MAJOR SUBDIVISION APPLICATION

(a total of four or more lots)

City of Rochester, New Hampshire

RECEIVED JAN 07 2014 Planning Dept.

[office use only. Check # 1431 Amount $2275.- Date paid 1/7/14]

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

Property information

Tax map #: 259 ; Lot #('s): 29 ; Zoning district: Agricultural (A)

Property address/location: 139 Flagg Road

Name of project (if applicable): _____

Size of site: 9.86 acres; Overlay zoning district(s)? Conservation District

Property owner

Name (include name of individual): Steve Miller General Contracting, LLC

Mailing address: 95 Blackwater Road, Rochester, NH 03867

Telephone #: (603) 396-3977 Email: smgc89@yahoo.com

Applicant/developer (if different from property owner)

Name (include name of individual): _____

Mailing address: _____

Telephone #: _____ Email: _____

Engineer/surveyor

Name (include name of individual): Norway Plains Associates, Inc. Scott Lawler, PE

Mailing address: PO Box 249, Rochester, NH 03866-0249

Telephone #: (603) 335-3948 Fax #: (603) 332-0098

Email address: slawler@norwayplains.com Professional license #: 10026

Proposed project

Number of proposed lots: 7 ; estimated length of new roads: 410' to cul-de-sac

Number of cubic yard of earth being removed from the site? 40,000+/- cy

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

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

If city water, what are the est. total gal. per day? 4,800 ; Are there pertinent covenants? ___

Where will stormwater be discharged? Into either a detention or infiltration basins before leaving the site

(Continued *Major Subdivision Plan* application Tax Map: 259 Lot: 29 Zone A)

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

Comments

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

Same project as conditionally approved on February 23, 2009 (case #259-29-A-08).

Four extensions were granted with the final one expiring on February 24, 2012.

Submission of application

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

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

Signature of property owner: _____

Date: 1-7-14

Signature of applicant/developer: _____

Date: _____

Signature of agent: _____

Date: 01/7/14

Authorization to enter subject property

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

Signature of property owner: _____

Date: 1-7-14

NORWAY PLAINS ASSOCIATES, INC.

SURVEYORS - ENGINEERS - TRANSPORTATION PLANNERS

E-MAIL: slawler@norwayplains.com
WEB: http://www.norwayplains.com

2 Continental Boulevard (03867) P. O. Box 249
Rochester, New Hampshire 03866-0249
Telephone (603) 335-3948
NH (800) 479-3948
Fax (603) 332-0098

January 6, 2014

James Campbell, Chief of Planning
Department of Planning and Development
Second Floor, City Hall
31 Wakefield Street
Rochester, NH 03867-1917

Re: Cluster Subdivision of Land – Steve Miller General Contracting, LLC - Map 259, Lot 29

Dear Jim:

On behalf of Steve Miller General Contracting, LLC, we hereby submit plan and application for a 7-lot cluster subdivision. The 9.86 acre parcel is located at 139 Flagg Road, City Tax Map 259, Lot 29 and is in the Agricultural Zoning District. This proposal involves creating seven lots averaging 0.36 acres and placing the remaining 6.37 acres into open space.

The proposed cluster subdivision is the same subdivision plans that were conditionally approved by the Rochester Planning Board on February 23, 2009 (Case #259-29-A-08). However, due to the downturn in the economy at that time, construction did not start and all of the precedent conditions were not meet. As such, the Planning Board granted four (4) extensions to meet the Precedent Conditions, with the final one expiring on February 24, 2012. With the reapplication of the subdivision application, most of the precedent conditions from the past approval were added to the plans. It should be noted that on October 8, 2008, a variance was granted by the Zoning Board of Adjustments to allow a cluster subdivision on a parcel of land containing less than 10 acres.

Access to the proposed lots will be from a proposed 410 roadway with a cul-de-sac turnaround at the end. The 24-foot wide roadway will sheet flow stormwater to roadside ditches. These ditches will direct the stormwater to either a retention basin located at the entrance near Flagg Road or to a detention basin located at the end of the cul-de-sac. The basins will attenuate the increased stormwater rate of discharge before release it to the wetlands complex to the rear of the property or into the ground. Several of the houses will discharge stormwater runoff from the roofs directly into leaching basins to further reduce the stormwater that that would leave the project. The project has a valid Alteration of Terrain Permit (WPS-8393A), which expires on May 8, 2016.

The project will be connected to the City water and sewer systems located on Flagg Road and Trinity Circle, respectfully. As per the previously approved plan, a 12-inch water main will be extended up Flagg Road from Trinity Circle with the installation of water services to the existing lots and two hydrants. The proposed 8-inch gravity sewer line will be installed from the proposed roadway cross-country about 687 feet to an existing sewer system located within the Trinity Circle right-of-way. A 30 foot sewer easement will be necessary from 119 Flagg Road Development LLC. A NHDES Wastewater

Connection Permit will need to be updated, since the original permit has expired. All other utilities will be installed below ground, as required.

In closing, the application and plans are virtually the same as the previously approved plans, with updated to reflect the past precedent conditions and permit conditions from NHDES and Rochester Public Works Department.

Thank you for your consideration.

Sincerely,

NORWAY PLAINS ASSOCIATES, INC.

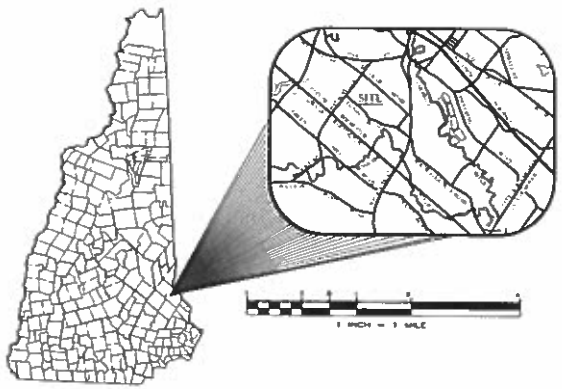
By:_____
Scott A. Lawler, PE, Project Engineer

cc: Steve Miller General Contracting, LLC

LAND SURVEYORS - SEPTIC DESIGNERS

CIVIL ENGINEERS - TRANSPORTATION PLANNERS

PROPOSED 7 LOT CLUSTER SUBDIVISION
FOR
STEVE MILLER GENERAL CONTRACTING, L.L.C.
FLAGG ROAD
ROCHESTER, N.H. 03867



OVERALL SITE
1" = 200'

RECEIVED
JAN 0 7 2014

CIVIL ENGINEERS

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

NPDES APPROVAL NUMBERS:
THIS PROJECT REQUIRED STATE DEPARTMENT OF ENVIRONMENTAL SERVICES PERMITS. THE PERMIT NUMBERS ARE AS FOLLOWS

STATE OF NEW HAMPSHIRE PERMIT NUMBERS:
ALTERATION OF TERRAIN PERMIT: WPS-8333
WASTEWATER CONNECTION PERMIT: 07308-0604

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES):
A NPDES PERMIT WILL BE REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT

NPDES PERMITS CONSIST OF A NOTICE OF INTENT (NOI) FILED WITH THE ENVIRONMENTAL PROTECTION AGENCY AT LEAST 48 HOURS 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.

OWNER & DEVELOPER

STEVE MILLER GENERAL CONTRACTING, L.L.C.
95 BLACKWATER ROAD, ROCHESTER, NH
(603) 396-3977

SHEET INDEX

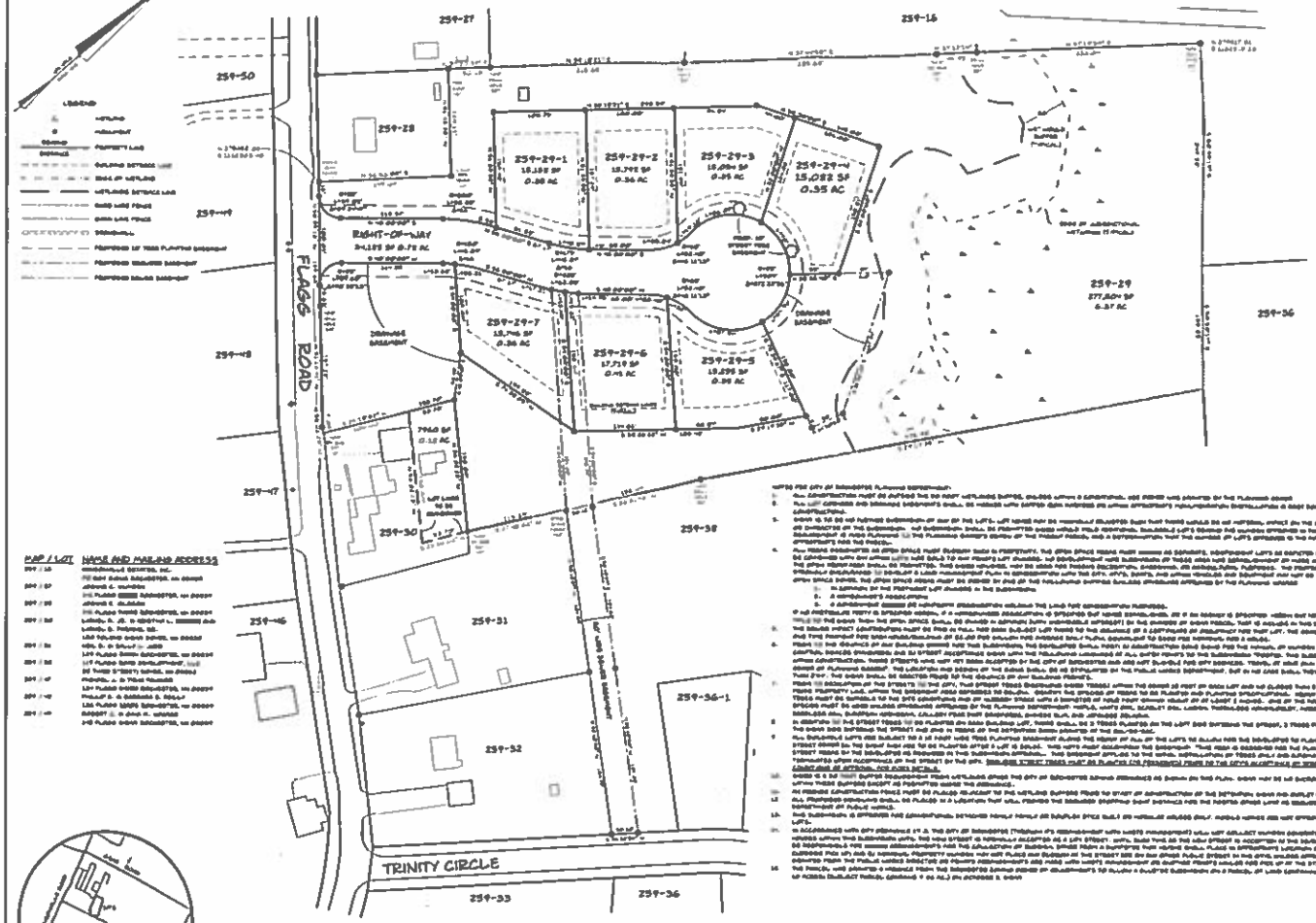
	COVER	AS SHOWN
S-1	CLUSTER SUBDIVISION PLAN	1" = 60'
S-2	TOPOGRAPHIC CLUSTER SUBDIVISION PLAN	1" = 60'
C-1	ROAD PLAN & PROFILE	AS SHOWN
C-2	GRADING AND DRAINAGE PLAN & PROFILE	AS SHOWN
C-3	UTILITY PLAN & PROFILE	AS SHOWN
C-4	WATER & SEWER MAIN EXTENSION PLAN	1"=40'
C-5	CROSS-COUNTRY SEWER PLAN & PROFILE	AS SHOWN
C-6	WATER MAIN EXTENSION PLAN & PROFILE	AS SHOWN
C-7	CONSTRUCTION DETAILS	AS SHOWN
C-8	TEMPORARY EROSION CONTROL DETAILS	AS SHOWN
C-9	DRAINAGE, EROSION AND SEDIMENTATION CONTROL DETAILS	AS SHOWN
C-10	DETENTION AND RETENTION BASIN DETAILS	AS SHOWN
C-11	WATER DETAILS	AS SHOWN
C-12	SEWER DETAILS	AS SHOWN
C-13	ROAD CROSS SECTIONS AND TYPICAL DRIVEWAY DETAILS	AS SHOWN

FILE NO. 134
PLAN NO. C-2502
DWG. NO. 07183\S-5
F.B. NO

LAND SURVEYORS – SEPTIC DESIGNERS

CIVIL ENGINEERS – TRANSPORTATION PLANNERS

REVISION:



MAP / LOT	NAME AND MAILING ADDRESS
259 / 16	[illegible]
259 / 27	[illegible]
259 / 28	[illegible]
259 / 29	[illegible]
259 / 30	[illegible]
259 / 31	[illegible]
259 / 32	[illegible]
259 / 33	[illegible]
259 / 36	[illegible]
259 / 36-1	[illegible]
259 / 38	[illegible]
259 / 46	[illegible]
259 / 47	[illegible]
259 / 48	[illegible]
259 / 49	[illegible]
259 / 50	[illegible]

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.

NATHAN H. MCCLELLAN, JR. L.L.S. DATE:

STORMWATER CONTROL NOTE:
HOMES ON LOTS 29-1 (REAR HALF ONLY), 29-2, 29-3, 29-4, & 29-6 (REAR HALF ONLY) MUST BE CONSTRUCTED WITH STORMWATER INFILTRATION SYSTEMS FOR WATER DRAINAGE FROM THE ROOF, AS SHOWN ON THE PLAN SHEETS C-1 THROUGH C-13. THE INFILTRATION SYSTEMS, ROOF GUTTERS AND DOWN SPOUTS MUST BE MAINTAINED BY THE HOME OWNER.

REFERENCE PLANS:

1. "CLUSTER SUBDIVISION PLAN FLAGG ROAD, ROCHESTER, N.H. FOR TRINITY CONSERVATION, LLC" DATED JANUARY 10th, 2006 BY NORWAY PLAINS ASSOCIATES, INC. S.C.R.D. PLAN 90-52, 93 & 94
2. "PROPOSED SUBDIVISION LOTS 5, 6, 7, 8, 9 & 10, LAND OF FRIENDS MOBILE HOMES ESTATES INC., ROCH., NH" DATED JUNE 01, 1978 BY BERRY CONST. CO., INC S.C.R.D. PLAN 158-94

FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

CERTIFIED BY: _____ DATE: _____

TAX MAP 259, LOT 29
OWNER OF RECORD:
STEVE MILLER GENERAL CONTRACTING, LLC
95 BLACKWATER ROAD
ROCHESTER, NH 03867
BK. 3545, PG. 705

CLUSTER SUBDIVISION PLAN
FLAGG ROAD
TAX MAP 259, LOT 29
ROCHESTER, NH

PREPARED FOR

STEVE MILLER GENERAL CONTRACTING, LLC

DECEMBER 2013

GRAPHIC SCALE

(IN FEET)
1 INCH = 60 FT.

