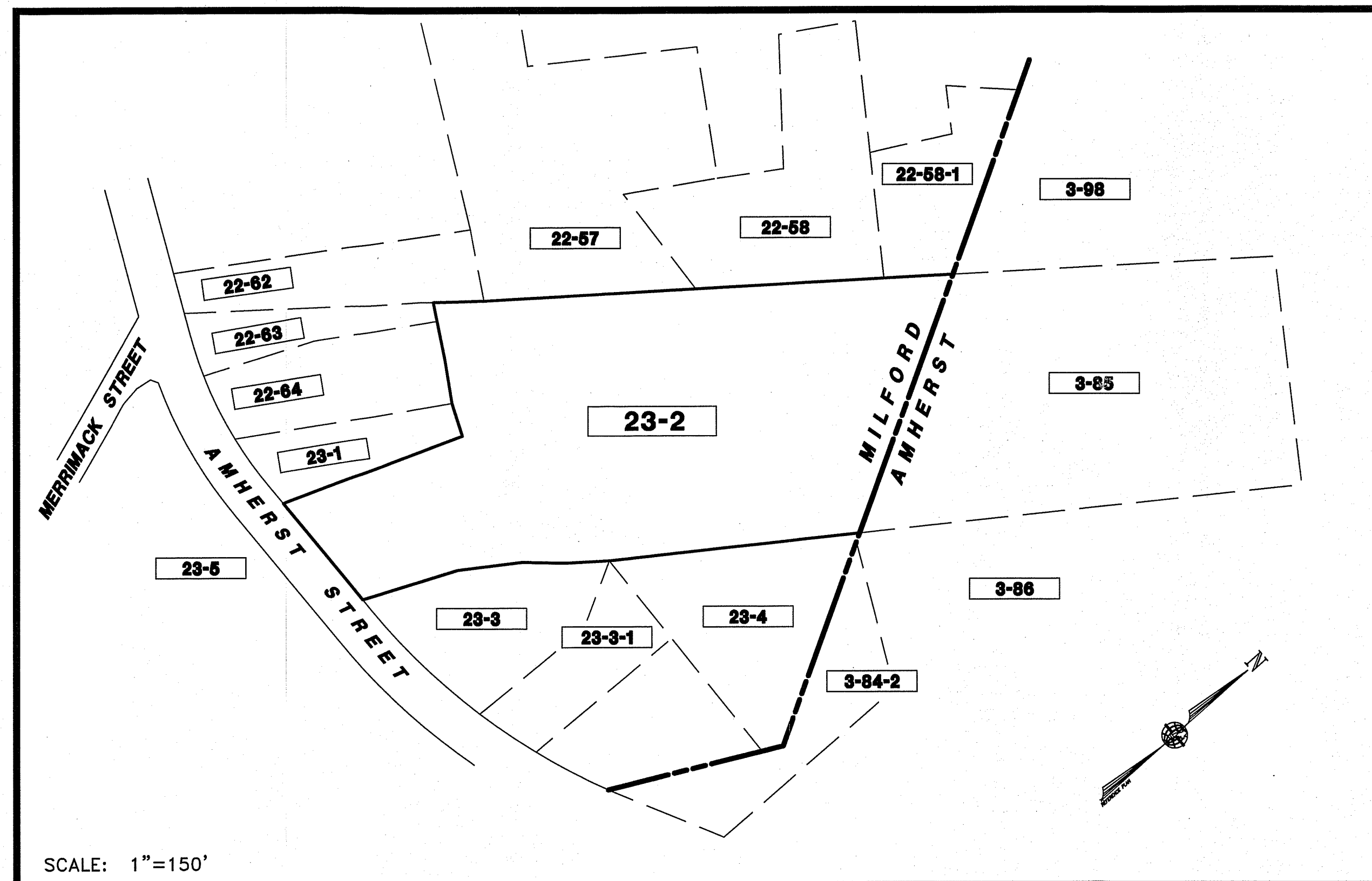


**NOTES:**

1. THE OWNER OF TAX MAP LOT 23-2 IS RICHARD N. KEOGH, 118 AMHERST STREET, MILFORD NEW HAMPSHIRE. SEE H.C.R.D. BK. 1615 DATED 8/17/1960.
2. THE PURPOSE OF THIS PLAN IS TO DEPICT A 8 LOT CONVENTIONAL SUBDIVISION OF TAX MAP LOT 23-2, TO BE ACCESSED BY A PUBLIC ROAD AND UNDERGROUND UTILITIES.
3. TOTAL AREA OF THE SITE IS 6.726 ACRES OR 292,993 SQ. FT.
4. ZONING FOR THE SITE IS RESIDENCE "A". MINIMUM REQUIREMENTS ARE: 15,000 S.F. OF AREA WITH MUNICIPAL SEWER & WATER & 100' OF ROAD FRONTAGE. SETBACKS ARE: 30' FRONT & 15' SIDE & REAR.
5. THE SITE LIES OUTSIDE OF THE 100 YEAR FLOOD HAZZARD AREA ON F.I.R.M. COMMUNITY PANEL MAP NUMBER 33011C0459D EFFECTIVE DATE SEPTEMBER 25, 2009.
6. THE SITE LIES WITHIN THE LEVEL 1 PROTECTION AREA OF THE GROUNDWATER PROTECTION OVERLAY DISTRICT AND IS SUBJECT TO GROUNDWATER PROTECTION OVERLAY DISTRICT REGULATIONS.
7. THE PROPOSED LOTS WILL BE SUBJECT TO POLICE AND LIBRARY IMPACT FEES.
8. HORIZONTAL ORIENTATION AND VERTICAL DATUM ARE BASED ON REFERENCE PLAN #1.
9. WETLANDS SHOWN WERE DELINEATED IN ACCORDANCE WITH THE ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, TECHNICAL REPORT Y-87-1 AND THE NORTHEAST REGIONAL SUPPLEMENT, BY SPENCER C. TATE C.W.S. OF THIS OFFICE IN DECEMBER, 2018.
10. PROPOSED LOTS 23-2-5 & 23-2-6 ARE SUBJECT TO A PROPOSED COMMON DRIVEWAY EASEMENT AS SHOWN AND PROPOSED LOT 23-2-7 IS SUBJECT TO A PROPOSED DRAINAGE EASEMENT AS SHOWN
11. NO RECORDED EASEMENTS OR DEED RESTRICTIONS WERE FOUND FOR THE PARENT LOT 23-2.
12. ALL WATER, SEWER, ROAD AND DRAINAGE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF MILFORD'S WATER UTILITIES DEPARTMENT AND PUBLIC WORKS DEPARTMENTS STANDARDS.
13. A SIGN, READING AS FOLLOWS, MUST BE POSTED AT THE ENTRANCE TO THE SUBDIVISION PRIOR TO ANY CERTIFICATE OF OCCUPANCY BEING ISSUED. "THIS ROAD HAS NOT BEEN ACCEPTED BY THE TOWN OF MILFORD. UNTIL THIS ROAD HAS BEEN ACCEPTED, THE TOWN ASSUMES NO RESPONSIBILITY FOR MAINTENANCE INCLUDING SNOW REMOVAL, NOR ANY LIABILITY FOR DAMAGE RESULTING FROM THE USE OF THIS ROAD. POSTED BY THE TOWN OF MILFORD."
14. THE PROPOSED PRIVATE RIGHT OF WAY IS NOT TO BE CONSIDERED A BUILDING LOT, BUT WILL BE CONVEYED TO THE OWNER OF AMHERST LOT 3-85 AND SHALL BE CONSIDERED A CONTIGUOUS PART THEREOF.
15. PRIOR TO THE SIGNING OF THE PLAN, ALL MONUMENTATION SHALL BE SET AND NOTED ON THE PLAN OR A SECURITY BE PROVIDED TO THE TOWN TO COVER THE COST OF MONUMENTATION.
16. THE PRIVATE RIGHT OF WAY SHOWN SHALL PROVIDE ACCESS/EGRESS TO ONE BUILDABLE LOT AND SHALL NOT BE USED AND/OR IMPROVED AS PART OF A FUTURE SUBDIVISION.

**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 & JENIFER 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.



**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 612 AMHERST, NH 03031	

**SHEET INDEX**

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

**OWNER'S SIGNATURES:**

RICHARD N. KEOGH

DATE

**APPROVED**

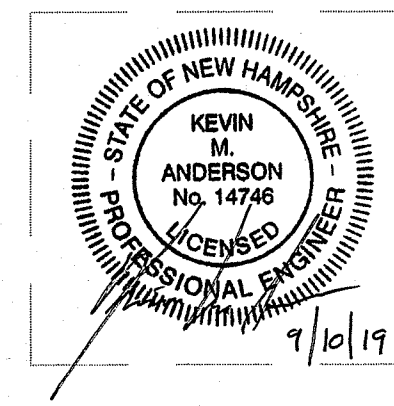
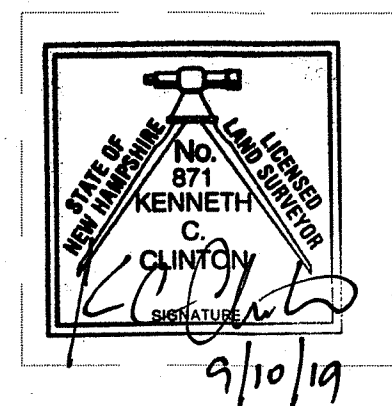
MILFORD, NH PLANNING BOARD

SUB DIVISION #: \_\_\_\_\_

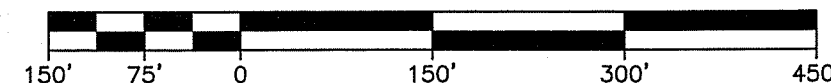
DATE APPROVED: \_\_\_\_\_

SIGNED: \_\_\_\_\_

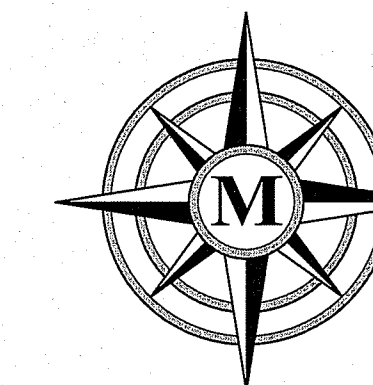
**MERIDIAN DESIGN PROFESSIONALS:**



**GRAPHIC SCALE**



REV.	DATE	DESCRIPTION	C/O	DR	CK
C	9/10/19	MILFORD UTILITY & KV COMMENTS	---	SDI	KCC
B	8/19/19	ADDITIONAL TOWN STAFF COMMENTS	---	SDI	KCC
A	6/24/19	INITIAL TOWN STAFF COMMENTS	---	SDI	KCC



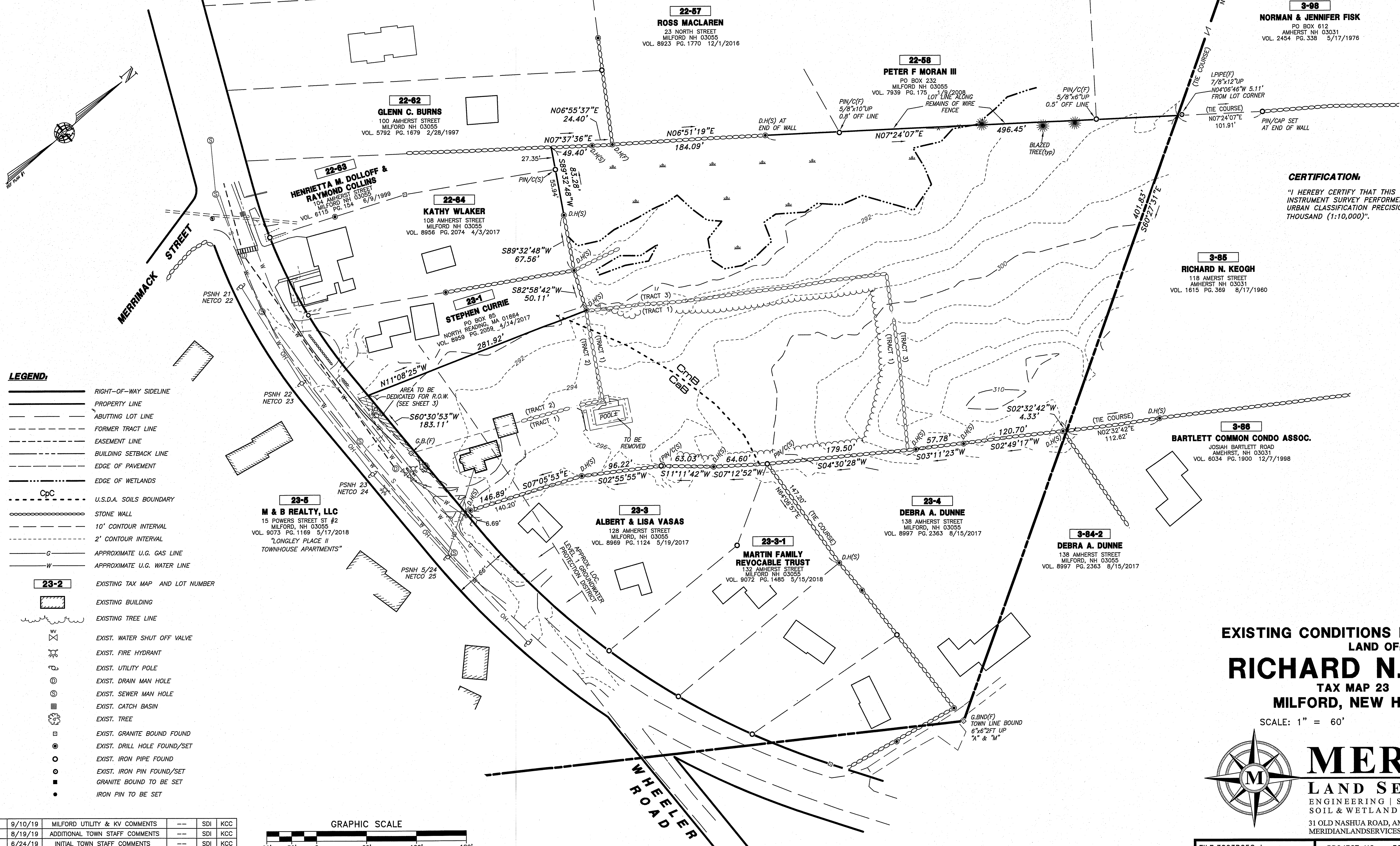
**MERIDIAN**

**LAND SERVICES, INC.**

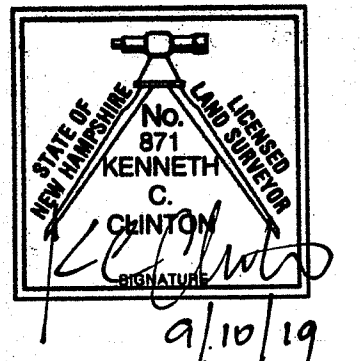
ENGINEERING | SURVEYING | PERMITTING  
SOIL & WETLAND MAPPING | SEPTIC DESIGN  
31 OLD NASHUA ROAD, AMHERST, NH 03031 TEL. 603-673-1441  
MERIDIANLANDSERVICES.COM FAX 603-673-1584



**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)".



- LEGEND:**
- RIGHT-OF-WAY SIDELINE
  - PROPERTY LINE
  - - - ABUTING 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

**23-5**  
**M & B REALTY, LLC**  
 15 POWERS STREET ST #2  
 MILFORD, NH 03055  
 VOL. 9073 PG. 1189 5/17/2018  
 "LONGLEY PLACE II  
 TOWNHOUSE APARTMENTS"

**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 8/9/1999

**22-64**  
**KATHY WLAKER**  
 108 AMHERST STREET  
 MILFORD NH 03055  
 VOL. 8956 PG. 2074 4/3/2017

**23-1**  
**STEPHEN CURRIE**  
 PO BOX 85  
 NORTH READING, MA 01864  
 VOL. 8959 PG. 2068 4/14/2017

**22-67**  
**ROSS MACLAREN**  
 23 NORTH STREET  
 MILFORD NH 03055  
 VOL. 8923 PG. 1770 12/1/2016

**22-68**  
**PETER F MORAN III**  
 PO BOX 232  
 MILFORD NH 03055  
 VOL. 7939 PG. 175 9/2/2008  
 LOT LINE ALONG  
 REMAINS OF WIRE  
 FENCE

**22-68-1**  
**NORMAN & JENNIFER FISK**  
 PO BOX 612  
 AMHERST NH 03031  
 VOL. 7937 PG. 2874 1/4/2008

**3-88**  
**NORMAN & JENNIFER FISK**  
 PO BOX 612  
 AMHERST NH 03031  
 VOL. 2454 PG. 338 5/17/1978

**3-85**  
**RICHARD N. KEOGH**  
 118 AMERST STREET  
 AMHERST NH 03031  
 VOL. 1615 PG. 369 8/17/1960

**3-88**  
**BARTLETT COMMON CONDO ASSOC.**  
 JOSIAH BARTLETT ROAD  
 AMHERST, NH 03031  
 VOL. 6034 PG. 1900 12/7/1998

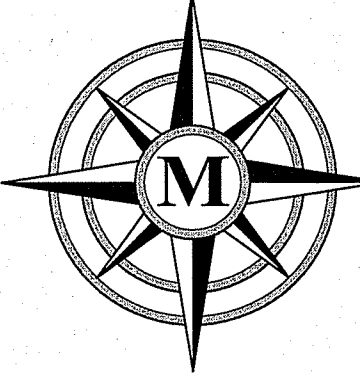
**23-3**  
**ALBERT & LISA VASAS**  
 128 AMHERST STREET  
 MILFORD, NH 03055  
 VOL. 8969 PG. 1124 5/19/2017

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

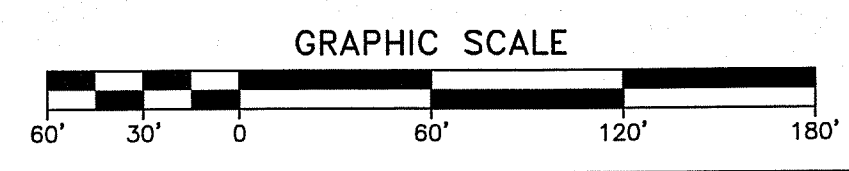
**3-84-2**  
**DEBRA A. DUNNE**  
 138 AMHERST STREET  
 MILFORD, NH 03055  
 VOL. 8997 PG. 2363 8/15/2017

**23-3-1**  
**MARTIN FAMILY  
 REVOCABLE TRUST**  
 132 AMHERST STREET  
 MILFORD NH 03055  
 VOL. 9072 PG. 1489 5/15/2018

**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



REV.	DATE	DESCRIPTION	C/O	DR	CK
C	9/10/19	MILFORD UTILITY & KV COMMENTS	--	SDI	KCC
B	8/19/19	ADDITIONAL TOWN STAFF COMMENTS	--	SDI	KCC
A	6/24/19	INITIAL TOWN STAFF COMMENTS	--	SDI	KCC

Picked: 9/10/2019 9:41 AM By: SDI  
 H: M:\S\_3203\3203\_05\_0\_Drawings\SRV\_32030505.dwg



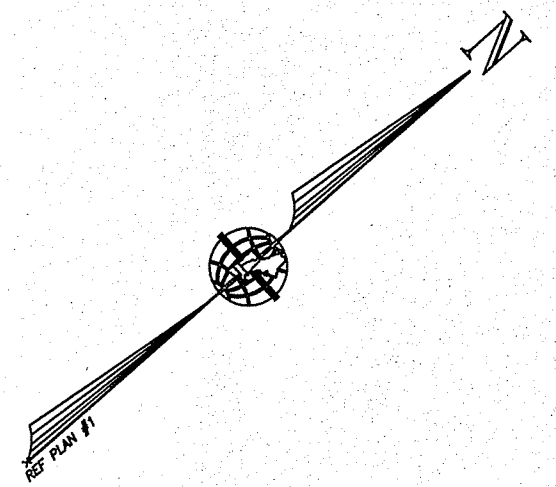


LINE	BEARING	LENGTH
L1	N60°30'53"E	87.31'
L2	S80°06'30"W	50.00'
L3	N09°53'30"W	30.00'
L4	N80°06'30"E	28.00'
L5	N09°53'30"W	50.00'
L6	S80°06'30"W	28.00'

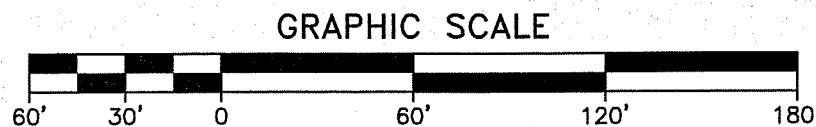
CURVE	RADIUS	LENGTH	DELTA	CHORD DIR.	DISTANCE
C1	25.00	47.27	108°20'42"	S65°18'46"E	40.54
C2	22.00	34.56	90°00'00"	N35°06'30"E	31.11
C3	22.00	34.56	90°00'00"	N54°53'30"W	31.11
C4	250.00	52.68	12°04'22"	S22°17'49"W	52.58

**APPROVED**

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

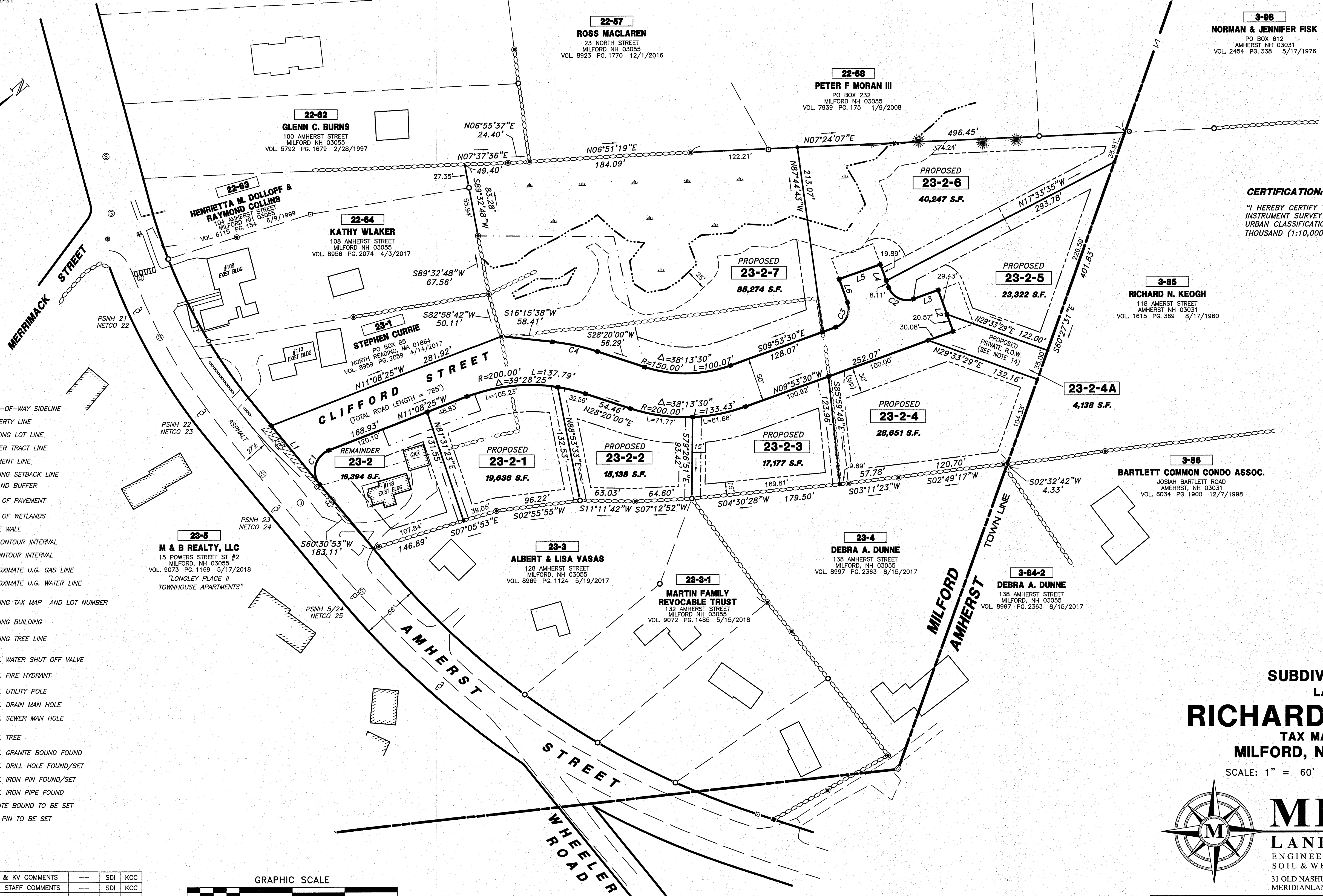


- LEGEND:**
- RIGHT-OF-WAY SIDELINE
  - PROPERTY LINE
  - - - ABUTTING LOT LINE
  - - - FORMER TRACT LINE
  - - - EASEMENT LINE
  - - - BUILDING SETBACK LINE
  - - - WETLAND BUFFER
  - - - EDGE OF PAVEMENT
  - - - EDGE OF WETLANDS
  - - - STONE WALL
  - - - 10' CONTOUR INTERVAL
  - - - 2' CONTOUR INTERVAL
  - - - 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

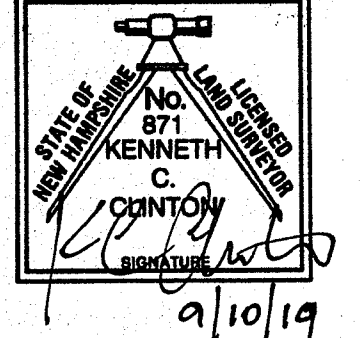


REV.	DATE	DESCRIPTION	C/O	DR	CK
C	9/10/19	MILFORD UTILITY & KV COMMENTS	--	SDI	KCC
B	8/19/19	ADDITIONAL TOWN STAFF COMMENTS	--	SDI	KCC
A	6/24/19	INITIAL TOWN STAFF COMMENTS	--	SDI	KCC

