



PROPOSED WAREHOUSE EXPANSION

FOR

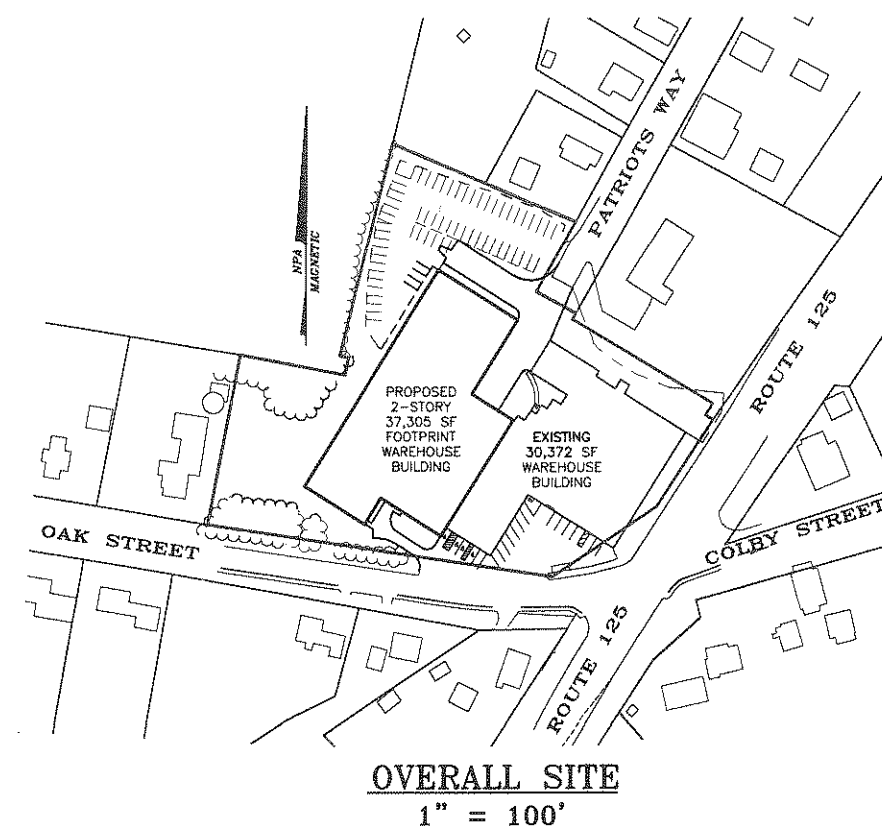
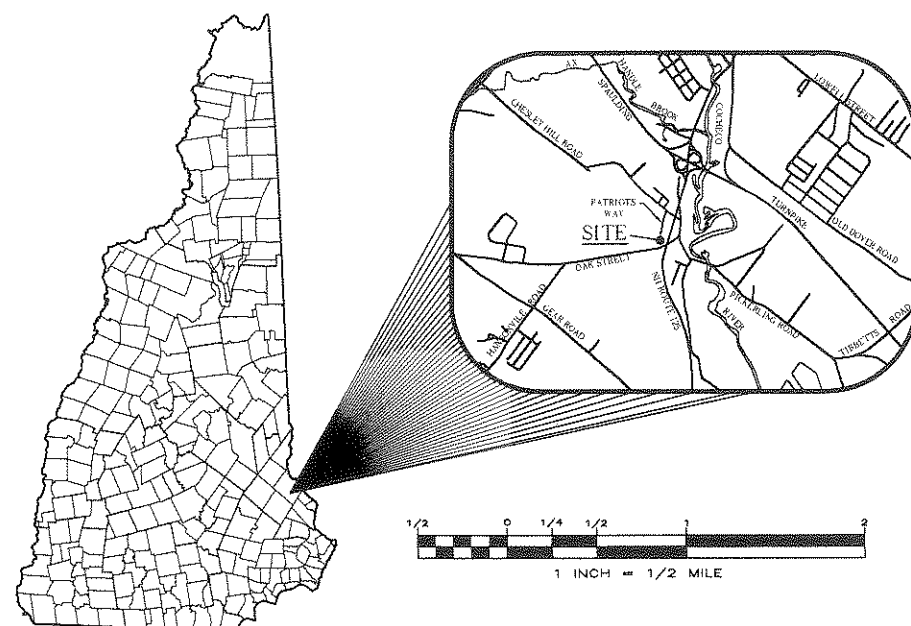
COLBY FOOTWEAR, INC.

15 OAK STREET & NH ROUTE 125

ROCHESTER, NEW HAMPSHIRE 03867

MARCH 2012

REVISIONS:



RECEIVED
MAR 28 2012
Planning Dept.

CIVIL ENGINEERS

NORWAY PLAINS ASSOCIATES, INC.
2 CONTINENTAL BOULEVARD
ROCHESTER, NH 03867
(603) 335-3948



OWNER / APPLICANT

COLBY FOOTWEAR, INC.
364 ROUTE 108
SOMERSWORTH, NH 03878
(800) 970-8482

FILE NO. 288
PLAN NO. PERLM
DWG NO. 12009\SP-2
F.B. NO. SDR

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.

SHEET INDEX

C-1	OVERALL SITE PLAN	1" = 60'
E-1	EXISTING FEATURES PLAN	1" = 30'
C-2	SITE LAYOUT PLAN	1" = 30'
C-3	GRADING AND DRAINAGE PLAN	1" = 30'
C-4	UTILITY PLAN	1" = 30'
C-5	CONSTRUCTION DETAILS	AS SHOWN
C-6	DRAINAGE AND DETENTION BASIN DETAILS	AS SHOWN
C-7	UTILITY DETAILS	AS SHOWN
C-8	TEMPORARY EROSION AND SEDIMENTATION CONTROL DETAILS	AS SHOWN
C-9	PERMANENT EROSION AND SEDIMENTATION CONTROL DETAILS	AS SHOWN

LEGEND

- 100.01' PROPERTY LINE
 S 56°12'29" W COMMON PROPERTY LINE
 JURISDICTIONAL WETLANDS
 BUILDING SETBACK LINES
 ZONING DISTRICT BOUNDARY LINE
 EXISTING TREE LINE
 WETLANDS
 EXISTING MONUMENTS
 PROPOSED PAVEMENT
 PROPOSED TREE LINE



MAP 138 - LOT 75
 DONALD DAGGETT
 31A OAK STREET
 ROCHESTER, NH 03839-5630

MAP 138 - LOT 78
 RONALD SR. & SANDRA ENGLISH
 PO BOX 7140
 ROCHESTER, NH 03839-7140

MAP 138 - LOT 59
 GERALD F. & THERESA GILMAN
 22 OAK STREET
 ROCHESTER, NH 03839-5631

MAP 138 - LOT 58
 LAWRENCE & CHRISTIE
 LAPIERRE
 20 OAK STREET
 ROCHESTER, NH 03839

MAP 138 - LOT 57
 BEYL MUGGELSTON IRREVOCABLE TRUST
 c/o BARBARA DEHART
 168 NORTH MAIN STREET
 ROCHESTER, NH 03867

MAP 138 - LOT 91
 FRANK P., ANTONIO J.,
 EVANGELINA FIGUEROA & SILVIA
 R. WEEKS
 PO BOX 7084
 ROCHESTER, NH 03865-7084

MAP 138 - LOT 90
 MAURICE A. & ARLENE M.
 LAMPER
 27 PATRIOTS WAY
 ROCHESTER, NH 03839

MAP 138 - LOT 48
 PLLB REALTY, LLC
 68 TEN ROD ROAD
 ROCHESTER, NH 03867

MAP 138 - LOT 49
 JERI VANDENBOSCH LIVING TRUST
 PO BOX 586
 BARRINGTON, NH 03825

MAP 138 - LOT 89
 ROLAND J. CHENARD
 3 LARK LANE
 ROCHESTER, NH 03868

MAP 138
 LOT 88-1

REFERENCE PLANS:

- "PLAN OF LAND - COLBY FOOTWEAR, INC. - GONIC, N.H." DATED AUGUST 1967 BY G.L. DAVIS & ASSOCIATES AND RECORDED AT STRAFFORD COUNTY REGISTRY OF DEEDS, PLAN 5, PCKET 12, FOLDER 1.
- "LOTS OWNED BY H.H. MEADER - GONIC, N.H." DATED APRIL, 1921 BY WILLIAM A. GROVER AND RECORDED AT STRAFFORD COUNTY OF REGISTRY OF DEEDS.
- "STATE OF NH DEPARTMENT OF PUBLIC WORKS & HIGHWAY - ROCHESTER F-019-1(2) S-2437 (GONIC PROJECT)" DATED 1955.

FILE NO. 288
 PLAN NO. PERLM
 DWG NO. 12009(SP-2
 F.B. NO. SDR

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

NORWAY PLAINS ASSOCIATES, INC.

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

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.

REVISIONS:

1/30/12 - REVISE PROPOSED BUILDING CONFIGURATION

GENERAL SITE PLAN NOTES:

- THE PURPOSE OF THIS PLAN IS TO DEPICT A 38,275 S.F. 2-STORY WAREHOUSE ADDITION TO THE EXISTING BUILDING.
- TOTAL PARCEL AREAS: MAP 138, LOTS 79 & 80
3.54 ACRES.
- PARCEL IS ZONED BUSINESS-2 & RESIDENCE-1.
- ALL EXISTING UTILITIES LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATION PRIOR TO ANY WORK BEING PERFORMED.
- THESE PLANS SHOW ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT ON THE DATE OF SURVEY. THE ABSENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. FROM THESE PLANS, BUT IN EXISTENCE, IS NOT INTENDED OR IMPLIED.
- DIMENSIONAL REGULATIONS PER ZONING ORDINANCE:
 BUSINESS - 2 ZONE (NON RESIDENTIAL USE)
 MINIMUM LOT SIZE = NO REGULATIONS (WITH WATER AND SEWER)
 MINIMUM LOT FRONTAGE = NO REGULATIONS
 MINIMUM YARD SETBACK:
 FRONT = NONE EXCEPT WHERE FRONTAGE IS PARTLY RESIDENCE AND PARTLY BUSINESS, THEN 25 FEET.
 SIDE = NONE EXCEPT WHERE ABUTS RESIDENCE 1 ZONE, THEN 10 FEET
 REAR = 25 FEET
 MAXIMUM LOT COVERAGE = 30%
 RESIDENCE 1 ZONE
 MINIMUM LOT SIZE = 10,000 SQUARE FEET (WITH WATER AND SEWER)
 MINIMUM LOT FRONTAGE = 100 FEET
 MINIMUM YARD SETBACK:
 FRONT = 25 FEET
 SIDE = 10 FEET
 REAR = 25 FEET
 MAXIMUM LOT COVERAGE = 30%
 PARCEL IS NOT LOCATED WITHIN ZONE A (100 YR FLOOD) AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY MAP, COMMUNITY #3301750216D.
 A VARIANCE WAS GRANTED BY THE ROCHESTER ZBA ON MAY 9, 2007 TO ALLOW A WAREHOUSE IN THE RESIDENTIAL-1 ZONE.
 7. ORIENTATION: HORIZONTAL AND VERTICAL. DRAINAGE - CITY OF ROCHESTER GIS.
 8. SOIL TYPES ARE PER NATIONAL RESOURCES CONSERVATION SERVICES.
 SWA - SWANTON FINE SANDY LOAM, 0 TO 3% SLOPES
 WSA - WINDSOR LOAMY SAND, 0 TO 3% SLOPES
 9. FOR MORE INFORMATION ABOUT THIS SITE PLAN, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT, 31 WAKEFIELD ST., ROCHESTER, NH 03867. (603) 335-1335.
 11. WETLANDS WERE DELINEATED BY N.H. SOILS CONSULTANTS, INC. IN MAY 2007 AND VERIFIED BY GZA GEOTECHNICAL, INC. IN MARCH 2012.
 12. PARKING REQUIREMENTS (ZONING REGS. SECTION 42.8(4)(19):
 WHOLESALE DISTRIBUTION, WAREHOUSE:
 1 SPACE PER 800 SQUARE FEET OF GROSS FLOOR AREA (GFA); OR, 1 SPACES PER EMPLOYEE IN THE MAXIMUM SHIFT; WHICHEVER IS GREATER:

EXISTING:	TOTAL SPACES
30,372 SF GFA X 1 SPACES / 800 SF GFA =	38 SPACES
OR:	
20 EMPLOYEES X 1 SPACE / EMPLOYEE =	20 SPACES
PROPOSED:	
71,610 SF GFA X 1 SPACES / 800 SF GFA =	90 SPACES
OR:	
11 EMPLOYEES X 1 SPACE / EMPLOYEE =	11 SPACES
TOTAL REQUIRED SPACES =	128 SPACES OR 31 SPACES
TOTAL PROVIDED SPACES =	82 SPACES

ACCESSIBLE PARKING (SITE PLAN REGULATIONS SECTION 6(D)(3)):

THE SPACES ARE PART OF THE TOTAL ABOVE.
 ACCESSIBLE PARKING SPACES = 76 TO 100 = 4 SPACES
 TOTAL PROVIDED SPACES = 4 SPACES