FILE NO 134
PLAN NO C-2502
DWG NO 07183\3-5
F B NO

31 Mooney Street, Alton, N.H. 603-875-3948

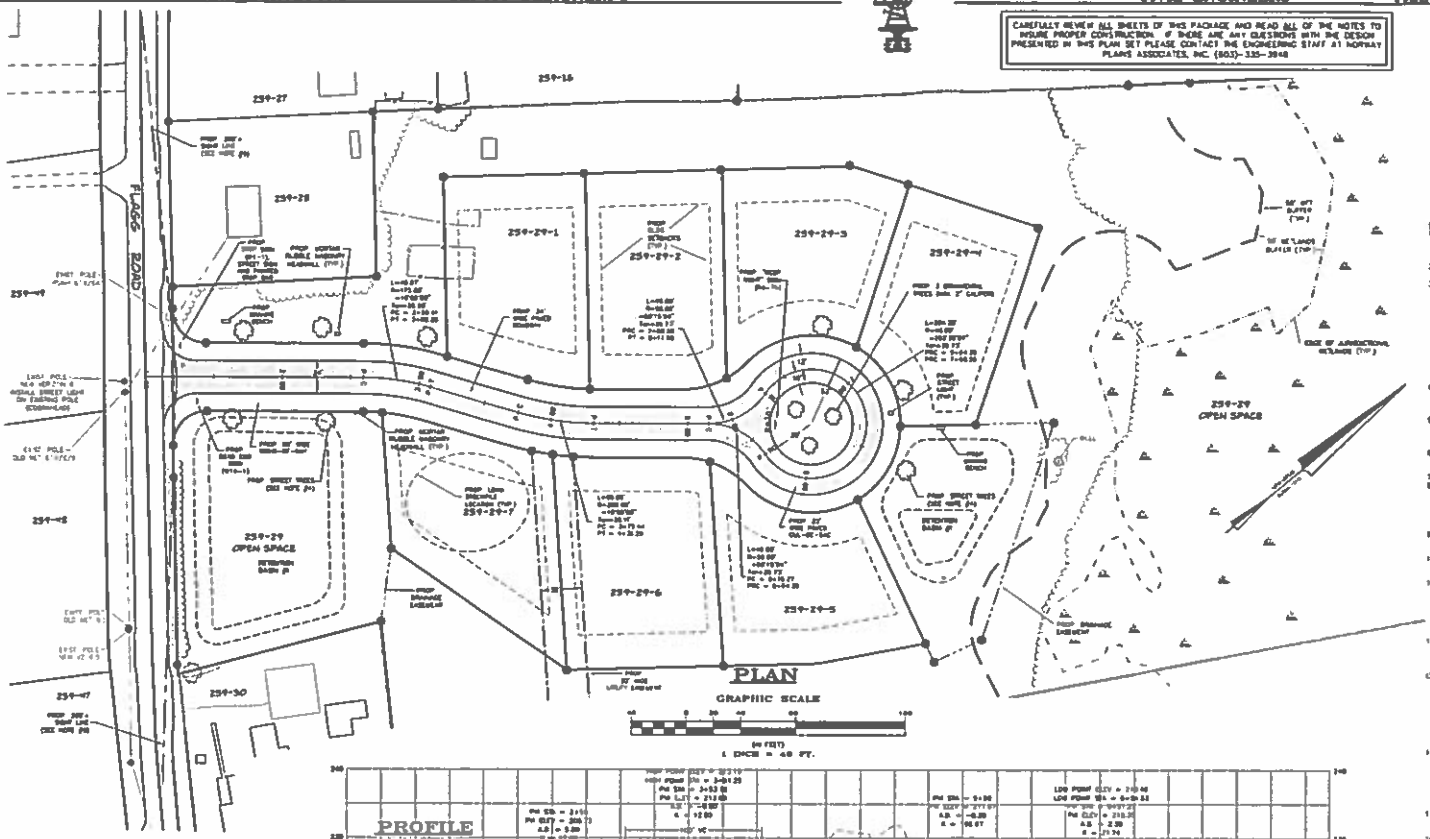
NORWAY PLAINS ASSOCIATES, INC.

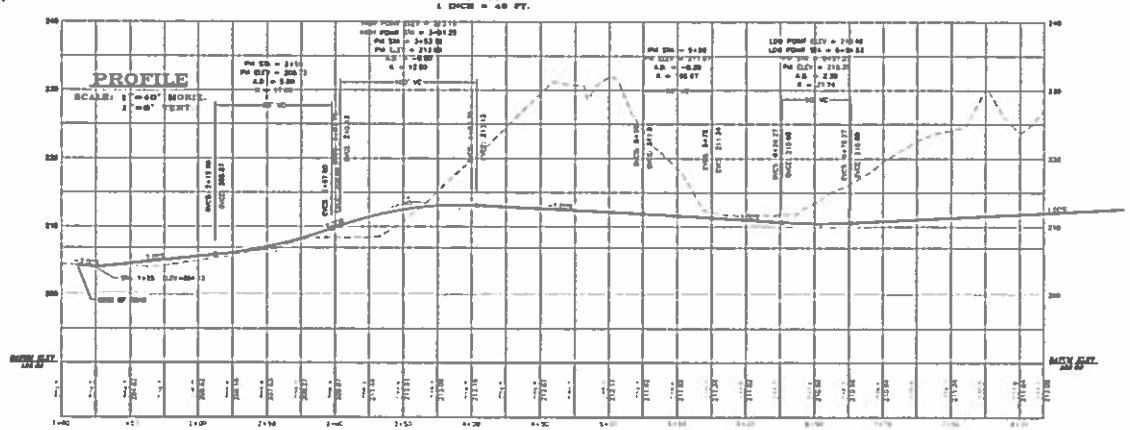
2 Continental Blvd., Rochester, N.H. 603-335-3948 S-1

LAND SURVEYORS – SEPTIC DESIGNERS – CIVIL ENGINEERS – TRANSPORTATION PLANNERS

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE AND READ ALL OF THE NOTES TO INSURE PROPER CONSTRUCTION. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948

REVISIONS:





LEGEND

- DOUBLE YELLOW LINE
- UTILITY POLE
- EDGE OF JURISDICTIONAL WETLANDS
- EDGE OF WETLANDS BUFFER
- FENCE
- TREE LINE
- SEWER MANHOLE
- CATCH BASIN
- HYDRANT
- GATE VALVE
- STONE WALL
- OVERHEAD WIRE
- PROP TREE LINE
- PROP SEWER MANHOLE
- PROP POND
- PROP LIGHT POST
- PROP HYDRANT

GENERAL CONSTRUCTION AND GENERAL NOTES

1. LOAM STOCKPILE SHALL BE SEEDED IN ACCORDANCE WITH THE SEEDING NOTES ON SHEET C-6. 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.
2. THE CITY RESERVES THE RIGHT TO REQUIRE ADDITIONAL EROSION CONTROL MEASURES IF ANY OFF-SITE IMPACTS ARE FOUND DURING CONSTRUCTION.
3. 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, BUT NO CLOSER THAN 5 FEET FROM THE FRONT PROPERTY LINE, AS A PRECEDENT CONDITION. THE APPLICATION MUST IDENTIFY / FLAG APPROPRIATE, HEALTHY, DECIDUOUS TREES ON SITE THAT MEET THIS OBJECTIVE AND/OR SHOW LOCATIONS OF PROPOSED 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, PHEMINUS HONEYLOCUST, MARSHALL SEEDLESS ASH, EUROPEAN HORNBEAM, CALLERY PEAR (NOT BRADFORD), CHINESE ELM, AND JAPANESE ZELKOVA. WHERE SUITABLE COVERAGE OF EXISTING EVERGREEN TREES IS PRESENT, THESE MAY BE SUBSTITUTE FOR DECIDUOUS TREES.
4. IN ADDITION TO THE STREET TREES FOR EACH BUILDING LOT, THREE STREET TREES MUST BE PLANTED ON THE LEFT SIDE ENTERING THE STREET, TWO ON THE RIGHT SIDE ENTERING THE STREET AND ONE IN FRONT OF THE RETENTION BASIN LOCATED BY THE CUL-DE-SAC.
5. ALL LOT CORNERS SHALL BE MARKED WITH CAPPED IRON MARKERS OR APPROPRIATE MONUMENTATION AFTER THE CONSTRUCTION OF THE ROAD IS COMPLETE. GRANITE MONUMENTS SHALL BE PLACED ALONG THE RIGHT-OF-WAY PURSUANT TO THE CITY OF ROCHESTER SUBDIVISION REGULATIONS.
6. 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.
7. STUMPS SHALL BE DISCARDED IN ACCORDANCE WITH NEW HAMPSHIRE SOLID WASTE RULES.
8. THE RETENTION BASIN AND DETENTION BASIN SHALL BE INSPECTED PRIOR TO ROADWAY ACCEPTANCE. ANY EROSION SHALL BE FIXED AND SEDIMENT SHALL BE REMOVED AND VEGETATION REESTABLISHED ON THE RETENTION BASIN AND DETENTION BASIN BOTTOM. THE RETENTION BASIN SHALL BE GRADED AS SHOWN ON SHEET C-2. THE DETENTION BASIN SHALL BE GRADED AS SHOWN ON SHEET C-2 AND AS SPECIFIED IN THE DETAILS ON SHEET C-10 OF THIS PLAN SET.
9. 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.
10. THE SIGHT DISTANCE AT THE ENTRANCE TO THE SUBDIVISION IS ADEQUATE. NO IMPROVEMENT IS CREATED BY THE ALIGNMENT OR GRADE OF FLAGG ROAD OR THE GRADE PROPOSED AT THE ENTRANCE OF THE NEW ROAD.
11. THE APPLICANT SHALL OBTAIN A STORMWATER MANAGEMENT PERMIT FROM THE PUBLIC WORKS DEPARTMENT (UNLESS DETERMINED TO BE UNNECESSARY BY THE CITY ENGINEER) AND FOLLOW THE REQUIREMENTS OF CITY ORDINANCE CHAPTER 38. THE PERMITTEE SHALL PREPARE A WRITTEN PLAN FOR MANAGING THE STORMWATER THAT ENTERS THE CONSTRUCTION SITE AND SHALL PRESENT IT TO THE INSPECTION ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE PERMITTEE SHALL FOLLOW BEST MANAGEMENT PRACTICES TO PREVENT EROSION IN AREAS WHERE THE SOIL HAS BEEN DISTURBED.
12. 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.
13. 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 OF ALL OTHER ASPECTS OF CURRENT FEDERAL, STATE AND LOCAL STORM WATER OR NPDES REGULATION OR REQUIREMENTS.
14. THE FINAL WEARING COURSE MUST BE INSTALLED AS FOLLOWS:
    1) IF MAY NOT BE INSTALLED until AT LEAST 50% OF THE NEW LOTS IN THE SUBDIVISION ARE BUILT OUT (CERTIFICATES OF OCCUPANCY ISSUED),
    2) IF MAY NOT BE INSTALLED UNTIL THE BINDER COURSE HAS BEEN IN PLACE FOR AT LEAST ONE WINTER SEASON, AND
    3) IT MUST BE INSTALLED WITHIN 12 MONTHS AFTER 50% OF THE LOTS IN THE SUBDIVISION ARE BUILT OUT.
15. NO CERTIFICATES OF OCCUPANCY SHALL BE ISSUED UNTIL THE DRAINAGE STRUCTURES, STREET LIGHTS AND ROAD (INCLUDING THE BASE COURSE OF PAVEMENT) ARE PROPERLY INSTALLED.
16. A PERMANENT APPROVED STREET SIGN MUST BE INSTALLED AT THE ENTRANCE TO THE SUBDIVISION PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY FOR ANY HOUSE WHICH WILL TAKE ACCESS OFF OF THE NEW STREET.
17. THE STREET TREES REQUIRED AS PART OF THIS APPROVAL MUST BE PLANTED BY OCTOBER 15 ON ANY LOT FOR WHICH A CERTIFICATE OF OCCUPANCY HAS BEEN ISSUED ON OR PRIOR TO AUGUST 31 OF THE SAME YEAR. NO ADDITIONAL C.O.'S WILL BE ISSUED UNLESS THIS REQUIREMENT IS MET.

FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

CERTIFIED BY: _____ DATE: _____

ROAD PLAN & PROFILE
FLAGG ROAD
ROCHESTER, N.H.
FOR
STEVE MILLER GENERAL CONTRACTING, L.L.C.

SCALE 1"=40' (HORIZ.) DEC. 2013
1"=8' (VERT.)

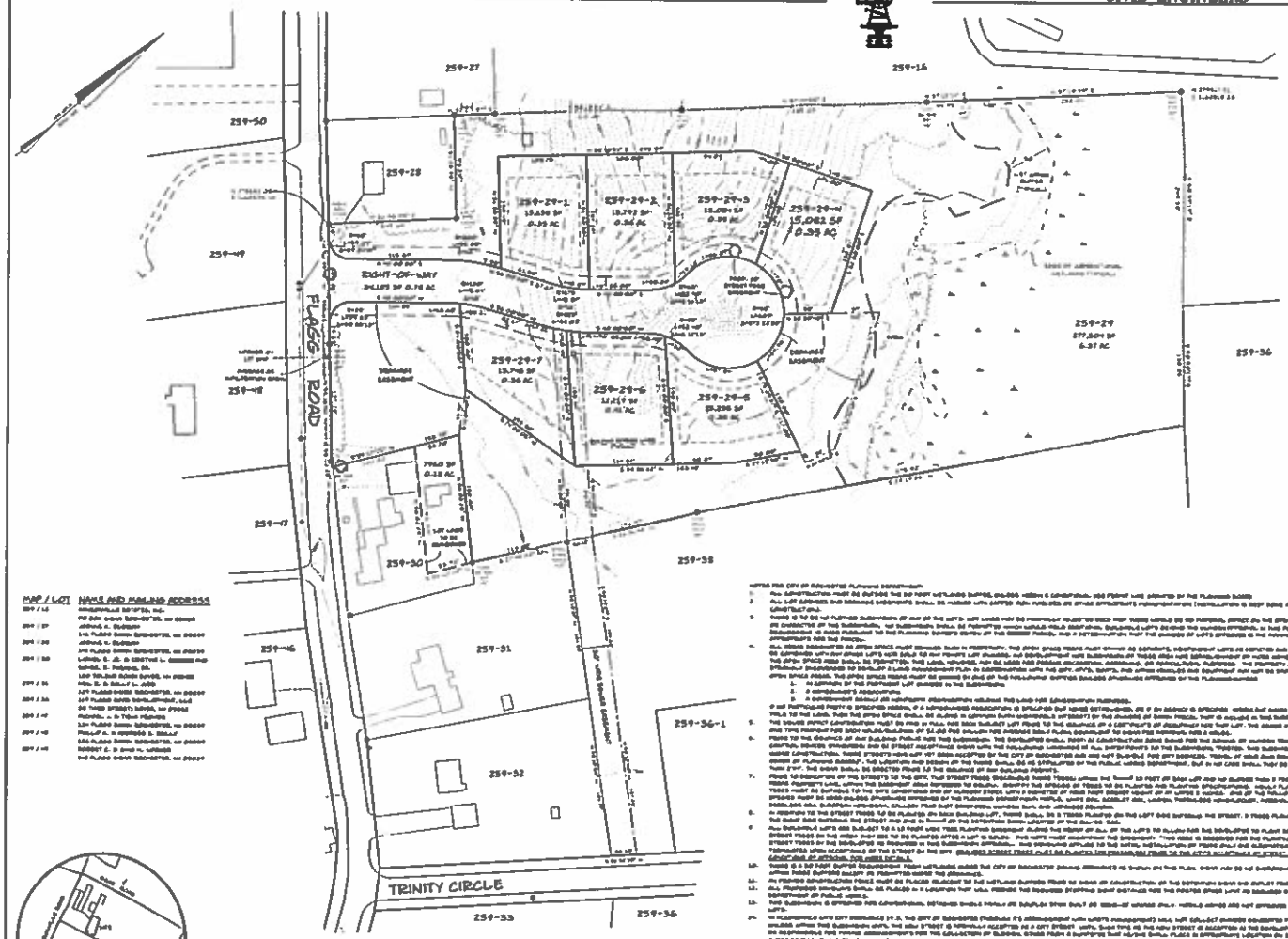
FILE NO 134
PLAN NO C-2502
DWG NO 071831\S-5
F.B NO

31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

2 Continental Blvd., Rochester, N.H. 603-335-3948 C-1

LAND SURVEYORS — SEPTIC DESIGNERS — CIVIL ENGINEERS — TRANSPORTATION PLANNERS



LEGEND

- WETLAND
- MONUMENT
- BOUND
- BEARING / DISTANCE
- PROPERTY LINE
- BUILDING SETBACK LINE
- EDGE OF WETLAND
- WETLANDS SETBACK LINE
- BARB WIRE FENCE
- CHAIN LINK FENCE
- STONEWALL
- PROPOSED 10' TREE PLANTING EASEMENT
- PROPOSED SEWER EASEMENT
- PROPOSED DRAINAGE EASEMENT

GENERAL SUBDIVISION NOTES:

