



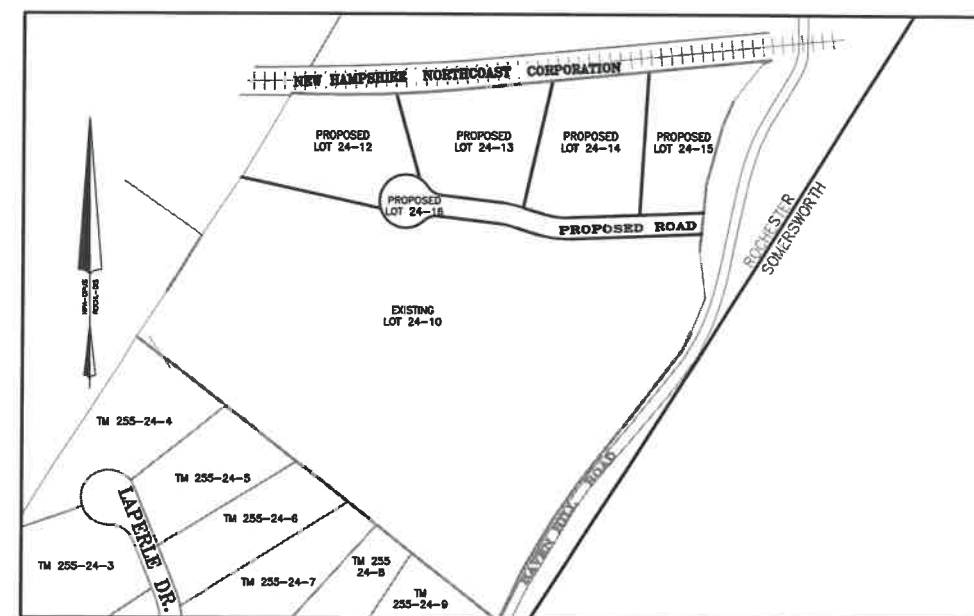
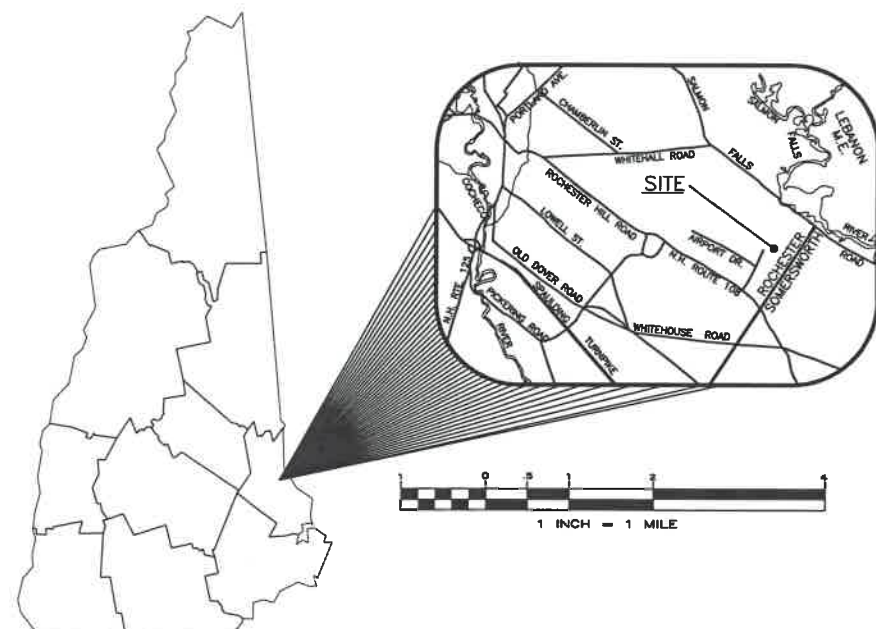
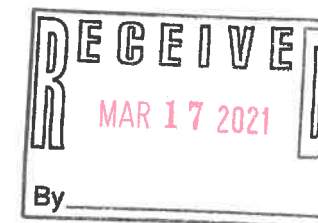
LAPERLE SUBDIVISION

HAVEN HILL ROAD

PREPARED FOR

LAPERLE FAMILY REVOCABLE TRUST

FEBRUARY 2021



OVERALL SITE
1" = 200'



CIVIL ENGINEERS
NORWAY PLAINS ASSOCIATES, INC.
2 CONTINENTAL BOULEVARD
ROCHESTER, NEW HAMPSHIRE 03867
(603) 335-3948

OWNER OF RECORD/APPLICANT
TM 255-24-10
LAPERLE FAMILY REVOCABLE TRUST
28 COPPERLINE ROAD
EPSOM, NH 03234
SCRD BOOK 4538 PAGE 666

STATE AND FEDERAL PERMITS:
STATE OF NEW HAMPSHIRE PERMIT NUMBERS:
NHDES ALTERATION OF TERRAIN: NOT REQUIRED
NHDES WETLANDS PERMIT: REQUIRED
NHDES DAM PERMIT: NOT REQUIRED
NHDES SUBDIVISION PERMIT: NOT REQUIRED
NHDES SUBSURFACE SYSTEMS PERMIT: REQUIRED
NHDES WASTEWATER PERMIT: NOT REQUIRED
NHDDOT DRIVEWAY/ENTRANCE PERMIT: NOT REQUIRED

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES):
NPDES PERMITS ARE ONLY REQUIRED FOR PROJECTS MEETING THE DISTURBED AREA CRITERIA BELOW AND HAVING A POINT SOURCE STORMWATER DISCHARGE FROM THE SITE TO AN ADJACENT WETLAND OR WATER BODY (I.E. CULVERT, SWALE, ETC. OUTLETING TO A WETLAND, CREEK, STREAM OR RIVER).

NPDES PERMIT: REQUIRED
NPDES PERMITS CONSIST OF A NOTICE OF INTENT (NOI) FILED WITH THE ENVIRONMENTAL PROTECTION AGENCY AT LEAST 14 DAYS PRIOR TO CONSTRUCTION COMMENCING AND A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) BEING PREPARED, KEPT ON SITE AND FOLLOWED BY THE CONTRACTOR.
FOR STATUS OF THIS PERMIT, CONTACT THE PROJECT GENERAL CONTRACTOR.

FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

CERTIFIED BY: _____ DATE: _____

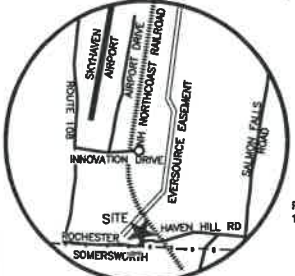
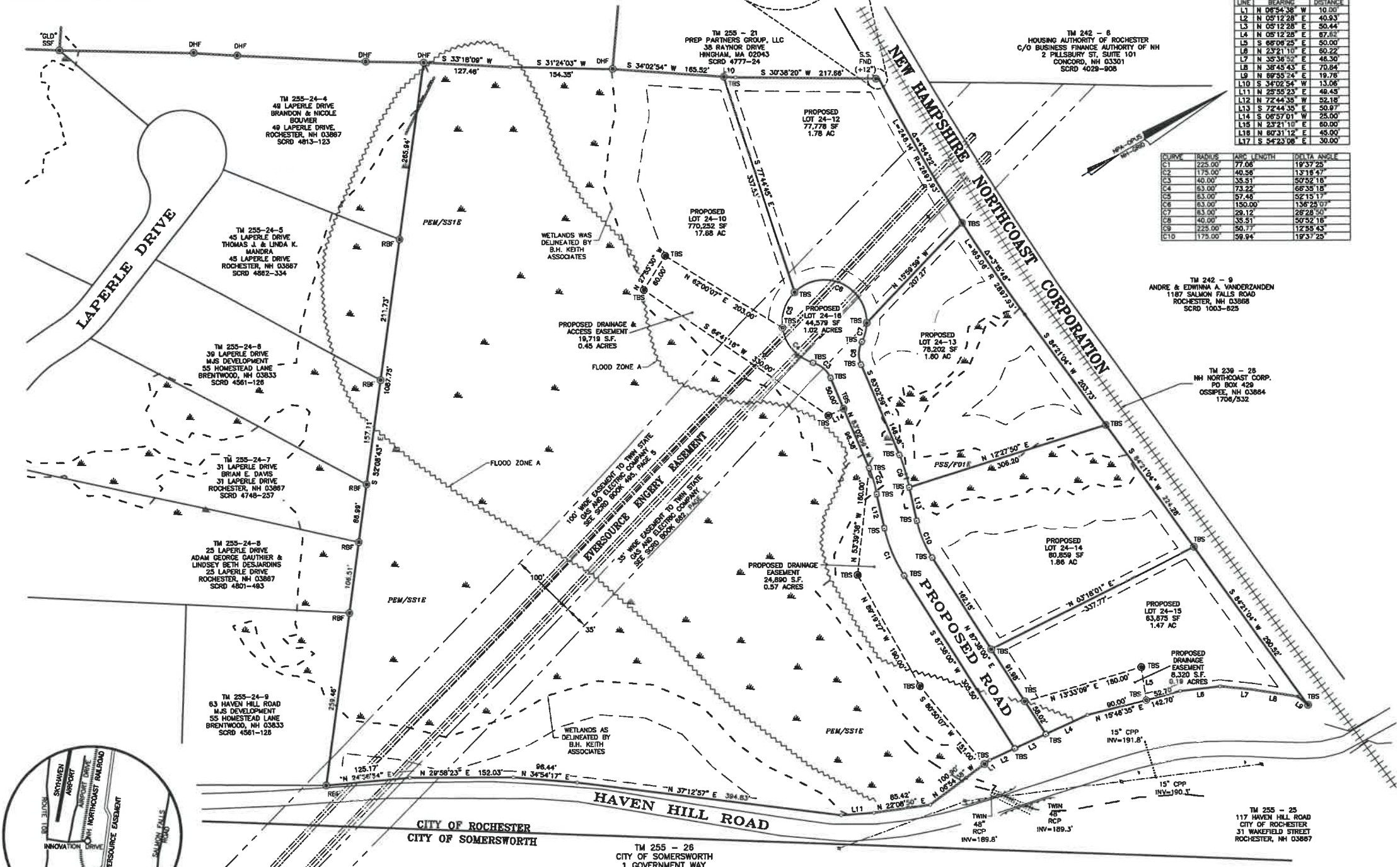
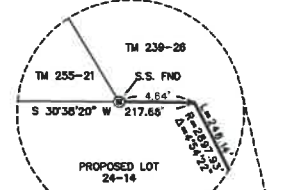
SHEET INDEX		
COVER		AS SHOWN
S-1	SUBDIVISION PLAN	1" = 80'
S-2	TOPOGRAPHIC SUBDIVISION PLAN	1" = 80'
E-1	EXISTING FEATURES PLAN	1" = 80'
C-1	OVERALL ROADWAY PLAN	1" = 50'
C-2	GRADING AND DRAINAGE PLAN	1" = 50'
C-3	EROSION & SEDIMENTATION CONTROL PLAN	1" = 50'
C-4	ROADWAY PROFILE & SIGHT DISTANCE	1" = 50'
C-5	CONSTRUCTION DETAILS	AS SHOWN
C-6	DRAINAGE DETAILS	AS SHOWN
C-7	INFILTRATION BASIN & TREATMENT SWALE DETAIL	AS SHOWN
C-8	EROSION AND SEDIMENTATION CONTROL DETAILS	AS SHOWN
C-9	PERMANENT EROSION & SEDIMENTATION CONTROL AS SHOWN DETAILS	AS SHOWN

FILE NO. 249
PLAN NO. C-2829
DWG. NO. 20071/S-1
F.B. NO.

LAND SURVEYORS

CIVIL ENGINEERS

- LEGEND**
- N 89°56'30" E 423.81' PROPERTY LINE
 - EVERSOURCE EASEMENT
 - DRAINAGE EASEMENT
 - JURISDICTIONAL WETLANDS
 - 50' WETLAND BUFFER
 - 100-YR FLOOD ZONE
 - STONEWALL
 - EDGE OF PAVEMENT
 - OVERHEAD WIRES
 - RAILROAD TRACKS
- MONUMENT**
- MONUMENT
 - BOUND
 - NO MONUMENT FOUND OR SET
 - UTILITY POLE
 - WELL
- ABBREVIATION LEGEND:**
- DHF - DRILL HOLE FOUND
 - DHCF - DRILL HOLE WITH IDENTIFICATION CAP FOUND
 - FND - FOUND
 - RFB - REBAR FOUND
 - ROW - RIGHT OF WAY
 - SSF - STEEL STAKE FOUND
 - TAB - IDENTIFICATION TAB FOUND
 - (+2) - DENOTES HEIGHT OF THE MONUMENT
 - TM - TAX MAP & LOT NUMBER
 - SCRD - STRAFFORD COUNTY REGISTRY OF DEEDS
- MONUMENT IDENTIFICATION INSCRIPTIONS:**
- "NPA" - NORWAY PLAINS ASSOCIATES
 - "GLD" - GRANT L. DAVIS ASSOCIATES



FILE NO. 249
PLAN NO. C-2829-2
DWG. NO. 20071/S-1
F.B. NO.

- REFERENCE PLANS:**
- "CORRECTED PLAN OF LOTS, MAP 255, LOT 24, HAVEN HILL ROAD, ROCHESTER, NH FOR DONALD R. & RACHEL M. LAPERLE" DATED: FEB 2005, BY NORWAY PLAINS ASSOCIATES, INC. RECORDED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS, PLAN 102-70.
 - "SUBDIVISION PLAN, 92 HAVEN HILL ROAD, ROCHESTER, STRAFFORD COUNTY, NH, FOR DONALD R. LAPERLE" DATED: MARCH 2017, BY NORWAY PLAINS ASSOCIATES, INC. RECORDED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS, PLAN 115-81
 - "SCRAWNERS AFFIDAVIT" SIGNED BY STEVEN M. OLES, LLS 903 DATED FEBRUARY 20, 2019 AND RECORDED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS IN BOOK 4636, PAGE 98.

31 MOONEY STREET, ALTON, NH 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

WETLAND NOTES

STATE AND FEDERAL JURISDICTIONAL WETLANDS WERE DELINEATED BY N.H. CERTIFIED WETLAND SCIENTIST, BARRY H. KEITH, DURING JUNE OF 2018 AND MAPPED BY NORWAY PLAINS ASSOCIATES, INC. USING TOTAL STATION SURVEY METHODS AND IN ACCORDANCE WITH THE FOLLOWING GUIDANCE DOCUMENTS:

- N.H. CODE OF ADMINISTRATIVE RULES (ENR-WT 301.01) WITH THE TECHNIQUES OUTLINED IN THE 1987 "U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, TECHNICAL REPORT Y-87-1."
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- U.S. ARMY CORPS OF ENGINEERS, 2012, "NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS: NORTHEAST REGION, U.S. ARMY CORPS OF ENGINEERS RESEARCH AND DEVELOPMENT CENTER, ENVIRONMENTAL LABORATORY."
- N.H. CODE OF ADMINISTRATIVE RULES (ENR-WT 301.02) WITH THE U.S. FISH AND WILDLIFE SERVICE MANUAL FWS/OBS-79/31 ENTITLED "CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES, CORWAIN ET AL. 1978."
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- U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, 2010, "FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 7.0," L.M. VASILEAS, G.W. HURT, AND C.V. MOBLE (EDS.), USDA, NRCS, IN COOPERATION WITH THE NATIONAL TECHNICAL COMMITTEE FOR HYDRIC SOILS.

RESERVED REGISTRY OF DEEDS

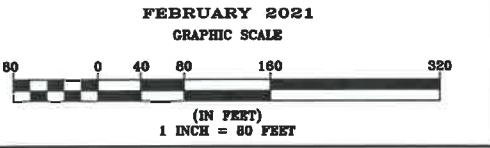
- GENERAL NOTES:**
- THE PURPOSE OF THIS PLAN IS TO SHOW THE SUBDIVISION OF MAP 255 LOT 24-10 INTO 5 LOTS.
 - TOTAL PARCEL AREA: 1,115,714 SQUARE FEET OR 25.81 ACRES
 - PARCEL IS ZONED AGRICULTURE (A)
 - MINIMUM LOT REQUIREMENTS: LOT SIZE = 45,000, FRONTAGE = 150'
 - BUILDING SETBACKS: FRONTY: = 20', SY. = 10', RT. = 20'
 - THE LOTS AND LOTS ARE BEING DIVIDED BY (S) SITE WELLS AND SEPTIC SYSTEMS.
 - A PORTION OF MAP 255 LOT 24-11 IS LOCATED WITHIN THE 100 YEAR FLOOD ZONE AS SHOWN ON THE FLOOD INSURANCE RATE MAP DATED SEPTEMBER 30, 2015 COMMUNITY PANEL 33017C02180 PANEL 218 OF 405.
 - FOR MORE INFORMATION ABOUT THIS SUBDIVISION CONTACT THE ROCHESTER PLANNING DEPARTMENT, 31 WAKEFIELD STREET, ROCHESTER, NH 03607. (603) 335-1338.
- CITY OF ROCHESTER SUBDIVISION REQUIREMENTS:**
- ALL HOUSE CONSTRUCTION MUST BE OUTSIDE THE 50 FOOT WETLANDS BUFFER.
 - ALL LOT CORNERS AND DRAINAGE EASEMENTS SHALL BE MARKED WITH CAPPED IRON MARKERS OR OTHER APPROPRIATE MONUMENTATION.
 - THERE IS A 50 FOOT BUFFER REQUIREMENT FROM WETLANDS UNDER THE CITY OF ROCHESTER ZONING ORDINANCE AS SHOWN ON THIS PLAN SET. THERE MAY BE NO ENCROACHMENT WITHIN THESE BUFFERS EXCEPT AS PERMITTED UNDER THE ORDINANCE.
 - PRIOR TO THE ISSUANCE OF ANY BUILDING PERMIT FOR THIS SUBDIVISION, THE DEVELOPER SHALL POST: A) CONSTRUCTION ZONE SIGNS PER THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES STANDARDS; AND B) STREET ACCEPTANCE SIGNS WITH THE FOLLOWING LANGUAGE AT ALL ENTRY POINTS TO THE SUBDIVISION: "POSTED, THIS SUBDIVISION IS UNDER CONSTRUCTION. THESE STREETS HAVE NOT YET BEEN ACCEPTED BY THE CITY OF ROCHESTER AND ARE NOT ELIGIBLE FOR CITY SERVICES. TRAVEL AT YOUR OWN RISK. (PER ORDER OF PLANNING BOARD)". THE LOCATION AND DESIGN OF THE SIGNS SHALL BE AS STIPULATED BY THE PUBLIC WORKS DEPARTMENT, BUT IN NO CASE SHALL THEY BE LESS THAN 2'X4'. THE SIGNS SHALL BE ERRECTED PRIOR TO THE ISSUANCE OF ANY BUILDING PERMITS.
 - PRIOR TO DEDICATION OF THE STREETS TO THE CITY TWO STREET TREES (DECIDUOUS SHADE TREES) WITHIN THE FRONT 15 FEET OF EACH LOT, IDENTIFY THE SPECIES OF TREES TO BE PLANTED AND PLANTING SPECIFICATIONS. NEWLY PLANTED TREES MUST BE SUITABLE TO THE SITE CONDITIONS AND OF NURSERY STOCK WITH A DIAMETER AT FOUR FOOT BREAST HEIGHT OF AT LEAST 2 INCHES. ONE OF THE FOLLOWING SPECIES MUST BE USED UNLESS OTHERWISE APPROVED BY THE PLANNING DEPARTMENT: MAPLE, WHITE OAK, SCARLET OAK, LINDA, THORNLESS HONEYSUCKER, MARSHALL, SEEDLESS ASA, EUROPEAN HORNBARK, GALLERY PEAR (NOT BRADFORD), CHINESE ELM, AND JAPANESE ZELKOVA.
 - AN ORANGE CONSTRUCTION FENCE MUST BE PLACED ALONG THE WETLAND BUFFERS WITHIN 100 FEET OF ANY PROPOSED GRADING PRIOR TO START OF CONSTRUCTION.
 - BUFFER MARKERS MUST BE INSTALLED ALONG THE OUTER EDGE OF THE WETLAND BUFFER ON ALL LOTS THAT CONTAIN A WETLAND BUFFER. THE MARKER MUST BE IN PLACE IN ORDER FOR THE CERTIFICATE OF OCCUPANCY FOR THAT LOT TO BE ISSUED.
 - ALL PROPOSED DRIVEWAYS SHALL BE PLACED IN A LOCATION THAT WILL PROVIDE THE REQUIRED STOPPING SIGHT DISTANCE FOR THE POSTED SPEED LIMIT AS REQUIRED BY THE DEPARTMENT OF PUBLIC WORKS.
 - ALL UTILITIES 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 ACCESS 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 REQUIREMENT.
 - THIS DEVELOPMENT MUST BE IN COMPLIANCE WITH ALL APPLICABLE LAW - INCLUDING ALL PERTINENT PROVISIONS OF THE CITY OF ROCHESTER SUBDIVISION REGULATIONS - UNLESS OTHERWISE WAIVED.
 - THE DEVELOPER IS RESPONSIBLE FOR MAINTENANCE OF THE STREET AT ALL TIMES UNTIL IT IS ACCEPTED BY THE CITY OF ROCHESTER. REASONABLE ACCESS SHALL BE PROVIDED FOR LOT OWNERS AND THEIR CONTRACTORS, IF NECESSARY, DURING THE CONSTRUCTION PROCESS (SEE CONDITION REGARDING ACCESS FOR FIRE APPARATUS). ONCE ANY CERTIFICATE OF OCCUPANCY HAS BEEN ISSUED, THE DEVELOPER MUST PROVIDE APPROPRIATE MAINTENANCE INCLUDING PLOWING SERVICES IN ORDER TO ALLOW FOR SAFE PASSAGE FOR RESIDENTS, EMERGENCY VEHICLES, AND SERVICE VEHICLES.
 - ALL HOUSES SHALL MEET THE CITY OF ROCHESTER FIRE DEPARTMENT REQUIREMENTS FOR FIRE PROTECTION, SUCH AS A RESIDENTIAL FIRE SPRINKLERS, INSTALLED PRIOR ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
 - HOUSE CONSTRUCTION ON LOTS WITH SHALLOW SEASONAL HIGH WATER TABLE SHALL HAVE A PROPER FOUNDATION DRAINS, SUMP PUMPS, FOUNDATION WATERPROOFING AND OTHER APPROPRIATE PROTECTION FROM GROUNDWATER. FOUNDATION DRAINS SHALL NOT BE DIRECTED TO ADJUTING LOTS OR EXTENDED INTO THE WETLANDS BUFFERS OR WETLANDS.
 - THERE WERE NO VERNAL POOLS WITHIN THE PROPOSED SUBDIVISION LOTS.

