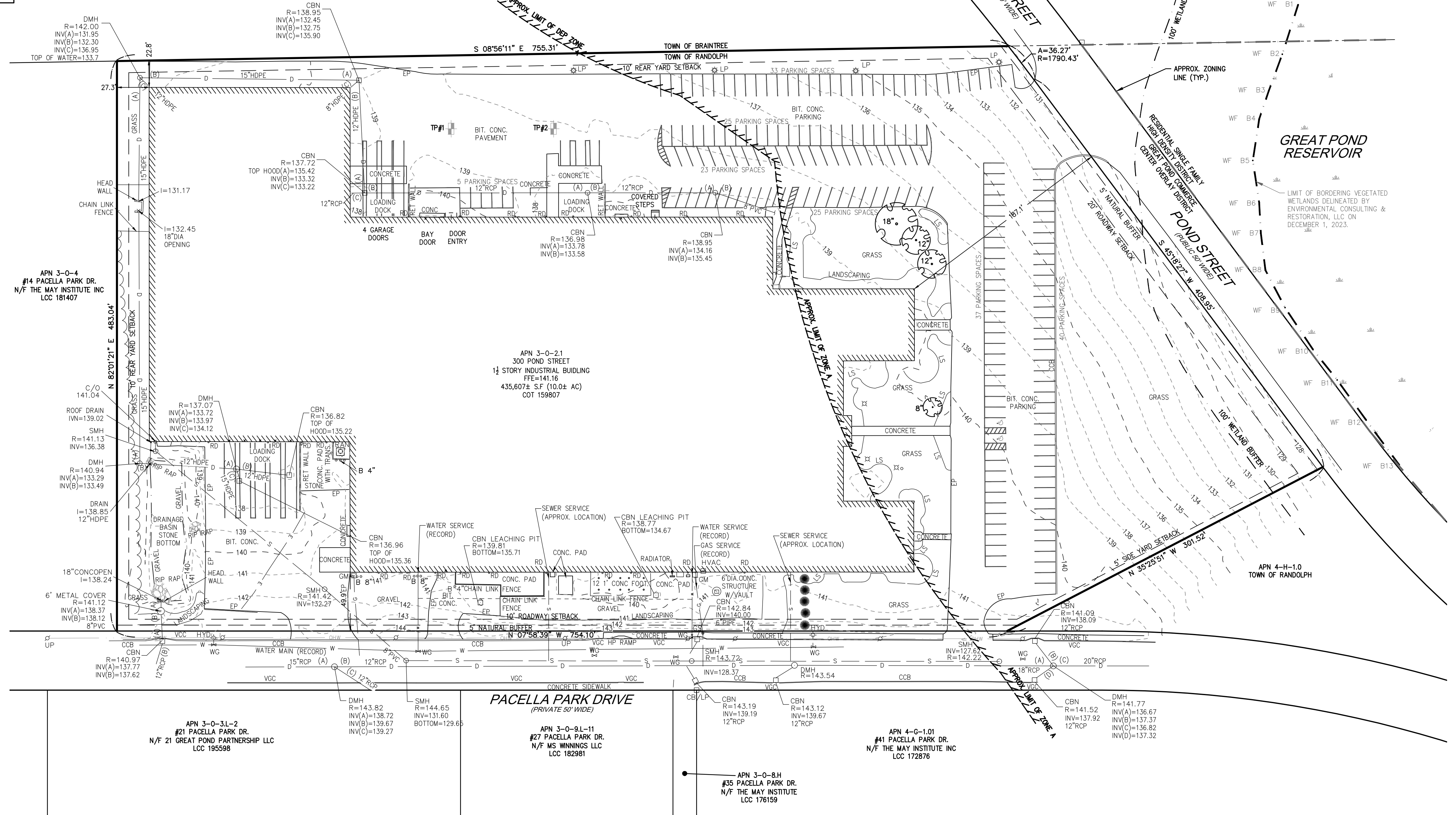


LOCUS MAP  
Not to Scale



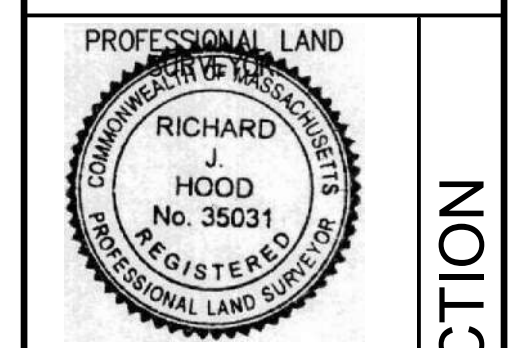
LEGEND

- SURVEY SYMBOLS**
- CB/DH □ CONCRETE BOUND WITH DRILL HOLE
  - SB □ STONE BOUND
  - SB/DH □ STONE BOUND
- UTILITY SYMBOLS**
- TRANSFORMER
  - ≡ WATER GATE
  - EMH ELECTRIC MANHOLE
  - SMH SEWER MANHOLE
  - DMH DRAIN MANHOLE
  - TMH TELEPHONE MANHOLE
  - CBN DRAINAGE CATCH BASIN
  - ⊙ HYDRANT
  - ⊙ UTILITY POLE
  - ⊙ B BOLLARD
  - ⊙ SIGN
- LINE DESIGNATORS**
- W — WATER MAIN
  - OHW — OVERHEAD WIRES
  - G — GAS LINE
  - WS — WATER SERVICE
  - E — UNDERGROUND ELECTRIC
  - D — STORM DRAIN LINE
  - S — SANITARY SEWER LINE
  - — DRAINAGE SWALE
  - X — CHAIN LINK FENCE
- ABBREVIATIONS**
- FFE FIRST FLOOR ELEVATION
  - FFC BITUMINOUS CONCRETE PAVEMENT
  - CBP CAPE COD BERM
  - EP EDGE OF PAVEMENT
  - BC BITUMINOUS CONCRETE CURB
  - RET WALL RETAINING WALL
  - CONC. CONCRETE
  - VCC VERTICAL GRANITE CURB
  - VCC VERTICAL CONCRETE CURB
  - FOOT CONCRETE FOOTING

REV	DATE	DESCRIPTION	BY	APP



**EXISTING CONDITIONS PLAN**  
300 POND STREET  
RANDOLPH, MASSACHUSETTS



OWNERS/APPLICANT:  
**EMERSON - SWAN FLEXCON**  
300 POND STREET  
RANDOLPH, MASSACHUSETTS

**NOT FOR CONSTRUCTION**

- SURVEY NOTES:**
- LOCUS IS SHOWN AS PARCEL NUMBER 03-0-2.1 ON THE TOWN OF RANDOLPH ASSESSORS MAPS. DEED TO LOCUS IS RECORDED IN THE NORFOLK COUNTY REGISTRY OF DEEDS LAND COURT AT CERTIFICATE #159807.
  - THIS SURVEY WAS MADE ON THE GROUND IN NOVEMBER OF 2022 AND UPDATED IN SEPTEMBER AND DECEMBER OF 2023 BY MCKENZIE ENGINEERING GROUP, INC.
  - ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.
  - WETLAND RESOURCE AREAS WERE DELINEATED BY ENVIRONMENTAL CONSULTING & RESTORATION, LLC ON DECEMBER 1, 2023.
  - LOCUS IS SITUATED IN ZONE X AS SHOWN ON F.I.R.M. No 250210209E, EFFECTIVE 7/17/2012.
  - LOCUS IS NOT LOCATED IN A DEP ZONE 2 OR TOWN OF RANDOLPH AQUIFER PROTECTION DISTRICT ZONE. A PORTION OF THE SITE IS LOCATED WITHIN A DEP ZONE A SURFACE WATER SUPPLY PROTECTION AREA.
  - UTILITY INFORMATION SHOWN HEREON IS DERIVED FROM ABOVE GROUND OBSERVED EVIDENCE IN CONJUNCTION WITH DIG SAFE MARKINGS AND RECORD PLANS. THE LAND SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE LAND SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. BEFORE CONSTRUCTION CALL DIG SAFE SYSTEMS, INC. AT 1-888-344-7233.
  - PLAN REFERENCES:  
#953 OF 1963  
#393 OF 1927 (POND STREET LAYOUT)  
#256 OF 1923 (WEST STREET LAYOUT)

**ZONING NOTES:**  
GREAT POND COMMERCE CENTER OVERLAY DISTRICT

**MINIMUM SETBACKS:**

FRONT YARD:	REQUIRED:	20' FROM POND STREET 10' ALL OTHER ROADWAYS	EXISTING:	187.1' FROM POND STREET 49.9' FROM PACELLA PARK DRIVE
SIDE YARD:	REQUIRED:	5'	EXISTING:	22.8'
REAR YARD:	REQUIRED:	10'	EXISTING:	27.3'

**AREA:**

FRONTAGE:	REQUIRED:	120'	EXISTING:	408.95'
LOT SIZE:	REQUIRED:	60000	EXISTING:	435607 (10 AC)
BUILDING COVERAGE:	REQUIRED:	50% (217804 S.F.)	EXISTING:	41% 180624 S.F.
IMPERVIOUS AREA:	REQUIRED:	25% (108902 S.F.)	EXISTING:	29% 127286 S.F.
OPEN SPACE:	REQUIRED:	25% (108902 S.F.)	EXISTING:	29% 127697 S.F.

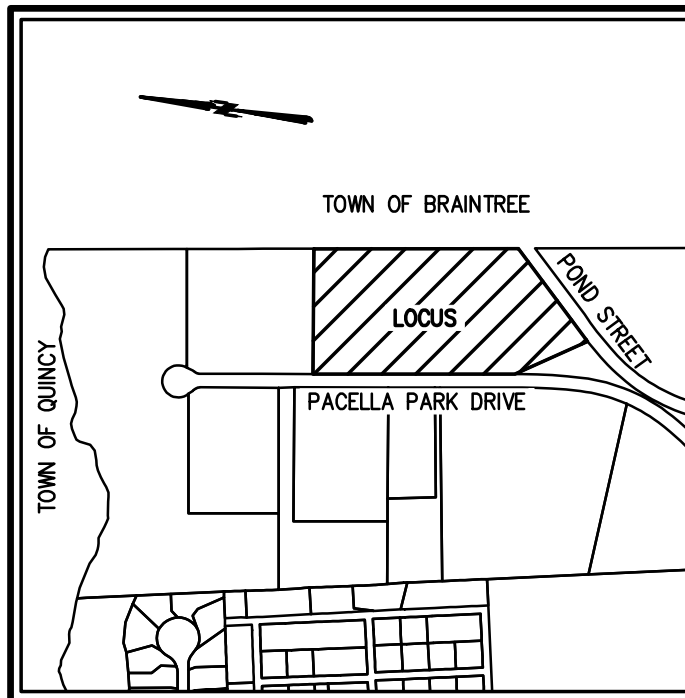
I HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ON-THE-GROUND INSTRUMENT SURVEY CONDUCTED BY MCKENZIE ENGINEERING GROUP, INC. IN NOVEMBER OF 2022 AND UPDATED IN SEPTEMBER, DECEMBER OF 2023.

*Richard J. Hood*      *of 12/24*  
RICHARD J. HOOD, PLS      DATE

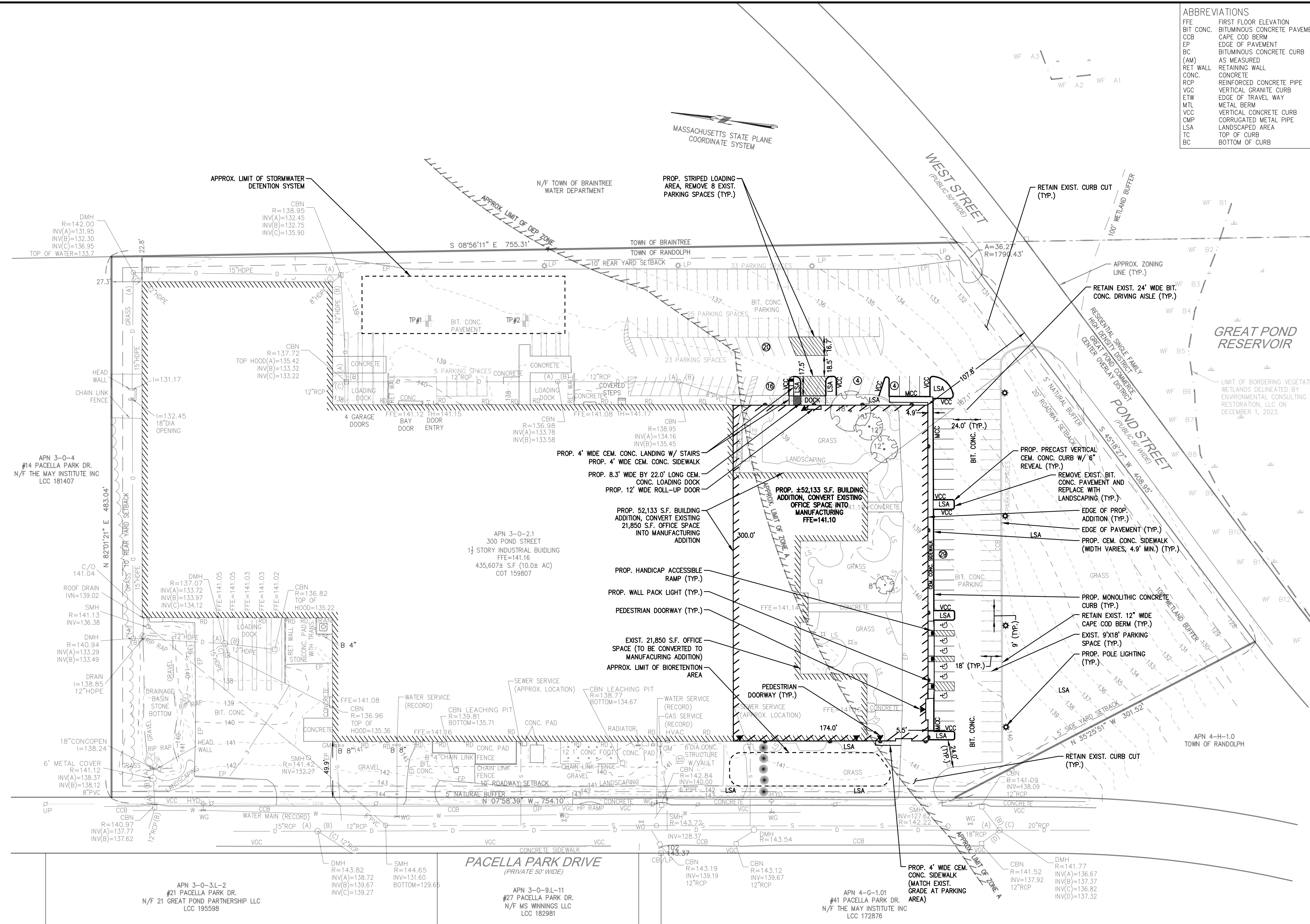


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DRAWN BY:	BDB/AL
DESIGNED BY:	—
CHECKED BY:	RTLS
APPROVED BY:	RJH
DATE:	26APR24
SCALE:	1"=50'
PROJECT NO.:	222-209
DWG. TITLE:	<b>EXISTING CONDITIONS PLAN</b>
DWG. NO.:	<b>EX-1</b>



LOCUS MAP  
Not to Scale



ABBREVIATIONS

FFE	FIRST FLOOR ELEVATION
BIT CONC.	BITUMINOUS CONCRETE PAVEMENT
CCB	CAPE COD BERM
EP	EDGE OF PAVEMENT
BC	BITUMINOUS CONCRETE CURB
(AM)	AS MEASURED
RET WALL	RETAINING WALL
CONC.	CONCRETE
RCP	REINFORCED CONCRETE PIPE
VCC	VERTICAL GRANITE CURB
ETW	EDGE OF TRAVEL WAY
MTL	METAL BERM
VCC	VERTICAL CONCRETE CURB
CMP	CORRUGATED METAL PIPE
LSA	LANDSCAPED AREA
TC	TOP OF CURB
BC	BOTTOM OF CURB

LEGEND

UTILITY SYMBOLS

- REBAR
- CONCRETE BOUND WITH DRILL HOLE
- STONE BOUND
- STONE BOUND

LINE DESIGNATORS

- WATER MAIN
- OVERHEAD WIRES
- GAS LINE
- WATER SERVICE
- UNDERGROUND ELECTRIC
- STORM DRAIN LINE
- SANITARY SEWER LINE
- DRAINAGE SWALE
- CHAIN LINK FENCE

LAND USAGE TABLES

RANDOLPH ZBL SEC. 200-16.1 - GREAT POND COMMERCE CENTER OVERLAY DISTRICT ARTICLE VI - AREA REGULATIONS

CRITERIA	INDUSTRIAL DISTRICT (ID) & GREAT POND COMMERCE CENTER OVERLAY DISTRICT (GPCOOD)			
	REQUIRED (GPCOOD)	REQUIRED (ID)	EXISTING	PROPOSED
MIN. LOT SIZE	60,000 S.F.	20,000 S.F.	435,607 S.F.	NO CHANGE
MIN. LOT FRONTAGE	120 FT.	75 FT.	445.2 FT.	NO CHANGE
BUILDING HEIGHT	6 STORIES/78 FT. 2 STORIES/25 FT.	4 STORIES/50 FT.	1.5 STORIES	34 FT. 2 STORIES
MIN. FRONT YARD DEPTH	20 FT./10 FT. <sup>(6)</sup>	50 FT.	187.1 FT.	107.8 FT.
MIN. SIDE YARD DEPTH	5 FT./40 FT. <sup>(6)</sup>	6 FT.	22.8 FT.	NO CHANGE
MIN. REAR YARD DEPTH	10 FT./40 FT. <sup>(6)</sup>	15 FT.	27.3 FT.	NO CHANGE
BUILDING LOT COVERAGE	50%	60%	41.4%	48.4%
IMPERVIOUS LOT COVERAGE	25%	25%	29.9%	27.8%
GREEN AREA OPEN SPACE	10%	15%	28.7%	23.8%

TABLE NOTES

- SEC. 200-16.1.F.3.1 - REQUIRED SETBACK DISTANCE: 20 FT. FROM THE SIDE LINE OF POND STREET; 10 FT. FROM THE SIDE LINE OF ANY OTHER STREET.
- SEC. 200-16.1.F.3.2 - REQUIRED SIDE YARD WIDTH: 5 FT.; 40 FT. IF SIDE YARD ABUTS A RESIDENTIAL DISTRICT WITHIN THE TOWN OF RANDOLPH OR A BUILDING LOCATED WITHIN THE TOWN OF RANDOLPH AND USED PRIMARILY FOR RESIDENTIAL PURPOSES.
- SEC. 200-16.1.F.3.3 - REQUIRED REAR YARD DEPTH: 10 FT.; 40 FT. IF REAR YARD ABUTS A RESIDENTIAL DISTRICT WITHIN THE TOWN OF RANDOLPH OR A BUILDING LOCATED WITHIN THE TOWN OF RANDOLPH AND USED PRIMARILY FOR RESIDENTIAL PURPOSES.
- SEC. 200-16.1.F.4 - BUILDINGS IN THE GREAT POND COMMERCE CENTER OVERLAY DISTRICT WHICH ARE LOCATED ON LOTS NOT DIRECTLY ABUTTING ANY PORTION OF A RESIDENTIALLY ZONED PREMISE WITHIN THE TOWN OF RANDOLPH MAY CONTAIN A MAX. OF 6 STORIES AND SHALL NOT EXCEED 78 FT. IN HEIGHT. BUILDINGS WHICH ARE LOCATED ON LOTS WHICH DIRECTLY ABUT ANY PORTION OF A RESIDENTIALLY ZONED PREMISE WITHIN RANDOLPH MAY CONTAIN 2 STORIES AND SHALL NOT EXCEED 25 FT. IN HEIGHT.
- SEC. 200-16.1.F.6 - BUFFER STRIPS. A MINIMUM FIVE-FOOT-WIDE BUFFER STRIP SHALL BE MAINTAINED ALONG THE ENTIRE FRONTAGE OF ALL LOTS WITHIN THE GREAT POND COMMERCE CENTER OVERLAY DISTRICT, EXCEPTING ONLY THOSE PORTIONS OF THE LOT FRONTAGE WHICH MUST BE PAVED FOR NORMAL VEHICULAR ACCESS. SAID BUFFER SHALL BE MAINTAINED AS A PLANTING AREA AND SHALL BE LANDSCAPED WITH GRASS, TREES, SHRUBS AND/OR OTHER NATURAL MATERIALS. A MINIMUM FORTY-FOOT-WIDE BUFFER STRIP SHALL BE MAINTAINED ALONG THE ENTIRE SIDE AND REAR BOUNDARY LINES OF ALL LOTS WITHIN THE GREAT POND COMMERCE CENTER OVERLAY DISTRICT WHERE THE SIDE OR REAR YARD OF THE LOT IN QUESTION ABUTS A RESIDENTIAL DISTRICT WITHIN THE TOWN OF RANDOLPH OR A BUILDING LOCATED WITHIN THE TOWN OF RANDOLPH WHICH IS USED FOR RESIDENTIAL PURPOSES. OTHERWISE, NO BUFFER REQUIREMENT SHALL APPLY IN THE SIDE AND/OR REAR YARD AREAS.

