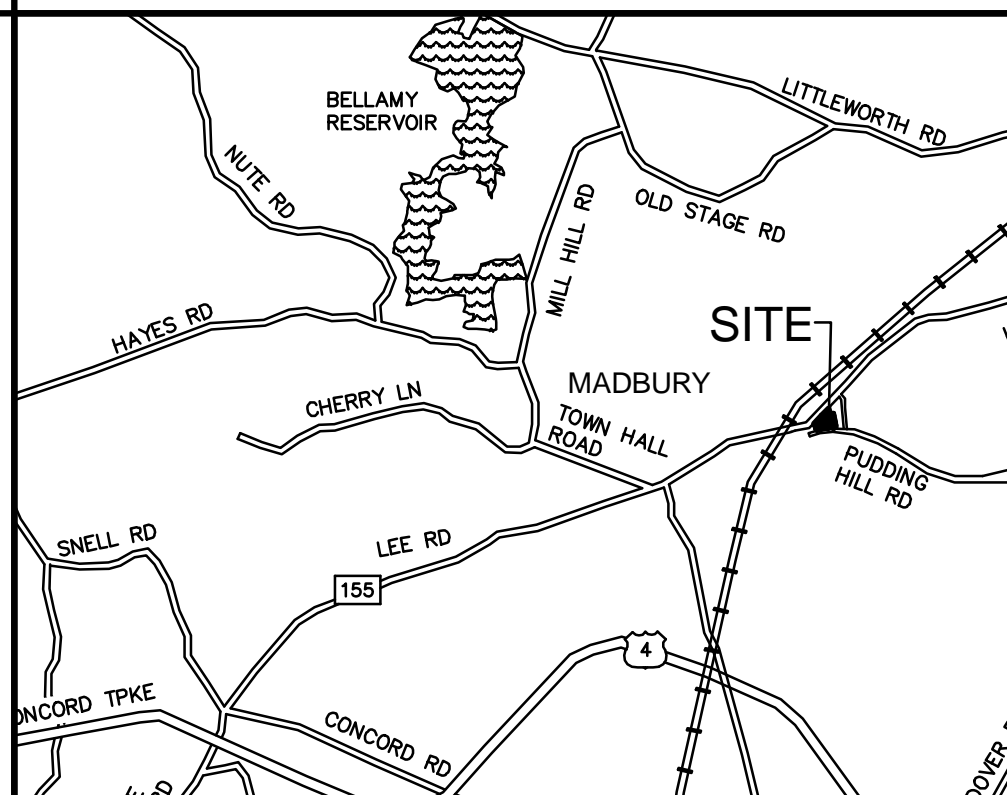


THESE PLANS ARE PERMIT DRAWINGS ONLY AND NOT INTENDED FOR CONSTRUCTION OR BIDDING



LOCATION PLAN

AMENDED SITE DEVELOPMENT PLANS CARRIAGE HILL ASSISTED LIVING

304 KNOX MARSH ROAD
MADBURY, NEW HAMPSHIRE

JANUARY 27, 2014

PROPERTY OWNER:

MAP 9 LOT 8 AND 8A
JASON W. BERNDTSON
123 DOVER ROAD
DURHAM, NH 03824

PERMITS REQUIRED

NHDES SUBSURFACE CONSTRUCTION PERMIT CA2014118502
EPA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM REQUIRED
NHDOT DRIVEWAY PERMIT 06-281-113

STATUS

CIVIL ENGINEER/LAND SURVEYOR:

NORWAY PLAINS ASSOCIATES, INC.
P.O. BOX 249
2 CONTINENTAL BOULEVARD
ROCHESTER, NH 03866-0249
(603)-335-3948

IN ASSOCIATION WITH

ARCHITECT:

TONY FALLON ARCHITECTURE
501 BARN DOOR GAP
STRAFFORD, NH 03884-6233
(603) 269-3206

ENVIRONMENTAL CONSULTANT:

GOVE ENVIRONMENTAL SERVICES, INC.
8 CONTINENTAL DRIVE, BUILDING 2, UNIT H
EXETER, NH 03833-7507
(603) 778-0644

LANDSCAPE ARCHITECT:

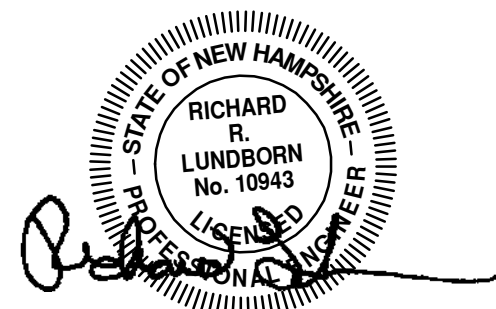
HBLA INC.
170 COMMERCE WAY, SUITE 102
PORTSMOUTH, NH 03801
(603) 431-4000

PLAN INDEX

SHEET #

EXISTING FEATURES PLAN	C-001
SITE PLAN	C-002
GRADING, DRAINAGE & EROSION CONTROL PLAN	C-003
LANDSCAPE PLAN	C-004
UTILITY PLAN	C-005
DETAILS	C-006 & C-007

FILE NO:	303		
JOB NO:	14010		
F.B. NO:	MSC		
PLAN NO:	C-2691		
SCRD NO:			
DRAWN BY:	RRL		
CHECK BY:	RRL		
DWG NO:	COVER		
NO.	REVISION	DATE	
5	ADDED NH PERMIT NUMBERS	8/05/14	
4	REVISIONS PER NHDOT	5/12/14	
3	REVISIONS PER NHDES SSB REVIEW	4/03/14	
2	CORRECTED UNIT COUNT ALL SHEETS	2/20/14	
1	ADDED TREATMENT SWALE	2/14/14	



NORWAY PLAINS ASSOCIATES, INC.
SURVEYORS
SEPTIC SYSTEM DESIGNERS
ALTON
31 Mooney Street
Alton, NH 03809
(603) 875-3948
www.norwayplains.com



ASSOCIATES, INC.
ENGINEERS
TRANSPORTATION PLANNERS
ROCHESTER
2 Continental Boulevard
P.O. Box 249
Rochester, NH 03866-0249
(603) 335-3948

AMMENDED SITE DEVELOPMENT PLAN
PROPERTY OF
JASON W. BERNDTSON
123 DOVER ROAD
DURHAM, NH 03824
SCRD: BK 3141, PG 848 & BK 3068, PG 199

CARRIAGE HILL ASSISTED LIVING
TAX MAP 9 LOTS 8 & 8A
304 & 306 KNOX MARSH ROAD/RTE. 155
MADBURY, NEW HAMPSHIRE
STRAFFORD COUNTY

REV: 08-05-14

COVER

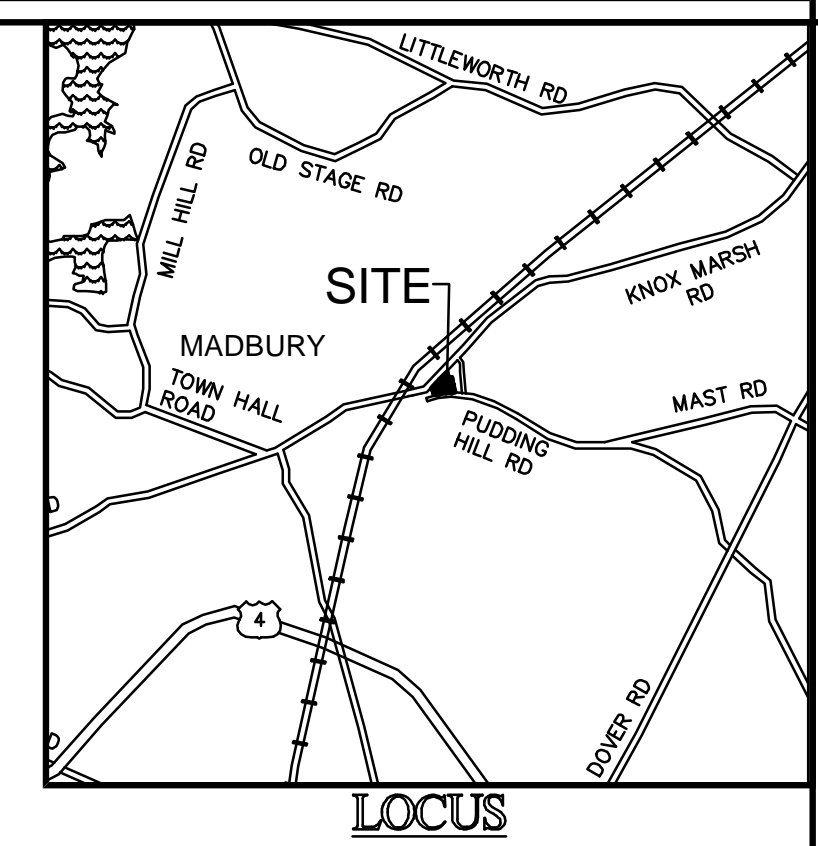
LEGEND

- BK.2562/PG.2783 BOOK NO./PAGE NO.
- ELEV. ELEVATION
- EP EDGE OF PAVEMENT
- INV. INVERT
- NAVDB8 NORTH AMERICAN VERTICAL DATUM OF 1988
- N/F NOW OR FORMERLY
- PSNH PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
- RCP REINFORCED CONCRETE PIPE
- SCRD STRAFFORD COUNTY REGISTRY OF DEEDS
- S.F. SQUARE FEET
- TBM TEMPORARY BENCH MARK
- UGU UNDERGROUND UTILITIES
- MAP/LOT ASSESSORS MAP & PARCEL NUMBER
- PROPERTY LINE
- TREE LINE
- OHU OVERHEAD UTILITIES
- D EXISTING DRAINAGE
- 120 EXISTING CONTOUR
- High Intensity Soil Boundary Line
- Utility Pole
- Iron Pipe
- Guy Pole
- Sign
- Well
- Drainage Manhole
- Test Pit
- Riprap
- Gravel

- HIGH INTENSITY MAP SYMBOL 523BH**
- DRAINAGE CLASS 5**
- Excessively drained.
 - Well drained.
 - Moderately well drained.
 - Somewhat poorly drained.
 - Poorly drained.
 - Very poorly drained.
 - Not determinable.
- PARENT MATERIAL 2**
- Glacioluvial.
 - Glacial till.
 - Marine or glaciolacustrine very fine sand and silt.
 - Marine or glaciolacustrine loamy/sandy over all/clay.
 - Marine or glaciolacustrine silt and clay.
 - Excavated, regraded, or filled.
 - Alluvial deposits.
 - Bedrock present 20-40 in. below the mineral soil surface.
 - Depth to bedrock variable.
 - Organic materials fresh water.
 - Organic materials tidal marsh.
- RESTRICTIVE FEATURE 3**
- None.
 - Bouldery, with more than 15% of surface covered.
 - Mineral restrictive layer(s) are present at less than 40 in. depth.
 - Bedrock 0 in. to 20 in. depth.
 - Subject to flooding.
 - Does not meet fill standards.
 - Bedrock present 20-40 in. below the mineral soil surface.
 - Depth to bedrock variable.
 - Complex of soil types.

High Intensity Map Symbol 523BH indicates a poorly drained glacial till soil with a restrictive feature, on a slope of 0 to 8%.

Developed from Society of Soil Scientists of Northern New England. "Special Publication No.1 High Intensity Soil Maps for New Hampshire Standards and Origins"



PLAN REFERENCES:

- "SUBDIVISION IN MADBURY FOR JERODA PROPERTIES, 86 KNOX MARSH ROAD MADBURY, N.H." BY KIMBALL CHASE COMPANY, INC. DATED AUGUST 7, 1985. SCRD PLAN NO. 27-94.
- STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, PS&E FEDERAL AID PROJECT, STP-BRF-X-0325 (002), N.H. PROJECT NO. 12922, NH ROUTE 155 OVER BOSTON & MAINE RAILROAD, TOWN OF MADBURY, STRAFFORD COUNTY, AS-BUILT PLANS" DATED NOVEMBER 19, 2008.
- "CONDOMINIUM SITE PLAN, LOT 4 - JERODA SUBDIVISION, MADBURY, N.H., PREPARED FOR SEAN BOYLE" BY KIMBALL CHASE COMPANY, INC., DATED 8-18-88.
- "EXISTING FEATURES PLAN, TAXMAP 9 LOTS 8 & 8A, PROPERTY OF JASON W. BERNDTSON, 304 & 306 KNOX MARSH ROAD, MADBURY, NEW HAMPSHIRE, COUNTY OF STRAFFORD" BY: MSC CIVIL ENGINEERS & LAND SURVEYORS, INC., DATED APRIL 16, 2013

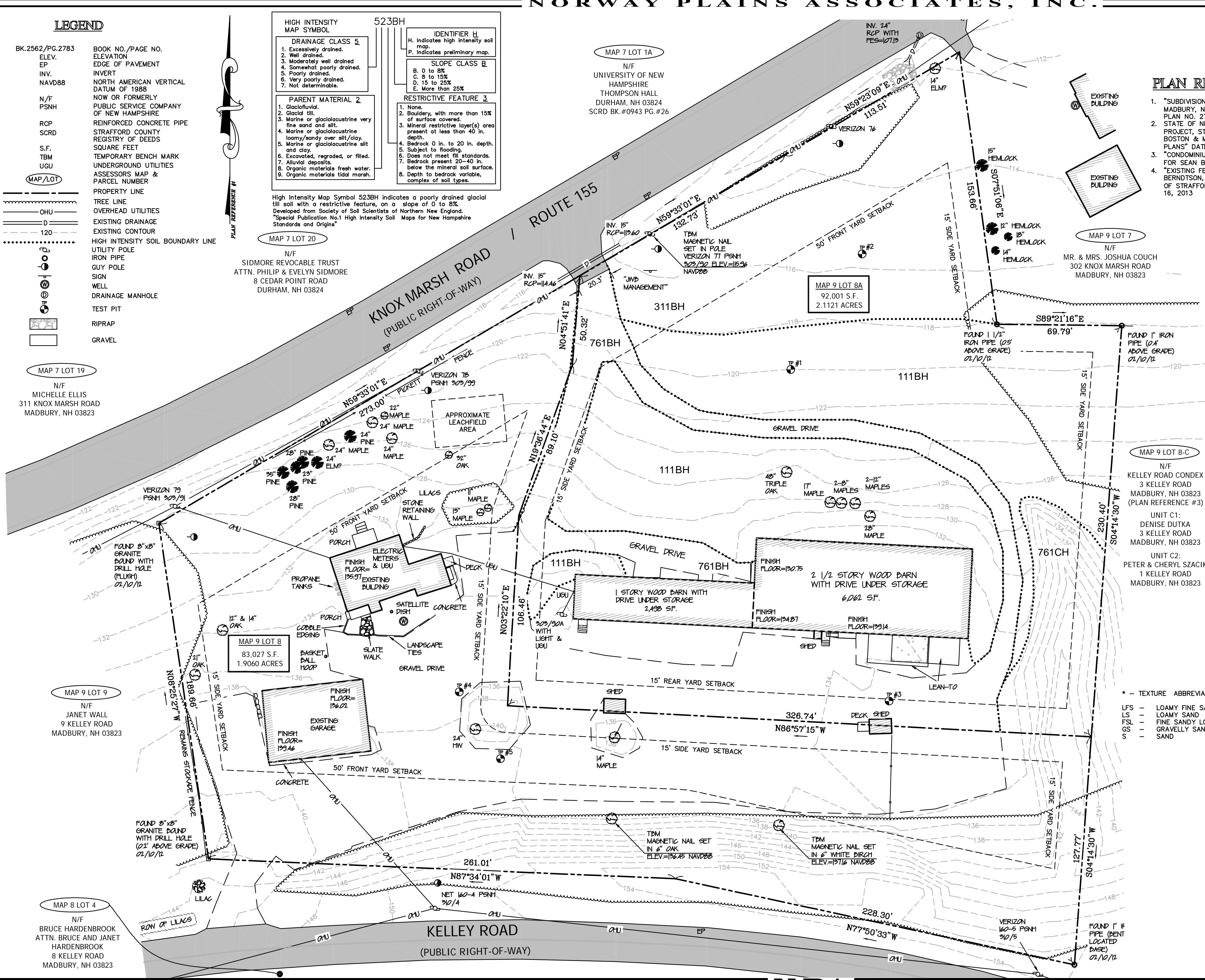
NOTES:

- THE PARCELS ARE LOCATED IN THE GENERAL RESIDENTIAL AND AGRICULTURAL DISTRICT AND THE AQUIFER AND WELLHEAD PROTECTION OVERLAY DISTRICT.
- THE PARCELS ARE AS SHOWN ON THE TOWN OF MADBURY ASSESSOR'S MAP 9 AS LOTS 8A & 8.
- THE PARCELS ARE LOCATED IN FLOOD ZONE X AS SHOWN ON FLOOD INSURANCE RATE MAP, STRAFFORD COUNTY, NEW HAMPSHIRE, PANEL 320 OF 405, MAP NUMBER 33017C0320D, EFFECTIVE DATE: MAY 17, 2005.
- OWNER OF RECORD: MAP 9 LOTS 8A & 8 JASON W. BERNDTSON 123 DOVER ROAD DURHAM, NH 03824 SCRD BK.#3141 PG.#848 SCRD BK.#3068 PG.#199
- ZONING REQUIREMENTS:

MINIMUM LOT SIZE:	80,000 S.F./SINGLE FAMILY DWELLING OR 120,000 S.F./TWO FAMILY DWELLING
MINIMUM FRONTAGE:	200'
MINIMUM SETBACKS:	
FRONT YARD:	50'
SIDE YARD:	15'
REAR YARD:	15'
LOT DEPTH:	150'
IMPERVIOUS COVERAGE:	20% MAXIMUM UNLESS ACCOMPANIED BY STORMWATER DRAINAGE PLAN
- PARCEL AREA: MAP 9 LOT 8A 92,001 S.F. 2.1121 ACRES. MAP 9 LOT 8 83,027 S.F. 1.9060 ACRES.
- TEST PITS 1&2 WERE CONDUCTED BY GOVE ENVIRONMENTAL SERVICES, INC. ON 01/18/2012 AND WITNESSED BY MIKE CUOMO, COUNTY CONSERVATION DISTRICT. TEST PITS 3-5 WERE CONDUCTED BY STEVE OLES OF MSC ON 05/02/12 AND WITNESSED BY MIKE CUOMO.