STEVEN M. OLES, LLS DATE:

OWNER OF RECORD
TM 255-24-10
LAPERLE FAMILY REVOCABLE TRUST
28 COPPERLINE ROAD
EPSOM, NH 03234
SCRD BOOK 4536 PAGE 666

SUBDIVISION PLAN
TAX MAP 255, LOT 24-10
HAVEN HILL RD.
ROCHESTER, NH

PREPARED FOR:
LAPERLE FAMILY TRUST
FEBRUARY 2021



FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

CERTIFIED BY _____ DATE _____

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 EXCEPT 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 FROM SUBDIVISION APPROVAL.

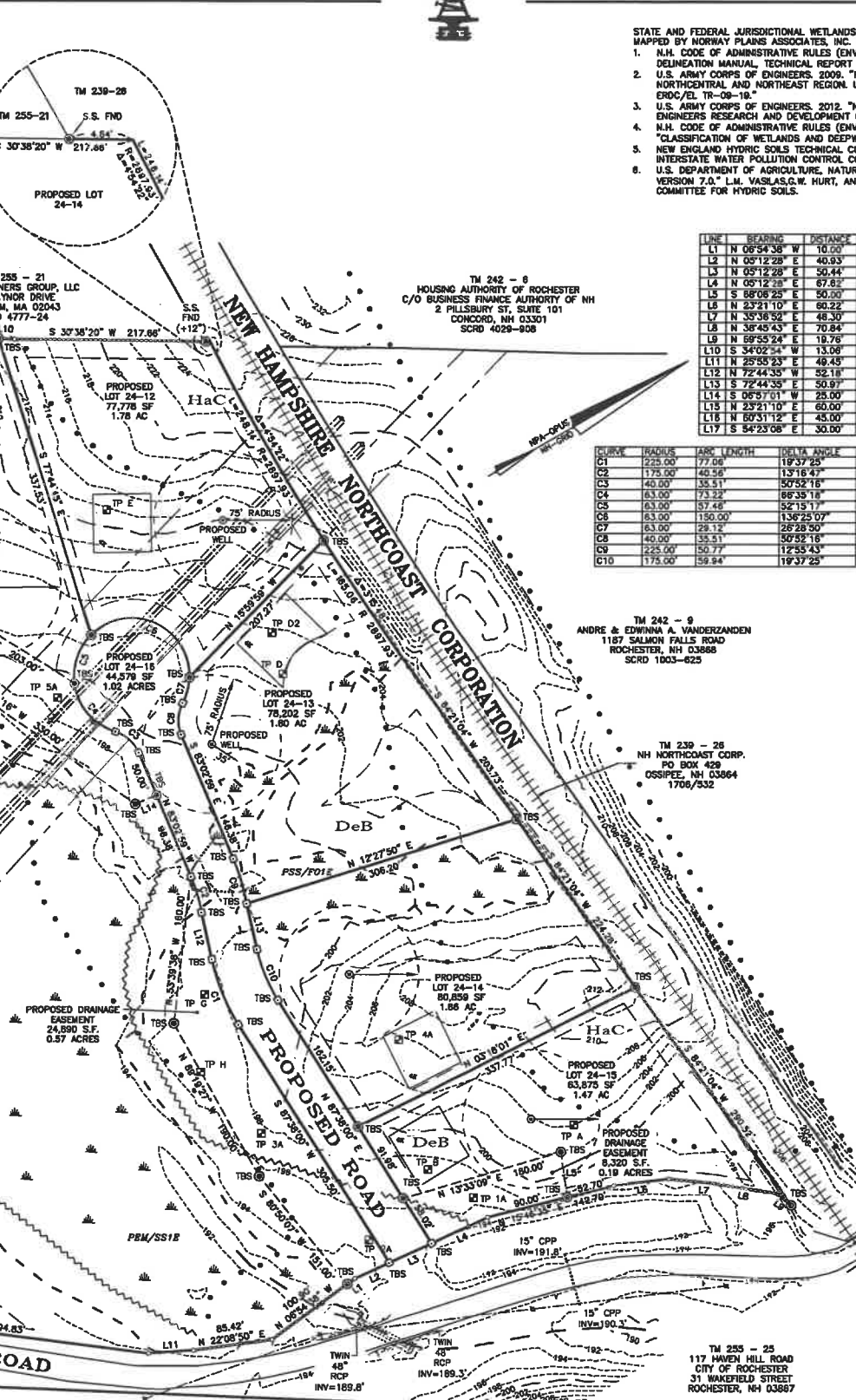
2 CONTINENTAL BLVD., ROCHESTER, NH 603-335-3948

LAND SURVEYORS



CIVIL ENGINEERS

- LEGEND**
- N 89°55'30" E 425.61' PROPERTY LINE
 - EVERSOURCE EASEMENT
 - DRAINAGE EASEMENT
 - JURISDICTIONAL WETLANDS
 - 30' WETLAND BUFFER
 - 100-YR FLOOD ZONE
 - STONEWALL
 - EDGE OF PAVEMENT
 - OVERHEAD WIRES
 - RAILROAD TRACKS
 - SEPTIC SETBACK
 - DRAINAGE PIPES
 - CONTOUR LINE
 - 4,000 SF EFFLUENT DISPOSAL AREA
 - MONUMENT
 - BOUND
 - NO MONUMENT FOUND OR SET
 - UTILITY POLE
 - WELL
- ABREVIATION LEGEND:**
- DHF - DRILL HOLE FOUND
 - DHF - DRILL HOLE WITH IDENTIFICATION CAP FOUND
 - FND - FOUND
 - RFB - REBAR FOUND
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 - SSP - STEEL STAKE FOUND
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- U.S. ARMY CORPS OF ENGINEERS, 2012, "NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS: NORTHEAST REGION, U.S. ARMY CORPS OF ENGINEERS RESEARCH AND DEVELOPMENT CENTER, ENVIRONMENTAL LABORATORY."
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TEST PITS PERFORMED BY ASHLEY F. ROWE, THE DESIGNER OF SUBSURFACE DISPOSAL SYSTEMS #1887.

TEST PITS "A" - "H" WERE PERFORMED ON DECEMBER 18, 2018.

TEST PITS "IA" - "DA" WERE PERFORMED ON DECEMBER 18, 2020.

TEST PITS DE AND DA WERE PERFORMED ON MARCH 12, 2021.

TEST PIT "K"

- 0' - 10YR2/2 LOAM TOPSOIL, COMMON ROOTS.
- 1' - 20' 10YR2/6 VERY FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 20' - 30' 10YR4/6 VERY COARSE GRAVELLY SAND, COMMON REDMORPHIC CONCENTRATIONS AT 30'.
- 30' - 60' 10YR4/6 MEDIUM GRAIN SAND, SINGLE GRAIN IN HAND, FIRM IN PLACE.
- 60' - 80' REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
- PERC. 1" IN 8 @ 20'

TEST PIT "L"

- 0' - 7' 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
- 7' - 24' 10YR5/4 FINE LOAMY SAND, GRANULAR, FRABLE, FIRM IN PLACE.
- 24' - 30' 10YR5/6 VERY COARSE GRAVELLY SAND, GRANULAR IN HAND, FIRM IN PLACE.
- 30' - 50' 10YR4/6 MEDIUM GRAIN SAND, DAMP, SINGLE GRAIN IN HAND, FIRM IN PLACE.
- 50' - 60' 10YR4/6 MEDIUM GRAIN SAND, DAMP, SINGLE GRAIN IN HAND, FIRM IN PLACE.
- 60' - 80' REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
- PERC. 1" IN 10 @ 24'

TEST PIT "M"

- 0' - 10' 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
- 10' - 18' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 18' - 24' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 24' - 30' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 30' - 40' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 40' - 50' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 50' - 60' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 60' - 80' REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
- PERC. 1" IN 10 @ 24'

TEST PIT "N"

- 0' - 10' 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
- 10' - 18' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 18' - 24' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 24' - 30' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 30' - 40' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 40' - 50' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 50' - 60' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 60' - 80' REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
- PERC. 1" IN 10 @ 24'

TEST PIT "O"

- 0' - 10' 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
- 10' - 18' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 18' - 24' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 24' - 30' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 30' - 40' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 40' - 50' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 50' - 60' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 60' - 80' REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
- PERC. 1" IN 10 @ 24'

TEST PIT "P"

- 0' - 10' 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
- 10' - 18' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 18' - 24' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 24' - 30' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 30' - 40' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
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- 60' - 80' REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
- PERC. 1" IN 10 @ 24'

TEST PIT "Q"

- 0' - 10' 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
- 10' - 18' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 18' - 24' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 24' - 30' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 30' - 40' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 40' - 50' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 50' - 60' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 60' - 80' REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
- PERC. 1" IN 10 @ 24'

TEST PIT "R"

- 0' - 10' 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
- 10' - 18' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 18' - 24' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 24' - 30' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 30' - 40' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 40' - 50' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 50' - 60' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 60' - 80' REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
- PERC. 1" IN 10 @ 24'

TEST PIT "S"

- 0' - 10' 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
- 10' - 18' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 18' - 24' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 24' - 30' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 30' - 40' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 40' - 50' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 50' - 60' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 60' - 80' REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
- PERC. 1" IN 10 @ 24'

TEST PIT "T"

- 0' - 10' 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
- 10' - 18' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 18' - 24' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 24' - 30' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 30' - 40' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 40' - 50' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 50' - 60' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 60' - 80' REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
- PERC. 1" IN 10 @ 24'

TEST PIT "U"

- 0' - 10' 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
- 10' - 18' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 18' - 24' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 24' - 30' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 30' - 40' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 40' - 50' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 50' - 60' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 60' - 80' REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
- PERC. 1" IN 10 @ 24'

TEST PIT "V"

- 0' - 10' 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
- 10' - 18' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 18' - 24' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 24' - 30' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 30' - 40' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 40' - 50' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 50' - 60' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 60' - 80' REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
- PERC. 1" IN 10 @ 24'

TEST PIT "W"

- 0' - 10' 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
- 10' - 18' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 18' - 24' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 24' - 30' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 30' - 40' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 40' - 50' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 50' - 60' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 60' - 80' REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
- PERC. 1" IN 10 @ 24'

TEST PIT "X"

- 0' - 10' 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
- 10' - 18' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 18' - 24' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 24' - 30' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 30' - 40' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 40' - 50' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 50' - 60' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 60' - 80' REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
- PERC. 1" IN 10 @ 24'

TEST PIT "Y"

- 0' - 10' 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
- 10' - 18' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 18' - 24' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 24' - 30' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 30' - 40' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 40' - 50' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 50' - 60' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 60' - 80' REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
- PERC. 1" IN 10 @ 24'

TEST PIT "Z"

- 0' - 10' 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
- 10' - 18' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 18' - 24' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 24' - 30' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 30' - 40' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 40' - 50' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 50' - 60' 10YR4/6 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
- 60' - 80' REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
- PERC. 1" IN 10 @ 24'

LOT LOADING CALCULATIONS

PROPOSED LOT 24-1

TOTAL LOT AREA = 77,778 SF, 1.79 ACRES - 154.75% OF MINIMUM LOT SIZE BY SOILS COMPOSED OF:

37,017 SQUARE FEET OF MDC-HICKORY LOAMY SAND, 8 TO 15 PERCENT SLOPES (GROUP 3, C SLOPE BASED ON TEST PIT DATA) 53,000 SQUARE FEET REQUIRED 37,017 / 53,000 = 0.6984 X 100 = 69.84% OF MINIMUM LOT SIZE

40,781 SQUARE FEET OF DMB-DEERFIELD LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES (GROUP 3, B SLOPE BASED ON TEST PIT DATA) 48,000 SQUARE FEET REQUIRED 40,781 / 48,000 = 0.8498 X 100 = 84.98% OF MINIMUM LOT SIZE

PROPOSED LOT 24-2

TOTAL LOT AREA = 78,202 SF, 1.80 ACRES - 149.03% OF MINIMUM LOT SIZE BY SOILS COMPOSED OF:

20,827 SQUARE FEET OF MDC-HICKORY LOAMY SAND, 8 TO 15 PERCENT SLOPES (GROUP 3, C SLOPE BASED ON TEST PIT DATA) 53,000 SQUARE FEET REQUIRED 20,827 / 53,000 = 0.3929 X 100 = 39.29% OF MINIMUM LOT SIZE

47,374 SQUARE FEET OF DMB-DEERFIELD LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES (GROUP 3, B SLOPE BASED ON TEST PIT DATA) 48,000 SQUARE FEET REQUIRED 47,374 / 48,000 = 0.9870 X 100 = 98.70% OF MINIMUM LOT SIZE

PROPOSED LOT 24-3

TOTAL LOT AREA = 80,859 SF, 1.86 ACRES - 136.20% OF MINIMUM LOT SIZE BY SOILS COMPOSED OF:

25,788 SQUARE FEET OF MDC-HICKORY LOAMY SAND, 8 TO 15 PERCENT SLOPES (GROUP 3, C SLOPE BASED ON TEST PIT DATA) 53,000 SQUARE FEET REQUIRED 25,788 / 53,000 = 0.4866 X 100 = 48.66% OF MINIMUM LOT SIZE

34,174 SQUARE FEET OF DMB-DEERFIELD LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES (GROUP 3, B SLOPE BASED ON TEST PIT DATA) 48,000 SQUARE FEET REQUIRED 34,174 / 48,000 = 0.7119 X 100 = 71.19% OF MINIMUM LOT SIZE

PROPOSED LOT 24-4

TOTAL LOT AREA = 80,859 SF, 1.86 ACRES - 136.20% OF MINIMUM LOT SIZE BY SOILS COMPOSED OF:

25,788 SQUARE FEET OF MDC-HICKORY LOAMY SAND, 8 TO 15 PERCENT SLOPES (GROUP 3, C SLOPE BASED ON TEST PIT DATA) 53,000 SQUARE FEET REQUIRED 25,788 / 53,000 = 0.4866 X 100 = 48.66% OF MINIMUM LOT SIZE

34,174 SQUARE FEET OF DMB-DEERFIELD LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES (GROUP 3, B SLOPE BASED ON TEST PIT DATA) 48,000 SQUARE FEET REQUIRED 34,174 / 48,000 = 0.7119 X 100 = 71.19% OF MINIMUM LOT SIZE

PROPOSED LOT 24-5

TOTAL LOT AREA = 80,859 SF, 1.86 ACRES - 136.20% OF MINIMUM LOT SIZE BY SOILS COMPOSED OF:

25,788 SQUARE FEET OF MDC-HICKORY LOAMY SAND, 8 TO 15 PERCENT SLOPES (GROUP 3, C SLOPE BASED ON TEST PIT DATA) 53,000 SQUARE FEET REQUIRED 25,788 / 53,000 = 0.4866 X 100 = 48.66% OF MINIMUM LOT SIZE

34,174 SQUARE FEET OF DMB-DEERFIELD LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES (GROUP 3, B SLOPE BASED ON TEST PIT DATA) 48,000 SQUARE FEET REQUIRED 34,174 / 48,000 = 0.7119 X 100 = 71.19% OF MINIMUM LOT SIZE

GENERAL NOTES:

- THE PURPOSE OF THIS PLAN IS TO SHOW THE SUBDIVISION OF MAP 255 LOT 24-1 INTO 5 LOTS.
- TOTAL PARCEL AREA: 25.6 ACRES
- PARCELS ARE ZONED AGRICULTURAL (A)
- MINIMUM LOT REQUIREMENTS: LOT SIZE = 45,000, FRONTAGE = 150'
- BUILDING SETBACKS: FRONTY = 20', SY. = 10', RY. = 20'
- THE LOTS ARE SERVED BY ONE-SIDE SLT SAND, COMPACTED, FRABLE, VERY FIRM IN PLACE.
- A PORTION OF MAP 255 LOT 24-1 IS LOCATED WITHIN THE 100 YEAR FLOOD ZONE AS SHOWN ON THE FLOOD INSURANCE RATE MAP DATED SEPTEMBER 30, 2015 COMMUNITY PANEL 33017002180 PANEL E18 OF 408.
- FOR MORE INFORMATION ABOUT THIS SUBDIVISION CONTACT THE ROCHESTER PLANNING DEPARTMENT, 31 WAKEFIELD STREET, ROCHESTER, NH 03867. (603) 335-1336.

I HEREBY CERTIFY THAT THIS PLAN, PREPARED UNDER MY DIRECTION, IS THE RESULT OF A SURVEY MADE ON THE GROUND AS PER RECORD DESCRIPTIONS AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THE PLAN CLOSURE EXCEEDS 1:10,000.

STEVEN M. OLES, LLS **DATE:**

OWNER OF RECORD

TM 255-24-10

LAPERLE FAMILY REVOCABLE TRUST

28 COPPERLINE ROAD

EPSOM, NH 03234

SCRD BOOK 4536 PAGE 686

TOPOGRAPHIC SUBDIVISION PLAN

TAX MAP 255, LOT 24-10

HAVEN HILL RD.

ROCHESTER, NH

PREPARED FOR:

LAPERLE FAMILY TRUST

FEBRUARY 2021

GRAPHIC SCALE

80 0 40 80 160 320

(IN FEET)

1 INCH = 80 FEET

2 CONTINENTAL BLVD., ROCHESTER, NH 603-335-3948

S-2

FILE NO. 249

PLAN NO. C-2829-2

DWC. NO. 20071/S-1

F.B. NO.

LOCUS N.T.S.

REFERENCE PLANS:

- "CORRECTED PLAN OF LOTS, MAP 255, LOT 24, HAVEN HILL ROAD, ROCHESTER, NH FOR DONALD R. & RACHEL M. LAPERLE" DATED: FEB 2005, BY NORWAY PLAINS ASSOCIATES, INC. RECORDED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS, PLAN 102-70.
- "SUBDIVISION PLAN, 52 HAVEN HILL ROAD, ROCHESTER, STRAFFORD COUNTY, NH, FOR: DONALD R. LAPERLE" DATED: MARCH 2017, BY NORWAY PLAINS ASSOCIATES, INC. RECORDED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS, PLAN 115-81
- "SCANNERS AFFIDAVIT" SIGNED BY STEVEN M. OLES, LLS 963 DATED FEBRUARY 20, 2019 AND RECORDED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS IN BOOK 4536, PAGE 68.

TM 255 - 25

CITY OF SOMERSWORTH

1 GOVERNMENT WAY

SOMERSWORTH, NH 03878

SCRD 1792-627

FINAL APPROVAL BY

ROCHESTER PLANNING BOARD

CERTIFIED BY **DATE**

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 EXCEPT 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 FROM SUBDIVISION APPROVAL.

NORWAY PLAINS ASSOCIATES, INC.

31 MOONEY STREET, ALTON, NH 603-875-3948

LAND SURVEYORS



CIVIL ENGINEERS

LEGEND	
PROPERTY LINE	EXISTING UTILITY POLE
LIMITS OF JURISDICTIONAL WETLANDS	EXISTING MONUMENT
JURISDICTIONAL WETLANDS 50 FOOT SETBACK	EXISTING TEST PIT LOCATION & NUMBER
EXISTING TREE LINE	EXISTING WETLANDS
EXISTING STONEWALLS	
EXISTING RAILROAD TRACKS	
EXISTING CONTOUR LINE	
EXISTING DRAIN LINE	
EXISTING OVERHEAD WIRES	
EXISTING WOODS PATH	
EXISTING EDGE OF PAVEMENT	
FEMA FLOOD ZONE LINE	
NRCS SOIL TYPE BOUNDARY LINE	

MAP UNIT SYMBOL	NRCS SOIL	HSQ	MAP VALUE
HaC	HINCKLEY	A	6 in/hr
DeB	DEERFIELD	A	6 in/hr
Mp	FREETOWN/SWANSEA (MUCKY PEATS)		

WETLAND NOTES

STATE AND FEDERAL JURISDICTIONAL WETLANDS WERE DELINEATED BY N.A. CERTIFIED WETLAND SCIENTIST, BARRY H. KEITH, DURING JUNE 2018 AND MAPPED BY NORWAY PLAINS ASSOCIATES, INC. USING TOTAL STATION SURVEY METHODS AND IN ACCORDANCE WITH THE FOLLOWING GUIDANCE DOCUMENTS:

- N.H. CODE OF ADMINISTRATIVE RULES (ENR-WT 301.01) WITH THE TECHNIQUES OUTLINED IN THE 1987 "U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, TECHNICAL REPORT Y-87-1."
- U.S. ARMY CORPS OF ENGINEERS, 2008, "REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHEAST AND NORTHWEST REGION, U.S. ARMY CORPS OF ENGINEERS RESEARCH AND DEVELOPMENT CENTER, ENVIRONMENTAL LABORATORY ERDC/EL TR-09-19."
- U.S. ARMY CORPS OF ENGINEERS, 2012, "NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS: NORTHEAST REGION, U.S. ARMY CORPS OF ENGINEERS RESEARCH AND DEVELOPMENT CENTER, ENVIRONMENTAL LABORATORY."
- N.H. CODE OF ADMINISTRATIVE RULES (ENR-WT 301.02) WITH THE U.S. FISH AND WILDLIFE SERVICE MANUAL FWS/OBS-78/31 ENTITLED "CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES, COWARD ET AL. 1979."
- NEW ENGLAND HYDRIC SOILS TECHNICAL COMMITTEE, 2004, 3RD ED., "FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND," NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION, LOWELL, MA.
- U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, 2010, "FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 7.0," L.M. VASILEWSKY, H.M. HUNT, AND C.V. NOBLE (EDS.), USDA, NRCS, IN COOPERATION WITH THE NATIONAL TECHNICAL COMMITTEE FOR HYDRIC SOILS.