1. THE PURPOSE OF THIS PLAN IS TO SUBDIVIDE MAP 259, LOT 29 INTO 7 LOTS WITH REMAINING RESERVED SPACE UNDER THE CLUSTER SUBDIVISION REGULATIONS.
2. TOTAL PARCELS AREA = 6.86 ACRES
3. PARCEL IS ZONED AGRICULTURAL.
4. MINIMUM LOT REQUIREMENTS (UNDER CLUSTER DEVELOPMENT):
   LOT SIZE = 10,000 SF (WITH BOTH WATER AND SEWER)
   FRONTAGE = 70'
5. BUILDING SETBACKS: FRONT YARD = 25', SIDE YARD = 10', IN REAR YARD = 25'
6. THE LOTS ARE TO BE SERVICED BY CITY WATER AND SEWER SYSTEMS.
7. THE SUBJECT PARCEL IS NOT LOCATED WITHIN THE 100 YEAR FLOOD ZONE AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR ROCHESTER.
8. WETLANDS WERE DELINEATED BY RANDOLPH R. TETSEALL? ON OR ABOUT SEPT. AND NOV. 2007 ON THE BASIS OF HYDROPHYTIC VEGETATION, HYDRIC SOILS, AND WETLANDS HYDROLOGY IN ACCORDANCE WITH THE TECHNIQUES OUTLINED IN THE CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, TECHNICAL REPORT Y-87-1, JANUARY 1987. THE HYDRIC SOIL COMPONENT WAS DETERMINED BY USING THE FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 3, JULY 1997. (USE DEPT.NO 1014.03 DELINEATION OF WETLANDS HYDRIC SOILS DETERMINATION).
9. ALL WETLANDS LESS THAN ONE HALF AN ACRE IN SIZE, EXCEPT VERNAL POOLS ARE EXEMPT FROM THE PROVISIONS OF THE CONSERVATION OVERLAY DISTRICT AND DO NOT HAVE A WETLANDS BUFFER AROUND THEM.
10. ALL UTILITIES MUST BE UNDERGROUND, INCLUDING UTILITIES EXTENDED INTO THE SITE FROM EXISTING POLES NEAR THE SITE. HOWEVER, IF THE ONLY POLE NEARBY IS ACROSS THE STREET, ONE ADDITIONAL POLE MAY BE PLACED ON NEAR THE PROPERTY TO ALLOW FOR OVERHEAD EXTENSION OF WIRES ACROSS THE STREET. UTILITIES EXTENDED FROM ANY SUCH NEW POLE MUST BE UNDERGROUND. THE APPLICANT MAY WORK WITH THE CITY STAFF AS APPROPRIATE TO ADDRESS THIS CONDITION.
11. THIS DEVELOPMENT MUST BE IN COMPLIANCE WITH ALL APPLICABLE LAW – INCLUDING ALL PERTINENT PROVISIONS OF THE CITY OF ROCHESTER SUBDIVISION REGULATIONS – UNLESS OTHERWISE WAIVED.
12. FOR MORE INFORMATION ABOUT THIS SUBDIVISION, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT: 31 WAKEFIELD STREET, ROCHESTER, 03867, (603) 330-1330.
13. THE DEVELOPER IS RESPONSIBLE FOR THE 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 CONDITIONS REGARDING ACCESS FOR FIRE APPARATUS). ONCE ANY CERTIFICATE OF OCCUPANCY HAS BEEN ISSUED THE DEVELOPER MUST PROVIDE APPROPRIATE MAINTENANCE INCLUDING SNOW-PLOWING SERVICES IN ORDER TO ALLOW SAFE PASSAGE FOR RESIDENTS, EMERGENCY VEHICLES, AND SERVICE VEHICLES. THE CITY OF ROCHESTER MAY USE ANY SURETY ATTACHED TO THIS PROJECT TO PROVIDE THE NECESSARY MAINTENANCE, IF THE DEVELOPER FAILS TO PROVIDE THIS MAINTENANCE, AS DETERMINED BY THE CITY.

SUBDIVISION APPROVAL:

WHETHER OR NOT OTHERWISE EXPRESSLY STATED ON THIS SUBDIVISION PLAN, THE SUBDIVISION APPROVAL GRANTED IS CONDITIONED ON PARTIAL 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 WAIVED AS EXPRESSLY NOTED ON ANY PARTICULAR SUBDIVISION. NON-ADHERENCE MAY RESULT IN A REVOCATION OF APPROVAL. ANY VARIATION FROM THE APPROVED PLAN WILL REQUIRE A RESUBMISSION FROM SUBDIVISION APPROVAL.

MAP / LOT	NAME AND MAILING ADDRESS
259 / 15	[illegible]
259 / 27	[illegible]
259 / 28	[illegible]
259 / 29	[illegible]
259 / 30	[illegible]
259 / 31	[illegible]
259 / 32	[illegible]
259 / 33	[illegible]
259 / 36	[illegible]
259 / 36-1	[illegible]
259 / 37	[illegible]
259 / 38	[illegible]
259 / 46	[illegible]
259 / 47	[illegible]
259 / 48	[illegible]
259 / 49	[illegible]
259 / 50	[illegible]

LOCUS
N.T.S

FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

CERTIFIED BY: _____ DATE: _____

STORMWATER CONTROL NOTE:
HOMES ON LOTS 29-1 (REAR HALF ONLY), 29-2, 29-3, 29-4, & 29-6 (REAR HALF ONLY) MUST BE CONSTRUCTED WITH STORMWATER INFILTRATION SYSTEMS FOR WATER DRAINAGE FROM THE ROOF, AS SHOWN ON THE PLAN SHEETS C-1 THROUGH C-13. THE INFILTRATION SYSTEMS, ROOF GUTTERS AND DOWN SPOUTS MUST BE MAINTAINED BY THE HOME OWNER.

TAX MAP 259, LOT 29
OWNER OF RECORD:
STEVE MILLER GENERAL CONTRACTING, LLC
93 BLACKWATER ROAD
ROCHESTER, NH 03867
BK. 3545, PG. 705

~TOPOGRAPHIC~

CLUSTER SUBDIVISION PLAN
FLAGG ROAD
TAX MAP 259, LOT 29
ROCHESTER, NH

PREPARED FOR

STEVE MILLER GENERAL CONTRACTING, LLC

DECEMBER 2013

GRAPHIC SCALE

(IN FEET)
1 INCH = 60 FT.

REVISION DATES: 04/15/04

FILE NO 134
PLAN NO C-2502
DFC NO 07183\S-S
F.B. NO.

31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

2 Continental Blvd., Rochester, N.H. 603-335-3948

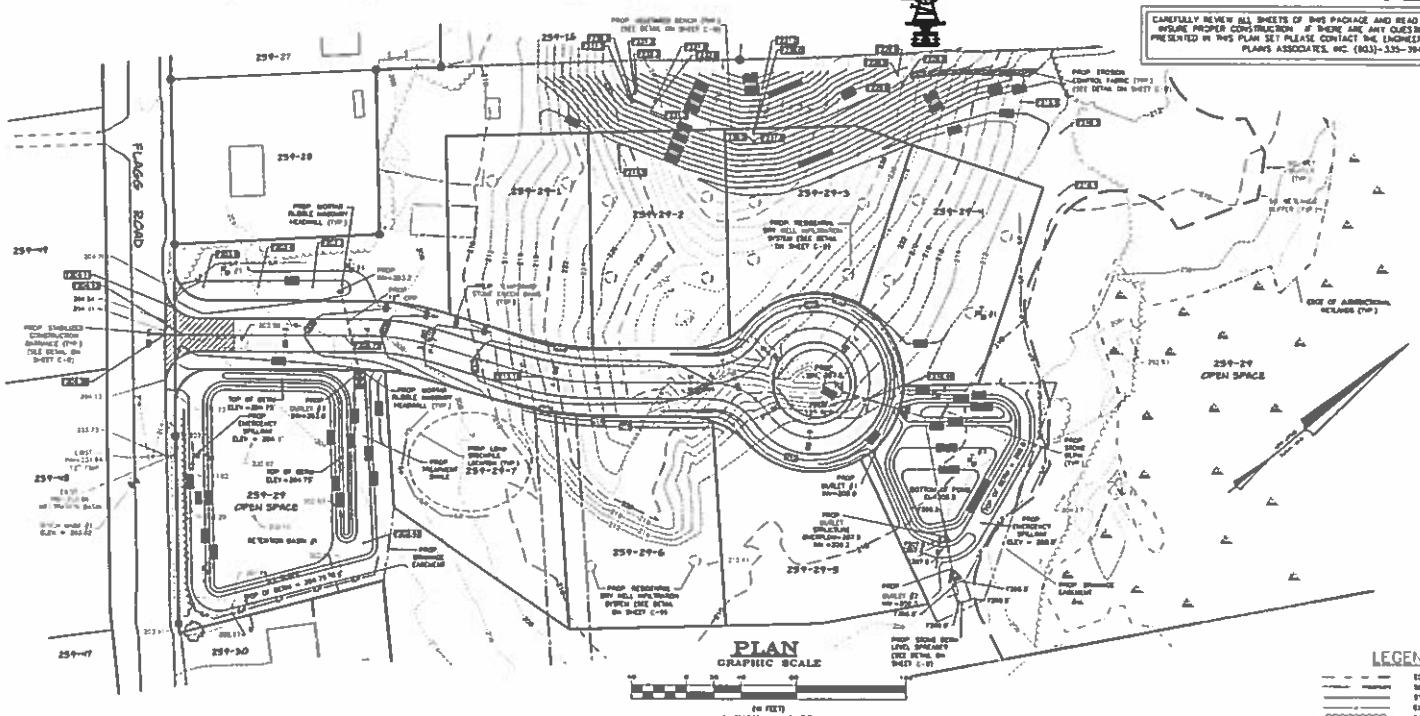
S-2

LAND SURVEYORS - SEPTIC DESIGNERS

CIVIL ENGINEERS - TRANSPORTATION PLANNERS

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE AND READ ALL OF THE NOTES TO ENSURE PROPER CONSTRUCTION. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948

REVISIONS:



PLAN

GRAPHIC SCALE

(IN FEET)

1 INCH = 40 FT.

LEGEND

- EDGE OF AGRICULTURAL WETLANDS
- 100' WETLANDS BUFFER
- STONEWALL
- EXIST. FENCE
- EXIST. TREE LINE
- EXIST. DRAINAGE PIPE
- EXIST. CONTOUR
- EXIST. CATCH BASIN
- EXIST. SPOT ELEVATION
- PROP. TREE LINE
- PROP. DRAINAGE EASEMENT
- PROP. DRAINAGE PIPE
- PROP. CONTOUR
- PROP. OUTLET PROTECTION
- PROP. SILT FENCE
- PROP. CATCH BASIN
- PROP. OUTLET STRUCTURE
- PROP. SPOT GRADE

GRADING & EROSION CONTROL NOTES

1. INSTALL CONSTRUCTION ENTRANCES AS SHOWN ON THIS PLAN AND IN ACCORDANCE WITH THE DETAILS ON SHEET C-8
2. INSTALL ALL DRAINAGE STRUCTURES AS SHOWN ON THIS PLAN AND IN ACCORDANCE WITH THE DETAILS ON C-8
3. INSTALL ALL EROSION CONTROL MEASURES (SILT FENCE, HAY BALES, ETC.) AS SHOWN ON THIS PLAN AND IN ACCORDANCE WITH THE DETAILS ON C-8.
4. PLACE WHOOT SPEC. GRAVEL AND CRUSHED GRAVEL COURSES FOR THE ROAD PER THE ROAD CROSS-SECTION ON SHEET C-7 IN 8 INCH LIFTS. COMPACT TO 95% MAXIMUM PROCTOR DENSITY PRIOR TO PAVING.
5. ALL DISTURBED AREAS NOT PAVED OR OTHERWISE TREATED SHALL RECEIVE 4" OF LOAM, SEED AND MULCH AS SPECIFIED IN THE NOTES ON THE EROSION CONTROL DETAIL SHEET C-8.
6. COMPACTION REQUIREMENTS

LOCATION	MINIMUM COMPACTION*
BELOW PAVED/CONCRETE AREAS	95%
TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL	95%
BELOW LOAM AND SEED AREAS	90%

*ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM PROCTOR DENSITY.

7. ADJUST ALL MANHOLES, ETC. WITHIN LIMITS OF WORK TO FINISHED GRADE.
8. THE CONTRACTOR SHALL PROVIDE A PAVEMENT SURFACE FREE OF LOW AND PONDING AREAS. CRITICAL AREAS INCLUDE ROADWAY INTERSECTION, DRIVEWAY INTERSECTIONS AND AT CULVERTS.
9. EROSION CONTROL DEVICES SHALL BE INSPECTED AFTER EACH RAIN STORM OF 0.25 INCHES OR GREATER. DAMAGED EROSION CONTROL DEVICES SHALL BE REPAIRED/MODIFIED AS NECESSARY.
10. SEE THE EROSION CONTROL NOTES LOCATED ON THE EROSION CONTROL DETAIL SHEET C-8 FOR A COMPREHENSIVE CONSTRUCTION SEQUENCE.
11. ON ALL DISTURBED AREAS WITH SLOPES GREATER THAN 3:1, THE CONTRACTOR SHALL INSTALL 4" OF LOAM AND EROSION CONTROL FABRIC. SEED AND MULCH SHALL BE USED AS SPECIFIED IN THE NOTES ON THE EROSION CONTROL DETAIL SHEET C-8.
12. INSTALLATION OF DRAINAGE PIPE SHALL INCLUDE ONE GASKET PER JOINT.
13. INFILTRATION SYSTEM LOCATIONS SHOWN ARE SUGGESTIONS. CONTRACTOR SHALL COORDINATE INFILTRATION SYSTEM LOCATIONS PRIOR TO DEVELOPMENT FOR LOT 259-29-1 THROUGH LOT 259-29-6 AND LOT 259-29-8. THE INFILTRATION SYSTEM DETAIL IS SHOWN ON SHEET C-9.
14. ALL LOT DISTURBANCE, OTHER THAN THAT SHOWN ON THE APPROVED PLANS, SHALL NOT OCCUR UNTIL AFTER THE ROADWAY AND ASSOCIATED DRAINAGE HAVE BEEN COMPLETED AND STABILIZED.

LEFT SIDE-DITCH GRADING SUMMARY

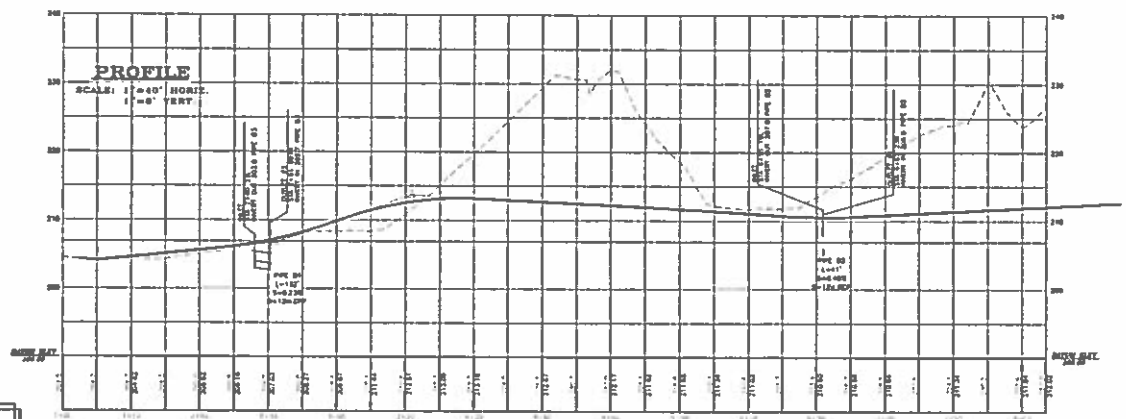
STATION	OFFSET	ELEVATION
1+40	35.00 L	203.60
1+60	35.00 L	203.52
1+80	35.00 L	203.42
2+00	35.00 L	203.36
2+20	35.00 L	203.28
2+40	35.00 L	203.20

GENERAL DRY WELL INFILTRATION SYSTEM NOTES

1. EACH RESIDENTIAL DRY WELL INFILTRATION SYSTEM SHALL BE 6 FEET IN DIAMETER AND 3.33 FEET DEEP OF 1.5" CLEAN COARSE GRADED STONE AGGREGATE.
2. THE 1.5" COARSE GRADED STONE AGGREGATE SHALL HAVE A NONWOVEN GEOTEXTILE FABRIC, WHICH HAS BEEN EQUAL OVER THE TOP AND AROUND THE PERIMETER OF THE SYSTEM.
3. EACH INFILTRATION SYSTEM HAS BEEN SIZED TO ACCEPT RUNOFF FROM ROOFS THE REAR OR FRONT HALF OF EACH DUPLEX UNIT. LOT 259-29-1 AND LOT 259-29-6 WILL INCLUDE TWO INFILTRATION SYSTEMS FOR THE REAR HALVES. LOTS 259-29-2 THROUGH 259-29-4 WILL INCLUDE TWO INFILTRATION SYSTEMS FOR BOTH THE FRONT AND REAR ROOFS.
4. ROOF GUTTERS WILL NEED TO BE PROVIDED AND DIRECTED FOR THE FRONTS AND REARS OF LOTS WITH REGARD INFILTRATION SYSTEMS.
5. EACH RESIDENTIAL DRY WELL INFILTRATION SYSTEM SHALL BE A MINIMUM OF 10 FEET FROM ANY PROPERTY LINE AND A MINIMUM OF 10 FEET FROM ANY FOUNDATION.

