

LOCUS MAP SCALE: 1"=1000'

### Drawing Index:

No.	Drawing Title
1	COVER SHEET
2	GENERAL NOTES, LEGEND, SYMBOLS & ABBREVIATIONS
3	EXISTING CONDITIONS PLAN
4	LOTTING PLAN
5	SITE PLAN
6	GRADING & UTILITY PLAN
7	ROADWAY PROFILES
8-12	CONSTRUCTION DETAILS
13	EROSION CONTROL DETAILS

### Owner

Steven J. Sheftel, Trustee  
The Steven J. Sheftel Family Trust  
2697 N. Ocean Blvd., #F510  
Boca Raton, FL 33431

### Applicant:

McSharry, Bros., Inc.  
7 Leah Drive  
Rockland, MA 02370

### Engineer/Surveyor:

McKenzie Engineering Group, Inc.  
150 Longwater Drive  
Suite 101  
Norwell, MA 02061

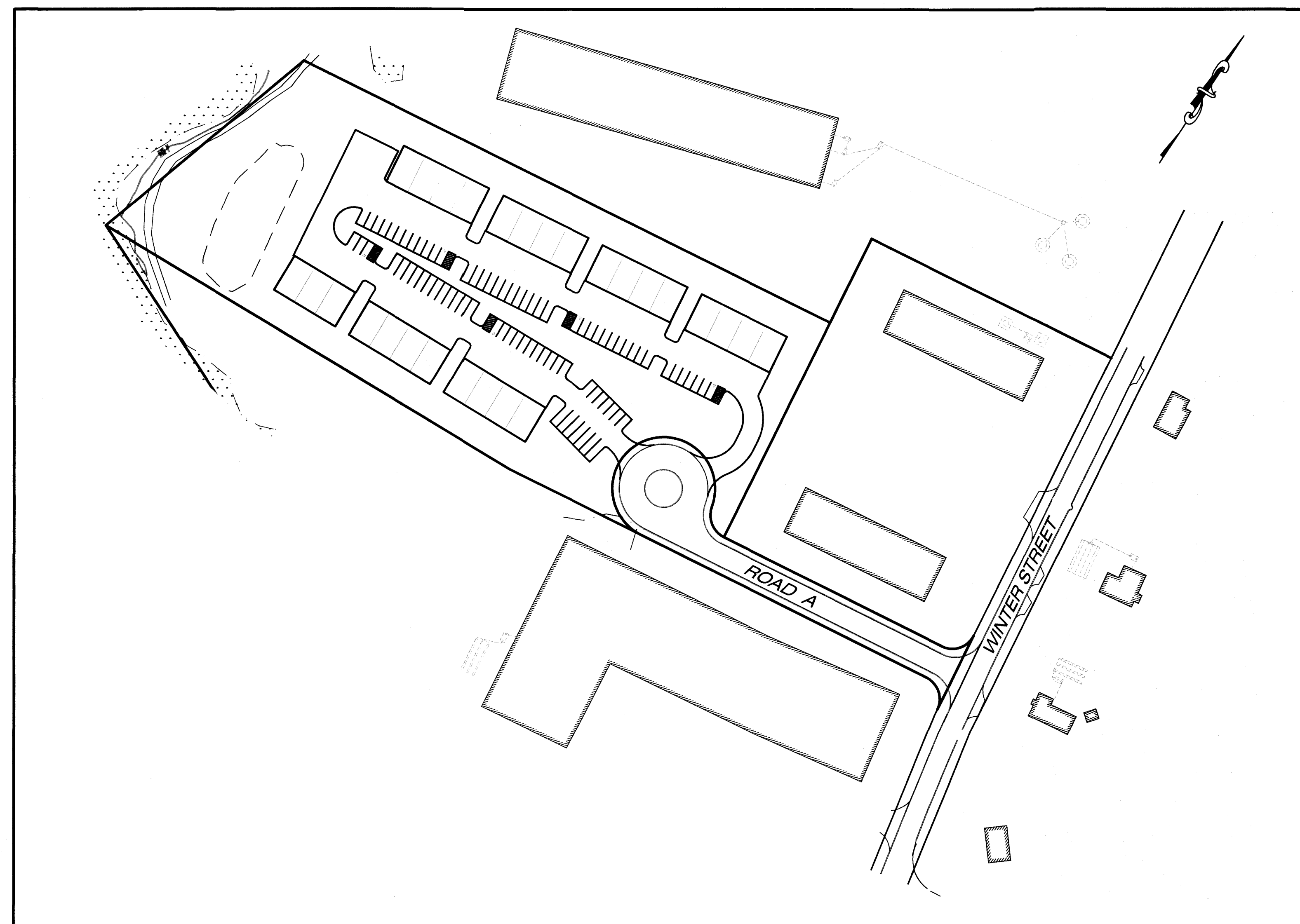
# WINTER STREET

(Assessors Map 76, Lot 18)

## Definitive Subdivision Plan

in

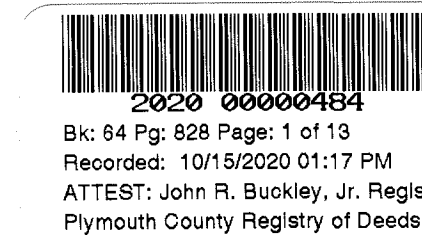
## Hanover, Massachusetts



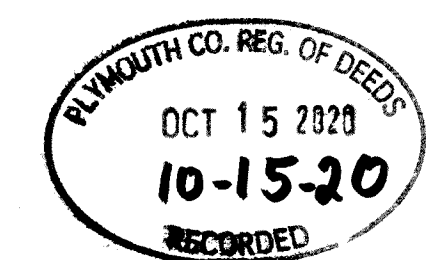
SCALE: 1" = 100'

Issued Date: July 2, 2018  
Revised: September 18, 2018

McKenzie Engineering Group, Inc. Consulting Engineers  
150 Longwater Drive, Suite 101, Norwell, Massachusetts 02061



Plymouth County Registry of Deeds  
PLAN BOOK 64 PAGE 828



20-484

FOR REGISTRY USE ONLY

I HEREBY CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS DATED JANUARY 2, 1976 AND REVISED JANUARY 12, 1988.

BRADLEY C. MCKENZIE, P.E. MCKENZIE ENGINEERING GROUP, INC.

I, Bradley C. McKenzie, CLERK OF THE TOWN OF HANOVER, HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD WAS RECEIVED ON 7/2/18 AND RECORDED AT THIS OFFICE. NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT FOLLOWING SUCH RECEIPT AND RECORDING OF SAID NOTICE.

DATE 7/2/18 TOWN CLERK Bradley C. McKenzie

APPROVED 7/2/18, SUBJECT TO COVENANT CONDITIONS SET FORTH IN A COVENANT EXECUTED BY Steven J. Sheftel, DATED 7/2/18 AND TO BE RECORDED HERewith.

APPROVAL UNDER THE SUBDIVISION CONTROL LAW REQUIRED

DATE OF APPLICATION: 7/2/18

DATE OF HEARING: 8/13/18

DATE OF APPROVAL: 8/12/19

DATE OF ENDORSEMENT: 3/9/20

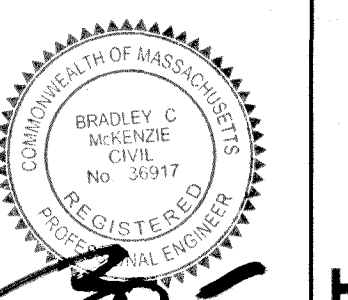
Bradley C. McKenzie  
Steven J. Sheftel  
Bradley C. McKenzie  
HANOVER PLANNING BOARD

REV	DATE	DESCRIPTION	BY	APP
1	9/18/18	PER CONSULTANT REVIEW	AWL	BCM

**MEG**  
MCKENZIE ENGINEERING GROUP  
Assinippi Office Park  
150 Longwater Drive, Suite 101  
Norwell, MA 02061  
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www.mckeng.com

**DEFINITIVE SUBDIVISION PLAN**  
**WINTER STREET**  
(ASSESSORS MAP 76, LOT 18)  
**WINTER STREET**  
**HANOVER, MASSACHUSETTS**

REGISTERED PROFESSIONAL ENGINEER:



APPLICANT:  
**MC SHARRY BROS., INC.**  
7 LEAH DRIVE  
ROCKLAND, MASSACHUSETTS 02370

PERMIT SET

DRAWN BY: AWL  
DESIGNED BY: AWL  
CHECKED BY: BCM  
APPROVED BY: BCM  
DATE: JULY 2, 2018  
SCALE: AS NOTED  
PROJECT NO.: 217-169  
DWG. TITLE:

Cover Sheet

DWG. No: 10F13

© MCKENZIE ENGINEERING GROUP, INC.

FILE LOCATION: M:\217-169\Draws\217-169 Definitive.dwg  
(1-01-13) 20-484

ALONE CW 1368 Ignore Covenant here with NO LC

Abbreviations

AC	ASBESTOS CEMENT
BIT	BITUMINOUS
BOLL	BOLLARD
CB	CATCH BASIN
CB/DH	CONCRETE BOUND WITH DRILL HOLE
CB/LCD	CONCRETE BOUND WITH LAND COURT DISK
CB/LP	CONCRETE BOUND WITH LEAD PLUG
CCB	CAPE COD BERM
CI	CAST IRON
CLDI	CEMENT LINED DUCTILE IRON
CLF	CHAINLINK FENCE
CONC.	CONCRETE
CONN.	CONNECTION
D	DRAIN
DMH	DRAIN MANHOLE
ELEC	ELECTRIC
ELEV.	ELEVATION
EM	ELECTRIC METER
F.F.	FIRST FLOOR
FND	FOUND
FSB	FIELDSTONE BOUND
GAR.	GARAGE
G	GAS
GM	GAS METER
GUY	GUY WIRE
LP	LIGHT POLE
M	MONITORING WELL
(M)	MARKED
N/F	NOW OR FORMERLY
NO.	NUMBER
OHW	OVERHEAD WIRES
PL	PLASTIC
PROP	PROPOSED
PVC	POLYVINYL CHLORIDE PIPE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RET	RETAINING
SB	STONE BOUND
SB/DH	STONE BOUND WITH DRILLHOLE
S/C	SLOPED GRANITE CURB
SMH	SEWER MANHOLE
STH	STEEL
T	TEST PIT
TFC	TELEPHONE, ELECTRIC, CABLE
TYP	TYPICAL
UGE	UNDERGROUND ELECTRIC
UP	UTILITY POLE
VGC	VERTICAL GRANITE CURB

Legend

Existing	Proposed	Description
x 100.50	+100.50	SPOT ELEVATIONS
		HYDRANT
		WATER GATE
		WATER SERVICE
		UTILITY POLE
		GUY WIRE
		MAILBOX
		DRAIN MANHOLE
		CATCH BASIN
		FLARED END SECTION
		MONITORING WELL
		TEST PIT
		SIGN
		GRANITE OR CONCRETE BOUND
		IRON PIN
		CONIFEROUS TREE
		DECIDUOUS TREE
		MAJOR CONTOUR
		MINOR CONTOUR
		CHAINLINK FENCE
		OVERHEAD WIRES
		WATER LINE
		GAS LINE
		UNDERGROUND ELECTRIC
		STONE WALL
		TREELINE

General Notes

- DEED REFERENCE: PLYMOUTH COUNTY REGISTRY OF DEEDS. DEED BOOK 34855, PAGE 265
- ZONING: LOCUS IS SITUATED WITHIN THE INDUSTRIAL ZONING DISTRICT.  
DIMENSIONAL REQUIREMENTS  
LOT SIZE 44,000 S.F. (UPLAND)  
FRONTAGE 200 FT.  
BLDG. SETBACKS 75 FT. FRONT YARD  
25 FT. SIDE YARD  
50 FT. REAR YARD  
LOT COVERAGE 60%
- TAX MAP REFERENCE: LOCUS IS SHOWN AS LOT 18 ON THE TOWN OF HANOVER ASSESSOR'S MAP 76.
- AQUIFER PROTECTION: LOCUS IS NOT SITUATED WITHIN A WATER RESOURCE PROTECTION OVERLAY DISTRICT OR A DEP. ZONE II: WELLHEAD PROTECTION AREA.
- WETLANDS: WETLAND RESOURCE AREAS WERE DELINEATED BY ENVIRONMENTAL CONSULTING CONSULTING AND RESTORATION ON DECEMBER 12, 2017.
- FEMA: LOCUS FALLS WITHIN ZONE AE AND ZONE X AS SHOWN ON THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 25023C02014, WHICH BEARS AN EFFECTIVE DATE OF JULY 17, 2012.
- EXISTING CONDITIONS: EXISTING TOPOGRAPHIC INFORMATION AND PROPERTY LINES SHOWN HEREON ARE THE RESULT OF AN ON THE GROUND FIELD SURVEY PERFORMED BY MCKENZIE ENGINEERING GROUP, INC. BETWEEN DECEMBER OF 2017 AND MARCH OF 2018.
- DATUM: ALL ELEVATIONS, SHOWN HEREON, ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88).
- EXISTING UTILITIES: UTILITY INFORMATION FROM ABOVE GROUND OBSERVED EVIDENCE IN CONJUNCTION WITH DIG SAFE MARKINGS AND RECORD PLANS. THE LAND SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE LAND SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM AVAILABLE INFORMATION AND CONSTRUCTION AS THE LAND SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. BEFORE CONSTRUCTION CALL DIG SAFE SYSTEMS, INC. AT 1-888-344-7233.
- FIELD CHANGES: ANY CHANGE IN THE FIELD CONDITIONS SHOULD BE REPORTED TO THE ENGINEER TO INSURE THAT ANY MODIFICATIONS TO THE ORIGINAL DESIGN ARE PROPER AND ADEQUATE TO SERVE THE PROJECT'S NEEDS, AND COMPLY WITH THE APPLICABLE STANDARDS AND REGULATIONS.
- GENERAL CONSTRUCTION: ALL CONSTRUCTION SHALL CONFORM TO THE RULES AND REGULATIONS OF THE TOWN OF HANOVER PLANNING BOARD AND DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS.
- NHESP: THE SUBJECT PROPERTY DOES NOT FALL WITHIN THE NATURAL HERITAGE ENDANGERED SPECIES PROGRAM PRIORITY HABITAT AS SHOWN ON THE MASSGIS.

Plymouth County Registry of Deeds  
PLAN BOOK **64** PAGE **829**

FOR REGISTRY USE ONLY

I HEREBY CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS DATED JANUARY 2, 1976 AND REVISED JANUARY 12, 1988.

*Bradley C. McKenzie*  
BRADLEY C. MCKENZIE, P.E. MCKENZIE ENGINEERING GROUP, INC.

I, *Bradley C. McKenzie*, CLERK OF THE TOWN OF HANOVER, HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD WAS RECEIVED ON *8/13/18* AND RECORDED AT THIS OFFICE. NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT FOLLOWING SUCH RECEIPT AND RECORDING OF SAID NOTICE.

*3/9/20* *Bradley C. McKenzie*  
DATE TOWN CLERK

APPROVED \_\_\_\_\_, SUBJECT TO COVENANT CONDITIONS SET FORTH IN A COVENANT EXECUTED BY \_\_\_\_\_, DATED \_\_\_\_\_, AND TO BE RECORDED HEREWITH.

APPROVAL UNDER THE SUBDIVISION CONTROL LAW REQUIRED

DATE OF APPLICATION: *7/2/18*

DATE OF HEARING: *8/13/18*

DATE OF APPROVAL: *8/12/19*

DATE OF ENDORSEMENT: *3/9/20*

*Maghan Bragadi*  
*James A. Bragadi*  
*Maghan Bragadi*  
HANOVER PLANNING BOARD

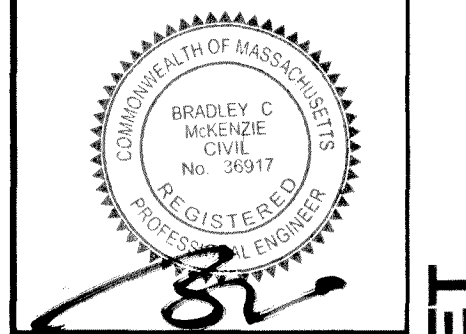
List of Waivers Requested from the Rules and Regulations Governing the Subdivision of Land in Hanover Massachusetts (June 1998)

- SECT. IV.A.1.b: STREETS, LOCATION  
REQUIRED: "PROVISION SATISFACTORY TO THE PLANNING BOARD SHALL BE MADE FOR THE PROPER PROJECTION OF STREETS, OR FOR ACCESS TO ADJOINING PROPERTY WHICH IS NOT YET SUBDIVIDED."  
PROVIDED: NO PROJECTION OF STREET TO ADJOINING PROPERTY.
- SECT. IV.A.2.e: STREETS, ALIGNMENT  
REQUIRED: "PROPERTY LINES AT STREET INTERSECTIONS SHALL BE ROUNDED OR CUT BACK TO PROVIDE FOR A CURB RADIUS OF NOT LESS THAN FORTY (40) FEET."  
PROVIDED: THE PROPOSED CURB RADIUS AT THE INTERSECTION OF WINTER STREET IS THIRTY NINE (39) FEET.
- SECT. IV.A.3.a: MINIMUM WIDTH OF RIGHT-OF WAY  
REQUIRED: "THE MINIMUM WIDTH OF RIGHTS-OF-WAY SHALL BE AS FOLLOWS; MINOR STREETS: FIFTY (50) FEET."  
PROVIDED: THE PROPOSED RIGHT-OF-WAY IS FORTY FOUR (44) FEET (WIDTH OF EXISTING PARCEL).
- SECT. IV.A.5.c: DEAD-END STREET TURN-AROUND ON EXTENDED CENTERLINE  
REQUIRED: "THE CENTERS OF THE TURN-AROUND AND THE CENTRAL CIRCULAR ISLAND SHALL BE LOCATED ON THE EXTENDED CENTERLINE OF THE DEAD-END WAY."  
PROVIDED: THE PROPOSED CUL-DE-SAC IS OFFSET FROM THE CENTERLINE OF THE ROADWAY.
- SECT. V.B.1: CURBS  
REQUIRED: "VERTICLE GRANITE CURBS SHALL BE INSTALLED ON ALL STREET EXCEPT FOR CUL-DE-SAC ISLANDS WHERE GRANITE EDGING SHALL BE USED."  
PROVIDED: CAPE COD BERM IS PROPOSED IN LIEU OF GRANITE CURBING EXCEPT AT ENTRANCE RADI AND CUL-DE-SAC.
- SECT. V.C.1: SIDEWALKS  
REQUIRED: "PAVED SIDEWALKS SHALL BE CONSTRUCTED ALONG THE FULL LENGTH OF BOTH SIDES OF EVERY SUBDIVISION WAY..."  
PROVIDED: NO SIDEWALKS ARE PROVIDED.
- SECT. V.I.1: STREET TREES  
REQUIRED: "STREET TREES SHALL BE PLANTED AT A MINIMUM NUMBER OF ONE TREE PER FORTY FEET OF ROAD ON EACH SIDE OF THE ROAD WITHIN THE RIGHT OF WAY."  
PROVIDED: STREET TREES ARE PROVIDED ALONG THE NORTHERN SIDE OF ROADWAY.



DEFINITIVE SUBDIVISION PLAN  
WINTER STREET  
(ASSESSOR'S MAP 76, LOT 18)  
WINTER STREET  
HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL ENGINEER:



APPLICANT:  
MCSHARRY BROS., INC.  
7 LEAH DRIVE  
ROCKLAND, MASSACHUSETTS 02370

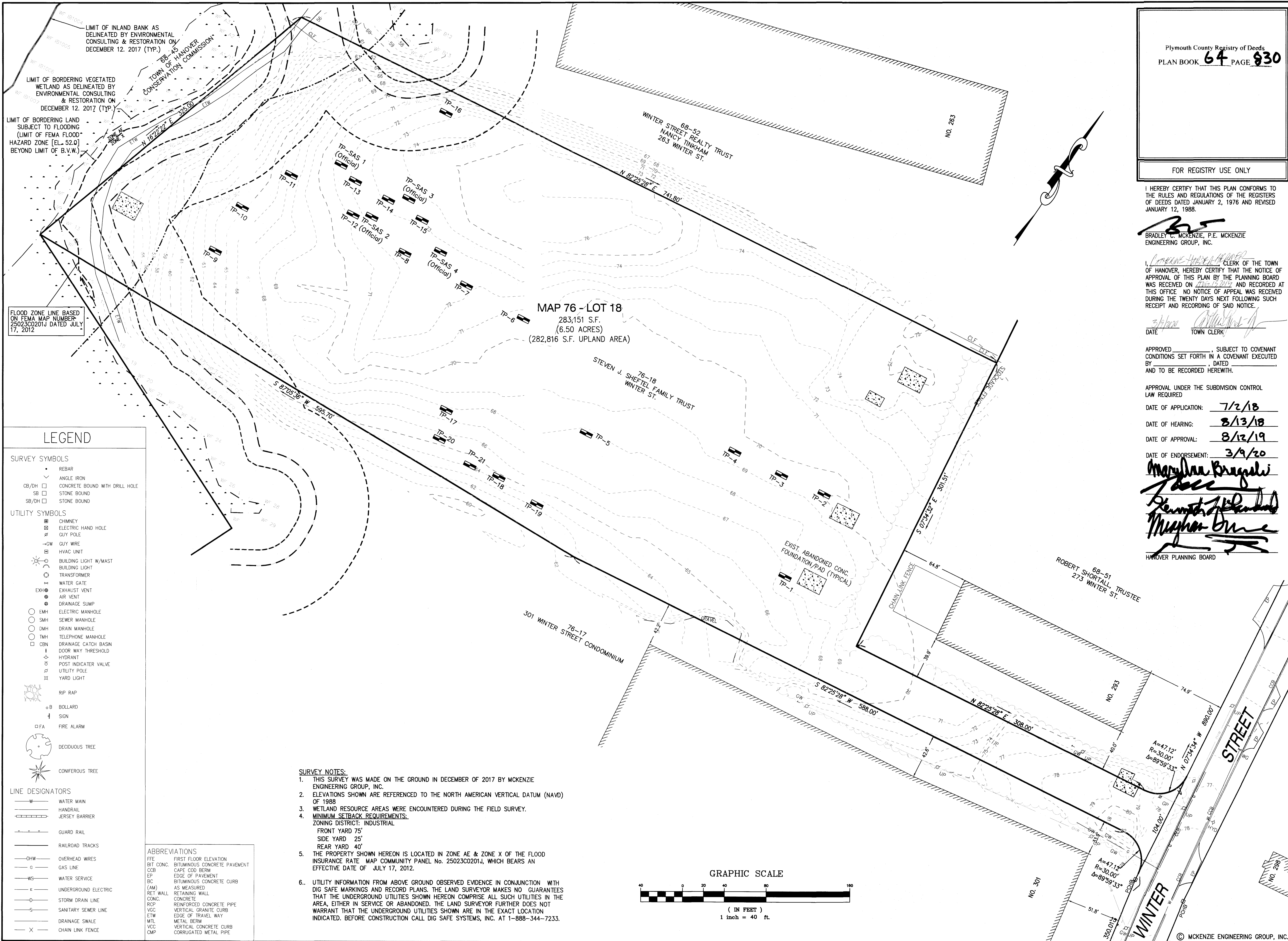
DRAWN BY: *AWL*  
DESIGNED BY: *AWL*  
CHECKED BY: *BCM*  
APPROVED BY: *BCM*  
DATE: JULY 2, 2018  
SCALE: AS NOTED  
PROJECT NO.: 217-169  
DWG. TITLE:

General Notes,  
Legend, Symbols  
& Abbreviations

DWG. No.: *2 OF 13*

PERMIT SET





Plymouth County Registry of Deeds  
PLAN BOOK **64** PAGE **830**

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BRADLEY C. MCKENZIE, P.E. MCKENZIE ENGINEERING GROUP, INC.

