MAJOR SUBDIVISION APPLICATION

(a total of four or more lots)

City of Rochester, New Hampshire

RECEIVED
NOV 07 2017
By CM

[office use only. Check # _____ Amount $_____ Date paid _____]

Date: November 7, 2017 Is a conditional needed? Yes:____ No: X Unclear:____
(If so, we encourage you to submit an application as soon as possible.)

Property information

Tax map #: 140; Lot #('s): 73; Zoning district: R-1

Property address/location: Old Dover Road

Name of project (if applicable): Hayes Hill

Size of site: 20.799 acres; Overlay zoning district(s)? Conservation

Property owner

Name (include name of individual): Quantum Real Estate Group, LLC

Mailing address: 755 Central Avenue, Dover, NH

Telephone #: (603)742-8107 Email: rjs@tritecheng.com

Applicant/developer (if different from property owner)

Name (include name of individual): _____

Mailing address: _____

Telephone #: _____ Email: _____

Engineer/surveyor

Name (include name of individual): Tritech Engineering Corporation

Mailing address: 755 Central Avenue, Dover, NH

Telephone #: (603)742-8107 Fax #: (603)742-4830

Email address: rjs@tritecheng.com Professional license #: P.E. 9903 LLS 884

Proposed project

Number of proposed lots: 17; estimated length of new roads: 1200 Feet

Number of cubic yard of earth being removed from the site? N/A

City water? yes X no ___; How far is city water from the site? _____

City sewer? yes ___ no X; How far is city sewer from the site? More than a mile

If city water, what are the est. total gal. per day? 10,200; Are there pertinent covenants? No

Where will stormwater be discharged? Infiltration, Bioretention then to unnamed stream.

(Continued *Major Subdivision Plan* application Tax Map: 140 Lot: 73 Zone R-1)

Wetlands: Is any fill proposed? No ; area to be filled: No ; buffer impact? No

Comments

Please feel free to add any comments, additional information, or requests for waivers here:

Submission of application

This application must be signed by the property owner, applicant/developer (if different from property owner), *and/or* the agent.

I(we) hereby submit this Subdivision application to the City of Rochester Planning Board pursuant to the City of Rochester Subdivision Regulations and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant/developer (if different from property owner)/as agent, I attest that I am duly authorized to act in this capacity.

Signature of property owner: , MANAGER

Date: 11/07/17

Signature of applicant/developer:

Date:

Signature of agent: , PRESIDENT

Date: 11/07/17

Authorization to enter subject property

I hereby authorize members of the Rochester Planning Board, Zoning Board of Adjustment, Conservation Commission, Planning Department, and other pertinent City departments, boards and agencies to enter my property for the purpose of evaluating this application including performing any appropriate inspections during the application phase, review phase, post-approval phase, construction phase, and occupancy phase. This authorization applies specifically to those particular individuals legitimately involved in evaluating, reviewing, or inspecting this specific application/project. It is understood that these individuals must use all reasonable care, courtesy, and diligence when entering the property.

Signature of property owner: , MANAGER

Date: 11/07/17

TRITECH
ENGINEERING CORPORATION

755 Central Avenue
Dover, New Hampshire 03820

Telephone 603.742.8107
Facsimile 603.742.3830

November 7, 2017

Seth Creighton, Chief Planner
City of Rochester
31 Wakefield Street
Rochester, NH 03867-1917

Subject: **Major Subdivision Application**
Quantum Real Estate Group, LLC
Rochester Tax Map 140, Lot 73
Old Dover Road
Rochester, New Hampshire
Job No. 16133

Dear Seth:

Quantum Real Estate Group is the owner of 20 acres of vacant land on the easterly side of Old Dover Road shown as City of Rochester Tax Map 140, Lot 73. The property is located in the R-1 Zoning District and has City Water available. Quantum Real Estate, LLC desires to subdivide the property.

The owner has proposed a 17 Lot Subdivision (16 new lots). Lot 73 will access from its frontage on Old Dover Road. The remaining 16 Lots, along with the previously subdivided Lot 73-1, will access the proposed road.

All lots will be serviced by municipal water, on-site septic systems, and underground electric, telephone and cable tv. All lots meet the zoning requirements of 100 feet of frontage and 10,000 square foot lot size. As this project utilizes on-site septic systems, the project will require NHDES Subdivision Approval. All Lots have been sized to conform to the NHDES lot sizing requirements.

The proposed roadway crosses an intermittent stream at Station 9+ 56. This crossing will require a NHDES Wetlands Permit. There are no wetlands associated with it at this location. The Rochester Conservation Overlay District is not applicable to this work as there are no wetlands or wetlands buffer impact and it is not a "Perennial Stream". A Conditional Use Permit is not required.

Enclosed please find the following:

- Cover Letter (22 copies)
- Major Subdivision Application (22 copies)
- Major Subdivision Checklist (22 copies)
- Traffic Assessment Memorandum (22 copies)
- Subdivision Plan Set, Sheets S-1 & S-2 – 11 x 17 (22 copies)
- Subdivision Plan Set, Sheets S-1 & S-2 – full size (3 copies)
- Application Fee $4,365.60 (Tritech Check No. 31517)
- Abutters List (1 copy) with Labels

We look forward to meeting with the Technical Review Group on November 17, 2017 and hopeful this will clear the way for review by the Planning Board Meeting on December 4, 2017.

Please advise should you have any questions.

Very truly yours,
TRITECH ENGINEERING CORP.

Robert J. Stowell, P.E., L.L.S.
President

RJS / rms

Enclosures
\\16133_TRG_SubmissionLtr.doc

SUBDIVISION & CONSTRUCTION PLANS

THE HOMES AT

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE

LIST OF PLANS

PREPARED BY
TRITECH
ENGINEERING CORPORATION

PREPARED FOR
Quantum real estate group, llc

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 9117
FAX 603 742 3630

REVISIONS
DATE: DESCRIPTION:

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 874 ROCHESTER, N.H.
140-73-1	CHRISTOPHER COFFEY & KAILA PAQUETTE 156 OLD DOVER ROAD ROCHESTER, N.H.
140-74	NORMA JEAN BAILEY 147 OLD DOVER ROAD ROCHESTER, N.H.
140-75-1	DANA & KAREN GRAVEL 151 OLD DOVER ROAD ROCHESTER, N.H.
253-1	HENRY & TARYN DECKEN 162 OLD DOVER ROAD ROCHESTER, N.H.
253-23	PATRICIA WOODWARD 1991 TRUST 227 LEDGES DRIVE #125 LACONIA, N.H.
253-24	PATRICIA WOODWARD 1991 TRUST 227 LEDGES DRIVE #125 LACONIA, N.H.
253-25	ALEXANDRE KLEVITCH & EMILY SMITH 1 LAURA DRIVE ROCHESTER, N.H.
253-93-1	CHARLES A. BURROWS 155 OLD DOVER ROAD ROCHESTER, N.H.
253-94	CHARLES A. BURROWS 155 OLD DOVER ROAD ROCHESTER, N.H.

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

REVISIONS
DATE: DESCRIPTION:

KEY PLAN

HAYES HILL

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

SHEET NO.

T-2

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

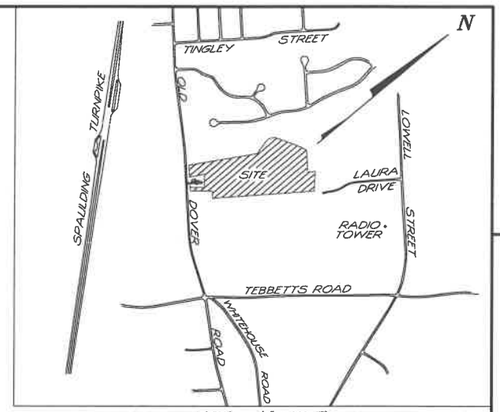
8.) ZONING: RESIDENTIAL –1 (R–1)
MIN. LOT SIZE: 10,000 SQ.FT.
MIN. FRONTAGE: 100 FT
MIN. SETBACKS:
FRONT: 10 FT
SIDE: 10 FT
REAR: 20 FT

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.

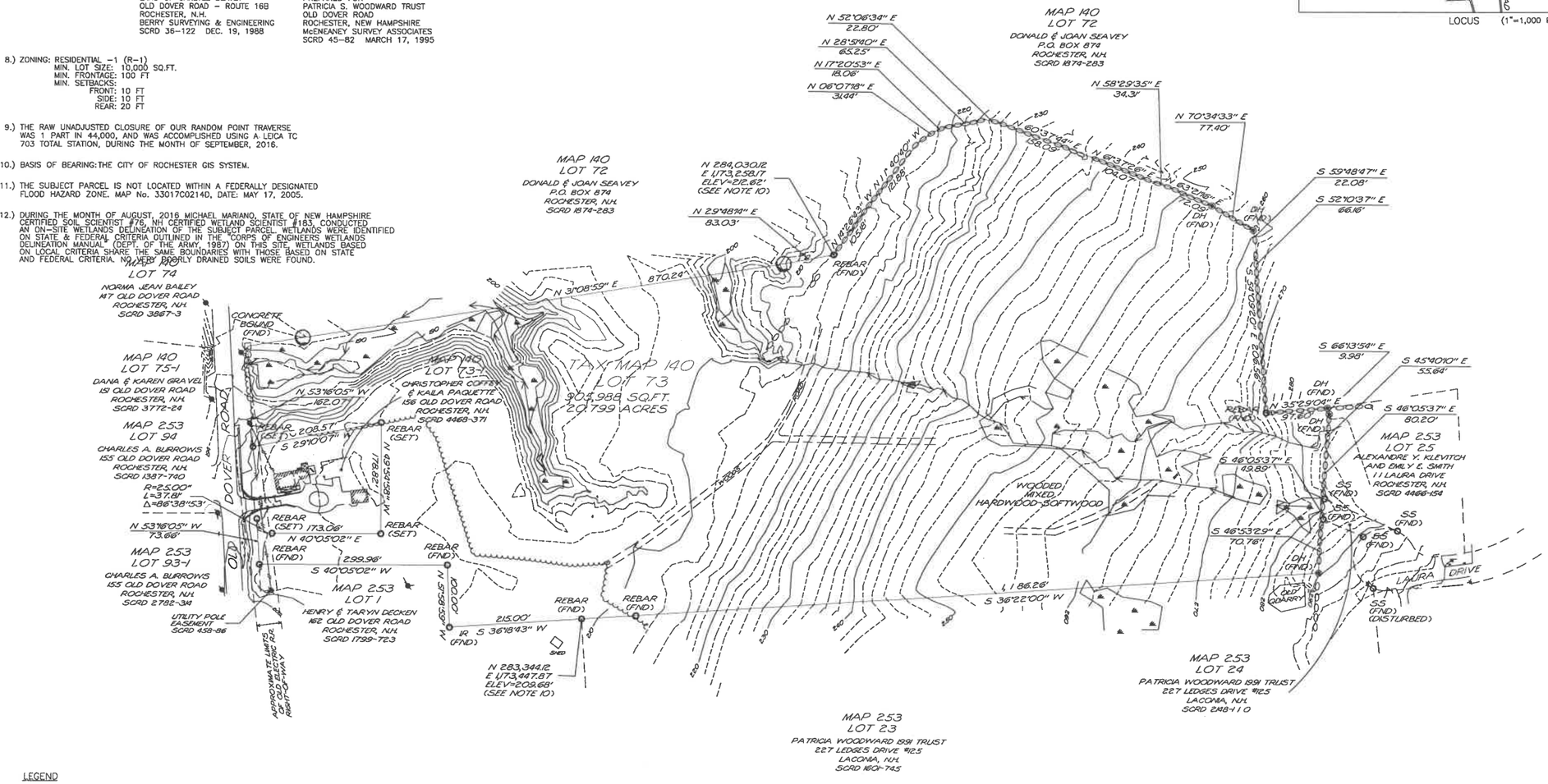
10.) BASIS OF BEARING: THE CITY OF ROCHESTER GIS SYSTEM.

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

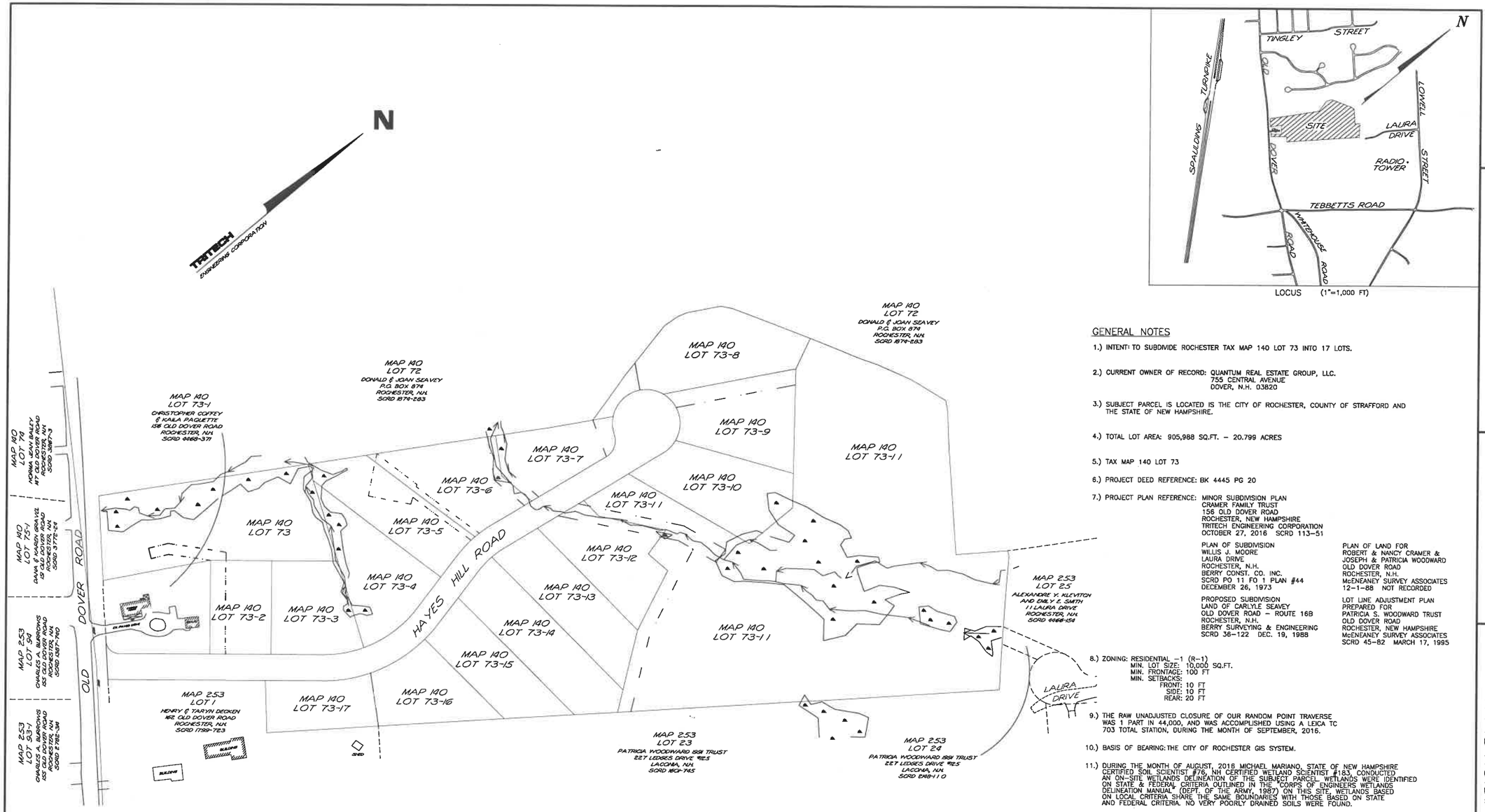
100 0 50 100 200 400
1"=100'

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

REVISIONS
DATE: DESCRIPTION:

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



LOCUS (1"=1,000 FT)

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

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TRITECH ENGINEERING CORPORATION
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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, 31 WAKEFIELD STREET ROCHESTER, N.H. 03867. (603) 335–1338

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

LEGEND

WETLAND BOUNDARY (SEE NOTE 11)

INTERMITTENT STREAM

100 0 50 100 200 400

1"=100'

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.

