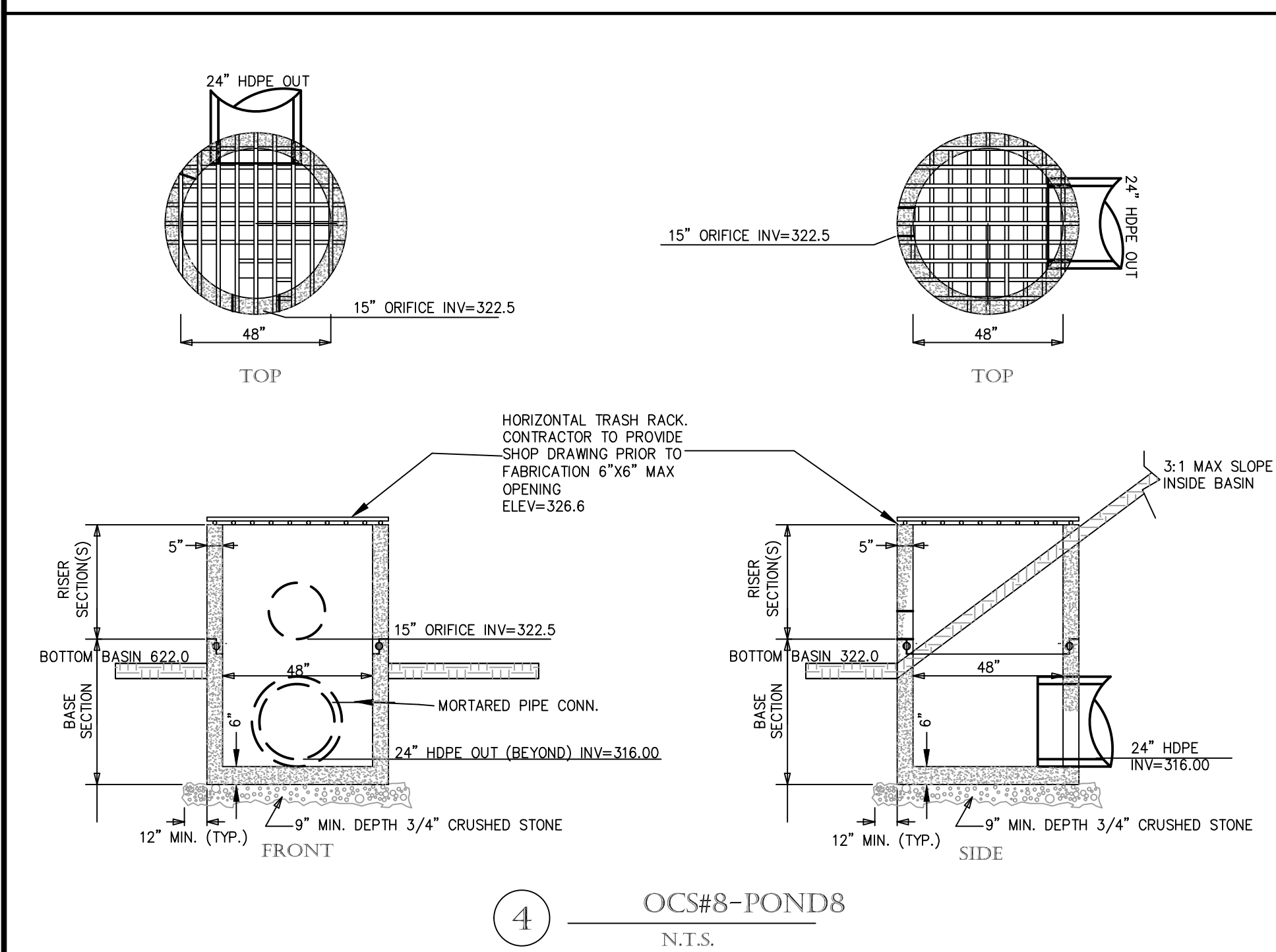
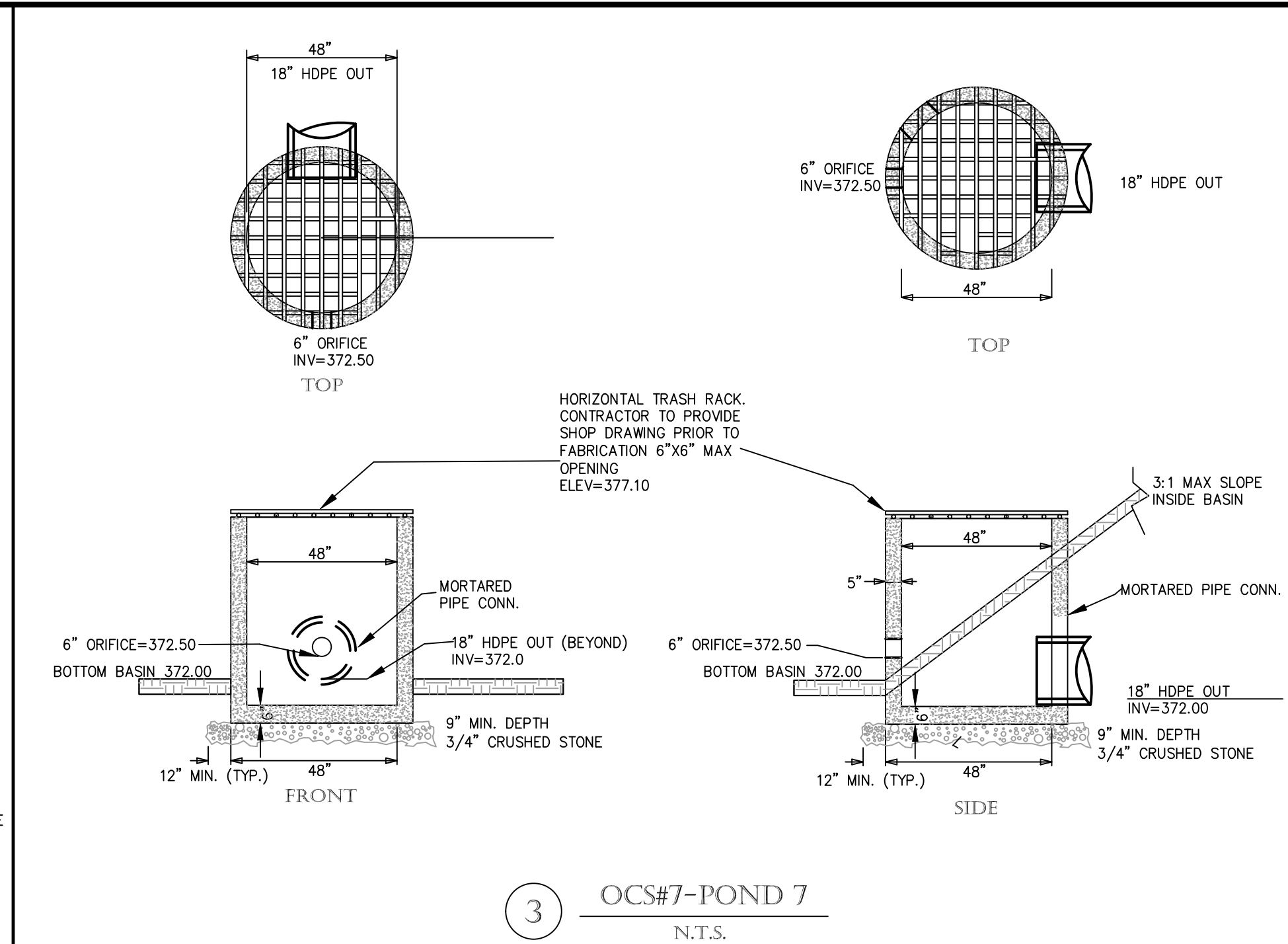
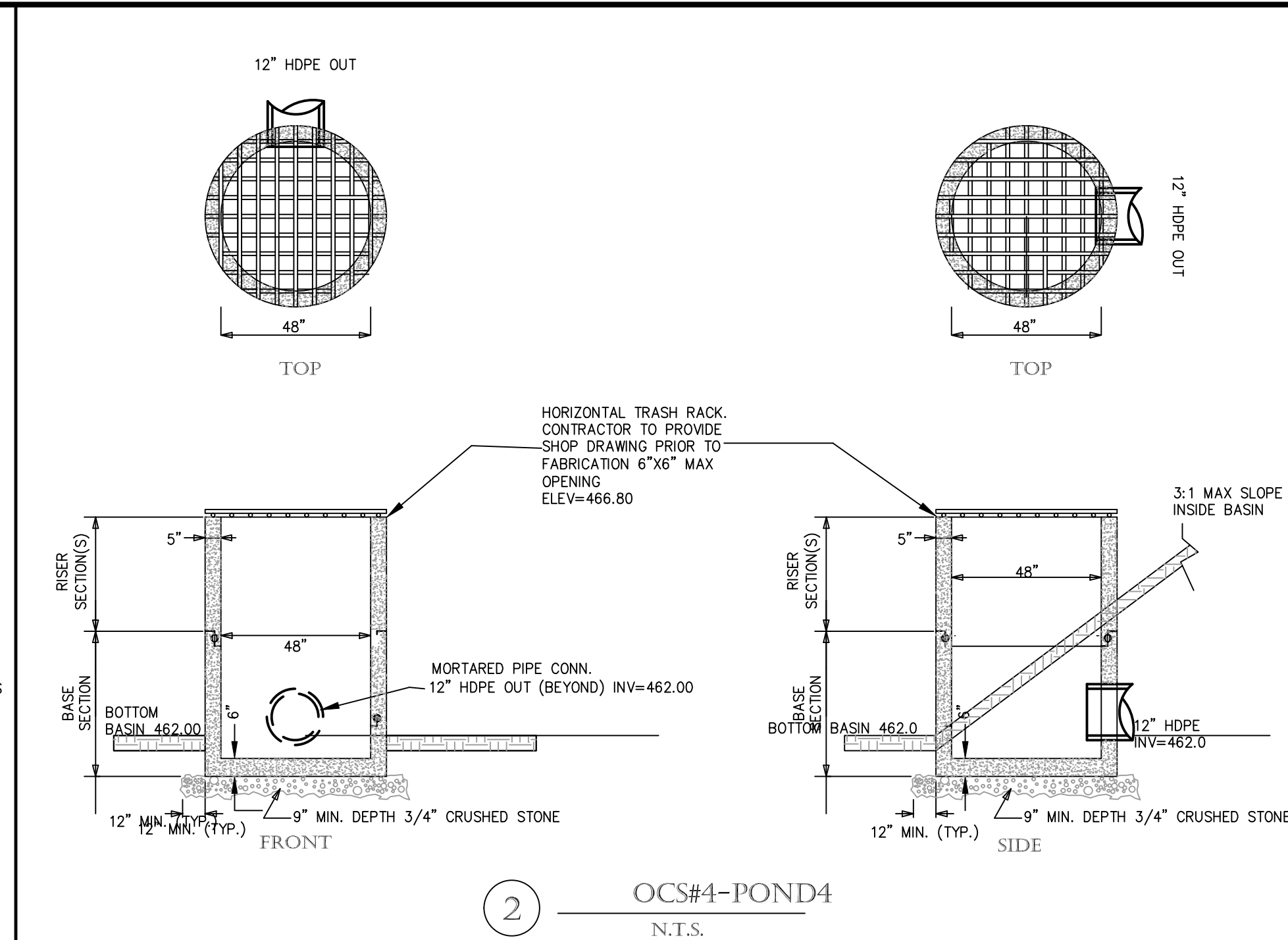
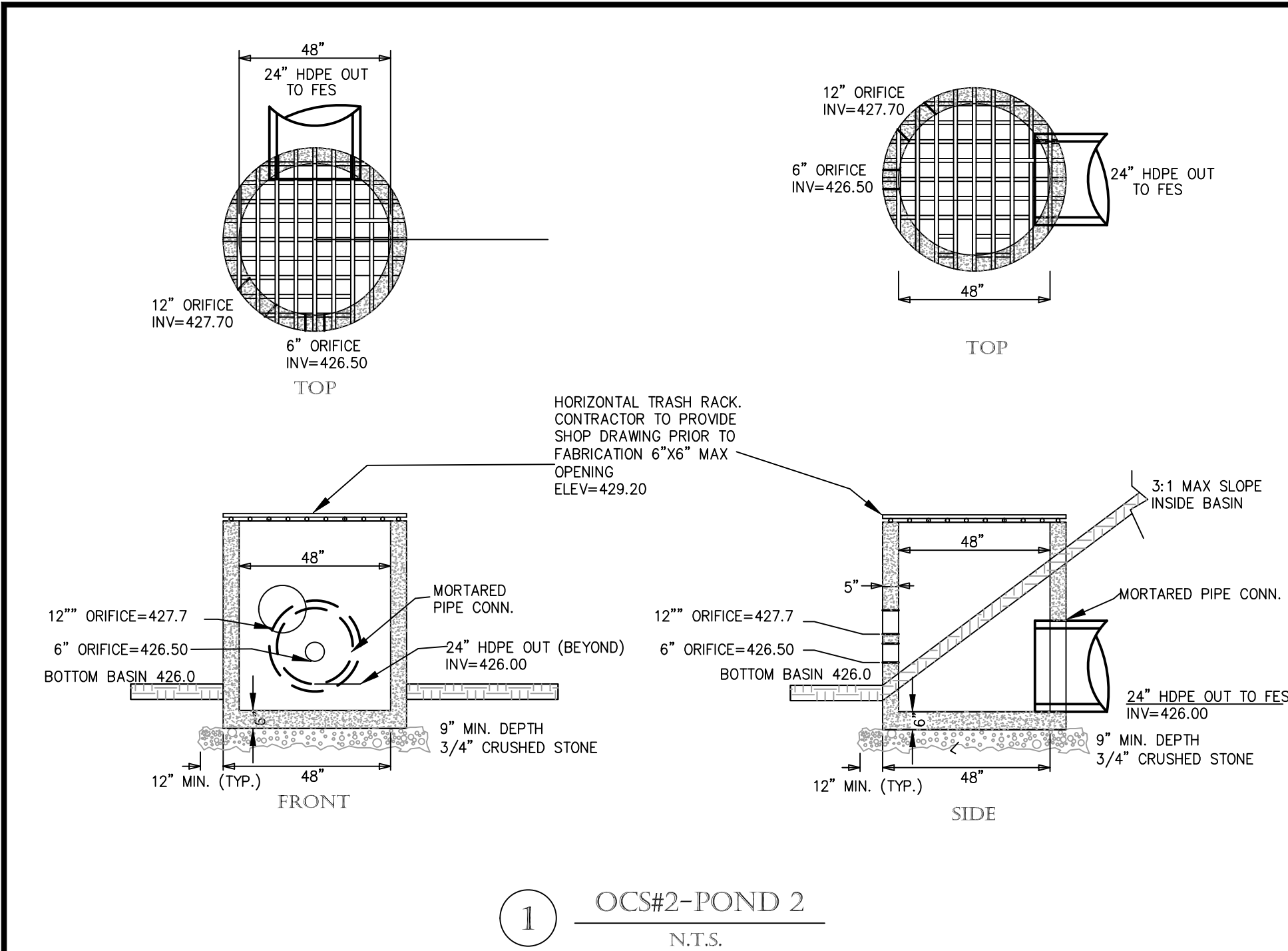
4 TYPICAL BREAKAWAY SIGN POST  
N.T.S.