ZBL ARTICLE IV - OFF-STREET PARKING REGULATIONS

COMPONENT	REQUIRED SPACES	EXISTING CONDITIONS	PROPOSED CONDITIONS	TOTAL SITE
OFFICE	1 SPACE PER 200 S.F.	13,000 S.F. / 200 S.F. = 65 SPACES	21,850 S.F. / 200 S.F. = 109 SPACES	38 MANUFACTURING SPACES + 65 OFFICE SPACES = 103 SPACES
WAREHOUSE/INDUSTRIAL	1 SPACE PER 2 EMPLOYEES	150 MANUFACTURING / WAREHOUSE EMPLOYEES (2 SHIFTS, 75 PER SHIFT) = 75 EMP. X 1 SPACE/2 EMP. = 38 SPACES	0 ADDITIONAL EMPLOYEES ASSOCIATED W/ PROPOSED WAREHOUSE ADDITION	
				12 SPACE REDUCTION (188 TOTAL EXISTING CONDITION) (176 TOTAL PROPOSED CONDITION) (103 SPACES REQUIRED)

PARKING NOTES:

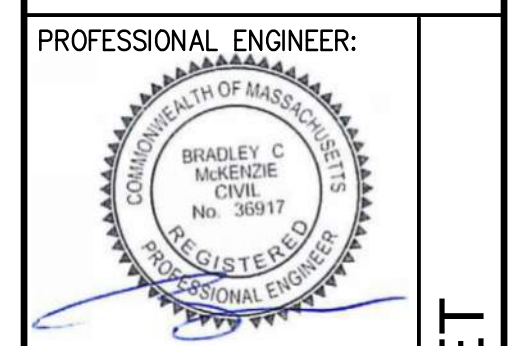
- 176 PARKING SPACES INCLUDE 6 AAB ACCESSIBLE 9' X 18' WITH 1 - 8' X 18' ACCESS AREA (VAN ACCESSIBLE SPACE) (521 CMR: ARCHITECTURAL ACCESS BOARD) ACCESSIBLE SPACES REQUIRED = 6 (151-200 PARKING SPACES)



REV	DATE	DESCRIPTION	BY	APP
1	7/16/24	PLANNING BOARD REV.	ESS	BCM
2	7/29/24	PLANNING BOARD MTG.	ESS	BCM

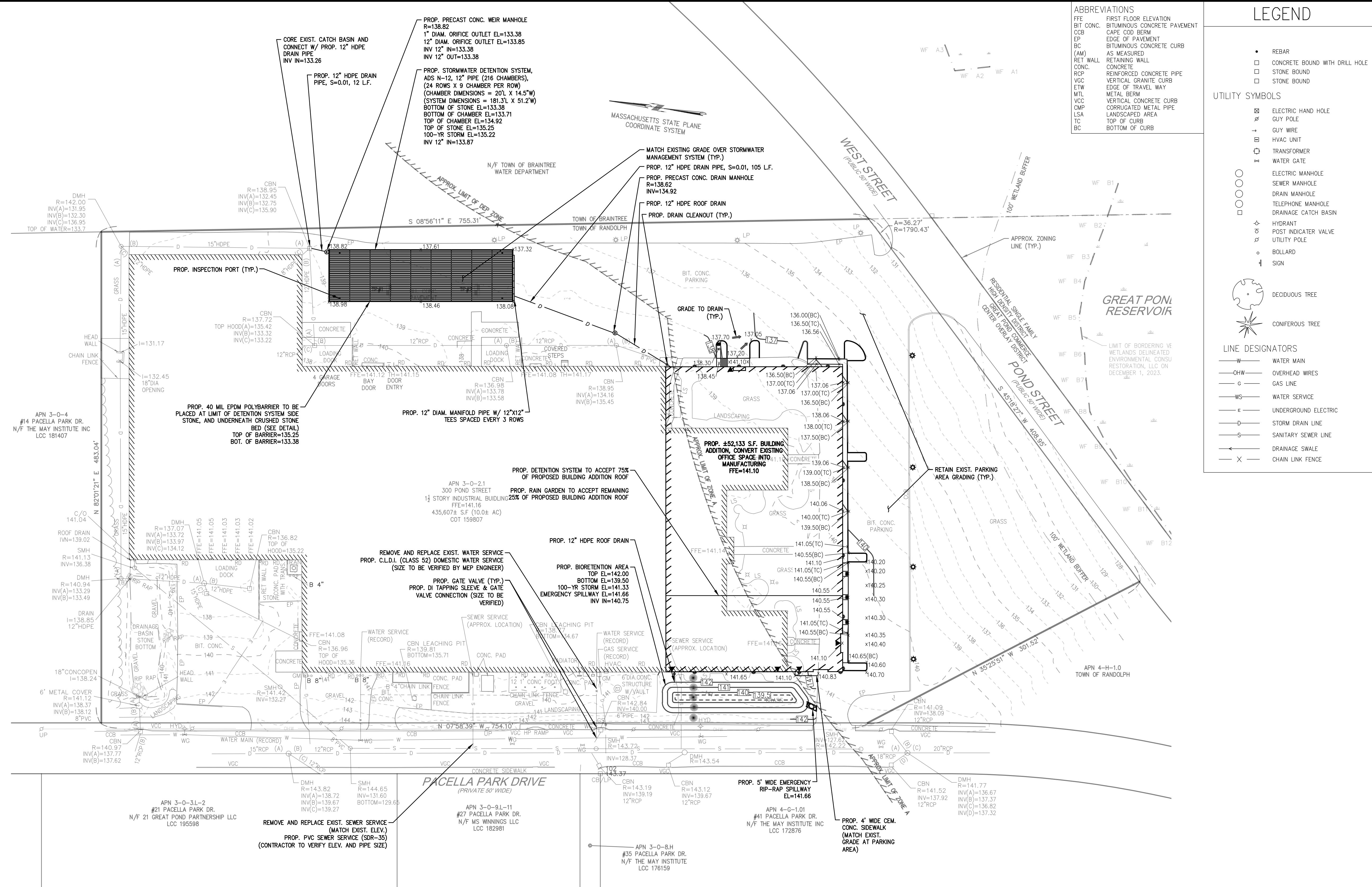
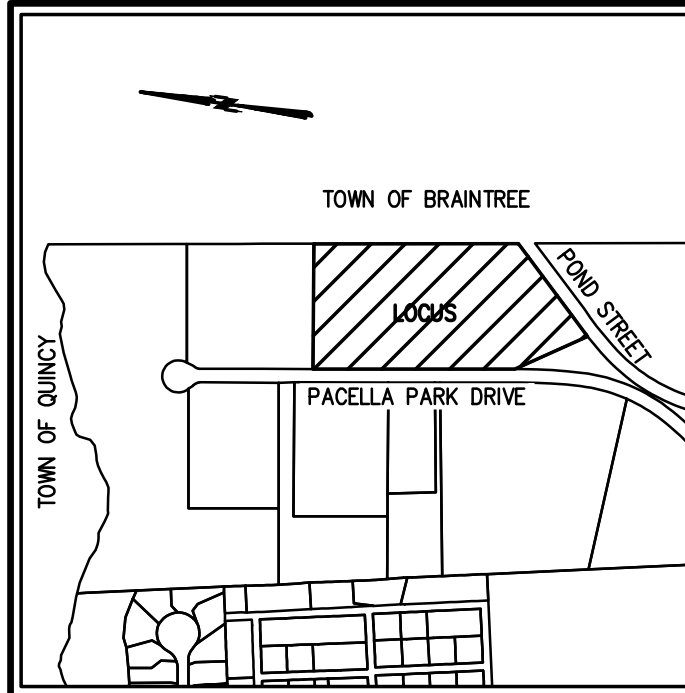


SITE DEVELOPMENT PLAN  
(ASSESSOR'S PARCEL NUMBER 3-0-2.1)  
300 POND STREET  
RANDOLPH, MASSACHUSETTS



OWNERS/APPLICANT:  
EMERSON - SWAN FLEXCON  
300 POND STREET  
RANDOLPH, MASSACHUSETTS

DESIGNED BY: ESS  
CHECKED BY: BCM  
APPROVED BY: BCM  
DATE: JUNE 11, 2024  
SCALE: 1"=50'  
PROJECT NO.: 222-209  
DWG. TITLE: SITE LAYOUT PLAN  
DWG. NO.: C-1



**ABBREVIATIONS**

FFE	FIRST FLOOR ELEVATION
BIT CONC.	BITUMINOUS CONCRETE PAVEMENT
CCB	CAPE COB BERM
EP	EDGE OF PAVEMENT
BC	BITUMINOUS CONCRETE CURB
(AM)	AS MEASURED
RET WALL	RETAINING WALL
CONC.	CONCRETE
RCP	REINFORCED CONCRETE PIPE
VGC	VERTICAL GRANITE CURB
ETC	EDGE OF TRAVEL WAY
MTL	METAL BERM
VCC	VERTICAL CONCRETE CURB
CMP	CORRUGATED METAL PIPE
LSA	LANDSCAPED AREA
TC	TOP OF CURB
BC	BOTTOM OF CURB

**LEGEND**

**UTILITY SYMBOLS**

- REBAR
- CONCRETE BOUND WITH DRILL HOLE
- STONE BOUND
- STONE BOUND

**UTILITY SIGNALS**

- ELECTRIC HAND HOLE
- GUY POLE
- GUY WIRE
- HVAC UNIT
- TRANSFORMER
- WATER GATE
- ELECTRIC MANHOLE
- SEWER MANHOLE
- DRAIN MANHOLE
- TELEPHONE MANHOLE
- DRAINAGE CATCH BASIN
- HYDRANT
- POST INDICATOR VALVE
- UTILITY POLE
- BOLLARD
- SIGN

**LINE DESIGNATORS**

- WATER MAIN
- OVERHEAD WIRES
- GAS LINE
- WATER SERVICE
- UNDERGROUND ELECTRIC
- STORM DRAIN LINE
- SANITARY SEWER LINE
- DRAINAGE SWALE
- CHAIN LINK FENCE

- DRAINAGE NOTES:**
- ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY EARTH MOVING ACTIVITIES.
  - THE CONTRACTOR SHALL KEEP ON SITE AT ALL TIMES, ADDITIONAL SILTATION FENCING AND FILTER FABRIC FOR INSTALLATION AS DIRECTED BY THE TOWN TO MITIGATE ANY EMERGENCY CONDITIONS.
  - UPON COMPLETION OF ALL SITE WORK THE CONTRACTOR SHALL INSPECT ALL ON-SITE AND OFF-SITE CATCH BASINS (THAT RECEIVED CATCH BASIN PROTECTION) AND DRAINAGE MANHOLES AND REMOVE ALL SEDIMENT AND DEBRIS THAT HAS ACCUMULATED DURING THE COURSE OF CONSTRUCTION.

REV	DATE	DESCRIPTION	BY	APP
1	7/16/24	PLANNING BOARD REV.	ESS	BCM
2	7/29/24	PLANNING BOARD MTG.	ESS	BCM



**SITE DEVELOPMENT PLAN**  
**(ASSESSOR'S PARCEL NUMBER 3-0-2.1)**  
**300 POND STREET**  
**RANDOLPH, MASSACHUSETTS**



OWNERS/APPLICANT:  
**EMERSON - SWAN FLEXCON**  
 300 POND STREET  
 RANDOLPH, MASSACHUSETTS

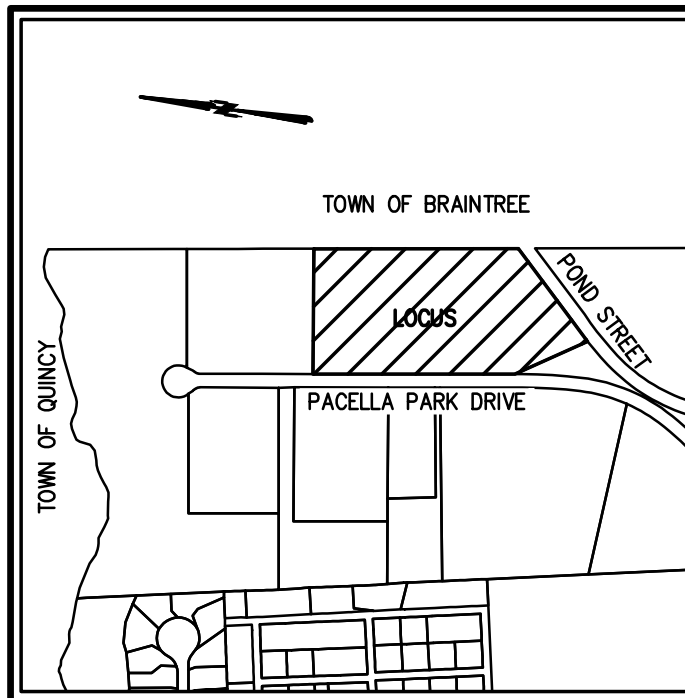
DESIGNED BY: ESS  
 CHECKED BY: BCM  
 APPROVED BY: BCM  
 DATE: JUNE 11, 2024  
 SCALE: 1"=50'  
 PROJECT NO.: 222-209  
 DWG. TITLE: GRADING AND UTILITY PLAN

PERMIT PLAN SET

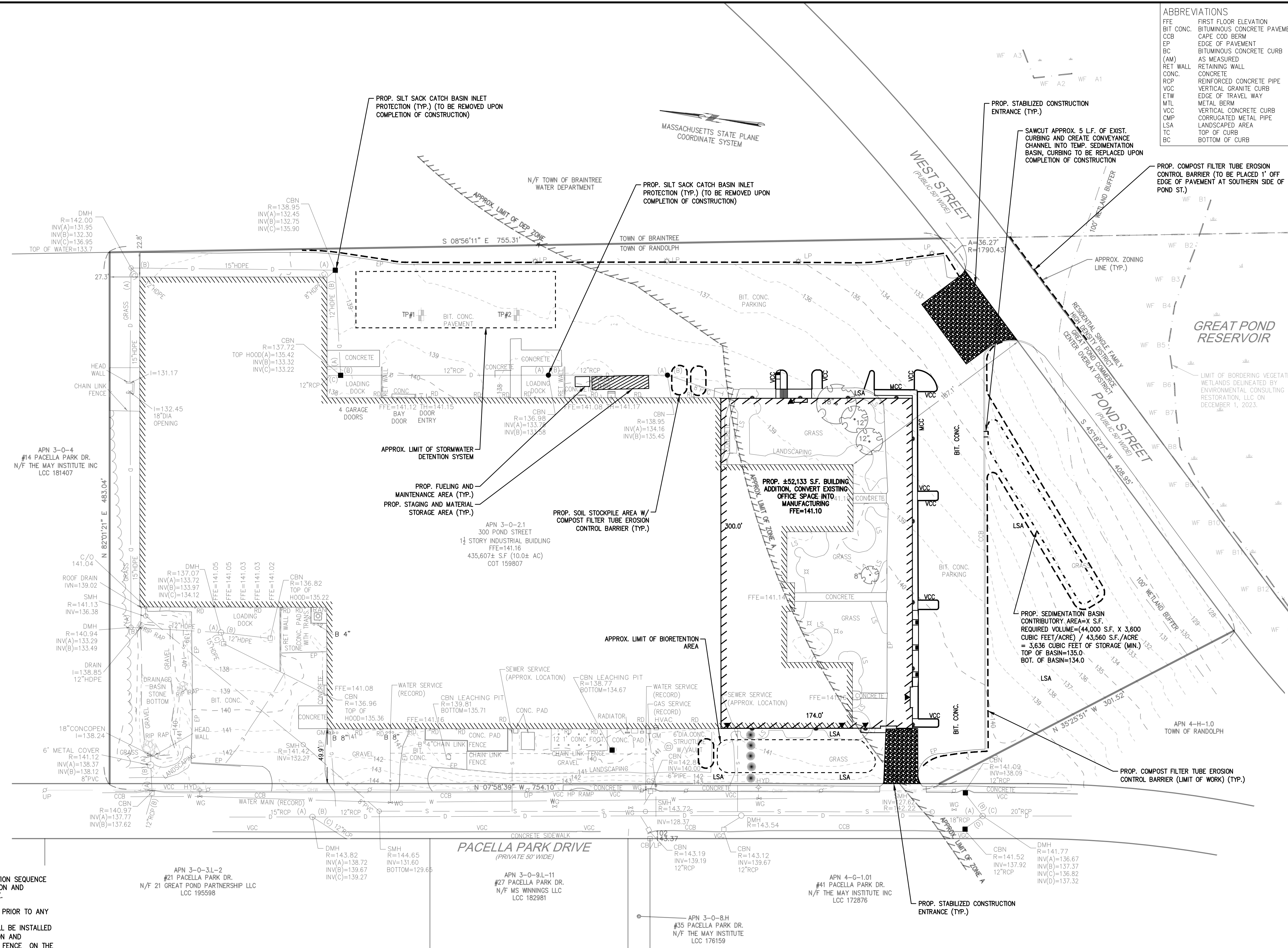
DWG. NO.: **C-2**



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**LOCUS MAP**  
Not to Scale



**ABBREVIATIONS**

FFE	FIRST FLOOR ELEVATION
BIT CONC.	BITUMINOUS CONCRETE PAVEMENT
CCB	CAPE COB BERM
EP	EDGE OF PAVEMENT
BC	BITUMINOUS CONCRETE CURB
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**LEGEND**

**UTILITY SYMBOLS**

- REBAR
- CONCRETE BOUND WITH DRILL HOLE
- STONE BOUND
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**LINE DESIGNATORS**

- WATER MAIN
- OVERHEAD WIRES
- GAS LINE
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**SITE DEVELOPMENT PLAN**  
**(ASSESSOR'S PARCEL NUMBER 3-0-2.1)**  
**300 POND STREET**  
**RANDOLPH, MASSACHUSETTS**



PROFESSIONAL ENGINEER:  
BRADLEY C. MCKENZIE  
REG. NO. 30917  
EXPIRES 12/31/2025

OWNERS/APPLICANT:  
**EMERSON - SWAN FLEXCON**  
300 POND STREET  
RANDOLPH, MASSACHUSETTS

DRAWN BY: ESS  
DESIGNED BY: ESS  
CHECKED BY: BCM  
APPROVED BY: BCM  
DATE: JUNE 11, 2024  
SCALE: 1"=50'  
PROJECT NO.: 222-209  
DWG. TITLE:  
**EROSION AND SEDIMENT CONTROL PLAN**  
DWG. NO.: **ESC-1**

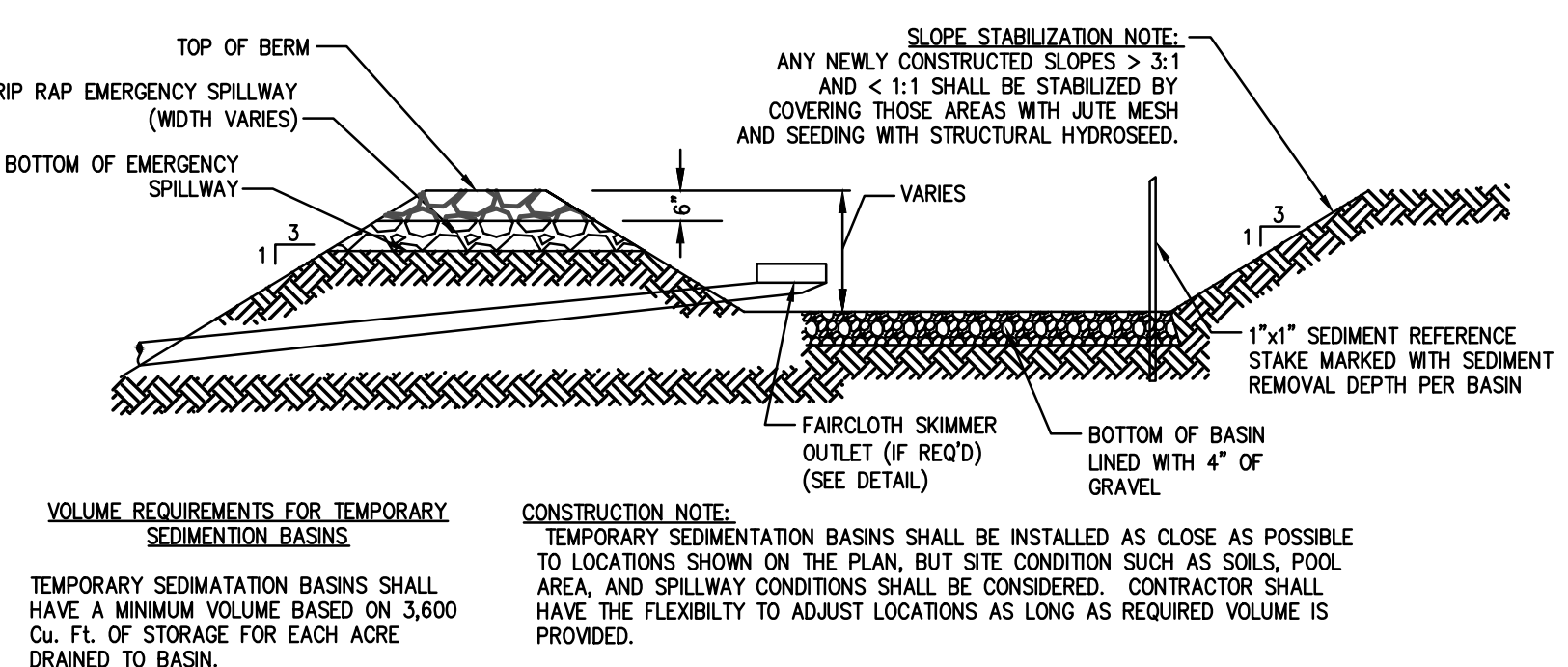
**CONSTRUCTION SEQUENCE**

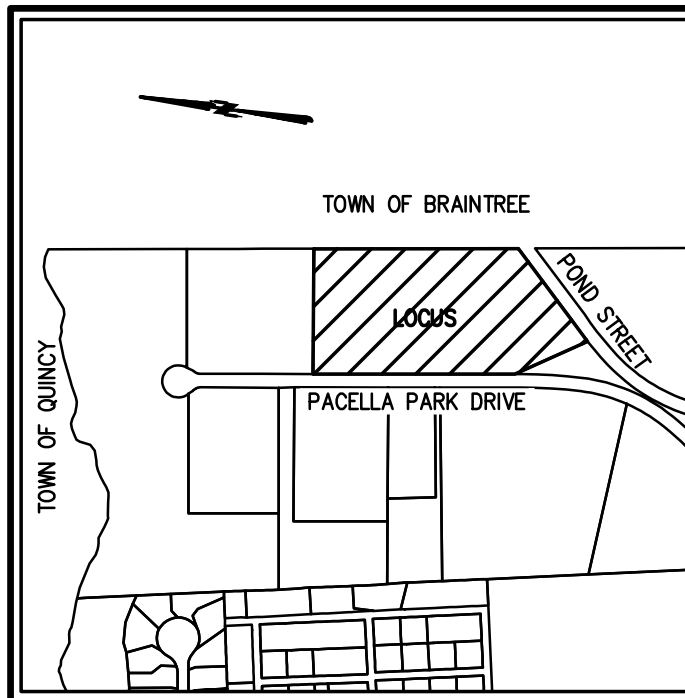
TO PREVENT EXCESSIVE EROSION AND SILTING, THE FOLLOWING CONSTRUCTION SEQUENCE COUPLED WITH OTHER WIDELY ACCEPTED PRINCIPALS FOR REDUCING EROSION AND SEDIMENTATION SHALL BE IMPLEMENTED IN THE DEVELOPMENT OF THE SITE.