GENERAL SITE PLAN NOTES

- THIS PARCELS ARE LOCATED IN THE AGRICULTURAL ZONE KNOWN AS MAP 255 LOT 24-10.
- TOTAL PARCEL AREA: 1,115,714 SQUARE FEET OR 25.81 ACRES.
- THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING FEATURES ON THE LOT.
- ALL EXISTING UTILITIES LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATION PRIOR TO ANY WORK BEING PERFORMED.
- THESE PLANS SHOW ONLY THOSE FEATURES THAT WERE VISUALLY PER REFERENCE PLAN 1.
- DIMENSIONAL REGULATIONS PER ZONING ORDINANCE:
 - MINIMUM LOT AREA = 45,000 SF OR 1.03 ACRES
 - MINIMUM LOT FRONTAGE = 150 FEET
 - MINIMUM YARD SETBACKS:
 - FRONT = 20'
 - SIDE = 10'
 - REAR = 20'
 - MAXIMUM LOT COVERAGE = 30%
 - MAXIMUM BUILDING HEIGHT = 35'
- ORIENTATION: HORIZONTAL NAD83 AND VERTICAL DATUMS NAVD83
- A PORTION OF PARCEL IS LOCATED WITHIN ZONE A (100YR FLOOD) AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY MAP, COMMUNITY #530170210E, DATED SEPTEMBER 30, 2015.
- WETLANDS WERE DELINEATED BY B.H. KEITH ASSOCIATES IN 2018.

TEST PITS PERFORMED BY ASHLEY P. ROWE, NH DESIGNER OF SUBSURFACE DISPOSAL SYSTEMS #1857.

TEST PITS "A"-"H" WERE PERFORMED ON DECEMBER 18, 2018.

TEST PITS "IA"-"GA" WERE PERFORMED ON DECEMBER 9, 2020.

TEST PITS DE AND GA WERE PERFORMED ON MARCH 12, 2021

TEST PIT "A"
0' - 4" 10YR2/2 LOAM TOPSOIL, COMMON ROOTS.
4' - 29" 10YR5/4 FINE LOAMY SAND, GRANULAR, FRABLE, FIRM IN PLACE.
29' - 39" 10YR4/3 VERY COARSE GRAVELLY SAND, GRANULAR IN HAND, FIRM IN PLACE.
39' - 68" 10YR4/3 MEDIUM GRAIN SAND, SINGLE GRAIN IN HAND, FIRM IN PLACE.
68" REFUSAL ON FRACTURED LEDGE, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 39'.
PERC. 1" IN 8 @ 24'

TEST PIT "B"
0' - 7" 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
7' - 24" 10YR5/4 FINE LOAMY SAND, GRANULAR, FRABLE, FIRM IN PLACE.
24' - 30" 10YR5/4 VERY COARSE GRAVELLY SAND, GRANULAR IN HAND, FIRM IN PLACE.
30' - 52" 10YR4/3 MEDIUM GRAIN SAND, DAMP, SINGLE GRAIN IN HAND, FIRM IN PLACE, HEAVY REDDYMORPHIC CONCENTRATIONS AT 30', WATER OBSERVED AT 52'.
52" NO REFUSAL, SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
PERC. 1" IN 10 @ 24'

TEST PIT "C"
0' - 5" 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
5' - 18" 10YR4/3 SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
18' - 23" 2.5YR3/4 SAND, SINGLE GRAIN IN HAND, FIRM IN PLACE, COMMON REDDYMORPHIC CONCENTRATIONS AT 18'.
23' - 44" 10YR4/3 SANDY LOAM, SATURATED, GRANULAR, FRABLE, WATER OBSERVED AT 34'.
44" NO REFUSAL, SEASONAL HIGH WATER TABLE ESTIMATED AT 18'.
PERC. 1" IN 6 @ 14'

TEST PIT "D"
0' - 6" 10YR3/2 LOAM TOPSOIL, COMMON ROOTS.
6' - 30" 10YR5/6 LOAMY SAND, GRANULAR, LOOSE.
30' - 66" 10YR5/6 LOAMY SAND, SINGLE GRAIN IN HAND, REDDYMORPHIC CONCENTRATIONS AT 30'.
66" NO REFUSAL, WATER OBSERVED AT 30', SEASONAL HIGH WATER TABLE ESTIMATED AT 30'.
PERC. 1" IN 10 @ 24'

TEST PIT "E"
0' - 6" 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
6' - 24" 10YR4/3 SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
24' - 42" 10YR6/4 FINE SAND, SINGLE GRAIN IN HAND, FIRM IN PLACE.
42' - 78" 10YR6/3 SAND, SINGLE GRAIN IN HAND, FIRM IN PLACE, VERY FRABLE COMMON VERY HEAVY REDDYMORPHIC CONCENTRATIONS AT 34', COMMON REDDYMORPHIC DEPLECTIONS AT 58'.
78" NO REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 34'. PERC. 1" IN 4 @ 30'

TEST PIT "F"
0' - 10" 10YR2/1 LOAM TOPSOIL, COMMON ROOTS.
10' - 34" 10YR4/3 FINE SANDY LOAM, GRANULAR, FRABLE, FIRM IN PLACE.
34' - 58" 10YR6/3 VERY FINE LOAMY SAND, SINGLE GRAIN IN HAND, FIRM IN PLACE, HEAVY STRATIFICATION OF COARSE GRAVELLY SAND CONTAINING STRONG REDDYMORPHIC CONCENTRATIONS AND DEPLECTIONS BELOW 48'.
58' - 88" 10YR3/3 VERY FINE SILTY SAND, COMPACTED, FRABLE, VERY FIRM IN PLACE.
88" NO REFUSAL, NO OBSERVED WATER, SEASONAL HIGH WATER TABLE ESTIMATED AT 48'.
PERC. 1" IN 6 @ 30'

TEST PIT "G"
0' - 8" 10YR2/2 LOAM TOPSOIL, COMMON ROOTS.
8' - 31" 10YR5/6 MEDIUM GRAIN SAND, SINGLE GRAIN IN HAND, LOOSE, STRONG REDDYMORPHIC CONCENTRATIONS AND DEPLECTIONS AT 29'.
31' - 68" 10YR5/2 FINE SAND, SINGLE GRAIN IN HAND, FIRM IN PLACE, WATER OBSERVED AT 60'.
68" NO REFUSAL, SEASONAL HIGH WATER TABLE ESTIMATED AT 29'.
PERC. 1" IN 4 @ 24'

TEST PIT "H"
0' - 5" 10YR2/2 LOAM TOPSOIL, COMMON ROOTS.
5' - 52" 10YR5/6 FINE SANDY LOAM, GRANULAR, FRABLE, VERY FIRM IN PLACE, HEAVY REDDYMORPHIC CONCENTRATIONS AND DEPLECTIONS AT 27', WATER OBSERVED AT 52'.
52" NO REFUSAL, SEASONAL HIGH WATER TABLE ESTIMATED AT 27'.
PERC. 1" IN 12 @ 20'

TEST PIT "IA"
0' - 11" LOAM TOPSOIL, LOOSE, COMMON ROOTS
11' - 38" LOAMY FINE SAND, GRANULAR, FRABLE, FIRM IN PLACE
38' - 52" LOAMY FINE SAND, GRANULAR, FRABLE, FIRM IN PLACE, REDDYMORPHIC CONCENTRATIONS PRESENT BELOW 37'.
52" NO REFUSAL, PERC. 1" IN 12 @ 30'

TEST PIT "2A"
0' - 12" LOAM TOPSOIL, LOOSE, COMMON ROOTS
12' - 60" VERY FINE SANDY LOAM, FRABLE, FIRM IN PLACE.
60' - 72" CONCRETEOUS DEPLETED SALT, VERY FIRM IN PLACE, BLOCKY, FRABLE IN HAND. REDDYMORPHIC CONCENTRATIONS PRESENT BELOW 60', WATER OBSERVED AT 72'.
72" NO REFUSAL, PERC. 1" IN 10' @ 30'

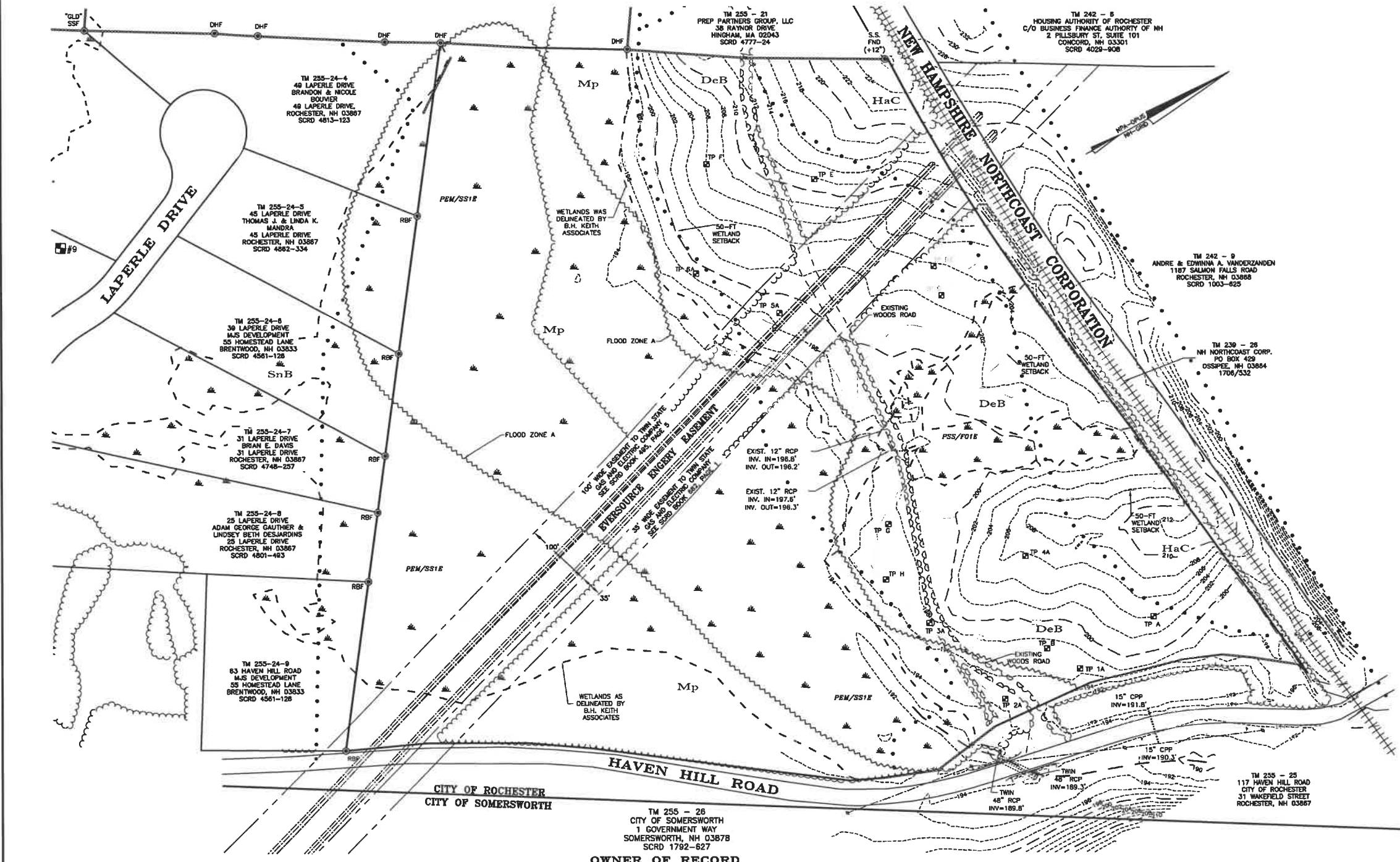
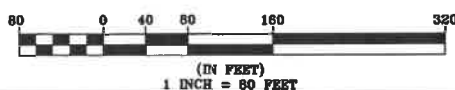
TEST PIT "3A"
0' - 13" LOAM TOPSOIL, LOOSE, COMMON ROOTS
13' - 37" LOAMY FINE SAND, GRANULAR, FRABLE, SOMEWHAT FIRM IN PLACE.
37' - 51" LOAMY MEDIUM SAND, DEPLETED, GRANULAR, FRABLE, FIRM IN PLACE, REDDYMORPHIC CONCENTRATIONS PRESENT BELOW 37'.
51" NO REFUSAL, NO OBSERVED WATER, PERC. 1" IN 10' @ 30'

TEST PIT "4A"
0' - 9" LOAM TOPSOIL, LOOSE, COMMON ROOTS
9' - 29" 10YR4/3 LOAMY FINE SAND, GRANULAR, FRABLE, INCLUSIONS OF SINGLE GRAIN COARSE SANDS.
29' - 38" 10YR4/3 LOAMY VERY FINE SAND, FIRM IN PLACE, VERY FRABLE.
38' - 56" 10YR6/3 LOAMY FINE SAND, GRANULAR, FRABLE, REDDYMORPHIC CONCENTRATIONS PRESENT BELOW 38'.
56" NO REFUSAL, NO OBSERVED WATER, PERC. 1" IN 8' @ 30'

TEST PIT "5A"
0' - 7" LOAM TOPSOIL, LOOSE, COMMON ROOTS
7' - 21" LOAMY VERY FINE SAND, GRANULAR, FRABLE, FIRM IN PLACE.
21' - 37" FINE SAND, GRANULAR, FRABLE.
37' - 48" LOAMY FINE SAND, GRANULAR, FRABLE, FIRM IN PLACE, REDDYMORPHIC CONCENTRATIONS PRESENT BELOW 37'.
48" NO REFUSAL, PERC. 1" IN 12' @ 30'

TEST PIT "6A"
0' - 10" 10YR3/2 LOAM TOPSOIL, COMMON ROOTS
10' - 35" 10YR4/3 LOAMY FINE SAND, SINGLE GRAIN, LOOSE
35' - 56" 10YR4/3 LOAM FINE SAND, SINGLE GRAIN, LOOSE, COMMON REDDYMORPHIC CONCENTRATIONS BELOW 35'.
56" - 72" 10YR4/4 MEDIUM TO FINE SAND, SINGLE GRAIN, LOOSE
72" NO REFUSAL, NO OBSERVED WATER, ESTIMATED SEASONAL HIGH WATER TABLE AT 35'.
PERC. 1" IN 4' @ 30'

**EXISTING FEATURES PLAN
TAX MAP 255, LOT 24-10
HAVEN HILL RD.
ROCHESTER, NH**
PREPARED FOR:
LAPERLE FAMILY TRUST
FEBRUARY 2021
GRAPHIC SCALE



REFERENCE PLANS:
1. "CORRECTED PLAN OF LOTS, MAP 255, LOT 24, HAVEN HILL ROAD, ROCHESTER, NH FOR DONALD R. & RACHEL M. LAPERLE" DATED FEB 2005, BY NORWAY PLAINS ASSOCIATES, INC. RECORDED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS, PLAN 102-70.

FILE NO. 249
PLAN NO. C-2829-2
DWG. NO. 20071/S-1
F.B. NO.

TM 255 - 28
CITY OF SOMERSWORTH
GOVERNMENT WAY
SOMERSWORTH, NH 03878
SCRD 1792-627

OWNER OF RECORD
TM 255-24-10
LAPERLE FAMILY REVOCABLE TRUST
28 COPPERLINE ROAD
EPSOM, NH 03234
SCRD BOOK 4536 PAGE 666

31 MOONEY STREET, ALTON, NH 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

2 CONTINENTAL BLVD., ROCHESTER, NH 603-335-3948

E-1

LEGEND

- PROPERTY LINE
 --- LIMITS OF JURISDICTIONAL WETLANDS
 --- EXISTING TREE LINE
 --- EXISTING STONEWALLS
 --- EXISTING RAILROAD TRACKS
 --- EXISTING EDGE OF PAVEMENT
 --- FEMA FLOOD ZONE LINE
 --- PROPOSED TREE LINE
 --- PROPOSED SLOPE GRANITE CURBING
 --- EXISTING UTILITY POLE
 --- EXISTING WETLANDS



- OVERALL CONSTRUCTION AND GENERAL NOTES:
1. ALL CONSTRUCTION ACTIVITY RELATED TO THE DEVELOPMENT OF THIS SITE IS RESTRICTED TO THE HOURS OF 7:00 A.M. TO 6:00 P.M., MONDAY THROUGH FRIDAY AND 8:00 A.M. TO 6:00 P.M. ON SATURDAY.
 2. ALL LOT CORNERS AND DRAINAGE EASEMENTS SHALL BE MARKED WITH CAPPED IRON MARKERS OR APPROPRIATE MONUMENTATION AFTER THE CONSTRUCTION OF THE ROAD IS COMPLETE.
 3. ALL UTILITIES 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 ACCESS 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 REQUIREMENT.
 4. PRIOR TO DEDICATION OF THE STREETS TO THE CITY, TWO STREET TREES (DECIDUOUS SHADE TREES) MUST BE MAINTAINED OR PLANTED WITHIN THE FRONT 15 FEET OF EACH LOT. THE EXISTING TREES MUST IDENTIFY OR FLAG APPROPRIATE, HEALTHY, INDIVIDUAL TREES ON SITE THAT MEET THIS OBJECTIVE. ALTERNATIVELY, IF TREES ARE TO BE PLANTED, THEY NEED TO BE PLANTED PRIOR TO THE SALE OF THE LOT OR A 15 FOOT EASEMENT MUST BE SHOWN AT THE FRONT OF THE LOT WHICH ALLOWS FOR THE DEVELOPER TO PLANT THOSE TREES. NEWLY PLANTED TREES MUST BE SUITABLE TO THE SITE CONDITIONS AND OF NURSERY STOCK WITH A DIAMETER AT FOUR FOOT BREAST HEIGHT OF AT LEAST 2 INCHES. SUGGESTED (BUT NOT REQUIRED) SPECIES INCLUDE MAPLE, WHITE OAK, SCARLET OAK, LINDEN, THORNLESS HONEYLOCUST, MARSHALL SEEDLESS ASH, EUROPEAN HORNBEAM, CALLERY PEAR (NOT BRADFORD), CHINESE ELM, AND JAPANESE ZELKOWA. WHERE SUITABLE COVERAGE OF EXISTING EVERGREEN TREES IS PRESENT, THESE MAY BE SUBSTITUTE FOR DECIDUOUS TREES.
 5. ORANGE CONSTRUCTION FENCE MUST BE PLACED ALONG THE WETLAND BUFFERS WITHIN 100 FEET OF ANY PROPOSED GRADING PRIOR TO START OF CONSTRUCTION.
 6. THE SIGHT DISTANCE AT THE ENTRANCE TO THE SUBDIVISION WILL BE ADEQUATE. NO IMPEDIMENT OR GRADE OF HAVEN HILL ROAD OR THE GRADE PROPOSED ENTRANCE. THE BRUSH AND TREES SOUTH-WEST OF THE PROPOSED ROADWAY WITHIN THE RIGHT OF WAY SHALL BE CLEARED TO ENSURE SIGHT DISTANCE OF 400 FEET IS ACHIEVED.
 7. THE INFILTRATION BASINS AND TREATMENT SWALES SHALL BE INSPECTED PRIOR TO ROADWAY ACCEPTANCE. ANY EROSION SHALL BE FIXED AND ANY SEDIMENT SHALL BE REMOVED AND VEGETATION REESTABLISHED ON THE INFILTRATION BASIN BOTTOM. THE INFILTRATION BASIN BOTTOM SHALL BE AT DESIGN ELEVATION AS SPECIFIED IN THE DETAILS ON SHEET C-7 OF THIS PLAN SET.
 8. LOAM STOCKPILES SHALL BE SEEDED IN ACCORDANCE WITH THE SEEDING NOTES ON SHEET C-9. IF STORED MORE THAN 30 DAYS, SILT FENCE SHALL BE INSTALLED AT THE DOWN GRADIENT SIDE OF THE LOAM STOCKPILE AS SHOWN IN THE PLAN VIEW AROUND AT LEAST ONE HALF THE CIRCUMFERENCE OF THE PILE.
 9. DURING ALL PHASES OF CONSTRUCTION DUST SHALL BE PREVENTED FROM BECOMING A SAFETY OR HEALTH HAZARD BY THE IMPLEMENTATION OF ACCEPTED CONTROL METHODS SUCH AS WATERING.
 10. THE CITY RESERVES THE RIGHT TO REQUIRE ADDITIONAL EROSION CONTROL PRIOR TO ISSUANCE OF ANY BUILDING PERMIT FOR THIS SUBDIVISION, THE DEVELOPER SHALL POST:
 - A. CONSTRUCTION ZONE SIGNS PER THE MANUAL OF UNIFORMED TRAFFIC CONTROL DEVICES STANDARDS.
 - B. STREET ACCEPTANCE SIGN AT THE ENTRANCE WHICH READS "POSTED. THIS SUBDIVISION IS UNDER CONSTRUCTION. THESE STREETS HAVE NOT YET BEEN ACCEPTED BY THE CITY OF ROCHESTER AND ARE NOT ELIGIBLE FOR CITY SERVICES. TRAVEL AT YOUR OWN RISK (PER THE ORDER OF PLANNING BOARD)" THE LOCATION AND DESIGN OF THIS SIGN SHALL BE AS STIPULATED BY THE PUBLIC WORKS DEPARTMENT. BUT IN NO CASE SHALL IT BE LESS THAN 2'X4' AND IT SHALL BE ERECTED PRIOR TO ISSUANCE OF ANY BUILDING PERMIT.
 12. FOR MORE INFORMATION ABOUT THIS SUBDIVISION, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT; 33 WAKEFIELD STREET, ROCHESTER, 03607, (603) 335-1338.
 13. 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 (603) 330-7182 WITH ANY QUESTIONS ABOUT ACCESS REQUIREMENTS.
 14. BUFFER MARKERS MUST BE INSTALLED ALONG THE OUTER EDGE OF THE WETLAND BUFFER ON ALL LOTS THAT CONTAIN A WETLAND BUFFER. THE MARKER MUST BE INSTALLED AT THE TIME THAT THE ORANGE CONSTRUCTION FENCE IS REMOVED. THE MARKER MUST BE IN PLACE IN ORDER FOR THE CERTIFICATE OF OCCUPANCY FOR THAT LOT TO BE ISSUED.
 15. THIS DEVELOPMENT MUST BE IN COMPLIANCE WITH ALL APPLICABLE LAW - INCLUDING ALL PERTINENT PROVISIONS OF THE CITY OF ROCHESTER SUBDIVISION REGULATIONS - UNLESS OTHERWISE WAIVED.
 16. ALL ROADWAY SIGNS SHALL BE INSTALLED AT THE DEVELOPER'S EXPENSE. THE TEMPORARY STREET SIGN WITH "PRIVATE" ABOVE SHALL BE INSTALLED ONCE THE ROADWAY GRADING STARTS.
 17. THIS PROJECT PROPOSED TO DISTURB OVER ONE ACRE OF EXISTING GROUND COVER AND MEETS OTHER SPECIFIC REQUIREMENTS RELATED TO PERMIT CRITERIA FOR EPA NPDES COMPLIANCE. THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPMENT AND IMPLEMENTATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP). SUBMISSION OF A NOTICE OF INTENT (NOI) TO EPA, INSPECTION AND MAINTENANCE OF SEDIMENT CONTROL MEASURES, DOCUMENTATION OF MAINTENANCE ACTIVITIES, AND SUBMISSION A NOTICE OF TERMINATION (NOT) TO EPA. THE CONTRACTOR IS ALSO RESPONSIBLE TO COMPLY WITH ANY OR ALL OTHER ASPECTS OF CURRENT FEDERAL, STATE AND LOCAL STORM WATER OR NPDES REGULATION OR REQUIREMENTS.
 18. THE FINAL WEARING COURSE MUST BE INSTALLED AS FOLLOWS:
 - A. IT MAY NOT BE INSTALLED UNTIL AT LEAST 50% OF THE NEW LOTS IN THE SUBDIVISION TAKING ACCESS FROM THE NEW STREET (I.E. 3 LOTS OUT OF THE 5 LOTS) ARE BUILT OUT (CERTIFICATES OF OCCUPANCY ISSUED);
 - B. IT MAY NOT BE INSTALLED UNTIL THE BINDER COURSE HAS BEEN IN PLACE FOR AT LEAST ONE WINTER SEASON; AND
 - C. IT MUST BE INSTALLED WITHIN 12 MONTHS AFTER 50% OF THE LOTS IN THE SUBDIVISION ARE BUILT OUT.
 19. THE DEVELOPER IS RESPONSIBLE FOR MAINTENANCE OF THE STREET AT ALL TIMES UNTIL IT IS ACCEPTED BY THE CITY OF ROCHESTER. REASONABLE ACCESS SHALL BE PROVIDED FOR LOT OWNERS AND THEIR CONTRACTORS, IF NECESSARY, DURING THE CONSTRUCTION PROCESS (SEE CONDITION REGARDING ACCESS FOR FIRE APPARATUS). ONCE ANY CERTIFICATE OF OCCUPANCY HAS BEEN ISSUED THE DEVELOPER MUST PROVIDE APPROPRIATE MAINTENANCE INCLUDING PLOWING SERVICES IN ORDER TO ALLOW FOR SAFE PASSAGE FOR RESIDENTS, EMERGENCY VEHICLES, AND SERVICE VEHICLES.
 20. ALL PROPOSED ROADWAY AND STORMWATER MANAGEMENT SYSTEMS SHALL BE CONSTRUCTED AND STABILIZED PRIOR TO ANY LOT DEVELOPMENT.

