



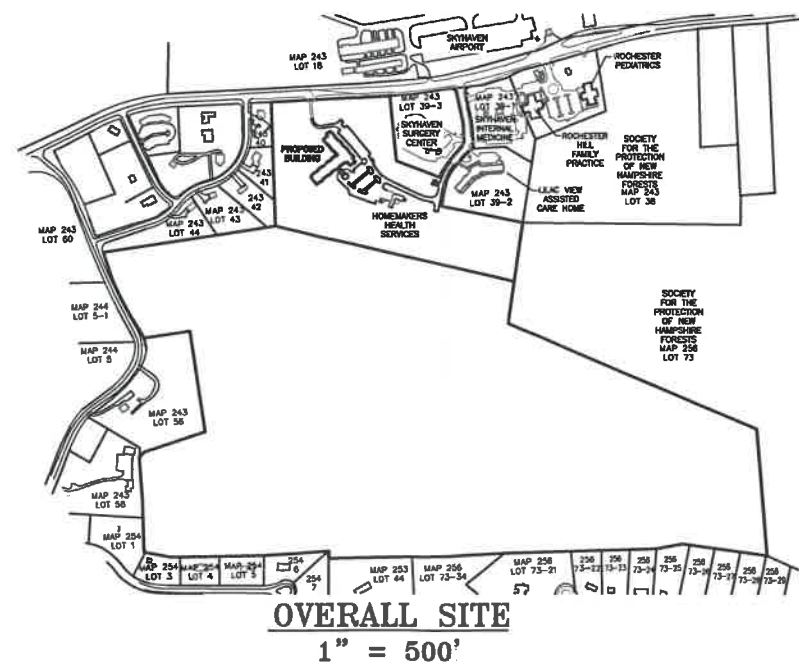
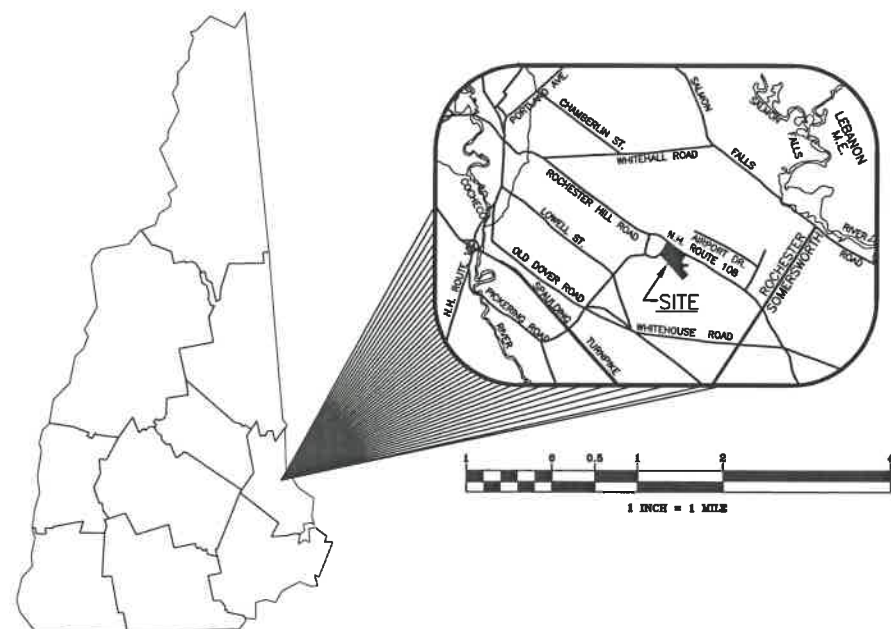
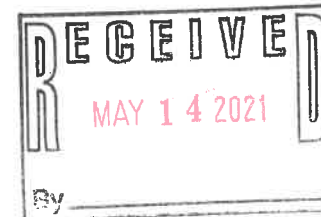
CHAMPLIN PLACE

215 ROCHESTER HILL ROAD

PREPARED FOR

EASTER SEALS NH, INC.

APRIL 2021



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

ARCHITECTS
 MARKET SQUARE ARCHITECTS, PLLC
 104 CONGRESS STREET, SUITE 203
 PORTSMOUTH, NEW HAMPSHIRE 03801
 (603) 501-0202

LANDSCAPING ARCHITECTS
 TIGHE & BOND
 177 CORPORATION DRIVE
 PORTSMOUTH, NEW HAMPSHIRE 03801
 (603) 294-9234

OWNER OF RECORD
 TAX MAP 243, LOT 39
 OWNER OF RECORD:
 EASTER SEALS NEW HAMPSHIRE, INC.
 555 AUBURN STREET
 MANCHESTER, NH 03103
 SCRD BOOK 4801, PAGE 784

APPLICANT
 EASTER SEALS NEW HAMPSHIRE, INC.
 555 AUBURN STREET
 MANCHESTER, NH 03103

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. 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.

STATE AND FEDERAL PERMITS:

STATE OF NEW HAMPSHIRE PERMIT NUMBERS:

NHDES ALTERATION OF TERRAIN:	REQUIRED
NHDES WETLANDS PERMIT:	NOT REQUIRED
NHDES DAM PERMIT:	NOT REQUIRED
NHDES SUBDIVISION PERMIT:	NOT REQUIRED
NHDES SUBSURFACE SYSTEMS PERMIT:	NOT REQUIRED
NHDES WASTEWATER PERMIT:	REQUIRED
NHDOT DRIVEWAY/ENTRANCE PERMIT:	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 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

SHEET	COVER	SCALE
SHEET S-1	SUBDIVISION PLAN	1" = 200'
SHEET S-2	SUBDIVISION TOPOGRAPHY PLAN	1" = 200'
SHEET E-1	EXISTING FEATURES	1" = 50'
SHEET E-2	DEMOLITION PLAN	1" = 50'
SHEET C-1	OVERALL SITE PLAN	1" = 100'
SHEET C-2	SITE LAYOUT PLAN	1" = 30'
SHEET C-3	GRADING AND DRAINAGE PLAN	1" = 50'
SHEET C-4	EROSION AND SEDIMENTATION CONTROL PLAN	1" = 50'
SHEET C-5	UTILITY PLAN	1" = 50'
SHEET C-6	PARKING AND SIDEWALK DETAILS	AS SHOWN
SHEET C-7	CONSTRUCTION DETAILS	AS SHOWN
SHEET C-8	DRAINAGE DETAILS	AS SHOWN
SHEET C-9	INFILTRATION BASIN #1 DETAILS	AS SHOWN
SHEET C-10	INFILTRATION BASIN #2 DETAILS	AS SHOWN
SHEET C-11	TEMPORARY EROSION AND SEDIMENTATION CONTROL DETAILS	AS SHOWN
SHEET C-12	PERMANENT EROSION AND SEDIMENTATION CONTROL DETAILS	AS SHOWN
SHEET C-13	SEWER GRAVITY PROFILE	AS SHOWN
SHEET C-14	SEWER DETAILS	AS SHOWN
SHEET C-15	UTILITY DETAILS	AS SHOWN
SHEET C-16	GUARDRAIL DETAILS	AS SHOWN
SHEET L-1	LIGHTING PLAN AND DETAILS	1" = 50'
SHEET L-101	SITE LANDSCAPING PLAN	1" = 50'
SHEET L-501	SITE LANDSCAPING DETAILS	AS SHOWN
SHEET A2.00	BUILDING ELEVATIONS	3/8" = 1'-0"

FILE NO. 102
 PLAN NO. C-3154
 DWG. NO. 19249 SP-1
 F.B. NO.



MAP 243
LOT 18
SKYHAVEN AIRPORT

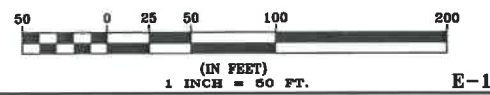
ROCHESTER HILL ROAD

HEALTHCARE DRIVE

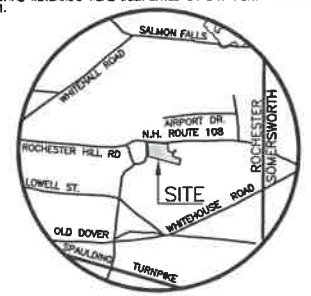
MAP 243
LOT 39-3
SKYHAVEN SURGERY CENTER

MAP 243
LOT 39-2
LUC VIEW ASSISTED CARE HOME

EXISTING FEATURES PLAN
TAX MAP 243, LOT 39
215 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
EASTER SEALS NH, INC.
APRIL 2021
GRAPHIC SCALE



- GENERAL SITE PLAN NOTES**
1. THIS PARCELS ARE LOCATED IN THE AGRICULTURAL ZONE (AG).
 2. TOTAL PARCEL AREA: ~142.8 ACRES.
 3. THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING FEATURES ON THE LOT.
 4. ALL EXISTING UTILITIES LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATION PRIOR TO ANY WORK BEING PERFORMED.
 5. THESE PLANS SHOW ONLY THOSE FEATURES THAT WERE VISUALLY PER REFERENCE PLAN 1.
 6. DIMENSIONAL REGULATIONS PER ZONING ORDINANCE:
AGRICULTURAL ZONE (AG):
MINIMUM LOT AREA (MUNICIPAL WATER & SEWER) = 20,000 SF
MINIMUM LOT AREA (MUNICIPAL WATER OR SEWER) = 30,000 SF
MINIMUM LOT AREA (NEITHER MUNICIPAL WATER NOR SEWER) = 45,000 SF
MINIMUM LOT FRONTAGE = 150 FEET
MINIMUM YARD SETBACKS:
FRONT = 20'
SIDE = 10'
REAR = 20'
MAXIMUM LOT COVERAGE = 35%
MAXIMUM BUILDING HEIGHT = 35'
 7. ORIENTATION: HORIZONTAL HAD33 AND VERTICAL NGVD29 DATUMS - CITY OF ROCHESTER GIS.
 8. PARCEL IS NOT LOCATED WITHIN A FLOOD ZONE (100YR FLOOD) AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY MAPS, COMMUNITY #33017002120 #33017002140, #33017002160, DATED MAY 17, 2005 AND #33017002180 DATED SEPTEMBER 30, 2015.
 9. SOILS DATA DEPICTED ON THIS PLAN IS PER THE NATURAL RESOURCES CONSERVATION SERVICES (NRCS) FOR STRAFFORD COUNTY, NEW HAMPSHIRE. JURISDICTIONAL WETLANDS WERE DELINEATED BY B.H. KEITH ASSOCIATES IN APRIL 2021.



LOCUS
N.T.S.

- LEGEND**
- PROPERTY LINE
 - UNITS OF JURISDICTIONAL WETLANDS
 - EXISTING TREE LINE
 - EXISTING STONEWALLS
 - EXISTING RAILROAD TRACKS
 - EXISTING CONTOUR LINE
 - EXISTING DRAIN LINE
 - EXISTING OVERHEAD WIRES
 - EXISTING WATER LINE
 - EXISTING SEWER LINE
 - 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 SIGN

FILE NO. 102
PLAN NO. C-3154
DWG. NO. 19249 SP-1
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

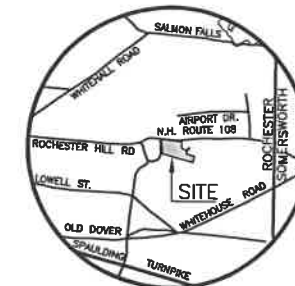
ROCHESTER HILL ROAD

MAP 243
LOT 39-3
SKYHAVEN SURGERY

CENTER

GENERAL NOTES

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE AREAS THAT WILL BE DEMOLISHED.
2. ALL EXISTING UTILITIES LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATION PRIOR TO ANY WORK BEING PERFORMED.
3. INSTALL ALL EROSION AND SEDIMENTATION CONTROLS PRIOR TO THE START OF DEMOLITION. SEE EROSION AND SEDIMENTATION PLAN SHEET C-4.
4. ORIENTATION: HORIZONTAL NAD83 AND VERTICAL NGVD28 DATUMS.

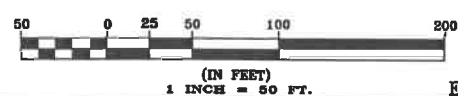


LOCUS

LEGEND

	PROPERTY LINE
	LIMITS OF JURISDICTIONAL WETLANDS
	EXISTING TREE LINE
	EXISTING STONEWALLS
	EXISTING RAILROAD TRACKS
	EXISTING CONTROL LINE
	EXISTING DRAIN LINE
	EXISTING OVERHEAD WIRES
	EXISTING WATER LINE
	EXISTING SEWER LINE
	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 SIGN

DEMOLITION PLAN
TAX MAP 243, LOT 39
215 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
EASTER SEALS NH, INC.
APRIL 2021
GRAPHIC SCALE



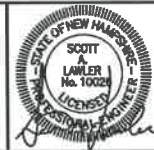
E-2

FILE NO. 102
PLAN NO. C-3154
DWG. NO. 19249 SP-1
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



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LEGEND

- PROPERTY LINE
- - - JURISDICTIONAL WETLANDS
- EXISTING TREE LINE
- EXISTING OVERHEAD WRES
- EXISTING HYDRANT
- EXISTING UTILITY POLE
- EXISTING SEWER MAN HOLE
- EXISTING CATCH BASIN
- EXISTING LIGHT POLES
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- PROPOSED PAVEMENT WITH CURBING
- PROPOSED TREE LINE

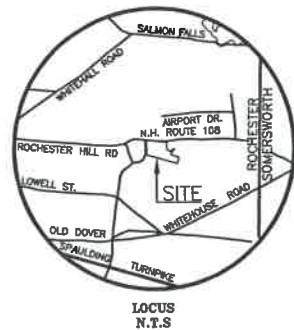
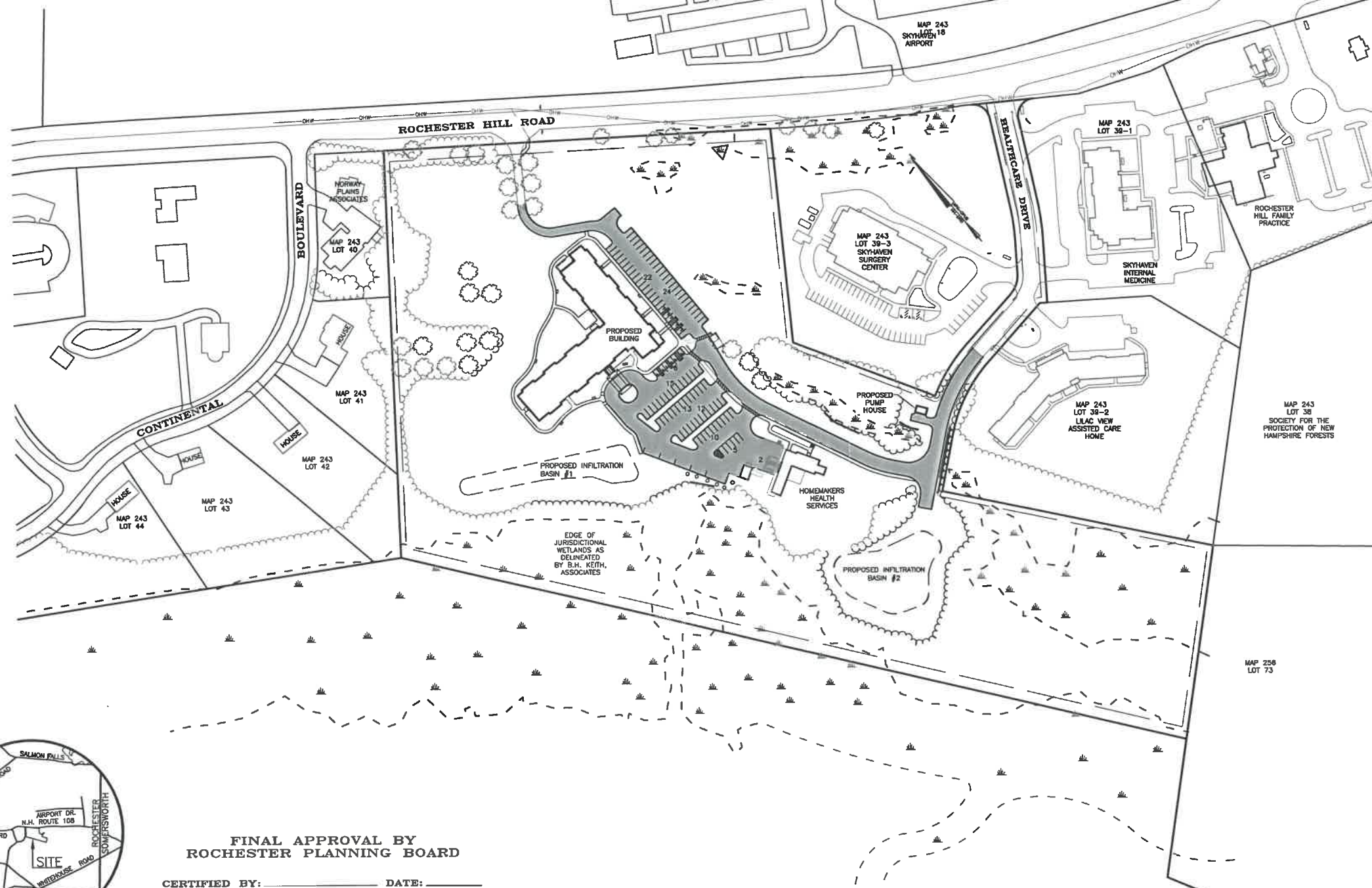
- GENERAL SITE PLAN NOTES
1. THIS PARCELS ARE LOCATED IN THE AGRICULTURAL ZONE (A0).
 2. TOTAL PARCEL AREA = 142.8 ACRES.
 3. THE PURPOSE OF THIS PLAN IS TO DEPICT THE PROPOSED FEATURES ON THE LOT.
 4. ALL EXISTING UTILITIES LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATION PRIOR TO ANY WORK BEING PERFORMED.
 5. THESE PLANS SHOW ONLY THOSE FEATURES THAT WERE VISUALLY PER REFERENCE PLAN 1.
 6. DIMENSIONAL REGULATIONS PER ZONING ORDINANCE:
 - AGRICULTURAL ZONE (A0):
 - MINIMUM LOT AREA (MUNICIPAL WATER & SEWER) = 20,000 SF
 - MINIMUM LOT AREA (MUNICIPAL WATER OR SEWER) = 30,000 SF
 - MINIMUM LOT AREA (NEITHER MUNICIPAL WATER NOR SEWER) = 45,000 SF
 - MINIMUM LOT FRONTAGE = 150'
 - MINIMUM YARD SETBACKS:
 - FRONT = 20'
 - SIDE = 10'
 - REAR = 20'
 - MAXIMUM LOT COVERAGE = 35%
 - MAXIMUM BUILDING HEIGHT = 35'
 - ORIENTATION: HORIZONTAL NAD83 AND VERTICAL NAD29 DATUMS - QTY OF ROCHESTER GIS.
 - 8. PARCEL IS NOT LOCATED WITHIN A FLOOD ZONE (100YR FLOOD) AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY MAPS, COMMUNITY #33017002120, #33017002140, #33017002180, DATED MAY 17, 2005 AND #33017002180 DATED SEPTEMBER 30, 2015.
 - 9. THE SITE-SPECIFIC SOIL MAP WAS COMPLETED BY JOSEPH W. NOEL, NH CSS#017 ON MARCH 2021.
 - 10. JURISDICTIONAL WETLANDS WERE DELINEATED BY B.H. KEITH ASSOCIATES IN APRIL 2021.
 - 11. REQUIRED PARKING CALCULATIONS:
 - REQUIRED PARKING PER ROCHESTER SITE REVIEW REGULATIONS (SECTION 10)
 - RESIDENTIAL USE: 2 SPACES PER DWELLING UNIT = 160 SPACES
 - 2 SPACE PER DWELLING UNITS X 80 UNITS = 160 SPACES
 - OFFICE USE: 3 SPACES PER 1,000 SQUARE FEET OF GROSS FLOOR AREA
 - 9,400 SF OFFICE USE X 3 SPACES/1,000 SF = 28 SPACES
 - 28 SPACES
 - 188 SPACES

PROPOSED PARKING CALCULATIONS:

- RESIDENTIAL PARKING:
- 1 SPACE PER ONE-BEDROOM UNITS AND 2 SPACES PER TWO-BEDROOM UNITS
 - 74 ONE-BEDROOM UNITS X 1 SPACE / UNIT = 74 SPACES
 - 6 TWO-BEDROOM UNITS X 2 SPACES / UNIT = 12 SPACES
 - TOTAL PROPOSED RESIDENTIAL PARKING SPACES = 86 SPACES

- OFFICE PARKING:
- 9,400 SF OFFICE USE X 3 SPACES/1,000 SF = 28 SPACES
 - TOTAL NUMBER OF REQUIRED SPACES = 114 SPACES
 - TOTAL NUMBER OF PROPOSED SPACE PROVIDED = 109 SPACES

12. THIS DEVELOPMENT MUST BE IN COMPLIANCE WITH ALL APPLICABLE LAW - INCLUDING ALL PERTINENT ORDINANCES OF THE CITY OF ROCHESTER - UNLESS OTHERWISE WAIVED.
13. 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 THE CITY ORDINANCE CHAPTER 218. THE PERMITTEE SHALL PREPARE A WRITTEN PLAN FOR MANAGING 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 SOIL HAS BEEN DISTURBED.
14. ACCESS INTO THE SITE FOR FIRE APPARATUS MUST BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION PROCESS. THIS IS THE SOLE RESPONSIBILITY OF THE APPLICANT/DEVELOPER TO MAINTAIN THIS ACCESS. PLEASE CONTACT THE FIRE DEPARTMENT AT 330-7182 WITH ANY QUESTIONS ABOUT ACCESS REQUIREMENTS.
15. SNOW SHALL NOT BE PILED IN SUCH A MANNER AS TO BLOCK THE VISIBILITY OF THE VEHICLES ON NH ROUTE 108 AND HEALTHCARE DRIVE.
16. ALL OUTSIDE 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 5:00 P.M. SATURDAY.
17. 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 WRES ACROSS THE STREET. UTILITIES EXTENDING FROM ANY SUCH NEW POLE MUST BE UNDERGROUND. THE APPLICANT MAY WORK WITH THE CITY STAFF AS APPROPRIATE TO ADDRESS THIS REQUIREMENT.
18. THE CODE ENFORCEMENT OFFICER ADMINISTERS THE CITY OF ROCHESTER SIGN ORDINANCE. SIGNAGE SUBMITTED AS PART OF THIS SITE PLAN PACKAGE IS STILL SUBJECT TO HIS REVIEW TO ENSURE COMPLIANCE WITH THAT ORDINANCE AND OTHER APPLICABLE CODES, INDEPENDENT FROM THIS SITE PLAN REVIEW. IN ADDITION, IF ANY SIGNIFICANT CHANGE OR EXPANSION IS PROPOSED TO THE DESIGN OF THE APPROVED FREESTANDING SIGN OR TO THE OVERALL ADVERTISING SIGNAGE FOR THE SITE (NOT INCLUDING ACCESSORY SIGNAGE SUCH AS HANDICAP PARKING SIGNS), THE PROPOSED SIGN DESIGNS MUST BE PRESENTED TO THE PLANNING BOARD FOR REVIEW PRIOR TO ISSUANCE OF THOSE SIGN PERMITS. A SIGN PERMIT MUST BE OBTAINED PRIOR TO INSTALLATION OF ANY SIGNS ON SITE.
19. ALL ELEMENTS SHOWN ON THE APPROVED SITE PLAN MUST BE PROPERLY COMPLETED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY, UNLESS APPROPRIATE SURETY IS PLACED WITH THE PLANNING DEPARTMENT.
20. NOTE THAT THIS APPROVAL IS FOR THE SITE PLAN ONLY. LIFE SAFETY CODE AND BUILDING CODE REVIEW WILL BE REQUIRED AS PART OF THE BUILDING PERMIT PROCESS WHEN THE CONSTRUCTION PLANS ARE SUBMITTED. VARIOUS REQUIREMENTS REGARDING THE BUILDING DESIGN POSSIBLY INCLUDING A SPRINKLER SYSTEM - MAY BE SPECIFIED AT THAT TIME.
21. THE SENIOR IMPACT CONTRIBUTION MUST BE PAID IN FULL TO THE CODE ENFORCEMENT DEPARTMENT, PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THE SENIOR IMPACT IS A ONE TIME PAYMENT OF \$2.00 PER GALLON FOR AVERAGE DAILY FLOW.
22. 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, INSPECTIONS AND MAINTENANCE OF SEDIMENT CONTROL MEASURES, DOCUMENTATION OF MAINTENANCE ACTIVITIES, AND SUBMISSION OF A NOTICE OF TERMINATION (NOT) TO EPA. THE CONTRACTOR IS ALSO RESPONSIBLE TO COMPLY WITH ANY OR ALL OTHER ASPECTS OF THE CURRENT FEDERAL, STATE AND LOCAL STORM WATER OR NPDES REGULATIONS OR REQUIREMENTS.
23. A SIGN PERMIT APPLICATION TO THE CITY OF ROCHESTER WILL BE REQUIRED PRIOR TO ERECTION OF A SIGN.
24. THE PROPOSED SENIOR HOUSING FACILITY WILL NEED TO HAVE PERMITTED FIRE SERVICE AND DOMESTIC SERVICE BACKFLOW PREVENTION DEVICES. DEPARTMENT OF PUBLIC WORKS WILL DETERMINE THE HAZARD CLASS (LOW OR HIGH) OF BOTH BACKFLOW PREVENTION DEVICES BASED UPON PROPOSED USE, BUILDING PLANS, SPECIFICATIONS, AND SCHEMATICS OF THE DOMESTIC/FIRE SERVICES. A CERTIFICATE OF OCCUPANCY WILL NOT BE APPROVED FOR THE FACILITY UNTIL THE DOMESTIC AND FIRE SERVICE BACKFLOW DEVICES ARE FULLY PERMITTED WHICH REQUIRES A PASSING TEST ON BOTH DEVICES BY A CERTIFIED BACKFLOW PREVENTION DEVICE TESTING FIRM.



FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

CERTIFIED BY: _____ DATE: _____

SITE REVIEW APPROVAL

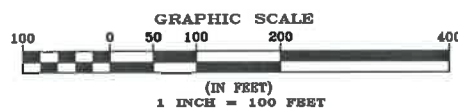
WHETHER OR NOT OTHERWISE EXPRESSLY RECITED ON THIS SITE REVIEW PLAN, THE SITE REVIEW APPROVAL GRANTED IS CONDITIONED ON FAITHFUL AND DILIGENT ADHERENCE BY THE OWNER/DEVELOPER TO ALL WRITTEN AND VERBAL REPRESENTATIONS MADE REGARDING SUCH MATTERS AS USE, NUMBER OF EMPLOYEES, DRAINAGE, CONSTRUCTION, ETC. AS WELL AS ALL OTHER TERMS, CONDITIONS, PROVISIONS, REQUIREMENTS AND SPECIFICATIONS OF THE SITE PLAN REVIEW REGULATIONS OF THE CITY OF ROCHESTER, N.H., AS AMENDED, IN EFFECT ON THE DATE OF APPROVAL. ANY VARIATION FROM THE PROPOSAL AS APPROVED MAY ALSO REQUIRE THE SUBMISSION AND APPROVAL OF A NEW SITE REVIEW APPLICATION.