1. THE CONTRACTOR SHALL COORDINATE A PRE-CONSTRUCTION MEETING PRIOR TO ANY CONSTRUCTION ACTIVITY.
2. STABILIZATION PRACTICES FOR EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. REFER TO "EROSION AND SEDIMENTATION CONTROL" SECTION OF THIS PLAN & PLACE SILTATION FENCE ON THE SITE PLANS.
3. CLEAR AND GRUB UP AS REQUIRED FOR THE CONSTRUCTION OF THE ADDITION, PARKING AREAS AND RELATED INFRASTRUCTURE.
4. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
5. EXCAVATE TOPSOIL AND SUBSOIL FROM CUT AND FILL AREAS AND STOCKPILE ON SITE IN LOCATIONS SHOWN ON THE PLAN. CONSIDERATION SHOULD BE GIVEN TO LOCATING STOCKPILES ON THE UPHILL SIDE OF DISTURBED AREAS, WHERE POSSIBLE, TO ACT AS TEMPORARY DIVERSIONS.
6. CONSTRUCT CUT AND FILL AREAS, INSTALLING HAYBALE CHECK DAMS AT TOES OF ALL 3:1 OR GREATER SLOPES, AND AT ENDS OF ALL CUT AREAS. ALL FILL WILL BE INSTALLED USING 12" MAXIMUM COMPACTION LIFTS. PLACE ALL SLOPE PROTECTION WHERE INDICATED ON THE PLAN. THE DETENTION SYSTEM SHALL BE CONSTRUCTED IMMEDIATELY AFTER THE PARKING AREA ROUGH GRADING IS COMPLETED AND THE AREA HAS BEEN CLEARED OF VEGETATION.
7. INSTALL CLOSED DRAINAGE SYSTEM AND OTHER UTILITIES. ALL CATCH BASINS SHALL BE COVERED WITH SILTSACK OR EQUIVALENT INLET PROTECTION.
8. GRADE PARKING AREAS TO SUBGRADE ELEVATION AND CONSTRUCT SIDE SLOPES. APPLY TEMPORARY STABILIZATION MEASURES WHERE WARRANTED. REFER TO "EROSION AND SEDIMENTATION CONTROL" SECTION OF THIS PLAN.
9. EXCAVATE AND CONSTRUCT BUILDING FOUNDATION.
10. PLACE GRAVEL SUBBASE.
11. PLACE THE BITUMINOUS CONCRETE BINDER COURSE ON PARKING AREAS.
12. CONSTRUCT BUILDING STRUCTURE AND ASSOCIATED UTILITY CONNECTIONS.
13. GRADE SLOPES AND STABILIZE CUT AREAS AT TOE OF SLOPES. BLEND ALL SLOPES INTO EXISTING TOPOGRAPHY AND SEED ALL DISTURBED AREAS. SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH JUTE MESH.
14. PLACE THE FINAL WEARING COURSE OF PAVEMENT.
15. COMPLETE FINE GRADING OF SHOULDERS AND PLACE PAVEMENT IN MISCELLANEOUS AREAS.
16. REMOVE TEMPORARY EROSION CONTROL DEVICES ONCE ADEQUATE GROWTH IS ESTABLISHED. ADEQUATE GROWTH IS DEFINED AS VEGETATION COVERING 75% OR MORE OF THE GROUND SURFACE.

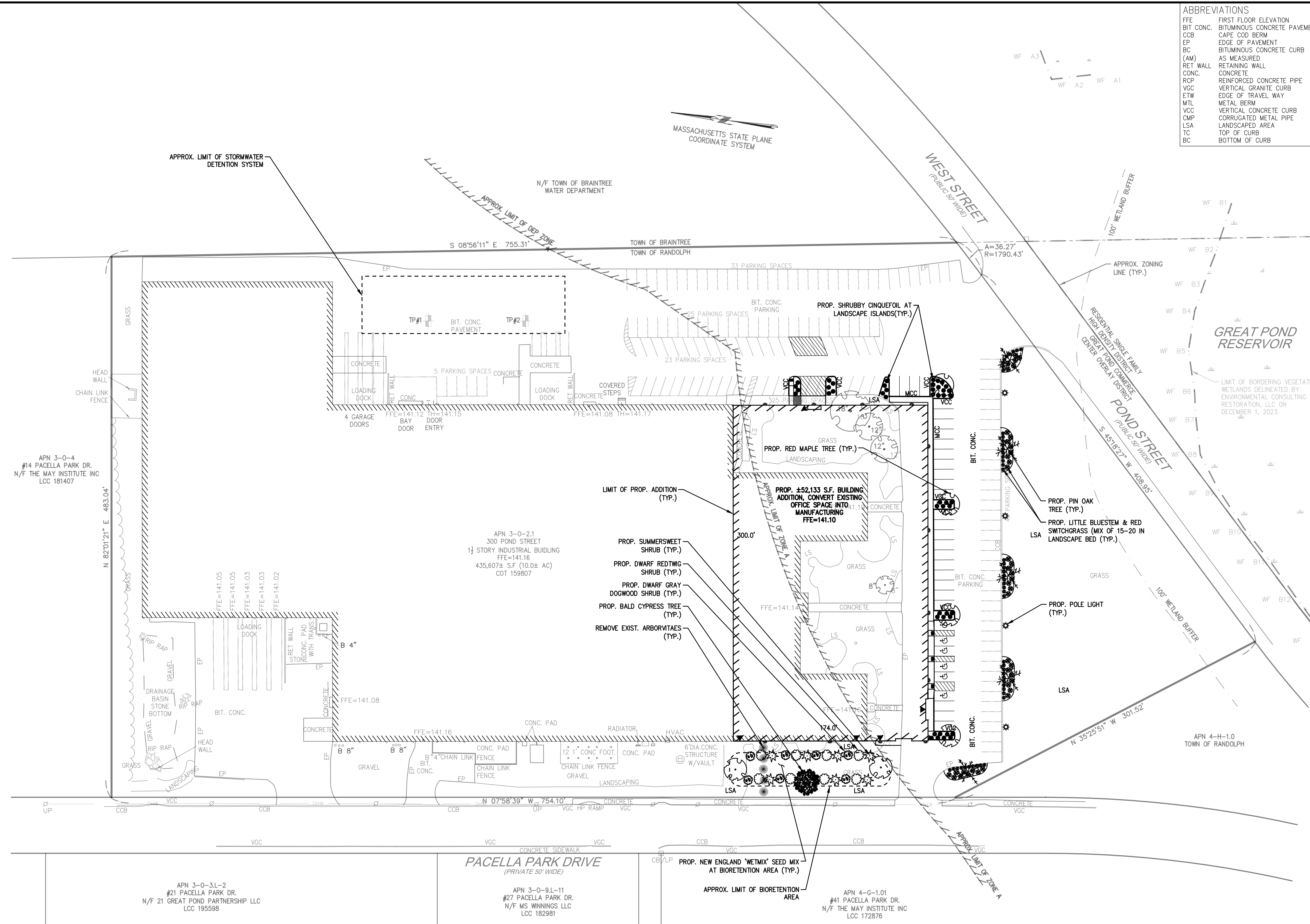
**CONSTRUCTION PHASE BMP OPERATION AND MAINTENANCE NOTES:**

1. STRUCTURAL PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE SILT SOCK, EROSION CONTROL BARRIERS, STABILIZED CONSTRUCTION ENTRANCES, CONCRETE WASH STATIONS, STOCKPILE AREAS, AND INLET PROTECTION.
2. STABILIZATION PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE TEMPORARY SEEDING, GEOTEXTILES (JUTE MESH), MULCHING, AND PERMANENT SEEDING.
3. OPERATOR PERSONNEL AND/OR ITS CONSULTANTS MUST INSPECT THE CONSTRUCTION SITE AT LEAST ONCE EVERY 7 CALENDAR DAYS OR EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT 1/4 INCH OR GREATER. THE INSPECTOR SHOULD REVIEW THE EROSION AND SEDIMENT CONTROLS WITH RESPECT TO THE FOLLOWING:
  - A. WHETHER OR NOT THE BMP WAS INSTALLED/PERFORMED CORRECTLY.
  - B. WHETHER OR NOT THERE HAS BEEN DAMAGE TO THE BMP SINCE IT WAS INSTALLED OR PERFORMED.
  - C. WHAT SHOULD BE DONE TO CORRECT ANY PROBLEMS WITH THE BMP.
4. THE INSPECTOR SHALL COMPLETE THE INSPECTION SCHEDULE AND EVALUATION CHECKLIST FOR FINDINGS AND SHOULD REQUEST THE REQUIRED MAINTENANCE OR REPAIR.
5. ALL SLOPES EXCEEDING 15% RESULTING FROM SITE GRADING SHALL BE BOTH COVERED WITH FOUR INCHES OF TOPSOIL AND PLANTED WITH A VEGETATED COVER SUFFICIENT TO PREVENT EROSION.





LOCUS MAP  
Not to Scale



ABBREVIATIONS

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BIT CONC.	BITUMINOUS CONCRETE PAVEMENT
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LEGEND

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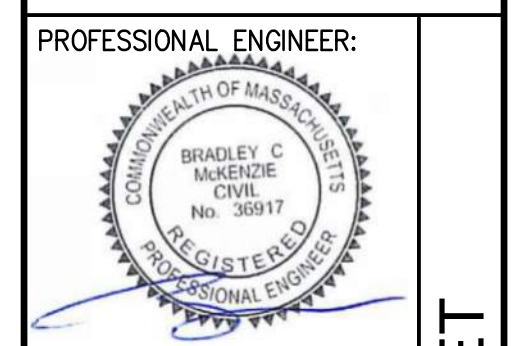
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- SANITARY SEWER LINE
- DRAINAGE SWALE
- CHAIN LINK FENCE

REV	DATE	DESCRIPTION	BY	APP
1	7/16/24	PLANNING BOARD REV.	ESS	BCM
2	7/29/24	PLANNING BOARD MTG.	ESS	BCM



**SITE DEVELOPMENT PLAN**  
**(ASSESSOR'S PARCEL NUMBER 3-0-2.1)**  
**300 POND STREET**  
**RANDOLPH, MASSACHUSETTS**



PROFESSIONAL ENGINEER:  
BRADLEY C. MCKENZIE  
No. 30917  
REGISTERED PROFESSIONAL ENGINEER

OWNERS/APPLICANT:  
**EMERSON - SWAN FLEXCON**  
300 POND STREET  
RANDOLPH, MASSACHUSETTS

DRAWN BY: ESS  
DESIGNED BY: ESS  
CHECKED BY: BCM  
APPROVED BY: BCM  
DATE: JUNE 11, 2024  
SCALE: 1"=50'  
PROJECT NO.: 222-209  
DWG. TITLE:

**LANDSCAPE PLAN**

DWG. NO.: **LA-1**

PLANTING LIST

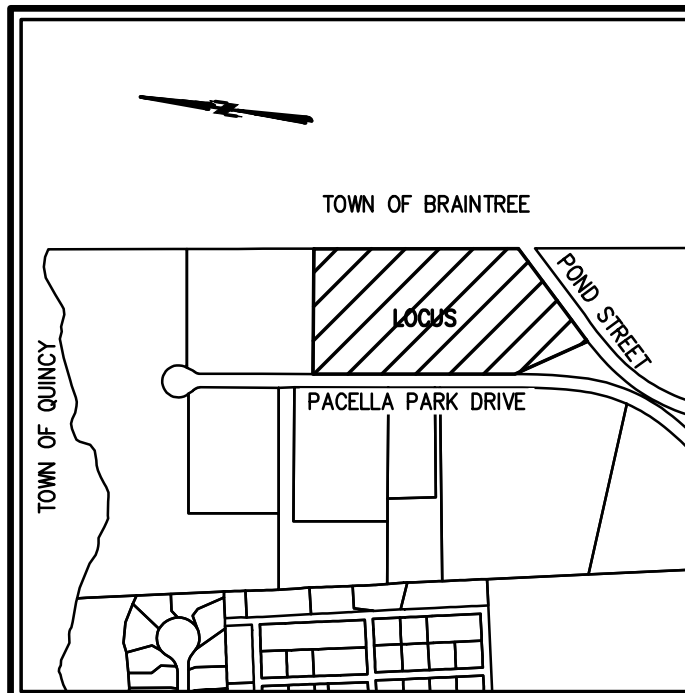
QTY.	BOTANICAL NAME	COMMON NAME	SIZE	SYMBOL
<b>TREES</b>				
6	ACER RUBRUM	RED MAPLE (SUGGESTED BOMHALL VARIETY)	7"-8" HEIGHT	
1	TAXODIUM DISTICHUM	BALD CYPRESS	2-2.5" CALIPER	
5	QUERCUS PALUSTRIS	PIN OAK	3" CALIPER	
<b>SHRUBS</b>				
8	CORNUS SERICEA	DWARF REDTIG DOGWOOD 'ARTIC FIRE'	5 GALLON POT	
7	CLETHRA ALNIFOLIA	SUMMERSWEET 'HUMMINGBIRD'	5 GALLON POT	
7	CORNUS RACEMOSA	DWARF GRAY DOGWOOD 'HURZAM'	5 GALLON POT	
47	POTENTILLA FRUTICOSA	SHRUBBY CINQUEFOIL	3 GALLON POT	
<b>ORNAMENTAL GRASS</b>				
49	PANICUM VIRGATUM	DWARF RED SWITCHGRASS 'RUBY RIBBONS'	1 GALLON POT	
39	SCHIZACHYRIUM SCOPARIUM	DWARF LITTLE BLUESTEM 'THE BLUES'	1 GALLON POT	

LANDSCAPING NOTES:

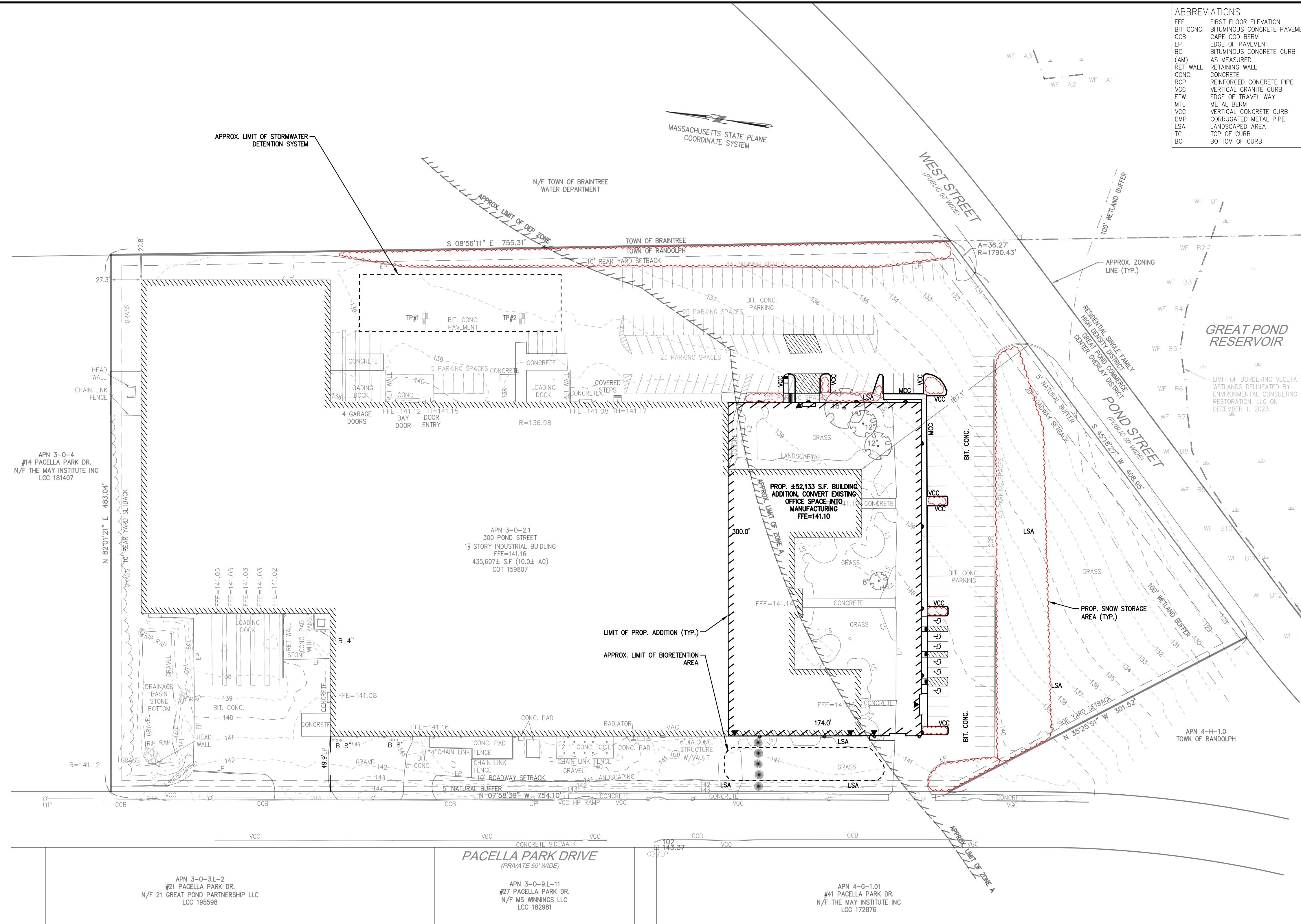
- TO THE GREATEST EXTENT POSSIBLE, EXISTING NATIVE TREES AND SHRUBS SHALL BE MAINTAINED.
- NO TREE, SHRUB OR PLANT SHALL BE USED THAT HAS BEEN IDENTIFIED AS AN INVASIVE SPECIES BY THE MASSACHUSETTS PLANT ADVISORY GROUP IN THE MOST RECENT VERSION OF "THE EVALUATION OF NON-NATIVE PLANT SPECIES FOR INVASIVENESS IN MASSACHUSETTS" (WITH ANNOTATED LIST) OR HAS BEEN IDENTIFIED AS INVASIVE OR BANNED ON THE "MASSACHUSETTS PROHIBITED PLANT LIST" AS PERIODICALLY UPDATED BY THE MASSACHUSETTS DEPARTMENT OF AGRICULTURE.
- EXISTING INVASIVE PLANTS SHALL BE REMOVED.
- THE CONTRACTOR SHALL LOCATE AND VERIFY ALL UTILITY LINE LOCATIONS PRIOR TO EXCAVATION FOR TREE FITS AND REPORT AND CONFLICTS TO THE ENGINEER.
- ALL PLANTS ARE TO BE THOROUGHLY WATERED AFTER INSTALLATION, AT LEAST TWICE WITHIN THE FIRST 24 HOURS. WE RECOMMEND GATOR BAGS TO BE INSTALLED AND MAINTAINED AT NEW TREE PLANTINGS DURING ESTABLISHMENT. TEMPORARY SPRAY IRRIGATION FOR SHRUB/ORNAMENTAL GRASS PLANTINGS DURING ESTABLISHMENT IS RECOMMEND.
- NEW ENGLAND 'WETMIX' (WETLAND SEED MIX) SHALL BE PLANTED WITHIN LIMIT OF BIORETENTION AREA.



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LOCUS MAP  
Not to Scale



ABBREVIATIONS

FFE	FIRST FLOOR ELEVATION
BIT CONC.	BITUMINOUS CONCRETE PAVEMENT
CCB	CAPE COD BERM
EP	EDGE OF PAVEMENT
BC	BITUMINOUS CONCRETE CURB
(AM)	AS MEASURED
RET WALL	RETAINING WALL
CONC.	CONCRETE
RCF	REINFORCED CONCRETE PIPE
VCC	VERTICAL GRANITE CURB
ETW	EDGE OF TRAVEL WAY
MTL	METAL BERM
VCC	VERTICAL CONCRETE CURB
CMP	CORRUGATED METAL PIPE
LSA	LANDSCAPED AREA
TC	TOP OF CURB
BC	BOTTOM OF CURB

LEGEND

•	REBAR
□	CONCRETE BOUND WITH DRILL HOLE
○	STONE BOUND
○	STONE BOUND

UTILITY SYMBOLS

⊗	ELECTRIC HAND HOLE
⊘	GUY POLE
+	GUY WIRE
⊕	HVAC UNIT
⊖	TRANSFORMER
⊗	WATER GATE
⊗	ELECTRIC MANHOLE
⊗	SEWER MANHOLE
⊗	DRAIN MANHOLE
⊗	TELEPHONE MANHOLE
⊗	DRAINAGE CATCH BASIN
⊗	HYDRANT
⊗	POST INDICATOR VALVE
⊗	UTILITY POLE
⊗	BOLLARD
⊗	SIGN

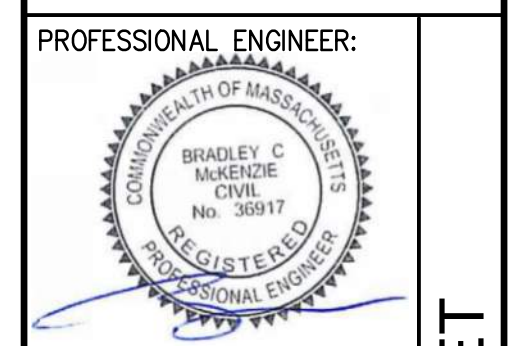
LINE DESIGNATORS

—	WATER MAIN
—	OVERHEAD WIRES
—	GAS LINE
—	WATER SERVICE
—	UNDERGROUND ELECTRIC
—	STORM DRAIN LINE
—	SANITARY SEWER LINE
—	DRAINAGE SWALE
—	CHAIN LINK FENCE

REV	DATE	DESCRIPTION	BY	APP
1	7/16/24	PLANNING BOARD REV.	ESS	BCM
2	7/29/24	PLANNING BOARD MTC.	ESS	BCM



**SITE DEVELOPMENT PLAN  
(ASSESSOR'S PARCEL NUMBER 3-0-2.1)  
300 POND STREET  
RANDOLPH, MASSACHUSETTS**



OWNERS/APPLICANT:  
**EMERSON - SWAN FLEXCON**  
300 POND STREET  
RANDOLPH, MASSACHUSETTS

PERMIT PLAN SET

DRAWN BY:	ESS
DESIGNED BY:	ESS
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	JUNE 11, 2024
SCALE:	1"=50'
PROJECT NO.:	222-209
DWG. TITLE:	