10 TYPICAL WALL SECTION  
SCALE: N.T.S.

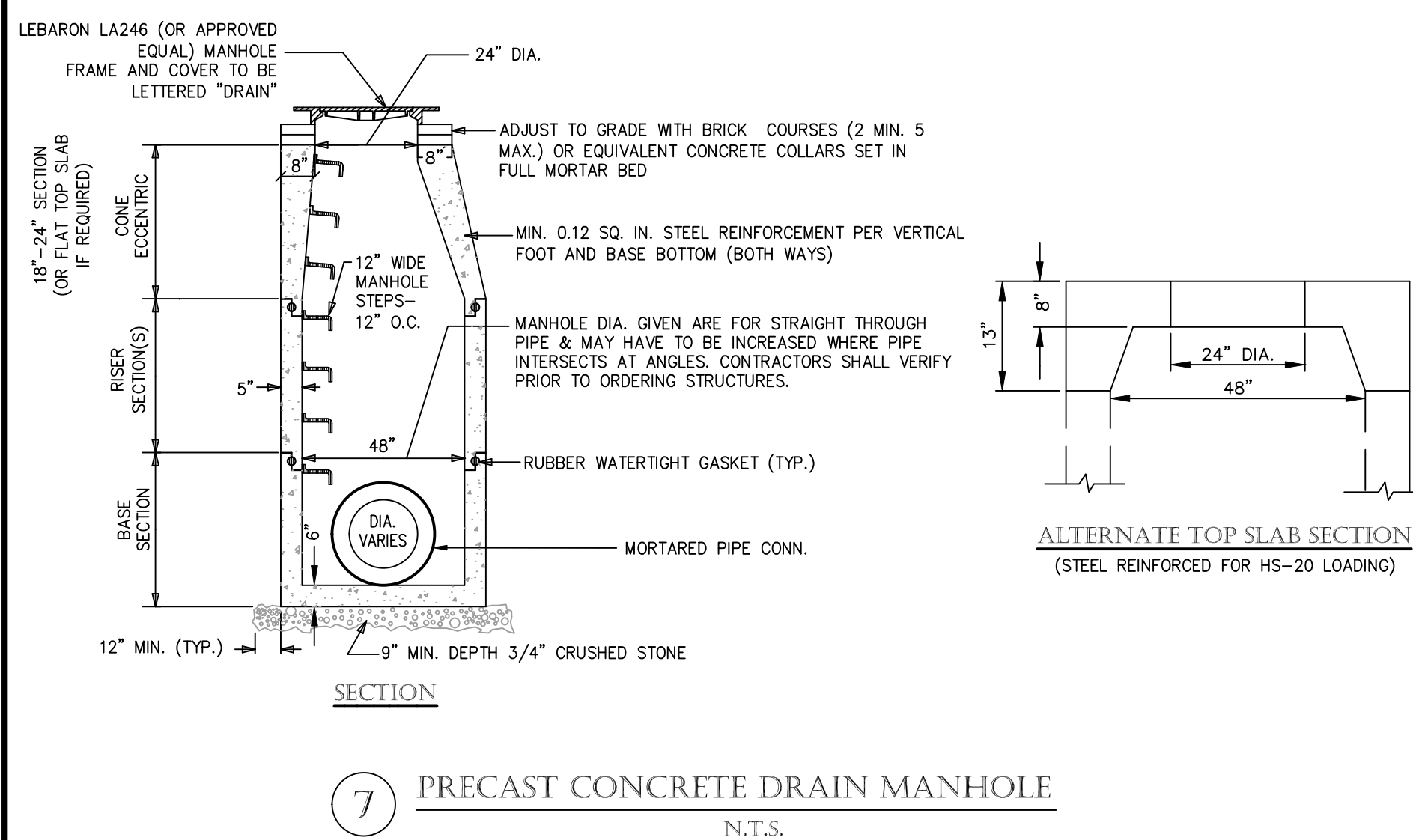






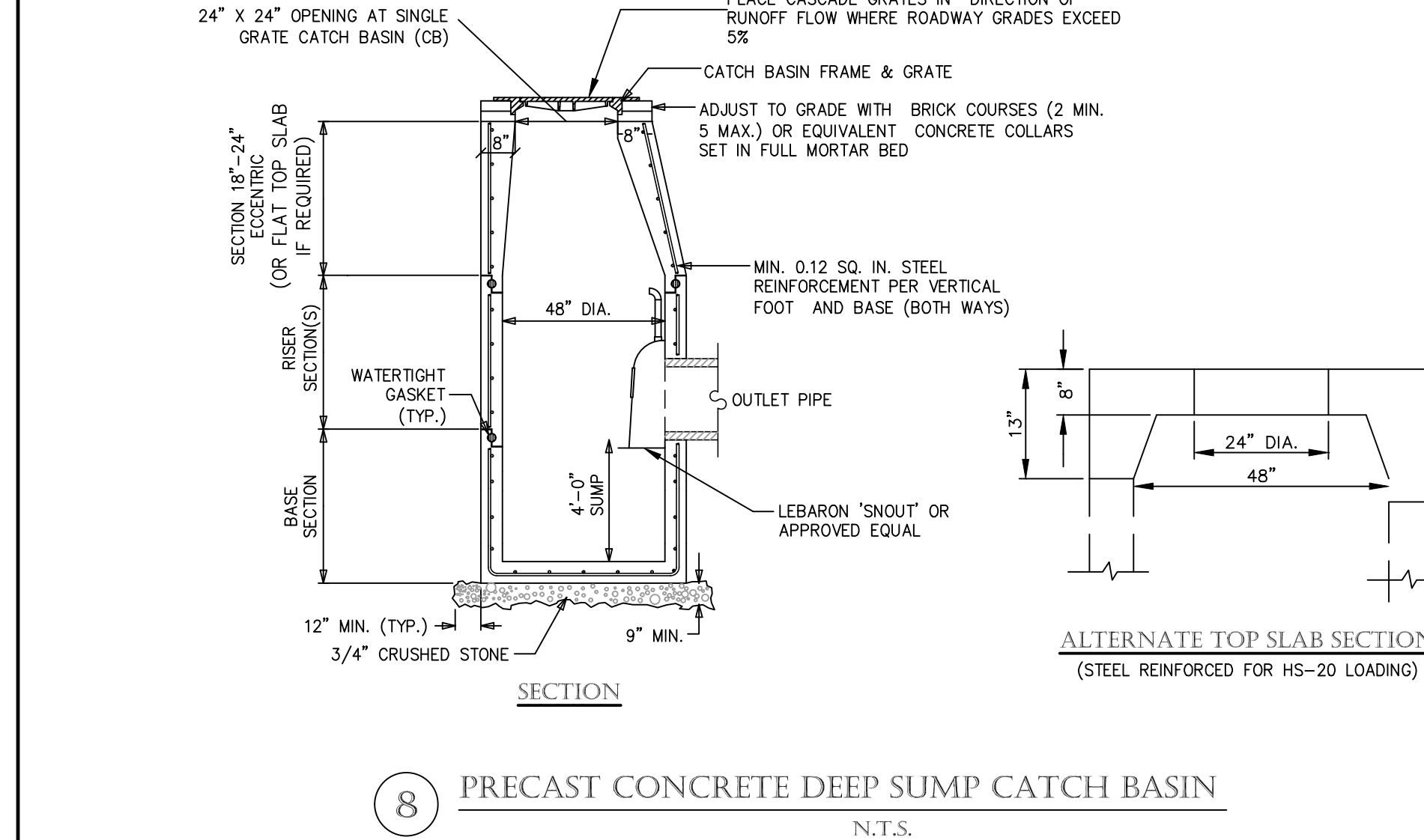
**NOTES:**

1. REINFORCED STEEL CONFORMS TO LATEST A185 SPEC. 0.12 SQ. IN./LINEAL FT. (0.15 SQ. IN. FOR 60" DIA) AND BASE BOTTOM.
2. CONCRETE COMPRESSIVE STRENGTH 4000 PSI MIN.
3. MANHOLE DESIGN CONFORMS TO LATEST ASTM C478 SPEC. FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS".
4. JOINT SEALANT SHALL BE SYNTHETIC RUBBER GASKET THAT COMPLIES W/ C-443 OR C-361. 5. BASE SECTION SHALL BE ONE POUR MONOLITHIC.



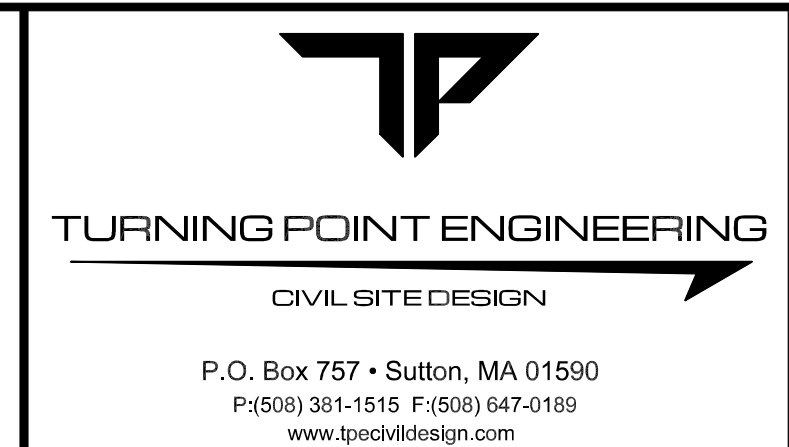
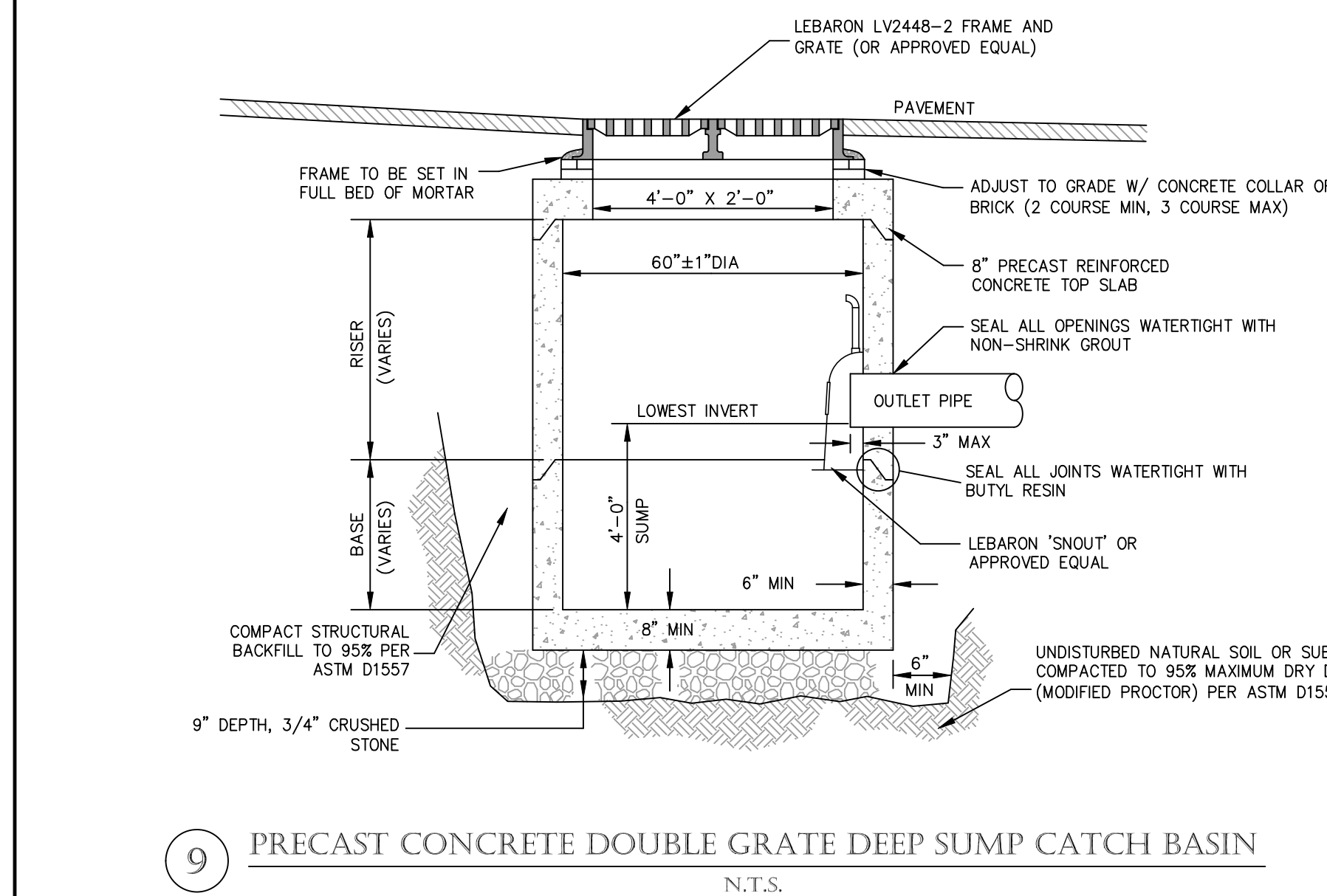
NOTES
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1. USE 4-FLANGE LEBARON LF248-2 (OR APPROVED EQUAL) GRATES AT ALL CB STRUCTURES.
2. SUBMIT SHOP DRAWINGS FOR APPROVAL. INSTALL CASCADE FRAMES AND GRATES IN LOCATIONS WHERE BROADWAYS EXCEEDS 5%
3. REINFORCED STEEL CONFORMS TO LATEST A185 SPEC. 0.12 SQ. IN./LINEAL FT. (0.15 SQ. IN. FOR 60" DIA) AND BASE BOTTOM.
4. CONCRETE COMPRESSIVE STRENGTH 4000 PSI MIN.
5. JOINT SEALANT SHALL BE SYNTHETIC RUBBER GASKET THAT COMPLIES W/ C-443 OR C-361