Plotted: 9/10/2019 9:44 AM By: SDI  
 H:\MIS\3203\3203.DWG Drawings\32030505.dwg



**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)".



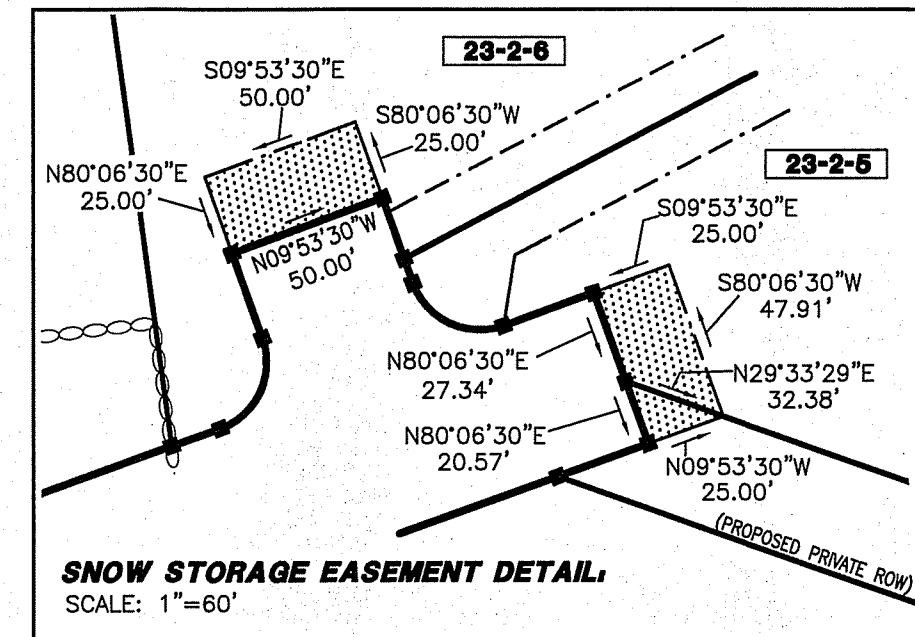
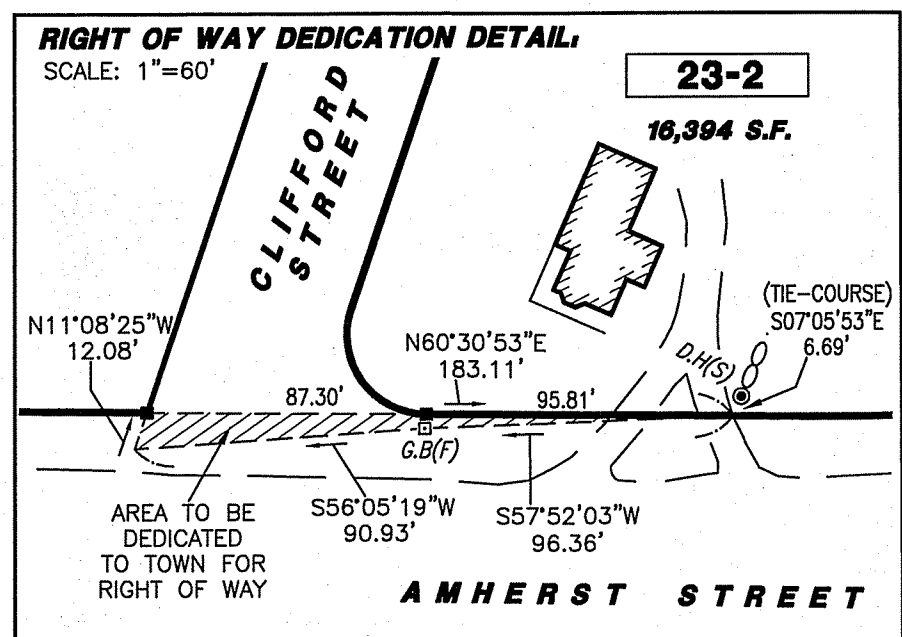
**SUBDIVISION PLAN**  
 LAND OF:  
**RICHARD N. KEOGH**  
 TAX MAP 23 LOT 2  
 MILFORD, NEW HAMPSHIRE  
 SCALE: 1" = 60'      MAY 28, 2019

**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





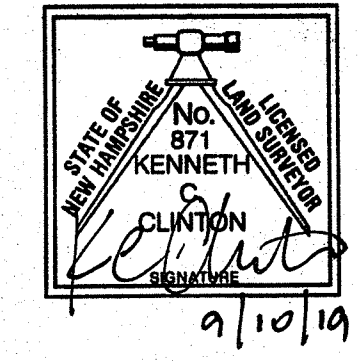
**APPROVED**  
 MILFORD, NH PLANNING BOARD  
 SUB DIVISION #:  
 DATE APPROVED:  
 SIGNED:



- LEGEND:**
- RIGHT-OF-WAY SIDELINE
  - PROPERTY LINE
  - ABUTTING LOT LINE
  - - - FORMER TRACT LINE
  - - - EASEMENT LINE
  - - - BUILDING SETBACK LINE
  - - - WETLAND BUFFER
  - - - 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

- EASEMENT LEGEND:**
- PROPOSED DRAINAGE EASEMENT
  - PROPOSED PRIVATE DRAINAGE EASEMENT
  - PROPOSED COMMON DRIVEWAY EASEMENT
  - PROPOSED SNOW STORAGE EASEMENT

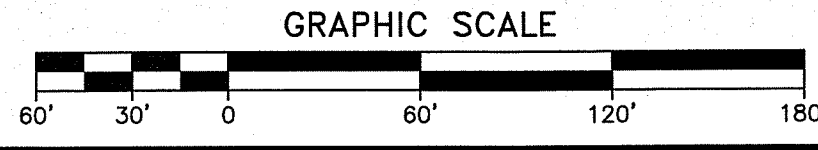
**CERTIFICATION:**  
 "I HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ON-SITE INSTRUMENT SURVEY PERFORMED BY THIS OFFICE WHICH MEETS THE URBAN CLASSIFICATION PRECISION REQUIREMENT OF ONE PART IN TEN THOUSAND (1:10,000)."



**EASEMENT 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

REV.	DATE	DESCRIPTION	C/O	DR	CK
C	9/10/19	MILFORD UTILITY & KV COMMENTS	--	SDI	KCC
B	8/19/19	ADDITIONAL TOWN STAFF COMMENTS	--	SDI	KCC
A	6/24/19	INITIAL TOWN STAFF COMMENTS	--	SDI	KCC



Plotted: 9/10/2019 11:18 AM By: SDI  
 H: \\MS\3203\3203\05\Drawings\SURV\320305C.dwg

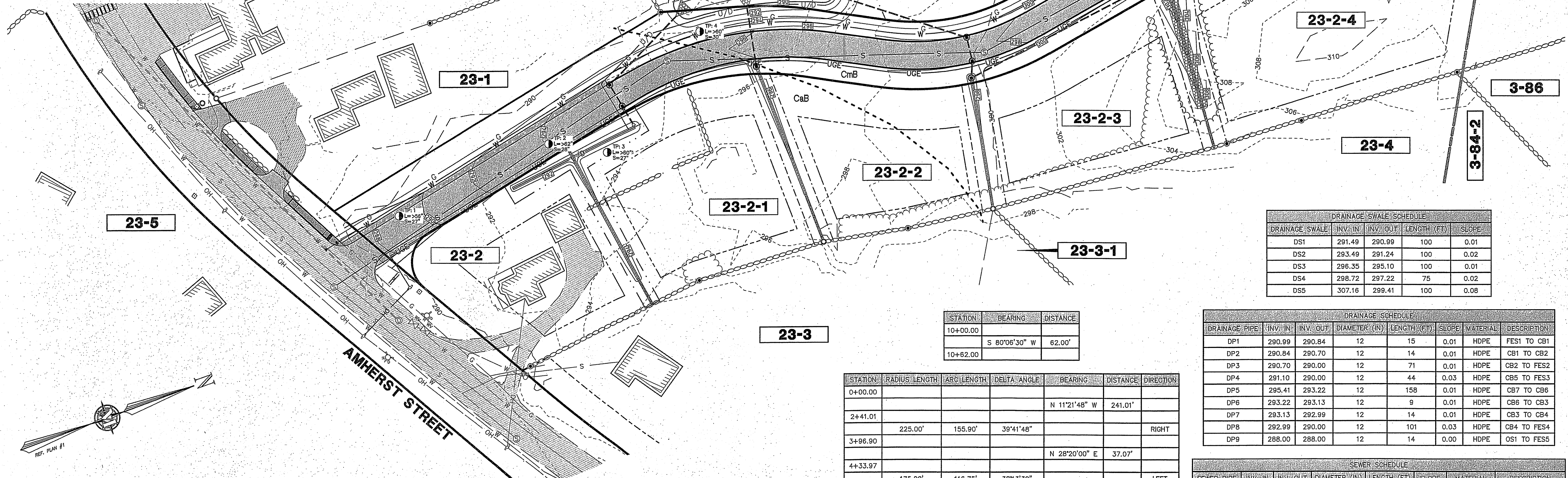


**LEGEND:**

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



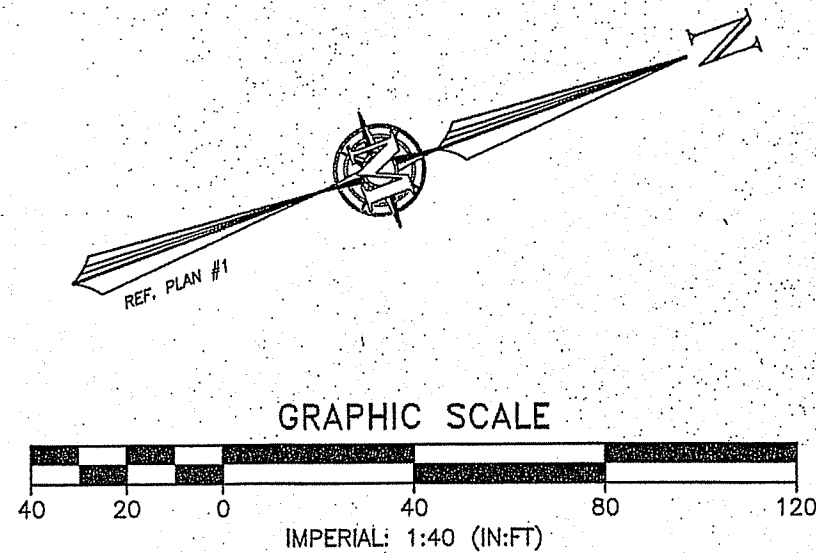
DRAINAGE SWALE SCHEDULE				
DRAINAGE SWALE	INV. IN	INV. OUT	LENGTH (FT)	SLOPE
DS1	291.49	290.99	100	0.01
DS2	293.49	291.24	100	0.02
DS3	296.35	295.10	100	0.01
DS4	298.72	297.22	75	0.02
DS5	307.16	299.41	100	0.08

STATION	BEARING	DISTANCE
10+00.00		
	S 80°08'30" W	62.00'
10+62.00		

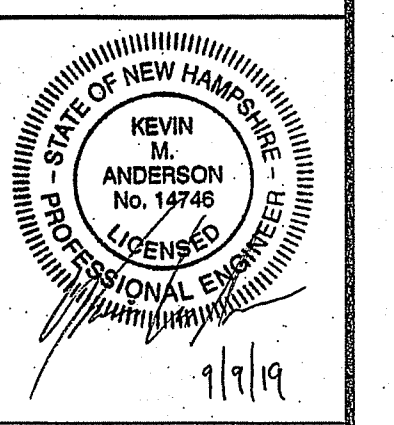
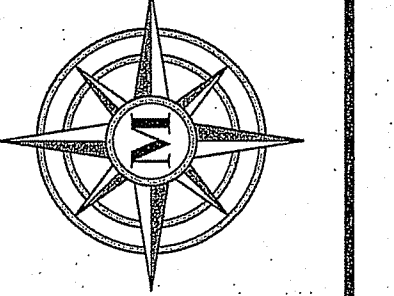
STATION	RADIUS	LENGTH	ARC LENGTH	DELTA ANGLE	BEARING	DISTANCE	DIRECTION
0+00.00					N 11°21'48" W	241.01'	
2+41.01	225.00'	155.90'	39°41'48"				RIGHT
3+96.90					N 28°20'00" E	37.07'	
4+33.97							LEFT
5+50.72	175.00'	116.75'	38°13'30"				
7+85.79					N 09°53'30" W	235.07'	

DRAINAGE SCHEDULE						
DRAINAGE PIPE	INV. IN	INV. OUT	DIAMETER (IN)	LENGTH (FT)	SLOPE	DESCRIPTION
DP1	290.99	290.84	12	15	0.01	HDPE FES1 TO CB1
DP2	290.84	290.70	12	14	0.01	HDPE CB1 TO CB2
DP3	290.70	290.00	12	71	0.01	HDPE CB2 TO FES2
DP4	291.10	290.00	12	44	0.03	HDPE CB5 TO FES3
DP5	295.41	293.22	12	158	0.01	HDPE CB7 TO CB6
DP6	293.22	293.13	12	9	0.01	HDPE CB6 TO CB3
DP7	293.13	292.99	12	14	0.01	HDPE CB3 TO CB4
DP8	292.99	290.00	12	101	0.03	HDPE CB4 TO FES4
DP9	288.00	288.00	12	14	0.00	HDPE OS1 TO FES5

SEWER SCHEDULE						
SEWER PIPE	INV. IN	INV. OUT	DIAMETER (IN)	LENGTH (FT)	SLOPE	DESCRIPTION
SP1	294.91	290.21	8	268	0.0176	PVC SDR 35 SMH3 TO SMH2
SP2	290.11	289.19	8	231	0.0040	PVC SDR 35 SMH2 TO SMH1
SP3	289.09	279.41	8	293	0.0000	PVC SDR 35 SMH1 TO EX. SMH1



**MERIDIAN**  
**LAND SERVICES, INC.**  
 ENGINEERING | SURVEYING | ERMATING  
 SOIL & WETLAND MAPPING | SEPTIC DESIGN  
 MERIDIANLANDSERVICES.COM  
 905-573-1384



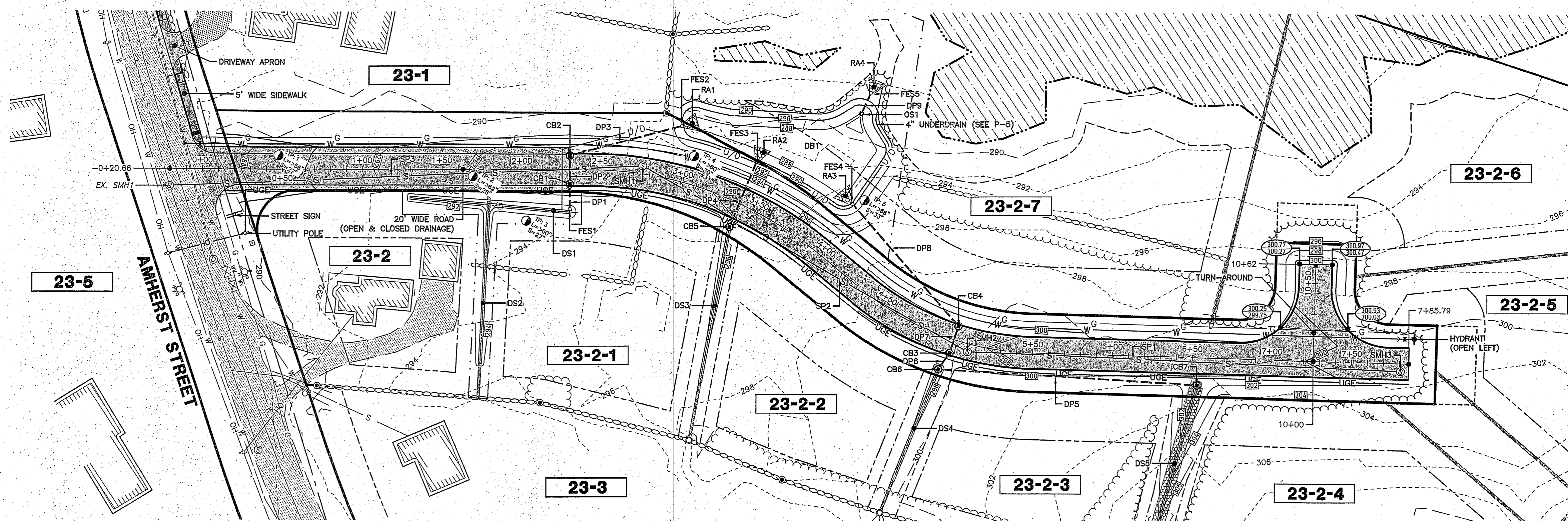
REV.	DATE	DESCRIPTION
A	5/28/19	PLANNING BOARD SUBMISSION
B	6/25/19	INITIAL TOWN STAFF COMMENTS
C	8/1/19	REVISE DRAINAGE LAYOUT
D	8/19/19	ADDITIONAL TOWN STAFF COMMENTS
E	8/23/19	KV PARTNERS REVIEW COMMENTS
F	9/9/19	KV PARTNERS / TOWN COMMENTS

**OVERVIEW PLAN**  
 FEBRUARY 25, 2019

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

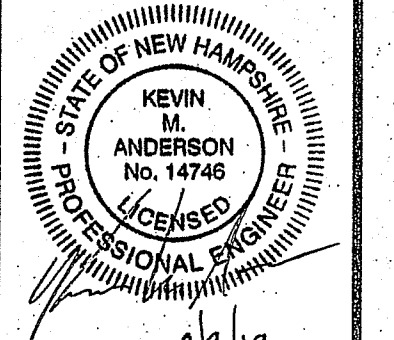
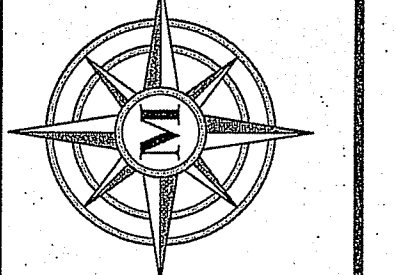
**P-1**  
 SHEET  
 FILE: 3203P05F.dwg  
 PROJECT: 3203.05  
 SHEET NO. 5 OF 16



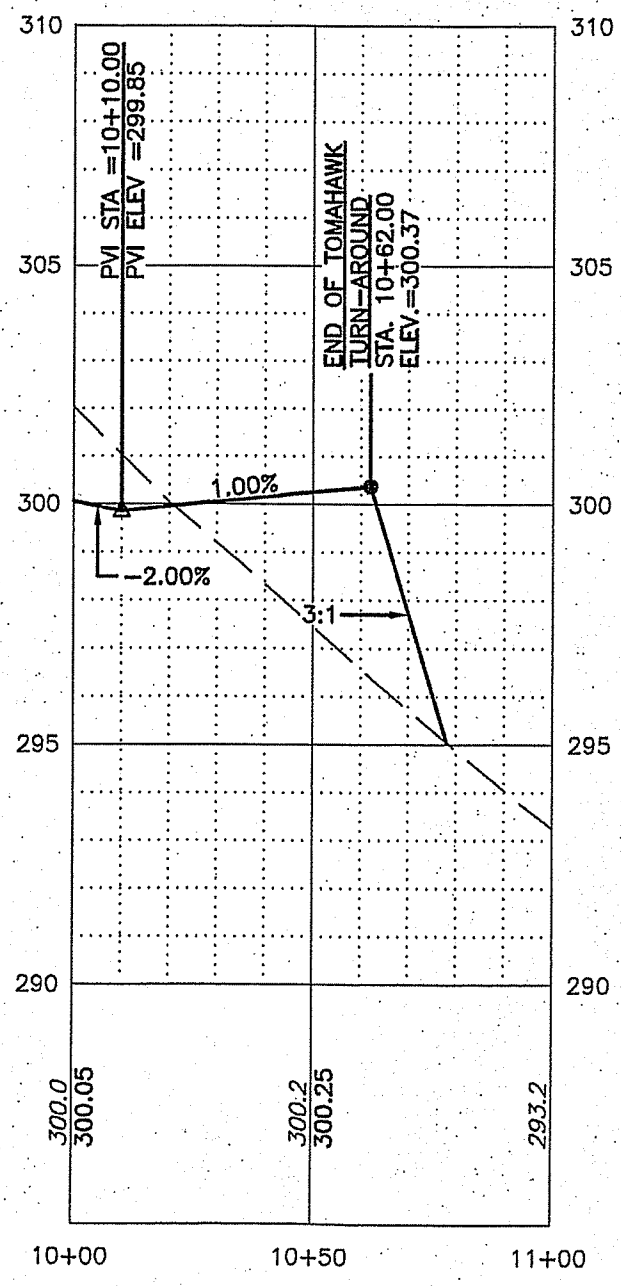
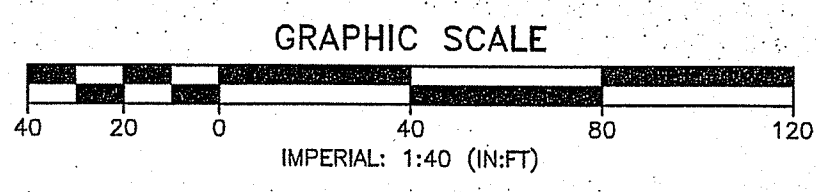
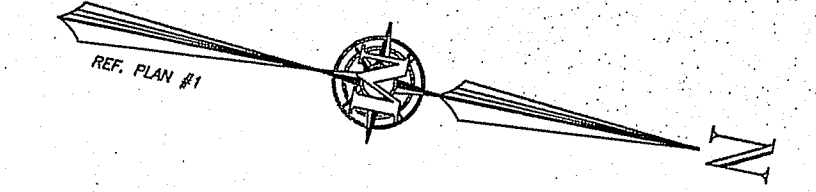
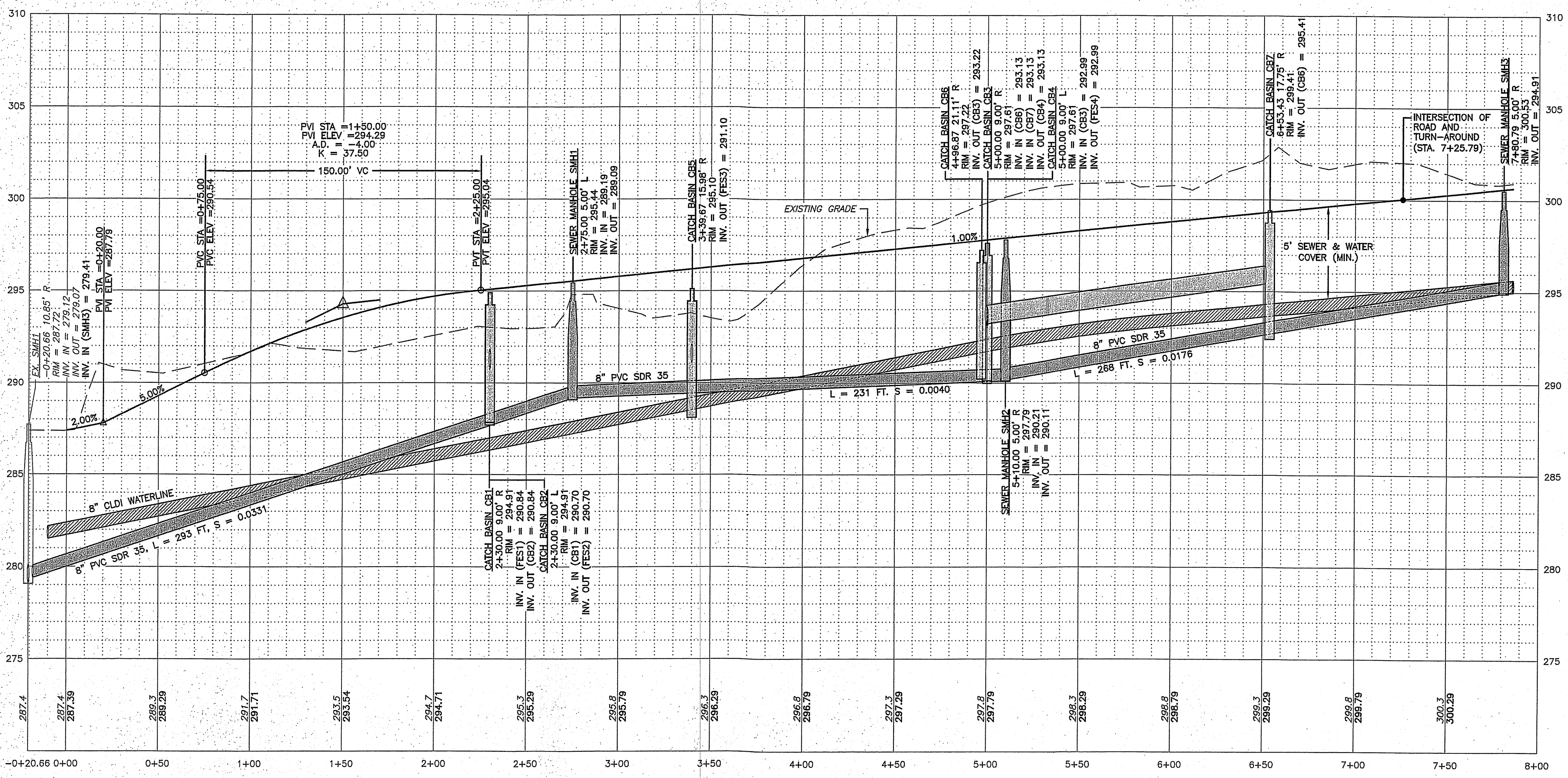


STRUCTURE	STATION	OFFSET	RIM
CB1	2+30.00	9.00' R	294.91
CB2	2+30.00	9.00' L	294.91
CB3	5+00.00	9.00' R	287.97
CB4	5+00.00	9.00' L	286.97
CB5	3+39.67	15.98' R	295.10
CB6	4+96.87	21.11' R	297.22
CB7	6+53.43	17.75' R	299.41
SMH1	2+75.00	5.00' L	295.44
SMH2	5+10.00	5.00' R	297.79
SMH3	7+80.79	5.00' R	300.53

**MERIDIAN**  
**LAND SERVICES, INC.**  
 ENGINEERING | SURVEYING | PERMITTING  
 SOIL & WETLAND MAPPING | SEPTIC DESIGN  
 31 OLD NASTUA ROAD, AMHERST, NH 03811  
 MERIDIANLANDSERVICES.COM  
 TEL: 603-673-1441  
 FAX: 603-673-1594



REV.	DATE	DESCRIPTION	DR	CK
A	1/25/19	PLANNING BOARD SUBMISSION	DR	CK
B	8/25/19	PLANNING BOARD SUBMISSION	DR	CK
C	8/1/19	REUSE DRAINAGE LAYOUT	DR	CK
D	8/19/19	REUSE DRAINAGE LAYOUT	DR	CK
E	8/23/19	ADDITIONAL TOWN STAFF COMMENTS	DR	CK
F	9/9/19	KV PARTNERS REVIEW COMMENTS	DR	CK
G	9/9/19	KV PARTNERS / TOWN COMMENTS	DR	CK



