SUBDIVISION & CONSTRUCTION PLANS

THE HOMES AT

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE

LIST OF PLANS

T-1	-	TITLE SHEET
T-2	-	KEY PLAN - 1" = 200'
EX-1	-	EXISTING CONDITIONS PLAN - 1" = 100'
S-1	-	SUBDIVISION PLAN - 1" = 100'
S-2	-	SUBDIVISION PLAN - 1" = 60'
S-3	-	SUBDIVISION PLAN - 1" = 60'
S-4	-	TOPOGRAPHIC PLAN - 1" = 60'
S-5	-	TOPOGRAPHIC PLAN - 1" = 60'
SSS-1	-	SITE SPECIFIC SOILS PLAN - 1" = 40'
SSS-2	-	SITE SPECIFIC SOILS PLAN - 1" = 40'
SSS-3	-	SITE SPECIFIC SOILS, TEST PITS
SSS-4	-	SITE SPECIFIC SOILS, TEST PITS
C-1	-	ROAD PLAN & PROFILE - 1" = 30'
C-2	-	ROAD PLAN & PROFILE - 1" = 30'
C-3	-	CONSTRUCTION NOTES
C-4	-	STREAM CROSSING PLAN & PROFILE - 1" = 10'
C-5	-	INFILTRATION PRACTICE (IP-#1) PLAN - 1" = 20'
C-6	-	CROSS COUNTRY DRAINAGE PLAN - 1" = 20'
C-7	-	CONSTRUCTION DETAILS
C-8	-	CONSTRUCTION DETAILS
C-9	-	CONSTRUCTION DETAILS
LA-1	-	LANDSCAPING DETAILS
LA-2	-	LANDSCAPING DETAILS
XS-1	-	ROADWAY CROSS SECTIONS (STA. 0+00 - 3+50)
XS-2	-	ROADWAY CROSS SECTIONS (STA. 4+00 - 5+90)
XS-3	-	ROADWAY CROSS SECTIONS (STA. 6+00 - 7+50)
XS-4	-	ROADWAY CROSS SECTIONS (STA. 8+00 - 9+50)
XS-5	-	ROADWAY CROSS SECTIONS (STA. 9+60 - 11+50)
XS-6	-	ROADWAY CROSS SECTIONS (STA. 12+00 - 13+50)

PREPARED BY
TRITECH
ENGINEERING CORPORATION

PREPARED FOR
Quantum real estate group, llc

Certified 4/15/19 by: Seth Creighton Chief Planner

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3830

REVISIONS

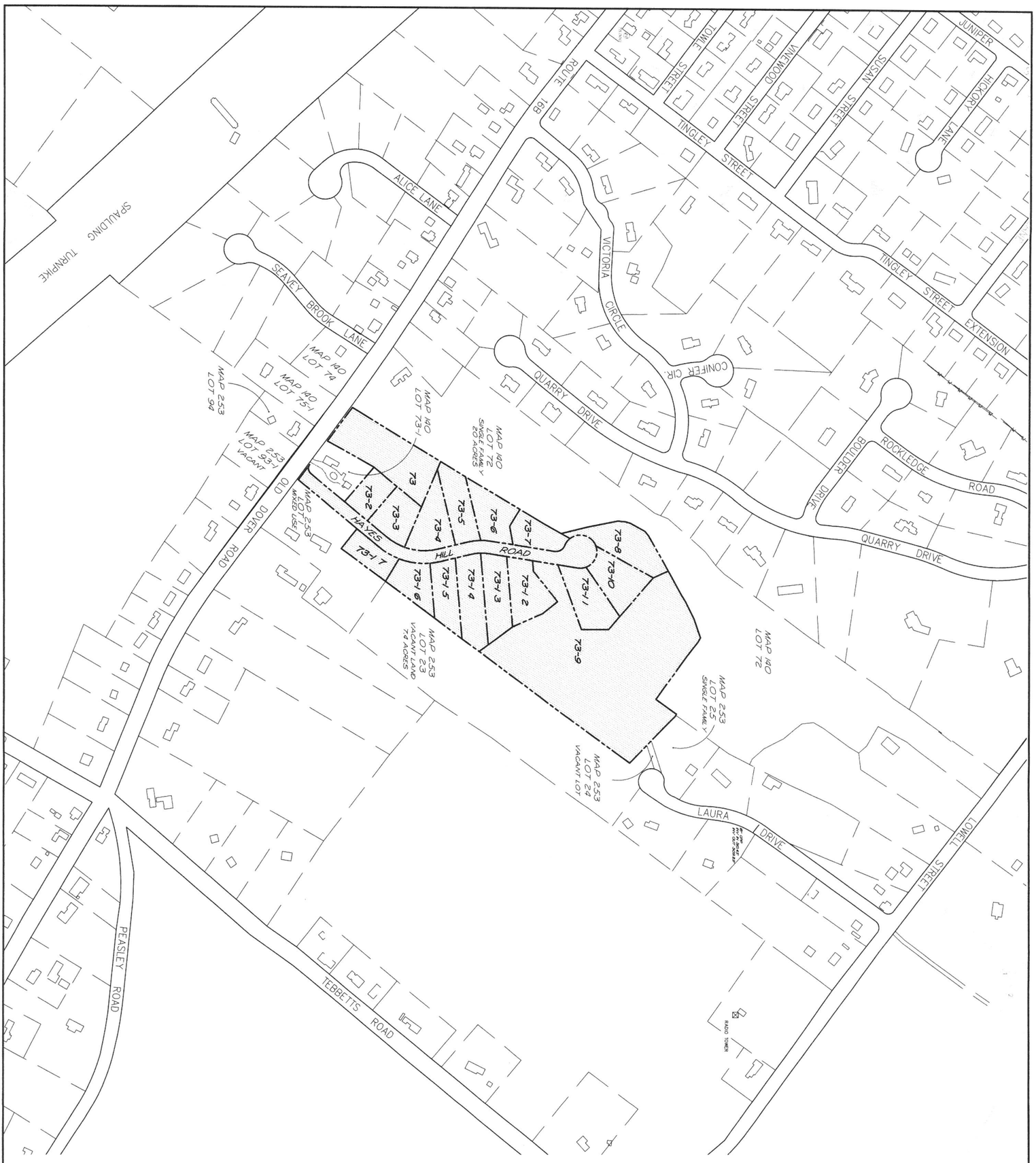
DATE:	DESCRIPTION:
01-09-2018	REVISED PER TRC COMMENTS
02-20-2018	REVISED PER TRC COMMENTS
09-21-2018	REVISED PER NOD

STATE OF NEW HAMPSHIRE - ROBERT J. STOWELL No. 9803 - PROFESSIONAL ENGINEER

LICENSED LAND SURVEYOR ROBERT J. STOWELL NO. 884 STATE OF NEW HAMPSHIRE

TITLE SHEET
HAYES HILL
OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017
JOB No. 16133

SHEET NO.
T-1



MAP - LOT	OWNER-ADDRESS
140-72	DONALD & JOAN SEAVEY P.O. BOX 870 ROCHESTER, NH
140-73-1	CHRISTOPHER COFFEY & KALLA PAQUETTE 42 OLD DOVER ROAD ROCHESTER, NH
140-74	NORMAN & JOAN BAILEY 40 OLD DOVER ROAD ROCHESTER, NH
140-75-1	DANA & KIMBERLY GRAVEL 35 OLD DOVER ROAD ROCHESTER, NH
253-1	HENRY & TARYN DECKEN SEE OLD DOVER ROAD ROCHESTER, NH
253-23	HENRY & TARYN DECKEN SEE OLD DOVER ROAD ROCHESTER, NH
253-24	HENRY & TARYN DECKEN SEE OLD DOVER ROAD ROCHESTER, NH
253-25	ALEXANDRE KLEYNTCH & EMILY SMITH 9 LAURA DRIVE ROCHESTER, NH
253-93-1	CHARLES A. BURROWS 357 OLD DOVER ROAD ROCHESTER, NH
253-94	CHARLES A. BURROWS 357 OLD DOVER ROAD ROCHESTER, NH

TRITECH
ENGINEERING CORPORATION

N

SHEET NO.

T-2

KEY PLAN

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017 JOB No. 16133
SCALE: 1" = 200'

REVISIONS	
DATE:	DESCRIPTION:
01-09-2018	REVISED PER TRG COMMENTS
02-20-2018	REVISED PER TRG COMMENTS

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3830

NOTES

1.) INTENT: TO SHOW THE EXISTING CONDITIONS FOR ROCHESTER TAX MAP 140 LOT 73.

2.) CURRENT OWNER OF RECORD: QUANTUM REAL ESTATE GROUP
755 CENTRAL AVENUE
DOVER, N.H. 03820

3.) SUBJECT PARCELS ARE LOCATED IS THE CITY OF ROCHESTER, COUNTY OF STRAFFORD AND THE STATE OF NEW HAMPSHIRE.

4.) TOTAL LOT AREA: 905,988 SQ.FT. – 20.799 ACRES

5.) TAX MAP 140 LOT 73.

6.) PROJECT DEED REFERENCE: BK 4445 PG 20

7.) PROJECT PLAN REFERENCE: MINOR SUBDIVISION PLAN
CRAMER FAMILY TRUST
156 OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
TRITECH ENGINEERING CORPORATION
OCTOBER 27, 2017 SCRD 113-51

PLAN OF SUBDIVISION
WILLIS J. MOORE
LAURA DRIVE
ROCHESTER, N.H.
BERRY CONST. CO. INC.
SCRD PO 11 FO 1 PLAN #44
DECEMBER 26, 1973

PLAN OF LAND FOR
ROBERT & NANCY CRAMER &
JOSEPH & PATRICIA WOODWARD
OLD DOVER ROAD
ROCHESTER, N.H.
McENEANEY SURVEY ASSOCIATES
12-1-88 NOT RECORDED

PROPOSED SUBDIVISION
LAND OF CARLYLE SEAVEY
OLD DOVER ROAD – ROUTE 16B
ROCHESTER, N.H.
BERRY SURVEYING & ENGINEERING
SCRD 36-122 DEC. 19, 1988

LOT LINE ADJUSTMENT PLAN
PREPARED FOR
PATRICIA S. WOODWARD TRUST
OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
McENEANEY SURVEY ASSOCIATES
SCRD 45-82 MARCH 17, 1995

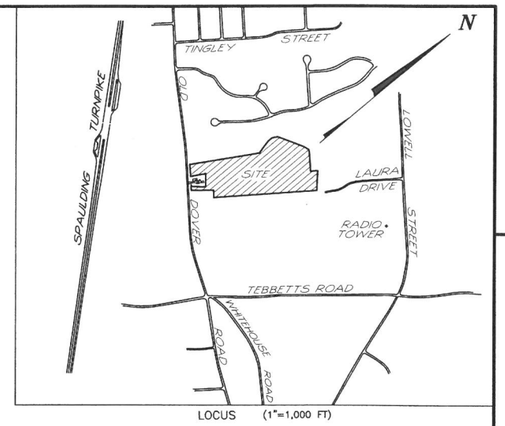
8.) ZONING: RESIDENTIAL – 1 (R-1)
MIN. LOT SIZE: 10,000 SQ.FT.
MIN. FRONTAGE: 100 FT
MIN. SETBACKS:
FRONT: 10 FT
SIDE: 10 FT
REAR: 20 FT

9.) THE RAW UNADJUSTED CLOSURE OF OUR RANDOM POINT TRAVERSE WAS 1 PART IN 44,000, AND WAS ACCOMPLISHED USING A LEICA TC 703 TOTAL STATION, DURING THE MONTH OF SEPTEMBER, 2016.

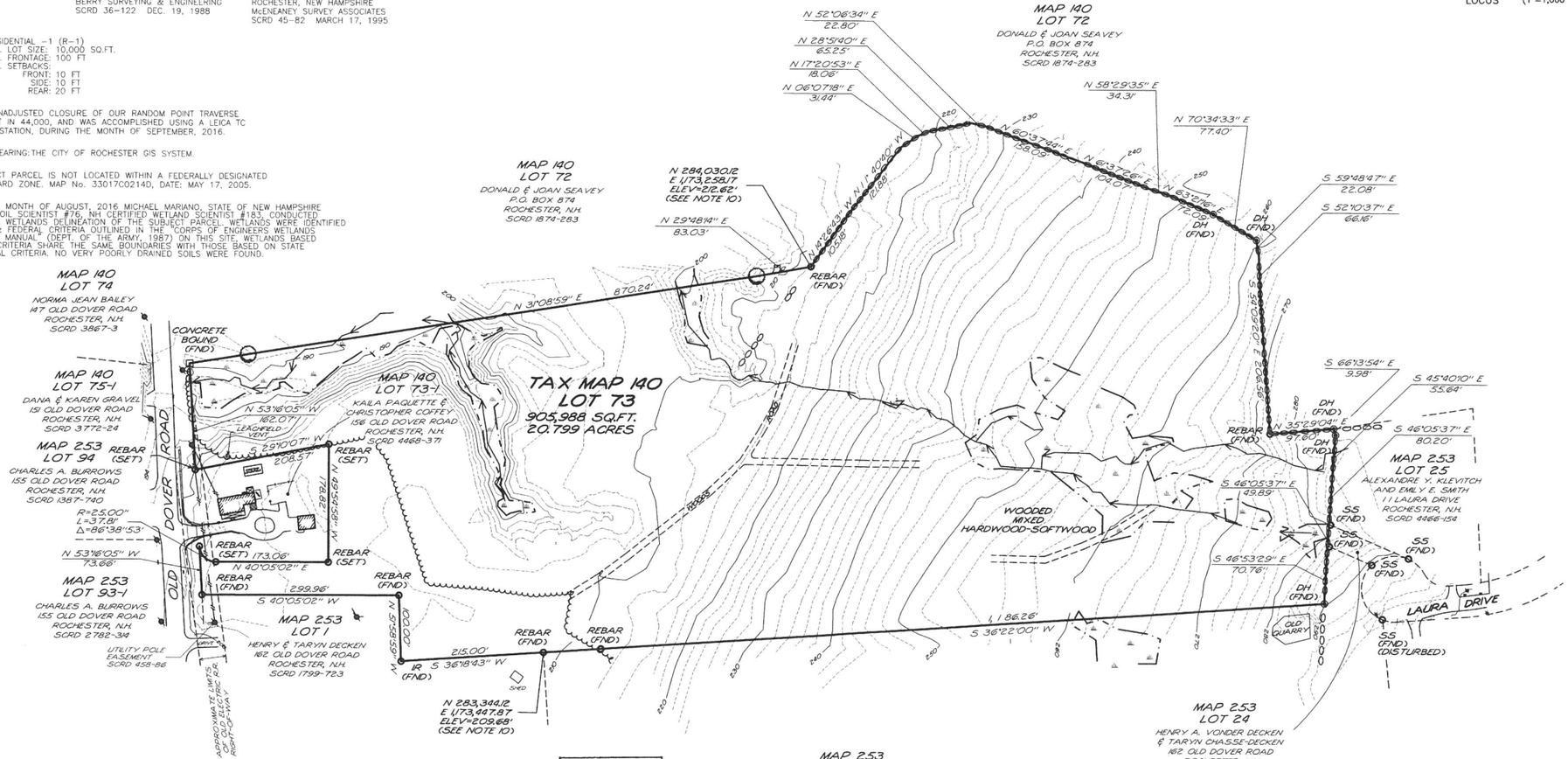
10.) BASIS OF BEARING: THE CITY OF ROCHESTER GIS SYSTEM.

11.) THE SUBJECT PARCEL IS NOT LOCATED WITHIN A FEDERALLY DESIGNATED FLOOD HAZARD ZONE. MAP No. 33017C0214D, DATE: MAY 17, 2005.

12.) DURING THE MONTH OF AUGUST, 2016 MICHAEL MARIANO, STATE OF NEW HAMPSHIRE CERTIFIED SOIL SCIENTIST #76, NH CERTIFIED WETLAND SCIENTIST #183, CONDUCTED AN ON-SITE WETLANDS DELINEATION OF THE SUBJECT PARCEL. WETLANDS WERE IDENTIFIED ON STATE & FEDERAL CRITERIA OUTLINED IN THE "CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL" (DEPT. OF THE ARMY, 1987) ON THIS SITE. WETLANDS BASED ON LOCAL CRITERIA SHARE THE SAME BOUNDARIES WITH THOSE BASED ON STATE AND FEDERAL CRITERIA. NO VERY POORLY DRAINED SOILS WERE FOUND.



LOCUS (1"=1,000 FT)



LEGEND

- FENCE POST WITH WIRE
- TREE WITH WIRE
- STONEWALL
- BARBED WIRE FENCE
- TREE LINE
- WETLAND BOUNDARY (SEE NOTE 12)
- INTERMITTENT STREAM

STATE OF NEW HAMPSHIRE
No. 884
ROBERT J. STOWELL
LICENSED LAND SURVEYOR
SIGNATURE

STATE OF NEW HAMPSHIRE
MICHAEL A. MARIANO
No. 183
CERTIFIED WETLAND SCIENTIST

100 0 50 100 200 400
1"=100'

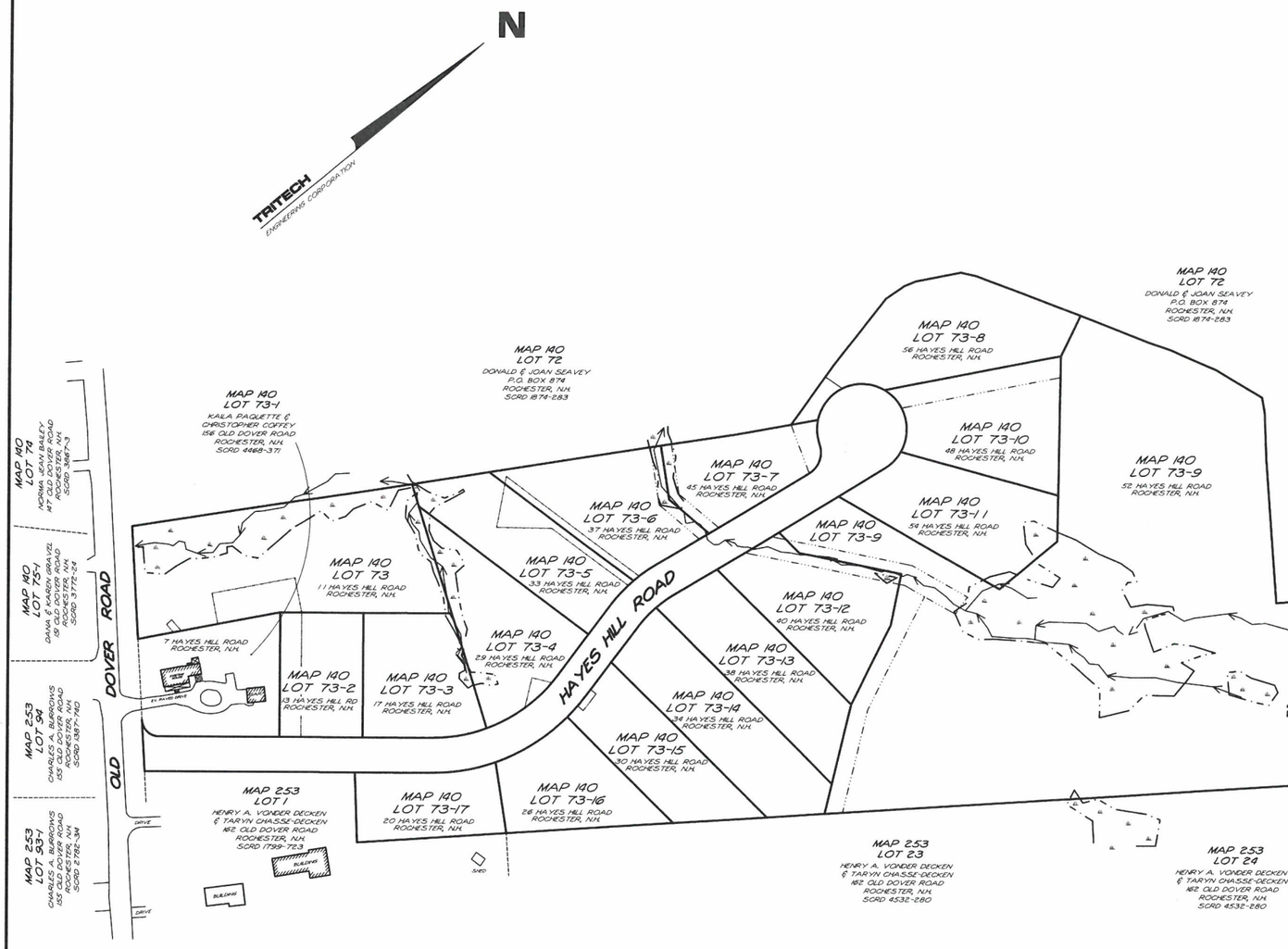
TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3630

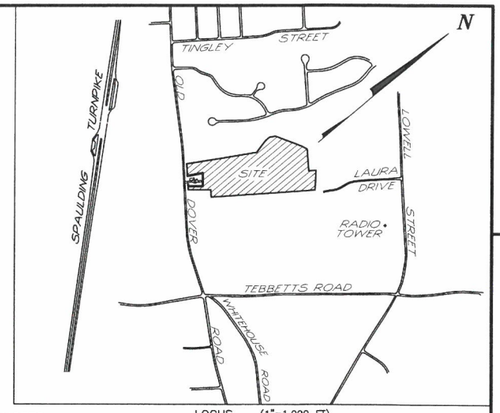
REVISIONS

DATE:	DESCRIPTION:
01-09-18	REVISED PER TRG COMMENTS
02-20-18	REVISED PER TRG COMMENTS

EXISTING CONDITIONS PLAN
QUANTUM REAL ESTATE GROUP
OLD DOVER ROAD
AND LAURA DRIVE
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017 JOB NO. 16133
SCALE: 1" = 100'

SHEET NO.
EX-1





GENERAL NOTES

1.) INTENT: TO SUBDIVIDE ROCHESTER TAX MAP 140 LOT 73 INTO 17 LOTS.

2.) CURRENT OWNER OF RECORD: QUANTUM REAL ESTATE GROUP, LLC.
755 CENTRAL AVENUE
DOVER, N.H. 03820

3.) SUBJECT PARCEL IS LOCATED IS THE CITY OF ROCHESTER, COUNTY OF STRAFFORD AND THE STATE OF NEW HAMPSHIRE.

4.) TOTAL LOT AREA: 905,988 SQ.FT. – 20.799 ACRES

5.) TAX MAP 140 LOT 73

6.) PROJECT DEED REFERENCE: BK 4445 PG 20

7.) PROJECT PLAN REFERENCE: MINOR SUBDIVISION PLAN
CRAMER FAMILY TRUST
156 OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
TRITECH ENGINEERING CORPORATION
OCTOBER 27, 2016 SCRD 113-51

PLAN OF SUBDIVISION
WILLIS J. MOORE
LAURA DRIVE
ROCHESTER, N.H.
BERRY CONST. CO. INC.
SCRD PO 11 FO 1 PLAN #44
DECEMBER 26, 1973

PROPOSED SUBDIVISION
LAND OF CARLYLE SEAVEY
OLD DOVER ROAD – ROUTE 16B
ROCHESTER, N.H.
BERRY SURVEYING & ENGINEERING
SCRD 36-122 DEC. 19, 1988

PLAN OF LAND FOR
ROBERT & NANCY CRAMER &
JOSEPH & PATRICIA WOODWARD
OLD DOVER ROAD
ROCHESTER, N.H.
McENEANEY SURVEY ASSOCIATES
12-1-88 NOT RECORDED

LOT LINE ADJUSTMENT PLAN
PREPARED FOR
PATRICIA S. WOODWARD TRUST
OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
McENEANEY SURVEY ASSOCIATES
SCRD 45-82 MARCH 17, 1995

8.) ZONING: RESIDENTIAL – 1 (R-1)
MIN. LOT SIZE: 10,000 SQ.FT.
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SIDE: 10 FT
REAR: 20 FT

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10.) BASIS OF BEARING: THE CITY OF ROCHESTER GIS SYSTEM.

11.) DURING THE MONTH OF AUGUST, 2016 MICHAEL MARIANO, STATE OF NEW HAMPSHIRE CERTIFIED SOIL SCIENTIST #76, NH CERTIFIED WETLAND SCIENTIST #183, CONDUCTED AN ON-SITE WETLANDS DELINEATION OF THE SUBJECT PARCEL. WETLANDS WERE IDENTIFIED ON STATE & FEDERAL CRITERIA OUTLINED IN THE "CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL" (DEPT. OF THE ARMY, 1987) ON THIS SITE, WETLANDS BASED ON LOCAL CRITERIA SHARE THE SAME BOUNDARIES WITH THOSE BASED ON STATE AND FEDERAL CRITERIA. NO VERY POORLY DRAINED SOILS WERE FOUND.

12.) THE SUBJECT PARCEL IS NOT LOCATED WITHIN A FEDERALLY DESIGNATED FLOOD HAZARD ZONE. MAP No. 33017C0214D, DATE: MAY 17, 2005.

13.) LOTS ARE TO BE SERVICED BY MUNICIPAL WATER AND PRIVATE SEPTIC SYSTEMS.

14.) UTILITIES FOR NEW LOTS MUST BE UNDERGROUND, INCLUDING UTILITIES EXTENDED ONTO THE SITE FROM EXISTING POLES NEAR THE SITE. HOWEVER, IF THE ONLY POLE NEARBY IS ACROSS THE STREET, ONE ADDITIONAL POLE MAY BE PLACED ON-NEAR THE PROPERTY TO ALLOW FOR OVERHEAD EXTENSION OF WIRES ACROSS THE STREET. UTILITIES EXTENDED FROM ANY SUCH NEW POLE MUST BE UNDERGROUND. THE APPLICANT MAY WORK WITH THE CITY STAFF AS APPROPRIATE TO ADDRESS THIS CONDITION.

15.) WHEN A HOME IS CONSTRUCTED ON A LOT, THE OWNER SHALL OBTAIN A STORMWATER MANAGEMENT PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS DEPARTMENT (UNLESS DETERMINED TO BE UN-NECESSARY BY THE CITY ENGINEER) AND FOLLOW THE REQUIREMENTS OF THE CITY ORDINANCE CHAPTER 50. THE PERMITTEE SHALL PREPARE A WRITTEN PLAN FOR MANAGING STORMWATER THAT ENTERS THE CONSTRUCTION SITE. THE PERMITTEE SHALL FOLLOW BEST MANAGEMENT PRACTICES TO PREVENT EROSION IN AREAS WHERE THE SOIL HAS BEEN DISTURBED.

16.) WETLANDS HAVE BEEN DELINEATED ON SITE AS DESCRIBED IN NOTE 11. CHAPTER 42.12 CONSERVATION OVERLAY DISTRICT REGULATIONS APPLY.

17.) FOR MORE INFORMATION ABOUT THIS SUBDIVISION CONTACT THE ROCHESTER PLANNING DEPARTMENT, 33 WAKEFIELD STREET ROCHESTER, N.H. 03867. (603) 335-1338

18.) STATE OF NEW HAMPSHIRE STATE SUBDIVISION APPROVAL NUMBER: PENDING.

19.) NO BUILDING, ON-LOT SEWAGE SYSTEM OR LEACHING AREA SHALL BE ERECTED WITHIN AN EASEMENT.

20.) MAINTENANCE AND CONSTRUCTION EASEMENT IN FAVOR OF MAP 140 LOT 73, FOR THE EXISTING VENT PIPE LOCATED ON MAP 140 LOT 73, THAT SERVICES MAP 140 LOT 73-1.

LEGEND

WETLAND BOUNDARY (SEE NOTE 11)

INTERMITTENT STREAM

SUBDIVISION APPROVAL – WHETHER OR NOT OTHERWISE EXPRESSLY RECITED ON THIS SUBDIVISION PLAN, THE SUBDIVISION APPROVAL GRANTED IS CONDITIONED ON FAITHFUL AND DILIGENT ADHERENCE BY THE OWNER/SUBDIVIDER/DEVELOPER OF ALL TERMS, CONDITIONS, PROVISIONS AND SPECIFICATIONS OF THE CITY OF ROCHESTER LAND SUBDIVISION REGULATIONS AS AMENDED OR AS MAY LATER BE AMENDED, IN EFFECT ON THE DATE OF APPROVAL, UNLESS OR EXPECT INSOFAR AS EXPRESSLY WAIVED, IN ANY PARTICULAR, BELOW, NON-ADHERENCE MAY RESULT IN A REVOCATION OF APPROVAL. ANY VARIATION FROM THE APPROVED PLAN WILL REQUIRE A RESUBMISSION FOR SUBDIVISION APPROVAL.
GRANTED WAIVERS: NONE.

