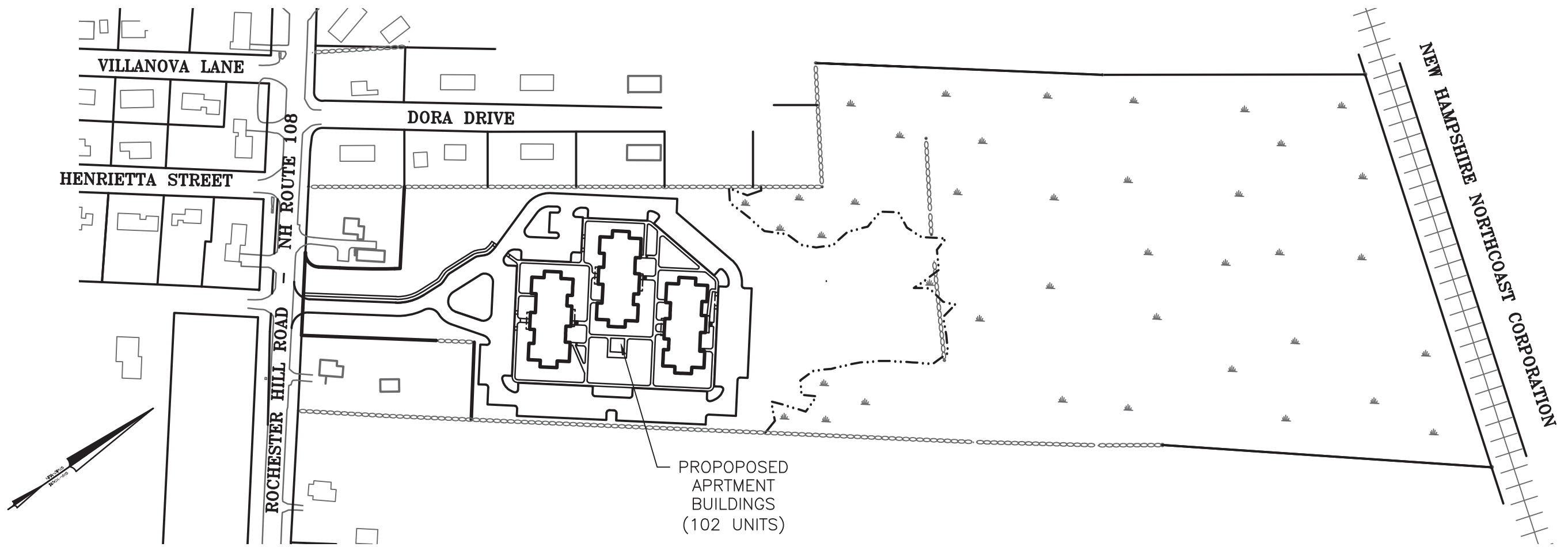


APPLE RIDGE APARTMENTS
114 ROCHESTER HILL ROAD
PREPARED FOR
D.R. LEMIEUX BUILDERS, INC.
ROCHESTER, N.H. 03867
JUNE 22, 2018



OVERALL SITE
1" = 200'



CIVIL ENGINEERS

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

LANDSCAPING ARCHITECTS

WOODBURN & COMPANY LANDSCAPE ARCHITECTURE, LLC
103 KENT PLACE
NEWMARKET, NEW HAMPSHIRE 03857
(603) 659-5949

ARCHITECTS

LASSEL ARCHITECTS PA
370 MAIN STREET
SOUTH BERWICK, ME 03908-370
(207) 384-2049

OWNER OF RECORD

TAX MAP 134, LOT 5
OWNER OF RECORD:
ROCHESTER HILL HOLDINGS, LLC
76 EXETER ROAD
NEWMARKET, NH 03857
SCRD BOOK 4452, PAGE 648

APPLICANT

D.R. LEMIEUX BUILDERS, INC.
76 EXETER ROAD
NEWMARKET, NH 03857
(603) 292-3555

STATE AND FEDERAL PERMITS:

STATE OF NEW HAMPSHIRE PERMIT NUMBERS:	
NHDES ALTERATION OF TERRAIN:	AoT-1128
NHDES WETLANDS PERMIT:	NOT REQUIRED
NHDES DAM PERMIT:	NOT REQUIRED
NHDES SUBDIVISION PERMIT:	NOT REQUIRED
NHDES SUBSURFACE SYSTEMS PERMIT:	NOT REQUIRED
NHDES WASTEWATER PERMIT:	D2016-1110
NHDOT DRIVEWAY/ENTRANCE PERMIT:	06-389-620

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES):

NPDES PERMITS ARE ONLY REQUIRED FOR PROJECTS MEETING THE DISTURBED AREA CRITERIA BELOW AND HAVING A POINT SOURCE STORMWATER DISCHARGE FROM THE SITE TO AN ADJACENT WETLAND OR WATER BODY (I.E. CULVERT, SWALE, ETC. OUTLETING TO A WETLAND, CREEK, STREAM OR RIVER).

NPDES PERMIT: REQUIRED

NPDES PERMITS CONSIST OF A NOTICE OF INTENT (NOI) FILED WITH THE ENVIRONMENTAL PROTECTION AGENCY AT LEAST 14 DAYS PRIOR TO CONSTRUCTION COMMENCING AND A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) BEING PREPARED, KEPT ON SITE AND FOLLOWED BY THE CONTRACTOR.

FOR STATUS OF THIS PERMIT, CONTACT THE PROJECT GENERAL CONTRACTOR.

FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

CERTIFIED BY: _____ DATE: _____

SHEET INDEX

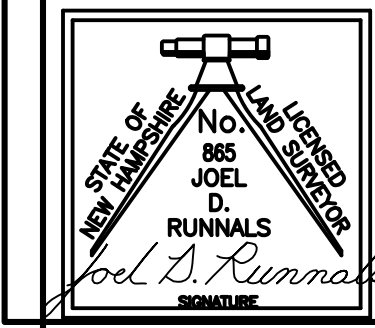
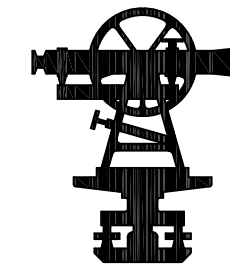
SHEET C-0	COVER	1" = 200'
SHEET S-1	PLAN OF LAND	1" = 100'
SHEET E-1	EXISTING FEATURES	1" = 40'
SHEET C-1	OVERALL SITE PLAN	1" = 100'
SHEET C-2	SITE LAYOUT PLAN	1" = 40'
SHEET C-2-P1	SITE LAYOUT PLAN - PHASE 1 ONLY	1" = 40'
SHEET C-3	GRADING AND DRAINAGE PLAN	1" = 40'
SHEET C-3-P1	GRADING AND DRAINAGE PLAN-PHASE 1 ONLY	1" = 40'
SHEET C-3A	DETAILED GRADING AND DRAINAGE PLAN	1" = 20'
SHEET C-3A-P1	DETAILED GRADING AND DRAINAGE PLAN - PHASE 1 ONLY	1" = 20'
SHEET C-4	EROSION AND SEDIMENTATION CONTROL PLAN	1" = 40'
SHEET C-4-P1	EROSION AND SEDIMENTATION CONTROL PLAN - PHASE 1 ONLY	1" = 40'
SHEET C-5	UTILITY PLAN	1" = 40'
SHEET C-5-P1	UTILITY PLAN - PHASE 1 ONLY	1" = 40'
SHEET C-5A	DETAILED UTILITY PLAN	1" = 20'
SHEET C-6	PARKING AND SIDEWALK DETAILS	AS SHOWN
SHEET C-7	CONSTRUCTION DETAILS	AS SHOWN
SHEET C-8	DRAINAGE DETAILS	AS SHOWN
SHEET C-9	GRAVEL WETLANDS BASIN DETAILS	AS SHOWN
SHEET C-10	TEMPORARY EROSION AND SEDIMENTATION CONTROL DETAILS	AS SHOWN
SHEET C-11	PERMANENT EROSION AND SEDIMENTATION CONTROL DETAILS	AS SHOWN
SHEET C-12	UTILITY DETAILS	AS SHOWN
SHEET C-13	SEWER DETAILS	AS SHOWN
SHEET C-14	PUMP STATION AND FORCE MAIN DETAILS	AS SHOWN
SHEET C-15	GUARDRAIL DETAILS	AS SHOWN
SHEET C-16	GRAVITY SEWER & FORCE MAIN PROFILE	AS SHOWN
SHEET C-17	FORCE MAIN & OFFSITE GRAVITY SEWER PROFILE	AS SHOWN
SHEET P-1	PHASING PLAN	1" = 40'
SHEET L-1	SITE LANDSCAPING PLAN	1" = 30'
SHEET L-2	GRAVEL WETLANDS PLANTING & SEEDING	1" = 30'
SHEET L-3	FOUNDATION LANDSCAPE PLAN	1" = 20'
SHEET L-4	LIGHTING PLAN AND DETAILS	1" = 40'
SHEET L-4-P1	LIGHTING PLAN AND DETAILS - PHASE 1 ONLY	1" = 40'
SHEET DOT-0	COVER	1" = 200'
SHEET DOT-1	STANDARD LEGEND AND SYMBOLS	AS SHOWN
SHEET DOT-2	STANDARD LEGEND AND SYMBOLS	AS SHOWN
SHEET DOT-3	OVERALL IMPROVEMENTS PLAN	1" = 100'
SHEET DOT-4	EXISTING FEATURES PLAN	1" = 50'
SHEET DOT-5	ROADWAY IMPROVEMENT PLAN	1" = 50'
SHEET DOT-6	PAVEMENT MARKING AND SIGNAGE PLAN	1" = 50'
SHEET DOT-7	DRIVEWAY IMPROVEMENT PLAN AND PROFILE	AS SHOWN
SHEET DOT-8	ROADWAY PROFILE AND TYPICAL CROSS SECTIONS	AS SHOWN
SHEET DOT-9	CROSS SECTIONS	1" = 10'
SHEET DOT-10	CROSS SECTIONS	1" = 10'
SHEET DOT-11	CROSS SECTIONS	1" = 10'
SHEET DOT-12	CROSS SECTIONS	1" = 10'

FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

LEGEND

- PROPERTY LINE
- LIMITS OF JURISDICTIONAL WETLANDS
- - - - - EXISTING TREE LINE
- ===== EXISTING STONEWALLS
- +++++ EXISTING RAILROAD TRACKS
- EXISTING OVERHEAD WRES
- ||||| EXISTING WETLANDS
- EXISTING UTILITY POLE
- EXISTING MONUMENT

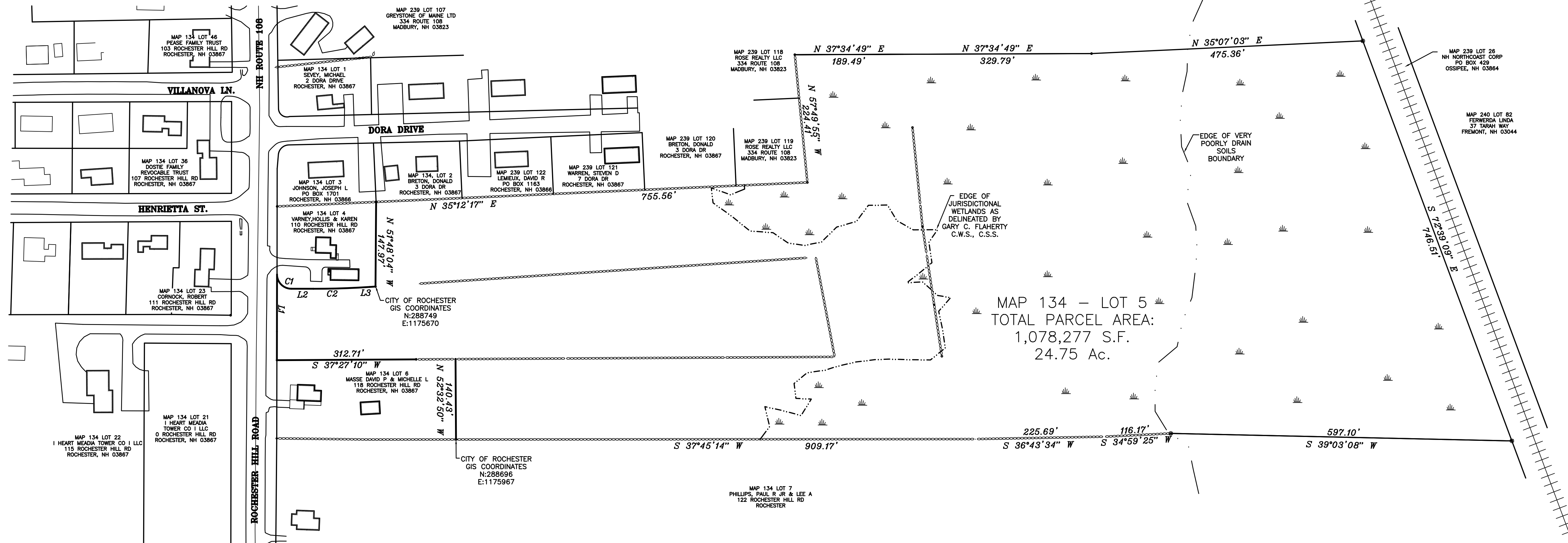
CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.



06/20/2018 - REVISE OWNER OF RECORD

GENERAL SITE PLAN NOTES

- THIS PARCELS ARE LOCATED IN THE RESIDENTIAL-2 (R2) ZONE.
- TOTAL PARCEL AREA: 1,078,277 SQUARE FEET OR 24.75 ACRES.
- THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING FEATURES ON THE LOT.
- ALL EXISTING UTILITIES LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATION PRIOR TO ANY WORK BEING PERFORMED.
- THESE PLANS SHOW ONLY THOSE FEATURES THAT WERE VISUALLY PER REFERENCE PLAN 1.
- DIMENSIONAL REGULATIONS PER ZONING ORDINANCE:
RESIDENTIAL (R2) ZONE:
MINIMUM LOT AREA/DWELLING UNIT = 75,000 SF
MINIMUM LOT AREA = 30,000 SF
MINIMUM LOT FRONTAGE = 100 FEET
MINIMUM YARD SETBACKS:
FRONT = 15'
SIDE = 10'
REAR = 25'
MAXIMUM LOT COVERAGE = 30%
MAXIMUM BUILDING HEIGHT = 35'
7. ORIENTATION: HORIZONTAL AND VERTICAL DATUMS - CITY OF ROCHESTER GIS.
- PARCEL IS NOT LOCATED WITHIN ZONE A (100YR FLOOD) AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY MAP, COMMUNITY #33017C0212D DATED MAY 17, 2005.

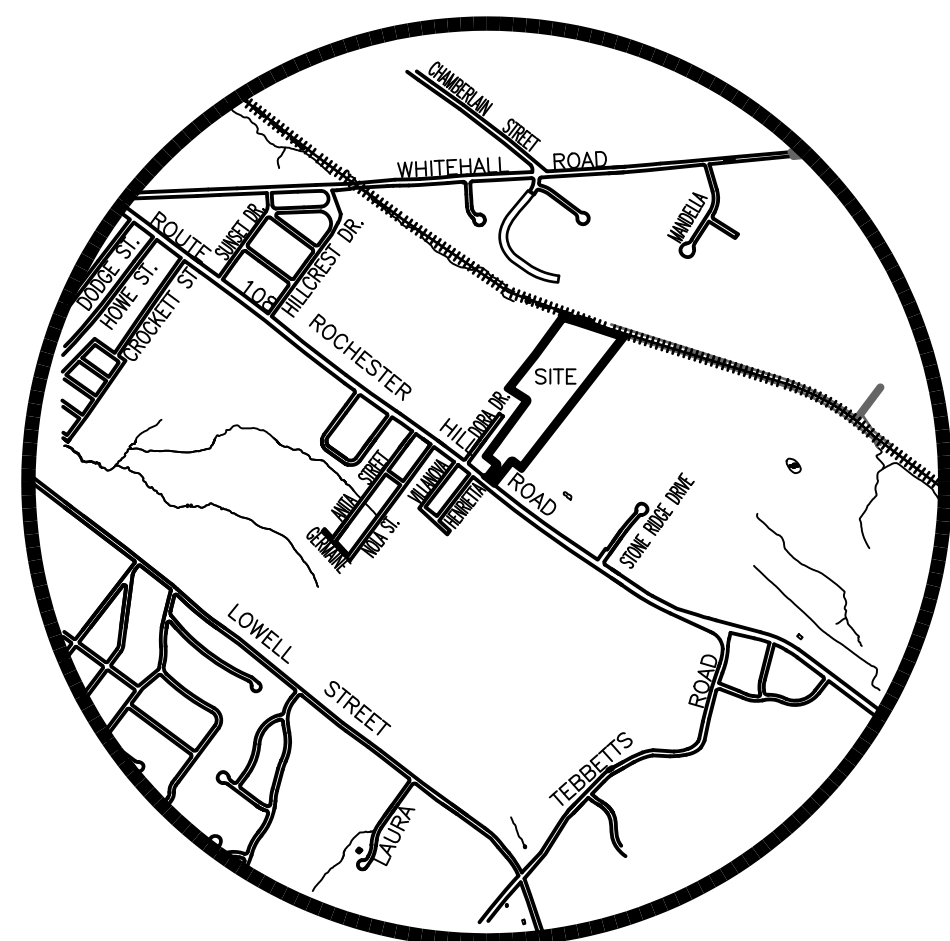


LINE DATA

- L1 N 52°06'40" W 150.00'
L2 N 37°53'20" E 38.66'
L3 N 33°58'59" E 10.00'

CURVE DATA

- C1 R=25.00' L=39.27' Δ=90°00'00"
C2 R=1450.09' L=98.86' Δ=3°54'22"



FILE NO. 104
PLAN NO. C-2780
DWG NO. 15225\SP-2
F.B. NO.

REFERENCE PLAN

- 1) APPLE RIDGE ROCHESTER HILL ROAD, ROCHESTER NEW HAMPSHIRE" DATED: JANUARY 3, 2005, REV. TO 1-3-2006; BY CIVILWORKS, INC.
2) LOT LINE ADJUSTMENT PLAN LOTS 5 & 6, TAX ASSESSOR'S MAP 134, ROCHESTER HILL ROAD, ROCHESTER, NEW HAMPSHIRE, COUNTY OF STRAFFORD". SCALE 1"=100'; DATED: JANUARY 11, 2002. REV. TO 2-11-2002; BY CIVILWORKS, INC. RECORDED S.C.R.D. PLAN 64-76.

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

NORWAY PLAINS ASSOCIATES, INC.

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

S-1

TAX MAP 134, LOT 5
OWNER OF RECORD:
ROCHESTER HILL HOLDINGS, LLC
76 EXETER ROAD
NEWMARKET, NH 03857
SCRD BOOK 4552, PAGE 648

PLAN OF LAND
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR: D.R. LEMIEUX BUILDERS, INC.

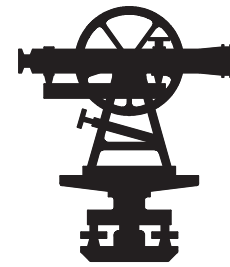
OWNER OF RECORD:
APPLE RIDGE ESTATES LLC

MAY 2016

GRAPHIC SCALE



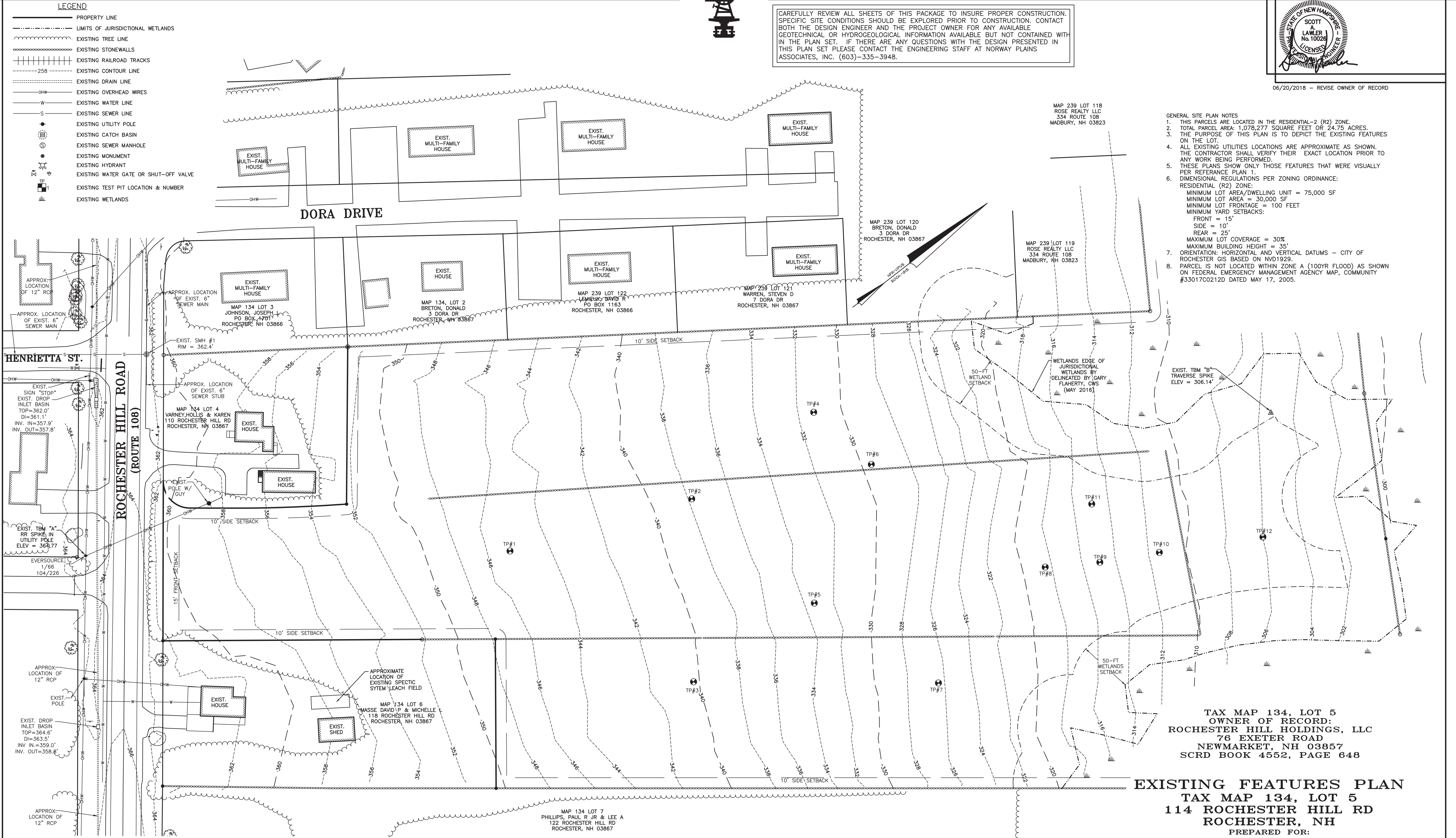
(IN FEET)
1 INCH= 100 FT.



CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.



06/20/2018 - REVISE OWNER OF RECORD

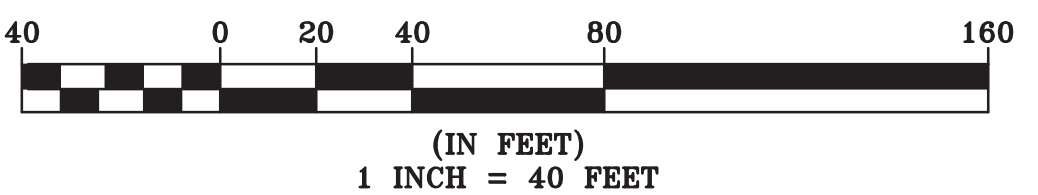


- GENERAL SITE PLAN NOTES
1. THIS PARCELS ARE LOCATED IN THE RESIDENTIAL-2 (R2) ZONE.
 2. TOTAL PARCEL AREA: 1,078,277 SQUARE FEET OR 24.75 ACRES.
 3. THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING FEATURES ON THE LOT.
 4. ALL EXISTING UTILITIES LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATION PRIOR TO ANY WORK BEING PERFORMED.
 5. THESE PLANS SHOW ONLY THOSE FEATURES THAT WERE VISUALLY PER REFERENCE PLAN 1.
 6. DIMENSIONAL REGULATIONS PER ZONING ORDINANCE:
RESIDENTIAL (R2) ZONE:
MINIMUM LOT AREA/DWELLING UNIT = 75,000 SF
MINIMUM LOT AREA = 30,000 SF
MINIMUM LOT FRONTAGE = 100 FEET
MINIMUM YARD SETBACKS:
FRONT = 15'
SIDE = 10'
REAR = 25'
MAXIMUM BUILDING COVERAGE = 30%
MAXIMUM BUILDING HEIGHT = 35'
 7. ORIENTATION: HORIZONTAL AND VERTICAL DATUMS - CITY OF ROCHESTER GIS BASED ON NVD1929.
 8. PARCEL IS NOT LOCATED WITHIN ZONE A (100YR FLOOD) AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY MAP, COMMUNITY #33017C0212D DATED MAY 17, 2005.

TAX MAP 134, LOT 5
OWNER OF RECORD:
ROCHESTER HILL HOLDINGS, LLC
76 EXETER ROAD
NEWMARKET, NH 03857
SCRD BOOK 4552, PAGE 648

EXISTING FEATURES PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.

MAY 2016
GRAPHIC SCALE



FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

CERTIFIED BY: _____ DATE: _____

REFERENCE PLAN
1) APPLE RIDGE ROCHESTER HILL ROAD, ROCHESTER NEW HAMPSHIRE DATED: JANUARY 3, 2005, REV. TO 1-3-2006; BY CIVILWORKS, INC.
2) LOT LINE ADJUSTMENT PLAN LOTS 5 & 6, TAX ASSESSOR'S MAP 134, ROCHESTER HILL ROAD, ROCHESTER, NEW HAMPSHIRE, COUNTY OF STRAFFORD, SCALE 1"=100', DATED: JANUARY 11, 2002, REV. TO 2-11-2002; BY CIVILWORKS, INC. RECORDED S.C.R.D. PLAN 64-76.

FILE NO. 104
PLAN NO. C-2780
DWG NO. 15225\SP-2
F.B. NO.

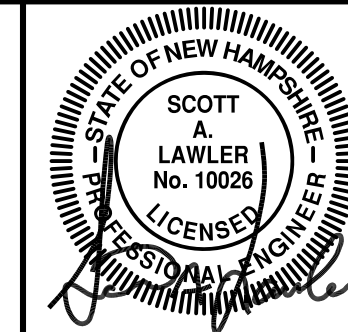
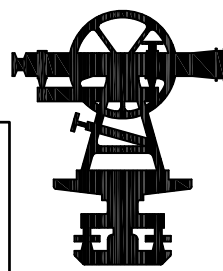
LEGEND

- PROPERTY LINE
- JURISDICTIONAL WETLANDS
- EXISTING TREE LINE
- EXISTING OVERHEAD WIRES
- EXISTING HYDRANT
- EXISTING WATER GATE OR SHUT-OFF VALVE
- EXISTING UTILITY POLE
- EXISTING SEWER MAN HOLE
- EXISTING CATCH BASIN
- EXISTING LIGHT POLES
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- PROPOSED PAVEMENT WITH CURBING
- PROPOSED TREE LINE

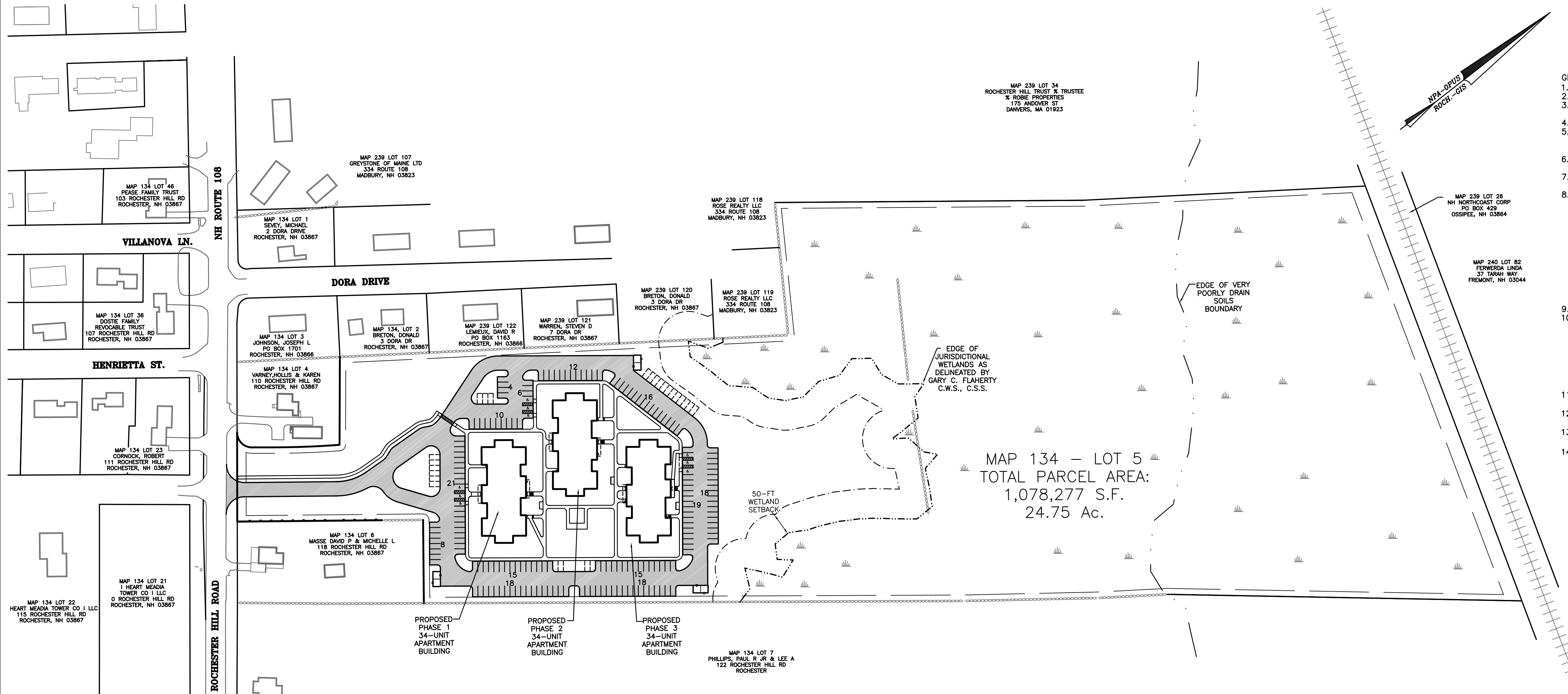
CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.

SITE REVIEW APPROVAL

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



05/20/2016 - REVISED PLAN PER ROCHESTER TRG COMMENTS
06/20/2018 - REMOVE ONE SET OF STAIRS AND WALKWAY
FROM THE COMMUNITY ROOM. REVISE OWNER OF RECORD



- GENERAL SITE PLAN NOTES
1. THIS PARCELS ARE LOCATED IN THE RESIDENTIAL-2 (R2) ZONE.
 2. TOTAL PARCEL AREAS: MAP 134 - LOT 5: 1,078,277 SQUARE FEET OR 24.75 ACRES.
 3. THE PURPOSE OF THIS PLAN IS TO DEPICT A PROPOSED THREE 34-UNIT APARTMENT BUILDINGS AND ASSOCIATED PARKING.
 4. THIS IS A THREE PHASED PROJECT. THIS PHASING IS OUTLINED ON THE PHASING PLAN.
 5. TOTAL NUMBER OF ALLOWABLE UNITS = 103 UNIT
(TOTAL LOT AREA - VERY POORLY DRAIN SOILS - 25% SLOPE)/7,500 SF= 103 UNIT
NUMBER OF PROPOSED UNITS = 102
 6. ALL EXISTING UTILITIES LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATION PRIOR TO ANY WORK BEING PERFORMED.
 7. THESE PLANS SHOW ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT PER REFERENCE PLAN 1.
 8. DIMENSIONAL REGULATIONS PER ZONING ORDINANCE:
RESIDENTIAL (R2) ZONE:
MINIMUM LOT AREA / DWELLING UNIT (WITH WATER AND SEWER) = 75,000 SF
MINIMUM LOT SIZE = 30,000 SF
MINIMUM LOT FRONTAGE = 100 FEET
MINIMUM YARD SETBACKS:
FRONT = 15'
SIDE = 10'
REAR = 25'
MAXIMUM LOT COVERAGE = 30%
MAXIMUM BUILDING HEIGHT = 35'
BUFFER FROM SINGLE FAMILY = 100' UNDER 42.20.b.11.B
 9. ORIENTATION: HORIZONTAL AND VERTICAL (NVD1929) DATUMS - CITY OF ROCHESTER GIS.
 10. SOIL TYPES ARE PER SITE SPECIFIC SOIL SURVEY REPORT BY GARY C. FLAHERTY, C.W.S., C.S.S. 50 FARMWOOD DRIVE, NASHUA, NH:
68B - SUTTON SERIES, STONY FINE SANDY LOAM, 3-8 % SLOPES (MODERATELY WELL DRAINED).
508B - LEICESTER SERIES, VARIANT, STONY FINE SANDY LOAM, 0-3 % SLOPES (SOMEWHAT POORLY DRAINED).
508C - LEICESTER SERIES, VARIANT, STONY FINE SANDY LOAM, 3-8 % SLOPES (SOMEWHAT POORLY DRAINED).
514B - LEICESTER SERIES, STONY FINE SANDY LOAM, 0-3 % SLOPES (POORLY DRAINED).
 11. JURISDICTIONAL WETLANDS WERE DELINEATED BY GARY C. FLAHERTY, C.W.S., C.S.S. 50 FARMWOOD DRIVE, NASHUA, NH
 12. PARCEL IS NOT LOCATED WITHIN ZONE A (100YR FLOOD) AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY MAP, COMMUNITY #33017C0212D DATED MAY 17, 2005.
 13. FOR MORE INFORMATION ABOUT THIS SITE PLAN, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT, 31 WAKEFIELD ST., ROCHESTER, NH 03867, (603) 335-1338.
 14. PARKING REQUIREMENTS (SITE PLAN REGULATIONS; SECTION 10 (A):
RESIDENTIAL USE:
1.75 SPACE PER DWELLING UNIT
102 UNITS X 1.75 = 179 SPACES

TOTAL REQUIRED SPACES = 179 SPACE
TOTAL PROVIDED SPACES = 180 SPACES INCLUDING 12 VISITOR SPACES
TOTAL FUTURE SPACES = 25 SPACES
ACCESSIBLE PARKING (SITE PLAN REGULATIONS SECTION 10(D)(2)):
THE SPACES ARE PART OF THE TOTAL ABOVE
ACCESSIBLE PARKING SPACES = 151 TO 200 = 6 SPACES
TOTAL PROVIDED SPACES = 9 SPACES

GENERAL SITE PLAN NOTES (CONTINUED)

15. THIS DEVELOPMENT MUST BE IN COMPLIANCE WITH ALL APPLICABLE LAW - INCLUDING ALL PERTINENT PROVISIONS OF THE CITY OF ROCHESTER SITE PLAN REGULATIONS - UNLESS OTHERWISE WAIVED.
16. THE APPLICANT SHALL OBTAIN A STORMWATER MANAGEMENT PERMIT FROM THE PUBLIC WORKS DEPARTMENT (UNLESS DETERMINED TO BE UNNECESSARY BY THE CITY ENGINEER) AND FOLLOW THE REQUIREMENTS OF THE CITY ORDINANCE CHAPTER 50. THE PERMITTEE SHALL PREPARE A WRITTEN PLAN FOR MANAGING STORMWATER THAT ENTERS THE CONSTRUCTION SITE AND SHALL PRESENT IT TO THE INSPECTION ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE PERMITTEE SHALL FOLLOW BEST MANAGEMENT PRACTICES TO PREVENT EROSION IN AREAS WHERE SOIL HAS BEEN DISTURBED.
17. ACCESS INTO THE SITE FOR FIRE APPARATUS MUST BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION PROCESS. THIS IS THE SOLE RESPONSIBILITY OF THE APPLICANT/DEVELOPER TO MAINTAIN THIS ACCESS. PLEASE CONTACT THE FIRE DEPARTMENT AT 330-7182 WITH ANY QUESTIONS ABOUT ACCESS REQUIREMENTS.
18. SNOW SHALL NOT BE PILED IN SUCH A MANNER AS TO BLOCK THE VISIBILITY OF THE VEHICLES ON NH ROUTE 108 AND ALL EXCESS SNOW SHALL BE REMOVED FROM THE SITE.
19. ALL OUTSIDE CONSTRUCTION ACTIVITY RELATED TO THE DEVELOPMENT OF THIS SITE IS RESTRICTED TO THE HOURS OF 7:00 A.M. TO 6:00 P.M. MONDAY THROUGH FRIDAY AND 8:00 A.M. TO 6:00 P.M. SATURDAY.
20. ALL UTILITIES MUST BE UNDERGROUND, INCLUDING UTILITIES EXTENDED ONTO THE SITE FROM EXISTING POLES NEAR THE SITE. HOWEVER, IF THE ONLY POLE NEARBY IS ACROSS THE STREET, ONE ADDITIONAL POLE MAY BE PLACED ON/NEAR THE PROPERTY TO ALLOW FOR OVERHEAD EXTENSION OF WIRES ACROSS THE STREET. UTILITIES EXTENDING FROM ANY SUCH NEW POLE MUST BE UNDERGROUND. THE APPLICANT MAY WORK WITH THE CITY STAFF AS APPROPRIATE TO ADDRESS THIS REQUIREMENT.
21. THE CODE ENFORCEMENT OFFICER ADMINISTERS THE CITY OF ROCHESTER SIGN ORDINANCE. SIGNAGE SUBMITTED AS PART OF THIS SITE PLAN PACKAGE IS STILL SUBJECT TO HIS REVIEW TO ENSURE COMPLIANCE WITH THAT ORDINANCE AND OTHER APPLICABLE CODES, INDEPENDENT FROM THIS SITE PLAN REVIEW. IN ADDITION, IF ANY SIGNIFICANT CHANGE OR EXPANSION IS PROPOSED TO THE DESIGN OF THE APPROVED PRESTANDING SIGN OR TO THE OVERALL ADVERTISING SIGNAGE FOR THE SITE (NOT INCLUDING ACCESSORY SIGNAGE, SUCH AS HANDICAP PARKING SIGNS), THE PROPOSED SIGN DESIGNS MUST BE PRESENTED TO THE PLANNING BOARD FOR REVIEW PRIOR TO ISSUANCE OF THOSE SIGN PERMITS. A SIGN PERMIT MUST BE OBTAINED PRIOR TO INSTALLATION OF ANY SIGNS ON SITE.
22. ALL ELEMENTS SHOWN ON THE APPROVED SITE PLAN MUST BE PROPERLY COMPLETED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY, UNLESS APPROPRIATE SURETY IS PLACED WITH THE PLANNING DEPARTMENT.
23. NOTE THAT THIS APPROVAL IS FOR THE SITE PLAN ONLY. LIFE SAFETY CODE AND BUILDING CODE REVIEW WILL BE REQUIRED AS PART OF THE BUILDING PERMIT PROCESS WHEN THE CONSTRUCTION PLANS ARE SUBMITTED. VARIOUS REQUIREMENTS REGARDING THE BUILDING DESIGN POSSIBLY INCLUDING A SPRINKLER SYSTEM - MAY BE SPECIFIED AT THAT TIME.
24. THE SEWER IMPACT CONTRIBUTION MUST BE PAID IN FULL TO THE CODE ENFORCEMENT DEPARTMENT, PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THE SEWER IMPACT IS A ONE TIME PAYMENT OF \$2.00 PER GALLON FOR AVERAGE DAILY FLOW.
25. THIS PROJECT PROPOSED TO DISTURB OVER ONE ACRE OF EXISTING GROUND COVER AND MEETS OTHER SPECIFIC REQUIREMENTS RELATED TO PERMIT CRITERIA FOR EPA NPDES COMPLIANCE. THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPMENT AND IMPLEMENTATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), SUBMISSION OF A NOTICE OF INTENT (NOI) TO EPA, INSPECTIONS AND MAINTENANCE OF SEDIMENT CONTROL MEASURES, DOCUMENTATION OF MAINTENANCE ACTIVITIES, AND SUBMISSION OF A NOTICE OF TERMINATION (NOT) TO EPA. THE CONTRACTOR IS ALSO RESPONSIBLE TO COMPLY WITH ANY OR ALL OTHER ASPECTS OF THE CURRENT FEDERAL, STATE AND LOCAL STORM WATER OR NPDES REGULATIONS OR REQUIREMENTS.
26. THIS PROJECT HAS BEEN APPROVED IN THREE PHASES AND THAT THE DEVELOPER SHALL CONSTRUCT THE SITE IMPROVEMENTS IN ACCORDANCE WITH THE APPROVED PLANS. THE DEVELOPER SHALL START CONSTRUCTION OF EACH PHASE WITHIN THE FOLLOWING TIMETABLE:
PHASE 1: WITHIN ONE YEAR OF THE PLAN CERTIFICATION.
PHASE 2: WITHIN TWO YEARS OF COMPLETION OF PHASE 1.
PHASE 3: WITHIN TWO YEARS OF COMPLETION OF PHASE 2.

FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

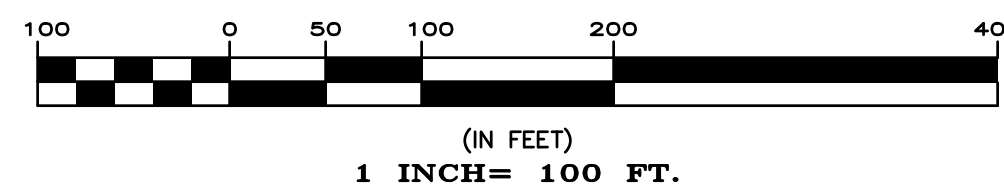
CERTIFIED BY: _____ DATE: _____

TAX MAP 134, LOT 5
OWNER OF RECORD:
ROCHESTER HILL HOLDINGS, LLC
76 EXETER ROAD
NEWMARKET, NH 03857
SCRD BOOK 4552, PAGE 648

OVERALL SITE PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.

MAY 2016

GRAPHIC SCALE

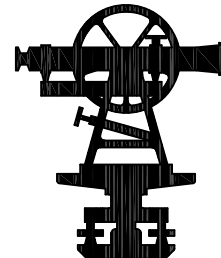


FILE NO. 104
PLAN NO. C-2780
DWG NO. 15225\SP-2
F.B. NO.

REFERENCE PLAN
1) APPLE RIDGE ROCHESTER HILL ROAD, ROCHESTER NEW HAMPSHIRE DATED: JANUARY 3, 2005, REV. TO 1-3-2006; BY CIVILWORKS, INC.
2) LOT LINE ADJUSTMENT PLAN LOTS 5 & 6, TAX ASSESSOR'S MAP 134, ROCHESTER HILL ROAD, ROCHESTER, NEW HAMPSHIRE, COUNTY OF STRAFFORD. SCALE 1"=100'; DATED: JANUARY 11, 2002, REV. TO 2-11-2002; BY CIVILWORKS, INC. RECORDED S.C.R.D. PLAN 64-76.

LEGEND

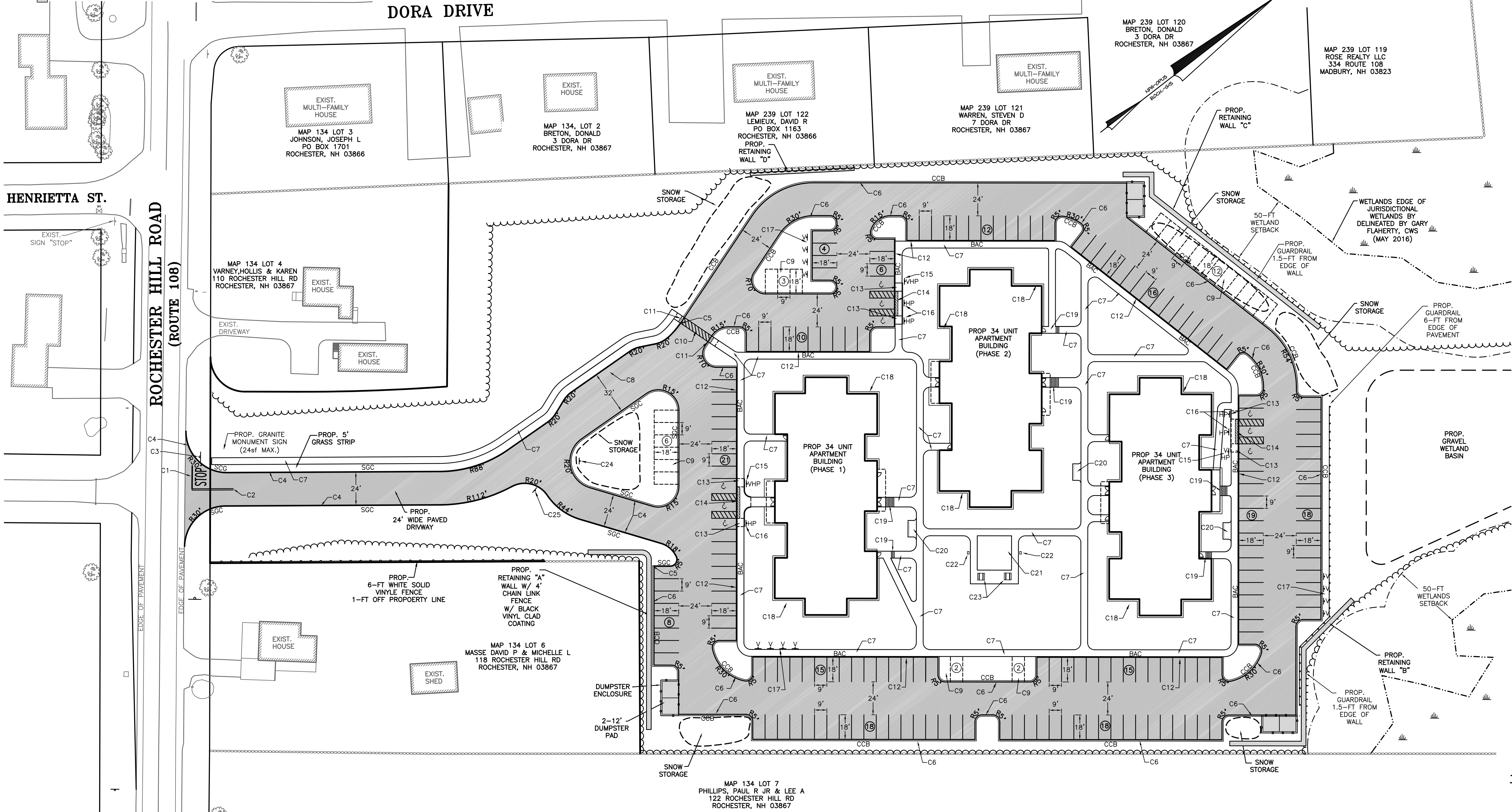
PROPERTY LINE	PROPOSED DETECTABLE WARNING PAVERS
JURISDICTIONAL WETLANDS	PROPOSED SIGNS
EXISTING TREE LINE	BITUMINOUS ASPHALT CURB - TYPE A
EXISTING OVERHEAD WIRES	SGCB
EXISTING HYDRANT	CCB
EXISTING WATER GATE OR SHUT-OFF VALVE	CAPE CODE BERM
EXISTING UTILITY POLE	PAVEMENT RADIUS (20')
EXISTING SEWER MAN HOLE	PROPOSED STANDARD PARKING SPACES (9' x 18')
EXISTING CATCH BASIN	PROPOSED FUTURE PARKING SPACES (9' x 18')
EXISTING LIGHT POLES	PROPOSED VISITOR PARKING SPACES (9' x 18')
PROPOSED BUILDING	PROPOSED VAN ACCESSIBLE PARKING SPACES (11' x 18' WITH 5' x 18' ACCESS ISLE)
PROPOSED PAVEMENT	PROPOSED ACCESSIBLE PARKING SPACES (8' x 18' WITH 5' x 18' ACCESS ISLE)
PROPOSED PAVEMENT WITH CURBING	
PROPOSED TREE LINE	
PROPOSED VINYL PLANK FENCE	
PROPOSED GUARDRAIL	
PROPOSED BLOCK RETAINING WALL	
PROPOSED PAVEMENT	
PROPOSED CONCRETE	



CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.



05/20/2016 - REVISED PLAN PER ROCHESTER TRG COMMENTS
06/20/2018 - REMOVE ONE SET OF STAIRS AND WALKWAY FROM THE COMMUNITY ROOM
08/08/2018 - REVISE CURB STYLE NEXT TO SIDEWALKS

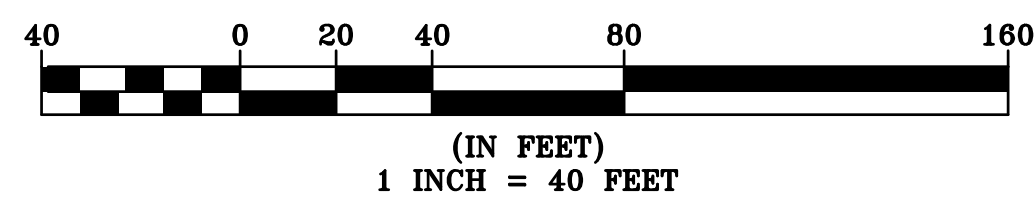


- PROPOSED SITE FEATURES:
- C1 PAINTED 12" WHITE STOP BAR
 - C2 PAINTED DOUBLE YELLOW LINES
 - C3 STOP SIGN (R1-1)
 - C4 SLOPED GRANITE CURB, 6" REVELE
 - C5 TRANSITION FROM GRANITE CURB TO BITUMINOUS CAPE COD BERM
 - C6 BITUMINOUS CAPE COD BERM, 3" REVELE
 - C7 5' WIDE PAVED SIDEWALK OR WALKWAY
 - C8 8' WIDE PAVED PULL-OFF
 - C9 FUTURE PARKING SPACES
 - C10 5' WIDE PAINTED CROSS WALK
 - C11 CONCRETE SIDEWALK TIP-DOWN WITH DETECTABLE WARNING PAVERS
 - C12 BITUMINOUS ASPHALT CURB (TYPE A), 6" REVELE
 - C13 SIDEWALK AND CURB TIP-DOWN
 - C14 DETECTABLE WARNING PAVERS
 - C15 VAN ACCESSIBLE PARKING SIGN (R7-8a & R7-8b)
 - C16 ACCESSIBLE PARKING SIGN (R7-8a)
 - C17 VISITOR PARKING SIGNS (4 EACH)
 - C18 18" WIDE STONE DRIP EDGE WITH ALUMINUM EDGING
 - C19 CONCRETE STAIRS, LANDING AND HANDRAILS
 - C20 BIKE RACK FIXED TO A CONCRETE PAD
 - C21 FUTURE PAVILION OR GAZEBO AREA
 - C22 BARBECUE GRILL STANDS
 - C23 PICNIC TABLES AND BENCHES
 - C24 ONE WAY SIGN (R6-1)
 - C25 DO NOT ENTER (R5-1)

SITE LAYOUT PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.

FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

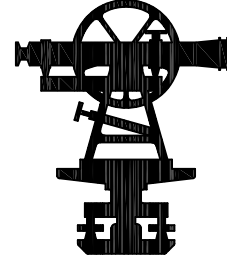
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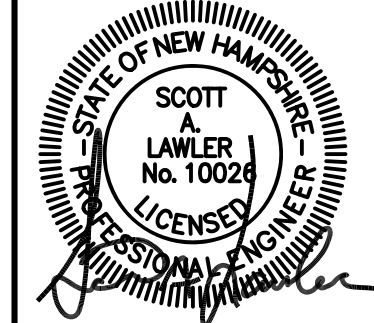
FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

LEGEND

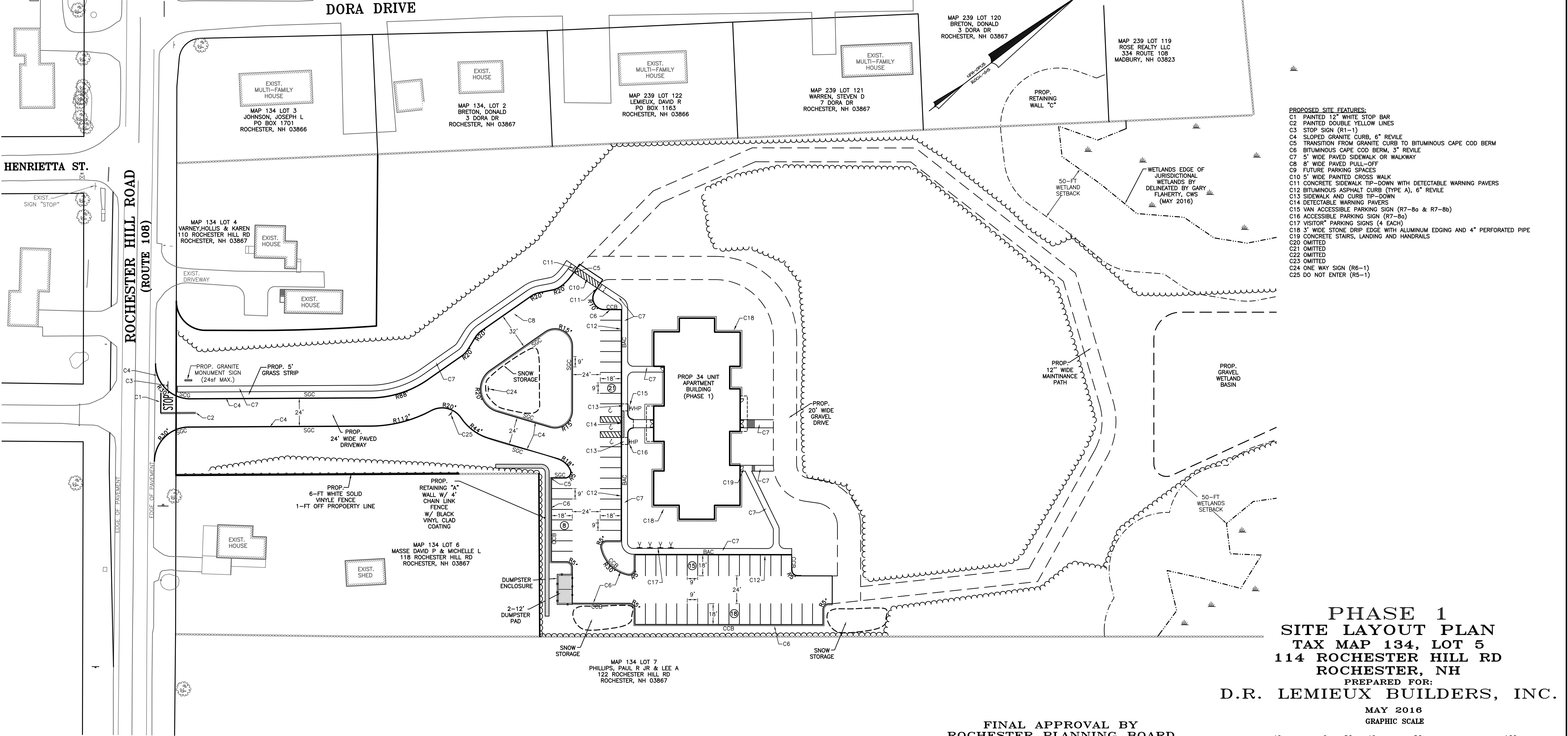
PROPERTY LINE	PROPOSED DETECTABLE WARNING PAVERS
JURISDICTIONAL WETLANDS	PROPOSED SIGNS
EXISTING TREE LINE	BITUMINOUS ASPHALT CURB - TYPE A
EXISTING OVERHEAD WIRES	SGB SLOPE GRANITE CURB
EXISTING HYDRANT	CCB CAPE CODE BERM
EXISTING WATER GATE OR SHUT-OFF VALVE	R20' PAVEMENT RADIUS (20')
EXISTING UTILITY POLE	PROPOSED STANDARD PARKING SPACES (9' x 18')
EXISTING SEWER MAN HOLE	PROPOSED FUTURE PARKING SPACES (9' x 18')
EXISTING CATCH BASIN	PROPOSED VISITOR PARKING SPACES (9' x 18')
EXISTING LIGHT POLES	PROPOSED VAN ACCESSIBLE PARKING SPACES (11' x 18' WITH 5' x 18' ACCESS ISLE)
PROPOSED BUILDING	PROPOSED ACCESSIBLE PARKING SPACES (8' x 18' WITH 5' x 18' ACCESS ISLE)
PROPOSED PAVEMENT	
PROPOSED PAVEMENT WITH CURBING	
BAC PROPOSED TREE LINE	
PROPOSED VINYL PLANK FENCE	
PROPOSED GUARDRAIL	
PROPOSED BLOCK RETAINING WALL	
PROPOSED PAVEMENT	
PROPOSED CONCRETE	



CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.



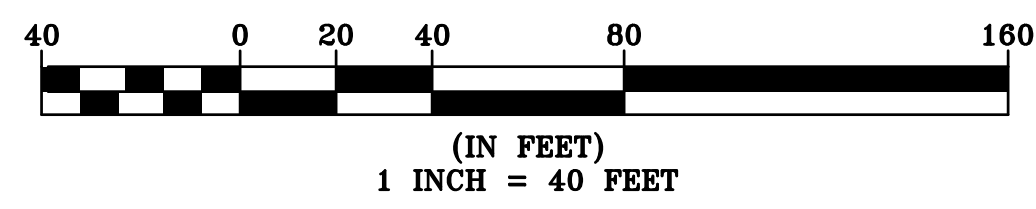
05/20/2016 - REVISED PLAN PER ROCHESTER TRG COMMENTS
06/20/2018 - REMOVE ONE SET OF STAIRS AND WALKWAY FROM THE COMMUNITY ROOM



- PROPOSED SITE FEATURES:
- C1 PAINTED 12" WHITE STOP BAR
 - C2 PAINTED DOUBLE YELLOW LINES
 - C3 STOP SIGN (R1-1)
 - C4 SLOPED GRANITE CURB, 6" REVILE
 - C5 TRANSITION FROM GRANITE CURB TO BITUMINOUS CAPE COD BERM
 - C6 BITUMINOUS CAPE COD BERM, 3" REVILE
 - C7 5' WIDE PAVED SIDEWALK OR WALKWAY
 - C8 8' WIDE PAVED PULL-OFF
 - C9 FUTURE PARKING SPACES
 - C10 5' WIDE PAINTED CROSS WALK
 - C11 CONCRETE SIDEWALK TIP-DOWN WITH DETECTABLE WARNING PAVERS
 - C12 BITUMINOUS ASPHALT CURB (TYPE A), 6" REVILE
 - C13 SIDEWALK AND CURB TIP-DOWN
 - C14 DETECTABLE WARNING PAVERS
 - C15 VAN ACCESSIBLE PARKING SIGN (R7-8a & R7-8b)
 - C16 ACCESSIBLE PARKING SIGN (R7-8a)
 - C17 VISITOR PARKING SIGNS (4 EACH)
 - C18 3" WIDE STONE DRIP EDGE WITH ALUMINUM EDGING AND 4" PERFORATED PIPE
 - C19 CONCRETE STAIRS, LANDING AND HANDRAILS
 - C20 OMITTED
 - C21 OMITTED
 - C22 OMITTED
 - C23 OMITTED
 - C24 ONE WAY SIGN (R6-1)
 - C25 DO NOT ENTER (R5-1)

PHASE 1
SITE LAYOUT PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.

MAY 2016
GRAPHIC SCALE



FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

CERTIFIED BY: _____ DATE: _____

FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.



LEGEND

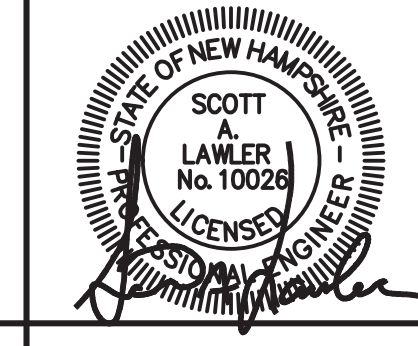
- PROPERTY LINE
- JURISDICTIONAL WETLANDS
- EXISTING TREE LINE
- EXISTING DRAIN LINE
- EXISTING CONTOUR LINE
- EXISTING TEST PIT
- E234.1' EXISTING SPOT GRADE
- P234.25' PROPOSED SPOT GRADE
- PROPOSED TREE LINE
- PROPOSED DRAIN LINE
- PROPOSED CONTOUR LINE
- PROPOSED CATCH BASIN
- PROPOSED DRAIN MANHOLE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

HENRIETTA ST.

