

LOCUS MAP  
(NOT TO SCALE)

# SITE DEVELOPMENT PLANS FOR THE PINES RESIDENCES

## 41 NORTH MAIN STREET 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  
WOBBURN, MA 01801

**40B CONSULTANT**

LDS CONSULTING GROUP, LLC  
233 NEEDHAM STREET  
NEWTON, MA 02464

**ARCHITECT:**

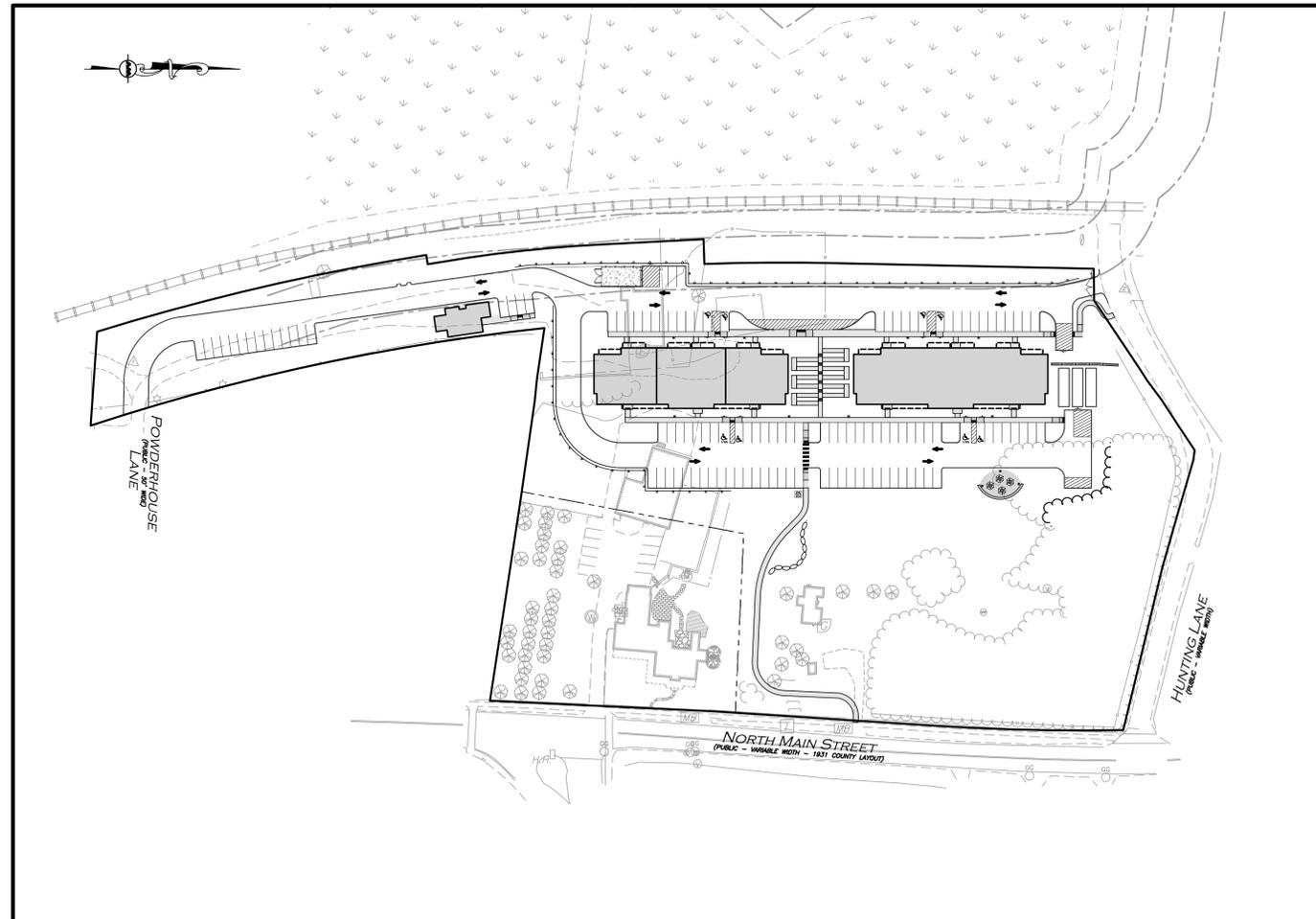
DREAM COLLABORATIVE  
31 ST. JAMES AVENUE, 6TH FLOOR  
BOSTON, MA 02116

**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	C-101	10-01-20	-
LAYOUT & MATERIALS PLAN	C-102	10-01-20	04-09-21
GRADING & DRAINAGE PLAN	C-103	10-01-20	04-09-21
UTILITIES PLAN	C-104	10-01-20	04-09-21
DETAILS	C-501	10-01-20	04-09-21
DETAILS	C-502	10-01-20	04-09-21
DETAILS	C-503	10-01-20	04-09-21
DETAILS	C-504	10-01-20	04-09-21
DETAILS	C-505	10-01-20	04-09-21
DETAILS	C-506	10-01-20	04-09-21
LANDSCAPE PLAN	L-101	10-01-20	-
LANDSCAPE DETAILS	L-102	10-01-20	-



Digitally signed by Michael  
Malynowski  
Date: 2021.04.09 14:07:12 -04'00'

PROFESSIONAL ENGINEER FOR  
ALLEN & MAJOR ASSOCIATES, INC.

PREPARED BY:



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ISSUED FOR ZBA APPLICATION: OCTOBER 1, 2020  
ISSUED FOR STORMWATER PEER REVIEW: APRIL 9, 2021

R:\PROJECTS\2513-01A\CIVIL\DRAWINGS\CURRENT\C-2513-01A\_COVER SHEET.DWG

**LOCUS REFERENCES**

- RECORD OWNER: BARSKY ESTATE REALTY TRUST
- TOWN OF SHERBORN ASSESSORS MAP 11, LOTS 41 & 43
- DEED BOOK 66954, PAGE 354

**PLAN REFERENCES**

- 1931 COUNTY LAYOUT OF NORTH MAIN STREET
- PLAN 201 OF 1940
- PLAN 1038 OF 1963
- PLAN 427 OF 1981
- PLAN 1330 OF 1981

**NOTES**

1. NORTH ARROW IS BASED ON MASSACHUSETTS GRID COORDINATE SYSTEM (MAINLAND ZONE) (NAD 83).
2. BOOK/PAGE AND PLAN REFERENCES ARE TAKEN FROM MIDDLESEX (SOUTH) REGISTRY OF DEEDS IN CAMBRIDGE, MA.
3. VERTICAL DATUM IS NAVD 88.
4. CONTOUR INTERVAL IS ONE FOOT (1').

**BENCHMARK SUMMARY**

TBM #	DESCRIPTION	ELEV.
1	RAILROAD SPIKE SET IN UTILITY POLE	175.46
2	RAILROAD SPIKE SET IN UTILITY POLE	173.33

FOR REGISTRY USE ONLY

**LEGEND**

DRILL HOLE (DH)	⊙
STONE BOUND (SB)	□
IRON PIPE (IP)	○
SEPTIC COVER	⊕
MISC. MANHOLE (MH)	⊗
CATCH BASIN (CB)	⊞
UTILITY POLE	⊠
UTILITY POLE W/LIGHT	⊡
GUY WIRE	—
GAS GATE	⊞
INVERT (INV)	▽
LIGHT	⊙
TRAFFIC MAST	⊞
AIR CONDITIONER	⊞
IRRIGATION CONTROL VALVE	⊞
TELEPHONE BOX	⊞
SIGN	⊞
VENT	⊞
MAILBOX	⊞
TREE	⊞
BRICK	⊞
LANDSCAPED AREA (LSA)	⊞
FLAGSTONE WALK	⊞
BUILDING	⊞
BUILDING OVERHANG	⊞
1' CONTOUR	---
5' CONTOUR	---
PROPERTY LINE	---
ABUTTERS LINE	---
STONE WALL	---
CONCRETE RETAINING WALL	---
TREE LINE	---
EDGE OF PAVEMENT	---
EDGE OF GRAVEL	---
EDGE OF BRICK	---
CURB	---
CHAIN LINK FENCE	x
STOCKADE FENCE	o
VINYL FENCE	o
OVERHEAD WIRES	OHW
FINISHED FLOOR ELEVATION	FFE
BITUMINOUS	BIT.
CONCRETE	CONC.
GRANITE	GRAN.
FOUND	FND
NOW OR FORMERLY	N/F
BOOK	BK.
PAGE	PG.

WE HEREBY CERTIFY THAT:

THIS PLAN IS THE RESULT OF AN ACTUAL ON THE GROUND SURVEY PERFORMED ON OR BETWEEN JULY 11, 2018 AND JULY 16, 2018. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS DATED JANUARY 1, 1976 AND REVISED JANUARY 12, 1988. ACCORDING TO DEEDS AND PLANS OF RECORD, THE PROPERTY LINES SHOWN ON THIS PLAN ARE THE LINES DIVIDING EXISTING OWNERSHIP, AND THE LINES OF THE STREETS OR WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS AND WAYS ALREADY ESTABLISHED, AND THAT NO NEW LINES FOR THE DIVISION OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE SHOWN. THE ABOVE CERTIFICATION IS INTENDED TO MEET REGISTRY OF DEEDS REQUIREMENTS FOR THE RECORDING OF PLANS AND IS NOT A CERTIFICATION TO THE TITLE OR OWNERSHIP OF THE PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT TOWN OF SHERBORN ASSESSOR'S INFORMATION. THE ABOVE IS CERTIFIED TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF.

ALLEN & MAJOR ASSOCIATES, INC.

PROFESSIONAL LAND SURVEYOR FOR ALLEN & MAJOR ASSOCIATES, INC.



REV	DATE	DESCRIPTION

**APPLICANT/OWNER:**

BARSKY ESTATE REALTY TRUST  
23 HUNTING LANE  
SHERBORN, MA 01770

**PROJECT:**

41-43 NORTH MAIN STREET  
SHERBORN, MA

PROJECT NO. 2513-01 DATE: 09/01/2020

SCALE: 1" = 40' DWG. NAME: S-2513-01

DRAFTED BY: AJR CHECKED BY: NIL

**PREPARED BY:**



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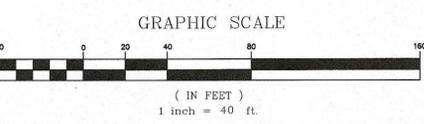
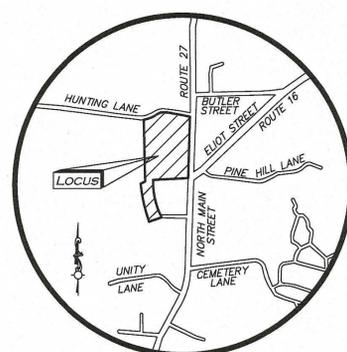
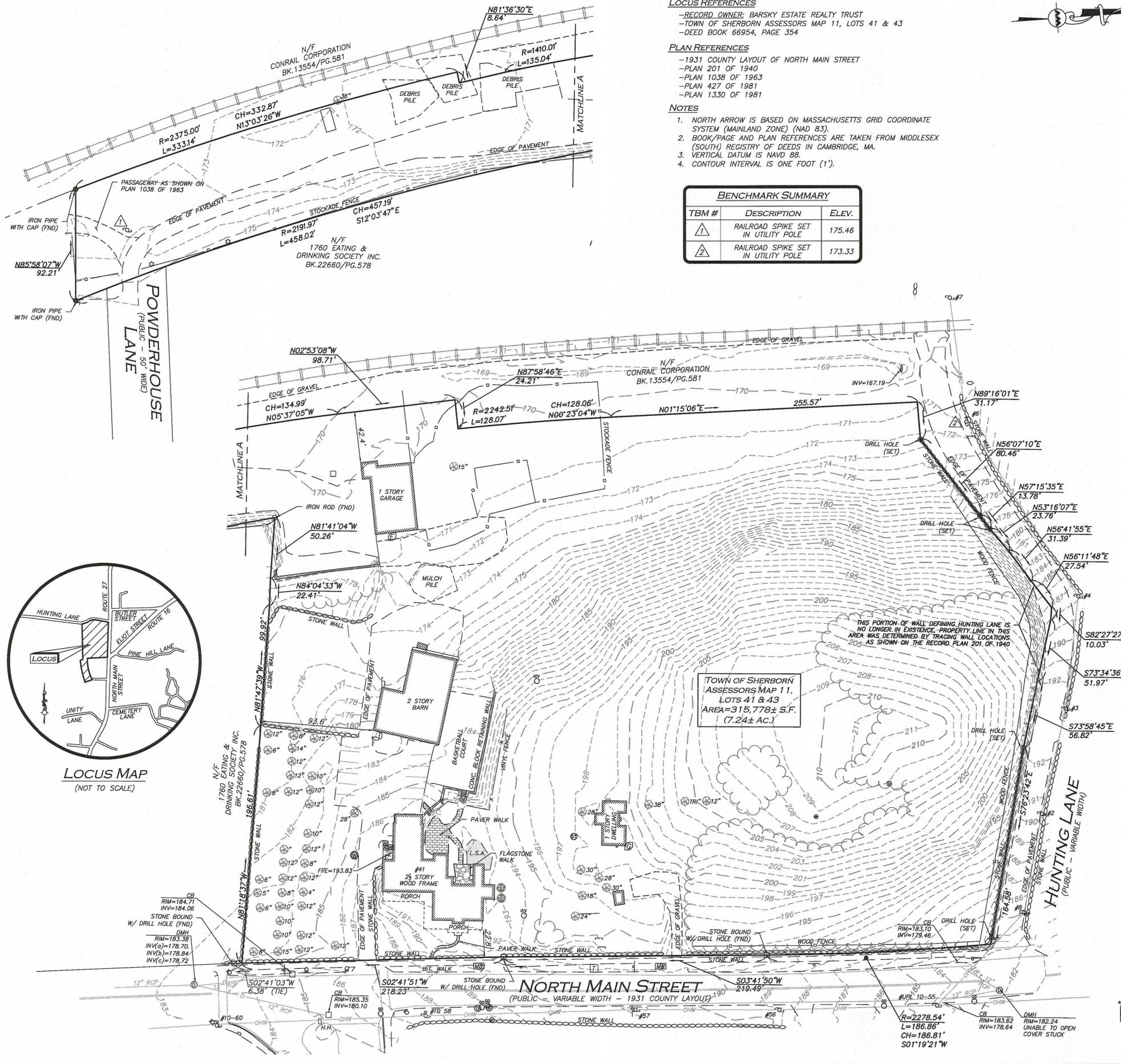
100 COMMERCE WAY  
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DRAWING TITLE: EXISTING CONDITIONS SHEET No. V-101

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ZONING SUMMARY TABLE RESIDENTIAL A (RA) DISTRICT		
ITEM	REQUIRED	PROPOSED MAP 11 LOT 41A
MINIMUM LOT AREA	1 ACRE	6.24 ACRE
MINIMUM FRONTAGE	150 FEET	347±FT (MAIN ST) 491±FT (HUNTING LN)
MINIMUM LOT WIDTH	150 FEET <sup>1</sup>	276 FEET
MINIMUM LOT DEPTH	N/A	N/A
MINIMUM FRONT SETBACK	60 FEET	301.0 FT (MAIN ST) 67.2 FT (HUNTING LN)
MINIMUM SIDE SETBACK	30 FEET	3.4 FEET*
MINIMUM REAR SETBACK	30 FEET	N/A
MAXIMUM HEIGHT (STORIES)	2.5	3 (LOWSIDE)* 2.5 (HIGHSIDE)
MAXIMUM HEIGHT (FEET)	35	>35*
MAXIMUM LOT COVERAGE	N/A	N/A

ZONING SUMMARY TABLE NOTES:

- 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.

