

- NOTES:
1. LOCATION: 890-940 NORTH BROADWAY
HAVERHILL, MA 01832
PARCEL ID: M 575-2-8
 2. DEED: SOUTHERN ESSEX DISTRICT
REGISTRY OF DEEDS
BOOK 36727 PAGE 171
 3. ZONE: RURAL RESIDENTIAL (RR)
 4. USE: GOLF COURSE
 5. APPLICANT: STERLING GOLF MANAGEMENT INC.
212 KENRICK STREET
NEWTON, MA 02458
 6. OWNER: STERLING GOLF CRYSTAL LAKE LLC
212 KENRICK ST.
NEWTON, MA 02458
 7. EXISTING CONDITIONS INFORMATION GENERATED FROM AN ON THE
GROUND SURVEY PERFORMED BY SEC & ASSOCIATES, INC. IN JUNE
2024 AND CIVIL DESIGN CONSULTANTS INC. IN MAY 2025.
 8. PROPERTY IS NOT LOCATED WITHIN A DESIGNATED FLOOD HAZARD AREA
PER FLOOD INSURANCE RATE MAP NUMBER 25009C0067G DATED JULY
8, 2025.
 9. ALL ELEVATIONS REFER TO THE NATIONAL GEODETIC VERTICAL DATUM
(NAVD88), PER GPS OBSERVATIONS.
 10. UTILITY LOCATIONS ARE SHOWN PER READILY AVAILABLE RECORD
INFORMATION AND OBSERVABLE FIELD EVIDENCE. OTHER UNDERGROUND
UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THIS PLAN. CDG
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INFORMATION. 72 HOURS PRIOR TO ANY EXCAVATION ON SITE, THE
CONTRACTOR SHALL CONTACT DIG-SAFE AT 811.
 11. WETLANDS DELINEATED BY NORSE ENVIRONMENTAL SERVICES, INC., 2100
LAKEVIEW AVE UNIT 3A DRACUT, MA 01826, IN APRIL 2025 AND MAY
2026.

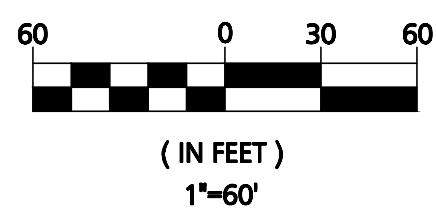
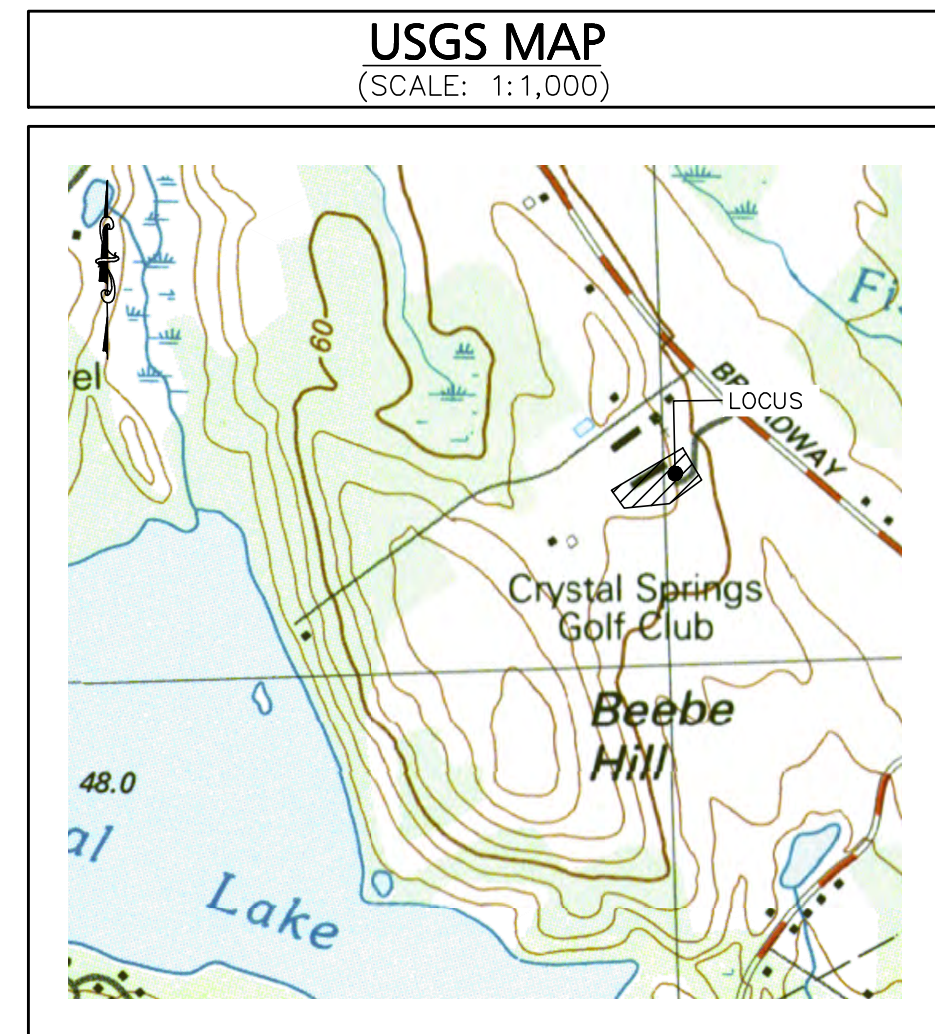
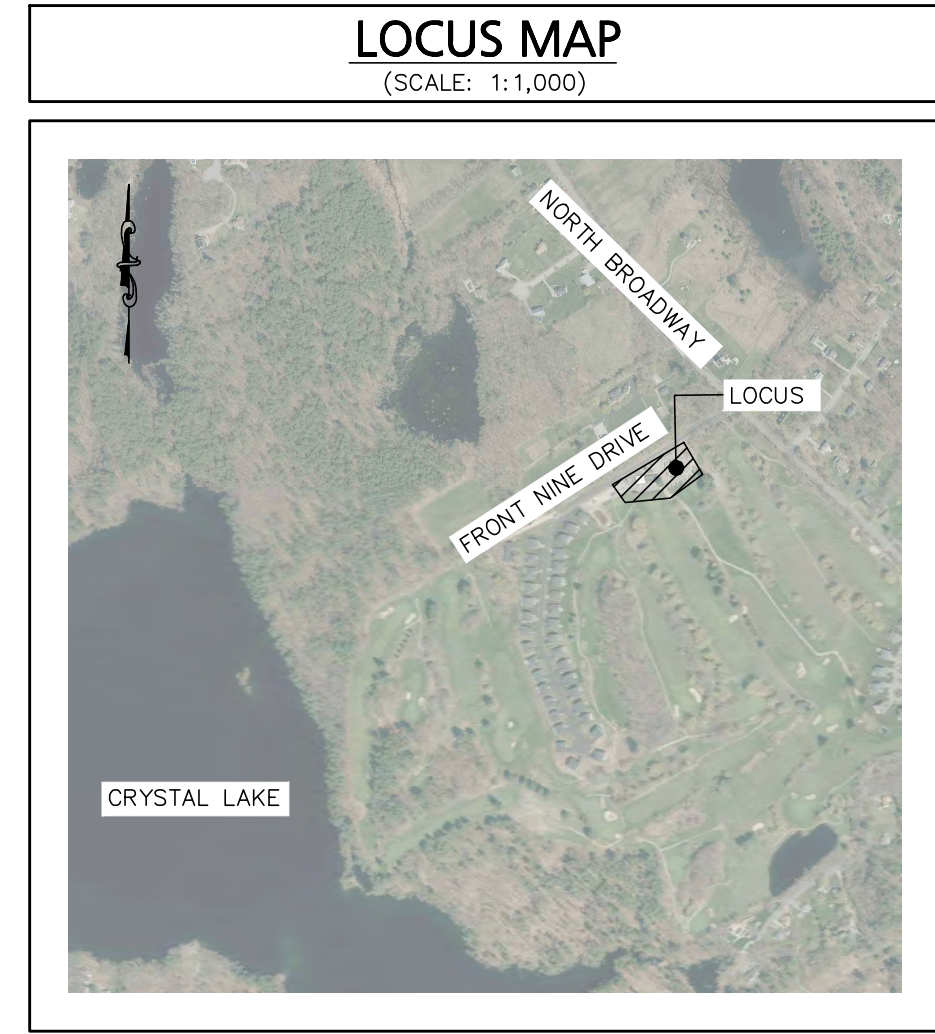
SITE DEVELOPMENT PLANS

FOR

890 NORTH BROADWAY

(MAP 575/ BLOCK 2/ LOT 8)

HAVERHILL, MA 01832



PLAN INDEX:		
TITLE	DATE ISSUED	REVISED
C-1 COVER SHEET	02/26/26	07/22/26
C-2 EXISTING CONDITIONS PLAN	02/26/26	05/11/26
C-3 SEDIMENTATION & EROSION CONTROL PLAN	02/26/26	07/22/26
C-4 LAYOUT & MATERIALS PLAN	02/26/26	07/22/26
C-5 GRADING & DRAINAGE PLAN	02/26/26	07/22/26
C-6 UTILITIES PLAN	02/26/26	07/22/26
D-1 CONSTRUCTION DETAILS	02/26/26	-
D-2 CONSTRUCTION DETAILS	02/26/26	-
D-3 CONSTRUCTION DETAILS	02/26/26	07/22/26
D-4 CONSTRUCTION DETAILS	05/11/26	07/22/26

CIVIL ABBREVIATIONS	
AD	ALGEBRAIC DIFFERENCE
ADD INFO	ADDITIONAL INFORMATION
APPROX	APPROXIMATE
BIT CONC	BITUMINOUS CONCRETE
BC	BOTTOM OF CURB
BLDG	BUILDING
BW	BOTTOM OF WALL
BT	BOTTOM
CB	CATCH BASIN
CO	CLEAN OUT
CONFIG	CONFIGURATION
CONC	CONCRETE
CMP	CORRUGATED METAL PIPE
DICL	DUCTILE IRON CEMENT LINED
DMH	DRAIN MANHOLE
DYCL	DOUBLE YELLOW CENTERLINE
ELE	ELEVATION
EOP	EDGE OF PAVEMENT
ETC	ELECTRIC TELEPHONE CABLE
EX	EXISTING
FM	FORCE MAIN
FMCO	FORCE MAIN CLEANOUT
FT	FEET
GFA	GROSS FLOOR AREA
GV	GAS VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH POINT
HYD	HYDRANT
I(I)	INVERT IN
I(O)	INVERT OUT
LOC	LOCATION
LOW	LIMIT OF WORK
MW	MONITORING WELL
N/F	NOW OR FORMERLY
PC	POINT OF CURVATURE
PCB	PROPOSED CATCH BASIN
PDMH	PROPOSED DRAIN MANHOLE
PRES	PROPOSED FLARED END SECTION
PHW	PROPOSED HEADWALL
POS	PROPOSED OUTLET STRUCTURE
PS	PUMP STATION
PSMH	PROPOSED SEWER MANHOLE
PROP	PROPOSED
PT	POINT OF TANGENCY
PVC	PIPE POLYVINYL CHLORIDE PIPE
PVC	POINT OF VERTICAL CURVATURE
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
RCOP	REINFORCED CONCRETE PIPE
RET	RETAINING
ROW	RIGHT OF WAY
SF	SQUARE FEET
SGC	SLOPED GRANITE CURB
SMH	SEWER MANHOLE
STA	STATION
SWL	SOLID WHITE LINE
SYL	SOLID YELLOW LINE
TBM	TEMPORARY BENCH MARK
TC	TOP OF CURB
TW	TOP OF WALL
TP	TEST PIT
TYP	TYPICAL
UP	UTILITY POLE
VGC	VERTICAL GRANITE CURB
W/	WITH

ISSUED FOR REVIEW: JULY 22, 2026

07/22/2026	REV. PER CEI COMMENTS
05/11/2026	REV. PER CEI COMMENTS
DATE	DESCRIPTION
REVISIONS	

OWNER / APPLICANT:
**STERLING GOLF
MANAGEMENT, INC.**
212 KENDRICK STREET
NEWTON, MA 02458

PROJECT:
890 NORTH BROADWAY

HAVERHILL, MA 01832

DATE ISSUED:	FEBRUARY 26, 2026
PROJECT #:	24-10594
PREPARED BY:	TJS

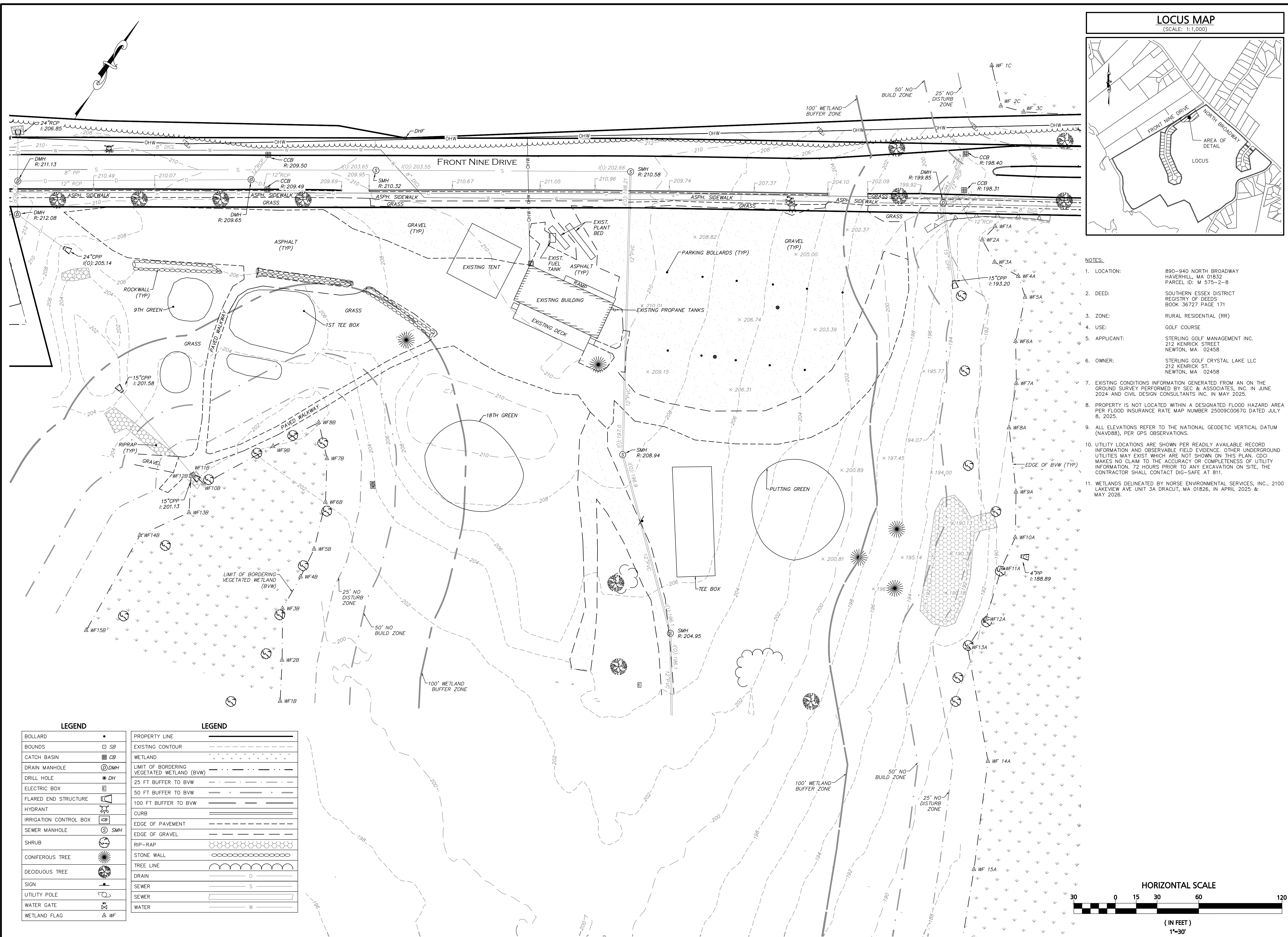
ISSUED FOR REVIEW
JULY 22, 2026

PROFESSIONAL ENGINEER FOR CIVIL DESIGN
CONSULTANTS, INC.

