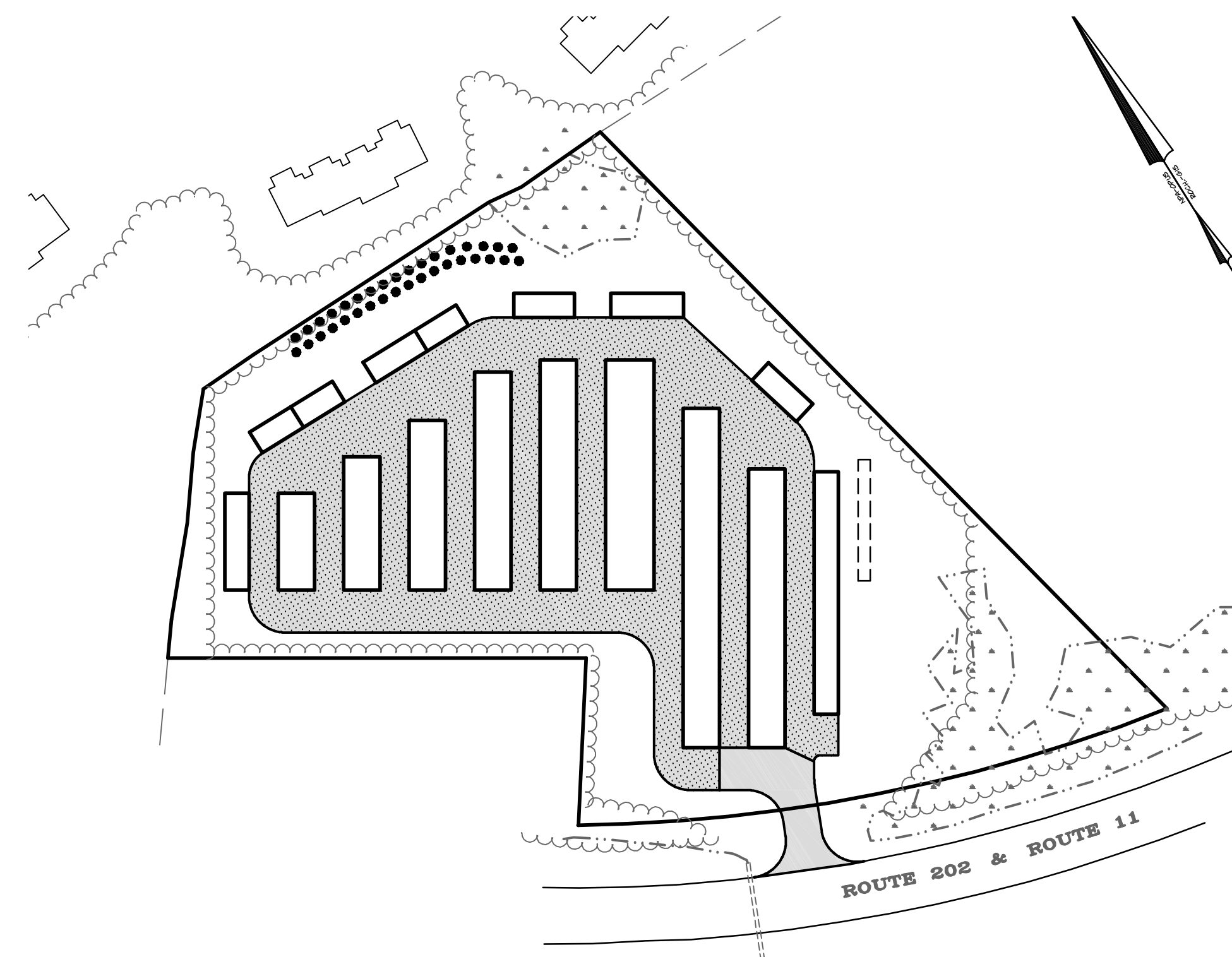


REVISIONS:

# SITE PLAN MINI-STORAGE FACILITY FOR SENSIBLE SELF STORAGE HIGHLAND STREET ROCHESTER, N.H.

## JULY 2013



**OVERALL SITE**  
1" = 100'

### CIVIL ENGINEERS

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

### DEVELOPER

SENSIBLE SELF STORAGE, LLC  
158 KNOWLES POND ROAD  
NORTHFIELD, NH 03276  
(603) 340-2541

#### SHEET INDEX

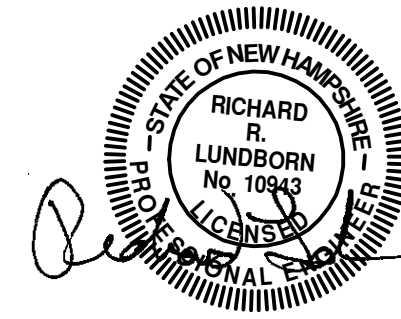
		AS SHOWN
C-0	COVER	1" = 40'
C-1	EXISTING FEATURES PLAN	1" = 40'
C-2	SITE PLAN	1" = 40'
C-3	GRADING PLAN	1" = 40'
C-4	EROSION CONTROL PLAN	1" = 40'
C-5	SITE SPECIFIC SOILS MAP	1" = 40'
C-6	EROSION CONTROL DETAILS	AS SHOWN
C-7	CONSTRUCTION DETAILS	AS SHOWN
	SECURITY LIGHTING PLAN	1" = 50'

REVISION DATE

SHEET COVER

FILE NO. 121 DRAWN BY: RRL  
PLAN NO. C-2669 CHK'D BY: RRL  
F.B. NO. ### SCRD NO: D-###  
DWG. NO. 12214/SP-1

NORWAY PLAINS ASSOCIATES, INC.



REVISIONS:

GENERAL NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING FEATURES OF TAX MAP 106 LOT 3.
2. TOTAL PARCEL AREA: MAP 06, LOT 3 253,168-SF (5.81 ACRES)
3. PARCEL IS ZONED: AGRICULTURAL (A)
4. JURISDICTIONAL WETLANDS DELINEATED BY: RANDY R. ORVIS, CWS OF GEOMETRES BLUE HILLS, LLC DURING MAY 2011; IN ACCORDANCE WITH THE 1987 CORPS OF ENGINEERS WETLANDS DELINEATIONS MANUAL, TECHNICAL REPORT Y-87-1.
5. THE PROPOSED LOT IS NOT LOCATED WITHIN THE 100 YEAR FLOOD ZONE AS SHOWN ON THE FLOOD INSURANCE RATE MAP DATED 05/17/05 COMMUNITY PANEL 33017C02030, PANEL 203 OF 405.
6. THE LOT IS SERVICED BY THE MUNICIPAL WATER AND SEWER SYSTEM.
7. ZONE A DIMENSIONAL REQUIREMENTS PER ORDINANCE AND REGULATION:

MINIMUM LOT SIZE	=	REQUIRED
MINIMUM FRONTAGE	=	40,000-SF
MAXIMUM LOT COVERAGE*	=	150-FT
BUILDING SETBACKS:	=	30%
FRONT YARD	=	35-FT
SIDE YARD	=	25-FT
REAR YARD	=	50-FT
DISTANCE FROM OTHER BUILDINGS	=	10-FT

PARKING LOT SETBACKS:	=	15-FT
FRONT YARD	=	10-FT
SIDE YARD	=	50-FT**
REAR YARD	=	

\*COVERAGE IS DEFINED AS THE PERCENTAGE OF THE LOT AREA COVERED BY BUILDINGS.  
\*\*PER VARIANCE DATED 01/09/2013.

APPLICANT:  
SENSIBLE SELF STORAGE, LLC  
158 KNOWLES POND ROAD  
NORTHFIELD, NH 03276

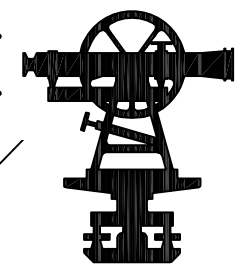
OWNER OF RECORD:  
JEAN P. TAYLOR  
P.O. BOX 1084  
ROCHESTER, NH 03866-1084  
BK. 4001, PG. 578

EXISTING FEATURES  
SITE PLAN  
HIGHLAND STREET  
ROUTE 202 BYPASS  
ROCHESTER, NH  
STRAFFORD COUNTY  
FOR  
SENSIBLE SELF  
STORAGE, LLC  
JULY 2013



REVISION DATE

SHEET C-0



TAX MAP 106, LOT 11  
WOODLAND GREEN CONDO. ASSOC.  
C/O EXECUTIVE PROPERTIES  
108A WAKEFIELD ST.  
ROCHESTER, NH 03867-1921

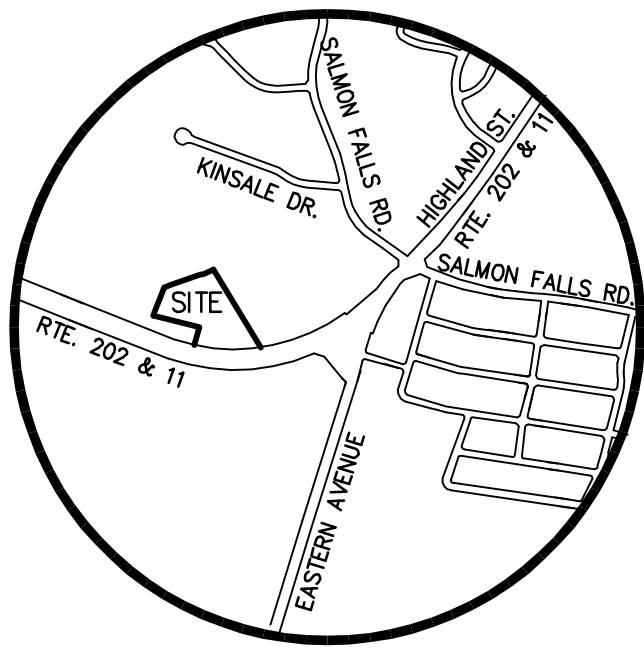
TAX MAP 106, LOT 4  
N/F ARTHUR TAYLOR JR.  
479 TOVAR DRIVE  
SAN JOSE, CA 95123-4948

TAX MAP 106, LOT 2  
N/F NORBERT THERRIEN REV. TRUST  
40 TEMPLE ST.  
NASHUA, NH 03060

TAX MAP 110, LOT 12  
N/F SEAN P. TAYLOR REV. TRUST  
JEAN P. TAYLOR TRUSTEE  
PO BOX 1084  
ROCHESTER, NH 03866-1084

TAX MAP 106, LOT 1  
N/F NORBERT THERRIEN REV. TRUST  
40 TEMPLE ST.  
NASHUA, NH 03060

- LEGEND
- EXISTING GRANITE OR CONCRETE BOUND
  - EXISTING IRON PIN, PIPE OR STAKE
  - WETLAND
  - EXISTING SIGN
  - EXISTING UTILITY POLE
  - BEARING
  - DISTANCE
  - SETBACK LINE
  - EDGE OF WETLAND
  - EXISTING TREE LINE
  - EXISTING DRAIN LINE
  - EXISTING CONTOURS
  - EXISTING SPOT GRADE



FILE NO. 121 DRAWN BY: RRL  
PLAN NO. C-2669 CHK'D BY: RRL  
F.B. NO. ### SCR'D NO: D-###  
DWG. NO. 12214/SP-1



1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE PROPOSED LAYOUT OF TAX MAP 106 LOT 3.
2. TOTAL PARCEL AREA: MAP 06, LOT 3 253,168-SF (5.81 ACRES)
3. PARCEL IS ZONED: AGRICULTURAL (A)
4. JURISDICTIONAL WETLANDS DELINEATED BY: RANDY R. ORVIS, CWS OF GEOMETRES BLUE HILLS, LLC DURING MAY 2011; IN ACCORDANCE WITH THE 1987 CORPS OF ENGINEERS WETLANDS Delineations MANUAL, TECHNICAL REPORT Y-87-1.
5. THE PROPOSED LOT IS NOT LOCATED WITHIN THE 100 YEAR FLOOD ZONE AS SHOWN ON THE FLOOD INSURANCE RATE MAP DATED 05/17/05 COMMUNITY PANEL 3301700203D, PANEL 203 OF 405.
6. THE LOT IS SERVICED BY THE MUNICIPAL WATER AND SEWER SYSTEM.
7. ZONE A DIMENSIONAL REQUIREMENTS PER ORDINANCE AND REGULATION:

MINIMUM LOT SIZE	=	40,000-SF
MINIMUM FRONTAGE	=	150-FT
MAXIMUM LOT COVERAGE*	=	30%
<u>BUILDING SETBACKS:</u>		
FRONT YARD	=	35-FT
SIDE YARD	=	25-FT
REAR YARD	=	50-FT
DISTANCE FROM OTHER BUILDINGS	=	10-FT
<u>PARKING LOT SETBACKS:</u>		
FRONT YARD	=	15-FT
SIDE YARD	=	10-FT
REAR YARD	=	50-FT**

\*COVERAGE IS DEFINED AS THE PERCENTAGE OF THE LOT AREA COVERED BY BUILDINGS.  
\*\*PER VARIANCE DATED 01/09/2013.

OWNER OF RECORD:  
JEAN P. TAYLOR  
P.O. BOX 1084  
ROCHESTER, NH 03866-1084  
BK. 4001, PG. 578

**GRAPHIC SCALE**

REVISION DATE

SHEET C-1

FILE NO.	121	DRAWN BY:	RRL
PLAN NO.	C-2669	CHK'D BY:	RRL
F.B. NO.	###	SCRD NO:	D-###
DWG. NO.	12214/SP-1		

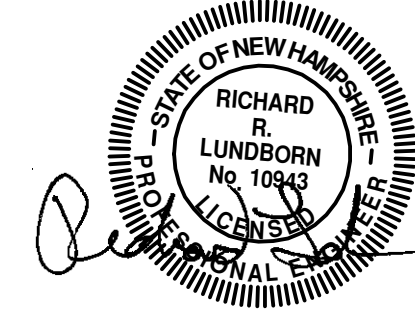
FINAL APPROVAL BY ROCHESTER PLANNING BOARD

CERTIFIED BY \_\_\_\_\_ DATE \_\_\_\_\_

NORWAY PLAINS ASSOCIATES, INC.

SHEET C-1





REVISIONS:

## GENERAL NOTES:

- THE PURPOSE OF THIS PLAN IS TO DEPICT THE PROPOSED GRADING OF TAX MAP 106 LOT 3.
- TOTAL PARCEL AREA: MAP 06, LOT 3 253,168-SF (5.81 ACRES)
- PARCEL IS ZONED: AGRICULTURAL (A)
- JURISDICTIONAL WETLANDS DELINEATED BY: RANDY R. ORVIS, CWS OF GEOMETRES BLUE HILLS, LLC DURING MAY 2011, IN ACCORDANCE WITH THE 1987 CORPS OF ENGINEERS WETLANDS DELINEATIONS MANUAL, TECHNICAL REPORT Y-87-1.
- THE PROPOSED LOT IS NOT LOCATED WITHIN THE 100 YEAR FLOOD ZONE AS SHOWN ON THE FLOOD INSURANCE RATE MAP DATED 05/17/05 COMMUNITY PANEL 33017C0203D, PANEL 203 OF 405.
- THE LOT IS SERVICED BY THE MUNICIPAL WATER AND SEWER SYSTEM.
- ZONE A DIMENSIONAL REQUIREMENTS PER ORDINANCE AND REGULATION:

	REQUIRED
MINIMUM LOT SIZE	= 40,000-SF
MINIMUM FRONTAGE	= 150-FT
MAXIMUM LOT COVERAGE*	= 30%
BUILDING SETBACKS:	
FRONT YARD	= 35-FT
SIDE YARD	= 25-FT
REAR YARD	= 50-FT
DISTANCE FROM OTHER BUILDINGS	= 10-FT
PARKING LOT SETBACKS:	
FRONT YARD	= 15-FT
SIDE YARD	= 10-FT
REAR YARD	= 50-FT**

\*COVERAGE IS DEFINED AS THE PERCENTAGE OF THE LOT AREA COVERED BY BUILDINGS.  
\*\*PER VARIANCE DATED 01/09/2013.