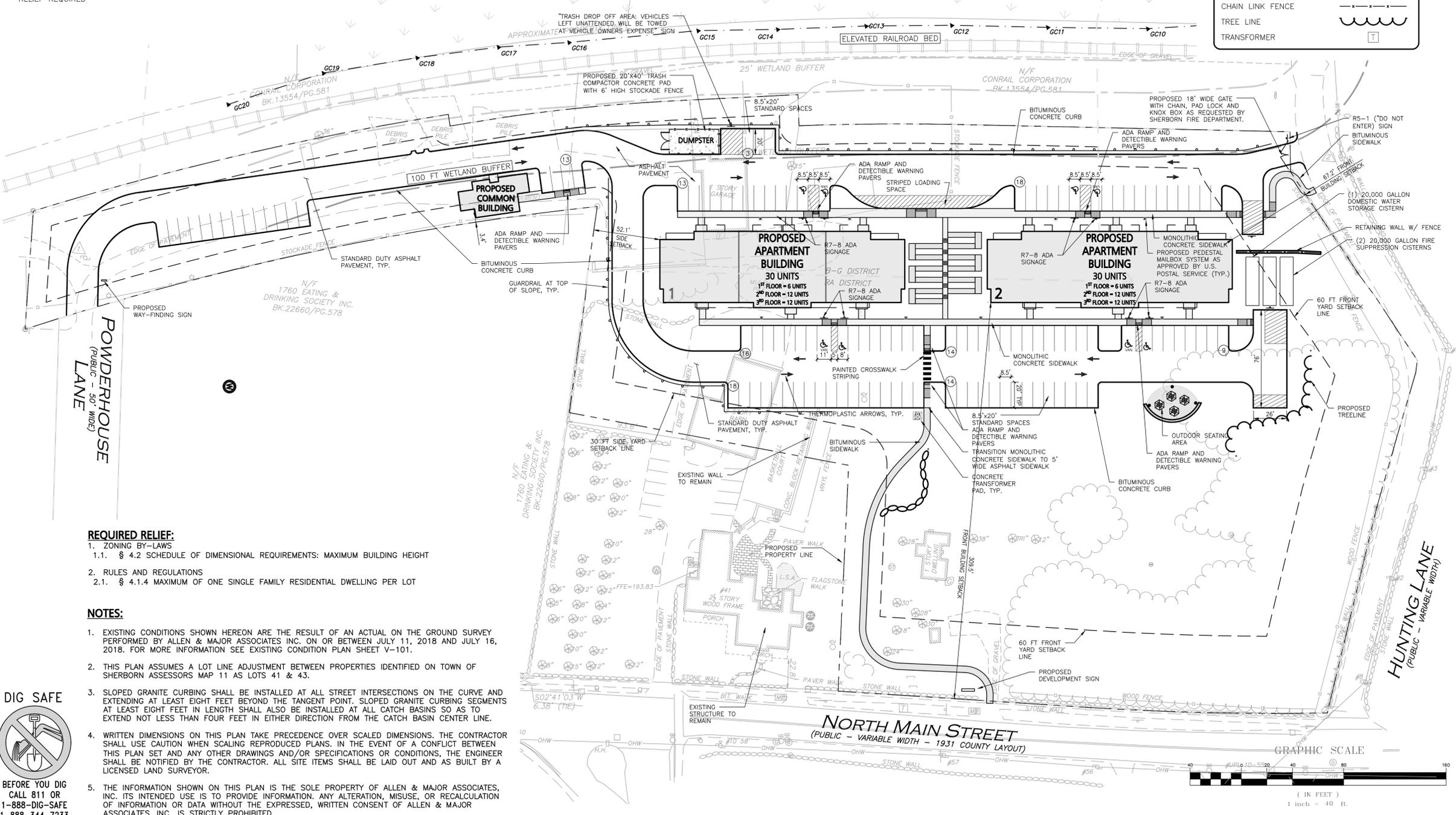
\* RELIEF REQUIRED

OFF-STREET PARKING SUMMARY TABLE			
USE	CALCULATION	MIN. REQUIRED	PROPOSED
MULTI-FAMILY 60 UNITS	1.75 SPACES PER UNIT 60 UNITS * 1.75 = 105	105	118
TOTAL		105	118

NOTES:

- STANDARD PARKING SPACES SHALL BE 8.5' X 20'
- PARALLEL PARKING SPACES SHALL BE 8.5' X 22'
- ADA SPACES REQUIRED:  
(101 - 150) TOTAL PARKING SPACES PROVIDED REQUIRES 5 ADA SPACES, 1 BEING VAN ACCESSIBLE
- 8 ADA SPACE PROVIDED, 4 BEING VAN SPACES

LEGEND	
PROP. PROPERTY LINE	---
SIGN	⊕
BOLLARD	•
BUILDING	[ ]
BUILDING ARCHITECTURE	[ ]
BUILDING INTERIOR WALLS	
CURB	—
RETAINING WALL	—
PARKING STRIPING	—
ROADWAY STRIPING	—
SIDEWALK	—
ADA ACCESSIBLE RAMP	—
ADA DET. WARNING SURFACE	—
SETBACK LINE	---
BASELINE	---
SAW-CUT LINE	---
PARKING COUNT	(10)
STEEL GUARDRAIL	—
CHAIN LINK FENCE	—
TREE LINE	—
TRANSFORMER	⊕



REQUIRED RELIEF:

- ZONING BY-LAWS
  - § 4.2 SCHEDULE OF DIMENSIONAL REQUIREMENTS: MAXIMUM BUILDING HEIGHT
- RULES AND REGULATIONS
  - § 4.1.4 MAXIMUM OF ONE SINGLE FAMILY RESIDENTIAL DWELLING PER LOT

NOTES:

- EXISTING CONDITIONS SHOWN HEREON ARE THE RESULT OF AN ACTUAL ON THE GROUND SURVEY PERFORMED BY ALLEN & MAJOR ASSOCIATES INC. ON OR BETWEEN JULY 11, 2018 AND JULY 16, 2018. FOR MORE INFORMATION SEE EXISTING CONDITION PLAN SHEET V-101.
- THIS PLAN ASSUMES A LOT LINE ADJUSTMENT BETWEEN PROPERTIES IDENTIFIED ON TOWN OF SHERBORN ASSESSORS MAP 11 AS LOTS 41 & 43.
- 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.
- 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.
- 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.



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

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Date: 2021.04.09 14:06:48 -04'00'

REV	DATE	DESCRIPTION
4	04-09-2021	REVS PER PEER REVIEW
3	10-01-2020	ISSUED FOR ZBA APPLICATION
2	05-21-2020	MISCELLANEOUS REVISIONS
1	01-21-2020	MISCELLANEOUS REVISIONS

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

PROJECT:  
THE PINES RESIDENCES  
41 NORTH MAIN STREET  
SHERBORN, MA

PROJECT NO. 2513-01A DATE: 10-23-20  
SCALE: 1" = 30' DWG. NAME: C2513-01A  
DESIGNED BY: ARM CHECKED BY: MAM

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DRAWING TITLE: LAYOUT & MATERIALS PLAN  
SHEET No. C-102

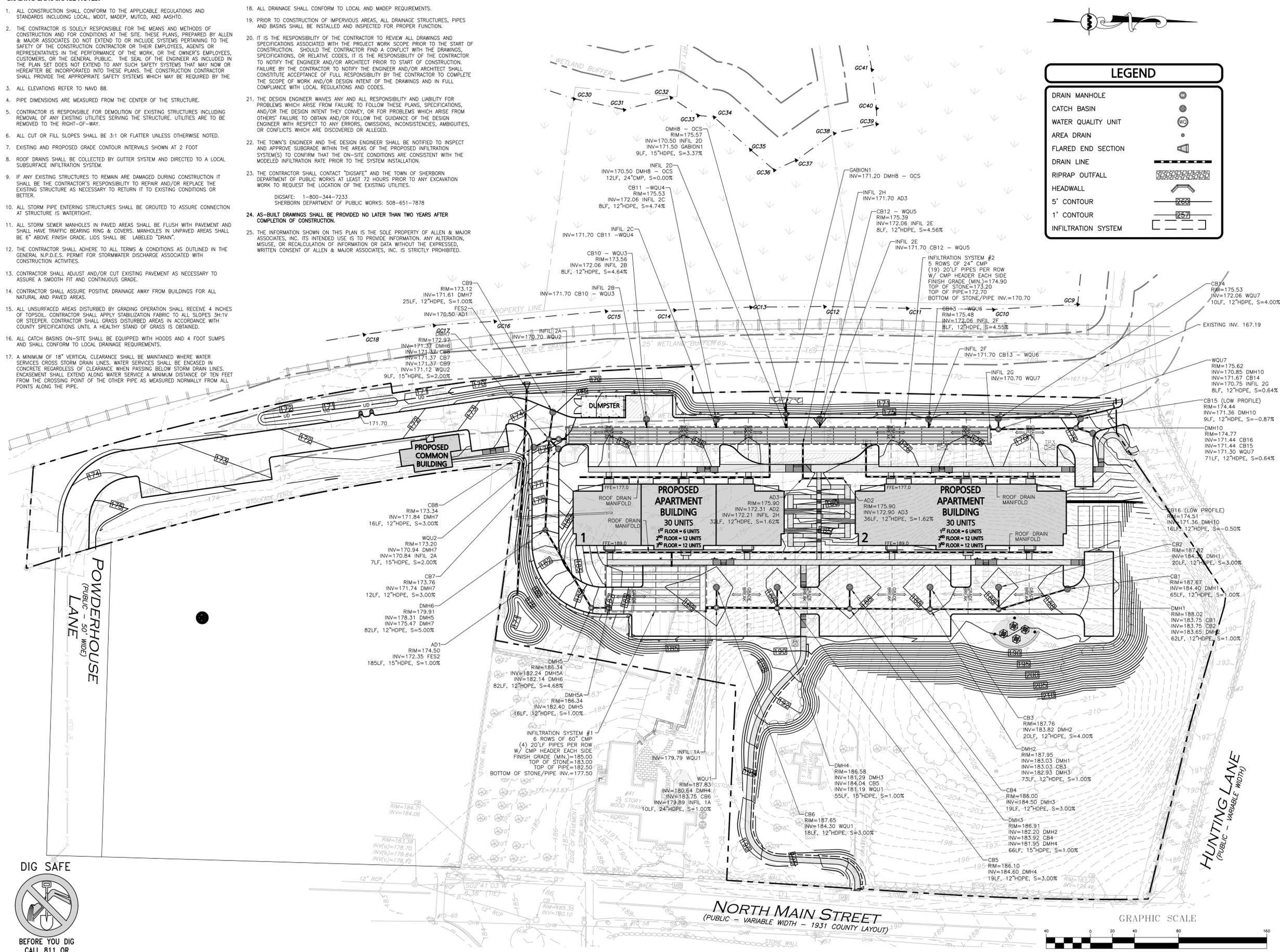
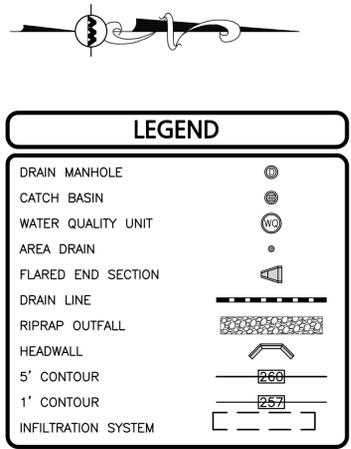
R:\PROJECTS\2513-01A\CIVIL\DRAWINGS\CURRENT\C-2513-01A\_LAYOUT & MATERIALS.DWG

**GRADING & DRAINAGE NOTES:**

- ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS INCLUDING LOCAL, MDOT, MADEP, MUTCD, AND AASHTO.
- 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, OR 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 HEREFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PROVIDE THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE STATE.
- ALL ELEVATIONS REFER TO NAVD 88.
- PIPE DIMENSIONS ARE MEASURED FROM THE CENTER OF THE STRUCTURE.
- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.
- ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
- EXISTING AND PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 2 FOOT
- ROOF DRAINS SHALL BE COLLECTED BY GUTTER SYSTEM AND DIRECTED TO A LOCAL SUBSURFACE INFILTRATION SYSTEM.
- IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
- ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATER TIGHT.
- ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "DRAIN".
- THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL GRASS DISTURBED AREAS IN ACCORDANCE WITH COUNTY SPECIFICATIONS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- ALL CATCH BASINS ON-SITE SHALL BE EQUIPPED WITH HOODS AND 4 FOOT SUMPS AND SHALL CONFORM TO LOCAL DRAINAGE REQUIREMENTS.
- A MINIMUM OF 18" VERTICAL CLEARANCE SHALL BE MAINTAINED WHERE WATER SERVICES CROSS STORM DRAIN LINES. WATER SERVICES SHALL BE ENCASED IN CONCRETE REGARDLESS OF CLEARANCE WHEN PASSING BELOW STORM DRAIN LINES. ENGAGEMENT SHALL EXTEND ALONG WATER SERVICE A MINIMUM DISTANCE OF TEN FEET FROM THE CROSSING POINT OF THE OTHER PIPE AS MEASURED NORMALLY FROM ALL POINTS ALONG THE PIPE.
- ALL DRAINAGE SHALL CONFORM TO LOCAL AND MADEP REQUIREMENTS.
- PRIOR TO CONSTRUCTION OF IMPERVIOUS AREAS, ALL DRAINAGE STRUCTURES, PIPES AND BASINS SHALL BE INSTALLED AND INSPECTED FOR PROPER FUNCTION.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE START OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DRAWINGS, SPECIFICATIONS, OR RELATIVE CODES, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER AND/OR ARCHITECT PRIOR TO START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE ENGINEER AND/OR ARCHITECT SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AND/OR DESIGN INTENT OF THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND CODES.
- THE DESIGN ENGINEER WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS, AND/OR THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE GUIDANCE OF THE DESIGN ENGINEER WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES, OR CONFLICTS WHICH ARE DISCOVERED OR ALLEGED.
- THE TOWN'S ENGINEER AND THE DESIGN ENGINEER SHALL BE NOTIFIED TO INSPECT AND APPROVE SUBGRADE WITHIN THE AREAS OF THE PROPOSED INFILTRATION SYSTEM(S) TO CONFIRM THAT THE ON-SITE CONDITIONS ARE CONSISTENT WITH THE MODELED INFILTRATION RATE PRIOR TO THE SYSTEM INSTALLATION.
- 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

- AS-BUILT DRAWINGS SHALL BE PROVIDED NO LATER THAN TWO YEARS AFTER COMPLETION OF CONSTRUCTION.
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PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
4	04-09-2021	REVS PER PEER REVIEW
3	10-01-2020	ISSUED FOR ZBA APPLICATION
2	05-21-2020	MISCELLANEOUS REVISIONS
1	01-21-2020	MISCELLANEOUS REVISIONS

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

PROJECT:  
**THE PINES RESIDENCES**  
41 NORTH MAIN STREET  
SHERBORN, MA

PROJECT NO. 2513-01A DATE: 10-23-20  
SCALE: 1" = 40' DWG. NAME: C2513-01A  
DESIGNED BY: ARM CHECKED BY: MAM

PREPARED BY:

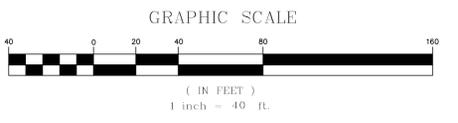
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DRAWING TITLE: **GRADING & DRAINAGE PLAN** SHEET No. **C-103**  
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1-888-344-7233



**UTILITY NOTES:**

- 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: 800-344-7233  
SHERBORN DEPARTMENT OF PUBLIC WORKS: 508-651-7878
- 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 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 THE TOWN OF SHERBORN, 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 OR 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 HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE AND OBTAIN THE APPROPRIATE SAFETY SYSTEMS THAT MAY BE REQUIRED BY THE US OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
- ALL ELEVATIONS REFER TO NAVD 88.
- PIPE DIMENSIONS ARE MEASURED FROM THE INSIDE FACE OF THE STRUCTURE.
- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.
- LOCATION OF PROPOSED ELECTRICAL/COMMUNICATION SERVICE IS SCHEMATIC IN NATURE AND FOR COORDINATION PURPOSES ONLY. SPECIFIC ALIGNMENTS ARE TO BE DESIGNED BY OTHERS AND REVIEWED BY THE UTILITY PROVIDING SERVICE. PROPOSED ELECTRICAL SERVICE TO BE BURIED IN ACCORDANCE WITH THE CITY OF DOVER REGULATIONS AND ELECTRIC COMPANY.
- LOCATION OF PROPOSED GAS MAIN IS SCHEMATIC IN NATURE AND FOR COORDINATION PURPOSES ONLY. SPECIFIC ALIGNMENTS ARE TO BE DESIGNED BY OTHERS AND REVIEWED BY THE UTILITY PROVIDING SERVICE. THIS WORK TO BE INCLUDED AS PART OF BASE BID FOR SITE WORK.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE START OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DRAWINGS, SPECIFICATIONS, OR RELATIVE CODES, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER AND/OR ARCHITECT PRIOR TO START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE ENGINEER AND/OR ARCHITECT SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AND/OR DESIGN INTENT OF THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND CODES.
- THE DESIGN ENGINEER WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS, AND/OR THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE GUIDANCE OF THE DESIGN ENGINEER WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES, OR CONFLICTS WHICH ARE DISCOVERED OR ALLEGED.

**LEGEND**

- SEWER MANHOLE
- SEWER CLEANOUT
- SEWER LINE
- SEWER FORCEMAIN
- CONCRETE PIPE ENCASEMENT
- WATER LINE
- WATER VALVE
- WATER LINE REDUCER
- GAS LINE
- OVER HEAD WIRE
- UTILITY POLE
- ELEC/TELE/CABLE CONDUIT

**DIG SAFE**

BEFORE YOU DIG  
CALL 811 OR  
1-888-DIG-SAFE  
1-888-344-7233

Digitally signed by Michael Malynowski  
Date: 2021.04.09 14:06:24 -04'00'

PROFESSIONAL ENGINEER FOR  
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
1	04-09-2021	REVS PER PEER REVIEW
2	08-28-2021	REVISIONS PER COMMENTS
3	10-01-2021	ISSUED FOR ZBA APPLICATION
4	05-21-2020	MISCELLANEOUS REVISIONS
5	01-21-2020	MISCELLANEOUS REVISIONS

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

PROJECT:  
**THE PINES RESIDENCES**  
41 NORTH MAIN STREET  
SHERBORN, MA

PROJECT NO. 2513-01A DATE: 10-23-20

SCALE: 1" = 40' DWG. NAME: C2513-01A

DESIGNED BY: ARM CHECKED BY: MAM

PREPARED BY:

