

ABUTTER LIST

23-1 STEPHEN CURRIE PO BOX 85 NORTH READING, MA 01864	23-3-1 MARTIN FAMILY REVOCABLE TRUST 132 AMHERST STREET MILFORD, NH 03055
22-64 KATHY WALKER 108 AMHERST STREET MILFORD, NH 03055	ALBERT & LISA VASAS 128 AMHERST STREET MILFORD, NH 03055
22-63 HENRIETTA M. & RAYMOND COLLINS 104 AMHERST STREET MILFORD, NH 03055	23-5 M&B REALTY, LLC 15 POWERS STREET MILFORD, NH 03055
22-62 GLENN C. BURNS 100 AMHERST STREET MILFORD, NH 03055	3-85 RICHARD N. KEOGH 118 AMHERST ST MILFORD, NH 03055
22-57 ROSS MACLAREN 23 NORTH STREET MILFORD, NH 03055	3-84 BARTLETT
22-58 PETER F. MORAN III PO BOX 232 MILFORD, NH 03055	3-84-2 & 23-4 DEBRA A. DUNNE 138 AMHERST STREET MILFORD, NH 03055
22-58-1 & 3-98 NORMAN & JENNIFER FISK PO BOX 812 AMHERST, NH 03031	

SHEET INDEX

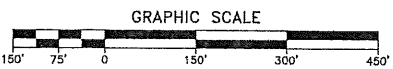
1. COVER SHEET *
2. EXISTING CONDITIONS BOUNDARY SHEET *
3. SUBDIVISION PLAN *
4. P-1, OVERVIEW PLAN
5. P-2, PROPOSED ROAD PLAN & PROFILE
6. P-3, AMHERST STREET PLAN & PROFILE
7. P-4, SIGHT DISTANCE PLAN & PROFILE
8. P-5, UTILITY PLAN
9. D-1, CONSTRUCTION DETAILS
10. D-2, DRAINAGE DETAILS
11. D-3, EROSION DETAILS
12. D-4, SEWER LINE DETAILS
13. D-5, WATER LINE DETAILS (1)
14. D-6, WATER LINE DETAILS (2)

OWNER'S SIGNATURES:

RICHARD N. KEOGH _____ DATE _____

APPROVED

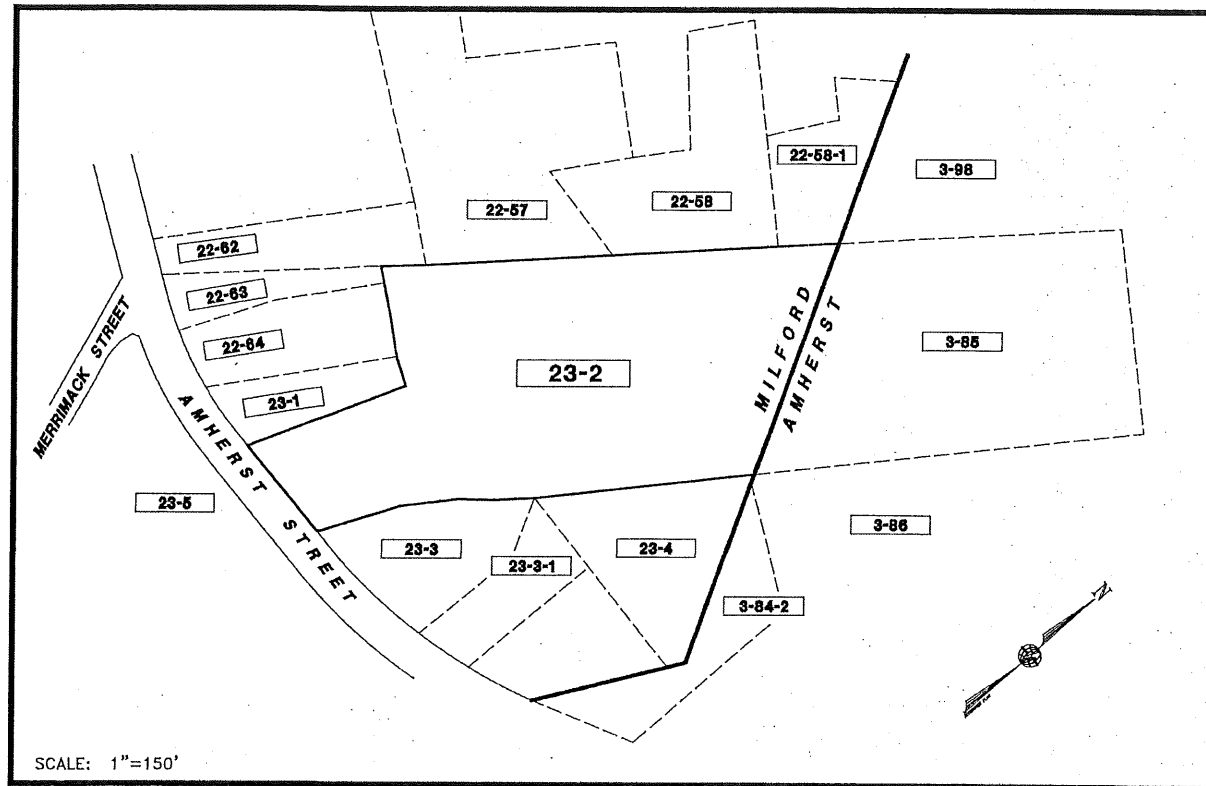
MILFORD, NH PLANNING BOARD
SUB DIVISION #: _____
DATE APPROVED: _____
SIGNED: _____

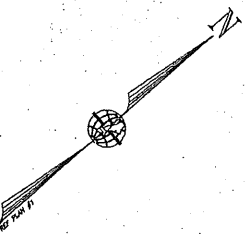


REV.	DATE	DESCRIPTION	C/O	DR	CK
B					
A					

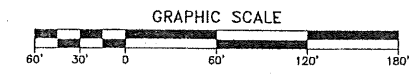
REFERENCE PLANS:

1. "SUBDIVISION PLAN - TAX MAP 23 LOT 3 - LAND OF: - GWENDOLYN R. & - SCOTT A. KRAUSS - AMHERST STREET - MILFORD & AMHERST, NEW HAMPSHIRE" SCALE: 1"=40' DATED SEPTEMBER 15, 2015. PREPARED BY THIS OFFICE AND RECORDED AT H.C.R.D. AS PLAN #38767.
2. "BARTLETT COMMON - CONDOMINIUM SITE PLAN - AMHERST STREET & NORTH STREET - AMHERST, NEW HAMPSHIRE - PREPARED FOR: - STARTER BUILDING & DEVELOPMENT, LLC - 20 TRAFALGAR SQUARE, SUITE 109 - NASHUA, NH 03063" SCALE: 1"=100' DATED MAY 24, 2000. PREPARED BY TF MORAN AND RECORDED AT H.C.R.D. AS PLAN #30504.
3. "LOT LINE ADJUSTMENT PLAN - MAP 22 / LOTS 52, 53, 57 & 58 (MILFORD) & MAP 3 / LOT 98 (AMHERST) - ROSS & SANDRA GANGLOFF, - JEFFREY M. & LISA C. SZELEST, - BRANDI THOMPSON & ERIC KILBANE, - OCRAH LAND DEVELOPMENT, LLC AND - NORMAN & JENNIFER FISK - NORTH STREET - TOWN OF MILFORD & AMHERST - HILLSBOROUGH COUNTY, NEW HAMPSHIRE" SCALE: 1"=50' DATED AUGUST 3, 2007. PREPARED BY SANFORD SURVEYING AND ENGINEERING AND RECORDED AT H.C.R.D. AS PLAN #35842.
4. "BOUNDARY PLAN OF LAND - TAX MAP LOT 22-64 - FRANK C., SR. & PATRICIA A. STOREY - MILFORD, NEW HAMPSHIRE" SCALE: 1"=50' DATED APRIL 10, 2002. PREPARED BY THIS OFFICE.





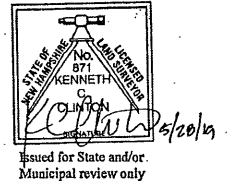
- LEGEND:**
- RIGHT-OF-WAY SIDELINE
 - PROPERTY LINE
 - ABUTTING LOT LINE
 - - - FORMER TRACT LINE
 - - - EASEMENT LINE
 - - - BUILDING SETBACK LINE
 - - - EDGE OF PAVEMENT
 - - - EDGE OF WETLANDS
 - - - CpC U.S.D.A. SOILS BOUNDARY
 - STONE WALL
 - - - 10' CONTOUR INTERVAL
 - - - 2' CONTOUR INTERVAL
 - - - APPROXIMATE U.G. GAS LINE
 - - - APPROXIMATE U.G. WATER LINE
 - 23-2 EXISTING TAX MAP AND LOT NUMBER
 - EXISTING BUILDING
 - EXISTING TREE LINE
 - EXIST. WATER SHUT OFF VALVE
 - EXIST. FIRE HYDRANT
 - EXIST. UTILITY POLE
 - EXIST. DRAIN MAN HOLE
 - EXIST. SEWER MAN HOLE
 - EXIST. CATCH BASIN
 - EXIST. TREE
 - EXIST. GRANITE BOUND FOUND
 - EXIST. DRILL HOLE FOUND/SET
 - EXIST. IRON PIPE FOUND
 - EXIST. IRON PIN FOUND/SET
 - GRANITE BOUND TO BE SET
 - IRON PIN TO BE SET



REV.	DATE	DESCRIPTION	C/O	DR	CK
B					
A					

APPROVED
 MILFORD, NH PLANNING BOARD
 SUB DIVISION #: _____
 DATE APPROVED: _____
 SIGNED: _____

CERTIFICATION:
 "I HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ON-SITE INSTRUMENT SURVEY PERFORMED BY THIS OFFICE WHICH MEETS THE URBAN CLASSIFICATION PRECISION REQUIREMENT OF ONE PART IN TEN THOUSAND (1:10,000)".



22-58-1
NORMAN & JENNIFER FISK
 PO BOX 612
 MILFORD NH 03051
 VOL. 7937 PG. 2874 1/4/2008

3-98
NORMAN & JENNIFER FISK
 PO BOX 612
 AMHERST NH 03031
 VOL. 2454 PG. 338 5/17/1978

22-57
ROSS MACLAREN
 23 NORTH STREET
 MILFORD NH 03055
 VOL. 8923 PG. 1770 12/1/2016

22-58
PETER F MORAN III
 PO BOX 232
 MILFORD NH 03055
 VOL. 7939 PG. 175 1/9/2008

22-62
GLENN C. BURNS
 100 AMHERST STREET
 MILFORD NH 03055
 VOL. 5792 PG. 1679 2/28/1997

22-63
HENRIETTA M. DOLLOFF & RAYMOND COLLINS
 104 AMHERST STREET
 MILFORD NH 03055
 VOL. 6115 PG. 154 6/9/1999

22-64
KATHY WLAKER
 108 AMHERST STREET
 MILFORD NH 03055
 VOL. 8958 PG. 2074 4/3/2017

23-5
M & B REALTY, LLC
 15 POWERS STREET ST #2
 MILFORD, NH 03055
 VOL. 9073 PG. 1169 5/17/2018
 "LONGLEY PLACE II TOWNHOUSE APARTMENTS"

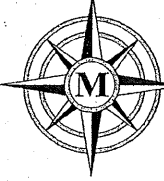
23-3
ALBERT & LISA VASAS
 128 AMHERST STREET
 MILFORD, NH 03055
 VOL. 8989 PG. 1124 5/19/2017

23-4
DEBRA A. DUNNE
 138 AMHERST STREET
 MILFORD, NH 03055
 VOL. 8997 PG. 2363 8/15/2017

3-84-2
DEBRA A. DUNNE
 138 AMHERST STREET
 MILFORD, NH 03055
 VOL. 8997 PG. 2363 8/15/2017

3-86
BARTLETT COMMON CONDO ASSOC.
 JOSIAH BARTLETT ROAD
 AMHERST, NH 03031
 VOL. 6034 PG. 1600 12/7/1998

EXISTING CONDITIONS BOUNDARY PLAN
 LAND OF:
RICHARD N. KEOGH
 TAX MAP 23 LOT 2
 MILFORD, NEW HAMPSHIRE
 SCALE: 1" = 60'
 MAY 25, 2019



MERIDIAN
LAND SERVICES, INC.
 ENGINEERING | SURVEYING | PERMITTING
 SOIL & WETLAND MAPPING | SEPTIC DESIGN
 31 OLD NASHUA ROAD, AMHERST, NH 03031 TEL. 603-673-1441
 MERIDIANLANDSERVICES.COM FAX 603-673-1584

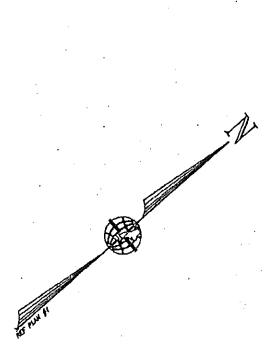
Plotted: 5/25/2019 2:35 PM By: SJI
 File: \\s:\3203\3203D05.dwg



LINE	BEARING	LENGTH
L1	N80°30'53"E	87.31'
L2	S80°06'30"W	50.00'
L3	N09°53'30"W	30.00'
L4	N80°06'30"E	28.00'
L5	N09°53'30"W	50.00'
L6	S80°06'30"W	28.00'

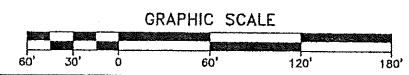
CURVE	RADIUS	LENGTH	DELTA	CHORD DIR.	DISTANCE
C1	25.00	47.27	108°20'42"	S65°18'46"E	40.54
C2	22.00	34.56	90°00'00"	N35°06'30"E	31.11
C3	22.00	34.56	90°00'00"	N54°53'30"W	31.11
C4	250.00	52.68	12°04'22"	S22°17'49"W	52.58

APPROVED
MILFORD, NH PLANNING BOARD
SUB DIVISION #: _____
DATE APPROVED: _____
SIGNED: _____

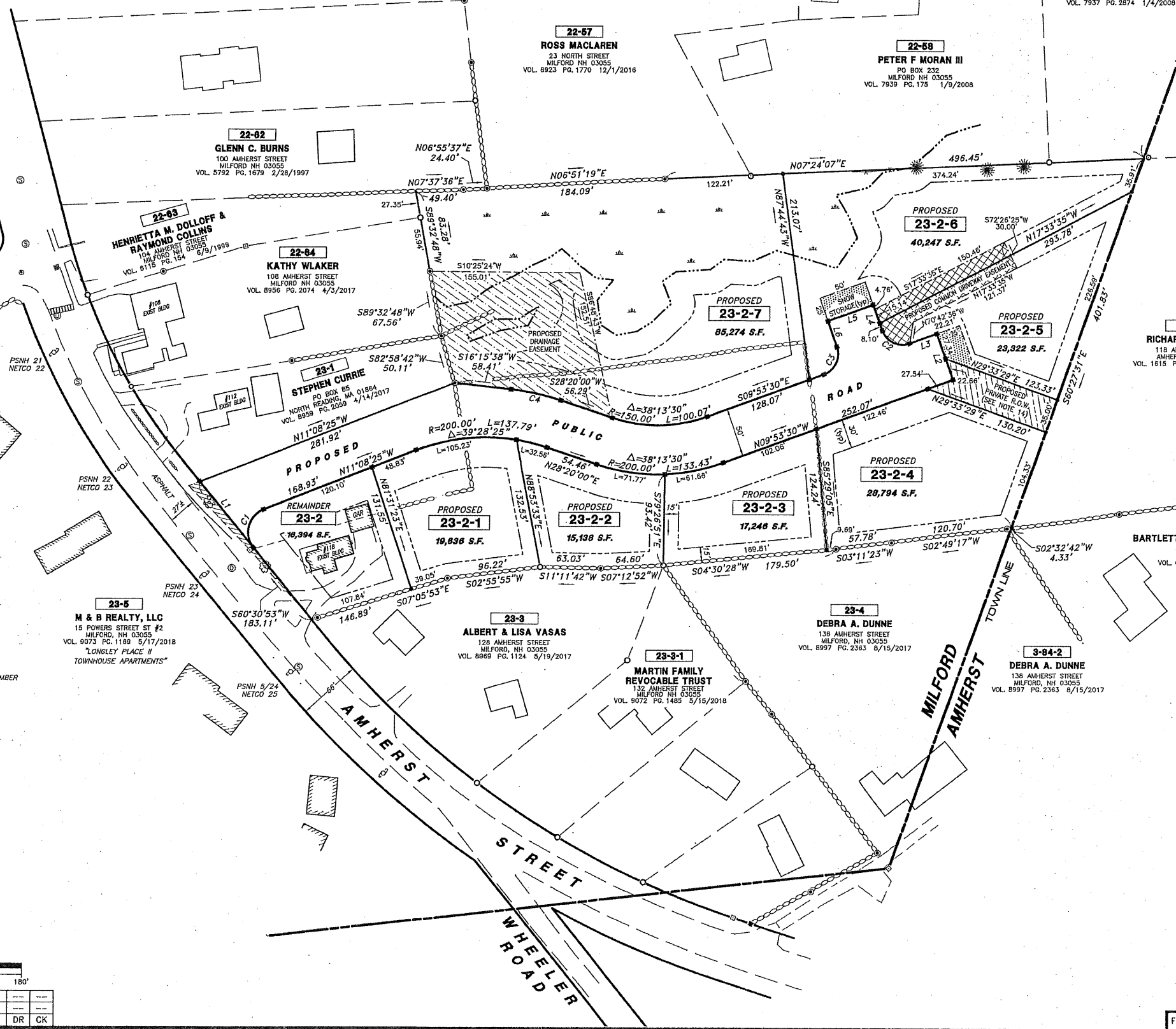


- LEGEND:**
- RIGHT-OF-WAY SIDELINE
 - PROPERTY LINE
 - - - ABUTTING LOT LINE
 - - - FORMER TRACT LINE
 - - - EASEMENT LINE
 - - - BUILDING SETBACK LINE
 - - - EDGE OF PAVEMENT
 - - - EDGE OF WETLANDS
 - - - STONE WALL
 - - - 10' CONTOUR INTERVAL
 - - - 2' CONTOUR INTERVAL
 - - - APPROXIMATE U.G. GAS LINE
 - - - APPROXIMATE U.G. WATER LINE