CLERK OF THE TOWN OF HANOVER, HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD WAS RECEIVED ON 7/2/18 AND RECORDED AT THIS OFFICE. NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT FOLLOWING SUCH RECEIPT AND RECORDING OF SAID NOTICE.

DATE 3/9/20 TOWN CLERK Marylan Bragali

APPROVED 3/9/20, SUBJECT TO COVENANT CONDITIONS SET FORTH IN A COVENANT EXECUTED BY 3/9/20, DATED 3/9/20 AND TO BE RECORDED HERewith.

APPROVAL UNDER THE SUBDIVISION CONTROL LAW REQUIRED

DATE OF APPLICATION: 7/2/18

DATE OF HEARING: 8/13/18

DATE OF APPROVAL: 8/13/19

DATE OF ENDORSEMENT: 3/9/20

Marylan Bragali  
Deputy Planning Board  
Mayor Bruce

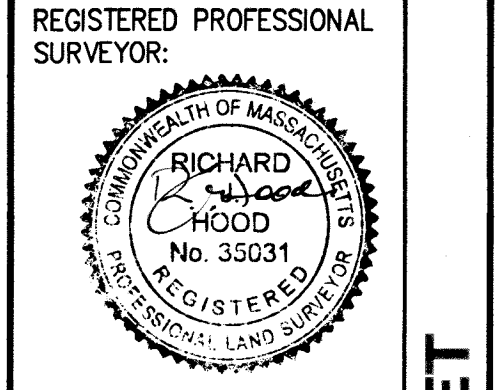
HANOVER PLANNING BOARD

REV	DATE	DESCRIPTION	BY	APP
1	9/18/18	PER CONSULTANT REVIEW	AWL	BCM

**MCKENZIE**  
ENGINEERING GROUP

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

**DEFINITIVE SUBDIVISION PLAN**  
**WINTER STREET**  
(ASSESSOR'S MAP 76, LOT 18)  
**WINTER STREET**  
HANOVER, MASSACHUSETTS



APPLICANT:  
**MCSHARRY BROS., INC.**  
7 LEAH DRIVE  
ROCKLAND, MASSACHUSETTS 02370

DRAWN BY: AWL

DESIGNED BY: AWL

CHECKED BY: BCM

APPROVED BY: BCM

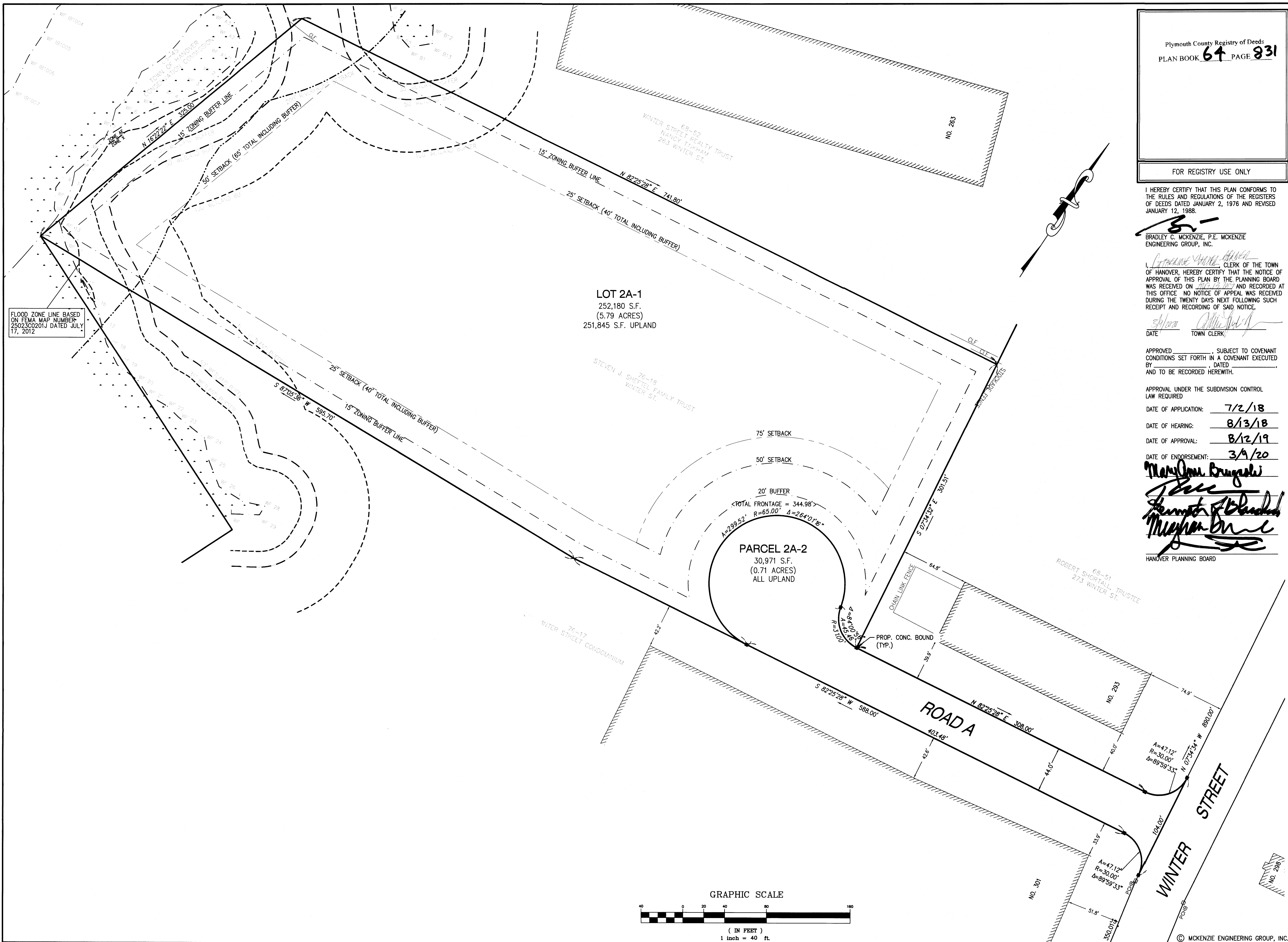
DATE: JULY 2, 2018

SCALE: 1"=40'

PROJECT NO.: 217-169

DWG. TITLE:  
**Existing Conditions Plan**

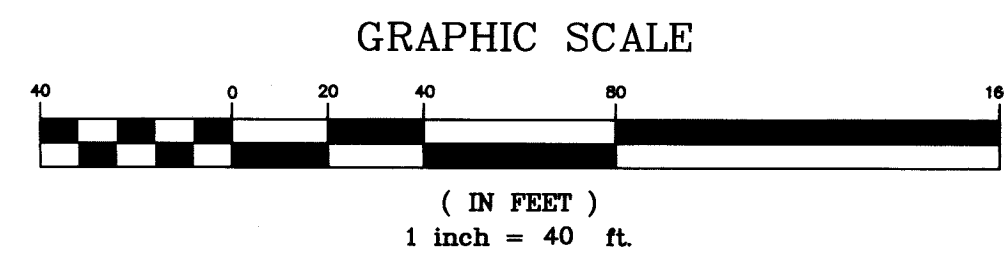
DWG. No.: **3 OF 13**



FLOOD ZONE LINE BASED ON FEMA MAP NUMBER 25023C0201J DATED JULY 17, 2012

LOT 2A-1  
252,180 S.F.  
(5.79 ACRES)  
251,845 S.F. UPLAND

PARCEL 2A-2  
30,971 S.F.  
(0.71 ACRES)  
ALL UPLAND



Plymouth County Registry of Deeds  
PLAN BOOK **64** PAGE **831**

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*Bradley C. McKenzie*  
BRADLEY C. MCKENZIE, P.E. MCKENZIE ENGINEERING GROUP, INC.

I, *Catherine Marie Haver* CLERK OF THE TOWN OF HANOVER, HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD WAS RECEIVED ON *8/13/18* AND RECORDED AT THIS OFFICE. NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT FOLLOWING SUCH RECEIPT AND RECORDING OF SAID NOTICE.

*Sharon* DATE *8/13/18* TOWN CLERK

APPROVED \_\_\_\_\_, SUBJECT TO COVENANT CONDITIONS SET FORTH IN A COVENANT EXECUTED BY \_\_\_\_\_, DATED \_\_\_\_\_ AND TO BE RECORDED HERewith.

APPROVAL UNDER THE SUBDIVISION CONTROL LAW REQUIRED

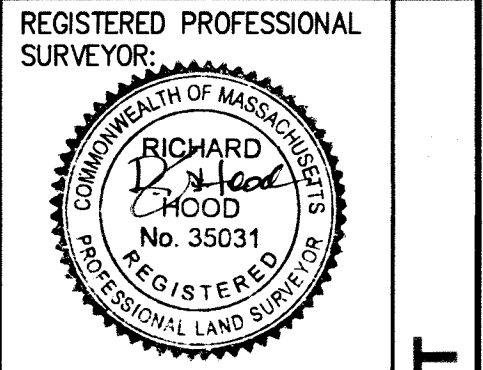
DATE OF APPLICATION: 7/2/18  
DATE OF HEARING: 8/13/18  
DATE OF APPROVAL: 8/12/18  
DATE OF ENDORSEMENT: 3/9/20

*Mary Jane Bruggs*  
*James F. Blawie*  
*Stephen Brune*  
HANOVER PLANNING BOARD

REV	DATE	DESCRIPTION	BY	APP
1	9/18/18	PER CONSULTANT REVIEW	AWL	BCM

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**DEFINITIVE SUBDIVISION PLAN**  
**WINTER STREET**  
(ASSESSOR'S MAP 76, LOT 18)  
**WINTER STREET**  
HANOVER, MASSACHUSETTS



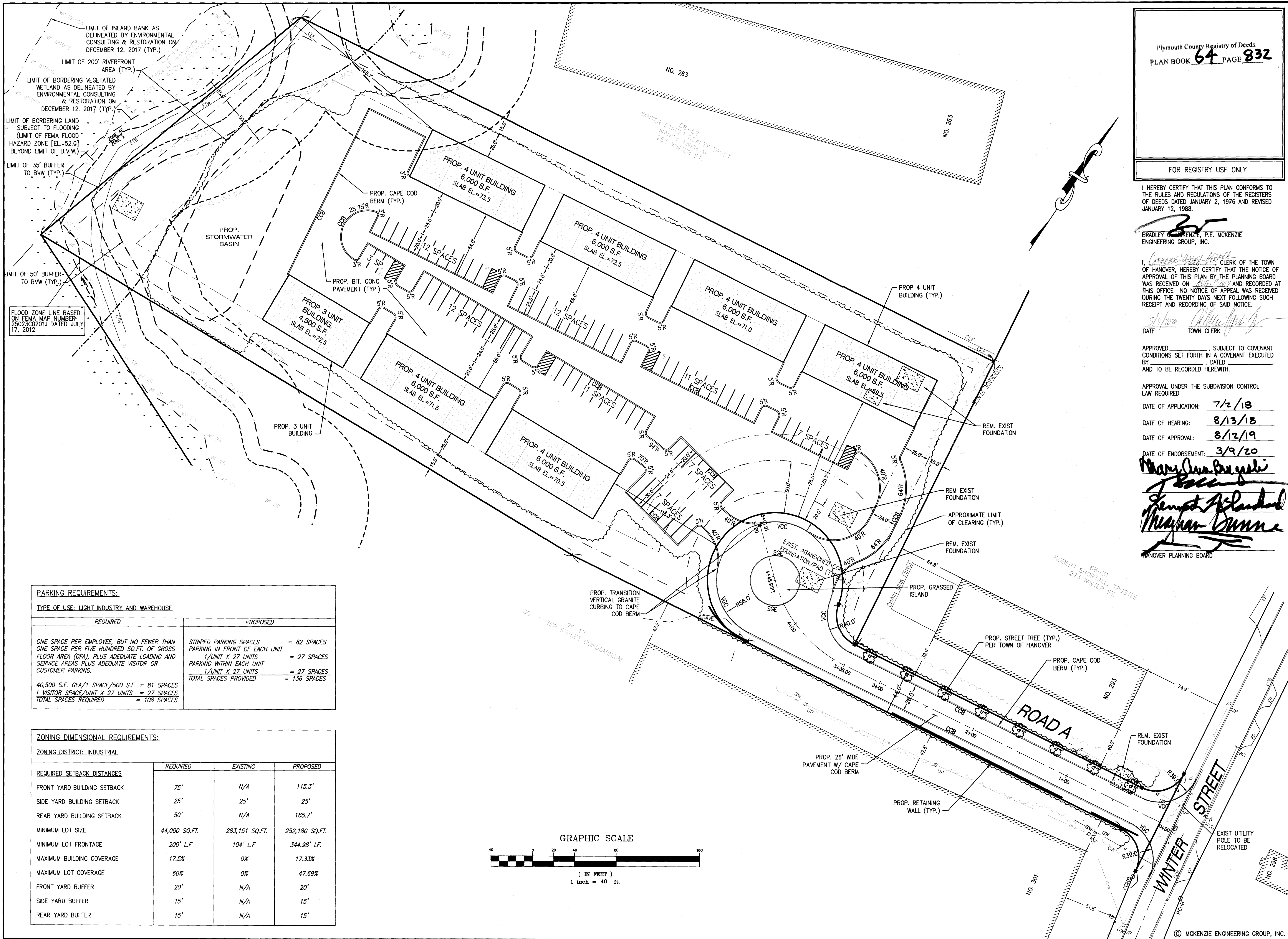
REGISTERED PROFESSIONAL SURVEYOR

APPLICANT:  
**MCSHARRY BROS., INC.**  
7 LEAH DRIVE  
ROCKLAND, MASSACHUSETTS 02370

DRAWN BY: AWL  
DESIGNED BY: AWL  
CHECKED BY: BCM  
APPROVED BY: BCM  
DATE: JULY 2, 2018  
SCALE: 1"=40'  
PROJECT NO.: 217-169  
DWG. TITLE: Lot Layout Plan

DWG. No: **4 of 13**





Plymouth County Registry of Deeds  
PLAN BOOK **64** PAGE **832**

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BRADLEY G. MCKENZIE, P.E. MCKENZIE ENGINEERING GROUP, INC.

I, Courteney V. Bennett, CLERK OF THE TOWN OF HANOVER, HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD WAS RECEIVED ON 9/18/18 AND RECORDED AT THIS OFFICE. NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT FOLLOWING SUCH RECEIPT AND RECORDING OF SAID NOTICE.

DATE 9/18/18 TOWN CLERK Courteney V. Bennett

APPROVED [Signature], SUBJECT TO COVENANT CONDITIONS SET FORTH IN A COVENANT EXECUTED BY [Signature], DATED 8/13/18 AND TO BE RECORDED HEREWITH.

APPROVAL UNDER THE SUBDIVISION CONTROL LAW REQUIRED

DATE OF APPLICATION: 7/2/18

DATE OF HEARING: 8/13/18

DATE OF APPROVAL: 8/12/19

DATE OF ENDORSEMENT: 3/9/20

Mary Jane Bragaglia  
Joseph A. Blumhagen  
Michael D. Dwyer  
HANOVER PLANNING BOARD

**MEG**  
MCKENZIE ENGINEERING GROUP  
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**DEFINITIVE SUBDIVISION PLAN**  
**WINTER STREET**  
(ASSESSOR'S MAP 76, LOT 18)  
WINTER STREET  
HANOVER, MASSACHUSETTS

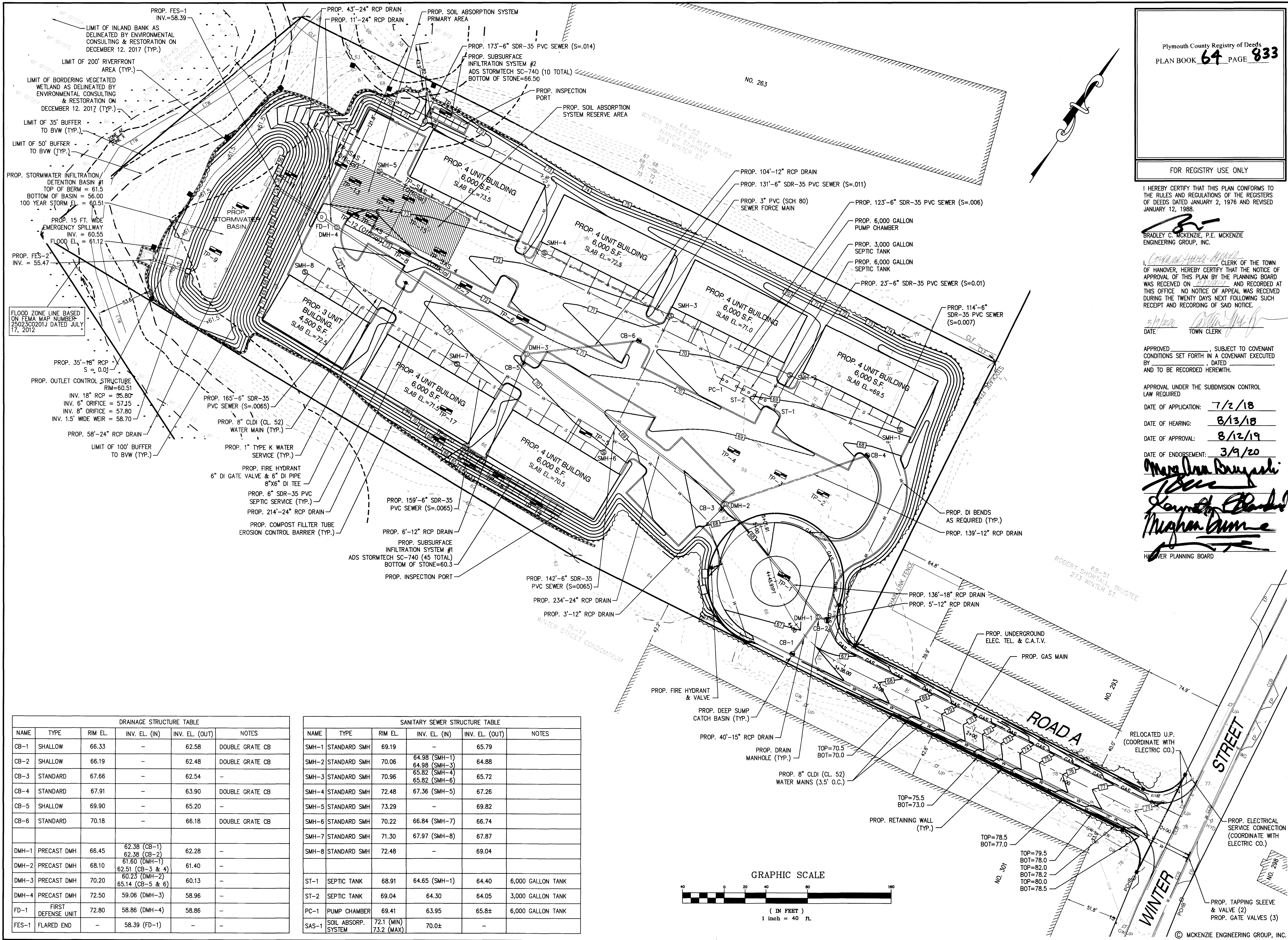
REGISTERED PROFESSIONAL ENGINEER:  
[Signature]

