

SITE PLAN

16 FENCOURT AVENUE, RANDOLPH, MA

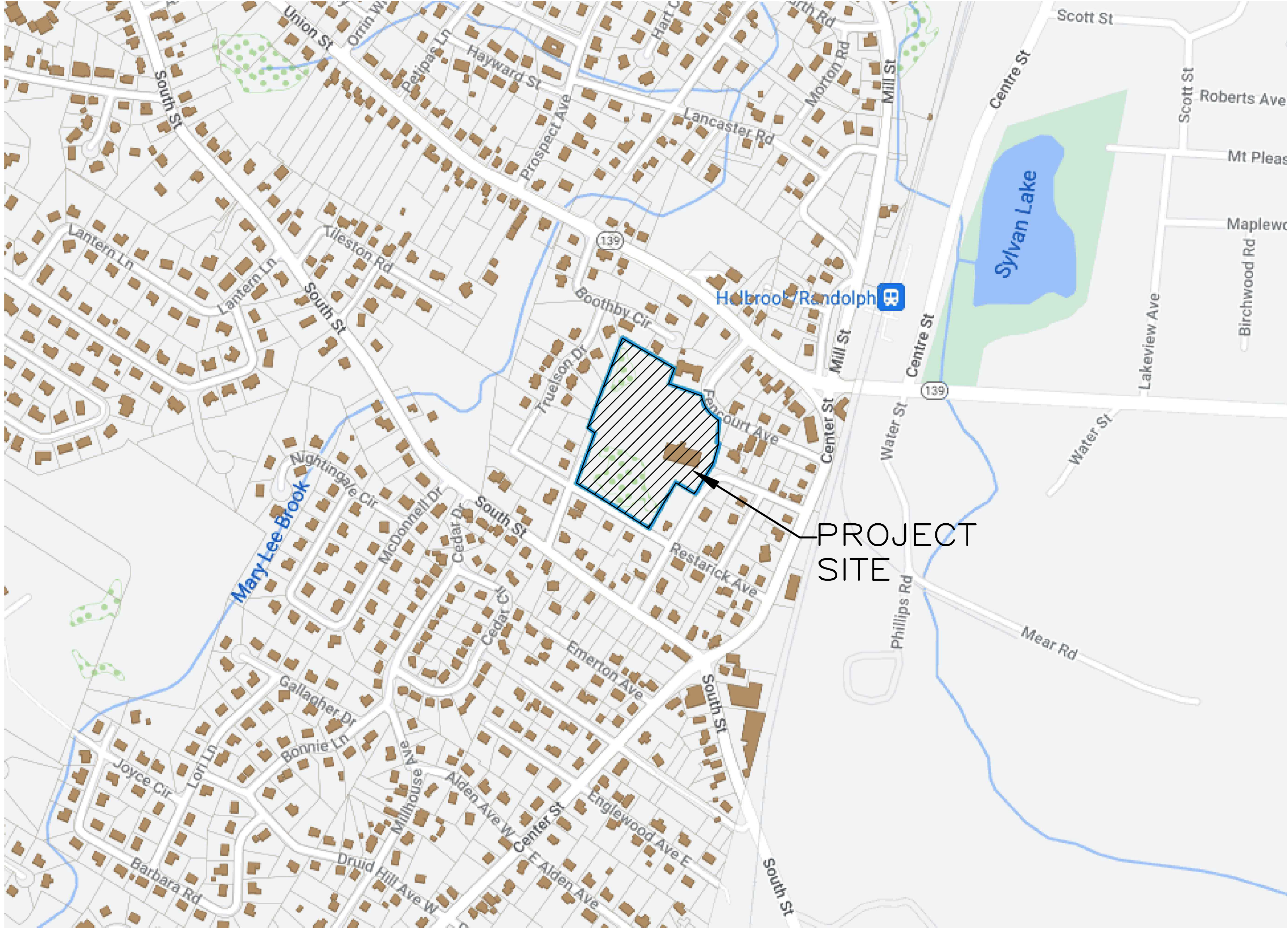
DIMENSIONAL REQUIREMENTS			
ZONING ITEM	UCTD	EXISTING	PROPOSED
MIN. LOT AREA	5 ACRES	7.13 ACRES	7.13 ACRES
MIN. LOT FRONTAGE/DEPTH	100/75 FT	142.5/599FT	142.5/599FT
MAX. YARD – FRONT	10 FT**	167.5 FT	5.4 FT
MIN. YARD – SIDE	30 FT***	69.9 FT	30 FT
MIN. YARD – REAR	30 FT***	287.3 FT	30 FT
BUILDING HEIGHT	NOTE****	1 STORY	3 STORIES
MIN. OPEN SPACE	10%	79%	45.1%

* VARIANCE REQUIRED

** IN ORDER TO DEFINE A CONSISTENT BUILDING LINE ALONG THE STREET, NEW BUILDING SHALL NOT BE SET BACK MORE THAN (10) FEET FROM THE FRONT PROPERTY LINE.

*** A UCTD PROJECT SHALL COMPLY WITH THE FOLLOWING REQUIREMENT:
1) SIDE YARD SETBACK FOR THREE (3) STORY BUILDING ABUTTING A RESIDENTIAL DISTRICT: 30 FEET FROM THE LOT LINE.
2) REAR YARD SETBACK FOR THREE (3) STORY BUILDING ABUTTING A RESIDENTIAL DISTRICT: 30 FEET FROM THE LOT LINE.

**** THE MINIMUM PERMITTED HEIGHT FOR BUILDING IN A UCTD PROJECT SHALL BE TWO (2) STORIES OR TWENTY (20) FEET, WHICHEVER IS GREATER, AND THE MAXIMUM PERMITTED HEIGHT FOR BUILDING AND STRUCTURES IN A UCTD PROJECT SHALL BE FOUR (4) STORIES OR (FORTY) 40 FEET, WHICH EVER IS LESS.
1) THE HEIGHT OF A BUILDING OR STRUCTURE IN THE UCTD SHALL BE DEFINED AS THE VERTICAL DISTANCE FROM THE AVERAGE GRADE OF THE STREET THE PROPERTY HAS FRONTAGE ON, ALONG THE FRONTAGE OF THE LOT/S OF THE UCTD PROJECT AT THE TIME OF THE SPECIAL PERMIT APPLICATION, TO THE TOP OF THE STRUCTURE (THE HIGHEST ROOF BEAMS OF A FLAT ROOF, THE DECK OF A MANSARD ROOF OR THE MEAN LEVEL OF THE HIGHEST GABLE OR SLOPE OF A HIP ROOF).



LOCUS MAP
APPROX. 1" = 300'

DRAWING INDEX:

- C-1 TITLE SHEET
- C-2 LAYOUT PLAN
- C-3 GRADING AND DRAINAGE PLAN
- C-4 UTILITY PLAN
- C-5 DEMOLITION & EROSION CONTROL PLAN
- C-6 DETAIL SHEET 1
- C-7 DETAIL SHEET 2
- C-8 DETAIL SHEET 3

ZONING:
UCTD

RECORD OWNER:
TAJ ESTATES OF RANDOLPH II, LLC
BOOK 39214 PAGE 555

DATUM:
ALL ELEVATIONS ARE ON NAVD 1988 DATUM

GENERAL NOTES

- NOTIFY DIG-SAFE AT 1-888-DIG-SAFE PRIOR TO EXCAVATION.
- EXISTING CONDITIONS BASE MAP PROVIDED BY TURNING POINT ENGINEERING, INC. REFERENCE TO THE EXISTING CONDITIONS PLAN.

OWNER/APPLICANT:
TAJ ESTATES OF RANDOLPH II, LLC
16 FENCOURT AVENUE
RANDOLPH, MA 02368

LEGAL COUNCIL:
KEVIN M. REILLY, ESQ
19 SOUTH MAIN STREET
RANDOLPH, MA 02368
(781) 961-7343

ARCHITECT:
DENNIS COLWELL ARCHITECTS
132 CENTRAL STREET, SUITE 203
FOXBOROUGH, MA 02035
(508) 241-2122


CIVIL ENGINEER:
HARDY + MAN DESIGN GROUP PC
1285 WASHINGTON STREET
WEYMOUTH, MA 02189
(781) 335-1464

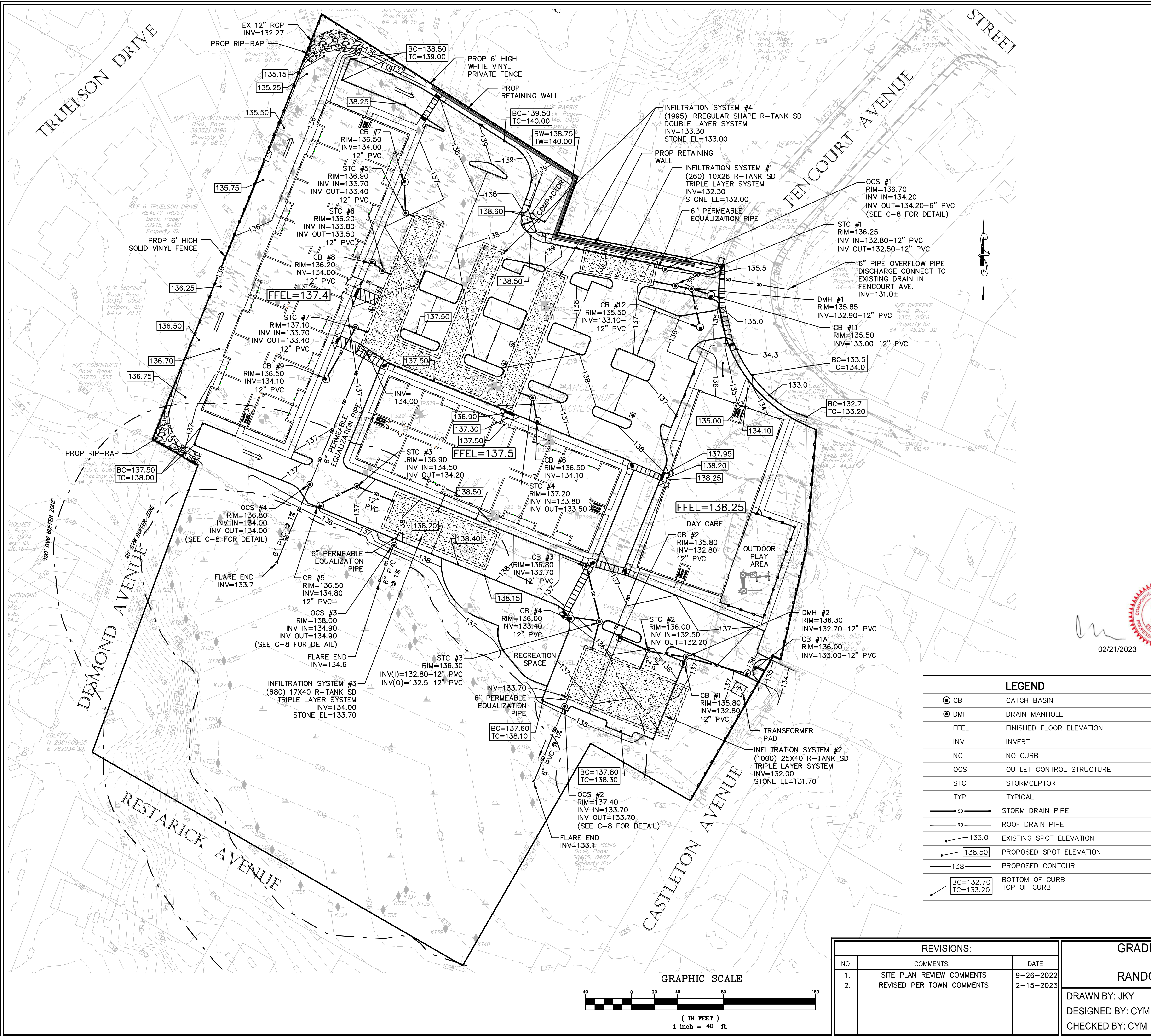
LAND SURVEYOR:
BORDERLAND ENGINEERING, INC.
61 PLEASANT STREET, STUDIO B
RANDOLPH, MA 02368
(781) 963-9500

TRAFFIC ENGINEER:
VANASSE & ASSOCIATES, INC.
35 NEW ENGLAND BUSINESS CENTER DRIVE
SUITE 140
ANDOVER, MA 01810
(978) 474-8800

SITE LIGHTING CONSULTANT:
BOSTON LIGHT SOURCE
64 COMMERCIAL WHARF
BOSTON, MA 02110
(617) 788-2400



REVISIONS:			TITLE SHEET 16 Fencourt Ave RANDOLPH, MASSACHUSETTS		 HARDY + MAN DESIGN GROUP PC CIVIL ENGINEERING & LAND DEVELOPMENT CONSULTING	1285 WASHINGTON STREET WEYMOUTH, MA (781) 335-1464
NO.:	COMMENTS:	DATE:				
1.	SITE PLAN REVIEW COMMENTS	9-26-2022	DRAWN BY: JKY	DATE: 9-06-2022	PREPARED FOR: PERMITTING	SHEET C-1
2.	REVISED PER TOWN COMMENTS	2-15-2023	DESIGNED BY: CYM	LATEST REVISION: 2-15-2023		
			CHECKED BY: CYM	SCALE: 1" = 40'		



TEST PIT #1 (9-10-2021)				
DEPTH(IN)	HORIZON	SOIL TEXTURE	COLOR	OTHER
0-13	A	FILL		
13-36	B	FILL		
36-72	C	COARSE SANDY LOAM	10Y 4/3	FRIABLE 5% COBBLE SOME BOULDER
WEEPING @60"				
TEST PIT #2 (9-10-2021)				
DEPTH(IN)	HORIZON	SOIL TEXTURE	COLOR	OTHER
0-36	A	FILL		
36-92	B	FINE SAND	10YR 4/3	LIKE BEACH SAND
NO GROUNDWATER NO WEEPING NO MOTTLE				
TEST PIT #3 (9-10-2021)				
DEPTH(IN)	HORIZON	SOIL TEXTURE	COLOR	OTHER
0-13	A	FILL		
13-36	B	FILL		
36-100	C	LOAMY SAND	10Y 4/3	FINE FRIABLE 1% COBBLE
WEEPING @63"				
TEST PIT #4 (9-10-2021)				
DEPTH(IN)	HORIZON	SOIL TEXTURE	COLOR	OTHER
0-42		SANDY LOAM		FILL LOAM
42-46	A	SANDY LOAM		BURIED A
46-60	B	LOAMY SAND		
60-90	C	FINE SAND	10YR 5/3	3% COBBLE
WEEPING @60"				
TEST PIT #5 (9-10-2021)				
DEPTH(IN)	HORIZON	SOIL TEXTURE	COLOR	OTHER
0-12		SANDY LOAM	10YR 3/2	TOP SOIL FILL LOAM
12-26	A	SANDY LOAM	10YR 3/2	
26-36	B	LOAMY SAND	10YR 3/2	
36-80	C	COARSE SAND	10YR 4/4	FRIABLE, 5% COBBLE
WEEPING @69" NO MOTTLE				
TEST PIT #6 (9-10-2021)				
DEPTH(IN)	HORIZON	SOIL TEXTURE	COLOR	OTHER
0-12	A	SANDY LOAM	10YR 3/3	
12-27	B	SANDY LOAM	10YR 4/6	
27-96	C	COARSE SAND	10YR 4/4	FRIABLE, 5% COBBLE
NO WEEPING NO MOTTLE				




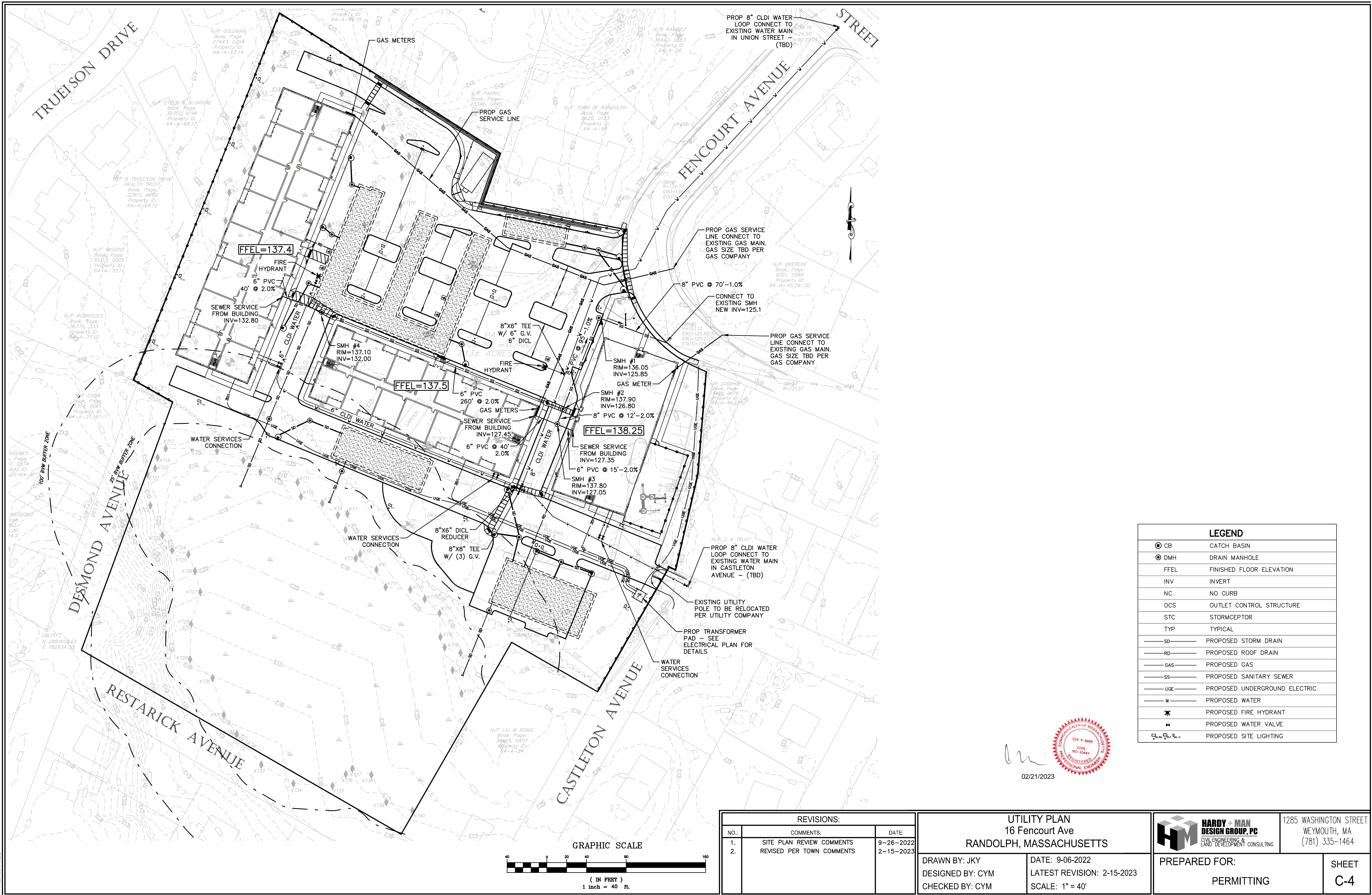
LEGEND	
● CB	CATCH BASIN
● DMH	DRAIN MANHOLE
FFEL	FINISHED FLOOR ELEVATION
INV	INVERT
NC	NO CURB
OCS	OUTLET CONTROL STRUCTURE
STC	STORMCEPTOR
TYP	TYPICAL
—SD—	STORM DRAIN PIPE
—RD—	ROOF DRAIN PIPE
133.0	EXISTING SPOT ELEVATION
138.50	PROPOSED SPOT ELEVATION
138	PROPOSED CONTOUR
BC=132.70 TC=133.20	BOTTOM OF CURB TOP OF CURB

