

# SITE DEVELOPMENT PLANS FOR APPLE HILL ESTATES

## 31 HUNTING LANE SHERBORN, MA 01770

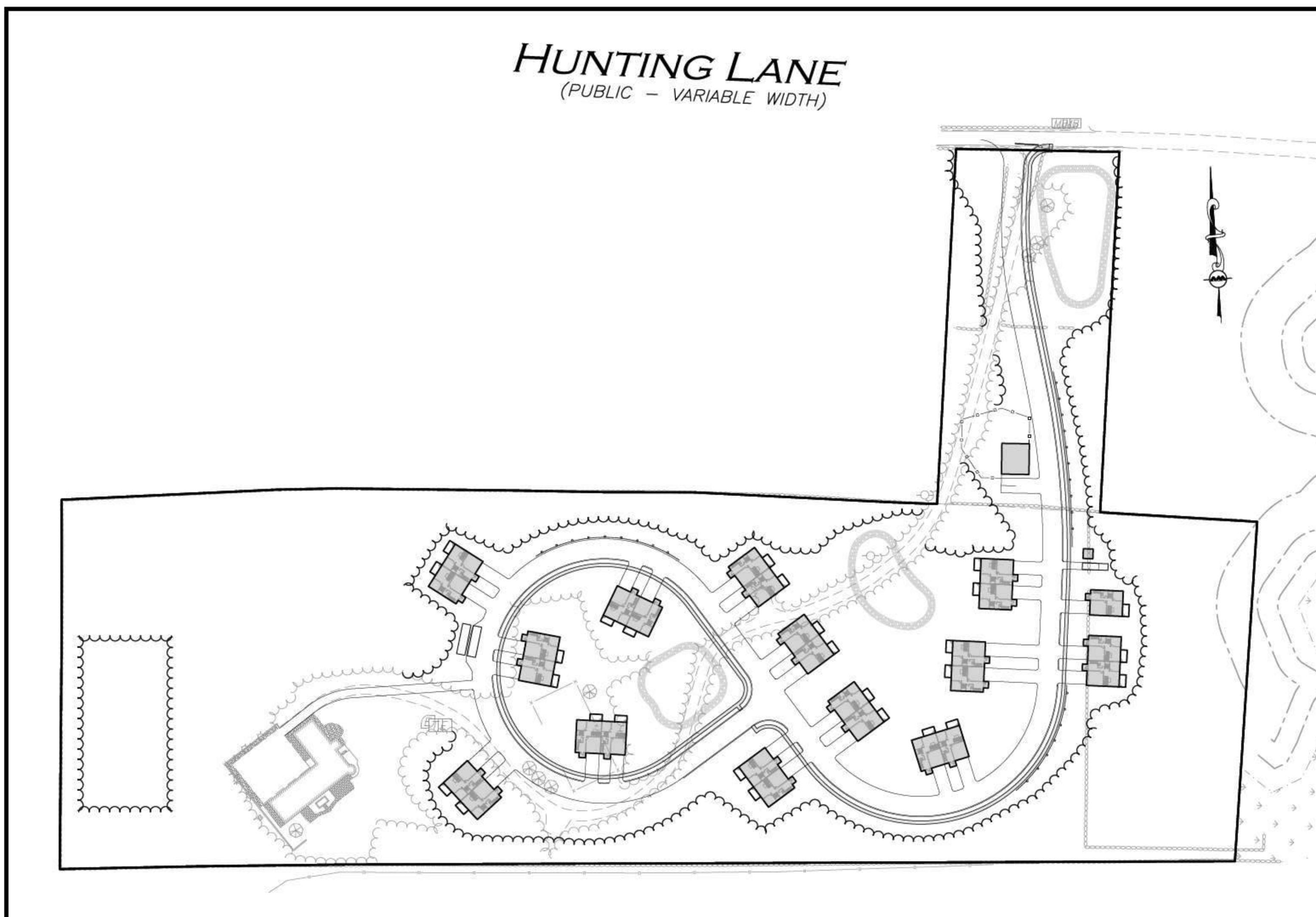
**OWNER/APPLICANT:**  
BARSKY ESTATE REALTY TRUST  
23 HUNTING LANE  
SHERBORN, MA 01770

**SITE ENGINEER & LAND SURVEYOR:**  
ALLEN & MAJOR ASSOCIATES, INC.  
100 COMMERCE WAY  
WOBURN, MA 01801

**40B CONSULTANT**  
LDS CONSULTING GROUP, LLC  
233 NEEDHAM STREET  
NEWTON, MA 02464

**TRAFFIC ENGINEER:**  
VANASSE & ASSOCIATES INC  
35 NEW ENGLAND BUSINESS CENTER DR  
SUITE 140  
ANDOVER, MA 01810

**WASTEWATER & DRINKING WATER ENGINEER:**  
ONSITE ENGINEERING, INC.  
279 EAST CENTRAL STREET, PMB 241  
FRANKLIN, MA 02038



LIST OF DRAWINGS			
DRAWING TITLE	SHEET NO.	ISSUED	REVISED
EXISTING CONDITIONS	V-101	09-01-20	-
BY-RIGHT SUBDIVISION PLAN - OPTION 2	C-101	10-01-20	-
LAYOUT & MATERIALS PLAN	C-102	10-01-20	-
GRADING & DRAINAGE PLAN	C-103	10-01-20	-
UTILITIES PLAN	C-104	10-01-20	-
EASEMENT PLAN	C-105	10-01-20	-
DETAILS	C-501	10-01-20	-
DETAILS	C-502	10-01-20	-
DETAILS	C-503	10-01-20	-
DETAILS	C-504	10-01-20	-



PROFESSIONAL ENGINEER FOR  
ALLEN & MAJOR ASSOCIATES, INC.

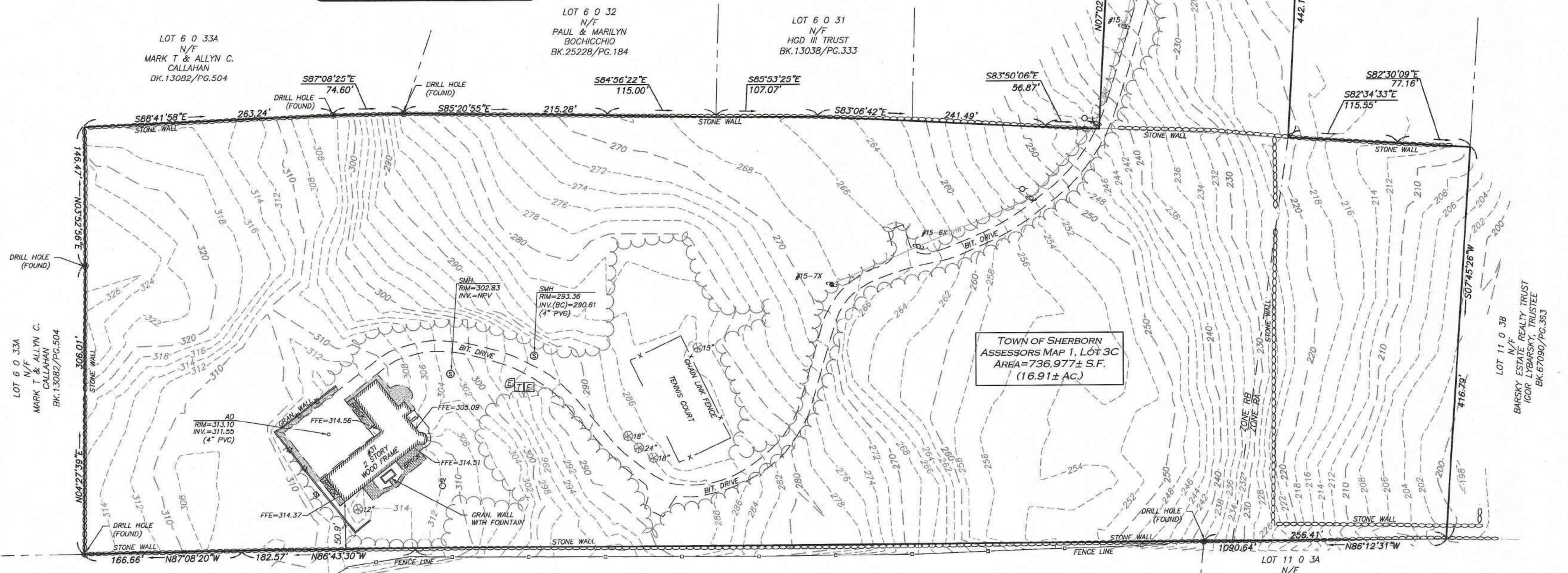
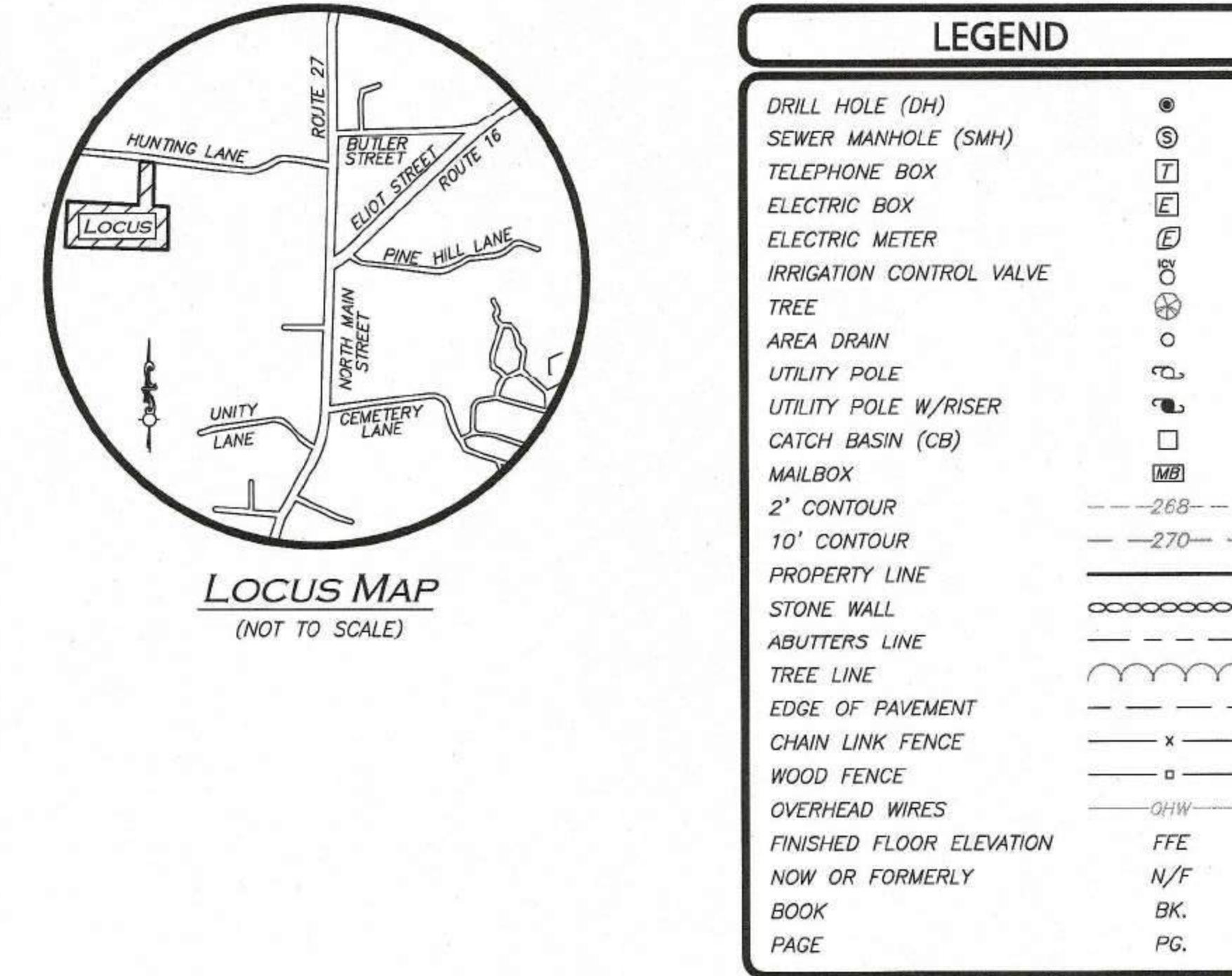


PREPARED BY:  
  
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ASSOCIATES, INC.**  
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 environmental consulting • landscape architecture  
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ISSUED FOR ZBA APPLICATION: OCTOBER 1, 2020

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*Sept 1, 2020*  
PROFESSIONAL LAND SURVEYOR FOR  
ALLEN & MAJOR ASSOCIATES, INC.