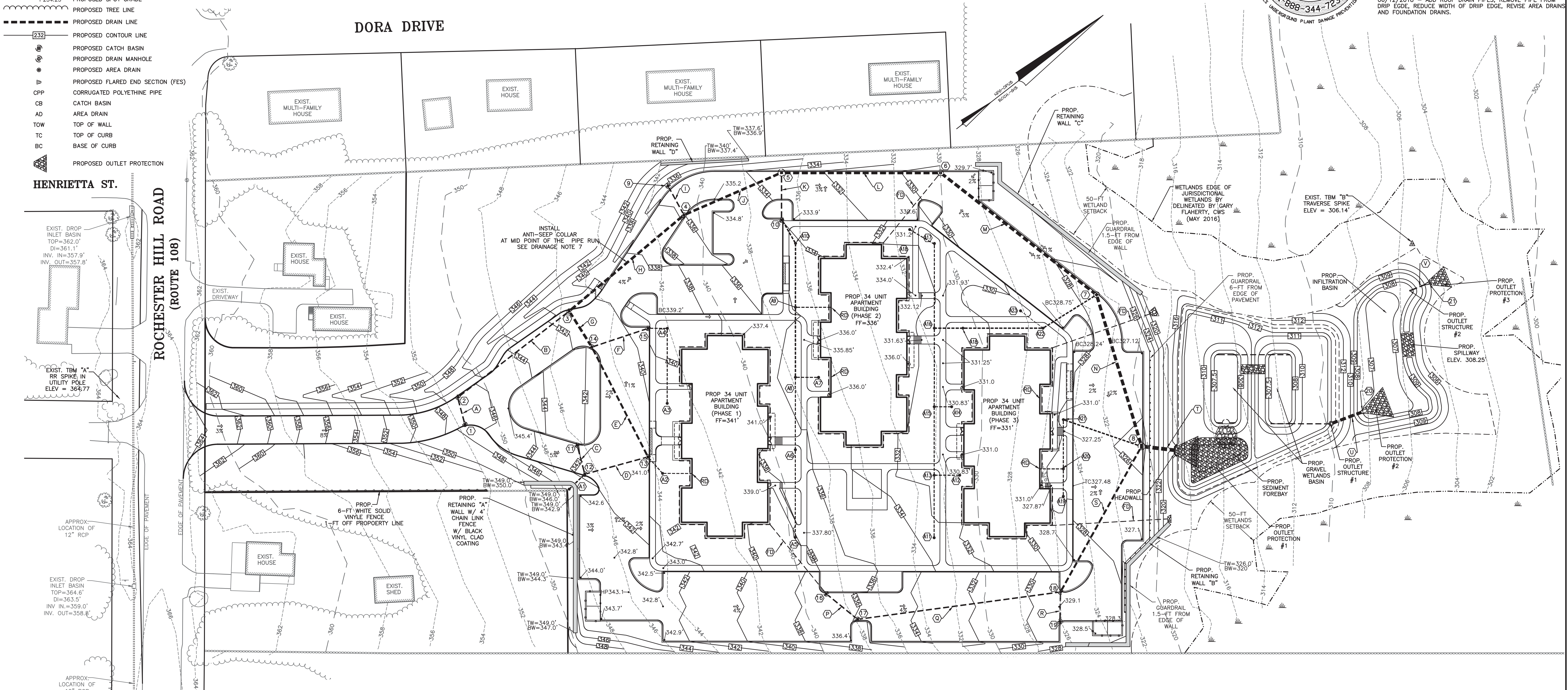
ROCHESTER HILL ROAD
(ROUTE 108)

DORA DRIVE

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.



06/06/2018 - REVISED FINISH GRADES AROUND BUILDING 1
06/12/2018 - ADD ROOF DRAIN PIPES, REMOVE PIPE FROM DRAIN EDGE, REDUCE WIDTH OF DRAIN EDGE, REVISE AREA DRAINS AND FOUNDATION DRAINS.



PROPOSED DRAINAGE STRUCTURES

- | | | | | |
|--|---|--|--|--|
| 1. PROP. CB #1
RIM = 347.1'
INV. IN = 340.5' (A)
SUMP = 337.5' | 5. PROP. CB #5 (6" DIA)
RIM = 333.1'
INV. IN = 328.1' (J)
INV. IN = 328.1' (K)
INV. OUT = 328.0' (L)
SUMP = 325.0' | 9. PROP. CB #9
RIM = 334.8'
INV. OUT = 331.8' (I)
SUMP = 328.8' | 13. PROP. CB #13
RIM = 340.5'
INV. IN = 336.0' (D)
INV. IN = 337.0' (6" AD-2)
INV. OUT = 335.9' (E)
SUMP = 332.9' | 17. PROP. CB #17
RIM = 335.8'
INV. IN = 331.8' (P)
INV. OUT = 331.7' (Q)
SUMP = 328.7' |
| 2. PROP. CB #2
RIM = 346.9'
INV. IN = 339.7' (A)
INV. OUT = 339.6' (B)
SUMP = 336.6' | 6. PROP. CB #6 (5" DIA)
RIM = 328.9'
INV. IN = 326.5' (6" FD)
INV. IN = 323.4' (L)
INV. OUT = 323.3' (M)
SUMP = 320.3' | 10. PROP. CB #10
RIM = 344.0'
INV. IN = 330.0' (AD-10)
INV. OUT = 329.5' (K)
SUMP = 326.5' | 14. PROP. CB #14
RIM = 341.0'
INV. IN = 334.9' (E)
INV. IN = 334.9' (F)
INV. OUT = 334.8' (G)
SUMP = 331.8' | 18. PROP. CB #18
RIM = 328.7'
INV. IN = 324.1' (O)
INV. IN = 324.1' (R)
INV. OUT = 324.0' (S)
SUMP = 321.0' |
| 3. PROP. CB #3
RIM = 340.9'
INV. IN = 335.0' (B)
INV. IN = 334.4' (C)
INV. OUT = 334.3' (H)
SUMP = 331.3' | 7. PROP. CB #7 (5" DIA)
RIM = 327.5'
INV. IN = 322.0' (M)
INV. IN = 322.0' (AD-22)
INV. OUT = 321.9' (N)
SUMP = 318.9' | 11. PROP. CB #11
RIM = 342.0'
INV. IN = 330.0' (AD-10)
INV. OUT = 337.6' (C)
SUMP = 334.6' | 15. PROP. CB #15
RIM = 339.35'
INV. IN = 335.4' (AD-4)
INV. OUT = 335.3' (F)
SUMP = 332.3' | 19. PROP. CB #19
RIM = 328.7'
INV. OUT = 325.0' (R)
SUMP = 322.0' |
| 4. PROP. CB #4
RIM = 335.7'
INV. IN = 330.7' (I)
INV. IN = 330.7' (H)
INV. OUT = 330.6' (J)
SUMP = 327.6' | 8. PROP. CB #8 (6" DIA)
RIM = 325.5'
INV. IN = 316.1' (N)
INV. IN = 317.0' (S)
INV. IN = 319.5' (AD-21)
INV. OUT = 316.0' (T) *
SUMP = 312.0' | 12. PROP. CB #12
RIM = 341.4'
INV. IN = 336.7' (C)
INV. OUT = 336.6' (D)
SUMP = 333.6' | 16. PROP. CB #16
RIM = 336.8'
INV. IN = 334.0' (6" FD)
INV. OUT = 333.0' (P)
SUMP = 330.0' | 21. PROP. FES #2
INV. = 304.5' (V) |

PROPOSED DRAINAGE PIPES

- | | | | |
|--|--|--|---------------------------------------|
| A. PROP. PIPE A
12" CPP
L = 20' | H. PROP. PIPE H
24" CPP
L = 125.5'
ANTI-SEEP COLLAR | P. PROP. PIPE P
12" CPP
L = 31' | FD. PROP. FOUNDATION DRAIN
6" HDPE |
| B. PROP. PIPE B
12" CPP
L = 117.5'
ANTI-SEEP COLLAR | I. PROP. PIPE I
24" CPP
L = 25' | Q. PROP. PIPE Q
12" CPP
L = 173' | RD. PROP. ROOF DRAIN
8" HDPE |
| C. PROP. PIPE C
12" CPP
L = 22' | J. PROP. PIPE J
24" CPP
L = 88' | R. PROP. PIPE R
12" CPP
L = 21.5' | |
| D. PROP. PIPE D
18" CPP
L = 53' | K. PROP. PIPE K
18" CPP
L = 40' | S. PROP. PIPE S
18" CPP
L = 139.5' | |
| E. PROP. PIPE E
18" CPP
L = 103'
ANTI-SEEP COLLAR | L. PROP. PIPE L
30" CPP
L = 133.5'
ANTI-SEEP COLLAR | T. PROP. PIPE T
36" CPP
L = 39.5' | |
| F. PROP. PIPE F
24" CPP
L = 48' | M. PROP. PIPE M
30" CPP
L = 167'
ANTI-SEEP COLLAR | U. PROP. PIPE U
30" CPP
L = 26.5' | |
| G. PROP. PIPE G
24" CPP
L = 33' | N. PROP. PIPE N
30" CPP
L = 132'
ANTI-SEEP COLLAR | V. PROP. PIPE V
24" CPP
L = 15' | |

NOTE:
1. SEE SHEET C34 FOR AREA DRAIN SCHEDULE AND DETAIL GRADING.
2. ALL AREA NOT IMPERVIOUS SHALL HAVE A MINIMUM OF 6" LOAM, SEEDED, AND MULCHED.

FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

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

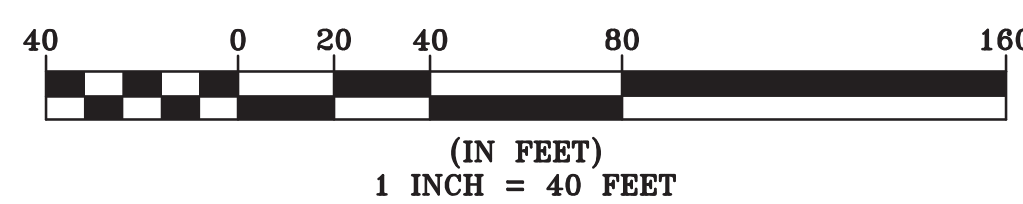
NORWAY PLAINS ASSOCIATES, INC.

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

C-3

GRADING &
DRAINAGE PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD.
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX
BUILDERS, INC.

MAY 2016
GRAPHIC SCALE



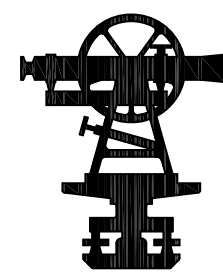
LEGEND

- PROPERTY LINE
 - - - - - JURISDICTIONAL WETLANDS
 - - - - - EXISTING TREE LINE
 - - - - - EXISTING DRAIN LINE
 - - - - - EXISTING CONTOUR LINE
 - - - - - EXISTING TEST PIT
 - - - - - EXISTING SPOT GRADE
 - - - - - PROPOSED SPOT GRADE
 - - - - - PROPOSED TREE LINE
 - - - - - PROPOSED DRAIN LINE
 - - - - - PROPOSED CONTOUR LINE
 - - - - - PROPOSED CATCH BASIN
 - - - - - PROPOSED DRAIN MANHOLE
 - - - - - PROPOSED AREA DRAIN
 - - - - - PROPOSED FLARED END SECTION (FES)
 - - - - - CORRUGATED POLYETHYLENE PIPE
 - - - - - CATCH BASIN
 - - - - - AREA DRAIN
 - - - - - TOP OF WALL
 - - - - - TOP OF CURB
 - - - - - BASE OF CURB
 - - - - - PROPOSED OUTLET PROTECTION

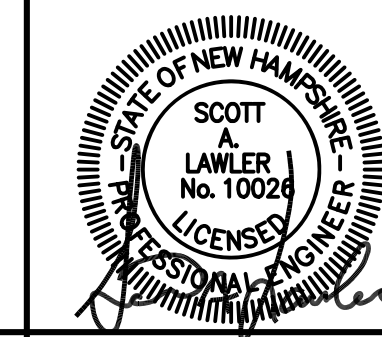
HENRIETTA ST.

ROCHESTER HILL ROAD
(ROUTE 108)

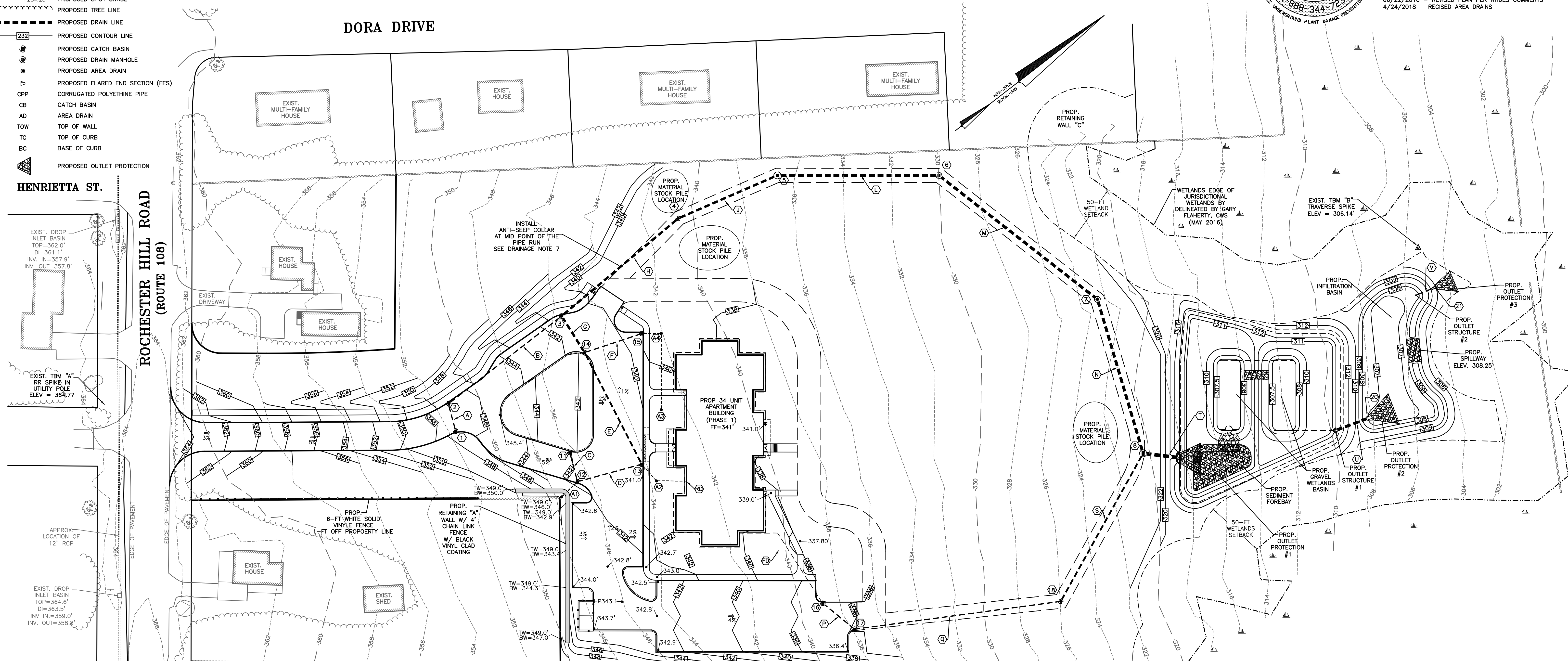
DORA DRIVE



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05/20/2016 - REVISED PLAN PER ROCHESTER TRG COMMENTS
08/22/2016 - REVISED PLAN PER NHDES COMMENTS
4/24/2018 - RECISED AREA DRAINS



PROPOSED DRAINAGE STRUCTURES

- | | | |
|--|---|--|
| 1. PROP. CB #1
RIM = 347.1'
INV. IN = 340.5' (A)
SUMP = 337.5' | 5. PROP. CB #5 (6" DIA)
RIM = 333.1'
INV. IN = 328.1' (J)
INV. IN = 328.1' (K)
INV. OUT = 335.9' (L)
SUMP = 325.0' | 9. OMITTED |
| 2. PROP. CB #2
RIM = 346.9'
INV. IN = 339.7' (A)
INV. OUT = 339.6' (B)
SUMP = 336.6' | 6. PROP. CB #6 (5" DIA)
RIM = 327.5'
INV. IN = 326.5' (6" FD)
INV. IN = 323.4' (L)
INV. OUT = 323.3' (M)
SUMP = 320.3' | 10. OMITTED |
| 3. PROP. CB #3
RIM = 340.9'
INV. IN = 335.0' (B)
INV. IN = 334.4' (C)
INV. OUT = 334.3' (H)
SUMP = 331.3' | 7. PROP. CB #7 (5" DIA)
RIM = 327.5'
INV. IN = 322.0' (M)
INV. OUT = 321.9' (AD-22)
INV. OUT = 321.9' (N)
SUMP = 318.9' | 11. PROP. CB #11
RIM = 342.0'
INV. IN = 337.6' (C)
SUMP = 334.6' |
| 4. PROP. CB #4
RIM = 335.7'
INV. IN = 330.7' (I)
INV. IN = 330.7' (H)
INV. OUT = 330.6' (J)
SUMP = 327.6' | 8. PROP. CB #8 (6" DIA)
RIM = 321.5'
INV. IN = 316.1' (N)
INV. IN = 317.0' (S)
INV. IN = 319.5' (AD-21)
INV. OUT = 316.0' (T) *
SUMP = 312.0' | 12. PROP. CB #12
RIM = 341.4'
INV. IN = 336.7' (C)
INV. OUT = 336.6' (D)
SUMP = 333.6' |
| | | 13. PROP. CB #13
RIM = 340.5'
INV. IN = 336.0' (D)
INV. IN = 337.0' (6" AD-2)
INV. OUT = 335.9' (E)
SUMP = 332.9' |
| | | 14. PROP. CB #14
RIM = 341.0'
INV. IN = 334.9' (E)
INV. IN = 334.9' (F)
INV. OUT = 334.8' (G)
SUMP = 331.8' |
| | | 15. PROP. CB #15
RIM = 339.35'
INV. IN = 335.4' (AD-4)
INV. OUT = 335.3' (F)
SUMP = 332.3' |
| | | 16. PROP. CB #16
RIM = 336.8'
INV. IN = 334.0' (6" FD)
INV. OUT = 333.0' (P)
SUMP = 330.0' |
| | | 17. PROP. CB #17
RIM = 335.8'
INV. IN = 331.8' (P)
INV. OUT = 331.7' (Q)
SUMP = 328.7' |
| | | 18. PROP. CB #18
RIM = 328.7'
INV. IN = 324.1' (Q)
INV. IN = 324.1' (R)
INV. OUT = 324.0' (S)
SUMP = 321.0' |
| | | 19. OMITTED |
| | | 20. PROP. FES #1
INV. IN = 307.0' (U) |
| | | 21. PROP. FES #2
INV. IN = 304.5' (V) |

PROPOSED DRAINAGE PIPES

- | | | |
|--|--|---|
| A. PROP. PIPE A
12" CPP
L = 20' | H. PROP. PIPE H
24" CPP
L = 125.5'
ANTI-SEEP COLLAR | P. PROP. PIPE P
12" CPP
L = 31' |
| B. PROP. PIPE B
12" CPP
L = 117.5'
ANTI-SEEP COLLAR | I. OMITTED | Q. PROP. PIPE Q
12" CPP
L = 173' |
| C. PROP. PIPE C
12" CPP
L = 22' | J. PROP. PIPE J
24" CPP
L = 88' | R. OMITTED |
| D. PROP. PIPE D
18" CPP
L = 53' | K. OMITTED | S. PROP. PIPE S
18" CPP
L = 139.5' |
| E. PROP. PIPE E
18" CPP
L = 103'
ANTI-SEEP COLLAR | L. PROP. PIPE L
30" CPP
L = 133.5'
ANTI-SEEP COLLAR | T. PROP. PIPE T
HEADWALL
36" CPP
L = 39.5' |
| F. PROP. PIPE F
24" CPP
L = 48' | M. PROP. PIPE M
30" CPP
L = 167'
ANTI-SEEP COLLAR | U. PROP. PIPE U
30" CPP
L = 26.5' |
| G. PROP. PIPE G
24" CPP
L = 33' | N. PROP. PIPE N
30" CPP
L = 132'
ANTI-SEEP COLLAR | V. PROP. PIPE V
24" CPP
L = 15' |

NOTE:

- SEE SHEET C3A FOR AREA DRAIN SCHEDULE AND DETAIL GRADING.
- ALL AREA NOT IMPERVIOUS SHALL HAVE A MINIMUM OF 6" LOAM, SEED, AND MULCHED.
- CONSTRUCTION GENERAL PERMIT, CREATION OF SWPPP, AND ASSOCIATED INSPECTIONS SHALL BE THE RESPONSIBILITY OF THE OWNERS.

FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

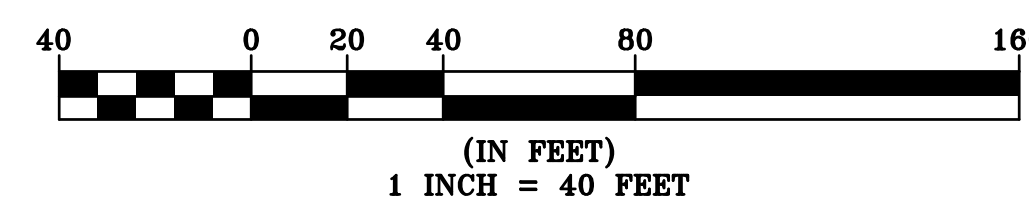
31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

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

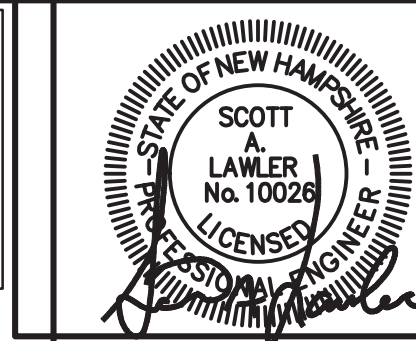
C-3

PHASE 1
GRADING &
DRAINAGE PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD.
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX
BUILDERS, INC.
MAY 2016
GRAPHIC SCALE





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06/06/2018 - REVISED FINISH GRADES AROUND BUILDING 1
06/12/2018 - ADD ROOF DRAIN PIPES, REMOVE PIPE FROM
DRIP EDGE, REDUCE WIDTH OF DRIIP EDGE, REVISE AREA DRAINS
AND FOUNDATION DRAINS.

PROPOSED AREA DRAINS

- A1** PROP. AD-1
RIM = 347.8'
INV. = 337.4'(OUT) 12"
L = 16'

A2 PROP. AD-2
RIM = 340.3'
INV. = 337.0'(N) 8"E
INV. = 337.0'(OUT) 8"NW
TO CB13
L = 17'

A3 PROP. AD-3
RIM = 339.3'
INV. = 336.6' (OUT) 8"N
L = 62.8'

A4 PROP. AD-4
RIM = 339.3'
INV. = 336.0'(N) 8"S
INV. = 335.8'(OUT) 12"W
TO CB-15
L = 13.5'

A5 PROP. AD-5
RIM = 337.7'
INV. = 335.8'(OUT) 8"N
L = 73.7'

A6 PROP. AD-6
RIM = 336.1'
INV. = 334.0' (N) 8"N
INV. = 333.9' (OUT) 8"N
L = 54.4'

A7 PROP. AD-7
RIM = 335.0'
INV. = 333.2'(OUT) 8"W
L = 18.0'

A8 PROP. AD-8
RIM = 335.2'
INV. = 332.1'(N) 8"S
INV. = 333.0'(N) 8"E
INV. = 332.0'(OUT) 12"N
L = 41.1'

A9 PROP. AD-9
RIM = 335.5'
INV. = 331.6'(N) 8"W
INV. = 331.6'(N) 8"S
INV. = 331.5'(OUT) 12"N
L = 76.6'

A10 PROP. AD-10
RIM = 334.8'
INV. = 330.7'(N) 12"S
INV. = 330.6'(OUT) 12"NE
TO CB-10
L = 20.5'

A11 PROP. AD-11
RIM = 332.9'
INV. = 328.1'(OUT) 8"N
L = 52'

A12 PROP. AD-12
RIM = 329.5'
INV. = 327.9'(OUT) 8"W
L = 20'

A13 PROP. AD-13
RIM = 331.5'
INV. = 327.6'(N) 8"E
INV. = 327.6'(N) 8"S
INV. = 327.5'(OUT) 8"N
L = 57.0'

A14 PROP. AD-14
RIM = 329.8'
INV. = 328.0'(N) 4"E
INV. = 327.9'(OUT) 8"W
L = 13.0'

A15 PROP. AD-15
RIM = 330.0'
INV. = 327.0'(N) 8"S
INV. = 327.5'(N) 8"E
INV. = 326.9'(OUT) 8"N
L = 45.1'

A16 PROP. AD-16
RIM = 331.5'
INV. = 326.2'(N) 8"S
INV. = 326.2'(N) 8"N
INV. = 326.0'(OUT) 12"E
L = 22.7'

A17 PROP. AD-17
RIM = 331'
INV. = 327.0'(N) 8"W
INV. = 326.9'(OUT) 8"S
L = 71.0'

A18 PROP. AD-18
RIM = 331.0'
INV. = 327.2'(OUT) 8"E
L = 22.6'

A19 PROP. AD-19
RIM = 327.7'
INV. = 324.9'(OUT) 8"N
L = 22.0'

A20 PROP. AD-20
RIM = 327.7'
INV. = 324.6'(N) 8"S
INV. = 324.5'(OUT) 8"N
L = 40.2'

A21 PROP. AD-21
RIM = 327.7'
INV. = 324.0'(N) 8"N
INV. = 324.0'(N) 8"S
INV. = 323.3'
L = 67.3'
TO CB-8

A22 PROP. AD-22
RIM = 329.0'
INV. = 325.1'(N) 12"W
INV. = 325.0'(OUT) 12"NE
TO CB-7
L = 51.0'

A23 PROP. AD-23
RIM = 329'
INV. = 326.0'(OUT) 8"SW
L = 22.5'

A24 PROP. AD-24
RIM = 329.0'
INV. = 325.7'(N) 12"W
INV. = 325.7'(OUT) 12"E
L = 67.2'



**DETAILED
GRADING & DRAINAGE PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD.
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.
APRIL 2018**

GRAPHIC SCALE

(IN FEET)
1 INCH = 20 FEET

LEGEND

	PROPERTY LINE
	JURISDICTIONAL WETLANDS
	EXISTING STONEWALL
	EXISTING TREE LINE
	EXISTING DRAIN LINE
	EXISTING CONTOUR LINE
	EXISTING SPOT GRADE
	PROPOSED SPOT GRADE
	PROPOSED TREE LINE
	PROPOSED DRAIN LINE
	PROPOSED CONTOUR LINE
	PROPOSED CATCH BASIN
	PROPOSED DRAIN MANHOLE
	PROPOSED AREA DRAIN
	CORROGATED POLYETHYLENE PIPE
CP	CATCH BASIN
AD	AREA DRAIN
TW	TOP OF WALL
TO	TOP OF CURB
BC	BASE OF CURB

FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

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

NORWAY PLAINS ASSOCIATES, INC.

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

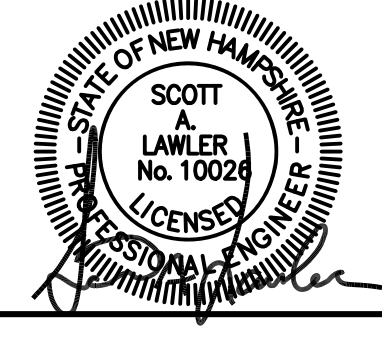
C-3A	
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LEGEND

PROPERTY LINE
JURISDICTIONAL WETLANDS
EXISTING STONEWALL
EXISTING TREE LINE
EXISTING DRAIN LINE
EXISTING CONTOUR LINE
EXISTING SPOT GRADE
P234.1'
P234.25'
PROPOSED TREE LINE
PROPOSED DRAIN LINE
PROPOSED CONTOUR LINE
PROPOSED CATCH BASIN
PROPOSED DRAIN MANHOLE
PROPOSED AREA DRAIN
CORRUGATED POLYETHYLENE PIPE
CATCH BASIN
AREA DRAIN
TOP OF WALL
TOP OF CURB
BASE OF CURB

CCP
CB
AD
TW
BC
BC

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06/06/2018 - REVISED FINISH GRADES AROUND BUILDING 1
06/12/2018 - ADD ROOF DRAIN PIPES, REMOVE PIPE FROM DRIP EDGE, REDUCE WIDTH OF DRIP EDGE.

PROPOSED AREA DRAINS

- ① PROP. AD-1
RIM = 347.8'
INV. = 337.4'(OUT) 12"
L = 16'
- ② PROP. AD-2
RIM = 340.3'
INV. = 338.5'(IN) 6"
INV. = 338.2'(OUT) 8"NW
TO CB13
L = 16'
- ③ PROP. AD-3
RIM = 339.3'
INV. = 336.6'(OUT) 8"N
L = 62.8'
- ④ PROP. AD-4
RIM = 339.3'
INV. = 336.0'(IN) 8"S
INV. = 335.8'(OUT) 12"W
TO CB-15
L = 13.5'

PROP 34 UNIT
APARTMENT
BUILDING
(PHASE 1)
FF=341'

PHASE 1
DETAILED
GRADING & DRAINAGE PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD.
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.
APRIL 2018

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 INCH = 20 FEET

FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

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

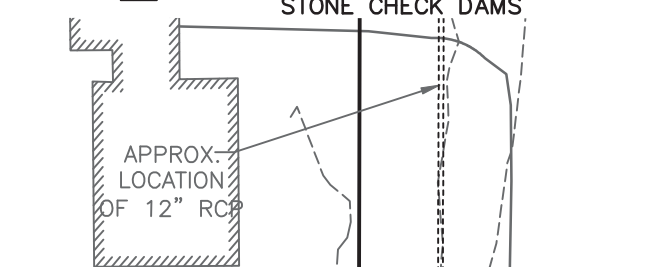
NORWAY PLAINS ASSOCIATES, INC.

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

C-3A

LEGEND

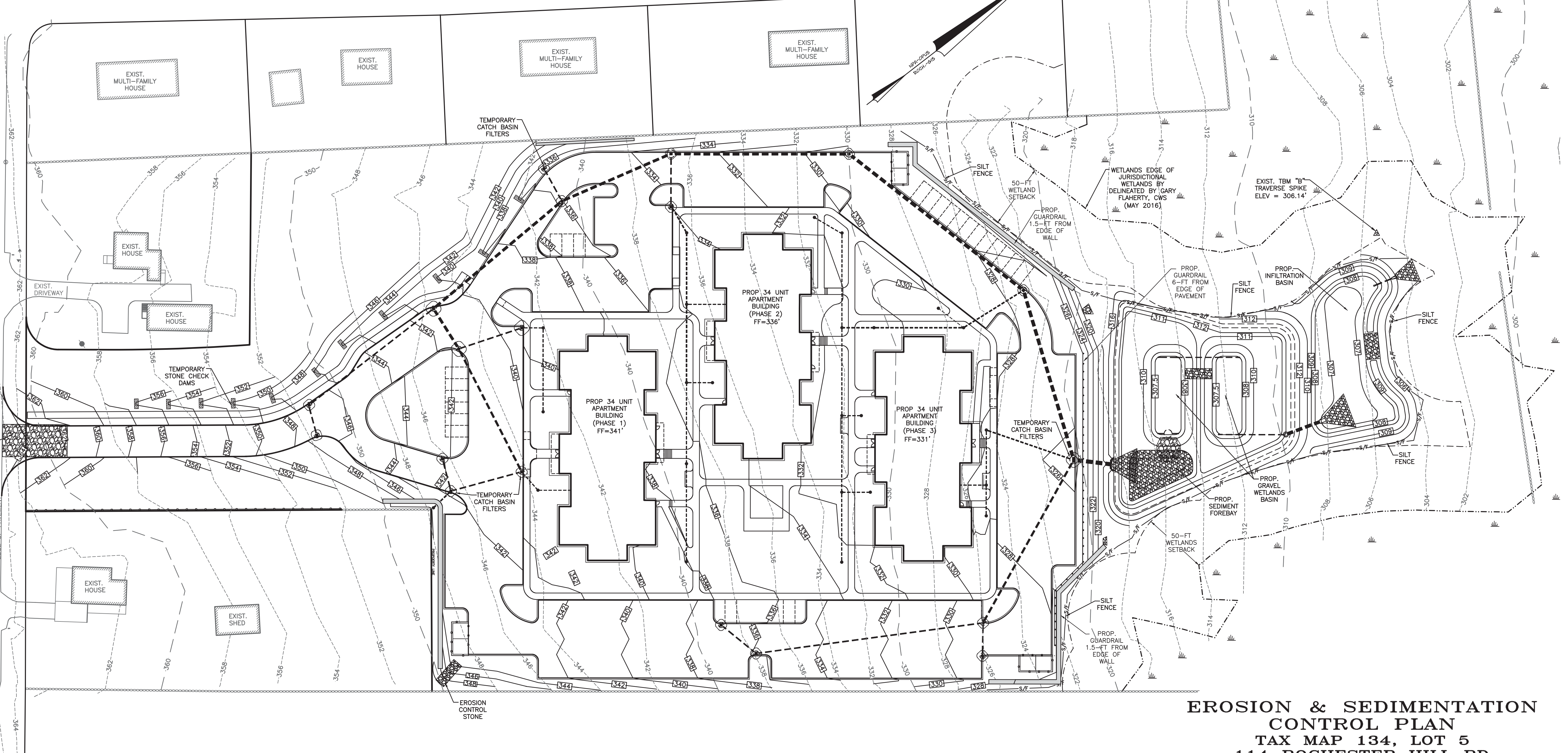
- PROPERTY LINE
- JURISDICTIONAL WETLANDS
- EXISTING TREE LINE
- EXISTING DRAIN LINE
- EXISTING CONTOUR LINE
- EXISTING CATCH BASIN
- PROPOSED TREE LINE
- PROPOSED DRAIN LINE
- PROPOSED CONTOUR LINE
- PROPOSED SILTATION FENCE
- PROPOSED CATCH BASIN
- PROPOSED DRAIN MANHOLE
- PROPOSED FLARED END SECTION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



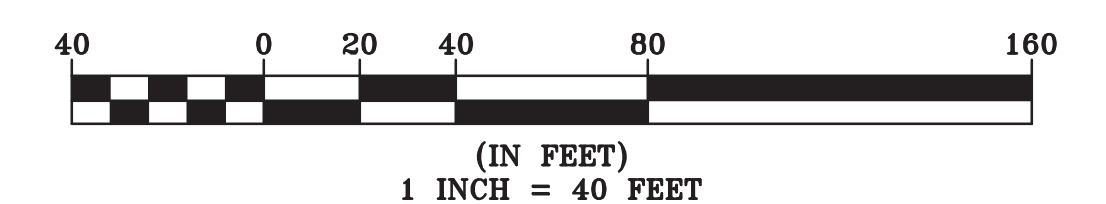
HENRIETTA ST.

ROCHESTER HILL ROAD
(ROUTE 108)EXIST. DROP
INLET BASIN
TOP=362.0'
DI=361.1'
INV. IN=357.9'
INV. OUT=357.8'EXIST. TBM "A"
RR SPIKE IN
UTILITY POLE
ELEV = 364.77APPROX.
LOCATION OF
12" RCPEXIST. DROP
INLET BASIN
TOP=364.6'
DI=363.5'
INV. IN=359.0'
INV. OUT=358.8'APPROX.
LOCATION OF
12" RCP

DORA DRIVE



**EROSION & SEDIMENTATION
CONTROL PLAN**
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.

MAY 2016
GRAPHIC SCALE

FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

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

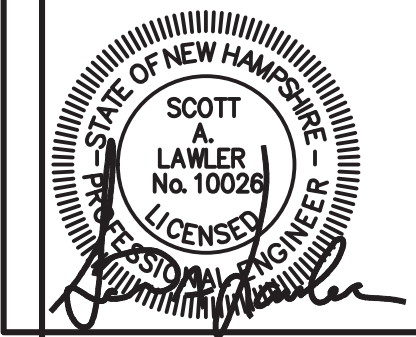
NORWAY PLAINS ASSOCIATES, INC.

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

C-4

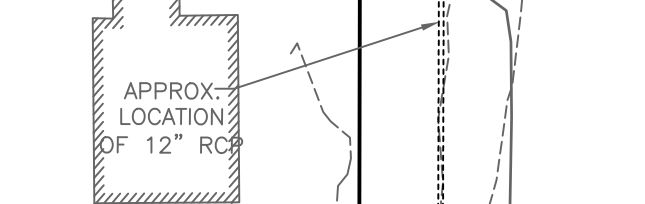


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LEGEND

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



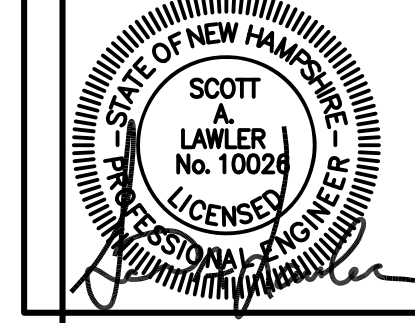
HENRIETTA ST.

ROCHESTER HILL ROAD
(ROUTE 108)EXIST. DROP
INLET BASIN
TOP=362.0'
DI=361.1'
INV. IN=357.9'
INV. OUT=357.8'EXIST. TBM "A"
RR SPIKE IN
UTILITY POLE
ELEV = 364.77APPROX.
LOCATION OF
12" RCPEXIST. DROP
INLET BASIN
TOP=364.6'
DI=363.5'
INV. IN=359.0'
INV. OUT=358.8'APPROX.
LOCATION OF
12" RCP

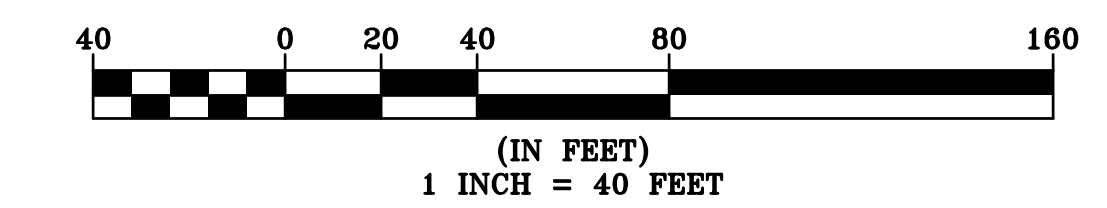
DORA DRIVE

TEMPORARY
CATCH BASIN
FILTERSPROP. MATERIAL
STOCK PILE
LOCATIONPROP. MATERIAL
STOCK PILE
LOCATIONPROP. 34 UNIT
APARTMENT
BUILDING
(PHASE 1)
FF=341'TEMPORARY
CATCH BASIN
FILTERSEROSION
CONTROL
STONE

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PHASE 1
EROSION & SEDIMENTATION
CONTROL PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.

MAY 2016
GRAPHIC SCALE

FILE NO. 104
PLAN NO. C-2780
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31 Mooney Street, Alton, N.H. 603-875-3948

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

C-4

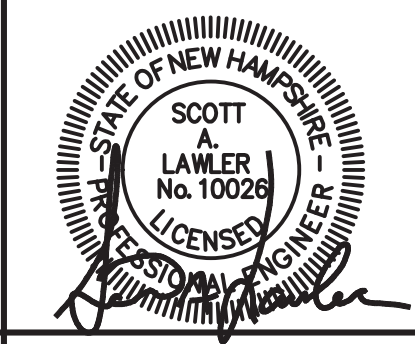
LEGEND

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

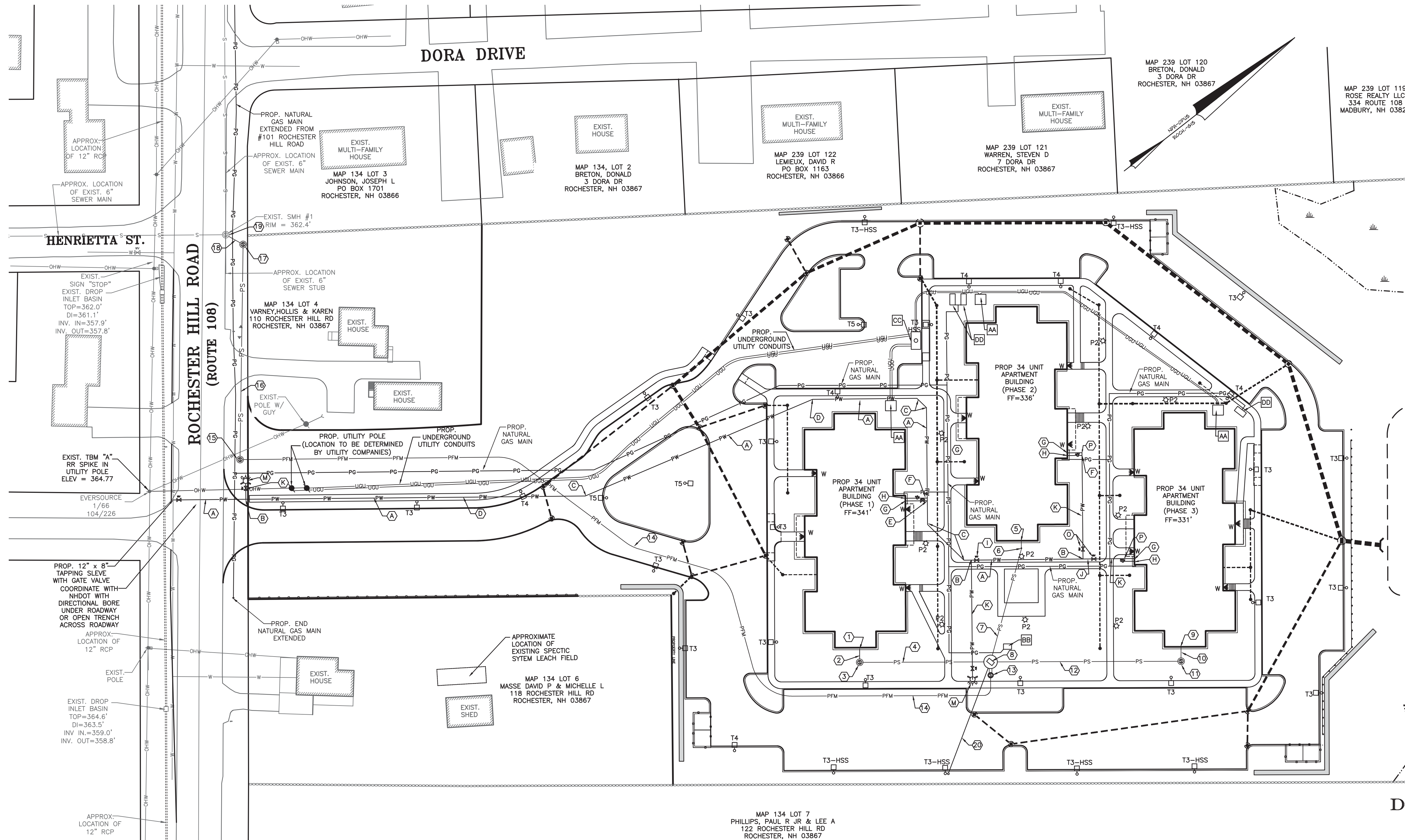


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- NOTES:
- 1) CONSTRUCTION WILL CONFORM TO THE FOLLOWING UTILITIES STANDARDS AND SPECIFICATION:
A) SANITARY SEWER DISPOSAL - NHDES
B) ELECTRIC DISTRIBUTION - EVERSOURCE
C) TELEPHONE - FAIRPOINT
D) CABLE - METROCAST
E) WATER - CITY OF ROCHESTER, STANDARDS
 - 2) ALL PROPOSED ON-SITE UTILITIES SHALL BE INSTALLED UNDERGROUND.
 - 3) ALL WORK WITHIN THE ROUTE 108 RIGHT OF WAY WILL REQUIRE AN EXCAVATION PERMIT FROM NHDOT. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SECURE ANY AND ALL PERMITS TO WORK IN THE RIGHT OF WAY.



05/20/2016 - REVISE PLAN PER ROCHESTER TRG COMMENTS
07/08/2016 - REVISE PROPOSED ON-SITE SEWER COLLECTION AND PUMP SYSTEMS.
08/24/16 - REVISE PROPOSED SEWER SYSTEM
11/10/16 - REVISE SEWER INVERT ELEVATIONS AT BUILDING #3, SMH#3 AND PUMP STATION
12/12/16 - REVISED OFFSITE GRAVITY SEWER PER NHDES
12/28/16 - REVISED SEWER MANHOLE #2 INVERTS PER NHDES WASTEWATER BUREAU COMMENTS
4/24/18 - REVISED UNDERGROUND ELECTRICAL AND POLE LOCATION
6/22/18 - REVISED WATER SERVICES, PROPOSED HYDRANT LOCATION. ADD GAS LINES AND BUILDING GENERATORS
8/11/18 - REVISED SEWER PUMP STATION LOCATION, GRAVITY AND PRESURE SEWER SYSTEMS.



PROPOSED SEWER SYSTEM

- 1) PROP 8" SDR 35 PVC INV. = 335.75'
- 2) PROP. SDR35 PVC 8" SEWER PIPE L = 8.0'
- 3) PROP. SEWER MANHOLE #1 RIM = 340.1' INV. IN = 334.6' INV. OUT = 334.5'
- 4) PROP. SDR35 PVC 8" SEWER PIPE L = 147.0'
- 5) PROP 8" SDR 35 PVC INV. = 330.75'
- 6) PROP 8" SDR 35 PVC CLEAN OUT
- 7) PROP. SDR35 PVC 8" SEWER PIPE L = 82.0'
- 8) PROP. SEWER PUMP STATION COVER = 336.00' INV. IN (FROM SMH#1) = 328.65' INV. IN (FROM BLDG 2) = 328.65' INV. IN (FROM SMH#2) = 325.00' INV. OUT = 330.00'
- 9) PROP 8" SDR 35 PVC INV. = 323.25'
- 10) PROP. SDR35 PVC 8" SEWER PIPE L = 8.0'
- 11) PROP. SEWER MANHOLE #2 RIM = 331.0' INV. IN = 325.7' INV. OUT = 325.6'
- 12) PROP. SDR35 PVC 8" SEWER PIPE L = 81.0'
- 13) PROP. VALVE PIT RIM = 336.5' INV. IN & OUT = 330.0' DRAIN BACK = 329.0'
- 14) PROP. 3" SDR11 HDPE FORCE MAIN L = 645'
- 15) PROP. SEWER MANHOLE #3 RIM = 364.0' INV. IN = 355.0' INV. OUT = 354.2'
- 16) PROP. 6" SDR35 PVC SEWER PIPE L = 154'
- 17) PROP. SEWER MANHOLE #4 RIM = 361.7' INV. IN = 351.8' INV. OUT = 351.7'
- 18) PROP. 8" SDR35 PVC SEWER PIPE L=9.7'
- 19) EXIST. SEWER MANHOLE #1 RIM = 362.4' INV. IN (SW) = 353.4' (EXISTING) INV. IN (NE) = 351.6' (PROPOSED) INV. OUT = 351.5' (EXISTING)
- 20) PROP. 4" SDR35 PUMP STATION VENT

PROPOSED WATER SYSTEM

- A) PROP 8" D.I. CLASS 52 WATER MAIN
- B) PROP. 8" x 6" TEE WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT
- C) PROP. 8" 45' BEND WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT
- D) PROP. 8" 22.5' BEND WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT
- E) PROP. 8" x 4" TEE & GATE VALVE WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT
- F) PROP. 2" SERVICE CONNECTION AND SHUT-OFF VALVE
- G) PROP. 4" DI CLASS 52 FIRE SERVICE MAIN
- H) PROP. 2" PE CTS OR COPPER DOMESTIC WATER SERVICE
- I) PROP. 8" GATE VALVE WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT
- J) PROP. 8" x 6" REDUCER WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT
- K) PROP 6" D.I. CLASS 52 WATER MAIN
- L) PROP. 6" x 6" TEE WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT
- M) PROP. FIRE HYDRANT WITH GATE VALVE AND THRUST BLOCK OR MECHANICAL JOINT RESTRAINT
- N) PROP. 6" 45' BEND WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT
- O) PROP. 6" GATE VALVE WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT

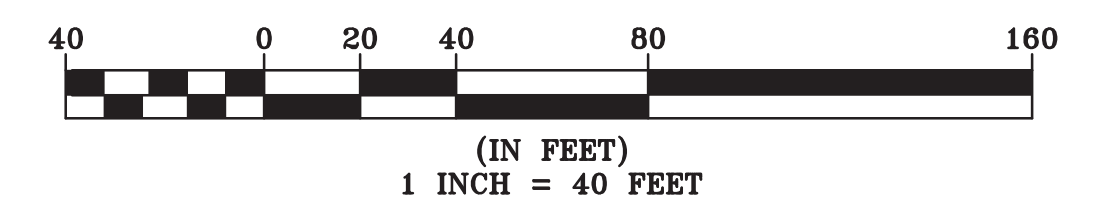
PROPOSED ELECTRICAL SYSTEM

- AA) PROP. CONCRETE 3 PHASE PADMOUNTED TRANSFORMER (SIZE AND EXACT LOCATION TO BE DETERMINED BY EVERSOURCE)
- BB) PROP. CONCRETE PAD FOR PUMP STATION BACKUP GENERATOR THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE NEC AND STATE FIRE CODE IN Sd-C 6000.
- CC) CONVENTIONAL UNDERGROUND PRECAST, CONCRETE MANHOLE EVERSOURCE NORTHEAST UTILITIES CONSTRUCTION STANDARD DTR 76.311

UTILITY PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD.
ROCHESTER, NH

PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.

MAY 2016
GRAPHIC SCALE



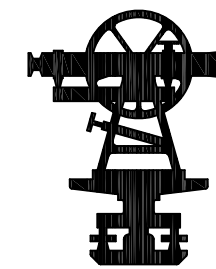
FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

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

NORWAY PLAINS ASSOCIATES, INC.

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

C-5

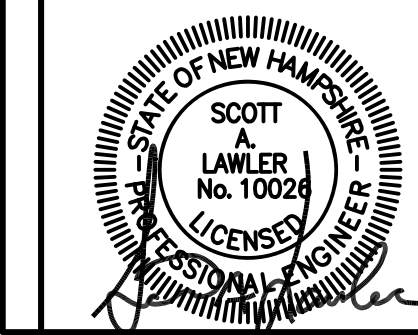


LEGEND

—	PROPERTY LINE	---	PROPOSED DRAIN LINE
- - -	JURISDICTIONAL WETLANDS	PW	PROPOSED WATER SERVICE
—H/O—	EXISTING OVERHEAD WIRES	PS	PROPOSED SEWER LINE
—W—	EXISTING WATER MAIN	PFM	PROPOSED SEWER FORCE MAIN PIPE HDPE SDR 11
—S—	EXISTING GRAVITY SEWER MAIN	PG	PROPOSED PROPANE GAS LINE
—FM—	EXISTING SEWER FORCE MAIN	UGU	PROPOSED UNDERGROUND UTILITY WIRES
—UGE—	EXISTING UNDERGROUND ELECTRIC WIRES	---	PROPOSED UNDERGROUND ELECTRIC WIRES
—UGU—	EXISTING UNDERGROUND UTILITY WIRES	⚡	PROPOSED HYDRANT
---	EXISTING GAS PIPE	⚡	PROPOSED WATER VALVE
---	EXISTING DRAIN LINE	⚡	PROPOSED WATER SHUT-OFF VALVE
---	EXISTING HYDRANT	⚡	PROPOSED SEWER SHUT-OFF VALVE
---	EXISTING WATER GATE OR SHUT-OFF VALVE	⚡	PROPOSED UTILITY POLE
---	EXISTING UTILITY POLE	⚡	PROPOSED SEWER MANHOLE
---	EXISTING SEWER MANHOLE	⚡	PROPOSED DRAIN MANHOLE
---	EXISTING CATCH BASIN	⚡	PROPOSED CATCH BASIN
---	EXISTING LIGHT POLES	⚡	PROPOSED LIGHT POLES
		⚡	PROPOSED BUILDING LIGHT FIXTURES
		⚡	TOP OF PIPE
		⚡	B.O.P.
		⚡	BOTTOM OF PIPE

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.

- NOTES:
- CONSTRUCTION WILL CONFORM TO THE FOLLOWING UTILITIES STANDARDS AND SPECIFICATION:
 - SANITARY SEWER DISPOSAL - NHDES
 - ELECTRIC DISTRIBUTION - EVERSOURCE
 - TELEPHONE - FAIRPOINT
 - CABLE - METROCAST
 - WATER - CITY OF ROCHESTER, STANDARDS
 - ALL PROPOSED ON-SITE UTILITIES SHALL BE INSTALLED UNDERGROUND.
 - ALL WORK WITHIN THE ROUTE 108 RIGHT OF WAY WILL REQUIRE AN EXCAVATION PERMIT FROM NHDOT. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SECURE ANY AND ALL PERMITS TO WORK IN THE RIGHT OF WAY.



- 05/20/2016 - REVISE PLAN PER ROCHESTER TRG COMMENTS
07/08/2016 - REVISE PROPOSED ON-SITE SEWER COLLECTION AND PUMP SYSTEMS.
08/24/16 - REVISE PROPOSED SEWER SYSTEM
11/10/16 - REVISE SEWER INVERT ELEVATIONS AT BUILDING #3, SMH#3 AND PUMP STATION
12/12/16 - REVISED OFFSITE GRAVITY SEWER PER NHDES
12/28/16 - REVISED SEWER MANHOLE #2 INVERTS PER NHDES WASTEWATER BUREAU COMMENTS
4/24/18 - REVISED UNDERGROUND ELECTRICAL AND POLE LOCATION
6/12/18 - REVISED PROPOSED HYDRANT LOCATION

PROPOSED SEWER SYSTEM

- PROP 8" SDR 35 PVC
INV. = 335.75'
- PROP. SDR35 PVC
8" SEWER PIPE
L = 8.0'
- PROP. SEWER MANHOLE #1
RIM = 340.1'
INV. IN = 334.6'
INV. OUT = 334.5'
- PROP. SDR35 PVC
8" SEWER PIPE
L = 147.0'
- PROP 8" SDR 35 PVC
INV. = 330.75'
- PROP 8" SDR 35 PVC
CLEAN OUT
- PROP. SDR35 PVC
8" SEWER PIPE
L = 82.0'
- PROP. SEWER PUMP STATION
COVER = 336.00'
INV. IN (FROM SMH#1) = 328.65'
INV. IN (FROM BLDG 2) = 328.65'
INV. IN (FROM SMH#2) = 325.00'
INV. OUT = 330.00'
- THOUGH 12 - OMITTED
- PROP. VALVE PIT
RIM = 336.5'
INV. IN & OUT = 330.0'
DRAIN BACK = 329.0'
- PROP. 3" SDR11 HDPE
FORCE MAIN
L = 645'
- PROP. SEWER MANHOLE #3
RIM = 364.0'
INV. IN = 355.0'
INV. OUT = 354.2'
- PROP. 6" SDR35 PVC
SEWER PIPE
L = 154'
- PROP. SEWER MANHOLE #4
RIM = 361.7'
INV. IN = 351.8'
INV. OUT = 351.7'
- PROP. 8" SDR35 PVC
SEWER PIPE
L = 9.7'
- EXIST. SEWER MANHOLE #1
RIM = 362.4'
INV. IN (SW) = 353.4' (EXISTING)
INV. IN (NE) = 351.6' (PROPOSED)
INV. OUT = 351.5' (EXISTING)
- PROP. 4" SDR35
PUMP STATION VENT

PROPOSED WATER SYSTEM

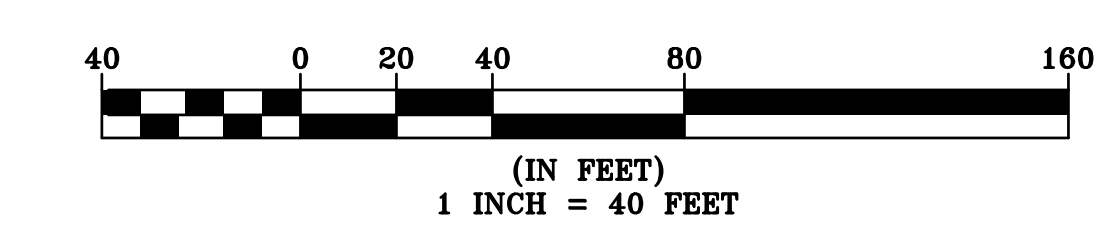
- PROP 8" D.I. CLASS 52
WATER MAIN
- PROP. 8" x 6" TEE
WITH THRUST BLOCK OR
MECHANICAL JOINT RESTRAINT
- PROP. 8" 45' BEND
WITH THRUST BLOCK OR
MECHANICAL JOINT RESTRAINT
- PROP. 8" 22.5' BEND
WITH THRUST BLOCK OR
MECHANICAL JOINT RESTRAINT
- PROP. 8" x 4" TEE & GATE VALVE
WITH THRUST BLOCK OR
MECHANICAL JOINT RESTRAINT
- PROP. 2" SERVICE CONNECTION
AND SHUT-OFF VALVE
- PROP. 4" D.I. CLASS 52
FIRE SERVICE MAIN
- PROP. 2" PE CTS OR COPPER
DOMESTIC WATER SERVICE
- PROP. 8" GATE VALVE
WITH THRUST BLOCK
OR MECHANICAL JOINT RESTRAINT
- PROP. 8" x 6" REDUCER
WITH THRUST BLOCK
OR MECHANICAL JOINT RESTRAINT
- PROP. 6" D.I. CLASS 52
WATER MAIN
- PROP. 6" x 6" TEE
WITH THRUST BLOCK
OR MECHANICAL JOINT RESTRAINT
- PROP. FIRE HYDRANT WITH GATE VALVE
AND THRUST BLOCK OR
MECHANICAL JOINT RESTRAINT
- PROP. 6" 45' BEND
WITH THRUST BLOCK OR
MECHANICAL JOINT RESTRAINT
- PROP. 6" GATE VALVE
WITH THRUST BLOCK
OR MECHANICAL JOINT RESTRAINT
- PROP. 8" CAP
WITH THRUST BLOCK
OR MECHANICAL JOINT RESTRAINT

PROPOSED ELECTRICAL SYSTEM

- PROP. CONCRETE 3 PHASE
PADMOUNTED TRANSFORMER
(SIZE AND EXACT LOCATION
TO BE DETERMINED BY
EVERSOURCE)
- PROP. CONCRETE PAD
FOR PUMP STATION
BACKUP GENERATOR
THE INSTALLATION SHALL COMPLY WITH
ALL APPLICABLE REQUIREMENTS OF THE
NEC AND STATE FIRE CODE IN 304-C
6000.
- CONVENTIONAL UNDERGROUND
PRECAST, CONCRETE MANHOLE
EVERSOURCE
NORTHEAST UTILITIES CONSTRUCTION
STANDARD DTR 76.311
- NATURAL GAS 100KW
BACK UP GENERATOR
ON A CONCRETE PAD
(SEE ELECTRICAL SITE PLANS FOR
DIMENSIONS AND SPECIFICATIONS)

**PHASE 1
UTILITY PLAN**
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD.
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.

MAY 2016
GRAPHIC SCALE



FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

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

NORWAY PLAINS ASSOCIATES, INC.