APPLICANT:  
SENSIBLE SELF STORAGE, LLC  
158 KNOWLES POND ROAD  
NORTHFIELD, NH 03276

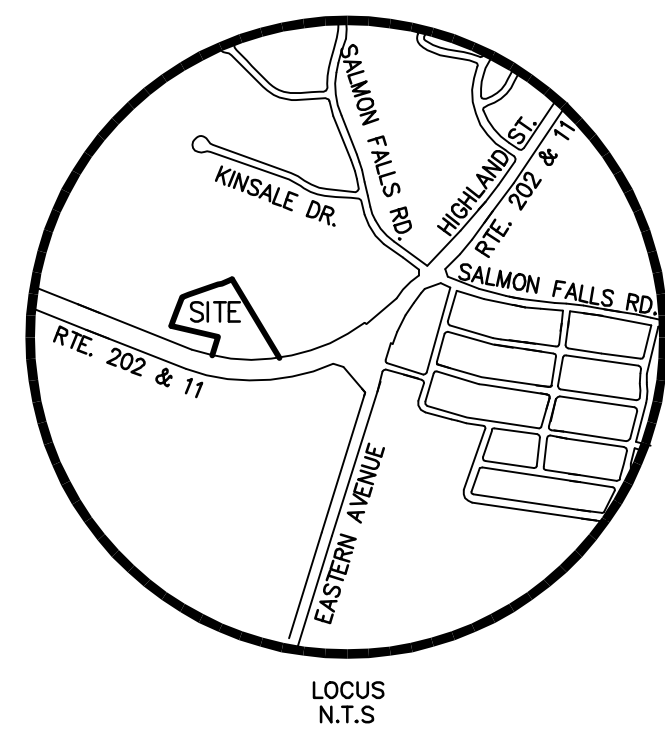
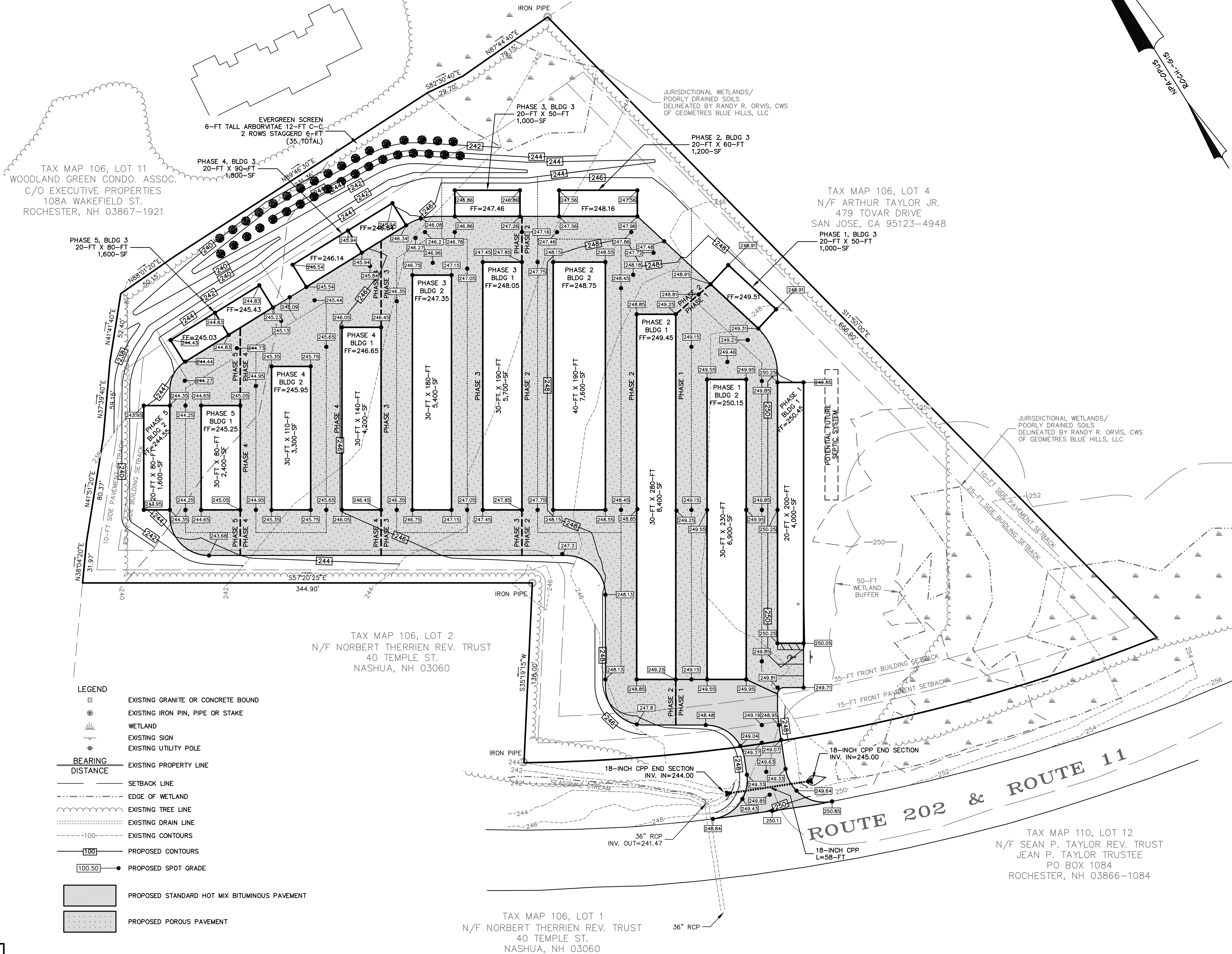
OWNER OF RECORD:  
JEAN P. TAYLOR  
P.O. BOX 1084  
ROCHESTER, NH 03866-1084  
BK. 4001, PG. 578

GRADING PLAN  
HIGHLAND STREET  
ROUTE 202 BYPASS  
ROCHESTER, NH  
STRAFFORD COUNTY  
FOR  
SENSIBLE SELF  
STORAGE, LLC  
JULY 2013

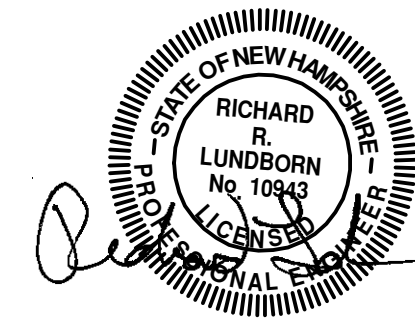


REVISION DATE

SHEET C-2



FILE NO. 121 DRAWN BY: RRL  
PLAN NO. C-2669 CHK'D BY: RRL  
F.B. NO. ### SCRD NO: D-###  
DWG. NO. 12214/SP-1



REVISIONS:

## GENERAL NOTES:

- THE PURPOSE OF THIS PLAN IS TO DEPICT THE PROPOSED EROSION CONTROL PRACTICES FOR TAX MAP 106 LOT 3.
- TOTAL PARCEL AREA: MAP 06, LOT 3 253,168-SF (5.81 ACRES)
- PARCEL IS ZONED: AGRICULTURAL (A)
- JURISDICTIONAL WETLANDS DELINEATED BY: RANDY R. ORVIS, CWS OF GEOMETRES BLUE HILLS, LLC DURING MAY 2011, IN ACCORDANCE WITH THE 1987 CORPS OF ENGINEERS WETLANDS DELINEATIONS MANUAL, TECHNICAL REPORT Y-87-1.
- THE PROPOSED LOT IS NOT LOCATED WITHIN THE 100 YEAR FLOOD ZONE AS SHOWN ON THE FLOOD INSURANCE RATE MAP DATED 05/17/05 COMMUNITY PANEL 33017C0203D, PANEL 203 OF 405.
- THE LOT IS SERVICED BY THE MUNICIPAL WATER AND SEWER SYSTEM.
- ZONE A DIMENSIONAL REQUIREMENTS PER ORDINANCE AND REGULATION:

	REQUIRED
MINIMUM LOT SIZE	= 40,000-SF
MINIMUM FRONTAGE	= 150-FT
MAXIMUM LOT COVERAGE*	= 30%
BUILDING SETBACKS:	
FRONT YARD	= 35-FT
SIDE YARD	= 25-FT
REAR YARD	= 50-FT
DISTANCE FROM OTHER BUILDINGS	= 10-FT
PARKING LOT SETBACKS:	
FRONT YARD	= 15-FT
SIDE YARD	= 10-FT
REAR YARD	= 50-FT**

\*COVERAGE IS DEFINED AS THE PERCENTAGE OF THE LOT AREA COVERED BY BUILDINGS.  
\*\*PER VARIANCE DATED 01/09/2013.

APPLICANT:  
SENSIBLE SELF STORAGE, LLC  
158 KNOWLES POND ROAD  
NORTHFIELD, NH 03276

OWNER OF RECORD:  
JEAN P. TAYLOR  
P.O. BOX 1084  
ROCHESTER, NH 03866-1084  
BK. 4001, PG. 578

EROSION CONTROL  
PLAN  
HIGHLAND STREET  
ROUTE 202 BYPASS  
ROCHESTER, NH  
STRAFFORD COUNTY  
FOR  
SENSIBLE SELF  
STORAGE, LLC  
JULY 2013



REVISION DATE

SHEET C-3

TAX MAP 106, LOT 11  
WOODLAND GREEN CONDO. ASSOC.  
C/O EXECUTIVE PROPERTIES  
108A WAKEFIELD ST.  
ROCHESTER, NH 03867-1921

TAX MAP 106, LOT 4  
N/F ARTHUR TAYLOR JR.  
479 TOVAR DRIVE  
SAN JOSE, CA 95123-4948

PHASE 1, BLDG 3  
20-FT X 50-FT  
1,000-SF

PHASE 2, BLDG 3  
20-FT X 60-FT  
1,200-SF

PHASE 3, BLDG 3  
20-FT X 50-FT  
1,000-SF

PHASE 4, BLDG 3  
20-FT X 90-FT  
1,800-SF

PHASE 5, BLDG 3  
20-FT X 80-FT  
1,600-SF

PHASE 3, BLDG 1  
FF=247.35

PHASE 3, BLDG 2  
FF=248.03

PHASE 2, BLDG 2  
FF=248.75

PHASE 2, BLDG 1  
FF=249.45

PHASE 1, BLDG 2  
FF=250.15

PHASE 1, BLDG 1  
FF=250.45

PHASE 2, BLDG 2  
FF=250.15

PHASE 1, BLDG 2  
FF=250.45

PHASE 1, BLDG 1  
FF=250.75

PHASE 1, BLDG 1  
FF=251.05

PHASE 1, BLDG 1  
FF=251.35

PHASE 1, BLDG 1  
FF=251.65

PHASE 1, BLDG 1  
FF=251.95

PHASE 1, BLDG 1  
FF=252.25

PHASE 1, BLDG 1  
FF=252.55

PHASE 1, BLDG 1  
FF=252.85

PHASE 1, BLDG 1  
FF=253.15

PHASE 1, BLDG 1  
FF=253.45

## LEGEND

- EXISTING GRANITE OR CONCRETE BOUND
- EXISTING IRON PIN, PIPE OR STAKE
- WETLAND
- EXISTING SIGN
- EXISTING UTILITY POLE
- BEARING
- DISTANCE
- EXISTING PROPERTY LINE
- SETBACK LINE
- EDGE OF WETLAND
- EXISTING TREE LINE
- EXISTING DRAIN LINE
- PROPOSED CONTOURS
- PROPOSED SPOT GRADE
- PROPOSED STONE CHECK DAM
- S/F
- PROPOSED SILT FENCE
- PROPOSED STANDARD HOT MIX BITUMINOUS PAVEMENT
- PROPOSED POROUS PAVEMENT

TAX MAP 106, LOT 2  
N/F NORBERT THERRIEN REV. TRUST  
40 TEMPLE ST.  
NASHUA, NH 03060

TAX MAP 106, LOT 1  
N/F NORBERT THERRIEN REV. TRUST  
40 TEMPLE ST.  
NASHUA, NH 03060

TAX MAP 110, LOT 12  
N/F SEAN P. TAYLOR REV. TRUST  
JEAN P. TAYLOR TRUSTEE  
PO BOX 1084  
ROCHESTER, NH 03866-1084



## TEST PIT DATA:

THE SOILS WITHIN THE AREA MAPPED WERE SURFACE EXAMINED DURING THE SPRING OF 2013. TEST PITS WERE DUG BY D&D HATCH, LLC WITH THE USE OF AN EXCAVATOR, THEN OBSERVED AND RECORDED ON APRIL 5, 2013 BY DAVID J. ALLAIN CSS#13.

THE TEST PITS (TP#) OBSERVED WERE FLAGGED IN THE FIELD, NUMBERED AND THE LOCATIONS NOTED ON THE PLANS PROVIDED. THE DESCRIPTIONS OF THE PROFILES OBSERVED FOLLOW:

## TEST PIT 1 (04-05-13)

0-2" 10YR3/3 SANDY LOAM, GRANULAR, FRIABLE  
2-18" 10YR5/4 SANDY LOAM, GRANULAR, FRIABLE  
18-24" 10YR5/6 LOAMY SAND, MASSIVE, FRIABLE, REDOX FEATURES NOTED.  
24-30" 10YR5/1 LOAMY SAND, GRANULAR, VERY FRIABLE, REDOX FEATURES NOTED.  
30-72" 10YR5/2 LOAMY SAND, GRANULAR, VERY FRIABLE, REDOX FEATURES NOTED.

NOTES:  
SEASONAL HIGH WATER TABLE (SHWT) = 18"  
SOILS ARE A MODERATELY WELL DRAINED SOILS FORMED IN GLACIOFLUVIAL DEPOSITS AND FIT WITHIN THE OFFICIAL SERIES DESCRIPTION (OSD) FOR THE (313) DEERFIELD SERIES. HYDROLOGIC GROUP B.

## TEST PIT 2 (04-05-13)

0-12" 10YR3/3 SANDY LOAM, GRANULAR, FRIABLE  
12-14" 7.5YR4/4 STONY SANDY LOAM, GRANULAR, FRIABLE.  
14-73" 10YR5/2 LOAMY SAND, FIRM, BLOCKY, REDOX FEATURES NOTED.

NOTES:  
SEASONAL HIGH WATER TABLE (SHWT) = 14"  
OBSERVED WATER AT 16"  
SOILS ARE SOMEWHAT POORLY DRAINED FORMED IN GLACIOFLUVIAL DEPOSITS AND FIT WITHIN THE OFFICIAL SERIES DESCRIPTION (OSD) FOR THE (926) RIDGEBURY SERIES SOILS. HYDROLOGIC GROUP C.

## TEST PIT 3 (04-05-13)

0-2" 10YR3/2 SANDY LOAM, GRANULAR, FRIABLE  
2-16" 10YR4/4 STONY SANDY LOAM, GRANULAR, FRIABLE.  
16-73" 10YR5/2 LOAMY SAND, FIRM-FRIABLE IN HAND, MASSIVE, REDOX FEATURES NOTED.

NOTES:  
SEASONAL HIGH WATER TABLE (SHWT) = 16"  
OBSERVED WATER AT 30"  
SOILS ARE MODERATELY WELL DRAINED FORMED IN GLACIOFLUVIAL DEPOSITS AND FIT WITHIN THE OFFICIAL SERIES DESCRIPTION (OSD) FOR THE (313) DEERFIELD SERIES. HYDROLOGIC GROUP B.

## TEST PIT 4 (04-05-13)

A HORIZON STRIPPED  
0-15" 10YR5/6 SANDY LOAM, GRANULAR, FRIABLE.  
15-35" 10YR5/3 LOAMY SAND, FIRM-FRIABLE IN HAND, MASSIVE, REDOX FEATURES NOTED.

NOTES:  
SEASONAL HIGH WATER TABLE (SHWT) = 15"  
OBSERVED WATER AT 32"  
SOILS ARE MODERATELY WELL DRAINED FORMED IN GLACIOFLUVIAL DEPOSITS AND FIT WITHIN THE OFFICIAL SERIES DESCRIPTION (OSD) FOR THE (313) DEERFIELD SERIES. HYDROLOGIC GROUP B.