CIVIL
DESIGN
CONSULTANTS, INC.
344 North Main Street | Andover - MA 01810
(978) 416-0920 | www.civilcdi.com

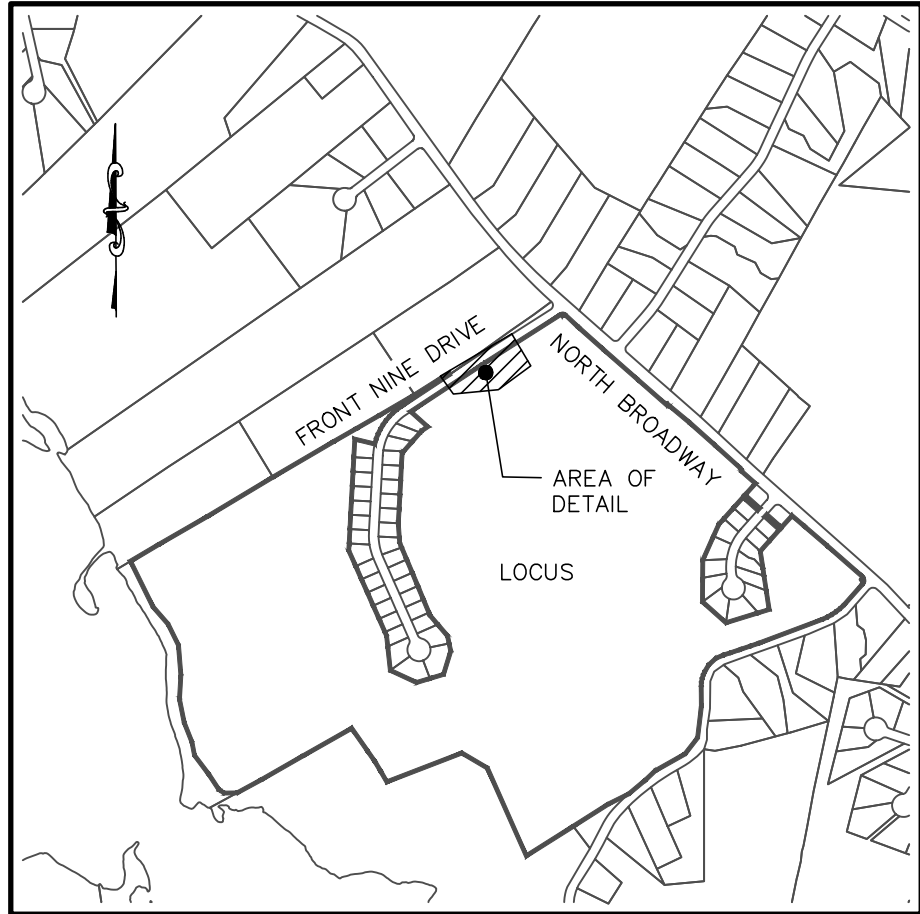
DRAWING TITLE:
COVER SHEET

DRAWING #:
C-1



LOCUS MAP

(SCALE: 1:1,000)



NOTES:

1. LOCATION: 890-940 NORTH BROADWAY
HAVERHILL, MA 01832
PARCEL ID: M 575-2-8
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LAKEVIEW DRIVE UNIT 3A DRACUT, MA 01826, IN APRIL 2025 & MAY
2026.

05/11/2026	ADDITIONAL WETLAND FLAGS
DATE	DESCRIPTION
REVISIONS	

PREPARED FOR:
STERLING GOLF
MANAGEMENT, INC
212 KENRICK STREET
NEWTON, MA 02458

PROJECT

890 NORTH BROADWAY
HAVERHILL, MA 01832

DATE ISSUED:	MAY 1, 2026
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PROJECT #:	24-10594
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PREPARED BY:	MEY / LRD
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5/11/26

PROFESSIONAL LAND SURVEYOR FOR CIVIL
DESIGN CONSULTANTS, INC.



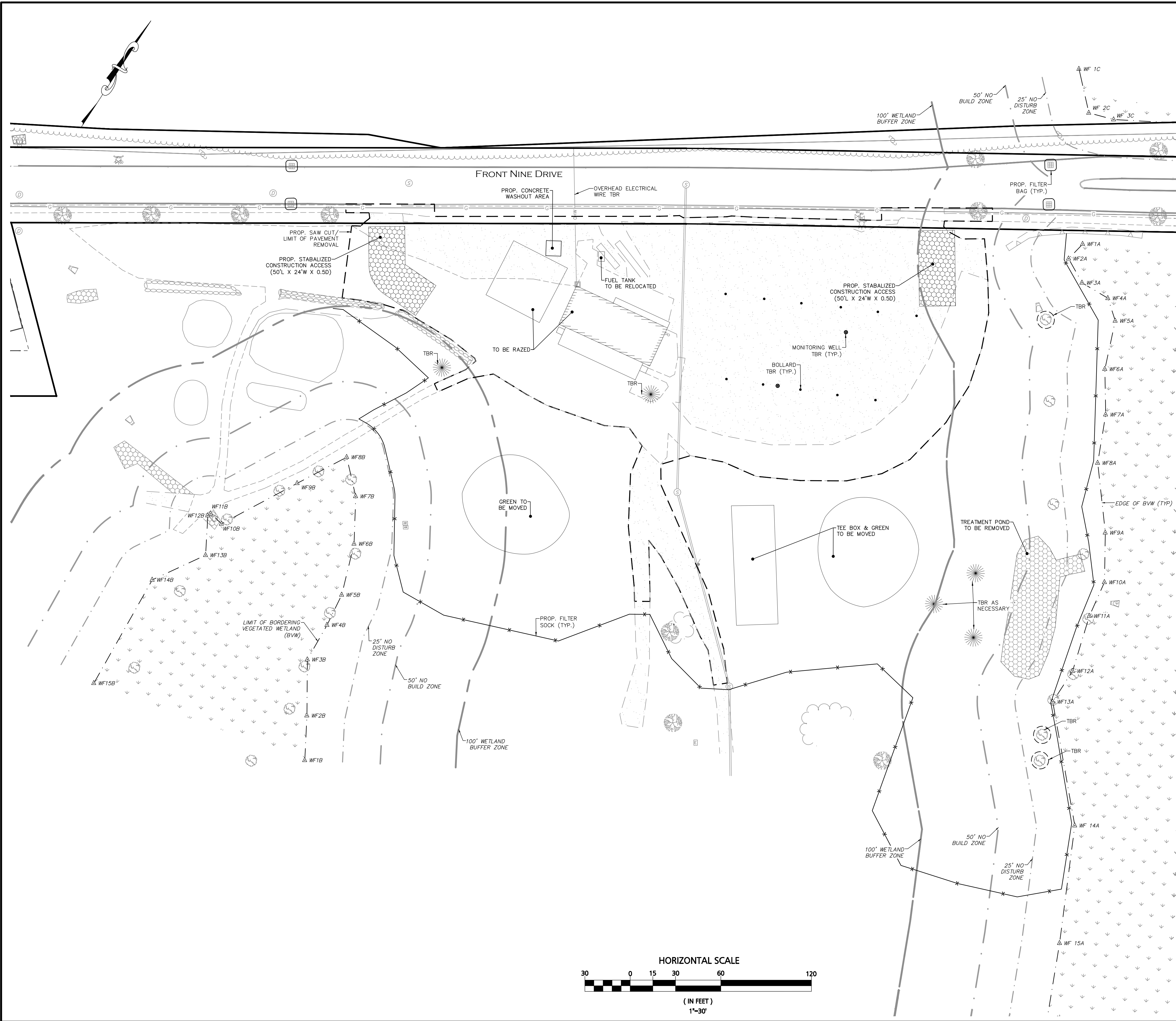
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DRAWING TITLE

EXISTING CONDITIONS PLAN

DRAWING #:

C-2



07/22/2026	REV. PER CEI COMMENTS
05/11/2026	REV. PER CEI COMMENTS
DATE	DESCRIPTION
REVISIONS	

PREPARED FOR:
STERLING GOLF MANAGEMENT, INC
212 KENRICK STREET
NEWTON, MA 02458

PROJECT:
890 NORTH BROADWAY
HAVERHILL, MA 01832

DATE ISSUED: FEBRUARY 26, 2026

PROJECT #: 24-10594

PREPARED BY: MEY / LRD

ISSUED FOR REVIEW
JAN 22, 2026

PROFESSIONAL ENGINEER FOR CIVIL DESIGN
CONSULTANTS, INC.

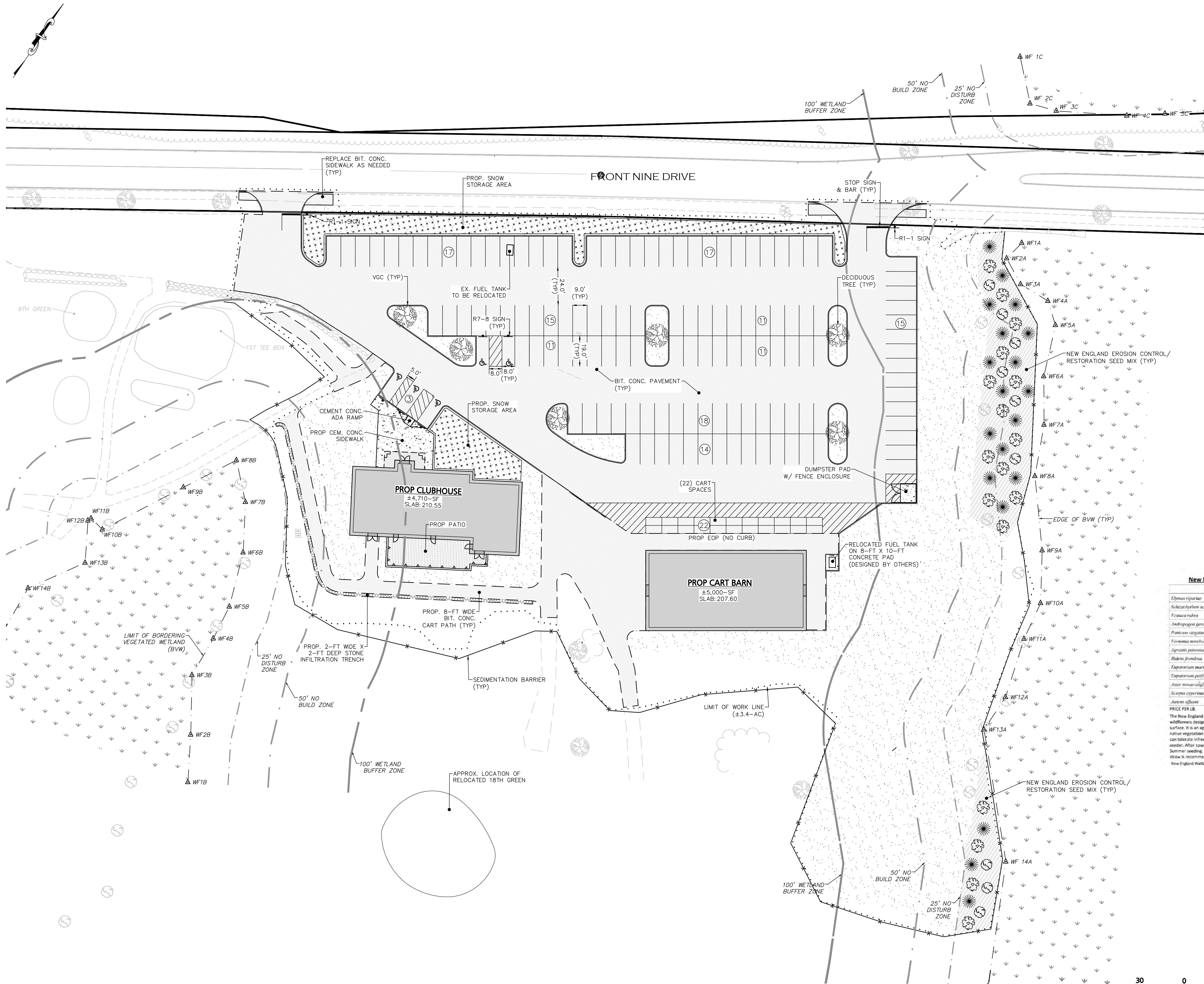
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CONSULTANTS, INC.

344 North Main Street | Andover - MA 01810
(978) 416-0920 | www.civildco.com

DRAWING TITLE:
**SEDIMENTATION &
EROSION CONTROL PLAN**

DRAWING #:

C-3



LAND USE TABLE		
LOCATION:	890 NORTH BROADWAY (MAP 575/ BLOCK 2/ LOT 8)	
ZONE:	RURAL RESIDENTIAL (RR) SPECIAL CONSERVATION (SC)	
USE:	GOLF COURSE	
ITEM	RR	PROP. CLUBHOUSE
MINIMUM LOT AREA	80,000-SF	125.35-AC
MINIMUM LOT FRONTAGE	200-FT	943.0-FT(FRONT NINE DR.) 1,343.1-FT(NORTH BROADWAY)
MINIMUM FRONT SETBACK(1)	40-FT	157.8-FT(FRONT NINE DR.) 403.2-FT(NORTH BROADWAY)
MINIMUM SIDE SETBACK	25-FT	>500-FT
MINIMUM REAR SETBACK	40-FT	>40-FT

- A CORNER LOT SHALL HAVE MINIMUM STREET YARDS WITH DEPTHS WHICH SHALL BE THE SAME AS THE REQUIRED FRONT YARD DEPTHS FOR THE ADJOINING LOTS
- IN ALL RESIDENTIAL AND COMMERCIAL DISTRICTS, A DETACHED ACCESSORY BUILDING SHALL CONFORM TO THE FOLLOWING PROVISIONS: IT SHALL NOT OCCUPY MORE THAN 25% OF THE AREA OF THE REAR YARD, IT SHALL NOT BE LESS THAN 20 FEET FROM THE FRONT STREET LINE, NOR LESS THAN FIVE FEET FROM ANY OTHER LOT LINE OR FROM ANY PRINCIPAL BUILDING; AND IT SHALL NOT EXCEED 20 FEET IN HEIGHT.

PARKING CALCULATIONS:	
GOLF COURSE & ASSOCIATED CLUBHOUSE :	1 SPACE / 100-SF OF GFA
	4,760-SF / 100 SF/SPACE
	48 SPACES
	132 SPACES PROVIDED (5 ADA SPACES)

BUFFER ZONE ENHANCEMENT PLANTING LIST:	
	17, 24"-36" Highbush Blueberry (VACCINIUM CORYMBOSUM)
	9 - 24"-36" Red-Osier Dogwood (COMUS SERICIA)
	19 - 24"-36" Witch-Hazel (HAMAMELIS VIRGINIANA)

PARKING LOT PLANTING LIST:	
	6, DECIDUOUS TREES

NEW ENGLAND WETLAND PLANTS, INC.		
820 WEST STREET, AMHERST, MA 01002		
PHONE: 413-548-8000 FAX 413-548-4000		
EMAIL: INFO@NEWWP.COM WEB ADDRESS: WWW.NEWWP.COM		
New England Erosion Control/Restoration Mix For Detention Basins and Moist Sites		
Botanical Name	Common Name	Indicator
<i>Elymus riparius</i>	Riverbank Wild Ryegrass	FACW
<i>Salicodryum scirpoides</i>	Little Bluestem	FACU
<i>Festuca rubra</i>	Red Fescue	FACU
<i>Andropogon gerardii</i>	Big Bluestem	FAC
<i>Panicum virgatum</i>	Switch Grass	FAC
<i>Eriophorum maculatum</i>	New York Ironweed	FACW+
<i>Agrilus perennans</i>	Upland Berggrass	FACU
<i>Bidens frondosa</i>	Beggar Ticks	FACW
<i>Eupatorium maculatum (Eutrochium maculatum)</i>	Spotted Joe Pye Weed	OBL
<i>Eupatorium perfoliatum</i>	Boneset	FACW
<i>Aster novae-angliae Symphyotrichum novae-angliae</i>	New England Aster	FACW-
<i>Scirpus cyperinus</i>	Wool Grass	FACW
<i>Juncus effusus</i>	Soft Rush	FACW+
PRICE PER LB. \$37.00 MIN. QUANTITY 3 LBS. TOTAL: \$111.00 APPLY 35 LBS/ACRE (1250 sq ft/lb)		
The New England Erosion Control/Restoration Mix for Detention Basins and Moist Sites contains a selection of native grasses and wildflowers designed to colonize generally moist, recently disturbed sites where quick growth of vegetation is desired to stabilize the soil surface. It is an appropriate seed mix for ecologically sensitive restorations that require stabilization as well as long-term establishment of native vegetation. This mix is particularly appropriate for detention basins that do not hold standing water. Many of the plants in this mix can tolerate infrequent inundation, but not constant flooding. The mix may be applied by hand, by mechanical spreader, or by hydro-seeder. After sowing, lightly rake, roll or cultipack to insure good seed-to-soil contact. Best results are obtained with a Spring or late Summer seeding. Late Fall and Winter dormant seeding requires an increase in the application rate. A light mulching of clean, weed-free straw is recommended.		
New England Wetland Plants, Inc. may modify seed mixes at any time depending upon seed availability. The design criteria and ecological function of the mix will remain unchanged. Price is \$/bulk pound, FOB warehouse. Plus 10% and applicable taxes.		