**PROPOSED ROAD**  
**AMHERST STREET**  
**MAP 23 LOT 2**  
**MILFORD, NEW HAMPSHIRE**

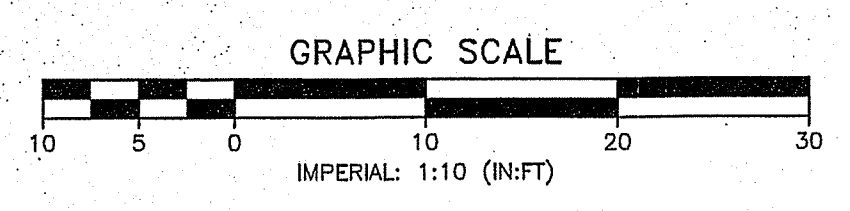
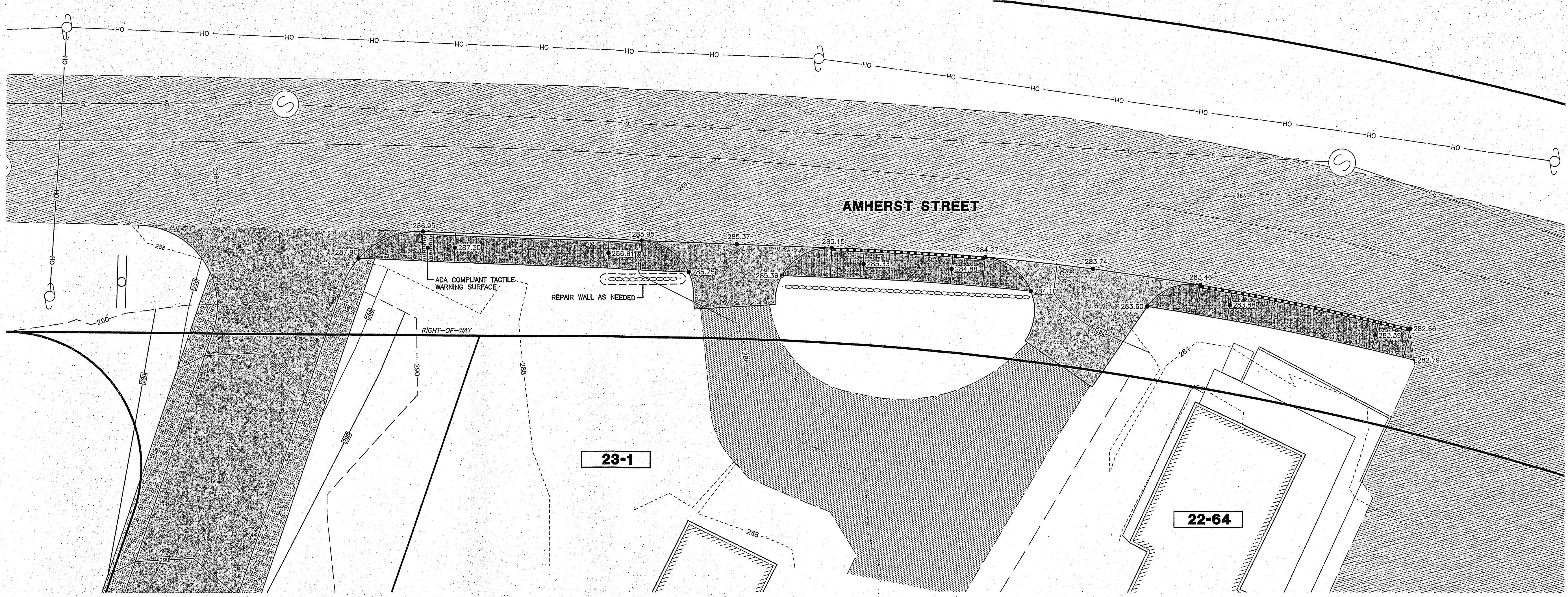
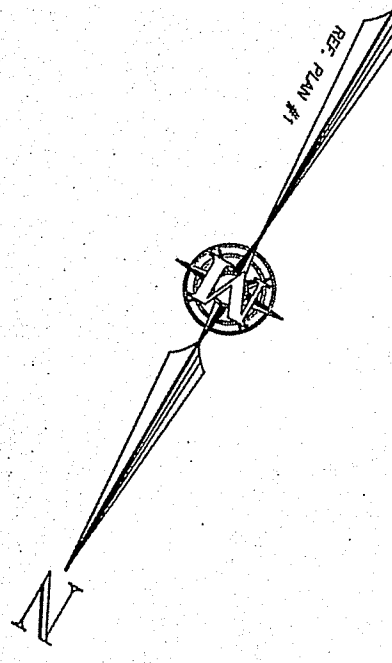
**RICHARD KEOGH**  
 AMHERST STREET  
 MAP 23 LOT 2  
 MILFORD, NEW HAMPSHIRE

**P-2**  
 SHEET

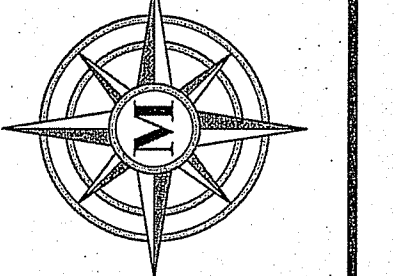
FILE: 3203P05F.dwg  
 PROJECT: 3203.05  
 SHEET NO. 6 OF 16

H:\FILES\0203\0203.05\Drawings\ENG\3203P05F.dwg





**MERIDIAN**  
**LAND SERVICES, INC.**  
 ENGINEERING | SURVEYING | PERMITTING  
 SOIL & WETLAND MAPPING | SEPTIC DESIGN  
 31 OLD WASHUA ROAD, AMHERST, NE 08051  
 MERIDIANLANDSERVICES.COM  
 TEL: 603-673-1441  
 FAX: 603-673-1586



STATE OF NEW HAMPSHIRE  
 KEVIN M. ANDERSON  
 No. 14749  
 LICENSED PROFESSIONAL ENGINEER  
 9/9/19

REV.	DATE	DESCRIPTION	DR	CK
I				
H				
G				
F	9/9/19	KV PARTNERS / TOWN COMMENTS	BJC	KVA
E	8/23/19	KV PARTNERS REVIEW COMMENTS	BJC	KVA
D	8/19/19	ADDITIONAL TOWN STAFF COMMENTS	BJC	KVA
C	8/1/19	REVISE DRAINAGE LAYOUT	BJC	KVA
B	6/28/19	INITIAL TOWN STAFF COMMENTS	BJC	KVA
A	5/28/19	PLANNING BOARD SUBMISSION	BJC	KVA

**AMHERST STREET  
 SIDEWALK PLAN**

SCALE: VARIES  
 FEBRUARY 25, 2019

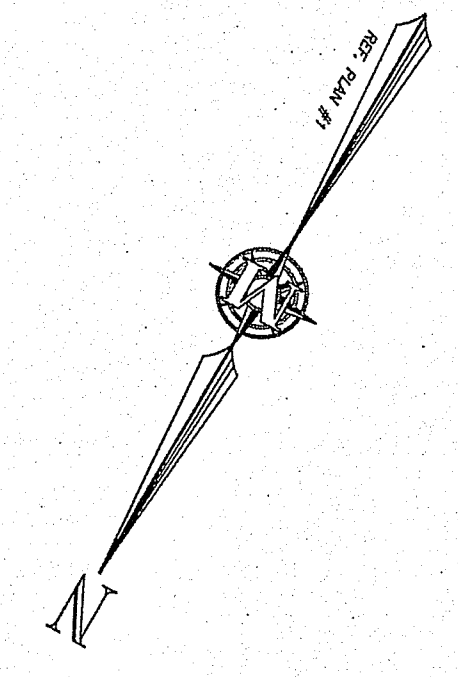
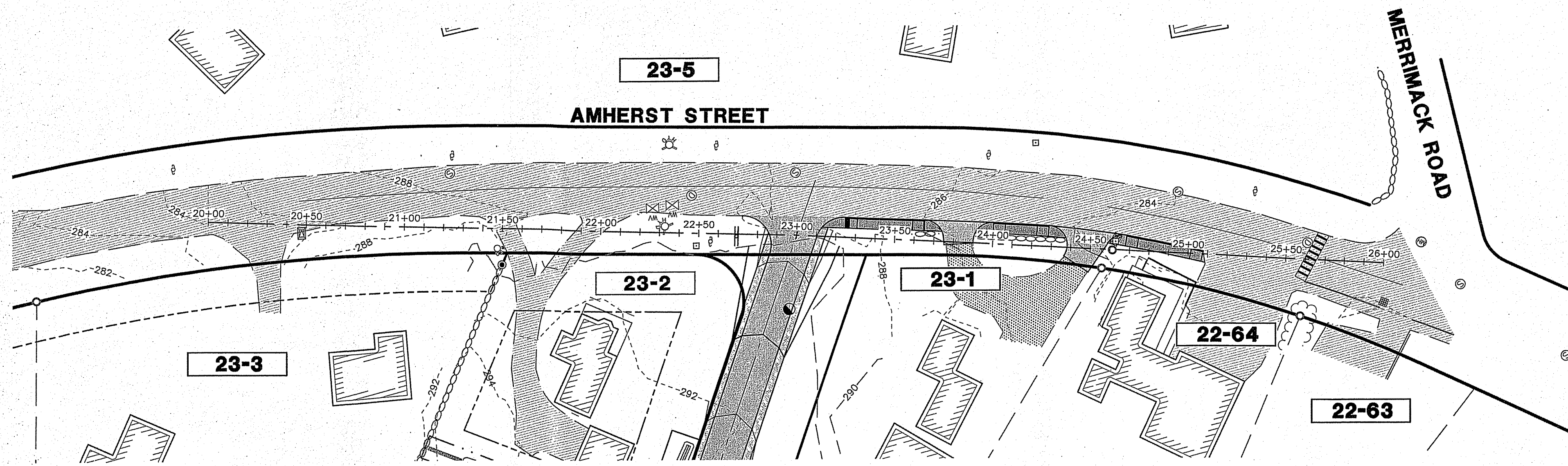
**RICHARD KOECH  
 AMHERST STREET  
 MAP 23 LOT 2  
 MILFORD, NEW HAMPSHIRE**

**P-3**  
 SHEET

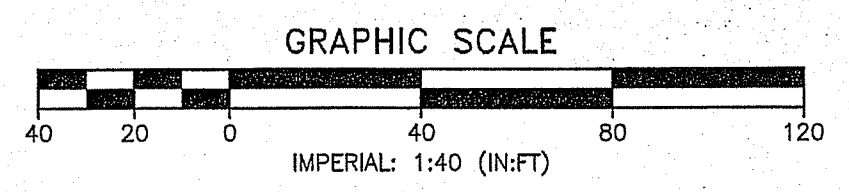
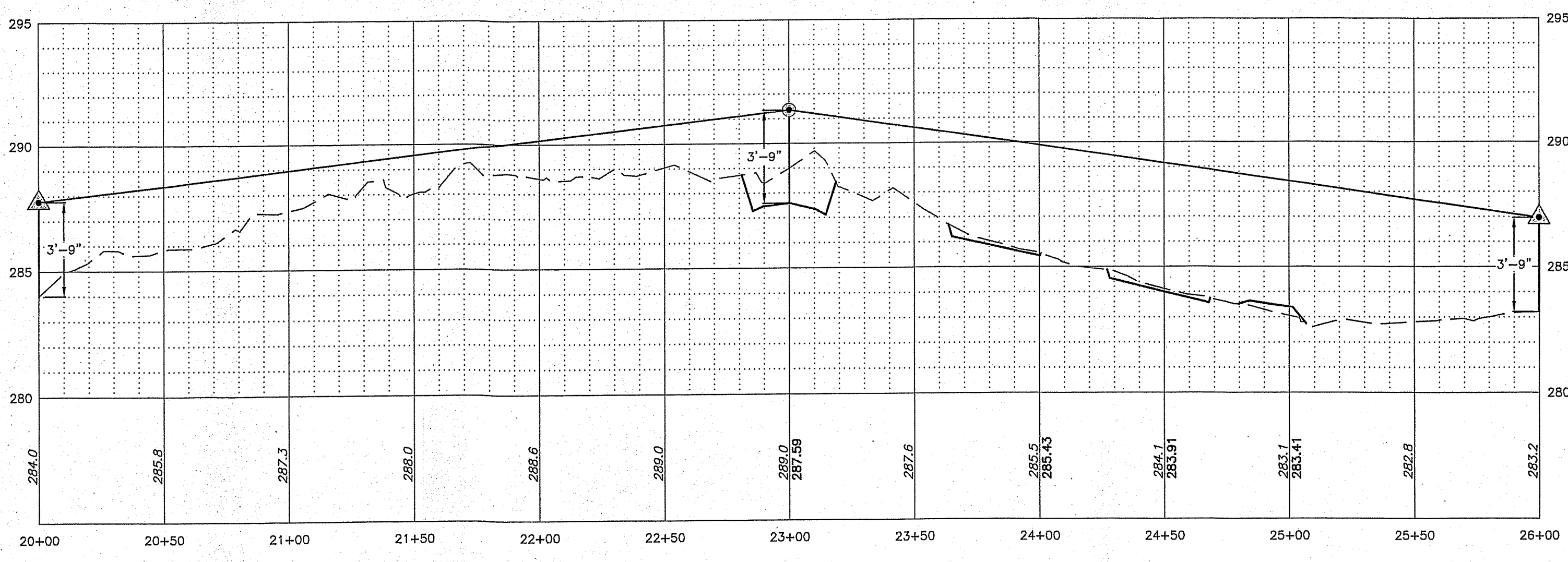
FILE: 3203P05F.dwg  
 PROJECT: 3203.05  
 SHEET NO. 7 OF 16

H:\MIS\052605\3203.05\Drawings\ENR\3203P05F.dwg  
 3/20/2019 10:54:00 AM  
 R:\MIS\052605\3203.05\Drawings\ENR\3203P05F.dwg

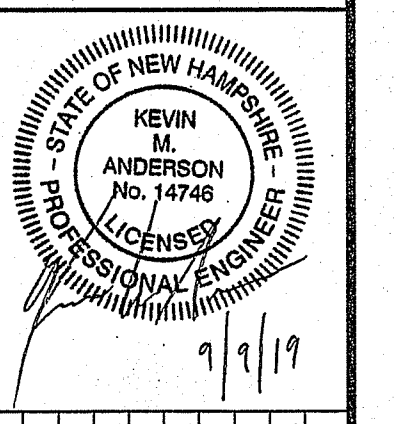
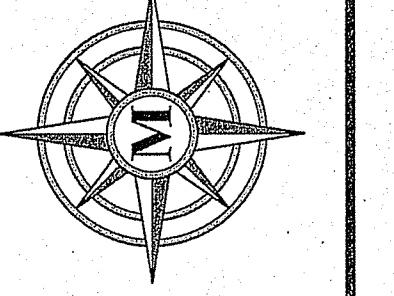




**SIGHT DISTANCE REQUIREMENTS**  
 POSTED SPEED LIMIT ON AMHERST STREET: 30 MPH  
 REQUIRED SIGHT DISTANCE: 300 FEET (FOR 26-35 MPH SPEED LIMIT)



**MERIDIAN**  
 LAND SERVICES, INC.  
 ENGINEERING | SURVEYING | PERMITTING  
 SOIL & WETLAND MAPPING | SEPTIC DESIGN  
 100 WINDY HILL ROAD, MILFORD, NH 03055  
 MERIDIANLANDSERVICES.COM FAX 603-671-1584



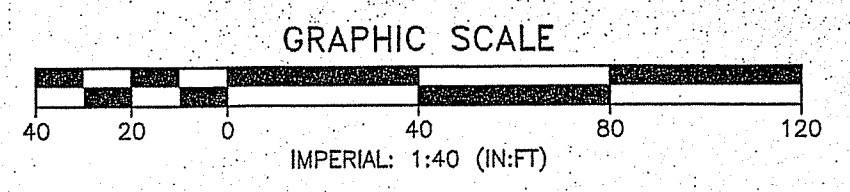
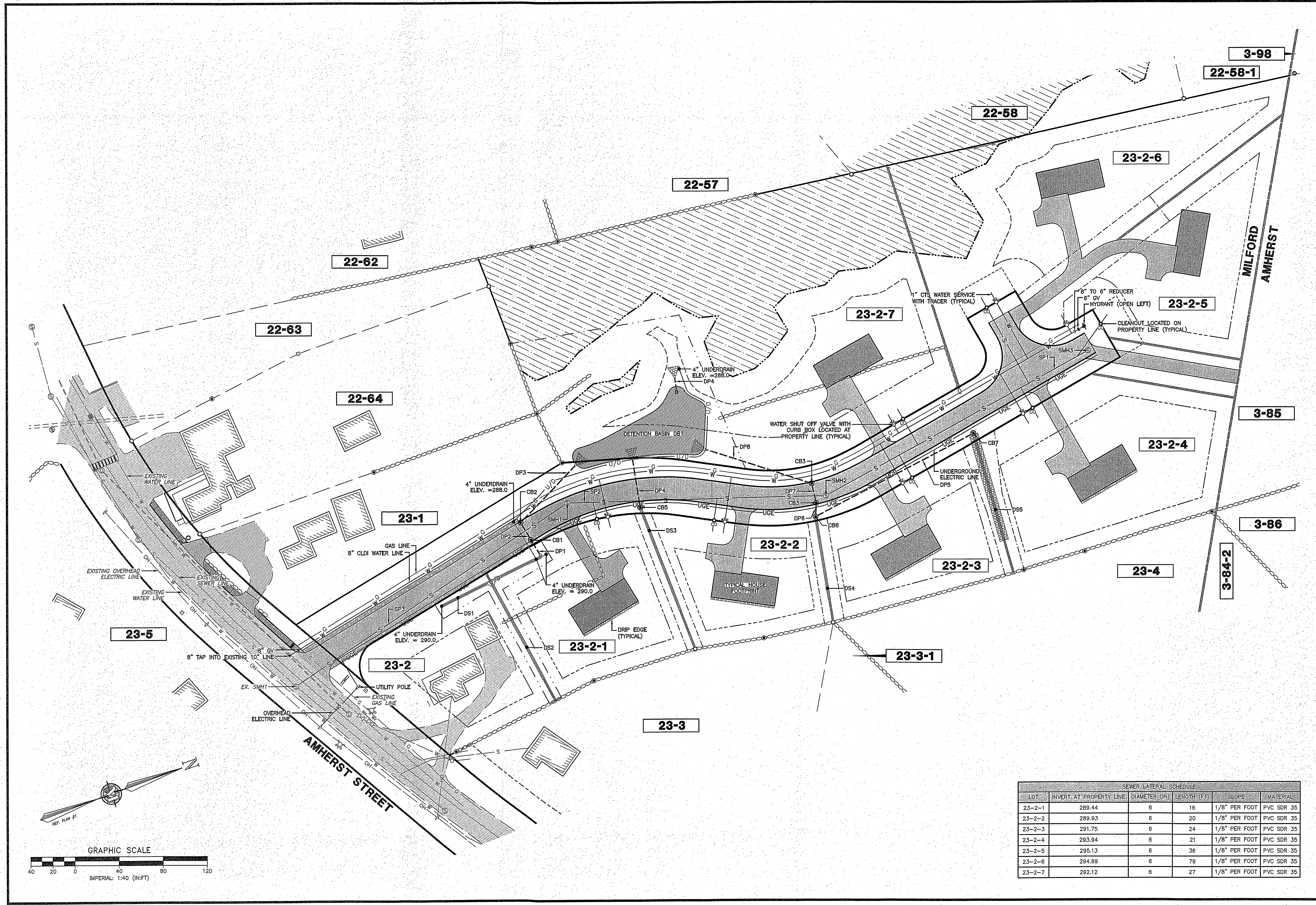
REV.	DATE	DESCRIPTION	BY	CHK
H				
G	9/9/19	KV PARTNERS / TOWN COMMENTS	B/C	KWA
F	8/23/19	KV PARTNERS REVIEW COMMENTS	B/C	KWA
E	8/19/19	ADDITIONAL TOWN STAFF COMMENTS	B/C	KWA
D	8/17/19	REVISE DRAINAGE LAYOUT	B/C	KWA
C	8/17/19	INITIAL TOWN STAFF COMMENTS	B/C	KWA
B	8/25/19	PLANNING BOARD SUBMISSION	B/C	KWA
A	5/23/19		B/C	KWA

**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: 3203P05F.dwg  
 PROJECT: 3203.05  
 SHEET NO. 8 OF 16

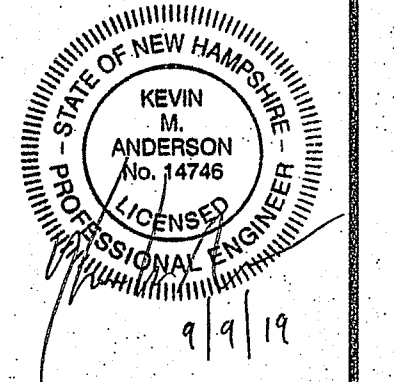
plotted: 9/10/2019 8:12 AM by: bdc  
 H:\MS\03203\3203.05\Drawings\ENC\3203P05F.dwg





SEWER LATERAL SCHEDULE					
LOT	INVERT AT PROPERTY LINE	DIAMETER (IN)	LENGTH (FT)	SLOPE	MATERIAL
23-2-1	289.44	6	16	1/8" PER FOOT	PVC SDR 35
23-2-2	289.93	6	20	1/8" PER FOOT	PVC SDR 35
23-2-3	291.75	6	24	1/8" PER FOOT	PVC SDR 35
23-2-4	293.94	6	21	1/8" PER FOOT	PVC SDR 35
23-2-5	295.13	6	36	1/8" PER FOOT	PVC SDR 35
23-2-6	294.69	6	79	1/8" PER FOOT	PVC SDR 35
23-2-7	292.12	6	27	1/8" PER FOOT	PVC SDR 35

**MERIDIAN**  
**LAND SERVICES, INC.**  
 ENGINEERING | SURVEYING | PERMITTING  
 SOIL & WETLAND MAPPING | SEPTIC DESIGN  
 31 OLD NASHUA ROAD, AMHERST, NH 03091  
 TEL: 603-671-1941  
 MERIDIANLANDSERVICES.COM  
 FAX: 603-671-1586



REV.	DATE	DESCRIPTION
A	5/25/19	PLANNING BOARD SUBMISSION
B	8/25/19	INITIAL TOWN STAFF COMMENTS
C	9/17/19	REVISE DRAINAGE LAYOUT
D	9/19/19	ADDITIONAL TOWN STAFF COMMENTS
E	9/23/19	KV PARTNERS REVIEW COMMENTS
F	9/29/19	KV PARTNERS / TOWN COMMENTS
G		
H		

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

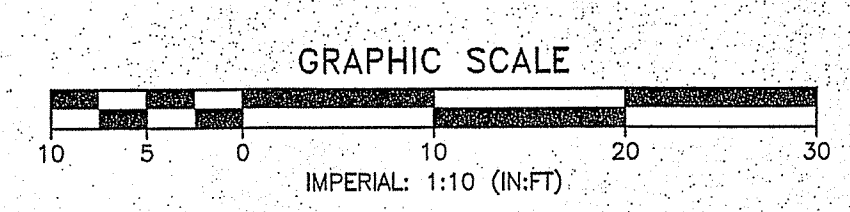
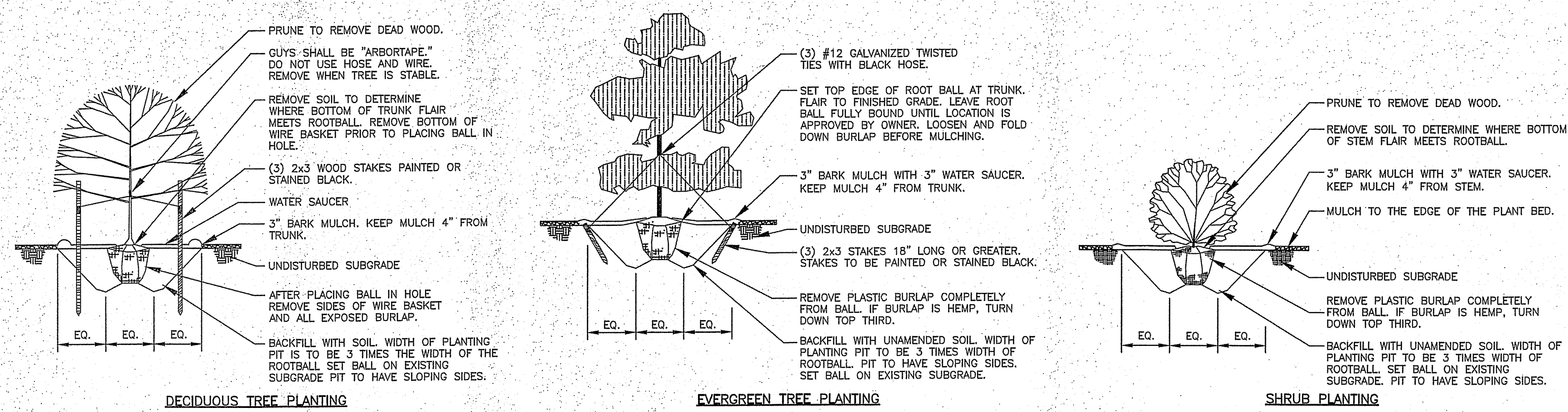
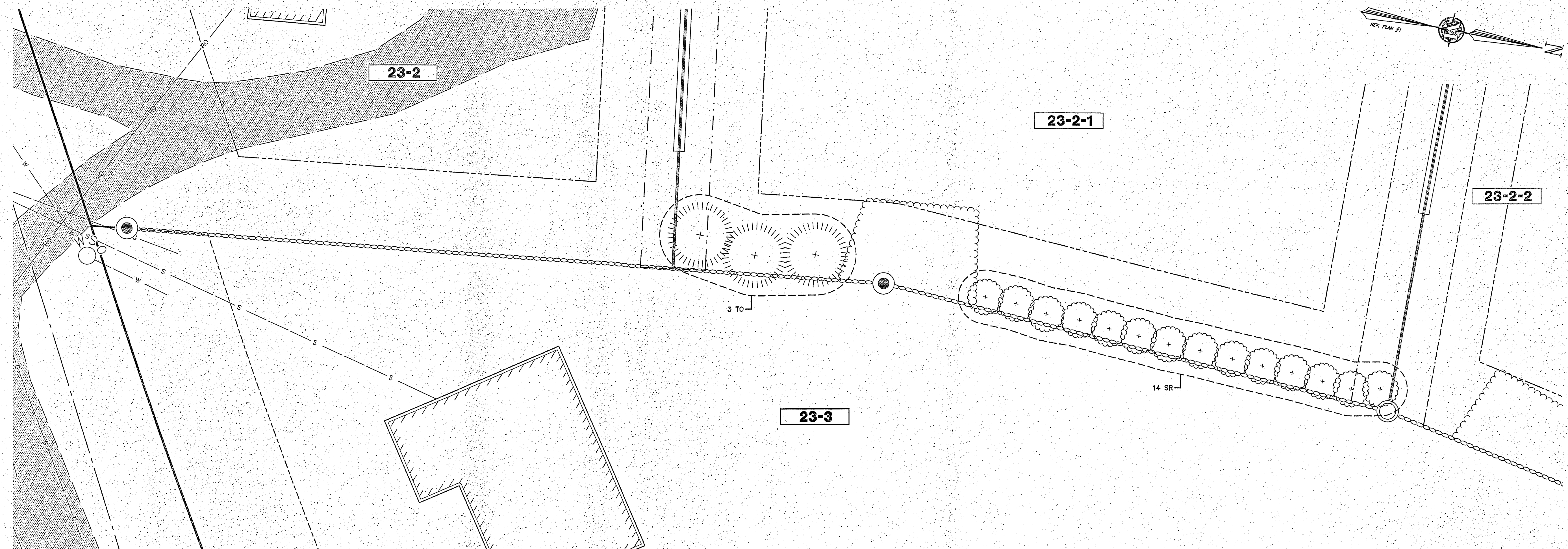
**P-5**  
 SHEET  
 FILE: 3203P05F.dwg  
 PROJECT: 3203.05  
 SHEET NO. 9 OF 16

Plotted: 9/10/2019 9:12 AM By: BJC  
 H:\MLS\3203\3203.05\Drawings\ENG\3203P05F.dwg



PLANTING SCHEDULE				
KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE
TO	3	THUJA OCCIDENTALIS NIGRA	DARK AMERICAN ARBORVITAE	7' TO 8'
SR	14	SYRINGA VULGARIS	COMMON LILAC	3' TO 4'

SEE NOTE 14 OF 'CONSTRUCTION SEQUENCE NOTES' ON SHEET D-3 REGARDING INSTALLATION.