## TEST PIT 5 (04-05-13)

0-4" 10YR2/2 SANDY LOAM, GRANULAR, FRIABLE  
4-10" 10YR5/6 SANDY LOAM, GRANULAR, FRIABLE.  
10-50" 10YR5/2 SANDY LOAM, FIRM, MASSIVE, REDOX FEATURES NOTED.

NOTES:  
SEASONAL HIGH WATER TABLE (SHWT) = 10"  
OBSERVED WATER AT 10"  
SOILS ARE POORLY DRAINED FORMED IN GLACIAL TILL DEPOSITS AND FIT WITHIN THE OFFICIAL SERIES DESCRIPTION (OSD) FOR THE (656) RIDGEBURY SERIES SOILS. HYDROLOGIC GROUP C.

## TEST PIT 6 (04-05-13)

0-3" 10YR2/2 SANDY LOAM, GRANULAR, FRIABLE  
3-17" 10YR5/6 SANDY LOAM, GRANULAR, FRIABLE.  
17-50" 10YR5/2 SANDY LOAM, FIRM, MASSIVE, REDOX FEATURES NOTED.

NOTES:  
SEASONAL HIGH WATER TABLE (SHWT) = 17"  
OBSERVED WATER AT 24"  
SOILS ARE SOMEWHAT POORLY DRAINED FORMED IN GLACIAL TILL DEPOSITS AND FIT WITHIN THE OFFICIAL SERIES DESCRIPTION (OSD) FOR THE (926) RIDGEBURY SERIES SOILS. HYDROLOGIC GROUP C.

## TEST PIT 7 (04-05-13)

0-3" 10YR3/2 SANDY LOAM, GRANULAR, FRIABLE  
3-18" 10YR4/4 SANDY LOAM, GRANULAR, FRIABLE.  
18-62" 10YR5/2 LOAMY SAND, MASSIVE, FRIABLE, REDOX FEATURES NOTED.

NOTES:  
SEASONAL HIGH WATER TABLE (SHWT) = 18"  
OBSERVED WATER = 24"  
SOILS ARE A MODERATELY WELL DRAINED SOILS FORMED IN GLACIOFLUVIAL DEPOSITS AND FIT WITHIN THE OFFICIAL SERIES DESCRIPTION (OSD) FOR THE (313) DEERFIELD SERIES. HYDROLOGIC GROUP B.

## TEST PIT 8 (04-05-13)

0-4" 10YR3/3 SANDY LOAM, GRANULAR, FRIABLE  
4-16" 10YR5/4 SANDY LOAM, GRANULAR, FRIABLE.  
16-20" 10YR5/6 LOAMY SAND, MASSIVE, FRIABLE, REDOX FEATURES NOTED.  
20-62" 10YR5/2 LOAMY FINE SAND, MASSIVE, FIRM-FRIABLE IN HAND, REDOX FEATURES NOTED.

NOTES:  
SEASONAL HIGH WATER TABLE (SHWT) = 16"  
OBSERVED WATER = 36"  
SOILS ARE A MODERATELY WELL DRAINED SOILS FORMED IN GLACIOFLUVIAL DEPOSITS AND FIT WITHIN THE OFFICIAL SERIES DESCRIPTION (OSD) FOR THE (313) DEERFIELD SERIES. HYDROLOGIC GROUP B.

## TEST PIT 9 (04-05-13)

0-4" 10YR3/3 SANDY LOAM, GRANULAR, FRIABLE  
4-14" 10YR5/4 SANDY LOAM, GRANULAR, FRIABLE.  
14-48" 10YR5/2 SANDY LOAM, FIRM, MASSIVE, REDOX FEATURES NOTED.

NOTES:  
SEASONAL HIGH WATER TABLE (SHWT) = 14"  
OBSERVED WATER AT 18"  
SOILS ARE SOMEWHAT POORLY DRAINED FORMED IN GLACIAL TILL DEPOSITS AND FIT WITHIN THE OFFICIAL SERIES DESCRIPTION (OSD) FOR THE (926) RIDGEBURY SERIES SOILS. HYDROLOGIC GROUP C.

## TEST PIT 10 (04-05-13)

0-4" 10YR3/3 SANDY LOAM, GRANULAR, FRIABLE  
4-16" 10YR5/4 SANDY LOAM, GRANULAR, FRIABLE.  
16-28" 10YR5/1 SANDY LOAM, FIRM, MASSIVE, REDOX FEATURES NOTED .  
28-62" 10YR5/2 SANDY LOAM, MASSIVE, FIRM, REDOX FEATURES NOTED.

NOTES:  
SEASONAL HIGH WATER TABLE (SHWT) = 16"  
SOILS ARE SOMEWHAT POORLY DRAINED FORMED IN GLACIAL TILL DEPOSITS AND FIT WITHIN THE OFFICIAL SERIES DESCRIPTION (OSD) FOR THE (926) RIDGEBURY SERIES SOILS. HYDROLOGIC GROUP C.

## TEST PIT 11 (04-05-13)

0-3" 10YR3/3 SANDY LOAM, GRANULAR, FRIABLE  
3-14" 10YR5/6 SANDY LOAM, GRANULAR, FRIABLE.  
14-66" 10YR5/2 SANDY LOAM, FIRM, MASSIVE, REDOX FEATURES NOTED .

NOTES:  
SEASONAL HIGH WATER TABLE (SHWT) = 14"  
OBSERVED WATER AT 18"  
SOILS ARE SOMEWHAT POORLY DRAINED FORMED IN GLACIAL TILL DEPOSITS AND FIT WITHIN THE OFFICIAL SERIES DESCRIPTION (OSD) FOR THE (926) RIDGEBURY SERIES SOILS. HYDROLOGIC GROUP C.

## TEST PIT 11 (04-05-13)

0-3" 10YR3/3 SANDY LOAM, GRANULAR, FRIABLE  
3-14" 10YR5/6 SANDY LOAM, GRANULAR, FRIABLE.  
14-66" 10YR5/2 SANDY LOAM, FIRM, MASSIVE, REDOX FEATURES NOTED .

NOTES:  
SEASONAL HIGH WATER TABLE (SHWT) = 14"  
OBSERVED WATER AT 18"  
SOILS ARE SOMEWHAT POORLY DRAINED FORMED IN GLACIAL TILL DEPOSITS AND FIT WITHIN THE OFFICIAL SERIES DESCRIPTION (OSD) FOR THE (926) RIDGEBURY SERIES SOILS. HYDROLOGIC GROUP C.

FILE NO. 121 DRAWN BY: RRL  
PLAN NO. C-2669 CHK'D BY: RRL  
F.B. NO. ### SCRD NO: D-###  
DWG. NO. 12214/SP-1

## LEGEND

	EXISTING GRANITE OR CONCRETE BOUND
	EXISTING IRON PIN, PIPE OR STAKE
	WETLAND
	EXISTING SIGN
	EXISTING UTILITY POLE
	EXISTING PROPERTY LINE
	SETBACK LINE
	EDGE OF WETLAND
	EXISTING TREE LINE
	EXISTING DRAIN LINE
	EXISTING CONTOURS
	EXISTING SPOT GRADE
	SOIL TYPE BOUNDARY
	SOIL TYPE
	TEST PIT LOCATION

## SOIL SERIES MAPPING LEGEND:

THE ?NEW HAMPSHIRE STATE-WIDE NUMERICAL LEGEND? ISSUE #8, NOVEMBER 2007 WAS USED TO PROVIDE NUMERICAL SYMBOLS FOR THE SOIL SERIES FOUND. THE NUMERICAL SYMBOLS, SERIES NAMES DESCRIPTIONS AND HYDROLOGIC GROUPS FOR THESE ARE DESCRIBED AS FOLLOWS:

## 313A DEERFIELD SERIES SOIL:

THIS MAP UNIT REPRESENTS A MODERATELY WELL DRAINED SOILS FORMED IN GLACIOFLUVIAL DEPOSITS ON 0 TO 3% SLOPES. TAXONOMIC CLASS: MIXED, MESIC AQUIC UDIPSAMMENTS. HYDROLOGIC GROUP B.

## 656A / (POORLY DRAINED SOILS), RIDGEBURY SERIES SOILS:

THIS UNIT REPRESENTS A POORLY DRAINED GLACIAL TILL ON 0-3% SLOPES. TAXONOMIC CLASS: LOAMY, MIXED, ACTIVE, ACID, MESIC, SHALLOW AERIC ENDOAQUEPTS. THIS SOIL IS WITHIN THE COE JURISDICTIONAL WETLANDS MAPPED BY RANDY ORVIS, NH CWS # 034 IN 2011. HYDROLOGIC GROUP C.

## 926A RIDGEBURY SERIES SOILS:

THIS UNIT REPRESENTS A SOMEWHAT POORLY DRAINED GLACIAL TILL ON 0-3% SLOPES. TAXONOMIC CLASS: LOAMY, MIXED, ACTIVE, ACID, MESIC, SHALLOW AERIC ENDOAQUEPTS. HYDROLOGIC GROUP C.

JURISDICTIONAL WETLANDS/  
POORLY DRAINED SOILS  
DELINEATED BY RANDY R. ORVIS, CWS  
OF GEOMETRES BLUE HILLS, LLC

JURISDICTIONAL WETLANDS/  
POORLY DRAINED SOILS  
DELINEATED BY RANDY R. ORVIS, CWS  
OF GEOMETRES BLUE HILLS, LLC

## REVISIONS:

## SOIL MAP NOTES:

A. THIS SITE-SPECIFIC SOIL MAP WAS COMPLETED IN MAY 2013 BY DAVID J. ALLAIN, NH CERTIFIED SOIL SCIENTIST #13, ROUND POND SOIL SURVEY, 374 POND HILL ROAD, BARRINGTON NH 03825. "SITE-SPECIFIC SOIL MAPPING STANDARDS FOR NEW HAMPSHIRE AND VERMONT", VERSION 3.0, DECEMBER 2006, SSSNNE SPECIAL PUBLICATION NO.3 WAS USED AS A REFERENCE AND GUIDE IN DEVELOPING THIS MAP. "THE DISTURBED SOIL MAPPING SUPPLEMENT FOR NEW HAMPSHIRE DES AOT SITE SPECIFIC SOIL MAPS", FEBRUARY 2011 WAS ALSO USED TO COMPLY WITH THE SOIL MAPPING REQUIREMENTS OF RSA 485 A:17 AND NHDES ENV-WQ 1500, ALTERATION OF TERRAIN (AOT) PROGRAM.

B. THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, INTENDED FOR USE IN PLANNING AND CONSTRUCTING INFILTRATION STRUCTURES OR PRACTICES CONSISTENT WITH NHDES ALTERATION OF TERRAIN PROGRAM REQUIREMENTS PER ENV-WQ 1500 RULES. THIS MAP WAS PRODUCED BY A NH CERTIFIED SOIL SCIENTIST AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCE CONSERVATION SERVICE.

C. THERE IS A REPORT THAT ACCOMPANIES THIS MAP.

D. ORIGINAL STAMP WITH SIGNATURE AND DATE ARE REQUIRED ON PLANS SUBMITTED.

## GENERAL NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE SITE SPECIFIC SOILS MAP OF TAX MAP 106 LOT 3.

2. TOTAL PARCEL AREA: MAP 06, LOT 3 253,168-SF (5.81 ACRES)

3. PARCEL IS ZONED: AGRICULTURAL (A)

4. JURISDICTIONAL WETLANDS DELINEATED BY: RANDY R. ORVIS, CWS OF GEOMETRES BLUE HILLS, LLC DURING MAY 2011; IN ACCORDANCE WITH THE 1987 CORPS OF ENGINEERS WETLANDS DELINEATIONS MANUAL, TECHNICAL REPORT Y-87-1.

5. THE PROPOSED LOT IS NOT LOCATED WITHIN THE 100 YEAR FLOOD ZONE AS SHOWN ON THE FLOOD INSURANCE RATE MAP DATED 05/17/05 COMMUNITY PANEL 33017C02030, PANEL 203 OF 405.

6. THE LOT IS SERVICED BY THE MUNICIPAL WATER AND SEWER SYSTEM.

7. ZONE A DIMENSIONAL REQUIREMENTS PER ORDINANCE AND REGULATION:

MINIMUM LOT SIZE	= REQUIRED
MINIMUM FRONTAGE	= 40,000-SF
MAXIMUM LOT COVERAGE*	= 150-FT
BUILDING SETBACKS:	= 30%
FRONT YARD	= 35-FT
SIDE YARD	= 25-FT
REAR YARD	= 50-FT
DISTANCE FROM OTHER BUILDINGS	= 10-FT

## PARKING LOT SETBACKS:

FRONT YARD	= 15-FT
SIDE YARD	= 10-FT
REAR YARD	= 50-FT**

\*COVERAGE IS DEFINED AS THE PERCENTAGE OF THE LOT AREA COVERED BY BUILDINGS.

\*\*PER VARIANCE DATED 01/09/2013.

APPLICANT:  
SENSIBLE SELF STORAGE, LLC  
158 KNOWLES POND ROAD  
NORTHFIELD, NH 03276

OWNER OF RECORD:  
JEAN P. TAYLOR  
P.O. BOX 1084  
ROCHESTER, NH 03866-1084  
BK. 4001, PG. 578

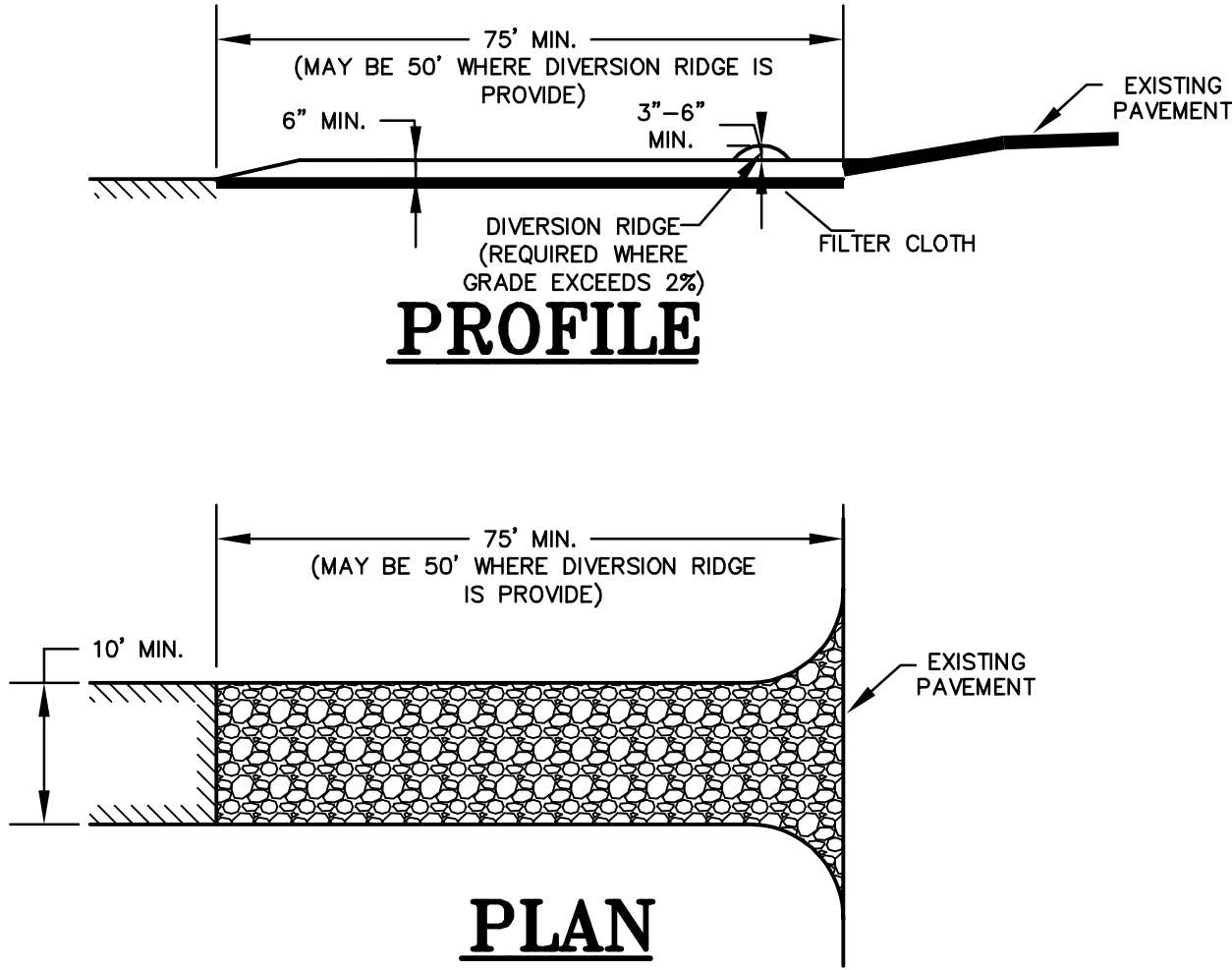
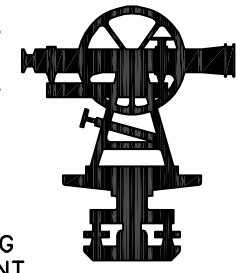
SITE SPECIFIC SOILS  
MAP  
HIGHLAND STREET  
ROUTE 202 BYPASS  
ROCHESTER, NH  
STRAFFORD COUNTY  
FOR  
SENSIBLE SELF  
STORAGE, LLC  
JULY 2013