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

C-5



LEGEND

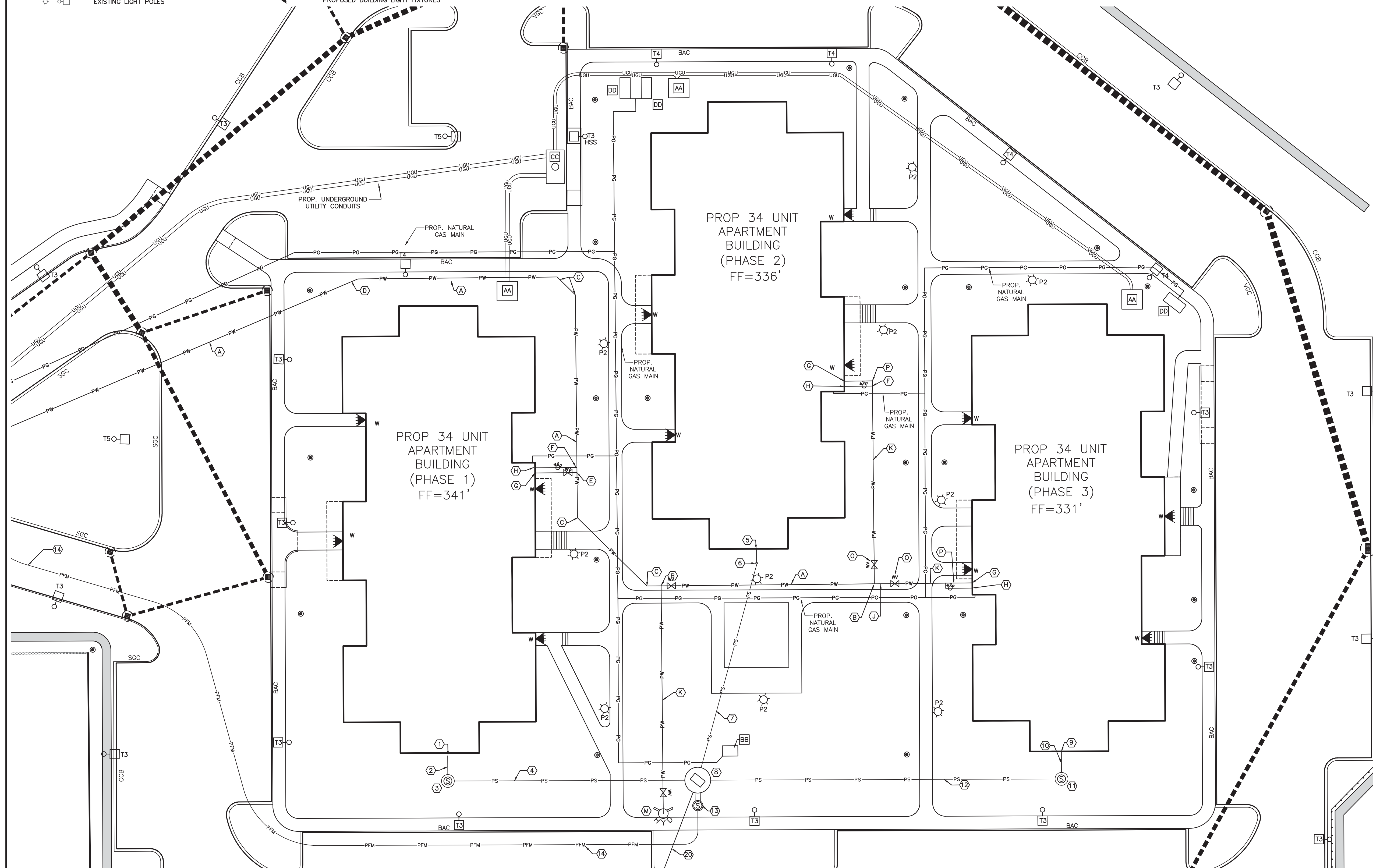
—	PROPERTY LINE	---	PROPOSED DRAIN LINE
---	JURISDICTIONAL WETLANDS	PW	PROPOSED WATER SERVICE
---HWO---	EXISTING OVERHEAD WIRES	PS	PROPOSED SEWER LINE
---	EXISTING WATER MAIN	PFM	PROPOSED SEWER FORCE MAIN PIPE HDPE SDR 11
---	EXISTING GRAVITY SEWER MAIN	PG	PROPOSED PROPANE GAS LINE
---	EXISTING SEWER FORCE MAIN	UGU	PROPOSED UNDERGROUND UTILITY WIRES
---	EXISTING UNDERGROUND ELECTRIC WIRES	---	PROPOSED UNDERGROUND ELECTRIC WIRES
---	EXISTING UNDERGROUND UTILITY WIRES	---	PROPOSED HYDRANT
---	EXISTING GAS PIPE	---	PROPOSED WATER VALVE
---	EXISTING DRAIN LINE	---	PROPOSED WATER SHUT-OFF VALVE
---	EXISTING HYDRANT	---	PROPOSED SEWER SHUT-OFF VALVE
---	EXISTING WATER GATE OR SHUT-OFF VALVE	---	PROPOSED UTILITY POLE
---	EXISTING UTILITY POLE	---	PROPOSED SEWER MANHOLE
---	EXISTING SEWER MANHOLE	---	PROPOSED DRAIN MANHOLE
---	EXISTING CATCH BASIN	---	PROPOSED CATCH BASIN
---	EXISTING LIGHT POLES	---	PROPOSED LIGHT POLES
---		---	PROPOSED BUILDING LIGHT FIXTURES

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 - B) ELECTRIC DISTRIBUTION – EVERSOURCE
 - C) TELEPHONE – FAIRPOINT
 - D) CABLE – METROCAST
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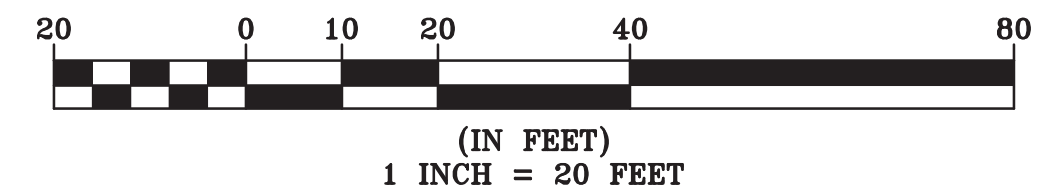


- 05/20/2016 – REVISE PLAN PER ROCHESTER TRG COMMENTS
- 07/08/2016 – REVISE PROPOSED ON-SITE SEWER COLLECTION AND PUMP SYSTEMS.
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- 11/10/16 – REVISE SEWER INVERT ELEVATIONS AT BUILDING #3, SMH#3 AND PUMP STATION
- 12/12/16 – REVISED OFFSITE GRAVITY SEWER PER NHDES WATER BUREAU COMMENTS
- 12/28/16 – REVISED SEWER MANHOLE #2 INVERTS PER NHDES WASTEWATER BUREAU COMMENTS
- 4/24/18 – REVISED UNDERGROUND ELECTRICAL AND POLE LOCATION
- 6/22/18 – REVISED WATER SERVICES, PROPOSED HYDRANT LOCATION. ADD GAS LINES AND BUILDING GENERATORS
- 8/11/18 – REVISED SEWER PUMP STATION LOCATION, GRAVITY AND PRESURE SEWER SYSTEMS.

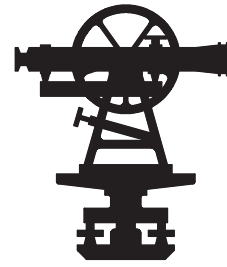


- | | |
|--|---|
| <p>PROPOSED SEWER SYSTEM</p> <ul style="list-style-type: none"> 1- PROP 8" SDR 35 PVC INV. = 335.75' 2- PROP. SDR35 PVC 8" SEWER PIPE L = 8.0' 3- PROP. SEWER MANHOLE #1 RIM = 340.1' INV. IN = 334.6' INV. OUT = 334.5' 4- PROP. SDR35 PVC 8" SEWER PIPE L = 147.0' 5- PROP 8" SDR 35 PVC INV. = 330.75' 6- PROP 8" SDR 35 PVC CLEAN OUT 7- PROP. SDR35 PVC 8" SEWER PIPE L = 82.0' 8- PROP. SEWER PUMP STATION COVER = 336.00' INV. IN (FROM SMH#1) = 328.65' INV. IN (FROM BLDG 2) = 328.65' INV. IN (FROM SMH#2) = 325.00' INV. OUT = 330.00' 9- PROP 8" SDR 35 PVC INV. = 323.25' 10- PROP. SDR35 PVC 8" SEWER PIPE L = 8.0' 11- PROP. SEWER MANHOLE #2 RIM = 331.0' INV. IN = 325.7' INV. OUT = 325.6' 12- PROP. SDR35 PVC 8" SEWER PIPE L = 81.0' 13- PROP. VALVE PIT RIM = 336.5' INV. IN & OUT = 330.0' DRAIN BACK = 329.0' 14- PROP. 3" SDR11 HDPE FORCE MAIN L = 645' 15- PROP. SEWER MANHOLE #3 RIM = 364.0' INV. IN = 355.0' INV. OUT = 354.2' 16- PROP. 6" SDR35 PVC SEWER PIPE L = 154' 17- PROP. SEWER MANHOLE #4 RIM = 361.7' INV. IN = 351.8' INV. OUT = 351.7' 18- PROP. 8" SDR35 PVC SEWER PIPE L=9.7' 19- EXIST. SEWER MANHOLE #1 RIM = 362.4' INV. IN (SW) = 353.4' (EXISTING) INV. IN (NE) = 351.6' (PROPOSED) INV. OUT = 351.5' (EXISTING) 20- PROP. 4" SDR35 PUMP STATION VENT | <p>PROPOSED WATER SYSTEM</p> <ul style="list-style-type: none"> A- PROP 8" D.I. CLASS 52 WATER MAIN B- PROP 8" x 6" TEE WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT C- PROP. 8" 45' BEND WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT D- PROP. 8" 22.5' BEND WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT E- PROP. 8" x 4" TEE & GATE VALVE WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT F- PROP. 2" SERVICE CONNECTION AND SHUT-OFF VALVE G- PROP. 4" DI CLASS 52 FIRE SERVICE MAIN H- PROP. 2" PE CTS OR COPPER DOMESTIC WATER SERVICE I- PROP. 8" GATE VALVE WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT J- PROP. 8" x 6" REDUCER WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT K- PROP 6" DI CLASS 52 WATER MAIN L- PROP. 6" x 6" TEE WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT M- PROP. FIRE HYDRANT WITH GATE VALVE AND THRUST BLOCK OR MECHANICAL JOINT RESTRAINT N- PROP. 6" 45' BEND WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT O- PROP. 6" GATE VALVE WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT P- PROP. 6" x 4" REDUCER WITH THRUST BLOCK OR MECHANICAL JOINT RESTRAINT |
| <p>PROPOSED ELECTRICAL SYSTEM</p> <ul style="list-style-type: none"> AA- PROP. CONCRETE 3 PHASE PAD MOUNTED TRANSFORMER (SIZE AND EXACT LOCATION TO BE DETERMINED BY EVERSOURCE) BB- PROP. CONCRETE PAD FOR PUMP STATION BACKUP GENERATOR THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE NEC AND STATE FIRE CODE IN Sot-C 6000. CC- CONVENTIONAL UNDERGROUND PRECAST, CONCRETE MANHOLE EVERSOURCE NORTHEAST UTILITIES CONSTRUCTION STANDARD DTR 76.311 DD- NATURAL GAS 100KW BACK UP GENERATOR ON A CONCRETE PAD (SEE ELECTRICAL SITE PLANS FOR DIMENSIONS AND SPECIFICATIONS) | |

DETAILED UTILITY PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD.
ROCHESTER, NH
 PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.
 MAY 2018
 GRAPHIC SCALE



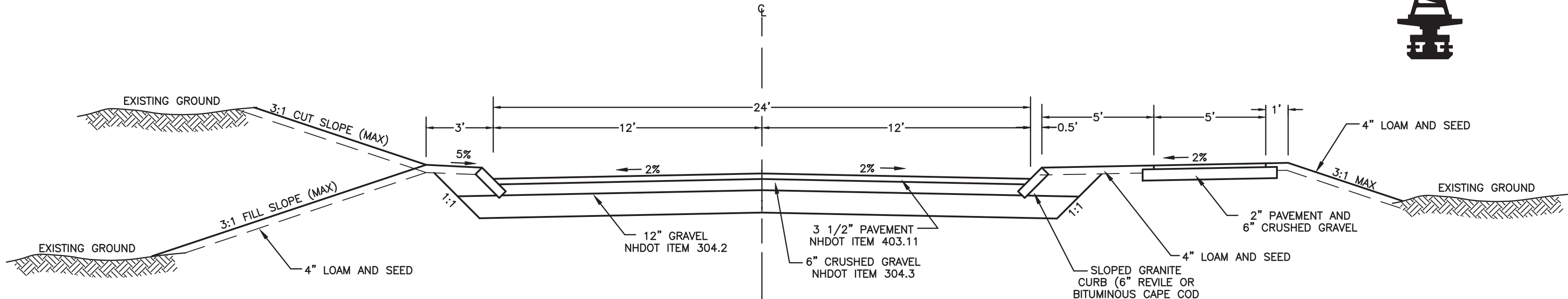
FILE NO. 104
 PLAN NO. C-2780
 DWG. NO. 15225/SP-2
 F.B. NO.



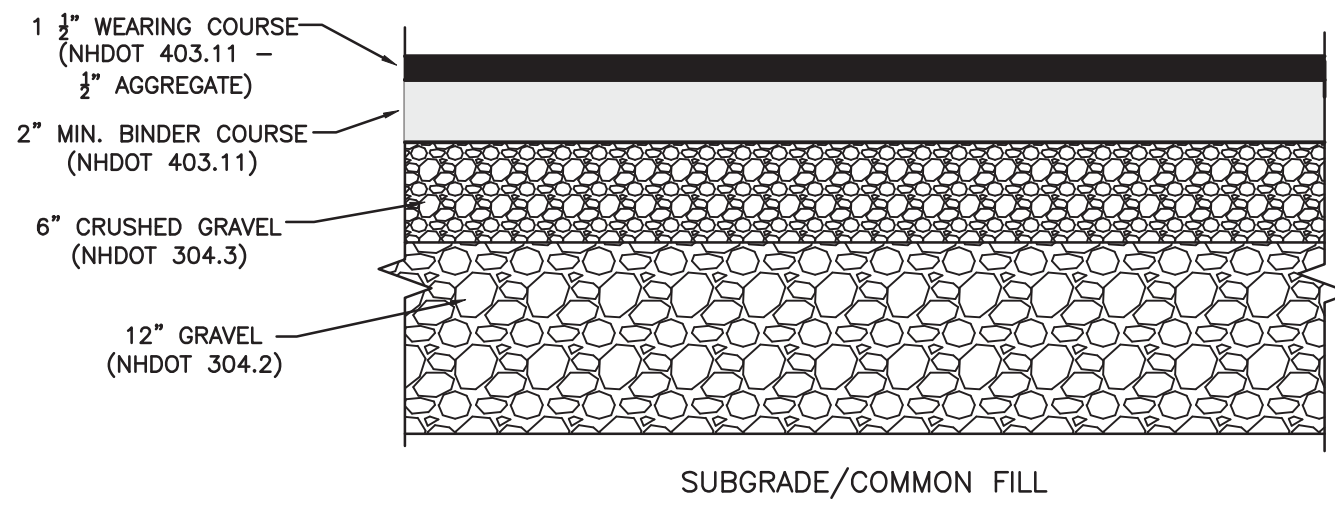
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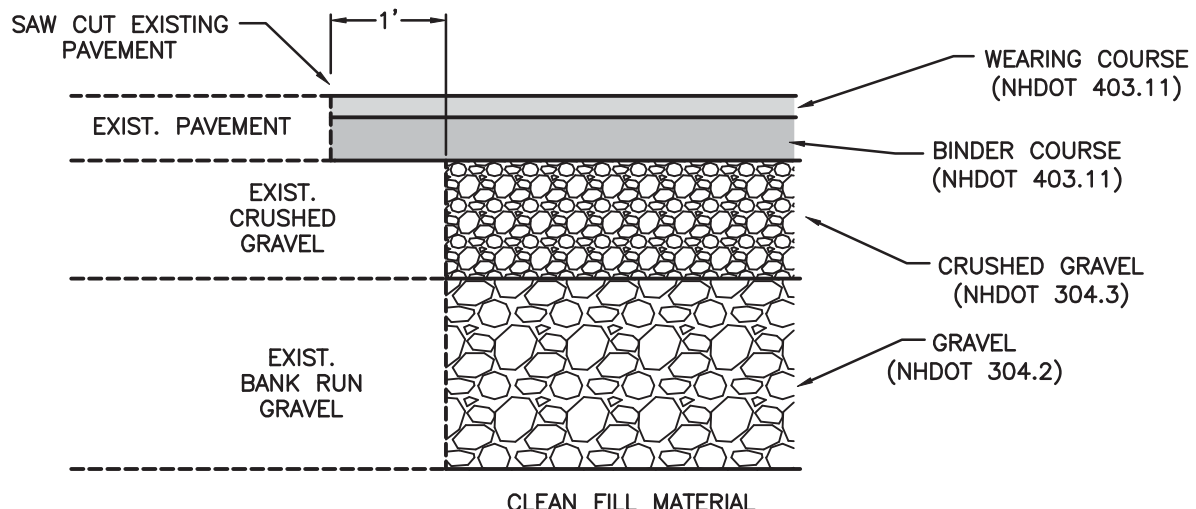
05/20/2016 - REVISED PLAN PER ROCHESTER TRG COMMENTS



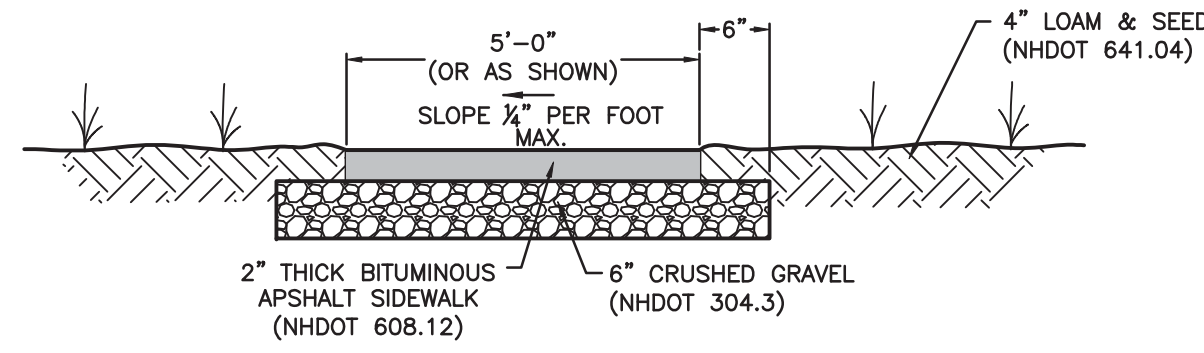
DRIVEWAY CROSS-SECTION
1" = 4'



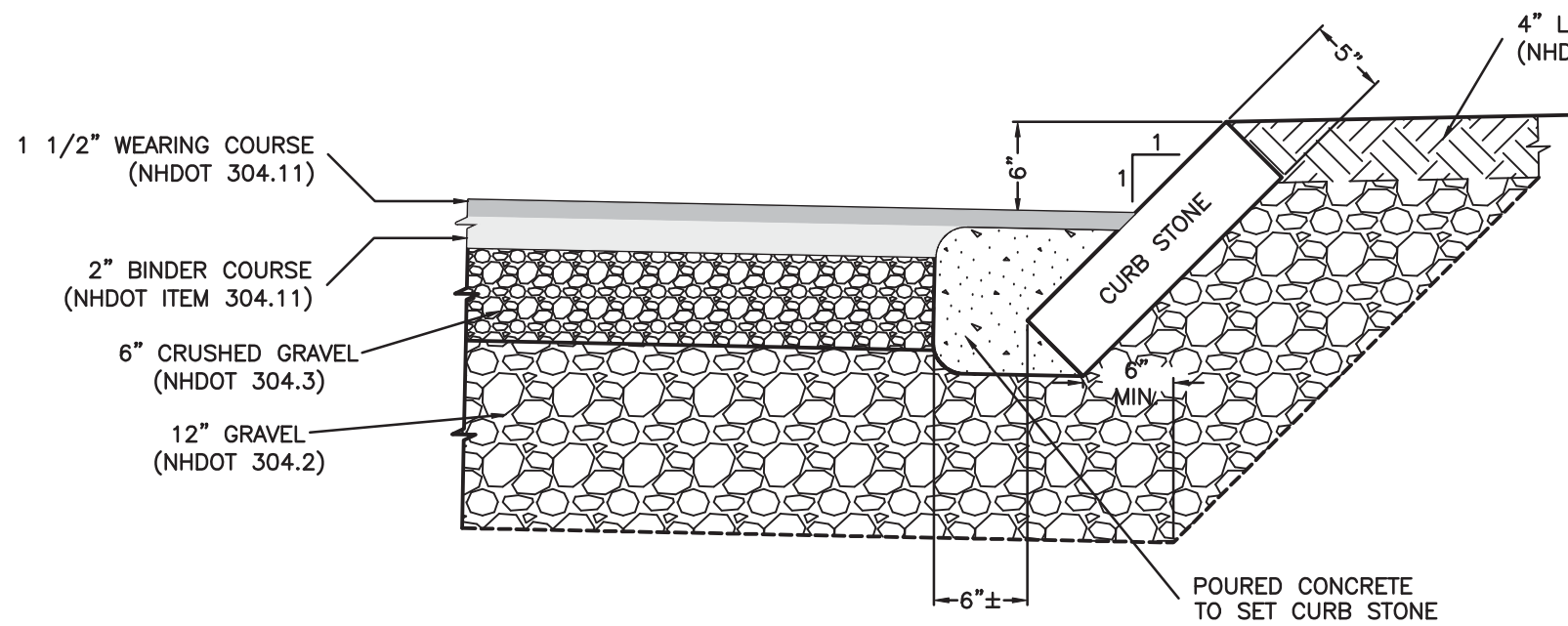
PARKING LOT CROSS-SECTIONS
NOT TO SCALE



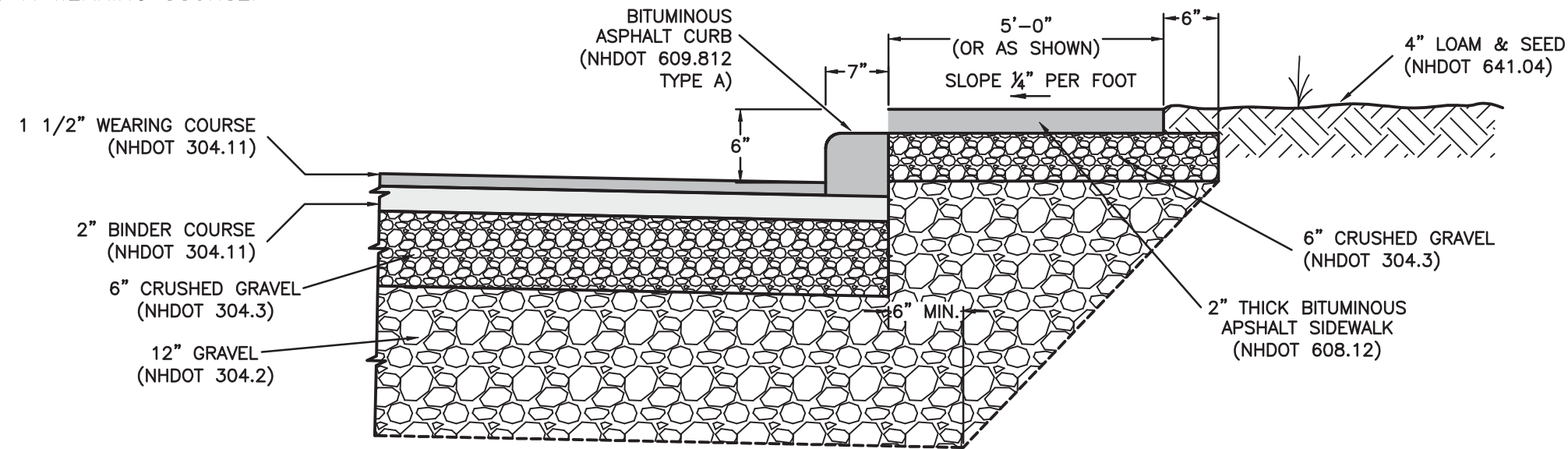
TYPICAL PAVEMENT MATCHING DETAIL
NOT TO SCALE



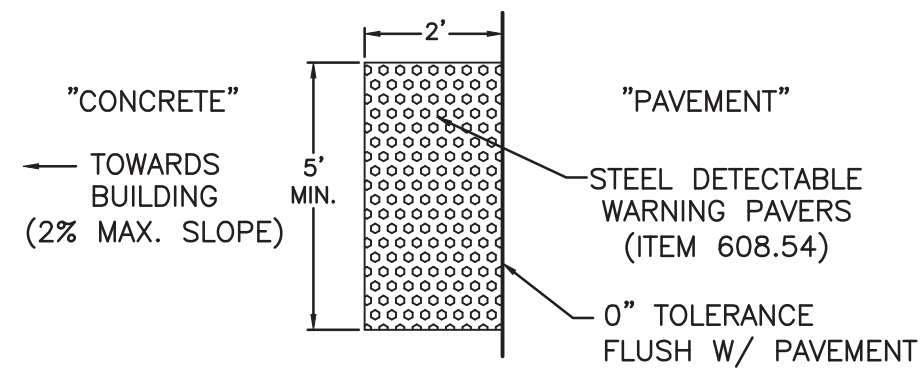
PAVED SIDEWALK DETAIL
NOT TO SCALE



GRANITE SLOPE CURB DETAIL
NOT TO SCALE

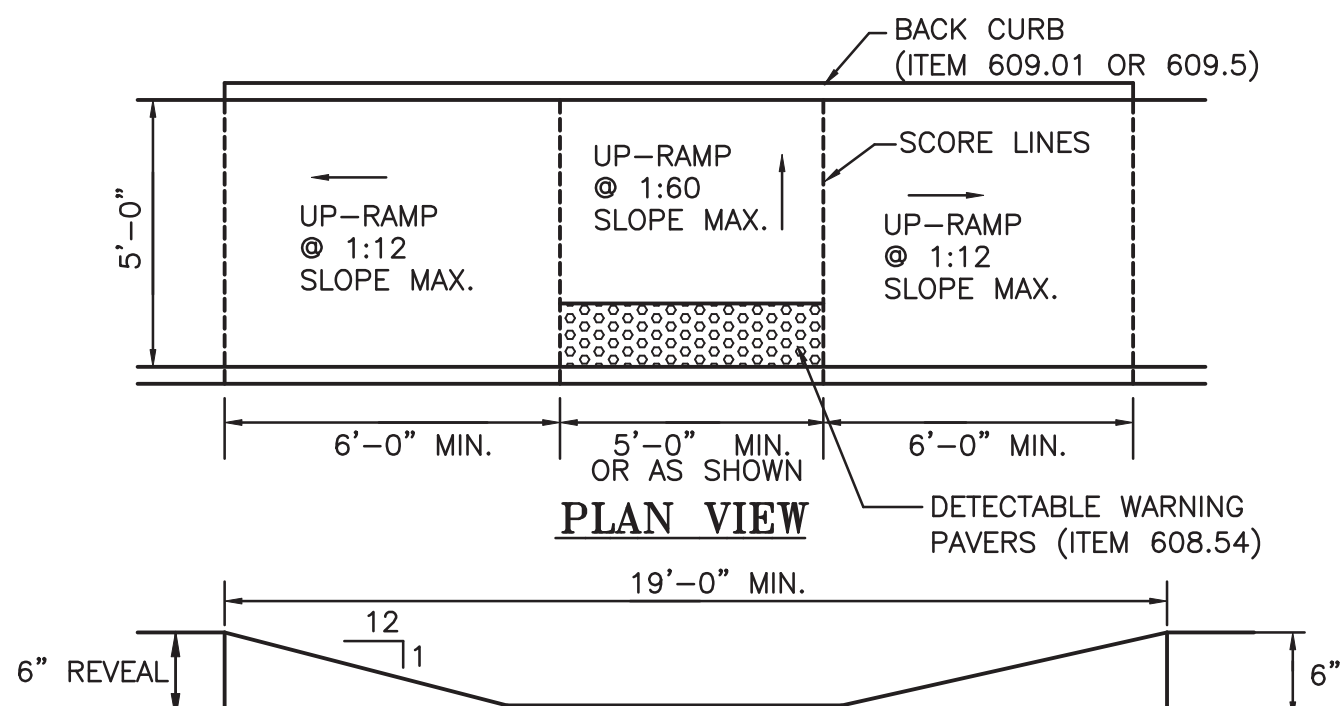


PAVED SIDEWALK WITH
BITUMINOUS ASPHALT CURB DETAIL
NOT TO SCALE



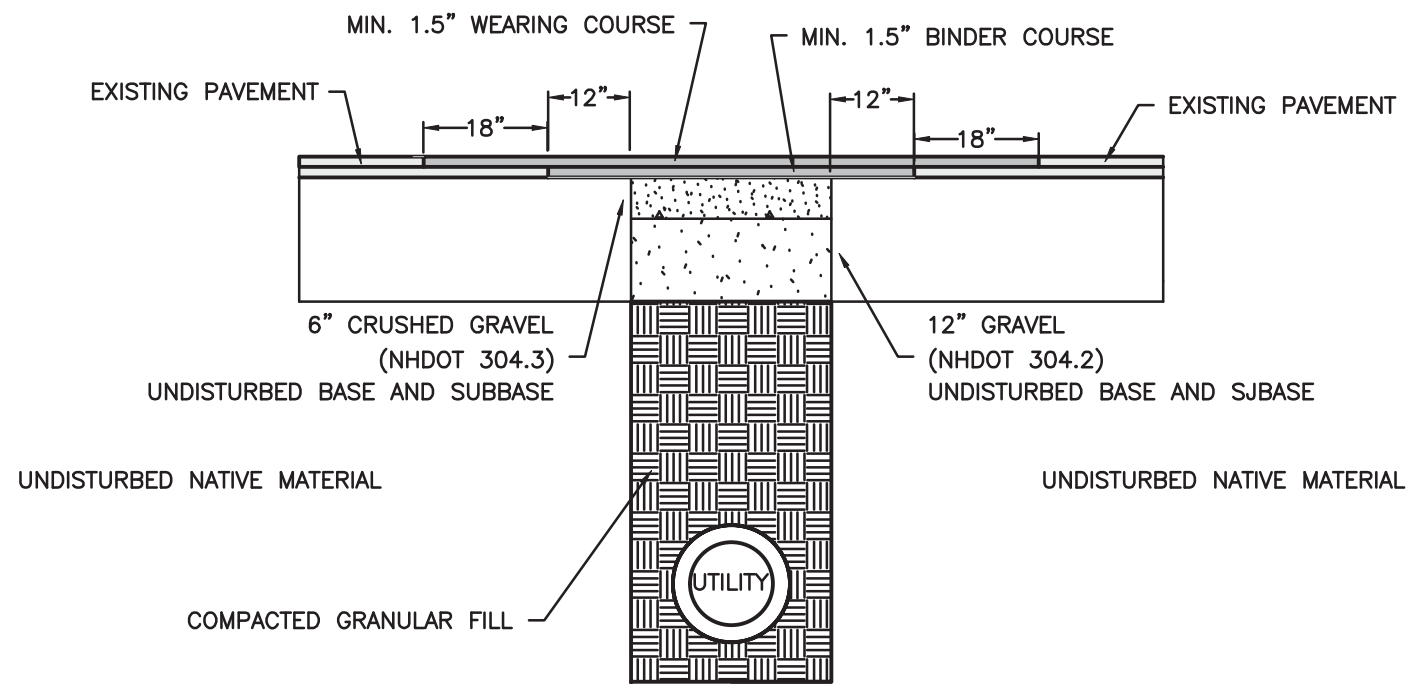
DETECTABLE WARNING PAVER DETAIL
NOT TO SCALE

- DETECTABLE WARNING PAVER NOTES:
1. THE MAXIMUM CROSS OF CONCRETE WALKWAY SLOPE IS 2%. THE SLOPE OF THE LANDING SHALL NOT EXCEED 2% IN ANY DIRECTION.
 2. TRANSITIONS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.
 3. DETECTABLE WARNING PAVERS (ITEM 608.54) SHALL BE USED ON CONCRETE RAMPS AS SHOWN. EACH TACTICAL WARNING STRIP PANEL SHALL A TRUNCATED DOMED SURFACE AT LEAST 2'-0" IN WIDTH, MEASURED FROM THE BACK OF THE CURB TIP DOWN, AND 5'-0" IN LENGTH MEASURE PERPENDICULAR T THE DIRECTION OF PEDESTRIAN TRAVEL.
 4. ALL DETECTABLE WARNING PAVERS SHALL BE CAST IN PLACE ARMOR-TILE TACTILE SYSTEM, YELLOW IN COLOR, OR APPROVED EQUAL.



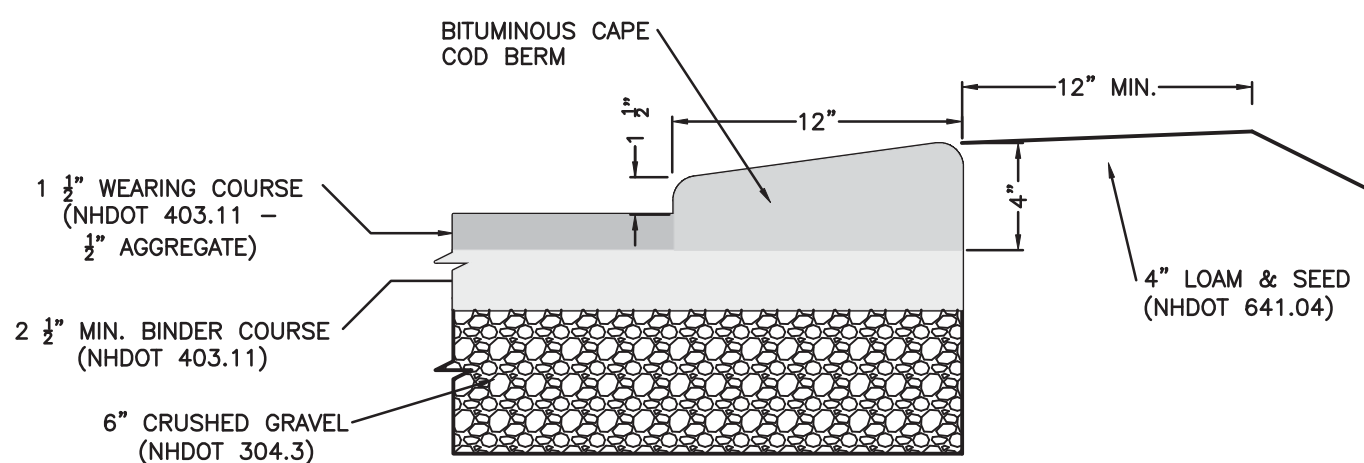
HANDICAP RAMP DETAIL "A"
NOT TO SCALE

- GENERAL SIDEWALK NOTES:
1. THE MAXIMUM RUNNING SLOPE OF ANY SIDEWALK CURB IS 12:1. THE MAXIMUM CROSS SLOPE IS 2%. THE SLOPE OF THE LANDING SHALL NOT EXCEED 2% IN ANY DIRECTION.
 2. TRANSITIONS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.
 3. DETECTABLE WARNING PAVERS (ITEM 608.54) SHALL BE USED ON CONCRETE RAMPS AS SHOWN. EACH TACTICAL WARNING STRIP PANEL SHALL A TRUNCATED DOMED SURFACE AT LEAST 2'-0" IN WIDTH, MEASURED FROM THE BACK OF THE CURB TIP DOWN, AND 5'-0" IN LENGTH MEASURE PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL.



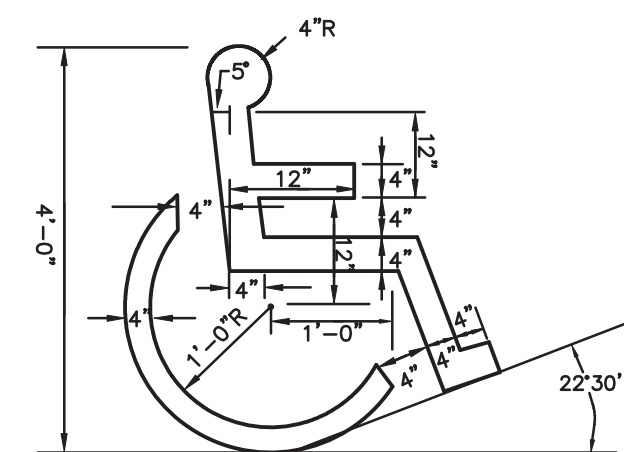
- NOTES:
1. PAVEMENT EDGES SHALL BE DEFINED BY A STRAIGHT EDGE FORMED BY A MACHINED SAW CUT.
 2. TRENCH SUBGRADE MATERIAL SHALL BE BACKFILLED WITH GRANULAR FILL AND COMPACTED TO 95% OF ITS DRY DENSITY.
 3. TOP 18" OF BACKFILL SHALL BE 6" OF COMPACTED 3/4" CRUSHED GRAVEL (NHDOT 304.3) SUPPORTED BY 12" OF COMPACTED GRAVEL (NHDOT 304.2).
 4. ALL VERTICAL AND HORIZONTAL JOINTS BETWEEN PAVEMENTS SHALL BE TACK COATED.
 5. PAVEMENT THICKNESS SHALL MATCH EXISTING BUT IN NOT CASE SHALL BE LESS THAN 3" THICK TOTAL.
 6. PAVEMENT SHALL BE PLACED IN TWO PLACES:
6.1 THE FIRST PHASE SHALL CONSIST OF CUTTING BACK THE FULL DEPTH OF PAVEMENT 12" BEYOND THE EDGES OF THE DISTURBED TRENCH AND PAVING A BINDER COURSE THE FULL DEPTH OF THE PAVEMENT AS TO BRING THE PATCH FLUSH WITH THE EXISTING ROAD SURFACE.
6.2 THE SECOND PHASE SHALL BE CONDUCTED THE FOLLOWING YEAR AND SHALL CONSIST OF MILLING OVER THE EDGES OF THE PREVIOUS PATCH BY A MINIMUM OF 18" IN ALL DIRECTIONS TO A DEPTH OF 1.5". WEARING COURSE PAVEMENT SHALL BE USED TO CREATE A SMOOTH SURFACE WITH THE ROADWAY OVER THE EXTENTS OF THE MILLED AREA.
 7. ANY TRENCH PATCH REQUIRES PRE-APPROVAL BY DPW AND IS SUBJECT TO INSPECTION TO ENSURE COMPLIANCE WITH CITY STANDARDS.

TRENCH PATCH PROFILE
NOT TO SCALE

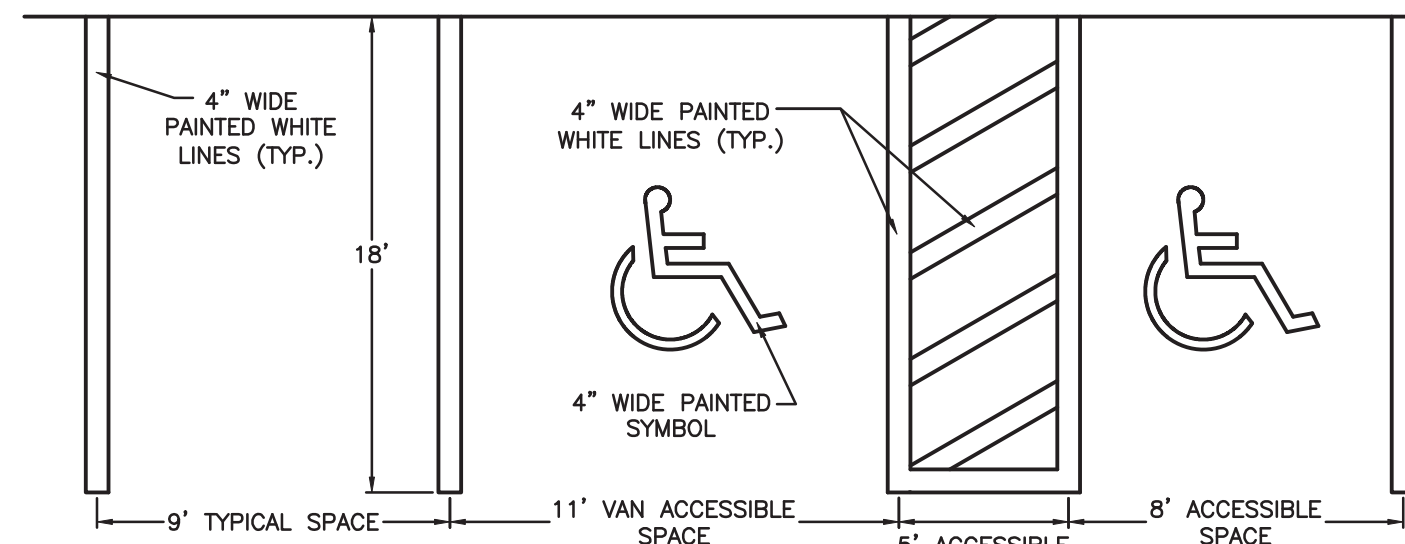


BITUMINOUS CAPE COD BERM DETAIL

- NOT TO SCALE
1. CURB PLACED ON BASE COURSE OF ASPHALT.
 2. PLACE WEARING COURSE OF PAVEMENT AGAINST CURB.



ACCESSIBLE SYMBOL



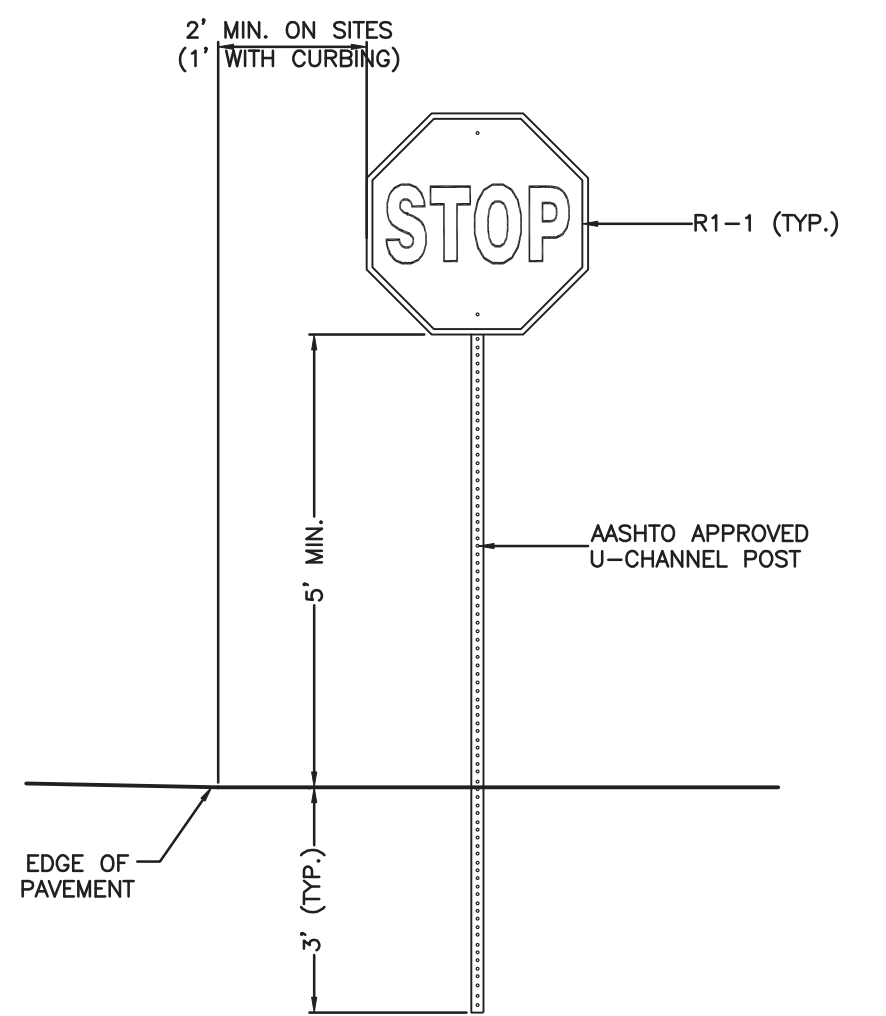
- NOTE:
1. HANDICAP GRAPHIC SYMBOL (PAINTED WHITE) TO BE CENTERED IN SPACE. SYMBOL TO BE PAINTED ON ASPHALT AS PER DETAIL.

STALL STRIPING DETAIL
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	9
R7-8b	6"	12"	VAN ACCESSIBLE	3
	18"	12"	VISITOR PARKING ONLY	12
R6-1	12"	36"	ONEWAY	1
R5-1	30"	30"	NO PARKING	8

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

SIGN SCHEDULE
NOT TO SCALE



- NOTES:
1. SIGN POST SHALL BE AASHTO APPROVED U-CHANNEL OR OTHER PER AASHTO "SPECIFICATIONS FOR STRUCTURAL SUPPORT OF HIGHWAY SIGNS, LUMINARIES AND SIGNALS", LATEST EDITION.
 2. SIGNS SHALL BE MOUNTED 5 FT FROM GROUND TO BOTTOM EDGE WHERE PARKING AND PARKING LOT MOVEMENTS TAKE PLACE.
 3. SIGNS SHALL BE PLACED SO THAT NEAREST EDGE IS 2 FT. FROM EDGE OF PAVEMENT UNLESS CURBED.

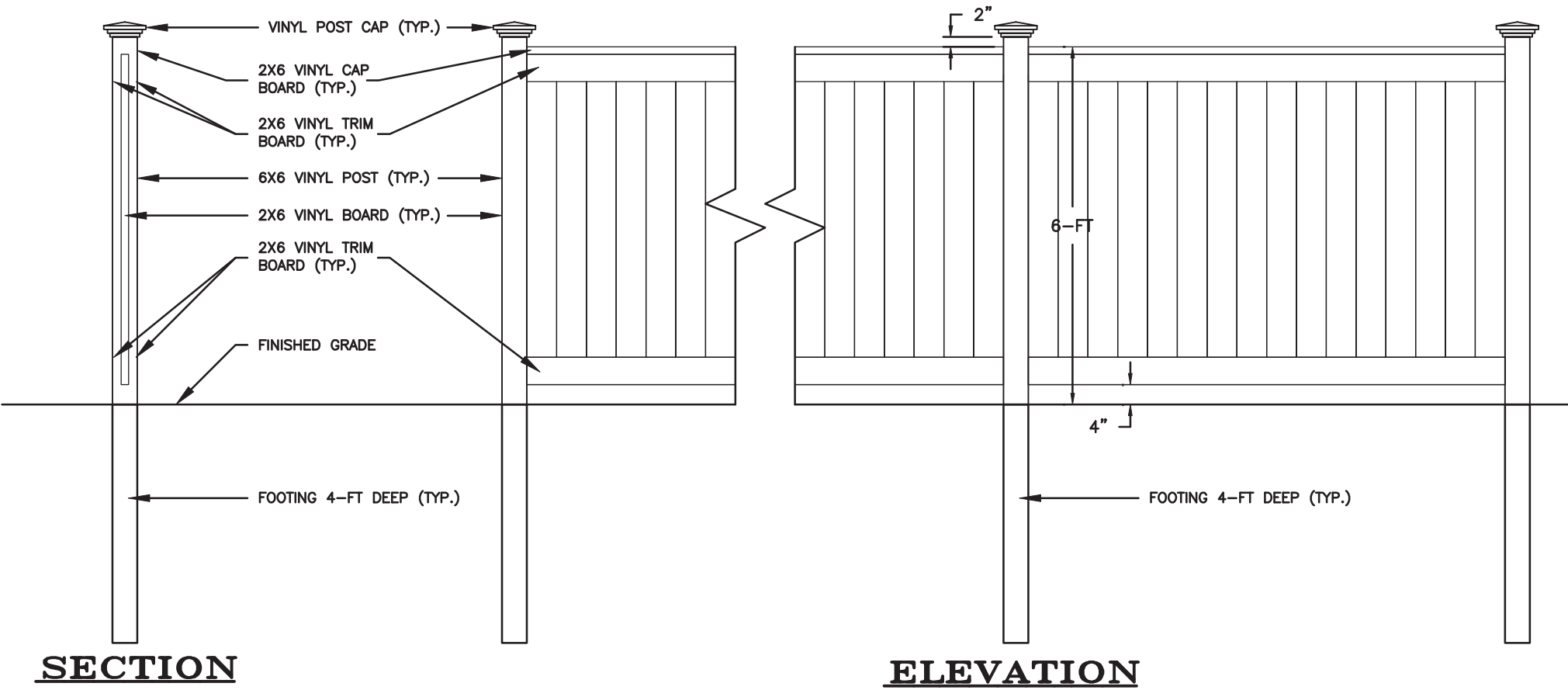
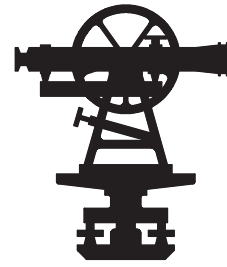
TYPICAL TRAFFIC SIGN
NOT TO SCALE

PARKING AND SIDEWALK DETAILS

TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH

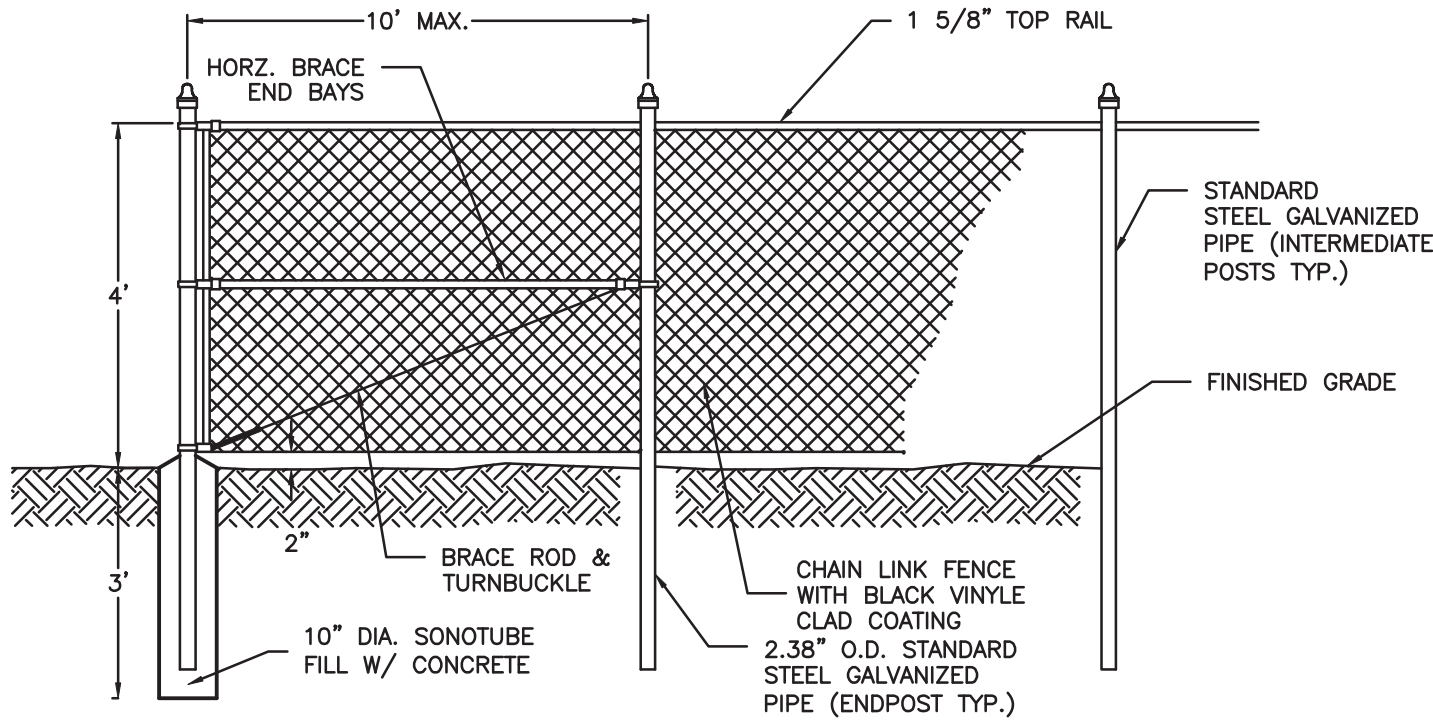
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.
MAY 2016

FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.



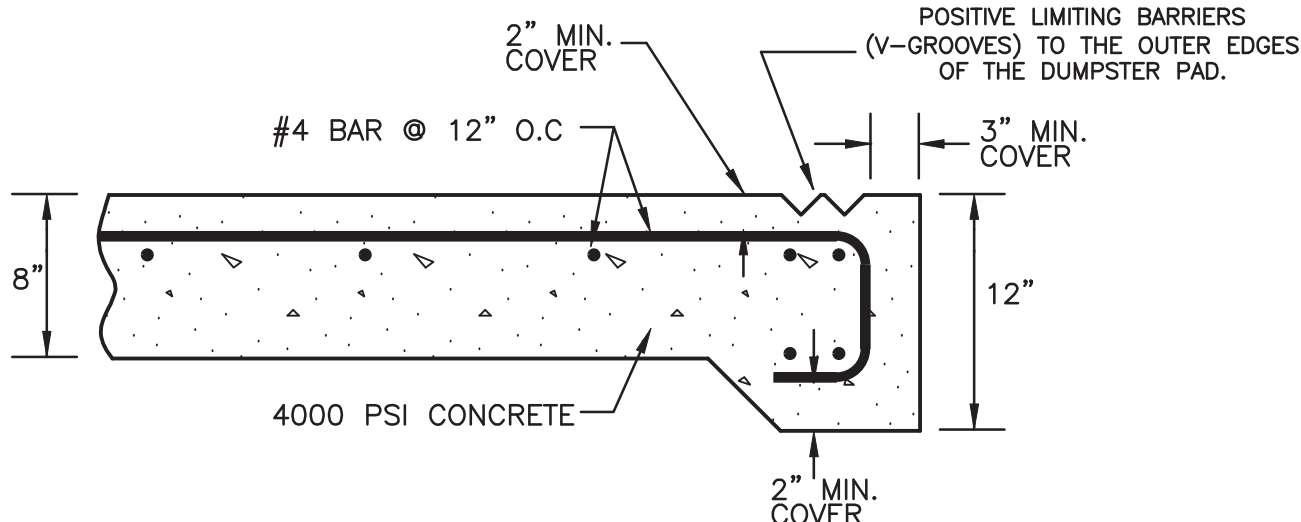
TYPICAL SOLID VINYL FENCE DUMPSTER ENCLOSURE

SCALE: 1/2"=1'



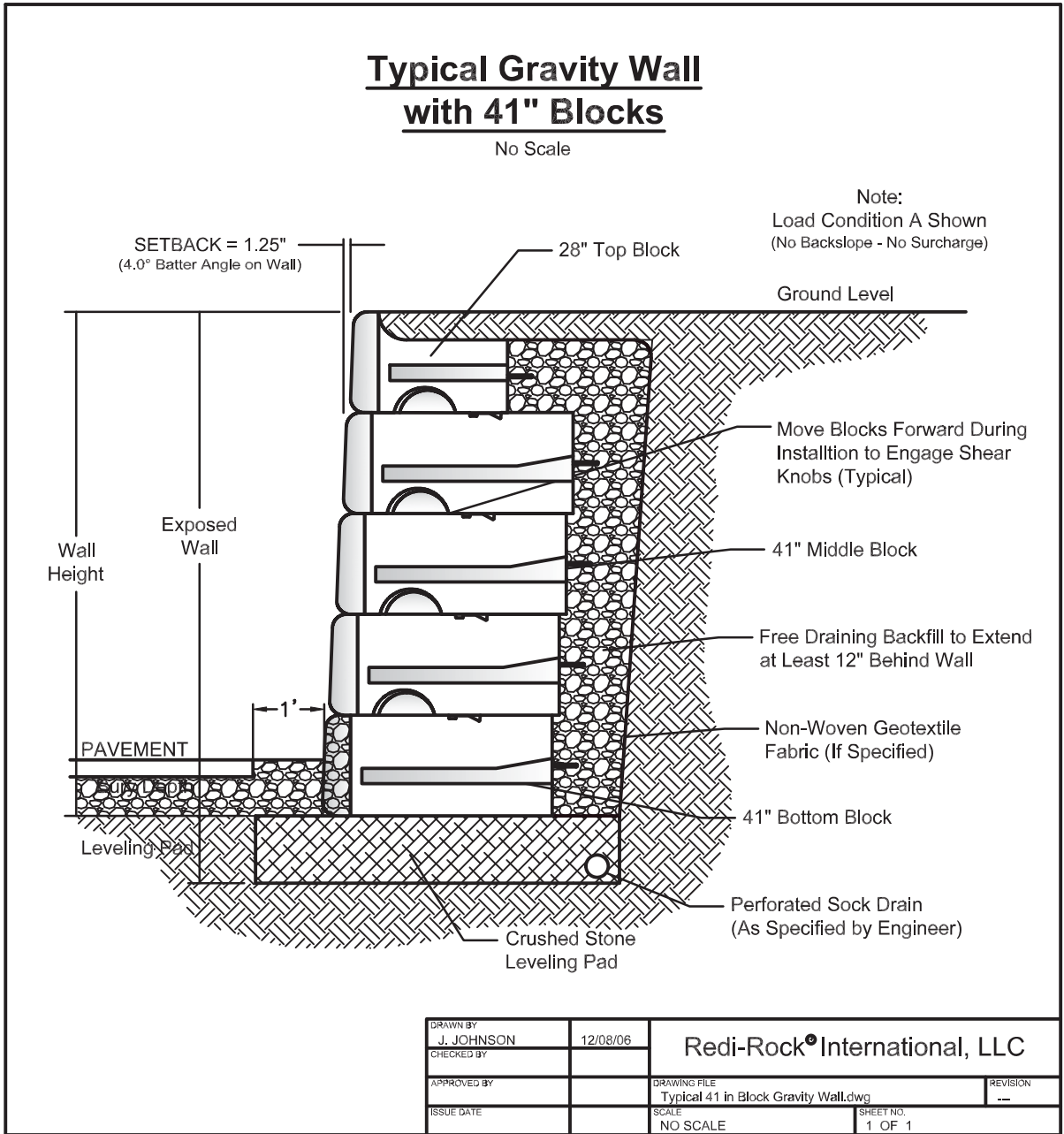
TYPICAL CHAINLINK FENCE

NOT TO SCALE



DUMPSTER PAD DETAIL

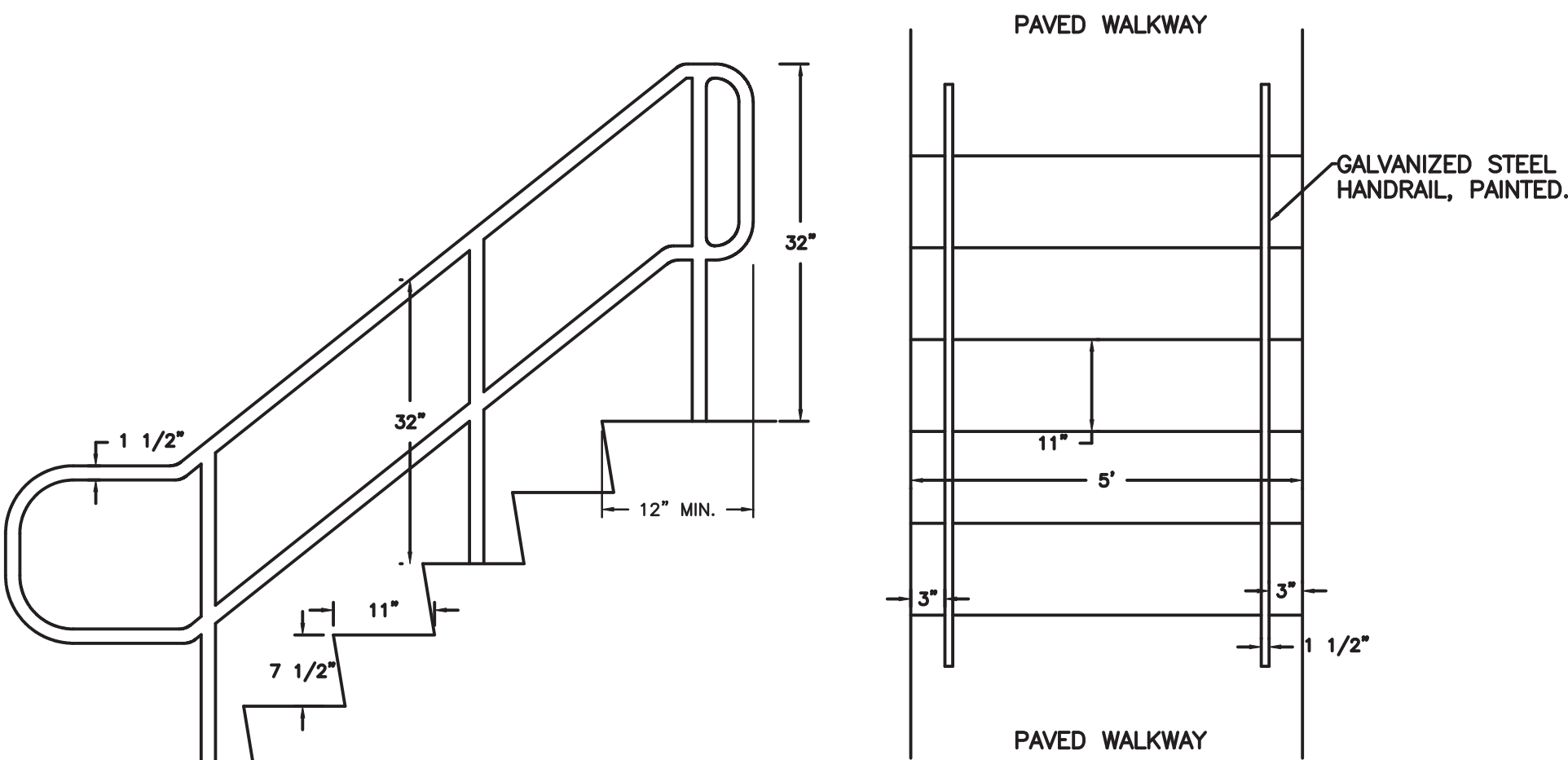
NOT TO SCALE



TYPICAL BLOCK RETAINING WALL DETAIL

NOT TO SCALE

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

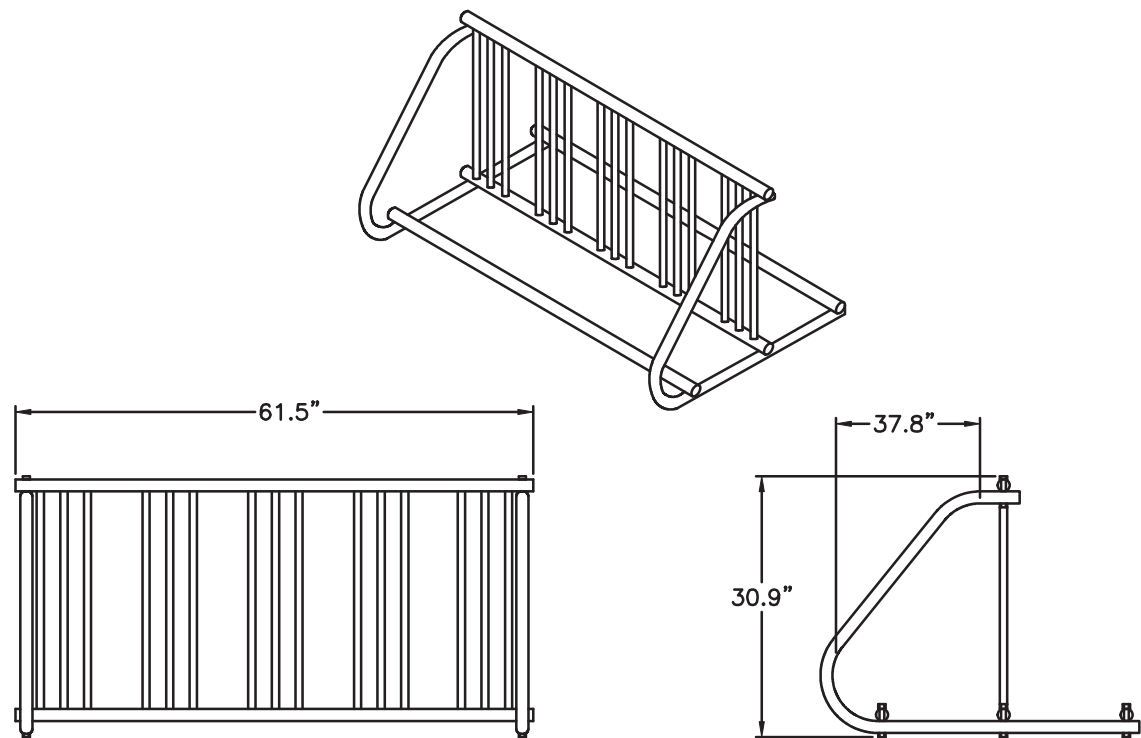


PROFILE

PLAN

RAIL & STAIR DETAIL

NOT TO SCALE



BICYCLE RACK DETAIL

NOT TO SCALE

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.