APPLICANT:  
**MCSHARRY BROS., INC.**  
7 LEAH DRIVE  
ROCKLAND, MASSACHUSETTS 02370

DRAWN BY: AML  
DESIGNED BY: AML  
CHECKED BY: BCM  
APPROVED BY: BCM  
DATE: JULY 2, 2018  
SCALE: 1"=40'  
PROJECT NO.: 217-169  
DWG. TITLE:

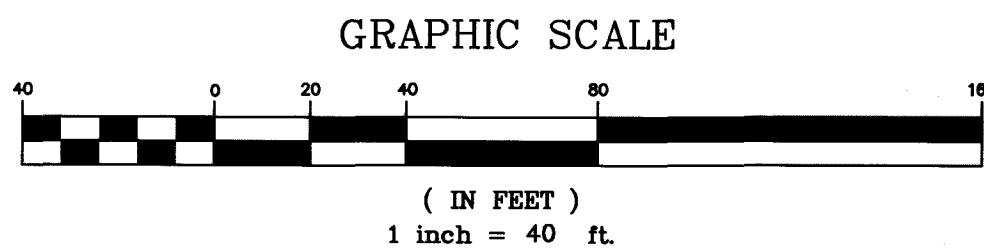
Site Plan  
DWG. No.: **50613**





DRAINAGE STRUCTURE TABLE					
NAME	TYPE	RIM EL.	INV. EL. (IN)	INV. EL. (OUT)	NOTES
CB-1	SHALLOW	66.33	-	62.58	DOUBLE GRATE CB
CB-2	SHALLOW	66.19	-	62.48	DOUBLE GRATE CB
CB-3	STANDARD	67.66	-	62.54	-
CB-4	STANDARD	67.91	-	63.90	DOUBLE GRATE CB
CB-5	SHALLOW	69.90	-	65.20	-
CB-6	STANDARD	70.18	-	66.18	DOUBLE GRATE CB
DMH-1	PRECAST DMH	66.45	62.38 (CB-1) 62.38 (CB-2)	62.28	-
DMH-2	PRECAST DMH	68.10	61.60 (DMH-1) 62.51 (CB-3 & 4)	61.40	-
DMH-3	PRECAST DMH	70.20	60.23 (DMH-2) 65.14 (CB-5 & 6)	60.13	-
DMH-4	PRECAST DMH	72.50	59.06 (DMH-3)	58.96	-
FD-1	FIRST DEFENSE UNIT	72.80	58.86 (DMH-4)	58.86	-
FES-1	FLARED END	-	58.39 (FD-1)	-	-

SANITARY SEWER STRUCTURE TABLE					
NAME	TYPE	RIM EL.	INV. EL. (IN)	INV. EL. (OUT)	NOTES
SMH-1	STANDARD SMH	69.19	-	65.79	-
SMH-2	STANDARD SMH	70.06	64.98 (SMH-1) 64.98 (SMH-3)	64.88	-
SMH-3	STANDARD SMH	70.96	65.82 (SMH-4) 65.82 (SMH-6)	65.72	-
SMH-4	STANDARD SMH	72.48	67.36 (SMH-5)	67.26	-
SMH-5	STANDARD SMH	73.29	-	69.82	-
SMH-6	STANDARD SMH	70.22	66.84 (SMH-7)	66.74	-
SMH-7	STANDARD SMH	71.30	67.97 (SMH-8)	67.87	-
SMH-8	STANDARD SMH	72.48	-	69.04	-
ST-1	SEPTIC TANK	68.91	64.65 (SMH-1)	64.40	6,000 GALLON TANK
ST-2	SEPTIC TANK	69.04	64.30	64.05	3,000 GALLON TANK
PC-1	PUMP CHAMBER	69.41	63.95	65.8±	6,000 GALLON TANK
SAS-1	SOIL ABSORP. SYSTEM	-	72.1 (MIN) 73.2 (MAX)	70.0±	-



Plymouth County Registry of Deeds  
PLAN BOOK **64** PAGE **833**

FOR REGISTRY USE ONLY

I HEREBY CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS DATED JANUARY 2, 1976 AND REVISED JANUARY 12, 1988.

BRADLEY C. MCKENZIE, P.E. MCKENZIE ENGINEERING GROUP, INC.

I, CLERK OF THE TOWN OF HANOVER, HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD WAS RECEIVED ON 8/13/18 AND RECORDED AT THIS OFFICE. NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT FOLLOWING SUCH RECEIPT AND RECORDING OF SAID NOTICE.

DATE 8/13/18 TOWN CLERK [Signature]

APPROVED [Signature], SUBJECT TO COVENANT CONDITIONS SET FORTH IN A COVENANT EXECUTED BY [Signature], DATED 8/13/18 AND TO BE RECORDED HERewith.

APPROVAL UNDER THE SUBDIVISION CONTROL LAW REQUIRED

DATE OF APPLICATION: 7/2/18

DATE OF HEARING: 8/13/18

DATE OF APPROVAL: 8/12/19

DATE OF ENDORSEMENT: 3/9/20

[Signature]  
HANOVER PLANNING BOARD

**DEFINITIVE SUBDIVISION PLAN**  
**WINTER STREET**  
(ASSESSOR'S MAP 76 LOT 18)  
**WINTER STREET**  
HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL ENGINEER:  
[Signature]  
BRADLEY C. MCKENZIE  
No. 35917

APPLICANT:  
**MCSHARRY BROS., INC.**  
7 LEAH DRIVE  
ROCKLAND, MASSACHUSETTS 02370

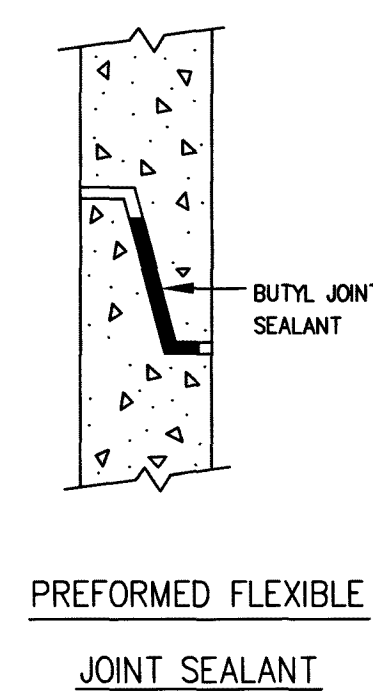
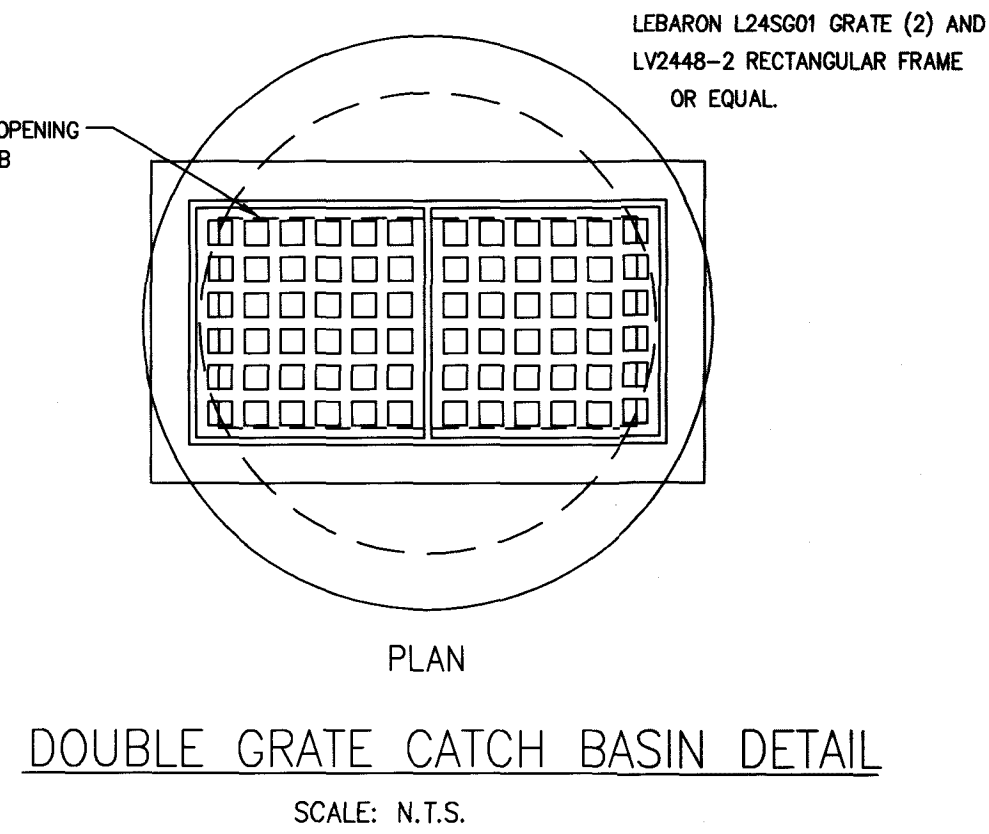
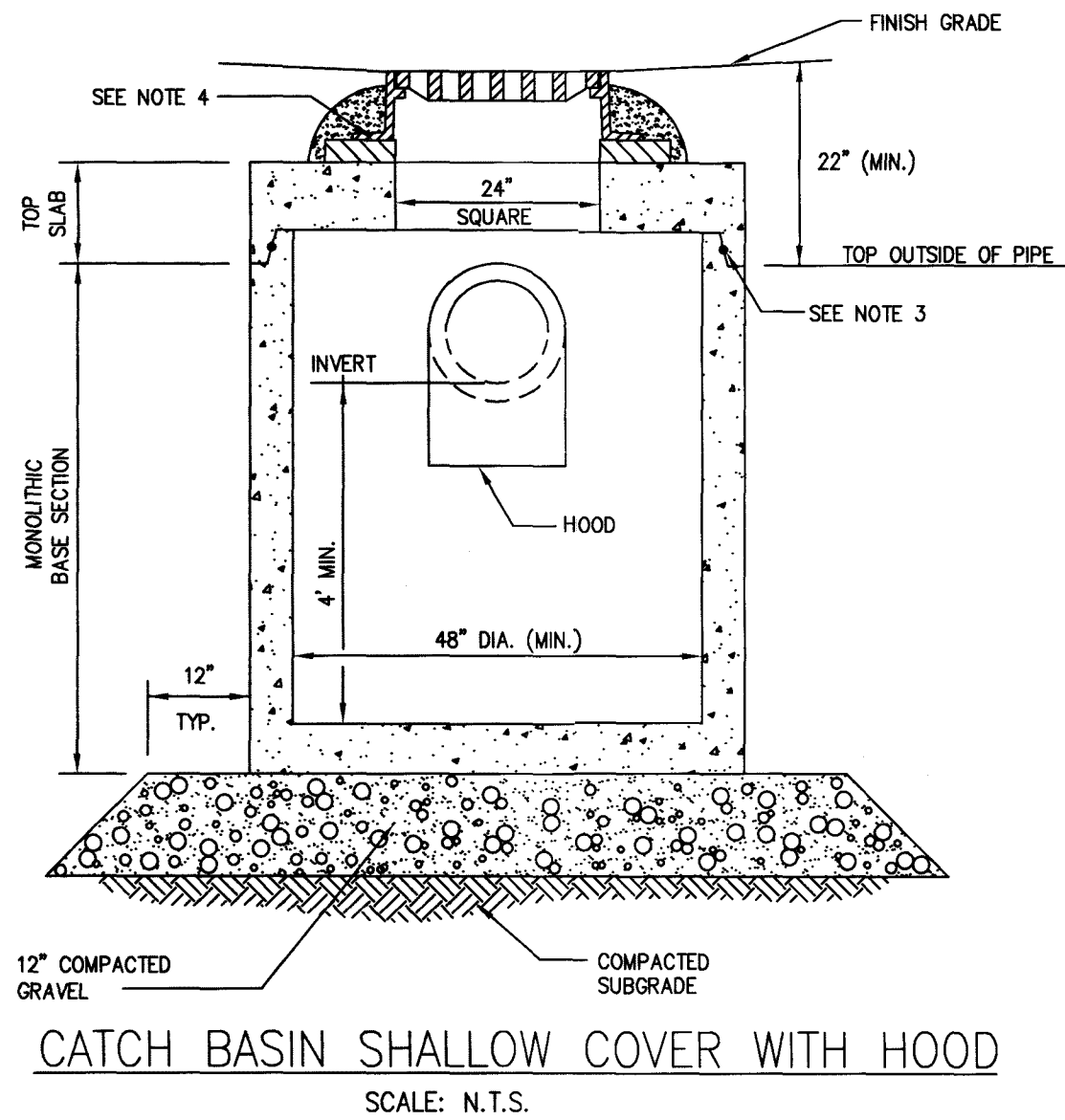
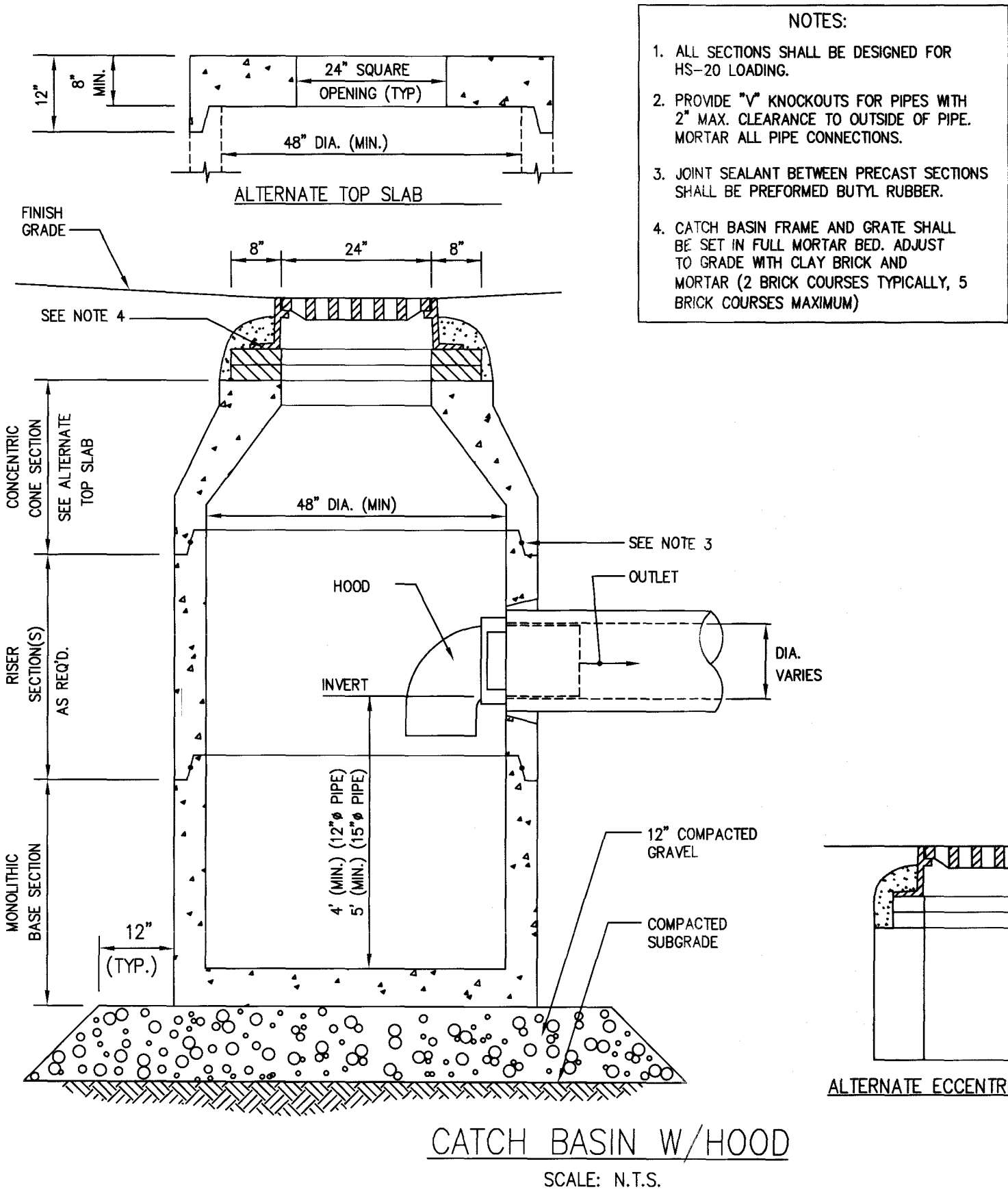
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DESIGNED BY: AWL  
CHECKED BY: BCM  
APPROVED BY: BCM  
DATE: JULY 2, 2018  
SCALE: 1"=40'  
PROJECT NO.: 217-169  
DWG. TITLE: Grading & Utility Plan

DWG. No: 6 of 13

**PERMIT SET**







STORM DRAIN NOTES:

1. REINFORCED CONCRETE DRAIN PIPE SHALL BE CLASS IV UNLESS OTHERWISE NOTED.
2. DRAIN PIPES WITH LESS THAN 3' OF COVER SHALL BE CLASS V RCP.
3. BACKFILL SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY BY AASHTO T-1800 METHOD.
4. SHEETING, IF USED, SHALL BE CUT OFF NO MORE THAN 12" ABOVE TOP OF PIPE.
5. UNSUITABLE SOIL BELOW THE INVERT SHALL BE REMOVED AND REPLACED WITH APPROVED MATERIAL AND SHALL NOT BE USED AS BACKFILL.

Plymouth County Registry of Deeds  
PLAN BOOK 64 PAGE 935

FOR REGISTRY USE ONLY

I HEREBY CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS DATED JANUARY 2, 1976 AND REVISED JANUARY 12, 1988.

BRADLEY C. MCKENZIE, P.E. MCKENZIE ENGINEERING GROUP, INC.

CLERK OF THE TOWN OF HANOVER, HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD WAS RECEIVED ON 3/9/20 AND RECORDED AT THIS OFFICE. NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT FOLLOWING SUCH RECEIPT AND RECORDING OF SAID NOTICE.

DATE 3/9/20 TOWN CLERK

APPROVED \_\_\_\_\_, SUBJECT TO COVENANT CONDITIONS SET FORTH IN A COVENANT EXECUTED BY \_\_\_\_\_ DATED \_\_\_\_\_ AND TO BE RECORDED HERewith.

APPROVAL UNDER THE SUBDIVISION CONTROL LAW REQUIRED

DATE OF APPLICATION: 7/2/18

DATE OF HEARING: 8/13/18

DATE OF APPROVAL: 8/12/19

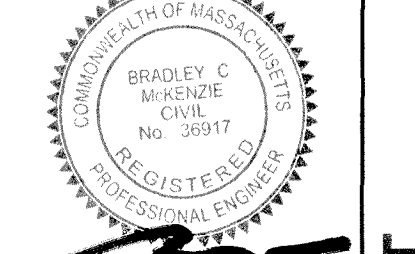
DATE OF ENDORSEMENT: 3/9/20

Maya M. Bazzoli  
Kenneth J. Bland  
Morgan B. Bland

HANOVER PLANNING BOARD

DEFINITIVE SUBDIVISION PLAN  
WINTER STREET  
(ASSESSOR'S MAP 76, LOT 18)  
WINTER STREET  
HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL ENGINEER:



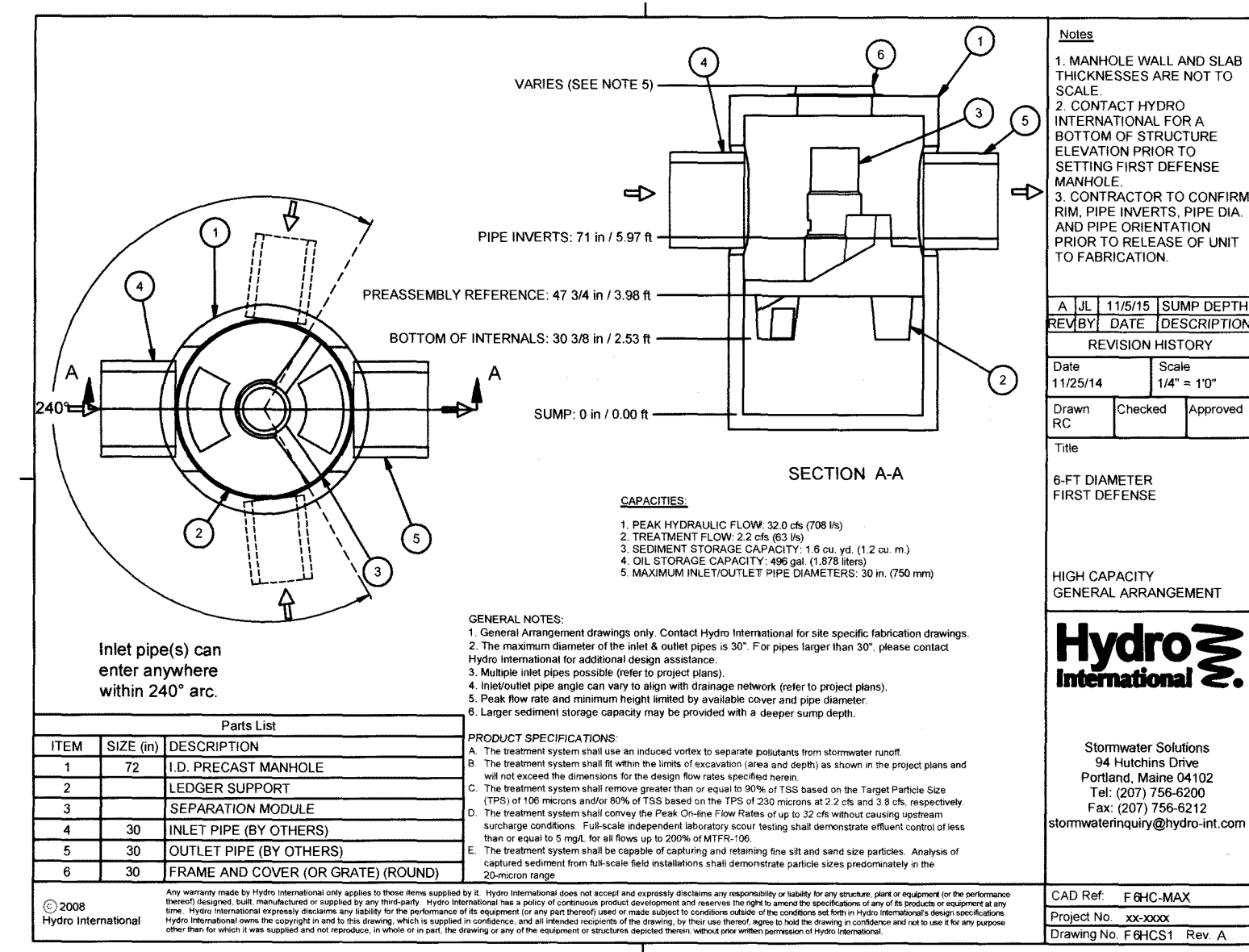
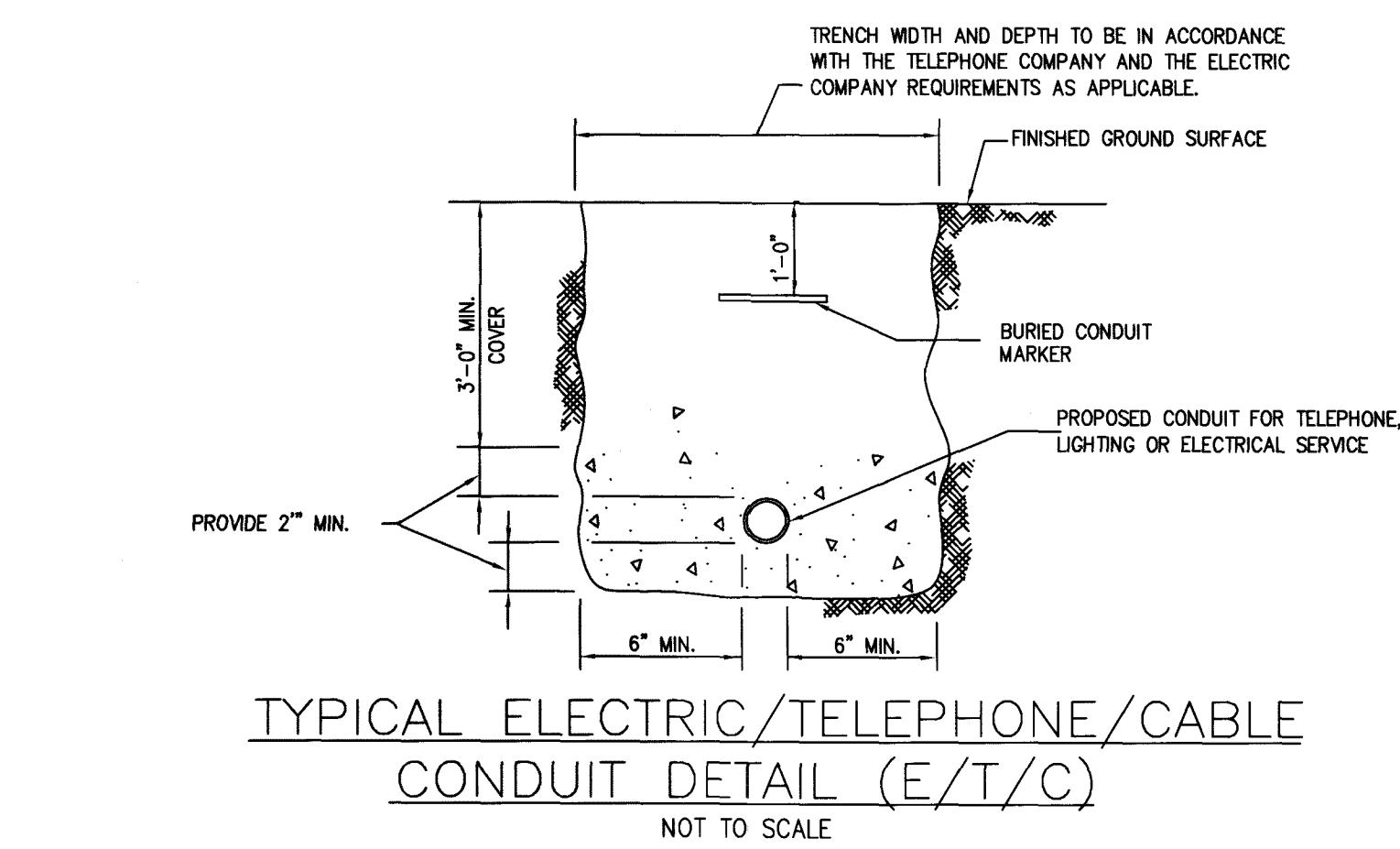
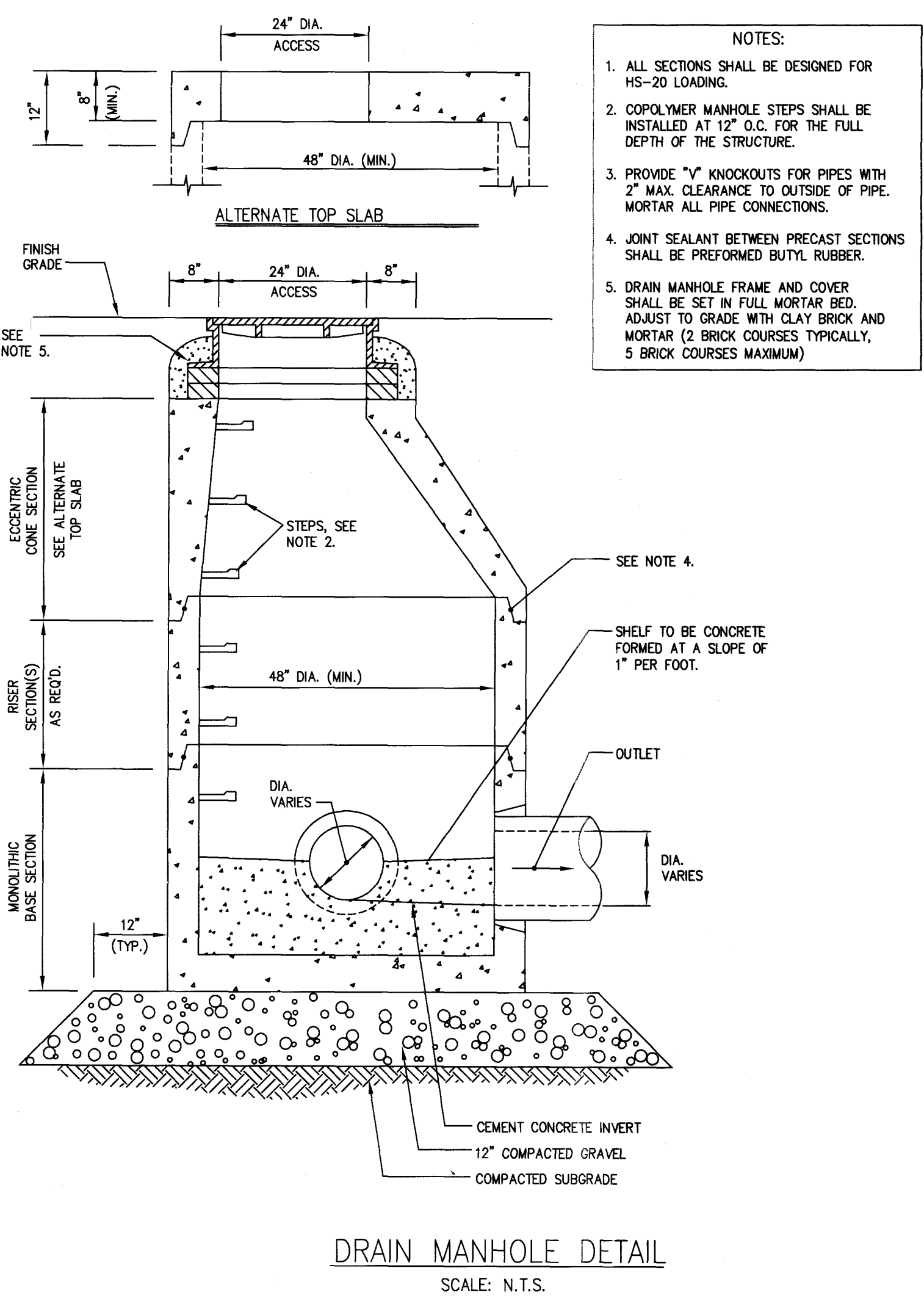
APPLICANT:  
MCSHARRY BROS., INC.  
7 LEAH DRIVE  
ROCKLAND, MASSACHUSETTS 02370

DRAWN BY: AWL  
CHECKED BY: AWL  
APPROVED BY: BOM  
DATE: JULY 2, 2018  
SCALE: AS NOTED  
PROJECT NO.: 217-169  
DWG. TITLE:

Construction Details

DWG. No:

8 OF 13

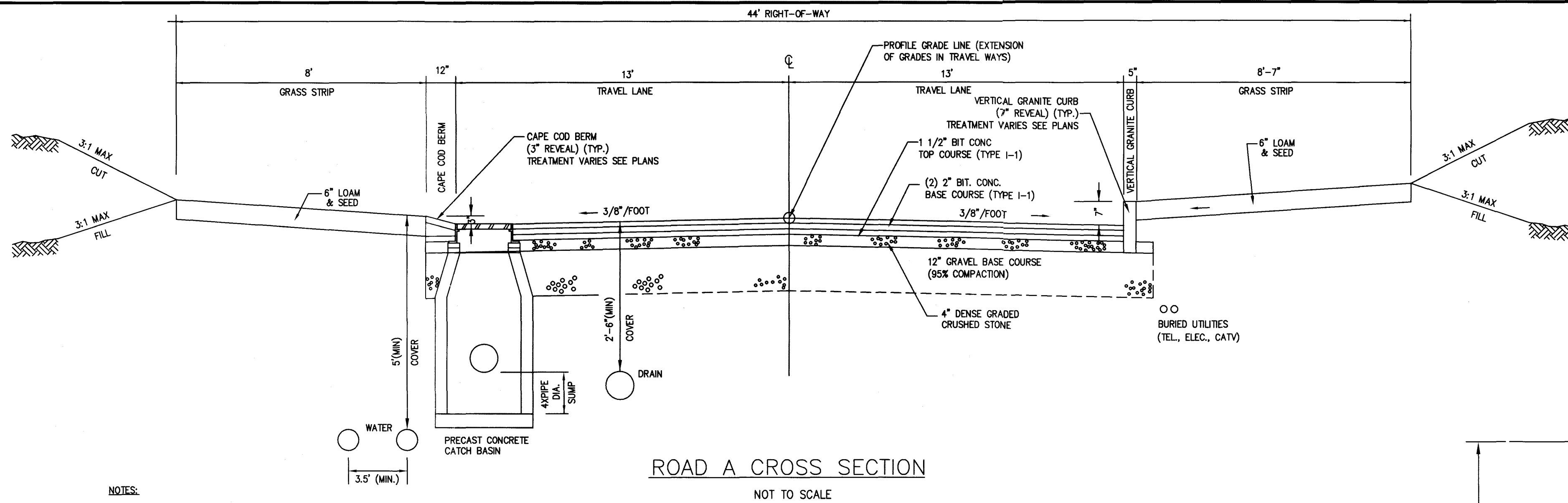


© MCKENZIE ENGINEERING GROUP, INC.

FILE LOCATION: M:\217-169\Draws\217-169 Definitive.dwg

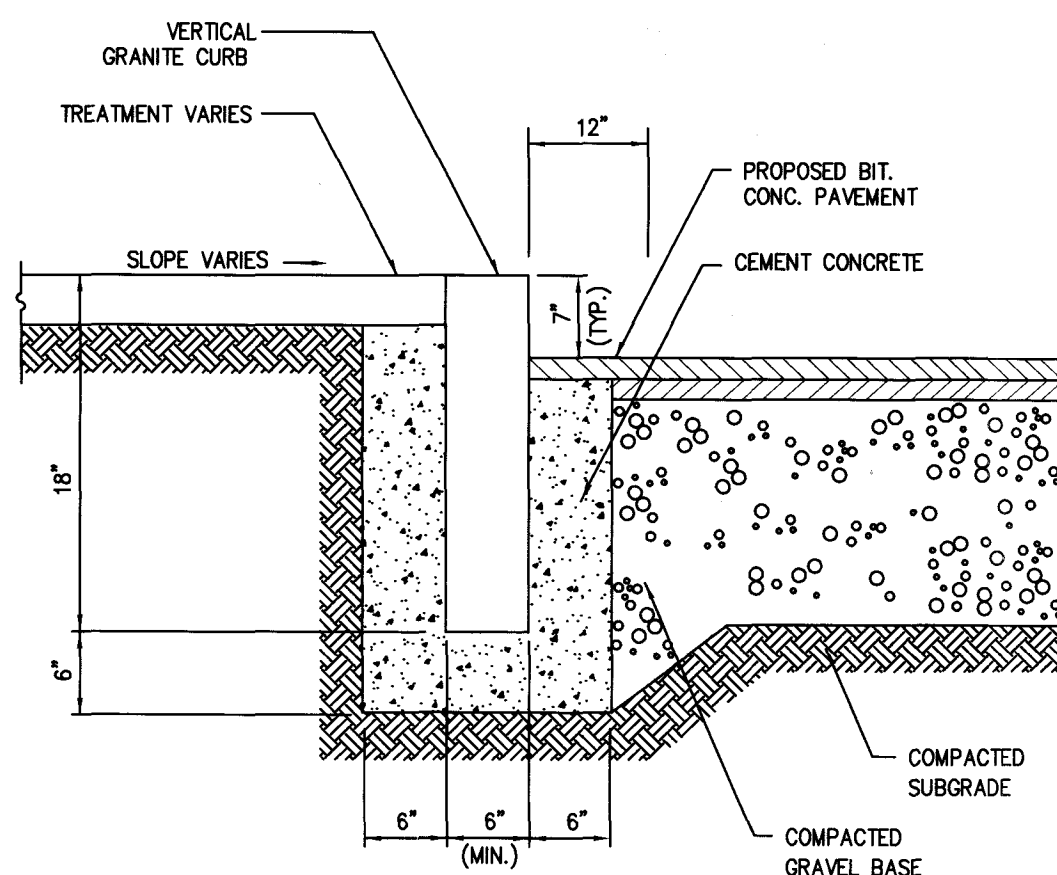
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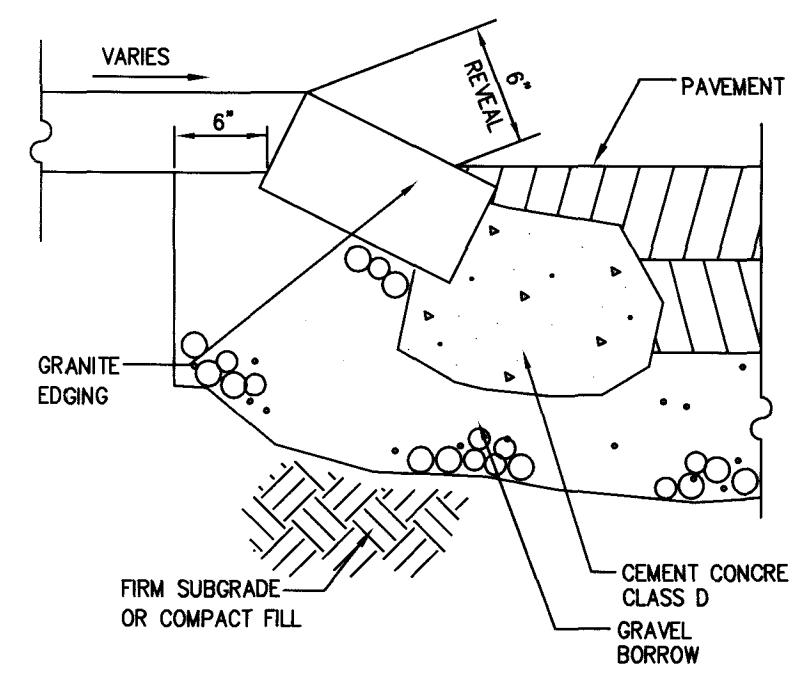
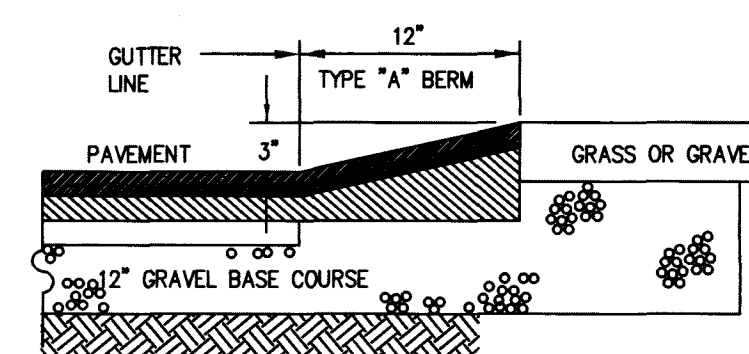
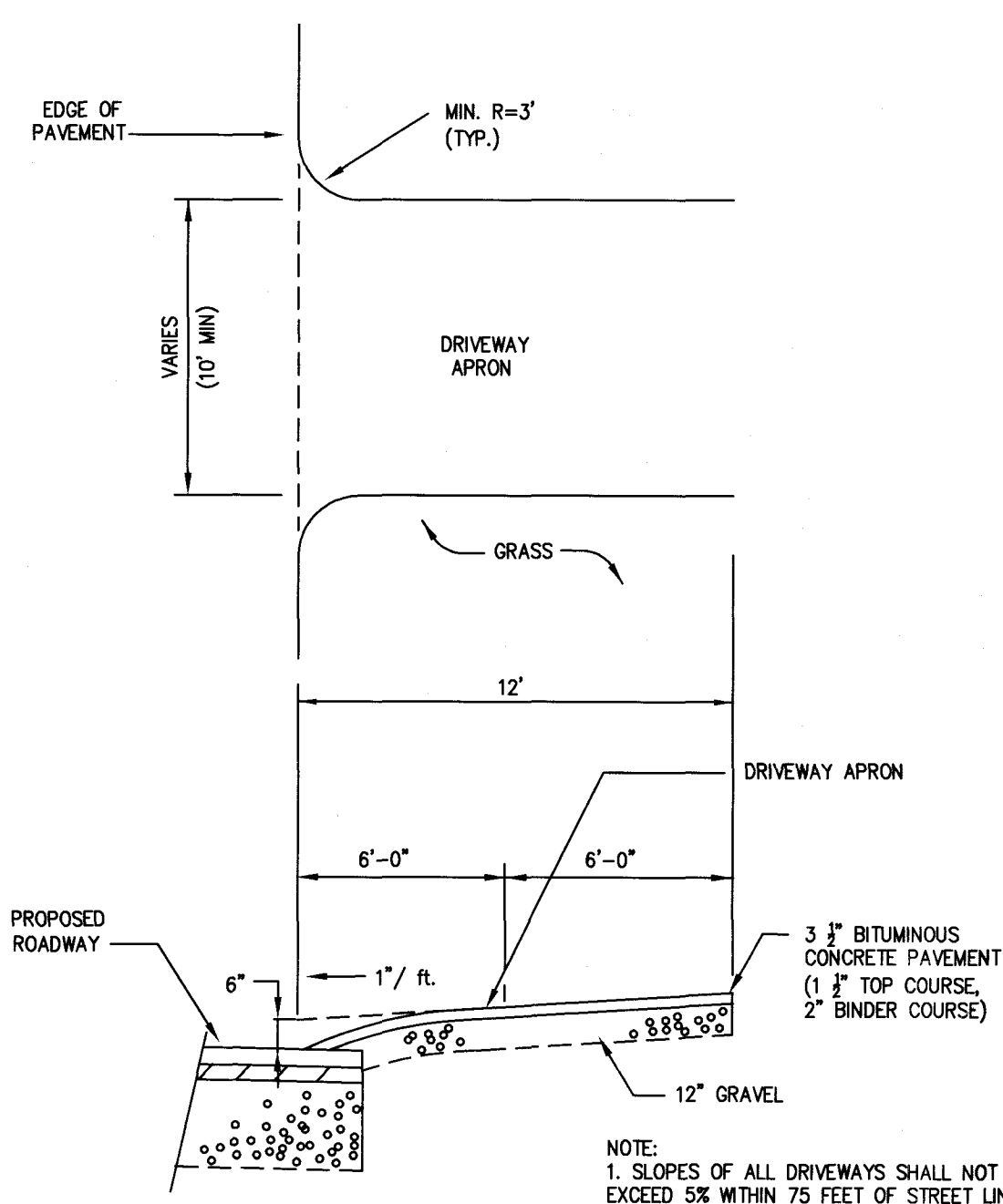
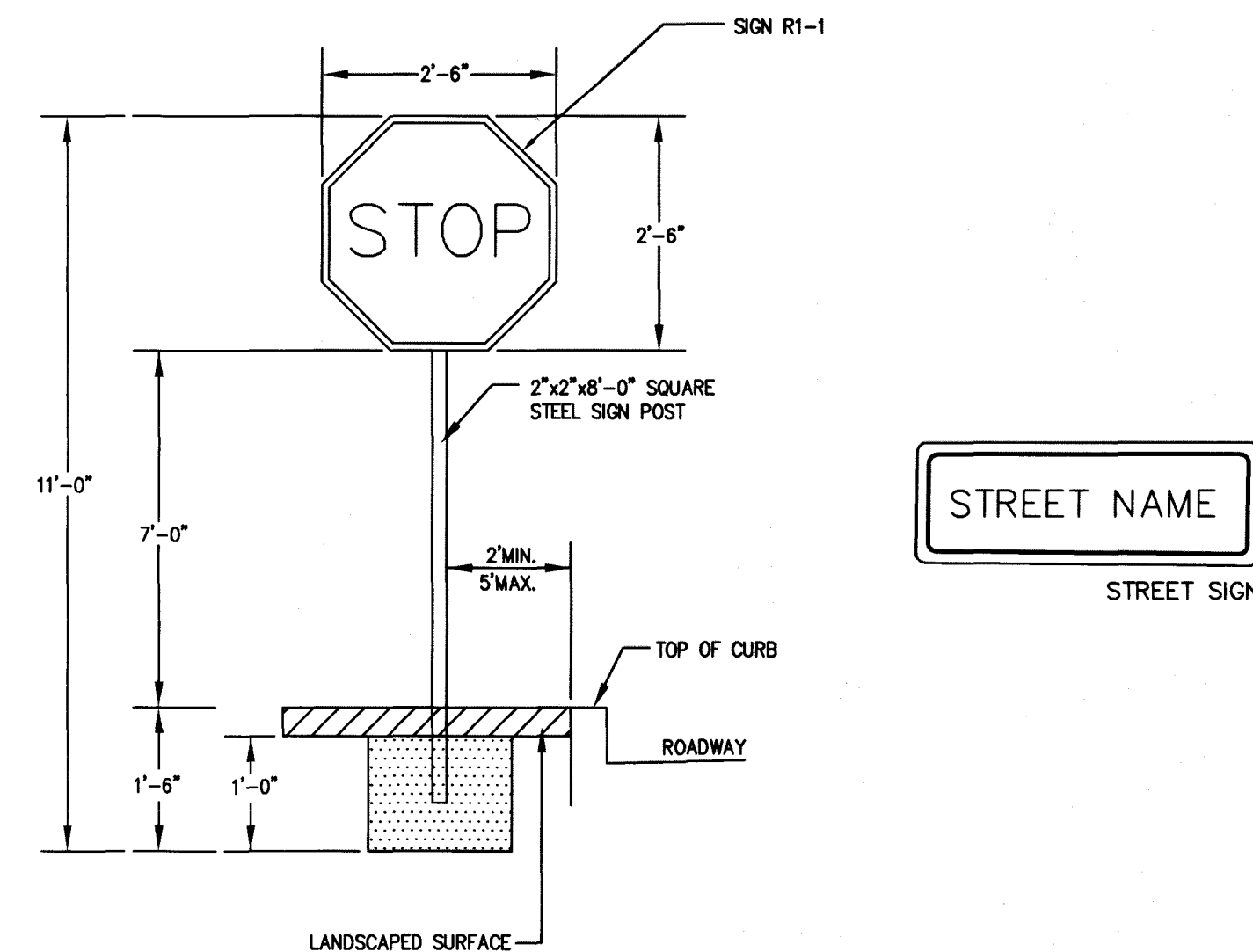
#### NOTES:

1. ALL MATERIALS SHALL CONFORM WITH MASS. HIGHWAY AND TOWN OF HANOVER SPECIFICATIONS. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH MASS. HIGHWAY AND TOWN OF HANOVER SPECIFICATIONS (SECTION 4.11 OF TOWN OF HANOVER PLANNING BOARD RULES AND REGULATIONS).



#### GENERAL UTILITY NOTES

1. 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 UPON 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. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND 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 PLAN.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCHMARKS NECESSARY FOR THE WORK.
3. THE CONTRACTOR SHALL EXCAVATE THE TEST PITS IN THE LOCATIONS SHOWN ON THE PLAN PRIOR TO COMMENCING WORK TO VERIFY THE ELEVATIONS AND LOCATIONS OF EXISTING UTILITIES. THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH THE RESULTS PRIOR TO COMMENCING ANY WORK.
4. ALL WATER SERVICES SHALL BE INSTALLED WITH 5' OF COVER EXCEPT AS NOTED OR DETAILED OTHERWISE.
5. DOMESTIC WATER SERVICES 2 INCHES AND SMALLER SHALL BE TYPE K COPPER TUBING AND SHALL BE INSTALLED WITH APPROPRIATELY SIZED CORPORATION STOP WITH APPROVED SADDLE, CURB STOP, GATE AND BOX.
6. FOR HANOVER WATER DEPT. CONSTRUCTION DETAILS, NOTES, AND SPECIFICATIONS, SEE DETAIL SHEETS.



Plymouth County Registry of Deeds  
PLAN BOOK **64** PAGE **836**

FOR REGISTRY USE ONLY

I HEREBY CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS DATED JANUARY 2, 1976 AND REVISED JANUARY 12, 1988.

BRADLEY C. MCKENZIE, P.E. MCKENZIE ENGINEERING GROUP, INC.

I, CATHERINE MCKENZIE, CLERK OF THE TOWN OF HANOVER, HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD WAS RECEIVED ON 7/2/18 AND RECORDED AT THIS OFFICE. NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT FOLLOWING SUCH RECEIPT AND RECORDING OF SAID NOTICE.

DATE 7/2/18 TOWN CLERK [Signature]

APPROVED [Signature], SUBJECT TO COVENANT CONDITIONS SET FORTH IN A COVENANT EXECUTED BY [Signature], DATED 7/2/18, AND TO BE RECORDED HEREWITH.

APPROVAL UNDER THE SUBDIVISION CONTROL LAW REQUIRED

DATE OF APPLICATION: 7/2/18

DATE OF HEARING: 8/13/18

DATE OF APPROVAL: 8/12/19

DATE OF ENDORSEMENT: 3/9/20

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

HANOVER PLANNING BOARD

REV	DATE	DESCRIPTION	BY	APP
1	9/13/18	PER CONSULTANT REVIEW	AWL	BCM

10/15 7454

MCKENZIE ENGINEERING GROUP

Assinippi Office Park

150 Longwater Drive, Suite 101

Norwell, MA 02061

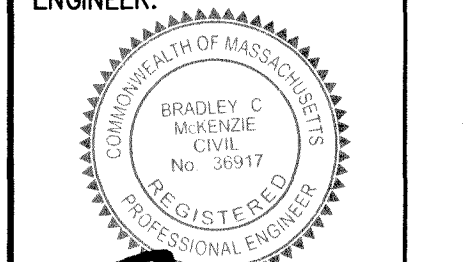
P: 781.792.3900

F: 781.792.0333

www.mckeng.com

**DEFINITIVE SUBDIVISION PLAN**  
**WINTER STREET**  
(ASSESSOR'S MAP 76, LOT 18)  
WINTER STREET  
HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL ENGINEER:



[Signature]

APPLICANT:

MCSHARRY BROS., INC.

7 LEAH DRIVE

ROCKLAND, MASSACHUSETTS 02370

PERMIT SET

DRAWN BY: AWL

DESIGNED BY: AWL

CHECKED BY: BCM

APPROVED BY: BCM

DATE: JULY 2, 2018

SCALE: AS NOTED

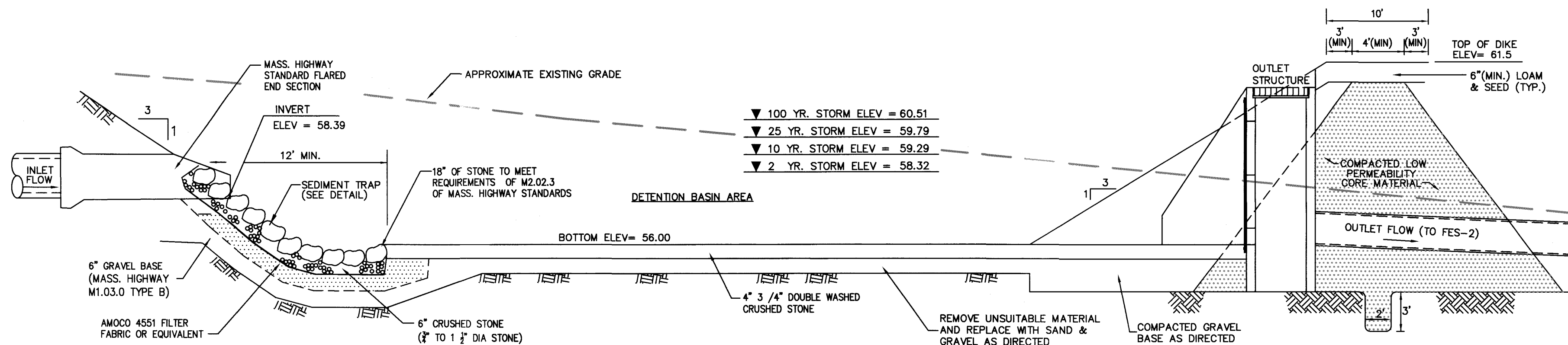
PROJECT NO.: 217-169

DWG. TITLE:

Construction Details

DWG. No:

9 of 13



**NOTES:**

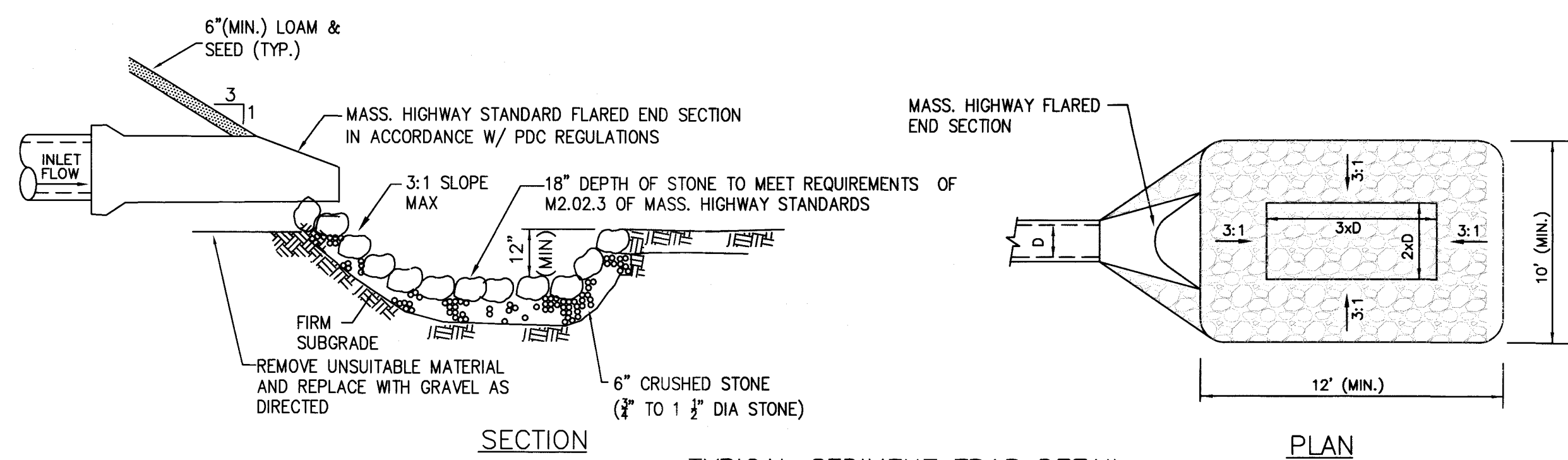
1. FILL AND BASE FOR DIKS SHALL INSURE WATER TIGHTNESS AND STABILITY.
2. BASIN SIDE SLOPES SHALL BE PROVIDED WITH 6" OF LOAM, SEED AT A RATE OF 2 POUNDS OF RED TOP, 15 POUNDS OF CREEPING RED FESCUE AND 20 POUNDS TALL FESCUE PER ACRE.
3. THE CONTRACTOR SHALL NOT DISCHARGE SEDIMENT-LADEN WATER TO BASINS DURING CONSTRUCTION. NO HEAVY EQUIPMENT SHALL BE ALLOWED ON THE BASIN FLOORS AFTER INSTALLATION.
4. ALL CONTRIBUTING AREAS TO THE BASIN SHALL BE FULLY STABILIZED PRIOR TO THE DETENTION BASIN BEING PLACED INTO SERVICE.
5. THE CONTRACTOR SHALL PROVIDE PROTECTION ABOVE AND AROUND THE SUBSURFACE STORMWATER INFILTRATION FACILITY FROM CONSTRUCTION VEHICLE ACTIVITY, TO PREVENT ANY DAMAGE TO THE SUBSURFACE FACILITIES.

**DIKE SECTION NOTES:**

1. THE PLACEMENT AND COMPACTION OF THE COMPACTED LOW PERMEABILITY CORE MATERIAL SHALL PROVIDE AN IN-SITU PERMEABILITY RATE OF NOT MORE THAN  $1.0 \times 10^{-10}$  CM/SEC AND SHALL BE INSTALLED AT A SLOPE NO STEEPER THAN 1:1. BASED ON THE SPECIFIC APPLICATION, A SLOWER PERMEABILITY RATE MAY BE REQUIRED BY THE ENGINEER.
2. PIPES PENETRATING THE LOW PERMEABILITY CORE SHALL BE BEDDED IN THE LOW PERMEABILITY CORE MATERIAL.

**PROPOSED STORMWATER INFILTRATION/DETENTION BASIN SECTION**

SCALE: N.T.S.

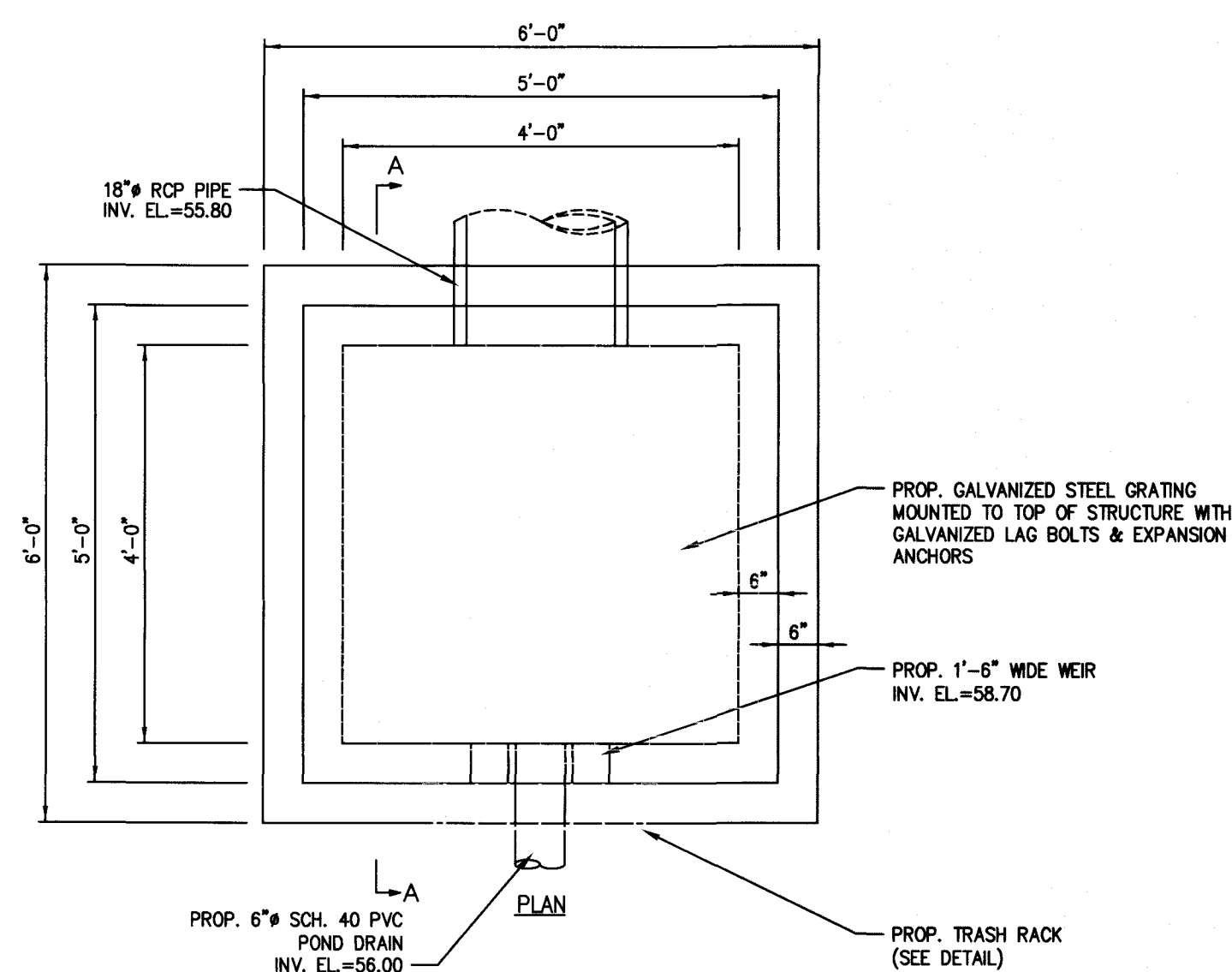


**SECTION**

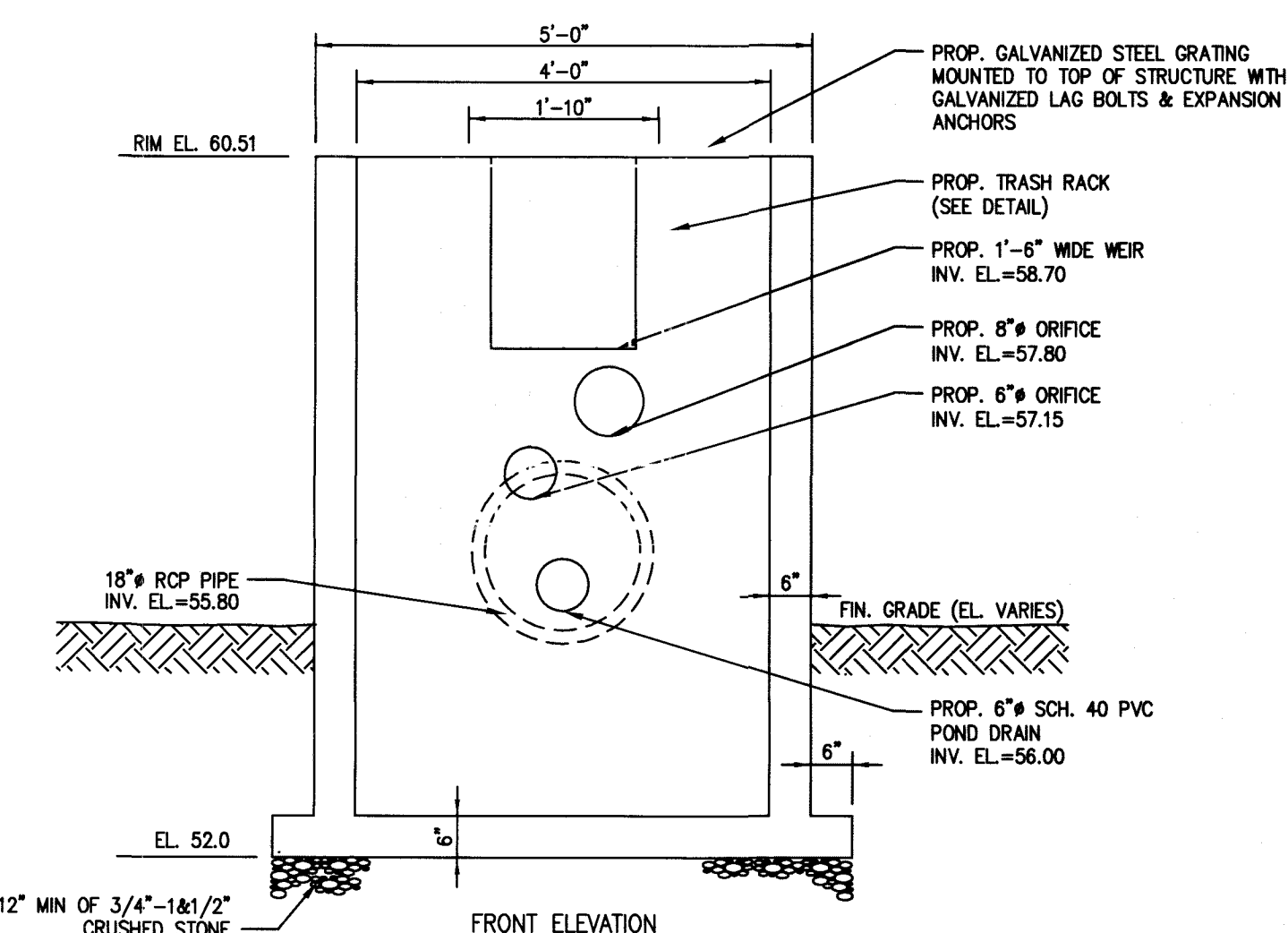
**TYPICAL SEDIMENT TRAP DETAIL**

SCALE: N.T.S.