STATE OF NEW HAMPSHIRE
No. 884
ROBERT J. STOWELL
LICENSED LAND SURVEYOR
SIGNATURE

STATE OF NEW HAMPSHIRE
MICHAEL A. MARIANO
No. 183
CERTIFIED WETLAND SCIENTIST

APPROVED BY THE ROCHESTER PLANNING BOARD ON 4-16-18 DATE

SIGNED BY _____ NAME, Chief Planner POSITION

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3630

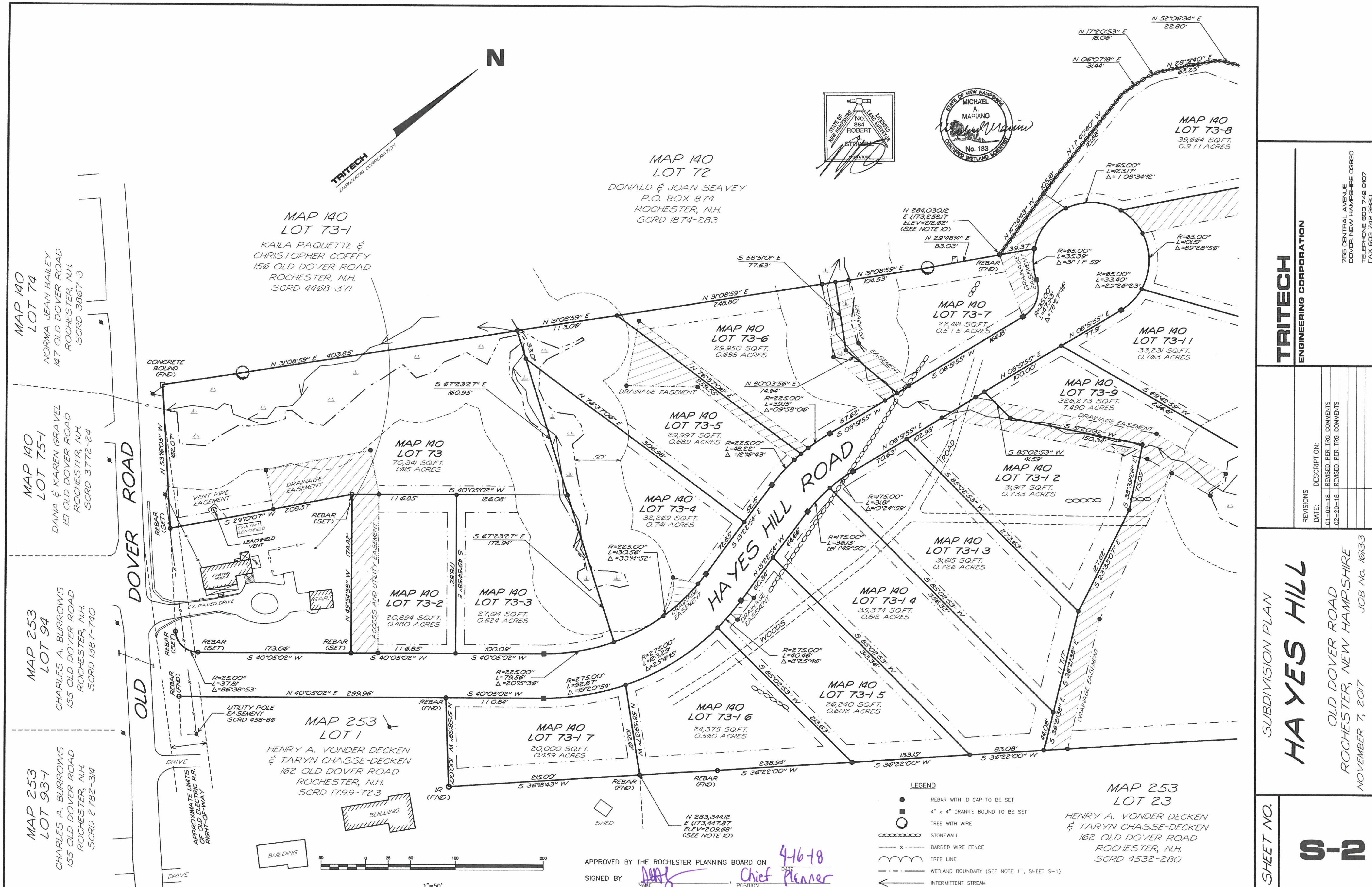
REVISIONS	DESCRIPTION:
DATE:	
01-09-18	REVISED PER TRG COMMENTS
02-20-18	REVISED PER TRG COMMENTS

SUBDIVISION PLAN

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017 JOB No. 16133
SCALE: 1" = 100'

SHEET NO. S-1


N
TRITECH ENGINEERING CORPORATION
MAP 140
LOT 72
DONALD & JOAN SEAVEY
P.O. BOX 874
ROCHESTER, N.H.
SCRD 1874-283
MAP 140
LOT 73-1
KAILA PAQUETTE &
CHRISTOPHER COFFEY
156 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 4468-371
MAP 140
LOT 74
NORMA JEAN BAILEY
147 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 3867-3
MAP 140
LOT 75-1
DANA & KAREN GRAVEL
151 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 3772-24
MAP 253
LOT 94
CHARLES A. BURROWS
155 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 1387-740
MAP 253
LOT 93-1
CHARLES A. BURROWS
155 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 2782-314
OLD DOVER ROAD
HAYES HILL ROAD
MAP 140
LOT 73
70,341 SQ.FT.
1.615 ACRES
MAP 140
LOT 73-2
20,894 SQ.FT.
0.480 ACRES
MAP 140
LOT 73-3
27,194 SQ.FT.
0.624 ACRES
MAP 140
LOT 73-4
32,269 SQ.FT.
0.741 ACRES
MAP 140
LOT 73-5
29,997 SQ.FT.
0.689 ACRES
MAP 140
LOT 73-6
29,950 SQ.FT.
0.688 ACRES
MAP 140
LOT 73-7
22,418 SQ.FT.
0.515 ACRES
MAP 140
LOT 73-8
39,664 SQ.FT.
0.911 ACRES
MAP 140
LOT 73-9
326,273 SQ.FT.
7.490 ACRES
MAP 140
LOT 73-11
33,231 SQ.FT.
0.763 ACRES
MAP 140
LOT 73-12
31,917 SQ.FT.
0.733 ACRES
MAP 140
LOT 73-13
31,615 SQ.FT.
0.726 ACRES
MAP 140
LOT 73-14
35,374 SQ.FT.
0.812 ACRES
MAP 140
LOT 73-15
26,240 SQ.FT.
0.602 ACRES
MAP 140
LOT 73-16
24,375 SQ.FT.
0.560 ACRES
MAP 140
LOT 73-17
20,000 SQ.FT.
0.459 ACRES
MAP 253
LOT 1
HENRY A. VONDER DECKEN
& TARYN CHASSE-DECKEN
162 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 1799-723
MAP 253
LOT 23
HENRY A. VONDER DECKEN
& TARYN CHASSE-DECKEN
162 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 4532-280
N 31°08'59" E 403.85'
N 31°08'59" E 113.06'
N 31°08'59" E 248.80'
N 31°08'59" E 104.53'
CONCRETE BOUND (FND)
DRAINAGE EASEMENT
ACCESS AND UTILITY EASEMENT
VENT PIPE EASEMENT
UTILITY POLE EASEMENT SCRD 458-86
APPROXIMATE LIMITS OF OLD ELECTRIC R.R. RIGHT-OF-WAY
EXISTING HOUSE
EX. PAVED DRIVE
BUILDING
SHED
DRIVE
N 284,030.12
E 1,173,258.17
ELEV=212.62'
(SEE NOTE 10)
N 283,344.12
E 1,173,447.87
ELEV=209.68'
(SEE NOTE 10)
LEGEND
REBAR WITH ID CAP TO BE SET
4" x 4" GRANITE BOUND TO BE SET
TREE WITH WIRE
STONEWALL
BARBED WIRE FENCE
TREE LINE
WETLAND BOUNDARY (SEE NOTE 11, SHEET S-1)
INTERMITTENT STREAM
1"=50'
APPROVED BY THE ROCHESTER PLANNING BOARD ON 4-16-18
SIGNED BY
NAME
POSITION Chief Planner
DATE
STATE OF NEW HAMPSHIRE ROBERT A. STOWELL No. 884 LICENSED LAND SURVEYOR
STATE OF NEW HAMPSHIRE MICHAEL A. MARIANO No. 183 CERTIFIED WETLAND SCIENTIST
TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
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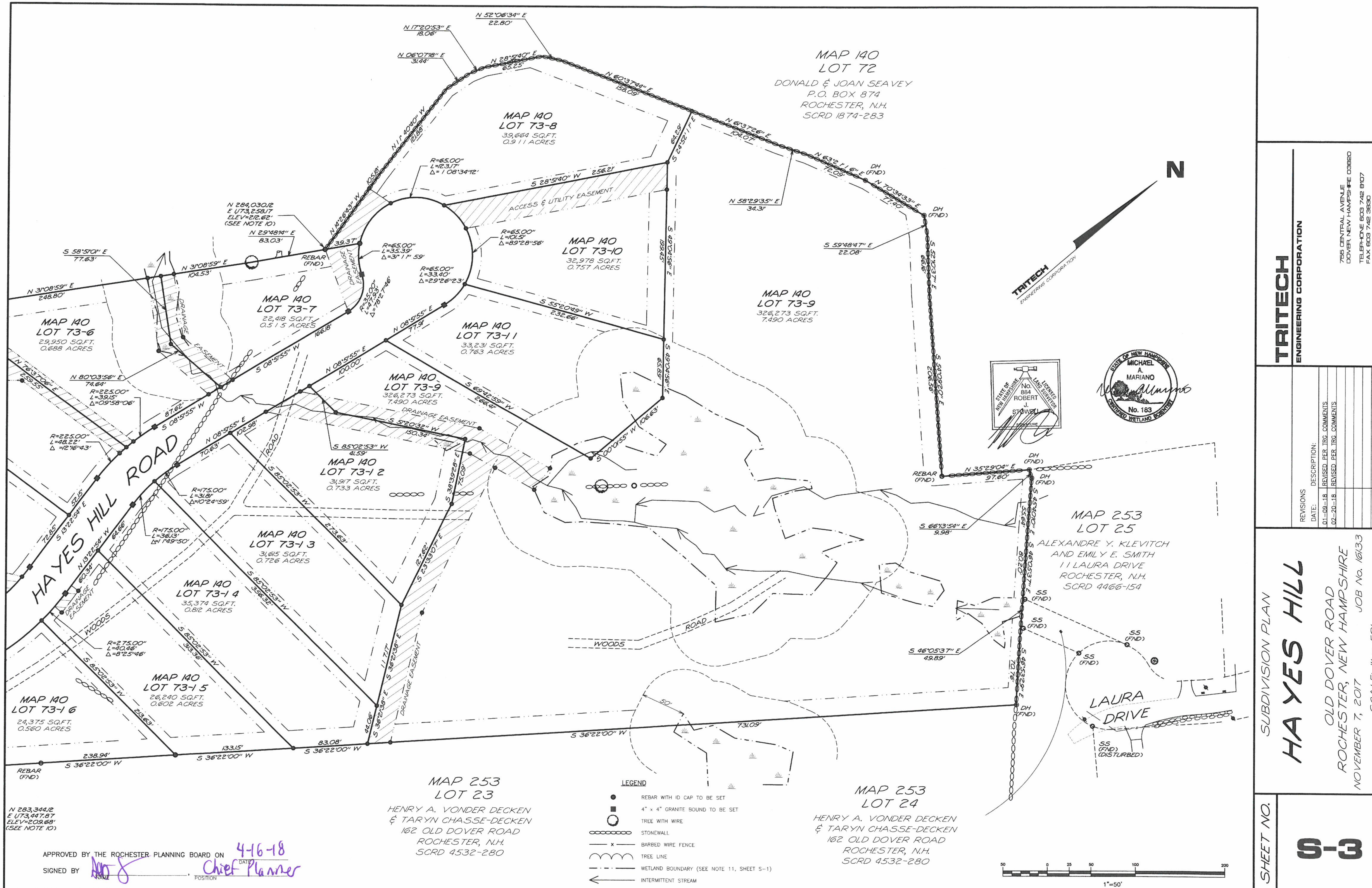
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017 JOB No. 16133
SCALE: 1" = 50'
SHEET NO.
S-2



MAP 140
LOT 72
DONALD & JOAN SEAVEY
P.O. BOX 874
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SCRD 1874-283
MAP 140
LOT 73-8
39,664 SQ.FT.
0.911 ACRES
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32,978 SQ.FT.
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326,273 SQ.FT.
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31,917 SQ.FT.
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MAP 140
LOT 73-16
24,375 SQ.FT.
0.560 ACRES
HAYES HILL ROAD
ACCESS & UTILITY EASEMENT
DRAINAGE EASEMENT
WOODS ROAD
MAP 253
LOT 25
ALEXANDRE Y. KLEVITCH
AND EMILY E. SMITH
11 LAURA DRIVE
ROCHESTER, N.H.
SCRD 4466-154
LAURA DRIVE
MAP 253
LOT 23
HENRY A. VONDER DECKEN
& TARYN CHASSE-DECKEN
162 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 4532-280
MAP 253
LOT 24
HENRY A. VONDER DECKEN
& TARYN CHASSE-DECKEN
162 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 4532-280
N 284,030.12
E 1,173,258.17
ELEV=212.62'
(SEE NOTE 10)
N 283,344.12
E 1,173,447.87
ELEV=209.68'
(SEE NOTE 10)
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REBAR WITH ID CAP TO BE SET
4" x 4" GRANITE BOUND TO BE SET
TREE WITH WIRE
STONEWALL
BARBED WIRE FENCE
TREE LINE
WETLAND BOUNDARY (SEE NOTE 11, SHEET S-1)
INTERMITTENT STREAM
1"=50'
N
STATE OF NEW HAMPSHIRE
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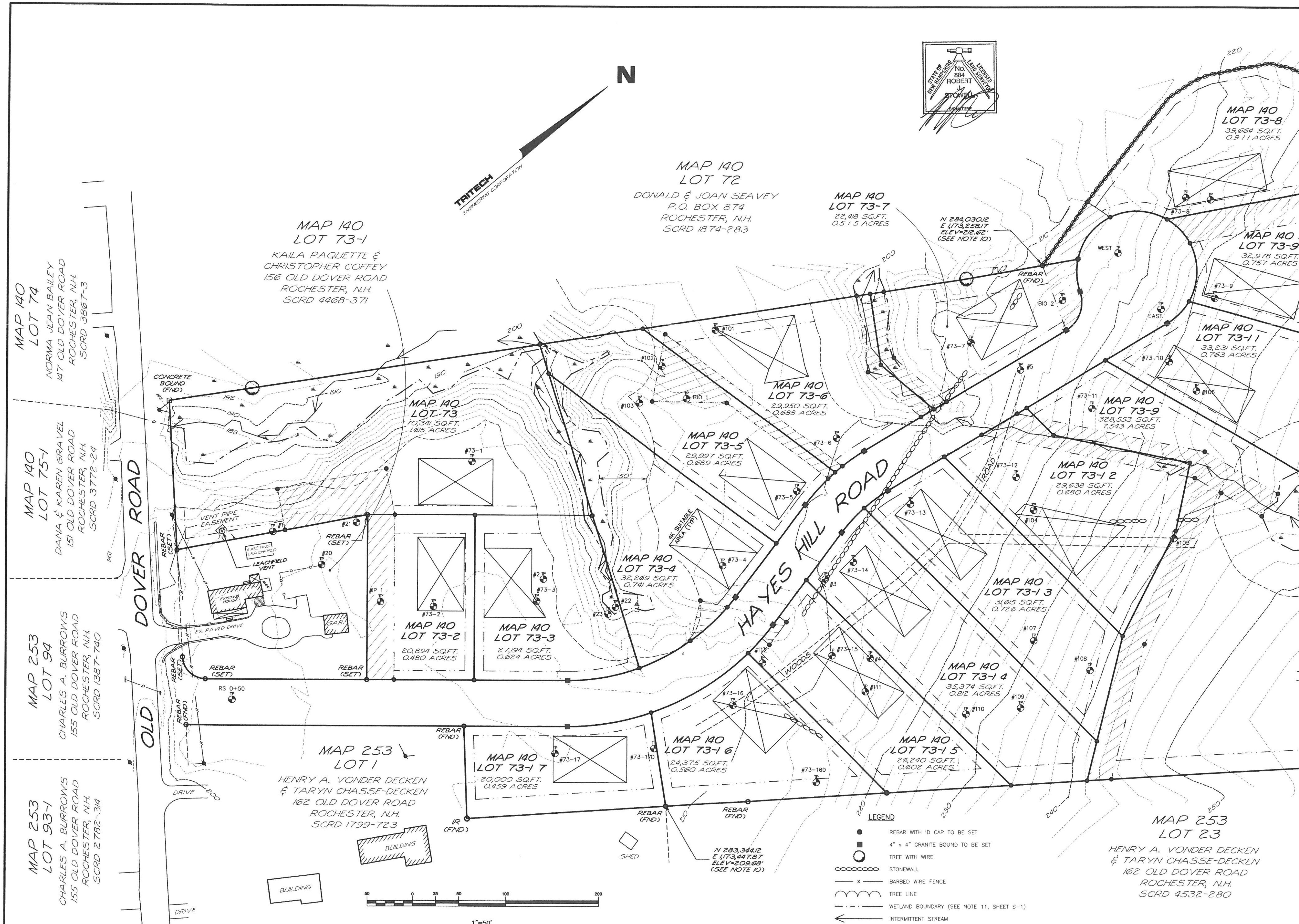
SCALE: 1" = 50'
SHEET NO.
S-3



N
TRITECH ENGINEERING CORPORATION
STATE OF NEW HAMPSHIRE No. 884 ROBERT STOWELL LICENSED LAND SURVEYOR
MAP 140 LOT 72
DONALD & JOAN SEAVEY
P.O. BOX 874
ROCHESTER, N.H.
SCRD 1874-283
MAP 140 LOT 73-1
KAILA PAQUETTE & CHRISTOPHER COFFEY
156 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 4468-371
MAP 140 LOT 74
NORMA JEAN BAILEY
147 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 3867-3
MAP 140 LOT 75-1
DANA & KAREN GRAVEL
151 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 3772-24
MAP 253 LOT 94
CHARLES A. BURROWS
155 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 1387-740
MAP 253 LOT 93-1
CHARLES A. BURROWS
155 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 2782-314
OLD DOVER ROAD
MAP 253 LOT 1
HENRY A. VONDER DECKEN & TARYN CHASSE-DECKEN
162 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 1799-723
MAP 253 LOT 23
HENRY A. VONDER DECKEN & TARYN CHASSE-DECKEN
162 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 4532-280
MAP 140 LOT 73 70,341 SQ.FT. 1.615 ACRES
MAP 140 LOT 73-2 20,894 SQ.FT. 0.480 ACRES
MAP 140 LOT 73-3 27,194 SQ.FT. 0.624 ACRES
MAP 140 LOT 73-4 32,269 SQ.FT. 0.741 ACRES
MAP 140 LOT 73-5 29,997 SQ.FT. 0.689 ACRES
MAP 140 LOT 73-6 29,950 SQ.FT. 0.688 ACRES
MAP 140 LOT 73-7 22,418 SQ.FT. 0.515 ACRES
MAP 140 LOT 73-8 39,664 SQ.FT. 0.911 ACRES
MAP 140 LOT 73-9 32,978 SQ.FT. 0.757 ACRES
MAP 140 LOT 73-11 33,231 SQ.FT. 0.763 ACRES
MAP 140 LOT 73-9 328,553 SQ.FT. 7.543 ACRES
MAP 140 LOT 73-12 29,638 SQ.FT. 0.680 ACRES
MAP 140 LOT 73-13 31,615 SQ.FT. 0.726 ACRES
MAP 140 LOT 73-14 35,374 SQ.FT. 0.812 ACRES
MAP 140 LOT 73-15 26,240 SQ.FT. 0.602 ACRES
MAP 140 LOT 73-16 24,375 SQ.FT. 0.560 ACRES
MAP 140 LOT 73-17 20,000 SQ.FT. 0.459 ACRES
HAYES HILL ROAD
N 284,030.12 E 1,173,258.17 ELEV=212.62' (SEE NOTE 10)
N 283,344.12 E 1,173,447.87 ELEV=209.68' (SEE NOTE 10)
CONCRETE BOUND (FND)
VENT PIPE EASEMENT
EXISTING LEACHFIELD
LEACHFIELD VENT
EXISTING HOUSE
GAR.
EX. PAVED DRIVE
REBAR (SET)
REBAR (FND)
IR (FND)
BUILDING
SHED
DRIVE
4K SUITABLE AREA (TYP)
WOODS ROAD
BIO 1
BIO 2
WEST
EAST
LEGEND
REBAR WITH ID CAP TO BE SET
4" x 4" GRANITE BOUND TO BE SET
TREE WITH WIRE
STONEWALL
BARBED WIRE FENCE
TREE LINE
WETLAND BOUNDARY (SEE NOTE 11, SHEET S-1)
INTERMITTENT STREAM
1"=50'

TRITECH ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
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REVISIONS

DATE:	DESCRIPTION:
01-09-18	REVISED PER TRG COMMENTS
02-20-18	REVISED PER TRG COMMENTS

TOPOGRAPHIC PLAN

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017 JOB No. 16133
SCALE: 1" = 50'

SHEET NO. **S-4**

MAP 140
LOT 72
DONALD & JOAN SEAVEY
P.O. BOX 874
ROCHESTER, N.H.
SCRD 1874-283

MAP 140
LOT 73-8
39,664 SQ.FT.
0.911 ACRES

MAP 140
LOT 73-7
22,418 SQ.FT.
0.515 ACRES

N 284,030.12
E 1,173,258.17
ELEV=212.62'
(SEE NOTE 10)

MAP 140
LOT 73-9
32,978 SQ.FT.
0.757 ACRES

MAP 140
LOT 73-9
328,553 SQ.FT.
7.543 ACRES

MAP 140
LOT 73-11
33,231 SQ.FT.
0.763 ACRES

MAP 140
LOT 73-6
29,950 SQ.FT.
0.688 ACRES

MAP 140
LOT 73-9
328,553 SQ.FT.
7.543 ACRES

MAP 140
LOT 73-12
29,638 SQ.FT.
0.680 ACRES

MAP 140
LOT 73-13
31,615 SQ.FT.
0.726 ACRES

MAP 140
LOT 73-14
35,374 SQ.FT.
0.812 ACRES

MAP 140
LOT 73-15
26,240 SQ.FT.
0.602 ACRES

MAP 253
LOT 25
ALEXANDRE Y. KLEVITCH
AND EMILY E. SMITH
11 LAURA DRIVE
ROCHESTER, N.H.
SCRD 4466-154

MAP 253
LOT 23
HENRY A. VONDER DECKEN
& TARYN CHASSE-DECKEN
162 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 4532-280

MAP 253
LOT 24
HENRY A. VONDER DECKEN
& TARYN CHASSE-DECKEN
162 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 4532-280

HA YES HILL ROAD

LAURA DRIVE

WOODS ROAD

N 283,344.12
E 1,173,447.87
ELEV=205.68'
(SEE NOTE 10)

REBAR (FND)

DH (FND)

SS (FND)

SS (FND) (DISTURBED)

LEGEND
- REBAR WITH ID CAP TO BE SET
- 4" x 4" GRANITE BOUND TO BE SET
- TREE WITH WIRE
- STONEWALL
- BARBED WIRE FENCE
- TREE LINE
- WETLAND BOUNDARY (SEE NOTE 11, SHEET S-1)
- INTERMITTENT STREAM

50 0 25 50 100 200
1"=50'

STATE OF NEW HAMPSHIRE
No. 884
ROBERT J. STOWELL
LICENSED LAND SURVEYOR

N

TRITECH
ENGINEERING CORPORATION

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
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REVISIONS
DATE:	DESCRIPTION:
01-09-18	REVISED PER TRG COMMENTS
02-20-18	REVISED PER TRG COMMENTS

TOPOGRAPHIC PLAN
HA YES HILL
OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017 JOB No. 1@133
SCALE: 1" = 50'

SHEET NO.
S-5

LEGEND

A	0 - 3%	TEST PIT
B	3 - 8%	WETLANDS
C	8 - 15%	WETLAND BOUNDARY
D	15 - 25%	2FT CONTOUR
E	25 - 35%	10FT CONTOUR
E	35%+	SOILS BOUNDARY
		PROPERTY LINE

SOIL TYPES

SITE SPECIFIC MAP UNIT	NAME	DRAINAGE CLASS
26	WINDSOR	EXCESSIVELY DRAINED
214	NAUMBURG	POORLY DRAINED
313	DEERFIELD	SOMEWHAT POORLY DRAINED
915	DEERFIELD VARIANT	SOMEWHAT POORLY DRAINED
448	SCITUATE	MODERATELY WELL DRAINED
946	RIDGEBURY	SOMEWHAT POORLY DRAINED VERY STONY
957	RIDGEBURY	POORLY DRAINED, VERY STONY

40 0 20 40 80 160

1"=40'

N

TRITECH ENGINEERING CORPORATION

NARROW BAND OF 915 SOILS AT TOE OF SLOPE AT WETLAND BOUNDARY, RUNS AROUND RAVINE PERIMTER, UNABLE TO SHOW CLEARLY DUE TO MAP SCALE

LOT 73 · LOT 73-1 · LOT 73-2 · LOT 73-3 · LOT 73-4 · LOT 73-5 · LOT 73-6 · LOT 73-7 · LOT 73-9 · LOT 73-12 · LOT 73-13 · LOT 73-14 · LOT 73-15 · LOT 73-16 · LOT 73-17

MAP 140 LOT 73-1

MAP 253 LOT 1

R.S. 0+50

SOILS NOTES

1.) THE SOIL TYPES ON THIS PLAN HAVE BEEN IDENTIFIED IN ACCORDANCE WITH THE SOCIETY OF SOIL SCIENTISTS OF NORTHERN NEW ENGLAND (SSSNNE) SPECIAL PUBLICATION No. 3, SITE SPECIFIC SOIL MAPPING STANDARDS FOR NEW HAMPSHIRE AND VERMONT, DECEMBER 2006; BY MICHAEL MARIANO, CERTIFIED SOIL SCIENTIST #76.

2.) IN 2016 AND 2017, MICHAEL MARIANO, STATE OF NEW HAMPSHIRE CERTIFIED SOIL SCIENTIST CONDUCTED AN ON-SITE DELINEATION OF THE SUBJECT PARCEL. WETLANDS UNDER STATE AND FEDERAL JURISDICTION WERE IDENTIFIED BASED ON THE "CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL" (DEPT. OF THE ARMY, 1987), AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION VERSION 2.0, JANUARY 2012. EXCEPT IN SPECIAL CIRCUMSTANCES, THESE CRITERIA REQUIRE THAT INDICATORS OF WETLAND SOILS, VEGETATION, AND HYDROLOGY ALL BE PRESENT FOR AN AREA TO BE CONSIDERED A WETLAND.

THIS SITE CONTAINS NO VERY POORLY DRAINED SOILS, AS DEFINED IN HIGH INTENSITY SOIL MAPS FOR NEW HAMPSHIRE STANDARDS SPONSORED BY THE SOCIETY OF SOIL SCIENTIST OF NORTHERN NEW ENGLAND SPECIAL PUBLICATION No. 1, SEPT. 2002.

3.) TEST PITS WERE OBSERVED AND DESCRIBED IN 2016 AND 2017.

TRITECH
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REVISIONS

DATE:	DESCRIPTION:
11-09-2018	REVISED WITH INFILTRATION TEST PITS
12-20-2018	REVISED PER TRG COMMENTS

STATE OF NEW HAMPSHIRE MICHAEL A. MARIANO NO. 076 CERTIFIED SOIL SCIENTIST

LICENSED LAND SURVEYOR NO. 8941 ROBERT J. STOCKWELL SURVEYOR

SITE SPECIFIC SOILS PALN

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE

NOVEMBER 7, 2017 JOB No. 16133

SCALE: 1" = 40'

SHEET NO. SSS-1

SOIL TYPES

		SITE SPECIFIC MAP UNIT	NAME	DRAINAGE CLASS
A	0 - 3%	26	WINDSOR	EXCESSIVELY DRAINED
B	3 - 8%	214	NAUMBURG	POORLY DRAINED
		313	DEERFIELD	SOMEWHAT POORLY DRAINED
C	8 - 15%	915	DEERFIELD VARIANT	SOMEWHAT POORLY DRAINED
D	15 - 25%	448	SCITUATE	MODERATELY WELL DRAINED
		946	RIDGEBURY	SOMEWHAT POORLY DRAINED VERY STONY
E	25 - 35%	957	RIDGEBURY	POORLY DRAINED, VERY STONY
E	35%+			

TRITECH ENGINEERING CORPORATION

40 0 20 40 80 160

1"=40'

TEST PIT
WETLANDS
WETLAND BOUNDARY
2FT CONTOUR
10FT CONTOUR
SOILS BOUNDARY
PROPERTY LINE

LOT 73-8
LOT 73-10
LOT 73-7
LOT 73-11
LOT 73-6
LOT 73-9
LOT 73-12
LOT 73-14
LOT 73-13
LOT 73-15
LOT 73-5
LOT 73-16D

WETLAND LINE IS BOUNDARY BETWEEN 946 AND 957

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REVISIONS

DATE:	DESCRIPTION:
01-09-2018	REVISED WITH INFILTRATION TEST PITS
02-20-2018	REVISED PER TRC COMMENTS

LICENSED LAND SURVEYOR — MICHAEL A MARIANO — No. 076 — STATE OF NEW HAMPSHIRE

LICENSED LAND SURVEYOR — No. 894 — ROBERT J. STAPWELL — STATE OF NEW HAMPSHIRE

SITE SPECIFIC SOILS PALN

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017 JOB No. 16133
SCALE: 1" = 40'

SHEET NO. SSS-2

TEST PIT 1

00 – 08"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; DRY, SOFT.
08 – 16"	YELLOWISH BROWN (10YR5/6) SAND; SINGLE GRAIN; DRY LOOSE
16 – 30"	LIGHT YELLOWISH BROWN (10YR6/4) SAND; THIN HORIZONTAL BANDS OF STRONG BROWN (7.5YR5/8) SAND; SINGLE GRAIN; DRY, LOOSE.
30 – 66"	BROWN (10YR5/3) SAND; COMMON MEDIUM TO COARSE DISTINCT YELLOWISH BROWN (10YR5/6) AND PROMINENT STRONG BROWN (7.5YR5/8) RELICT MOTTLES; SINGLE GRAIN; DRY, LOOSE.

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: >66"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

TEST PIT 2

00 – 09"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; DRY, SOFT.
09 – 12"	YELLOWISH BROWN (10YR5/6) SAND; SINGLE GRAIN; DRY, LOOSE.
12 – 27"	LIGHT YELLOWISH BROWN (10YR6/4) SAND; SINGLE GRAIN; DRY, LOOSE.
27 – 66"	BROWN (10YR5/3) SAND; SINGLE GRAIN; DRY, LOOSE.

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: >66"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

TEST PIT 3

00 – 09"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; DRY, SOFT.
09 – 27"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; DRY, SOFT.
27 – 60"	PALE BROWN (10YR6/3) AND BROWN (2.5Y5/3) SAND; SINGLE GRAIN; DRY, LOOSE.

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: >60"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

TEST PIT 4

00 – 12"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; DRY, SOFT
12 – 24"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; WEAK MEDIUM GRANULAR STRUCTURE; DRY, SOFT.
24 – 32"	OLIVE (5Y4/4) SAND; SINGLE GRAIN; MODERATELY CEMENTED; DRY, VERY HARD.
32 – 60"	LIGHT OLIVE BROWN (2.5Y5/4) GRAVELLY AND COBBLY LOAMY SAND; MODERATE MEDIUM GRANULAR STRUCTURE; DRY, SLIGHTLY HARD.

SERIES: WINDSOR
NOTE: ORTSTEIN DISCONTINUOUS. MAPPED WITH DEERFIELD
ESTIMATED SEASONAL HIGH WATER TABLE: >60"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: 24"
SOIL HYDROLOGIC GROUP: C

TEST PIT 5

00 – 08"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; DRY, SOFT
08 – 24"	STRONG BROWN (7.5YR5/8) LOAMY SAND; WEAK MEDIUM GRANULAR STRUCTURE; DRY, SLIGHTLY HARD.
24 – 40"	STRONG BROWN (7.5YR5/8) STONY SAND; SINGLE GRAIN; DRY, LOOSE. ORTSTEIN FRAGMENTS ON ONE PIT FACE
40 – 48"	YELLOWISH BROWN (10YR5/6) STONY SAND; SINGLE GRAIN; DRY, LOOSE.
48 – 60"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; MANY MEDIUM PROMINENT STRONG BROWN (7.5YR5/8) AND DISTINCT YELLOWISH BROWN (10YR5/6) REDOX CONCENTRATIONS; COMMON MEDIUM DISTINCT GRAY (10YR6/1) REDOX DEPLETIONS; SINGLE GRAIN; DRY, LOOSE.

SERIES: WINDSOR
NOTE: ORTSTEIN – DISCONTINUOUS
ESTIMATED SEASONAL HIGH WATER TABLE: 48"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: 24" (DISCONTINUOUS)
SOIL HYDROLOGIC GROUP: A

TEST PIT 6

00 – 10"	DARK BROWN (10YR4/4) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; DRY, SOFT.
10 – 38"	STRONG BROWN (7.5YR5/8) SAND; SINGLE GRAIN; DRY, LOOSE
38 – 42"	YELLOWISH BROWN (10YR5/6) SAND; SINGLE GRAIN; DRY, LOOSE.
42 – 54"	YELLOWISH BROWN (10YR5/6) SAND; SINGLE GRAIN; MODERATELY CEMENTED; DRY, VERY HARD.
54" – 65"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; COMMON MEDIUM PROMINENT STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; DRY, SLIGHTLY HARD.

SERIES: WINDSOR
NOTE: ORTSTEIN
ESTIMATED SEASONAL HIGH WATER TABLE: 54"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: 42"
SOIL HYDROLOGIC GROUP: B

TEST PIT 7

00 – 08"	DARK BROWN (10YR4/4) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; DRY, SOFT.
08 – 30"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; SINGLE GRAIN; DRY, LOOSE.
30 – 38"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; FEW MEDIUM DISTINCT GRAY (10YR6/1) REDOX DEPLETIONS; SINGLE GRAIN; DRY, LOOSE.
38 – 45"	SAME AS ABOVE BUT WEAKLY CEMENTED; DRY, HARD.
45" – 55"	LIGHT OLIVE BROWN (2.5Y5/4) LOAMY SAND; MANY MEDIUM DISTINCT GRAY (10YR6/1) REDOX DEPLETIONS AND COMMON MEDIUM PROMINENT STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; MODERATE MEDIUM GRANULAR STRUCTURE; DRY, SLIGHTLY HARD.

SERIES: DEERFIELD
ESTIMATED SEASONAL HIGH WATER TABLE: 30"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: 38"
SOIL HYDROLOGIC GROUP: C

TEST PIT 8

00 – 07"	DARK BROWN (10YR4/4) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; DRY, SOFT.
07 – 14"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; WEAK MEDIUM GRANULAR STRUCTURE; DRY, SLIGHTLY HARD
14 – 20"	STRONG BROWN (7.5YR5/8) LOAMY SAND; MODERATE MEDIUM GRANULAR STRUCTURE; DRY, SLIGHTLY HARD.
20 – 32"	LIGHT OLIVE BROWN (2.5Y5/4) LOAMY SAND; MODERATE MEDIUM GRANULAR STRUCTURE; DRY, SLIGHTLY HARD.
32" – 50"	LIGHT OLIVE BROWN (2.5Y5/4) LOAMY SAND; COMMON MEDIUM PROMINENT STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; COMMON MEDIUM DISTINCT GRAY (10YR6/1) REDOX DEPLETIONS; DRY, SLIGHTLY HARD.