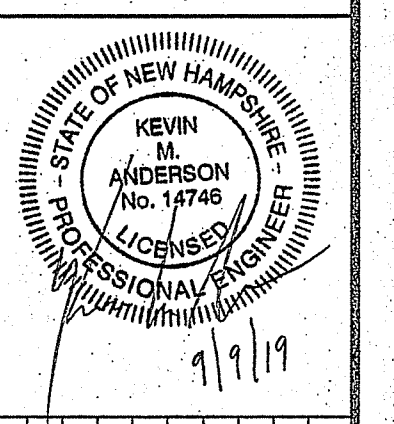
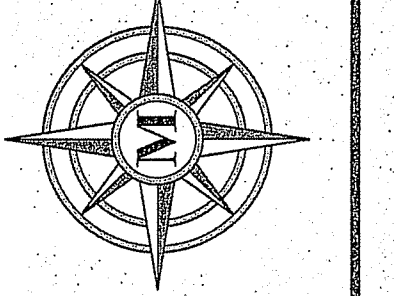
PLANTING DETAIL

SCALE: NONE 1 LS-1

REV.	DATE	DESCRIPTION	DR	CK
H				
G				
F	9/9/19	KV PARTNERS / TOWN COMMENTS	EJC	KMA
E	8/23/19	KV PARTNERS REVIEW COMMENTS	EJC	KMA
D	8/19/19	ADDITIONAL TOWN STAFF COMMENTS	EJC	KMA
C	8/17/19	REVISE DRAINAGE LAYOUT	EJC	KMA
B	8/25/19	INITIAL TOWN STAFF COMMENTS	EJC	KMA
A	1/5/20/19	PLANNING BOARD SUBMISSION	EJC	KMA

LANDSCAPING PLAN  
RICHARD KEOGH  
AMHERST STREET  
MAP 23 LOT 2  
MILFORD, NEW HAMPSHIRE  
FEBRUARY 25, 2019  
SCALE: 1" = 10'





REV.	DATE	DESCRIPTION	DR	CR
A	5/25/19	INITIAL TOWN STAFF COMMENTS	B/C	KMA
B	6/25/19	PLANNING BOARD SUBMISSION	B/C	KMA
C	9/19/19	REVISE DRAINAGE LAYOUT	B/C	KMA
D	9/19/19	ADDITIONAL TOWN STAFF COMMENTS	B/C	KMA
E	9/23/19	KV PARTNERS REVIEW COMMENTS	B/C	KMA
F	9/23/19	KV PARTNERS / TOWN COMMENTS	B/C	KMA

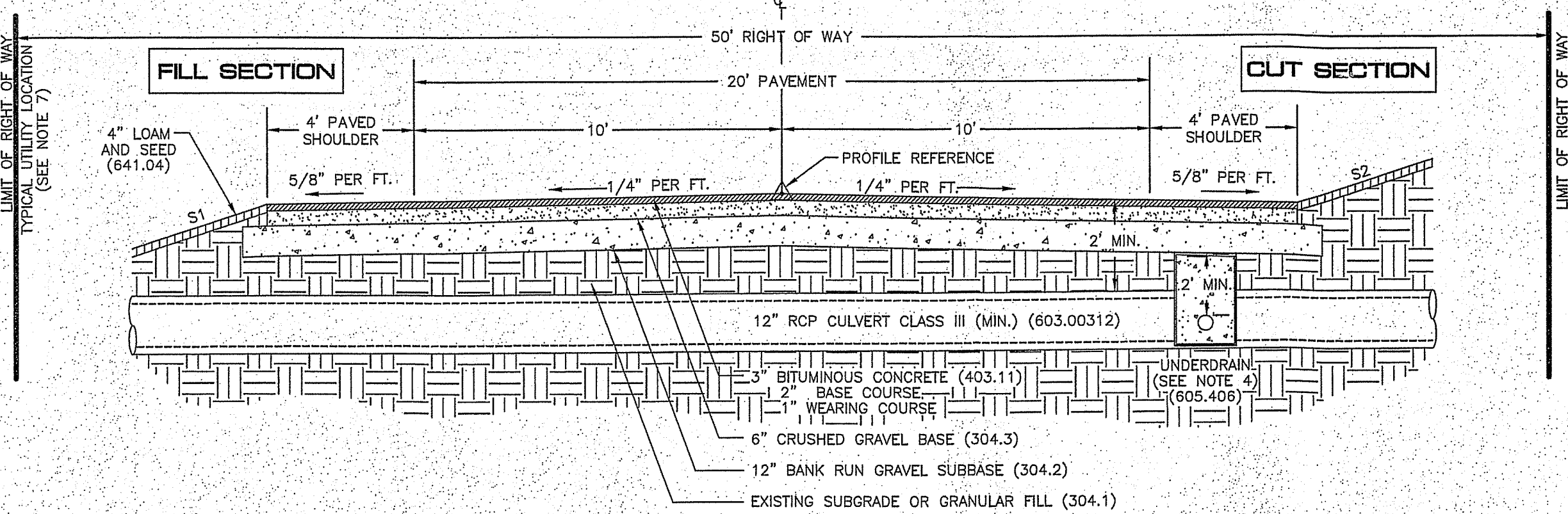
REV.	DATE	DESCRIPTION	DR	CR
A	5/25/19	INITIAL TOWN STAFF COMMENTS	B/C	KMA
B	6/25/19	PLANNING BOARD SUBMISSION	B/C	KMA
C	9/19/19	REVISE DRAINAGE LAYOUT	B/C	KMA
D	9/19/19	ADDITIONAL TOWN STAFF COMMENTS	B/C	KMA
E	9/23/19	KV PARTNERS REVIEW COMMENTS	B/C	KMA
F	9/23/19	KV PARTNERS / TOWN COMMENTS	B/C	KMA

**CONSTRUCTION DETAILS**

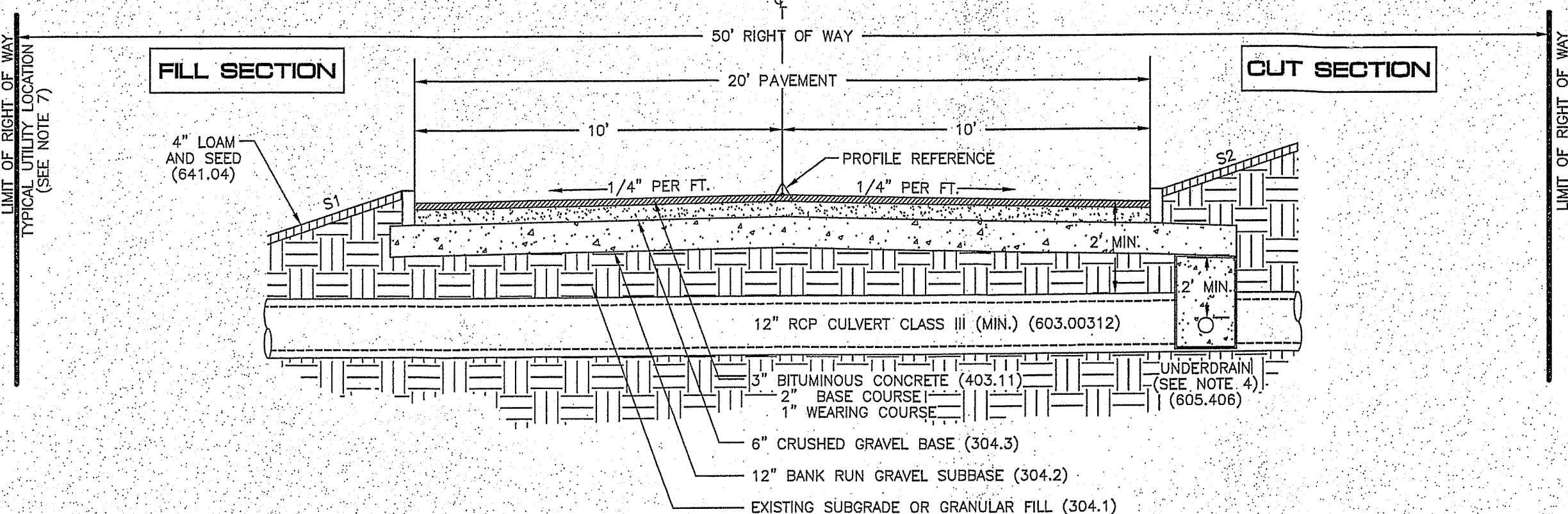
RICHARD KEOGH  
 AMHERST STREET  
 MAP 28 LOT 2  
 MILFORD, NEW HAMPSHIRE

SCALE: VARIES  
 FEBRUARY 25, 2019

**ROADWAY SECTION - OPEN DRAINAGE**



**ROADWAY SECTION - CLOSED DRAINAGE**



**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:

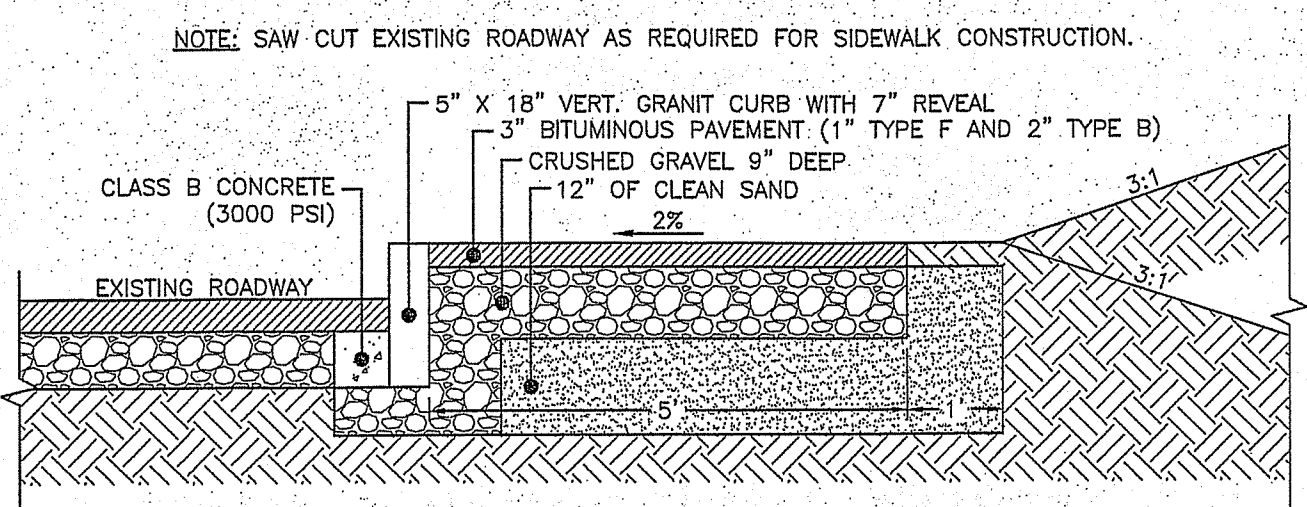
DISTANCE TO ORIGINAL GROUND	S1 (FILL)	S2 (CUT)
LESS THAN 10'	4:1	3:1
10' TO 20'	3:1	2:1
GREATER THAN 20'	2:1	2:1
LEDGE	-	1:2

- 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.

**GUARDRAIL LOCATIONS**

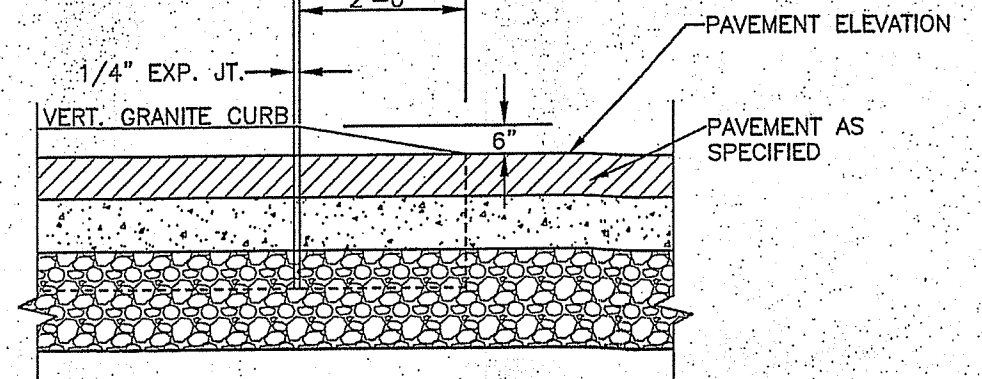
IF THE FILL SLOPE IS STEEPER THAN 4:1 WITH MORE THAN 10' OF FILL, A GUARDRAIL SHALL BE PROVIDED.

**TYPICAL ROAD CROSS-SECTIONS**

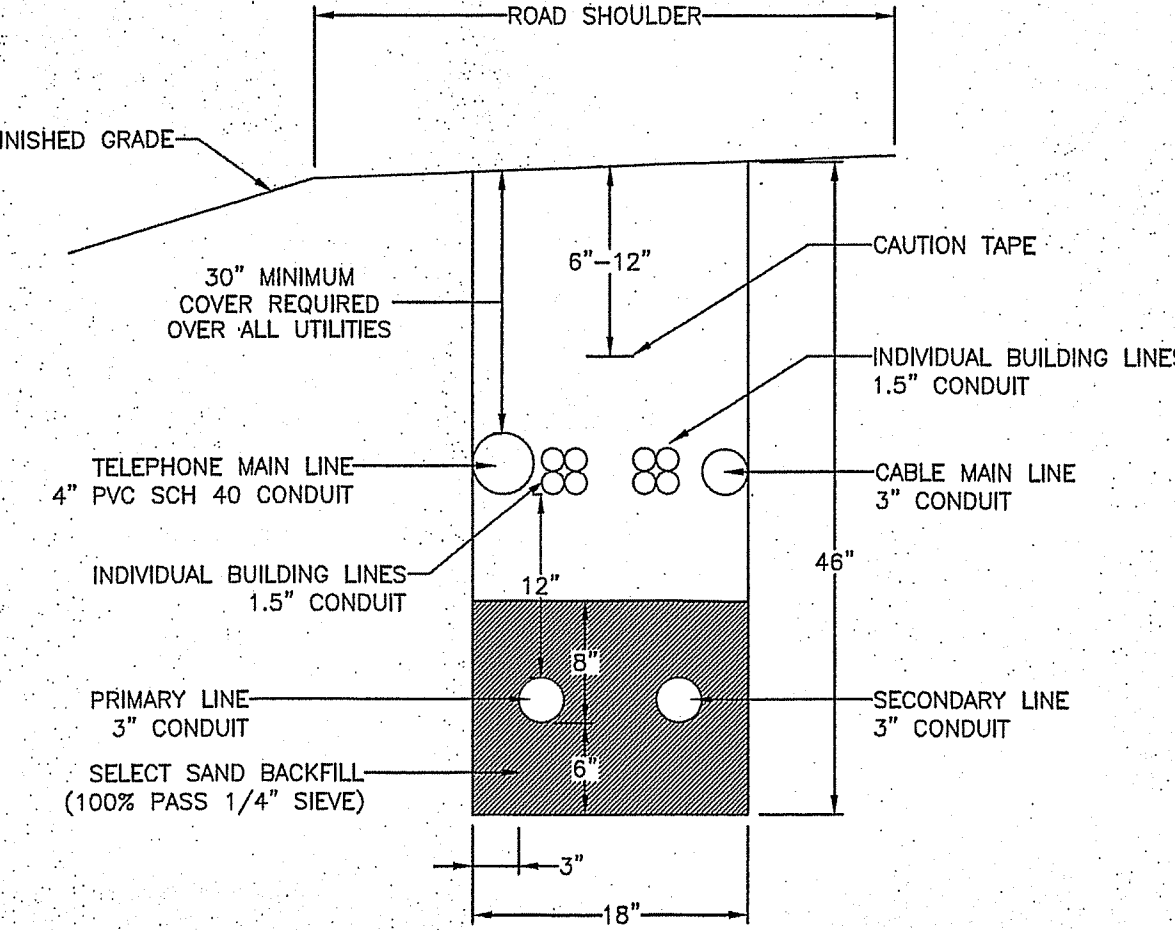


**SIDEWALK - ASPHALT**

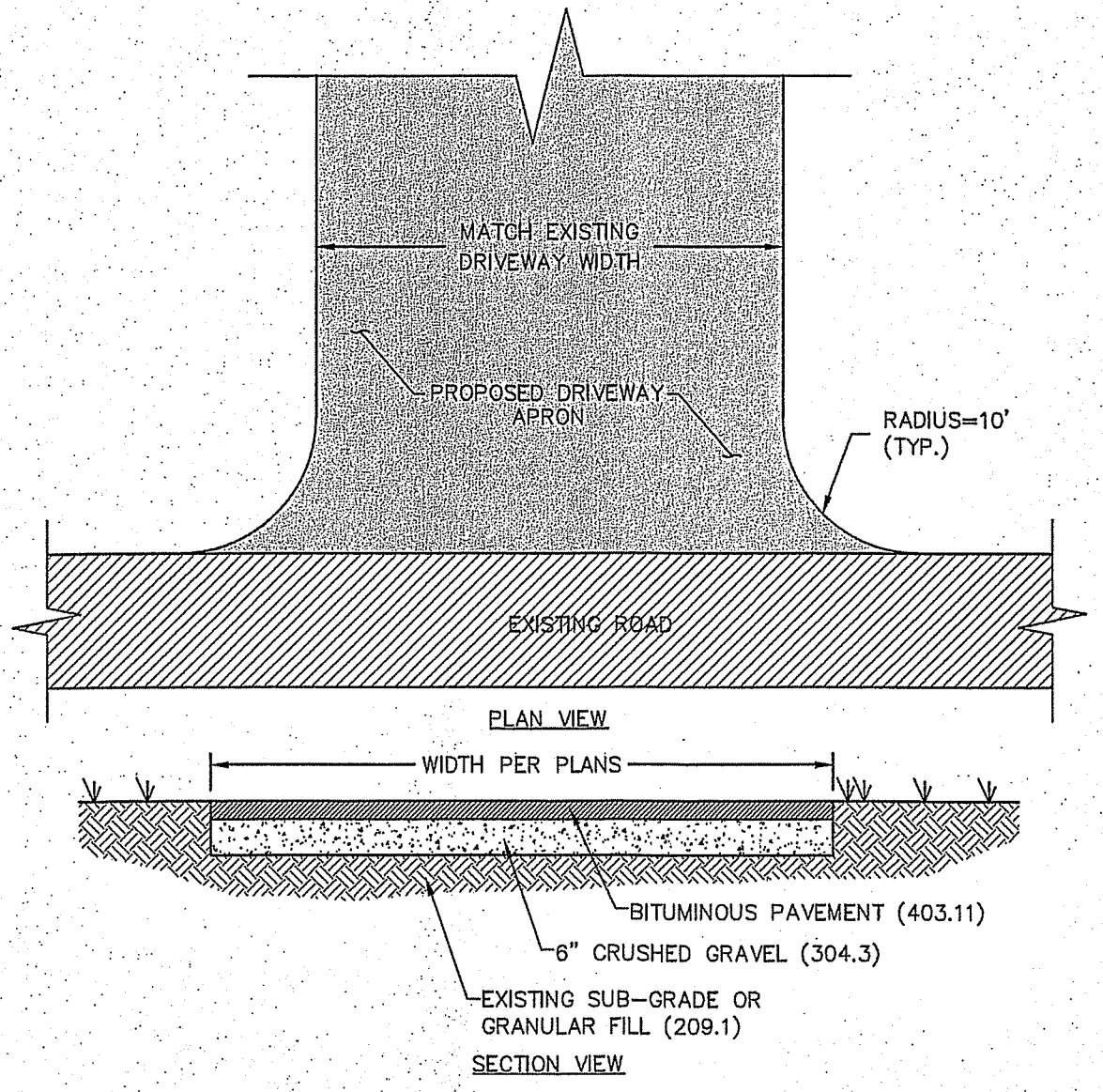
**CURB - TYPICAL END TIP DOWN**



**TYPICAL UTILITY TRENCH**



**PAVED DRIVEWAY APRON (LOT 23-1)**



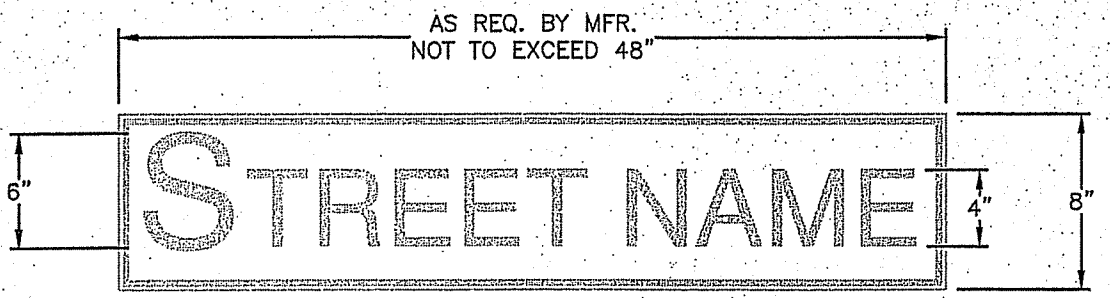
**TYPICAL DRIVEWAY - SECTION**

**TYPICAL DRIVEWAY PLAN VIEW**

**DRIVEWAY CONSTRUCTION REQUIREMENTS**

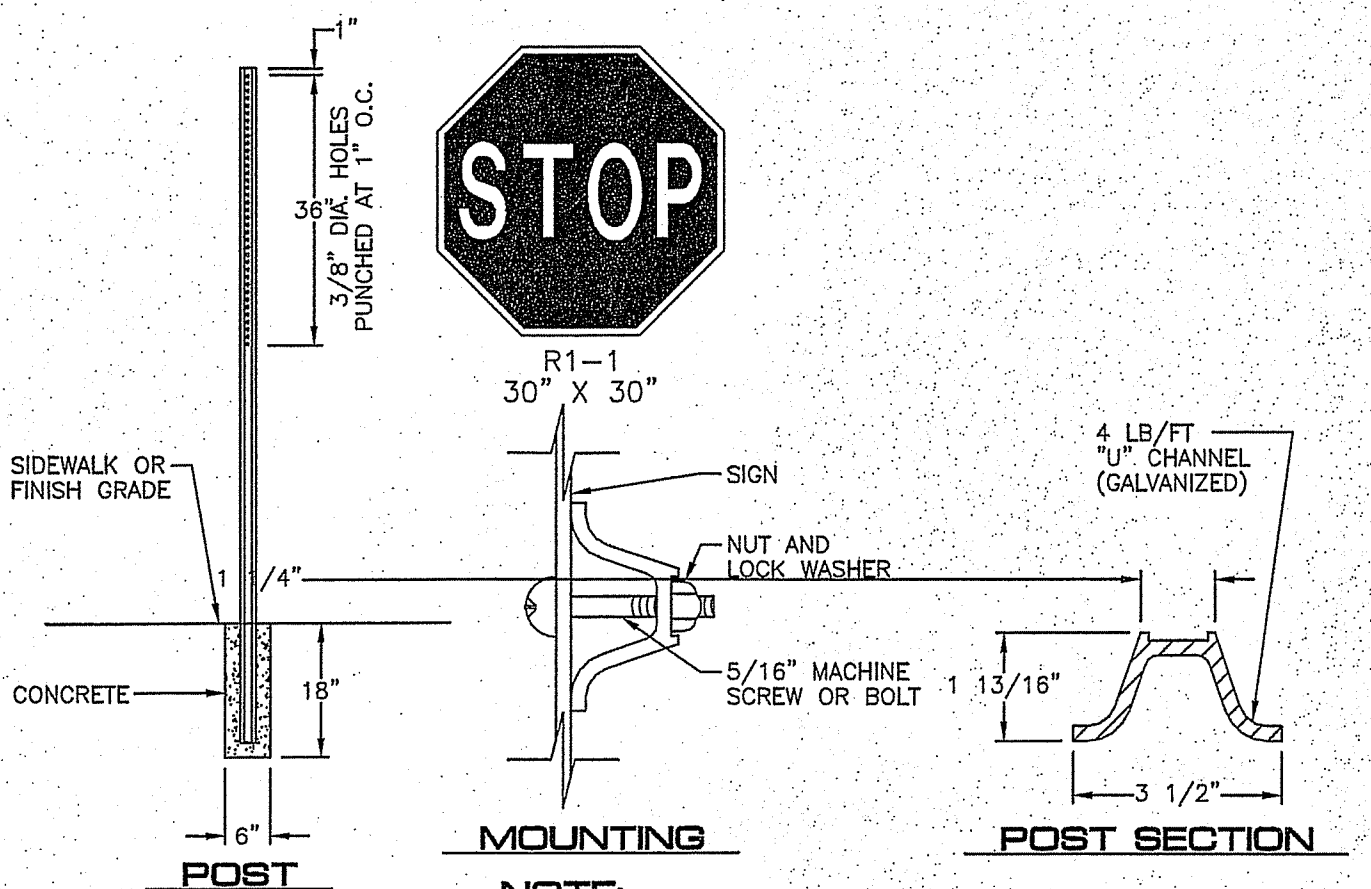
- ALL DRIVEWAYS CONNECTED TO TOWN ROADS MUST BE BUILT AND MAINTAINED BY THE HOMEOWNER OR HIS/HER REPRESENTATIVE IN ACCORDANCE WITH THESE SPECIFICATIONS AND THE TOWN DRIVEWAY REGULATIONS.
- ALL MAILBOXES SHALL BE PLACED ON THE LEFT UPON ENTERING THE PROPERTY TO FACILITATE MUNICIPAL SNOW REMOVAL.
- WHERE 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.