05/20/2016 - REVISED PLAN PER ROCHESTER TRG COMMENTS

FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

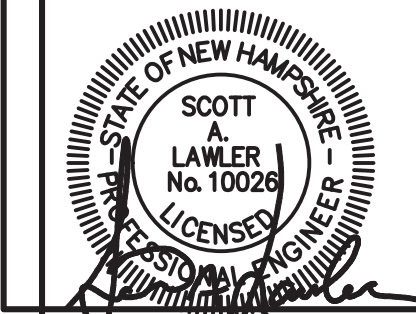
31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

CONSTRUCTION DETAILS
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.
MAY 2016

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

C-7



SEDIMENT FOREBAY
GAUGE DETAIL
NOT TO SCALE

A diagram of a vertical pile in soil. The pile is represented by a vertical line. Three horizontal arrows pointing to the right represent lateral loads at different heights. The top two arrows are at a height of 3' from the ground surface. The third arrow is at the ground surface. The ground surface is indicated by a horizontal line with diagonal hatching below it. The pile extends 3' below the ground surface.

SPECIFICATIONS:

- GRAVEL WETLAND:**

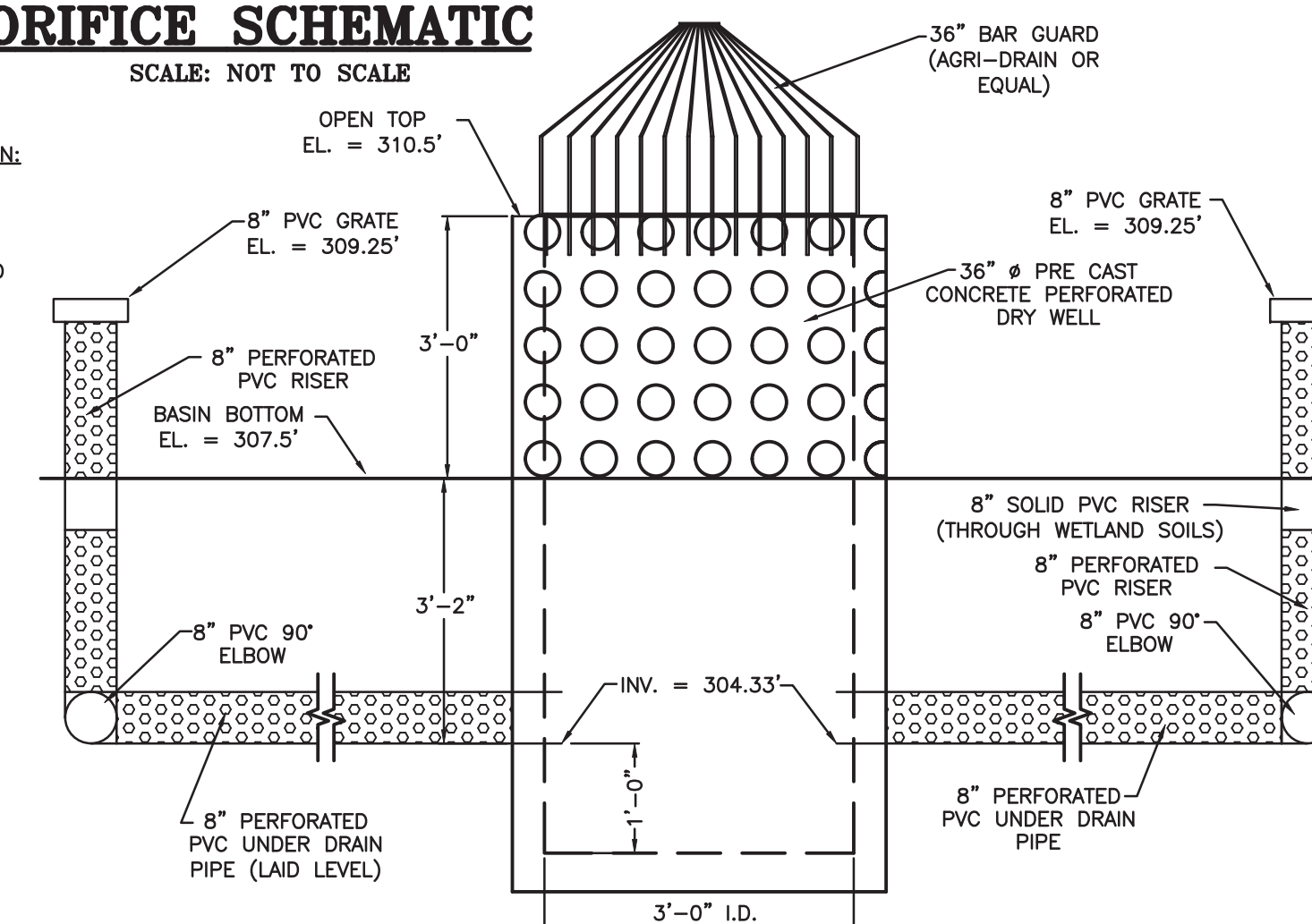
RECOMMENDED SEEDING RATES:
SUPPLEMENTAL LLB/6,000 SQ. FT. OR STRAIGHT LLB/3,000 SQ.FT.

MAINTENANCE REQUIREMENTS:

1. INSPECT PRETREATMENT MEASURES (I.E. SEDIMENT FOREBAY(S), HOODED CATCH BASINS, ETC.) BI-ANNUALLY, ONCE IN THE SPRING PRIOR TO MAY 15 AND ONCE IN THE FALL PRIOR TO OCTOBER 15.
2. INSPECT GRAVEL WETLAND SURFACE BI-ANNUALLY, ONCE IN THE SPRING PRIOR TO MAY 15 AND ONCE IN THE FALL PRIOR TO OCTOBER 15.
3. INSPECT GRAVEL WETLAND AFTER ANY RAINFALL EVENT OF 2.5-INCHES IN OR MORE PERIOD OR GREATER.
4. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT BASED ON INSPECTION. REPAIR AREA OF REMOVAL AS NECESSARY.
5. PERFORM MAINTENANCE AND REHABILITATION BASED ON INSPECTIONS.
6. REMOVE DEBRIS (IF ANY) FROM INFILTRATION BASIN INLET BASED ON INSPECTION.
7. CONDUCT PERIODIC MOWING OF THE INFILTRATION BASIN SLOPES AND EMBANKMENTS (MINIMUM TWICE A YEAR) TO ELIMINATE WOODY GROWTH FROM THE EMBANKMENTS AND BOTTOM. MOWING THE INFILTRATION BASIN EMBANKMENTS AND BOTTOMS TWICE A YEAR IF THE SITE IS RECORDED.
8. REMOVE PLANT MATERIAL THAT DIES BACK IN THE FALL FROM THE GRAVEL WETLAND SURFACE (I.E. GRASSES, REEDS, ETC.) ONLY REMOVE THE ABOVE GROUND GROWTH THAT HAS DIED BACK- LEAVE THE ROOT MASS INTACT.
9. INSPECT GRAVEL WETLAND BOTTOMS TWICE A YEAR. IF THE SITE IS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL (I.E. PROFESSIONAL ENGINEER, CERTIFIED WETLAND OR SOILS SCIENTIST OR LANDSCAPE ARCHITECT, ETC.) SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FUNCTION, INCLUDING BUT NOT LIMITED TO REMOVAL OF SEDIMENT AND SEDIMENTS OR RECONSTRUCTION OF THE STONE BED AND PIPE MANHOLE.

SCALE: NOT TO SCALE

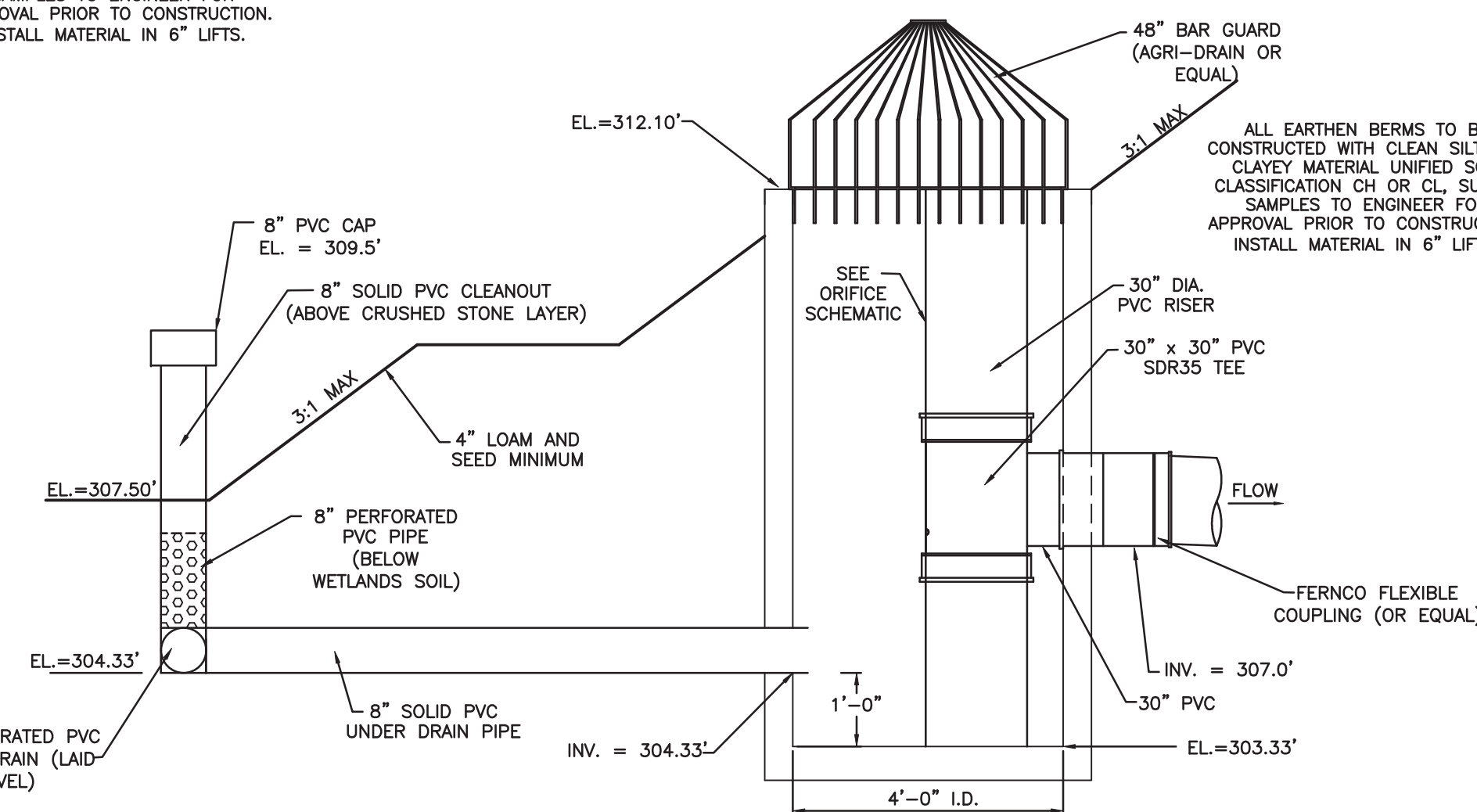
OPEN TO



SCALE: NOT TO SCALE

NOTES:

1. 8" PERFORATED PIPE SHALL BE SUPPLIED WITH 4 ROWS OF 1" TO 3/8" DIAMETER HOLES EVERY 3 INCHES.
2. PERFORATED PIPES SHALL BE PERFORATED IN ACCORDANCE TO ASTM F-758.



SCALE: NOT TO SCALE

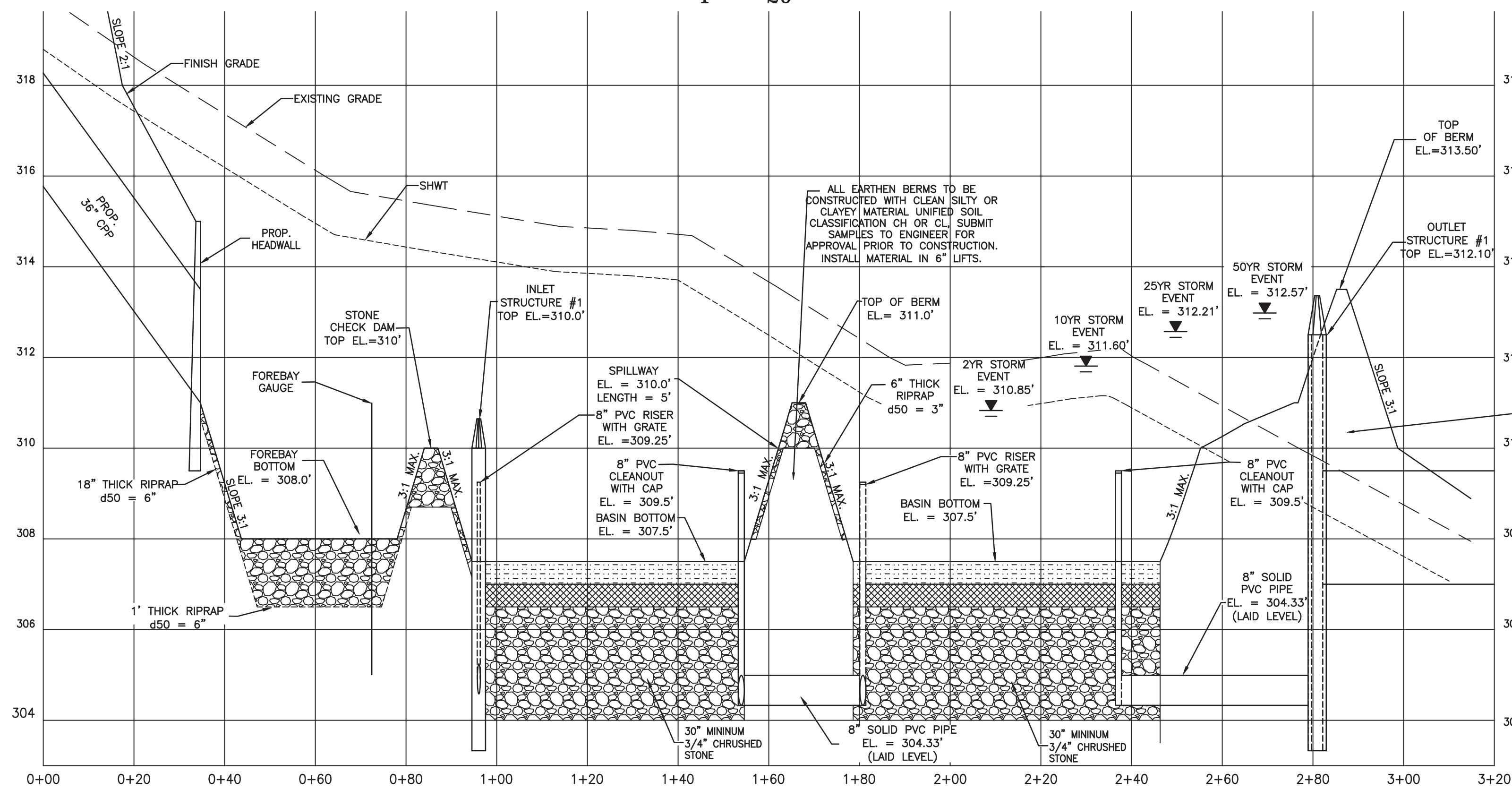
$$1'' = 20'$$

$$1'' = 20' \text{ (HORZ.)} \quad \& \quad 1'' = 2' \text{ (VERT.)}$$

Diagram illustrating the cross-section of a vegetated slope. The slope is 3:1. The structure consists of three layers: 30" MINIMUM THICKNESS 3/4" CRUSHED STONE, UNIFORM DIMENSION; 4" MINIMUM THICKNESS 3/8" PEA STONE (FILTER); and 6" MIN. THICKNESS LOW PERMEABILITY SOIL. The top layer is labeled "LOAM AND SEED PER PERMANENT VEGETATION NOTES AND SPECIFICATIONS". A central vertical line indicates a planting location, with a note "REFER TO NOTE #4 FOR PLANTING SPECIFICATION". The bottom layer is labeled "LOAM AND SEED PER PERMANENT VEGETATION NOTES AND SPECIFICATIONS". The slope is labeled "3:1 SLOPE".

NOT TO SCALE

LOW PERMEABILITY MATERIAL GRADATION	
SIEVE SIZE:	%PASSING:
#4	95-100
#40	60-90
#100	40-60
#200	25-45

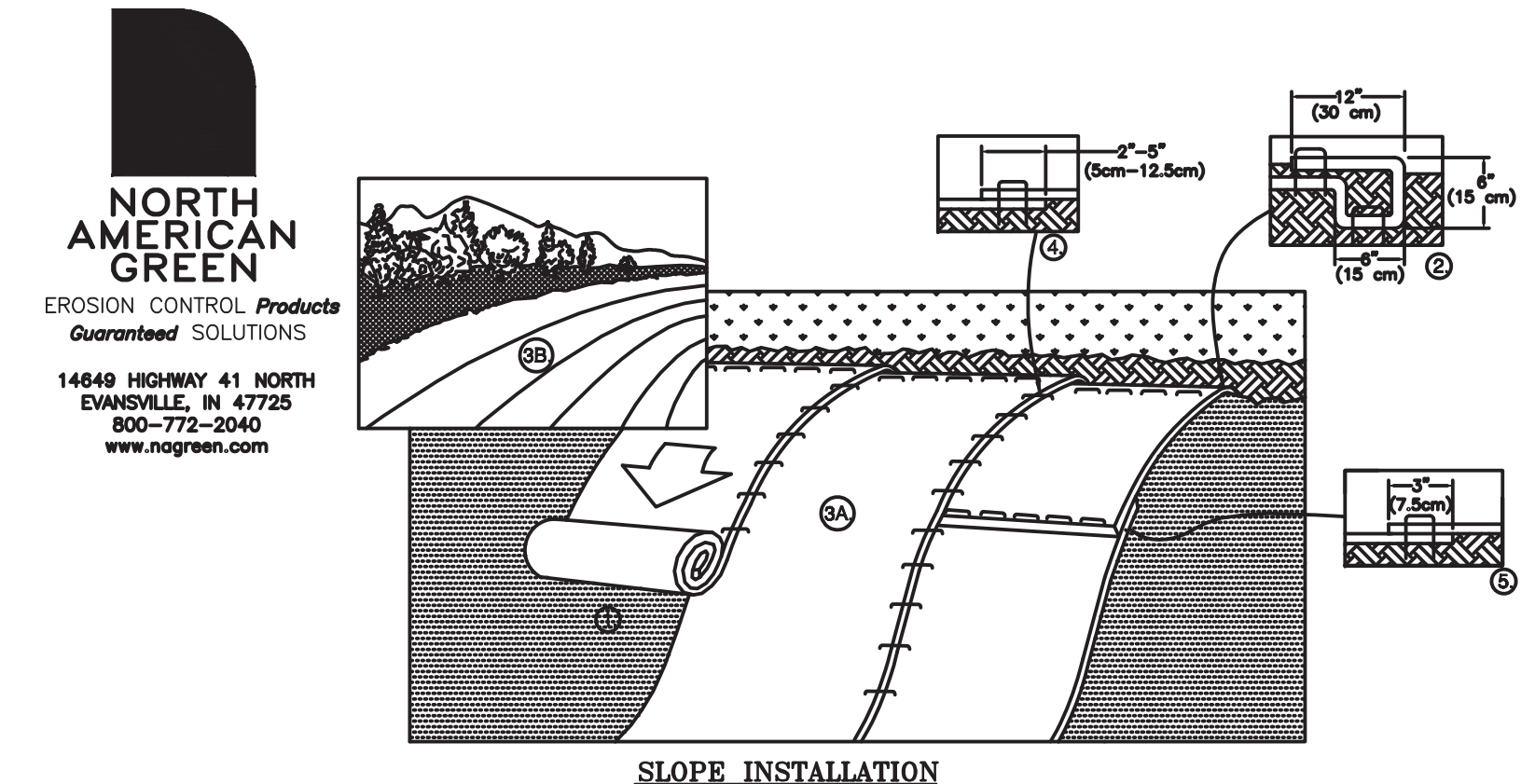
31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.		2 Continental Blvd., Rochester, N.H. 603-335-3948	C-9
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2 Continental Blvd., Rochester, N.H. 603-335-3948

MAY 2016

D.R. LEMIEUX BUILDERS, INC.

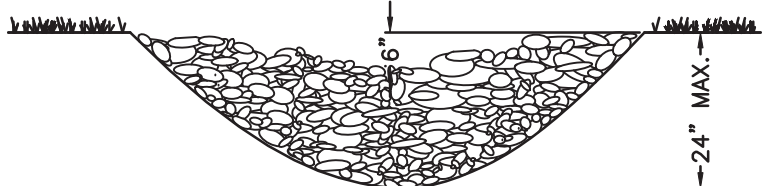


- MAINTENANCE REQUIREMENTS:**
- ALL BLANKET AND MATS SHALL BE INSPECTED WEEKLY DURING THE CONSTRUCTION PERIOD, AND AFTER ANY RAINFALL EVENT EXCEEDING 1/2 INCH IN A 24-HOUR PERIOD.
 - ANY FAILURE SHALL BE REPAIRED IMMEDIATELY. IF WASHOUT OF THE SLOPE, DISPLACEMENT OF THE MAT, OR DAMAGE TO THE TRENCH OCCURS, 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 SHALL 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 SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP's WIDTH.
NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.
 - 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 SEEDBED BY LOOSENING 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.

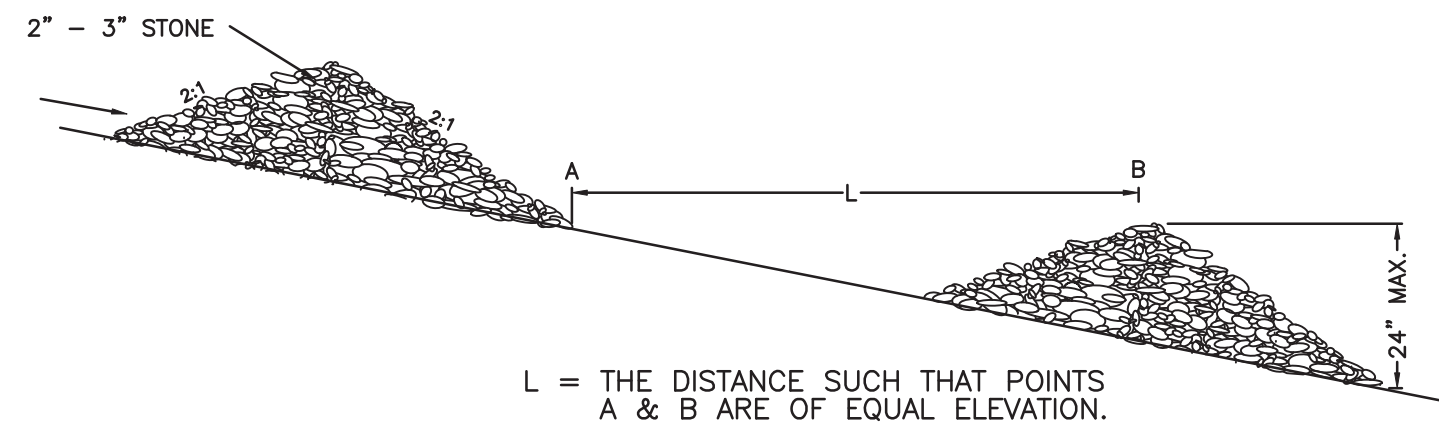
TEMPORARY EROSION CONTROL BLANKET DETAIL

NOT TO SCALE

SPACING BETWEEN CHECK DAMS	
SLOPE (FT/FT)	LENGTH (FT)
0.020	75
0.030	50
0.040	37
0.050	30
0.060	19
0.100	15
0.120	13
0.150	10



DRAINAGE WAY CROSS-SECTION



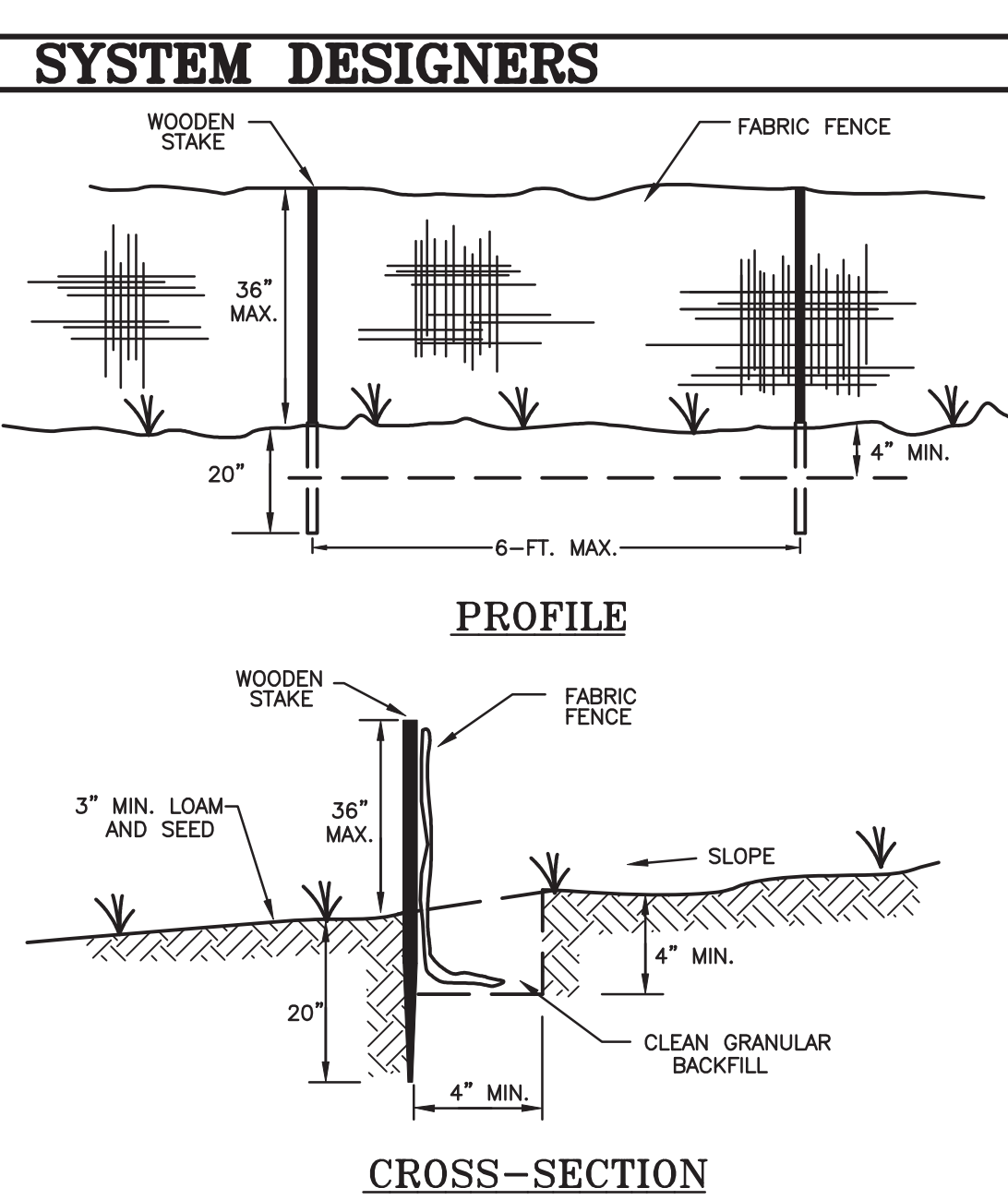
SPACING BETWEEN STONE CHECK DAMS

- CONSTRUCTION SPECIFICATIONS:**
- STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.
 - CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION, AIR AND WATER POLLUTION WILL BE MINIMIZED.
 - STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED.
- MAINTENANCE NOTES:**
- TEMPORARY GRADE STABILIZATION STRUCTURES SHALL BE INSPECTED AFTER EACH STORM AND DAILY DURING PROLONGED STORM EVENTS. ANY DAMAGE TO THE STRUCTURES SHALL BE REPAIRED IMMEDIATELY.
 - PARTICULAR ATTENTION SHALL BE GIVEN TO END RUN AND EROSION AT THE DOWNSTREAM TOE OF THE STRUCTURE.
 - WHEN REMOVING THE STRUCTURES, THE DISTURBED AREAS SHALL BE BROUGHT UP TO EXISTING CHANNEL GRADE AND THE AREAS PREPARED, SEEDED AND MULCHED.
 - SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURES WHEN IT REACHES 1/2 THE ORIGINAL HEIGHT OF THE STRUCTURE.

STONE CHECK DAM INSTALLATION DETAIL

NOT TO SCALE

FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.



CROSS-SECTION

- MAINTENANCE REQUIREMENTS:**
- FENCES SHALL BE INSPECTED AND MAINTAINED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALLS.
 - SEDIMENT DEPOSITION SHALL BE REMOVED AT A MINIMUM, WHEN DEPOSITION ACCUMULATES TO ONE-HALF THE HEIGHT OF THE FENCE, AND MOVED TO AN APPROPRIATE LOCATION SO THE SEDIMENT IS NOT READILY TRANSPORTED BACK TOWARD THE SILT FENCE.
 - SILT FENCES SHALL BE REPAIRED IMMEDIATELY IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM.
 - SHALL THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
 - ANY SEDIMENT DEPOSITS REMAINING AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE PREPARED AND SEEDED.
 - IF THERE IS EVIDENCE OF END FLOW ON PROPERLY INSTALLED BARRIERS, EXTEND BARRIERS UPHILL OR CONSIDER REPLACING THEM WITH OTHER MEASURES, SUCH AS TEMPORARY DIVERSIONS AND SEDIMENT TRAPS.
 - SILT FENCES HAVE A USEFUL LIFE OF ONE SEASON, ON LONGER CONSTRUCTION PROJECTS, SILT FENCE SHALL BE REPAIRED PERIODICALLY AS REQUIRED TO MAINTAIN EFFECTIVENESS.
- CONSTRUCTION SPECIFICATIONS:**
- FENCES SHALL BE USED IN AREAS WHERE EROSION WILL OCCUR ONLY IN THE FORM OF SHEET EROSION AND THERE IS NO CONCENTRATION OF WATER IN A CHANNEL OR DRAINAGE WAY ABOVE THE FENCE. SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.
 - THE MAXIMUM CONTRIBUTING DRAINAGE AREA ABOVE THE FENCE SHALL BE LESS THAN 1 ACRE PER 100 LINEAR FEET OF FENCE.
 - THE MAXIMUM LENGTH OF SLOPE ABOVE THE FENCE SHALL BE 100 FEET.
 - THE MAXIMUM SLOPE ABOVE THE FENCE SHALL BE 2:1.
 - FENCES SHALL BE INSTALLED FOLLOWING THE CONTOUR OF THE LAND AS CLOSELY AS POSSIBLE, AND
 - THE ENDS OF THE FENCE SHALL BE FLARED UPSLOPE.
 - THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 4 INCHES IN DEPTH AND INCHES IN WIDTH IN A TRENCH EXCAVATED INTO THE GROUND, OR IF SITE CONDITIONS INCLUDE FROZEN GROUND, LEDGE, OR THE PRESENCE OF HEAVY ROOTS, THE BASE OF THE FABRIC SHALL BE EMBEDDED WITH A MINIMUM THICKNESS OF 8 INCHES OF 3/4-INCH STONE.
 - THE SOIL SHALL BE COMPACTED OVER THE EMBEDDED FABRIC.
 - SUPPORT POSTS SHALL BE SIZED AND ANCHORED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS WITH MAXIMUM POST SPACING OF 6 FEET.
 - ADJOINING SECTIONS OF THE FENCE SHALL BE OVERLAPPED BY A MINIMUM OF 6 INCHES (24 INCHES IS PREFERRED), FOLDED AND STAPLED TO A SUPPORT POST. IF METAL POSTS ARE USED, FABRIC SHALL BE WIRE-TIED DIRECTLY TO THE POSTS WITH THREE DIAGONAL TIES.
 - SILT FENCING SHALL NOT BE STAPLED OR NAILED TO TREES.
 - THE FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER.
 - THE FILTER FABRIC SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 DEGREES FAHRENHEIT TO 120 DEGREES FAHRENHEIT.
 - POSTS FOR SILT FENCES SHALL BE EITHER 4-INCH DIAMETER WOOD OR 1.33 POUNDS PER LINEAR FOOT STEEL WITH A MINIMUM LENGTH OF 5 FEET. STEEL POSTS SHALL HAVE PROJECTIONS FOR FASTENING WIRE TO THEM. POSTS SHALL BE PLACED ON THE DOWN SLOPE SIDE OF THE FABRIC.
 - THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES AS HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.
 - THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPICED TOGETHER ONLY AT SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND SECURELY SEALED.
 - A MANUFACTURED SILT FENCE SYSTEM WITH INTEGRAL POSTS MAY BE USED.
 - POST SPACING SHALL NOT EXCEED 6 FEET.
 - A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 4 INCHES DEEP ALONG THE LINE OF POSTS AND UP GRADIENT FROM THE BARRIER.
 - THE STANDARD STRENGTH OF FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE POST, AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
 - THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
 - SILT FENCE MAY BE INSTALLED BY "SLICING" USING MECHANICAL EQUIPMENT SPECIFICALLY DESIGNED FOR THIS PROCEDURE. THE SLICING METHOD USES AN IMPLEMENT TOWED BEHIND A TRACTOR TO "PLOW" OR SLICE THE SILT FENCE MATERIAL INTO THE SOIL. THE SLICING METHOD MINIMALLY DISRUPTS THE SOIL UPWARD AND SLIGHTLY DISPLACES THE SOIL, MAINTAINING THE SOIL'S PROFILE AND CREATING AN OPTIMAL CONDITION FOR SUBSEQUENT MECHANICAL COMPACTION.
 - SILT FENCES SHALL BE INSTALLED WITH "SMILES" OR "J-HOOKS" TO REDUCE THE DRAINAGE AREA THAT ANY SEGMENT WILL IMPOUND.
 - AT THE ENDS OF THE FENCE SHALL BE TURNED UPHILL.
 - SILT FENCES PLACED AT THE TOE OF A SLOPE SHALL BE SET AT LEAST 6 FEET FROM THE TOE M ALLOW SPACE FOR SHALLOW PONDING AND TO ALLOW MAINTENANCE ACCESS WITHOUT DISTURBING THE SLOPE.
 - SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.

SILTATION CONTROL FENCE DETAIL

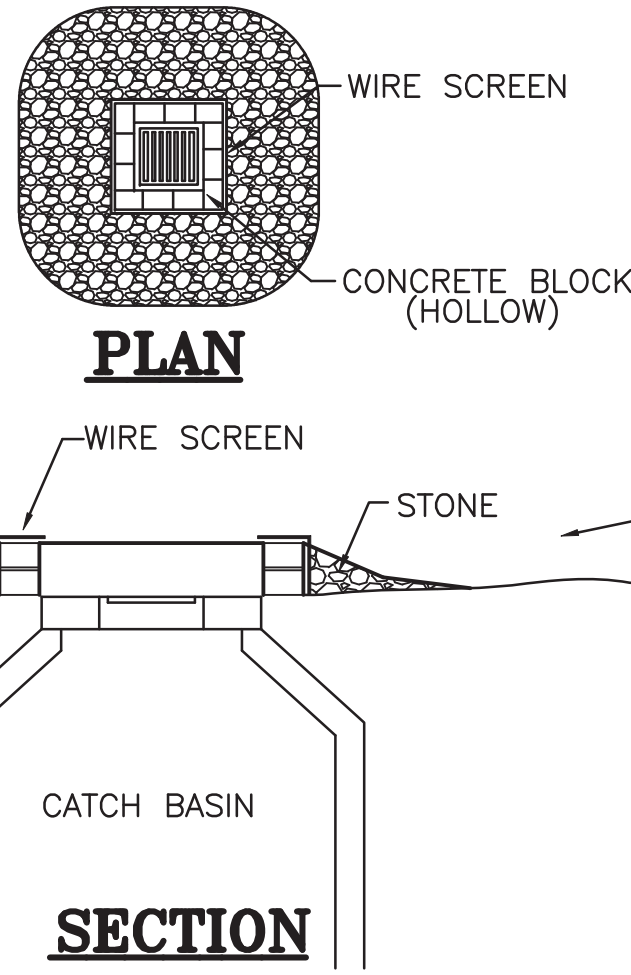
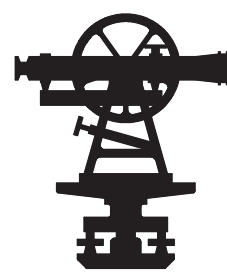
NOT TO SCALE

TEMPORARY VEGETATION SEEDING RECOMMENDATIONS

SPECIES	PER ACRE BUSHELS (BU) OR POUNDS (LBS.)	PER 1,000-SF	REMARKS
WINTER RYE	2.5 BU OR 112 LBS.	2.5 LBS.	BEST FOR FALL SEEDING. SEED FROM AUGUST 15 TO SEPTEMBER 15 FOR BEST COVER. SEED TO A DEPTH OF 1 INCH.
OATS	2.5 BU OR 80 LBS.	2.0 LBS.	BEST FOR SPRING SEEDING. SEED NO LATER THAN MAY 15 FOR SUMMER PROTECTION. SEED TO A DEPTH OF 1 INCH.
ANNUAL RYE GRASS	40 LBS.	1.0 LB.	GROWS QUICKLY, BUT IS OF SHORT DURATION. USE WHERE APPEARANCES ARE IMPORTANT. SEED EARLY SPRING AND/OR BETWEEN AUGUST 15 AND SEPTEMBER 15. COVER THE SEED WITH NO MORE THAN 0.25 INCH OF SOIL.
PERENNIAL RYE GRASS	30 LBS.	0.7 LBS.	BEST FOR FALL SEEDING. SEED FROM AUGUST 15 TO SEPTEMBER 15 FOR BEST COVER. SEED TO A DEPTH OF 1 INCH.

SOURCES:

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

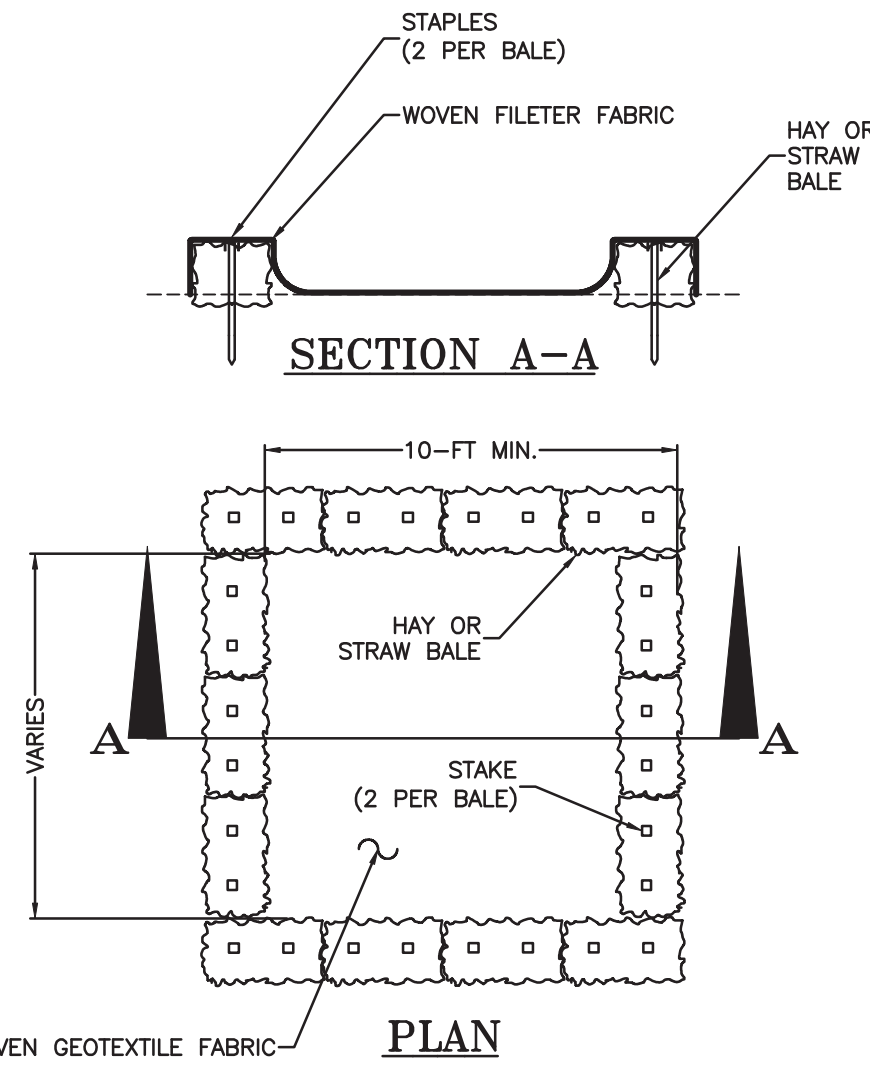


BLOCK AND GRAVEL DROP INLET SEDIMENT FILTER

NOT TO SCALE

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

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



- CONSTRUCTION SPECIFICATIONS:**
- THE DE-WATERING AREA WILL BE CONSTRUCTED BEFORE ANY PUMPING OCCURS AT THE SITE.
 - TEMPORARY DE-WATERING AREA TYPE, ABOVE GRADE, WILL BE CONSTRUCTED AS SHOWN ABOVE, WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 20-FT.
 - THE DE-WATERING AREA WILL BE LOCATED AS SHOWN OR AS DIRECTED BY THE ENVIRONMENTAL CONSULTANT.
 - GEOTEXTILE LINING WILL BE FREE OF TEARS, OR OTHER DEFECTS THAT COMPROMISE THE DURABILITY OF THE MATERIAL.
- MAINTENANCE NOTES:**
- THE DE-WATERING AREAS(S) WILL BE INSPECTED DAILY TO ENSURE THAT ALL SEDIMENT IS BEING DISCHARGED INTO THE HAYBALE DAM AREA, NO TEARS ARE PRESENT AND TO IDENTIFY WHEN SEDIMENT NEED TO BE REMOVED.
 - THE DE-WATERING AREAS(S) WILL BE CLEANED OUT ONCE THE AREA IS FILLED TO 75 PERCENT OF ITS HOLDING CAPACITY.
 - ONCE THE HOLDING CAPACITY HAS BEEN REACHED THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATION.
 - THE GEOTEXTILE LINING WILL BE REPLACED IF TEARS OCCUR DURING REMOVAL OF SEDIMENT FROM THE DE-WATERING AREA.

DE-WATERING AREA DETAIL

NOT TO SCALE

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.

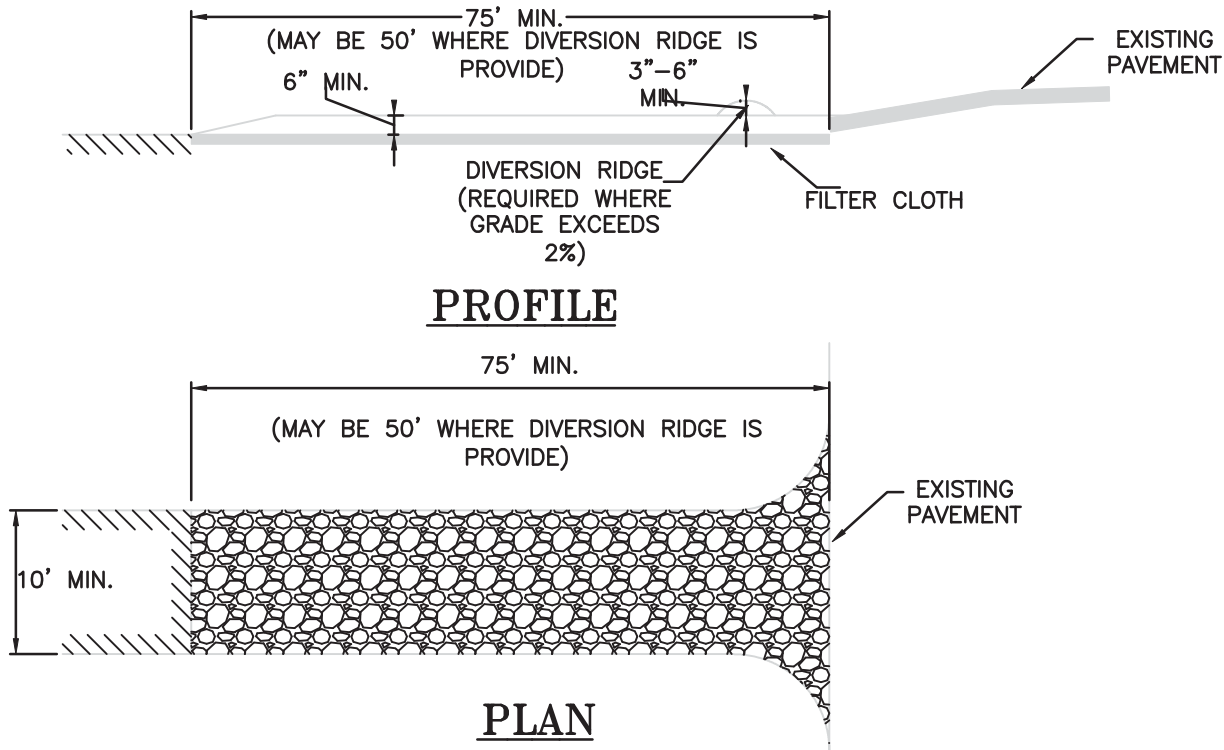


TEMPORARY VEGETATION:

- 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 SHALL BE DIVERTED FROM THE SEEDBED AREA.
 - ON SLOPES 4:1 OR STEEPER, THE FINAL PREPARATION SHALL INCLUDE CREATING HORIZONTAL GROOVES PERPENDICULAR TO THE DIRECTION OF THE SLOPE TO CATCH SEED AND REDUCE RUNOFF.
- SEEDBED PREPARATION:**
- STONES AND TRASH SHALL 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 SHALL BE APPLIED DURING THE GROWING SEASON.
 - APPLY LIME AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. FERTILIZER SHALL BE RESTRICTED TO LIME, WOOD ASH OR LOW PHOSPHATE AND SLOW RELEASE NITROGEN VARIETIES, UNLESS A SOIL TEST WARRANTS OTHERWISE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL FERTILIZER AND LIMESTONE MAY BE APPLIED AT THE FOLLOWING RATES:
- LIMESTONE APPLICATION RATE = 3 TONS/ACRE (138 LB./1,000-SF)*
*EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE
- FERTILIZER APPLICATION RATE = 870 LB./ACRE (20 LB./1,000-SF)*
*LOW PHOSPHATE FERTILIZER (6-0-4) OR EQUIVALENT

- SEEDING:**
- APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL CULTIPACKER TYPE SEEDER OR HYDRO SEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM 1/4 TO 1/2 INCH.
 - HYDROSEEDING OF MULCH MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
 - TEMPORARY SEED SHALL TYPICALLY OCCUR PRIOR TO SEPTEMBER 15.
 - AREAS SEEDING BETWEEN MAY 15 AND AUGUST 15 SHALL BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE DESCRIBED IN THE NHSSM, VOL. 3.
 - VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA SHALL BE ACHIEVED PRIOR TO OCTOBER 15. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT OTHER TEMPORARY STABILIZATION MEASURES FOR OVER WINTER PROTECTION.

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



TEMPORARY CONSTRUCTION EXIT

NOT TO SCALE

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

- CONSTRUCTION SPECIFICATIONS:**
- THE MINIMUM STONE USED SHALL BE 3-INCH CRUSHED STONE.
 - THE MINIMUM LENGTH OF THE PAD SHALL BE 75 FEET, EXCEPT THAT THE MINIMUM LENGTH MAY BE REDUCED TO 50 FEET IF A 3-INCH TO 6-INCH BERM IS INSTALLED AT THE ENTRANCE OF THE PROJECT SITE.
 - THE PAD SHALL BE THE FULL WIDTH OF CONSTRUCTION ACCESS ROAD OR 10 FEET, WHICHEVER IS GREATER.
 - THE PAD SHALL SLOPE AWAY FROM THE EXISTING ROADWAY.
 - THE STONE SHALL BE AT LEAST 6 INCHES THICK.
 - THE GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE STONE PAD AND THE EARTH SURFACE BELOW THE PAD.
 - THE PAD SHALL BE MAINTAINED OR REPLACED WHEN MUD AND SOIL PARTICLES CLOG THE VOIDS IN THE STONE OR WHEN SUCH PARTICLES ARE TRACKED OFF-SITE.
 - NATURAL DRAINAGE THAT CROSSES THE LOCATION OF THE STONE PAD SHALL BE INTERCEPTED AND PIPED BENEATH THE PAD, AS NECESSARY, WITH SUITABLE OUTLET PROTECTION.

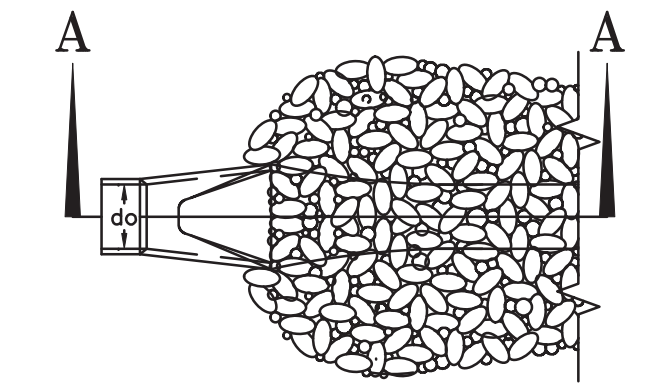
TEMPORARY EROSION AND SEDIMENTATION CONTROL

TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH

PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.

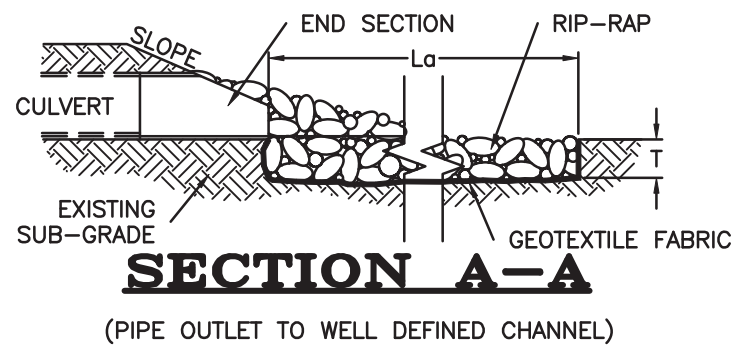


05/20/2016 - REVISED PLAN PER ROCHESTER TRG COMMENTS

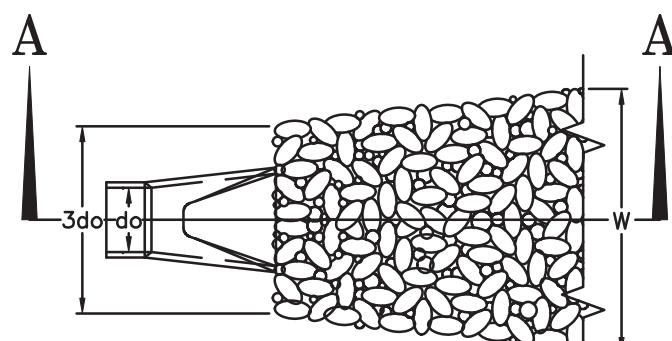


RIP-RAP GRADATION

d50 = 3"		
% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE (INCHES)	
100	5	TO 8
85	4	TO 5
50	3	TO 5
15	1	TO 2

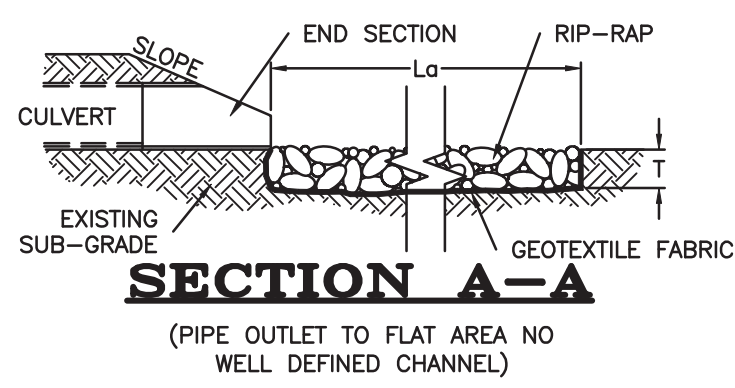


d50 = 4"		
% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE (INCHES)	
100	6	TO 8
85	5	TO 7
50	4	TO 6
15	1	TO 2



APRON DIMENSION TABLE

OUTLET PROT. #	PIPE OUTLET	W ₀	W	L ₀	T	d50
#1	36" CPP INTO FORABAY	9'	21.8'	32.2'	18"	6"
#2	30" CPP INTO INFILTRATION BASIN	7.5'	27.5'	20.0'	9"	3"
#3	24" CPP OUTLET	6'	21.85'	15.85'	9"	3"



- NOTES:
- ALL PIPE CULVERTS SHALL HAVE END SECTIONS OR HEADWALLS. END SECTION MATERIAL AND MANUFACTURER SHALL MATCH THAT OF THE PIPE CULVERT.
 - THE LARGEST RIP-RAP SIZE DETERMINED DURING HYDROLOGIC ANALYSIS HAS BEEN USED FOR ALL OUTLETS FOR ECONOMY AND SIMPLICITY.
 - APRON LENGTHS, WIDTHS AND THICKNESSES HAVE BEEN ROUNDED UP TO WHOLE NUMBERS FOR EASE OF CONSTRUCTION.
- CONSTRUCTION SPECIFICATIONS:
- PREPARE THE SUB-GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP-RAP TO THE GRADES SHOWN ON THE PLANS.
 - MINIMUM 6" SAND/GRAVEL BEDDING OR GEOTEXTILE FABRIC REQUIRED UNDER ALL ROCK RIP-RAP.
 - THE ROCK OR GRAVEL USED FOR FILTER OR RIP-RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
 - GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF ROCK RIP-RAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO (2) PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
 - STONE FOR THE RIP-RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.
 - RIP-RAP SIZE CHOSEN FOR THE WORST CASE OF ALL OUTLETS. ALL RIP-RAP USED FOR PIPE OUTLET PROTECTION WILL HAVE THE SAME GRADATION AND THICKNESS.

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

PIPE OUTLET PROTECTION DETAIL

PERMANENT VEGETATION SEEDING RECOMMENDATIONS

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

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

DUST CONTROL PRACTICES:

- APPLY DUST CONTROL MEASURES AS NECESSARY TO MAINTAIN CONTROL OF DUST ON SITE.
- WATER APPLICATION:
 - MOISTEN EXPOSED SOIL SURFACES PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.
 - Avoid EXCESSIVE APPLICATION OF WATER THAT WOULD RESULT IN MOBILIZING SEDIMENT AND SUBSEQUENT DEPOSITION IN NATURAL WATERBODIES.
- STONE APPLICATION:
 - COVER SURFACE WITH CRUSHED OR COARSE GRAVEL.
 - IN AREAS NEAR WATERWAYS USE ONLY CHEMICALLY STABILIZED OR WASHED AGGREGATE.
- REFER TO "NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 3, CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROLS, DECEMBER 2008" FOR OTHER ALLOWABLE DUST CONTROL PRACTICES (I.E. COMMERCIAL TACKIFIERS OR CHEMICAL TREATMENTS SUCH AS CALCIUM CHLORIDE, ETC.)

STOCKPILE PRACTICES:

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

- PROTECTION OF INACTIVE STOCKPILES:
- INACTIVE SOIL STOCKPILES SHALL BE COVERED WITH ANCHORED TARPS OR PROTECTED WITH SOIL STABILIZATION MEASURES (TEMPORARY SEED AND MULCH OR OTHER TEMPORARY STABILIZATION PRACTICE) AND TEMPORARY PERIMETER SEDIMENT BARRIERS (I.E. SILT FENCE, ETC.) AT ALL TIMES.
 - INACTIVE STOCKPILES OF CONCRETE RUBBLE, AGGREGATE MATERIALS, AND SIMILAR MATERIALS SHALL BE PROTECTED WITH TEMPORARY SEDIMENT PERIMETER BARRIERS (I.E. SILT FENCE, ETC.) AT ALL TIMES. IF THE MATERIALS ARE A SOURCE OF DUST, THEY SHALL ALSO BE COVERED.