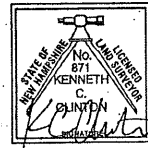
- 23-2** EXISTING TAX MAP, AND LOT NUMBER
- EXISTING BUILDING
 - EXISTING TREE LINE
 - EXIST. WATER SHUT OFF VALVE
 - EXIST. FIRE HYDRANT
 - EXIST. UTILITY POLE
 - EXIST. DRAIN MAN HOLE
 - EXIST. SEWER MAN HOLE
 - EXIST. TREE
 - EXIST. GRANITE BOUND FOUND
 - EXIST. DRILL HOLE FOUND/SET
 - EXIST. IRON PIN FOUND/SET
 - EXIST. IRON PIPE FOUND
 - GRANITE BOUND TO BE SET
 - IRON PIN TO BE SET



REV.	DATE	DESCRIPTION	C/O	DR	CK
B					
A					



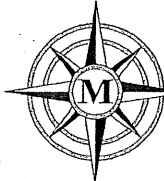
CERTIFICATION:
"I HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ON-SITE INSTRUMENT SURVEY PERFORMED BY THIS OFFICE WHICH MEETS THE URBAN CLASSIFICATION PRECISION REQUIREMENT OF ONE PART IN TEN THOUSAND (1:10,000)".



Issued for State and/or Municipal review only

SUBDIVISION PLAN
LAND OF:
RICHARD N. KEOGH
TAX MAP 23 LOT 2
MILFORD, NEW HAMPSHIRE

SCALE: 1" = 60' MAY 28, 2019



MERIDIAN
LAND SERVICES, INC.
ENGINEERING | SURVEYING | PERMITTING
SOIL & WETLAND MAPPING | SEPTIC DESIGN
31 OLD NASHUA ROAD, AMHERST, NH 03031 TEL. 603-673-1441
MERIDIANLANDSERVICES.COM FAX 603-673-1584

Plotfile: 5/28/2019 2:39 PM By: SSI
H:\MS\0203\3203\05\02\Drawings\SUBV\3203D05.dwg

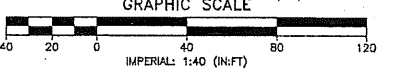
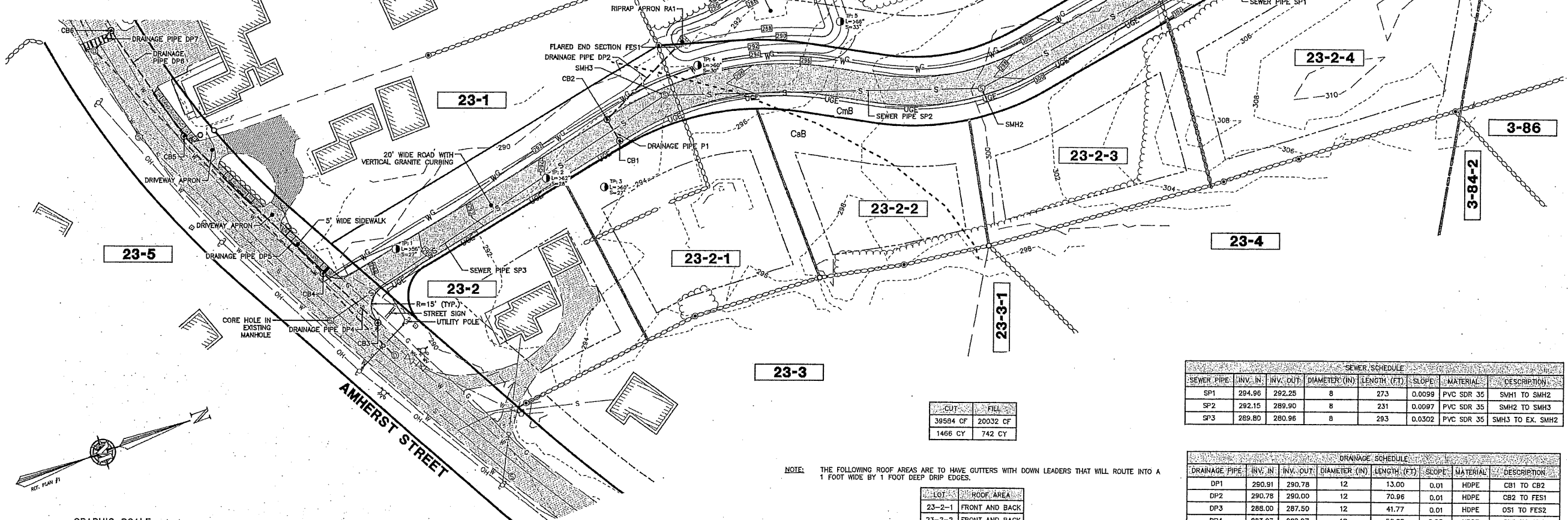
LEGEND:

---	EXISTING 2' CONTOUR INTERVAL	---	PROPOSED 2' CONTOUR INTERVAL	[Pattern]	PROPOSED PAVEMENT
---	EXISTING 10' CONTOUR INTERVAL	---	PROPOSED 10' CONTOUR INTERVAL	[Pattern]	PROPOSED BUILDING
---	EXISTING RIGHT-OF-WAY	---	PROPOSED RIGHT-OF-WAY	[Pattern]	PROPOSED SIDEWALK
---	EXISTING PROPERTY LINE	---	PROPOSED PROPERTY LINE	[Pattern]	PROPOSED RIPRAP
---	TOWN LINE	---	PROPOSED EASEMENT	[Pattern]	PROPOSED CATCH BASIN
---	ABUTTING LOT LINE	---	ROAD CENTERLINE	[Pattern]	PROPOSED FLARED END SECTION
---	EXISTING STONE WALL	---	PROPOSED VERTICAL GRANITE CURBING	[Pattern]	PROPOSED SEWER MANHOLE
---	WETLAND & BUILDING SETBACK LINE	---	PROPOSED TREE LINE	[Pattern]	PROPOSED SIGN
---	NRCS SOIL DELINEATION	---	PROPOSED EASEMENT LINE	[Symbol]	
---	EXISTING TREE LINE	---	PROPOSED DRAINAGE PIPE	[Symbol]	
---	EXISTING FENCE	---	PROPOSED SEWER LINE	[Symbol]	
---	EXISTING DRAINAGE PIPE	---	PROPOSED WATER LINE	[Symbol]	
---	EXISTING GAS LINE	---	PROPOSED UNDERGROUND ELECTRIC LINE	[Symbol]	
---	EXISTING SEWER LINE	---	PROPOSED GAS LINE	[Symbol]	
---	EXISTING WATER LINE				
---	EXISTING OVERHEAD ELECTRIC LINE				
[Pattern]	EXISTING WETLAND				
[Pattern]	EXISTING PAVEMENT				
[Pattern]	EXISTING BUILDING				
[Pattern]	EXISTING GRAVEL				
[Symbol]	TEST PIT DATA				
[Symbol]	EXISTING GRANITE BOUND				
[Symbol]	EXISTING DRILL HOLE				
[Symbol]	EXISTING IRON PIPE				
[Symbol]	EXISTING MANHOLE				
[Symbol]	EXISTING MAILBOX				
[Symbol]	EXISTING WATER HYDRANT				
[Symbol]	EXISTING WATER VALVE				
[Symbol]	EXISTING DRAINAGE MANHOLE				
[Symbol]	EXISTING SEWER MANHOLE				
[Symbol]	EXISTING UTILITY POLE				
[Symbol]	NRCS SOIL LABEL				

SOIL LEGEND:

CaB	CANTON FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES	HSG B
CmB	CANTON FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY	HSG B

SOURCE: USDA NATURAL RESOURCE CONSERVATION SERVICE (NRCS) WEB SOIL SURVEY



CUT	FILL
39504 CF	20032 CF
1466 CY	742 CY

NOTE: THE FOLLOWING ROOF AREAS ARE TO HAVE GUTTERS WITH DOWN LEADERS THAT WILL ROUTE INTO A 1 FOOT WIDE BY 1 FOOT DEEP DRIP EDGES.

LOT	ROOF AREA
23-2-1	FRONT AND BACK
23-2-2	FRONT AND BACK
23-2-5	FRONT AND BACK
23-2-6	FRONT AND BACK
23-2-7	FRONT

SEWER SCHEDULE							
SEWER PIPE	INV. IN.	INV. OUT.	DIAMETER (IN.)	LENGTH (FT.)	SLOPE	MATERIAL	DESCRIPTION
SP1	294.96	292.25	8	273	0.0099	PVC SDR 35	SMH1 TO SMH2
SP2	292.15	289.90	8	231	0.0087	PVC SDR 35	SMH2 TO SMH3
SP3	289.80	280.96	8	293	0.0302	PVC SDR 35	SMH3 TO EX. SMH2

DRAINAGE SCHEDULE							
DRAINAGE PIPE	INV. IN.	INV. OUT.	DIAMETER (IN.)	LENGTH (FT.)	SLOPE	MATERIAL	DESCRIPTION
DP1	290.91	290.78	12	13.00	0.01	HDPE	CB1 TO CB2
DP2	290.78	290.00	12	70.96	0.01	HDPE	CB2 TO FES1
DP3	288.00	287.50	12	41.77	0.01	HDPE	OS1 TO FES2
DP4	283.97	282.97	12	50.65	0.02	HDPE	CB3 TO CB4
DP5	282.97	279.40	12	140.06	0.03	HDPE	CB4 TO CB5
DP6	279.40	278.33	12	90.32	0.01	HDPE	CB5 TO CB6
DP7	278.33	278.03	12	15.22	0.02	HDPE	CB6 TO EX. DMH2

MERIDIAN
LAND SERVICES, INC.
ENGINEERING, SURVEYING, PLANNING,
SOIL & WETLAND MAPPING, SEPTIC DESIGN
31 OLD NASHUA ROAD, AMHERST, NH 03824
TEL: 603-673-1941
FAX: 603-673-1944
MERIDIANLANDSERVICES.COM



KEVIN M. ANDERSON
No. 14746
LICENSED PROFESSIONAL ENGINEER
5/28/19

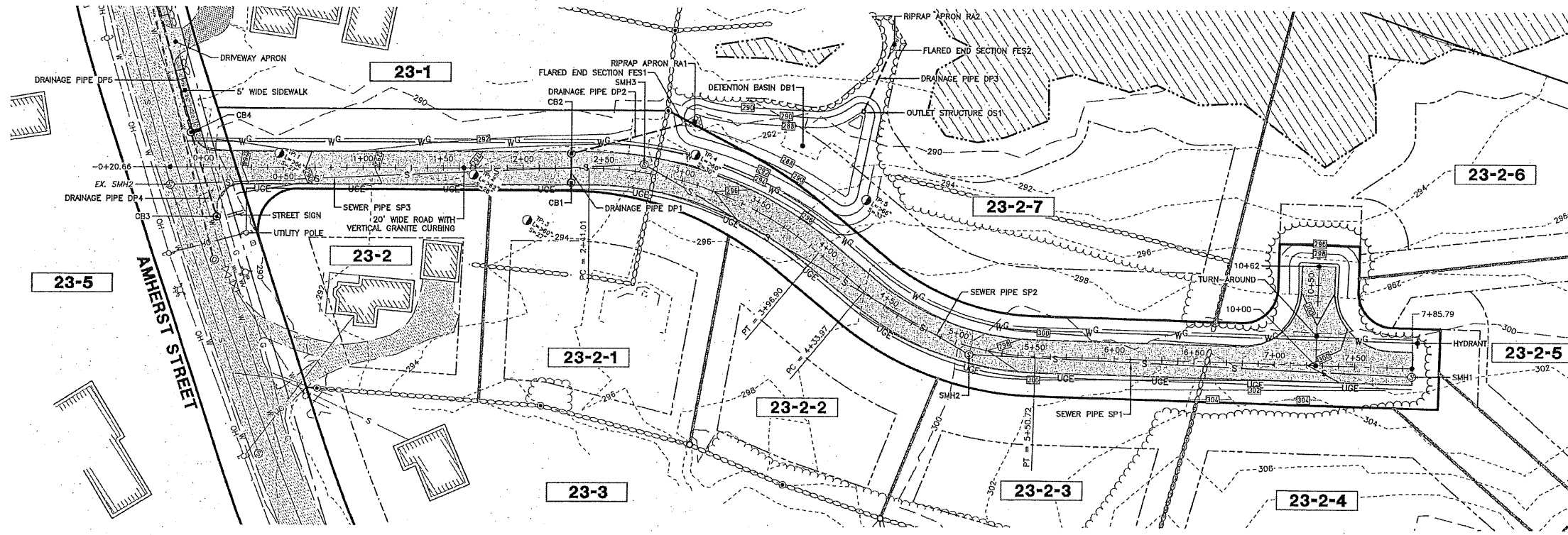
REV.	DATE	DESCRIPTION
A	5/29/19	PLANNING BOARD SUBMISSION
B		
C		
D		
E		
F		
G		
H		
I		
J		
K		
L		
M		
N		
O		
P		
Q		
R		
S		
T		
U		
V		
W		
X		
Y		
Z		

OVERVIEW PLAN
FEBRUARY 25, 2013

RICHARD KEOGH
AMHERST STREET
MAP 23 LOT 2
MILFORD, NEW HAMPSHIRE
SCALE: 1" = 40'

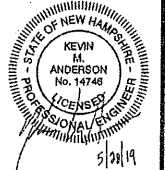
P-1
SHEET
FILE: 3203POSA.dwg
PROJECT: 3203.05
SHEET NO. 4 OF 14