APPROVED BY THE ROCHESTER PLANNING BOARD ON _____ DATE

SIGNED BY _____ NAME _____ POSITION

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

REVISIONS
DATE: DESCRIPTION:

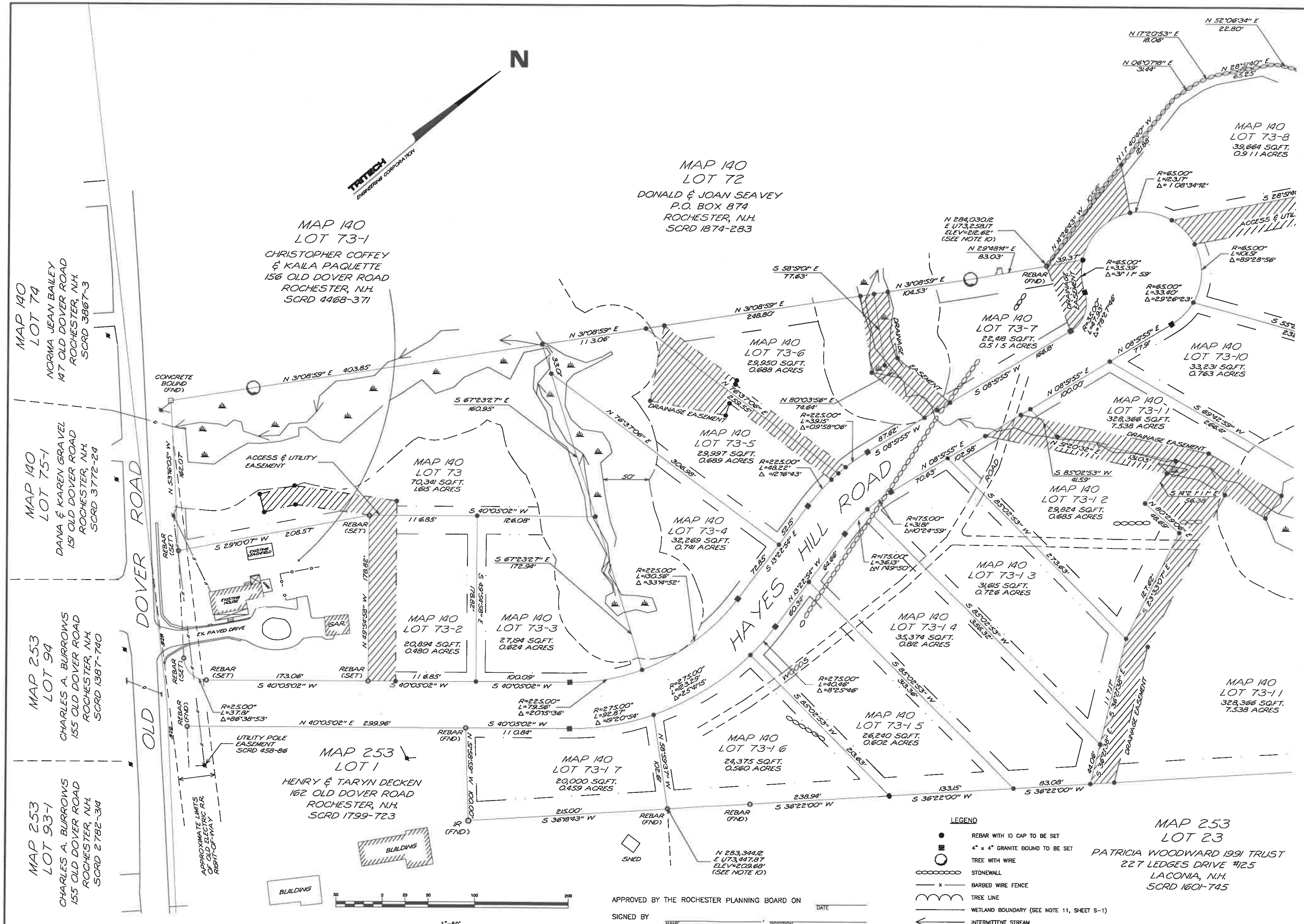
SUBDIVISION PLAN

HAYES HILL

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

SHEET NO.

S-1



APPROVED BY THE ROCHESTER PLANNING BOARD ON ______ DATE

SIGNED BY ______ NAME ______ POSITION

TRITECH
ENGINEERING CORPORATION

REVISIONS
DATE: DESCRIPTION:

SUBDIVISION PLAN

HAYES HILL

OLD DOVER ROAD
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
ROCHESTER, N.H.
SCRD 1874-283

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
328,366 SQ.FT.
7.538 ACRES

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

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

MAP 140
LOT 73-10
33,231 SQ.FT.
0.763 ACRES

MAP 140
LOT 73-12
29,824 SQ.FT.
0.685 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 253
LOT 25
ALEXANDRE Y. KLEVITCH
AND EMILY E. SMITH
11 LAURA DRIVE
ROCHESTER, N.H.
SCRD 4466-154

MAP 253
LOT 23
PATRICIA WOODWARD 1991 TRUST
227 LEDGES DRIVE #125
LACONIA, N.H.
SCRD 1601-745

MAP 253
LOT 24
PATRICIA WOODWARD 1991 TRUST
227 LEDGES DRIVE #125
LACONIA, N.H.
SCRD 2148-110

ACCESS & UTILITY EASEMENT
DRAINAGE EASEMENT
HAYES HILL ROAD
LAURA DRIVE
WOODS
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

APPROVED BY THE ROCHESTER PLANNING BOARD ON _____ DATE

SIGNED BY _____ NAME, _____ POSITION

N

1"=50'

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

REVISIONS
DATE: DESCRIPTION:

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

SHEET NO.
S-3

N

TRITECH ENGINEERING CORPORATION

MAP 140
LOT 73-1
CHRISTOPHER COFFEY
& KAILA PAQUETTE
156 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 4468-371

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

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

MAP 253
LOT 1
HENRY & TARYN DECKEN
162 OLD DOVER ROAD
ROCHESTER, N.H.
SCRD 1799-723

MAP 253
LOT 23
PATRICIA WOODWARD 1991 TRUST
227 LEDGES DRIVE #125
LACONIA, N.H.
SCRD 1601-745

OLD DOVER ROAD

HAYES HILL ROAD

MAP 140
LOT 73-7
22,918 SQ.FT.
0.515 ACRES

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

MAP 140
LOT 73-9
32,578 SQ.FT.
0.757 ACRES

MAP 140
LOT 73-10
33,281 SQ.FT.
0.783 ACRES

MAP 140
LOT 73-11
328,553 SQ.FT.
7.543 ACRES

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

MAP 140
LOT 73-13
13,815 SQ.FT.
0.726 ACRES

MAP 140
LOT 73-14
35,874 SQ.FT.
0.824 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 140
LOT 73-6
29,950 SQ.FT.
0.688 ACRES

MAP 140
LOT 73-5
29,957 SQ.FT.
0.689 ACRES

MAP 140
LOT 73-4
32,269 SQ.FT.
0.741 ACRES

MAP 140
LOT 73-3
27,194 SQ.FT.
0.624 ACRES

MAP 140
LOT 73-2
20,894 SQ.FT.
0.480 ACRES

MAP 140
LOT 73
20,941 SQ.FT.
0.645 ACRES

N 284,030.12
E 1,173,238.17
ELEV=210.69'
(SEE NOTE 10)

N 283,344.12
E 1,173,447.87
ELEV=209.68'
(SEE NOTE 10)

REBAR (FND)

REBAR (SET)

CONCRETE BOUND (FND)

EXISTING LEACHFIELD

EXISTING HOUSE

G.A.R.

PARKED DRIVE

IR (FND)

SHED

BUILDING

BUILDING

ACCESS & UTILITY EASEMENT

DRAINAGE EASEMENT

4K SUITABLE AREA (TYP)

WOODS

50 0 25 50 100 200

1"=50'

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

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TELEPHONE 603 742 8107
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REVISIONS
DATE: DESCRIPTION:

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=212.82'
(SEE NOTE 10)

REBAR (FND)

ACCESS & UTILITY EASEMENT

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

DRAINAGE EASEMENT

MAP 140
LOT 73-10
33,259 SQ.FT.
0.763 ACRES

MAP 140
LOT 73-11
328,553 SQ.FT.
7.543 ACRES

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

MAP 140
LOT 73-11
328,553 SQ.FT.
7.543 ACRES
DRAINAGE EASEMENT

MAP 140
LOT 73-12
29,639 SQ.FT.
0.680 ACRES

HILL ROAD

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

MAP 140
LOT 73-14
35,874 SQ.FT.
0.824 ACRES

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

MAP 140
LOT 73-11
328,553 SQ.FT.
7.543 ACRES

WOODS

ROAD

DRAINAGE EASEMENT

REBAR (FND)

N 283,394.12
E 1,173,447.87
ELEV=209.68'
(SEE NOTE 10)

MAP 253
LOT 23
PATRICIA WOODWARD 1991 TRUST
227 LEDGES DRIVE #125
LACONIA, N.H.
SCRD 1601-745

MAP 253
LOT 24
PATRICIA WOODWARD 1991 TRUST
227 LEDGES DRIVE #125
LACONIA, N.H.
SCRD 2148-110

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

LAURA DRIVE

DH (FND)

SS (FND)

SS (FND) (DISTURBED)

REBAR (FND)

220 230 240 250 260 270 280 290

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

50 0 25 50 100 200
1"=50'

N

TRITECH ENGINEERING CORPORATION

TRITECH
ENGINEERING CORPORATION
795 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
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REVISIONS
DATE: DESCRIPTION:

TOPOGRAPHIC PLAN
HAYES HILL
OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017 JOB No. 16133
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 73-10 · LOT 73-11 · 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. 0150

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 ENGINEERING CORPORATION
785 CENTRAL AVENUE
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REVISIONS
DATE: DESCRIPTION:

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
C	8 - 15%	313	DEERFIELD	SOMEWHAT POORLY DRAINED
		915	DEERFIELD VARIANT	SOMEWHAT POORLY DRAINED
D	15 - 25%	448	SCITUATE	MODERATELY WELL DRAINED
E	25 - 35%	946	RIDGEBURY	SOMEWHAT POORLY DRAINED VERY STONY
E	35%+	957	RIDGEBURY	POORLY DRAINED, VERY STONY

TRITECH ENGINEERING CORPORATION

40 0 20 40 80 160

1"=40'

TP TEST PIT

WETLANDS

WETLAND BOUNDARY

2FT CONTOUR

10FT CONTOUR

SOILS BOUNDARY

PROPERTY LINE

N

LOT 73-8 · LOT 73-9 · LOT 73-10 · LOT 73-11 · LOT 73-12 · LOT 73-13 · LOT 73-14 · LOT 73-15 · LOT 73-7 · LOT 73-6

WETLAND LINE IS BOUNDARY BETWEEN 946 AND 957

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
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REVISIONS
DATE: DESCRIPTION:

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: NONE
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: ORSTEIN – 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 (10YR8/1) 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

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 (10YR8/3 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

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; MODERATE MEDIUM GRANULAR STRUCTURE; DRY, SLIGHTLY HARD.
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

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 (LOYR5/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 (10YR8/1) 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 STNICTURE; 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

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 (1 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 (10YR4/8) LOAMY SAND; MANY YELLOWISH BROWN (10YR5/6) AND STRONG BROWN (7.5YR5/8) REDOX CONCENTRATIONS; MANY COARSE DISTINCT GRAY (10YR6/L) 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"
SOIL HYDROLOGIC GROUP: C

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"	YELLOWISH BROWN (10YR5/6) SAND; FEW COBBLES AND STONES; SINGLE GRAIN; MOIST, LOOSE.
36 – 60"	LIGHT OLIVE BROWN (2.5Y5/4) STONY SAND; MANY STRONG BPOWN (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: 38"
OBSERVED WATER: 36"
RESTRICTIVE LAYER: 36"
SOIL HYDROLOGIC GROUP: C

TEST PIT 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 (10YR5/1) 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

TRITECH
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REVISIONS: DESCRIPTION:
DATE:

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 (10YR5/1) REDOX DEPLETIONS; SINGLE GRAIN; WET, NON-STICKY, NON-PLASTIC
@48"	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 (10YR3/3) 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; COMMON GRAY (10YR6/1) REDOX DEPLETIONS; STRONG MEDIUM BLOCKY STRUCTURE; MOIST, FIRM.
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 (7.5YR5/8) AND YELLOWISH BROWN (10YR5/6) 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.
@48"	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 – 95"	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: 33"
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 (10YR3/8) 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 (10YR8/1) 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 (10YR8/1) 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 73-18D

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.
@30"	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