STORMWATER SYSTEM ELEVATIONS					
	SYSTEM #1	SYSTEM #2	SYSTEM #3	SYSTEM #4	
MIN. GROUND ELEVATION	137.0	136.0	137.5	136.7	
TOP OF STONE	135.0	134.7	136.0	135.3	
TOP OF CHAMBER	134.5	134.2	135.5	134.8	
BOTTOM OF CHAMBER	132.3	132.0	134.0	133.3	
BOTTOM OF STONE	132.0	131.7	133.7	133.0	
OVERFLOW OUTLET	134.2	133.7	134.9	134.0	
EST. GWT	N/A	N/A	131.7	131.0	

REVISIONS:		
NO.	COMMENTS:	DATE:
1.	SITE PLAN REVIEW COMMENTS	9-26-2022
2.	REVISED PER TOWN COMMENTS	2-15-2023

GRADING AND DRAINAGE PLAN 16 Fencourt Ave RANDOLPH, MASSACHUSETTS	
DRAWN BY: JKY DESIGNED BY: CYM CHECKED BY: CYM	DATE: 9-06-2022 LATEST REVISION: 2-15-2023 SCALE: 1" = 40'


 HARDY + MAN DESIGN GROUP, PC CIVIL ENGINEERING & LAND DEVELOPMENT CONSULTING	1285 WASHINGTON STREET WEYMOUTH, MA (781) 335-1464	
	PREPARED FOR: PERMITTING	SHEET C-3

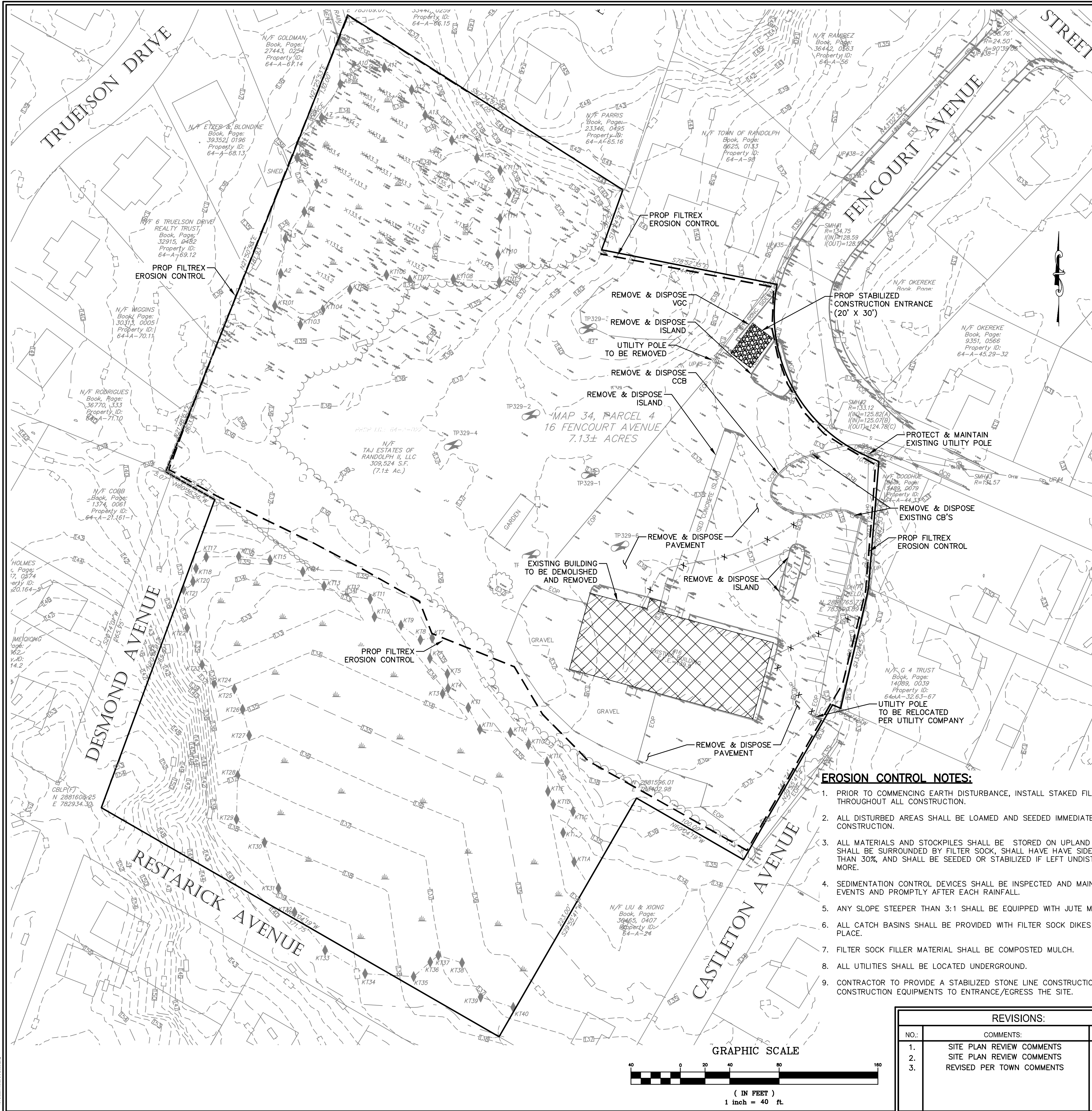


LEGEND	
● CB	CATCH BASIN
● DMH	DRAIN MANHOLE
FFEL	FINISHED FLOOR ELEVATION
INV	INVERT
NC	NO CURB
OCS	OUTLET CONTROL STRUCTURE
STC	STORMCEPTOR
TYP	TYPICAL
—SD—	PROPOSED STORM DRAIN
—RD—	PROPOSED ROOF DRAIN
—GAS—	PROPOSED GAS
—SS—	PROPOSED SANITARY SEWER
—UGE—	PROPOSED UNDERGROUND ELECTRIC
—W—	PROPOSED WATER
⋈	PROPOSED FIRE HYDRANT
⋈	PROPOSED WATER VALVE
⋈	PROPOSED SITE LIGHTING

REVISIONS:		
NO.	COMMENTS:	DATE:
1.	SITE PLAN REVIEW COMMENTS	9-26-2022
2.	REVISED PER TOWN COMMENTS	2-15-2023

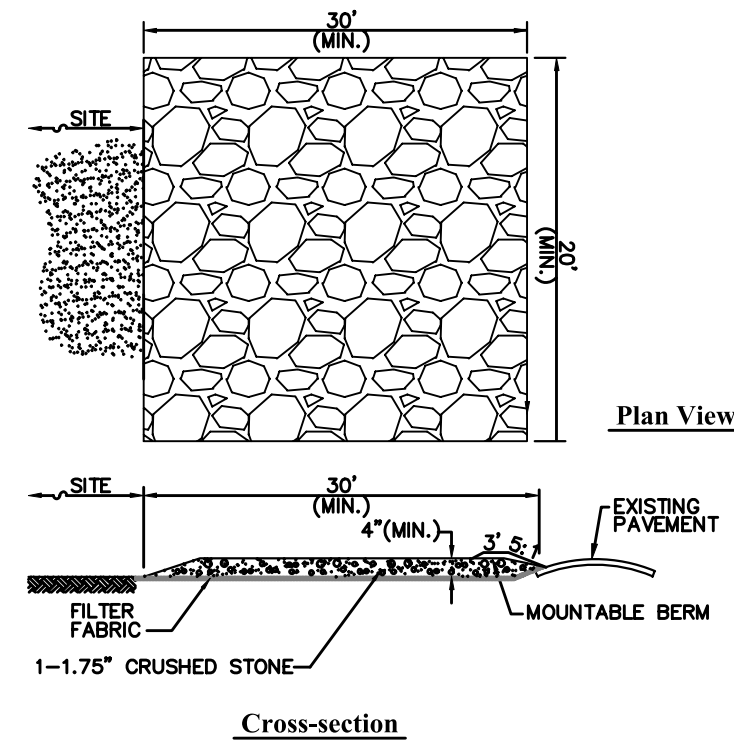
UTILITY PLAN	
16 Fencourt Ave	
RANDOLPH, MASSACHUSETTS	
DRAWN BY: JKY	DATE: 9-06-2022
DESIGNED BY: CYM	LATEST REVISION: 2-15-2023
CHECKED BY: CYM	SCALE: 1" = 40'

 HARDY + MAN DESIGN GROUP, PC CIVIL ENGINEERING & LAND DEVELOPMENT CONSULTING	1285 WASHINGTON STREET WEYMOUTH, MA (781) 335-1464	PREPARED FOR:	SHEET
		PERMITTING	C-4



DEMOLITION NOTES:

1. SITE PREPARATION AND DEMOLITION SHALL INCLUDE THOSE AREAS WITHIN THE LIMIT OF WORK LINE AS SHOWN ON THE CONTRACT DOCUMENTS.
2. ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
3. CONSULT ALL OF THE DRAWINGS AND SPECIFICATIONS FOR COORDINATION REQUIREMENTS BEFORE COMMENCING DEMOLITION.
4. THE CONTRACTOR SHALL COORDINATE SITE DEMOLITION EFFORTS WITH ALL TRADES THAT MAY BE AFFECTED BY THE WORK.
5. ALL ITEMS REQUIRING REMOVAL SHALL BE REMOVED TO FULL DEPTH TO INCLUDE BASE MATERIAL AND FOOTINGS OR FOUNDATIONS AS REQUIRED TO FACILITATE CONSTRUCTION, AND LEGALLY DISPOSED OF OFFSITE BY CONTRACTOR.
6. UTILITY PIPES DESIGNATED TO BE ABANDONED IN PLACE SHALL BE CAPPED IN PLACE.
7. UTILITY PIPES DESIGNATED TO BE REMOVED SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF THE ENTIRE LENGTH OF PIPE AND BACKFILL AND 95% WITH ORDINARY BORROW OR FLOWABLE FILL, AND THE TOP OF THE STRUCTURE SHALL BE REMOVED SO THAT IT IS AT LEAST 36 INCHES BELOW FINISH GRADE.
8. UTILITY STRUCTURES DESIGNATED TO BE ABANDONED IN PLACE SHALL HAVE THEIR CAST IRON CASTINGS REMOVED AND DISPOSED, INLET AND OUTLET PIPES PLUGGED, THE BOTTOM OF THE STRUCTURES SHALL BE BROKEN, THE VOID OF THE STRUCTURES SHALL BE BACKFILLED AND COMPACTED TO 95% WITH ORDINARY BORROW OR FLOWABLE FILL, AND THE TOP OF THE STRUCTURE SHALL BE REMOVED SO THAT IT IS AT LEAST 36 INCHES BELOW FINISH GRADE.
9. UTILITY STRUCTURES DESIGNATED TO BE REMOVED SHALL CONSIST OF THE REMOVAL AND DISPOSAL OF CAST IRON CASTINGS, PLUGGING OF INLET AND OUTLET PIPES, REMOVAL OF THE STRUCTURE, AND BACKFILL AND 95% COMPACTION OF THE VOID WITH ORDINARY BORROW, WHEN THE VOID IS WITHIN THE FOOTPRINT OF THE NEW BUILDING, GRAVEL BORROW SHALL BE USED TO BACKFILL THE VOID.
10. ALL DEBRIS GENERATED DURING SITE PREPARATION ACTIVITIES SHALL BE LEGALLY DISPOSED OF OFFSITE.
11. AT ALL LOCATIONS WHERE EXISTING CURBING, CONCRETE PAVEMENT OR BITUMINOUS CONCRETE ROADWAY ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE.
12. EXTEND DESIGNATED LIMIT OF WORK AS NECESSARY TO ACCOMPLISH ROUGH GRADING, EROSION CONTROL, TREE PROTECTION, AND SITE WORK AS REQUIRED BY THESE DRAWINGS AND SPECIFICATIONS.
13. THE CONTRACTOR SHALL REMOVE FROM THE SITE ALL RUBBISH AND DEBRIS FOUND THEREON. STORAGE OF SUCH MATERIALS ON THE PROJECT SITE WILL NOT BE PERMITTED. THE CONTRACTOR SHALL LEAVE THE SITE IN SAFE, CLEAN, AND LEVEL CONDITION UPON COMPLETION OF THE SITE DEMOLITION WORK.
14. REMOVE AND STOCKPILE ALL EXISTING SITE LIGHTS, BENCHES, TRASH RECEPTACLES, TRAFFIC SIGNS, GRANITE CURB, AND OTHER SITE IMPROVEMENTS WITHIN LIMIT OF WORK LINE UNLESS OTHERWISE NOTED.
15. ALL EXISTING TREES AND SHRUBS TO REMAIN SHALL BE PROTECTED AND MAINTAINED THROUGHOUT THE TIME OF CONSTRUCTION, AS SPECIFIED AND DIRECTED BY THE LANDSCAPE ARCHITECT/ENGINEER/OWNER.
16. BEFORE ANY TREES OR SHRUBS ARE REMOVED, THE CONTRACTOR SHALL ARRANGE A CONFERENCE ON THE SITE WITH THE OWNER OR OWNER'S REPRESENTATIVE TO IDENTIFY TREES AND SHRUBS THAT ARE TO BE REMOVED, AS WELL AS THOSE WHICH ARE TO BE PROTECTED. DO NOT COMMENCE CLEARING OPERATIONS WITHOUT A CLEAR UNDERSTANDING OF EXISTING CONDITIONS TO BE PRESERVED.
17. THE CONTRACTOR SHALL REMOVE FROM THE AREA OF CONSTRUCTION PAVEMENT, CONCRETE, CURBING, POLES AND FOUNDATIONS, ISLANDS, TREE BERMS AND OTHER FEATURES WITHIN THE LIMITS OF CONSTRUCTION AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION WHETHER SPECIFIED ON THE DRAWINGS OR NOT.
18. CONTRACTOR TO PROVIDE TEMPORARY CHAIN LINK FENCE WITH FABRIC AROUND SITE ALL NECESSARY TO PROTECT PUBLIC SAFETY AND DUST CONTROL.

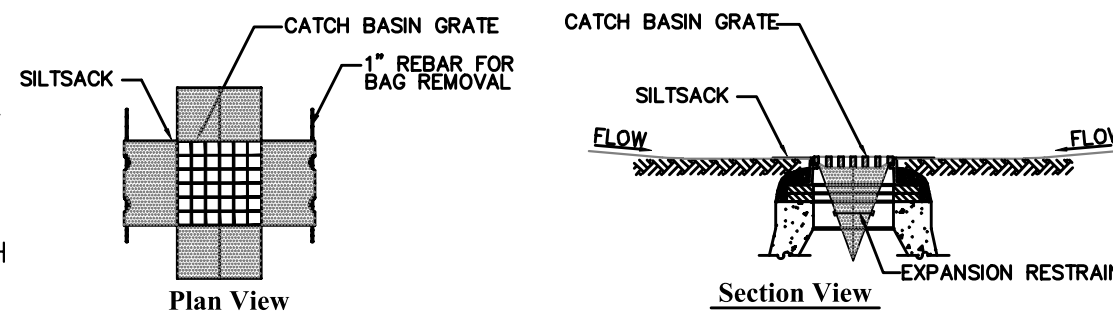


Notes:

1. ENTRANCE WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
3. STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

Stabilized Construction Exit

N.T.S.