REVISION DATE

SHEET C-4





MAINTENANCE REQUIREMENTS:

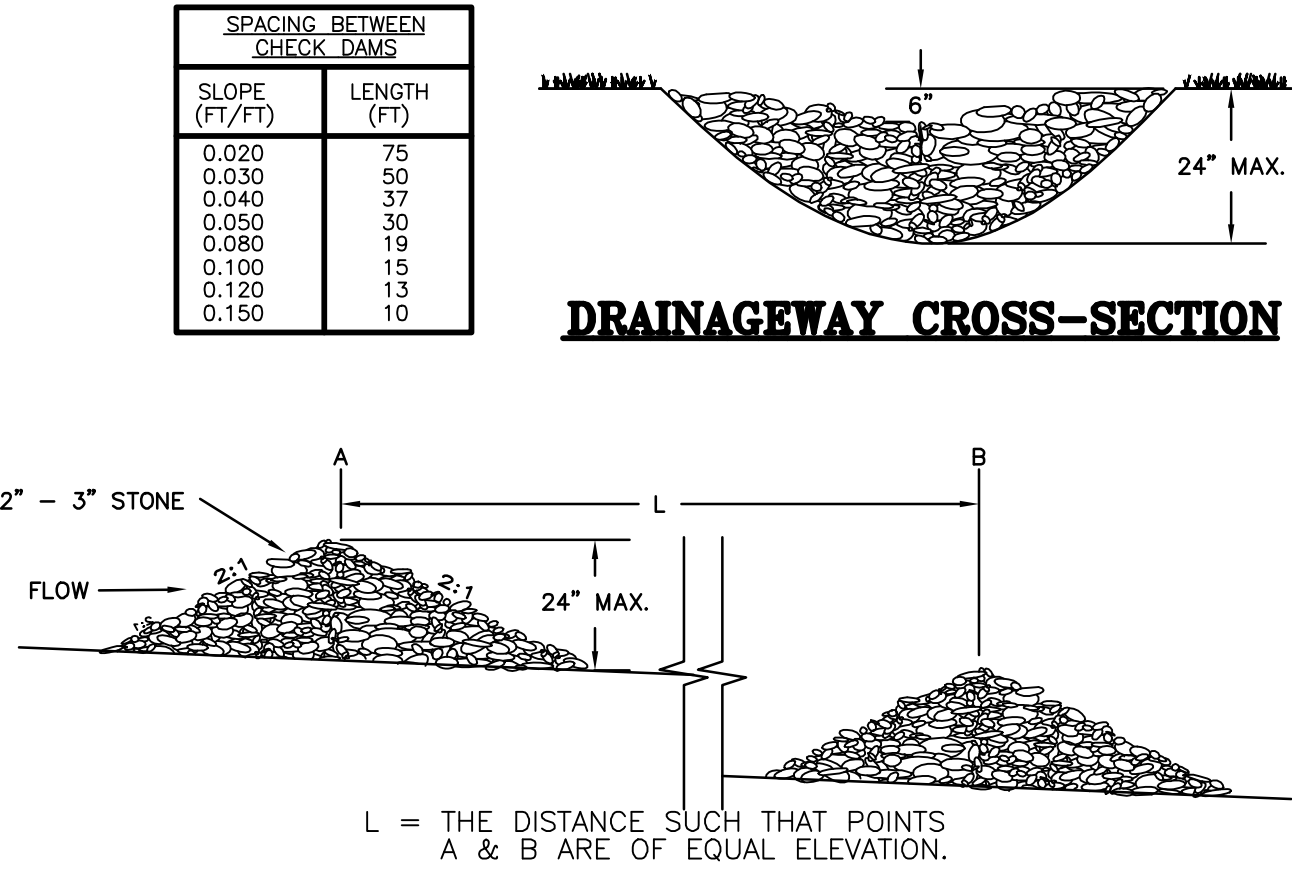
1. WHEN THE CONTROL PAD BECOMES INEFFECTIVE, THE STONE SHOULD BE REMOVED ALONG WITH THE COLLECTED SOIL MATERIAL, REGRADED ON SITE, AND STABILIZED. THE ENTRANCE SHOULD THEN BE RECONSTRUCTED.
2. THE CONTRACTOR SHOULD SWEEP THE PAVEMENT AT EXITS WHENEVER SOIL MATERIALS ARE TRACKED ONTO THE ADJACENT PAVEMENT 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 BERM IS INSTALLED AT THE ENTRANCE OF THE PROJECT SITE.
3. THE PAD SHOULD BE THE FULL WIDTH OF CONSTRUCTION ACCESS ROAD OR TO 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 EXIT

NOT TO SCALE



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.
5. STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED.

MAINTENANCE NOTES:

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

STONE CHECK DAM  
INSTALLATION DETAIL

NOT TO SCALE

SOIL 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 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.
4. IMPLEMENT WIND EROSION CONTROL PRACTICES AS APPROPRIATE ON ALL STOCKPILED MATERIAL.
5. PLACE BAGGED MATERIALS ON PALLETS OR UNDERCOVER.

PROTECTION OF INACTIVE STOCKPILES:

3. INACTIVE SOIL STOCKPILES SHOULD BE COVERED WITH ANCHORED TARPS OR PROTECTED WITH SOIL STABILIZATION MEASURES (TEMPORARY SEED AND MULCH OR OTHER TEMPORARY STABILIZATION PRACTICES) AND TEMPORARY PERIMETER SEDIMENT BARRIERS (I.E. SILT FENCE, ETC.) AT ALL TIMES.

7. INACTIVE STOCKPILES OF CONCRETE RUBBLE, ASPHALT CONCRETE RUBBLE, AGGREGATE MATERIAL, 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:

8. 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.
9. WHEN A STORM IS PREDICTED, STOCKPILES SHOULD BE PROTECTED WITH AN ANCHORED PROTECTIVE COVERING.

WINTER STABILIZATION &  
CONSTRUCTION PRACTICES:

MAINTENANCE REQUIREMENTS:

1. MAINTENANCE MEASURES SHOULD BE PERFORMED THROUGHOUT CONSTRUCTION, INCLUDING OVER THE WINTER PERIOD. AFTER EACH RAINFALL, SNOWSTORM, OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHOULD 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 SHOULD 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 SHOULD BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 15.

- THE AREA OF EXPOSED, UNSTABILIZED SOIL SHOULD BE LIMITED TO 1-ACRE AND SHOULD 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.

- STABILIZATION AS FOLLOWS SHOULD BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS:

2. 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, SHOULD BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR SEDIMENT MULCH PER ACRE SECURED WITH ANCHORED NETTING, OR 2 INCHES OF EROSION CONTROL MIX (REFER TO NHSM, VOL. 3 FOR SPECIFICATION).
3. 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, SHOULD BE SEEDED AND COVERED WITH A PROPERLY INSTALLED EROSION CONTROL BLANKET OR WITH A MINIMUM OF 4 INCHES OF EROSION CONTROL MIX, UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER. NOTE THAT COMPOST BLANKETS SHOULD NOT EXCEED 2 INCHES IN THICKNESS OR THEY MAY OVERHEAT.
4. ALL STONE COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY OCTOBER 15.
5. INSTALLATION OF ANCHORED HAY MULCH OR EROSION CONTROL MIX SHOULD NOT OCCUR OVER SNOW OF GREATER THAN 1 INCH IN DEPTH.
6. ALL MULCH APPLIED DURING WINTER SHOULD BE ANCHORED (I.E. BY NETTING, TRACKING, WOOD CELLULOSE FIBER).
7. WITHIN 24 HOURS OF STOCKPILING SOIL MATERIALS SHOULD 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 SHOULD BE RE-ESTABLISHED PRIOR TO ANY RAIN OR SNOWFALL. NO SOIL STOCKPILE SHOULD BE PLACED (EVEN COVERED WITH MULCH) WITHIN 100-FT. OF ANY WETLAND OR OTHER WATER RESOURCE AREA.
8. FROZEN MATERIAL (I.E. FROST LAYER REMOVED DURING WINTER CONSTRUCTION) SHOULD BE STOCKPILED SEPARATELY AND IN A LOCATION AWAY FROM ANY AREA NEEDING PROTECTION. FROZEN MATERIAL STOCKPILES CAN MELT IN SPRING AND BECOME UNWORKABLE AND DIFFICULT TO TRANSPORT DUE TO HIGH SOIL MOISTURE CONTENT.
9. INSTALLATION OF EROSION CONTROL BLANKETS SHOULD NOT OCCUR OVER SNOW OF GREATER THAN 1 INCH IN DEPTH OR ON FROZEN GROUND.
10. ALL GRASS-LINED DITCHES AND CHANNELS SHOULD BE CONSTRUCTED BY SEPTEMBER 1. ALL DITCHES AND SWALES WHICH DO NOT EXHIBIT 85% VEGETATIVE GROWTH BY OR ARE DISTURBED AFTER OCTOBER 15, SHOULD 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.
11. ALL STONE LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY OCTOBER 15.
12. AFTER NOVEMBER 15, INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION HAS STOPPED FOR THE WINTER SHOULD 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.
13. SEDIMENT BARRIERS THAT ARE INSTALLED DURING FROZEN CONDITIONS SHOULD CONSIST OF EROSION CONTROL MIX BERMS, OR CONTINUOUS CONTAINED BERMS. SILT FENCES AND HAY BALES SHOULD NOT BE INSTALLED WHEN FROZEN CONDITIONS PREVENT PROPER EMBEDMENT OF THESE BARRIERS.

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.)

GENERAL  
CONSTRUCTION PHASING:

1. STABILIZATION:
  - A) AREAS 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:
    - i) A MINIMUM OF 85% VEGETATIVE COVER HAS BEEN ESTABLISHED;
    - ii) A MINIMUM OF 3-INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR A CERTIFIED COMPOST BLANKET HAS BEEN INSTALLED, OR;
    - iii) EROSION CONTROL BLANKETS HAVE BEEN INSTALLED.
  - B) IN AREAS TO BE PAVED:
    - i) BASE COURSE GRAVELS HAVE BEEN INSTALLED.
2. TEMPORARY STABILIZATION:
  - A) ALL AREAS OF EXPOSED OR DISTURBED SOIL SHOULD BE TEMPORARILY STABILIZED AS SOON AS PRACTICABLE BUT NO LATER THAN 3 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.
3. PERMANENT STABILIZATION:
  - A) ALL AREAS OF EXPOSED OR DISTURBED SOIL SHOULD BE PERMANENTLY STABILIZED AS SOON AS PRACTICABLE BUT NO LATER THAN 3 DAYS FOLLOWING FINAL GRADING.
4. MAXIMUM AREA OF DISTURBANCE:
  - A) THE AREA OF UNSTABILIZED SOIL SHOULD NOT EXCEED 5 ACRES 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 SHOULD BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN DEPICTED ON SHEET C-2.
7. ALL EROSION AND SEDIMENT CONTROL PRACTICES AND MEASURES SHOULD BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN DEPICTED ON SHEET C-2.
8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHOULD 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 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 DAMAGE.
11. AREAS TO BE FILLED SHOULD BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND/OR OTHER OBJECTIONABLE MATERIALS.

12. 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.
13. ALL FILLS SHOULD 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, SHOULD BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
14. IN GENERAL, FILLS SHOULD BE COMPACTED IN LAYERS RANGING FROM 6 TO 24 INCHES IN THICKNESS. THE CONTRACTOR SHOULD REVIEW THE PROJECT GEOTECHNICAL REPORT AND/OR THE "PROJECT SPECIFIC PHASING NOTES" FOR SPECIFIC GUIDANCE.

15. 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.
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 SHOULD BE PERFORMED UNDER THE DIRECTION OF A **PROFESSIONAL ENGINEER**.
17. 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 "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. ALL BENCHES SHOULD BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF CONSTRUCTION.

20. 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.
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.

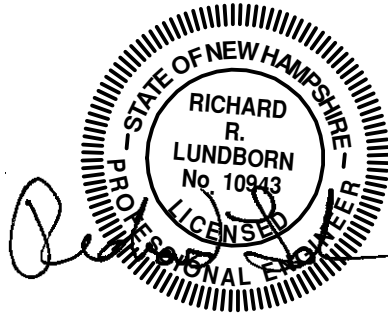
22. ALL GRADED AREAS SHOULD BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.

23. SEDIMENT SHALL BE DISPOSED OF PROPERLY EITHER ON SITE OR OFF SITE.

24. 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.

25. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM ALL STONE CHECK DAMS AND FROM ALL LOCATIONS OF ACCUMULATION.

26. 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).



REVISIONS:

PROJECT SPECIFIC  
CONSTRUCTION PHASING:

1. THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.
2. 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.

3. INSTALL ALL TEMPORARY SEDIMENT CONTROL BARRIERS (I.E. SILT FENCE, EROSION CONTROL MIX BERMS, STONE CHECK DAMS, ETC.) AROUND THE OUTER PERIMETER OF THE CONSTRUCTION SITE AS DEPICTED ON SHEET C-3 PRIOR TO EARTH MOVING OPERATIONS.

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 REGULATION.

5. TEMPORARY CONSTRUCTION ENTRANCE: INSTALL A CONSTRUCTION ENTRANCE AT THE CURB CUT AND UTILIZE IT FOR ACCESS TO THE SITE UNTIL PAVING IS COMPLETE.

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. CONSTRUCT THE BERM AND SWALE ALONG THE NORTHERN PROPERTY LINE. LOAM SEED AND MULCH IN ACCORDANCE WITH THE NOTES AND DETAILS ON SHEET C-6. EARLY STABILIZATION OF THE SWALE IS ENCOURAGED. SWALE SHALL BE STABILIZED PRIOR TO DIRECTING FLOW TO IT.

8. PLANT THE ARBORVITAE VEGETATIVE SCREEN AS DEPICTED ON SHEET C-1, THE SITE PLAN. ONE ROW OF THE ARBORVITAE TO BE CENTERED ALONG THE TOP OF THE BERM. THE OTHER ROW TO JUST DOWN TO THE NORTH.

9. PERFORM THE NECESSARY CUTS AND FILLS TO SUBGRADE IN THE PAVED AREA FOR THE PHASE(S) BEING CONSTRUCTED.

10. INSTALL REQUIRED FILLS IN MAXIMUM 8-INCH LIFTS AND COMPACT EACH LIFT TO 95% MAXIMUM PROCTOR DENSITY.

11. AS SUBGRADE IS ACHIEVED INSTALL REMAINING SEDIMENT CONTROL BARRIERS WITHIN THE SITE (I.E. ADDITIONAL SILT FENCE, EROSION CONTROL MIX BERMS, CHECK DAMS AND SEDIMENT CONTROLS AND CATCH BASINS, ETC.)