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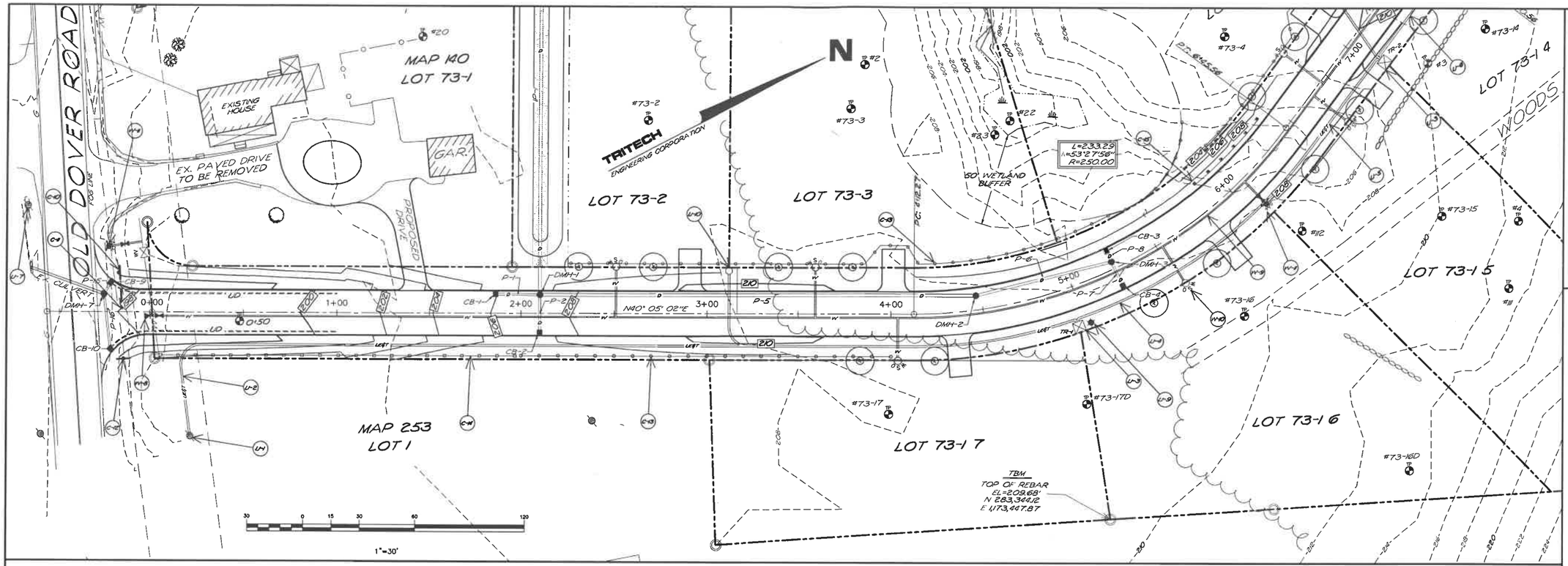
REVISIONS
DATE: DESCRIPTION:

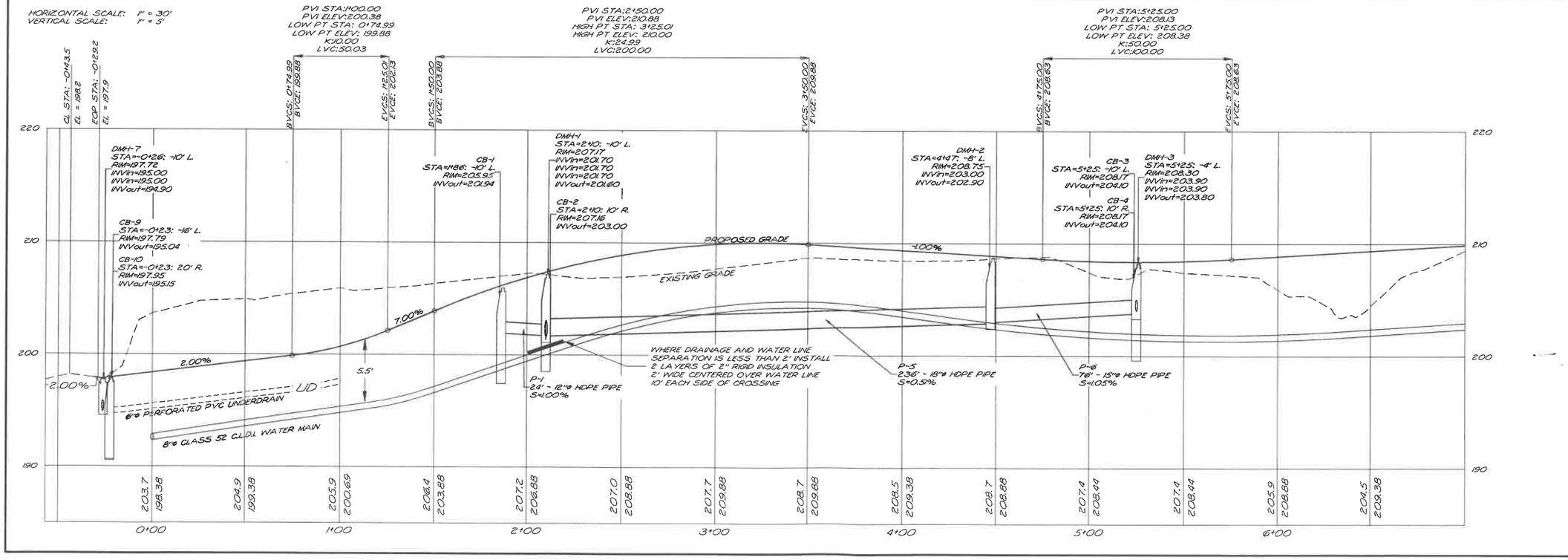
SITE SPECIFIC SOILS, TEST PITS

HAYES HILL

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

SHEET NO.
SSS-4





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REVISIONS
DATE: DESCRIPTION:

ROADWAY PLAN & PROFILE

HAYES HILL

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

SHEET NO.
C-1

TRITECH
ENGINEERING CORPORATION

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REVISIONS
DATE: DESCRIPTION:

ROADWAY PLAN & PROFILE

HAYES HILL

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

SHEET NO.

C-2

DRAINAGE STRUCTURE TABLE				
STRUCTURE	RIM ELEV.	INVERT IN	INVERT OUT	SUMP
CB-1	205.95		201.94	197.94
CB-2	207.16		203.00	199.00
CB-3	208.17		204.10	200.10
CB-4	208.17		204.10	200.10
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	197.79		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	201.60
DMH-2	208.75	203.00 (P-6)	202.90	202.90
DMH-3	208.30	203.90 (P-7) 203.90 (P-8)	203.80	203.80
DMH-4	206.36	201.45 (IP-1)	204.30	199.45
DMH-5	210.84	206.65 (P-10) 206.65 (P-9)	206.55	206.55
DMH-6	219.65	215.05 (P-13) 215.05 (P-12)	214.95	214.95
DMH-7	197.72	195.00 (P-15) 195.00 (P-16)	194.90	194.90
F.E.S. #101		204.31 (P-11)		
F.E.S. #102		199.04 (P-4)		
F.E.S. #103		215.00 (P-14)		

DRAIN PIPE TABLE							
PIPE	START	INV.	END	INV.	SIZE	L.F.	SLOPE
EX. CULVERT	DMH-7	194.90		194.50	12"	42'	0.96%
IP-1	P-3	201.45	DMH-4	201.45	18"	186'	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		201.45	18"	15'	1.00%
P-4	DMH-4	204.30		199.04	12"	8.3'	6.34%
P-5	DMH-2	202.90	DMH-1	201.70	18"	236'	0.5%
P-6	DMH-3	203.80	DMH-2	203.00	15"	76'	1.05%
P-7	CB-4	204.10	DMH-3	203.90	12"	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		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		215.00	12"	16'	-0.31%
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		209.57		204.90	24"	52'	9.00%

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 2, SHEET C-8.
6. INSTALL STABILIZED CONSTRUCTION ENTRANCE AT PROJECT ENTRANCE, PER DETAIL 10, SHEET C-8.
7. INSTALL SLOPED GRANITE CURB PER DETAIL 3, SHEET C-8.
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 OR ORANGE SILT FENCE MUST BE PLACED AT WETLANDS UNDER 1/2 ACRE IN SIZE, THE WETLAND BUFFER AND THE LIMITS OF CLEARING.
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 SOCK. SEE DETAIL 11, SHEET C-8, WITH ORANGE CONSTRUCTION FENCE SEE DETAIL 2, SHEET C-8.
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.

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.
9. INSTALL 1,225' - 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+00 TO 12+25.
10. INSTALL 1" TYPE "K" COPPER OR APPROVED EQUAL WATER SERVICE. MINIMUM DEPTH OF COVER OVER PIPE = 5.5'.
11. INSTALL HYDRANT AND GATE VALVE (AMERICAN DARLING OR KENNEDY) PER CITY REQUIREMENTS, SEE DETAIL 5, SHEET C-7
12. INSTALL 6" END CAP WITH THRUST BLOCK.

U-1 UTILITY NOTES:

1. EXISTING POLE, TO REMAIN AS RISER POLE
2. INSTALL 530 FT OF UNDERGROUND CONDUIT IN ACCORDANCE WITH PSNH STANDARDS & DETAIL 12, SHEET C-10 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-10 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-10 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-10 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 4 & 5, SHEET C-10. LIGHTS TO BE BACK SHIELDED TO DIRECT LIGHT FORWARD.
10. INSTALL JUNCTION BOX PER EVERSOURCE REQUIREMENTS.

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', Lo=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', Lo=10', D=6", D50=3".
6. CONSTRUCT 300'± LONG SWALE BOTTOM = 4', 3 TO 1 SIDE SLOPES, MIN. DEPTH = 1.5' SLOPE = 0.01 FT/FT, INVERT @ START = 242.0', TO INVERT @ END = 239.0'
7. CONSTRUCT 10' WIDE SPILLWAY IN BERM @ ELEVATION 239.50'.
8. INSTALL FES 101 @ ELEV = 199.04. SEE DETAIL 10 SHEET C-9
9. INSTALL RIP-RAP PER DETAIL 9 SHEET C-9 Wo=3', We=10', Lo=10', D=6", D50=2.5"
10. CONSTRUCT 20' LONG LEVEL SPREADER PER DETAIL 11, SHEET C-9 CHANNEL ELEVATION = 195.50 LIP ELEVATION = 196.00'
11. INSTALL STREAM CROSSING CULVERT. 24" 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 7 SHEET C-10
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-10
15. INSTALL READY ROCK RETAINING WALL/HEADWALL
16. INSTALL FES 103 @ ELEV = 215.00. SEE DETAIL 10 SHEET C-9
17. INSTALL RIP-RAP PER DETAIL 9 SHEET C-9 Wo=3', We=10', Lo=10', D=6", D50=2.5"
18. INSTALL BIORETENTION BASIN AREA #2
19. CONSTRUCT 10' WIDE SPILLWAY IN BERM @ ELEVATION 215.50'.

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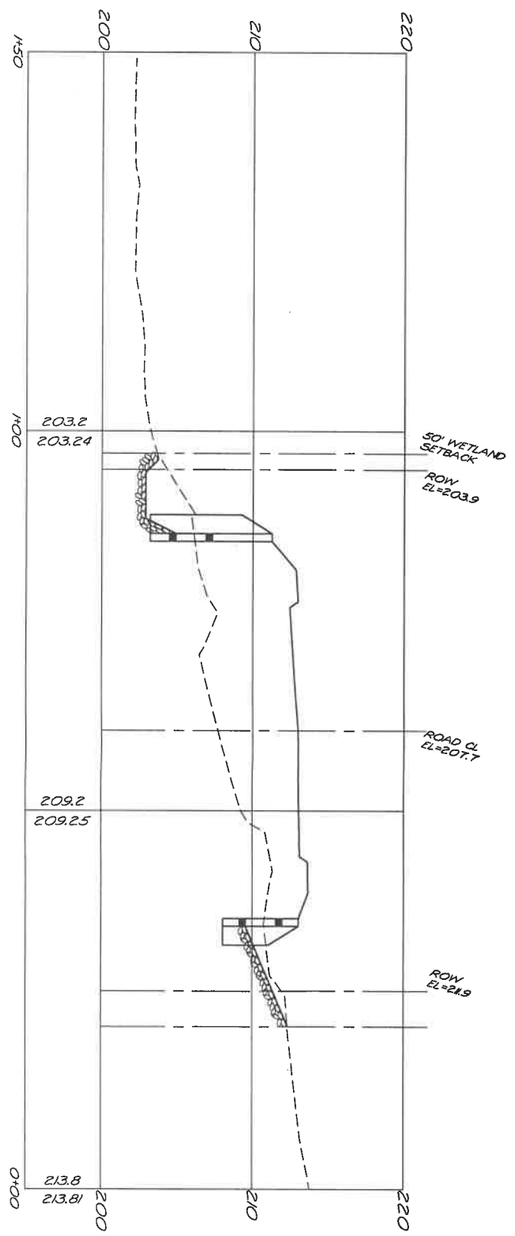
REVISIONS
DATE: DESCRIPTION:

CONSTRUCTION NOTES

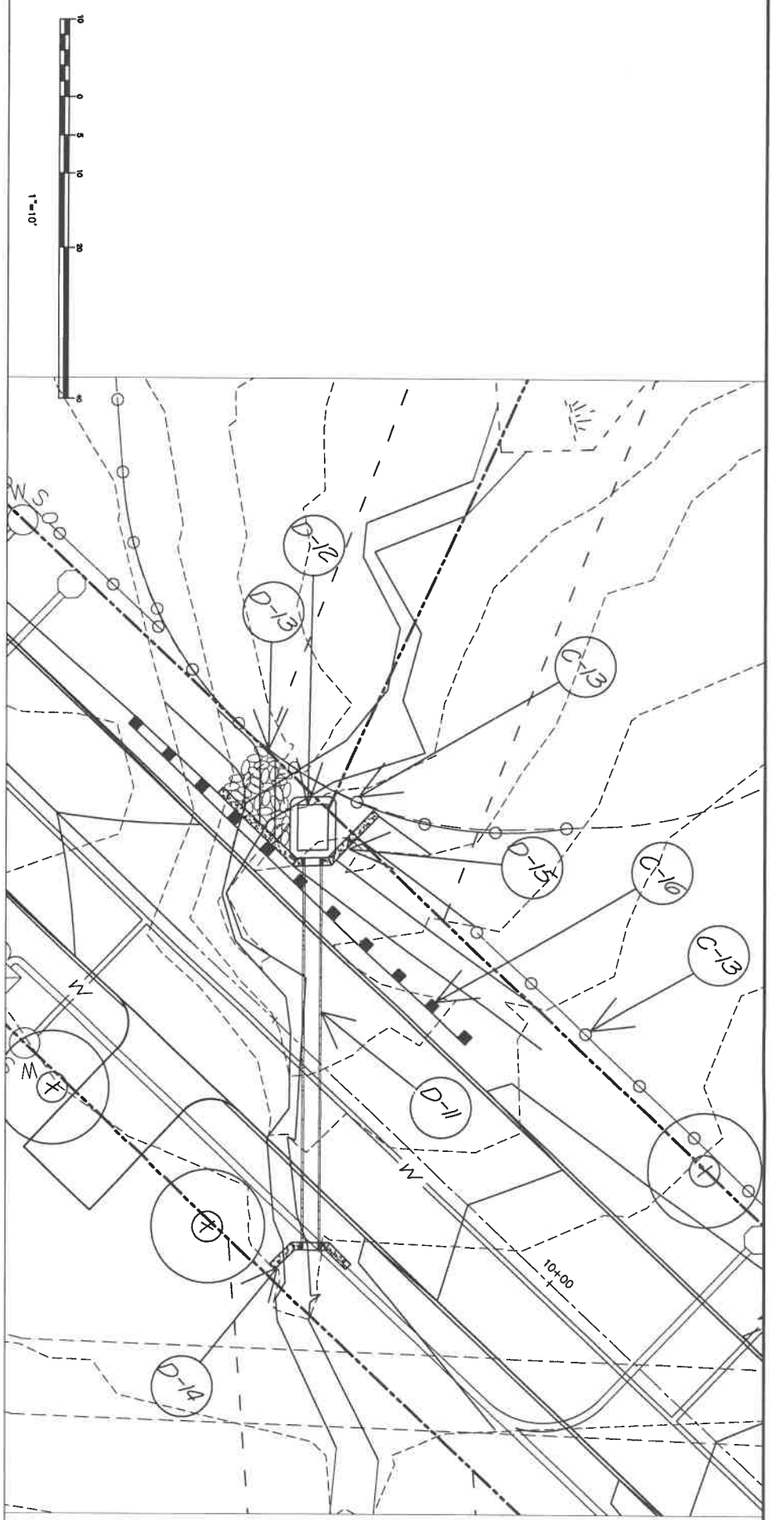
HAYES HILL

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

SHEET NO.
C-3



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



SHEET NO.	STREAM CROSSING PLAN & PROFILE		
C-4	HAYES HILL OLD DOVER ROAD ROCHESTER, NEW HAMPSHIRE NOVEMBER 7, 2017 JOB No. 16133 SCALE: 1" = 10'	REVISIONS DATE: DESCRIPTION:	TRITECH ENGINEERING CORPORATION 755 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE 603 742 8107 FAX 603 742 3830

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

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REVISIONS
DATE: DESCRIPTION:

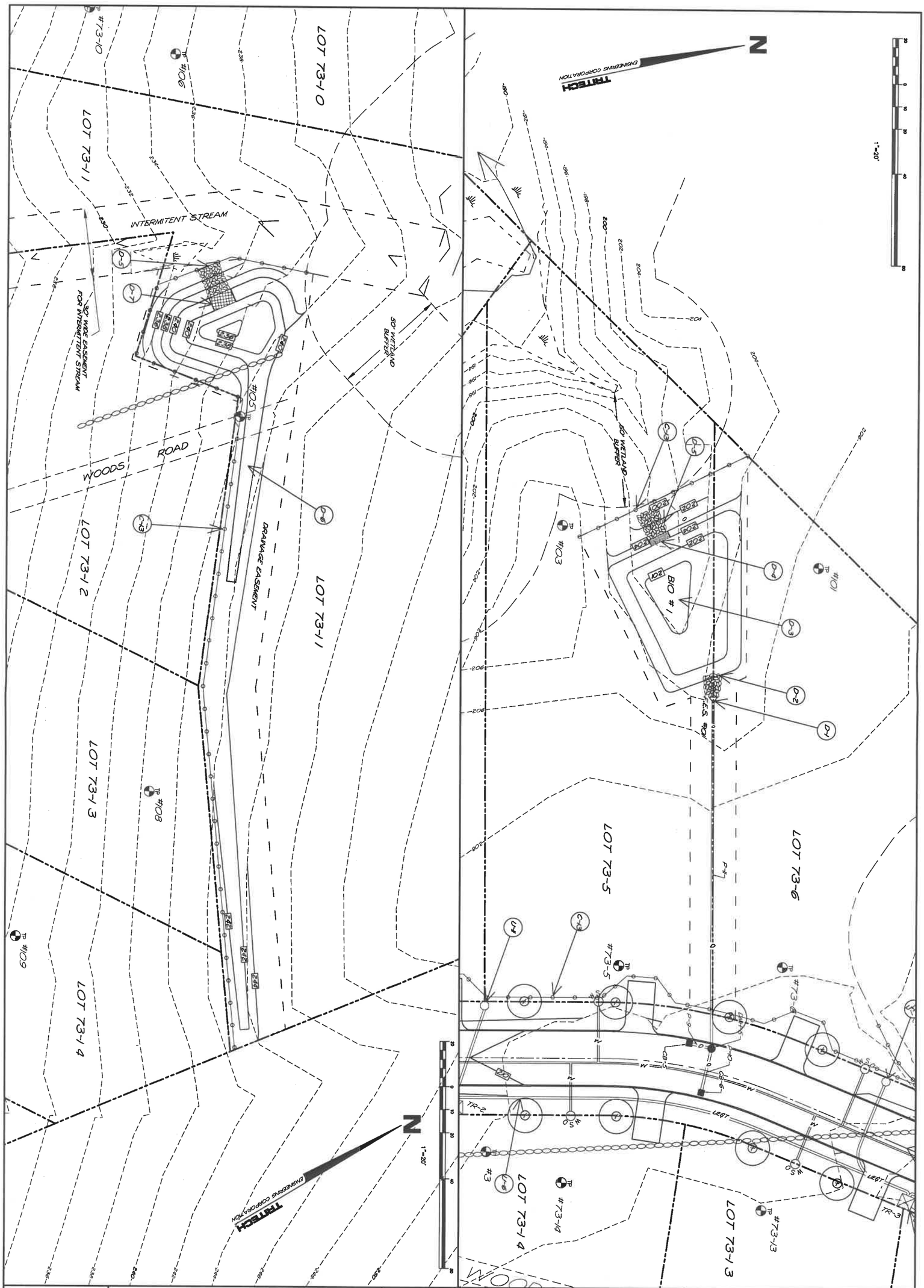
INFILTRATION PRACTICE (IP-#1) PLAN

HAYES HILL

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

REVISIONS	
DATE:	DESCRIPTION:

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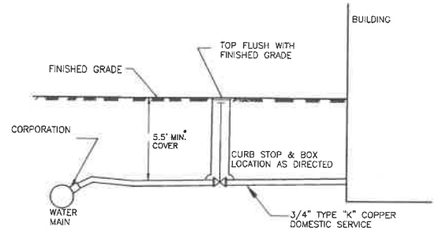


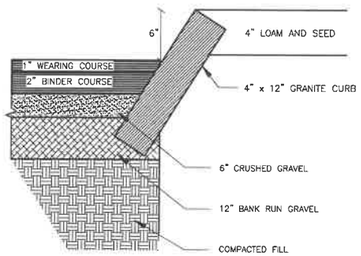
* USE 2" x 2' RIGID BOARD INSULATION OVER PIPE WHEN COVER REQUIREMENT CANNOT BE SATISFIED.

NOTES:

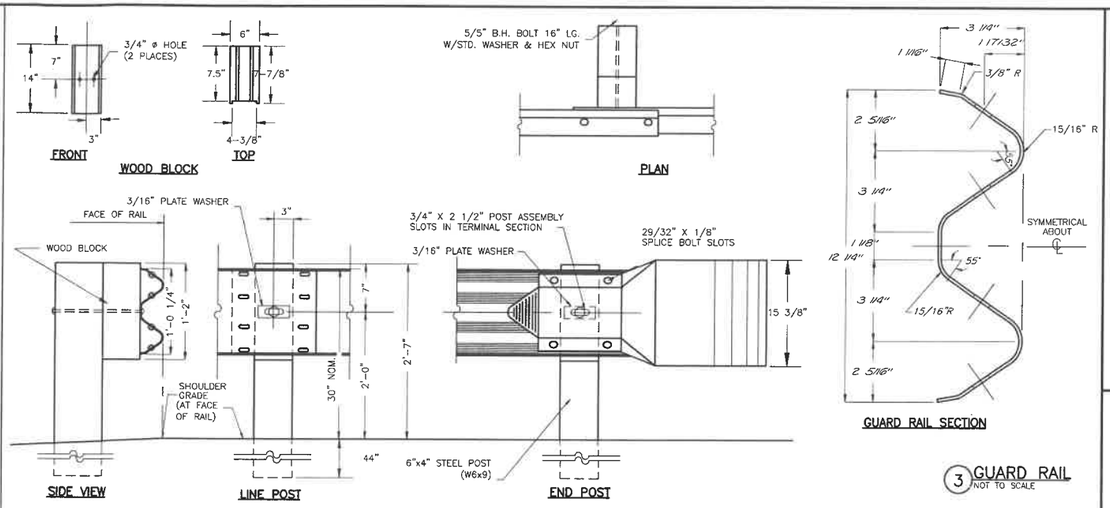
1.) SERVICE TO BE TYPE "K" COPPER OR EQUAL, APPROVED BY LOCAL AND STATE SPECIFICATIONS.

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

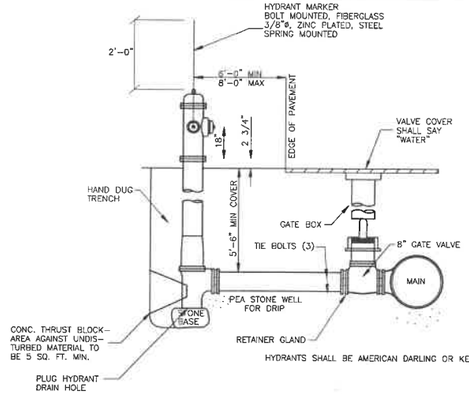
1 BUILDING WATER SERVICE
NOT TO SCALE



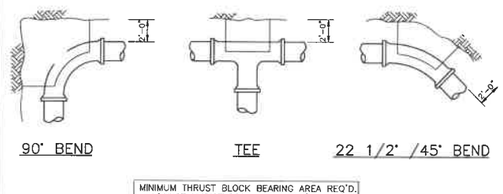
2 SLOPED GRANITE CURB SECTION
NOT TO SCALE



3 GUARD RAIL
NOT TO SCALE



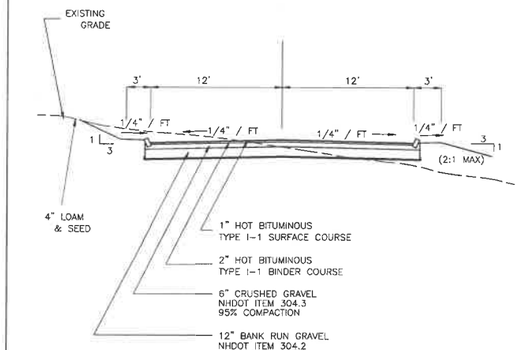
5 HYDRANT & VALVE DETAIL
NOT TO SCALE



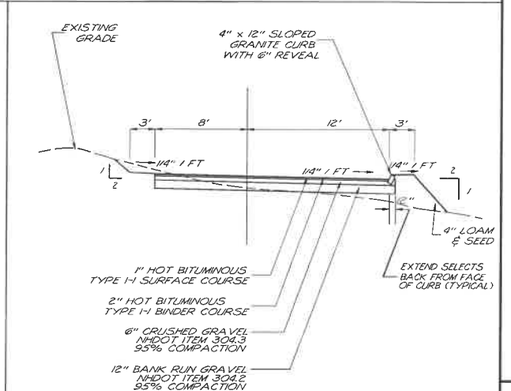
MINIMUM THRUST BLOCK BEARING AREA REQ'D. AGAINST UNDISTURBED MATERIAL (SQ. FT.)					
PIPE SIZE	90° BEND	TEE	PLUG	45° BEND	22 1/2° & SMALLER
6"	5	4	3	2	2
8"	9	6	5	7	7
12"	11	9	7	7	4

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

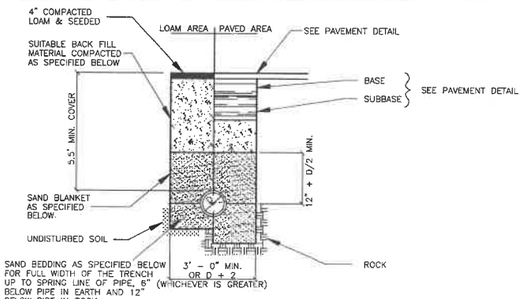
6 WATER MAIN THRUST BLOCK DETAILS
NOT TO SCALE



7 TYPICAL ROAD CROSS SECTION
NOT TO SCALE



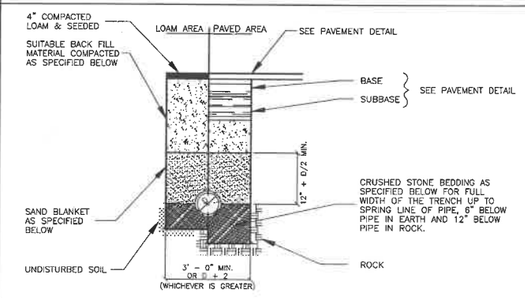
8 TYPICAL CUL-DE-SAC CROSS SECTION
NOT TO SCALE



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



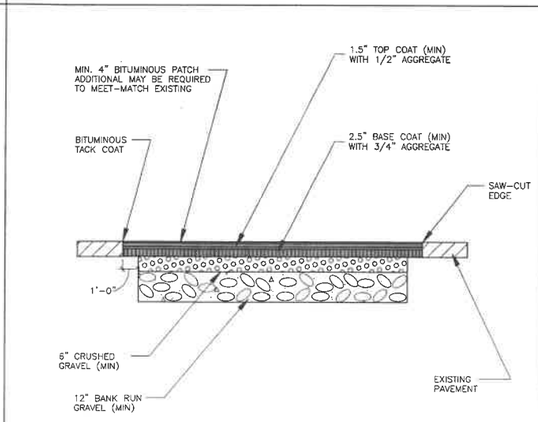
SAND BLANKET	
SIEVE SIZE	%FINER BY WEIGHT
1/2"	90 - 100
200	0 - 15

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

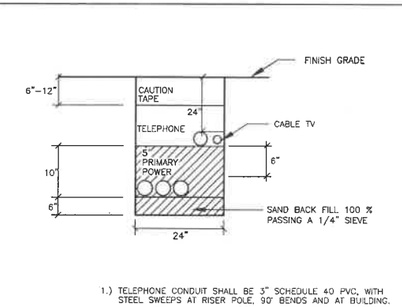
* EQUIVALENT TO STANDARD STONE SIZE #67 - SECTION 703 OF NHDOT STANDARD SPECIFICATIONS

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



2 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 3633

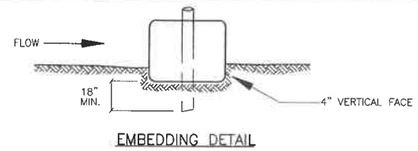
REVISIONS
DATE: DESCRIPTION:

CONSTRUCTION DETAILS

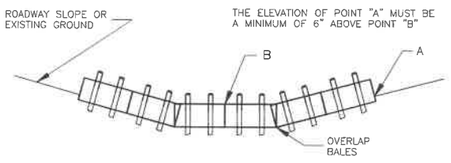
HAYES HILL

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

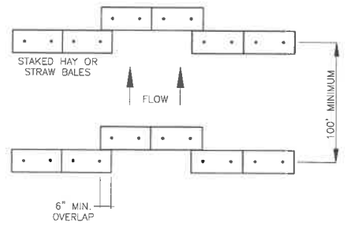
SHEET NO.
C-7



EMBEDDING DETAIL



ELEVATION

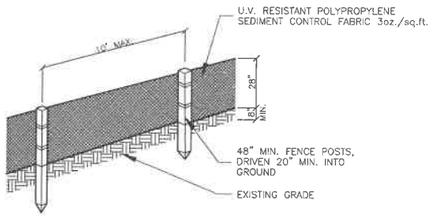


PLAN

CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR REBARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED (AFTER EACH RAIN).
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
6. REMOVE AND PROPERLY DISPOSE OF ALL SEDIMENT PRIOR TO REMOVING HAYBALES.