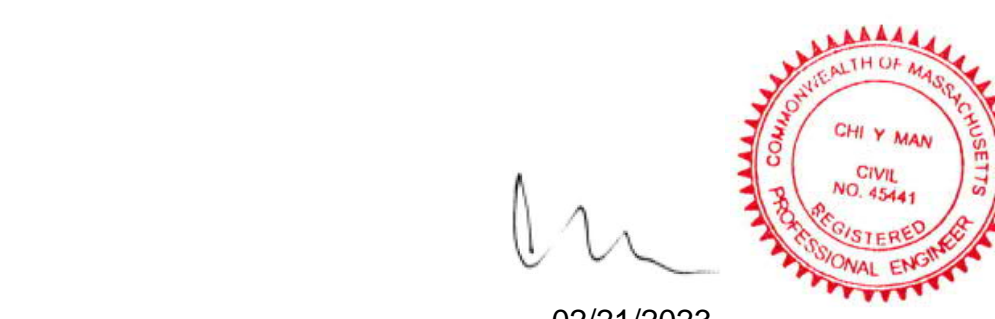


Notes:

1. INSTALL SILTSACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS AFTER BINDER COURSE IS PLACED AND HAY BALES HAVE BEEN REMOVED.
2. GRATE TO BE PLACED OVER SILTSACK.
3. SILTSACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED.

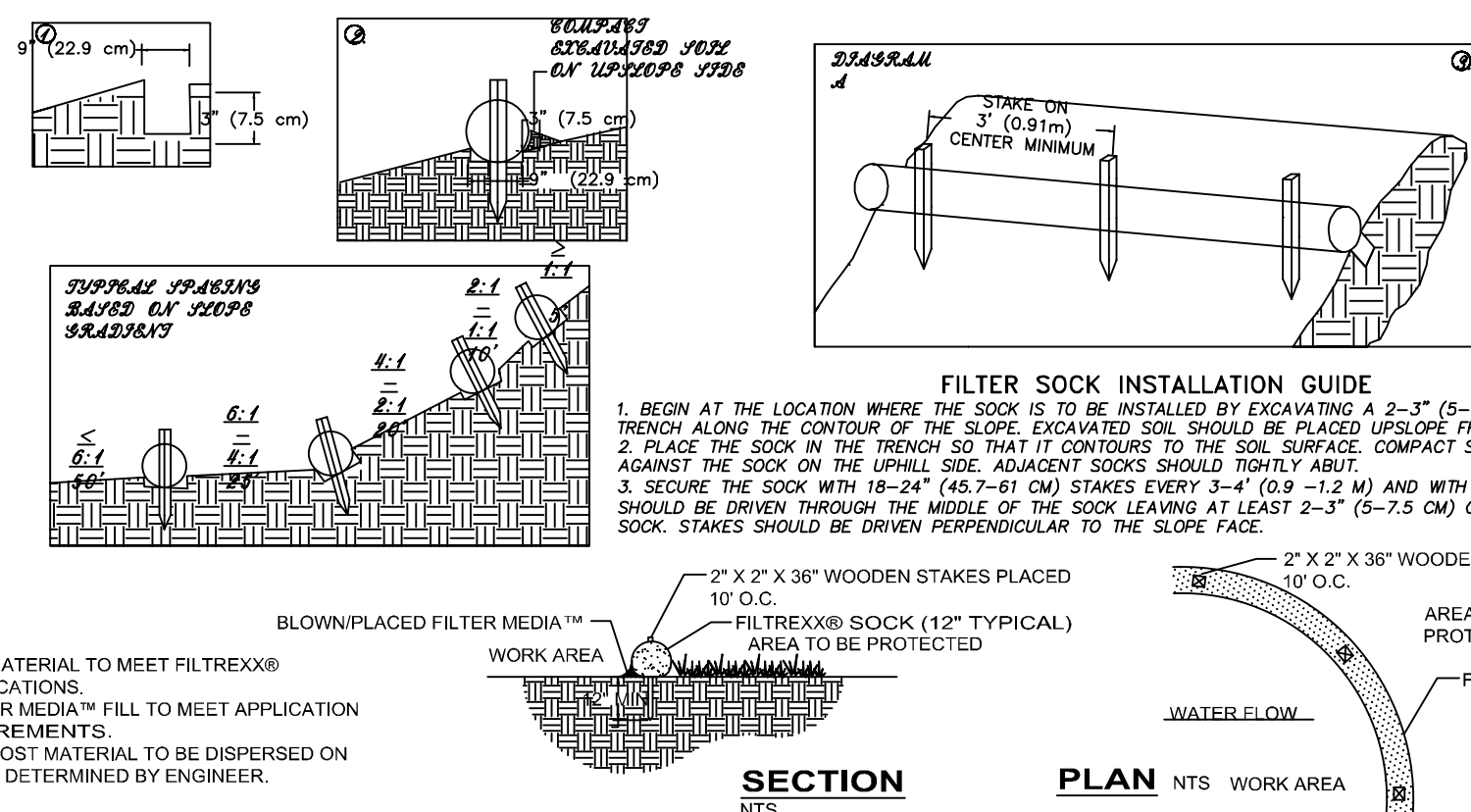
Siltsack Sediment Trap

N.T.S.



EROSION CONTROL NOTES:

1. PRIOR TO COMMENCING EARTH DISTURBANCE, INSTALL STAKED FILTER SOCK AND MAINTAIN THROUGHOUT ALL CONSTRUCTION.
2. ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
3. ALL MATERIALS AND STOCKPILES SHALL BE STORED ON UPLAND AREAS. STOCKPILES SHALL BE SURROUNDED BY FILTER SOCK, SHALL HAVE HAVE SIDE SLOPES NO GREATER THAN 30%, AND SHALL BE SEEDED OR STABILIZED IF LEFT UNDISTURBED FOR TWO WEEKS OR MORE.
4. SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED AND MAINTAINED PRIOR TO ANY EVENTS AND PROMPTLY AFTER EACH RAINFALL.
5. ANY SLOPE STEEPER THAN 3:1 SHALL BE EQUIPPED WITH JUTE MESH SLOPE STABILIZATION.
6. ALL CATCH BASINS SHALL BE PROVIDED WITH FILTER SOCK DIKES UNTIL BASE COURSE IS IN PLACE.
7. FILTER SOCK FILLER MATERIAL SHALL BE COMPOSTED MULCH.
8. ALL UTILITIES SHALL BE LOCATED UNDERGROUND.
9. CONTRACTOR TO PROVIDE A STABILIZED STONE LINE CONSTRUCTION ENTRANCE FOR CONSTRUCTION EQUIPMENTS TO ENTRANCE/EGRESS THE SITE.



NOTES:


1. ALL MATERIAL TO MEET FILTREX® SPECIFICATIONS.
2. FILTER MEDIA™ FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

Filtrex Erosion Control

N.T.S.

REVISIONS:		
NO.:	COMMENTS:	DATE:
1.	SITE PLAN REVIEW COMMENTS	9-26-2022
2.	SITE PLAN REVIEW COMMENTS	1-10-2023
3.	REVISED PER TOWN COMMENTS	2-15-2023

EXISTING CONDITIONS, DEMOLITION & EROSION CONTROL PLAN	
16 Fencourt Ave RANDOLPH, MASSACHUSETTS	
DRAWN BY: JKY	DATE: 9-06-2022
DESIGNED BY: CYM	LATEST REVISION: 2-16-2023
CHECKED BY: CYM	SCALE: 1" = 40'

 HARDY + MAN DESIGN GROUP, PC CIVIL ENGINEERING & LAND DEVELOPMENT CONSULTING	1285 WASHINGTON STREET WEYMOUTH, MA (781) 335-1464	
	PREPARED FOR: PERMITTING	SHEET C-5



Commonwealth of Massachusetts
City/Town of Randolph

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 329-1 Hole # 3/29/21 Date Time 45 - cloudy Weather Latitude Longitude:

1. Land Use (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%) Description of Location:

2. Soil Parent Material: Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body feet Drainage Way feet Wetlands feet Property Line feet Drinking Water Well feet Other feet

4. Unsuitable Materials Present: ☒ Yes ☐ No If Yes: ☐ Disturbed Soil ☒ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☐ Yes ☒ No If yes: Depth Weeping from Pit Depth Standing Water in Hole

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-96	FILL	-	-	-	-	-	-	-	-	-	-
96-122	C	LS	10YR 4/3	102"	10YR 6/8	40%	15%	15%	M	V. Friable	

Additional Notes:

329-1 & 329-2.doc • rev. 3/15/18 Form 11 – Soil Suitability Assessment for On-Site Sewage Disposal • Page 2 of 5



Commonwealth of Massachusetts
City/Town of Randolph

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 329-2 Hole # 3/29/21 Date Time 45 - cloudy Weather Latitude Longitude:

1. Land Use (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%) Description of Location:

2. Soil Parent Material: Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body feet Drainage Way feet Wetlands feet Property Line feet Drinking Water Well feet Other feet

4. Unsuitable Materials Present: ☒ Yes ☐ No If Yes: ☐ Disturbed Soil ☒ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☒ Yes ☐ No If yes: 92" Depth Weeping from Pit 98" Depth Standing Water in Hole

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-24	FILL	-	-	-	-	-	-	-	-	-	-
24-32	A	FSL	10YR 3/2	-	-	-	<5%	<5%	Cr	Friable	
32-46	B	SL	2.5Y 6/8	-	-	-	<5%	<5%	Sabk	Friable	
46-80	C1	LS	10YR 4/2	64"	10YR 6/8	50%	5%	5%	M	V. Friable	
80-128	C2	M. Sand	10YR 5/2	-	-	-	25%	10%	SG	Loose	

Additional Notes:

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Commonwealth of Massachusetts
City/Town of Randolph

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 329-3 Hole # 3/29/21 Date Time 45 - cloudy Weather Latitude Longitude:

1. Land Use (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%) Description of Location:

2. Soil Parent Material: Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body feet Drainage Way feet Wetlands feet Property Line feet Drinking Water Well feet Other feet

4. Unsuitable Materials Present: ☒ Yes ☐ No If Yes: ☐ Disturbed Soil ☒ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☐ Yes ☒ No If yes: Depth Weeping from Pit Depth Standing Water in Hole

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-8	A / FILL	FSL	10YR 3/2	-	-	-	<5%	<5%	Cr	Friable	
8-132	C	LS	10YR 4/3	-	-	-	20%	30%	M	V. Friable	

Additional Notes:

329-3 & 329-4.doc • rev. 3/15/18 Form 11 – Soil Suitability Assessment for On-Site Sewage Disposal • Page 2 of 5



Commonwealth of Massachusetts
City/Town of Randolph

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 329-4 Hole # 3/29/21 Date Time 45 - cloudy Weather Latitude Longitude:

1. Land Use (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%) Description of Location:

2. Soil Parent Material: Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body feet Drainage Way feet Wetlands feet Property Line feet Drinking Water Well feet Other feet

4. Unsuitable Materials Present: ☒ Yes ☐ No If Yes: ☐ Disturbed Soil ☒ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☒ Yes ☐ No If yes: 108" Depth Weeping from Pit 118" Depth Standing Water in Hole

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-46	FILL	-	-	-	-	-	-	-	-	-	-
46-56	A	FSL	10YR 3/2	-	-	-	<5%	<5%	Cr	Friable	
56-64	B	SL	2.5Y 6/8	-	-	-	<5%	<5%	Sabk	Friable	
64-134	C	Sand	10YR 5/2	86"	10YR 6/8	40%	5%	5%	SG	Loose	

Additional Notes:

329-3 & 329-4.doc • rev. 3/15/18 Form 11 – Soil Suitability Assessment for On-Site Sewage Disposal • Page 3 of 5



Commonwealth of Massachusetts
City/Town of Randolph

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 329-5 Hole # 3/29/21 Date Time 45-cloudy Weather Latitude Longitude:

1. Land Use (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%) Description of Location:

2. Soil Parent Material: Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body feet Drainage Way feet Wetlands feet Property Line feet Drinking Water Well feet Other feet

4. Unsuitable Materials Present: ☒ Yes ☐ No If Yes: ☐ Disturbed Soil ☒ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☒ Yes ☐ No If yes: 76" Depth Weeping from Pit 90" Depth Standing Water in Hole

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-56	FILL	-	-	-	-	-	-	-	-	-	-
56-60	A	FSL	10YR 2/1	-	-	-	<5%	<5%	Cr	Friable	
60-68	B	C. Sand	10YR 6/8	-	-	-	15%	10%	SG	Loose	
68-94	C	Sand	10YR 5/3	72"	10YR 6/8	40%	20%	10%	SG	Loose	

Additional Notes:

329-5 & 329-6.doc • rev. 3/15/18 Form 11 – Soil Suitability Assessment for On-Site Sewage Disposal • Page 2 of 5



Commonwealth of Massachusetts
City/Town of Randolph

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 329-1 Hole # 3/29/21 Date Time 45 - cloudy Weather Latitude Longitude:

1. Land Use (e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%) Description of Location:

2. Soil Parent Material: Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body feet Drainage Way feet Wetlands feet Property Line feet Drinking Water Well feet Other feet

4. Unsuitable Materials Present: ☒ Yes ☐ No If Yes: ☐ Disturbed Soil ☒ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☐ Yes ☒ No If yes: Depth Weeping from Pit Depth Standing Water in Hole

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-96	FILL	-	-	-	-	-	-	-	-	-	-
96-122	C	LS	10YR 4/3	102"	10YR 6/8	40%	15%	15%	M	V. Friable	

Additional Notes:

329-1 & 329-2.doc • rev. 3/15/18 Form 11 – Soil Suitability Assessment for On-Site Sewage Disposal • Page 2 of 5

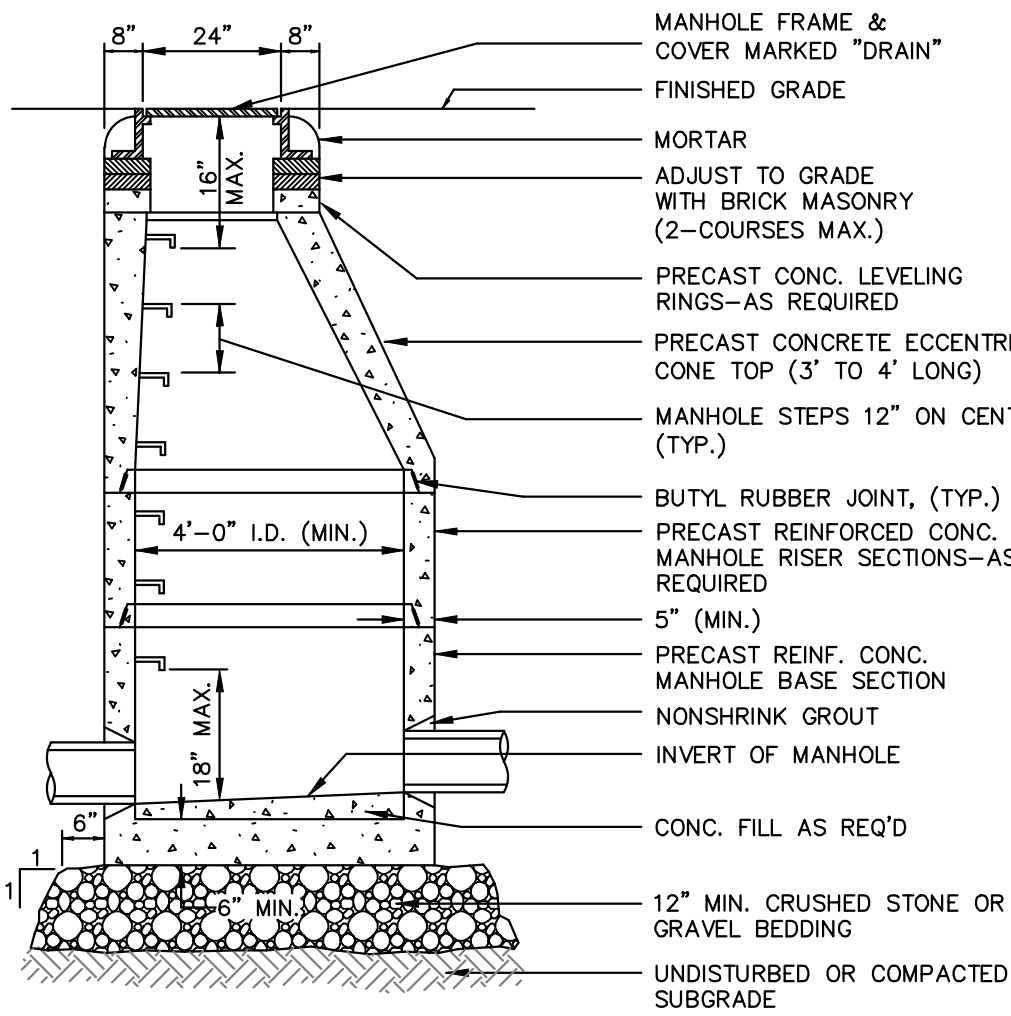
02/21/2023

CH Y MAN
CIVIL
NO. 45441
REGISTERED
PROFESSIONAL ENGINEER

REVISIONS:		
NO.:	COMMENTS:	DATE:
1.	SITE PLAN REVIEW COMMENTS	9-26-2022
2.	REVISED PER TOWN COMMENTS	2-15-2023

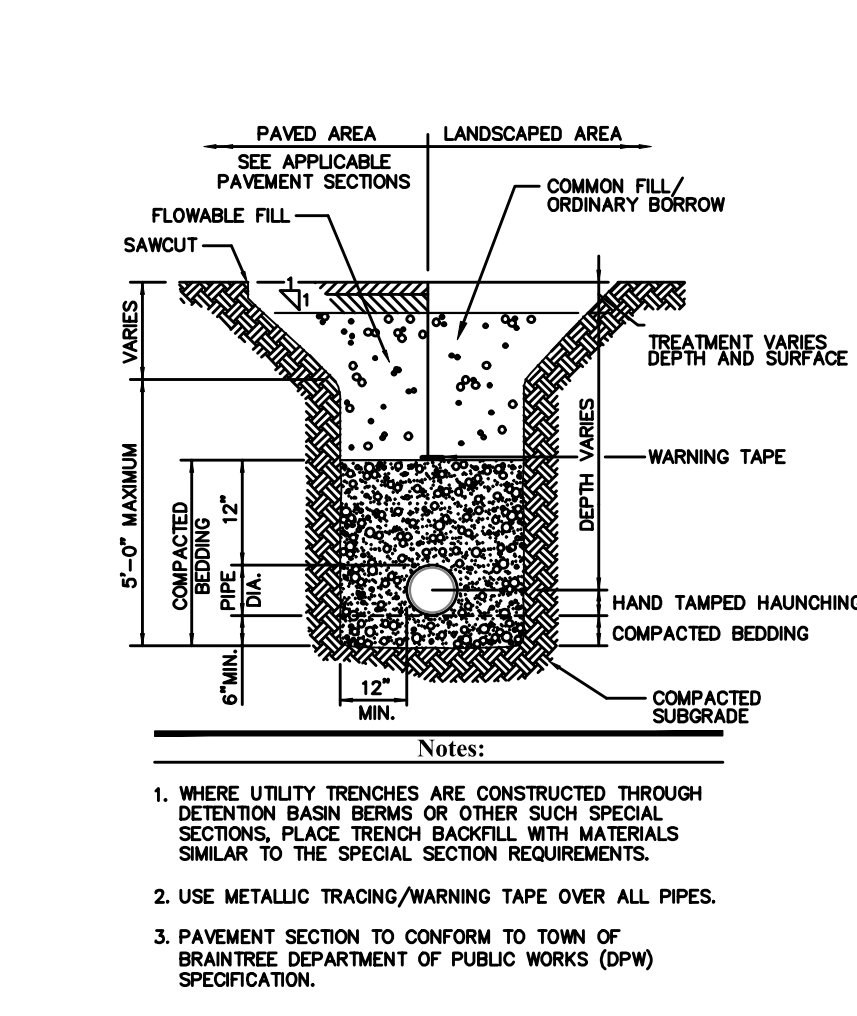
DETAILS 1 16 Fencourt Ave RANDOLPH, MASSACHUSETTS	
DRAWN BY: JKY DESIGNED BY: CYM CHECKED BY: CYM	DATE: 9-06-2022 LATEST REVISION: 2-15-2023 SCALE: AS SHOWN