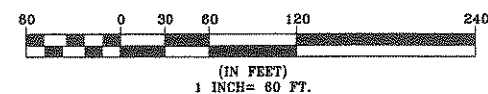
- ALL CONSTRUCTION ACTIVITY RELATED TO THE DEVELOPMENT OF THIS SITE IS NOT RESTRICTED.
- LOAM STOCKPILES SHALL BE SEEDDED IN ACCORDANCE WITH THE SEEDING NOTES ON SHEET C-5, IF STORED MORE THAN 30 DAYS. SILT FENCE SHALL BE INSTALLED AT THE DOWN GRADIENT SIDE OF THE LOAM STOCKPILE AS SHOWN IN THE PLAN VIEW AROUND AT LEAST ONE HALF THE CIRCUMFERENCE OF THE PILE.
- DURING ALL PHASES OF CONSTRUCTION DUST SHALL BE PREVENTED FROM BECOMING A SAFETY OR HEALTH HAZARD BY THE IMPLEMENTATION OF ACCEPTED CONTROL METHODS SUCH AS WATERING.
- THE CITY RESERVES THE RIGHT TO REQUIRE ADDITIONAL EROSION CONTROL MEASURES IF ANY OFF-SITE IMPACTS ARE FOUND DURING CONSTRUCTION.
- ALL UTILITIES MUST BE UNDERGROUND, INCLUDING UTILITIES EXTENDED ONTO THE SITE FROM EXISTING POLES NEAR THE SITE.
- 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 THE ACCESS REQUIREMENTS.
- THIS DEVELOPMENT MUST BE IN COMPLIANCE WITH ALL APPLICABLE LAW - INCLUDING ALL PERTINENT PROVISIONS OF THE CITY OF ROCHESTER SITE PLAN REGULATIONS - UNLESS OTHERWISE WAIVED.
- FINAL SIGN APPLICATIONS MUST BE SUBMITTED TO THE CODE ENFORCEMENT OFFICER TO ENSURE COMPLIANCE WITH ALL APPLICABLE CODES, INDEPENDENT FROM THIS SITE PLAN REVIEW. IF ANY SIGNIFICANT CHANGES OR EXPANSION IS PROPOSED TO THE DESIGN OF THE APPROVED FREESTANDING SIGN OR TO THE OVERALL ADVERTISING SIGNAGE FOR THIS SITE, THE PROPOSED SIGN MUST BE PRESENTED TO THE PLANNING BOARD FOR REVIEW PRIOR TO ISSUANCE OF THOSE PERMITS.
- A KNOX BOX SHALL BE PROVIDED AS SPECIFIED BY THE ROCHESTER FIRE DEPARTMENT.
- THIS SITE IS DESIGNED TO BE COMPLIANT WITH AMERICAN DISABILITY ACT FOR ACCESS TO THE PROPOSED BUILDING FROM THE PARKING AND UNLOADING ZONES.
- ALL ELEMENTS SHOWN ON THE APPROVED SITE PLANS MUST BE PROPERLY COMPLETED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY, UNLESS APPROPRIATE SURETY IS PLACED WITH THE PLANNING DEPARTMENT.
- 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.
- 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 REQUIREMENT OF CITY ORDINANCE CHAPTER 50. 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 THE SOIL HAS BEEN DISTURBED.
- THE SEWER IMPACT CONTRIBUTION MUST BE PAID IN FULL, TO THE CODE ENFORCEMENT DEPARTMENT, PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THE SEWER IMPACT IS A ONE TIME PAYMENT OF \$2.00 PER GALLON FOR AVERAGE DAILY FLOW.
- 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 - POSSIBLE INCLUDING A SPRINKLER SYSTEM - MAY BE SPECIFIED AT THAT TIME.

MAP 138, LOTS 79 & 80
 OWNER OF RECORD:
 COLBY FOOTWEAR, INC.
 364 ROUTE 108
 SOMERSWORTH, NH 03878
 BK. 2017, PG. 792

OVERALL SITE PLAN
 OAK STREET / ROUTE 125
 ROCHESTER, NH
 PREPARED FOR
 COLBY FOOTWEAR, INC.

SCALE: 1" = 60' JANUARY 2012

GRAPHIC SCALE



FINAL APPROVAL BY THE
 ROCHESTER PLANNING BOARD

CERTIFIED BY _____ DATE _____

LEGEND

- PROPERTY LINE
- COMMON PROPERTY LINE
- JURISDICTIONAL WETLANDS
- SOIL TYPE BOUNDARY LINE
- EXISTING TREE LINE
- EXISTING OVERHEAD WIRES
- EXISTING WATER MAIN
- EXISTING SEWER MAIN
- EXISTING GAS MAIN
- EXISTING DRAIN LINE
- EXISTING CONTOUR LINE
- EXISTING HYDRANT
- EXISTING WATER GATE VALVE
- EXISTING WATER SHUT-OFF VALVE
- EXISTING UTILITY POLE
- EXISTING SEWER MAN HOLE
- EXISTING CATCH BASIN
- WETLANDS
- TEST PIT LOCATION
- EXISTING MONUMENTS



REVISIONS:

GENERAL SITE PLAN NOTES:

- THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING FEATURES ON THE PARCELS.
- TOTAL PARCEL AREAS: MAP 138, LOTS 79 & 80, 3.54 ACRES.
- PARCEL IS ZONED BUSINESS-2 & RESIDENCE-1.
- ALL EXISTING UTILITIES LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATION PRIOR TO ANY WORK BEING PERFORMED.
- THESE PLANS SHOW ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT ON THE DATE OF SURVEY. THE ABSENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. FROM THESE PLANS, BUT IN EXISTENCE, IS NOT INTENDED OR IMPLIED.
- DIMENSIONAL REGULATIONS PER ZONING ORDINANCE:
 - BUSINESS - 2 ZONE (NON RESIDENTIAL USE):
 - MINIMUM LOT SIZE = NO REGULATIONS (WITH WATER AND SEWER)
 - MINIMUM LOT FRONTAGE = NO REGULATIONS
 - MINIMUM YARD SETBACK:
 - FRONT = NONE EXCEPT WHERE FRONTAGE IS PARTLY RESIDENCE AND PARTLY BUSINESS, THEN 25 FEET
 - SIDE = NONE EXCEPT WHERE ABUTS RESIDENCE 1 ZONE, THEN 10 FEET
 - REAR = 25 FEET
 - MAXIMUM LOT COVERAGE = 30%
 - RESIDENCE 1 ZONE:
 - MINIMUM LOT SIZE = 10,000 SQUARE FEET (WITH WATER AND SEWER)
 - MINIMUM LOT FRONTAGE = 100 FEET
 - MINIMUM YARD SETBACK:
 - FRONT = 25 FEET
 - SIDE = 10 FEET
 - REAR = 25 FEET
 - MAXIMUM LOT COVERAGE = 30%
- PARCEL IS NOT LOCATED WITHIN ZONE A (100 YR FLOOD) AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY MAP, COMMUNITY #33017502180.
- A VARIANCE WAS GRANTED BY THE ROCHESTER ZBA ON MAY 9, 2007 TO ALLOW A WAREHOUSE IN THE RESIDENTIAL-1 ZONE.
- ORIENTATION: HORIZONTAL AND VERTICAL DATUMS - CITY OF ROCHESTER GIS.
- SOIL TYPES ARE PER NATIONAL RESOURCES CONSERVATION SERVICES:
 - SWA - SWANTON FINE SANDY LOAM, 0 TO 3% SLOPES
 - WDA - WINDSOR LOAMY SAND, 0 TO 3% SLOPES
- FOR MORE INFORMATION ABOUT THIS SITE PLAN, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT, 31 WAKEFIELD ST., ROCHESTER, NH 03607, (603) 335-1336.
- WETLANDS WERE DELINEATED BY N.H. SOILS CONSULTANTS, INC. IN MAY 2007 AND VERIFIED BY GZA GEDENVIRONMENTAL, INC. IN MARCH 2012.

TEST PIT DATA:

PERFORMED BY: CHARLES E. KARCHER, JR.
PERFORMED ON: FEBRUARY 7, 2012 & MARCH 15, 2012

TEST PIT #1
0'-7" 10YR 3/3 SANDY LOAM
7'-14" 10YR 5/6 FINE SAND
14'-48" 10YR 6/6 FINE SAND
48'-56" 10YR 6/4 FINE SAND, REDOX
66'-132" 2.5Y 6/3 FINE SAND, PLATY, COMPACT, REDOX

ESHWAT AT 48"
WATER OBSERVED AT 102"

TEST PIT #2
0'-12" 10YR 3/3 SANDY LOAM
12'-31" 10YR 5/6 SANDY LOAM
31'-48" 10YR 5/4 FINE SAND, REDOX
48'-60" 2.5Y 5/2 FINE SAND, PLATY, COMPACT, REDOX

ESHWAT AT 31"
WATER OBSERVED AT 40"

TEST PIT #3
0'-10" 10YR 3/3 SANDY LOAM
10'-18" 10YR 5/6 SANDY LOAM
18'-27" 10YR 3/3 SANDY LOAM
27'-42" 10YR 3/6 FINE SAND
42'-48" 10YR 4/6 FINE SAND, REDOX
48'-60" 2.5Y 5/4 FINE SAND, PLATY, COMPACT, REDOX

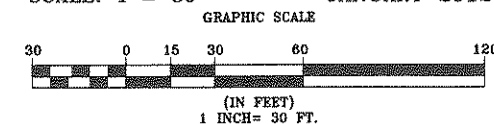
ESHWAT AT 42"
WATER OBSERVED AT 48"

MAP 138, LOTS 79 & 80
OWNER OF RECORD:
COLBY FOOTWEAR, INC.
364 ROUTE 108
SOMERSWORTH, NH 03878
BK. 2017, PG. 792

EXISTING FEATURES PLAN OAK STREET / ROUTE 125 ROCHESTER, NH

PREPARED FOR
COLBY FOOTWEAR, INC.

SCALE: 1" = 30' JANUARY 2012



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.

FINAL APPROVAL BY THE
ROCHESTER PLANNING BOARD

CERTIFIED BY _____ DATE _____

FILE NO. 288
PLAN NO. PERLIM
DWG NO. 12009\SP-2
F.B. NO. SDR

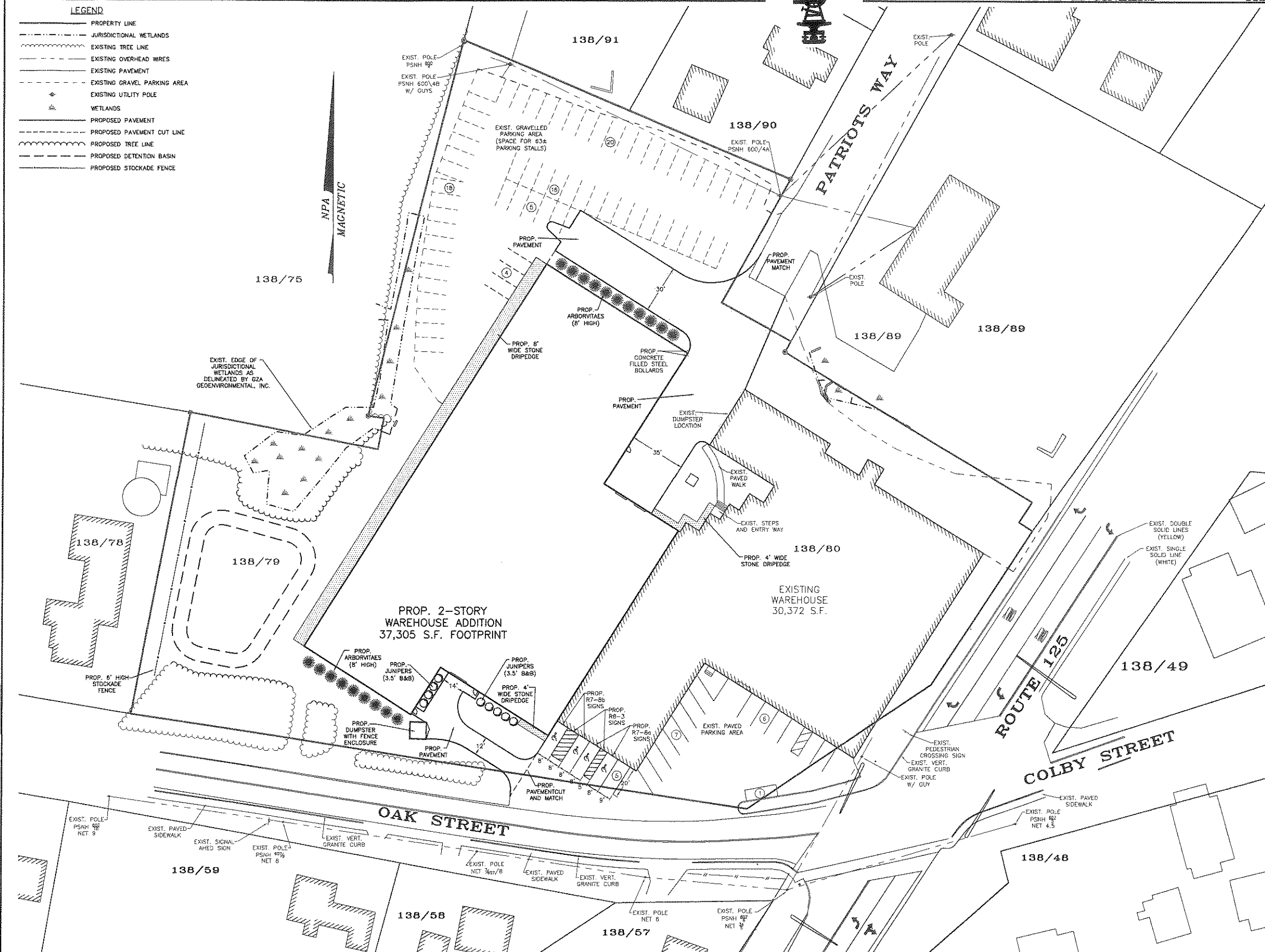
LEGEND

- PROPERTY LINE
- - - JURISDICTIONAL WETLANDS
- - - EXISTING TREE LINE
- - - EXISTING OVERHEAD WIRES
- - - EXISTING PAVEMENT
- - - EXISTING GRAVEL PARKING AREA
- - - EXISTING UTILITY POLE
- - - WETLANDS
- - - PROPOSED PAVEMENT
- - - PROPOSED PAVEMENT CUT LINE
- - - PROPOSED TREE LINE
- - - PROPOSED DETENTION BASIN
- - - PROPOSED STOCKADE FENCE

NPA
MAGNETIC



REVISIONS:

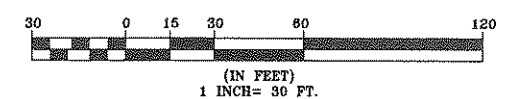


MAP 138, LOTS 79 & 80
OWNER OF RECORD:
COLBY FOOTWEAR, INC.
364 ROUTE 108
SOMERSWORTH, NH 03878
BK. 2017, PG. 792

SITE LAYOUT PLAN
OAK STREET / ROUTE 125
ROCHESTER, NH
PREPARED FOR
COLBY FOOTWEAR, INC.