OVERALL ROADWAY PLAN
TAX MAP 255, LOT 24-10
HAVEN HILL RD.
ROCHESTER, NH
 PREPARED FOR:
LAPERLE FAMILY TRUST
 FEBRUARY 2021



FILE NO. 249
 PLAN NO. C-2829
 DWC. NO. 20071/S-1
 F.B. NO.

31 MOONEY STREET, ALTON, NH 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

2 CONTINENTAL BLVD., ROCHESTER, NH 603-335-3948

C-1

LAND SURVEYORS



CIVIL ENGINEERS

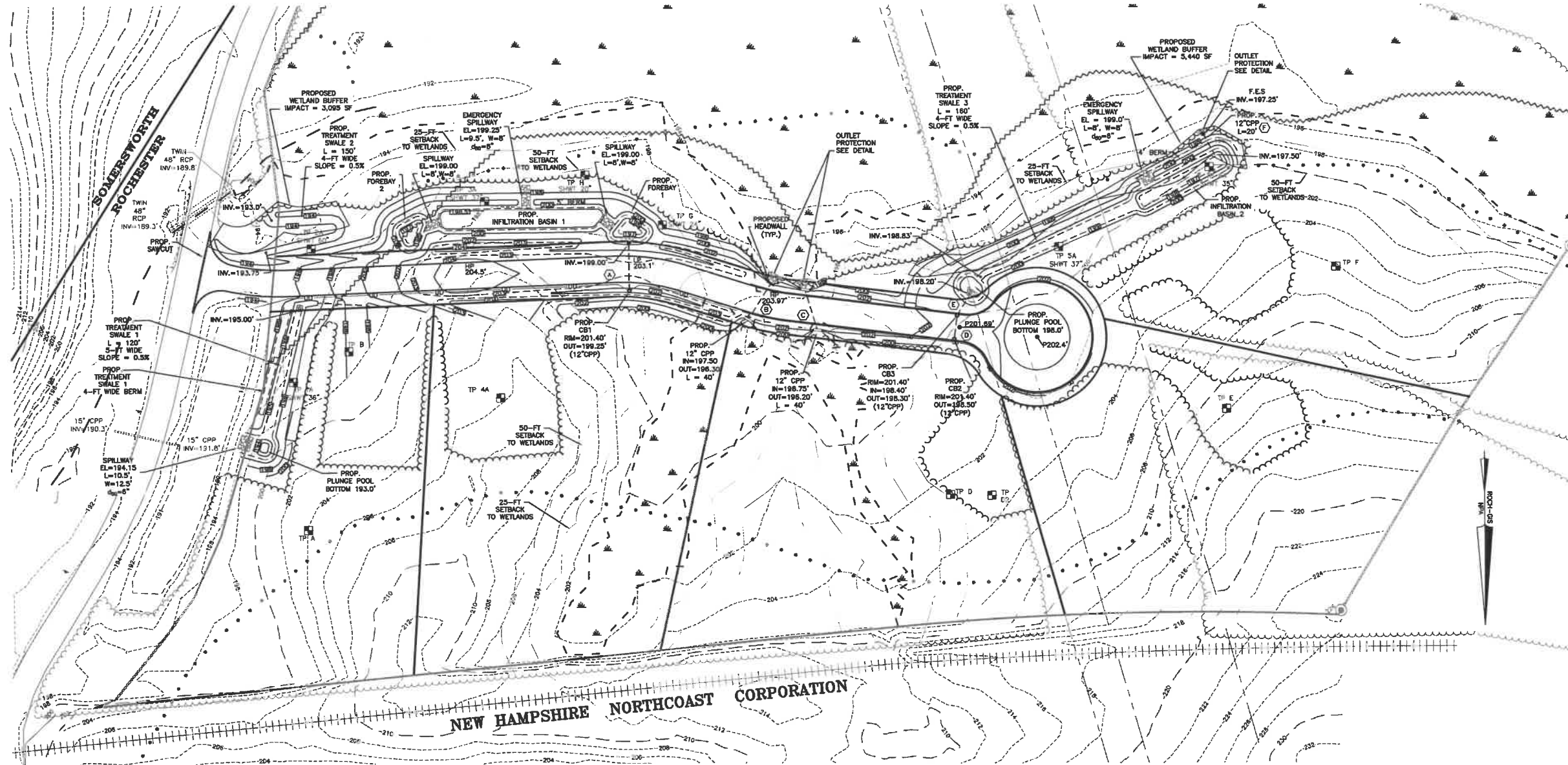


- LEGEND**
- PROPERTY LINE
 - LIMITS OF JURISDICTIONAL WETLANDS
 - JURISDICTIONAL WETLANDS 50 FOOT SETBACK
 - EXISTING TREE LINE
 - EXISTING STONEWALLS
 - EXISTING RAILROAD TRACKS
 - EXISTING CONTOUR LINE
 - EXISTING DRAIN LINE
 - EXISTING OVERHEAD WIRES
 - EXISTING EDGE OF PAVEMENT
 - PROPOSED SPOT GRADE
 - PROPOSED TREE LINE
 - PROPOSED EDGE OF PAVEMENT
 - PROPOSED EDGE OF PAVEMENT W/ SLOPE GRANITE
 - PROPOSED DRAIN LINE
 - PROPOSED CONTOUR LINE
 - PROPOSED UNDERDRAIN
 - PROPOSED DRIVEWAY CULVERT
 - NRCS SOIL TYPE BOUNDARY LINE

- EXISTING UTILITY POLE
- EXISTING MONUMENT
- EXISTING TEST PIT LOCATION & ID
- EXISTING WETLANDS
- EXISTING CLASSIFICATION CODE
- PROPOSED CATCH BASIN
- PROPOSED FLARED END SECTION (FES)
- PROPOSED OUTLET PROTECTION
- PROPOSED HEADWALL

MAP UNIT SYMBOL	NRCS SOIL	MAP UNIT NAME	HSG	Knot VALUE
Hac	WINCKLEY		A	6 in/hr
Dch	DEERFIELD		B	6 in/hr
Mp	FREETOWN/SWANSEA (MUCKY PEATS)		D	6 in/hr

- NOTES:**
- TOTAL DISTURBED AREA = 98,000 S.F.
 - BASINS AND SWALE SHALL BE INSTALLED BEFORE ROUGH GRADING THE SITE.
 - TEMPORARY WATER DIVERSION (SWALE AND BASINS) MUST BE USED AS NECESSARY UNTIL AREA ARE STABILIZED.
 - NO DISTURBANCE OF INDIVIDUAL LOTS, EXCEPT AS SHOWN ON THIS PLAN, SHALL BE PERFORMED UNTIL AFTER THE CONSTRUCTION AND STABILIZATION OF ALL OTHER CONSTRUCTION ASSOCIATED WITH THE SUBDIVISION HAS BEEN COMPLETED.



PROPOSED DRAINAGE PIPES

- | | | | | |
|---|---|---|---|---|
| <p>①- PROP. PIPE
12" CPP
INV. IN = 199.25'
INV. OUT = 198.00'
L = 40'</p> | <p>②- PROP. PIPE
12" CPP
INV. IN = 197.50'
INV. OUT = 196.30'
L = 40'</p> | <p>③- PROP. PIPE
12" CPP
INV. IN = 196.75'
INV. OUT = 195.20'
L = 40.0'</p> | <p>④- PROP. PIPE
12" CPP
INV. IN = 196.20'
INV. OUT = 195.00'
L = 20.0'</p> | <p>⑤- PROP. PIPE
12" CPP
INV. IN = 197.50'
INV. OUT = 197.25'
L = 40.0'</p> |
|---|---|---|---|---|

ALL DRAINAGE PIPES TO HAVE AN ANTI-SLEEP COLLAR AT THE MID POINT OF THE PIPE RUN

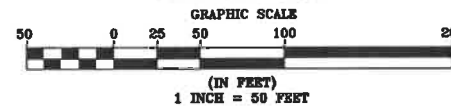
PROPOSED DRAINAGE STRUCTURES

- | | | |
|---|---|---|
| <p>①- PROP. 4-FT CB #1
RM = 201.40'
INV. OUT = 198.25' (A)
SUMP = 195.25'</p> | <p>②- PROP. 4-FT CB #2
RM = 204.40'
INV. OUT = 198.50' (D)
SUMP = 194.50'</p> | <p>③- PROP. 4-FT CB #3
RM = 201.40'
INV. IN = 198.40' (D)
INV. OUT = 198.30' (E)
SUMP = 194.30'
INSTALL THE ELIMINATOR OIL AND DEBRIS TRAP SEE DETAIL</p> |
|---|---|---|

GRADING AND DRAINAGE PLAN TAX MAP 255, LOT 24-10 HAVEN HILL RD. ROCHESTER, NH

PREPARED FOR:
LAPERLE FAMILY TRUST

FEBRUARY 2021



FILE NO. 249
PLAN NO. C-2829
DWG. NO. 20071/S-1
F.B. NO.

31 MOONEY STREET, ALTON, NH 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

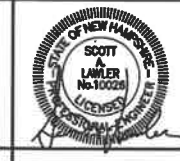
2 CONTINENTAL BLVD., ROCHESTER, NH 603-335-3948

C-2

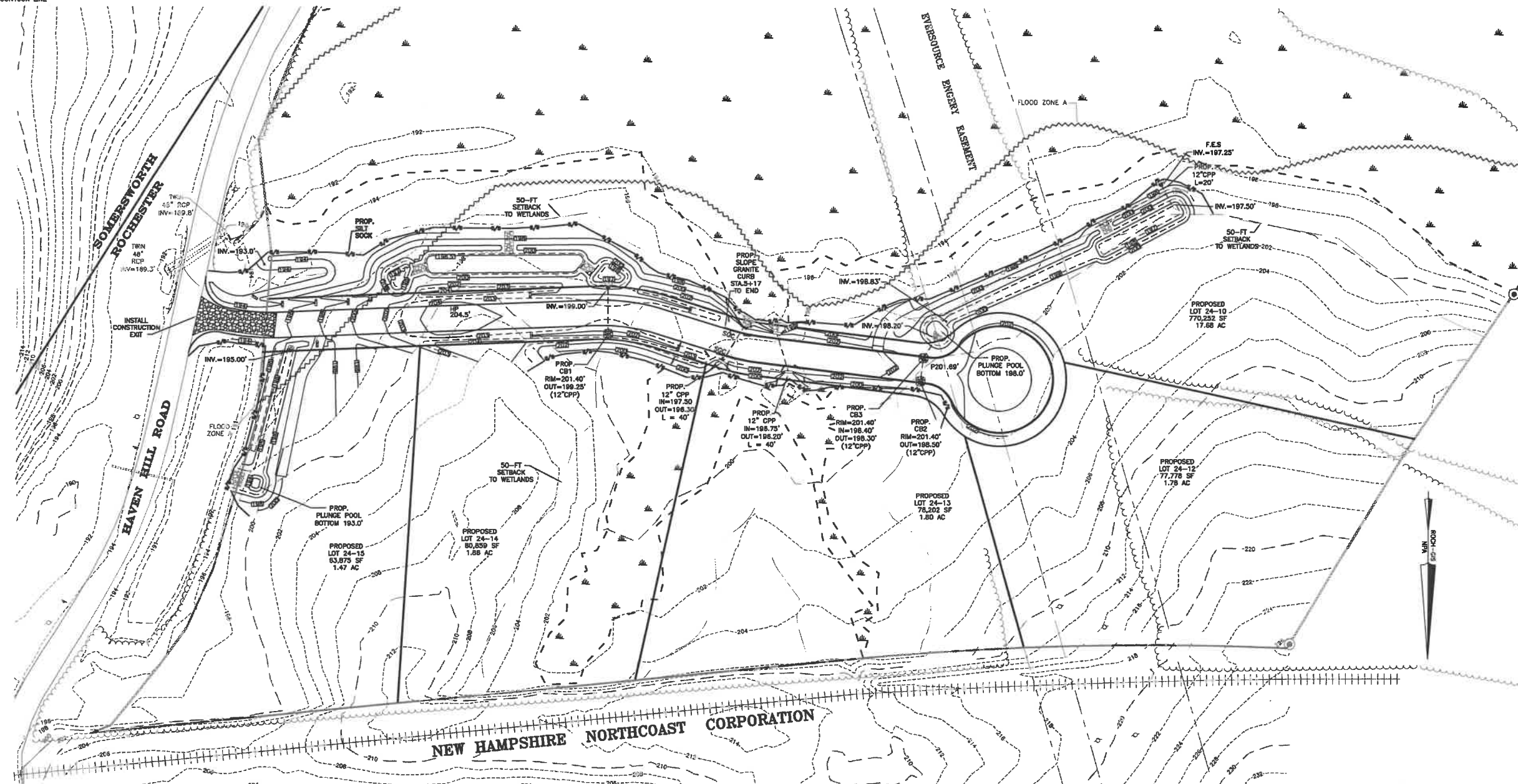
LAND SURVEYORS



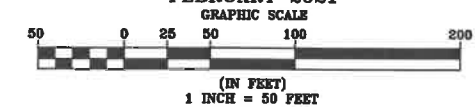
CIVIL ENGINEERS



<ul style="list-style-type: none"> PROPERTY LINE LIMITS OF JURISDICTIONAL WETLANDS JURISDICTIONAL WETLANDS 50 FOOT SETBACK EXISTING TREE LINE EXISTING STONEWALLS EXISTING RAILROAD TRACKS EXISTING CONTOUR LINE EXISTING DRAIN LINE EXISTING OVERHEAD WIRES EXISTING WATER LINE EXISTING SEWER LINE EXISTING CHAIN LINK FENCE EXISTING GRAVEL ROAD EXISTING EDGE OF PAVEMENT PROPOSED SILT FENCE PROPOSED SILT FENCE PROPOSED TREE LINE PROPOSED DRAIN LINE PROPOSED CONTOUR LINE 	<ul style="list-style-type: none"> EXISTING UTILITY POLE EXISTING SEWER MANHOLE EXISTING MONUMENT EXISTING HYDRANT EXISTING WATER GATE OR SHUT-OFF VALVE EXISTING TEST PIT LOCATION & NUMBER EXISTING WETLANDS EXISTING CLASSIFICATION CODE PROPOSED CATCH BASIN PROPOSED FLARED END SECTION (FES) PROPOSED OUTLET PROTECTION 	<ul style="list-style-type: none"> CONSTRUCTION EXIT PROPOSED CATCH BASIN INLET PROTECTION PROPOSED STONE CHECK DAM PROPOSED EROSION CONTROL BLANKET
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**EROSION & SEDIMENTATION
CONTROL PLAN**
TAX MAP 255, LOT 24-10
HAVEN HILL RD.
ROCHESTER, NH
PREPARED FOR:
LAPERLE FAMILY TRUST
FEBRUARY 2021



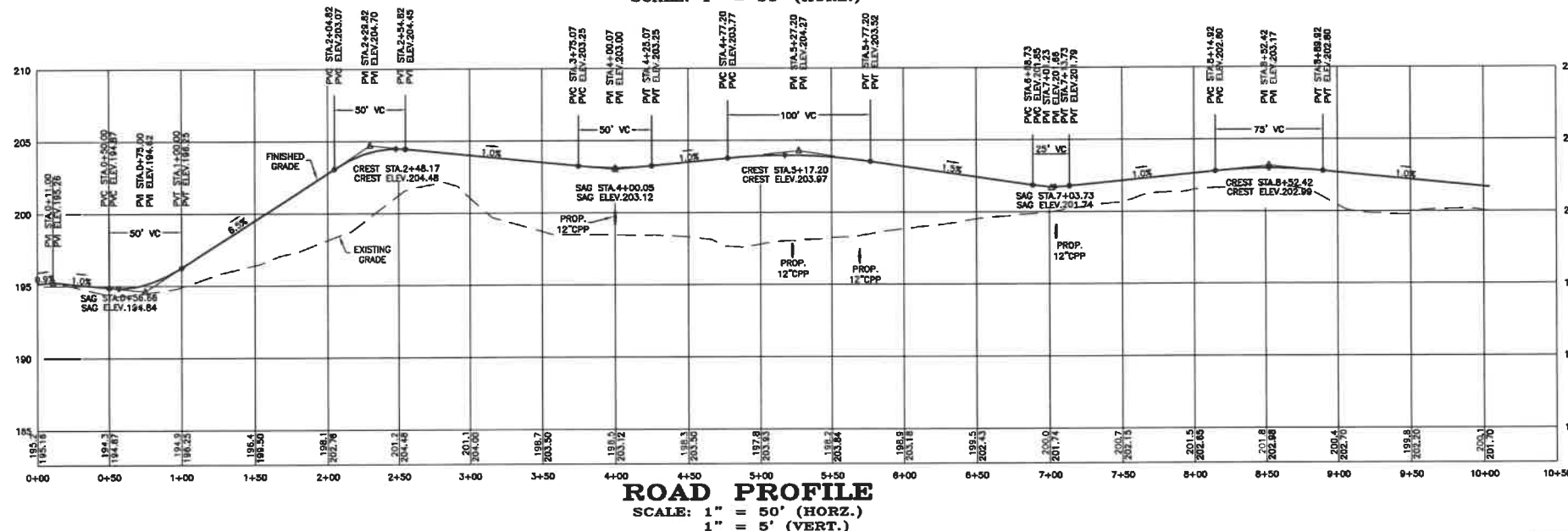
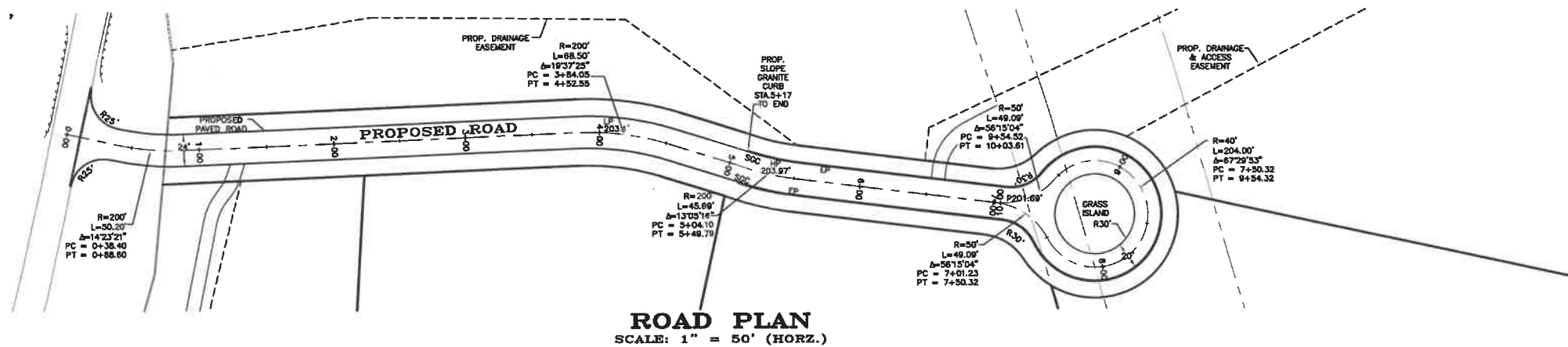
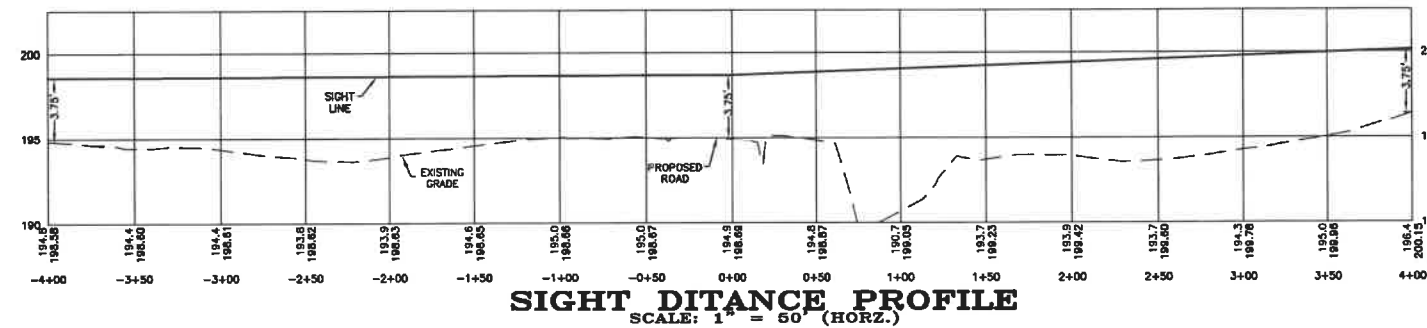
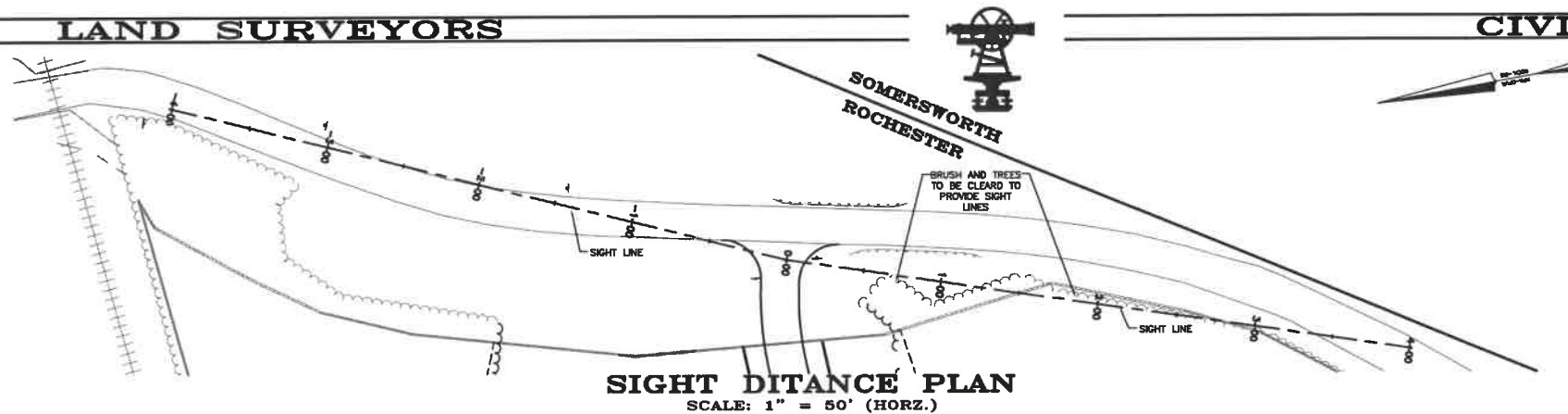
FILE NO. 249
PLAN NO. C-2829
DWG. NO. 20071/S-1
F.B. NO.