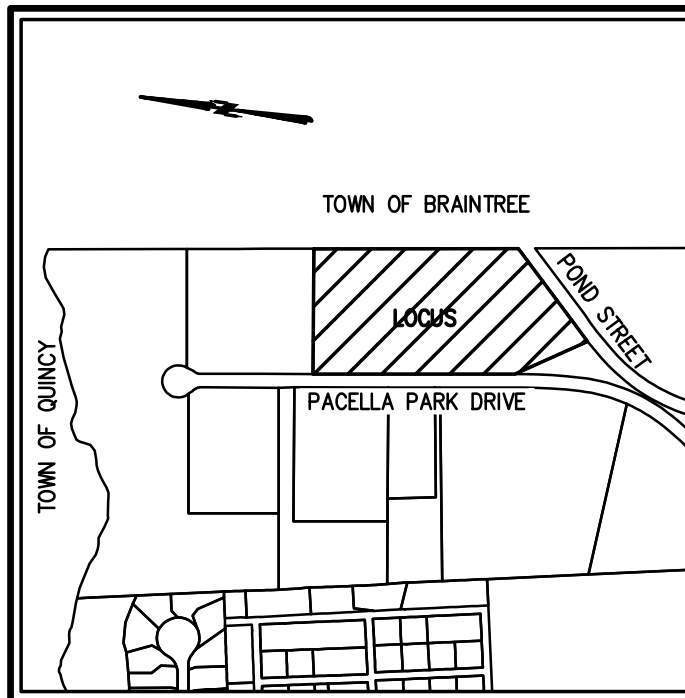
**SNOW STORAGE PLAN**

DWG. NO.: **SS-1**

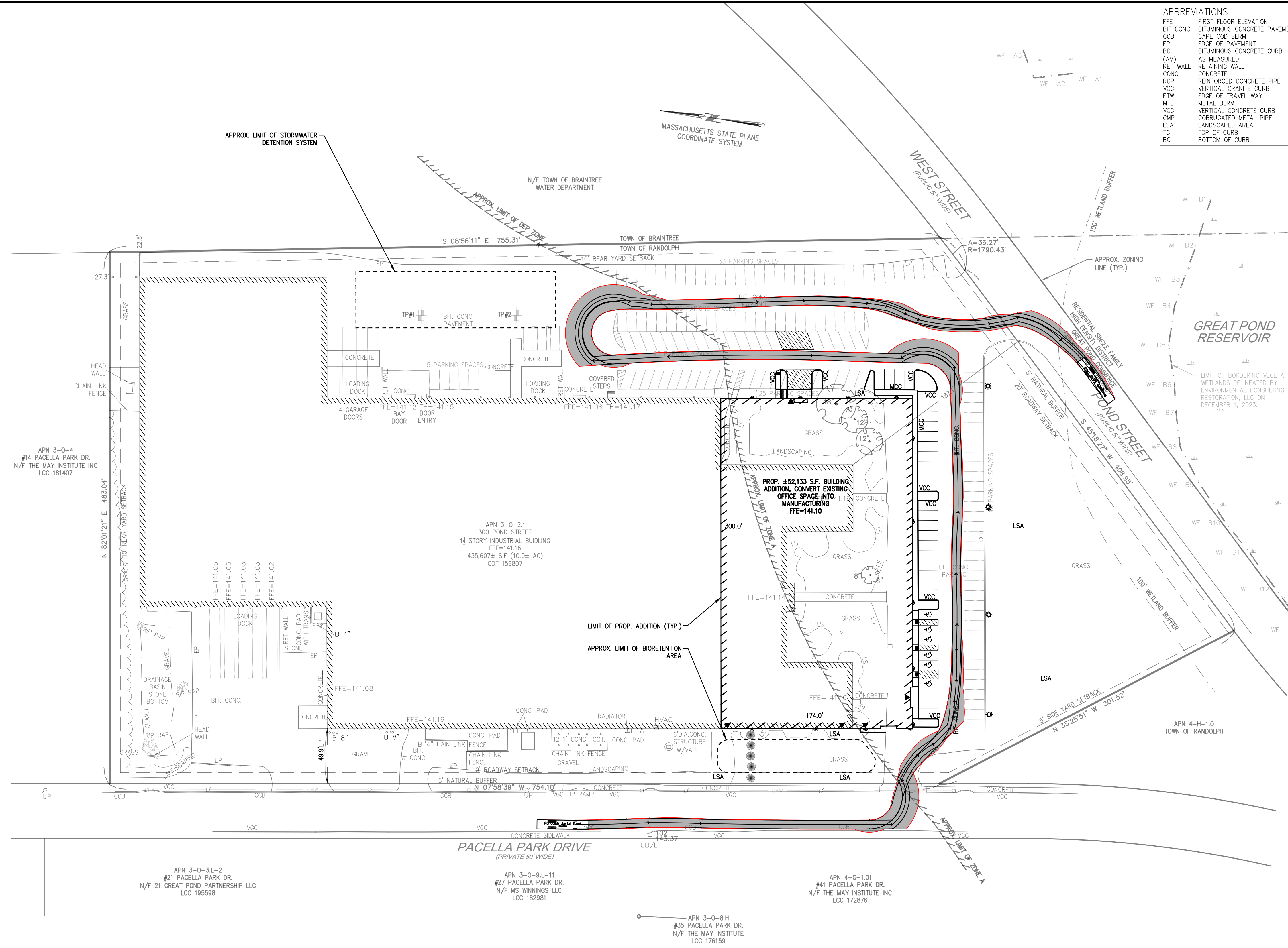
- SNOW STORAGE NOTES:**
- SNOW ACCUMULATION THAT CANNOT BE STORED ON-SITE WILL BE HAULED OFF-SITE TO A SNOW STORAGE FACILITY, TRANSFER OFF-SITE WILL BE PAID FOR BY THE PROPERTY OWNER.



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**LOCUS MAP**  
Not to Scale



**ABBREVIATIONS**

FFE	FIRST FLOOR ELEVATION
BT CONC.	BITUMINOUS CONCRETE PAVEMENT
CCB	CAPE COD BERM
EP	EDGE OF PAVEMENT
BC	BITUMINOUS CONCRETE CURB
(AM)	AS MEASURED
RET WALL	RETAINING WALL
CONC.	CONCRETE
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VCC	VERTICAL CONCRETE CURB
CMP	CORRUGATED METAL PIPE
LSA	LANDSCAPED AREA
TC	TOP OF CURB
BC	BOTTOM OF CURB

**LEGEND**

**UTILITY SYMBOLS**

- REBAR
- CONCRETE BOUND WITH DRILL HOLE
- STONE BOUND
- STONE BOUND

**UTILITY SYMBOLS**

- ELECTRIC HAND HOLE
- GUY POLE
- GUY WIRE
- HVAC UNIT
- TRANSFORMER
- WATER GATE
- ELECTRIC MANHOLE
- SEWER MANHOLE
- DRAIN MANHOLE
- TELEPHONE MANHOLE
- DRAINAGE CATCH BASIN
- HYDRANT
- POST INDICATOR VALVE
- UTILITY POLE
- BOLLARD
- SIGN

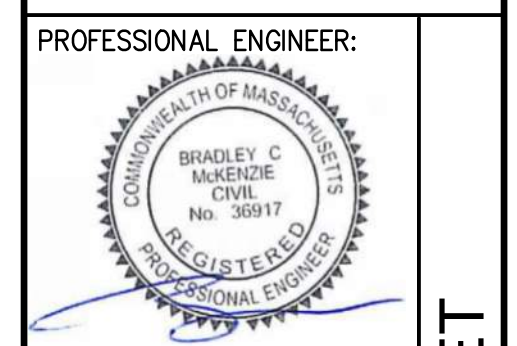
**LINE DESIGNATORS**

- WATER MAIN
- OVERHEAD WIRES
- GAS LINE
- WATER SERVICE
- UNDERGROUND ELECTRIC
- STORM DRAIN LINE
- SANITARY SEWER LINE
- DRAINAGE SWALE
- CHAIN LINK FENCE

REV	DATE	DESCRIPTION	BY	APP
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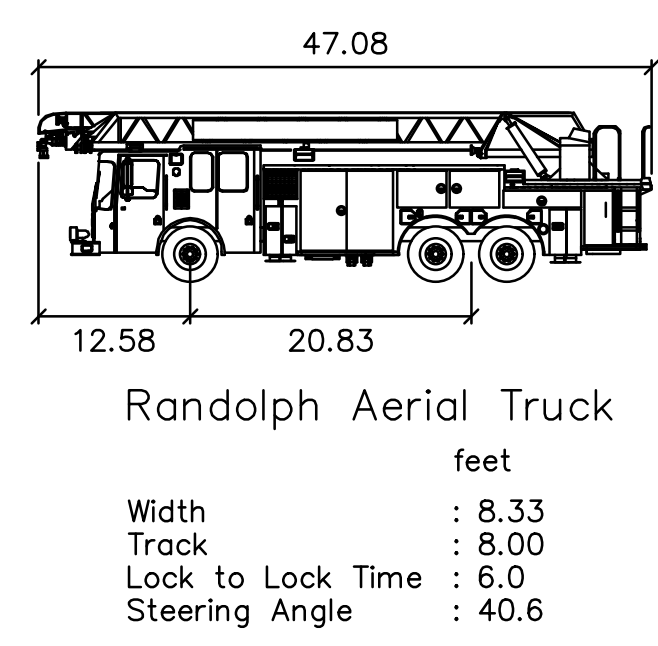


**SITE DEVELOPMENT PLAN**  
**(ASSESSOR'S PARCEL NUMBER 3-0-2.1)**  
**300 POND STREET**  
**RANDOLPH, MASSACHUSETTS**



OWNERS/APPLICANT:  
**EMERSON - SWAN FLEXCON**  
300 POND STREET  
RANDOLPH, MASSACHUSETTS

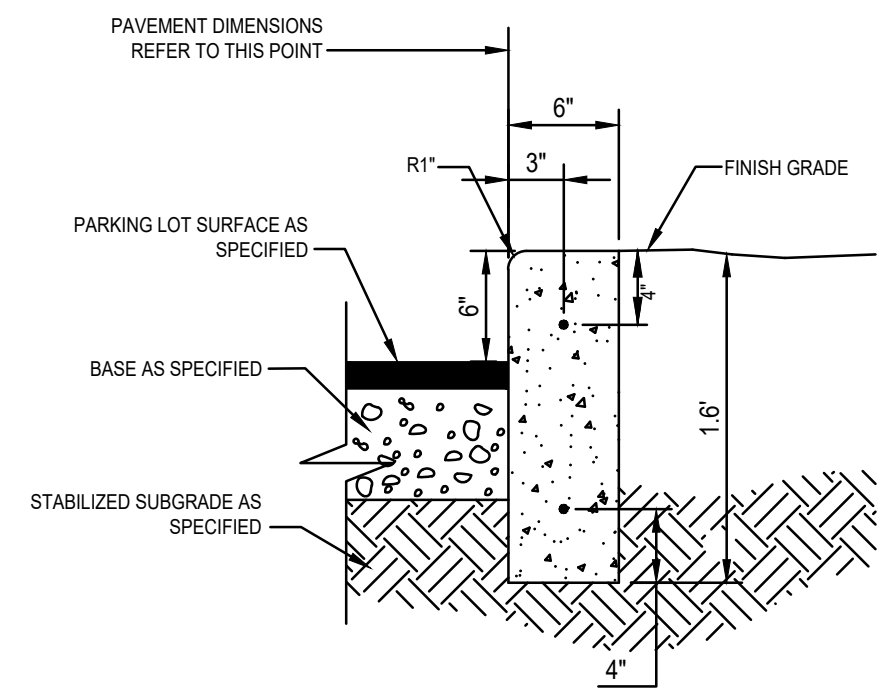
DESIGNED BY: ESS  
CHECKED BY: BCM  
APPROVED BY: BCM  
DATE: JUNE 11, 2024  
SCALE: 1"=50'  
PROJECT NO.: 222-209  
DWG. TITLE: FIRE TRUCK TURNING PLAN



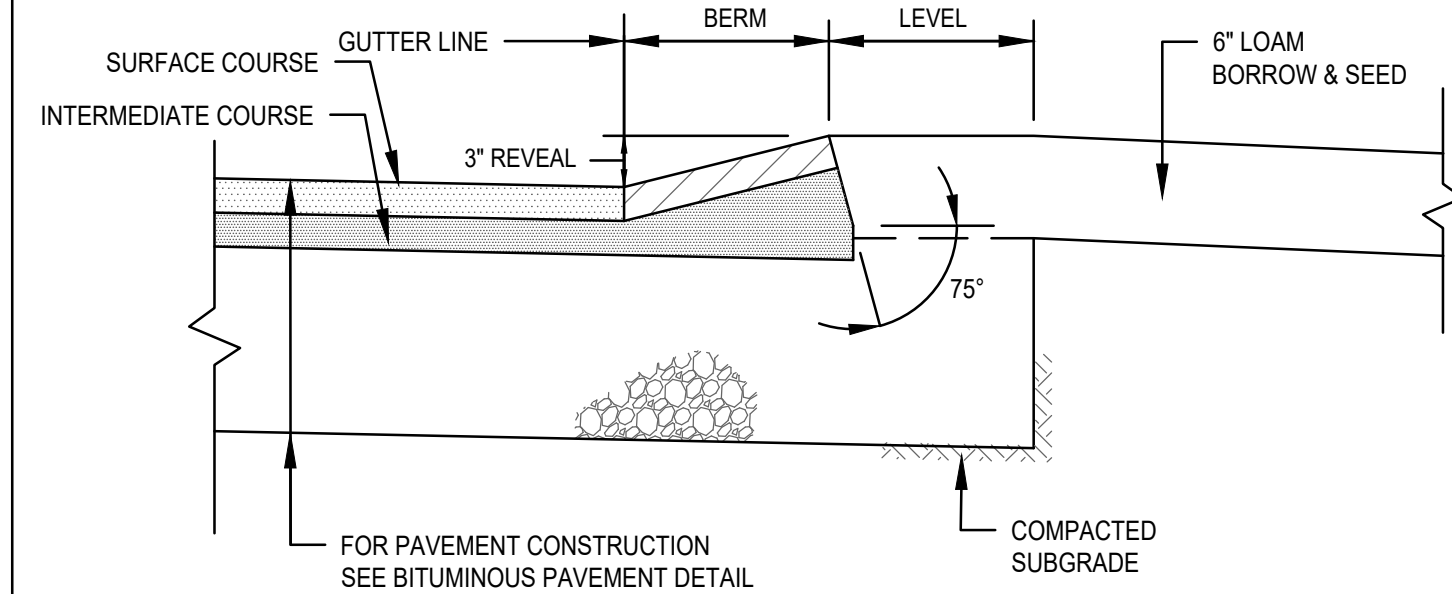
- PLAN NOTES:**
- LIMIT OF BUMPER OVERHANG IS SHOWN IN RED. VEHICLE WHEEL PATH IS SHOWN AS BLACK LINES.



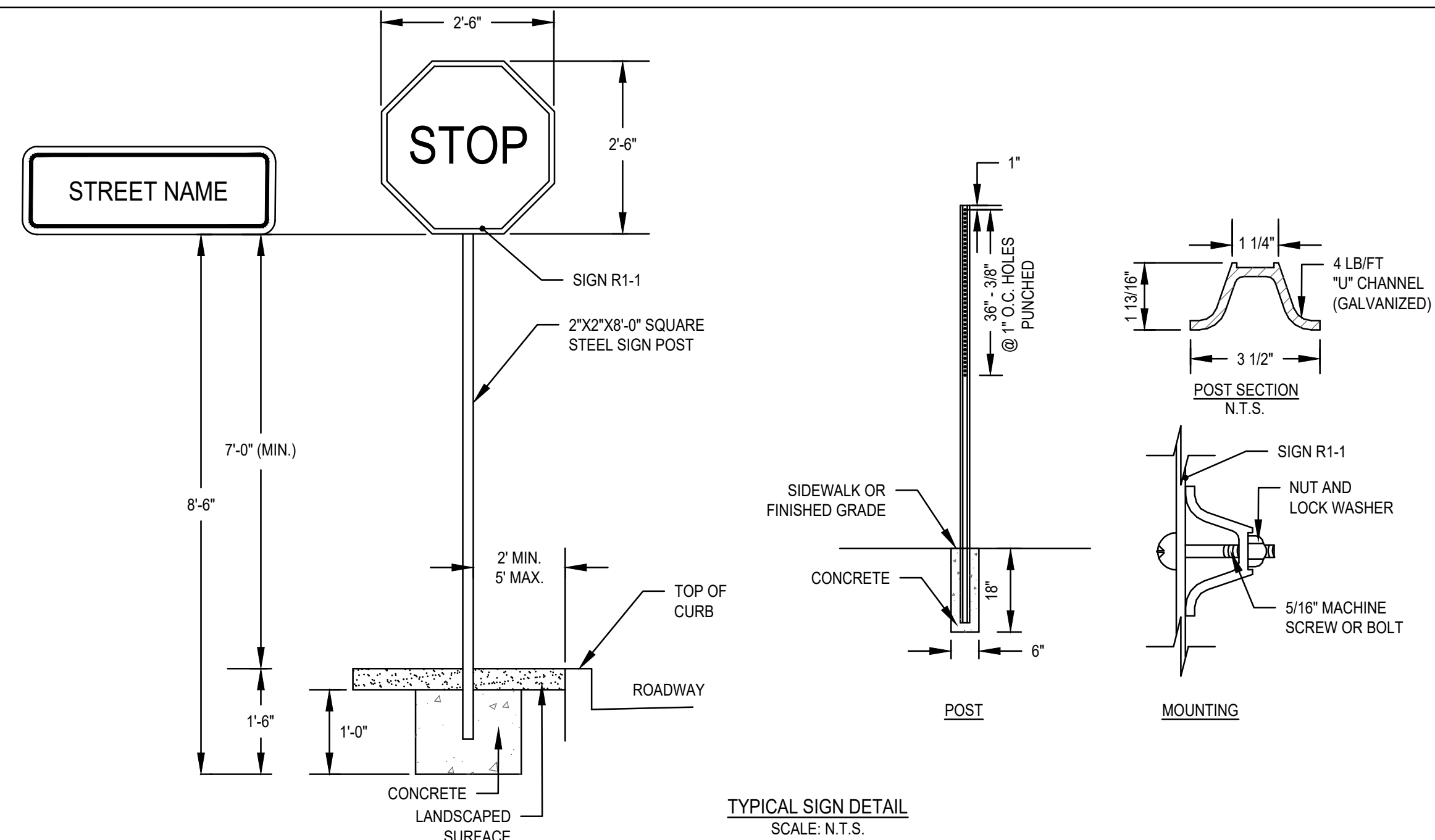
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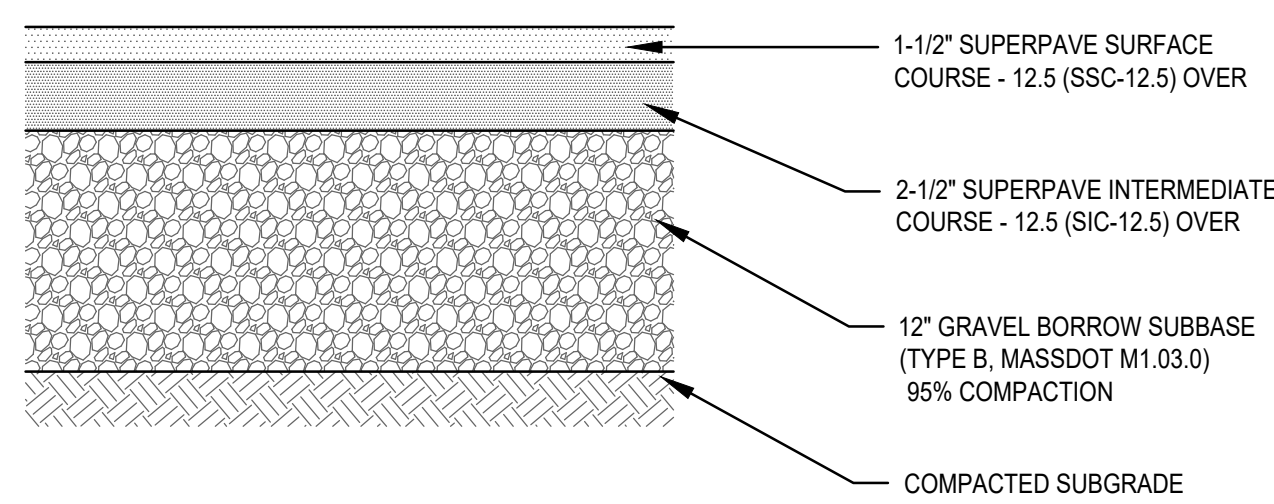
PRECAST VERTICAL CEMENT CONCRETE CURB DETAIL  
SCALE: N.T.S.



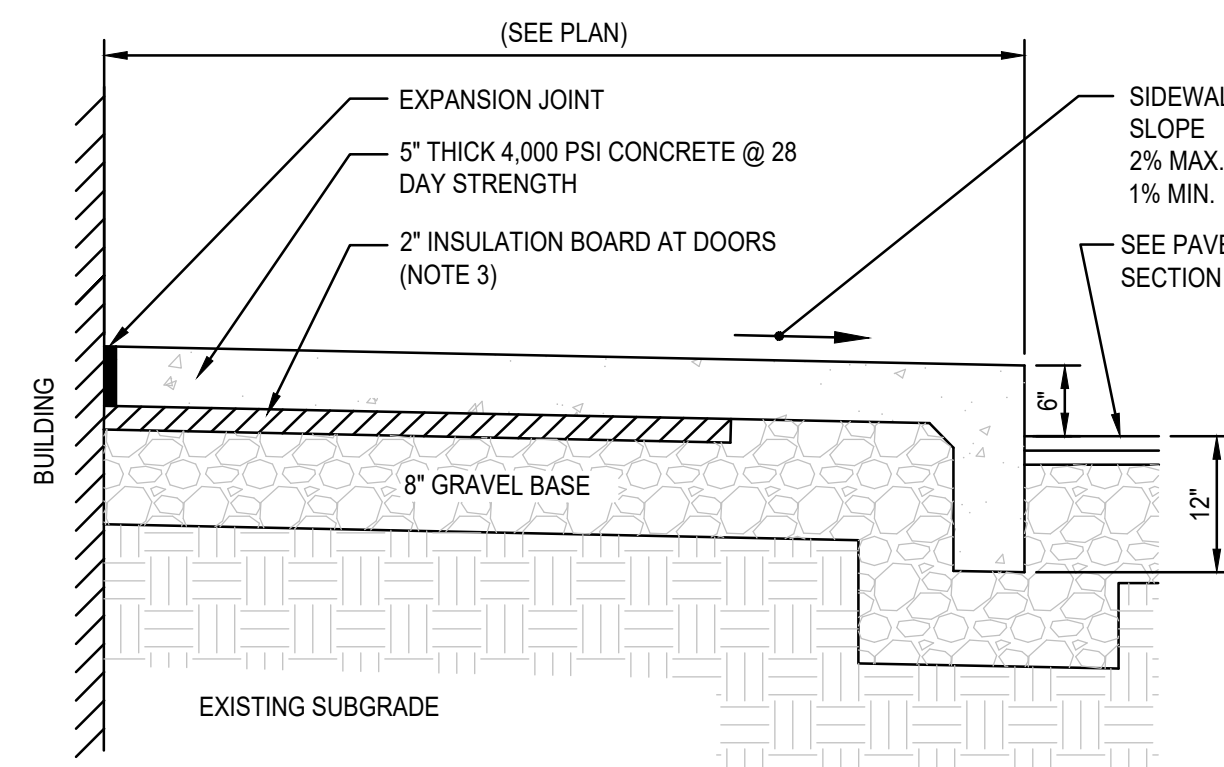
MONOLITHIC BITUMINOUS CONCRETE BERM (CAPE COD BERM) DETAIL  
SCALE: N.T.S.



TYPICAL SIGN DETAIL  
SCALE: N.T.S.