SCALE: 1" = 30' JANUARY 2012

GRAPHIC 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.

FINAL APPROVAL BY THE
ROCHESTER PLANNING BOARD

CERTIFIED BY _____ DATE _____

FILE NO. 288
PLAN NO. PERLM
DWG NO. 12009/SP-2
F.B. NO. SDR

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

NORWAY PLAINS ASSOCIATES, INC.

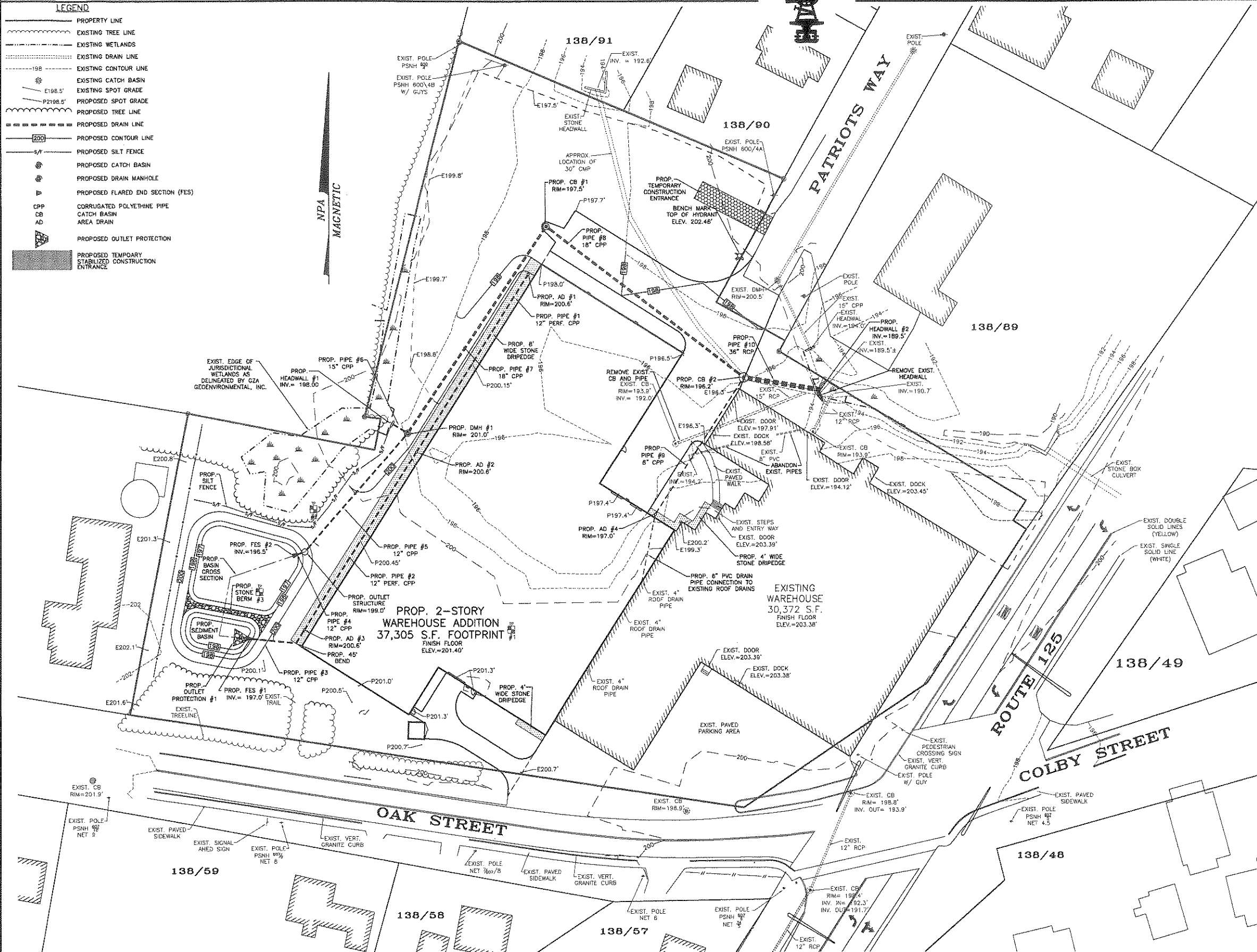
2 Continental Blvd., Rochester, N.H. 603-335-3948

LEGEND

- PROPERTY LINE
 - - - - - EXISTING TREE LINE
 - - - - - EXISTING WETLANDS
 - - - - - EXISTING DRAIN LINE
 - - - - - EXISTING CONTOUR LINE
 - - - - - EXISTING CATCH BASIN
 - - - - - EXISTING SPOT GRADE
 - - - - - PROPOSED SPOT GRADE
 - - - - - PROPOSED TREE LINE
 - - - - - PROPOSED DRAIN LINE
 - - - - - PROPOSED CONTOUR LINE
 - - - - - PROPOSED SILT FENCE
 - - - - - PROPOSED CATCH BASIN
 - - - - - PROPOSED DRAIN MANHOLE
 - - - - - PROPOSED FLARED END SECTION (FES)
 - - - - - CORRUGATED POLYETHYLENE PIPE
 - - - - - CATCH BASIN
 - - - - - AREA DRAIN
 - - - - - PROPOSED OUTLET PROTECTION
 - - - - - PROPOSED TEMPORARY STABILIZED CONSTRUCTION ENTRANCE

NPA
MAGNETIC

REVISIONS:



PROPOSED DRAINAGE TABLE

PROP. AD #1 RM = 200.6' INV. OUT = 198.4' (#1)	PROP. DMH #1 RM = 201.0' INV. IN = 194.5' (#5) INV. IN = 194.5' (#6) INV. OUT = 194.2' (#7)	PROP. PIPE #1 12" PERFORATED CPP L = 130'	PROP. PIPE #6 15" CPP L = 9'
PROP. AD #2 RM = 200.6' INV. IN = 197.8' (#1) INV. OUT = 197.8' (#2)	PROP. CB #1 RM = 197.5' INV. IN = 193.5' (#7) INV. OUT = 193.2' (#8) SUMP = 190.2'	PROP. PIPE #2 12" PERFORATED CPP L = 130'	PROP. PIPE #7 18" CPP L = 154'
PROP. AD #3 RM = 200.6' INV. IN = 197.2' (#2) INV. OUT = 197.2' (#3)	PROP. AD #4 RM = 197.0' INV. IN = 195.0' (ROOF DRAIN) INV. OUT = 195.0' (#9)	PROP. PIPE #3 12" CPP L = 54'	PROP. PIPE #8 15" CPP L = 153'
PROP. FES #1 RM = 196.0' (#3)	PROP. CB #2 RM = 196.2' INV. IN = 192.7' (#8) INV. IN = 193.5' (#9) INV. IN = 189.7' (EXISTING) INV. OUT = 189.7' (#10) SUMP = 186.7'	PROP. PIPE #4 12" CPP L = 2'	PROP. PIPE #9 8" CPP L = 100'
PROP. FES #2 RM = 195.5' (#4)	PROP. CB #3 RM = 196.2' INV. IN = 192.7' (#8) INV. IN = 193.5' (#9) INV. IN = 189.7' (EXISTING) INV. OUT = 189.7' (#10) SUMP = 186.7'	PROP. PIPE #5 12" CPP L = 95'	PROP. PIPE #10 36" RCP L = 48'
PROP. OUTLET STRUCTURE #1 RM = 199.0' INV. IN = 196.5' (#4) INV. OUT = 196.5' (#5)	PROP. HEADWALL #1 RM = 198.0' (#6)	PROP. HEADWALL #2 RM = 189.5' (#10)	

* WITH HOODED OUTLET

DRAINAGE STRUCTURE NOTES:

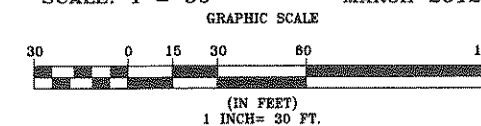
1. DRAINAGE STRUCTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS SHOWN ON SHEET C-6.
2. ALL CORRUGATED PLASTIC PIPE (CPP) USED SHALL BE DUAL WALLED HIGH DENSITY POLYETHYLENE.
3. ALL MATERIALS SHALL BE AS SPECIFIED. ANY CHANGES SHALL BE APPROVED BY THE DESIGN ENGINEER.

MAP 138, LOTS 79 & 80
 OWNER OF RECORD:
 COLBY FOOTWEAR, INC.
 364 ROUTE 108
 SOMERSWORTH, NH 03878
 BK. 2017, PG. 792

GRADING AND DRAINAGE PLAN OAK STREET / ROUTE 125 ROCHESTER, NH

PREPARED FOR
 COLBY FOOTWEAR, INC.

SCALE: 1" = 30' MARCH 2012



FILE NO. 288
 PLAN NO. PERLM
 DWG NO. 12009/SP-2
 F.B. NO. SDR

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.

FINAL APPROVAL BY THE
 ROCHESTER PLANNING BOARD

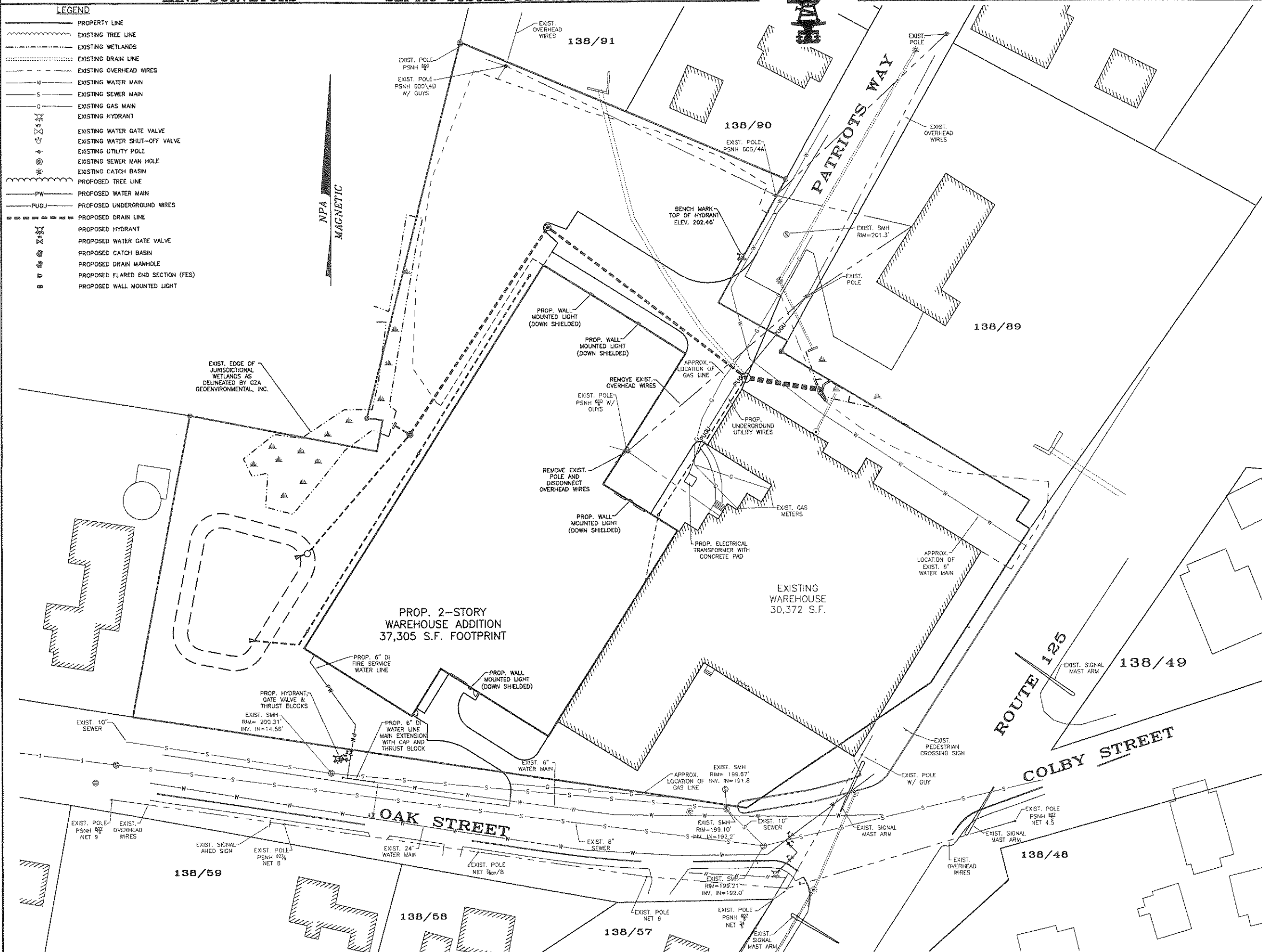
CERTIFIED BY _____ DATE _____

LEGEND

- PROPERTY LINE
- - - EXISTING TREE LINE
- - - EXISTING WETLANDS
- - - EXISTING DRAIN LINE
- - - EXISTING OVERHEAD WIRES
- - - EXISTING WATER MAIN
- - - EXISTING SEWER MAIN
- - - EXISTING GAS MAIN
- - - EXISTING HYDRANT
- - - EXISTING WATER GATE VALVE
- - - EXISTING WATER SHUT-OFF VALVE
- - - EXISTING UTILITY POLE
- - - EXISTING SEWER MAN HOLE
- - - EXISTING CATCH BASIN
- - - PROPOSED TREE LINE
- - - PROPOSED WATER MAIN
- - - PROPOSED UNDERGROUND WIRES
- - - PROPOSED DRAIN LINE
- - - PROPOSED HYDRANT
- - - PROPOSED WATER GATE VALVE
- - - PROPOSED CATCH BASIN
- - - PROPOSED DRAIN MANHOLE
- - - PROPOSED FLARED END SECTION (FES)
- - - PROPOSED WALL MOUNTED LIGHT

NPA
MAGNETIC

REVISIONS:



MAP 138, LOTS 79 & 80
OWNER OF RECORD:
COLBY FOOTWEAR, INC.
384 ROUTE 108
SOMERSWORTH, NH 03878
BK. 2017, PG. 792

UTILITY PLAN
OAK STREET / ROUTE 125
ROCHESTER, NH
PREPARED FOR
COLBY FOOTWEAR, INC.