HARDY + MAN DESIGN GROUP, PC CIVIL ENGINEERING & LAND DEVELOPMENT CONSULTING	1285 WASHINGTON STREET WEYMOUTH, MA (781) 335-1464	
	PREPARED FOR: PERMITTING	SHEET C-6



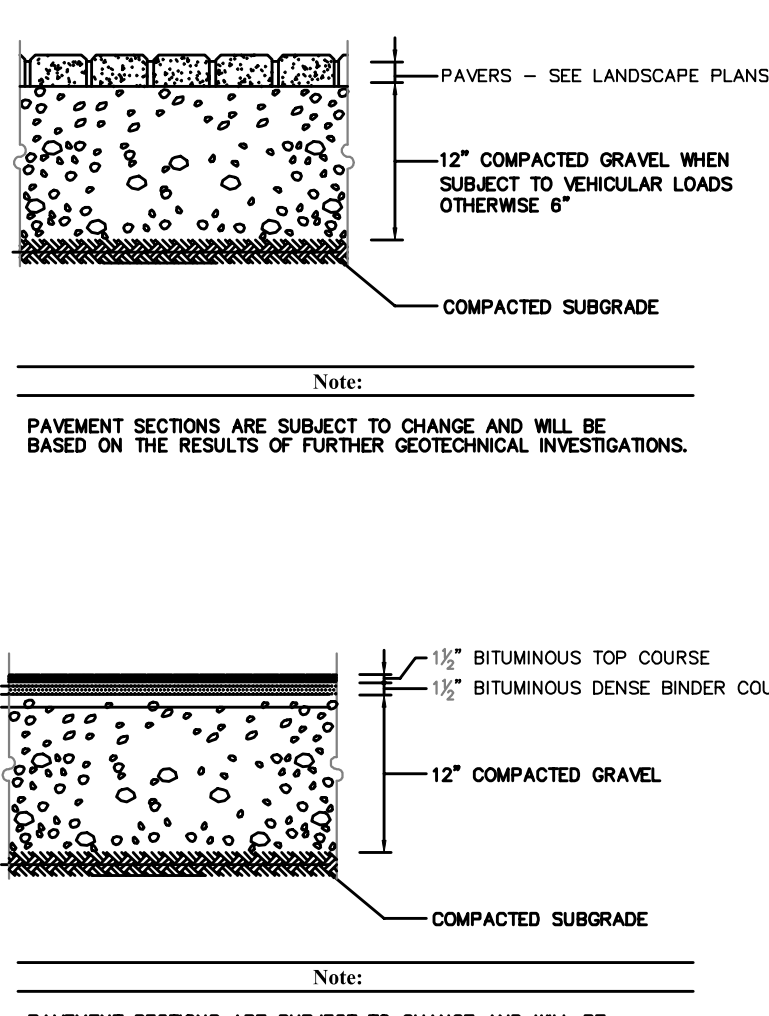
Precast Concrete Drain Manhole (DMH)

N.T.S.



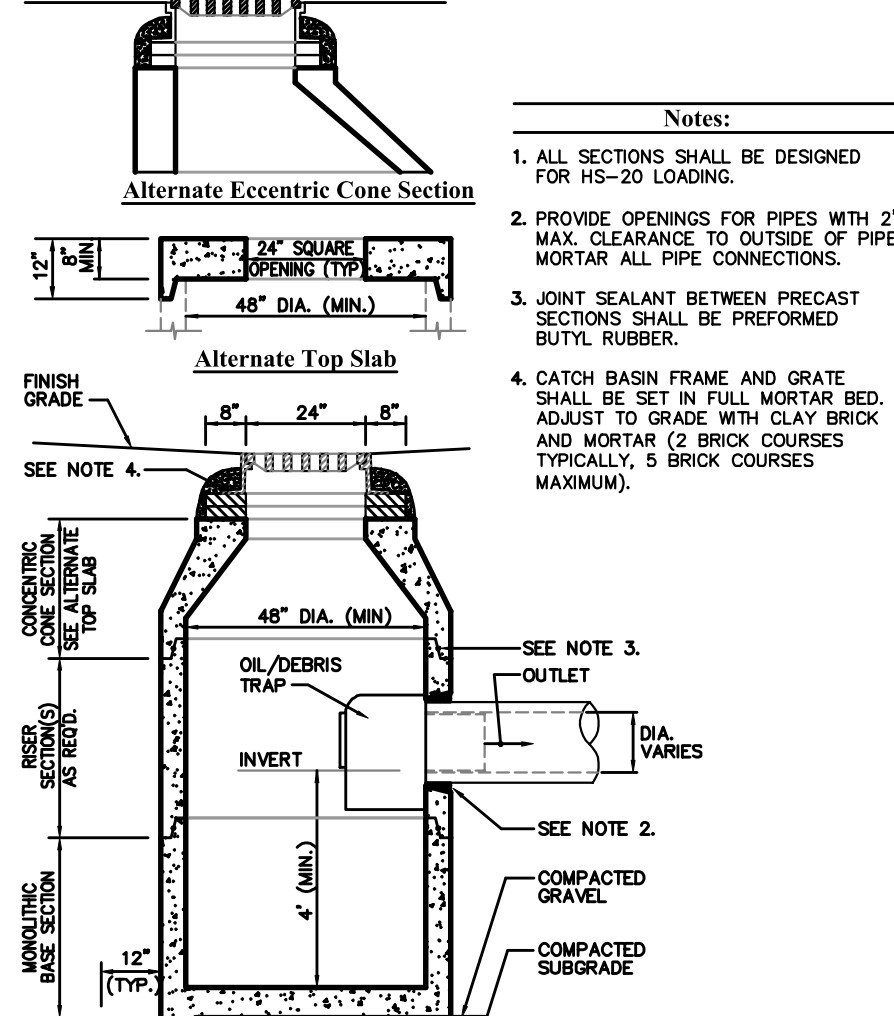
Utility Trench

N.T.S.



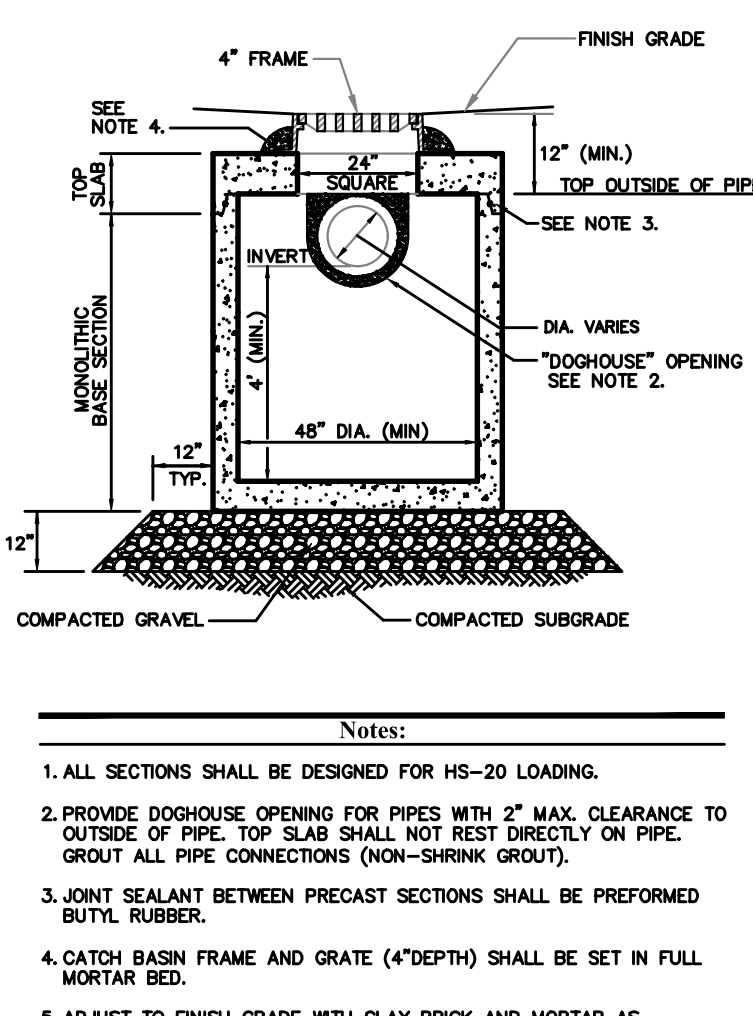
Bituminous Concrete Pavement Section

N.T.S.



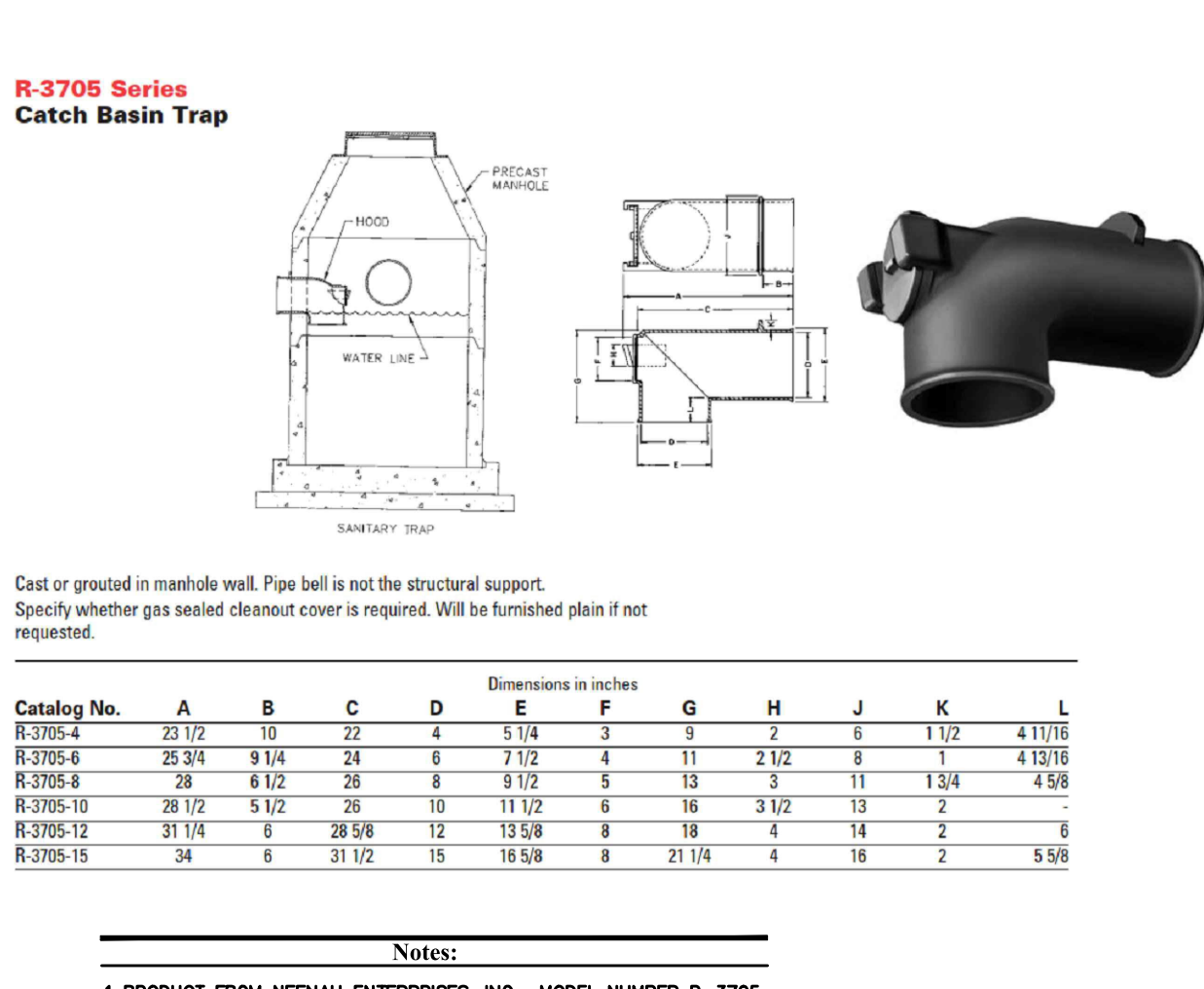
Catch Basin (CB) With Oil/Debris Trap

N.T.S.



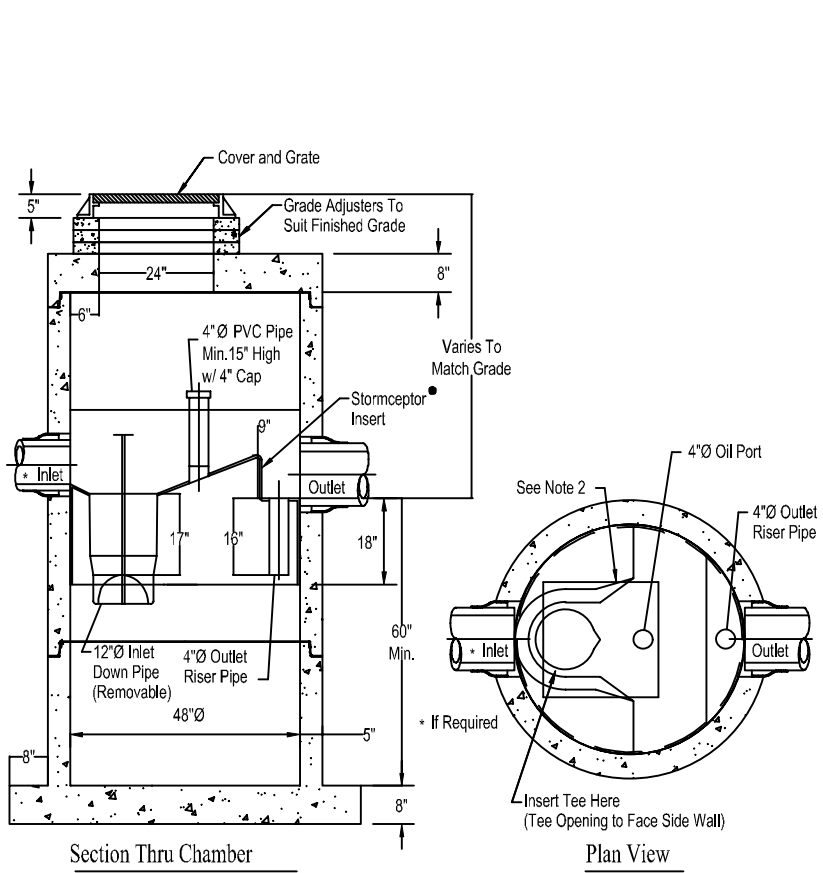
Catch Basin (CB) Shallow Cover

N.T.S.