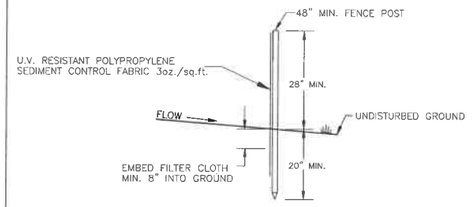
1 HAYBALE BARRIER – TREATMENT SWALE
NOT TO SCALE



PERSPECTIVE VIEW

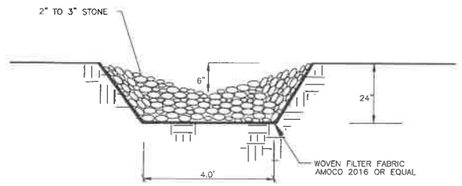
NOTES

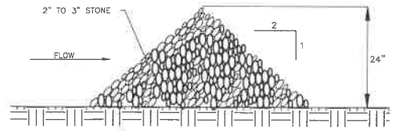
1. THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR BEST MANAGEMENT PRACTICE FOR SILT FENCES, OF THE "STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE" PREPARED BY ROCKINGHAM COUNTY CONSERVATION DISTRICT, DATED AUGUST 1992.
2. THE 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.



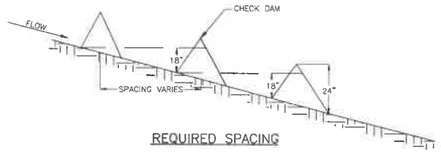
SECTION

2 SILT FENCE
NOT TO SCALE





ELEVATION



REQUIRED SPACING

CONSTRUCTION SPECIFICATIONS

1. CHECK DAMS TO BE SPACED SO THAT THE BOTTOM OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE DOWNSTREAM OVERFLOW.

3 STONE CHECK DAM
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 are 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

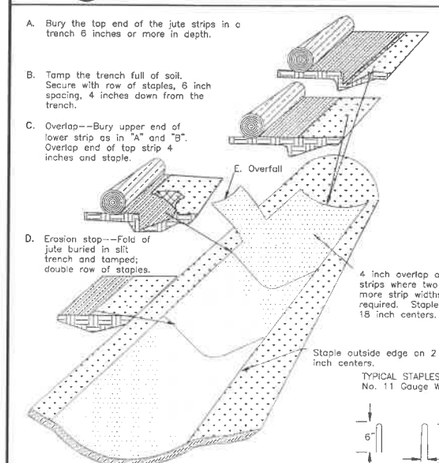
During the period of construction and/or until long term vegetation is established:

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

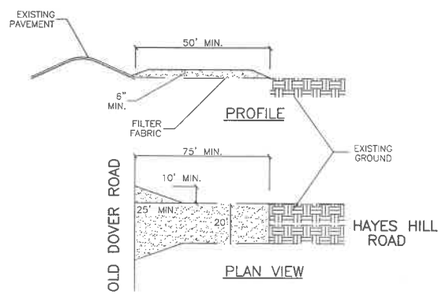
1. All proposed vegetated areas which do not exhibit a minimum of 85% vegetation growth by October 15th, or which are disturbed after October 15th, shall be stabilized by seeding and installing erosion control blankets on slopes greater than 3:1, and seeding and placing 3 to 4 tons of mulch per acre, 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

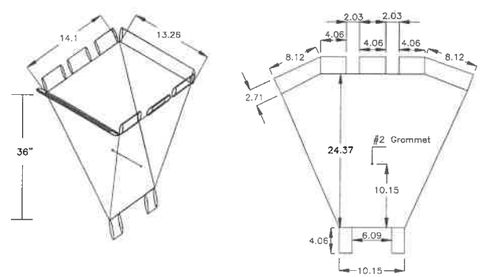


9 EROSION CONTROL BLANKET
NOT TO SCALE

1. GRADE AND COMPACT ACCESS ROAD ENTRANCE AS NECESSARY
2. 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) TIE 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

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

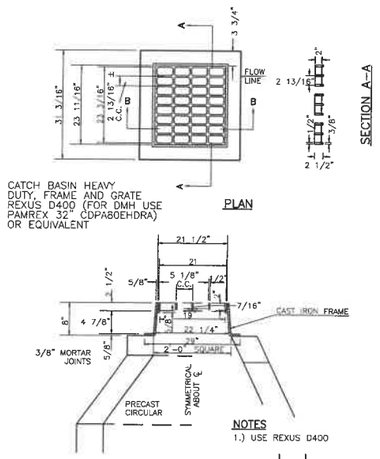
REVISIONS
DATE: DESCRIPTION:

CONSTRUCTION DETAILS

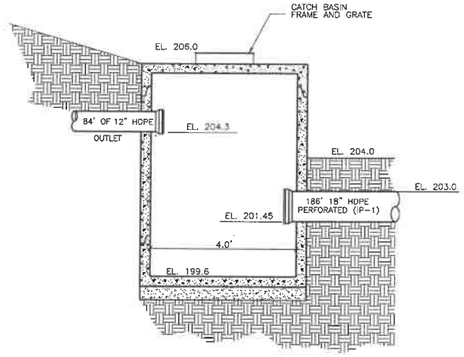
HAYES HILL

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

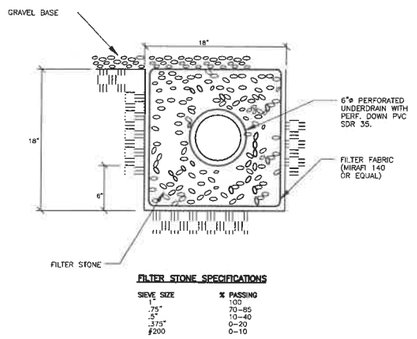
SHEET NO.
C-8



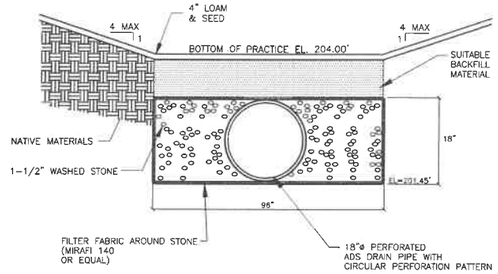
1 CATCH BASIN FRAME & GRATE
NOT TO SCALE



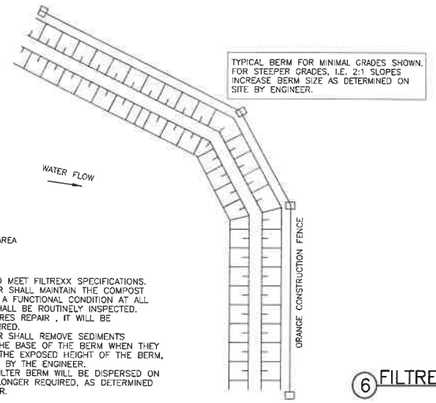
2 INFILTRATION PRACTICE (IP-#1) OUTLET STRUCTURE
NOT TO SCALE



3 UNDERDRAIN DETAIL
NOT TO SCALE

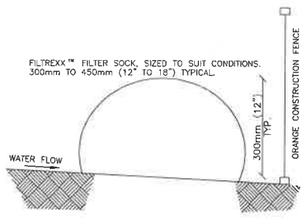


4 INFILTRATION PRACTICE DETAIL (IP-1)
NOT TO SCALE

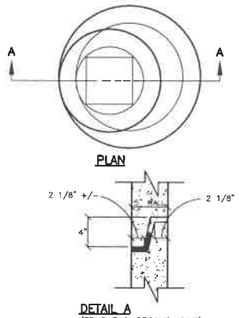


NOTES
1.) ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2.) THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTER BERM IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED.
3.) WHERE IT REQUIRES REPAIR , IT WILL BE ROUTINELY REPAIRED.
4.) THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED 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.

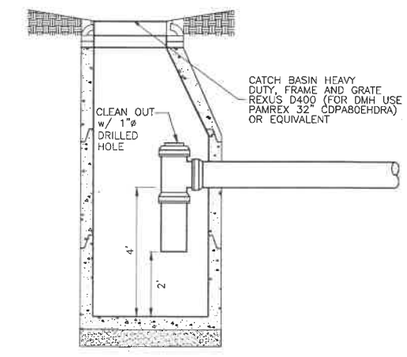
5 UNUSED DETAIL
NOT TO SCALE



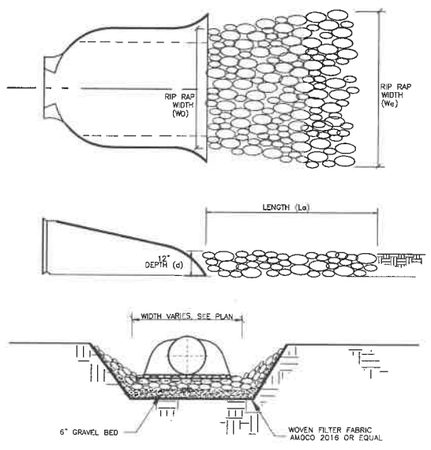
6 FILTREXX SOCK



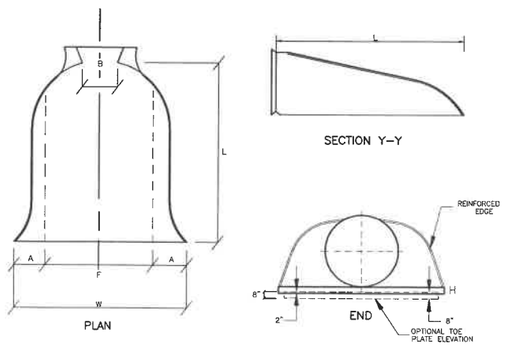
NOTES
1. ALL SECTIONS SHALL BE CONCRETE CLASS AA(4000 psi).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE OR GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 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

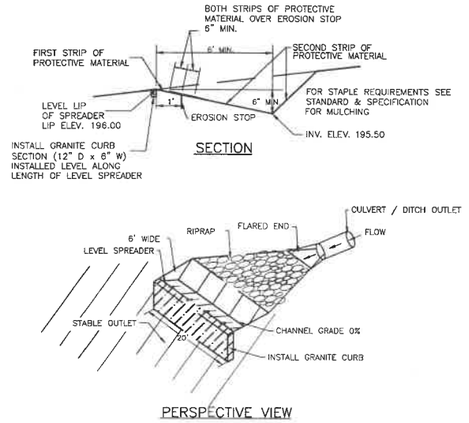


9 RIPRAP DETAIL
NOT TO SCALE



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



11 LEVEL SPREADER
NOT TO SCALE

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

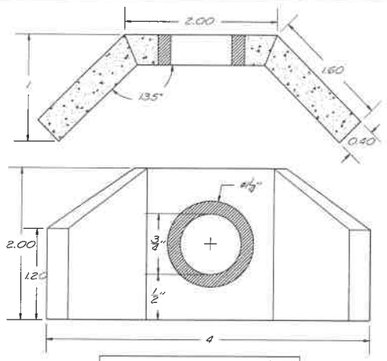
REVISIONS
DATE: DESCRIPTION:

CONSTRUCTION DETAILS

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017
JOB No. 1833

SHEET NO.
C-9



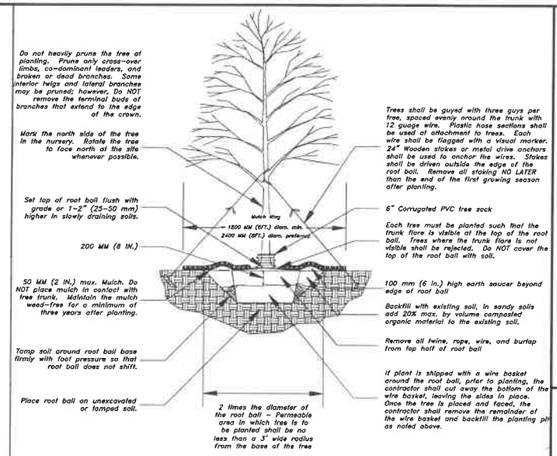
Notes — **General**

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

1. Design is based on drawings and information from Tritech Engineering received 09/28/2017 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 and 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. Plantings 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. Do not fill or mulch on the trunk flare. Do not disturb roots. Snow fence shall be located at the drip line or at least 4' from shrubs and 10' from trees in all directions, whichever is greater, and shall include any and all surface 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).
7. Location, support, protection, and restoration of all existing utilities and appurtenances shall be the responsibility of the Contractor.
8. 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.
9. The Contractor shall procure any required permits prior to construction.
10. The Contractor shall furnish and plant all plants shown on the drawings and listed thereon. All plants shall be nursery-grown under climactic 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.
11. All plants shall be legibly tagged with proper botanical name.
12. The Contractor shall guarantee all plants for not less than one year from time of acceptance.
13. 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 the progress trees at the place of growth of the work. The Owner reserves the right to inspect and/or select all and reserves the right to approve a representative sample of each type of shrub, herbaceous 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.
14. No substitutions of plants may be made without prior approval of the Owner or the Owner's Representative for any reason.
14. All landscaping shall be provided with either of the following
    a. An underground sprinkling system
    b. An outside hose attachment within 150 feet
15. If automatic irrigation is installed, all irrigation valve boxes shall be located within planting bed areas.
16. Contractor shall provide an alternate price for irrigating all newly landscaped areas. Contractor shall provide irrigation design for review by Landscape Architect or Owner's Representative when awarded the project.
17. All disturbed areas will be dressed with 6" of loam and planted as noted on the plans or seeded except plant beds. Plant beds shall be prepared to a depth of 12" with 75 % compost and 25 % loam.
18. 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 wood chips 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.
19. Owner is solely responsible for maintaining vehicular and pedestrian vision lines pertaining to vegetation growth.