SCALE: 1" = 30' MARCH 2012
GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 INCH = 30 FT.

FILE NO. 288
PLAN NO. PERLM
DWG NO. 12009\SP-2
F.B. NO. SDR

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

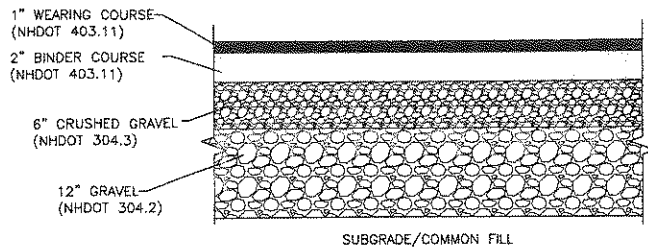
CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN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

FINAL APPROVAL BY THE
ROCHESTER PLANNING BOARD

CERTIFIED BY _____ DATE _____

NORWAY PLAINS ASSOCIATES, INC.

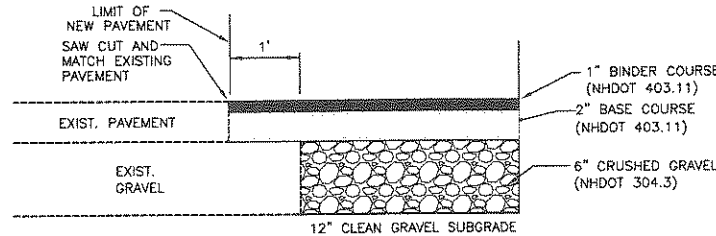
2 Continental Blvd., Rochester, N.H. 603-335-3948



- NOTES:
1. PLACE COMMON FILL IN 12 INCH LIFTS. COMPACT COMMON FILL TO 95% MAXIMUM PROCTOR DENSITY.
 2. PLACE BANK RUN GRAVEL IN MAXIMUM 8 INCH LIFTS. COMPACT TO 95% MAXIMUM PROCTOR DENSITY.
 3. PLACE CRUSHED GRAVEL IN MAXIMUM 8 INCH LIFTS. COMPACT TO 95% MAXIMUM PROCTOR DENSITY.
 4. INSTALL 2" BINDER COURSE AND 1" WEARING COURSE.

PARKING LOT CROSS-SECTION

NOT TO SCALE



PAVEMENT MATCHING DETAIL

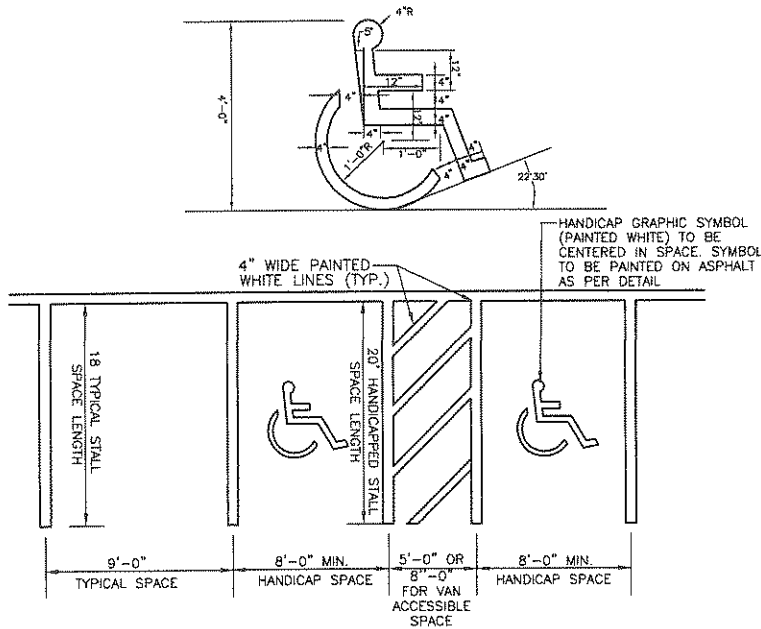
NOT TO SCALE

ITEM NO.	SIGN SIZE		TEXT	NO. SIGNS REQ'D
	HEIGHT	WIDTH		
R7-8a	18"	12"	RESERVED PARKING	2
R7-8b	18"	12"	RESERVED PARKING	2
R8-3	18"	12"	NO PARKING	2

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

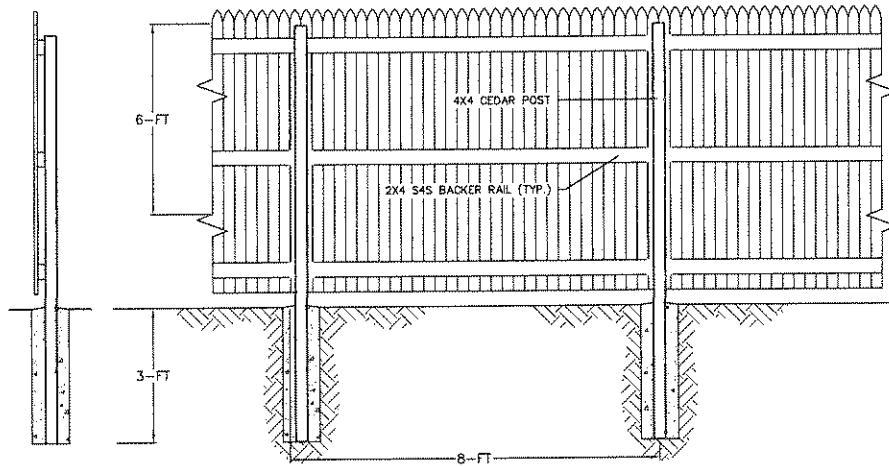
SIGN SCHEDULE

NOT TO SCALE



STALL STRIPING DETAIL

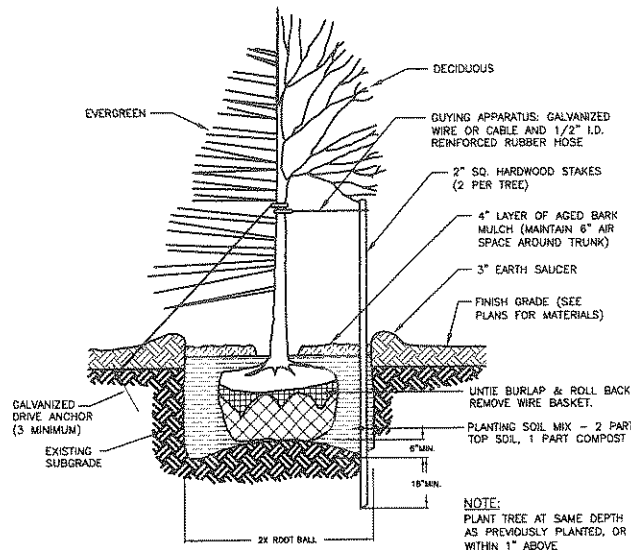
NOT TO SCALE



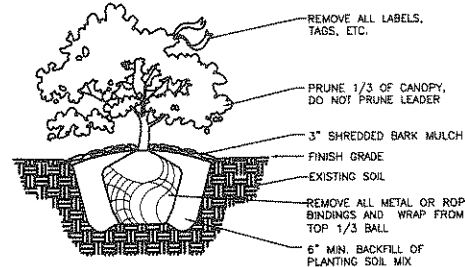
- FENCE SPECIFICATIONS:
1. FENCE POSTS SHALL BE 4"x4" CEDAR.
 2. STOCKADE PANELS SHALL BE 6'-FT X 8'-FT #1 NORTHERN WHITE CEDAR.
 3. PICKETS SHALL BE 1"x3"x8'-FT NORTHERN WHITE CEDAR.
 4. BACKER RAILS SHALL BE 2"x4"x8'-FT S4S SQUARE END.

TYPICAL WOODEN STOCKADE DETAIL

NOT TO SCALE

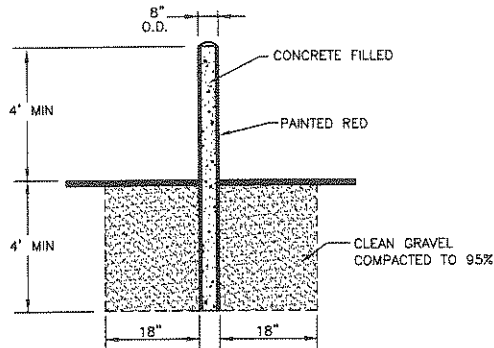


TREE PLANTING DETAIL



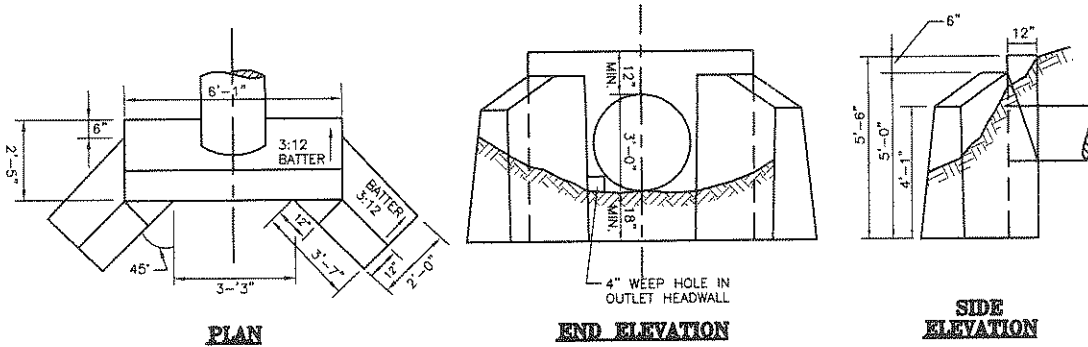
SHRUB PLANTING DETAIL

NOT TO SCALE



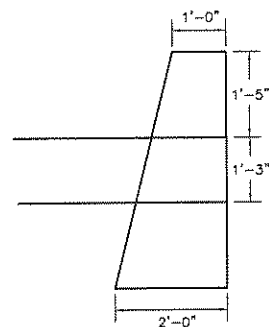
STEEL BOLLARD DETAIL

NOT TO SCALE



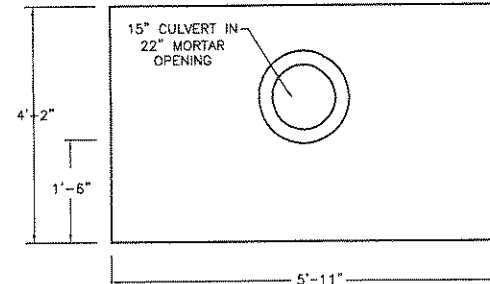
3-SIDED CONCRETE HEADWALL DETAIL

NOT TO SCALE



PRE-CAST CONCRETE HEADWALL DETAIL

NOT TO SCALE



CONSTRUCTION DETAILS
OAK STREET / ROUTE 125
ROCHESTER, NH

PREPARED FOR
COLBY FOOTWEAR, INC.

SCALE: AS SHOWN MARCH 2012

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. 288
PLAN NO. PERLIM
DWG NO. 12009/SP-2
F.B. NO. SDR

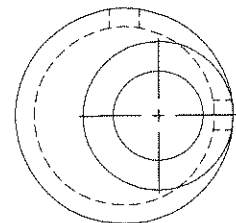
31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

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



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 HYDROLOGICAL 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.