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212 KENDRICK STREET
NEWTON, MA 02458

PROJECT:
890 NORTH BROADWAY

HAVERHILL, MA 01832

DATE ISSUED:	FEBRUARY 26, 2026
PROJECT #:	24-10594
PREPARED BY:	MAC

ISSUED FOR REVIEW
MAY 2, 2026

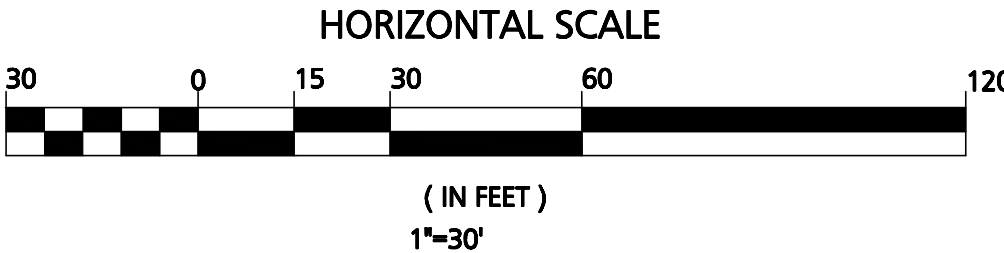
PROFESSIONAL ENGINEER FOR CIVIL DESIGN
CONSULTANTS, INC.

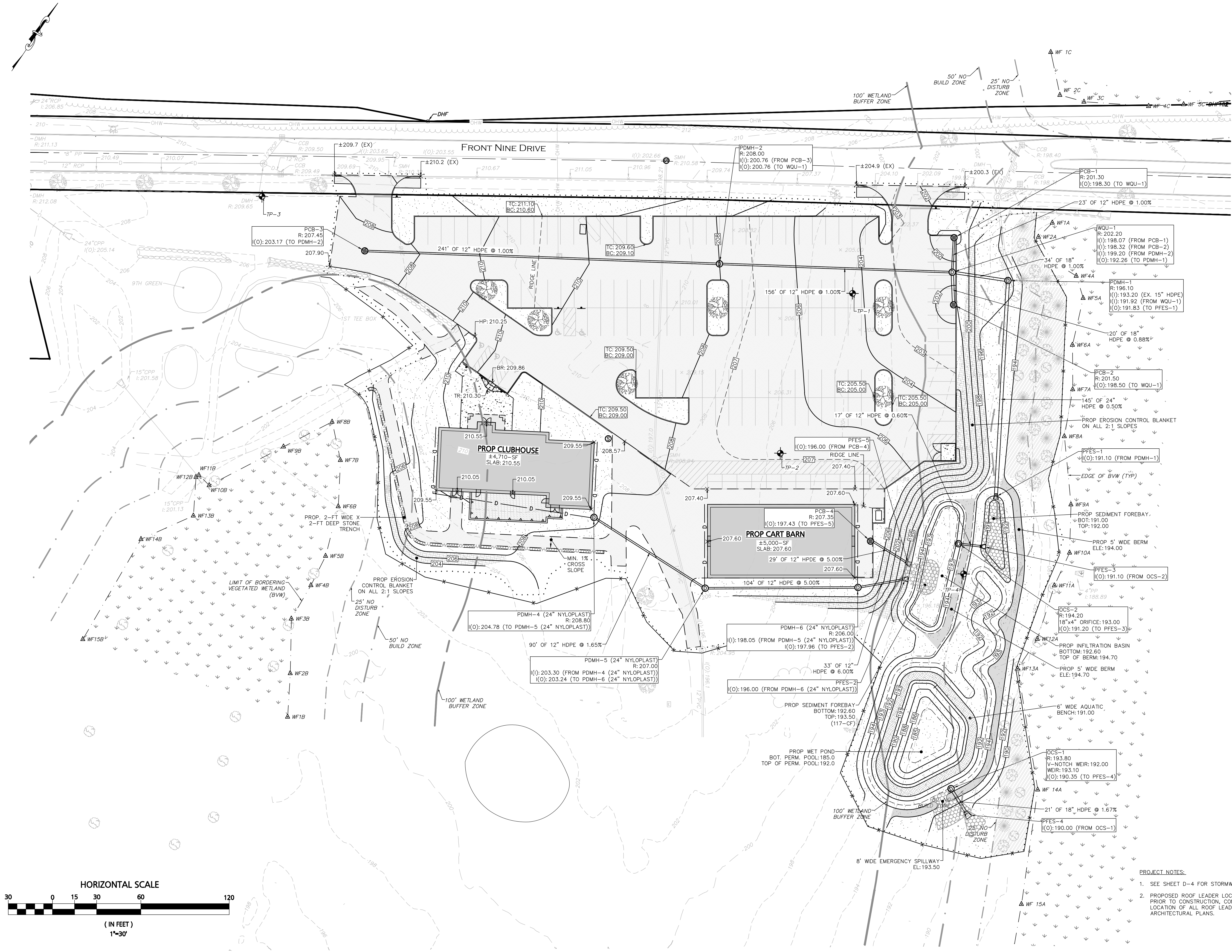
CIVIL
DESIGN
CONSULTANTS, INC.
344 North Main Street | Andover - MA 01810
(978) 416-0920 | www.civildci.com

DRAWING TITLE:
LAYOUT & MATERIALS PLAN

DRAWING #:

C-4





07/22/2026	REV. PER CEI COMMENTS
05/11/2026	REV. PER CEI COMMENTS
DATE	DESCRIPTION
REVISIONS	

OWNER / APPLICANT:
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PROJECT:
890 NORTH BROADWAY

HAVERHILL, MA 01832

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PREPARED BY: MAC

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CONSULTANTS, INC.

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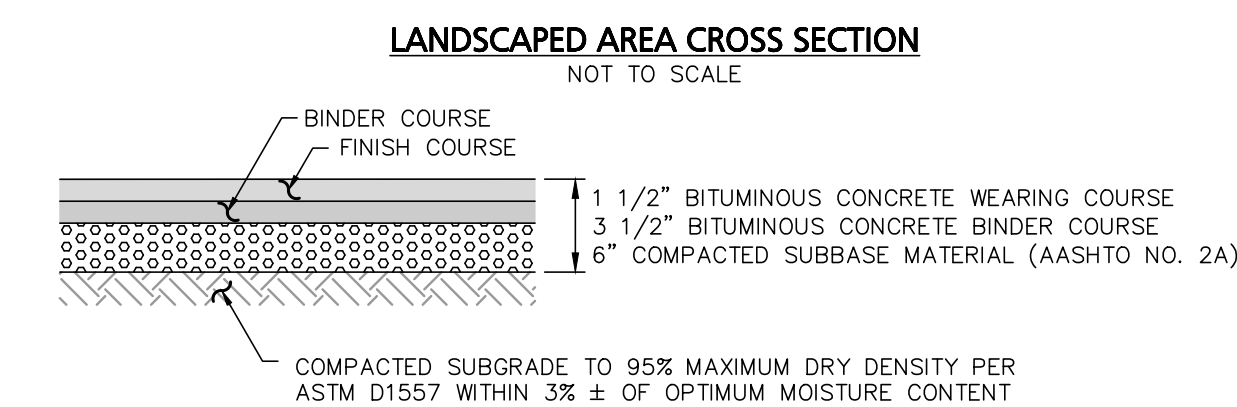
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DRAWING TITLE:

**GRADING &
DRAINAGE PLAN**

DRAWING #:

C-5



STANDARD DUTY BITUMINOUS CONCRETE PAVEMENT
NOT TO SCALE

—TYPICAL SIDEWALK AT LANDSCAPE APPLICATION

—TYPICAL SIDEWALK AT CURBING APPLICATION

WIDTH VARIES
(SEE SITE PLAN FOR ADDITIONAL INFORMATION)

1 1/2" BINDER COURSE

1.5% (MAX.)
1.0% (MIN.)

1 1/2" WEARING COURSE

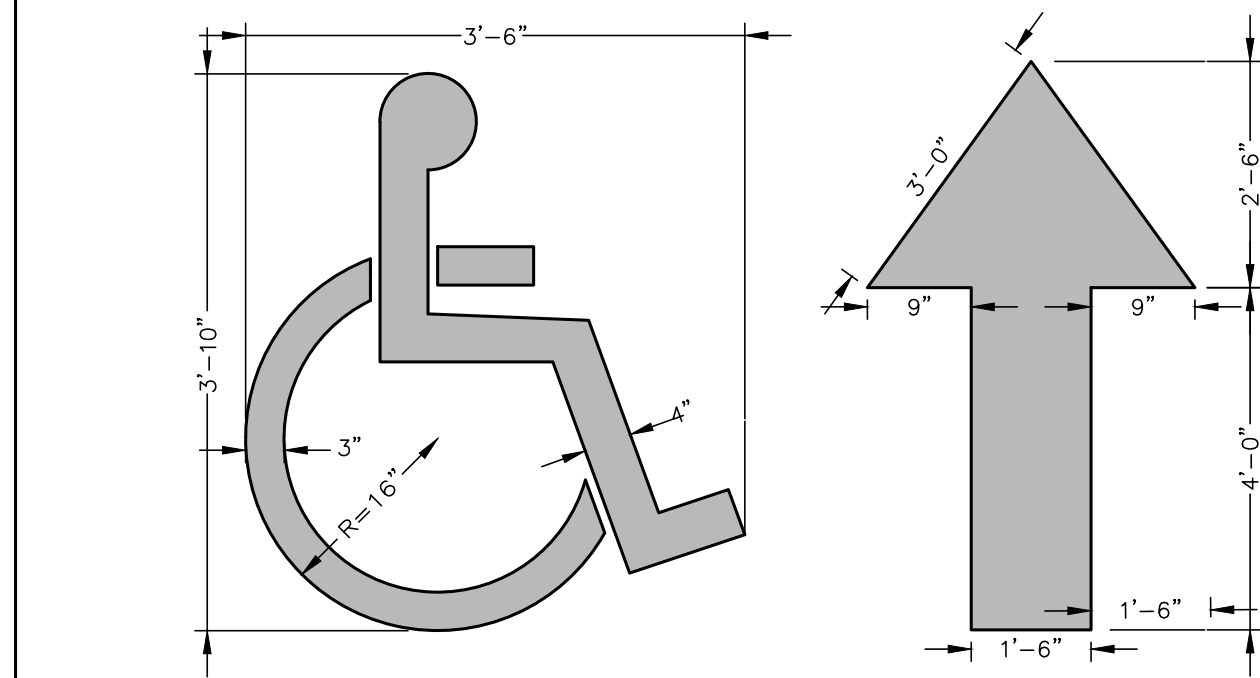
SEE APPROPRIATE DETAIL FOR CURB APPLICATION

SEE TYPICAL ROADWAY CROSS SECTION FOR ROADWAY SPECIFICATIONS

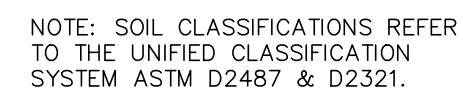
COMPACTED GRAVEL BASE

COMPACTED SUBGRADE

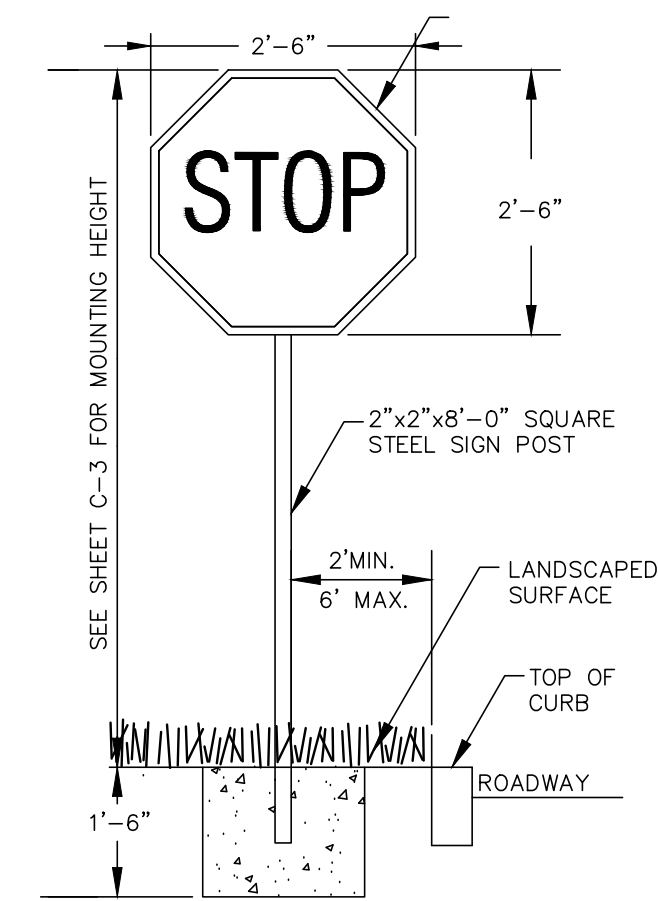
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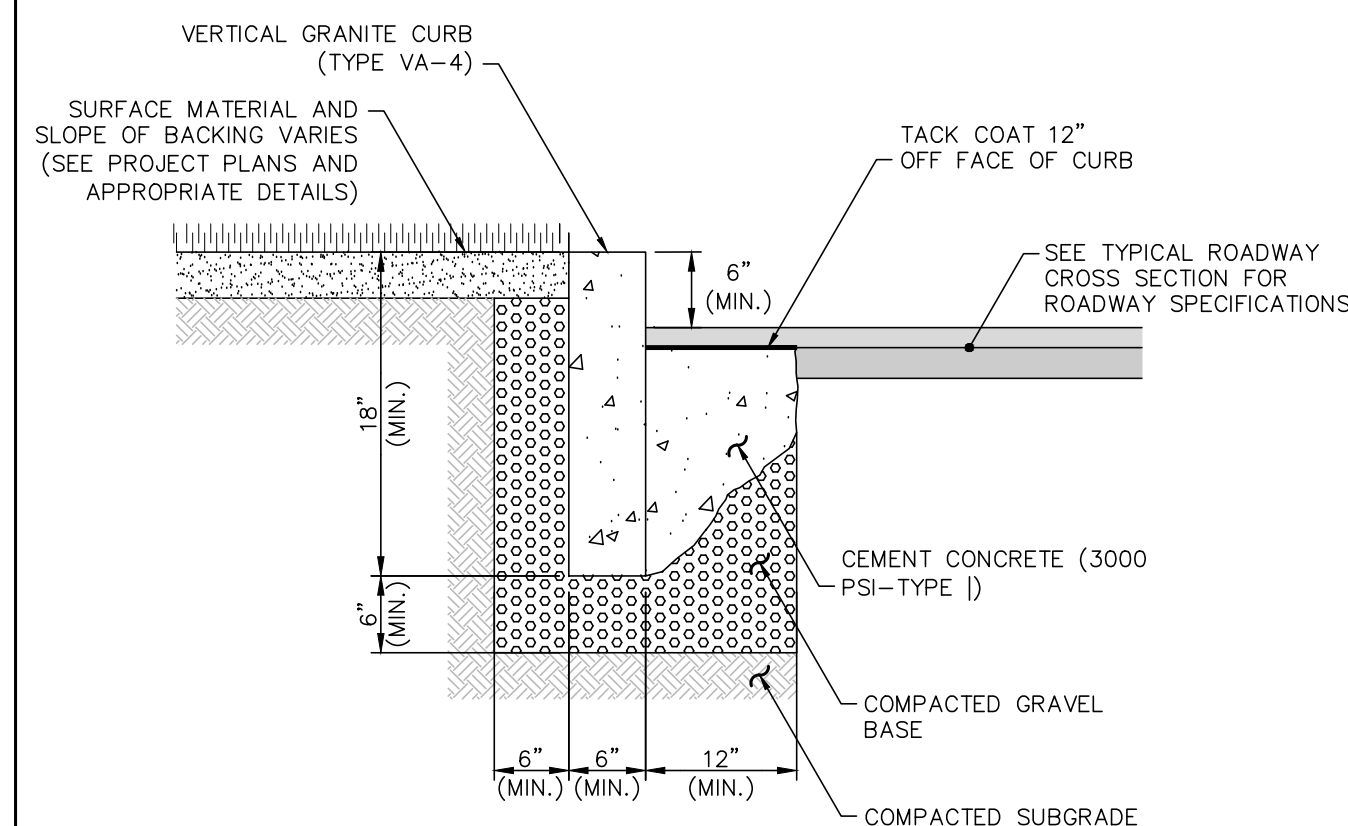
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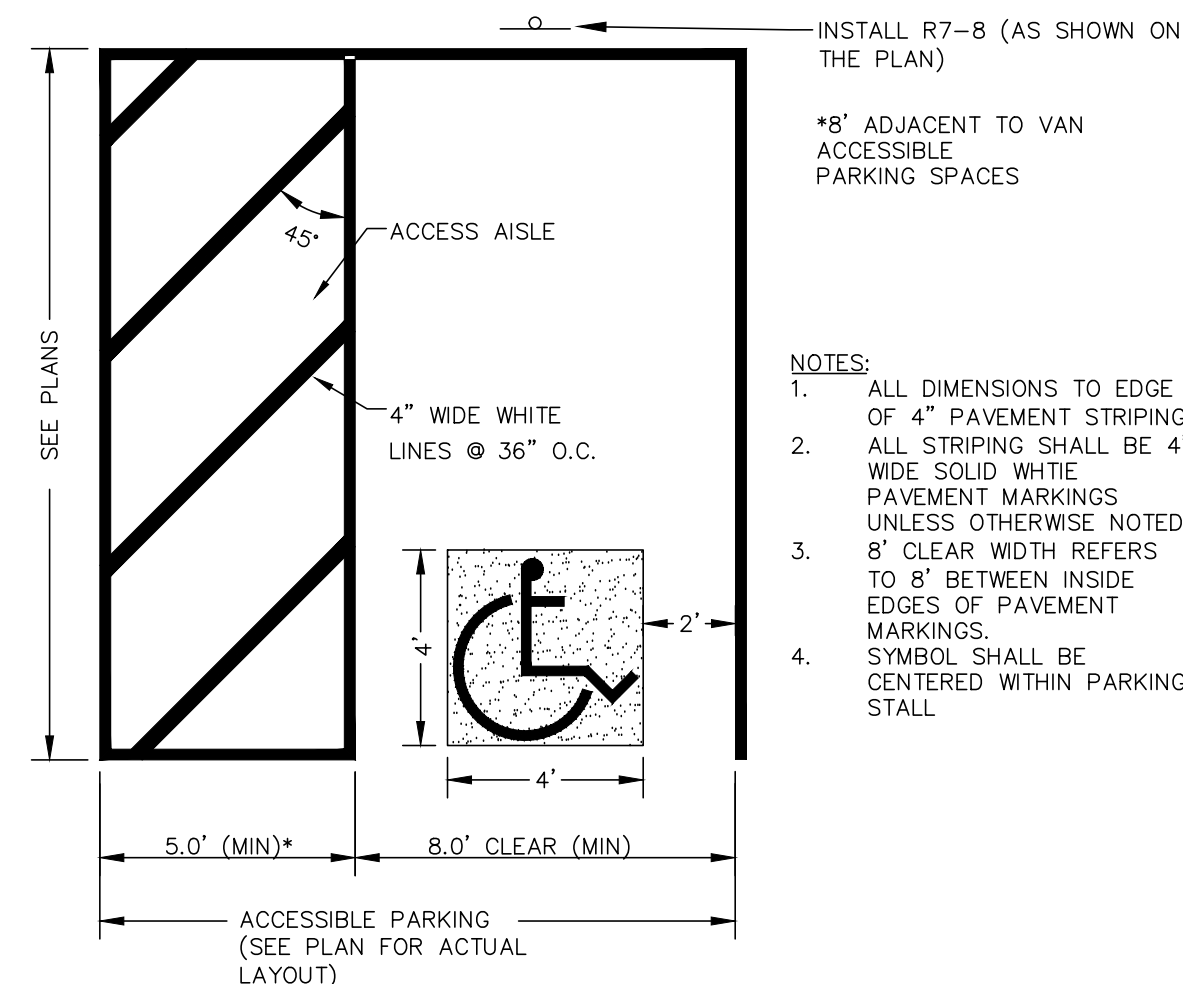
NOT TO SCALE