FILE NO. 102
PLAN NO. C-3154
DWG. NO. 19249 SP-1
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

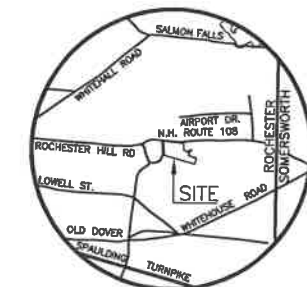


LAND SURVEYORS

CIVIL ENGINEERS

LEGEND

- PROPERTY LINE
- JURISDICTIONAL WETLANDS
- EXISTING TREE LINE
- EXISTING OVERHEAD WIRES
- EXISTING HYDRANT
- EXISTING WATER GATE OR SHUT-OFF VALVE
- EXISTING UTILITY POLE
- EXISTING SEWER MAN HOLE
- EXISTING CATCH BASIN
- EXISTING LIGHT POLES
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- PROPOSED PAVEMENT WITH CURBING
- PROPOSED TREE LINE
- PROPOSED VINYL PLANK FENCE
- PROPOSED GUARDRAIL
- PROPOSED BLOCK RETAINING WALL
- PROPOSED PAVEMENT
- PROPOSED CONCRETE
- PROPOSED DETECTABLE WARNING PAVERS
- PROPOSED SIGNS
- VGC VERTICAL GRANITE CURB
- SQC SLOPE GRANITE CURB
- R20' PAVEMENT RADIUS (20')
- PROPOSED STANDARD PARKING SPACES (9' x 18')
- PROPOSED VISITOR PARKING SPACES (9' x 18')
- PROPOSED VAN ACCESSIBLE PARKING SPACES (11' x 18' WITH 5' x 18' ACCESS ISLE)
- PROPOSED ACCESSIBLE PARKING SPACES (9' x 18' WITH 5' x 18' ACCESS ISLE)



LOCUS N.T.S.

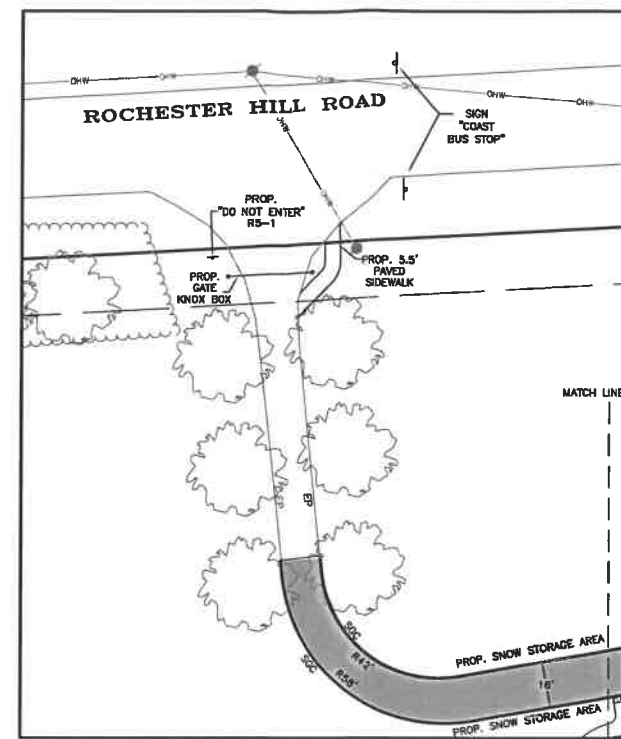
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2 Continental Blvd., Rochester, N.H. 603-335-3948



SITE LAYOUT PLAN
TAX MAP 243, LOT 39
215 ROCHESTER HILL RD
ROCHESTER, NH

PREPARED FOR:
EASTER SEALS NH, INC.

APRIL 2021

GRAPHIC SCALE



1 INCH = 30 FEET

C-2

LAND SURVEYORS



CIVIL ENGINEERS



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LEGEND

- PROPERTY LINE
- JURISDICTIONAL WETLANDS
- EXISTING TREE LINE
- EXISTING DRAIN LINE
- 232
- EXISTING CONTOUR LINE
- TP #1
- EXISTING TEST PIT
- E234.1'
- EXISTING SPOT GRADE
- P234.25'
- PROPOSED SPOT GRADE
- PROPOSED TREE LINE
- PROPOSED DRAIN LINE
- 232
- PROPOSED CONTOUR LINE
- PROPOSED CATCH BASIN
- PROPOSED DRAIN MANHOLE
- PROPOSED AREA DRAIN
- PROPOSED FLARED END SECTION (FES)
- CORRUGATED POLYETHYLENE PIPE
- CATCH BASIN
- AREA DRAIN
- TOW
- TOP OF WALL
- TC
- TOP OF CURB
- BC
- BASE OF CURB
- SPOT GRADE CURVING
- PROPOSED OUTLET PROTECTION

PROPOSED AREA DRAINS

AD1 RIM = 336.90' INV. IN = 334.75' (DRIP EDGE) INV. OUT = 334.75' (AB2) L = 30' 12"CPP	AD2 RIM = 336.90' INV. OUT = 335.00' (AD1) L = 30' 12"CPP	AD3 RIM = 336.90' INV. OUT = 335.25' (AB4) L = 30' 12"CPP
AD4 RIM = 336.90' INV. OUT = 335.00' (CB1A) L = 50' 12"CPP	AD5 RIM = 336.75' INV. IN = 334.75' (DRIP EDGE) INV. OUT = 334.75' (AD4) L = 30' 12"CPP	AD6 RIM = 336.75' INV. IN = 334.25' (AD7) INV. OUT = 334.00' (CB1B) L = 30' 12"CPP
AD7 RIM = 336.50' INV. OUT = 334.50' (AD6) L = 30' 12"CPP	AD8 RIM = 336.50' INV. OUT = 333.00' (CB2B) L = 10' 12"CPP	AD9 RIM = 336.50' INV. IN = 334.75' INV. OUT = 334.00' (AD10) L = 50' 12"CPP
AD10 RIM = 336.50' INV. OUT = 333.00' (FES3) L = 70' 12"CPP	F.E.S. 3 INV. = 329.50'	

PROPOSED DRAINAGE PIPES

- 1A PROP. PIPE 1A 12" CPP L = 18.0'
- 1B PROP. PIPE 1B 12" CPP L = 27.0'
- 1C PROP. PIPE 1C 12" CPP L = 15.0'
- 2A PROP. PIPE 2A 12" CPP L = 15.3'
- 2B PROP. PIPE 2B 12" CPP L = 22.3'
- 2C PROP. PIPE 2C 12" CPP L = 40.0'
- 3A PROP. PIPE 3A 12" CPP L = 103.0'
- 3B PROP. PIPE 3B 12" CPP L = 35.6'
- 3C PROP. PIPE 3C 15" CPP L = 58.1'
- 4A PROP. PIPE 4A 12" CPP L = 14.8'
- 4B PROP. PIPE 4A 12" CPP L = 40.0'
- 4C PROP. PIPE 4C 15" CPP L = 35.2'
- 5A PROP. PIPE 5A 15" CPP L = 19.0'
- 6A PROP. PIPE 6A 18" CPP L = 75.0'
- 7A PROP. PIPE 7A 18" CPP L = 60.0'
- 8A PROP. PIPE 8A 12" CPP L = 19.0'
- 9A PROP. PIPE 9A 12" CPP L = 16.0'
- 10A PROP. PIPE 10A 24" CPP L = 27.0'
- 11A PROP. PIPE 11A 24" CPP L = 35.0'
- 12A PROP. PIPE 12A 24" CPP L = 182.6'
- 13A PROP. PIPE 13A 24" CPP L = 78.5'
- 14A PROP. PIPE 14A 30" CPP L = 38.3'
- 15A PROP. PIPE 15A 24" CPP L = 20.6'
- 16A PROP. PIPE 16A 30" CPP L = 39.0'
- 17A PROP. PIPE 17A 30" CPP L = 50.0'
- 18A PROP. PIPE 18A INV. IN = 312.00' (HEADWALL) 30" CPP L = 95'
- 19A PROP. PIPE 19A 30" CPP L = 65'

GRADING & DRAINAGE PLAN

CHAMPLIN PLACE
TAX MAP 243, LOT 39
ROCHESTER HILL ROAD &
HEALTHCARE DRIVE
ROCHESTER, NH

PREPARED FOR:
EASTER SEALS NH, INC.
APRIL 2021
GRAPHIC SCALE



1 INCH = 50 FEET



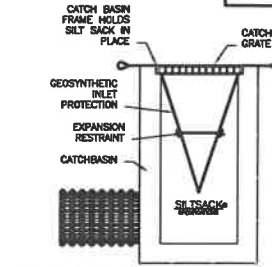
PROPOSED DRAINAGE STRUCTURES

PROP. CB1A RIM = 335.25' INV. IN = 332.00' (AD1) INV. OUT = 331.25' (CB2A) L = 18' 12"CPP	CB4A RIM = 335.50' INV. IN = 329.65' (CB3A) INV. OUT = 328.58' (CB5A) L = 14.8' 12"CPP	CB8A RIM = 334.15' INV. OUT = 330.00' (CB7A) L = 19.0' 12" CPP	CB12A RIM = 327.57' INV. IN = 319.00' (CB11A) INV. IN = 318.70' (CB4C) INV. OUT = 318.40' (CB13A) L = 182.6' 24"CPP	CB16A RIM = 318.50' INV. IN = 313.60' (CB14A) INV. IN = 313.50' (CB15A) INV. OUT = 313.40' (CB17A) L = 39.0' 30"CPP	CB18 RIM = 335.35' INV. IN = 332.50' (AD6) INV. OUT = 332.00' (CB2B) L = 27.0' 12"CPP	CB1C RIM = 331.60' INV. OUT = 328.00' (CB2C) INV. IN = 315.90' (CB12A) L = 35.2' 15"CPP	CB4C RIM = 323.40' INV. IN = 319.00' (CB3C) INV. OUT = 318.90' (CB12A) L = 35.2' 15"CPP
CB2A RIM = 336.34' INV. IN = 331.00' (CB1A) INV. OUT = 331.00' (CB3A) L = 15.3' 12"CPP	CB5A RIM = 335.82' INV. IN = 329.50' (CB4A) INV. OUT = 328.40' (CB6A) L = 19.0' 12"CPP	CB9A RIM = 329.50' INV. OUT = 325.50' (CB10A) L = 19.0' 12" CPP	CB13A RIM = 323.61' INV. IN = 318.70' (CB12A) INV. OUT = 317.30' (CB15A) L = 78.5' 18"CPP	CB17A RIM = 318.00' INV. IN = 313.00' (CB16A) INV. OUT = 312.90' (F.E.S.1) L = 50.0' 30"CPP	CB2B RIM = 335.35' INV. IN = 332.00' (AD6) INV. IN = 331.87' (CB1B) INV. OUT = 331.77' (CB3B) L = 22.3' 12"CPP	CB2C RIM = 322.50' INV. IN = 319.70' (CB1C) INV. OUT = 319.60' (CB3C) L = 40.0' 12"CPP	F.E.S. 1 INV. = 312.50'
CB3A RIM = 335.50' INV. IN = 330.92' (CB2A) INV. OUT = 330.82' (CB4A) L = 103' 12"CPP	CB6A RIM = 336.00' INV. IN = 329.30' (CB5A) INV. IN = 331.00' (AD5) INV. OUT = 329.20' (CB7A) L = 75.0' 18"CPP	CB10A RIM = 327.50' INV. IN = 323.50' (CB9A) INV. IN = 323.50' (CB7A) INV. OUT = 323.40' (CB11A) L = 27.0' 18"CPP	CB14A RIM = 318.70' INV. OUT = 313.60' (CB16A) L = 38.3' 30"CPP	DMH1A RIM = 318.13' INV. IN = 311.50' (HEADWALL) INV. OUT = 311.40' (F.E.S.3) L = 65' 30"CPP	CB3B RIM = 335.45' INV. IN = 331.80' (CB2B) INV. IN = 332.00' (AD6) INV. OUT = 331.50' (CB4B) L = 56.1' 15"CPP	CB3C RIM = 322.50' INV. IN = 319.40' (CB2C) INV. OUT = 319.30' (CB4C) L = 40.0' 12"CPP	F.E.S. 2 INV. = 331.00'
FILE NO. 102 PLAN NO. C-3154 DWG. NO. 19249 SP-1 F.B. NO.	CB7A RIM = 331.67' INV. IN = 327.00' (CB6A) INV. IN = 327.00' (CB8A) INV. OUT = 326.90' (CB10A) L = 65.0' 18"CPP	CB11A RIM = 327.15' INV. OUT = 322.90' (CB10A) L = 35.0' 18"CPP	CB15A RIM = 319.75' INV. IN = 315.50' (CB13A) INV. OUT = 313.60' (CB16A) L = 20.6' 24"CPP	CB38 RIM = 334.60' INV. IN = 331.30' (CB3B) INV. OUT = 331.20' (F.E.S.2) L = 40.0' 12"CPP	F.E.S. 3 INV. = 309.75'		

LEGEND

- PROPERTY LINE
- JURISDICTIONAL WETLANDS
- EXISTING TREE LINE
- EXISTING DRAIN LINE
- EXISTING CONTOUR LINE
- EXISTING CATCH BASIN
- PROPOSED TREE LINE
- PROPOSED DRAIN LINE
- PROPOSED CONTOUR LINE
- PROPOSED SILTATION FENCE
- PROPOSED SILTATION SOCK
- PROPOSED CATCH BASIN
- PROPOSED DRAIN MANHOLE
- PROPOSED FLARED END SECTION (FES)
- PROPOSED TEMPORARY CATCH BASIN FILTERS
- PROPOSED TEMPORARY STABILIZED CONSTRUCTION EXIT
- PROPOSED TEMPORARY STONE CHECK DAMS

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. 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.



REGULAR FLOW SILTSACK

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

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4633	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4633	120 LBS
UV RESISTANCE	ASTM D-4338	60 %
APPROXIMATE OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE PERMEABILITY	ASTM D-4491	0.55 SEC -1

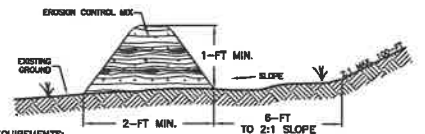
NOTES:

- GEOSYNTHETIC SEDIMENT FILTER TRAP SHALL BE "REGULAR FLOW SILTSACK" OR APPROVED EQUAL. SPECIFICATIONS FOR SILTSACKS 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



MAINTENANCE REQUIREMENTS:

- EROSION CONTROL MIX BERM SHOULD BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
- EROSION CONTROL MIX BERM SHOULD BE REPAIRED IMMEDIATELY IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM.
- IF THERE ARE SIGNS OF BREACHING OF THE BARRIER, OR IMPONDING OF LARGE VOLUMES OF WATER BEHIND THEM, THE EROSION CONTROL MIX BERM SHOULD BE REPLACED WITH OTHER MEASURES TO INTERCEPT AND TRAP SEDIMENT (SUCH AS A DIVERSION BERM DIRECTING RUNOFF TO A SEDIMENT TRAP OR BASIN).
- SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT.
- SEDIMENT DEPOSITS MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE THIRD (1/3) OF THE HEIGHT OF THE BARRIER.
- EROSION CONTROL MIX BERM SHOULD BE RESHAPED OR REAPPLIED AS NEEDED.
- ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIER IS NO LONGER REQUIRED SHOULD BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEED.

CONSTRUCTION SPECIFICATIONS:

- EROSION CONTROL MIX CAN BE MANUFACTURED ON OR OFF OF THE PROJECT SITE.
- EROSION CONTROL MIX MUST CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS.
- WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

COMPOSITION OF THE EROSION CONTROL MIX SHOULD BE AS FOLLOWS:

- EROSION CONTROL MIX SHALL BE A WELL GRADED MIXTURE OF PARTICLE SIZES FREE OF REFUSE, PHYSICAL CONTAMINANTS, MATERIAL TOXIC TO PLANT GROWTH AND MAY NOT CONTAIN ROCKS LESS THAN 4-INCHES IN DIAMETER.
- ORGANIC MATTER: 25-55% DRY WEIGHT BASIS
- PARTICLES PASSING BY WEIGHT:
 - 3-INCH: 100%
 - 1-INCH: 90-100%
 - 3/4-INCH: 70-100%
 - 1/4-INCH: 30-75%
- THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED.
- THE MIX SHOULD CONTAIN NO SILTS, CLAYS OR FINE SANDS.
- SOLUBLE SALTS CONTENT: < 4.0 mmol/kg
- PH OF THE MIX SHOULD BE BETWEEN 5.0 AND 8.0

- THE BARRIER MUST BE PLACED ALONG A RELATIVELY LEVEL CONTOUR.
- IT MAY BE NECESSARY TO CUT TALL GRASSES AND WOODY VEGETATION TO AVOID CREATING VOIDS AND BRIDGES IN THE BARRIER THAT WOULD ENABLE FINES TO WASH UNDER THE BARRIER THROUGH THE GRASS BLADES OR PLANT STEMS.
- THE BARRIER MUST BE A MINIMUM OF 12-INCHES TALL AS MEASURED ON THE UPHILL SIDE OF THE BARRIER.
- THE BARRIER MUST BE A MINIMUM OF 2-FT WIDE.

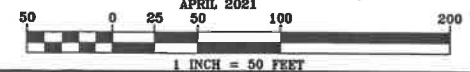
EROSION CONTROL MIX BERM DETAIL

NOT TO SCALE

EROSION & SEDIMENTATION CONTROL PLAN
CHAMPLIN PLACE
TAX MAP 243, LOT 39
ROCHESTER HILL ROAD & HEALTHCARE DRIVE
ROCHESTER, NH

PREPARED FOR:
EASTER SEALS NH, INC.

APRIL 2021



FILE NO. 102
PLAN NO. C-8154
DWG. NO. 19249 SP-1
F.B. NO.

LAND SURVEYORS

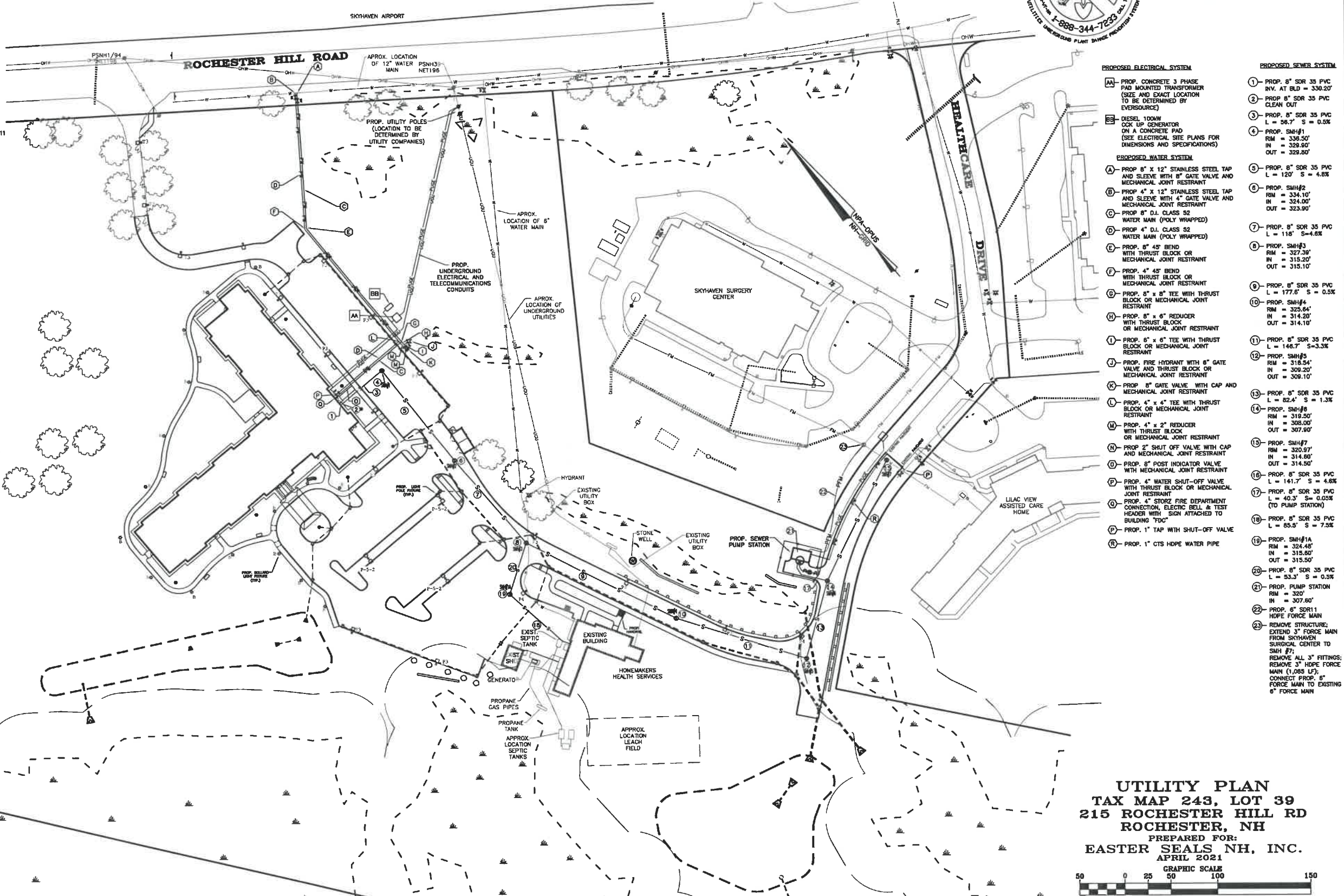
CIVIL ENGINEERS

LEGEND

- PROPERTY LINE
- JURISDICTIONAL WETLANDS
- EXISTING OVERHEAD WIRES
- EXISTING WATER MAIN
- EXISTING GRAVITY SEWER MAIN
- EXISTING SEWER FORCE MAIN
- EXISTING UNDERGROUND ELECTRIC WIRES
- EXISTING UNDERGROUND UTILITY WIRES
- EXISTING GAS PIPE
- EXISTING DRAIN LINE
- EXISTING HYDRANT
- EXISTING WATER GATE OR SHUT-OFF VALVE
- EXISTING UTILITY POLE
- EXISTING SEWER MANHOLE
- EXISTING CATCH BASIN
- EXISTING LIGHT POLES
- PROPOSED DRAIN LINE
- PROPOSED WATER SERVICE
- PROPOSED SEWER LINE
- PROPOSED SEWER FORCE MAIN PIPE HOPE SDR 11
- PROPOSED PROPANE GAS LINE
- PROPOSED UNDERGROUND UTILITY WIRES
- PROPOSED UNDERGROUND ELECTRIC WIRES
- PROPOSED HYDRANT
- PROPOSED WATER GATE VALVE
- PROPOSED WATER SHUT-OFF VALVE
- PROPOSED SEWER SHUT-OFF VALVE
- PROPOSED UTILITY POLE
- PROPOSED SEWER MANHOLE
- PROPOSED DRAIN MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED LIGHT POLES
- PROPOSED BUILDING LIGHT FIXTURES
- T.O.P. TOP OF PIPE
- B.O.P. BOTTOM OF PIPE

- NOTES:
- CONSTRUCTION WILL CONFORM TO THE FOLLOWING UTILITIES STANDARDS AND SPECIFICATION:
 - A) SANITARY SEWER DISPOSAL - CITY OF ROCHESTER
 - B) ELECTRIC DISTRIBUTION - EVERSOURCE
 - C) TELEPHONE - FAIRPOINT
 - D) CABLE - CONSOLIDATED COMMUNICATIONS
 - E) WATER - CITY OF ROCHESTER
 - ALL PROPOSED ON-SITE UTILITIES SHALL BE INSTALLED UNDERGROUND.

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. 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.



PROPOSED ELECTRICAL SYSTEM

- AA) PROP. CONCRETE 3 PHASE PAD MOUNTED TRANSFORMER (SIZE AND EXACT LOCATION TO BE DETERMINED BY EVERSOURCE)
- BB) DIESEL 100KW COCK UP GENERATOR ON A CONCRETE PAD (SEE ELECTRICAL SITE PLANS FOR DIMENSIONS AND SPECIFICATIONS)
- CC) PROP. 8" X 12" STAINLESS STEEL TAP AND SLEEVE WITH 8" GATE VALVE AND MECHANICAL JOINT RESTRAINT
- DD) PROP. 4" X 12" STAINLESS STEEL TAP AND SLEEVE WITH 4" GATE VALVE AND MECHANICAL JOINT RESTRAINT
- EE) PROP. 8" D.I. CLASS 32 WATER MAIN (POLY WRAPPED)
- FF) PROP. 4" D.I. CLASS 32 WATER MAIN (POLY WRAPPED)
- GG) PROP. 8" 45° BEND WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT
- HH) PROP. 4" 45° BEND WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT
- II) PROP. 8" X 8" TEE WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT
- JJ) PROP. 8" X 6" REDUCER WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT
- KK) PROP. 8" GATE VALVE WITH CAP AND MECHANICAL JOINT RESTRAINT
- LL) PROP. 4" X 4" TEE WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT
- MM) PROP. 4" X 2" REDUCER WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT
- NN) PROP. 2" SHUT OFF VALVE WITH CAP AND MECHANICAL JOINT RESTRAINT
- OO) PROP. 8" POST INDICATOR VALVE WITH MECHANICAL JOINT RESTRAINT
- PP) PROP. 4" WATER SHUT-OFF VALVE WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT
- QQ) PROP. 4" STORM FIRE DEPARTMENT CONNECTION, ELECTRIC BELL & TEST HEADER WITH SIGN ATTACHED TO BUILDING "FDC"
- RR) PROP. 1" TAP WITH SHUT-OFF VALVE
- SS) PROP. 1" CTS HOPE WATER PIPE

PROPOSED SEWER SYSTEM

- 1) PROP. 8" SDR 35 PVC R.V. AT BLD = 330.20'
- 2) PROP. 8" SDR 35 PVC CLEAN OUT
- 3) PROP. 8" SDR 35 PVC L = 56.7' S = 0.5%
- 4) PROP. SMH#1 RM = 334.50' IN = 324.50' OUT = 329.50'
- 5) PROP. 8" SDR 35 PVC L = 120' S = 4.6%
- 6) PROP. SMH#2 RM = 334.10' IN = 324.00' OUT = 323.90'
- 7) PROP. 8" SDR 35 PVC L = 118' S = 4.6%
- 8) PROP. SMH#3 RM = 327.39' IN = 315.20' OUT = 315.10'
- 9) PROP. 8" SDR 35 PVC L = 177.6' S = 0.5%
- 10) PROP. SMH#4 RM = 325.84' IN = 314.20' OUT = 314.10'
- 11) PROP. 8" SDR 35 PVC L = 146.7' S = 3.3%
- 12) PROP. SMH#5 RM = 325.84' IN = 309.20' OUT = 309.10'
- 13) PROP. 8" SDR 35 PVC L = 82.4' S = 1.3%
- 14) PROP. SMH#6 RM = 319.50' IN = 308.00' OUT = 307.90'
- 15) PROP. SMH#7 RM = 320.97' IN = 314.60' OUT = 314.50'
- 16) PROP. 8" SDR 35 PVC L = 141.7' S = 4.6%
- 17) PROP. 8" SDR 35 PVC L = 40.3' S = 0.05% (TO PUMP STATION)
- 18) PROP. 8" SDR 35 PVC L = 65.5' S = 7.5%
- 19) PROP. SMH#1A RM = 324.45' IN = 315.60' OUT = 315.50'
- 20) PROP. 8" SDR 35 PVC L = 53.3' S = 0.5%
- 21) PROP. PUMP STATION RM = 320' IN = 307.60'
- 22) PROP. 8" SDR11 HOPE FORCE MAIN
- 23) REMOVE STRUCTURE; EXTEND 3" FORCE MAIN FROM SKYHAVEN SURGICAL CENTER TO SMH #7; REMOVE ALL 3" FITTINGS; REMOVE 3" HOPE FORCE MAIN (1,085 LF); CONNECT PROP. 8" FORCE MAIN TO EXISTING 8" FORCE MAIN

UTILITY PLAN
TAX MAP 243, LOT 39
215 ROCHESTER HILL RD
ROCHESTER, NH
 PREPARED FOR:
EASTER SEALS NH, INC.
 APRIL 2021
 GRAPHIC SCALE
 50 0 25 50 100 150
 1 INCH = 50 FEET

FILE NO. 102
 PLAN NO. C-3154
 DWG. NO. 19249 SP-1
 F.B. NO.