12. INSTALL ALL GRAVEL BASE AND CRUSHED GRAVEL MATERIALS FOR THE STANDARD HOT MIX BITUMINOUS ASPHALT AREAS AS SPECIFIED IN THE CORRESPONDING DETAILS.

13. SCARIFY THE SUB-GRADE IN THE AREA THAT IS TO BE THE POROUS PAVEMENT CROSS SECTION, ONCE SCARIFIED, CARE SHALL BE TAKEN TO LIMIT VEHICULAR TRAVEL ON THE SUB-GRADE. IF RE-SCARIFICATION IS NEEDED DURING THE INSTALLATION OF THE RESERVOIR COURSE IT SHALL BE DONE PRIOR TO PLACEMENT OF THE RESERVOIR STONE.

14. CONSTRUCT THE POROUS ASPHALT CROSS-SECTION THROUGH THE CHOKER COURSE IN ACCORDANCE WITH THE CROSS-SECTION AND SPECIFICATIONS ON SHEET C-7.

15. CARE SHOULD BE TAKEN TO LIMIT TRAVEL ON ALL COURSES OF THE POROUS PAVEMENT CROSS-SECTION DURING CONSTRUCTION. ONCE THE CHOKER COURSE IS PLACED, THE FILTER FABRIC SHALL BE SECURED OVER IT TO LIMIT SEDIMENT GETTING INTO THE STONE. THE FILTER FABRIC SHALL BE REMOVED PRIOR TO PLACEMENT OF THE POROUS PAVEMENT.

16. THEREAFTER TO BE PAVED SHALL BE STABILIZED (CONSTRUCTED TO GRAVEL BASE COURSE OR THROUGH CHOKER COURSE) WITHIN 72 HOURS OF ACHIEVING FINISHED SUBGRADE ELEVATIONS.

17. INSTALL PAVEMENT SURFACES AS SOON AS POSSIBLE AFTER INSTALLATION OF GRAVEL BASE AND CRUSHED GRAVEL AND CHOKER COURSE INSTALLATION, IN ORDER TO LIMIT SOIL EROSION AND POLLUTION OF THE GRAVEL MATERIALS WITH ORGANIC MATERIALS. IN NO CASE SHALL AREAS TO BE PAVED BE LEFT UNPROTECTED THROUGH THE WINTER MONTHS.

18. IF ONLY CONSTRUCTING A PHASE OR PHASES SHORT OF THE TOTAL PROJECT, CONSTRUCT THE WESTERN SLOPE OF THE PHASE AS SHOWN IN THE POROUS PAVEMENT CROSS-SECTION.

19. ALL CUT AND FILL SLOPES AND LAWN AREAS NOT TO BE PAVED SHALL BE LOAMED AND SEEDED FOR PERMANENT VEGETATION AND STABILIZATION AS DESCRIBED UNDER THE "PERMANENT VEGETATION PRACTICES" WITHIN 72 HOURS OF ACHIEVING FINAL GRADE.

20. ALL DISTURBED AREAS EXCLUDING AREAS TO BE PAVED SHALL BE STABILIZED AS SOON AS POSSIBLE. IN NO CASE SHALL ANY DISTURBED AREA BE LEFT UNSTABILIZED FOR LONGER THAN 45 DAYS. IF NECESSARY TEMPORARY STABILIZATION MEASURES AS DISCUSSED IN THE "GENERAL CONSTRUCTION PHASING NOTES" AND NHSM, VOL. 3 SHOULD BE EMPLOYED.

21. MAINTENANCE AND INSPECTION:
  - A) DURING CONSTRUCTION ALL TEMPORARY AND PERMANENT SEDIMENT, EROSION CONTROL AND STORMWATER MANAGEMENT PRACTICES SHOULD BE INSPECTED WEEKLY, AFTER EVERY 1/2 INCH OF RAINFALL, AND ANNUALLY.

22. 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.

23. ALL DAMAGED TEMPORARY AND PERMANENT SEDIMENT, EROSION CONTROL AND STORMWATER MANAGEMENT PRACTICES SHOULD BE REPAIRED OR REPLACED IMMEDIATELY UPON NOTICE.

24. SEDIMENT SHALL BE DISPOSED OF PROPERLY EITHER ON SITE OR OFF SITE.

25. PROJECT COMPLETION AND STABILIZATION:
  - A) UPON PROJECT COMPLETION, ONCE THE SITE IS DEEMED STABILIZED (VEGETATION IS GERMINATED), THE TEMPORARY SEDIMENT CONTROL BARRIERS AND EROSION CONTROL PRACTICES SHALL BE REMOVED. ANY DISTURBANCE CREATED DURING REMOVAL SHALL BE REPAIRED IN AN APPROPRIATE MANNER.

26. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM ALL STONE CHECK DAMS AND FROM ALL LOCATIONS OF ACCUMULATION.

EROSION CONTROL  
DETAILS

HIGHLAND STREET  
ROUTE 202 BYPASS  
ROCHESTER, NH  
STRAFFORD COUNTY

FOR  
SENSIBLE SELF  
STORAGE, LLC

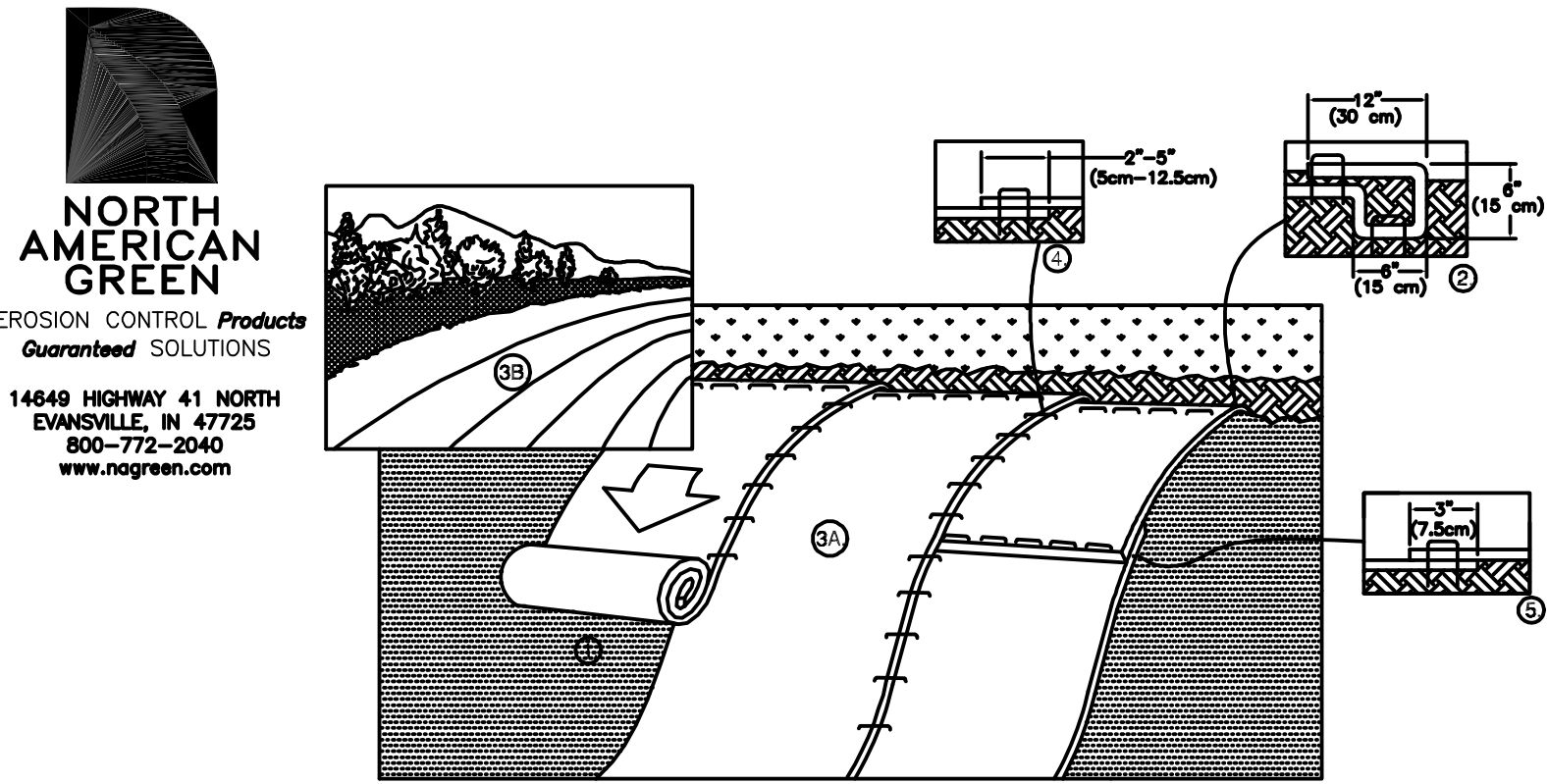
JULY 2013

REVISION DATE

SHEET C-5

FILE NO. 121 DRAWN BY: RRL  
PLAN NO. C-2669 CHK'D BY: RRL  
F.B. NO. ### SCRD NO: D-###  
DWG. NO. 12214/SP-1

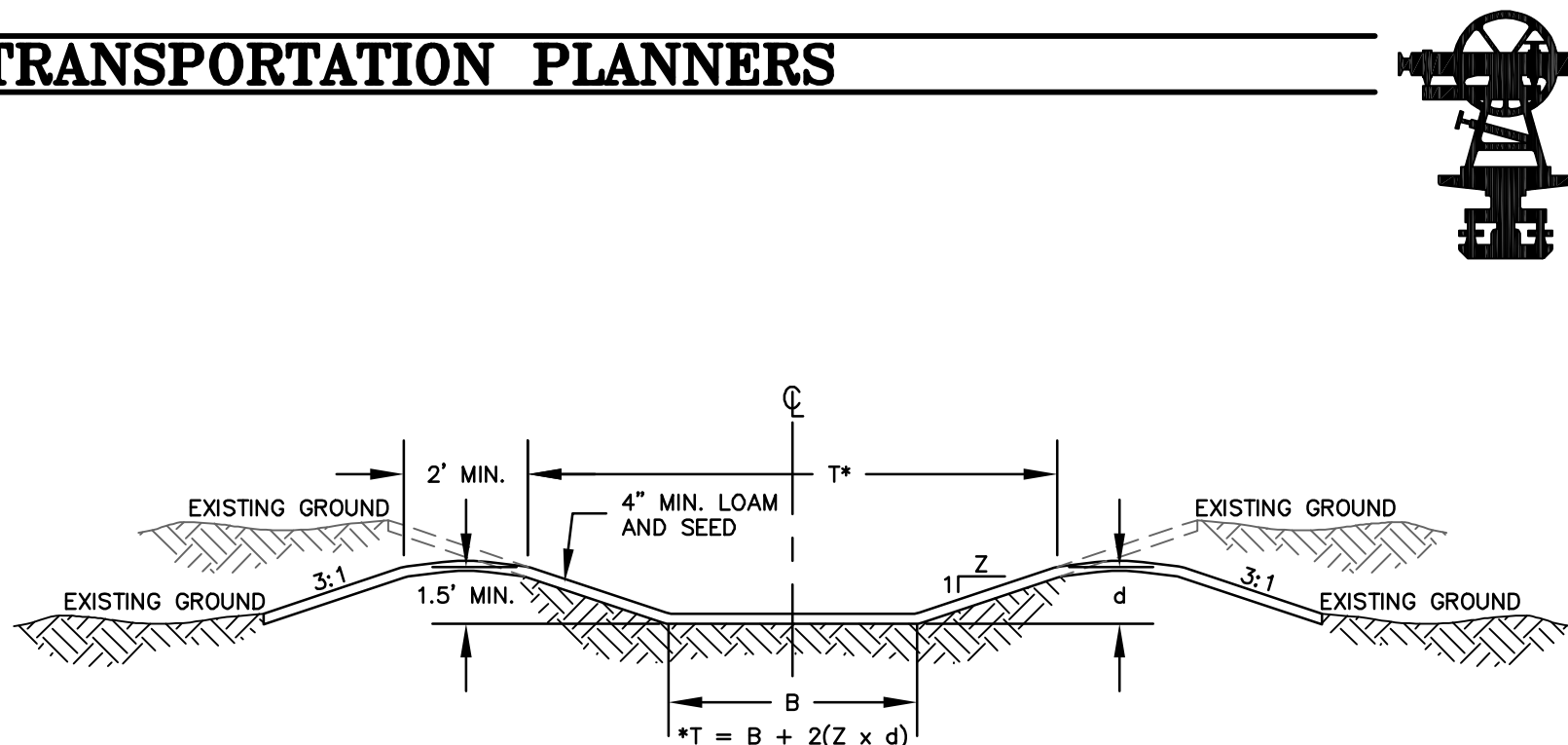




- MAINTENANCE REQUIREMENTS:**
- ALL BLANKET AND MATS SHOULD BE INSPECTED WEEKLY DURING THE CONSTRUCTION PERIOD, AND AFTER ANY RAINFALL EVENT EXCEEDING 1/2 INCH IN A 24-HOUR PERIOD.
  - ANY FAILURE SHOULD IMMEDIATELY. IF WASHOUT OF THE SLOPE, DISPLACEMENT OF THE MAT, OR DAMAGE TO THE MAT OCCURS, THE AFFECTED SLOPE SHALL BE REPAIRED AND RESEEDED, AND THE AFFECTED AREA OF MAT SHALL BE RE-INSTALLED.
- CONSTRUCTION SPECIFICATIONS:**
- MANUFACTURER'S INSTALLATION INSTRUCTIONS:
    - 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.
    - 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.
    - 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.
    - THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" – 5" (5 CM – 12.5 CM) OVERLAP DEPENDING ON RECP's TYPE.
    - CONSECUTIVE RECP's SPLICED 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.
  - SITE PREPARATION:
    - PROPER SITE PREPARATION IS ESSENTIAL TO ENSURE COMPLETE CONTACT OF THE PROTECTION MATTING WITH THE SOIL.
    - GRADE AND SHAPE AREA IF INSTALLATION.
    - REMOVE ALL ROCKS, CLODS, TRASH, VEGETATIVE OR OTHER OBSTRUCTIONS SO THAT THE INSTALLED BLANKETS WILL HAVE DIRECT CONTACT WITH THE SOIL.
    - PREPARE SEEDED 2-3 INCHES OF TOPSOIL ABOVE FINAL GRADE.
    - INCORPORATE AMENDMENTS, SUCH AS LIME AND FERTILIZER, INTO SOIL ACCORDING TO SOIL TEST AND THE SEEDING PLAN.
  - SEEDING:
    - 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.
    - 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