**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 6" 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.

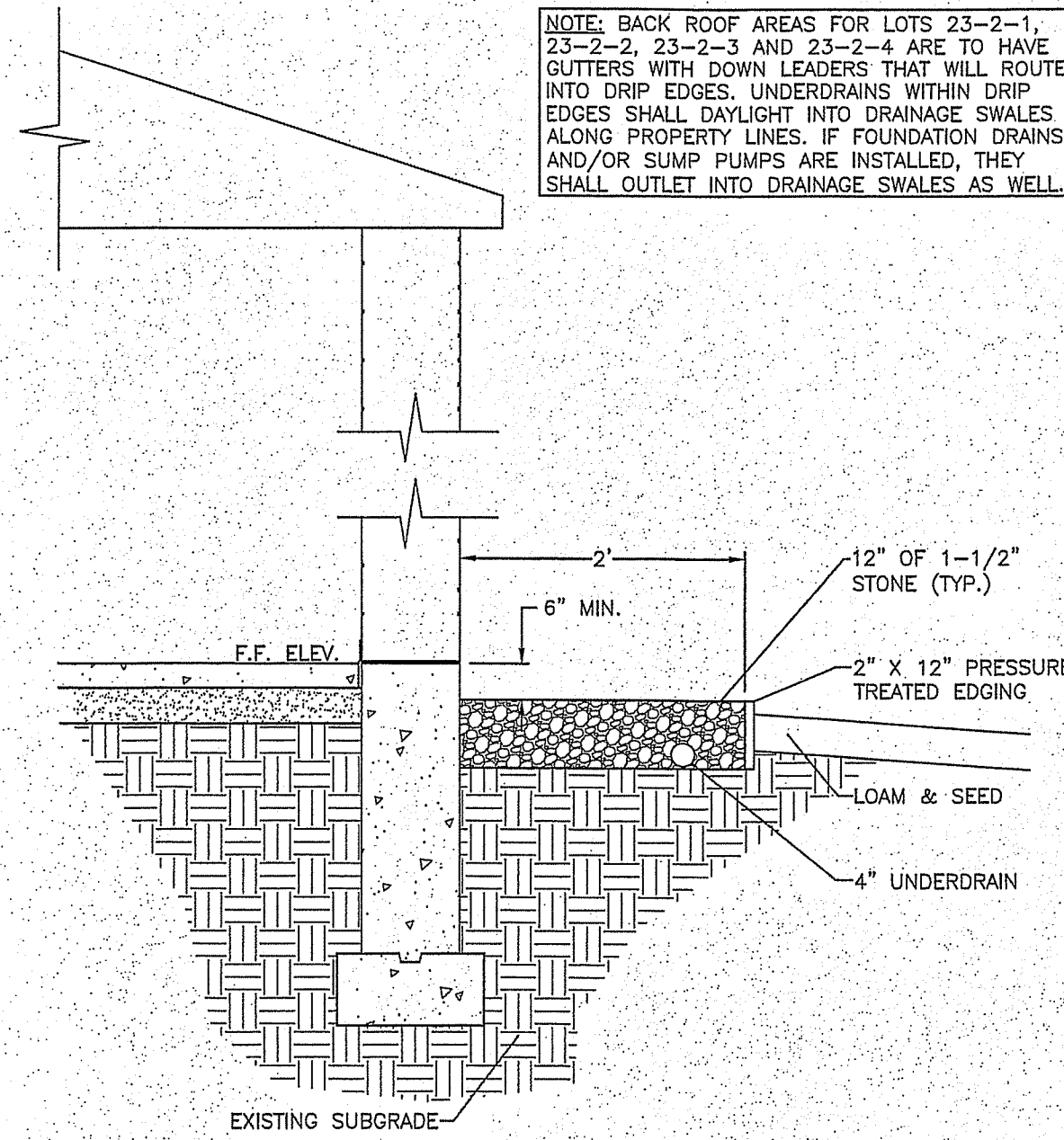


**SIGNS & POST**

**GENERAL ROAD CONSTRUCTION NOTES**

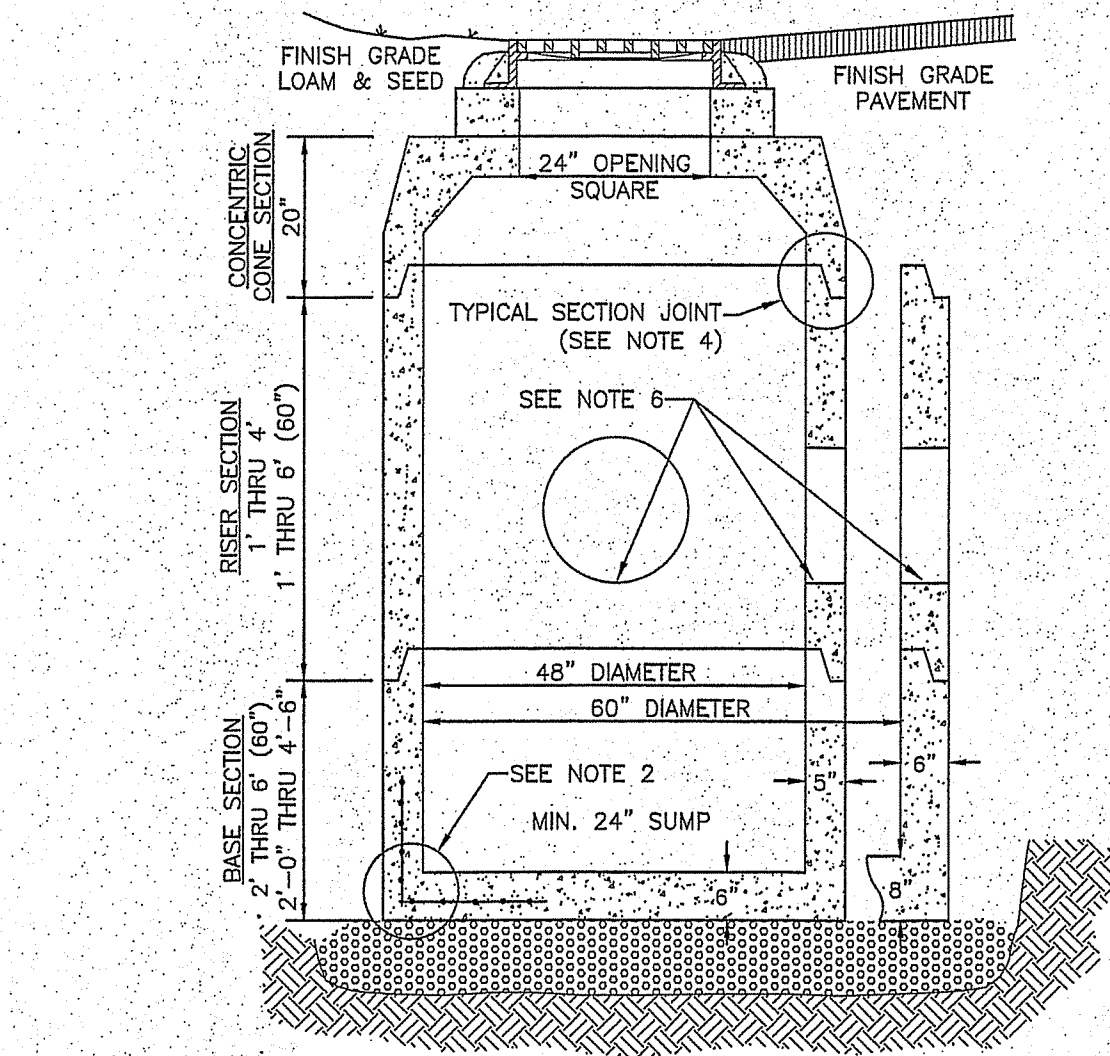
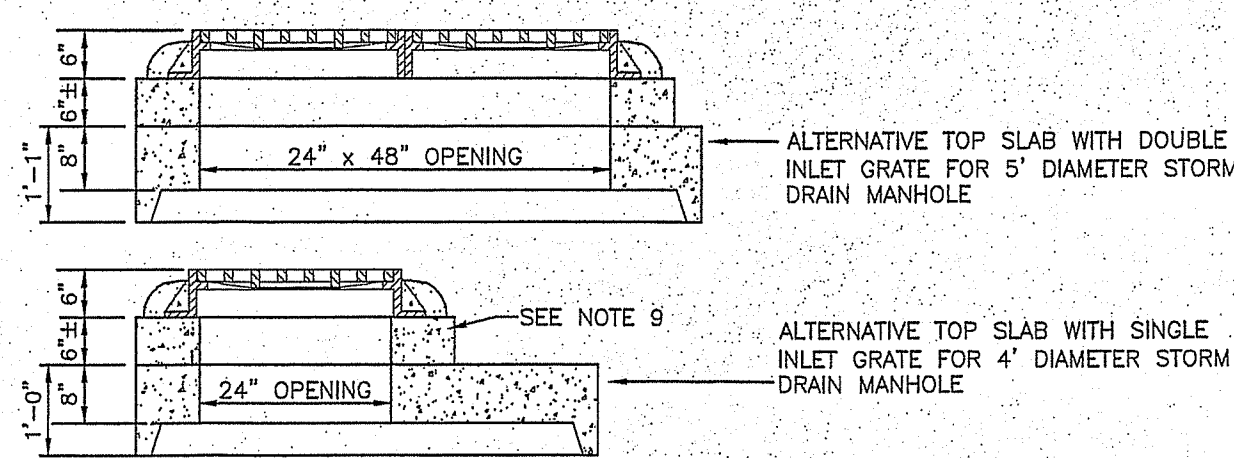
- REMOVE ALL LOAM, CLAY, MUCK, STUMPS, AND OTHER IMPROPER ROAD FOUNDATION MATERIAL WITHIN 3' OF SUBGRADE. REPLACE WITH COMPACTED GRANULAR FILL MATERIAL ACCEPTABLE TO THE DIRECTOR OF PUBLIC WORKS. COMPACTION TO BE AT LEAST 95% OF THE DRY WEIGHT AS DETERMINED BY MODIFIED PROCTOR TESTING (ASTM 1557).
- 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 MAINTAINANCE 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.





**ROOF DRIP EDGE**

SCALE: NONE **1**  
D-2

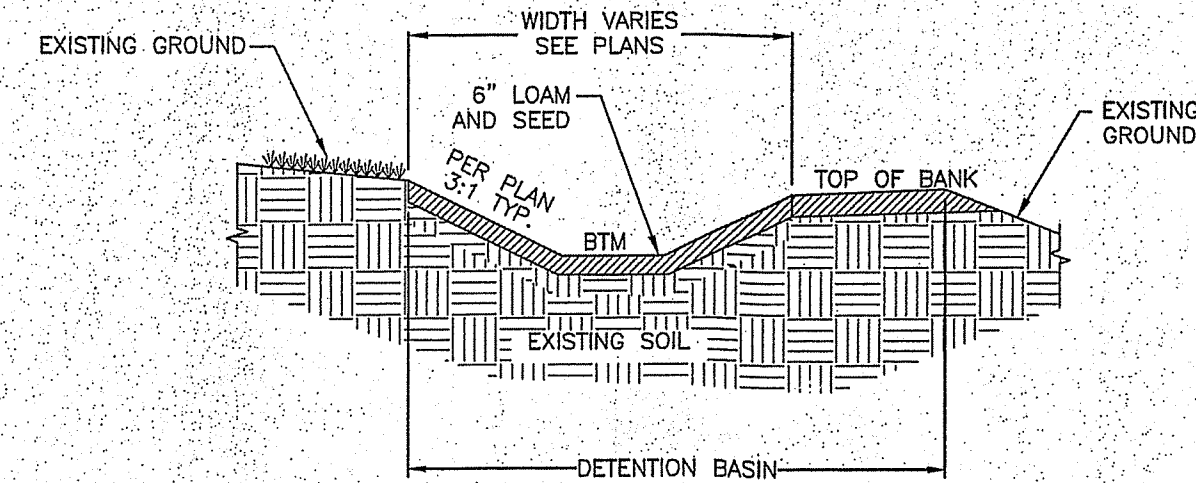


**GENERAL NOTES**

1. STORM DRAIN MANHOLE SHALL BE SUPPLIED BY CONCRETE SYSTEMS, INC., HUDSON, NH OR EQUAL.
2. REINFORCING STEEL SHALL CONFORM TO THE LATEST ASTM SPECIFICATION: 0.12 SQ. IN./LINEAR FT. AND 0.12 SQ. IN. (BOTH WAYS) BASE BOTTOM.
3. CONCRETE COMPRESSIVE STRENGTH - 4000 PSI MINIMUM.
4. TYPICAL SECTION JOINT SHALL BE SEALED WITH BUTYL RUBBER AND SHALL CONFORM TO ASTM C443 SPEC. AND FED SPEC. SS-S-210A.
5. MANHOLE DESIGN SPECIFICATIONS SHALL CONFORM TO THE LATEST ASTM C478 SPEC. FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS".
6. ALL PIPING SHALL BE SEALED WITH NON SHRINK GROUT.
7. ALTERNATIVE TOP SLAB IS TO BE STEEL REINFORCED TO MEET OR EXCEED H-20 LOADING.
8. INLET GRATE AND FRAME IS TO BE NEENAH MODEL R-3405 FOR SINGLE GRATE AND MODEL R-3405-A FOR A DOUBLE GRATE STRUCTURE, OR EQUAL.
9. 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.
10. STORM DRAIN MANHOLE IS TO BE SET ON 6" OF 3/4" STONE BEDDING.
11. THE 48" DIAMETER STORM DRAIN MANHOLE SHALL BE RESTRICTED TO PIPES OF 24" IN DIAMETER OR LESS. THE 60" DIAMETER STORM DRAIN SHALL BE RESTRICTED TO PIPES OF 36" IN DIAMETER OR LESS.
12. ALL DRAINAGE STRUCTURES SHALL CONFORM TO NHDOT STANDARDS.

**CATCH BASIN**

SCALE: NONE **2**  
D-2



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

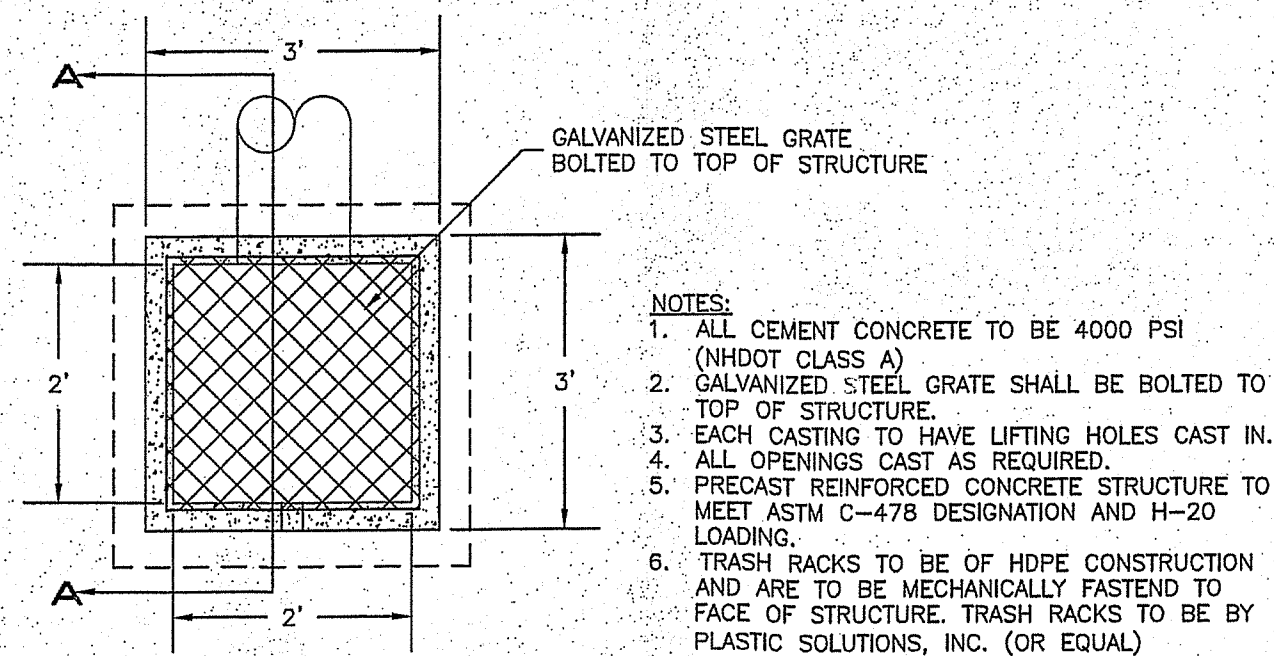
- NOTES:**
1. DO NOT PLACE DETENTION BASINS INTO SERVICE UNTIL THE CONTRIBUTING AREA HAS BEEN COMPLETELY STABILIZED.

- MAINTENANCE REQUIREMENTS:**
1. PERIODIC MOWING OF EMBANKMENTS.
  2. REMOVAL OF WOODY VEGETATION FROM FILL EMBANKMENTS.
  3. REMOVAL OF DEBRIS FROM OUTLET STRUCTURES.
  4. REMOVAL OF ACCUMULATED SEDIMENT FOR THE FOREBAY AND DETENTION BASIN.
  5. INSPECTION AND REPAIR OF EMBANKMENTS, INLET AND OUTLET STRUCTURES AND APPURTENANCES.

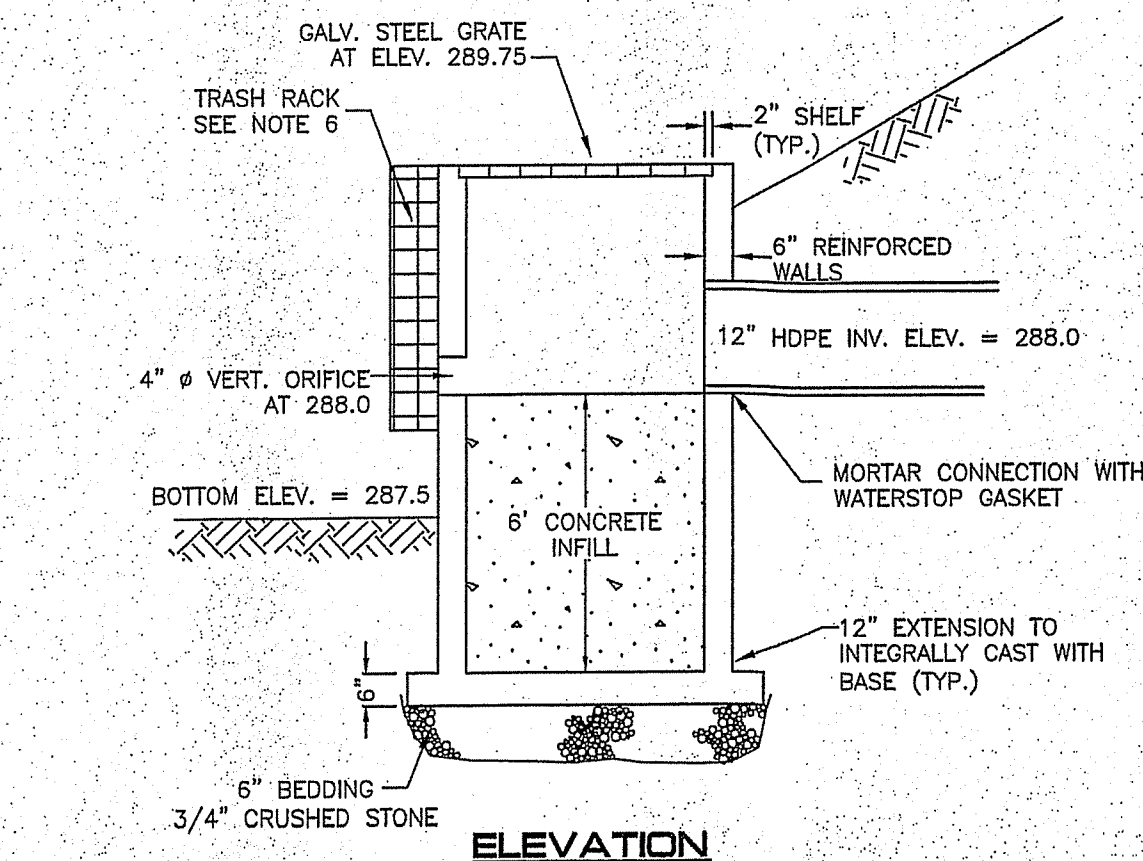
LOCATION	BOTTOM ELEVATION	RIM ELEVATION
DB1	287.5	290.0

**DETENTION BASIN - TYPICAL CROSS-SECTION**

SCALE: NONE **3**  
D-2

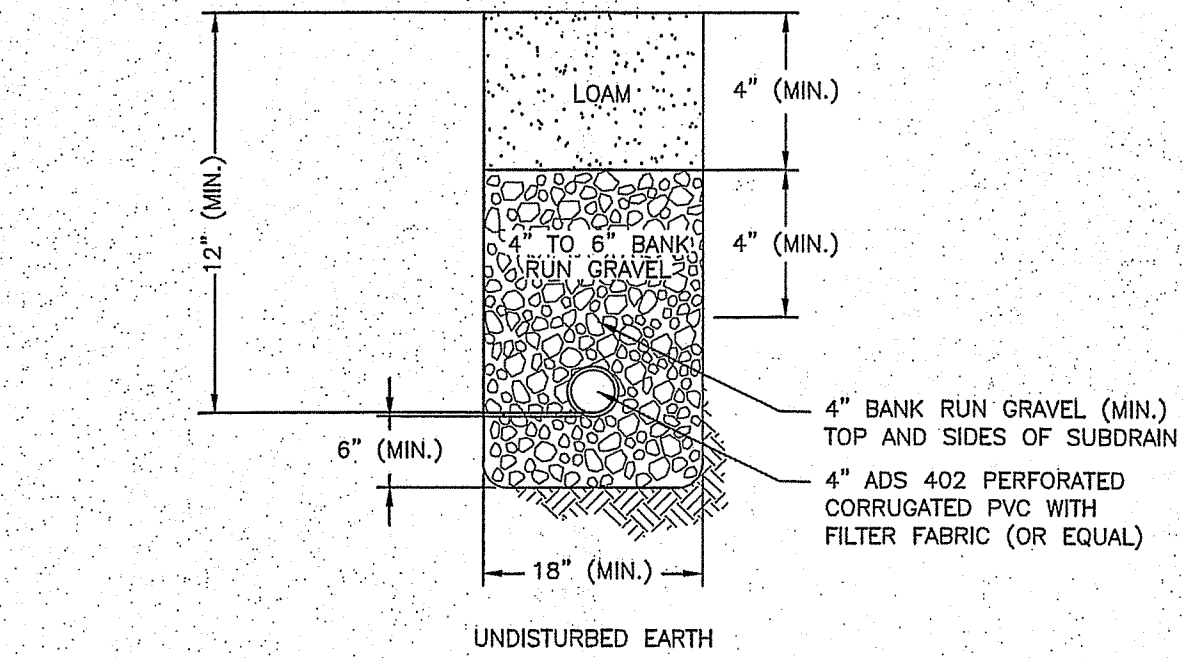


- NOTES:**
1. ALL CEMENT CONCRETE TO BE 4000 PSI (NHDOT CLASS A)
  2. GALVANIZED STEEL GRATE SHALL BE BOLTED TO TOP OF STRUCTURE.
  3. EACH CASTING TO HAVE LIFTING HOLES CAST IN.
  4. ALL OPENINGS CAST AS REQUIRED.
  5. PRECAST REINFORCED CONCRETE STRUCTURE TO MEET ASTM C-478 DESIGNATION AND H-20 LOADING.
  6. TRASH RACKS TO BE OF HDPE CONSTRUCTION AND ARE TO BE MECHANICALLY FASTENED TO FACE OF STRUCTURE. TRASH RACKS TO BE BY PLASTIC SOLUTIONS, INC. (OR EQUAL)