31 MOONEY STREET, ALTON, NH 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

2 CONTINENTAL BLVD., ROCHESTER, NH 603-335-3948

C-3



- NOTES:
- 1) ORIENTATION: HORIZONTAL DATUM IS NAD83 AND VERTICAL DATUM IS NAVD83.
 - 2) CONSTRUCTION WILL CONFORM TO THE FOLLOWING UTILITIES STANDARDS AND SPECIFICATIONS:
 - A) SUBSURFACE - NHDES
 - B) ELECTRIC DISTRIBUTION - EVERSOURCE
 - C) TELEPHONE - FAIRPOINT
 - D) CABLE - ATLANTIC BROADBAND
 - 3) ALL PROPOSED ON-SITE UTILITIES SHALL BE INSTALLED UNDERGROUND.

**ROAD PROFILE
& SIGHT DISTANCE**
TAX MAP 255, LOT 24-10
HAVEN HILL RD.
ROCHESTER, NH
PREPARED FOR:
LAPERLE FAMILY TRUST

FEBRUARY 2021

FILE NO. 249
PLAN NO. C-2829
DWG. NO. 20071/S-1
F.B. NO.

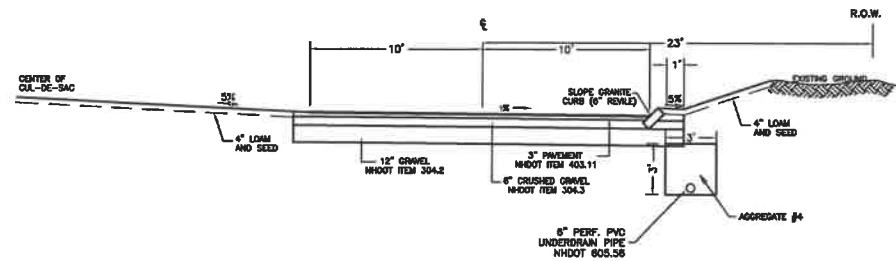
31 MOONEY STREET, ALTON, NH 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

2 CONTINENTAL BLVD., ROCHESTER, NH 603-335-3948

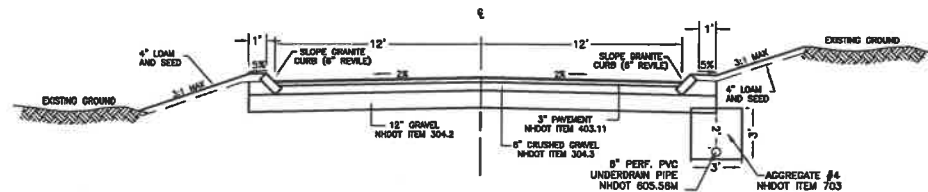
C-4

LAND SURVEYORS



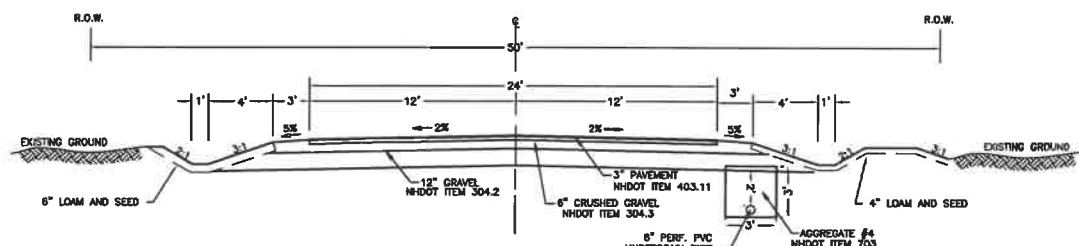
TYPICAL ROADWAY CROSS SECTION CUL-DE-SAC

SCALE: 1"=5'



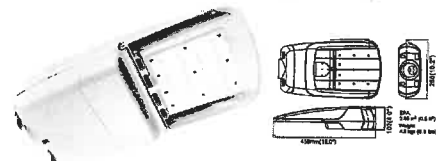
TYPICAL ROADWAY CROSS SECTION STA.5+10 TO STA.7+00

SCALE: 1"=5'



TYPICAL ROADWAY CROSS SECTION STA.0+00 TO 5+10

- CONSTRUCTION MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH NHDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND THE CITY OF ROCHESTER CONSTRUCTION SPECIFICATIONS.
- THE ENTIRE AREA OF THE STREET WITHIN ITS RIGHT-OF-WAY LINES AND ITS ADJOINING SLOPED AREAS SHALL BE CLEARED OF ALL STUMPS, BRUSH, ROOTS, ROCKS, BOULDERS, AND LIKE MATERIALS AND ALSO OF ALL TREES NOT INTENDED FOR PRESERVATION.
- CONTRACTOR IS TO CONTACT CITY ENGINEER, TO REVIEW CONDITION OF THE ROUGHED IN ROAD, 72 HOURS PRIOR TO THE INSTALLATION PAVEMENT.
- ALL BACK FILL IN TRENCHES AND FILL FOR THE ROAD BEDS SHALL BE COMPACTED TO 95% OPTIMUM DENSITY.
- UNDERDRAIN SHALL BE INSTALLED IN AREAS DEEMED NECESSARY AS DETERMINED BY SUBDRAINAGE CONDITIONS OR AS REQUIRED BY THE CITY ENGINEER. (NHDOT ITEM 605.56)
- AGGREGATE #4 (NHDOT ITEM 703) SHALL BE WRAPPED IN A SUPPORT MEMBRANE (FILTER FABRIC).
- UNDERDRAIN SHALL BE TIED IN TO THE PROPOSED DRAINAGE STRUCTURES.



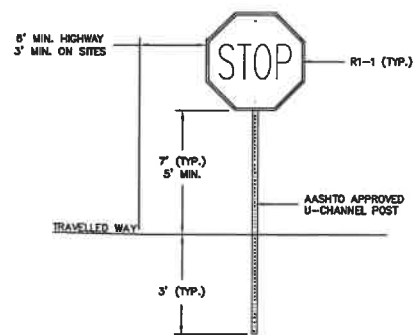
CITY OF ROCHESTER LIGHT FIXTURE

NOT TO SCALE

- NOTES:
- PROPOSED COBRA HEAD LIGHT SHALL BE MOUNTED ON THE PROPOSED UTILITY POLE AT THE ENTRANCE OF THE PROPOSED ROADWAY. COORDINATE INSTALLATION WITH EVERSOURCE UTILITY COMPANY.
 - THE PROPOSED COBRA HEAD STYLE LIGHT FIXTURE SHALL BE AN AFFINITY MOOLE S800-25W-30K-CCT-10V WITH WHITE HEADS.
 - CONTRACTOR SHALL CONTACT THE CITY OF ROCHESTER PUBLIC WORKS DEPARTMENT PRIOR TO ORDERING AND INSTALLING THE FIXTURE TO VERIFY THE FIXTURE SPECIFICATIONS.

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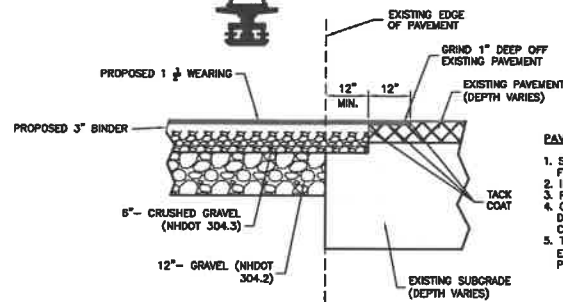
31 MOONEY STREET, ALTON, NH 603-875-3948



- NOTES:
- SIGN POST SHALL BE AASHTO APPROVED U-CHANNEL OR OTHER PER AASHTO "SPECIFICATIONS FOR STRUCTURAL SUPPORT OF HIGHWAY SIGNS, LUMINAIRES AND SIGNALS", LATEST EDITION.
 - SIGNS SHALL BE MOUNTED 7 FT FROM GROUND TO BOTTOM EDGE WHERE PARKING AND PARKING LOT MOVEMENTS TAKE PLACE.
 - SIGNS SHALL BE PLACED SO THAT NEAREST EDGE IS 6 FT. FROM TRAVELED WAY.

TYPICAL TRAFFIC SIGN

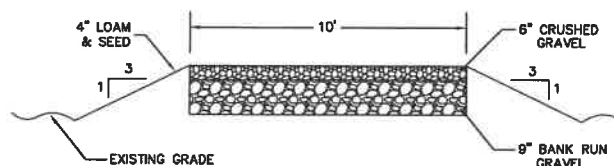
NOT TO SCALE



PAVEMENT SAWCUT NOTES:

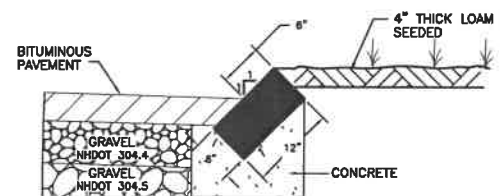
- SAWCUT THROUGH DEPTH OF PAVEMENT AT LEAST 1 FT. FROM EDGE OR GREATER IF REQUIRED.
- INSTALL AND COMPACT CRUSHED GRAVEL TO GRADE.
- PLACE BINDER COURSE.
- GRIND OR SAWCUT EXISTING PAVEMENT 1 FT. WIDE TO A DEPTH NECESSARY TO PROPERLY MATCH NEW WEARING COURSE PAVEMENT.
- TACK COAT ALL EXISTING PAVEMENT SURFACES WITH EMULSIFIED ASPHALT (MS-1) PRIOR TO PLACING NEW PAVEMENT.

TYPICAL PAVEMENT SAWCUT DETAIL



MAINTENANCE PATH CROSS-SECTION

NOT TO SCALE



GRANITE SLOPE CURB DETAIL

NOT TO SCALE

NOT TO SCALE

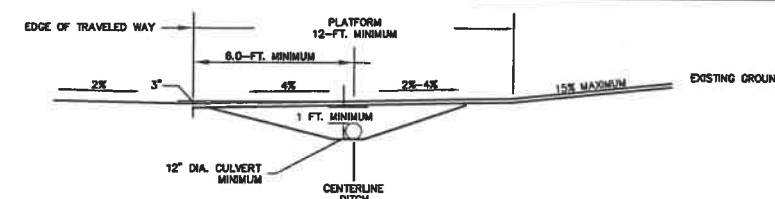
ITEM NO.	SIGN SIZE		TEXT	NO. SIGNS REQ'D
	HEIGHT	WIDTH		
R1-1	30"	30"	STOP	1
R4-7b	30"	24"	KEEP RIGHT	1
W14-1	30"	30"	DEAD END	1
W2-2	30"	30"	T	1
ROCHESTER STREET SIGN	9" HIGH (GREEN) W/ 6" WHITE LETTERS		STREET NAME	1
TEMPORARY ROCHESTER STREET SIGN	6" HIGH (GREEN) W/ 4" WHITE LETTERS & 9" HIGH (GREEN) W/ 6" WHITE LETTERS		PRIVATE STREET NAME	1

- NOTES:
- ALL SIGNS SHALL BE PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.

SIGN SCHEDULE

NOT TO SCALE

CIVIL ENGINEERS

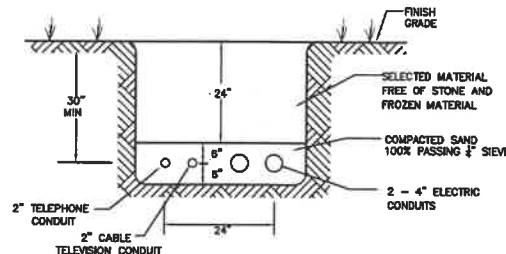


TYPICAL DRIVE IN CUT SECTION

NOT TO SCALE

DRIVEWAY NOTES:

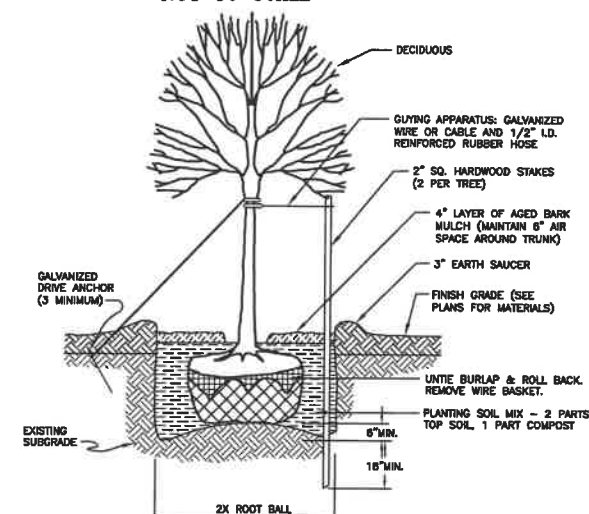
- THE OWNER OF THE LOT WILL BE RESPONSIBLE FOR OBTAINING A DRIVEWAY PERMIT FROM ROCHESTER PUBLIC WORKS.
- DRIVEWAY CULVERTS SHALL BE 12" MIN. AND SHALL EXTEND 3 FEET BEYOND BOTH SIDES OF THE DRIVEWAY UNLESS CONCRETE HEADWALLS ARE PROVIDED.
- GRADES BEYOND PLATFORM SHALL NOT EXCEED 15% NOR SHALL THEY BE LESS THAN 0.5%.
- THE ALGEBRAIC DIFFERENCE BETWEEN TWO ADJACENT GRADE CHANGES SHOULD NOT EXCEED 10%.
- DITCHES ARE RECOMMENDED FOR UNCURBED DRIVEWAYS IN CUT SLOPES.
- USE RUBBLE MASONRY OR PRECAST HEADWALLS OR SLOPE END SECTIONS ON CULVERT PIPES.



TELEPHONE AND ELECTRICAL COMPANY

TRENCH CROSS SECTION

NOT TO SCALE

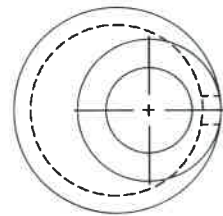


TREE PLANTING DETAIL

NOT TO SCALE

CONSTRUCTION DETAILS
TAX MAP 255, LOT 24-10
HAVEN HILL RD.
ROCHESTER, NH

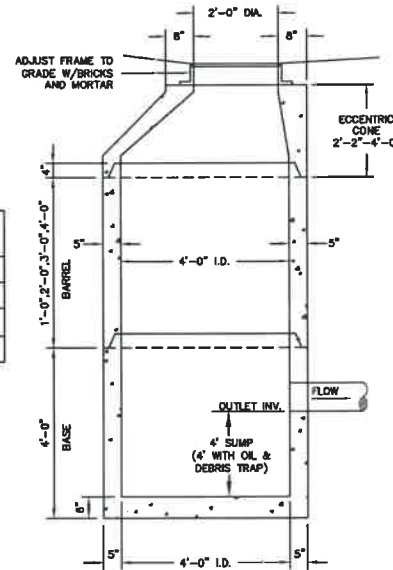
PREPARED FOR:
LAPERLE FAMILY TRUST
FEBRUARY 2021



PLAN VIEW

DRAIN LINE DIAMETER	SUM OF DRAIN LINE DIAMETER	CATCH BASIN DIAMETER
18" TO 18"	LESS THAN 54"	4'
24" TO 27"	LESS THAN 72"	5'
30" TO 33"	LESS THAN 90"	6'
36" & LARGER	GREATER THAN 90"	REFER TO THE STANDARD

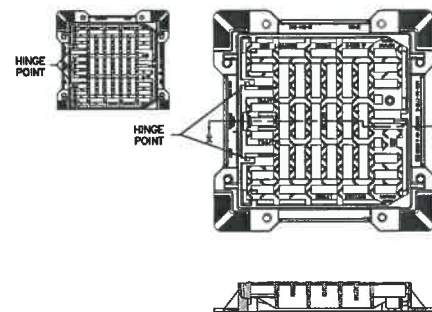
- NOTES:
1. CONCRETE: 4,000 PSI AFTER 28 DAYS.
 2. REINFORCING: SHALL BE PROVIDED FOR H-20 LOADING.
 3. SHUTLAP JOINTS SEALED WITH 1 STRIP OF BUTYL RUBBER SEALANT.
 4. PIPE OPENINGS CAST IN AS REQUIRED.
 5. RISER HEIGHT VARIES 1', 2', 3' OR 4' TO REACH DESIRED DEPTH.
 6. PIPE CONNECTIONS SHALL BE MORTARED.
 7. PRECAST SECTIONS SHALL CONFORM TO ASTM C-478.
 8. SEE SLAB TOP DETAIL FOR STRUCTURES REQUIRING SLAB TOPS, I.E. DOUBLE GRATE AND FRAME STRUCTURES.



SECTION VIEW

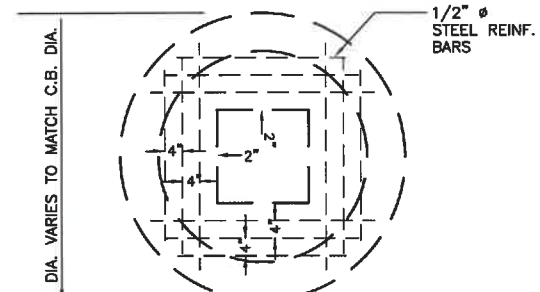
PRE-CAST REINFORCED CATCH BASIN

NOT TO SCALE

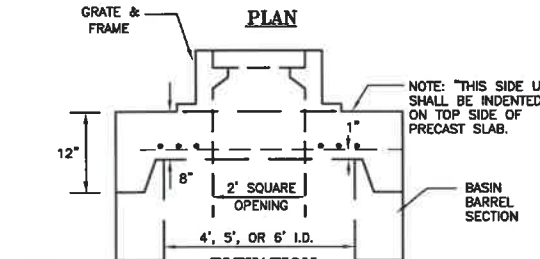


24" REXUS DI CB F & GRATE 62114 CB3R

NOT TO SCALE



PLAN

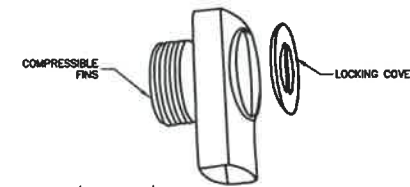


ELEVATION

- NOTE:
1. SLAB TO BE PLACED IN LIEU OF TAPERED SECTION WHERE PIPE WOULD OTHERWISE ENTER INTO TAPERED SECTION OF THE STRUCTURE AND WHERE PERMITTED.
 2. SLAB TOP MAY BE CASTED WITH MINIMUM OR NO INTERLOCKING CHANNEL. HOWEVER, THE CONTRACTOR MUST ENSURE THE SLAB TOP IS FIRMLY ATTACHED TO THE STRUCTURE.

REINFORCED CONCRETE SLAB COVER

NOT TO SCALE



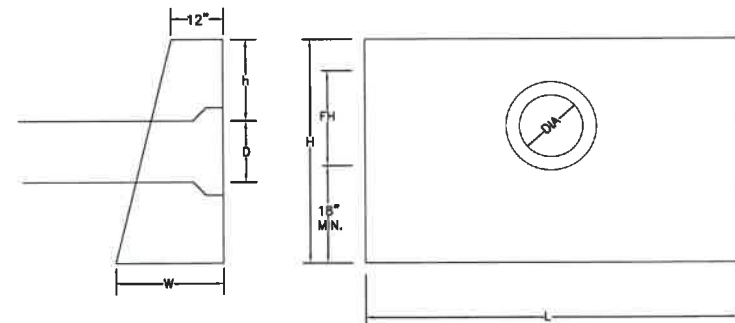
SIDE VIEW

FRONT VIEW

**ELIMINATOR CATCH BASIN
OIL AND DEBRIS TRAP DETAIL**

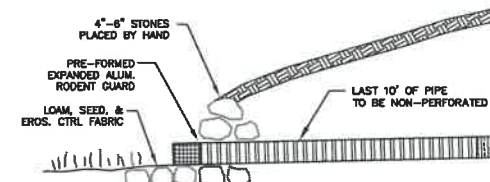
NOT TO SCALE

- NOTES:
1. HOOD SHALL BE "THE ELIMINATOR" OIL & FLOATING DEBRIS TRAP AS MANUFACTURED BY GROUND WATER RESCUE, INC., QUINCY, MA, TEL. 617-773-1128 ON THE WEB @ WWW.KLEANSTREAM.COM
 2. AVAILABLE IN 8", 10", 12", 15" AND 18" DIAMETERS.