REVISED: 5/29/2019 1:53 PM BY: BJC
REVISED: 02/03/2020 02:00:00 BY: BJC

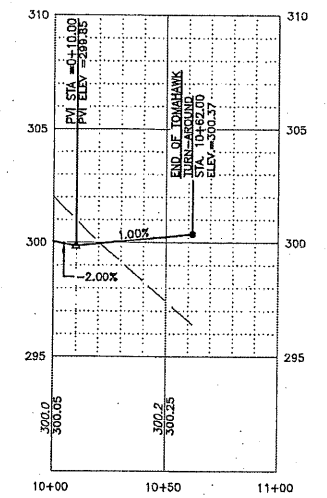
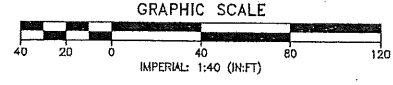
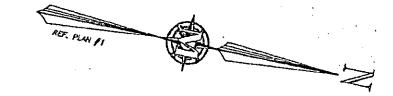
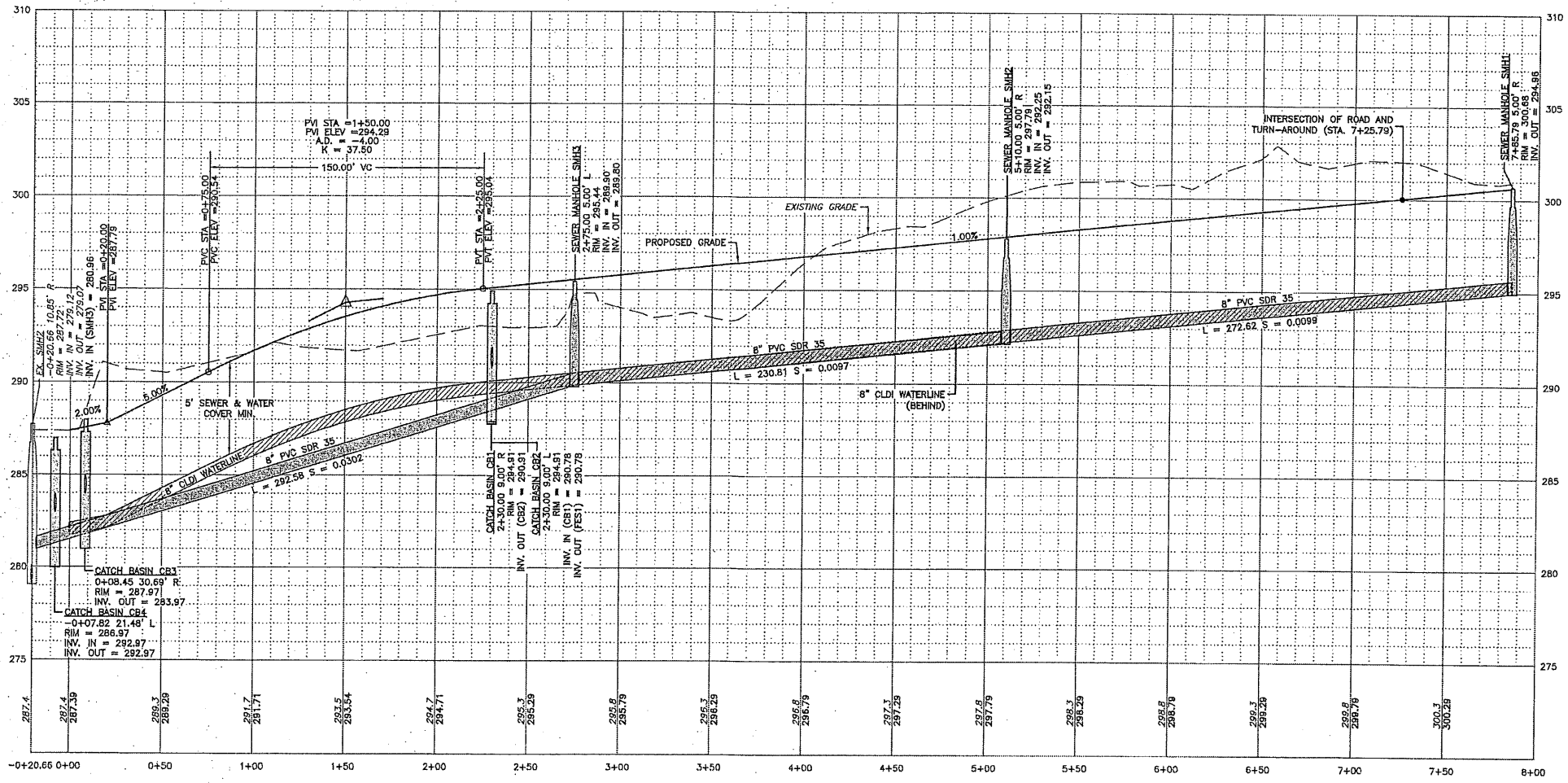


STRUCTURE	STATION	OFFSET	RIM
CB4	-0+07.82	21.48' L	286.97
CB3	0+08.45	30.69' R	287.97
CB1	2+30.00	9.00' R	294.91
CB2	2+30.00	9.00' L	294.91
SMH1	2+75.00	5.00' L	295.44
SMH2	5+10.00	5.00' R	297.79
SMH3	7+85.79	5.00' R	300.68

MERIDIAN
LAND SERVICES, INC.
 ENGINEERING, SURVEYING, PLANNING,
 SOIL & WETLAND MAPPING, SEPTIC DESIGN
 31 OLD NASHUA ROAD, AMHERST, NH 03811 TEL: 603-421-1541
 MERIDIANLANDSERVICES.COM FAX: 603-671-1544



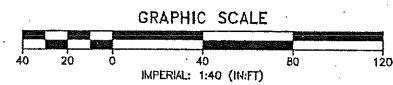
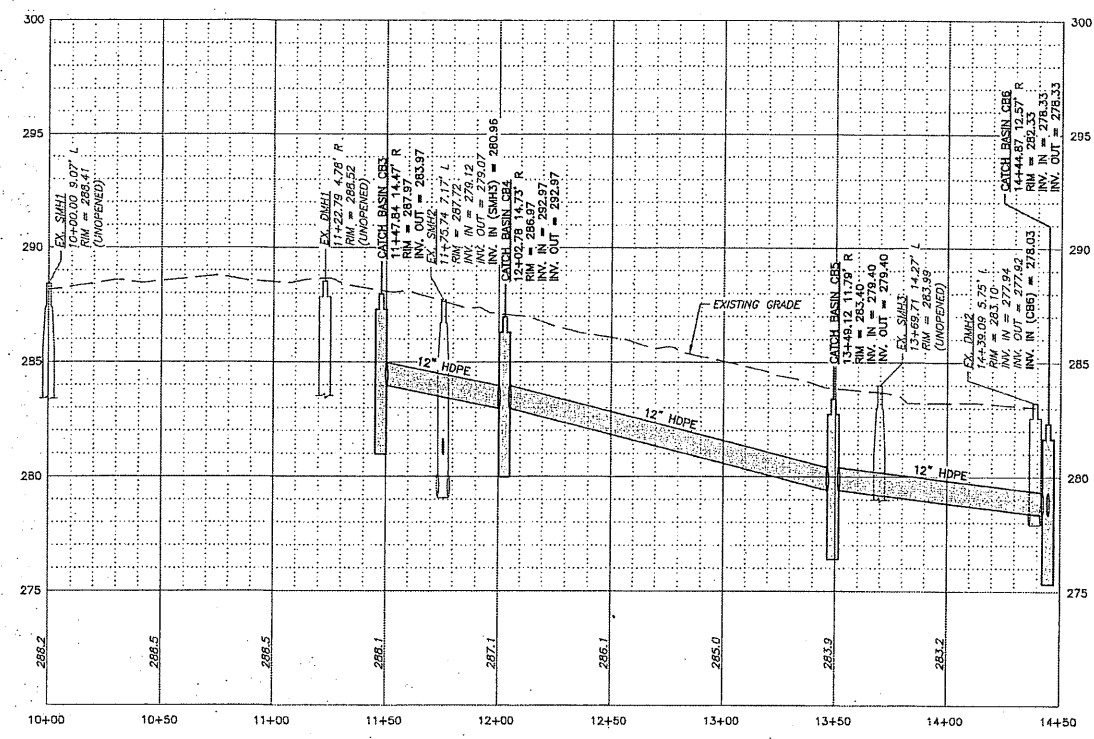
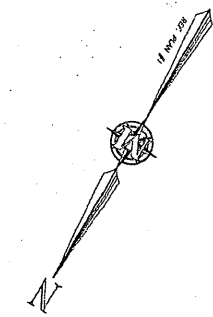
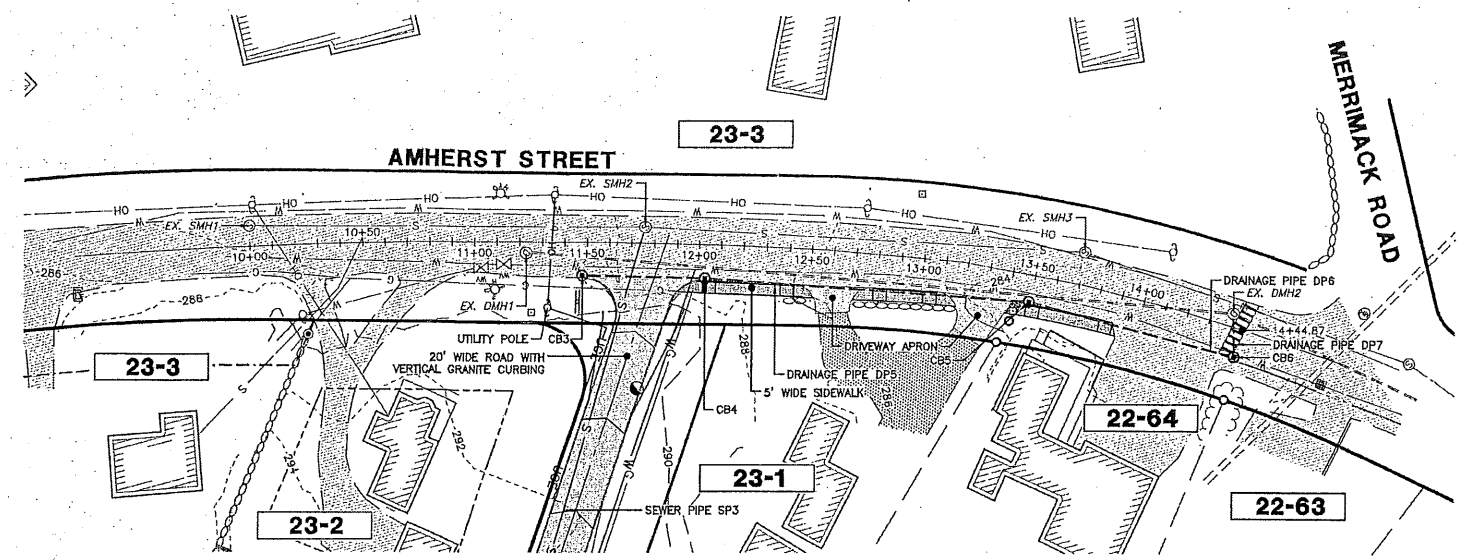
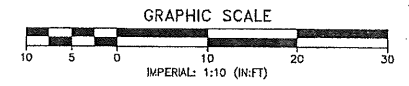
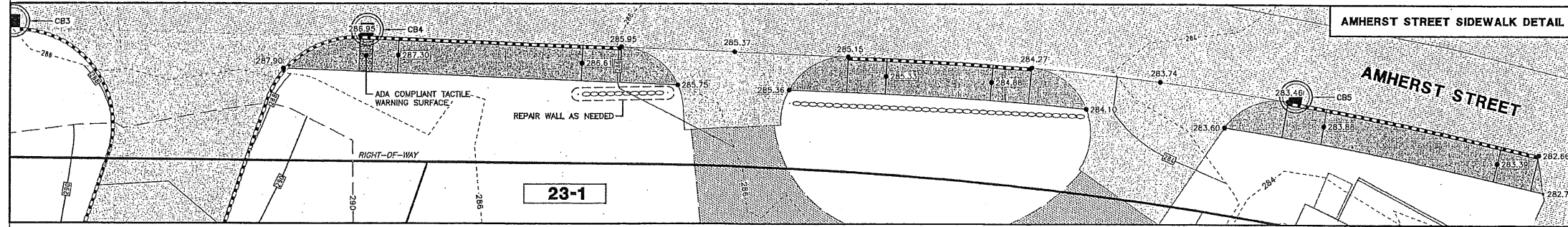
REV.	DATE	DESCRIPTION
A	5/29/19	PLANNING BOARD SUBMISSION
B		
C		
D		
E		
F		
G		
H		



Plotfile: 5/29/2019 1:32 PM By: RLC
 H:\US\0203\2303\05\Drawings\3203\3203A.dwg

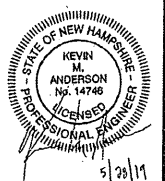
PROPOSED ROAD
PLAN AND PROFILE
 RICHARD KEOGH
 AMHERST STREET
 MAP 23 LOT 2
 MILFORD, NEW HAMPSHIRE
 SCALE: 1" = 40'
 FEBRUARY 25, 2019

P-2
 SHEET
 FILE: 3203POSA.dwg
 PROJECT: 3203.05
 SHEET NO. 5 OF 14



STRUCTURE	STATION	OFFSET	RM
EX. SMH1	10+00.00	9.07' L	288.41
EX. DMH1	11+22.79	4.78' R	288.52
CB3	11+47.84	14.47' R	287.97
EX. SMH2	11+75.74	7.17' L	287.72
CB4	12+02.78	14.73' R	286.97
CB5	13+49.12	11.79' R	283.40
EX. SMH3	13+69.71	14.27' L	283.99
EX. DMH2	14+39.09	5.75' L	283.23
CB6	14+44.87	12.57' R	282.33

MERIDIAN
LAND SERVICES, INC.
ENGINEERING, SURVEYING,
SOIL & WETLAND MAPPING (SEPTIC DESIGN)
31 OLD NASHUA ROAD, AMHERST, NH 03831
TEL: 603.551.1111
MERIDIANLANDSERVICES.COM FAX: 603.693.1584



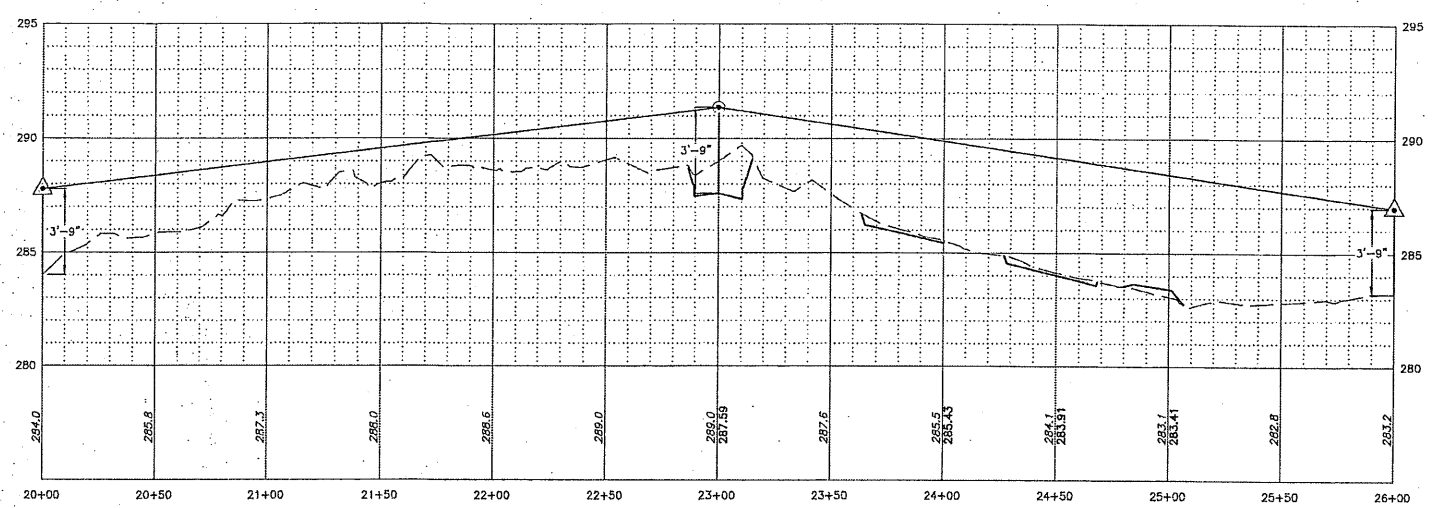
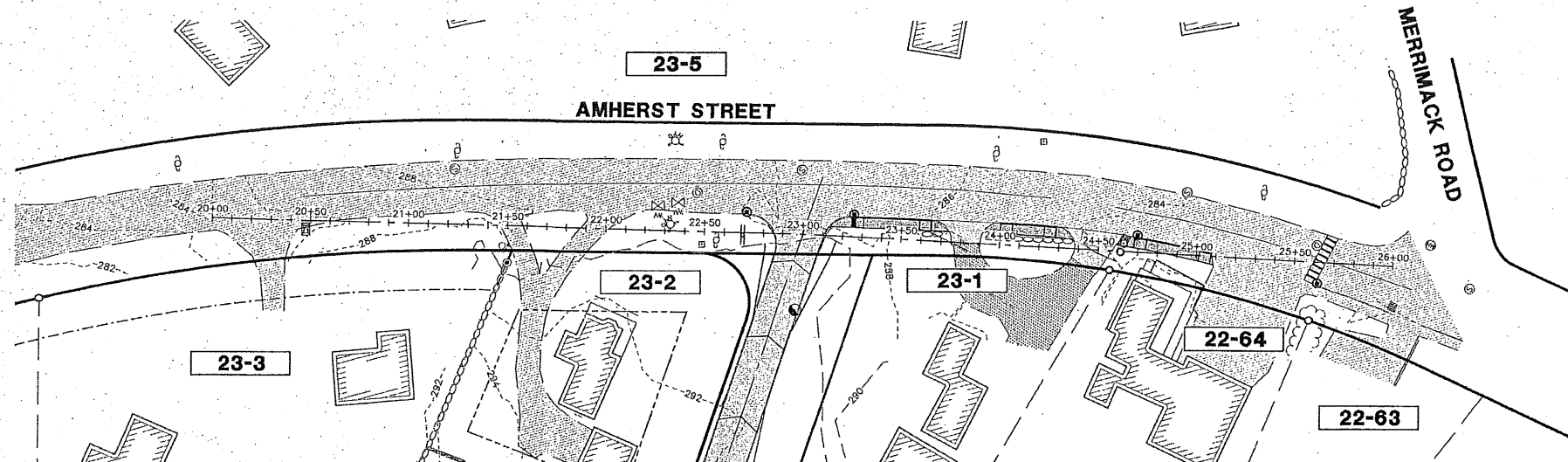
REV.	DATE	DESCRIPTION	DR	CK
A	5/29/19	PLANNING BOARD SUBMISSION		
B				
C				
D				
E				
F				
G				
H				