REV	DATE	DESCRIPTION
APPLICANT/OWNER:		
BARSKY ESTATE REALTY TRUST 23 HUNTING LANE SHERBORN, MA 01770		

**PROJECT:**  
31 HUNTING LANE  
SHERBORN, MA

**PROJECT NO.** 2513-02 **DATE:** 09/01/20  
**SCALE:** 1" = 60' **DWG. NAME:** S-2513-02-EC

**DRAFTED BY:** AJR **CHECKED BY:** NIL

**PREPARED BY:**



**ALLEN & MAJOR  
ASSOCIATES, INC.**

civil engineering & land surveying  
environmental consulting & landscape architecture

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100 COMMERCE WAY  
WOBBURN MA 01801-8501  
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POTENTIAL THAT THE PROVIDED INFORMATION MAY BE USED  
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OR PORTABLE DOCUMENT FORMAT OF THE DRAWINGS AND  
SPECIFICATIONS ISSUED SHALL BE THE ONLY RECORD COPIES OF  
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**DRAWING TITLE:** EXISTING CONDITIONS **SHEET NO.:** V-101

## ZONING SUMMARY TABLE

ITEM	REQUIRED		PROPOSED
	RA DISTRICT	RB DISTRICT	
MINIMUM LOT AREA	1 ACRE	2 ACRES	>2 ACRES
MINIMUM FRONTAGE	150 FEET	200 FEET	200 FEET
MINIMUM LOT WIDTH	150 FEET	200 FEET	>200 FEET
MINIMUM LOT DEPTH	N/A	N/A	N/A
MINIMUM FRONT SETBACK	60 FEET	60 FEET	>60 FEET
MINIMUM SIDE SETBACK	30 FEET	40 FEET	>40 FEET
MINIMUM REAR SETBACK	30 FEET	30 FEET	>30 FEET
MAXIMUM HEIGHT (STORIES)	2.5	2.5	<2.5
MAXIMUM HEIGHT (FEET)	35 FEET	35 FEET	<35 FEET
MAXIMUM LOT COVERAGE	N/A	N/A	N/A

## LEGEND

PROP. PROPERTY LINE \_\_\_\_\_  
SETBACK LINE \_\_\_\_\_

# HUNTING LANE



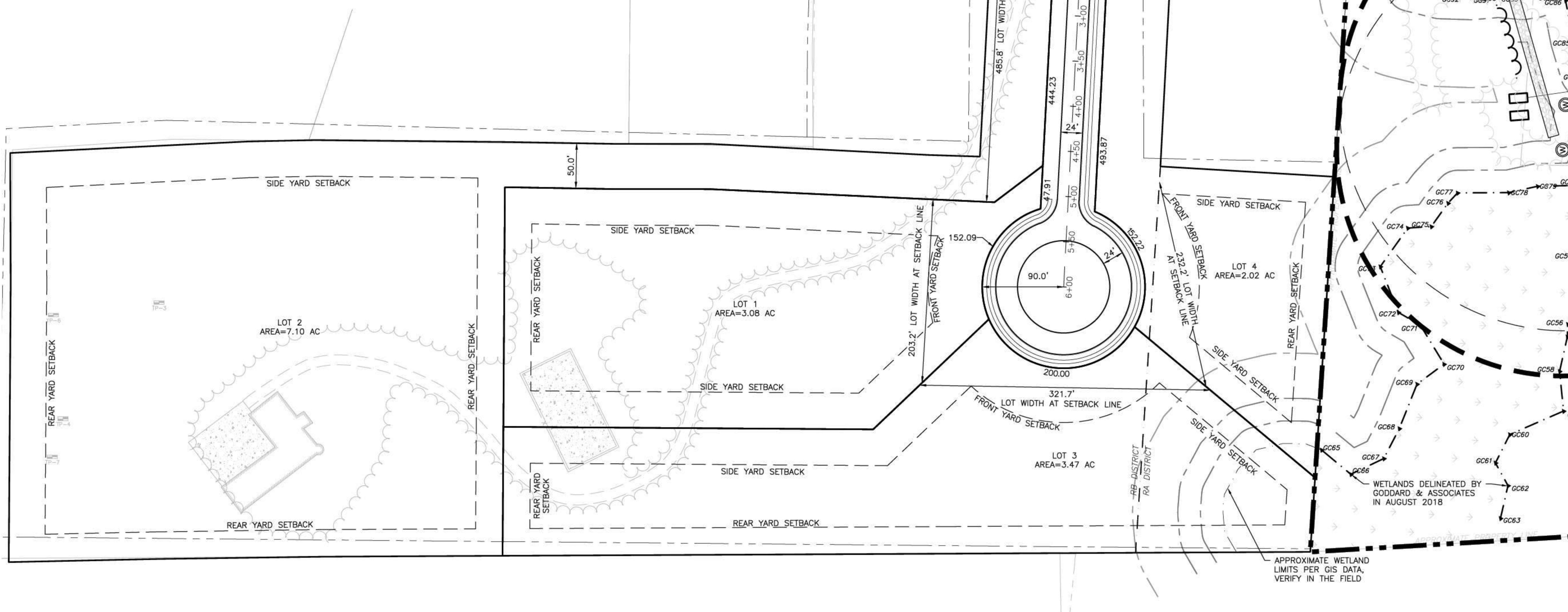
**ZONING SUMMARY TABLE NOTES:**

1. MINIMUM LOT WIDTH SHALL BE MEASURED AT FRONT SETBACK LINE AND AT BUILDING LINE. AT NO POINT BETWEEN THE REQUIRED FRONTAGE AND THE BUILDING LINE SHALL LOT WIDTH BE REDUCED TO LESS THAN 50 FEET, WITHOUT EXCEPTION FROM THE PLANNING BOARD.

## NOTES:

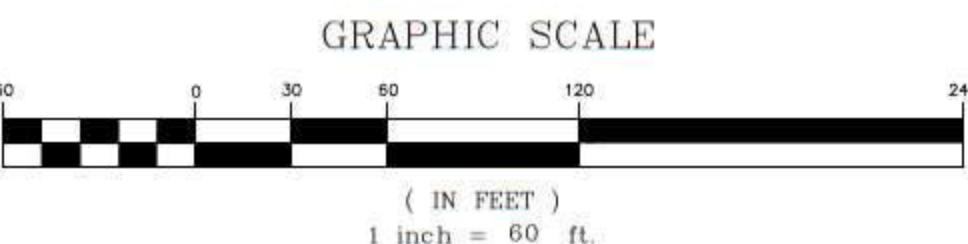
**NOTES:**

1. THE PROPERTY BOUNDARY SHOWN HEREON WAS TAKEN FROM PLAN TITLED "PLAN OF LAND, SHERBORN, MA" PREPARED FOR WILMA I. & ORVILLE J. BROWN, PREPARED BY METROWEST ENGINEERING, INC., DATED OCTOBER 1, 1993, LAST REVISED NOVEMBER 4, 1993. THE PROPERTY LINE HAS NOT BEEN VERIFIED BY A FIELD SURVEY BY ALLEN & MAJOR ASSOCIATES, INC.
2. EXISTING CONDITIONS SHOWN HEREON ARE THE RESULT OF AERIAL IMAGERY AND MASS GIS DATA. THE EXISTING CONDITIONS AND TOPOGRAPHY HAVE NOT BEEN VERIFIED BY A FIELD SURVEY BY ALLEN & MAJOR ASSOCIATES, INC.
3. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. ITS INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.



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1-888-344-7233

E:\PROJECTS\2513-02\CMII\CURRENT\DRAWINGS\SUBDIVISION\AYOUT 2.DWG



( IN FEET )

WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

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DRAWING TITLE:

SHEET NO.

**REQUIRED RELIEF:**

1. RULES AND REGULATIONS
  - 1.1. § 4.1.c. MAXIMUM OF ONE SINGLE FAMILY RESIDENTIAL DWELLING PER LOT
  - 1.2. § 4.3.b. MAXIMUM LENGTH OF DEAD-END STREET. 600 FEET ALLOWED, 1,150 FEET PROPOSED

**GENERAL NOTES:**

1. THIS PROJECT WILL BE SERVED BY PUBLIC TELEPHONE, CABLE AND ELECTRIC. ALL UTILITY LINES WILL BE INSTALLED UNDERGROUND. SANITARY SEWER WILL BE PROVIDED BY ON-SITE SUBSURFACE DISPOSAL SYSTEM. WATER WILL BE PROVIDED BY PRIVATE WELL.
2. ANY DAMAGE TO PRIVATE OR PUBLIC PROPERTIES DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED AND RESTORED BY THE CONTRACTOR AT THEIR OWN EXPENSE.
3. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
4. ALL PROPERTY MARKERS AND STREET LINE MONUMENTS SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED AND RESTORED BY A SURVEYOR REGISTERED IN THE STATE OF MASSACHUSETTS AT THE CONTRACTOR'S EXPENSE.
5. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION MEETING WITH THE TOWN, THE APPROPRIATE UTILITY COMPANIES, THE OWNER AND OWNER'S REPRESENTATIVE. THE MEETING SHALL TAKE PLACE PRIOR TO THE START OF CONSTRUCTION AND THE CONTRACTOR MUST PROVIDE 48 HOURS NOTICE TO ALL ATTENDEES PRIOR TO THE START OF THE MEETING.
6. APPROPRIATE WARNING SIGNS, MARKERS, BARRICADES AND/OR FLAGGER SHALL BE PROVIDED TO REGULATE TRAFFIC. CONSTRUCTION TRAFFIC CONTROL SHALL BE IMPLEMENTED PER THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE LOCAL AUTHORITY.
7. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ADDITIONAL BENCHMARK INFORMATION IF REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING BENCHMARKS. IF IT IS NECESSARY TO RELOCATE A BENCHMARK, IT SHALL BE RELOCATED BY A MASSACHUSETTS PROFESSIONAL LAND SURVEYOR AND DONE SO AT THE CONTRACTOR'S EXPENSE.
8. ALL PERMITS AND APPROVALS NECESSARY FROM AGENCIES GOVERNING THE WORK SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORK.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY SITE WORK OR EARTH-WORK OPERATIONS, SHALL BE MAINTAINED DURING CONSTRUCTION, AND SHALL REMAIN IN PLACE UNTIL ALL SITE WORK IS COMPLETE AND GROUND COVER IS ESTABLISHED. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DETERMINED NECESSARY BY SITE INSPECTIONS BY THE OWNER, THEIR REPRESENTATIVES, OR REGULATORY AGENCIES HAVING JURISDICTION AT NO ADDITIONAL COST TO THE OWNER.
10. CONSTRUCTION DURING WET WEATHER OR WINTER CONDITIONS IS TO BE ANTICIPATED AND PROVISIONS TO ADEQUATELY ADDRESS THESE CONDITIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
11. ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS INCLUDING THE TOWN, MADOT, MADCP, MUTCD, AND ASHTO.
12. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY ALLEN & MAJOR ASSOCIATES DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK, ON THE OWNER'S EMPLOYEES, CUSTOMERS, OR THE GENERAL PUBLIC. THE SEAL OF THE ENGINEER AS INCLUDED IN THE PLAN SET DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PROVIDE THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), STATE, AND LOCAL REGULATIONS.
13. GRANITE CURBING REMOVED FROM PUBLIC ROADS SHALL BE STOCKPILED AND RETURNED TO THE RESPECTIVE TOWN DPW.
14. EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED OR RELOCATED AS NECESSARY. ALL COSTS SHALL BE INCLUDED IN BASE BID.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH THE TOWN'S GOVERNING AUTHORITY'S SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COSTS SHALL BE INCLUDED IN BASE BID.
16. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK. THE CONTRACTOR SHALL ALSO CONTACT THE CITY DEPARTMENT OF PUBLIC WORKS AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF LOCAL UTILITIES.

**PLAN NOTES:**

1. EXISTING CONDITIONS WERE COMPILED FROM AN ON THE GROUND SURVEY PERFORMED BY ALLEN & MAJOR ASSOCIATES AS WELL AS AVAILABLE RECORD PLANS OBTAINED FROM THE TOWN ENGINEERING DEPARTMENT AND OTHER SOURCES.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
3. SLOPED GRANITE CURBING SHALL BE INSTALLED AT ALL STREET INTERSECTIONS ON THE CURVE AND EXTENDING AT LEAST EIGHT FEET BEYOND THE TANGENT POINT. SLOPED GRANITE CURBING SEGMENTS AT LEAST EIGHT FEET IN LENGTH SHALL ALSO BE INSTALLED AT ALL CATCH BASINS SO AS TO EXTEND NOT LESS THAN FOUR FEET IN EITHER DIRECTION FROM THE CATCH BASIN CENTER LINE.
4. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
5. WRITTEN DIMENSIONS ON THIS PLAN TAKE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN THE EVENT OF A CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWINGS AND/OR SPECIFICATIONS OR CONDITIONS, THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR. ALL SITE ITEMS SHALL BE LAID OUT AND AS BUILT BY A LICENSED LAND SURVEYOR.
6. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. ITS INTENDED USE IS TO PROVIDE INFORMATION, ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.

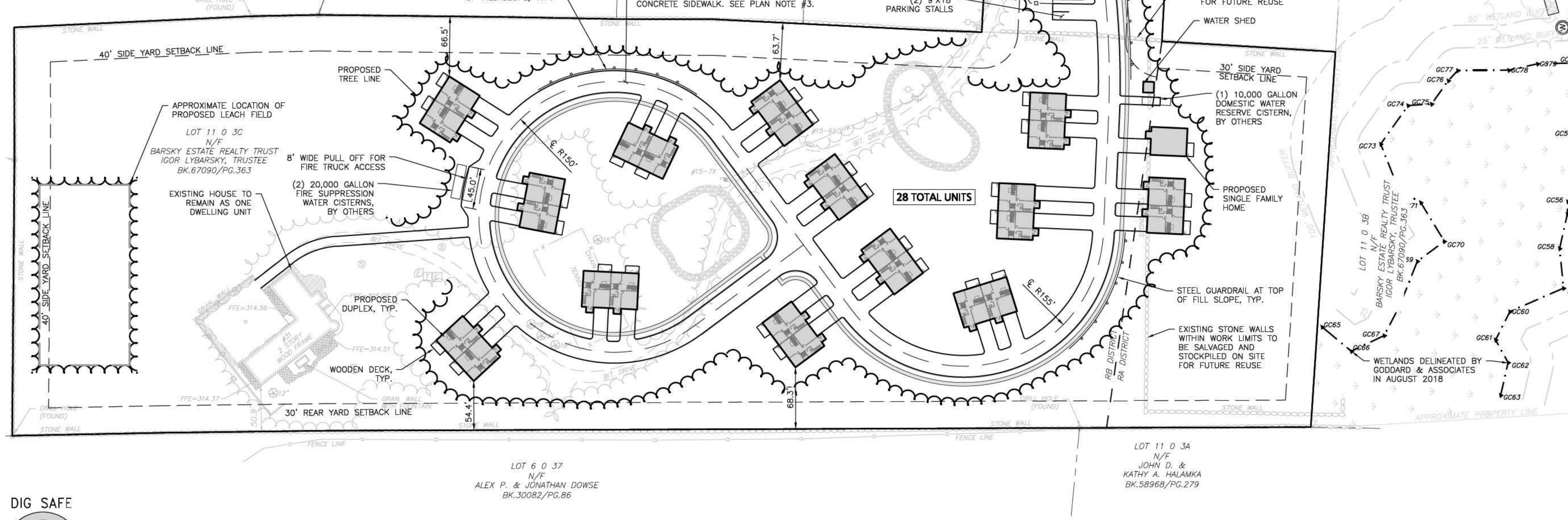
LOT 6 0 33A  
N/F  
MARK T. & ALLYN C.  
CALLAHAN  
BK.13082/PG.504

LOT 6 0 32  
N/F  
PAUL & MARILYN  
BOCHICCHIO  
BK.25228/PG.184

LOT 6 0 31  
N/F  
HOD III TRUST  
BK.13038/PG.333

TYPICAL SHERBORN SUBDIVISION STREET  
24' WIDE BITUMINOUS TRAVEL WAY, ONE SIDE  
W/ CAPE COD BERM & 4' WIDE BITUMINOUS  
CONCRETE SIDEWALK. SEE PLAN NOTE #3.