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

NORWAY PLAINS ASSOCIATES, INC.

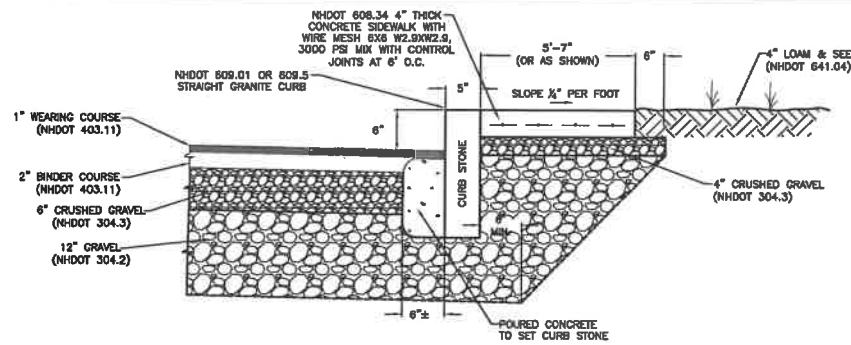
2 Continental Blvd., Rochester, N.H. 603-335-3948

LAND SURVEYORS

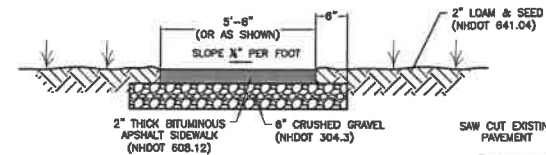


CIVIL ENGINEERS

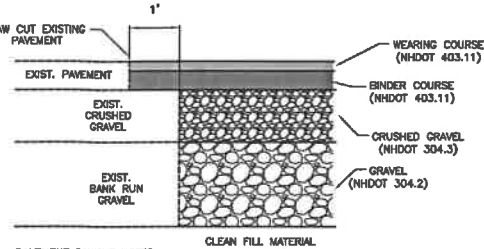
CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. 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.



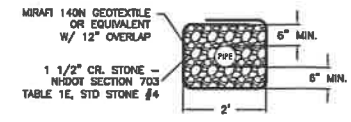
CONCRETE SIDEWALK WITH GRANITE CURB DETAIL
NOT TO SCALE



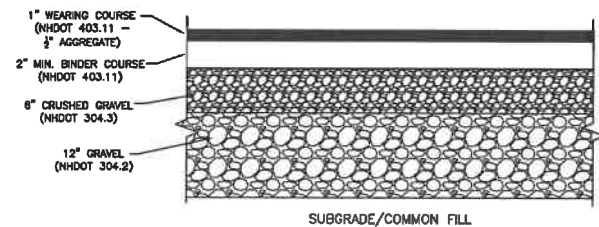
PAVED SIDEWALK DETAIL
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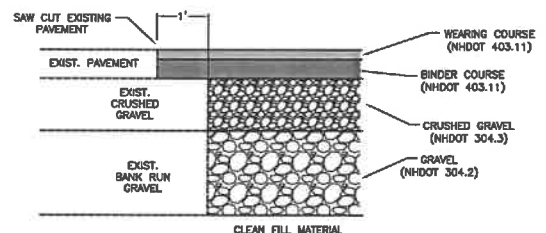
TYPICAL PAVEMENT SAWCUT DETAIL
NOT TO SCALE



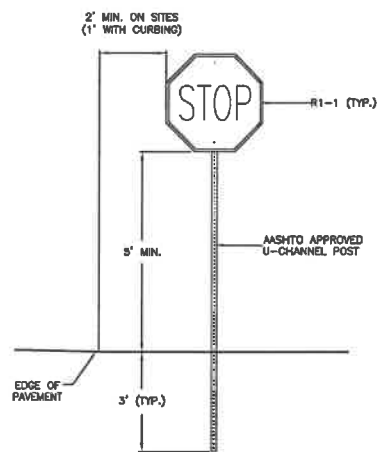
TYPICAL UNDERDRAIN
NOT TO SCALE



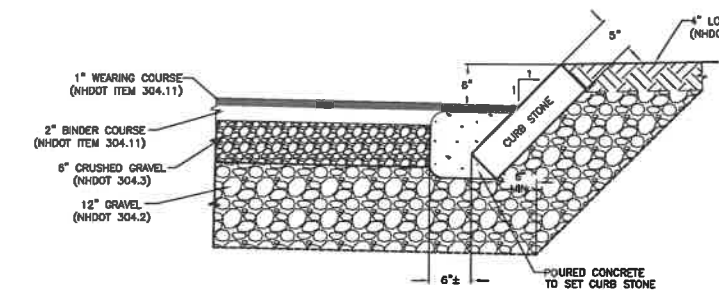
PARKING LOT CROSS-SECTIONS
NOT TO SCALE



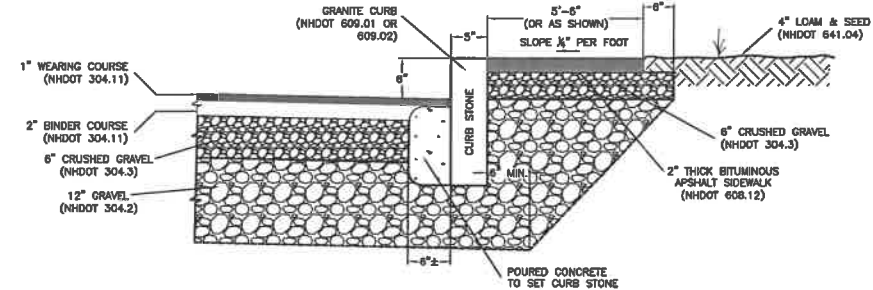
TYPICAL PAVEMENT MATCHING DETAIL
NOT TO SCALE



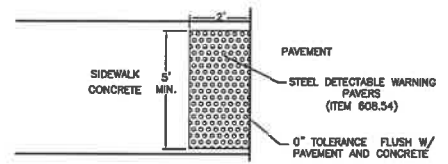
TYPICAL TRAFFIC SIGN
NOT TO SCALE



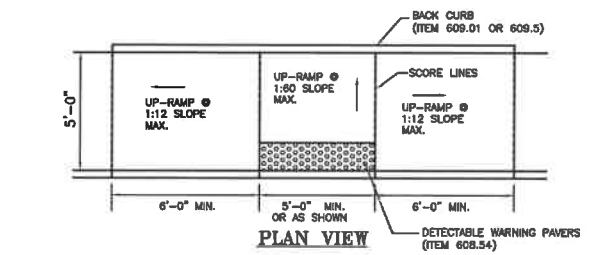
GRANITE SLOPE CURB DETAIL
NOT TO SCALE



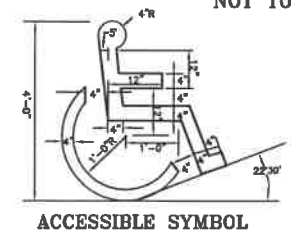
PAVED SIDEWALK WITH GRANITE CURB DETAIL
NOT TO SCALE



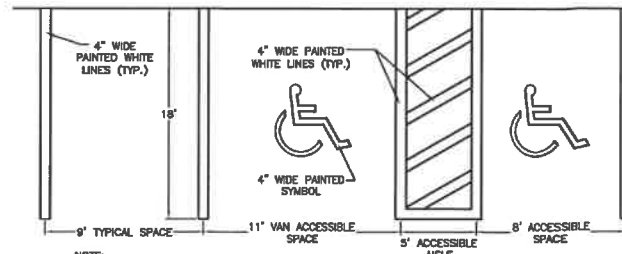
DETECTABLE WARNING PAVER DETAIL
NOT TO SCALE



HANDICAP RAMP DETAIL "A"
NOT TO SCALE



ACCESSIBLE SYMBOL



STALL STRIPING DETAIL
NOT TO SCALE

ITEM NO.	SIGN SIZE		TEXT	NO. SIGNS REQ'D
	HEIGHT	WIDTH		
R1-1	30"	30"	STOP	3
R7-8 R7-8a	18"	12"	WHEELCHAIR	6
R7-8P	6"	18"	VAN ACCESSIBLE	2
R7-1	18"	12"	NO PARKING FIRE LAKE	2
NHE-9455	7"	10"	FDC	1
W14-2	30"	30"	NO OUTLET	1
W11A-2	30"	30"	WALK	2
ROCHESTER STREET SIGN WITH REMOVABLE "PRIVATE" TOPPER	4"	8"	PRIVATE	1
	9"	24"	XXX DRIVE	1
RS-1	30"	30"	DO NOT ENTER	8

SIGN SCHEDULE
NOT TO SCALE

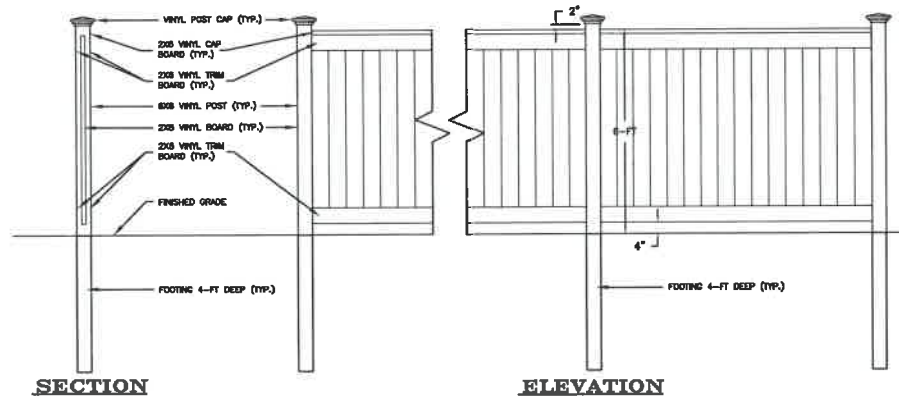
FILE NO. 102
PLAN NO. C-3154
DWG. NO. 19249 SP-1
F.B. NO.

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

NORWAY PLAINS ASSOCIATES, INC.

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

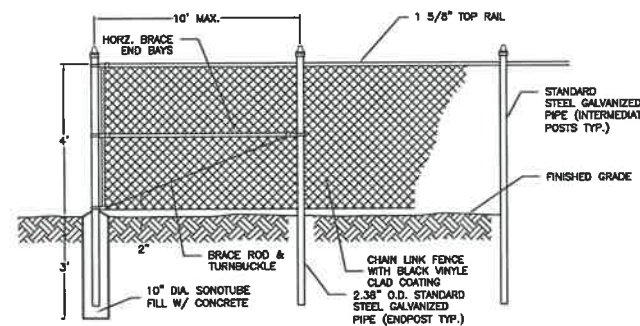
LAND SURVEYORS



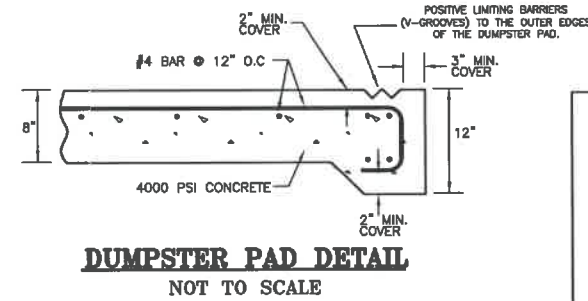
SECTION

ELEVATION

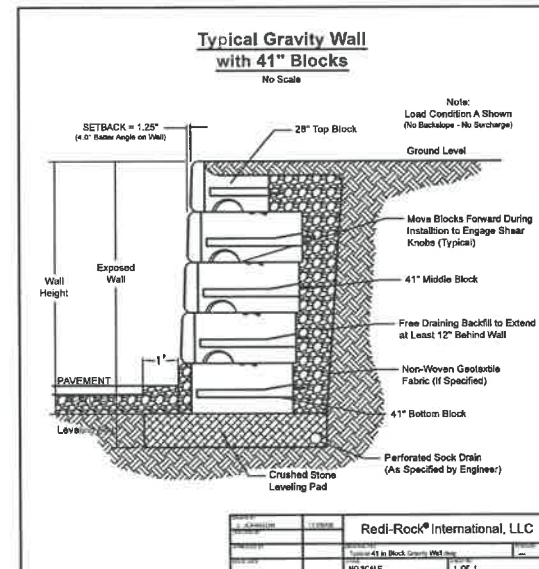
TYPICAL SOLID VINYL FENCE DUMPSTER ENCLOSURE
SCALE: 1/2"=1'



TYPICAL CHAINLINK FENCE
NOT TO SCALE

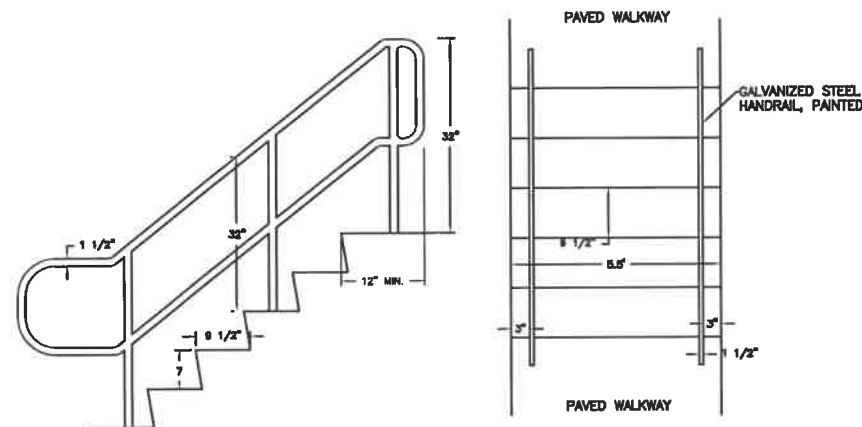


DUMPSTER PAD DETAIL
NOT TO SCALE



TYPICAL BLOCK RETAINING WALL DETAIL
NOT TO SCALE

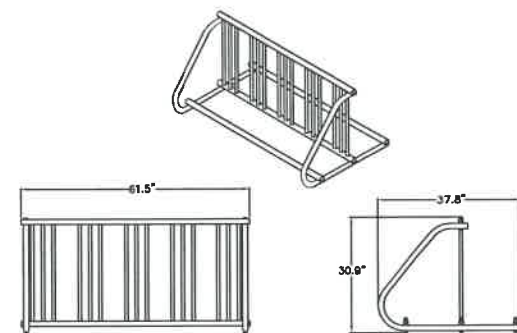
- NOTES:
- DESIGN OF RETAINING WALLS TO BE PROVIDED BY MANUFACTURE AND INSTALLED PER THE MANUFACTURES REQUIREMENTS.
 - SHOP DRAWINGS SHALL BE SUBMITTED PRIOR TO ORDERING AND APPROVED BY NORWAY PLAINS ASSOCIATES, INC.
 - CHAINLINK FENCE SHALL BE INSTALLED ON TOP OF WALL WHERE THE VERTICAL DROP IS GREATER THAN 2 FEET OR AS REQUIRED BY CODES.



PROFILE

PLAN

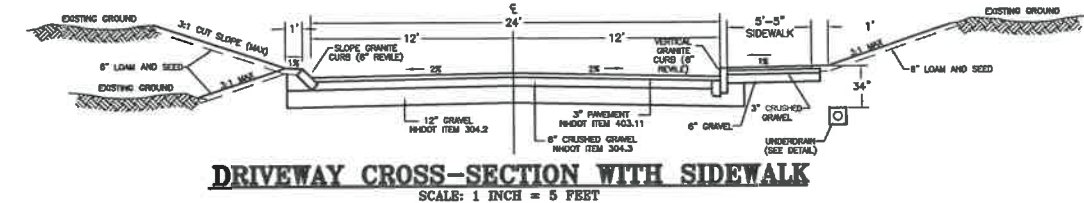
RAIL & STAIR DETAIL
NOT TO SCALE



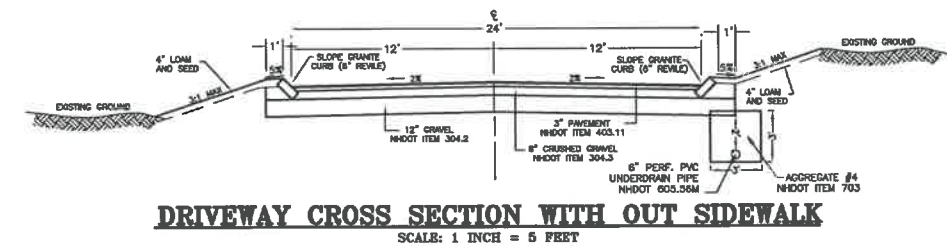
BICYCLE RACK DETAIL
NOT TO SCALE

CIVIL ENGINEERS

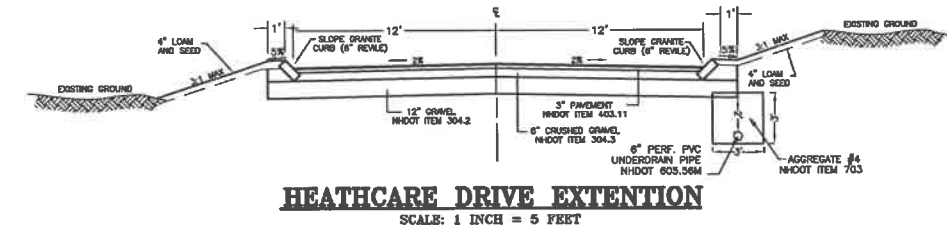
CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. 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.



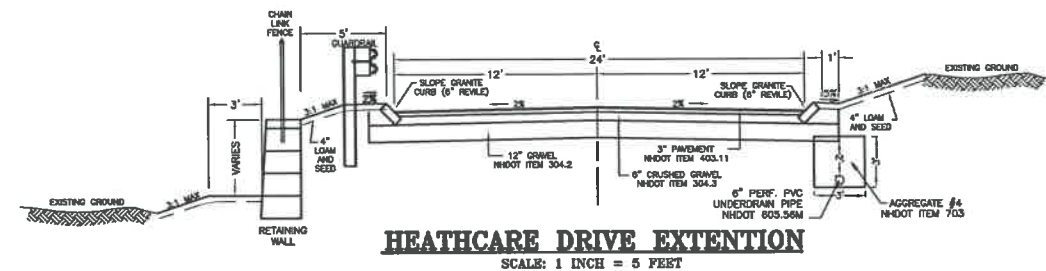
DRIVEWAY CROSS-SECTION WITH SIDEWALK
SCALE: 1 INCH = 5 FEET



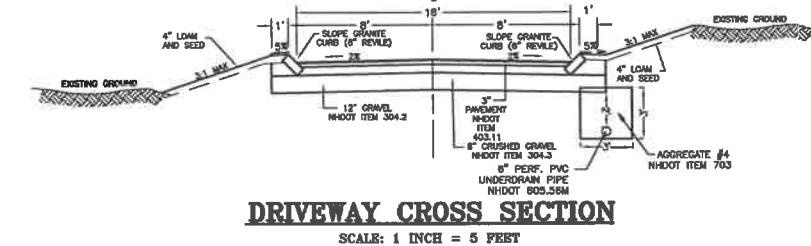
DRIVEWAY CROSS SECTION WITH OUT SIDEWALK
SCALE: 1 INCH = 5 FEET



HEATHCARE DRIVE EXTENSION
SCALE: 1 INCH = 5 FEET



HEATHCARE DRIVE EXTENSION
SCALE: 1 INCH = 5 FEET



DRIVEWAY CROSS SECTION
SCALE: 1 INCH = 5 FEET

CONSTRUCTION DETAILS
TAX MAP 243, LOT 39
ROCHESTER HILL ROAD &
HEALTHCARE DRIVE
ROCHESTER, NH
PREPARED FOR:
EASTER SEALS NH, INC.
APRIL 2021

FILE NO. 102
PLAN NO. C-3154
DWG. NO. 19249 SP-1
F.B. NO.

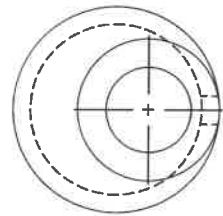
31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

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

C-7

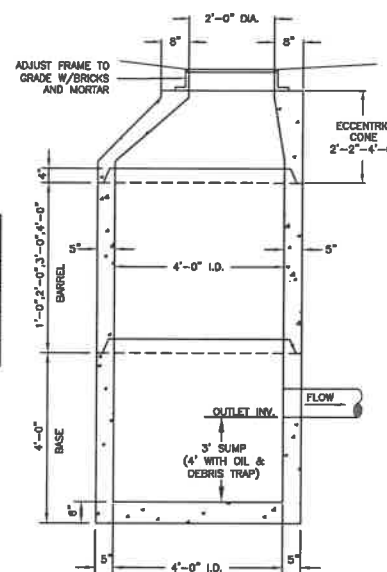
LAND SURVEYORS



PLAN VIEW

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

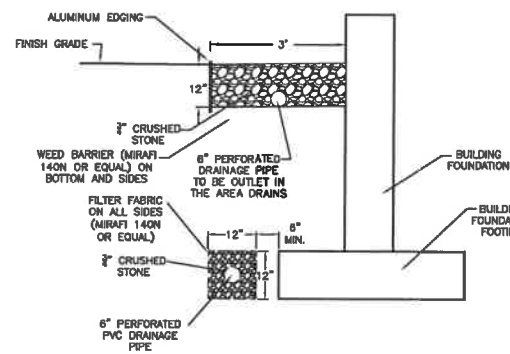
- NOTES:
1. CONCRETE: 4,000 PSI AFTER 28 DAYS.
 2. REINFORCING: SHALL BE PROVIDED FOR H-20 LOADING.
 3. SHIRLAP JOINTS SEALED WITH 1 STRIP OF BUTYL RUBBER SEALANT.
 4. PIPE OPENINGS CAST IN AS REQUIRED.
 5. RISER HEIGHT VARIES 1', 2', 3' OR 4' TO REACH DESIRED DEPTH.
 6. PIPE CONNECTIONS SHALL BE MORTARED.
 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

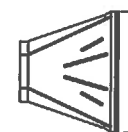
PRE-CAST REINFORCED CATCH BASIN

NOT TO SCALE

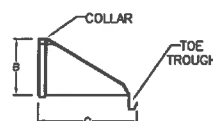


FOUNDATION AND DRIP EDGE DRAIN DETAIL

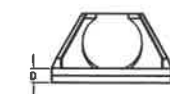
NOT TO SCALE



TOP VIEW



SIDE VIEW



FRONT VIEW

FLARED END SECTION DETAIL

NOT TO SCALE

PIPE DIAMETER	A	B	C	D
10" / 12"	42	14.5	33	8
15"	41	19	34	8
18"	48	22	43	8
24"	58.5	28	48	8
30"	68	38	63.5	8
36"	68	43	66.5	8

- INSTALLATION NOTES:
1. ANTI-SEEP COLLARS SHALL BE MADE PLASTIC IF BEING USED WITH PLASTIC PIPE. ANTI-SEEP COLLARS SHALL BE GALVANIZED SHEET STEEL IF BEING USED WITH CORRUGATED METAL PIPE AND SHALL BE POURED CONCRETE IF BEING USED WITH REINFORCED CONCRETE PIPE.
 2. ANTI-SEEP COLLAR SHALL BE WATERPROOF AND HAVE A WATERPROOF CONNECTION TO THE OUTLET PIPE.
 3. A NUMBER OF ANTI-SEEP COLLARS SHALL BE PLACED ALONG THE PIPE IN A SPACING THAT INCREASES THE PIPE LENGTH BY 15%.

SOURCES FOR PLASTIC ANTI-SEEP COLLARS FOR USE WITH PLASTIC PIPE:

1. THE FOLLOWING ARE A FEW MANUFACTURERS OF PLASTIC ANTI-SEEP COLLARS. COLLARS FROM THESE MANUFACTURERS MAY BE USED WITH BOTH SMOOTH WALLED AND CORRUGATED OUTSIDE WALLED PIPE.

McRIP MANUFACTURING
18 MESERVE ROAD
DURHAM, NH 03824
PHONE: (603) 868-5176
FAX: (603) 868-2074
E-MAIL: info@trenchdom.com

SCHIEB DRAINAGE PRODUCTS
203 SOUTH MONROE STREET
OREGON, MO 64473
PHONE: (660)-446-2343

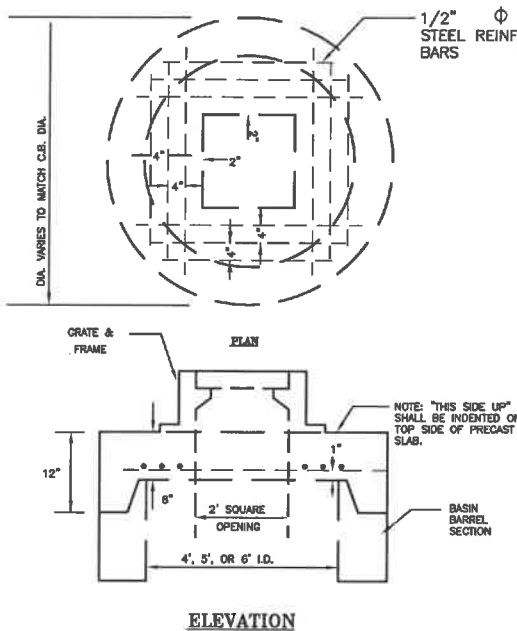
- IT IS ALSO SUGGESTED THAT LOCAL SUPPLIERS BE CONTACTED TO ENQUIRE ABOUT SUITABLE ANTI-SEEP COLLAR PRODUCTS. IF A POSSIBLE ALTERNATIVE IS FOUND CONTACT THE DESIGN ENGINEER TO ENSURE ITS APPROPRIATENESS AND TO GET APPROVAL FOR ITS USE.

COLLAR DIMENSION TABLE

D	W	H
12	10"	6"
18	10.25"	6"
24	12"	7.5"
30	12"	7.5"

ANTI-SEEP COLLAR DETAIL

NOT TO SCALE

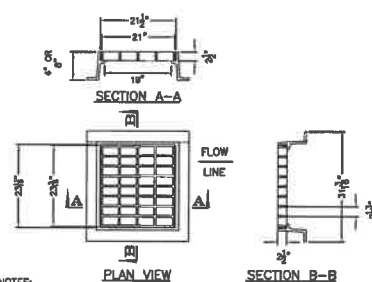


ELEVATION

- 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



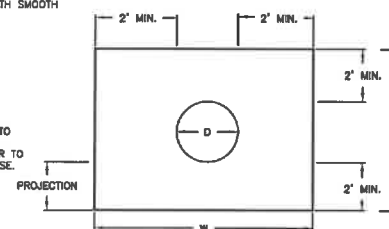
PLAN VIEW

SECTION B-B

- NOTES:
1. FRAME AND GRATE SHALL BE CAST IRON.
 2. FRAME AVAILABLE IN 4" OR 6" HEIGHTS.
 3. USE 3 FLANGE FRAME IF INSTALLED ADJACENT TO GRANITE CURB.
 4. ALL DIMENSIONS ARE NOMINAL.