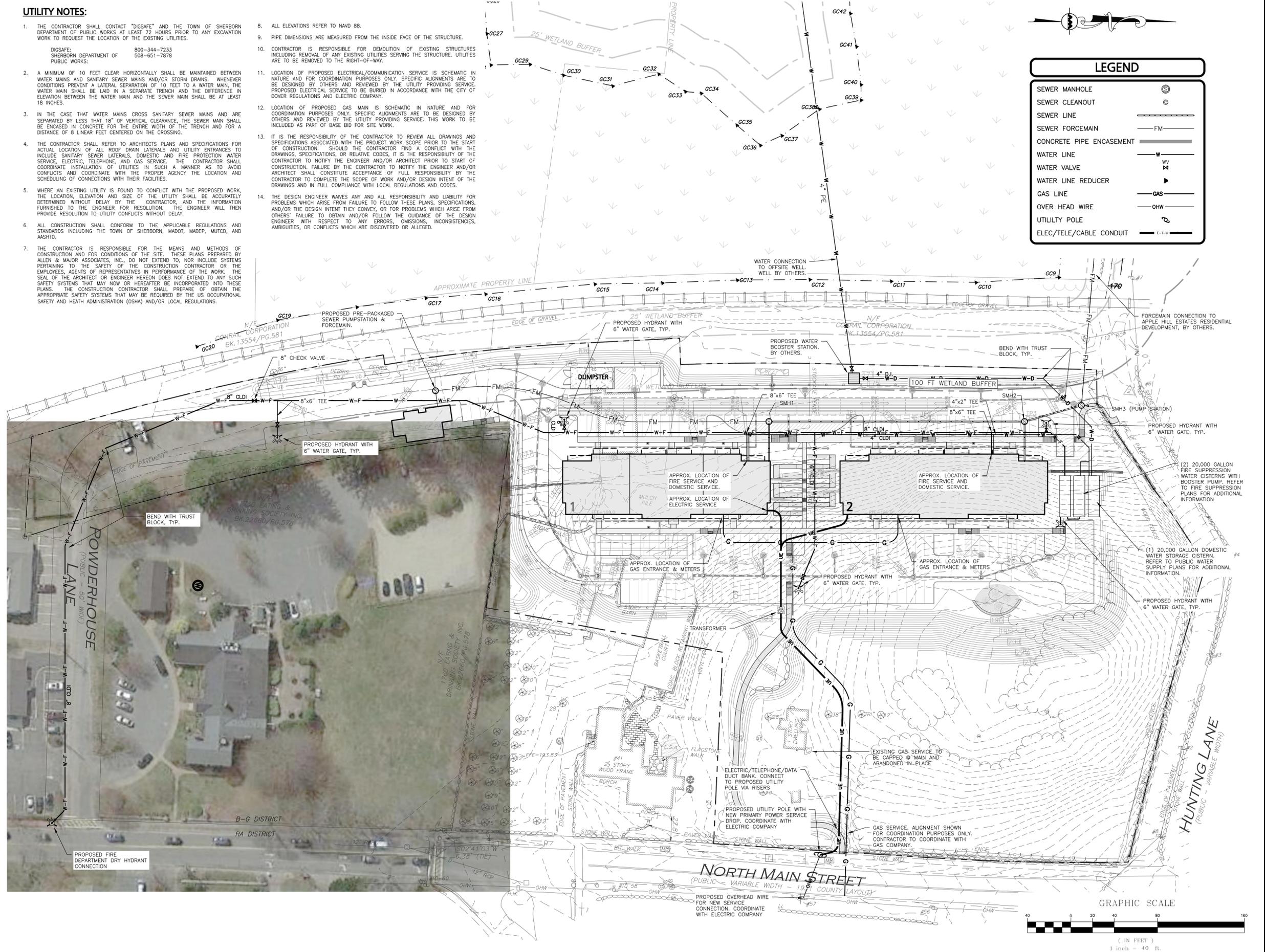
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WOBBURN MA 01801  
TEL: (781) 935-6889  
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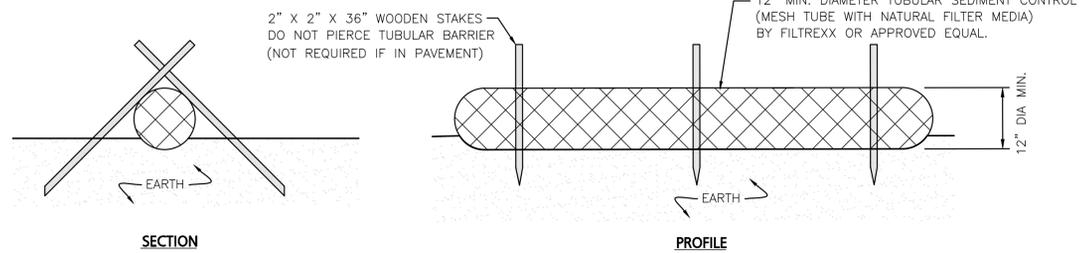
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DRAWING TITLE: UTILITIES PLAN SHEET NO. C-104

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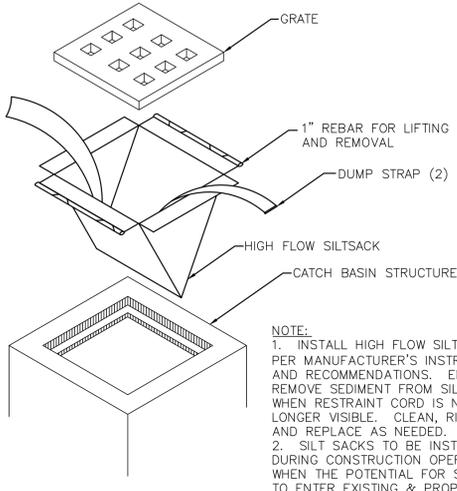


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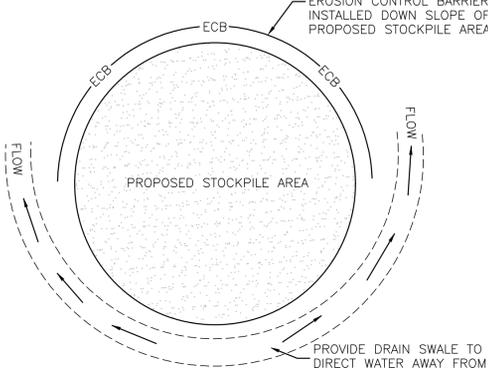
- NOTES:**
- ALL MATERIALS TO MEET MANUFACTURERS SPECIFICATIONS.
  - INSTALL WOODEN STAKES IN A CRISS-CROSS PATTERN EVERY 8' ON CENTER.
  - OVERLAP TUBULAR BARRIER SEGMENTS A MINIMUM OF 12".
  - THE CONTRACTOR SHALL MAINTAIN THE TUBULAR BARRIERS IN A FUNCTIONAL CONDITION AT ALL TIMES. THE CONTROLS SHALL BE ROUTINELY INSPECTED BY THE CONTRACTOR.
  - WHERE THE TUBULAR BARRIERS REQUIRE REPAIR OR SEDIMENT REMOVAL, IT WILL BE COMPLETED BY THE CONTRACTOR AT NO ADDITIONAL COST.
  - AT A MINIMUM, THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE WHEN THEY REACH 1/3 THE EXPOSED HEIGHT OF THE BARRIER.

**TUBULAR SEDIMENT BARRIER**  
NOT TO SCALE



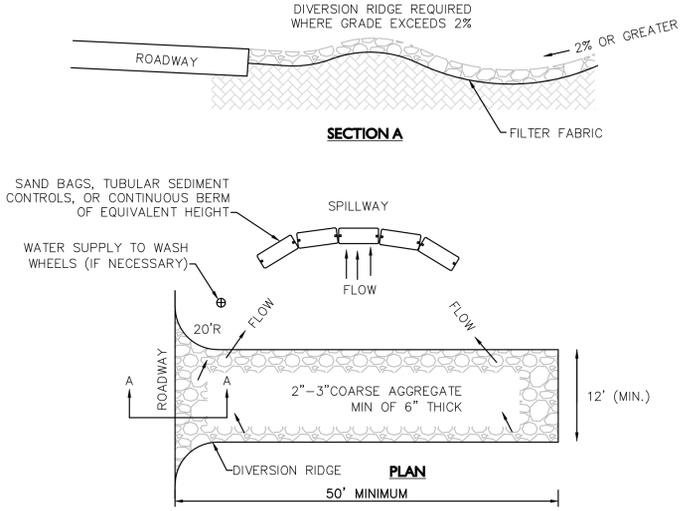
- NOTE:**
- INSTALL HIGH FLOW SILTSACK PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. EMPTY OR REMOVE SEDIMENT FROM SILTSACK WHEN RESTRAINT CORD IS NO LONGER VISIBLE. CLEAN, RINSE, AND REPLACE AS NEEDED.
  - SILT SACKS TO BE INSTALLED DURING CONSTRUCTION OPERATIONS WHEN THE POTENTIAL FOR SEDIMENT TO ENTER EXISTING & PROPOSED BASINS EXISTS.

**SILTSACK INLET DETAIL**  
NOT TO SCALE



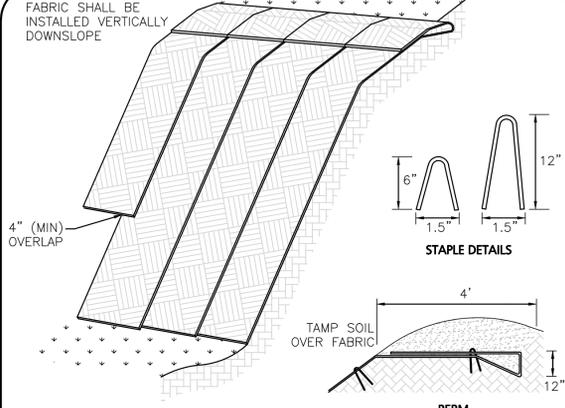
- NOTES:**
- SOIL AND FILL STOCKPILES EXPECTED TO REMAIN IN PLACE FOR LESS THAN 90 DAYS SHALL BE COVERED WITH STRAW AND MULCH (AT 100LBS/1,000 SF), OR WITH AN ANCHORED TARP WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL.
  - SOIL AND FILL STOCKPILES EXPECTED TO REMAIN IN PLACE FOR 90 DAYS OR MORE SHALL BE SEEDED WITH WINTER RYE (FOR FALL SEEDING AT 1LB/1,000 SF) OR OATS (FOR SUMMER SEEDING AT 2LB/1,000 SF) AND THEN COVERED WITH STRAW MULCH (AT 100LB/1,000 SF) OR AN ANCHORED TARP WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL.

**STOCKPILE PROTECTION DETAIL**  
NOT TO SCALE



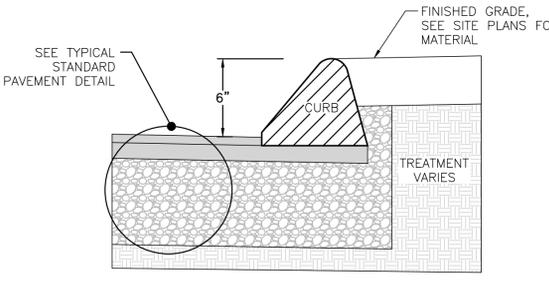
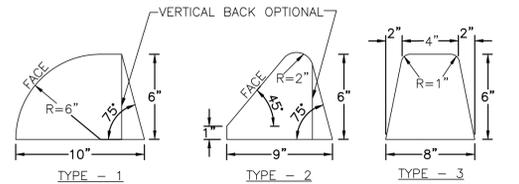
- NOTES:**
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
  - WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTERING THE PUBLIC RIGHT-OF-WAY.
  - WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
  - USE SANDBAGS, TUBULAR SEDIMENT CONTROLS, OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED.

**TEMPORARY CONSTRUCTION ENTRANCE/EXIT**  
NOT TO SCALE

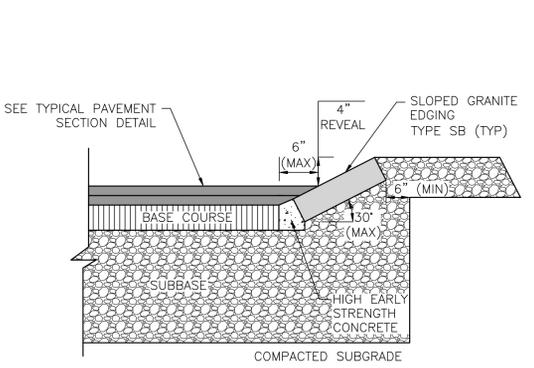


- NOTE:**
- SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. FABRIC SHALL HAVE GOOD SOIL CONTACT.
  - APPLY PERMANENT SEEDING BEFORE PLACING FABRIC.
  - LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
  - CHOOSE MATERIAL BASED ON SLOPE, SOILS, AND APPLICATION.

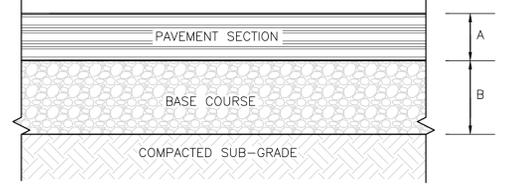
**EROSION CONTROL FABRIC**  
NOT TO SCALE



**BITUMINOUS CONCRETE CURB**  
NOT TO SCALE



**SLOPED GRANITE CURB**  
NOT TO SCALE



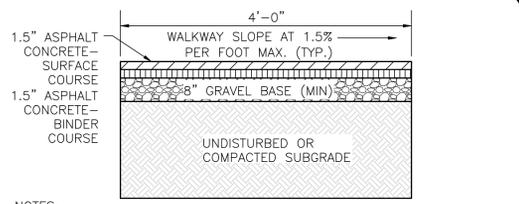
- NOTES:**
- PAVEMENT SECTION, BASE COURSE, AND SUBGRADE SHALL BE PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. IN THE ABSENCE OF A GEOTECHNICAL ENGINEER'S RECOMMENDATION, THE MATERIALS AND THICKNESS SHALL BE AS SHOWN HEREON.
  - SUBGRADE SHALL BE COMPACTED TO 95% OF PROCTOR
  - EXISTING SUBSURFACE SOILS SHALL BE PROOF-ROLLED.

**MATERIALS AND THICKNESSES:**

A = 1.5" ASPHALT CONCRETE - SURFACE COURSE (M3.11.0, TABLE A, TOP COURSE)  
 3.0" ASPHALT CONCRETE - BINDER COURSE (M3.11.0, TABLE A, BINDER COURSE)

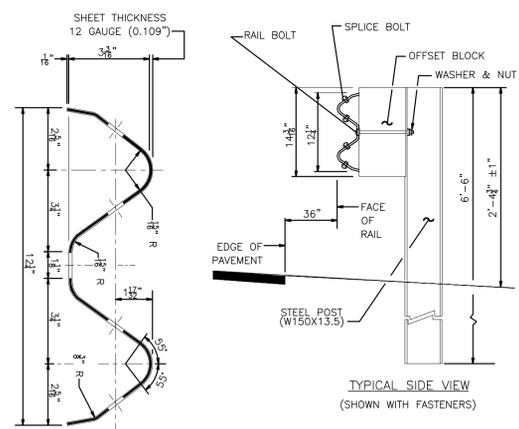
B = 14" PROCESSED GRAVEL BASE (MHD M2.01.7)

**ASPHALT PAVEMENT SECTION**  
NOT TO SCALE



- NOTES:**
- REFERENCE PLANS FOR ELEVATIONS.
  - COMPACT SOIL SUBGRADE UNIFORMLY TO AT LEAST 95% OF ASTM D 1557 LABORATORY DENSITY.
  - PROOF-ROLL PREPARED SUBGRADE TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING, EXCAVATE SOFT SPOTS, UNSATISFACTORY SOILS, AND AREAS OF EXCESSIVE PUMPING OR RUTTING, AS DETERMINED BY GEOTECHNICAL ENGINEER AND REPLACE WITH COMPACTED BACKFILL OR FILL AS DIRECTED.
  - CONTRACTOR SHALL COORDINATE SURFACE, BINDER, AND BASE COURSES WITH GEOTECHNICAL OR SOILS REPORT. REFER TO REPORT FOR RECOMMENDATIONS FOR LOCAL SOILS OR DRAINAGE CONDITIONS AND/OR METHODS.
  - BASE COURSE SHALL EXTEND 6 INCHES BEYOND WALKWAY EDGE WHERE WALKWAY DOES NOT ABUT DEEP CURB, WALL, STEPS, OR FIXED OBJECT.
  - WALKWAY EDGES SHALL BE TAMPED WHERE WALKWAY DOES NOT ABUT DEEP CURB, WALL, STEPS, OR FIXED OBJECT.

**BITUMINOUS CONCRETE SIDEWALK**  
NOT TO SCALE



**NOTE:**  
SEE MASSDOT DRAWING NUMBERS E401.1.1, E401.7.0, E401.8.0R, E401.20.0 FOR ADDITIONAL INFORMATION.

**STEEL GUARDRAIL DETAIL**  
NOT TO SCALE



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Date: 2021.04.09 14:05:58 -0400

REV	DATE	DESCRIPTION
4	04-09-2021	REVS PER PEER REVIEW
3	10-01-2020	ISSUED FOR ZBA APPLICATION
2	05-21-2020	MISCELLANEOUS REVISIONS
1	01-21-2020	MISCELLANEOUS REVISIONS

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

**PROJECT:**  
THE PINES RESIDENCES  
41 NORTH MAIN STREET  
SHERBORN, MA

**PROJECT NO.:** 2513-01A **DATE:** 10-23-20

**SCALE:** AS SHOWN **DWG. NAME:** C2513-01A

**DESIGNED BY:** ARM **CHECKED BY:** MAM

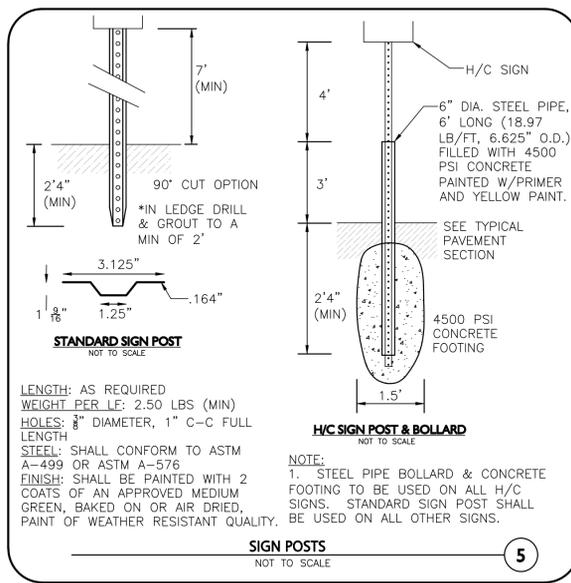
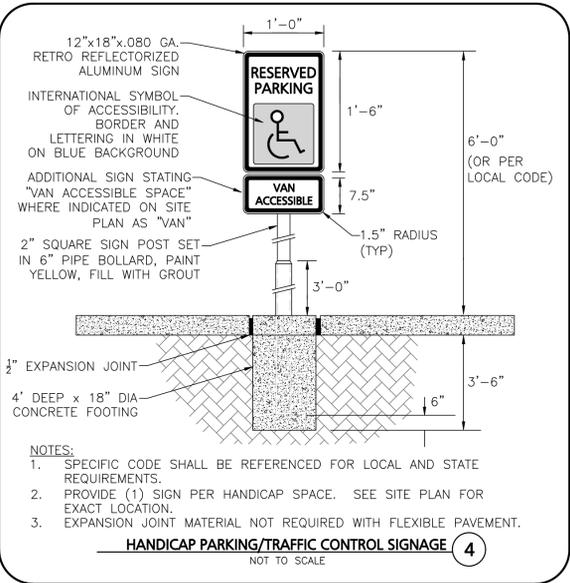
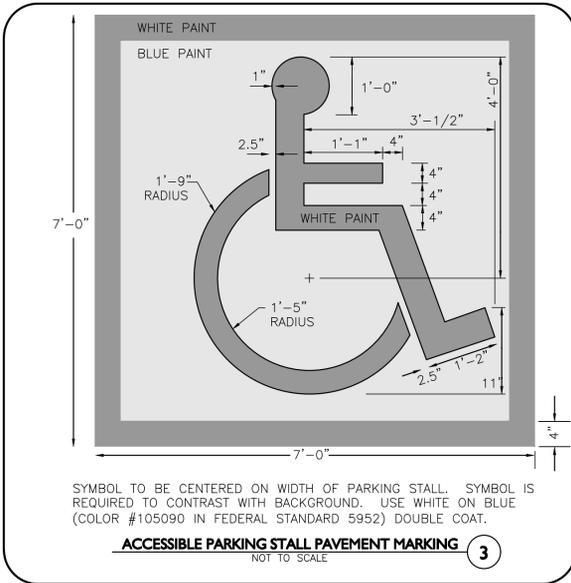
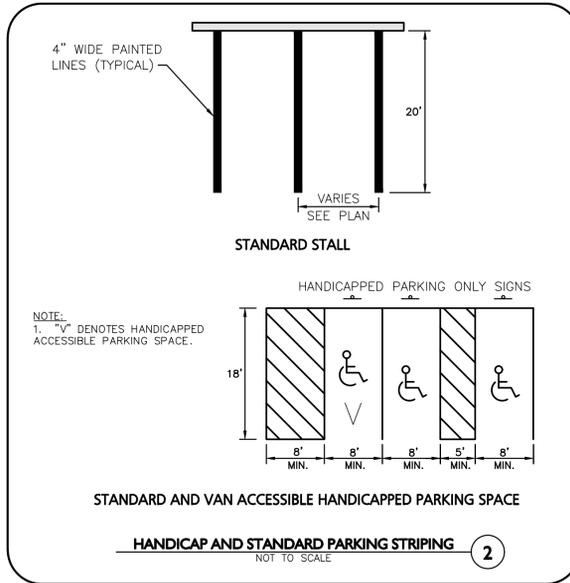
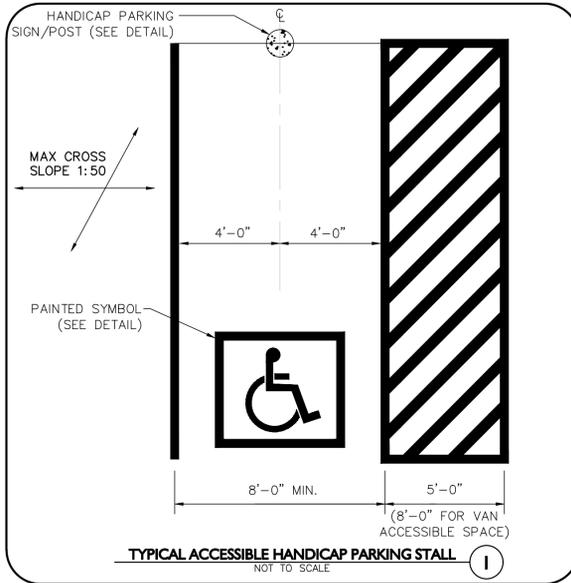