**PLAN**

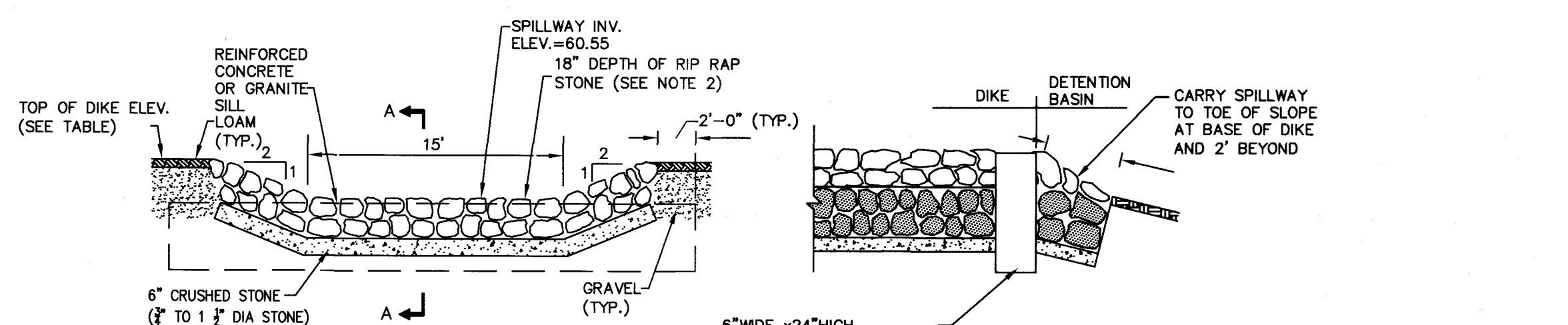


**PLAN**



**STORMWATER BASIN OUTLET CONTROL STRUCTURE DETAIL**

SCALE: N.T.S.



**SPILLWAY DETAIL**

SCALE: N.T.S.

- NOTES:**
1. DIMENSIONS VARY TO SUIT CAPACITY REQUIREMENTS
  2. RIP RAP TO BE HAND CHINKED WITH A SMOOTH SURFACE ALONG THE TOP OF THE DIKE AND A ROUGH SURFACE ALONG THE DOWNSTREAM FACE AND TOE OF THE DIKE. STONE TO MEET M2.02.3 REQUIREMENTS.
  3. RIP RAP SHALL EXTEND A MINIMUM OF 2 FT. DOWN THE UPSTREAM FACE OF DIKE AND DOWN THE DOWNSTREAM FACE OF THE DIKE TO A POINT AT LEAST 2 FT. BEYOND THE TOE OF SLOPE.

Plymouth County Registry of Deeds  
PLAN BOOK **64** PAGE **837**

FOR REGISTRY USE ONLY

I HEREBY CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS DATED JANUARY 2, 1976 AND REVISED JANUARY 12, 1988.

BRADLEY C. MCKENZIE, P.E. MCKENZIE ENGINEERING GROUP, INC.

I, CLARENCE SHANNON PERRELL, CLERK OF THE TOWN OF HANOVER, HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD WAS RECEIVED ON 8/13/18 AND RECORDED AT THIS OFFICE. NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT FOLLOWING SUCH RECEIPT AND RECORDING OF SAID NOTICE.

DATE 8/13/18 TOWN CLERK CLARENCE SHANNON PERRELL

APPROVED 7/2/18, SUBJECT TO COVENANT CONDITIONS SET FORTH IN A COVENANT EXECUTED BY 7/2/18, DATED 7/2/18, AND TO BE RECORDED HERewith.

APPROVAL UNDER THE SUBDIVISION CONTROL LAW REQUIRED

DATE OF APPLICATION: 7/2/18

DATE OF HEARING: 8/13/18

DATE OF APPROVAL: 8/12/19

DATE OF ENDORSEMENT: 3/9/20

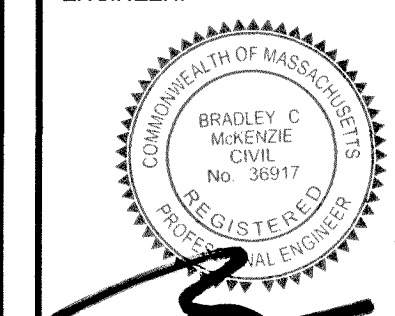
Mary Ann Pringle  
John J. Pringle  
Stephen J. Pringle  
Michael J. Pringle  
HANOVER PLANNING BOARD

REV	DATE	DESCRIPTION	BY	APP
1	9/18/18	PER CONSULTANT REVIEW	AWL	BCM

**MCKENZIE ENGINEERING GROUP**  
Assinippi Office Park  
150 Longwater Drive, Suite 101  
Norwell, MA 02061  
P: 781.792.3800  
F: 781.792.0333  
www.mckeng.com

**DEFINITIVE SUBDIVISION PLAN**  
**WINTER STREET**  
(ASSESSOR'S MAP 76, LOT 18)  
**WINTER STREET**  
HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL ENGINEER:



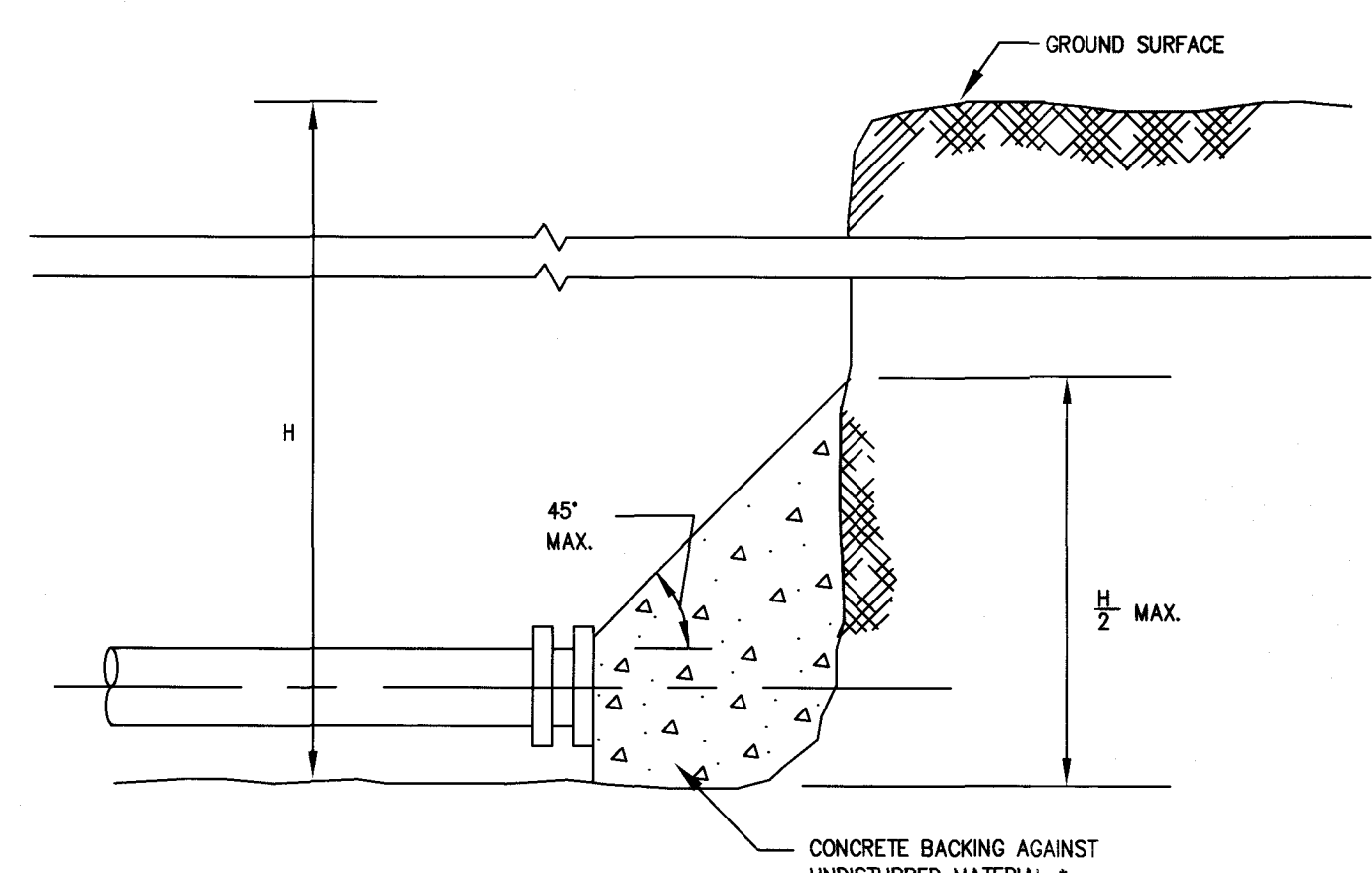
APPLICANT:  
**MCSHARRY BROS., INC.**  
7 LEAH DRIVE  
ROCKLAND, MASSACHUSETTS 02370

DRAWN BY: AWL  
DESIGNED BY: AWL  
CHECKED BY: BCM  
APPROVED BY: BCM  
DATE: JULY 2, 2018  
SCALE: AS NOTED  
PROJECT NO.: 217-169  
DWG. TITLE:

**Construction Details**

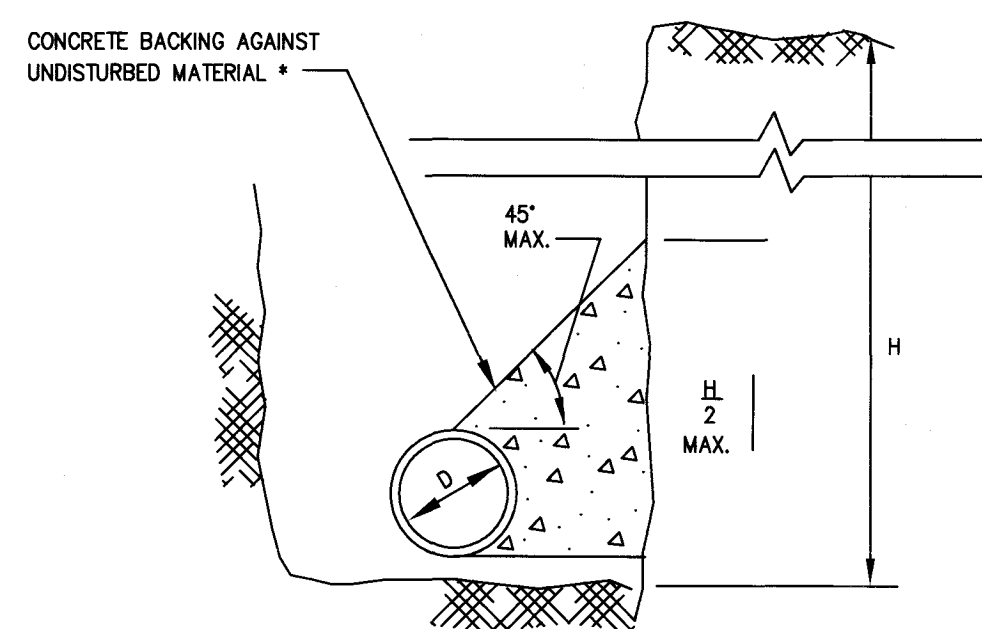
DWG. No: **10 OF 13**





TYPICAL WATER MAIN PLUG

NOT TO SCALE



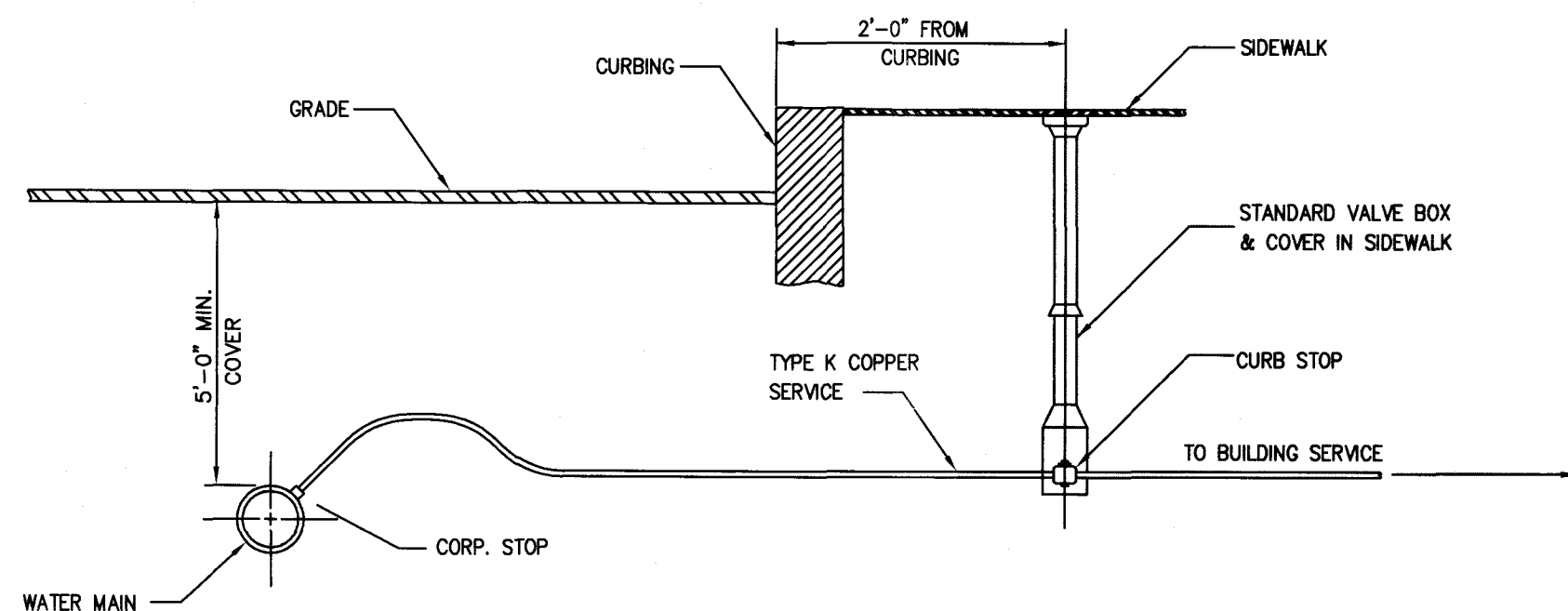
TYPICAL WATER MAIN THRUST BLOCK SECTION DETAILS

NOT TO SCALE

MAXIMUM SIZE TAPPED CONNECTION *	
WATER MAIN DIAMETER	MAXIMUM TAP DIAMETER
4"	1/2"
6"	3/4"
8"	3/4"
12"	1"

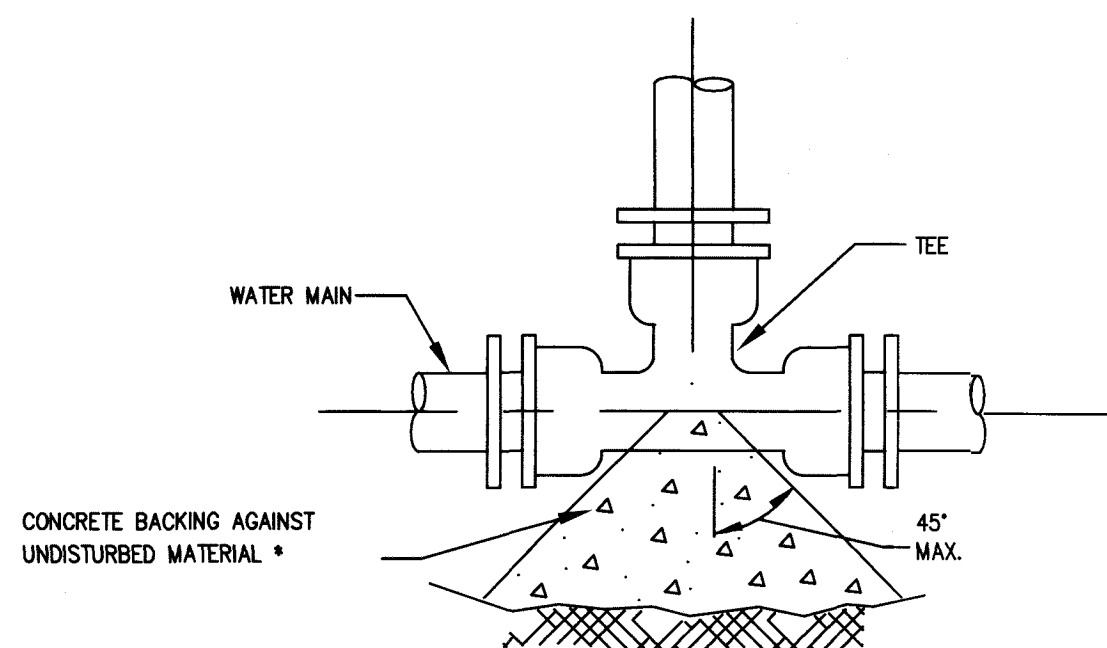
\* WHERE THE SIZE OF THE CONNECTION EXCEEDS THAT GIVEN IN THE TABLE A BOSS SHALL BE PROVIDED OR THE TAP SHALL BE MADE BY MEANS OF MULTIPLE CORP. STOPS AND BRANCH FITTINGS, TAPPED TEE, OR TAPPED SADDLE.

NOTE: WHERE NO PAVED SIDEWALK EXIST CURB STOPS & VALVE BOXES TO BE INSTALLED IN STREET



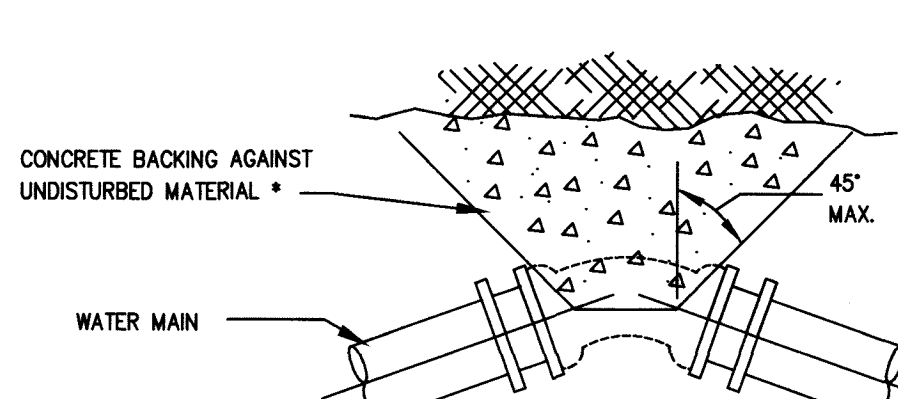
COPPER SERVICE CONNECTION

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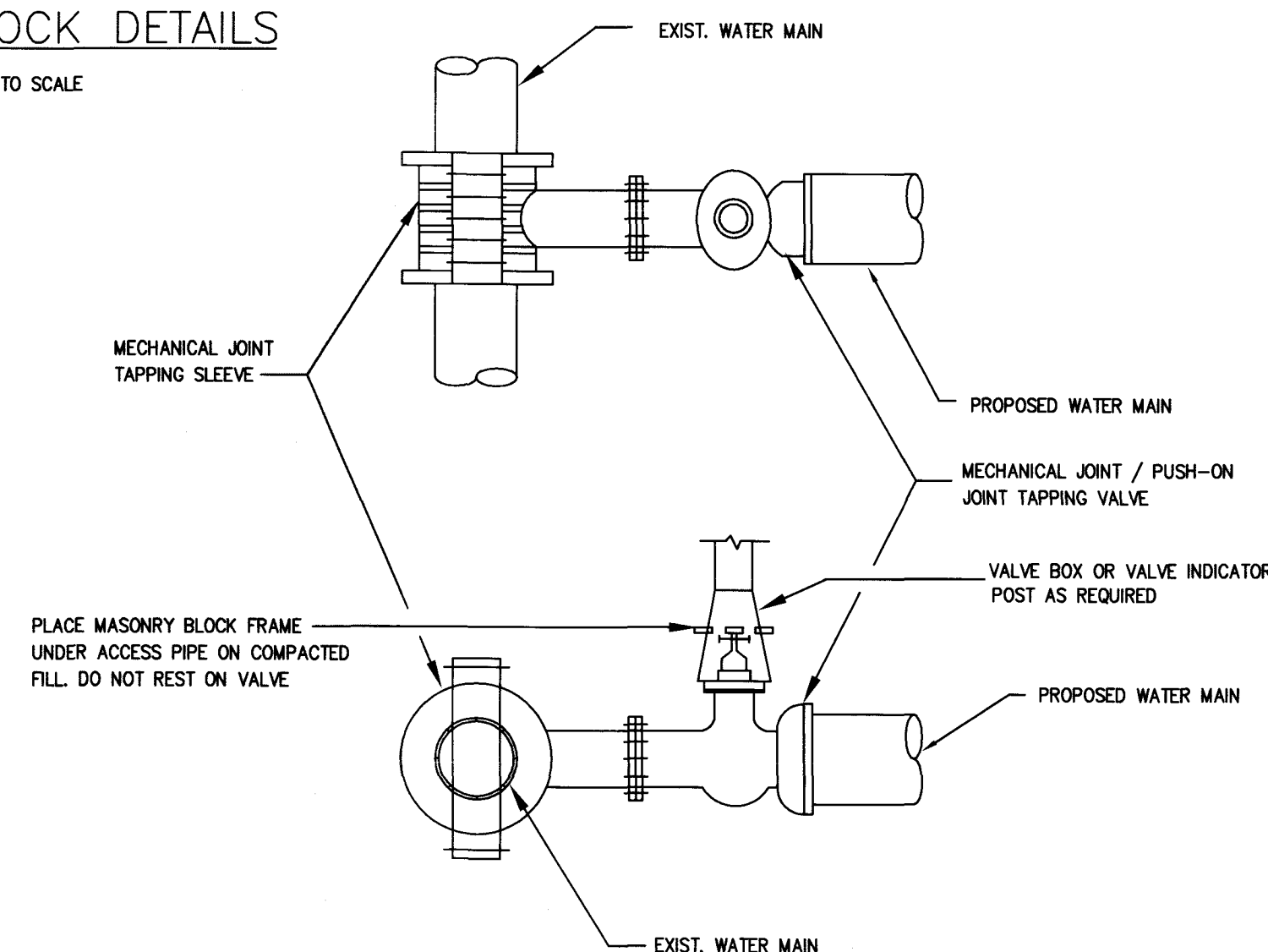
TYPICAL WATER MAIN TEE THRUST BLOCK DETAILS