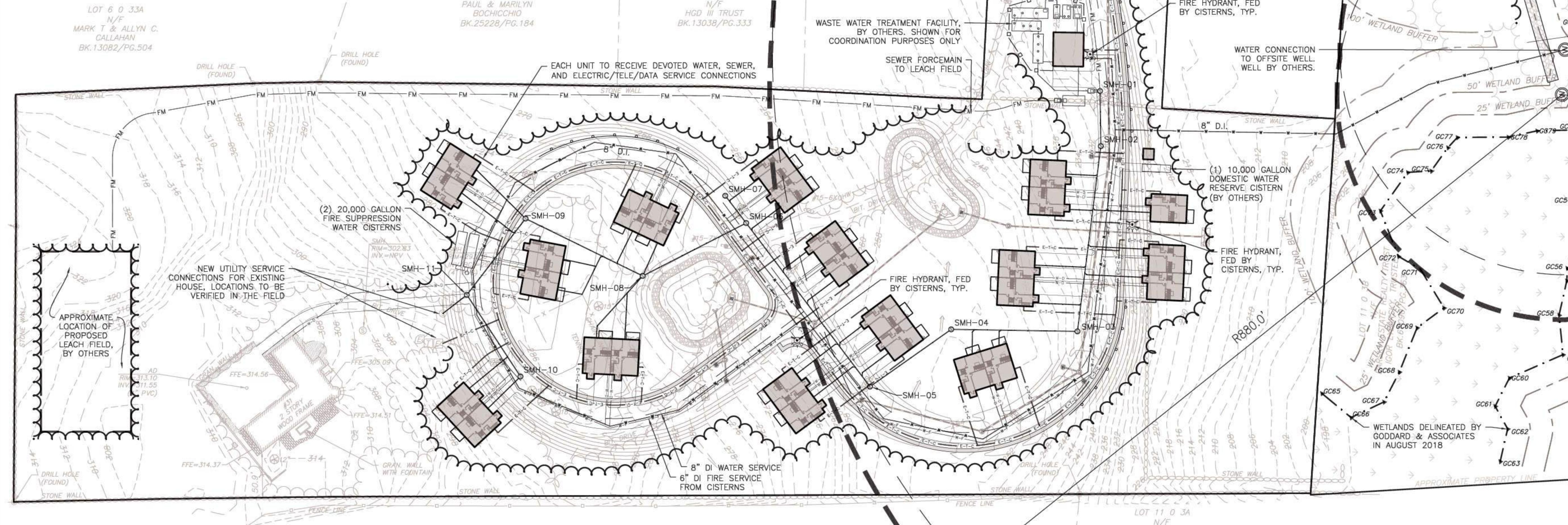
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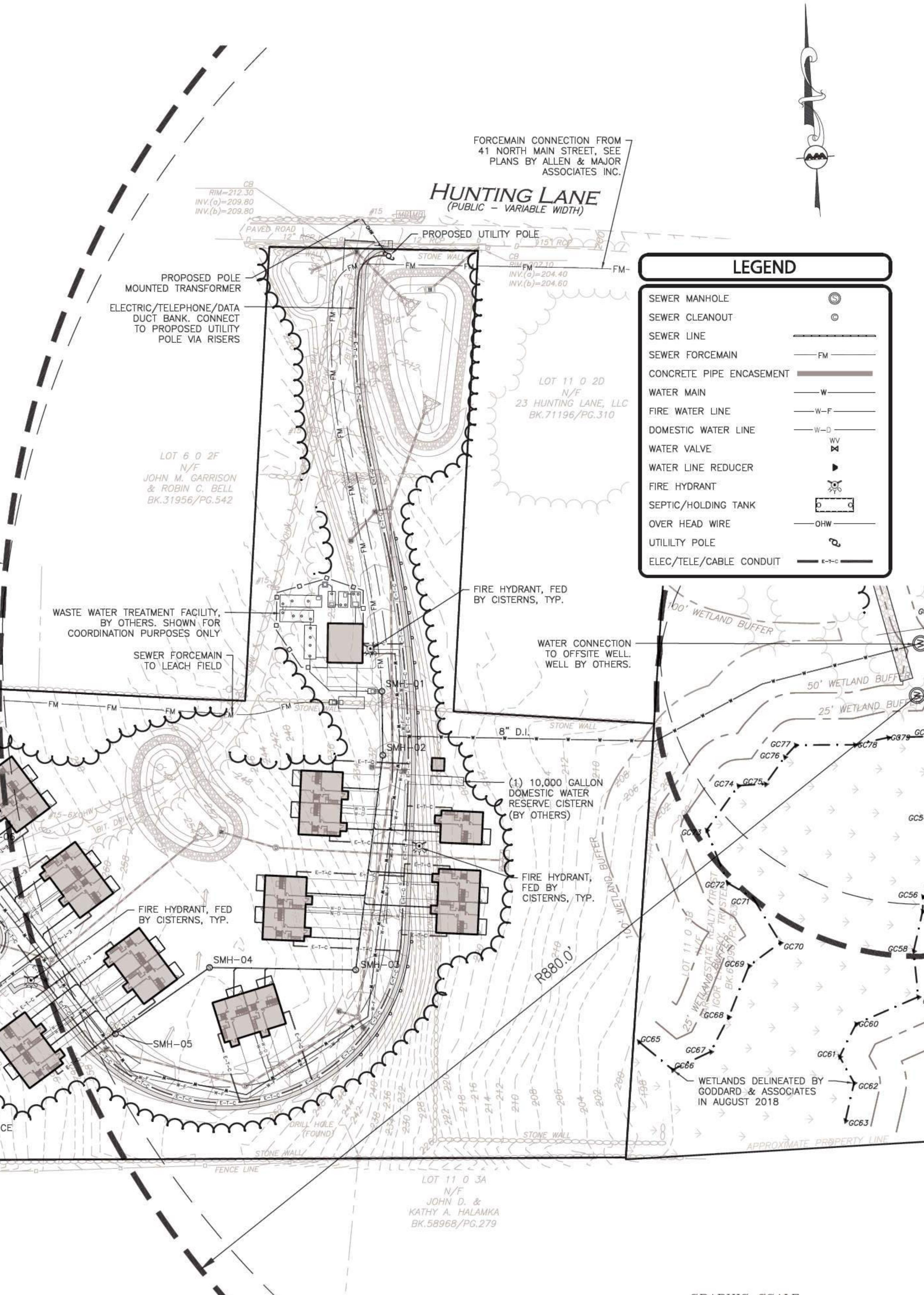


### UTILITY NOTES:

- A MINIMUM OF 10 FEET CLEAR HORIZONTALLY SHALL BE MAINTAINED BETWEEN WATER MAINS AND SANITARY SEWER MAINS AND/OR STORM DRAINS. WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET TO A WATER MAIN, THE WATER MAIN SHALL BE LAID IN A SEPARATE TRENCH AND THE DIFFERENCE IN ELEVATION BETWEEN THE WATER MAIN AND THE SEWER MAIN SHALL BE AT LEAST 18 INCHES.
- IN THE CASE THAT WATER MAINS CROSS SANITARY SEWER MAINS AND ARE SEPARATED BY LESS THAN 18" OF VERTICAL CLEARANCE, THE SEWER MAIN SHALL BE ENCASED IN CONCRETE FOR THE ENTIRE WIDTH OF THE TRENCH AND FOR A DISTANCE OF 8 LINEAR FEET CENTERED ON THE CROSSING.
- THE CONTRACTOR SHALL REFER TO ARCHITECTS PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL ROOF DRAIN LATERALS AND UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRIC, TELEPHONE, AND OIL/GAS SERVICE. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND COORDINATE WITH THE PROPER AGENCY THE LOCATION AND SCHEDULING OF CONNECTIONS WITH THEIR FACILITIES.
- WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION. THE ENGINEER WILL THEN PROVIDE RESOLUTION TO UTILITY CONFLICTS WITHOUT DELAY.
- ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS INCLUDING LOCAL, MADOT, MADEP, MUTCD, AND AASHTO.
- THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS OF THE SITE. THESE PLANS PREPARED BY ALLEN & MAJOR ASSOCIATES, INC., DO NOT EXTEND TO, NOR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THE EMPLOYEES, AGENTS OF REPRESENTATIVES IN PERFORMANCE OF THE WORK. THE SEAL OF THE ARCHITECT OR ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HERAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OF OBTAIN THE APPROPRIATE SAFETY SYSTEMS THAT MAY BE REQUIRED BY THE US OCCUPATIONAL SAFETY AND HEATH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
- ALL ELEVATIONS REFER TO NAVD 88.



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 1-888-DIG-SAFE  
 1-888-344-7233



GRAPHIC SCALE  
 ( IN FEET )  
 1 inch = 60 ft.



PROFESSIONAL ENGINEER FOR  
 ALLEN & MAJOR ASSOCIATES, INC.

3 10-01-2020 ISSUED FOR ZBA APPLICATION  
 2 05-19-2020 MISC. REV. PER MASSHOUSING & ABUTTER WALK  
 1 01-21-2020 MISCELLANEOUS REVISIONS  
 REV DATE DESCRIPTION

APPLICANT/OWNER:  
 BARSKY ESTATE REALTY TRUST  
 23 HUNTING LANE  
 SHERBORN, MA 01770

PROJECT:  
 APPLE HILL ESTATES  
 31 HUNTING LANE  
 SHERBORN, MA 01770

PROJECT NO. 2513-02 DATE: 11-14-19

SCALE: 1"- 60' DWG. NAME: C2513-02

DESIGNED BY: SM CHECKED BY: MAM

PREPARED BY:

  
**ALLEN & MAJOR  
 ASSOCIATES, INC.**  
 civil engineering • land surveying  
 environmental consulting • landscape architecture  
 www.allen-major.com  
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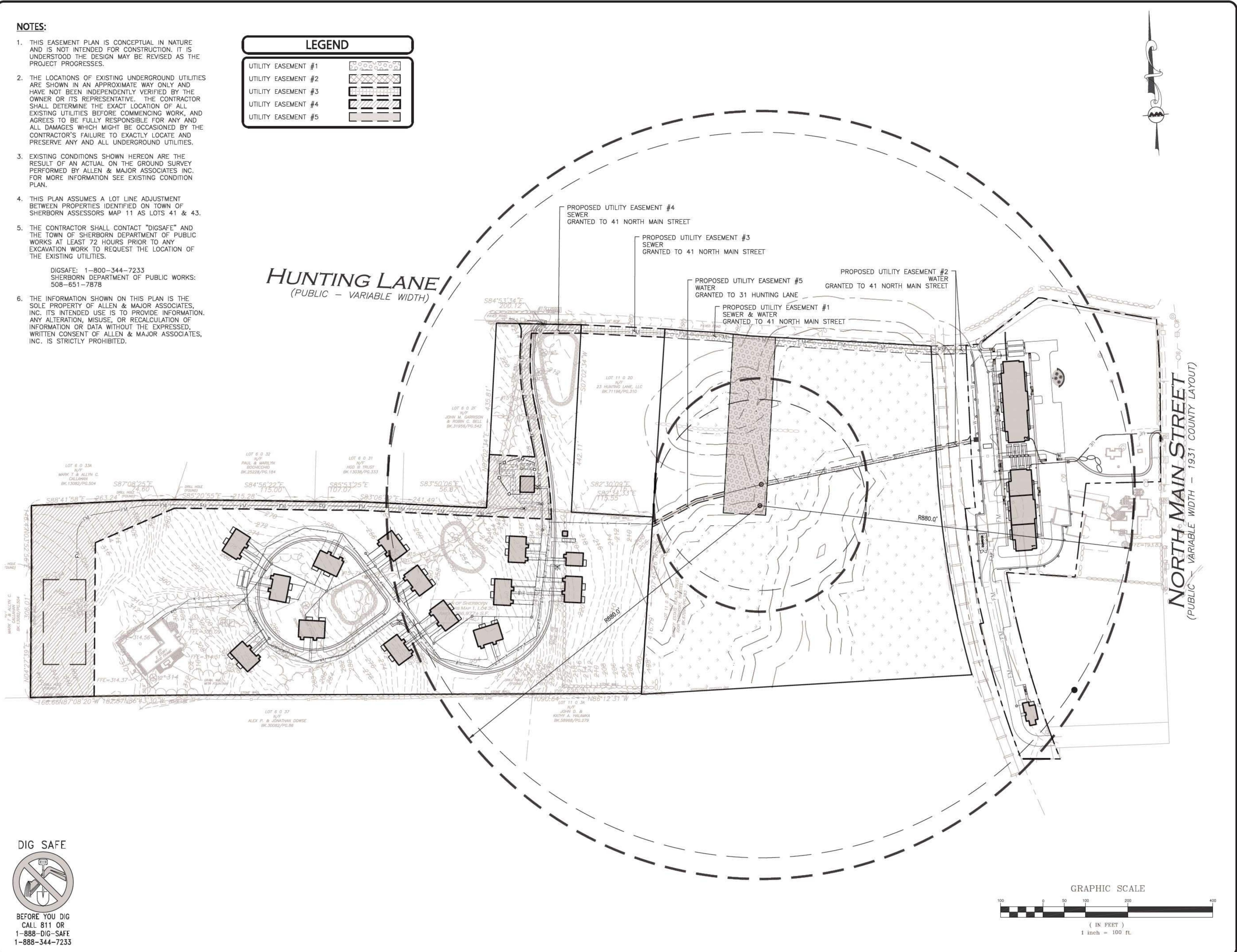
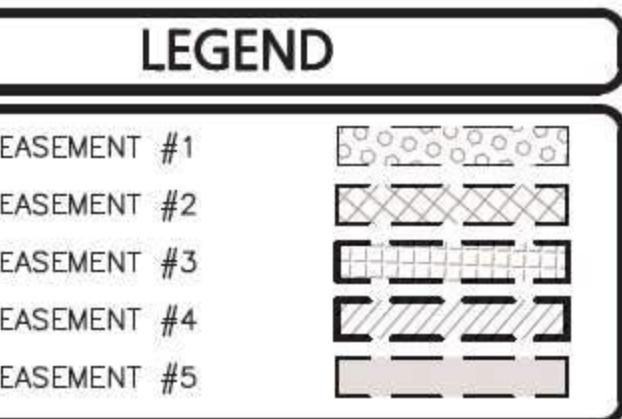
DRAWING TITLE: UTILITIES PLAN SHEET No. C-104  
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## NOTES:

1. THIS EASEMENT PLAN IS CONCEPTUAL IN NATURE AND IS NOT INTENDED FOR CONSTRUCTION. IT IS UNDERSTOOD THE DESIGN MAY BE REVISED AS THE PROJECT PROGRESSES.
2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. EXISTING CONDITIONS SHOWN HEREON ARE THE RESULT OF AN ACTUAL ON THE GROUND SURVEY PERFORMED BY ALLEN & MAJOR ASSOCIATES INC. FOR MORE INFORMATION SEE EXISTING CONDITION PLAN.
4. THIS PLAN ASSUMES A LOT LINE ADJUSTMENT BETWEEN PROPERTIES IDENTIFIED ON TOWN OF SHERBORN ASSESSORS MAP 11 AS LOTS 41 & 43.
5. THE CONTRACTOR SHALL CONTACT "DIGSAFE" AND THE TOWN OF SHERBORN DEPARTMENT OF PUBLIC WORKS AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST THE LOCATION OF THE EXISTING UTILITIES.

