

LOCUS MAP SCALE: 1"=1000'

Drawing Index:

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20	SITE EROSION & SEDIMENTATION PLAN

Owners

Anthony McSharry
6 Leah Drive, Rear
Rockland, MA 02370

Ursula B. Stone, Trustee
Stone II Realty Trust
58 Oakland Avenue
Hanover, MA 02339

Cardinal Cushing School
& Training Center
405 Washington Street
Hanover, MA 02339

Applicant:

32 Oakland Ave LLC
30 Wade Way
Hanover, MA 02339

Engineer/Surveyor:

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

OAKLAND ESTATES

(Assessors Map 49, Portions of Lots 1 & 2, Map 57, Lot 31)

Definitive Subdivision Plan

in

Hanover, Massachusetts

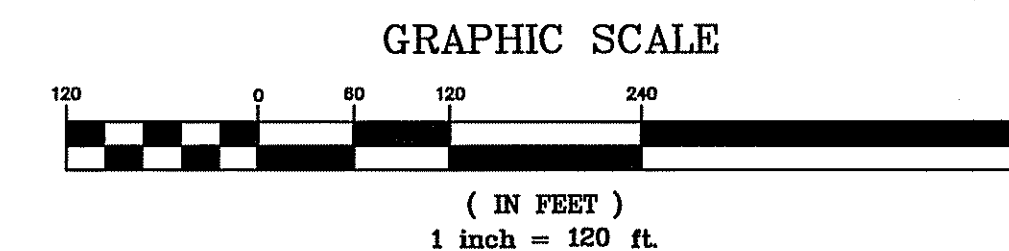


SCALE: 1" = 120'

Index Plan

Issued Date: December 14, 2020
Revised: January 21, 2021
Revised: March 11, 2021

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



FOR REGISTRY USE ONLY			
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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 _____ 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 _____ 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: _____

DATE OF HEARING: _____

DATE OF APPROVAL: _____

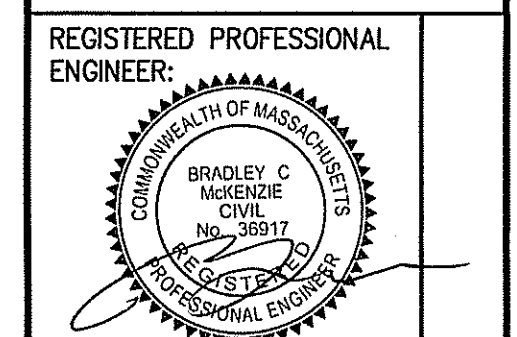
DATE OF ENDORSEMENT: _____

HANOVER PLANNING BOARD

REV	DATE	DESCRIPTION	BY	APP
1	1/21/21	RET. WALL LOCATION	AWL	BCM
2	3/11/21	PER. FEED REVIEW	AWL	BCM



DEFINITIVE SUBDIVISION PLAN
OAKLAND ESTATES
(ASSESSOR'S MAP 49, PORTION OF LOTS 1 & 2 AND MAP 57, LOT 31)
OAKLAND AVENUE
HANOVER, MASSACHUSETTS



APPLICANT:
32 OAKLAND AVE LLC
30 WADE WAY
HANOVER, MASSACHUSETTS 02339

DRAWN BY: _____ AWL
DESIGNED BY: _____ AWL
CHECKED BY: _____ BCM
APPROVED BY: _____ BCM
DATE: DECEMBER 14, 2020
SCALE: AS NOTED
PROJECT NO.: 217-106
DWG. TITLE:

Cover Sheet

DWG. No.: 1

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FILE LOCATION: M:\217-106\DWGS-Definitive\217-106 Definitive.dwg

Abbreviations

AC	ASBESTOS CEMENT
BIT	BITUMINOUS
BOL	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
EL	ELECTRIC METER
F.F.	FIRST FLOOR
FND	FOUND
FSD	FIELDSTONE BOUND
GAR.	GARAGE
G	GAS
GC	GAS GATE
GM	GAS METER
GUY	GUY WIRE
IR	IRON ROD
LP	LIGHT POLE
M	MONITORING WELL
(M)	MARKED
N/F	NOW OR FORMERLY
NUMBER	NUMBER
OHW	OVERHEAD WIRES
PL	PLASTIC
PROP	PROPOSED
PVC	POLYVINYL CHLORIDE PIPE
R	RIM
RCP	REINFORCED CONCRETE PIPE
ROD	ROOF DRAIN
RET	RETAINING
SDH	STONE BOUND WITH DRILLHOLE
SGC	SLOPED GRANITE CURB
SMH	SEWER MANHOLE
STEEL	STEEL
TEC	TELEPHONE, ELECTRIC, CABLE
TEST PIT	TEST PIT
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 51349, PAGE 325 (ASSESSOR'S MAP 57, LOT 31)
DEED BOOK 1988, PAGE 478 (ASSESSOR'S MAP 49, LOT 1)
DEED BOOK 39381, PAGE 115 (ASSESSOR'S MAP 49, LOT 2)
- ZONING: LOCUS IS SITUATED WITHIN THE RESIDENCE A ZONING DISTRICT.
DIMENSIONAL REQUIREMENTS
LOT SIZE 30,000 S.F. (UPLAND)
FRONTAGE 150 FT.
BLDG. SETBACKS 50 FT. FRONT YARD
20 FT. SIDE YARD
40 FT. REAR YARD
LOT COVERAGE 30%
- TAX MAP REFERENCE: LOCUS IS SHOWN AS PORTIONS OF LOTS 1 & 2 ON THE TOWN OF HANOVER ASSESSOR'S MAP 49 AND LOT 31 ON TOWN OF HANOVER ASSESSOR'S MAP 57.
- 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 AND RESTORATION, LLC ON JANUARY 9 & 22, 2019.
- FEMA: LOCUS FALLS WITHIN ZONE A AND ZONE X AS SHOWN ON THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 25023C0202J, 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 JUNE AND JULY OF 2020.
- DATUM: ALL ELEVATIONS, SHOWN HEREON, ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVDB8).
- 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.

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. V.C.1: SIDEWALKS
REQUIRED: "PAVED SIDEWALKS SHALL BE CONSTRUCTED ALONG THE FULL LENGTH OF BOTH SIDES OF EVERY SUBDIVISION WAY..."
PROVIDED: ONE SIDEWALK IS PROVIDED.
- TYPICAL ROADWAY SECTION
REQUIRED: "TYPICAL ROADWAY SECTION" AS SHOWN IN THE TOWN OF HANOVER RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND IN HANOVER, MASSACHUSETTS
PROVIDED: PROPOSED RETAINING WALL SHOWN WITHIN THE PROPOSED RIGHT OF WAY AT THE BACK EDGE OF SIDEWALK.



FOR REGISTRY USE ONLY

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

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DATE _____ TOWN CLERK _____

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DATE OF APPLICATION: _____

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DATE OF APPROVAL: _____

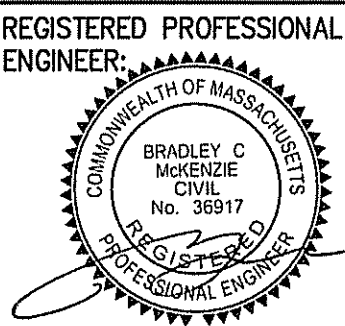
DATE OF ENDORSEMENT: _____

HANOVER PLANNING BOARD

REV	DATE	DESCRIPTION	BY	APP
1	1/21/21	RET WALL LOCATION	AWL	BCM
2	3/11/21	PER PEER REVIEW	AWL	BCM



DEFINITIVE SUBDIVISION PLAN
OAKLAND ESTATES
(ASSESSOR'S MAP 49, PORTION OF LOTS 1 & 2 AND MAP 57, LOT 31)
OAKLAND AVENUE
HANOVER, MASSACHUSETTS

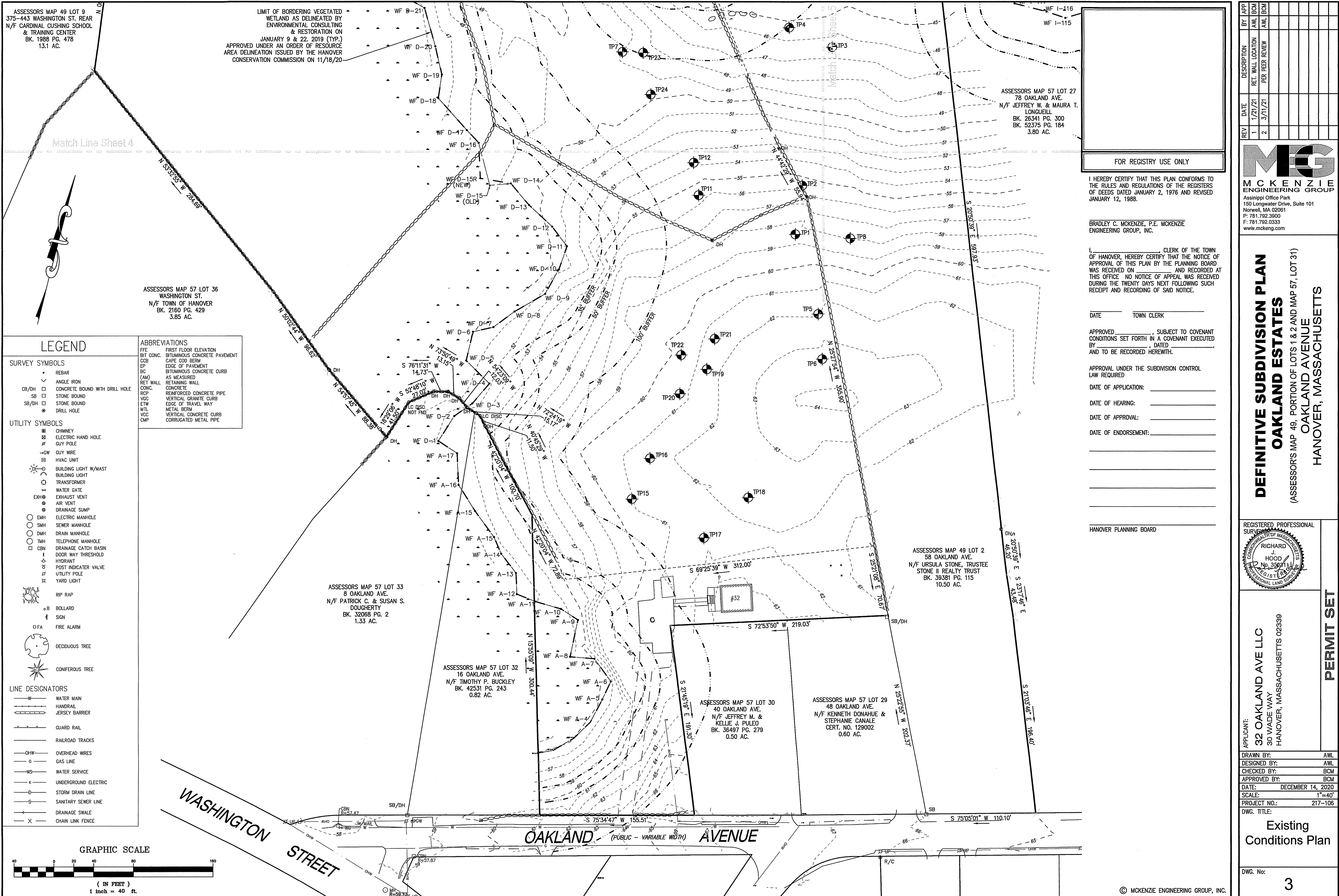


APPLICANT:
32 OAKLAND AVE LLC
30 WADE WAY
HANOVER, MASSACHUSETTS 02339

DRAWN BY:	AWL
DESIGNED BY:	AWL
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	DECEMBER 14, 2020
SCALE:	AS NOTED
PROJECT NO.:	217-106
DWG. TITLE:	

General Notes,
Legend, Symbols
& Abbreviations

DWG. No:
2



LEGEND

SURVEY SYMBOLS

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

UTILITY SYMBOLS

- CHIMNEY
- ELECTRIC HAND HOLE
- GUY POLE
- GUY WIRE
- HVAC UNIT
- BUILDING LIGHT W/MAST
- BUILDING LIGHT
- TRANSFORMER
- WATER GATE
- EXHAUST VENT
- AIR VENT
- DRAINAGE SUMP
- ELECTRIC MANHOLE
- SEWER MANHOLE
- DRAIN MANHOLE
- TELEPHONE MANHOLE
- DRAINAGE CATCH BASIN
- DOOR WAY THRESHOLD
- HYDRANT
- POST INDICATOR VALVE
- UTILITY POLE
- YARD LIGHT
- RIP RAP
- BOLLARD
- SIGN
- FIRE ALARM
- DECIDUOUS TREE
- CONIFEROUS TREE

LINE DESIGNATORS

- WATER MAIN
- HANDRAIL
- JERSEY BARRIER
- GUARD RAIL
- RAILROAD TRACKS
- OVERHEAD WIRES
- GAS LINE
- WATER SERVICE
- UNDERGROUND ELECTRIC
- STORM DRAIN LINE
- SANITARY SEWER LINE
- DRAINAGE SWALE
- CHAIN LINK FENCE

ABBREVIATIONS

FPE FIRST FLOOR ELEVATION
BTC BIT CONG.
CCB BIT CONG.
EP CAFE COB BERM
BC EDGE OF PAVEMENT
(AM) BITUMINOUS CONCRETE CURB
RET WALL AS MEASURED
CONC. RETAINING WALL
RCP CONCRETE
VCC REINFORCED CONCRETE PIPE
ETW VERTICAL GRANITE CURB
MTL EDGE OF TRAVEL WAY
VCC METAL BERM
VCC VERTICAL CONCRETE CURB
CMP CORRUGATED METAL PIPE

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2	3/11/21	PER REE REVIEW	AWL	BCM

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

DEFINITIVE SUBDIVISION PLAN
OAKLAND ESTATES
(ASSESSOR'S MAP 49, PORTION OF LOTS 1 & 2 AND MAP 57, LOT 31)
OAKLAND AVENUE
HANOVER, MASSACHUSETTS

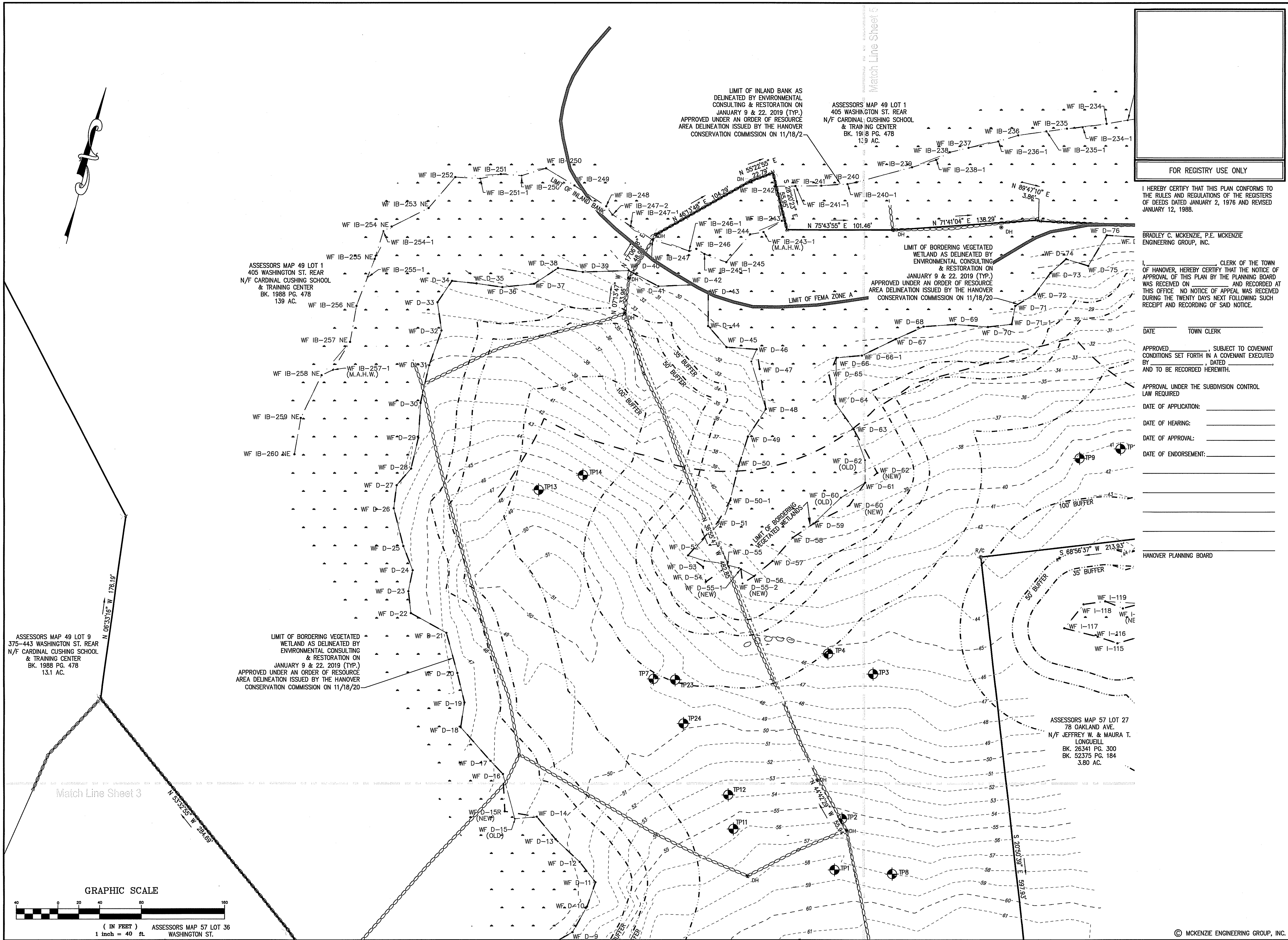
REGISTERED PROFESSIONAL SURVEYOR
COMMONWEALTH OF MASSACHUSETTS
RICHARD J. HOOD
No. 2562
REGISTERED PROFESSIONAL LAND SURVEYOR

APPLICANT:
32 OAKLAND AVE LLC
30 WADE WAY
HANOVER, MASSACHUSETTS 02339

DRAWN BY:	AWL
DESIGNED BY:	AWL
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	DECEMBER 14, 2020
SCALE:	1"=40'
PROJECT NO.:	217-106
DWG. TITLE:	

Existing Conditions Plan

DWG. No: **3**



FOR REGISTRY USE ONLY

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

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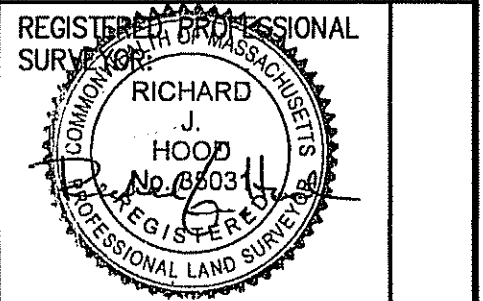
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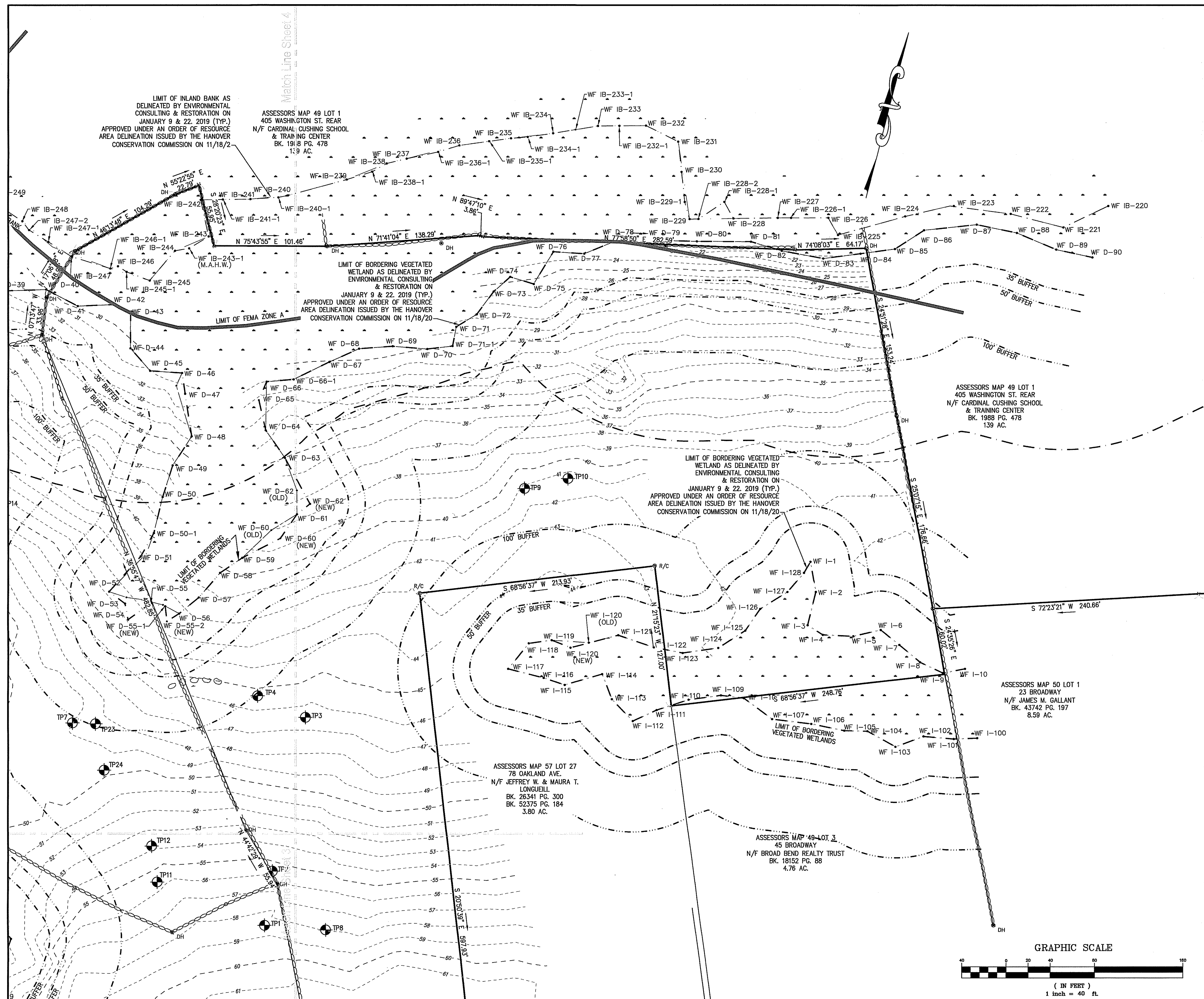


APPLICANT:
32 OAKLAND AVE LLC
80 WADE WAY
HANOVER, MASSACHUSETTS 02339

DRAWN BY: AWL
DESIGNED BY: AWL
CHECKED BY: BCM
APPROVED BY: BCM
DATE: DECEMBER 14, 2020
SCALE: 1"=40'
PROJECT NO.: 217-106
DWG. TITLE:

Existing
Conditions Plan

DWG. No: **4**



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

I, _____, CLERK OF THE TOWN
OF HANOVER, HEREBY CERTIFY THAT THE NOTICE OF
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APPROVAL UNDER THE SUBDIVISION CONTROL
LAW REQUIRED

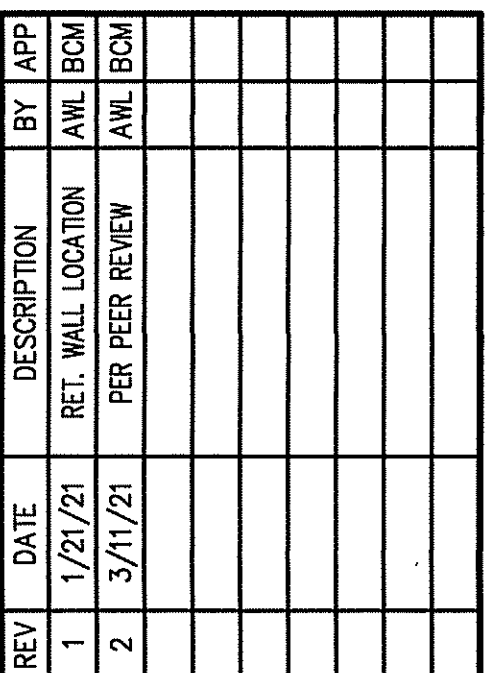
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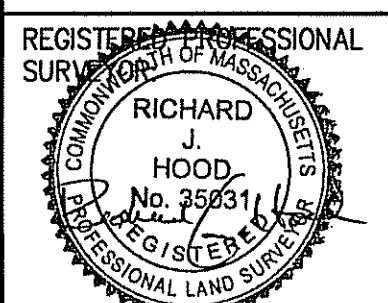
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HANOVER PLANNING BOARD



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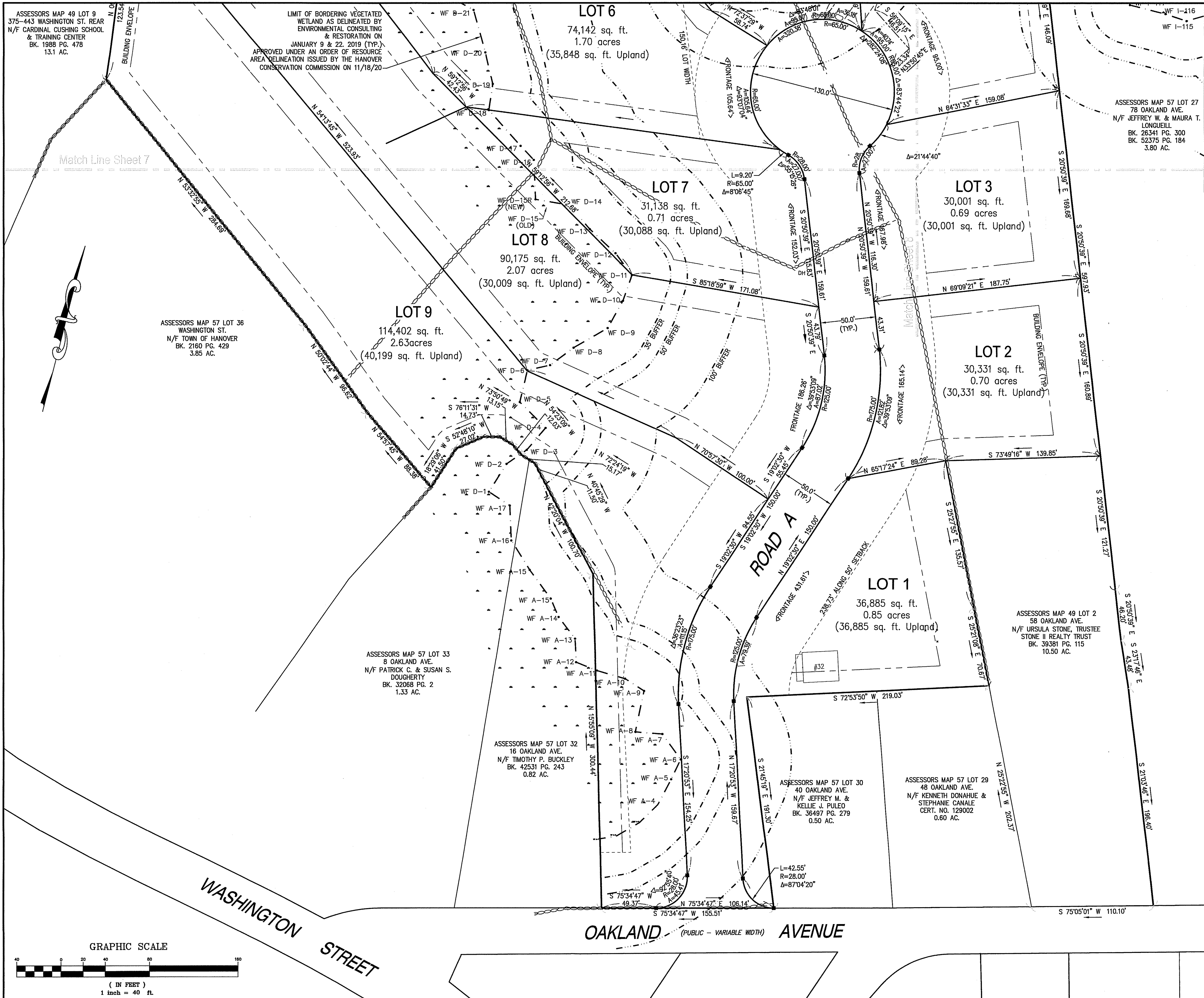
Existing Conditions Plan

DWG. No:

5

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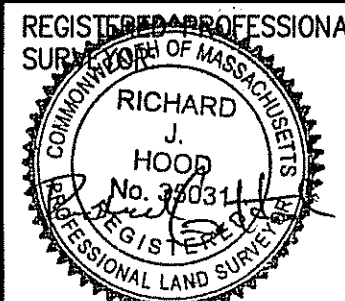
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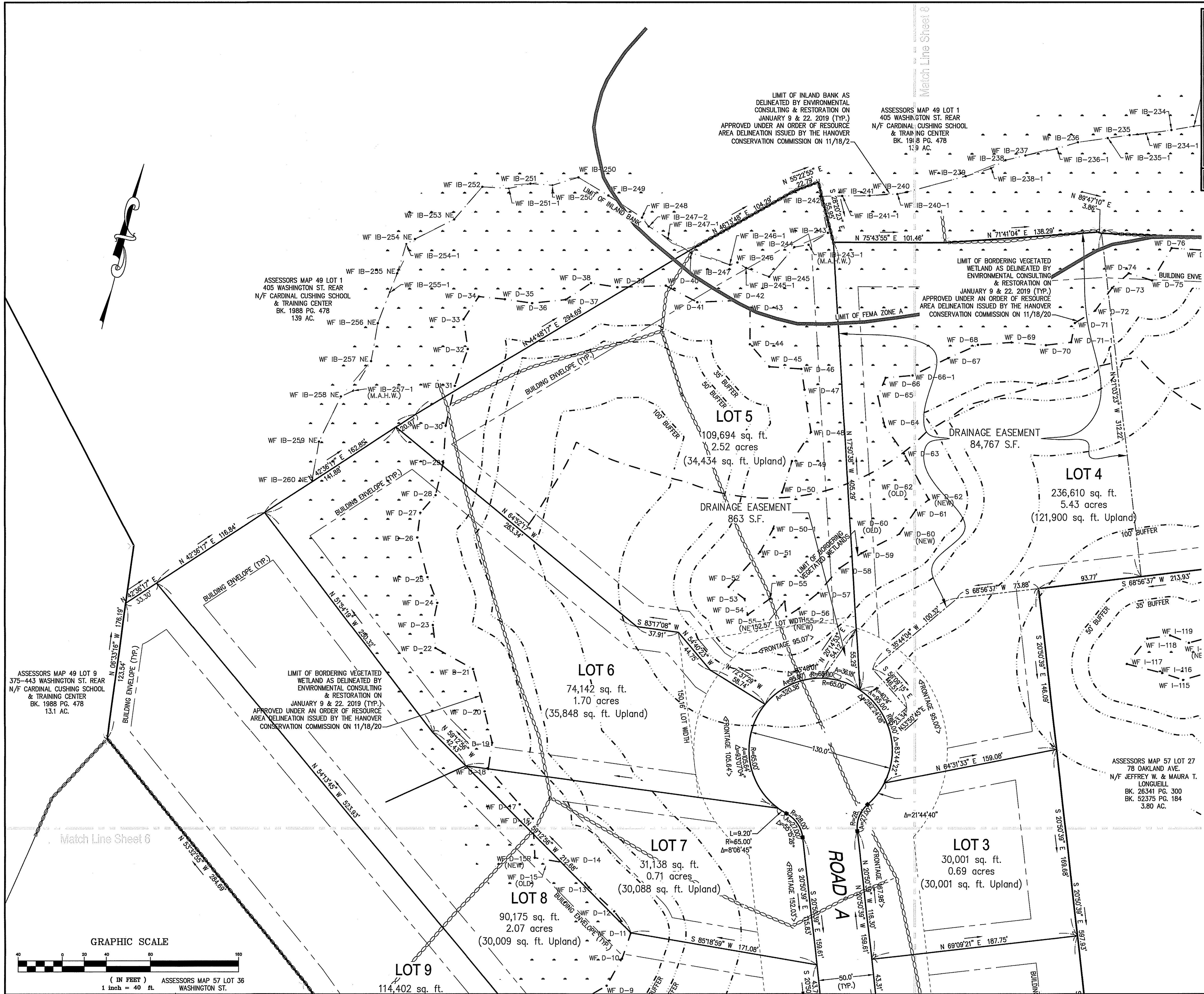
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APPROVED BY: BCM
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DWG. TITLE:

Lot Layout Plan

DWG. No:

6



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HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL
SURVEYOR
RICHARD J. HOOD
No. 35031
MASSACHUSETTS
PROFESSIONAL LAND SURVEYOR

APPLICANT:
32 OAKLAND AVE LLC
30 WADE WAY
HANOVER, MASSACHUSETTS 02339

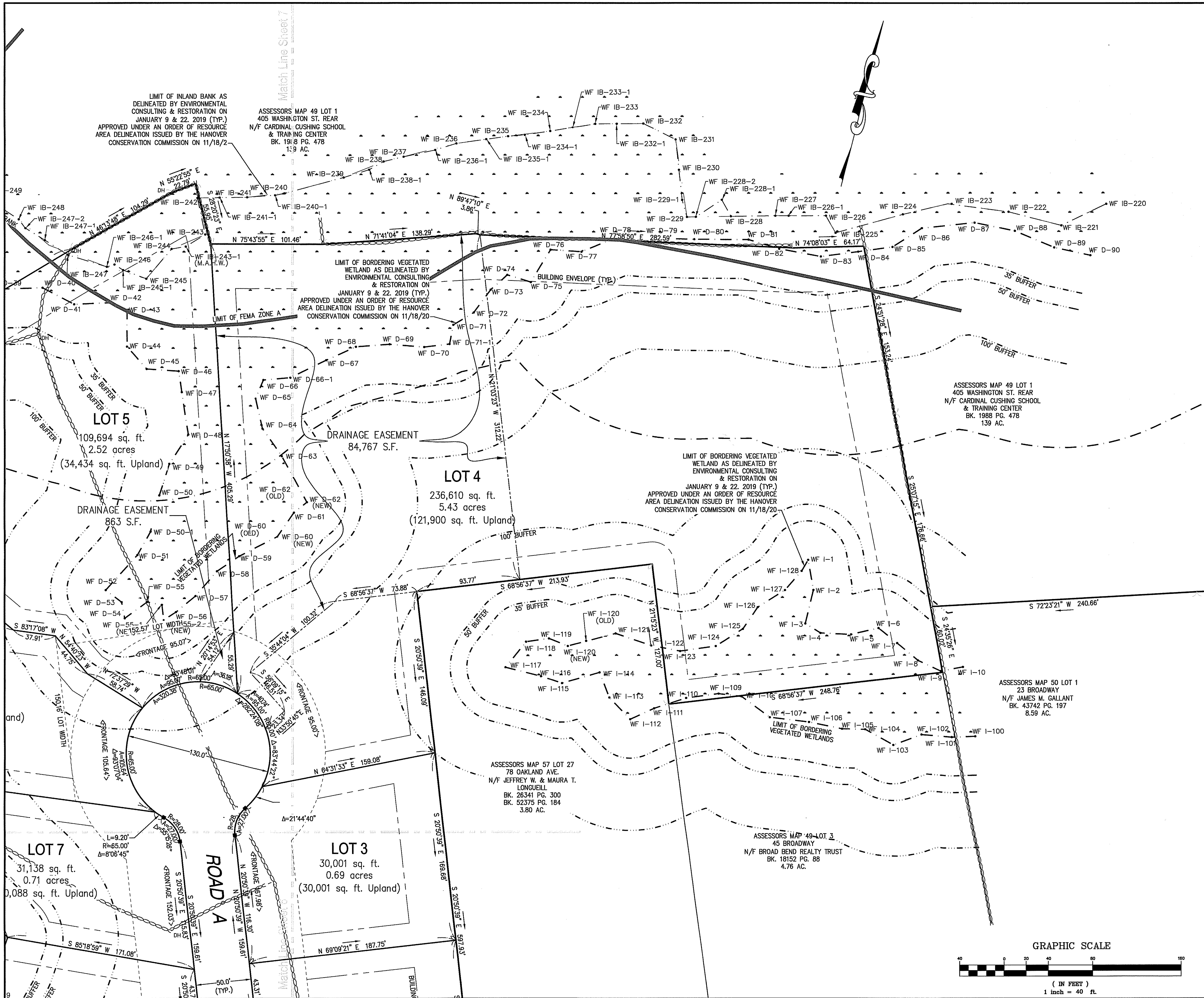
PERMIT SET

DRAWN BY: AWL
DESIGNED BY: AWL
CHECKED BY: BCM
APPROVED BY: BCM
DATE: DECEMBER 14, 2020
SCALE: 1"=40'
PROJECT NO.: 217-106
DWG. TITLE: Lot Layout Plan

DWG. No: **7**

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FILE LOCATION: M:\217-106\DWGS\DWGS-Definitive\217-106 Definitive.dwg



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 _____ 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 _____ 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: _____

DATE OF HEARING: _____

DATE OF APPROVAL: _____

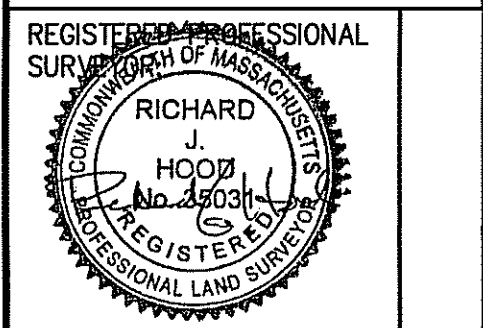
DATE OF ENDORSEMENT: _____

HANOVER PLANNING BOARD

REV	DATE	DESCRIPTION	BY	APP
1	1/21/21	RET. WALL LOCATION	AWL	BCM
2	3/11/21	PER. FEED REVIEW	AWL	BCM

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

**DEFINITIVE SUBDIVISION PLAN
OAKLAND ESTATES**
(ASSESSOR'S MAP 49, PORTION OF LOTS 1 & 2 AND MAP 57, LOT 31)
OAKLAND AVENUE
HANOVER, MASSACHUSETTS



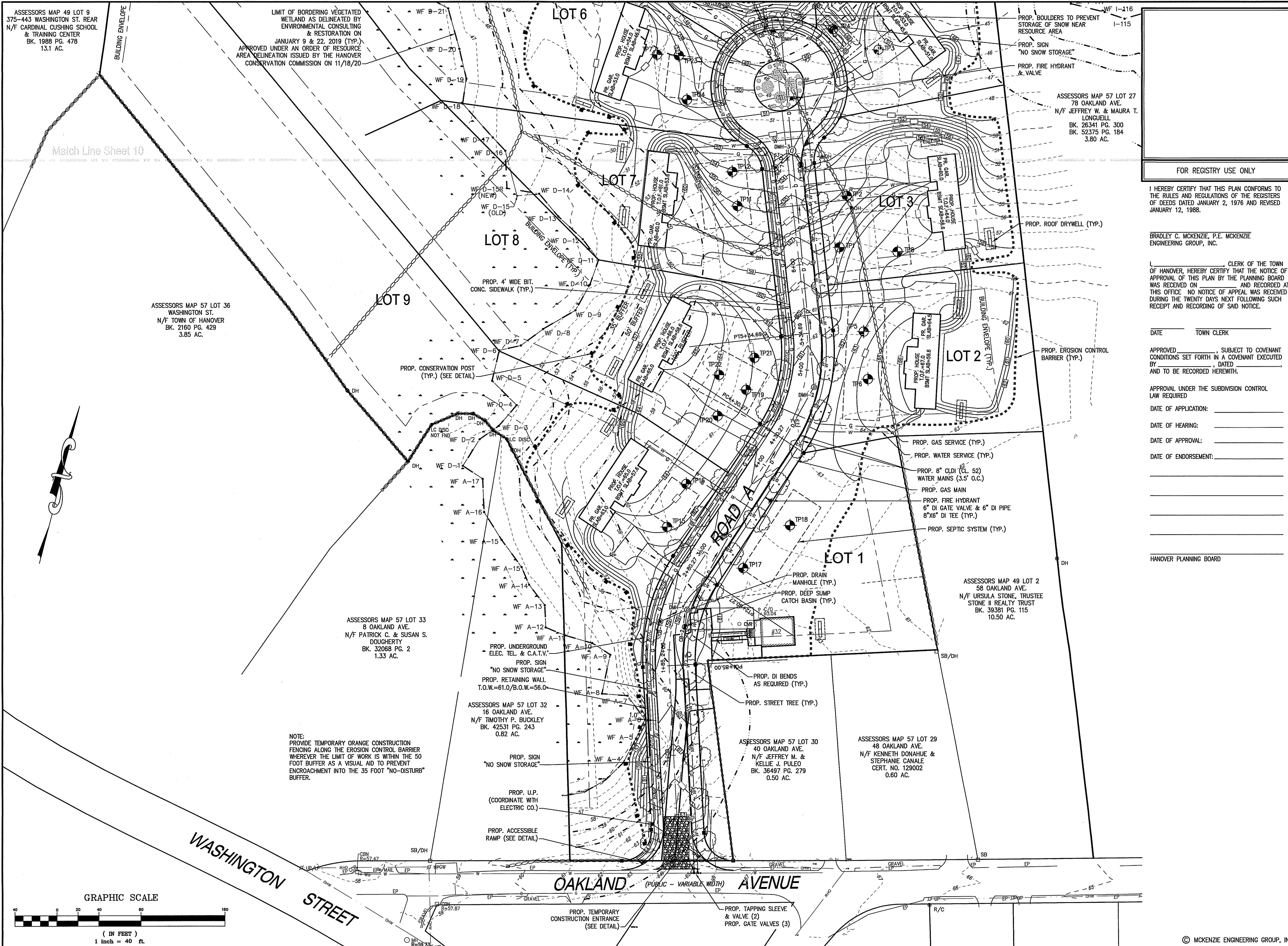
APPLICANT:
32 OAKLAND AVE LLC
30 WADE WAY
HANOVER, MASSACHUSETTS 02339

DRAWN BY: AWL
DESIGNED BY: AWL
CHECKED BY: BCM
APPROVED BY: BCM
DATE: DECEMBER 14, 2020
SCALE: 1"=40'
PROJECT NO.: 217-106
DWG. TITLE:

Lot Layout Plan

DWG. No: **8**

PERMIT SET



FOR REGISTRY USE ONLY

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

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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: _____
DATE OF HEARING: _____
DATE OF APPROVAL: _____
DATE OF ENDORSEMENT: _____
HANOVER PLANNING BOARD _____

REV	DATE	DESCRIPTION	BY	APP
1	1/21/21	RET. WALL LOCATION	AWL	BCM
2	3/11/21	PER FEED REVIEW	AWL	BCM

MCKENZIE ENGINEERING GROUP
Assinippi Office Park
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Norwell, MA 02061
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www.mckeng.com

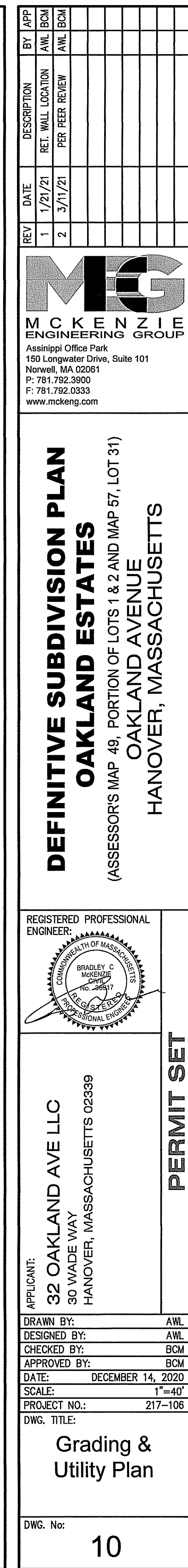
**DEFINITIVE SUBDIVISION PLAN
OAKLAND ESTATES**
(ASSESSOR'S MAP 49, PORTION OF LOTS 1 & 2 AND MAP 57, LOT 31)
OAKLAND AVENUE
HANOVER, MASSACHUSETTS

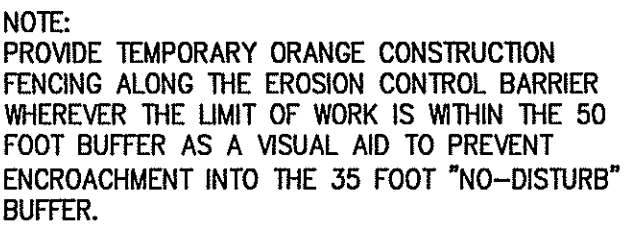
REGISTERED PROFESSIONAL ENGINEER:

APPLICANT:
32 OAKLAND AVE LLC
30 WADE WAY
HANOVER, MASSACHUSETTS 02339

DRAWN BY:	AWL
DESIGNED BY:	AWL
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	DECEMBER 14, 2020
SCALE:	1"=40'
PROJECT NO.:	217-106
DWG. TITLE:	

Grading & Utility Plan





LIMIT OF INLAND BANK AS
 DELINEATED BY ENVIRONMENTAL
 CONSULTING & RESTORATION ON
 JANUARY 9 & 22, 2019 (TYP.)
 APPROVED UNDER AN ORDER OF RESOURCE
 AREA DELINEATION ISSUED BY THE HANOVER
 CONSERVATION COMMISSION ON 11/18/2-

ASSESSORS MAP 49 LOT 1
405 WASHINGTON ST. REAR
N/F CARDINAL CUSHING SCHOOL
& TRAINING CENTER
BK. 1918 PG. 478
1.59 AC.

LIMIT OF BORDERING VEGETATED
 WETLAND AS DELINEATED BY
 ENVIRONMENTAL CONSULTING,
 & RESTORATION ON
 JANUARY 9 & 22, 2019 (TYP.)
 APPROVED UNDER AN ORDER OF RESOURCE
 AREA DELINEATION ISSUED BY THE HANOVER
 CONSERVATION COMMISSION ON 11/18/20

P. OUTLET CONTROL STRUCTURE
RIM=38.00
INV. 18" RCP = 32.10
INV. 1.5" ORIFICE = 33.00
INV. 3.5" ORIFICE = 33.25
INV. 12" ORIFICE = 34.00
INV. 2' WIDE WEIR = 35.50

PROP. STONE RIP-RAP

LIMIT OF BORDERING VEGETATED
 WETLAND AS DELINEATED BY
 ENVIRONMENTAL CONSULTING
 & RESTORATION ON
 JANUARY 9 & 22, 2019 (TYP.)
 APPROVED UNDER AN ORDER OF RESOURCE
 AREA DELINEATION ISSUED BY THE HANOVER
 CONSERVATION COMMISSION ON 11/18/20

ASSESSORS MAP 49 LOT 1
405 WASHINGTON ST. REAR
1/2 CARDINAL CUSHING SCHOOL
& TRAINING CENTER
BK. 1988 PG. 478
139 AC.

ASSESSORS MAP 50 LOT 1
23 BROADWAY
N/F JAMES M. GALLANT
BK. 43742 PG. 197
8.59 AC.

ASSESSORS MAP 49-Lot 3
45 BROADWAY
N/F BROAD BEND REALTY TRUST
BK. 18152 PG. 88
4.76 AC.

ASSESSORS MAP 57 LOT 27
78 OAKLAND AVE.
N/F JEFFREY W. & MAURA T.
LONGUEILL
BK. 26341 PG. 300
BK. 52375 PG. 184
3.80 AC.

PROP. GAS SERVICE (TYP.)

1- PROP. ROOF DRYWELL (TYP.)

P. GAS MAIN

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

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CONDITIONS SET FORTH IN A COVENANT EXECUTED
BY _____, DATED _____,
AND TO BE RECORDED HERewith.

APPROVAL UNDER THE SUBDIVISION CONTROL
LAW REQUIRED

DATE OF APPLICATION:

DATE OF HEARING:

DATE OF APPROVAL:

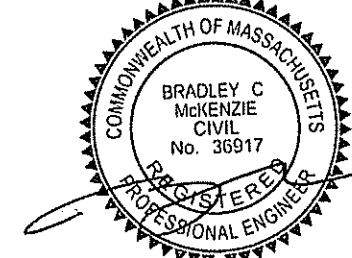
DATE OF ENDORSEMENT:

HANOVER PLANNING BOARD

[illegible]

DEFINITIVE SUBDIVISION PLAN
OAKLAND ESTATES
(ASSESSOR'S MAP 49, PORTION OF LOTS 1 & 2 AND MAP 57, LOT 31)
OAKLAND AVENUE
HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL
ENGINEER:



APPLICANT:
32 OAKLAND AVE LLC
30 WADE WAY
HANOVER, MASSACHUSETTS 02339

DRAWN BY:	AWL
DESIGNED BY:	AWL
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	DECEMBER 14, 2020
SCALE:	1"=40'
PROJECT NO.:	217-106
DWG. TITLE:	

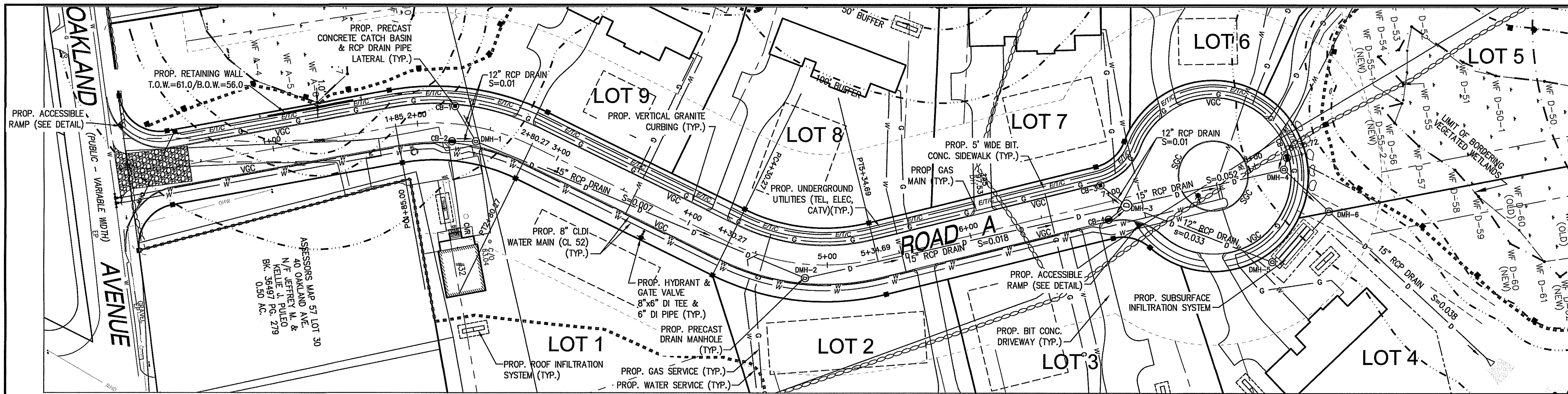
Grading & Utility Plan

DWG. No:

11

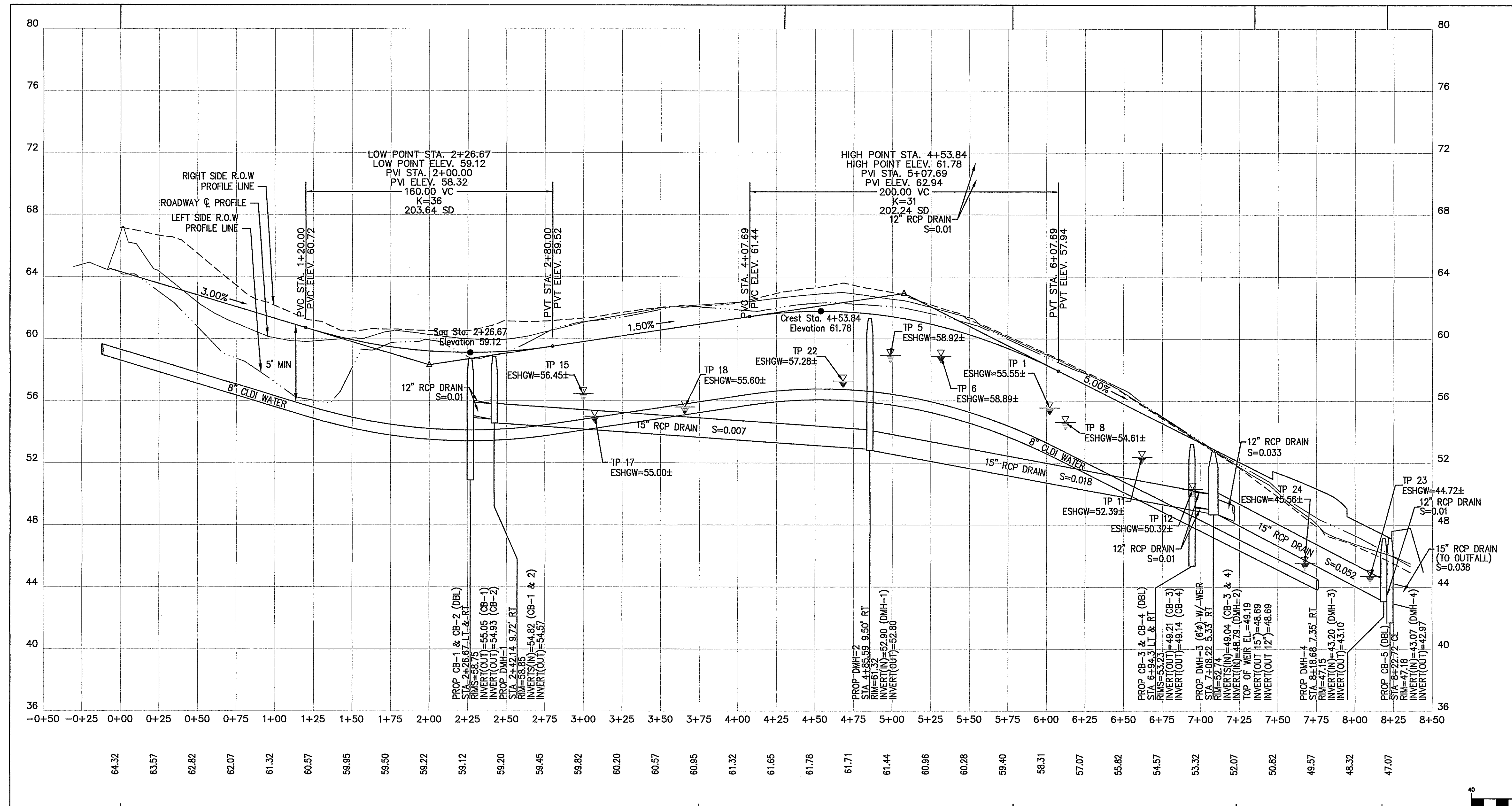
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FILE LOCATION: M:\217-106\DWGS\DWGS-Definitive\217-106 Definitive.dwg



ROAD A PLAN

SCALE: 1"=40'



ROAD A PROFILE

VERTICAL: 1"=4'
HORIZONTAL: 1"=40'



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FILE LOCATION: M:\217-106\DWGS\DWGS-Definitive\217-106 Definitive.dwg

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APPROVAL UNDER THE SUBDIVISION CONTROL LAW REQUIRED

DATE OF APPLICATION: _____

DATE OF HEARING: _____

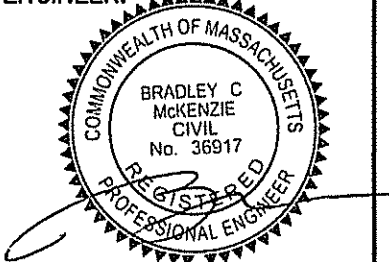
DATE OF APPROVAL: _____

DATE OF ENDORSEMENT: _____

HANOVER PLANNING BOARD

DEFINITIVE SUBDIVISION PLAN
OAKLAND ESTATES
(ASSESSOR'S MAP 49, PORTION OF LOTS 1 & 2 AND MAP 57, LOT 31)
OAKLAND AVENUE
HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL ENGINEER



APPLICANT:
32 OAKLAND AVE LLC
30 WADE WAY
HANOVER, MASSACHUSETTS 02339

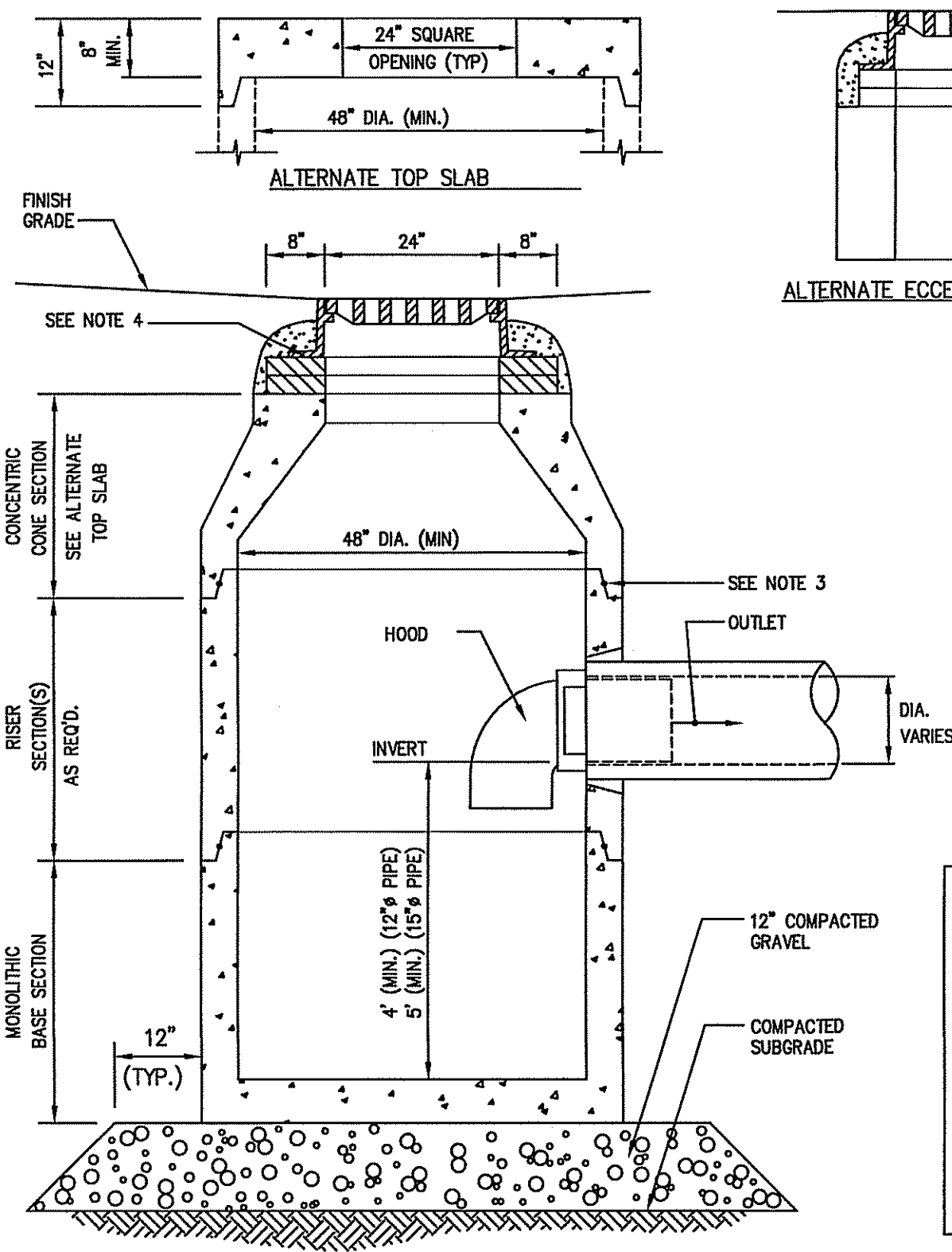
DRAWN BY: AWL
DESIGNED BY: AWL
CHECKED BY: BCM
APPROVED BY: BCM
DATE: DECEMBER 14, 2020
SCALE: 1"=40'
PROJECT NO.: 217-106
DWG. TITLE:

Roadway
Plan & Profile

DWG. No:

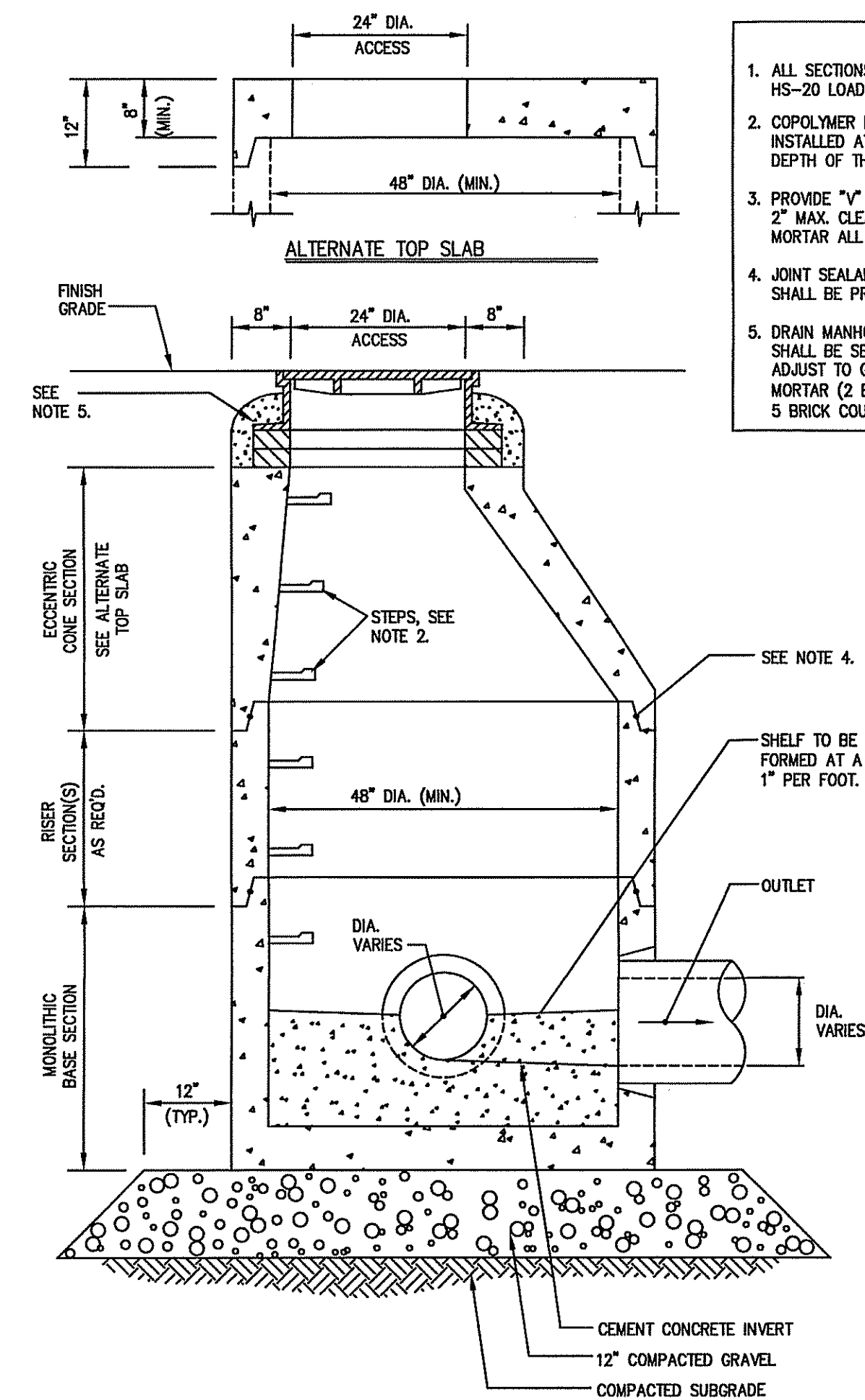
12

PERMIT SET

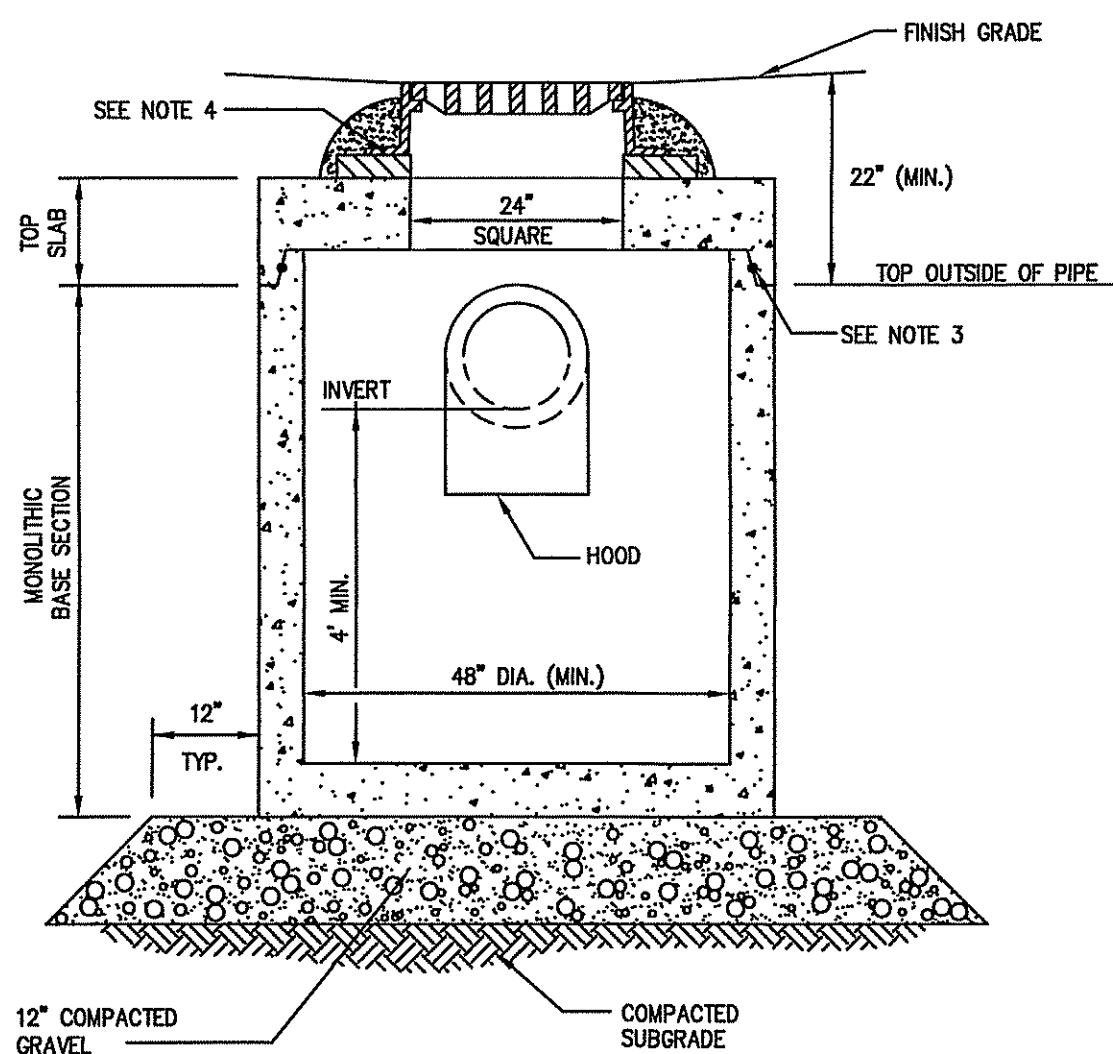


- NOTES:
1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
 2. PROVIDE "Y" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
 3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PERFORMED BUTYL RUBBER.
 4. CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).

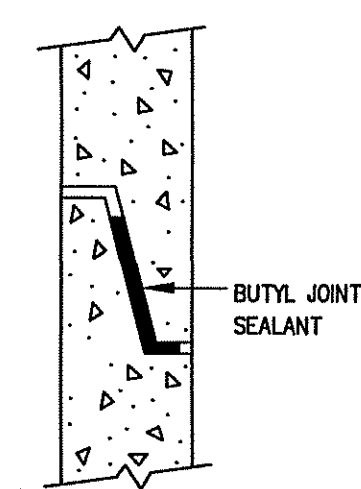
CATCH BASIN W/HOOD
SCALE: N.T.S.



DRAIN MANHOLE DETAIL
SCALE: N.T.S.

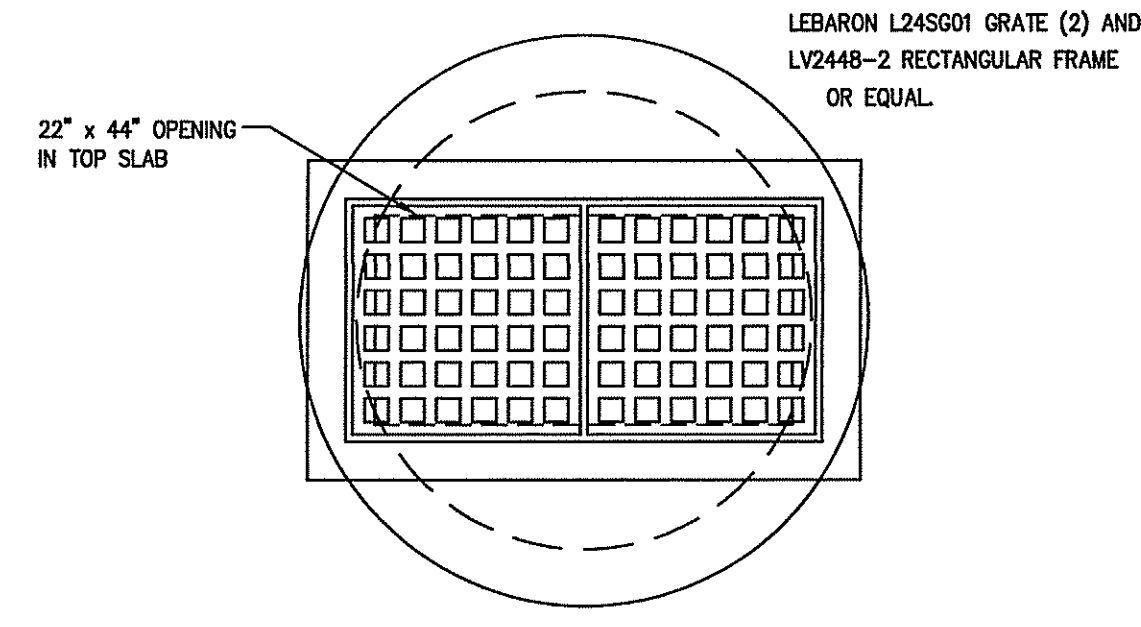


CATCH BASIN SHALLOW COVER WITH HOOD
SCALE: N.T.S.



MANHOLE JOINT DETAILS
NOT TO SCALE

- 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.



DOUBLE GRATE CATCH BASIN DETAIL
SCALE: N.T.S.

- NOTES:
1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
 2. PROVIDE DOGHOUSE OPENING FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. TOP SLAB SHALL NOT REST DIRECTLY ON PIPE. GROUT ALL PIPE CONNECTIONS (NON-SHRINK GROUT).
 3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PERFORMED BUTYL RUBBER.
 4. CATCH BASIN FRAME AND GRATE (4" DEPTH) SHALL BE SET IN FULL MORTAR BED.
 5. ADJUST TO FINISH GRADE WITH CLAY BRICK AND MORTAR AS REQUIRED.

FOR REGISTRY USE ONLY

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

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APPROVAL UNDER THE SUBDIVISION CONTROL LAW REQUIRED

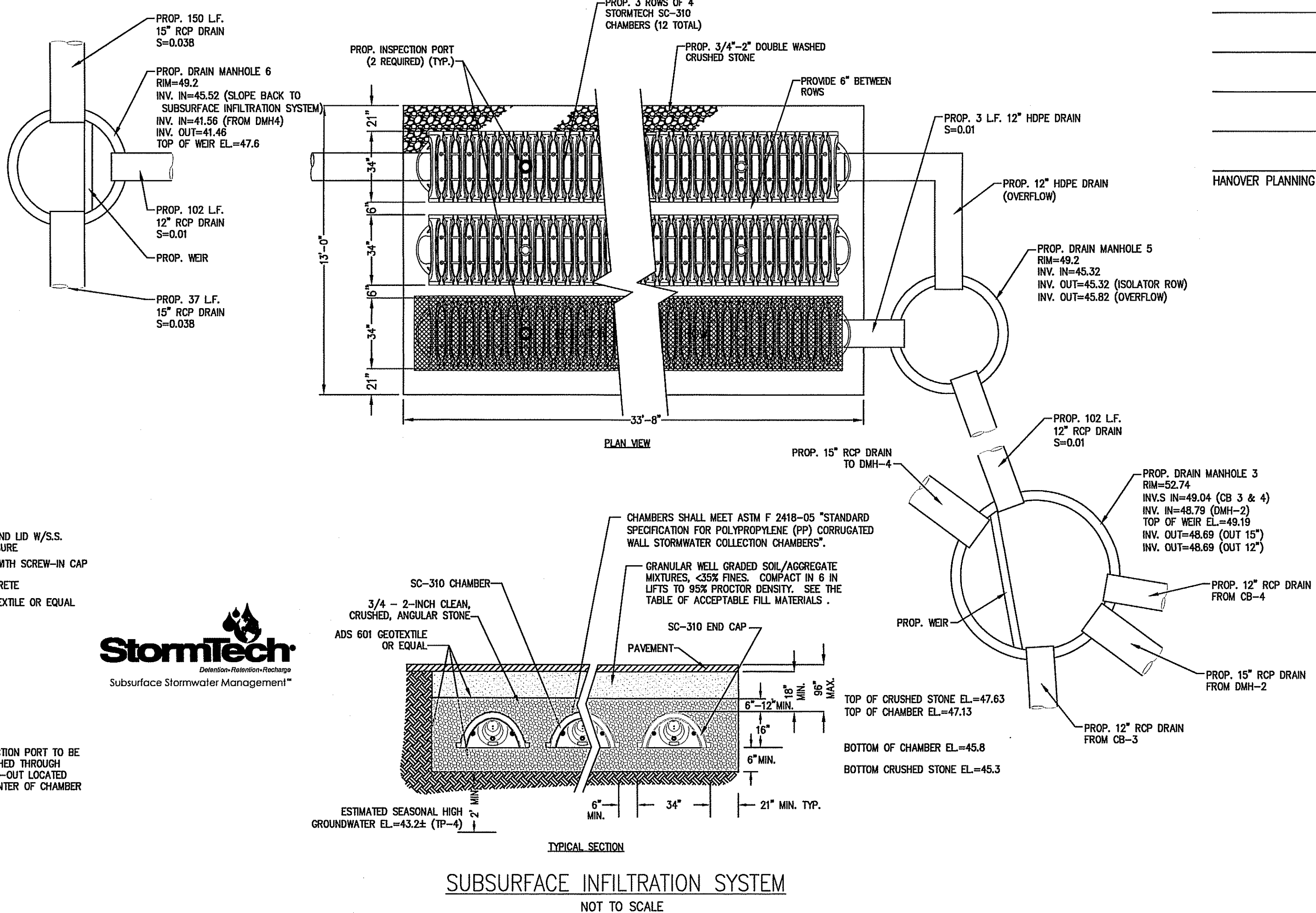
DATE OF APPLICATION: _____

DATE OF HEARING: _____

DATE OF APPROVAL: _____

DATE OF ENDORSEMENT: _____

HANOVER PLANNING BOARD



SUBSURFACE INFILTRATION SYSTEM
NOT TO SCALE

REV	DATE	DESCRIPTION	BY	APP
1	1/21/21	RET WALL LOCATION	AWL	BCM
2	3/11/21	PER PEER REVIEW	AWL	BCM

MCKENZIE ENGINEERING GROUP
Assinippi Office Park
150 Longwater Drive, Suite 101
Norwell, MA 02061
P: 781.792.3900
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DEFINITIVE SUBDIVISION PLAN
OAKLAND ESTATES
(ASSESSOR'S MAP 49, PORTION OF LOTS 1 & 2 AND MAP 57, LOT 31)
OAKLAND AVENUE
HANOVER, MASSACHUSETTS

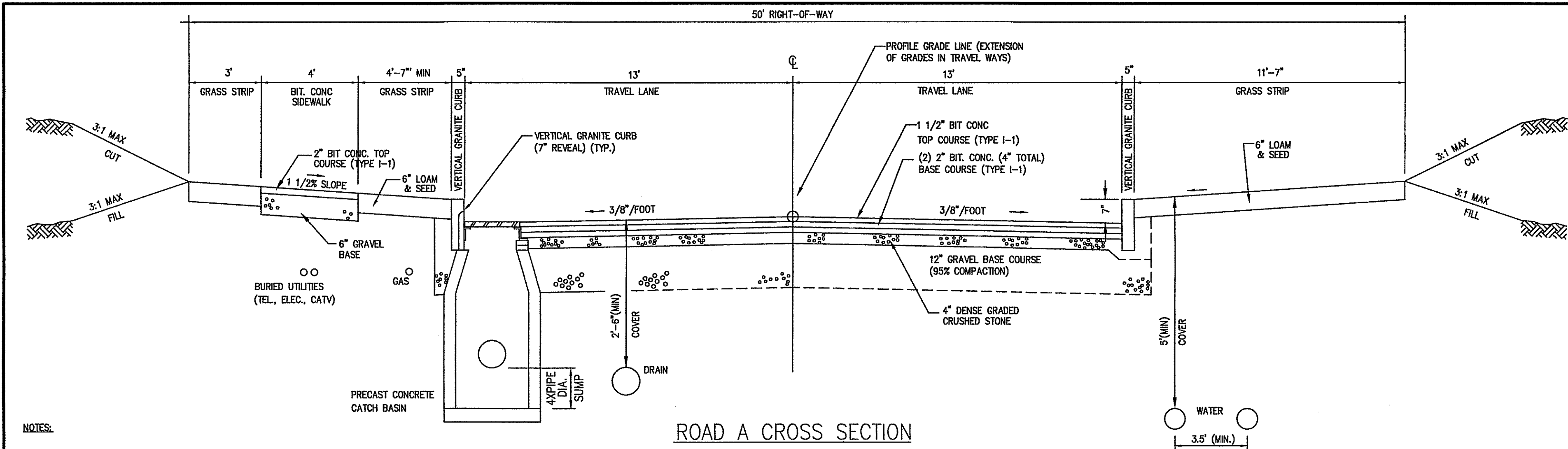
REGISTERED PROFESSIONAL ENGINEER:
BRADLEY C. MCKENZIE
CIVIL
No. 35917
MASSACHUSETTS
PROFESSIONAL ENGINEER

APPLICANT:
32 OAKLAND AVE LLC
30 WADE WAY
HANOVER, MASSACHUSETTS 02339

DRAWN BY: AWL
DESIGNED BY: AWL
CHECKED BY: BCM
APPROVED BY: BCM
DATE: DECEMBER 14, 2020
SCALE: AS NOTED
PROJECT NO.: 217-106
DWG. TITLE:

Construction Details

DWG. No: 13

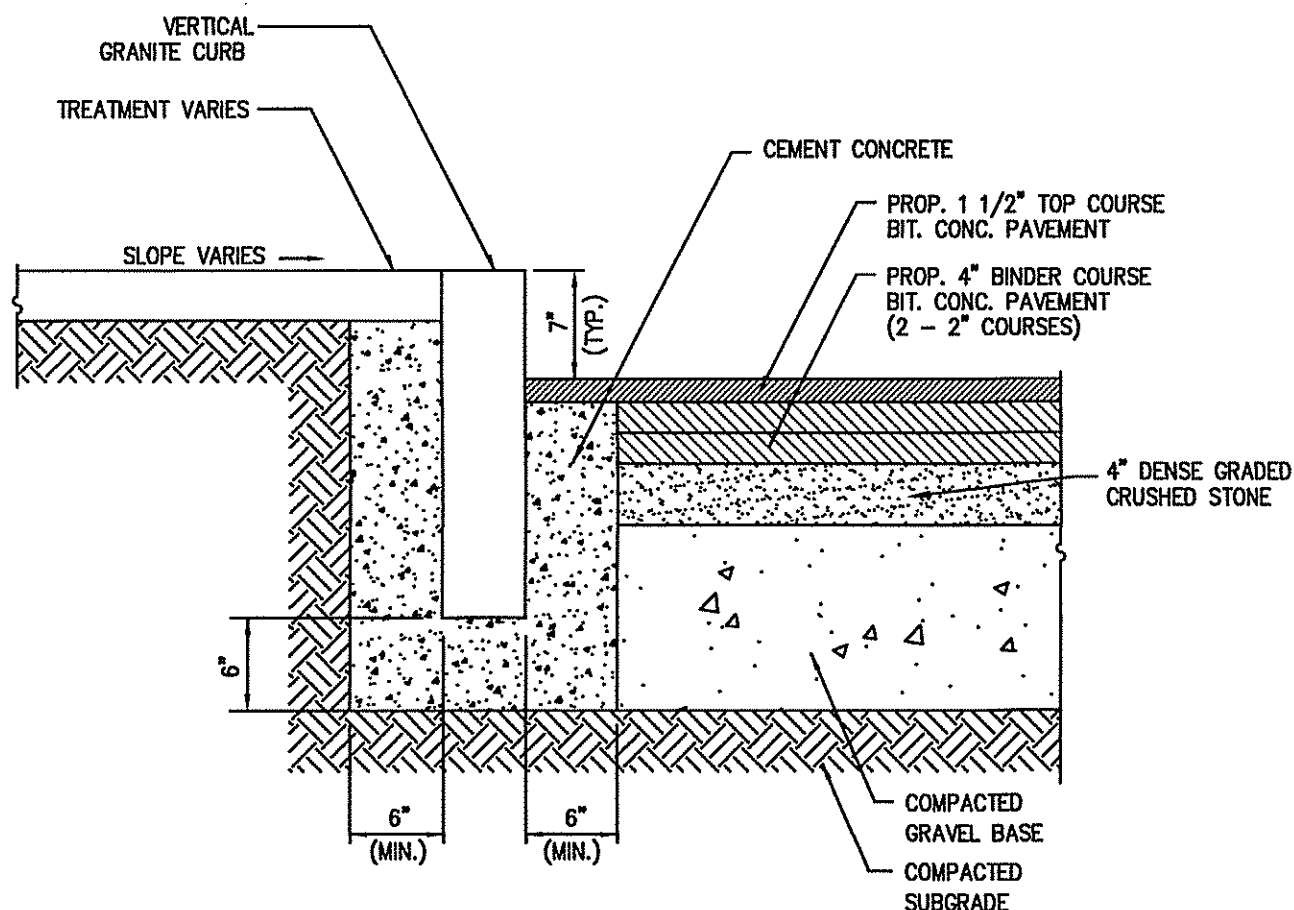


ROAD A CROSS SECTION

NOT TO SCALE

NOTES:

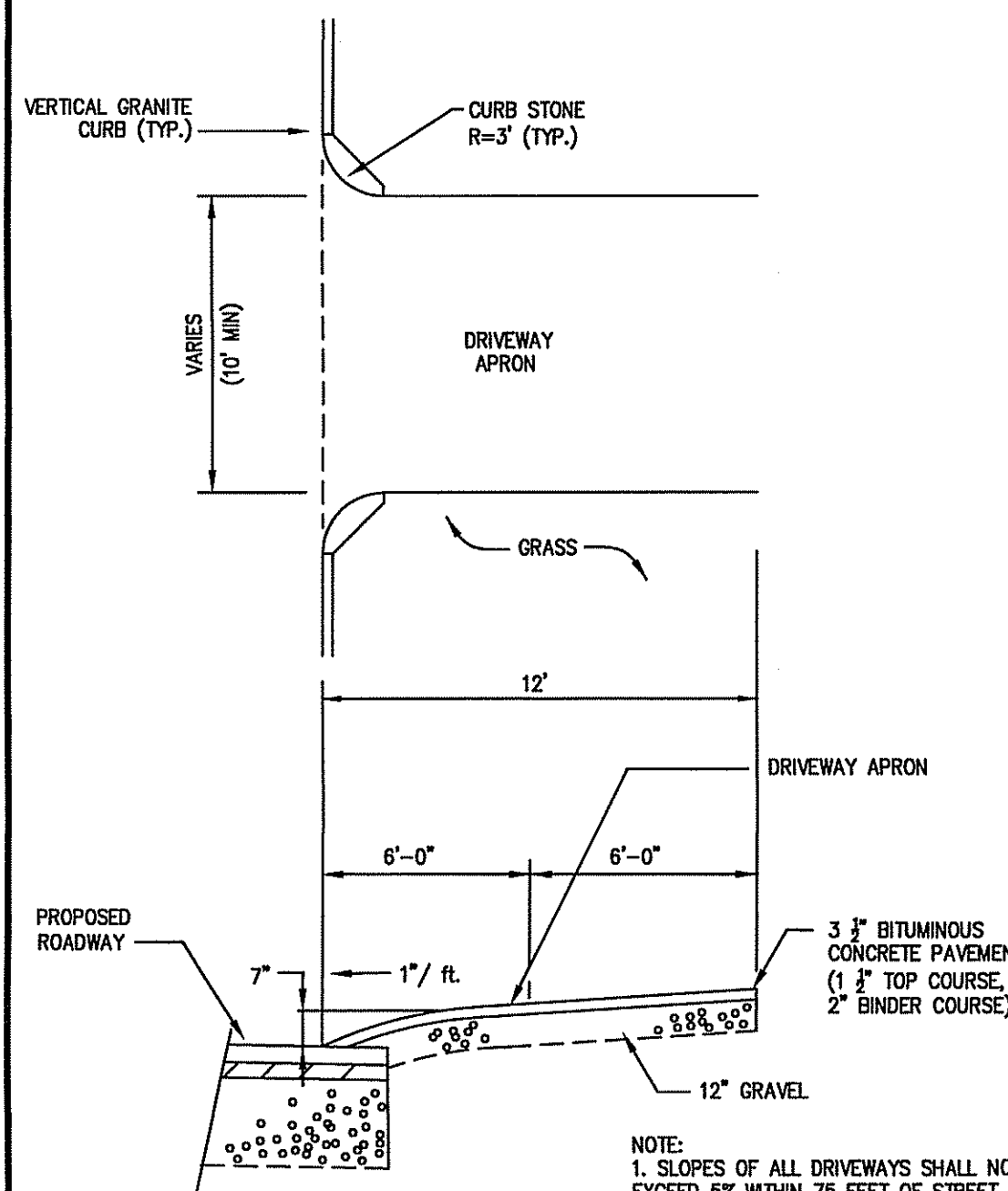
1. ALL MATERIALS SHALL CONFORM WITH MASS. HIGHWAY AND TOWN OF HANOVER SPECIFICATIONS. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH MASS. HIGHWAY AND TOWN OF HANOVER SPECIFICATIONS (SECTION 4.11 OF TOWN OF HANOVER PLANNING BOARD RULES AND REGULATIONS).