NOT TO SCALE



TYPICAL WATER MAIN BEND THRUST BLOCK DETAILS

NOT TO SCALE



TYPICAL TAPPING SLEEVE AND VALVE

NOT TO SCALE

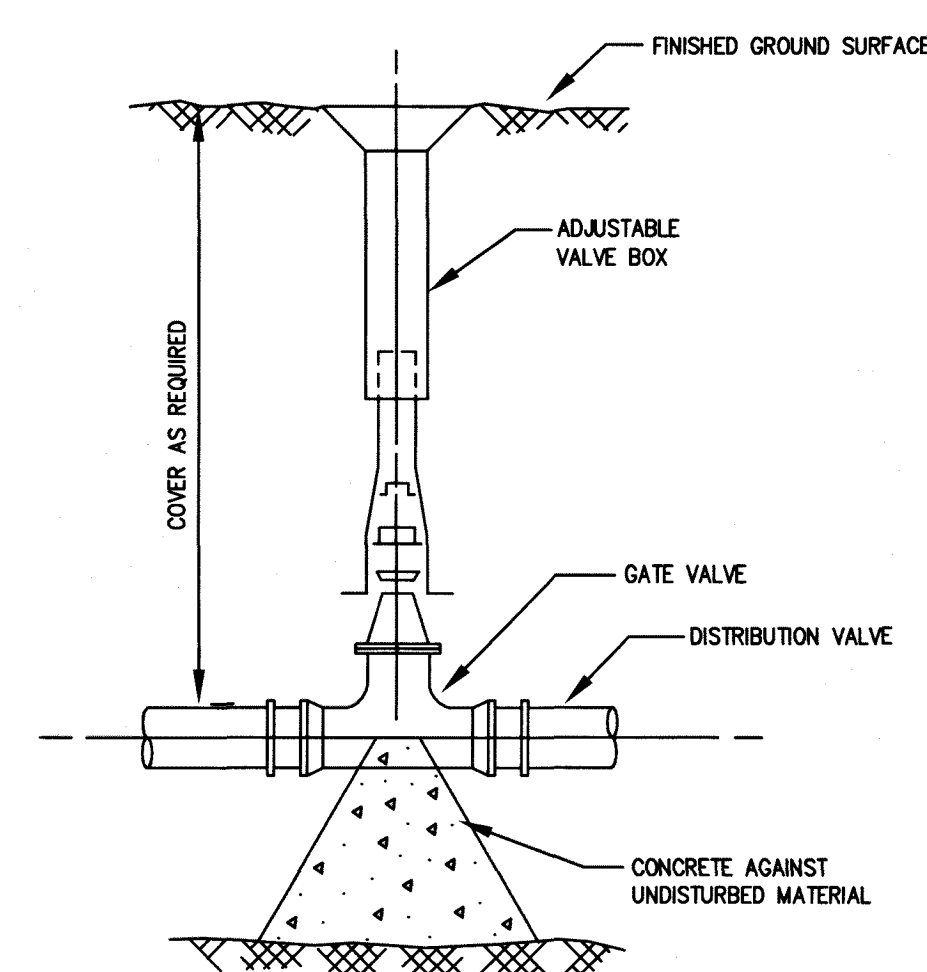
THRUST BLOCK BEARING AREAS FOR WATER PIPE

TABLE OF BEARING AREAS IN SQ. FT. AGAINST UNDISTURBED MATERIAL FOR WATER MAIN FITTINGS*			
SIZE OF MAIN (IN.)	90° BEND	TEES AND PLUGS	45° BEND
6	4	2.5	2
8	6	4	3
12	12	9	7
16	21	16	12

\* TYPE OF SOIL IS MEDIUM CLAYEY, 6 OR MORE BLOWS PER FOOT, OR LOOSE GRANULAR, 9 OR MORE BLOWS PER FOOT. SOIL CONDITIONS OTHER THAN THOSE GIVEN WILL REQUIRE LARGER BEARING AREAS.

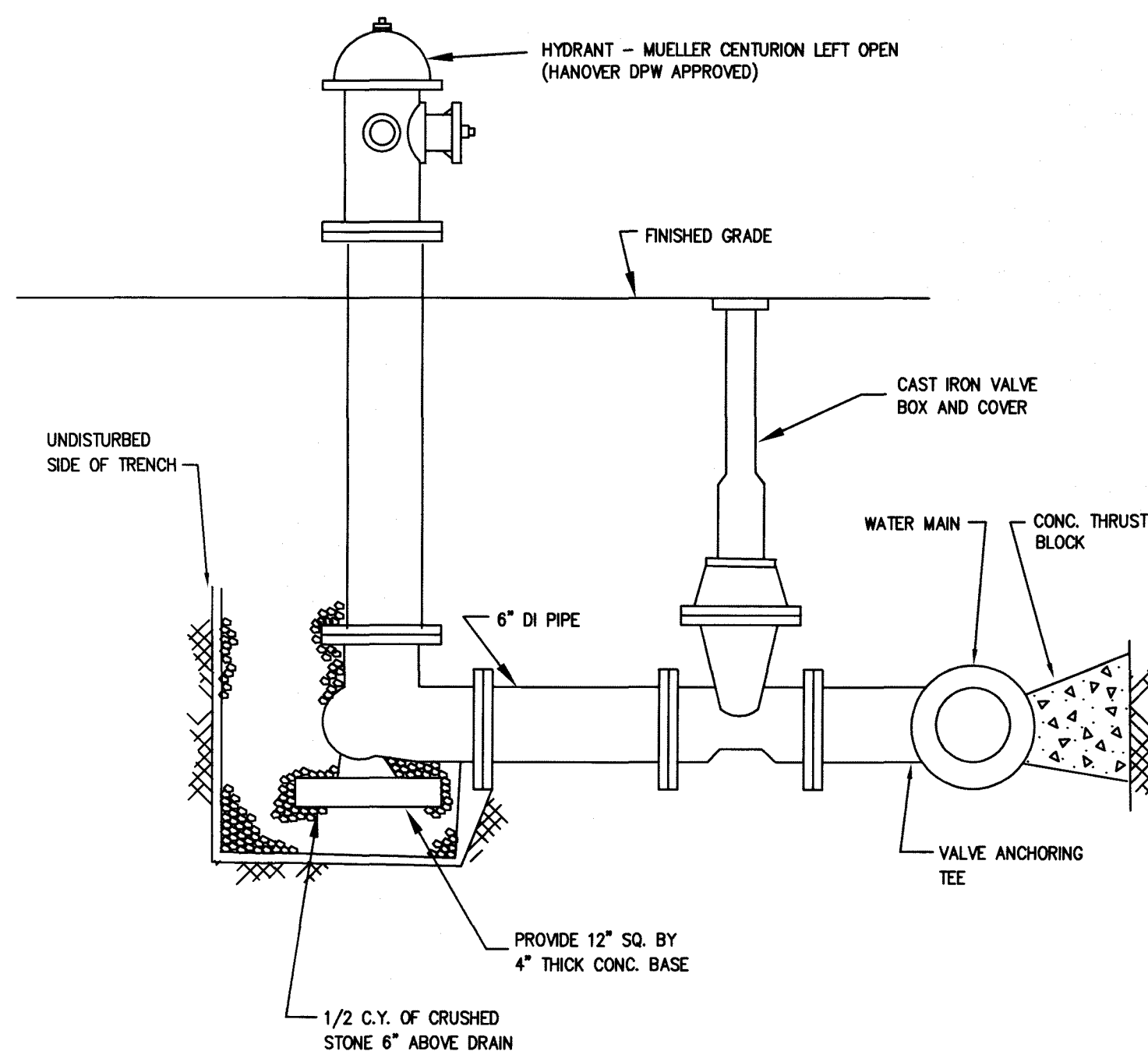
NOTES:

- FOR FITTINGS WITH LESS THAN 45° DEFLECTION, USE BEARING AREAS FOR 45° BEND.
- BEARING AREAS BASED ON HORIZONTAL PASSIVE SOIL PRESSURE OF 2000 P.S.F. AND INTERNAL WATER PRESSURE OF 150 P.S.I.G. JOINTS SHALL NOT BE ENCASED IN CONCRETE. BEARING AREAS MAY BE DREGARDED FOR TRENCHES IN ROCK WHERE THE TOP OF THE ROCK FACE IS AT OR ABOVE THE CROWN OF THE PIPE. HOWEVER, CONCRETE BACKING SHALL BE PLACED BETWEEN THE PIPE AND THE ROCK FACE.
- THE CONTRACTOR SHALL SUBMIT 2 WEEKS IN ADVANCE OF PLACEMENT, WORKING DRAWINGS FOR EACH THRUST BLOCK TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- ALL TEES, GATE VALVES, HYDRANTS AND FITTINGS SHALL BE MECHANICAL JOINTS WITH MEGA-LUGS.
- THRUST BLOCKS SHALL BE BARREL BLOCKS.



WATER GATE DETAIL

NOT TO SCALE



HYDRANT DETAIL

NOT TO SCALE

Plymouth County Registry of Deeds  
PLAN BOOK 64 PAGE 938

FOR REGISTRY USE ONLY

I HEREBY CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS DATED JANUARY 2, 1976 AND REVISED JANUARY 12, 1988.

BRADLEY C. MCKENZIE, P.E. MCKENZIE ENGINEERING GROUP, INC.

I, Bradley C. McKenzie, CLERK OF THE TOWN OF HANOVER, HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD WAS RECEIVED ON 8/13/18 AND RECORDED AT THIS OFFICE. NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT FOLLOWING SUCH RECEIPT AND RECORDING OF SAID NOTICE.

DATE 8/13/18 TOWN CLERK  
APPROVED Bradley C. McKenzie, SUBJECT TO COVENANT CONDITIONS SET FORTH IN A COVENANT EXECUTED BY Bradley C. McKenzie, DATED 8/13/18 AND TO BE RECORDED HERewith.

APPROVAL UNDER THE SUBDIVISION CONTROL LAW REQUIRED

DATE OF APPLICATION: 7/2/18

DATE OF HEARING: 8/13/18

DATE OF APPROVAL: 8/12/19

DATE OF ENDORSEMENT: 3/9/20

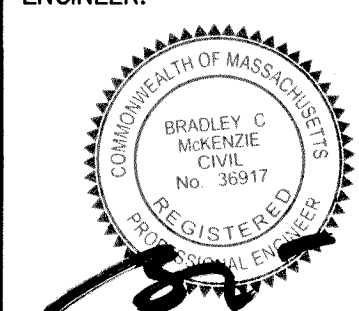
Mayor Dan F. Gault  
Richard A. Chamberlain  
Michael D. Dineen  
HANOVER PLANNING BOARD

BY APP  
DESCRIPTION  
PER CONSULTANT REVIEW  
DATE  
REV  
1  
9/18/18

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

DEFINITIVE SUBDIVISION PLAN  
WINTER STREET  
(ASSESSOR'S MAP 76 LOT 18)  
WINTER STREET  
HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL ENGINEER:



APPLICANT:  
MCSHARRY BROS., INC.  
7 LEAH DRIVE  
ROCKLAND, MASSACHUSETTS 02370

DRAWN BY: AWL  
DESIGNED BY: AWL  
CHECKED BY: BCM  
APPROVED BY: BCM  
DATE: JULY 2, 2018  
SCALE: AS NOTED  
PROJECT NO.: 217-169  
DWG. TITLE:

Construction Details

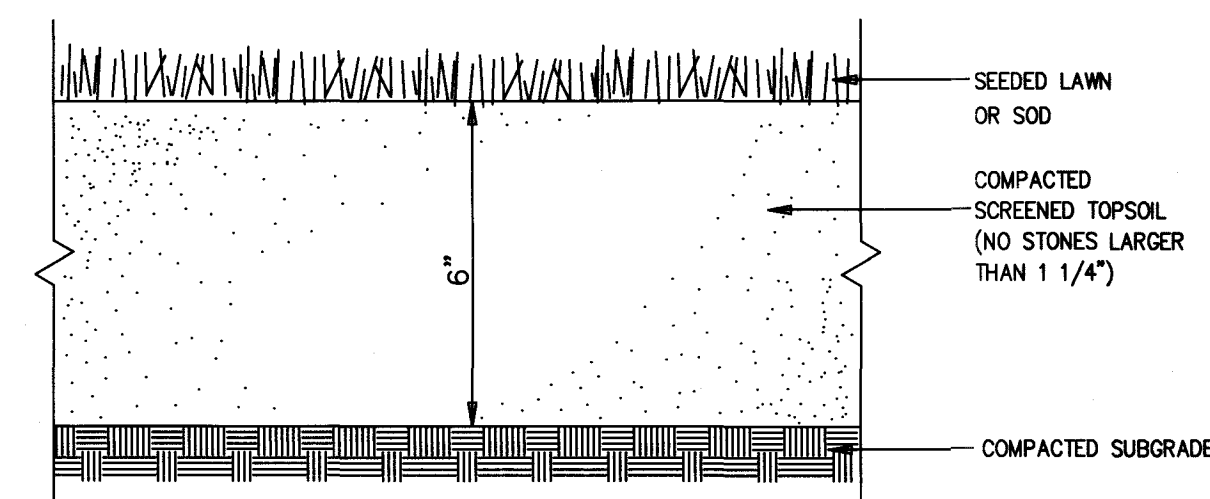
DWG. No:

110413

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FILE LOCATION: M:\217-169\Drawings\217-169 Definitive.dwg

(11-0F-13) - 20-484



NOTES:  
1. TOP OF LOAM (TOPSOIL) IS FINISHED GRADE.  
2. TOPSOIL SHALL CONTAIN BETWEEN 5% AND 12% ORGANIC MATTER AND SHALL HAVE A MAXIMUM STONE SIZE OF 1 1/4\"/>

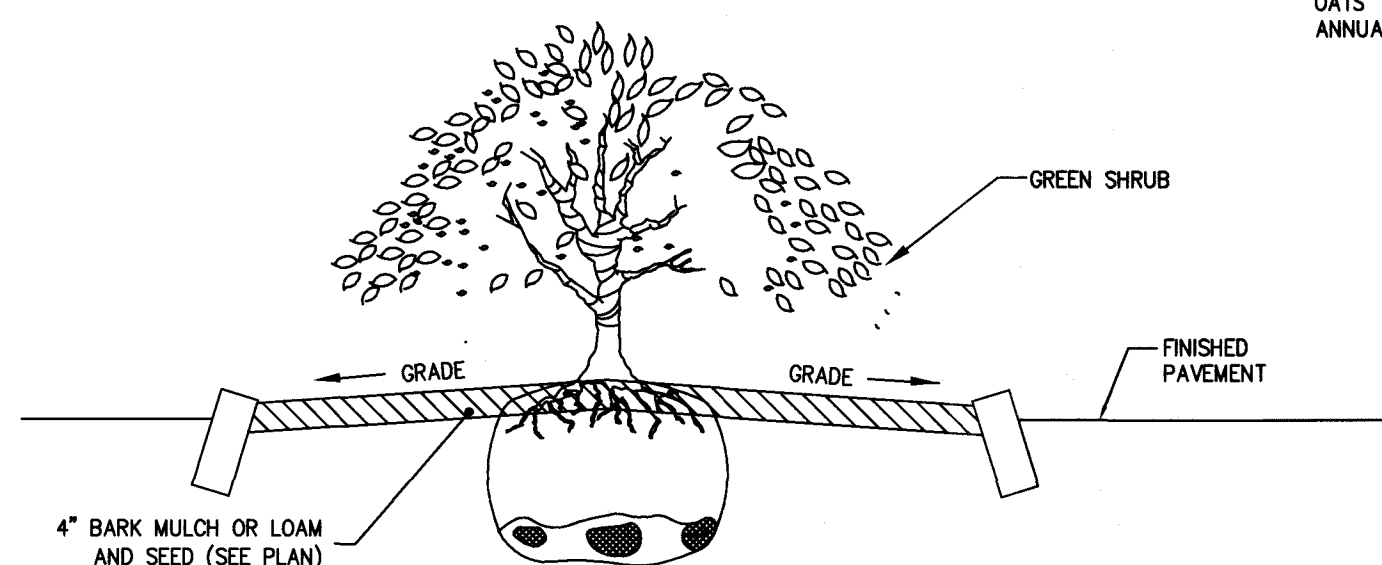
SIEVE	% PASSING
1 1/4 INCH	100
No. 4	85-100
No. 10	60-85
No. 20	38-60
No. 40	28-40

## SEEDING RATES

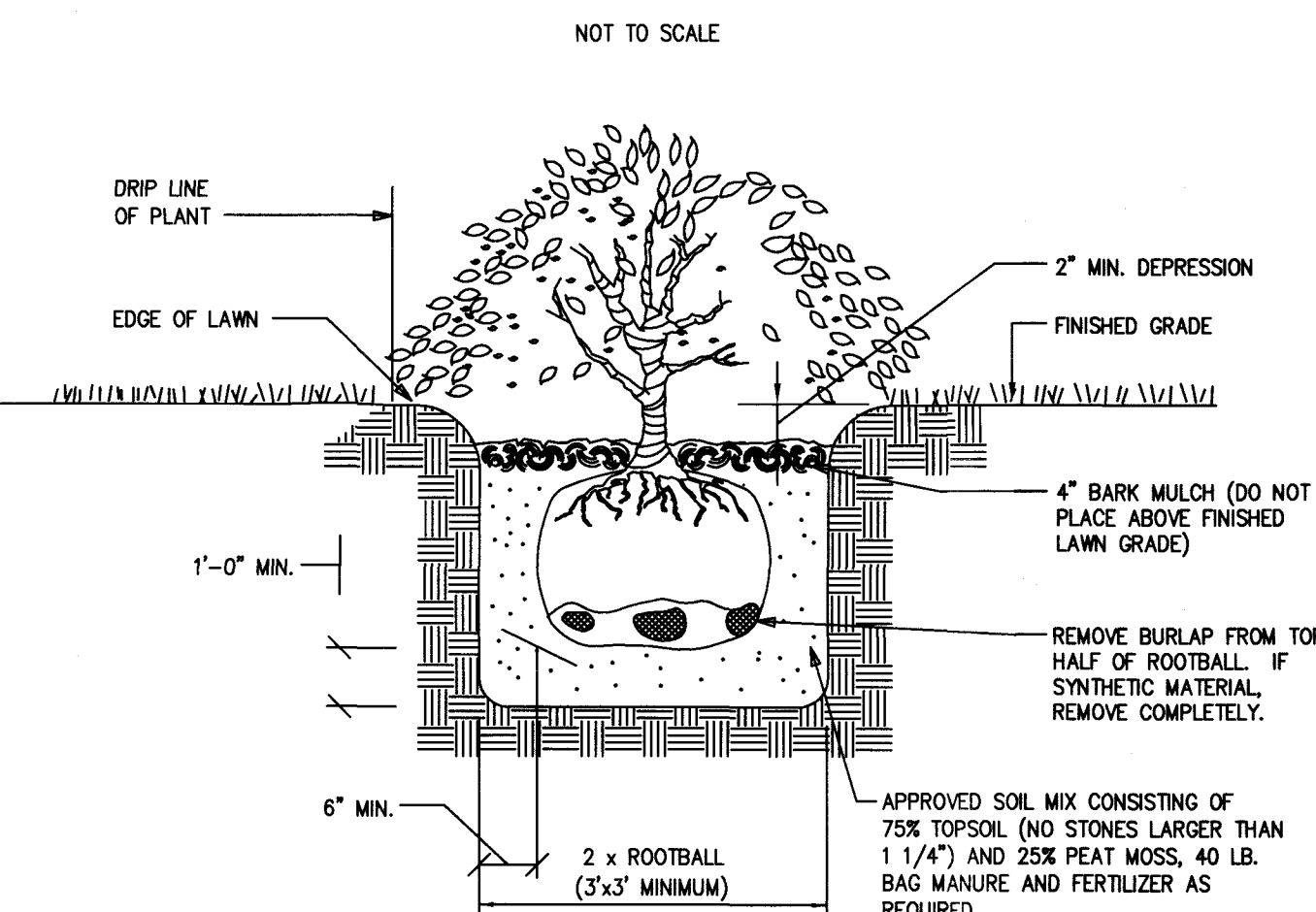
	POUND / ACRE	POUNDS / 1,000 S.F.
A. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
REDTOP	2	0.05
TOTAL	42	0.95
B. TALL FESCUE	15	0.35
CREEPING RED FESCUE	15	0.35
BIRDSFOOT TREFOIL	15	0.35
TOTAL	45	1.05
C. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
BIRDSFOOT TREFOIL	8	0.20
TOTAL	48	1.10
D. BIRDSFOOT TREFOIL	10	0.25
REDTOP	5	0.10
REED CANSTYGRASS	15	0.35
TOTAL	30	0.70
E. TALL FESCUE	20	0.45
FLATPEA	30	0.75
TOTAL	50	1.20
F. CREEPING RED FESCUE 1/	50	1.15
KENTUCKY BLUEGRASS 1/	50	1.15
TOTAL	100	2.30
G. TALL FESCUE 1/	150	3.60