AMHERST STREET
PLAN AND PROFILE

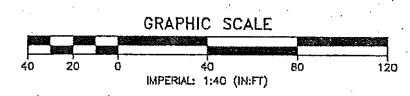
RICHARD KEOGH
AMHERST STREET
MAP 23 LOT 2
MILFORD, NEW HAMPSHIRE
SCALE: VARIES

P-3
SHEET

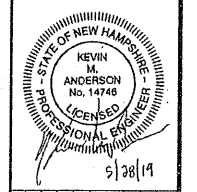
FILE: 3203P05A.dwg
PROJECT 3203.05
SHEET NO. 6 OF 14



SIGHT DISTANCE REQUIREMENTS
 POSTED SPEED LIMIT ON AMHERST STREET: 30 MPH
 REQUIRED SIGHT DISTANCE: 300 FEET (FOR 26-35 MPH SPEED LIMIT)



MERIDIAN
 LAND SERVICES INC.
 ENGINEERING, SURVEYING, PLANNING,
 SOIL & WETLAND MAPPING | SEPTIC DESIGN
 31 OLD NASHUA ROAD, AMHERST, NH 03031 TEL: 603.675.1441
 MERIDIANLANDSERVICES.COM FAX: 603.675.1584

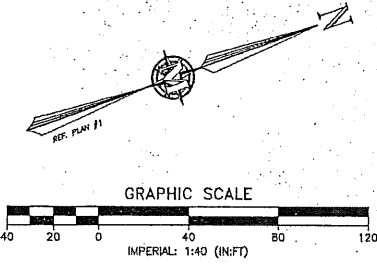
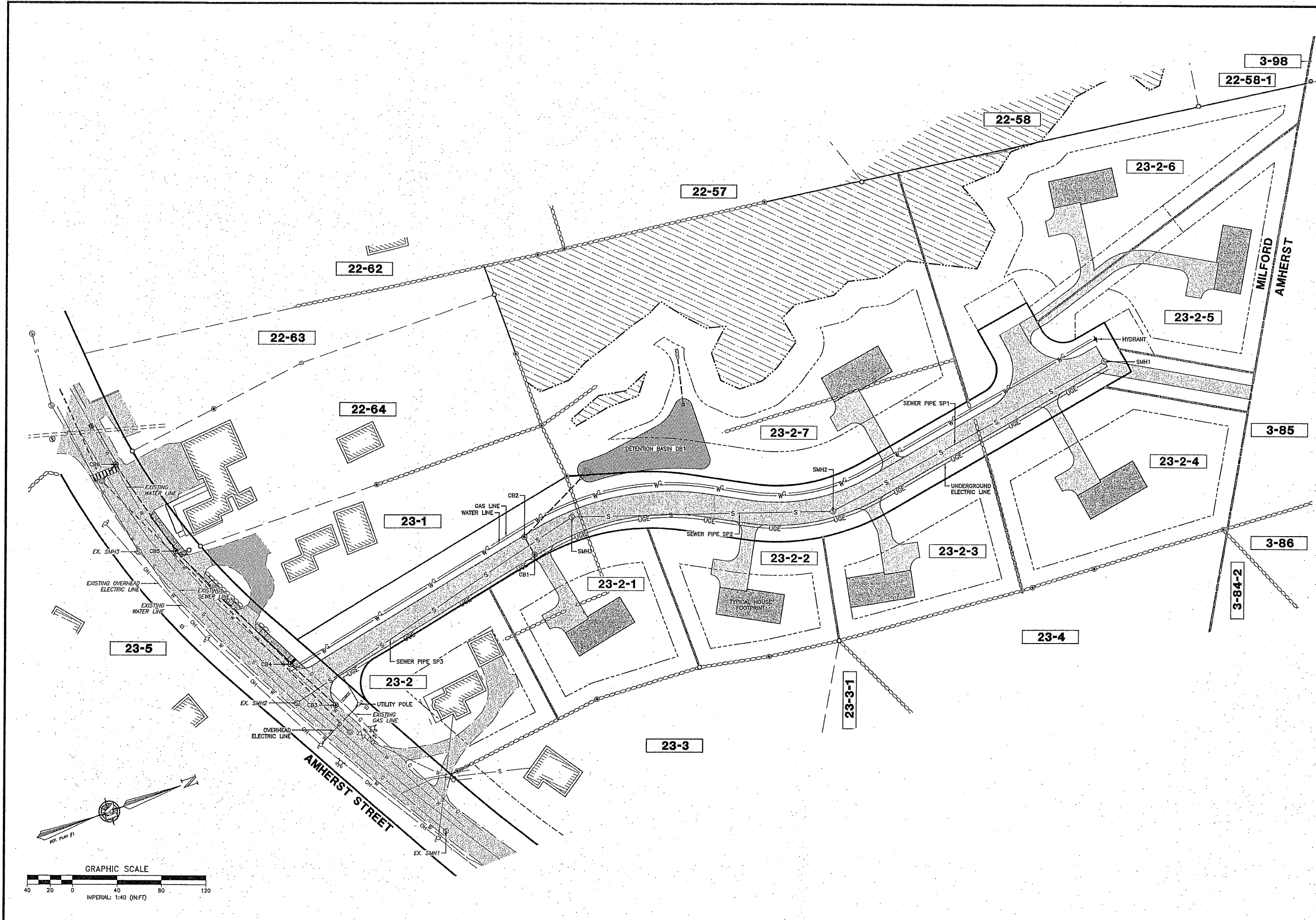


REV.	DATE	DESCRIPTION	DR	CK
A	5/29/19	PLANNING BOARD SUBMISSION		
B				
C				
D				
E				
F				
G				
H				

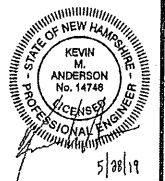
SIGHT DISTANCE PLAN AND PROFILE
 RICHARD KEOGH
 AMHERST STREET
 MAP 23 LOT 2
 MILFORD, NEW HAMPSHIRE
 SCALE: 1" = 40'
 FEBRUARY 25, 2019

P-4
 SHEET
 FILE: 3203P05A.dwg
 PROJECT: 3203.05
 SHEET NO. 7 OF 14

Retired: 5/23/2019 1:35 PM By: BJC
 H:\FILES\3203\3203.05\Drawings\3203\3203.dwg



MERIDIAN
 LAND SERVICES, INC.
 ENGINEERING, SURVEYING, PLANNING, ARCHITECTURE,
 SOIL & WETLAND MAPPING, SEPTIC DESIGN
 31 OLD NASHUA ROAD, AMHERST, NH 03831
 TEL: 603-671-1441
 MERIDIAN.LANDSERVICES.COM
 FAX: 603-671-1941

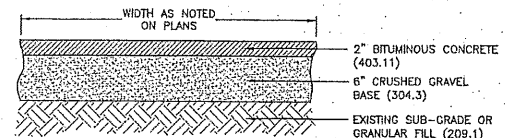


REV.	DATE	DESCRIPTION	DR	CK
A	1/26/19	PLANNING BOARD SUBMISSION	BUC	KVA
B				
C				
D				
E				
F				
G				
H				

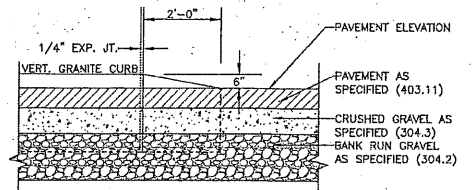
UTILITY PLAN
 FEBRUARY 25, 2019

RICHARD KEOGH
 AMHERST STREET
 MAP 23 LOT 2
 MILFORD, NEW HAMPSHIRE
 SCALE: 1" = 40'

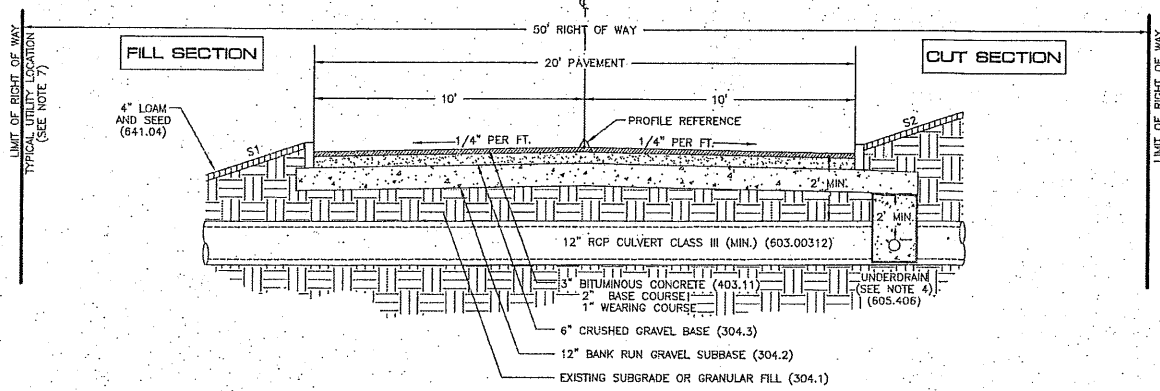
P-5
 SHEET
 FILE: 3203POSA.dwg
 PROJECT: 3203.05
 SHEET NO. 8 OF 14



SIDEWALK - ASPHALT SCALE: NONE **1** D-1



CURB - TYPICAL END TIP DOWN SCALE: NONE **2** D-2



ROAD DESIGN REQUIREMENTS

ROAD GRADE (MIN.)	1%
ROAD GRADE (MAX.)	8%
GRADE WITHIN 75' OF INTERSECTION	3%
CENTERLINE RADIUS - CURVES (MIN.)	100'
BINDER COURSE	2" (MIN.)
WEARING COURSE	1" (MIN.)

MAXIMUM SIDE SLOPES:		
DISTANCE TO ORIGINAL GROUND	S1 (FILL)	S2 (CUT)
LESS THAN 10'	4:1	3:1
10' TO 20'	3:1	2:1
GREATER THAN 20'	2:1	1.5:1
LEDGE	-	1:2

- NOTES:
- THE ROAD DESIGNS ARE IN ACCORD WITH THE FOLLOWING DESIGN STANDARDS:
NHDOT - "HIGHWAY DESIGN MANUAL" MAY 1981
AASHTO - "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS", 1990
 - DESIGN SPEED MAY BE MODIFIED UPON APPROVAL OF THE MILFORD CHIEF OF POLICE AND IN ACCORDANCE WITH STATE LAW.

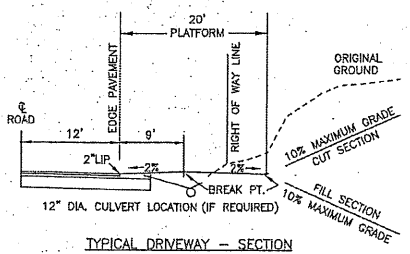
GENERAL ROAD CONSTRUCTION NOTES

- REMOVE ALL LOAM, CLAY, MUCK, STUMPS, AND OTHER IMPROPER ROAD FOUNDATION MATERIAL WITHIN 3' OF SUBGRADE. REPLACE WITH COMPACTED GRANULAR FILL MATERIAL ACCEPTABLE TO THE DIRECTOR OF PUBLIC WORKS. COMPACTION TO BE AT LEAST 95% OF THE DRY WEIGHT AS DETERMINED BY MODIFIED PROCTOR TESTING (ASTM 1557).
- ALL MATERIALS AND CONSTRUCTION SHALL MEET AND BE COMPLETED IN STRICT ACCORDANCE WITH THE TOWN OF MILFORD'S CURRENT ROAD AND DRAINAGE SPECIFICATIONS, DATED DECEMBER 1995.
- A 2.5' SHOULDER EXTENSION IS REQUIRED WHEREVER GUARDRAILS ARE TO BE LOCATED (SEE BELOW) TO PROVIDE FOR GUARDRAIL CONSTRUCTION AND SUPPORT.
- SHOULD UNDERDRAIN PIPE BE REQUIRED IN CUT SECTIONS, THE PIPE SHALL DISCHARGE THROUGH A MORTARED RUBBLE AND MASONRY ENDWALL OR INTO A CATCH BASIN.
- AN EASEMENT SHALL BE PROVIDED BEYOND THE LIMITS OF THE RIGHT OF WAY TO THE BOUNDARY OF THE EXISTING WETLAND TO PROVIDE FOR MAINTENANCE OF THE DRAINAGE STRUCTURES.
- WHERE ROAD GRADE IS 3% OR GREATER, ROAD SWALE SHALL BE LINED WITH RIPRAP (2 LAYERS, 6" TO 8" STONE, 6" WIDE WITH 6" GRAVEL BASE OR EROSION CONTROL FABRIC). WHERE ROAD GRADE IS LESS THAN 3%, EROSION CONTROL FABRIC SHALL BE INSTALLED EXTENDING 3' EACH SIDE FROM SWALE CENTERLINE.
- ALL UTILITY POLES AND TRANSFORMER SLABS SHALL BE LOCATED AT THE RIGHT OF WAY LINE.

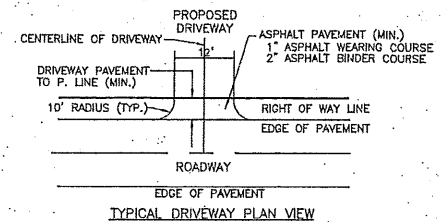
GUARDRAIL LOCATIONS

IF THE FILL SLOPE IS STEEPER THAN 4:1 WITH MORE THAN 10' OF FILL, A GUARDRAIL SHALL BE PROVIDED.

TYPICAL ROAD CROSS-SECTION WITH CLOSED DRAINAGE SCALE: NONE **3** D-1



TYPICAL DRIVEWAY - SECTION

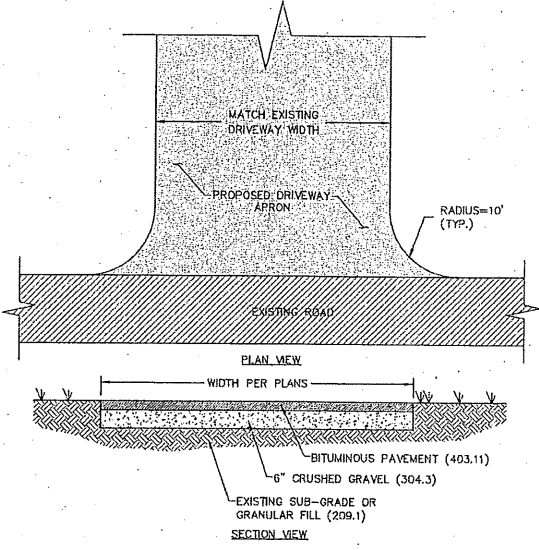


TYPICAL DRIVEWAY PLAN VIEW

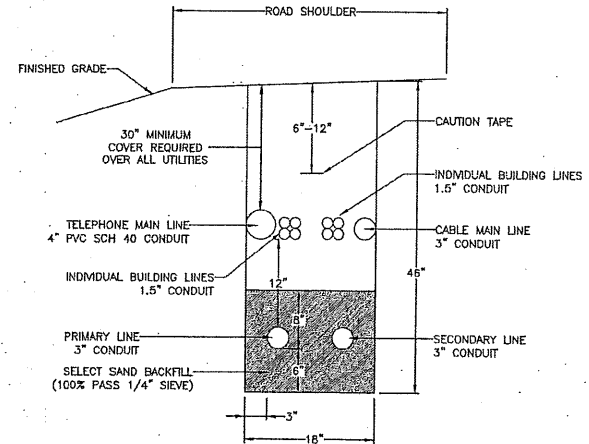
DRIVEWAY CONSTRUCTION REQUIREMENTS

- ALL DRIVEWAYS CONNECTED TO TOWN ROADS MUST BE BUILT AND MAINTAINED BY THE HOMEOWNER OR HIS/HER REPRESENTATIVE IN ACCORDANCE WITH THESE SPECIFICATIONS AND THE TOWN DRIVEWAY REGULATIONS.
- ALL MAILBOXES SHALL BE PLACED ON THE LEFT UPON ENTERING THE PROPERTY TO FACILITATE MUNICIPAL SNOW REMOVAL.
- WHERE REQUIRED, CULVERTS SHALL BE A MINIMUM OF TWELVE (12) INCHES IN DIAMETER AND SHALL BE CONSTRUCTED OF CORRUGATED METAL, REINFORCED CONCRETE, HIGH DENSITY POLYETHYLENE PIPE OR APPROVED EQUAL. THE DRIVEWAY SHALL HAVE A MINIMUM 3-FOOT SHOULDER ON EACH SIDE WHERE IT MEETS THE CULVERT.
- HEADWALLS SHALL BE CONSTRUCTED OF STONE RUBBLE AND MORTAR, PRECAST CONCRETE OR APPROVED EQUAL AND INSTALLED ON BOTH ENDS OF THE CULVERT.
- ON ALL PAVED ROADS, NEW DRIVEWAYS REQUIRE AN ASPHALT APRON FROM THE ROAD TO THE PROPERTY LINE.