NOT TO SCALE



NOT TO SCALE



NOT TO SCALE

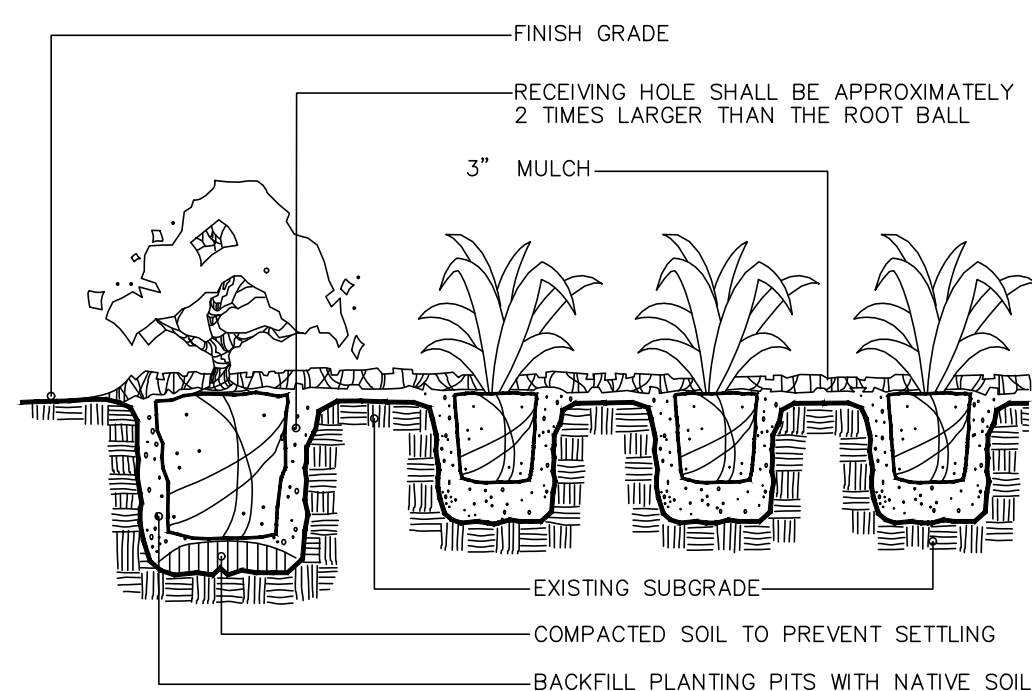
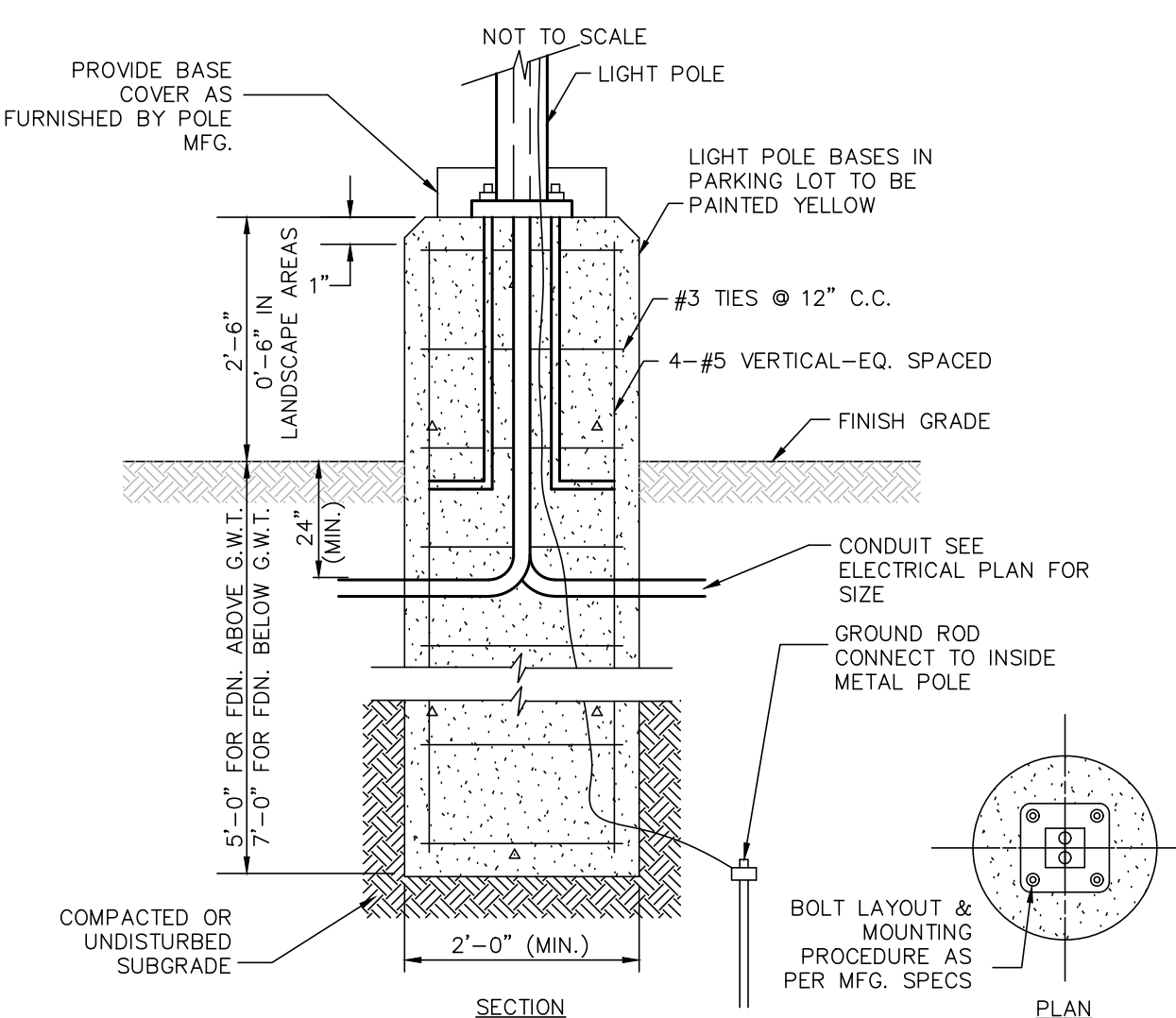


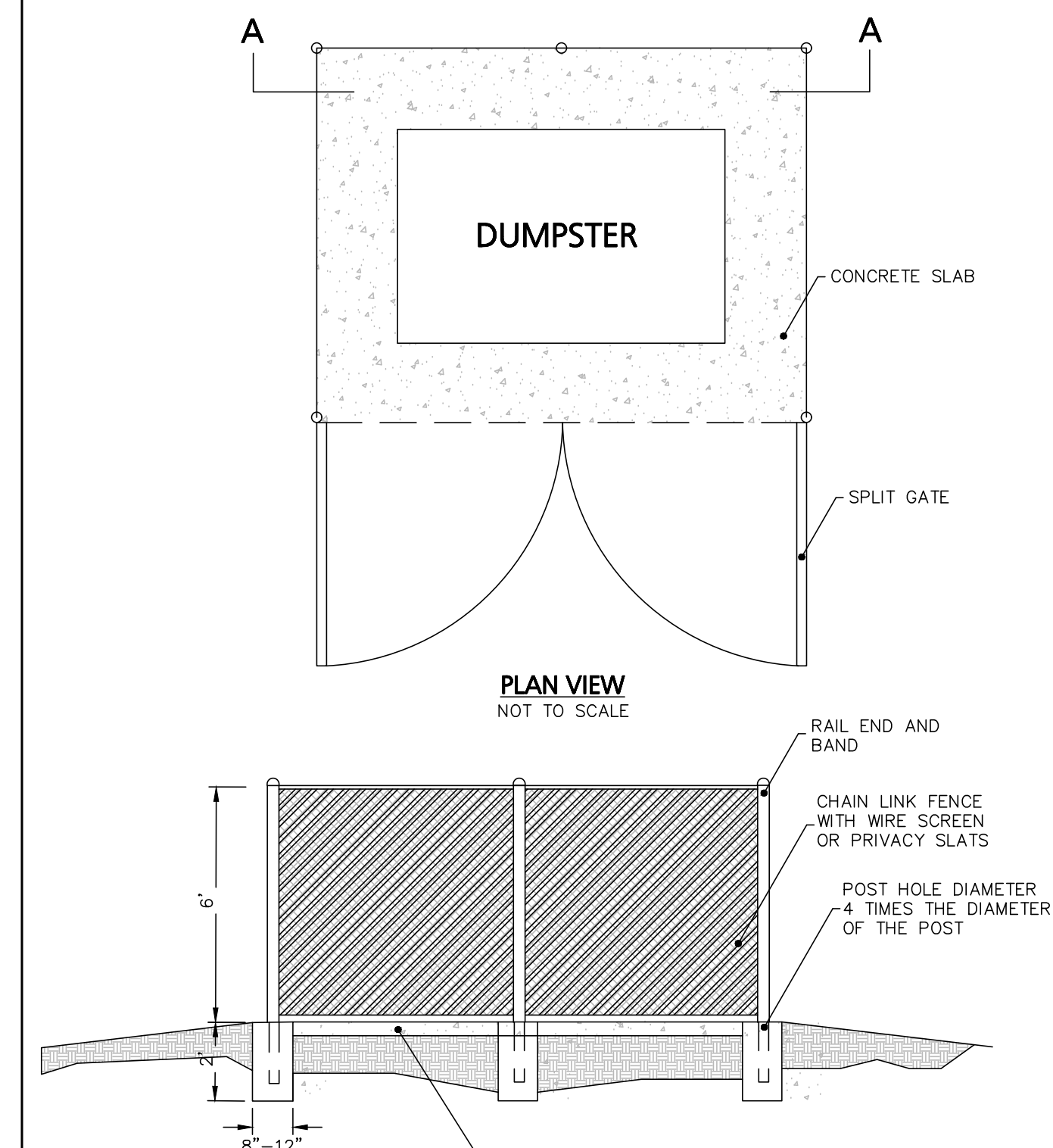
Diagram illustrating the correct method for planting a tree, showing the rootball, soil grade, mulch, and backfill material.