TEST PIT LOGS

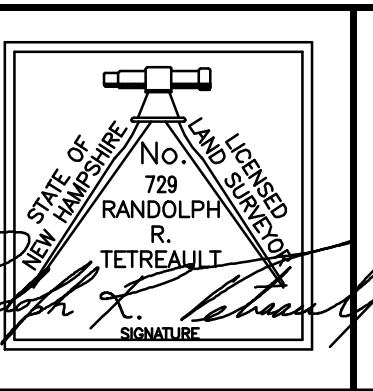
DEPTH	COLOR	TEXTURE*	STRUCTURE	CONSISTENCE	MOTTLES: QUANTITY/ CONTRAST
0"-8"	10YR 4/3	LFS	GRANULAR	FRIABLE	NONE
8"-16"	10YR 3/3	FSL	GRANULAR	FRIABLE	NONE
16"-22"	10YR 5/8	FSL	GRANULAR	VERY FRIABLE	NONE
22"-28"	10YR 5/6	S	GRANULAR	VERY FRIABLE	NONE
28"-60"	2.5Y 6/6	S	GRANULAR	VERY FRIABLE	20% GRAVEL



FILE NO:	303
JOB NO:	14010
F.B. NO:	MSC
PLAN NO:	C-2691
SCRD NO:	
DRAWN BY:	RRL
CHECK BY:	RRL
DWG NO:	EF

NO.	REVISION	DATE
5	ADDED NH PERMIT NUMBERS	8/05/14
4	REVISIONS PER NHDOT	5/12/14
3	REVISIONS PER NHDES SSB REVIEW	4/03/14
2	CORRECTED UNIT COUNT ALL SHEETS	2/20/14
1	ADDED TREATMENT SWALE	2/14/14

BOUNDARY AND EXISTING FEATURES SURVEY PER REFERENCE PLAN #4 BY MSC ENGINEERS & LAND SURVEYORS, INC. THE PLAN WAS REVIEWED AND APPROVED FOR USE BY RANDOLPH R. TETREAU, L.L.S. OF NORWAY PLAINS ASSOCIATES, INC. ON JANUARY 23, 2014.



NORWAY PLAINS ASSOCIATES, INC.

SURVEYORS
SEPTIC SYSTEM DESIGNERS

ALTON
31 Mooney Street
Alton, NH 03809
(603) 875-3948
www.norwayplains.com

ENGINEERS
TRANSPORTATION PLANNERS

ROCHESTER
2 Continental Boulevard
P.O. Box 249
Rochester, NH 03866-0249
(603) 335-3948

AMMENDED SITE DEVELOPMENT PLAN

PROPERTY OF
JASON W. BERNDTSON
123 DOVER ROAD
DURHAM, NH 03824
SCRD: BK 3141, PG 848 & BK 3068, PG 199

EXISTING FEATURES PLAN
CARRIAGE HILL ASSISTED LIVING
TAX MAP 9 LOTS 8 & 8A
304 & 306 KNOX MARSH ROAD/RTE. 155
MADBURY, NEW HAMPSHIRE
STRAFFORD COUNTY

0 15 30 60
1 INCH = 30 FEET

REV: 08-05-14

C-001

LEGEND

EP	EDGE OF PAVEMENT
SF	SQUARE FEET
TYP	TYPICAL
W/	WITH
(S)	PROPOSED SIGN
(18)	PROPOSED PARKING COUNT
(D)	PROPOSED DUMPSTER
[Hatched Box]	PROPOSED PAINT
[Dotted Box]	PROPOSED CONCRETE
[Dashed Box]	EXISTING GRAVEL DRIVEWAY
---	PROPERTY LINE
- - -	SETBACK LINE
~ ~ ~	TREELINE
- - -	EXISTING FENCE
■	PROPOSED DARK-SKY COMPLIANT WALL PACK LIGHT
▼	PROPOSED DARK-SKY COMPLIANT UNDER OVERHANG LIGHT
●	PROPOSED LIGHT POLE, BASE AND DARK-SKY COMPLIANT FIXTURE

SITE DATA

ZONED: GENERAL RESIDENTIAL AND AGRICULTURAL & AQUIFER AND WELLHEAD PROTECTION OVERLAY DISTRICT
 EXISTING USE: COMMERCIAL STORAGE FACILITY
 PROPOSED USE: ASSISTED LIVING FACILITY (24 BEDS)

DIMENSIONAL REQUIREMENTS

	REQUIRED:	EXISTING	PROPOSED:
MINIMUM LOT DIMENSIONS:			
LOT AREA	80,000 SF/SINGLE FAMILY 120,000 SF/TWO FAMILY	175,028 SF	175,028 SF
STREET FRONTAGE DEPTH	200 FT 150 FT	489 FT 189 FT	489 FT 189 FT
MINIMUM YARD SETBACKS:			
FRONT	50 FT	65 FT	55.3 FT
SIDE	15 FT	73 FT	41.2 FT
REAR	15 FT	N/A	N/A
MAXIMUM IMPERVIOUS COVERAGE	20 % (UNLESS STORMWATER DRAINAGE PLAN INCLUDED)	34.6 %	28.9 %

PARKING REQUIREMENTS

ACCESSIBLE SPACES (REQ'D BY ADA)	1 SPACE	N/A	2 SPACES
PARKING SPACE SIZE	8.5 FT X 19 FT	N/A	9 FT X 19 FT

PARKING SPACES PROPOSED

RESIDENTS	= 6 +
EMPLOYEES	= 6 +
VISITORS	= 6
TOTAL	= 18

IMPERVIOUS COVERAGE CALCULATION

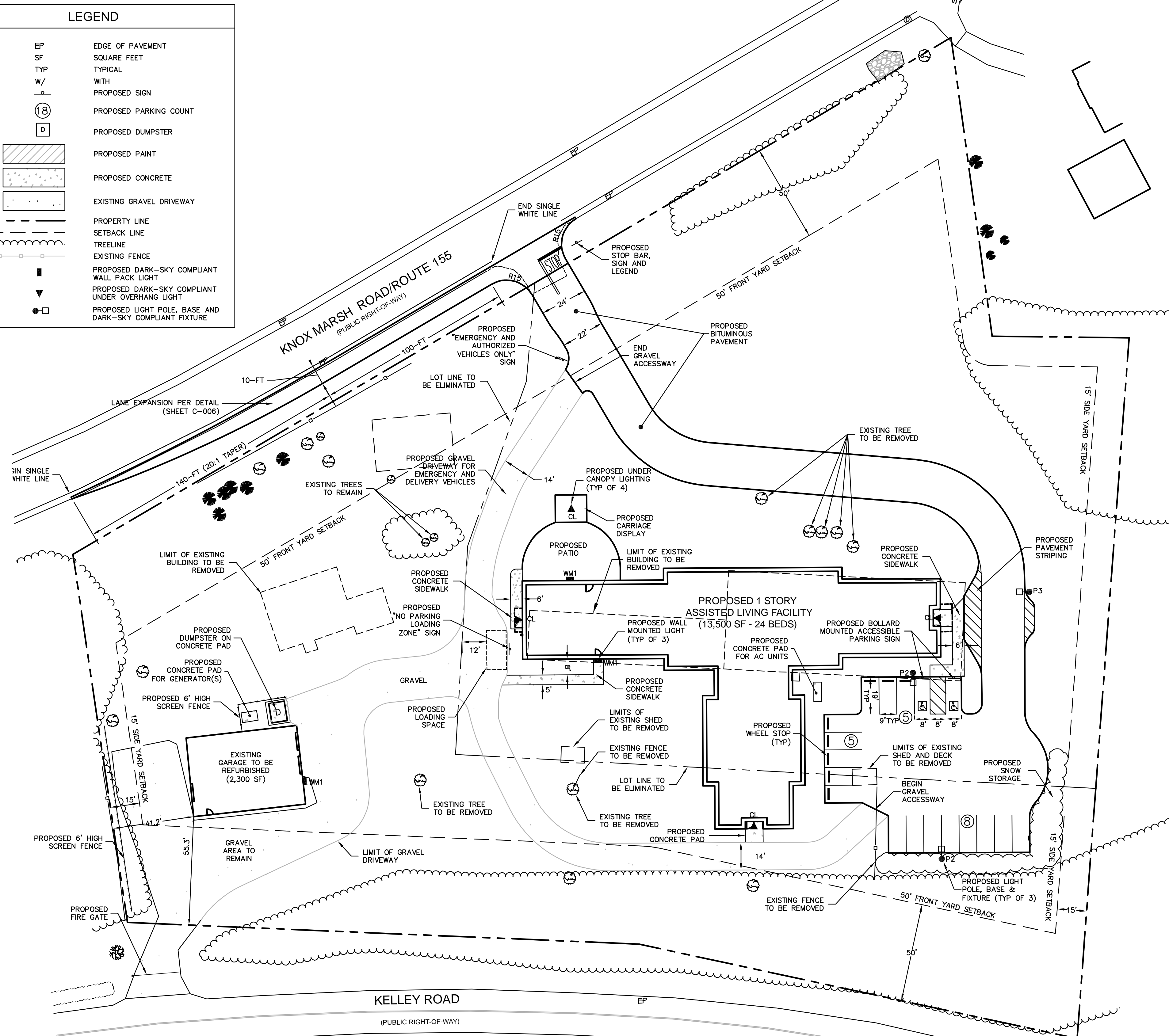
PAVEMENT	= 16,755
GRAVEL	= 15,531
CONCRETE/PATIO	= 2,458
BUILDINGS	= 15,800
TOTAL	= 50,544

SITE NOTES

- THESE PLANS ARE PERMIT DRAWINGS ONLY AND NOT INTENDED FOR CONSTRUCTION OR BIDDING.
- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO APPLICABLE TOWN, STATE, AND FEDERAL CODES.
- ALL PAVEMENT MARKINGS AND SIGNS TO CONFORM TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" AND THE AMERICANS WITH DISABILITIES ACT REQUIREMENTS, LATEST EDITIONS, AND STATE SPECIFICATIONS.
- SEE DETAILS FOR PARKING STALL MARKINGS, ACCESSIBLE SYMBOLS, SIGNS, AND SIGN POSTS.
- CONTACT EASEMENT OWNERS PRIOR TO COMMENCING ANY WORK WITHIN THE EASEMENTS.
- CONTRACTOR TO NOTIFY ENGINEER IN WRITING OF ANY DISCREPANCIES OF PROPOSED LAYOUT AND/OR EXISTING FEATURES.
- THE CONTRACTOR SHALL EMPLOY A LICENSED SURVEYOR TO DETERMINE ALL LINES AND GRADES AND LAYOUT OF SITE ELEMENTS AND BUILDINGS.
- CURBING ALIGNMENT SHALL BE MODIFIED TO AVOID CONFLICTS WITH ALL UTILITY MANHOLES AND OTHER CASTINGS. ALL CONFLICTS SHALL BE REVIEWED WITH THE OWNER PRIOR TO PLACEMENT OF CURB FOR APPROVAL OF MODIFIED ALIGNMENT.
- CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO REDUCE, TO THE FULLEST EXTENT POSSIBLE, NOISE, DUST AND UNSIGHTLY DEBRIS.
- ALL WORK WITHIN THE RIGHT-OF-WAY OF THE TOWN AND/OR STATE SHALL COMPLY WITH APPLICABLE STANDARDS.
- VERIFY LAYOUT OF PROPOSED BUILDING FOUNDATIONS WITH ARCHITECT AND THAT PROPOSED FOUNDATION MEETS PROPERTY LINE SETBACKS PRIOR TO COMMENCING ANY FOUNDATION CONSTRUCTION.
- REFER TO ARCHITECTURAL PLANS FOR LAYOUT OF BUILDING FOUNDATIONS. DO NOT USE SITE PLANS FOR LAYOUT OF FOUNDATIONS.
- WHERE PROPOSED PAVEMENT MEETS EXISTING PAVEMENT, THE SEAM SHALL BE A SAW CUT EDGE AND TREATED WITH EMULSION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATIONS, SIZE AND ELEVATIONS OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION TO DETERMINE APPROPRIATE ACTION TO BE TAKEN BEFORE PROCEEDING WITH THE WORK.
- CONTRACTOR TO COORDINATE WITH ALL UTILITY COMPANIES AND DIGSAFE PRIOR TO ANY EXCAVATION. CONTRACTOR TO CONTACT DIGSAFE MINIMUM 72 HOURS PRIOR TO ANY EXCAVATION. CALL 811 OR (888) 344-7233.
- DELIVERIES TO SITE ARE ESTIMATED TO BE BETWEEN 2 AND 4 TIMES PER WEEK.
- MEDICAL/HAZARDOUS WASTE SHALL BE PLACED IN SPECIFIED CONTAINERS AND PICKED UP REGULARLY BY CONTRACTED SERVICE PROVIDER.

LIGHTING SCHEDULE

Symbol	Quantity	Label	Description
▼	4	CL	H77-RL706830E26WBS/ MTD 10' UNDER CANOPY
■	3	WM1	XTOR2A/ WALL MTD 10' AFG
●	2	P2	LDRV-SL4-B04-E/ POLE MTD 20' AFG
●	1	P3	LDRV-SL3-B02-E/ 20' AFG



FILE NO:	303
JOB NO:	14010
F.B. NO:	MSC
PLAN NO:	C-2691
SCRD NO:	
DRAWN BY:	RRL
CHECK BY:	RRL
DWG NO:	SITE

NO.	REVISION	DATE
5	ADDED NH PERMIT NUMBERS	8/05/14
4	REVISIONS PER NHDOT	5/12/14
3	REVISIONS PER NHDES SSB REVIEW	4/03/14
2	CORRECTED UNIT COUNT ALL SHEETS	2/20/14
1	ADDED TREATMENT SWALE	2/14/14

NORWAY PLAINS ASSOCIATES, INC.

SURVEYORS
SEPTIC SYSTEM DESIGNERS
ALTON
31 Mooney Street
Alton, NH 03809
(603) 875-3948
www.norwayplains.com

ENGINEERS
TRANSPORTATION PLANNERS
ROCHESTER
2 Continental Boulevard
P.O. Box 249
Rochester, NH 03866-0249
(603) 335-3948

AMMENDED SITE DEVELOPMENT PLAN

PROPERTY OF
JASON W. BERNDTSON
123 DOVER ROAD
DURHAM, NH 03824
SCRD: BK 3141, PG 848 & BK 3068, PG 199

SITE PLAN
CARRIAGE HILL ASSISTED LIVING
TAX MAP 9 LOTS 8 & 8A
304 & 306 KNOX MARSH ROAD/RTE. 155
MADBURY, NEW HAMPSHIRE
STRAFFORD COUNTY

REV: 08-05-14

C-002

LEGEND

HP	HIGH POINT
INV	INVERT
FES	FLARED END SECTION
TYP	TYPICAL
[Symbol]	PROPOSED CATCH BASIN
[Symbol]	PROPOSED INLET PROTECTION
[Symbol]	PROPOSED SPOT GRADE
[Symbol]	EXISTING CONTOUR
[Symbol]	PROPOSED CONTOUR
[Symbol]	PROPOSED SILT FENCE
[Symbol]	PROPOSED RETAINING WALL
[Symbol]	EXISTING DRAIN LINE

GRADING NOTES

- ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 4" LOAM, SEED, FERTILIZER AND MULCH.
- DENSITY REQUIREMENTS:

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

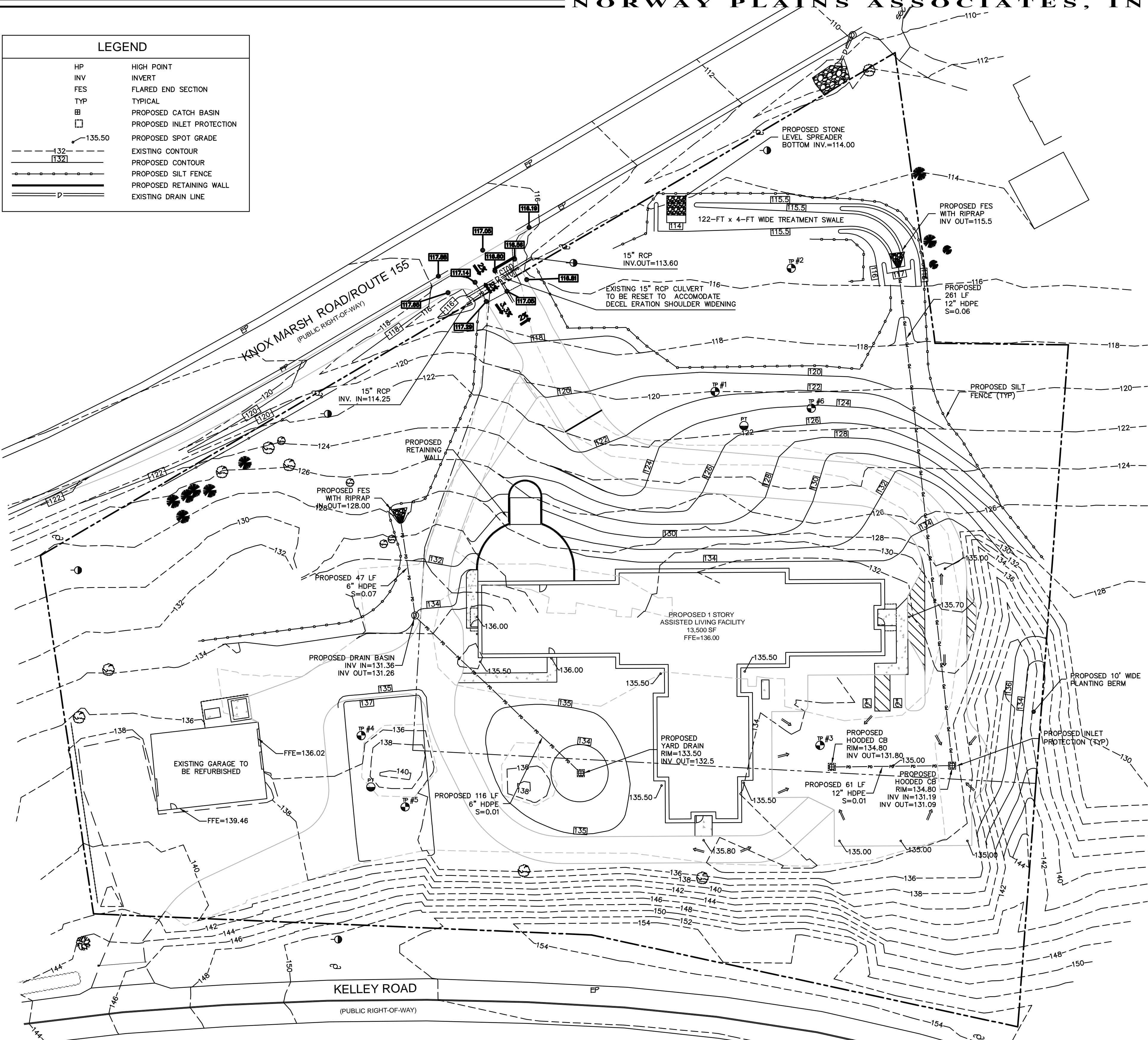
*ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C. FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR ASTM D-6938.
- ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE PRIOR TO INSTALLATION OF FINISHED PAVEMENT.
- CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE, RAMPS AND LOADING AREAS.
- SEE EXISTING FEATURES PLAN FOR BENCHMARK INFORMATION.
- ALL SIDEWALK AND OTHER CURB REVEALS SHALL BE 6" WITH A TOLERANCE OF PLUS OR MINUS 3/8". WHERE SIDEWALK IS TO BE FLUSH, THE CURB REVEAL SHALL BE 0" WITH A TOLERANCE OF PLUS OR MINUS 1/8".
- THE SITE SHALL BE GRADED SO ALL FINISHED PAVEMENT HAS POSITIVE DRAINAGE AND SHALL NOT POND WATER DEEPER THEN 1/4 INCH FOR A PERIOD OF MORE THEN 15 MINUTES AFTER FLOODING.
- THE FINISHED GRADE AT BOTTOM OF ALL HANDICAPPED RAMPS SHALL BE FLUSH WITH PAVEMENT WITH A TOLERANCE OF PLUS OR MINUS 1/4".
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SLOPE STABILITY DURING CONSTRUCTION.
- NO FILL SHALL BE PLACED IN ANY WETLAND AREA.

DRAINAGE NOTES

- ALL STORM DRAINS SHALL BE HIGH DENSITY POLYETHYLENE (HANCOR "HIG", ADS "N-12", OR APPROVED EQUAL) UNLESS OTHERWISE NOTED FOR ROOF DRAINS & CANOPY LEADERS.
- ALL CATCH BASINS, MANHOLES, AND DRAIN LINES SHALL BE THOROUGHLY CLEANED OF ALL SEDIMENT AND DEBRIS AFTER ALL AREAS HAVE BEEN STABILIZED.
- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE TOWN, COUNTY, AND STATE CODES.
- LENGTH OF PIPE IS PROVIDED FOR CONVENIENCE ONLY. ACTUAL PIPE LENGTH SHALL BE DETERMINED IN THE FIELD.
- COORDINATE ROOF AND CANOPY DRAINS WITH BUILDING PLANS.
- ALL PROPOSED MANHOLES, CATCH BASINS AND OTHER STORMWATER STRUCTURES SHALL BE SUBJECT TO REVIEW AND APPROVAL UNDER SUBMITTAL REQUIREMENTS.
- WHERE EXISTING MANHOLES AND CATCH BASINS ARE TO BE RETROFITTED TO ACCEPT NEW PIPES, CONTRACTOR SHALL MAKE ALL NEW PENETRATIONS WITH CONCRETE CORE. THE CONNECTION BETWEEN THE STRUCTURE AND PIPE SHALL BE MADE WATERTIGHT WITH NON-SHRINK GROUT. CONTRACTOR SHALL VERIFY SIZE OF STRUCTURE AND INVERT ELEVATIONS PRIOR TO COMPLETING WORK AND REPORT ANY DISCREPANCIES TO ENGINEER.

EROSION CONTROL NOTES

- SEE GENERAL EROSION CONTROL NOTES ON THE EROSION CONTROL DETAIL SHEET AND THE APPROVED SWPPP.
- INSTALL SILT FENCE BARRIER ALONG THE PERIMETER OF THE AREA TO BE DISTURBED AS FIRST ORDER OF WORK.
- PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS WITHIN THE WORK LIMITS AND MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED. INLET PROTECTION BARRIERS SHALL BE IN PLACE AT ALL CATCH BASINS PRIOR TO THE DISTURBANCE OF SOIL.
- DUST CONTROL SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. IT SHALL BE ACCOMPLISHED BY THE UNIFORM APPLICATION OF CALCIUM CHLORIDE AT THE RATE OF 1-1/2 POUNDS PER SQUARE YARD BY MEANS OF A LIME SPREADER OR OTHER APPROVED METHOD. WATER MAY ALSO BE USED FOR DUST CONTROL, AND APPLIED BY SPRINKLING WITH WATER TRUCK DISTRIBUTORS, AS REQUIRED.
- A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) WAS PREPARED AND IS INCLUDED IN THE SITE WORK TECHNICAL SPECIFICATIONS. PHASING AND CONSTRUCTING STORMWATER CONTROL SHALL BE BASED ON THAT DOCUMENT AND SPECIFICATIONS.
- SILT PROTECTION MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED IN THIS PLAN SET.
- CONSTRUCT JUTE MATTING ON ALL SLOPES STEEPER THAN 3:1, DISTURBED AREAS SLOPING TOWARDS WETLANDS AND ALL LOCATIONS SHOWN ON PLAN.
- INSPECT EROSION CONTROL MEASURES AFTER EACH RAIN STORM OF 0.10 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE FILTER EFFICIENCY. REMOVE SEDIMENT WHEN SEDIMENT IS 1/3 THE STRUCTURE HEIGHT.
- PROVIDE SILT FENCE BARRIERS AT THE BASE OF CUT AND FILL SLOPES UNTIL COMPLETION OF THE PROJECT OR UNTIL VEGETATION BECOMES ESTABLISHED ON SLOPES. EROSION PROTECTION BELOW FILL SLOPES SHALL BE PLACED IMMEDIATELY AFTER CLEARING, PRIOR TO EMBANKMENT CONSTRUCTION.
- ALL DISTURBED AREAS SHALL BE REVEGETATED AS QUICKLY AS POSSIBLE. ALL CUT AND FILL SLOPES SHALL BE SEEDED WITHIN 72 HOURS AFTER GRADING.
- ALL WORK AREAS TO BE STABILIZED AT THE END OF EACH WORK DAY AND PRIOR TO ANY PREDICTED SIGNIFICANT RAIN EVENT.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED
 - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
 - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED
 - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED
- ALL CATCH BASINS, MANHOLES, AND DRAIN LINES SHALL BE THOROUGHLY CLEANED OF ALL SEDIMENT AND DEBRIS AFTER ALL AREAS HAVE BEEN STABILIZED.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SLOPE STABILITY DURING CONSTRUCTION.
- BOTH CATCHBASINS IN PARKING AREA SHALL INCLUDE DEEP SUMPS AND OIL-DEBRIS SEPARATORS.



FILE NO:	303		
JOB NO:	14010		
F.B. NO:	MSC		
PLAN NO:	C-2691		
SCRD NO:			
DRAWN BY:	RRL		
CHECK BY:	RRL		
DWG NO:	GDE		
NO.	REVISION	DATE	
5	ADDED NH PERMIT NUMBERS	8/05/14	
4	REVISIONS PER NHDOT	5/12/14	
3	REVISIONS PER NHDES SSB REVIEW	4/03/14	
2	CORRECTED UNIT COUNT ALL SHEETS	2/20/14	
1	ADDED TREATMENT SWALE	2/14/14	

NORWAY PLAINS ASSOCIATES, INC.

SURVEYORS
SEPTIC SYSTEM DESIGNERS

ALTON
31 Mooney Street
Alton, NH 03809
(603) 875-3948
www.norwayplains.com

ENGINEERS
TRANSPORTATION PLANNERS

ROCHESTER
2 Continental Boulevard
P.O. Box 249
Rochester, NH 03866-0249
(603) 335-3948

AMMENDED SITE DEVELOPMENT PLAN

PROPERTY OF
JASON W. BERNDTSON
123 DOVER ROAD
DURHAM, NH 03824
SCRD: BK 3141, PG 848 & BK 3068, PG 199

GRADING, DRAINAGE & EROSION CONTROL

CARRIAGE HILL ASSISTED LIVING
TAX MAP 9 LOTS 8 & 8A
304 & 306 KNOX MARSH ROAD/RTE. 155
MADBURY, NEW HAMPSHIRE
STRAFFORD COUNTY

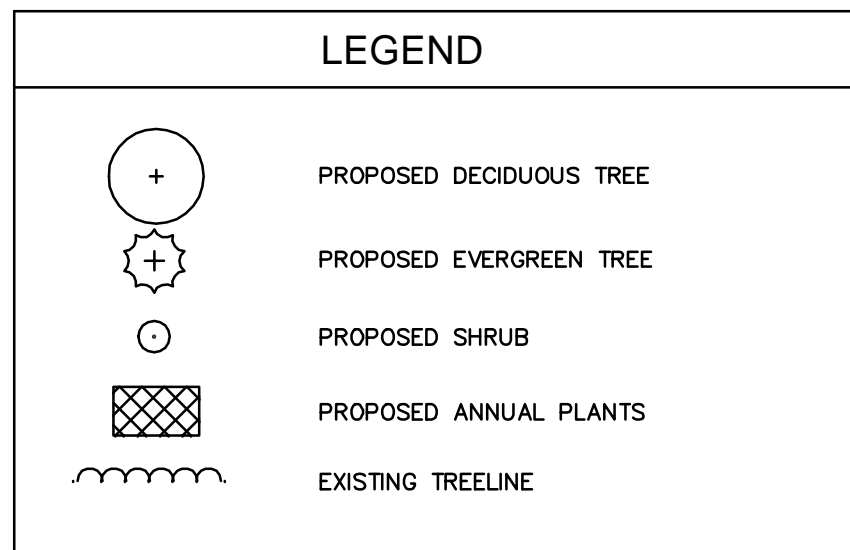
0 15 30 60
1 INCH = 30 FEET

REV: 08-05-14

C-003

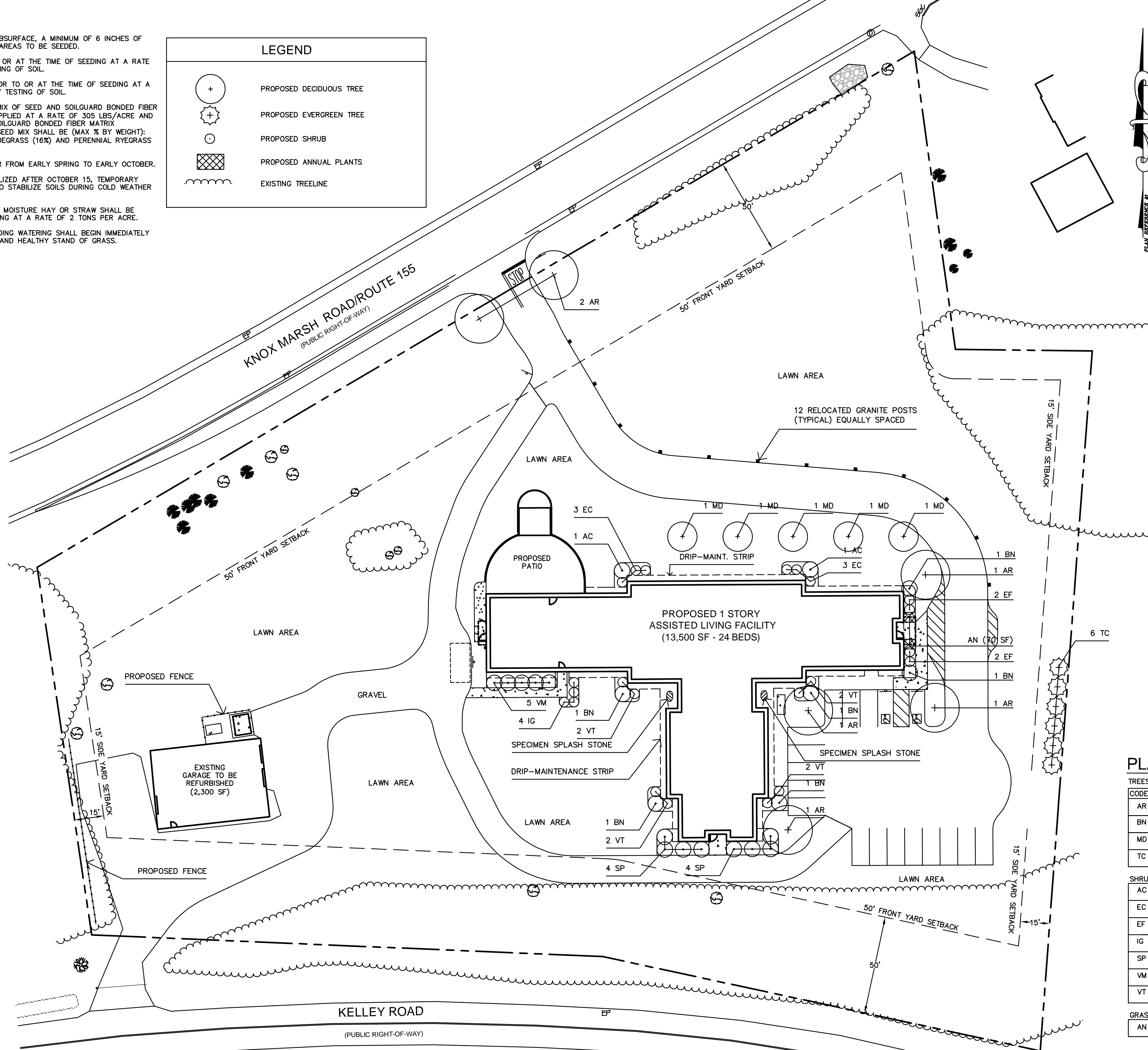
SEEDING NOTES

1. DUE TO EXCESSIVELY DRAINING SUBSURFACE, A MINIMUM OF 6 INCHES OF TOPSOIL SHALL BE SPREAD OVER AREAS TO BE SEEDED.
2. LIME SHALL BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AT A RATE DETERMINED BY LABORATORY TESTING OF SOIL.
3. FERTILIZER SHALL BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AT A RATE DETERMINED BY LABORATORY TESTING OF SOIL.
4. AREA TO BE HYDROSEED WITH MIX OF SEED AND SOILGUARD BONDED FIBER MATRIX OR EQUAL. SEED TO BE APPLIED AT A RATE OF 305 LBS/ACRE AND IN A MANNER CONSISTENT WITH SOILGUARD BONDED FIBER MATRIX MANUFACTURER'S SPECIFICATION. SEED MIX SHALL BE (MAX % BY WEIGHT): RED FESCUE (42%), KENTUCKY BLUEGRASS (16%) AND PERENNIAL RYEGRASS (42%).
5. PERMANENT SEEDING SHALL OCCUR FROM EARLY SPRING TO EARLY OCTOBER.
6. IF DISTURBANCE REMAINS UNSTABILIZED AFTER OCTOBER 15, TEMPORARY SEEDING SHALL BE CONDUCTED TO STABILIZE SOILS DURING COLD WEATHER MONTHS.
7. TO PREVENT WEEDS AND MAINTAIN MOISTURE HAY OR STRAW SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 2 TONS PER ACRE.
8. APPROPRIATE MAINTENANCE INCLUDING WATERING SHALL BEGIN IMMEDIATELY IN ORDER TO GUARANTEE A FULL AND HEALTHY STAND OF GRASS.