CATCH BASIN TYPE 'B' GRATE DETAIL

NOT TO SCALE

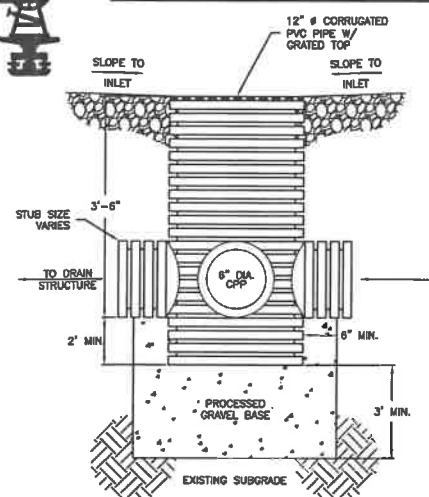


PROJECTION



CIVIL ENGINEERS

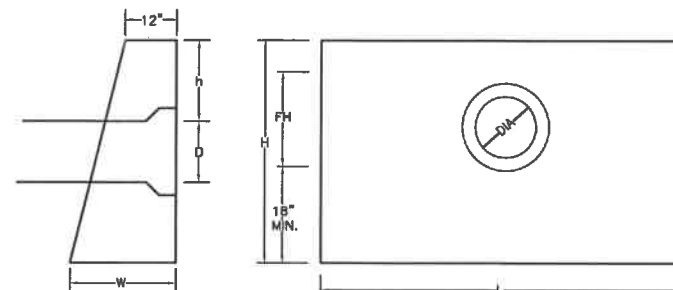
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- NOTES:
1. AREA DRAINS TO BE ADS PIPE TEE & RISER SECTIONS WITH GRATES, OR EQUAL.
 2. AREA DRAINS SHALL BE SET ON 3 FT OF PROCESSED GRAVEL BASE, COMPACTED TO 95% PROCTOR DENSITY.
 3. USE EITHER CLEAN GRANULAR FILL OR #10 DOT CRUSHED GRAVEL FOR THE PROCESSED GRAVEL BASE (SEE C6).

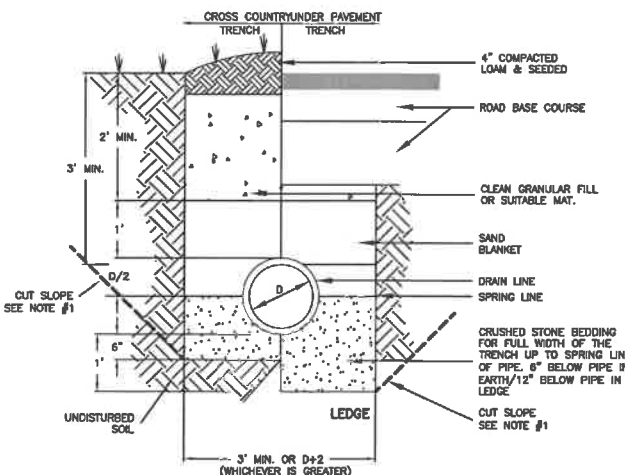
AREA DRAIN DETAIL

NOT TO SCALE



DIA.	HEADWALL LENGTH L	HEADWALL HEIGHT H	FILL HEIGHT FH	PIPE COVER h	HEADWALL STM HEIGHT W
12"	4'3"	3'9"	1'1"	1'3"	2'
15"	6'	4'3"	1'7"	1'8"	2'1"
18"	7'	4'8"	1'10"	1'8"	2'2"
24"	9'	5'	2'4"	1'8"	2'3"
30"	11'	5'8"	2'10"	1'8"	2'5"
36"	13'	6'	3'4"	1'8"	2'8"
42"	15'8"	6'9"	4'1"	1'9"	2'9"
48"	17'8"	7'3"	4'7"	1'9"	2'10"

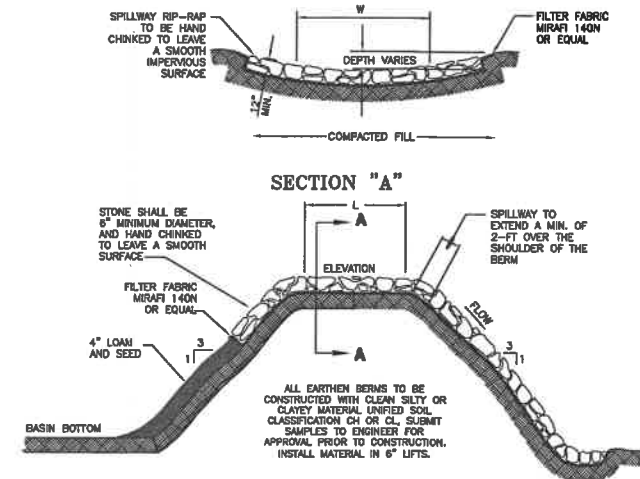
PRE-CAST HEADWALL



- 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.

DRAINAGE PIPE TRENCH INSTALLATION DETAIL

NOT TO SCALE



SPILLWAY #	LOCATION	LENGTH	WIDTH	ELEVATION
1	FB 1	11'	8'	331.0'
2	RE 1	11'	8'	331.0'
3	FB 2	11'	8'	310.0'
4	RE 2	11'	8'	311.0'

SPILLWAY DETAIL

NOT TO SCALE

DRAINAGE DETAILS
TAX MAP 243, LOT 39
ROCHESTER HILL ROAD &
HEALTHCARE DRIVE
ROCHESTER, NH

PREPARED FOR:
EASTER SEALS NH, INC.

APRIL 2021

C-8

FILE NO. 102
PLAN NO. C-3154
DWC NO. 19249 SP-1
F.B. NO.

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

NORWAY PLAINS ASSOCIATES, INC.

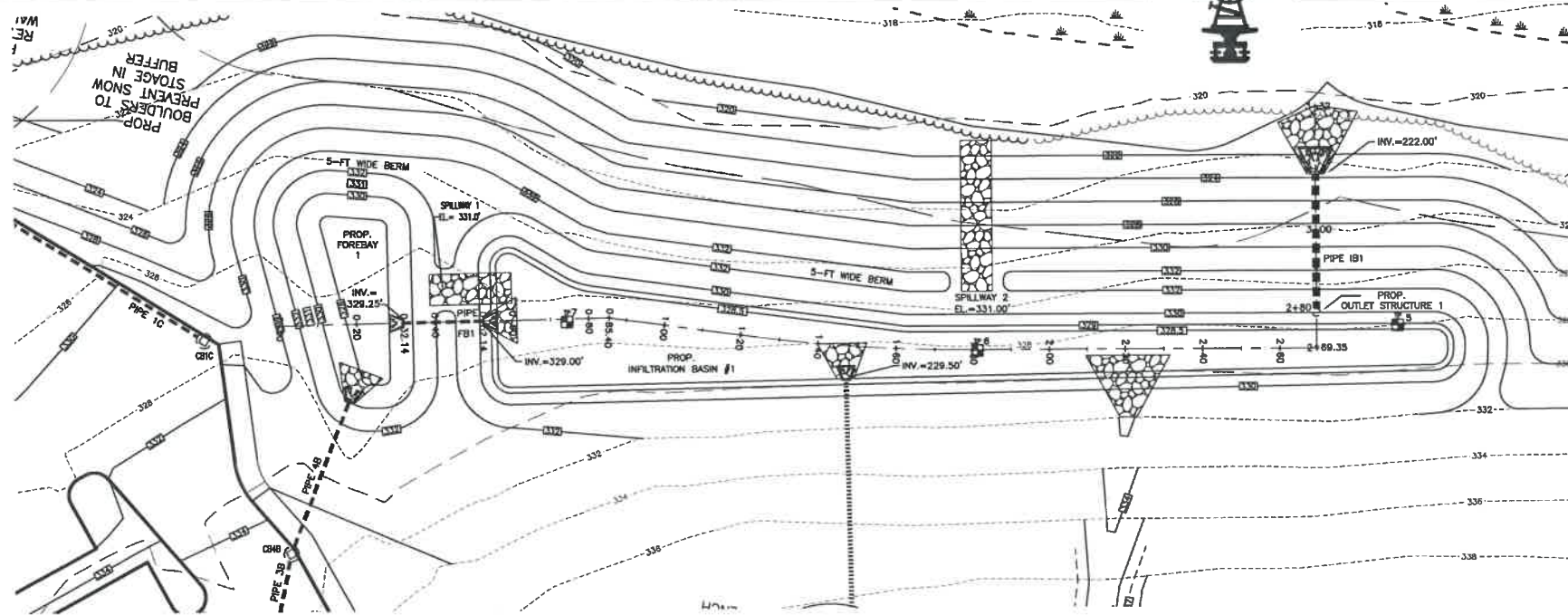
2 Continental Blvd., Rochester, N.H. 603-335-3948

LAND SURVEYORS

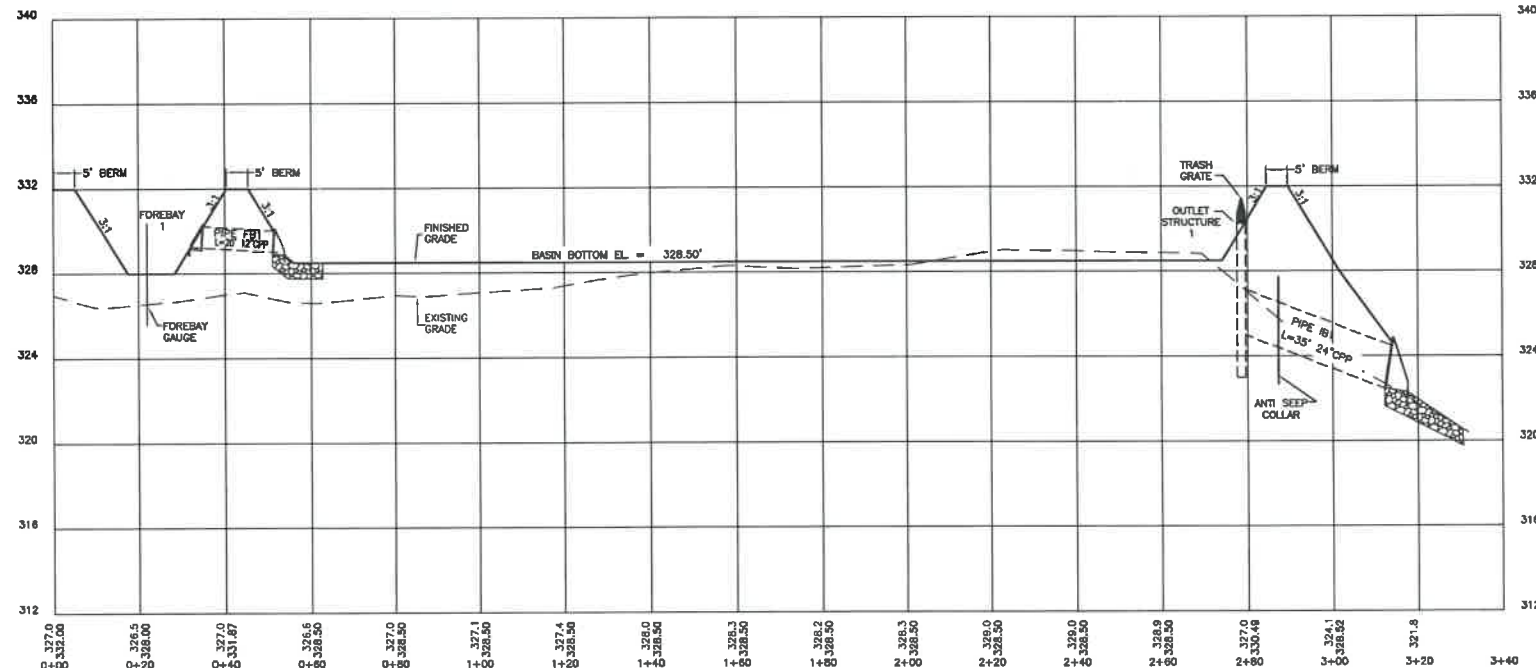


CIVIL ENGINEERS

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INFILTRATION BASIN #1
1" = 20'



INFILTRATION BASIN #1 CROSS SECTION
1" = 20' (HORZ.) & 1" = 4' (VERT.)

TEST PITS CONDUCTED: MARCH 29, 2021
BY: JOSEPH W. NOEL
NEW HAMPSHIRE CERTIFIED SOIL SCIENTIST #017
PURPOSE: STORMWATER PLANNING & SITE-SPECIFIC SOIL MAPPING

TEST PIT 5

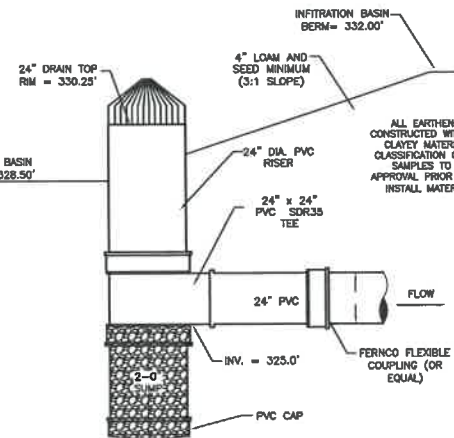
1-0 INCHES PARTIALLY DECOMPOSED GRASSES
0-10 INCHES DARK BROWN (10YR 3/3) FINE SANDY LOAM, FRAGILE, GRANULAR
10-33 INCHES LIGHT OLIVE BROWN (10YR 5/6) FINE SANDY LOAM, FRAGILE, BLOCKY
33-60 INCHES LIGHT OLIVE BROWN (2.5Y 5/4) SANDY LOAM, FIRM, MASSIVE, COMMON DISTINCT REDOX FEATURES
SEASONAL HIGH WATER TABLE @ 33"
OBSERVED WATER TABLE NONE TO 80"
RESTRICTIVE HORIZON @ 33"
BEDROCK NONE TO 60"

TEST PIT 6

1-0 INCHES PARTIALLY DECOMPOSED GRASSES
0-12 INCHES VERY DARK GRAYISH BROWN (10YR 3/2) SANDY LOAM, FRAGILE, GRANULAR
12-27 INCHES DARK YELLOWISH BROWN (10YR 4/6) LOAMY SAND, VERY FRAGILE, MASSIVE
27-42 INCHES LIGHT OLIVE BROWN (2.5Y 5/4) LOAMY SAND TO SAND, FRAGILE, MASSIVE, COMMON DISTINCT REDOX FEATURES
42-60 INCHES OLIVE GRAY (5Y 5/2) LOAMY VERY FINE SAND, FRAGILE TO FIRM, MASSIVE, COMMON PROMINENT REDOX FEATURES
SEASONAL HIGH WATER TABLE @ 27"
OBSERVED WATER TABLE @ 40"
RESTRICTIVE HORIZON @ 42"
BEDROCK NONE TO 60"

TEST PIT 7

1-0 INCHES PARTIALLY DECOMPOSED GRASSES
0-7 INCHES DARK BROWN (10YR 3/3) SANDY LOAM, FRAGILE, GRANULAR
7-35 INCHES YELLOWISH BROWN (10YR 5/6) SANDY LOAM, FRAGILE, BLOCKY
35-60 INCHES OLIVE (5Y 5/3) SANDY LOAM TO LOAMY SAND, FIRM, MASSIVE, COMMON PROMINENT REDOX FEATURES
SEASONAL HIGH WATER TABLE @ 35"
OBSERVED WATER TABLE NONE TO 60"
RESTRICTIVE HORIZON @ 35"
BEDROCK NONE TO 60"



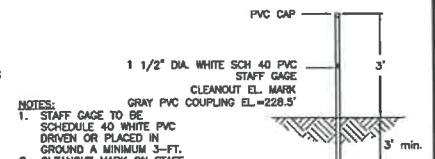
**INFILTRATION BASIN #1
OUTLET STANDPIPE DETAIL**
NOT TO SCALE

- SPECIFICATIONS:**
- DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE INFILTRATION BASIN.
 - DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION BASIN.
 - AFTER THE BASIN IS EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
 - VEGETATION SHALL BE ESTABLISHED IMMEDIATELY AFTER FINAL GRADING IS COMPLETED.
 - CONSTRUCT THE INFILTRATION BASIN TO THE GRADES DEPICTED ON THE PLAN AND CROSS-SECTION.
 - LOAM AND SEED ONLY THE SLOPES OF THE INFILTRATION BASIN AS PRESCRIBED IN THE "PERMANENT VEGETATION" NOTES FOUND ON SHEET C-12. SEED MIXTURE = A
 - DO NOT PLACE INFILTRATION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

- MAINTENANCE REQUIREMENTS:**
- INSPECT PRETREATMENT MEASURES (I.E. SEDIMENT FOREBAY(S), HOODED CATCH BASINS, ETC.) AT LEAST TWICE A YEAR AND AFTER EVERY STORM GREATER THAN 2.5 INCHES OF RAIN OVER A 24-HOUR PERIOD.
 - INSPECT INFILTRATION SURFACE BI-ANNUALLY. ONCE IN THE SPRING PRIOR TO MAY 15 AND ONCE IN THE FALL PRIOR TO OCTOBER 15.
 - INSPECT INFILTRATION SURFACE AFTER ANY RAINFALL EVENT OF 2.5-INCHES OR GREATER IN A 24-HOUR PERIOD.
 - REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT BASED ON INSPECTION. REPAIR AREA OF REMOVAL AS NECESSARY TO RESTORE INFILTRATION CAPACITY.
 - PERFORM MAINTENANCE AND REHABILITATION BASED ON INSPECTIONS.
 - REMOVE DEBRIS (IF ANY) FROM INFILTRATION BASIN INLET BASED ON INSPECTION.
 - CONDUCT PERIODIC MOWING OF THE INFILTRATION BASIN SLOPES AND EMBANKMENTS (MINIMUM TWICE A YEAR) TO ELIMINATE WOODY GROWTH FROM THE EMBANKMENTS AND BOTTOM. MOWING THE INFILTRATION BASIN EMBANKMENTS WHEN MOWING THE REST OF THE SITE IS RECOMMENDED.
 - IF THE INFILTRATION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL (I.E. PROFESSIONAL ENGINEER, CERTIFIED SOILS SCIENTIST, ETC.) SHALL ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE INFILTRATION FUNCTION, INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE INFILTRATION SURFACE.

INFILTRATION BASIN

- SPECIFICATIONS:**
- CONSTRUCT THE SEDIMENT FOREBAY TO THE GRADES DEPICTED ON THE PLAN AND CROSS-SECTION.
 - LOAM AND SEED THE SLOPES AND BOTTOM OF THE SEDIMENT FOREBAY AS PRESCRIBED IN THE "PERMANENT VEGETATION" NOTES FOUND ON SHEET C-12. SEED MIXTURE = A
- MAINTENANCE REQUIREMENTS:**
- INSPECT SEDIMENT FOREBAY BI-ANNUALLY. ONCE IN THE SPRING PRIOR TO MAY 15 AND ONCE IN THE FALL PRIOR TO OCTOBER 15.
 - CONDUCT PERIODIC MOWING OF THE SEDIMENT FOREBAY SLOPES AND EMBANKMENTS (MINIMUM TWICE A YEAR) TO ELIMINATE WOODY GROWTH FROM THE EMBANKMENTS AND BOTTOM. MOWING THE SEDIMENT FOREBAY EMBANKMENTS WHEN MOWING THE REST OF THE SITE IS RECOMMENDED.
 - REMOVE DEBRIS FROM THE OUTLET STRUCTURE OF THE SEDIMENT FOREBAY (I.E. STONE CHECK DAM) AT LEAST ONCE ANNUALLY.
 - REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT BASED ON INSPECTION. WHEN SEDIMENT HAS REACHED THE RED MARK ON THE SEDIMENT STAFF GAGE INSTALLED IN THE FOREBAY, REMOVE SEDIMENT AND DISPOSE OF IT OFF-SITE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS. ELEVATION OF RED CLEANOUT MARK ON STAFF GAGE = 228.5'



**SEDIMENT FOREBAY
GAUGE DETAIL**
NOT TO SCALE

SEDIMENT FOREBAY

INFILTRATION BASIN 1 DETAIL
CHAMPLIN PLACE
TAX MAP 243, LOT 39
ROCHESTER HILL ROAD &
HEALTHCARE DRIVE
ROCHESTER, NH
PREPARED FOR:
EASTER SEALS NH, INC.
APRIL 2021

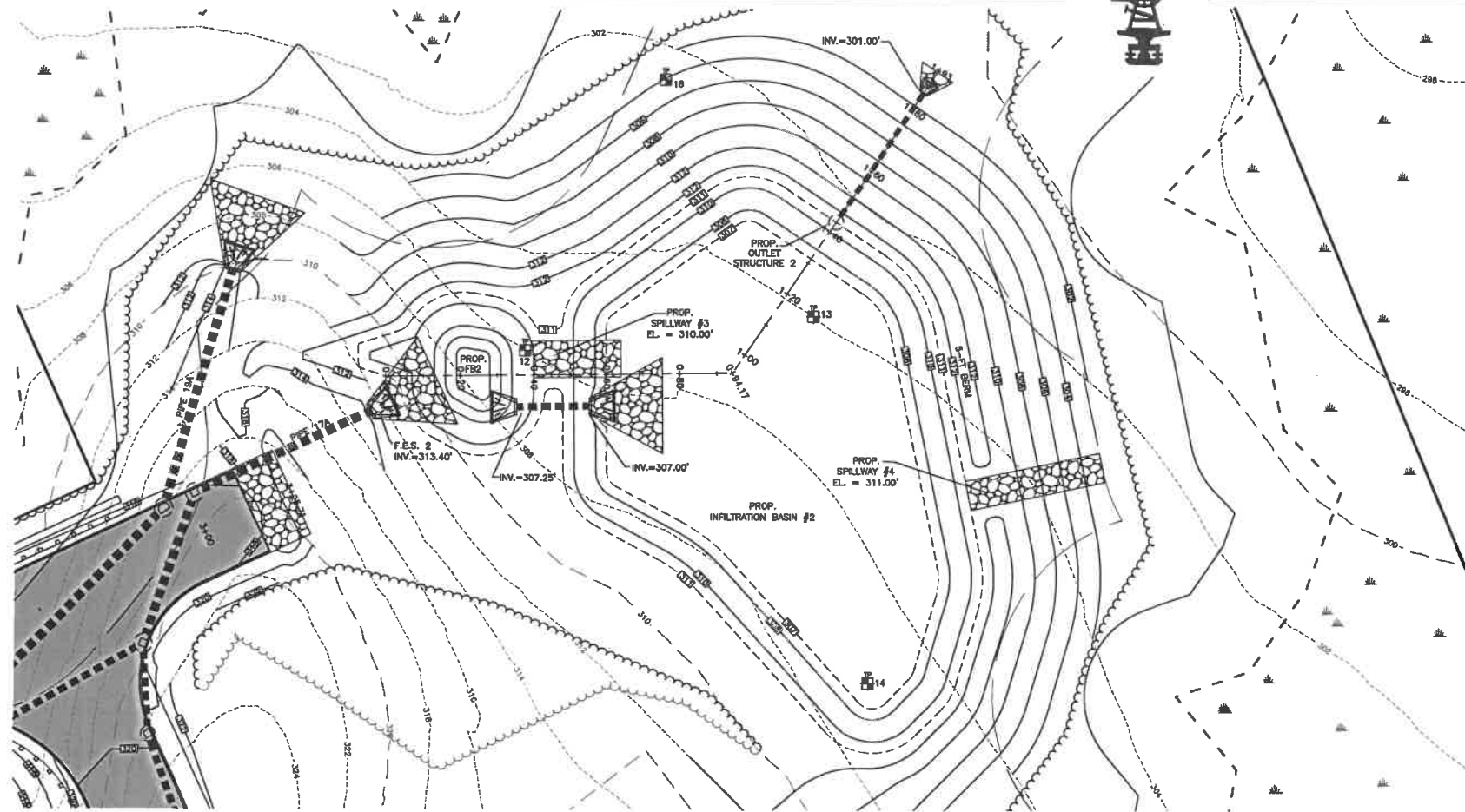
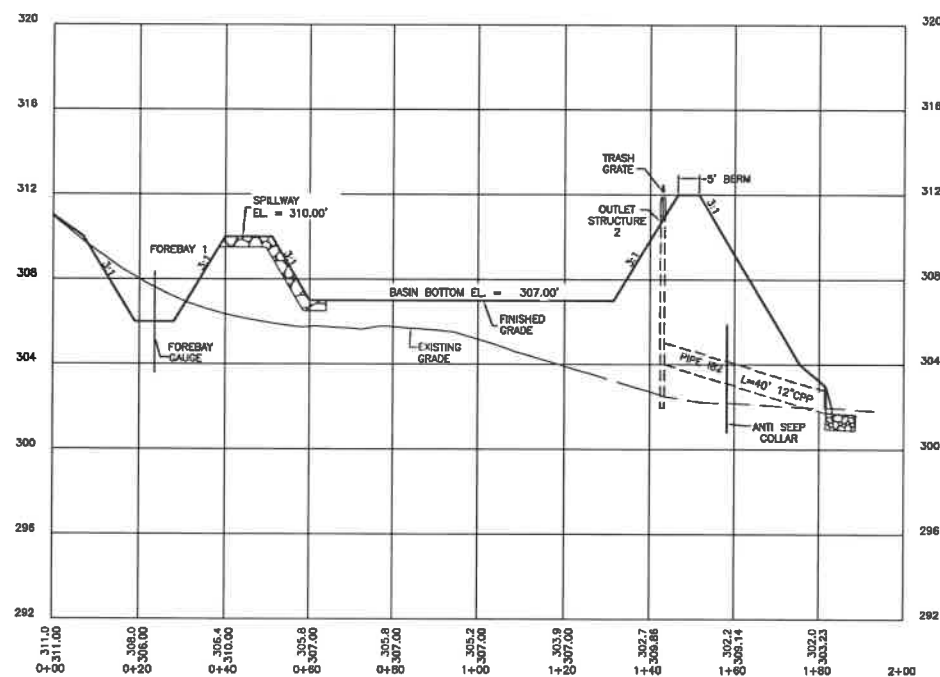
C-9

FILE NO. 154
PLAN NO. C-
DWG. NO. 17233/SP-1
F.B. NO.

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

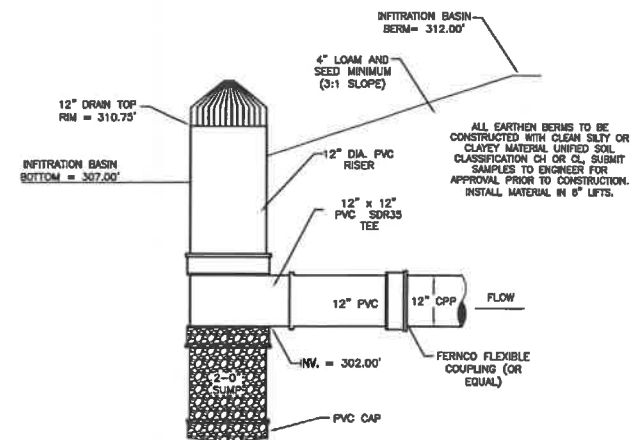
NORWAY PLAINS ASSOCIATES, INC.

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


$$1'' = 20'$$


1" = 20' (HORZ.) & 1" = 4' (VERT.)

1-0 INCHES PARTIALLY DECOMPOSED ORGANIC MATTER
0-6 INCHES DARK BROWN (10YR 3/3) SANDY LOAM, FRAGILE, GRANULAR
6-24 INCHES DARK YELLOWISH BROWN (10YR 4/6) SANDY LOAM, FRAGILE, BLOCKY
24-60 INCHES LIGHT OLIVE BROWN (2.5Y 5/4) SANDY LOAM WITH SOME LAYERS OF LOAMY SAND,
FIRM, MASSIVE, COMMON DISTINCT REDOX FEATURES
SEASONAL HIGH WATER TABLE @ 2'±
OBSERVED WATER TABLE @ 3'±
RESTRICTIVE HORIZON @ 2'±
BEDROCK NONE TO 80'



SPECIFICATIONS:

1. DO NOT DISCHARGE SEDIMENT-ADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE INFILTRATION BASIN.
2. DO NOT TRAMPLE EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION BASIN.
3. AFTER THE BASIN IS EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
4. VEGETATION SHALL BE ESTABLISHED IMMEDIATELY AFTER FINAL GRADING IS COMPLETED.
5. CONSTRUCT THE INFILTRATION BASIN TO THE GRADES DEPICTED ON THE PLAN AND CROSS-SECTION.
6. LOAM AND SEED ONLY THE SLOPES OF THE INFILTRATION BASIN AS PRESCRIBED IN THE "PERMANENT VEGETATION" NOTES FOUND ON SHEET 1212. SEED MIXTURE = A
7. DO NOT PLACE INFILTRATION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

SPECIFICATIONS:

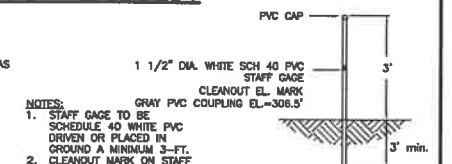
1. CONSTRUCT THE SEDIMENT FOREBAY TO THE GRADES DEPICTED ON THE PLAN AND CROSS-SECTION.
2. THE SEDIMENT FOREBAY SLOPES AND BOTTOM OF THE SEDIMENT FOREBAY AS PRESCRIBED IN THE "PERMANENT VEGETATION" NOTES FOUND ON SHEET C-12.