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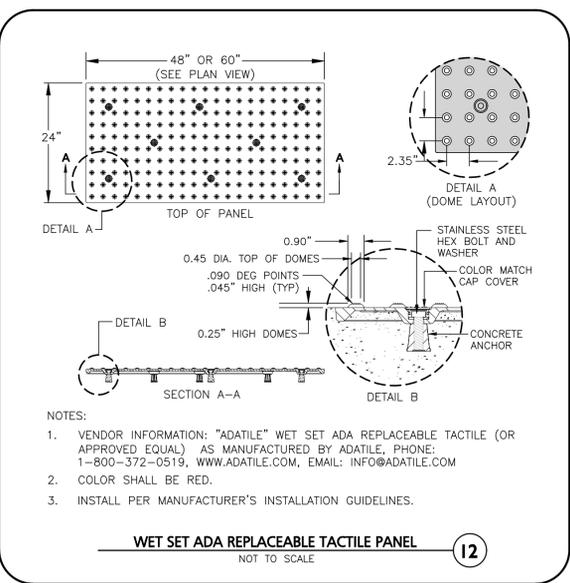
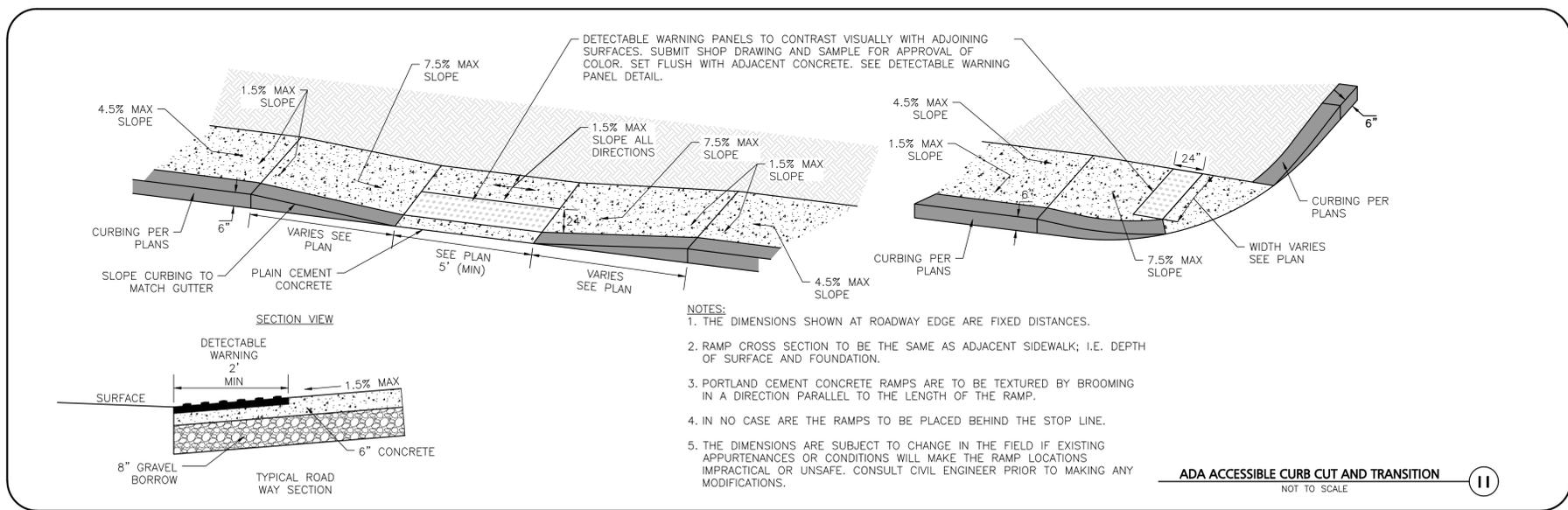
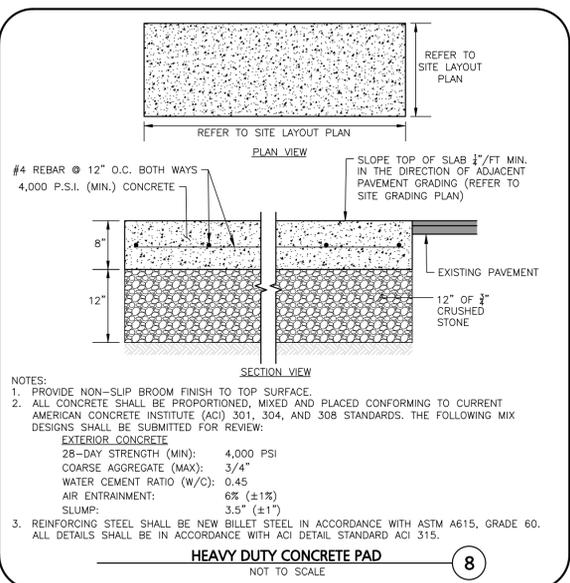
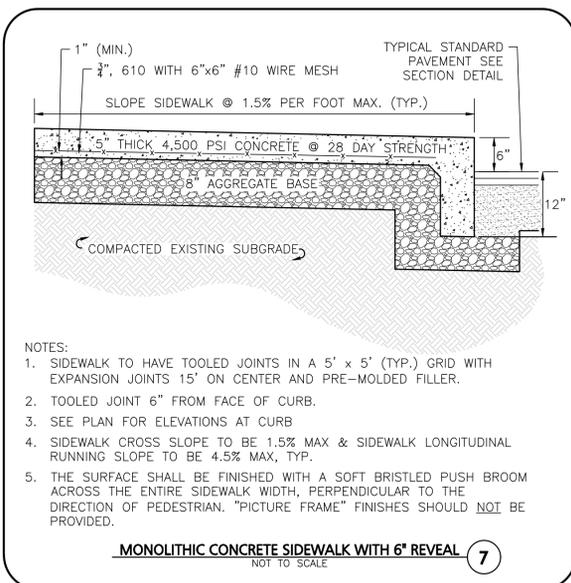
**DRAWING TITLE:** DETAILS **SHEET NO.:** C-501

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DESC.	SIGN	SIZE	MOUNTING HEIGHT	DESCRIPTION	REFLECTORIZED
R7-8		12" x 20"	7' - 0"	GREEN & BLUE ON WHITE	NO
R7-8 (MODIFIED)		12" x 20"	7' - 0"	GREEN & BLUE ON WHITE	NO
R1-1		30" x 30"	7' - 0"	WHITE ON RED	YES
R5-1		30" x 30"	7'-0"	RED ON WHITE	YES

**SIGN TABLE** 6  
NOT TO SCALE



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Date: 2021.04.09 14:07:58 -04'00'  
PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

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

**PROJECT:**  
THE PINES RESIDENCES  
41 NORTH MAIN STREET  
SHERBORN, MA

**PROJECT NO.:** 2513-01A **DATE:** 10-23-20  
**SCALE:** AS SHOWN **DWG. NAME:** C2513-01A  
**DESIGNED BY:** ARM **CHECKED BY:** MAM

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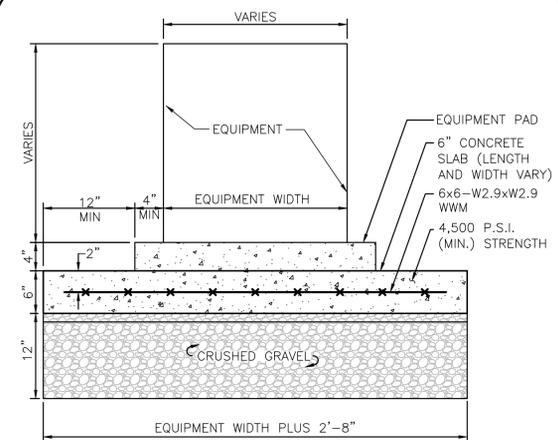
**DRAWING TITLE:** DETAILS **SHEET No.:** C-502

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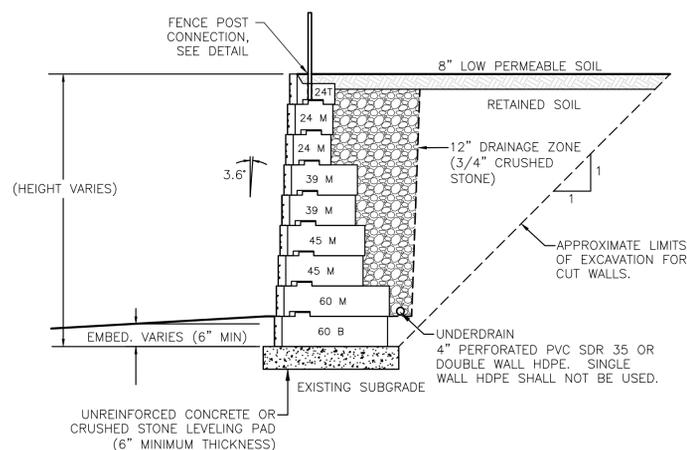
1



NOTE:  
REFERENCE MECHANICAL ENGINEER'S PLANS FOR ANY PIPE, CONDUIT AND GROUND WIRE LOCATIONS

TYPICAL UTILITY EQUIPMENT PAD  
NOT TO SCALE

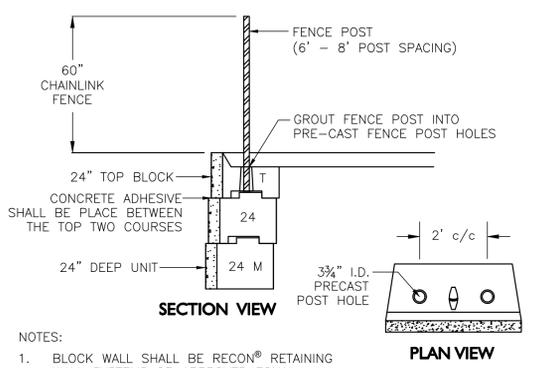
2



- NOTES:
- BLOCK WALL SHALL BE RECON® RETAINING WALL SYSTEMS OR APPROVED EQUAL.
  - VENDOR INFORMATION:  
SHEA WALL SYSTEM INC.  
87 HAVERHILL STREET  
AMESBURY, MA 01913  
PHONE: 800-696-7432  
www.sheaconcrete.com
  - RECON BLOCK STYLE SHALL BE "NORTH SHORE GRANITE".
  - THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND WALL CALCULATIONS PREPARED AND ENDORSED BY A NH REGISTERED PROFESSIONAL ENGINEER.
  - SEE GRADING PLANS FOR WALL LAYOUT AND HEIGHTS.

BLOCK RETAINING WALL SECTION  
NOT TO SCALE

3



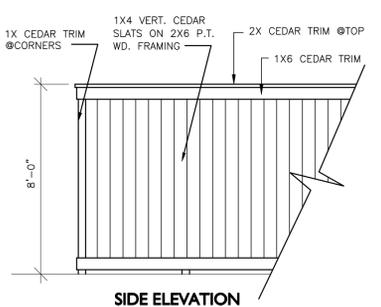
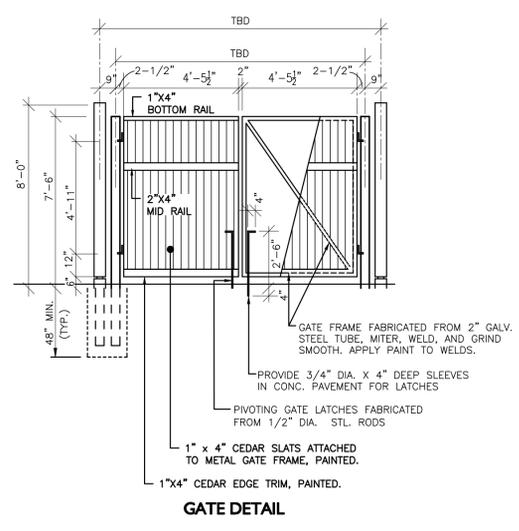
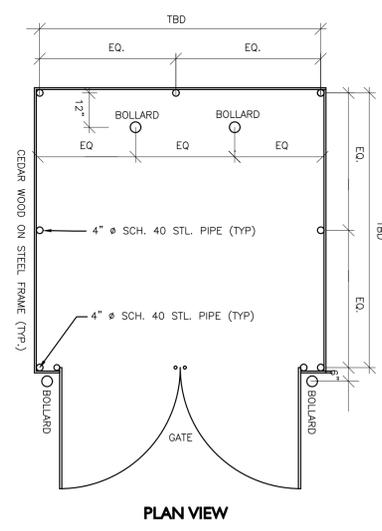
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AMESBURY, MA 01913  
PHONE: 800-696-7432  
www.sheaconcrete.com

FENCE CONNECTION TO TOP OF WALL  
NOT TO SCALE

4

NOT USED  
NOT TO SCALE

5



NOTE:  
PAINT ALL TRIM AND WOOD FRAMING TO MATCH BUILDING

SCREENED DUMPSTER ENCLOSURE  
NOT TO SCALE

6

NOT USED  
NOT TO SCALE

7



Digitally signed by Michael Malynowski  
Date: 2021.04.09 14:10:43 -04'00

PROFESSIONAL ENGINEER FOR  
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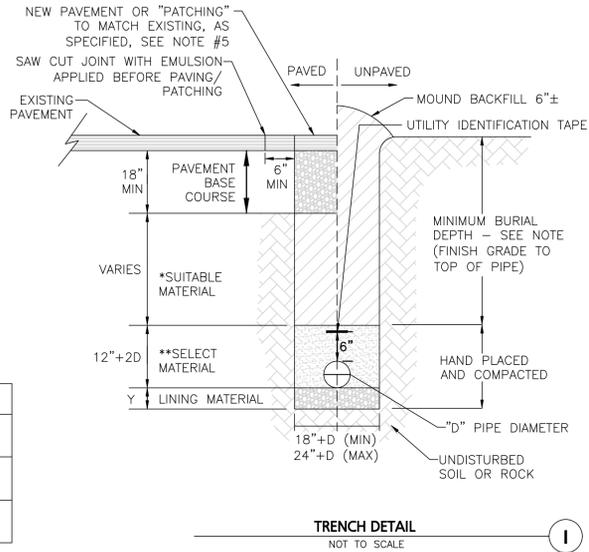
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**NOTES:**

- MINIMUM BURIAL DEPTH (FINISH GRADE TO TOP OF PIPE) GRAVITY PIPE (SEWER & DRAIN) - SEE PLAN OR PROFILE PRESSURE PIPE UNDER PAVING - 4' WATER PIPE BENEATH UNPAVED - 3'
- WHERE BACKFILL IS DESIGNATED AS COMPACTED, THIS MEANS 90 TO 95% STANDARD PROCTOR, AASHTO T-99. ALL FILL PLACED BELOW PIPES AND STRUCTURES MUST MEET THIS REQUIREMENT.
- TRENCHES WITHIN PUBLIC RIGHT OF WAY MAY REQUIRE FLOWABLE FILL. VERIFY WITH MUNICIPAL ENGINEER.
- WHERE WASTE FILLS ARE ENCOUNTERED AT SUBGRADE LEVEL FOR NEW UTILITIES, THE FILL SHOULD BE OVER-EXCAVATED, THE SUBGRADE SHOULD BE RE-COMPACTED, AND BACKFILL CONSISTING OF PIPE BEDDING MATERIAL, CRUSHED STONE OR OTHER SUITABLE GRANULAR FILL SHOULD BE PLACED TO A SUFFICIENT DEPTH TO CREATE A FIRM AND STABLE SUBGRADE (TYPICALLY 12 TO 18 INCHES OVER-EXCAVATION).
- REFER TO PAVING, CURBS, WALKS AND DRIVEWAY DETAILS.
- REFER TO LANDSCAPING DETAILS.