LANDSCAPE NOTES

1. THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS IN QUANTITIES AS SHOWN ON THIS PLAN OR LIST, WHICHEVER IS GREATER. NO SUBSTITUTIONS WILL BE PERMITTED UNLESS APPROVED IN WRITING BY OWNER. ALL PLANTS SHALL BE NURSERY GROWN.
2. PLANTS SHALL BE IN ACCORDANCE WITH THE CURRENT "AMERICAN ASSOCIATION FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
3. PLANT STOCK SHALL BE GROWN WITHIN THE HARDINESS ZONES 4 THRU 7 ESTABLISHED BY THE PLANT HARDINESS ZONE MAP, MISCELLANEOUS PUBLICATIONS NO. 814, AGRICULTURAL RESEARCH SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE, LATEST REVISION.
4. ALL PLANTS MUST BE MOVED WITH THE ROOT SYSTEMS AS SOLID UNITS WITH BALLS OF EARTH FIRMLY WRAPPED WITH BURLAP. NO PLANT SHALL BE ACCEPTED WHEN THE BALL OF EARTH SURROUNDING ITS ROOTS HAS BEEN BADLY CRACKED OR BROKEN BEFORE PLANTING. ALL PLANTS SHALL BE FRESHLY DUG. ALL PLANTS THAT CANNOT BE PLANTED AT ONCE MUST BE HEELED-IN BY SETTING IN THE GROUND, AND COVERING THE BALLS WITH SOIL AND THEN WATERING. DURING TRANSPORT, ALL PLANT MATERIALS SHALL BE WRAPPED WITH WIND PROOF COVERING.
5. PLANT MATERIAL SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS TO THE ORIGINAL PLANTING GRADE PRIOR TO DIGGING.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE THE APPROPRIATE ARRANGEMENTS TO PROVIDE ALL PLANTS AND MATERIALS TO ACCOMMODATE PLANTINGS WITHIN THE TIME ALLOWED BY THE CONSTRUCTION SCHEDULE.
7. THE CONTRACTOR SHALL LOCATE, VERIFY AND MARK ALL EXISTING AND NEWLY INSTALLED UNDERGROUND UTILITIES PRIOR TO ANY LAWN WORK OR PLANTING. ANY CONFLICTS WHICH MIGHT OCCUR BETWEEN PLANTING AND UTILITIES SHALL IMMEDIATELY BE REPORTED TO THE OWNER SO THAT ALTERNATE PLANTING LOCATIONS CAN BE DETERMINED.
8. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED, DUE TO EXCESSIVELY DRAINING SUBSURFACE, SHALL RECEIVE SIX (6) INCH LOAM AND SEED.
9. SEE PLANTING DETAILS FOR WEED BARRIER INFORMATION AND ADDITIONAL REQUIREMENTS.
10. TREE STAKES AND WRAP SHALL REMAIN IN PLACE FOR NO LESS THAN 6 MONTHS AND NO MORE THAN 1 YEAR.
11. PLANTING SHALL BE COMPLETED FROM APRIL 15TH THROUGH OCTOBER 30TH. NO PLANTING DURING JULY AND AUGUST UNLESS SPECIAL PROVISIONS ARE MADE FOR DROUGHT.
12. TREES SHALL BE PRUNED IN ACCORDANCE WITH THE LATEST EDITION OF ANSI A300 "TREES, SHRUBS AND OTHER WOOD PLANT MAINTENANCE STANDARD PRACTICES".
13. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL BE WATERED WEEKLY, OR MORE OFTEN, IF NECESSARY DURING THE FIRST GROWING SEASON, NOT LESS THAN ONE YEAR.
14. EXISTING TREES SHOWN ON THE PLAN ARE TO REMAIN UNDISTURBED. ALL EXISTING TREES SHOWN TO REMAIN ARE TO BE PROTECTED WITH A 4-FOOT SNOW FENCE PLACED AT THE DRIP LINE OF THE BRANCHES.
15. THE CONTRACTOR SHALL MAINTAIN AND GUARANTEE ALL PLANTINGS TO BE IN GOOD HEALTHY, FLOURISHING AND ACCEPTABLE CONDITION FOR A PERIOD OF (1) YEAR BEGINNING AT THE DATE OF ACCEPTANCE OF SUBSTANTIAL COMPLETION. ALL GRASSES, TREES AND SHRUBS THAT, IN THE OPINION OF THE LANDSCAPE ARCHITECT, SHOW LESS THAN 80% HEALTHY GROWTH AT THE END OF (1) YEAR PERIOD SHALL BE REPLACED BY THE CONTRACTOR.
16. ALL MULCH WITHIN BEDS IS TO BE LAID OVER APPROVED LANDSCAPE WEED FABRIC TO INHIBIT WEED GROWTH.
17. PLANT GROUPINGS SHALL BE INCORPORATED INTO PLANTING BEDS UNLESS OTHERWISE NOTED. WHERE MULCHED PLANT BEDS ABUT LAWN, PROVIDE TURF CUT EDGE. WHERE MULCHED PLANT BEDS ABUT PAVEMENT, EDGES SHALL INTERSECT AT 90 DEGREE.
18. PROPOSED TREES OVERHANGING SIDEWALKS, ROADS, OR PARKING SHALL BEGIN BRANCHING NATURALLY (NOT PRUNED) AT 6' HEIGHT.
19. ALL PLANTS SHALL BE WATERED THOROUGHLY DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL BE WATERED WEEKLY, OR MORE OFTEN, IF NECESSARY DURING THE FIRST GROWING SEASON.
20. LANDSCAPE PLAN IS FOR APPROVAL ONLY. DO NOT USE LANDSCAPE PLAN FOR CONSTRUCTION.



PLANT LIST

TREES:

CODE	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	ROOTS	COMMENTS
AR	ACER RUBRUM "OCTOBER GLORY"	OCTOBER GLORY RED MAPLE	6	2 1/2" CAL.	B&B	SINGLE STRAIGHT MAIN TRUNK, FULL & BUSHY CROWN
BN	BETULA NIGRA "LITTLE KING"	FOX VALLEY RIVER BIRCH	6	6" HT.	B&B	3 LEADER TRUNK, CLUMP, FULL & BUSHY CROWN
MD	MALUS "DONALD WYMAN"	DONALD WYMAN CRABAPPLE	5	2" CAL.	B&B	SINGLE STRAIGHT MAIN TRUNK, FULL & BUSHY CROWN
TC	TSUGA CANADENSIS	CANADIAN HEMLOCK	6	5' HT.	B&B	SINGLE STRAIGHT MAIN TRUNK, FULL & BUSHY

SHRUBS:

CODE	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	ROOTS	COMMENTS
AC	AMELANCER X.G. "ROBIN HILL"	ROBIN HILL SERVICEBERRY	2	6' HT.	B&B	FULL & BUSHY CROWN
EC	ENKIANTHUS CAMPANULATUS	REDVEIN ENKIANTHUS	6	30" HT.	B&B	FULL & BUSHY
EF	EUONYMUS FORTUNEI "EMERALD GAITY"	EMERALD GAITY WINTERCREEPER	4	5 GAL.	B&B	FULL & BUSHY
IG	ILEX GLABRA "COMPACTA"	DWARF INKBERRY	4	30" HT.	B&B	FULL & BUSHY
SP	SYRINGA PATULA "MISS KIM"	MISS KIM LILAC	8	3' HT.	CONTAINER	FULL & BUSHY
VM	VIORNUM P.T. "MARIESII"	MARIE'S DOUBLEFILE VIBURNUM	5	3' HT.	B&B	FULL & BUSHY
VT	VIORNUM TRILOBUM "COMPACTA"	COMPACT AMERICAN CRANBERRY	8	30" HT.	B&B	FULL & BUSHY

GRASSES, GROUND COVERS AND BULBS:

CODE	DESCRIPTION	QUANTITY	SIZE	CONTAINER	COMMENTS
AN	BRIGHTLY COLORED ANNUALS	70 S.F.	-	CONTAINER	PLANT 12" O.C., INSTALL FOR GRAND OPENING

FILE NO:	303
JOB NO:	14010
F.B. NO:	MSC
PLAN NO:	C-2691
SCRD NO:	
DRAWN BY:	RRL
CHECK BY:	RRL
DWG NO:	LAND

NO.	REVISION	DATE
5	ADDED NH PERMIT NUMBERS	8/05/14
4	REVISIONS PER NHDOT	5/12/14
3	REVISIONS PER NHDES SSB REVIEW	4/03/14
2	CORRECTED UNIT COUNT ALL SHEETS	2/20/14
1	ADDED TREATMENT SWALE	2/14/14

LANDSCAPE ARCHITECT:

HBLA INC
 170 Commerce Way,
 Suite 102
 Portsmouth, NH 03801
 P. 603-431-4000

NORWAY PLAINS ASSOCIATES, INC.

SEPTIC SYSTEM DESIGNERS
 ALTON
 31 Mooney Street
 Alton, NH 03809
 (603) 875-3948
 www.norwayplains.com

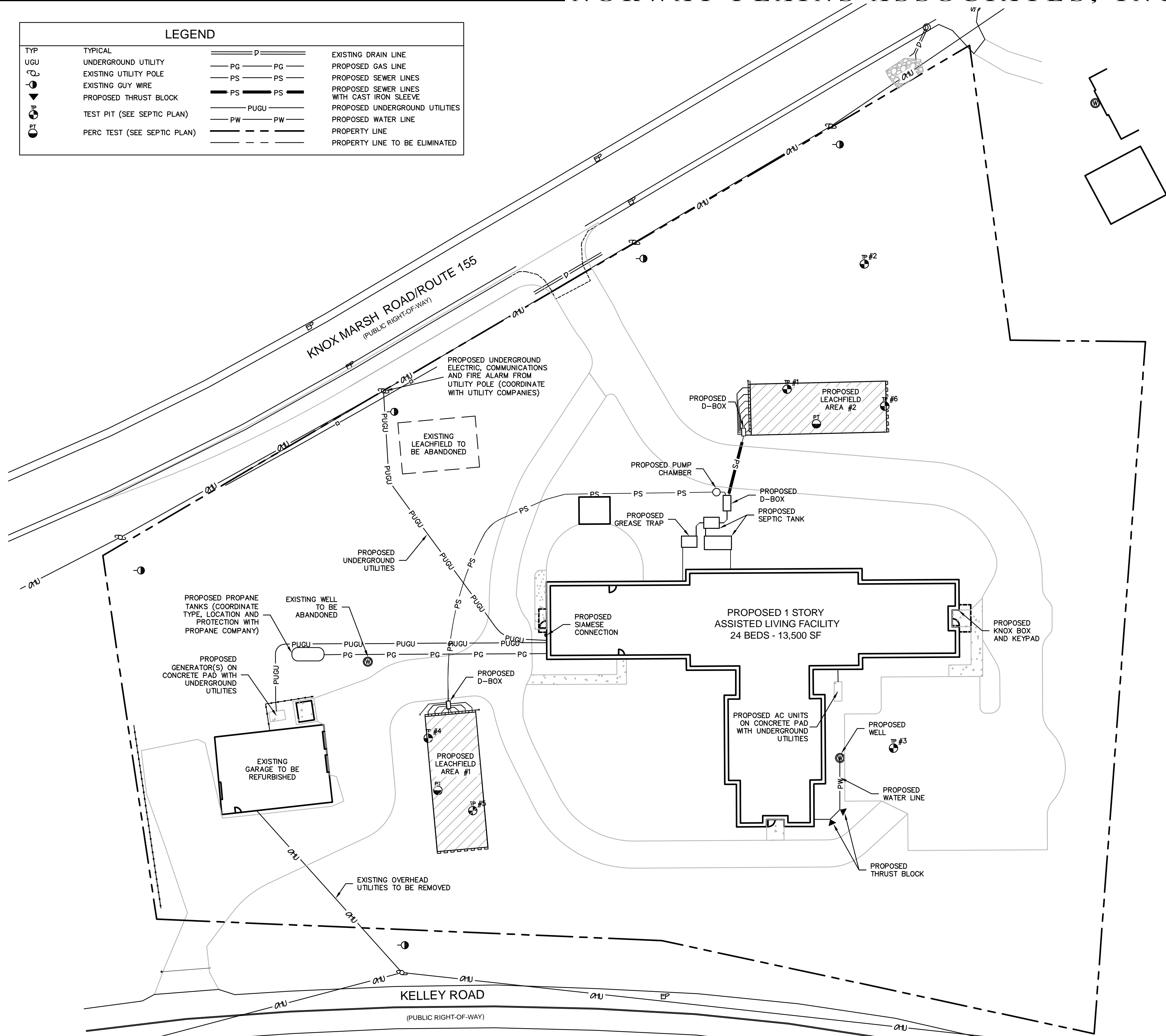
ENGINEERS
 TRANSPORTATION PLANNERS
 ROCHESTER
 2 Continental Boulevard
 P.O. Box 249
 Rochester, NH 03866-0249
 (603) 335-3948

AMMENDED SITE DEVELOPMENT PLAN
 PROPERTY OF
JASON W. BERNDTSON
 123 DOVER ROAD
 DURHAM, NH 03824
 SCRD: BK 3141, PG 848 & BK 3068, PG 199

LANDSCAPE PLAN
 CARRIAGE HILL ASSISTED LIVING
 TAX MAP 9 LOTS 8 & 8A
 304 & 306 KNOX MARSH ROAD/RTE. 155
 MADBURY, NEW HAMPSHIRE
 STRAFFORD COUNTY

REV: 08-05-14
C-004

LEGEND			
TYP	TYPICAL		EXISTING DRAIN LINE
UGU	UNDERGROUND UTILITY		PROPOSED GAS LINE
	EXISTING UTILITY POLE		PROPOSED SEWER LINES
	EXISTING GUY WIRE		PROPOSED SEWER LINES WITH CAST IRON SLEEVE
	PROPOSED THRUST BLOCK		PROPOSED UNDERGROUND UTILITIES
	TEST PIT (SEE SEPTIC PLAN)		PROPOSED WATER LINE
	PERC TEST (SEE SEPTIC PLAN)		PROPERTY LINE
			PROPERTY LINE TO BE ELIMINATED



UTILITY NOTES

1. THE BEST AVAILABLE INFORMATION WAS USED TO DETERMINE THE LOCATION AND SIZE OF EXISTING UTILITIES. THE LOCATION IS NOT GUARANTEED BY THE OWNER OR THE ENGINEER. THE EXACT SIZE AND LOCATION OF UTILITIES SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR PRIOR TO COMMENCING WORK. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO ANTICIPATE CONFLICTS AND REPAIR EXISTING UTILITIES AS NECESSARY TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER. THE EXISTING UTILITY CONTACT SUMMARY INFORMATION IS PROVIDED FOR THE CONTRACTOR'S USE. THE CONTRACTOR SHALL COORDINATE TERMINATION OF ALL UTILITIES WITH THE APPROPRIATE UTILITY COMPANY.
2. COORDINATE ALL WORK WITHIN THE RIGHT-OF-WAY WITH APPROPRIATE TOWN, COUNTY AND/OR STATE AGENCY.
3. COORDINATE ALL WORK ADJACENT TO PROPOSED BUILDINGS WITH ARCHITECTURAL BUILDING DRAWINGS.
4. THE EXACT LOCATION OF NEW UTILITY CONNECTIONS SHALL BE DETERMINED BY THE CONTRACTOR IN COORDINATION WITH UTILITY COMPANY, COUNTY AGENCY AND/OR PRIVATE UTILITY COMPANY.
5. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES.
6. THE CONTRACTOR SHALL ARRANGE AND PAY FOR ALL INSPECTIONS, TESTING AND RELATED SERVICES AND SUBMIT COPIES OF ACCEPTANCE TO THE OWNER, UNLESS OTHERWISE INDICATED.
7. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER THE UTILITY INSTALLATION COMPLETE AND OPERATIONAL.
8. ALL UTILITY COMPANIES REQUIRE INDIVIDUAL CONDUITS. CONTRACTOR TO COORDINATE WITH TELEPHONE, CABLE AND ELECTRIC COMPANIES REGARDING NUMBER, SIZE AND TYPE OF CONDUITS REQUIRED PRIOR TO INSTALLATION OF ANY CONDUIT.
9. LENGTH OF PIPE IS FOR CONVENIENCE ONLY. ACTUAL PIPE LENGTH SHALL BE DETERMINED IN THE FIELD.
10. ALL PROPOSED UTILITY WORK, INCLUDING MATERIAL, INSTALLATION, TERMINATION, EXCAVATION, BEDDING, BACKFILL, COMPACTION, TESTING, CONNECTIONS, AND CONSTRUCTION SHALL BE COORDINATED WITH AND COMPLETED IN ACCORDANCE WITH THE APPROPRIATE REQUIREMENTS, CODES AND STANDARDS OF ALL CORRESPONDING UTILITY ENTITIES.

SEPTIC CALCULATIONS

FROM NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES CODE OF ADMINISTRATIVE RULES (ENV-WQ 1000):
 USE = NURSING HOME
 DESIGN FLOW = 125 GPD/BED + 35 GPD/NUMBER OF EMPLOYEES ON LARGEST SHIFT
 = (125 GPD/BED x 24 BEDS) + (35 GPD/EMPLOYEE x 7 EMPLOYEES)
 = 3,245 GALLONS PER DAY

UTILITY CONTACTS	
ELECTRIC:	PSNH 74 OLD DOVER ROAD ROCHESTER, NH 03867 CONTACT: PIERRE BOUGIE (603) 332-4227 X5307
TELEPHONE:	FAIRPOINT COMMUNICATION CONTACT: CHRISTOPHER STEVENS (603) 430-2059
CABLE:	COMCAST 155 COMMERCE WAY PORTSMOUTH, NH 03801 CONTACT: GEORGE KIRKWOOD (603) 433-2166

FILE NO:	303
JOB NO:	14010
F.B. NO:	MSC
PLAN NO:	C-2691
SCRD NO:	
DRAWN BY:	RRL
CHECK BY:	RRL
DWG NO:	UTILITY

NO.	REVISION	DATE
5	ADDED NH PERMIT NUMBERS	8/05/14
4	REVISIONS PER NHDOT	5/12/14
3	REVISIONS PER NHDES SSB REVIEW	4/03/14
2	CORRECTED UNIT COUNT ALL SHEETS	2/20/14
1	ADDED TREATMENT SWALE	2/14/14

NORWAY PLAINS ASSOCIATES, INC.