- 6" SOIL SAUCER TO HOLD WATER
- 3" MULCH
- FINISH GRADE
- REMOVE COVERINGS FROM THE TOP & 1/3 OF THE WAY DOWN THE SIDE OF THE ROOTBALL
- EXISTING SUBGRADE
- SEE PLANTING NOTES FOR BACKFILL MATERIAL
- COMPACT SOIL TO PREVENT SETTLING
- RECEIVING HOLE SHALL BE APPROXIMATELY 2 TIMES LARGER THAN ROOTBALL

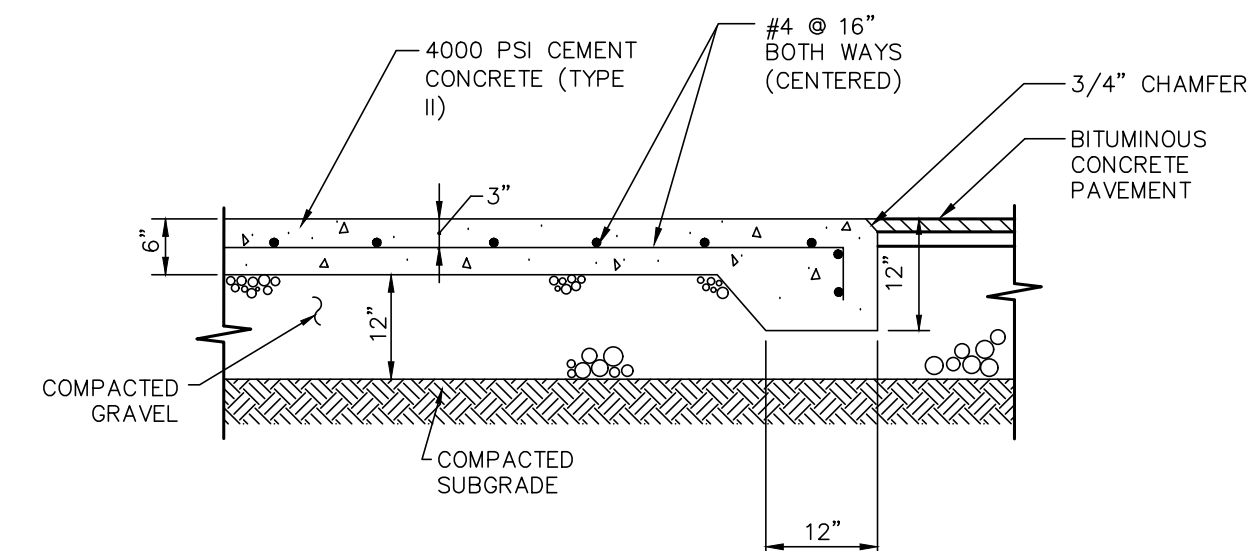
(TREES WITH 3" CAL. & SMALLER)
NOT TO SCALE