SERIES: NEWFIELDS
ESTIMATED SEASONAL HIGH WATER TABLE: 32"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: B

TEST PIT 9

00 – 08"	DARK BROWN (10YR4/4) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; DRY, SOFT.
08 – 36"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; MODERATE MEDIUM GRANULAR STRUCTURE; DRY, SLIGHTLY HARD
@ 36"	BEDROCK

SERIES: TUNBRIDGE
ESTIMATED SEASONAL HIGH WATER TABLE: NONE
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE BEDROCK AT 36"
SOIL HYDROLOGIC GROUP: C

TEST PIT 10

00 – 04"	DARK BROWN (10YR4/4) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; DRY, SOFT.
04 – 49"	YELLOWISH BROWN (10YR5/6) SAND; FEW THIN HORIZONTAL STRATIFICATIONS OF STRONG BROWN (7.5YR5/8) SAND; SINGLE GRAIN; DRY, LOOSE.
49 – 60"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; COMMON MEDIUM FAINT DARK GRAYISH BROWN (2.5Y4/2) REDOX DEPLETIONS; SINGLE GRAIN; DRY, LOOSE.

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: 49"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

NO LONGER LOCUS

TEST PIT 11

00 – 08"	DARK BROWN (10YR4/4) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; DRY, SOFT.
08 – 42"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; SINGLE GRAIN; DRY, LOOSE.
42 – 54"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; COMMON MEDIUM FAINT PALE BROWN (10YR6/3 AND PROMINENT STRONG BROWN (7.5YR5/8) RELICT MOTTLES; SINGLE GRAIN; DRY, LOOSE.
54 – 60"	STRONG BROWN (7.5YR5/8) AND YELLOWISH BROWN (10YR5/6) SAND; SINGLE GRAIN; DRY, LOOSE.

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: NONE
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

NO LONGER LOCUS

TEST PIT 12

00 – 06"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; DRY, SOFT.
06 – 24"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; DRY, SLIGHTLY HARD.
24 – 45"	LIGHT OLIVE BROWN (2.5Y5/4) LOAMY SAND; COMMON MEDIUM PROMINENT STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS, FEW FINE AND MEDIUM RED (2.5YR4/6) FE AND MN CONCRETIONS.
45 – 60"	LIGHT OLIVE BROWN (2.5Y5/4) LOAMY SAND; COMMON MEDIUM PROMINENT STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS, FEW FINE AND MEDIUM RED (2.5YR4/6) FE AND MN CONCRETIONS.

SERIES: NEWFIELDS
ESTIMATED SEASONAL HIGH WATER TABLE: 45"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: B

NO LONGER LOCUS

TEST PIT 20

00 – 17"	DARK BROWN (10YR4/3) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE: MOIST, FRIABLE.
17 – 36"	LIGHT OLIVE BROWN (2.5Y5/6) SAND; SINGLE GRAIN; MOIST, LOOSE.
36 – 55"	YELLOWISH BROWN (10YR5/6) SAND; SINGLE GRAIN; MOIST, LOOSE.
55 – 90"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; FEW RELICT STREAKS OF STRONG BROWN (7.5YR5/8) SINGLE GRAIN: MOIST, LOOSE.

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: >90"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP : A

TEST PIT 21

00 – 20"	DARK BROWN (LOYR.4/3) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST. FRIABLE.
20 – 29"	YELLOWISH BROWN (LOYR5/6) SAND; SINGLE GRAIN; MOIST, LOOSE.
29 – 90"	LIGHT OLIVE BROWN (2.5Y5/4) SAND SINGLE GRAIN; MOIST, LOOSE.

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: >90"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

TEST PIT 22

00 – 15"	DARK BROWN (10YR4/3) AND LIGHT OLIVE BROWN (2.5Y5/4) ILLUVIAL SAND; FEW REDOX DEPLETIONS; SINGLE GRAIN: MOIST LOOSE.
15 – 18"	BLACK (10YR2/L) MUCKY PEAT
18 – 25"	BLACK (LOYR2/L) VERY FINE SAND; MASSIVE STRUCTURE; WET, NON–STICKY, NON–PLASTIC
25 – 50"	GRAY (LOYR6/L) SAND; COMMON BROWN (10YR4/3) STAINS: SINGLE GRAIN; WET NON- STICKY, NON–PLASTIC.

SERIES: NAUMBURG
ESTIMATED SEASONAL HIGH WATER TABLE: 4"
OBSERVED WATER: 18"
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: D

TEST PIT 23

00 – 08"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; DRY, SOFT
08 – 12"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; SINGLE GRAIN: MOIST, LOOSE
12 – 20"	GRAYISH BROWN (2.5Y5/2) SAND: MANY MEDIUM AND COARSE PROMINENT STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS, FEW MEDIUM RED (2.5YR4/6) FE/MN CONCRETIONS: SINGLE GRAIN; MOIST, LOOSE
20 – 24"	GRAY (10YR6/1) SAND; SINGLE GRAIN; WET, NON–STICKY, NON-PLASTIC
24 – 48"	LIGHT OLIVE BROWN (2.5Y5/4), GRAY (10YR6/1, AND STRONG BROWN (7.5YR5/8) SAND; MOIST. VERY HARD

SERIES: NAUMBURG
ESTIMATED SEASONAL HIGH WATER TABLE: 12"
OBSERVED WATER: 24"
RESTRICTIVE LAYER: 24"
SOIL HYDROLOGIC GROUP: D

TEST PIT 24

00 – 04"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
04 – 36"	YELLOWISH BROWN (10YR5/6) SANDY LOAM; WEAK MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE
36 – 42"	LIGHT YELLOWISH BROWN (10YR6/4) LOAMY FINE SAND; MASSIVE STRUCTURE; MOIST, FRIABLE
@ 42"	BEDROCK

SERIES: TUNBRIDGE
ESTIMATED SEASONAL HIGH WATER TABLE: NONE
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE BEDROCK AT 42"
SOIL HYDROLOGIC GROUP: C

NO LONGER LOCUS

TEST PIT 25

00 –08"	DARK BROWN (10YR4/3) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
08 – 18"	YELLOWISH BROWN (10YR5/6) SAND; SINGLE GRAIN; MOIST, LOOSE.
18 – 32"	DARK YELLOWISH BROWN (10YR4/6) SAND: SINGLE GRAIN; MOIST, LOOSE.
32 – 50"	DARK YELLOWISH BROWN (10YR4/6) LOAMY SAND; MANY YELLOWISH BROWN (10YR5/6) AND STRONG BROWN (7.5YR 5/8) REDOX CONCENTRATIONS: MANY COARSE DISTINCT GRAY (LOYR6/ L) REDOX DEPLETIONS; STRONG MEDIUM BLOCKY STRUCTURE; MOIST, VERY FIRM.
@ 50"	BEDROCK

SERIES: SCITUATE
ESTIMATED SEASONAL HIGH WATER TABLE: 32"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: 32" BEDROCK AT 50"
SOIL HYDROLOGIC GROUP: C

TEST PIT 26

00 – 13"	DARK BROWN (I OYR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
13 – 25"	DARK YELLOWISH BROWN (LOYR4/6) LOAMY SAND: MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
25 – 35"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
35 – 39"	YELLOWISH BROWN (LOYR5/6) LOAMY SAND: MANY MEDIUM TO COARSE STRONG DISTINCT STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; MANY MEDIUM TO COARSE PROMINENT GRAY (10YR6/1) REDOX DEPLETIONS; MODERATE MEDIUM GRANULAR STRUCTURE: MOIST, FRIABLE.
39 – 54"	DARK YELLOWISH BROWN (10YR4/6) LOAMY SAND; MANY YELLOWISH BROWN (10YR5/6) AND STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; MANY COARSE DISTINCT GRAY (10YR6/1) REDOX DEPLETIONS; STRONG MEDIUM BLOCKY STRUCTURE; MOIST, VERY FIRM.
@ 54"	BEDROCK

SERIES: SCITUATE
ESTIMATED SEASONAL HIGH WATER TABLE: 35"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: 39"
BEDROCK AT 54"
SOIL HYDROLOGIC GROUP: C

TEST PIT 27

00 – 04"	DARK BROWN (10YR4/4) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
04 – 16"	STRONG BROWN (7.5YR5/8) SANDY LOAM; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
16 – 27"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
27 – 38"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; MANY MEDIUM TO COARSE STRONG DISTINCT STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; FEW MEDIUM RED (2.5YR4/6) FE/MN CONCRETIONS; STRONG MEDIUM BLOCKY STRUCTURE; MOIST, VERY FIRM.
@38"	BEDROCK

SERIES: TUNBRIDGE
ESTIMATED SEASONAL HIGH WATER TABLE: 27"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: 27"
BEDROCK AT 38"
SOILHYDROLOGIC GROUP: C

NO LONGER LOCUS

TEST PIT 73–1

00 – 08"	DARK BROWN (10YR3/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
08 – 16"	YELLOWISH BROWN (10Y5/6) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
16 – 44"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; SINGLE GRAIN; MOIST, LOOSE.
44 – 66"	LIGHT OLIVE BROWN (2.5Y5/4) AND (2.5Y5/3) SAND; FEW RELICT STREAKS OF STRONG BROWN (7.5YR5/8) SINGLE GRAIN; MOIST, LOOSE

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: >66"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

TEST PIT 73–2

00 – 09"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
09 – 14"	YELLOWISH BROWN (10YR5/6) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
14 – 40"	LIGHT OLIVE BROWN (2.5Y5/4) AND LIGHT YELLOWISH BROWN (2.5Y6/3) SAND; SINGLE GRAIN; MOIST, LOOSE.
40 – 66"	LIGHT YELLOWISH BROWN (2,5Y6/3) SAND; SINGLE GRAIN; MOIST, LOOSE.

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: >66"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

TEST PIT 73–3

00 – 09"	DARK BROWN (10YR3/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
09 – 15"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
15 – 21"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; FEW MEDIUM PROMINENT RELICT MOTTLES IN STRONG BROWN (7.5YR5/8) SINGLE GRAIN; MOIST, LOOSE.
21 – 66"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; SINGLE GRAIN; MOIST, LOOSE.

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: >66"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

TEST PIT 73–4

00 – 10"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
10 – 18"	STRONG BROWN (7.5YR5/8) SAND; SINGLE GRAIN; MOIST, LOOSE.
18 – 36"	YELLOWSH BROWN (10YR5/6) SAND; FEW COBBLES AND STONES; SINGLE GRAIN; MOIST, LOOSE.
36 – 60"	LIGHT OLIVE BROWN (2.5Y5/4) STONY SAND; MANY STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; MANY GRAY (10YR6/1) REDOX DEPLETIONS; SOME BLACK (10YR2/1) SAND AT 36"; MOIST WEAKLY CEMENTED TO STRONGLY CEMENTED; EXTREMELY FIRM.

SERIES: DEERFIELD
ESTIMATED SEASONAL HIGH WATER TABLE: 36"
OBSERVED WATER: 36
RESTRICTIVE LAYER: 36
SOIL HYDROLOGIC GROUP: C

TEST PIT 73–5

00 – 10"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
10 – 20"	LIGHT OLIVE BROWN (2.5Y5/4) LOAMY SAND; WEAK MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE
20 – 36"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; SINGLE GRAIN; MOIST, LOOSE.
36 – 60"	GRAYISH BROWN (2.5Y5/2) AND LIGHT OLIVE BROWN (2.5Y5/4) SAND; STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS AND GRAY (10YR6/1) REDOX DEPLETIONS INCREASING WITH DEPTH; SINGLE GRAIN; CEMENTED ; EXTREMELY FIRM

SERIES: DEERFIELD
ESTIMATED SEASONAL HIGH WATER TABLE: 36"
OBSERVED WATER: 36"
RESTRICTIVE LAYER: 36"
SOIL HYDROLOGIC GROUP: C

TEST 73–6

00 – 09"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
09 – 20"	LIGHT OLIVE BROWN (2.5Y5/4) LOAMY SAND; WEAK MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE
20 – 34"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; SINGLE GRAIN; MOIST, LOOSE.
34 – 36"	LIGHT OLIVE BROWN (2.5Y5/4) COARSE SAND; SINGLE GRAIN; MOIST, LOOSE.
36 – 60"	GRAYISH BROWN (2.5Y5/2) AND LIGHT OLIVE BROWN (2.5Y5/4) SAND; STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS AND GRAY (10YR6/1) REDOX DEPLETIONS INCREASING WITH DEPTH; SINGLE GRAIN; CEMENTED ; EXTREMELY FIRM

SERIES: DEERFIELD
ESTIMATED SEASONAL HIGH WATER TABLE: 36"
OBSERVED WATER: 36"
RESTRICTIVE LAYER: 36"
SOIL HYDROLOGIC GROUP: C

TEST PIT 73–7

00 – 09"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
09 – 17"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
17 – 55"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; SINGLE GRAIN; MOIST, LOOSE.
55 – 60"	LIGHT OLIVE BROWN (2.5Y5/4) AND (2.5Y5/3) SAND; COMMON STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; SINGLE GRAIN; MOIST, LOOSE.

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: 55"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

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REVISIONS
DATE: 02-20-2018
DESCRIPTION: REVISED PER TRG COMMENTS

SITE SPECIFIC SOILS, TEST PITS

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017
JOB No. 16133

SHEET NO.
SSS-3

TEST PIT 73-8

00 – 10"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
10 – 24"	STRONG BROWN (7.5YR5/8) SAND; SINGLE GRAIN; MOIST, LOOSE.
24 – 26"	BLACK (10YR2/1) SAND; STRONG MEDIUM BLOCKY STRUCTURE; MOIST, EXTREMELY FIRM.
26 – 31"	LIGHT OLIVE BROWN (2.5Y5/4) VERY STONY SAND; MANY STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS AND MANY GRAY (10YR6/1) REDOX DEPLETIONS; SINGLE GRAIN; WET, NON-STICKY, NON-PLASTIC
Ø48"	REFUSAL – BOULDERS.

SERIES: DEERFIELD
ESTIMATED SEASONAL HIGH WATER TABLE: 24"
OBSERVED WATER: 36"
RESTRICTIVE LAYER: 24"
SOIL HYDROLOGIC GROUP: C

TEST PIT 73-9

00 – 08"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
08 – 18"	REDDISH BROWN (5YR4/4) SANDY LOAM; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
18 – 25"	LIGHT OLIVE BROWN (2.5Y5/4) LOAMY SAND; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
25 – 35"	LIGHT OLIVE BROWN (2.5Y5/4) LOAMY SAND; MANY STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; MANY GRAY (10YR6/1) REDOX DEPLETIONS; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
35 – 60"	LIGHT OLIVE BROWN (2.5Y5/4) LOAMY SAND; MANY STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; MANY GRAY (10YR6/1) REDOX DEPLETIONS; STRONG MEDIUM BLOCKY STRUCTURE; MOIST, FIRM.

SERIES: SCITUATE
ESTIMATED SEASONAL HIGH WATER TABLE: 25"
OBSERVED WATER: 30"
RESTRICTIVE LAYER: 35"
SOIL HYDROLOGIC GROUP: C

TEST PIT 73-10

00 – 10"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
10 – 18"	STRONG BROWN (7.5YR5/8) LOAMY SAND; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
18 – 32"	OLIVE BROWN (2.5Y4/4) LOAMY SAND; COMMON STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
32 – 60"	LIGHT OLIVE BROWN (2.5Y5/4) LOAMY SAND; MANY STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; MANY GRAY (10YR6/1) REDOX DEPLETIONS; STRONG MEDIUM BLOCKY STRUCTURE; MOIST, FIRM

SERIES: SCITUATE
ESTIMATED SEASONAL HIGH WATER TABLE: 18"
OBSERVED WATER: 24"
RESTRICTIVE LAYER: 18"
SOIL HYDROLOGIC GROUP: C

TEST PIT 73-11

00 – 06"	DARK BROWN (10YR4/3) STONY SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
06 – 25"	YELLOWISH RED (5YR4/6) STONY SANDY LOAM; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE
25 – 31"	LIGHT OLIVE BROWN (2.5Y5/4) STONY LOAMY SAND; MANY STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
31 – 60"	LIGHT OLIVE BROWN (2.5Y5/4) STONY LOAMY SAND; MANY STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; COMMON GRAY (10YR6/1) REDOX DEPLETIONS; STRONG MEDIUM BLOCKY STRUCTURE; MOIST, FIRM.

SERIES: SCITUATE
ESTIMATED SEASONAL HIGH WATER TABLE: 25"
OBSERVED WATER: 28"
RESTRICTIVE LAYER: 31"
SOIL HYDROLOGIC GROUP: C

TEST PIT 73-12

00 – 13"	DARK BROWN (10YR4/3) STONY SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
13 – 18"	STRONG BROWN (7.5YR5/8) STONY LOAMY SAND; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE
18 – 22"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
22 – 31"	LIGHT OLIVE BROWN (2.5Y5/4) LOAMY SAND; COMMON STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS, COMMON GRAY (10YR6/1) REDOX DEPLETIONS; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
31 – 60"	STRONG BROWN (7.5YR5/8) GRAVELLY SAND; MANY RED (2.5YR4/6) REDOX CONCENTRATIONS; MANY MEDIUM AND FINE BLACK (10YR2/1) CONCRETIONS; SINGLE GRAIN; WET, NON-STICKY, NON-PLASTIC.

SERIES: DEERFIELD
ESTIMATED SEASONAL HIGH WATER TABLE: 22"
OBSERVED WATER: 30"
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: C

TEST PIT 73-13

00 – 09"	DARK BROWN (10YR4/3) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
09 – 13"	YELLOWISH BROWN (10YR5/6) SAND; SINGLE GRAIN; MOIST, LOOSE.
13 – 24"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; SINGLE GRAIN; MOIST, LOOSE.
24 –60"	LIGHT OLIVE BROWN (2.5Y5/3) SAND; COMMON STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS, COMMON GRAY (10YR6/1) REDOX DEPLETIONS; SINGLE GRAIN; MOIST, LOOSE TO 30" THEN WET, NON-STICKY, NON-PLASTIC.

SERIES: DEERFIELD
ESTIMATED SEASONAL HIGH WATER TABLE: 24"
OBSERVED WATER: 30"
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: C

TEST PIT 73-14

00 – 08"	DARK BROWN (10YR3/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
08 – 27"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; SINGLE GRAIN; MOIST, LOOSE.
27 – 60"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; MANY STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; SINGLE GRAIN; MOIST, LOOSE TO 35" THEN WET, NON-STICKY, NON-PLASTIC.

SERIES: DEERFIELD
ESTIMATED SEASONAL HIGH WATER TABLE: 24"
OBSERVED WATER: 30"
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: C

TEST PIT 73-15

00 – 08"	DARK BROWN (10YR4/3) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
08 – 18"	YELLOWISH BROWN (10YR5/6) SAND; SINGLE GRAIN; MOIST, LOOSE.
18 – 48"	YELLOWISH BROWN (10YR5/6) SAND; STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS, GRAY (10YR6/1 REDOX DEPLETIONS, BOTH INCREASING WITH DEPTH; SINGLE GRAIN; MOIST, LOOSE TO 20" THEN WET, NON-STICKY, NON-PLASTIC.

SERIES: DEERFIELD
ESTIMATED SEASONAL HIGH WATER TABLE: 18"
OBSERVED WATER: 20"
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: C

TEST PIT 73-16

00 – 09"	DARK BROWN (10YR3/3) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
09 – 18"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
18 – 24"	YELLOWISH BROWN (10YR5/6) SAND; SINGLE GRAIN; MOIST, LOOSE.
24 –28"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; SINGLE GRAIN; MOIST, LOOSE.
28 – 60"	LIGHT OLIVE BROWN (2.5Y5/4 & 5/3) SAND; STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS, GRAY (10YR6/1) REDOX DEPLETIONS; SINGLE GRAIN; MOIST, LOOSE TO 32" THEN WET, NON-STICKY, NON-PLASTIC.

SERIES: DEERFIELD
ESTIMATED SEASONAL HIGH WATER TABLE: 28"
OBSERVED WATER: 32"
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: C

TEST PIT 73-17

00 – 09"	DARK BROWN (10YR3/3) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
09 – 24"	YELLOWISH BROWN (10YR5/6) SAND; SINGLE GRAIN' MOIST, LOOSE.
24 – 46"	LIGHT OLIVE BROWN (2.5Y5/3) SAND; SINGLE GRAIN; MOIST, LOOSE.
46 –72"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; FEW STRONG BROWN (7.5YR5/8) REDOC CONCENTRATIONS; SINGLE GRAIN; MOIST, LOOSE.

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: 46"
OBSERVED WATER: 50"
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

TEST PIT 73-17D

00 – 09"	DARK BROWN (10YR3/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
09 – 21"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
21 – 31"	LIGHT OLIVE BROWN (10YR5/4) SAND; SINGLE GRAIN; MOIST, LOOSE.
31 –39"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; FEW GRAYISH BROWN (2.5Y5/2) REDOX DEPLETIONS; SINGLE GRAIN; MOIST, LOOSE.
39 – 60"	OLIVE BROWN (2.5Y4/4) SAND; GRAY (10YR6/1) REDOX DEPLETIONS INCREASING WITH DEPTH; SINGLE GRAIN; MOIST, LOOSE TO 40" THEN WET, NON-STICKY, NON-PLASTIC.

SERIES: DEERFIELD
ESTIMATED SEASONAL HIGH WATER TABLE: 31"
OBSERVED WATER: 40"
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: B

TEST PIT CUL-DE-SAC (EAST)

00 – 08"	DARK BROWN (10YR3/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
08 – 22"	YELLOWISH RED (5YR4/6) STONY LOAMY SAND; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
22 – 48"	LIGHT OLIVE BROWN (2.5Y5/4) STONY LOAMY SAND; MANY STRONG BROWN (7.5YR5/8) AND YELLOWISH BROWN (10YR5/6) REDOX CONCENTRATIONS; MANY GRAY (10YR6/1) REDOX DEPLETIONS; LOAMY SAND; MODERATE MEDIUM GRANULAR STRUCTURE; WET, NON-STICKY, NON-PLASTIC.

SERIES: NEWFIELDS (INCLUSION IN SCITUATE UNIT)
ESTIMATED SEASONAL HIGH WATER TABLE: 22"
OBSERVED WATER: 22"
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: C

TEST PIT CUL-DE-SAC (WEST)

00 – 07"	DARK BROWN (10YR3/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
07 – 19"	YELLOWISH RED (5YR4/6) LOAMY SAND; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
19 – 30"	YELLOWISH RED (5YR4/6) VERY STONY SAND; MANY STRONG BROWN (7.5YR5/6) REDOX CONCENTRATIONS; MANY GRAY (10YR6/1) REDOX DEPLETIONS; SINGLE GRAIN; MOIST, LOOSE.
30 – 48"	LIGHT OLIVE BROWN (2.5Y5/4) VERY STONY LOAMY SAND; MANY STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS AND MANY GRAY (10YR6/1) REDOX DEPLETIONS; COMMON BLACK (10YR2/1) STAINS; MODERATE MEDIUM GRANULAR STRUCTURE; WET, NON-STICKY.
Ø48"	REFUSAL – BOULDERS

SERIES: DEERFIELD
ESTIMATED SEASONAL HIGH WATER TABLE: 19"
OBSERVED WATER: 30"
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: C

TEST PIT 101

00 – 07"	DARK YELLOWISH BROWN (10YR4/4) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
07 – 18"	DARK YELLOWISH BROWN (10YR4/6) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
18 – 96"	YELLOWISH BROWN (10YR5/4) SAND; SINGLE GRAIN; MOIST, LOOSE.

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: >96"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

TEST PIT 102

00 – 03"	VERY DARK GRAYISH BROWN (2.5Y3/2) SANDY LOAM: WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
03 – 10"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
10 – 15"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; MANY RELICT MOTTLES IN STRONG BROWN (7.5YR5/8, GRAY (10YR6/1) AND RED (2.5YR4/6); MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
15 – 24"	MIXED OLIVE BROWN (2.5Y4/4 AND YELLOWISH BROWN (10YR5/6) FINE SANDY LOAM; MANY GRAY (10YR6/1) REDOX DEPLETIONS; MODERATE MEDIUM GRANULAR STRUCTURE.
24 – 36"	BLACK (10YR2/1) FINE SANDY LOAM; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
36 – 42"	GRAY (10YR6/1) SAND; SINGLE GRAIN; WET, NON-STICKY, NON-PLASTIC.

SERIES: RECENT ILLUVIUM OVER NAUMBURG
ESTIMATED SEASONAL HIGH WATER TABLE: 15"
OBSERVED WATER: 36"
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: C

TEST PIT 103

00 – 07"	DARK BROWN (10YR4/3) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
07 – 14"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
14 – 26"	YELLOWISH BROWN (10YR5/6) SAND; SINGLE GRAIN; MOIST, LOOSE.
26 – 59"	YELLOWISH BROWN (10YR5/4) SAND STRATIFIED WITH THIN HORIZONTAL LAYERS OF STRONG BROWN (7.5YR5/8) SAND; SINGLE GRAIN; MOIST, LOOSE
59 – 96"	YELLOWISH BROWN (10YR5/4) SAND; SINGLE GRAIN; MOIST, LOOSE.

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: >96"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

TEST PIT 104

BOULDERS ON SURFACE

00 – 10"	DARK BROWN (10YR4/3) STONY SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
10 – 25"	STRONG BROWN (7.5YR4/6) STONY SANDY LOAM; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE
25 – 36"	YELLOWISH BROWN (10YR5/6) SANDY LOAM; FEW STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
36 – 66"	YELLOWISH BROWN (10YR5/6) STONY LOAMY SAND; MANY STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; COMMON GRAY (10YR6/1) REDOX DEPLETIONS; STRONG MEDIUM BLOCKY STRUCTURE; MOIST, FIRM.

SERIES: SCITUATE
ESTIMATED SEASONAL HIGH WATER TABLE: 25"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: 36"
SOIL HYDROLOGIC GROUP: C

TEST PIT 105

00 – 09"	DARK BROWN (10YR4/3) FINE SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
09 – 18"	STRONG BROWN (7.5YR5/8) SANDY LOAM; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE
18 – 33"	YELLOWISH BROWN (10YR5/6) SANDY LOAM; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
33 – 60"	LIGHT OLIVE BROWN (2.4Y5/4) SANDY LOAM PARTING TO LOAMY SAND; STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS AND GRAY (10YR6/1) REDOX DEPLETIONS INCREASING WITH DEPTH; STRONG MEDIUM BLOCKY STRUCTURE; MOIST, FIRM.

SERIES: SCITUATE
ESTIMATED SEASONAL HIGH WATER TABLE: 33"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: 36"
SOIL HYDROLOGIC GROUP: C

TEST PIT 106

00 – 12"	DARK BROWN (10YR3/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
12 – 27"	DARK YELLOWISH BROWN (10YR3/6) LOAMY SAND; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE
27 – 54"	OLIVE BROWN (2.5Y4/3) LOAMY SAND, BOULDER AND STONY AT 36"; MANY STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS AND GRAY (10YR6/1) REDOX DEPLETIONS); STRONG MEDIUM BLOCKY STRUCTURE; MOIST, FIRM.

SERIES: SCITUATE
ESTIMATED SEASONAL HIGH WATER TABLE: 27"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: 27"
SOIL HYDROLOGIC GROUP: C

TEST PIT 107

00 – 07"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
07 – 22"	YELLOWISH BROWN (10YR5/6) SANDY LOAM; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE
22 – 30"	LIGHT OLIVE BROWN (2.5Y5/4) LOAMY SAND; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
30 – 60"	LIGHT OLIVE BROWN (2.4Y5/4) LOAMY SAND; STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS AND GRAY (10YR6/1) REDOX DEPLETIONS; STRONG MEDIUM BLOCKY STRUCTURE; MOIST, FIRM.

SERIES: SCITUATE
ESTIMATED SEASONAL HIGH WATER TABLE: 30"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: 30"
SOIL HYDROLOGIC GROUP: C

TEST PIT 108

00 – 10"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
10 – 31"	YELLOWISH BROWN (7.5YR5/8) SANDY LOAM; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE
31 – 37"	LIGHT OLIVE BROWN (2.5Y5/4) LOAMY SAND; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE.
37 – 60"	LIGHT OLIVE BROWN (2.4Y5/4) LOAMY SAND; STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS AND GRAY (10YR6/1) REDOX DEPLETIONS; STRONG MEDIUM BLOCKY STRUCTURE; MOIST, FIRM.

SERIES: SCITUATE
ESTIMATED SEASONAL HIGH WATER TABLE: 37"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: 37"
SOIL HYDROLOGIC GROUP: C

TEST PIT 109

00 – 10"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
10 – 36"	YELLOWISH BROWN (7.5YR5/8) SANDY LOAM; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE
36 – 60"	LIGHT OLIVE BROWN (2.4Y5/4) LOAMY SAND; STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS AND GRAY (10YR6/1) REDOX DEPLETIONS; STRONG MEDIUM BLOCKY STRUCTURE; MOIST, FIRM.

SERIES: SCITUATE
ESTIMATED SEASONAL HIGH WATER TABLE: 36"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: 36"
SOIL HYDROLOGIC GROUP: C

TEST PIT 110

00 – 10"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
10 – 32"	YELLOWISH BROWN (7.5YR5/8) SANDY LOAM; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE
32 – 60"	LIGHT OLIVE BROWN (2.4Y5/4) LOAMY SAND; STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS AND GRAY (10YR6/1) REDOX DEPLETIONS; STRONG MEDIUM BLOCKY STRUCTURE; MOIST, FIRM.

SERIES: SCITUATE
ESTIMATED SEASONAL HIGH WATER TABLE: 32"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: 32"
SOIL HYDROLOGIC GROUP: C

TEST PIT 111

00 – 04"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
04 – 20"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
20 – 30"	LIGHT OLIVE BROWN (10YR5/4) SAND; SINGLE GRAIN; MOIST, LOOSE.
30 – 66"	LIGHT OLIVE BROWN (2.5Y5/4) BOULDER SAND; FEW GRAYISH BROWN (2.5Y5/2) REDOX DEPLETIONS; SINGLE GRAIN; MOIST, LOOSE.

SERIES: DEERFIELD
ESTIMATED SEASONAL HIGH WATER TABLE: 30"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: B

TEST PIT 112

00 – 12"	DARK BROWN (10YR3/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
12 – 17"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
17 – 34"	LIGHT OLIVE BROWN (10YR5/4) SAND; SINGLE GRAIN; MOIST, LOOSE.
34 –60"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; FEW GRAYISH BROWN (2.5Y5/2) REDOX DEPLETIONS; SINGLE GRAIN; MOIST, LOOSE.

SERIES: DEERFIELD
ESTIMATED SEASONAL HIGH WATER TABLE: 34"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: B

TEST PIT 73-16D

00 – 07"	DARK BROWN (10YR3/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
07 – 15"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE.
15 – 30"	YELLOWISH BROWN (10YR5/6) LOAMY SAND; DIFFICULT TO IDENTIFY REDOX FEATURES AND SOIL STRUCTURE DUE TO WETNESS; WET, NON-STICKY, NON-PLASTIC.
Ø30"	REFUSAL. MAY BE BEDROCK OR BOULDER – COULD NOT DETERMINE WITH SMALL EXCAVATOR.

SERIES: DEERFIELD
ESTIMATED SEASONAL HIGH WATER TABLE: 15"
OBSERVED WATER: 15"
RESTRICTIVE LAYER: NONE
REFUSAL: 30"
SOIL HYDROLOGIC GROUP: B

TEST PIT AT ROAD STA 0+50

00 – 10"	DARK BROWN (10YR3/3) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
10 – 30"	LIGHT OLIVE BROWN (10YR4/3) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, LOOSE.
30 – 84"	YELLOWISH BROWN (10YR5/6) SAND; SINGLE GRAIN; MOIST, LOOSE.
84 –108"	LIGHT OLIVE BROWN (2.5Y5/4) SAND; FEW REDOX DEPLETIONS AND CONCENTRATIONS; SINGLE GRAIN; WET, NON-STICKY, NON-PLASTIC.