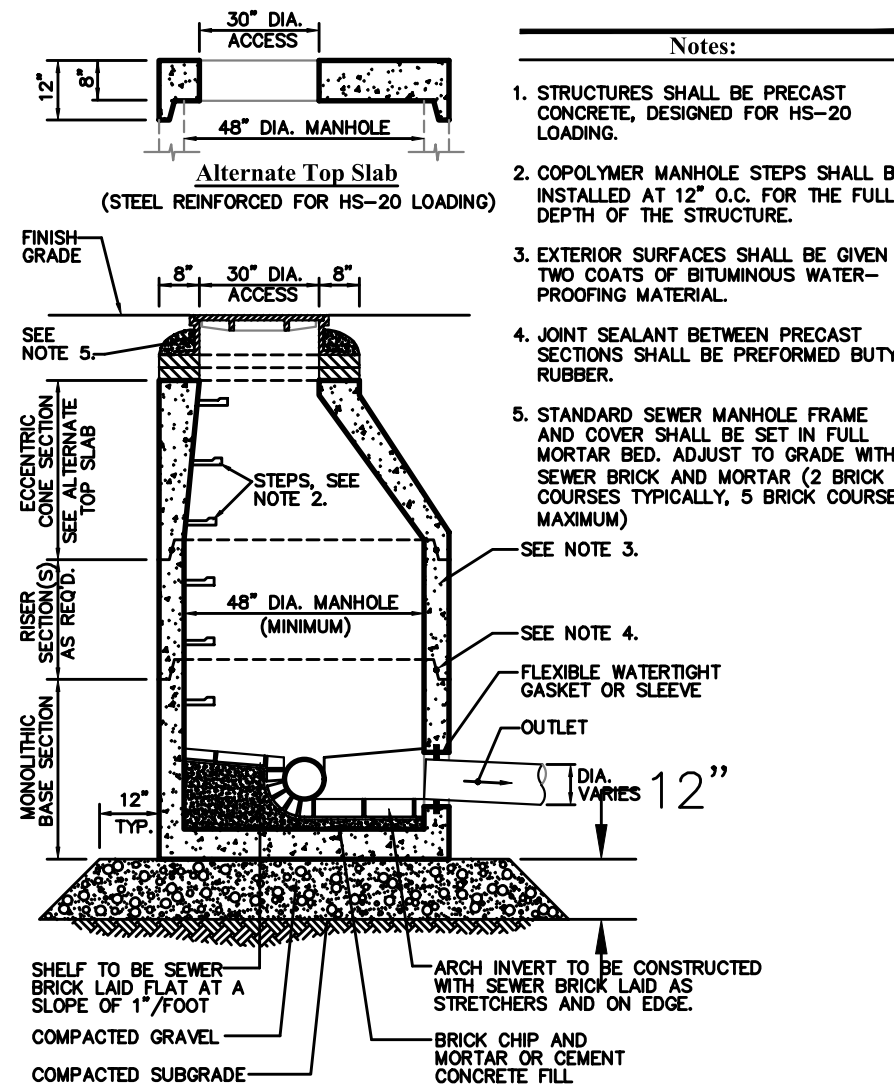
Catch Basin Trap

N.T.S.



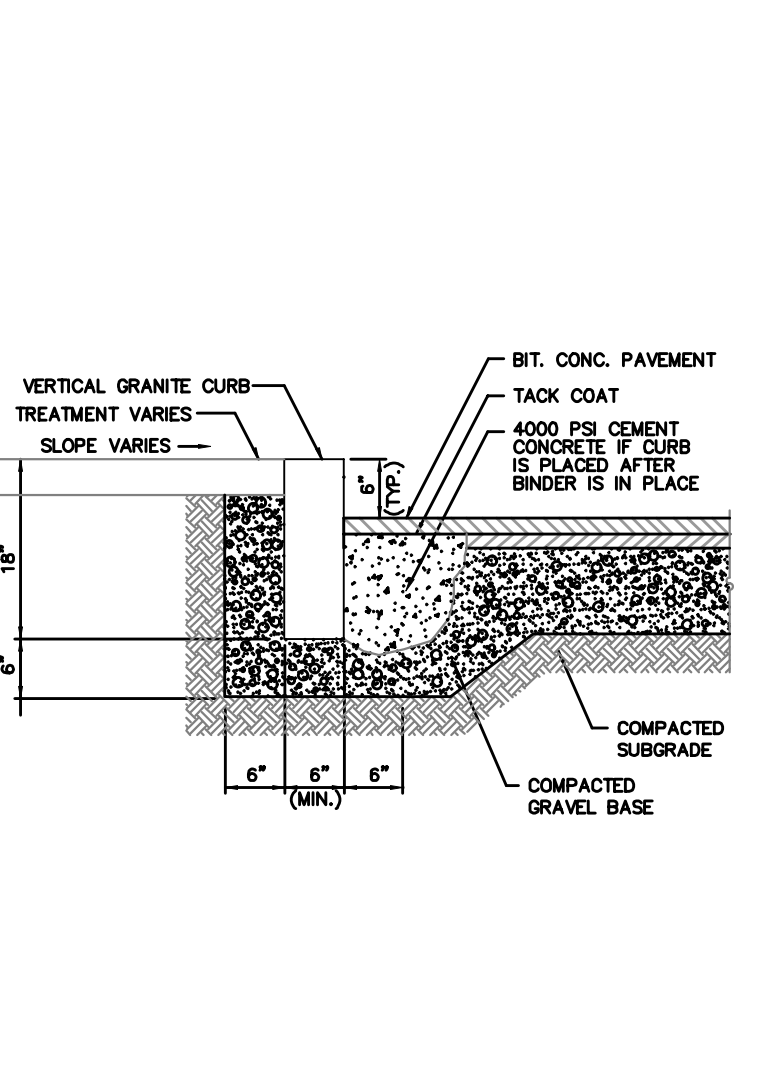
STC 450i PRECAST CONCRETE STORMCEPTOR

N.T.S.



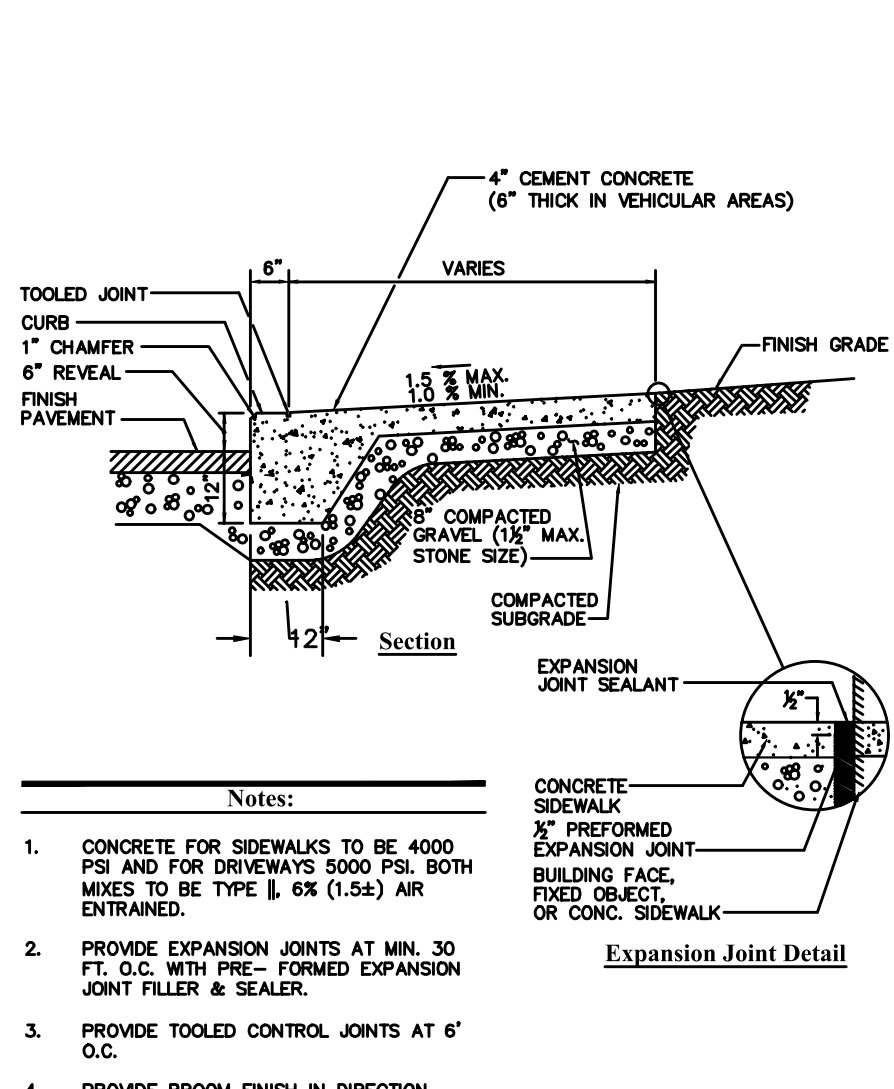
Sanitary Sewer Manhole (SMH)

N.T.S.



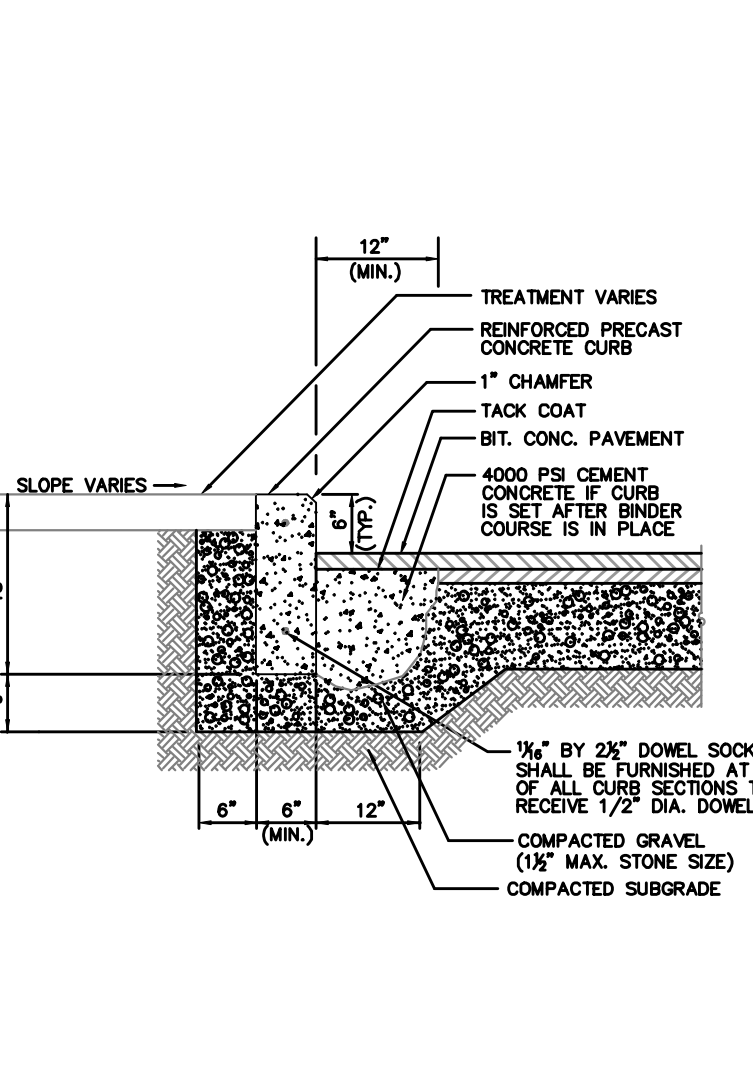
Vertical Granite Curb (VGC)

N.T.S.



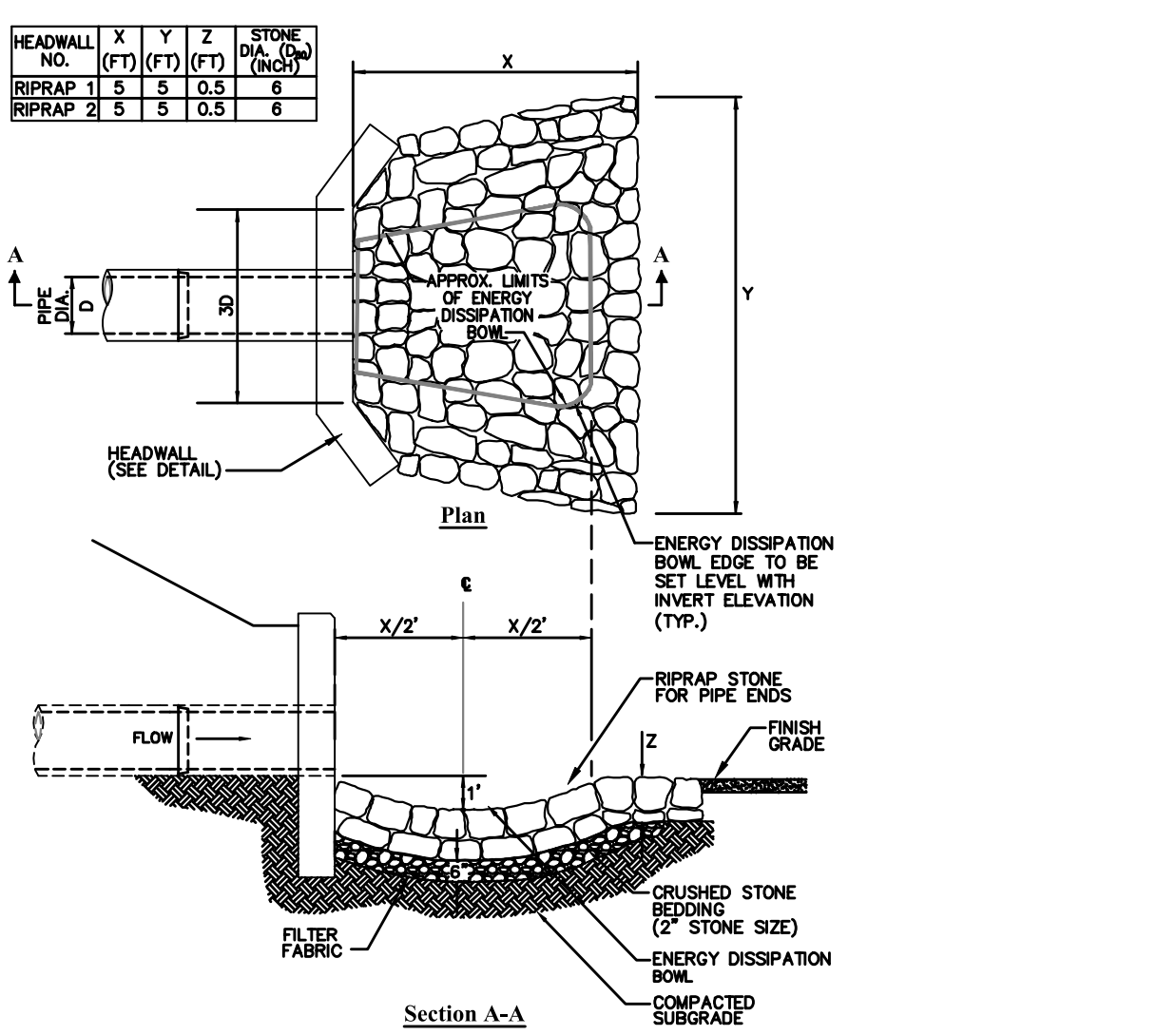
Monolithic Concrete Curb (MCC) & Sidewalk

N.T.S.



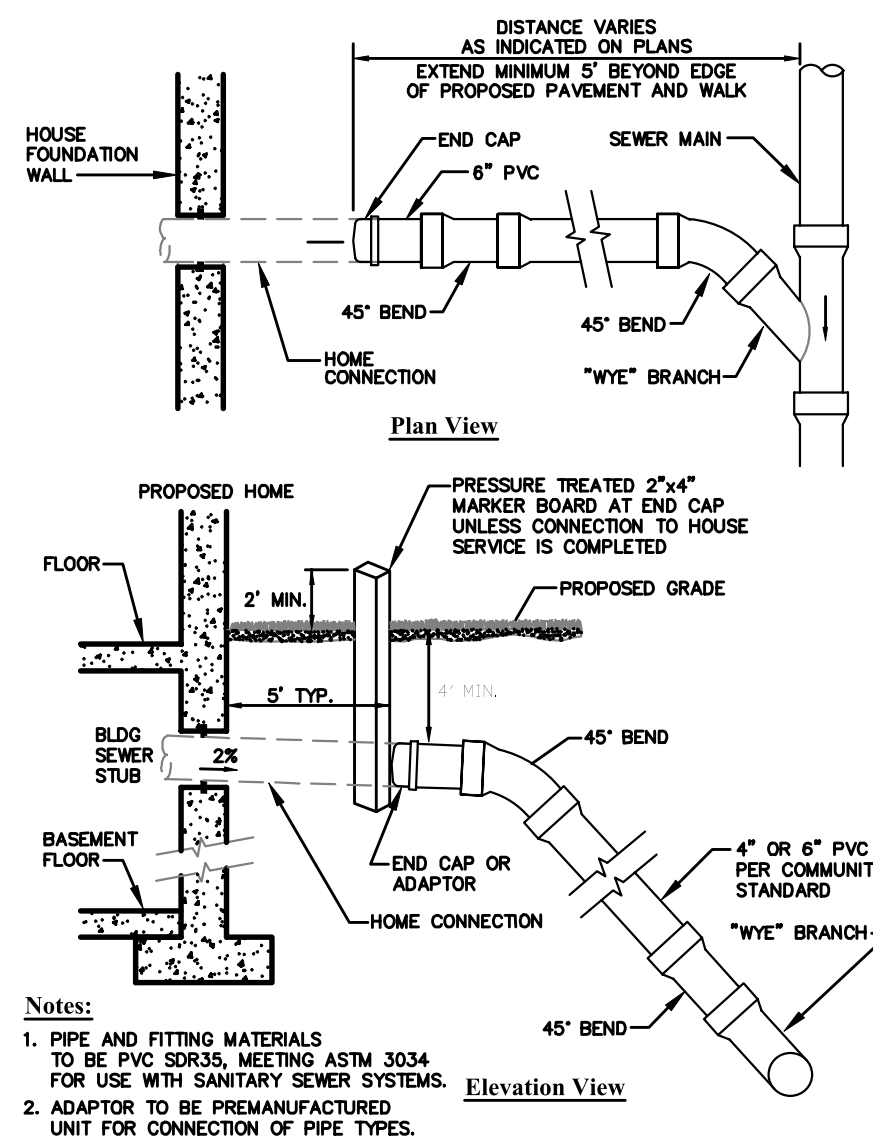
Precast Concrete Curb (PCC)

N.T.S.