## TEMPORARY SEEDING RATES

H. WINTER RYE	112 (AUG 15 TO SEPT. 5)	2.50
OATS	80 (BEFORE MAY 15)	2.00
ANNUAL RYEGRASS	40 (AUG 15 TO SEPT. 15)	1.00



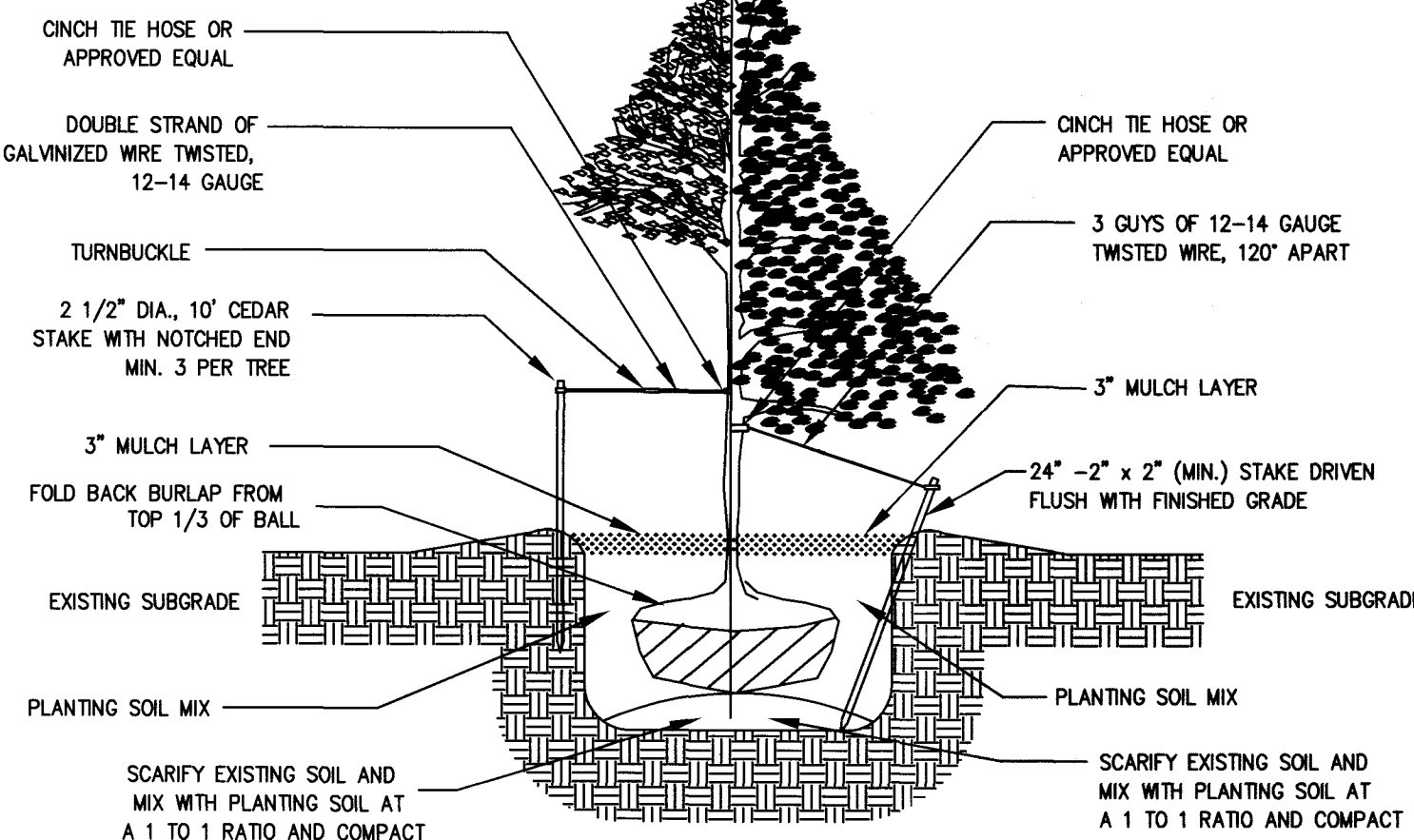
## TYPICAL ISLAND GRADING TREATMENT DETAIL



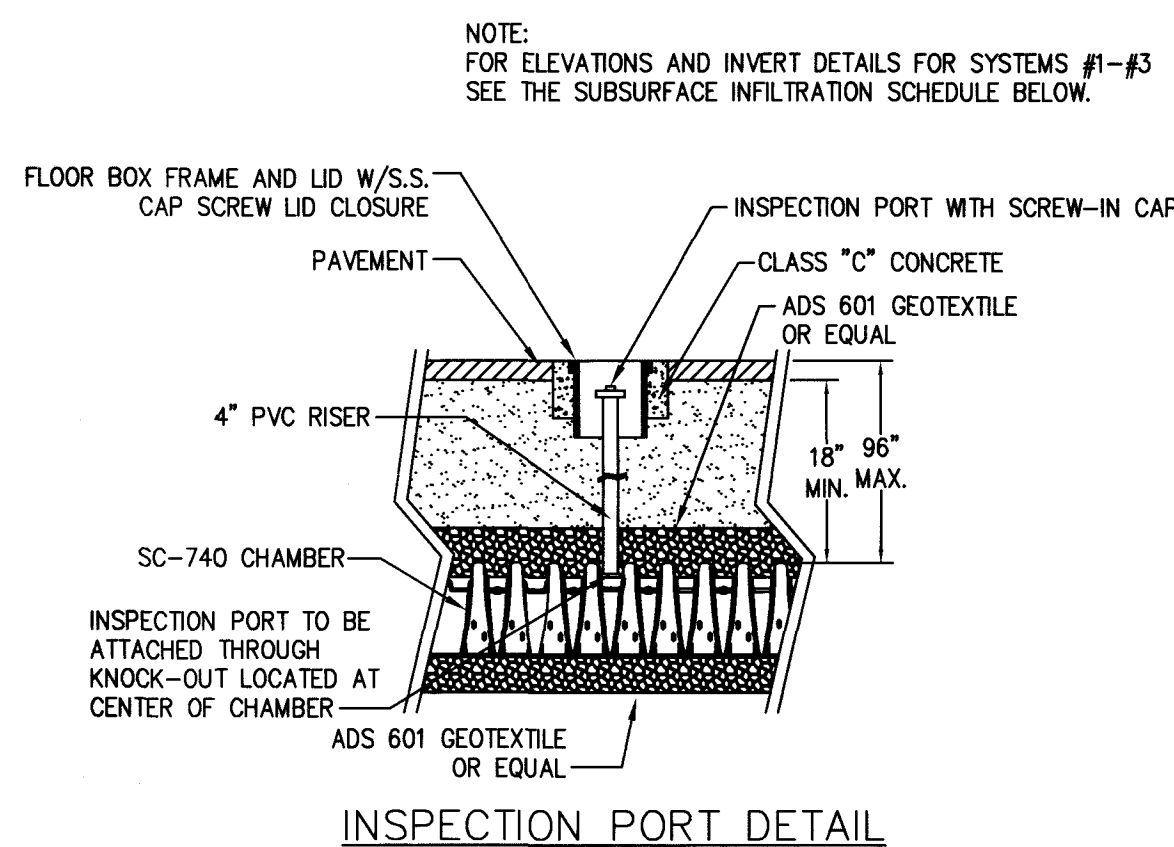
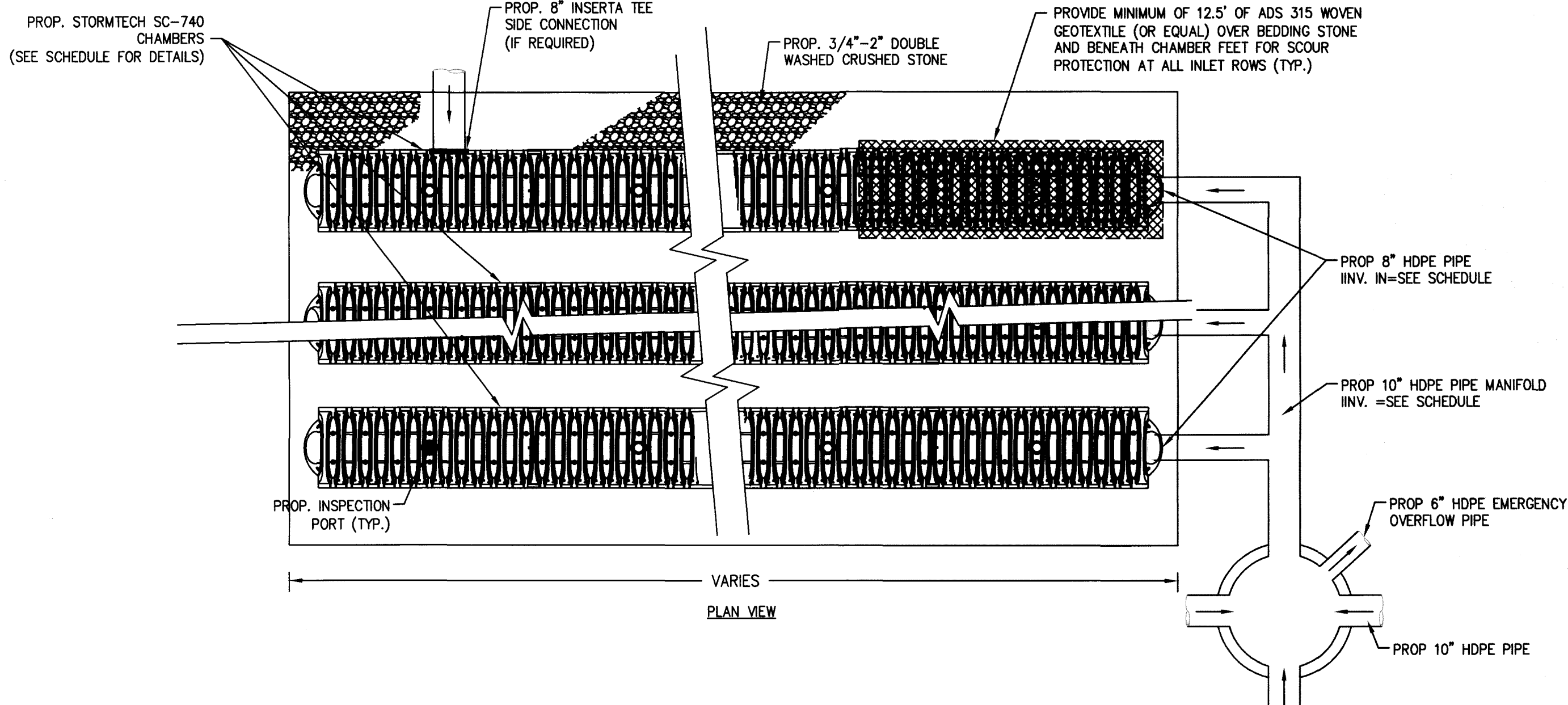
## TYPICAL SHRUB PLANTING DETAIL

DECIDUOUS TREE - PRUNE BACK 1/4\"/>

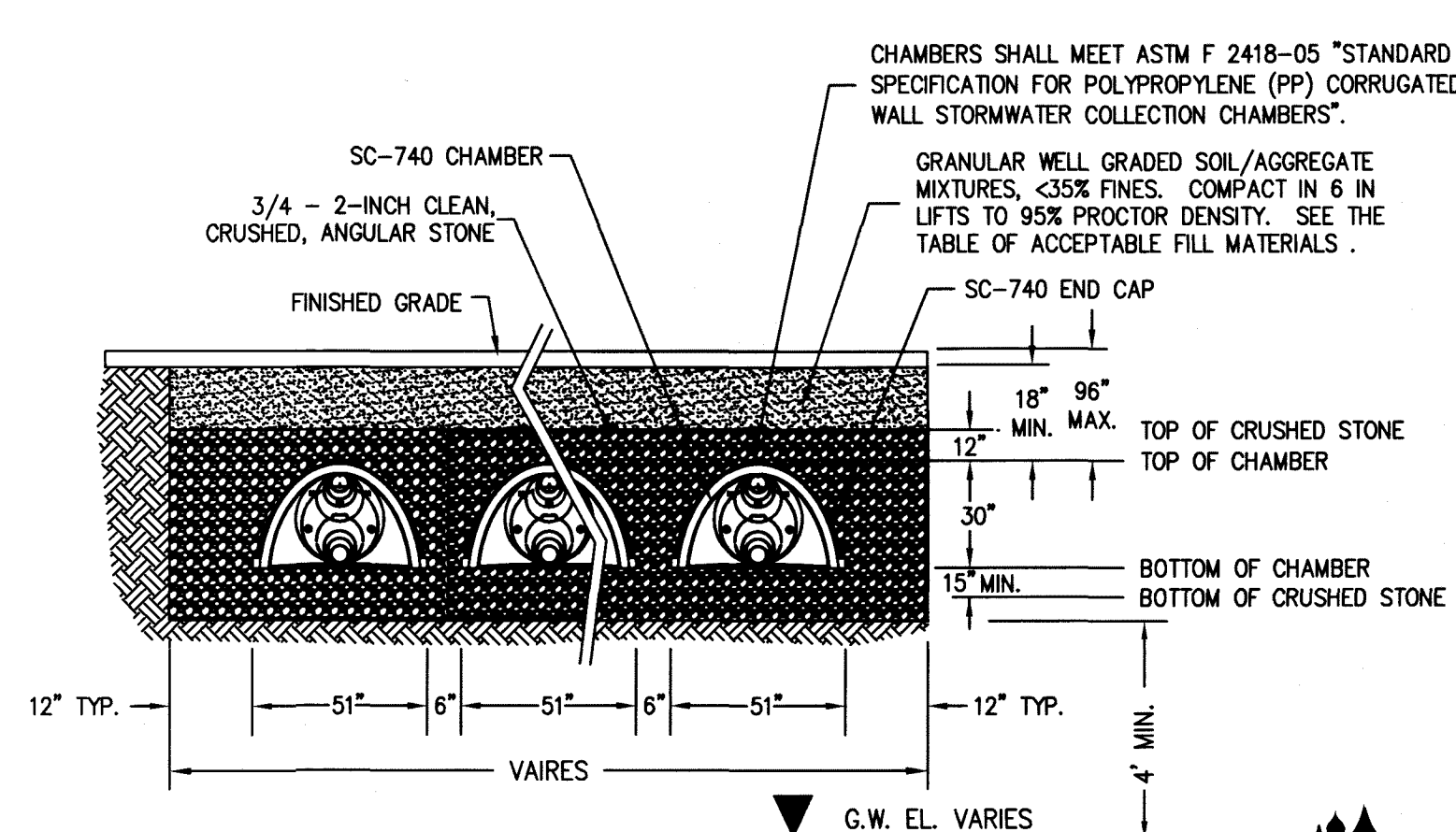
EVERGREEN TREE - GROUNDLINE TO BE THE SAME AS EXISTED AT THE NURSERY



## DECIDUOUS AND EVERGREEN TREE PLANTING DETAIL



## INSPECTION PORT DETAIL



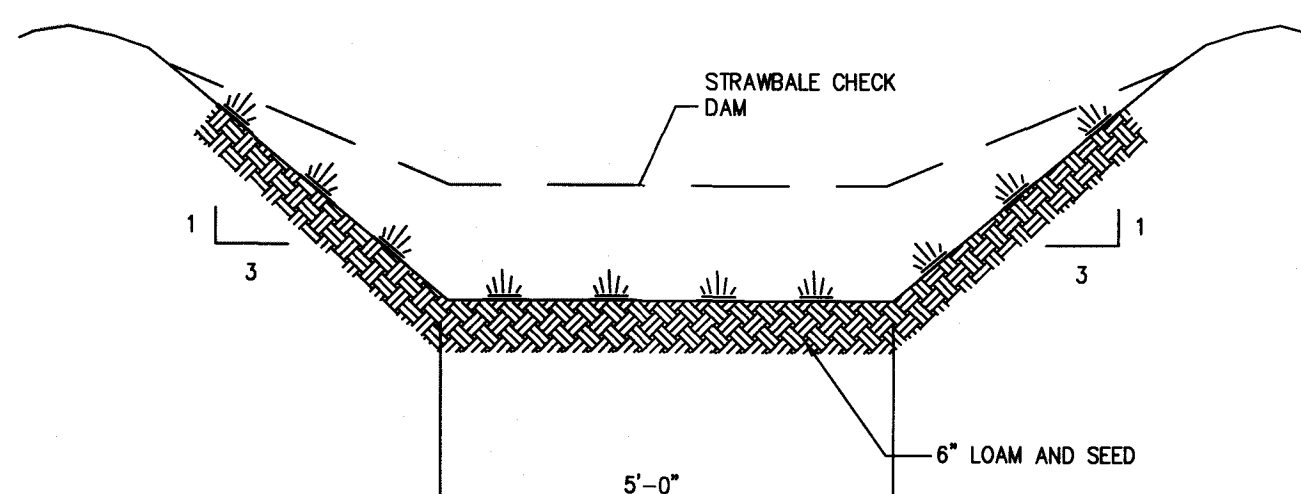
## TYPICAL SECTION

## SUBSURFACE INFILTRATION SYSTEM

NOT TO SCALE

SYSTEM #	DMH RIM ELEV.	INV. IN DMH	INV. OUT DMH	INV. OUT EMERGENCY OVERFLOW	CHAMBER TYPE	NUMBER OF CHAMBERS	INV. MANIFOLD	INV. IN CHAMBERS	G.W. ELEVATION	BOTTOM OF STONE	BOTTOM OF CHAMBER	TOP OF CHAMBER	TOP OF STONE	FINISHED GRADE
#1	71.0±	62.10	62.00	63.55	SC-740	45	62.00	62.00	56.3	60.30	60.80	63.30	63.80	65.5-70.5
#2	71.8±	67.80	67.70	69.25	SC-740	10	67.70	67.70	61.0	66.50	67.00	69.50	70.00	71-72

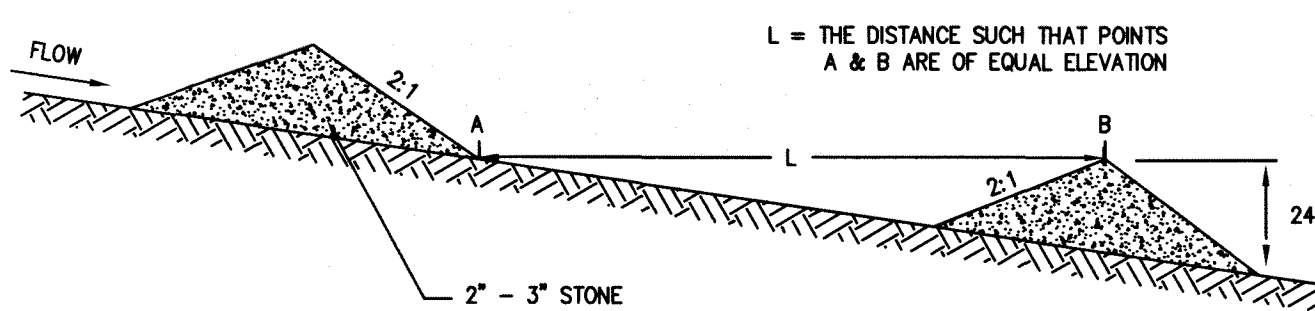
## SUBSURFACE INFILTRATION SCHEDULE



## SECTION VIEW

## GRASS SWALE DETAIL

NOT TO SCALE



## TYPICAL STONE CHECK DAM DETAIL

NOT TO SCALE

Plymouth County Registry of Deeds  
PLAN BOOK **64** PAGE **839**

FOR REGISTRY USE ONLY

I HEREBY CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS DATED JANUARY 2, 1976 AND REVISED JANUARY 12, 1988.

BRADLEY C. MCKENZIE, P.E. MCKENZIE ENGINEERING GROUP, INC.

I, Bradley C. McKenzie, CLERK OF THE TOWN OF HANOVER, HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD WAS RECEIVED ON 8/13/18 AND RECORDED AT THIS OFFICE. NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT FOLLOWING SUCH RECEIPT AND RECORDING OF SAID NOTICE.

DATE 8/13/18 TOWN CLERK William J. Goff

APPROVED Bradley C. McKenzie, SUBJECT TO COVENANT CONDITIONS SET FORTH IN A COVENANT EXECUTED BY McSharry Bros., Inc., DATED 7/2/18 AND TO BE RECORDED HERewith.

APPROVAL UNDER THE SUBDIVISION CONTROL LAW REQUIRED

DATE OF APPLICATION: 7/2/18

DATE OF HEARING: 8/13/18

DATE OF APPROVAL: 8/12/19

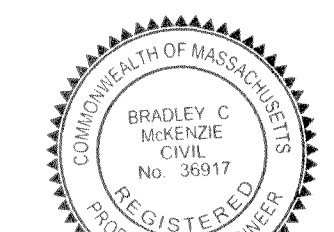
DATE OF ENDORSEMENT: 3/9/20

Maureen Bougale  
Richard A. Blawie  
Theresa  
Maureen Bougale  
HANOVER PLANNING BOARD

## DEFINITIVE SUBDIVISION PLAN

WINTER STREET  
(ASSESSOR'S MAP 76, LOT 18)  
WINTER STREET  
HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL ENGINEER:



APPLICANT:  
MC SHARRY BROS., INC.  
7 LEAH DRIVE  
ROCKLAND, MASSACHUSETTS 02370

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12 of 13

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(12 of 13) 20484