DIGSAFE: 1-800-344-7233  
SHERBORN DEPARTMENT OF PUBLIC WORKS:  
508-651-7878

6. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. ITS INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.



3	10-01-2020	ISSUED FOR ZBA APPLICATION
2	05-19-2020	MISC. REV. PER MASSHOUSING & ABUTTER WALK
1	01-21-2020	MISCELLANEOUS REVISIONS

REV DATE DESCRIPTION

APPLICANT/OWNER:  
BARSKY ESTATE REALTY TRUST  
23 HUNTING LANE  
SHERBORN, MA 01770

PROJECT:

APPLE HILL ESTATES  
31 HUNTING LANE  
SHERBORN, MA 01770

PROJECT NO. 2513-02 DATE: 11-14-19

SCALE: 1" = 100' DWG. NAME: C2513-02

DESIGNED BY: SM CHECKED BY: MAM

PREPARED BY:



ALLEN & MAJOR  
ASSOCIATES, INC.  
civil engineering • land surveying  
environmental consulting • landscape architecture  
www.allenmaj.org

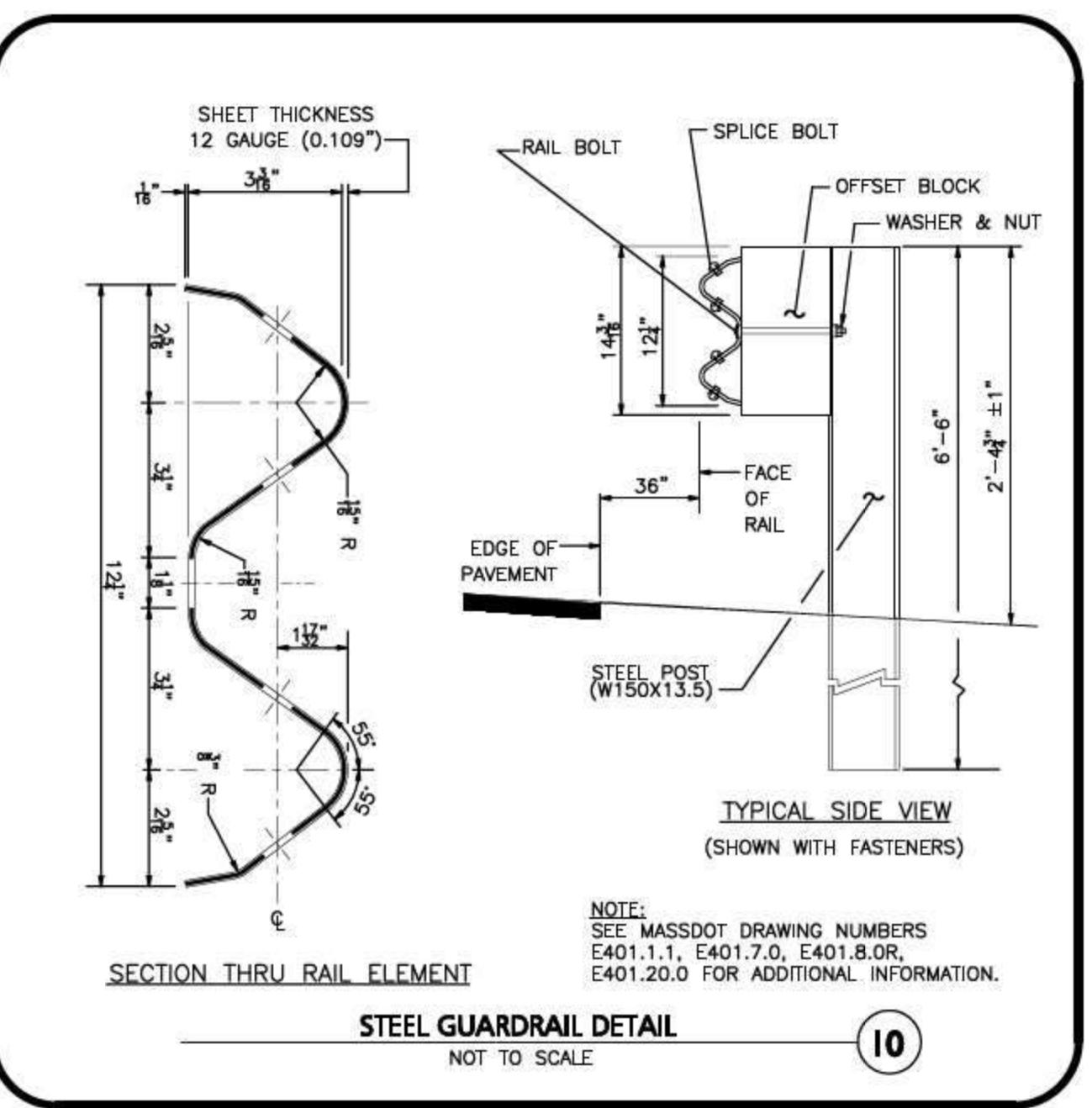
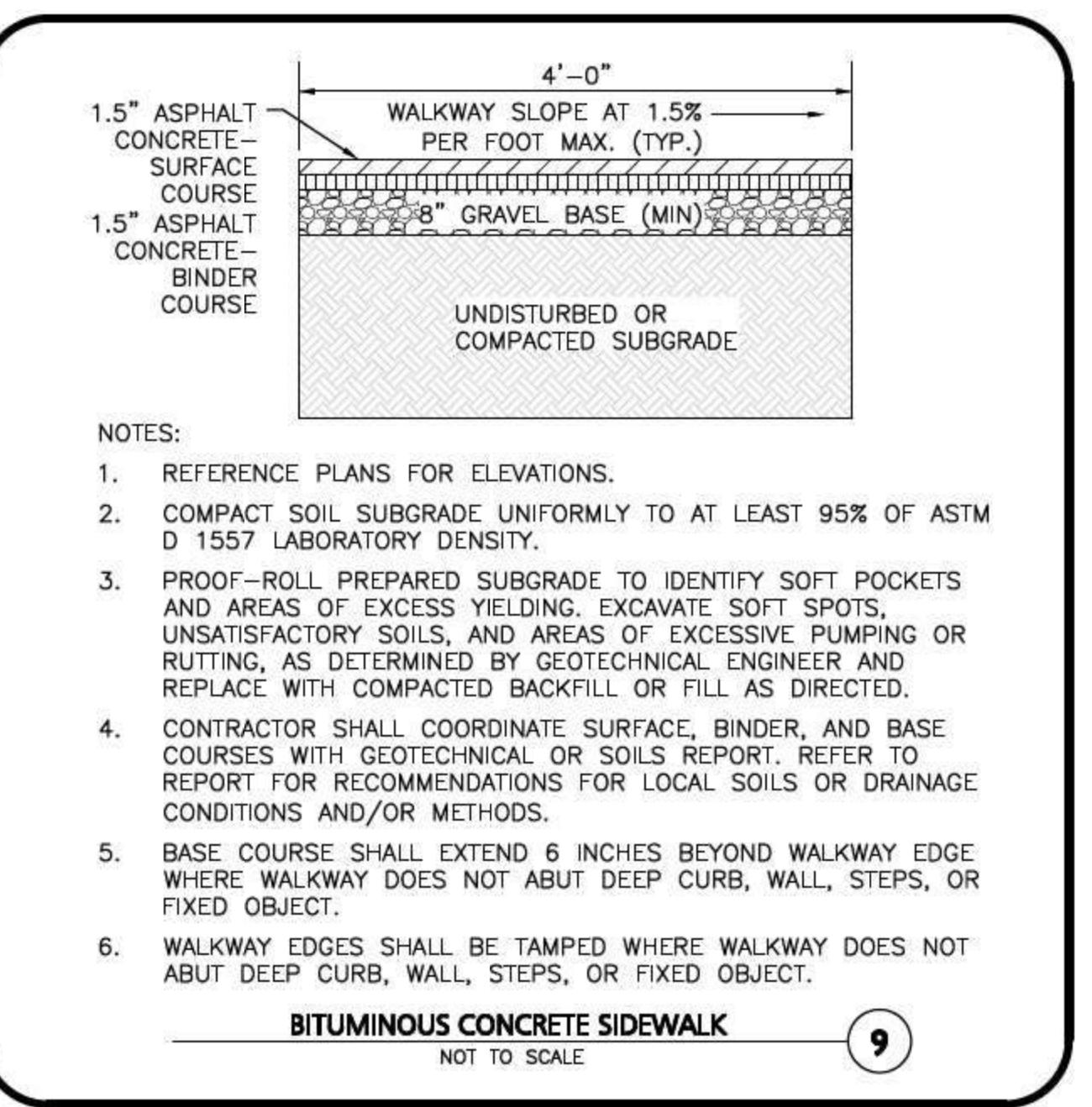
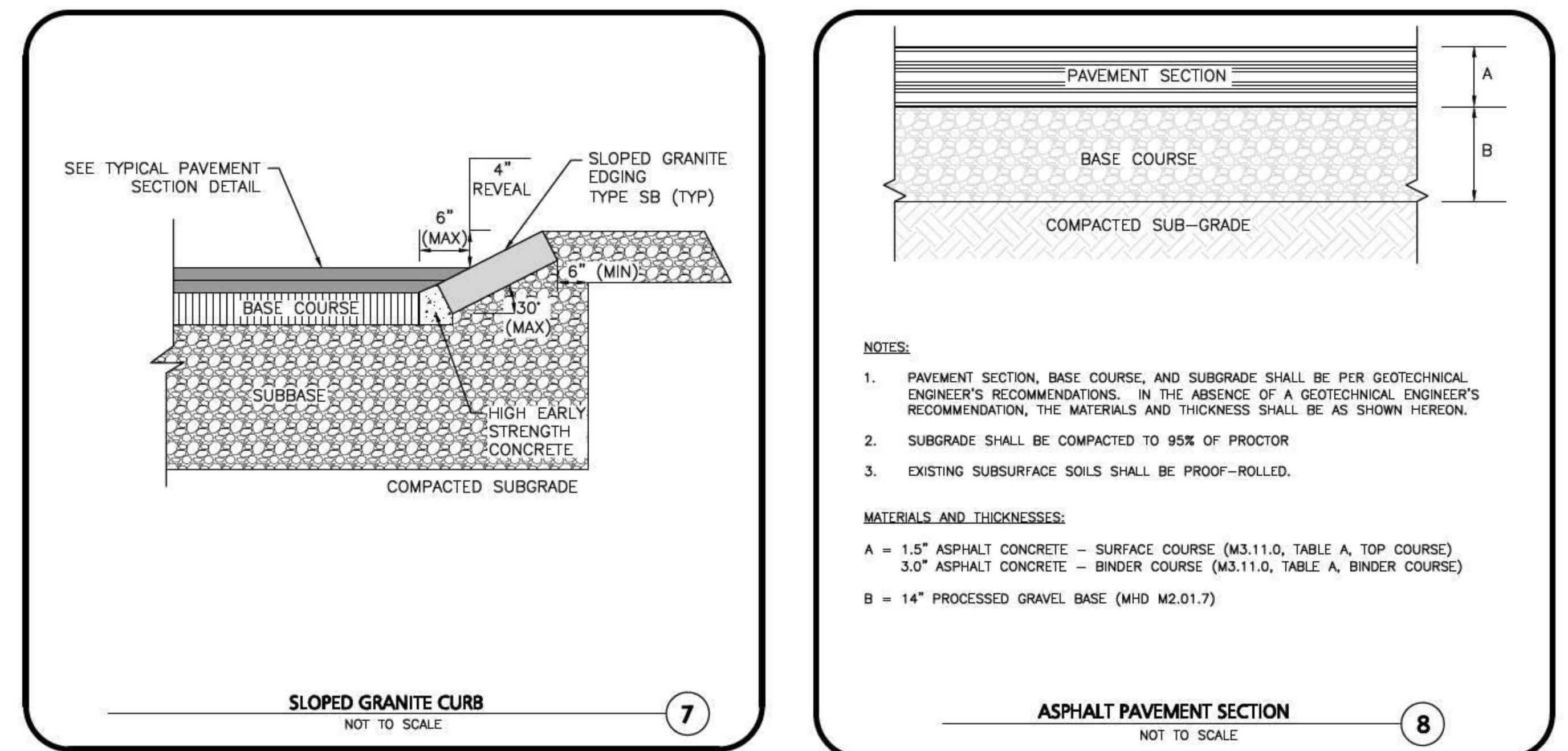
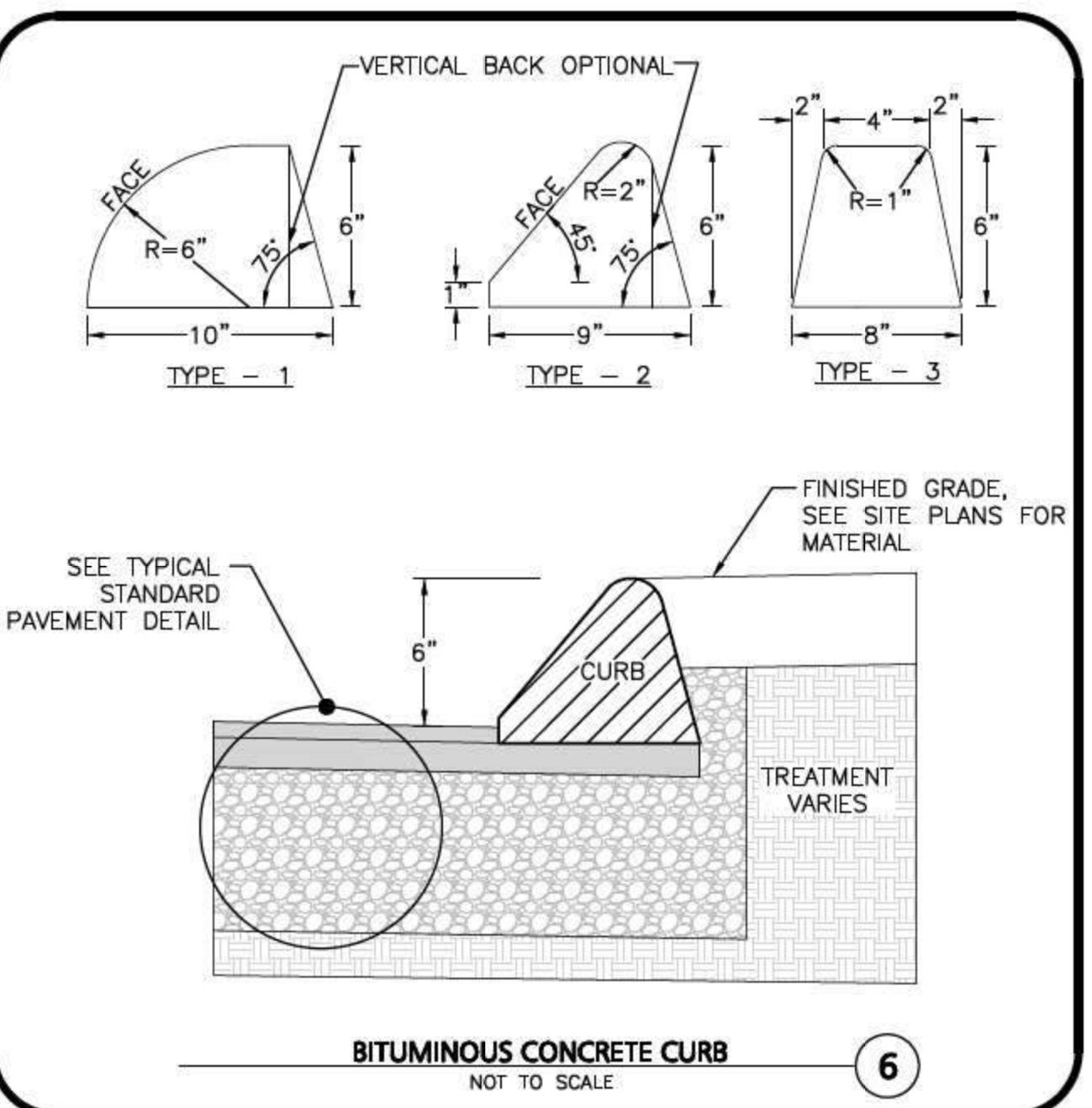
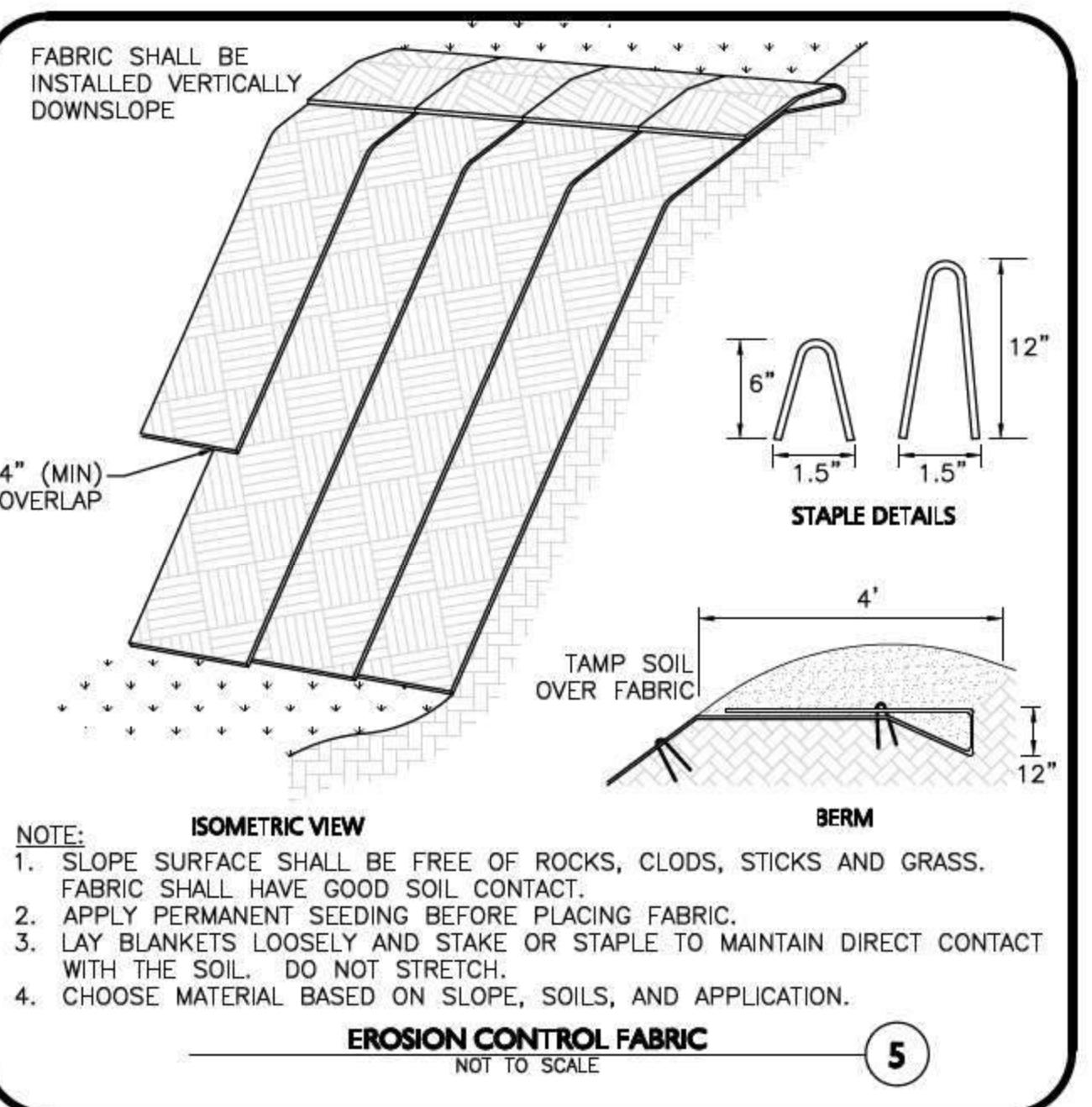
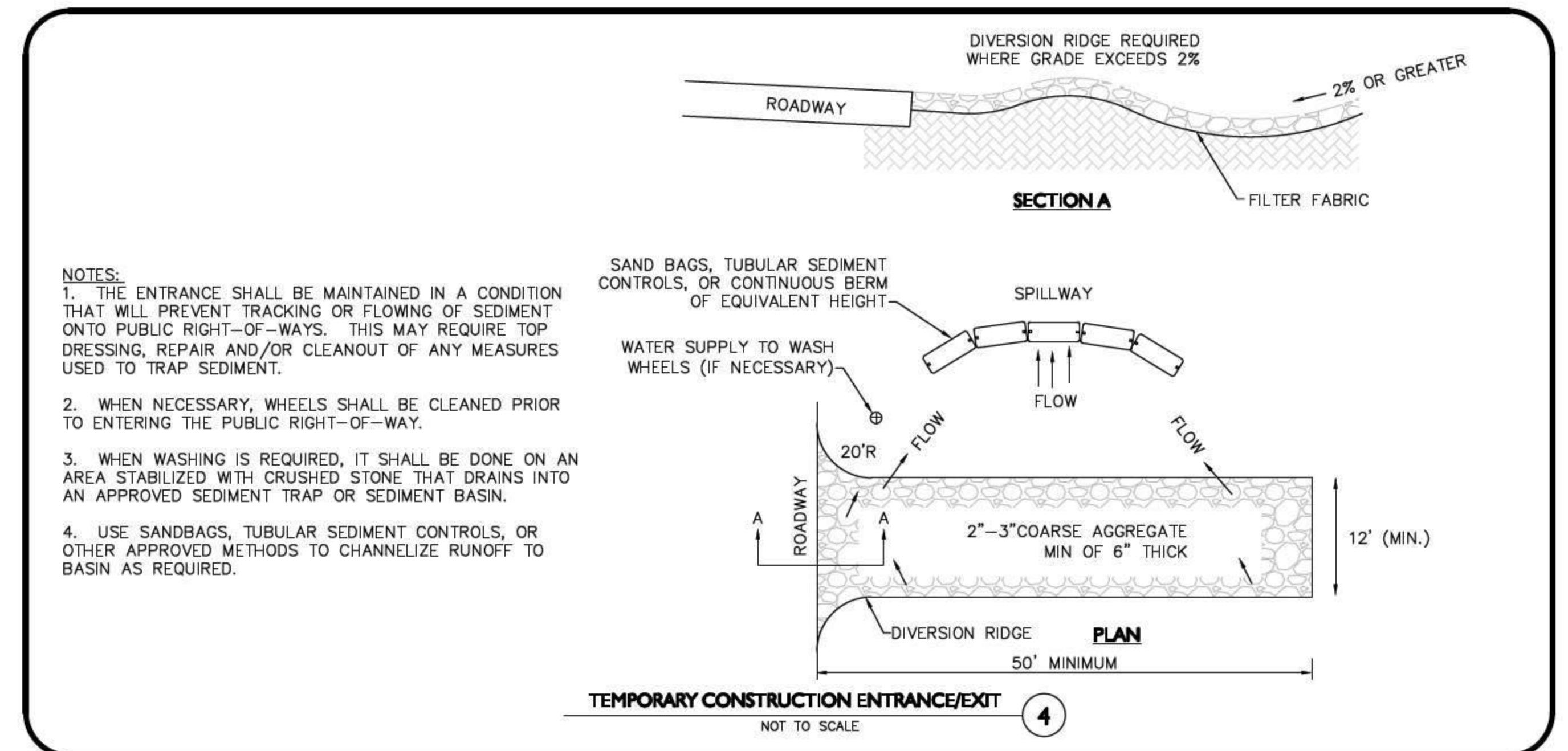
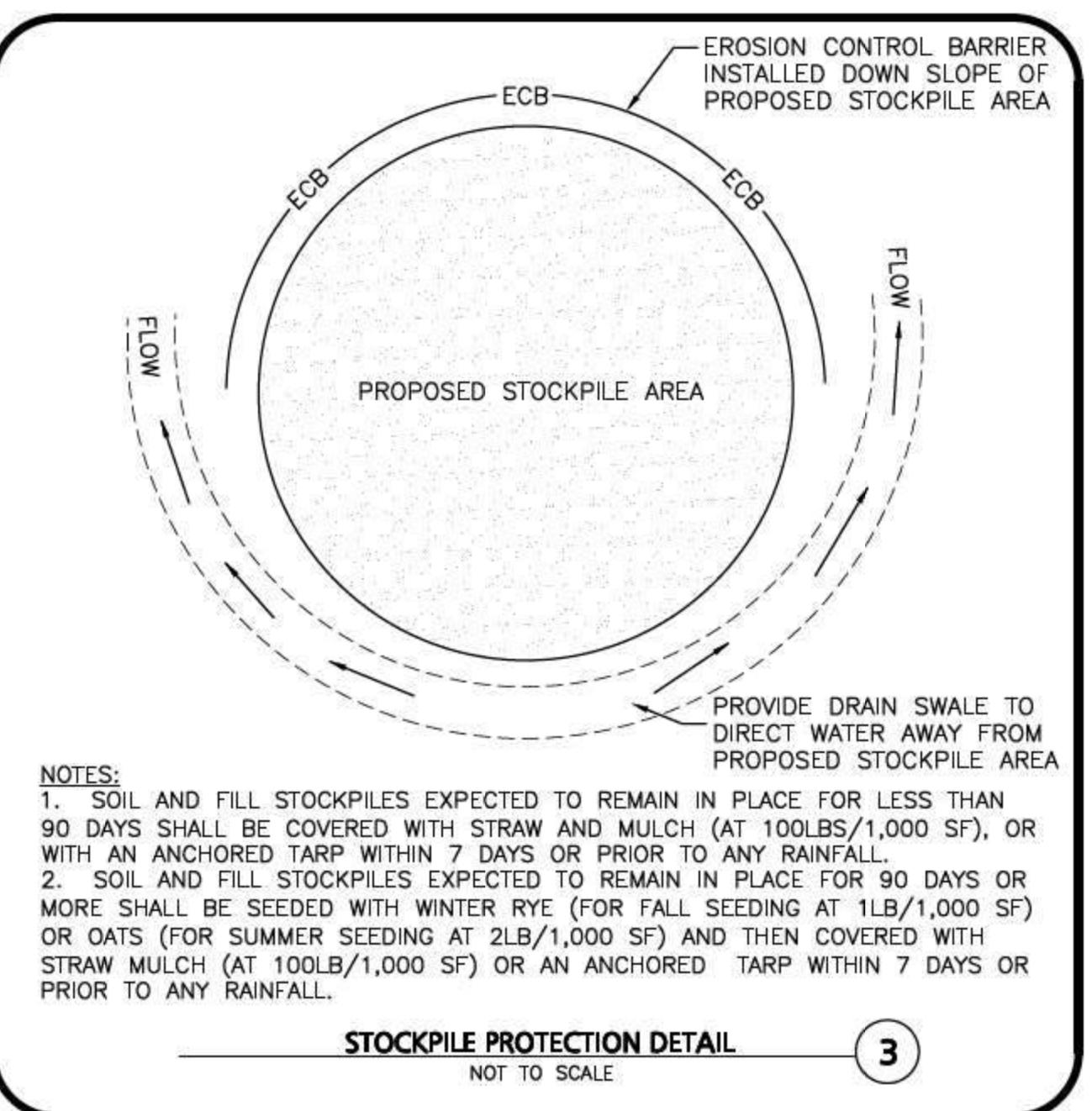
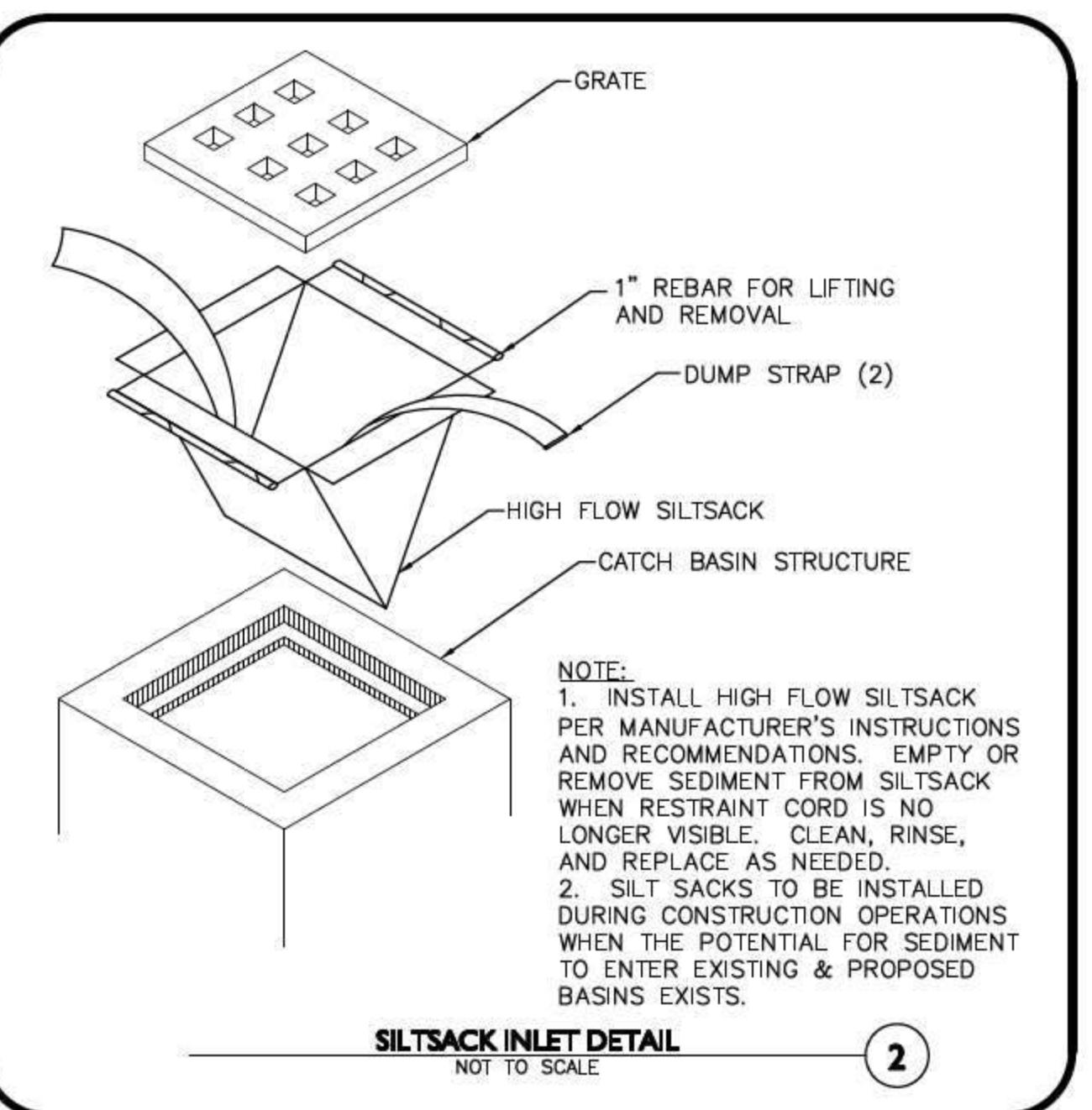
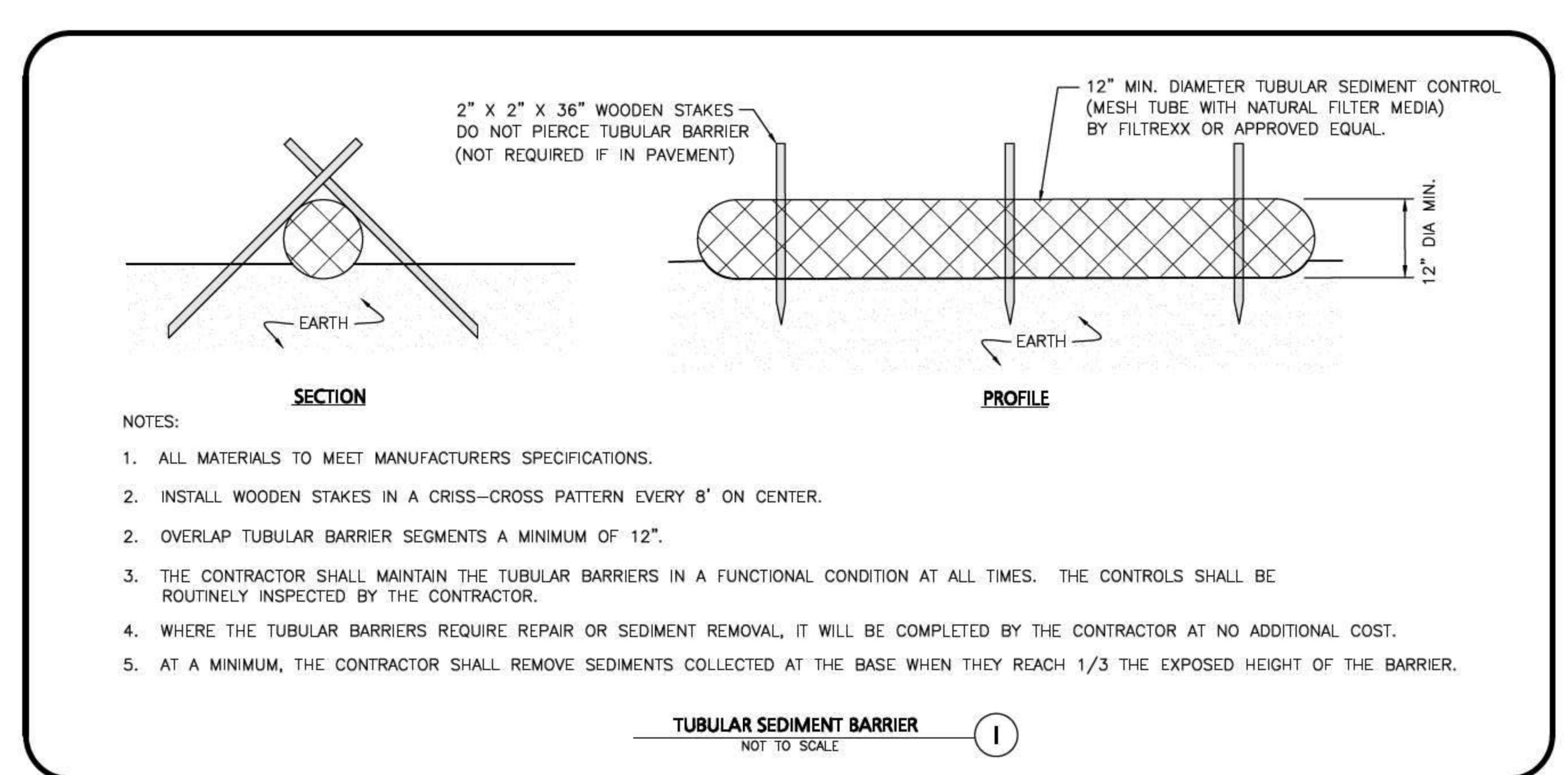
100 COMMERCE WAY  
WOBURN, MA 01801  
TEL: (781) 935-8889  
FAX: (781) 935-2896