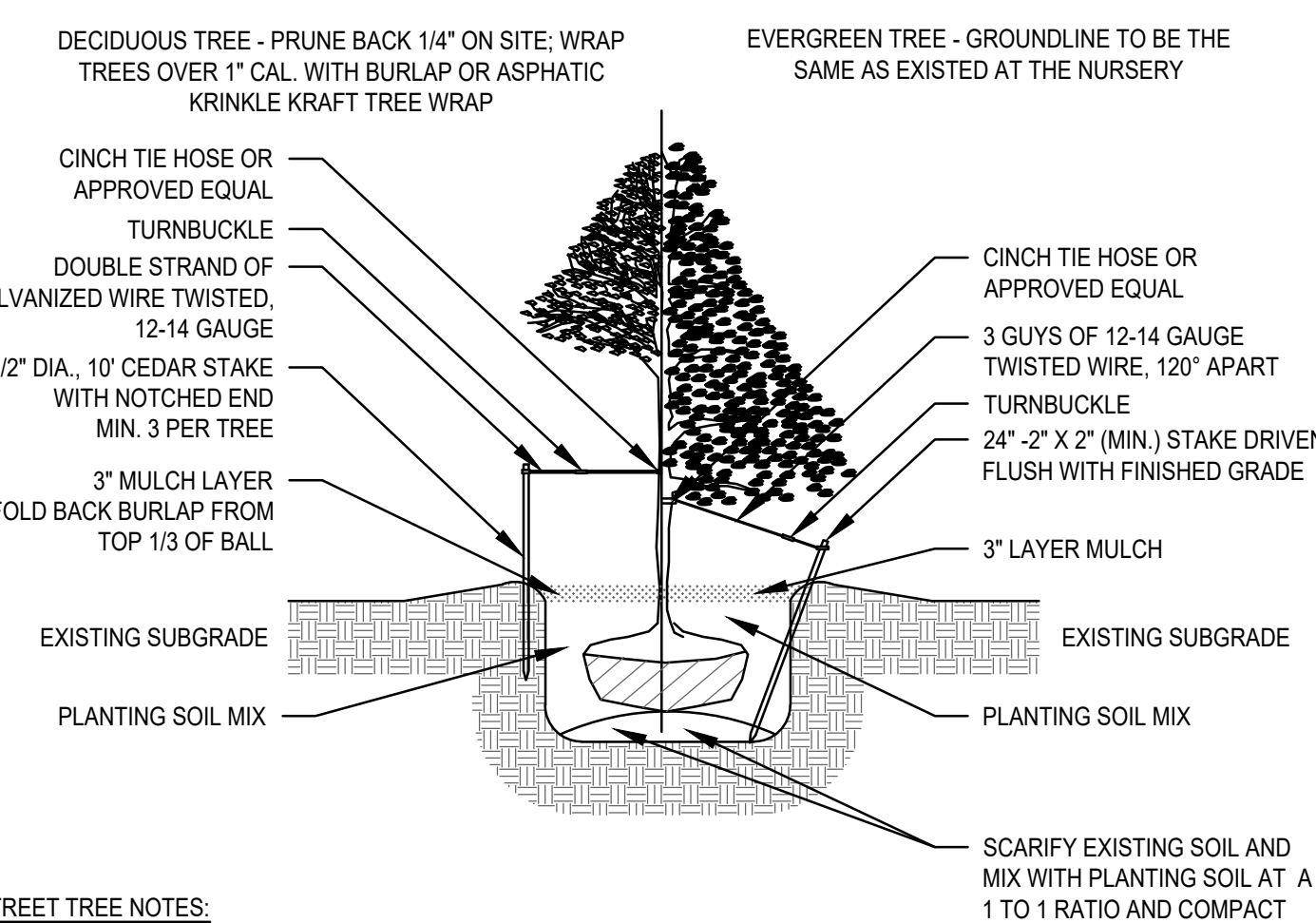


BITUMINOUS PAVEMENT DETAIL  
SCALE: N.T.S.



NOTES:  
1. SIDEWALK TO HAVE TOOLED JOINTS 5' O.C. (TYP.) WITH EXPANSION JOINTS 15' ON CENTER AND PREMOLDED FILLER.  
2. TOOLED JOINT 6" FROM FACE OF CURB  
3. PLACE 2" RIGID EXTRUDED STYROFOAM NONEXPANDABLE INSULATION BOARD LIGHT BLUE IN COLOR AT DOORS. BOARD TO BE PLACED IN 2-2x8" SECTIONS CENTERED ON AND EXTENDING 4' PERPENDICULAR FROM DOOR. BASE MATERIAL SHALL BE CRUSHED STONE AT DOORS.  
4. SEE PLAN FOR ELEVATIONS AT DOORS AND CURB

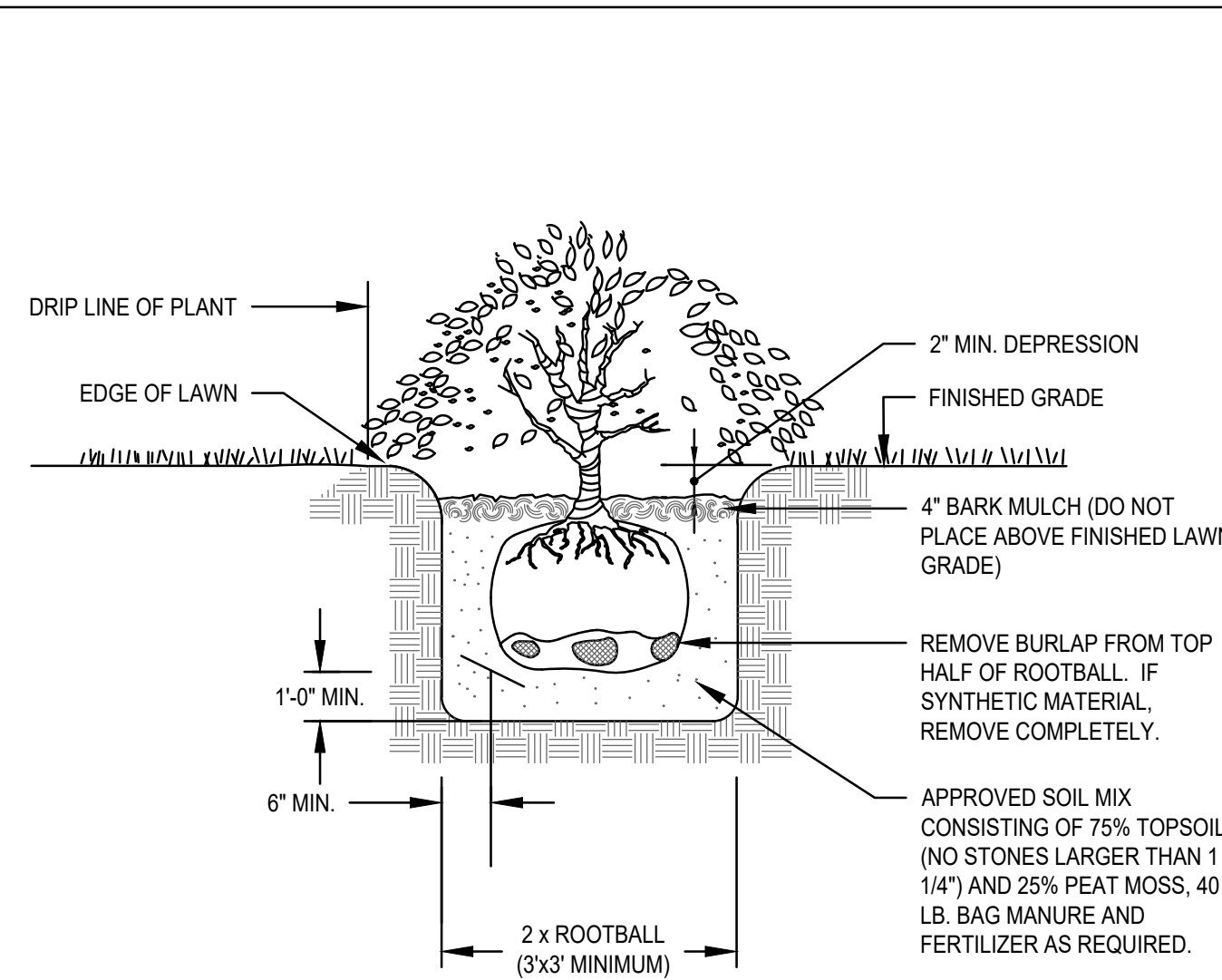
CONCRETE SIDEWALK AND MONOLITHIC CURB AT BUILDING  
SCALE: N.T.S.



STREET TREE NOTES:

- NEW TREES SHALL BE NURSERY GROWN AND COMPLY WITH THE ASSOCIATION OF AMERICAN NURSERIES SPECIFICATIONS AND BE AT LEAST 3 INCHES IN CALIPER.
- THE PRESERVATION OF EXISTING TREES AND THE VARIETIES OF NEW TREES FOR PLANTING SHALL BE SUBJECT TO THE APPROVAL OF THE PLANNING BOARD WHICH SHALL BE GUIDED BY THE RECOMMENDATION OF THE TOWN'S DIRECTOR OF LANDS AND NATURAL RESOURCES AS TO THE NUMBER, LOCATION, CONDITION AND SPECIES OF SUCH TREES AND UNDER APPENDIX III 0 DETAIL B.

DECIDUOUS AND EVERGREEN TREE  
PLANTING DETAIL  
SCALE: N.T.S.



TYPICAL SHRUB PLANTING DETAIL  
SCALE: N.T.S.

SEEDING SPECIFICATIONS

SEEDING RECOMMENDATIONS

1. SEEDBED PREPARATION

- SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
- STONES LARGER THAN FOUR INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT FOUR INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

2. ESTABLISHING A STAND

- LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:

AGRICULTURAL LIMESTONE:	2 TONS PER ACRE OR 100 LBS. PER 1000 SQ. FT.
NITROGEN (N):	50 LBS. PER ACRE OR 1.1 LBS. PER 1000 SQ. FT.
PHOSPHATE (P O):	100 LBS. PER ACRE OR 2.2 LBS. PER 1000 SQ. FT.
POTASH (K O):	100 LBS. PER ACRE OR 2.2 LBS. PER 1000 SQ. FT.

(NOTE: THIS IS THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS. PER ACRE OF 5-10-10 FERTILIZER)

- SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING, AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH 0.25 INCH OF SOIL OR LESS, BY CULTIVATING OR RAKING.

3. MULCH

- HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
- MULCH WILL BE HELD IN PLACE USING TECHNIQUES AS SPECIFIED IN THE "BEST MANAGEMENT PRACTICES OPERATION AND MAINTENANCE PLAN"

4. MAINTENANCE TO ESTABLISH A STAND

- PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.
- FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIALS TAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.
- IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

NOTES:

- TOP OF LOAM (TOPSOIL) IS FINISHED GRADE.
- TOPSOIL SHALL CONTAIN BETWEEN 5% AND 12% ORGANIC MATTER AND SHALL HAVE A MAXIMUM STONE SIZE OF 3/4" AND SHALL CONFORM TO THE FOLLOWING GRADATION:

SIEVE	% PASSING
1 1/4 INCH	100
No. 4	85-100
No. 40	60-85
No. 100	38-60
No. 200	28-40

SEEDING RATES

	POUND / ACRE	POUNDS / 1,000 S.F.
A. TALL FESCUE	20	0.45
CREeping RED FESCUE	20	0.45
REDTOP	2	0.05
TOTAL	42	0.95
B. TALL FESCUE	15	0.35
CREeping RED FESCUE	10	0.35
BIRDFOOT TREFOIL	15	0.35
TOTAL	40	0.95
C. TALL FESCUE	20	0.45
CREeping RED FESCUE	20	0.45
BIRDFOOT TREFOIL	8	0.20
TOTAL	48	1.10
D. BIRDFOOT TREFOIL	10	0.25
REDTOP	5	0.10
TOTAL	15	0.35
E. TALL FESCUE	20	0.45
FLATPEA	30	0.75
TOTAL	50	1.20
F. CREeping RED FESCUE 1/	85	2.00
KENTUCKY BLUEGRASS 1/	85	2.00
TOTAL	170	4.00
G. TALL FESCUE 1/	150	3.60

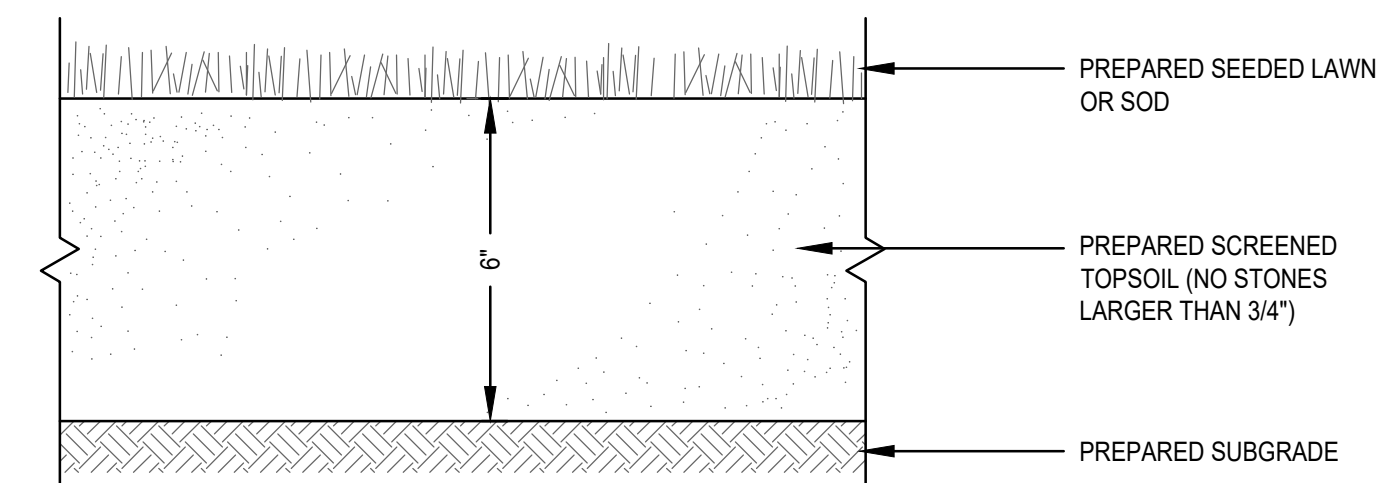
TEMPORARY SEEDING RATES

H. WINTER RYE	112	2.50 (BEST FOR FALL SEEDING, AUG 15 TO SEPT. 5)
OATS	80	2.00 (BEST FOR SPRING SEEDING, BEFORE MAY 15)
ANNUAL RYEGRASS	40	1.00 (BEST FOR FALL SEEDING, AUG 15 TO SEPT. 15)
TOTAL	232	5.50 (MAY BE USED EARLY SPRING ALSO)

1/ FOR HEAVY USE ATHLETIC FIELDS CONSULT THE UNIVERSITY OF NEW HAMPSHIRE COOPERATIVE EXTENSION TURF SPECIALIST FOR CURRENT VARIETIES AND SEEDING RATES.

SEEDING GUIDE

USE	SEEDING MIXTURE 1/
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	E
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER	D
LAWN AREAS	F



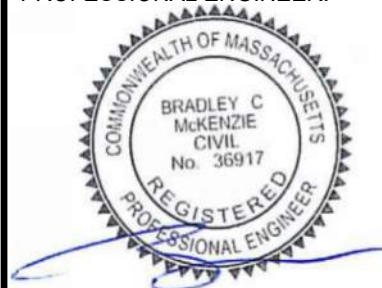
SEEDED OR SODDED LAWN DETAIL  
SCALE: N.T.S.

REV	DATE	DESCRIPTION	BY	APP
1	7/16/24	PLANNING BOARD REV.	ESS	BCM
2	7/29/24	PLANNING BOARD JTG.	ESS	BCM

**MG**  
MCKENZIE  
ENGINEERING GROUP  
Assinippi Office Park  
150 Longwater Drive, Suite 101  
Norwell, MA 02061  
P: 781.792.3900  
F: 781.792.0333  
www.mckeng.com

SITE DEVELOPMENT PLAN  
(ASSESSOR'S PARCEL NUMBER 3-0-2.1)  
300 POND STREET  
RANDOLPH, MASSACHUSETTS

PROFESSIONAL ENGINEER:



EMERSON - SWAN FLEXCON  
300 POND STREET  
RANDOLPH, MASSACHUSETTS

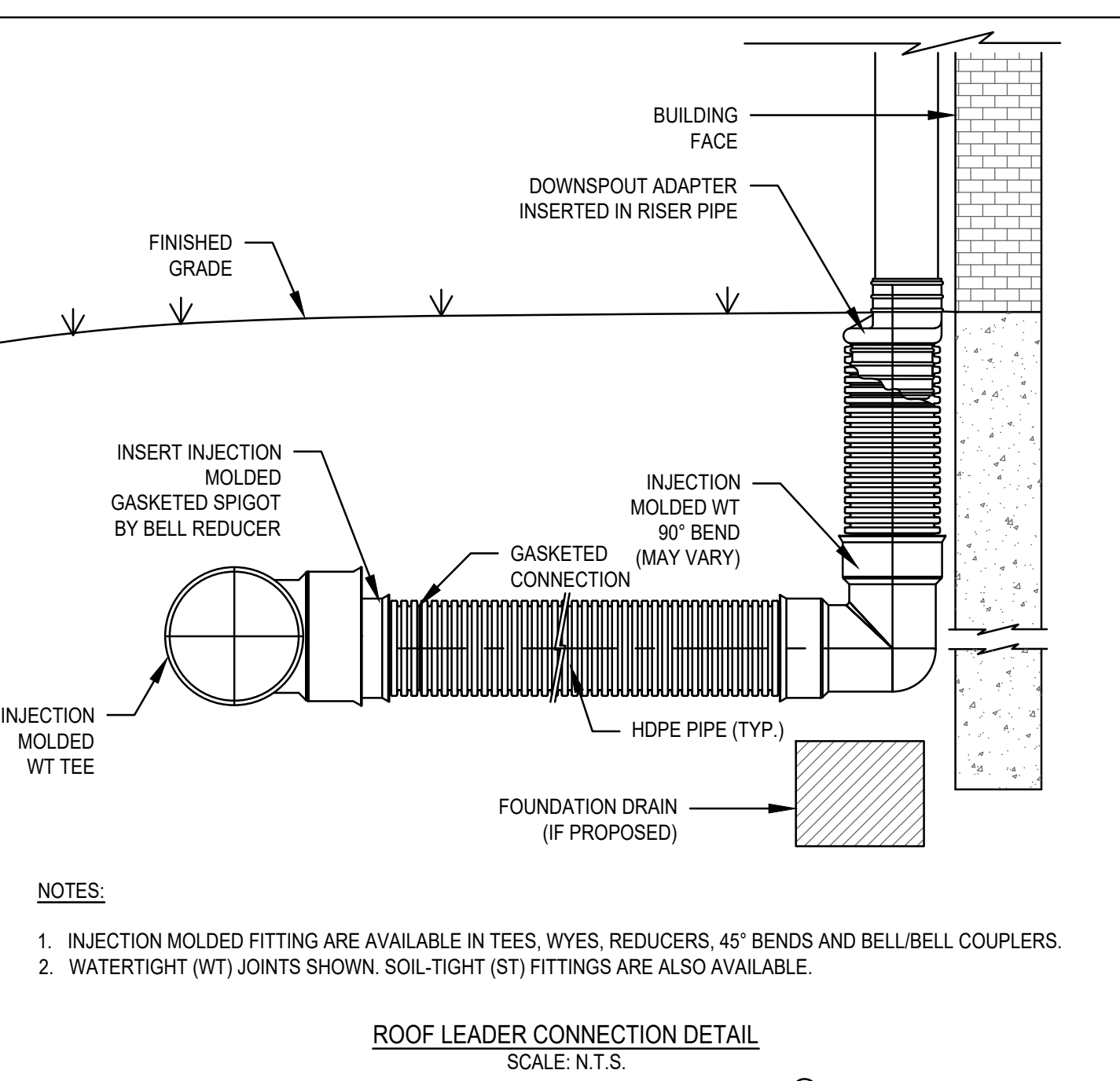
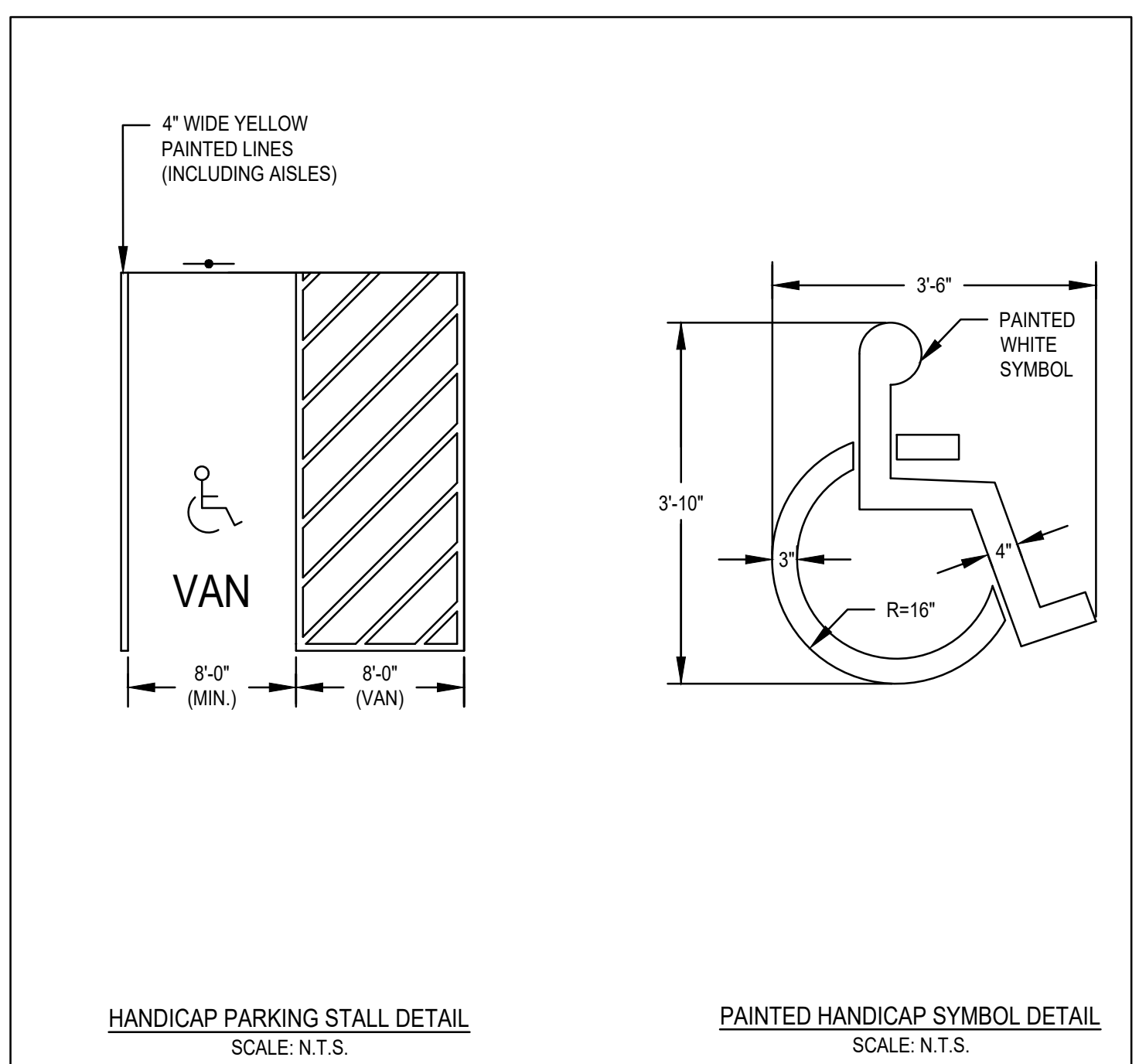
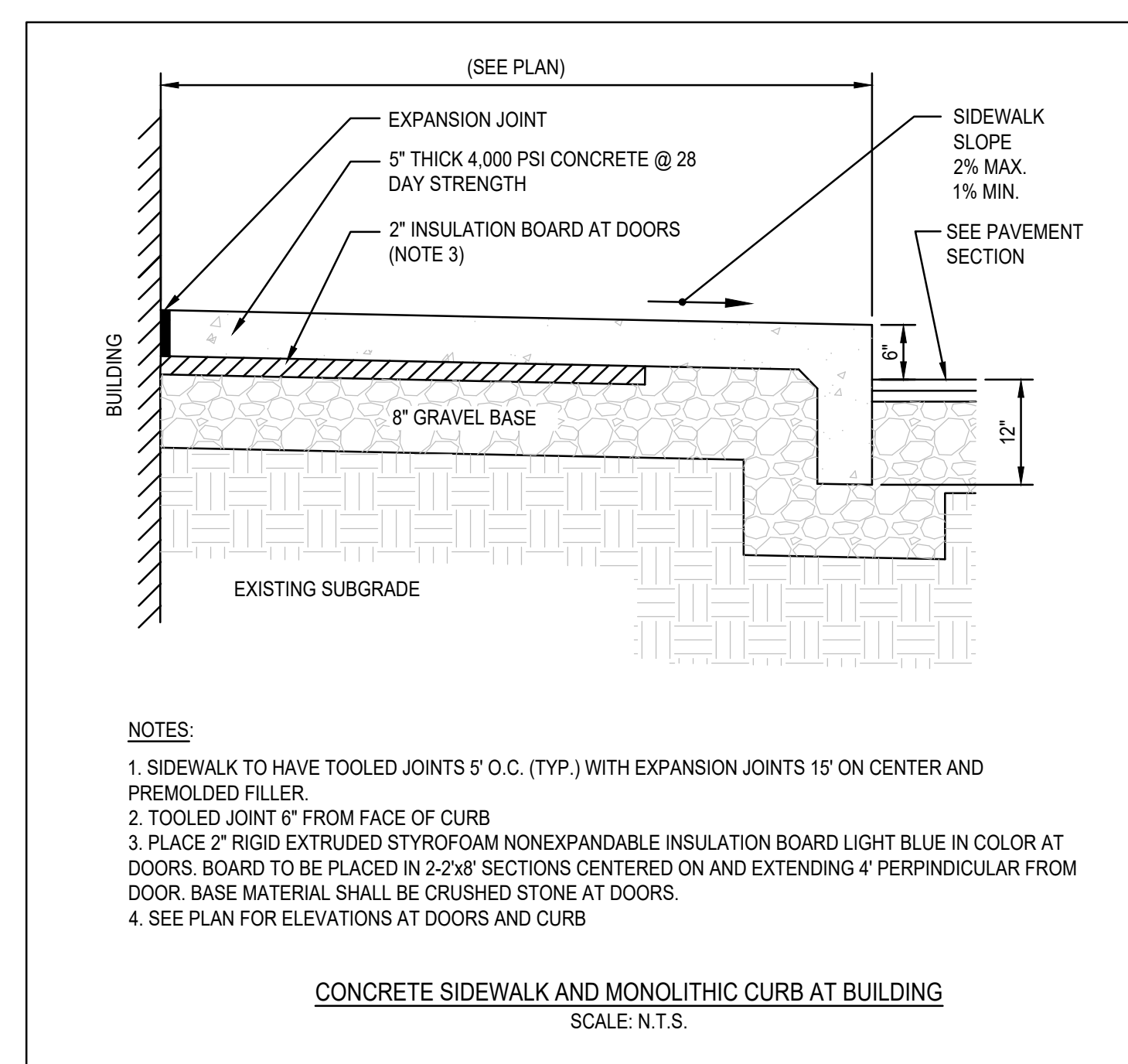
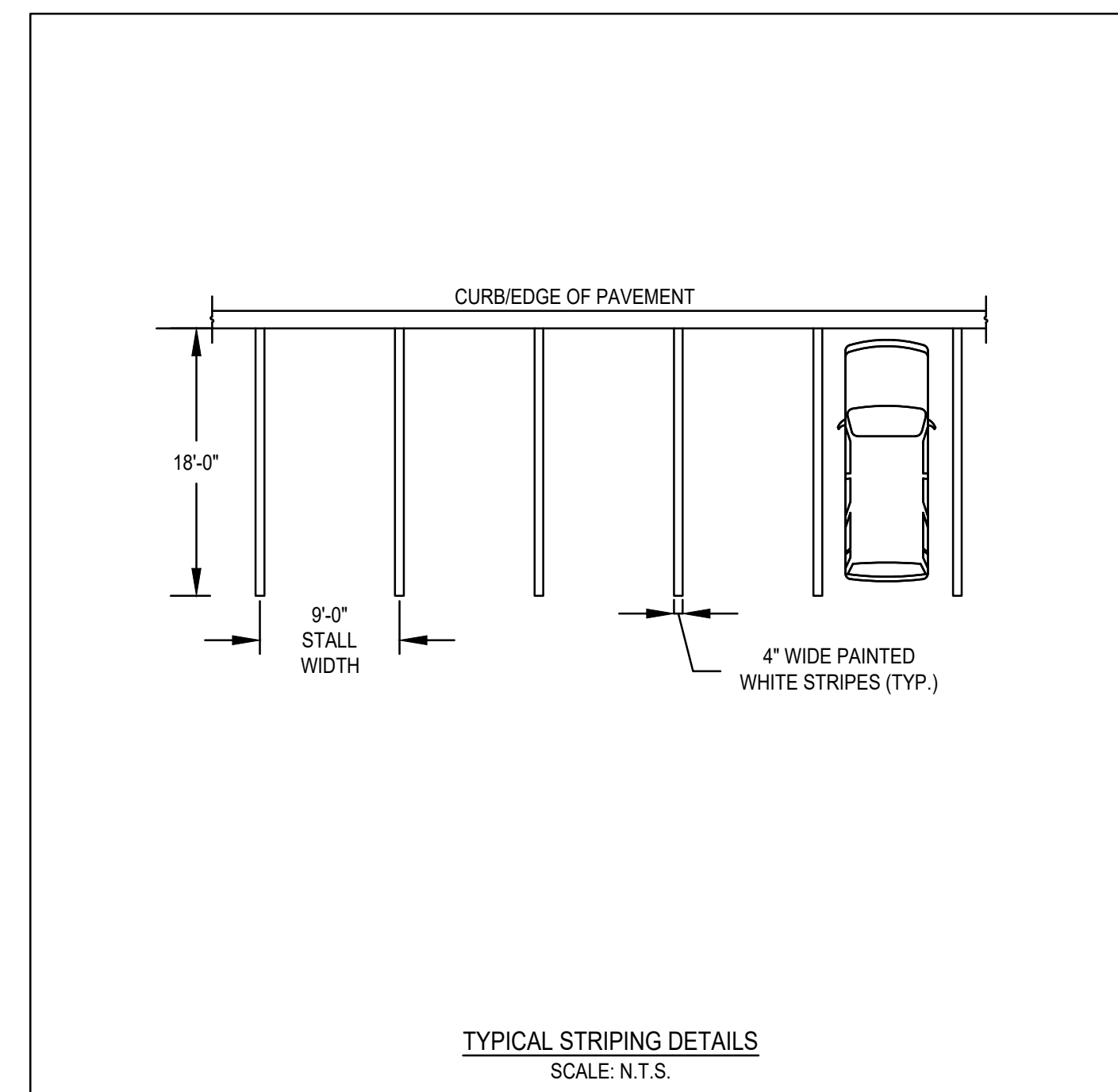
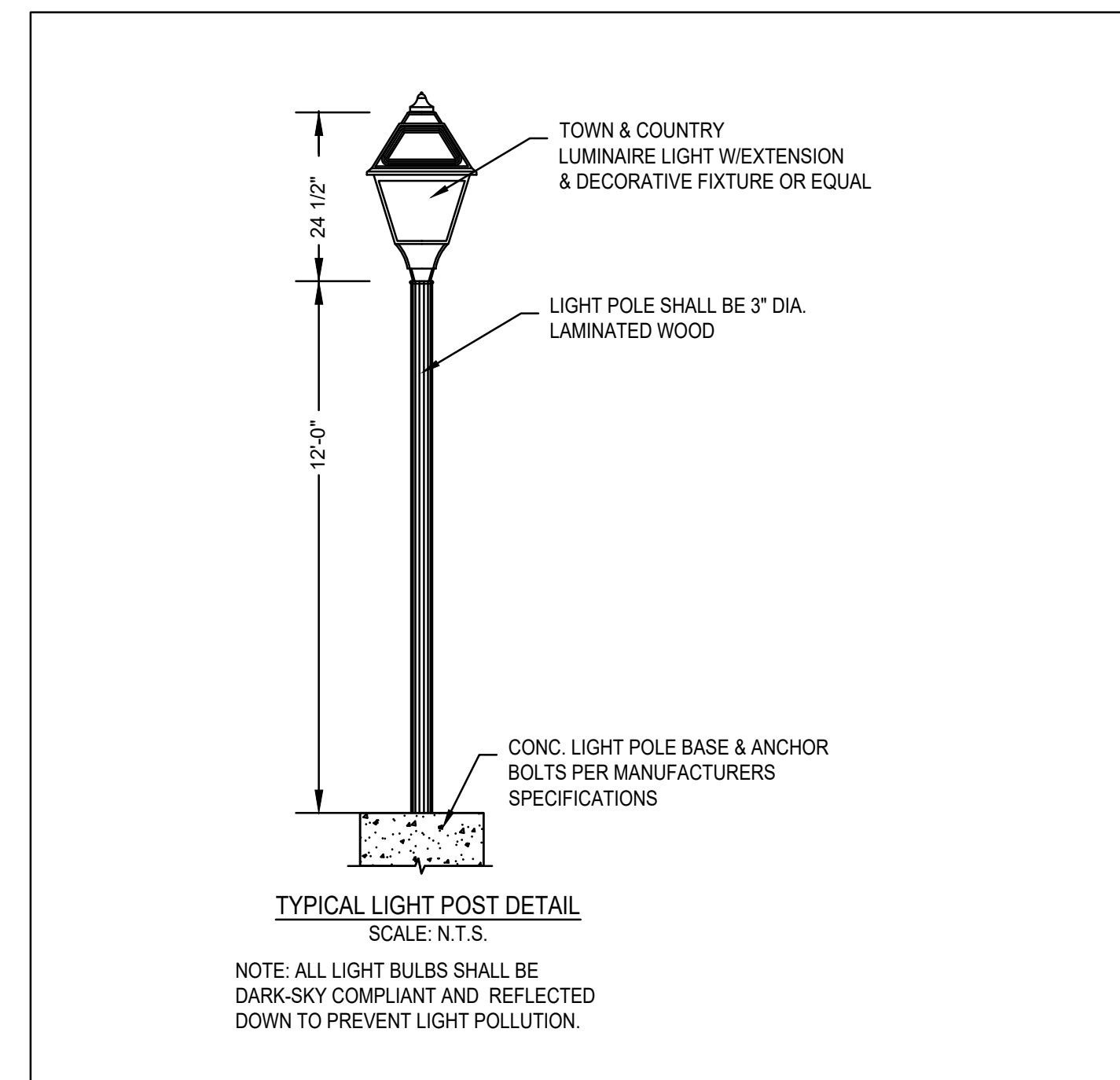
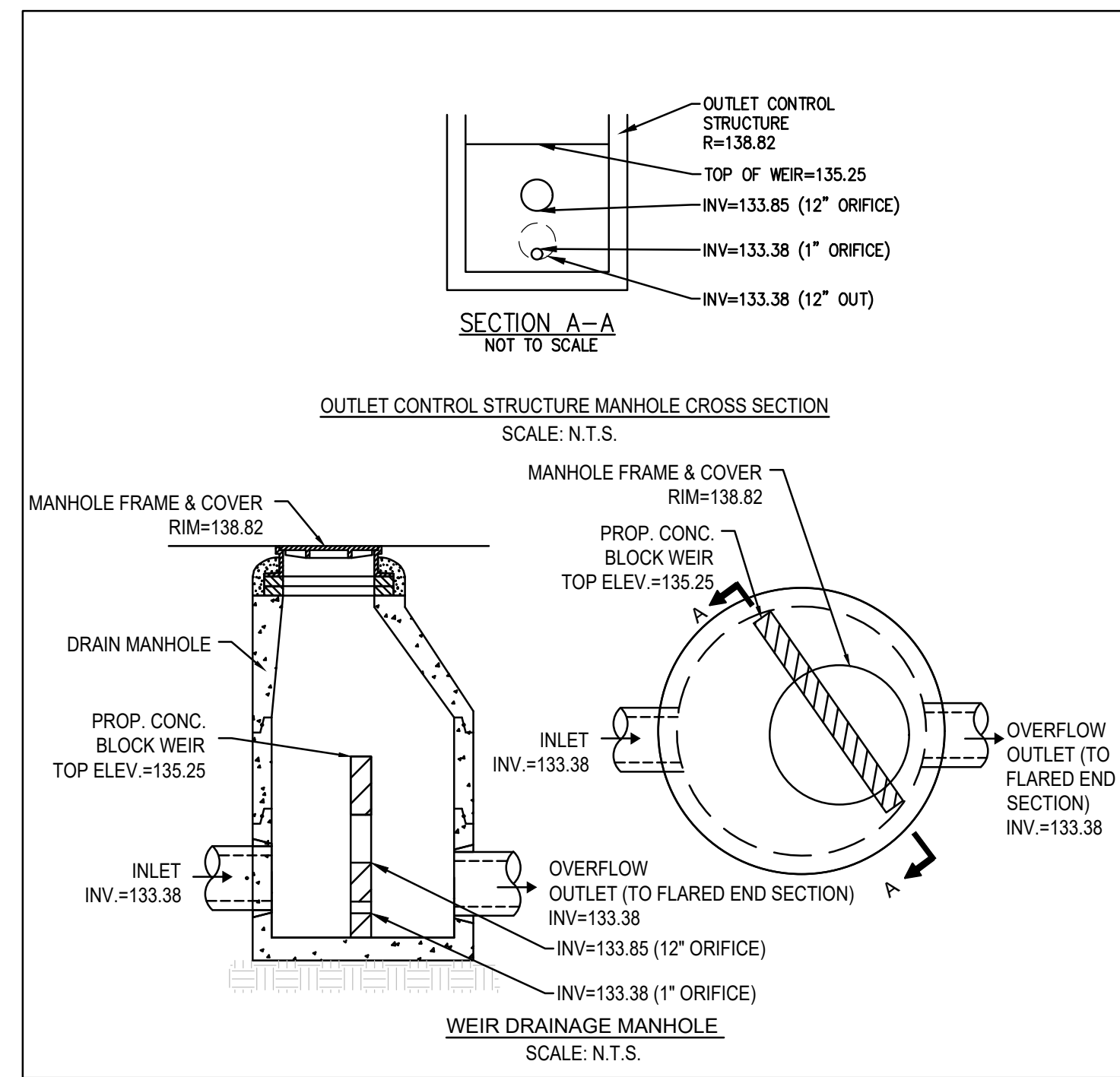
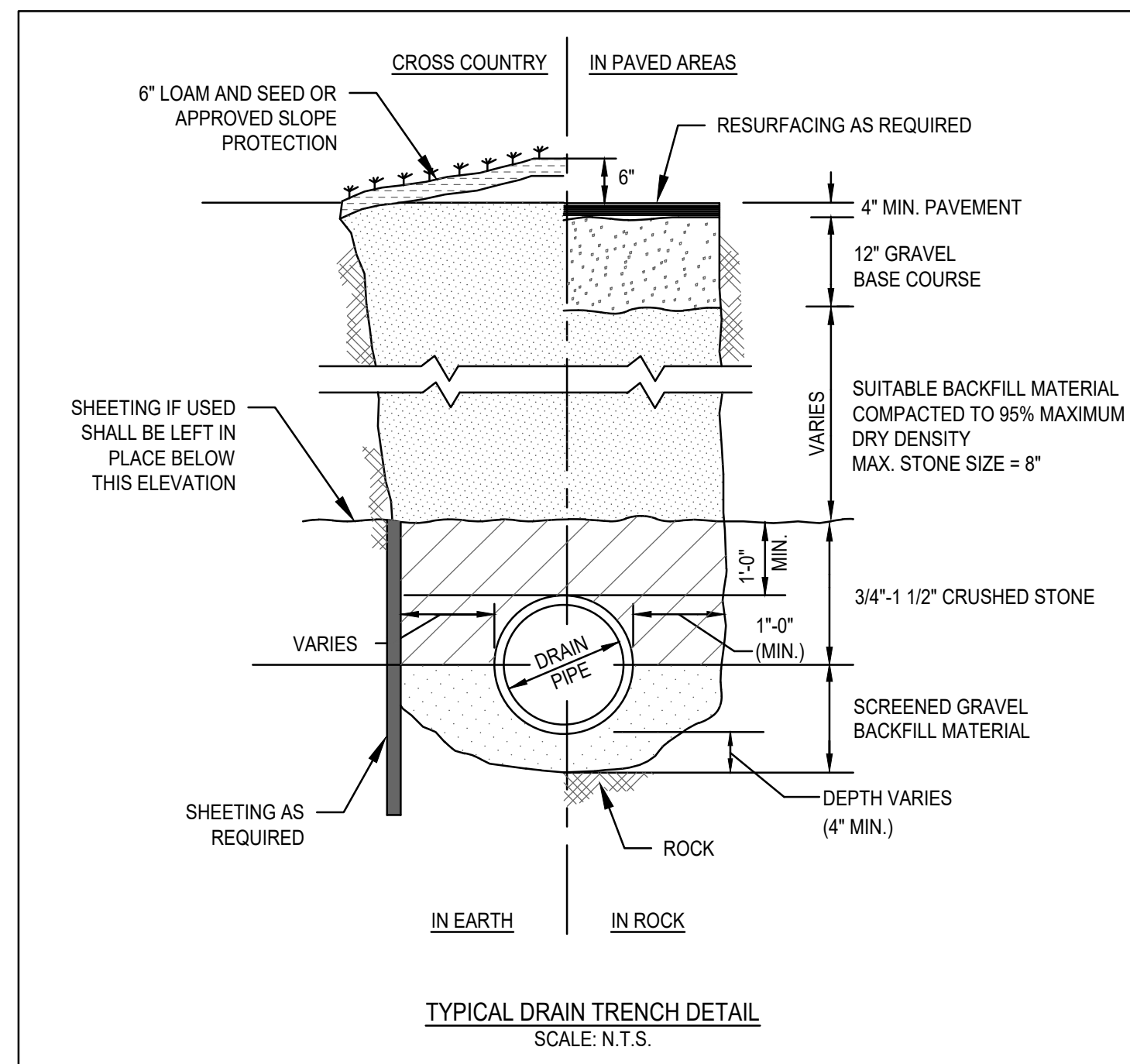
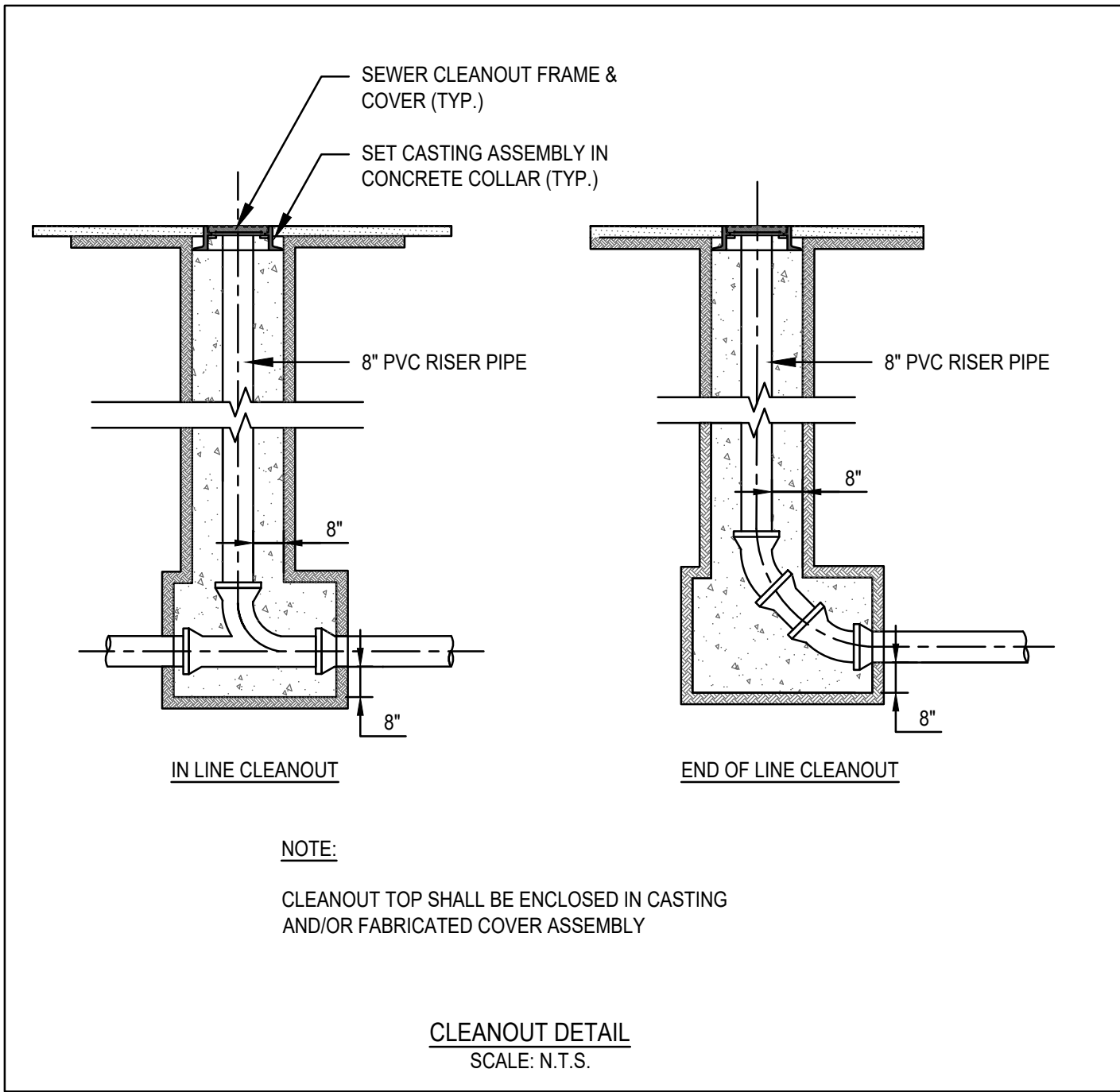
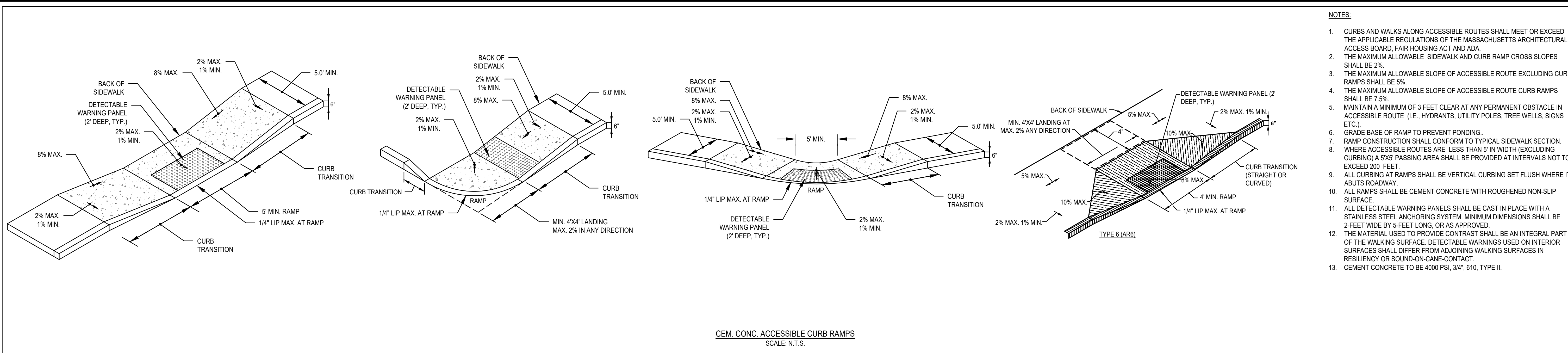
DRAWN BY:	ESS
DESIGNED BY:	ESS
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	JUNE 11, 2024
SCALE:	AS NOTED
PROJECT NO.:	222-209
DWG. TITLE:	

CONSTRUCTION  
DETAILS

DWG. NO.:

D-1





REV	DATE	DESCRIPTION
1	7/16/24	PLANNING BOARD REV.
2	7/29/24	PLANNING BOARD ATG.