PRE-CAST HEADWALL

DIA.	HEADWALL LENGTH L	HEADWALL HEIGHT H	FILL HEIGHT FH	PIPE COVER h	HEADWALL BTM HEIGHT W
12"	4'3"	3'9"	1'1"	1'3"	2'
15"	6'	4'3"	1'7"	1'6"	2'1"

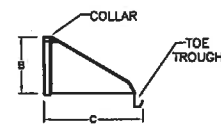


TYPICAL UNDERDRAIN OUTLET

NOT TO SCALE

PIPE DIAMETERS	A	B	C	D
10" / 12"	42	14.5	33	6
15"	41	10	34	6
18"	49	22	43	6

TOP VIEW

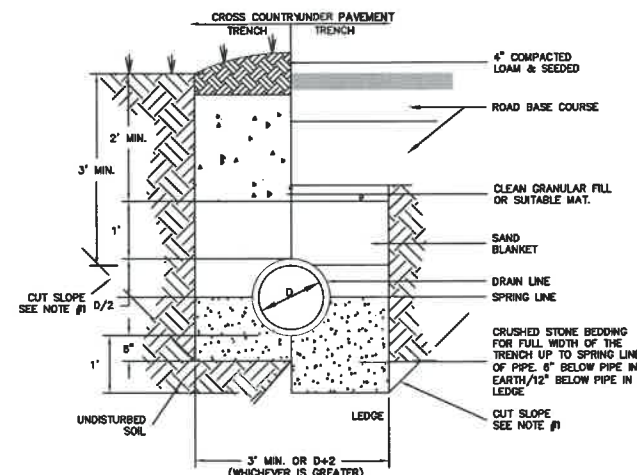


SIDE VIEW

FRONT VIEW

HDPE FLAIED END SECTION DETAIL

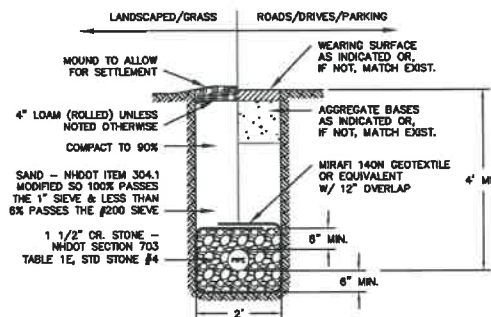
NOT TO SCALE



- NOTES:
1. PIPES MAY BE INSTALLED BY EXCAVATING AN OPEN TRENCH WITH SIDE SLOPES OF 1:1 MAXIMUM TO A DEPTH OF 4'-7'. INSTALLATIONS DEEPER THAN 4'-7' REQUIRE THE USE OF A TRENCH BOX.
 2. PIPE MATERIALS SHALL BE AS SPECIFIED ON THE DESIGN PLAN.
 3. SAND BLANKET MAY BE OMITTED FOR REINFORCED CONCRETE PIPE.

**DRAINAGE PIPE
TRENCH INSTALLATION DETAIL**

NOT TO SCALE



- NOTES:
1. PIPE SHALL BE HDPE CORRUGATED TUBING (SEE PLAN FOR SIZE) COMPLYING WITH AASHTO M252 W/ CLASS 2 PERFORATIONS (N-HDOT SECTION 805.2.4.1).
 2. UNLESS NOTED OTHERWISE, ALL SOIL AND AGGREGATE MATERIALS (EXCEPT LOAM) TO BE COMPACTED TO 95% BASED ON ITS OPTIMUM DENSITY PER AASHTO T-99.

TYPICAL UNDERDRAIN

NOT TO SCALE

DRAINAGE DETAILS
TAX MAP 255, LOT 24-10
HAVEN HILL RD.
ROCHESTER, NH
PREPARED FOR:
LAPERLE FAMILY TRUST
FEBRUARY 2021

FILE NO. 249
PLAN NO. C-2829
DWC. NO. 20071/S-1
F.B. NO.

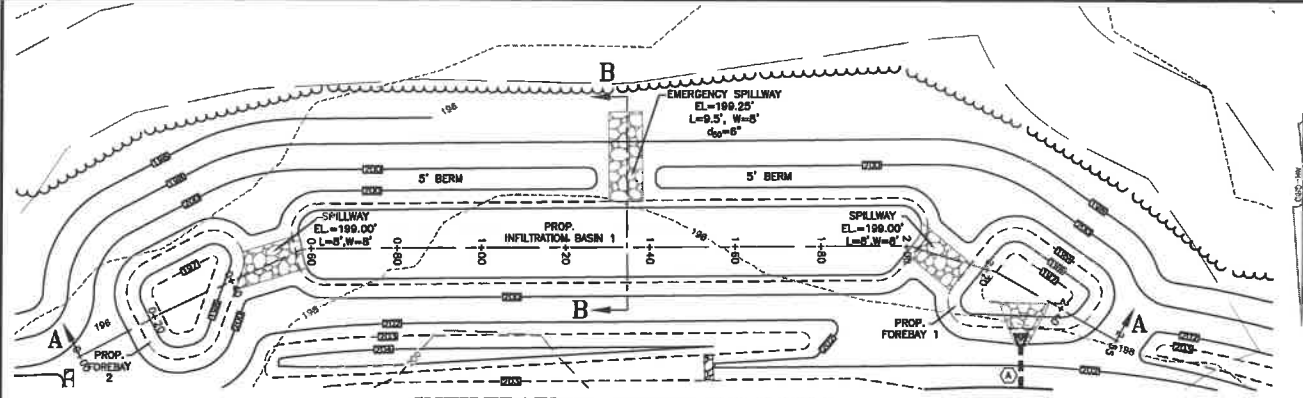
31 MOONEY STREET, ALTON, NH 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

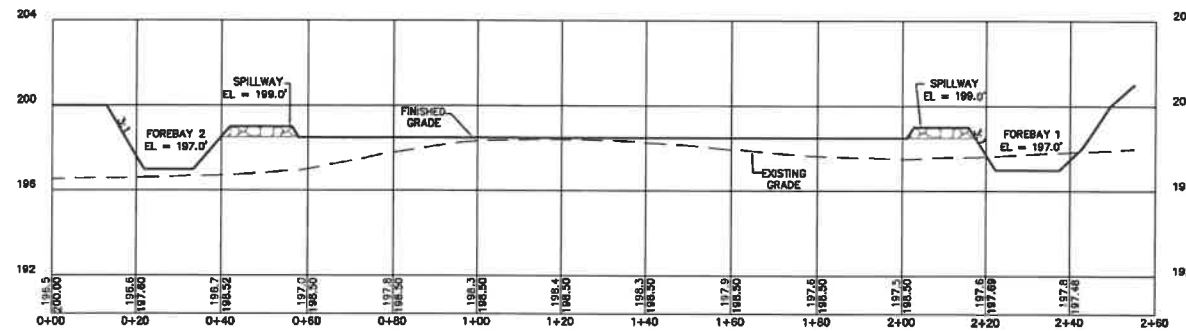
2 CONTINENTAL BLVD., ROCHESTER, NH 603-335-3948

C-6

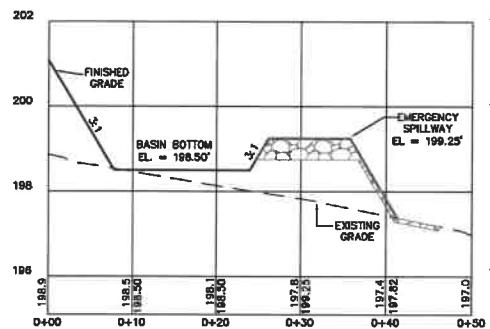
LAND SURVEYORS



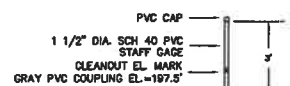
INFILTRATION BASIN #1 PLAN
1" = 20'



INFILTRATION BASIN #1 A-A
1" = 20' (HORZ.) & 1" = 4' (VERT.)



INFILTRATION BASIN #1 B-B
1" = 10' (HORZ.) & 1" = 2' (VERT.)



**SEDIMENT FOREBAY
GAUGE DETAIL**
NOT TO SCALE

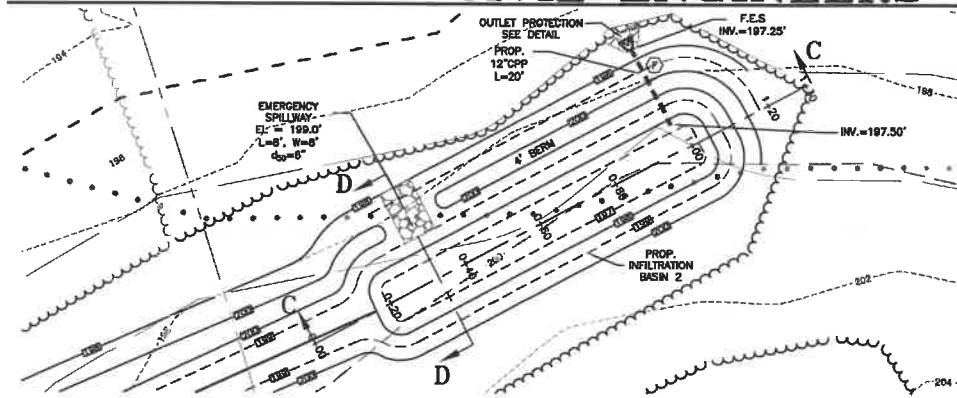
NOTES:
1. STAFF GAGE TO BE SCHEDULE 40 WHITE PVC DRIVEN OR PLACED IN GROUND A MINIMUM 3'-FT.
2. CLEANOUT MARK ON STAFF TO BE GRAY PVC COUPLING SET 6-INCHES FROM BOTTOM OF BASIN.

FILE NO. 249
PLAN NO. C-2829
DWG. NO. 20071/S-1
F.B. NO.

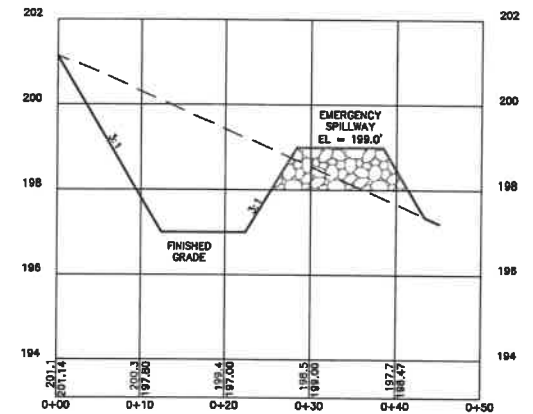
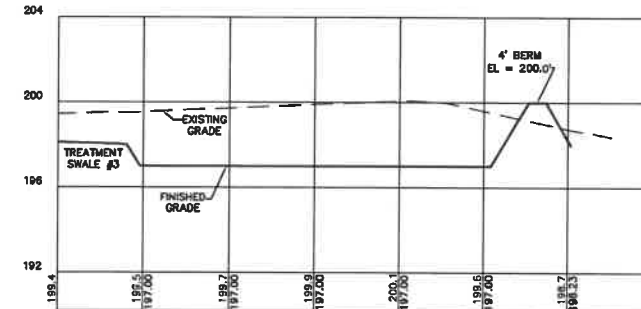
31 MOONEY STREET, ALTON, NH 603-875-3948



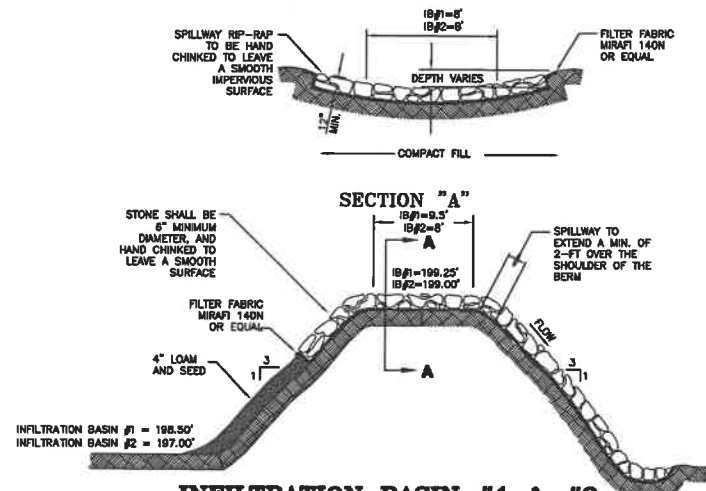
CIVIL ENGINEERS



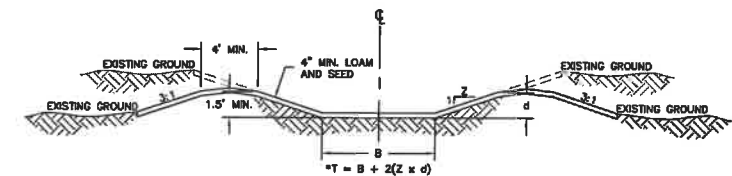
INFILTRATION BASIN #2 C-C
1" = 20' (HORZ.) & 1" = 4' (VERT.)



INFILTRATION BASIN #2 D-D
1" = 10' (HORZ.) & 1" = 2' (VERT.)



**INFILTRATION BASIN #1 & #2
EMERGENCY SPILLWAY DETAIL**
NOT TO SCALE



- MAINTENANCE NOTES:**
1. THE SWALE(S) SHALL BE MAINTAINED WITH THE REST OF THE SITES LAWN AREAS TO PROMOTE HEALTHY GROWTH AND PREVENT THE ENCROACHMENT OF WEEDS AND WOODY VEGETATION. DO NOT MOW GRASS IN SWALE(S) LESS THAN 4" HIGH. THIS WILL REDUCE THE SWALES FILTERING ABILITY.
 2. THE SWALE(S) SHOULD BE FERTILIZED ON AN AS NECESSARY BASIS, TO KEEP THE GRASS HEALTHY. OVER FERTILIZATION COULD RESULT IN THE SWALE(S) BECOMING A SOURCE OF POLLUTION TO THE SURROUNDING WETLAND AREAS.
 3. THE SWALE(S) SHOULD BE INSPECTED PERIODICALLY AND AFTER EVERY MAJOR STORM. RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND RE-VEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION.

SWALE DIMENSION TABLE				
LOCATION	B	d	Z	LENGTH
TS1	5'	2.0'	3	120'
TS2	4'	2.0'	3	150'
TS3	4'	2.0'	3	160'

VEGETATED TREATMENT SWALE DETAIL
NOT TO SCALE

**INFILTRATION BASIN &
TREATMENT SWALE PROFILE
& DETAILS**
TAX MAP 255, LOT 24-10
HAVEN HILL RD.
ROCHESTER, NH
PREPARED FOR:
LAPERLE FAMILY TRUST
FEBRUARY 2021

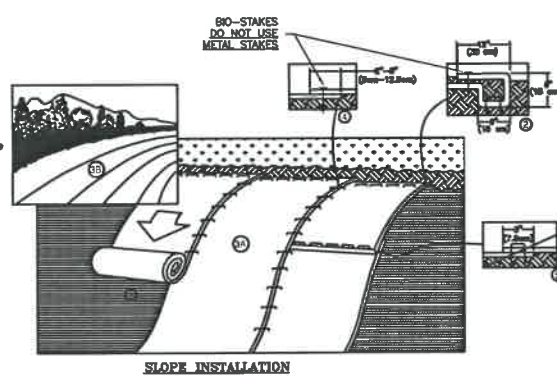
NORWAY PLAINS ASSOCIATES, INC.

2 CONTINENTAL BLVD., ROCHESTER, NH 603-335-3948

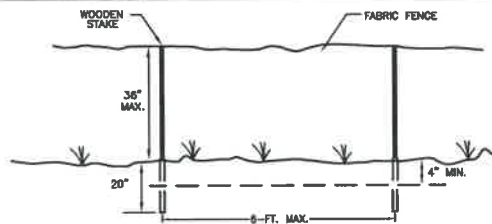
C-7



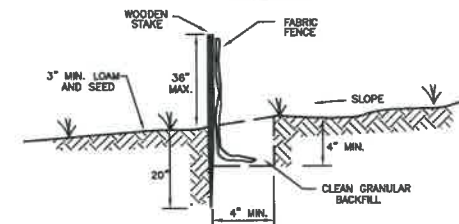
NORTH AMERICAN GREEN
EROSION CONTROL PRODUCTS
Erosion Control Solutions
14949 HIGHWAY 41 NORTH
DANVILLE, VA 27025
800-775-2040
www.nagreen.com



SLOPE INSTALLATION



PROFILE



CROSS-SECTION

MAINTENANCE REQUIREMENTS:

- FENCES SHALL BE INSPECTED AND MAINTAINED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALLS.
- SEDIMENT DEPOSITION SHALL BE REMOVED, AT A MINIMUM, WHEN DEPOSITION ACCUMULATES TO ONE-HALF THE HEIGHT OF THE FENCE, AND MOVED TO AN APPROPRIATE LOCATION SO THE SEDIMENT IS NOT REDIRECTED BACK TOWARD THE SILT FENCE.
- SILT FENCES SHALL BE REPAIRED IMMEDIATELY IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM.
- SHALL THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
- ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEED.
- IF THERE IS EVIDENCE OF END FLOW ON PROPERLY INSTALLED BARRIERS, EXTEND BARRIERS UPHILL OR CONSIDER REPLACING THEM WITH OTHER MEASURES, SUCH AS TEMPORARY DIVERSIONS AND SEDIMENT TRAPS.
- SILT FENCES HAVE A USEFUL LIFE OF ONE SEASON. ON LONGER CONSTRUCTION PROJECTS, SILT FENCE SHALL BE REPAIRED PERIODICALLY AS REQUIRED TO MAINTAIN EFFECTIVENESS.

CONSTRUCTION SPECIFICATIONS:

- FENCES SHALL BE USED IN AREAS WHERE EROSION WILL OCCUR ONLY IN THE FORM OF SHEET EROSION AND THERE IS NO CONCENTRATION OF WATER IN A CHANNEL OR DRAINAGE WAY ABOVE THE FENCE. SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.
- THE MAXIMUM CONTRIBUTING DRAINAGE AREA ABOVE THE FENCE SHALL BE LESS THAN 1 ACRE PER 100 LINEAR FEET OF FENCE.
- THE MAXIMUM LENGTH OF SLOPE ABOVE THE FENCE SHALL BE 100 FEET.
- THE MAXIMUM SLOPE ABOVE THE FENCE SHALL BE 2:1.
- FENCES SHALL BE INSTALLED FOLLOWING THE CONTOUR OF THE LAND AS CLOSELY AS POSSIBLE, AND
- A. THE EDGES OF THE FENCE SHALL BE FLARED UPSLOPE.
- B. THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 4 INCHES IN DEPTH AND INCHES IN WIDTH IN A TRENCH EXCAVATED INTO THE GROUND, OR IF SITE CONDITIONS INCLUDE FROZEN GROUND, LEDGE, OR THE PRESENCE OF HEAVY ROOTS, THE BASE OF THE FABRIC SHALL BE EMBEDDED WITH A MINIMUM THICKNESS OF 8 INCHES OF 3/4-INCH STONE.
- C. THE SOIL SHALL BE COMPACTED OVER THE EMBEDDED FABRIC.
- D. SUPPORT POSTS SHALL BE SIZED AND ANCHORED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS WITH MAXIMUM POST SPACING OF 8 FEET.
- E. ADDITIONAL SECTIONS OF THE FENCE SHALL BE OVERLAPPED BY A MINIMUM OF 8 INCHES (24 INCHES IS PREFERRED), FOLDED AND STAPLED TO A SUPPORT POST. IF METAL POSTS ARE USED, FABRIC SHALL BE WIRE-TIED DIRECTLY TO THE POSTS WITH THREE DIAGONAL TIES.
- SILT FENCING SHALL NOT BE STAPLED OR Nailed TO TREES.
- THE FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER.
- THE FILTER FABRIC SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 DEGREES FAHRENHEIT TO 120 DEGREES FAHRENHEIT.
- POSTS FOR SILT FENCES SHALL BE EITHER 4-INCH DIAMETER WOOD OR 1.33 POUNDS PER LINEAR FOOT STEEL WITH A MINIMUM LENGTH OF 5 FEET. STEEL POSTS SHALL HAVE PROJECTIONS FOR FASTENING WIRE TO THEM. POSTS SHALL BE PLACED ON THE DOWN SLOPE SIDE OF THE FABRIC.
- THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES AS HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.
- THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPICED TOGETHER ONLY AT SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND SECURELY SEALED.
- A MANUFACTURED SILT FENCE SYSTEM WITH INTEGRAL POSTS MAY BE USED.
- POST SPACING SHALL NOT EXCEED 8 FEET.
- A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 4 INCHES DEEP ALONG THE LINE OF POSTS AND UP GRADIENT FROM THE BARRIER.
- THE STANDARD STRENGTH OF FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE POST, AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
- SILT FENCE MAY BE INSTALLED BY "SLUICING" USING MECHANICAL EQUIPMENT SPECIFICALLY DESIGNED FOR THIS PROCEDURE. THE SLUICING METHOD USES AN IMPLEMANT TOWED BEHIND A TRACTOR TO "PUSH" OR SLICE THE SILT FENCE MATERIAL INTO THE SOIL. THE SLUICING METHOD MINIMALLY DISRUPTS THE SOIL UPWARD AND SLIGHTLY DISPLACES THE SOIL, MAINTAINING THE SOIL'S PROFILE AND CREATING AN OPTIMAL CONDITION FOR SUBSEQUENT MECHANICAL COMPACTION.
- SILT FENCES SHALL BE INSTALLED WITH "SABLES" OR "J-HOOKS" TO REDUCE THE DRAINAGE AREA THAT ANY SEGMENT WILL IMPOUND.
- THE EDGES OF THE FENCE SHALL BE TURNED UPHILL.
- SILT FENCES PLACED AT THE TOE OF A SLOPE SHALL BE SET AT LEAST 8 FEET FROM THE TOE TO ALLOW SPACE FOR SHALLOW PONDING AND TO ALLOW FOR MAINTENANCE ACCESS WITHOUT DISTURBING THE SLOPE.
- SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.