SURVEYORS
SEPTIC SYSTEM DESIGNERS
ALTON
31 Mooney Street
Alton, NH 03809
(603) 875-3948
www.norwayplains.com

ENGINEERS
TRANSPORTATION PLANNERS
ROCHESTER
2 Continental Boulevard
P.O. Box 249
Rochester, NH 03866-0249
(603) 335-3948

AMMENDED SITE DEVELOPMENT PLAN

PROPERTY OF
JASON W. BERNDTSON
123 DOVER ROAD
DURHAM, NH 03824
SCRD: BK 3141, PG 848 & BK 3068, PG 199

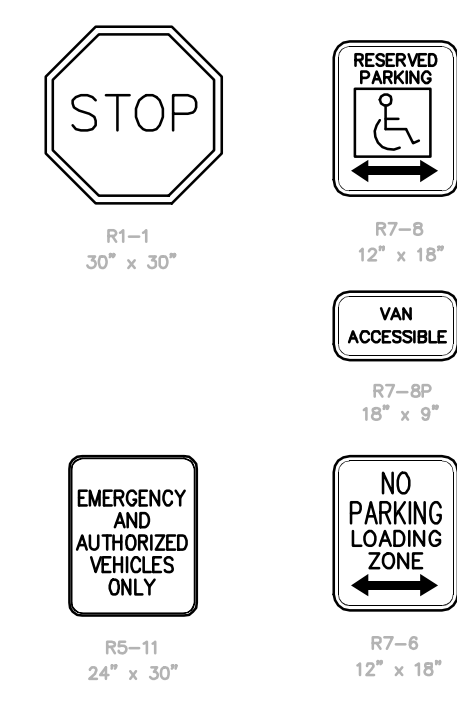
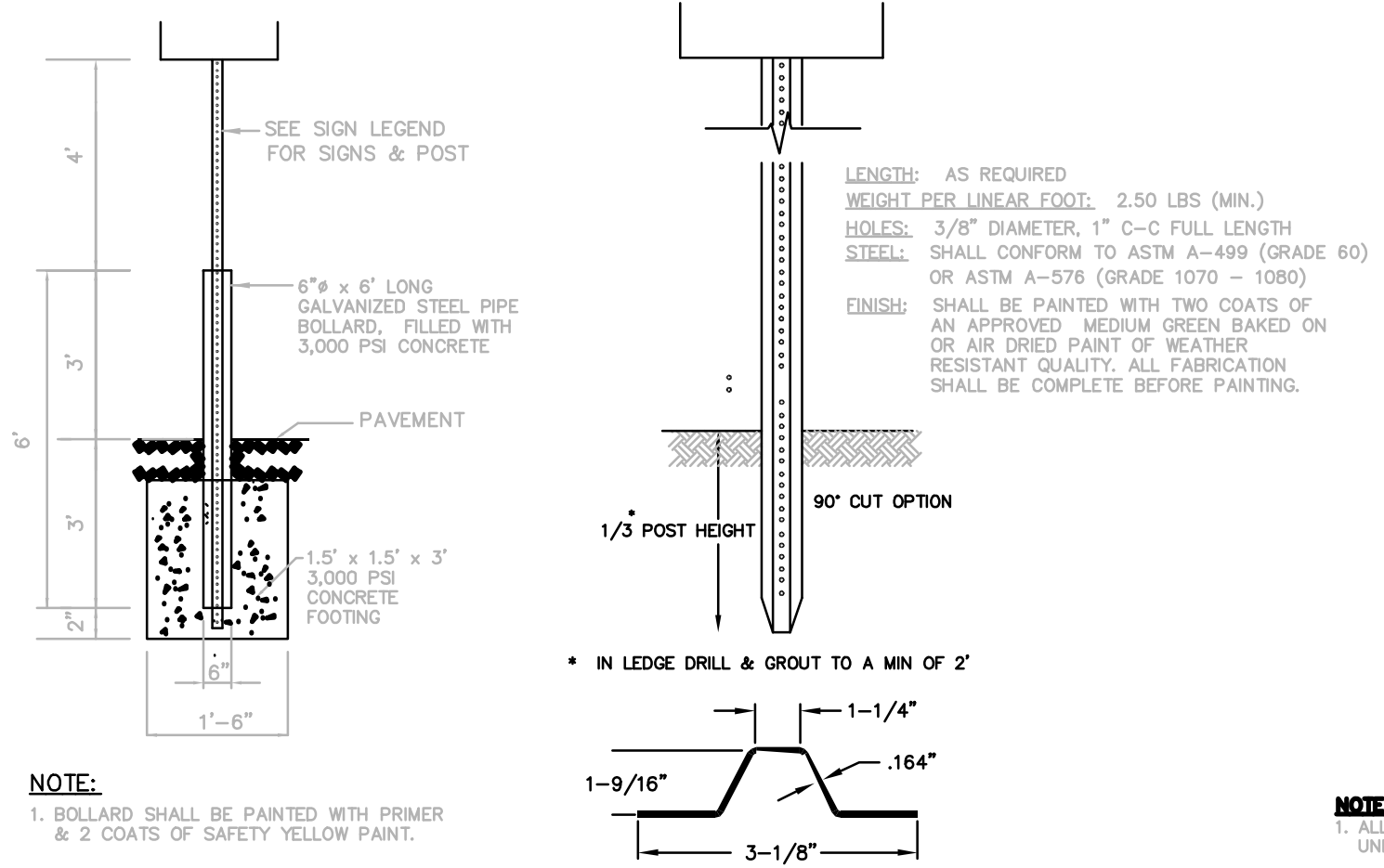
UTILITY PLAN

CARRIAGE HILL ASSISTED LIVING
TAX MAP 9 LOTS 8 & 8A
304 & 306 KNOX MARSH ROAD/RTE. 155
MADBURY, NEW HAMPSHIRE
STRAFFORD COUNTY

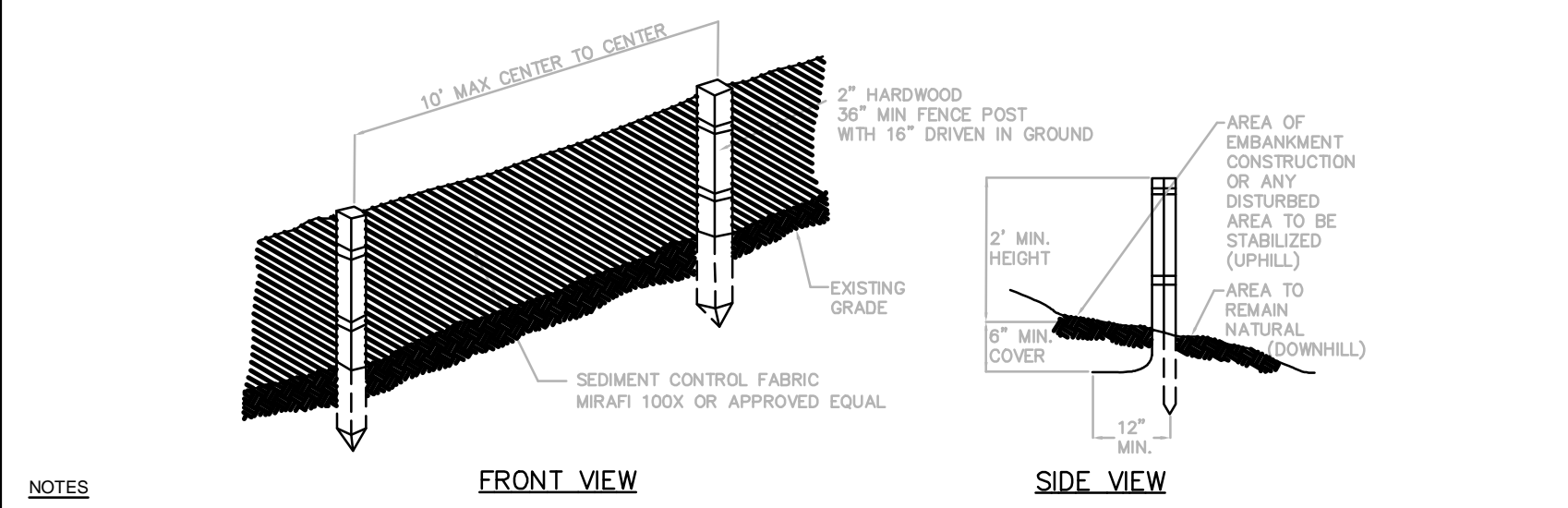
0 15 30 60
1 INCH = 30 FEET

REV: 08-05-14

C-005

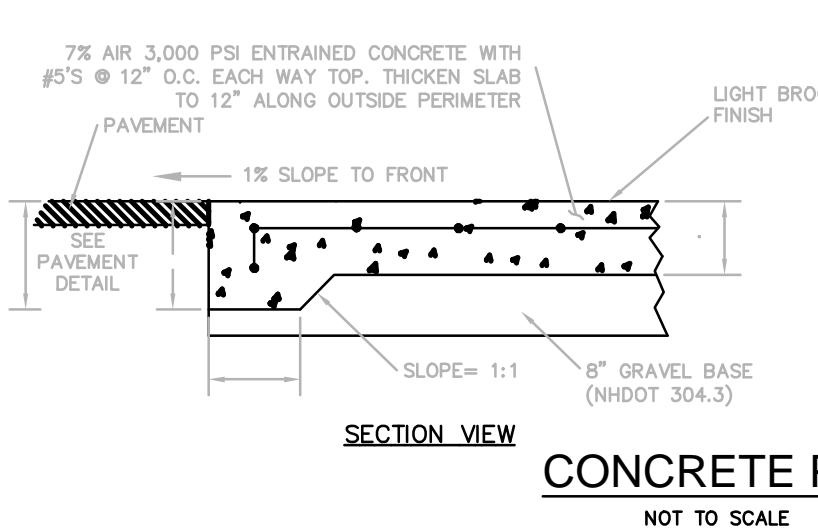
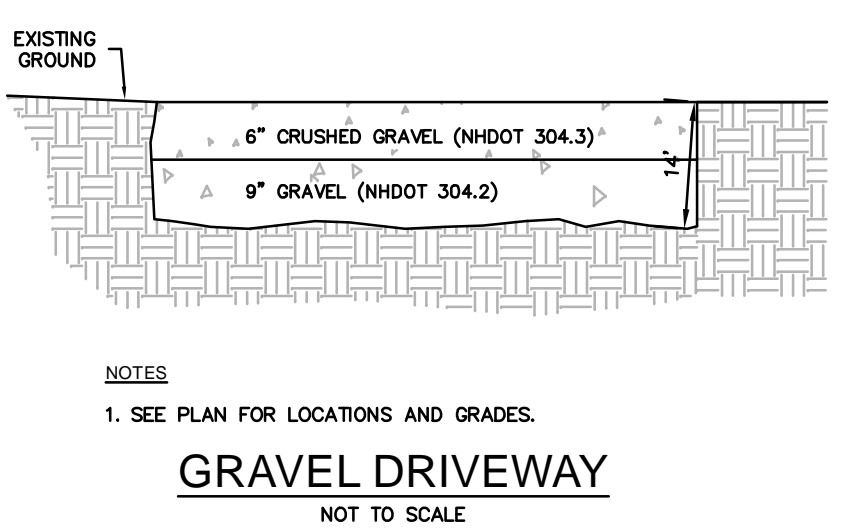


SIGN BOLLARD NOT TO SCALE
SIGN POST NOT TO SCALE
SIGN LEGEND NOT TO SCALE

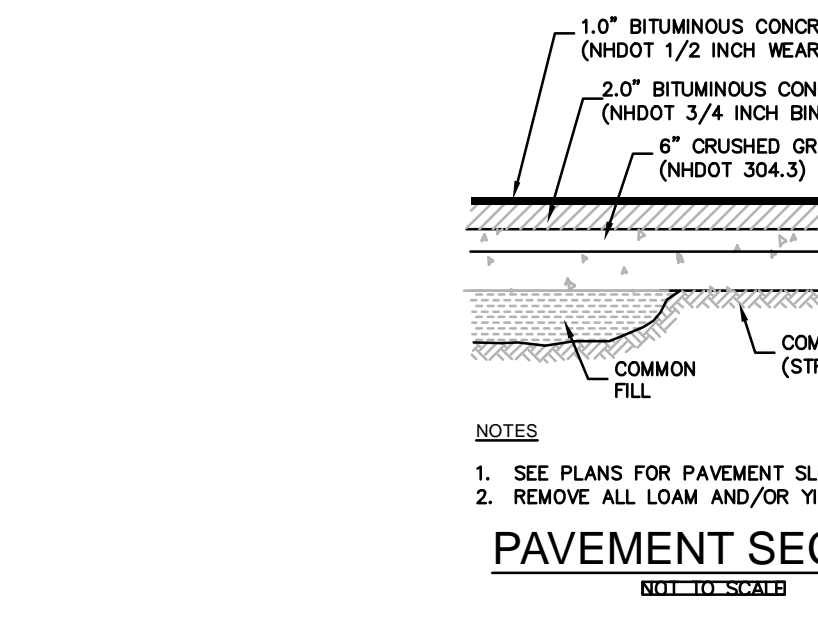
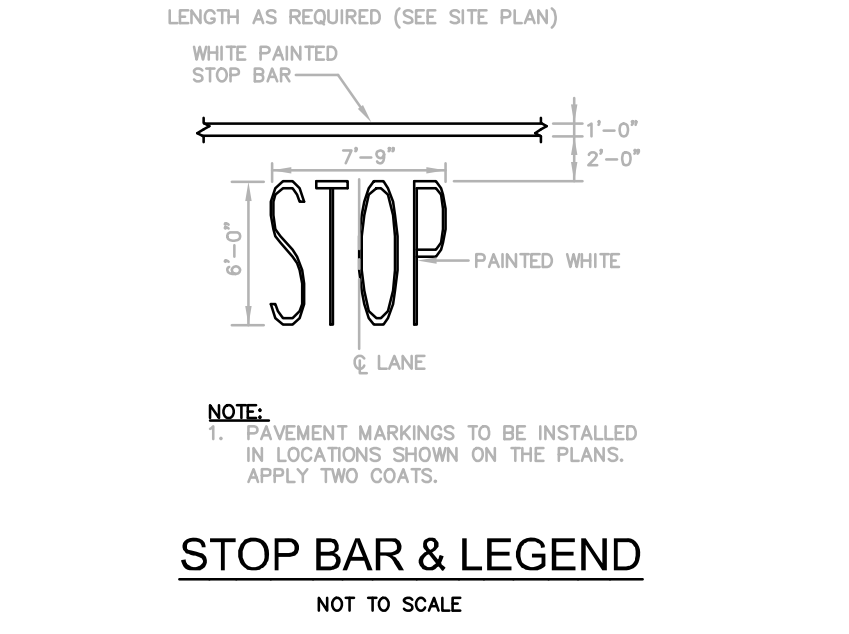


- NOTES**
- THE GEOTEXTILE FABRIC SHALL MEET THE NEW HAMPSHIRE DESIGN CRITERIA FOR SILT FENCES.
 - THE HEIGHT OF THE BARRIER SHALL NOT EXCEED 36 INCHES.
 - WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND SECURELY SEALED. SEE MANUFACTURER'S RECOMMENDATIONS.
 - POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 8 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL BE AS MANUFACTURER RECOMMENDS.
 - A TRENCH SHALL BE EXCAVATED APPROXIMATELY 6 INCHES WIDE AND 6 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER IN ACCORDANCE WITH RECOMMENDATIONS.
 - THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE, AND WILL EXTEND TO A MINIMUM OF 8 INCHES INTO THE TRENCH. FILTER FABRIC SHALL NOT BE STAPLED INTO EXISTING TREES.
 - THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
 - FILTER BARRIERS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
 - FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL OF 0.10 INCH OR GREATER, AND AT LEAST DAILY DURING PROLONGED RAINFALL, ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
 - SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
 - SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-THIRD THE HEIGHT OF THE BARRIER.
 - ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED, SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