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DRAWING TITLE: PROPOSED EASEMENT PLAN

SHEET No. C-105



A circular seal with a scalloped edge. The outer ring contains the text "COMMONWEALTH OF MASSACHUSETTS" at the top and "PROFESSIONAL ENGINEER" at the bottom. The center of the seal contains the name "MICHAEL A. MALYNOWSKI", "CIVIL", and "No. 47269". Below the name, the text "REGISTERED" is curved along the inner edge. A blue ink signature "10-1-2020" is written across the center of the seal.

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PROFESSIONAL ENGINEER FOR  
ALLEN & MAJOR ASSOCIATES, INC.

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REV	DATE	DESCRIPTION
3	10-01-2020	ISSUED FOR ZBA APPLICATION
2	05-19-2020	MISC. REV. PER MASSHOUSING & ABUTTER WALK
1	01-21-2020	MISCELLANEOUS REVISIONS

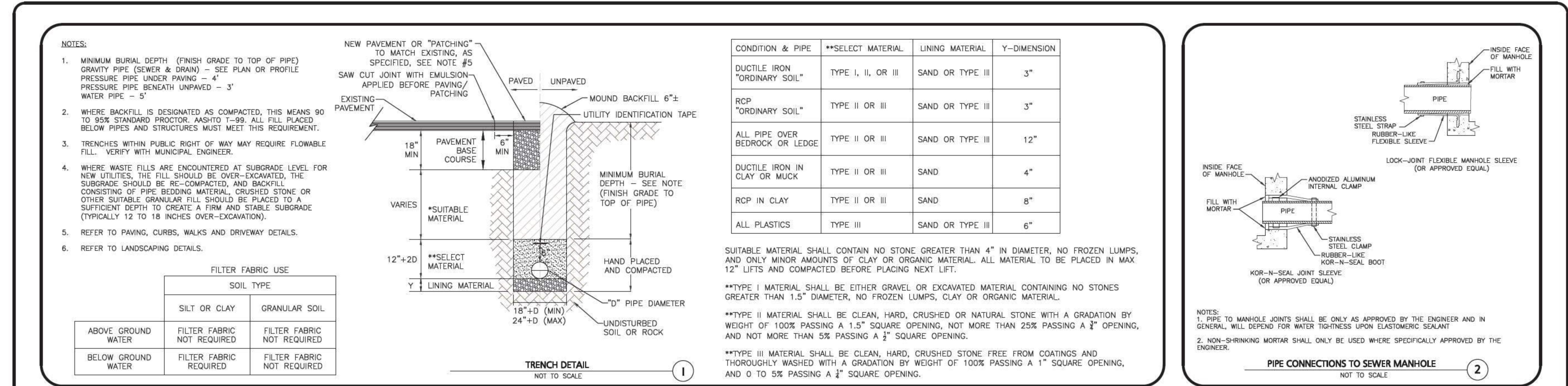
PLICANT/OWNER:

BARSKY ESTATE REALTY TRUST  
23 HUNTING LANE  
SHERBORN, MA 01770

PROJECT:

APPLE HILL ESTATES  
31 HUNTING LANE  
SHERBORN, MA 01770

PROJECT NO.	2513-02	DATE:	11-14-19
SCALE:	AS SHOWN	DWG. NAME:	C2513-02
DESIGNED BY:	SM	CHECKED BY:	MAM
PREPARED BY:			
 <hr/> <b>ALLEN &amp; MAJOR ASSOCIATES, INC.</b>			
civil engineering • land surveying environmental consulting • landscape architecture <a href="http://www.allenmajor.com">www.allenmajor.com</a>			
100 COMMERCE WAY WOBURN MA 01801 TEL: (781) 985-6889 FAX: (781) 985-2896			
WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH			
<p>THIS DRAWING HAS BEEN PREPARED IN ELECTRONIC FORMAT.          THE PROJECT'S REPRESENTATIVE OR CONSULTANT MAY BE          PROVIDED COPIES OF DRAWINGS AND SPECIFICATIONS ON MAGNETIC          MEDIA FOR HIS/HER INFORMATION AND USE FOR SPECIFIC          APPLICATION TO THIS PROJECT. DUE TO THE POTENTIAL THAT THE          MAGNETIC INFORMATION MAY BE MODIFIED UNINTENTIONALLY OR          OTHERWISE, ALLEN &amp; MAJOR ASSOCIATES, INC. MAY REMOVE ALL          INDICATION OF THE DOCUMENT'S AUTHORSHIP ON THE MAGNETIC          MEDIA. PRINTED REPRESENTATIONS OF THE DRAWINGS AND          SPECIFICATIONS ISSUED SHALL BE THE ONLY RECORD COPIES OF          ALLEN &amp; MAJOR ASSOCIATES, INC.'S WORK PRODUCT.</p>			
DRAWING TITLE:		SHEET No.	



PROFESSIONAL ENGINEER FOR  
ALLEN & MAJOR ASSOCIATES, INC.