NOT TO SCALE

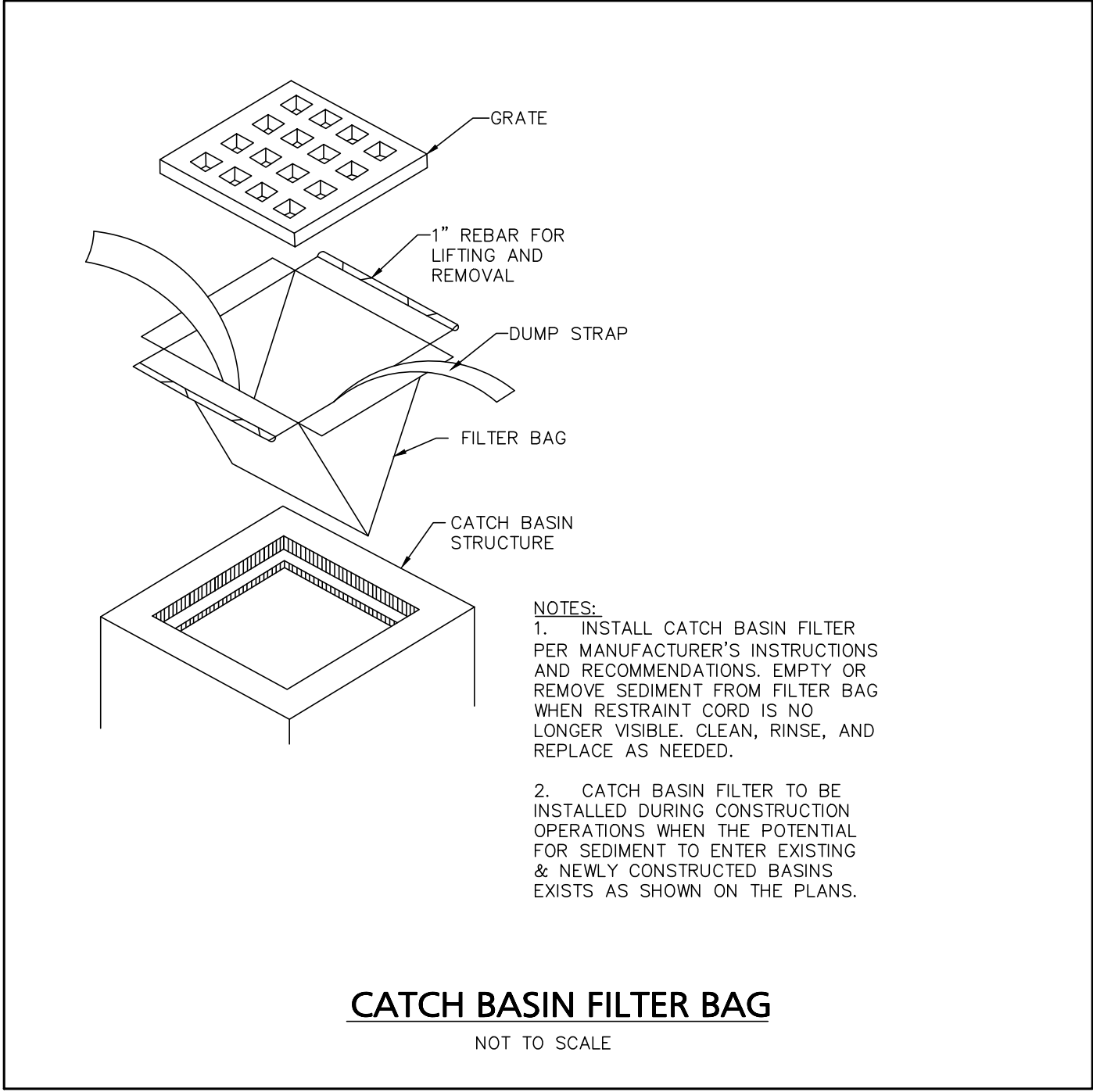
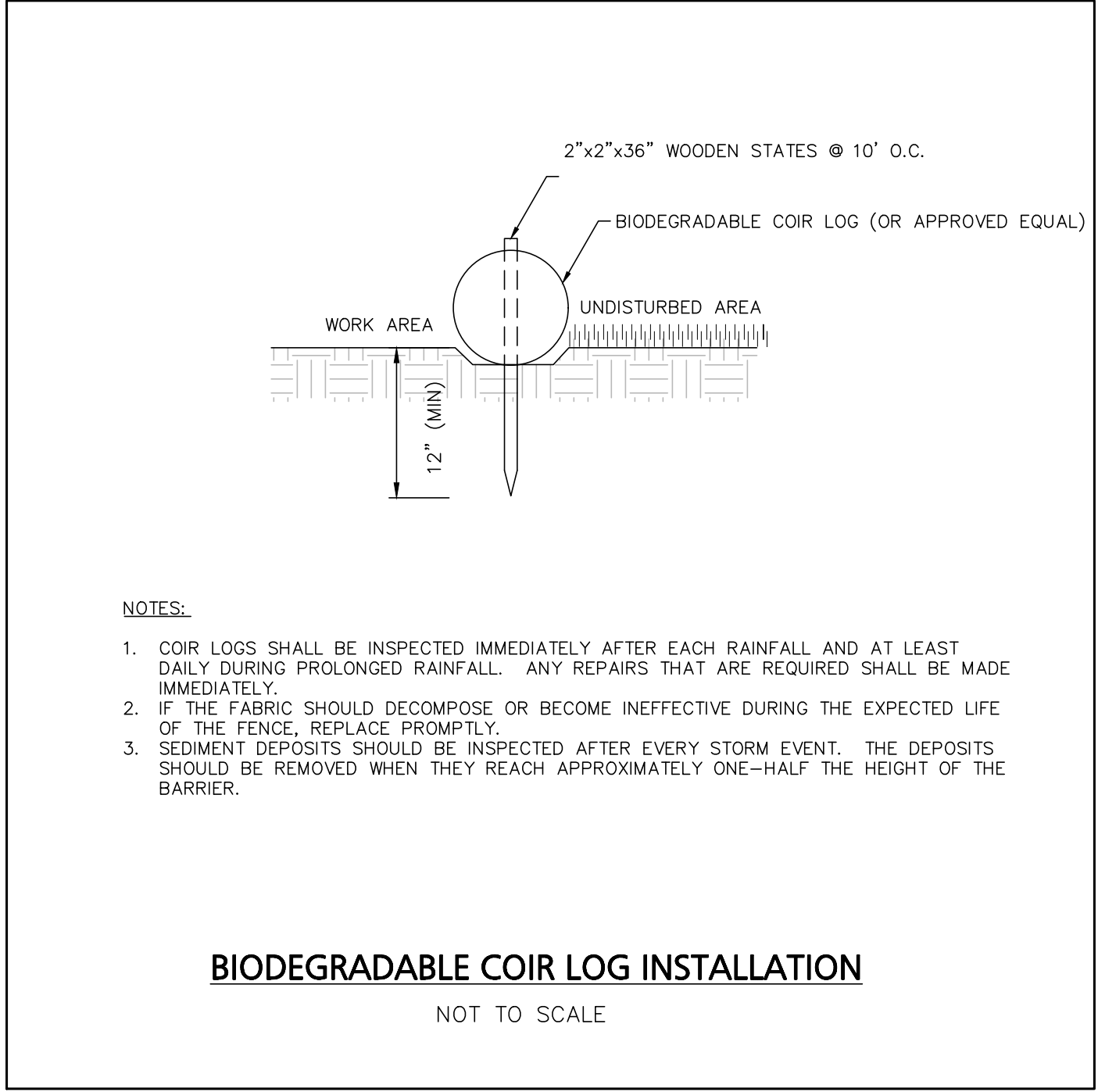
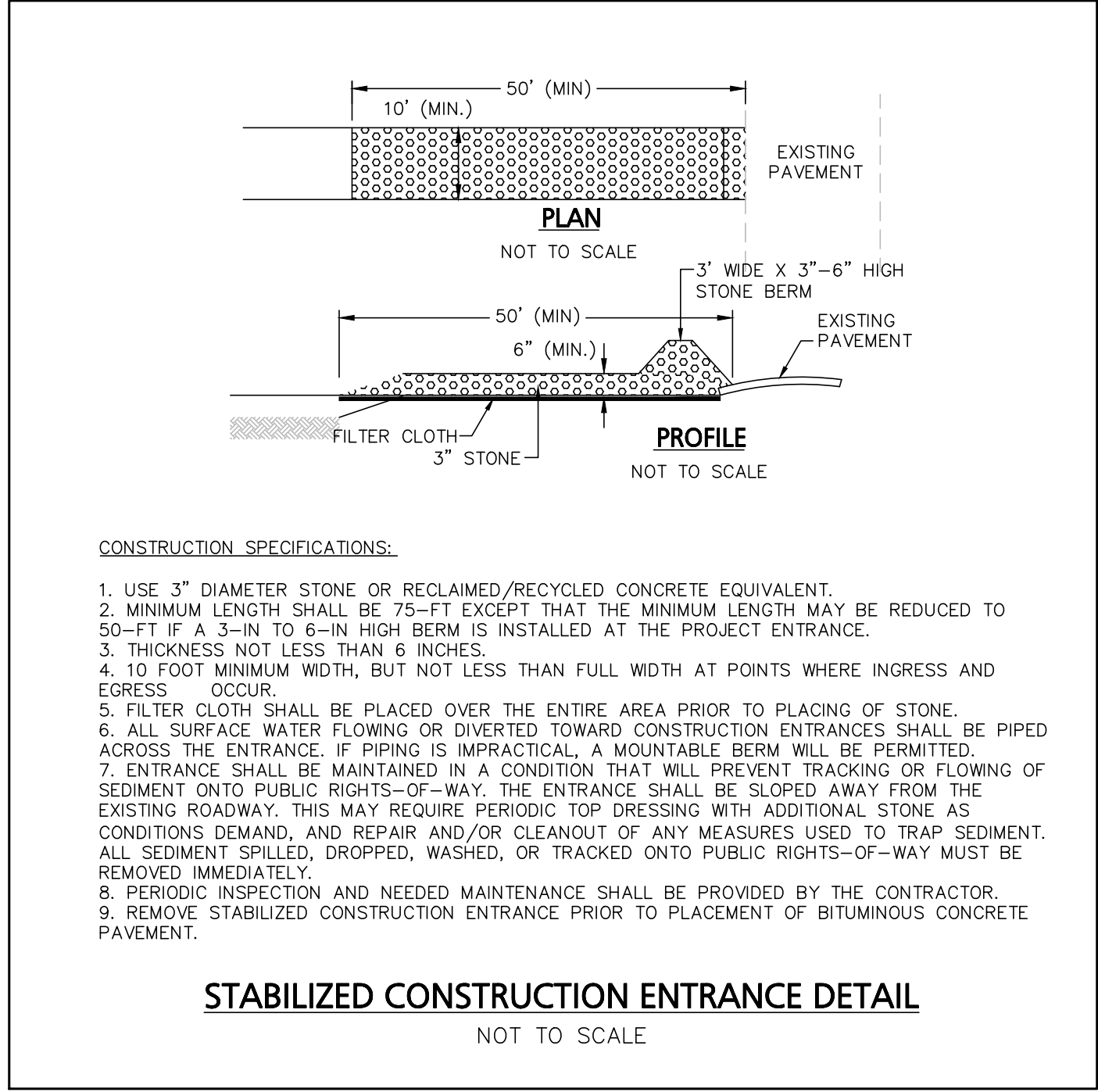
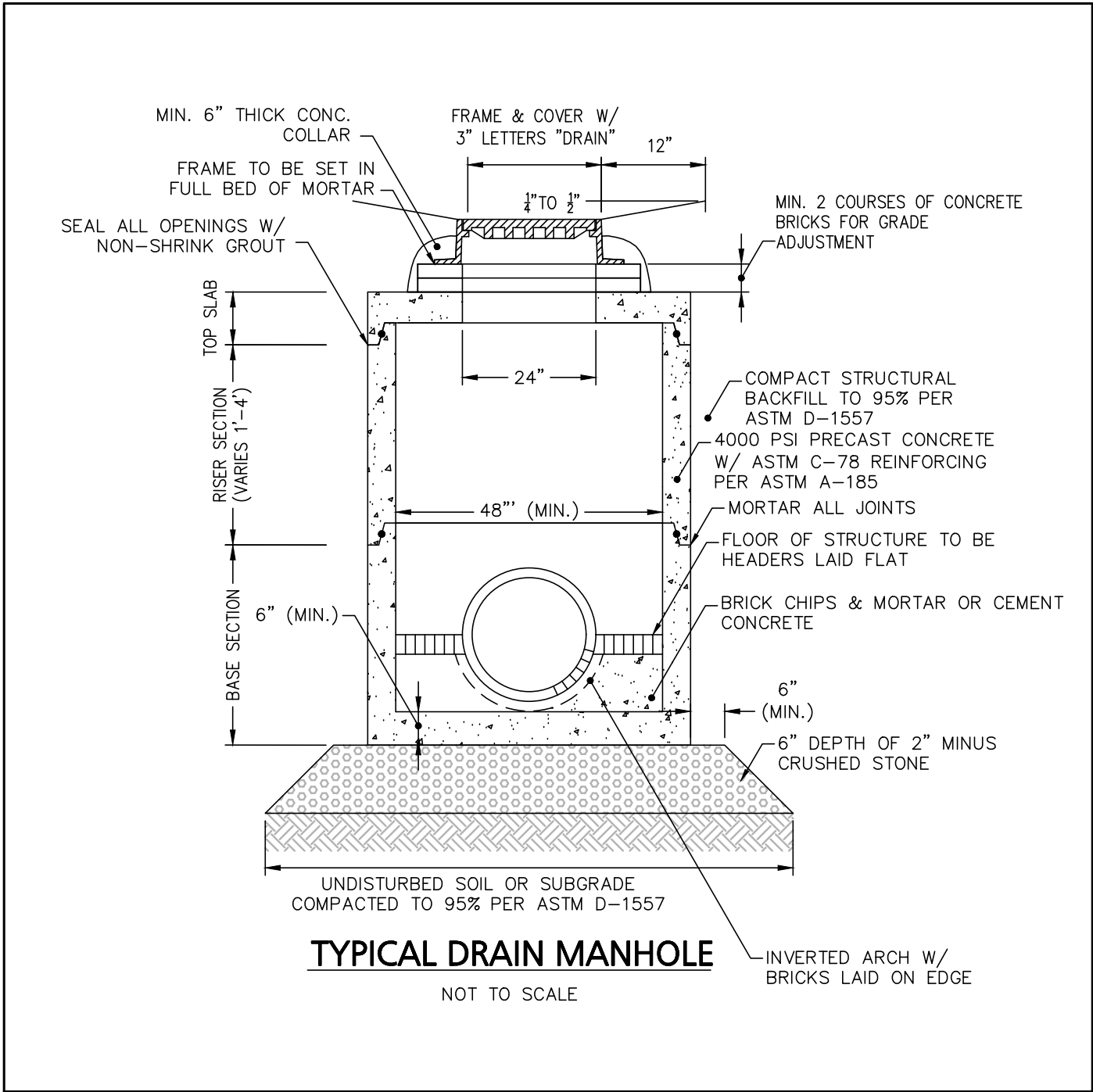
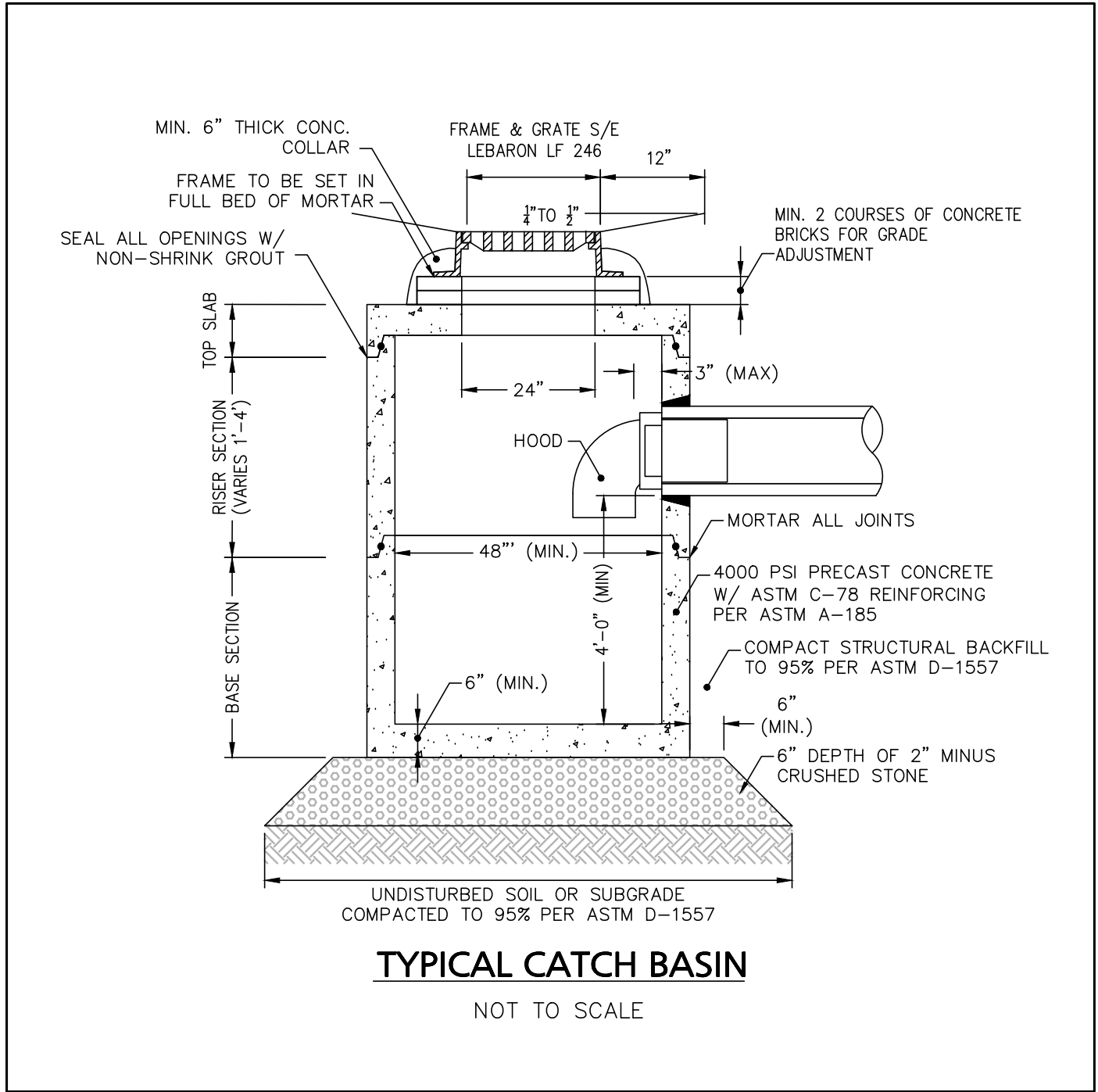
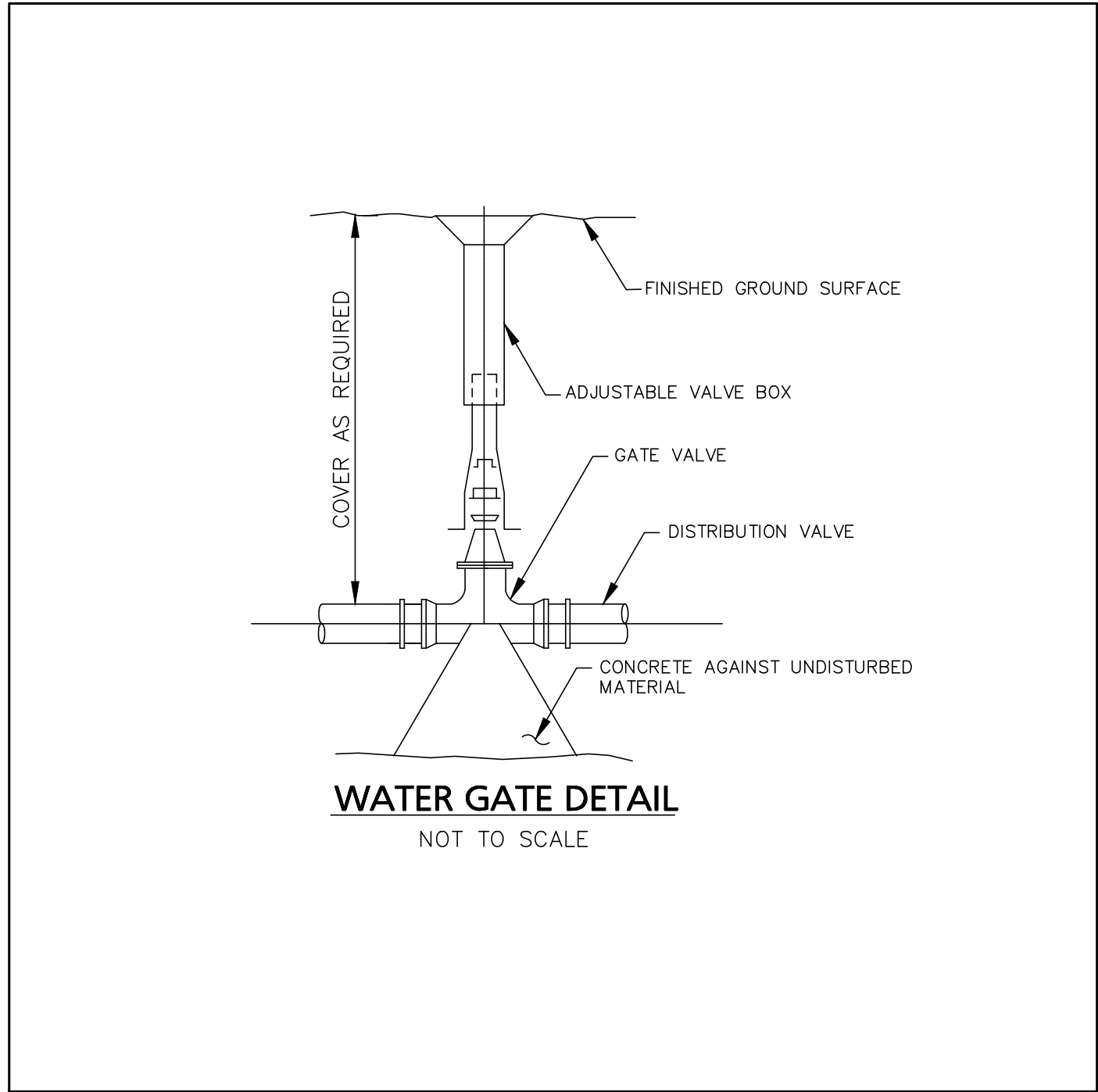
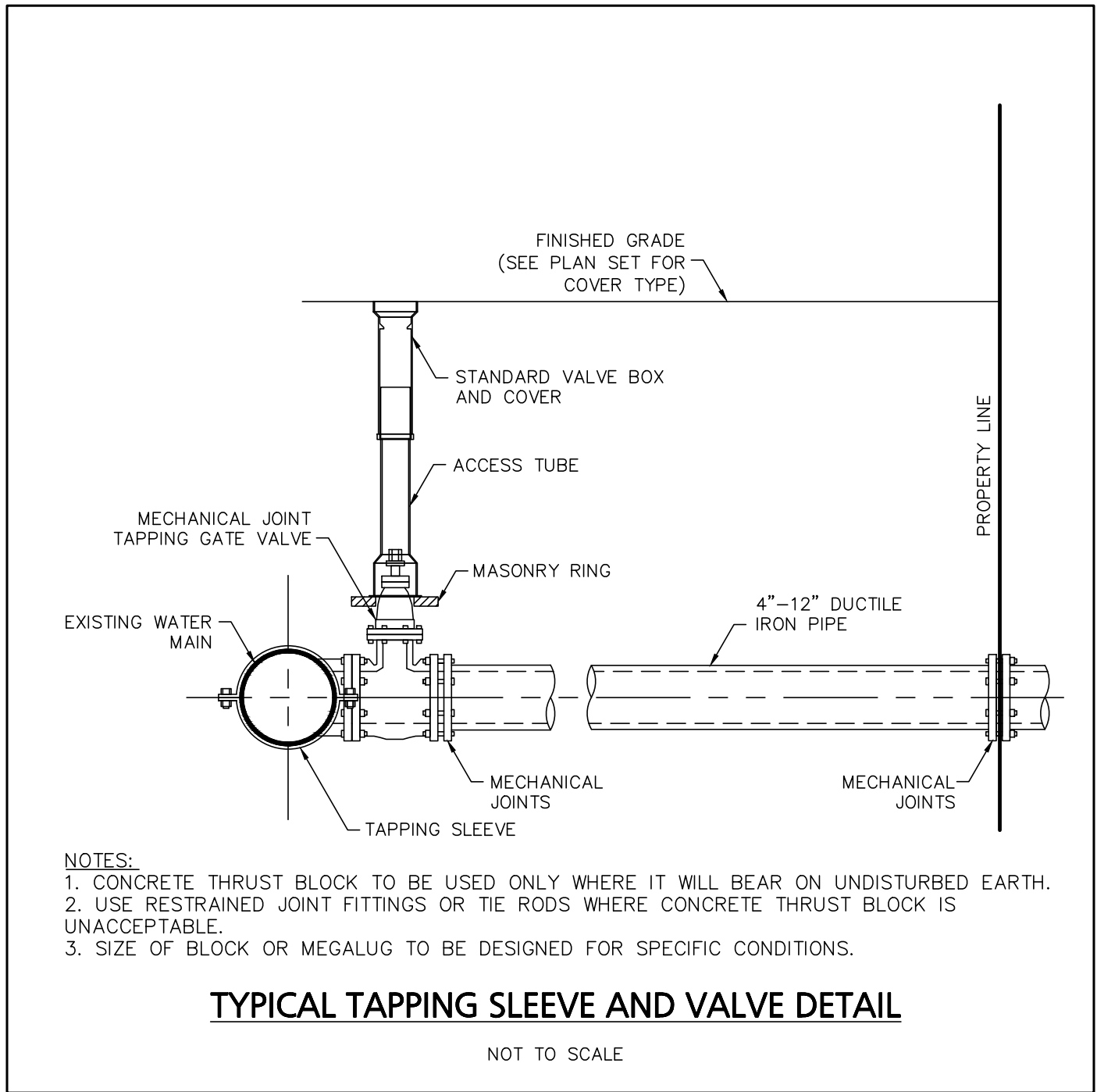
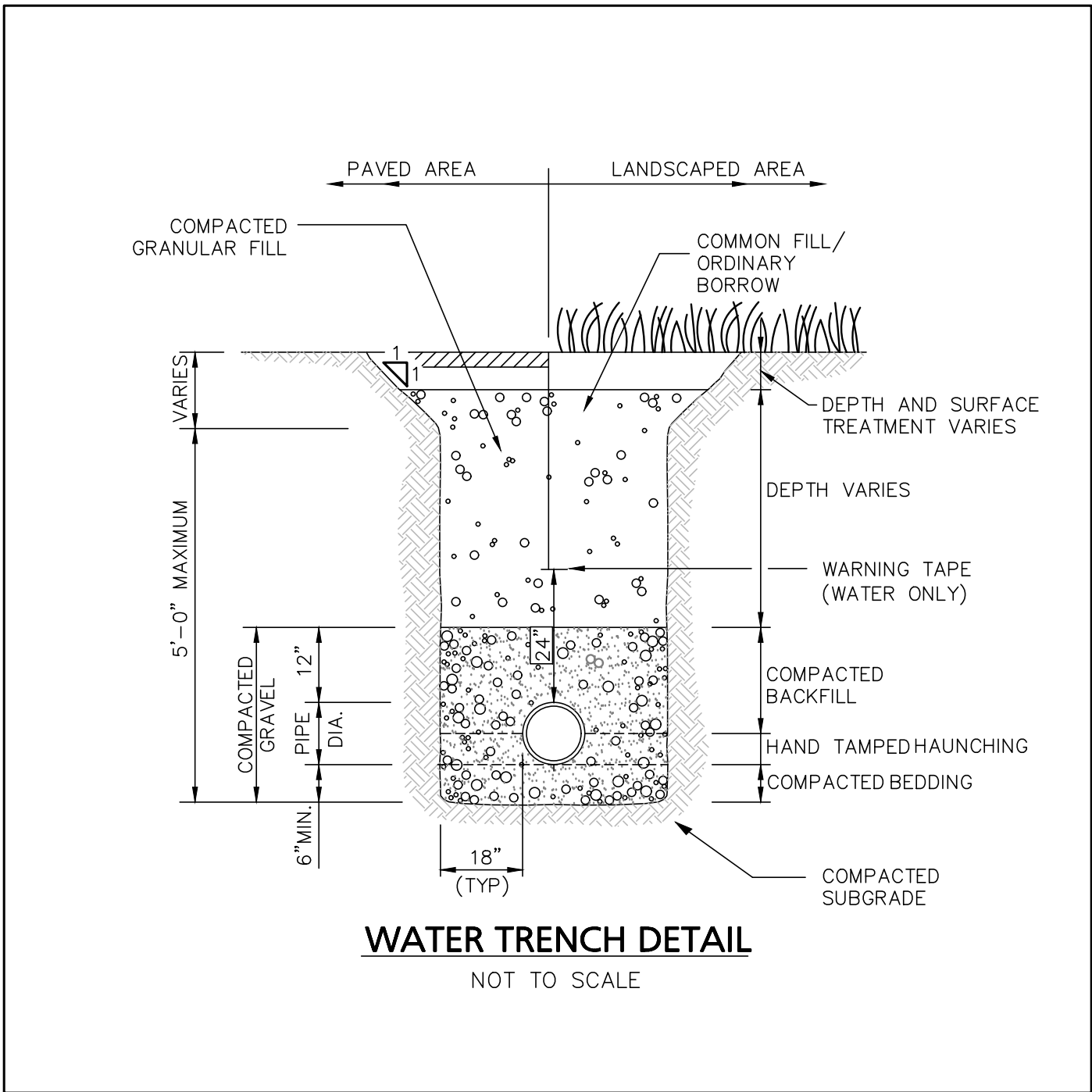
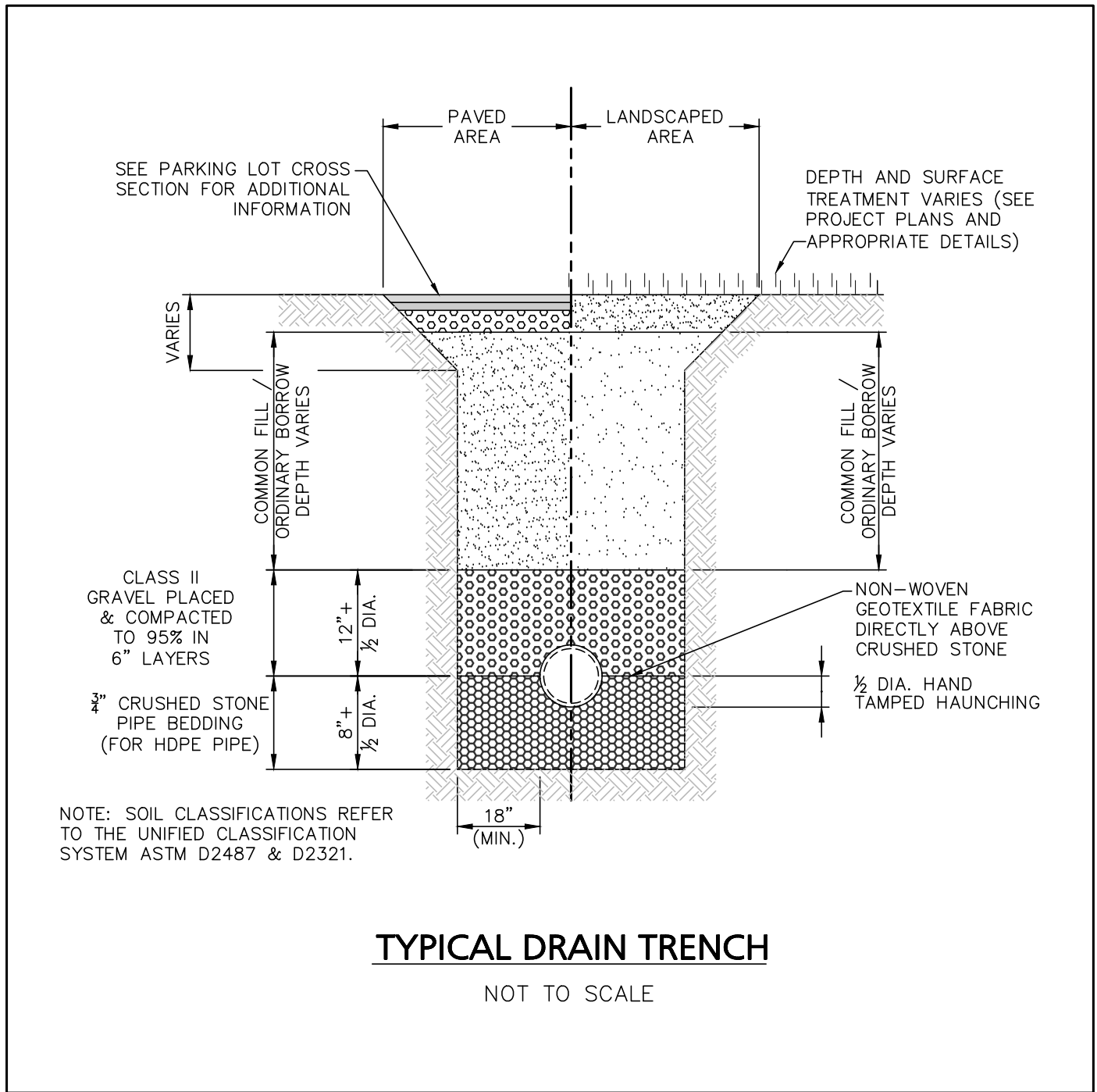
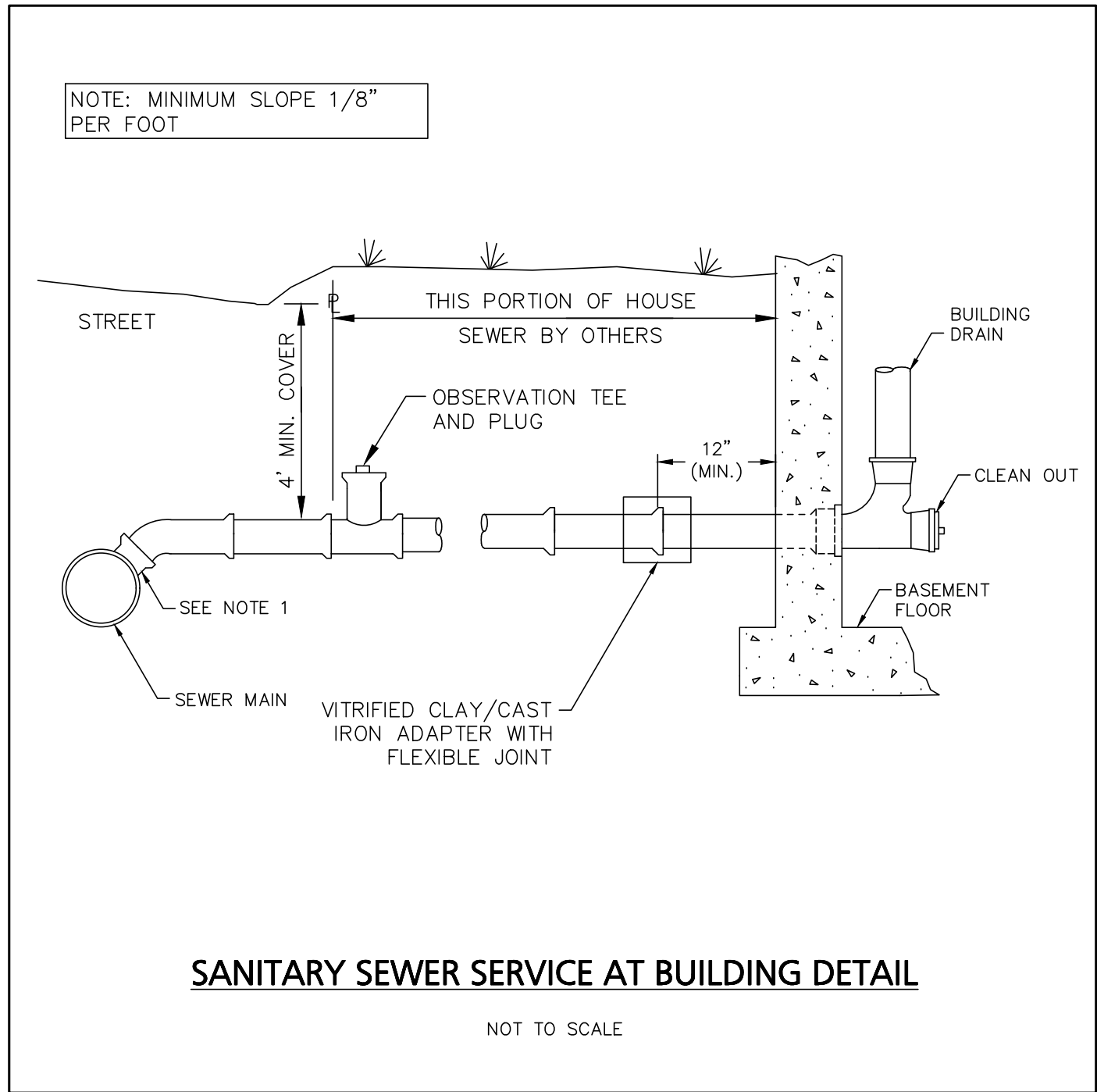