**OUTLET STRUCTURE**

SCALE: NONE **4**  
D-2



**4" UNDERDRAIN**

SCALE: NONE **5**  
D-2

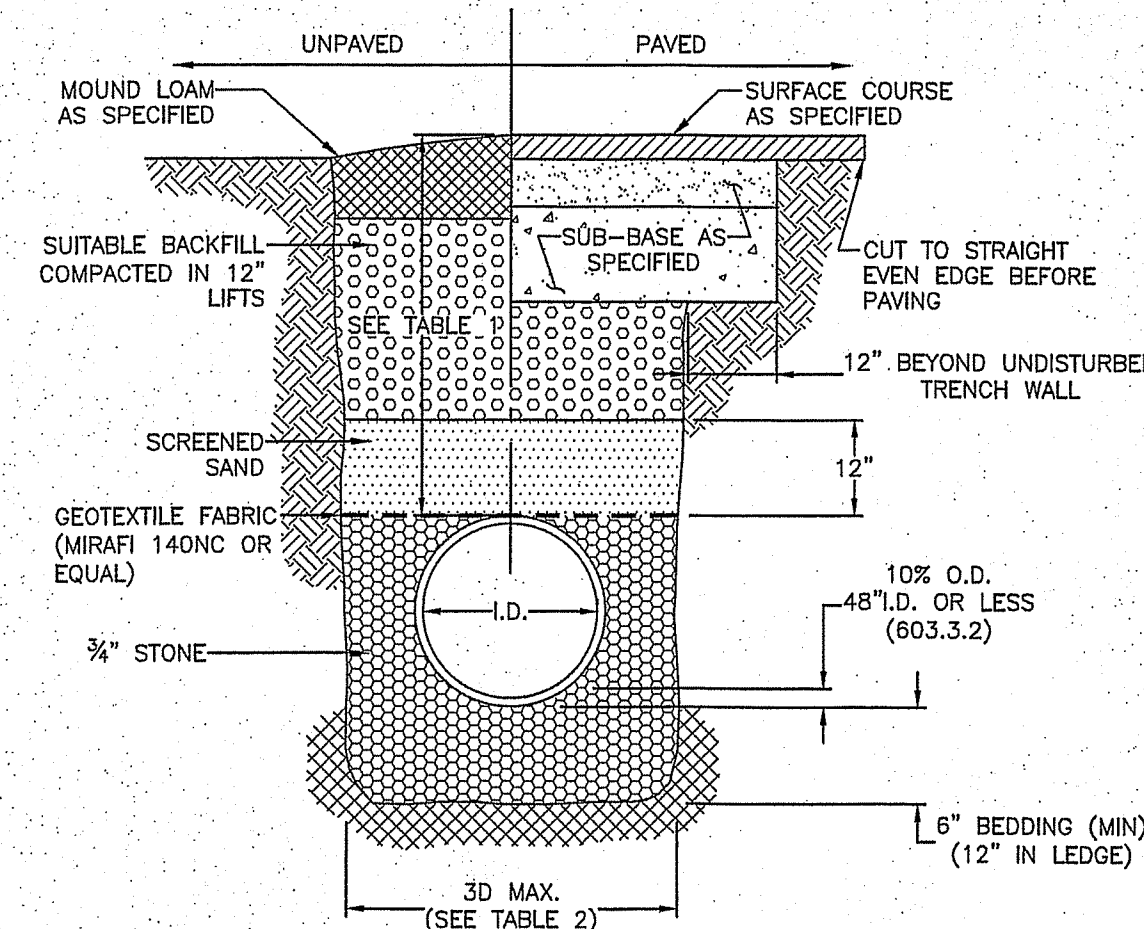
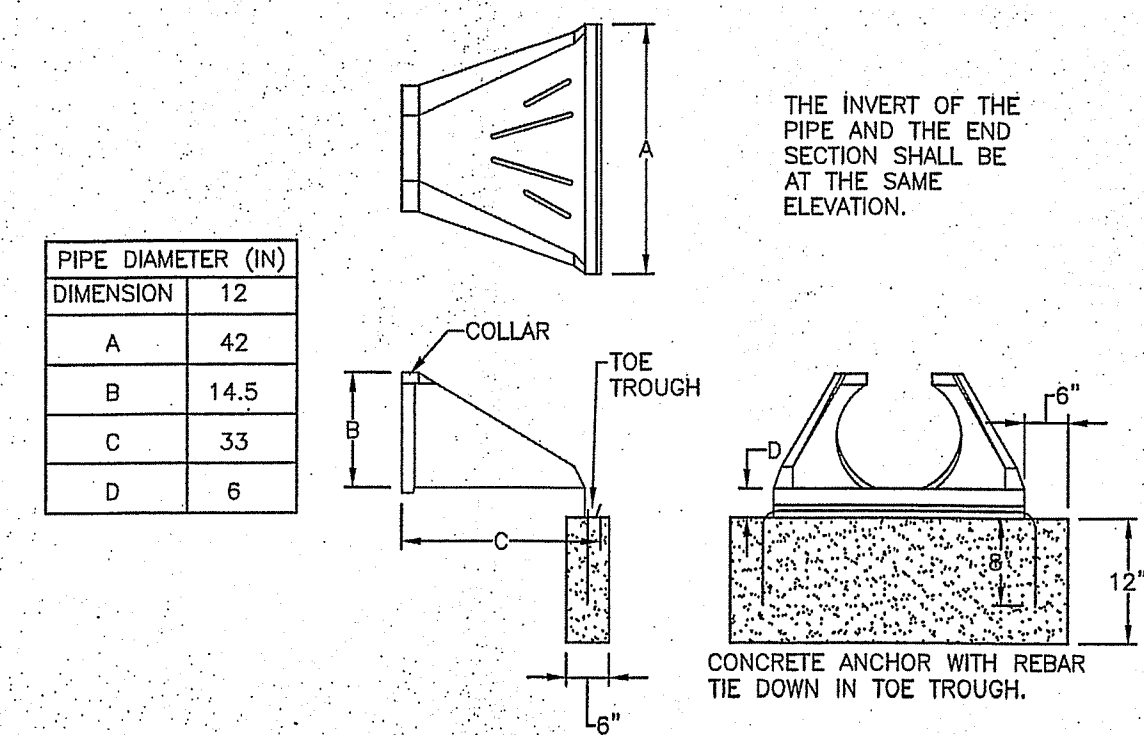


TABLE 1			TABLE 2 (206.4.1.2)	
LOCATION	PIPE MATERIAL	MINIMUM COVER	INSIDE DIAMETER	TOTAL WIDTH
PAVED ROADS	ALL	3 FT.	UP TO 12"	36"
UNPAVED ROADS	ALL	3 FT.	12" TO 24"	I.D. + 24"
DRIVEWAYS	ALL	1 FT.	OVER 24"	2 x I.D.
UNPAVED AREAS	ALL	2 FT.		

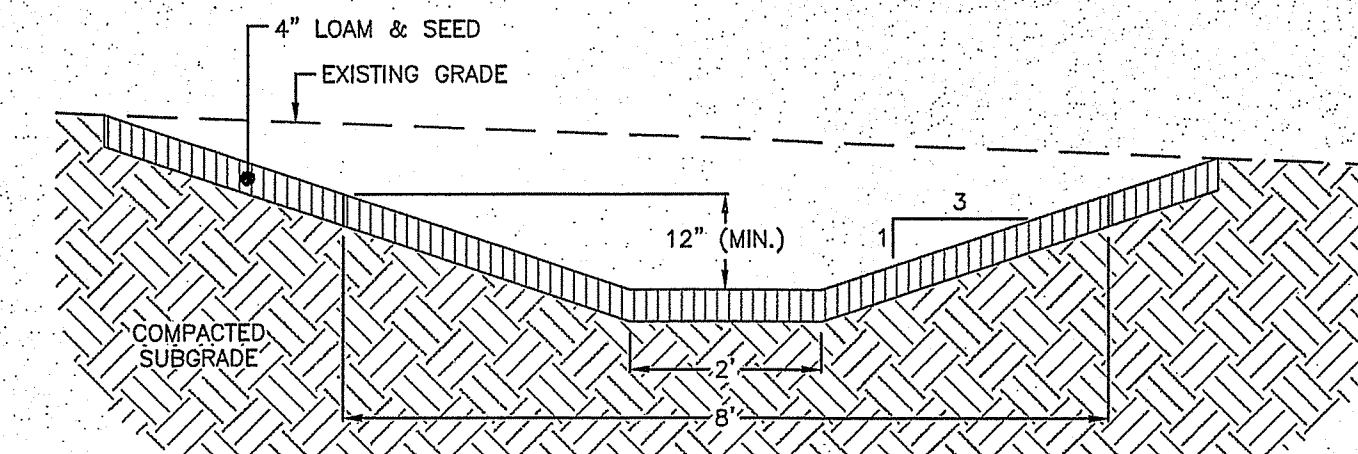
**TYPICAL DRAINAGE TRENCH - HDPE**

SCALE: NONE **6**  
D-2



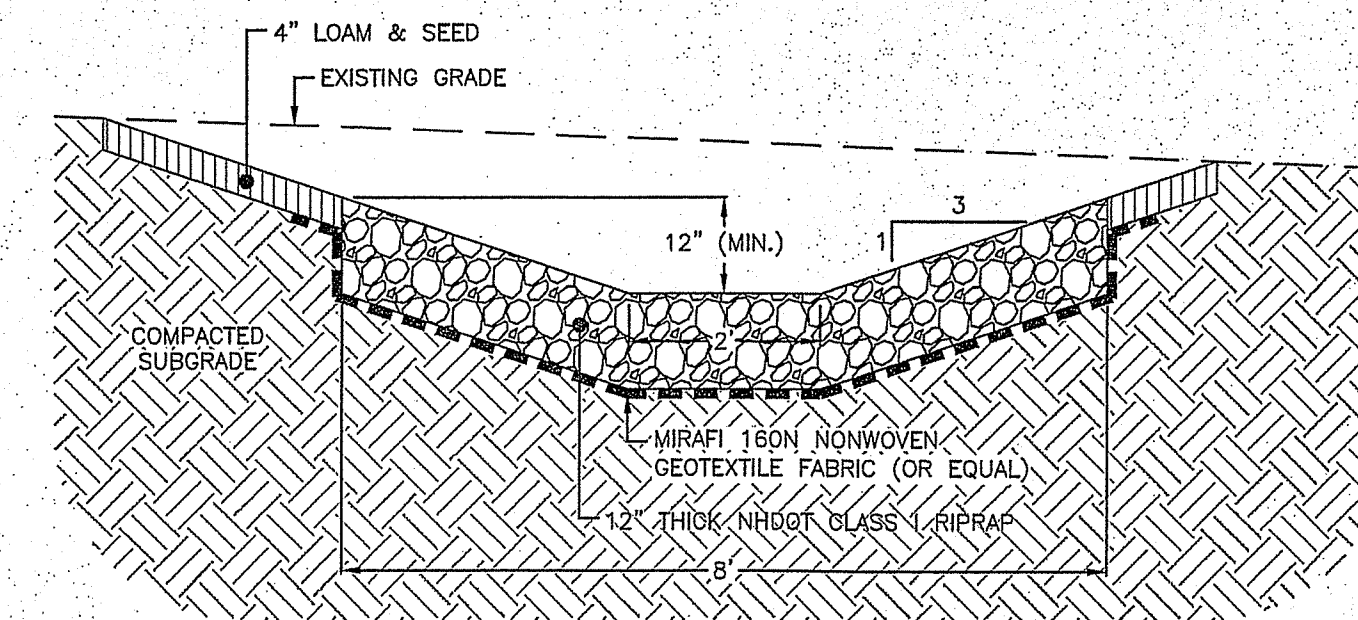
**FLARED END SECTION - HDPE**

SCALE: NONE **7**  
D-2



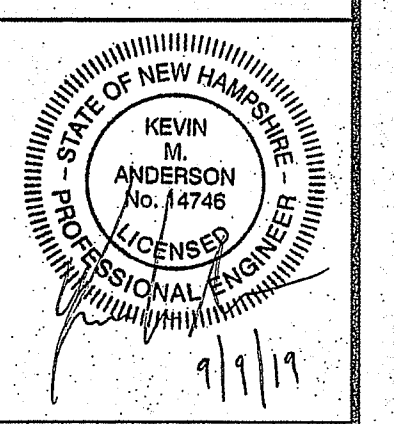
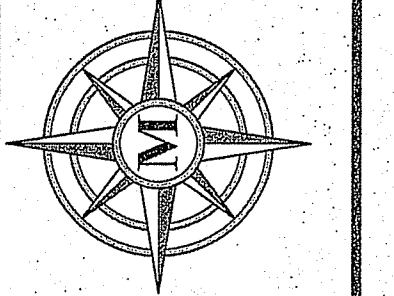
**GRASS LINED SWALE (DS1, DS2, DS3 & DS4)**

SCALE: NONE **8**  
D-2



**RIPRAP LINED SWALE (DS5)**

SCALE: NONE **9**  
D-2

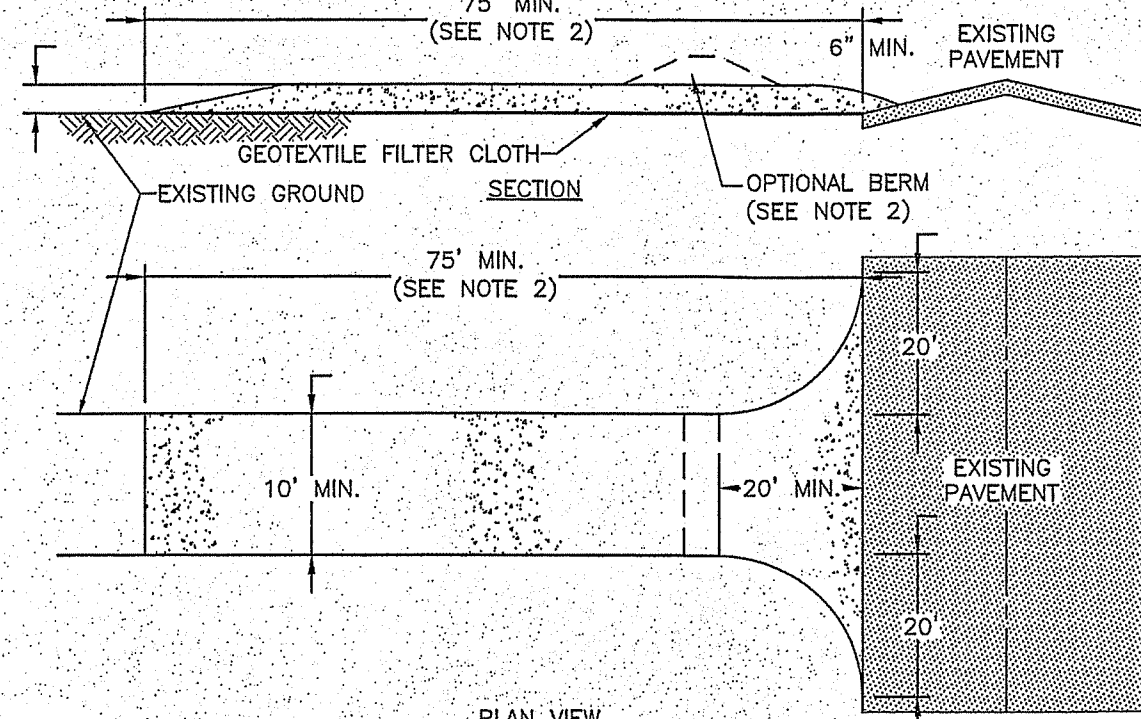


REV.	DATE	DESCRIPTION	DR	CK
A	5/23/19	PLANNING BOARD SUBMISSION	DR	CK
B	6/25/19	INITIAL TOWN STAFF COMMENTS	DR	CK
C	9/1/18	REVISE DRAINAGE LAYOUT	DR	CK
D	8/19/18	ADDITIONAL TOWN STAFF COMMENTS	DR	CK
E	8/23/18	KV PARTNERS REVIEW COMMENTS	DR	CK
F	9/9/19	KV PARTNERS / TOWN COMMENTS	DR	CK

**DRAINAGE DETAILS**

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



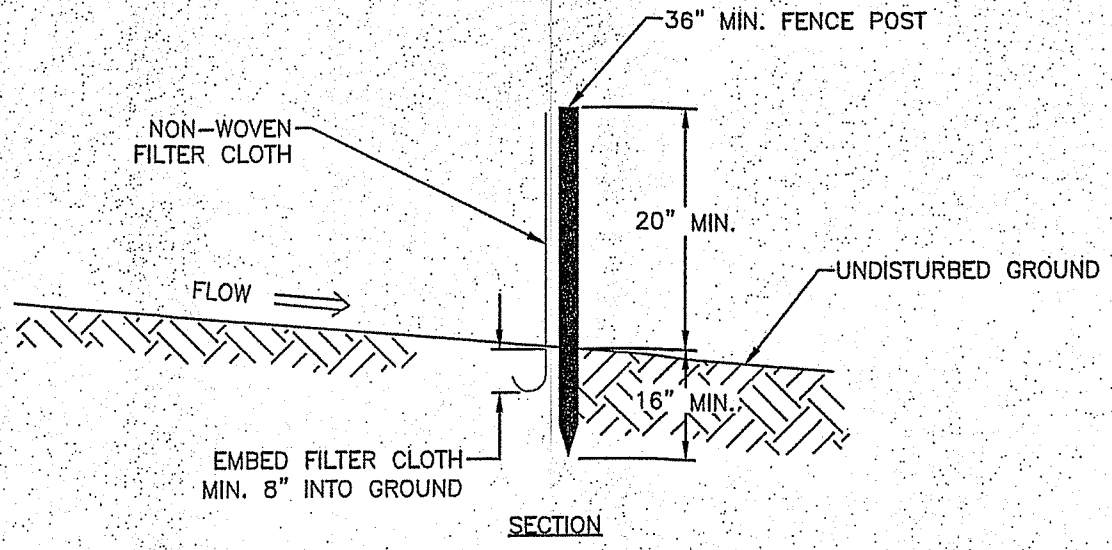
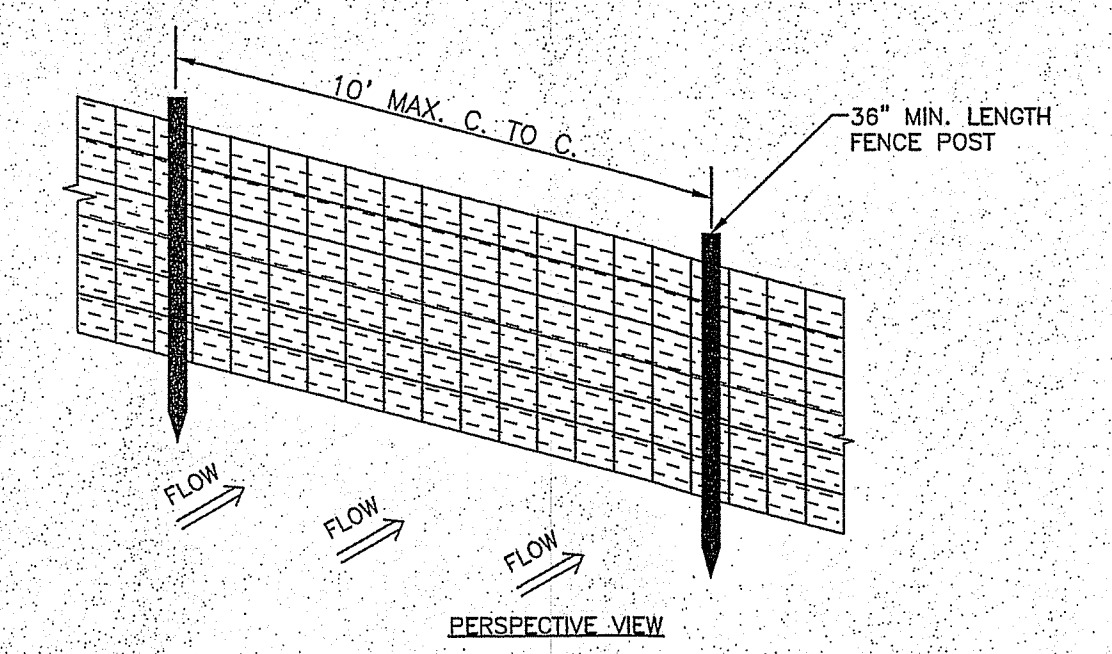


- STONE FOR STABILIZED CONSTRUCTION EXIT SHALL BE 3 INCH CRUSHED STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
- THE MINIMUM LENGTH OF THE PAD SHOULD BE 75 FEET, EXCEPT THAT THE MINIMUM LENGTH MAY BE REDUCED TO 50 FEET IF A 3-INCH TO 6-INCH HIGH BERM IS INSTALLED AT THE EXIT OF THE PROJECT 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.

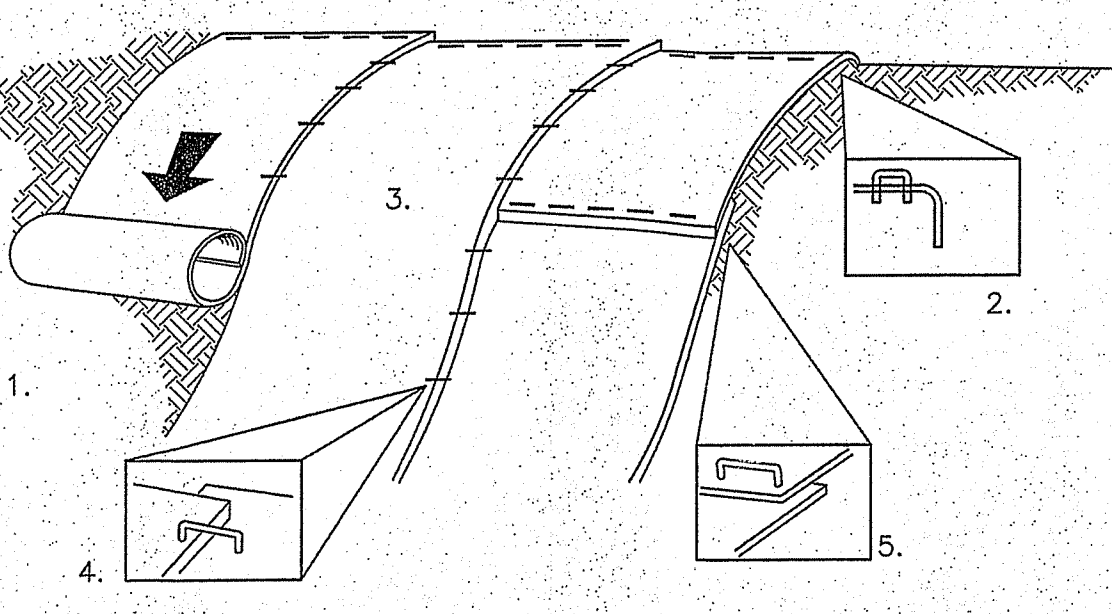
**STABILIZED CONSTRUCTION EXIT** SCALE: NONE **D-3**

- 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 WETLAND. 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 2H:1V OR STEEPER SLOPES ARE TO BE CONSTRUCTED WITH SC250 STRAW/COCONUT FIBER EROSION CONTROL TURF REINFORCEMENT MAT AND ALL 3H:1V TO 4H: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 MANUFACTURERS 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 SPLICED 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.

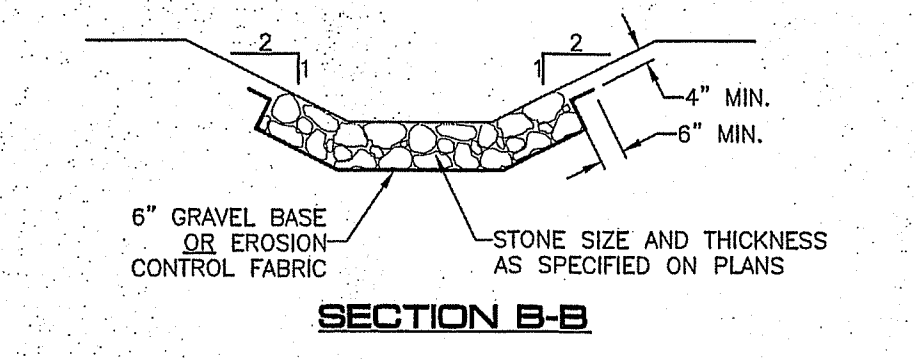
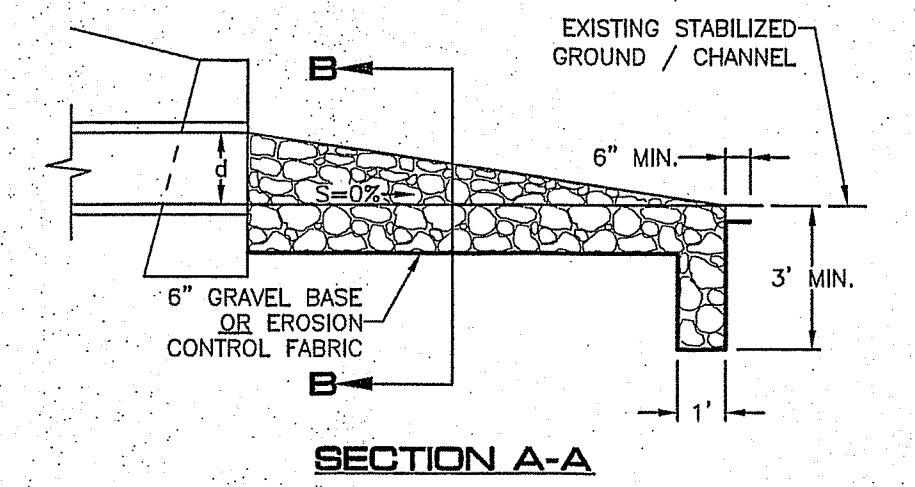
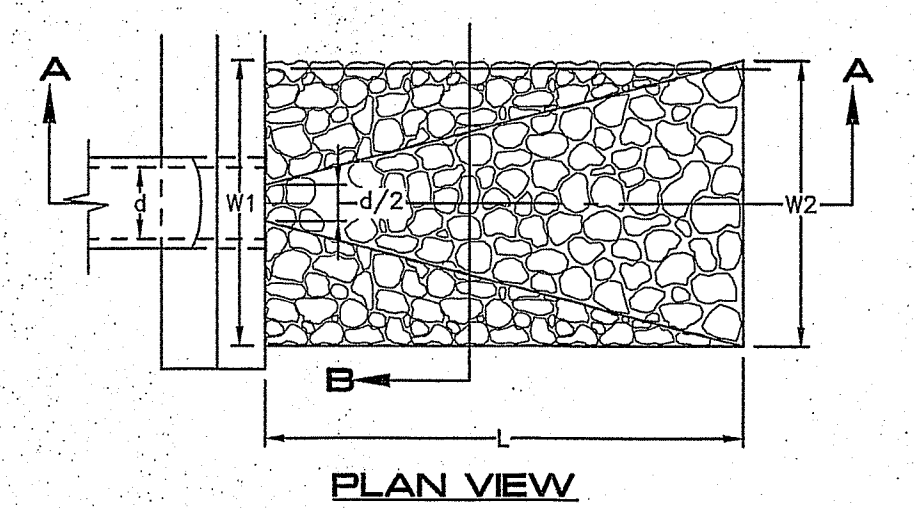
**SLOPE STABILIZATION TURF REINFORCEMENT MAT** SCALE: NONE **D-3**

- 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.

**CONSTRUCTION NOTES** SCALE: NONE **D-3**



LOCATION	LENGTH (FT)	WIDTH 1 (FT)	WIDTH 2 (FT)	STONE SIZE 450 (IN)	THICKNESS (IN)
RA1	9	3	12	4	8
RA2	8	3	11	4	8
RA3	10	3	13	4	8
RA4	9	3	11	4	8

**RIPRAP OUTLET PROTECTION** SCALE: NONE **D-3**

- TEMPORARY PROTECTION OF DISTURBED AREAS SHALL BE IMPLEMENTED WHERE A TEMPORARY STAND OF GRASS OR SMALL GRAINS WILL NORMALLY PRODUCE SUFFICIENT COVER TO RETARD EROSION AND REDUCE SEDIMENT.
- USE OF TEMPORARY SEEDING SHALL BE IMPLEMENTED WHEN A DISTURBED AREA OR MATERIAL STOCKPILE WILL BE INACTIVE FOR A PROLONGED PERIOD OF TIME.
- ALL ESSENTIAL GRADING SUCH AS DIVERSIONS, DAMS, DITCHES, AND DRAINS NEEDED TO PREVENT GULLYING AND REDUCE SILTATION SHALL BE COMPLETED PRIOR TO SEEDING.
- PREPARE SEEDBED BY REMOVING ALL STONES, TRASH AND STUMPING DEBRIS THAT WILL INTERFERE WITH SEEDING AREA. WHERE FEASIBLE, TILL THE SOIL TO A DEPTH OF ABOUT 3 INCHES TO PREPARE SEEDBED AND MIX FERTILIZER INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATIONS SHOULD BE PERFORMED ACROSS THE SLOPE.
- A MINIMUM OF 300 POUNDS PER ACRE (7 LBS. PER 1,000 SQ.FT.) OF 10-10-10 FERTILIZER, OR ITS EQUIVALENT, SHALL BE UNIFORMLY SPREAD OVER THE AREA PRIOR TO BEING INCORPORATED INTO THE SOIL.
- THE SEED SHALL BE SPREAD UNIFORMLY OVER THE AREA. AFTER SEEDING, THE SOIL SHOULD BE FIRMED BY ROLLING OR PACKING. WHERE ROLLING OR PACKING IS NOT FEASIBLE, THE SEED SHALL BE COVERED LIGHTLY BY RAKING, DISKING, OR DRAGGING.
- HAY OR STRAW MULCH MAY BE NECESSARY TO PROMOTE SEED GERMINATION IN DRY AND/OR INFERTILE CONDITIONS.
- PLANT SELECTION AND APPLICATION RATES:

**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 (NOT 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:

- BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
- A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
- A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
- 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.
		BIRDSFOOT 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 13.8 POUNDS PER 1,000 SQUARE FEET OF LOW PHOSPHATE FERTILIZER (N-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).