CONDITION & PIPE	**SELECT MATERIAL	LINING MATERIAL	Y-DIMENSION
DUCTILE IRON "ORDINARY SOIL"	TYPE I, II, OR III	SAND OR TYPE III	3"
RCP "ORDINARY SOIL"	TYPE II OR III	SAND OR TYPE III	3"
ALL PIPE OVER BEDROCK OR LEDGE	TYPE II OR III	SAND OR TYPE III	12"
DUCTILE IRON IN CLAY OR MUCK	TYPE II OR III	SAND	4"
RCP IN CLAY	TYPE II OR III	SAND	8"
ALL PLASTICS	TYPE III	SAND OR TYPE III	6"

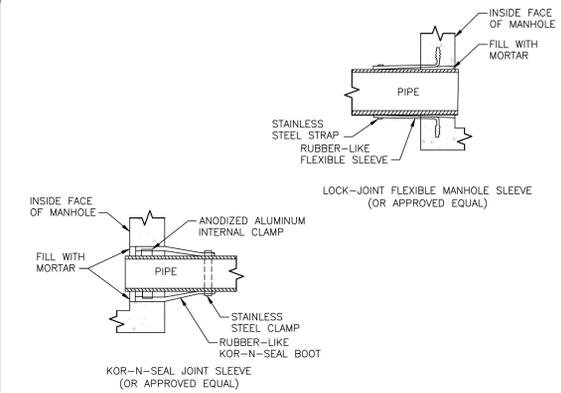
SUITABLE MATERIAL SHALL CONTAIN NO STONE GREATER THAN 4" IN DIAMETER, NO FROZEN LUMPS, AND ONLY MINOR AMOUNTS OF CLAY OR ORGANIC MATERIAL. ALL MATERIAL TO BE PLACED IN MAX 12" LIFTS AND COMPACTED BEFORE PLACING NEXT LIFT.

\*\*TYPE I MATERIAL SHALL BE EITHER GRAVEL OR EXCAVATED MATERIAL CONTAINING NO STONES GREATER THAN 1.5" DIAMETER, NO FROZEN LUMPS, CLAY OR ORGANIC MATERIAL.

\*\*TYPE II MATERIAL SHALL BE CLEAN, HARD, CRUSHED OR NATURAL STONE WITH A GRADATION BY WEIGHT OF 100% PASSING A 1.5" SQUARE OPENING, NOT MORE THAN 25% PASSING A 3/4" OPENING, AND NOT MORE THAN 5% PASSING A 1/2" SQUARE OPENING.

\*\*TYPE III MATERIAL SHALL BE CLEAN, HARD, CRUSHED STONE FREE FROM COATINGS AND THOROUGHLY WASHED WITH A GRADATION BY WEIGHT OF 100% PASSING A 1" SQUARE OPENING, AND 0 TO 5% PASSING A 1/2" SQUARE OPENING.

	FILTER FABRIC USE	
	SILT OR CLAY	GRANULAR SOIL
ABOVE GROUND WATER	FILTER FABRIC NOT REQUIRED	FILTER FABRIC NOT REQUIRED
BELOW GROUND WATER	FILTER FABRIC REQUIRED	FILTER FABRIC NOT REQUIRED



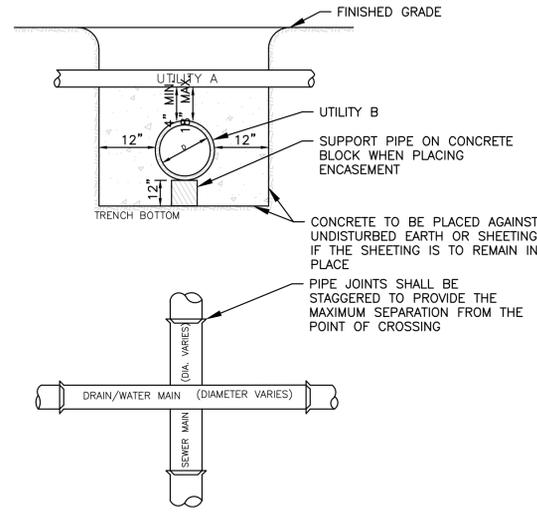
- NOTES:**
- PIPE TO MANHOLE JOINTS SHALL BE ONLY AS APPROVED BY THE ENGINEER AND IN GENERAL, WILL DEPEND FOR WATER TIGHTNESS UPON ELASTOMERIC SEALANT
  - NON-SHRINKING MORTAR SHALL ONLY BE USED WHERE SPECIFICALLY APPROVED BY THE ENGINEER.

**PIPE CONNECTIONS TO SEWER MANHOLE**  
NOT TO SCALE

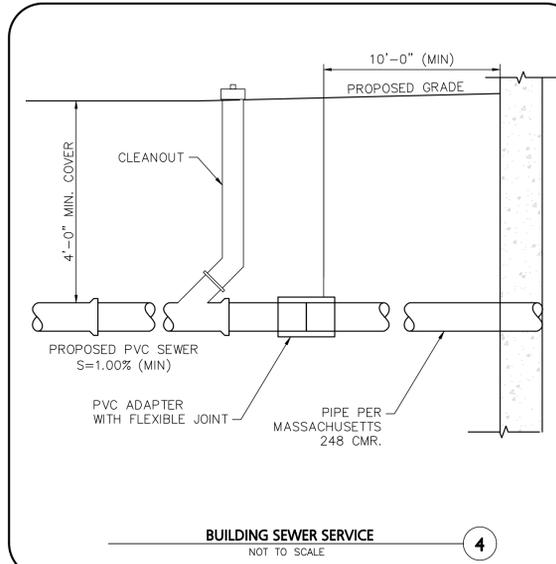
**NOTES:**

WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET BETWEEN A SEWER MAIN AND A WATER/RAIN MAIN:

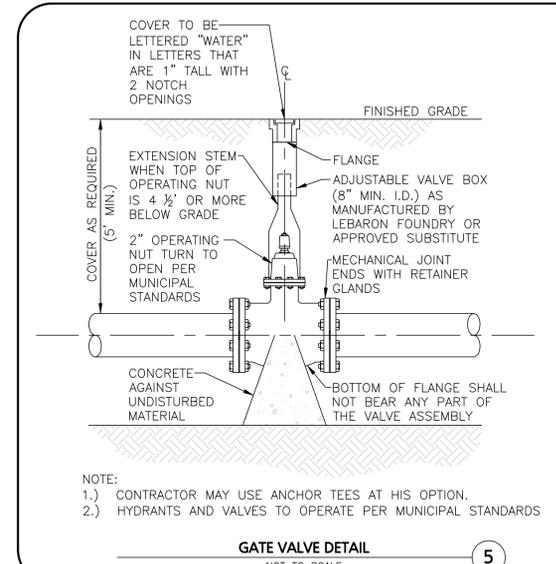
- THE WATER/DRAIN MAIN SHALL BE LAID IN A SEPARATE TRENCH AND THE DIFFERENCE IN ELEVATION BETWEEN THE WATER/DRAIN MAIN AND THE SEWER MAIN SHALL BE AT LEAST 18 INCHES.
- THE PIPE CROSSING SHALL OCCUR AS CLOSE TO 90° AS PRACTICABLE.
- THE PIPE JOINTS SHALL BE STAGGERED TO PROVIDE THE MAXIMUM SEPARATION FROM THE POINT OF CROSSING.
- THE CROSSING SHALL BE ENCASED IN CONCRETE FOR THE ENTIRE WIDTH OF THE TRENCH AND FOR A DISTANCE OF 10 LINEAR FEET CENTERED ON THE CROSSING.
- UTILITIES A AND B CAN BE EITHER NEW OR EXISTING.
- WHEN ONE UTILITY IS A SANITARY SEWER, IT IS PREFERABLE TO BE POSITIONED AS SHOWN FOR UTILITY B.
- ENCASEMENT EXTENDS 10'-0" ON EACH SIDE OF THE CENTERLINE OF UTILITY A.
- PIPE MUST BE BRACED VERTICALLY AND HORIZONTALLY TO PREVENT FLOATATION DURING PLACEMENT OF CONCRETE.



**SEWER/WATER/DRAIN CROSSING**  
NOT TO SCALE



**BUILDING SEWER SERVICE**  
NOT TO SCALE

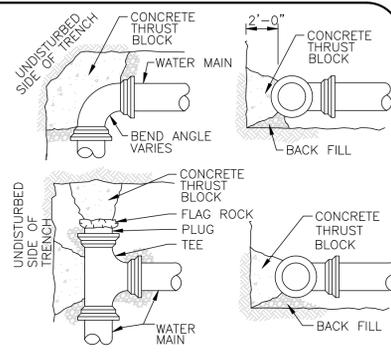


- NOTE:**
- CONTRACTOR MAY USE ANCHOR TEES AT HIS OPTION.
  - HYDRANTS AND VALVES TO OPERATE PER MUNICIPAL STANDARDS

**GATE VALVE DETAIL**  
NOT TO SCALE

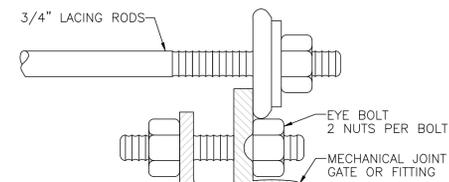
**NOTES:**

- ALL WATER MAIN FITTINGS, BENDS, TEES, PLUGS ETC. SHALL BE RESTRAINED W/ THRUST BLOCKS EXCEPT WHERE NOTED.
- ALL THRUST BLOCKS & COLLARS SHALL BE INSTALLED SO THAT THEY BEAR AGAINST UNDISTURBED EARTH.
- SIZE OF CONCRETE THRUST BLOCKS SHALL BE AS NOTED BELOW.
- MINIMUM COMPRESSIVE STRENGTH OF THRUST BLOCK CONCRETE SHALL BE 3,000 P.S.I.
- KEEP CONCRETE CLEAR OF MECHANICAL JOINTS.
- THE BELOW PREDICATED ON A WATER PRESSURE OF 225 PSI AND A SOIL RESISTANCE OF 2000 PSF (TILL). FOR OTHER SOILS THE VALUES IN THE ABOVE TABLE SHALL BE MULTIPLIED BY:



PIPE Ø	MINIMUM THRUST BLOCK BEARING AREAS			TEES, PLUGS, CAPS & HYD.
	90° BEND (SQ. FT.)	45° BEND (SQ. FT.)	22.5° BEND (SQ. FT.)	
6"	5	3	3	4
8"	9	6	3	9
10"	13	7	4	12
12"	20	10	5	16

**THRUST BLOCK DETAILS**  
NOT TO SCALE



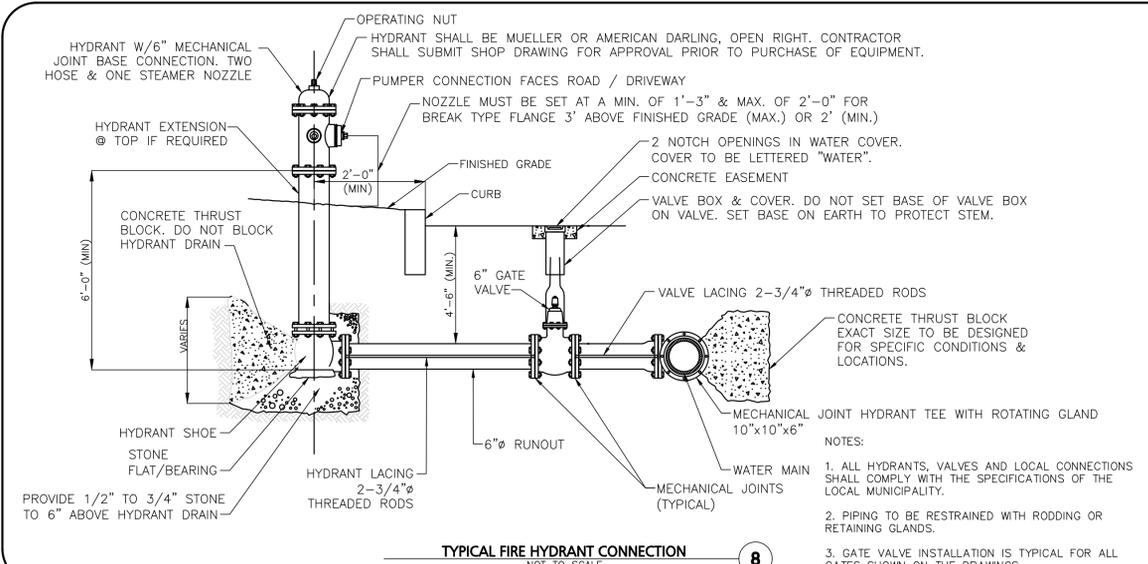
PIPE SIZE	No. LACING RODS
4", 6" & 8"	2 - 3/4"
10" & 12"	4 - 3/4"
16"	4 - 3/4"
20"	6 - 3/4"

\* STANDARD LENGTHS ARE 6' & 10'. COUPLINGS MAY BE USED FOR LONGER LENGTHS.

**NOTES:**

- NUMBER OF LACING RODS IS BASED ON MAXIMUM PRESSURE OF 125 P.S.I. IN MAIN.
- EYE-BOLTS AND LACING RODS ARE TO BE FABRICATED FROM A-36 STEEL.
- STEEL LACING RODS SHALL HAVE A YIELD STRESS OF NOT LESS THAN 36,000 P.S.I.
- EYE-BOLTS SHALL HAVE A MINIMUM TENSILE STRENGTH OF 7,000 LBS. EACH.

**MECHANICAL JOINT LACING DETAIL**  
NOT TO SCALE



**TYPICAL FIRE HYDRANT CONNECTION**  
NOT TO SCALE



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REV	DATE	DESCRIPTION
4	04-09-2021	REVS PER PEER REVIEW
3	10-01-2020	ISSUED FOR ZBA APPLICATION
2	05-21-2020	MISCELLANEOUS REVISIONS
1	01-21-2020	MISCELLANEOUS REVISIONS

**APPLICANT/OWNER:**

**BARSKY ESTATE REALTY TRUST**  
23 HUNTING LANE  
SHERBORN, MA 01770

**PROJECT:**

**THE PINES RESIDENCES**  
41 NORTH MAIN STREET  
SHERBORN, MA

**PROJECT NO. 2513-01A DATE: 10-23-20**

**SCALE: AS SHOWN DWG. NAME: C2513-01A**

**DESIGNED BY: ARM CHECKED BY: MAM**

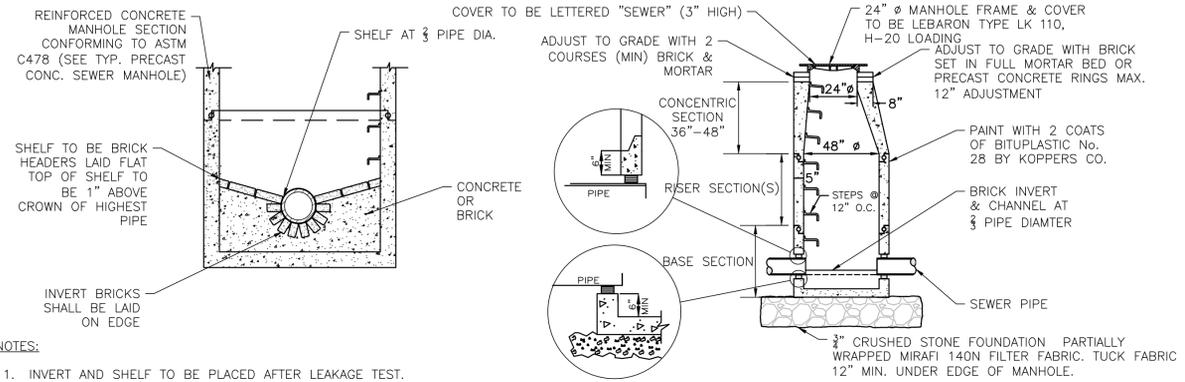
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**NOTES:**

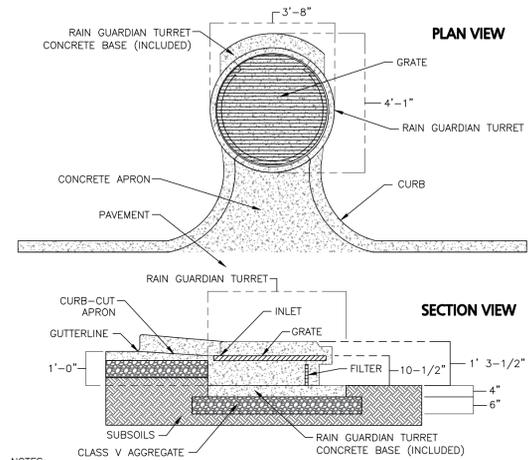
1. INVERT AND SHELF TO BE PLACED AFTER LEAKAGE TEST.
2. MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE HIGHEST PIPE 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

1



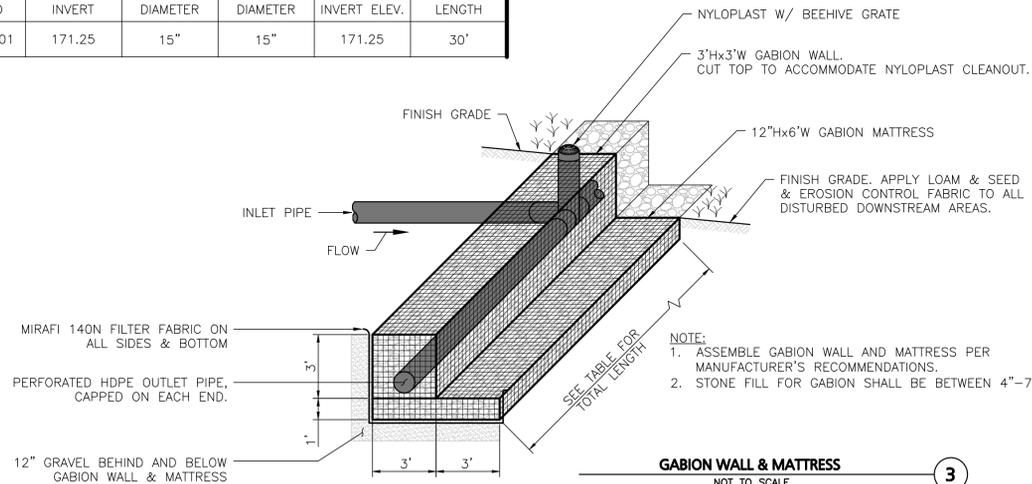
**NOTES:**

1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
2. SOIL UNDER BASE TO BE COMPACTED TO 95 PERCENT STANDARD PROCTOR.