SEED MIXTURE - A

MAINTENANCE REQUIREMENTS:

1. INSPECT SEDIMENT FOREBAY BI-ANNUALLY, ONCE IN THE SPRING FROM MAY 15 AND ONCE IN THE FALL PRIOR TO OCTOBER 15.
2. CONDUCT PERIODIC MOWING OF THE SEDIMENT FOREBAY SLOPES AND EMBANKMENTS AND REMOVAL OF WEEDS AND WOODY GROWTH FROM THE EMBANKMENTS AND BOTTOM. MOWING THE SEDIMENT FOREBAY EMBANKMENTS WHEN MOWING THE REST OF THE SITE IS RECOMMENDED.
3. REMOVE WEEDS FROM THE OUTLET STRUCTURE OF THE SEDIMENT FOREBAY ONCE EACH DAY.
4. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT BASED ON INSPECTION. WHEN SEDIMENT HAS REACHED THE RED MARK ON THE SEDIMENT STAFF AS CALLED IN THE FOREBAY, REMOVE SEDIMENT AND DISPOSE OF IT OFF-SITE IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS.

ELEVATION OF RED CLEANOUT MARK ON STAFF GAUGE = 306.5'



NOT TO SCALE

INFILTRATION BASIN 2 DETAIL
CHAMPLIN PLACE
TAX MAP 243, LOT 39
ROCHESTER HILL ROAD &
HEALTHCARE DRIVE
ROCHESTER, NH
PREPARED FOR:
EASTER SEALS NH, INC.
APRIL 2021

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

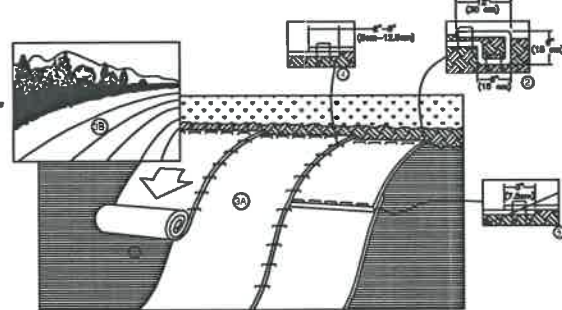
NORWAY PLAINS ASSOCIATES, INC.

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

C-10

LAND SURVEYORS

NORTH AMERICAN GREEN
EROSION CONTROL PRODUCTS
SOLUTIONS
14646 HIGHWAY 41 NORTH
DUNSMITH, N.H. 03828
603-775-2040
www.nagreen.com

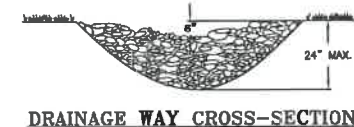


SLOPE INSTALLATION

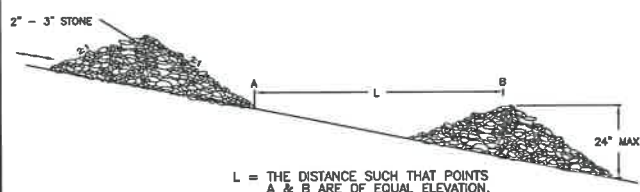
- MAINTENANCE REQUIREMENTS:**
1. ALL BLANKET AND MATS SHALL BE INSPECTED WEEKLY DURING THE CONSTRUCTION PERIOD, AND AFTER ANY RAINFALL EVENT EXCEEDING 1/2 INCH IN A 24-HOUR PERIOD.
 2. ANY FAILURE SHALL BE REPAIRED IMMEDIATELY. IF WASHOUT OF THE SLOPE, DISPLACEMENT OF THE MAT, OR DAMAGE TO THE MAT OCCURS, THE AFFECTED SLOPE SHALL BE REPAIRED AND RESEEDED, AND THE AFFECTED AREA OF MAT SHALL BE RE-INSTALLED.
- CONSTRUCTION SPECIFICATIONS:**
1. MANUFACTURE'S INSTALLATION INSTRUCTIONS:
 - A. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
 - NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
 - B. 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" (30 CM) 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 BACK 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.
 - C. ROLL THE RECP'S (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHALL BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
 - D. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON RECP'S TYPE.
 - E. CONSECUTIVE RECP'S SPUNCE DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH 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.
 2. SITE PREPARATION:
 - A. PROPER SITE PREPARATION IS ESSENTIAL TO ENSURE COMPLETE CONTACT OF THE PROTECTION MATTING WITH THE SOIL.
 - B. GRADE AND SHAPE AREA IF INSTALLATION.
 - C. REMOVE ALL ROCKS, CLODS, TRASH, VEGETATION OR OTHER OBSTRUCTIONS SO THAT THE INSTALLED BLANKETS WILL HAVE DIRECT CONTACT WITH THE SOIL.
 - D. PREPARE SEEDBED BY LOOSENING 2-3 INCHES OF TOPSOIL ABOVE FINAL GRADE.
 - E. INCORPORATE ANCHORMENTS, SUCH AS LIME AND FERTILIZER, INTO SOIL, ACCORDING TO SOIL TEST AND THE SEEDING PLAN.
 3. SEEDING:
 - A. SEED AREA BEFORE BLANKET INSTALLATION FOR EROSION CONTROL AND REVEGETATION. SEEDING AFTER MAT INSTALLATION IS ORDER SPECIFIED FOR TURF REINFORCEMENT APPLICATIONS. WHEN SEEDING PRIOR TO BLANKET INSTALLATION, ALL CHECK SLOTS AND OTHER AREAS DISTURBED DURING INSTALLATION MUST BE RESEED.
 - B. WHEN SOIL FILLING IS SPECIFIED, SEED THE MATTING AND THE ENTIRE DISTURBED AREA AFTER INSTALLATION AND PRIOR TO FILLING THE MAT WITH SOIL.

TEMPORARY EROSION CONTROL BLANKET DETAIL NOT TO SCALE

SPACING BETWEEN CHECK DAMS	
SLOPE (FT/100)	LENGTH (FT)
0.020	75
0.030	50
0.040	37
0.050	30
0.060	19
0.100	13
0.120	13
0.150	10



DRAINAGE WAY CROSS-SECTION



SPACING BETWEEN STONE CHECK DAMS

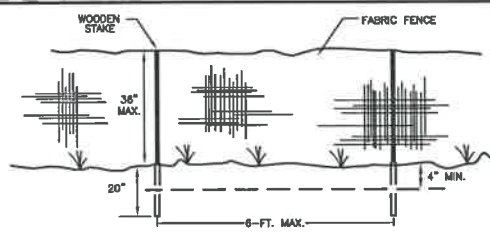
- CONSTRUCTION SPECIFICATIONS:**
1. STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.
 2. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION, AIR AND WATER POLLUTION WILL BE MINIMIZED.
 3. STRUCTURES SHALL BE REMOVED FROM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

- MAINTENANCE NOTES:**
1. TEMPORARY GRADE STABILIZATION STRUCTURES SHALL BE INSPECTED AFTER EACH STORM AND DAILY DURING PROLONGED STORM EVENTS. ANY DAMAGE TO THE STRUCTURES SHALL BE REPAIRED IMMEDIATELY.
 2. PARTICULAR ATTENTION SHALL BE GIVEN TO END RUN AND EROSION AT THE DOWNSTREAM TOE OF THE STRUCTURE.
 3. WHEN REMOVING THE STRUCTURES, THE DISTURBED AREAS SHALL BE BROUGHT UP TO EXISTING CHANNEL GRADE AND THE AREA PROPERLY REPAIRED, RESEEDED AND MULCHED.
 4. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURES WHEN IT REACHES 1/2 THE ORIGINAL HEIGHT OF THE STRUCTURE.

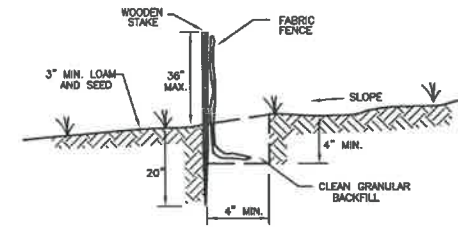
STONE CHECK DAM INSTALLATION DETAIL NOT TO SCALE

FILE NO. 102
PLAN NO. C-3154
DWG. NO. 19249 SP-1
F.B. NO.

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



PROFILE



CROSS-SECTION

- MAINTENANCE REQUIREMENTS:**
1. FENCES SHALL BE INSPECTED AND MAINTAINED IMMEDIATELY AFTER EACH RAINFALL, AND AT LEAST DAILY DURING PROLONGED RAINFALLS.
 2. 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 TRANSPORTED BACK TOWARD THE SILT FENCE.
 3. 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 IMPONDING OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM.
 4. 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.
 5. 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.
 6. 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.
 7. 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:**
1. 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.
 2. THE MAXIMUM CONTRIBUTING DRAINAGE AREA ABOVE THE FENCE SHALL BE LESS THAN 1 ACRE PER 100 LINEAR FEET OF FENCE.
 3. THE MAXIMUM LENGTH OF SLOPE ABOVE THE FENCE SHALL BE 100 FEET.
 4. THE MAXIMUM SLOPE ABOVE THE FENCE SHALL BE 2:1.
 5. FENCES SHALL BE INSTALLED FOLLOWING THE CONTOUR OF THE LAND AS CLOSELY AS POSSIBLE, AND
 - A. THE ENDS 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. ADJOINING 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.
 6. SILT FENCING SHALL NOT BE STAPLED OR NAILED TO TREES.
 7. THE FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER.
 8. THE FILTER FABRIC SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 8 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 DEGREES FAHRENHEIT TO 120 DEGREES FAHRENHEIT.
 9. POSTS FOR SILT FENCES SHALL BE EITHER 4-INCH DIAMETER WOOD OR 1.33 POUNDS PER LINEAR FOOT STEEL WITH A MINIMUM LENGTH OF 3 FEET. STEEL POSTS SHALL HAVE PROJECTIONS FOR FASTENING WIRE TO THEM. POSTS SHALL BE PLACED ON THE DOWN SLOPE SIDE OF THE FABRIC.
 10. 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.
 11. 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 SPUNCE TOGETHER ONLY AT SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND SECURELY SEALED.
 12. A MANUFACTURED SILT FENCE SYSTEM WITH INTEGRAL POSTS MAY BE USED.
 13. POST SPACING SHALL NOT EXCEED 8 FEET.
 14. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 4 INCHES DEEP ALONG THE LINE OF POSTS AND UP GRADIENT FROM THE BARRIER.
 15. 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.
 16. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
 17. SILT FENCE MAY BE INSTALLED BY "SLICING" USING MECHANICAL EQUIPMENT SPECIFICALLY DESIGNED FOR THIS PROCEDURE. THE SLICING METHOD USES AN IMPLEMENT TOWED BEHIND A TRACTOR TO "FLOW" OR SLICE THE SILT FENCE MATERIAL INTO THE SOIL. THE SLICING METHOD MANUALLY DISRUPTS THE SOIL UPWARD AND SLIGHTLY DISPLACES THE SOIL, MAINTAINING THE SOIL'S PROFILE AND CREATING AN OPTIMAL CONDITION FOR SUBSEQUENT MECHANICAL COMPACTION.
 18. SILT FENCES SHALL BE INSTALLED WITH "SMILES" OR "J-HOOKS" TO REDUCE THE DRAINAGE AREA THAT ANY SEDIMENT WILL IMPOUND.
 19. THE ENDS OF THE FENCE SHALL BE SET AT LEAST 6 FEET FROM THE TOE TO ALLOW SPACE FOR SHALLOW FLOWING AND TO ALLOW FOR MAINTENANCE ACCESS WITHOUT DISTURBING THE SLOPE.
 20. 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 (BU) OR POUNDS (LBS.)	PER 1,000-SF	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:

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



CIVIL ENGINEERS

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. 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.

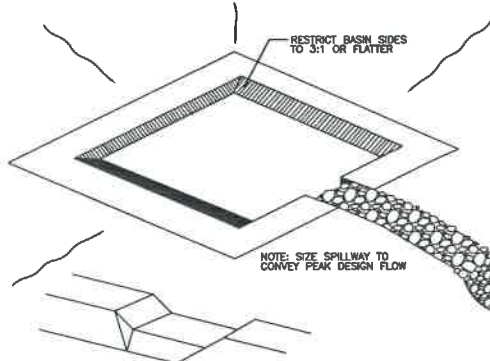


TEMPORARY VEGETATION:

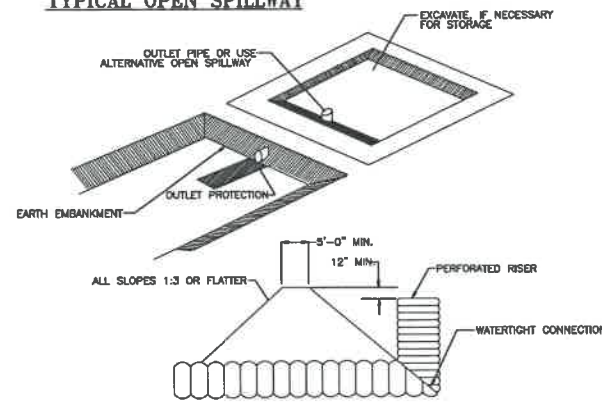
- SPECIFICATIONS:**
- SITE PREPARATION:**
1. INSTALL NEEDED EROSION AND SEDIMENT CONTROL MEASURES SUCH AS SILTATION BARRIERS, DIVERSIONS, AND SEDIMENT TRAPS.
 2. GRADE AS NEEDED FOR THE ACCESS OF EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING.
 3. RUNOFF SHALL BE DIVERTED 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. STONES AND TRASH SHALL BE REMOVED SO AS NOT TO INTERFERE WITH THE SEEDING AREA.
 2. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
 3. IF APPLICABLE, FERTILIZER AND ORGANIC SOIL AMENDMENTS SHALL BE APPLIED DURING THE GROWING SEASON.
 4. APPLY LIME 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 LIME SHALL BE APPLIED AT THE FOLLOWING RATES:
- LIME 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. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDRO SEEDER (SLURRY INCLUDING SEED AND FERTILIZER). 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.
 2. TEMPORARY SEEDING SHALL TYPICALLY OCCUR PRIOR TO SEPTEMBER 15.
 3. 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 NHSSM, VOL. 3.
 4. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA SHALL BE ACHIEVED PRIOR TO OCTOBER 15. IF THE CONDITION IS NOT ACHIEVED, IMPLEMENT OTHER TEMPORARY STABILIZATION MEASURES FOR WINTER PROTECTION.

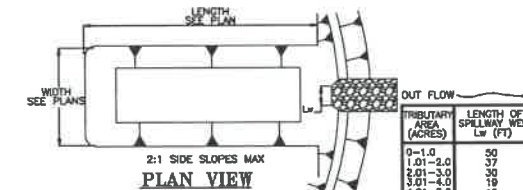
- MAINTENANCE REQUIREMENTS:**
1. TEMPORARY SEEDING SHALL BE INSPECTED WEEKLY AFTER ANY RAINFALL EXCEEDING 1/2 INCH IN 24 HOURS ON ACTIVE CONSTRUCTION SITES. TEMPORARY SEEDING SHALL BE INSPECTED JUST PRIOR TO SEPTEMBER 15, TO ASCERTAIN WHETHER ADDITIONAL SEEDING IS REQUIRED TO PROVIDE STABILIZATION OVER THE WINTER PERIOD.
 2. 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.
 3. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND AREAS SHALL BE RESEED, WITH OTHER TEMPORARY MEASURES (I.E. MULCH, ETC.) USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.



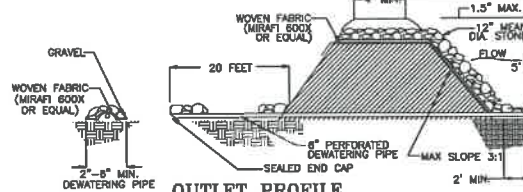
TYPICAL OPEN SPILLWAY



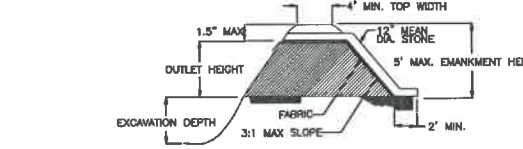
EMBANKMENT SECTION THRU RISER



PLAN VIEW

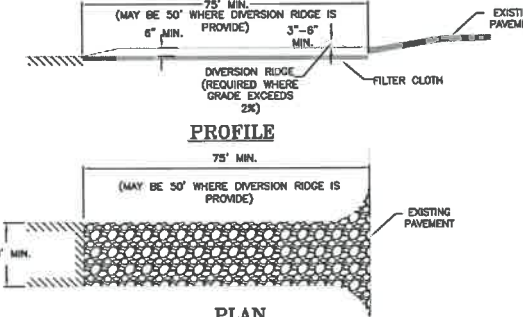


OUTLET PROFILE



ALTERNATE OUTLET PROFILE

SEDIMENT TRAP



TEMPORARY CONSTRUCTION EXIT NOT TO SCALE

- MAINTENANCE REQUIREMENTS:**
1. 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.
 2. THE CONTRACTOR SHALL SWEEP THE PAVEMENT AT EXITS WHENEVER SOIL MATERIALS ARE TRACKED ONTO THE ADJACENT PAVEMENT OR TRAVELED WAY.
 3. 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:**
1. THE MINIMUM STONE USED SHALL BE 3-INCH CRUSHED STONE.
 2. THE MINIMUM LENGTH OF THE PAD SHALL BE 75 FEET, EXCEPT THAT THE MINIMUM LENGTH MAY BE REDUCED TO 50 FEET IF A 3-INCH TO 6-INCH BERM IS INSTALLED AT THE ENTRANCE OF THE PROJECT SITE.
 3. THE PAD SHALL BE THE FULL WIDTH OF CONSTRUCTION ACCESS ROAD OR 10 FEET, WHICHEVER IS GREATER.
 4. THE PAD SHALL SLOPE AWAY FROM THE EXISTING ROADWAY.
 5. THE PAD SHALL BE AT LEAST 6 INCHES THICK.
 6. THE GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE STONE PAD AND THE EARTH SURFACE BELOW THE PAD.
 7. 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.
 8. 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
TAX MAP 243, LOT 39
215 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
EASTER SEALS NH, INC.

APRIL 2021

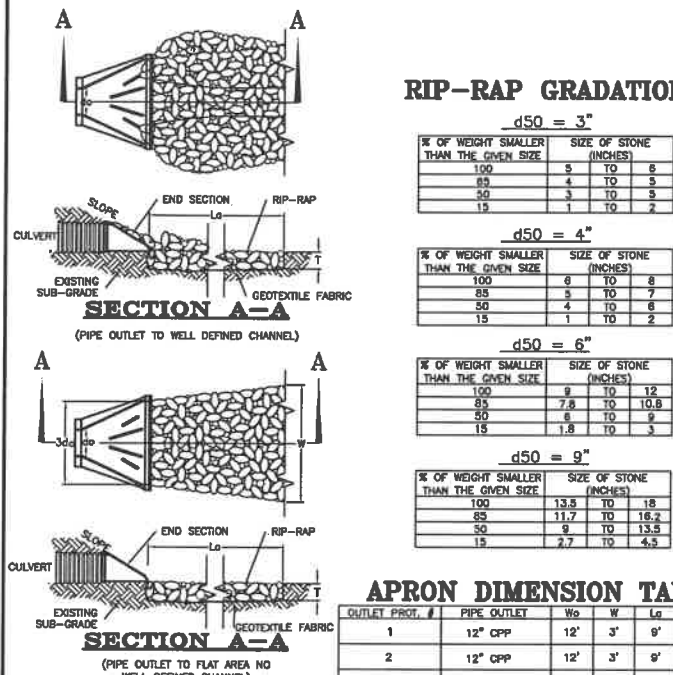
C-11

NORWAY PLAINS ASSOCIATES, INC.

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



RIP-RAP GRADATION



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 CONTROLS, DECEMBER 2008 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 EROSION OR SEDIMENTATION 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.
 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 LINE AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW 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 ZINCHES 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, LINE AND SEED.
5. IF APPLICABLE, 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 APPLIED UNIFORMITY BY HAND, CYCLOPE SEEDER, DRILL, CULPACHER 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 CULPACHER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHALL BE FIRME FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG.

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 UNIFORMITY BY HAND, CYCLOPE SEEDER, DRILL, CULPACHER 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 CULPACHER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHALL BE FIRME FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG.
3. SPRING SEEDING USUALLY OWNS THE BEST RESULTS FOR ALL MIXES OR WITH LEGUMES. PERMANENT SEEDING SHALL BE COMPLETED 45 DAYS PRIOR TO FIRST KILLING FROST. WHEN CROWN VETCH IS SEEDING IN LATE SUMMER AT LEAST 33% OF THE SEED SHALL BE HARD SEED (UNCARPIED). 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.
5. 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.
6. 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 NO STEEPER THAN 2:1 (2 FEET HORIZONTALLY BY 1 FOOT VERTICALLY).
3. LINE 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 RECOMMENDATIONS:

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 PROJECT.
2. SEEDING AREAS SHALL BE MONITORED AS REQUIRED TO MAINTAIN A HEALTHY STAND OF VEGETATION. MOWING HEIGHT AND FREQUENCY DEPEND OF TYPE OF GRASS COVER. BASED ON INSPECTION, AREAS SHALL BE RESEED TO ACHIEVE FULL STABILIZATION OF EXPOSED SOIL.
3. AT A MINIMUM 85% OF THE SOIL SURFACE SHALL BE COVERED BY VEGETATION.
4. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND AREAS SHALL BE RESEED 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	LIB./ACRE	LIB./1,000-SF
STEEP CUTS AND FILLS, BORROW AREAS	A	TALL FESCUE	20	0.45
		CREeping RED FESCUE	20	0.45
		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
		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
		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.

RAIN AREAS TO BE PAVED:

 - a) BASE COURSE GRAVELS 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.
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.
4. **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.
5. **ONLY DISTURB, CLEAR, OR GRADE AREAS NECESSARY FOR CONSTRUCTION.**
 - a) FLAG OR OTHERWISE DELINEATE AREAS NOT TO BE DISTURBED.
 - b) EXCLUDE VEHICLES AND CONSTRUCTION EQUIPMENT FROM THESE AREAS TO PRESERVE NATURAL VEGETATION.
6. **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-3.**
7. **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-3.**
8. **TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN THE AMOUNT NECESSARY TO COMPLETE FINISHED GRADING AND BE PROTECTED FROM EROSION.**
9. **STOCKPILES, BORROW AREAS AND SPOILS SHALL BE STABILIZED AS DESCRIBED UNDER "SOIL STOCKPILE PRACTICES".**
10. **SLOPES SHALL NOT BE CREATED SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJACENT PROPERTY OR SUBJECT ADJACENT PROPERTIES AGAINST SEDIMENTATION, EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED DAMAGE.**
11. **AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND/OR OTHER OBJECTIONABLE MATERIALS.**
12. **AREAS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3-INCHES PRIOR TO PLACEMENT OF TOPSOIL. TOPSOIL SHALL BE PLACED WITHOUT SIGNIFICANT COMPACTION TO PROVIDE A LOOSE BEDDING FOR PLACEMENT OF SEED.**
13. **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.**
14. **IN GENERAL, FILLS SHALL BE COMPACTED IN LAYERS RANGING FROM 6 TO 24 INCHES IN THICKNESS. THE CONTRACTOR SHALL REVIEW THE PROJECT GEOTECHNICAL REPORT AND/OR THE "PROJECT SPECIFIC PHASING NOTES" FOR SPECIFIC GUIDANCE.**
15. **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 OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY LIFTS.**
16. **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.**
17. **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 (CLAY TRACKS) CREATE GROOVES PERPENDICULAR TO THE SLOPE. IF THE SOIL IS NOT TOO MOIST, EXCESSIVE COMPACTION WILL NOT OCCUR. SEE "SURFACE ROUGHENING" IN THE NHSM, VOL.3.**
18. **ROUGHEN THE SURFACE OF ALL SLOPES DURING THE CONSTRUCTION OPERATION TO RETAIN WATER, INCREASE INFILTRATION AND FACILITATE VEGETATION ESTABLISHMENT.**
19. **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. FILL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF CONSTRUCTION.**
20. **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.**
21. **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.**
22. **ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.**
23. **THE PROJECT SHALL BE CONSTRUCTED TO MEET ALL REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER ARB 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 BERM, STONE CHECK DAMS, ETC.) AROUND THE OUTER PERIMETER OF THE CONSTRUCTION SITE AS DEPICTED ON SHEET C-4 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 REQUIREMENTS.
5. INSTALL A TEMPORARY CONSTRUCTION EXIT AT THE LOCATION OF THE PROPOSED HEALTH CARE DRIVE EXTENSION AND THE OLD EASIER SEASIDE DRIVE. 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-9 AND C-10.
8. PERFORM THE NECESSARY CUTS AND FILLS TO CONSTRUCT THE INFILTRATION BASIN AS DEPICTED ON SHEET C-9 AND C-10.
9. CONSTRUCT THE INFILTRATION BASIN, SEDIMENT FOREBAY AND OUTLET AS DEPICTED ON SHEET C-9 AND C-10.
10. ALL DITCHES/SWALES AND BASINS SHALL BE STABILIZED PRIOR TO MORE THAN 5 DAYS.
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 95% MAXIMUM PROCTOR DENSITY.
12. AS SUBGRADE IS ACHIEVED INSTALL REMAINING SEDIMENT CONTROL BARRIERS WITHIN THE SITE (I.E. ADDITIONAL SILT FENCE, CHECK DAMS AND SEDIMENT CONTROLS AND OTHER BASINS, ETC.).
13. INSTALL ALL UTILITIES AND CLOSED DRAINAGE SYSTEM COMPONENTS (I.E. PIPE CULVERTS, CATCH BASINS AND REMAINING WATER MAIN) PER THE CORRESPONDING DETAILS AND AS SHOWN ON SHEET C-3 AND C-5. AS EACH STRUCTURE IS COMPLETED INSTALL THE CORRESPONDING SEDIMENT CONTROL MEASURE.
14. CONSTRUCT THE 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-9 AND C-10.
15. ALL CUT AND FILL SLOPES AND LAWN AREAS NOT TO BE PAVED SHALL BE LOADED AND SEED FOR PERMANENT VEGETATION AND STABILIZATION AS DESCRIBED UNDER THE "PERMANENT VEGETATION PRACTICES" WITHIN 3 DAYS OF ACHIEVING FINAL GRADE.
16. INSTALL ALL GRAVEL BASE AND CRUSHED GRAVEL MATERIALS FOR THE PARKING AREA AS SPECIFIED IN THE CORRESPONDING DETAILS.
17. THE PARKING AREAS SHALL BE STABILIZED (CONSTRUCTED TO GRAVEL BASE COURSE) WITHIN 3 DAYS OF ACHIEVING FINISHED SUBGRADE ELEVATIONS.
18. 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.
19. 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.