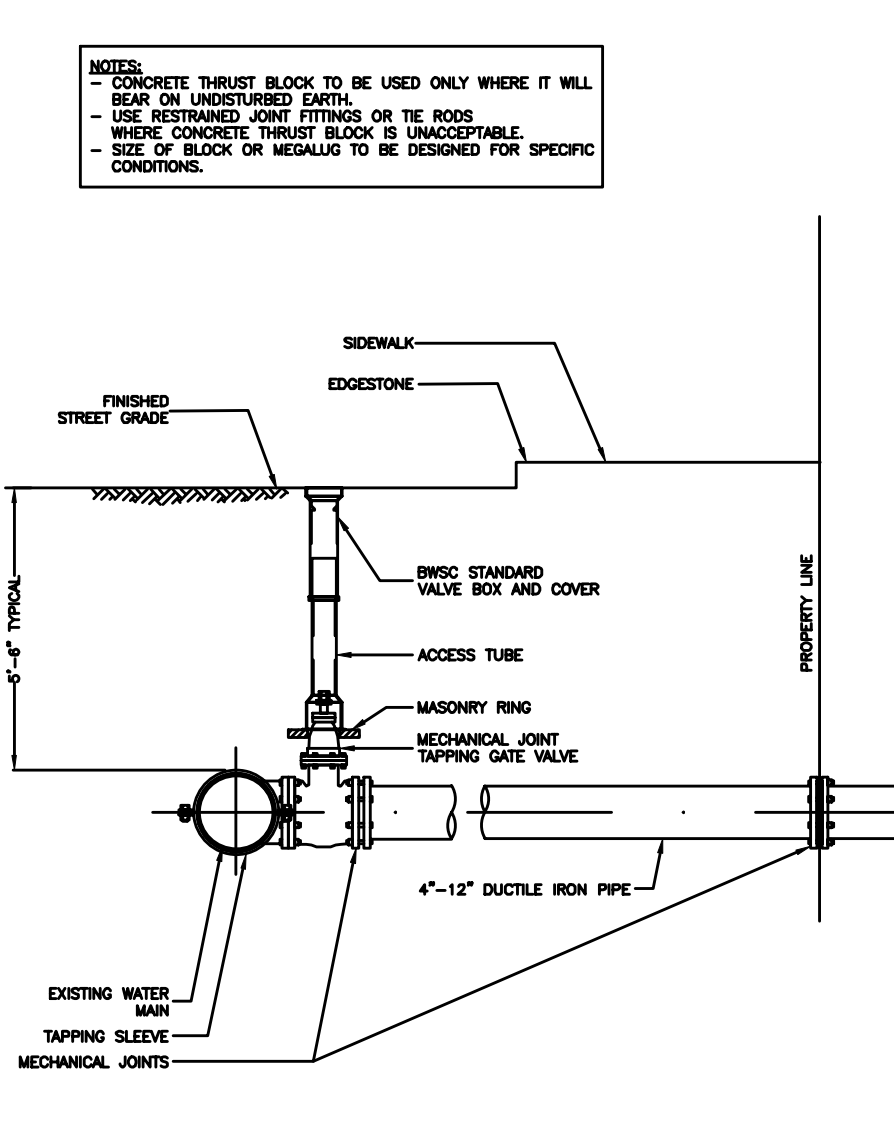
Stone Protection at Headwall

N.T.S.



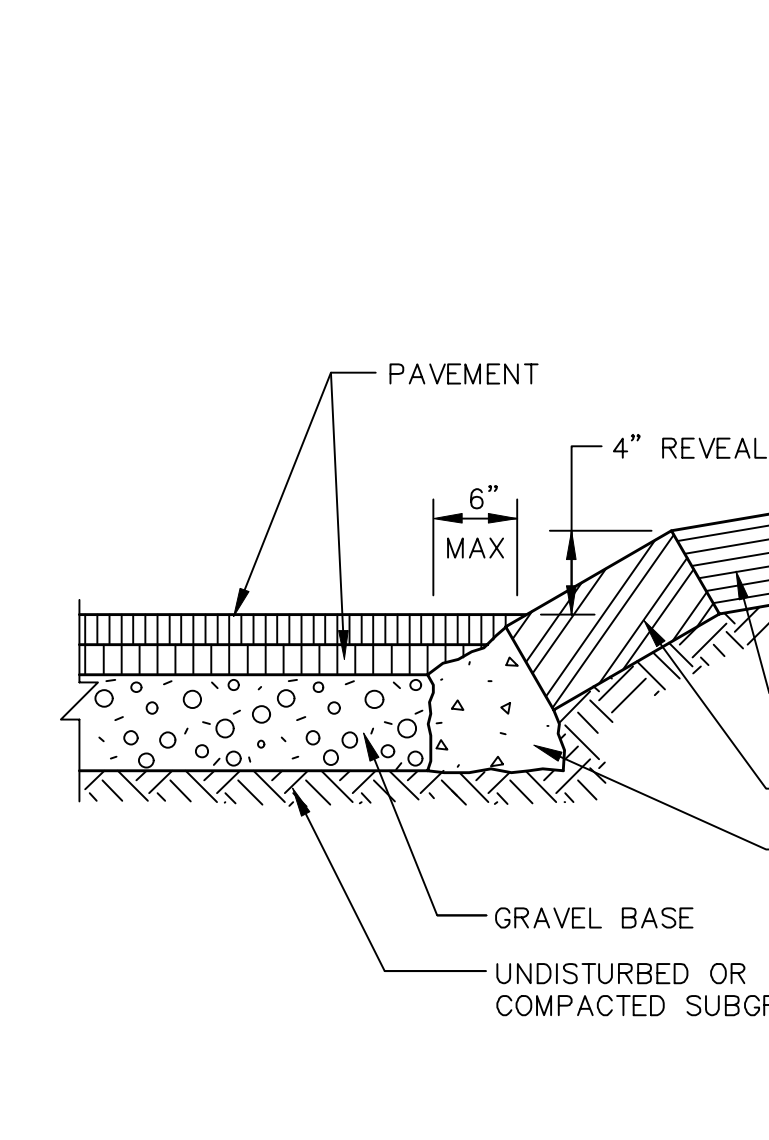
Typical Wye and Chimney Detail (Residential)

N.T.S.



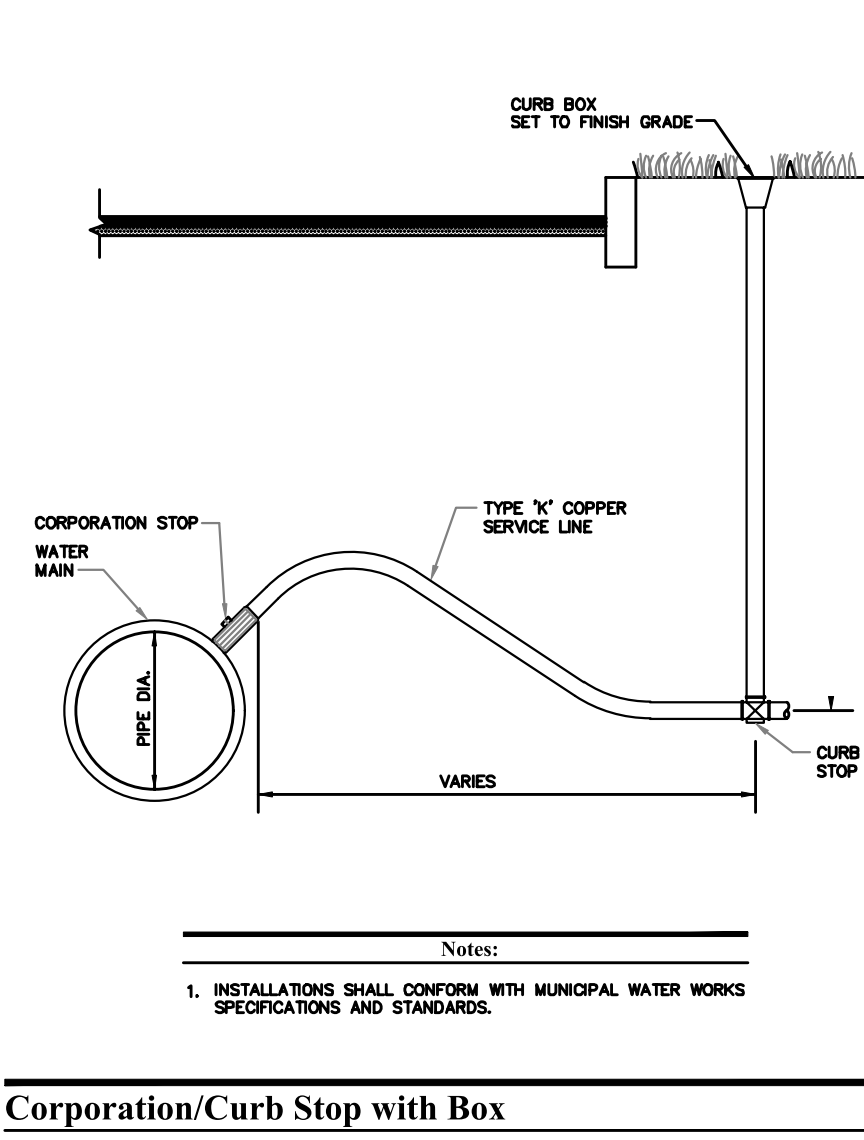
Water Connection to Existing Main

N.T.S.



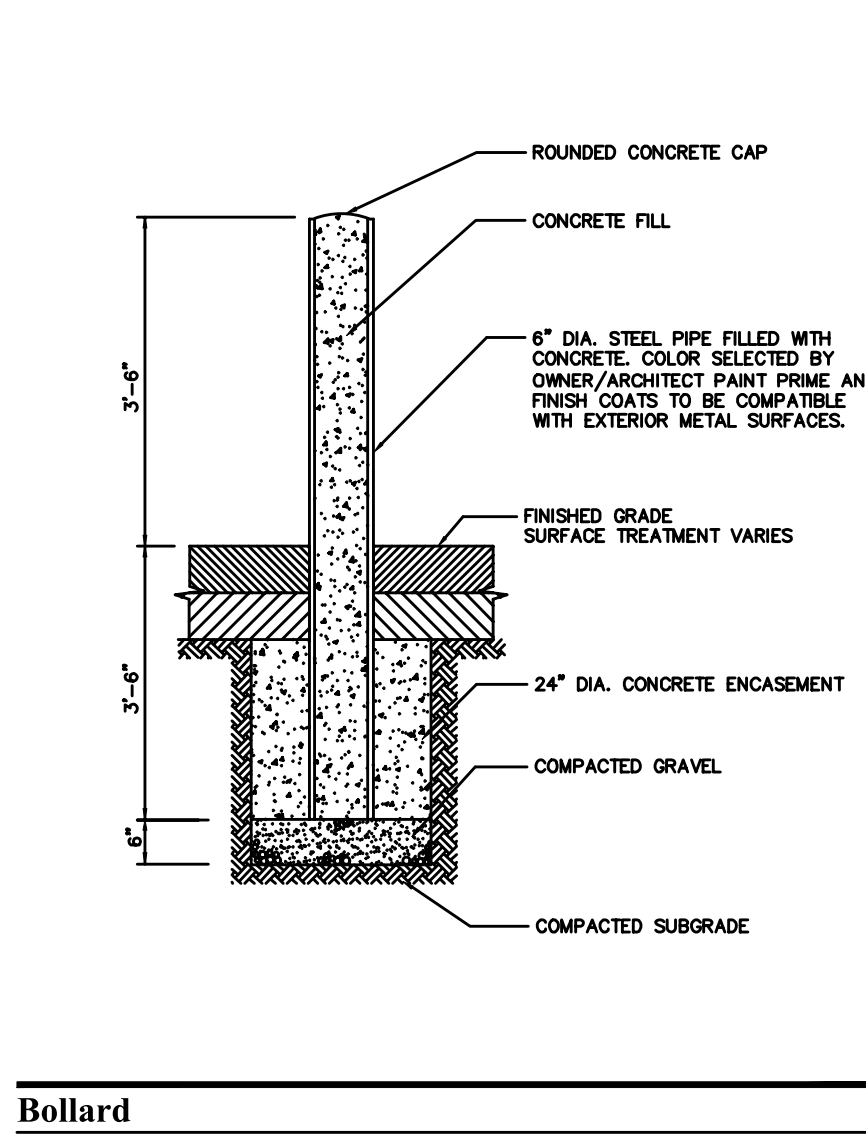
Slope Granite Curb

N.T.S.



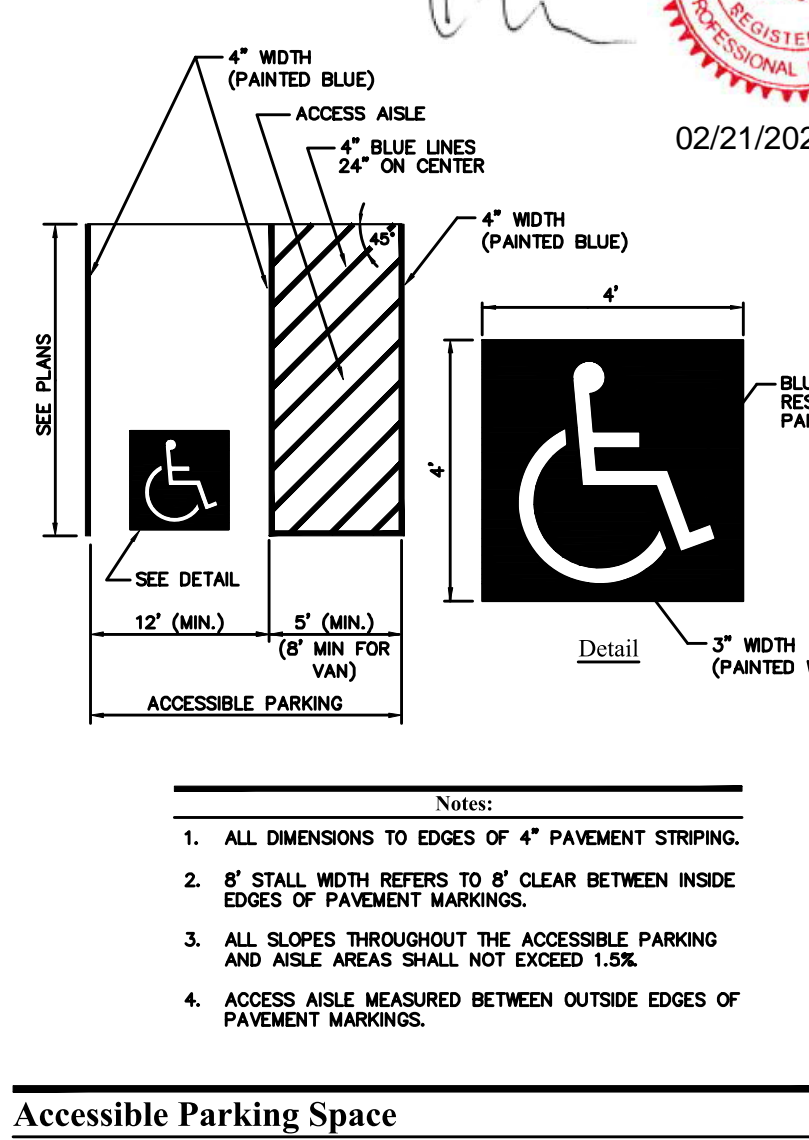
Corporation/Curb Stop with Box

N.T.S.



Bollard

N.T.S.



Accessible Parking Space

N.T.S.