PROFILE

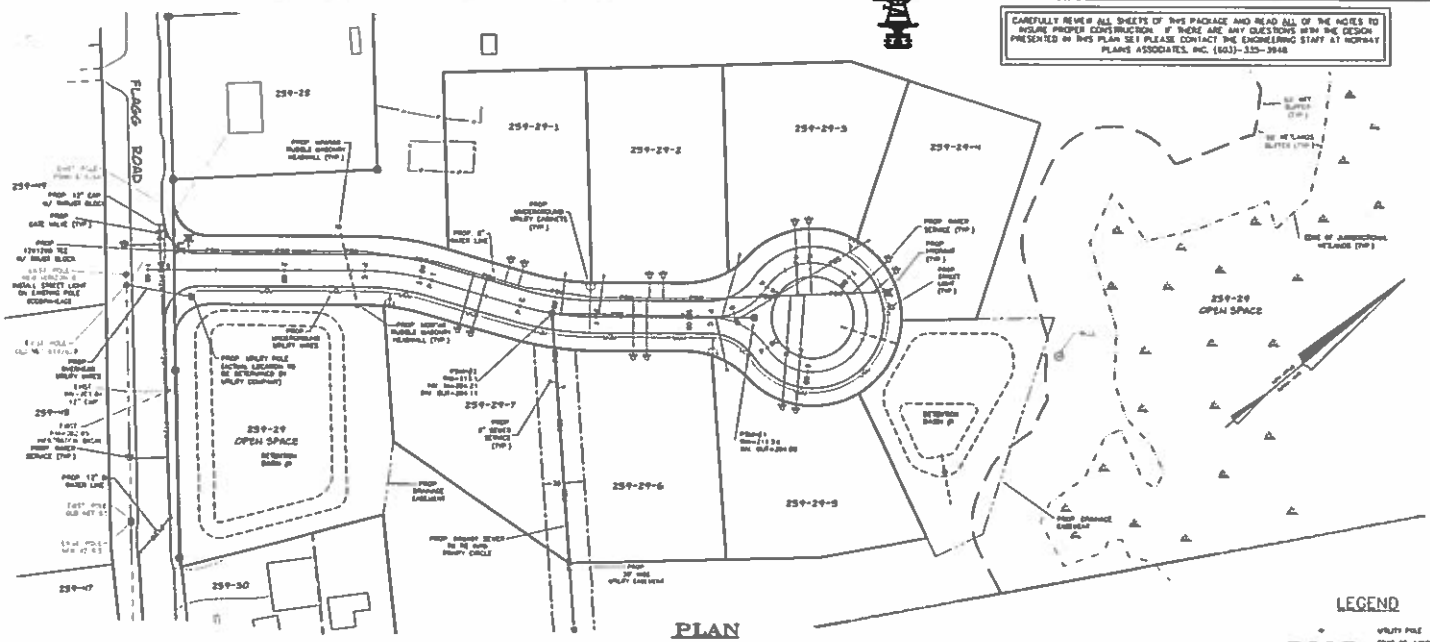
SCALE: 1"=40' HORIZ.
1"=8' VERT.



LAND SURVEYORS — SEPTIC DESIGNERS — CIVIL ENGINEERS — TRANSPORTATION PLANNERS

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE AND READ ALL OF THE NOTES TO INSURE PROPER CONSTRUCTION. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED ON THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948

REVISIONS:

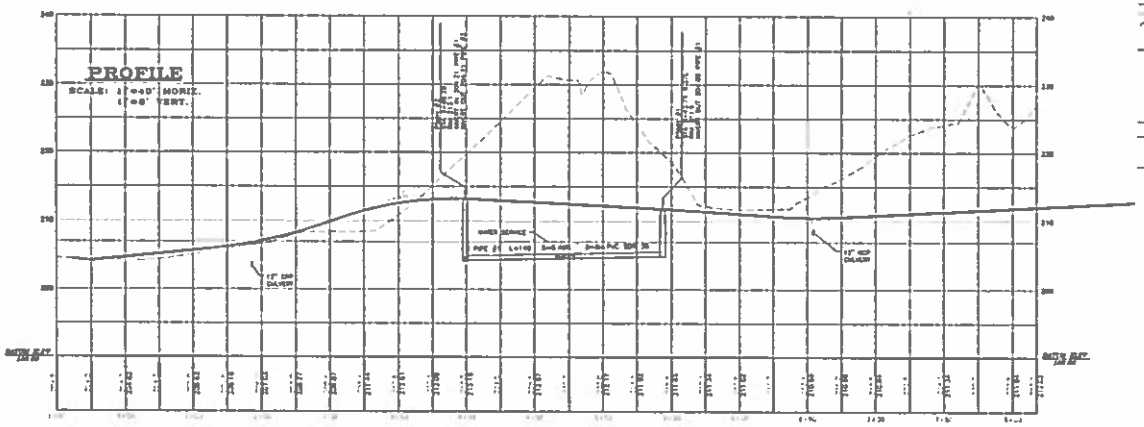


PLAN

GRAPHIC SCALE

(IN FEET)

1 INCH = 40 FT.



LEGEND

- UTILITY POLE
- EDGE OF JURISDICTIONAL WETLANDS
- 50' WETLANDS BUFFER
- FENCE
- TREE LINE
- SEWER MANHOLE
- CATCH BASIN
- HYDRANT
- GATE VALVE
- STONE WALL
- SHORELAND WATER
- PROP TREE LINE
- PROP OUTLET STRUCTURE
- PROP DRAINAGE PIPE
- PROP SEWER MANHOLE
- PROP LIGHT POST
- PROP WATER SHUT OFF
- PROP HYDRANT
- PROP GATE VALVE
- PROP 8" WATER LINE
- PROP 12" WATER LINE
- PROP SEWER SERVICE
- PROP 8" SEWER LINE

UTILITY NOTES

1) CONTRACTOR SHALL NOTIFY DIG-SAFE (1-888 344-7233) 72 HOURS PRIOR TO THE START OF CONSTRUCTION
2) ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION OF THE PROPOSED SERVICES
3) THIS PLAN SHOWS ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT ON THE DATE OF THE SURVEY. THE ABSENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. FROM THIS PLAN, BUT IN EXISTENCE IS NOT INTENDED OR IMPLIED
4) WATERLINE CONSTRUCTION
   A) ALL PROPOSED WATER LINE MATERIAL USED SHALL MEET ROCHESTER WATER DEPARTMENT AND ROCHESTER ENGINEERING DEPARTMENT SPECIFICATIONS. WATER LINES SHALL BE A.W.W.A. C 151, CLASS 52, DOUBLE CEMENT LINED, DUCTILE IRON PIPE
   B) PROPOSED WATER GATE VALVES SHALL BE MANUFACTURED BY KENNEDY OF AMERICAN FLOW CONTROL, RESILIENT SEAT TYPE
   C) ALL WATER LINES SHALL BE BURIED A MINIMUM OF 5.5'
   D) ALL WATER FITTINGS SHALL BE CLASS 350
   E) PROPOSED WATER GATE VALVE SHALL OPEN CLOCKWISE (RIGHT)
5) NOTE TO CONNECT INTO THE WATER OR SEWER MAINS REQUIRES A PERMIT FROM THE ROCHESTER PUBLIC WORKS DEPARTMENT. CONTRACTORS ARE TO BE PRE-QUALIFIED.
6) CONTRACTOR SHALL LOCATE EXISTING SERVICES AND COORDINATE WITH THE CITY OF ROCHESTER FOR DISCONTINUATION OF THE SERVICES.
7) PROVIDE THRUST BLOCKS AT ALL BENDS ON WATERLINE.
8) ALL UTILITIES ARE TO BE UNDERGROUND AND INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS SET BY THE APPROPRIATE UTILITY COMPANY
9) CONTRACTOR SHALL COORDINATE CONNECTION TO CITY WATER WITH PUBLIC WORKS
10) CONTRACTOR SHALL COORDINATE TESTING OF THE WATER MAIN, SEWER MAIN, SEWER FORCEMAINS AND SEWER MANHOLES WITH PUBLIC WORKS
   A) MANHOLES MUST BE VACUUM LEAKAGE TESTED IN ACCORDANCE WITH (ASTM C1244)
   B) SANITARY SEWER MUST BE TESTED IN ACCORDANCE WITH LOW-PRESSURE AIR TESTING (ASTM F1417) AND DEFLECTION TESTING USING A 60/40 GO/NO GO MANDREL
   C) FORCEMAINS MUST BE PRESSURE TESTED IN ACCORDANCE WITH AWWA C600 AT 150% OF THE DESIGN OPERATING TOTAL DYNAMIC HEAD AND AT LEAST 100 PSI
11) SEWER MAIN AND WATER MAIN CROSSING
   A) VERTICAL SEPARATION OF THE SEWER AND WATER MAIN SHALL NOT BE LESS THAN 18 INCHES, WITH WATER ABOVE SEWER
   B) SEWER PIPE JOINTS SHALL BE LOCATED AT LEAST 6 FEET HORIZONTALLY FROM THE WATER MAIN
12) WATER AND SEWER MAINS INSTALLED ADJACENT ONE ANOTHER SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 10 FEET
13) INSULATE SEWER LINE WITH 2" RIGID INSULATION WHERE LESS THAN 6' FEET OF COVER UNDER PAVEMENT AND LESS THAN 4' OF COVER UNDER GRASS
14) ALL SEWER SHUT-OFF VALVES SHALL BE PAINTED GREEN AND ALL WATER SHUT-OFF VALVES SHALL BE PAINTED BLUE
15) INSTALLATION OF GAS, ELECTRIC, AND TELEPHONE SERVICE SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANIES
16) INSULATE WATER LINE WITH 2" RIGID INSULATION WHERE LESS THAN 5.5 FEET OF COVER
17) 6" PVC SDR 35 SEWER SERVICE STUBS SHALL BE INSTALLED FOR EACH LOT AT 2% SLOPE
18) EACH UNIT SHALL BE SERVICED BY A 3/4" COPPER WATER SERVICE. EACH BUILDING SHALL BE SERVICED BY A 3/4" SPRINKLER SERVICE. A TYPICAL WATER SERVICE SCHEMATIC IS SHOWN ON SHEET C-1

FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

CERTIFIED BY: _____ DATE: _____

UTILITY PLAN & PROFILE
FLAGG ROAD
ROCHESTER, N.H.
FOR
STEVE MILLER GENERAL CONTRACTING, L.L.C.

SCALE 1"=40' (HORIZ.) DEC. 2013
1"=8' (VERT.)

TITLE NO 124
PLAN NO C-2502
DWG NO 07193\S-5
F.B NO.

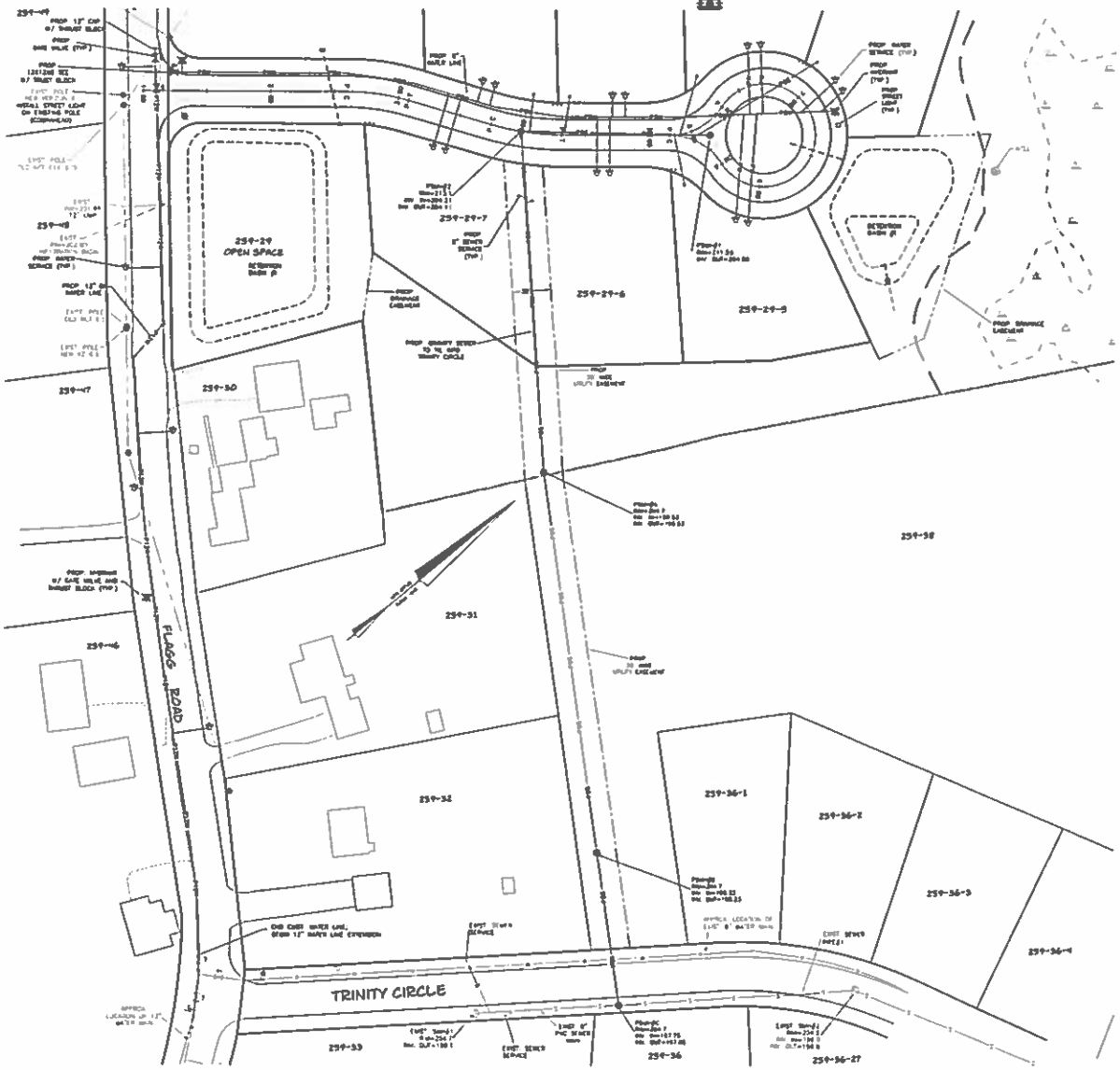
31 Meaney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

2 Continental Blvd., Rochester, N.H. 603-335-3948

LAND SURVEYORS — SEPTIC DESIGNERS — CIVIL ENGINEERS — TRANSPORTATION PLANNERS

REVISIONS



LEGEND

WATER & SEWER MAIN EXTENSION PLAN
FLAGG ROAD
ROCHESTER, N.H.

FOR

STEVE MILLER GENERAL CONTRACTING, L.L.C.

SCALE: 1" = 40' DEC. 2013

GRAPHIC SCALE

1 INCH = 40 FT.

TILE NO. 134
PLAN NO. C-2502
DWG NO. 07183\S-5
F.B NO.