3 10-01-2020 ISSUED FOR ZBA APPLICATION  
2 05-19-2020 MISC. REV. PER MASSHOUSING & ABUTTER WALK  
1 01-21-2020 MISCELLANEOUS REVISIONS  
REV DATE DESCRIPTION

APPLICANT/OWNER:  
BARSKY ESTATE REALTY TRUST  
23 HUNTING LANE  
SHERBORN, MA 01770

PROJECT:

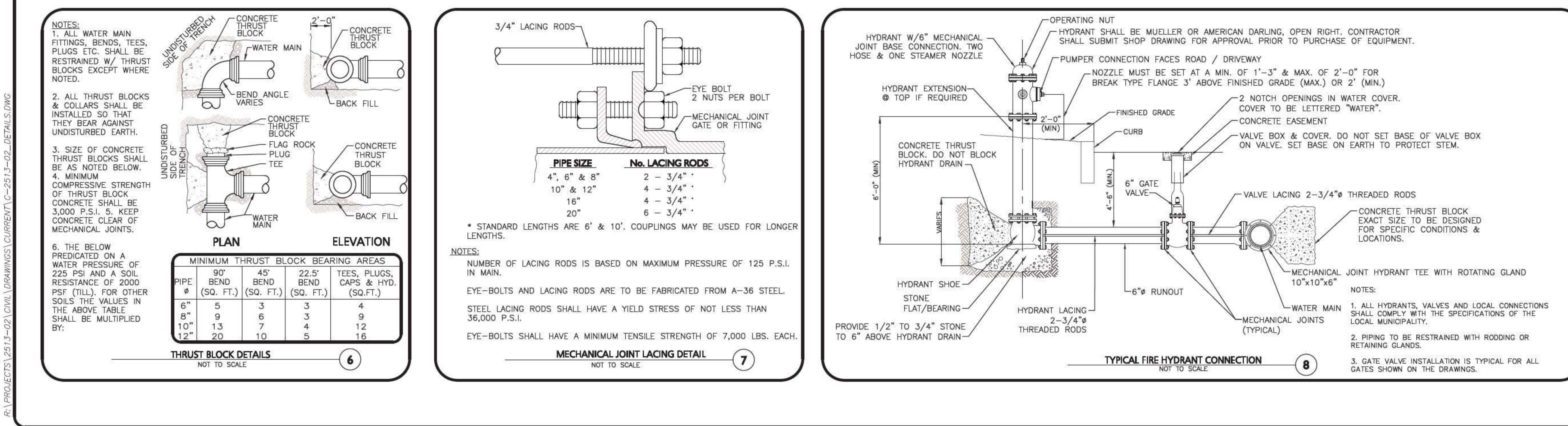
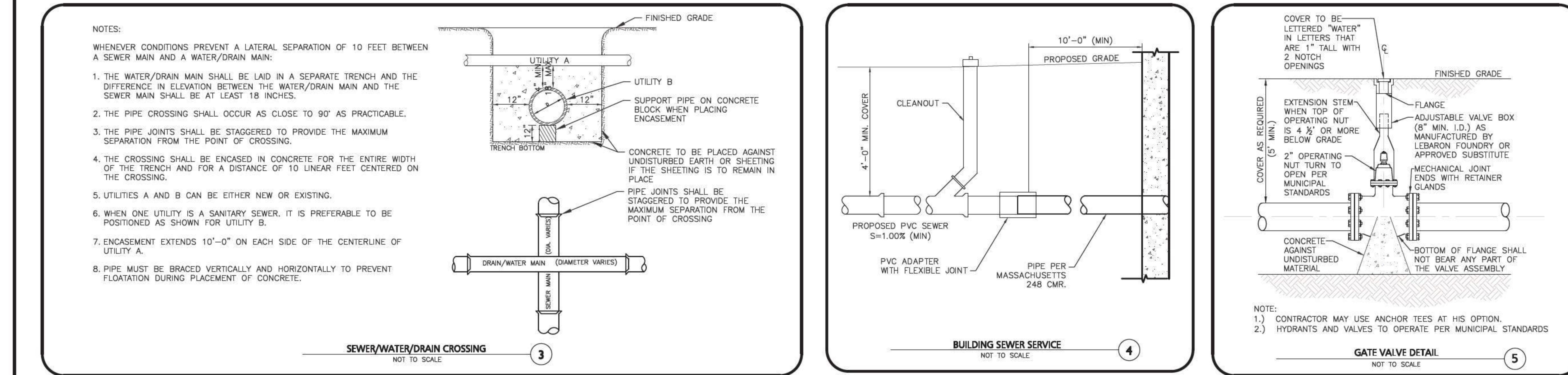
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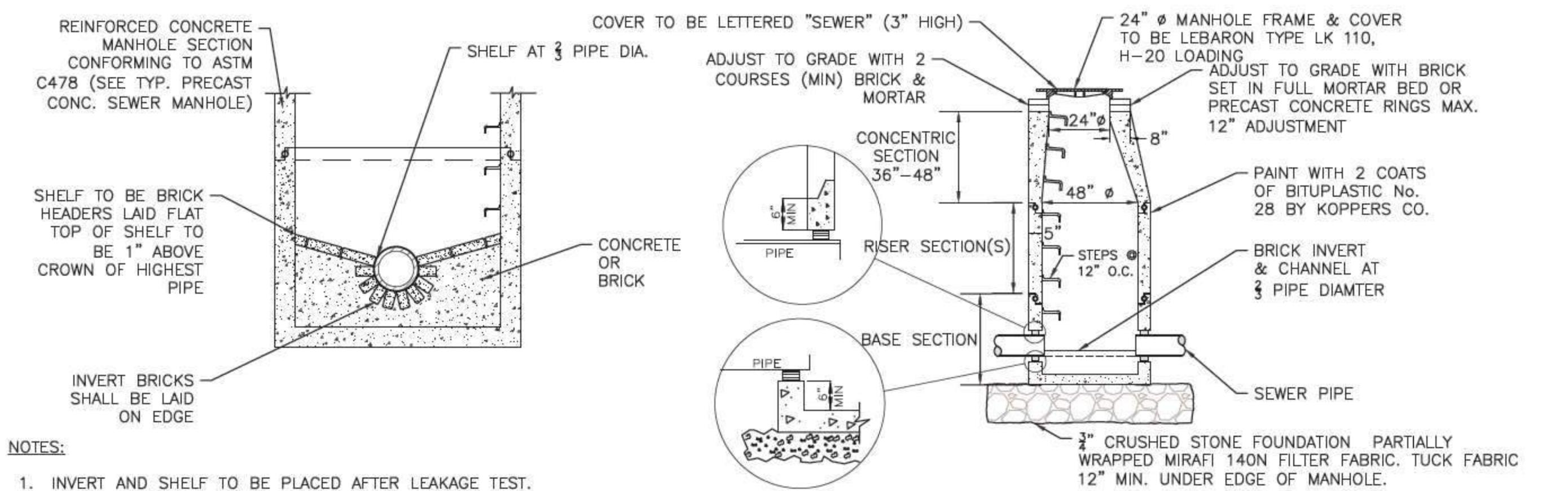
PROJECT NO. 2513-02 DATE: 11-14-19  
SCALE: AS SHOWN DWG. NAME: C2513-02  
DESIGNED BY: SM CHECKED BY: MAM

PREPARED BY:  
  
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DRAWING TITLE: **DETAILS** SHEET NO. **C-502**  
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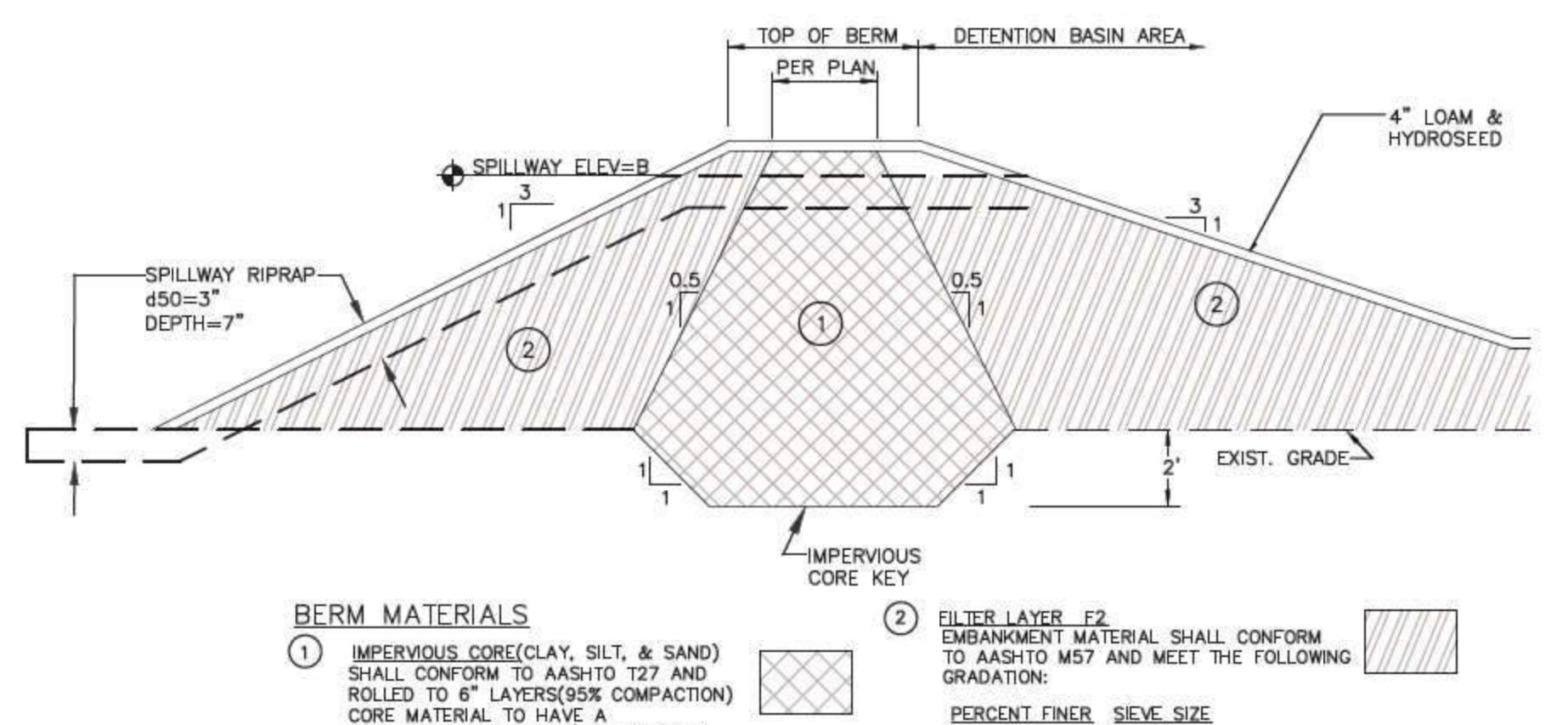
NOTES:

2. MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLayment OF INVERT AND SHELF SHALL CONSIST OF CEMENT CONCRETE OR BRICK IN MORTAR.

NOTE: THE MANHOLE, INCLUDING ALL COMPONENT PARTS, SHALL HAVE ADEQUATE SPACE, STRENGTH AND LEAK PROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE SPACE REQUIREMENT AND CONFIGURATIONS SHALL BE AS SHOWN ON THE DRAWING. MANHOLES MAY BE AN ASSEMBLY OR PRECAST SECTIONS, WITH OR WITHOUT STEEL REINFORCEMENT, WITH ADEQUATE JOINTING OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH OR WITHOUT REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE.