- PROTECTION OF ACTIVE STOCKPILES:
- ALL STOCKPILES SHALL BE SURROUNDED WITH TEMPORARY LINEAR SEDIMENT BARRIERS (I.E. SILT FENCE, ETC.) PRIOR TO THE ONSET OF PRECIPITATION. PERIMETER BARRIERS SHALL BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIAL FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHALL BE INSPECTED AT THE END OF EACH WORKING DAY.
 - WHEN A STORM IS PREDICTED, STOCKPILES SHALL BE PROTECTED WITH AN ANCHORED PROTECTIVE COVERING.

PERMANENT VEGETATION:

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

- SEEDBED PREPARATION:
- 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 SHALL BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY AND SILT SOILS SHALL BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
 - 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 SHALL BE APPLIED DURING THE GROWING SEASON.
 - APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. FERTILIZER SHALL BE RESTRICTED TO LIME, WOOD ASH OR LOW PHOSPHATE AND SLOW RELEASE NITROGEN VARIETIES, UNLESS A SOIL TEST WARRANTS OTHERWISE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL FERTILIZER AND LIMESTONE MAY BE APPLIED AT THE FOLLOWING RATES:

LIMESTONE APPLICATION RATE = 3 TONS/ACRE (138 LB./1,000-SF)*
*EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE
FERTILIZER APPLICATION RATE = 870 LB./ACRE (20 LB./1,000-SF)*
*LOW PHOSPHATE FERTILIZER (6-0-4) OR EQUIVALENT

- 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 SHALL 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 SHALL BE COMPLETED 45 DAYS PRIOR TO FIRST KILLING FROST. WHEN CROWN VETCH IS SEEDING IN LATE SUMMER AT LEAST 35% OF THE SEED SHALL 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 LATE SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
 - AREAS SEEDING BETWEEN MAY 15 AND AUGUST 15 SHALL BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE DESCRIBED IN THE NHSSM, VOL. 3.
 - VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA SHALL BE ACHIEVED PRIOR TO OCTOBER 15. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT OTHER TEMPORARY STABILIZATION MEASURES FOR OVER WINTER PROTECTION.

- HYDROSEEDING:
- WHEN HYDROSEEDING (HYDRAULIC APPLICATION), PREPARE THE SEEDBED AS SPECIFIED ABOVE OR BY HAND. FAKING TO LOOSEN AND SMOOTH THE SOIL AND REMOVE SURFACE STONES LARGER THAN 2 INCHES IN DIAMETER.
 - SLOPES MUST BE NO STEEPER THAN 2:1 (2 FEET HORIZONTALLY BY 1 FOOT VERTICALLY).
 - LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF FIBER MULCH ON CRITICAL AREAS IS NOT RECOMMENDED (UNLESS IT IS USED TO HOLD STRAW OR HAY). BETTER PROTECTION IS GAINED BY USING STRAW MULCH AND HOLDING IT WITH ADHESIVE MATERIALS OR 500 POUNDS PER ACRE OF WOOD FIBER MULCH.
 - SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.

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

GENERAL CONSTRUCTION PHASING:

- STABILIZATION:

A SITE IS DEEMED STABILIZED WHEN IT IS IN A CONDITION IN WHICH THE SOIL ON SITE WILL NOT EXPERIENCE ACCELERATED OR UNNATURAL EROSION UNDER THE CONDITIONS OF A 10-YEAR STORM EVENT, SUCH AS BUT NOT LIMITED TO:

A) IN AREAS THAT WILL NOT BE PAVED:

 - A MINIMUM OF 85% VEGETATIVE COVER HAS BEEN ESTABLISHED;
 - A CERTIFIED COMPOST BLANKET HAS BEEN INSTALLED; OR
 - EROSION CONTROL BLANKETS HAVE BEEN INSTALLED.

A) IN AREAS TO BE PAVED:

 - BASE COURSE GRAVELS HAVE BEEN INSTALLED.
- TEMPORARY STABILIZATION:

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

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

THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREA ARE STABILIZED.
- ONLY DISTURB, CLEAR, OR GRADE AREAS NECESSARY FOR CONSTRUCTION.
 - FLAG OR OTHERWISE DELINEATE AREAS NOT TO BE DISTURBED.
 - EXCLUDE VEHICLES AND CONSTRUCTION EQUIPMENT FROM THESE AREAS TO PRESERVE NATURAL VEGETATION.
- ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED GRADING AND DRAINAGE PLAN DEPICTED ON SHEET C-3.
- ALL EROSION AND SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN DEPICTED ON SHEET C-4.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN THE AMOUNT NECESSARY TO COMPLETE FINISHED GRADING AND BE PROTECTED FROM EROSION.
- STOCKPILES, BORROW AREAS AND SPOILS SHALL BE STABILIZED AS DESCRIBED UNDER "SOIL STOCKPILE PRACTICES".
- SLOPES SHALL 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.
- AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND/OR OTHER OBJECTIONABLE MATERIALS.
- AREAS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3-INCHES PRIOR TO PLACEMENT OF TOPSOIL. TOPSOIL SHALL BE PLACED WITHOUT SIGNIFICANT COMPACTION TO PROVIDE A LOOSE BEDDING FOR PLACEMENT OF SEED.
- ALL FILLS SHALL BE COMPACTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS TO REDUCE EROSION, SLIP, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, SITE UTILITIES, CONDUITS AND OTHER FACILITIES, SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
- IN GENERAL, FILLS SHALL BE COMPACTED IN LAYERS RANGING FROM 6 TO 24 INCHES IN THICKNESS. THE CONTRACTOR SHALL REVIEW THE PROJECT GEOTECHNICAL REPORT AND/OR THE "PROJECT SPECIFIC PHASING NOTES" FOR SPECIFIC GUIDANCE.
- ANY AND ALL FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS (LARGER THAN 3/4 THE DEPTH OF THE LIFT BEING INSTALLED), LOGS, STUMPS, BUILDING DEBRIS, FROZEN MATERIAL AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY LIFTS.
- FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE (I.E. CLAY, SILT) MATERIALS ARE SUSCEPTIBLE TO ACCELERATED SETTLEMENT AND POTENTIAL ACCELERATED EROSION. WORK IN AREAS OF THESE MATERIALS SHALL BE PERFORMED UNDER THE DIRECTION OF A PROFESSIONAL ENGINEER.
- THE OUTER FACE OF THE FILL SLOPE SHALL BE ALLOWED TO STAY LOOSE, NOT ROLLED OR COMPACTED, OR BLADE SMOOTHED. A BULLDOZER MAY RUN UP AND DOWN THE FILL SLOPE SO THE DOZER TREADS (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 NHSSM, VOL.3.
- ROUGHEN THE SURFACE OF ALL SLOPES DURING THE CONSTRUCTION OPERATION TO RETAIN WATER, INCREASE INFILTRATION AND FACILITATE VEGETATION ESTABLISHMENT.
- USE SLOPE BREAKS, SUCH AS DIVERSIONS, BENCHES, OR CONTOUR FURROWS AS APPROPRIATE TO REDUCE THE LENGTH OF CUT-FILL SLOPES TO LIMIT SHEET AND RILL EROSION AND PREVENT GULLY EROSION. ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF CONSTRUCTION.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE EVALUATED BY A PROFESSIONAL ENGINEER (PREFERABLY THE DESIGN ENGINEER) TO DETERMINE IF THE PROPOSED DESIGN SHALL BE REVISED TO PROPERLY MANAGE THE CONDITION.
- STABILIZE ALL GRADED AREAS (AS ABOVE) WITH VEGETATION, CRUSHED STONE, COMPOST BLANKET, OR OTHER GROUND COVER AS SOON AS GRADING IS COMPLETE OR IF WORK IS INTERRUPTED FOR 21 WORKING DAYS OR MORE. USE MULCH OR OTHER APPROVED METHODS TO STABILIZE AREAS TEMPORARILY WHERE FINAL GRADING MUST BE DELAYED.
- ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.
- THE PROJECT SHALL BE CONSTRUCTED TO MEET ALL REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER ARG 3800 RELATIVE TO INVASIVE SPECIES.

ABOVE NOTES EXCERPTED, ADAPTED AND REFERENCED FROM "NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 3, CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROLS, DECEMBER 2008" (NHSSM, VOL. 3)

PROJECT SPECIFIC CONSTRUCTION PHASING:

- 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.
- INSTALL ALL TEMPORARY SEDIMENT CONTROL BARRIERS (I.E. SILT FENCE, EROSION CONTROL MIX, STONE CHECK DAMS, ETC.) AROUND THE OUTER PERIMETER OF THE CONSTRUCTION SITE AS DEPICTED ON SHEET C-2 PRIOR TO EARTH MOVING OPERATIONS.
- INSTALL ORANGE SNOW FENCE AROUND THE PERIMETER OF THE INFILTRATION BASINS AND THE FENCE SHALL REMAIN IN PLACE UNTIL CONSTRUCTION OF THE BASINS HAS STARTED.
- CLEAR, GRUB AND STRIP THE STUMPS, BRUSH AND OTHER ORGANIC WASTE SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
- INSTALL A TEMPORARY CONSTRUCTION EXIT AT THE LOCATION OF THE PROPOSED DRIVEWAY CONNECTION TO SHORTPORT DRIVE. MAINTAIN AS DIRECTED BY THE TEMPORARY CONSTRUCTION EXIT DETAIL.
- STOCKPILE STRIPPED TOPSOIL AND CUT MATERIAL TO BE REUSED ON SITE. IN AN APPROPRIATE LOCATION IN ACCORDANCE WITH THE "SOIL STOCKPILES PRACTICES". MAINTAIN THE STOCKPILES AS DIRECTED IN THE "SOIL STOCKPILE PRACTICES".
- PERFORM THE NECESSARY CUTS AND FILLS TO CONSTRUCT THE GRAVEL WETLANDS BASIN AS DEPICTED ON SHEET C-3, AND IN ACCORDANCE WITH THE GRAVEL WETLAND BASIN DETAILS SHOWN ON SHEET C-2.
- PERFORM THE NECESSARY CUTS AND FILLS TO CONSTRUCT THE INFILTRATION BASIN AS DEPICTED ON SHEET C-3 AND IN ACCORDANCE WITH THE INFILTRATION BASIN DETAILS SHOWN ON SHEET C-4.
- CONSTRUCT THE GRAVEL WETLANDS BASIN, SEDIMENT FOREBAY AND OUTLET PROTECTION. LOAM SEED AND MULCH THE SIDE SLOPES OF THE BASIN AS DIRECTED IN THE INFILTRATION BASIN DETAILS.
- ALL DITCHES/SWALES AND BASINS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- PERFORM THE NECESSARY CUTS AND FILLS TO SUBGRADE IN THE BUILDING AND PARKING LOT AREAS.
 - INSTALL REQUIRED FILLS IN MAXIMUM 8-INCH LIFTS AND COMPACT EACH LIFT TO 95% MAXIMUM PROCTOR DENSITY.
 - AS SUBGRADE IS ACHIEVED INSTALL REMAINING SEDIMENT CONTROL BARRIERS WITHIN THE SITE (I.E. ADDITIONAL SILT FENCE, CHECK DAMS AND SEDIMENT CONTROLS AND CATCH BASINS, ETC.)
- INSTALL ALL UTILITIES AND CLOSED DRAINAGE SYSTEM COMPONENTS (I.E. PIPE CULVERTS, CATCH BASINS AND REMAINING WATER MAIN) PER THE CORRESPONDING DETAILS AND AS SHOWN ON SHEET C-3 AND C-5, AS EACH STRUCTURE IS COMPLETED INSTALL THE CORRESPONDING.
- CONSTRUCT THE INFILTRATION BASINS AND OUTLET PROTECTION. LOAM SEED AND MULCH THE SIDE SLOPES OF THE BASIN AS DIRECTED IN THE INFILTRATION BASIN DETAILS AND TEMPORARY SEDIMENT CONTROL BARRIER DEPICTED ON SHEET C-7.
- ALL CUT AND FILL SLOPES AND LAWN AREAS NOT TO BE PAVED SHALL BE LOAMED AND SEEDING FOR PERMANENT VEGETATION AND STABILIZATION AS DESCRIBED UNDER THE "PERMANENT VEGETATION PRACTICES" WITHIN 3 DAYS OF ACHIEVING FINAL GRADE.
- INSTALL ALL GRAVEL BASE AND CRUSHED GRAVEL MATERIALS FOR THE PARKING AREA AS SPECIFIED IN THE CORRESPONDING DETAILS.
- THE PARKING AREAS SHALL BE STABILIZED (CONSTRUCTED TO GRAVEL BASE COURSE) WITHIN 3 DAYS OF ACHIEVING FINISHED SUBGRADE ELEVATIONS.
- INSTALL PAVEMENT SURFACES AS SOON AS POSSIBLE AFTER THE INSTALLATION OF THE GRAVEL BASE AND CRUSHED GRAVEL. IN ORDER TO LIMIT THE SOIL EROSION AND POLLUTION OF THE GRAVEL MATERIALS WITH ORGANIC MATERIALS. IN NO CASE SHALL AREAS TO BE PAVED BE LEFT UNPROTECTED THROUGH OUT THE WINTER MONTHS.
- ALL DISTURBED AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE. IN NO CASE SHALL ANY DISTURBED AREA BE LEFT UN-STABILIZED FOR LONGER THAN 21 DAYS. IF NECESSARY TEMPORARY STABILIZATION MEASURES AS DISCUSSED IN THE "GENERAL CONSTRUCTION PHASING NOTES" AND NHSSM, VOL. 3 SHOULD BE EMPLOYED.
- MAINTENANCE AND INSPECTION:
 - 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.
 - 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.
 - ALL DAMAGED TEMPORARY AND PERMANENT SEDIMENT, EROSION CONTROL AND STORMWATER MANAGEMENT PRACTICES SHOULD BE REPAIRED OR REPLACED IMMEDIATELY UPON NOTICE.
 - SEDIMENT SHALL BE DISPOSED OF PROPERLY EITHER ON SITE OR OFF SITE. PROJECT COMPLETION AND STABILIZATION.
 - 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.
 - ACCUMULATED SEDIMENT SHALL BE REMOVED FROM ALL ON SITE CATCH BASINS AND THE SEDIMENT FOREBAYS TO THE GRAVEL WETLANDS BASIN.

PERMANENT EROSION AND SEDIMENTATION CONTROL

TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.

MAY 2016

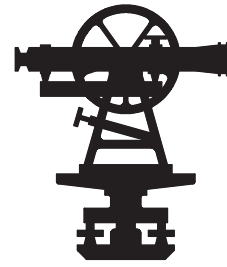
FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

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

NORWAY PLAINS ASSOCIATES, INC.

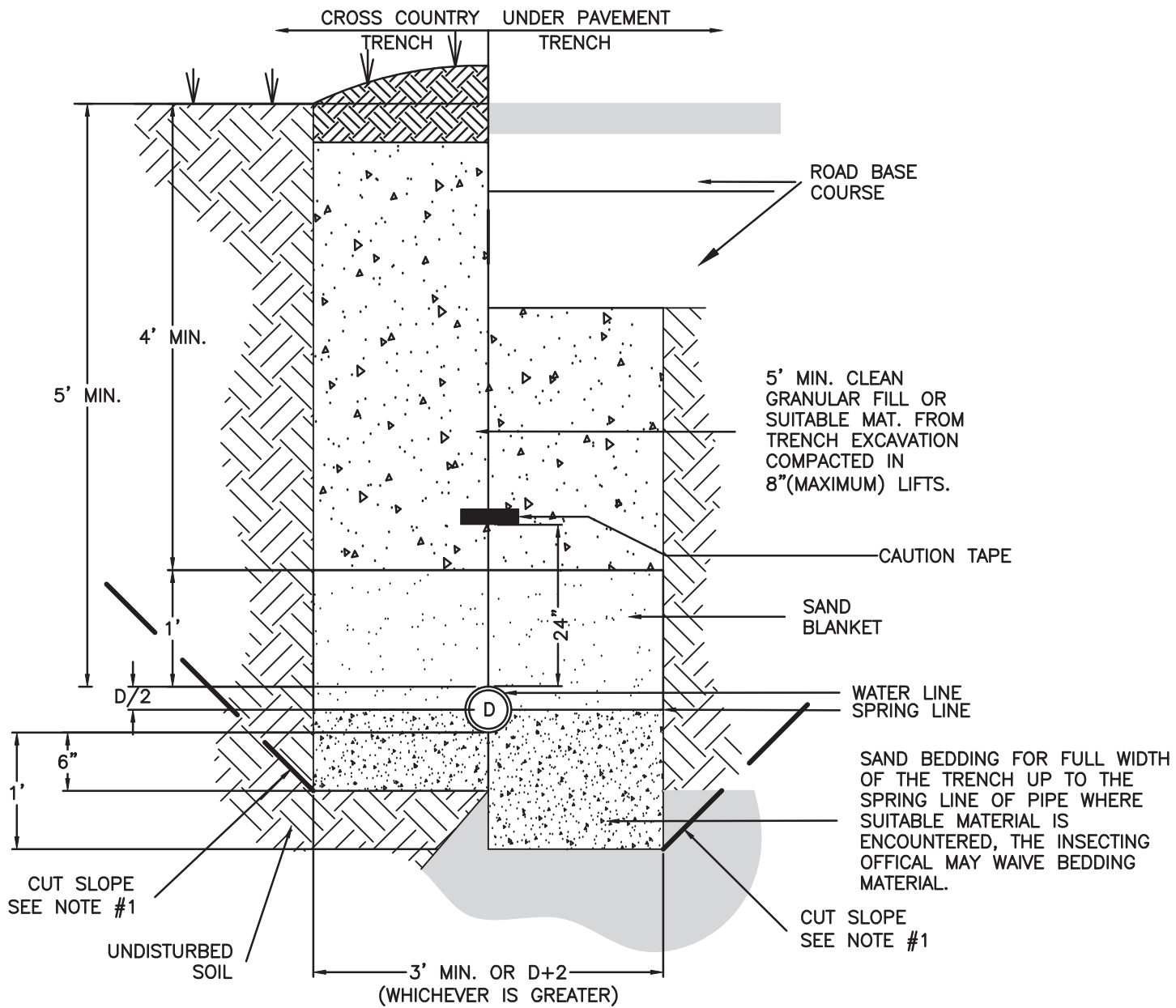
2 Continental Blvd., Rochester, N.H. 603-335-3948

C-11



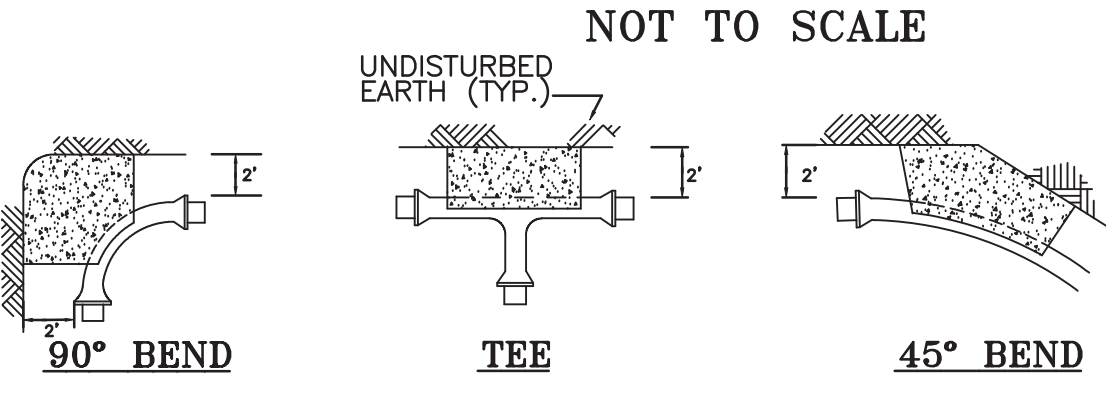
05/20/2016 - REVISED PLAN PER ROCHESTER TRG COMMENTS

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.



NOTES:
1. PIPES MAY BE INSTALLED BY EXCAVATING AN OPEN TRENCH WITH SIDE SLOPES OF 1:1 MAXIMUM TO A DEPTH OF 4'-FT. INSTALLATIONS DEEPER THAN 4'-FT REQUIRE THE USE OF A TRENCH BOX.
2. PIPE MATERIALS SHALL BE AS SPECIFIED ON THE DESIGN PLAN.
3. SAND BLANKET MAY BE OMITTED FOR REINFORCED CONCRETE PIPE.

WATER PIPE TRENCH INSTALLATION DETAIL



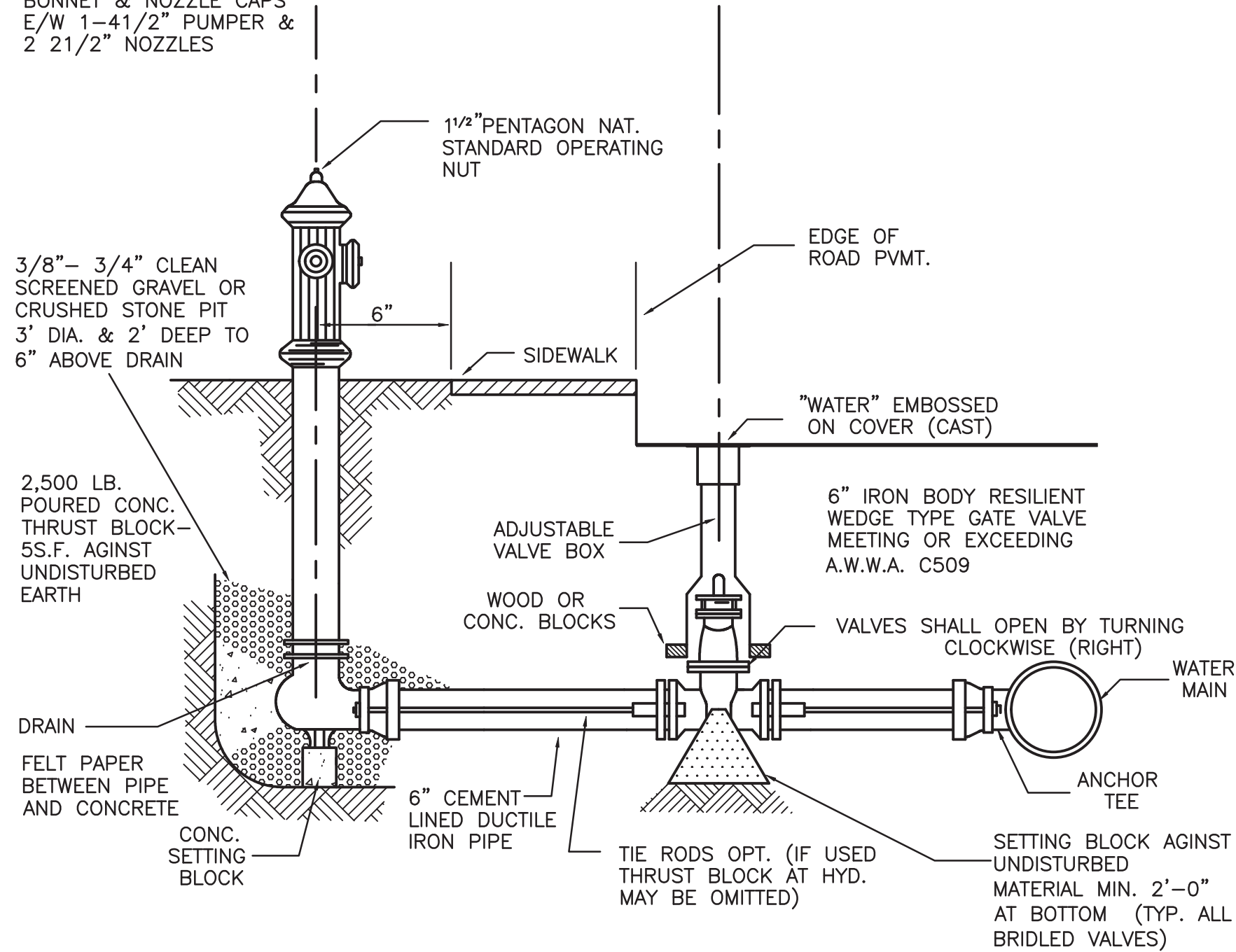
PIPE SIZE	90° BEND	TEE	PLUG	45° BEND	22 1/2" & SMALLER
6"	5	4	3	2	2
8"	10	8	6	6	3
12"	24	18	8	12	8

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

WATER MAIN THRUST BLOCK DETAILS
NOT TO SCALE

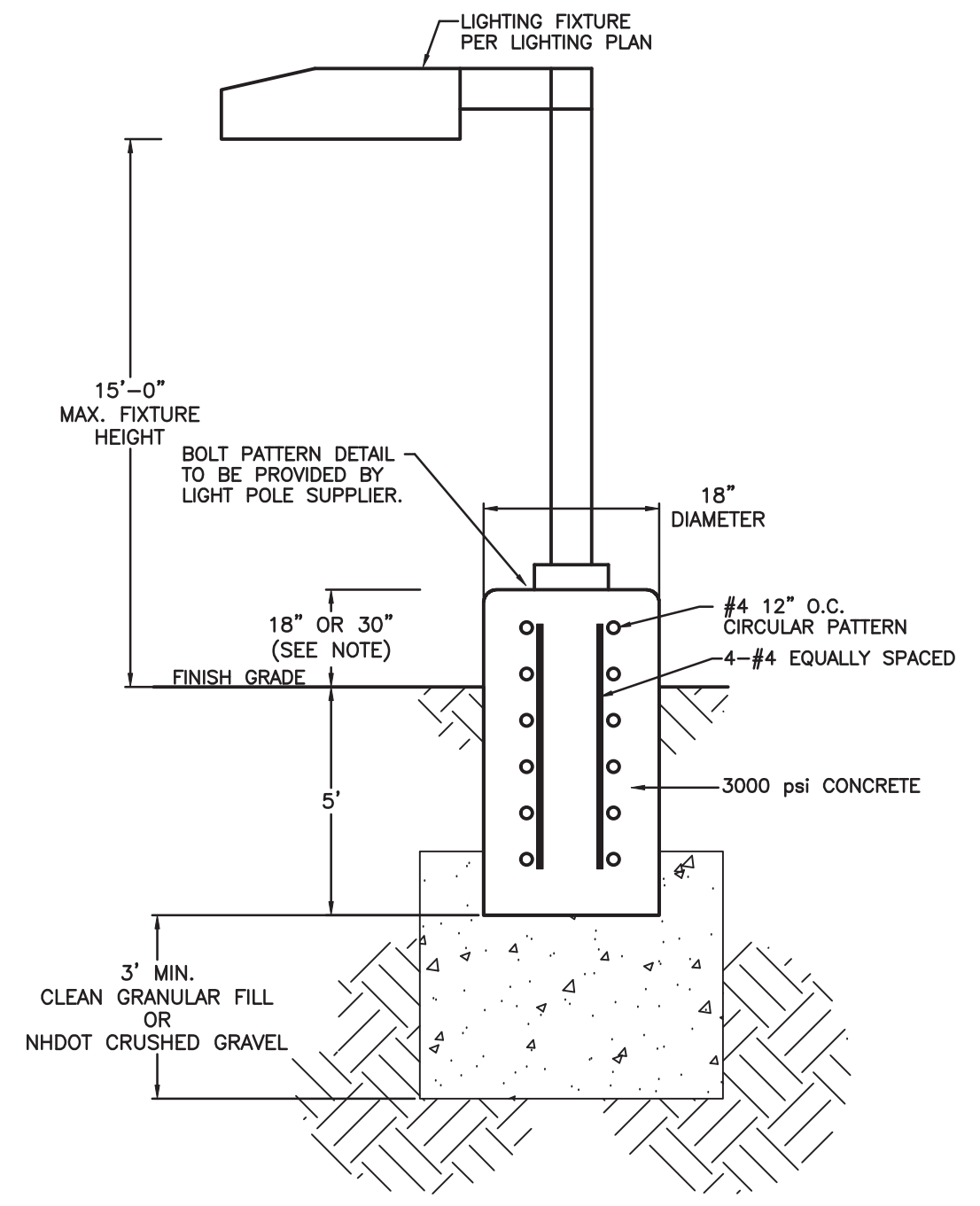
HYDRANTS ARE TO BE KENNEDY GUARDIAN MODEL #K81A W/6" MECHANICAL JOINT SHOE W/BREAK FLANGE TO BE PROVIDED W/DRAIN-OPENING CLOCKWISE (RIGHT). HYDRANTS SHALL MEET OR EXCEED ALL REQ. OF A.W.W.A. STANDARD SPEC. C502

HYDRANTS TO BE OSHA RED W/WHITE FLOURESCENT BONNET & NOZZLE CAPS E/W 1-41/2" PUMPER & 2 21/2" NOZZLES



TYPICAL HYDRANT SECTION

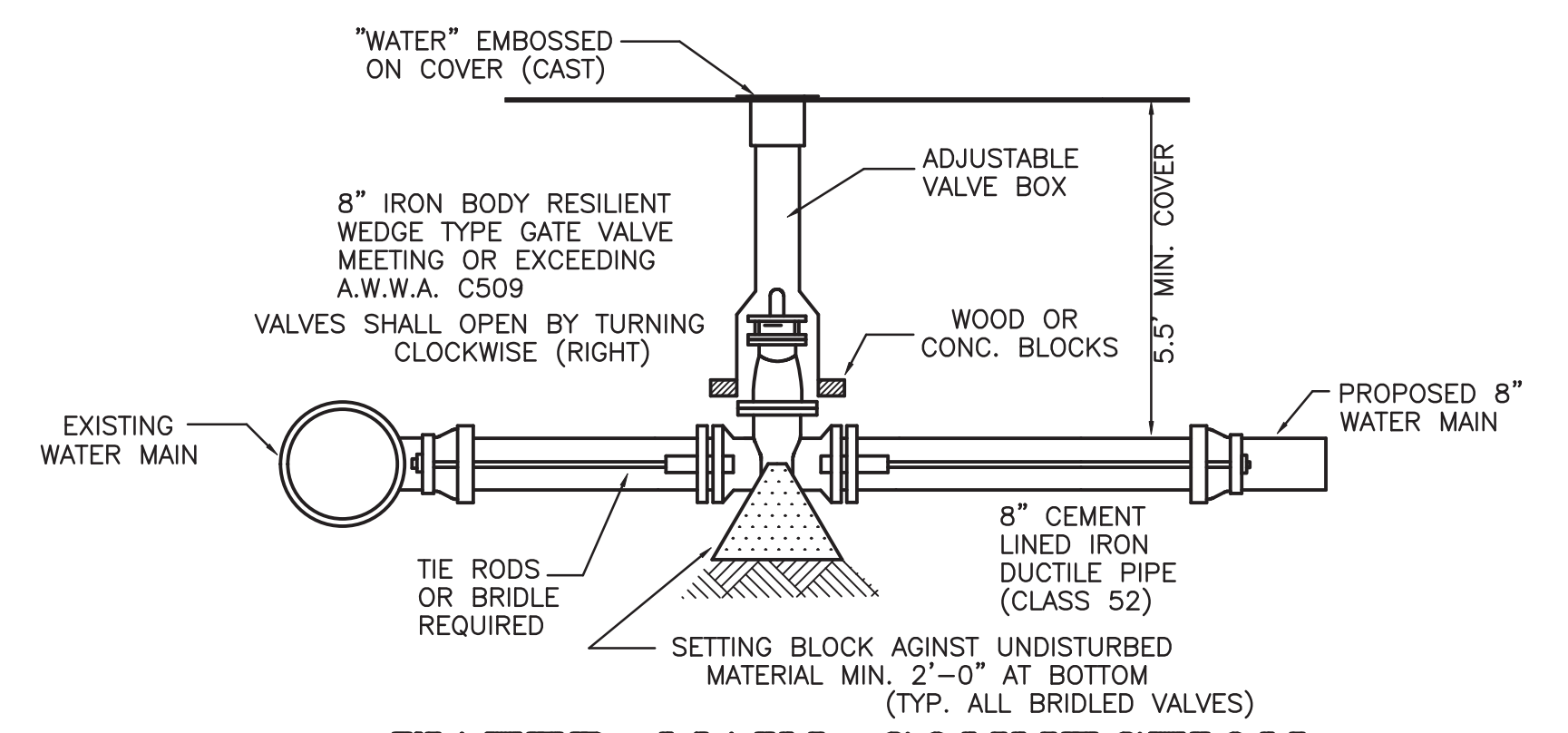
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POLE MOUNTED LIGHT DETAIL

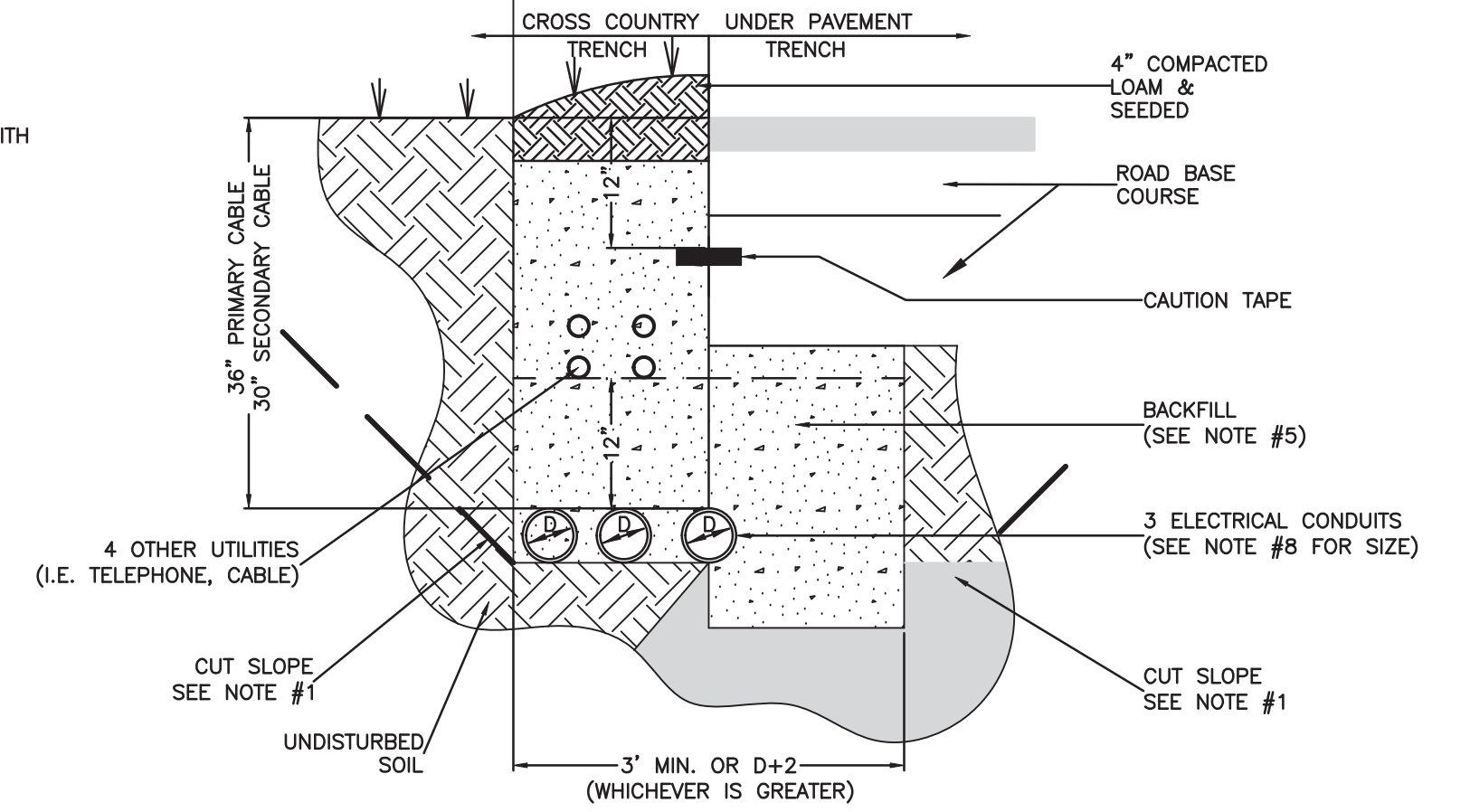
NOT TO SCALE

NOTE:
1. LIGHT POLE BASE SHALL BE 18" ABOVE FINISH GRADE FOR NON VEHICLE IMPACT AREAS AND 30" FOR VEHICLE IMPACT AREAS. THE LIGHT POLE BASES CAN BE PRECAST, WITH COORDINATION WITH THE LIGHTING FIXTURE MANUFACTURE FOR BOLT PATTERN.
2.



WATER MAIN CONNECTION

NOT TO SCALE



NOTES:
1. ALL NON-METALLIC CONDUIT AND FITTINGS SHALL BE ELECTRICAL GRADE, SCHEDULE 40 PVC, AND SHALL CONFORM TO THE APPLICABLE SECTIONS OF NEMA TC2-1990 AND BE UL LISTED. ONLY GRAY-COLORED CONDUIT WILL BE ACCEPTED. ANY PVC CONDUIT NOT HAVING THE PROPER NEMA AND UL MARKINGS WILL NOT BE ACCEPTED. ALL STEEL CONDUITS SHALL CONFORM TO ASTM A120 AND BE RIGID GALVANIZED STEEL. ALL PVC JOINTS MUST BE CEMENTED. STEEL FITTINGS SHALL BE SEALED WITH COMPOUND.
2. ALL 90 DEGREE SWEEPS WILL BE MADE USING RIGID GALVANIZED STEEL WITH A MINIMUM RADIUS OF 36 INCHES FOR PRIMARY CABLES AND 24 INCHES FOR SECONDARY CABLES. ALL STEEL SWEEPS WITHIN 18" OF THE SURFACE SHALL BE PROPERLY GROUNDED.
3. A 10-FOOT HORIZONTAL SECTION OF RIGID GALVANIZED STEEL CONDUIT WILL BE REQUIRED AT EACH SWEEP, UNLESS IN THE OPINION OF THE PSNH DESIGNER, THE SWEEP-PVC JOINT IS NOT SUBJECT TO FAILURE, DURING CABLE PULLING.
4. THE CONDUIT SHALL CROSS PAVED AREAS AT APPROXIMATELY 90 DEGREES.
5. BACKFILL MAY BE MADE WITH EXCAVATED MATERIAL OR COMPARABLE, UNLESS MATERIAL IS DEEMED UNSUITABLE BY PSNH. BACKFILL SHALL BE FREE OF FROZEN LUMPS, ROCKS, DEBRIS, AND RUBBISH. ORGANIC MATERIAL SHALL NOT BE USED AS BACKFILL. BACKFILL SHALL BE THOROUGHLY COMPACTED IN 6-INCH LAYERS.
6. A SUITABLE PULL STRING, CAPABLE OF 200 POUNDS OF PULL, MUST BE INSTALLED IN THE CONDUIT BEFORE PSNH IS NOTIFIED TO INSTALL CABLE. THE STRING SHOULD BE BLOWN INTO THE CONDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING TO THE CONDUIT.
7. ROUTING OF THE CONDUIT AND INSPECTION PRIOR TO BACKFILL WILL BE PROVIDED BY PSNH. INSTALLATION OF THE CONDUIT WILL BE DONE BY THE CONTRACTOR. THE PSNH SUPERVISOR MUST BE NOTIFIED 2 BUSINESS DAYS PRIOR TO BACKFILLING THE TRENCH. IN THE EVENT THAT A CABLE CANNOT BE SUCCESSFULLY PULLED THROUGH THE COMPLETED CONDUIT SYSTEM DUE TO A CONSTRUCTION ERROR, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND REPAIR THE INVOLVED CONDUIT. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL RESULTING EXPENSES.
8. NORMAL CONDUIT SIZES FOR PSNH ARE 3-INCH FOR SINGLE PHASE PRIMARY AND SECONDARY VOLTAGE CABLES, 4-INCH FOR THREE PHASE SECONDARY, AND 5-INCH FOR THREE PHASE PRIMARY.
9. ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND WHERE APPLICABLE THE NATIONAL ELECTRIC CODE.
10. CONDUIT MAY BE INSTALLED BY EXCAVATING AN OPEN TRENCH WITH SIDE SLOPES OF 1:1 MAXIMUM TO A DEPTH OF 4'-FT. INSTALLATIONS DEEPER THAN 4'-FT REQUIRE THE USE OF A TRENCH BOX.

ELECTRICAL & UNDERGROUND UTILITY TRENCH INSTALLATION DETAIL

NOT TO SCALE

UTILITY DETAILS
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH

PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.

AS SHOWN MAY 2016

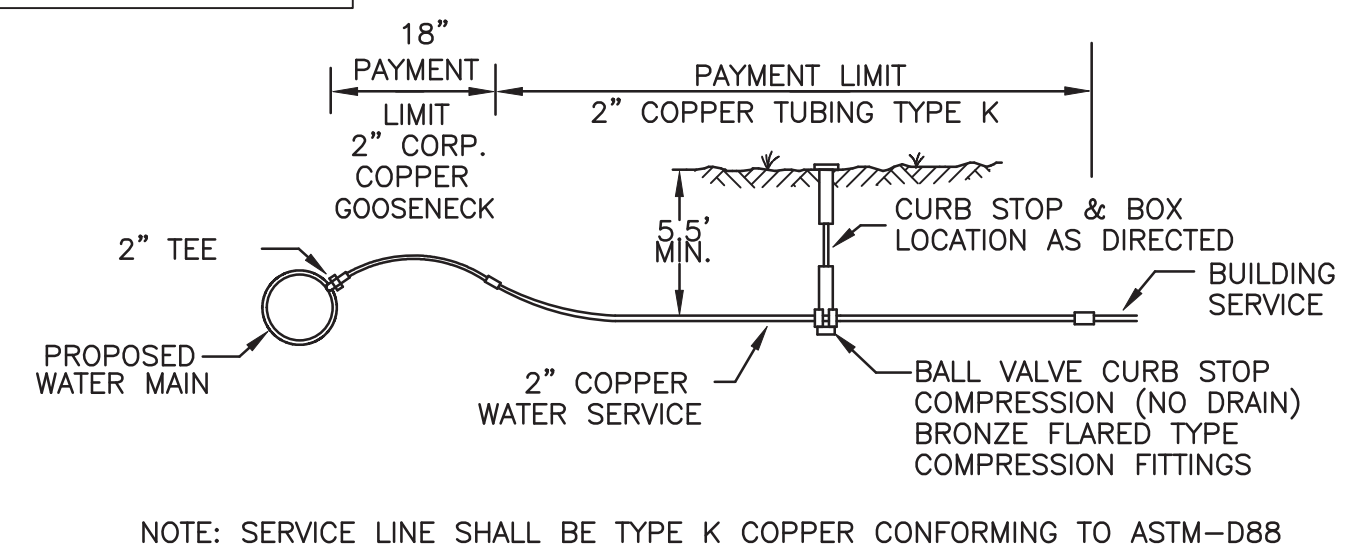
DUCTILE IRON MECHANICAL RETRAINED LENGTH (FEET)																				
PIPE DIAMETER (INCHES)	BENDS																DEAD END			
	11 1/4"				22 1/2"				45°				90°							
	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi	50 psi	100 psi	150 psi	200 psi	50 psi	100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

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

MECHANICAL RESTRAINED LENGTH SCHEDULE

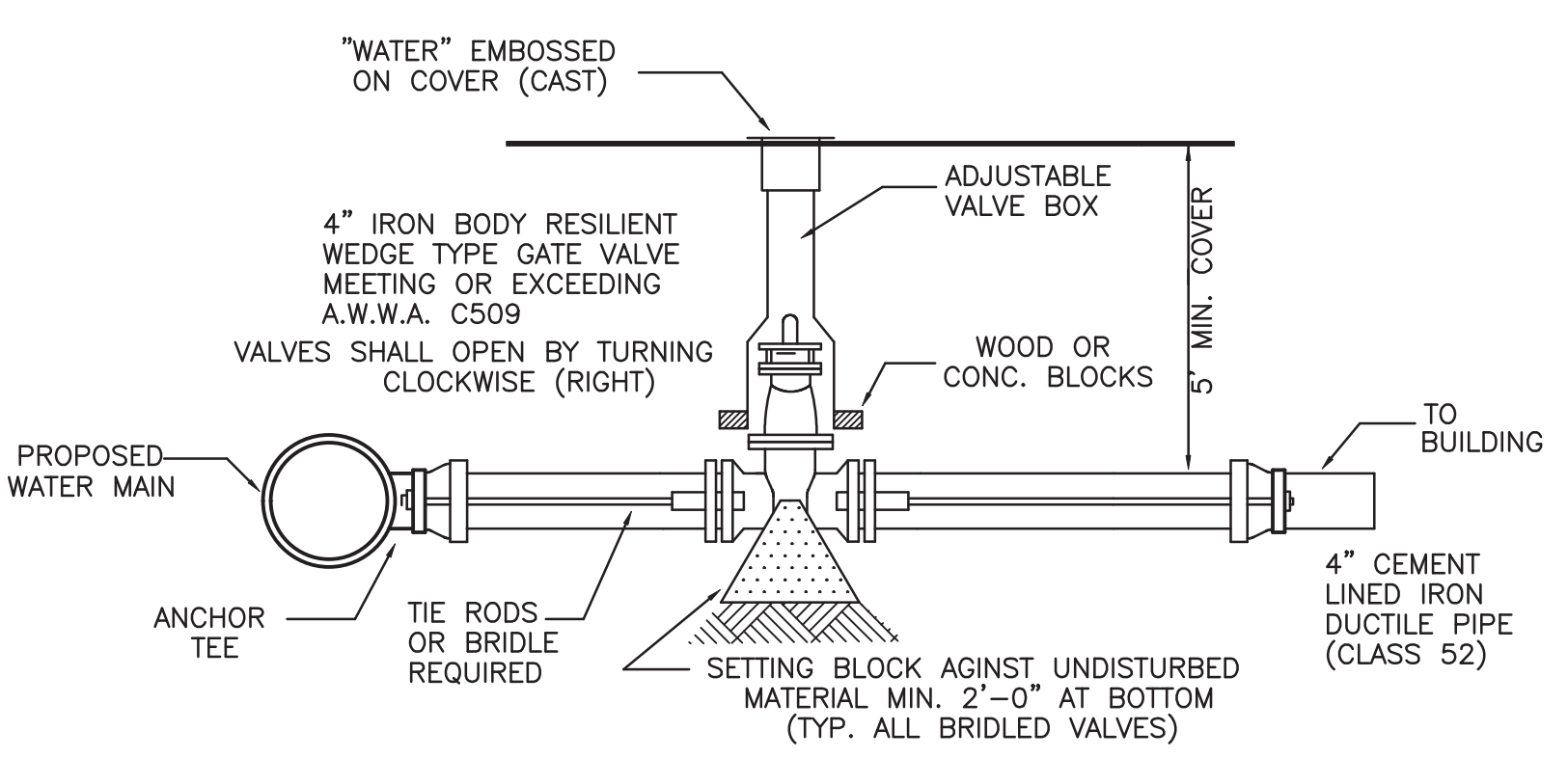
NOT TO SCALE

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



TYPICAL DOMESTIC SERVICE CONNECTION

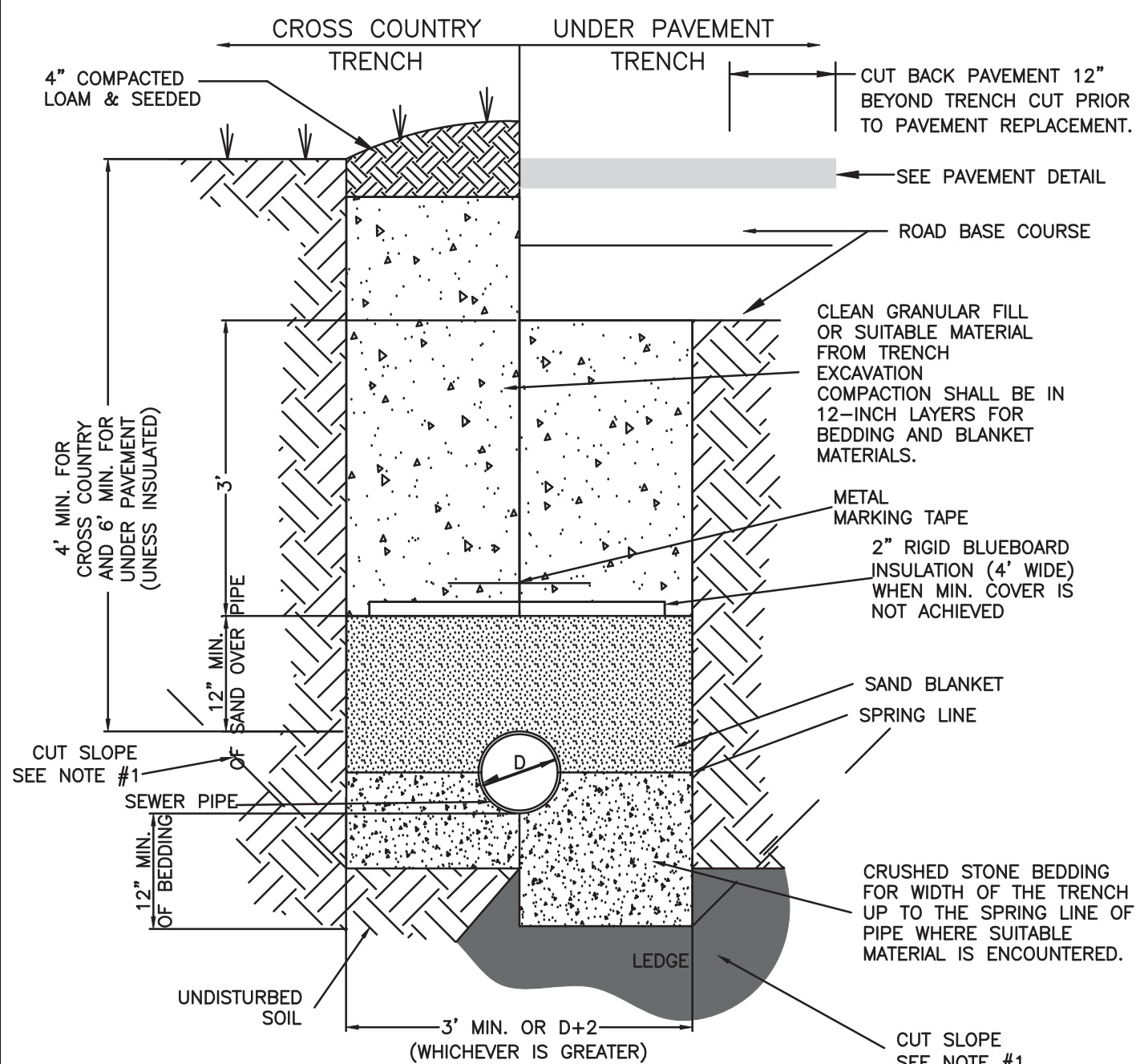
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TYPICAL FIRE SERVICE CONNECTION

NOT TO SCALE

FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.



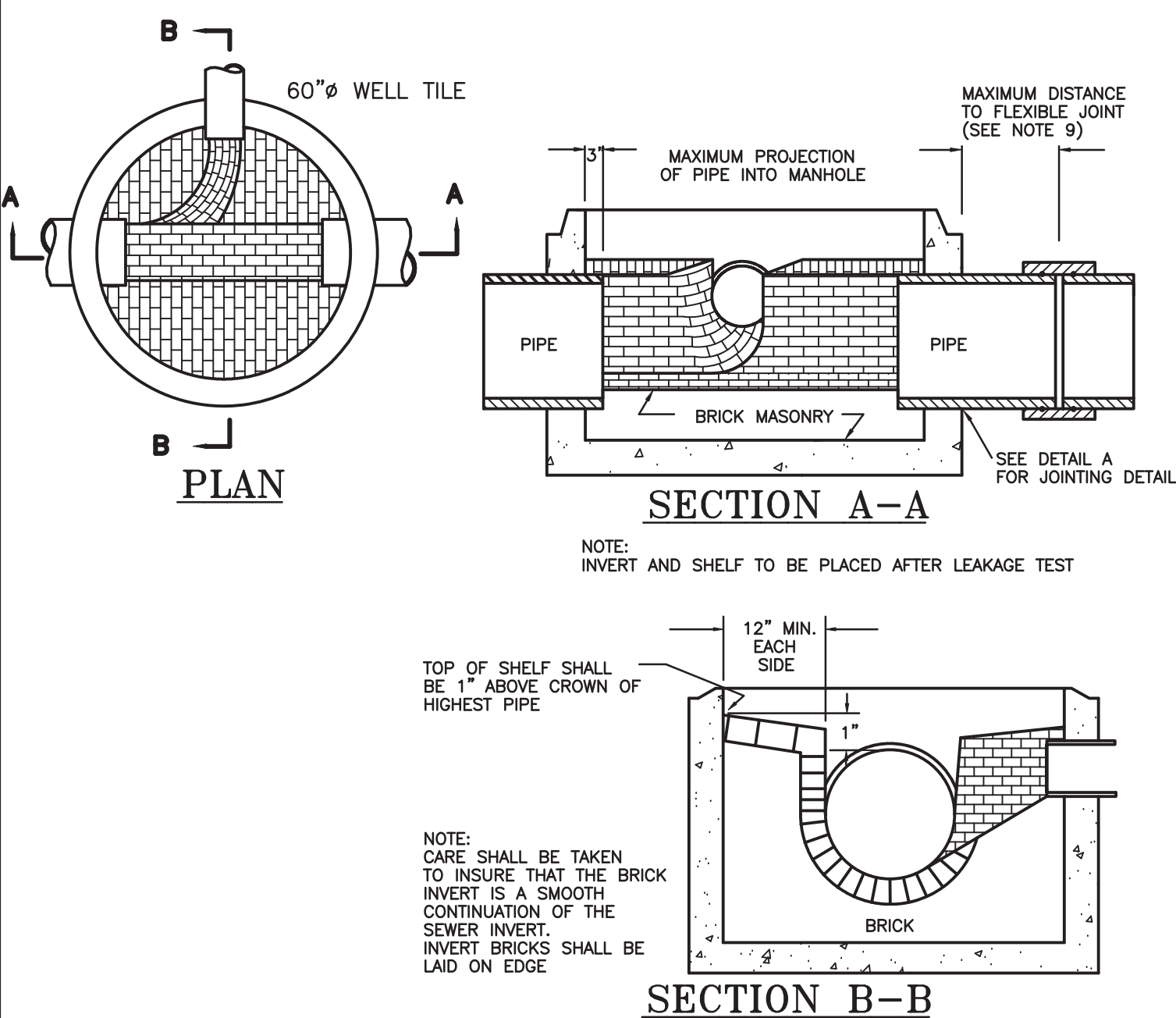
- NOTES:
1. PIPES MAY BE INSTALLED BY EXCAVATING AN OPEN TRENCH WITH SIDE SLOPES OF 1:1 MAXIMUM TO A DEPTH OF 4-FT. INSTALLATIONS DEEPER THAN 4-FT REQUIRE THE USE OF A TRENCH BOX.
 2. PIPE MATERIALS SHALL BE AS SPECIFIED ON THE DESIGN PLAN.
 3. SAND BLANKET MAY BE OMITTED FOR REINFORCED CONCRETE PIPE.
 4. WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER, THE SHEETING SHALL BE CUT OFF AND LEFT IN PLACE AT AN ELEVATION NOT LESS THAN ONE FOOT ABOVE THE TOP OF THE PIPE AND AT LEAST 3 FEET BELOW FINISHED GRADE.
 5. THE PIPE SAND BLANKET MATERIAL SHALL BE GRADED SAND FREE FROM ORGANIC MATERIALS, GRADED SUCH THAT 100 PERCENT PASSES A 1/2-INCH SIEVE AND A MAXIMUM OF 15 PERCENT PASSES A #200 SIEVE.
 6. TRENCH BACKFILL MATERIAL IN ROADWAY LOCATIONS SHALL BE NATURAL MATERIALS EXCAVATED FROM THE TRENCH DURING CONSTRUCTION, EXCLUDING:

- (1) DEBRIS;
- (2) PIECES OF PAVEMENT;
- (3) ORGANIC MATTER;
- (4) TOP SOIL;
- (5) WET OR SOFT MUCK;
- (6) PEAT OR CLAY;
- (7) EXCAVATED LEDGE MATERIAL;
- (8) ROCKS OVER 6 INCHES IN THE LARGEST DIMENSION; AND
- (9) ANY MATERIAL NOT APPROVED BY THE ENGINEER.

SEWER PIPE TRENCH INSTALLATION DETAIL

NOT TO SCALE

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.