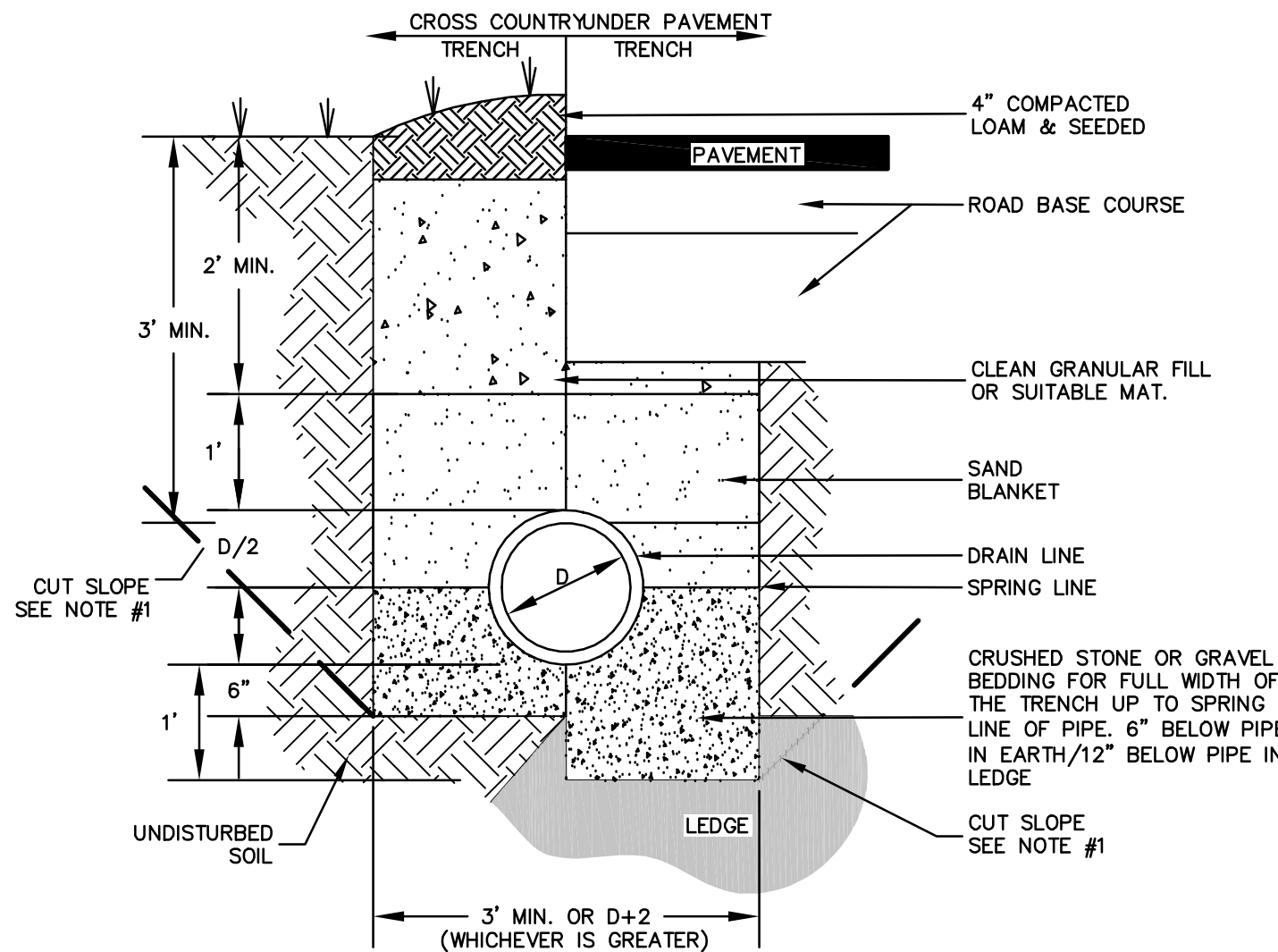


- MAINTENANCE NOTES:**
- THE SWALE(S) SHALL BE MOWED WITH THE REST OF THE SITE'S LAWN AREAS TO PROMOTE HEALTHY GROWTH AND PREVENT THE ENCROACHMENT OF WEEDS AND WOODY VEGETATION. DO NOT MOW GRASS IN SWALE(S) TOO SHORT. THIS WILL REDUCE THE SWALES FILTERING ABILITY.
  - THE SWALE(S) SHOULD BE FERTILIZED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

SWALE DIMENSION TABLE				
LOCATION	B	d	Z	T
EXISTING NORTH PROPERTY LINE	2'	2'	3	16'

## VEGETATED SWALE 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

FILE NO. 121  
PLAN NO. C-2669  
F.B. NO. ###  
DWG. NO. 12214/SP-1

DRAWN BY: RRL  
CHK'D BY: RRL  
SCRD NO: D-###

## TEMPORARY 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:

- STONES AND TRASH SHOULD BE REMOVED SO AS NOT TO INTERFERE WITH THE SEEDING AREA.
- WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
- IF APPLICABLE, FERTILIZER AND ORGANIC SOIL AMENDMENTS SHOULD BE APPLIED DURING THE GROWING SEASON.  
  
LIMESTONE APPLICATION RATE = 3 TONS/ACRE (138 LB./1,000-SF)\*  
\*EQUIVALENT TO 50% CALCIUM PLUS 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 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.  
  
LIMESTONE APPLICATION RATE = 3 TONS/ACRE (138 LB./1,000-SF)\*  
FERTILIZER APPLICATION RATE = 600 LB./ACRE (13.8 LB./1,000-SF)\*  
\*LOW PHOSPHATE FERTILIZER (N-P205-K20) OR EQUIVALENT

### SEEDING:

- 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. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
- TEMPORARY SEED SHOULD TYPICALLY OCCUR PRIOR TO SEPTEMBER 15.
- AREAS SEEDED 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.
- 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 OVERWINTER PROTECTION.

### MAINTENANCE REQUIREMENTS:

- 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.
- 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.
- 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 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 RYEGRASS	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 RYEGRASS	30 LBS.	0.7 LBS.	BEST FOR FALL SEEDING. SEED FROM AUGUST 15 TO SEPTEMBER 15 FOR BEST COVER. SEED TO A DEPTH OF 1 INCH.

### SOURCES:

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

## 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. CONTINUE 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 2 INCHES 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.  
  
LIMESTONE APPLICATION RATE = 3 TONS/ACRE (138 LB./1,000-SF)\*  
\*EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE  
  
FERTILIZER APPLICATION RATE = 600 LB./ACRE (13.8 LB./1,000-SF)\*  
\*LOW PHOSPHATE FERTILIZER (N-P205-K20) OR EQUIVALENT
- 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)\*  
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 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:

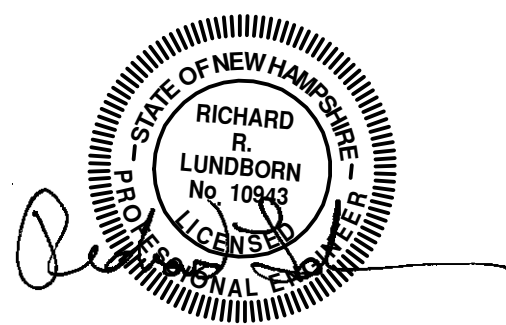
- INOCULATE ALL LEGUME SEED WITH THE CORRECT TYPE OF INOCULANT.
- APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL CULTPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM 1/4 TO 1/2 INCH. HYDROSEEDING THAT INCLUDES MULCH MAY BE LEFT ON SOIL SURFACE.
- WHERE FEASIBLE EXCEPT WHERE EITHER CULTPACKER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHOULD BE FIRMED 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 CROWN VETCH IS SEEDED IN LATE SUMMER AT LEAST 35% 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 NHSSM, VOL. 3. AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
- AREAS SEEDED 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.
- 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 OVERWINTER 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 SEEDED 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.
- SEEDED AREAS SHOULD BE MOWED AS REQUIRED TO MAINTAIN A HEALTHY STAND OF VEGETATION. MOWING HEIGHT AND FREQUENCY DEPEND OF TYPE OF GRASS COVER.
- BASED ON INSPECTION, AREAS SHOULD BE RESEDED TO ACHIEVE FULL STABILIZATION OF EXPOSED SOILS.
- AT A MINIMUM 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION.
- 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.



### REVISIONS:

## PERMANENT VEGETATION SEEDING RECOMMENDATIONS

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

## EROSION CONTROL DETAILS

### HIGHLAND STREET ROUTE 202 BYPASS ROCHESTER, NH STRAFFORD COUNTY

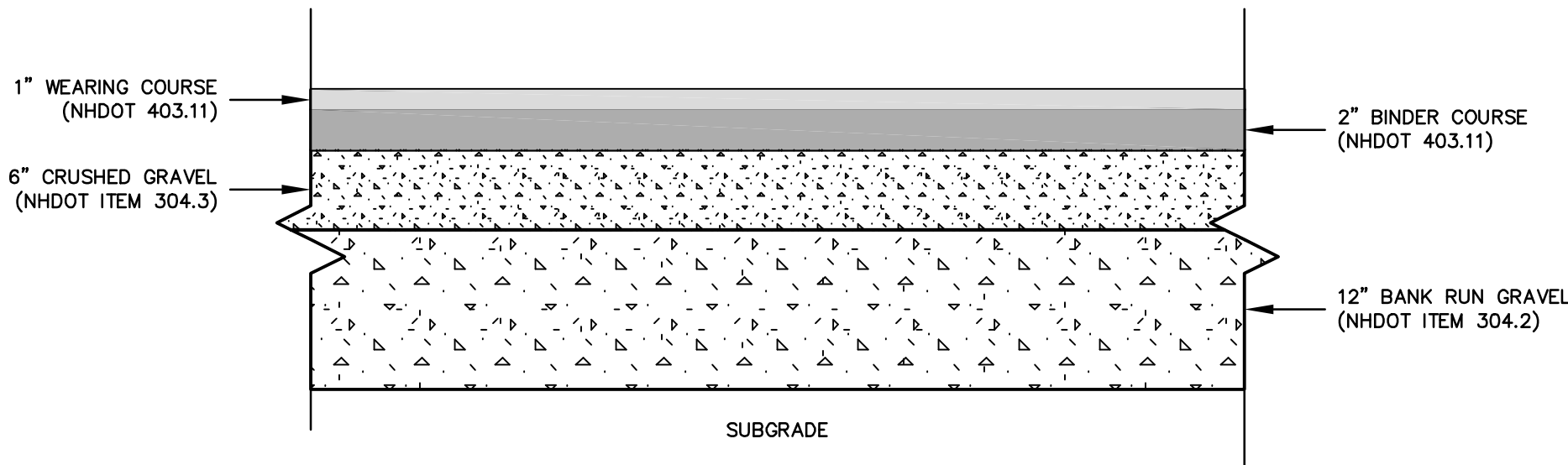
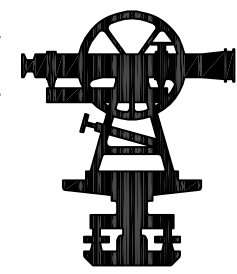
FOR SENSIBLE SELF STORAGE, LLC

JULY 2013

REVISION DATE

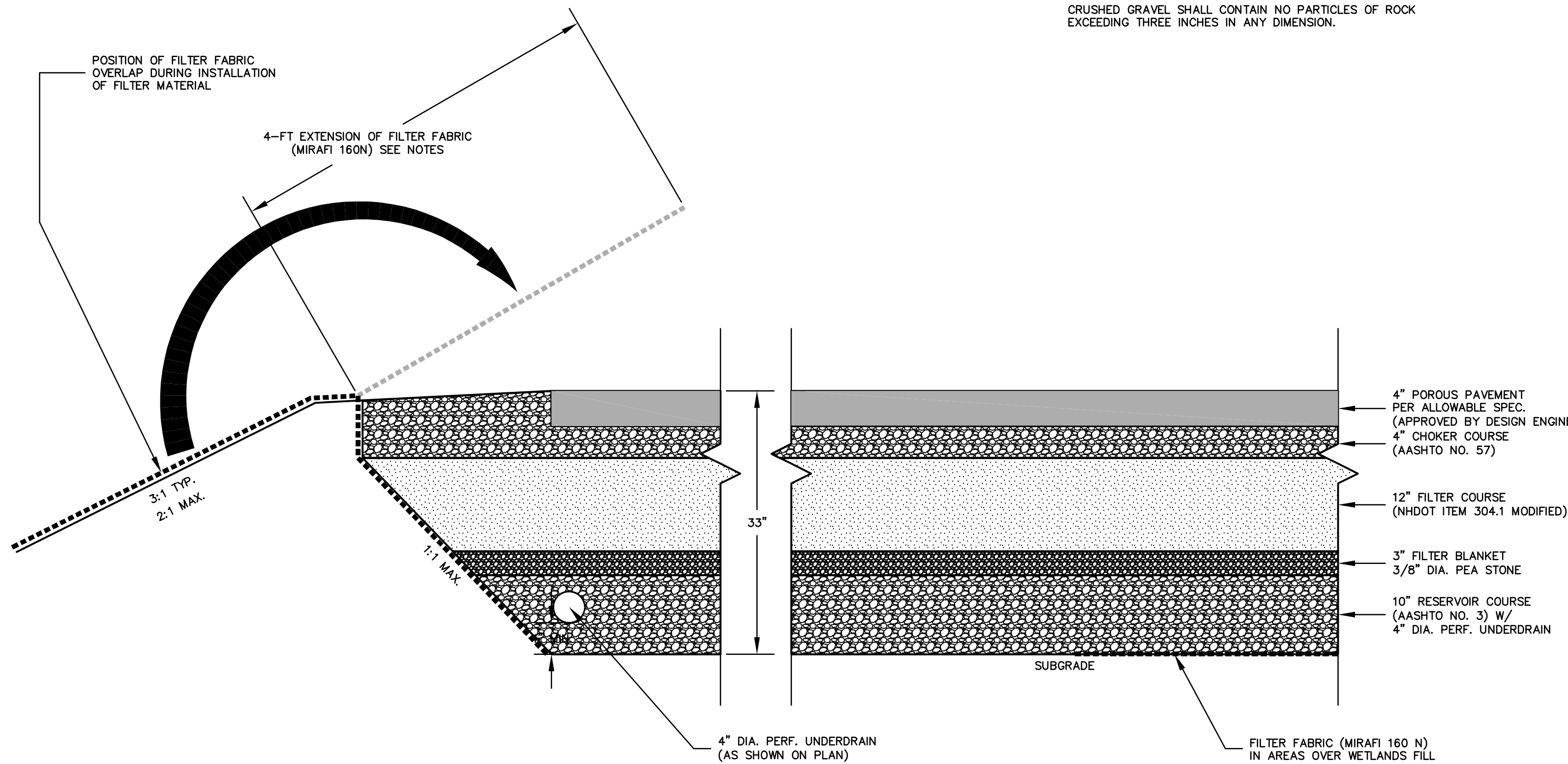
SHEET C-6





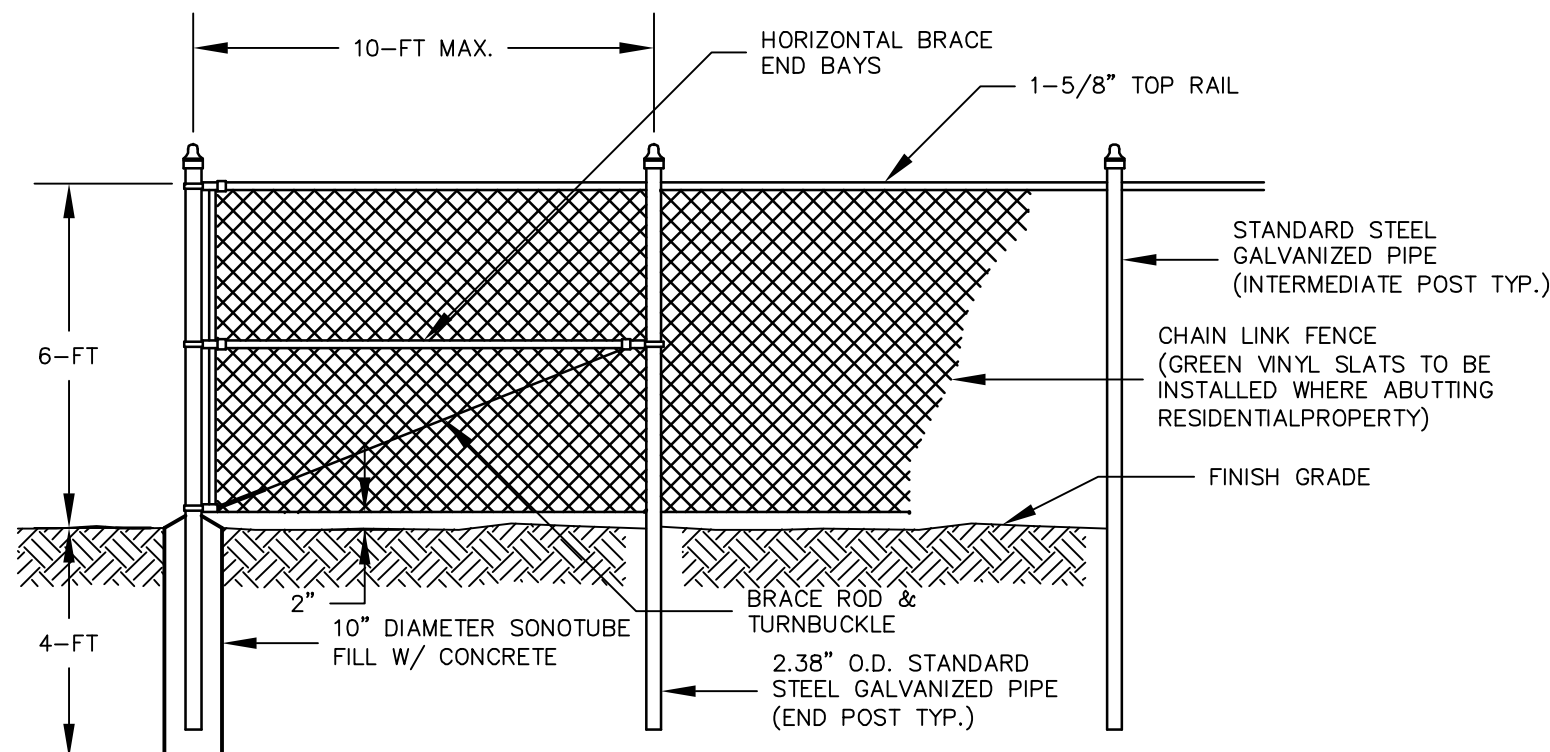
## STANDARD HOT MIX DRIVEWAY CROSS-SECTION

NOT TO SCALE



## POROUS PAVEMENT DRIVEWAY CROSS-SECTION

NOT TO SCALE



## TYPICAL CHAINLINK FENCE

NOT TO SCALE

FILE NO. 121 DRAWN BY: RRL  
PLAN NO. C-2669 CHK'D BY: RRL  
F.B. NO. ### SCRD NO: D-###  
DWG. NO. 12214/SP-1

### PAVEMENT CONSTRUCTION NOTES:

- THERE WILL BE 2 STANDARD PAVEMENT CROSS-SECTIONS FOR THIS PROJECT.
  - STANDARD HOT MIX ASPHALT (ENTRANCE AREA)
  - POROUS ASPHALT 4-INCH CHOKER COURSE (ACCESSWAY)

NOTES FOR EACH TYPE OF PAVEMENT CROSS-SECTION FOLLOW BELOW.