NOTES:

- NOTES:
1. 4,000 PSI PRECAST CONCRETE AT 28 DAYS CONFORMING WITH LATEST ASTM C475
  2. REINFORCING PER LATEST ASTM A185.
  3. STRUCTURE SHALL BE RATED FOR H-20 LOADING UNLESS SPECIFIED OTHERWISE.
  4. VERIFY FRAME AND GRATE TO SUIT APPLICATION



APPROVAL UNDER SUBDIVISION CONTROL LAW  
NORTHBRIDGE PLANNING BOARD

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PROJECT NAME

**FOX HOLLOW**

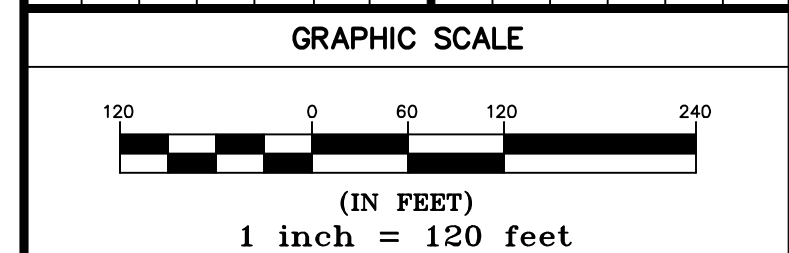
**DEFINITIVE SUBDIVISION PLAN**

**TESSIER LANE & FOWLER ROAD**

**NORTHBRIDGE, MASSACHUSETTS**

**Eastland**  
Eastland Partners, Inc.  
997 Millbury Street  
Worcester, MA 01607

REVISIONS					
REV.	DATE	DESCRIPTION			
PROJECT NO.			TPE-1139		
DESIGNED BY			JAB, TB		
CHECKED BY			JAB		
DATE			NOVEMBER 17, 2025		
CAD FILE			H:\1139-DEF-Subdivision-REV0.dwg		
PLAN NO.			L-XXX		

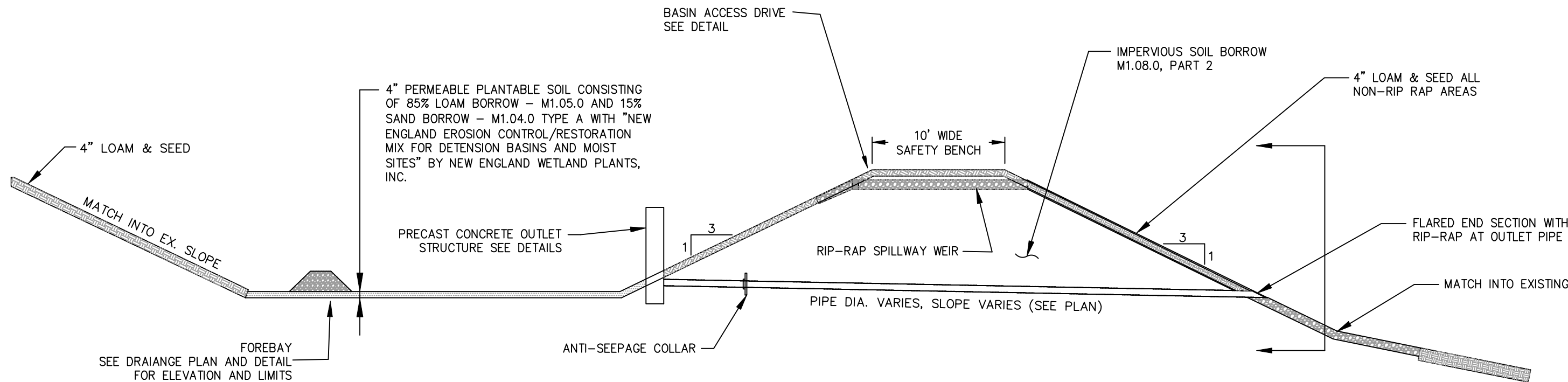


SHEET TITLE	
CONSTRUCTION DETAILS	

<b>DRAWING ISSUED FOR:</b>	<b>SHEET NO.</b>
<input checked="" type="checkbox"/> PERMIT THIS PLAN IS INTENDED TO SHOW CONSTRUCTIBILITY AND MAY NOT SHOW ALL CONSTRUCTION DETAILS AND SPECIFICATIONS FOR THE SHOWN IMPROVEMENTS AND MAY NOT IDENTIFY ALL CONSTRUCTION ITEMS/AREAS OF CONTRACTOR JURISDICTION.	C-8.

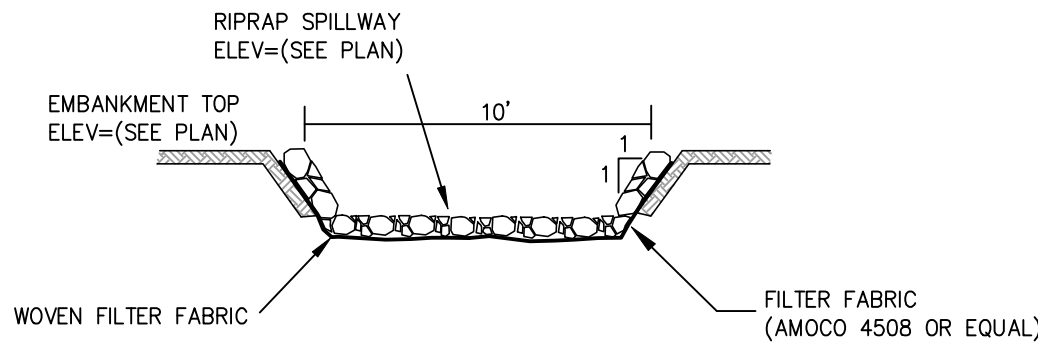
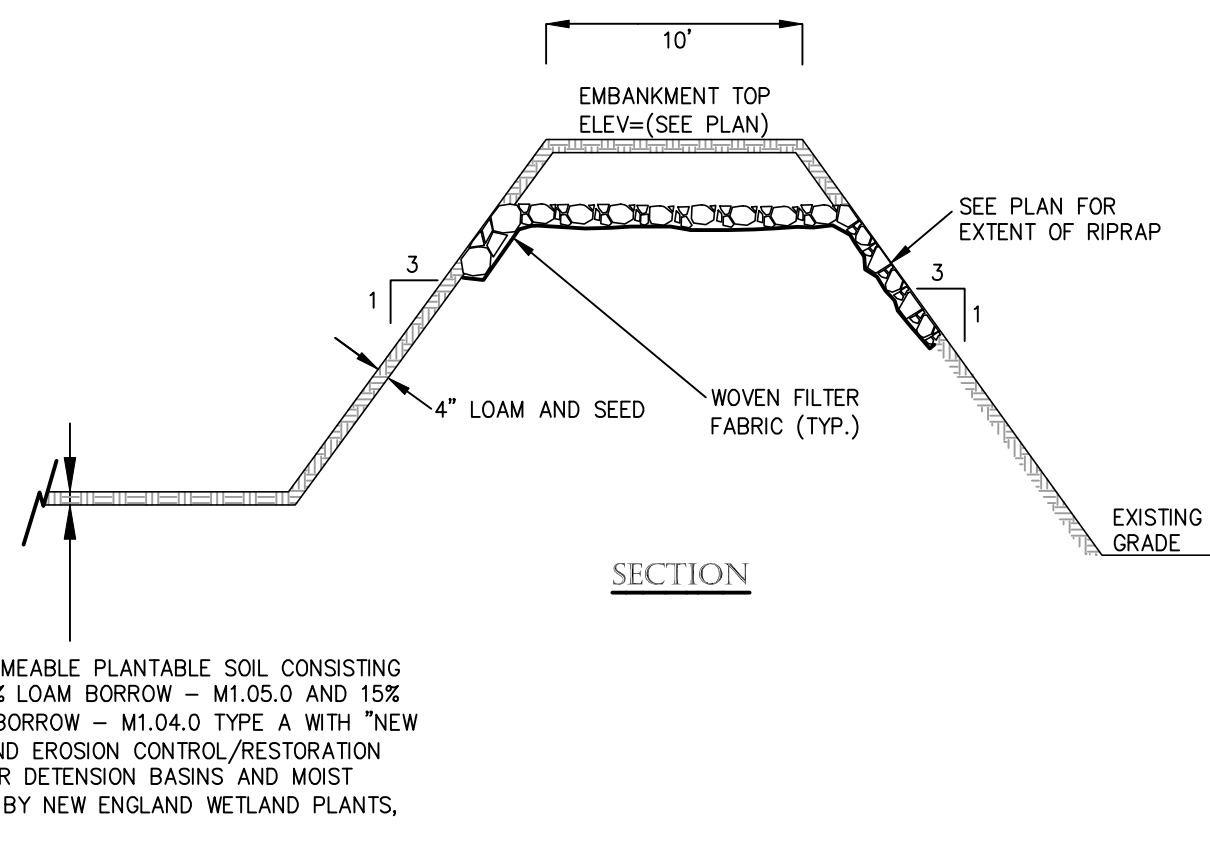


NOTES:  
1. ALL TOP AND SUBSOIL SHALL BE REMOVED PRIOR TO CONSTRUCTION OF INFILTRATION BASIN.  
2. INFILTRATION BASINS NOT TO BE USED FOR SEDIMENT BASINS DURING CONSTRUCTION.

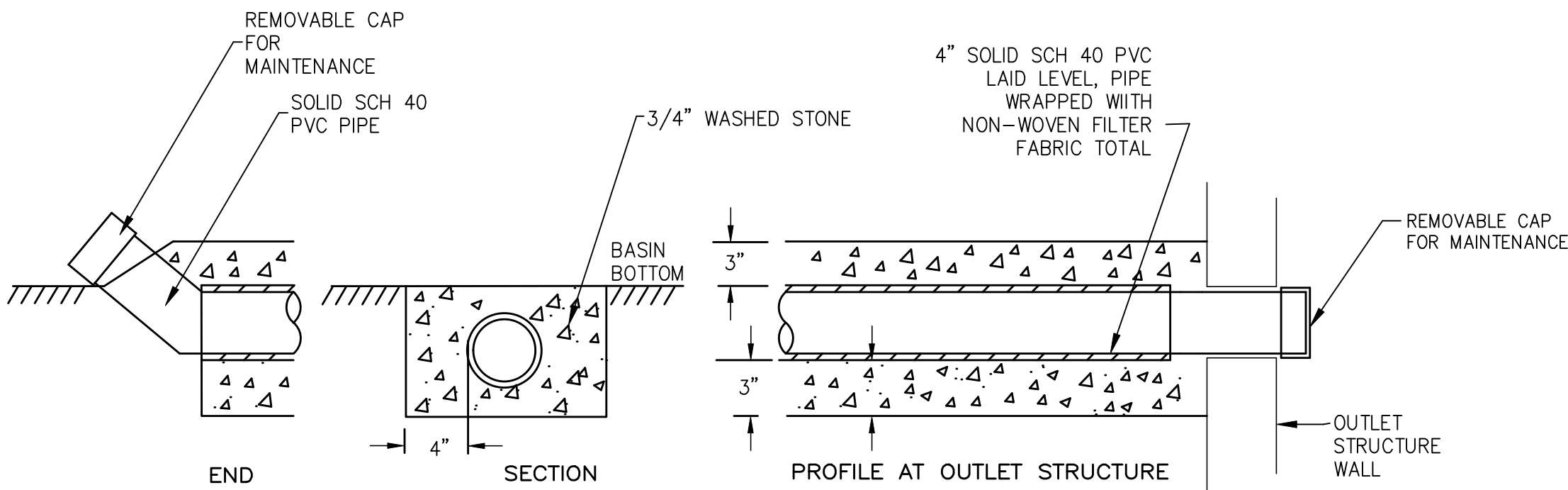


1 TYPICAL INFILTRATION BASIN CROSS SECTION  
N.T.S.

NOTES:  
1. EMBANKMENT TO BE CONSTRUCTED OF CLEAN FILL FREE OF ORGANIC SOILS/MATERIALS WITH NO STONES OVER 12" MAX. DIMENSION: EMBANKMENT TO BE CONSTRUCTED IN COMPACTED LIFTS NOT TO EXCEED 8".  
2. BASIN SIDE SLOPES (INSIDE AND OUT) TO BE COVERED WITH 4" LOAM AND SEED.  
3. RIP-RAP SPILLWAY STONE (M2.02.2).