REVISIONS:		
NO.	COMMENTS:	DATE:
1.	SITE PLAN REVIEW COMMENTS	9-26-2022
2.	REVISED PER TOWN COMMENTS	2-15-2023

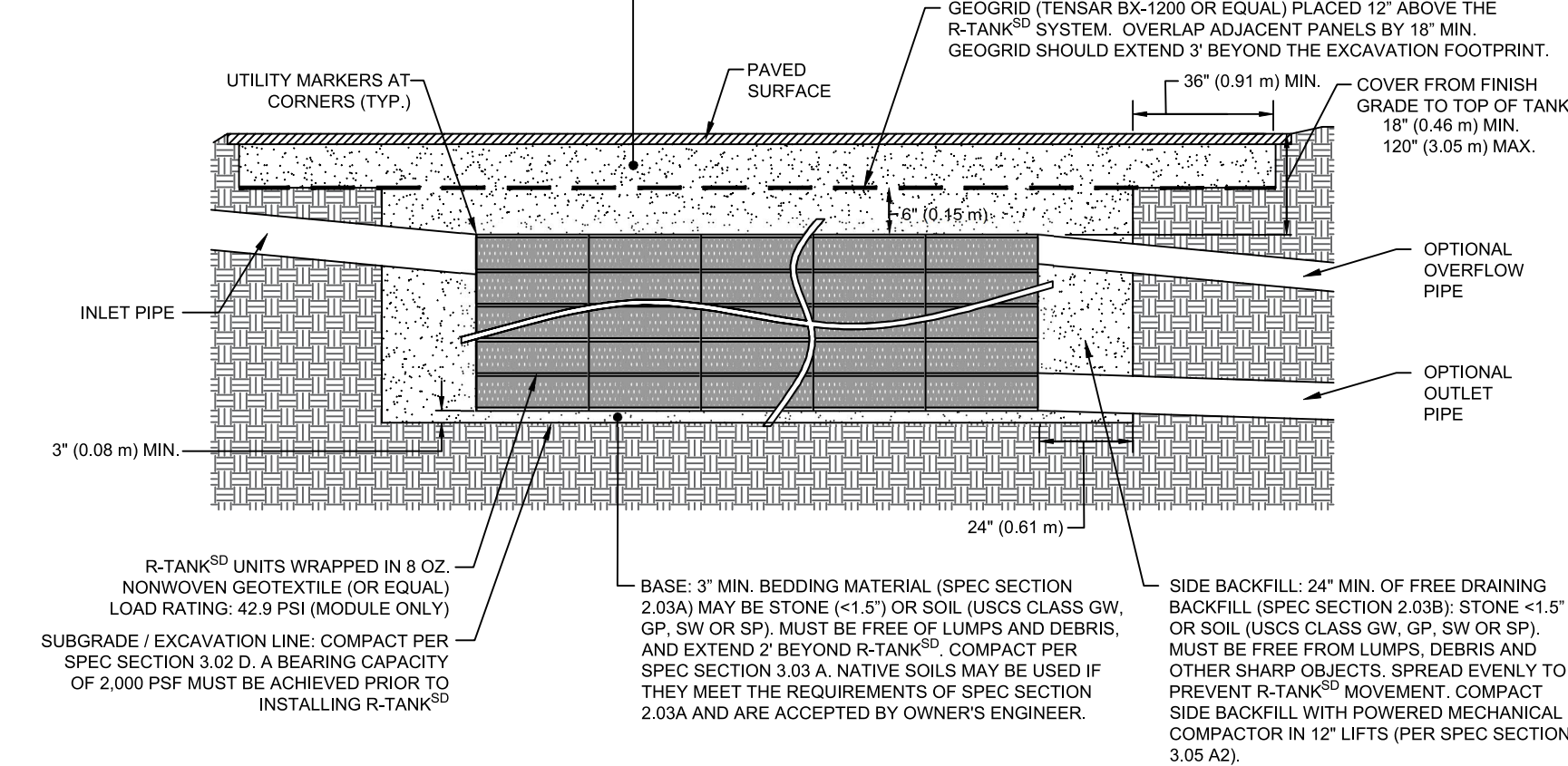
DETAILS 2 16 Fencourt Ave RANDOLPH, MASSACHUSETTS	
DRAWN BY: JKY DESIGNED BY: CYM CHECKED BY: CYM	DATE: 9-06-2022 LATEST REVISION: 2-15-2023

HARDY + MAN DESIGN GROUP, PC CIVIL ENGINEERING & LAND DEVELOPMENT CONSULTING	1285 WASHINGTON STREET WEYMOUTH, MA (781) 335-1464	
	PREPARED FOR: PERMITTING	SHEET C-7

TOTAL COVER: 18" MINIMUM AND 120" MAXIMUM. FIRST 12" MUST BE FREE DRAINING BACKFILL (SPEC SECTION 2.03B). STONE <1.5" OR SOIL (USCS CLASS GW, GP, SW OR SP). ADDITIONAL FILL MAY BE STRUCTURAL FILL (SPEC SECTION 2.03C). STONE OR SOIL (USCS CLASS SM, SP, SW, GM, GP OR GW) WITH MAX CLAY CONTENT<10%, MAX 25% PASSING NO. 200 SIEVE, AND MAX PLASTICITY INDEX OF 4. A MIN. 12" COVER MUST BE MAINTAINED BETWEEN BACKFILL EQUIPMENT AND THE TOP OF THE R-TANK™ SYSTEM AT ALL TIMES. TOTAL HEIGHT OF TOP BACKFILL SHOULD NOT EXCEED 10'. CONTACT ACF ENVIRONMENTAL IF MORE THAN 18" OF TOP BACKFILL IS REQUIRED (FROM TOP OF TANK TO TOP OF PAVEMENT).

NOTES:

- FOR COMPLETE MODULE DATA, SEE APPROPRIATE R-TANK™ MODULE SHEET.
- INSTALLATIONS PER THIS DETAIL MEET GUIDELINES OF HL-93 LOADING PER THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, CUSTOMARY U.S. UNITS, 7TH EDITION, 2014 WITH 2015 AND 2016 INTERIM REVISIONS.
- PRE-TREATMENT STRUCTURES NOT SHOWN.
- FOR INFILTRATION APPLICATIONS, GEOTEXTILE ENVELOPING R-TANK SHALL BE ACF M200 (PER SPEC SECTION 2.02A) AND BASE SHALL BE 4" MIN. UNCOMPACTED FREE DRAINING BACKFILL (SPEC SECTION 2.03A) TO PROVIDE A LEVEL BASE. SURFACE MUST BE SMOOTH, FREE OF LUMPS OR DEBRIS, AND EXTEND 2' BEYOND R-TANK™ FOOTPRINT.

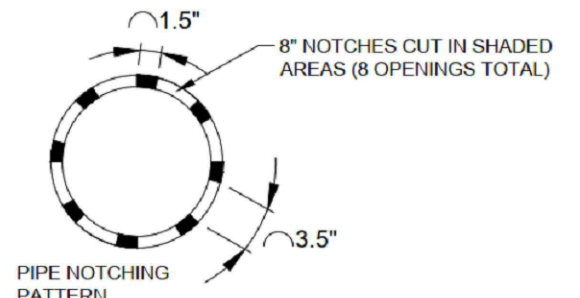


R-TANK^{SD} & HS-20 LOADS - SECTION VIEW

FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com

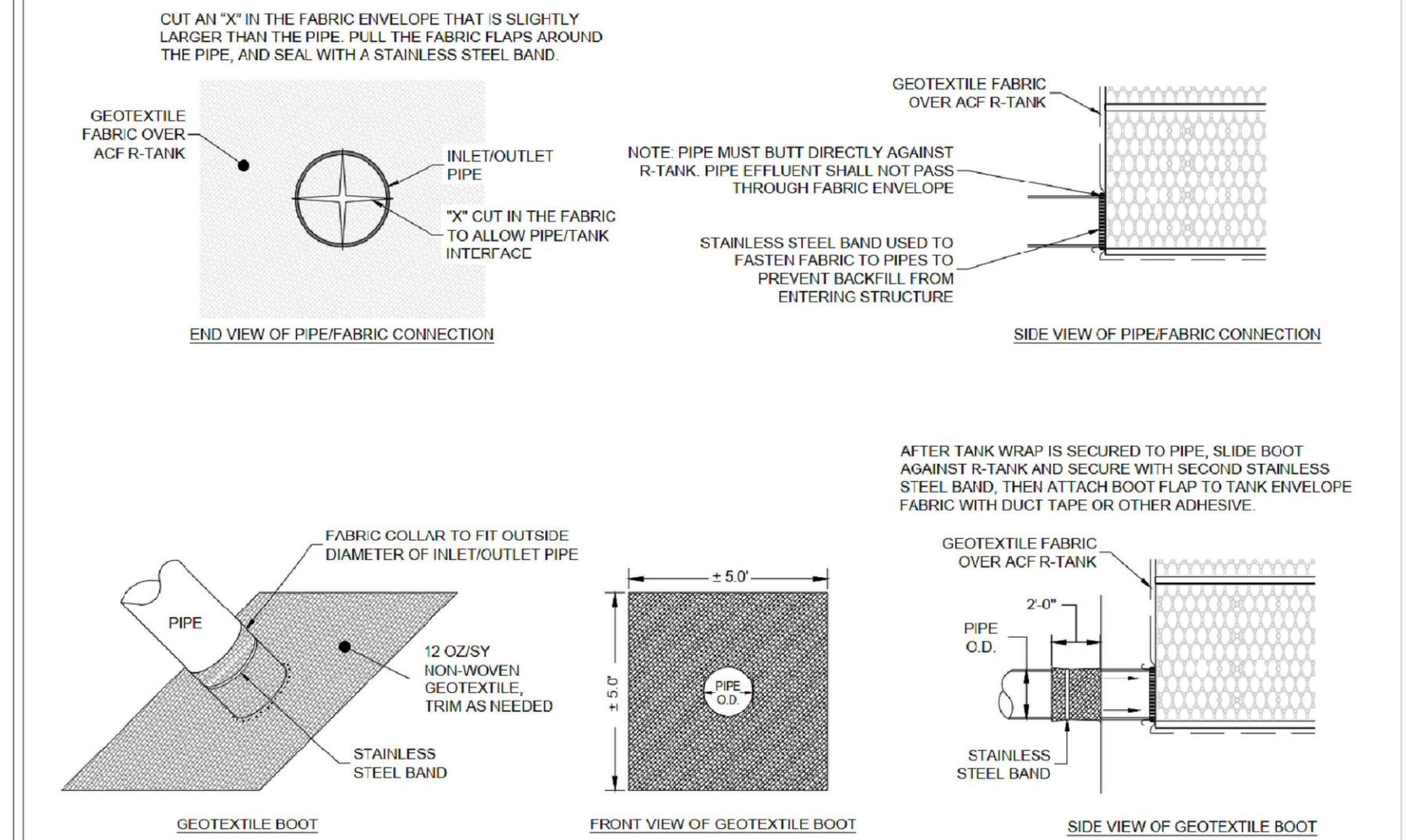
- NOTES:
- THIS PORT IS USED TO PUMP WATER INTO THE SYSTEM AND RE-SUSPEND ACCUMULATED SEDIMENT SO THAT IT MAY BE PUMPED OUT.
 - MINIMUM REQUIRED MAINTENANCE INCLUDES A QUARTERLY INSPECTION DURING THE FIRST YEAR OF OPERATION AND A YEARLY INSPECTION THEREAFTER. FLUSH AS NEEDED.
 - ONLY R-TANK™, R-TANK™, R-TANK™, AND R-TANK™ MAY BE USED IN TRAFFIC APPLICATIONS.
 - IF MAINTENANCE PORT IS LOCATED IN A NON-TRAFFIC AREA, A PLASTIC CAP CAN BE USED IN LIEU OF A FRAME AND COVER WITH CONCRETE COLLAR.

DEPTH SUMMARY		
TYPE	A	B
R-TANK ^{SD}	12" MIN - 36" MAX	AS SHOWN ON PLANS
R-TANK ^{SD}	20" MIN - 6.99' MAX	12"
R-TANK ^{SD}	18" MIN - 9.99' MAX	12"
R-TANK ^{SD}	12" MIN - 5.00' MAX	12"
R-TANK ^{SD}	6" MIN - 16.67' MAX	N/A



R-TANK MAINTENANCE PORT

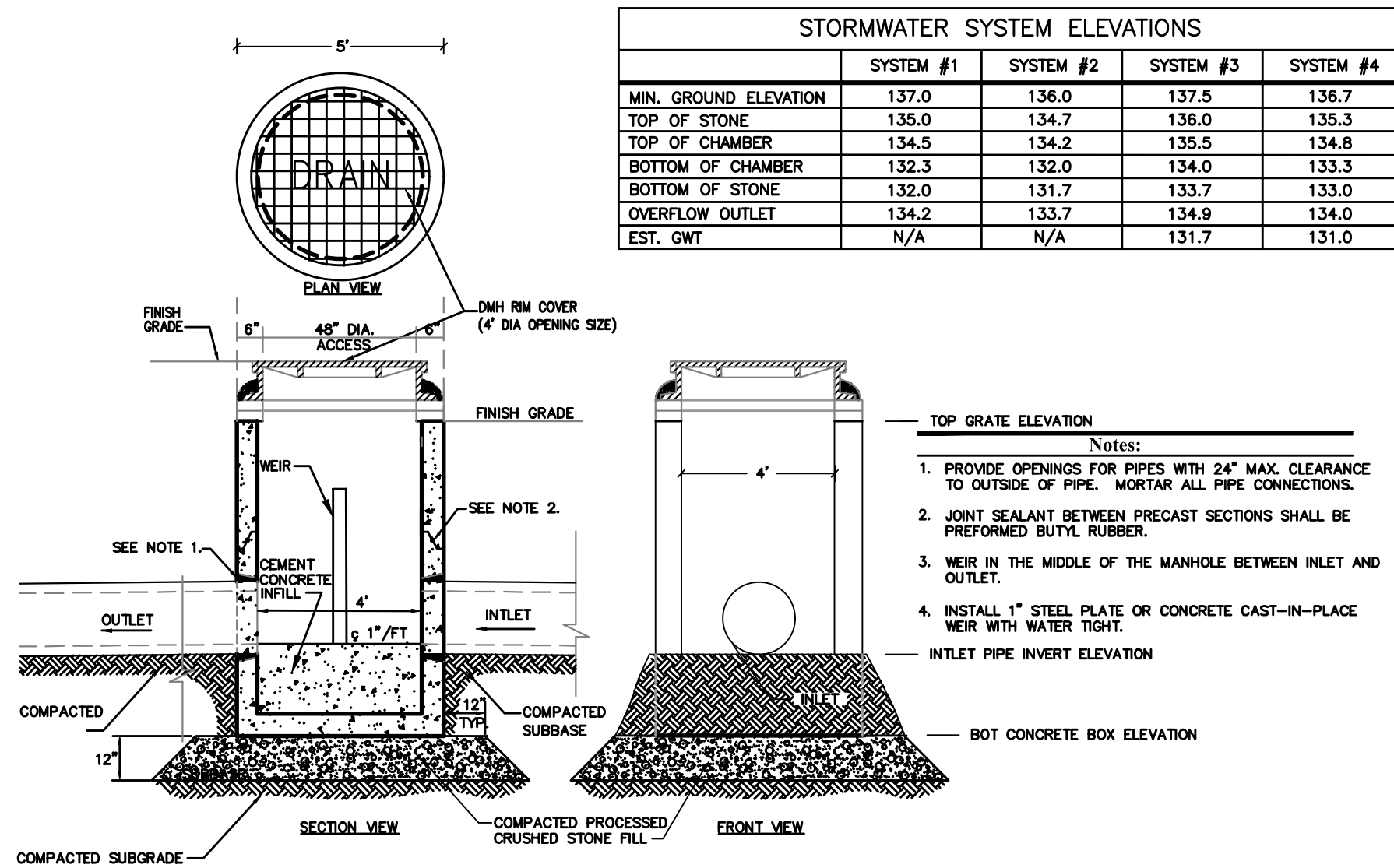
FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com



R-TANK TYPICAL INLET/OUTLET W/ GEOTEXTILE BOOT

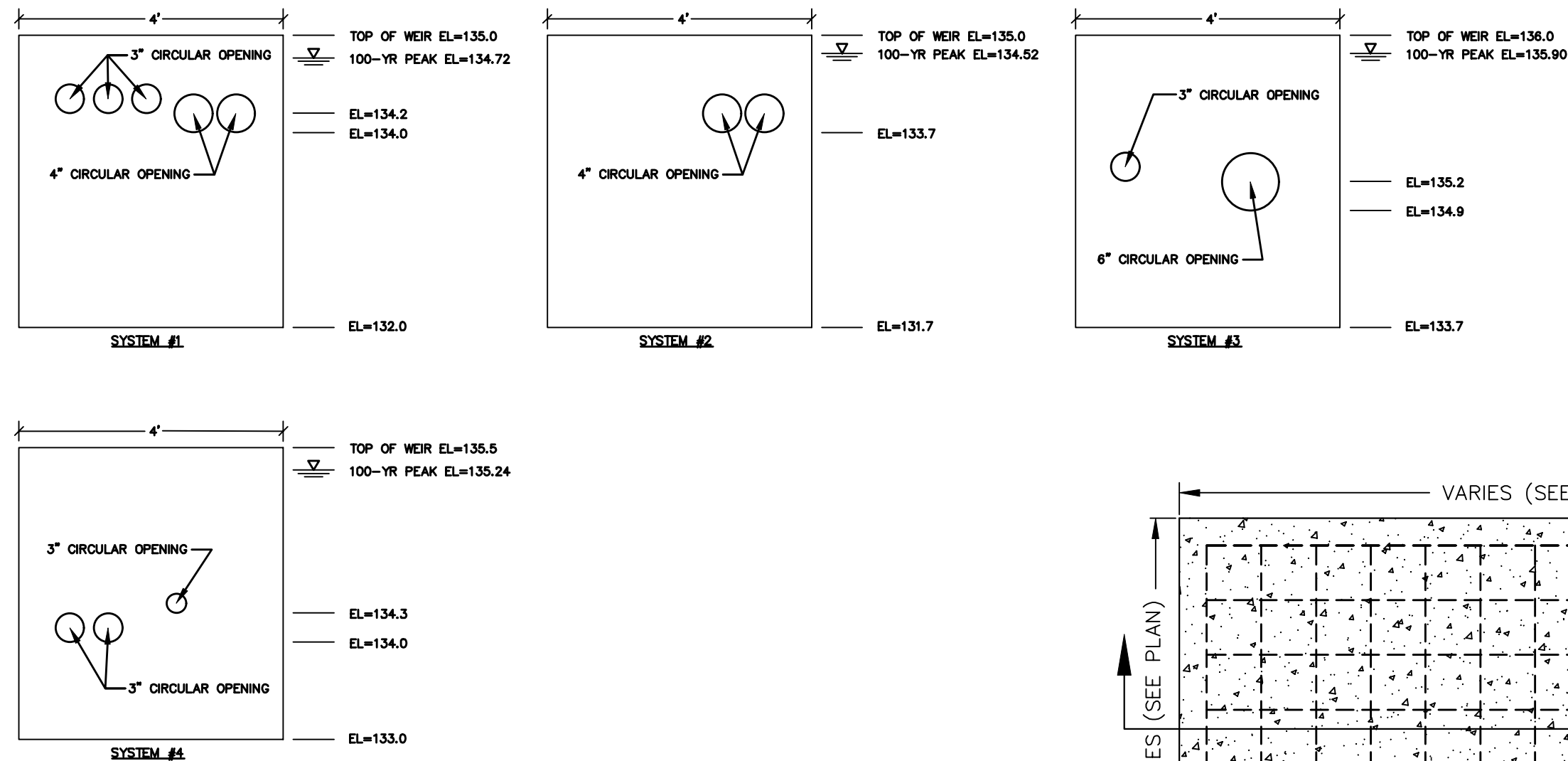
FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com