VERTICAL GRANITE CURB DETAIL

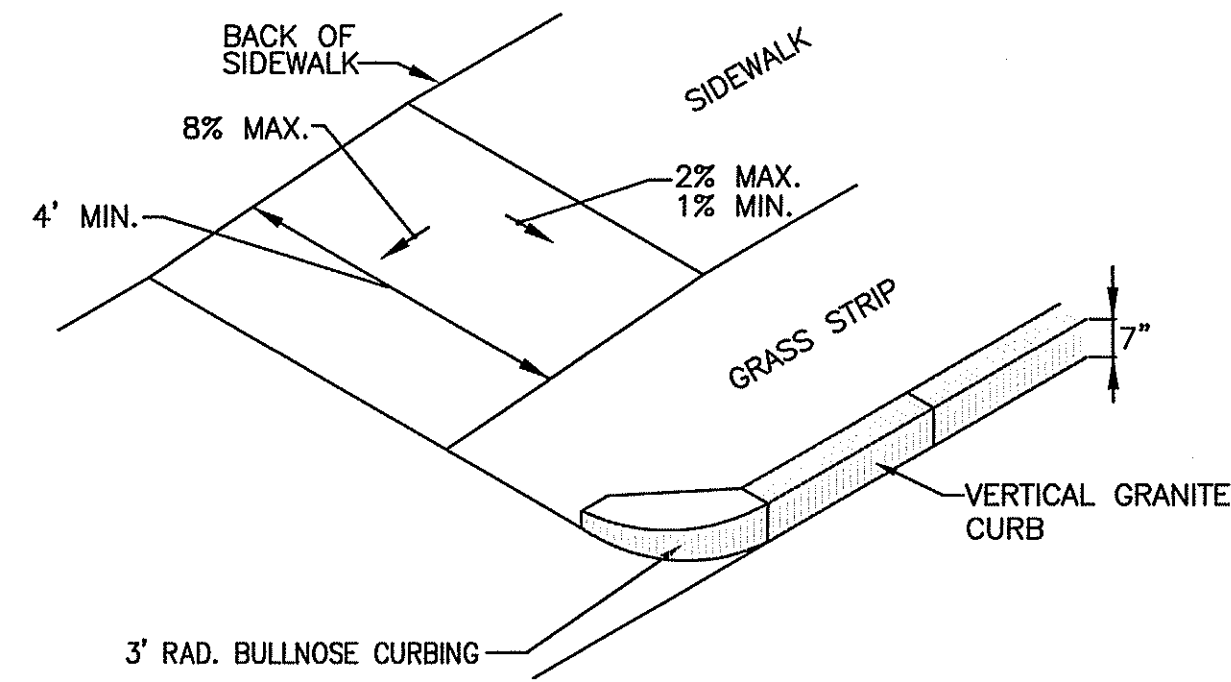
(VGC)

NOT TO SCALE



DRIVEWAY APRON DETAIL

NOT TO SCALE



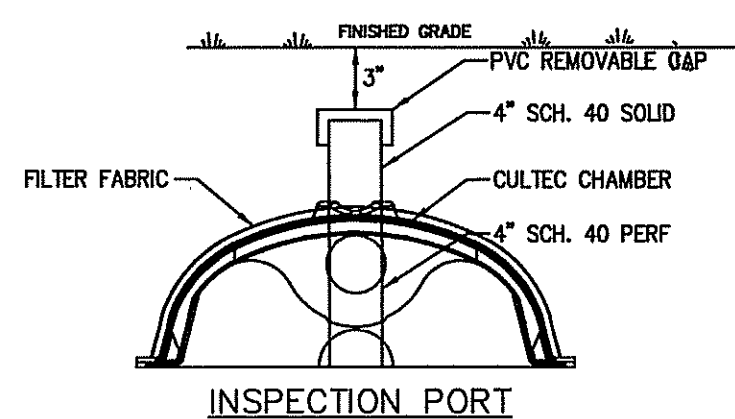
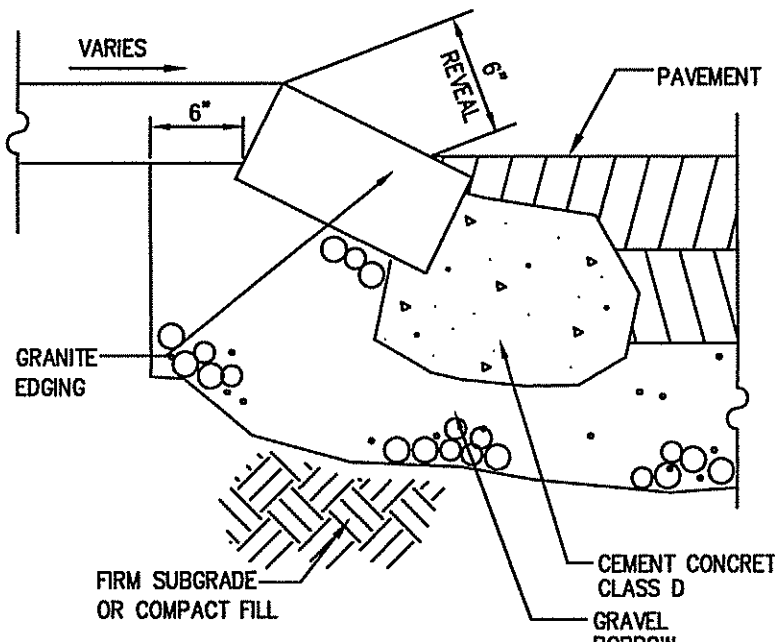
SLOPED GRANITE CURB DETAIL

(ISLANDS ONLY)

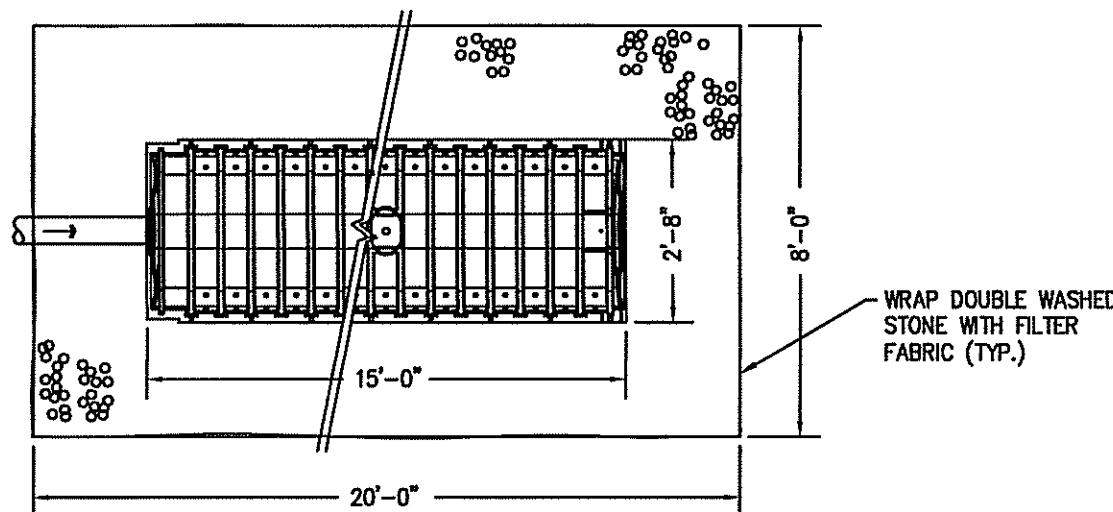
NOT TO SCALE

GENERAL UTILITY NOTES

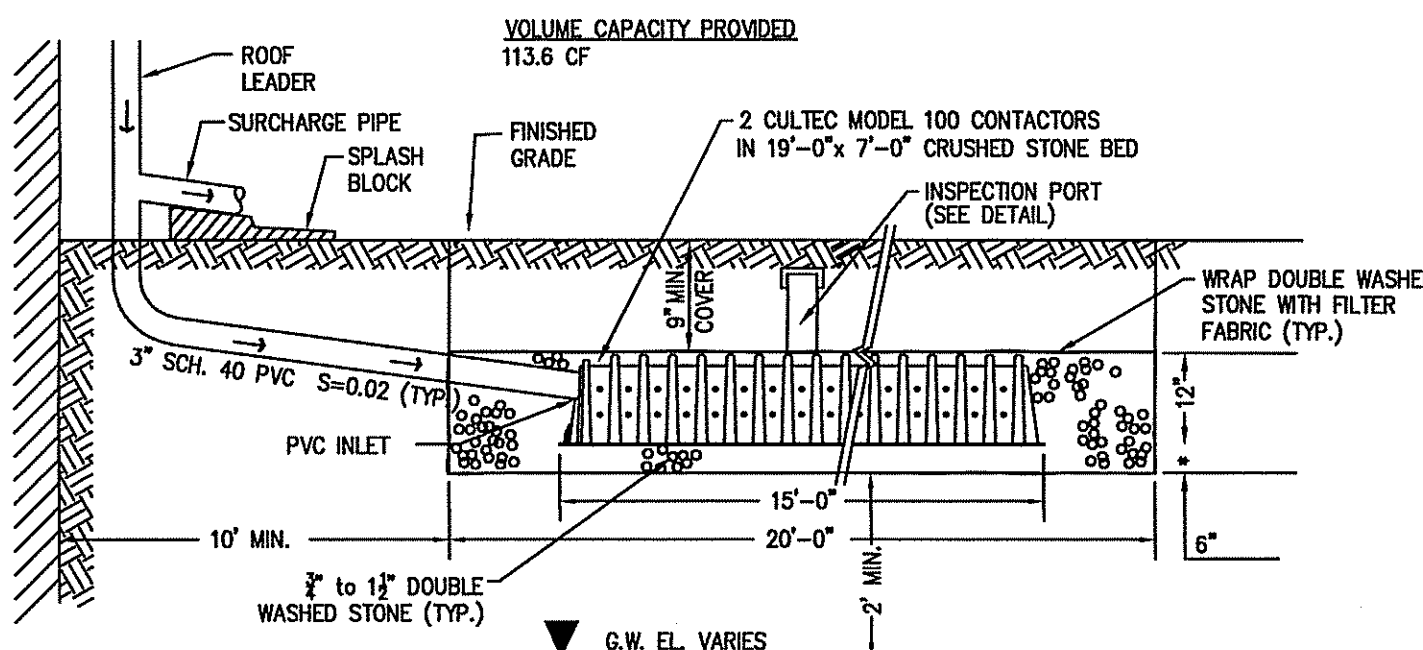
1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR 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 "DISSAFE" 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.



INSPECTION PORT

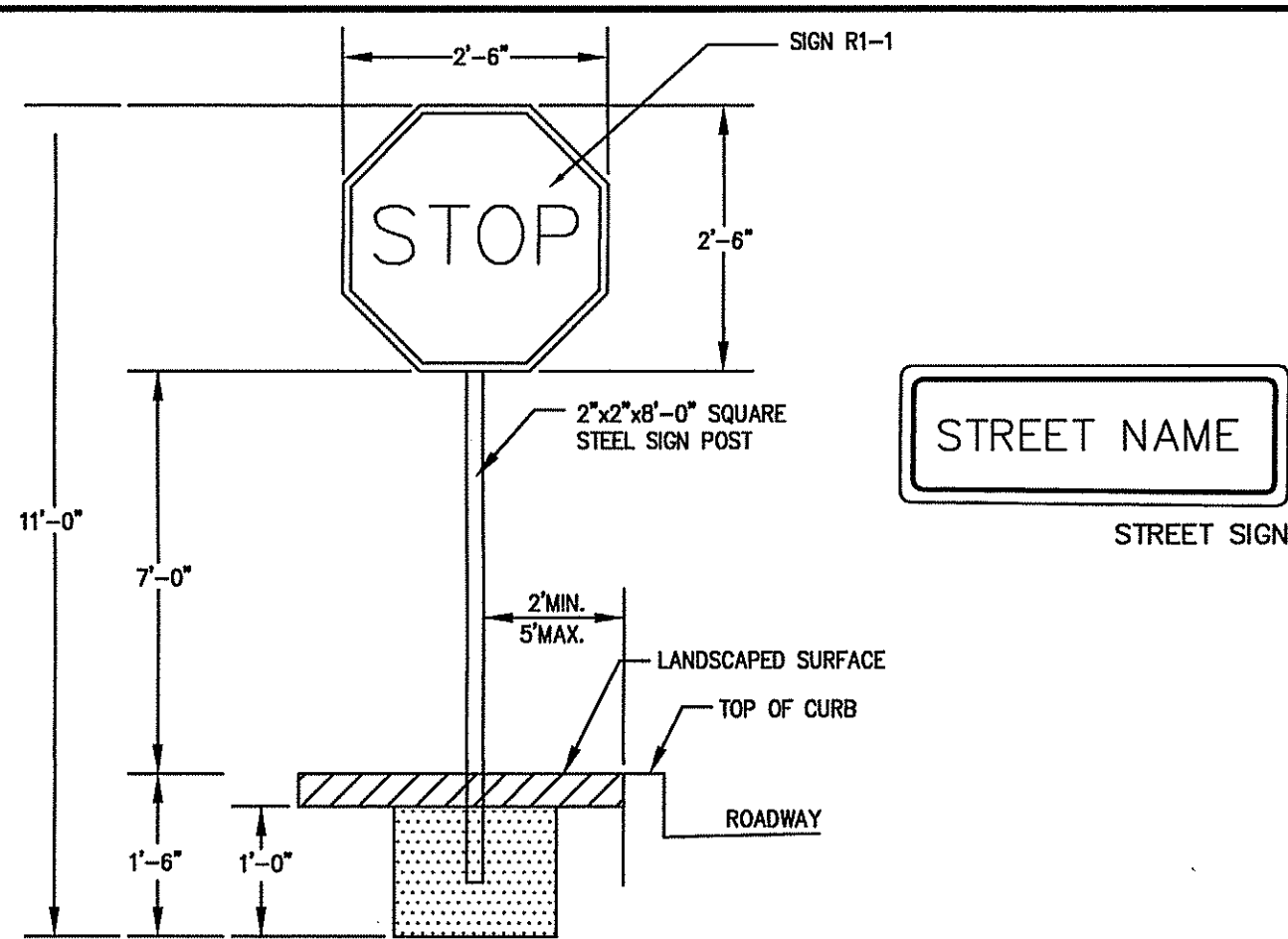


- NOTES:
- 1) EXCAVATE BELOW BOTTOM OF CRUSHED STONE. BASE AND BACKFILL WITH CLEAN GRAVEL BORROW (MASS. HIGHWAY M1.03.0 TYPE B) TO NATURALLY OCCURRING PERVIOUS MATERIAL. REMOVE ALL UNSUITABLE SOIL TO ENSURE CONTACT BETWEEN SUITABLE SOIL AND CLEAN GRAVEL BORROW. WRAP CRUSHED STONE BED WITH FILTER FABRIC.
 - 2) ALL ROOF LEADERS SHALL BE EQUIPPED WITH DOWNSPOUT STRAINERS.
 - 3) NO CONSTRUCTION ACTIVITY (TRAFFIC) SHALL BE ALLOWED OVER THE LEACHING ROOF DRYWELL AREAS.
 - 4) NO CONSTRUCTION SURFACE WATER OR DEWATERING DISCHARGES SHALL BE DISCHARGED INTO THE ROOF DRYWELL STRUCTURES OR ROOF DRYWELL SITE LOCATIONS.
 - 5) PLACE ORANGE TEMPORARY CONSTRUCTION FENCING AROUND ROOF DRYWELLS PRIOR TO STUMPING.



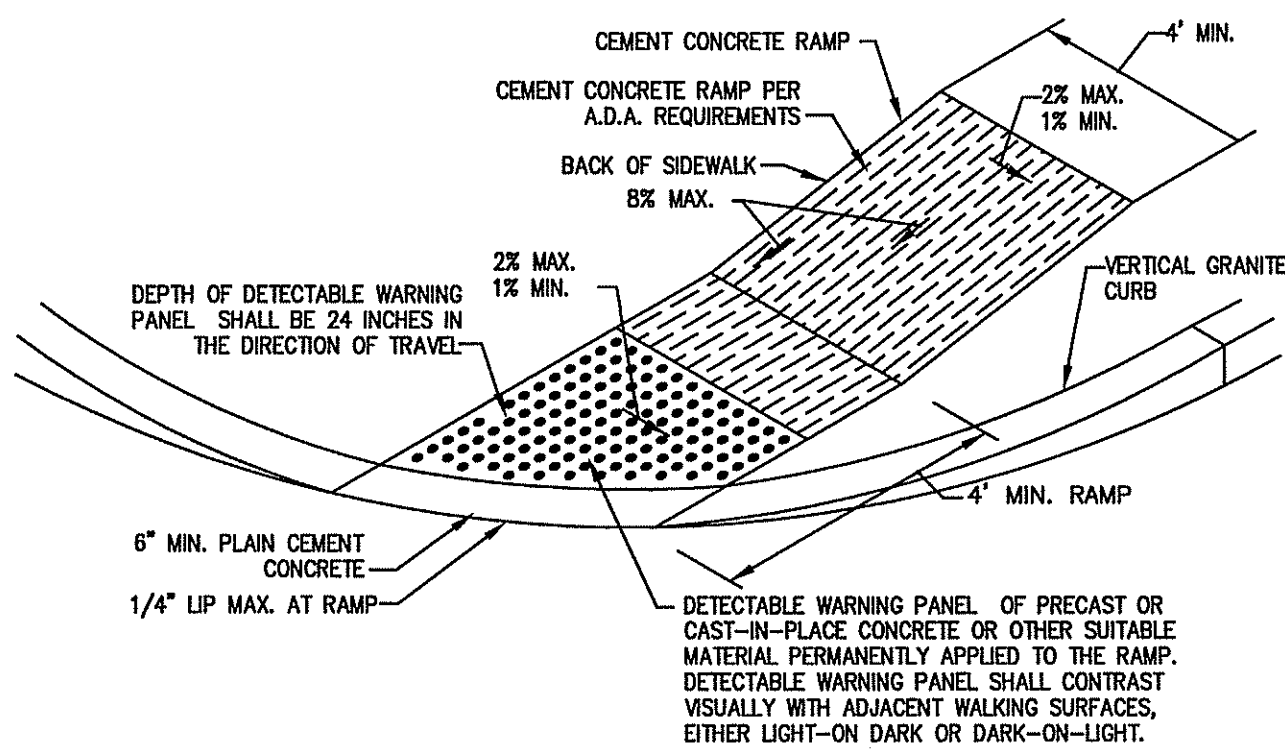
SUBSURFACE LEACHING DRYWELL

NOT TO SCALE



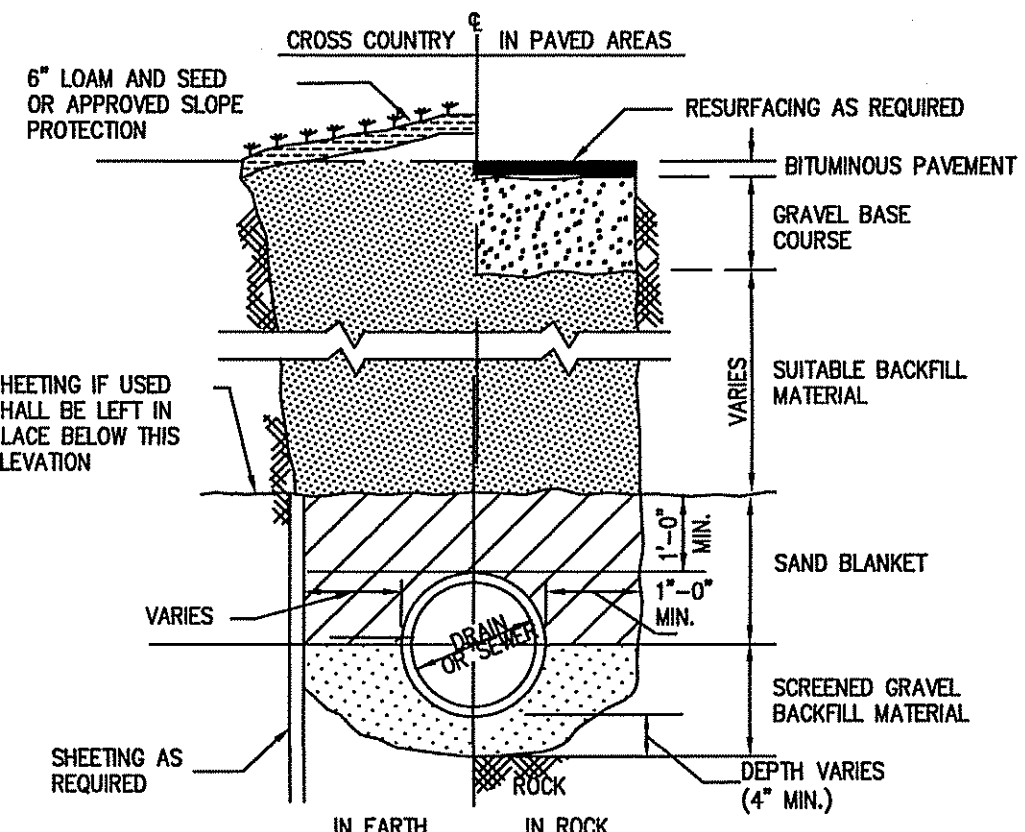
TYPICAL SIGN DETAIL

NOT TO SCALE



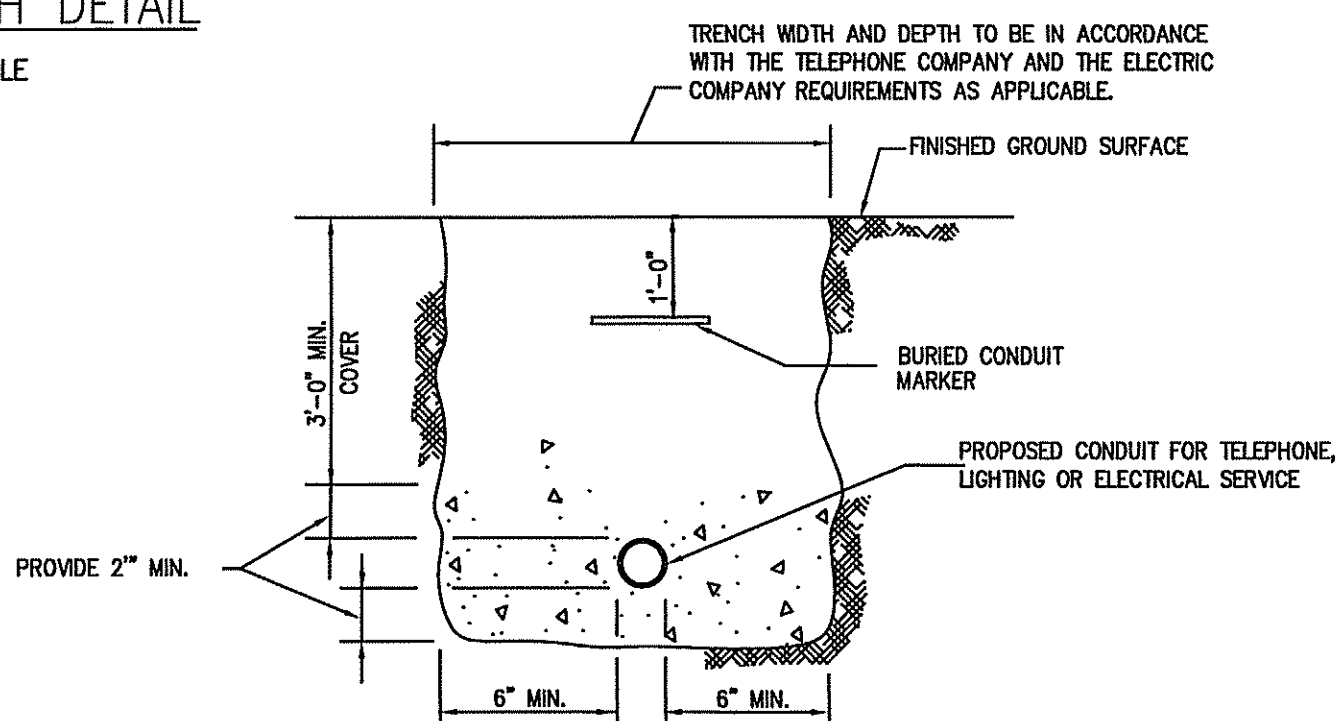
ACCESSIBLE RAMP DETAIL

SCALE: N.T.S.



TYPICAL TRENCH DETAIL

NOT TO SCALE



TYPICAL ELECTRIC/TELEPHONE/CABLE

CONDUIT DETAIL (E/T/C)

NOT TO SCALE

FOR REGISTRY USE ONLY

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DATE OF HEARING: _____

DATE OF APPROVAL: _____

DATE OF ENDORSEMENT: _____

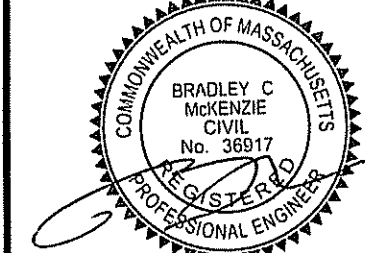
HANOVER PLANNING BOARD

REV	DATE	DESCRIPTION	BY	APP
1	1/21/21	RET. WALL LOCATION	AWL	BCM
2	3/11/21	PER. PEER REVIEW	AWL	BCM

MEG
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
OAKLAND ESTATES**
(ASSESSOR'S MAP 49, PORTION OF LOTS 1 & 2 AND MAP 57, LOT 31)
OAKLAND AVENUE
HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL ENGINEER:



APPLICANT:
32 OAKLAND AVE LLC
30 WADE WAY
HANOVER, MASSACHUSETTS 02339

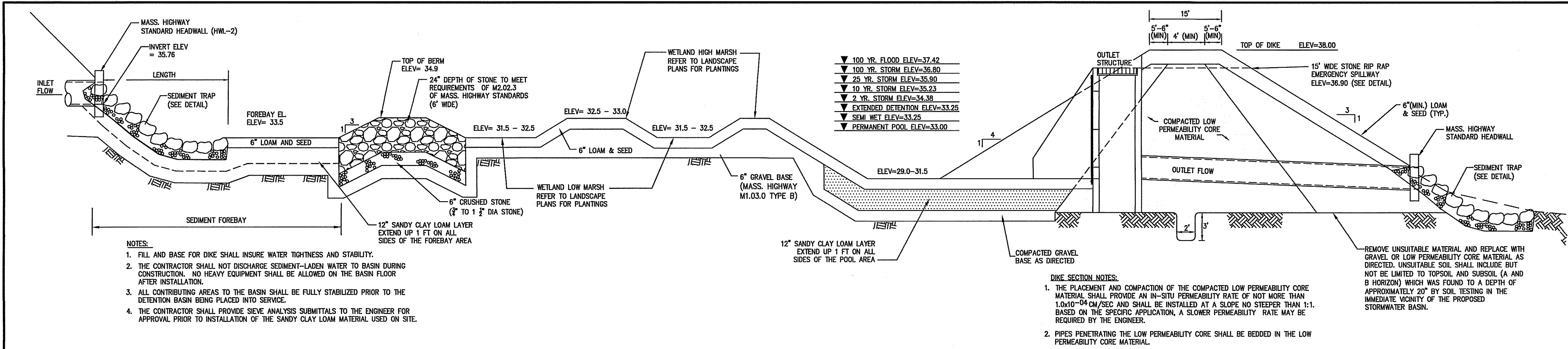
DRAWN BY: AWL
DESIGNED BY: AWL
CHECKED BY: BCM
APPROVED BY: BCM
DATE: DECEMBER 14, 2020
SCALE: AS NOTED
PROJECT NO.: 217-106
DWG. TITLE:

Construction Details

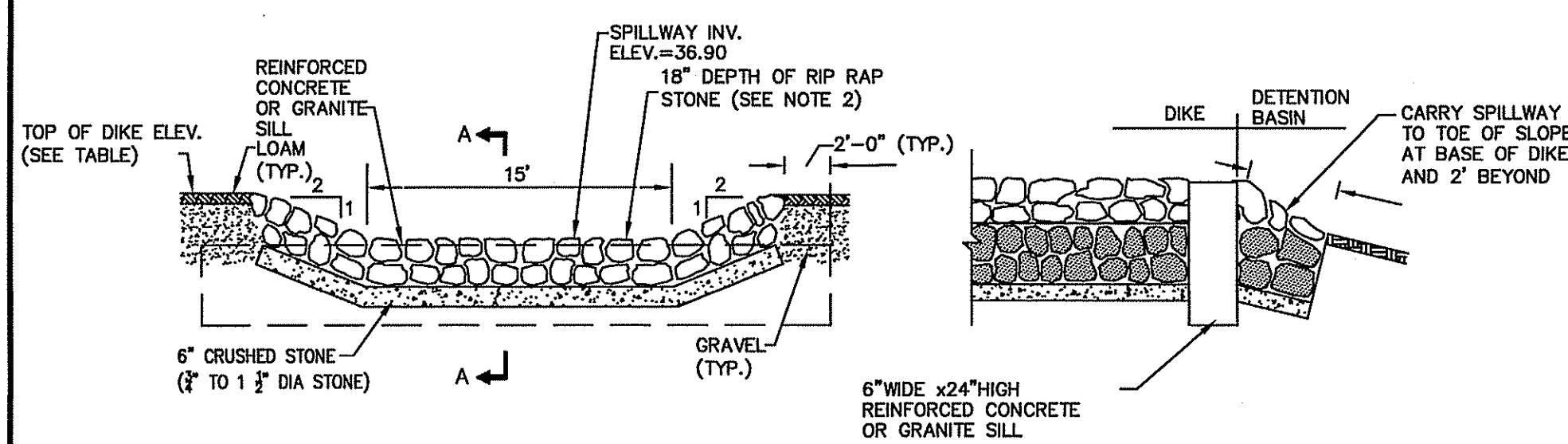
DWG. No:

14

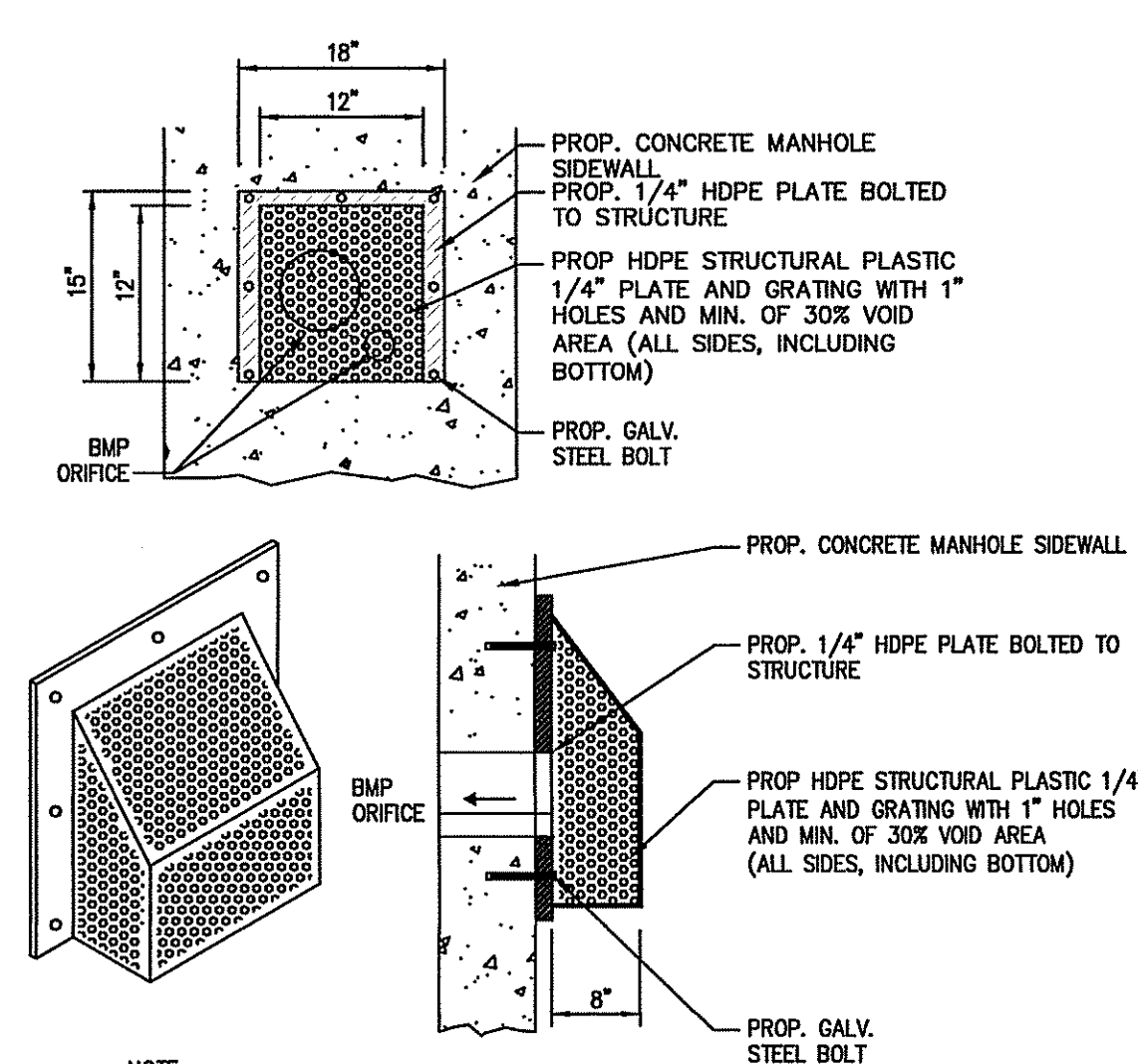
© MCKENZIE ENGINEERING GROUP, INC.