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: 84"
OBSERVED WATER: 84
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

TEST PIT IP #1

00 – 09"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
09 – 20"	STRONG BROWN (7.5YR5/8) LOAMY SAND; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
20 – 49"	YELLOWISH BROWN (10YR5/6) SAND; SINGLE GRAIN; MOIST, LOOSE
49 – 70"	YELLOWISH BROWN (10YR5/6) SAND; COMMON MEDIUM TO COARSE PROMINENT STRONG BROWN RELICT MOTTLES IN A BAND 45 DEGREES OFF HORIZONTAL; SINGLE GRAIN; MOIST, LOOSE
70 – 120"	OLIVE BROWN (2.5Y5/3) SAND; SINGLE GRAIN; MOIST, LOOSE

OBSERVATIONS BELOW 8' DONE FROM OUTSIDE PIT.
SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: >120"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

TEST PIT BIO #1

00 – 06"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE;
06 – 24"	YELLOWISH BROWN (10YR5/6) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
24 – 70"	LIGHT OLIVE BROWN (2.5Y5/6) SAND; SINGLE GRAIN; MOIST, LOOSE.
70 – 96"	GRAY (10YR6/1) SAND; SINGLE GRAIN; MOIST, LOOSE. AT 84" – SINGLE GRAIN WET, NON-STICKY, NON-PLASTIC.

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: 70"
OBSERVED WATER: 84"
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

TEST PIT BIO #2

00 – 11"	DARK BROWN (10YR4/3) SANDY LOAM; WEAK FINE GRANULAR STRUCTURE; MOIST, FRIABLE
11 – 56"	YELLOWISH BROWN (7.5YR5/6) STONY SAND; SINGLE GRAIN; MOIST, LOOSE
56 – 71"	YELLOWISH BROWN (10YR5/6) STONY SAND; COMMON REDOX CONCENTRATIONS IN 7.5YR5/8; FEW MEDIUM BLACK (10YR2/1) MANGANESE CONCRETIONS; SINGLE GRAIN; MOIST, LOOSE
71 – 96"	LIGHT OLIVE BROWN (2.4Y5/4) STONY LOAMY SAND; COMMON REDOX CONCENTRATIONS IN 7.5YR5/8 AND 10YR6/1; MODERATE MEDIUM GRANULAR STRUCTURE; MOIST, FRIABLE

SERIES: WINDSOR
ESTIMATED SEASONAL HIGH WATER TABLE: 56"
OBSERVED WATER: NONE
RESTRICTIVE LAYER: NONE
SOIL HYDROLOGIC GROUP: A

NEW HAMPSHIRE Designer of Subsurface Disposal Systems Michael A. Mariano No. 941 Water Supply & Pollution Control

STATE OF NEW HAMPSHIRE MICHAEL A. MARIANO NO. 076 CERTIFIED SOIL SCIENTIST

NEW HAMPSHIRE Designer of Subsurface Disposal Systems ★★★ Robert J. Stowell No. 0800 Department of Environmental Services

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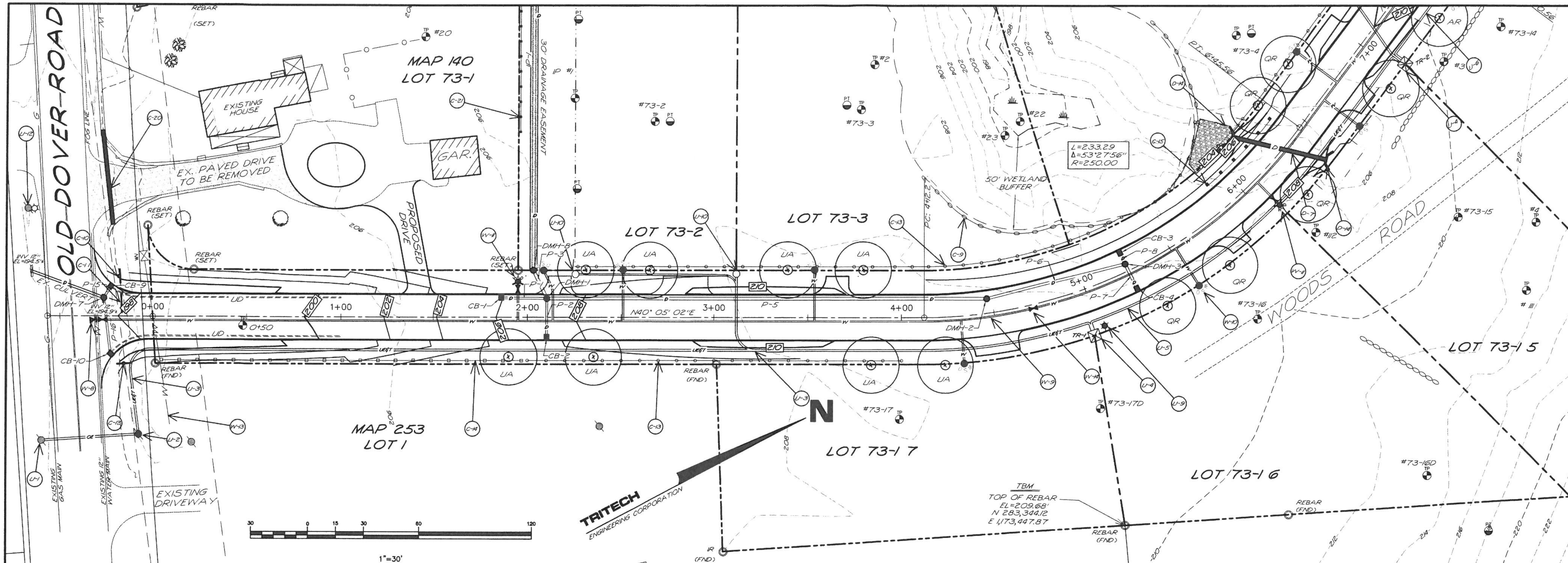
REVISIONS
DATE: 01-09-2018
DESCRIPTION: REVISED WITH INFILTRATION TEST PITS

SITE SPECIFIC SOILS, TEST PITS

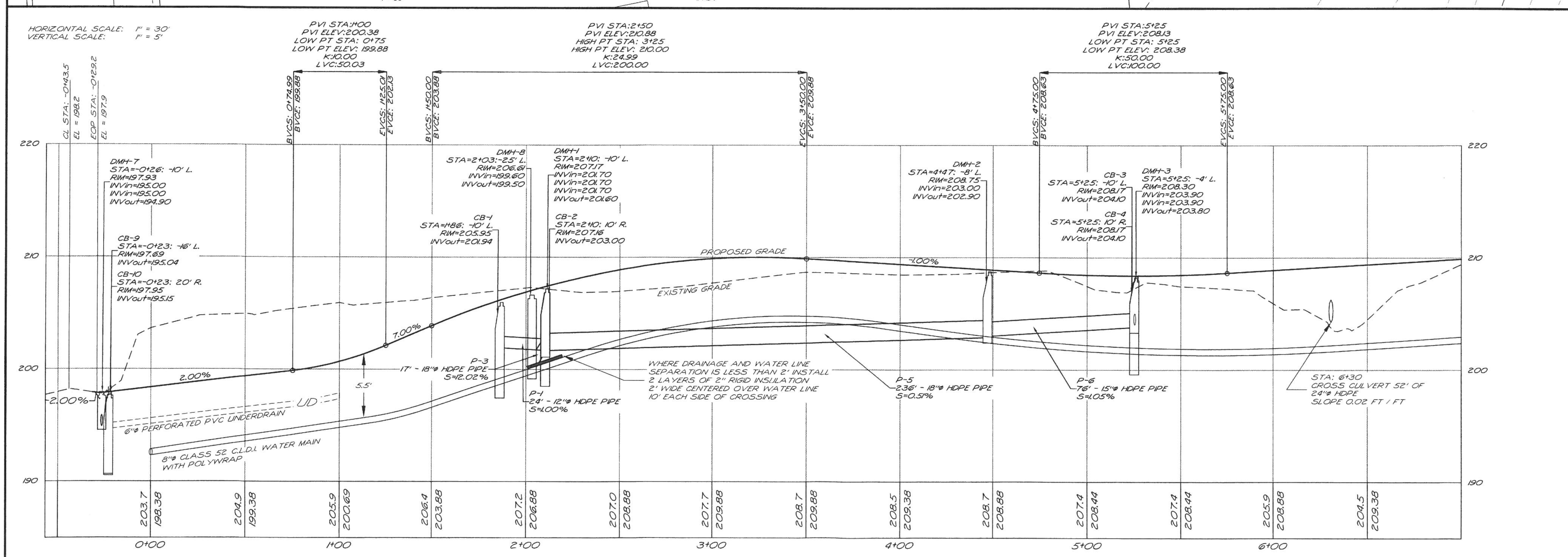
HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017
JOB No. 1633

SHEET NO.
SSS-4



OLD DOVER ROAD
MAP 140
LOT 73-1
EXISTING HOUSE
GAR.
EX. PAVED DRIVE TO BE REMOVED
PROPOSED DRIVE
30' DRAINAGE EASEMENT
LOT 73-2
LOT 73-3
50' WETLAND BUFFER
L=233.29
Δ=53°27'56"
R=250.00
WOODS ROAD
LOT 73-1 5
LOT 73-1 6
LOT 73-1 7
MAP 253
LOT 1
N40° 05' 02"E
EXISTING DRIVEWAY
EXISTING GAS MAIN
EXISTING 8" WATER MAIN
TBM
TOP OF REBAR
EL=209.68'
N 283,344.12
E 1,173,447.87
TRITECH ENGINEERING CORPORATION
N
1"=30'



HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 5'
PVI STA:1+00
PVI ELEV:200.38
LOW PT STA: 0+75
LOW PT ELEV: 199.88
K:10.00
LVC:50.03
PVI STA:2+50
PVI ELEV:210.88
HIGH PT STA: 3+25
HIGH PT ELEV: 210.00
K:24.99
LVC:200.00
PVI STA:5+25
PVI ELEV:208.13
LOW PT STA: 5+25
LOW PT ELEV: 208.38
K:50.00
LVC:100.00
DMH-7
STA=-0+26: -10' L.
RIM=197.93
INVin=195.00
INVin=195.00
INVout=194.90
CB-9
STA=-0+23: -16' L.
RIM=197.69
INVout=195.04
CB-10
STA=-0+23: 20' R.
RIM=197.95
INVout=195.15
DMH-8
STA=2+03: -25' L.
RIM=206.61
INVin=199.60
INVout=199.50
CB-1
STA=1+86: -10' L.
RIM=205.95
INVout=201.94
DMH-1
STA=2+10: -10' L.
RIM=207.17
INVin=201.70
INVin=201.70
INVin=201.70
INVout=201.60
CB-2
STA=2+10: 10' R.
RIM=207.16
INVout=203.00
DMH-2
STA=4+47: -8' L.
RIM=208.75
INVin=203.00
INVout=202.90
CB-3
STA=5+25: -10' L.
RIM=208.17
INVout=204.10
CB-4
STA=5+25: 10' R.
RIM=208.17
INVout=204.10
DMH-3
STA=5+25: -4' L.
RIM=208.30
INVin=203.90
INVin=203.90
INVout=203.80
PROPOSED GRADE
EXISTING GRADE
2.00%
-2.00%
7.00%
-1.00%
P-3
17' - 18"Ø HDPE PIPE
S=12.02%
P-1
24' - 12"Ø HDPE PIPE
S=1.00%
WHERE DRAINAGE AND WATER LINE SEPARATION IS LESS THAN 2' INSTALL 2 LAYERS OF 2" RIGID INSULATION 2' WIDE CENTERED OVER WATER LINE 10' EACH SIDE OF CROSSING
P-5
236' - 18"Ø HDPE PIPE
S=0.51%
P-6
76' - 15"Ø HDPE PIPE
S=1.05%
STA: 6+30
CROSS CULVERT 52' OF 24"Ø HDPE
SLOPE 0.02 FT / FT
6"Ø PERFORATED PVC UNDERDRAIN
8"Ø CLASS 52 C.L.D.I. WATER MAIN WITH POLYWRAP
0+00
1+00
2+00
3+00
4+00
5+00
6+00

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REVISIONS

DATE:	DESCRIPTION:
01-09-2018	REVISED PER TRG COMMENTS
02-20-2018	REVISED PER TRG COMMENTS
09-21-2018	REVISED PER NOD

ROBERT J. STOWELL No. 9903 — STATE OF NEW HAMPSHIRE

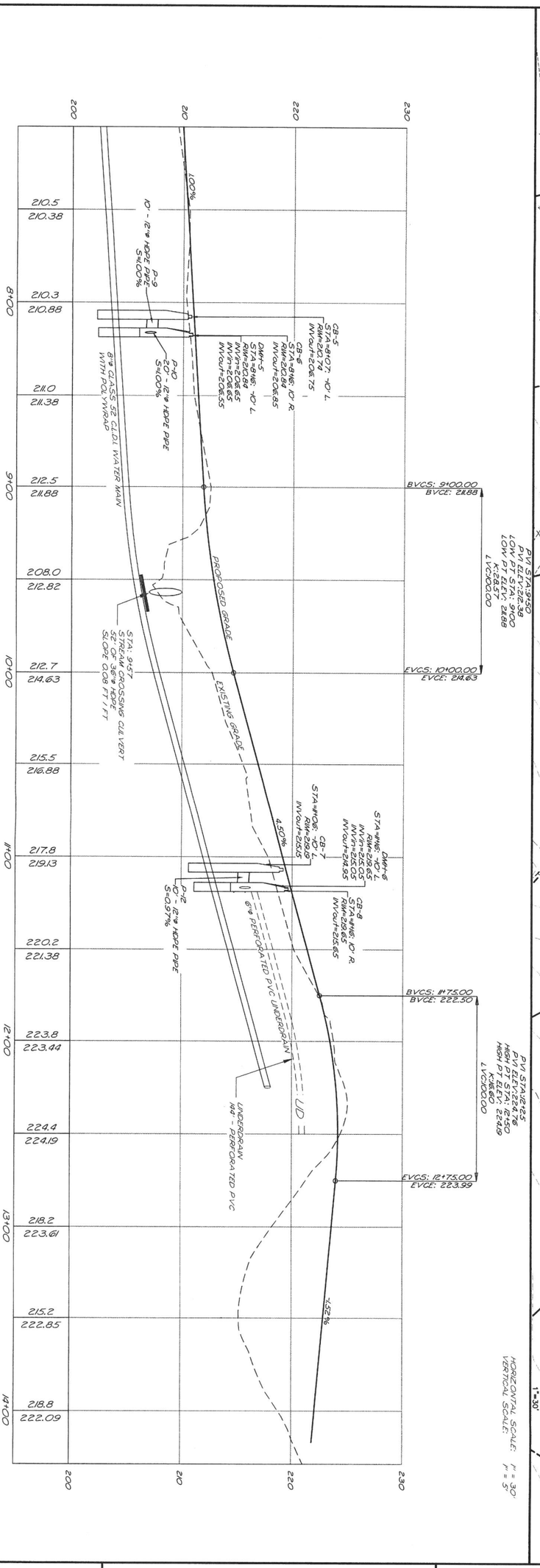
ROADWAY PLAN & PROFILE

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017 JOB No. 16133
SCALE: 1" = 30'

SHEET NO.

C-1



SHEET NO.

C-2

ROADWAY PLAN & PROFILE

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017 JOB No. 16133
SCALE: 1" = 30'

ROBERT J. STOWELL No. 9903 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

REVISIONS	
DATE:	DESCRIPTION:
01-09-2018	REVISED PER TRG COMMENTS
02-20-2018	REVISED PER TRG COMMENTS
09-21-2018	REVISED PER NOD

TRITECH
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DRAINAGE STRUCTURE TABLE					
STRUCTURE	RIM ELEV.	INVERT IN	INVERT OUT	SUMP	NOTES
CB-1	205.95		201.94	197.94	
CB-2	207.16		203.00	199.00	
CB-3	208.17		204.10	200.10	DOUBLE GRATE W/ 6'ø CB
CB-4	208.17		204.10	200.10	DOUBLE GRATE W/ 6'ø CB
CB-5	210.74		206.75	202.75	
CB-6	210.84		206.85	202.85	
CB-7	219.19		215.15	211.15	
CB-8	219.65		215.65	211.65	
CB-9	197.69		195.04	191.04	
CB-10	197.95		195.15	191.15	
DMH-1	207.17	201.70 (P-2) 201.70 (P-1) 201.70 (P-5)	201.60		
DMH-2	208.75	203.00 (P-6)	202.90		
DMH-3	208.30	203.90 (P-7) 203.90 (P-8)	203.80		
DMH-4	206.04	199.50 (IP-1)	199.40		
DMH-5	210.84	206.65 (P-10) 206.65 (P-9)	206.55		
DMH-6	219.65	215.05 (P-13) 215.05 (P-12)	214.95		
DMH-7	197.93	195.00 (P-15) 195.00 (P-16)	194.90		
DMH-8	206.61	199.60 (P-3)	199.50		
F.E.S. #101		204.31 (P-11)			
F.E.S. #102		199.09 (P-4)			
F.E.S. #103		214.75 (P-14)			

DRAIN PIPE TABLE							
PIPE	START	INV.	END	INV.	SIZE	L.F.	SLOPE
CROSS CULVERT		204.75		203.72	24"	52'	1.98%
EX. CULVERT	DMH-7	194.90		194.50	12"	42'	0.96%
IP-1	DMH-8	199.50	DMH-4	199.50	18"	200'	0.00%
P-1	CB-1	201.94	DMH-1	201.70	12"	24'	1.00%
P-2	CB-2	203.00	DMH-1	201.70	12"	20'	6.40%
P-3	DMH-1	201.60	DMH-8	199.60	18"	17'	12.02%
P-4	DMH-4	199.40	FES 102	199.09	18"	20'	1.54%
P-5	DMH-2	202.90	DMH-1	201.70	18"	236'	0.51%
P-6	DMH-3	203.80	DMH-2	203.00	15"	76'	1.05%
P-7	CB-4	204.10	DMH-3	203.90	15"	14'	1.40%
P-8	DMH-3	203.90	CB-3	204.10	12"	6'	3.16%
P-9	CB-5	206.75	DMH-5	206.65	12"	10'	1.00%
P-10	CB-6	206.85	DMH-5	206.65	12"	20'	1.00%
P-11	DMH-5	206.55	FES 101	204.31	12"	153'	1.47%
P-12	DMH-6	215.05	CB-7	215.15	12"	10'	0.97%
P-13	CB-8	215.65	DMH-6	215.05	12"	20'	2.96%
P-14	DMH-6	214.95	FES 103	214.75	12"	16'	1.25%
P-15	DMH-7	195.00	CB-9	195.04	12"	7'	0.50%
P-16	DMH-7	195.00	CB-10	195.15	12"	30'	0.50%
STREAM-CROSSING-CULVERT		209.05		204.90	36"	52'	8.01%

LEGEND

- WETLAND
- WETLAND BOUNDARY
- IRON PIPE
- UTILITY POLE
- TEST PIT
- EXISTING STREET LIGHT
- EXISTING STONE WALL
- 156 EXISTING 2 FOOT CONTOUR
- 160 EXISTING 10 FT CONTOUR
- G EXISTING GAS LINE
- W EXISTING WATER LINE OR SERVICE
- EXISTING WATER SHUTOFF
- WV EXISTING WATER GATE VALVE
- PROPOSED PROPERTY LINE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED EDGE OF GRAVEL
- 200 PROPOSED CONTOUR
- PROPOSED HYDRANT
- PROPOSED END CAP WITH THRUST BLOCK
- WV PROPOSED WATER GATE VALVE
- PROPOSED WATER SHUT-OFF
- W PROPOSED WATER LINE OR SERVICE
- PROPOSED VINYL STOCKADE FENCE
- UE&T PROPOSED UNDERGROUND ELECTRIC & TELEPHONE
- PROPOSED ELECTRICAL TRANSFORMER
- PROPOSED ELECTRICAL JUNCTION BOX
- PROPOSED STREET LIGHT
- D PROPOSED DRAIN LINE
- PROPOSED CATCH BASIN
- PROPOSED DMH
- UD PROPOSED UNDERDRAIN LINE
- PROPOSED FLARED END SECTION
- PROPOSED RIP RAP
- PROPOSED EASEMENT
- PROPOSED GUARDRAIL
- PROPOSED SILT FENCE OR SILT SOCK
- PROPOSED CONSTRUCTION FENCE
- PROPOSED SILT SOCK WITH ORANGE CONSTRUCTION FENCE OR ORANGE SILT FENCE
- PROPOSED STREET SIGN
- PROPOSED STOP SIGN
- PROPOSED STOP BAR
- PROPOSED STREET TREE
- PROPOSED TREELINE

D-1 DRAINAGE NOTES

1. INSTALL FES 101 @ ELEV = 204.31. SEE DETAIL 10, SHEET C-9.
2. INSTALL RIP-RAP PER DETAIL 9, SHEET C-9 Wo=3', We=10', La=10', D=6", D50=2.5".
3. INSTALL BIORETENTION BASIN AREA #1.
4. CONSTRUCT 10' WIDE SPILLWAY IN BERM @ ELEVATION 203.50'.
5. INSTALL RIP-RAP PER DETAIL 9, SHEET C-9 Wo=10', We=10', La=10', D=6", D50=3".
6. CONSTRUCT 300'± LONG SWALE BOTTOM = 4', 2 TO 1 SIDE SLOPES, MIN. DEPTH = 1.5' SLOPE = 0.01 FT/FT, INVERT @ START = 242.0', TO INVERT @ END = 239.0'.
7. INSTALL CROSS CULVERT. 24"ø HDPE, L = 52' @STA. 6+30. S=0.02 FT/FT INVERT IN EL = 204.75 INVERT OUT EL = 203.70.
8. INSTALL FES 102 @ ELEV = 199.09. SEE DETAIL 10, SHEET C-9.
9. INSTALL RIP-RAP PER DETAIL 9 SHEET C-9 Wo=3', We=10', La=10', D=6", D50=2.5".
10. CONSTRUCT BERM (TOP OF BERM 202.25) WITH 6' WIDE OUTLET WEIR. OUTLET EL = 201.75.
11. INSTALL STREAM CROSSING CULVERT. 36"ø HDPE, L=52', SLOPE=0.1 FT/FT INVERT IN EL = 209.56 INVERT OUT EL = 204.90.
12. CONSTRUCT PLUNGE POOL PER DETAIL 5, SHEET C-8.
13. INSTALL RIP-RAP ON 1 TO 1 SLOPE AS SHOWN, SEE DETAIL 9, SHEET C-9 D=6", D50=2".
14. INSTALL PRE-CAST HEADWALL PER DETAIL 1, SHEET C-8.
15. INSTALL READY ROCK RETAINING WALL/HEADWALL
16. INSTALL FES 103 @ ELEV = 214.75. SEE DETAIL 10, SHEET C-9.
17. INSTALL RIP-RAP PER DETAIL 9 SHEET C-9 Wo=3', We=10', La=10', D=6", D50=2.5".
18. INSTALL BIORETENTION BASIN AREA #2.
19. CONSTRUCT 10' WIDE SPILLWAY IN BERM @ ELEVATION 215.50'.
20. AS ROOF RUNOFF MITIGATION, ALL NEW HOUSES AND ACCESSORY STRUCTURES SHALL BE CONSTRUCTED WITH 2 FOOT WIDE, 1 FOOT DEEP STONE DRIP EDGES AT ALL EAVES TO COLLECT & INFILTRATE ROOF RUNOFF. (SEE DETAIL 11, SHEET C-9). THE DRIP EDGES ARE TO BE INSPECTED AT THE TIME OF INSTALLATION, AND WITHIN THE FIRST SIX MONTHS AFTER CONSTRUCTION; THEREAFTER THE DRIP EDGES SHALL BE INSPECTED 2 TIMES PER YEAR TO ENSURE THAT THEY ARE FREE OF DEBRIS AND SEDIMENT. REMOVE AND DISPOSE OF SEDIMENT AND DEBRIS AS NEEDED.
21. WHERE HIGH WATER TABLES ARE ENCOUNTERED DURING HOUSE CONSTRUCTION, HOUSES WILL BE CONSTRUCTED WITH DAMP PROOF FOUNDATIONS AND FOUNDATION DRAINS TO DRAIN THE GROUNDWATER.

U-1 UTILITY NOTES:

1. EXISTING POLE, TO REMAIN AS RISER POLE.
2. INSTALL 530 FT OF UNDERGROUND CONDUIT IN ACCORDANCE WITH EVERSOURCE STANDARDS & DETAIL 12, SHEET C-7 FROM RISER POLE TO TRANSFORMER 1 (TR-1).
3. INSTALL TRANSFORMER AND CONCRETE PAD (SUITABLE FOR A 100 KW TRANSFORMER), IN ACCORDANCE WITH PSNH STANDARDS.
4. INSTALL 220 FT OF UNDERGROUND CONDUIT IN ACCORDANCE WITH PSNH STANDARDS & DETAIL 12, SHEET C-7 FROM TRANSFORMER NUMBER 1 (TR-1) TO TRANSFORMER NUMBER 2 (TR-2).
5. INSTALL 205 FT OF UNDERGROUND CONDUIT IN ACCORDANCE WITH PSNH STANDARDS & DETAIL 12, SHEET C-7 FROM TRANSFORMER NUMBER 2 (TR-2) TO TRANSFORMER NUMBER 3 (TR-3).
6. INSTALL 310 FT OF UNDERGROUND CONDUIT IN ACCORDANCE WITH PSNH STANDARDS & DETAIL 12, SHEET C-7 FROM TRANSFORMER NUMBER 3 (TR-3) TO TRANSFORMER NUMBER 4 (TR-4).
7. EXISTING POLE WITH PSNH COBRA STYLE LIGHT.
8. INSTALL CONDUIT FOR UNDERGROUND UTILITIES, CABLE INSTALLED BY OTHERS. COORDINATE LOCATION & SIZE WITH INDIVIDUAL UTILITY.
9. INSTALL CONCRETE POLE BASE AND LIGHTS WHERE SHOWN (2), LIGHTS SHALL BE MOUNTED 15' ABOVE FINISH GRADE. SUN VALLEY LIGHTING 250 WATT SIGMA 1 LED. SEE DETAIL 3 & 7, SHEET C-8. LIGHTS TO BE BACK SHIELDED TO DIRECT LIGHT FORWARD. ALTERNATIVE POLE INSTALLATION: DIRECT BURIAL ROUND FIBERGLASS POLE, EVERSOURCE ENERGY DETAIL SPC P-631.
10. INSTALL JUNCTION BOX PER EVERSOURCE REQUIREMENTS.

C-1 CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL CONFORM WITH THE 2010 STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION"; HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS".
2. THE CONTRACTOR IS REQUIRED UNDER NEW HAMPSHIRE LAW TO CONTACT "DIG SAFE" AT 1-888-344-7233, 72 HOURS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN THE "DIG SAFE" LOCATIONS THROUGH OUT THE DURATION OF THE PROJECT.
3. AS-BUILT PLANS OF THE SITE SHALL BE SUBMITTED ON A REPRODUCIBLE MYLAR MEDIUM AND IN A DIGITAL DXF FORMAT TO THE CITY OF ROCHESTER ENGINEER'S OFFICE UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED CORRECT BY A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER.
4. A PRE-CONSTRUCTION MEETING WITH THE CITY, THE ENGINEER, THE APPLICANT, AND THE APPLICANTS SITE CONTRACTOR SHALL OCCUR PRIOR TO ANY SITE WORK COMMENCING.
5. ALL DISTURBED AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION BY THE IMPLEMENTATION OF THE EROSION AND SEDIMENT CONTROL PRACTICES WHICH ARE GIVEN IN DETAIL 12, SHEET C-8. INSTALL TEMPORARY SILT FENCE PRIOR TO ANY EARTHWORK ACTIVITIES PER DETAIL 6, SHEET C-8.
6. INSTALL STABILIZED CONSTRUCTION ENTRANCE AT PROJECT ENTRANCE, PER DETAIL 10, SHEET C-8.
7. INSTALL SLOPED GRANITE CURB PER DETAIL 2, SHEET C-7.
8. ACCESS INTO THE SITE FOR FIRE APPARATUS MUST BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION PROCESS. THIS IS THE SOLE RESPONSIBILITY OF THE APPLICANT/DEVELOPER TO MAINTAIN THIS ACCESS. PLEASE CONTACT THE FIRE DEPARTMENT AT 330-7182 WITH ANY QUESTIONS ABOUT ASSESS REQUIREMENTS.
9. PRIOR TO THE START OF CONSTRUCTION, AN ORANGE CONSTRUCTION FENCE WITH SILT SOCK, SEE DETAIL 6, SHEET C-9, OR ORANGE SILT FENCE, SEE DETAIL 6, SHEET C-8, MUST BE PLACED AT WETLANDS UNDER 1/2 ACRE IN SIZE AND THE WETLAND BUFFER WITHIN 50 FEET OF CONSTRUCTION. THESE LOCATIONS WILL BE MARKED IN THE FIELD BY A LICENSED LAND SURVEYOR & SHALL BE MONITORED AS PART OF THE SWPPP INSPECTION. THIS FENCING SHALL BE MAINTAINED AND REMAIN IN PLACE UNTIL FULL STABILIZATION IS ESTABLISHED.
10. INSTALL STOP SIGN IN ACCORDANCE WITH THE 2010 STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
11. INSTALL 18" STOP BAR IN ACCORDANCE WITH THE 2010 STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
12. INSTALL STREET SIGN "HAYES HILL ROAD" IN ACCORDANCE WITH THE CITY OF ROCHESTER DEPARTMENT OF PUBLIC WORKS.
13. INSTALL SILT FENCE. SEE DETAIL 6, SHEET C-8, OR SILT SOCK SEE DETAIL 6, SHEET C-9,
14. INSTALL ORANGE CONSTRUCTION FENCE.
15. INSTALL 50' OF GUARD RAIL FROM STA 5+90 TO STA 6+40. SEE DETAIL 3, SHEET C-7.
16. INSTALL 60' OF GUARD RAIL FROM STA 9+10 TO STA 9+70. SEE DETAIL 3, SHEET C-7.
17. INSTALL 100' OF GUARD RAIL FROM STA 13+00 TO STA 14+00. SEE DETAIL 3, SHEET C-7.
18. CONSTRUCTION ZONE SIGNS SHALL BE INSTALLED PER THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES STANDARDS.
19. INSTALL STREET ACCEPTANCE SIGNS WITH THE FOLLOWING LANGUAGE: "POSTED. THIS SUBDIVISION IS UNDER CONSTRUCTION. THESE STREETS HAVE NOT YET BEEN ACCEPTED BY THE CITY OF ROCHESTER AND ARE NOT ELIGIBLE FOR CITY SERVICES. TRAVEL AT YOUR OWN RISK. (PER ORDER OF PLANNING BOARD)"
20. EXISTING DRIVEWAY TO BE RELOCATED TO HAYES HILL ROAD STA. 1+42. REMOVE EXISTING PAVEMENT, REGRADE TO MATCH EXISTING GRADE INCLUDING THE CONSTRUCTION OF A STONE RETAINING WALL TO FILL THE GAP IN THE STONE WALL AND MATCH THE EXISTING WALL. LOAM AND SEED THE DISTURBED AREA.
21. INSTALL 104' OF 6' HIGH WHITE VINYL STOCKADE FENCE. (SEE DETAIL 5, SHEET C-9)

W-1 WATER NOTES:

1. PRIOR TO WATER SYSTEM CONSTRUCTION A PERMIT SHALL BE OBTAINED FROM THE CITY OF ROCHESTER DPW.
2. ALL WATER SYSTEM TESTING SHALL BE IN ACCORDANCE WITH THE CITY OF ROCHESTER "STANDARDS OF INFRASTRUCTURE DESIGN".
3. WATERLINE AND APPENDITURES, INSTALLATION, AND MATERIALS SHALL CONFORM WITH THE CITY OF ROCHESTER, N.H. AND AMERICAN WATER WORKS STANDARDS. ALL VALVES SHALL REQUIRE RESTRAINED MECHANICAL JOINTS USING EITHER MEGA-LUG, GRIP RINGS, OR OTHER METHODS OF RESTRAIN ACCEPTABLE TO THE CITY OF ROCHESTER WATER DEPARTMENT, IN ADDITION TO USE OF CONCRETE THRUST BLOCKS.
4. PRESSURE AND LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST STANDARDS OF AAWA. CHLORINATING AND FLUSHING SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST STANDARDS OF AAWA, STATE AND LOCAL REGULATIONS.
5. INSTALL BACKFLOW PREVENTER FOR ALL WATER SERVICES.
6. DOMESTIC WATER AND LANDSCAPING WATER MAY BE METERED SEPARATELY.
7. INSTALL CONCRETE THRUST BLOCKS WHERE SHOWN. SEE DETAIL 6, SHEET C-7.
8. INSTALL 8" TAPPING SLEEVE WITH 8" GATE VALVE AND THRUST BLOCK. ONLY APPROVED CONTRACTORS (BY THE CITY OF ROCHESTER DPW) ARE ALLOWED TO CONDUCT A TAP ON THE EXISTING WATER MAIN. THE CITY OF ROCHESTER DPW MUST BE PRESENT FOR THE TAP.
9. INSTALL 1,255' – 8" CONCRETE LINED DUCTILE IRON CLASS 52 (C.L.D.I.) WATER MAIN WITH POLYWRAP. MINIMUM DEPTH OF COVER OVER PIPE = 5.5'. FROM STATION -0+30 TO 12+25.
10. INSTALL 1" TYPE "K" COPPER OR APPROVED EQUAL WATER SERVICE. MINIMUM DEPTH OF COVER OVER PIPE = 5.5' (17).
11. INSTALL HYDRANT AND GATE VALVE (AMERICAN DARLING OR KENNEDY) PER CITY REQUIREMENTS, SEE DETAIL 5, SHEET C-7 (3).
12. INSTALL 8"ø END CAP WITH THRUST BLOCK.
13. EXISTING 3"ø WATER LINE. TO BE TAKEN OUT OF SERVICE BY THE CITY OF ROCHESTER DPW. COORDINATE WITH THE DPW TO ENSURE THERE IS NO LOSS OF SERVICE FOR THE ABUTTERS. CONTRACTOR MAY NEED TO PROVIDE TEMPORARY SERVICE DURING CONSTRUCTION.
14. INSTALL 8" GATE VALVE (2).