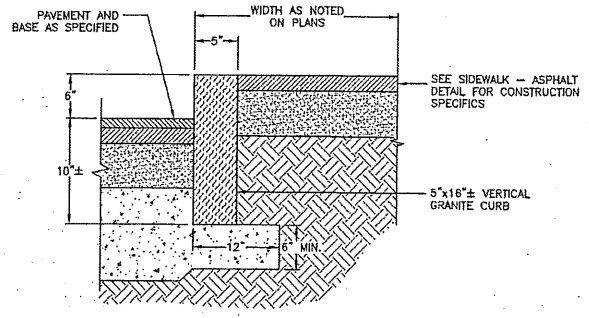
TYPICAL DRIVEWAY SCALE: NONE **4** D-1



PAVED DRIVEWAY APRON (LOT 23-1) SCALE: NONE **5** D-1



TYPICAL UTILITY TRENCH SCALE: NONE **6** D-1

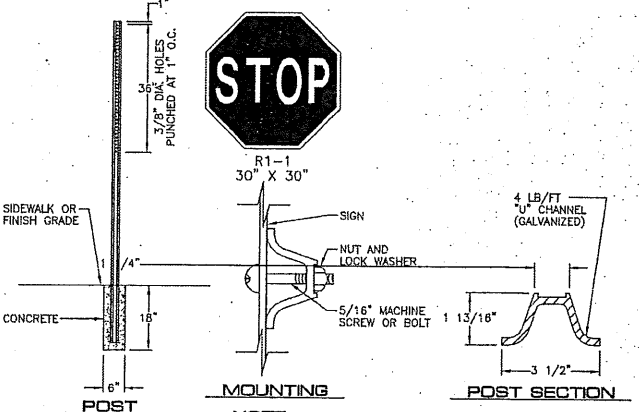


VERTICAL GRANITE CURB - ASPHALT SIDEWALK SCALE: NONE **7** D-1



STREET SIGN

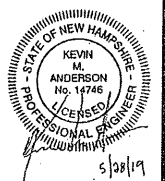
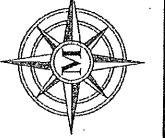
- STREET SIGN NOTES:
- STREET SIGNS SHALL CONFORM TO THE LATEST EDITION OF THE MUTCD SIGN TYPE D3-1, GREEN IN COLOR UNLESS OTHERWISE SPECIFIED BY THE TOWN.
 - STREET SIGN SHALL CONFORM TO THE LATEST EDITION OF THE MUTCD IN SIGN LOCATION, MOUNTING HEIGHT, SIGN HEIGHT AND WIDTH AND TEXT HEIGHT AND STYLE.
 - LETTERING ON POST-MOUNTED STREET NAMES SIGNS SHOULD BE COMPOSED OF INITIAL UPPER-CASE LETTERS AT LEAST 6 INCHES IN HEIGHT AND LOWER CASE LETTERS AT LEAST 4.5 INCHES IN HEIGHT.
 - STREET NAME SIGN SHALL BE RETROREFLECTIVE TO SHOW THE SAME SHAPE AND COLOR BOTH DAY AND NIGHT. NAME AND BORDER SHALL CONTRAST WITH THE BACKGROUND COLOR.
 - SIGN HEIGHT SHALL BE 8" IN HEIGHT WITH A WIDTH NOT TO EXCEED 48".
 - CAPITAL LETTERS SHALL BE 6" IN HEIGHT. LOWER CASE LETTERS SHALL BE 4.5" IN HEIGHT.



NOTE:
1. STREET NAME SIGNS TO BE INSTALLED PER TOWN STANDARDS.

SIGNS & POST SCALE: NONE **8** D-1

MERIDIAN LAND SERVICES, INC.
ENGINEERING, SURVEYING, MAPPING,
SOIL & WETLAND MAPPING (SEPTIC DESIGN)
21 OLD NASHUA ROAD, AMHERST, NH 03824
TEL: 603-931-4441 FAX: 603-931-1884
MERIDIAN.LANDSERVICES.COM



DATE	DESCRIPTION	BY	CHK
5/28/19	PLANNING BOARD SUBMISSION	BAC	DKA
15/28/19	REV.	A	B

CONSTRUCTION DETAILS

RICHARD KEOGH
AMHERST STREET
MAP 23 LOT 2
MILFORD, NEW HAMPSHIRE

SCALE: VARIES

FEBRUARY 25, 2019

D-1
SHEET

FILE: 3203PO5A.dwg
PROJECT: 3203.05
SHEET NO. 9 OF 14



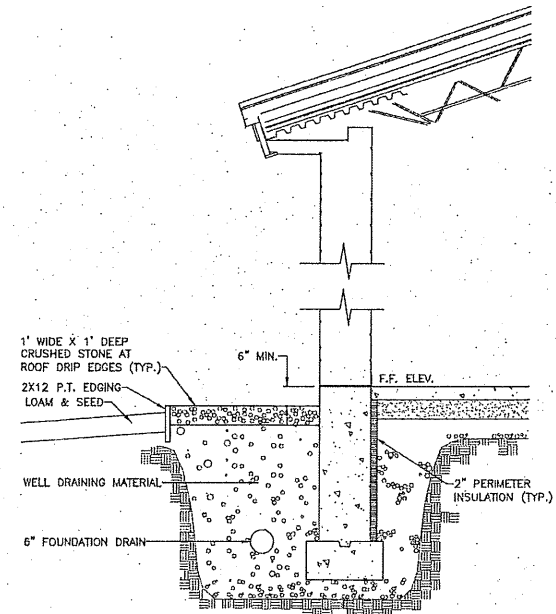
REV.	DATE	DESCRIPTION
A	12/28/19	PLANNING BOARD SUBMISSION
B		
C		
D		
E		
F		
G		
H		
I		
J		
K		
L		
M		
N		
O		
P		
Q		
R		
S		
T		
U		
V		
W		
X		
Y		
Z		

DRAINAGE DETAILS

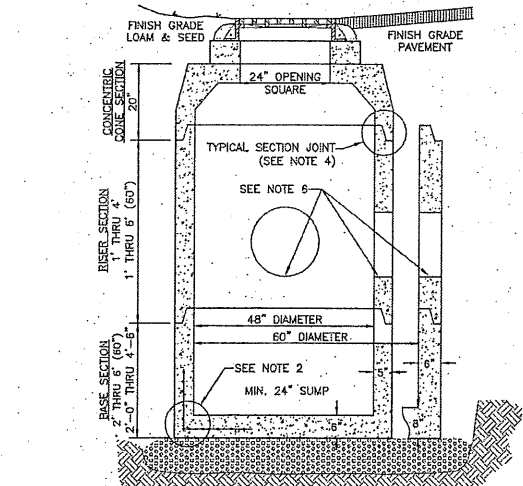
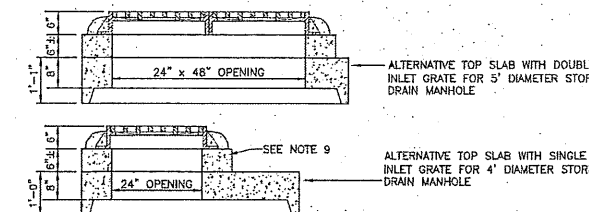
RICHARD KEOGH
 AMHERST STREET
 MAP 23 LOT 2
 MILFORD, NEW HAMPSHIRE

D-2
 SHEET

FILE: 3203P05A.dwg
 PROJECT: 3203.05
 SHEET NO. 10 OF 14

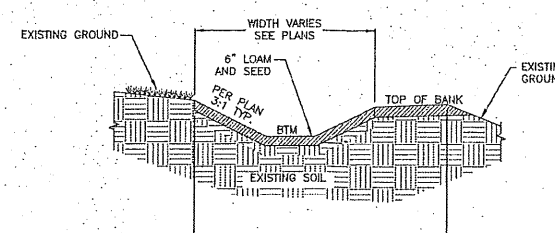


ROOF DRIP EDGE SCALE: NONE **1** D-2



- GENERAL NOTES**
- STORM DRAIN MANHOLE SHALL BE SUPPLIED BY CONCRETE SYSTEMS, INC., HUDSON, NH OR EQUAL.
 - REINFORCING STEEL SHALL CONFORM TO THE LATEST ASTM SPECIFICATION: 0.12 SQ. IN./LINEAR FT. AND 0.12 SQ. IN. (BOTH WAYS) BASE BOTTOM.
 - CONCRETE COMPRESSIVE STRENGTH - 4000 PSI MINIMUM.
 - TYPICAL SECTION JOINT SHALL BE SEALED WITH BUTYL RUBBER AND SHALL CONFORM TO ASTM C443 SPEC. AND FED SPEC. SS-S-210A.
 - MANHOLE DESIGN SPECIFICATIONS SHALL CONFORM TO THE LATEST ASTM C478 SPEC. FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS".
 - ALL PIPING SHALL BE SEALED WITH NON SHRINK GROUT.
 - ALTERNATIVE TOP SLAB IS TO BE STEEL REINFORCED TO MEET OR EXCEED H-20 LOADING.
 - INLET GRATE AND FRAME IS TO BE NENAH MODEL R-3405 FOR SINGLE GRATE AND MODEL R-3405-A FOR A DOUBLE GRATE STRUCTURE, OR EQUAL.
 - INLET FRAME IS TO BE ADJUSTED TO GRADE WITH A MINIMUM OF TWO (2) COURSES OF BRICK OR ONE SOLID CONCRETE RING AND GROUT. SEALED IN PLACE WITH NON SHRINK GROUT.
 - STORM DRAIN MANHOLE IS TO BE SET ON 6" OF 3/4" STONE BEDDING.
 - THE 48" DIAMETER STORM DRAIN MANHOLE SHALL BE RESTRICTED TO PIPES OF 24" IN DIAMETER OR LESS. THE 60" DIAMETER STORM DRAIN MANHOLE SHALL BE RESTRICTED TO PIPES OF 36" IN DIAMETER OR LESS.
 - ALL DRAINAGE STRUCTURES SHALL CONFORM TO NHDOT STANDARDS.

CATCH BASIN SCALE: NONE **2** D-2

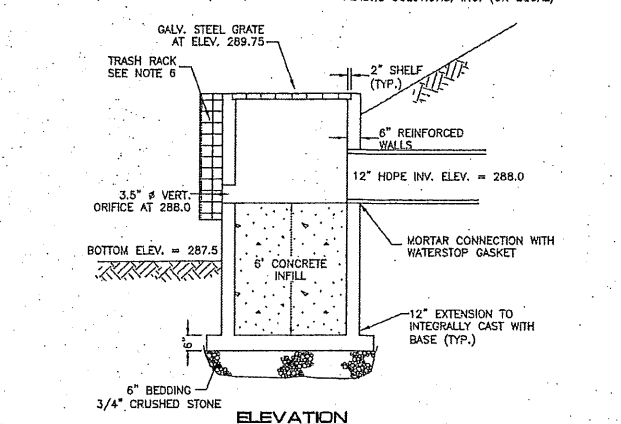
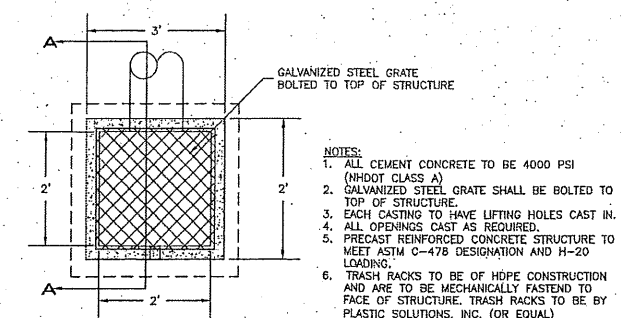


- CONSTRUCTION NOTES:**
- THE BOTTOM OF THE EXCAVATION SHALL BE SHAPED PER PLAN AND MODERATELY COMPACTED PRIOR TO INSTALLATION OF 6" SILTY LOAM LAYER.
 - THE SIDES AND OF THE DETENTION BASIN SHALL HAVE 6" OF LOAM AND TYPE C SEED FOR ESTABLISHMENT OF VEGETATION.

- NOTES:**
- DO NOT PLACE DETENTION BASINS INTO SERVICE UNTIL THE CONTRIBUTING AREA HAS BEEN COMPLETELY STABILIZED.
- MAINTENANCE REQUIREMENTS:**
- PERIODIC MOWING OF EMBANKMENTS.
 - REMOVAL OF WOODY VEGETATION FROM FILL EMBANKMENTS.
 - REMOVAL OF DEBRIS FROM OUTLET STRUCTURES.
 - REMOVAL OF ACCUMULATED SEDIMENT FOR THE FOREBAY AND DETENTION BASIN.
 - INSPECTION AND REPAIR OF EMBANKMENTS, INLET AND OUTLET STRUCTURES AND APPURTENANCES.

LOCATION	BOTTOM ELEVATION	RIM ELEVATION
DB1	287.5	290.0

DETENTION BASIN - TYPICAL CROSS-SECTION SCALE: NONE **3** D-2



OUTLET STRUCTURE SCALE: NONE **4** D-2

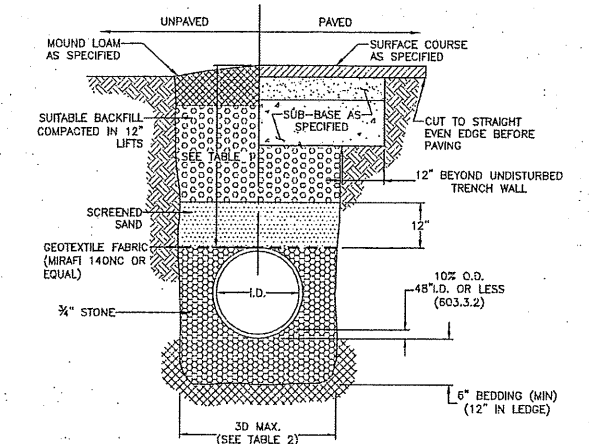
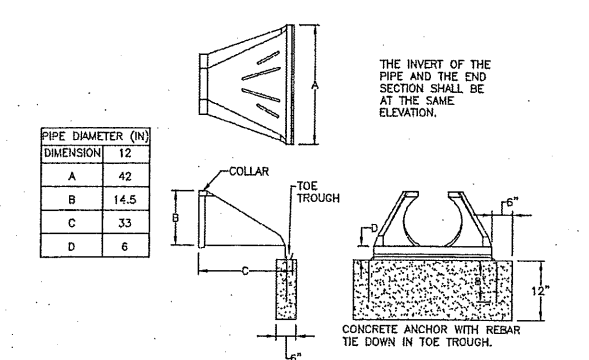
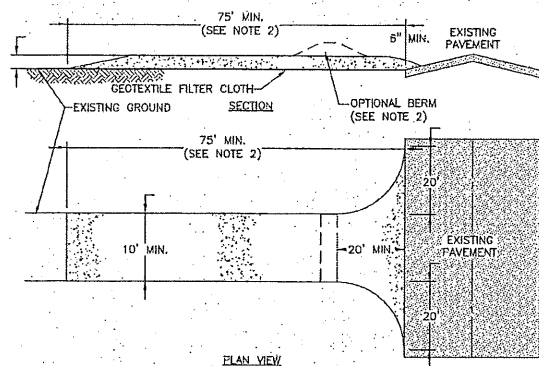


TABLE 1			TABLE 2 (206-4.1.2)	
LOCATION	PIPE MATERIAL	MINIMUM COVER	INSIDE DIAMETER	TOTAL WIDTH
PAVED ROADS	ALL	3 FT.	UP TO 12"	36"
UNPAVED ROADS	ALL	3 FT.	12" TO 24"	I.D. + 24"
BRIVEWAYS	ALL	1 FT.	OVER 24"	2 x I.D.
UNPAVED AREAS	ALL	2 FT.		