STORMWATER SYSTEM ELEVATIONS				
	SYSTEM #1	SYSTEM #2	SYSTEM #3	SYSTEM #4
MIN. GROUND ELEVATION	137.0	136.0	137.5	136.7
TOP OF STONE	135.0	134.7	136.0	135.3
TOP OF CHAMBER	134.5	134.2	135.5	134.8
BOTTOM OF CHAMBER	132.3	132.0	134.0	133.3
BOTTOM OF STONE	132.0	131.7	133.7	133.0
OVERFLOW OUTLET	134.2	133.7	134.9	134.0
EST. GW	N/A	N/A	131.7	131.0



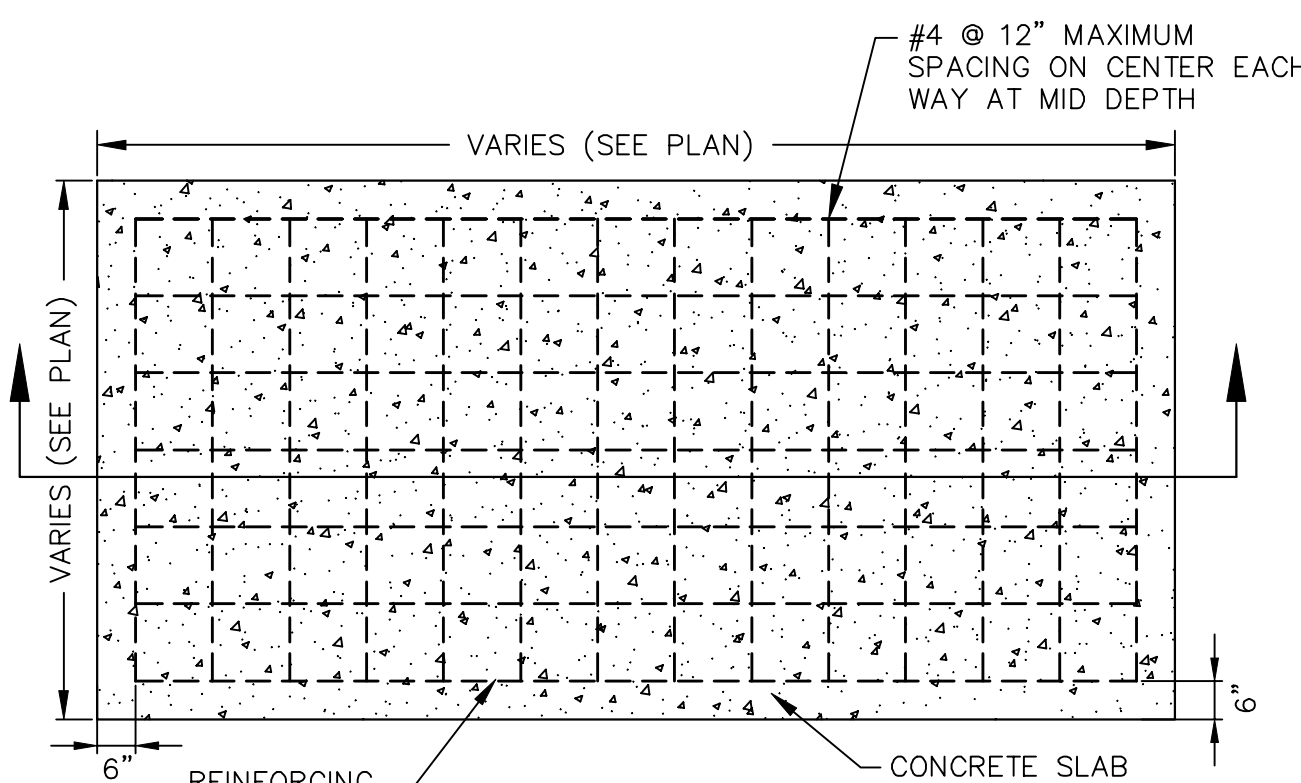
Outlet Control Structure Detail

N.T.S.

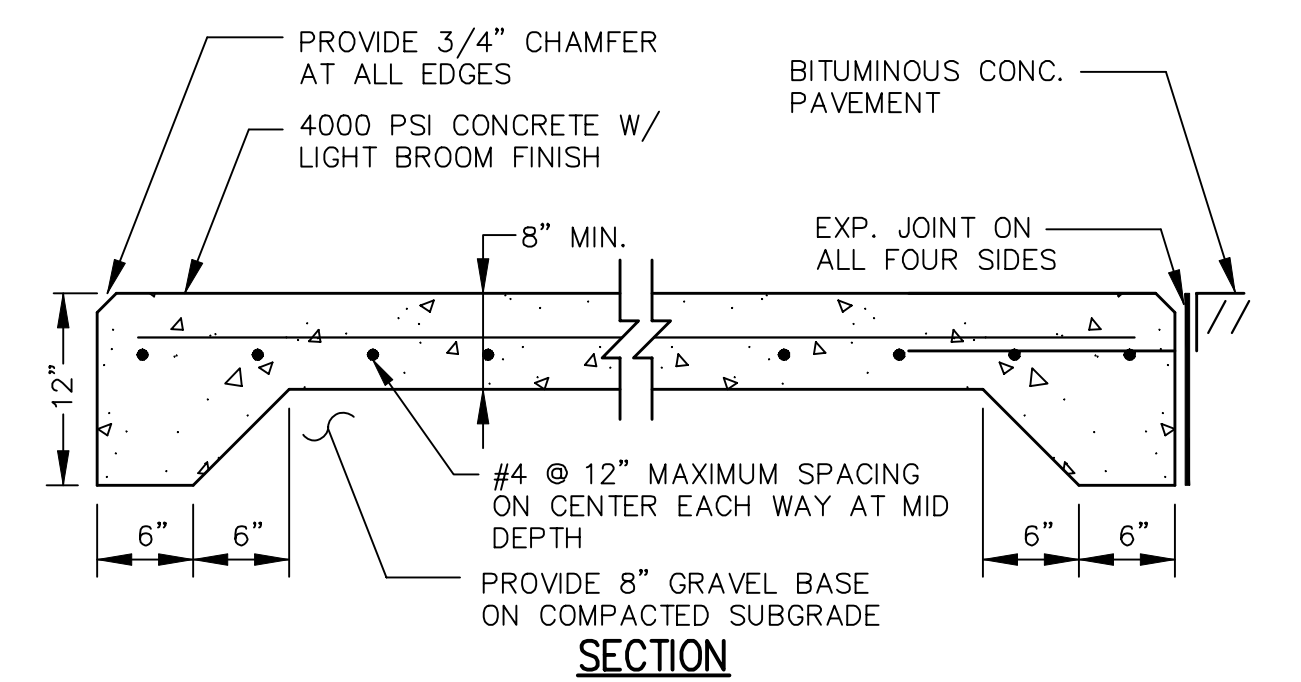


Outlet Control Structure Weir Detail

N.T.S.



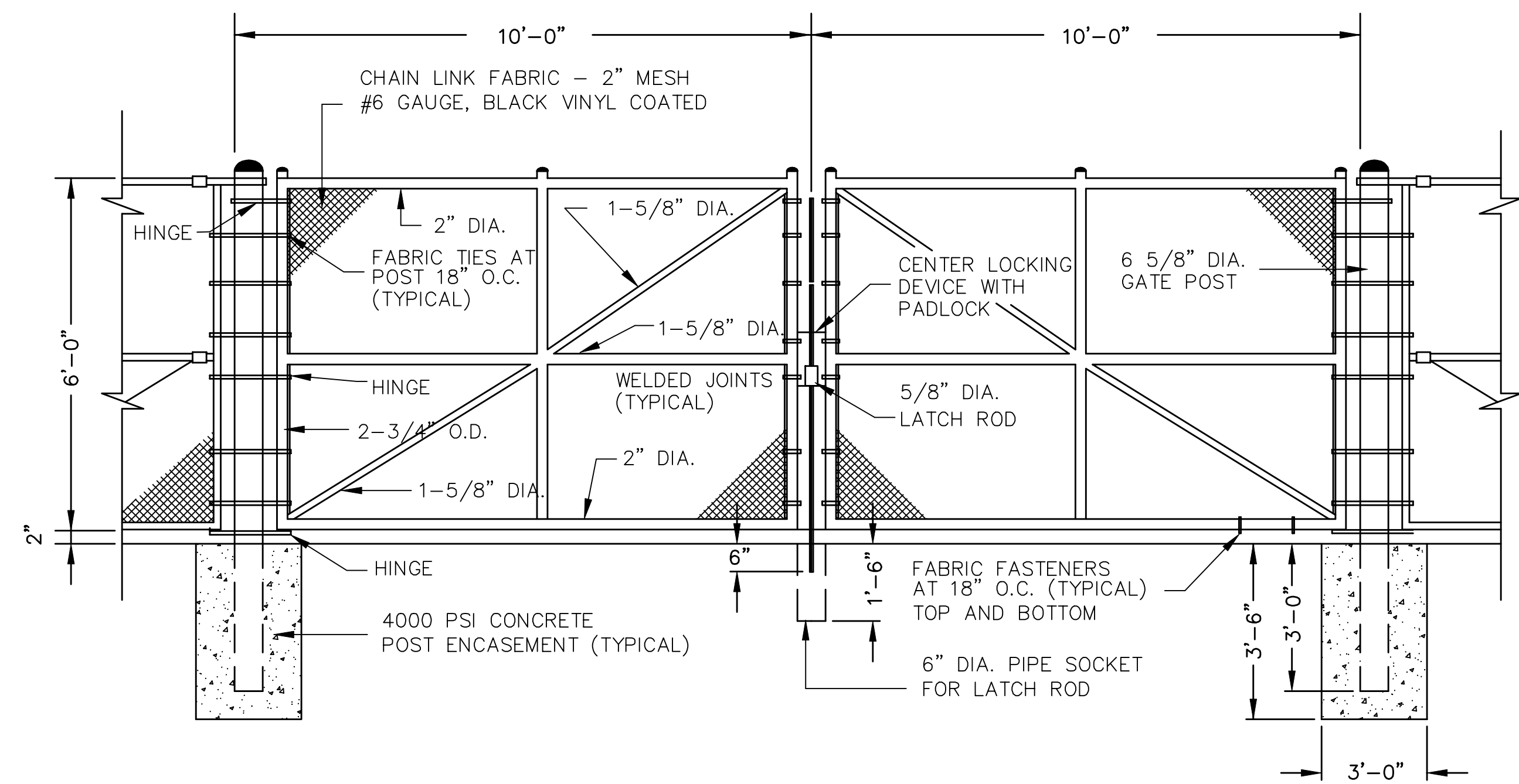
PLAN VIEW



- NOTES:
- ALL REINFORCEMENT BARS SHALL BE EPOXY COATED.
 - SLAB SHALL HAVE A CONTROL JOINT AT THE MID-POINT OF THE WIDTH.

Cement Concrete Dumpster Pad

N.T.S.



20 Feet Wide Double Swing Gate Fence

N.T.S.



- NOTES:
- DETAILS SHOWN ARE SAMPLE ONLY.
 - REFER TO MANUFACTURER FOR SPECIFICATION AND INSTALLATION.

6' High White Vinyl Privacy Fence

N.T.S.

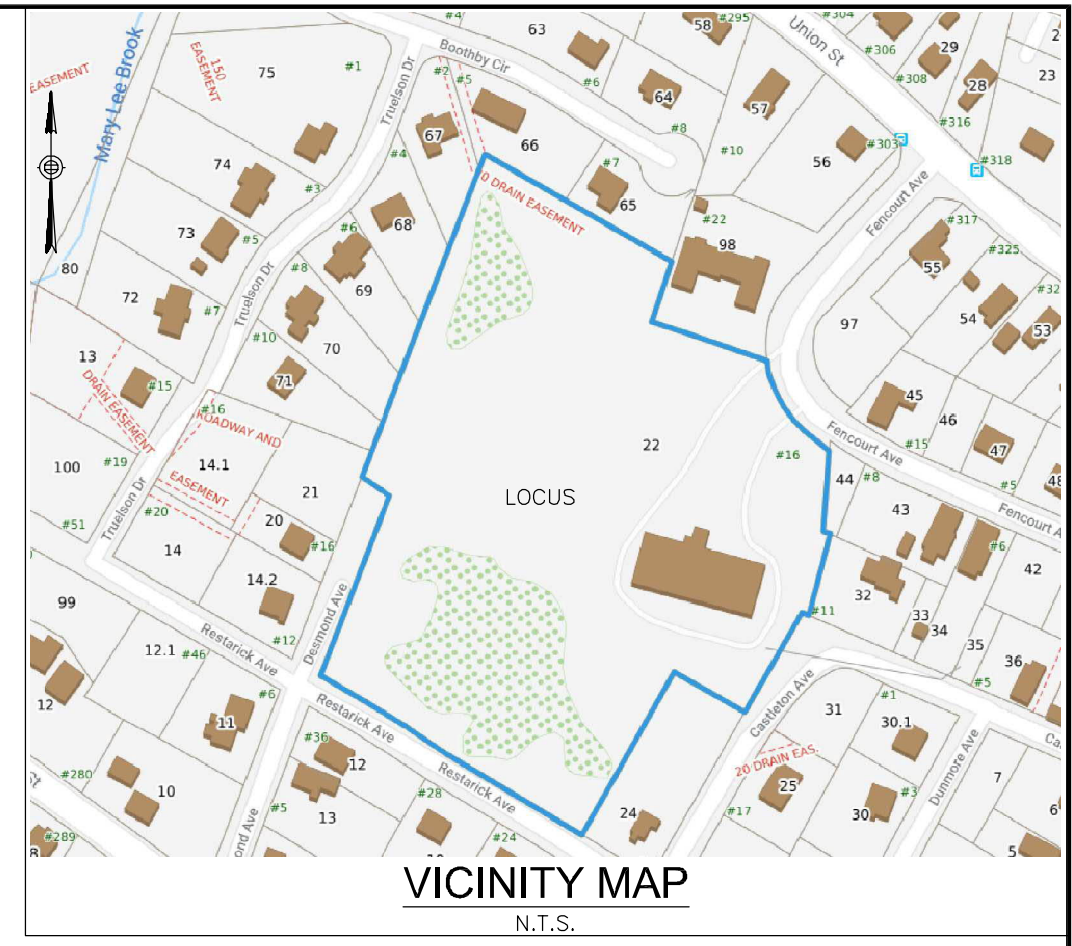
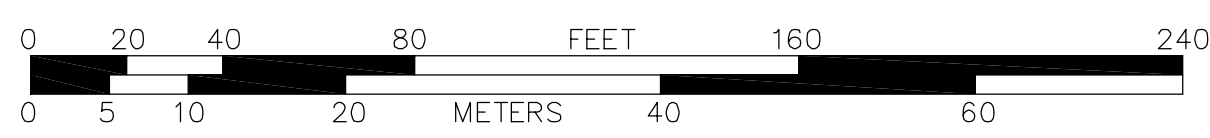
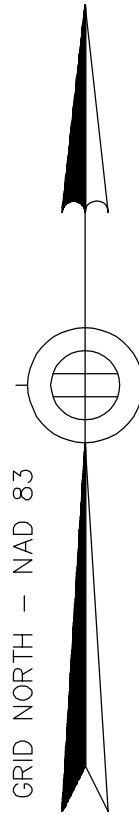
REVISIONS:		
NO.	COMMENTS:	DATE:
1.	SITE PLAN REVIEW COMMENTS	9-26-2022
2.	REVISED PER TOWN COMMENTS	2-15-2023

DETAILS 3 16 Fencourt Ave RANDOLPH, MASSACHUSETTS		DRAWN BY: JKY DESIGNED BY: CYM CHECKED BY: CYM		DATE: 9-06-2022 LATEST REVISION: 2-26-2023		PREPARED FOR: PERMITTING		SHEET C-8	
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1285 WASHINGTON STREET
WEYMOUTH, MA
(781) 335-1464

MASSACHUSETTS COORDINATE SYSTEM
GRID NORTH - NAD 83



- NOTES:**
1. THIS LAND IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS, OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.
 2. THIS SITE IS NOT WITHIN A SPECIAL HAZARD FLOOD ZONE AS DESIGNATED BY F.L.R.M. NUMBER 23021C0219E EFFECTIVE DATE JULY 17, 2012.

ASSESSOR'S REFERENCE: 64-A-022
OWNER: TAJ ESTATES OF RANDOLPH II, LLC
DEED REFERENCE: BOOK 39214, PAGE 555
LOT AREA: 7.1±Ac.
PLAN REFERENCES:
Plan # 362-1527
Plan # 56-2671
Plan # 201-28
Plan # 28221-A
Plan # 37408-A
Plan # 40430-A
Plan # 40430-B
Plan # D1901-203
Plan # D3469-96
Plan # D4137-680
Plan # D4346-565
Plan # D4346-570
Plan # D4368-227
Plan # D4401-300-B
Plan # D4721-80
Plan # D5755-405
Plan # D6303-269
UNION STREET COUNTY LAYOUT DATED JUNE 19, 1928 - 3 SHEETS



BORDERLAND ENGINEERING, INC.

61b Pleasant Street
Randolph, MA 02368

office 781-963-9500
fax 888-566-4131

PLAN OF LAND
IN
RANDOLPH, MASSACHUSETTS

16 FENCOURT AVENUE

PREPARED FOR:

HARDY + MAN DESIGN GROUP, PC
1285 WASHINGTON STREET
WEYMOUTH, MA 02189

DRAWING SCALE: 1 INCH = 40 FEET

DATE: AUGUST 13, 2022 PROJECT NUMBER: P2225