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DATE:	DESCRIPTION:
01-09-2018	REVISED PER TRC COMMENTS
02-20-2018	REVISED PER TRC COMMENTS
09-21-2018	REVISED PER NOD

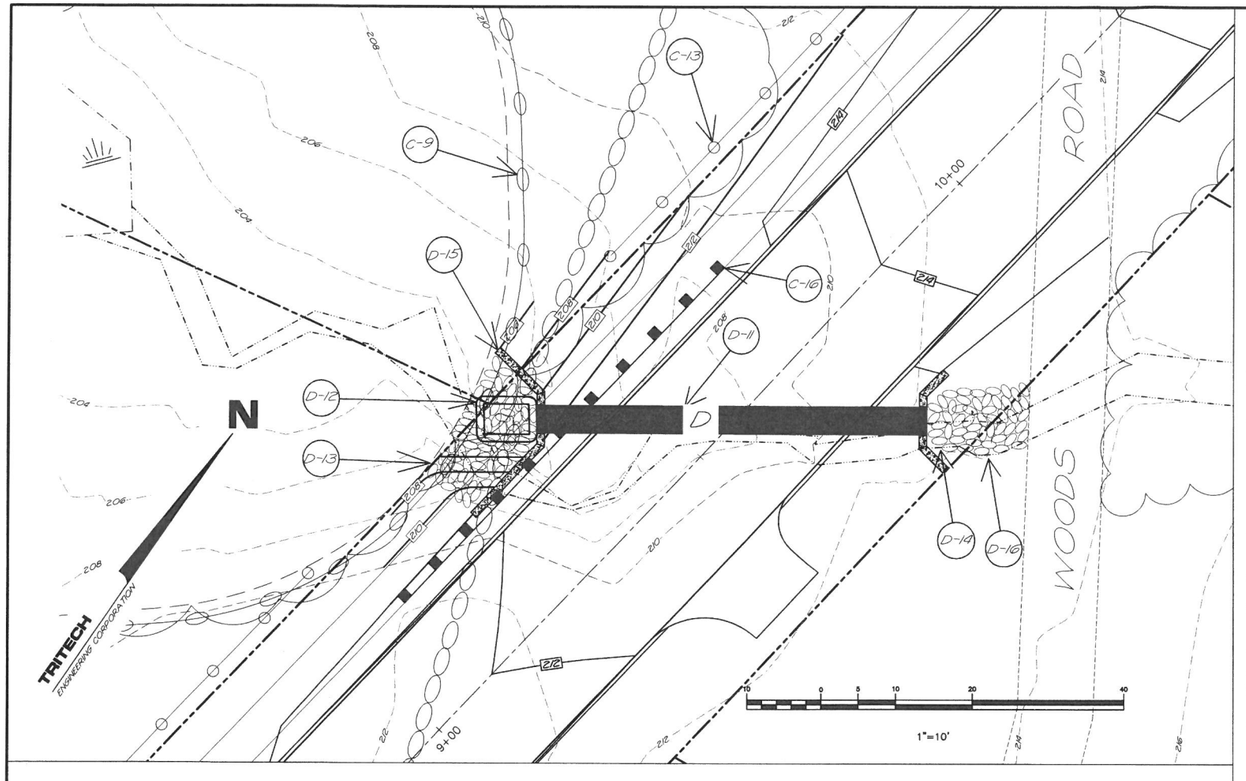
STATE OF NEW HAMPSHIRE
ROBERT J. STOWELL
LICENSED PROFESSIONAL ENGINEER

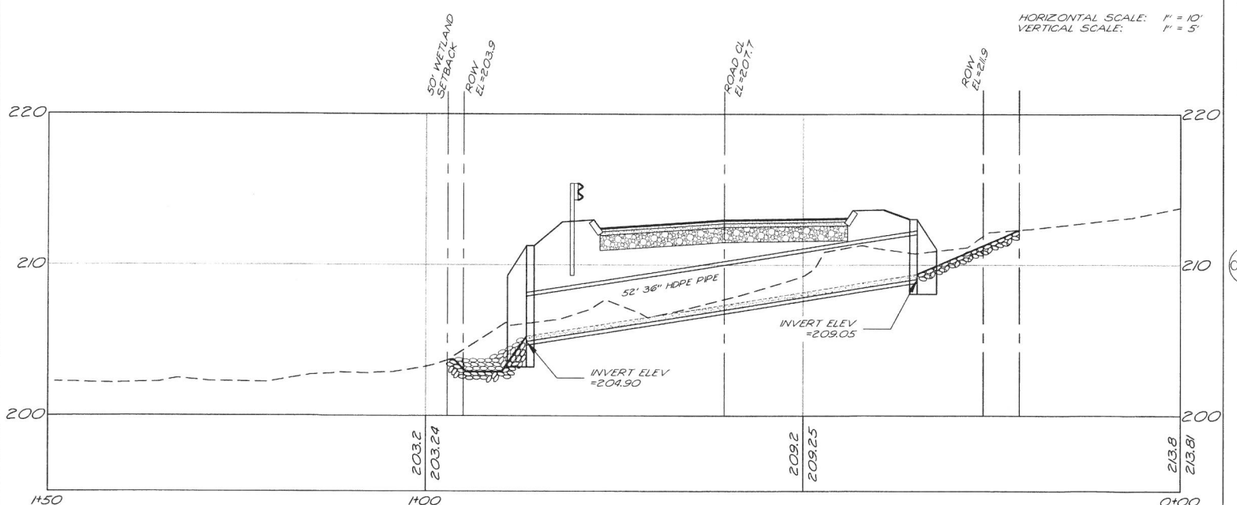
CONSTRUCTION NOTES

HAYES HILL

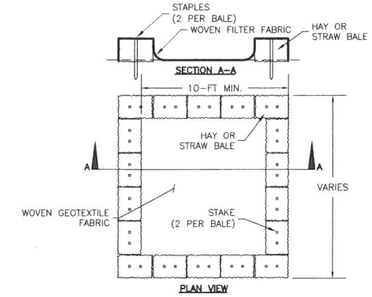
OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017 JOB No. 16133
SCALE: 1" = 10'

SHEET NO.
C-3





DEWATERING AREA DETAIL



CONSTRUCTION SPECIFICATIONS:

1. THE DEWATERING AREA WILL BE CONSTRUCTED BEFORE ANY PUMPING OCCURS AT THE SITE.
2. TEMPORARY DEWATERING AREA TYPE, ABOVE GRADE, WILL BE CONSTRUCTED AS SHOWN ABOVE, WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 20-FT.
3. THE DEWATERING AREA WILL BE LOCATED AS SHOWN OR AS DIRECTED BY THE ENVIRONMENTAL CONSULTANT.
4. GEOTEXTILE LINING WILL BE FREE OF TEARS, OR OTHER DEFECTS THAT COMPROMISE THE DURABILITY OF THE MATERIAL.

MAINTENANCE NOTES:

1. THE DEWATERING AREA(S) WILL BE INSPECTED DAILY TO ENSURE THAT ALL SEDIMENT IS BEING DISCHARGED INTO THE HAYBALE DAM AREA, NO TEARS ARE PRESENT AND TO IDENTIFY WHEN SEDIMENT NEEDS TO BE REMOVED.
2. THE DEWATERING AREA(S) WILL BE CLEANED OUT ONCE THE AREA IS FILLED TO 75 PERCENT OF ITS ITS HOLDING CAPACITY.
3. ONCE THE HOLDING CAPACITY HAS BEEN REACHED, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATION.
4. THE GEOTEXTILE LINING WILL BE REPLACED IF TEARS OCCUR DURING REMOVAL OF SEDIMENT FROM THE DEWATERING AREA.

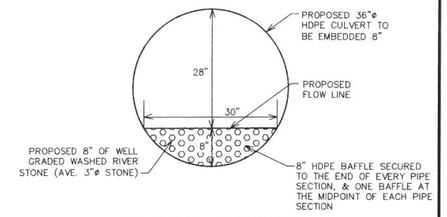
NOTES:

1. THE TEMPORARY SEDIMENT BASIN WILL BE INSTALLED ACCORDING TO BEST MANAGEMENT PRACTICES (BMP) MANUAL.
2. THE SEDIMENT BASIN WILL BE COMPRISED OF HAY BALES AND NON-WOVEN GEOTEXTILE FILTER FABRIC. FILTER FABRIC IS USED TO LINE THE INSIDE OF THE HAY BALE BASIN TO FILTER SEDIMENT. SEDIMENTS ACCUMULATED INSIDE THE BASIN WILL BE DISPOSED OF AT A LOCATION AWAY FROM THE STREAM TO PREVENT FUTURE EROSION AND TRANSPORT OF THE SEDIMENTS BACK INTO THE STREAM.
3. PROPRIETARY PRODUCTS SUCH AS "DIRT BAGS" CAN ALSO BE USED. A "DIRT BAG" IS A LARGE BAG MADE OF FILTER FABRIC THAT WILL FILTER TURBID WATER IN A WAY SIMILAR TO THE SEDIMENT BASIN.
4. THE SEDIMENTATION BASIN WILL BE LOCATED CLOSE TO THE WORK SITE WITH ADEQUATE VEGETATION BETWEEN IT AND THE STREAM TO PROVIDE ADDITIONAL FILTRATION.
5. PUMPING DIRTY WATER TO THE SEDIMENT BASIN.
   a. HOSES WILL BE SETUP BETWEEN THE SEDIMENT BASIN AND THE WORK AREA BETWEEN THE COFFERDAMS TO BE DEWATERED.
   b. THE "DIRTY WATER" PUMP(S) WILL THEN BE STARTED AND THE WATER WILL BE PUMPED TO THE SEDIMENT BASIN.
6. ONCE FISH ARE EVACUATED FROM THE WORK AREA, IT WILL BE PUMPED AS DRY AS POSSIBLE.
7. IF THERE IS LEAKAGE AROUND THE COFFERDAM OR UPWELLING IN THE WORK AREA, POCKETS WILL BE EXCAVATED IN THE WORK AREA TO COLLECT THE WATER. THIS WATER WILL BE PUMPED INTO THE SEDIMENT BASIN FOR FILTRATION, PRIOR TO ITS RELEASE BACK INTO THE THE STREAM. CLEAN CRUSHED STONE IS OFTEN PLACED AROUND THIS PUMP INTAKE TO FURTHER MINIMIZE SUSPENDED SEDIMENTS FROM BEING PUMPED IN THE SEDIMENT BASIN.

CS-1

CONSTRUCTION SEQUENCE:

1. ALL CONSTRUCTION IN AND RELATED TO THE STREAM CROSSING SHOWN SHALL BE INITIATED AND COMPLETED IN THE LOW FLOW PERIOD. (JULY 15TH TO OCTOBER 1ST).
2. INSTALL COFFERDAM – SEE COFFERDAM DETAIL FOR INSTALLATION INSTRUCTIONS.
3. WORK AREA TO BE DEWATERED. IF THE WATER IS TURBID, PUMP TO A TEMPORARY SEDIMENT BASIN, SEE DETAIL, OR A GEOTEXTILE DEWATERING BAG.
4. ONCE THE WORK AREA IS DRY AND THE BYPASSING WATER IS FREE FROM SEDIMENT, CULVERT INSTALLATION CAN START.
5. INSTALL CULVERT AND STONE. SEE DETAIL "STONE LINED CULVERT".
6. INSTALL HEADWALLS.
7. INSTALL RIPRAP PROTECTION. SEE DETAIL 9, SHEET C-9, AND DETAIL 5, SHEET C-8.
8. REMOVE COFFERDAM. REMOVE SANDBAGS SLOWLY SO NOT TO HAVE THE FLOW OF WATER BREACHING THE DAM REACH HIGH VELOCITIES.
9. BRING PROPOSED ROAD TO GRADE.
10. LOAM AND SEED ROAD SIDE SLOPE.
11. INSTALL EROSION CONTROL BLANKET. SEE SHEET C-8 DETAIL 9.



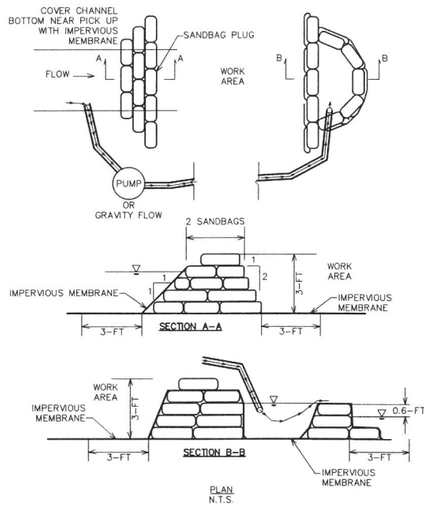
RIVER STONE GRADATION

d50 = 3"

% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE (INCHES)		
100	3	TO	4
85	3	TO	4
50	2	TO	3
15	1	TO	1

STONE LINED CULVERT DETAIL

NOT TO SCALE



1. THE UPSTREAM COFFERDAM IS INSTALLED FIRST. THICK MIL POLY SHEETING IS LAID ALONG THE STREAMBED BEFORE THE SANDBAGS ARE PLACED.

2. THE EXCESS PLASTIC IS THEN FOLDED OVER THE SANDBAGS IN THE UPSTREAM DIRECTION AND ANOTHER LAYER OF SANDBAGS IS PLACED ON THE PLASTIC TO HELP SEAL THE DAM FROM INFILTRATION. THE PLASTIC IS THEN EXTENDED ALONG THE STREAM BOTTOM AS FAR UPSTREAM AS PRACTICABLE TO INCREASE THE FLOW LENGTH OF THE SUBSURFACE FLOW. THIS HELPS PREVENT FLOW FROM GOING BENEATH THE SANDBAG COFFERDAM.

3. WHEN INDUSTRIAL SANDBAGS ARE USED, ADDITIONAL SMALL SANDBAGS MAY BE PLACED BETWEEN THE LARGE SANDBAGS TO HELP SEAL THE WORK AREA.

4. ONCE THE UPSTREAM COFFERDAM IS SECURED, THE CONTRACTOR WILL BEGIN DIVERTING UPSTREAM FLOWS AROUND THE COFFERDAM AREA USING A BYPASS PUMP. THIS WATER WILL BE DISCHARGED DIRECTLY INTO THE STREAM CANNEL BELOW THE DOWNSTREAM COFFERDAM. AT THE OUTLET OF THE PUMPS, HIGH VELOCITY (>5 FPS) WATER IS BEING DISCHARGED BACK INTO THE STREAM. THIS WATER HAS THE POTENTIAL TO ERODE THE STREAM SUBSTRATE AND CAUSE A TURBIDITY RELEASE. THE CONTRACTOR WILL IMPLEMENT SCOUR PREVENTION MEASURES AT THE DISCHARGE SITE TO REDUCE ENERGY AT THE POINT OF DISCHARGE AND PREVENT ELEVATED TURBIDITY LEVELS.

5. THE DOWNSTREAM COFFERDAM WILL THEN BE INSTALLED IN THE SAME MANNER AS THE UPSTREAM COFFERDAM. THE DOWNSTREAM COFFERDAM ACTS AS A SAFEGUARD AGAINST A FAILURE OF THE UPSTREAM COFFERDAM AND TO CONTROL DOWNSTREAM BACKWATER SITUATIONS.

6. ONCE BOTH COFFERDAMS HAVE BEEN INSTALLED, THE CONTRACTOR WILL BEGIN TO DEWATER THE AREA BETWEEN THE COFFERDAMS. IF THE WATER IS TURBID FROM DISTURBANCE CAUSED BY THE INSTALLATION OF THE COFFERDAMS, THE WATER WILL BE PUMPED TO A TEMPORARY SEDIMENT BASIN TO ALLOW FILTRATION TO OCCUR. IF THE WATER INSIDE OF THE COFFERDAM VISUALLY APPEARS TO BE AS TURBID AS THE WATER FLOWING INTO THE UPSTREAM COFFERDAM IT WILL BE PUMPED TO DOWNSTREAM OF THE DOWNSTREAM COFFERDAM.

COFFERDAM STREAM DIVERSION DETAIL

NOT TO SCALE

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REVISIONS

DATE:	DESCRIPTION:
01-09-2018	REVISED PER TRG COMMENTS
02-20-2018	REVISED PER TRG COMMENTS
09-21-2018	REVISED PER NOD

ROBERT STOCKWELL No. 9903 LICENSED LAND SURVEYOR - STATE OF NEW HAMPSHIRE - PROFESSIONAL ENGINEER

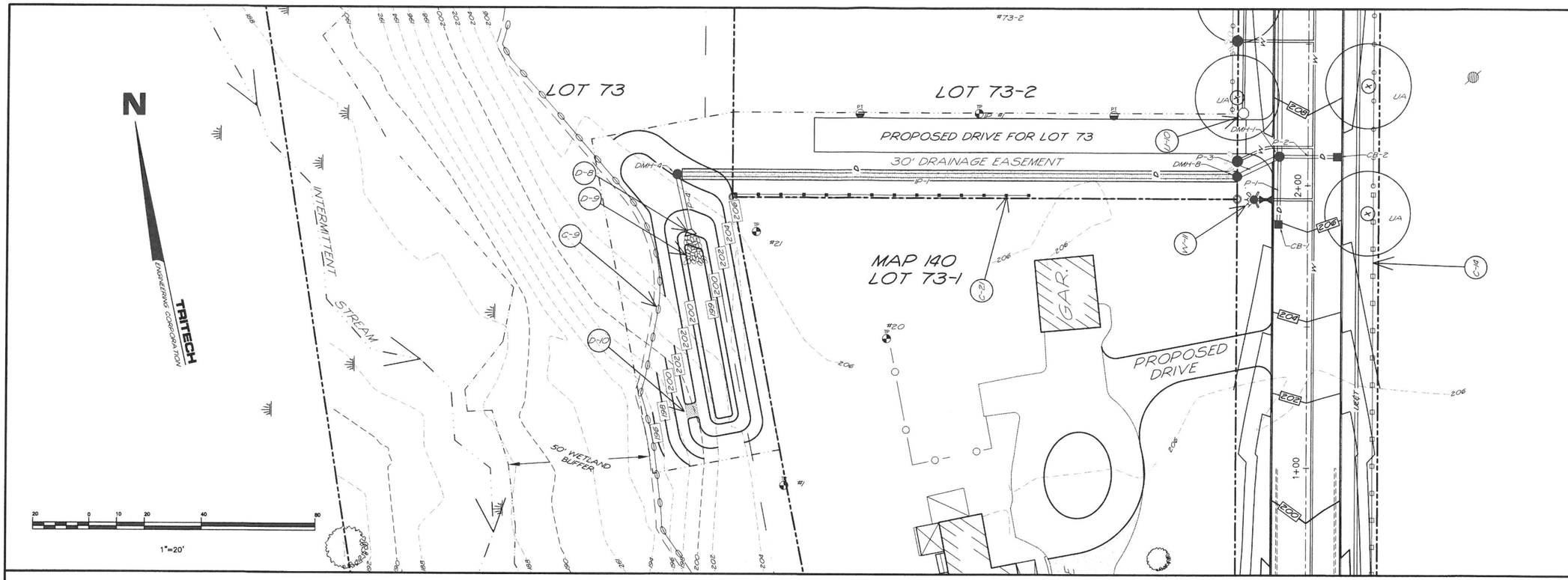
STREAM CROSSING PLAN & PROFILE

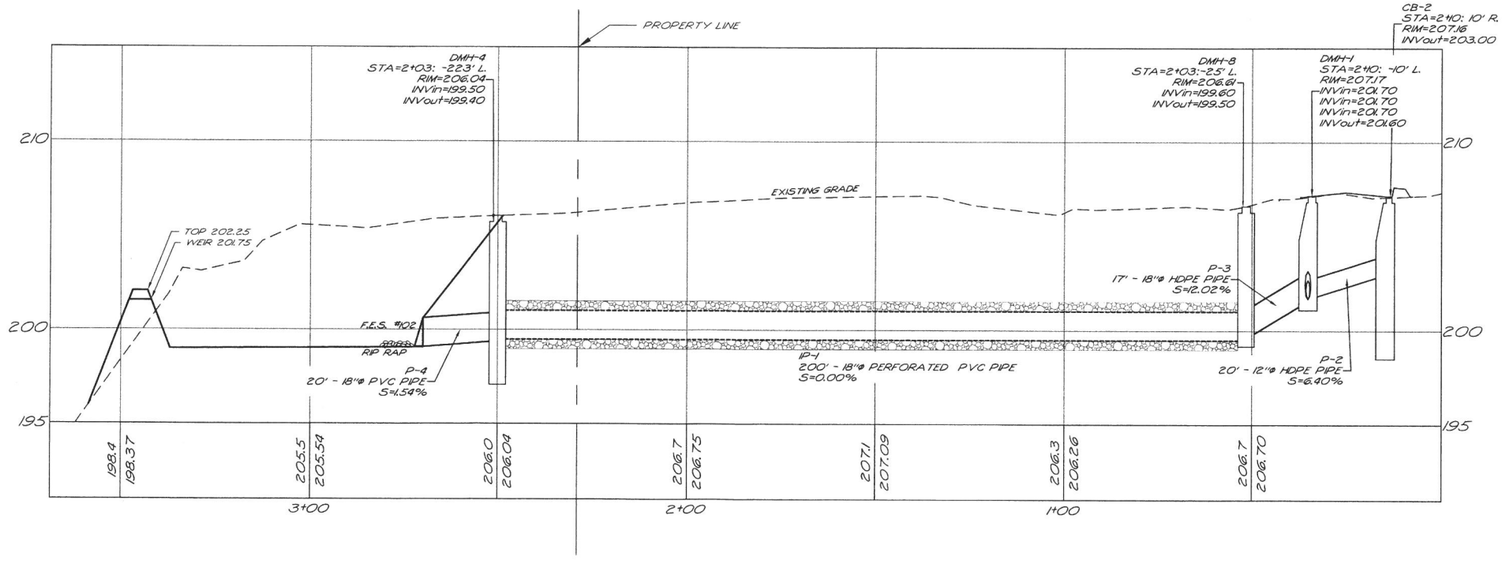
HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017
JOB No. 1033
SCALE: 1" = 10'

SHEET NO.

C-4





HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

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02-20-2018	REVISED PER TRG COMMENTS
04-27-2018	REVISED PER NOD
09-21-2018	REVISED PER NOD

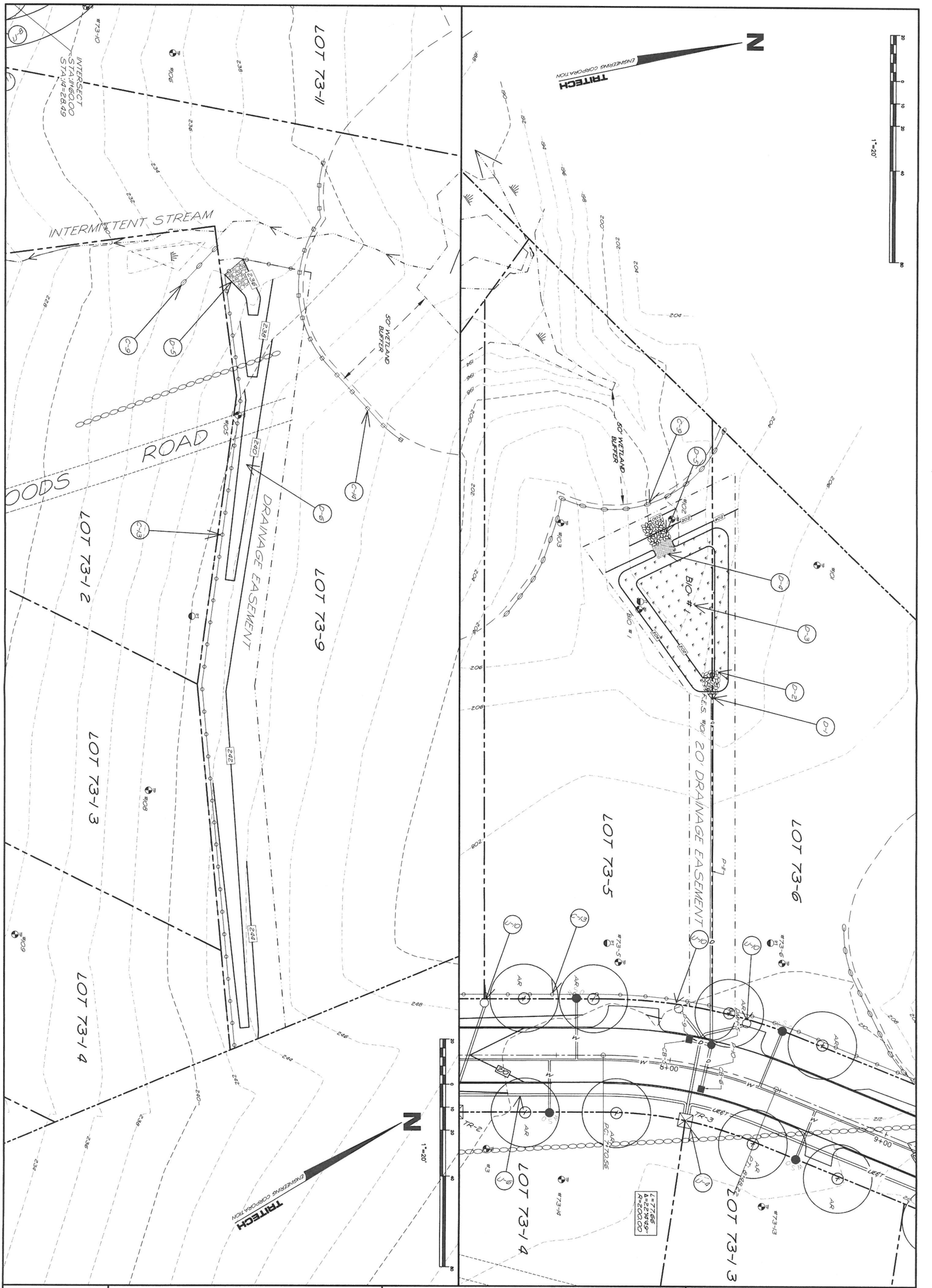
STATE OF NEW HAMPSHIRE - ROBERT J. STOWELL No. 9903 - PROFESSIONAL ENGINEER

INFILTRATION PRACTICE (IP-#1) PLAN

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017 JOB No. 1633
SCALE: 1" = 20'

SHEET NO. C-5



SHEET NO.	CROSS COUNTRY DRAINAGE PLAN
C-6	HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017 JOB No. 16133
SCALE: 1" = 20'

STATE OF NEW HAMPSHIRE
ROBERT J. STOWELL No. 9003 LICENSED PROFESSIONAL ENGINEER

REVISIONS	
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02-20-2018	REVISED PER TRG COMMENTS

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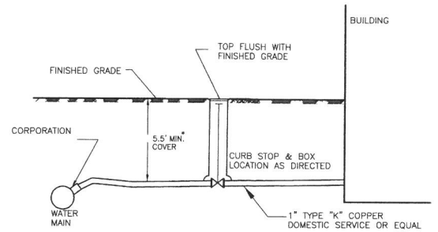


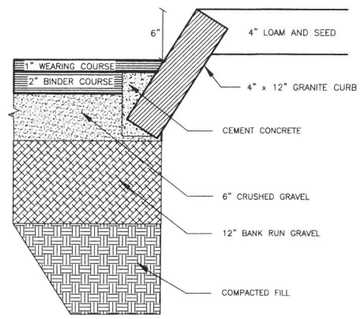
*USE 2" x 2' RIGID BOARD INSULATION OVER PIPE WHEN COVER REQUIREMENT CANNOT BE SATISFIED.

NOTES:

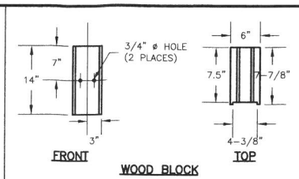
1.) SERVICE TO BE TYPE "K" COPPER OR EQUAL, APPROVED BY LOCAL AND STATE SPECIFICATIONS.