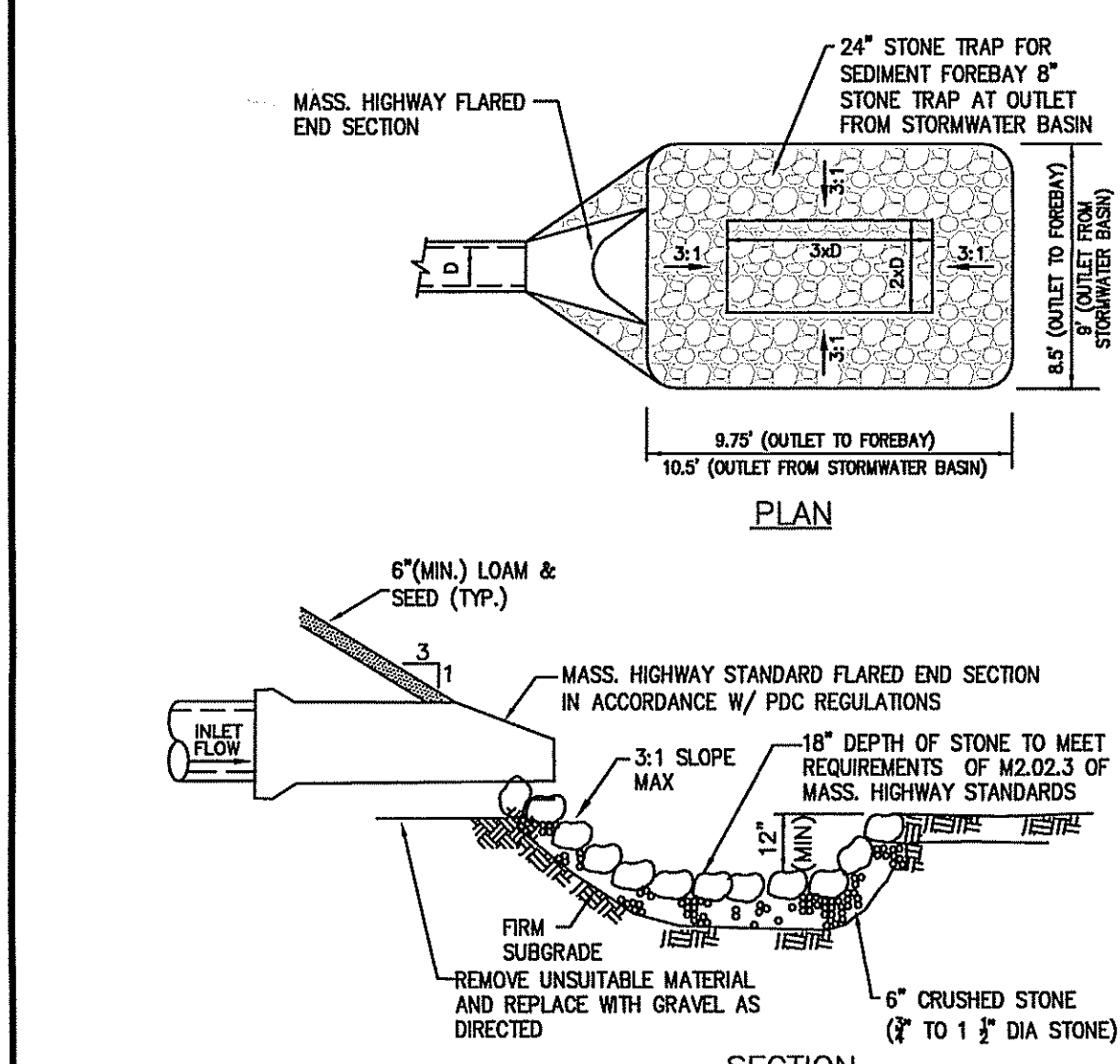
STORMWATER CONSTRUCTED EXTENDED DETENTION POCKET WETLAND BASIN SECTION
SCALE: N.T.S.



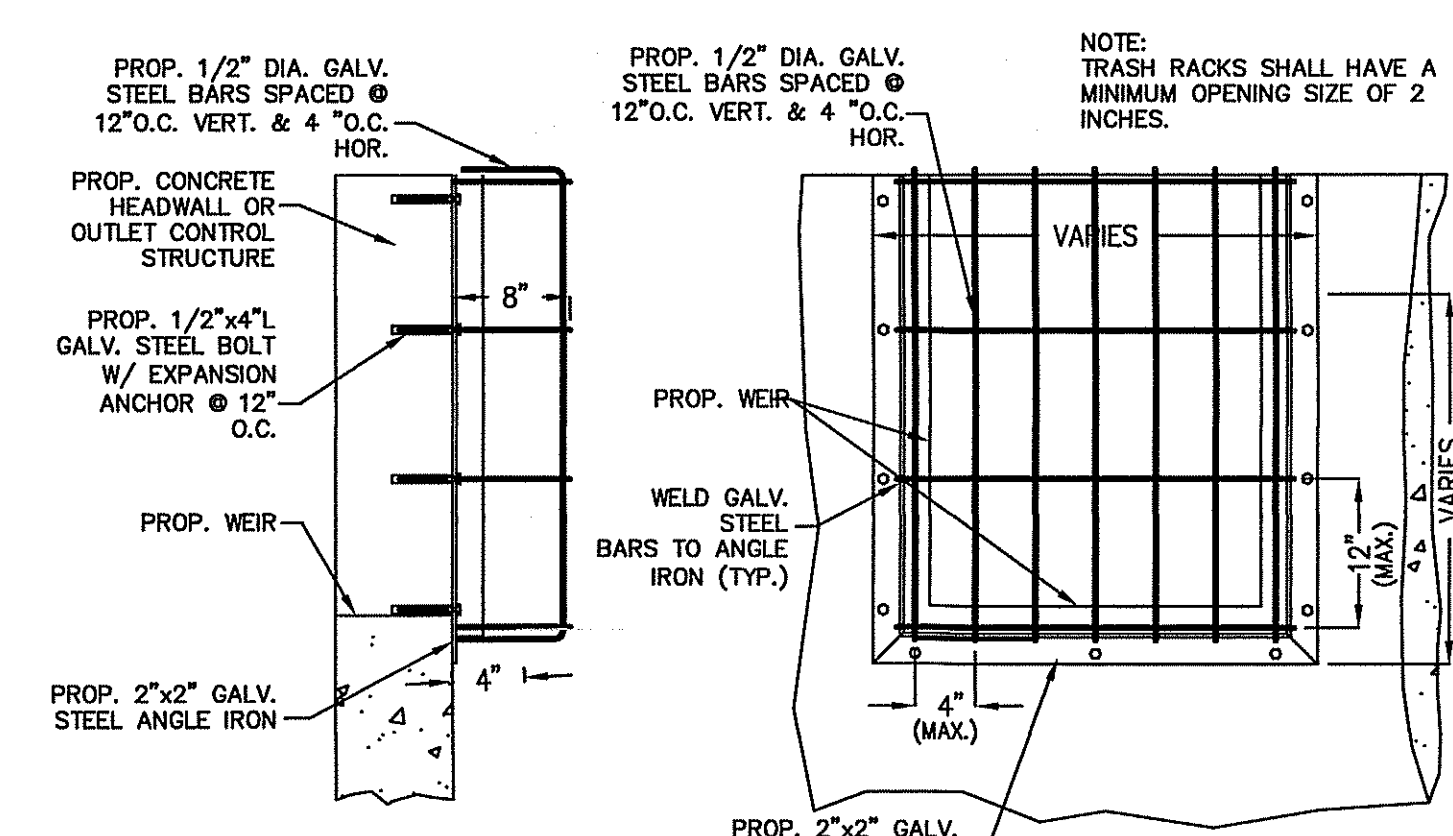
SPILLWAY DETAIL
SCALE: N.T.S.



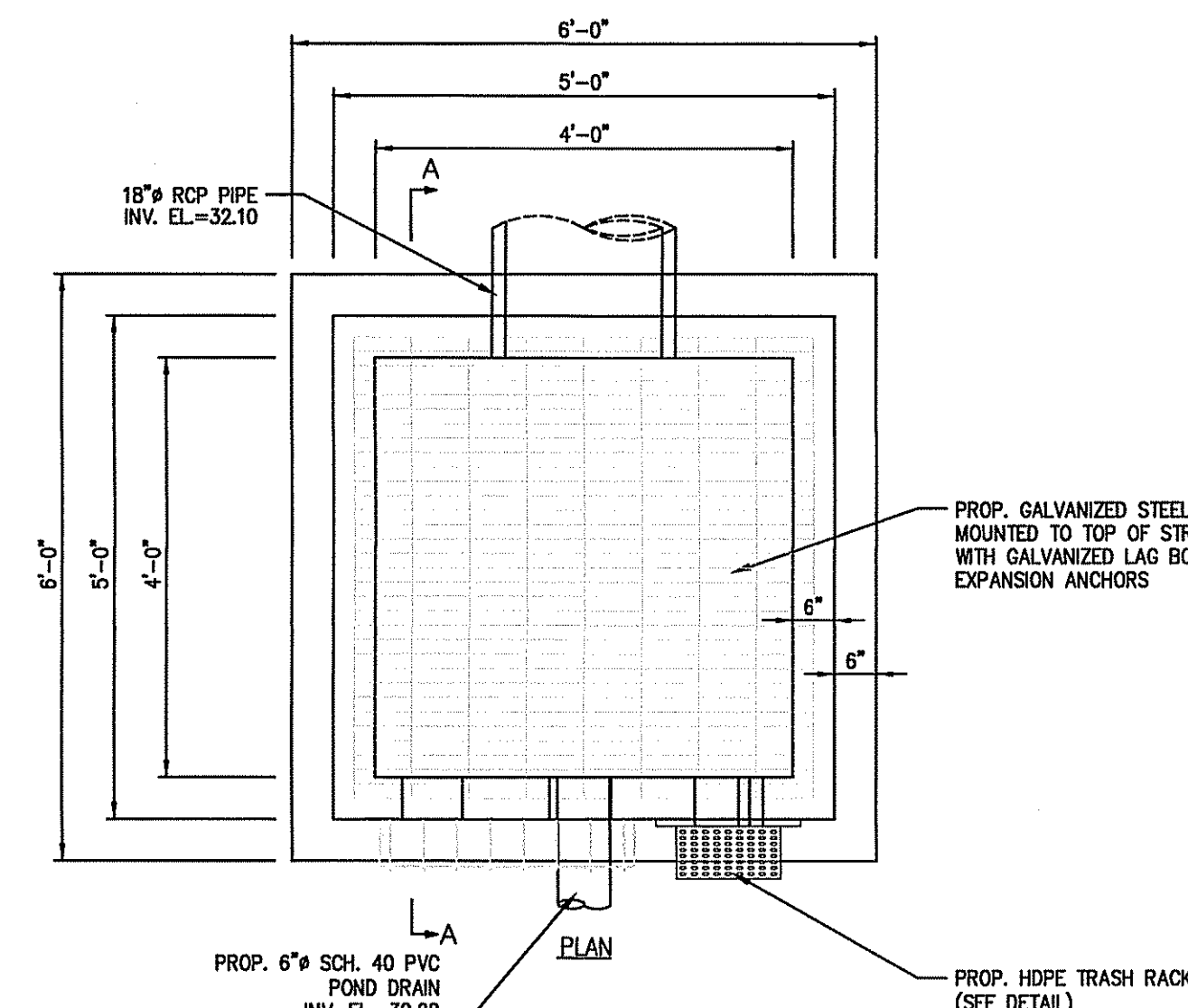
HDPE TRASH RACK DETAIL
FOR 1 1/2" & 5" ORIFICES
SCALE: N.T.S.



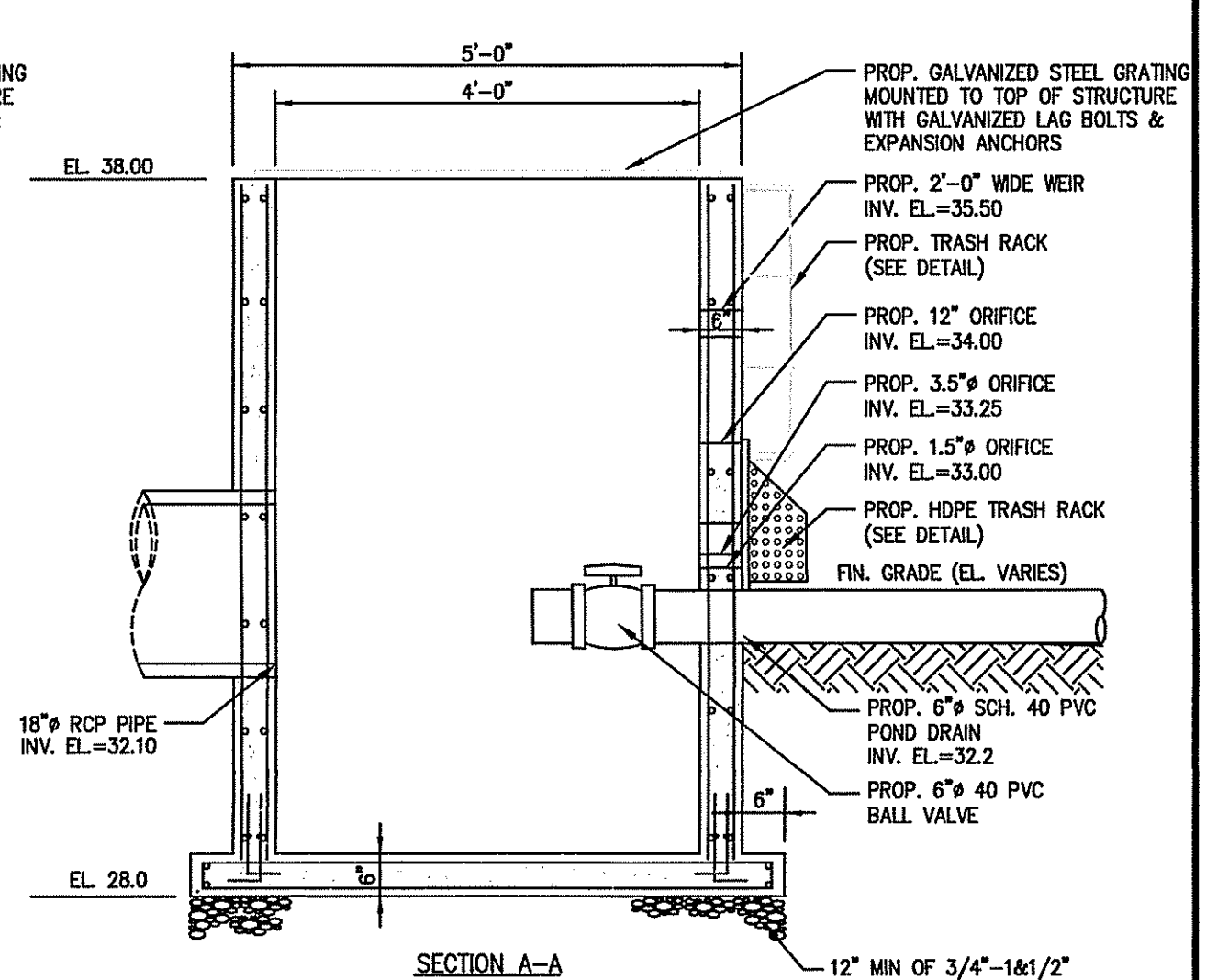
TYPICAL SEDIMENT TRAP DETAIL
SCALE: N.T.S.



TYPICAL TRASH RACK DETAIL
SCALE: N.T.S.



STORMWATER BASIN OUTLET
CONTROL STRUCTURE DETAIL
SCALE: N.T.S.



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.

1. _____, CLERK OF THE TOWN OF HANOVER, HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD WAS RECEIVED ON _____ 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 _____ 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: _____

DATE OF HEARING: _____

DATE OF APPROVAL: _____

DATE OF ENDORSEMENT: _____

HANOVER PLANNING BOARD

REV	DATE	DESCRIPTION	BY	APP
1	1/21/21	RET. WALL LOCATION	AWL	BCM
2	3/11/21	PER FEED REVIEW	AWL	BCM

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

DEFINITIVE SUBDIVISION PLAN
OAKLAND ESTATES
(ASSESSOR'S MAP 49, PORTION OF LOTS 1 & 2 AND MAP 57, LOT 31)
OAKLAND AVENUE
HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL ENGINEER:

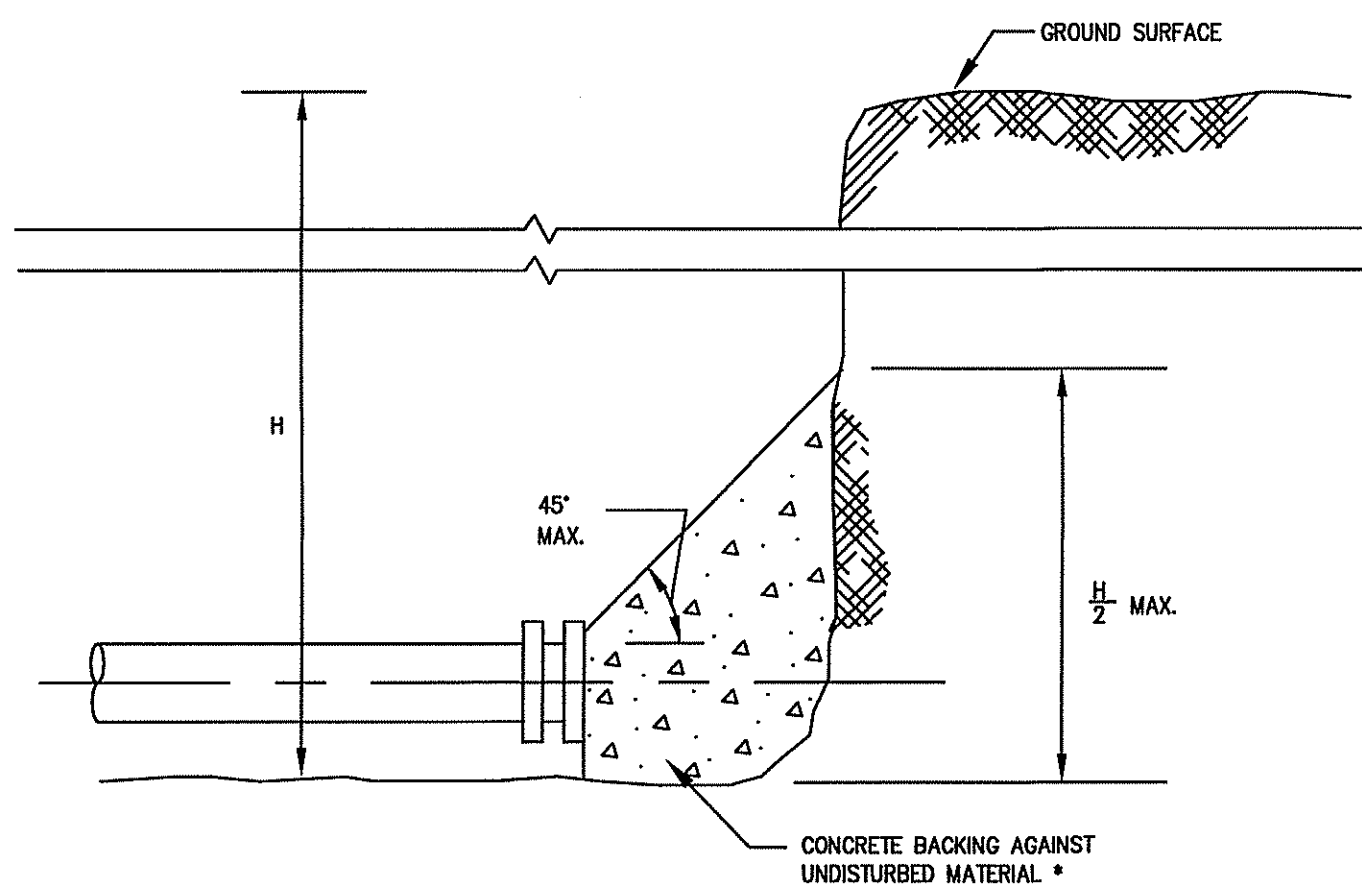
APPLICANT:
32 OAKLAND AVE LLC
30 WADE WAY
HANOVER, MASSACHUSETTS 02339

DRAWN BY: AWL
DESIGNED BY: AWL
CHECKED BY: BCM
APPROVED BY: BCM
DATE: DECEMBER 14, 2020
SCALE: AS NOTED
PROJECT NO.: 217-106
DWG. TITLE:

PERMIT SET

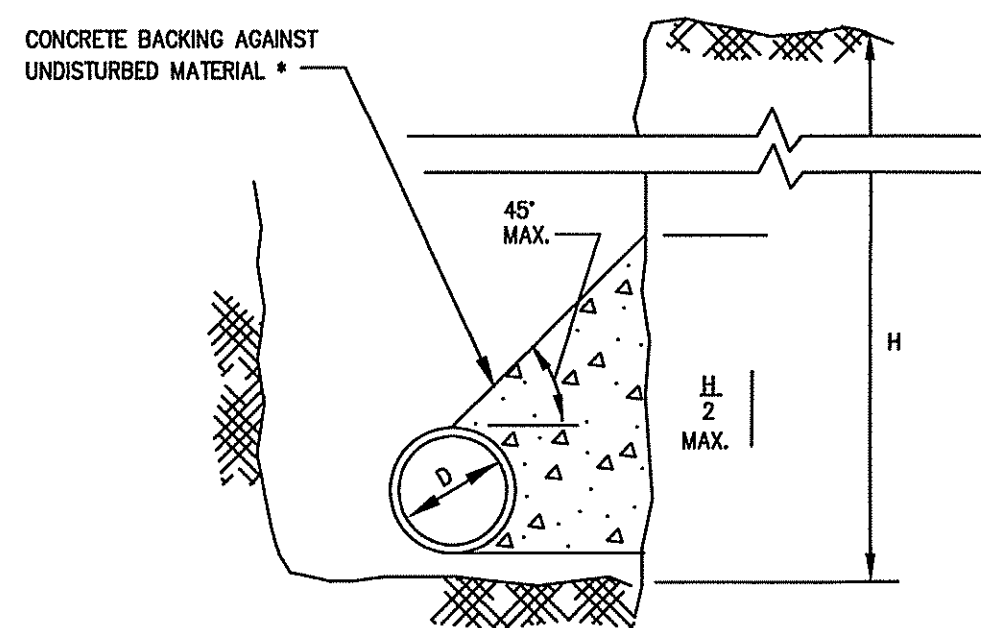
Construction Details

DWG. No: 15



TYPICAL WATER MAIN PLUG

NOT TO SCALE



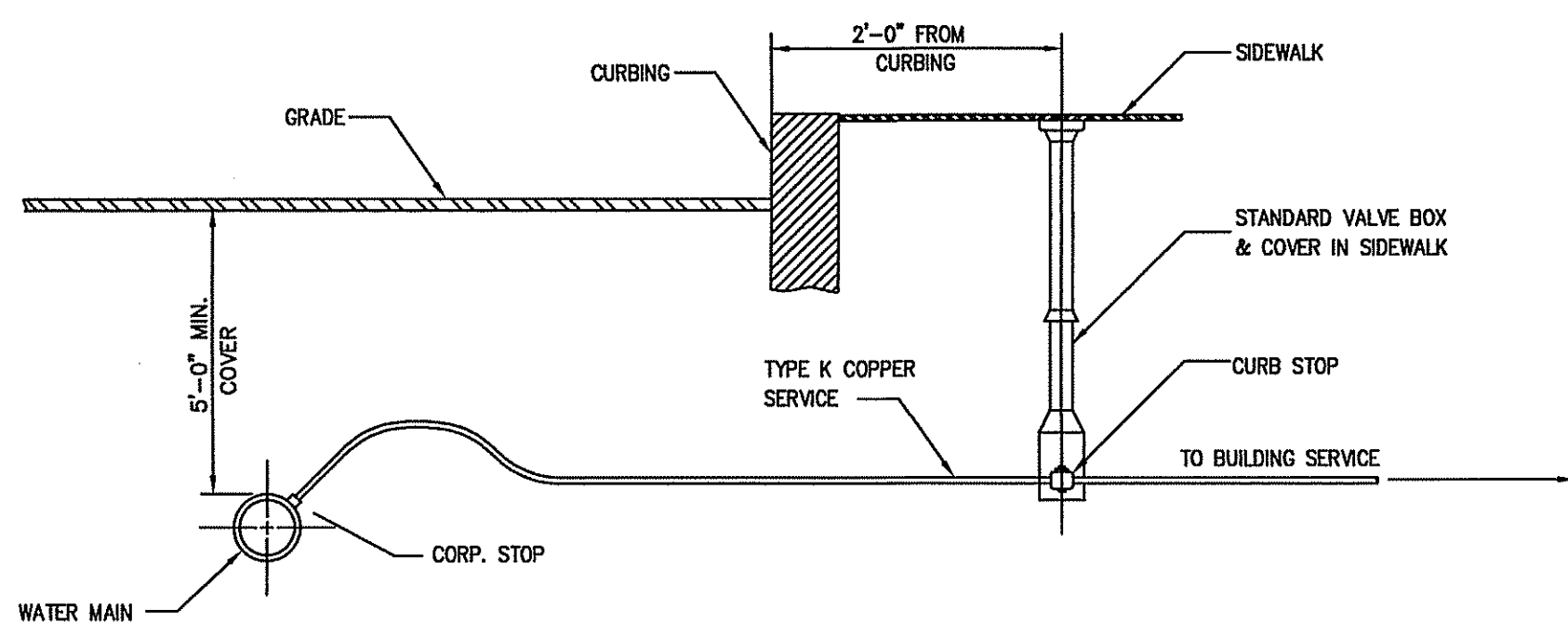
TYPICAL WATER MAIN THRUST BLOCK SECTION DETAILS

NOT TO SCALE

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.

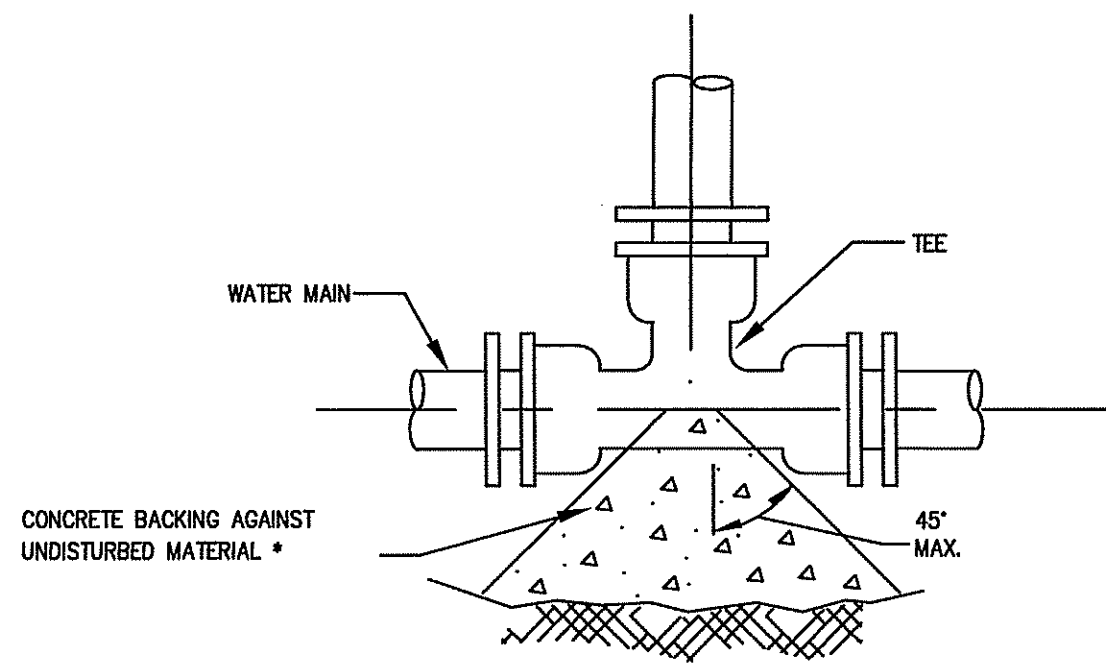
NOTE: WHERE NO PAVED SIDEWALK EXIST CURB STOPS & VALVE BOXES TO BE INSTALLED IN STREET



COPPER SERVICE CONNECTION

NOT TO SCALE

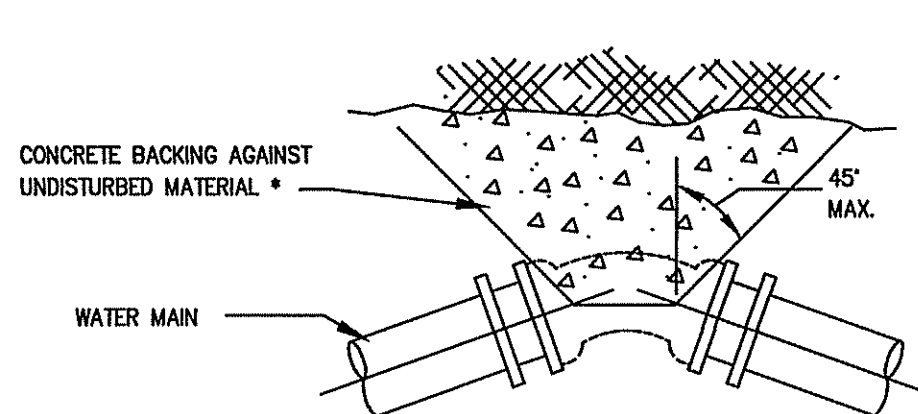
- IF SHEETING IS USED, IT SHALL BE CUT OFF NO MORE THAN 12" ABOVE TOP OF PIPE.
- ALL PIPES SHALL BE PRESSURE TESTED AT 200 PSI WORKING PRESSURE FOR A MINIMUM DURATION OF TWO HOUR.
- WATER SYSTEM IS TO BE DISINFECTED TO 50 P.P.M. AVAILABLE CHLORINE AND AFTER 24 HOURS TO 25 P.P.M. OR AS REQUIRED BY HANOVER WATER SUPERINTENDENT/ENGINEER.
- WATER PIPE IS TO BE CEMENT LINED DUCTILE IRON "TYTON" OR EQUAL TYPE JOINT, CONFORMING TO A.N.S.I./A.W.W.A. C150/A21.50, CLASS 52, AS APPROVED BY THE HANOVER WATER SUPERINTENDENT/ENGINEER.
- ALL PIPING SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH A.W.W.A. STANDARDS PRIOR TO PAVING IF PAVING ABOVE TRENCH IS REQUIRED.



* SEE TABLE ON THRUST BLOCK BEARING AREAS FOR THE AREA OF CONCRETE REQUIRED.