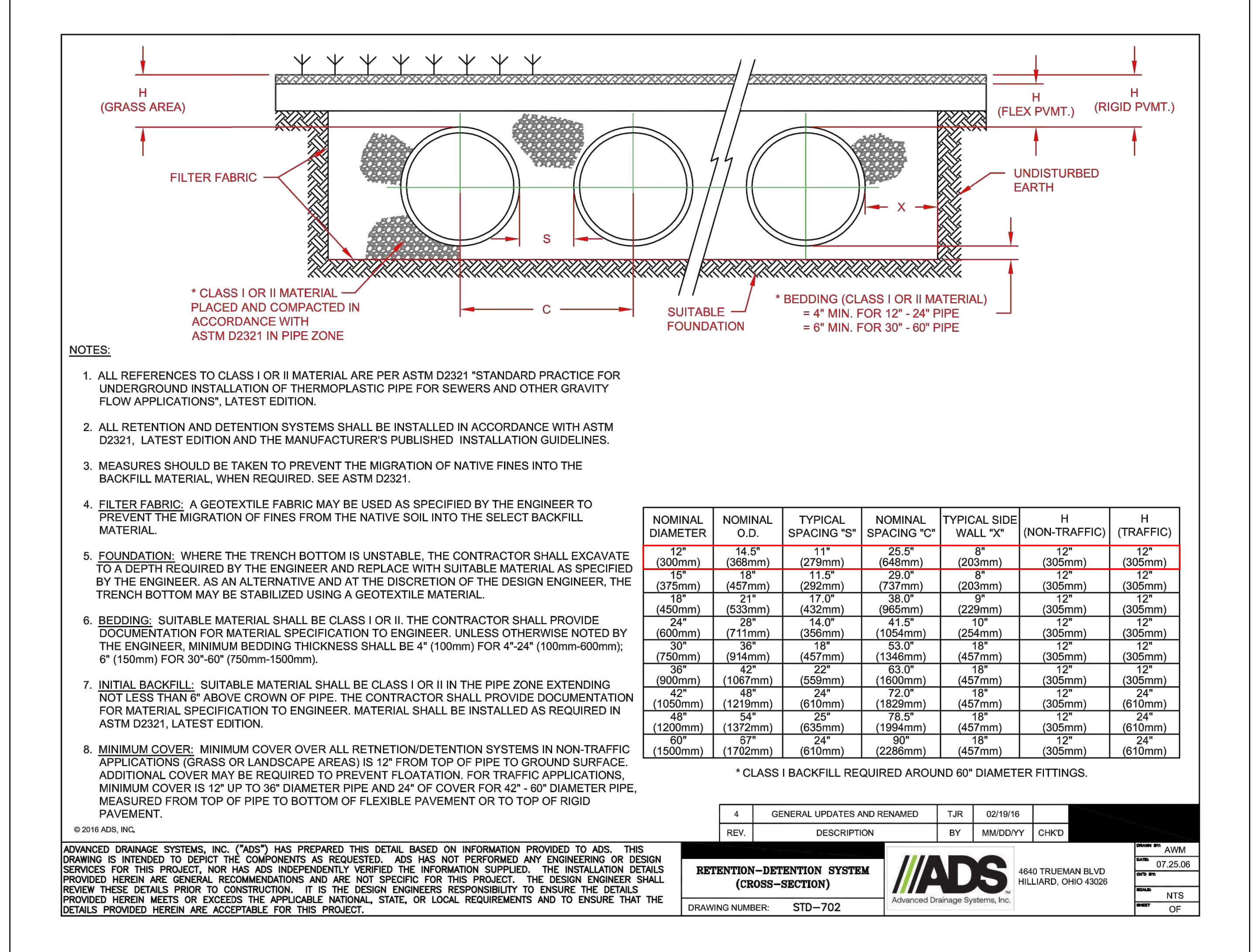
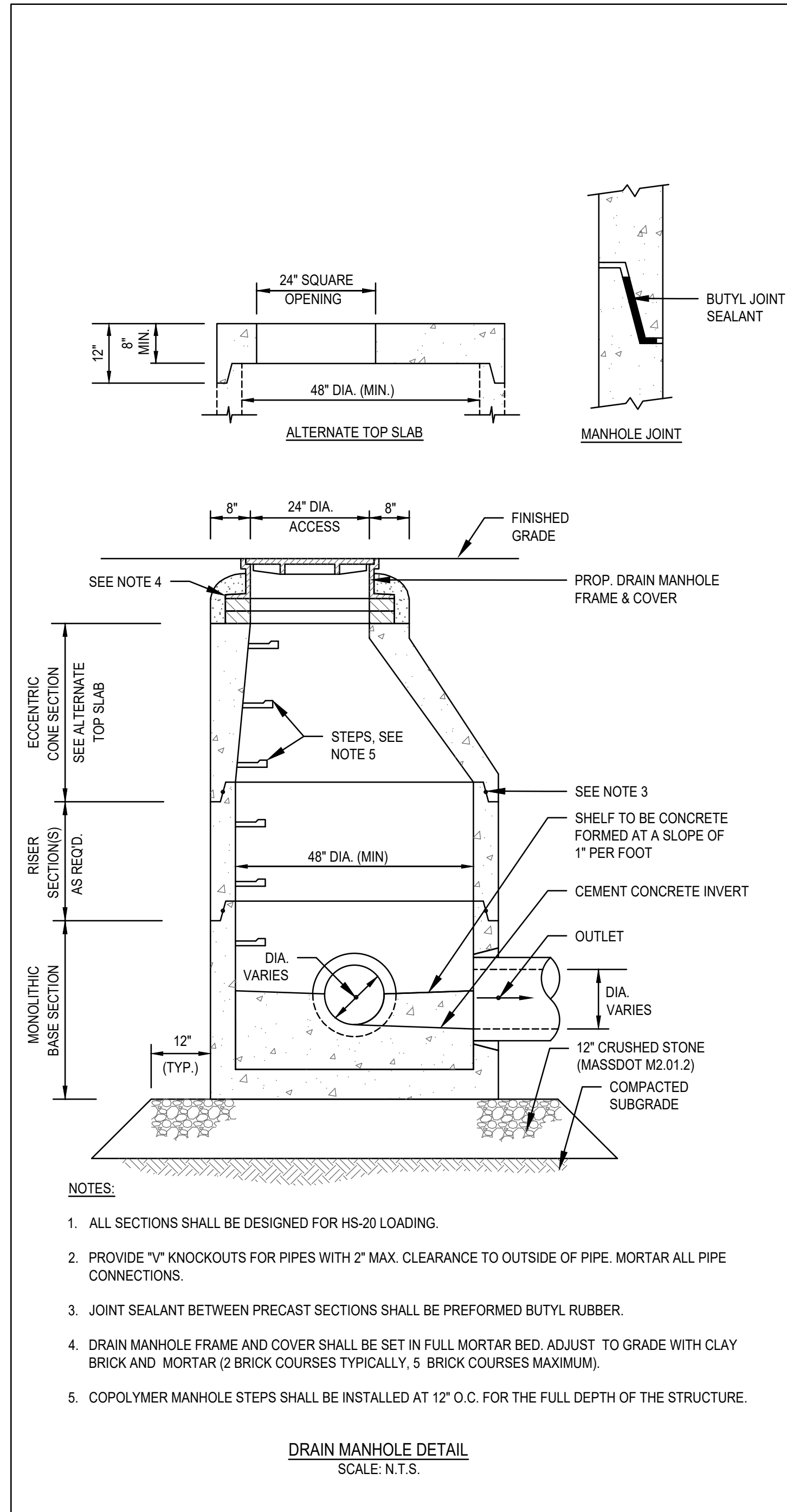
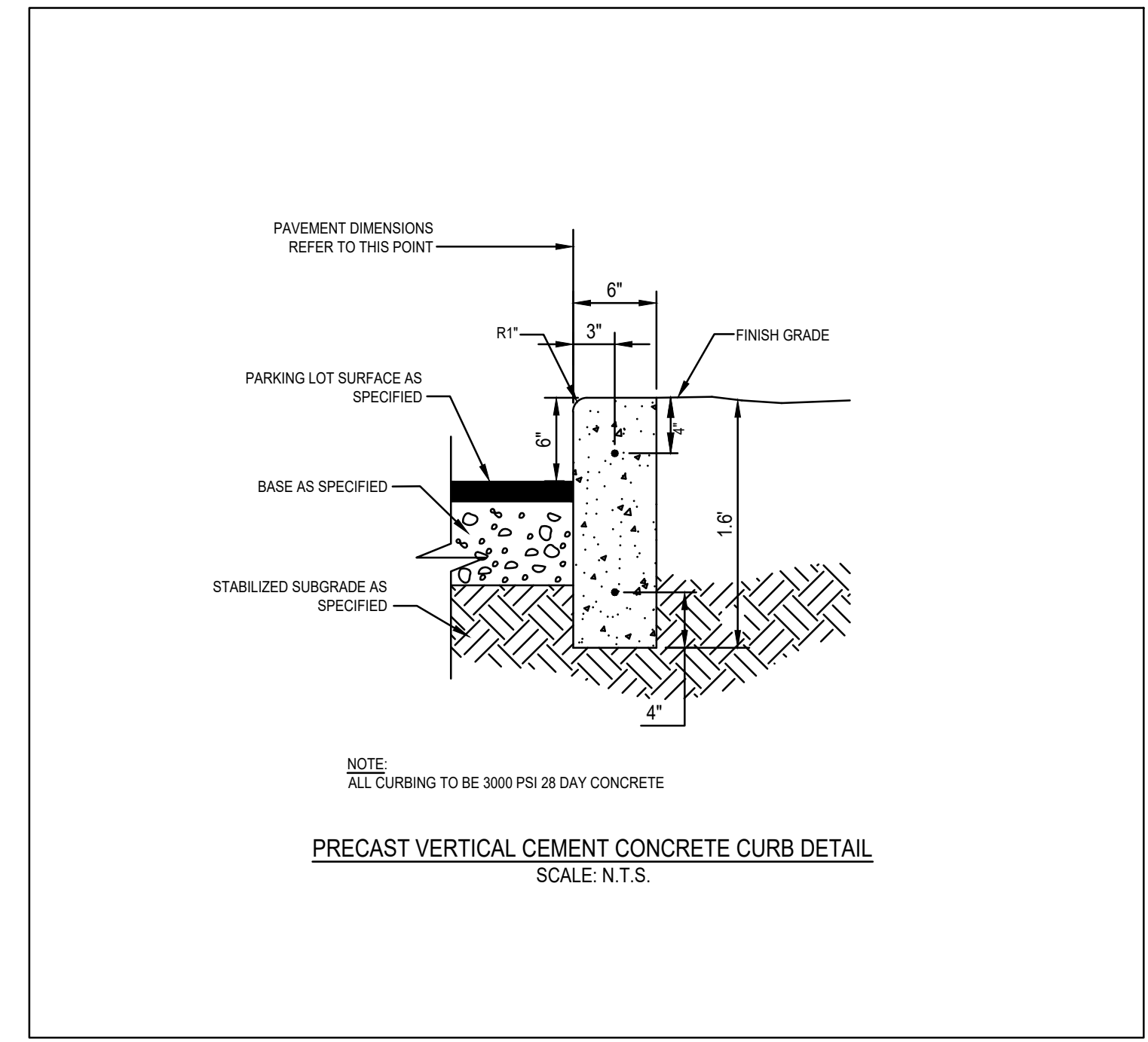
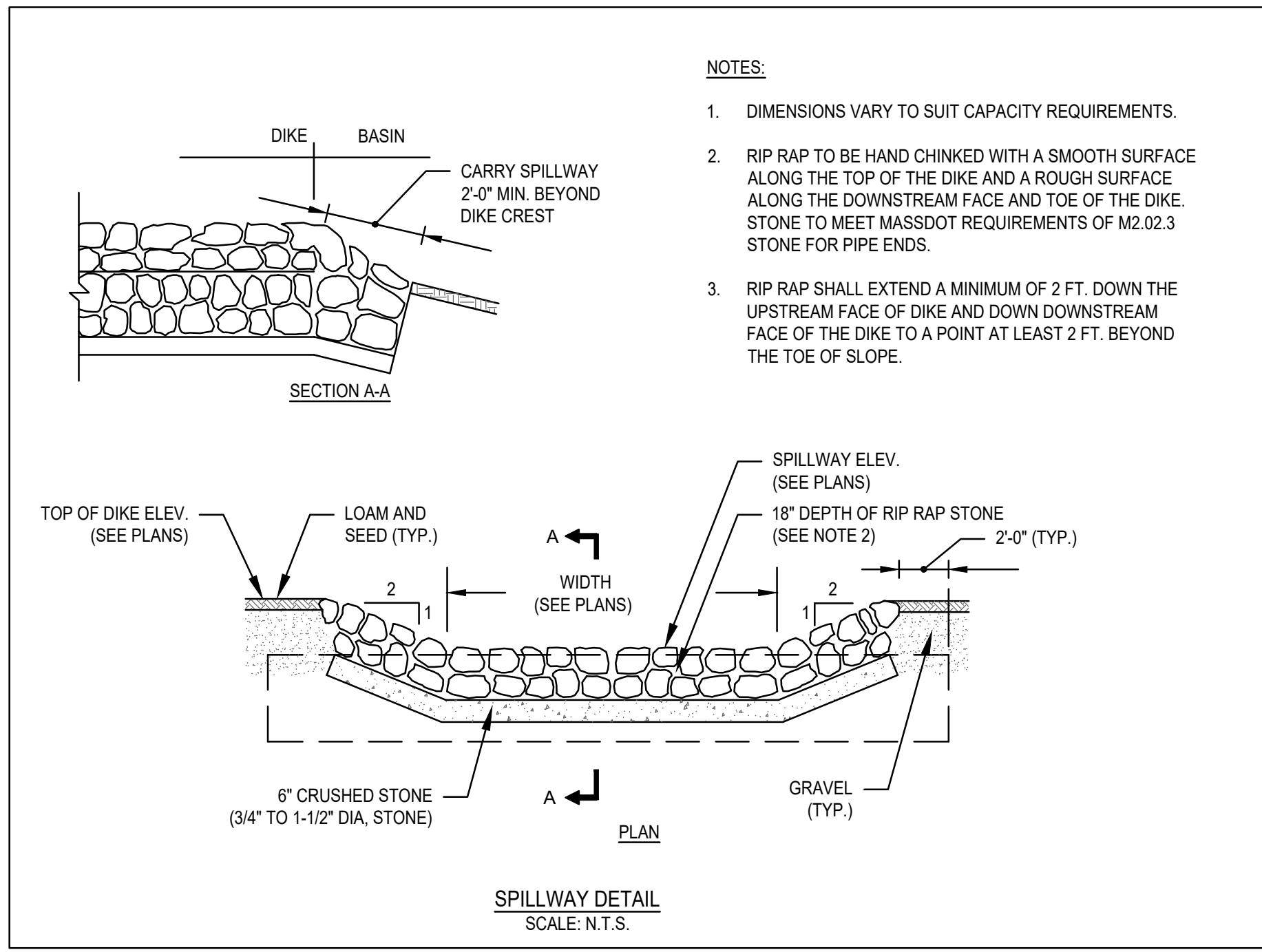
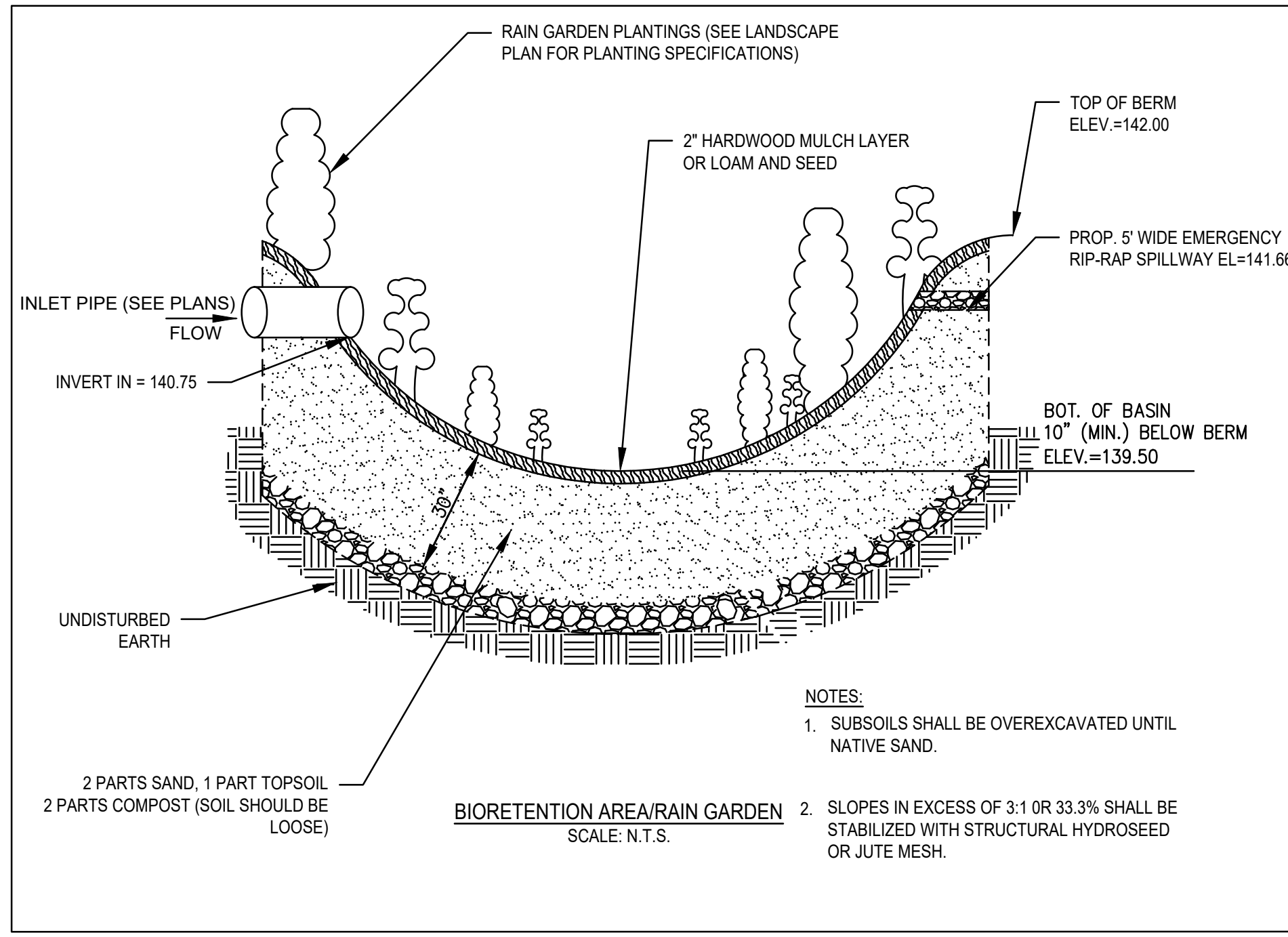
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www.mckeng.com

**SITE DEVELOPMENT PLAN**  
**(ASSESSOR'S PARCEL NUMBER 3-0-2.1)**  
**300 POND STREET**  
**RANDOLPH, MASSACHUSETTS**

PROFESSIONAL ENGINEER:

OWNER/APPLICANT:  
**EMERSON - SWAN FLEXCON**  
300 POND STREET  
RANDOLPH, MASSACHUSETTS

DRAWN BY: ESS  
DESIGNED BY: ESS  
CHECKED BY: BCM  
APPROVED BY: BCM  
DATE: JUNE 11, 2024  
SCALE: AS NOTED  
PROJECT NO.: 222-209  
DWG. TITLE: CONSTRUCTION DETAILS



BY APP: ESS, BCM  
DESCRIPTION: PLANNING BOARD REV. 1, 2  
DATE: 7/16/24, 7/29/24  
REV: 1, 2

**MG**  
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**SITE DEVELOPMENT PLAN**  
**(ASSESSOR'S PARCEL NUMBER 3-0-2.1)**  
**300 POND STREET**  
**RANDOLPH, MASSACHUSETTS**

PROFESSIONAL ENGINEER:  
BRADLEY C. MCKENZIE  
No. 30917  
REGISTERED PROFESSIONAL ENGINEER

OWNER/APPLICANT:  
EMERSON - SWAN FLEXCON  
300 POND STREET  
RANDOLPH, MASSACHUSETTS

DRAWN BY: ESS  
DESIGNED BY: ESS  
CHECKED BY: BCM  
APPROVED BY: BCM  
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**CONSTRUCTION DETAILS**

DWG. NO.: **D-3**

PERMIT PLAN SET



**CONSTRUCTION SEQUENCE**

TO PREVENT EXCESSIVE EROSION AND SILTING, THE FOLLOWING CONSTRUCTION SEQUENCE COUPLED WITH OTHER WIDELY ACCEPTED PRINCIPALS FOR REDUCING EROSION AND SEDIMENTATION SHALL BE IMPLEMENTED IN THE DEVELOPMENT OF THE SITE.