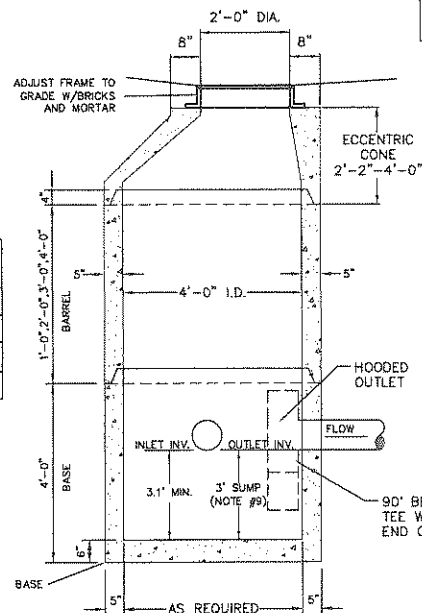


PLAN VIEW

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

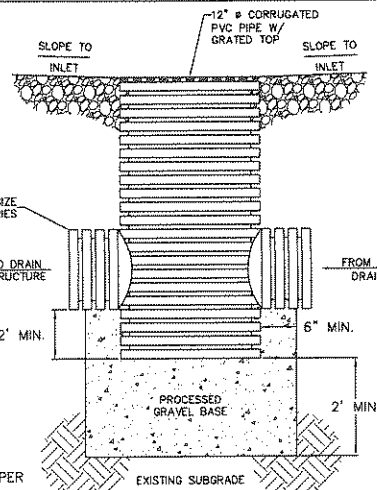
- CONCRETE: 4,000 PSI AFTER 28 DAYS.
- REINFORCING: SHALL BE PROVIDED FOR H-20 LOADING.
- SHOULDER JOINTS SEALED WITH 1 STRIP OF BUTYL RUBBER SEALANT.
- PIPE OPENINGS CAST IN AS REQUIRED.
- RISER HEIGHT VARIES 1', 2', 3' OR 4' TO REACH DESIRED DEPTH.
- PIPE CONNECTIONS SHALL BE MORTARED. PRECAST SECTIONS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



SECTION VIEW

PRE-CAST REINFORCED CATCH BASIN

NOT TO SCALE

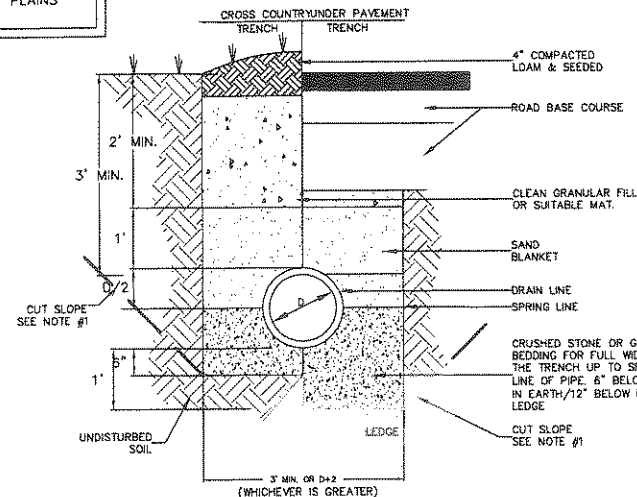


NOTES

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

AREA DRAIN DETAIL

NOT TO SCALE

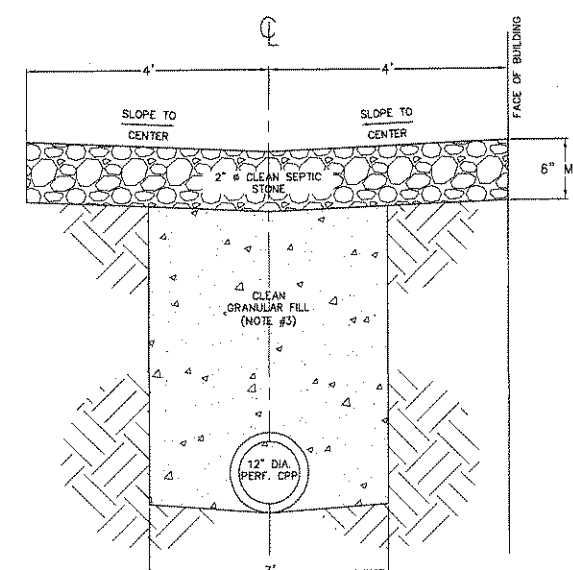


NOTES

- 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.

DRAINAGE PIPE TRENCH INSTALLATION DETAIL

NOT TO SCALE

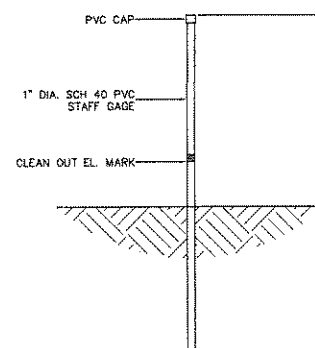


NOTES

- THE DRIP EDGE SHALL BE 8 FT. WIDE, 6 INCHES THICK, 2 INCH DIAMETER SEPTIC STONE.
- THE UNDERDRAIN SHALL BE 12 INCH DIAMETER PERFORATED CORRUGATED PLASTIC PIPE (ADS OR EQUAL).
- USE CLEAN GRANULAR FILL FOR THE MATERIAL SURROUNDING THE UNDERDRAIN.

DRIP EDGE AND UNDERDRAIN DETAIL

NOT TO SCALE

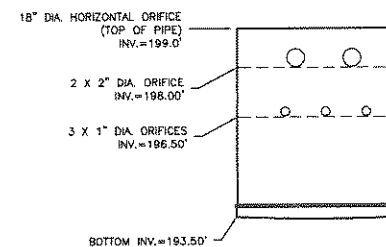


NOTES

- STAFF GAGE TO BE SCH 40 PVC DRIVEN OR PLACED IN GROUND A MINIMUM 3'-FT.
- CLEAN OUT MARK ON STAFF TO BE RED PAINT SET 6-INCHES FROM BOTTOM OF BASIN.

SEDIMENT STAFF GAGE DETAIL

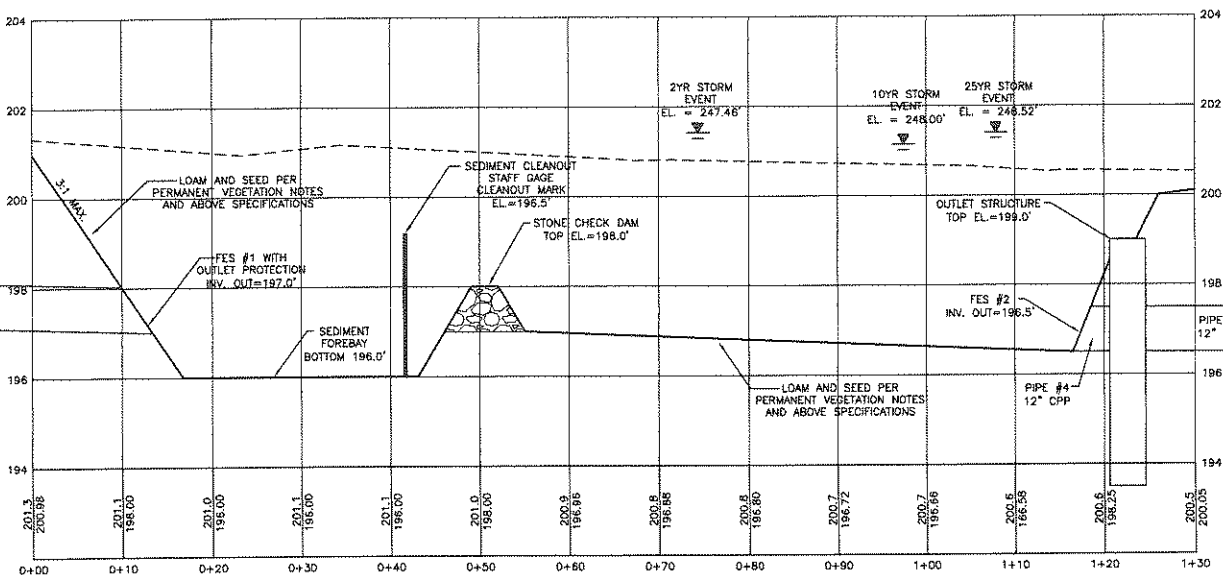
NOT TO SCALE



DETENTION BASIN

ORIFICE SCHEMATIC DETAIL

NOT TO SCALE



DETENTION BASIN CROSS SECTION

1" = 10' (HORZ.) & 1" = 2' (VERT.)

SEDIMENT FOREBAY:

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-8. USING 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 = 196.5.

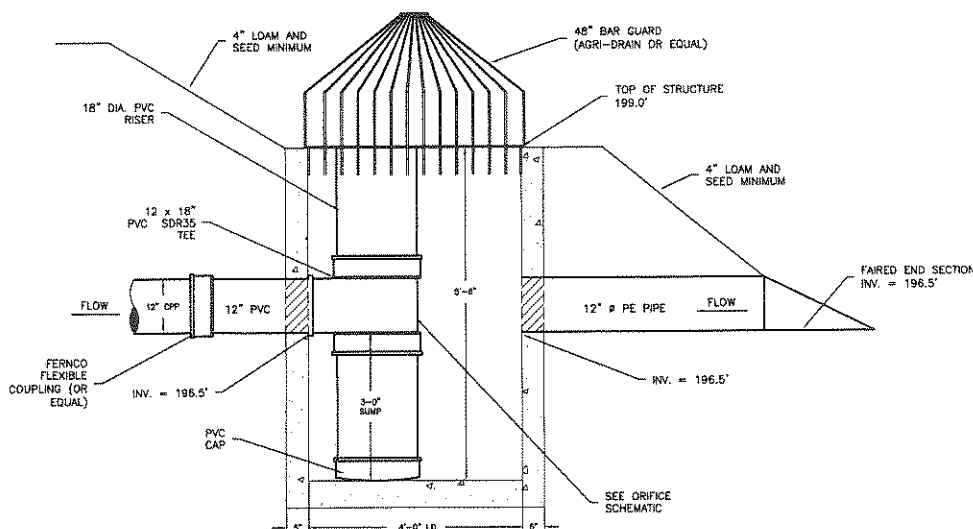
DETENTION BASIN:

SPECIFICATIONS:

- DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE DETENTION BASIN.
- DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE DETENTION BASIN.
- CONSTRUCT THE DETENTION BASIN TO THE GRADES DEPICTED ON THE PLAN AND CROSS-SECTION.
- LOAM AND SEED THE SLOPES AND BOTTOM OF THE DETENTION BASIN AS PRESCRIBED IN THE "PERMANENT VEGETATION" NOTES FOUND ON SHEET C-8. USING SEED MIXTURE = A.
- DO NOT PLACE DETENTION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

MAINTENANCE REQUIREMENTS:

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

DETENTION BASIN
OUTLET STRUCTURE DETAIL

NOT TO SCALE

FILE NO. 288
PLAN NO. PERLM
DWG NO. 12009/SP-2
F.B. NO. SDR

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

NORWAY PLAINS ASSOCIATES, INC.

DRAINAGE AND DETENTION
BASIN DETAILSOAK STREET / ROUTE 125
ROCHESTER, NH

PREPARED FOR

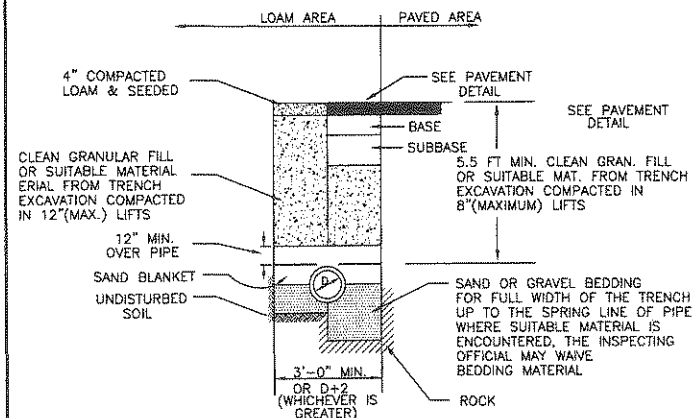
COLBY FOOTWEAR, INC.

SCALE: AS SHOWN

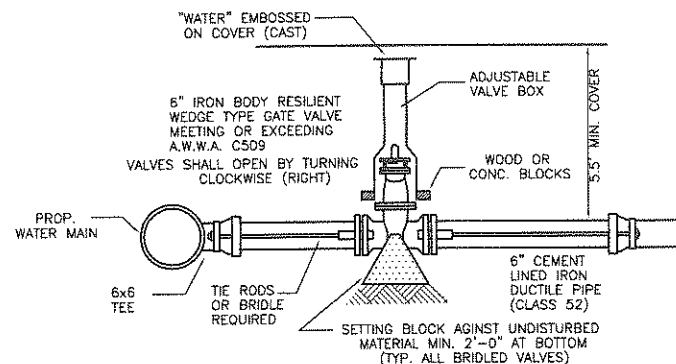
MARCH 2012

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

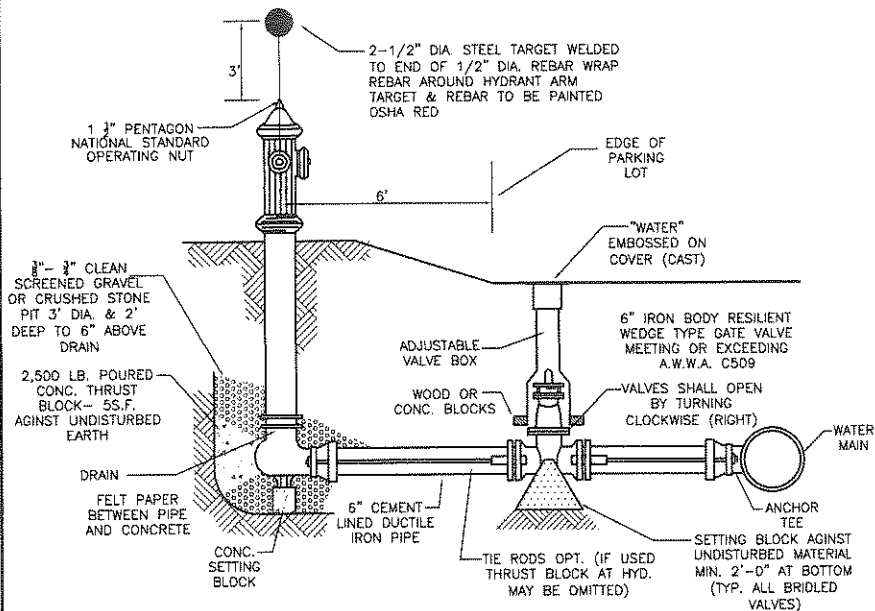
C-6



**TRENCH DETAIL FOR
WATER PIPE**
NOT TO SCALE

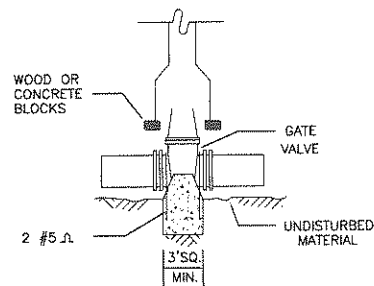


WATER MAIN CONNECTION
NOT TO SCALE

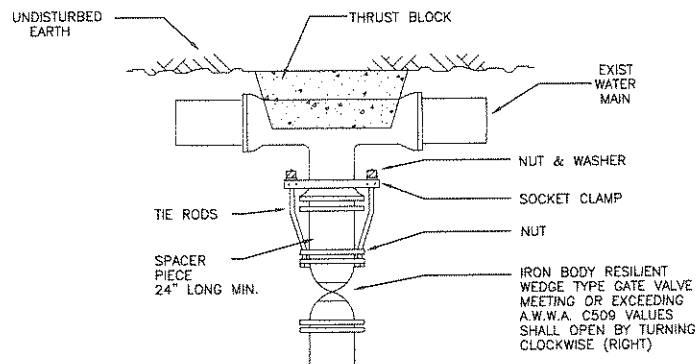


TYPICAL HYDRANT SECTION
NOT TO SCALE

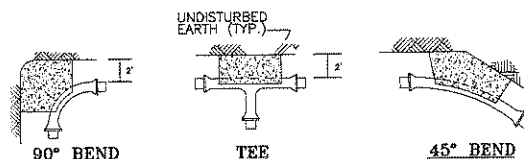
- NOTES:
- HYDRANTS ARE TO BE KENNEDY GUARDIAN MODEL #K81A (OR EQUAL) WITH 6" MECHANICAL JOINT SHOE WITH BREAK FLANGE TO BE PROVIDED WITH DRAIN-OPENING CLOCKWISE (RIGHT).
 - HYDRANTS TO BE OSHA RED
 - HYDRANTS SHALL HAVE ONE 5 INCH PUMPER OUTLET AND TWO 2 1/2-INCH HOSE OUTLETS.
 - HYDRANT SHALL BE GATED WITH A 5 INCH BOTTOM VALVE.
 - HYDRANTS SHALL MEET OR EXCEED ALL REQUIREMENTS OF A.W.W.A. STANDARD SPEC. C502