SILTATION CONTROL FENCE DETAIL

NOT TO SCALE

TEMPORARY VEGETATION SEEDING RECOMMENDATIONS

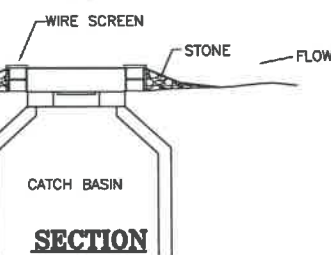
SPECIES	PER ACRE BUREL (BU) OR POUNDS (LBS.)	PER 1,000-SQ FT	REMARKS
WINTER RYE	2.5 BU OR 112 LBS.	2.5 LBS.	BEST FOR FALL SEEDING. SEED FROM AUGUST 15 TO SEPTEMBER 15 FOR BEST COVER. SEED TO A DEPTH OF 1 INCH.
OATS	2.5 BU OR 80 LBS.	2.0 LBS.	BEST FOR SPRING SEEDING. SEED NO LATER THAN MAY 15 FOR SUMMER PROTECTION. SEED TO A DEPTH OF 1 INCH.
ANNUAL RYE GRASS	40 LBS.	1.0 LB.	GROWS QUICKLY, BUT IS OF SHORT DURATION. USE WHERE APPEARANCES ARE IMPORTANT. SEED EARLY SPRING AND/OR BETWEEN AUGUST 15 AND SEPTEMBER 15. COVER THE SEED WITH NO MORE THAN 0.25 INCH OF SOIL.
PERENNIAL RYE GRASS	30 LBS.	0.7 LBS.	BEST FOR FALL SEEDING. SEED FROM AUGUST 15 TO SEPTEMBER 15 FOR BEST COVER. SEED TO A DEPTH OF 1 INCH.

SOURCES:

- NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 3, TABLE 4-1
- MINNICK, E.L. AND H.T. MARSHALL, (AUGUST 1992)



PLAN



SECTION

BLOCK AND GRAVEL DROP INLET SEDIMENT FILTER

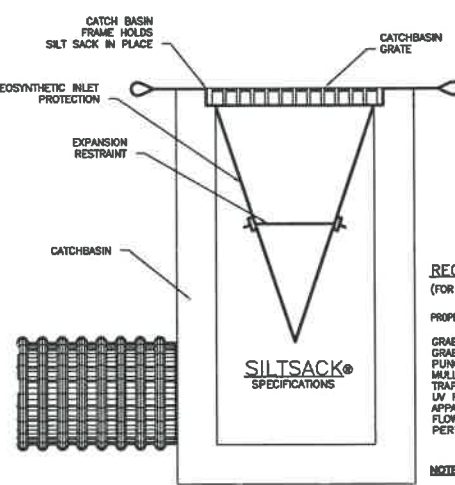
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS:

- PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDE IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET, WITH THE ENDS OF ADJACENT BLOCKS ABUTTING. THE HEIGHT OF THE BARRIER ON DESIGN NEEDS, BY STACKING COMBINATIONS OF 4-INCH, 8-INCH AND 12-INCH WIDE BLOCKS. THE BARRIER OF BLOCKS SHALL BE AT LEAST 12 INCHES HIGH AND NO GREATER THAN 24 INCHES HIGH.
- WIRE MESH SHALL BE PLACED OVER THE OUTSIDE VERTICAL FACE (WEBBING) OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED.
- STONE SHALL BE PILED AGAINST THE WIRE TO THE TOP OF THE BLOCK BARRIER, AS SHOWN IN FIGURE 16.7. STONE GRADATION SHALL BE WELL GRADED WITH THE MAXIMUM STONE SIZE OF 8 INCHES AND MINIMUM STONE SIZE OF 1 INCH.
- IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCKS, CLEANED AND REPLACED.

MAINTENANCE:

- THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
- SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
- STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.



REGULAR FLOW SILTSACK®

(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4832	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4832	20 %
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3788	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4335	80 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4481	0.55 SEC -1
PERMITTIVITY	ASTM D-4481	0.55 SEC -1

NOTES:

- GEOSYNTHETIC SEDIMENT FILTER TRAP SHALL BE "REGULAR FLOW SILTSACK" OR APPROVED EQUAL. SPECIFICATIONS FOR SILTSACK® ARE DETAILED.
- FILTER TRAPS SHALL BE INSPECTED AFTER EVERY RAIN EVENT OF 0.25" OR GREATER AND SEDIMENTS SHALL BE REMOVED FROM TRAP WHEN SEDIMENT HAS REACHED TWO THIRDS OF THE DEPTH OF THE TRAP, OR IF PONDING OF WATER AT SURFACE BEGINS TO OCCUR. DO NOT PUNCTURE FILTER TRAP TO MITIGATE PONDING.
- INSTALL SILT SACKS IN CATCH BASIN UPON INSTALLATION OF STRUCTURE.

CATCH BASIN GEOSYNTHETIC SEDIMENT TRAP

NOT TO SCALE



TEMPORARY VEGETATION:

SPECIFICATIONS:

SITE PREPARATION:

- INSTALLED EROSION AND SEDIMENT CONTROL MEASURES SUCH AS SILTATION BARRIERS, DIVERSIONS, AND SEDIMENT TRAPS.
- GRADE AS NEEDED FOR THE ACCESS OF EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING.
- RUNOFF SHALL BE DIVERTED FROM THE SEEDBED AREA.
- ON SLOPES 4:1 OR STEEPER, THE FINAL PREPARATION SHALL INCLUDE CREATING HORIZONTAL GROOVES PERPENDICULAR TO THE DIRECTION OF THE SLOPE TO CATCH SEED AND REDUCE RUNOFF.

SEEDING PREPARATION:

- STONES AND TRASH SHALL BE REMOVED SO AS NOT TO INTERFERE WITH THE SEEDING AREA.
- WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME, AND SEED.
- IF APPLICABLE, FERTILIZER AND ORGANIC SOIL AMENDMENTS SHALL BE APPLIED DURING THE GROWING SEASON.
- APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. FERTILIZER SHALL BE RESTRICTED TO LIME, WOOD ASH OR LOW PHOSPHATE AND SLOW RELEASE NITROGEN VARIETIES, UNLESS A SOIL TEST WARRANTS OTHERWISE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TUNING IS CRITICAL, FERTILIZER AND LIMESTONE MAY BE APPLIED AT THE FOLLOWING RATES:

LIMESTONE APPLICATION RATE = 3 TONS/ACRE (130 LB./1,000-SQ-FT)

*EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE

FERTILIZER APPLICATION RATE = 870 LB./ACRE (20 LB./1,000-SQ-FT)

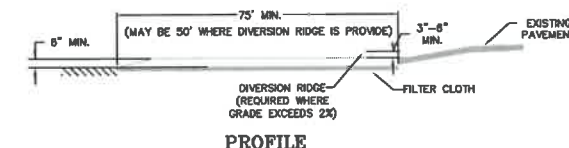
*LOW PHOSPHATE FERTILIZER (8-0-4) OR EQUIVALENT

SEEDING:

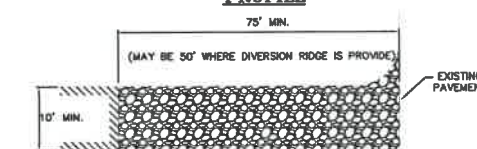
- APPLY SEED UNIFORMLY BY HAND, CYCLOM SEEDER, DRILL CULTIPACKER TYPE SEEDER OR HYDRO SEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM 1/4 TO 1/2 INCH. HYDROSEEDING THAT INCLUDES MULCH MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
- TEMPORARY SEED SHALL TYPICALLY OCCUR PRIOR TO SEPTEMBER 15.
- AREAS SEEDING BETWEEN MAY 15 AND AUGUST 15 SHALL BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE DESCRIBED IN THE NHSSA, VOL. 3.
- VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA SHALL BE ESTABLISHED BY OCTOBER 15. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT OTHER TEMPORARY STABILIZATION MEASURES FOR OVER WINTER PROTECTION.

MAINTENANCE REQUIREMENTS:

- TEMPORARY SEEDING SHALL BE INSPECTED WEEKLY AFTER ANY RAINFALL EXCEEDING 1/2 INCH IN 24 HOURS ON ACTIVE CONSTRUCTION SITES. TEMPORARY SEEDING SHALL BE INSPECTED JUST PRIOR TO SEPTEMBER 15, TO ASCERTAIN WHETHER ADDITIONAL SEEDING IS REQUIRED TO PROVIDE STABILIZATION OVER THE WINTER PERIOD.
- BASED ON INSPECTION, AREAS SHALL BE RESEED TO ACHIEVE FULL STABILIZATION OF EXPOSED SOILS. IF IT IS TOO LATE IN THE PLANTING SEASON TO APPLY ADDITIONAL SEED, THEN OTHER TEMPORARY STABILIZATION MEASURES SHALL BE IMPLEMENTED.
- IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND AREAS SHALL BE RESEED. WITH OTHER TEMPORARY MEASURES (E.G. MULCH, ETC.) USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.



PROFILE



PLAN

TEMPORARY CONSTRUCTION EXIT

NOT TO SCALE

MAINTENANCE REQUIREMENTS:

- WHEN THE CONTROL PAD BECOMES INEFFECTIVE, THE STONE SHALL BE REMOVED ALONG WITH THE COLLECTED SOIL MATERIAL, REGRADED ON SITE, AND STABILIZED. THE ENTRANCE SHALL THEN BE RECONSTRUCTED.
- THE CONTRACTOR SHALL SWEEP THE PAVEMENT AT EXITS WHENEVER SOIL MATERIALS ARE TRACKED ONTO THE ADJACENT PAVEMENT OR TRAVELED WAY.
- WHEN WHEEL WASHING IS REQUIRED, IT SHALL BE CONDUCTED ON AN AREA STABILIZED WITH AGGREGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT-TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS.

CONSTRUCTION SPECIFICATIONS:

- THE MINIMUM STONE USED SHALL BE 3-INCH CRUSHED STONE.
- THE MINIMUM LENGTH OF THE PAD SHALL BE 75 FEET.
- THE PAD SHALL BE THE FULL WIDTH OF CONSTRUCTION ACCESS ROAD OR 10 FEET, WHICHEVER IS GREATER.
- THE PAD SHALL SLOPE AWAY FROM THE EXISTING ROADWAY.
- THE PAD SHALL BE AT LEAST 8 INCHES THICK.
- THE GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE STONE PAD AND THE EARTH SURFACE BELOW THE PAD.
- THE PAD SHALL BE MAINTAINED OR REPLACED WHEN MUD AND SOIL PARTICLES CLOG THE VOIDS IN THE STONE SUCH THAT MUD AND SOIL PARTICLES ARE TRACKED OFF-SITE.
- NATURAL DRAINAGE THAT CROSSES THE LOCATION OF THE STONE PAD SHALL BE INTERCEPTED AND PIPED BENEATH THE PAD, AS NECESSARY, WITH SUITABLE OUTLET PROTECTION.

TEMPORARY EROSION AND SEDIMENTATION CONTROL DETAILS

TAX MAP 255, LOT 24-10
HAVEN HILL RD.

ROCHESTER, NH

PREPARED FOR:

LAPERLE FAMILY TRUST

FEBRUARY 2021

2 CONTINENTAL BLVD., ROCHESTER, NH 603-335-3948

C-8

STONE CHECK DAM INSTALLATION DETAIL

NOT TO SCALE

FILE NO. 249
PLAN NO. C-2829
DWC. NO. 20071/S-1
F.B. NO.

31 MOONEY STREET, ALTON, NH 803-875-3948

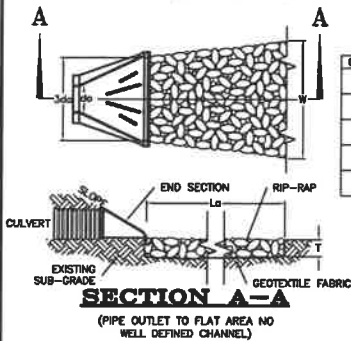
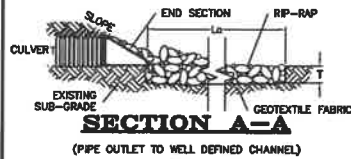
NORWAY PLAINS ASSOCIATES, INC.



RIP-RAP GRADATION

d50 = 3"

% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE (INCHES)
100	3 TO 6
85	4 TO 5
50	3 TO 3
15	1 TO 2



APRON DIMENSION TABLE

OUTLET PROT. #	PIPE OUTLET	W ₀	W	L ₀	T	d50
PIPE A	12" CPP	3'	11'	8'	18"	6"
PIPE B	12" CPP	3'	12'	9'	8"	3"
PIPE C	12" CPP	3'	11'	8'	8"	3"
PIPE E	12" CPP	3'	7'	10'	8"	3"
PIPE F	12" CPP	3'	12'	9'	8"	3"

- NOTES:
1. ALL PIPE CULVERTS SHALL HAVE END SECTIONS OR HEADWALLS. END SECTION MATERIAL AND MANUFACTURER SHALL MATCH THAT OF THE PIPE CULVERT.
 2. THE LARGEST RIP-RAP SIZE DETERMINED DURING HYDROLOGIC ANALYSIS HAS BEEN USED FOR ALL OUTLETS FOR ECONOMY AND SIMPLICITY.
 3. APRON LENGTHS, WIDTHS AND THICKNESSES HAVE BEEN ROUNDED UP TO WHOLE NUMBERS FOR EASE OF CONSTRUCTION.

CONSTRUCTION SPECIFICATIONS:

1. PREPARE THE SUB-GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP-RAP TO THE GRADES SHOWN ON THE PLANS.
2. MINIMUM 6" SAND/GRAVEL BEDDING OR GEOTEXTILE FABRIC REQUIRED UNDER ALL ROCK RIP-RAP.
3. THE ROCK OR GRAVEL USED FOR FILTER OR RIP-RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
4. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF ROCK RIP-RAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO (2) PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
5. STONE FOR THE RIP-RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.
6. RIP-RAP SIZE CHOSEN FOR THE WORST CASE OF ALL OUTLETS. ALL RIP-RAP USED FOR PIPE OUTLET PROTECTION WILL HAVE THE SAME GRADATION AND THICKNESS.

MAINTENANCE NOTES:

1. OUTLETS SHALL BE INSPECTED AND CLEANED ANNUALLY AND AFTER ANY MAJOR STORM EVENT. ANY EROSION OR DAMAGE TO THE RIP-RAP SHALL BE REPAIRED IMMEDIATELY.
2. THE CHANNEL IMMEDIATELY DOWNSTREAM FROM THE OUTLET SHOULD BE CHECKED TO SEE THAT NO EROSION IS OCCURRING.
3. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION APRON.

PIPE OUTLET PROTECTION DETAIL

DUST CONTROL PRACTICES:

1. APPLY DUST CONTROL MEASURES AS NECESSARY TO MAINTAIN CONTROL OF DUST ON SITE.
2. WATER APPLICATION:
 - A) MOISTEN EXPOSED SOIL SURFACES PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.
 - B) AVOID EXCESSIVE APPLICATION OF WATER THAT WOULD RESULT IN MOBILIZING SEDIMENT AND SUBSEQUENT DEPOSITION IN NATURAL WATERBODIES.
3. STONE APPLICATION:
 - A) COVER SURFACE WITH CRUSHED OR COARSE GRAVEL.
 - B) IN AREAS NEAR WATERWAYS USE ONLY CHEMICALLY STABILIZED OR WASHED AGGREGATE.
4. REFER TO "NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 3 CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROL" FOR OTHER ALLOWABLE DUST CONTROL PRACTICES (I.E. COMMERCIAL TACKIFIERS OR CHEMICAL TREATMENTS SUCH AS CALCIUM CHLORIDE, ETC.).

STOCKPILE PRACTICES:

1. LOCATE STOCKPILES A MINIMUM OF 50-FT. AWAY FROM CONCENTRATED FLOWS OF STORMWATER, DRAINAGE COURSES OR INLETS.
2. PROTECT ALL STOCKPILES FROM STORMWATER RUN-ON USING TEMPORARY PERIMETER MEASURES SUCH AS DIVERSIONS, BERMS, SANDBAGS OR OTHER APPROVED PRACTICES.
3. STOCKPILES SHALL BE SURROUNDED BY SEDIMENT BARRIERS AS DESCRIBED ON THE PLANS AND IN NHSM VOL. 3, TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILE.
4. IMPLEMENT WIND EROSION CONTROL PRACTICES AS APPROPRIATE ON ALL STOCKPILED MATERIAL.
5. PLACE BAGGED MATERIALS ON PALLETS OR UNDERCOVER.

PROTECTION OF INACTIVE STOCKPILES:

6. INACTIVE SOIL STOCKPILES SHALL BE COVERED WITH ANCHORED TARPS OR PROTECTED WITH SOIL STABILIZATION MEASURES (TEMPORARY SEED AND MULCH OR OTHER TEMPORARY STABILIZATION PRACTICE) AND TEMPORARY PERIMETER SEDIMENT BARRIERS (I.E. SILT FENCE, ETC.) AT ALL TIMES.
7. INACTIVE STOCKPILES OF CONCRETE RUBBLE, ASPHALT CONCRETE RUBBLE, AGGREGATE MATERIALS, AND SIMILAR MATERIALS SHALL BE PROTECTED WITH TEMPORARY SEDIMENT PERIMETER BARRIERS (I.E. SILT FENCE, ETC.) AT ALL TIMES. IF THE MATERIALS ARE A SOURCE OF DUST, THEY SHALL ALSO BE COVERED.

PROTECTION OF ACTIVE STOCKPILES:

8. ALL STOCKPILES SHALL BE SURROUNDED WITH TEMPORARY LINEAR SEDIMENT BARRIERS (I.E. SILT FENCE, ETC.) PRIOR TO THE ONSET OF PRECIPITATION. PERIMETER BARRIERS SHALL BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIAL FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHALL BE INSPECTED AT THE END OF EACH WORKING DAY.
9. WHEN A STORM IS PREDICTED, STOCKPILES SHALL BE PROTECTED WITH AN ANCHORED PROTECTIVE COVERING.

PERMANENT VEGETATION:

SPECIFICATIONS:

SITE PREPARATION:

1. INSTALL NEEDED EROSION AND SEDIMENT CONTROL MEASURES SUCH AS SILTATION BARRIERS, DIVERSIONS, AND SEDIMENT TRAPS.
2. GRADE AS NEEDED FOR THE ACCESS OF EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL BUT CLAY AND SILT SOILS SHALL BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
3. RUNOFF SHALL BE DIVERTED FROM THE SEEDBED AREA.
4. ON SLOPES 4:1 OR STEEPER, THE FINAL PREPARATION SHALL INCLUDE CREATING HORIZONTAL GROOVES PERPENDICULAR TO THE DIRECTION OF THE SLOPE TO CATCH SEED AND REDUCE RUNOFF.

SEEDBED PREPARATION:

1. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HAWK OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OPERATION SHALL BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY AND SILT SOILS SHALL BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
2. REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, CONCRETE CLOGS, LUMPS, TRASH OR OTHER UNSUITABLE MATERIAL.
3. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED; THE AREA MUST BE TILLED AND FIRMED AS ABOVE.
4. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
5. APPLICATION OF FERTILIZER AND ORGANIC SOIL AMENDMENTS SHALL BE APPLIED DURING THE GROWING SEASON.
6. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. FERTILIZER SHALL BE RESTRICTED TO LIME, WOOD ASH OR LOW PHOSPHATE AND SLOW RELEASE NITROGEN VARIETIES, UNLESS A SOIL TEST WARRANTS OTHERWISE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER AND LIMESTONE MAY BE APPLIED AT THE FOLLOWING RATES:

LIMESTONE APPLICATION RATE = 3 TONS/ACRE (138 LB./1,000-SF)*

*EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE

FERTILIZER APPLICATION RATE = 870 LB./ACRE (20 LB./1,000-SF)*

*LOW PHOSPHATE FERTILIZER (6-0-4) OR EQUIVALENT

SEEDING:

1. INOCULATE ALL LEGUME SEED WITH THE CORRECT TYPE OF INOCULANT.
2. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM 1/4 TO 1/2 INCH. HYDROSEEDING THAT INCLUDES MULCH MAY BE LEFT ON SOIL SURFACE, WHERE FEASIBLE EXCEPT WHERE EITHER CULTIPACKER TYPE SEEDER OR HYDROSEEDER IS USED. THE SEEDBED SHALL BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG.
3. SPRING SEEDING USUALLY GIVES THE BEST RESULTS FOR ALL SEED MIXES OR WITH LEGUMES. PERMANENT SEEDING SHALL BE COMPLETED AS DAYS PRIOR TO FIRST KILLING FROST, WHICH CROWN VETCH IS SEEDING IN LATE SUMMER AT LEAST 35% OF THE SEED SHALL BE HARD SEED (UNSCARIFIED). IF SEEDING CANNOT BE DONE WITHIN THE SPECIFIED SEEDING DATES, MULCH ACCORDING TO THE TEMPORARY AND PERMANENT MULCHING PRACTICE DESCRIBED IN THE NHSM, VOL. 3, AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
4. AREAS SEEDING BETWEEN MAY 15 AND AUGUST 15 SHALL BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE TEMPORARY AND PERMANENT MULCHING PRACTICE DESCRIBED IN THE NHSM, VOL. 3.
5. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA SHALL BE ACHIEVED PRIOR TO OCTOBER 15. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT OTHER TEMPORARY STABILIZATION MEASURES FOR OVER WINTER PROTECTION.

HYDROSEEDING:

1. WHEN HYDROSEEDING (HYDRAULIC APPLICATION), PREPARE THE SEEDBED AS SPECIFIED ABOVE OR BY HAND RAKING TO LOOSEN AND SMOOTH THE SOIL, AND REMOVE SURFACE STONES LARGER THAN 2 INCHES IN DIAMETER.
2. SLOPES MUST BE STEEPER THAN 2:1 (2 FEET HORIZONTALLY BY 1 FOOT VERTICALLY).
3. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF FIBER MULCH ON CRITICAL AREAS IS NOT RECOMMENDED (UNLESS IT IS USED TO HOLD STRAW OR HAY). BETTER PROTECTION IS GAINED BY USING STRAW MULCH AND HOLDING IT WITH ADHESIVE MATERIALS OR 500 POUNDS PER ACRE OF WOOD FIBER MULCH.
4. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.