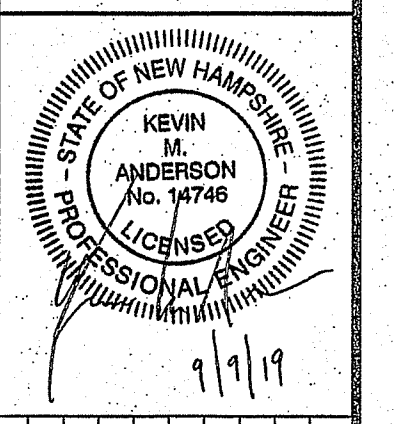
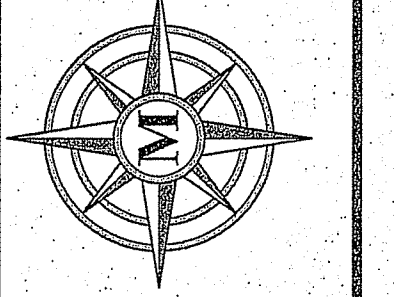
FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 FEET AND 250 FEET FROM A SURFACE WATER BODY AS SPECIFIED BY THE COMPREHENSIVE SHORELAND PROTECTION ACT (SLOW RELEASE FERTILIZERS MUST BE AT LEAST 50% SLOW RELEASE NITROGEN COMPONENT). 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 SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED 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 03001  
MERIDIANLANDSERVICES.COM  
TEL: 603-675-1584  
FAX: 603-675-1584



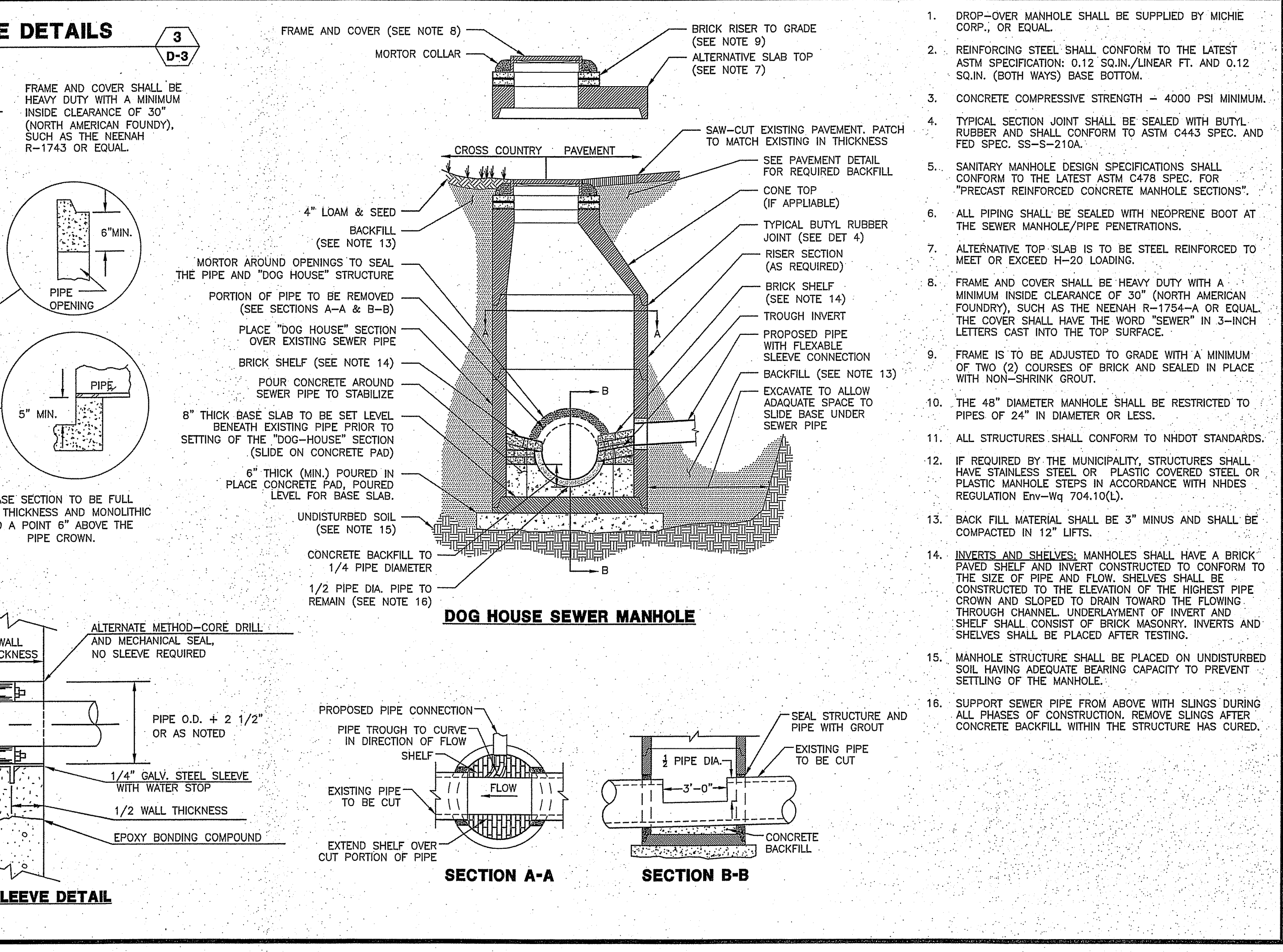
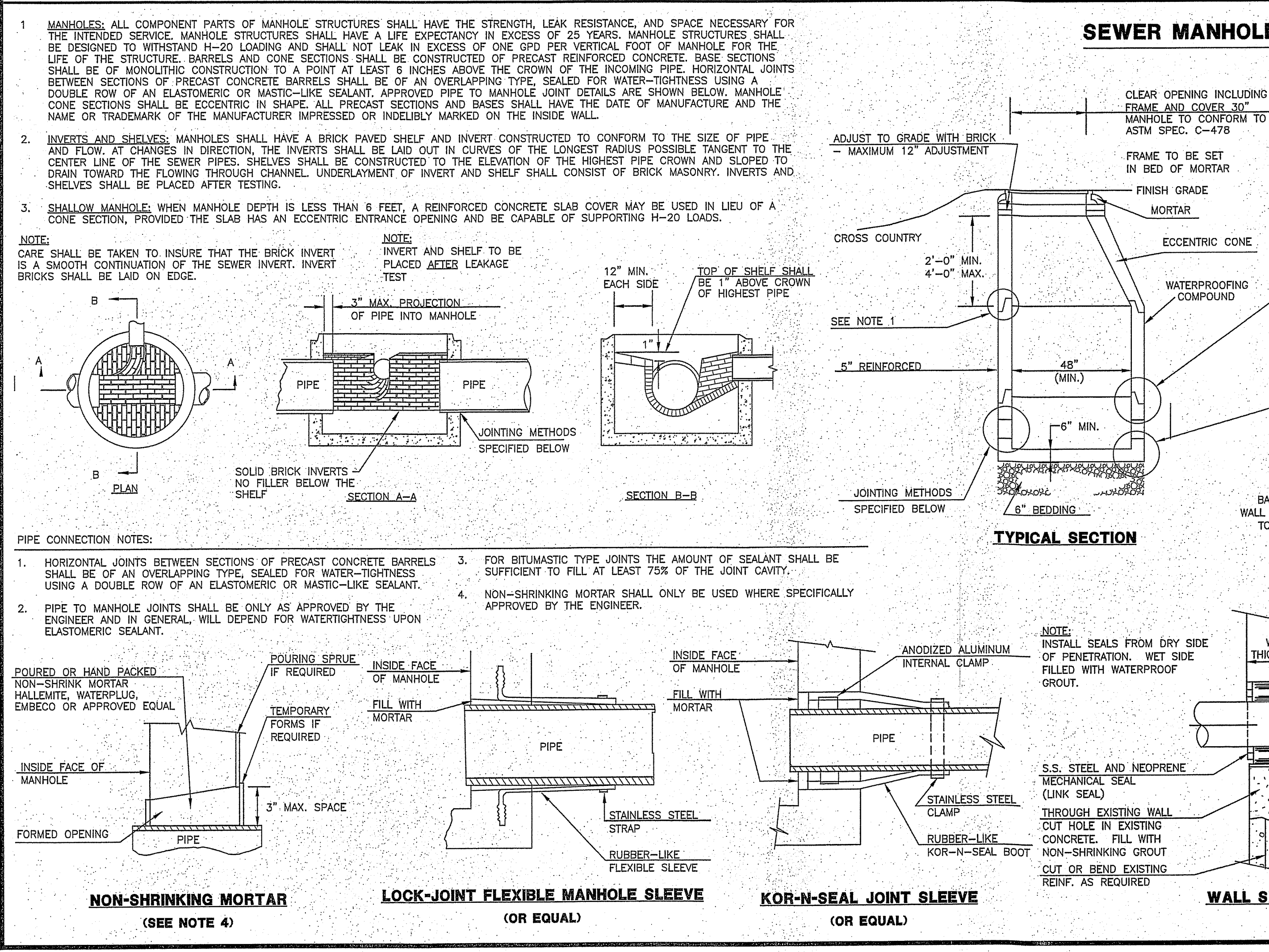
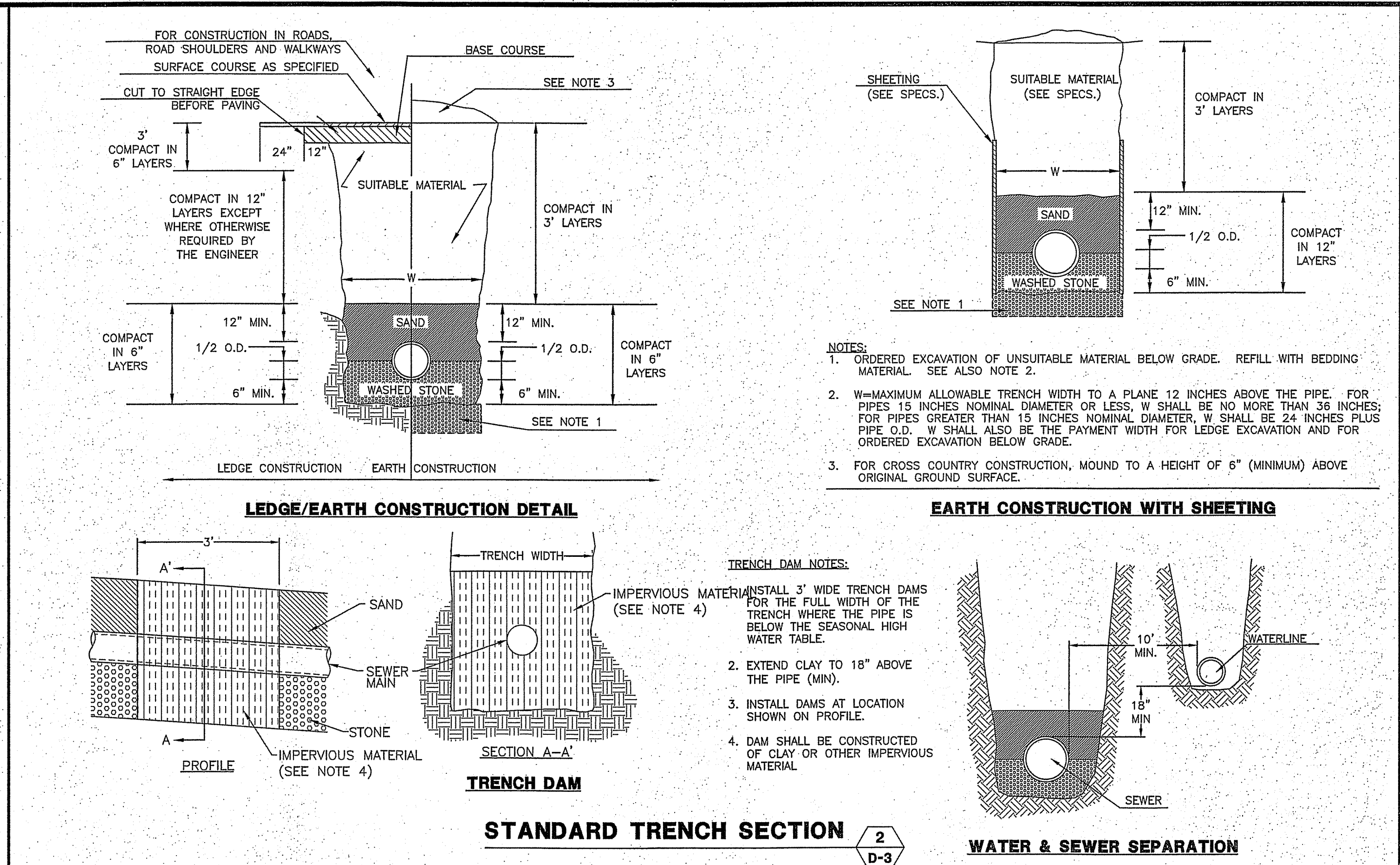
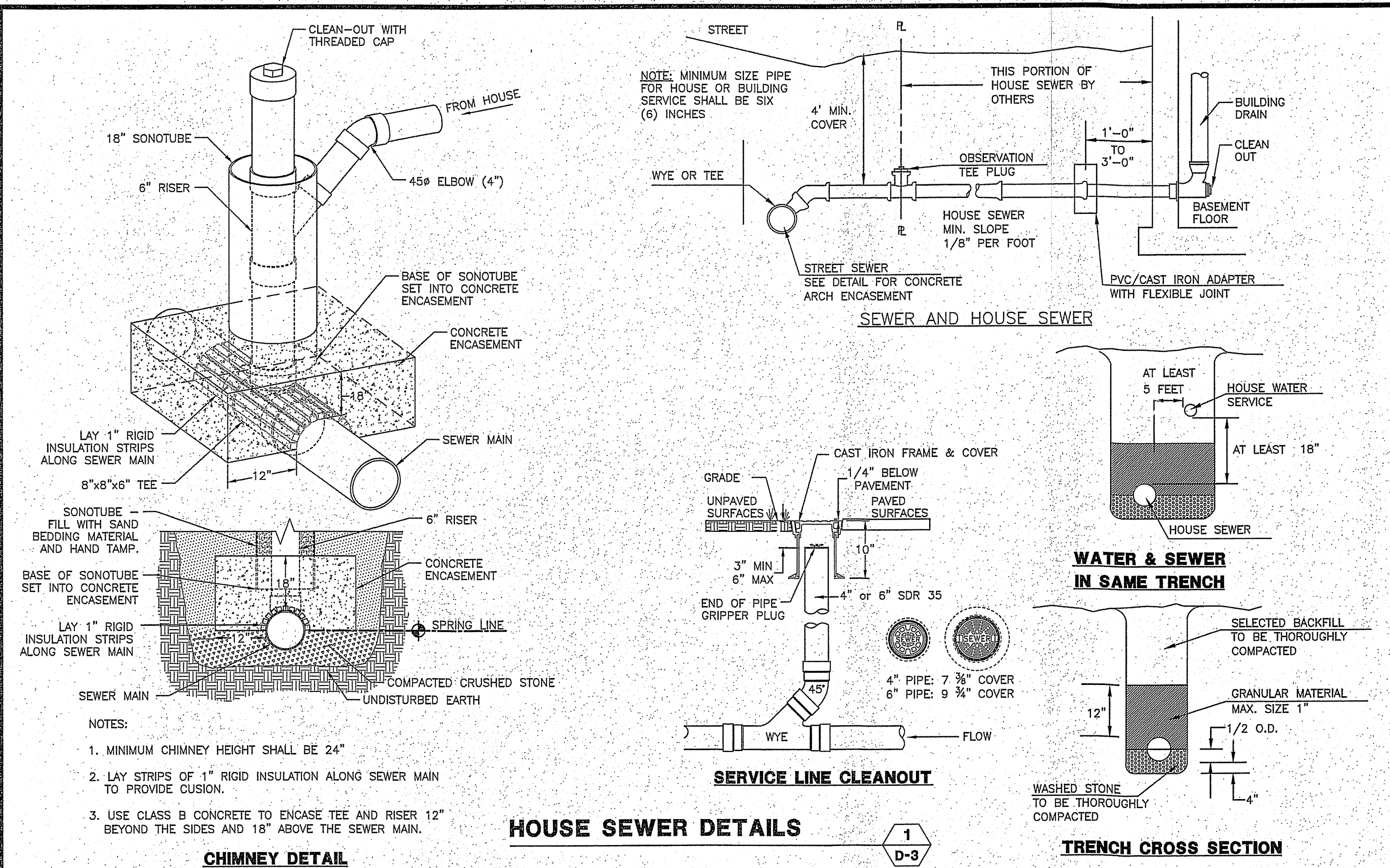
REV.	DATE	DESCRIPTION	DR	CR
A	5/29/19	PLANNING BOARD SUBMISSION		
B	8/23/19	INITIAL TOWN STAFF COMMENTS		
C	8/17/19	REVISE DRAINAGE LAYOUT		
D	8/19/19	ADDITIONAL TOWN STAFF COMMENTS		
E	8/23/19	KV PARTNERS REVIEW COMMENTS		
F	9/09/19	KV PARTNERS / TOWN COMMENTS		
G				
H				

**EROSION CONTROL DETAILS**

RICHARD KEOGH  
AMHERST STREET  
MAP 20 LOT 2  
MILFORD, NEW HAMPSHIRE

SCALE: VARIES  
FEBRUARY 25, 2019  
**D-3**  
SHEET  
FILE: 3203P05F.dwg  
PROJECT: 3203.05  
SHEET NO. 13 OF 16



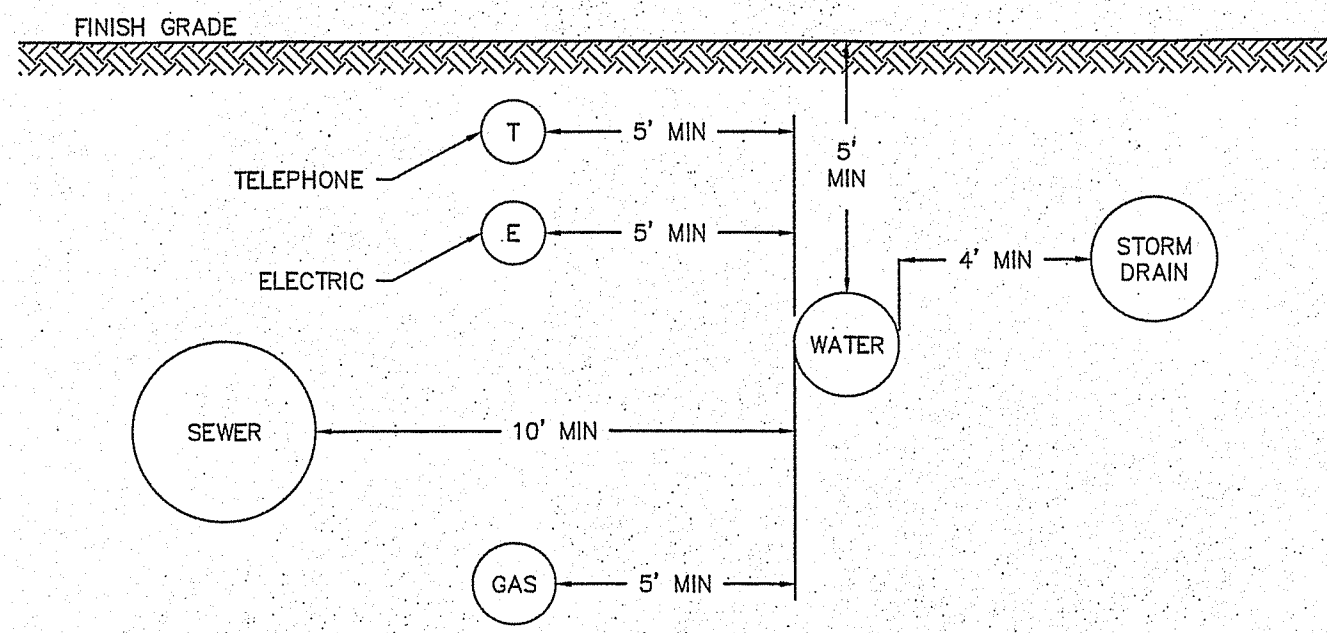


**MERIDIAN LAND SERVICES, INC.**  
ENGINEERING | SURVEYING | PERMITTING  
SOIL & WETLAND MAPPING | SEPTIC DESIGN  
31 OLD NASHUA ROAD, AMHERST, NH 03061  
TEL: 603-673-1441  
FAX: 603-673-1584  
MERIDIANLANDSERVICES.COM

**NEW HAMPSHIRE**  
STATE OF  
KEVIN M. ANDERSON  
No. 14946  
LICENSED PROFESSIONAL ENGINEER  
9/1/19

NO.	DATE	REVISION	BY	CHK
1	9/19/19	REVISE DRAINAGE LAYOUT	BUC/KMA	DR
2	9/23/19	REVISE DRAINAGE LAYOUT	BUC/KMA	DR
3	9/25/19	REVISE DRAINAGE LAYOUT	BUC/KMA	DR
4	9/27/19	INITIAL TOWN STAFF COMMENTS	BUC/KMA	DR
5	9/29/19	PLANNING BOARD SUBMISSION	BUC/KMA	DR

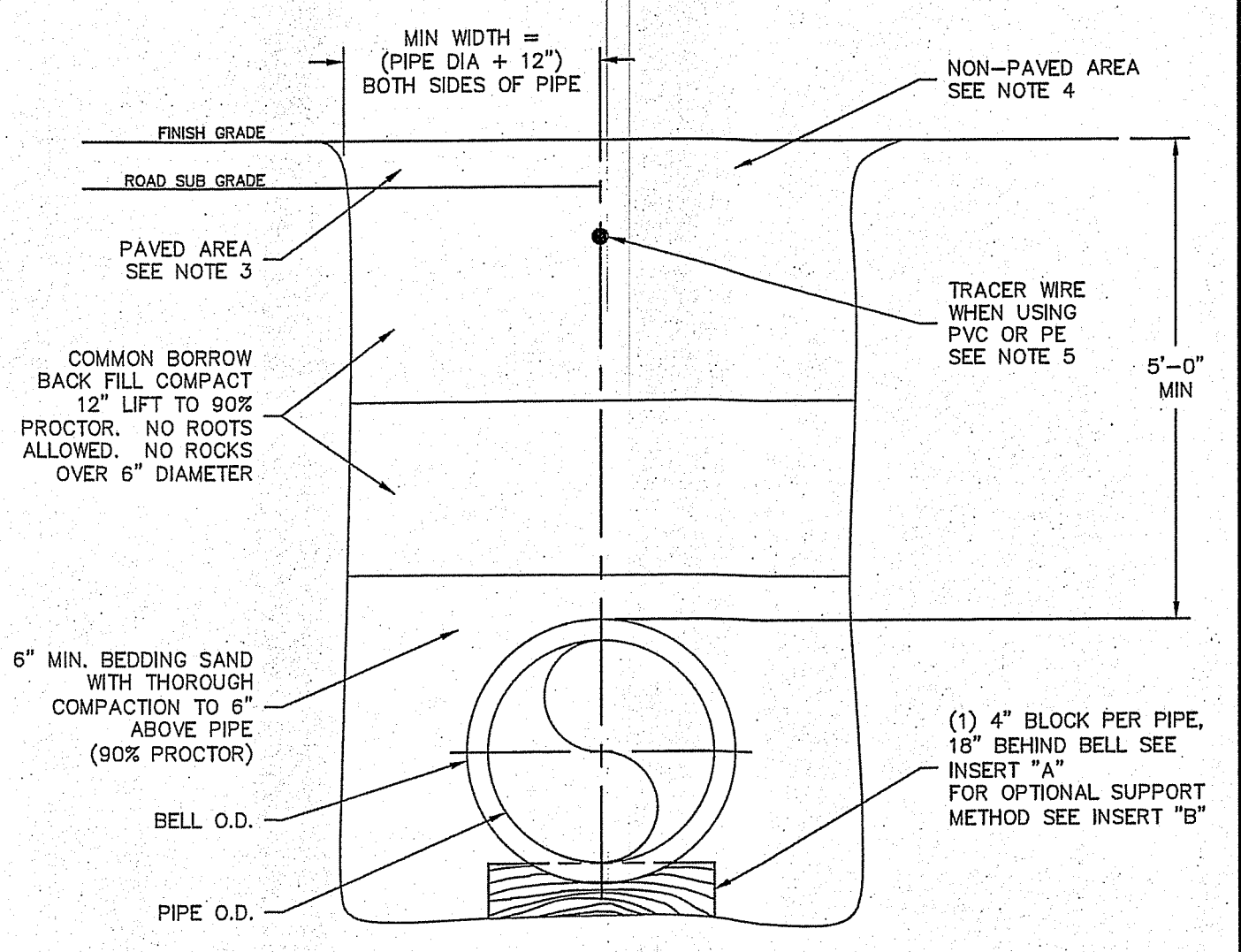




- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
  2. ALL WATER MAIN SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
  3. SEE DETAIL A-2 FOR TRENCH DETAIL.
  4. SEE DETAIL A-11 FOR OUTSIDE SERVICE ENTRANCE DETAIL.