31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

2 Continental Blvd., Rochester, N.H. 603-335-3948

C-4

LAND SURVEYORS - SEPTIC DESIGNERS

CIVIL ENGINEERS - TRANSPORTATION PLANNERS

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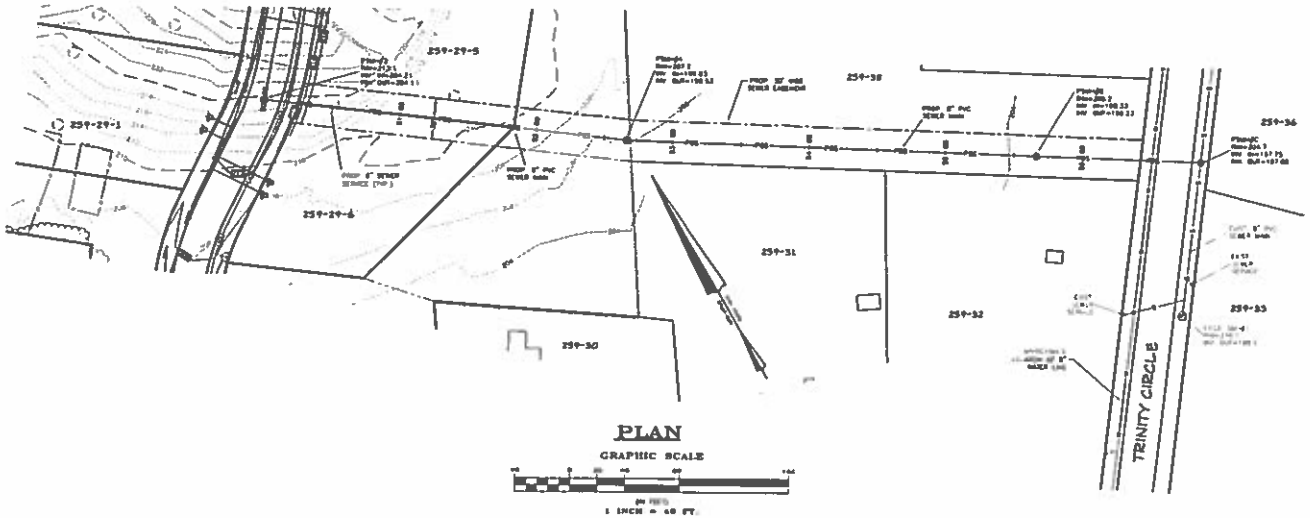

PLAN

GRAPHIC SCALE

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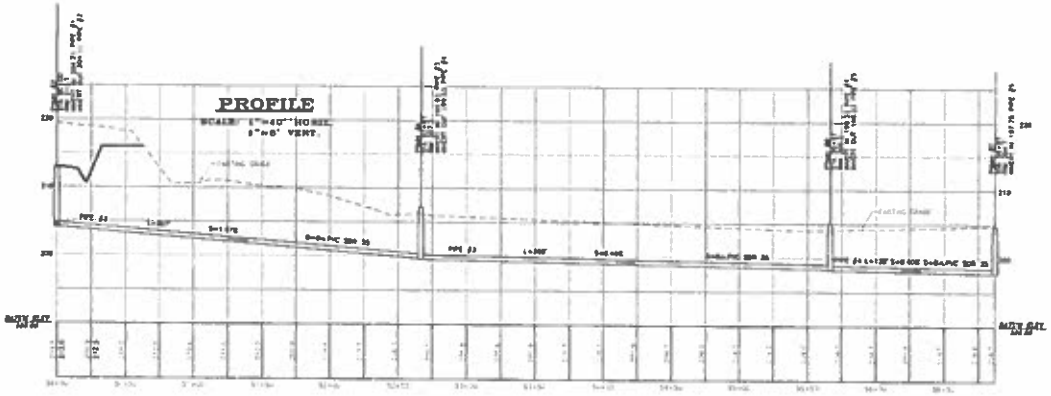

LEGEND

UTILITY POLE
EDGE OF JURISDICTIONAL WETLANDS
50' WETLANDS BUFFER
FENCE
TREE LINE
SEWER MANHOLE
CATCH BASIN
HYDRANT
GATE VALVE
STONEWALL
OVERHEAD WIRE
PROP TREE LINE
PROP OUTLET STRUCTURE
PROP DRAINAGE PIPE
PROP SEWER MANHOLE
PROP LIGHT POLE
PROP WATER SHUT OFF
PROP HYDRANT
PROP GATE VALVE
PROP 8" WATER LINE
PROP 12" WATER LINE
PROP SEWER SERVICE
PROP 8" SEWER MAIN

CROSS-COUNTRY SEWER PLAN & PROFILE

FLAGG ROAD

ROCHESTER, N.H.

FOR

STEVE MILLER GENERAL CONTRACTING, L.L.C.

SCALE 1"=40' (HORIZ.) DEC. 2013
1"=5' (VERT.)

FILE NO 134
PLAN NO C-2502
DWG NO 07183\S-5
F.B NO

31 Meadow Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

2 Continental Blvd., Rochester, N.H. 603-335-3948

C-5

LAND SURVEYORS - SEPTIC DESIGNERS

CIVIL ENGINEERS - TRANSPORTATION PLANNERS

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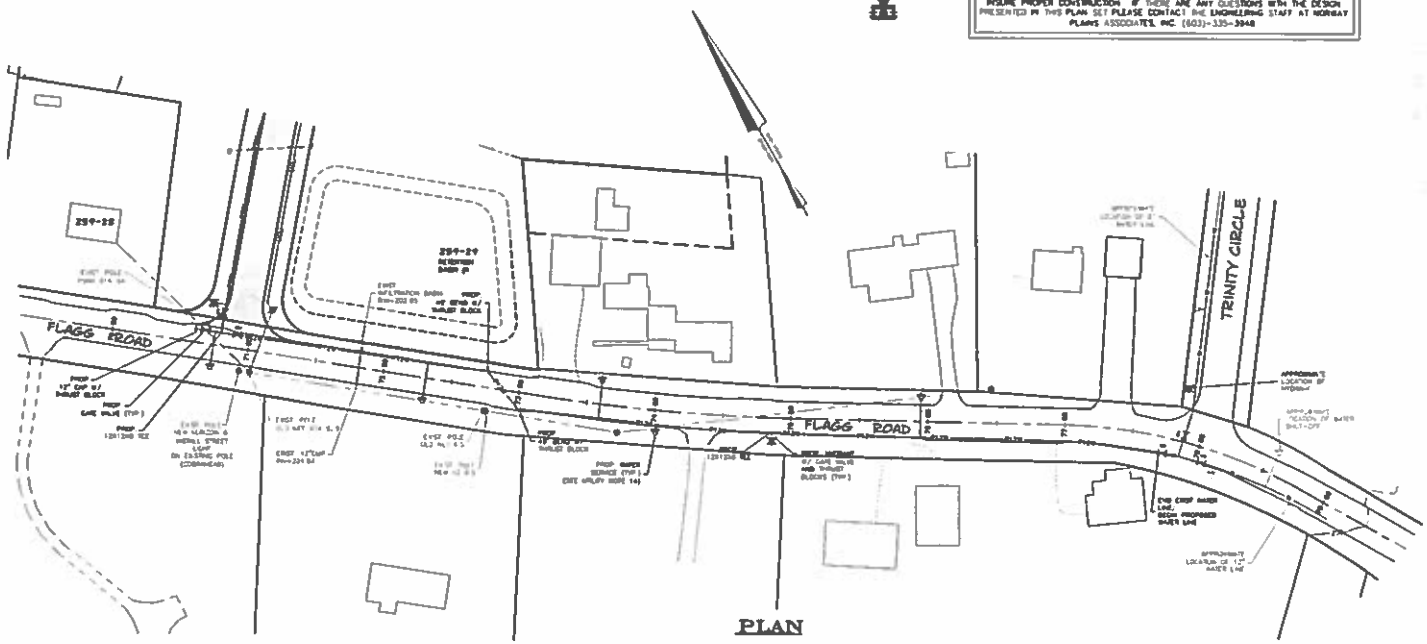

PLAN

GRAPHIC SCALE

1 INCH = 40 FT.

WATER MAIN EXTENSION NOTES

1) EACH EXISTING HOUSE LOT ON FLAGG ROAD SHALL BE PROVIDED WITH A 3/4" COPPER WATER SERVICE.

LEGEND

- UTILITY POLE
- EDGE OF JURISDICTIONAL WETLANDS
- 50' WETLANDS BUFFER
- FENCE
- TREE LINE
- SEWER MANHOLE
- CATCH BASIN
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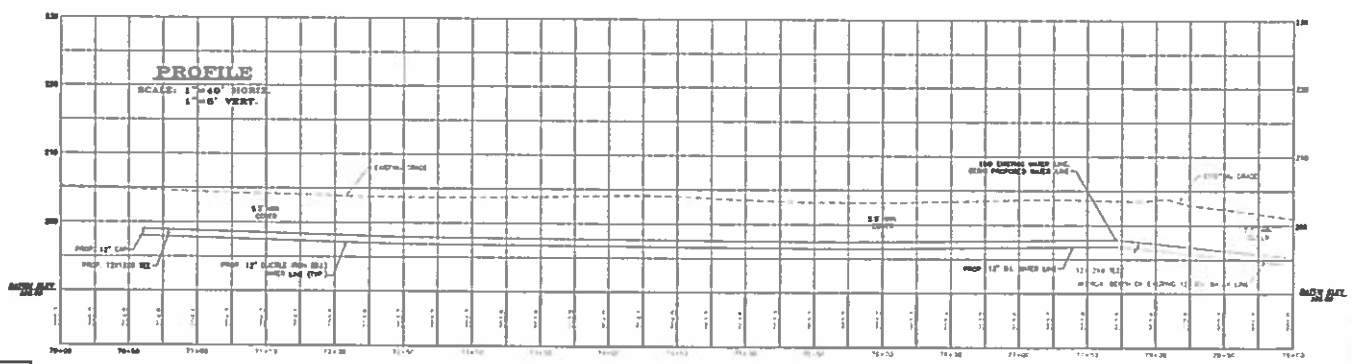
- PROP. TREE LINE
- PROP. OUTLET STRUCTURE
- PROP. DRAINAGE PIPE
- PROP. SEWER MANHOLE
- PROP. LIGHT POLE
- PROP. GATE SHUT OFF
- PROP. HYDRANT
- PROP. GATE VALVE
- PROP. 8" WATER LINE
- PROP. 12" WATER LINE
- PROP. SEWER SERVICE
- PROP. 8" SEWER MAIN



WATER MAIN EXTENSION PLAN & PROFILE

FLAGG ROAD

ROCHESTER, N.H.

FOR

STEVE MILLER GENERAL CONTRACTING, L.L.C.

SCALE 1"=40' (HORIZ.) DEC. 2013
1"=8' (VERT.)

TITLE NO 124
PLAN NO C-2502
DWG. NO. 07183\3-5
F.B. NO.

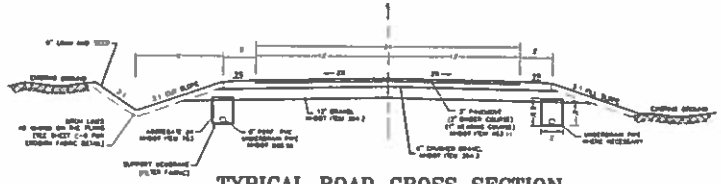
31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

2 Continental Blvd., Rochester, N.H. 603-335-3948

C-6

REVISIONS:

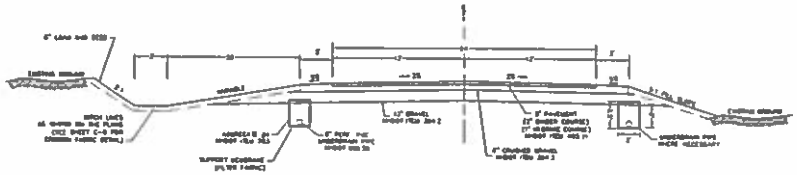


TYPICAL ROAD CROSS SECTION

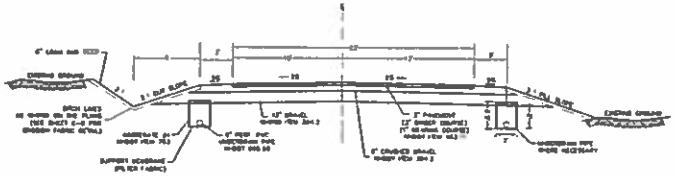
SCALE: 1"=5'

CONSTRUCTION MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH NHDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION, AND THE CITY OF ROCHESTER CONSTRUCTION SPECIFICATIONS.

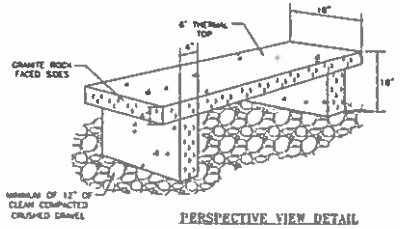
NOTES:
1) CONTRACTOR IS TO CONTACT CITY ENGINEER, TO REVIEW CONDITION OF THE ROLLCHED ON ROAD, 72 HOURS PRIOR TO THE INSTALLATION OF PAVEMENT
2) CRUBBING IS REQUIRED UNDER THE LIMITS OF THE ROADWAY AND FILL SECTIONS.
3) ALL BACK FILL IN TRENCHES AND FILL FOR THE ROAD BEDS SHALL BE COMPACTED TO 95% OPTIMUM DENSITY
4) UNDERDRAIN SHALL BE INSTALLED IN AREAS DEEMED NECESSARY AS DETERMINED BY SUBDRAINAGE CONDITIONS, OR AS REQUIRED BY THE CITY ENGINEER (NHDOT ITEM 605.56)
5) AGGREGATE (6" (NHDOT ITEM 703) SHALL BE WRAPPED IN A SUPPORT MEMBRANE (FILTER FABRIC).
6) UNDERDRAIN SHALL OUTLET TO THE ROADSIDE DITCHES.
7) INSTALL EROSION FABRIC IN THE ROADSIDE DITCHES AS SHOWN ON THE EROSION CONTROL FABRIC SUMMARY ON SHEETS C-2 AND C-8 AND IN ACCORDANCE WITH THE EROSION FABRIC DETAIL ON SHEET C-8



TYPICAL ROAD CROSS SECTION STA 1+12 TO STA 2+60



TYPICAL ROAD CROSS SECTION AT CUL-DE-SAC

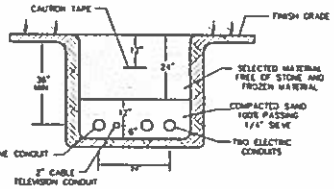


PERSPECTIVE VIEW DETAIL

NOTES:
1. SPECIFICATIONS FOR SIZE DIMENSIONS OF BENCH SHALL BE AS SHOWN OR AS CHOSEN [illegible]
2. THE BENCH SHALL BE A SOLID GRANITE BLOCK WITH A THERMAL TOP AND POLE FACED SIDES AS SHOWN
3. THE BENCH SHALL BE SET ON 12" COMPACTED GRAVEL AS SHOWN IF NOT ON CONCRETE OR SOME OTHER PAVED SURFACE

SOLID GRANITE BLOCK BENCH

NOT TO SCALE



NOTES
1. UTILITY CONDUITS SHALL BE INSTALLED WITH THE SPECIFICATIONS SET BY THE APPROPRIATE UTILITY COMPANY
2. NORMAL CONDUITS SIZES FOR PSNH ARE 3-INCH FOR SINGLE PHASE PRIMARY AND SECONDARY VOLTAGE CABLES, 4-INCH FOR THREE PHASE SECONDARY, AND 5-INCH FOR THREE PHASE PRIMARY GRAY COLORED ELECTRICAL GRADE SCHEDULE 40 PVC IS REQUIRED.
3. TELEPHONE CONDUIT SHALL BE 4-INCH GRAY NESC SCHEDULE 40 PVC OR EQUIVALENT.

TELEPHONE AND ELECTRICAL COMPANY TRENCH CROSS SECTION

NOT TO SCALE

UTILITY OWNERS:

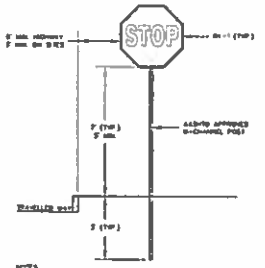
CITY OF ROCHESTER WATER & SEWER SYSTEM
DELOCK (STEVENS, P.E.
CITY OF ROCHESTER-PUBLIC WORKS DEPARTMENT
45 OLD DOVER ROAD
ROCHESTER, NH 03867
(603) 332-4096
(603) 335-4352 (FAX)

ITEM NO.	SIGN SIZE HEIGHT	SIGN SIZE WIDTH	TEXT	NO SIGNS REQ'D
R1-1	30"	30"	STOP	1
R4-7b	30"	24"	KEEP RIGHT	1
W14-1	30"	30"	DEAD END	1
ROCHESTER STREET SIGN	9" HIGH (GREEN) W/ 6" WHITE LETTERS	AS NECESSARY	STREET NAME	1

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

SIGN SCHEDULE

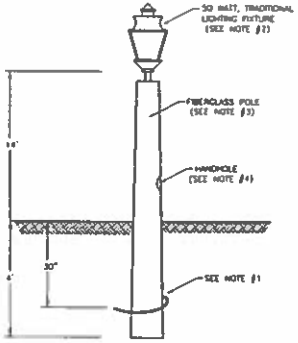
NOT TO SCALE



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

TYPICAL TRAFFIC SIGN

NOT TO SCALE



STREET LIGHT DETAIL

NOT TO SCALE

NOTES:
1. POLES TO BE SET SO THAT WIRING EXIT FACES THE ROAD.
2. ORIENT FIXTURE CORRECTLY AS TO FIELD AND STREET SIDE.
3. USE GRAY POLE WITH BLACK TRADITIONAL LUMINAIRE FIXTURE.
4. EXTEND DIRECT BURIED CABLE FAR ENOUGH INTO THE POLE TO MAKE THE CONNECTION AT THE HANDHOLE IN THE POLE. EXTEND #14, 2/C COPPER STREET LIGHT CABLE FROM THIS CONNECTION TO THE LUMINAIRE.
5. STREET LIGHTS SHALL NOT BE SPACED FURTHER APART THAN 500-FT
6. A STREET LIGHT SHALL BE LOCATED AT EACH INTERSECTION
7. STREET LIGHTS SHALL BE TOWN AND COUNTRY STYLE.

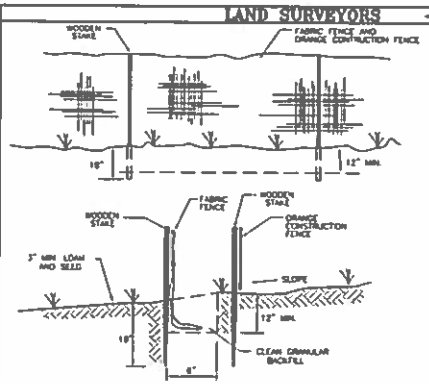
CONSTRUCTION DETAILS
FLAGG ROAD
ROCHESTER, N.H.
FOR
STEVE MILLER GENERAL CONTRACTING, L.L.C.