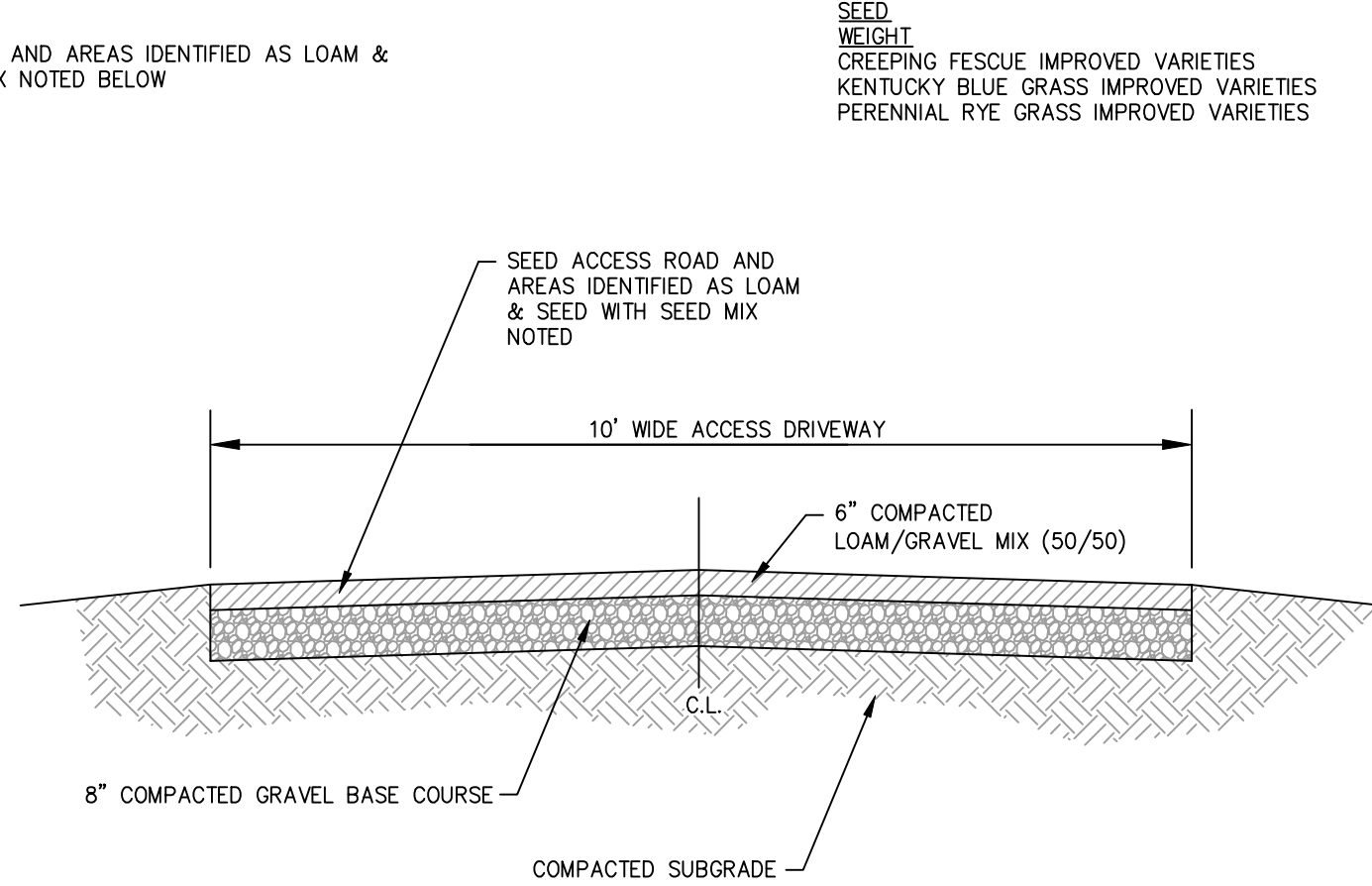


2 TYPICAL BASIN EMBANKMENT/SPILLWAY  
N.T.S.



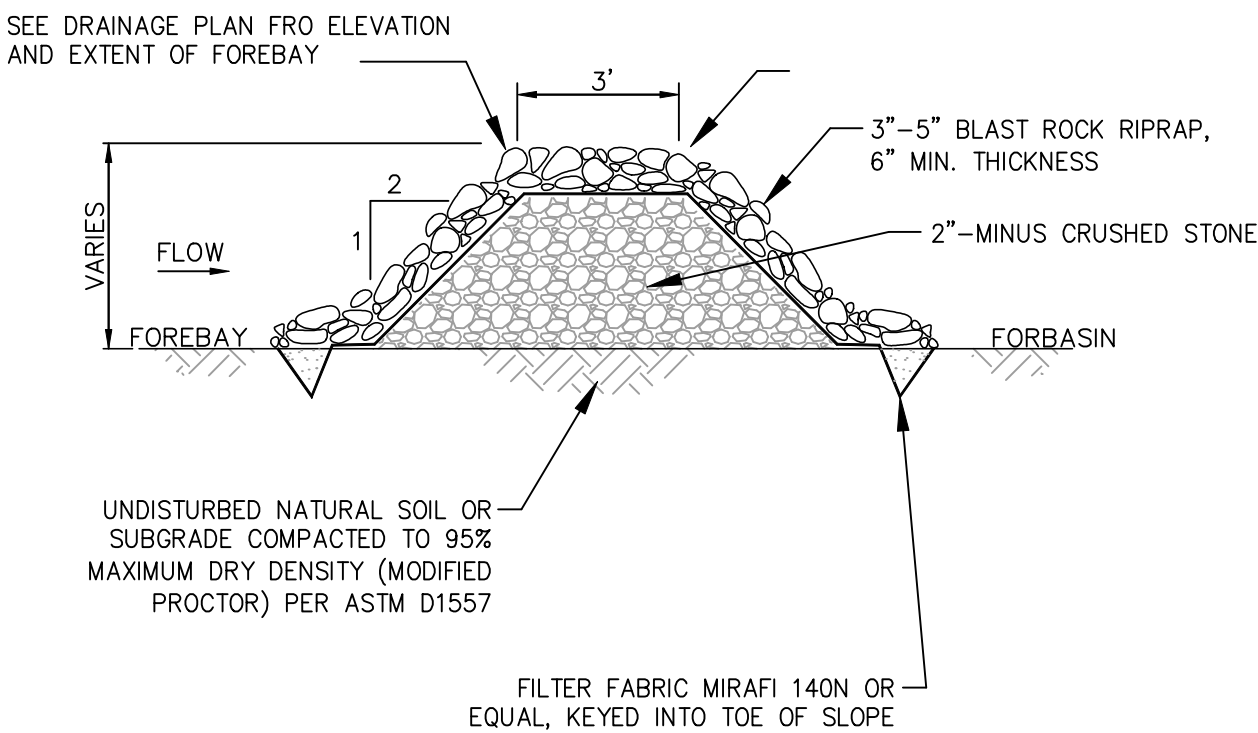
3 DRAWDOWN DEVICE  
N.T.S.

NOTE:  
1. SEED ACCESS ROAD AND AREAS IDENTIFIED AS LOAM & SEED WITH SEED MIX NOTED BELOW

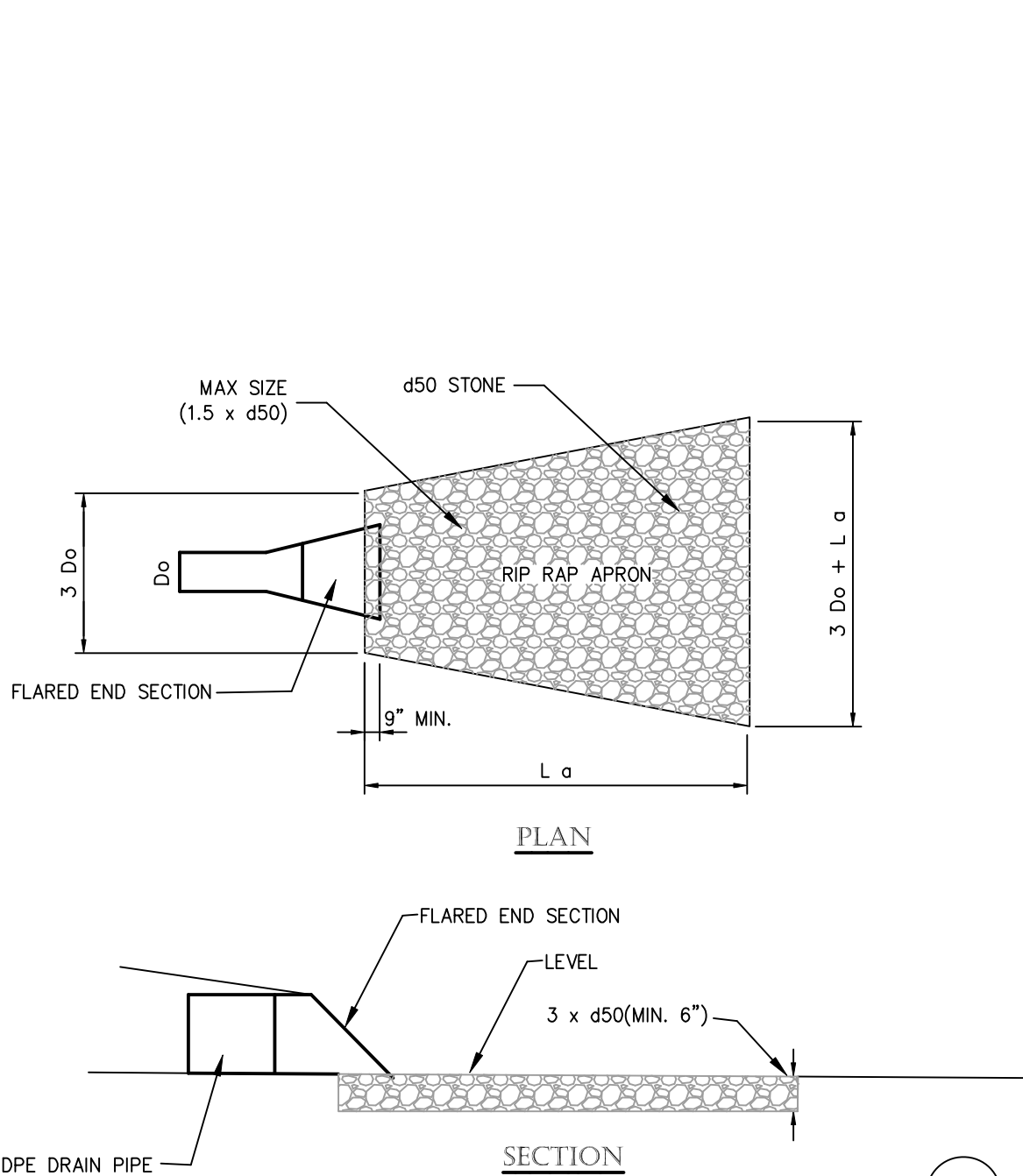


4 BASIN ACCESS DRIVE  
N.T.S.

SEED WEIGHT % BY  
CREEPING FESCUE IMPROVED VARIETIES 70  
KENTUCKY BLUE GRASS IMPROVED VARIETIES 15  
PERENNIAL RYE GRASS IMPROVED VARIETIES 15