**RAIN GUARDIAN TURRET STYLE**  
NOT TO SCALE

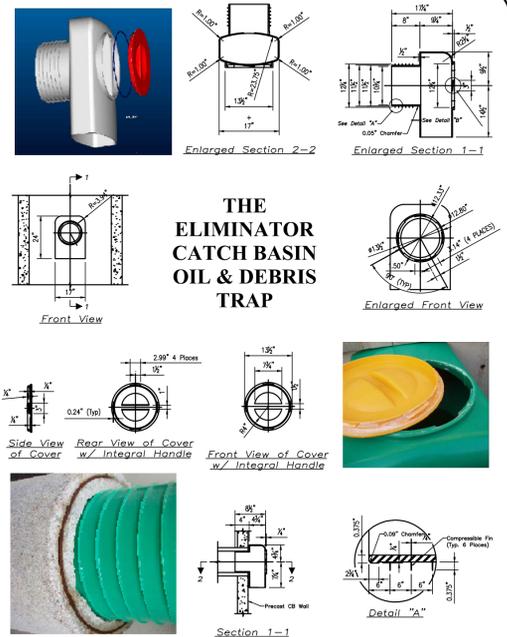
2

WALL ID	INLET PIPE		GABION OUTLET PIPE		
	INVERT	DIAMETER	DIAMETER	INVERT ELEV.	LENGTH
GABION-01	171.25	15"	15"	171.25	30'



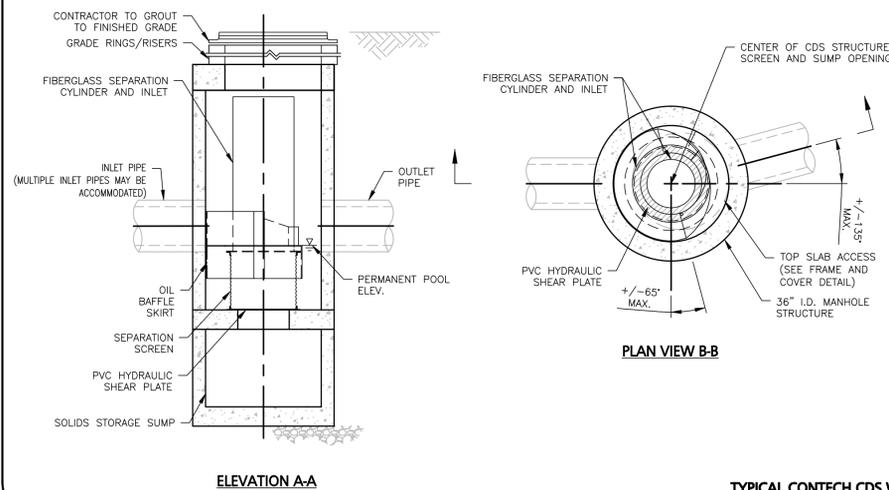
**GABION WALL & MATTRESS**  
NOT TO SCALE

3



**OIL & GAS TRAP MOUNTING DETAIL**  
NOT TO SCALE

3

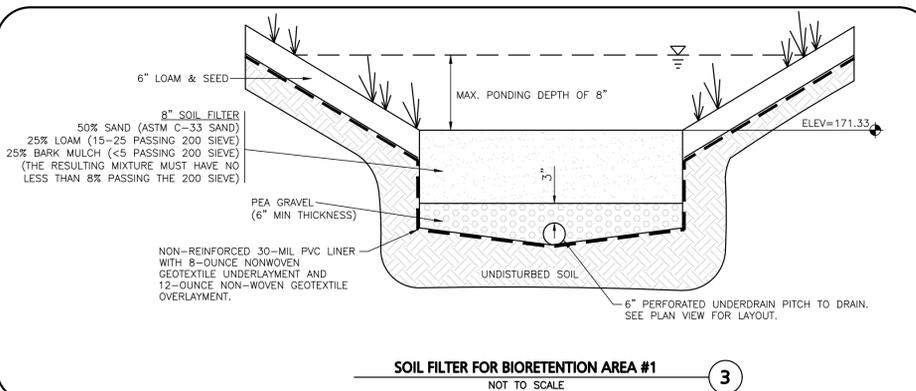


**TYPICAL CONTECH CDS WATER QUALITY STRUCTURE**  
NOT TO SCALE

5

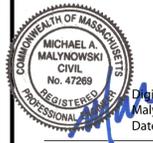
**GENERAL NOTES**

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 ASHTO 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.



**SOIL FILTER FOR BIORETENTION AREA #1**  
NOT TO SCALE

3



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SHERBORN, MA 01770

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41 NORTH MAIN STREET  
SHERBORN, MA

PROJECT NO. 2513-01A DATE: 10-23-20  
SCALE: AS SHOWN DWG. NAME: C2513-01A  
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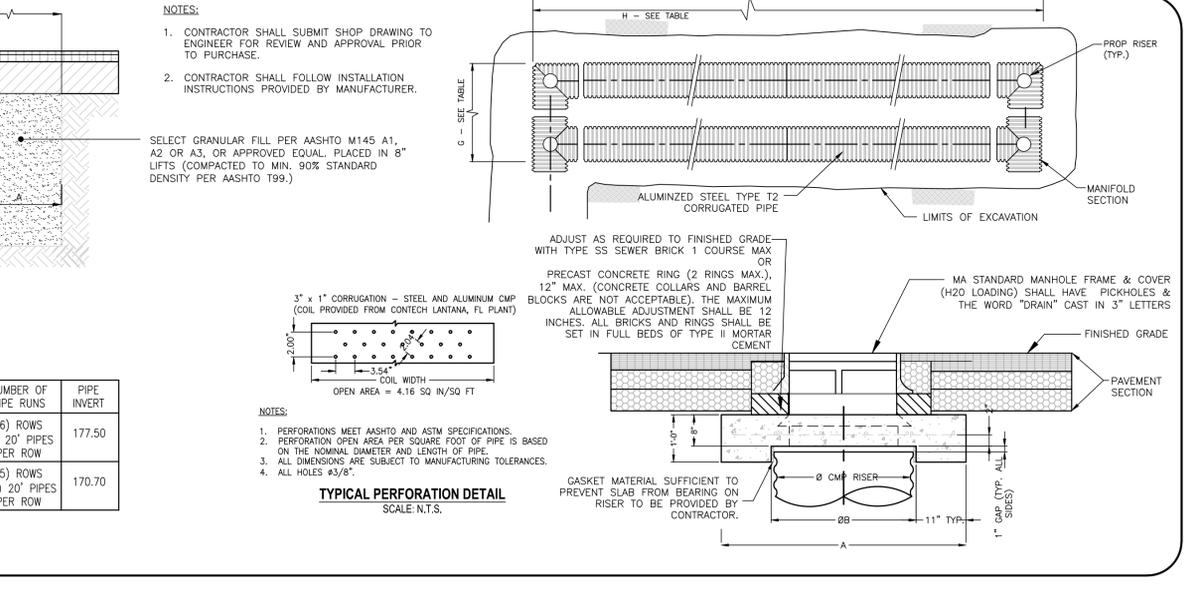
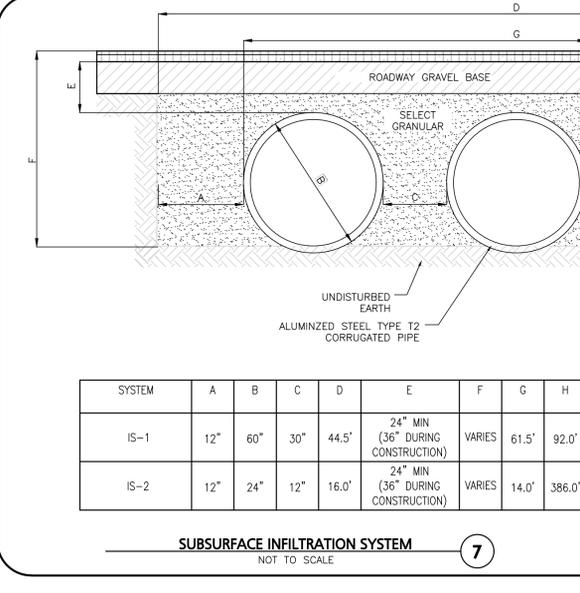
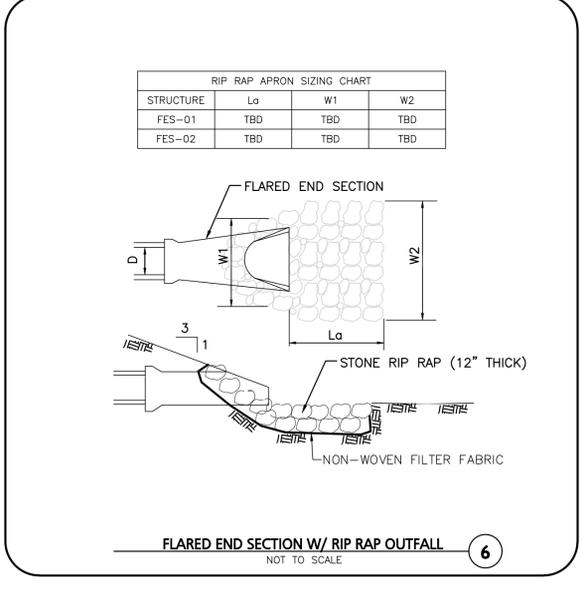
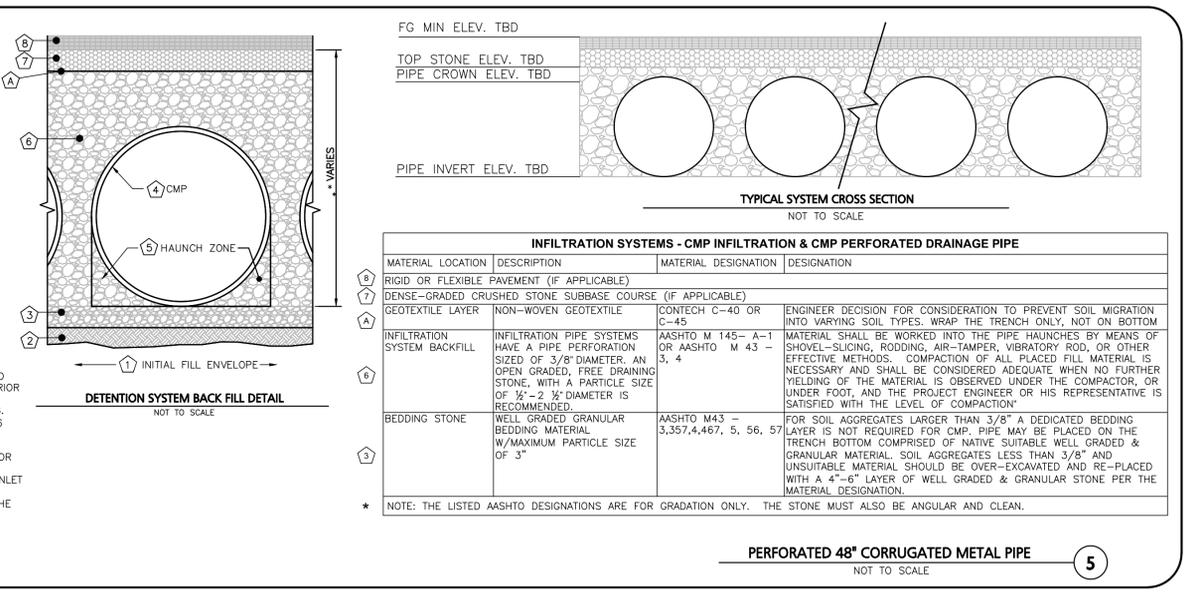
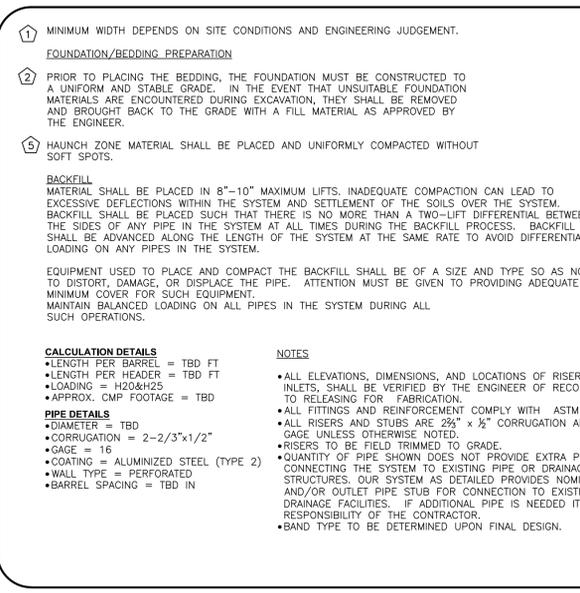
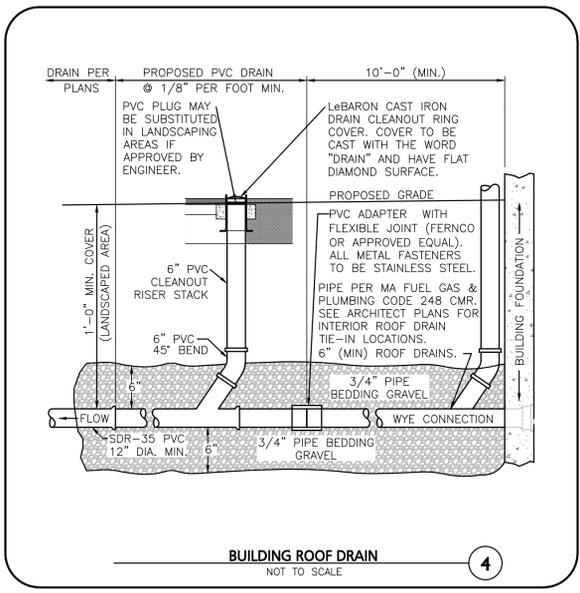
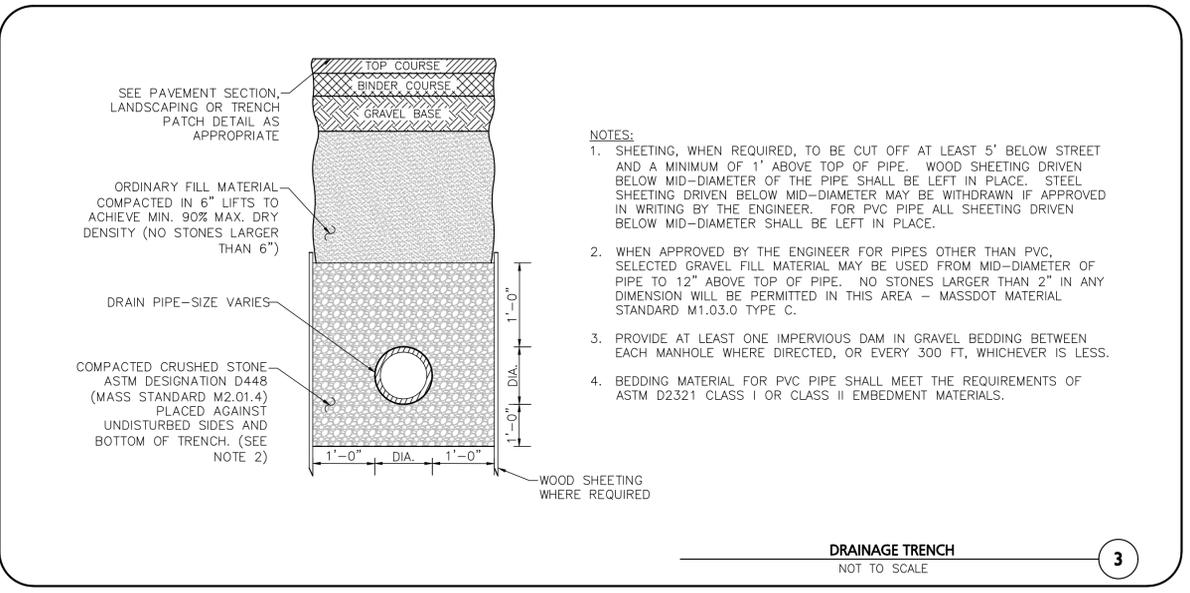
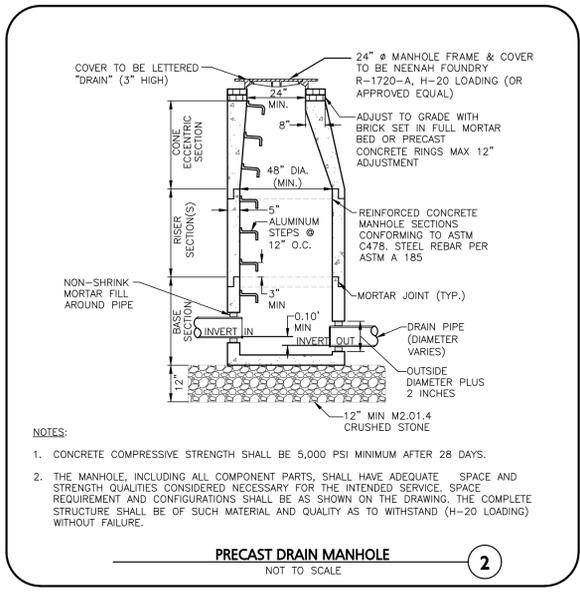
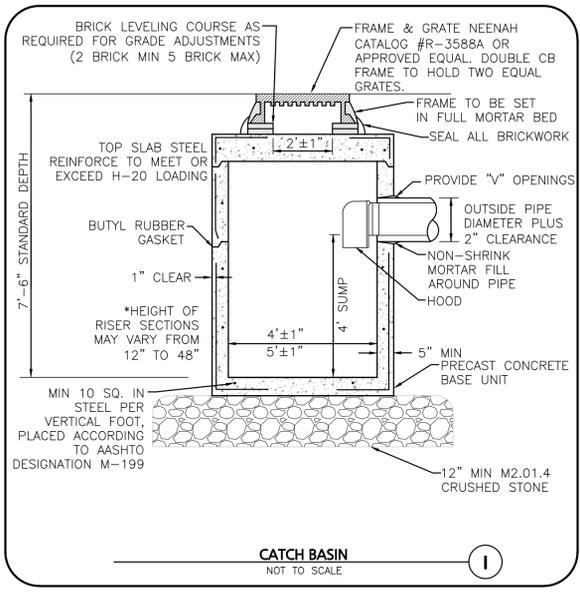
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**LOAM AND SEEDING NOTES (GENERAL LAWN MIX):**

CONTRACTOR SHALL SEED ALL DISTURBED AREAS NOT NOTED TO RECEIVE OTHER MATERIALS, AND AT AREAS SHOWN ON THE PLAN PER SPECIFICATIONS BELOW