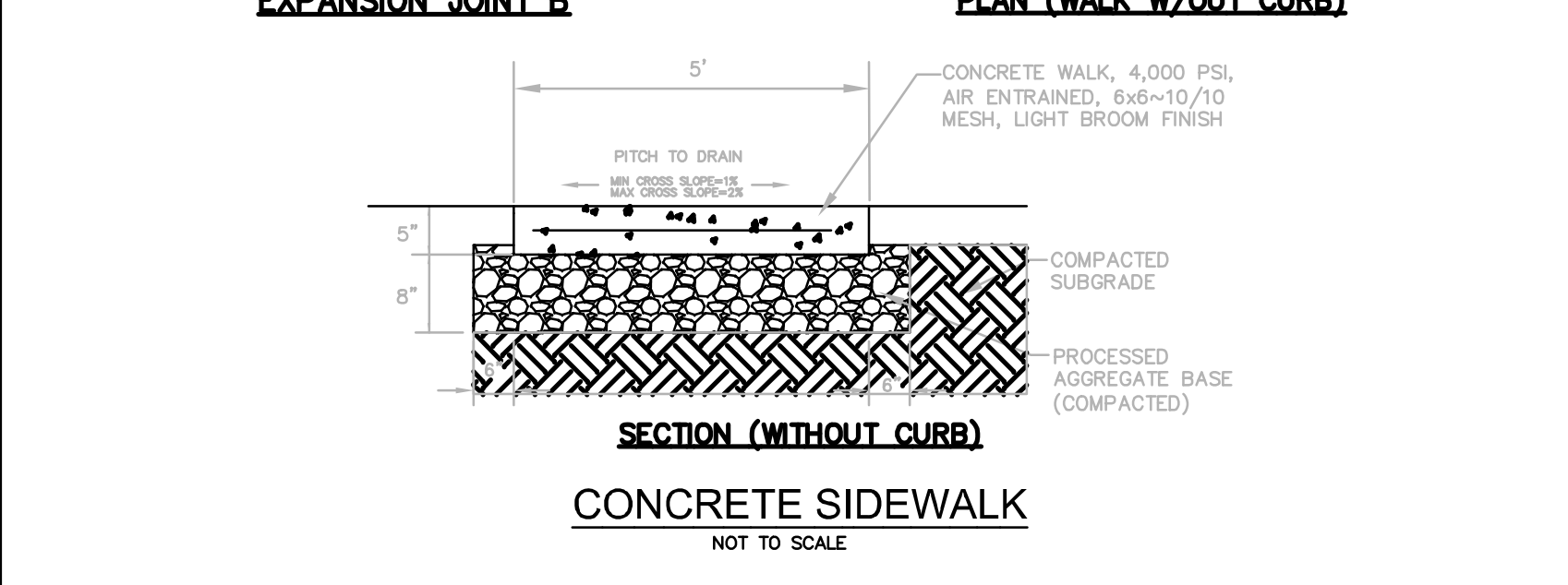
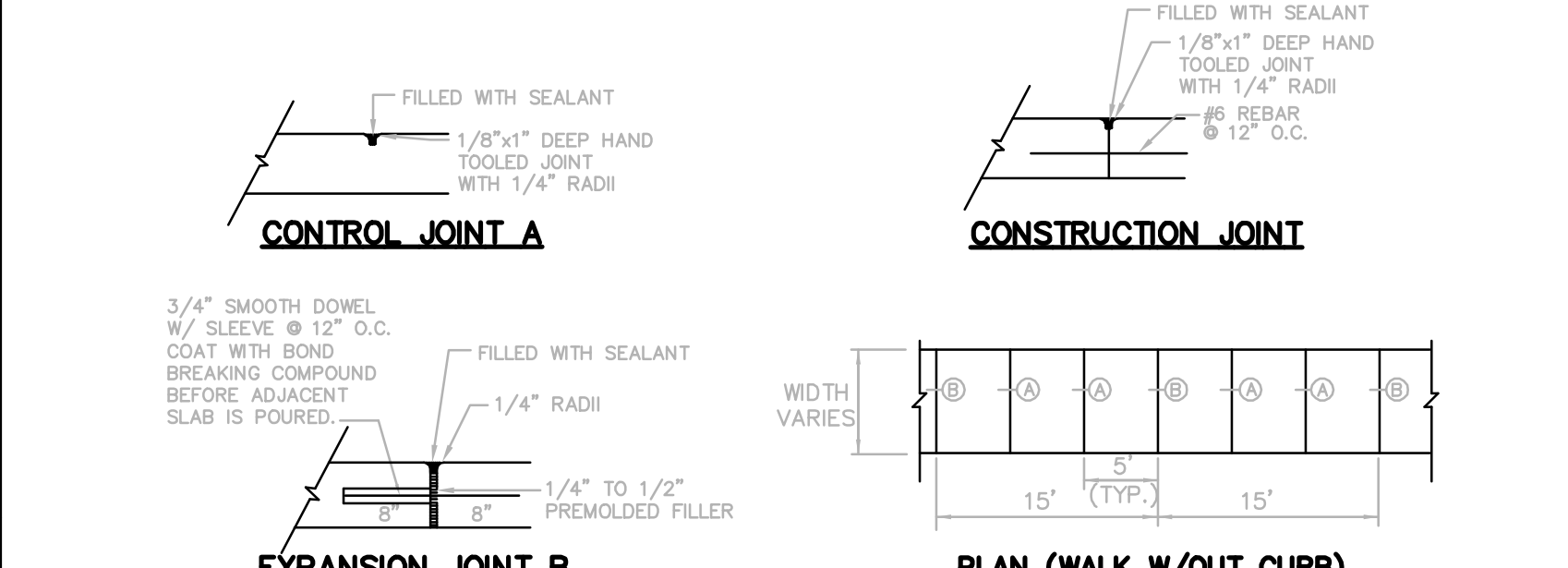
SILT FENCE NOT TO SCALE



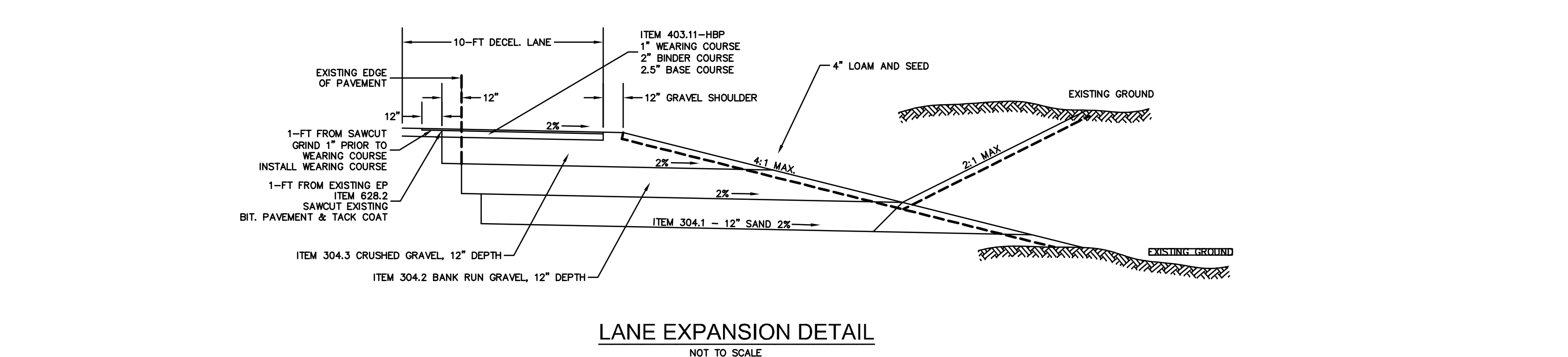
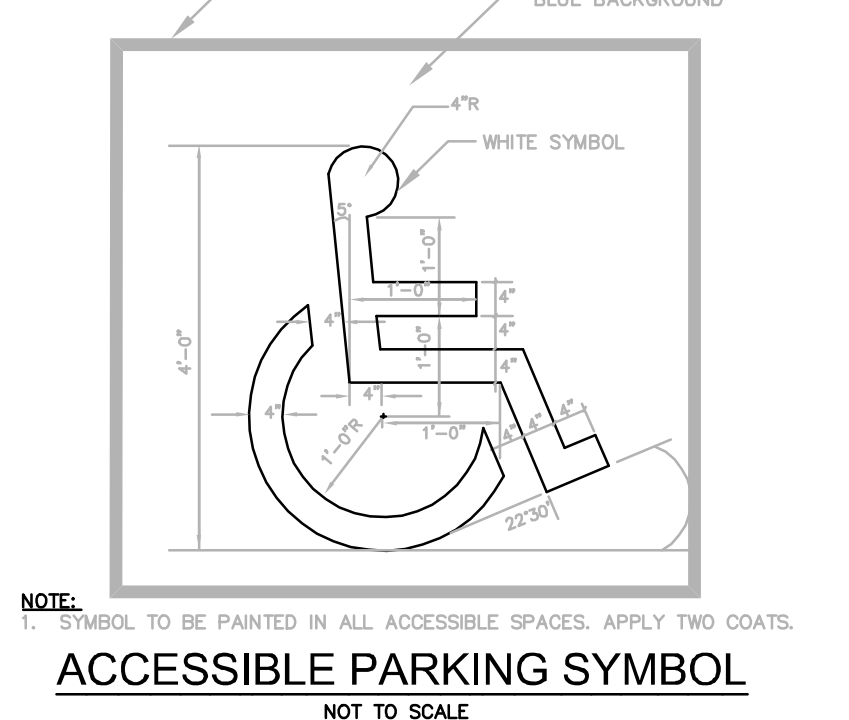
GRAVEL DRIVEWAY NOT TO SCALE
CONCRETE PAD NOT TO SCALE



STOP BAR & LEGEND NOT TO SCALE
PAVEMENT SECTION NOT TO SCALE



CONTROL JOINT A
CONSTRUCTION JOINT
EXPANSION JOINT B
PLAN (WALK W/O CURB)
SECTION (WITHOUT CURB)
CONCRETE SIDEWALK NOT TO SCALE



ACCESSIBLE PARKING SYMBOL NOT TO SCALE
LANE EXPANSION DETAIL NOT TO SCALE

CONSTRUCTION SEQUENCE

- TO MINIMIZE EROSION AND SEDIMENTATION DUE TO CONSTRUCTION, CONSTRUCTION SHALL FOLLOW THIS GENERAL CONSTRUCTION SEQUENCE. MODIFICATIONS TO THE SEQUENCE NECESSARY DUE TO THE CONTRACTORS SCHEDULE SHALL INCLUDE APPROPRIATE TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES.
- THE CONTRACTOR SHALL SCHEDULE HIS WORK SUCH THAT ANY CONSTRUCTION AREA IS STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE EXCEPT AS NOTED BELOW. NO MORE THAN THREE ACRES OF DISTURBED LAND SHALL BE UNSTABILIZED AT ANY ONE TIME. ALL ROADWAYS/DRIVEWAYS AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER DISTURBANCE.
- THE CONTRACTOR SHALL INSTALL ALL PERIMETER EROSION PROTECTION MEASURES AS INDICATED ON THE PLANS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO SILT FENCE, HAY BALES AND INLET PROTECTION.
 - CLEAR ALL VEGETATION FROM AREAS TO BE DISTURBED.
 - EXCAVATE AND CONSTRUCT TEMPORARY AND/OR PERMANENT DETENTION AREAS.
 - CONDUCT MAJOR EARTHWORK, INCLUDING BLASTING AS NECESSARY. ALL CUT AND FILL SLOPES SHALL BE SEEDED WITHIN 72 HOURS AFTER GRADING.
 - ALL STRIPPED TOPSOIL AND OTHER EARTH MATERIALS SHALL BE STOCKPILED OUTSIDE THE IMMEDIATE WORK AND WETLAND AREAS. A SILT FENCE SHALL BE CONSTRUCTED AROUND THESE PILES IN A MANNER TO PROVIDE ACCESS AND AVOID SEDIMENT OUTSIDE OF THE WORK AREA.
 - CONSTRUCT TEMPORARY CULVERTS AND DIVERSIONS AS REQUIRED. PERMANENT DRAINAGE STRUCTURES MAY BE INSTALLED IN AREAS AT FINAL GRADE.
 - CONSTRUCT PROPOSED ROADWAY(S), PONDS AND DRAINAGE SWALES. ALL DITCHES, SWALES AND PONDS SHALL BE FULLY STABILIZED PRIOR TO DIRECTING FLOW TO THEM.
 - AS AREAS ARE FINISH GRADED, PROCEED WITH FINAL STABILIZATION. LOAM & SEED OR PLANTINGS AS SPECIFIED.
 - AS AREAS REACH FINAL STABILIZATION, TEMPORARY EROSION CONTROL MEASURES MAY BE REMOVED.
 - CONSTRUCT PROPOSED ROADWAY, PONDS AND DRAINAGE SWALES. ALL DITCHES, SWALES, AND PONDS SHALL BE FULLY STABILIZED PRIOR TO DIRECTING FLOW TO THEM.
 - DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED (SEE TEMPORARY SEED SPECIFICATION IN SEEDING SCHEDULE NOTE #4).
 - COMPLETE SEEDING AND MULCHING (SEED TO BE APPLIED WITH BROADCAST SPREADER OR BY HYDRO-SEEDING, THEN ROLLED, RAKED OR DRAGGED TO ASSURE SEED/SOIL CONTACT).
 - REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDED AREAS HAVE BECOME FIRMLY ESTABLISHED AND SITE IMPROVEMENTS ARE COMPLETE.
 - DURING THE COURSE OF THE WORK AND UPON COMPLETION, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT DEPOSITS (EITHER ON OR OFF SITE) INCLUDING CATCH BASINS AND SUMPS, DRAIN PIPES, DITCHES CURB LINES, ETC. RESULTING FROM SOIL AND/OR CONSTRUCTION OPERATIONS.
 - IF THE SITE IS TO BE LEFT OPEN AFTER OCTOBER 15TH, ALL DISTURBED AREAS AREA TO BE TEMPORARILY STABILIZED BY COVERING WITH MULCH HAY OR BY PLANTING ANNUAL RYE GRASS.

WINTER CONSTRUCTION SEQUENCE

- ALL PROPOSED POST-DEVELOPMENT LANDSCAPED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1 AND SEEDED AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING. ELSEWHERE, THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND IN ADVANCE OF THAW OR SPRING MELT EVENTS.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15TH, ALL TRAVEL SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3-INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARING OF ANY ACCUMULATED SNOWFALL AFTER EACH STORM EVENT.

EROSION PROTECTION NOTES

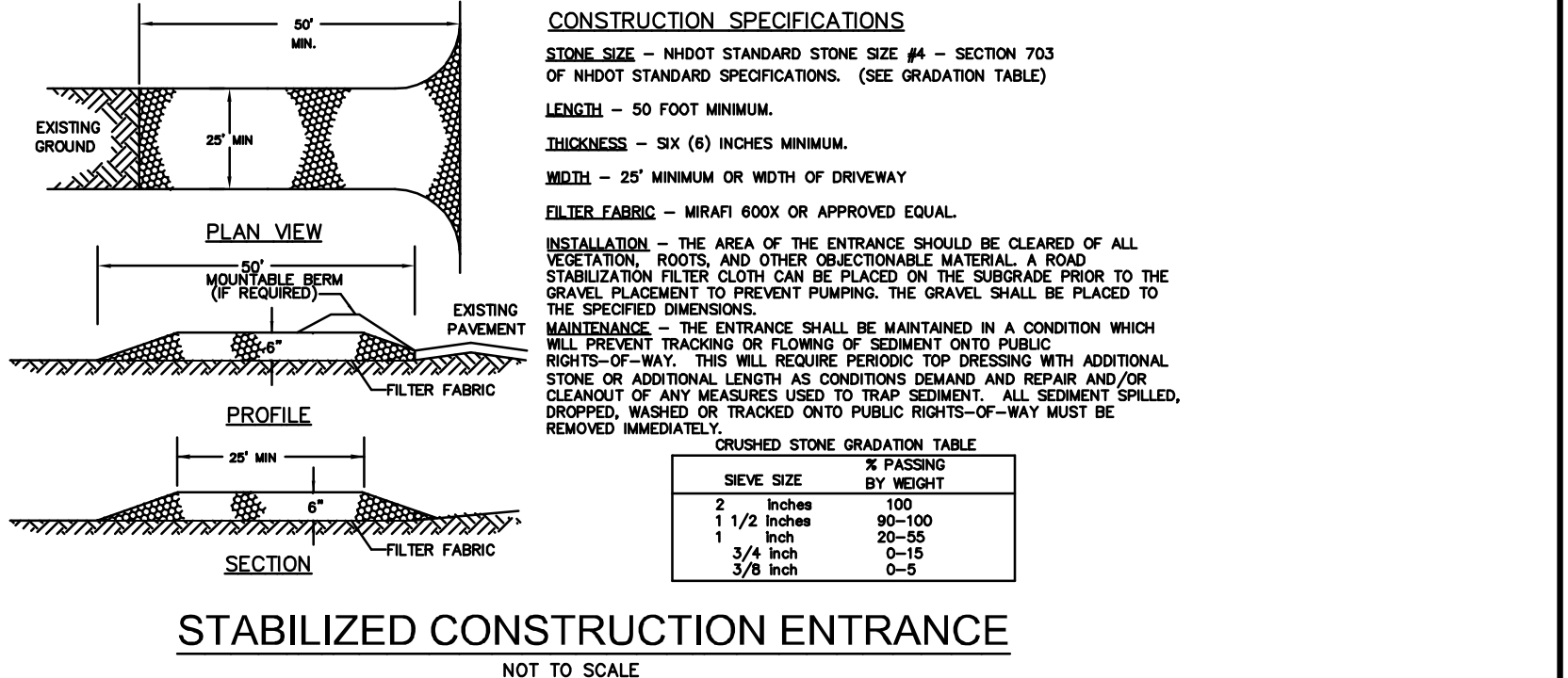
- SILT FENCE SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED IN THIS PLAN.
- PROVIDE SILT FENCE BARRIERS AT THE BASE OF CUT AND FILL SLOPES UNTIL COMPLETION OF THE PROJECT OR UNTIL VEGETATION BECOMES ESTABLISHED ON SLOPES. EROSION PROTECTION BELOW FILL SLOPES SHALL BE PLACED IMMEDIATELY AFTER CLEARING, PRIOR TO EMBANKMENT CONSTRUCTION.
- DURING CONSTRUCTION EVERY EFFORT SHALL BE MADE TO MANAGE SURFACE RUNOFF QUALITY.
- ALL DISTURBED AREAS SHALL BE REVEGETATED AS QUICKLY AS POSSIBLE. ALL CUT AND FILL SLOPES SHALL BE SEEDED WITHIN 72 HOURS AFTER GRADING. WHENEVER POSSIBLE DISTURBED AREAS WILL BE IMMEDIATELY STABILIZED. THIS INCLUDES BUT NOT LIMITED TO RIP-RAP, LOAM & SEED AND OTHER LANDSCAPE TREATMENTS SPECIFIED.
- ALL DISTURBED AREAS OUTSIDE OF ROADWAYS SHALL RECEIVE A MINIMUM OF 4" OF LOAM AND SEED.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED
 - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
 - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED
 - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED
- DAILY OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED. (SEE TEMPORARY SEED SPECIFICATION IN SEEDING SCHEDULE NOTES)
- COMPLETE SEEDING AND MULCHING (SEED TO BE APPLIED WITH BROADCAST SPREADER OR BY HYDRO-SEEDING, THEN ROLLED, RAKED OR DRAGGED TO ASSURE SEED/SOIL CONTACT).
- DURING THE COURSE OF THE WORK, EROSION PROTECTION MEASURES SHALL BE CHECKED AND MAINTAINED ON A DAILY BASIS. EROSION CONTROL MEASURES ARE TO BE REPLACED OR REPAIRED AS NECESSARY THROUGHOUT THE PROJECT CONSTRUCTION. EROSION CONTROL SHALL BE INSPECTED WEEKLY AND AFTER EVERY 1/2" OF RAINFALL. SEDIMENT DEPOSITS UPSTREAM OF HAY BALES AND SILT FENCES SHALL BE REMOVED DAILY IF NECESSARY. UPON COMPLETION, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT DEPOSITS/BUILDUPS, EITHER ON OR OFF SITE, INCLUDING CATCH BASINS AND SUMPS, DRAIN PIPES DITCHES, CURB LINES, ETC. RESULTING FROM SOIL AND/OR CONSTRUCTION OPERATIONS. SEDIMENT DEPOSITS UPSTREAM OF BALES AND SILT FENCES SHALL BE REMOVED ON REGULAR BASIS.
- ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
- THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.