MAINTENANCE REQUIREMENTS:

1. PERMANENT SEEDING AREAS SHALL BE INSPECTED AT LEAST MONTHLY DURING THE COURSE OF CONSTRUCTION. INSPECTION, MAINTENANCE AND CORRECTIVE ACTIONS SHALL CONTINUE UNTIL THE OWNER ASSUMES PERMANENT OPERATION OF THE SITE.
2. SEEDING AREAS SHALL BE MOVED AS REQUIRED TO MAINTAIN A HEALTHY STAND OF VEGETATION. MOWING HEIGHT AND FREQUENCY DEPEND OF TYPE OF GRASS COVER.
3. BASED ON INSPECTION, AREAS SHALL BE RESEED TO ACHIEVE FULL STABILIZATION OF EXPOSED SOILS.
4. AT A MINIMUM 85% OF THE SOIL SURFACE SHALL BE COVERED BY VEGETATION.
5. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND AREAS SHALL BE RESEEDING, WITH OTHER TEMPORARY MEASURES (I.E. MULCH, ETC.) USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.

PERMANENT VEGETATION SEEDING RECOMMENDATIONS

USE	MIXTURE	SPECIES	LBS./ACRE	LBS./1,000-SF
STEPP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	TALL FESCUE	20	0.45
		CREeping RED FESCUE	20	0.45
		REDTOP	2	0.05
		TOTAL	42	0.95
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER	A	TALL FESCUE	20	0.45
		CREeping RED FESCUE	20	0.45
		REDTOP	2	0.05
		TOTAL	42	0.95
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY RECREATION SITES	A	TALL FESCUE	20	0.45
		CREeping RED FESCUE	20	0.45
		REDTOP	2	0.05
		TOTAL	42	0.95
PLAY AREAS AND ATHLETIC FIELDS (TOPSOIL ESSENTIAL FOR GOOD TURF)	F	CREeping RED FESCUE	50	1.15
		KENTUCKY BLUEGRASS	50	1.15
		TOTAL	100	2.30

SOURCES:

1. NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 3, TABLES 4-2 AND 4-3
2. MINNICK, E.L. AND H.T. MARSHALL, (AUGUST 1992)

GENERAL CONSTRUCTION PHASING:

1. STABILIZATION: A SITE IS DEEMED STABILIZED WHEN IT IS IN A CONDITION IN WHICH THE SOIL ON SITE WILL NOT EXPERIENCE ACCELERATED OR UNNATURAL EROSION UNDER THE CONDITIONS OF A 10-YEAR STORM EVENT, SUCH AS BUT NOT LIMITED TO:
 - a) A MINIMUM OF 85% VEGETATIVE COVER HAS BEEN ESTABLISHED;
 - b) A MINIMUM OF 3-INCHES OF NON-EROSIVE MATERIAL, SUCH AS STONE OR A CERTIFIED COMPOST BLANKET HAS BEEN INSTALLED; OR,
 - c) EROSION CONTROL BLANKETS HAVE BEEN INSTALLED.
2. TEMPORARY STABILIZATION: ALL AREAS OF EXPOSED OR DISTURBED SOIL SHALL BE TEMPORARILY STABILIZED AS SOON AS PRACTICABLE BUT NO LATER THAN 3 DAYS FOLLOWING FINAL GRADING.
 - a) MAXIMUM AREA OF DISTURBANCE: THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, NO MORE THAN 5 ACRES SHALL BE DISTURBED (NOT STABILIZED) AT ANY TIME.
 - b) ONLY DISTURB, CLEAR, OR GRADE AREAS NECESSARY FOR CONSTRUCTION.
 - c) FLAG OR OTHERWISE DELINEATE AREAS NOT TO BE DISTURBED.
 - d) EXCLUDE VEHICLES AND CONSTRUCTION EQUIPMENT FROM THESE AREAS TO PRESERVE NATURAL VEGETATION.
3. PERMANENT STABILIZATION: ALL AREAS OF EXPOSED OR DISTURBED SOIL SHALL BE PERMANENTLY STABILIZED AS SOON AS PRACTICABLE BUT NO LATER THAN 3 DAYS FOLLOWING FINAL GRADING.
 - a) MAXIMUM AREA OF DISTURBANCE: THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, NO MORE THAN 5 ACRES SHALL BE DISTURBED (NOT STABILIZED) AT ANY TIME.
 - b) ONLY DISTURB, CLEAR, OR GRADE AREAS NECESSARY FOR CONSTRUCTION.
 - c) FLAG OR OTHERWISE DELINEATE AREAS NOT TO BE DISTURBED.
 - d) EXCLUDE VEHICLES AND CONSTRUCTION EQUIPMENT FROM THESE AREAS TO PRESERVE NATURAL VEGETATION.
4. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED GRADING AND DRAINAGE PLAN DEPICTED ON SHEET C-2.
5. ALL EROSION AND SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN DEPICTED ON SHEET C-2.
6. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN THE AMOUNT NECESSARY TO COMPLETE FINISHED GRADING AND BE PROTECTED FROM EROSION.
7. STOCKPILES, BORROW AREAS AND SPOILS SHALL BE STABILIZED AS DESCRIBED UNDER "SOIL STOCKPILE PRACTICES".
8. SLOPES SHALL NOT BE CREATED SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJACENT PROPERTIES WITHOUT ADEQUATE PROTECTION AGAINST SETBACK, EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED DAMAGE.
9. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND/OR OTHER OBSTRUCTIONABLE MATERIALS.
10. AREAS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3-INCHES PRIOR TO PLACEMENT OF TOPSOIL. TOPSOIL SHALL BE PLACED WITHOUT SIGNIFICANT COMPACTION TO PREPARE A LOOSE BEDDING FOR PLACEMENT OF SEED.
11. ALL FILLS SHALL BE COMPACTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, SITE UTILITIES, CONDUITS AND OTHER FACILITIES, SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
12. IN GENERAL, FILLS SHALL BE COMPACTED IN LAYERS RANGING FROM 8 TO 24 INCHES IN THICKNESS. THE CONTRACTOR SHALL REVIEW THE PROJECT GEOTECHNICAL REPORT AND/OR THE "PROJECT SPECIFIC PHASING NOTES" FOR SPECIFIC GUIDANCE.
13. ANY AND ALL FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS (LARGER THAN 3/4 THE DEPTH OF THE LIFT BEING INSTALLED), LOGS, STUMPS, BUILDING DEBRIS, FROZEN MATERIAL AND OTHER OBSTRUCTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY LIFTS.
14. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE (I.E. CLAY, SILT) MATERIALS ARE SUSCEPTIBLE TO ACCELERATED SETTLEMENT AND POTENTIAL ACCELERATED EROSION. WORK IN AREAS OF THESE MATERIALS SHALL BE PERFORMED UNDER THE DIRECTION OF A PROFESSIONAL ENGINEER.
15. THE OUTER FACE OF THE FILL SLOPE SHALL BE ALLOWED TO STAY LOOSE, NOT ROLLED OR COMPACTED, OR BLADE SMOOTHED. A BULLDOZER MAY RUN UP AND DOWN THE FILL SLOPE SO THE DOZER TREADS (CLEAN TRACKS) CREATE GROOVES PERPENDICULAR TO THE SLOPE. IF THE SOIL IS NOT TOO MOIST, EXCESSIVE COMPACTION WILL NOT OCCUR. SEE "SURFACE ROUNDING" IN THE NHSM, VOL. 3.
16. ROUGHEN THE SURFACE OF ALL SLOPES DURING THE CONSTRUCTION OPERATION TO RETAIN WATER, INCREASE INFILTRATION AND FACILITATE VEGETATION ESTABLISHMENT.
17. USE SLOPE BREAKS, SUCH AS DIVERSIONS, BENCHES, OR CONTOUR FURROWS AS APPROPRIATE TO REDUCE THE LENGTH OF CUT-FILL SLOPES TO LIMIT SHEET AND RILL EROSION AND PREVENT GULLY EROSION. ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF CONSTRUCTION.
18. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE EVALUATED BY A PROFESSIONAL ENGINEER (PREFERABLY THE DESIGN ENGINEER) TO DETERMINE IF THE PROPOSED DESIGN SHALL BE REVISED TO PROPERLY MANAGE THE CONDITION.
19. STABILIZE ALL GRADED AREAS (AS ABOVE) WITH VEGETATION, CRUSHED STONE, COMPOST BLANKET, OR OTHER GROUND COVER AS SOON AS GRADING IS COMPLETE OR IF WORK IS INTERRUPTED FOR 21 WORKING DAYS OR MORE. USE MULCH OR OTHER APPROVED METHODS TO STABILIZE AREAS TEMPORARILY WHERE FINAL GRADING MUST BE DELAYED.
20. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.
21. THE PROJECT SHALL BE CONSTRUCTED TO MEET ALL REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER ARG 3800 RELATIVE TO INVASIVE SPECIES.

ABOVE NOTES EXCERPTED, ADAPTED AND REFERENCED FROM "NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 3 CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROLS, DECEMBER 2008" (NHSM, VOL. 3)

PROJECT SPECIFIC CONSTRUCTION PHASING:

1. REFER TO THE "GENERAL CONSTRUCTION PHASING" NOTES PRIOR TO COMMENCING CONSTRUCTION IN ACCORDANCE WITH THE FOLLOWING PHASING. THE "GENERAL CONSTRUCTION PHASING" NOTES APPLY TO THE OVERALL CONSTRUCTION AND SHALL BE ADHERED TO.
2. INSTALL ALL TEMPORARY SEDIMENT CONTROL BARRIERS (I.E. SILT FENCE, EROSION CONTROL MIX BERMS, STONE CHECK DAMS, ETC.) AROUND THE OUTER PERIMETER OF THE CONSTRUCTION SITE AS DEPICTED ON SHEET C-1 PRIOR TO EARTH MOVING OPERATIONS.
3. INSTALL ORANGE SNOW FENCE AROUND THE PERIMETER OF THE INFILTRATION BASINS AND THE FENCE SHALL REMAIN IN PLACE UNTIL CONSTRUCTION OF THE BASINS HAS STARTED.
4. CLEAR, GRUB AND STRIP THE SITE. STUMPS, BRUSH AND OTHER ORGANIC WASTE SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
5. INSTALL A TEMPORARY CONSTRUCTION EXIT AT THE LOCATION OF THE PROPOSED ROADWAY CONNECTION TO HAVEN HILL. MAINTAIN AS DIRECTED BY THE TEMPORARY CONSTRUCTION EXIT DETAIL.
6. STOCKPILE STRIPPED TOPSOIL AND CUT MATERIAL TO BE REUSED ON SITE IN AN APPROPRIATE LOCATION IN ACCORDANCE WITH THE "SOIL STOCKPILE PRACTICES". MAINTAIN THE STOCKPILES AS DIRECTED IN THE "SOIL STOCKPILE PRACTICES".
7. PERFORM THE NECESSARY CUTS AND FILLS TO CONSTRUCT THE INFILTRATION BASINS AS DEPICTED ON SHEET C-2 AND IN ACCORDANCE WITH THE INFILTRATION BASIN DETAILS SHOWN ON SHEET C-2.
8. PERFORM THE NECESSARY CUTS AND FILLS TO CONSTRUCT THE INFILTRATION BASIN AS DEPICTED ON SHEET C-2 AND IN ACCORDANCE WITH THE INFILTRATION BASIN DETAILS SHOWN ON SHEET C-2.
9. CONSTRUCT THE INFILTRATION BASINS, SEDIMENT FOREBAY AND OUTLET PROTECTION. LOAM SEED AND MULCH THE SIDE SLOPES OF THE BASIN AS DEPICTED IN THE INFILTRATION BASIN DETAILS.
10. ALL DITCHES/SWALES/AND BASINS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
11. PERFORM THE NECESSARY CUTS AND FILLS TO SUBGRADE IN THE BUILDING AND PARKING LOT AREAS.
 - a) INSTALL REQUIRED FILLS IN MAXIMUM 8-INCH LIFTS AND COMPACT EACH LIFT TO 85% MAXIMUM PROCTOR DENSITY.
 - b) AS SUBGRADE IS ACHIEVED, INSTALL REMAINING SEDIMENT CONTROL BARRIERS WITHIN THE SITE (I.E. ADDITIONAL SILT FENCE, CHECK DAMS AND SEDIMENT CONTROLS AND CATCH BASINS, ETC.).
12. INSTALL ALL UTILITIES AND CLOSED DRAINAGE SYSTEM COMPONENTS (I.E. PIPE CULVERTS, AND CATCH BASINS) PER THE CORRESPONDING DETAILS AND AS SHOWN ON SHEET C-8. AS EACH STRUCTURE IS COMPLETED, INSTALL THE CORRESPONDING INFILTRATION BASINS AND OUTLET PROTECTION. LOAM SEED AND MULCH THE SIDE SLOPES OF THE BASIN AS DIRECTED IN THE INFILTRATION BASIN DETAILS AND TEMPORARY SEDIMENT CONTROL BARRIER DEPICTED ON SHEET C-2.
13. ALL CUT AND FILL SLOPES AND LAWN AREAS NOT TO BE PAVED SHALL BE LOAMED AND SEDED FOR PERMANENT VEGETATION AND STABILIZATION AS DESCRIBED UNDER THE "PERMANENT VEGETATION PRACTICES" WITHIN 3 DAYS OF ACHIEVING FINAL GRADE.
14. INSTALL ALL GRAVEL BASE AND CRUSHED GRAVEL MATERIALS FOR THE PARKING AREA AS SPECIFIED IN THE CORRESPONDING DETAILS.
15. THE ROADWAY AREAS SHALL BE STABILIZED (CONSTRUCTED TO GRAVEL BASE COURSE) WITHIN 3 DAYS OF ACHIEVING FINISHED SUBGRADE ELEVATIONS.
16. INSTALL PAVEMENT SURFACES AS SOON AS POSSIBLE AFTER THE INSTALLATION OF THE GRAVEL BASE AND CRUSHED GRAVEL, IN ORDER TO LIMIT THE SOIL EROSION AND POLLUTION OF THE GRAVEL MATERIALS WITH ORGANIC MATERIALS. IN NO CASE SHALL AREAS TO BE PAVED BE LEFT UNPROTECTED THROUGHOUT THE WINTER MONTHS.
17. ALL DISTURBED AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE. IN NO CASE SHALL ANY DISTURBED AREA BE LEFT UN-STABILIZED FOR LONGER THAN 21 DAYS. IF NECESSARY TEMPORARY STABILIZATION MEASURES AS DISCUSSED IN THE "GENERAL CONSTRUCTION PHASING NOTES" AND NHSM, VOL. 3 SHOULD BE EMPLOYED.
18. MAINTENANCE AND INSPECTION:
 - a) DURING CONSTRUCTION ALL TEMPORARY AND PERMANENT SEDIMENT, EROSION CONTROL AND STORMWATER MANAGEMENT PRACTICES SHOULD BE INSPECTED WEEKLY AFTER EVERY 1/2 INCH OF RAINFALL, AND ANNUALLY.
 - b) EXCESS SEDIMENT SHOULD BE REMOVED FROM TEMPORARY SEDIMENT, EROSION CONTROL AND STORMWATER MANAGEMENT PRACTICES WHEN IT REACHES PRESCRIBED THRESHOLDS DISCUSSED IN THE DETAILS FOR EACH PRACTICE.
 - c) ALL DAMAGED TEMPORARY AND PERMANENT SEDIMENT, EROSION CONTROL AND STORMWATER MANAGEMENT PRACTICES SHOULD BE REPAIRED OR REPLACED IMMEDIATELY UPON NOTICE.
 - d) SEDIMENT SHALL BE DISPOSED OF PROPERLY EITHER ON SITE OR OFF SITE.
19. PROJECT COMPLETION AND STABILIZATION:
 - a) UPON PROJECT COMPLETION, ONCE THE SITE IS DEEMED STABILIZED (VEGETATION IS GERMINATED), THE TEMPORARY SEDIMENT CONTROL BARRIERS AND EROSION CONTROL PRACTICES SHALL BE REMOVED. ANY DISTURBANCE CREATED DURING REMOVAL SHALL BE REPAIRED IN AN APPROPRIATE MANNER.
 - b) ACCUMULATED SEDIMENT SHALL BE REMOVED FROM ALL ON SITE CATCH BASINS AND THE SEDIMENT FOREBAYS TO THE INFILTRATION BASINS BASIN.

WINTER STABILIZATION & CONSTRUCTION PRACTICES:

MAINTENANCE REQUIREMENTS:

1. MAINTENANCE MEASURES SHALL BE PERFORMED THROUGHOUT CONSTRUCTION, INCLUDING OVER THE WINTER PERIOD. AFTER EACH RAINFALL, SNOWSTORM, OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL CONDUCT INSPECTION OF ALL INSTALLED EROSION CONTROL PRACTICES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUED FUNCTION.
2. FOR ANY AREA STABILIZED BY TEMPORARY OR PERMANENT SEEDING PRIOR TO THE ONSET OF THE WINTER SEASON, THE CONTRACTOR SHALL CONDUCT AN INSPECTION IN THE SPRING TO ASCERTAIN THE CONDITION OF THE VEGETATION AND REPAIR ANY DAMAGED AREAS OR BARE SPOTS AND RESEED AS REQUIRED TO ACHIEVE AN ESTABLISHED VEGETATIVE COVER (AT LEAST 85% OF AREA VEGETATED WITH HEALTHY, VIGOROUS GROWTH).

SPECIFICATIONS:

1. THE FOLLOWING STABILIZATION TECHNIQUES SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 15.
 - a) THE AREA OF EXPOSED, UNSTABILIZED SOIL SHALL BE LIMITED TO 1-ACRE AND SHALL BE PROTECTED AGAINST EROSION BY THE METHODS DISCUSSED IN NHSM, VOL. 3 AND ELSEWHERE IN THIS PLAN SET, PRIOR TO ANY THAW OR SPRING MELT EVENT.
 - b) STABILIZATION AS FOLLOWS SHALL BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 30 DAYS.
 - i) ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% WHICH DO NOT EXHIBIT A MINIMUM 85% VEGETATIVE GROWTH BY OR AFTER OCTOBER 15, SHALL BE SEEDING AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE SECURED WITH ANCHORED NETTING, OR 2 INCHES OF EROSION CONTROL MIX (REFER TO NHSM, VOL. 3 FOR SPECIFICATION).
 - ii) ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF GREATER THAN 15% WHICH DO NOT EXHIBIT A MINIMUM 85% VEGETATIVE GROWTH BY OR ARE DISTURBED AFTER OCTOBER 15 SHALL BE SEEDING AND COVERED WITH A PROPERLY INSTALLED EROSION CONTROL BLANKET OR WITH A MINIMUM OF 4 INCHES OF EROSION CONTROL MIX, UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER. NOTE THAT COMPOST BLANKETS SHALL NOT EXCEED 2 INCHES IN THICKNESS OR THEY MAY OVERHEAT.
 - c) ALL STONE COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY OCTOBER 15.
 - d) INSTALLATION OF ANCHORED HAY MULCH OR EROSION CONTROL MIX SHALL NOT OCCUR OVER SNOW OF GREATER THAN 1 INCH IN DEPTH.
 - e) ALL MULCH APPLIED DURING WINTER SHALL BE ANCHORED (I.E. BY NETTING, TRACKS, WOOD CELLULOSE FIBER).
 - f) WITHIN 24 HOURS OF STOCKPILING SOIL MATERIALS SHALL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A 4 INCH LAYER OF EROSION CONTROL MIX. MULCH SHALL BE REESTABLISHED PRIOR TO ANY RAIN OR SNOWFALL. NO SOIL STOCKPILE SHALL BE PLACED (EVEN COVERED WITH MULCH) WITHIN 100-FT OF ANY WETLAND OR OTHER WATER RESOURCE AREA.
 - g) FROZEN MATERIAL (I.E. FROST LAYER REMOVED DURING WINTER CONSTRUCTION) SHALL BE STOCKPILED SEPARATELY AND IN A LOCATION AWAY FROM ANY AREA NEEDING PROTECTION. FROZEN MATERIAL STOCKPILES CAN MELT IN SPRING AND BECOME UNWORKABLE AND DIFFICULT TO TRANSPORT DUE TO HIGH SOIL MOISTURE CONTENT.
 - h) INSTALLATION OF EROSION CONTROL BLANKETS SHALL NOT OCCUR OVER SNOW OF GREATER THAN 1 INCH IN DEPTH OR ON SILT.
 - i) ALL GRASS-LINED DITCHES AND CHANNELS SHALL BE CONSTRUCTED BY SEPTEMBER 1. ALL DITCHES AND SWALES WHICH DO NOT EXHIBIT 85% VEGETATIVE GROWTH BY OR ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS AS DETERMINED BY A PROFESSIONAL ENGINEER. IF STONE LINING IS NECESSARY, THE CONTRACTOR MAY NEED TO RE-GRADE THE DITCH AS REQUIRED TO PROVIDE ADEQUATE CROSS-SECTION AFTER ALLOWING FOR PLACEMENT OF THE STONE.
 - j) ALL STONE LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY OCTOBER 15.
 - k) AFTER HOWEVER, AN INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION HAS STOPPED FOR THE WINTER SHALL BE PROTECTED WITH A MINIMUM 3 INCH LAYER OF SAND AND GRAVEL, WITH A GRADATION THAT IS LESS THAN 12% OF THE SAND PORTION, OR MATERIAL PASSING THE NUMBER 4 SIEVE, BY WEIGHT, PASSES THE NUMBER 200 SIEVE.
 - l) SEDIMENT BARRIERS THAT ARE INSTALLED DURING FROZEN CONDITIONS SHALL CONSIST OF EROSION CONTROL MIX BERMS, OR CONTINUOUS CONTAINED BERMS. SILT FENCES AND HAY BALES SHALL NOT BE INSTALLED WHEN FROZEN CONDITIONS PREVENT PROPER EMBEDMENT OF THESE BARRIERS.

PERMANENT EROSION AND SEDIMENTATION CONTROL
TAX MAP 255, LOT 24-10
HAVEN HILL RD.
ROCHESTER, NH
PREPARED FOR:
LAPERLE FAMILY TRUST
FEBRUARY 2021

FILE NO. 249
PLAN NO. C-2829
DWC. NO. 20071/S-1
F.B. NO.

31 MOONEY STREET, ALTON, NH 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

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