SCALE: AS SHOWN DEC. 2013

TILE NO 134
PLAN NO. C-2502
DEC. NO. 07183/S-5
F.B. NO

31 Mooney Street, Alton, N.H. 603-875-3948
NORWAY PLAINS ASSOCIATES, INC.
2 Continental Blvd., Rochester, N.H. 603-335-3948

REVISIONS:



SILTATION CONTROL FENCE AND CONSTRUCTION FENCE DETAIL

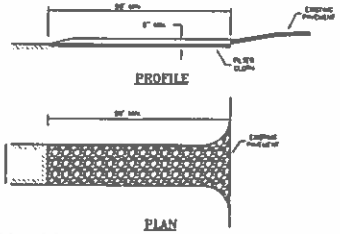
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. THE CENTRALE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES.
2. THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
3. FILTER CLOTH SHALL BE FASTENED SECURELY TO THE WOODEN STAKES OR AN INTEGRAL PART OF THE FENCE.
4. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED.
5. WOODEN STAKES SHALL BE A MINIMUM OF 36 INCHES LONG AND DRIVEN A MINIMUM OF 16 INCHES INTO THE GROUND. WOOD POSTS SHALL BE OF SOUND QUALITY HARDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED TO PREVENT BULGES IN THE SILT FENCE DUE TO DEPOSITION OF SEDIMENT.

MAINTENANCE

1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
2. IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
4. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE REGRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.



CONSTRUCTION SPECIFICATIONS

1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL AND BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE VEHICLES OR EQUIPMENT ENTERS ON TO THE SITE, WHICH EVER IS GREATER.
5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARDS THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIRS AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. VEHICLES SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

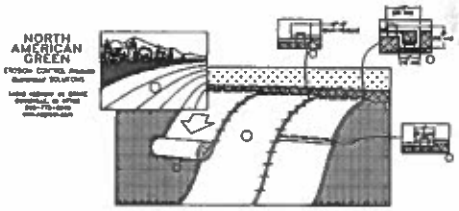
MAINTENANCE NOTES

1. HOSE AND SOIL PADDLES WILL EVENTUALLY CLOG THE VOIDS IN THE GRAVEL AND THE EFFECTIVENESS OF THE GRAVEL PAD WILL NOT BE SATISFACTORY WHEN THIS OCCURS. THE PAD SHOULD BE TOP DRESSED WITH NEW STONE.
2. COMPLETE REPLACEMENT OF THE PAD MAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY CLOGGED.
3. IF WASHING FACILITIES ARE USED, THE SEDIMENT TRAPS SHOULD BE CLEANED OUT AS OFTEN AS NECESSARY TO ENSURE THAT ADEQUATE WASHING EFFICIENCY AND STORAGE VOLUME IS AVAILABLE.
4. VEGETATED FILTER STRIPS SHOULD BE MAINTAINED TO ENSURE A MAXIMUM STAND OF VEGETATION AT ALL TIMES.

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

SLOPE INSTALLATION

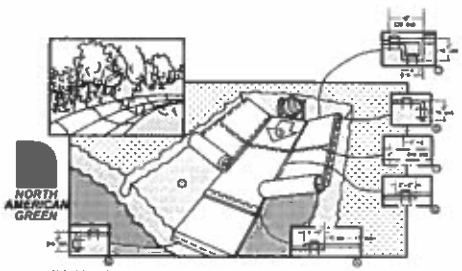


1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP'S OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP'S.
3. ROLL THE RECP'S (+/- 30YDS OR 30 M) VERTICALLY ACROSS THE SLOPE. RECP'S FULL WIDTH WILL APPROXIMATE 30M ALONG THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN ALTERNATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE WHICH COME WITH THE RECP'S. STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON RECP'S TYPE.
5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END-WIDE (OR TRIMMED STRIPS) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH THE OVERLAPPED AREA APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP'S WIDTH.

NOTE
IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

EROSION CONTROL BLANKET DETAIL

NOT TO SCALE



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. USE ROLL-OUT NETS OR HAND SEED PREPARED AREA. COLL-O-WEB MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL, BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL OTHER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL OVERLAP WITH APPROXIMATELY TWO INCHES THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE WHICH COME WITH THE RECP. STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE BLANKETS END WIDE AND STAPLED OVERLAP WITH A 4" - 6" (10 CM - 15 CM) OVERLAP. USE A DOUBLE ROW OF STAPLES/STAKES 6" (15 CM) APART AND 4" (10 CM) ON CENTER TO SECURE BLANKETS.
5. FOR LENGTH (END OF BLANKET) AT TOP OF SIDE SLOPES SHOULD BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. BLANKET BLANKETS MUST BE OVERLAPPED APPROXIMATELY 3" - 5" (5 CM - 12.5 CM DEPENDING ON BLANKET TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FEET OR 9 - 12 M OPTIMALLY. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

GENERAL MAINTENANCE OF EROSION CONTROL STRUCTURES

1) ALL EROSION CONTROL STRUCTURES SHALL BE INSPECTED WEEKLY AND AFTER EVERY 0.5" OF RAINFALL. ALL DAMAGED STRUCTURES, TEMPORARY OR PERMANENT, SHALL BE REPAIRED IMMEDIATELY.
2) ALL DEBRIS, OBSTRUCTIONS AND SEDIMENT SHALL BE REMOVED AS NEEDED TO MAINTAIN PROPER FUNCTIONING. SEDIMENT AND DEBRIS SHALL BE DISPOSED OF PROPERLY IN APPROVED LOCATIONS.
3) ALL VEGETATION SHALL BE INSPECTED AND MAINTAINED AS DESIGNED. SEED AND FERTILIZER SHALL BE REAPPLIED AS NEEDED.
4) ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AFTER CONSTRUCTION IS COMPLETE AND ORIGINAL VEGETATIVE GROWTH IS ESTABLISHED.

EROSION CONTROL MEASURES

1) INSTALL ALL SILT FENCE AND ORANGE CONSTRUCTION FENCE PRIOR TO BEGINNING CONSTRUCTION.
2) INSTALL SOD IN ALL SWALES, UNLESS AN ADEQUATE STAND OF GRASS IS ESTABLISHED BEFORE DIRECTING WATER TO THE SWALE, IMMEDIATELY AFTER THEY ARE CONSTRUCTED.
3) SEEDING FOR LONG TERM COVER:

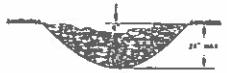
SEED MIXTURE	LBS./ACRE	LBS./1000 SQ. FT.
TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
BIRDSFOOT TREFOIL	8	0.20
TOTAL	48	1.10

NOTE: BIROSFOOT TREFOIL MUST BE INOCULATED

4) IF SOIL TEST IS NOT AVAILABLE THE FOLLOWING MINIMUM AMOUNTS SHALL BE USED:
LIME - 2 TONS/ACRE OR 100 LBS/1000 SQ. FT.
FERTILIZER - 500 LBS/ACRE OF 10-20-20 OR EQUAL.
5) THE ABOVE SPECIFICATION FOR GRASS SEED SHALL BE USED FOR THE RETENTION BASIN AND DETENTION BASIN.
6) SEEDING FOR TEMPORARY PROTECTION:

SEED MIXTURE	LBS./ACRE	LBS./1000 SQ. FT.
WINTER RYE	112	2.50

7) LOAM STOCKPILES. SEED LOAM STOCKPILES IN ACCORDANCE WITH NOTE #6 OF THE ABOVE IF TO BE STOCKPILED FOR 30 DAYS OR MORE. SILT FENCE SHALL BE INSTALLED AT THE TOE OF THE STOCKPILE ON THE DOWN GRADIENT SIDE ALONG 1/2 THE CIRCUMFERENCE OF THE STOCKPILE MINIMUM.
8) HAY OR STRAW MULCH SHALL BE PLACED ON ALL DISTURBED AREAS AT A RATE OF 2 TONS/ACRE OR 90 LBS/1000 SQ. FT.
9) STONE RIP RAP SHALL BE PLACED AT OUTLETS AS SHOWN ON THE PLANS.
10) RIP RAP, HAY BALES, AND EROSION CONTROL MATTING SHALL NOT BE PLACED ON FROZEN GROUND.



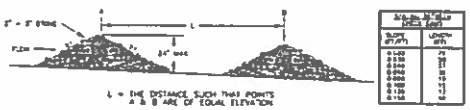
DRAINAGEWAY CROSS-SECTION

CONSTRUCTION SPECIFICATIONS

1. THE CHECK SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.
2. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED.
3. STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED.

MAINTENANCE NOTES

1. TEMPORARY CHECK STABILIZATION STRUCTURES SHOULD BE INSPECTED AFTER EACH STORM AND DAILY DURING PROLONGED STORM EVENTS. ANY CHANGE TO THE STRUCTURES SHALL BE REPAIRED IMMEDIATELY.
2. PARTICULAR ATTENTION SHOULD BE GIVEN TO END RUN AND EROSION AT THE DOWNSTREAM TOE OF THE STRUCTURE.
3. WHEN REMOVING THE STRUCTURES, THE DISTURBED AREAS SHALL BE GRADED UP TO EXISTING CHANNEL GRADE AND THE AREAS PREPARED, SEEDED AND MULCHED.
4. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURES WHEN IT REACHES 1/2 THE ORIGINAL HEIGHT OF THE STRUCTURE.



L = THE DISTANCE SUCH THAT POINTS A & B ARE OF EQUAL ELEVATION

SPACING BETWEEN STONE CHECK DAMS	
SLOPE (FT/FT)	LENGTH (FT)
0.100	75
0.150	50
0.200	38
0.250	30
0.300	25
0.350	22
0.400	19
0.450	17
0.500	15

STONE CHECK DAM INSTALLATION DETAIL

NOT TO SCALE

EROSION FABRIC DETAIL

NOT TO SCALE

ROADSIDE DITCHES - EROSION CONTROL FABRIC SUMMARY

DITCH	SOIL TYPE AND RECOMMENDED PRODUCT SPECIFICATION
0+75 - 1+75	STN
1+75 - 2+75	STN

CONSTRUCTION SEQUENCE

1. AREA OF DISTURBANCE SHALL BE MINIMIZED.
2. CONSTRUCT TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES. MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING.
3. CONSTRUCT A STABILIZED ENTRANCE AT THE INTERSECTION WITH FLAGG ROAD AND THE PROPOSED ROAD.
4. CUT TREES AND REMOVE STUMPS.
5. REMOVE THE LOAM AND VEGETATION FROM WITHIN THE ROADWAY AND SIDE SLOPE AREAS. THE LOAM WILL NEED TO BE STORED ON THE SITE FOR USE LATER IN STABILIZING THE SIDE SLOPES. THE LOAM PILE SHALL BE SEEDED FOR TEMPORARY PROTECTION SHOULD IT REMAIN INACTIVE FOR MORE THAN 30 DAYS.
6. CONSTRUCT THE RETENTION BASIN AND DETENTION BASIN. LOAM, SEED AND MULCH THE BOTTOM AND SIDE SLOPES IMMEDIATELY AFTER CONSTRUCTION. VEGETATION SHALL BE ESTABLISHED BEFORE DIRECTING WATER TO THE BASIN.
7. CUT THE ROADWAY TO SUBGRADE.
8. CONSTRUCT THE CLOSED DRAINAGE PIPES AND CATCH BASINS.
9. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED OR COVERED WITH AN EROSION CONTROL BLANKET IMMEDIATELY AFTER THEIR CONSTRUCTION.
10. INSTALL THE GRAVEL BASE IN ALL AREAS TO BE PAVED.
11. INSTALL ALL NEW PAVING.
12. ALL NEW ROADS SHALL BE STABILIZED WITHIN 72 HOURS AFTER GRADING.
13. LOT CONSTRUCTION SHALL NOT BEGIN UNTIL ALL ROADWAYS AND ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.
14. ALL DISTURBED AREAS (EXCLUDING BUILDINGS AND PARKING) SHALL BE STABILIZED AS SOON AS POSSIBLE, BUT IN NO CASE SHALL BE LEFT UNSTABILIZED FOR MORE THAN 30 DAYS. BUILDINGS AND DRIVEWAYS SHALL BE CONSTRUCTED AS PRACTICABLE, BUT IN NO CASE SHALL BE LEFT UNPROTECTED OVER THE WINTER MONTHS.
15. REMOVE TEMPORARY EROSION CONTROL (SILTFENCE, ETC.) TO ELIMINATE FLOW IMPEDIMENTS ONCE BUILDING IS FIRMLY ESTABLISHED.
16. AT NO POINT SHALL THERE BE MORE THAN 5 ACRES OF DISTURBED AREA, WITHOUT BEING STABILIZED.
17. ALL EROSION CONTROL SHALL BE INSPECTED WEEKLY AND AFTER 0.5 INCHES OF RAINFALL.
18. WINTER CONSTRUCTION NOTES:
   A) ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 2 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
   B) ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
   C) AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3-INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3. OR CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.

AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
C) A MINIMUM OF 3" OF NON-ERODIBLE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
D) EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

TEMPORARY EROSION CONTROL DETAILS

FLAGG ROAD

ROCHESTER, N.H.

FOR

STEVE MILLER GENERAL CONTRACTING, L.L.C.

SCALE: AS SHOWN DEC. 2013

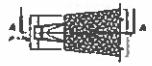
FILE NO. 134
PLAN NO. C-2502
DWG. NO. 07183/3-5
P.B. NO.

31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

2 Continental Blvd., Rochester, N.H. 603-335-3948

REVISIONS:



PLAN

SECTION A–A

(PIPE OUTLET TO FLAT AREA NO WELL DEFINED CHANNEL)

RIP-RAP GRADATION

% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE (INCHES)	
100	18	12
85	16	9
50	12	6
15	8	3

NOTES

1. ALL PIPE DIAMETER SHALL HAVE END SECTIONS OR HEADWALLS. END SECTION MATERIAL AND MANUFACTURER SHALL MATCH THAT OF THE PIPE DIAMETER
2. APRON LENGTHS, WIDTHS AND THICKNESSES HAVE BEEN ROUNDED UP TO WHOLE NUMBERS FOR EASE OF CONSTRUCTION

CONSTRUCTION SPECIFICATIONS

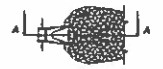
1. PREPARE THE SUB-GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC AND RIP-RAP TO THE GRADES SHOWN ON THE PLANS
2. MINIMUM 6" SAND/GRAVEL BEDDING OR GEOTEXTILE FABRIC REQUIRED UNDER ALL ROCK RIP-RAP
3. THE ROCK OR GRAVEL USED FOR FILTER OR RIP-RAP SHALL CONFORM TO THE SPECIFIED GRADATION
4. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF ROCK RIP-RAP. OVERLAPS AND AS ON 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 LINE & 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

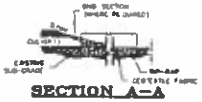
1. OUTLETS SHALL BE INSPECTED AND CLEANED ANNUALLY AND AFTER ANY MAJOR STORM EVENT. ANY EROSION OR DAMAGE TO THE RIP-RAP SHALL BE REPAIRED IMMEDIATELY
2. CHANNEL MATERIAL REMOVED FROM THE OUTLET SHOULD BE CHECKED TO SEE THAT NO EROSION IS OCCURRING
3. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAN OF OBSTRUCTIONS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

PIPE OUTLET PROTECTION

NOT TO SCALE



PLAN

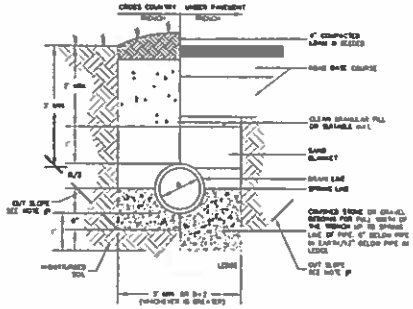


SECTION A–A

(PIPE OUTLET TO WELL DEFINED CHANNEL)

APRON DIMENSION TABLE

STRUCT #	Do	Wo	La	Wa	Dm	T
OUTLET #1	12"	3'	8'	11'	1.5'	8"
OUTLET #2	12"	3'	8'	11'	1.5'	8"
OUTLET #3	12"	8'	12'	8'	1.5'	8"

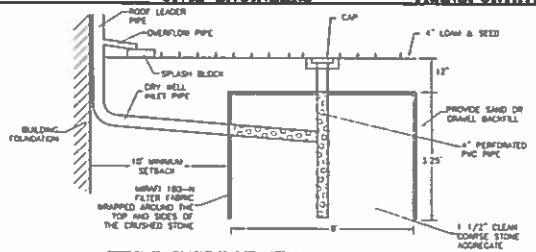


NOTES

1. PIPES MAY BE INSTALLED BY EXCAVATING AN OPEN TRENCH WITH SIDE SLOPES OF 1:1 MAXIMUM TO A DEPTH OF 4-FT. INSTALLATIONS DEEPER THAN 4-FT 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.
4. ALL DRAINAGE PIPES SHALL BE GASKETED.