INVERT DETAILS

NOT TO SCALE

FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

- NOTES:
1. IT IS INTENTION OF THE CITY OF ROCHESTER PUBLIC WORKS DEPARTMENT THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAK PROOF QUALITIES CONSIDERED NECESSARY BY THE PUBLIC WORKS DEPARTMENT FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFINEMENTS SHALL BE AS SHOWN ON THE DRAWING. MANHOLES MAY BE AN ASSEMBLY OF PRECAST SECTIONS, WITH OR WITHOUT STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH OR WITHOUT REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE, CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE. A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.
 2. BARRELS AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE, OR POURED IN PLACE REINFORCED CONCRETE. PRECAST CONCRETE BARRELS, SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478. ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDUBLY MARKED ON THE INSIDE WALL.
 3. VACUUM LEAKAGE TESTING (ASTM C1244) SHALL BE PERFORMED FOR ALL MANHOLES. LOW-PRESSURE AIR TESTING (ASTM F1417) AND DEFLECTION TESTING USING A 'GO/NO GO' MANDREL FOR ALL SANITARY SEWERS, IN ACCORDANCE WITH THE NHDES SEWER REGULATIONS AND THE CITY OF ROCHESTER DEPARTMENT OF PUBLIC WORKS REQUIREMENTS.
 4. INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK INVERT AND SHELVE, CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE. CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELVE SHALL CONSIST OF BRICK MASONRY. BRICK MASONRY CONFORM WITH ASTM C32. INVERTS AND SHELVES SHALL NOT BE INSTALLED UNTIL AFTER SUCCESSFUL TESTING IS COMPLETED.
 5. FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. A 3-INCH (MINIMUM HEIGHT) LETTER "SEWER" FOR SEWERS OR "DRAIN" FOR DRAINS SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.
 6. SEWER MANHOLE FRAME AND COVER: PARMEX 32" D.I. MANHOLE FRAME AND COVER SEWER - E.J. PRESCOTT PRODUCT# 62113-32-S. IMMEDIATELY FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON THE TOP OF THE MANHOLE OR SOME OTHER MEANS USED TO PREVENT ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN, OR ANIMALS. UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENT TO GRADE.
 7. BEDDING: MIN. 6" OF 3/4" CRUSHED STONE (12" IN LEDGE) FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33: 100% PASSING 1 INCH SCREEN 90-100% PASSING 3/4 INCH SCREEN 20-55% PASSING 3/8 INCH SCREEN 0-10% PASSING #4 SIEVE 0-5% PASSING #8 SIEVE
 8. WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, CRUSHED STONE MIN. 3/4" SHALL BE USED.
 9. CONCRETE FOR DROP SUPPORT SHALL CONFORM TO THE REQUIREMENT FOR CLASS A (3000#) CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS STANDARD SPECIFICATIONS AS FOLLOWS:
CEMENT: 6.0 BAGS PER CUBIC YARD
WATER: 5.75 GALLONS PER BAG CEMENT
MAXIMUM SIZE OF AGGREGATE: 1 INCH
 9. FLEXIBLE JOINT: A FLEXIBLE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES:
ROP & CI PIPE - ALL SIZES - 40'
AC & VC PIPE - UP THROUGH 12" DIA. - 18" SEE NOTE 9.A
AC & VC PIPE - LARGER THAN 12" DIA. - 36"
DI PIPE - NONE REQUIRED
PVC (ASTM 3034) - UP THROUGH 15" DIA. - NONE REQUIRED
PVC (ASTM F 679) - LARGER THAN 15" DIA. - 48" TO 60"
PVC (ASTM F 789) - ALL SIZES - 48" TO 60"
9.A. UNDER SEVERE CONDITIONS WHEN DIFFERENTIAL SETTING CANNOT BE CONTROLLED WITHIN NORMAL LIMITS, VARIATIONS IN THE STUB LENGTH MAY BE NECESSARY. OTHER PLASTIC PIPES SHALL BE REVIEWED ON A CASE BY CASE BASIS.
 10. SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS.
 11. OMITTED.
 12. MINIMUM SIZE PIPE FOR HOUSE SERVICE SHALL BE 4 INCHES.
 13. PIPE AND JOINT MATERIALS P.V.C. (POLY VINYL CHLORIDE) PIPE: ALL P.V.C. PIPE AND FITTINGS SHALL CONFORM TO THE MOST RECENT REQUIREMENTS OF ASTM SPECIFICATIONS FOR TYPE FPM POLY VINYL CHLORIDE (P.V.C.) SEWER PIPE AND FITTINGS. DESIGNATION D-3034 AND ASTM SPECIFICATIONS FOR SEWER PIPE JOINTS USING ELASTOMERIC SEALS, DESIGNATION D-3212. MANUFACTURER'S CERTIFICATE OF COMPLIANCE SHALL BE FURNISHED TO THE ENGINEER, PRIOR TO INSTALLATION METHODS OF SHIPMENT AND STORAGE ON SITE SHALL BE SUCH AS TO AVOID INJURY TO THE PIPE. DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB. MINIMUM "PIPE STIFFNESS" (F/Y) AT 1/2" DEFLECTION SHALL BE 45 PSI FOR SIZE WHEN TESTED IN ACCORDANCE WITH ASTM METHODS OF TEST D-2412, "EXTERNAL LOADING PROPERTIES OF PLASTIC PIPE BY PARALLEL - PLATE LOADING." ALL P.V.C. PIPE SHALL BE TYPE SDR-35 (A MEASURE OF THICKNESS AND RIGIDITY) AND SHALL HAVE ELASTOMERIC GASKET JOINTS. SOLVENT CEMENT JOINTS SHALL NOT BE ALLOWED. P.V.C. USED FOR FORCE MAINS SHALL CONFORM TO ASTM D-2241 AND D-1784 (CLASS 1254-B). A SAFETY FACTOR OF 2.5 SHALL BE USED FOR PRESSURE RATING DETERMINATION WITH A STANDARD DIMENSION RATIO (SDR) NO HIGHER THAN 26.
 14. DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.
 15. JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIAL USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE HOUSE CONNECTION, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.
 16. TEES OR WYES: WHERE A TEE OR WYE IS NOT AVAILABLE, IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE, FOLLOWING MANUFACTURER'S INSTRUCTIONS USING A BOLTED, CLAMPED, OR EPOXY-CEMENTED SADDLE TAPPED INTO A SMOOTHLY DRILLED OR SAWED HOLE IN THE SEWER. THE PRACTICE OF BREAKING AN OPENING WITH A SLEDGE HAMMER, STUFFING CLOTH OR OTHER SUCH MATERIAL AROUND THE JOINT, OR APPLYING MORTAR TO HOLD THE CONNECTION, AND ANY OTHER SIMILAR CRUDE PRACTICES OR INEPT OR HASTY IMPROVISATIONS WILL NOT BE PERMITTED. THE CONNECTION SHALL BE CONCRETE ENCASED AS SHOWN IN THE DETAIL UP TO AND INCLUDING 15" DIAMETER. DOES (NOT APPLY TO INSTALLATIONS WHERE TEES & WYES ARE USED).
 17. PIPE INSTALLATION: THE PIPE SHALL BE HANDLED, PLACED, AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE AS SPECIFIED IN NOTE 10. BEDDING AND RE-FILL FOR A DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH THE APPROPRIATE MECHANICAL DEVICES. THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE HOUSE FOUNDATION AT A GRADE OF NOT LESS THAN 1/8 INCH PER FOOT. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DRY THE TRENCH.
 18. TESTING: THE COMPLETED HOUSE SEWER SHALL BE SUBJECTED TO A LEAKAGE TEST IN ANY OF THE FOLLOWING MANNERS (PRIOR TO BACKFILLING):
A. AN OBSERVATION TEE SHALL BE INSTALLED AS SHOWN AND, WHEN READY FOR TESTING, AN INFLATABLE BLADDER OR PLUG SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE TEE AFTER INFLATION, WATER SHALL BE INTRODUCED INTO THE SYSTEM ABOVE THE PLUG TO A HEIGHT OF 5 FEET ABOVE THE LEVEL OF THE PLUG.
B. THE PIPE SHALL BE LEFT EXPOSED AND LIBERALLY HOSED WITH WATER, TO SIMULATE, AS NEARLY AS POSSIBLE, WET TRENCH CONDITIONS OR, IF THE TRENCH IS WET, THE GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. INSPECTIONS FOR LEAKS SHALL BE MADE THROUGH THE CLEANOUT WITH A FLASHLIGHT.
C. DRY FLUORESCENCE DYE SHALL BE SPRINKLED INTO THE TRENCH OVER THE PIPE. IF THE TRENCH IS DRY, THE PIPE SHALL BE LIBERALLY HOSED WITH WATER, OR IF THE TRENCH IS WET, GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. OBSERVATION FOR LEAKS SHALL BE MADE IN THE FIRST DOWNSTREAM MANHOLE. LEAKAGE OBSERVED IN ANY OF THE ABOVE ALTERNATE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG-UP IF NECESSARY AND RE-LAID SO AS TO ASSURE WATER-TIGHTNESS.
 19. ILLEGAL CONNECTION: NOTHING BUT SANITARY WASTE FLOW FROM THE HOUSE TOILETS, SINKS, LAUNDRY ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS OR SUMP PUMPS OR ANY OTHER SIMILAR CONNECTION CARRYING RAIN WATER, DRAINAGE, OR GROUND WATER, SHALL NOT BE PERMITTED.
 20. HOUSE AND WATER SERVICE SHOULD NOT BE LAID IN THE SAME TRENCH AS SEWER SERVICE, BUT WHEN NECESSARY, SHALL BE PLACED ABOVE AND TO THE SIDE OF THE HOUSE SEWER AS SHOWN.
 21. BEDDING: MIN. 3/4" CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM C33.6 100% PASSING 1 INCH SCREEN 90-100% PASSING 3/4 INCH SCREEN 20-55% PASSING 3/8 INCH SCREEN 0-10% PASSING #4 SIEVE 0-5% PASSING #8 SIEVE
 22. WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, MIN. 3/4" CRUSHED STONE SHALL BE USED.
 23. CHIMNEYS: IF VERTICAL DROP INTO SEWER IS GREATER THAN 4', A CHIMNEY SHALL BE CONSTRUCTED FOR THE HOUSE CONNECTION. 25' - ALL DRAINAGE AND SEWER STRUCTURES INCLUDING FRAMES AND GRATES SHALL BE H-20 LOADING. 26' - ALL SEWER CONSTRUCTION SHALL BE CONSTRUCTED TO NHDES AND THE CITY OF ROCHESTER STANDARDS & SPECIFICATIONS.
 27. HORIZONTAL JOINTS: BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF A TYPE APPROVED BY THE COMMISSION, WHICH TYPE SHALL, IN GENERAL, BE DESIGNED FOR WATER TIGHTNESS. NON-ELASTOMERIC OR MASTIC-LIKE GASKET PIPE TO MANHOLE JOINTS: SHALL BE ONLY AS APPROVED BY THE COMMISSION AND IN GENERAL, WILL DEPEND FOR WATER TIGHTNESS UPON EITHER AN APPROVED NON-SHRINKING MORTAR OR ELASTOMERIC SEALANT.
 28. FOR BITUMASTIC TYPE JOINTS: THE AMOUNT OF SEALANT SHALL BE SUFFICIENT TO FILL AT LEAST 75% OF THE JOINT CAVITY.
 29. APPROVED BITUMASTIC SEALANTS: RAM-NEK KENT SEAL NO.2 EZ.
 30. THE CONTRACTOR SHALL NOTIFY DIG-SAFE 1-888-344-7233 PRIOR TO CONSTRUCTION.

MORTAR USED IN MANHOLE CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING:

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

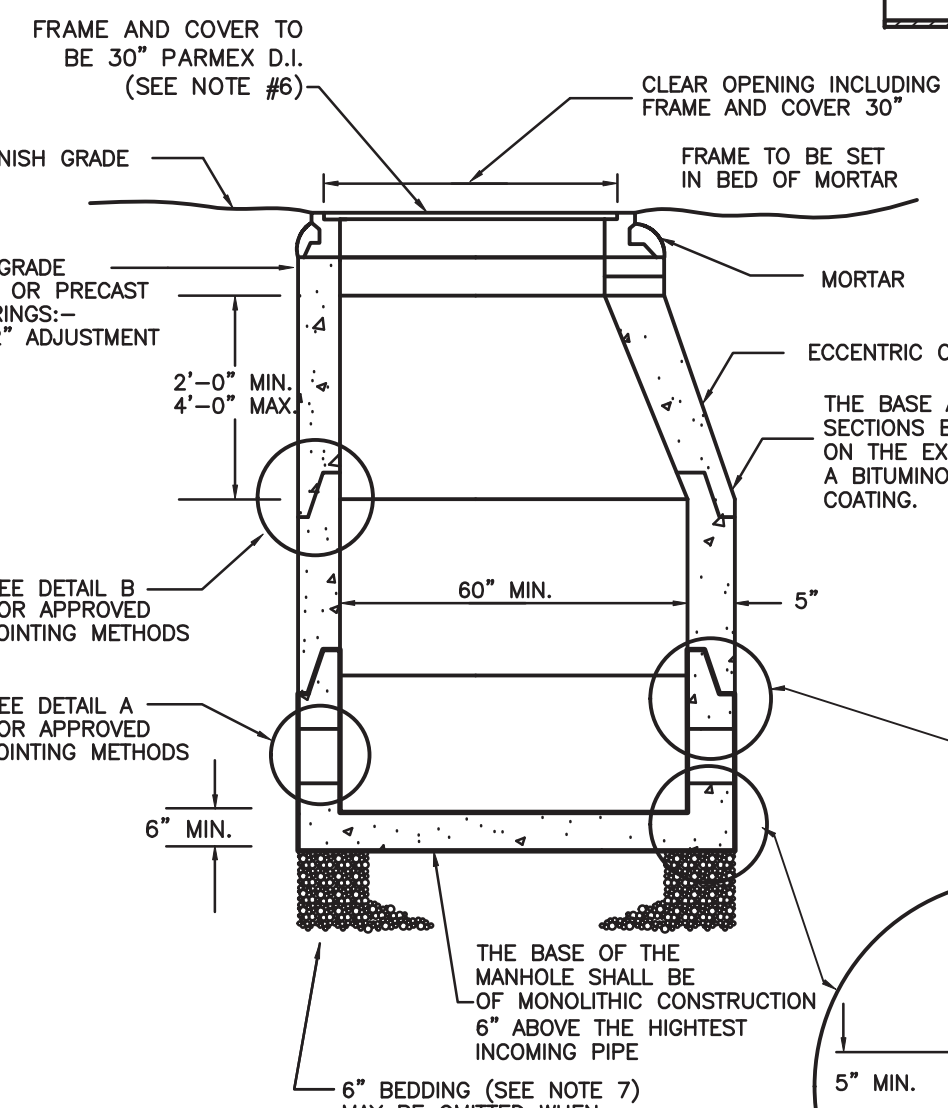
PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE AS SHOWN BELOW:

HYDRATED LIME	SAND	TYPE II PORTLAND CEMENT
NONE	4.5 PARTS	1.5 PARTS
0.5 PARTS	4.5 PARTS	1 PART

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

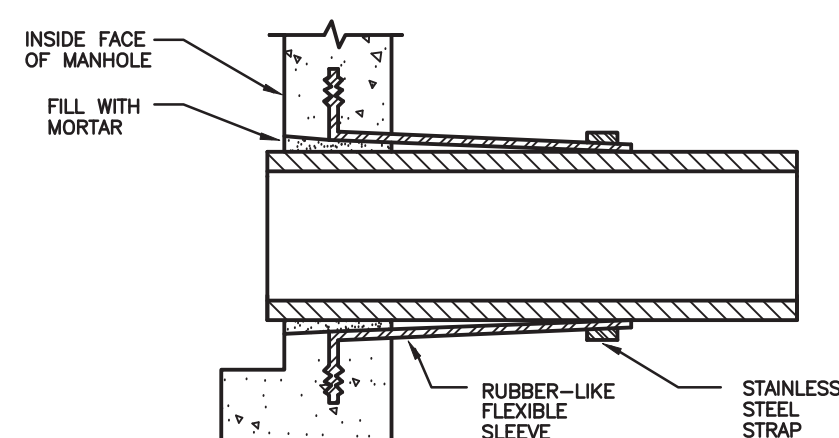
HYDRATED LIME SHALL BE TYPE S THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM C207 STANDARD IN EFFECT AT THE TIME THE HYDRATED LIME WAS PROCESSED.

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



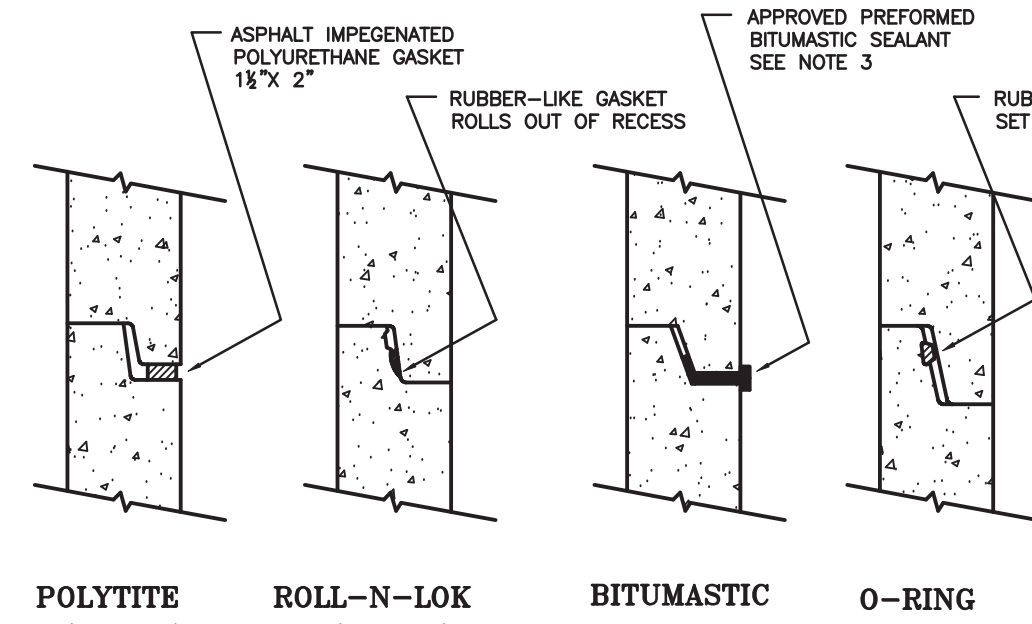
TYPICAL SECTION

NOT TO SCALE



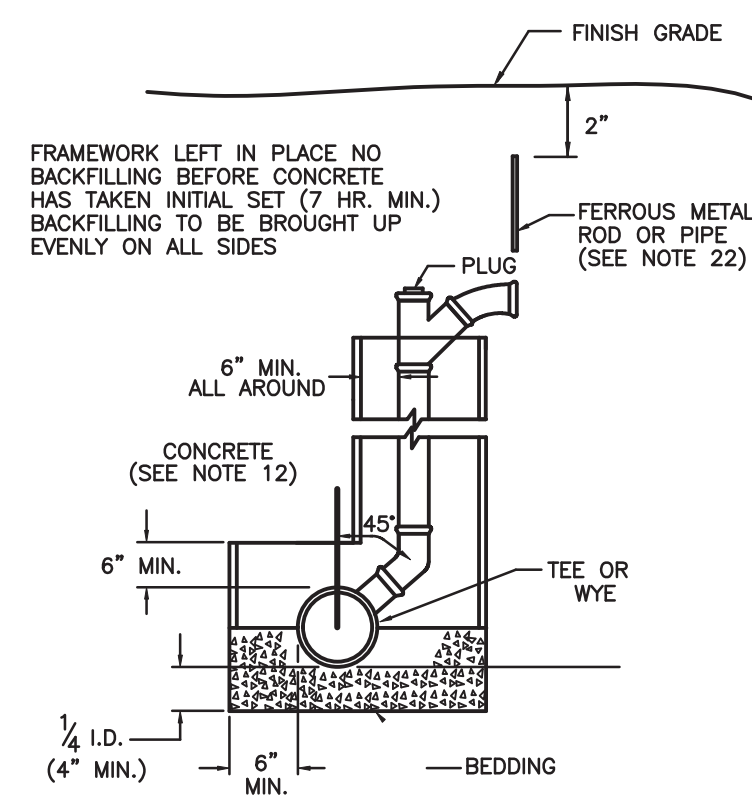
LOCK-JOINT FLEXIBLE MANHOLE SLEEVE

(OR EQUAL)



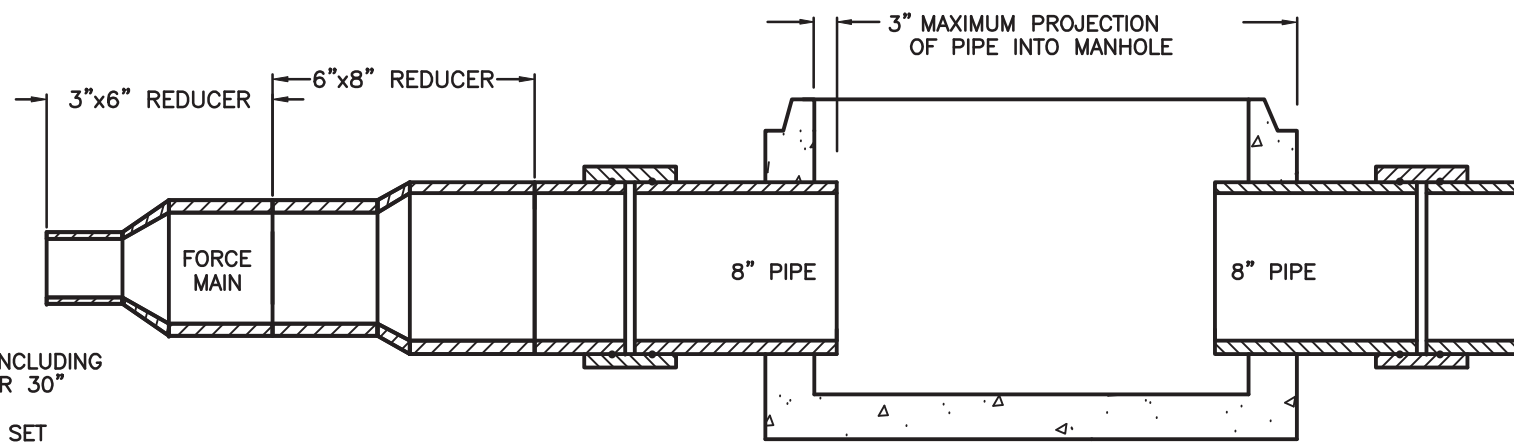
NOTE: ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.

DETAIL-B



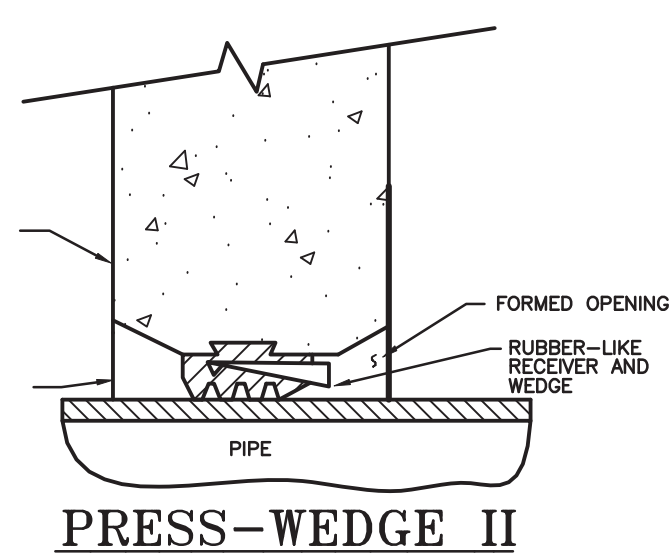
SEWER CLEAN OUT

NOT TO SCALE



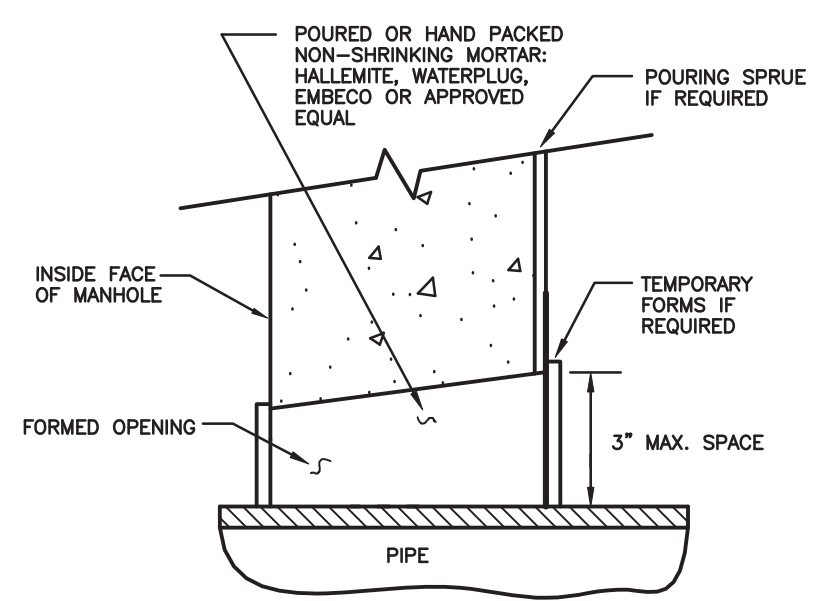
SEWER MANHOLE #4

NOT TO SCALE



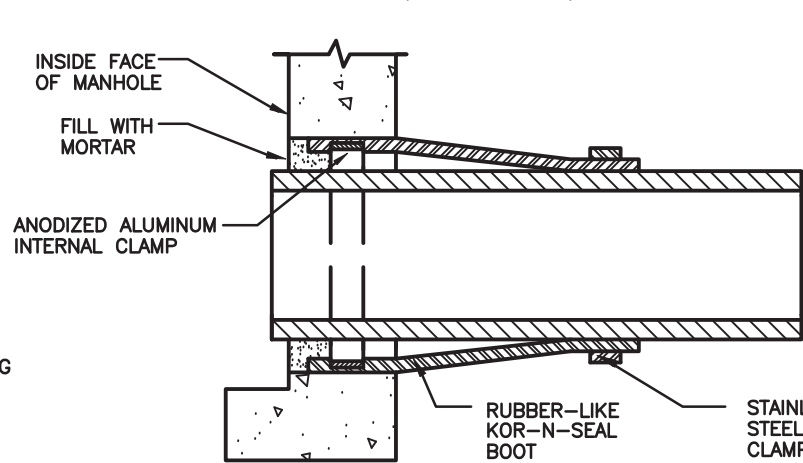
PRESS-WEDGE II

(OR EQUAL)



NON-SHRINKING MORTAR

(OR EQUAL)

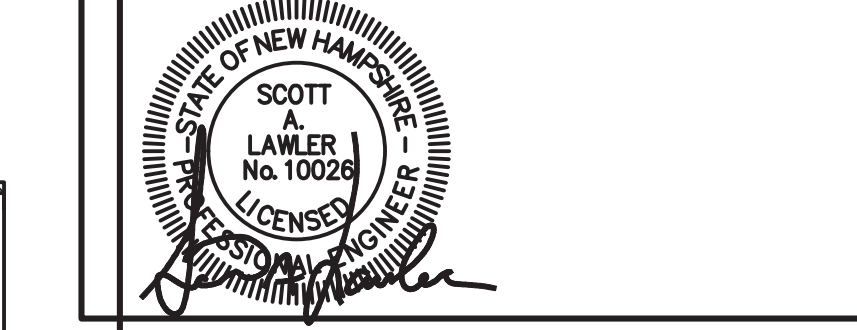


KOR-N-SEAL JOINT SLEEVE

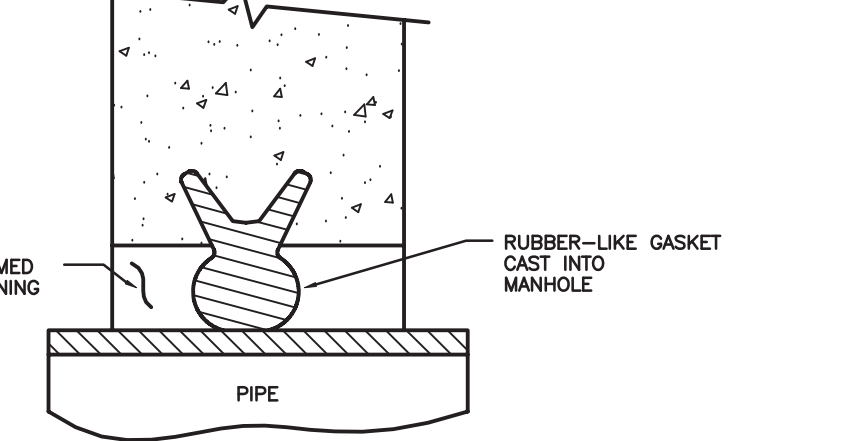
(OR EQUAL)

DETAIL-A

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

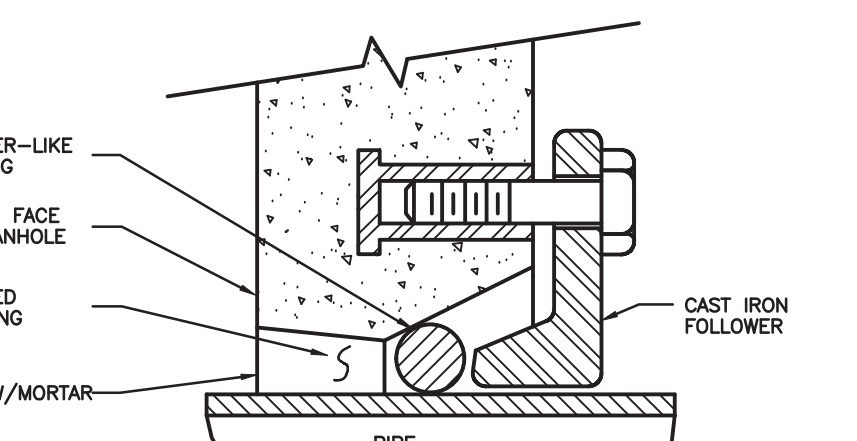


12/12/16 - REVISED OFFSITE GRAVITY SEWER PER NHDES WATER BUREAU COMMENTS



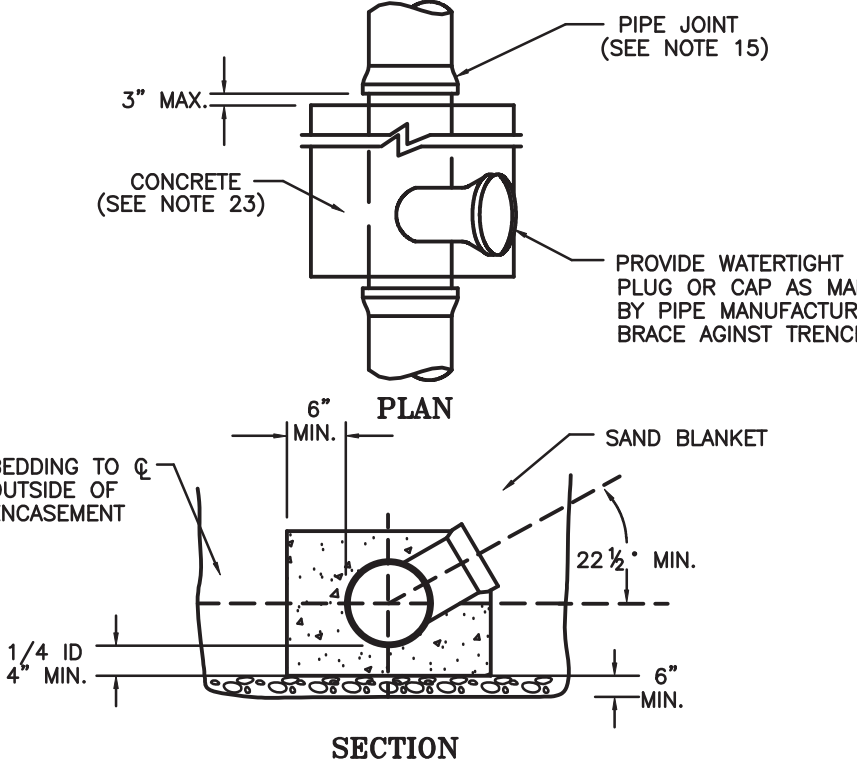
A-LOK

(OR EQUAL)

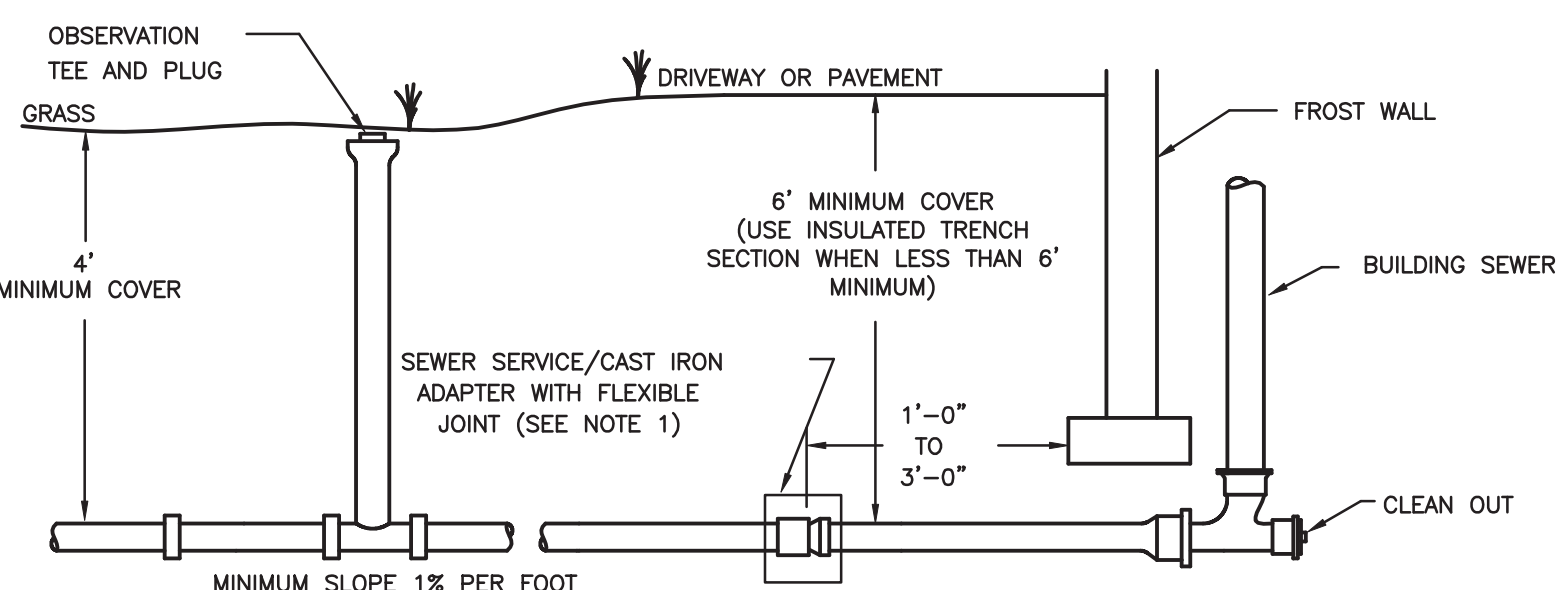


RES-SEAL

(OR EQUAL)



CONCRETE FULL ENCASEMENT



TYPICAL BUILDING SEWER SERVICE DETAIL

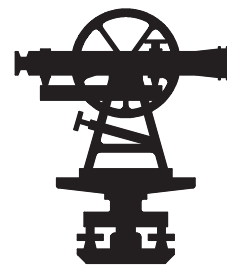
NOT TO SCALE

SANITARY SEWER DETAILS
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD.
ROCHESTER, NH

PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.

MAY 2016

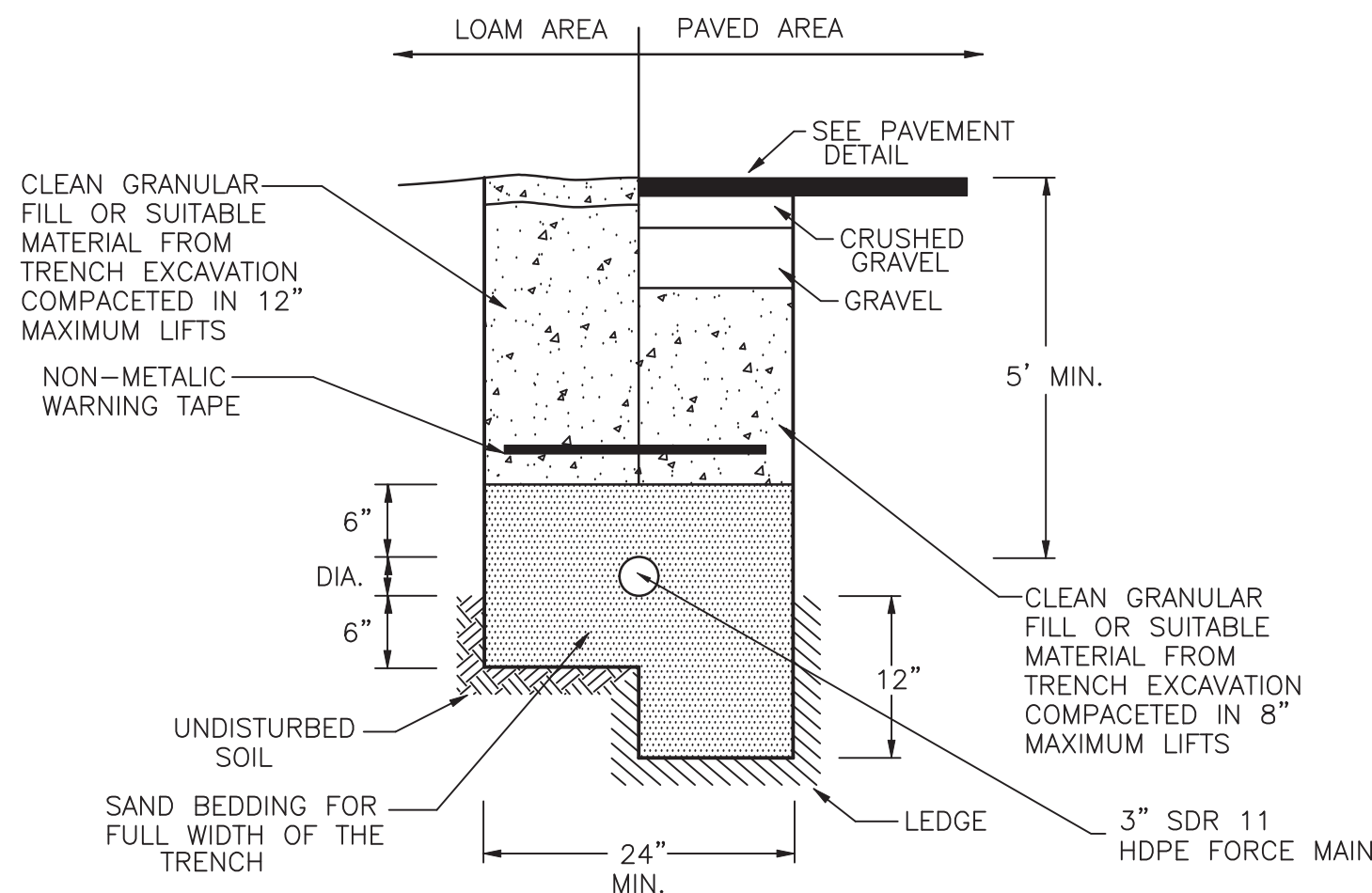
CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PUMP CHAMBER, PUMP, AND CONTROL PANEL TO NORWAY PLAINS, ASSOCIATES, INC. PRIOR TO ORDERING AND DELIVERY. ENGINEER APPROVAL REQUIRED PRIOR TO ORDERING.



CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.



11/10/2016 - REVISED SEWER PUMP STATION DETAILS AND CALCULATIONS PER COMMENTS FROM ROCHESTER PUBLIC WORKS DEPARTMENT
12/12/16 - REVISED DETAILS PER NHDES WASTEWATER BUREAU COMMENTS
12/28/16 - REVISED DETAILS PER NHDES WASTEWATER BUREAU COMMENTS
08/11/18 - REVISE PUMPS STATION ELEVATIONS.



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

TRENCH DETAIL FOR SEWER FORCE MAIN NOT TO SCALE

PUMP STATION DESIGN CALCULATIONS:

DAILY FLOW:

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

AND

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

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

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

INFILTRATION OF GRAVITY LINES = 155 GPD

TOTAL DAILY DESIGN FLOW = 23,309 GPD

WET WELL AND PUMP OPERATION NOTES:

WET WELL INVERTS:

INV. IN = 325.10'

HIGH WATER ALARM = 323.60'

LAG PUMP ON = 323.10'

LEAD PUMP ON = 322.60'

DOSE DEPTH = 2.00 FT.

PUMP OFF = 320.60'

DEPTH OF PUMP = 3.00 FT

SUBMERSION

CHAMBER BOTTOM = 317.60'

PUMP HEAD CALCULATIONS:

STATIC HEAD:

STATIC HEAD = PROPOSED ROCHESTER HILL SEWER INV. IN = 355.00'

STATIC HEAD = PUMP OFF ELEV. = 320.60'

STATIC HEAD = 34.40'

HEAD CREATED BY PIPE AND FITTINGS LOSS:

HEAD FROM PIPE & FITTINGS = 11.40 FT. @ 60 GPM

TOTAL DYNAMIC HEAD:

TOTAL DYNAMIC HEAD = STATIC HEAD + HEAD FROM PIPE/FITTINGS

TOTAL DYNAMIC HEAD = 45.80 FT

PUMP INFORMATION:

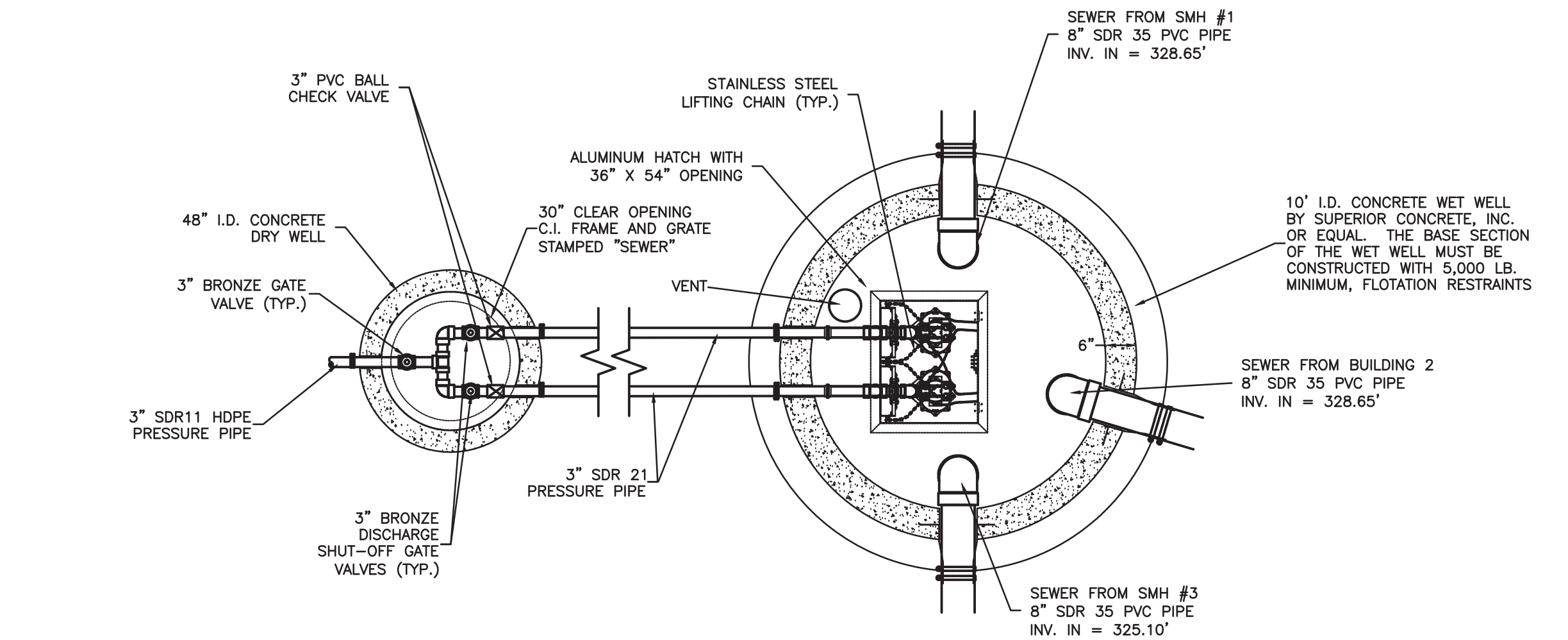
PUMP = BARNES 2.5" SOLIDS HANDLING SEWAGE PUMPS

MODEL = 3SE2024L 2.0 HP WITH 7" IMPELLERS

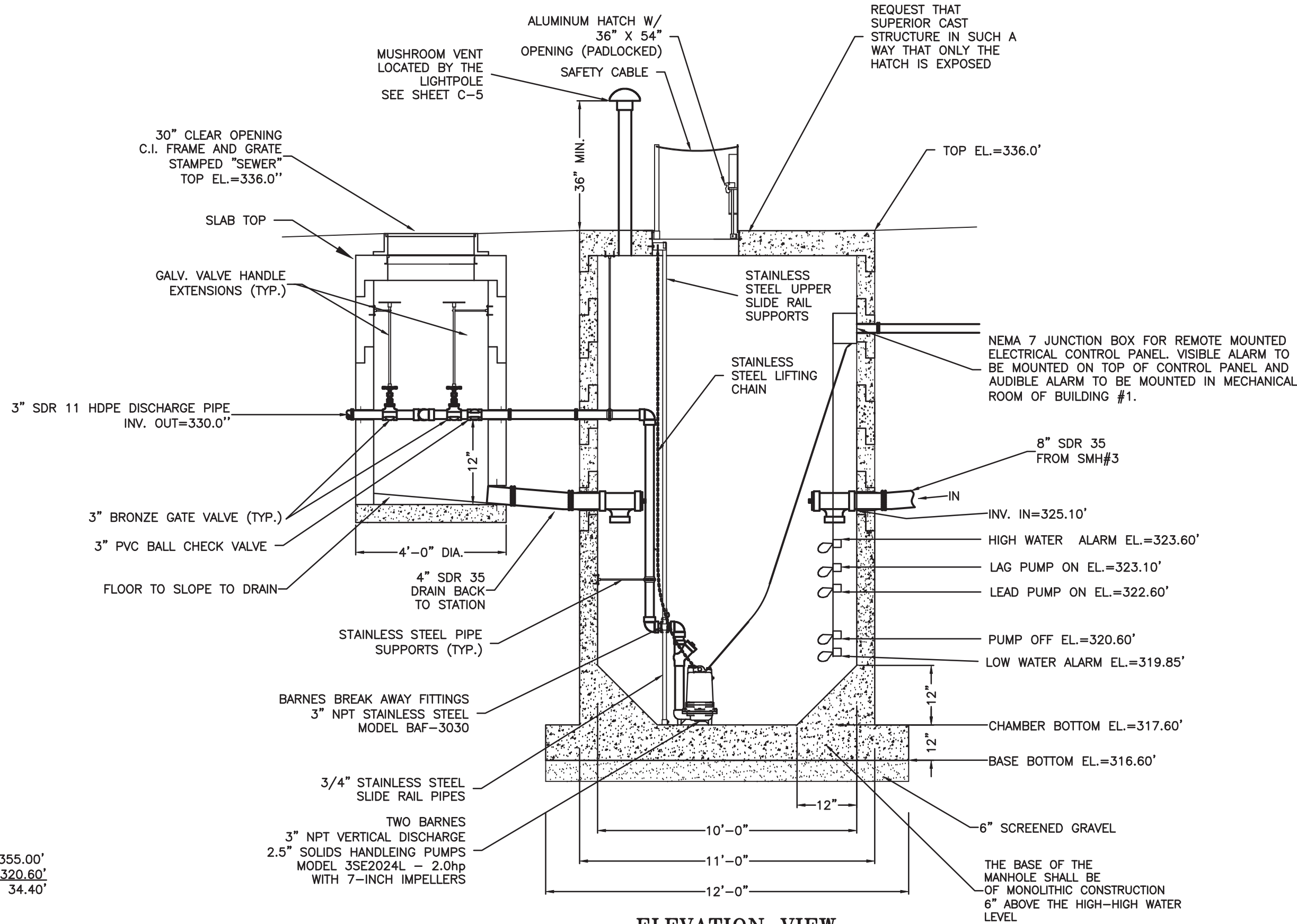
PUMP OPERATIONAL = 60 GPM

CAPACITY

RUN TIME = 19.6 MIN.



PLAN VIEW



ELEVATION VIEW

PUMP STATION INSTALLATION NOTES:

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

PUMP STATION DETAIL

NOT TO SCALE

NOTES:

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

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

BACK UP GENERATOR NOTES:

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

PUMP STATION AND
FORCE MAIN DETAILS
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD.
ROCHESTER, NH

PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.
MAY 2016

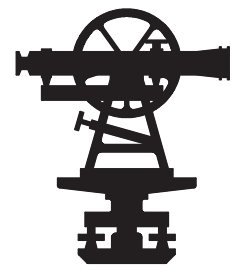
FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

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

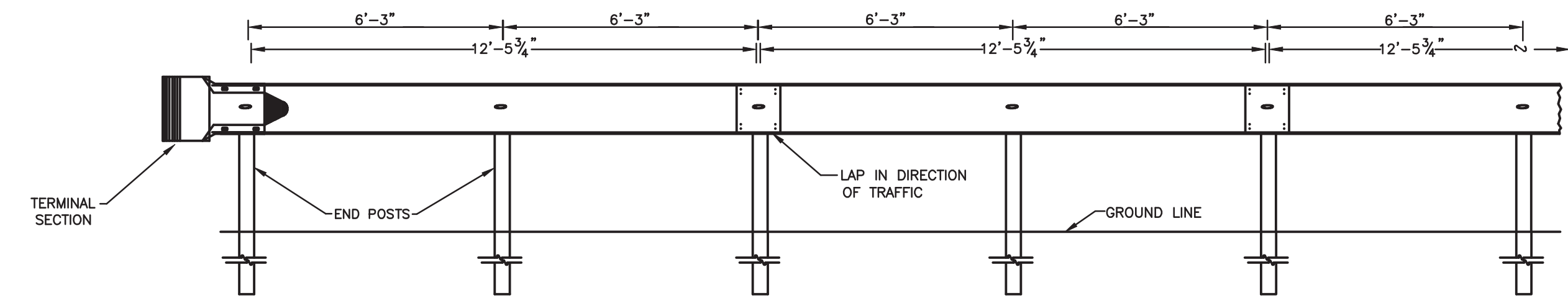
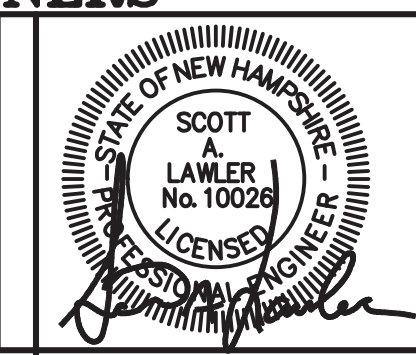
NORWAY PLAINS ASSOCIATES, INC.

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

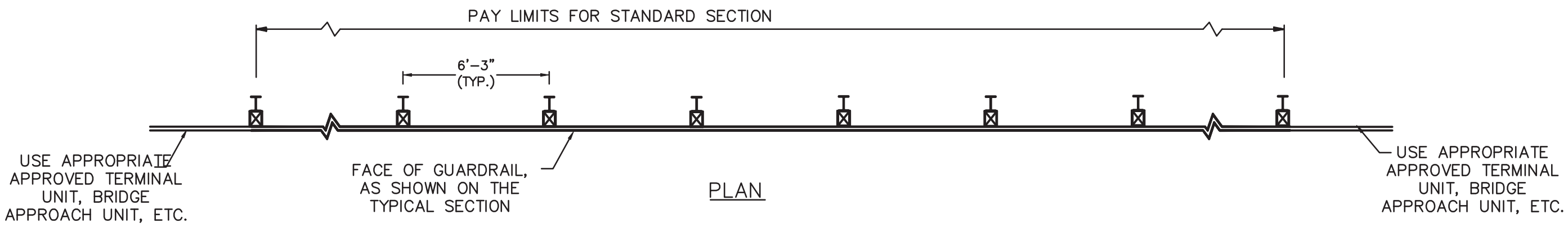
C-14



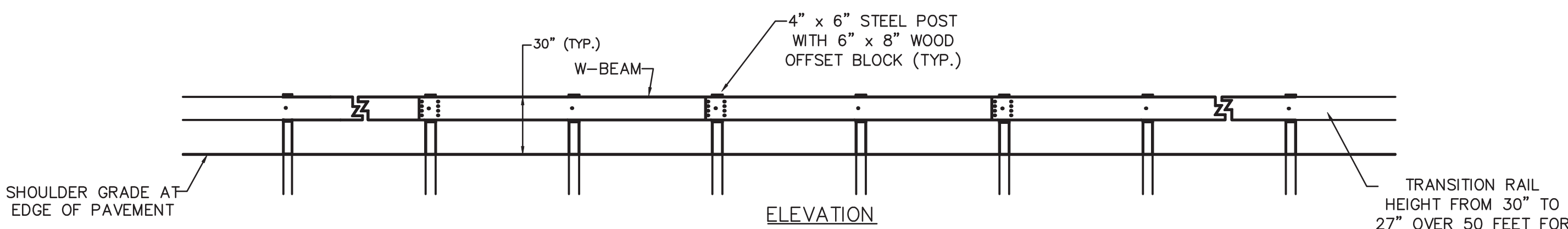
CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.



SAMPLE GUARDRAIL INSTALLATION LAYOUT

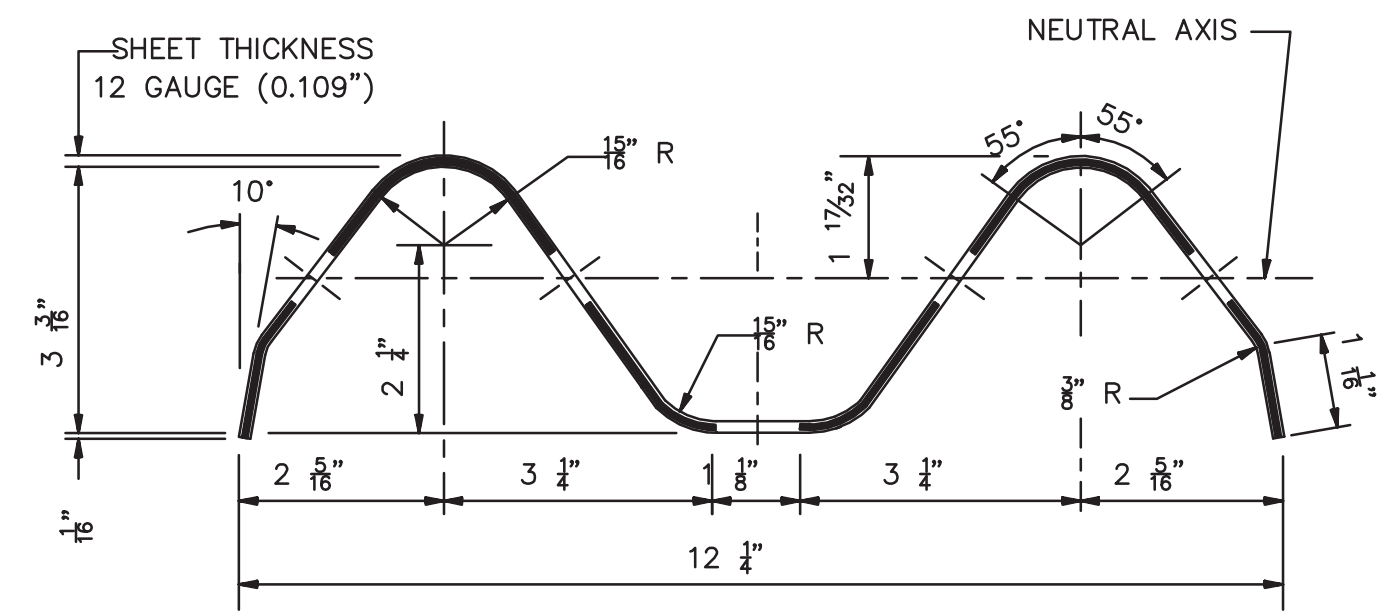


PLAN

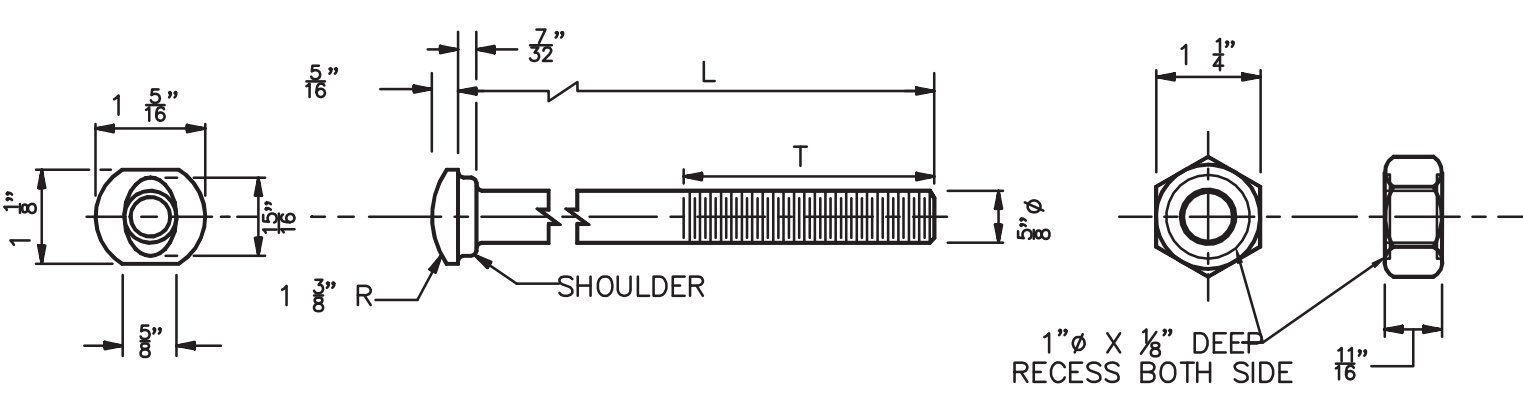


STANDARD SECTION

ITEM 606.120 - BEAM GUARDRAIL (STANDARD SECTION-STEEL POSTS)
PAID: LINEAR FOOT
USE: WHEREVER GUARDRAIL IS REQUIRED (NOTE: STEEL POSTS FOR PERMANENT INSTALLATIONS MAY ONLY BE USED IF SPECIFICALLY APPROVED BY THE CHIEF ENGINEER.)