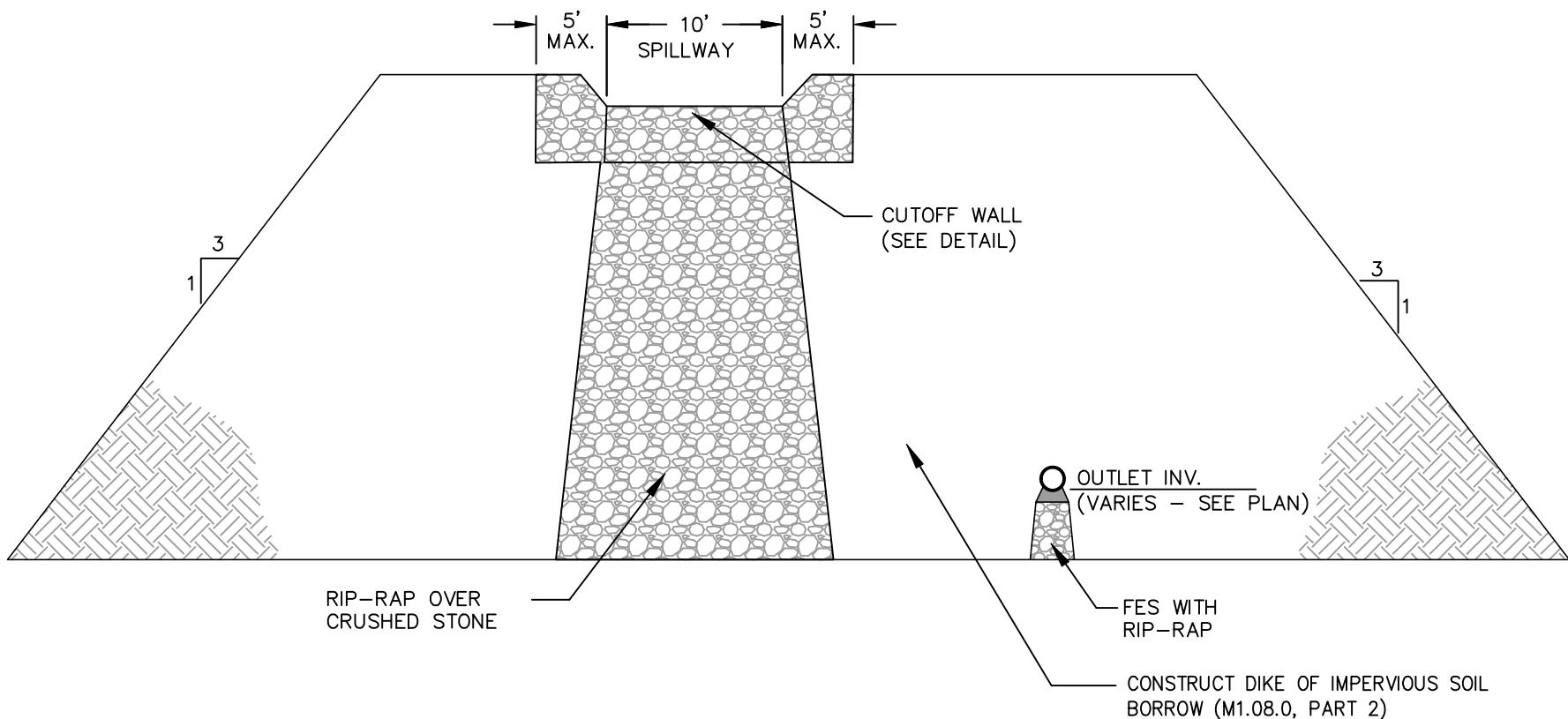


5 FOREBAY  
N.T.S.



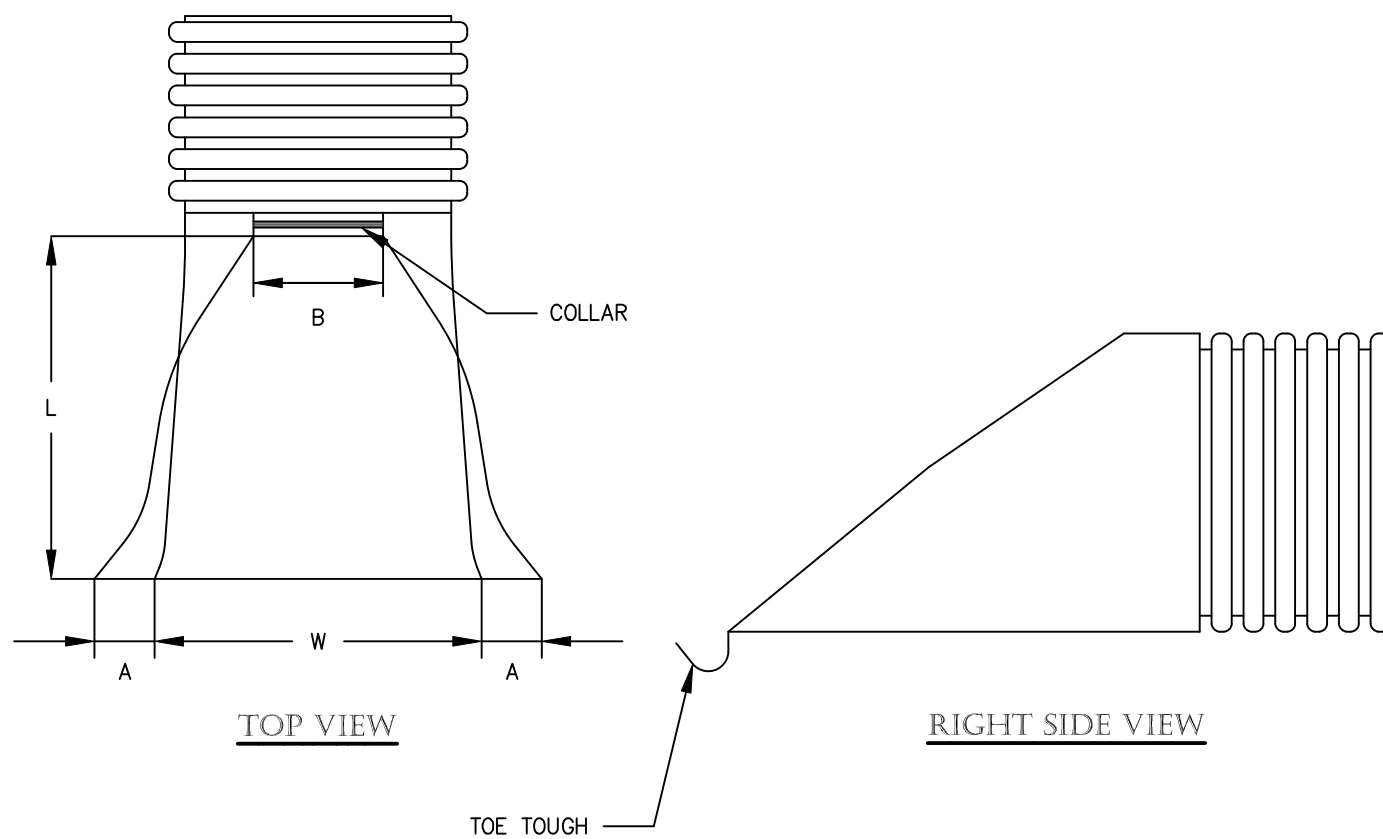
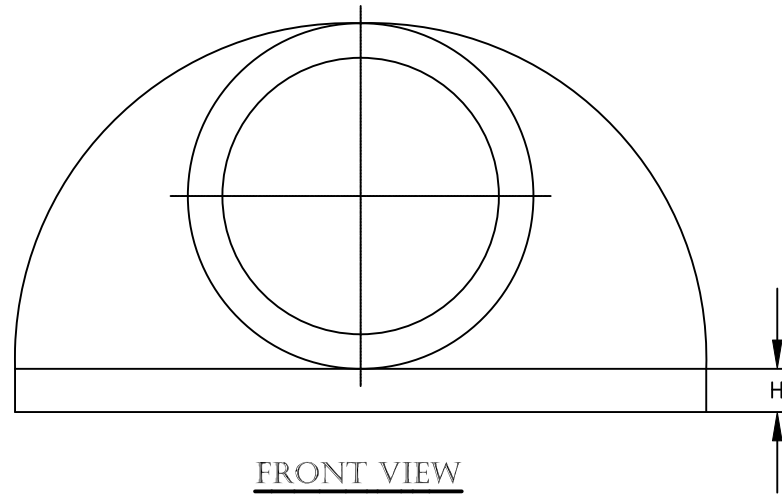
6 STONE RIP-RAP FOR FES PIPE ENDS  
N.T.S.

FES #	Do= Inside Diam. of Pipe L= (1.7 Q/Do 3/2) + 8 Do					
	Do (in)	3Do	La	3Do + La	d50 in-MED RIP RAP SIZE	MAX RIP RAP SIZE
1	15	4	18	22	6	9
2	8	2	14	16	5	8
3	15	4	19	23	7	10
4	10	3	16	19	7	10
5	15	4	17	20	5	7
6	24	6	24	30	6	9
7	24	6	28	34	9	14
8	24	6	27	33	9	13
9	15	4	20	23	7	10
10	24	6	27	33	9	13
11	15	4	21	24	8	12
12	15	4	24	28	11	16
13	18	5	26	31	11	16
14	8	2	13	15	5	7
15	8	2	9	11	2	4
16	24	6	30	36	11	17
17	15	4	15	19	4	6
18	18	5	23	28	8	13
19	24	6	29	35	10	15
20	24	6	31	37	12	18



7 TYPICAL BASIN ELEVATION  
N.T.S.

PIPE DIAMETER (INCHES)						
	12	15	18	24	30	36
A (INCHES)	6.5	6.5	7.5	7.5	7.5	7.5
B (MAX) (INCHES)	10.0	10.0	15.0	18.0	22.0	25.0
H (INCHES)	6.5	6.5	6.5	6.5	8.6	8.6
L (INCHES)	25.0	25.0	32.0	36.0	58.0	58.0
W (INCHES)	29.0	29.0	35.0	45.0	63.0	63.0



8 CORRUGATED POLYETHYLENE FLARED-END SECTION (FES)  
N.T.S.

**TURNING POINT ENGINEERING**  
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APPROVAL UNDER SUBDIVISION CONTROL LAW  
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**FOX HOLLOW**  
DEFINITIVE SUBDIVISION PLAN  
TESSIER LANE & FOWLER ROAD  
NORTHBRIDGE, MASSACHUSETTS

PREPARED FOR

Eastland Partners, Inc.  
987 Military Street  
Worcester, MA 01607

**Eastland**

REVISIONS

DESCRIPTION

REV. DATE

PROJECT NO. TPE-1139

DESIGNED BY JAB, TB

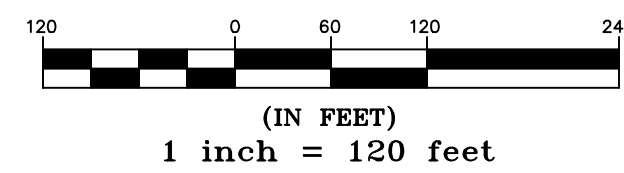
CHECKED BY JAB

DATE NOVEMBER 17, 2025

CAD FILE H:\1139-DEF-Subdivision-REV0.dwg

PLAN NO. L-XXX

GRAPHIC SCALE



(IN FEET)

1 inch = 120 feet

SHEET TITLE

CONSTRUCTION  
DETAILS

DRAWING ISSUED FOR:

PERMIT

THIS PLAN IS INTENDED TO SHOW CONSTRUCTION AND MAY NOT SHOW ALL CONSTRUCTION DETAILS AND SPECIFICATIONS FOR THE SHOWN IMPROVEMENTS AND MAY NOT IDENTIFY ALL CONSTRUCTION ITEMS/AREAS OF CONTRACTOR JURISDICTION.

SHEET NO.

C-8.4



1. REINFORCED STEEL CONFORMS TO LATEST A185 SPEC. 0.12 SQ. IN./LINEAL FT. (0.15 SQ. IN. FOR 60" DIA) AND BASE BOTTOM.
2. CONCRETE COMPRESSIVE STRENGTH 4000 PSI MIN.
3. MANHOLE DESIGN CONFORMS TO LATEST ASTM C478 SPEC. FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS".
4. JOINT SEALANT SHALL BE SYNTHETIC RUBBER GASKET THAT COMPLIES W/ C-443 OR C-361. 5. BASE SECTION SHALL BE ONE POUR MONOLITHIC.



ENDORSEMENT DATE: _____

1. REINFORCED STEEL CONFORMS TO LATEST A185 SPEC. 0.12 SQ. IN./LINEAL FT. (0.15 SQ. IN. FOR 60" DIA) AND BASE BOTTOM.
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Eastland

[illegible]

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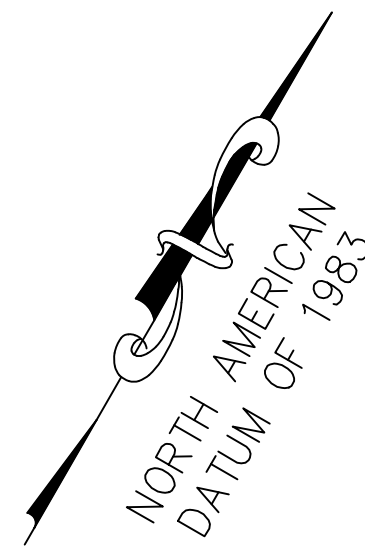
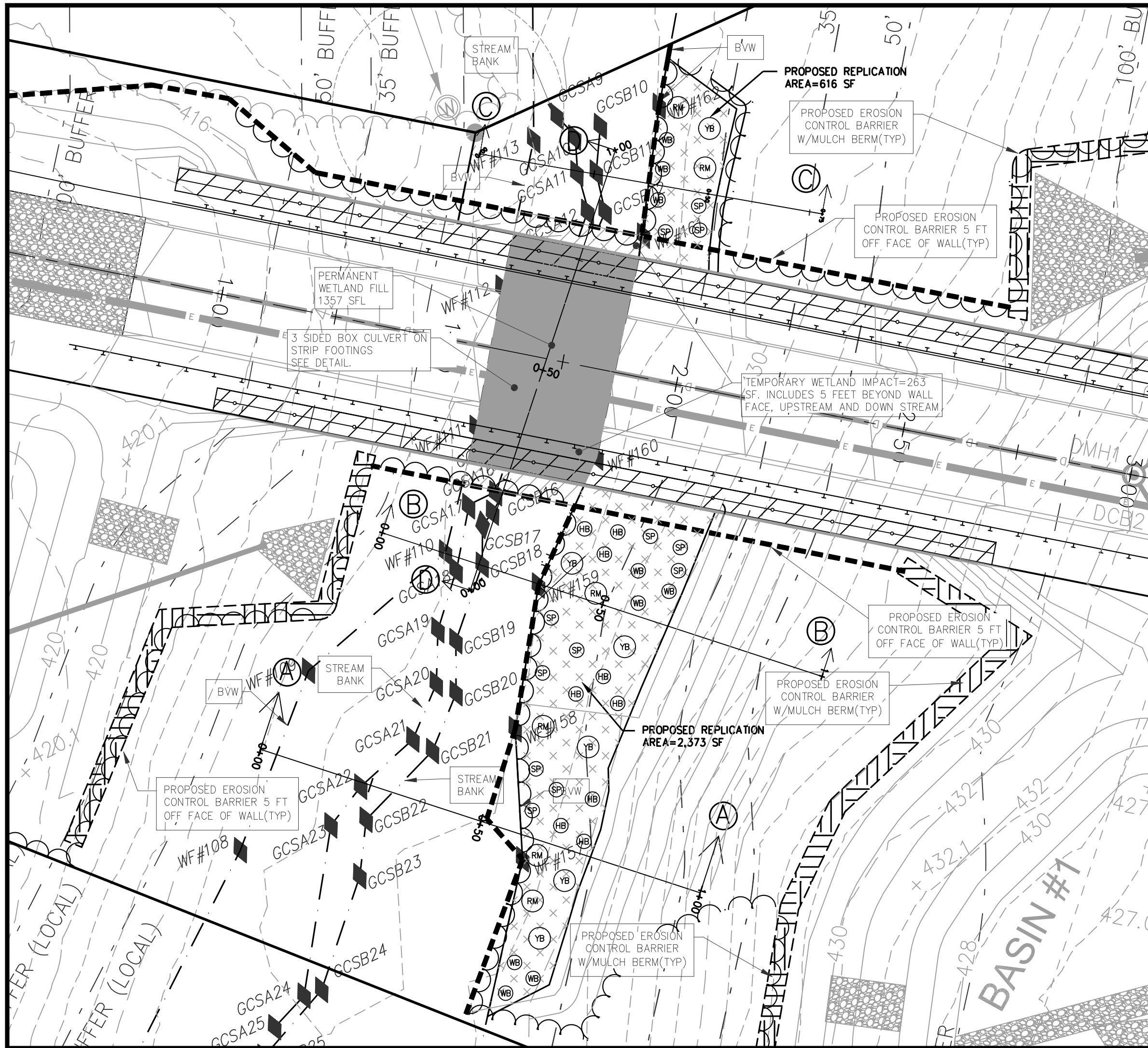
SHEET NO.