SEEDING SCHEDULE

- A MINIMUM OF 4 INCHES OF TOPSOIL SHALL BE SPREAD OVER AREAS TO BE SEEDED.
- LIME SHALL BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AT A MINIMUM RATE OF 2 TONS PER ACRE.
- FERTILIZER SHALL BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AT A MINIMUM RATE OF 500 POUNDS PER ACRE OF 10-20-20 FERTILIZER FOR PERMANENT SEEDING, OR 300 POUNDS PER ACRE OF 10-10-10 FERTILIZER FOR TEMPORARY SEEDING OR APPROVED EQUIVALENT.
- SEEDING MIXTURE SHALL BE AS FOLLOWS OR APPROVED EQUAL:

PERMANENT SEEDING SPECIFICATION	
SEED TYPE	APPLICATION RATE
TALL FESCUE	0.45 LBS/1000 S.F.
CREeping RED FESCUE	0.45 LBS/1000 S.F.
BIRDFOOT TREFOLI	0.20 LBS/1000 S.F.
TOTAL	1.10 LBS/1000 S.F.

TEMPORARY SEEDING SPECIFICATION	
SEED TYPE	APPLICATION RATE
WINTER RYE	2.50 LBS/1000 S.F.
- PERMANENT SEEDING SHALL OCCUR FROM EARLY SPRING TO EARLY OCTOBER.
- IF DISTURBANCE REMAINS UNSTABILIZED AFTER OCTOBER 15, TEMPORARY SEEDING SHALL BE CONDUCTED TO STABILIZE SOILS DURING COLD WEATHER MONTHS.
- HAY OR STRAW SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 2 TONS PER ACRE.
- APPROPRIATE MAINTENANCE SHALL BE PROVIDED TO GUARANTEE THE INTEGRITY OF THE STAND.



STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE

FILE NO:	303		
JOB NO:	14010		
F.B. NO:	MSC	5	ADDED NH PERMIT NUMBERS 8/05/14
PLAN NO:	C-2691	4	REVISIONS PER NHDOT 5/12/14
SCRD NO:		3	REVISIONS PER NHDES SSB REVIEW 4/03/14
DRAWN BY:	RRL	2	CORRECTED UNIT COUNT ALL SHEETS 2/20/14
CHECK BY:	RRL	1	ADDED TREATMENT SWALE 2/14/14
DWG NO:	DETAIL	NO.	REVISION

NORWAY PLAINS ASSOCIATES, INC.

SURVEYORS ENGINEERS
 SEPTIC SYSTEM DESIGNERS TRANSPORTATION PLANNERS

ALTON ROCHESTER
 31 Mooney Street P.O. Box 249
 Alton, NH 03809 Rochester, NH 03866-0249
 (603) 875-3948 (603) 335-3948
 www.norwayplains.com

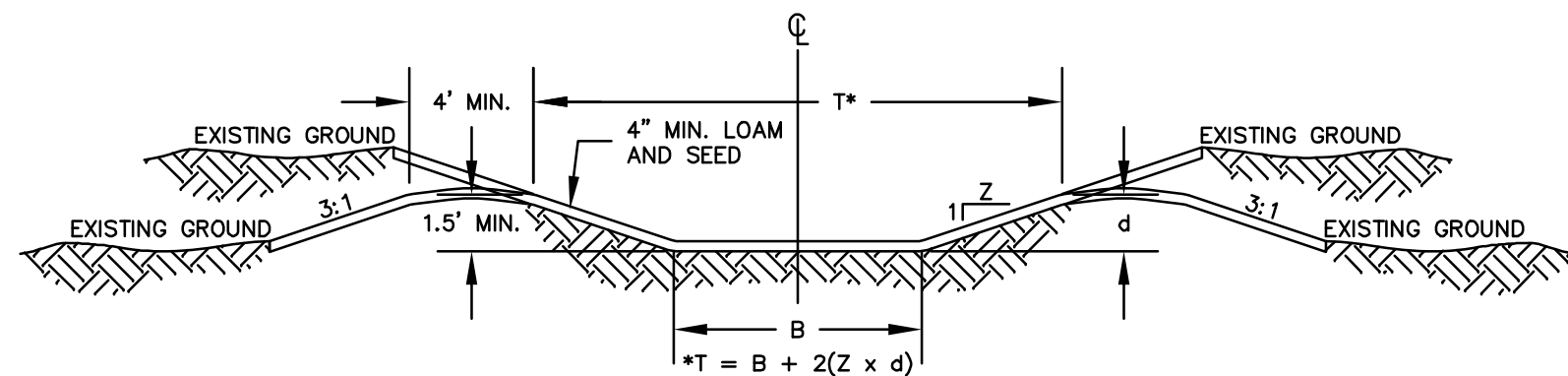
AMMENDED SITE DEVELOPMENT PLAN

PROPERTY OF
JASON W. BERNDTSON
 123 DOVER ROAD
 DURHAM, NH 03824
 SCRD: BK 3141, PG 848 & BK 3068, PG 199

DETAILS

CARRIAGE HILL ASSISTED LIVING
 TAX MAP 9 LOTS 8 & 8A
 304 & 306 KNOX MARSH ROAD/RTE. 155
 MADBURY, NEW HAMPSHIRE
 STRAFFORD COUNTY

SCALE:
 AS SHOWN
 REV: 08-05-14
C-006

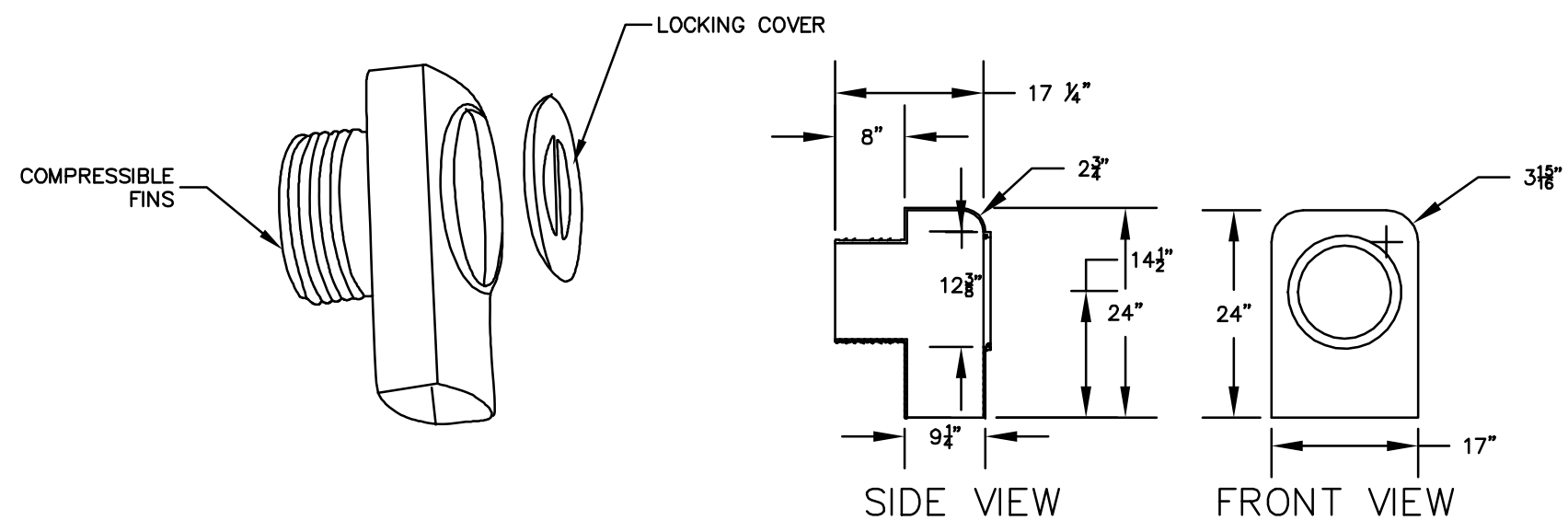


- MAINTENANCE NOTES:**
1. THE SWALE(S) SHALL BE MOWED WITH THE REST OF THE SITES LAWN AREAS TO PROMOTE HEALTHY GROWTH AND PREVENT THE ENCROACHMENT OF WEEDS AND WOODY VEGETATION. DO NOT MOW GRASS IN SWALE(S) TOO SHORT. THIS WILL REDUCE THE SWALES FILTERING ABILITY.
 2. THE SWALE(S) SHOULD BE FERTILIZED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

SWALE DIMENSION TABLE

LOCATION	B	d	Z	T
15" RCP OUTLET FROM CBS	3.75'	2'	3	15.75'
12" RCP OUTLET FROM CB7	3'	2'	3	15'
12" CPP OUTLET FROM DET POND 1	3'	2'	3	15'

VEGETATED TREATMENT SWALE
NOT TO SCALE



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

ELIMINATOR CATCH BASIN OIL AND DEBRIS TRAP DETAIL
NOT TO SCALE

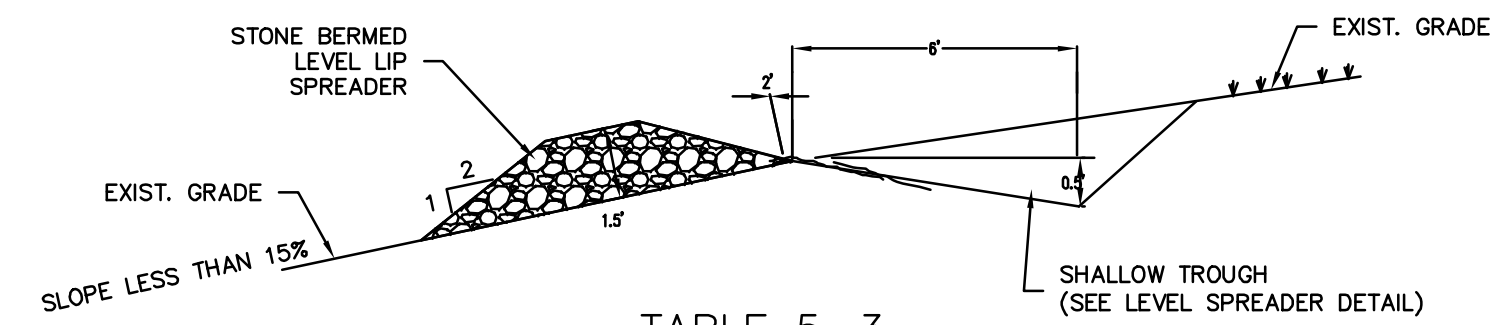
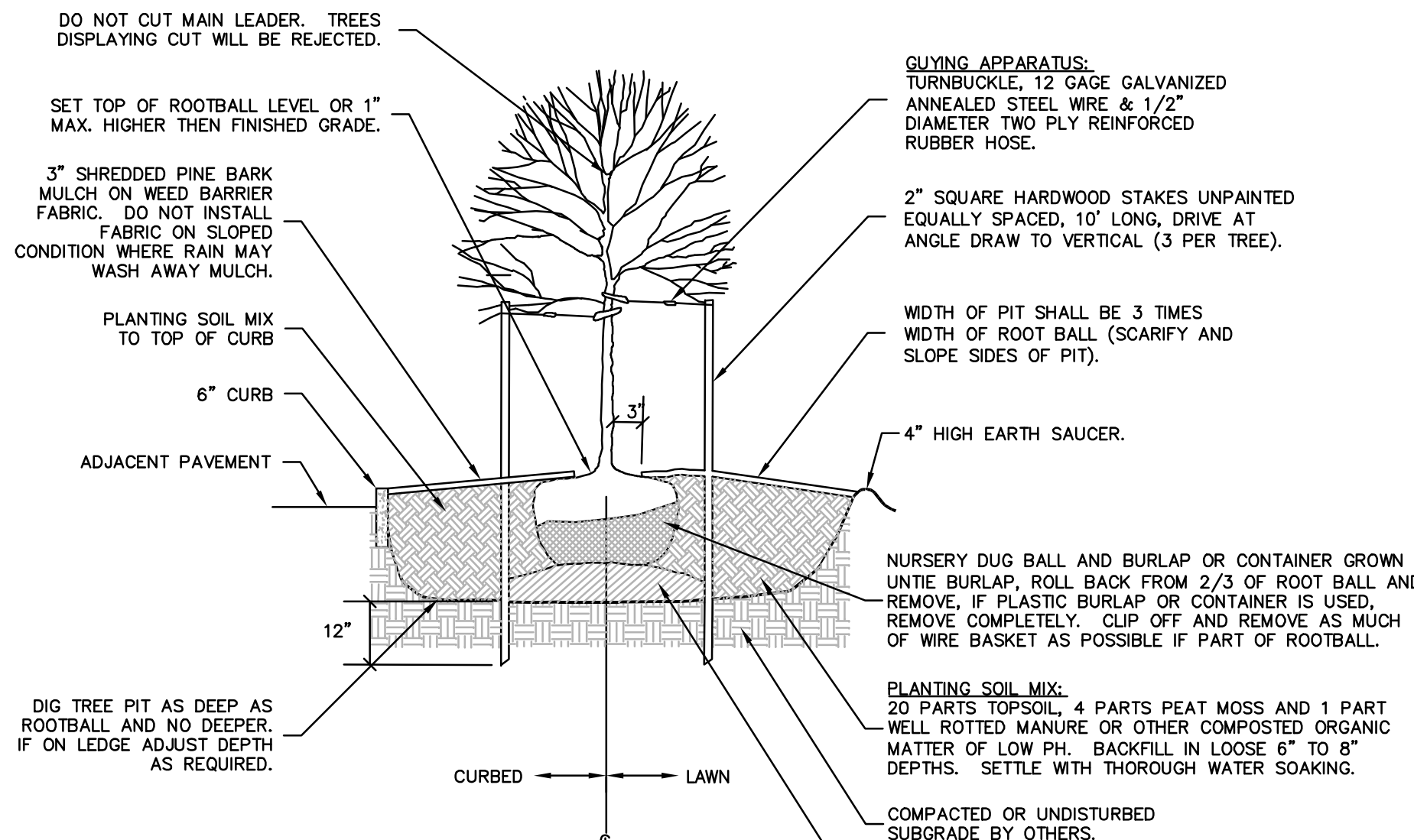