**PENNICHUCK WATER**

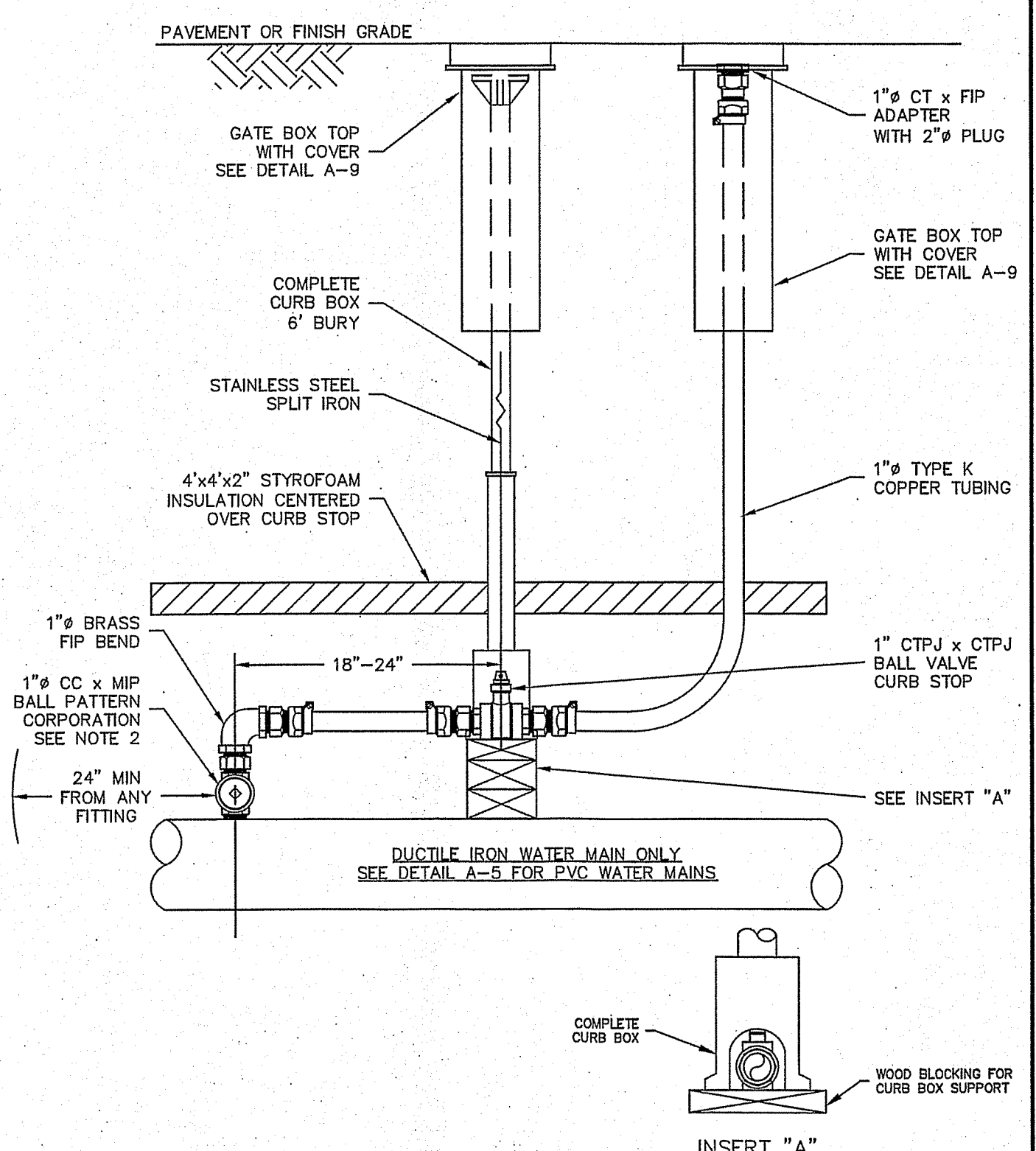
DETAIL A-1  
TYPICAL UTILITY SEPARATION  
(MAIN DETAIL)  
PENNICHUCK WATER WORKS, INC.  
REV: 5-01 SCALE: NTS



- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
  2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
  3. REQUIREMENTS FOR SUBBASE AND BASE MATERIAL TYPE ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN PAVED AREAS.
  4. REQUIREMENTS FOR GRAVEL, LOAM AND/OR SEED ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN NON-PAVED AREAS.
  5. 10 GAUGE TRACER WIRE AS MANUFACTURED BY BMS, DIVISION OF ALBASTAR CORP., AVON, MA OR EQUIVALENT.

**PENNICHUCK WATER**

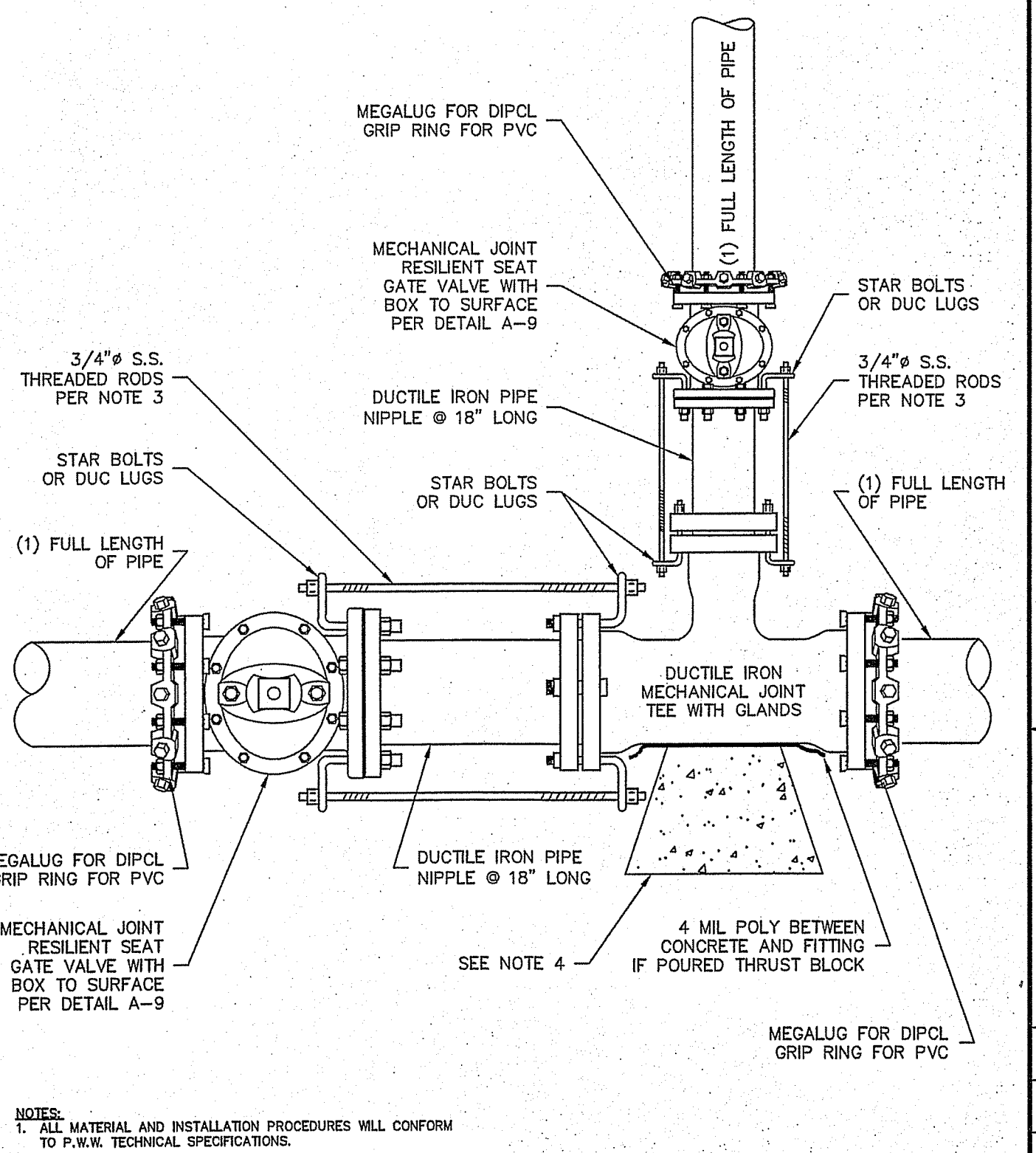
DETAIL A-2  
TYPICAL TRENCH DETAIL  
PENNICHUCK WATER WORKS, INC.  
REV: 5-01 SCALE: NTS



- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
  2. WATER MAIN MAY BE DIRECT TAPPED WHEN IT IS 6" OR LARGER DUCTILE IRON.
  3. SEE DETAIL A-5 FOR INSTALLATION ON PVC WATER MAINS.

**PENNICHUCK WATER**

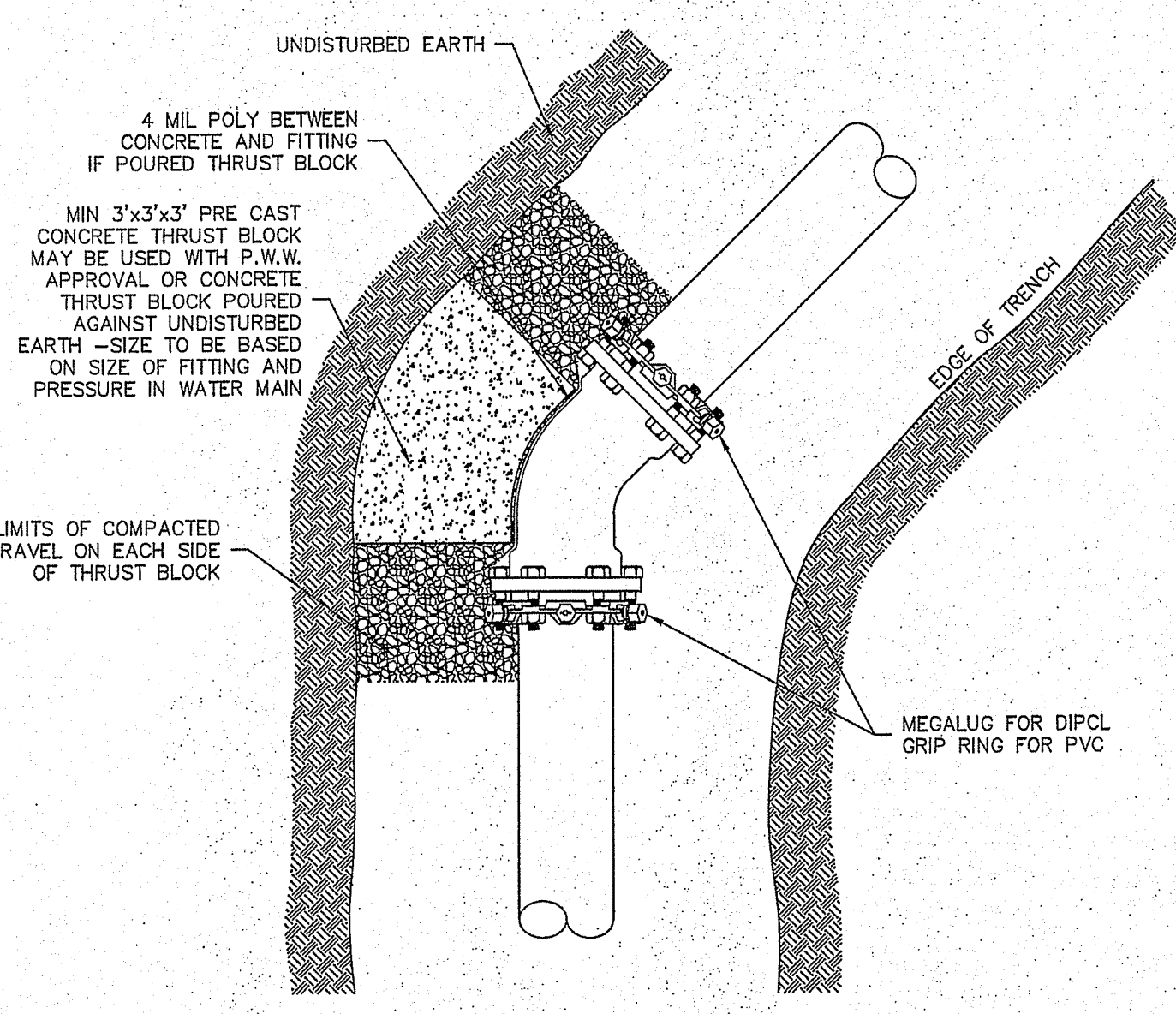
DETAIL A-3  
TYPICAL 1" RELEASE VALVE  
INSTALLATION ON DUCTILE IRON  
PENNICHUCK WATER WORKS, INC.  
REV: 5-01 SCALE: NTS



- NOTES:**
1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
  2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5' FROM TOP OF PIPE TO FINISH GRADE.
  3. 3/4" S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS. 10" FITTING OR SMALLER = (2) 3/4" S.S. RODS & ASSOC. HARDWARE. 12" FITTING OR LARGER = (4) 3/4" S.S. RODS & ASSOC. HARDWARE.
  4. MIN 3"x3"x3" PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN. SEE DETAIL A-7.

**PENNICHUCK WATER**

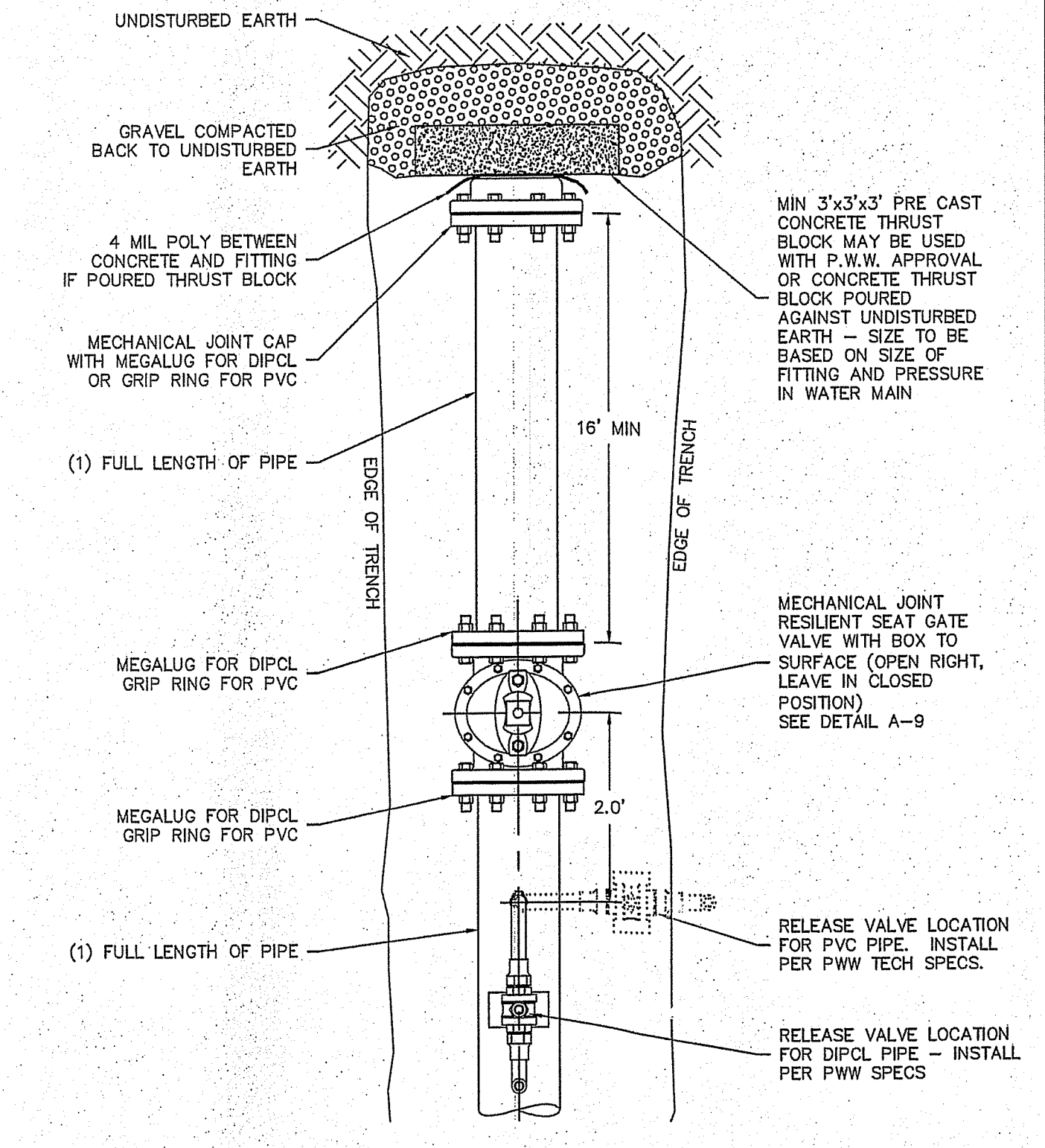
DETAIL A-6  
TYPICAL TEE INSTALLATION  
PENNICHUCK WATER WORKS, INC.  
REV: 5-01 SCALE: NTS



- NOTES:**
1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
  2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5' FROM TOP OF PIPE TO FINISH GRADE.
  3. 3/4" S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS. 10" FITTING OR SMALLER = (2) 3/4" S.S. RODS & ASSOC. HARDWARE. 12" FITTING OR LARGER = (4) 3/4" S.S. RODS & ASSOC. HARDWARE.
  4. MIN 3"x3"x3" PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN.

**PENNICHUCK WATER**

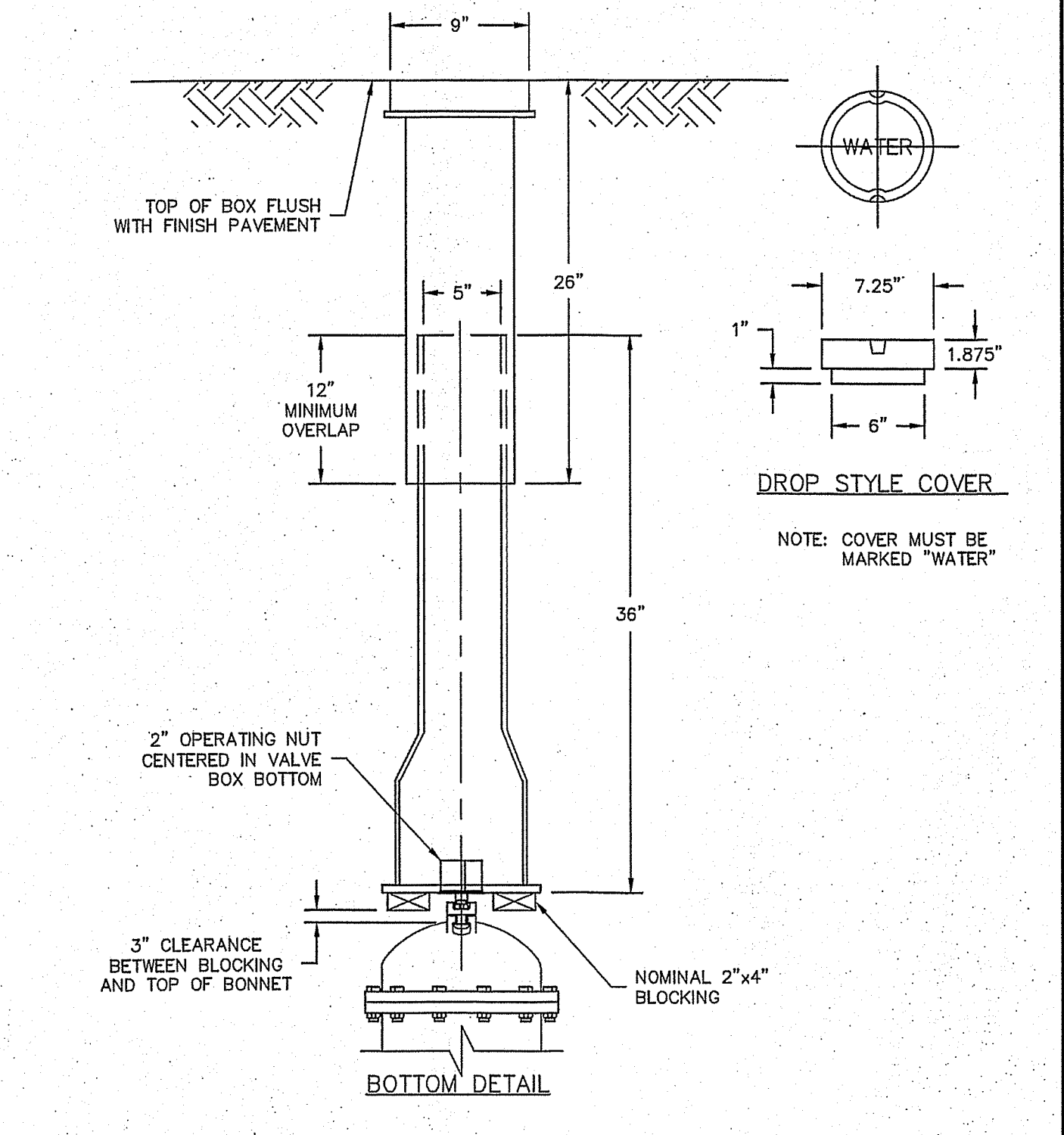
DETAIL A-7  
TYPICAL THRUST BLOCK BEHIND  
FITTINGS INSTALLATION  
PENNICHUCK WATER WORKS, INC.  
REV: 5-01 SCALE: NTS



- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
  2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.

**PENNICHUCK WATER**

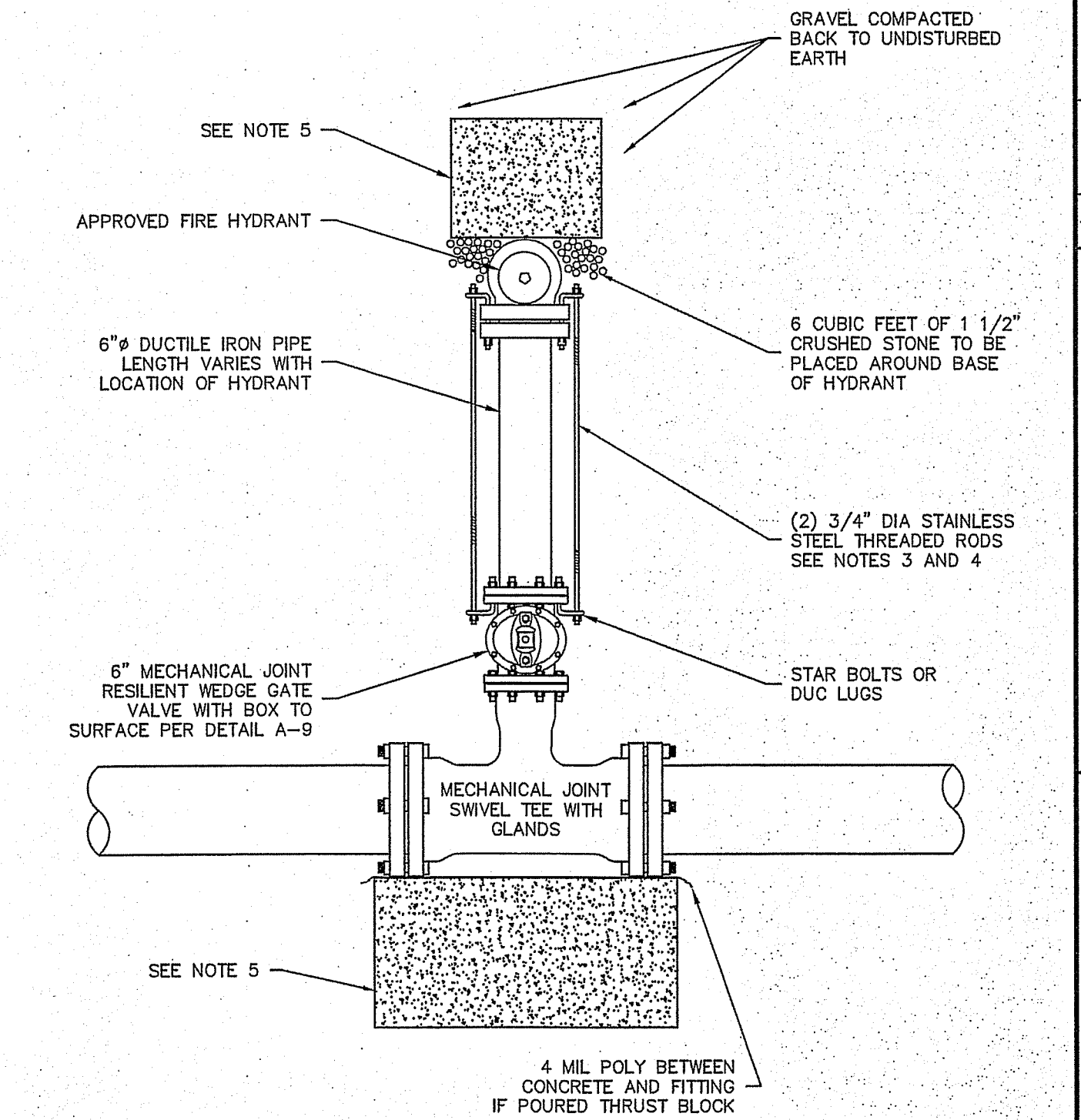
DETAIL A-8  
TYPICAL END OF MAIN  
INSTALLATION  
PENNICHUCK WATER WORKS, INC.  
REV: 5-01 SCALE: NTS



- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
  2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.

**PENNICHUCK WATER**

DETAIL A-9  
TYPICAL VALVE BOX DETAIL  
PENNICHUCK WATER WORKS, INC.  
REV: 5-01 SCALE: NTS



- NOTES:**
1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
  2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5' FROM TOP OF PIPE TO FINISH GRADE.
  3. 3/4" S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS. 10" FITTING OR SMALLER = (2) 3/4" S.S. RODS & ASSOC. HARDWARE. 12" FITTING OR LARGER = (4) 3/4" S.S. RODS & ASSOC. HARDWARE.
  4. WHEN DISTANCE FROM WATER MAIN TO HYDRANT IS MORE THAN 10' SUBSTITUTE MEGALUGS (OR GRIP RINGS) IN LEVY OF THREADED RODS.
  5. MIN 3"x3"x3" PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN. SEE DETAIL A-7.

**PENNICHUCK WATER**

DETAIL A-10  
TYPICAL HYDRANT INSTALLATION  
PENNICHUCK WATER WORKS, INC.  
REV: 5-01 SCALE: NTS

**MERIDIAN LAND SERVICES, INC.**  
ENGINEERING SURVEYING PERMITTING  
SOIL & WETLAND MAPPING SEPTIC DESIGN  
31 OLD MANHUA ROAD, AMHERST, NH 03001  
TEL: 603-972-1441  
FAX: 603-972-1584

KEVIN M. ANDERSON  
REGISTERED PROFESSIONAL ENGINEER  
LICENSE NO. 14948  
9/9/19

REV.	DATE	DESCRIPTION
A	5/23/19	INITIAL TOWN STAFF COMMENTS
B	6/17/19	REVISE DRAINAGE LAYOUT
C	8/19/19	ADDITIONAL TOWN STAFF COMMENTS
D	8/23/19	REVISE COMMENTS
E	9/9/19	KV PARTNERS / TOWN COMMENTS
F	9/9/19	KV PARTNERS / REVIEW COMMENTS
G		
H		

**WATER LINE DETAILS (1)**

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

SCALE: VARIES  
FEBRUARY 25, 2019

**D-5**  
SHEET

FILE: 3203P05F.dwg  
PROJECT: 3203.05  
SHEET NO. 15 OF 16