NOT TO SCALE



DUMPSTER PAD
NOT TO SCALE

DRAWING #:



GENERAL EROSION CONTROL NOTES

- PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICE AS SHOWN ON THE PLAN. ALL EROSION CONTROL DEVICES SHALL BE MAINTAINED IN EFFECTIVE CONDITION DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE TERMS AND CONDITIONS OF THE CONSTRUCTION GENERAL PERMIT ISSUED BY THE EPA AND THE STORMWATER POLLUTION PREVENTION PLAN SUBMITTED WITH THE PERMIT DOCUMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE TIMELY INSTALLATION, INSPECTION, MAINTENANCE, AND/OR REPLACEMENT OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES TO ENSURE PROPER OPERATION THROUGHOUT THE LIFE OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF PERMANENT MEASURES UNTIL CONSTRUCTION OF THE PROJECT IS COMPLETED OR UNTIL IT IS ACCEPTED BY THE OWNER. THE OWNER IS RESPONSIBLE THEREAFTER.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CLEAN ROADS, CONTROL DUST, AND TAKE ALL NECESSARY MEASURES TO ENSURE THAT THE SITE AND ALL ROADS BE MAINTAINED IN A MUD AND DUST-FREE CONDITION AT ALL TIMES THROUGHOUT THE LIFE OF THE CONTRACT. DUST CONTROL SHALL INCLUDE, BUT IS NOT LIMITED TO, WATER, CALCIUM CHLORIDE, AND/OR CRUSHED STONE OR COARSE GRAVEL.
- ALL PROPOSED CONSTRUCTION ENTRANCES SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS AND DETAILS. ALL VEHICLE TRAFFIC ENTERING OR EXITING THE WORK AREA SHALL PASS OVER THE CONSTRUCTION ENTRANCES TO REDUCE THE TRACKING OR FLOWING OF SEDIMENT ONTO THE SURROUNDING ROADWAYS.
- THE CONTRACTOR SHALL INSTALL ALL PERIMETER SEDIMENT CONTROL BARRIERS AS SHOWN ON THE SITE DEVELOPMENT PLANS. SILT FENCE SHALL ALSO BE INSTALLED AROUND ANY SOIL STOCKPILE AREAS.
- THE CONTRACTOR SHALL RESTORE DISTURBED AREAS AS CLOSELY AS POSSIBLE. AREAS DAMAGED DURING CONSTRUCTION SHALL BE RESEDED, RESEED, OR OTHERWISE RESTORED TO THEIR ORIGINAL STATE. TREES AND OTHER EXISTING VEGETATION SHALL BE RETAINED WHEREVER FEASIBLE.
- TEMPORARY VEGETATIVE COVER SHALL BE APPLIED TO ANY DISTURBED AREAS (INCLUDING SOIL STOCKPILE AREAS) THAT HAVE NOT YET REACHED FINISHED GRADE AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY CEASED, UNLESS THE ACTIVITY IS TO RESUME WITHIN TWENTY-ONE (21) DAYS. THE RECOMMENDED TEMPORARY SEEDING DATES ARE MARCH 1 TO JUNE 15 AND AUGUST 15 TO OCTOBER 1.
- PERMANENT VEGETATIVE COVER SHALL BE APPLIED TO ALL DISTURBED AREAS THAT HAVE REACHED FINISHED GRADE AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS PERMANENTLY CEASED. THE RECOMMENDED PERMANENT SEEDING DATES ARE APRIL 1 TO JUNE 15 AND AUGUST 15 TO OCTOBER 1.
- AREAS WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED SHOULD BE MULCHED IMMEDIATELY FOLLOWING SEEDING IN ADDITION TO AREAS WHICH CANNOT BE SEEDED WITHIN THE RECOMMENDED SEEDING DATES AND ANY SOIL STOCKPILE AREAS. TEMPORARY MULCHING SHOULD BE PERFORMED AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY CEASED UNLESS THE ACTIVITY IS TO RESUME WITHIN TWENTY-ONE (21) DAYS.
- STRAW OR HAY MULCH, WOOD FIBER MULCH, AND HYDROMULCH ARE RECOMMENDED. THE MATERIALS USED IN MULCHING SHALL CONFORM TO THE REQUIREMENTS LISTED IN SECTION M6.04.0 OF THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGES.
- IF SEEDING CANNOT BE COMPLETED IMMEDIATELY OR WITHIN THE RECOMMENDED SEEDING DATES, USE THE TEMPORARY MULCHING MEASURE TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
- ANY EXISTING OR PROPOSED CATCH BASINS THAT MAY BE SUBJECT TO SEDIMENTATION PROCESSES SHALL HAVE SILT SACKS INSTALLED TO PREVENT SEDIMENT FROM ENTERING THE PROPOSED STORM DRAINAGE SYSTEM PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED SITE. THE PROPER INLET PROTECTION DEVICES SHALL BE INSTALLED WHERE STORM DRAIN INLETS ARE TO BE MADE OPERATIONAL BEFORE PERMANENT STABILIZATION OF ANY DISTURBED DRAINAGE AREA.
- ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED IN ACCORDANCE WITH THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGES AND VOLUME TWO OF THE MASSACHUSETTS STORM WATER MANAGEMENT HANDBOOK.
- WASTE DISPOSAL: MATERIALS WHICH COULD BE A POTENTIAL SOURCE OF STORM WATER POLLUTION SUCH AS GASOLINE, DIESEL FUEL, HYDRAULIC OIL, ETC., SHALL BE STORED AT THE END OF EACH DAY IN A STORAGE TRAILER OR COVERED LOCATION AND TAKEN OFF-SITE AND PROPERLY DISPOSED OF. ALL TYPES OF WASTE GENERATED AT THIS SITE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH STATE LAW AND/OR REGULATIONS.
- GOOD HOUSEKEEPING: THE PROJECT SITE SHALL PROVIDE FOR THE MINIMIZATION OF EXPOSURE OF CONSTRUCTION DEBRIS (INCLUDING, BUT NOT LIMITED TO, INSULATION, WIRING, PAINTS AND PAINT CANS, SOLVENTS, WALL BOARD, ETC.) TO PRECIPITATION BY MEANS OF DISPOSAL AND/OR PROPER SHELTER OR COVER. IN ADDITION, CONSTRUCTION WASTE MUST BE PROPERLY DISPOSED OF IN ORDER TO AVOID EXPOSURE TO PRECIPITATION AT THE END OF EACH WORKING DAY.
- NO DUST WILL BE ALLOWED ON OR OFF WORK SITE. CONTRACTOR MUST CONDUCT CONTINUOUS EFFORT TO CONTROL DUST. LACK OF DUST CONTROL COULD CAUSE THE PROJECT TO BE STOPPED UNTIL ISSUES ARE RESOLVED.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTROL DUST AND TAKE ALL NECESSARY MEASURES TO ENSURE ALL ROADS ARE MAINTAINED IN A DUST FREE CONDITION AT ALL TIMES THROUGHOUT THE LIFE OF THE CONTRACT. REPETITIVE TREATMENTS SHOULD BE APPLIED AS NECESSARY.
- REPAIRS OR REPLACEMENT OF DRAINAGE STRUCTURES, RIP RAP CHANNELS, OR OTHER ELEMENTS OF THE FACILITY SHOULD BE DONE WITHIN 14 DAYS OF DEFICIENCY REPORTS. IF AN EMERGENCY SITUATION IS IMMINENT THEN REPAIR/REPLACEMENT MUST BE DONE IMMEDIATELY TO AVERT FAILURE OR DANGER TO NEARBY RESIDENTS.
- IMMEDIATELY PRIOR TO THE END OF CONSTRUCTION OR ACCEPTANCE BY THE OWNER, THE CONTRACTOR SHALL INSPECT ALL ON-SITE STORMWATER MANAGEMENT FACILITIES AND CLEAN AND FLUSH AS NECESSARY.
- THE GENERAL CONTRACTOR OR NOMINEE WILL BE THE PARTY RESPONSIBLE FOR THE INSPECTION, MAINTENANCE, AND REQUIRED DOCUMENTATION OF ALL STORM WATER STRUCTURES AS OUTLINED WITHIN.