**GENERAL LAWN MIX**

SCIENTIFIC NAME	COMMON NAME	PROPORTION BY WEIGHT	PURITY	PERCENT GERMINATION	PERCENT
FESTUCA RUBRA "RUBRA"	CREeping RED FESCUE	37%	95%	90%	90%
PAO PRAENTENSIS "BARON"	BARON KENTUCKY BLUEGRASS	40%	85%	90%	90%
LOLIUM PERENNE "PALMER"	PALMER PERENNIAL RYEGRASS	15%	95%	90%	90%
FESTUCA RUBRA COMMUTATA WILMA	WILMA CHEWINGS	8%	95%	80%	80%

- SEED TO BE SPREAD AT MINIMUM RATE OF 5 LBS. PER 1000 SQ. FT.
- ALL SEEDING (INCLUDING NEW ENGLAND WETLAND MIX SEEDS) TO BE COMPLETED "IN SEASON" BETWEEN APRIL 1 TO JUNE 15 OR AUGUST 15 TO OCTOBER 1, EXCEPT FOR RE-SEEDING OF BARE SPOTS. AT ALL SLOPED AREAS CONTRACTOR TO INSTALL COCONUT FIBER JUTE MESH NETTING ON ALL SLOPES 3:1 AND OVER. HYDROSEED ALL EXPOSED AREAS, ADD SOIL STABILIZER "FLUX TERRA HP-FGM SOIL STABILIZER" AS MANUFACTURED BY "PROFILE" TO HYDROSEED (AT RATE OF 3,000 LBS PER ACRE), AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR TO ALSO BE RESPONSIBLE FOR RE-GRADING AND RE-SEEDING ALL DISTURBED, ERODED, OR BARE SPOTS AT NO ADDITIONAL COST TO OWNER & UNTIL SLOPES ARE FULLY STABLE. CONTRACTOR RESPONSIBLE FOR ALL MAINTENANCE UNTIL FINAL ACCEPTANCE OF LAWN AREAS INCLUDING: WATERING, ADDING FERTILIZERS AND LIME AND MOWING AT NO ADDITIONAL COST TO OWNER. AFTER SEEDING, SEEDING AREAS TO BE LIGHTLY MULCHED WITH WEED FREE STRAW & CONTINUALLY WATERED EVERY DAY FOR 2 MONTHS (USE NO HAY) SO THAT SEED IS KEPT MOIST.
- COMMERCIAL FERTILIZER SHALL BE APPLIED AT THE RATE OF 25 POUNDS PER 1000 SQ. FT. OR AS RECOMMENDED BY THE TESTING AGENCY. LIME TO BE SPREAD AT THE RATE OF 100 POUNDS PER 1000 SQ. FT. OR AS RECOMMENDED BY THE TESTING AGENCY. COMMERCIAL FERTILIZER SHALL BE A COMPLETE FERTILIZER CONTAINING AT LEAST 50% OF THE NITROGEN OF WHICH IS DERIVED FROM NATURAL ORGANIZE SOURCES OF UREA FORM. IT SHALL CONTAIN THE FOLLOWING PERCENTAGES BY WEIGHT: NITROGEN (N) 10%, PHOSPHORUS (P) 6%, POTASH (K) 4%. LIME SHALL BE AN APPROVED AGRICULTURAL LIMESTONE CONTAINING NOT LESS THAN 85% OF TOTAL CARBONATES. LIMESTONE SHALL BE GROUND TO SUCH FINENESS THAT 50% WILL PASS A 100 MESH SIEVE AND 90% WILL PASS THROUGH A 20 MESH SIEVE.
- LAWN AREAS TO BE SEED BY SOWING EVENLY WITH AN APPROVED MECHANICAL SEEDER AT THE RATE OF TEN POUNDS PER 1000 SQUARE FEET.
- CONTRACTOR RESPONSIBLE FOR WATERING, MOWING, AND RESEEDING OF LAWN BARE SPOTS UNTIL A UNIFORM, HEALTHY STAND OF GRASS IS ESTABLISHED AND ACCEPTED.

**ADDITIONAL SEED MIX SPECIFICATIONS FOR SLOPES AREAS (AS NOTED ON THE PLAN):**

SEE NOTE #22 ON SHEET L-102 FOR RATE OF APPLICATION & ADDITIONAL INFORMATION

WWW.NEWP.COM OR  
Ph: (413) 548-8000 | Fx: (413) 549-4000 | info@newp.com  
New England Wetland Plants, Inc.  
820 West Street  
Amherst, MA 01002

**NEW ENGLAND EROSION CONTROL / RESTORATION MIX FOR DRY SITES:**

- |                                     |                         |
|-------------------------------------|-------------------------|
| 1. UPLAND BENTGRASS                 | AGROSTIS PERENNANS      |
| 2. ROUGH BENTGRASS/TICKLEGRASS      | AGROSTIS SCABRA         |
| 3. BLUE GRAMA                       | BOUTELOUA GRACILIS      |
| 4. CANADA WILD RYE                  | ELYMUS CANADENSIS       |
| 5. CREEPING RED FESCUE              | FESTUCA RUBRA           |
| 6. ANNUAL RYEGRASS (NATURALIZED)    | LOLIUM MULTIFLORUM      |
| 7. PERENNIAL RYEGRASS (NATURALIZED) | LOLIUM PERENNE          |
| 8. LITTLE BLUESTEM                  | SCHIZACHYRIUM SCOPARIUM |
| 9. INDIAN GRASS                     | SORGHASTRUM NUTANS      |

**(BY NEW ENGLAND WETLAND PLANTS INC)**

**EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES:**

- |                            |                      |
|----------------------------|----------------------|
| A. ELYMUS VIRGINICUS       | VIRGINIA WILD RYE    |
| B. FESTUCA RUBRA           | CREEPING RED FESCUE  |
| C. SCHIZACHYRIUM SCOPARIUM | LITTLE BLUESTEM      |
| D. ANDROPOGON GERARDII     | BIG BLUESTEM         |
| E. PANICUM VIRGATUM        | SWITCH GRASS         |
| F. VERBENA HASTATA         | BLUE VERVAIN         |
| G. AGROSTIS SCABRA         | ROUGH BENTGRASS      |
| H. ASTER NOVAE-ANGLIAE     | NEW ENGLAND ASTER    |
| I. EUPATORIUM MACULATUM    | SPOTTED JOE PYE WEED |
| J. EUPATORIUM PERFOOLIATUM | BONASET              |
| K. JUNCUS EFFUSUS          | SOFT RUSH            |
| L. SCIRPUS CYPERINUS       | WOOL GRASS           |

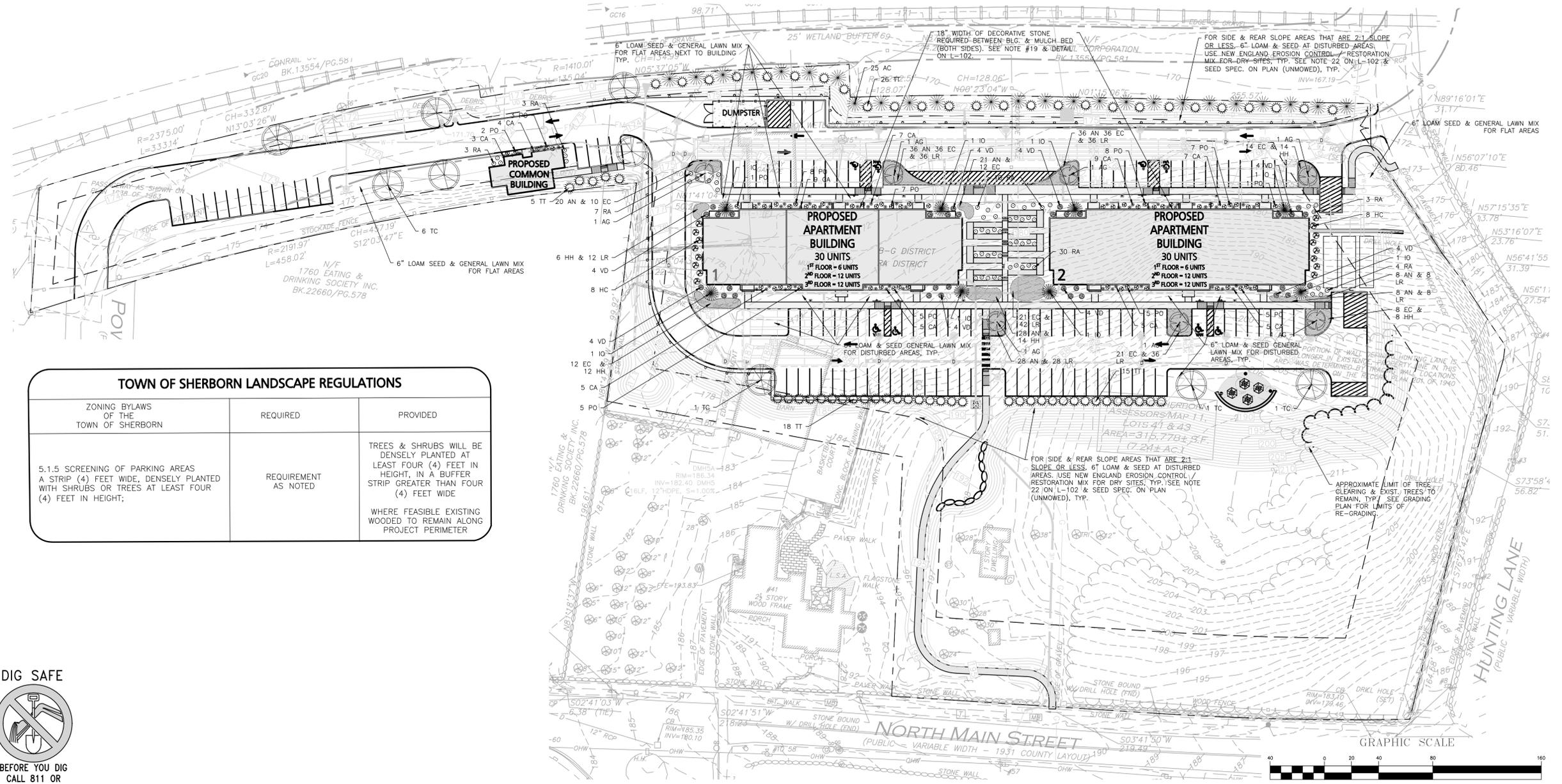
**GENERAL NOTES:**

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- ALL LANDSCAPED AREAS WITH SHRUBS, TREES, AND PERENNIALS TO HAVE 18" MINIMUM DEPTH OF TOPSOIL. EIGHTEEN INCHES OF TOPSOIL AROUND TREES AND SHRUBS DOES NOT INCLUDE AMENDED PLANTING SOIL WITHIN TREE / SHRUB PIT FOR FULL DEPTH OF ROOTBALLS. SEE PLANTING DETAILS FOR PLANTING DEPTH AT SHRUBS AND TREES. ALL AREAS OF LOAM AND SEED OR LOAM & SOD TO HAVE 6" MINIMUM DEPTH OF TOPSOIL. TOPSOIL TO BE TESTED BY CONTRACTOR, AND APPROVED BY AB&M PRIOR TO PURCHASE AND OR PLACEMENT. GENERAL CONTRACTOR, DEMOLITION CONTRACTOR, AND LANDSCAPE CONTRACTOR TO COORDINATE PROPER DEPTH OF EXISTING MATERIAL REMOVAL ACROSS SITE SO THAT 18" MINIMUM AND 6" MINIMUM DEPTHS OF PROPOSED TOPSOIL NOTED ABOVE ARE MET AT NO ADDITIONAL COST TO OWNER. SEE TOPSOIL DETAIL.
- SEE SHEET L-102 FOR ADDITIONAL LANDSCAPE INFORMATION.



**LEGEND**

- DECIDUOUS TREE
- EVERGREEN TREE
- SHRUBS
- PERENNIALS/GROUNDCOVER
- WETLAND SEED MIX
- EROSION CONTROL SEED MIX
- TREELINE



**TOWN OF SHERBORN LANDSCAPE REGULATIONS**

ZONING BYLAWS OF THE TOWN OF SHERBORN	REQUIRED	PROVIDED
5.1.5 SCREENING OF PARKING AREAS A STRIP (4) FEET WIDE, DENSELY PLANTED WITH SHRUBS OR TREES AT LEAST FOUR (4) FEET IN HEIGHT;	REQUIREMENT AS NOTED	TREES & SHRUBS WILL BE DENSELY PLANTED AT LEAST FOUR (4) FEET IN HEIGHT, IN A BUFFER STRIP GREATER THAN FOUR (4) FEET WIDE  WHERE FEASIBLE EXISTING WOODED TO REMAIN ALONG PROJECT PERIMETER

**DIG SAFE**

BEFORE YOU DIG  
CALL 811 OR  
1-888-DIG-SAFE  
1-888-344-7233

Digitally signed by Michael A. Malynowski  
Civil No. 47269  
Date: 2021.04.09 14:09:24 -04'00'

REGISTERED LANDSCAPE ARCHITECT FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
4	04-09-2021	REVS PER PEER REVIEW
3	10-01-2020	ISSUED FOR ZBA APPLICATION
2	05-21-2020	MISCELLANEOUS REVISIONS
1	01-21-2020	MISCELLANEOUS REVISIONS

PROJECT: **BARSKY ESTATE REALTY TRUST**  
23 HUNTING LANE  
SHERBORN, MA 01770

PROJECT: **THE PINES RESIDENCES**  
41 NORTH MAIN STREET  
SHERBORN, MA

PROJECT NO. 2513-01A DATE: 10-23-20  
SCALE: 1" = 40' DWG. NAME: C2513-01A

DESIGNED BY: ARM CHECKED BY: MAM

PREPARED BY:

**ALLEN & MAJOR ASSOCIATES, INC.**  
civil engineering • land surveying  
environmental consulting • landscape architecture  
www.allenmajor.com

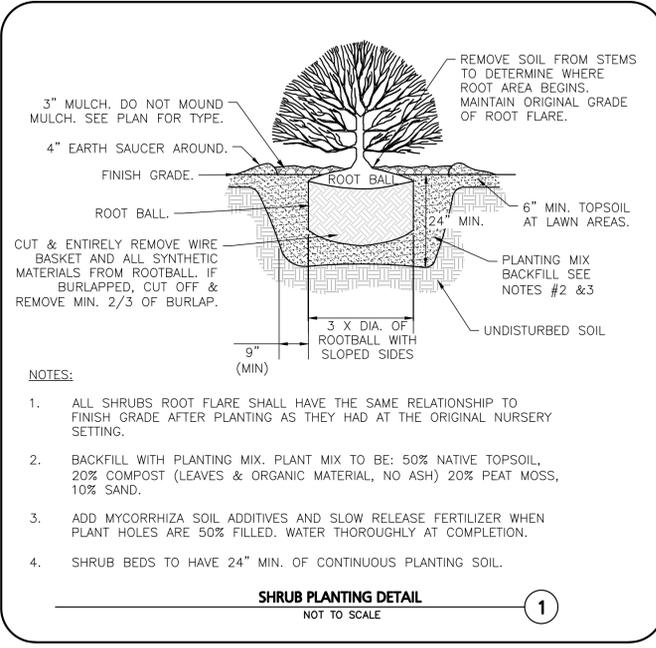
100 COMMERCE WAY  
WOBBURN MA 01801  
TEL: (781) 935-6889  
FAX: (781) 935-2896

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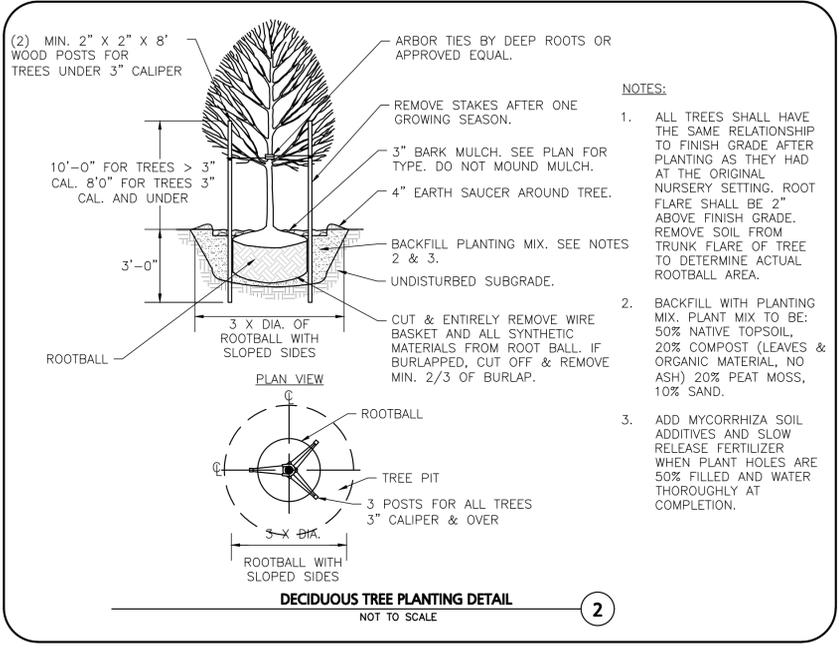
DRAWING TITLE: **LANDSCAPE PLAN** SHEET No. **L-101**

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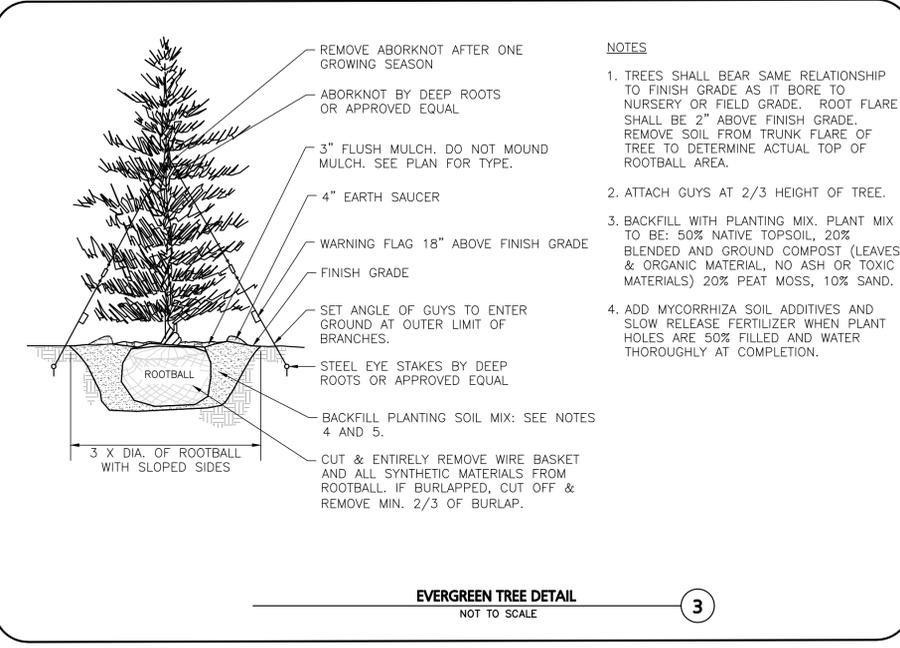
- NOTES:**
- ALL SHRUBS ROOT FLARE SHALL HAVE THE SAME RELATIONSHIP TO FINISH GRADE AFTER PLANTING AS THEY HAD AT THE ORIGINAL NURSERY SETTING.
  - BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH) 20% PEAT MOSS, 10% SAND.
  - ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED. WATER THOROUGHLY AT COMPLETION.
  - SHRUB BEDS TO HAVE 24" MIN. OF CONTINUOUS PLANTING SOIL.