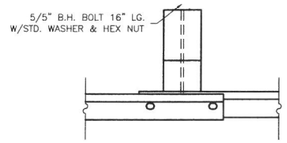
2.) BALL VALVE CURB STOP COMPRESSION (NO DRAIN)

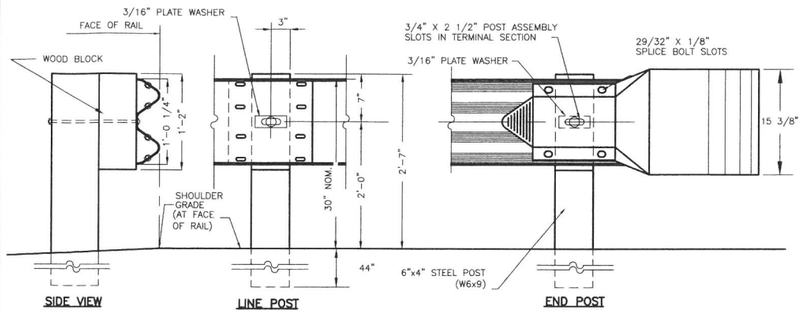
1 BUILDING WATER SERVICE
NOT TO SCALE

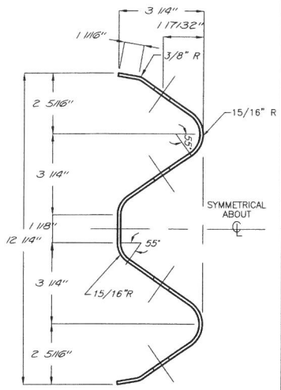


2 SLOPED GRANITE CURB SECTION
NOT TO SCALE



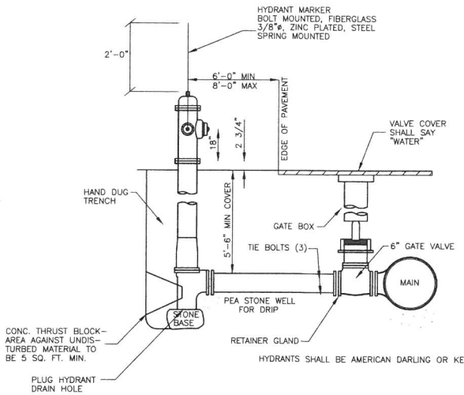






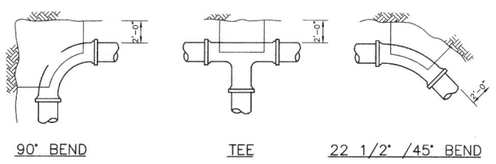
GUARD RAIL SECTION

3 GUARD RAIL
NOT TO SCALE



HYDRANTS SHALL BE AMERICAN DARLING OR KENNEDY

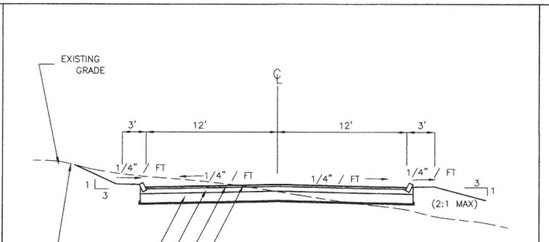
5 HYDRANT & VALVE DETAIL
NOT TO SCALE



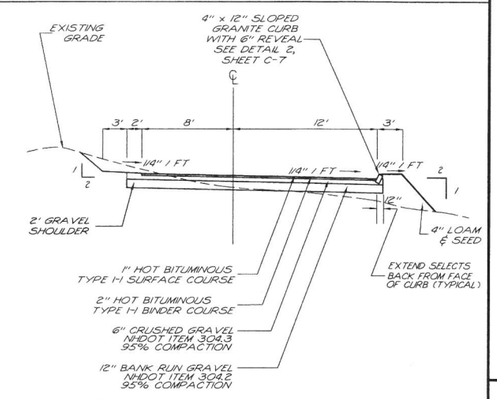
MINIMUM THRUST BLOCK BEARING AREA REQ'D. AGAINST UNDISTURBED MATERIAL (SQ. FT.)					
PIPE SIZE	90° BEND	TEE	PLUG	45° BEND	22 1/2° & SMALLER
6"	5	4	3	2	2
8"	9	6	5	7	7
12"	11	9	7	7	4

NOTE: SIZE OF THRUST BLOCK MAY BE INCREASED BY THE ENGINEER TO MEET SOIL CONDITIONS FOUND DURING CONSTRUCTION

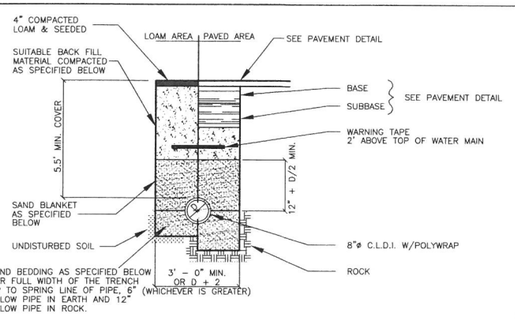
6 WATER MAIN THRUST BLOCK DETAILS
NOT TO SCALE



7 TYPICAL ROAD CROSS SECTION
NOT TO SCALE



8 TYPICAL CUL-DE-SAC CROSS SECTION
NOT TO SCALE

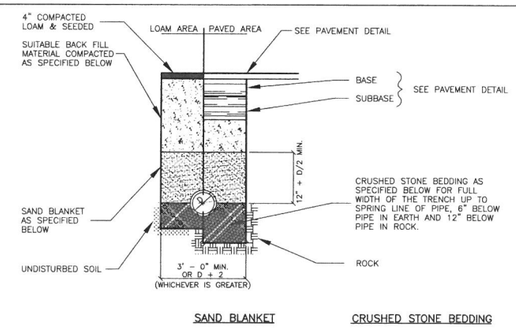


SAND BLANKET & BEDDING

SIEVE SIZE	%FINER BY WEIGHT
1/2"	90 - 100
200	0 - 15

BACK FILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACK FILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

9 WATER LINE TRENCH
NOT TO SCALE



SAND BLANKET

SIEVE SIZE	%FINER BY WEIGHT
1/2"	90 - 100
200	0 - 15

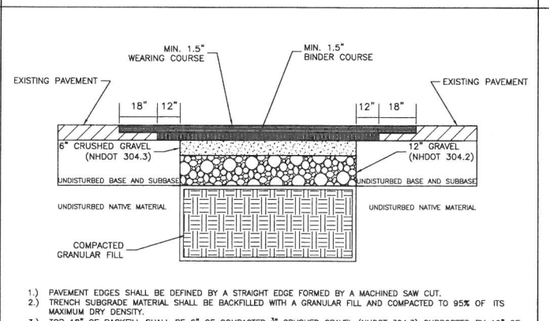
CRUSHED STONE BEDDING

SIEVE SIZE	%FINER BY WEIGHT
1"*	100
3/4"	90 - 100
3/8"	20 - 55
#4	0 - 10
#8	0 - 5

*EQUIVALENT TO STANDARD STONE SIZE #67 - SECTION 703 OF NHDOT STANDARD SPECIFICATIONS

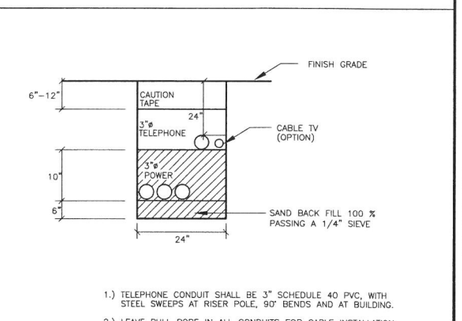
BACK FILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACK FILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

10 STORM DRAINAGE & SEWER PIPE TRENCH
NOT TO SCALE



1.) PAVEMENT EDGES SHALL BE DEFINED BY A STRAIGHT EDGE FORMED BY A MACHINED SAW CUT.
2.) TRENCH SUBGRADE MATERIAL SHALL BE BACKFILLED WITH A GRANULAR FILL AND COMPACTED TO 95% OF ITS MAXIMUM DRY DENSITY.
3.) TOP 18" OF BACKFILL SHALL BE 6" OF COMPACTED ¾" CRUSHED GRAVEL (NHDOT 304.3) SUPPORTED BY 12" OF COMPACTED GRAVEL (NHDOT 304.2).
4.) ALL VERTICAL AND HORIZONTAL JOINTS BETWEEN PAVEMENTS SHALL BE TACK COATED.
5.) PAVEMENT THICKNESS SHALL MATCH EXISTING BUT IN NO CASE SHALL BE LESS THAN 3".
6.) PAVEMENT SHALL BE PLACED IN TWO PHASES:
  6.1 THE FIRST PHASE SHALL CONSIST OF CUTTING BACK THE FULL DEPTH OF PAVEMENT 12" BEYOND THE EDGES OF THE DISTURBED TRENCH AND PAVING A BINDER COURSE THE FULL DEPTH OF THE PAVEMENT AS TO BRING THE PATCH FLUSH WITH THE EXISTING ROAD SURFACE.
  6.2 THE SECOND PHASE SHALL BE CONDUCTED THE FOLLOWING YEAR AND SHALL CONSIST OF MILLING OVER THE EDGES OF THE PREVIOUS PATCH BY A MINIMUM OF 18" IN ALL DIRECTIONS TO A DEPTH OF 1.5" WEARING COURSE PAVEMENT SHALL BE USED TO CREATE A SMOOTH SURFACE WITH THE ROADWAY OVER THE EXTENTS OF THE MILLED AREA.
7.) ANY EXCAVATION WITHIN A CITY RIGHT-OF-WAY REQUIRES PRE-APPROVAL BY DPW AND IS SUBJECT TO INSPECTION TO ENSURE COMPLIANCE WITH CITY STANDARDS.

11 TRENCH PATCH DETAIL
NOT TO SCALE



1.) TELEPHONE CONDUIT SHALL BE 3" SCHEDULE 40 PVC, WITH STEEL SWEEPS AT RISER POLE, 90° BENDS AND AT BUILDING.

2.) LEAVE PULL ROPE IN ALL CONDUITS FOR CABLE INSTALLATION.

3.) FOR COMPLETE SPECIFICATION SEE "PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE CONSTRUCTION SPECIFICATIONS FOR UNDERGROUND CONDUIT SYSTEMS".

4.) CONTRACTOR SHOULD VERIFY THE NUMBER & SIZE OF CONDUIT WITH THE APPROPRIATE UTILITIES.

12 ELECTRICAL TRENCH
NOT TO SCALE

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3630

REVISIONS

DATE:	DESCRIPTION:
01-09-2018	REVISED PER TRG COMMENTS
09-21-2018	REVISED PER NOD

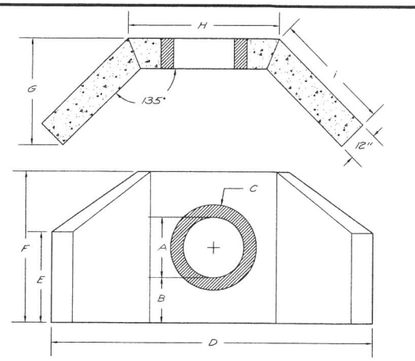
STATE OF NEW HAMPSHIRE - ROBERT STOWELL No. 9803 LICENSED PROFESSIONAL ENGINEER

CONSTRUCTION DETAILS

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017
JOB No. 1033

SHEET NO.
C-7

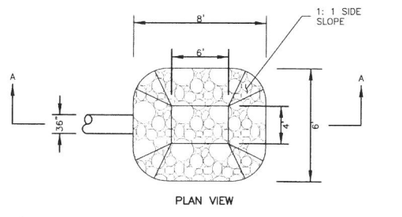


PIPE SIZE / DIMENSION	A	B	C	D	E	F	G	H	I
24"	24"	18"	34"	10'-8"	3'-0"	5'-0"	3'-6"	5'-0"	4'-0"
36"	36"	27"	48"	14'-4"	4'-0"	7'-0"	3'-1 1"	8'-0"	4'-6"

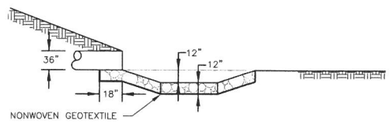
General

Notes
1. Steel Reinforcement Conforms to Latest ASTM Specification: ASTM A-615 Grade 60 Black Deformed Bars
2. Concrete: fc = 4,000 psi @ 28 Days Minimum
3. Est Weight: 7,600 Lbs

1 HEADWALL DETAIL
NOT TO SCALE

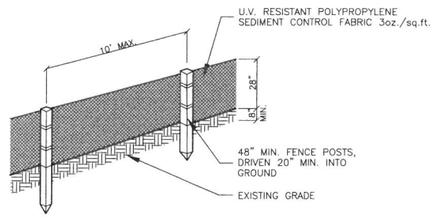


PLAN VIEW



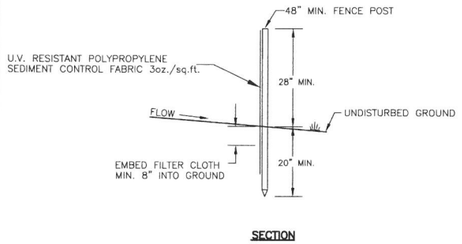
SECTION A-A

5 PERMANENT PLUNGE POOL
NOT TO SCALE



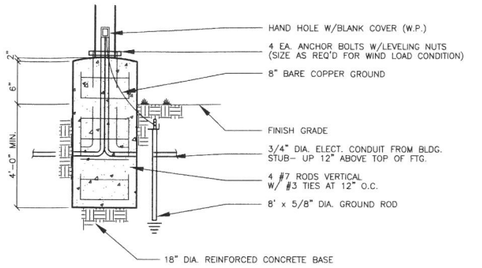
PERSPECTIVE VIEW

NOTES
1. THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR BEST MANAGEMENT PRACTICE FOR SILT FENCES, OF THE "STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE" PREPARED BY ROCKINGHAM COUNTY CONSERVATION DISTRICT, DATED AUGUST 1992.
2. THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
4. FENCE POSTS SHALL BE A MINIMUM OF 36 INCHES LONG AND DRIVEN A MINIMUM OF 20 INCHES INTO THE GROUND. WOOD POSTS SHALL BE OF SOUND QUALITY HARDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQ.IN..
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED TO PREVENT BULGES IN THE SILT FENCE DUE TO DEPOSITION OF SEDIMENT.
6. REMOVE BY HAND AND PROPERLY DISPOSE OF ALL SEDIMENT PRIOR TO REMOVING FENCE.



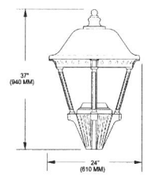
SECTION

6 SILT FENCE
NOT TO SCALE



3 SITE LIGHTING BASE
NOT TO SCALE

SUN VALLEY LED
SIGMA1
(SIG1)



EPA 1.58

7 STREET LIGHT DETAIL
NOT TO SCALE

A. Bury the top end of the jute strips in a trench 6 inches or more in depth.

B. Tamp the trench full of soil. Secure with row of staples, 6 inch spacing, 4 inches down from the trench.

C. Overlap---Bury upper end of lower strip as in "A" and "B". Overlap end of top strip 4 inches and staple.

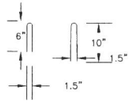
D. Erosion stop---Fold of jute buried in slit trench and tamped; double row of staples.

E. Overfall

4 inch overlap of jute strips where two or more strip widths are required. Staple on 18 inch centers.

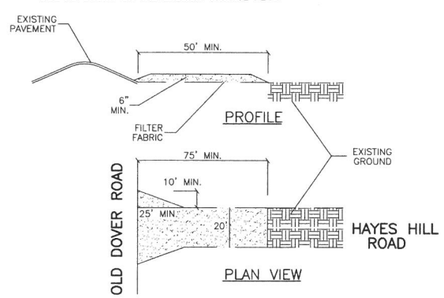
Staple outside edge on 2 inch centers.

TYPICAL STAPLES
No. 11 Gauge Wire

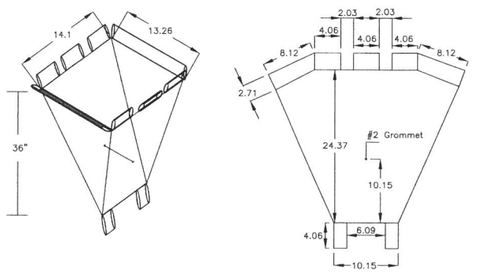


9 EROSION CONTROL BLANKET
NOT TO SCALE

1. GRADE AND COMPACT ACCESS ROAD ENTRANCE AS NECESSARY. PLACE FILTER FABRIC (MIRAFI OR EQUAL) AND PLACE 6" OF 1" - 2" STONE TO MATCH SLOPE OF EXISTING ROAD
2. PROVIDE NECESSARY SWALES OR DIVERSIONS TO MINIMIZE DIRECT FLOW OF WATER ONTO STONE AREA.
3. CONSTRUCTION ENTRANCE SHALL BE MAINTAINED AS NECESSARY TO REMOVE SILT FROM TIRES PRIOR TO ENTERING PUBLIC ROADS. A SMALL SWALE SHALL BE CONSTRUCTED ON THE DOWN GRADIENT SIDE TO TRAP ANY SILT WASHED FROM THE STONE.
4. HAYBALES OR SILT FENCE SHALL BE PLACED ON THE DOWN GRADIENT SIDE AS SHOWN ON THE EROSION CONTROL PLAN.



10 STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



SPECIFICATIONS:

A) FABRIC USED SHOULD NOT BE LAMINATED
B) SILT SACK TO HAVE TWO #2 GROMMETS, ONE ON EACH OF THE TWO SIDES, 15" FROM THE BOTTOM OF THE SILT SACK
C) THE 1/4" WIDE YELLOW ROPE 19' LONG THROUGH THE GROMMETS ON TWO SIDES OF THE SILT SACK

11 Hi Vis Hi Flow Silt Sack
NOT TO SCALE

CRITICAL AREAS
Anywhere on the site that existing vegetation is to be removed will require immediate erosion control treatment. Special care should be taken where runoff enters wetlands. All storm water practices areas shall be stabilized prior to directing storm water to them; specifically all bioretention basins and all infiltration practices.

EROSION AND SEDIMENT CONTROL PRACTICES
Erosion and sediment control practices will include the use of rip-rap, and silt fence check dams. All erosion and sediment control practices will be constructed and maintained according to the minimum standards and specifications contained in the "New Hampshire Stormwater Manual, Volume 2".

A. Erosion and Sediment Control Measures
1. The erosion control procedures shall conform to Section 645 of the "Standard Specifications for Road and Bridge Construction" of the NH DOT, and the "New Hampshire Stormwater Manual."
2. During Construction and thereafter, erosion control measures are to be implemented as noted. The smallest practical area of land should be exposed at any one time during development. The amount of exposed areas which are temporarily stabilized without permanent stabilization shall be limited to 5 acres.
3. During grading operations, install stone check dams at 50 foot intervals in drainage swales and at drain inlets where shown. Barriers are to be maintained and cleaned until disturbed areas are stabilized.
4. Any disturbed areas which are to be left temporarily, and which will be regraded later during construction shall be machine hay mulched and seeded with rye grass to prevent erosion.
5. Silt fences and other erosion control measures shall be inspected weekly and after every 0.25" rainfall event during the life of the project. All damaged silt fences shall be repaired. Sediment deposits shall periodically be removed.
6. Avoid the use of future open spaces (loam and seed areas) wherever possible during the construction. Construction traffic shall use the roadbeds of future roads and parking areas.
7. Topsoil required for the establishment of vegetation shall be stock piled in amounts necessary to complete finished grading of all exposed areas.
8. Areas to be filled shall be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots or other objectionable material. Stumps shall be disposed by grinding or fill in an approved facility.
9. All fills shall be placed and compacted to reduce erosion, slippage settlement, subsidence or other related problems.
10. All fill shall be placed and compacted in layers not to exceed 8 inches in thickness.
11. Frozen material or soft, mucky or highly compressible material shall not be incorporated into fills.
12. Fill material shall not be placed on a frozen foundation subgrade.
13. Disturbed areas shall be seeded immediately following finished grading.
14. Limit of exposed area that is temporarily stabilized without permanent stabilization is 5 acres or less.
15. All areas not stabilized by Nov. 1st must be protected by Erosion Control Blankets or equivalent and mulched/seeded with winter rye or oats.
16. All disturbed areas must be seed and mulched within 3 days of final grading, permanently stabilized within 15 days of final grading or temporarily stabilized within 45 days of initial disturbance.
17. All ditches and swales are to be stabilized prior to directing runoff to these features.
18. All cut and fill slopes shall be seeded immediately.
19. An area shall be considered stable if one of the following has occurred:
    a.) Base course gravels are 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
    d.) Erosion control blankets have been properly installed.

B. Vegetative Practice
All ground areas opened up for construction will be regraded, loamed, seeded and mulched in the shortest practical time. All Temporary and Permanent Seeding must be applied prior to October 1st. Employ temporary erosion and sedimentation control devices as detailed in this plan as necessary until adequate stabilization has been assured.

A. Temporary Seeding & Hay Mulching
1. At no time shall any disturbed area remain unstabilized for longer than 30 days. All areas where construction is not completed within 30 days of the initial disturbance shall receive temporary seeding measures.
2. Fertilizer shall be spread on the top layer of loam and worked into the surface. Fertilizer application rate shall be 300 pounds per acre of 10-10-10 fertilizer.
3. Seed shall be Winter Rye, 112 LBS. per acre.
4. Remove stones and trash that will interfere with seeding the area. Where feasible, till the soil to a depth of about 3 inches to prepare a seedbed and mix fertilizer into the soil. The seedbed should be left in a firm and smooth condition. The last tillage operation should be performed across the slope whenever practical.
5. If seeding between May 15th and August 15th, hay mulch shall be applied immediately after seeding at a rate of 1.5 to 2 tons per acre and shall be held in place using appropriate techniques from the Erosion and Sediment Control Handbook.
6. The surface shall be watered and kept moist with a fine spray as required without washing away the soil, until the grass is well established. Any areas which are not satisfactorily covered with grass shall be reseeded, and all noxious weeds are removed.

B. Permanent Seeding & Hay Mulching
1. All disturbed areas shall be loamed (4") and limed. Lime shall be thoroughly incorporated into the loam layer at a rate of 2 tons per acre.
2. Fertilizer shall be spread on the top layer of loam and worked into then surface. Fertilizer application rate shall be 500 pounds per acre of 10-20-20 fertilizer.
3. Seed shall be 48 lbs. per acre, SCS mixture "c" (20 lbs tall fescue, 20 lbs. creeping red fescue and 8 lbs. birds foot trefoil = 48 lbs total.) The soil shall be lightly raked immediately before seeding. One half the seed shall be sown in one direction and the other half at right angles to the original direction. It shall be lightly raked in to the soil to a depth not over 1/4 inch and rolled with hand roller weighing not over 100 points per linear foot to width.
4. Hay mulch shall be applied immediately after seeding at a rate of 1.5 to 2 tons per acre and shall be held in place using appropriate techniques from the Erosion and Sediment Control Handbook. The surface shall be watered and kept moist with a fine spray as required, without washing away the soil, until the grass is well established. Any areas which are not satisfactorily covered with grass shall be reseeded, and all noxious weeds removed.

CONSTRUCTION SEQUENCE
1. Do not begin construction until all local, state and federal permits have been applied for and received.
2. Install silt fences and hay bale barriers necessary to control erosion and prevent sediment contamination of wetlands prior to any earth moving activities.
3. Cut and remove trees, shrubs, saplings, brush, vines and other debris and rubbish as required for drainage construction.
4. Care shall be taken to preserve the infiltration capacity of the infiltrating soil. See the New Hampshire Stormwater Manual for additional information.
5. Construct stormwater Bioretention areas #1 & #2 and Infiltration Practice #1. Do not direct runoff to these practices until the practice and contributing areas are fully stabilized.
6. Cut and remove trees, shrubs, saplings, brush, vines and other debris and rubbish as required for remaining site.
7. Construct roadway and utilities.
8. Loam and seed disturbed areas in accordance with vegetative practice and general construction notes. Cut and fill slopes shall be seeded immediately after their construction.
9. All areas receiving runoff, including but not limited to the stormwater infiltration and bioretention areas, shall be stabilized prior to directing runoff to them.
10. All soils that are finish graded must be stabilized within 72 hours of disturbance.
11. Maintain disturbed areas as necessary.

MAINTENANCE
During the period of construction and/or until long term vegetation is established:
1. Seeded areas will be fertilized and reseeded as necessary to insure vegetative establishment.
2. The side slopes will be checked after each significant rainfall.
3. The side slopes will be checked weekly and repaired when necessary until adequate vegetation is established.
4. The silt fence barriers will be checked regularly. Necessary repairs will be made to correct undermining or deterioration of the structures.

WINTER CONSTRUCTION NOTES
1. All proposed vegetated areas which do not exhibit a minimum of 85% vegetation 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 installation 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 melts.
2. All ditches or swales which do not exhibit a minimum of 85% vegetation growth by October 15th, or which are disturbed after October 15th, shall be stabilized temporarily with stone or erosion control blankets appropriate for the design flow conditions.
3. After November 15th, incomplete road or parking surfaces, where work has stopped for the winter season, shall be protected with a minimum of 3 inches of crushed gravel per NHDOT item 304.3.

12 EROSION AND SEDIMENT CONTROL NOTES

TRITECH
ENGINEERING CORPORATION
795 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3830

REVISIONS
DATE: 01-09-2018
DESCRIPTION: REVISED PER TRC COMMENTS

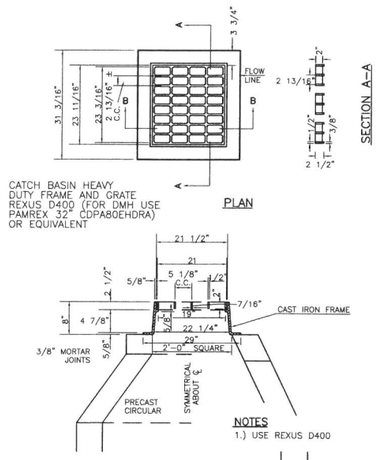
STATE OF NEW HAMPSHIRE - ROBERT J. STORELLI No. 9902 - LICENSED PROFESSIONAL ENGINEER

CONSTRUCTION DETAILS

HAYES HILL

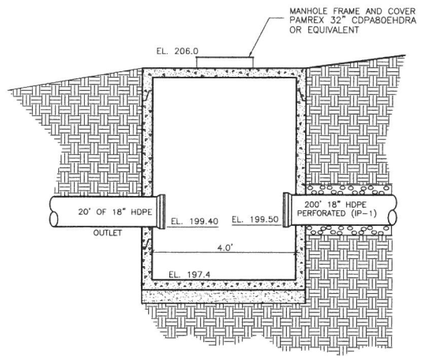
OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017
JOB No. 1033

SHEET NO.
C-8

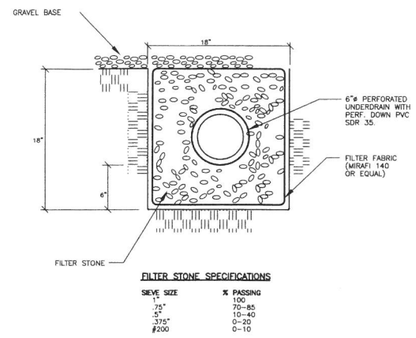


CATCH BASIN HEAVY DUTY FRAME AND GRATE REXUS D400 (FOR DMH USE PAMREX 32" CDPA80EHDRA) OR EQUIVALENT

1 CATCH BASIN FRAME & GRATE
NOT TO SCALE



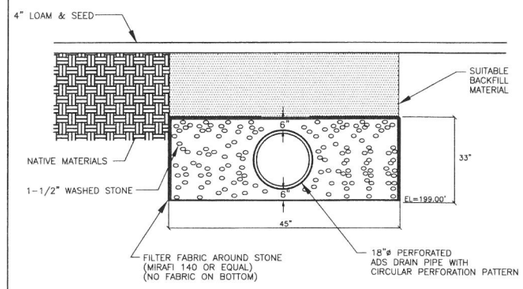
2 INFILTRATION PRACTICE (IP-#1) OUTLET STRUCTURE
NOT TO SCALE



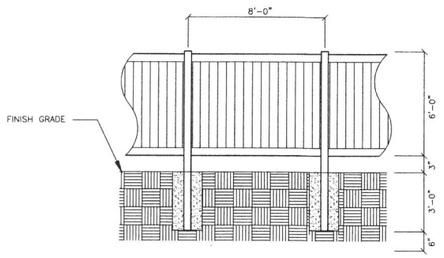
FILTER STONE SPECIFICATIONS

SIEVE SIZE	% PASSING
1"	100
.75"	70-85
.5"	10-40
.375"	0-20
#200	0-10

3 UNDERDRAIN DETAIL
NOT TO SCALE

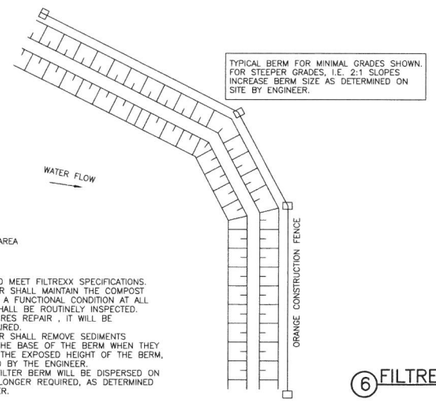


4 INFILTRATION PRACTICE DETAIL (IP-1)
NOT TO SCALE



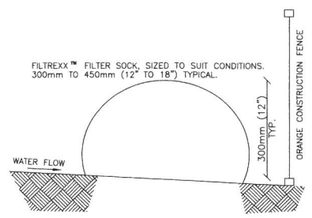
INSTALL 6' TALL VINYL FENCE POSTS SHALL BE EMBEDDED 36" MINIMUM

5 VINYL STOCKADE FENCE
NOT TO SCALE

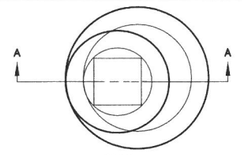


NOTES
1.) ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2.) THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTER BERM IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED.
3.) WHERE IT REQUIRES REPAIR , IT WILL BE ROUTINELY REPAIRED.
4.) THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE BERM WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE BERM, OR AS DIRECTED BY THE ENGINEER.
5.) THE COMPOST FILTER BERM WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.

6 FILTREXX SOCK
NOT TO SCALE

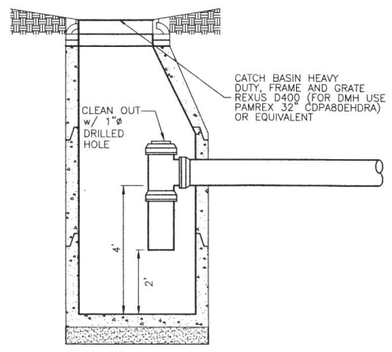


FILTER COMPOST MATERIAL AS PER SPECIFICATIONS.

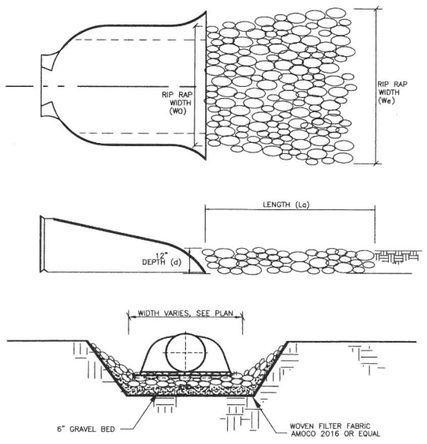


DETAIL A
(TONGUE & GROOVE JOINT)

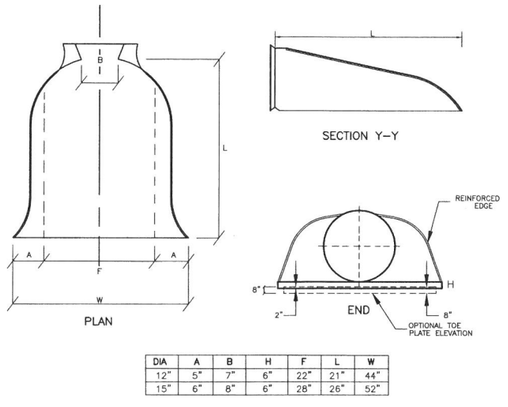
NOTES
1. ALL SECTIONS SHALL BE CONCRETE CLASS AA(4000 psi).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE OR GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FOOT.
4. RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH.
5. THE STRUCTURES SHALL BE DESIGNED FOR H-20 LOADING.
6. FOR SHALLOW INVERTS, A FLAT TOP SLAB WITH TONGUE AND GROOVE JOINTS (DETAIL A), MEETING H-20 LOADING MAY BE USED.