C-8.5

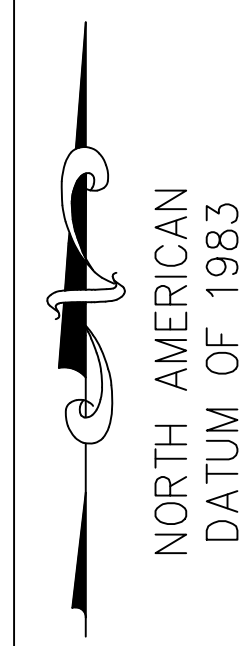
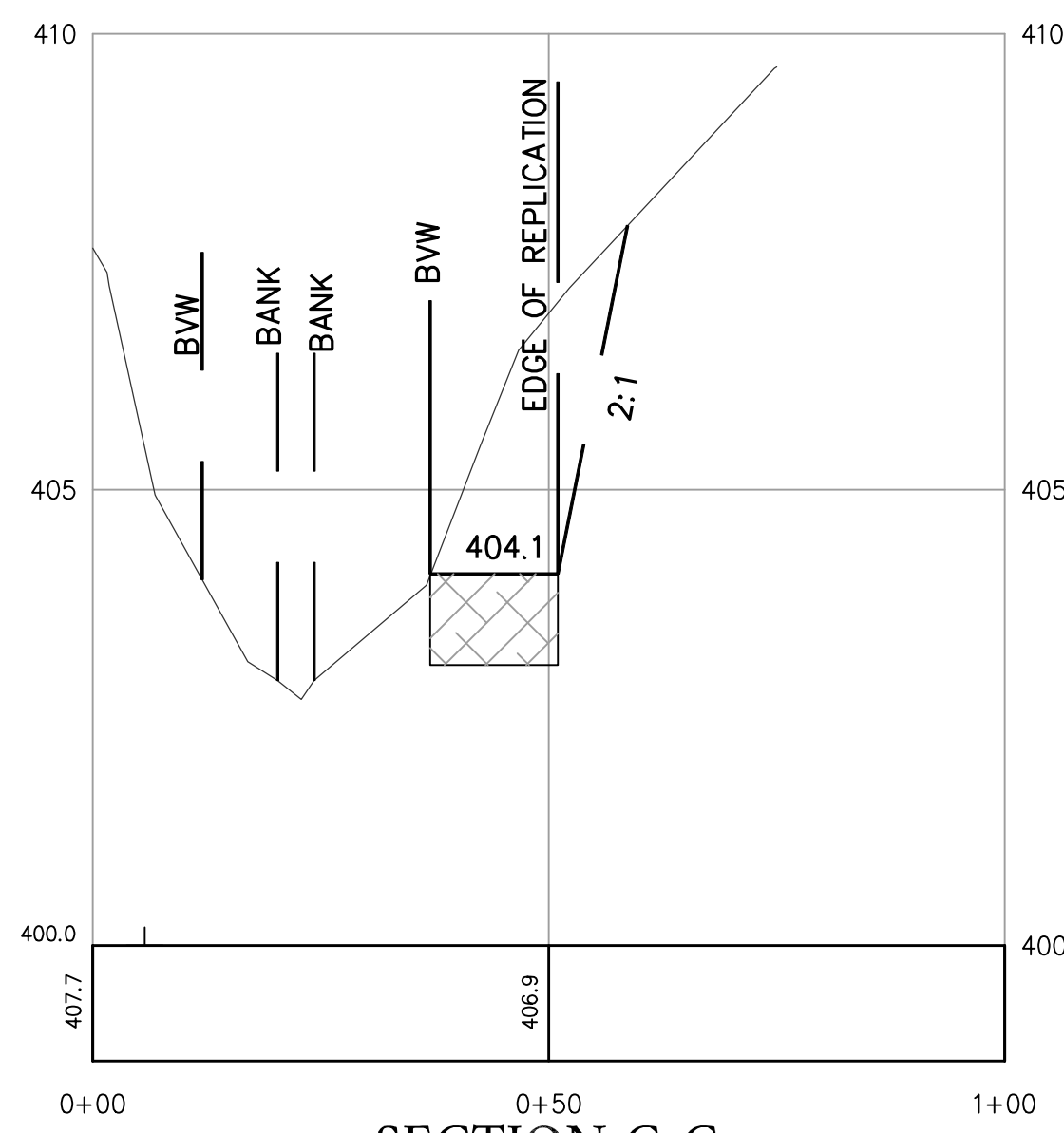
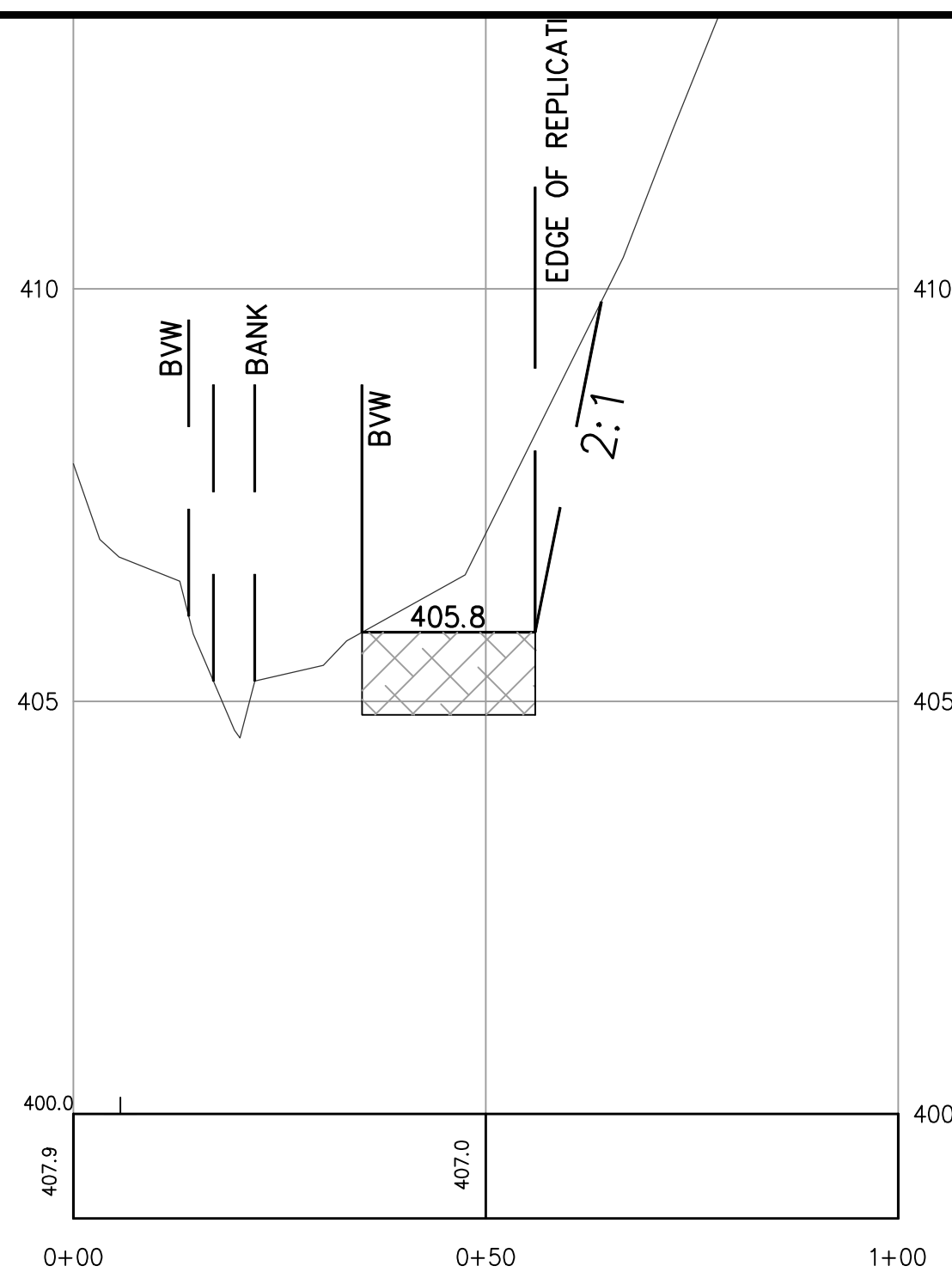
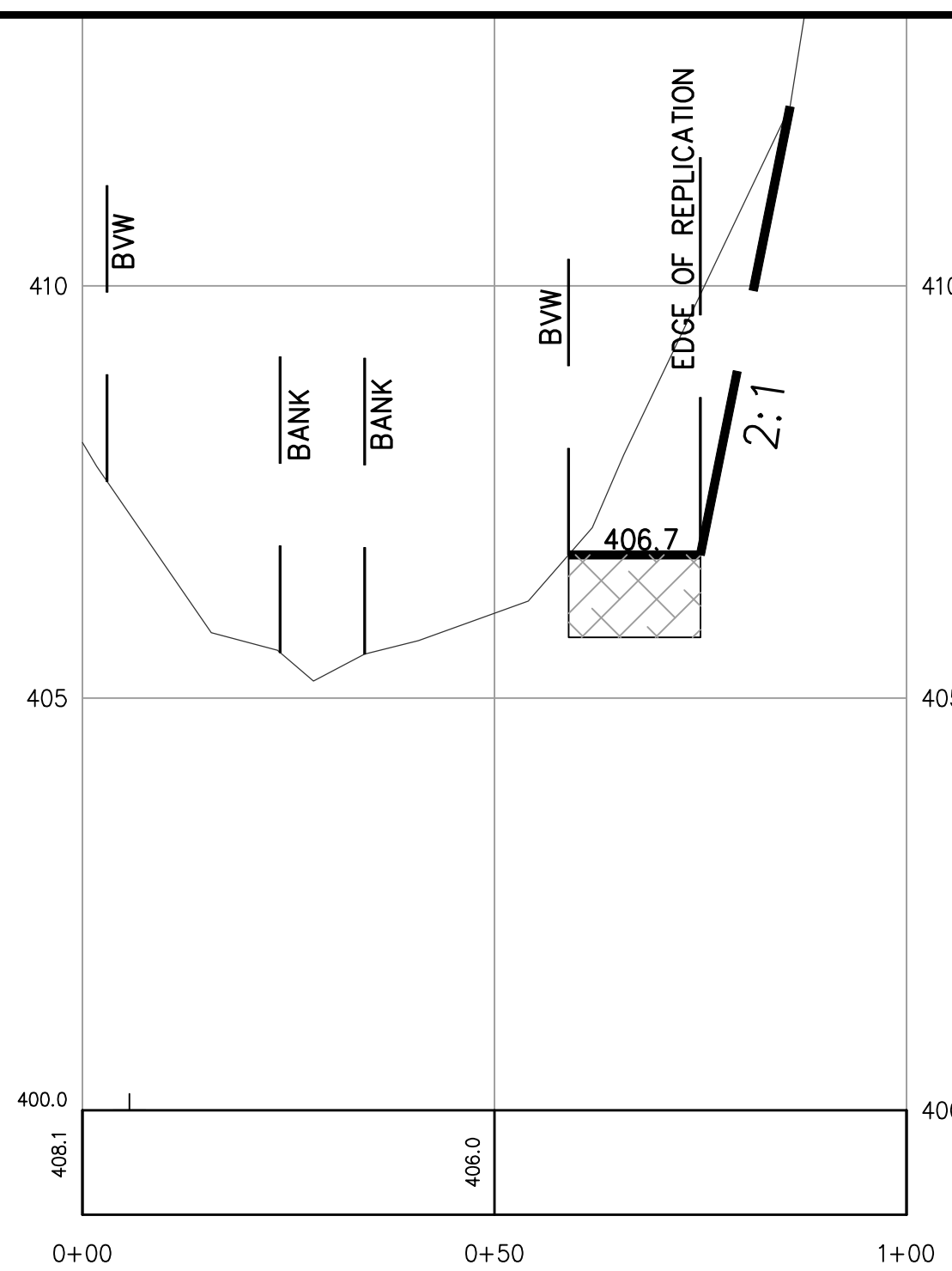
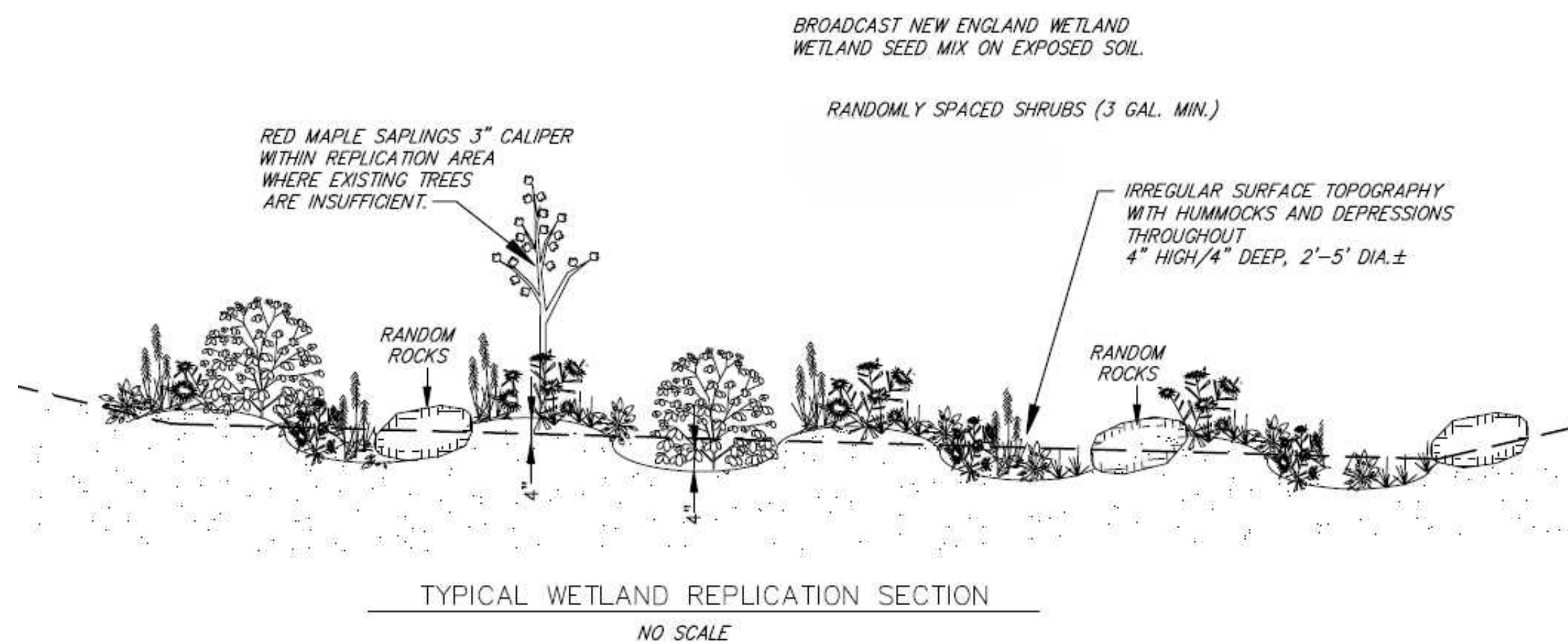
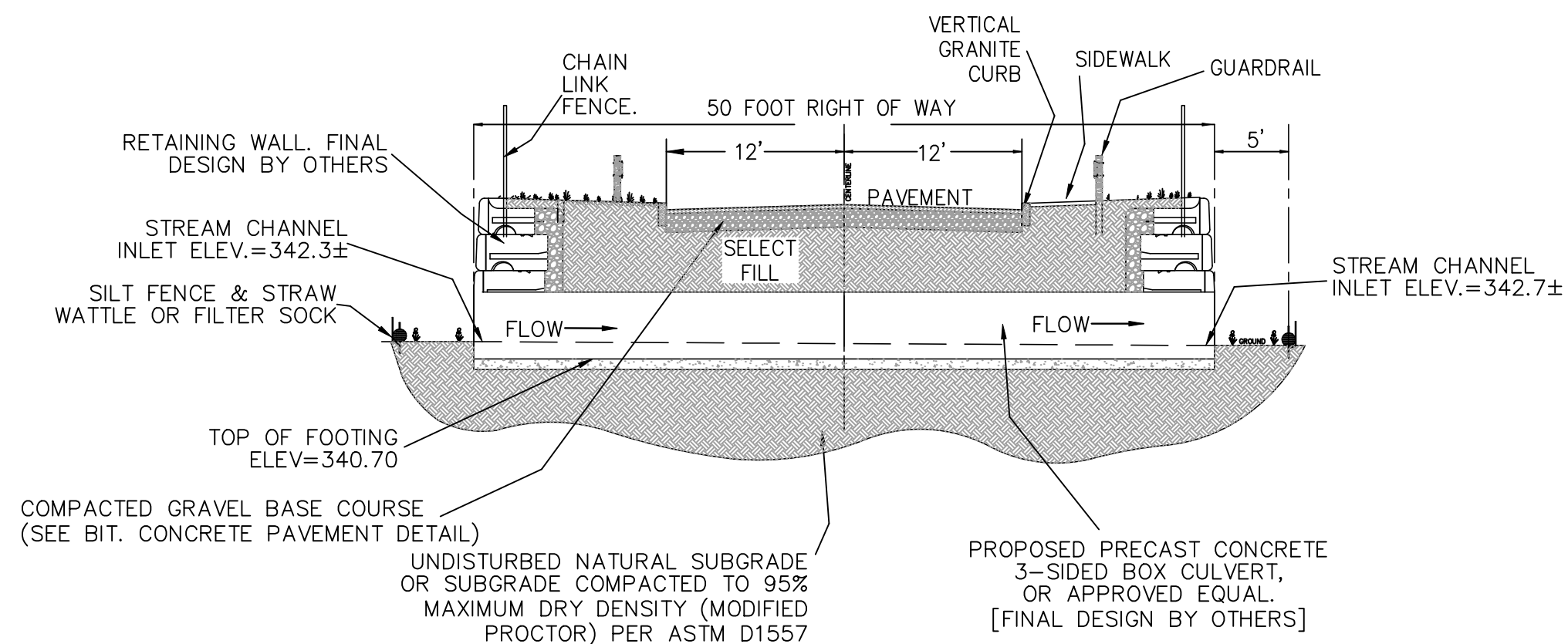