**TYPICAL AT NON
BRIDLED VALVE**
NOT TO SCALE



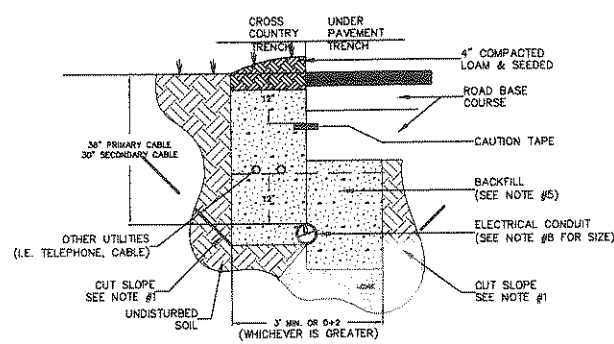
TYPICAL VALVE CONNECTION
NOT TO SCALE



**WATER MAIN
THRUST BLOCK DETAILS**
NOT TO SCALE

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

PIPE SIZE	90° BEND	TEE	PLUG	45° BEND	22 1/2°/27° SMALLER
6"	5	4	3	2	2
8"	10	8	6	6	3
12"	24	18	8	12	8



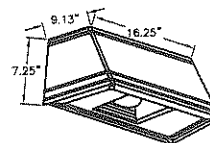
- NOTES:
- ALL NON-METALLIC CONDUIT AND FITTINGS SHALL BE ELECTRICAL GRADE, SCHEDULE 40 PVC, AND SHALL CONFORM TO THE APPLICABLE SECTIONS OF NFPA 70-1990 AND BE UL LISTED. ONLY GRAY-COLORED CONDUIT WILL BE ACCEPTED. ANY PVC CONDUIT NOT HAVING THE PROPER NEMA AND UL MARKINGS WILL NOT BE ACCEPTED. ALL STEEL CONDUITS SHALL CONFORM TO ASTM A152 AND BE RIGID GALVANIZED STEEL. ALL PVC JOINTS MUST BE CEMENTED. 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 PSNH DESIGNER, THE SWEEP-PVC JOINT IS NOT SUBJECT TO FAILURE DURING CABLE PULLING.
 - THE CONDUIT SHALL CROSS PAVED AREAS AT APPROXIMATELY 90 DEGREES.
 - BACKFILL MAY BE MADE WITH EXCAVATED MATERIAL OR COMPARABLE, UNLESS MATERIAL IS DEEMED UNSUITABLE BY PSNH. BACKFILL SHALL BE FREE OF FROZEN LUMPS, ROCKS, DEBRIS, AND RUBBISH. ORGANIC MATERIAL SHALL NOT BE USED AS BACKFILL. BACKFILL SHALL BE THOROUGHLY COMPACTED IN 8-INCH LAYERS.
 - A SUITABLE PULL STRING, CAPABLE OF 200 POUNDS OF PULL, MUST BE INSTALLED IN THE CONDUIT BEFORE PSNH IS NOTIFIED TO INSTALL CABLE. THE STRING SHOULD BE BLOWN INTO THE CONDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING TO THE CONDUIT.
 - ROUTING OF THE CONDUIT AND INSPECTION PRIOR TO BACKFILL WILL BE PROVIDED BY PSNH. INSTALLATION OF THE CONDUIT WILL BE DONE BY THE CONTRACTOR. THE PSNH 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 SYSTEM 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 PSNH ARE 3-INCH FOR SINGLE PHASE PRIMARY AND SECONDARY VOLTAGE CABLES, 4-INCH FOR THREE PHASE SECONDARY, AND 5-INCH FOR THREE PHASE PRIMARY.
 - 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-FT. INSTALLATIONS DEEPER THAN 4-FT REQUIRE THE USE OF A TRENCH BOX.

**ELECTRICAL & UNDERGROUND UTILITY
TRENCH INSTALLATION DETAIL**
NOT TO SCALE

- WALL PACK LIGHTING SPECIFICATIONS:
- ALL SITEWORK SHALL CONFORM TO CITY OF ROCHESTER STANDARDS AND LOCAL AUTHORITIES HAVING JURISDICTION.
 - ALL MATERIAL WORKMANSHIP SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING STANDARDS, NEW HAMPSHIRE ELECTRIC CODE, FIRE PROTECTION ASSOCIATION, NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION.
 - ALL EXTERIOR CONDUITS FOR LIGHTING SHALL BE 1 1/2" DIAMETER PVC SCHEDULE 40. ALL ELBOWS SHALL BE GALVANIZED RIGID STEEL. ALL CONDUITS UNDER ROADWAYS AND PARKING AREAS SHALL HAVE MINIMUM COVER OF THREE (3) FEET.
 - ALL UNDERGROUND CONDUITS WILL HAVE NYLON PULL ROPE TO FACILITATE PULLING IN CABLES.
 - ALL NO. 8 WIRE AND LARGER SHALL BE TYPE THHN COPPER, NO. 8 WIRE AND SMALLER SHALL BE THHN COPPER.
 - PROVIDE FUSING ON ALL LUMINAIRES. FUSES TO BE LOCATED AT POLE HANDHOLE. ALL LUMINAIRES 277 VOLT.

WALL PACK CATALOG INFORMATION:

LUMINAIRE: WST 175W (CLEAR LAMP)
DESCRIPTION: BUILDING MOUNTED LUMINAIRE, 175 WATT, METAL HALIDE, CLEAR LAMP, CUTOFF
MOUNTING HT: 18-FT (ABOVE FINISHED GROUND)



WALL PACK LIGHT DETAIL
NOT TO SCALE

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 PLAN SHOWS ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT ON THE DATE OF THE SURVEY. THE ABSENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. FROM THESE PLAN, BUT IN EXISTENCE IS NOT INTENDED OR IMPLIED.
- 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, POLYWRAPPED.
 - 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 5.5'.
 - ALL WATER FITTINGS SHALL BE CLASS 350.
 - PROPOSED WATER GATE VALVE SHALL OPEN COUNTER CLOCKWISE (RIGHT).
- WORK TO CONNECT INTO THE WATER REQUIRES A PERMIT FROM THE ROCHESTER PUBLIC WORKS DEPARTMENT. CONTRACTORS ARE TO BE PRE-QUALIFIED.
- ALL UTILITIES SHALL BE BURIED UNDERGROUND AS REQUIRED BY THE CITY OF ROCHESTER AND THE UTILITY COMPANIES.
- WATER AND SEWER LINES SHALL BE INSTALLED A MINIMUM OF 10-FT APART HORIZONTALLY.
- WHERE SEWER AND WATER LINES MUST CROSS, SEWER PIPE JOINTS SHALL BE LOCATED A MINIMUM 9-FT 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.

FILE NO. 288
PLAN NO. PERLM
DWG NO. 12009\SP-2
F.B. NO. SDR

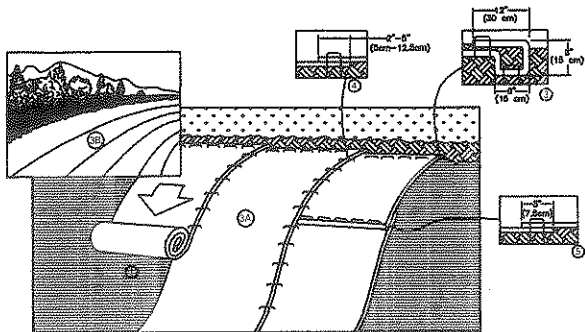
31 Mooney Street, Alton, N.H. 603-875-3948

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.

NORWAY PLAINS ASSOCIATES, INC.

UTILITY DETAILS
OAK STREET / ROUTE 125
ROCHESTER, NH
PREPARED FOR
COLBY FOOTWEAR, INC.
SCALE: AS SHOWN MARCH 2012

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

**NORTH
AMERICAN
GREEN**EROSION CONTROL PRODUCTS
Guaranteed SOLUTIONS14849 HIGHWAY 41 NORTH
EVANSVILLE, IN 47725
800-772-3040
www.namgreen.com**TEMPORARY EROSION CONTROL BLANKET DETAIL**

NOT TO SCALE

- MAINTENANCE REQUIREMENTS:**
1. ALL BLANKET AND MATS SHOULD BE INSPECTED WEEKLY DURING THE CONSTRUCTION PERIOD, AND AFTER ANY RAINFALL EXCEEDING 1/2 INCH IN A 24-HOUR PERIOD.
 2. ANY FAILURE SHOULD 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 RESEDED, 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" (30cm) OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP'S 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 SHOULD 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 SPICED 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. GRADE AND SHAPE AREA IF INSTALLATION.
 - B. REMOVE ALL ROCKS, CLOUDS, TRASH, VEGETATIVE OR OTHER OBSTRUCTIONS SO THAT THE INSTALLED BLANKETS WILL HAVE DIRECT CONTACT WITH THE SOIL.
 - C. PREPARE SEEDBED BY LOOSENING 2-3 INCHES OF TOPSOIL ABOVE FINAL GRADE.
 - D. INCORPORATE AMENDMENTS, 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 OFTEN SPECIFIED FOR TURF REINFORCEMENT APPLICATIONS. WHEN SEEDING PRIOR TO BLANKET INSTALLATION, ALL CHECK SLOTS AND OTHER AREAS DISTURBED DURING INSTALLATION MUST BE RESEDED.
 - B. WHEN SOIL FILLING IS SPECIFIED, SEED THE MATTING AND THE ENTIRE DISTURBED AREA AFTER INSTALLATION AND PRIOR TO FILLING THE MAT WITH SOIL.

MAINTENANCE REQUIREMENTS:

1. FENCES SHOULD BE INSPECTED AND MAINTAINED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALLS.
2. SEDIMENT DEPOSITION SHOULD 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 READILY TRANSPORTED BACK TOWARD THE SILT FENCE.
3. SILT FENCES SHOULD BE REPAIRED IMMEDIATELY IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHOULD BE REPLACED WITH A TEMPORARY CHECK DAM.
4. SHOULD 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 SHOULD BE REPLACED PROMPTLY.
5. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHOULD BE DRESSED TO CONFORM TO THE EXISTING GRADE PREPARED AND SEEDING.
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 SHOULD BE REPAIRED PERIODICALLY AS REQUIRED TO MAINTAIN EFFECTIVENESS.

CONSTRUCTION SPECIFICATIONS:

1. FENCES SHOULD 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 SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.
2. THE MAXIMUM CONTRIBUTING DRAINAGE AREA ABOVE THE FENCE SHOULD BE LESS THAN 1A ACRE PER 100 LINEAR FEET OF FENCE.
3. THE MAXIMUM LENGTH OF SLOPE ABOVE THE FENCE SHOULD BE 100 FEET.
4. THE MAXIMUM SLOPE ABOVE THE FENCE SHOULD BE 2:1.
5. FENCES SHOULD BE INSTALLED FOLLOWING THE CONTOUR OF THE LAND AS CLOSELY AS POSSIBLE, AND
 - A. THE ENDS OF THE FENCE SHOULD BE FLARED UPSLOPE.
 - B. THE FABRIC SHOULD 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 SHOULD BE EMBEDDED WITH A MINIMUM THICKNESS OF 8 INCHES OF 3/4-INCH STONE.
 - C. THE SOIL SHOULD BE COMPACTED OVER THE EMBEDDED FABRIC.
 - D. SUPPORT POSTS SHOULD BE SIZED AND ANCHORED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS WITH MAXIMUM POST SPACING OF 6 FEET.
 - E. ADJOINING SECTIONS OF THE FENCE SHOULD BE OVERLAPPED BY A MINIMUM OF 6 INCHES (24 INCHES IS PREFERRED), FOLDED AND STAPLED TO A SUPPORT POST. IF METAL POSTS ARE USED, FABRIC SHOULD BE WIRE-TIED DIRECTLY TO THE POSTS WITH THREE DIAGONAL TIES.
6. SILT FENCING SHOULD NOT BE STAPLED OR NAILED TO TREES.
7. THE FILTER FABRIC SHOULD BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN AND SHOULD BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER.
8. THE FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 DEGREES FAHRENHEIT TO 120 DEGREES FAHRENHEIT.
9. POSTS FOR SILT FENCES SHOULD BE EITHER 4-INCH DIAMETER WOOD OR 1.33 POUNDS PER LINEAR FOOT STEEL WITH A MINIMUM LENGTH OF 5 FEET. STEEL POSTS SHOULD HAVE PROJECTIONS FOR FASTENING WIRE TO THEM. POSTS SHOULD BE PLACED ON THE DOWN SLOPE SIDE OF THE FABRIC.
10. THE HEIGHT OF A SILT FENCE SHOULD NOT EXCEED 36 INCHES AS HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.
11. THE FILTER FABRIC SHOULD 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 SHOULD BE SPICED 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 SHOULD NOT EXCEED 6 FEET.
14. A TRENCH SHOULD 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 SHOULD BE STAPLED OR WIRE TO THE POST, AND 8 INCHES OF THE FABRIC SHOULD BE EXTENDED INTO THE TRENCH. THE FABRIC SHOULD NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
16. THE TRENCH SHOULD 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 "PLOW" OR SLICE THE SILT FENCE MATERIAL INTO THE SOIL. THE SLICING METHOD MINIMALLY DISRUPTS THE SOIL UPWARD AND SLIGHTLY DISPLACES THE SOIL, MAINTAINING THE SOIL'S PROFILE AND CREATING AN OPTIMAL CONDITION FOR SUBSEQUENT MECHANICAL COMPACTION.
18. SILT FENCES SHOULD BE INSTALLED WITH "SMILES" OR "J-HOOKS" TO REDUCE THE DRAINAGE AREA THAT ANY SEGMENT WILL IMPOUND.
19. THE ENDS OF THE FENCE SHOULD BE "TURNED UPHILL."
20. SILT FENCES PLACED AT THE TOE OF A SLOPE SHOULD BE SET AT LEAST 5 FEET FROM THE TOE TO ALLOW SPACE FOR SHALLOW PONDING AND TO ALLOW FOR MAINTENANCE ACCESS WITHOUT DISTURBING THE SLOPE.
21. SILT FENCES SHOULD 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