TYPICAL WATER MAIN TEE THRUST BLOCK DETAILS

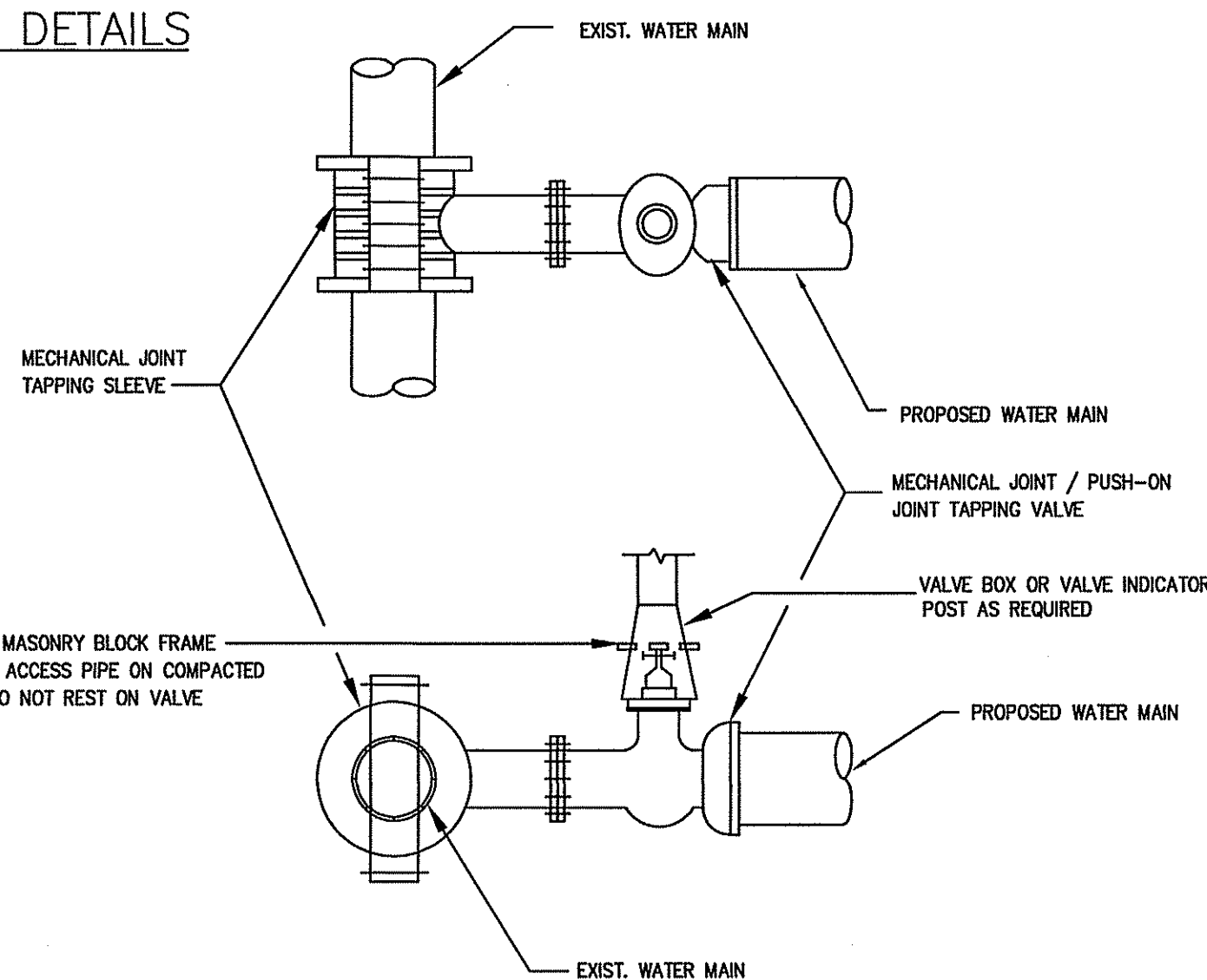
NOT TO SCALE



* SEE TABLE ON THRUST BLOCK BEARING AREAS FOR THE AREA OF CONCRETE REQUIRED.

TYPICAL WATER MAIN BEND THRUST BLOCK DETAILS

NOT TO SCALE



TYPICAL TAPPING SLEEVE AND VALVE

NOT TO SCALE

- BACKFILL IS TO BE COMPACTED TO 90% MAXIMUM DRY DENSITY BY AASHTO T-180 D.
- ALL WATER PIPE SHALL BE LAID WITH A MINIMUM OF 5 FEET OF COVER OF APPROVED MATERIALS.
- ALL HYDRANT LOCATIONS ARE TO BE APPROVED BY FIRE DEPARTMENT.
- RESULTS FROM PRESSURE TESTING AND DISINFECTION SHALL BE FURNISHED TO THE DIRECTOR OF PUBLIC WORKS FOR APPROVAL PRIOR TO WATER BEING TURNED ON.
- ALL WORK SHALL BE IN CONFORMANCE WITH HANOVER WATER DEPARTMENT STANDARDS.
- ALL PERMITS REQUIRED FOR STREET OPENINGS AND WATER MAIN TAPPING MUST BE OBTAINED.
- NO WATER WILL BE TURNED ON IN THE PROJECT WITHOUT WATER DEPARTMENT APPROVAL.

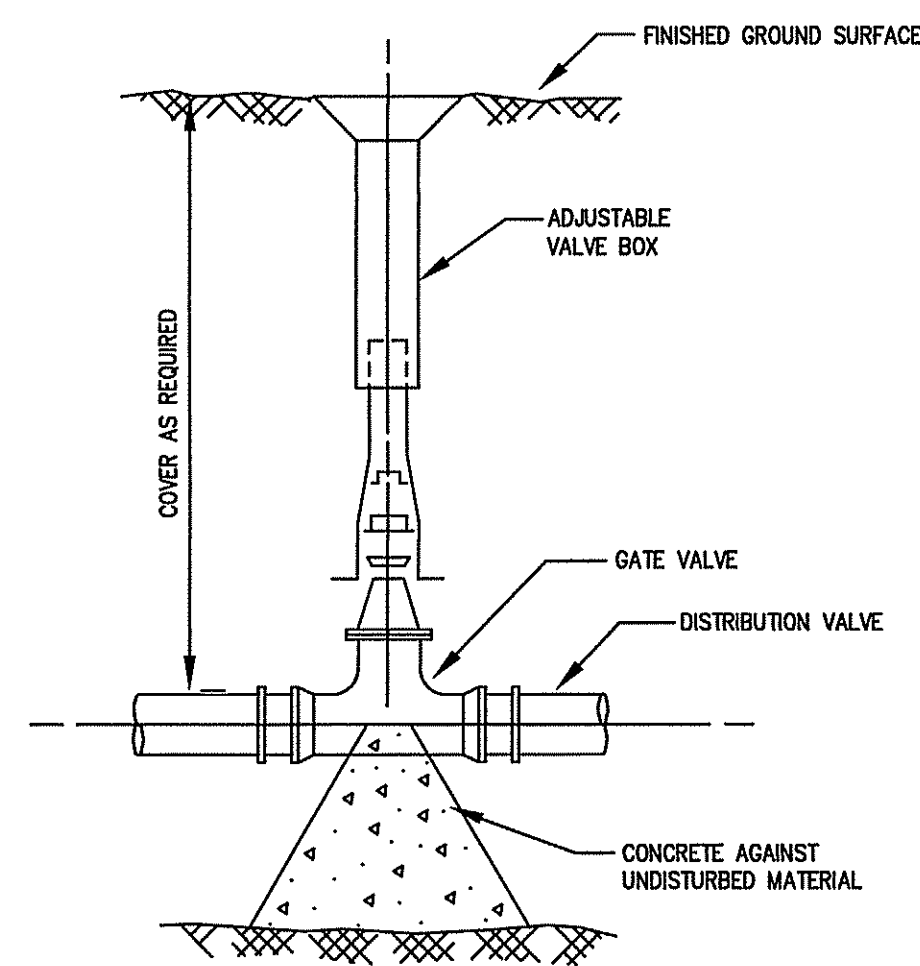
THRUST BLOCK BEARING AREAS FOR WATER PIPE

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.

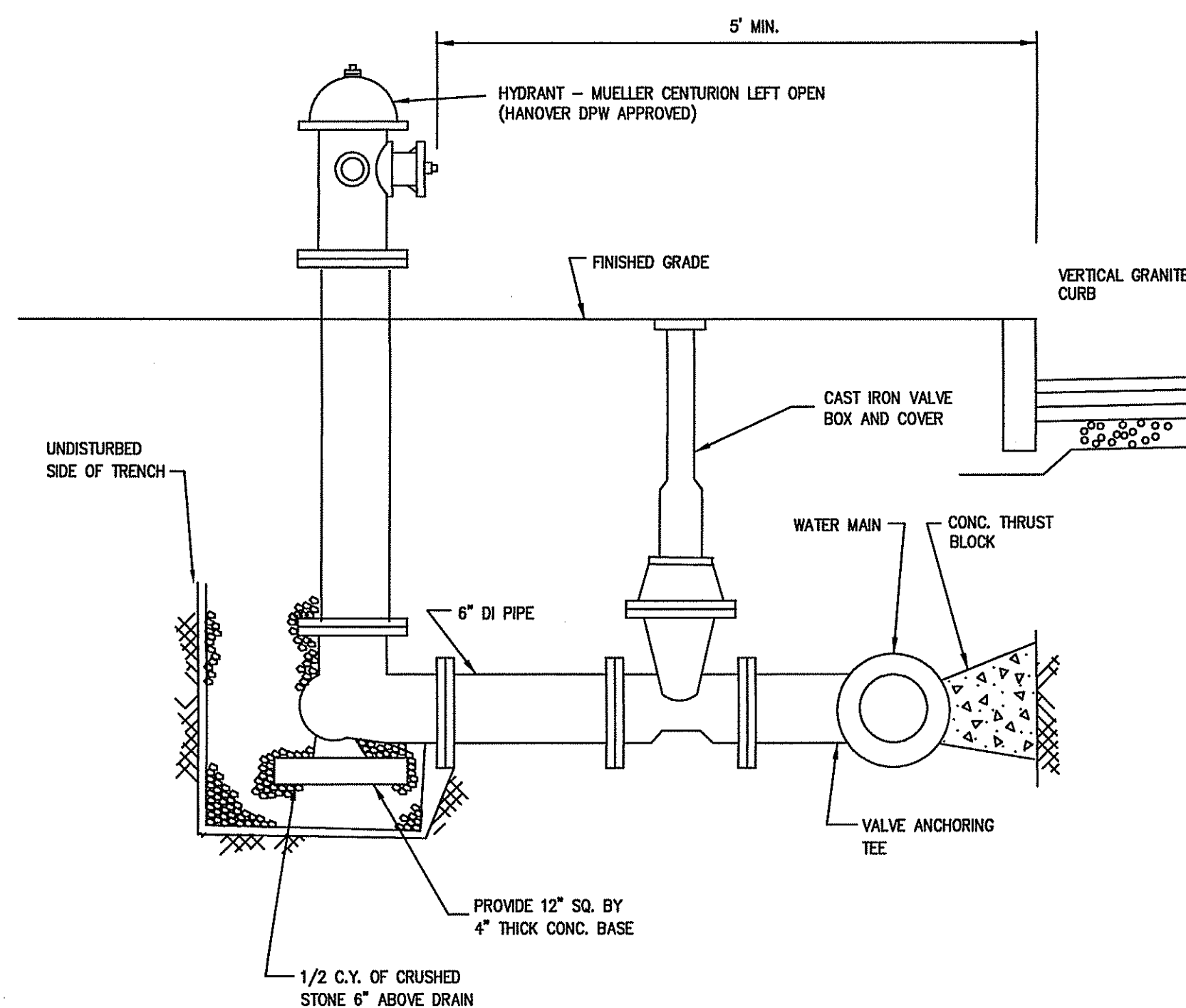
NOTES:

- 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

FOR REGISTRY USE ONLY

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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 _____ AND RECORDED AT THIS OFFICE. NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT FOLLOWING SUCH RECEIPT AND RECORDING OF SAID NOTICE.

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APPROVAL UNDER THE SUBDIVISION CONTROL LAW REQUIRED

DATE OF APPLICATION: _____

DATE OF HEARING: _____

DATE OF APPROVAL: _____

DATE OF ENDORSEMENT: _____

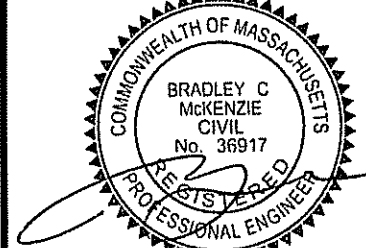
HANOVER PLANNING BOARD

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DEFINITIVE SUBDIVISION PLAN
OAKLAND ESTATES
 (ASSESSOR'S MAP 49, PORTION OF LOTS 1 & 2 AND MAP 57, LOT 31)
 OAKLAND AVENUE
 HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL ENGINEER:



APPLICANT:
32 OAKLAND AVE LLC
 30 WADE WAY
 HANOVER, MASSACHUSETTS 02339

DRAWN BY: AWL
 DESIGNED BY: AWL
 CHECKED BY: BCM
 APPROVED BY: BCM
 DATE: DECEMBER 14, 2020
 SCALE: AS NOTED
 PROJECT NO.: 217-106
 DWG. TITLE:

Construction Details

DWG. No:

16

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FILE LOCATION: M:\217-106\DWGS\Definitive\217-106 Definitive.dwg

Diagram illustrating the construction of a lawn area, showing the layers from top to bottom:

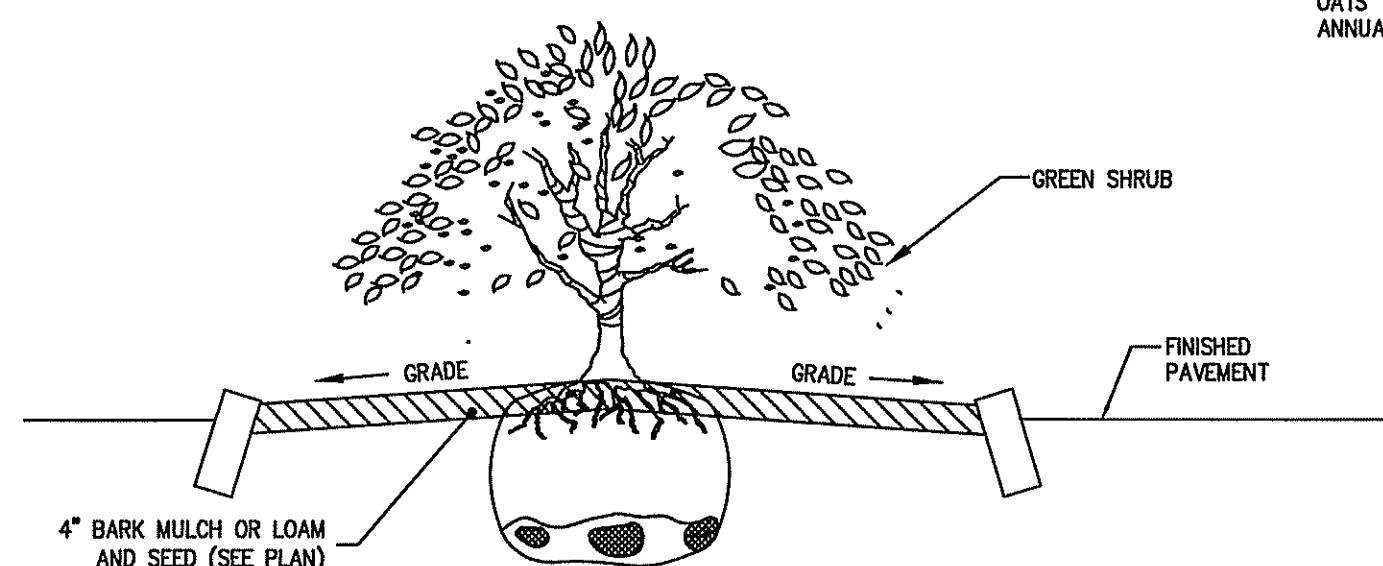
- SEEDED LAWN OR SOD
- COMPACTED SCREENED TOPSOIL (NO STONES LARGER THAN 1 1/4")
- COMPACTED SUBGRADE

2. TOPSOIL SHALL CONTAIN BETWEEN 5% AND 12% ORGANIC MATTER AND SHALL HAVE A MAXIMUM STONE SIZE OF 1 1/4" AND SHALL CONFORM TO THE FOLLOWING GRADATION:

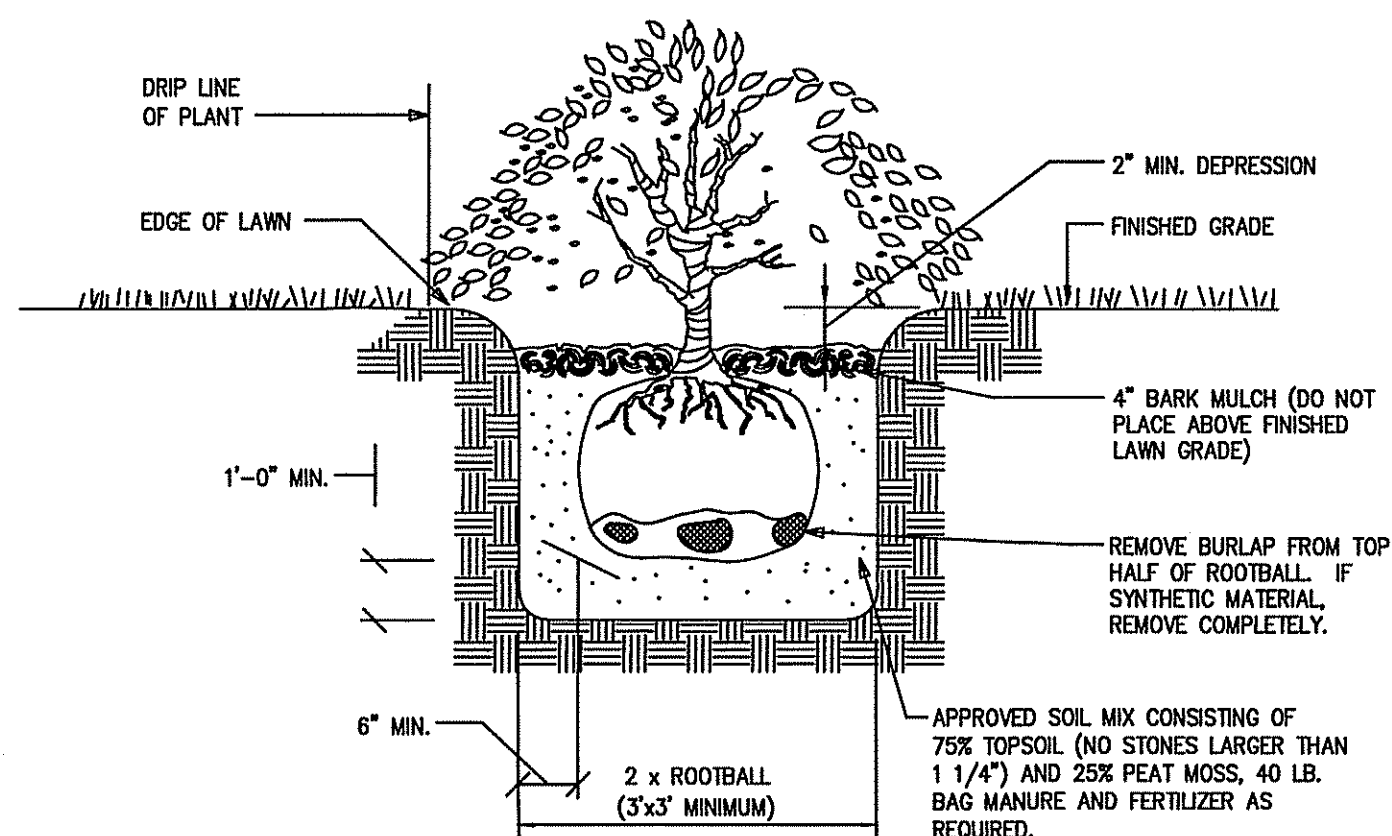
SIEVE	% PASSING
1 1/4 INCH	100
No.4	85-100
No.40	60-85
No.100	38-60
No.200	28-40

A. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
RED TOP	2	0.05
TOTAL	42	0.95
B. TALL FESCUE	15	0.35
CREEPING RED FESCUE	15	0.35
BIRDFOOT TREFLOI	15	0.35
TOTAL	40	0.95
C. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
BIRDFOOT TREFLOI	8	0.20
TOTAL	48	1.10
D. BIRDFOOT TREFLOI	10	0.25
RED TOP	5	0.10
REDD CANSTYGRASS	20	0.45
TOTAL	30	0.75
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

NOT TO SCALE



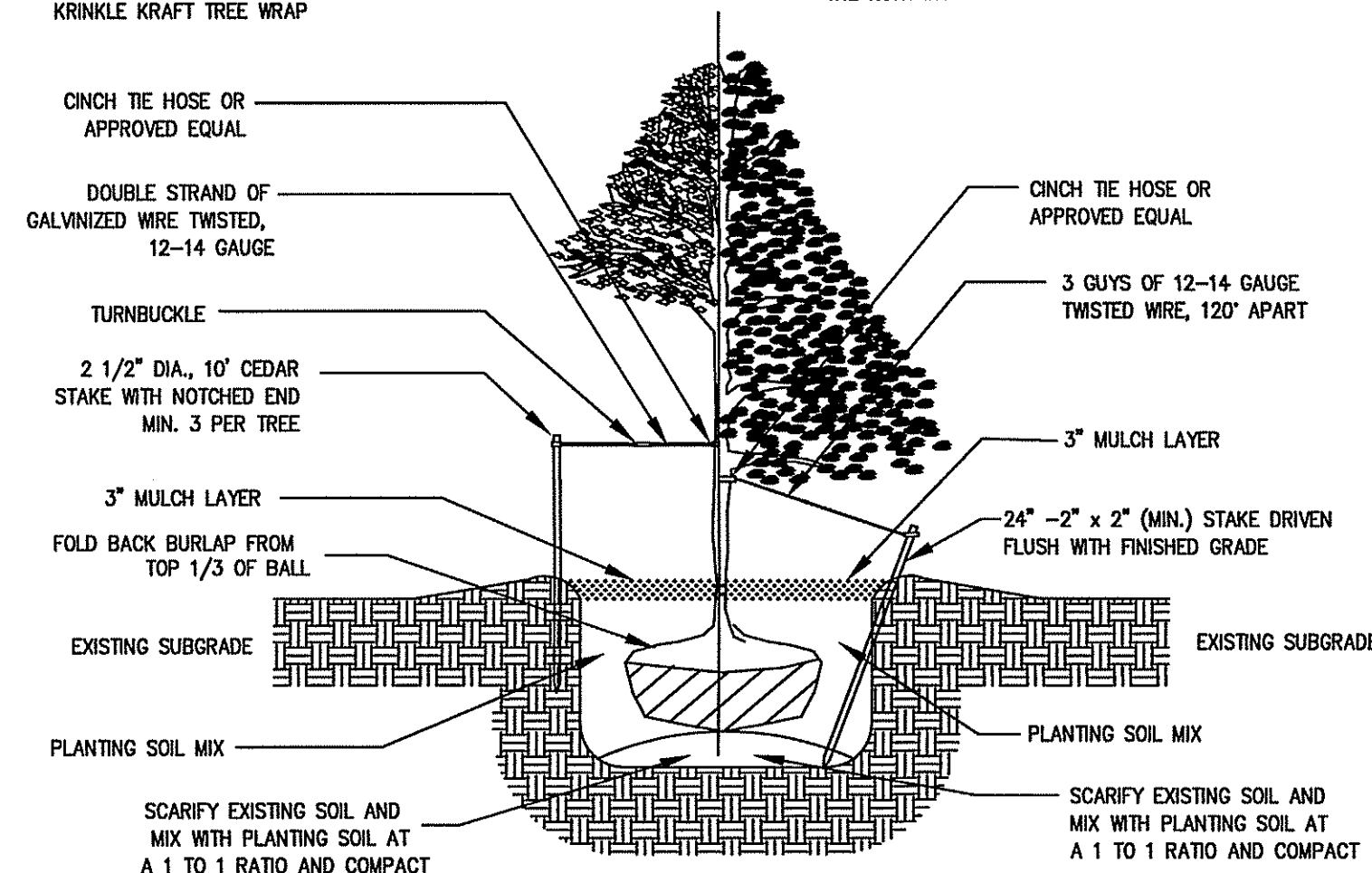
NOT TO SCALE



NOT TO SCALE

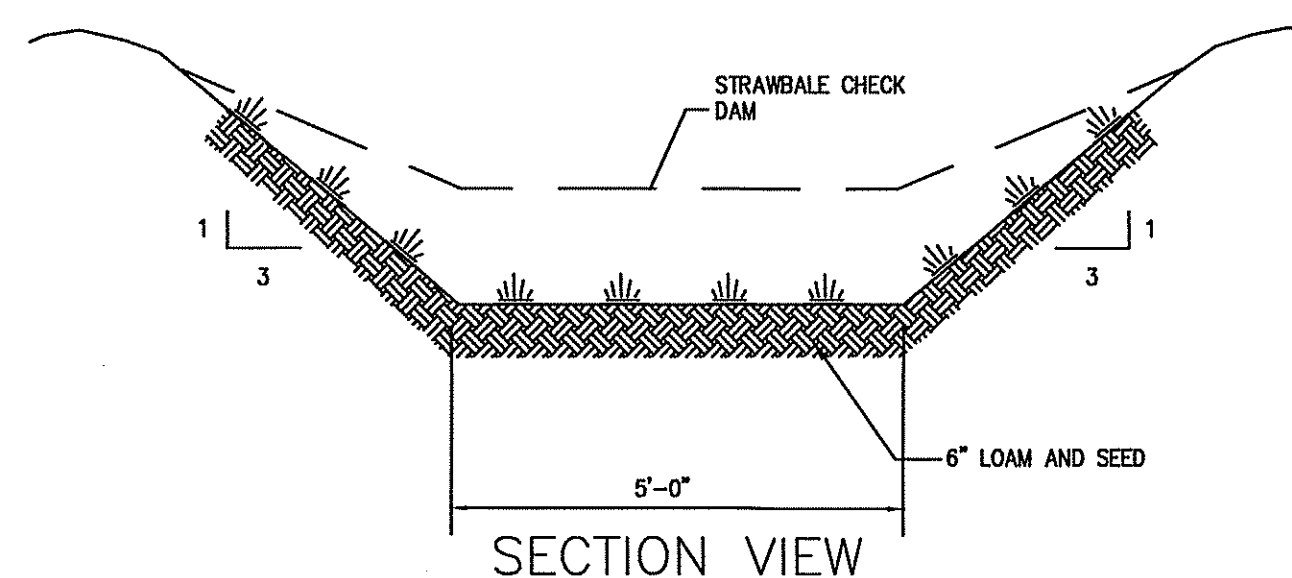
DECIDUOUS TREE - PRUNE BACK 1/4"
ON SITE; WRAP TREES OVER 1" CAL
WITH BURLAP OR ASPHALTIC
KRINKLE KRAFT TREE WRAP

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

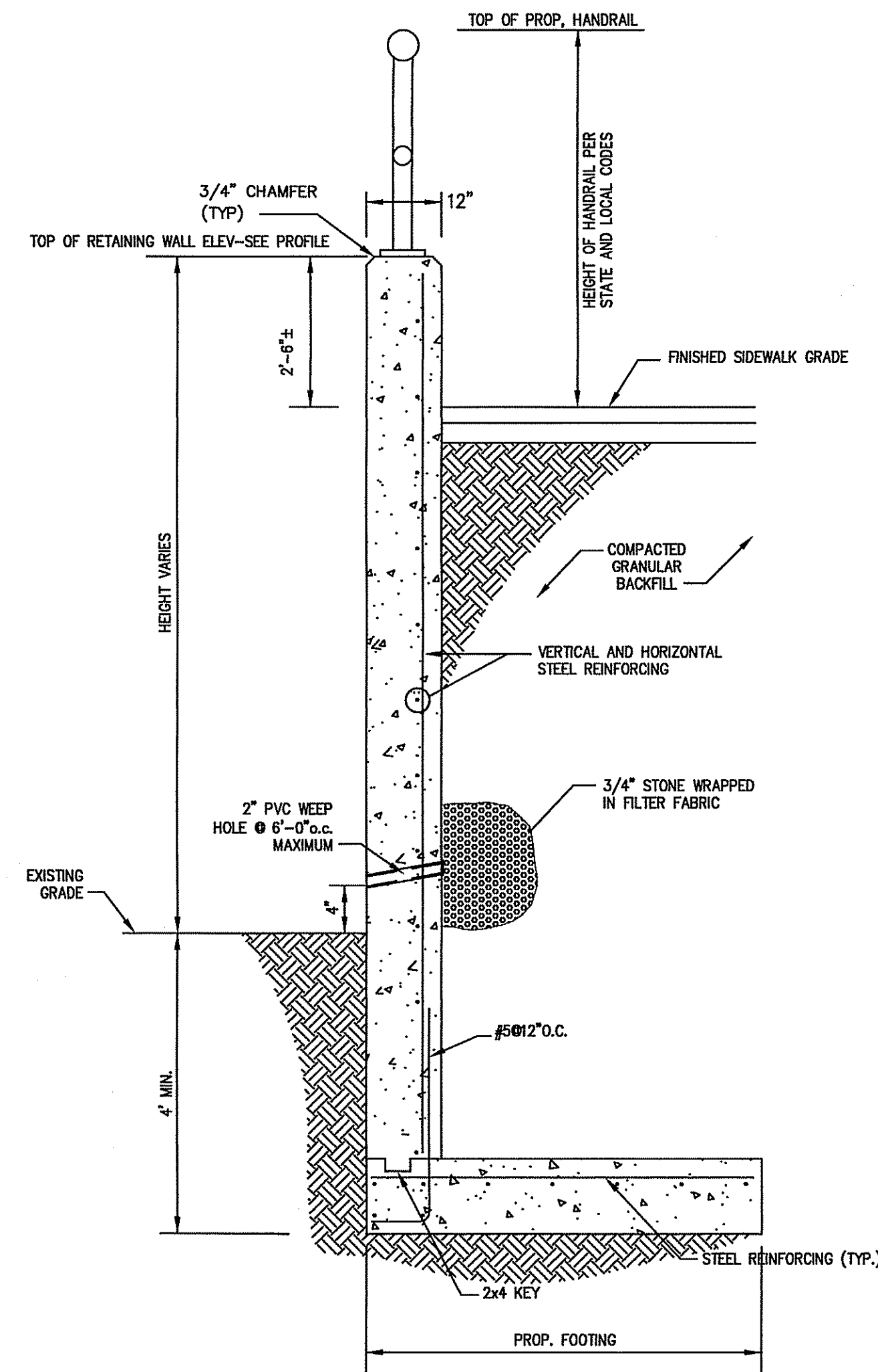


NOT TO SCALE

STREET TREES: STREET TREES SHALL BE OF A MINIMUM TEN (10) FEET IN HEIGHT WHEN PLANTED AND A MINIMUM CALIPER OF THREE (3) INCHES MEASURED AT SIX (6) INCHES ABOVE THE GROUND (STANDARD MEASUREMENT OF AMERICAN ASSOCIATION OF NURSERYMEN). NOTE THAT THIS SPECIFICATION IS FOR TYPICAL STREET OR SHADE TREES; OTHER TYPES OF TREES HAVE THEIR OWN SPECIFICATIONS DEPENDING ON SPECIES.