TARGET MOI. PROFILE		SEE CROSS SECTION
0"		Elev. =
6-12"	O	+/- 15YR2/1 Organic-rich silt/clay (Original or amended)
24"+	C	Original subsoil  Low chroma matrix and/or pedonotrophic features



CIVIL SITE DESIGN

BEING A MAJORITY

ENDORSEMENT DATE: _____

PROJECT NAME  
**FOX HOLLOW**  
DEFINITIVE SUBDIVISION PLAN  
TESSIER LANE & FOWLER ROAD  
NORTHBRIDGE, MASSACHUSETTS  
MAP 21 PARCELS 135, 139 AND 181

**Eastland Partners, Inc.**  
997 Millbury Street  
Worcester, MA 01607

[illegible]

SCALE

SHEET TITLE

DRAWING ISSUED FOR:

SHEET NO.







H:\PROJECTS\NORTHBRIDGE\1139- DEF- SUBDIVISION- REV0.DWG 11-24-25 1:47:40 PM - LAYOUT C-9.3 REPLICATION PLAN

TABLE 1.

PUBLIC INTERESTS:	VALUE OF AREAS TO BE ALTERED:	VALUE OF REPLICATION AREAS:
PUBLIC AND PRIVATE WATER SUPPLY, GROUNDWATER SUPPLY	YES. RECHARGES GROUNDWATER THROUGH INFILTRATION. SEASONALLY RECHARGES SURFACE WATER THROUGH OVERLAND FLOW. OVERLAND FLOW WILL BE MAINTAINED THROUGH CULVERTS.	YES. WILL ALSO RECHARGE GROUNDWATER THROUGH INFILTRATION IN FRIABLE SUBSOIL AND SUBSTRATE.
FLOOD CONTROL AND STORM DAMAGE PREVENTION	YES. SOME STORAGE OF RUNOFF IN SEASONALLY SATURATED SOILS	YES SEASONALLY SATURATED SOILS WILL STORE EQUAL OR GREATER VOLUMES OF RUNOFF.
PREVENTION OF POLLUTION	YES. CONTAMINANTS AND EXCESS NUTRIENTS RETAINED IN, AND DEGRADED BY, MINERAL AND ORGANIC COMPONENTS OF HYDRIC SOILS.	YES. CONTAMINANTS AND EXCESS NUTRIENTS RETAINED IN, AND DEGRADED BY, MINERAL AND ORGANIC COMPONENTS OF HYDRIC SOILS.
FISHERIES	N/A. NO PERENNIAL WATERWAY OR WATERBODY	N/A. NO PERENNIAL WATERWAY OR WATERBODY
WILDLIFE HABITAT	YES. EXISTING VEGETATIVE LAYERS, SOIL STRUCTURE, DEADWOOD AND SURFACE STONES PROVIDE FORAGING AND SHELTER OPPORTUNITIES.	YES. REPLICATED SOIL STRUCTURE, PLANTING WILL PROVIDE OPPORTUNITIES FOR WILDLIFE SHELTER AND FORAGE.

TABLE 2. STREAM CROSSING STANDARDS

PERFORMANCE STANDARD:	STANDARDS MET WITHIN REPLICATION AREA:
1. TYPE OF CROSSING • GENERAL: SPANS (BRIDGES, 3-SIDED BOX CULVERTS, OPEN BOTTOM CULVERTS OR ARCHES) ARE STRONGLY PREFERRED. • OPTIMUM: USE A BRIDGE.	A 3-SIDED BOX CULVERT THAT SPANS THE EXISTING STREAM HAS BEEN PROPOSED.
2. EMBEDMENT • ALL CULVERTS SHOULD BE EMBEDDED (SUNK INTO STREAM) A MINIMUM OF 2 FEET, AND ROUND PIPE CULVERTS AT LEAST 25%. • IF PIPE CULVERT CANNOT BE EMBEDDED THIS DEEP, THEN THEY SHOULD NOT BE USED. • WHEN EMBEDMENT MATERIAL INCLUDES ELEMENTS > 15 INCHES IN DIAMETER, EMBEDMENT DEPTHS SHOULD BE AT LEAST TWICE THE D54 (PARTICLE WIDTH LARGER THAN 84% OF PARTICLES) OF THE EMBEDMENT MATERIAL.	A 3-SIDED BOX CULVERT THAT SPANS THE EXISTING STREAM HAS BEEN PROPOSED. THERE IS NO EMBEDDING THAT WILL BE INCORPORATED INTO THIS STREAM CROSSING.
3. CROSSING SPAN • GENERAL: SPANS CHANNEL WIDTH (A MINIMUM OF 1.2 TIMES THE BANKFULL WIDTH OF THE STREAM. • OPTIMUM: SPANS THE STREAMBED AND BANKS (AT LEAST 1.2 TIMES BANKFULL WIDTH) WITH SUFFICIENT HEADROOM TO PROVIDE DRY PASSAGE FOR WILDLIFE.	THE EXISTING BANKFULL WIDTH OF THE STREAM IS APPROXIMATELY 4 FEET OR LESS. THE PROPOSED SPAN OF THE 3-SIDED BOX CULVERT IS 6 FEET WHICH IS 1.5 TIMES THE WIDTH OF THE EXISTING BANKFULL STREAM.
4. OPENNESS • GENERAL: OPENNESS RATIO (CROSS SECTIONAL AREA/CROSSING LENGTH) OF AT LEAST 0.82 FEET (0.25 METERS). THE CROSSING SHOULD BE WIDE AND HIGH RELATIVE TO ITS LENGTH. • OPTIMUM: OPENNESS RATIO OF AT LEAST 1.64 FEET (0.5 METERS) AND MINIMUM HEIGHT OF 6 FEET. IF CONDITION SIGNIFICANTLY REDUCE WILDLIFE PASSAGE NEAR A CROSSING (E.G. STEEP EMBANKMENTS, HIGH TRAFFIC VOLUMES, AND PHYSICAL BARRIERS), MAINTAIN A MINIMUM HEIGHT OF 8 FEET (2.4 METERS) AND OPENNESS RATIO OF 2.46 FEET (0.75 METERS).	$\frac{X-SEC\ CULVERT\ AREA\ PRE-EMBED - EMBEDDED\ AREA}{CULVERT\ LENGTH} = \frac{3-SIDED\ BOX\ CULVERT\ 50\ S.F. - 0\ S.F.\ (NOT\ EMBEDDED)}{50\ FEET} = 1.0\ FEET$  THE PROPOSED 3-SIDED BOX CULVERT MEETS STREAM CROSSING STANDARDS.
5. CROSSING SPAN • NATURAL BOTTOM SUBSTRATE SHOULD BE USED WITHIN THE CROSSING AND IT SHOULD MATCH THE UPSTREAM AND DOWNSTREAM SUBSTRATES. THE SUBSTRATE AND DESIGN SHOULD RESIST DISPLACEMENT DURING FLOWS AND MAINTAIN APPROPRIATE BOTTOM DURING NORMAL FLOWS.	A 3-SIDED BOX CULVERT THAT SPANS THE EXISTING STREAM HAS BEEN PROPOSED. THERE IS NO EMBEDDING THAT WILL BE INCORPORATED INTO THIS STREAM CROSSING AND THE NATURAL STREAM BED WILL BE UTILIZED. EROSION CONTROL WILL BE PLACED ON BOTH SIDES OF STREAM BANK.
6. WATER DEPTH AND VELOCITY • WATER DEPTHS AND VELOCITIES ARE COMPARABLE TO THOSE FOUND IN THE NATURAL CHANNEL AT A VARIETY OF FLOWS.	A 3-SIDED BOX CULVERT THAT SPANS THE EXISTING STREAM HAS BEEN PROPOSED AND THE NATURAL STREAM BED WILL BE UTILIZED. WATER DEPTH AND VELOCITY ARE COMPARABLE TO UPSTREAM AND DOWNSTREAM CONDITIONS.

TABLE 3.

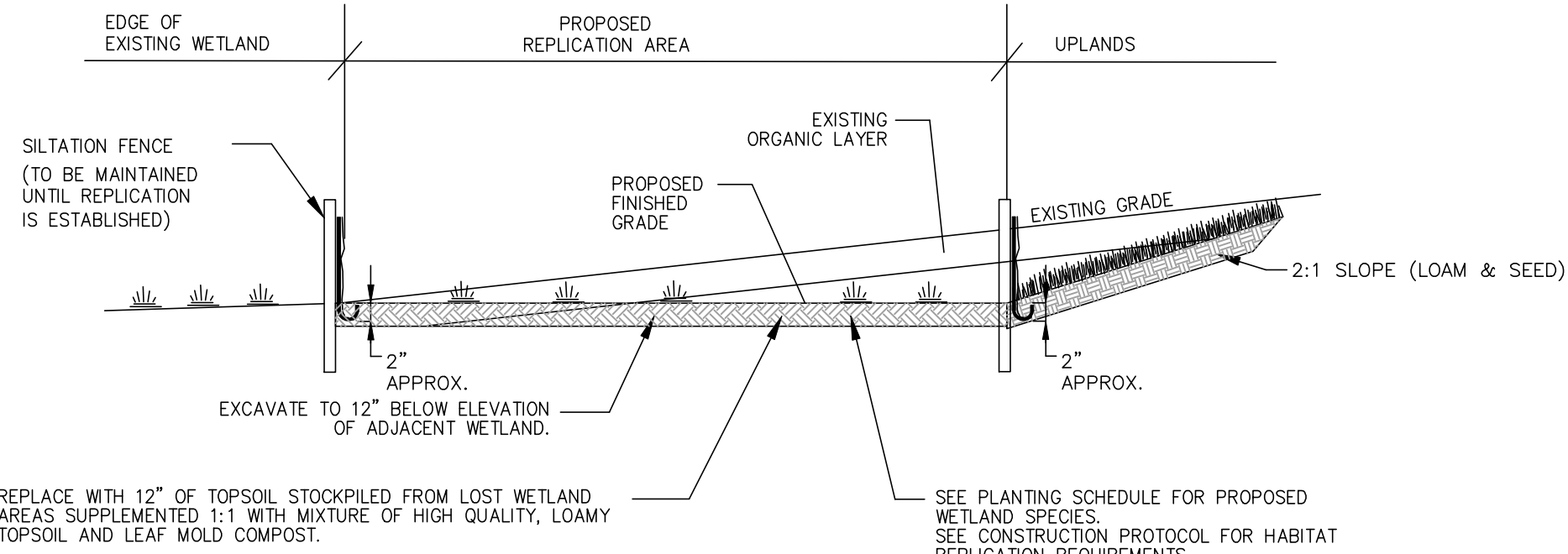
PERFORMANCE STANDARD:	STANDARDS MET WITHIN REPLICATION AREA:
EQUAL SURFACE AREAS (1,945 S.F. ALTERED).	YES. 2 TIMES GREATER SURFACE AREA (4,169 S.F. REPLICATED)
SIMILAR GROUNDWATER AND SURFACE ELEVATIONS.	YES SIMILAR ELEVATIONS.
LOCATION RELATIVE TO BANK	YES. SIMILAR PROXIMITY TO STREAM BANK
UNRESTRICTED HYDRAULIC CONNECTION.	YES. UNRESTRICTED CONNECTION TO SAME BORDERING WETLAND
SAME GENERAL LOCATION.	YES. AS CLOSE AS POSSIBLE TO IMPACTED WETLAND
MINIMUM 75% COVER OF NATIVE WETLAND PLANTS WITHIN TWO GROWING SEASONS AND PREVENTION OF SOIL EROSION.	YES. TO BE INSURED BY FOLLOWING CONSTRUCTION AND PLANTING PROTOCOL COMBINED WITH ANNUAL MONITORING AND RE-PLANTING AND/OR MODIFICATION AS NECESSARY. PLANTING DESIGNED TO REPLICATE LOST AREA(S) IN-KIND. EROSION PREVENTED WITH SILTATION BARRIERS, 3:1 SIDE SLOPES AND MULCH.