MAINTENANCE AND INSPECTION:

1. 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.
 2. 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.
 3. ALL DAMAGED TEMPORARY AND PERMANENT SEDIMENT, EROSION CONTROL AND STORMWATER MANAGEMENT PRACTICES SHOULD BE REPAIRED OR REPLACED IMMEDIATELY UPON NOTICE.
 4. SEDIMENT SHALL BE DISPOSED OF PROPERLY EITHER ON SITE OR OFF SITE.
- PROJECT COMPLETION AND STABILIZATION:**
1. 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.
 2. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM ALL ON SITE CATCH BASINS AND THE SEDIMENT FOREBAYS TO THE INFILTRATION 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:

- THE FOLLOWING STABILIZATION TECHNIQUES SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 15.
1. 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.
 2. STABILIZATION AS FOLLOWS SHALL BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS.
 - A. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% WHICH DO NOT EXHIBIT A MINIMUM 85% VEGETATIVE GROWTH BY OR ARE DISTURBED AFTER OCTOBER 15 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. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF GREATER THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OR ARE DISTURBED AFTER OCTOBER 15 SHALL BE SEEDING AND COVERED WITH A PROPERLY INSTALLED EROSION CONTROL MIX, UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER. NOTE THAT COMPOST BLANKETS SHALL NOT EXCEED 2 INCHES IN THICKNESS OR THEY MAY OVERHEAT.
 3. ALL STONE COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY OCTOBER 15.
 4. INSTALLATION OF ANCHORED HAY MULCH OR EROSION CONTROL MIX SHALL NOT OCCUR OVER SNOW OF GREATER THAN 1 INCH IN DEPTH.
 5. ALL MULCH APPLIED DURING WINTER SHALL BE ANCHORED (I.E. BY NETTING, TRACKING, WOOD CELLULOSE FIBER).
 6. 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.
 7. FROZEN MATERIAL (I.E. FROST LAYER REMOVED DURING WINTER CONSTRUCTION) SHALL BE STOCKPILED SEPARATELY AND IN A LOCATION AWAY FROM AREAS NEEDING PROTECTION. FROZEN MATERIAL AND STOCKPILES CAN MELT IN SPRING AND BECOME UNWORKABLE AND DIFFICULT TO TRANSPORT DUE TO HIGH SOIL MOISTURE CONTENT.
 8. 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.
 10. ALL STONE LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY OCTOBER 15.
 11. AFTER OCTOBER 15, 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.
 12. SEDIMENT BARRIERS THAT ARE INSTALLED DURING FROZEN CONDITIONS SHALL CONSIST OF EROSION CONTROL MIX BERMS, OR CONTINUOUSLY PLACED EROSION CONTROL MIX BERMS, OR CONTINUOUSLY PLACED EROSION CONTROL MIX BERMS, OR CONTINUOUSLY PLACED EROSION CONTROL MIX 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 243, LOT 39 215 ROCHESTER HILL RD ROCHESTER, NH

PREPARED FOR:
EASTER SEALS NH, INC.
APRIL 2021

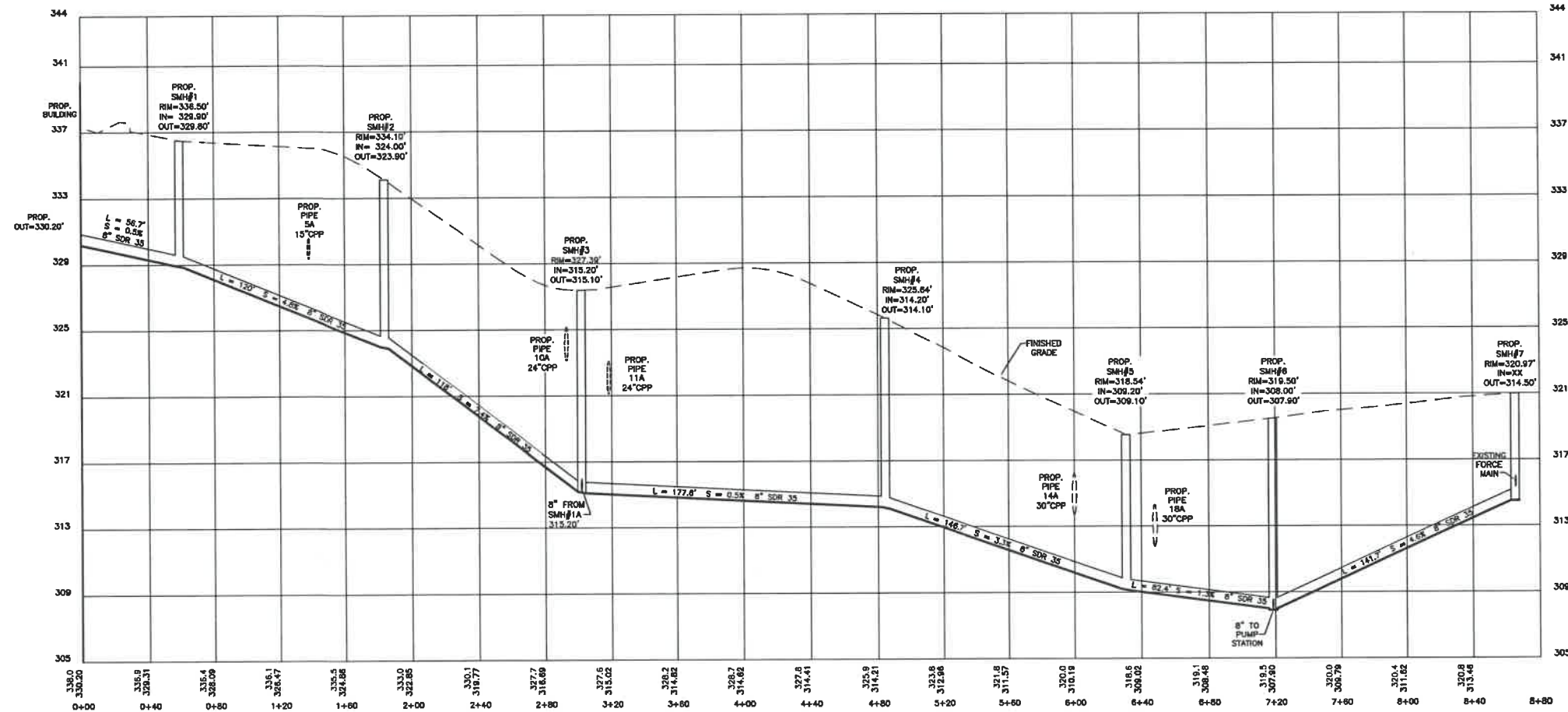
C-12

FILE NO. 102
PLAN NO. C-3154
DWG. NO. 19249 SP-1
F.B. NO.

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

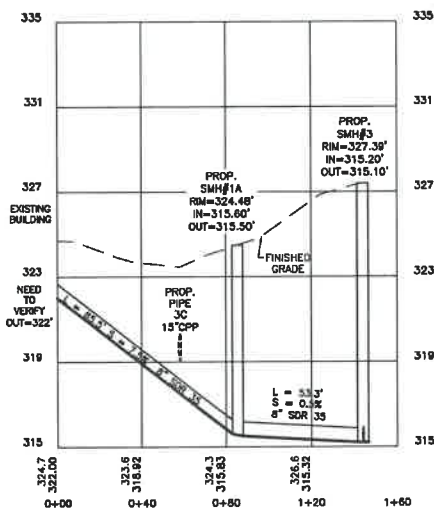
NORWAY PLAINS ASSOCIATES, INC.

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



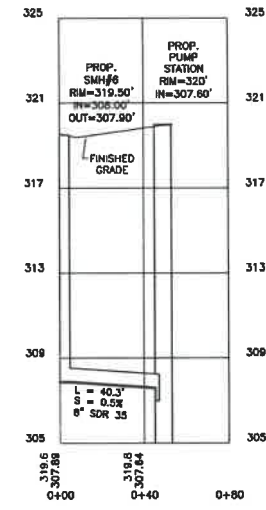
GRAVITY SEWER PROFILE

SCALE: 1" = 40' (HORZ.)
1" = 4' (VERT.)



GRAVITY SEWER PROFILE

SCALE: 1" = 40' (HORZ.)
1" = 4' (VERT.)



GRAVITY SEWER PROFILE
SCALE: 1" = 40' (HORZ.)
1" = 4' (VERT.)

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITH IN THE PLAN SET. 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.

GRAVITY SEWER PROFILE
TAX MAP 243, LOT 39
215 ROCHESTER HILL RD
ROCHESTER, NH
 PREPARED FOR:
EASTER SEALS NH, INC.

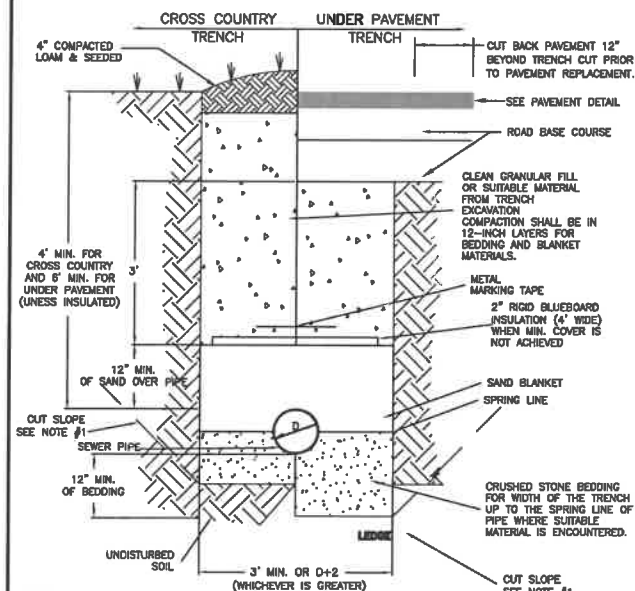
FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-1
F.B. NO.

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

NORWAY PLAINS ASSOCIATES, INC.

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

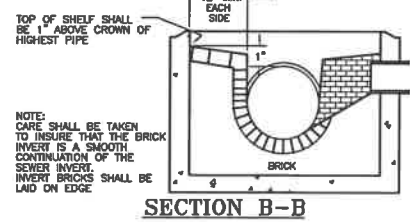
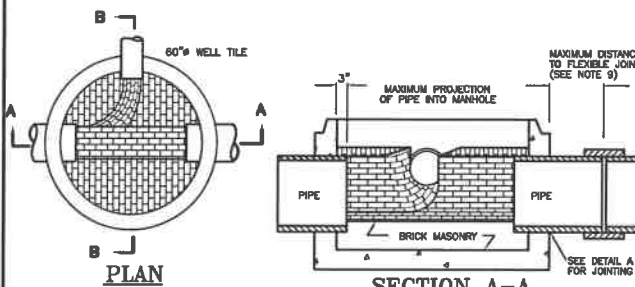
C-13



- NOTES:
- 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.
 - PIPE MATERIALS SHALL BE AS SPECIFIED ON THE DESIGN PLAN.
 - SAND BLANKET MAY BE OMITTED FOR REINFORCED CONCRETE PIPE.
 - WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER, THE SHEETING SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN ONE FOOT ABOVE THE TOP OF THE PIPE AND AT LEAST 3 FEET BELOW FINISHED GRADE.
 - THE PIPE SAND BLANKET MATERIAL SHALL BE GRADED SAND FREE FROM ORGANIC MATERIALS, GRADED SUCH THAT 100 PERCENT PASSES A #100 SIEVE AND A MAXIMUM OF 15 PERCENT PASSES A #200 SIEVE.
 - TRENCH BACKFILL MATERIAL IN ROADWAY LOCATIONS SHALL BE NATURAL MATERIALS EXCAVATED FROM THE TRENCH DURING CONSTRUCTION, EXCLUDING:
 - DEBRIS;
 - PIECES OF PAVEMENT;
 - ORGANIC MATTER;
 - TOP SOIL;
 - WET OR SOFT MUCK;
 - PEAT OR CLAY;
 - EXCAVATED LEDGE MATERIAL;
 - ROCKS OVER 6 INCHES IN THE LARGEST DIMENSION; AND
 - ANY MATERIAL NOT APPROVED BY THE ENGINEER.

SEWER PIPE TRENCH INSTALLATION DETAIL
NOT TO SCALE

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. 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.



FILE NO. 102
PLAN NO. C-3154
DWG. NO. 19249 SP-1
F.B. NO.

- NOTES:
- IT IS INTENTION OF THE CITY OF ROCHESTER PUBLIC WORKS DEPARTMENT THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAK PROOF QUALITIES CONSIDERED NECESSARY BY THE PUBLIC WORKS DEPARTMENT FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS SHALL BE AS SHOWN ON THE DRAWING. MANHOLES MAY BE AN ASSEMBLY OF PRECAST SECTIONS, WITH OR WITHOUT STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH OR WITHOUT REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE, CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE. A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.
 - BARRELS AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE, OR POURED IN PLACE REINFORCED CONCRETE. PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478. ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDUBLY MARKED ON THE INSIDE WALL.
 - VACUUM LEAKAGE TESTING (ASTM C1244) SHALL BE PERFORMED FOR ALL MANHOLES, LOW-PRESSURE AIR TESTING (ASTM F1417) AND DEFLECTION TESTING USING A "50/100" 60" MANHOLE FOR ALL SANITARY SEWERS, IN ACCORDANCE WITH THE NHDES SEWER REGULATIONS AND THE CITY OF ROCHESTER DEPARTMENT OF PUBLIC WORKS REQUIREMENTS.
 - INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELVE AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW, AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELVE SHALL CONSIST OF BRICK MASONRY, BRICK MASONRY CONFORM WITH ASTM C32. INVERTS AND SHELVES SHALL NOT BE INSTALLED UNTIL AFTER SUCCESSFUL TESTING IS COMPLETED.
 - FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. A 3-INCH (MINIMUM HEIGHT) LETTER "SEWER" FOR SEWERS OR "DRAIN" FOR DRAINS SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.
 - SEWER MANHOLE FRAME AND COVER: PAXREX 32" D.I. MANHOLE FRAME AND COVER SEWER - E.J. PRESCOTT PRODUCT# 82113-32-S. IMMEDIATELY FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON THE TOP OF THE MANHOLE OR SOME OTHER NEARBY LOCATION TO PREVENT ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN, OR ANIMALS, UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENT TO GRADE.
 - BEDDING: MIN. 6" OF 3/4" CRUSHED STONE (12" IN LEDGE) FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33.8.
 - 100% PASSING 1 INCH SCREEN
 - 90-100% PASSING 3/4 INCH SCREEN
 - 20-55% PASSING 3/8 INCH SCREEN
 - 0-10% PASSING #4 SIEVE
 - 0-5% PASSING #8 SIEVE
 - WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, CRUSHED STONE MIN. 3/4" SHALL BE USED.
 - CONCRETE FOR DROP SUPPORT SHALL CONFORM TO THE REQUIREMENT FOR CLASS A (3000 PSI) CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS STANDARD SPECIFICATIONS AS FOLLOWS:
 - CEMENT: 8.0 BAGS PER CUBIC YARD
 - WATER: 5.75 GALLONS PER BAG CEMENT
 - AGGREGATE: 1 1/2" MAX.
 - FLEXIBLE JOINT: A FLEXIBLE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES:
 - RCP & CI PIPE - ALL SIZES - 48"
 - AC & VC PIPE - UP THROUGH 12" DIA. - 18" SEE NOTE 8.A
 - AC & VC PIPE - LARGER THAN 12" DIA. - 36"
 - DI PIPE - NONE REQUIRED
 - PVC (ASTM 3034) - UP THROUGH 15" DIA. - NONE REQUIRED
 - PVC (ASTM F 670) - LARGER THAN 15" DIA. - 48" TO 60"
 - PVC (ASTM F 798) - ALL SIZES - 48" TO 60"
 - 8.A. UNDER SEVERE CONDITIONS WHEN DIFFERENTIAL SETTING CANNOT BE CONTROLLED WITHIN NORMAL LIMITS, VARIATIONS IN THE STUB LENGTH MAY BE NECESSARY. OTHER PLASTIC PIPES SHALL BE REVIEWED ON A CASE BY CASE BASIS.
 - SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 8 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS.
 - OMITTED.
 - MINIMUM SIZE PIPE FOR HOUSE SERVICE SHALL BE 4 INCHES.
 - PIPE AND JOINT MATERIALS: P.V.C. (POLY VINYL CHLORIDE) PIPE, ALL P.V.C. PIPE AND FITTINGS SHALL CONFORM TO THE MOST RECENT REQUIREMENTS OF ASTM SPECIFICATIONS FOR TYPE PSM POLY VINYL CHLORIDE (P.V.C.) SEWER PIPE AND FITTINGS, DESIGNATION D-3034 AND ASTM SPECIFICATIONS FOR SEWER PIPE, JOINTS USING ELASTOMERIC SEALS, DESIGNATION D-3212. MANUFACTURER'S CERTIFICATE OF COMPLIANCE SHALL BE FURNISHED TO THE ENGINEER, PRIOR TO INSTALLATION METHODS OF SHIPPING AND STORAGE ON SITE SHALL BE SUCH AS TO AVOID INJURY TO THE PIPE. DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB. MINIMUM "PIPE STIFFNESS" (F/Y) AT 7 1/2" DEFLECTION SHALL BE 45 PSI FOR SIZE WHEN TESTED IN ACCORDANCE WITH ASTM METHODS OF TEST D-2412. "EXTERNAL LOADING" PROPERTIES OF PLASTIC PIPE BY PARALLEL "PLATE LOADING." ALL P.V.C. PIPE SHALL BE TYPE SDR-35 (A MEASURE OF THICKNESS AND RIGIDITY) AND SHALL HAVE ELASTOMERIC GASKET JOINTS. SOLVENT CEMENT JOINTS SHALL NOT BE ALLOWED. P.V.C. USED FOR FORCE MAINS SHALL CONFORM TO ASTM D-2241 AND D-1784 (CLASS 1254-B). A SAFETY FACTOR OF 2.5 SHALL BE USED FOR PRESSURE RATING DETERMINATION WITH A STANDARD DIMENSION RATIO (SDR) NO HIGHER THAN 26.
 - DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.
 - JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MAINTAINED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.
 - TEES OR WYES: WHERE A TEE OR WYE IS NOT AVAILABLE IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE. FOLLOWERS INSTRUCTIONS USING A BOLTED, CLAMPED, OR EPOXY-CEMENTED SADDLE TAPPED INTO A SMOOTHLY DRILLED OR SAWN OPENING IN THE SEWER. THE PRACTICE OF BREAKING AN OPENING WITH A SLEDGE HAMMER, STUFFING CLOTH OR OTHER SUCH MATERIAL AROUND THE JOINT, OR APPLYING MORTAR TO HOLD THE CONNECTION, AND ANY OTHER SIMILAR CRUDE PRACTICES OR INEPT OR HASTY IMPROVISATIONS WILL NOT BE PERMITTED. THE CONNECTION SHALL BE CONCRETE ENCASED AS SHOWN IN THE DETAIL UP TO AND INCLUDING 15" DIAMETER. DOES (NOT APPLY TO INSTALLATIONS WHERE TEES & WYES ARE USED).
 - PIPE INSTALLATION: THE PIPE SHALL BE HANDLED, PLACED, AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE AS SPECIFIED IN NOTE 10. BEDDING AND RE-FILL FOR A DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH THE APPROPRIATE MECHANICAL DEVICES. THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE HOUSE FOUNDATION AT A GRADE OF NOT LESS THAN 1/8 INCH PER FOOT. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.
 - TESTING: THE COMPLETED HOUSE SEWER SHALL BE SUBJECTED TO A LEAKAGE TEST IN ANY OF THE FOLLOWING MANNERS (PRIOR TO BACKFILLING):
 - AN OBSERVATION TEE SHALL BE INSTALLED AS SHOWN AND, WHEN READY FOR TESTING, AN INFLATABLE BLADDER OR PLUG SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE TEE AFTER INFLATION, WATER SHALL BE INTRODUCED INTO THE TEE TO A HEIGHT OF 5 FEET ABOVE THE LEVEL OF THE PLUG.
 - THE PIPE SHALL BE LEFT EXPOSED AND LIBERALLY HOSED WITH WATER, TO SIMULATE, AS NEARLY AS POSSIBLE, WET TRENCH CONDITIONS OR, IF THE TRENCH IS WET, THE GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE INSPECTOR SHALL MAKE THROUGH THE CLEAROUT WITH A FLASHLIGHT.
 - DRY FLUORESCENCE DYE SHALL BE SPRINKLED INTO THE TRENCH OVER THE PIPE. IF THE TRENCH IS DRY, THE PIPE SHALL BE LIBERALLY HOSED WITH WATER, OR IF THE TRENCH IS WET, GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. OBSERVATION FOR LEAKS SHALL BE MADE IN THE FIRST DOWNSTREAM MANHOLE. LEAKAGE OBSERVED IN ANY OF THE ABOVE ALTERNATE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG-UP IF NECESSARY AND RE-LAID SO AS TO ASSURE WATER-TIGHTNESS.
 - ILLEGAL CONNECTION: NOTHING BUT SANITARY WASTE FROM THE HOUSE TOILETS, SINKS, LAUNDRY ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS OR SUMP PUMPS OR ANY OTHER SIMILAR CONNECTION CARRYING RAIN WATER, DRAINAGE, OR GROUND WATER, SHALL NOT BE PERMITTED.
 - HOUSE AND WATER SERVICE: SHOULD NOT BE LAID IN THE SAME TRENCH AS SEWER SERVICE, BUT WHEN NECESSARY, SHALL BE PLACED ABOVE AND TO THE SIDE OF THE HOUSE SEWER AS SHOWN.
 - BEDDING: MIN. 3/4" CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM C33.8.
 - 100% PASSING 1 INCH SCREEN
 - 90-100% PASSING 3/4 INCH SCREEN
 - 20-55% PASSING 3/8 INCH SCREEN
 - 0-10% PASSING #4 SIEVE
 - 0-5% PASSING #8 SIEVE
 - WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, MIN. 3/4" CRUSHED STONE SHALL BE USED.
 - LOCATION: THE LOCATION OF THE TEE OR WYE SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS METAL ROD OR PIPE SHALL BE PLACED OVER THE TEE OR WYE AS DESCRIBED IN THE TYPICAL "CHIMNEY" DETAIL, TO AID IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPEFINDER.
 - CONCRETE: CONCRETE SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (3000 PSI.) CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS STANDARD SPECIFICATIONS AS FOLLOWS:
 - CEMENT: 8.0 BAGS/C.Y.
 - WATER: 5.75 GALLONS/BAG OF CEMENT
 - AGGREGATE: 1 1/2" MAX.
 - CHIMNEYS: IF VERTICAL DROP INTO SEWER IS GREATER THAN 4', A CHIMNEY SHALL BE CONSTRUCTED FOR THE HOUSE CONNECTION. 25' ALL DRAINAGE AND SEWER STRUCTURES INCLUDING GRADERS SHALL BE CONSTRUCTED TO 20' MAXIMUM. 28' ALL SEWER CONSTRUCTION SHALL BE CONSTRUCTED TO INHIDES AND THE CITY OF ROCHESTER STANDARDS & SPECIFICATIONS.
 - HORIZONTAL JOINTS: BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF A TYPE APPROVED BY THE COMMISSION, WHICH TYPE SHALL, IN GENERAL, DEPEND FOR WATER TIGHTNESS UPON AN ELASTOMERIC OR MASTIC-LIKE GASKET.
 - PIPE TO MANHOLE JOINTS: SHALL BE ONLY AS APPROVED BY THE COMMISSION AND IN GENERAL, WILL DEPEND FOR WATER TIGHTNESS UPON EITHER AN APPROVED NON-SHRINKING MORTAR OR ELASTOMERIC SEALANT.
 - FOR BUTYMASTIC TYPE JOINTS: THE AMOUNT OF SEALANT SHALL BE SUFFICIENT TO FILL AT LEAST 75% OF THE JOINT CAVITY.
 - APPROVED BUTYMASTIC SEALANTS: RAM-NEK KENT SEAL NO.2 EZ
 - THE CONTRACTOR SHALL NOTIFY DIG-SAFE 1-888-344-7233 PRIOR TO CONSTRUCTION.

MORTAR USED IN MANHOLE CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING:

MORTAR SHALL BE COMPOSED OF TYPE II PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION.

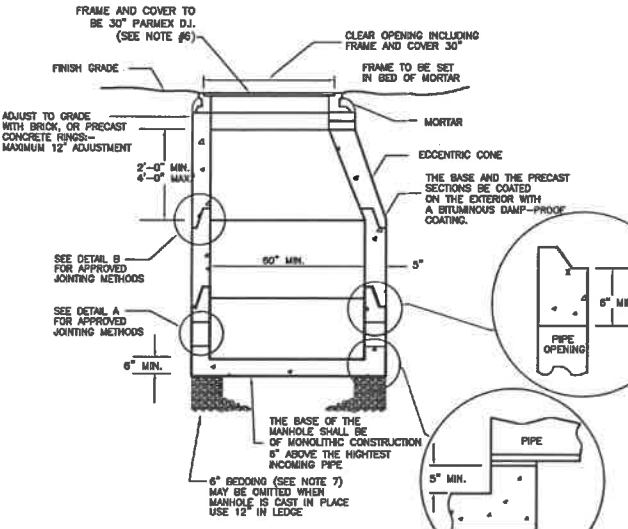
PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE AS SHOWN BELOW:

HYDRATED LIME	SAND	TYPE II PORTLAND CEMENT
1.0 PARTS	4.5 PARTS	1.5 PARTS
0.5 PARTS	4.5 PARTS	1.5 PARTS

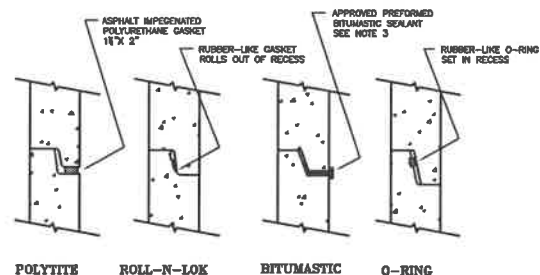
CEMENT SHALL BE TYPE II PORTLAND CEMENT THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM C150/C150M STANDARD IN EFFECT AT THE TIME THE CEMENT WAS MANUFACTURED.

HYDRATED LIME SHALL BE TYPE S THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM C207 STANDARD IN EFFECT AT THE TIME THE HYDRATED LIME WAS PROCESSED.

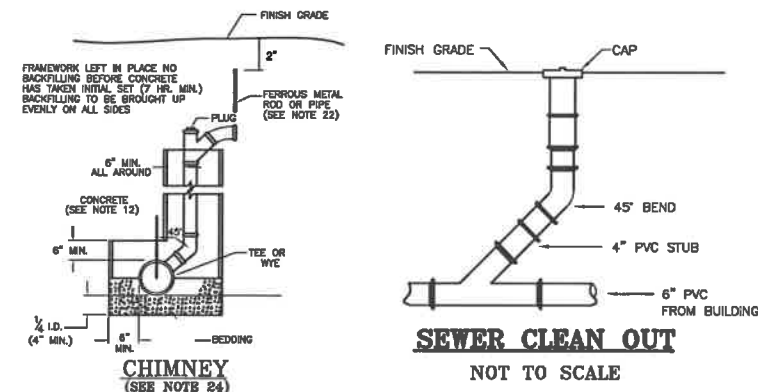
SAND SHALL CONSIST OF INERT NATURAL SAND THAT IS CERTIFIED BY ITS SUPPLIER AS CONFORMING TO THE ASTM C33 STANDARD IN EFFECT AT THE TIME THE SAND IS PROCESSED BY STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES.