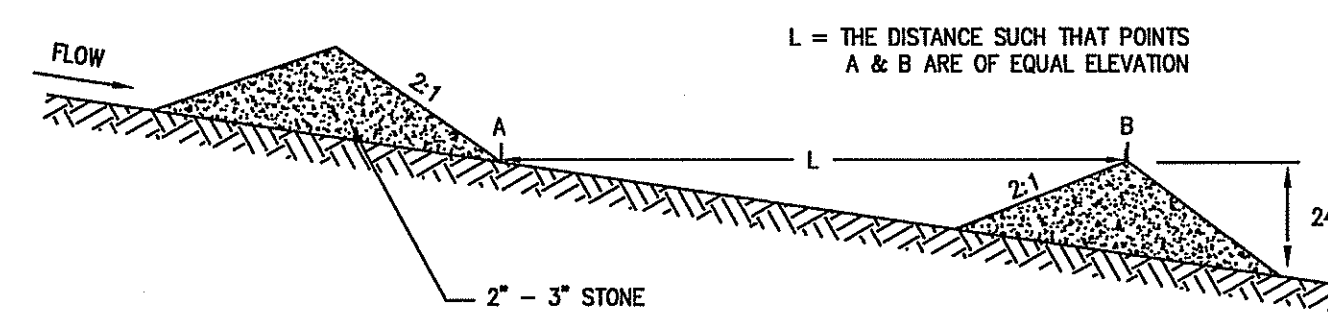


NOT TO SCALE



NOT TO SCALE

1. CONCRETE - 3000 PSI, 3/4" AGGREGATE
2. STEEL REINFORCEMENT TO BE 60,000 PSI.
3. ALL UNSUITABLE MATERIAL UNDER PROPOSED FOOTING TO BE REMOVED AND REPLACE WITH CRUSHED STONE.
4. DIMENSIONS OF WALL AND REINFORCING TO BE DESIGNED BY A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.



NOT TO SCALE

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 _____ 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 _____ 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:

DATE OF HEARING:

DATE OF APPROVAL:

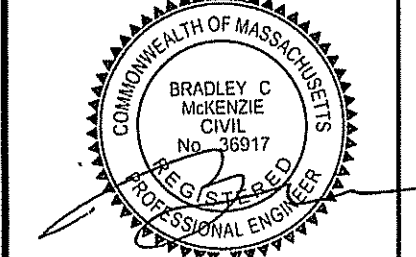
DATE OF ENDORSEMENT:

HANOVER PLANNING BOARD

[illegible]

DEFINITIVE SUBDIVISION PLAN
OAKLAND ESTATES
(ASSESSOR'S MAP 49, PORTION OF LOTS 1 & 2 AND MAP 57, LOT 31)
OAKLAND AVENUE
HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL
ENGINEER:



APPLICANT:
32 OAKLAND AVE LLC
30 WADE WAY
HANOVER, MASSACHUSETTS 02339

DRAWN BY:	AWL
DESIGNED BY:	AWL
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	DECEMBER 14, 2020
SCALE:	AS NOTED
PROJECT NO.:	217-106
DWG. TITLE:	

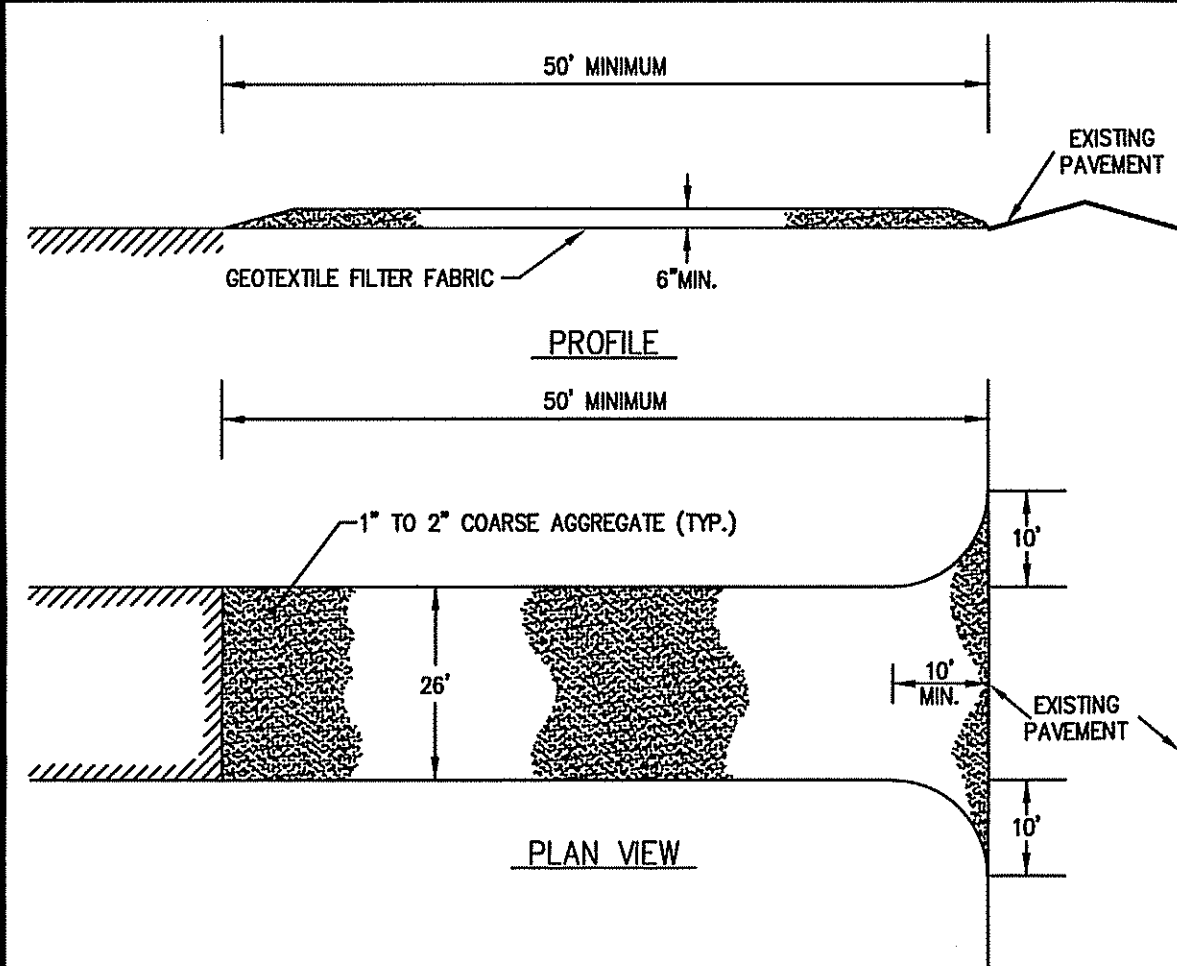
Construction Details

DWG. No:

17

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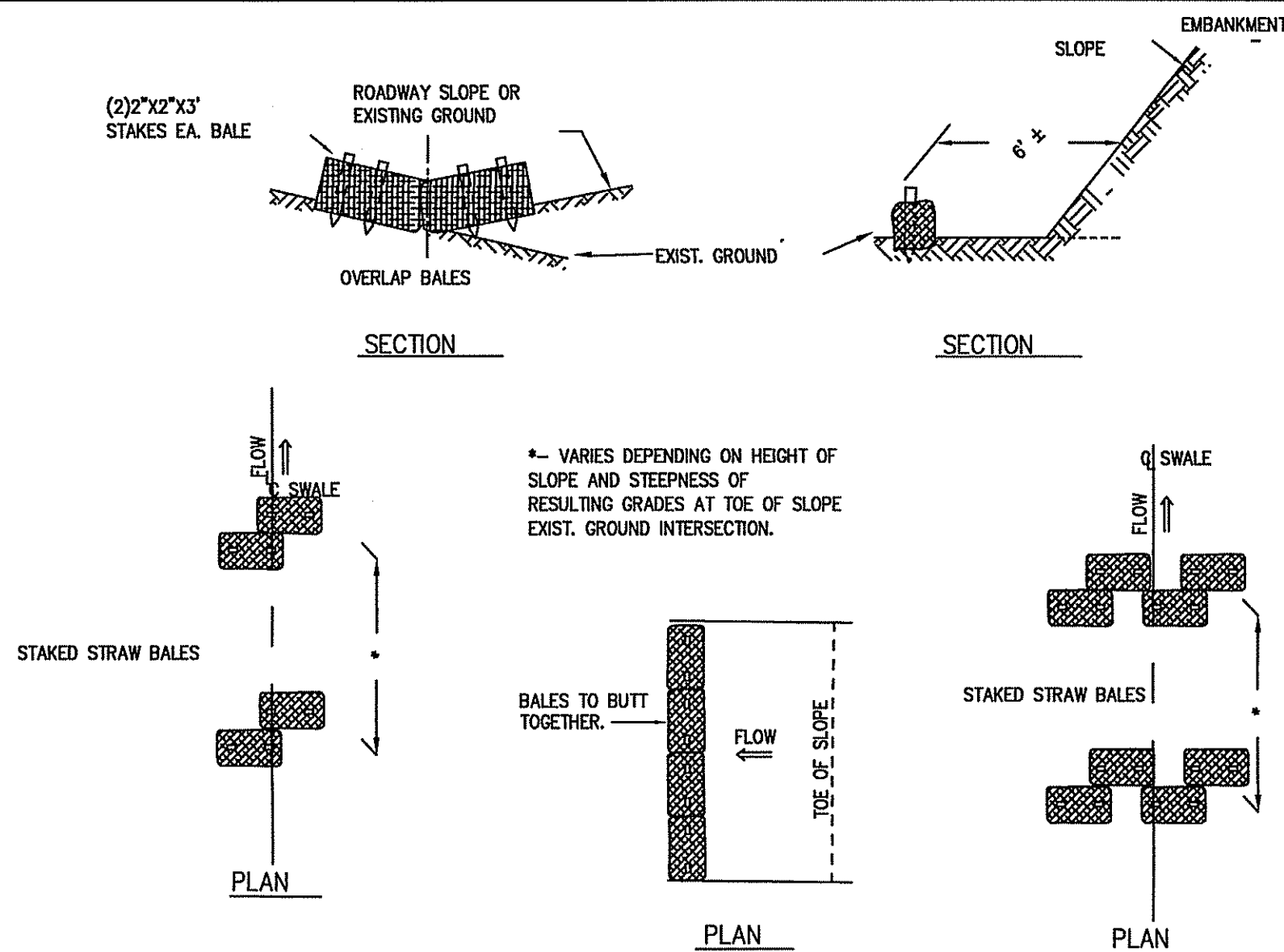
FILE LOCATION: M:\217-106\DWGS\DWGS-Definitive\217-106 Definitive.dwg



STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS:

- STONE FOR A STABILIZATION CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE.
- THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET.
- THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
- THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN A FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 20 FEET, WHICHEVER IS GREATER.
- GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.
- ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARDS THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.



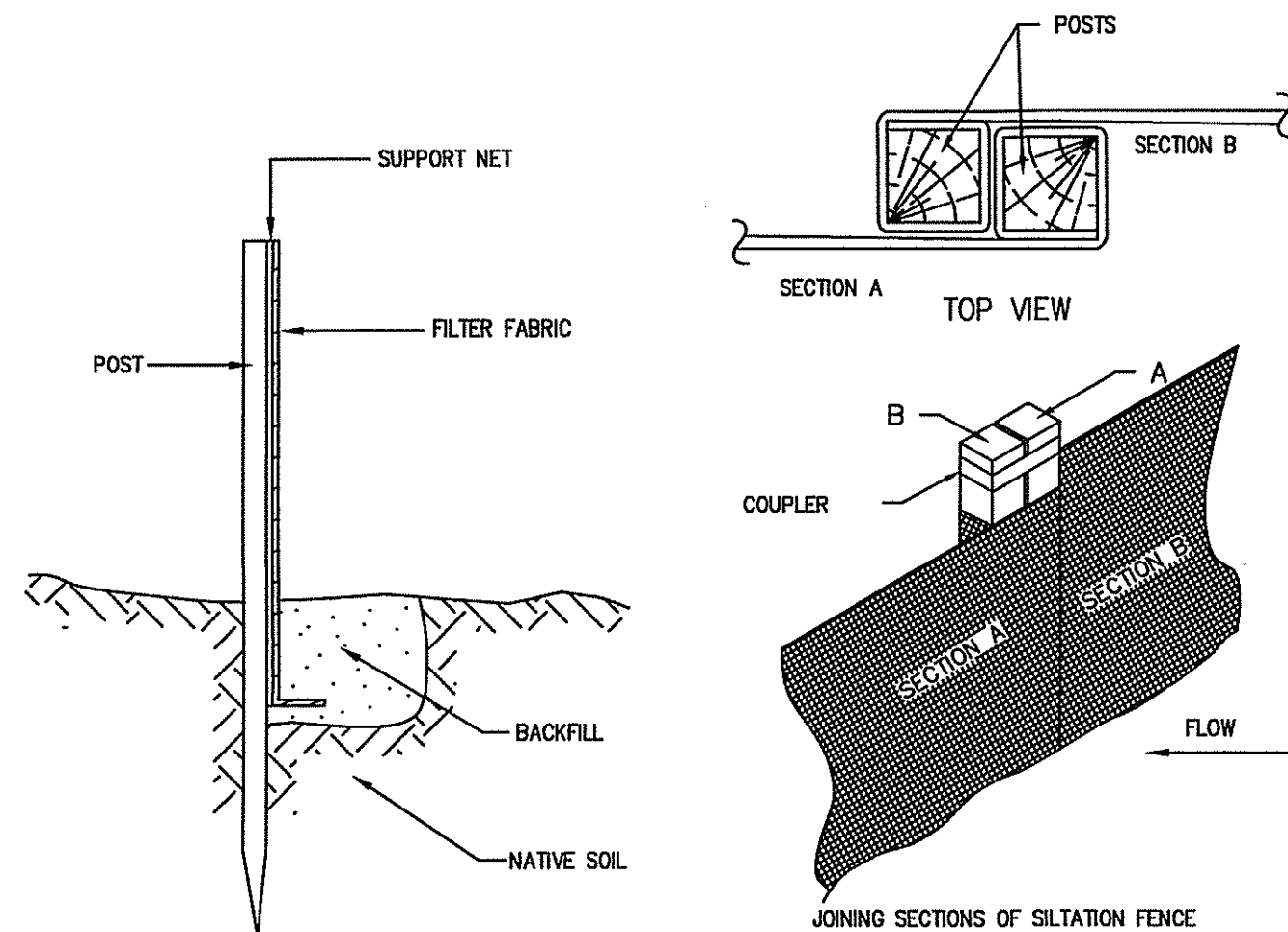
TEMPORARY EROSION CONTROL
NOT TO SCALE

CONSTRUCTION NOTES:

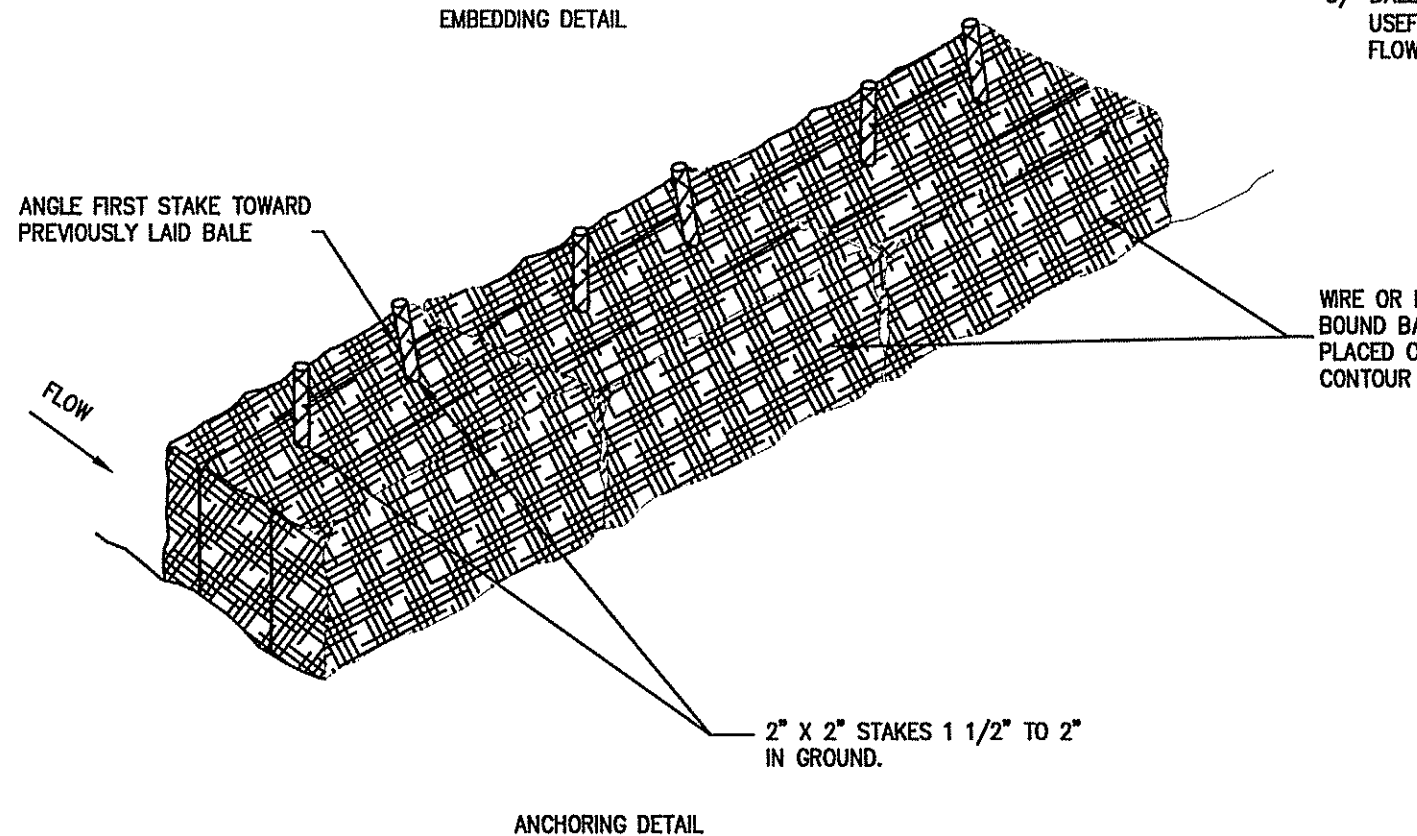
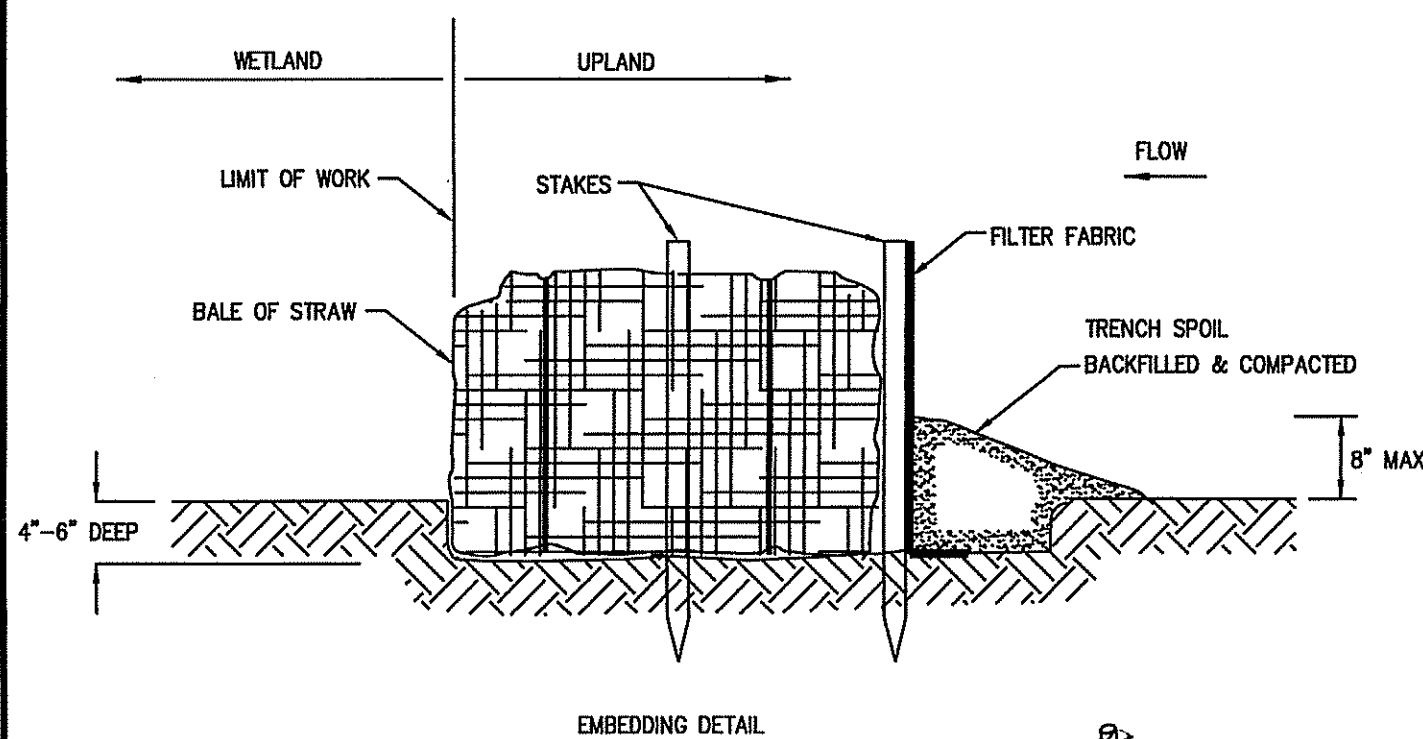
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24\"/>

NOTES:

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



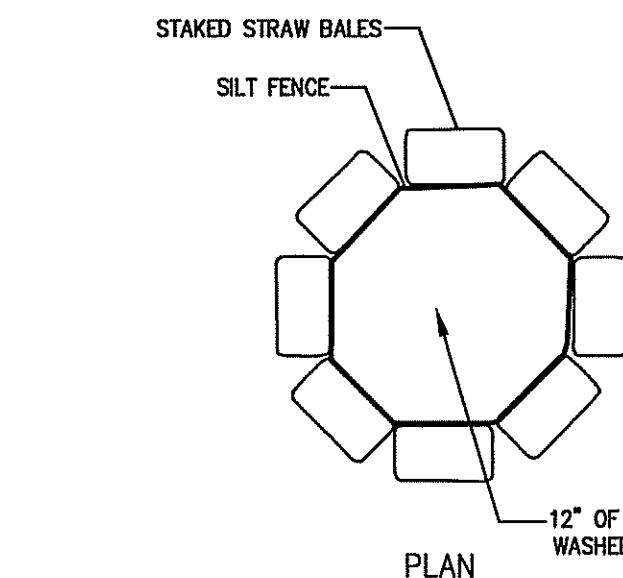
SILTATION FENCE
NOT TO SCALE



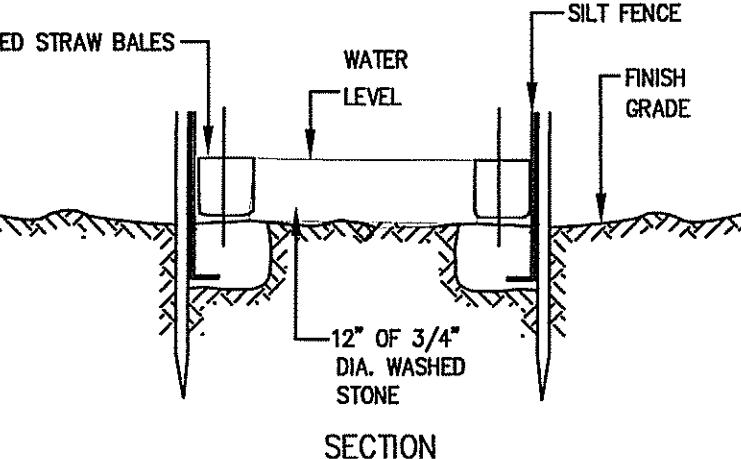
STAKED STRAW BALE AND SILTATION FENCE
NOT TO SCALE

EROSION AND SEDIMENTATION CONTROL

- REFER TO CONSTRUCTION PHASE BEST MANAGEMENT PRACTICES AS SPECIFIED IN "BEST MANAGEMENT PRACTICES OPERATION AND MAINTENANCE PLAN" PREPARED BY MEG, DATED DECEMBER 14, 2020 AS REVISED AND APPROVED FOR STRUCTURAL, STABILIZATION AND DUST CONTROL, EROSION AND SEDIMENTATION CONTROL MEASURES.
- STRUCTURAL PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE SEDIMENT FENCE/STRAW BALE BARRIER CONTROLS, STABILIZED CONSTRUCTION ENTRANCE, TEMPORARY DIVERSION SWALES WITH STONE CHECK DAMS, SEDIMENT BASINS, AND INLET PROTECTION.
- STABILIZATION PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE TEMPORARY SEEDING, GEOTEXTILES (JUTE MESH), MULCHING, AND PERMANENT SEEDING. EROSION CONTROL FABRIC IS RECOMMENDED ON ALL PROPOSED REGRADED SLOPES WITHIN THE 100' WETLAND BUFFER TO STABILIZE THE SLOPE AND PREVENT CHANNELING DURING AND AFTER CONSTRUCTION.
- IN GENERAL, THE SMALLEST POSSIBLE AREA OF LAND SHOULD BE EXPOSED AT ONE TIME. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHALL BE CONFINED TO A MAXIMUM PERIOD OF 3 MONTHS. LAND SHALL NOT BE EXPOSED DURING THE WINTER MONTHS. ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY AND THAT WILL BE REGRADED AT A LATER DATE SHALL BE MACHINE STRAW MULCHED AND SEEDED WITH WINTER RYE TO PREVENT EROSION.
- PROVIDE TEMPORARY ORANGE CONSTRUCTION FENCING ALONG THE EROSION CONTROL BARRIER WHEREVER THE LIMIT OF WORK IS WITHIN THE 50 FOOT BUFFER AS A VISUAL AID TO PREVENT ENCROACHMENT INTO THE 35 FOOT "NO-DISTURB" BUFFER.



DEWATERING FILTER DETAIL
NOT TO SCALE

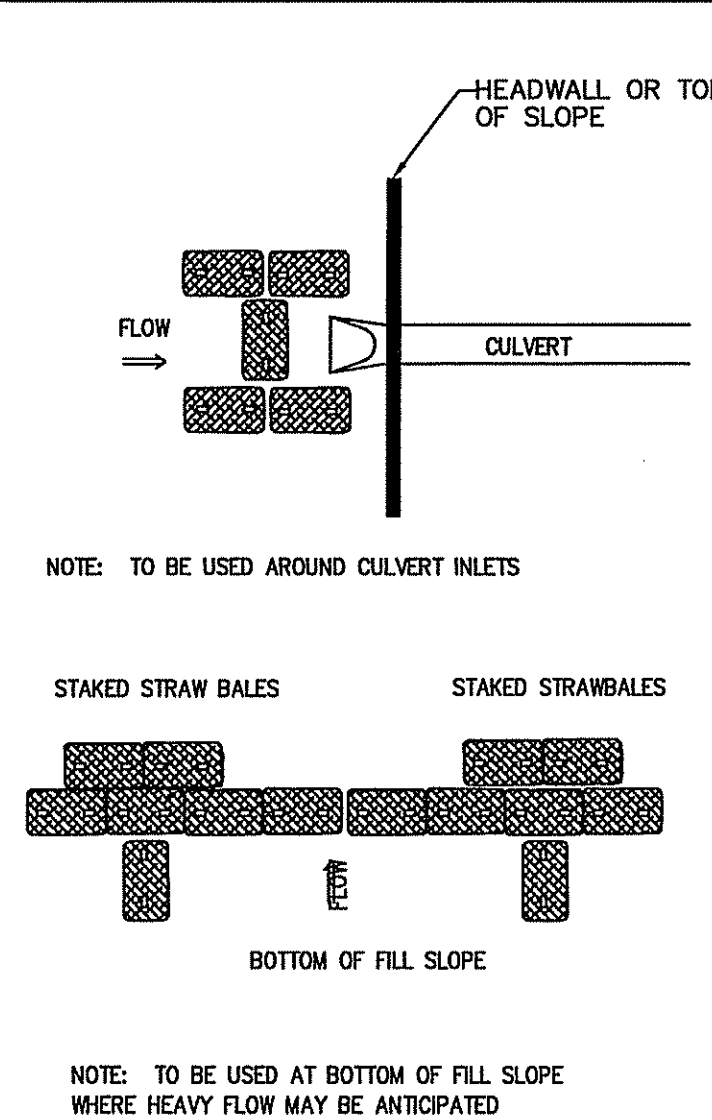


DEWATERING METHODS SHALL BE EMPLOYED IN ANY AREA WHERE PUMPING OF GROUNDWATER IS NECESSARY TO CONSTRUCT THE PROPOSED DRIVEWAY AND UTILITIES. DETAILS SHOWN ON THIS PLAN SHALL BE USED AND ANY MODIFICATION SHALL BE APPROVED BY THE CONSERVATION COMMISSION.