### STANDARD HOT MIX PAVEMENT NOTES:

- ALL MATERIAL TO BE INSTALLED SHALL MEET NHDOT SPECIFICATIONS AND BE FREE OF UNSUITABLE MATERIALS SUCH AS SILT, CLAY, ORGANIC MATERIAL, ROCKS LARGER THAN THE AGGREGATE SPECIFIED IN THE GRAVEL OR CRUSHED GRAVEL GRADATIONS, ETC.

- INSTALL BANK RUN GRAVELS IN AREAS WHERE CALLED FOR IN MAXIMUM 6 INCH LIFTS AND COMPACT TO 95% MAXIMUM PROCTOR DENSITY TO THE DEPTHS SPECIFIED IN THE TYPICAL CROSS SECTIONS.

### NHDOT ITEM 304.2 (BANK RUN GRAVEL) GRADING REQUIREMENTS:

SIEVE DESIGNATION:	PERCENTAGE BY WEIGHT
6 INCH	100%
NO. 4	25-70%
NO. 200	0-12%

BANK RUN GRAVEL SHALL CONTAIN NO PARTICLES OF ROCK EXCEEDING SIX INCHES IN ANY DIMENSION.

- INSTALL CRUSHED GRAVELS IN AREAS WHERE CALLED FOR IN MAXIMUM 6 INCH LIFTS AND COMPACT TO 95% MAXIMUM PROCTOR DENSITY TO THE DEPTHS SPECIFIED IN THE TYPICAL CROSS SECTIONS.

### NHDOT ITEM 304.3 (CRUSHED GRAVEL) GRADING REQUIREMENTS:

SIEVE DESIGNATION:	PERCENTAGE BY WEIGHT
3 INCH	100%
2 INCH	95-100%
1 INCH	55-85%
NO. 4	27-52%
NO. 200	0-12%

CRUSHED GRAVEL SHALL CONTAIN NO PARTICLES OF ROCK EXCEEDING THREE INCHES IN ANY DIMENSION.

### POROUS PAVEMENT NOTES:

- THE MOST CURRENT SPECIFICATION FOR POROUS ASPHALT PAVEMENT AND INFILTRATION BEDS FOUND AT THE UNH STORMWATER CENTER WEBSITE: [http://www.unh.edu/erg/cstev/pubs\\_specs\\_info.htm](http://www.unh.edu/erg/cstev/pubs_specs_info.htm), SHALL BE CONSIDERED PART OF THIS DESIGN. DEVIATIONS FROM THAT SPECIFICATION OTHER THAN THOSE PRESENT IN THE DETAILS ON THIS SHEET SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL.

- ALL MATERIAL TO BE INSTALLED SHALL MEET THE SPECIFICATIONS DISCUSSED IN THE UNH STORMWATER SPECIFICATIONS FOUND IN THE ABOVE WEB ADDRESS AND BE FREE OF UNSUITABLE MATERIALS SUCH AS SILT, CLAY, ORGANIC MATERIAL, ROCKS LARGER THAN THE AGGREGATE SPECIFIED IN THE GRADATIONS, ETC.

- ONCE THE AREA FOR THE POROUS PAVEMENT HAS BEEN PREPARED TO SUBGRADE, LINE THE SIDES OF THE EXCAVATION THAT WILL BE EXPOSED TO NATIVE MATERIALS OR MATERIALS USED FOR SLOPE FILL WITH FILTER FABRIC, MIRAFI 160 N.

- DO NOT LINE THE REMAINING BOTTOM OF THE POROUS PAVEMENT AREA.
- INSTALL FILTER FABRIC ON SIDES OF POROUS PAVEMENT AREA AS SHOWN IN THE DETAIL. OVERLAP FILTER FABRIC 16-INCHES WHERE JOINTS ARE NECESSARY.
- FOLD 4-FT OF FABRIC OUT OVER FILL SLOPES DURING CONSTRUCTION OF THE POROUS MEDIA BED TO LIMIT INTRODUCTION OF SEDIMENT AND IMPURITIES TO THE FILTER.
- ONCE THE FILTER MATERIAL IS PLACED THROUGH THE CHOKER COURSE FOLD THE 4-FT OVERLAP OVER THE FILTER MATERIAL TO PROTECT IT FROM SEDIMENT AND IMPURITIES UNTIL THE PAVEMENT IS PLACED.
- DO NOT PAVE OVER THE FILTER FABRIC.
- FOLD OVERLAP OVER PAVEMENT UNTIL VEGETATION IS ESTABLISHED ON ADJACENT SLOPE AREAS. REMOVE OVERLAPPING FABRIC ONCE VEGETATION IS ESTABLISHED, ELIMINATING THE THREAT OF DIRT AND OTHER MATERIALS MIGRATING ONTO THE PAVEMENT FROM THE LOAMED AREAS.

- INSTALL RESERVOIR COURSE MATERIAL (AASHTO NO.3 OR AASHTO NO. 5) IN AREAS WHERE CALLED FOR IN MAXIMUM 6 INCH LIFTS AND COMPACT TO 95% MAXIMUM PROCTOR DENSITY TO THE DEPTHS SPECIFIED IN THE TYPICAL CROSS SECTIONS.

### RESERVOIR COURSE (AASHTO NO. 3) GRADING REQUIREMENTS:

SIEVE DESIGNATION:	PERCENTAGE BY WEIGHT
2-1/2 INCH	100%
2 INCH	90-100%
1-1/2 INCH	35-70%
1 INCH	0-15%
1/2 INCH	0-5%

### RESERVOIR COURSE (AASHTO NO. 5) GRADING REQUIREMENTS:

SIEVE DESIGNATION:	PERCENTAGE BY WEIGHT
1-1/2 INCH	100%
1 INCH	90-100%
3/4 INCH	20-55%
1/2 INCH	0-10%
3/8 INCH	0-5%

- INSTALL FILTER BLANKET MATERIAL (3/8" PEA STONE; D50 = 3/8") IN AREAS WHERE CALLED FOR IN MAXIMUM 3 INCH LIFTS AND COMPACT TO 95% MAXIMUM PROCTOR DENSITY TO THE DEPTHS SPECIFIED IN THE TYPICAL CROSS SECTIONS.

- INSTALL FILTER COURSE MATERIAL (ITEM 304.1 SAND) IN AREAS WHERE CALLED FOR IN MAXIMUM 6 INCH LIFTS AND COMPACT TO 95% MAXIMUM PROCTOR DENSITY TO THE DEPTHS SPECIFIED IN THE TYPICAL CROSS SECTIONS.

### FILTER COURSE NHDOT ITEM 304.1 MODIFIED (SAND) GRADING REQUIREMENTS:

SIEVE DESIGNATION:	PERCENTAGE BY WEIGHT
6 INCH	100%
NO. 4	70-100%
NO. 200	0-8%

- INSTALL CHOKER COURSE (AASHTO NO.57) IN AREAS OF POROUS PAVEMENT AS DEPICTED IN THE CROSS-SECTION. COMPACT TO 95% MAXIMUM PROCTOR DENSITY TO THE DEPTHS SPECIFIED IN THE TYPICAL CROSS SECTIONS.

### CHOKER COURSE (AASHTO NO. 57) GRADING REQUIREMENTS:

SIEVE DESIGNATION:	PERCENTAGE BY WEIGHT
1-1/2 INCH	100%
1 INCH	95-100%
1/2 INCH	25-60%
NO. 4	0-10%
NO. 8	0-5%

CHOKER COURSE COMMONLY REFERRED TO AS WASHED 3/4 STONE.

### POROUS ASPHALT MIX SPECIFICATION:

- THE MOST CURRENT SPECIFICATION FOR POROUS ASPHALT PRODUCED BY THE UNH STORMWATER CENTER SHALL BE USED FOR THE POROUS PAVEMENT.

- ALTERNATIVE SPECIFICATIONS ARE ACCEPTABLE, MOST NOTABLY A NUMBER OF LOCALE MIX PLANTS PRODUCE POROUS ASPHALT WITH FIBER REINFORCEMENT IN LIEU OF THE LIQUID ADDITIVES SPECIFIED BY THE STORMWATER CENTER. IN THE EVENT AN ALTERNATIVE SPECIFICATION IS TO BE USED IT SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL.

- ALL POROUS ASPHALT SPECIFICATIONS SHALL MEET THE AIR VOID CONTENT BY CORELOK (ASTM D6752). AIR VOID SHALL BE BETWEEN 16-19%

### CURRENT UNH POROUS ASPHALT MIX DESIGN CRITERIA:

SIEVE DESIGNATION:	PERCENTAGE BY WEIGHT
3/4 INCH	100%
1/2 INCH	85-100%
3/8 INCH	55-75%
NO. 4	55-10%
NO. 8	2-4%

### ASPHALT CRITERIA:

BINDER CONTENT (AASHTO T164)	6-6.5%
AIR VOID CONTENT BY CORELOK (ASTM D6752)*	16-20%
AIR VOID CONTENT BY PARAFIN WAX (AASHTO T275)*	18-22%
DRAINDOWN (ASTM D6390)**	<0.3%
RETAINED TENSILE STRENGTH (AASHTO 283)***	>=80%

\*EITHER METHOD IS ACCEPTABLE

\*\*CELLULOSE OR MINERAL FIBERS MAY BE USED TO REDUCE DRAINDOWN.

\*\*\*TSR (RETAINED TENSILE STRENGTH) VALUES FALL BELOW BOX WHEN TESTED BY NAPA IS 13% (WITH A SINGLE FREEZE THAW CYCLE RATHER THAN 5). THE CONTRACTOR SHALL EMPLOY AN ANTI STRIP ADDITIVE, SUCH AS HYDRATED LIME (ASTM C977) OR A FATTY AMINE, TO RAISE THE TSR VALUE ABOVE 80%.

- THE DESIGN ENGINEER SHALL BE CONTACTED AND BE PRESENT FOR THE INSTALLATION OF EACH LAYER OF THE POROUS PAVEMENT SECTIONS TO INSURE THAT THE SUB-BASE, BANK RUN GRAVEL AND CHOKER COURSES ARE NOT OVER COMPACTED.

### TRANSFER OF OWNERSHIP:

- IN THE EVENT THE SITE IS SOLD TO ANOTHER PARTY, THAT NEW PARTY SHOULD BE MADE AWARE OF THE POROUS PAVEMENT, ITS PURPOSE AND SPECIAL MAINTENANCE REQUIREMENTS. THIS NOTIFICATION SHOULD BE DONE BOTH IN WRITING WITH THE INCLUSION OF A COPY OF THESE DESIGN MATERIALS AND VERBALLY.

- PLAN SETS AND OTHER INFORMATION ON THIS DESIGN CAN BE ACQUIRED FROM:

NORWAY PLAINS ASSOCIATES, INC.  
P.O. BOX 249  
2 CONTINENTAL BLVD.  
ROCHESTER, NH 03866-0249  
PHONE: 603-335-3948  
EMAIL: [norway@norwayplains.com](mailto:norway@norwayplains.com)

### EQUIPMENT NOTES:

#### HAULING EQUIPMENT:

- THE OPEN GRADED MIX SHALL BE TRANSPORTED IN CLEAN VEHICLES WITH TIGHT, SMOOTH DUMP BEDS THAT HAVE BEEN SPRAYED WITH A NON-PETROLEUM RELEASE AGENT OR SOAP SOLUTION TO PREVENT THE MIX FROM ADHERING TO THE DUMP BODIES.
- MINERAL FILLER, FINE AGGREGATE, SLAG DUST, ETC. SHALL NOT BE USED TO DUST TRUCK BEDS.
- THE OPEN GRADED MIX SHALL BE COVERED DURING TRANSPORT WITH A SUITABLE MATERIAL OF SUCH SIZE SUFFICIENT TO PROTECT THE MIX FROM THE WEATHER AND ALSO TO MINIMIZE COOLING AND PREVENT LUMPS.
- WHEN NECESSARY, TO ENSURE THE DELIVERY OF MATERIAL AT THE SPECIFIED TEMPERATURE, THE TRUCK BODIES SHALL BE INSULATED AND COVERS SHALL BE FASTENED SECURELY.
- LONG HAULS, ESPECIALLY THOSE IN EXCESS OF 25 MILES MAY RESULT IN SEPARATION OF THE MIX AND ITS REJECTION.