2 LANDSCAPING NOTES
NOT TO SCALE



3 PLANTING DETAIL
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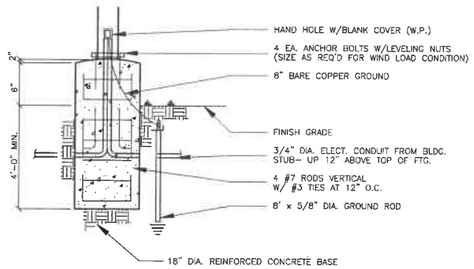
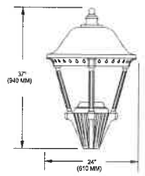


4 SITE LIGHTING BASE
NOT TO SCALE

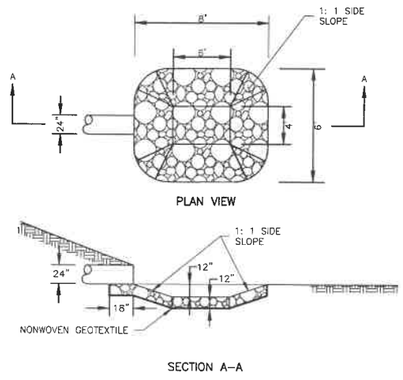
SUN VALLEY LED
SIGMA1
(SIG1)



EPA 1.58

5 STREET LIGHT DETAIL
NOT TO SCALE

6 NOT USED
NOT TO SCALE



7 PERMANENT PLUNGE POOL
NOT TO SCALE

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
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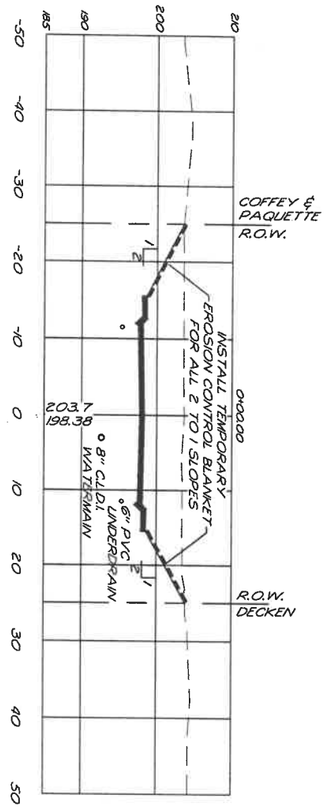
REVISIONS
DATE: DESCRIPTION:

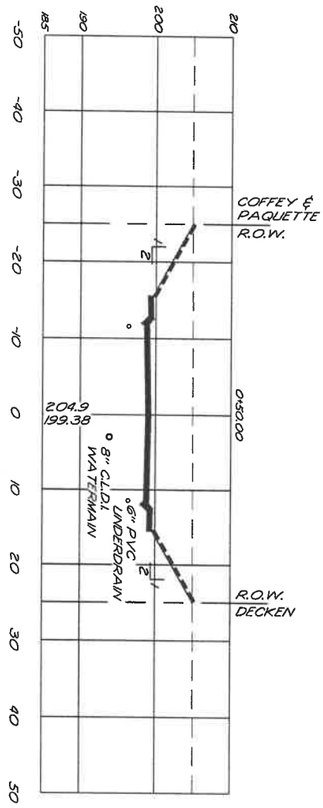
CONSTRUCTION DETAILS

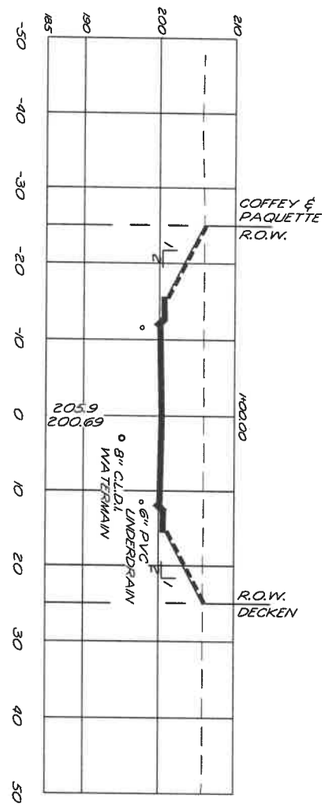
HAYES HILL

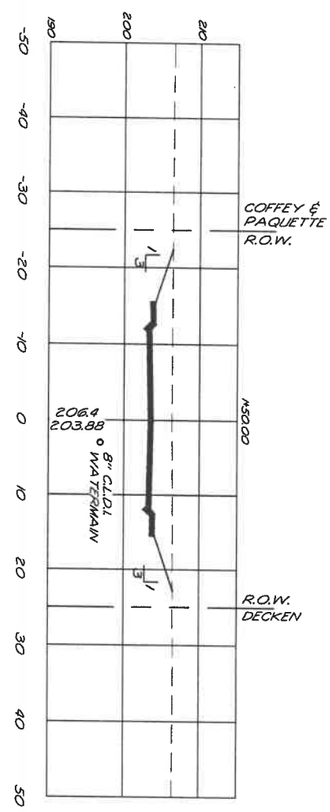
OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE
NOVEMBER 7, 2017
JOB No. 16133

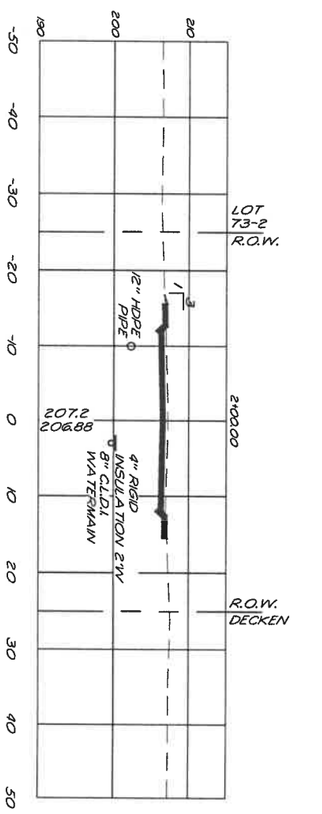
SHEET NO.
C-10

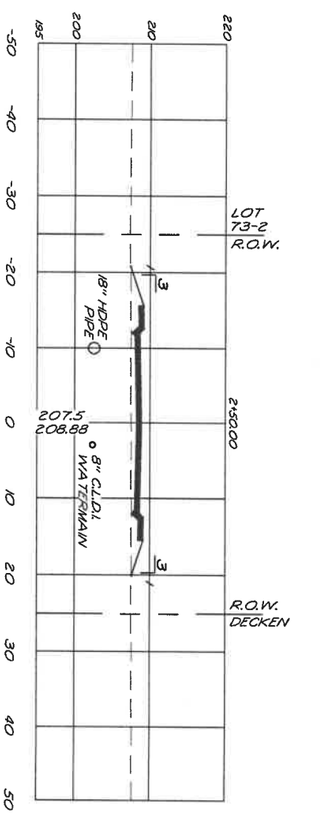


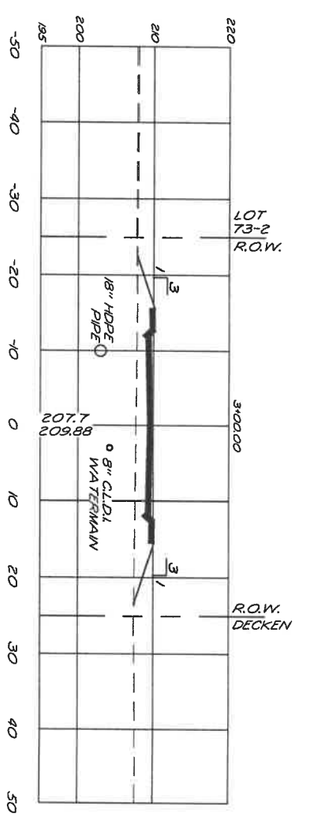


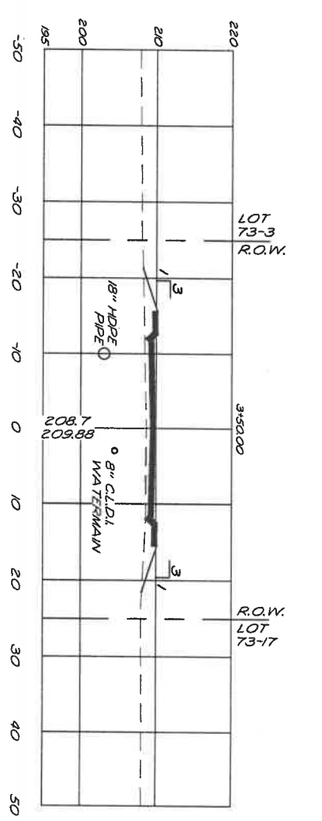












SHEET NO.	ROADWAY CROSS-SECTIONS
XS-1	HAYES HILL
	OLD DOVER ROAD
	ROCHESTER, NEW HAMPSHIRE
	NOVEMBER 7, 2017 JOB No. 16133
	SCALE: 1" = 10'

REVISIONS

DATE:	DESCRIPTION:

TRITECH
ENGINEERING CORPORATION

755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820

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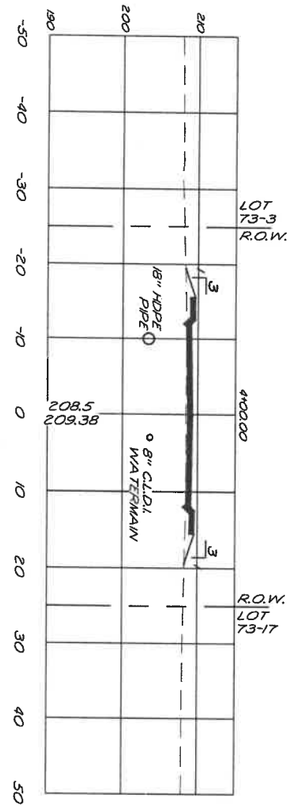
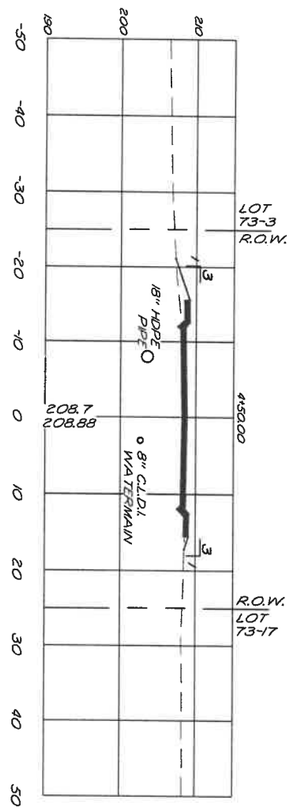
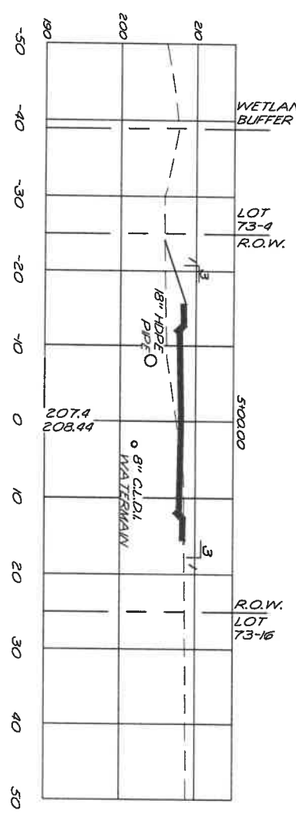
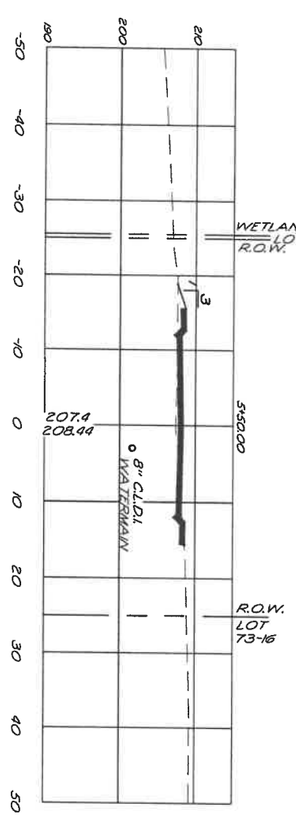
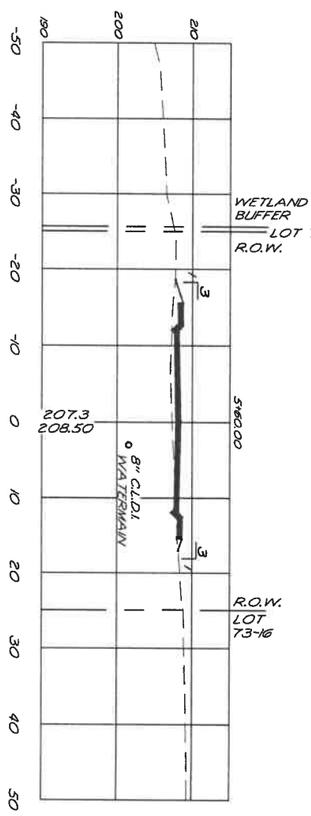
FAX 603 742 3630

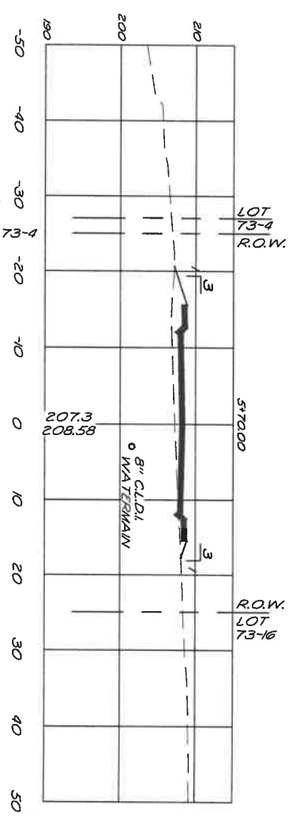


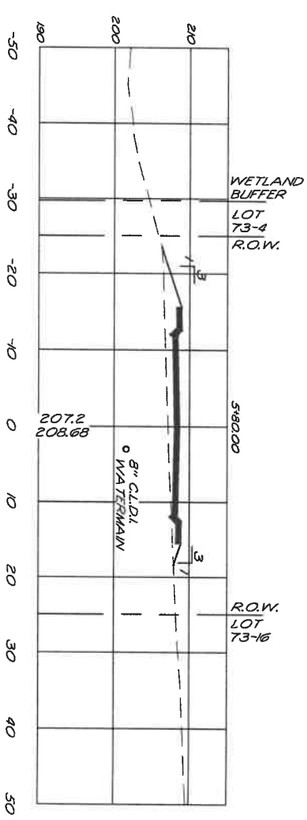


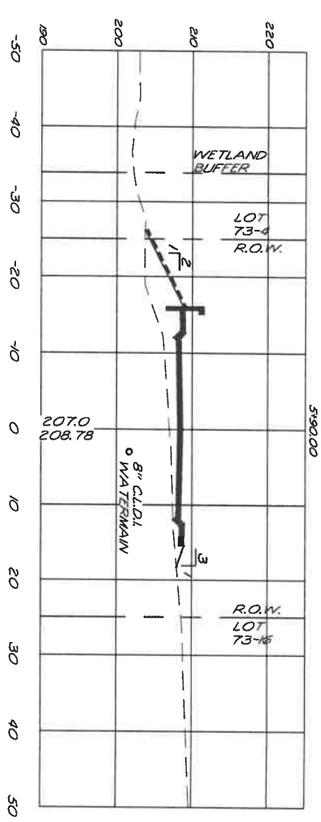












SHEET NO.