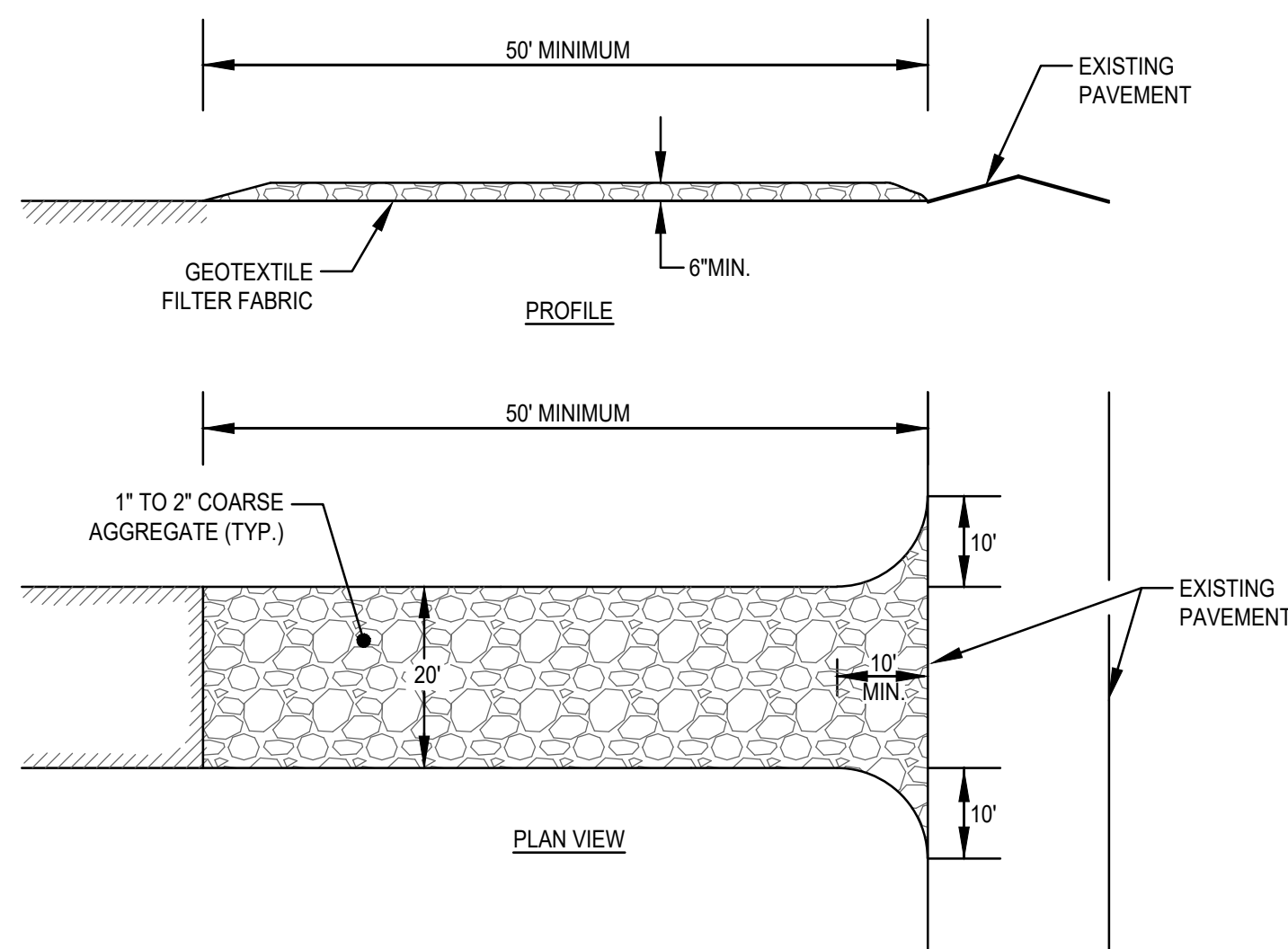
1. THE CONTRACTOR SHALL COORDINATE A PRE-CONSTRUCTION MEETING PRIOR TO ANY CONSTRUCTION ACTIVITY.
2. STABILIZATION PRACTICES FOR EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. REFER TO "EROSION AND SEDIMENTATION CONTROL" SECTION OF THIS PLAN & PLACE SILTATION FENCE ON THE SITE PLANS.
3. CLEAR AND GRUB UP AS REQUIRED FOR THE CONSTRUCTION OF THE ROADWAY, PARKING AREAS AND RELATED INFRASTRUCTURE.
4. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
5. EXCAVATE TOPSOIL AND SUBSOIL FROM CUT AND FILL AREAS AND STOCKPILE ON SITE IN LOCATIONS SHOWN ON THE PLAN. CONSIDERATION SHOULD BE GIVEN TO LOCATING STOCKPILES ON THE UPHILL SIDE OF DISTURBED AREAS, WHERE POSSIBLE, TO ACT AS TEMPORARY DIVERSIONS.
6. CONSTRUCT CUT AND FILL AREAS, INSTALLING HAYBALE CHECK DAMS AT TOES OF ALL 3:1 OR GREATER SLOPES, AND AT ENDS OF ALL CUT AREAS. ALL FILL WILL BE INSTALLED USING 12" MAXIMUM COMPACTION LIFTS. PLACE ALL SLOPE PROTECTION WHERE INDICATED ON THE PLAN. THE SUBSURFACE INFILTRATION SYSTEM SHALL BE CONSTRUCTED IMMEDIATELY AFTER THE ROADWAY ROUGH GRADING IS COMPLETED AND THE AREA HAS BEEN CLEARED OF VEGETATION.
7. INSTALL CLOSED DRAINAGE SYSTEM AND OTHER UTILITIES. ALL CATCH BASINS SHALL BE COVERED WITH SILTSACK OR EQUIVALENT INLET PROTECTION.
8. GRADE ROADWAY AND PARKING AREAS TO SUBGRADE ELEVATION AND CONSTRUCT SIDE SLOPES. APPLY TEMPORARY STABILIZATION MEASURES WHERE WARRANTED. REFER TO "EROSION AND SEDIMENTATION CONTROL" SECTION OF THIS PLAN.
9. EXCAVATE AND CONSTRUCT BUILDING FOUNDATION.
10. PLACE GRAVEL SUBBASE.
11. PLACE THE BITUMINOUS CONCRETE BINDER COURSE ON ROADWAY AND PARKING AREAS.
12. CONSTRUCT BUILDING STRUCTURES AND ASSOCIATED UTILITY CONNECTIONS.
13. GRADE SLOPES AND STABILIZE CUT AREAS AT TOE OF SLOPES. BLEND ALL SLOPES INTO EXISTING TOPOGRAPHY AND LOAM AND SEED ALL DISTURBED AREAS. SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH JUTE MESH.
14. PLACE THE FINAL WEARING COURSE OF PAVEMENT.
15. COMPLETE FINE GRADING OF SHOULDERS AND PLACE PAVEMENT IN MISCELLANEOUS AREAS.
16. REMOVE TEMPORARY EROSION CONTROL DEVICES ONCE ADEQUATE GROWTH IS ESTABLISHED. ADEQUATE GROWTH IS DEFINED AS VEGETATION COVERING 75% OR MORE OF THE GROUND SURFACE.

**CONSTRUCTION PHASE BMP OPERATION AND MAINTENANCE NOTES:**

1. STRUCTURAL PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE SILT SOCK EROSION CONTROL BARRIERS, STABILIZED CONSTRUCTION ENTRANCES, CONCRETE WASH STATIONS, STOCKPILE AREAS, AND INLET PROTECTION.
2. STABILIZATION PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE TEMPORARY SEEDING, GEOTEXTILES (JUTE MESH), MULCHING, AND PERMANENT SEEDING.
3. OPERATOR PERSONNEL AND/OR ITS CONSULTANTS MUST INSPECT THE CONSTRUCTION SITE AT LEAST ONCE EVERY 7 CALENDAR DAYS OR EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT 1/4 INCH OR GREATER. THE INSPECTOR SHOULD REVIEW THE EROSION AND SEDIMENT CONTROLS WITH RESPECT TO THE FOLLOWING:
  - A. WHETHER OR NOT THE BMP WAS INSTALLED/PERFORMED CORRECTLY.
  - B. WHETHER OR NOT THERE HAS BEEN DAMAGE TO THE BMP SINCE IT WAS INSTALLED OR PERFORMED.
  - C. WHAT SHOULD BE DONE TO CORRECT ANY PROBLEMS WITH THE BMP.
4. THE INSPECTOR SHALL COMPLETE THE INSPECTION SCHEDULE AND EVALUATION CHECKLIST FOR FINDINGS AND SHOULD REQUEST THE REQUIRED MAINTENANCE OR REPAIR.
5. ALL SLOPES EXCEEDING 15% RESULTING FROM SITE GRADING SHALL BE BOTH COVERED WITH FOUR INCHES OF TOPSOIL AND PLANTED WITH A VEGETATED COVER SUFFICIENT TO PREVENT EROSION.

**EROSION AND SEDIMENTATION CONTROL**

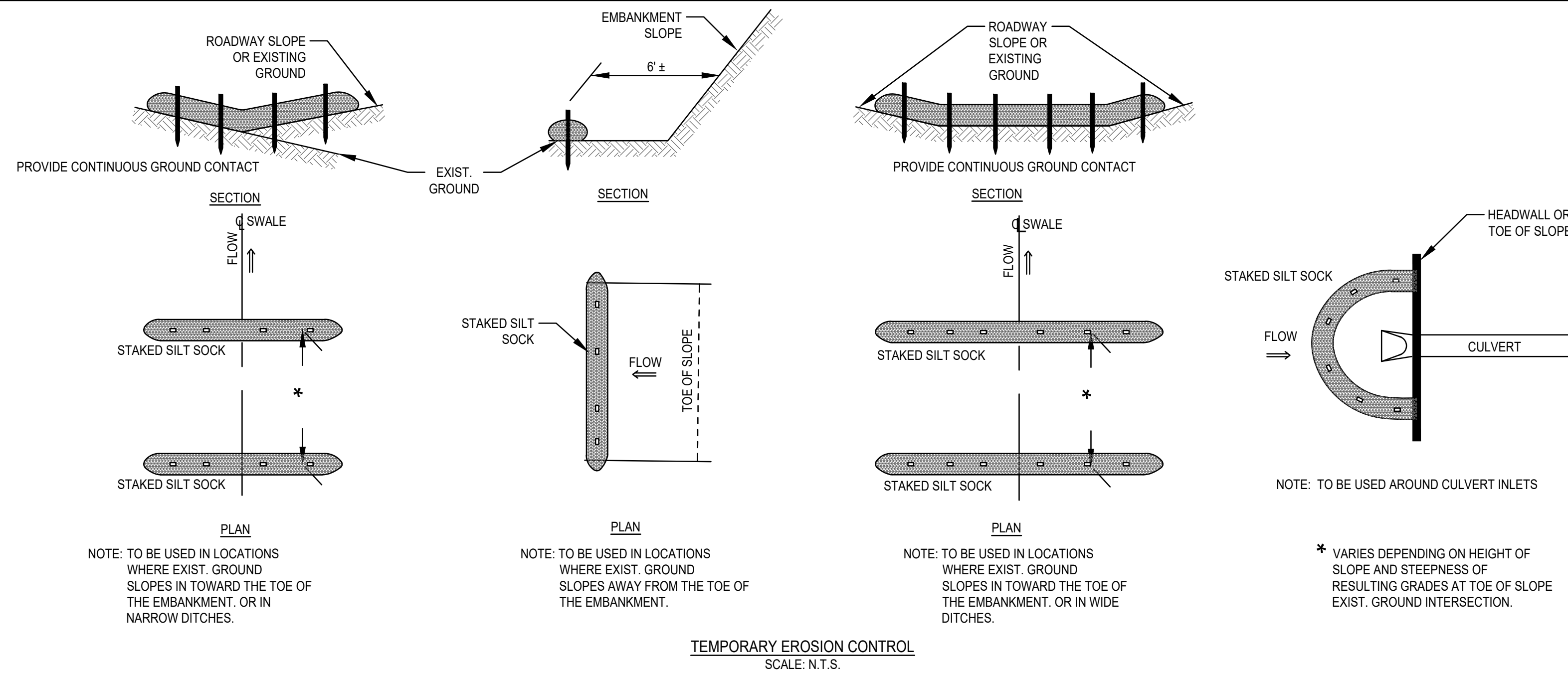
1. STRUCTURAL PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE SILT SOCK BARRIER CONTROLS, STABILIZED CONSTRUCTION ENTRANCE, TEMPORARY DIVERSION SWALES WITH STONE CHECK DAMS, SEDIMENT BASINS, AND INLET PROTECTION.
2. STABILIZATION PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE TEMPORARY SEEDING, GEOTEXTILES (JUTE MESH), MULCHING, AND PERMANENT SEEDING.
3. IN GENERAL, THE SMALLEST POSSIBLE AREA OF LAND SHOULD BE EXPOSED AT ONE TIME. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHALL BE CONFINED TO A MAXIMUM PERIOD OF 3 MONTHS. LAND SHALL NOT BE EXPOSED DURING THE WINTER MONTHS. ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY AND THAT WILL BE REGRADED AT A LATER DATE SHALL BE MACHINE HAY MULCHED AND SEEDED WITH WINTER RYE TO PREVENT EROSION.



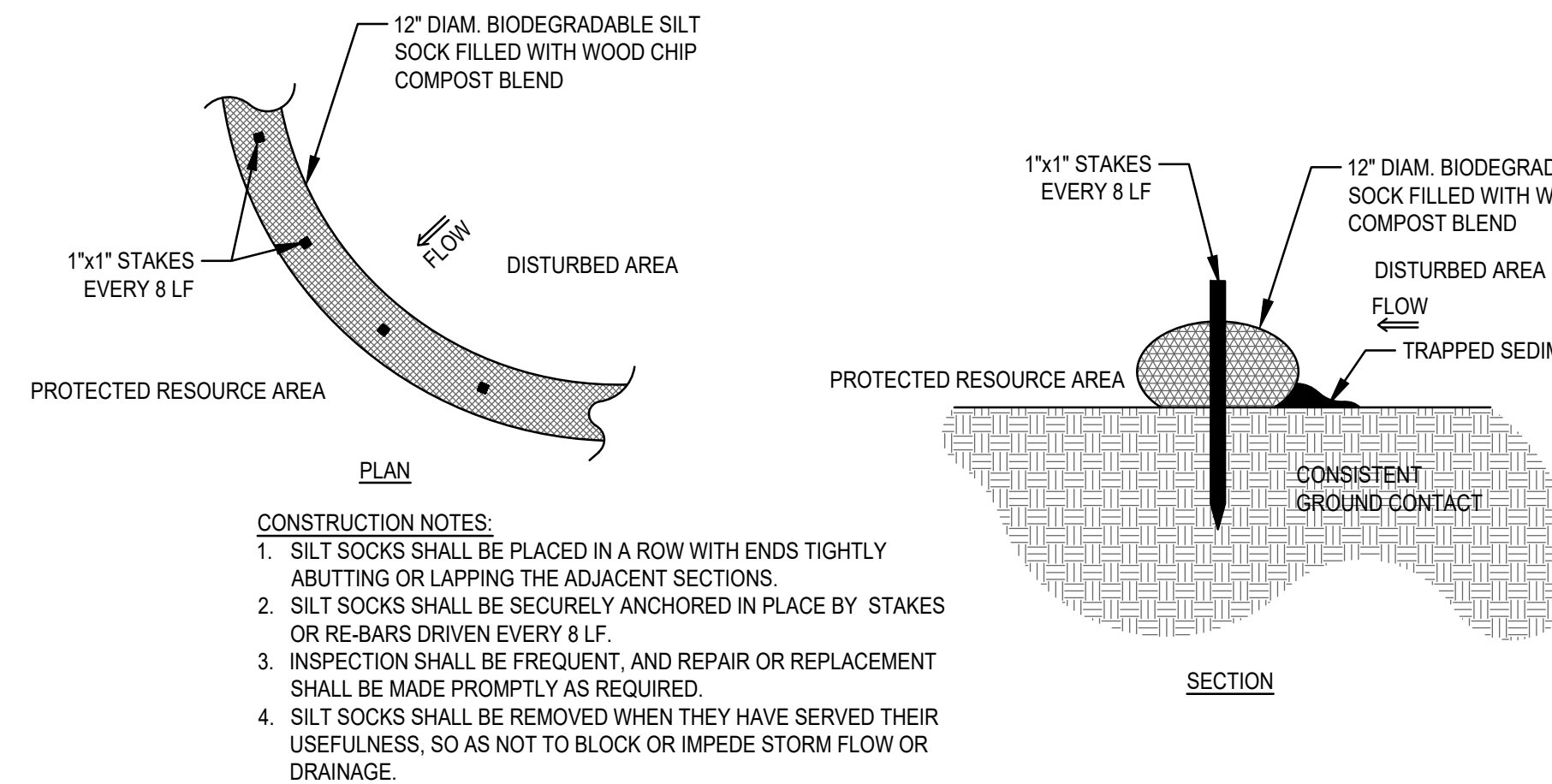
**(SCE) CONSTRUCTION SPECIFICATIONS:**

1. STONE FOR A STABILIZATION CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT A 30 FOOT MINIMUM LENGTH WOULD APPLY.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN A FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICHEVER IS GREATER.
5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.
6. ALL SURFACE WATER THAT IS FLOWING TO OR DEVERTED TOWARDS THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED PROMPTLY.

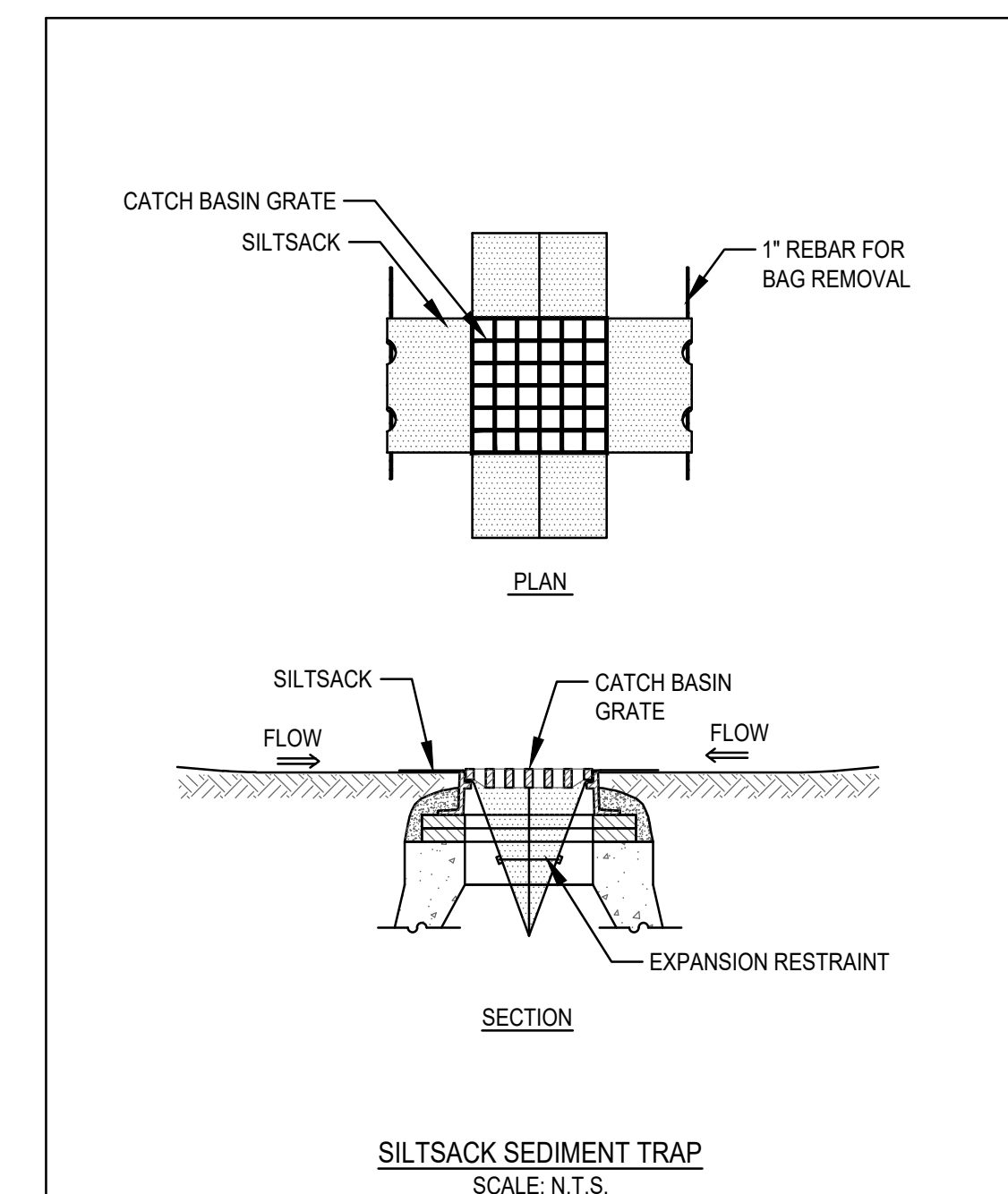
**STABILIZED CONSTRUCTION ENTRANCE (SCE) DETAIL**  
SCALE: N.T.S.



**TEMPORARY EROSION CONTROL**  
SCALE: N.T.S.



**SILT SOCK EROSION CONTROL BARRIER DETAIL**  
SCALE: N.T.S.



**SILT SACK SEDIMENT TRAP**  
SCALE: N.T.S.

C MCKENZIE ENGINEERING GROUP, INC.

REV	DATE	DESCRIPTION	BY	APP
1	7/18/24	PLANNING BOARD REV.	ESS	BCM
2	7/29/24	PLANNING BOARD JTG.	ESS	BCM

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**RANDOLPH, MASSACHUSETTS**

PROFESSIONAL ENGINEER:  
  
BRADLEY C. MCKENZIE  
CIVIL  
No. 30917  
EXPIRES 12/31/25

OWNER/APPLICANT:  
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**CONSTRUCTION DETAILS**

DWG. NO: **D-5**

PERMIT PLAN SET