#### PLACING EQUIPMENT:

- THE PAYER SHALL BE A SELF-PROPELLED UNIT WITH AN ACTIVATED SCREED OR STRIKE OFF ASSEMBLY, CAPABLE OF BEING HEATED IF NECESSARY, AND CAPABLE OF SPREADING AND FINISHING THE MIX WITHOUT SEGREGATION FOR THE WIDTHS AND THICKNESSES REQUIRED.
- IN GENERAL, TRACKED PAVERS HAVE PROVED SUPERIOR FOR POROUS ASPHALT PLACEMENT.
- THE SCREED SHALL BE ADJUSTABLE TO PROVIDE THE DESIRED CROSS-SECTIONAL SHAPE.
- THE FINISHED SURFACE SHALL BE OF UNIFORM TEXTURE AND EVENNESS AND SHALL NOT SHOW ANY INDICATION OF TEARING, SHOWING, OR PULLING OF THE MIX.
- THE MACHINE SHALL, AT ALL TIMES, BE IN GOOD MECHANICAL CONDITION AND OPERATED BY COMPETENT PERSONNEL.
- PAVERS SHALL BE EQUIPPED WITH THE NECESSARY ATTACHMENTS, DESIGNED TO OPERATE ELECTRONICALLY, FOR CONTROLLING THE GRADE OF THE FINISHED SURFACE.
- THE ADJUSTMENTS AND ATTACHMENTS OF THE PAYER WILL BE CHECKED AND APPROVED BY THE ENGINEER BEFORE PLACEMENT OF ASPHALT MATERIAL.
- PAVERS SHALL BE EQUIPPED WITH A SLOPED PLATE TO PRODUCE A TAPERED EDGE AT LONGITUDINAL JOINTS. THE SLOPED PLATE SHALL BE ATTACHED TO THE PAYER SCREED EXTENSION.
- THE SLOPED PLATE SHALL PRODUCE A TAPERED EDGE HAVING A FACE SLOPE OF 3:1 (HORIZONTAL:VERTICAL). THE PLATE SHALL BE SO CONSTRUCTED AS TO ACCOMMODATE COMPACTED MAT THICKNESS FROM 35 TO 100 mm (1 1/4 TO 4 INCHES). THE BOTTOM OF THE SLOPED PLATE SHALL BE MOUNTED 10 TO 15 mm (3/8 TO 1/2 INCH) ABOVE THE EXISTING PAVEMENT. THE PLATE SHALL BE INTERCHANGEABLE ON EITHER SIDE OF THE SCREED.
- PAVERS SHALL BE EQUIPPED WITH A JOINT HEATER CAPABLE OF HEATING THE LONGITUDINAL EDGE OF THE PREVIOUSLY PLACED MAT TO THE SURFACE TEMPERATURE OF 95 °C (200 °F), OR HIGHER IF NECESSARY, TO ACHIEVE BONDING OF THE NEWLY PLACED MAT WITH THE PREVIOUSLY PLACED MAT. THIS SHALL BE DONE WITHOUT UNDUE BREAKING OF FRACTURING OF THE AGGREGATE AT THE INTERFACE. THE TEMPERATURE SHALL BE MEASURED IMMEDIATELY BEHIND THE JOINT HEATER.
- THE JOINT HEATER SHALL BE EQUIPPED WITH AUTOMATED CONTROLS THAT SHUT OFF THE BURNERS WHEN THE PAVEMENT MACHINE STOPS AND REIGNITE THEM WITH THE FORWARD MOVEMENT OF THE PAYER.
- THE JOINT HEATER SHALL HEAT THE ENTIRE AREA OF THE PREVIOUSLY PLACED WEDGE TO THE REQUIRED TEMPERATURE.
- HEATING SHALL IMMEDIATELY PRECEDE PLACEMENT OF THE ASPHALT MATERIAL.

#### ROLLING EQUIPMENT:

- ROLLERS SHALL BE IN GOOD MECHANICAL CONDITION, OPERATED BY COMPETENT PERSONNEL, CAPABLE OF REVERSING WITHOUT BACKLASH, AND OPERATED AT SPEEDS SLOW ENOUGH TO AVOID DISPLACEMENT OF THE ASPHALT MIXTURE.
- ROLLERS SHALL BE TWO-AXLE TANDEM ROLLERS WITH A GROSS MASS (WEIGHT) OF NOT LESS THAN 7 METRIC TONS (8 TONS) AND NOT MORE THAN 10 METRIC TONS (12 TONS) AND SHALL BE CAPABLE OF PROVIDING A MINIMUM COMPACTIVE EFFORT OF 44 kN/m (250 POUNDS PER INCH) OF WIDTH OF THE DRIVE ROLLER. ALL ROLLERS SHALL BE AT LEAST 1 m (42 INCHES) IN DIAMETER.
- ROLLERS SHALL BE EQUIPPED WITH TANKS AND SPRINKLING BARS FOR WETTING THE ROLLS.
- A RUBBER TIRE ROLLER WILL NOT BE REQUIRED ON THE OPENGRADED ASPHALT FRICTION COURSE SURFACE.

#### POROUS PAVEMENT PARKING AREA MAINTENANCE:

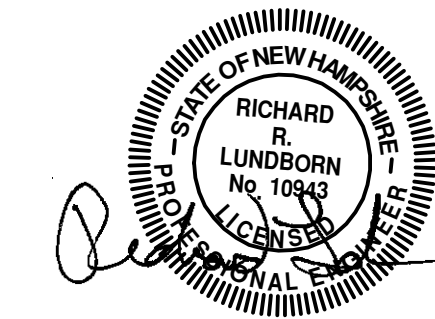
- THE POROUS PAVEMENT PARKING AREA SHALL BE VACUUM SWEEPED WITH A SWEEPER TRUCK THAT HAS A VACUUM CAPABILITY BI-ANNUALLY, ONCE IN THE SPRING TIME (APRIL 15- APRIL 30), AND ONCE IN THE FALL (OCTOBER 15-OCTOBER 30). THIS IS NECESSARY TO INSURE THE PROLONGED FUNCTION OF THE PAVEMENTS INFILTRATIVE CAPACITY.
- IT IS RECOMMENDED THAT PLOWING BE PERFORMED BY A PLOW VEHICLE WITH A PLOW THAT HAS RUBBER BLADE EDGE. THIS WILL LIMIT THE SCARRING OF THE PAVEMENT. HOWEVER, THIS IS NOT NECESSARY AND IS OPTIONAL.
- SANDING FOR WINTER TRACTION IS PROHIBITED. SALTING WITH NaCl IS PROHIBITED. DE-ICING AGENTS ARE PROHIBITED DUE TO THE PROXIMITY TO THE WETLANDS AND THE USE OF METAL STORAGE BUILDINGS THAT WOULD BE ADVERSELY AFFECTED.
- SNOW SHALL NOT BE STORED ON AREAS OF POROUS PAVEMENT. IT SHALL BE STORED OFF OF THE PAVED AREAS TO MINIMIZE FAILURE DUE TO FREEZING WITHIN THE PAVEMENT.
- REFER TO THE UNHSC WINTER MAINTENANCE FACT SHEET:

[http://www.unh.edu/erg/cstev/pubs\\_specs\\_info/winter\\_maintenance\\_fact\\_sheet.pdf](http://www.unh.edu/erg/cstev/pubs_specs_info/winter_maintenance_fact_sheet.pdf)

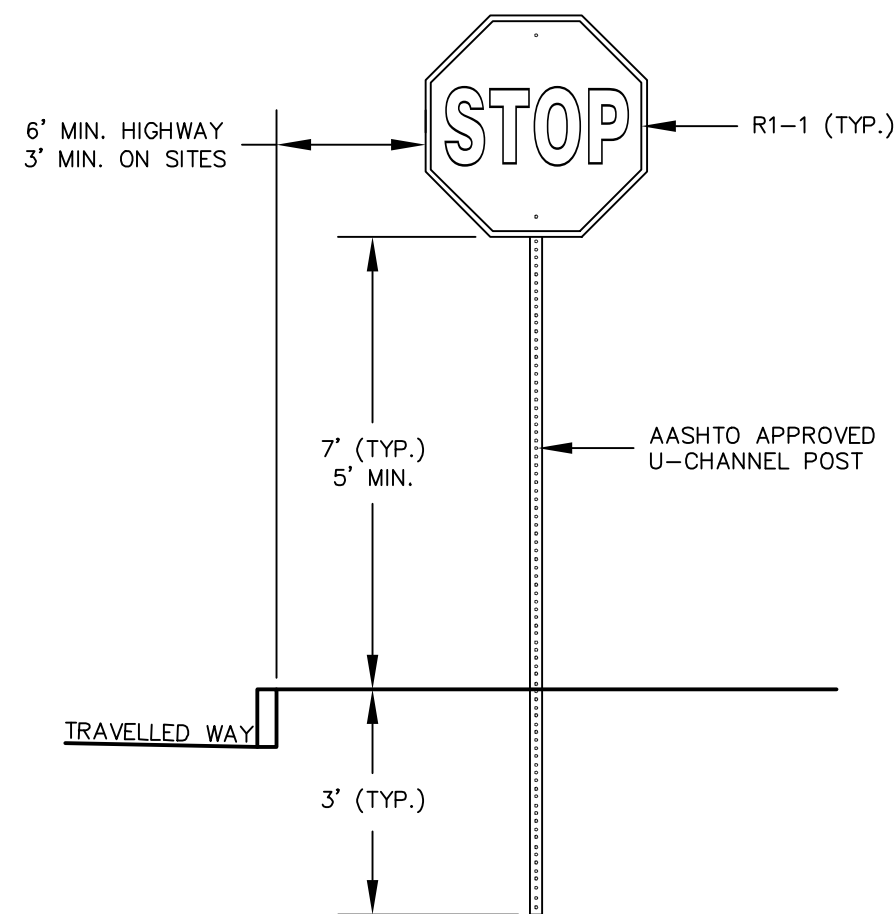
- ASPHALT SEAL COATING IS COMPLETELY FORBIDDEN. SURFACE SEAL COATING IRREVERSIBLY CLOGS THE PAVEMENT PORES.
- PLANTED AREAS (INCLUDING LAWN) ADJACENT TO THE POROUS PAVEMENT SHOULD BE WELL MAINTAINED TO PREVENT SOIL WASHOUT ONTO THE PAVEMENT. ANY OBSERVED BARE SPOTS OR ERODED AREAS SHOULD BE RECONSTRUCTED AND STABILIZED AT ONCE.
- IMMEDIATELY CLEAN ANY SOIL DEPOSITED ON PAVEMENT. DIRT GROUND INTO THE PORES OF THE ASPHALT CLOGS IT. THIS IS WHY TRACTOR TRAILERS AND HEAVY LOAD FIXED REAR DIFFERENTIAL VEHICLES ARE PROHIBITED AT THE SITE.
- CONSTRUCTION STAGING, SOIL/MULCH STORAGE, ETC. ON UNPROTECTED PAVEMENT SURFACES IS PROHIBITED.

#### POROUS PAVEMENT REPAIRS:

- POTHOLES/DAMAGED AREAS OF THE POROUS ASPHALT PAVEMENT LESS THAN 50-SQ-FT. IN SIZE CAN BE PATCHED BY ANY MEANS SUITABLE WITH STANDARD HOT MIX ASPHALT OR POROUS ASPHALT (PREFERRED).
- REPAIR OF DAMAGE GREATER THAN 50-SQ-FT. IN AREA REQUIRES THE DESIGN OF A PATCH TYPE DESIGNED BY A QUALIFIED PROFESSIONAL ENGINEER.
- ANY REPAIR OF DRAINAGE STRUCTURES REQUIRED SHOULD BE PERFORMED IMMEDIATELY TO ENSURE PROPER FUNCTIONING OF THE SYSTEM.



### REVISIONS:



#### NOTES:

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

## TYPICAL TRAFFIC SIGN

NOT TO SCALE

ITEM NO.	SIGN SIZE		TEXT	NO. SIGNS REQ'D
	HEIGHT	WIDTH		
R1-1	30"	30"	STOP	1
R7-8a	18"	12"	RESERVED PARKING	1
R7-8b	6"	12"	VAN ACCESSIBLE	1
UNIQUE	56"	48"	POROUS ASPHALT PAVEMENT FOR STORMWATER MANAGEMENT THE FOLLOWING ARE PROHIBITED: •TRACTOR TRAILERS/HEAVY LOAD •FIXED REAR DIFFERENTIAL VEHICLES •HANDLING OF HAZARDOUS MATERIALS ON-SITE •SEAL COATING •WINTER SANDING/SALTING THE FOLLOWING IS REQUIRED: •SEMI-ANNUAL VACUUMING OF PAVEMENT	1

#### NOTES:

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

## SIGN SCHEDULE


NOT TO SCALE

CONSTRUCTION DETAILS  
HIGHLAND STREET  
ROUTE 202 BYPASS  
ROCHESTER, NH  
STRAFFORD COUNTY  
FOR  
SENSIBLE SELF  
STORAGE, LLC  
JULY 2013

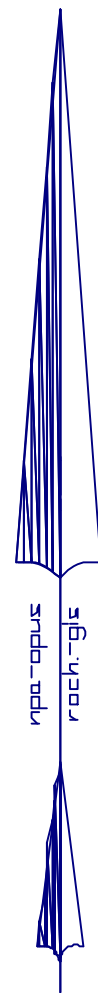
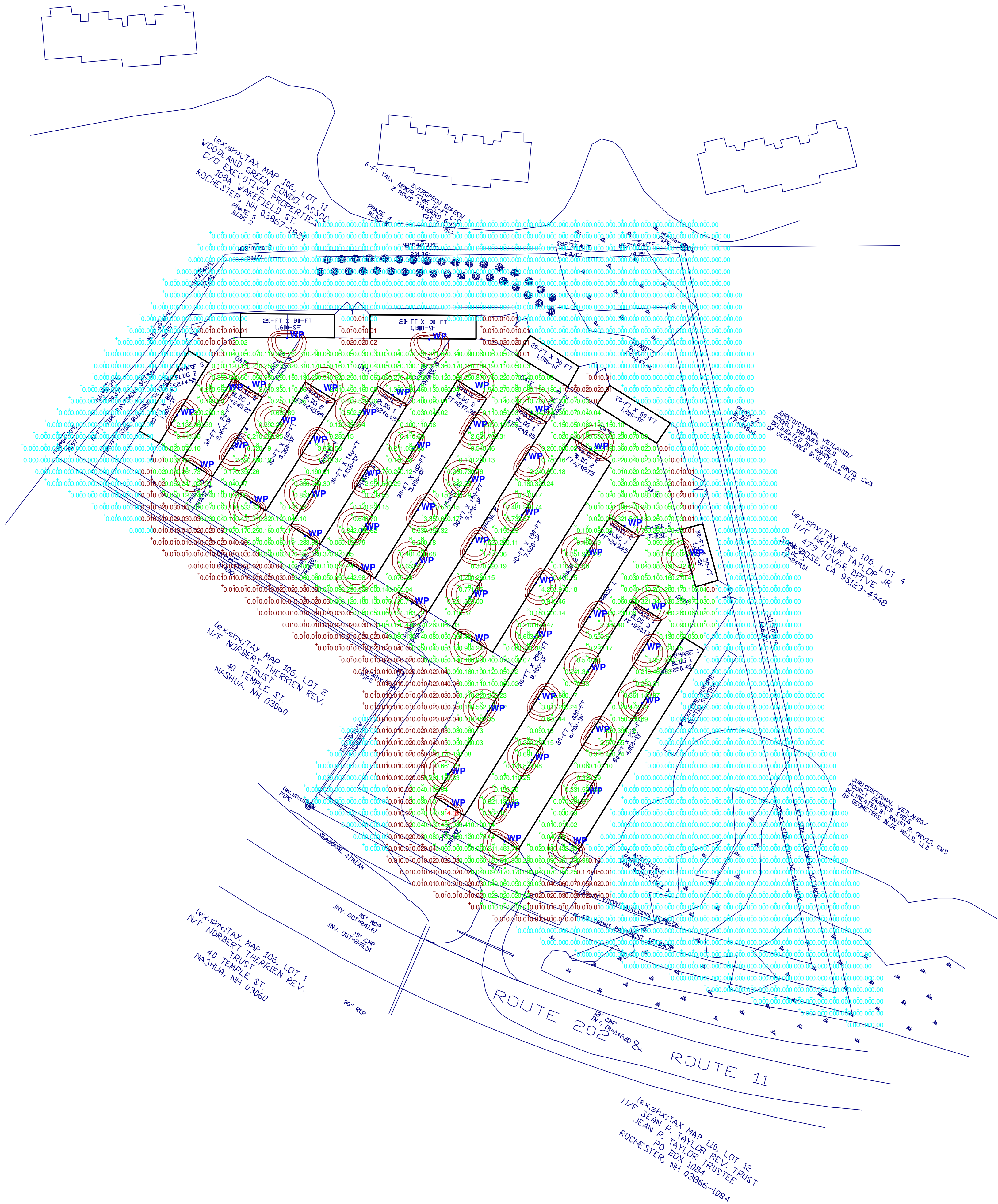
REVISION DATE

SHEET C-7



LUMINAIRE SCHEDULE									
Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
	WP	52	Lithonia Lighting: OLWP 11	OUTDOOR LED WALLPACK SMALL 4000K, TEMP 69.3C	LED	OLWP_11.ies	Absolute	1.00	20.41

STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone	+	0.15 fc	4.39 fc	0.00 fc	N / A	N / A
Paved Area	X	0.48 fc	4.39 fc	0.00 fc	N / A	N / A



## Storage Facility

Security Lighting

Designer  
INFURNA

Date  
Jun 28 2013

Scale

Drawing No.  
SL1 - REV1