XS-2

ROADWAY CROSS-SECTIONS

HAYES HILL

OLD DOVER ROAD
ROCHESTER, NEW HAMPSHIRE

NOVEMBER 7, 2017 JOB No. 16133

SCALE: 1" = 10'

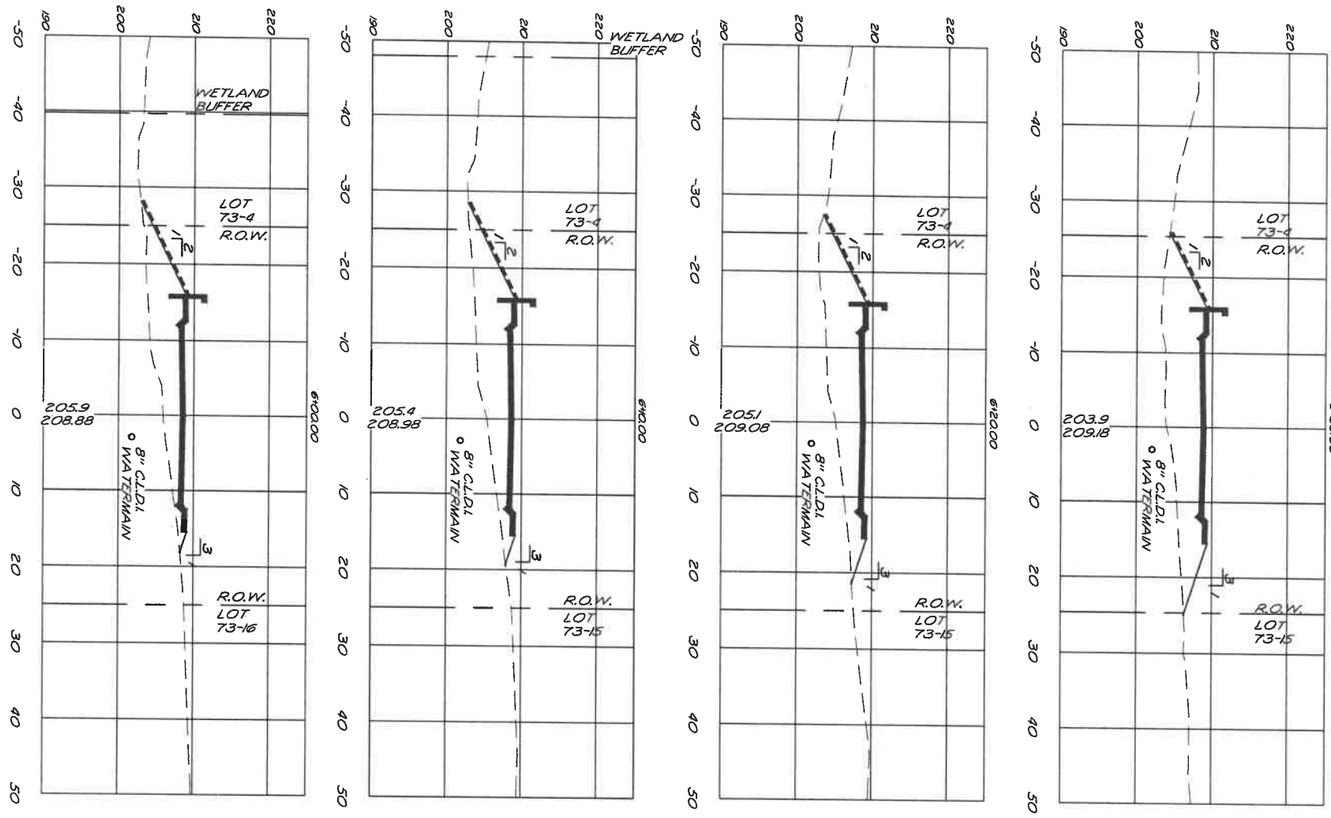
REVISIONS

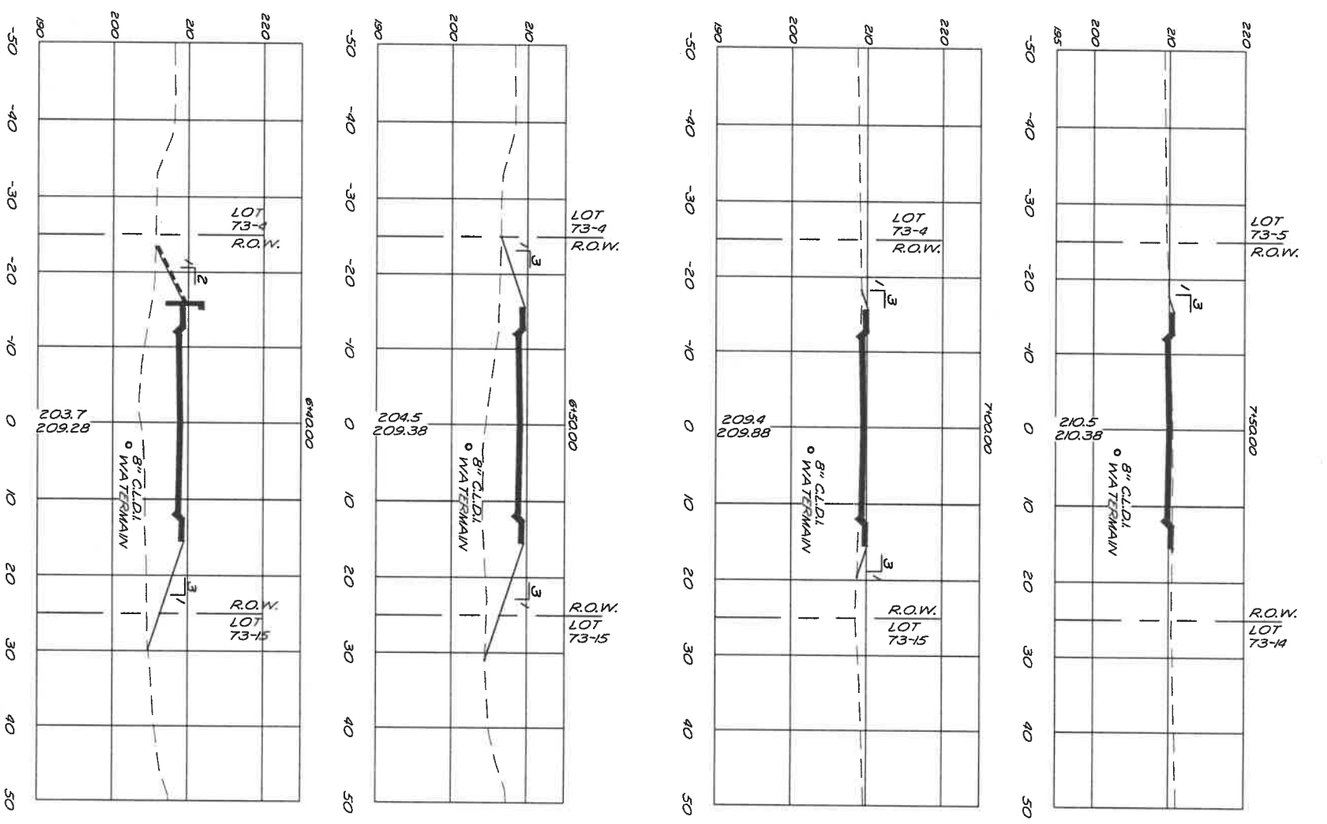
DATE:	DESCRIPTION:

TRITECH
ENGINEERING CORPORATION

755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820

TELEPHONE 603 742 8107
FAX 603 742 3630





SHEET NO.

XS-3

ROADWAY CROSS-SECTIONS

HAYES HILL

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

REVISIONS

DATE:	DESCRIPTION:

TRITECH
ENGINEERING CORPORATION

755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820

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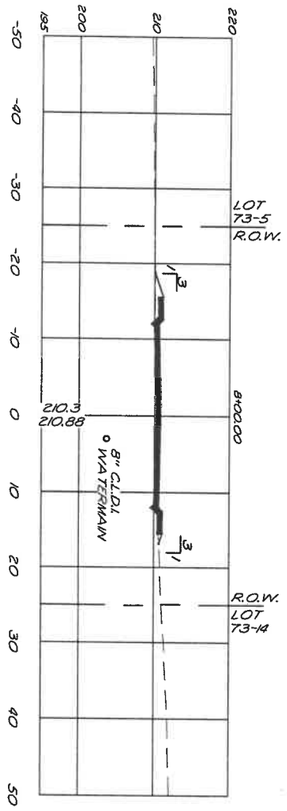

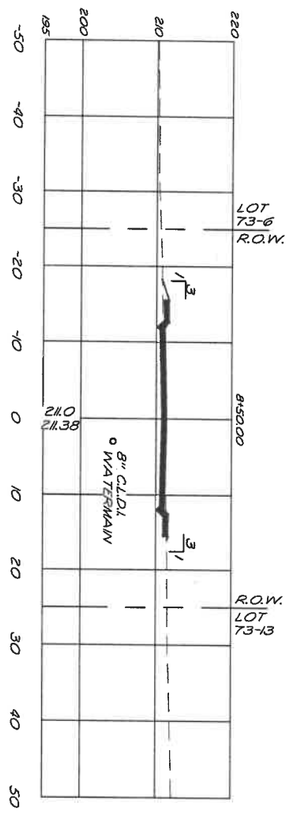

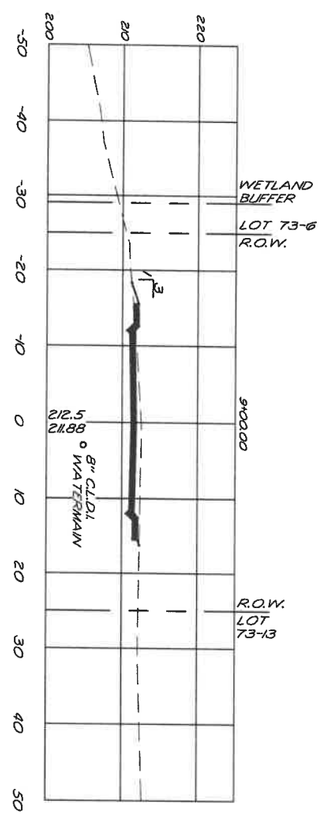

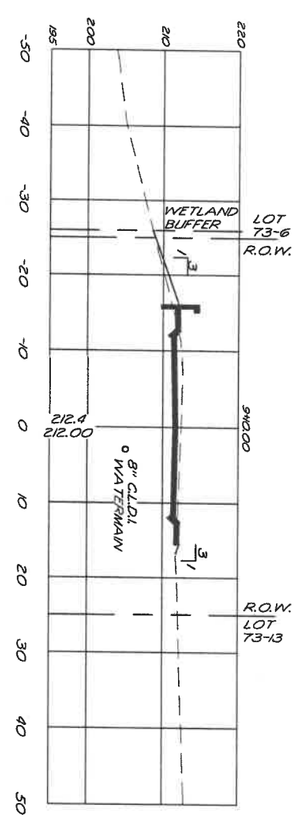

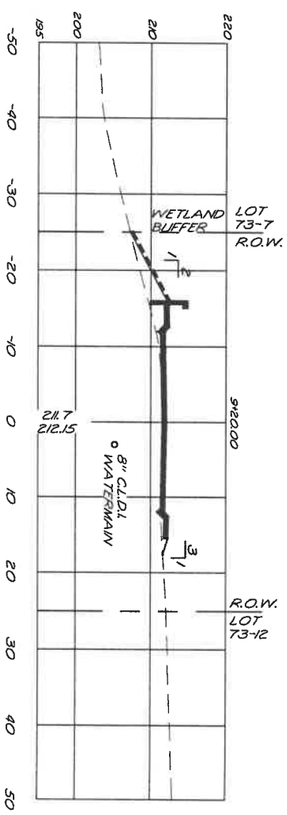

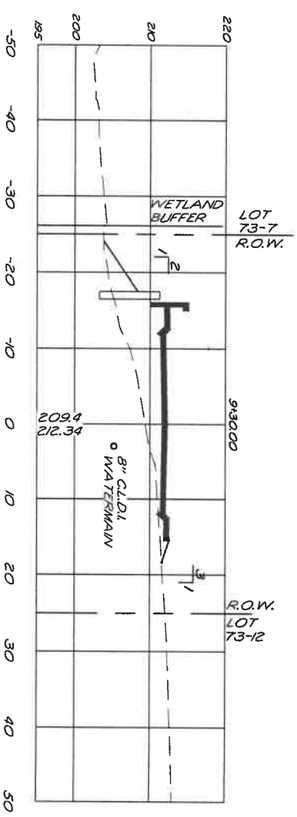

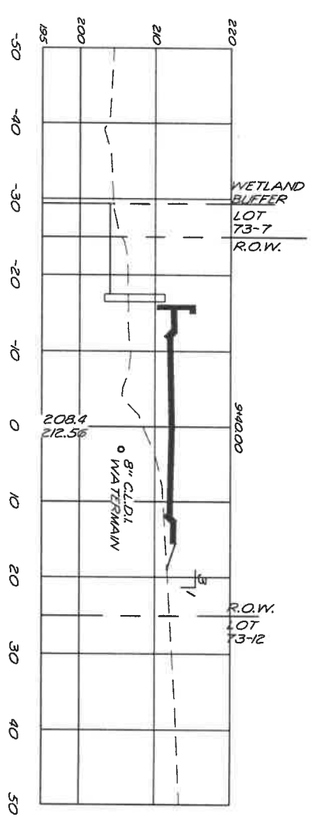

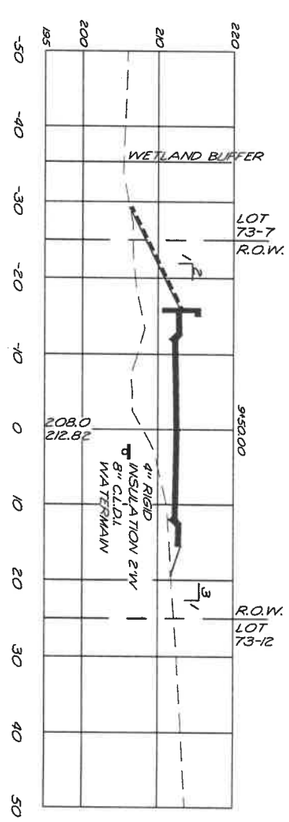

SHEET NO.