**PRECAST CONCRETE SEWER MANHOLE**  
NOT TO SCALE

**NOT USED**  
NOT TO SCALE



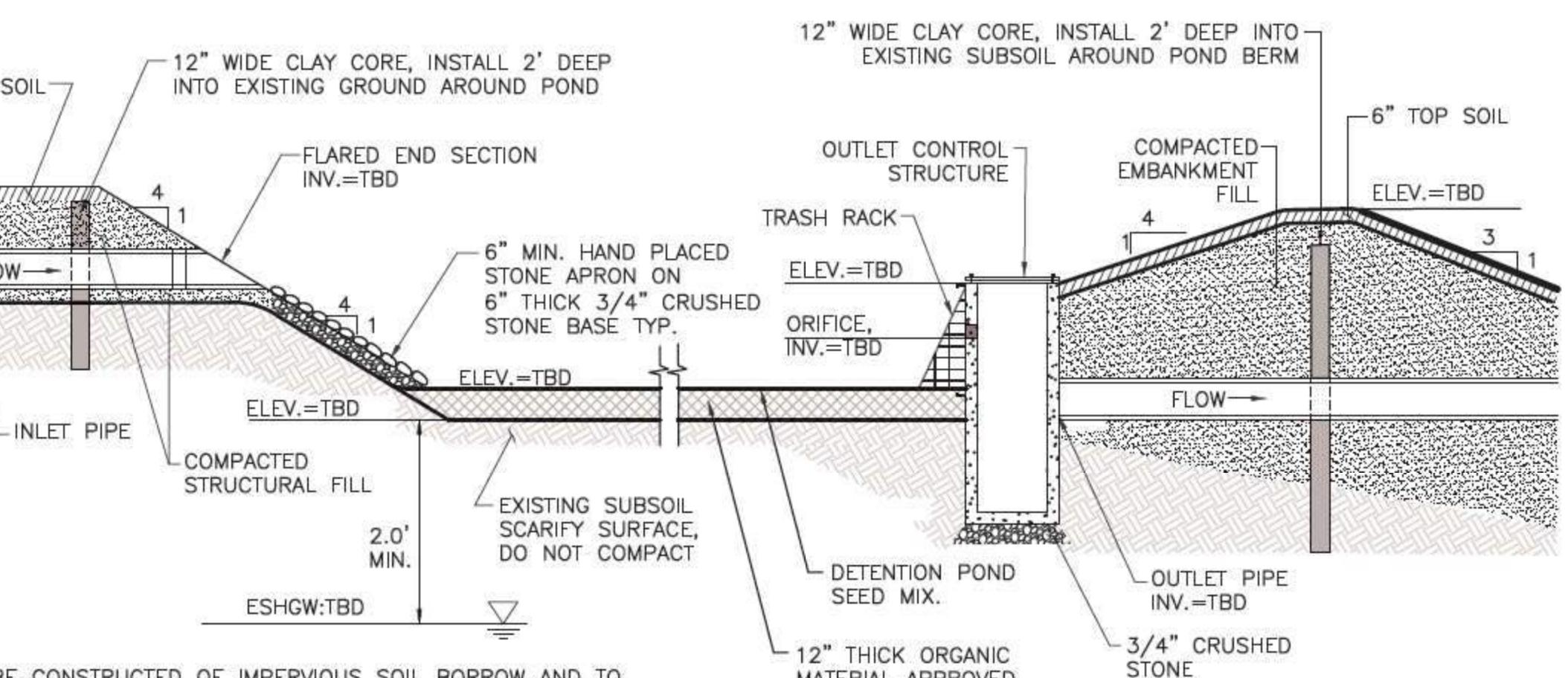
## BFM MATERIALS

<p>① IMPERVIOUS CORE(CLAY, SILT, &amp; SAND) SHALL CONFORM TO AASHTO T27 AND ROLLED TO 6" LAYERS(95% COMPACTION) CORE MATERIAL TO HAVE A PERMEABILITY OF <math>1 \times 10^{-4}</math> CM/SEC AND THE FOLLOWING GRADATION.</p> <p><u>PERCENT FINER</u>   <u>SIEVE SIZE</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">100</td> <td style="width: 50%; text-align: right;">#4</td> </tr> <tr> <td style="text-align: right;">30 TO 85</td> <td style="text-align: right;">#40</td> </tr> </table>	100	#4	30 TO 85	#40	<p>② EMBANKMENT MATERIAL SHALL CONFORM TO AASHTO M57 AND MEET THE FOLLOWING GRADATION:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: left;"><u>PERCENT FINER</u></th> <th style="width: 50%; text-align: left;"><u>SIEVE SIZE</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">100</td> <td style="text-align: right;">3 IN.</td> </tr> <tr> <td style="text-align: right;">95-100</td> <td style="text-align: right;">2 IN.</td> </tr> <tr> <td style="text-align: right;">55-85</td> <td style="text-align: right;">1 IN.</td> </tr> <tr> <td style="text-align: right;">27-52</td> <td style="text-align: right;">NO. 4</td> </tr> <tr> <td style="text-align: right;">50 MAX.</td> <td style="text-align: right;">NO. 40</td> </tr> <tr> <td style="text-align: right;">25 MAX.</td> <td style="text-align: right;">NO. 200</td> </tr> </tbody> </table>	<u>PERCENT FINER</u>	<u>SIEVE SIZE</u>	100	3 IN.	95-100	2 IN.	55-85	1 IN.	27-52	NO. 4	50 MAX.	NO. 40	25 MAX.	NO. 200
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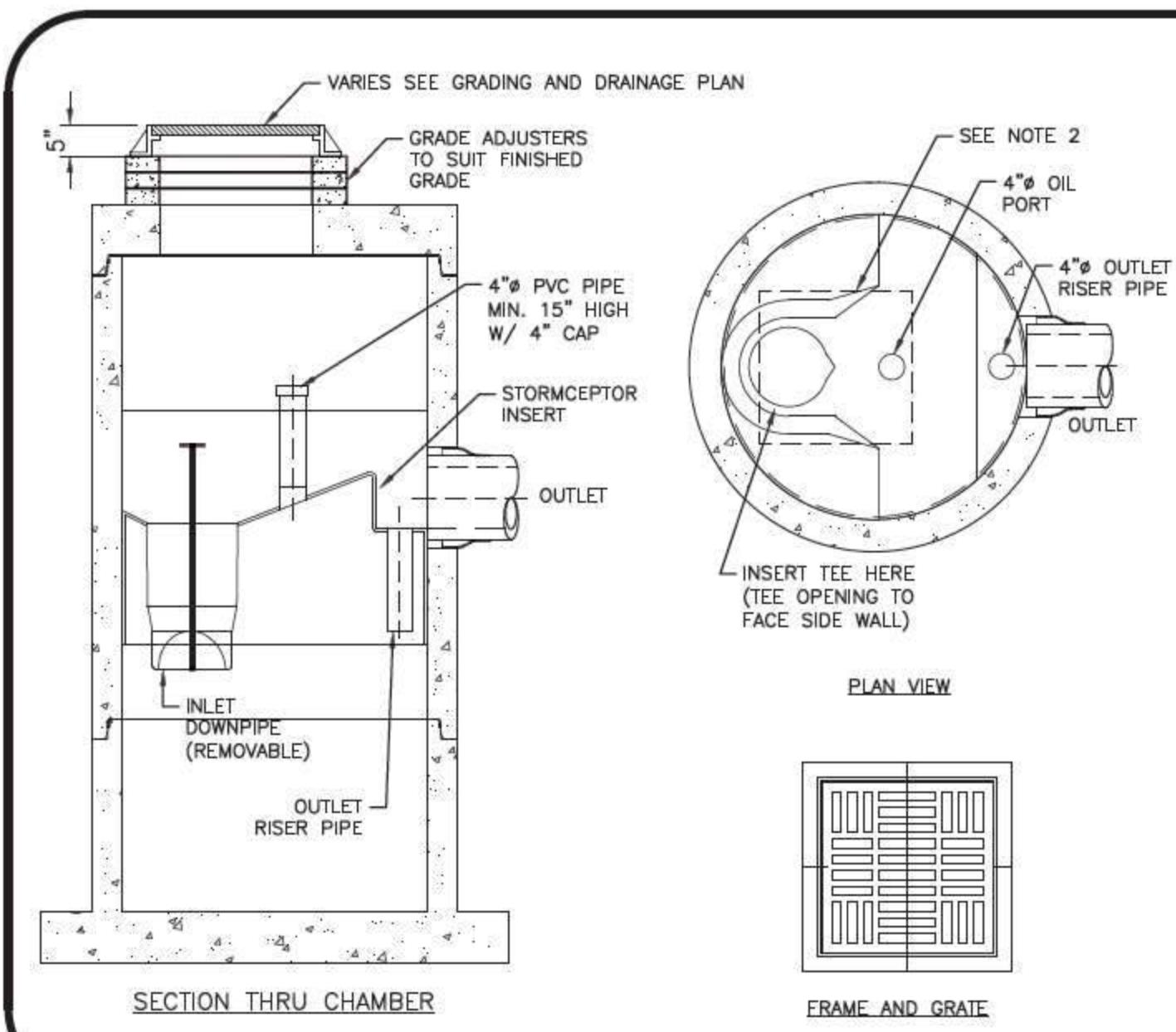
**TYPICAL BASIN EMBANKMENT CROSS SECTION**

NOTES:

- CLAY CORE TO BE CONSTRUCTED OF IMPERVIOUS SOIL BORROW AND TO BE COMPACTED TO 90% OF MAXIMUM DRY DENSITY WITH 6" OF TOPSOIL. BERM TO BE SEEDED. IMPERVIOUS CLAY CORE TO BE FREE OF PEAT STUMPS, BRUSH, ORGANIC SOILS AND OTHER DELETERIOUS MATERIALS. CORE MATERIAL TO HAVE MAXIMUM PERMEABILITY OF  $1 \times 10^{-4}$  CM/SEC
- INFILTRATION BASIN SIDE SLOPES TO BE SEEDED WITH NEW ENGLAND EROSION CONTROL.
- PROJECT CIVIL ENGINEER SHALL PERFORM AN INSPECTION PRIOR TO THE PLACEMENT OF THE SEED MIX.



**VEGETATED STORMWATER BASIN**  
NOT TO SCALE



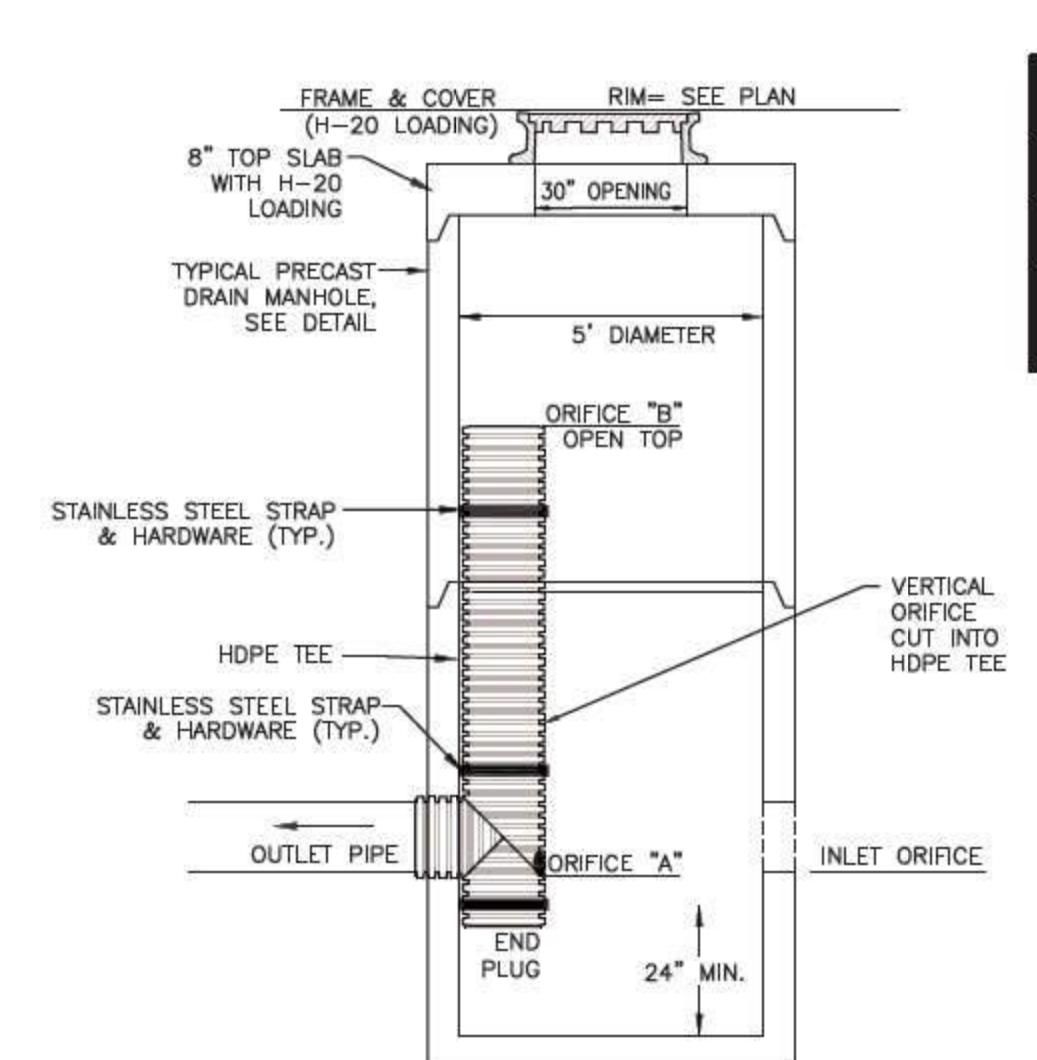
GENERAL NOTES

1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. WATER QUALITY STRUCTURES SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
3. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING.
4. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

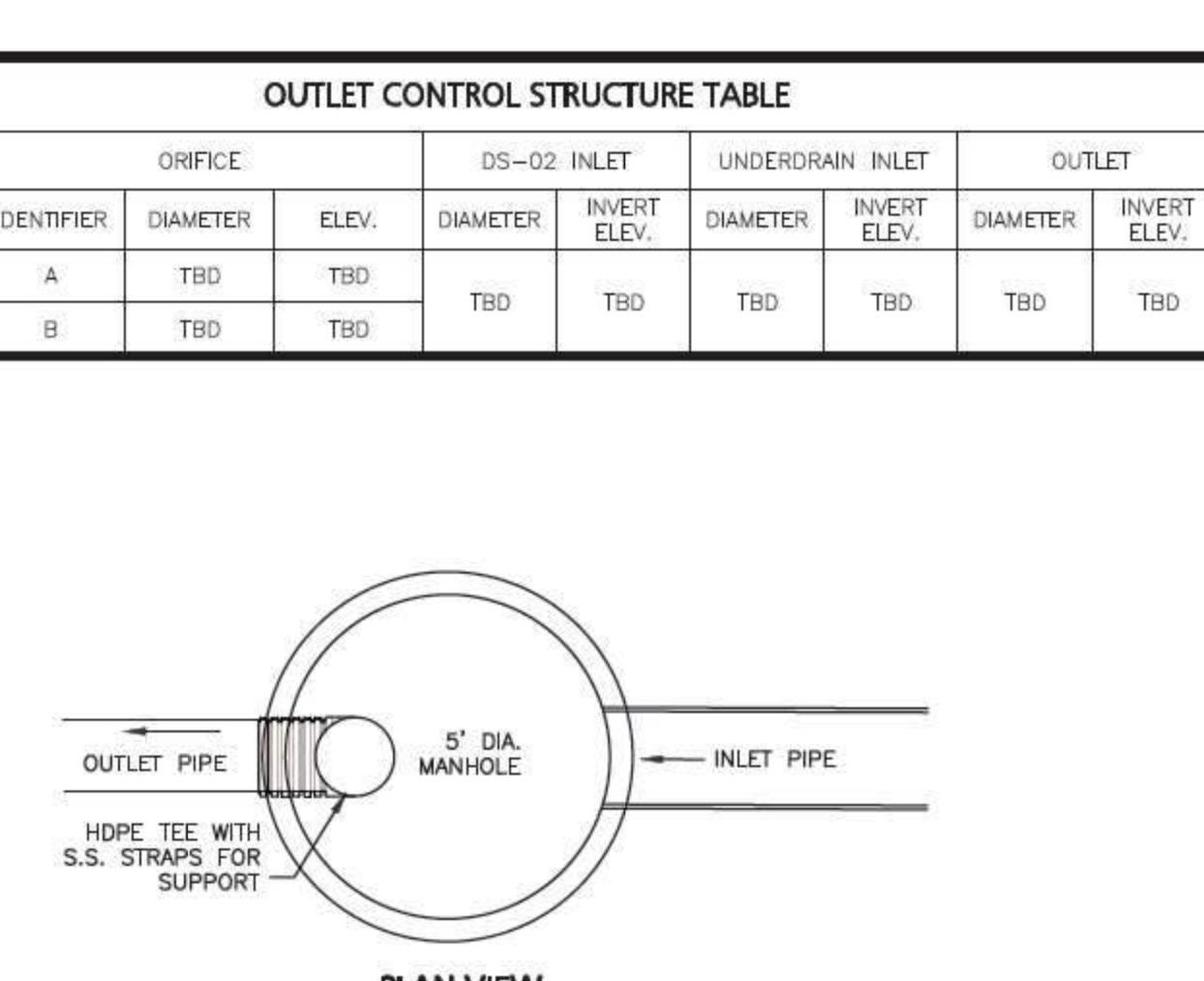
INSTALLATION NOTES

- A. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
- B. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
- C. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
- D. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

**TYPICAL STORMCEPTOR ST-450i WATER QUALITY STR**  
NOT TO SCALE



## SECTION VIEW



**OUTLET CONTROL STRUCTURE DETAIL**

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R:\PROJECTS\25113-02\CMH\DRAWINGS\CURRENT\25113-02.DWG



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PROFESSIONAL ENGINEER FOR  
ALLEN & MAJOR ASSOCIATES, INC.

	10-01-2020	ISSUED FOR ZBA APPLICATION
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V	DATE	DESCRIPTION

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**APPLE HILL ESTATES**  
31 HUNTING LANE  
SHERBORN, MA 01770

PROJECT NO.	2513-02	DATE:	11-14-19
SCALE:	AS SHOWN	DWG. NAME:	C2513-02
SIGNED BY:	SM	CHECKED BY:	MAM

The logo for Allen & Major Associates, Inc. consists of a large, stylized 'AM' monogram in a dark teal color, positioned above the company name. The monogram is composed of two large, slanted 'A's with a smaller 'M' in the center. Below the monogram, the company name 'ALLEN & MAJOR' is written in a bold, serif font, with 'ASSOCIATES, INC.' in a slightly smaller size directly beneath it. A horizontal line separates the monogram from the company name. Below the company name, the text 'civil engineering • land surveying' is followed by 'environmental consulting • landscape architecture' on the next line. The website 'www.allenmajor.com' is centered below these lines. At the bottom, the address '100 COMMERCE WAY' is on the first line, 'WOBURN MA 01801' on the second line, 'TEL: (781) 935-6889' on the third line, and 'FAX: (781) 935-9806' on the fourth line.

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