TYPICAL DRAINAGE TRENCH - HDPE SCALE: NONE **5** D-2



FLARED END SECTION - HDPE SCALE: NONE **6** D-2



- STONE FOR STABILIZED CONSTRUCTION EXIT SHALL BE 3 INCH CRUSHED STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
- THE MINIMUM LENGTH OF THE PAD SHOULD BE 75 FEET, EXCEPT THAT THE MINIMUM LENGTH MAY BE REDUCED TO 50 FEET IF A 3-INCH TO 6-INCH HIGH BERM IS INSTALLED AT THE EXIT OF THE PROJECT SITE.
- THE THICKNESS OF THE STONE SHALL NOT BE LESS THAN 6 INCHES.
- THE WIDTH OF THE EXIT SHALL NOT BE LESS THAN THE FULL WIDTH OF THE EXISTING POINT OF INGRESS/EGRESS OR 10 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 EXIT SHALL BE PIPED BENEATH THE EXIT. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
- THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.
- WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO EXIT ONTO PUBLIC RIGHT-OF-WAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

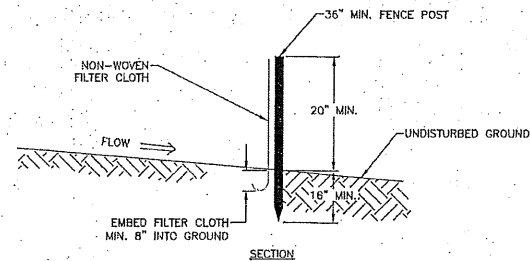
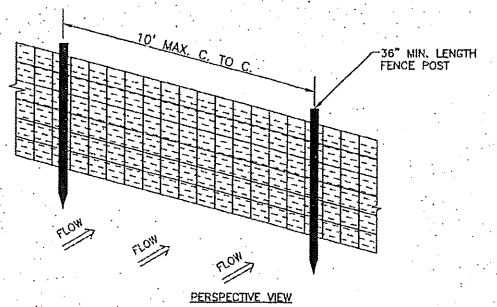
STABILIZED CONSTRUCTION EXIT

SCALE: NONE D-3

- INSTALL STABILIZED CONSTRUCTION ENTRANCE(S).
- CUT AND CLEAR TREES; DISPOSE OF DEBRIS.
- INSTALL PERIMETER EROSION AND SEDIMENTATION CONTROLS IN LOCATIONS SHOWN ON PLANS. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATION.
- PULL STUMPS AND REMOVE FROM SITE OR MULCH TO USE ON-SITE FOR EROSION CONTROL. REMOVE TOPSOIL AND STOCKPILE AWAY FROM ANY HILL AND. STABILIZE STOCKPILE IMMEDIATELY BY SEEDING. PLACE SILT FENCE AROUND THE DOWN SLOPE SIDE OF EARTH STOCKPILES.
- CONSTRUCT PONDS, SWALES AND LEVEL SPREADERS DURING INITIAL PORTION OF CONSTRUCTION, PRIOR TO ROUGH GRADING THE SITE. STABILIZE IMMEDIATELY WITH LOAM AND SEED PER THE EROSION CONTROL NOTES. DO NOT DIRECT STORM WATER RUNOFF TO PONDS, SWALES OR LEVEL SPREADERS UNTIL A HEALTHY VEGETATIVE COVER IS ESTABLISHED.
- ROUGH GRADE THE SITE INCLUDING ROADS AND DITCHES. ALL CUT AND FILL SLOPES SHALL BE STABILIZED UPON COMPLETION OF ROUGH GRADING PER THE EROSION CONTROL NOTES.
- EXCAVATE FOR AND CONSTRUCT THE FOUNDATION OF THE PROPOSED BUILDING(S). CONSTRUCT BUILDING(S).
- INSTALL DRAINAGE PIPES AND STRUCTURES; PLACE SEDIMENT FILTERS IN CATCH BASINS UNTIL ALL NON-PAVED DISTURBED AREAS HAVE A HEALTHY VEGETATIVE COVER.
- INSTALL UNDERGROUND UTILITIES: WATER, SEWER, TELEPHONE, ELECTRICAL.
- INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS AND AFTER ANY RAINFALL OF 0.50" OR MORE.
- AS REQUIRED, CONSTRUCT TEMPORARY BERMS, CULVERTS, DITCHES, SILT BARRIERS, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED.
- FINISH GRADING THE SITE. ALL CUT AND FILL SLOPES SHALL BE LOAMED AND SEEDED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- BASE PAVE ACCESS DRIVE AND PARKING AREAS. INSTALL CURBING AND FINISH PAVE DRIVE, PARKING, AND SIDEWALKS.
- APPLY LOAM. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WHEN ALL DISTURBED AREAS HAVE BEEN STABILIZED.
- LOT DISTURBANCE, OTHER THAN THAT SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.

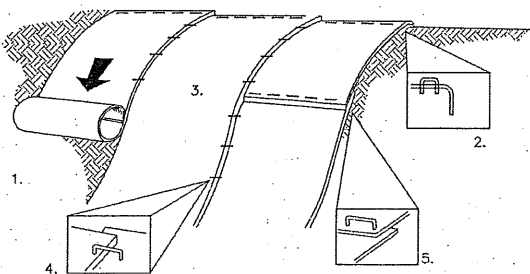
CONSTRUCTION SEQUENCE

SCALE: NONE D-3



SILTATION FENCE

SCALE: NONE D-3



ALL 2:1:1V OR STEEPER SLOPES ARE TO BE CONSTRUCTED WITH S2250 STRAW/COCONUT FIBER EROSION CONTROL TURF REINFORCEMENT MAT AND ALL 3:1:1V TO <2:1:1V SLOPES TO BE CONSTRUCTED WITH S150 STRAW FIBER EROSION CONTROL TURF REINFORCEMENT MAT BY NORTH AMERICAN GREEN OR EQUAL.

THE EROSION CONTROL MATERIAL(S) SHALL BE ANCHORED WITH "U" SHAPED 11 GAUGE WIRE STAPLES OR WOODEN STAKES WITH A MINIMUM TOP WIDTH OF 1" AND A LENGTH OF 6".

CONSTRUCTION REQUIREMENTS AND SLOPE APPLICATIONS:

- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROLL OF STAPLES OR STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET WITH A ROW OF STAPLES/STAKES PLACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE BLANKETS DOWN THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES OR STAKES IN APPROPRIATE LOCATIONS. REFER TO MANUFACTURER'S STAPLE GUIDE FOR CORRECT STAPLE PATTERN.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OF OVERLAP DEPENDING ON THE BLANKET TYPE.
- CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE OVERLAPPED AREA APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.

NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE BLANKETS.

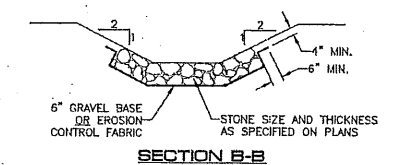
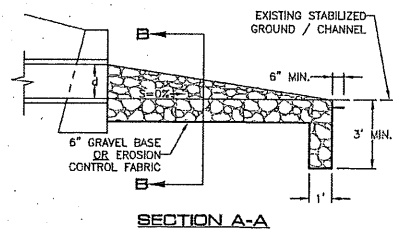
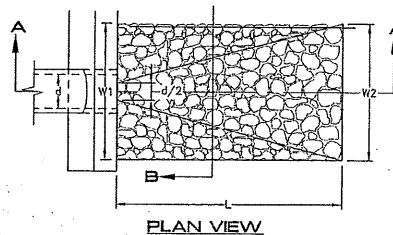
THE CONTRACTOR SHALL MAINTAIN THE BLANKET UNTIL ALL WORK ON THE CONTRACT HAS BEEN COMPLETED AND ACCEPTED. MAINTENANCE SHALL CONSIST OF THE REPAIR OF AREAS WHERE DAMAGED BY ANY CAUSE. ALL DAMAGED AREAS SHALL BE REPAIRED TO REESTABLISH THE CONDITIONS AND GRADE OF THE SOIL PRIOR TO APPLICATION OF THE COVERING AND SHALL BE REFERTILIZED, RESEEDED AND REMULCHED AS DIRECTED.

SLOPE STABILIZATION TURF REINFORCEMENT MAT

SCALE: NONE D-3

CONSTRUCTION NOTES

SCALE: NONE D-3



LOCATION	LENGTH (FT)	WIDTH 1 (FT)	WIDTH 2 (FT)	STONE SIZE #50 (IN)	THICKNESS (IN)
RA1	10	3	13	4	8
RA2	7	3	10	4	8

RIPRAP OUTLET PROTECTION

SCALE: NONE D-3

- ALL POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING. ELSEWHERE, THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE RIPRAP OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITION.
- AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.

WINTER CONSTRUCTION

SCALE: NONE D-3

- ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REQUIREMENTS AND SPECIFICATIONS OF THE TOWN OF MILFORD. OTHERWISE, ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION).
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS AND SHALL VERIFY THAT ALL THE INFORMATION SHOWN HEREON IS CONSISTENT, COMPLETE, ACCURATE, AND CAN BE CONSTRUCTED PRIOR TO AND/OR DURING CONSTRUCTION. MERIDIAN LAND SERVICES, INC., AS DESIGN ENGINEER, SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES, ERRORS, OMISSIONS, OR EXISTING UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION SO THAT REMEDIAL ACTION MAY BE TAKEN BEFORE PROCEEDING WITH THE WORK.
- THE OWNER AND/OR CONTRACTOR SHALL VERIFY ALL ZONING SETBACK REQUIREMENTS FOR CONFORMANCE PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT "DIGSAFE" (811) 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
- COMPLIANCE WITH ALL APPLICABLE REGULATIONS AND SPECIAL CONDITIONS OF TOWN/CITY AGENCIES, SUCH AS THE PLANNING BOARD, CONSERVATION COMMISSION, AND OTHERS, IS MANDATORY AND IS THE RESPONSIBILITY OF THE OWNER.
- ANY ALTERATION OF THIS DESIGN OR CHANGE DURING CONSTRUCTION MAY REQUIRE APPROVAL OF VARIOUS TOWN BOARDS OR AGENCIES AND SHALL BE DISCUSSED WITH THE OWNER AND MERIDIAN LAND SERVICES, INC. PRIOR TO CONSTRUCTION.
- IF APPLICABLE, ALL DRAINAGE STRUCTURES SHALL CONFORM TO NHDOT STANDARDS.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE TOWN DEPARTMENT PRIOR TO CONSTRUCTION TO ARRANGE FOR INSPECTIONS OF THE CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCURATE AS-BUILT INFORMATION OF ALL WORK, ESPECIALLY UNDERGROUND CONSTRUCTION OF UTILITY LINES, SERVICES, CONNECTIONS, ETC. AND APPROPRIATE TIES TO ABOVE GROUND PERMANENT STRUCTURES. FIELD SURVEY COORDINATES, OR SOME OTHER METHOD OF ESTABLISHING THE AS-BUILT CONDITION OF ALL CONSTRUCTION.

SEEDING FOR TEMPORARY PROTECTION OF DISTURBED AREAS

SCALE: NONE D-3

SPECIES	RATE 1 (LBS./AC.)	RATE 2 (LBS./1,000 S.F.)	REMARKS
WINTER RYE	112	2.5	FALL, 8/15 TO 9/15 PLANT 1.0 INCH DEEP
OATS	80	2.0	SPRING PRIOR TO 5/15 PLANT 1.0 INCH DEEP
ANNUAL RYEGRASS	40	1.0	QUICK, SHORT DURATION GOOD APPEARANCE EARLY SPRING & FALL PLANT 0.25 INCH DEEP
PERENNIAL RYEGRASS	30	0.7	LASTS LONGER THAN ANNUAL LATE SPRING & FALL MULCHING WILL ALLOW USE ALL SEASON PLANT 0.5 INCH DEEP

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED.

- INSTALLATION OF SILT SOCKS AND SILTATION FENCE WHERE INDICATED SHALL BE COMPLETED PRIOR TO THE START OF SITE WORK IN ANY GIVEN AREA.
- SILT SOCKS AND SILTATION FENCES SHALL BE KEPT CLEAN DURING CONSTRUCTION AND REMOVED WHEN ALL DISTURBED AREAS HAVE A HEALTHY STAND OF VEGETATIVE COVER. EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEK AND AFTER EVERY 0.5" OR GREATER RAINFALL.
- EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEREVER POSSIBLE.
- PER THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES, THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION. THE TOTAL AREA OF ACTIVE DISTURBANCE, INCLUDING LOT DISTURBANCES, SHALL NOT EXCEED 5 ACRES.
- THE DURATION OF TIME THAT AN AREA IS DISTURBED SHALL BE MINIMIZED. ALL NON-ACTIVE DISTURBED AREAS (IE: CLEARED FOR CONSTRUCTION BUT NOT PRESENTLY UNDERGOING CONSTRUCTION) SHALL BE STABILIZED WITHIN 45 DAYS OF DISTURBANCE. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING.
- ALL DITCHES, SWALES AND DRAINAGE BASINS SHALL BE CONSTRUCTED DURING THE INITIAL PHASE OF CONSTRUCTION AND SHALL BE STABILIZED PRIOR TO DIRECTING STORM WATER FLOW TO THEM.
- AN AREA MAY BE CONSIDERED STABILIZED WHEN ONE OF THE FOLLOWING HAS OCCURRED:
 - A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
 - B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
 - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- ALL DISTURBED AREAS SHALL BE COVERED WITH A MINIMUM OF 4" OF LOAM. LOAM SHALL BE COVERED WITH THE APPROPRIATE SEED MIXTURE AS INDICATED BELOW.

THE SEED MIXTURE SHALL BE APPLIED AT A RATE OF 2.5 POUNDS PER 1,000 SQ. FT. AND SHALL BE MIXED AS FOLLOWS:

TYPICAL LAWN SEED	SLOPE SEED		
CREeping RED FESCUE	0.87 LBS.	CREeping RED FESCUE	1.01 LBS.
KENTUCKY BLUEGRASS	0.71 LBS.	RYE GRASS	0.75 LBS.
RYE GRASS	0.58 LBS.	RED TOP	0.18 LBS.
RED TOP	0.14 LBS.	ALSIKE CLOVER	0.18 LBS.
		BIRD'SFOOT TREFLOIL	0.18 LBS.

- APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 600 POUNDS PER ACRE OR 13.6 POUNDS PER 1,000 SQUARE FEET OF LOW PHOSPHATE FERTILIZER (11-P205-K20) OR EQUIVALENT (LOW PHOSPHORUS FERTILIZER IS DEFINED BY THE COMPREHENSIVE SHORELAND PROTECTION ACT AS LESS THAN 2% PHOSPHORUS). APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQUARE FEET).

FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 FEET AND 250 FEET FROM A SURFACE WATER BODY AS SPECIFIED BY THE COMPREHENSIVE SHORELAND PROTECTION ACT (SLOW RELEASE FERTILIZERS MUST BE AT LEAST 50% SLOW RELEASE NITROGEN COMPONENT). NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER. THESE LIMITATIONS ARE REQUIREMENTS.

- PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDING AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDING AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 15. NO DISTURBED AREA SHALL BE LEFT EXPOSED DURING THE WINTER MONTHS.
- THE SITE CONTRACTOR SHALL MAINTAIN A VIGOROUS DUST CONTROL PROGRAM THROUGHOUT THE CONSTRUCTION PROCESS. EXPOSED EARTH SHALL BE KEPT MOIST OR MULCHED AT ALL TIMES TO PREVENT DUST FORMATION. SPECIAL ATTENTION SHALL BE PAID TO HIGH TRAFFIC AREAS.