LOCK-JOINT FLEXIBLE MANHOLE SLEEVE
(OR EQUAL)



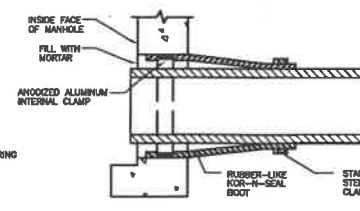
DETAIL-B



SEWER CLEAN OUT
NOT TO SCALE

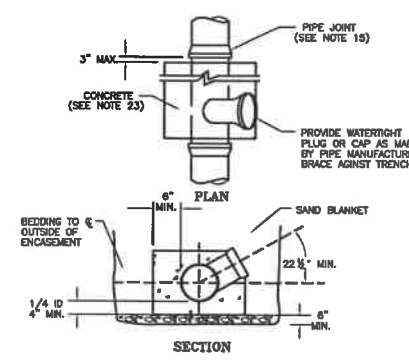
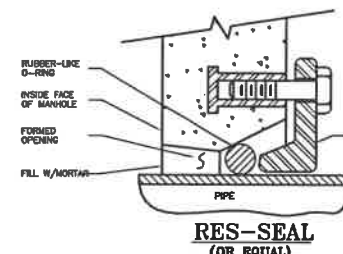
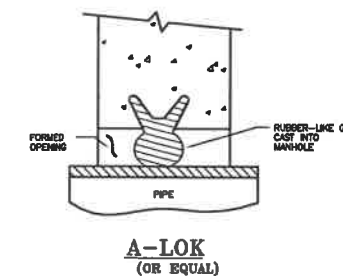


NON-SHRINKING MORTAR
(OR EQUAL)

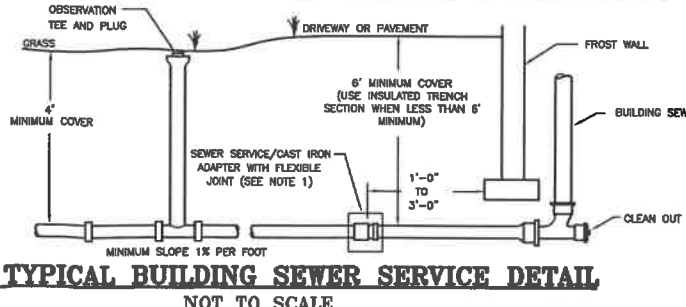


KOR-N-SEAL JOINT SLEEVE
(OR EQUAL)

NOTE: ALL GASKETS, SEALANTS, MORTAR, ETC. SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.



CONCRETE FULL ENCASEMENT



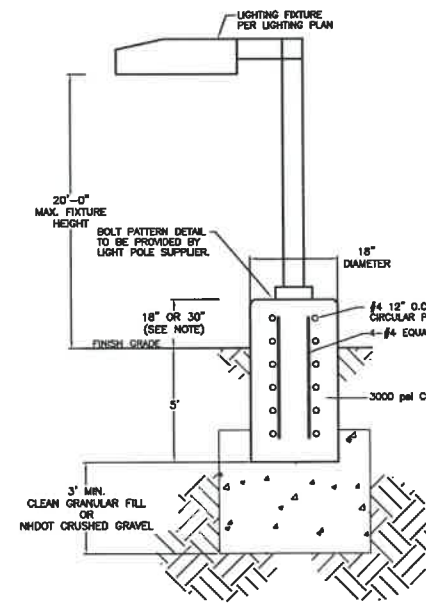
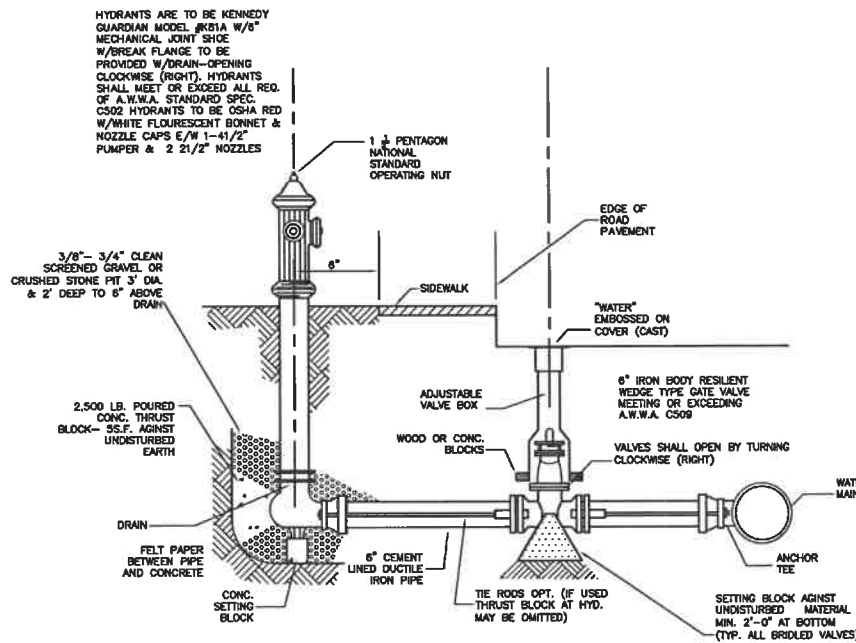
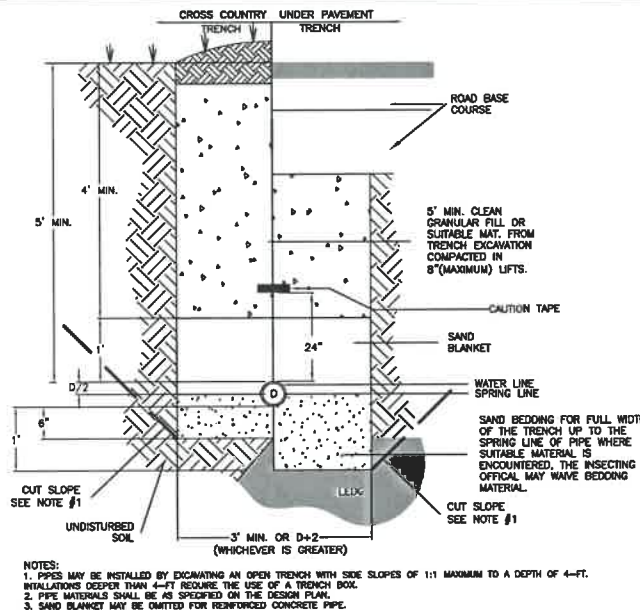
SANITARY SEWER DETAILS
TAX MAP 243, LOT 39
215 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
EASTER SEALS NH, INC.
APRIL 2021

LAND SURVEYORS



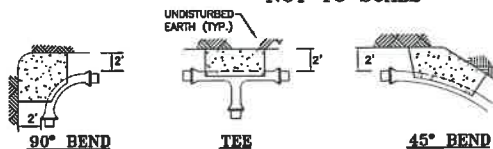
CIVIL ENGINEERS

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. 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.



GENERAL UTILITY NOTES

- CONTRACTOR SHALL NOTIFY DIG-SAFE (1-888-344-7233) 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
- ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR LOCATIONS AND ELEVATIONS.
- THESE PLANS SHOW 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.
- ANY UTILITY POLES THAT NEED TO BE RELOCATED SHALL BE COORDINATED WITH EVERSOURCE OR VERIZON, WHOM EVER HAS CONTROL OVER THEM.
- PROPOSED UTILITIES ARE TO BE UNDERGROUND. COORDINATE LOCATION OF UNDERGROUND UTILITIES AND TRANSFORMER PADS WITH PSNH AND OTHER PERTINENT UTILITY COMPANIES.
- WATER AND SEWER LINES SHALL BE INSTALLED A MINIMUM OF 10'-0" APART HORIZONTALLY.
- WHERE SEWER AND WATER LINES MUST CROSS, SEWER PIPE JOINTS SHALL BE LOCATED A MINIMUM 9'-0" HORIZONTALLY FROM THE WATER LINE AND A VERTICAL SEPARATION OF 18-INCHES SHALL BE MAINTAINED.
- SEWER PIPE JOINTS SHALL BE TESTED WITH ZERO LEAKAGE AT 25 POUNDS PER SQUARE INCH FOR GRAVITY SEWER AND AT 1-1/2 TIMES WORKING PRESSURE FOR ALL FORCE MAINS.
- WATERLINE CONSTRUCTION:
 - 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, CEMENT LINED, DUCTILE IRON PIPE.
 - PROPOSED WATER GATE VALVES SHALL BE MANUFACTURED BY KENNEDY OF AMERICAN FLOW CONTROL, RESILIENT SEAT TYPE.
 - ALL WATER LINES SHALL BE BURIED A MINIMUM OF 5'.
 - IF 5' OF COVER IS NOT AVAILABLE WATER LINE SHALL BE INSULATED AS SHOWN IN THE "SHALLOW COVER TRENCH DETAIL FOR INSULATED WATER PIPE".
 - ALL WATER FITTINGS SHALL BE CLASS 52.
 - PROPOSED WATER GATE VALVE SHALL OPEN CLOCKWISE (RIGHT).
- WORK TO CONNECT INTO THE WATER OR SEWER MAINS REQUIRES A PERMIT FROM THE ROCHESTER PUBLIC WORKS DEPARTMENT. CONTRACTORS ARE TO BE PRE-QUALIFIED.



PIPE SIZE	90° BEND	TEE	PLUG	45° BEND	2 1/2" & SMALLER
6"	5	4	3	2	2
8"	10	8	6	6	3
12"	24	18	8	12	8

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

DUCTILE IRON MECHANICAL RETRAINED LENGTH (FEET)																				
PIPE DIAMETER (INCHES)	BENDS																DEAD END			
	11 1/4'				22 1/2'				45'				90'							
	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi
2"	0	0	1	1	0	1	1	1	1	1	2	3	2	4	5	7	4	8	12	17
6"	0	0	1	1	1	1	2	2	1	2	3	4	3	5	8	10	6	12	18	23
8"	0	1	1	1	1	1	2	3	1	3	4	6	3	7	10	13	8	15	23	31
10"	0	1	1	2	1	2	2	3	2	3	5	7	4	8	12	16	9	19	28	37
12"	0	1	1	2	1	2	3	4	2	4	6	8	5	9	14	19	11	22	33	44
	TEE*								REDUCER											
	SAME SIZE				ONE SIZE SMALLER				ONE SIZE SMALLER				TWO SIZE SMALLER							
	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi				
2"	1	1	1	1	1	1	1	1	1	3	4	5	—	—	—	—				
6"	1	1	1	4	1	1	1	1	1	3	6	9	12	4	8	12	16			
8"	1	1	3	11	1	1	1	1	1	3	6	10	13	6	11	17	22			
10"	1	1	8	17	1	1	1	6	3	6	10	13	6	11	17	23				
12"	1	2	13	24	1	1	4	13	5	11	16	22	6	12	18	23				

* BASED ON A MINIMUM ATTACHED PIPE ALONG RUN (L_r) = 5 FEET

MECHANICAL RETRAINED LENGTH SCHEDULE

NOT TO SCALE

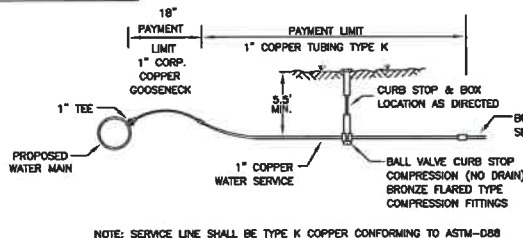
- NOTES:
- PIPE IS BURIED TO A DEPTH OF 6 FEET WITH A MINIMUM OF 4 INCHES OF COMPACTED GRANULAR MATERIAL UNDER THE PIPE TO THE SPRING LINE OF THE PIPE.
 - THE EXISTING SOIL IS POORLY GRADED GRAVEL AND GRAVEL SAND MIXTURE WITH LITTLE TO NO FINES.
 - ALL CALCULATIONS ARE BASED ON A FACTOR OF SAFETY OF 1.5 TO 1.
 - ALL CALCULATIONS ARE BASED ON THE "RETRAINED LENGTH CALCULATION PROGRAM" BY EBAA IRON, INC., RELEASE 3.1.

FILE NO. 102
PLAN NO. C-3154
DWG. NO. 19249 SP-1
F.B. NO.

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

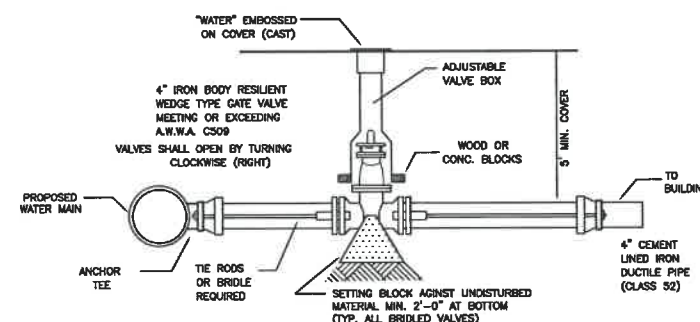
TYPICAL DOMESTIC SERVICE CONNECTION

NOT TO SCALE



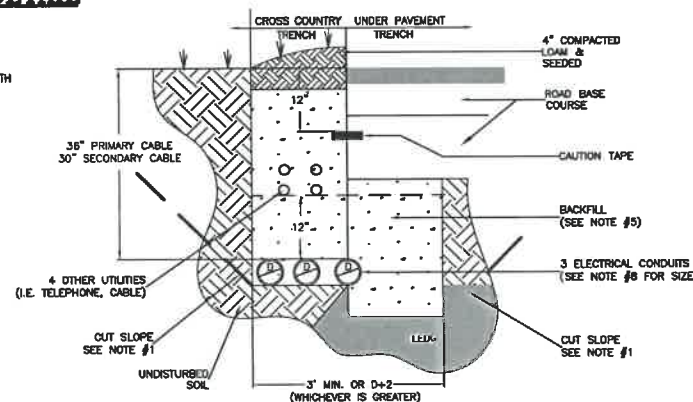
DOMESTIC SERVICE CONNECTION

NOT TO SCALE



ELECTRICAL & UNDERGROUND UTILITY TRENCH INSTALLATION DETAIL

NOT TO SCALE



- NOTES:
- ALL NON-METALLIC CONDUIT AND FITTINGS SHALL BE ELECTRICAL GRADE, SCHEDULE 40 PVC, AND SHALL CONFORM TO THE APPLICABLE SECTIONS OF NEMA TC-100 AND BE UL LISTED. ONLY GRAY-COLORED CONDUIT WILL BE ACCEPTED. ANY PVC CONDUIT NOT HAVING THE PROPER NEMA AND UL MARKINGS WILL NOT BE ACCEPTED. ALL STEEL CONDUITS SHALL CONFORM TO ASTM A120 AND BE RIGID GALVANIZED STEEL. ALL PVC JOINTS MUST BE COMBATED. STEEL FITTINGS SHALL BE SEALED WITH COMPOUND.
 - ALL 90 DEGREE SWEEPS WILL BE MADE USING RIGID GALVANIZED STEEL WITH A MINIMUM RADIUS OF 36 INCHES FOR PRIMARY CABLES AND 24 INCHES FOR SECONDARY CABLES. ALL STEEL SWEEPS WITHIN 18" OF THE SURFACE SHALL BE PROPERLY GROUNDING.
 - A 10-FOOT HORIZONTAL SECTION OF RIGID GALVANIZED STEEL CONDUIT WILL BE REQUIRED AT EACH SWEEP, UNLESS IN THE OPINION OF THE EVERSOURCE DESIGNER, THE SWEEP-PVC JOINT IS NOT SUBJECT TO FAILURE DURING CABLE PULLING.
 - THE CONDUIT SHALL BE GRADED TO APPROXIMATELY 90 DEGREES.
 - BACKFILL MAY BE MADE WITH EXCAVATED MATERIAL OR COMPARABLE, UNLESS MATERIAL IS DEEMED UNSUITABLE BY EVERSOURCE. BACKFILL SHALL BE FREE OF FROZEN LUMPS, ROCKS, DEBRIS, AND RUBBER. ORGANIC MATERIAL SHALL NOT BE USED AS BACKFILL. BACKFILL SHALL BE THOROUGHLY COMPACTED IN 6-INCH LAYERS.
 - A SUITABLE PULL STRING, CAPABLE OF 200 POUNDS OF PULL, MUST BE INSTALLED IN THE CONDUIT BEFORE EVERSOURCE IS NOTIFIED TO INSTALL CABLE. THE STRING SHOULD BE BLOWN INTO THE CONDUIT PRIOR TO THE RUN IS ASSUMED TO AVOID BONDING THE STRING TO THE CONDUIT.
 - ROUTING OF THE CONDUIT AND INSPECTION PRIOR TO BACKFILL WILL BE PROVIDED BY EVERSOURCE. INSTALLATION OF THE CONDUIT WILL BE DONE BY THE CONTRACTOR. THE EVERSOURCE SUPERVISOR MUST BE NOTIFIED 2 BUSINESS DAYS PRIOR TO BACKFILLING THE TRENCH. IN THE EVENT THAT A CABLE CANNOT BE SUCCESSFULLY PULLED THROUGH THE COMPLETED CONDUIT DUE TO A CONSTRUCTION ERROR, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND REPAIR THE INVOLVED CONDUIT. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL RESULTING EXPENSES.
 - NORMAL CONDUIT SIZES FOR EVERSOURCE ARE 3-INCH FOR SINGLE PHASE PRIMARY AND SECONDARY VOLTAGE CABLES, 4-INCH FOR THREE PHASE SECONDARY, AND 3-INCH FOR THREE PHASE PRIMARY.
 - ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND WHERE APPLICABLE, THE NATIONAL ELECTRIC CODE.
 - CONDUIT MAY BE INSTALLED BY EXCAVATING AN OPEN TRENCH WITH SIDE SLOPES OF 1:1 MAXIMUM TO A DEPTH OF 4'-0". INSTALLATIONS DEEPER THAN 4'-0" REQUIRE THE USE OF A TRENCH BOX.

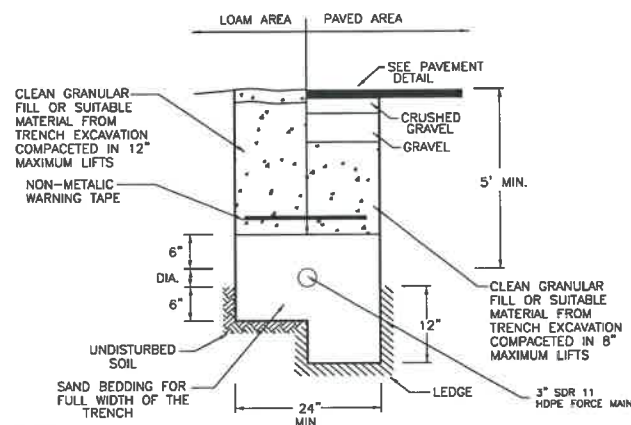
UTILITY DETAILS
TAX MAP 243, LOT 39
215 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
EASTER SEALS NH, INC.
APRIL 2021





CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PUMP CHAMBER, PUMP, AND CONTROL PANEL TO NORWAY PLAINS, ASSOCIATES, INC. PRIOR TO ORDERING AND DELIVERY. ENGINEER APPROVAL REQUIRED PRIOR TO ORDERING.

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. 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.



- 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. TRENCHES FOR SEWER PIPES WITH SLOPES OVER 0.08 FEET PER FOOT SHALL HAVE IMPERVIOUS TRENCH DAMS CONSTRUCTED EVERY 300 FEET TO PREVENT POTENTIAL DISTURBANCE TO PIPE BEDDING AND BLANKET MATERIALS.
 4. WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER, THE SHEETING SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN ONE FOOT ABOVE THE TOP OF THE PIPE AND AT LEAST 3 FEET BELOW FINISHED GRADE.
 5. THE PIPE SAND BLANKET MATERIAL SHALL BE GRADED SAND FREE FROM ORGANIC MATERIALS, GRADED SUCH THAT 100 PERCENT PASSES A 1/2-INCH SIEVE AND A MAXIMUM OF 15 PERCENT PASSES A #200 SIEVE.

TRENCH DETAIL FOR SEWER FORCE MAIN NOT TO SCALE

PUMP STATION DESIGN CALCULATIONS:

DAILY FLOW

DAILY FLOW BASED ON 77 GALLONS PER DAY PER CAPITA FOR ONE BEDROOM APARTMENT UNITS: (Env-Wq, 706.03 Table 3-2) AND ASSUMES MAXIMUM OF 2 PERSONS PER UNIT

AND

DAILY FLOW BASED ON 150 GALLONS PER DAY PER BEDROOM FOR 2 BEDROOM UNITS: (Env-Wq, 1008.03 Table 1008-1)

51 ONE BEDROOM UNITS X 77 GPD/CAPITA X 2 PERSON = 7,854 GPD
51 TWO BEDROOMS X 150 GPD/BEDROOM X 2 BEDROOMS = 15,300 GPD

INFILTRATION: 300 GAL./INCH DIA./MILE/DAY
340 FEET OF 8" DIA. PVC SEWER COLLECTION

INFILTRATION OF GRAVITY LINES = 155 GPD

TOTAL DAILY DESIGN FLOW = 23,309 GPD

WET WELL AND PUMP OPERATION NOTES:

WET WELL INVERTS:

INV. IN = 324.50'
HIGH WATER ALARM = 323.00'
LAG PUMP ON = 322.30'
LEAD PUMP ON = 322.00'
DOSE DEPTH = 2.00 FT.
PUMP OFF = 320.00'
DEPTH OF PUMP = 3.00 FT
SUBMERSION
CHAMBER BOTTOM = 315.3'

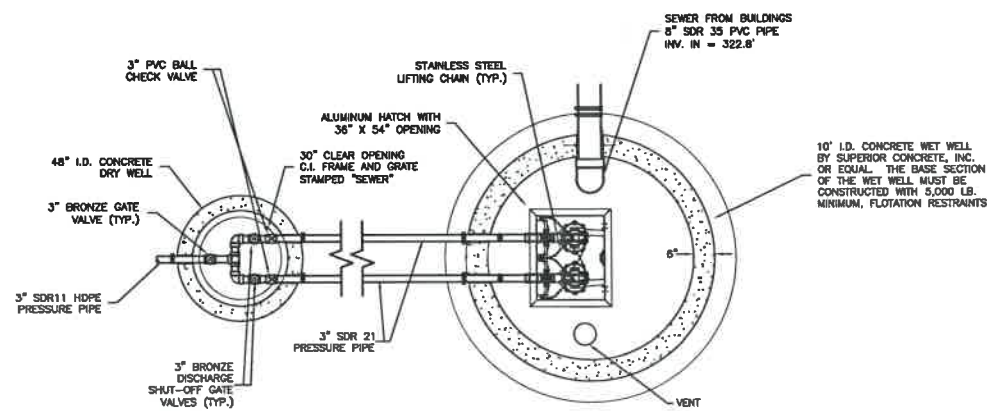
PUMP HEAD CALCULATIONS:

STATIC HEAD = PROPOSED ROCHESTER HILL SEWER INV. IN = 333.00'
PUMP OFF ELEV. = 318.30'
STATIC HEAD = 36.70'

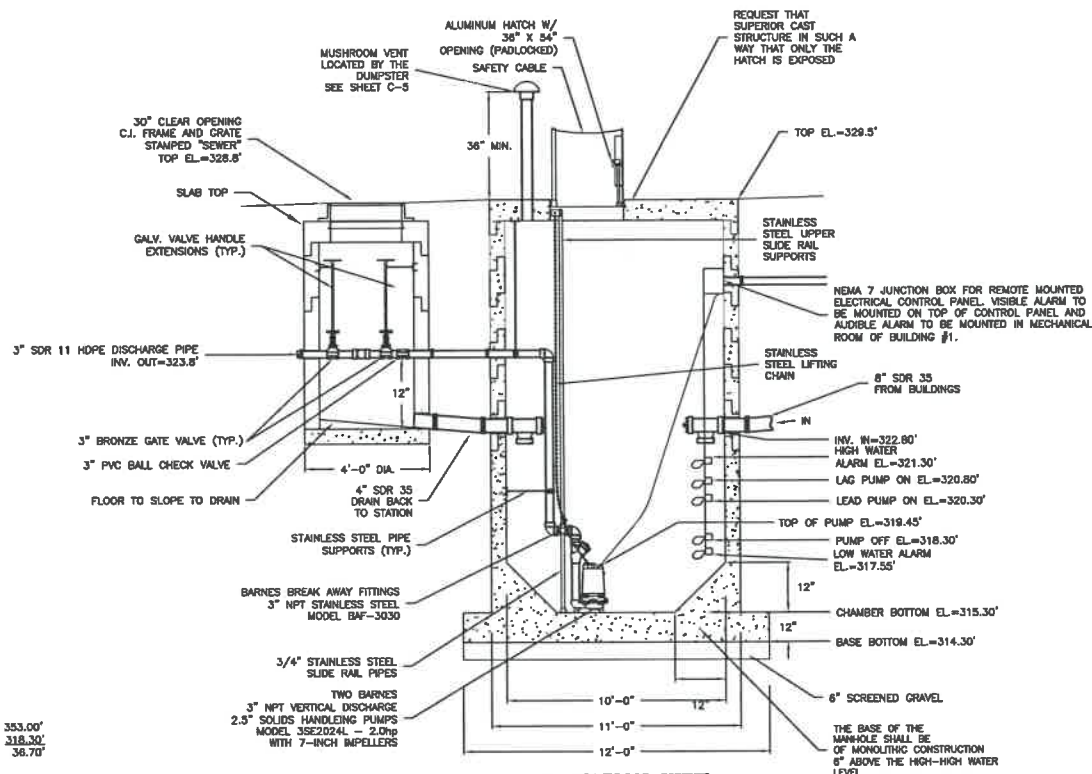
HEAD CREATED BY PIPE AND FITTINGS LOSS:
HEAD FROM PIPE & FITTINGS = 11.44 FT. @ 60 GPM

TOTAL DYNAMIC HEAD:
TOTAL DYNAMIC HEAD = STATIC HEAD + HEAD FROM PIPE/FITTINGS
TOTAL DYNAMIC HEAD = 48.10 FT

PUMP INFORMATION:
PUMP = BARNES 2.5" SOLIDS HANDLING SEWAGE PUMPS
MODEL = 3SE2024L, 2.0 HP WITH 7" IMPELLERS
PUMP OPERATIONAL CAPACITY = 60 GPM
RUN TIME = 19.6 MIN.



PLAN VIEW



ELEVATION VIEW

- PUMP STATION INSTALLATION NOTES:
1. THE PUMP STATION IS BEING INSTALLED IN AN AREA WITH POTENTIAL SEASONAL HIGH WATER TABLE EFFECTS. THE CONCRETE CHAMBER SHALL HAVE AN INTEGRAL FOOTING RING THAT ADDS SOIL LOAD TO THE STRUCTURE TO FIGHT THE EFFECTS OF BUOYANCY.
 2. DURING INITIAL CONSTRUCTION, DEWATERING WILL BE NECESSARY IN THE HOLE FOR THE PUMP STATION. ONCE BACKFILLED, THERE SHOULD BE NO THREAT OF FLOATAION.
 3. THE PUMP STATION WET WELL SHALL BE CONSIDERED CLASS I, GROUP D, DIVISION 2 AND THE DRY WELL SHALL BE CONSIDERED CLASS I, GROUP D, UNCLASSIFIED PURSUANT TO THE 2012 NFPA TABLE 4.2 UNLESS OTHERWISE CLASSIFIED BY AUTHORITY HAVING JURISDICTION (AHJ).
 4. ALL ELECTRICAL COMPONENTS SHALL MEET ALL REQUIREMENTS OF THE NATIONAL ELECTRICAL CODES.
 5. (a) SUBMERSIBLE PUMPS FOR SEWAGE PUMPING STATIONS SHALL CONFORM TO THE NEC REQUIREMENTS ADOPTED BY REFERENCE IN THE STATE BUILDING CODE PURSUANT TO RSA 155-A:1, IV, FOR INSTALLATION IN AREAS CLASSIFIED BY THE NEC AS CLASS I, DIVISION 1.
(b) ELECTRICAL SYSTEMS AND COMPONENTS, INCLUDING MOTORS, LIGHTS, CABLE, CONDUITS, SWITCH BOXES, AND CONTROL CIRCUITS SHALL BE PROTECTED FROM FLOODING IN ACCORDANCE WITH ENR-WQ 705.01.
(c) ELECTRICAL SYSTEMS AND COMPONENTS INCLUDING MOTORS, LIGHTS, CABLE, CONDUITS, SWITCH BOXES AND CONTROL CIRCUITS IN ENCLOSED OR PARTIALLY ENCLOSED SPACES WHERE FLAMMABLE MIXTURES OCCASIONALLY MAY BE PRESENT, INCLUDING RAW SEWAGE WET WELLS, SHALL BE CERTIFIED BY THEIR MANUFACTURER AS:
(1) COMPLYING WITH THE NEC REQUIREMENTS ADOPTED BY REFERENCE IN THE STATE BUILDING CODE PURSUANT TO RSA 155-A:1, IV, FOR CLASS I, DIVISION LOCATIONS; OR
(2) BEING RATED FOR CLASS I DIVISION 2 REQUIREMENTS WHERE MECHANICAL VENTILATION IS PROVIDED IN ACCORDANCE WITH THE NFPA AS ADOPTED BY REFERENCE IN THE STATE FIRE CODE IN SAF-C 6000.
(d) ALL ELECTRICAL EQUIPMENT AND WORK SHALL COMPLY WITH THE REQUIREMENTS OF NEC AS ADOPTED BY REFERENCE IN THE STATE BUILDING CODE PURSUANT TO RSA 155-A:1, IV, AND NFPA AS ADOPTED BY REFERENCE IN THE STATE FIRE CODE IN SAF-C 6000 IN EFFECT AT THE TIME OF INSTALLATION.