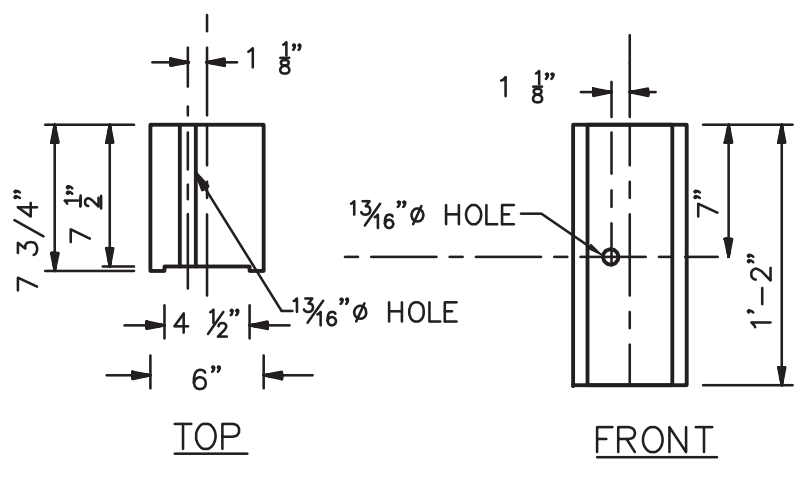


SECTION THRU RAIL ELEMENT
[RWM02a (12'-6") OR RWM22a (25'-0")]

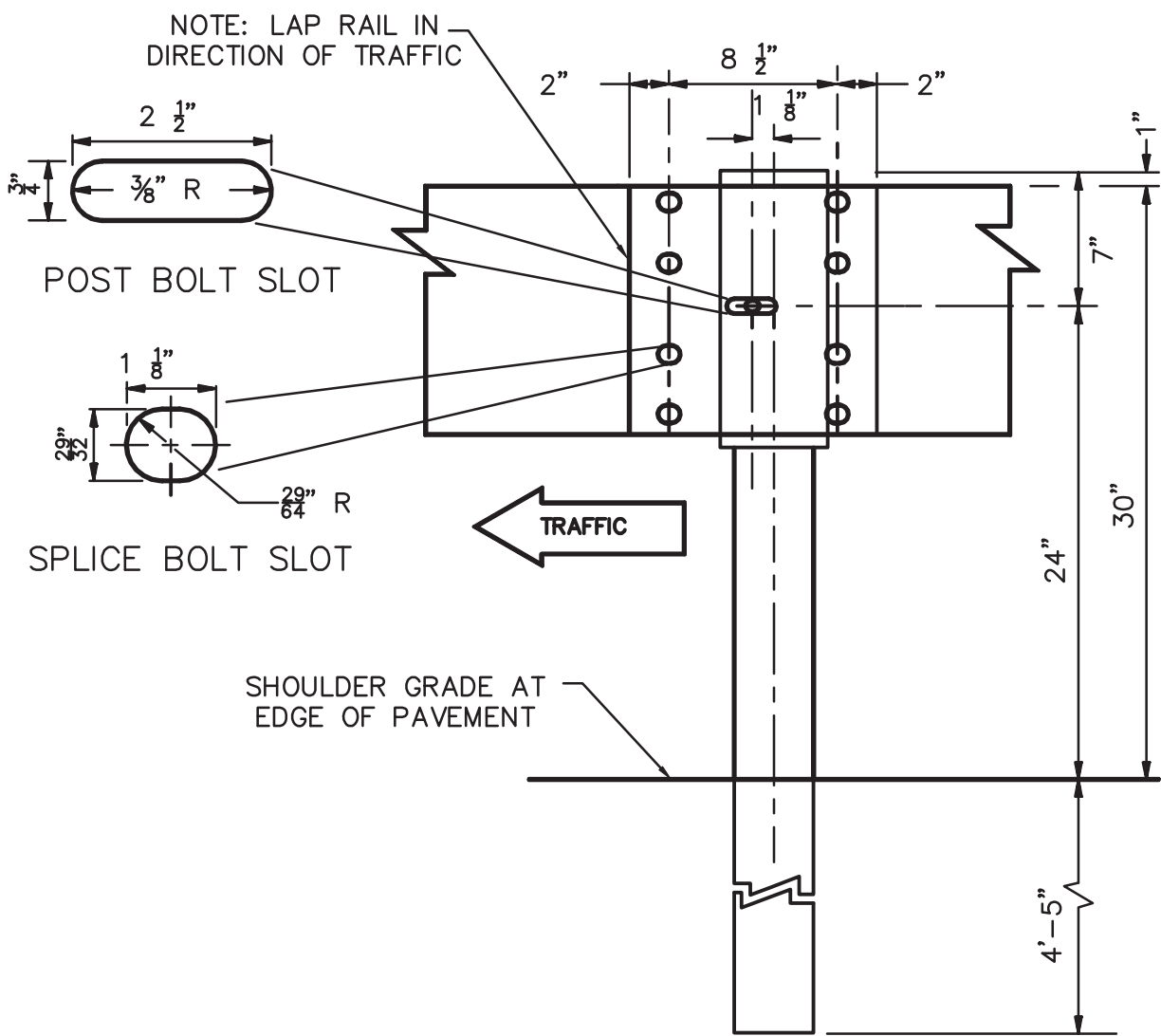


DESIGNATOR	L	T	INTENDED USE
FBB01	1 1/2"	FULL LENGTH THREAD	RAIL SPLICE BOLTS
FBB02	2"	1 3/4" MIN. THREAD LENGTH	POST BOLT (STEEL POSTS)
FBB03	10"	4" MIN. THREAD LENGTH	POST BOLT

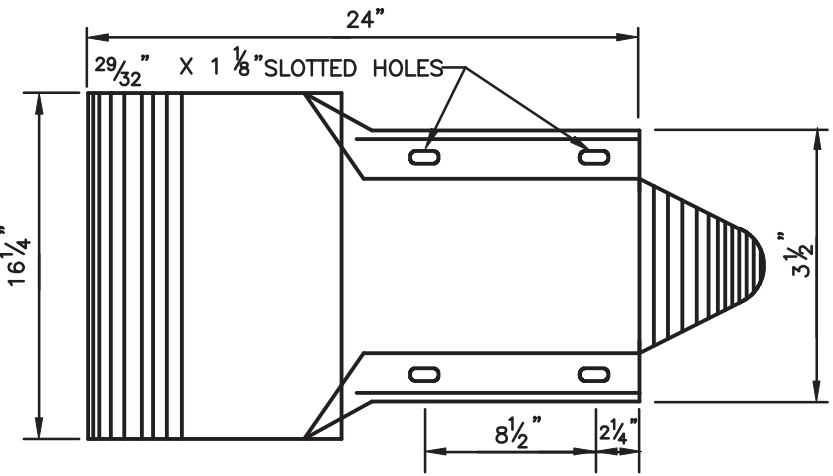
5/8" BUTTON HEAD BOLT AND RECESSED NUT



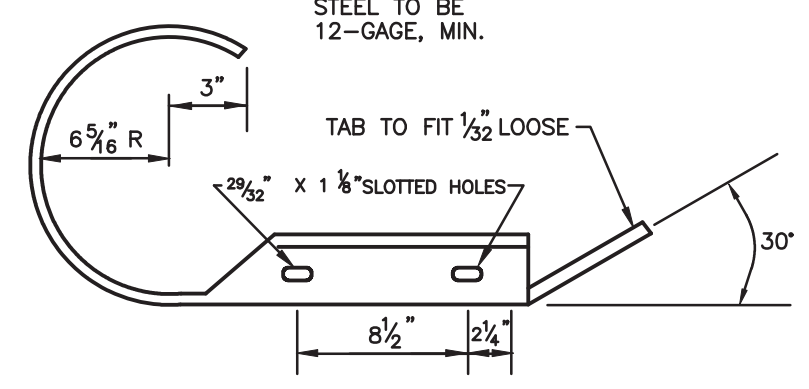
SYNTHETIC OFFSET BLOCK



LINE POST ELEVATION
VIEW AT BEAM SPLICE

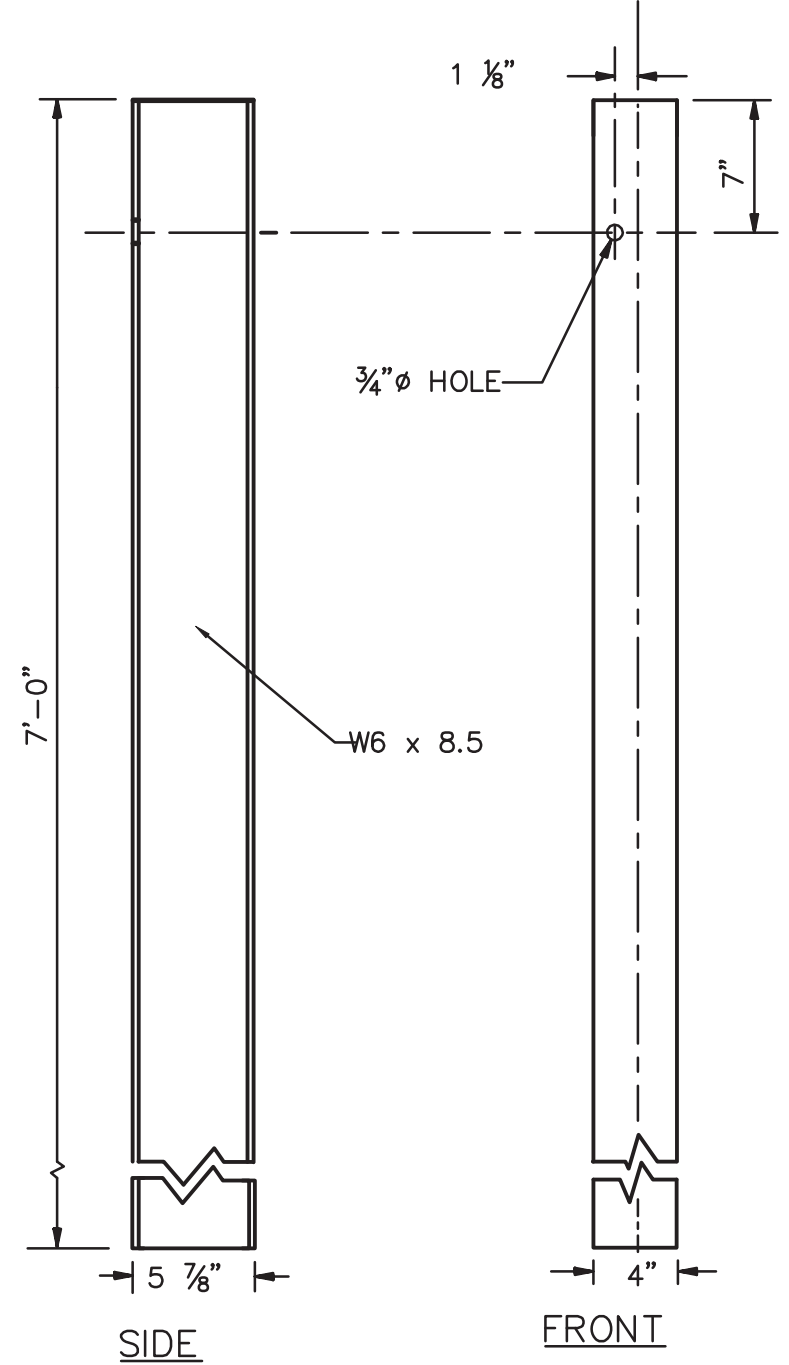


FRONT ELEVATION

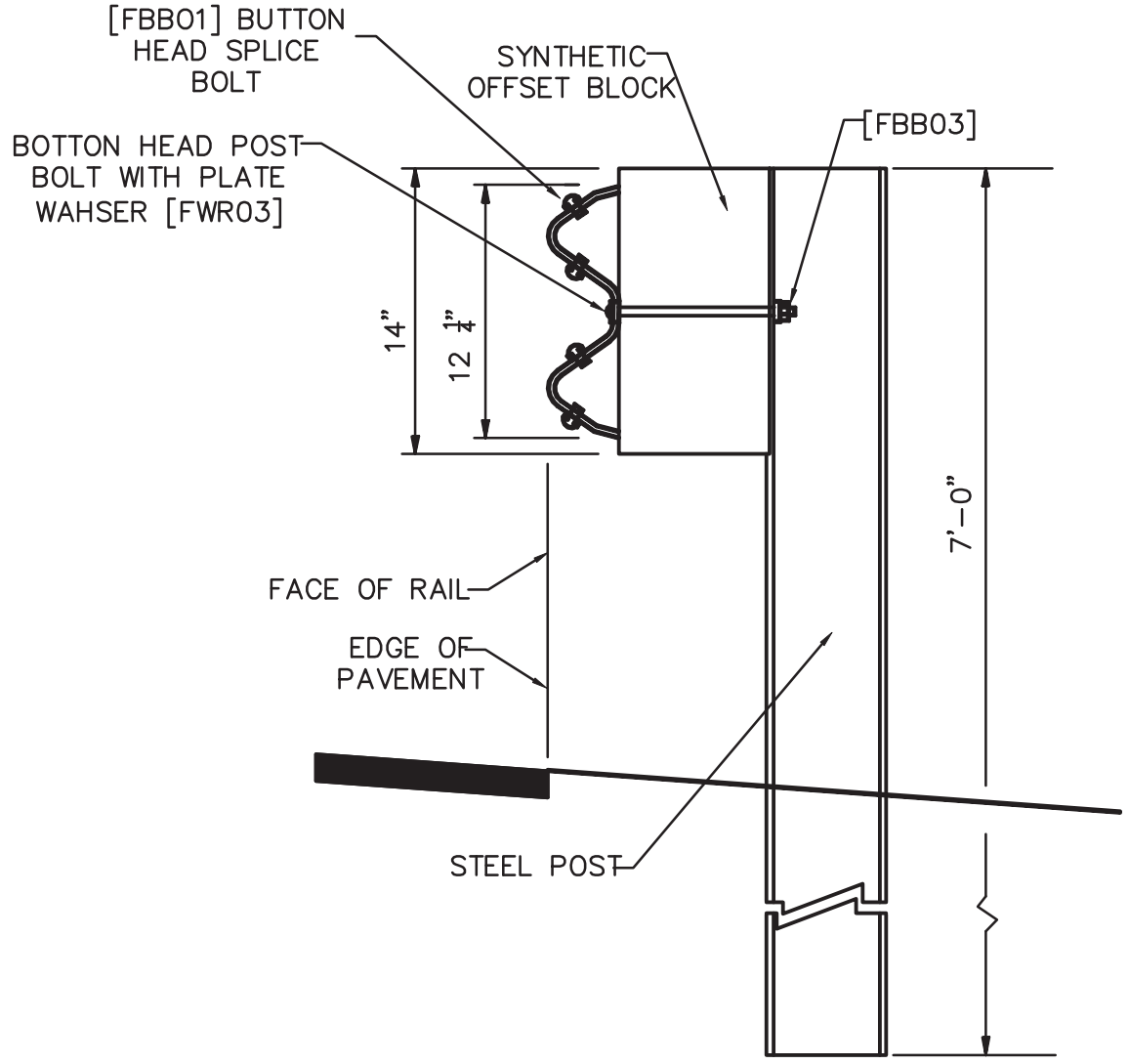


PLAN VIEW

TERMINAL SECTION



STRUCTURAL SHAPE STEEL POST



TYPICAL SIDE VIEW
(SHOWN WITH FASTENERS)

GENERAL NOTES

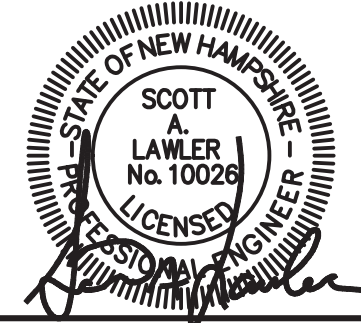
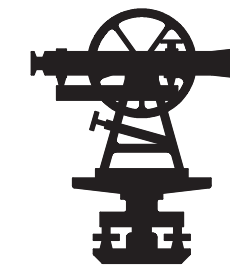
- LENGTH OF NEED IS THE TOTAL LENGTH OF A LONGITUDINAL BARRIER NEEDED TO SHIELD AN AREA OF CONCERN. TO DETERMINE THE LENGTH OF NEED, REFER TO THE "ROADSIDE - LATEST ADOPTED VERSION, DESIGN GUIDE".
- DESIGNATIONS PROVIDED IN BRACKETS [] REFERENCE "A GUIDE TO STANDARDIZED STANDARD ELEMENTS DETAILED IN, LATEST ADOPTED VERSION, HIGHWAY BARRIER HARDWARE" AASHTO-AGC-ARTBA JOINT COOPERATIVE COMMITTEE.
- THE RECTANGULAR PLATE WASHER [FWR03] IS USED ONLY FOR 37'-6" OF STANDARD SECTION UPSTREAM OF A TERMINAL UNIT TYPE G-2 (SEE STANDARD NO. GR-10).
- USE 12'-6" LENGTH RAIL ELEMENT IN CURVES OF LESS THAN 300' RAIL RADIUS.
- WHEN GUARDRAIL IS INSTALLED BEHIND CURB, EITHER 6'-0" BEHIND SLOPE CURB ON A CURBED RAMP OR AT THE BACK OF SIDEWALK WITH BARRIER CURB, THE RAIL HEIGHT SHALL BE SET FROM THE GRADE AT THE FACE OF RAIL.
- POSTS SHORTER THAN THE 7'-0" INDICATED ON THE DETAIL, BUT NOT LESS THAN 6'-0", MAY ONLY BE USED WHEN:
 - THE SLOPE BEHIND THE GUARDRAIL IS NO STEEPER THAN 4:1
 - WHERE THE DISTANCE FROM THE BACK OF THE POST TO THE BREAK OF THE SLOPE IS A MINIMUM OF 2'-0"
 - AND THEN ONLY AS APPROVED OR SPECIFICALLY SHOWN ON THE PLANS.
- TO INSTALL THE 7'-0" POSTS IN ROCK FILL AREAS AND IN AREAS OF OTHER DIFFICULT SITE CONDITIONS, METHODS SUCH AS AUGURING, EXCAVATING, AND OTHER MORE UNUSUAL METHODS MAY BE REQUIRED FOR INSTALLING POSTS. THOSE CONDITIONS AND THE REQUIREMENT FOR UNUSUAL METHODS OF POST INSTALLATION ARE NOT CONSIDERED JUSTIFICATION FOR REDUCING THE EMBEDMENT DEPTH OF THE POSTS AND WILL NOT BE APPROVED AS SUCH.
- THE FHWA ADMINISTRATION HAS APPROVED THE USE OF OFFSET BLOCKS WITH DIMENSIONS THAT VARY MORE THAN WOULD BE CONSIDERED WITHIN THE NORMAL CONTEXT OF NOMINAL DIMENSIONS. IN ORDER TO PROPOSE THE USE OF ANY OFFSET BLOCKS THAT HAVE OTHER THAN THE NOMINAL DIMENSIONS SHOWN ON THE DETAILS, THE FOLLOWING CRITERION APPLIES:
 - THE OFFSET BLOCKS BE SHOWN TO BE APPROVED BY THE FHWA ADMINISTRATION AS MEETING THE TL-3 CRITERIA AS DESCRIBED IN THE NCHRP 350 TESTING.
 - THE FACE OF RAIL MUST REMAIN AT THE EDGE OF PAVEMENT OR AT THE INDICATED OFFSET, PER THE DESIGN PLANS, AND
 - THERE MUST NOT BE A DECREASE IN THE DISTANCE FROM THE BACK OF THE POST TO THE BREAK IN THE SLOPE AS SHOWN ON THE DESIGN PLANS. AN INCREASE IN THE DISTANCE FROM THE BACK OF THE POST TO THE BREAK IN THE SLOPE IS ACCEPTABLE.
 - ALL OTHER REQUIREMENTS OF THE PERTINENT SPECIFICATIONS AND DETAILS REMAIN IN FORCE.

REFERENCE NOTE

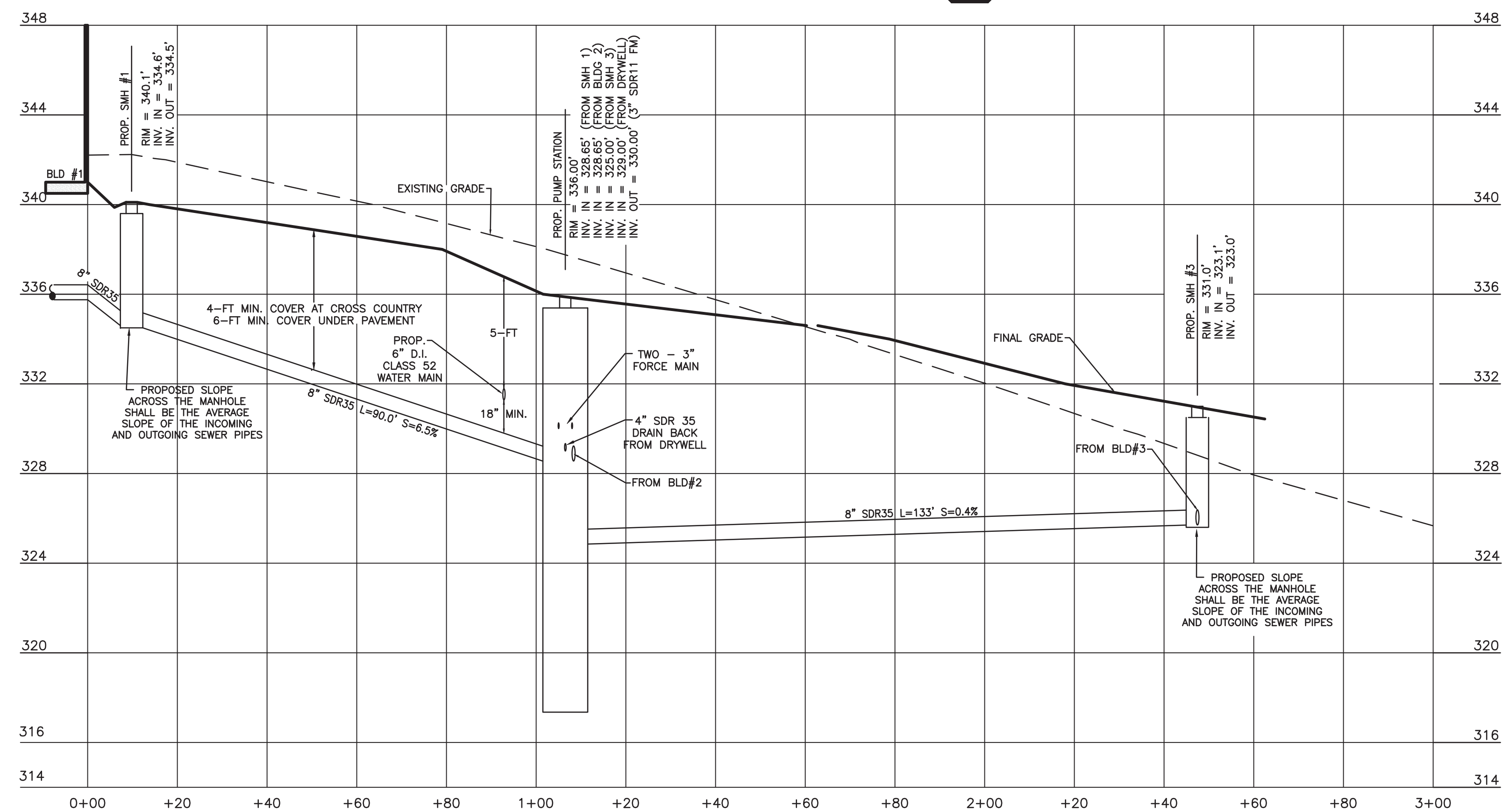
- DETAILS FOR GUARDRAIL SHOWN ON THIS PAGE EXCERPTED FROM AND SPECIFIED TO MATCH NHDOT STANDARD PLANS, STANDARD NO. GR-2 AND GR-10; BEAM GUARDRAIL STANDARD SECTION - STEEL POST & HARDWARE DETAILS.

GUARDRAIL DETAILS
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD.
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.
MAY 2016

FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

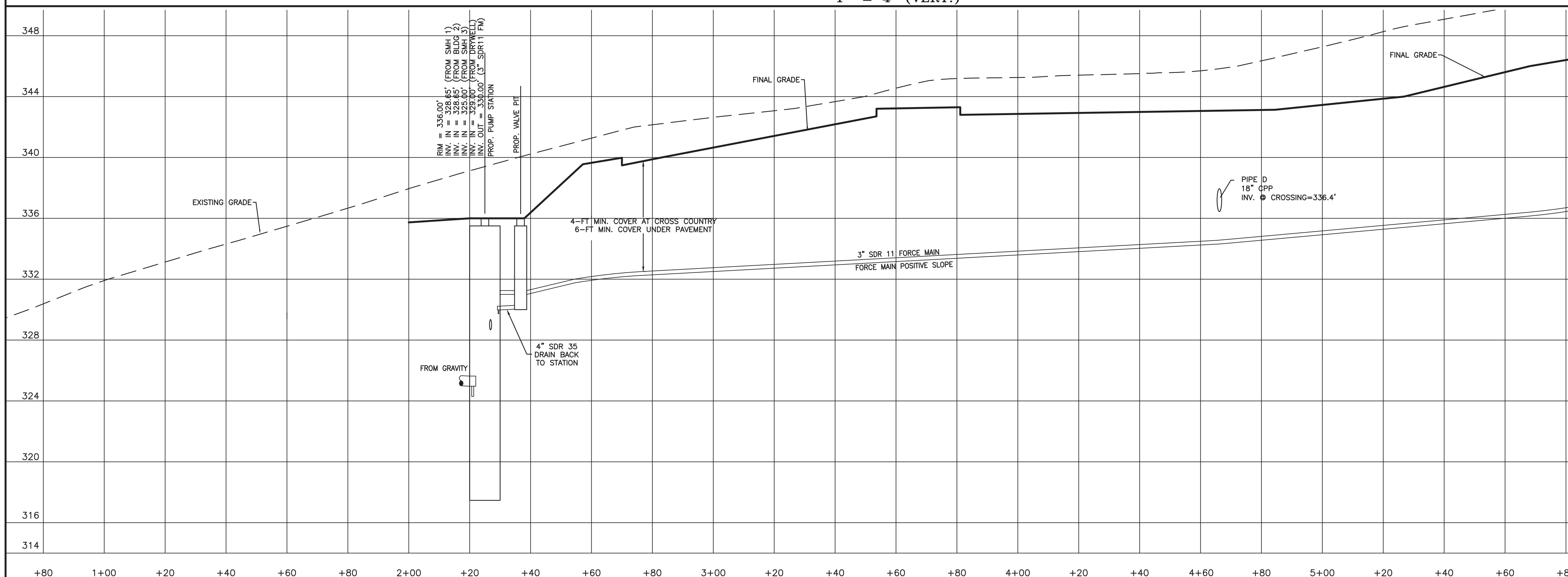


12/28/16 - REVISED DETAILS PER NHDES
WASTEWATER BUREAU COMMENTS
08/11/18 - REVISE LOCATION OF PUMP STATION AND
GRAVITY AND FORCE MAIN PROFILES.



ONSITE GRAVITY SEWER PROFILE

SCALE: 1" = 20' (HORZ.)
1" = 4' (VERT.)



ONSITE FORCEMAIN PROFILE

SCALE: 1" = 20' (HORZ.)
1" = 4' (VERT.)

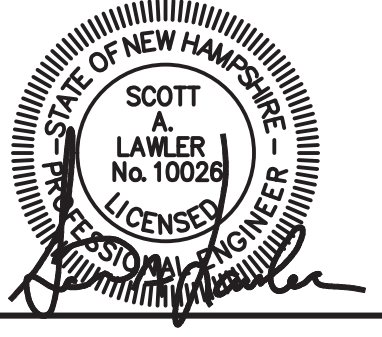
FILE NO. 104
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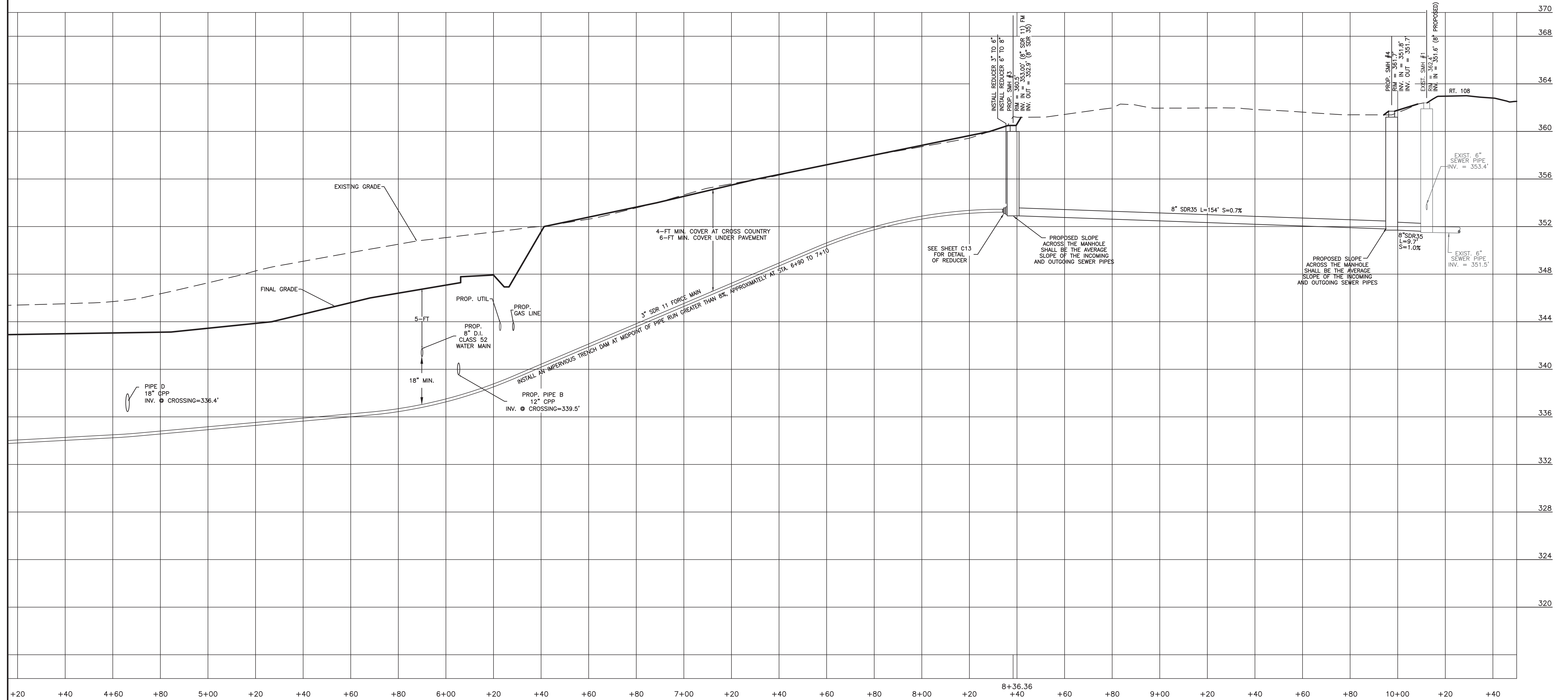
GRAVITY SEWER PROFILE
STA. 0+00 TO 3+00
FORCE MAIN PROFILE
STA. 0+00 TO 4+60
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD.
ROCHESTER, NH
PREPARED FOR:



CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.



12/28/16 - REVISED DETAILS PER NHDES WASTEWATER BUREAU COMMENTS



ONSITE FORCEMAIN AND OFFSITE GRAVITY PROFILE

SCALE: 1" = 20' (HORZ.)
1" = 4' (VERT.)

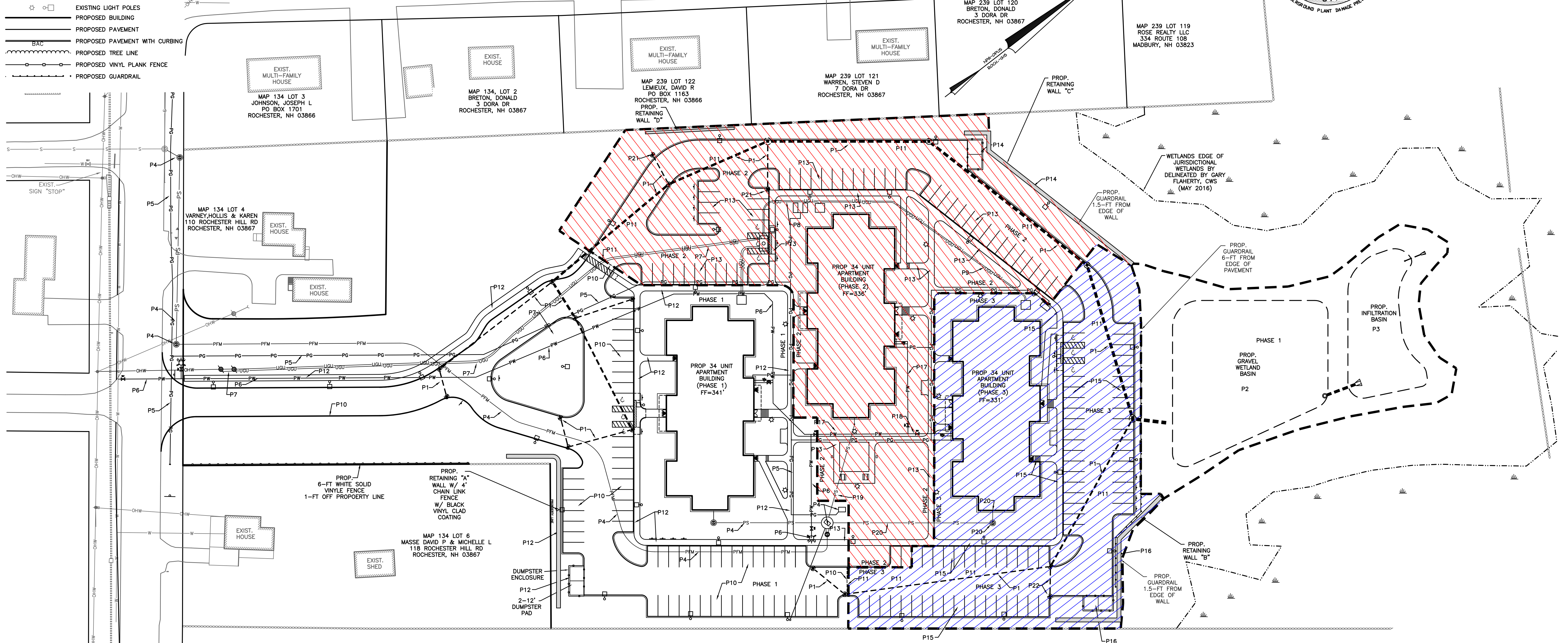
FORCE MAIN PROFILE
STA. 4+40 TO STA. 8+36
OFF SITE GRAVITY
STA. 8+36 TO STA. 10+40
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD.
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.

FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

LEGEND

---	PROPERTY LINE
---	JURISDICTIONAL WETLANDS
---	EXISTING TREE LINE
---	EXISTING OVERHEAD WIRES
---	EXISTING HYDRANT
---	EXISTING WATER GATE OR SHUT-OFF VALVE
---	EXISTING UTILITY POLE
---	EXISTING SEWER MAN HOLE
---	EXISTING CATCH BASIN
---	EXISTING LIGHT POLES
---	PROPOSED BUILDING
---	PROPOSED PAVEMENT
---	PROPOSED PAVEMENT WITH CURBING
---	PROPOSED TREE LINE
---	PROPOSED VINYL PLANK FENCE
---	PROPOSED GUARDRAIL

DORA DRIVE



PROPOSED CONSTRUCTION PHASING NOTES

- P1 PROPOSED CLOSED DRAINAGE SYSTEM SHALL BE CONSTRUCTED DURING PHASE 1
P2 PROPOSED GRAVEL WETLANDS BASIN AND ASSOCIATED OUTLET STRUCTURE, PIPES AND OUTLET PROTECTION SHALL BE CONSTRUCTED DURING PHASE 1.
P3 PROPOSED INFILTRATION BASIN AND ASSOCIATED OUTLET STRUCTURE, PIPE AND OUTLET PROTECTION SHALL BE CONSTRUCT DURING PHASE 1.
P4 INSTALL ALL PROPOSED SEWER MAN HOLES, ALL 8" SEWER PIPES; BOTH ON SITE AND OFF SITE, SEWER PUMP STATION WITH BACK UP GENERATOR, AND 3" FORCE MAIN FROM THE PUMP STATION TO THE PROPOSED SHM ON ROCHESTER HILL ROAD.
P5 INSTALL GAS MAIN FROM ROCHESTER HILL ROAD TO PHASE 1 BUILDING AND TO THE BACKUP GENERATOR. PROVIDE STUBS AND SHUT-OFF VALVES FOR PHASE 2 AND PHASE 3 BUILDINGS.
P6 INSTALL PROPOSED WATER MAIN FROM ROCHESTER HILL ROAD TO PROPOSED HYDRANT BY PROPOSED PHASE 1 BUILDING DURING PHASE 1.
P7 INSTALL PROPOSED UTILITY POLE AND UNDER GROUND CONDUIT FROM ROCHESTER HILL ROAD TO PHASE 1 BUILDING TRANSFORMER DURING PHASE 1.
P8 INSTALL UNDERGROUND CONDUITS TO PHASE 2 TRANSFORMER DURING PHASE 2.
P9 INSTALL UNDERGROUND CONDUITS TO PHASE 3 TRANSFORMER DURING PHASE 3.
P10 INSTALL PAVED DRIVEWAY AND ASSOCIATED PHASE 1 PARKING AREA DURING PHASE 1.
P11 INSTALL 12' WIDE GRAVEL ACCESS ROAD DURING PHASE 1 FOR CONSTRUCTION AND MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM. ACCESS DRIVE SHALL BE CENTERED ON PROPOSED DRAINAGE SYSTEM.
P12 INSTALL RETAINING WALL, DUMPSTER ENCLOSURE AND SIDEWALKS DURING PHASE 1.
P13 INSTALL PHASE 2 PARKING, SIDEWALKS AND AREA DRAINS DURING PHASE 2. PAVE GRAVEL DRIVE WITHIN PHASE 2 AREA.
P14 INSTALL RETAINING WALL AND DUMPSTER ENCLOSURE DURING PHASE 2.
P15 INSTALL PHASE 3 PARKING, SIDEWALKS AND AREA DRAINS DURING PHASE 3. PAVE GRAVEL DRIVE WITHIN PHASE 3 AREA.
P16 INSTALL RETAINING WALL, GUARD RAIL AND DUMPSTER ENCLOSURE DURING PHASE 3.
P17 INSTALL PHASE 2 WATER SERVICES.
P18 INSTALL PHASE 3 WATER SERVICES.
P19 INSTALL PHASE 2 SEWER SERVICE TO SMH #2.
P20 INSTALL PHASE 3 SEWER SERVICE TO SMH #3.
P21 INSTALL PHASE 2 CLOSED DRAINAGE SYSTEM.
P22 INSTALL PHASE 3 CLOSED DRAINAGE SYSTEM.

FILE NO. 104
PLAN NO. C-2780
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F.B. NO.

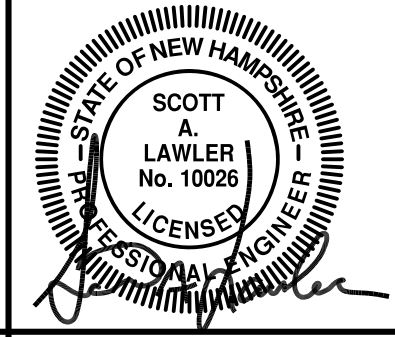
31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

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

P-1

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FINAL APPROVAL BY
ROCHESTER PLANNING BOARD

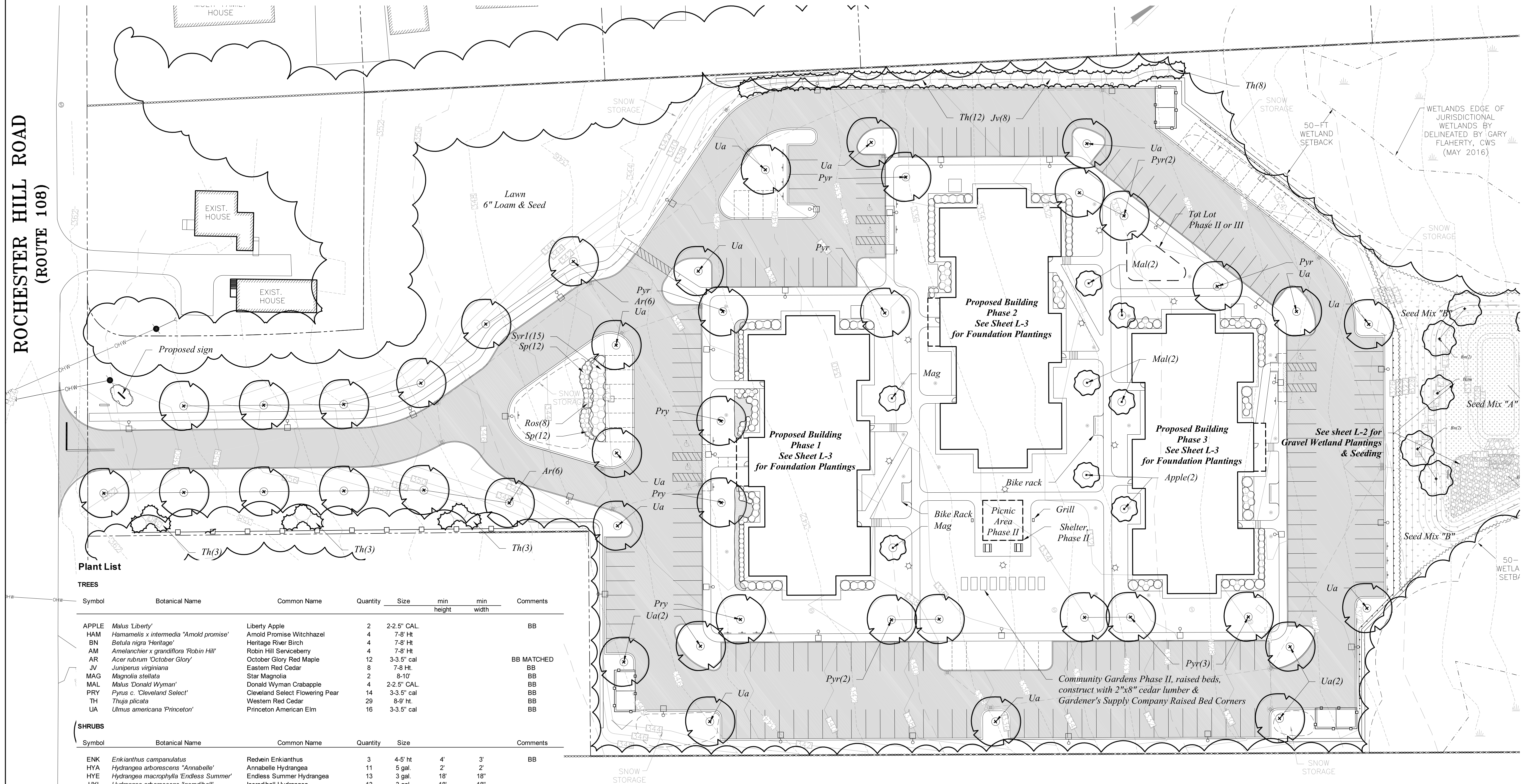
CERTIFIED BY: _____ DATE: _____

CONSTRUCTION
PHASING PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.

MAY 2016
GRAPHIC SCALE



(IN FEET)
1 INCH = 40 FEET

ROCHESTER HILL ROAD
(ROUTE 108)

Plant List

TREES

Symbol	Botanical Name	Common Name	Quantity	Size	min height	min width	Comments
APPLE	<i>Malus 'Liberty'</i>	Liberty Apple	2	2-2.5' CAL.			BB
HAM	<i>Hamamelis x intermedia 'Arnold promise'</i>	Arnold Promise Witchhazel	4	7-8' Ht			
BN	<i>Betula nigra 'Heritage'</i>	Heritage River Birch	4	7-8' Ht			
AM	<i>Amelanchier x grandiflora 'Robin Hill'</i>	Robin Hill Serviceberry	4	7-8' Ht			
AR	<i>Acer rubrum 'October Glory'</i>	October Glory Red Maple	12	3-3.5' cal			BB MATCHED
JV	<i>Juniperus virginiana</i>	Eastern Red Cedar	8	7-8' Ht.			BB
MAG	<i>Magnolia stellata</i>	Star Magnolia	2	8-10'			BB
MAL	<i>Malus 'Donald Wyman'</i>	Donald Wyman Crabapple	4	2-2.5' CAL.			BB
PRY	<i>Pyrus c. 'Cleveland Select'</i>	Cleveland Select Flowering Pear	14	3-3.5' cal			BB
TH	<i>Thuja plicata</i>	Western Red Cedar	29	8-9' ht.			BB
UA	<i>Ulmus americana 'Princeton'</i>	Princeton American Elm	16	3-3.5' cal			BB

SHRUBS

Symbol	Botanical Name	Common Name	Quantity	Size			Comments
ENK	<i>Enkianthus campanulatus</i>	Redvein Enkianthus	3	4-5' ht	4'	3'	BB
HYA	<i>Hydrangea arborescens 'Annabelle'</i>	Annabelle Hydrangea	11	5 gal.	2'	2'	
HYE	<i>Hydrangea macrophylla 'Endless Summer'</i>	Endless Summer Hydrangea	13	3 gal.	18"	18"	
HYI	<i>Hydrangea arborescens 'Incrediball'</i>	Incrediball Hydrangea	13	3 gal.	18"	18"	
HYLL	<i>Hydrangea 'Little Lime'</i>	Little Lime Hydrangea	8	3 gal.	18"	18"	
IBM	<i>Ilex meservee 'Blue Maid'</i>	Blue Maid Holly (female conical)	2	4-5' ht.	4'	2.5'	BB
IG	<i>Ilex glabra 'Shamrock'</i>	Shamrock Inkberry	21	3 gal.	18"	18"	
JUN2	<i>Juniperus chinensis 'Seagreen'</i>	Seagreen Juniper	15	3 gal.	18"	24"	
JUN3	<i>Juniperus chinensis 'Mountbatten'</i>	Mountbatten Juniper	4	5-6' ht.	5'	2'	
ROS	<i>Rosa 'Knockout'</i>	Knockout Rose Double Red	20	3 gal.	18"	18"	
SP	<i>Spiraea x 'Goldmound'</i>	Goldmound Spirea	40	3 gal.	18"	18"	
SPA	<i>Spiraea x bumalda 'Anthony Waterer'</i>	Anthony Waterer Spirea	19	3 gal.	18"	18"	
SYR1	<i>Syringa meyeri 'Palibin'</i>	Dwarf Korean Lilac	15	2-2.5'	24"	24"	BB
SYR2	<i>Syringa 'Bloomerang'</i>	Bloomerang Lilac	6	5 gal.	24"	24"	
TMT	<i>Taxus media 'tauntonii'</i>	Taunton Yew	13	2-2.5'	24"	24"	BB
VPT	<i>Viburnum plicatum tomentosum 'Mariesii'</i>	Marie's Doublefile Viburnum	10	3-4'ht.	3'	3'	BB

PERENNIALS, GROUNDCOVERS, VINES and ANNUALS

Symbol	Botanical Name	Common Name	Quantity	Size			Comments
P	<i>Pachysandra terminalis</i>	Japanese Spurge	12	flats/100			

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

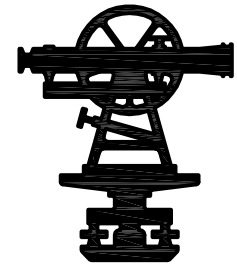
31 Mooney Street, Alton, N.H. 603-875-3948

NORWAY PLAINS ASSOCIATES, INC.

SITE LANDSCAPE PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.
JUNE 2016
GRAPHIC SCALE0 10 15 30 60
(IN FEET)
1 INCH = 30 FEET

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

L-1



Gravel Wetlands Specifications

Products: Soil Mixes – see engineering specifications.
Seed Mixes – See above.
Mulch – Clean weed-free straw

Preparation: Gravel wetland seeding shall be installed in the Spring and well established prior to release of stormwater runoff into the wetland.
Examine finish surfaces, grades, soil quality, and depth. Do not start seeding work until unsatisfactory conditions are corrected in a manner acceptable to Owner.
Prior to seeding soils in the gravel wetland area shall be loosened to a depth of 4" MIN. to mitigate compaction from construction processes.

Installation:
Do not hydroseed, apply with a mechanical spreader or by hand.
Seed immediately after preparation.
Apply seed to clean bare soil.
Perform seeding operations when the soil is dry and when winds do not exceed 5 miles per hour velocity.
Install seed evenly by sowing equal quantities in 2 directions, at right angle to each other.
Lightly rake or lightly roll to insure proper seed contact with the soil.
Mulch – A very light application of clean weed-free straw shall be applied to the finished seeding.
Contractor shall provide temporary irrigation for the seeding until a well- established stand of vegetation exists and approval is given by the Landscape Architect or Owner's representative.
Water daily to maintain adequate surface soil moisture for proper seed germination. Thereafter apply 1/2" of water twice weekly until acceptance. Continue daily watering for not less than 60 days.
Repair, rework, and re-seed all areas that have washed out, are eroded, or do not catch. Any part of seeded areas which fails to show a uniform stand shall be reseeded every twenty one days until areas are covered with established plants.

Inspection: Landscape architect or owner's representative shall inspect seeding for establishment and coverage prior to release of stormwater runoff into the wetland. The gravel wetland requires a healthy stand of vegetation which must be established before the stormwater is directed into the system.
Contractor shall oversee as needed to provide a well-established stand of wetland plants. Any and all weed species shall be removed as directed by the Landscape Architect or Owner's Representative.

Warranty: Provide a uniform stand of vegetation by maintaining seeded areas as specified for 1 year after final acceptance. Reseed areas which fail to provide a uniform stand, with specified materials, until all affected areas are accepted by the Owner.

Maintenance :
The forebay must be cleaned when it accumulates to either six (6) inches or 10% of the forebay volume.
Wetlands vegetation must be harvested at least once every three years and no more frequently than once a year.
Biweekly inspections of vegetation health should be performed during the first growing season or until the vegetation is established. Once established, inspections of vegetation health, density, and diversity should be performed at least twice annually during both the growing and non-growing seasons. The vegetative cover must be maintained at 85 percent. If vegetation has greater than 50 percent damage, the area must be reestablished in accordance with the original specifications and the inspection requirements presented above.
The seeded areas around the perimeter of the gravel should be mowed at least once annually.

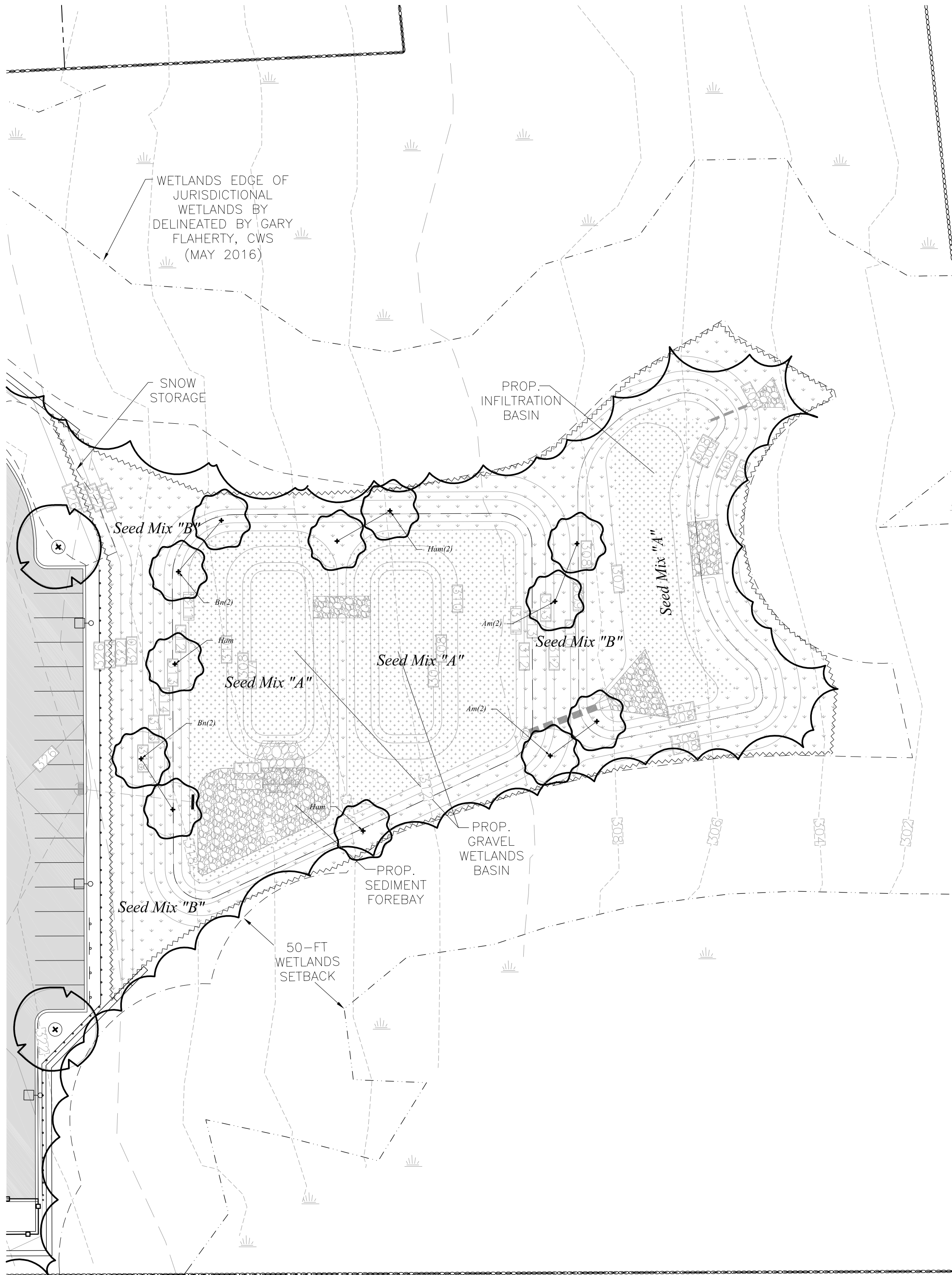
Seed Mixes

Seed Mixes:
Seed Mix A 50% New England Wetland Plants – Roadside Matrix Wet Meadow Seed Mix
50% New England Wetland Plants – Erosion Control/Restoration Mix for Dry Sites
Seed Mix B 100% New England Wetland Plants – Erosion Control/Restoration Mix for Dry Sites
Lawn Tall fescue bluegrass mix, such as Pennington Smartseed Tall Fescue Bluegrass Mix – or Approved equal

Application Rates:
Seed Mix A 50% @ 35lbs/acre Roadside Matrix Wet Meadow Seed Mix
50% @ 35lbs/acre Erosion Control/Restoration Mix for Dry Sites
Seed Mix B 35lbs/acre Erosion Control/Restoration Mix for Dry Sites
Lawn As recommended by seed provider

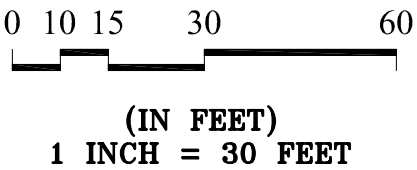
Landscape Notes

- Design is based on drawings by Norway Plains dated 5/10/2016 and may require adjustment due to actual field conditions.
- The contractor shall follow best management practices during construction and shall take all means necessary to stabilize and protect the site from erosion.
- Erosion Control shall be in place prior to construction.
- Erosion Control to consist of Hay Bales and Erosion Control Fabric shall be staked in place between the work and Water bodies, Wetlands and/or drainage ways prior to any construction.
- The Contractor shall verify layout and grades and inform the Landscape Architect or Client's Representative of any discrepancies or changes in layout and/or grade relationships prior to construction.
- It is the contractor's responsibility to verify drawings provided are to the correct scale prior to any bid, estimate or installation. A graphic scale bar has been provided on each sheet for this purpose. If it is determined that the scale of the drawing is incorrect, the landscape architect will provide a set of drawings at the correct scale, at the request of the contractor.
- Trees to Remain within the construction zone shall be protected from damage for the duration of the project by snow fence or other suitable means of protection to be approved by Landscape Architect or Client's Representative. Snow fence shall be located at the drip line at a minimum and shall include any and all surface roots. Do not fill or mulch on the trunk flare. Do not disturb roots. In order to protect the integrity of the roots, branches, trunk and bark of the tree(s) no vehicles or construction equipment shall drive or park in or on the area within the drip line(s) of the tree(s). Do not store any refuse or construction materials or portalets within the tree protection area.
- Location, support, protection, and restoration of all existing utilities and appurtenances shall be the responsibility of the Contractor.
- The Contractor shall verify exact location and elevation of all utilities with the respective utility owners prior to construction. Call DIGSAFE at 1-888-344-7233.
- The Contractor shall procure any required permits prior to construction.
- Prior to any landscape construction activities Contractor shall test all existing loam and loam from off-site intended to be used for lawns and plant beds using a thorough sampling throughout the supply. Soil testing shall indicate levels of pH, nitrates, macro and micro nutrients, texture, soluble salts, and organic matter. Contractor shall provide Landscape Architect with test results and recommendations from the testing facility along with soil amendment plans as necessary for the proposed plantings to thrive. All loam to be used on site shall be amended as approved by the Landscape Architect prior to placement.
- Contractor shall notify landscape architect or owner's representative immediately if at any point during demolition or construction a site condition is discovered which may negatively impact the completed project. This includes, but is not limited to, unforeseen drainage problems, unknown subsurface conditions, and discrepancies between the plan and the site. If a contractor is aware of a potential issue, and does not bring it to the attention of the landscape architect or owner's representative immediately, they may be responsible for the labor and materials associated with correcting the problem.
- The Contractor shall furnish and plant all plants shown on the drawings and listed thereon. All plants shall be nursery-grown under climatic conditions similar to those in the locality of the project. Plants shall conform to the botanical names and standards of size, culture, and quality for the highest grades and standards as adopted by the American Association of Nurserymen, Inc. in the *American Standard of Nursery Stock*, American Standards Institute, Inc. 230 Southern Building, Washington, D.C. 20005.
- A complete list of plants, including a schedule of sizes, quantities, and other requirements is shown on the drawings. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.
- All plants shall be legibly tagged with proper botanical name.
- The Contractor shall guarantee all plants for not less than one year from time of acceptance.
- Owner or Owner's Representative will inspect plants upon delivery for conformity to Specification requirements. Such approval shall not affect the right of inspection and rejection during or after the progress of the work. The Owner reserves the right to inspect and/or select all trees at the place of growth and reserves the right to approve a representative sample of each type of shrub, herbaceous perennial, annual, and ground cover at the place of growth. Such sample will serve as a minimum standard for all plants of the same species used in this work.
- No substitutions of plants may be made without prior approval of the Owner or the Owner's Representative for any reason.
- All landscaping shall be provided with either of the following
 - An underground sprinkling system
 - An outside hose attachment within 150 feet
- If an automatic irrigation system is installed, all irrigation valve boxes shall be located within planting bed areas.
- All disturbed areas will be dressed with 6" of topsoil and planted as noted on the plans or seeded except plant beds. Plant beds shall be prepared to a depth of 12" with 75% loam and 25% compost.
- Trees, ground cover, and shrub beds shall be mulched to a depth of 2" with one-year-old, well-composted, shredded native bark not longer than 4" in length and 1/2" in width, free of woodchips and sawdust. Mulch for ferns and herbaceous perennials shall be no longer than 1" in length. Trees in lawn areas shall be mulched in a 5' diameter min. saucer. Color of mulch shall be black.
- In no case shall mulch touch the stem of a plant nor shall mulch ever be more than 3" thick total (including previously applied mulch) over the root ball of any plant.
- Secondary lateral branches of deciduous trees overhanging vehicular and pedestrian travel ways shall be pruned up to a height of 6' to allow clear and safe passage of vehicles and pedestrians under tree canopy.
- Snow shall be stored a minimum of 5' from shrubs and trunks of trees.
- Landscape Architect is not responsible for the means and methods of the contractor.