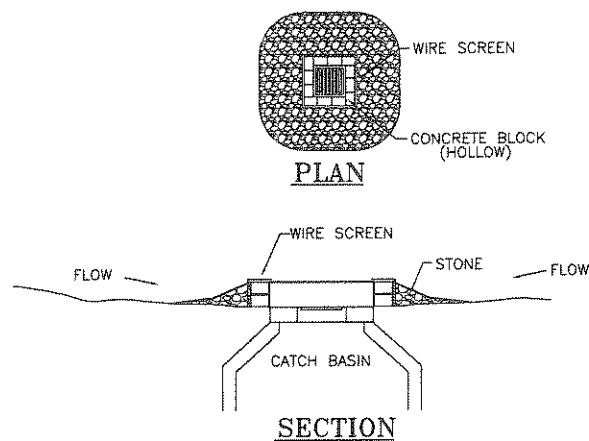
SPECIES	PER ACRE BUSHELS (BU) OR POUNDS (LBS.)	PER 1,000-SF	REMARKS
WINTER RYE	2.5 BU OR 112 LBS.	2.5 LBS.	BEST FOR FALL SEEDING. SEED FROM AUGUST 15 TO SEPTEMBER 15 FOR BEST COVER. SEED TO A DEPTH OF 1 INCH.
OATS	2.5 BU OR 80 LBS.	2.0 LBS.	BEST FOR SPRING SEEDING. SEED NO LATER THAN MAY 15 FOR SUMMER 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)

FILE NO. 288
PLAN NO. PERLIM
DWG NO. 12009\SP-2
P.B. NO. SDR

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

NORWAY PLAINS ASSOCIATES, INC.**CONSTRUCTION SPECIFICATIONS:**

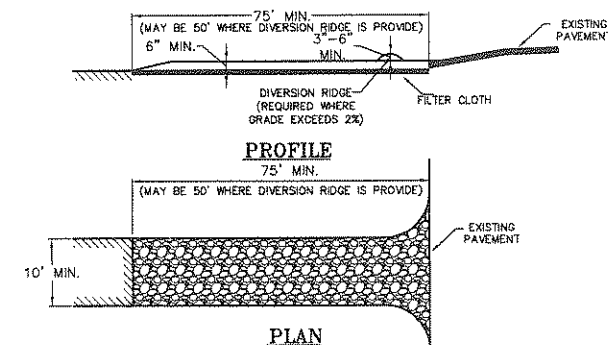
1. PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDE IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET, WITH THE ENDS OF ADJACENT BLOCKS ABUTTING. THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING ON DESIGN NEEDS, BY STACKING COMBINATIONS OF 4-INCH, 8-INCH AND 12-INCH WIDE BLOCKS. THE BARRIER OF BLOCKS SHALL BE AT LEAST 12 INCHES HIGH AND NO GREATER THAN 24 INCHES HIGH.
2. WIRE MESH SHALL BE PLACED OVER THE OUTSIDE VERTICAL FACE (WEBBING) OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED.
3. STONE SHALL BE PILED AGAINST THE WIRE TO THE TOP OF THE BLOCK BARRIER, AS SHOWN IN FIGURE 16.7. STONE GRADATION SHALL BE WELL GRADED WITH THE MAXIMUM STONE SIZE OF 6 INCHES AND MINIMUM STONE SIZE OF 1 INCH.
4. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCKS, CLEANED AND REPLACED.

MAINTENANCE

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

BLOCK AND GRAVEL DROP INLET SEDIMENT FILTER

NOT TO SCALE

**MAINTENANCE REQUIREMENTS:**

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

CONSTRUCTION SPECIFICATIONS:

1. THE MINIMUM STONE USED SHOULD BE 3-INCH CRUSHED STONE.
2. THE MINIMUM LENGTH OF THE PAD SHOULD BE 75 FEET, EXCEPT THAT THE MINIMUM LENGTH MAY BE REDUCED TO 50 FEET IF A 3-INCH TO 6-INCH BEAM IS INSTALLED AT THE ENTRANCE OF THE PROJECT SITE.
3. THE PAD SHOULD BE THE FULL WIDTH OF CONSTRUCTION ACCESS ROAD OR 10 FEET, WHICHEVER IS GREATER.
4. THE PAD SHOULD SLOPE AWAY FROM THE EXISTING ROADWAY.
5. THE PAD SHOULD BE AT LEAST 6 INCHES THICK.
6. THE GEOTEXTILE FILTER FABRIC SHOULD BE PLACED BETWEEN THE STONE PAD AND THE EARTH SURFACE BELOW THE PAD.
7. THE PAD SHOULD 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 SHOULD BE INTERCEPTED AND PIPED BENEATH THE PAD, AS NECESSARY, WITH SUITABLE OUTLET PROTECTION.

TEMPORARY CONSTRUCTION ENTRANCE

NOT TO SCALE



REVISIONS:

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 SHOULD BE DIVERTED FROM THE SEEDBED AREA.
4. ON SLOPES 4:1 OR STEEPER, THE FINAL PREPARATION SHOULD INCLUDE CREATING HORIZONTAL GROOVES PERPENDICULAR TO THE DIRECTION OF THE SLOPE TO CATCH SEED AND REDUCE RUNOFF.

SEEDING PREPARATION:

1. STONES AND TRASH SHOULD 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 SHOULD BE APPLIED DURING THE GROWING SEASON.
4. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL FERTILIZER AND LIMESTONE MAY BE APPLIED AT THE FOLLOWING RATES:

LIMESTONE APPLICATION RATE = 3 TONS/ACRE (138 LB./1,000-SF)*
EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDEFERTILIZER APPLICATION RATE = 600 LB./ACRE (13.8 LB./1,000-SF)
*LOW PHOSPHATE FERTILIZER (N-P205-K20) OR EQUIVALENT

5. FERTILIZER SHOULD BE RESTRICTED TO LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 AND 250-FT FROM A SURFACE WATER BODY. NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25-FT OF A SURFACE WATER BODY. THESE ARE THE REQUIREMENTS FOR ANY WATER BODY PROTECTED BY THE COMPREHENSIVE SHORELAND PROTECTION ACT.

SEEDING:

1. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDRO SEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM 1/4 TO 1/2 INCH. HYDROSEEDING THAT INCLUDES MULCH MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
2. TEMPORARY SEED SHOULD TYPICALLY OCCUR PRIOR TO SEPTEMBER 15.
3. AREAS SEEDING BETWEEN MAY 15 AND AUGUST 15 SHOULD 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 SHOULD BE ACHIEVED PRIOR TO OCTOBER 15. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT OTHER TEMPORARY STABILIZATION MEASURES FOR OVER WINTER PROTECTION.

MAINTENANCE REQUIREMENTS:

1. TEMPORARY SEEDING SHOULD BE INSPECTED WEEKLY AFTER ANY RAINFALL EXCEEDING 1/2 INCH IN 24 HOURS ON ACTIVE CONSTRUCTION SITES. TEMPORARY SEEDING SHOULD 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 SHOULD BE RESEDED 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 SHOULD BE IMPLEMENTED.
3. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHOULD BE MADE AND AREAS SHOULD BE RESEDED, WITH OTHER TEMPORARY MEASURES (I.E. MULCH, ETC.) USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.

TEMPORARY EROSION AND SEDIMENTATION CONTROL DETAILS

OAK STREET / ROUTE 125

ROCHESTER, NH

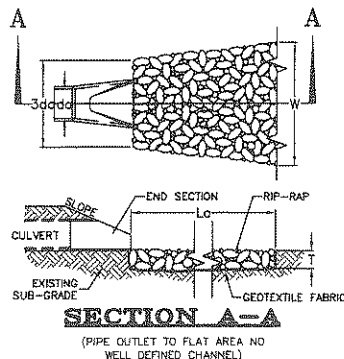
PREPARED FOR

COLBY FOOTWEAR, INC.

SCALE: AS SHOWN

MARCH 2012

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

**RIP-RAP GRADATION**

$d_{50} = 3"$

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

APRON DIMENSION TABLE

OUTLET PROT. #	PIPE OUTLET	W ₀	W	L ₀	T	d ₅₀
#1	12" CPP INLET INTO BASIN 1	3.00	13	9'	9"	3"

NOTES:

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

CONSTRUCTION SPECIFICATIONS:

- PREPARE THE SUB-GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP-RAP TO THE GRAPES SHOWN ON THE PLANS.
- MINIMUM OF SAND/GRAVEL BEDDING OR GEOTEXTILE FABRIC REQUIRED UNDER ALL ROCK RIP-RAP.
- THE ROCK OR GRAVEL USED FOR FILTER OR RIP-RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
- 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.
- 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 SIZE.
- 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:

- 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.
- THE CHANNEL IMMEDIATELY DOWNSTREAM FROM THE OUTLET SHOULD BE CHECKED TO SEE THAT NO EROSION IS OCCURRING.
- 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:**

- APPLY DUST CONTROL MEASURES AS NECESSARY TO MAINTAIN CONTROL OF DUST ON SITE.
- WATER APPLICATION:**
 - MOISTEN EXPOSED SOIL SURFACES PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.
 - AVOID EXCESSIVE APPLICATION OF WATER THAT WOULD RESULT IN MOBILIZING SEDIMENT AND SUBSEQUENT DEPOSITION IN NATURAL WATERBODIES.
- STONE APPLICATION:**
 - COVER SURFACE WITH CRUSHED OR COARSE GRAVEL.
 - IN AREAS NEAR WATERWAYS USE ONLY CHEMICALLY STABILIZED OR WASHED AGGREGATE.
- 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.)

PERMANENT VEGETATION:**SPECIFICATIONS:****SITE PREPARATION:**

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

SEEDBED PREPARATION:

- WORK LIME 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 SHOULD BE ON THE GENERAL CONTOUR. CONTRAIVE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY AND SILT SOILS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
- REMOVE FROM THE SURFACE ALL STONES ZINCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, CONCRETE CLODS, LUMPS, TRASH OR OTHER UNSUITABLE MATERIAL.
- INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE TILLED AND FIRMED AS ABOVE.
- WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
- IF APPLICABLE, FERTILIZER AND ORGANIC SOIL AMENDMENTS SHOULD BE APPLIED DURING THE GROWING SEASON.
- APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER AND LIMESTONE MAY BE APPLIED AT THE FOLLOWING RATES:

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

*EQUIVALENT TO 50% CALCIUM SULFIDE MAGNESIUM OXIDE

FERTILIZER APPLICATION RATE = 600 LB./ACRE (13.8 LB./1,000-SF)*

*LOW PHOSPHATE FERTILIZER (N-P205-K20) OR EQUIVALENT

- FERTILIZER SHOULD BE RESTRICTED TO LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 AND 250-FT FROM A SURFACE WATER BODY. NO FERTILIZER EXCEEDS SHOULD BE APPLIED WITHIN 25-FT OF A SURFACE WATER BODY. THESE ARE THE REQUIREMENTS FOR ANY WATER BODY PROTECTED BY THE COMPREHENSIVE SHORELAND PROTECTION ACT.

SEEDING:

- INOCULATE ALL LEGUME SEED WITH THE CORRECT TYPE OF INOCULANT.
- APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL CULTPACKER 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 CULTPACKER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHOULD BE FIRMLY FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG.
- SPRING SEEDING USUALLY GIVES THE BEST RESULTS FOR ALL SEED MIXES OR WITH LEGUMES. PERMANENT SEEDING SHOULD BE COMPLETED 45 DAYS PRIOR TO FIRST KILLING FROST. WHEN DROWN VETCH IS SEEDING IN LATE SUMMER AT LEAST 30% OF THE SEED SHOULD BE HARD SEED (UNSCARIFIED). IF SEEDING CANNOT BE DONE WITHIN THE SPECIFIED SEEDING DATES, MULCH ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE DESCRIBED IN THE NHSM, VOL. 3, AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
- AREAS SEEDING BETWEEN MAY 15 AND AUGUST 15 SHOULD BE COVERED WITH HAY OR STRAW MULCH ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE DESCRIBED IN THE NHSM, VOL. 3.
- VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA SHOULD BE ACHIEVED PRIOR TO OCTOBER 15. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT OTHER TEMPORARY STABILIZATION MEASURES FOR OVER WINTER PROTECTION.