EROSION CONTROL

SCALE: NONE D-3

MERIDIAN LAND SERVICES, INC.
ENGINEERING SURVEYING PERMITTING
SOIL & WETLAND MAPPING SEPTIC DESIGN
31 OLD NASHUA ROAD, AMHERST, NH 03031
TEL: 603-425-1441
FAX: 603-425-1841
MERIDIANLANDSERVICES.COM



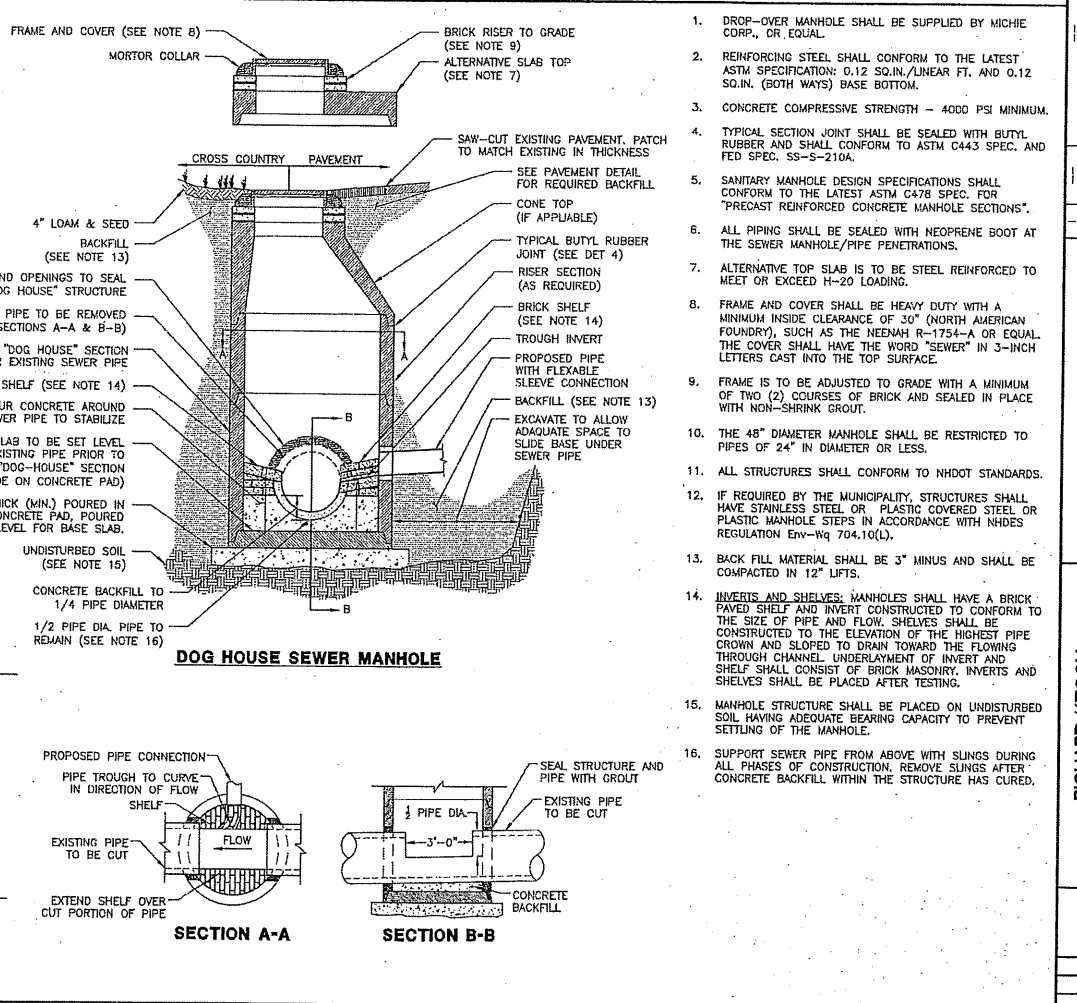
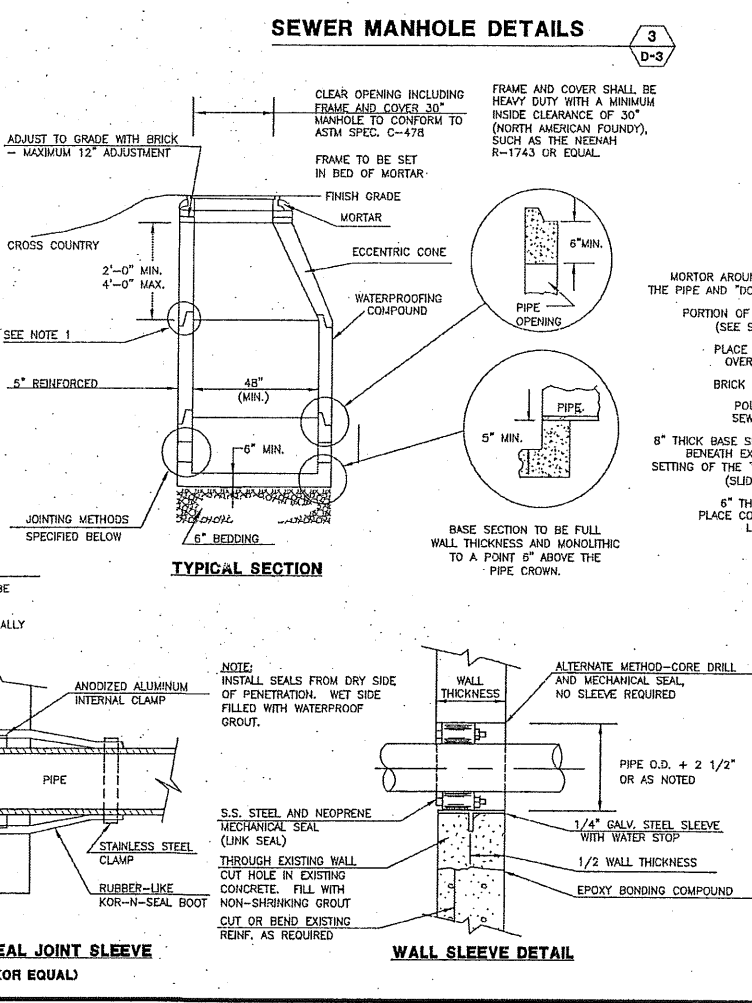
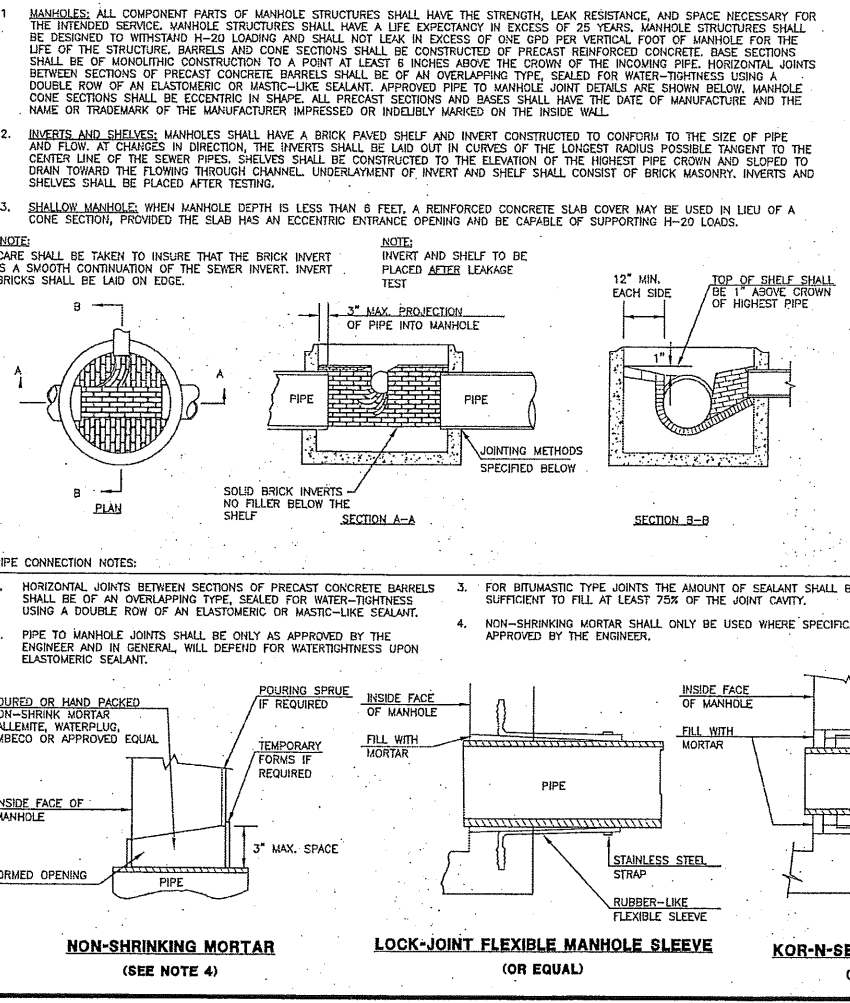
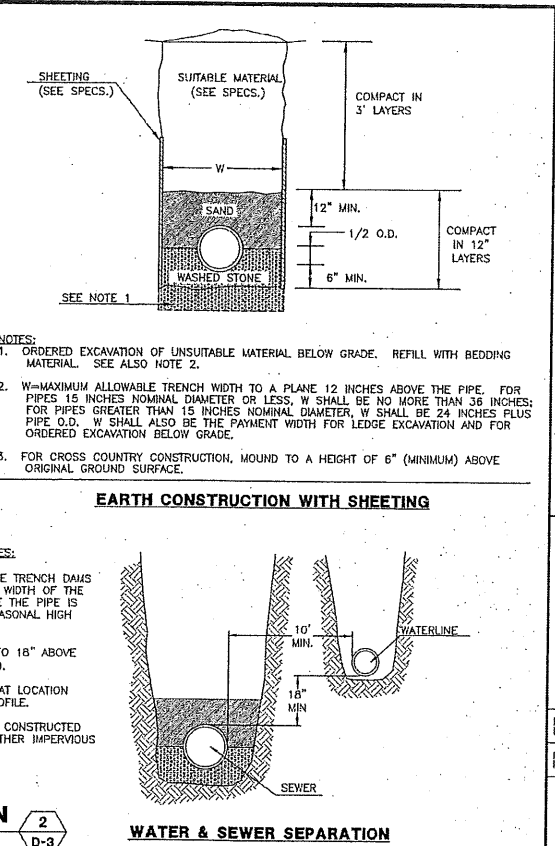
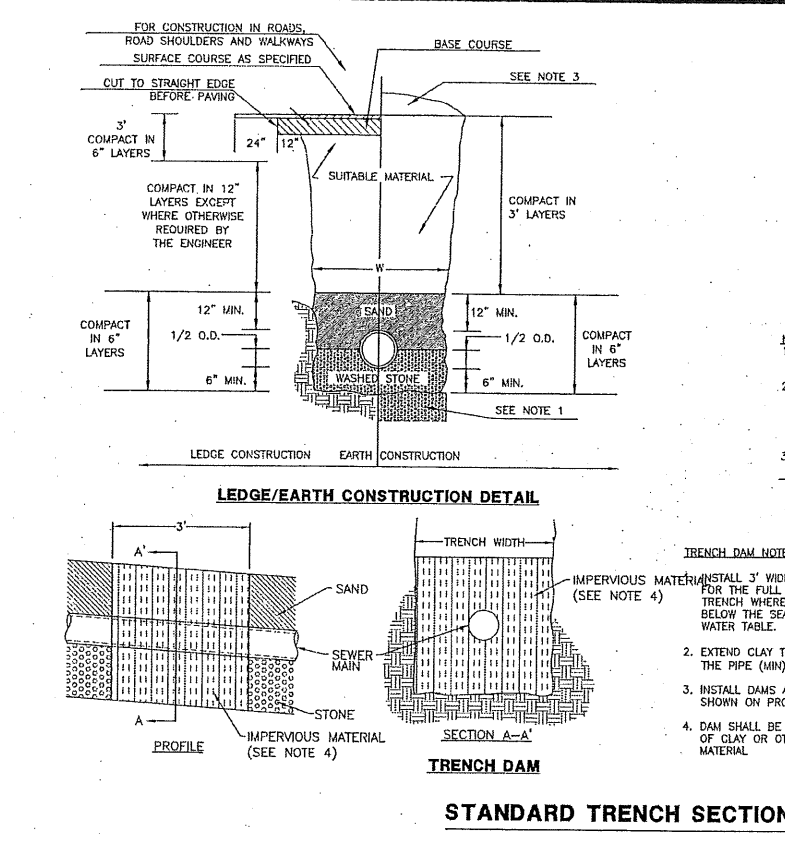
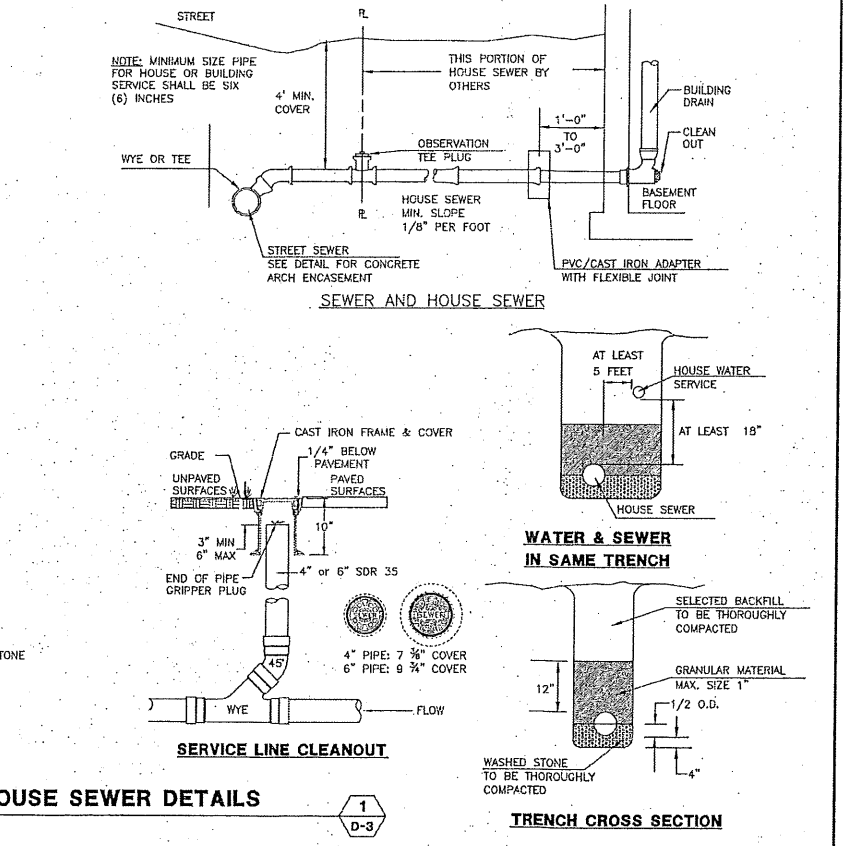
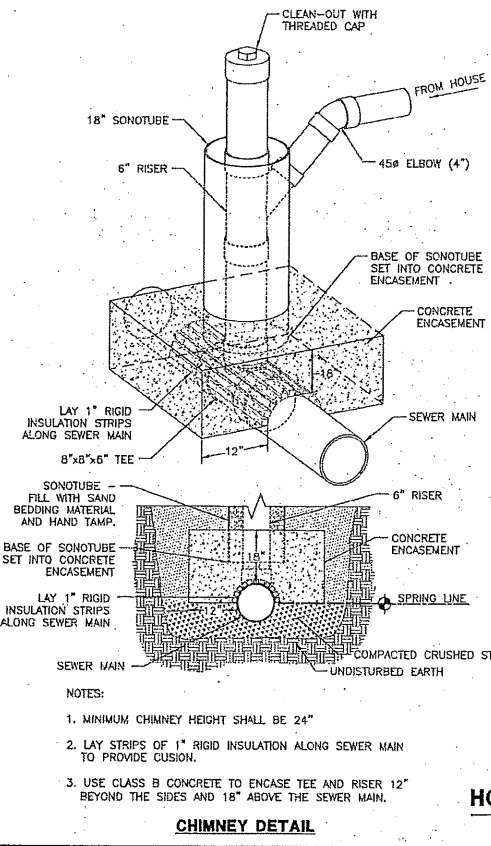
NO.	DATE	DESCRIPTION	BY	CHK
1	12/28/19	PLANNING BOARD SUBMISSION	BUC	KVA
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

EROSION CONTROL DETAILS

RICHARD KEOGH
AMHERST STREET
MAP 28 LOT 2
MILFORD, NEW HAMPSHIRE
SCALE: VARIES
FEBRUARY 25, 2019

D-3
SHEET
FILE: 3203P05A.dwg
PROJECT 3203.05
SHEET NO. 11 OF 14

PLN: 14-4 5/28/2019 1:35 PM BY: BUC
PL: 14-4 02/25/2020 10:50 AM BY: J203P05A.dwg



MERIDIAN LAND SERVICES, INC.
 ENGINEERING & ARCHITECTURE
 310 OLD NASHUA ROAD, AMHERST, NH 03821
 TEL: 603-833-1884 FAX: 603-833-1884