**SHRUB PLANTING DETAIL**  
NOT TO SCALE



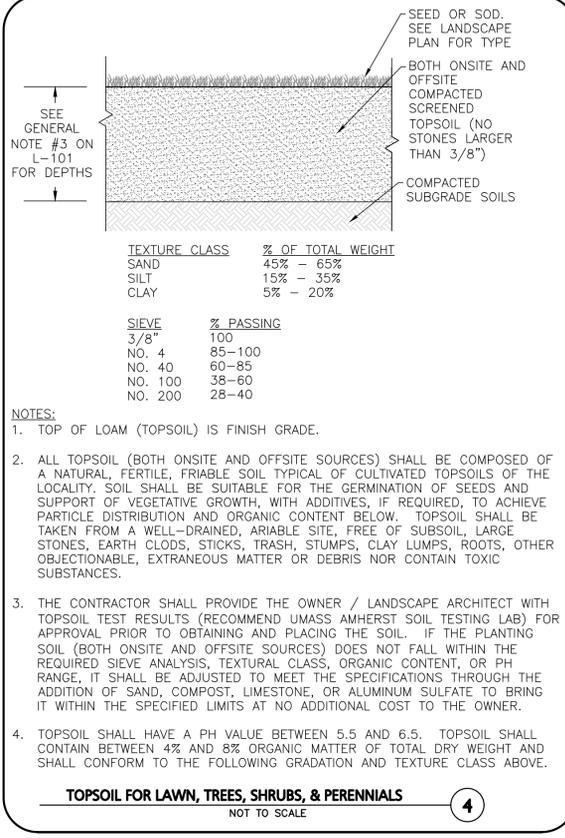
- NOTES:**
- ALL TREES SHALL HAVE THE SAME RELATIONSHIP TO FINISH GRADE AFTER PLANTING AS THEY HAD AT THE ORIGINAL NURSERY SETTING. ROOT FLARE SHALL BE 2" ABOVE FINISH GRADE. REMOVE SOIL FROM TRUNK FLARE OF TREE TO DETERMINE ACTUAL ROOTBALL AREA.
  - BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH) 20% PEAT MOSS, 10% SAND.
  - ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED AND WATER THOROUGHLY AT COMPLETION.

**DECIDUOUS TREE PLANTING DETAIL**  
NOT TO SCALE



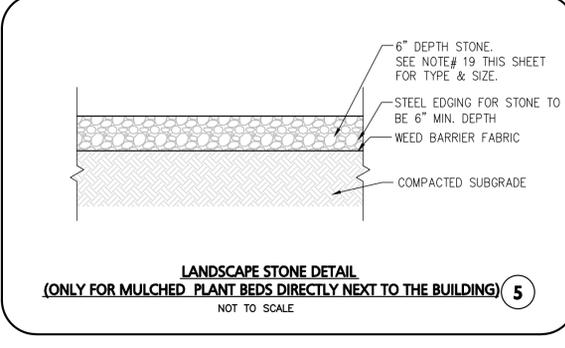
- NOTES:**
- TREES SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS IT BORE TO NURSERY OR FIELD GRADE. ROOT FLARE SHALL BE 2" ABOVE FINISH GRADE. REMOVE SOIL FROM TRUNK FLARE OF TREE TO DETERMINE ACTUAL TOP OF ROOTBALL AREA.
  - ATTACH GUYS AT 2/3 HEIGHT OF TREE.
  - BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% BLENDED AND GROUND COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH OR TOXIC MATERIALS) 20% PEAT MOSS, 10% SAND.
  - ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED AND WATER THOROUGHLY AT COMPLETION.

**EVERGREEN TREE DETAIL**  
NOT TO SCALE



- NOTES:**
- TOP OF LOAM (TOPSOIL) IS FINISH GRADE.
  - ALL TOPSOIL (BOTH ONSITE AND OFFSITE SOURCES) SHALL BE COMPOSED OF A NATURAL, FERTILE, FRIABLE SOIL TYPICAL OF CULTIVATED TOPSOILS OF THE LOCALITY. SOIL SHALL BE SUITABLE FOR THE GERMINATION OF SEEDS AND SUPPORT OF VEGETATIVE GROWTH, WITH ADDITIVES, IF REQUIRED, TO ACHIEVE PARTICLE DISTRIBUTION AND ORGANIC CONTENT BELOW. TOPSOIL SHALL BE TAKEN FROM A WELL-DRAINED, ARIABLE SITE, FREE OF SUBSOIL, LARGE STONES, EARTH CLODS, STICKS, TRASH, STUMPS, CLAY LUMPS, ROOTS, OTHER OBJECTIONABLE, EXTRANEOUS MATTER OR DEBRIS NOR CONTAIN TOXIC SUBSTANCES.
  - THE CONTRACTOR SHALL PROVIDE THE OWNER / LANDSCAPE ARCHITECT WITH TOPSOIL TEST RESULTS (RECOMMEND UMASS AMHERST SOIL TESTING LAB) FOR APPROVAL PRIOR TO OBTAINING AND PLACING THE SOIL. IF THE PLANTING SOIL (BOTH ONSITE AND OFFSITE SOURCES) DOES NOT FALL WITHIN THE REQUIRED SIEVE ANALYSIS, TEXTURAL CLASS, ORGANIC CONTENT, OR PH RANGE, IT SHALL BE ADJUSTED TO MEET THE SPECIFICATIONS THROUGH THE ADDITION OF SAND, COMPOST, LIMESTONE, OR ALUMINUM SULFATE TO BRING IT WITHIN THE SPECIFIED LIMITS AT NO ADDITIONAL COST TO THE OWNER.
  - TOPSOIL SHALL HAVE A PH VALUE BETWEEN 5.5 AND 6.5. TOPSOIL SHALL CONTAIN BETWEEN 4% AND 8% ORGANIC MATTER OF TOTAL DRY WEIGHT AND SHALL CONFORM TO THE FOLLOWING GRADATION AND TEXTURE CLASS ABOVE.

**TOPSOIL FOR LAWN, TREES, SHRUBS, & PERENNIALS**  
NOT TO SCALE



**LANDSCAPE STONE DETAIL**  
(ONLY FOR MULCHED PLANT BEDS DIRECTLY NEXT TO THE BUILDING)  
NOT TO SCALE

**LANDSCAPE NOTES**

- ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF SHERBORN, MA.
- PLANTING PLAN IS DIAGRAMMATIC IN NATURE. FINAL PLACEMENT OF PLANTS TO BE APPROVED BY THE LANDSCAPE ARCHITECT IN THE FIELD.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES, ANY PERMITTING AGENCIES, AND "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS IN ADVANCE OF ANY WORK THAT WILL REQUIRE EXCAVATION. CONTRACTOR SHALL NOTIFY THE OWNERS REPRESENTATIVE OF ANY CONFLICTS IN WRITING.
- NO PLANT MATERIAL SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA, ANY TREES NOTED AS "SEAL OR SELECTED SPECIMEN" SHALL BE TAGGED AND SEALED BY THE LANDSCAPE ARCHITECT.
- ALL TREES SHALL BE BALLED AND BURLAPPED (B&B) UNLESS OTHERWISE NOTED OR APPROVED BY THE OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL VERIFY QUANTITIES SHOWN ON PLANT LIST. QUANTITIES SHOWN ON PLANS SHALL GOVERN OVER PLANT LIST.
- ANY PROPOSED PLANT SUBSTITUTIONS MUST BE APPROVED IN WRITING BY OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT PRIOR TO PURCHASE.
- ALL PLANT MATERIALS INSTALLED SHALL MEET THE GUIDELINES ESTABLISHED BY THE STANDARDS FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF ACCEPTANCE. ANY PLANT MATERIALS WHICH DIE WITHIN THE ONE YEAR PLANT GUARANTEE PERIOD WILL BE REPLACED BY THE LANDSCAPE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNERS. OWNERS TO COORDINATE DIRECTLY WITH THE LANDSCAPE CONTRACTOR FOR REPLACEMENT PLANTINGS.
- ALL DISTURBED AREAS NOT OTHERWISE NOTED SHALL RECEIVE 6" OF SUITABLE LOAM & SEED. LAWNS WITH 3:1 OR GREATER SLOPES SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET.
- ANY FALL TRANSPLANTING HAZARD PLANTS SHALL BE DUG IN THE SPRING AND STORED FOR FALL PLANTING.
- TREES SHALL HAVE A MINIMUM CALIPER AS INDICATED ON THE PLANTING SCHEDULE TAKEN ONE FOOT ABOVE THE ROOT CROWN.
- ALL PLANT BEDS AND TREE SAUCERS TO RECEIVE 3" OF PINE BARK MULCH. GROUND COVER AREAS SHALL RECEIVE 1" OF PINE BARK MULCH
- ALL DECIDUOUS TREES ADJACENT TO WALKWAYS AND ROADWAYS SHALL HAVE A BRANCHING PATTERN TO ALLOW FOR A MINIMUM OF 7' OF CLEARANCE BETWEEN THE GROUND AND THE LOWEST BRANCH.
- ALL TREE STAKES SHALL BE STAINED DARK BROWN.
- CONTRACTOR RESPONSIBLE FOR WATERING, AND RESEEDING OF BARE SPOTS UNTIL A UNIFORM STAND OF VEGETATION IS ESTABLISHED AND ACCEPTED.
- ALL PARKING ISLANDS PLANTED WITH SHRUBS SHALL HAVE 18" OF TOP SOIL. FINISH GRADE SHALL BE EQUAL TO THE TOP OF CURB.
- SOIL SAMPLES, TESTS, AND SHOP DRAWINGS SHALL BE PROVIDED TO THE LANDSCAPE ARCHITECT OR THE OWNER FOR APPROVAL PRIOR TO CONSTRUCTION.
- AN MINIMUM 18" WIDE BARRIER OF 1-1/2" GRAY OR TAN PEASTONE SHALL BE INSTALLED IN ALL PLANT BEDS WHICH DIRECTLY ABUT THE BUILDINGS. NO MULCH IS ALLOWED WITHIN 18" OF ALL BUILDINGS PER THE LATEST EXECUTIVE OFFICE OF PUBLIC SAFETY AND SECURITY DEPARTMENT OF FIRE SERVICES REGULATION (527 CMR 17.00). INSTALL 6" DEEP OF PEASTONE WITH MIRAFI WEED FABRIC BENEATH AND STEEL EDGING BETWEEN THE PEASTONE AND ADJACENT MULCH BED. PROVIDE SHOP DRAWINGS TO A&M FOR APPROVAL PRIOR TO PURCHASE OF PEASTONE, MIRAFI WEED FABRIC & STEEL EDGING.
- AS THERE IS NO PROPOSED UNDERGROUND IRRIGATION SYSTEM, AFTER PLANTINGS & LAWNS & SEEDING AREAS HAVE BEEN INSTALLED, LANDSCAPE CONTRACTOR RESPONSIBLE TO TEMPORARILY WATER ALL INSTALLED PLANTINGS, SEEDING AREAS, & LAWN AREAS MIN. 4 TIMES A WEEK DURING INITIAL ESTABLISHMENT PERIOD OF 6 MONTHS AFTER ALL LANDSCAPING IS INSTALLED. BUILDING TO INCLUDE HOSE BIBS EVERY 50 FT. FOR WATERING WITH HOSE AND SPRINKLERS OF LANDSCAPING. CONTRACTOR'S OPTION TO ALSO WATER FROM WATERING TRUCK.
- PRIOR TO LAYING TOPSOIL, ALL SUBSOIL (BELOW PROPOSED TOPSOIL) TO BE TILLED TO A DEPTH OF AT LEAST 18" TO REMOVE CONSTRUCTION COMPACTION AND ALLOW FOR PROPER DRAINAGE OF TOPSOILS.

**PLANTING SCHEDULE- TREES, SHRUBS, & PERENNIALS**

KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	MIN. SIZE	SPACING	COMMENTS
<b>DECIDUOUS TREES</b>						
AG	7	ACER GRISEUM	PAPERBACK MAPLE	2" CAL.	AS SHOWN	B&B
TC	9	TILIA CORDATA	LITTLELEAF LINDEN	2.5" CAL.	AS SHOWN	B&B
<b>EVERGREEN TREES</b>						
AC	25	ABIES CONCOLOR	WHITE FIR	8'-10'	AS SHOWN	B&B
IO	8	ILEX OPACA	AMERICAN HOLLY	6'-8'	AS SHOWN	B&B
TT	64	THUJA 'GREEN GIANT'	GREEN GIANT ARBORVITAE	8'-10'	AS SHOWN	B&B
<b>SHRUBS</b>						
CA	59	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	2'-2.5' HT.	AS SHOWN	POTTED
HQ	16	HYDRANGEA QUERCIFOLIA	OAKLEAF HYDRANGEA	2'-3' HT.	AS SHOWN	POTTED
PO	58	PHYSOCARPUS OPULFOLIUS	NINEBARK	2'-3' HT.	AS SHOWN	POTTED
RA	60	RHUS AROMATICA	FRAGRANT SUMAC	1'-2' HT.	AS SHOWN	POTTED
VD	32	VIRBURNUM DENTATUM	ARROWWOOD	3'-4' HT.	AS SHOWN	B&B
<b>PERENNIALS</b>						
AN	185	ASCLEPIAS TUBEROSA	BUTTERFLYWEED	1 GAL.	12" O.C.	STAGGERED
EC	170	ECHINACEA PURPUREA	PURPLECONE FLOWER	1 GAL.	18" O.C.	STAGGERED
HH	44	HEMEROCALLIS	DAYLILY	1 GAL.	18" O.C.	STAGGERED
LR	206	LIRIOPE MUSCARI	LIRIOPE	1 GAL.	12" O.C.	STAGGERED

**22. SEEDING OF SLOPE AREAS:**  
SEEDING SHALL OCCUR IN THE DRY & AFTER SLOPES ARE COMPACTED. IT IS IMPORTANT THAT THE SLOPES ARE SEEDED AT THE BEGINNING OF THE PROJECT. THE SEED WILL NEED A MIN. OF 6 MONTHS TO INITIALLY ESTABLISH PRIOR TO OCCUPANCY SO THAT THERE IS LIMITED EROSION & SLOPE FAILURE. INSTALL NEW ENGLAND EROSION CONTROL RESTORATION MIX FOR DRY SITES PER PLAN AND SPREAD AT A RATIO OF 1 LB PER 600 SQ. FT. LIGHTLY RAKE SOIL TO ENSURE GOOD SEED-TO-SOIL CONTACT.

ALL SEEDING TO BE COMPLETED "IN SEASON" BETWEEN APRIL 1 TO JUNE 15 OR AUGUST 15 TO OCTOBER 1, EXCEPT FOR RE-SEEDING OF BARE SPOTS. AT ALL SLOPED AREAS CONTRACTOR TO INSTALL COCONUT FIBER JUTE MESH NETTING ON ALL SLOPES EQUAL TO 3:1 AND GREATER. HYDROSEED ALL EXPOSED AREAS, ADD SOIL STABILIZER "FLUX TERRA HP-FGM SOIL STABILIZER" AS MANUFACTURED BY "PROFILE" TO HYDROSEED (AT RATE OF 3,000 LBS PER ACRE) AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR TO ALSO BE RESPONSIBLE FOR RE-GRADING AND RE-SEEDING ALL DISTURBED, ERODED, OR BARE SPOTS AT NO ADDITIONAL COST TO OWNER & UNTIL SLOPES ARE FULLY STABLE. CONTRACTOR RESPONSIBLE FOR ALL MAINTENANCE UNTIL FINAL ACCEPTANCE OF LAWN AREAS INCLUDING: WATERING, ADDING FERTILIZERS AND LIME AND MOWING AT NO ADDITIONAL COST TO OWNER.

AFTER SEEDING, ALL AREAS TO BE LIGHTLY MULCHED WITH WEED FREE STRAW & CONTRACTOR RESPONSIBLE TO KEEP WATERED EVERY DAY UNTIL SEED IS ESTABLISHED & APPROVED BY A&M LANDSCAPE ARCHITECT (USE NO HAY) SO THAT SEED IS KEPT MOIST. FOR SPREADING OF THE SEED WITH DRY DETENTION BASINS, WATER LEVELS MAY BE LOWERED IN THE DETENTION AREAS BY RELYING ON DRY SEASON AND OR DRY SPELLS; OR MAY BE ACCOMPLISHED THROUGH THE USE OF DEWATERING METHODS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ANY DEWATERING METHODS FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. WATER FROM ANY DEWATERING OPERATION SHALL BE TREATED TO REDUCE TOTAL SUSPENDED SOLIDS AND BE IN COMPLIANCE WITH STATE AND FEDERAL STANDARDS.

Digitally signed by Michael Malynowski  
Date: 2021.04.09 14:11:06 -0400

REV	DATE	DESCRIPTION
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APPLICANT/OWNER:  
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PROJECT:  
**THE PINES RESIDENCES**  
41 NORTH MAIN STREET  
SHERBORN, MA

PROJECT NO. 2513-01A DATE: 10-23-20  
SCALE: NTS DWG. NAME: C2513-01A  
DESIGNED BY: ARM CHECKED BY: MAM

**ALLEN & MAJOR ASSOCIATES, INC.**  
civil engineering • land surveying  
environmental consulting • landscape architecture  
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DRAWING TITLE: **LANDSCAPE DETAILS** SHEET NO. **L-102**