WETLAND REPLICATION CONSTRUCTION PROTOCOL:

REFER TO WETLAND REPLICATION PLANTING PLAN FOR FOX HOLLOW SUBDIVISION DATED NOVEMBER 20, 2025, PREPARED BY GODDARD CONSULTING FOR REPLICATION PROCEDURES IN ITS ENTITY

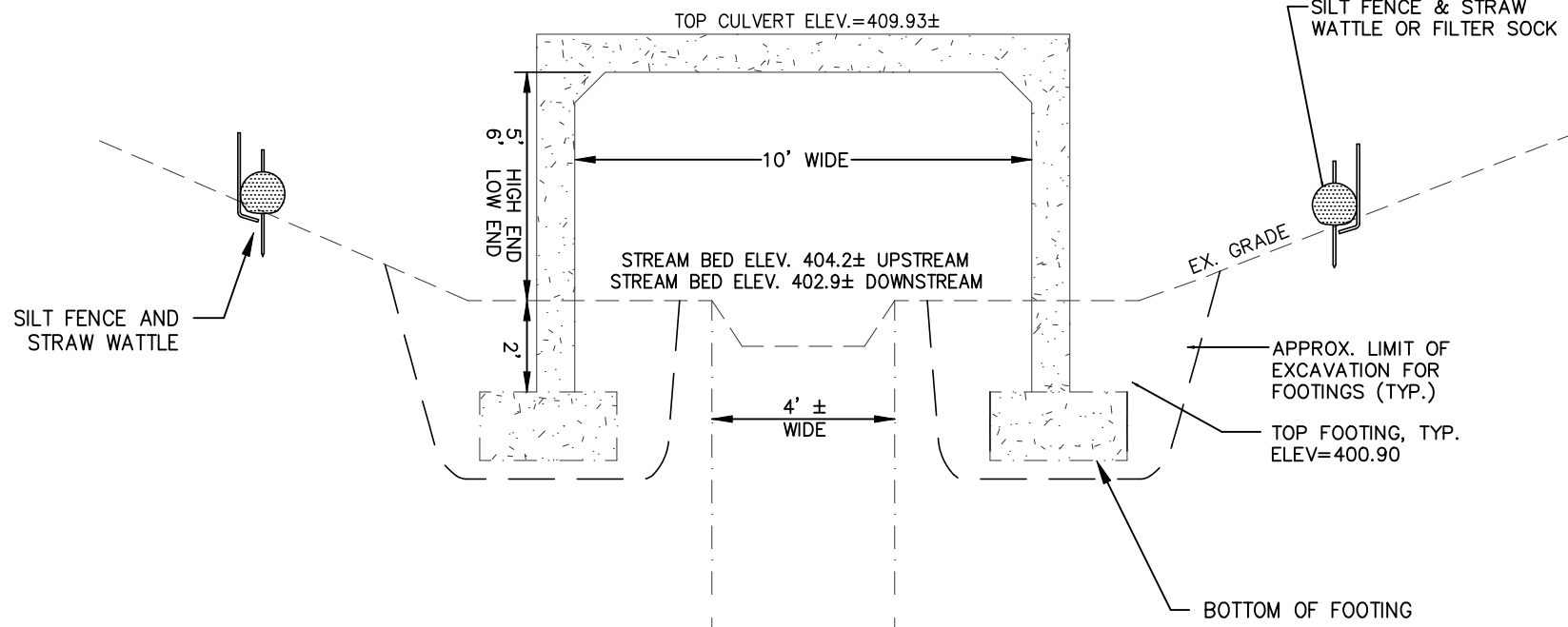
- THE FOLLOWING PROTOCOL CONFORMS TO THE GENERAL PERFORMANCE STANDARDS IN THE MA WETLANDS PROTECTION ACT REGULATIONS AT 310 CMR 10.55(4)(B) AS SUMMARIZED IN TABLE 2. PLEASE NOTE THAT THE REPLICATION AREA WILL BE BROUGHT TO SUB-GRADE PRIOR TO INITIATING WORK AT THE WETLAND CROSSING.
- THE WETLAND BOUNDARIES (I.E., DOWN GRADIENT EDGES OF THE WETLAND REPLICATION AREA) WILL BE MARKED IN THE FIELD.
- PRIOR TO THE START OF EARTH-MOVING ACTIVITIES IN THE REPLICATION AREA, AN EROSION CONTROL BARRIER OF PROPERLY INSTALLED SILTATION FENCE (I.E., THE BOTTOM FEW INCHES OF THE SILTATION FENCE INSTALLED IN A NARROW, TRENCH AND THE TRENCH FILLED WITH SOIL AROUND THE SILTATION FENCE) WILL BE INSTALLED ALONG THE WETLAND BOUNDARIES BETWEEN THE WETLAND AND THE WETLAND REPLICATION AREA. THE WETLAND REPLICATION AREA WILL THEN BE CLEARED AND GRUBBED, WITH THE EXCEPTION OF THE TREES THAT HAVE BEEN MARKED TO BE SAVED.
- THE PROPOSED FINAL GRADE FOR THE REPLICATION AREA SHOULD APPROXIMATE THE ELEVATION OF THE ADJACENT WETLAND AREAS, AS NOTED ON THE SITE PLANS. THE REPLICATION AREA WILL BE EXCAVATED TO A DEPTH OF 12 INCHES BELOW THE PROPOSED FINAL GRADE. THE EXCAVATION AND PLANTING WORK WILL BE CLOSELY SUPERVISED BY A QUALIFIED WETLAND SCIENTIST. MINOR MODIFICATIONS TO THE PROPOSED GRADING MAY BE MADE IN THE FIELD BY THE WETLAND SCIENTIST IN RESPONSE TO OBSERVED SUBSURFACE HYDROLOGIC CONDITIONS. ALL EXCAVATED MATERIAL WILL BE DISPOSED OF AWAY FROM ALL WETLAND RESOURCE AREAS.
- EXISTING TOPSOILS WITHIN THE IMPACT AREA WILL BE EXCAVATED, STOCKPILED AND KEPT MOIST BY WATERING AND/OR COVERING.
- RELOCATED WETLAND TOPSOILS WILL BE SUPPLEMENTED WITH A 1:1 MIXTURE OF HIGH QUALITY, LOAMY TOPSOIL AND LEAF MOLD COMPOST, AS NECESSARY, TO APPROXIMATE 12 INCHES IN THICKNESS THROUGHOUT THE REPLICATION AREA. THE SUBSTRATE WILL BE ROUGHLY GRADED TO PROVIDE AN APPROPRIATE MICROTOPOGRAPHY. A MINIMUM OF 4 INCHES OF LOAMY TOPSOIL WILL BE APPLIED TO THE SIDE-SLOPES OF THE WETLAND REPLICATION AREA. THE SIDE SLOPES SHOULD BE STABILIZED AS NECESSARY TO PREVENT EROSION.
- AN EROSION CONTROL BARRIER COMPRISING ONLY TOED-IN SILTATION FENCE WILL BE PROPERLY INSTALLED BETWEEN THE COMPLETED REPLICATION AREA AND THE ADJACENT UPLAND SIDE SLOPES.
- PLANTING WILL BE DONE ONLY DURING THE BEGINNING (APRIL 15 THROUGH JUNE) OR END (SEPTEMBER 1 TO NOVEMBER 15) OF THE GROWING SEASON. PLANTING IN THE MID-GROWING SEASON IS ONLY ACCEPTABLE IF IRRIGATION IS PROVIDED. THE PLANT SPECIES IDENTIFIED IN THE TABLE BELOW WILL BE PLANTED IN THE REPLICATION AREA EITHER BY TRANSPLANT OR FROM NURSERY STOCK. THE SAPLINGS WILL BE DISTRIBUTED THROUGHOUT THE AREA. THE WOODY VEGETATION SHOULD NOT BE PLANTED IN ROWS.
- THE REPLICATION AREA WILL BE SEEDED WITH "NEW ENGLAND WETMIX" AS PER NEW ENGLAND WETLAND PLANTS, INC SPECIFICATIONS OR APPROVED EQUAL TO PROVIDE FOR TEMPORARY EROSION CONTROL AND MOISTURE RETENTION.
- THE SIDE-SLOPES OF THE WETLAND REPLICATION AREA WILL BE SEEDED WITH A GRASS/WILDFLOWER MIXTURE DESIGNED TO PROVIDE PERMANENT COVER. AFTER SEEDING, THE SIDE-SLOPES WILL BE MULCHED WITH A THIN LAYER OF STRAW TO PROVIDE FOR TEMPORARY EROSION CONTROL.
- THE REPLICATION AREAS WILL BE INSPECTED, BY A QUALIFIED WETLAND SCIENTIST, AT THE END OF EACH GROWING SEASON FOR A MINIMUM OF TWO YEARS OR UNTIL SUCH TIME AS THE REQUIRED 75% OF VEGETATIVE COVER WITH WETLAND SPECIES HAS BEEN ESTABLISHED. WRITTEN RESULTS OF THESE INSPECTIONS WILL BE SUBMITTED TO THE CONSERVATION COMMISSION.
- AFTER THE WETLAND REPLICATION AREA HAS BECOME VEGETATIVELY STABILIZED, AND FOLLOWING APPROVAL OF THE ISSUING AUTHORITY, THE SILTATION FENCE AND ALL WOODEN STAKES WILL BE REMOVED AND DISPOSED OF PROPERLY.

ALL DRAINAGE STRUCTURES INCLUDING DETENTION PONDS, CROSS CULVERTS, STORM WATER MANHOLES, CATCH BASINS, AND ALL OTHER UNDERGROUND UTILITIES SHALL BE CONSTRUCTED AND STABILIZED PRIOR TO ANY LOT DEVELOPMENT. IMMEDIATELY FOLLOWING CATCH BASIN INSTALLATION, STRAW WATTLES SHALL BE PLACED AROUND RIMS AND ALL DISTURBED AREAS SHALL BE HYDROSEEDED, MULCHED OR COVERED WITH ENVIRONMENTAL MATTING AND CHECKED REGULARLY TO PREVENT EROSION FROM TAKING PLACE.



3 TYPICAL WETLAND REPLICATION DETAIL  
SCALE: N.T.S.

- NOTES:
- CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
  - DESIGN PER ASTM C1504 SPECIFICATION FOR 3-SIDED CULVERT.
  - ALL REINFORCEMENT PER ASTM A-615-75.
  - DESIGN AASHTO H-20 LOADING.
  - TONGUE AND GROOVE JOINT SEALED WITH BUTYL RESIN.
  - FINAL DESIGN BY OTHERS.
  - STREAM SUBSTRATE SHALL BE NATURAL AND MATCH UPSTREAM AND DOWNSTREAM SUBSTRATE.



SECTION A-A: PRECAST CONCRETE 3-SIDED BOX CULVERT  
SCALE: N.T.S.

NORTH AMERICAN  
DATUM OF 1983



TURNING POINT ENGINEERING

CIVIL SITE DESIGN

P.O. Box 757 • Sutton, MA 01590  
P:(508) 381-1515 F:(508) 647-9189  
www.tpecivildesign.com



APPROVAL UNDER SUBDIVISION CONTROL LAW  
NORTHBRIDGE PLANNING BOARD

BEING A MAJORITY

APPROVAL DATE: _____  
ENDORSEMENT DATE: _____

PROJECT NAME  
**FOX HOLLOW**  
DEFINITIVE SUBDIVISION PLAN  
TESSIER LANE & FOWLER ROAD  
NORTHBRIDGE, MASSACHUSETTS  
MAP 21 PARCELS 135, 139 AND 181  
PREPARED FOR

Eastland Partners, Inc.  
997 Millbury Street  
Worcester, MA 01617



REV.	DATE	DESCRIPTION	PROJECT NO.	DESIGNED BY	CHECKED BY	DATE	CAD FILE	PLAN NO.
			TPE-1139	JAB, TB	JAB	NOVEMBER 17, 2025	H:\1139-DEF-Subdivision-REV0.dwg	

SCALE

AS NOTED

SHEET TITLE

REPLICATION PLAN

DRAWING ISSUED FOR:

PERMIT

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SHEET NO.

C-9.3