DATE ISSUED: FEBRUARY 26, 2026

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PREPARED BY: TJS

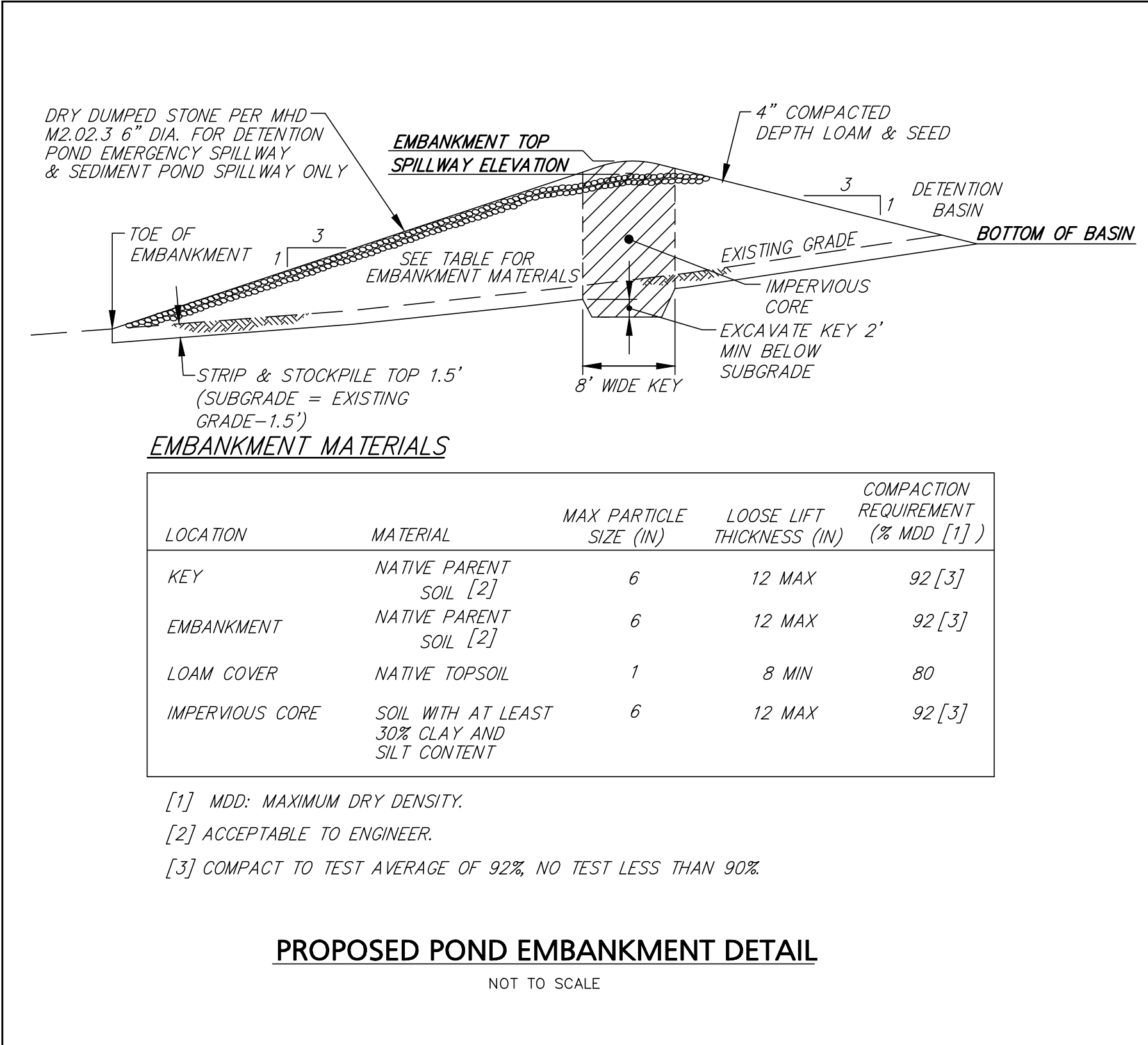
ISSUED FOR REVIEW February 26, 2026

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DRAWING TITLE: CONSTRUCTION DETAILS

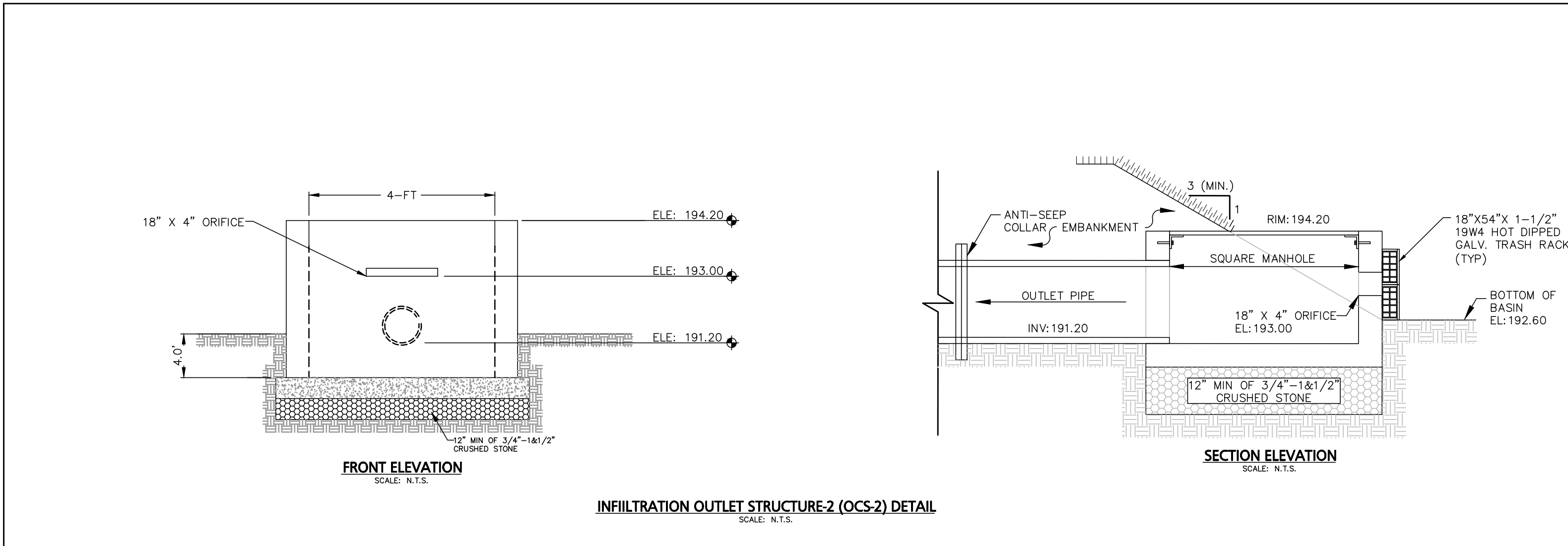
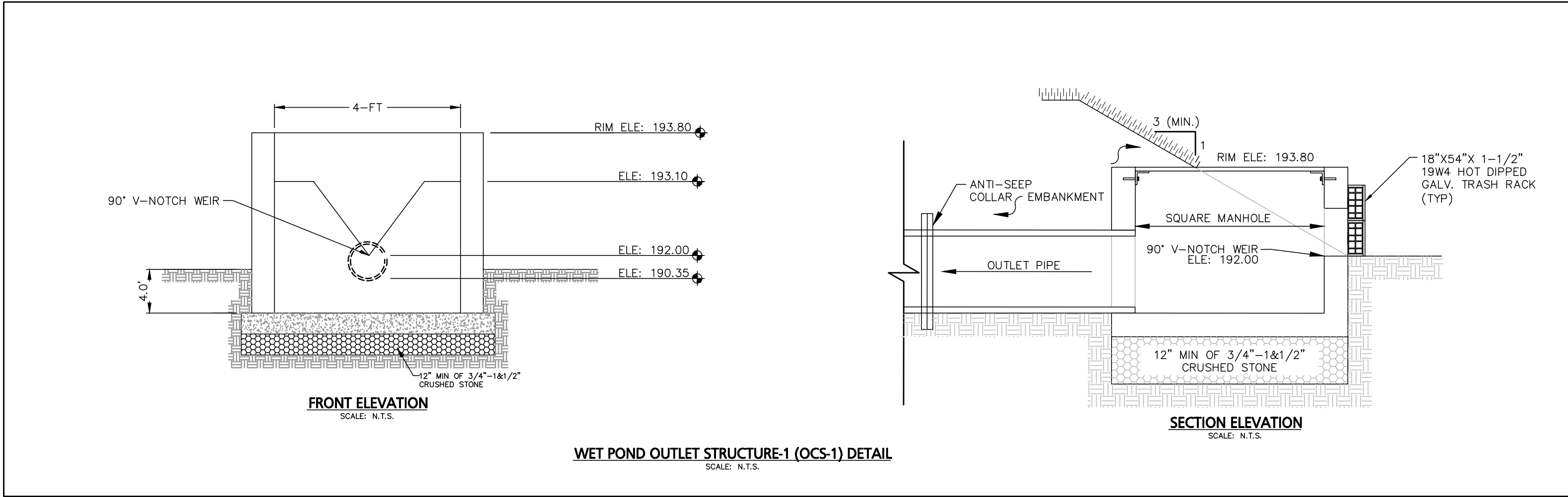
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- GENERAL UTILITY NOTES:**
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCHMARKS NECESSARY FOR THE WORK.
 2. WHERE SANITARY SEWERS CROSS WATER MAINS, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER MAIN. IF THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THIS REQUIREMENT, THE WATER MAIN SHALL BE RELOCATED TO PROVIDE THIS SEPARATION OR CONSTRUCTED WITH MECHANICAL-JOINT PIPE FOR A DISTANCE OF 10 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. WHENEVER IT IS IMPOSSIBLE TO OBTAIN VERTICAL SEPARATION AS STIPULATED ABOVE, BOTH THE WATER MAIN AND THE SEWER MAIN SHALL BE ENCASED IN CONCRETE FOR A MINIMUM DISTANCE OF 10 FEET FROM THE CROSSING POINT OF THE OTHER PIPE AS MEASURED NORMALLY FROM ALL POINTS ALONG THE PIPE.
 3. ALL UTILITY WORK PERFORMED WITHIN RIGHT-OF-WAY SHALL BE PERFORMED BY A CONTRACTOR LICENSED BY THE DPW AND OBTAIN A PERMIT FOR SUCH WORK FROM THE DPW, IF NEEDED.
 4. ALL DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.
 5. A DUST EMISSION CONTROL PLAN SHALL BE DEVELOPED AND IMPLEMENTED BY THE CONTRACTOR IF CONDITIONS WARRANT.
 6. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL UTILITIES AS SHOWN ON THESE PLANS IN ACCORDANCE WITH THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY CONSTRUCTION SHALL CONFORM TO THE APPROPRIATE UTILITY COMPANY STANDARDS FOR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING SPECIFICATIONS OF MATERIALS AND INSTALLATION PROCEDURES AND INSTALL IN ACCORDANCE WITH APPLICABLE REGULATIONS.
 7. THE CONTRACTOR IS RESPONSIBLE TO CONTACT AND DETERMINE, COORDINATE AND SCHEDULE ALL NECESSARY INSPECTIONS AND MONITORING WITH ALL APPROPRIATE UTILITY COMPANIES.
 8. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ANY PERMITS AND/OR CONNECTION FEES REQUIRED TO PERFORM THE WORK.
 9. ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE PROJECT BENCHMARK AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE RESTORATION AND CLEAN UP UPON COMPLETION OF THE PROJECT.
 11. WATER AND SEWER TESTING TO CONFORM TO LOCAL DPW REGULATIONS.

- GENERAL CONSTRUCTION SEQUENCING:**
- DESCRIBED BELOW ARE THE MAJOR CONSTRUCTION ACTIVITIES. THEY ARE PRESENTED IN THE ORDER (OR SEQUENCE) THEY ARE EXPECTED TO BEGIN, BUT EACH ACTIVITY WILL NOT NECESSARILY BE COMPLETED BEFORE THE NEXT BEGINS. ALSO, THESE ACTIVITIES COULD OCCUR IN A DIFFERENT ORDER IF NECESSARY TO MAINTAIN ADEQUATE EROSION AND SEDIMENTATION CONTROL. ALL ACTIVITIES AND THE TIMEFRAME (BEGINNING AND ENDING DATES) SHALL BE RECORDED BY THE GENERAL CONTRACTOR:
1. CONTRACTOR TO REVIEW ALL LOCAL, STATE AND FEDERAL PERMITS.
 2. REVIEW AND CERTIFY THE STORMWATER POLLUTION PREVENTION PLAN.
 3. DELINEATE THE LIMIT OF THE TREE CLEARING OPERATIONS.
 4. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
 5. CUT AND CLEAR TREES WITHIN THE AREA OF DISTURBANCE.
 6. PLACE REMAINING EROSION CONTROL MEASURES PRIOR TO ANY EARTH MOVING OPERATIONS.
 7. CONSTRUCT INFILTRATION AND WET POND.
 8. BEGIN ROUGH GRADING AND EARTHWORK OPERATIONS.
 9. CONSTRUCT REMAINING DRAINAGE IMPROVEMENTS. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER GRADING. ALL DISTURBED AREAS SHALL BE STABILIZED NO LATER THAN 72-HOURS AFTER CONSTRUCTION ACTIVITIES CEASE. IF EARTHWORK TEMPORARILY CEASES ON A PORTION OF OR ON THE ENTIRE SITE, AND WILL NOT RESUME WITHIN 21-DAYS, THE AREA SHALL BE STABILIZED. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP-RAP HAS BEEN INSTALLED; OR
D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
 10. INSTALL ALL UNDERGROUND UTILITIES.
 11. CONSTRUCT PARKING LOT ACCORDING TO THE PLAN. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
 12. CONSTRUCT BUILDINGS AND ASSOCIATED INFRASTRUCTURE.
 12. SURFACE TREATMENT OF ALL DISTURBED AREAS NOT PAVED OR OTHERWISE LANDSCAPED SHALL BE TREATED WITH 4" OF LOAM AND SEED.
 13. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL MEASURES CONSISTENT WITH THE PROCEDURE AND SCHEDULE OUTLINED IN THE STORMWATER POLLUTION PREVENTION PLAN.
 14. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
 15. REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE ALL AREAS ARE STABILIZED WITH A SUITABLE STAND OF GRASS, PAVEMENT OR COMPACTED GRAVELS.

- GENERAL CONSTRUCTION NOTES**
1. THE CONTRACTOR SHALL VERIFY THE PROPOSED LAYOUT WITH ITS RELATIONSHIP TO THE EXISTING SITE SURVEY. THE CONTRACTOR SHALL ALSO VERIFY ALL DIMENSIONS, SITE CONDITIONS, AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES BEFORE COMMENCING OR PROCEEDING WITH CONSTRUCTION.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, INSPECTIONS, BONDS, ETC. AND OTHER APPROVAL RELATED ITEMS. NO CONSTRUCTION SHALL COMMENCE UNTIL SUCH PERMITS HAVE BEEN SECURED.
 3. METHODS AND MATERIALS USED IN THE CONSTRUCTION OF IMPROVEMENTS FOR THIS PROJECT SHALL CONFORM TO THE CURRENT CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE MASSDOT AND THE LOCAL SUBDIVISION REGULATIONS.
 4. CONTRACTOR TO CONFIRM AND VERIFY THE VALIDITY, LOCATION, MATERIAL, AND AVAILABILITY TO USE EXISTING UTILITIES ON OR NEAR THE PROJECT SITE PROPERTY. CONTRACTOR TO LOCATE EXISTING UTILITIES AND CONFIRM SAID UTILITIES WITH ALL APPLICABLE MUNICIPALITIES AND UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION. ONCE UTILITIES HAVE BEEN CONFIRMED IN THE FIELD BY CONTRACTOR AND VERIFIED BY APPLICABLE MUNICIPALITY AND UTILITY COMPANY AND CONNECTION HAS BEEN APPROVED BY ENTITY, ONLY THEN SHALL THE CONTRACTOR CONSTRUCT AND UTILIZE THESE UTILITIES. CONTRACTOR TO IMMEDIATELY INFORM THE ENGINEER OF RECORD OF ANY DEVIATIONS TO PLANS.
 5. THE CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE ANY EXISTING UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF NECESSARY. THE EXISTENCE AND/OR LOCATION OF UTILITIES SHOWN ON THESE PLANS MAY BE ONLY APPROXIMATELY CORRECT AND THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN HEREON AND ANY OTHER EXISTING UTILITIES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING, AT HIS EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
 6. THE CONTRACTOR SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION AT LEAST THREE WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS, PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION. ALL WATER, GAS, SEWER AND OTHER UTILITIES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
 7. RELOCATION OF ANY UTILITIES SHALL BE AT THE OWNER'S EXPENSE AND COMPLETED WITH THE UTILITY WORK. THE OWNER SHALL BE NOTIFIED AS TO THE RELOCATIONS REQUIRED PRIOR TO THE START OF CONSTRUCTION.
 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING, WITH MATCHING MATERIALS, ANY PAVEMENT, WALKS, CURBS, ETC. THAT MUST BE CUT OR THAT ARE DAMAGED DURING CONSTRUCTION.
 9. AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE.
 10. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE DOCUMENTS AND SUBSEQUENT ISSUED PLAN REVISIONS. ANY DEVIATIONS FROM THESE DOCUMENTS SHALL REQUIRE NOTIFICATION TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTING ANY CHANGE. THE CONTRACTOR WILL BE WORKING AT HIS OR HER OWN RISK.
 11. ALL WATER AND SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF HAVERHILL RULES AND REGULATIONS



07/22/2026 REV. PER CEI COMMENTS

05/11/2026 REV. PER CEI COMMENTS

DATE DESCRIPTION

REVISIONS

OWNER / APPLICANT:
**STERLING GOLF
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NEWTON, MA 02458

PROJECT:

890 NORTH BROADWAY

HAVERHILL, MA 01832

DATE ISSUED: FEBRUARY 26, 2026

PROJECT #: 24-10594

PREPARED BY: TJS

ISSUED FOR REVIEW
APR 12, 2026

PROFESSIONAL ENGINEER FOR CIVIL DESIGN
CONSULTANTS, INC.

**CIVIL
DESIGN**
CONSULTANTS, INC.

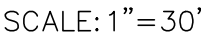
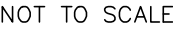
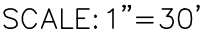
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DRAWING TITLE:

**CONSTRUCTION
DETAILS**

DRAWING #:

D-3



- NOT TO SCALE

DRAWING #