NOTES:

1. HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE, SEALED FOR WATER-TIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT.
2. PIPE TO MANHOLE JOINTS SHALL BE AS FOLLOWS:
(1) ELASTOMERIC RUBBER SLEEVE WITH WATERTIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES.
(2) CAST INTO THE WALL OR SECURED WITH STAINLESS STEEL CLAMPS.
(3) ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING; AND
(4) NON-SHRINK GROUTED JOINTS WHERE WATERTIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.
3. ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING.
4. PRECAST BASES SHALL BE PLACED ON A 6-INCH LAYER OF COMPACTED BEDDING MATERIAL THAT CONFORMS TO THE ASTM C33/C33M NO. 67 STONE STANDARD IN EFFECT WHEN THE STONE IS PROCESSED BY THE MANUFACTURER, AVAILABLE AS NOTED IN APPENDIX D. THE EXCAVATION SHALL BE DEWATERED WHILE PLACING BEDDING MATERIAL, AND SETTING THE BASE OR POURING CONCRETE.
5. CONCRETE FOR MANHOLES AND CONCRETE GRADE RINGS SHALL CONFORM TO THE REQUIREMENTS FOR CLASS AA CONCRETE IN THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
6. REINFORCING FOR CONCRETE MANHOLES AND CONCRETE GRADE RINGS SHALL BE STEEL OR STRUCTURAL FIBERS THAT CONFORM TO THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
7. PRECAST CONCRETE BARREL SECTIONS, CONES, AND BASES SHALL BE CERTIFIED BY THEIR MANUFACTURER(S) AS CONFORMING TO THE ASTM C478 STANDARD IN EFFECT AT THE TIME THE BARREL SECTIONS, CONES, AND BASES ARE MANUFACTURED.
8. WET WELLS SHALL BE TESTED PRIOR TO OPERATION USING INFILTRATION TESTING METHOD ACI 350.1 METHOD HST-HM IN EFFECT AT THE TIME THE WET WELL IS INSTALLED. AVAILABLE AS NOTED IN APPENDIX D. ANY VISIBLE SIGNS OF LEAKAGE SHALL BE REPAIRED AND RETESTED PRIOR TO PLACING THE WET WELL IN SERVICE.
9. THE WET WELL FLOOR SHALL HAVE A MINIMUM SLOPE OF 1 TO 1 TO THE HOPPER BOTTOM.
10. ALARM SIGNAL SHALL BE ACTIVATED IN ANY ONE OF THE FOLLOWING:
1. HIGH WATER IN WET WELL
2. LOW WATER IN WET WELL
3. LOSS OF ONE OR MORE PHASES OF POWER SUPPLY OR SEVERE VOLTAGE DROP
4. LOSS OF THE ALARM TRANSMISSION CAPABILITY
5. STANDBY GENERATOR APPLICATION
6. PUMP MALFUNCTION
7. LEVEL SENSING MALFUNCTION OR FAILURE
8. TEMPERATURE OUTSIDE NORMAL OPERATING RANGES.
11. HIGH WATER AND LOW WATER ALARM TRIGGERS SHALL BE SEPARATE DEVICES, INDEPENDENT OF PUMP WET WELL LEVEL CONTROL SYSTEM.
12. FOR THE POWER SOURCE FOR THE ALARM SYSTEM SHALL BE THE MAIN LINE POWER WITH A BACK UP BATTERY SYSTEM, WHICH SHALL BE CONNECTED AUTOMATICALLY SHOULD MAIN POWER FAILURE.
13. BACK-UP POWER SUPPLY FROM ON-SITE GENERATOR.
14. INSTALL A FLOW METER THAT RECORDS CONTINUOUS FLOW AND HAS THE CAPABILITY TO TOTALIZE.
15. INSTALL A WARNING SIGN ON THE ACCESS DOOR STATING THE BELOW.

WARNING
THIS IS A CONFINED SPACE,
ENTER ONLY WITH
PROPER EQUIPMENT.
FOLLOWING OSHA CONFINED
SPACE ACCESS REGULATIONS.

BACK-UP GENERATOR NOTES:

- A. AN INDEPENDENT ENGINE-GENERATOR TYPE SOURCE OF ELECTRIC POWER SHALL BE PROVIDED FOR ELECTRICALLY-DRIVEN PUMPS. THIS SOURCE SHALL BE AUTOMATICALLY ACTIVATED BY FAILURE OF ANY PHASE OF POWER SUPPLY OR UPON ANY FLUCTUATION IN VOLTAGE, THE AMOUNT OR DURATION OF WHICH WOULD CAUSE DAMAGE TO THE MOTORS. INSTALLATIONS SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE NEC AND THE STATE FIRE CODE IN SAF-C 6000.
- B. THE EMERGENCY POWER GENERATOR SHALL BE PERMANENTLY SECURED IN PLACE, WITH PROVISIONS FOR REMOVAL TO FACILITATE GENERATOR REPAIR OR REPLACEMENT.
- C. PROVISIONS SHALL BE MADE FOR AUTOMATIC AND MANUAL START-UP AND CUT-IN. THE CONTROLS SHALL BE SUCH THAT UPON AUTOMATIC START-UP UNDER EMERGENCY CONDITIONS, SHUT-DOWN SHALL BE ACCOMPLISHED AUTOMATICALLY ON RESTORATION OF UTILITY POWER WITH CONTROLLED SHUT-DOWN OF UNIT. MANUAL SHUT DOWN SHALL ALSO BE PROVIDED. PROVISION SHALL BE MADE TO ALLOW PUMPS TO RUN DOWN BEFORE RE-ENERGIZING ON TRANSFER OF POWER.
- D. THE EMERGENCY POWER GENERATOR SHALL BE SIZED TO SEQUENTIALLY START AND OPERATE ALL PUMPS NEEDED TO HANDLE DESIGN MAXIMUM WASTE FLOWS, PLUS LIGHTING, VENTILATION, CONTROLS, SCREENING, AND, IF APPLICABLE, GRINDING.
- E. THE EMERGENCY POWER GENERATOR SHALL BE LOCATED ABOVE GRADE WITH VENTILATION OF EXHAUST GASES.
- F. ALL EMERGENCY POWER GENERATION EQUIPMENT SHALL BE PROVIDED WITH INSTRUCTIONS FOR ROUTINE EXERCISING, LOAD TESTING, AND MAINTENANCE.
- G. THE GENERATOR ENGINE CONTROLS SHALL BE EQUIPPED WITH AN AUTOMATIC EXERCISER WHICH CAN BE SET ON ANY SELECTED SCHEDULE TO START THE GENERATOR, RUN THE GENERATOR UNDER NO-LOAD OR LOAD CONDITIONS BY SELECTION, AND SHUT THE GENERATOR OFF WITHOUT ACTUATING THE ALARM SYSTEM.
- H. SUBJECT TO (I), BELOW, THE OWNER SHALL PROVIDE EACH EMERGENCY GENERATOR WITH ENOUGH FUEL FOR THE GENERATOR TO RUN UNDER FULL LOAD OR PEAK STATION FLOW FOR AT LEAST 48 HOURS OR UNDER NORMAL OPERATING CONDITIONS FOR AT LEAST 96 HOURS, WHICHEVER REQUIRES THE GREATER AMOUNT OF FUEL.
- I. FOR SEWAGE PUMPING STATIONS WITH DUPLEX PUMPS, A STANDBY ENGINE DRIVE SYSTEM WHICH AUTOMATICALLY STARTS ON POWER LOSS TO DRIVE ONE PUMP MAY BE FURNISHED AS AN ALTERNATIVE TO A PERMANENT GENERATOR.

PUMP STATION AND
FORCE MAIN DETAILS
TAX MAP 243, LOT 39
215 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
EASTER SEALS NH, INC.

APRIL 2021

C-17

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PUMP STATION DETAIL
NOT TO SCALE
NORWAY PLAINS ASSOCIATES, INC.

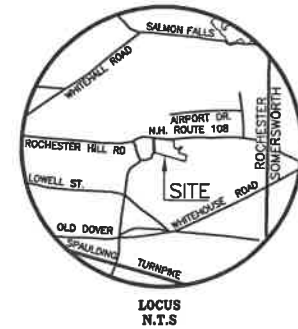
2 Continental Blvd., Rochester, N.H. 603-335-3948

LAND SURVEYORS

CIVIL ENGINEERS

LEGEND

- PROPERTY LINE
- JURISDICTIONAL WETLANDS
- EXISTING TREE LINE
- EXISTING OVERHEAD WIRES
- EXISTING HYDRANT
- EXISTING WATER GATE OR SHUT-OFF VALVE
- EXISTING UTILITY POLE
- EXISTING SEWER MAN HOLE
- EXISTING CATCH BASIN
- EXISTING LIGHT POLES
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- PROPOSED PAVEMENT WITH CURBING
- PROPOSED TREE LINE
- PROPOSED VINYL PLANK FENCE
- PROPOSED GUARDRAIL
- PROPOSED BLOCK RETAINING WALL
- PROPOSED PAVEMENT
- PROPOSED CONCRETE
- PROPOSED DETECTABLE WARNING PAVERS
- PROPOSED SIGNS
- VGC VERTICAL GRANITE CURB
- SGC SLOPE GRANITE CURB
- PAVEMENT RADIUS (20')
- PROPOSED STANDARD PARKING SPACES (9' x 18')
- PROPOSED VISITOR PARKING SPACES (9' x 18')
- PROPOSED VAN ACCESSIBLE PARKING SPACES (11' x 18' WITH 5' x 18' ACCESS ISLE)
- PROPOSED ACCESSIBLE PARKING SPACES (9' x 18' WITH 5' x 18' ACCESS ISLE)
- ROCHESTER FIRE TRUCK PATH
- FRONT TIRE PATH
- REAR TIRE PATH



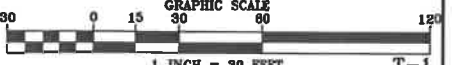
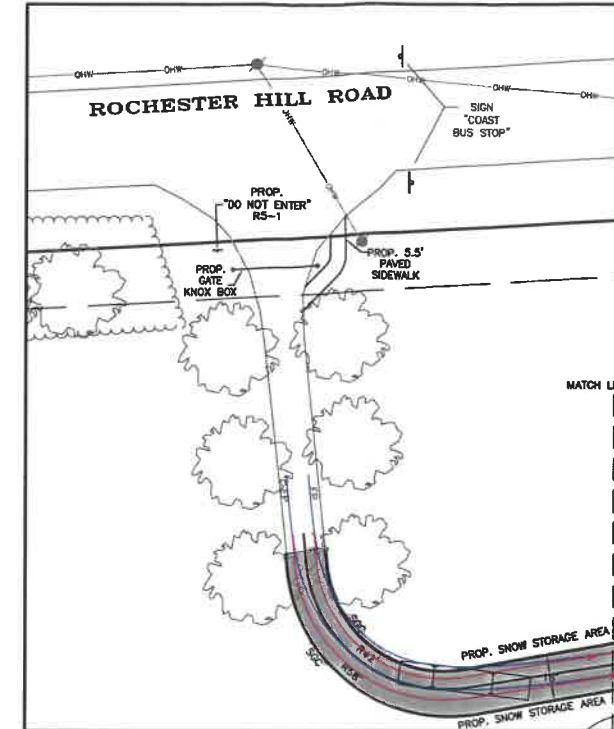
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FILE NO. 102
PLAN NO. C-3154
DWG. NO. 19249 SP-1
F.B. NO.

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

NORWAY PLAINS ASSOCIATES, INC.

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



FIRE TRUCK TURNING PLAN
TAX MAP 243, LOT 39
215 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
EASTER SEALS NH, INC.

APRIL 2021

GRAPHIC SCALE

LAND SURVEYORS



CIVIL ENGINEERS

LEGEND

- PROPERTY LINE
- EXISTING LIGHT POLES
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- PROPOSED PAVEMENT WITH CURBING
- PROPOSED LIGHT POLES
- PROPOSED BUILDING LIGHT FIXTURES
- PROPOSED LIGHT FOOTCANDLE
- PROPOSED LIGHT ILLUMINATION LINES

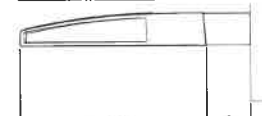
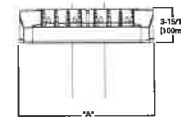
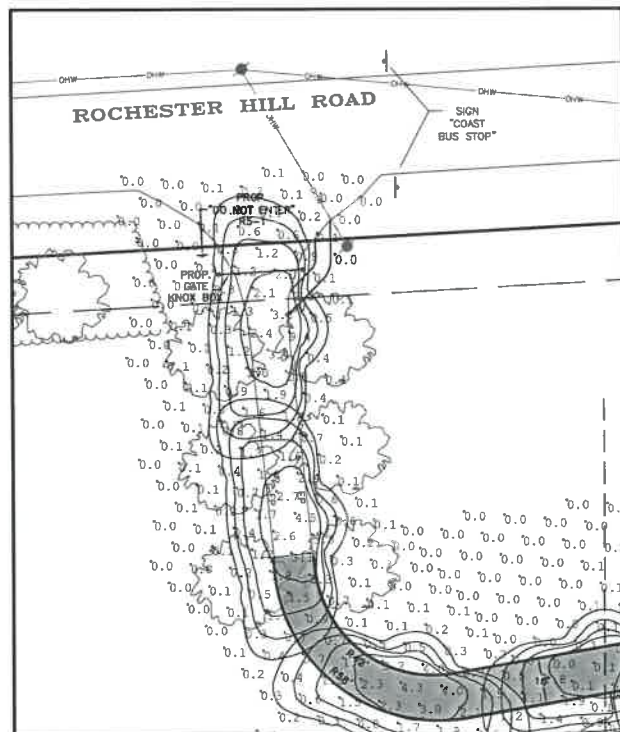
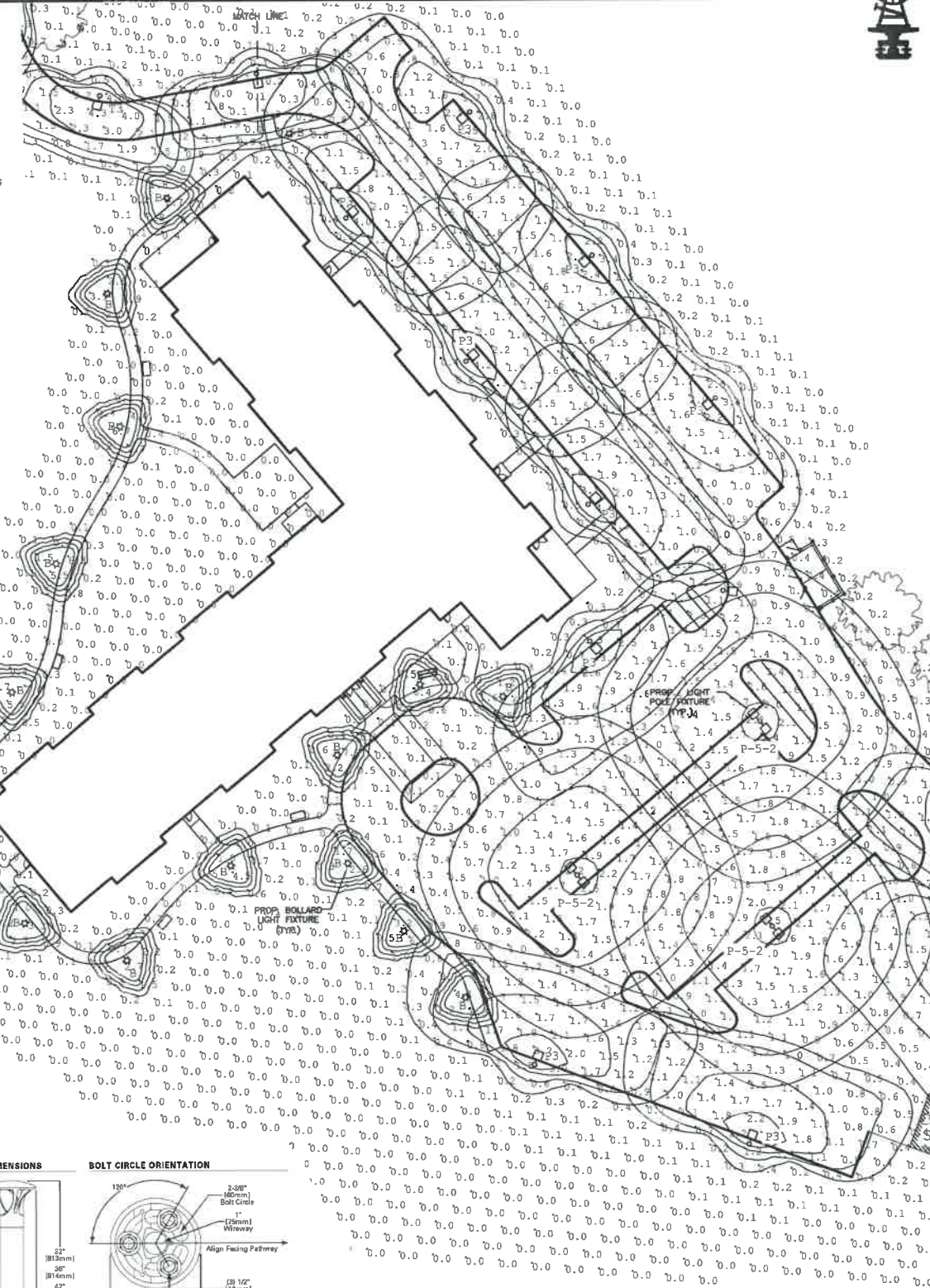
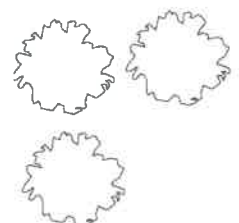
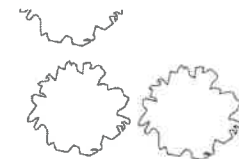
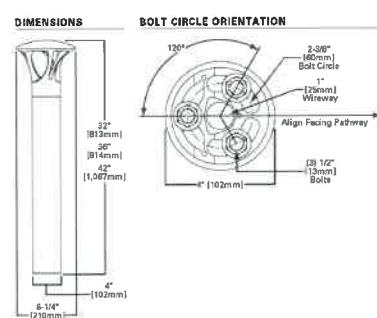


ABB ARBOR BOLLARD

PATHWAY LUMINAIRE



Luminaire Schedule					
Symbol	Qty	Label	Arrangement	Description	
1	21	B	SINGLE	ABB-B2-T8D-42-D1-S	32
2	17	P3	SINGLE	GLEON-SA1B-740-U-S13/ SSS4A20SFN1 (20' AFG)	44
3	8	P4	SINGLE	GLEON-SA1B-740-U-S14/ SSS4A20SFN1 (20' AFG)	44
4	4	P5-2	BACK-BACK	GLEON-SA1B-740-U-SWQ/ SSS4A20SFN2 (20' AFG)	44
5	4	T3	SINGLE	GLEON-SA1A-740-U-S13/ SSS4A12SFN1 (12' AFG)	34
					Total Watts
					672
					748
					352
					352
					136

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LIGHTING PLAN AND DETAILS TAX MAP 243, LOT 39 215 ROCHESTER HILL RD ROCHESTER, NH

PREPARED FOR:
EASTER SEALS NH, INC.
APRIL 2021



1 INCH = 30 FEET

L-1

FILE NO. 102
PLAN NO. C-3154
DWG. NO. 19249 SP-1
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



Rochester, New
Hampshire

L-101

CERTIFIED BY: _____ **DATE:** _____

L-501



1 SOUTHERN ELEVATION
SCALE: 3/32" = 1'-0"



2 WESTERN ELEVATION
SCALE: 3/32" = 1'-0"



3 NORTHERN ELEVATION (HILL ROAD)
SCALE: 3/32" = 1'-0"

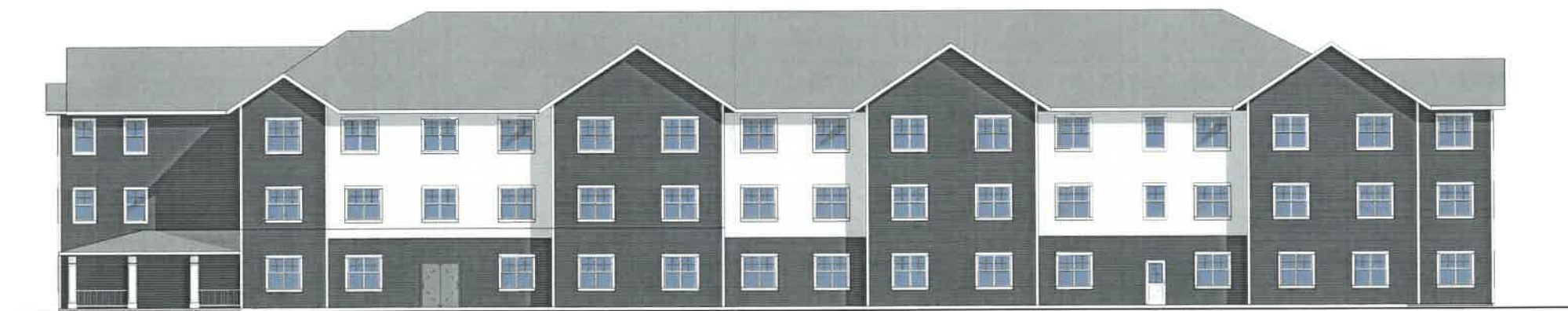
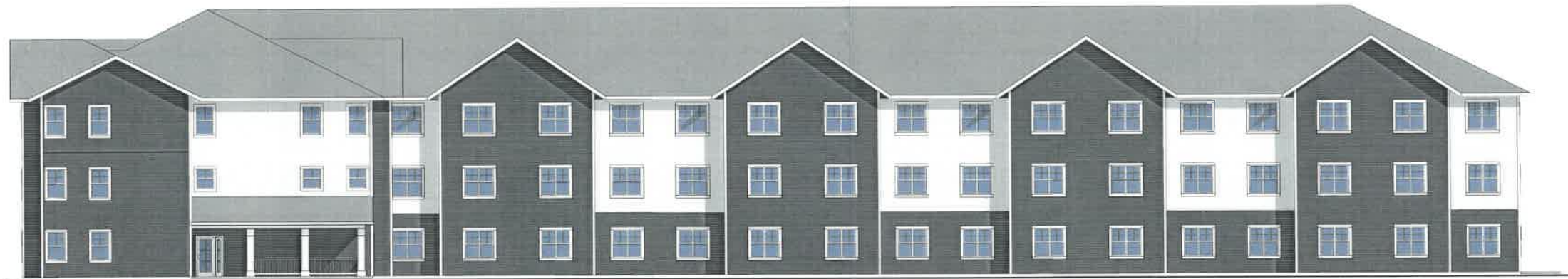
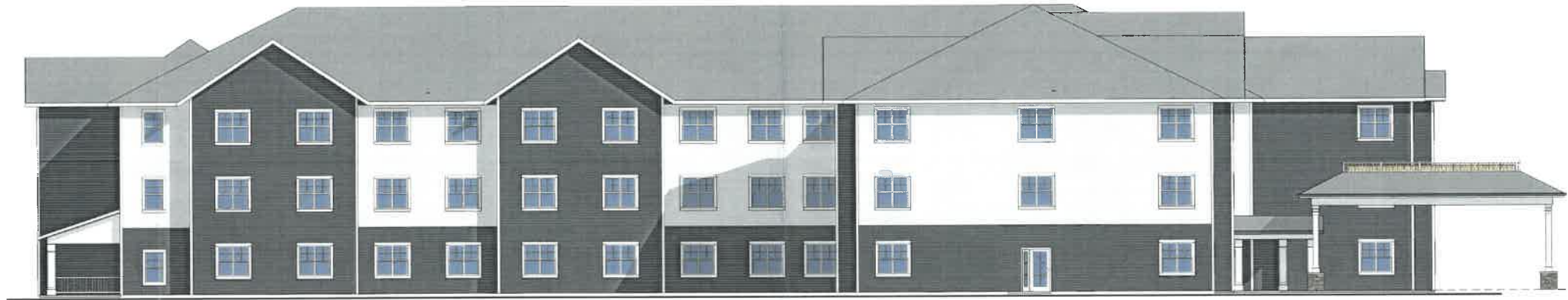
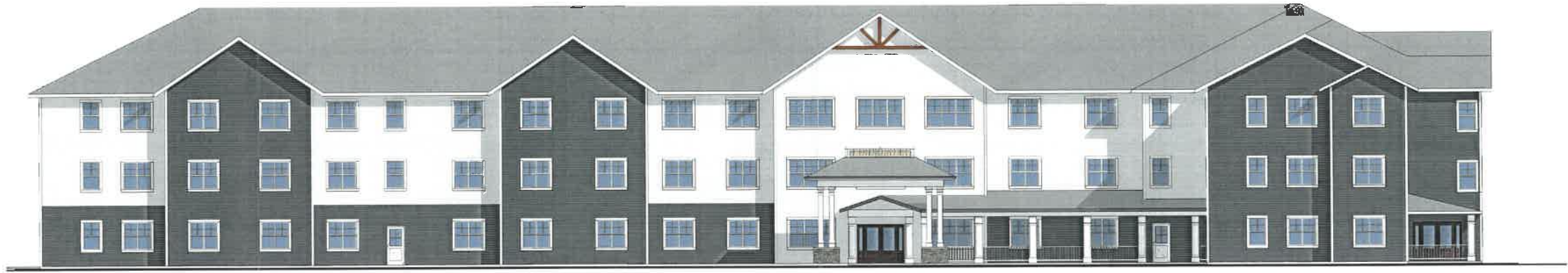


4 EASTERN ELEVATION
SCALE: 3/32" = 1'-0"

NOT FOR CONSTRUCTION

EXTERIOR ELEVATIONS	Scale: 3/32" = 1'-0"		Revisions: # Description	Date	
	Drawn By: SC, WB	Checked By: SC, CC			
	Project No.: 2021006				PLANNING BOARD
	Date: 04/21/2021				A2.00

2021 Market Square Architects		5/14/2021 9:51 PM AM
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PROJECT NO. 2021006

EASTERSEALS - CHAMPLIN PLACE

RENDERING

04/21/2021

MARKET
SQUARE
ARCHITECTS
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PH: 603.501.0202