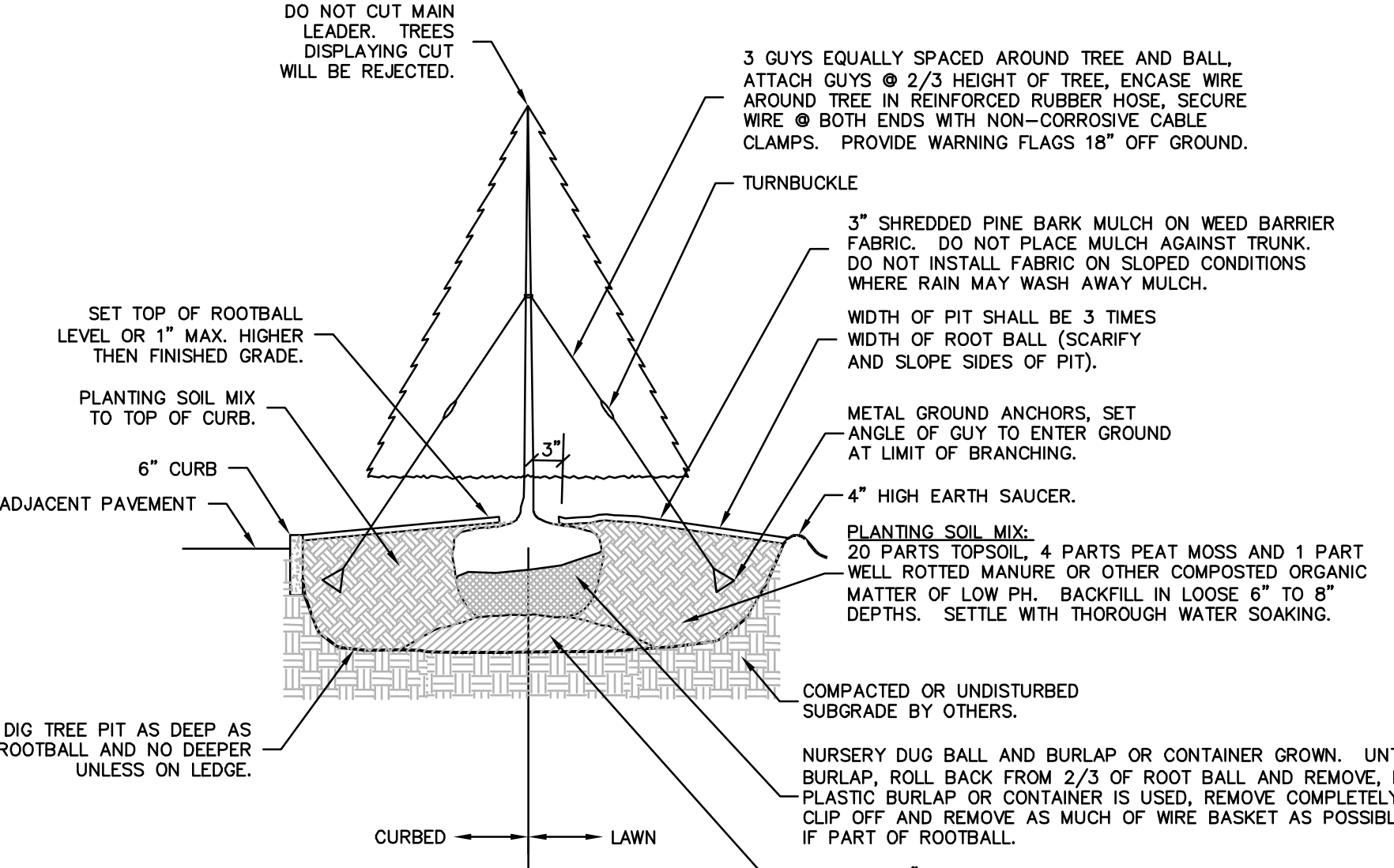
TABLE 5-3 BERM STONE SIZE

SIEVE DESIGNATION (US CUSTOMARY)	PERCENT BY WETWEIGHT PASSING SQUARE MESH SIEVES
12 INCH	100
6 INCH	84-100
3 INCH	68-83
1 INCH	42-55
NO. 4	8-12

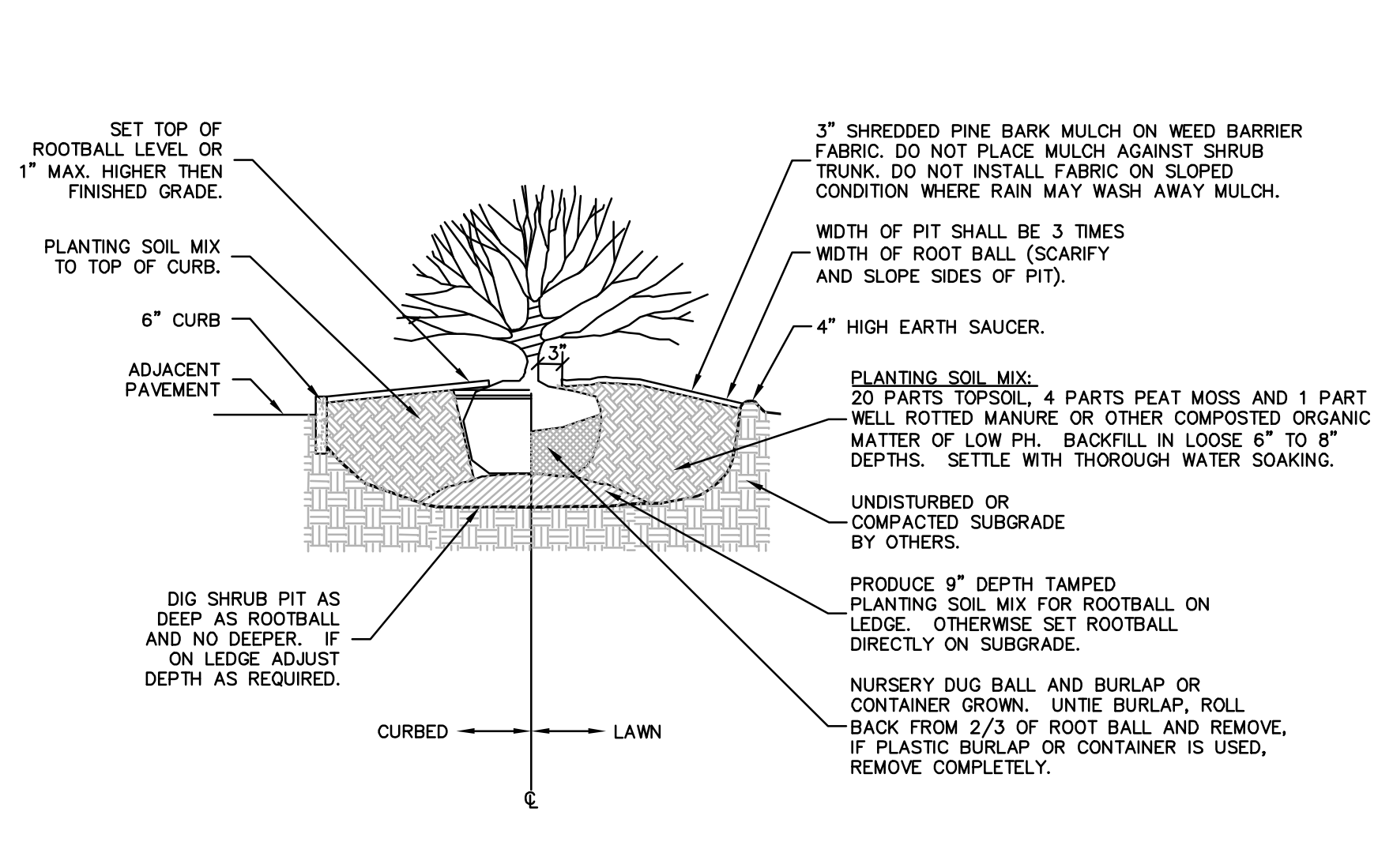
STONE BER LEVEL LIP SPREADER DETAIL
NOT TO SCALE



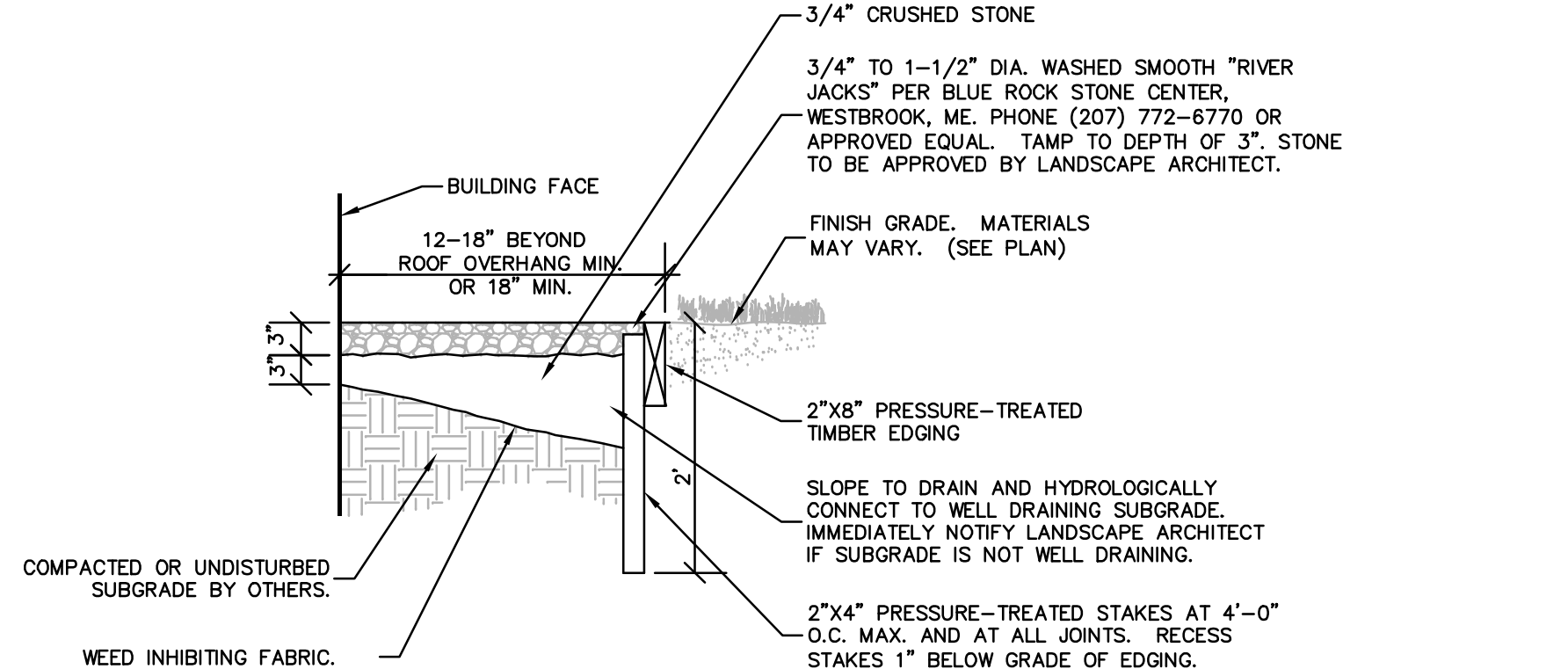
DECIDUOUS PLANTING
NOT TO SCALE



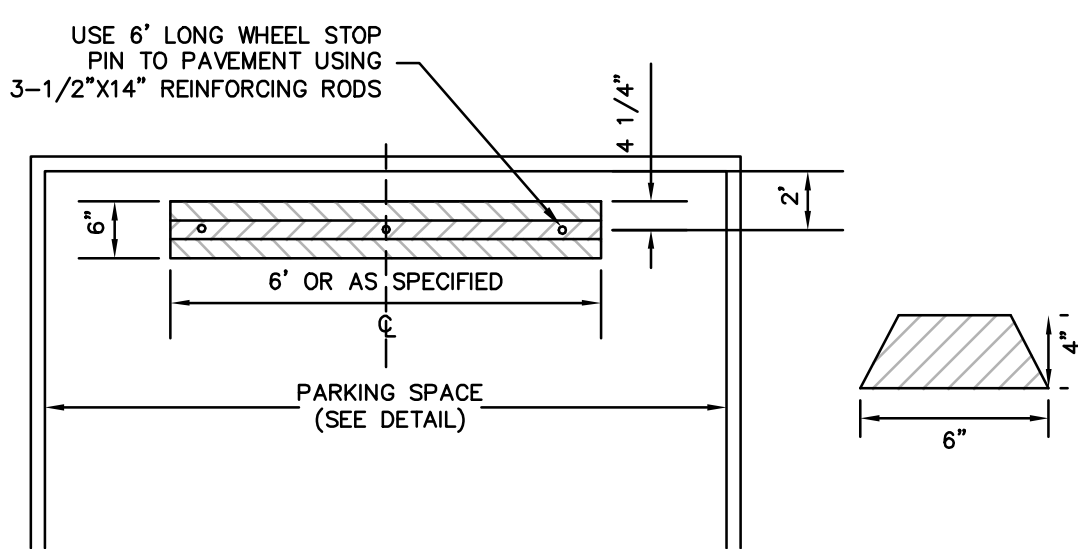
EVERGREEN TREE PLANTING
NOT TO SCALE



SHRUB PLANTING
NOT TO SCALE

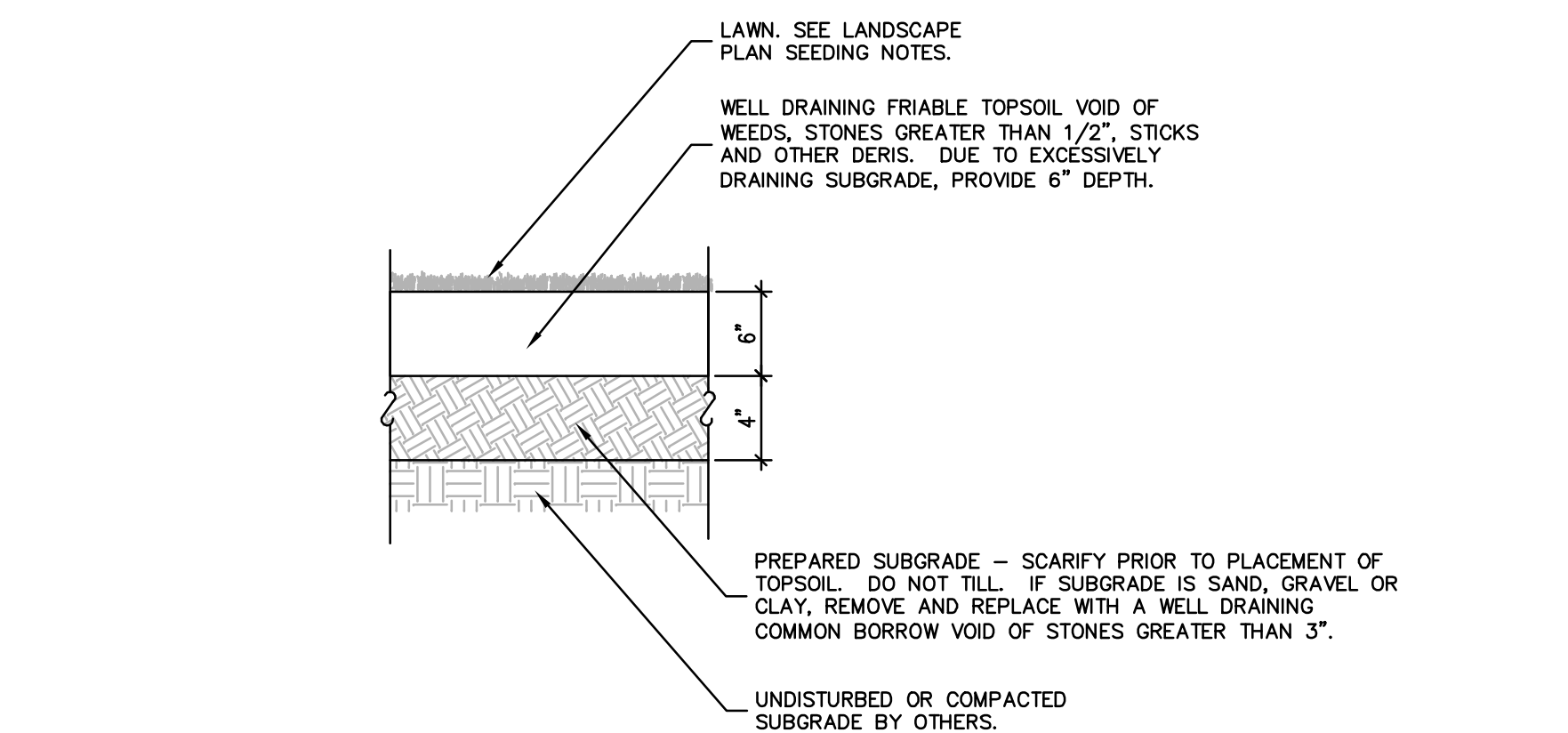


DRIP STRIP/MAINTENANCE
NOT TO SCALE



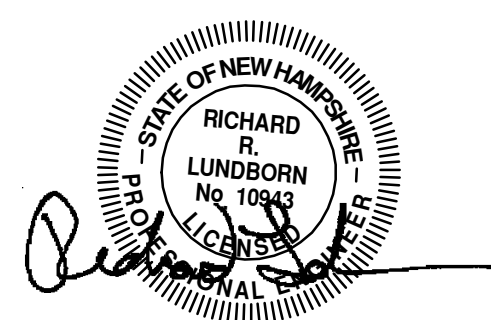
- NOTES:**
1. CENTER WHEEL STOP WITHIN PARKING SPACE.
 2. WHEEL STOP BY BARCO PRODUCTS (WWW.BARCOPRODUCTS.COM) MODEL WHLSTP OR EQUIVALENT.

WHEEL STOP
NOT TO SCALE



LAWNS AND LOAM
NOT TO SCALE

FILE NO:	303		
JOB NO:	14010		
F.B. NO:	MSC		
PLAN NO:	C-2691	5	ADDED NH PERMIT NUMBERS 8/05/14
SCRD NO:		4	REVISIONS PER NHDOT 5/12/14
DRAWN BY:	RRL	3	REVISIONS PER NHDES SSB REVIEW 4/03/14
CHECK BY:	RRL	2	CORRECTED UNIT COUNT ALL SHEETS 2/20/14
DWG NO:	DETAIL	1	ADDED TREATMENT SWALE 2/14/14
		NO.	REVISION
			DATE



NORWAY PLAINS ASSOCIATES, INC.

SEPTIC SYSTEM DESIGNERS ENGINEERS TRANSPORTATION PLANNERS

ALTON ROCHESTER

31 Mooney Street 2 Continental Boulevard
Alton, NH 03809 P.O. Box 249
(603) 875-3948 Rochester, NH 03866-0249
www.norwayplains.com (603) 335-3948

AMMENDED SITE DEVELOPMENT PLAN

PROPERTY OF

JASON W. BERNDTSON

123 DOVER ROAD
DURHAM, NH 03824

SCRD: BK 3141, PG 848 & BK 3068, PG 199

DETAILS

CARRIAGE HILL ASSISTED LIVING

TAX MAP 9 LOTS 8 & 8A

304 & 306 KNOX MARSH ROAD/RTE. 155

MADBURY, NEW HAMPSHIRE

STRAFFORD COUNTY

SCALE:
AS SHOWN

REV: 08-05-14

C-007