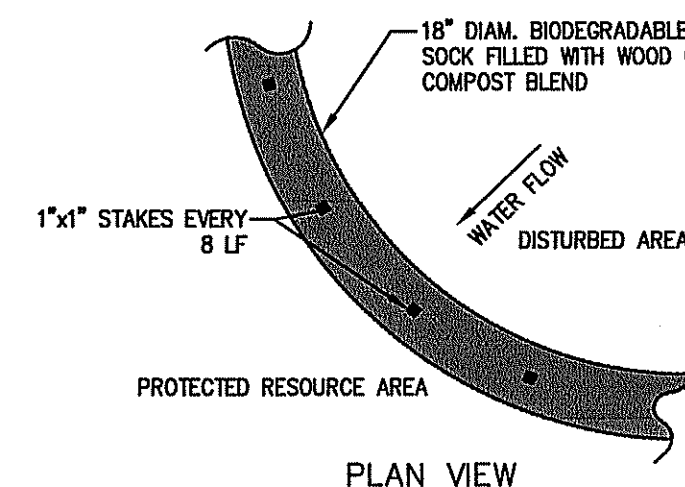
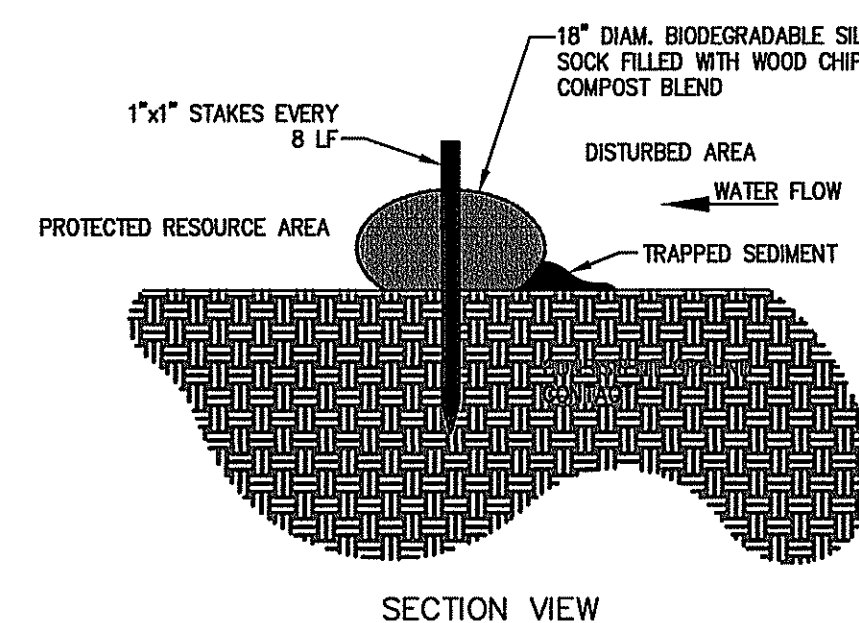
CONSTRUCTION SEQUENCE

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

- STABILIZATION PRACTICES FOR EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. REFER TO "EROSION AND SEDIMENTATION CONTROL" SECTION OF THIS PLAN.
PLACE EROSION CONTROL BARRIERS AT LOCATIONS INDICATED ON THE CONSTRUCTION DRAWINGS AND CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES AT OAKLAND AVE. WITH ASSOCIATED SEDIMENT BASINS.
- CLEAR AND GRUB ALL AREAS ASSOCIATED WITH THE CONSTRUCTION OF THE ROADWAY AND RELATED INFRASTRUCTURE.
- EXCAVATE TOPSOIL AND SUBSOIL FROM CUT AND FILL AREAS AND STOCKPILE ON SITE IN LOCATIONS SHOWN ON THE PLAN. CONSIDERATION SHOULD BE GIVEN TO LOCATING STOCKPILES ON THE UPHILL SIDE OF DISTURBED AREAS, WHERE POSSIBLE, TO ACT AS TEMPORARY DIVERSIONS.
- CONSTRUCT CUT AND FILL AREAS, INSTALLING STRAW BALE CHECK DAMS AT TOES OF ALL 3:1 OR GREATER SLOPES, AND AT ENDS OF ALL CUT AREAS. ALL FILL WILL BE INSTALLED USING 12\"/>



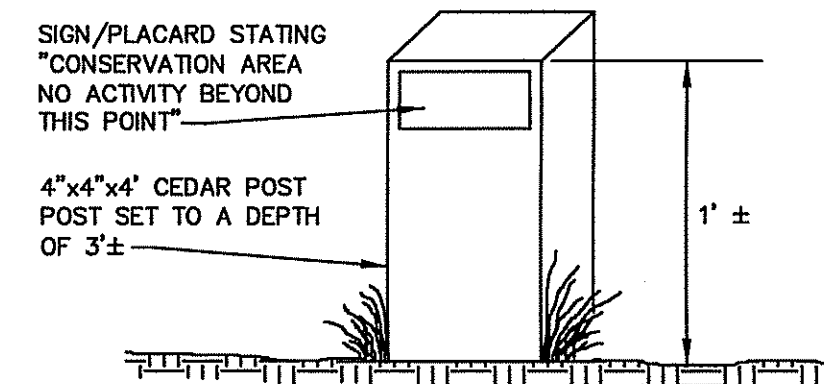
NOTE: TO BE USED AT BOTTOM OF FILL SLOPE WHERE HEAVY FLOW MAY BE ANTICIPATED



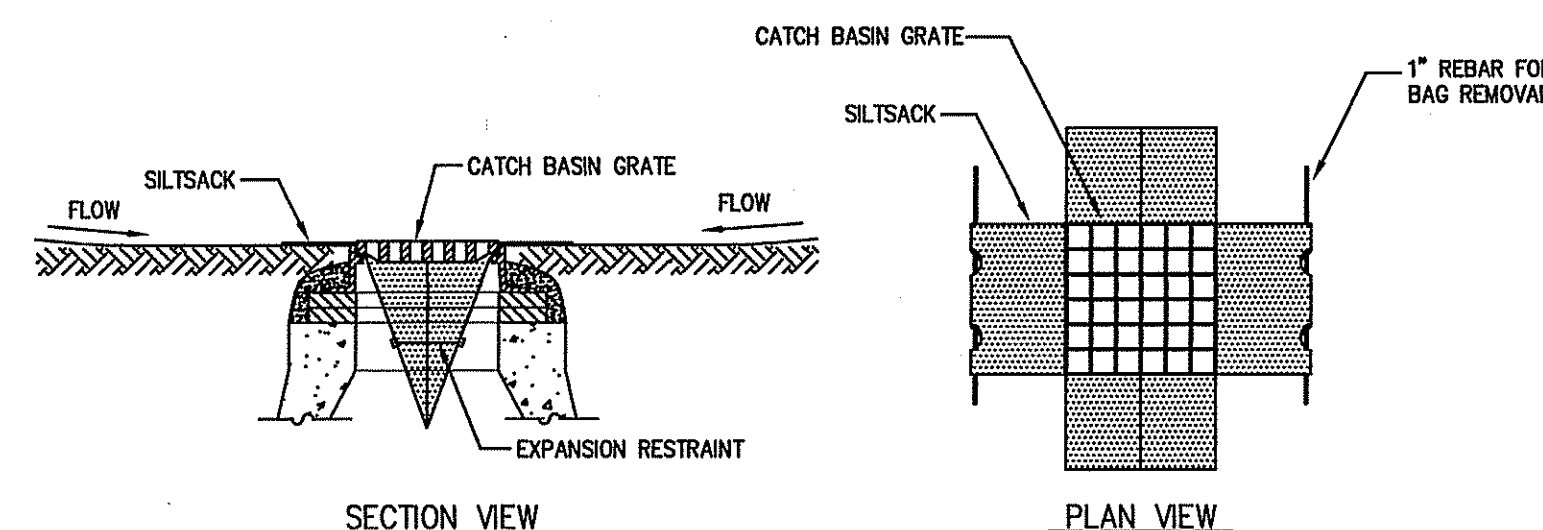
CONSTRUCTION NOTES:

- SILT SOCKS SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING OR LAPPING THE ADJACENT SECTIONS.
- SILT SOCKS SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR RE-BARS DRIVEN EVERY 8 LF.
- INSPECTION SHALL BE FREQUENT, AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS REQUIRED.
- SILT SOCKS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS, SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

SILT SOCK EROSION CONTROL
BARRIER DETAIL
NOT TO SCALE



CONSERVATION AREA
CEDAR POST DETAIL
NOT TO SCALE



SILT SACK SEDIMENT TRAP
NOT TO SCALE

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 _____ 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 _____ 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: _____

DATE OF HEARING: _____

DATE OF APPROVAL: _____

DATE OF ENDORSEMENT: _____

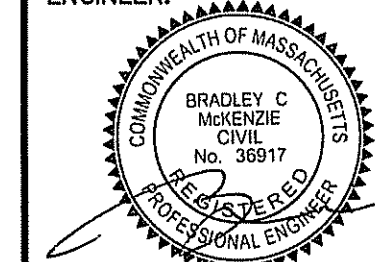
HANOVER PLANNING BOARD

REV	DATE	DESCRIPTION	BY	APP
1	1/21/21	RET. WALL LOCATION	AWL	BCM
2	3/11/21	PER. FEED REVIEW	AWL	BCM

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

**DEFINITIVE SUBDIVISION PLAN
OAKLAND ESTATES**
(ASSESSOR'S MAP 48, PORTION OF LOTS 1 & 2 AND MAP 57, LOT 31)
OAKLAND AVENUE
HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL ENGINEER:



APPLICANT:
32 OAKLAND AVE LLC
30 WADE WAY
HANOVER, MASSACHUSETTS 02339

DRAWN BY: _____ AWL
DESIGNED BY: _____ AWL
CHECKED BY: _____ BCM
APPROVED BY: _____ BCM
DATE: DECEMBER 14, 2020
SCALE: _____ AS NOTED
PROJECT NO.: 217-106

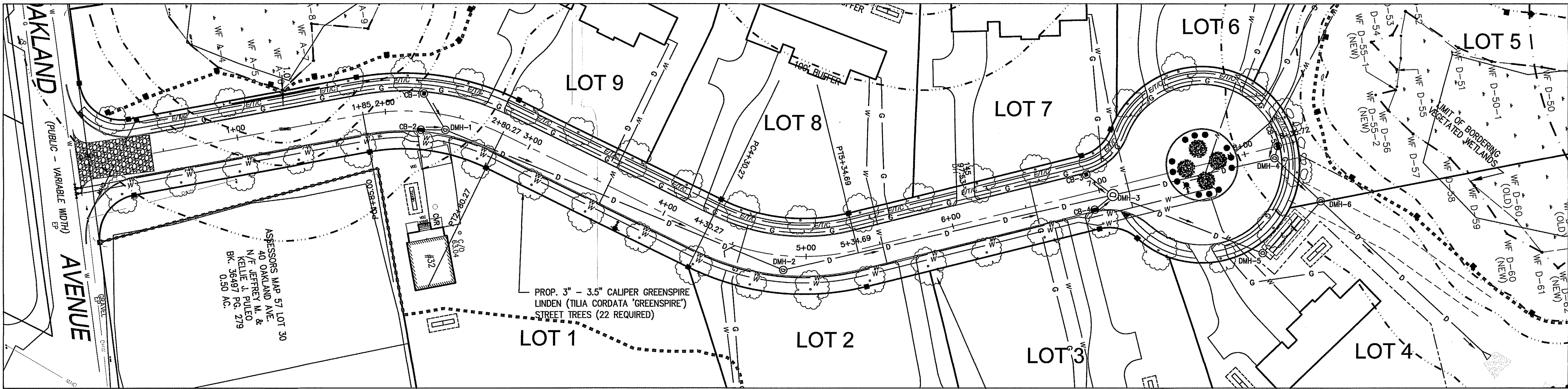
Erosion Control Details

DWG. No:

18

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FILE LOCATION: M:\217-106\DWGS\DWGS-Definitive\217-106 Definitive.dwg



ROAD A LANDSCAPING

SCALE: 1"=40'

GRAPHIC SCALE

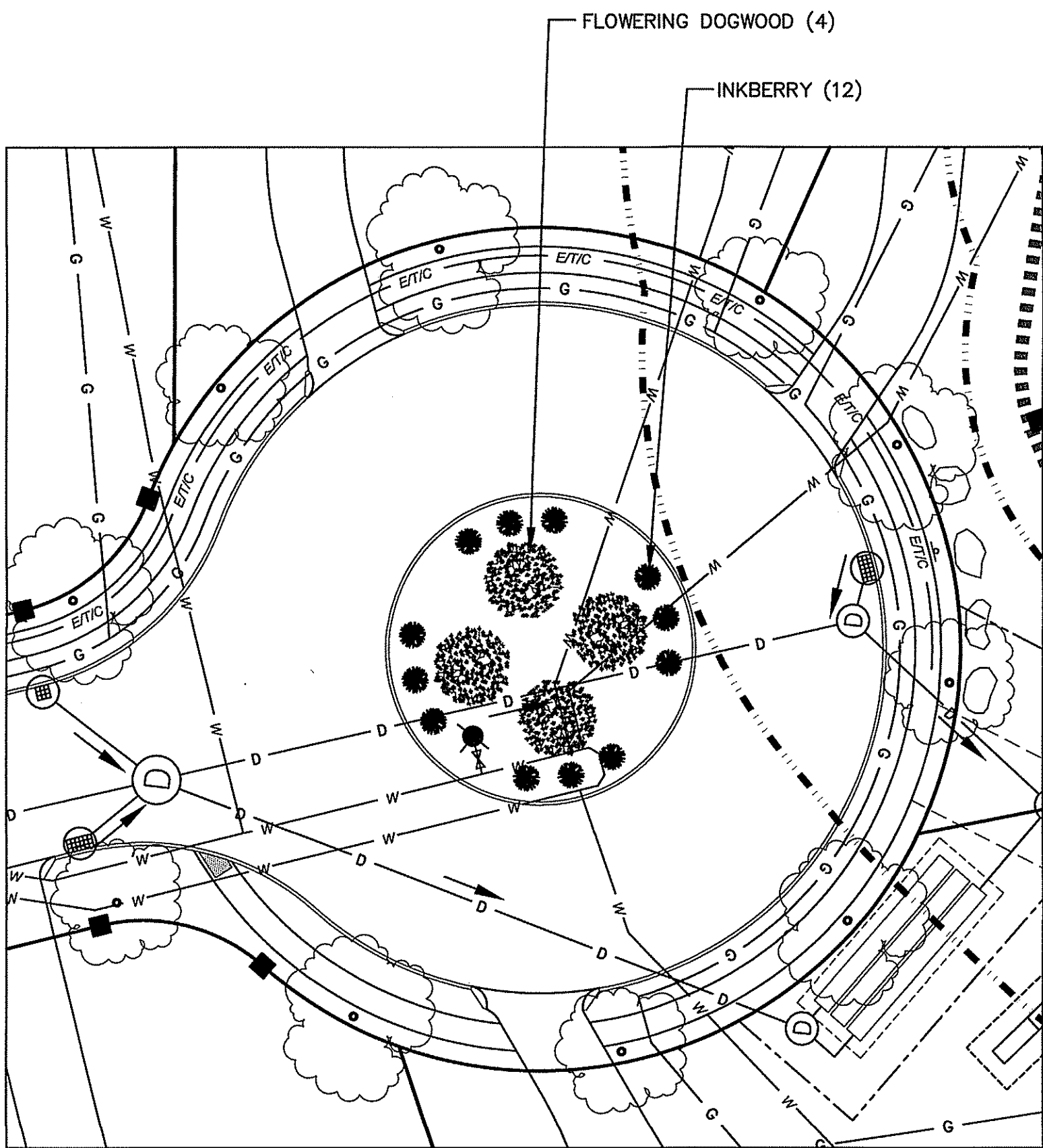


(IN FEET)
1 inch = 40 ft.

PROP. 3" - 3.5" CALIPER RED OAK
(QUERCUS RUBRA) STREET TREES
(22 REQUIRED)

PROP. 3" - 3.5" CALIPER GREENSPIRE
LINDEN (TILIA CORDATA "GREENSPIRE")
STREET TREES (22 REQUIRED)

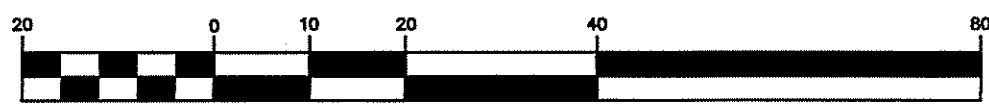
ASSESSORS MAP 57 LOT 30
40 OAKLAND AVE.
N/E JEFFREY PULEO
KELLEY PG 279
0.50 AC.



PLANTING PLAN FOR CUL-DE-SAC

SCALE: 1" = 20'

GRAPHIC SCALE




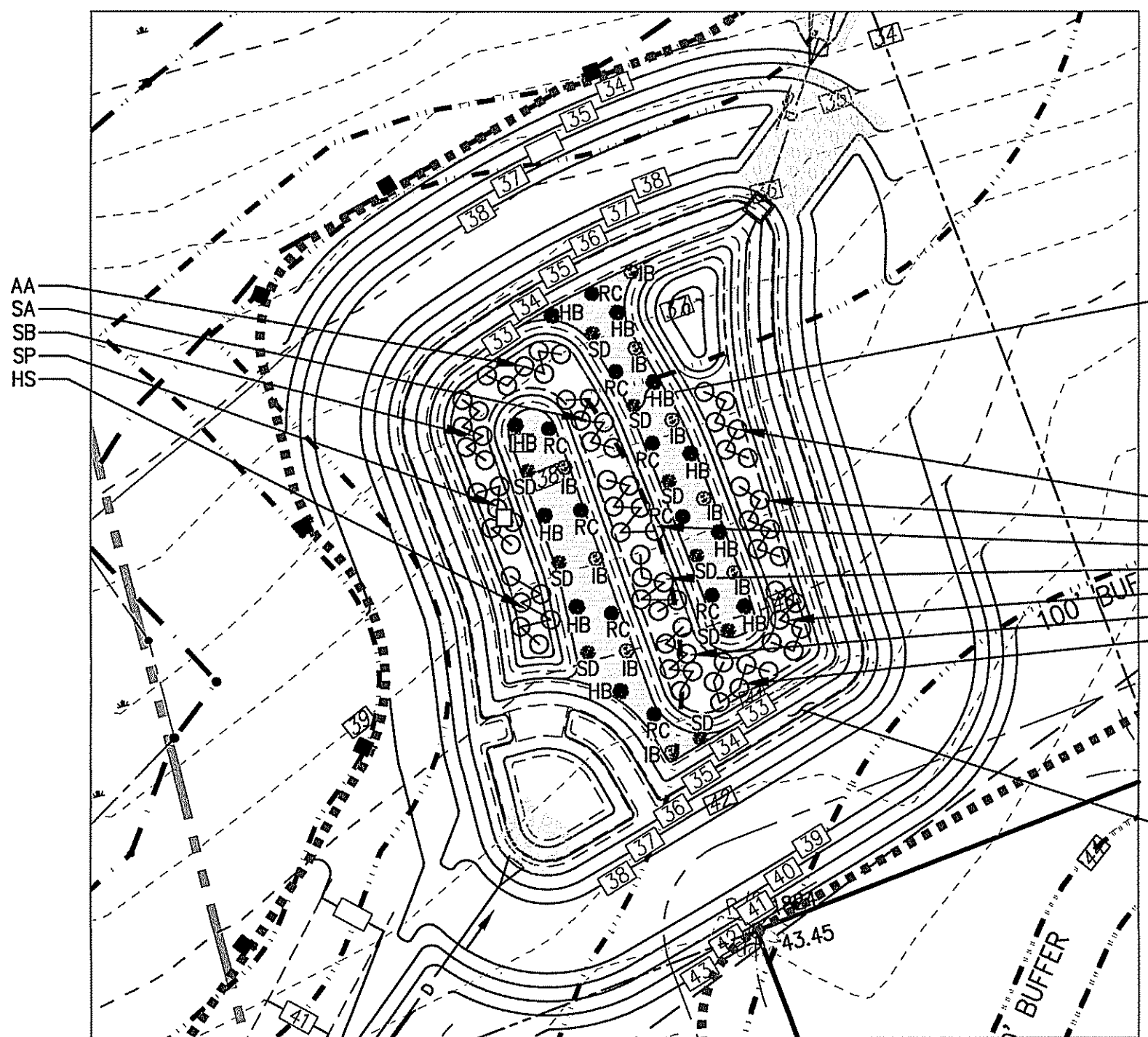
(IN FEET)
1 inch = 20 ft.

PLANTING SCHEDULE STORMWATER BASIN-1

TYPE	NAME	ABBREV.	SIZE	NUMBER OF SPECIMENS
Low Marsh	Soft-stem bulrush / <i>Schoenoplectus tabernaemontani</i>	SB	2" PLUG	120
	Hard-stem bulrush / <i>Schoenoplectus acutus</i>	HS	2" PLUG	120
	Common three square / <i>Schoenoplectus pungens</i>	SP	2" PLUG	120
	Burreed / <i>Sparganium americanum</i>	SA	2" PLUG	180
	Sweet flag / <i>Acorus americana</i>	AA	2" PLUG	180
High Marsh	Hydroseed with New England Wetland Mix at 1 lb/1250 square feet		SEED	
Side Slopes	Hydroseed with New England Erosion Control/Restoration Mix at 1 lb/1250 square feet		SEED	
Shrubs	Highbush Blueberry / <i>Vaccinium corymbosum</i>	HB	1.5-2 FT.	10
	Inkberry / <i>Ilex glabra</i>	IB	1.5-2 FT.	9
	Red Chokeberry / <i>Aronia arbutifolia</i>	RC	1.5-2 FT.	9
	Silky Dogwood / <i>Cornus amomum</i>	SD	1.5-2 FT.	9

PLANTING NOTES

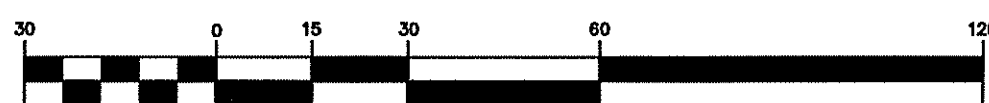
- The project supervisor shall hold a pre-construction conference with the contractor to ensure all aspects of the project, as well as any Order of Conditions issued by the Norwell Conservation Commission are understood. Equipment needs and access routes to the proposed replication area shall be firmly established.
- Erosion control barriers shall be installed along the proposed work area. This erosion control barrier shall also serve as a limit of work. It is recommended that only siltation fence and/or silt sock be used for erosion control in order to minimize the potential for invasion by weed species.
- Rough grades shall be verified by field survey to confirm design elevations have been met. Adjustments shall be made as directed by the wetland scientist.
- The stormwater basin shall be planted in accordance with the planting schedule provided.
- Plantings will be with container grown nursery stock. Substitutions may be required depending on availability and cost. It is recommended that the stormwater wetland basin plantings be conducted under the supervision of a wetland scientist experienced in the construction of wetlands.
- Symbol  on the planting plans represent a cluster of thirty (30) plants.



PLANTING PLAN FOR
STORMWATER CONSTRUCTED EXTENDED WETLAND BASIN SECTION

SCALE: 1" = 30'

GRAPHIC SCALE



(IN FEET)
1 inch = 30 ft.

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 _____ 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 _____ 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: _____

DATE OF HEARING: _____

DATE OF APPROVAL: _____

DATE OF ENDORSEMENT: _____

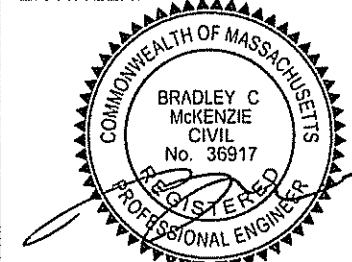
HANOVER PLANNING BOARD

REV	DATE	DESCRIPTION	BY	APP
1	1/21/21	RET. WALL LOCATION	AWL	BCM
2	3/11/21	PER. REE. REVIEW	AWL	BCM

MCKENZIE
ENGINEERING GROUP
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150 Longwater Drive, Suite 101
Norwell, MA 02061
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www.mckeng.com

**DEFINITIVE SUBDIVISION PLAN
OAKLAND ESTATES**
(ASSESSOR'S MAP 49, PORTION OF LOTS 1 & 2 AND MAP 57, LOT 31)
OAKLAND AVENUE
HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL ENGINEER:



APPLICANT:
32 OAKLAND AVE LLC
30 WADE WAY
HANOVER, MASSACHUSETTS 02339

DRAWN BY: AWL
DESIGNED BY: AWL
CHECKED BY: BCM
APPROVED BY: BCM
DATE: DECEMBER 14, 2020
SCALE: AS SHOWN
PROJECT NO.: 217-106
DWG. TITLE:

**Landscaping
Plan**

DWG. No:

19

PERMIT SET

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FILE LOCATION: M:\217-106\DWGS\DWGS-Definitive\217-106 Definitive.dwg

NOTE:
PROVIDE TEMPORARY ORANGE CONSTRUCTION
FENCING ALONG THE EROSION CONTROL BARRIER
WHEREVER THE LIMIT OF WORK IS WITHIN THE 50
FOOT BUFFER AS A VISUAL AID TO PREVENT
ENCROACHMENT INTO THE 35 FOOT "NO-DISTURB"
BUFFER.

LIMIT OF BORDERING VEGETATED
 WETLAND AS DELINEATED BY
 ENVIRONMENTAL CONSULTING
 & RESTORATION ONLY
 JANUARY 9 & 22, 2019 (TYP.)
 APPROVED UNDER AN ORDER OF RESOURCE
 AREA DELINEATION ISSUED BY THE HANOVER
 CONSERVATION COMMISSION ON 11/18/20

WF 18-240-1
LIMIT OF BORDERING VEGETATED
WETLAND AS DELINEATED BY
ENVIRONMENTAL CONSULTING
& RESTORATION ON
JANUARY 9 & 22, 2019 (TYP.)
APPROVED UNDER AN ORDER OF RESOURCE
AREA DELINEATION ISSUED BY THE HANOVER
CONSERVATION COMMISSION ON 11/18/20

FOR REGISTRY USE ONLY

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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 _____ 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 _____ 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:

DATE OF HEARING:

DATE OF APPROVAL:

DATE OF ENDORSEMENT: _____

HANOVER PLANNING BOARD

CONSTRUCTION PHASE BMP OPERATION AND MAINTENANCE NOTES:

1. REFER TO THE CONSTRUCTION PHASE BEST MANAGEMENT PRACTICES OPERATION AND MAINTENANCE PLAN FOR FURTHER DETAIL OF STRUCTURAL, STABILIZATION, DUST CONTROL AND EROSION AND SEDIMENTATION CONTROL MEASURES.
2. STRUCTURAL PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE EROSION CONTROL BARRIERS, STABILIZED CONSTRUCTION ENTRANCES, TEMPORARY DIVERSION SWALES WITH CHECK DAMS, SEDIMENT BASINS, AND INLET PROTECTION.
3. STABILIZATION PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE TEMPORARY SEEDING, GEOTEXTILES (JUTE MESH), MULCHING, AND PERMANENT SEEDING.
4. OPERATOR PERSONNEL MUST INSPECT THE CONSTRUCTION SITE AT LEAST ONCE EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT OF 1/2 INCH OR GREATER.
THE INSPECTOR SHOULD REVIEW THE EROSION AND SEDIMENT CONTROLS WITH RESPECT TO THE FOLLOWING:
 - A. WHETHER OR NOT THE MEASURE WAS INSTALLED/PERFORMED CORRECTLY.
 - B. WHETHER OR NOT THERE HAS BEEN DAMAGE TO THE MEASURE SINCE IT WAS INSTALLED OR PERFORMED.
 - C. WHAT SHOULD BE DONE TO CORRECT ANY PROBLEMS WITH THE MEASURE.THE INSPECTOR SHALL COMPLETE THE INSPECTION SCHEDULE AND EVALUATION CHECKLIST FOR FINDINGS AND SHOULD REQUEST THE REQUIRED MAINTENANCE OR REPAIR. THE CHECKLIST IS PROVIDED WITHIN THE OPERATION AND MAINTENANCE PLAN.
5. THE TEMPORARY BASIN SHALL BE INSPECTED AND CLEANED IF REQUIRED PRIOR TO ANY PREDICTED LARGE STORM EVENT.
6. ALL EROSION CONTROL BARRIERS (TEMPORARY DIVERSION SWALES & BERMS, COMPOST FILTER TUBES, ETC.) PROTECTING THE PROPOSED STORMWATER BASIN SHALL REMAIN IN PLACE THROUGHOUT THE ROADWAY CONSTRUCTION PHASE. THE SAME OR ADDITIONAL EROSION CONTROL BARRIERS SHALL REMAIN IN PLACE AS NECESSARY DURING THE CONSTRUCTION OF LOTS ADJACENT TO THE STORMWATER BASIN. THE CONTRACTOR SHALL INSPECT THE EROSION CONTROL BARRIERS ON A REGULAR BASIS AND PRIOR TO AND IMMEDIATELY AFTER SIGNIFICANT RAINFALL EVENTS TO ENSURE THAT NO SEDIMENT-LADEN RUNOFF ENTERS THE STORMWATER BASINS.
7. LOTS DESIGNATED AS STOCKPILE AREAS ARE TO BE DEVELOPED LAST. STOCKPILES MAY BE RELOCATED AS NECESSARY DURING CONSTRUCTION SUBJECT TO ALL THE REQUIREMENTS AND RESTRICTIONS DETAILED IN THESE DOCUMENTS. AS CONSTRUCTION PROCEEDS THE NEED FOR LARGE CENTRAL STOCKPILES WILL DIMINISH AND SMALLER STOCKPILES WILL BE UTILIZED ON THE FEW REMAINING LOTS WITH ENOUGH SOIL TO GRADE AND LOAM EACH LOT. SOIL STOCKPILES SHALL BE SURROUNDED BY EROSION CONTROL BARRIERS. STOCKPILES SHALL NOT BE PLACED ON ANY FUTURE SEPTIC SYSTEM LOCATION.

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FILE LOCATION: M:\217-106\DWGS\DWGS-Definitive\217-106 Definitive.dwg

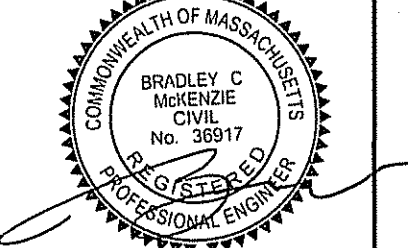
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DEFINITIVE SUBDIVISION PLAN OAKLAND ESTATES

(ASSESSOR'S MAP 49, PORTION OF LOTS 1 & 2 AND MAP 57, LOT 31)
OAKLAND AVENUE
HANOVER, MASSACHUSETTS

REGISTERED PROFESSIONAL
ENGINEER: 



APPLICANT:
332 OAKLAND AVE LLC
30 WADE WAY
HANOVER, MASSACHUSETTS 02339

PERMIT SET

DRAWN BY:	AWL
DESIGNED BY:	AWL
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	DECEMBER 14, 2020
SCALE:	1"=60'
PROJECT NO.:	217-106
DWG. TITLE:	

Site Erosion & Sedimentation Plan

DWG. No:

20