DRAINAGE PIPE TRENCH DETAIL

NOT TO SCALE

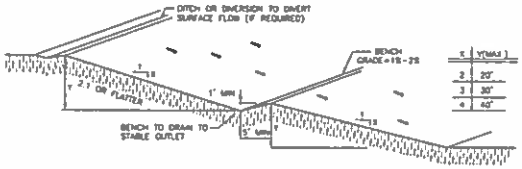


RESIDENTIAL DRY WELL INSTALLATION SYSTEM NOTES

1. EACH RESIDENTIAL DRY WELL INFILTRATION SYSTEM SHALL BE 8 FEET IN DIAMETER AND 3.25 FEET DEEP OF 1.5" CLEAN COARSE CRUSHED STONE AGGREGATE
2. THE 1.5" COARSE CRUSHED STONE AGGREGATE SHALL HAVE A NONWOVEN GEOTEXTILE FABRIC, MIRAFI 180-N OR EQUAL, OVER THE TOP AND AROUND THE PERIMETER OF THE SYSTEM
3. EACH INFILTRATION SYSTEM HAS BEEN SIZED TO ACCEPT RUNOFF FROM ROOFS THE REAR OR FRONT ROOF OF EACH DUPLEX UNIT. LOT 230-28-1 AND LOT 230-29-6 WILL REQUIRE TWO INFILTRATION SYSTEMS FOR THE REAR ROOFS. LOTS 230-28-2 THROUGH 230-28-4 WILL REQUIRE TWO INFILTRATION SYSTEMS FOR BOTH THE FRONT AND REAR ROOFS
4. RAIN GUTTERS WILL NEED TO BE PROVIDED AND DIRECTED FOR THE FRONTS AND REARS OF LOTS WHICH REQUIRE INFILTRATION SYSTEMS
5. EACH RESIDENTIAL DRY WELL INFILTRATION SYSTEM SHALL BE A MINIMUM OF 10 FEET FROM ANY PROPERTY LINE AND A MINIMUM OF 10 FEET FROM ANY FOUNDATION

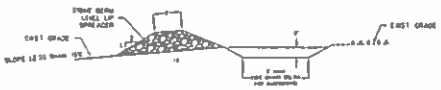
RESIDENTIAL DRY WELL INFILTRATION SYSTEM DETAIL

NOT TO SCALE



VEGETATED BENCH DETAIL

NOT TO SCALE



STONE BERM LEVEL SPREADER DETAIL

NOT TO SCALE

LEVEL SPREADER CONSTRUCTION SPECIFICATIONS

1. CONSTRUCT THE LEVEL SPREADER LIP ON A ZERO PERCENT GRADE TO ENSURE UNIFORM SPREADING OF RUNOFF
2. LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL AND NOT ON FILL
3. AN EROSION STOP SHALL BE PLACED VERTICALLY A MINIMUM OF SIX INCHES DEEP IN A 6x7 TRENCH ON FOOT BACK OF THE LEVEL LIP AND PARALLEL TO THE LIP. THE EROSION STOP SHALL EXTEND THE ENTIRE LENGTH OF THE LEVEL LIP
4. THE ENTIRE LEVEL LIP AREA SHALL BE PROTECTED BY PLACING TWO STRIPS OF JUTE OR EROSION MATTING ALONG THE LIP. EACH STRIP SHALL OVERLAP THE EROSION STOP BY AT LEAST SIX INCHES
5. THE ENTRANCE CHANNEL OR PIPE TO THE LEVEL SPREADER SHALL NOT EXCEED A 1 PERCENT GRADE FOR AT LEAST 20 FEET UPSTREAM EXCEPTING IN TO THE SPREADER
6. THE FLOW FROM THE LEVEL SPREADER SHALL OUTLET ONTO STABILIZED AREAS. AN ERR SHOULD NOT BE CONCEIVABLE SHORTLY BELOW THE SPREADER
7. PERIODIC INSPECTIONS AND REQUIRED MAINTENANCE SHALL BE PERFORMED

LEVEL SPREADER MAINTENANCE

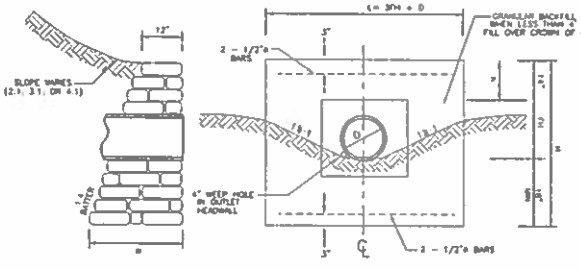
1. THE LEVEL SPREADER SHALLS BE CHECKED PERIODICALLY AND AFTER EVERY MAJOR STORM TO BE SURE THAT IT IS NOT HAS BEEN DAMAGED AND TO DETERMINE THAT THE DESIGN CONDITIONS HAVE NOT CHANGED
2. ANY SEDIMENTAL ACCUMULATION OF SEDIMENTS SHOULD BE REMOVED
3. IF RILLING HAS TAKEN PLACE ON THE LIP, THEN THE DAMAGE SHOULD BE REPAIRED AND RE-VEGETATED
4. THE VEGETATION SHOULD BE MOWED OCCASIONALLY TO CONTROL WEEDS AND THE ENCROACHMENT OF WOODY VEGETATION. CLIPPINGS SHOULD BE REMOVED AND DISPOSED OF OUTSIDE THE SPREADER AND AWAY FROM THE OUTLET AREA
5. REFORESTATION SHOULD BE DONE AS NECESSARY TO KEEP THE VEGETATION HEALTHY AND DENSE

LEVEL SPREADER DIMENSION TABLE

LOCATION	L	Z	Y	X	Z
OUTLET	75	0.5	8	200.0'	200.5'

GRADATION OF STONE FOR LEAVEL SPREADER BERM

SIEVE DESIGNATION (US STANDARD)	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
12 INCH	100
6 INCH	94-100
3 INCH	66-83
1 INCH	42-56
NO. 4	0-12



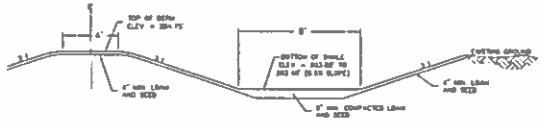
SECTION ON CENTER LINE

ELEVATION

MORTAR RUBBLE MASONRY HEADWALL

NOT TO SCALE

DIAMETER "D"	12"
MIN. LENGTH "L"	4'-3"
MIN. HEIGHT "H"	3'-0"
FILL HEIGHT "FH"	1'-1"
"X"	1'-3"
MIN. BOTTOM WIDTH "W"	2'-0"



TREATMENT SWALE DETAIL

NOT TO SCALE

NOTE

1. THE BOTTOM OF THE BASIN SHALL BE LOAMED, MINIMUM OF 6 INCHES AND COMPACTED, AND SEEDED USING THE FOLLOWING MIXTURE.

SPECIES	LBS/ACRE	LBS/1,000 SF
TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
RED CLOVER	8	0.20
TOTAL	48	1.10

CONSTRUCTION SPECIFICATIONS

1. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN UNTIL THEY ARE ADEQUATELY STABILIZED
2. ALL EROSION AND SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN
3. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AN AMOUNT NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS
4. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIALS
5. AREAS WHICH ARE TO BE TOP SOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 INCHES PRIOR TO PLACEMENT OF TOPSOIL
6. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SURFACE SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES
7. ALL FILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 8 INCHES IN THICKNESS
8. EXCEPT FOR APPROVED LANDFILLS OR NON-STRUCTURAL FILLS, FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS
9. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILL SLOPES OR STRUCTURAL FILLS
10. FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION
11. ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT
12. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE SUBSURFACE DRAINAGE BMP
13. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING
14. STOCKPILES, BORROW AREAS, AND SPOIL AREAS SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS BMP
15. ALL GRADED SLOPES OF 2:1 OR STEEPER SHALL BE STABILIZED WITH EROSION CONTROL BLANKETS

MAINTENANCE

1. ALL SLOPES SHOULD BE CHECKED PERIODICALLY TO SEE THAT VEGETATION IS IN GOOD CONDITION
2. RILLS AND ANNUAL BURROWING SHOULD BE REPAIRED IMMEDIATELY TO AVOID FURTHER DAMAGE
3. IF SEEPS DEVELOP ON THE SLOPES, THE AREA SHOULD BE EVALUATED TO DETERMINE IF THE SEEP WILL CAUSE AN UNSTABLE CONDITION. SUBSURFACE DRAINS OR GRAVEL BUILDING MAY BE REQUIRED TO SOLVE SEEP PROBLEMS
4. DIVERSIONS, BERMS, AND WATERWAYS ON THE LAND GRADING AREA SHOULD BE CHECKED TO SEE THEY ARE FUNCTIONING PROPERLY. PROBLEMS FOUND DURING THE INSPECTIONS SHOULD BE REPAIRED IMMEDIATELY. AREAS REQUIRING RE-VEGETATION SHOULD BE REPAIRED IMMEDIATELY
5. SLOPES AND ASSOCIATED PRACTICES UTILIZING VEGETATION SHOULD BE LIMED AND FERTILIZED AS NECESSARY TO KEEP HEALTHY VEGETATION
6. ENCROACHMENT OF UNDESIRABLE VEGETATION SUCH AS WEEDS AND WOODY GROWTH THAT IS NOT PLANNED SHOULD BE CONTROLLED TO AVOID BANK STABILITY IN THE FUTURE

DRAINAGE, EROSION AND SEDIMENTATION CONTROL DETAILS

FLAGG ROAD

ROCHESTER, N.H.

FOR

STEVE MILLER GENERAL CONTRACTING, L.L.C.

SCALE: AS SHOWN DEC. 2013

FILE NO 134
PLAN NO. C-2502
DWG. NO. 07133/S-5
F.B. NO

31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

2 Continental Blvd., Rochester, N.H. 603-335-3948

DETENTION BASIN CONSTRUCTION:

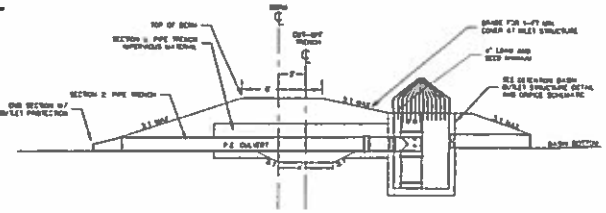
1. CLEAR AND GRUB THE AREA WHERE THE BASIN IS TO BE LOCATED (MINIMUM 5.0FM FOR MORE LATER)
2. THE BASIN FOUNDATION AREA SHALL BE SCARIFIED PRIOR TO PLACING FILL. ALL UNSUITABLE MATERIAL UNDER THE BERM SHALL BE REMOVED AND REPLACED WITH SUITABLE FOUNDATION MATERIAL.
3. THE OUTLET TRENCH SHALL BE EXCAVATED AND CONSTRUCTED AS SHOWN ON THE PLANS. THE TRENCH SHALL EXTEND UNDER THE ENTIRE BERM AND TIE INTO THE ORIGINAL GROUND ON THE SIDES OF THE BASIN.
4. THE BERM SHALL BE CONSTRUCTED BEGINNING FROM THE LOWEST POINT UNIFORMLY ALONG ITS ENTIRE LENGTH. PLACE MATERIALS IN MAXIMUM 8" LIFTS COMPACTED TO 95% MINIMUM PROCTOR DENSITY. FILL MATERIAL SHALL HAVE THE FOLLOWING GRADATION

BERM FILL MATERIAL		INTERNAL FILL MATERIAL	
SIEVE SIZE	% PASSING	SIEVE SIZE	% PASSING
3"	100	#4	95-100
#4	75-95	#40	60-90
#200	15-25	#100	30-60
		#200	15-45

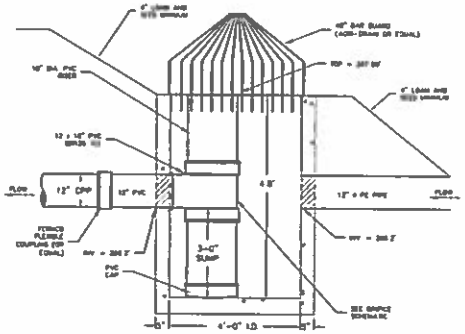
5. THE RISER OUTLET PIPE TO THE DETENTION BASIN SHALL BE CONSTRUCTED WITH PVC STANDARDS TO INSURE A WATER TIGHT CONNECTION AT THE OUTLET.
6. THE [illegible] OF PIPE IN THE DETENTION BASINS SHALL BE INSTALLED PER MANUFACTURER SPECIFICATIONS. CONNECTIONS BETWEEN INDIVIDUAL PIPE SECTIONS SHALL BE HELD BY MANUFACTURER SPECIFICATION USING MANUFACTURER APPROVED MATERIALS.
7. THE DETENTION BASIN SHALL BE STABILIZED AND HAVE ESTABLISHED GRASS GROWTH WHICH IS BLANKET BELOW [illegible] TO 18. SHOULD THE GRASS FAIL TO ESTABLISH WITHIN REASONABLE TIME FRAME, SOD SHALL BE PLACED AND ALLOWED TO FURTHER ATTACH PRIOR TO DIRECTING RUNOFF TO THE BASIN

DETENTION BASIN MAINTENANCE:

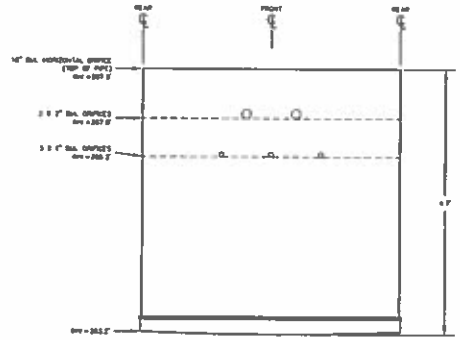
1. EMBANKMENT:
   THE EMBANKMENT SHOULD BE INSPECTED ANNUALLY TO DETERMINE IF RECENT RAINFALL HAS CREATED ANY AREAS OF EROSION IF THE FILL IS TAKING PLACE.
2. VEGETATION:
   ALL EXPOSED AREAS OF THE STRUCTURE SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH. LAWN AND PERENNIALS SHOULD BE MOWED AS NECESSARY AS DETERMINED BY THE OWNER.
3. THE EMBANKMENT SHALL BE MOWED ON A MINIMUM ANNUAL BASIS IN ORDER TO ELIMINATE WOODY GROWTH.
4. OUTLET:
   THE PIPE OUTLETS AND SPILLWAY STRUCTURES SHOULD BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. ACCUMULATED DEBRIS AND SEDIMENT SHOULD BE REMOVED.
5. OUTLETS:
   THE OUTLETS SHOULD BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. THE CONDITION OF THE PIPES SHOULD BE NOTED AND REPAIRS MADE AS NECESSARY. IF EROSION IS TAKING PLACE THEN MEASURES SHOULD BE TAKEN TO STABILIZE AND PROTECT THE AFFECTED AREA OF THE OUTLET.
6. REPAIRS:
   DURING CONSTRUCTION, SEDIMENT SHOULD BE CONTINUALLY CHECKED IN THE BASIN. WHEN SEDIMENT ACCUMULATIONS REACH THE MAXIMUM REMOVABLE DEPTH (1.0 FEET) THE SEDIMENT SHOULD BE REMOVED AND PROPERLY DISPOSED OF. AFTER CONSTRUCTION IS COMPLETE THE BASIN SHALL BE INSPECTED ANNUALLY. WHEN SEDIMENT ACCUMULATIONS REACH THE PRECAUTIONARY DEPTH ELEVATION, THE SEDIMENT SHOULD BE REMOVED AND PROPERLY DISPOSED OF.
7. ANNUAL INSPECTIONS:
   ALL PERMANENT IMPROVEMENTS SHOULD BE INSPECTED BY A QUALIFIED PROFESSIONAL ENGINEER ON A REGULAR BASIS. IF THERE IS POTENTIAL FOR SIGNIFICANT DAMAGE OR LOSS OF LIFE DOWN STREAM, THE INSPECTION SHOULD BE CARRIED OUT ANNUALLY. THE INSPECTION INDIVIDUAL OR GROUP SHOULD ALSO MAKE INSPECTIONS AFTER EACH MAJOR STORM (HEAVY RAINFALL). MAJOR STORMS SHOULD BE RECORDED AT AND AROUND THE POND.
8. REMOVE ANY TREE AND OR BRUSH GROWTH SEMI-ANNUALLY.
9. REPAIR ANY ERODED AREA OF THE EMBANKMENT WITH THE APPROPRIATE GRADE CONCRETE.
10. SEDIMENT SHALL BE REMOVED FROM THE DETENTION BASIN WHEN IT REACHES THE FOLLOWING ELEVATION
    DETENTION BASIN SEDIMENT ELEVATION = 237.0