KEVIN M. ANDERSON
 No. 14748
 PROFESSIONAL ENGINEER
 STATE OF NEW HAMPSHIRE

5/20/19

NO.	DATE	DESCRIPTION	BY	CHK
1	5/20/19	PLANNING BOARD SUBMISSION	ELC	IKM
2				DR
3				CK

SEWER LINE DETAILS

RICHARD KEOGH
 AMHERST STREET
 MAP 23 LOT 2
 MILFORD, NEW HAMPSHIRE

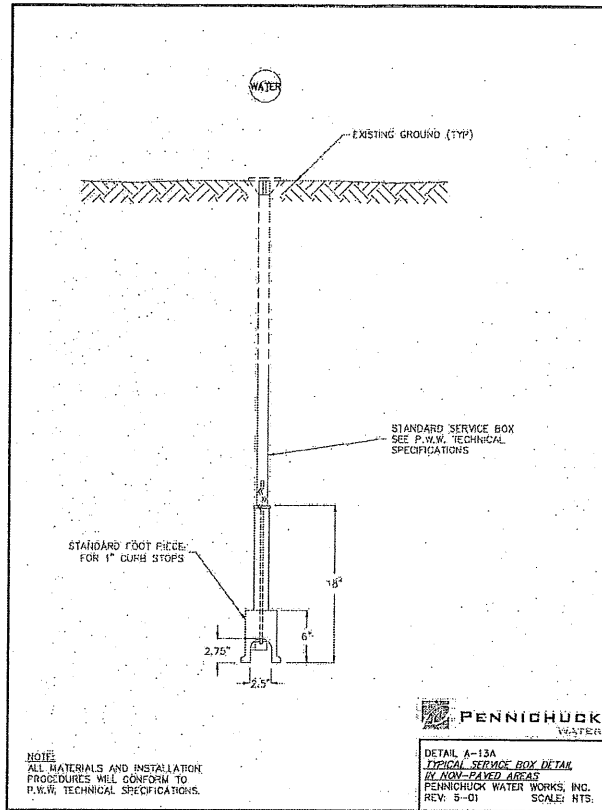
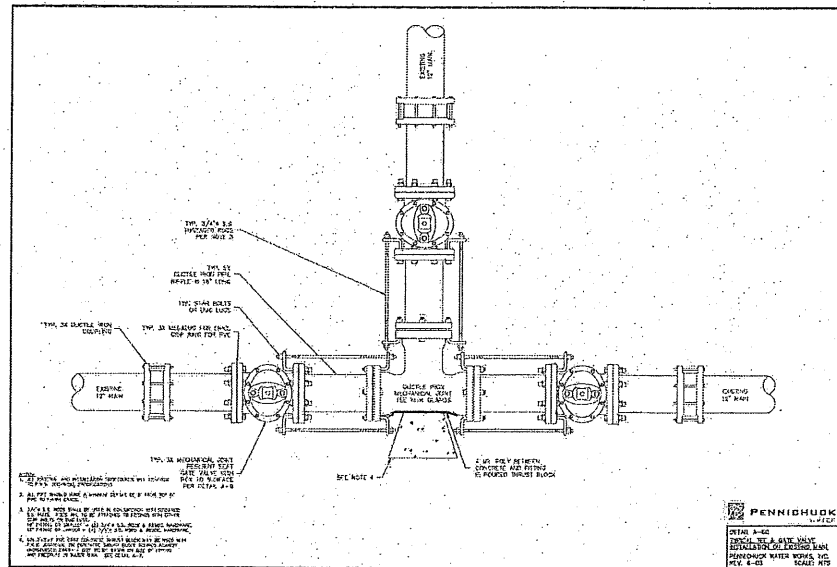
SCALE: VARIES

FEBRUARY 25, 2019

D-4
 SHEET

FILE: 3203P05A.dwg
 PROJECT: 3203.05
 SHEET NO. 12 OF 14

P:\14748\3203\3203.dwg 1:35 PM By: BJC
 PL: 3/20/19 10:03:05 AM



GENERAL NOTES

ALL WATER MAINS 6" AND OVER IN DIAMETER SHALL BE CONSTRUCTED WITH DUCTILE IRON WATER MAIN MEETING OR EXCEEDING THE PRODUCT SPECIFICATIONS BELOW. 4" DIAMETER WATER MAINS SHALL BE CONSTRUCTED WITH DUCTILE IRON THAT MEETS OR EXCEEDS THE PRODUCT SPECIFICATIONS BELOW.

A. DUCTILE IRON WATER MAIN SHALL CONFORM TO AWWA STANDARD C151 AND BE DOUBLE CEMENT LINED AND SEALED COATED TO MEET AWWA STANDARD C104 JOINTS SHALL BE PUSH ON AND SHALL CONFORM TO AWWA C111.

B. CLASS 52 WALL THICKNESS, 4" DIAMETER THROUGH 10" DIAMETER INCLUSIVE.

C. CLASS 51 WALL THICKNESS, 12" & 16" DIAMETER.

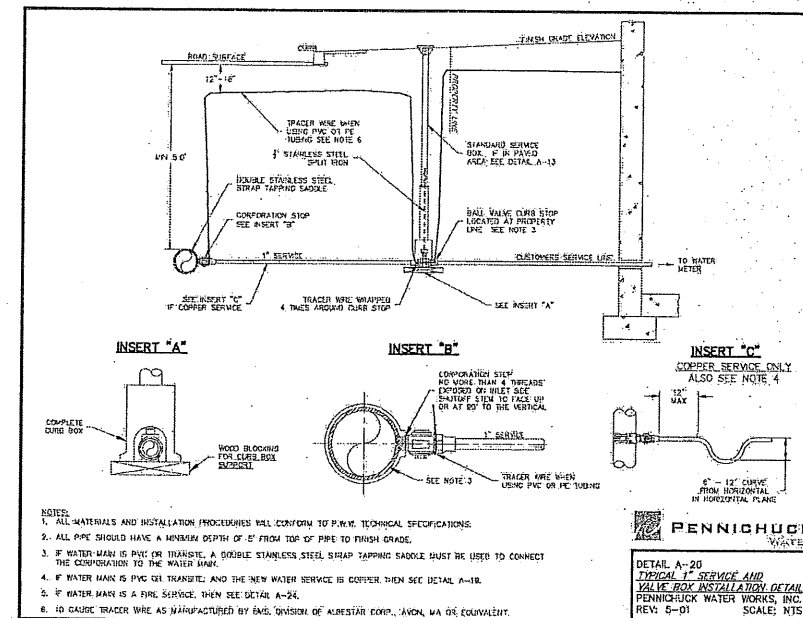
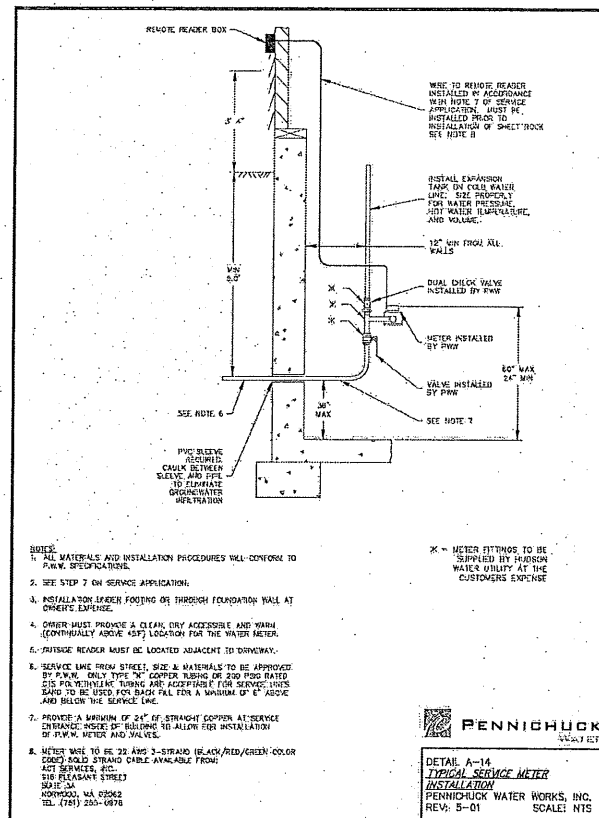
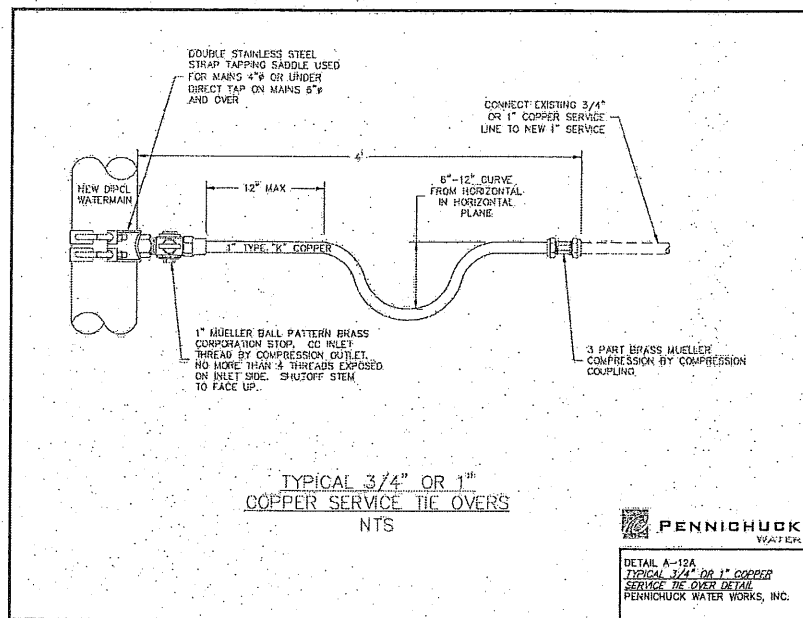
ALL MECHANICAL JOINT DUCTILE IRON FITTINGS 3" THROUGH 24" SHALL BE COMPACT DUCTILE IRON CLASS 350 IN ACCORDANCE WITH AWWA/ANSI C153/A-21.53 AND SHALL BE CEMENT LINED IN ACCORDANCE WITH AWWA/ANSI C104/A-21.40 OR BE FUSION BONDED MEETING OR EXCEEDING ANSI/AWWA C116/A21.16 STANDARDS.

ALL WATER MAINS AND APPURTENANCES SHALL BE SEPARATED FROM OTHER UTILITIES AND SEPTIC FIELDS IN ACCORDANCE WITH THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES ENV-W5 1000 AND ENV-W5 375. FURTHERMORE, THE SEPARATION SHALL BE IN ACCORDANCE WITH DETAIL A-1 IN THE STANDARD DETAILS.

IN THE ABSENCE OF A RECOGNIZED AND/OR APPROVED INDUSTRY STANDARD FOR SUCH HARDWARE, PENNICHUCK'S FIELD INSPECTORS WILL BE THE FINAL JUDGE AS TO THE ACCEPTABILITY OF MISCELLANEOUS HARDWARE USED IN THE INSTALLATION OF WATER MAINS.

ALL WATER MAINS AND FIRE SERVICES SHALL BE SUBJECTED TO PRESSURE AND LEAKAGE TESTING IN ACCORDANCE WITH THE LATEST VERSION OF AWWA STANDARD C600. ALLOWABLE LEAKAGE FOR EACH SECTION OF WATER MAIN TESTED SHALL BE COMPARED AGAINST THE CHART ATTACHED AT THE END OF THIS SECTION IN ORDER TO DETERMINE THE ACCEPTABILITY OF THE TEST.

THE CONTRACTOR SHALL CONDUCT FLUSHING OPERATIONS USING METHODS AND PROCEDURES CONFORMING TO AWWA C651. THE CONTRACTOR SHALL FLUSH THE WATER MAIN UNDER THE DIRECTION OF PENNICHUCK WATER WORKS' INSPECTOR. FLUSHING MAY BE REQUIRED DURING THE LATE EVENING HOURS IF IT IS DETERMINED THAT FLUSHING WILL RESULT IN OFF COLORED WATER TO PENNICHUCK WATER WORKS EXISTING CUSTOMERS.



MERIDIAN
LAND SERVICES, INC.
ENGINEERING SURVEYING, MAPPING,
SOIL & WETLAND MAPPING, SEPTIC DESIGN
31 OLD NASHUA ROAD, AMHERST, NH 03031
TEL: 603-671-1441
FAX: 603-671-1541
MERIDIAN.LANDSERVICES.COM



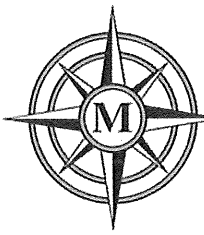
REV.	DATE	DESCRIPTION	DR	CK
A	5/28/19	PLANNING BOARD SUBMISSION	DR	CK
B				
C				
D				
E				
F				
G				
H				
I				
J				

WATER LINE DETAILS (2)

RICHARD KEOGH
AMHERST STREET
MAP 28 LOT 2
MILLFORD, NEW HAMPSHIRE
SCALE: VARIES
FEBRUARY 25, 2019

D-6
SHEET
FILE: 3203PO5A.dwg
PROJECT: 3203.05
SHEET NO. 14 OF 14

Plotted: 5/28/2019 11:35 AM By: B.C.
 P:\Users\B26265\3203PO5A\Drawings\DWG\3203PO5A.dwg



MERIDIAN LAND SERVICES, INC.

CIVIL ENGINEERING | LAND SURVEYING | PERMITTING | SOIL & WETLAND MAPPING | SEPTIC DESIGN | ENVIRONMENTAL

Office: 31 Old Nashua Road, Suite 2, Amherst, NH 03031

Mailing: PO Box 118, Milford, NH 03055

Phone: 603-673-1441 * Fax 603-673-1584

www.MeridianLandServices.com

May 28, 2019

Milford Planning Board
1 Union Square
Milford, New Hampshire 03055
Attn: Lincoln Daley, Community Development Director



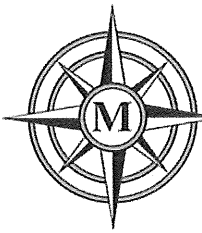
RE: Richard Keogh Subdivision
Map 23 Lot 2

Meridian Land Services Inc., on behalf of Richard Keogh, we request a waiver from section 5.32.080 (Design Standards) C.2.a. of the Town of Milford's Stormwater Management and Erosion Control Regulations for the increase to observation point 3 (OP-3) as indicated in calculations. Per discussions with the Rick Riendeau, director of the Public Works department, it is understood that drainage runoff towards Amherst Street will be captured by catch basins and tied into the existing drainage system in Amherst Street. However, drainage calculations indicated that there is a total net reduction in site runoff.

If there are any questions or concerns, please do not hesitate to contact Meridian Land Services, Inc.

Sincerely,

Kevin M. Anderson, P.E.
Chief of Engineering
Meridian Land Services, Inc.
KMAnderson@MeridianLandServices.com
(603) 673-1441



MERIDIAN LAND SERVICES, INC.

CIVIL ENGINEERING | LAND SURVEYING | PERMITTING | SOIL & WETLAND MAPPING | SEPTIC DESIGN | ENVIRONMENTAL

Office: 31 Old Nashua Road, Suite 2, Amherst, NH 03031

Mailing: PO Box 118, Milford, NH 03055

Phone: 603-673-1441 * Fax 603-673-1584

www.MeridianLandServices.com

Milford Planning Board

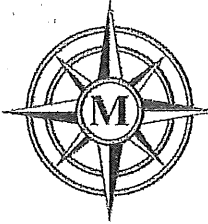
May 28, 2019

Re: Keogh Subdivision – Tax Map Lot 23-2, #118 Amherst Street

- 1) We hereby request a waiver from the Subdivision Regulations, Article V, Sec. 5.08 (Open Space Conservation Developments). A Conventional Design Subdivision will be pursued instead of Open Space as discussed in previous Design review meetings.
- 2) We hereby request a waiver from the Driveway Regulations Section VII, F requiring driveway entrance to have a negative slope. The proposed road will have a 2% positive slope at the entrance to allow for separation from the ground water table. Drainage onto the existing road will be controlled by the installation of the catch basins at the entrance as show on the design.
- 3) We hereby request a waiver from the Subdivision Checklist for Major Subdivision item Z (Provisions for storage of recycling and refuse). Not Applicable.
- 4) We hereby request a waiver from the Subdivision Checklist for Major Subdivision item BB (Location, size and detail of exterior lighting). Not Applicable.
- 5) We hereby request a waiver from the Subdivision Checklist for Major Subdivision item CC (Location, size and detail of storage tanks). Not Applicable.

Thank you for your consideration.

Samuel D. Ingram, SIT



MERIDIAN LAND SERVICES, INC.

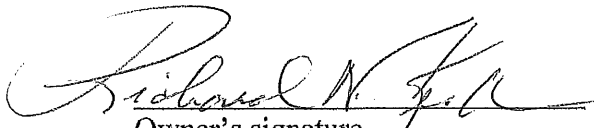
CIVIL ENGINEERING | LAND SURVEYING | PERMITTING | SOIL & WETLAND MAPPING | SEPTIC DESIGN | ENVIRONMENTAL

Office: 31 Old Nashua Road, Suite 2, Amherst, NH 03031
Mailing: PO Box 118, Milford, NH 03055
Phone: 603-673-1441 * Fax 603-673-1584
www.MeridianLandServices.com

December 14, 2018

To whom it may concern,

I / We hereby authorize Meridian Land Services, Inc. to act as my agent relative to matters associated with the subdivision of our property located at Tax Map 23 / Lot 2, 118 Amherst Street, Milford, NH.


Owner's signature

12/26/18
Date

RICHARD N. KEOGH
Owner's printed name

Owner's signature

Date

Owner's printed name

RECEIVED

DEC 31 2018

Meridian Land Services

SAM INGRAM