HYDROSEEDING:

- 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.
- SLOPES MUST BE NO STEEPER THAN 2:1 (2 FEET HORIZONTALLY BY 1 FOOT VERTICALLY). LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF FIBER MULCH ON CRITICAL AREAS IS NOT RECOMMENDED (UNLESS IT IS USED TO HOLD STRAW OR HAY). BETTER PROTECTION IS GAINED BY USING STRAW MULCH AND HOLDING IT WITH ADHESIVE MATERIALS OR 500 POUNDS PER ACRE OF WOOD FIBER MULCH.
- SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.

MAINTENANCE REQUIREMENTS:

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

PERMANENT VEGETATION SEEDING RECOMMENDATIONS

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

SOURCES:

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

STOCKPILE PRACTICES:

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

PROTECTION OF INACTIVE STOCKPILES:

- INACTIVE SOIL STOCKPILES SHOULD 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.
- INACTIVE STOCKPILES OF CONCRETE RUBBLE, ASPHALT CONCRETE RUBBLE, AGGREGATE MATERIALS, AND SIMILAR MATERIALS SHOULD BE PROTECTED WITH TEMPORARY SEDIMENT PERIMETER BARRIERS (I.E. SILT FENCE, ETC.) AT ALL TIMES. IF THE MATERIALS ARE A SOURCE OF DUST, THEY SHOULD ALSO BE COVERED.

PROTECTION OF ACTIVE STOCKPILES:

- ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY LINEAR SEDIMENT BARRIERS (I.E. SILT FENCE, ETC.) PRIOR TO THE ONSET OF PRECIPITATION. PERIMETER BARRIERS SHOULD 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 SHOULD BE INSPECTED AT THE END OF EACH WORKING DAY.
- WHEN A STORM IS PREDICTED, STOCKPILES SHOULD BE PROTECTED WITH AN ANCHORED PROTECTIVE COVERING.

GENERAL CONSTRUCTION PHASING:

- 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. STABILIZATION SHALL BE LIMITED TO:

 - IN AREAS THAT WILL NOT BE PAVED:**
 - A MINIMUM OF 85% VEGETATIVE COVER HAS BEEN ESTABLISHED;
 - A MINIMUM OF 3-INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR A CERTIFIED COMPOST BLANKET HAS BEEN INSTALLED; OR
 - EROSION CONTROL BLANKETS HAVE BEEN INSTALLED.
 - IN AREAS TO BE PAVED:**
 - BASE COURSE GRAVELS HAVE BEEN INSTALLED.
- TEMPORARY STABILIZATION:**

ALL AREAS OF EXPOSED OR DISTURBED SOIL SHOULD BE TEMPORARILY STABILIZED AS SOON AS PRACTICABLE BUT NO LATER THAN 45 DAYS FROM THE TIME OF INITIAL DISTURBANCE. UNLESS A SHORTER TIME IS SPECIFIED BY LOCAL AUTHORITIES, THE CONSTRUCTION SEQUENCE APPROVED AS PART OF THE ISSUED PERMIT OR AN INDEPENDENT MONITOR.
- PERMANENT STABILIZATION:**

ALL AREAS OF EXPOSED OR DISTURBED SOIL SHOULD BE PERMANENTLY STABILIZED AS SOON AS PRACTICABLE BUT NO LATER THAN 3 DAYS FOLLOWING FINAL GRADING.
- MAXIMUM AREA OF DISTURBANCE:**

THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREA ARE STABILIZED. ONLY DISTURB, CLEAR, OR GRADE AREAS NECESSARY FOR CONSTRUCTION.
- FLAG OR OTHER MARKS:**

ALL AREAS OF EXPOSED OR DISTURBED SOIL MUST BE MARKED.
- EXCLUDE VEHICLES AND CONSTRUCTION EQUIPMENT FROM THESE AREAS TO PRESERVE NATURAL VEGETATION.**
- ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHOULD BE PROTECTED DURING CONSTRUCTION AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL DETAIL ON SHEET C-3.**
- ALL EROSION AND SEDIMENT CONTROL PRACTICES AND MEASURES SHOULD BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL DETAIL ON SHEET C-3.**
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHOULD BE STOCKPILED IN THE AMOUNT NECESSARY TO COMPLETE FINISHED GRADING AND BE PROTECTED FROM EROSION.**
- STOCKPILES, BORROW AREAS AND SPOILS SHALL BE STABILIZED AS DESCRIBED UNDER "SOIL STOCKPILE PRACTICES".**
- SLOPES SHOULD NOT BE CREATED SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTIES WITHOUT ADEQUATE PROTECTION AGAINST SEDIMENTATION, EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.**
- AREAS TO BE FILLED SHOULD BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND/OR OTHER OBJECTIONABLE MATERIALS.**
- AREAS SHOULD BE SCARIFIED TO A MINIMUM DEPTH OF 3-INCHES PRIOR TO PLACEMENT OF TOPSOIL. TOPSOIL SHOULD BE PLACED WITHOUT SIGNIFICANT COMPACTION TO PROVIDE A LOOSE BEDDING FOR PLACEMENT OF SEED.**
- ALL FILLS SHOULD BE COMPACTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS TO REDUCE EROSION, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, SITE UTILITIES, CONDUITS AND OTHER FACILITIES, SHOULD BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.**
- IN GENERAL, FILLS SHOULD BE COMPACTED IN LAYERS RANGING FROM 8 TO 24 INCHES IN THICKNESS. THE CONTRACTOR SHOULD REVIEW THE PROJECT GEOTECHNICAL REPORT AND/OR THE "PROJECT SPECIFIC PHASING NOTES" FOR SPECIFIC GUIDANCE.**
- ANY AND ALL FILL MATERIAL SHOULD 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.**
- 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 SHOULD BE PERFORMED UNDER THE DIRECTION OF A PROFESSIONAL ENGINEER.**
- THE OUTER FACE OF THE FILL SLOPE SHOULD 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 (CLEAT TRACKS) CREATE GROOVES PERPENDICULAR TO THE SLOPE. IF THE SOIL IS NOT TOO MOIST, EXCESSIVE COMPACTION WILL NOT OCCUR. SEE "SUBGRADE ROUGHENING" IN THE NHSM, VOL. 3.**
- ROUGHEN THE SURFACE OF ALL SLOPES DURING THE CONSTRUCTION OPERATION TO RETAIN WATER, INCREASE DETENTION AND FACILITATE VEGETATION ESTABLISHMENT.**
- USE SLOPE BREAKS, SUCH AS DIVERSIONS, BENCHES, OR CONTOUR FURROWS AS APPROPRIATE TO REDUCE THE LENGTH OF CUT-FILL SLOPES TO LIMIT SHEET AND RILL EROSION AND PREVENT GULLY EROSION. ALL BENCHES SHOULD BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF CONSTRUCTION.**
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHOULD BE EVALUATED BY A PROFESSIONAL ENGINEER (PREFERABLY THE DESIGN ENGINEER) TO DETERMINE IF THE PROPOSED DESIGN SHOULD BE REVISED TO PROPERLY MANAGE THE CONDITION.**
- 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.**
- ALL GRADED AREAS SHOULD BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.**

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)

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. 288
PLAN NO. PERLM
DWG NO. 12009SP-2
F.B. NO. SDR

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

NORWAY PLAINS ASSOCIATES, INC.

PERMANENT EROSION AND SEDIMENTATION CONTROL DETAILS

OAK STREET / ROUTE 125

ROCHESTER, NH

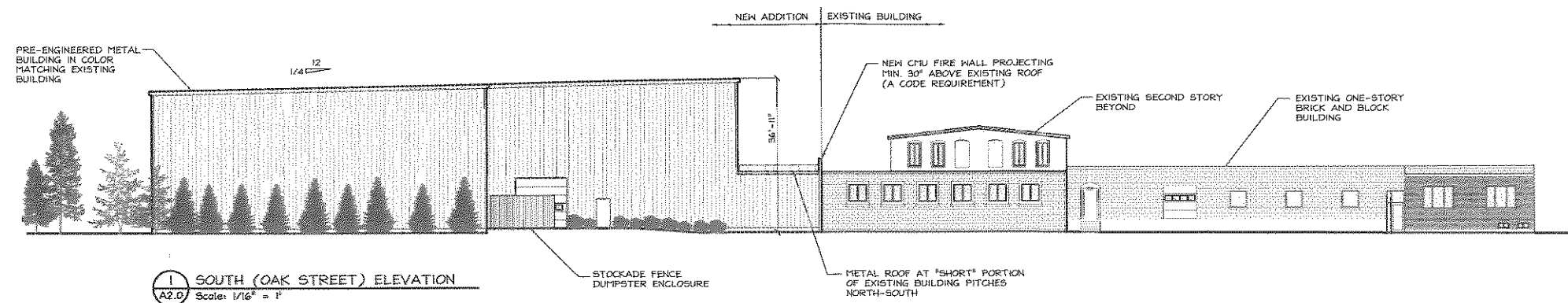
PREPARED FOR

COLBY FOOTWEAR, INC.

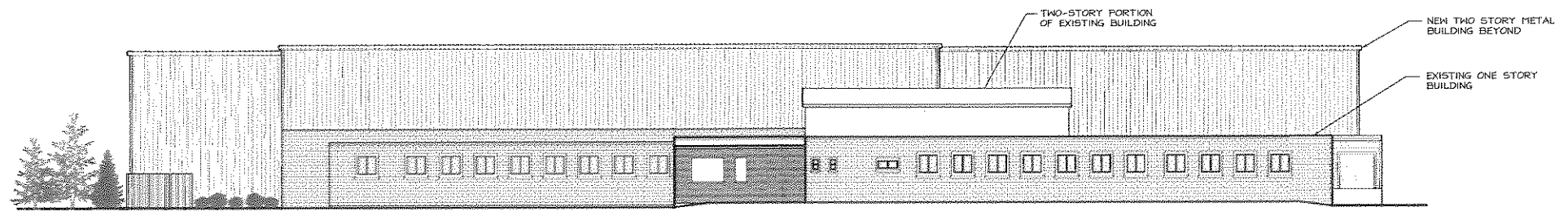
SCALE: AS SHOWN

MARCH 2012

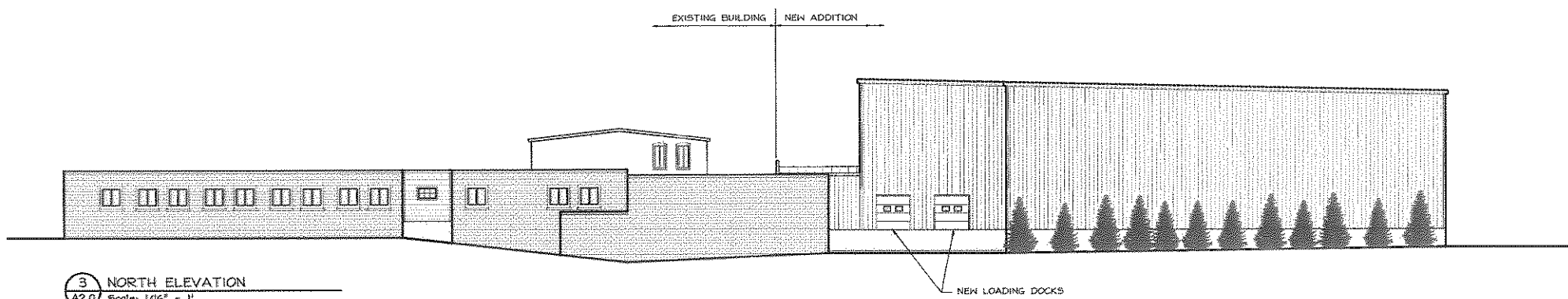
2 Continental Blvd., Rochester, N.H. 603-335-3948



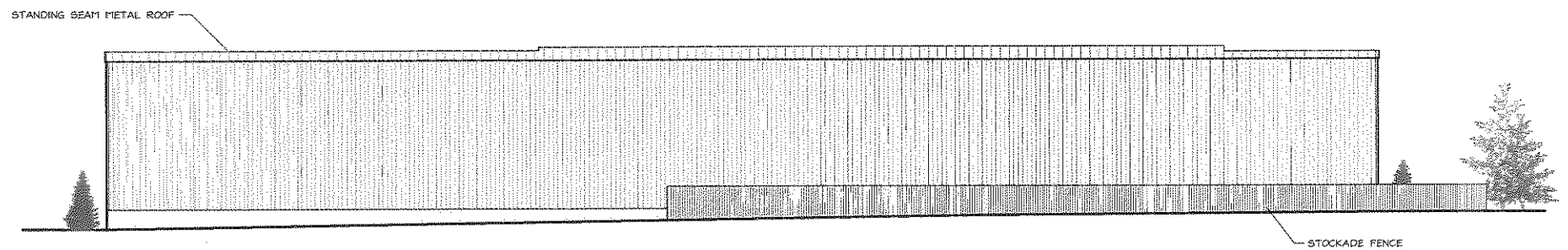
1 SOUTH (OAK STREET) ELEVATION
A2.0 Scale: 1/16" = 1'



2 EAST (ROUTE 125) ELEVATION
A2.0 Scale: 1/16" = 1'



3 NORTH ELEVATION
A2.0 Scale: 1/16" = 1'



4 WEST ELEVATION
A2.0 Scale: 1/16" = 1'

JSN
Associates, Inc.
Consulting Structural Engineers
One Autumn Street
Portsmouth, NH 03801
Phone: (603) 433-8639
Fax: (603) 431-2811
www.jsneng.com

Client:
Knights Construction
303 Reservoir Road
Farmington, NH

Addition to Colby Footwear, Inc.
Oak Street
Rochester, NH

Preliminary
Not for
Construction
03-26-12

Date: x
Scale: As Noted
Design By: RB
Approved By: JSN

Revisions

Elevations
A2.0
Project No: 120205