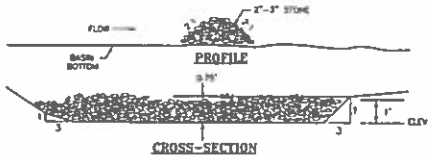
TYPICAL DETENTION BASIN BERM DETAIL
NOT TO SCALE



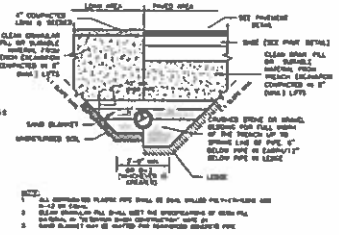
DETENTION BASIN #1
OUTLET STRUCTURE DETAIL
NOT TO SCALE



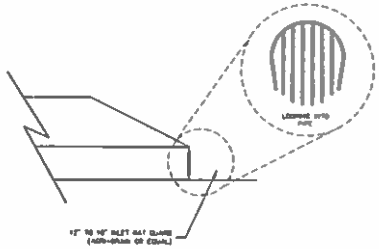
DETENTION BASIN #1
ORIFICE SCHEMATIC
NOT TO SCALE



STONE BERM DETAIL
NOT TO SCALE

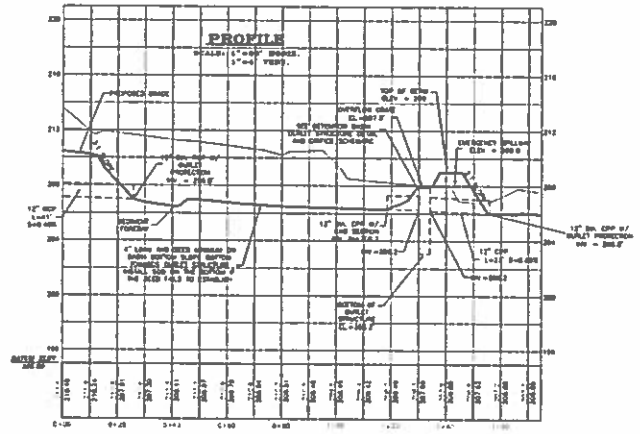


SECTION 2: TRENCH DETAIL FOR
PRINCIPLE SPILLWAY PIPE
NOT TO SCALE

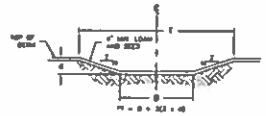


DETENTION BASIN INLET
PROTECTION DETAIL
NOT TO SCALE

NOTE:
1. PLACE APPROPRIATE DIAMETER INLET RAT GUARD (ACRI-DRAIN OR EQUAL) AT INLET PIPE IN EACH DETENTION BASIN.



DETENTION BASIN PROFILE
SCALE: 1" = 20' (HOR.) & 1" = 4' (VERT.)



TYPICAL
EMERGENCY SPILLWAY DETAIL
NOT TO SCALE

LOCATION	A	B	C	D	BERM ELEV.	SPILLWAY ELEV.
BERM PLAN	25'	6.00'	3	23.5'	204.75'	204.5'
BERM SECTION	25'	1.0'	3	30'	200.0'	200.0'

RETENTION BASIN DETAIL
NOT TO SCALE

NOTE:
1. THE BOTTOM OF THE BASIN SHALL BE EXCAVATED UTILIZING LIGHT MACHINERY, IN SUCH A MANNER AS TO NOT OVERLY COMPACT OR SMEAR THE SUBBASE.
2. THE BOTTOM OF THE BASIN SHALL BE LOAMED, MINIMUM OF 4 INCHES AND NOT TO BE COMPACTED, AND SEEDED USING THE FOLLOWING MIXTURE.

SPECIES	LBS/ACRE	LBS/1,000 SF
TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
RED CLOVER	8	0.20
TOTAL	48	1.10

SECTION 1: TRENCH DETAIL FOR
PRINCIPLE SPILLWAY PIPE
NOT TO SCALE

DIG SAFE
1-888-344-7233

DETENTION AND RETENTION BASIN DETAILS

FLAGG ROAD

ROCHESTER, N.H.

FOR

STEVE MILLER GENERAL CONTRACTING, L.L.C.

SCALE: AS SHOWN DEC. 2013

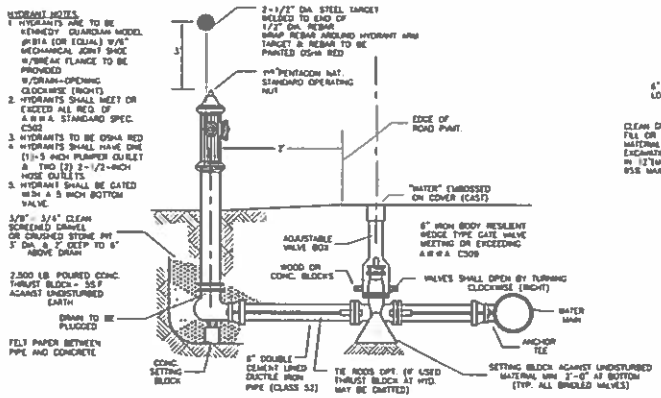
TITLE NO. 134
PLAN NO. C-2502
DWG. NO. 07193/S-5
F.B. NO

31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

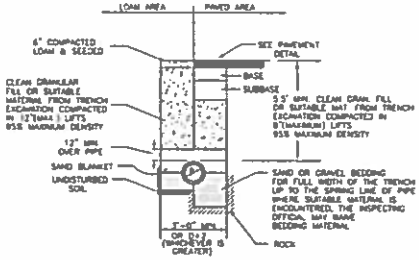
2 Continental Blvd., Rochester, N.H. 603-335-3948

REVISIONS:



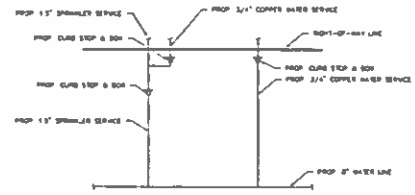
TYPICAL HYDRANT SECTION

NOT TO SCALE



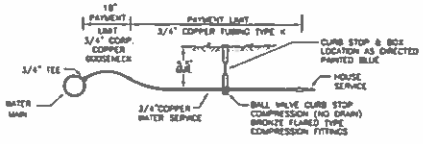
TRENCH DETAIL FOR WATER PIPE

NOT TO SCALE



TYPICAL WATER SERVICE SCHEMATIC FOR DUPLEX BUILDINGS

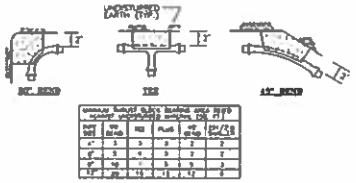
NOT TO SCALE



NOTE: SERVICE LINE SHALL BE TYPE K COPPER CONFORMING TO ASTM-D88

TYPICAL SERVICE CONNECTION

NOT TO SCALE

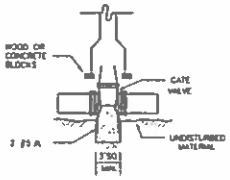


MINIMUM THRUST BLOCK BEARING AREA REQ'D AGAINST UNDISTURBED EARTH, IN FT²					
PIPE SIZE	90 BEND	TEE	PLUG	45 BEND	22½/11¼ BEND
4"	1	1	1	1	1
6"	1	1	1	1	1
8"	2	2	1	1	1
12"	4	4	1	2	1

THRUST BLOCK DETAILS

NOT TO SCALE

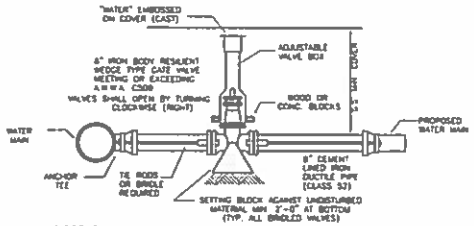
NOTE: SIZE OF THRUST BLOCKS MAY BE INCREASED BY THE ENGINEER TO MEET SOIL CONDITIONS FOUND DURING CONSTRUCTION



ELEVATION

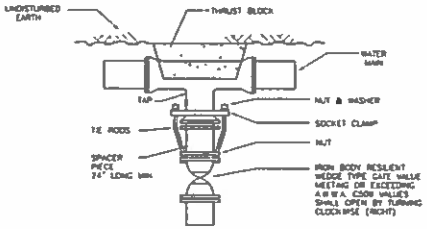
TYPICAL AT NON BRIDLED VALVE

NOT TO SCALE



TYPICAL WATER MAIN CONNECTION

NOT TO SCALE



PLAN VIEW

TYPICAL VALVE CONNECTION

NOT TO SCALE

WATER DETAILS
FLAGG ROAD
ROCHESTER, N.H.
FOR
STEVE MILLER GENERAL CONTRACTING, L.L.C.

SCALE: AS SHOWN DEC. 2015

FILE NO 134
PLAN NO C-2502
DWG NO 07183/3-5
FB NO

31 Mooney Street, Alton, N.H. 603-875-3948
NORWAY PLAINS ASSOCIATES, INC.
2 Continental Blvd., Rochester, N.H. 603-335-3948

LAND SURVEYORS – SEPTIC DESIGNERS

CIVIL ENGINEERS – TRANSPORTATION PLANNERS

REVISIONS:

NOTE: DIMENSIONS & CONSTRUCTION OF DROP MANHOLE TO BE SIMILAR TO TYPICAL MANHOLE EXCEPT AS SHOWN

INSIDE DROP MANHOLE DETAIL
NOT TO SCALE

TYPICAL SECTION
NOT TO SCALE

PLAN

SECTION A-A

SECTION H-B

DETAIL-A

DETAIL-B

RES-SEAL
(OR EQUAL)

KOR-N-SEAL JOINT SLEEVE
(OR EQUAL)

LOCK-JOINT FLEXIBLE MANHOLE SLEEVE
(OR EQUAL)

POLYTITE
(OR EQUAL)

ROLL-N-LOK
(OR EQUAL)

BITUMASTIC

O-RING

PRESS-WEDGE II
(OR EQUAL)

A-LOK
(OR EQUAL)

NON-SHRINKING MORTAR
(OR EQUAL)

PLAN

SECTION

CONCRETE FULL ENCASEMENT

CHIMNEY
(SEE NOTE 21)

TRENCH DETAIL FOR SEWER PIPE
NOT TO SCALE

BUILDING SEWER SERVICE DETAIL

GRAVITY SEWER DETAILS
FLAGG ROAD
ROCHESTER, N.H.
FOR
STEVE MILLER GENERAL CONTRACTING, L.L.C.

SCALE: AS SHOWN DEC. 2013

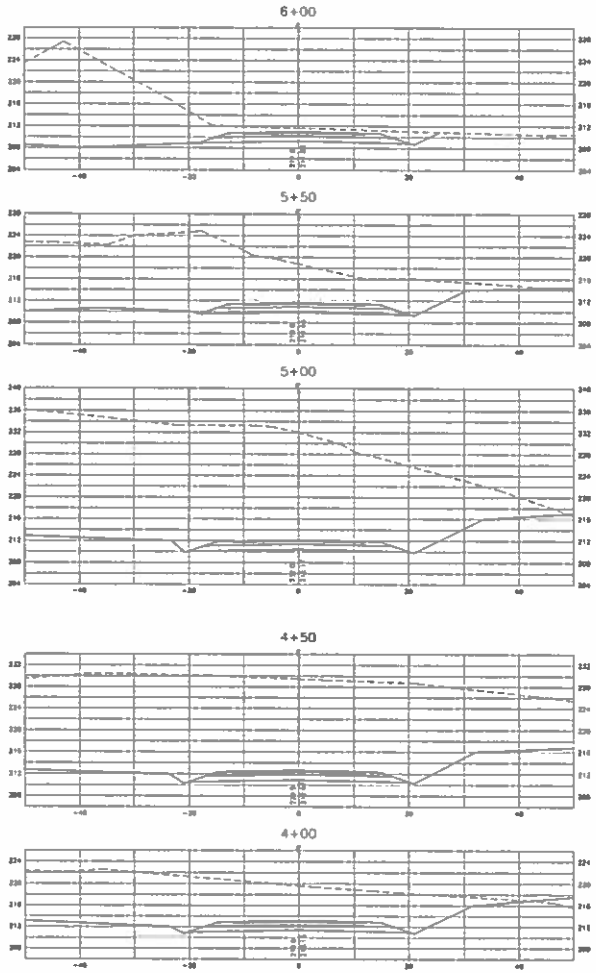
FILE NO. 134
PLAN NO. C-2502
DEC. NO. 07193/S-5
F.B. NO.

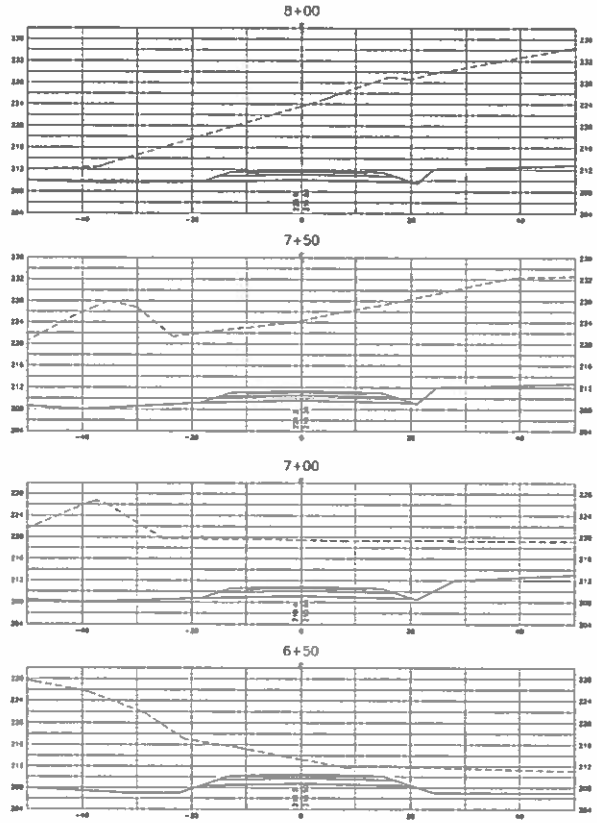
31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

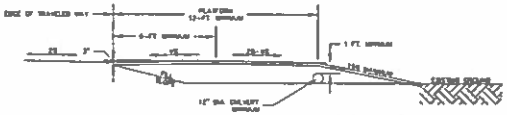
2 Continental Blvd., Rochester, N.H. 603-335-3948 C-12

REVISIONS:



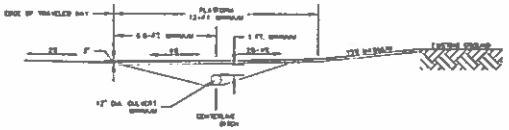


CROSS SECTIONS OF ROAD
SCALE: 1" =10'



TYPICAL DRIVE IN FILL SECTION
NOT TO SCALE

DRIVEWAY NOTES:
1. THE OWNER OF THE LOT WILL BE RESPONSIBLE FOR OBTAINING A DRIVEWAY PERMIT FROM ROCHESTER PUBLIC WORKS.
2. DRIVEWAY CULVERTS SHALL BE 12" MIN. AND SHALL EXTEND 5 FEET BEYOND BOTH SIDES OF THE DRIVEWAY UNLESS CONCRETE HEADWALLS ARE PROVIDED.
3. GRADES BEYOND PLATFORM SHALL NOT EXCEED 15% NOR SHALL THEY BE LESS THAN 0.5%.
4. THE ALGEBRAIC DIFFERENCE BETWEEN TWO ADJACENT GRADE CHANGES SHOULD NOT EXCEED 10%.
5. DITCHES ARE RECOMMENDED FOR UNCURBED DRIVEWAYS IN CUT SLOPES.
6. USE RUBBLE MASONRY OR PRECAST HEADWALLS OR SLOPE END SECTIONS ON CULVERT PIPES.



TYPICAL DRIVE IN CUT SECTION
NOT TO SCALE

ROAD CROSS SECTIONS AND
TYPICAL DRIVEWAY DETAILS
FLAGG ROAD
ROCHESTER, N.H.
FOR
STEVEN MILLER GENERAL
CONTRACTING, L.L.C.

SCALE: AS SHOWN DEC. 2013

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