12 DEEP SUMP HOODED CATCH BASIN
NOT TO SCALE

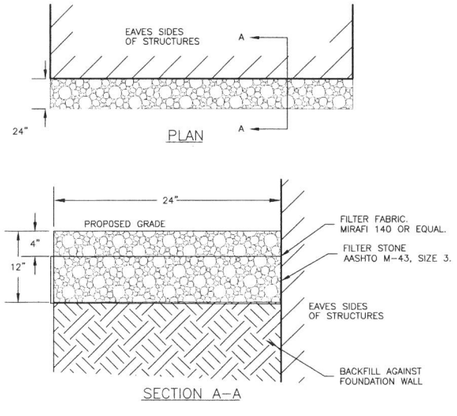


9 RIPRAP DETAIL
NOT TO SCALE



DIA	A	B	H	F	L	W
12"	5"	7"	6"	22"	21"	44"
15"	6"	8"	6"	28"	26"	52"

10 CMP FLARED END SECTION
NOT TO SCALE



SECTION A-A

11 BUILDING DRIP EDGE
NOT TO SCALE

TRITECH
ENGINEERING CORPORATION
795 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603.742.8107
FAX 603.742.3630

REVISIONS

DATE:	DESCRIPTION:
01-09-2018	REVISED PER TRC COMMENTS
02-20-2018	REVISED PER TRC COMMENTS
09-21-2018	REVISED PER NOD

STATE OF NEW HAMPSHIRE - ROBERT STOWELL No. 9903 LICENSED PROFESSIONAL ENGINEER

CONSTRUCTION DETAILS

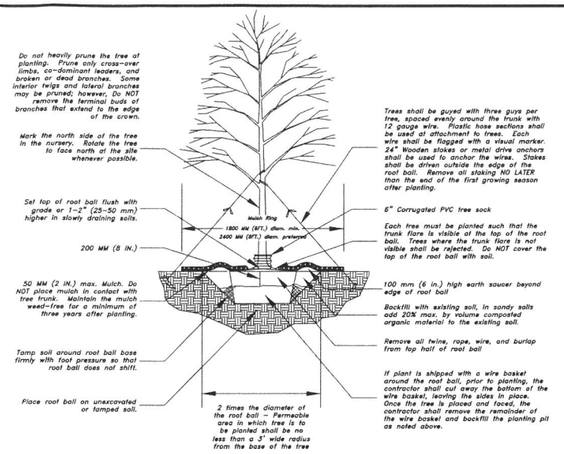
HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017
JOB No. 1633

SHEET NO.
C-9

1. DESIGN IS BASED ON DRAWINGS BY TRITECH ENGINEERING REVISED THROUGH 2/20/2018 AND MAY REQUIRE ADJUSTMENT DUE TO ACTUAL FIELD CONDITIONS.
2. THE CONTRACTOR SHALL FOLLOW BEST MANAGEMENT PRACTICES DURING CONSTRUCTION AND SHALL TAKE ALL MEANS NECESSARY TO STABILIZE AND PROTECT THE SITE FROM EROSION.
3. EROSION CONTROL SHALL BE IN PLACE PRIOR TO CONSTRUCTION.
4. EROSION CONTROL TO CONSIST OF HAY BALES AND EROSION CONTROL FABRIC SHALL BE STAKED IN PLACE BETWEEN THE WORK AND WATER BODIES, WETLANDS AND/OR DRAINAGE WAYS PRIOR TO ANY CONSTRUCTION.
5. THE CONTRACTOR SHALL VERIFY LAYOUT AND GRADES AND INFORM THE LANDSCAPE ARCHITECT OR CLIENT'S REPRESENTATIVE OF ANY DISCREPANCIES OR CHANGES IN LAYOUT AND/OR GRADE RELATIONSHIPS PRIOR TO CONSTRUCTION.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY DRAWINGS PROVIDED ARE TO THE CORRECT SCALE PRIOR TO ANY BID, ESTIMATE OR INSTALLATION. A GRAPHIC SCALE BAR HAS BEEN PROVIDED ON EACH SHEET FOR THIS PURPOSE. IF IT IS DETERMINED THAT THE SCALE OF THE DRAWING IS INCORRECT, THE LANDSCAPE ARCHITECT WILL PROVIDE A SET OF DRAWINGS AT THE CORRECT SCALE, AT THE REQUEST OF THE CONTRACTOR.
7. TREES TO REMAIN WITHIN THE CONSTRUCTION ZONE SHALL BE PROTECTED FROM DAMAGE FOR THE DURATION OF THE PROJECT BY SNOW FENCE OR OTHER SUITABLE MEANS OF PROTECTION TO BE APPROVED BY LANDSCAPE ARCHITECT OR CLIENT'S REPRESENTATIVE. SNOW FENCE SHALL BE LOCATED AT THE DRIP LINE AT A MINIMUM AND SHALL INCLUDE ANY AND ALL SURFACE ROOTS. DO NOT FILL OR MULCH ON THE TRUNK FLARE. DO NOT DISTURB ROOTS IN ORDER TO PROTECT THE INTEGRITY OF THE ROOTS, BRANCHES, TRUNK AND BARK OF THE TREE(S) NO VEHICLES OR CONSTRUCTION EQUIPMENT SHALL DRIVE OR PARK IN OR ON THE AREA WITHIN THE DRIP LINE(S) OF THE TREE(S). DO NOT STORE ANY REFUSE OR CONSTRUCTION MATERIALS OR PORTALETS WITHIN THE TREE PROTECTION AREA.
8. LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
9. THE CONTRACTOR SHALL VERIFY EXACT LOCATION AND ELEVATION OF ALL UTILITIES WITH THE RESPECTIVE UTILITY OWNERS PRIOR TO CONSTRUCTION. CALL DIGSAFE AT 1-888-344-7233.
10. THE CONTRACTOR SHALL PROCURE ANY REQUIRED PERMITS PRIOR TO CONSTRUCTION.
11. PRIOR TO ANY LANDSCAPE CONSTRUCTION ACTIVITIES CONTRACTOR SHALL TEST ALL EXISTING LOAM AND LOAM FROM OFF-SITE INTENDED TO BE USED FOR LAWNS AND PLANT BEDS USING A THOROUGH SAMPLING THROUGHOUT THE SUPPLY. SOIL TESTING SHALL INDICATE LEVELS OF PH, NITRATES, MACRO AND MICRO NUTRIENTS, TEXTURE, SOLUBLE SALTS, AND ORGANIC MATTER. CONTRACTOR SHALL PROVIDE LANDSCAPE ARCHITECT WITH TEST RESULTS AND RECOMMENDATIONS FROM THE TESTING FACILITY ALONG WITH SOIL AMENDMENT PLANS AS NECESSARY FOR THE PROPOSED PLANTINGS TO THRIVE. ALL LOAM TO BE USED ON SITE SHALL BE AMENDED AS APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PLACEMENT.
12. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE IMMEDIATELY IF AT ANY POINT DURING DEMOLITION OR CONSTRUCTION A SITE CONDITION IS DISCOVERED WHICH MAY NEGATIVELY IMPACT THE COMPLETED PROJECT. THIS INCLUDES, BUT IS NOT LIMITED TO, UNFORESEEN DRAINAGE PROBLEMS, UNKNOWN SUBSURFACE CONDITIONS, AND DISCREPANCIES BETWEEN THE PLAN AND THE SITE. IF A CONTRACTOR IS AWARE OF A POTENTIAL ISSUE, AND DOES NOT BRING IT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE IMMEDIATELY, THEY MAY BE RESPONSIBLE FOR THE LABOR AND MATERIALS ASSOCIATED WITH CORRECTING THE PROBLEM.
13. THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS SHOWN ON THE DRAWINGS AND LISTED THEREON. ALL PLANTS SHALL BE NURSERY-GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. PLANTS SHALL CONFORM TO THE BOTANICAL NAMES AND STANDARDS OF SIZE, CULTURE, AND QUALITY FOR THE HIGHEST GRADES AND STANDARDS AS ADOPTED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. IN THE AMERICAN STANDARD OF NURSERY STOCK, AMERICAN STANDARDS INSTITUTE, INC. 230 SOUTHERN BUILDING, WASHINGTON, D.C. 20005.
14. A COMPLETE LIST OF PLANTS, INCLUDING A SCHEDULE OF SIZES, QUANTITIES, AND OTHER REQUIREMENTS IS SHOWN ON THE DRAWINGS. IN THE EVENT THAT QUANTITY DISCREPANCIES OR MATERIAL OMISSIONS OCCUR IN THE PLANT MATERIALS LIST, THE PLANTING PLANS SHALL GOVERN.
15. ALL PLANTS SHALL BE LEGIBLY TAGGED WITH PROPER BOTANICAL NAME.
16. THE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR NOT LESS THAN ONE YEAR FROM TIME OF ACCEPTANCE.
17. OWNER OR OWNER'S REPRESENTATIVE WILL INSPECT PLANTS UPON DELIVERY FOR CONFORMITY TO SPECIFICATION REQUIREMENTS. SUCH APPROVAL SHALL NOT AFFECT THE RIGHT OF INSPECTION AND REJECTION DURING OR AFTER THE PROGRESS OF THE WORK. THE OWNER RESERVES THE RIGHT TO INSPECT AND/OR SELECT ALL TREES AT THE PLACE OF GROWTH AND RESERVES THE RIGHT TO APPROVE A REPRESENTATIVE SAMPLE OF EACH TYPE OF SHRUB, HERBACEOUS
    1. PERENNIAL, ANNUAL, AND GROUND COVER AT THE PLACE OF GROWTH. SUCH SAMPLE WILL SERVE AS A MINIMUM STANDARD FOR ALL PLANTS OF THE SAME SPECIES USED IN THIS WORK.
18. NO SUBSTITUTIONS OF PLANTS MAY BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER OR THE OWNER'S REPRESENTATIVE FOR ANY REASON.
19. ALL LANDSCAPING SHALL BE PROVIDED WITH EITHER OF THE FOLLOWING
    A. AN UNDERGROUND SPRINKLING SYSTEM
    B. AN OUTSIDE HOSE ATTACHMENT WITHIN 150 FEET
20. IF AN AUTOMATIC IRRIGATION SYSTEM IS INSTALLED, ALL IRRIGATION VALVE BOXES SHALL BE LOCATED WITHIN PLANTING BED AREAS.
21. CONTRACTOR SHALL PROVIDE AN ALTERNATE PRICE FOR IRRIGATING ALL NEWLY LANDSCAPED AREAS AND RESETTING OF ANY EXISTING IRRIGATION THAT WILL BE DISTURBED DURING PLANTING. CONTRACTOR SHALL PROVIDE IRRIGATION DESIGN FOR REVIEW BY LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE WHEN AWARDED THE PROJECT.
22. ALL DISTURBED AREAS WILL BE DRESSED WITH 6" OF TOPSOIL AND PLANTED AS NOTED ON THE PLANS OR SEEDED EXCEPT PLANT BEDS. PLANT BEDS SHALL BE PREPARED TO A DEPTH OF 12" WITH 75% LOAM AND 25% COMPOST.
23. TREES, GROUND COVER, AND SHRUB BEDS SHALL BE MULCHED TO A DEPTH OF 2" WITH ONE-YEAR-OLD, WELL- COMPOSTED, SHREDDED NATIVE BARK NOT LONGER THAN 4" IN LENGTH AND ½" IN WIDTH, FREE OF WOODCHIPS AND SAWDUST. MULCH FOR FERNS AND HERBACEOUS PERENNIALS SHALL BE NO LONGER THAN 1" IN LENGTH. TREES IN LAWN AREAS SHALL BE MULCHED IN A 5' DIAMETER MIN. SAUCER. COLOR OF MULCH SHALL BE BLACK.
24. IN NO CASE SHALL MULCH TOUCH THE STEM OF A PLANT NOR SHALL MULCH EVER BE MORE THAN 3" THICK TOTAL (INCLUDING PREVIOUSLY APPLIED MULCH) OVER THE ROOT BALL OF ANY PLANT.
25. SECONDARY LATERAL BRANCHES OF DECIDUOUS TREES OVERHANGING VEHICULAR AND PEDESTRIAN TRAVEL WAYS SHALL BE PRUNED UP TO A HEIGHT OF 6' TO ALLOW CLEAR AND SAFE PASSAGE OF VEHICLES AND PEDESTRIANS UNDER TREE CANOPY.
26. SNOW SHALL BE STORED A MINIMUM OF 5' FROM SHRUBS AND TRUNKS OF TREES.
27. LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR THE MEANS AND METHODS OF THE CONTRACTOR.

1 LANDSCAPING NOTES
NOT TO SCALE



3 PLANTING DETAIL
NOT TO SCALE

4 NOT USED
NOT TO SCALE

PLANT LIST					
KEY	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	COMMENTS
AR	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY	3-3½' CAL	8	BB - MATCHED PRUNE BRANCHING UP TO 6' HT
LS	LIQUIDAMBAR STYRACIFLUA	SWEET GUM	3-3½' CAL	6	BB - MATCHED PRUNE BRANCHING UP TO 6' HT
QB	QUERCUS BICOLOR	SWAMP WHITE OAK	3-3½' CAL	6	BB - MATCHED PRUNE BRANCHING UP TO 6' HT
QR	QUERCUS RUBRA	RED OAK	3-3½' CAL	6	BB - MATCHED PRUNE BRANCHING UP TO 6' HT
UA	ULMUS AMERICANA 'PRINCETON'	PRINCETON ELM	3-3½' CAL	8	BB - MATCHED PRUNE BRANCHING UP TO 6' HT

5 LANDSCAPING SCHEDULE
NOT TO SCALE

7 NOT USED
NOT TO SCALE

8 NOT USED
NOT TO SCALE

9 NOT USED
NOT TO SCALE

10 NOT USED
NOT TO SCALE

11 NOT USED
NOT TO SCALE

12 NOT USED
NOT TO SCALE

TRITECH
ENGINEERING CORPORATION
735 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603.742.8107
FAX 603.742.3630

REVISIONS
DATE:	DESCRIPTION:
01-09-2018	ADDED TO PLAN SET
02-20-2018	REVISED PER TRC COMMENTS

ROBERT J. STORELL No. 9803 - STATE OF NEW HAMPSHIRE - PROFESSIONAL ENGINEER

ROBERTA N. WOODBURN 002 - LICENSED LANDSCAPE ARCHITECT - STATE OF NEW HAMPSHIRE

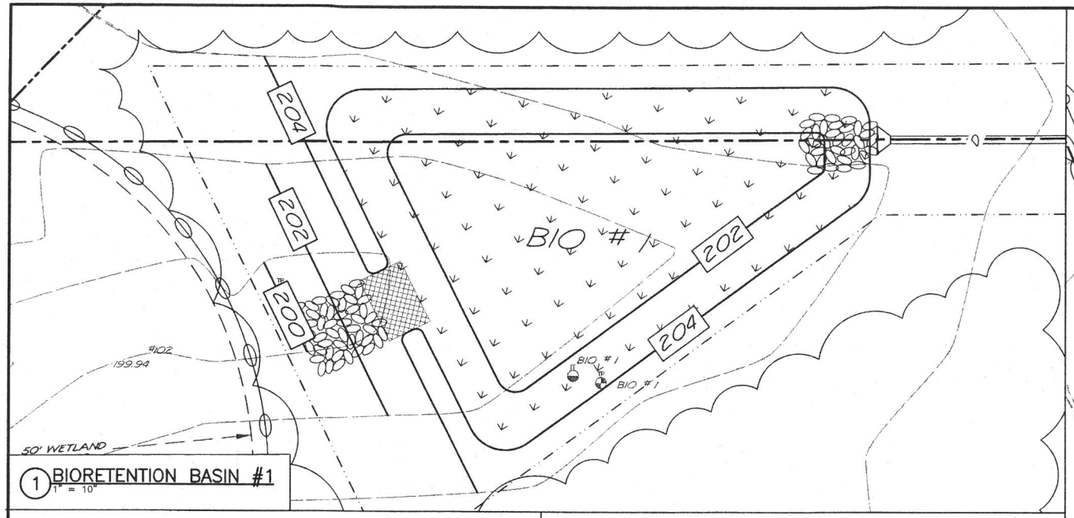
woodburn &company
LANDSCAPE ARCHITECTURE
103 Kent Place Newmarket, New Hampshire Phone: 603.659.5949

LANDSCAPING DETAILS

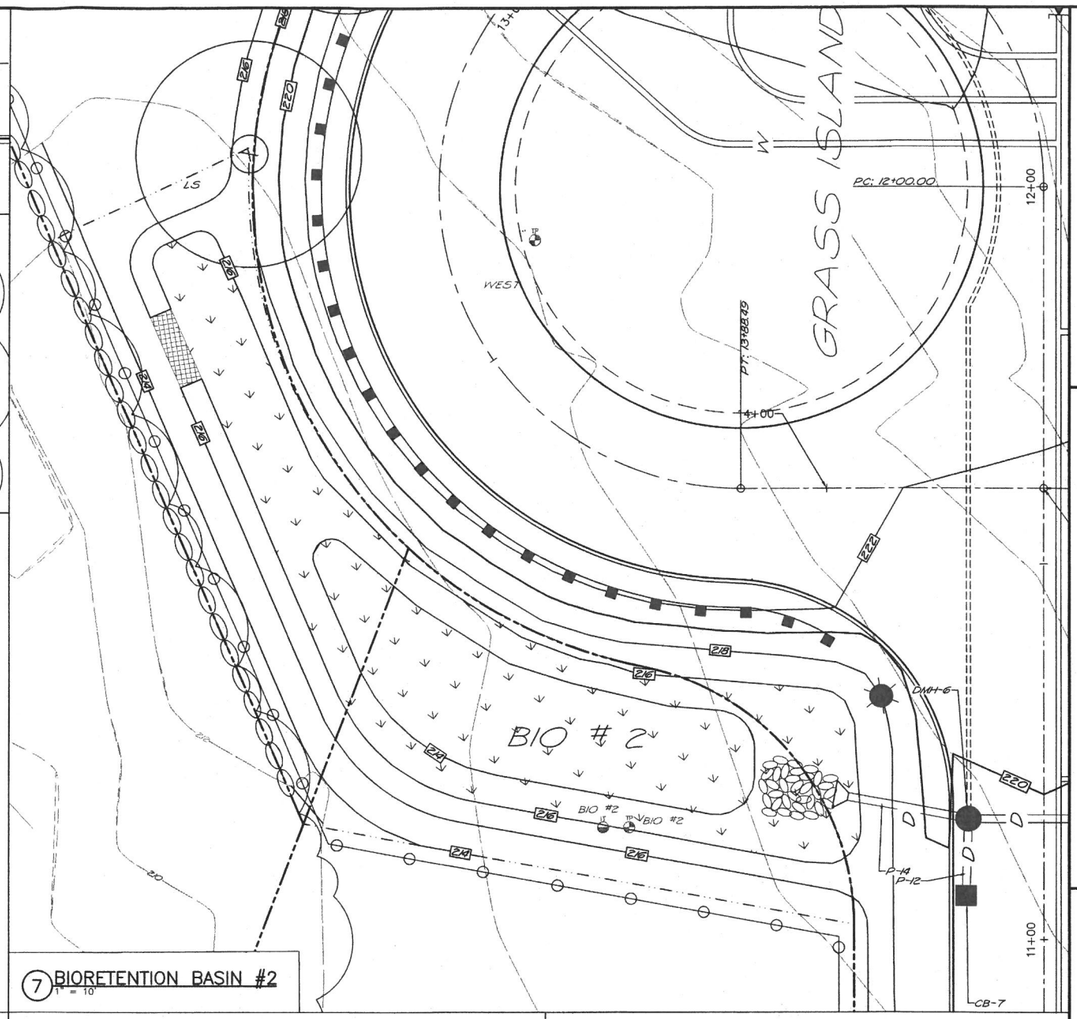
HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
JOB No. 1613.3
JANUARY 9, 2018

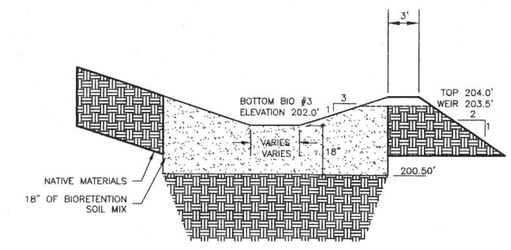
SHEET NO.
LA-1



1 BIORETENTION BASIN #1
1" = 10'

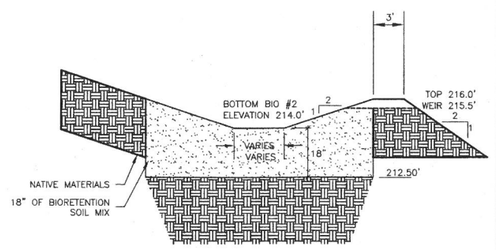


7 BIORETENTION BASIN #2
1" = 10'



SECTION VIEW

5 BIORETENTION BASIN #1 OUTLET WEIR
NOT TO SCALE



SECTION VIEW

6 BIORETENTION BASIN #2 OUTLET WEIR
NOT TO SCALE

NEW ENGLAND WETLAND PLANTS INC.
NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES

THE MIX MAY BE APPLIED BY HAND, BY MECHANICAL SPREADER, OR BY HYDRO-SEEDER. AFTER SOWING, LIGHTLY RAKE, ROLL, OR CULTIPACK TO INSURE GOOD SEED-TO-SOIL CONTACT. BEST RESULTS ARE OBTAINED WITH A SPRING OR LATE SUMMER SEEDING. LATE FALL AND WINTER DORMANT SEEDING REQUIRES AN INCREASE IN THE APPLICATION RATE. A LIGHT MULCHING OF CLEAN, WEED-FREE STRAW IS RECOMMENDED.

NEW ENGLAND WETLAND PLANTS INC.
NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DRY SITES

THE NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DRY SITES MAY BE APPLIED BY HYDRO SEEDING, BY MECHANICAL SPREADER, OR ON SMALL SITES IT CAN BE SPREAD BY HAND. LIGHTLY RAKE, OR ROLL TO ENSURE PROPER SOIL-SEED CONTACT. BEST RESULTS ARE OBTAINED WITH A SPRING OR LATE SUMMER SEEDING. LATE SPRING THROUGH MID-SUMMER SEEDING WILL BENEFIT FROM A LIGHT MULCHING OF WEED-FREE STRAW TO CONSERVE MOISTURE. IF CONDITIONS ARE DRIER THAN USUAL, WATERING WILL BE REQUIRED. FERTILIZATION IS NOT REQUIRED UNLESS THE SOILS ARE PARTICULARLY INFERTILE. PREPARATION OF A CLEAN WEED FREE SEED BASE IS NECESSARY FOR OPTIMAL RESULTS.

ANYWHERE ON THE SITE THAT EXISTING VEGETATION IS TO BE REMOVED WILL REQUIRE IMMEDIATE EROSION CONTROL TREATMENT. SPECIAL CARE SHOULD BE TAKEN WHERE RUNOFF ENTERS WETLANDS. ALL STORM WATER AREAS SHALL BE STABILIZED PRIOR TO DIRECTING STORM WATER TO THEM; SPECIFICALLY ALL BIORETENTION BASINS AND ALL INFILTRATION AREAS.

SEEDING LEGEND

- 50/50 BLEND OF NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DRY SITES AND NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES.

BOTH MIXES FROM NEW ENGLAND WETLAND PLANTS INC.
APPLY: 35 LBS/ACRE : 1250 SQ FT/LB

9 BIORETENTION SEEDING
NOT TO SCALE

BIORETENTION SOIL MIX

ITEM	COMPOSITION BY VOLUME
MODERATELY FINE SHREDDED BARK OF WOOD FIBER MULCH (NO GREATER THAN 5 % FINES PASSING NO. 200 SIEVE)	20 – 30%
LOAMY COURSE SAND (SEE SPECIFICATION)	70 – 80%

LOAMY COURSE SAND

SIEVE	COMPOSITION BY WEIGHT
#10	85 – 100%
#20	70 – 100%
#60	15 – 40%
#200	8 – 15%

PLANTING SOIL COMPOSITION

ITEM	COMPOSITION BY WEIGHT	TEST METHOD
SAND	50 – 85%	AASHTO T88
SILT	0 – 50%	AASHTO T88
CLAY	10 – 20%	AASHTO T88
ORGANIC MATTER	1.5 – 10%	AASHTO T194

10 BIORETENTION NOTES
NOT TO SCALE

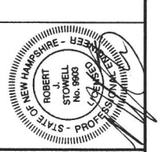
11 NOT USED
NOT TO SCALE

12 NOT USED
NOT TO SCALE

TRITECH
ENGINEERING CORPORATION
795 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3630

REVISIONS

DATE:	DESCRIPTION:
01-09-2018	ADDED TO PLAN SET
02-20-2018	REVISED PER TRC COMMENTS



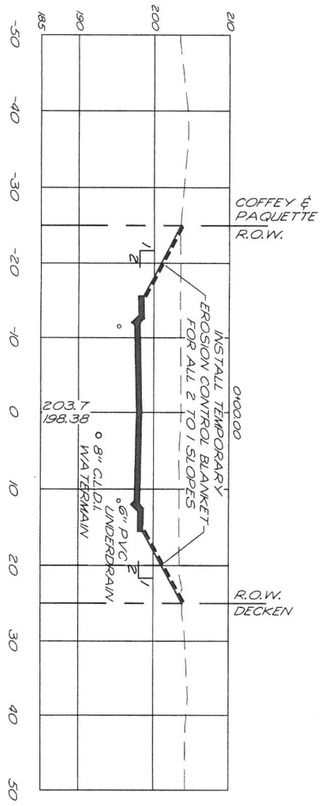
LANDSCAPE PLAN

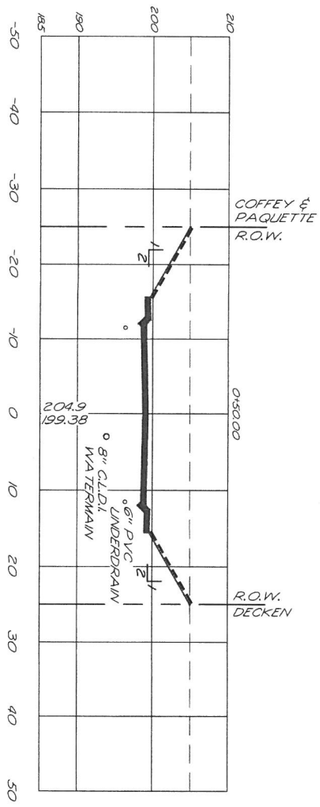
HAYES HILL

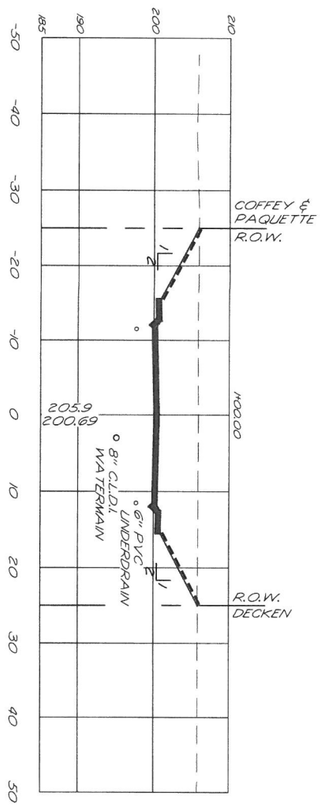
OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
JANUARY 9, 2018 JOB No. 16133
SCALE: 1" = 10'

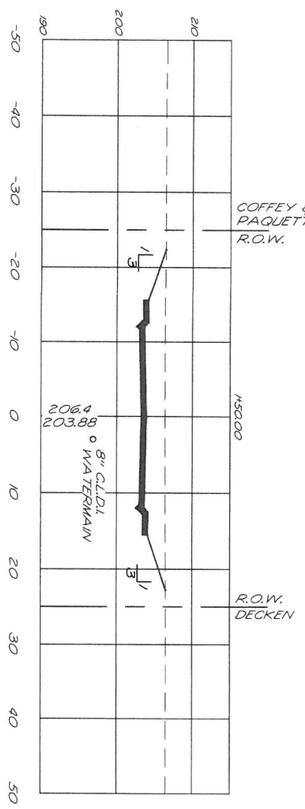
woodburn & company
LANDSCAPE ARCHITECTURE
103 Kent Place Newmarket, New Hampshire Phone: 603.659.5949

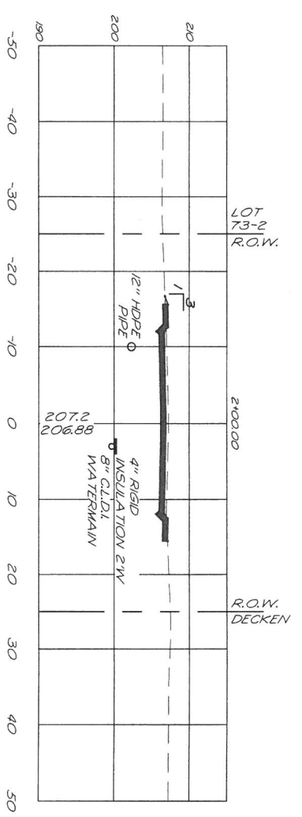
SHEET NO.
LA-2

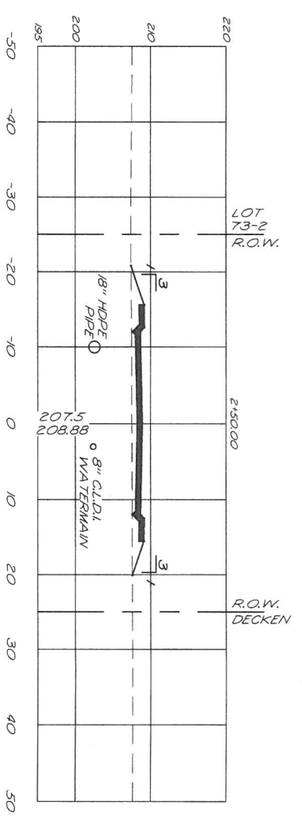


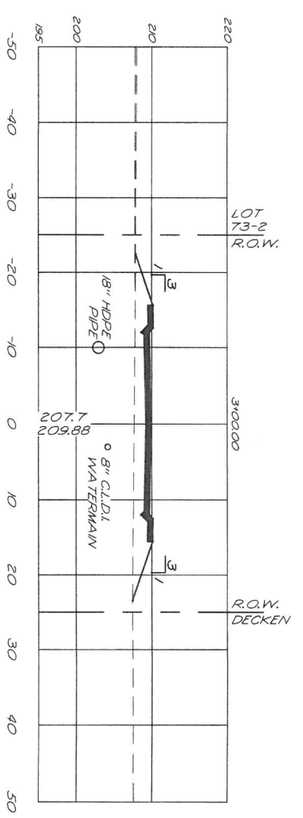


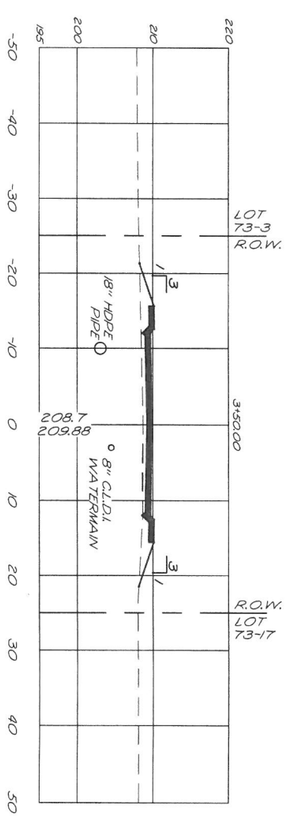












SHEET NO.