XS-4

ROADWAY CROSS-SECTIONS

HAYES HILL

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

REVISIONS

DATE:	DESCRIPTION:

TRITECH
ENGINEERING CORPORATION

755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820

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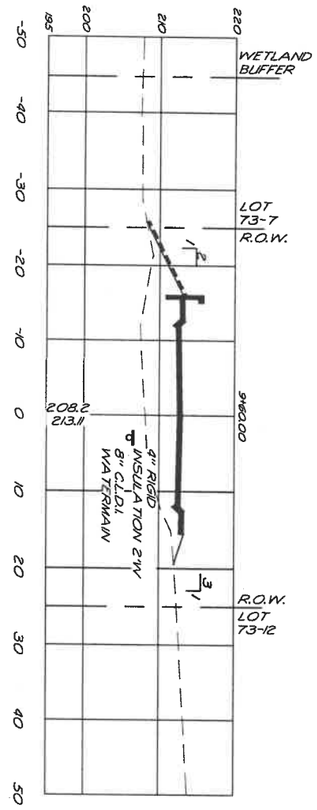

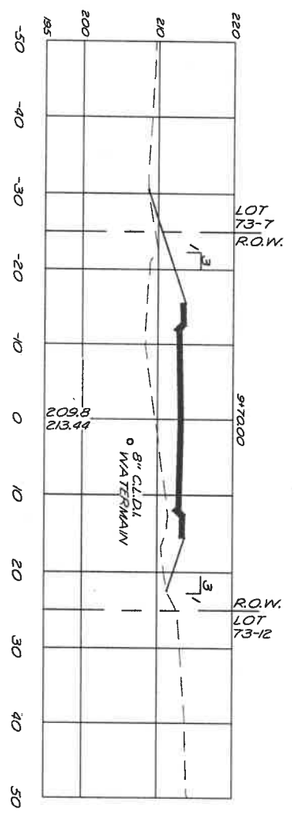

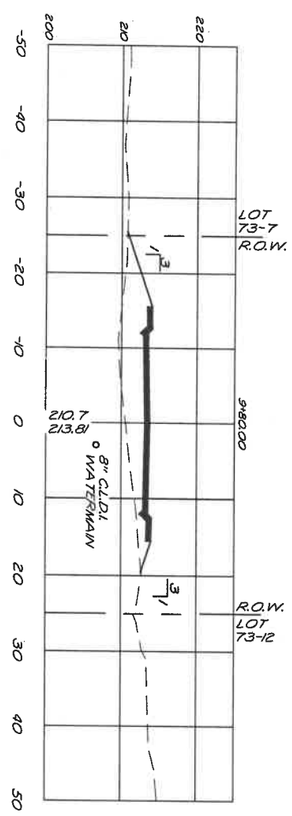

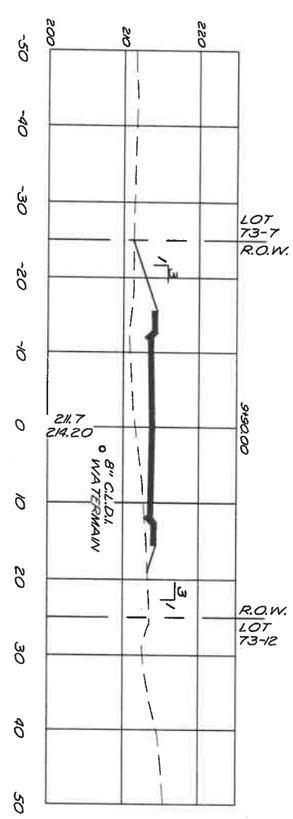

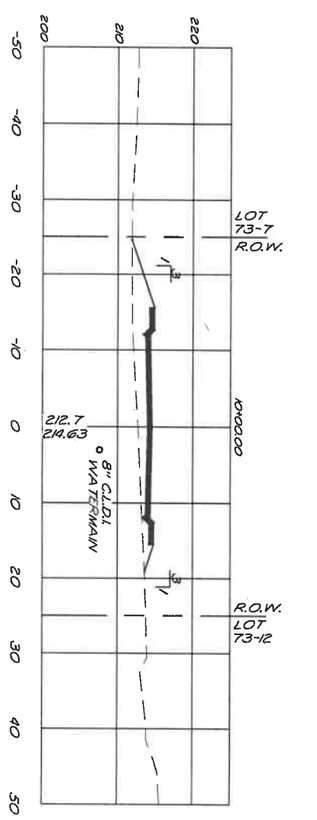

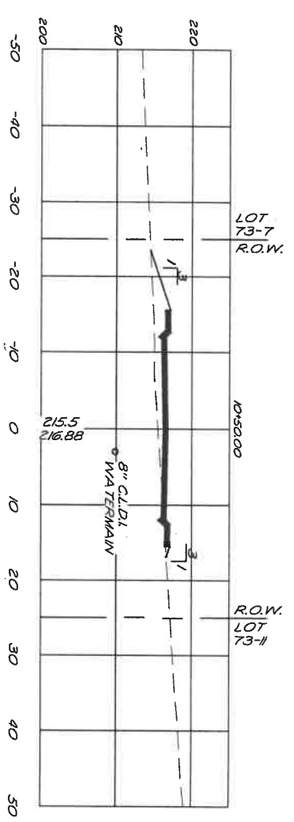

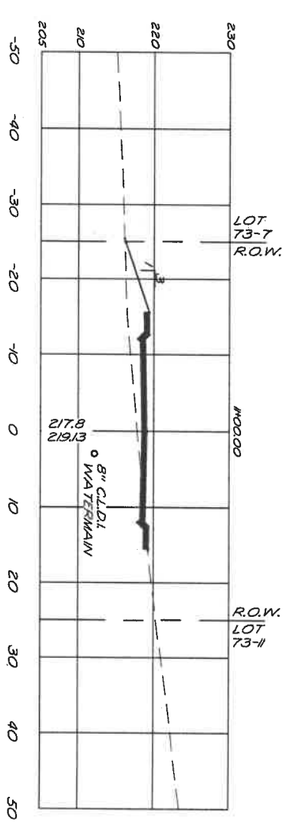

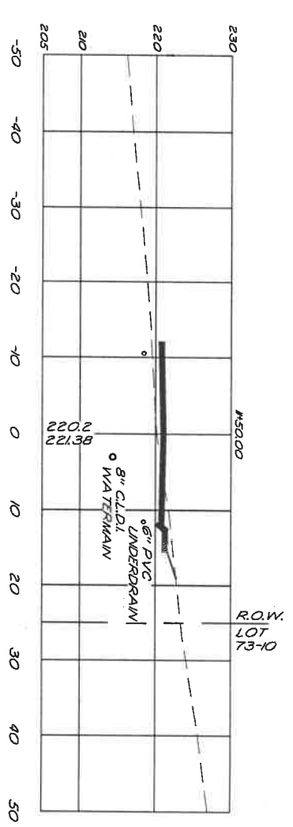

SHEET NO.

XS-5

ROADWAY CROSS-SECTIONS

HAYES HILL

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

REVISIONS

DATE:	DESCRIPTION:

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ENGINEERING CORPORATION

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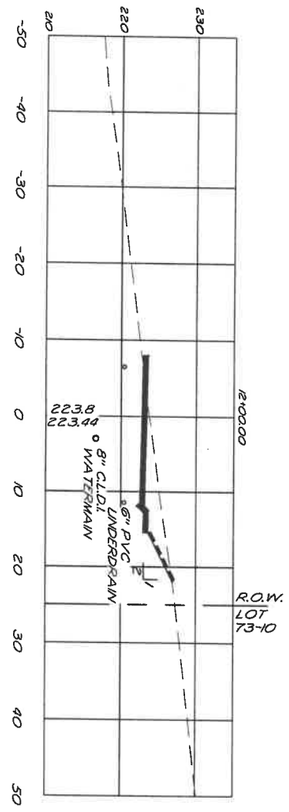

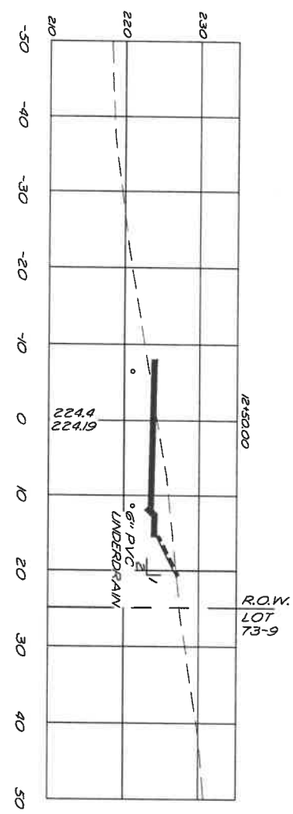

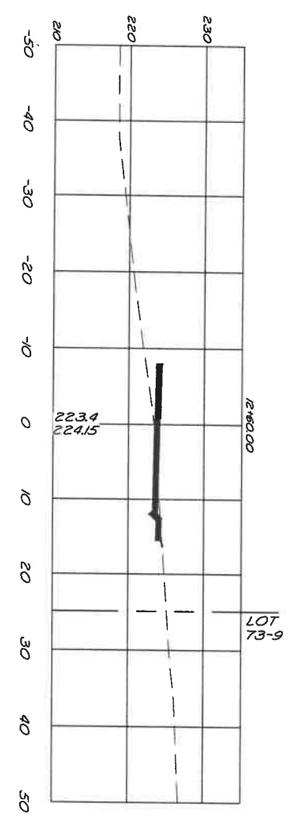

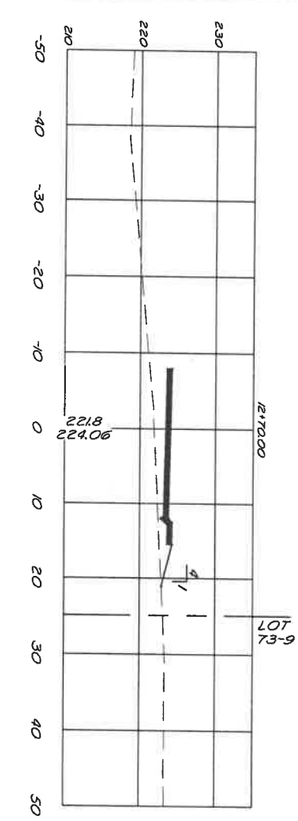

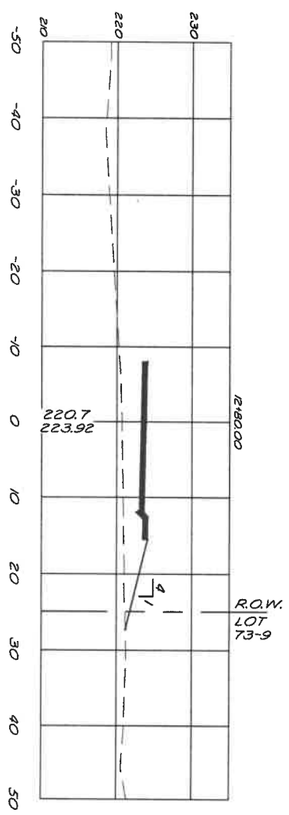

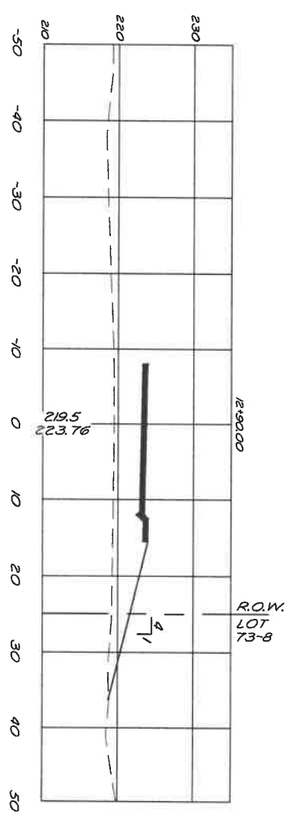

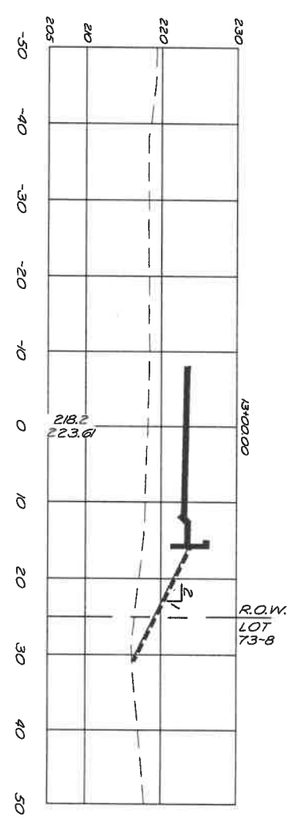

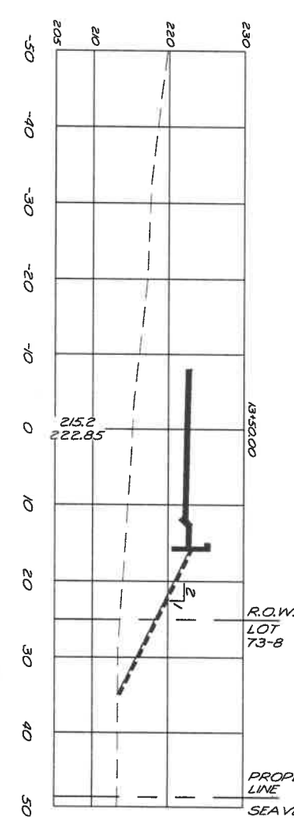

SHEET NO.

X-S-6

ROADWAY CROSS-SECTIONS

HAYES HILL

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

REVISIONS

DATE:	DESCRIPTION:

TRITECH
ENGINEERING CORPORATION

755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820

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