XS-1

ROADWAY CROSS-SECTIONS

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE

NOVEMBER 7, 2017 JOB No. 16133

SCALE: 1" = 10'

STATE OF NEW HAMPSHIRE
ROBERT STOWELL No. 9903
LICENSED PROFESSIONAL ENGINEER

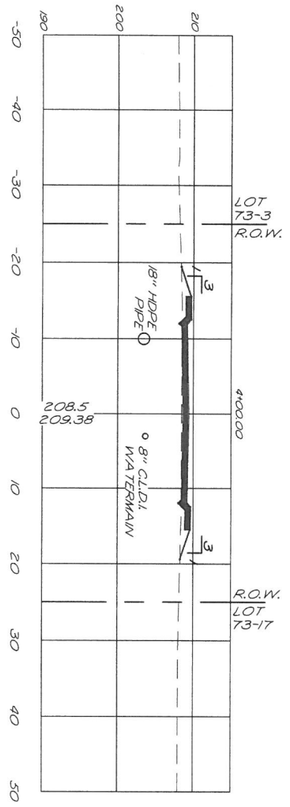
REVISIONS

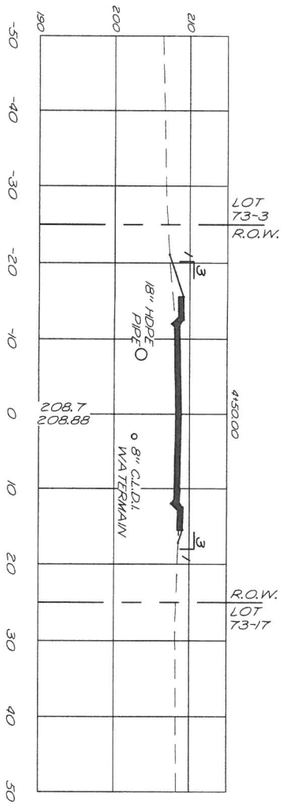
DATE:	DESCRIPTION:

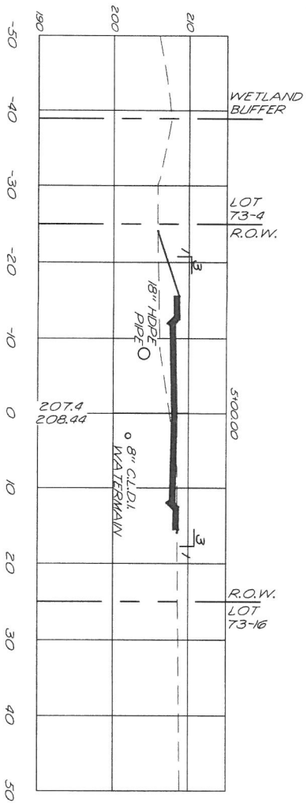
TRITECH
ENGINEERING CORPORATION

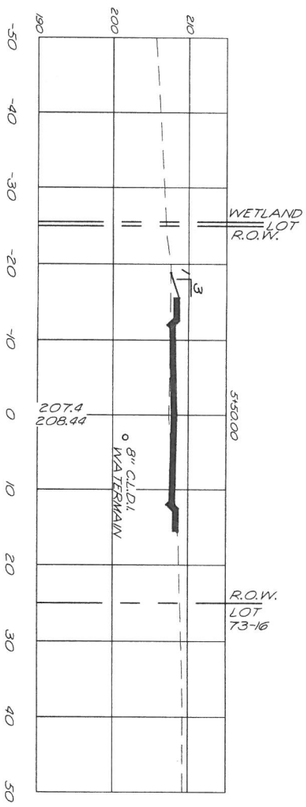
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820

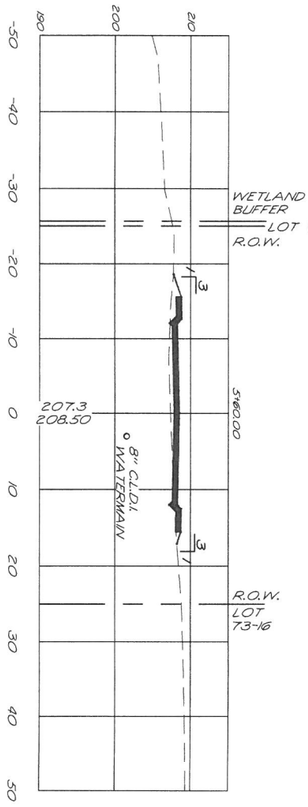
TELEPHONE 603 742 8107
FAX 603 742 3830

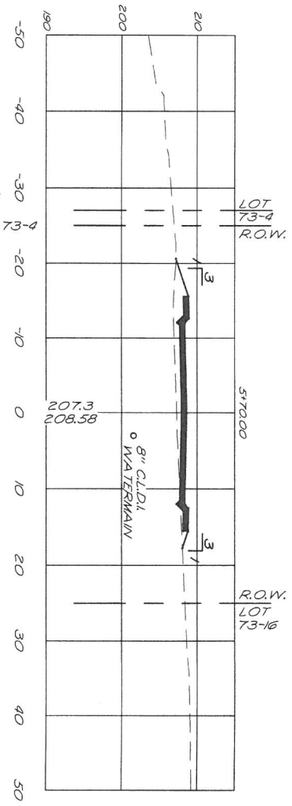


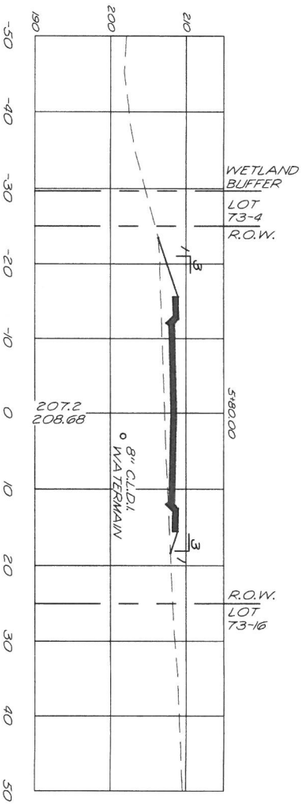


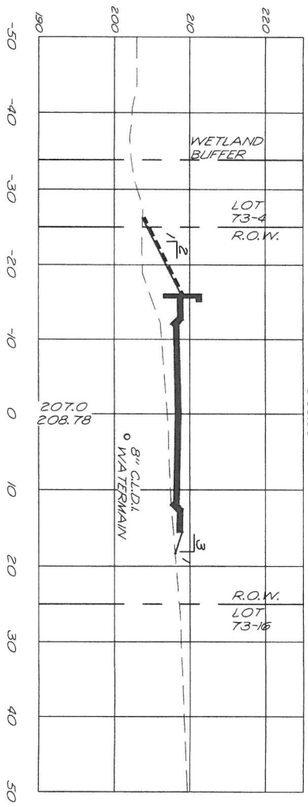












SHEET NO.

XS-2

ROADWAY CROSS-SECTIONS

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE

NOVEMBER 7, 2017 JOB No. 16133

SCALE: 1" = 10'

STATE OF NEW HAMPSHIRE
ROBERT J. STOWELL
No. 9003
LICENSED
PROFESSIONAL ENGINEER

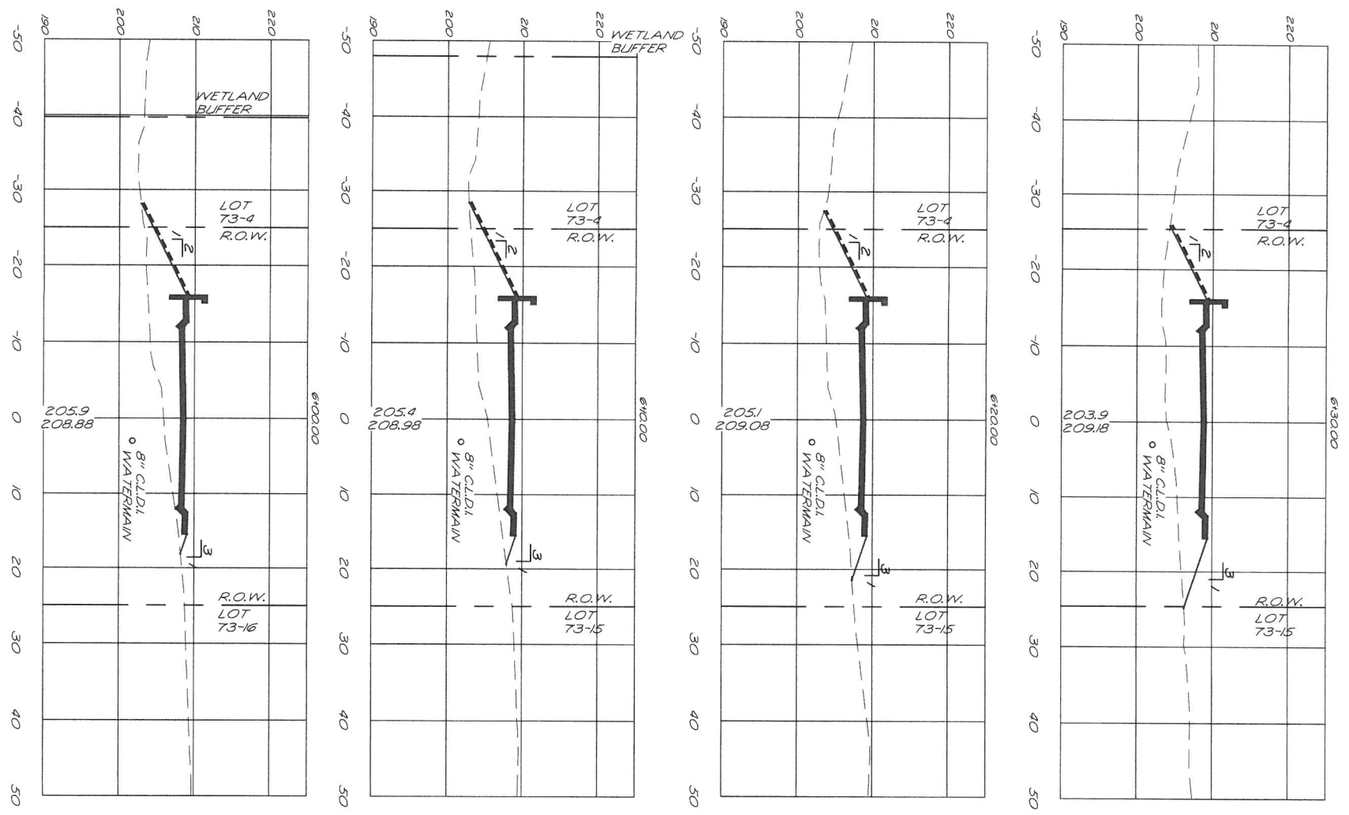
REVISIONS

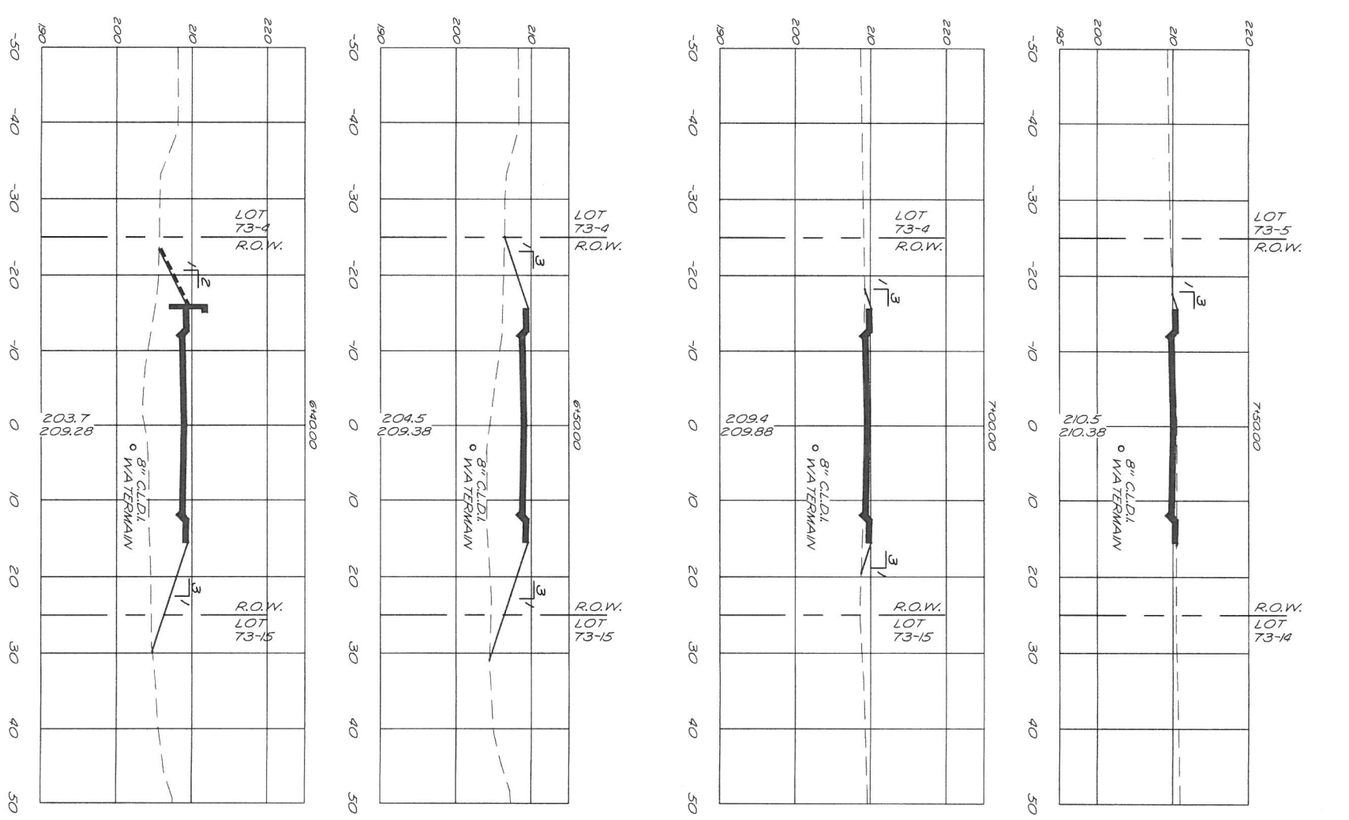
DATE:	DESCRIPTION:

TRITECH
ENGINEERING CORPORATION

755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820

TELEPHONE 603 742 8107
FAX 603 742 3830





SHEET NO.

XS-3

ROADWAY CROSS-SECTIONS

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017 JOB No. 16133
SCALE: 1" = 10'

STATE OF NEW HAMPSHIRE
ROBERT J. STOWELL
No. 9903
LICENSED PROFESSIONAL ENGINEER

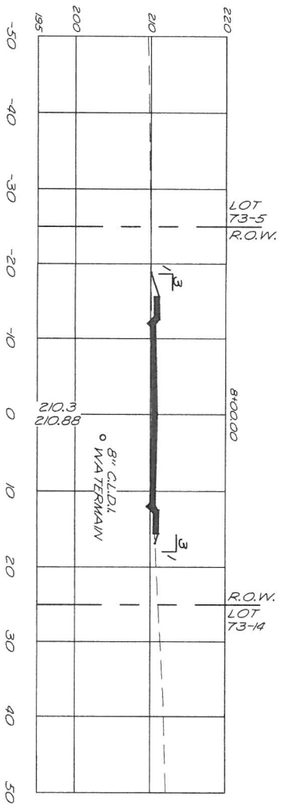
REVISIONS

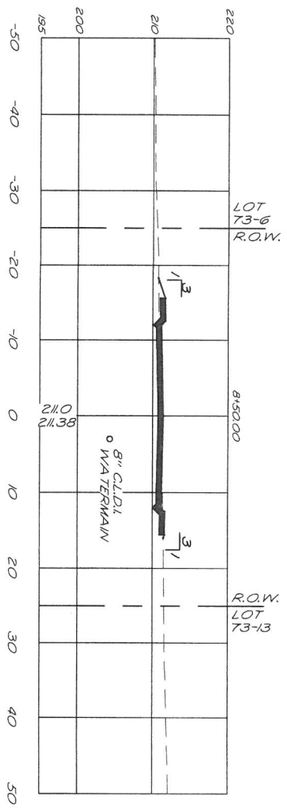
DATE:	DESCRIPTION:

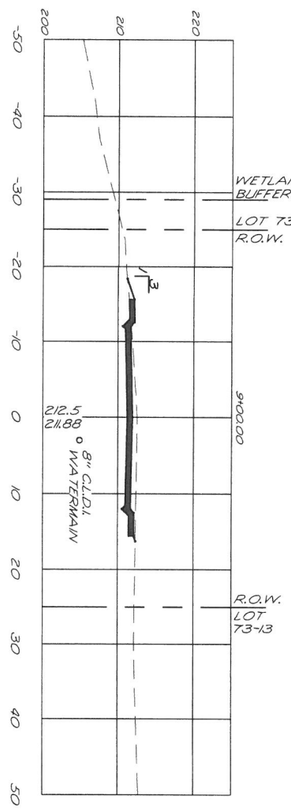
TRITECH
ENGINEERING CORPORATION

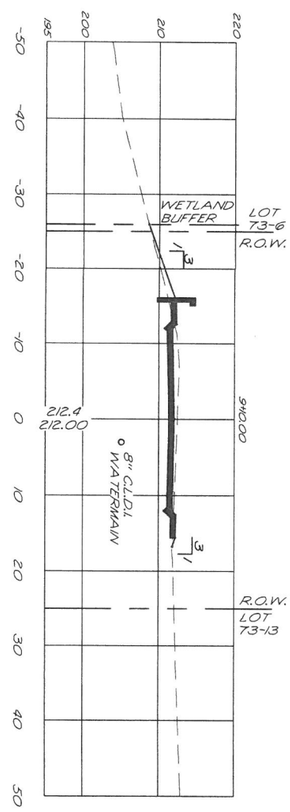
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820

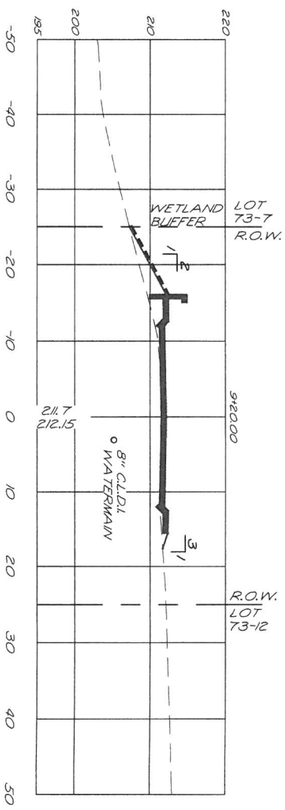
TELEPHONE 603 742 8107
FAX 603 742 3830

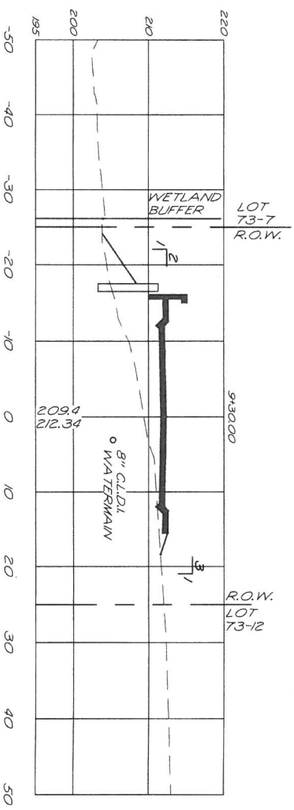


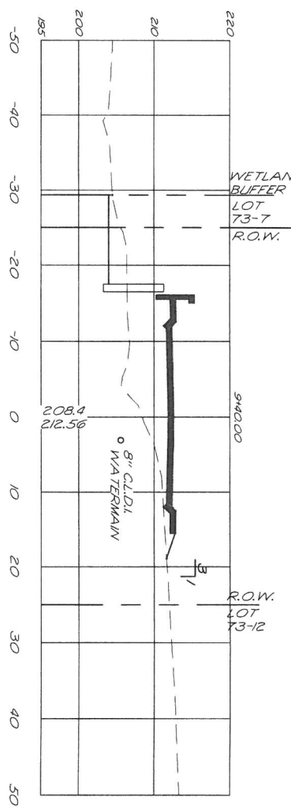


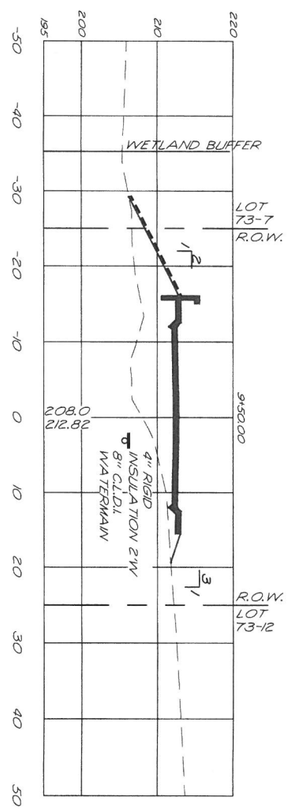












SHEET NO.

XS-4

ROADWAY CROSS-SECTIONS

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE

NOVEMBER 7, 2017 JOB No. 16133

SCALE: 1" = 10'

STATE OF NEW HAMPSHIRE
ROBERT J. STOWELL No. 9903 LICENSED PROFESSIONAL ENGINEER

REVISIONS

DATE:	DESCRIPTION:

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ENGINEERING CORPORATION

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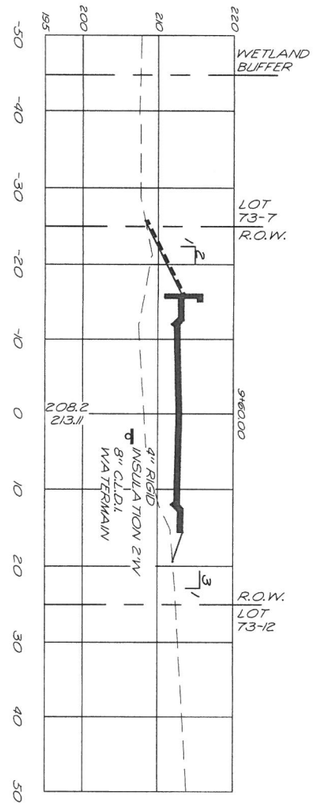
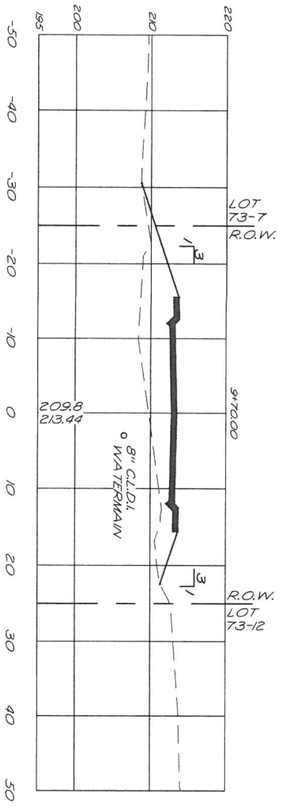
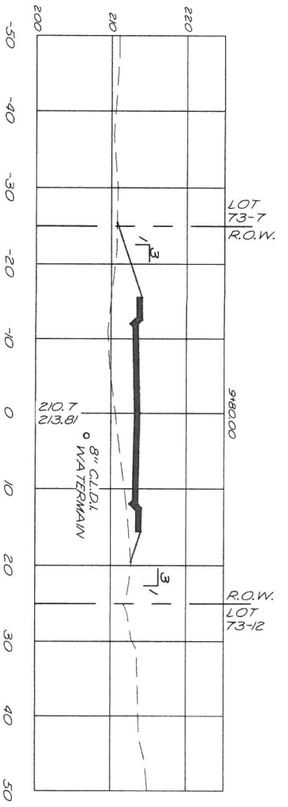
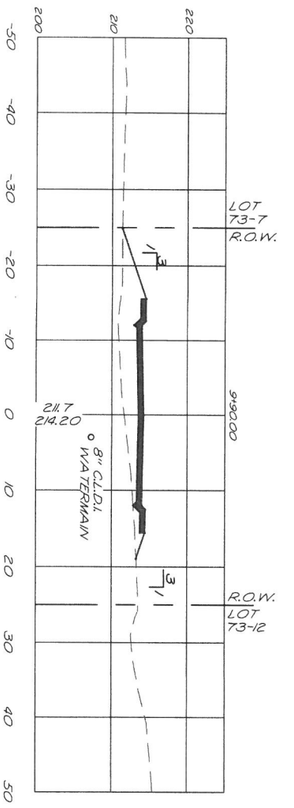
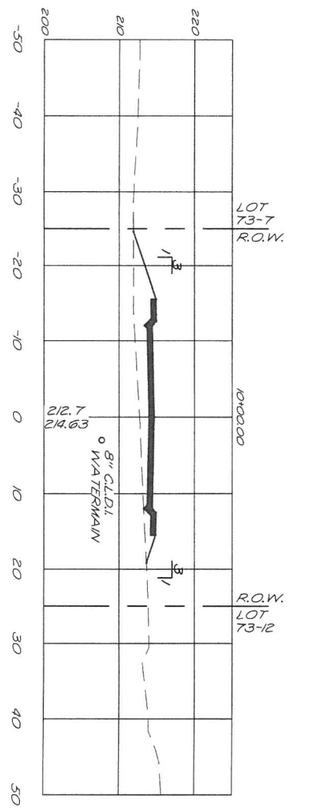
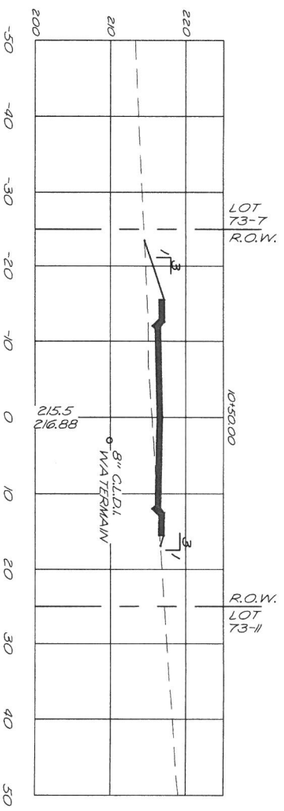


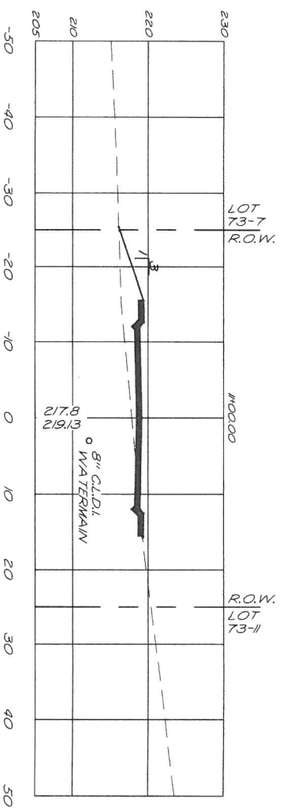


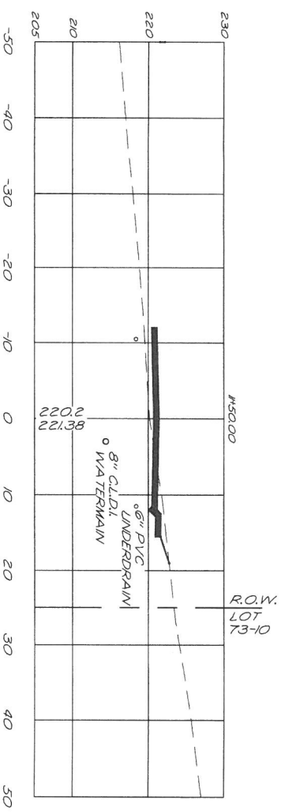












SHEET NO.

XS-5

ROADWAY CROSS-SECTIONS

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017 JOB No. 16133
SCALE: 1" = 10'

STATE OF NEW HAMPSHIRE
ROBERT J. STOWELL No. 9903 LICENSED PROFESSIONAL ENGINEER

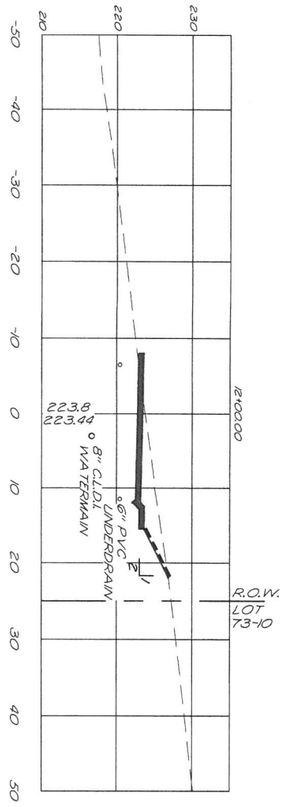
REVISIONS

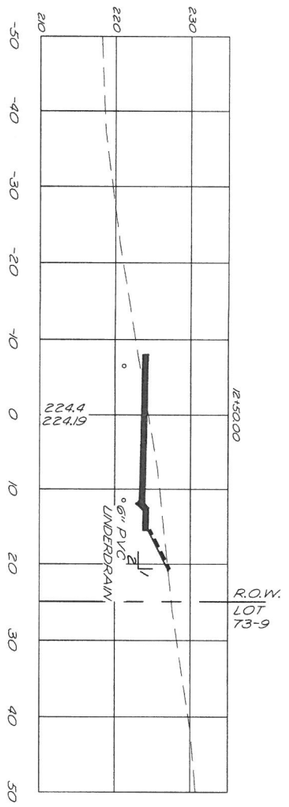
DATE:	DESCRIPTION:

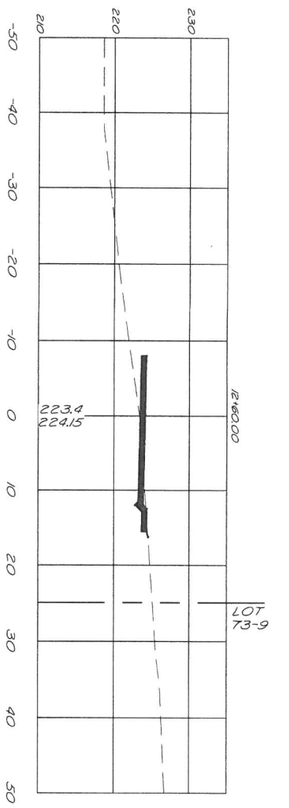
TRITECH
ENGINEERING CORPORATION

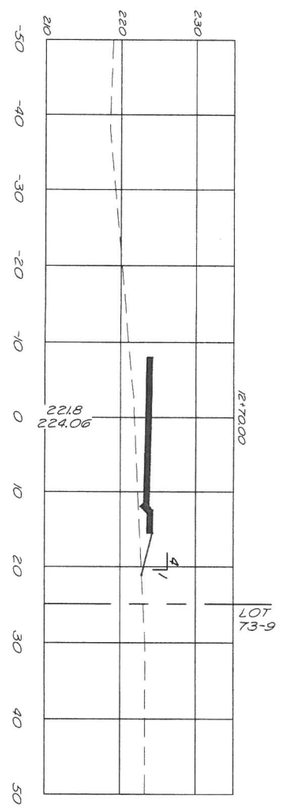
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820

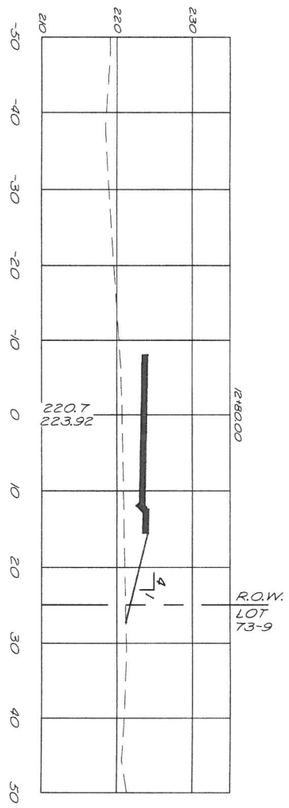
TELEPHONE 603 742 8107
FAX 603 742 3830

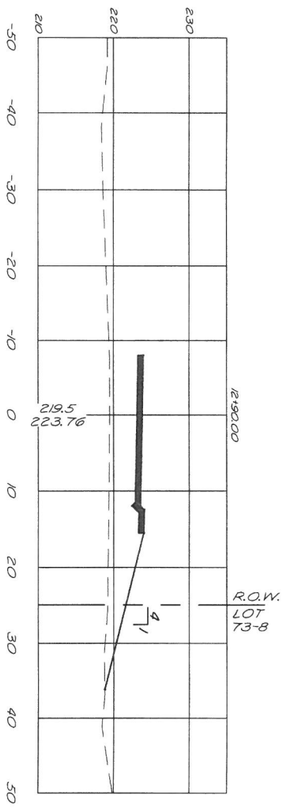


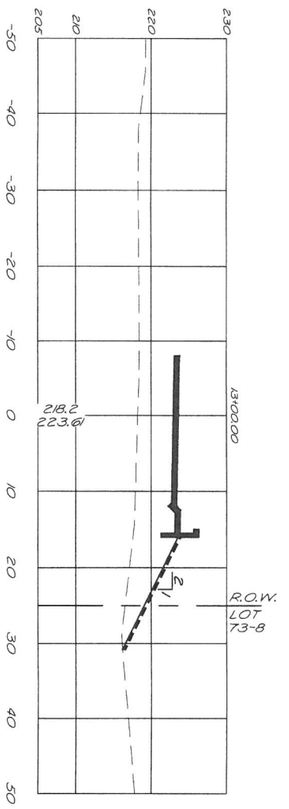


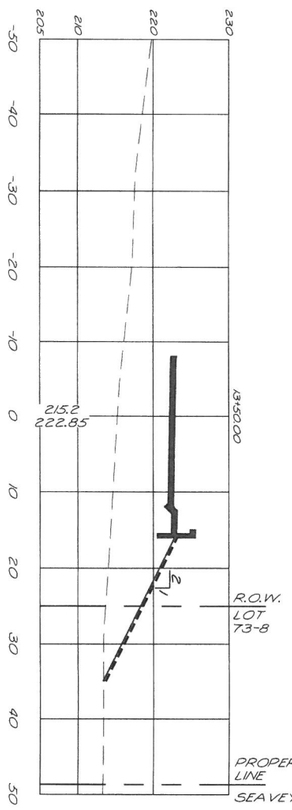












SHEET NO.

XS-6

ROADWAY CROSS-SECTIONS

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017 JOB No. 16133
SCALE: 1" = 10'

STATE OF NEW HAMPSHIRE
ROBERT J. STOWELL
No. 9903
LICENSED PROFESSIONAL ENGINEER

REVISIONS

DATE:	DESCRIPTION:

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ENGINEERING CORPORATION
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