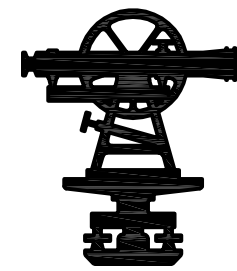


GRAVEL WETLAND PLANTING & SEEDING
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH

PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.
JUNE 2016
GRAPHIC SCALE



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



Plant List

TREES

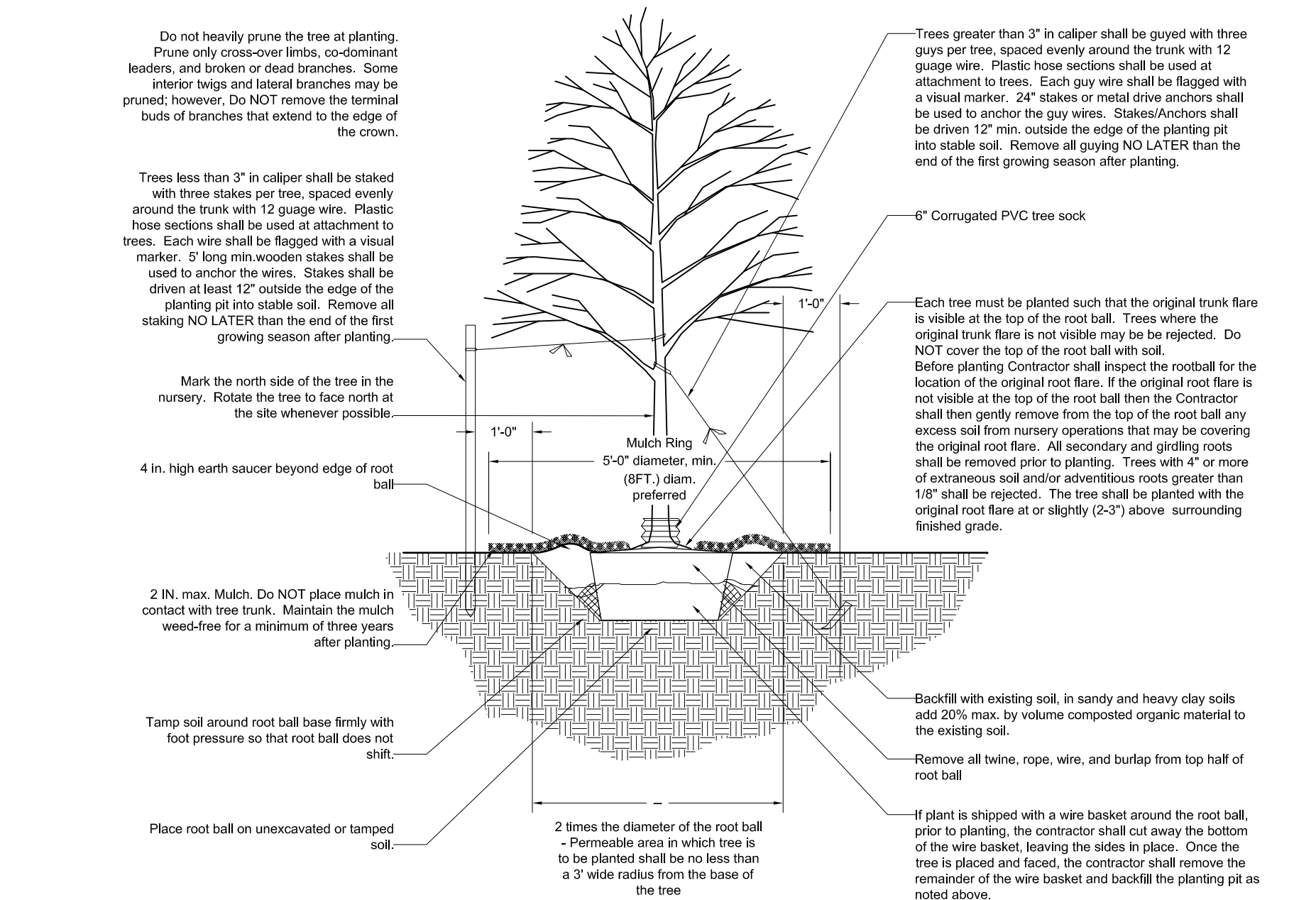
Symbol	Botanical Name	Common Name	Quantity	Size	min height	min width	Comments
APPLE	<i>Malus 'Liberty'</i>	Liberty Apple	2	2-2.5" CAL.			BB
HAM	<i>Hamamelis x intermedia 'Arnold promise'</i>	Arnold Promise Witchhazel	4	7-8' Ht.			
BN	<i>Betula nigra 'Heritage'</i>	Heritage River Birch	4	7-8' Ht.			
AM	<i>Amelanchier x grandiflora 'Robin Hill'</i>	Robin Hill Serviceberry	4	7-8' Ht.			
AR	<i>Acer rubrum 'October Glory'</i>	October Glory Red Maple	12	3-3.5" cal			BB MATCHED
JV	<i>Juniperus virginiana</i>	Eastern Red Cedar	8	7-8 Ht.			BB
MAG	<i>Magnolia stellata</i>	Star Magnolia	2	8-10'			BB
MAL	<i>Malus 'Donald Wyman'</i>	Donald Wyman Crabapple	4	2-2.5" CAL.			BB
PRY	<i>Pyrus c. 'Cleveland Select'</i>	Cleveland Select Flowering Pear	14	3-3.5" cal			BB
TH	<i>Thuja plicata</i>	Western Red Cedar	29	8-9' ht.			BB
UA	<i>Ulmus americana 'Princeton'</i>	Princeton American Elm	16	3-3.5" cal			BB

SHRUBS

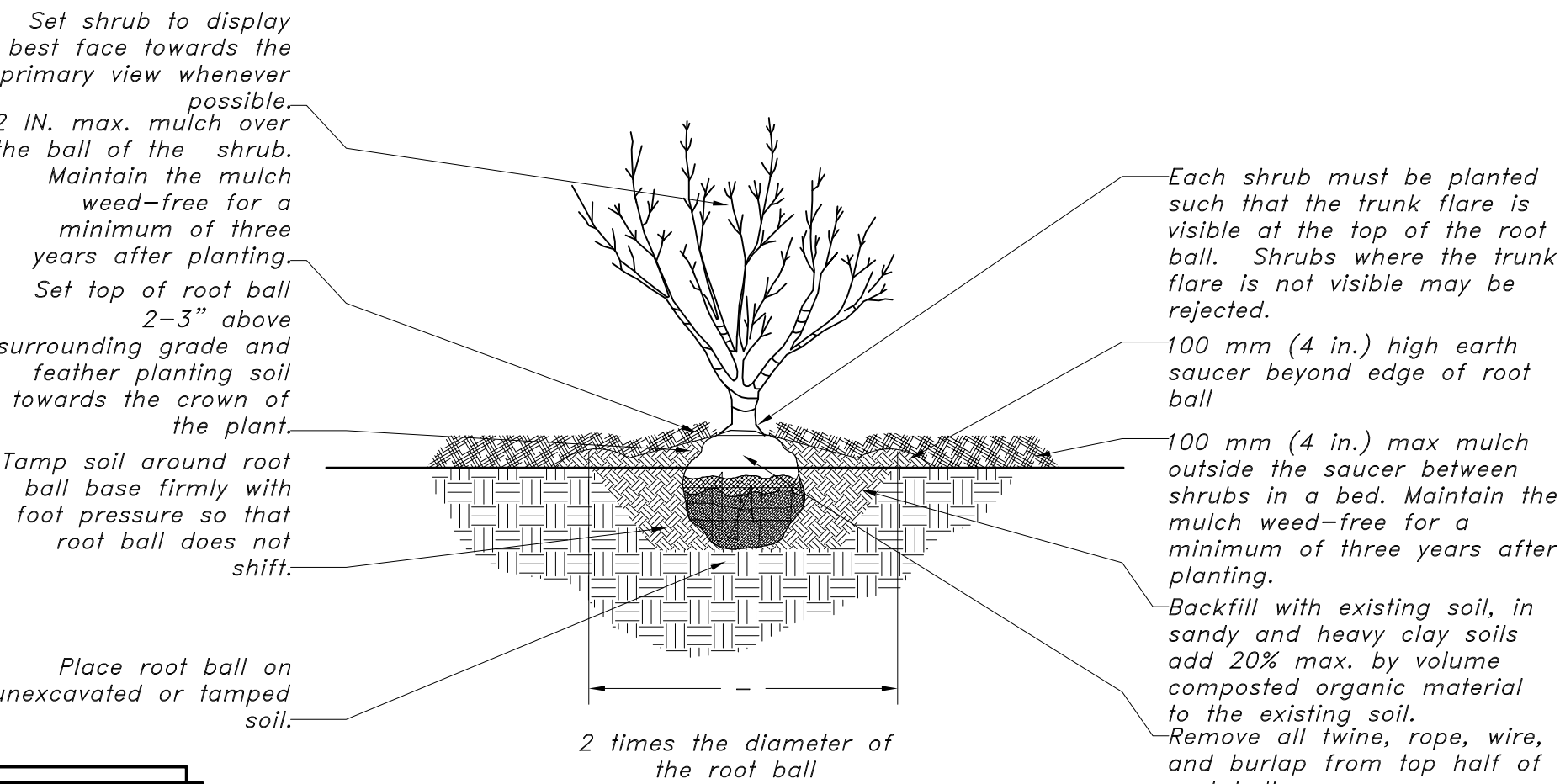
Symbol	Botanical Name	Common Name	Quantity	Size			Comments
ENK	<i>Enkianthus campanulatus</i>	Redvein Enkianthus	3	4-5' ht	4'	3'	BB
HYA	<i>Hydrangea arborescens 'Annabelle'</i>	Annabelle Hydrangea	11	5 gal.	2'	2'	
HYE	<i>Hydrangea macrophylla 'Endless Summer'</i>	Endless Summer Hydrangea	13	3 gal.	18"	18"	
HYI	<i>Hydrangea arborescens 'Incrediball'</i>	Incrediball Hydrangea	13	3 gal.	18"	18"	
HYLL	<i>Hydrangea 'Little Lime'</i>	Little Lime Hydrangea	9	3 gal.	18"	18"	
IBM	<i>Ilex meservee 'Blue Maid'</i>	Blue Maid Holly (female conical)	2	4-5' ht.	4'	2.5'	BB
IG	<i>Ilex glabra 'Shamrock'</i>	Shamrock Inkberry	21	3 gal.	18"	18"	
JUN2	<i>Juniperus chinensis 'Seagreen'</i>	Seagreen Juniper	15	3 gal.	18"	24"	
JUN3	<i>Juniperus chinensis 'Mountbatten'</i>	Mountbatten Juniper	4	5-6' ht.	5'	2'	
ROS	<i>Rosa 'Knockout'</i>	Knockout Rose Double Red	20	3 gal.	18"	18"	
SP	<i>Spiraea x 'Goldmound'</i>	Goldmound Spirea	40	3 gal.	18"	18"	
SPA	<i>Spiraea x bumalda 'Anthony Waterer'</i>	Anthony Waterer Spirea	19	3 gal.	18"	18"	
SYR1	<i>Syringa meyeri 'Palibin'</i>	Dwarf Korean Lilac	15	2-2.5'	24"	24"	BB
SYR2	<i>Syringa 'Bloomerang'</i>	Bloomerang Lilac	6	5 gal.	24"	24"	
TMT	<i>Taxus media 'Tauntonii'</i>	Taunton Yew	13	2-2.5'	24"	24"	BB
VPT	<i>Viburnum plicatum tomentosum 'Mariesii'</i>	Marie's Doublefile Viburnum	10	3-4'ht.	3'	3'	BB

PERENNIALS, GROUNDCOVERS, VINES and ANNUALS

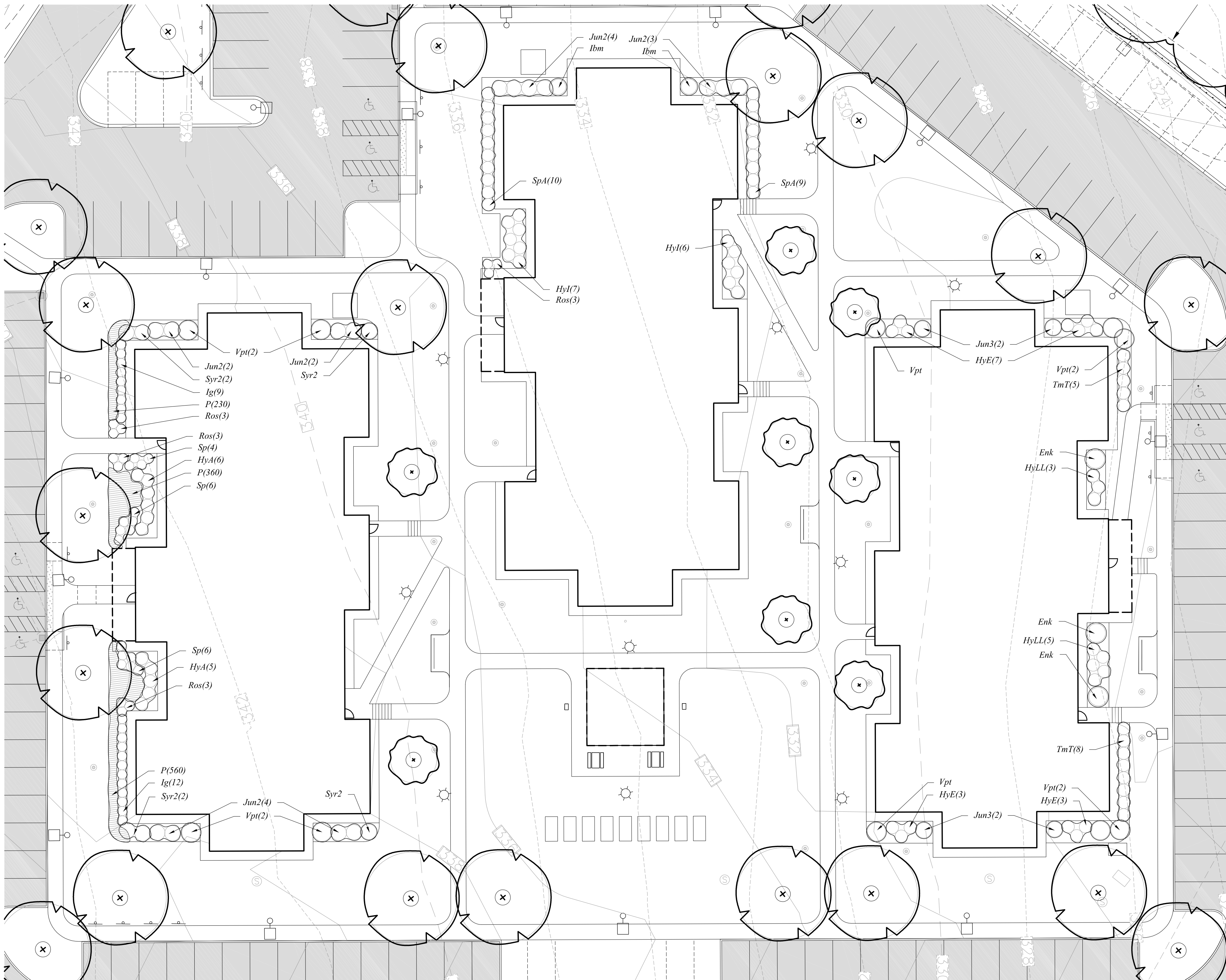
Symbol	Botanical Name	Common Name	Quantity	Size			Comments
P	<i>Pachysandra terminalis</i>	Japanese Spurge	12	flats/100			



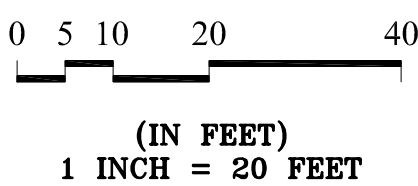
Tree Planting Detail, Typ.



Shrub Planting Detail, Typ.



FOUNDATION LANDSCAPE PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.
JUNE 2016
GRAPHIC SCALE



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

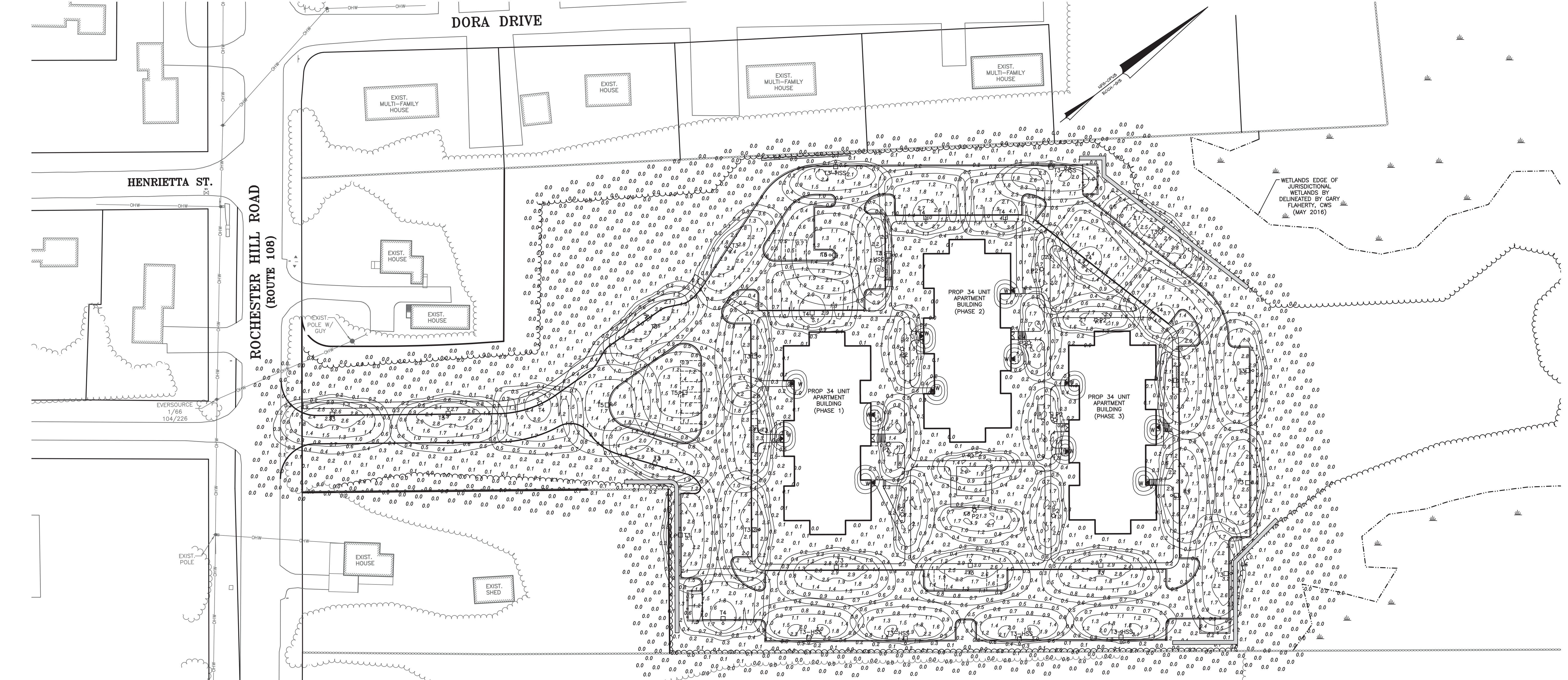
31 Mooney Street, Alton, N.H. 603-875-3948

LEGEND

- PROPERTY LINE
- JURISDICTIONAL WETLANDS
- EXISTING OVERHEAD WIRES
- EXISTING LIGHT POLES
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- PROPOSED PAVEMENT WITH CURBING
- PROPOSED LIGHT POLES
- PROPOSED BUILDING LIGHT FIXTURES
- PROPOSED LIGHT FOOTCANDLE
- PROPOSED LIGHT ISOILLUMINATION LINES

Luminaire Schedule				
Symbol	Label	Qty	Arrangement	Description
⊛	F2	10	SINGLE	MSA-E01-LED-E1-SL2/ 10' POLE
⊛	T3	18	SINGLE	ICM-E02-LED-E1-SL3/ 15' AFG
⊛	T3-HSS	7	SINGLE	ICM-E02-LED-E1-SL3-HSS/ 15' AFG
⊛	T4	7	SINGLE	ICM-E02-LED-E1-SL4/ 15' AFG
⊛	T5	3	SINGLE	ICM-E02-LED-E1-SWQ/ 15' AFG
◀	W	12	SINGLE	WEST 912 50 FAR 20

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.



LIGHTING PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.
MAY 2016
GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 INCH = 40 FEET

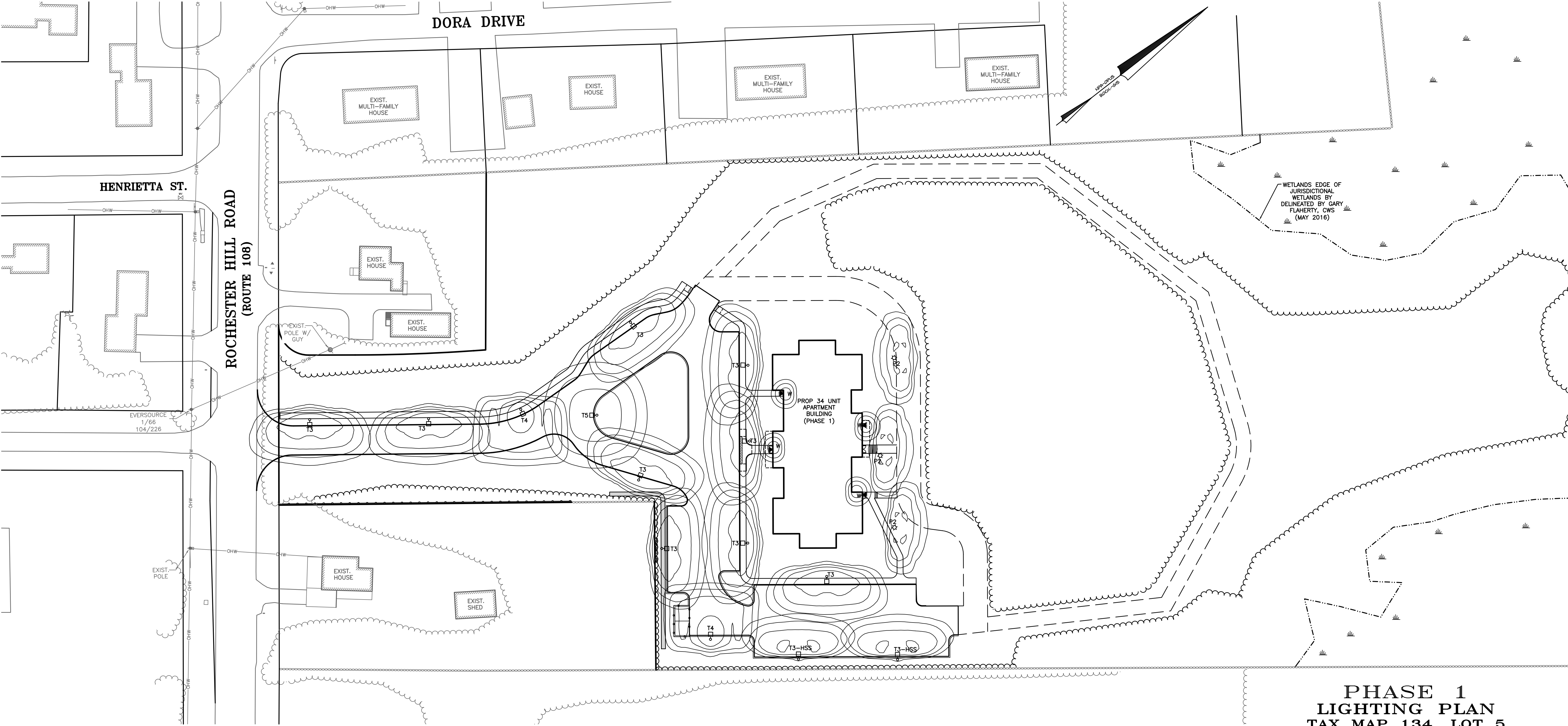
FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

LEGEND

- PROPERTY LINE
- JURISDICTIONAL WETLANDS
- EXISTING OVERHEAD WIRES
- EXISTING LIGHT POLES
- PROPOSED BUILDING
- PROPOSED PAVEMENT
- PROPOSED PAVEMENT WITH CURBING
- PROPOSED LIGHT POLES
- PROPOSED BUILDING LIGHT FIXTURES
- PROPOSED LIGHT FOOTCANDLE
- PROPOSED LIGHT ISOILLUMINATION LINES

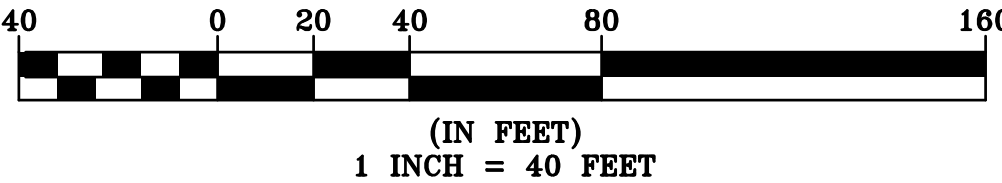
Luminaire Schedule				
Symbol	Label	Qty	Arrangement	Description
☆	P2	3	SINGLE	MSA-E01-LED-E1-SL2/ 10' POLE
○	T3	9	SINGLE	ICM-E02-LED-E1-SL3/ 15' AFG
○	T3-HSS	2	SINGLE	ICM-E02-LED-E1-SL3-HSS/ 15' AFG
○	T4	2	SINGLE	ICM-E02-LED-E1-SL4/ 15' AFG
○	T5	1	SINGLE	ICM-E02-LED-E1-5WQ/ 15' AFG
◀	W	4	SINGLE	WEST 912 50 PAR 20

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PHASE 1
LIGHTING PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR:
D.R. LEMIEUX BUILDERS, INC.

MAY 2016
GRAPHIC SCALE



ICS/ICM
ICON LED

1 - 6 LightBARs
Solid State LED



MSA MESA LED

1 - 6 LightBARs
Solid State LED

ARCHITECTURAL
AREA/SITE LUMINAIRE

FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.



ROADWAY IMPROVEMENT PLANS

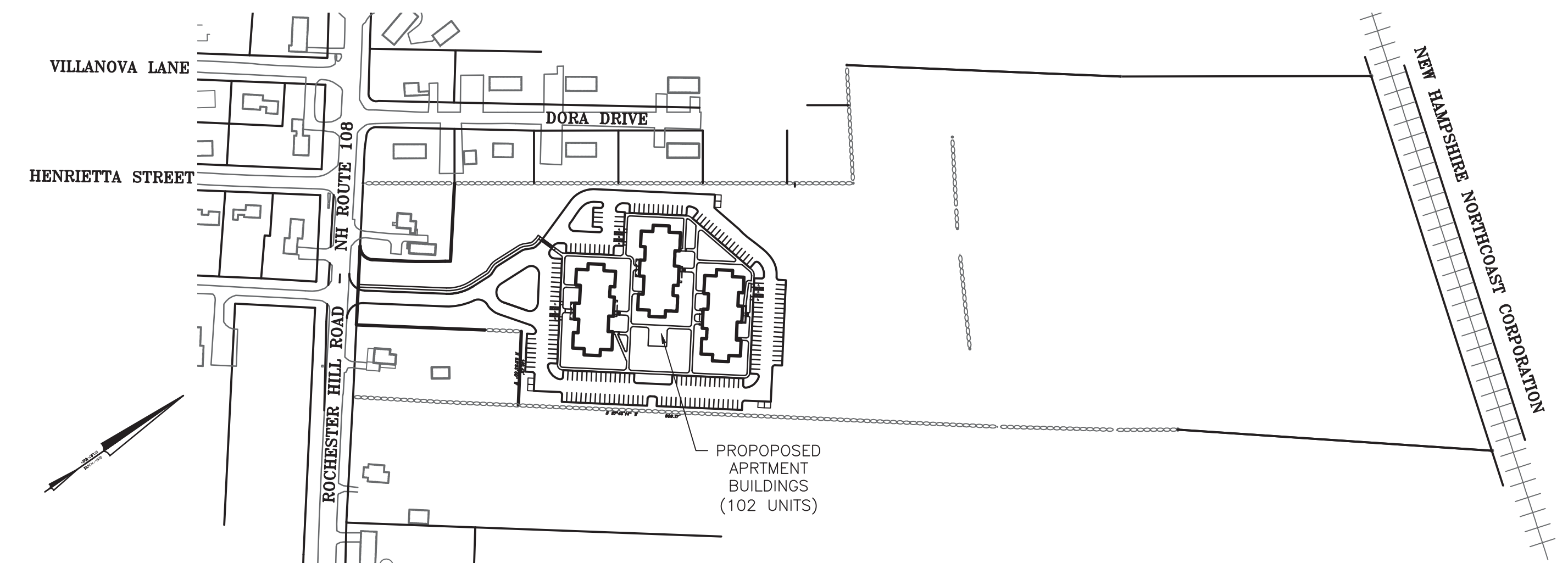
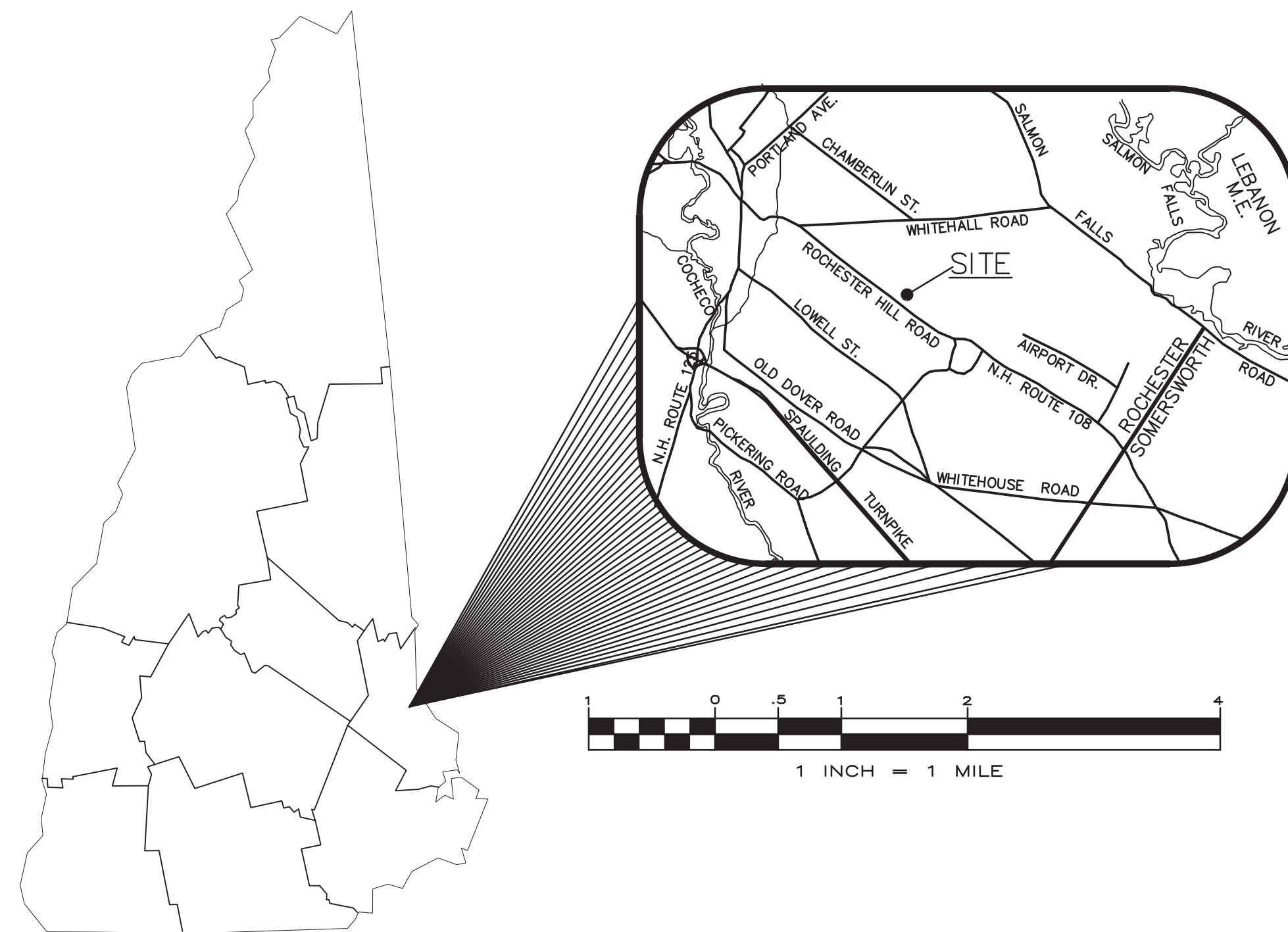
FOR

APPLE RIDGE ESTATES, LLC

114 ROCHESTER HILL ROAD

ROCHESTER, N.H. 03867

SEPTEMBER 2016



OVERALL SITE
1" = 200'

SHEET INDEX			
SHEET	DOT-0	COVER	1" = 200'
SHEET	DOT-1	STANDARD LEGEND AND SYMBOLS	AS SHOWN
SHEET	DOT-2	STANDARD LEGEND AND SYMBOLS	AS SHOWN
SHEET	DOT-3	OVERALL IMPROVEMENTS PLAN	1" = 100'
SHEET	DOT-4	EXISTING FEATURES PLAN	1" = 50'
SHEET	DOT-5	ROADWAY IMPROVEMENT PLAN	1" = 50'
SHEET	DOT-6	PAVEMENT MARKING AND SIGNAGE PLAN	1" = 50'
SHEET	DOT-7	DRIVEWAY IMPROVEMENT PLAN AND PROFILE	AS SHOWN
SHEET	DOT-8	ROADWAY PROFILE AND TYPICAL CROSS SECTIONS	AS SHOWN
SHEET	DOT-9	CROSS SECTIONS	1" = 10'
SHEET	DOT-10	CROSS SECTIONS	1" = 10'
SHEET	DOT-11	CROSS SECTIONS	1" = 10'
SHEET	DOT-12	CROSS SECTIONS	1" = 10'



CIVIL ENGINEERS

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

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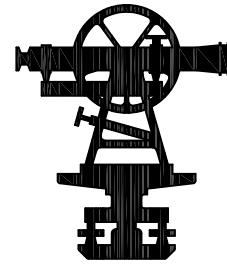
OWNER OF RECORD

TAX MAP 134, LOT 5
OWNER OF RECORD:
ROCHESTER HILL HOLDINGS, LLC
76 EXETER ROAD
NEWMARKET, NH 03857
SCRD BOOK 4552, PAGE 648

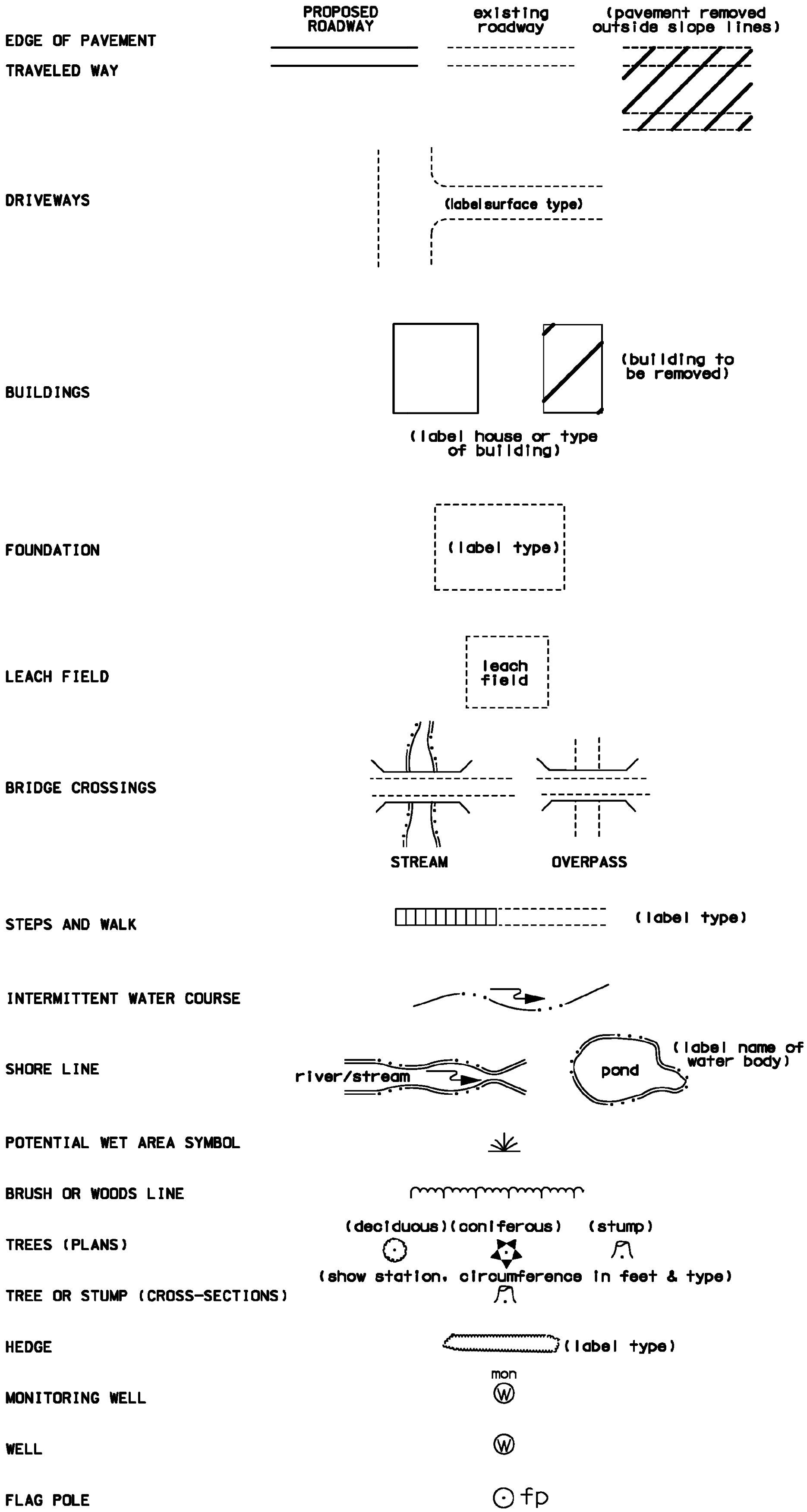
APPLICANT

DR LEMIEUX BUILDERS, INC.
76 EXETER ROAD
NEWMARKET, NH 03857

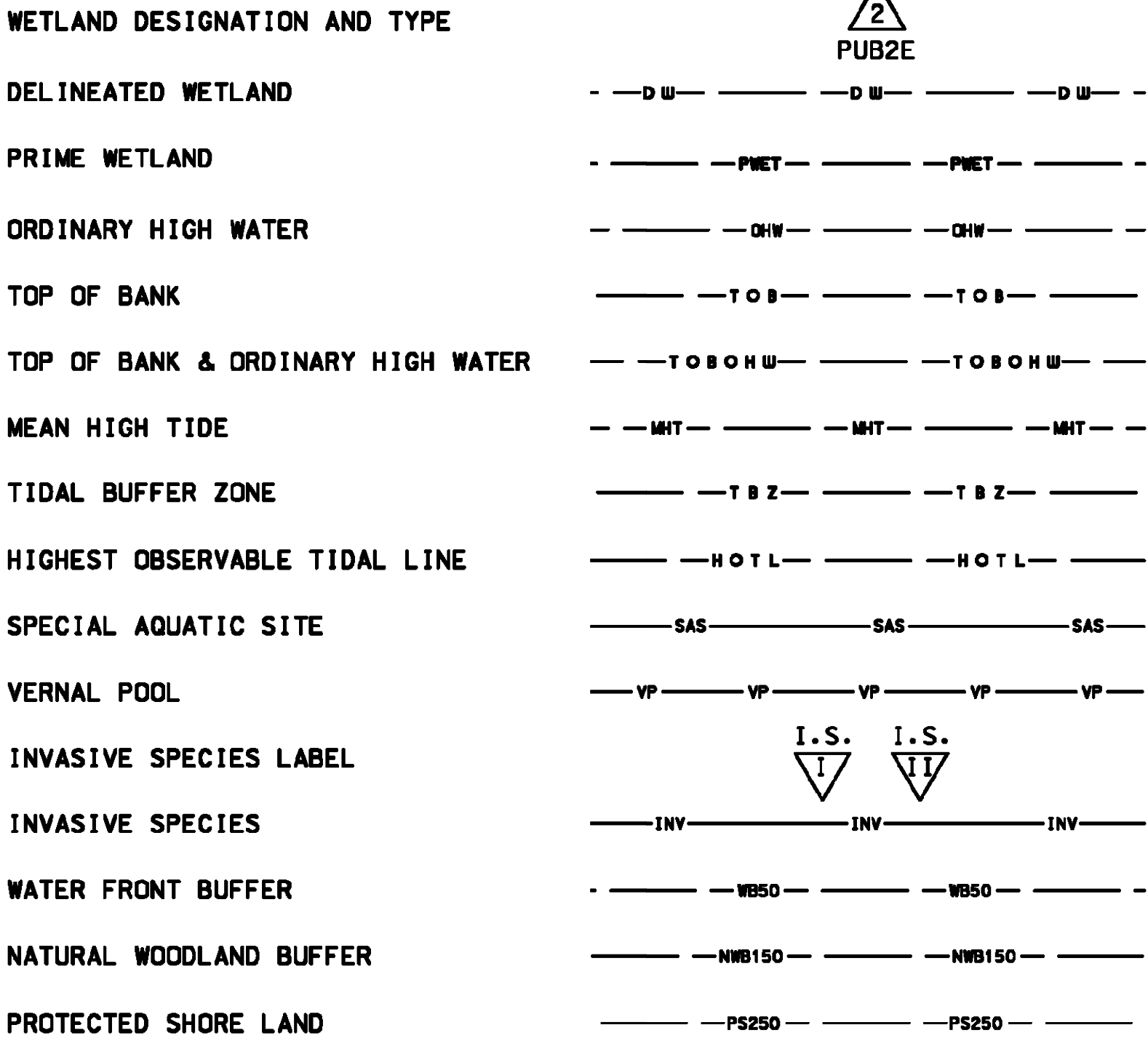
FILE NO. 104
PLAN NO. C-2780
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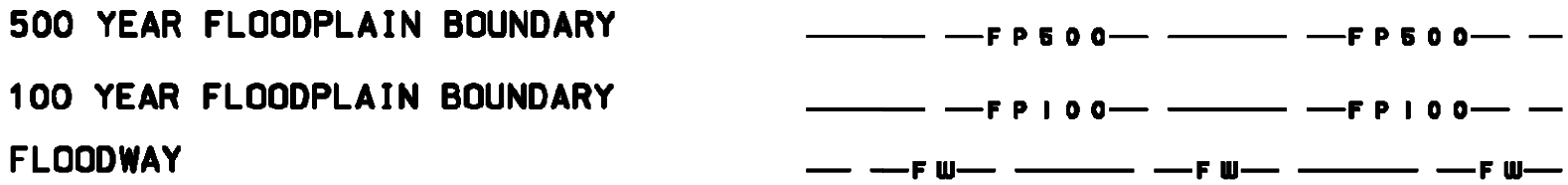
GENERAL



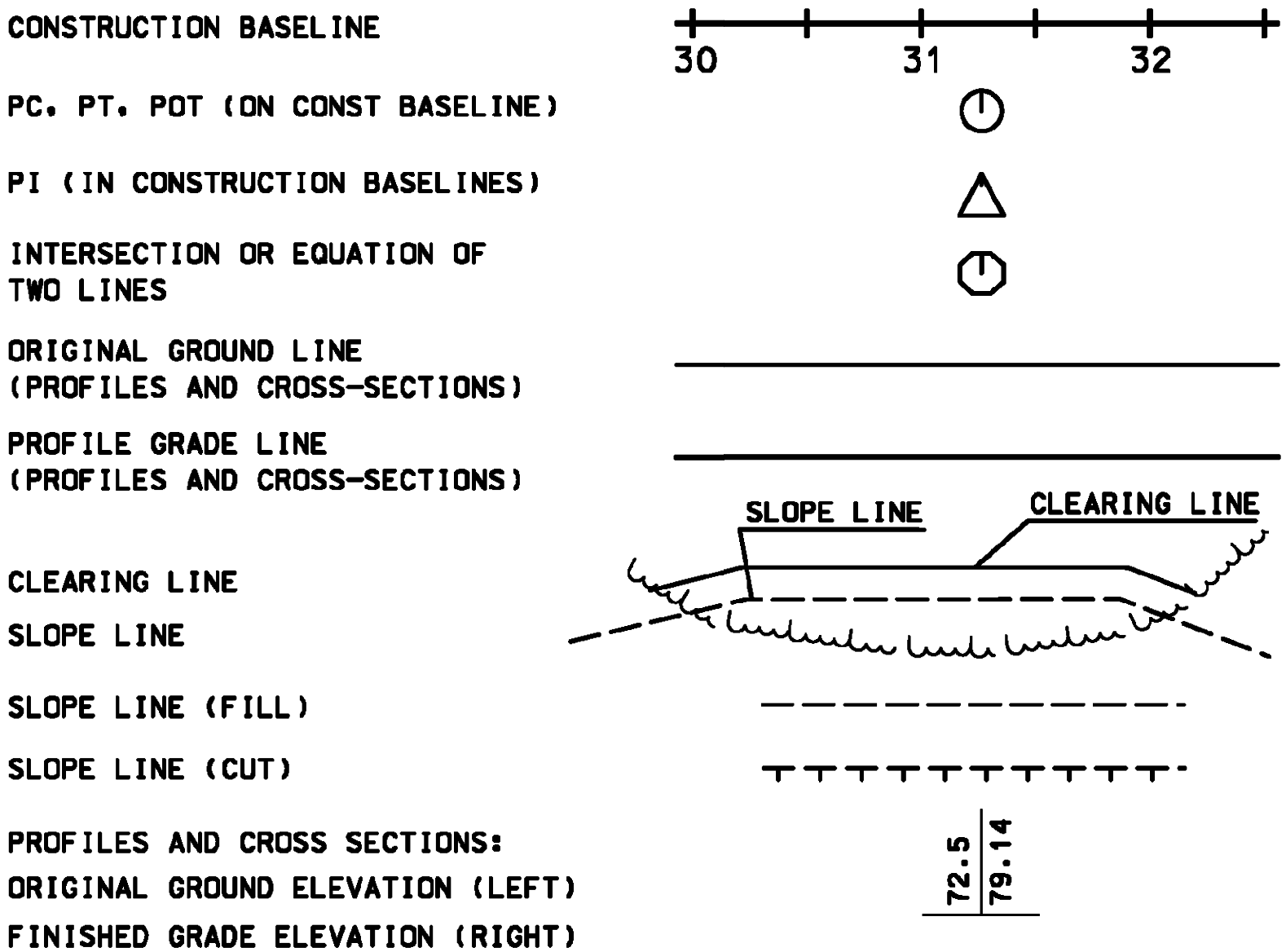
WETLANDS



FLOODPLAIN / FLOODWAY

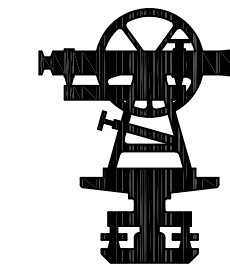


ENGINEERING

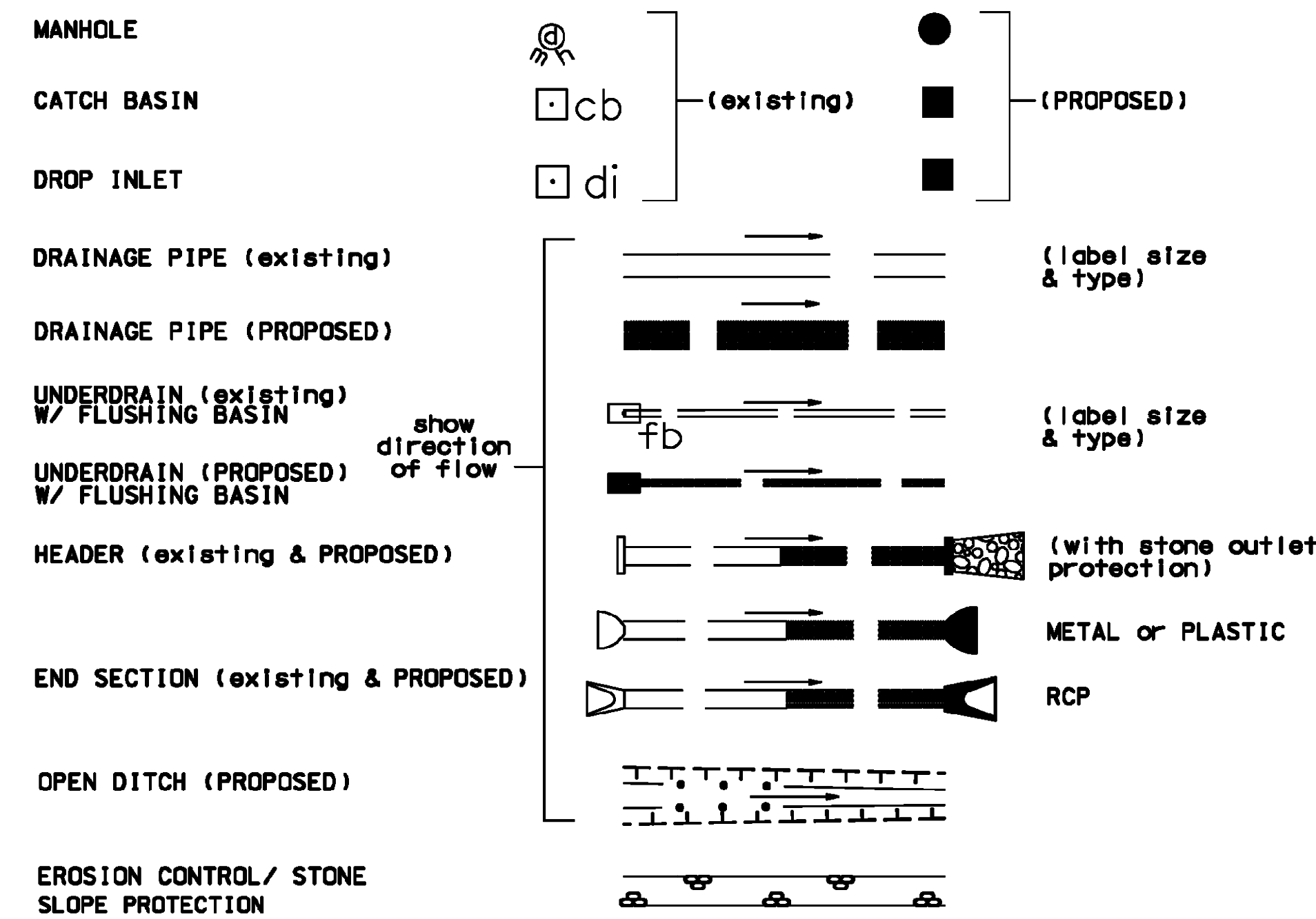


SHEET 1 OF 2

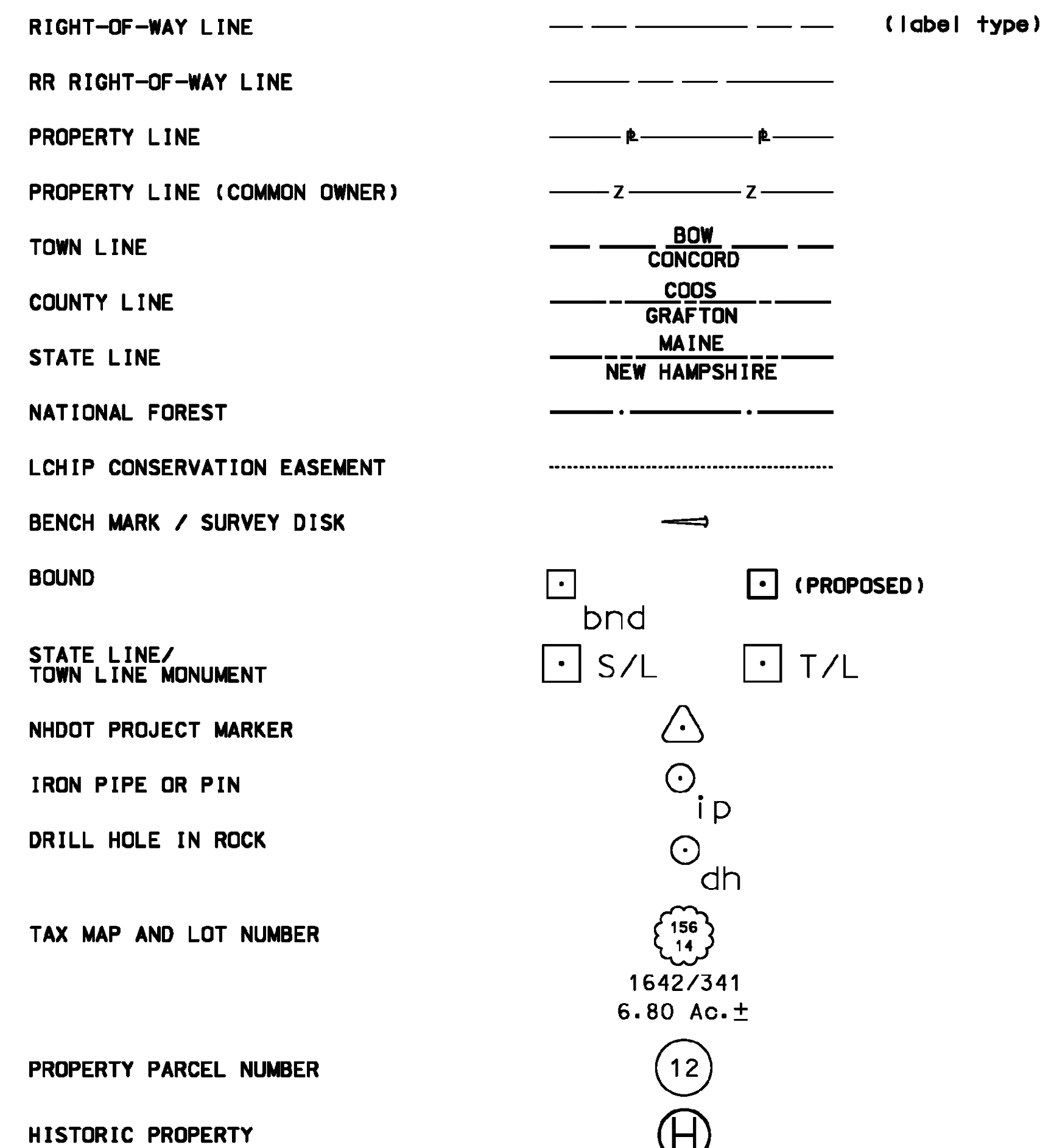
STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
STANDARD SYMBOLS				
REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
10-25-11	stdsyml_2		X	



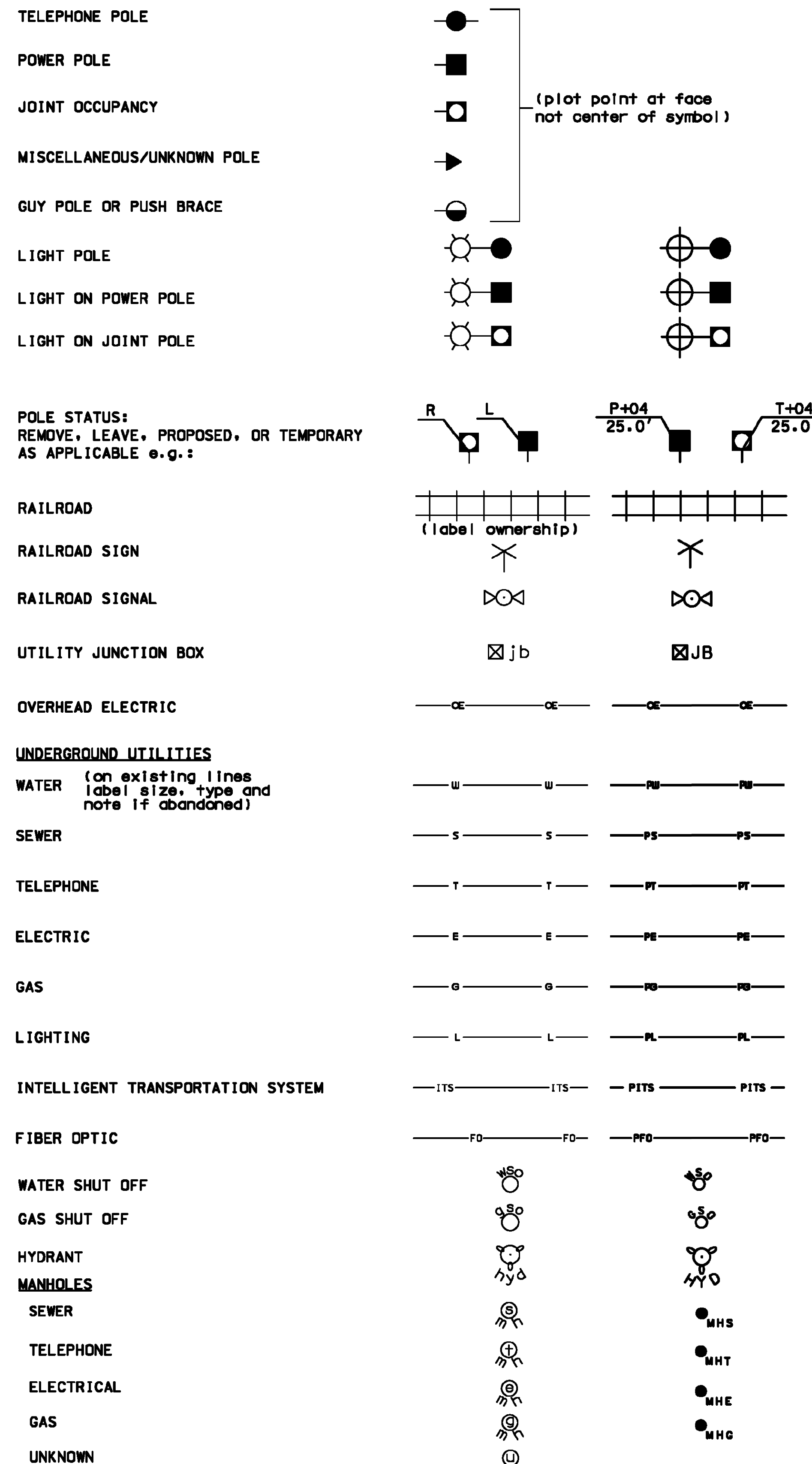
DRAINAGE



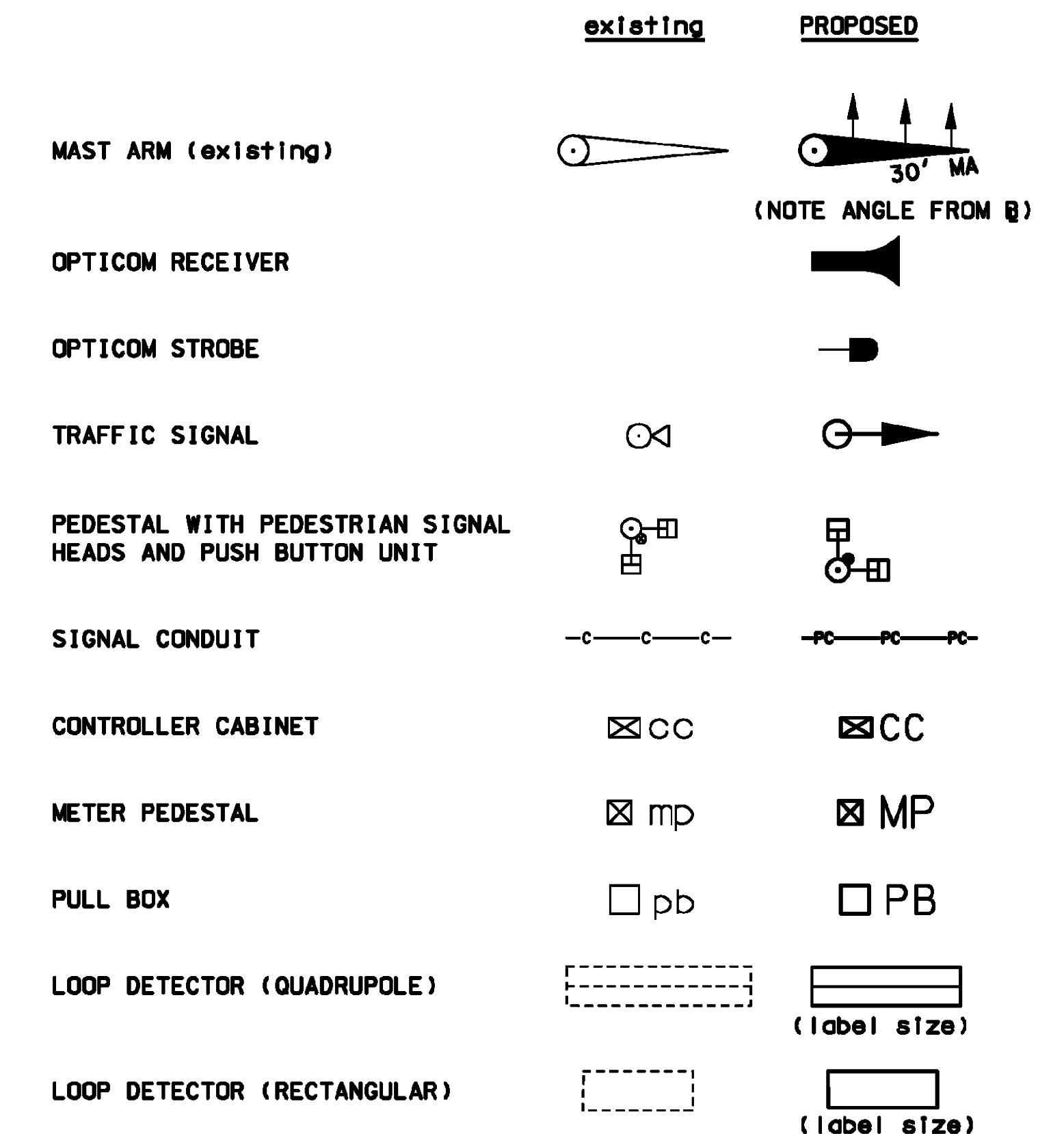
BOUNDARIES / RIGHT-OF-WAY



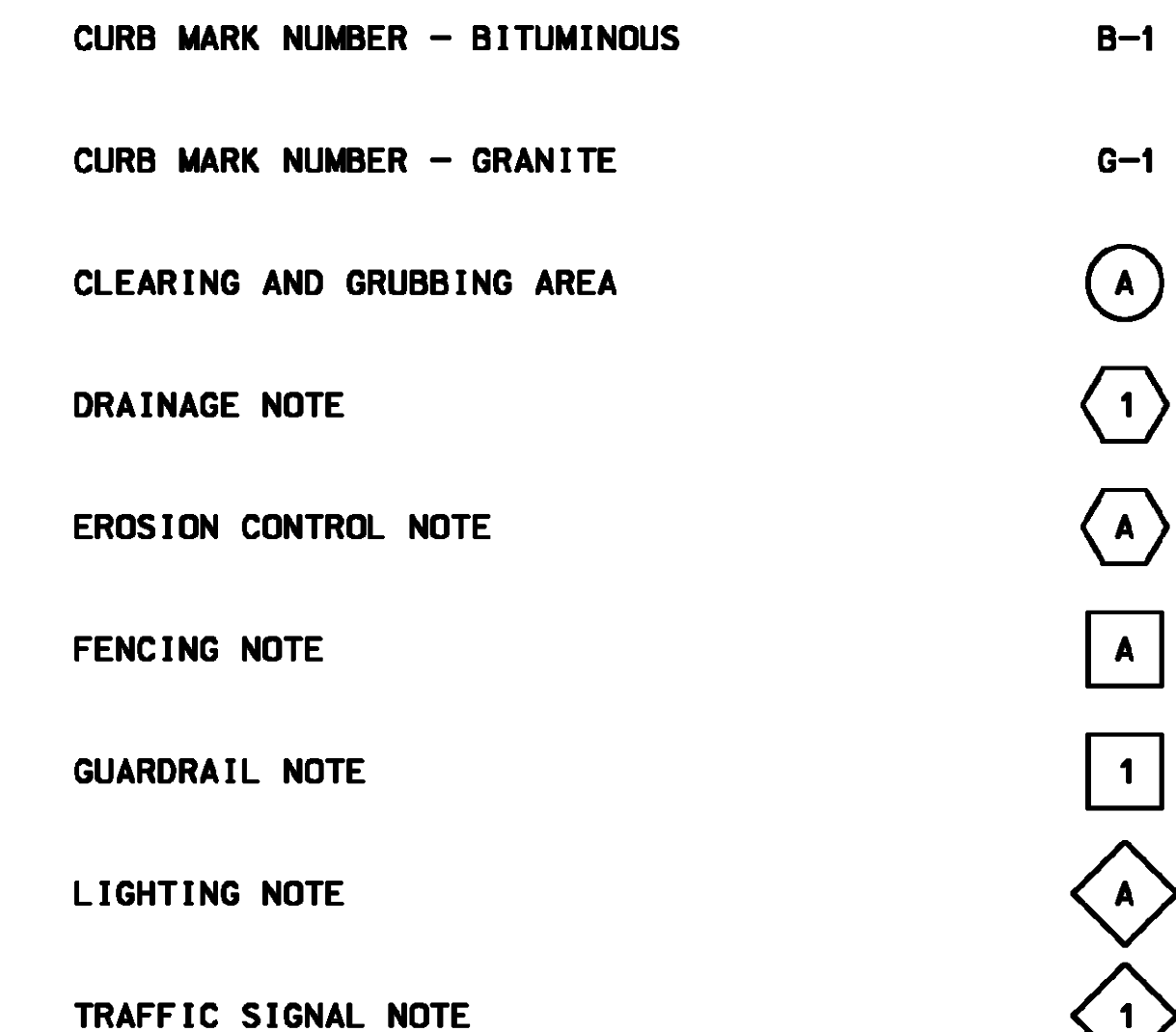
UTILITIES



TRAFFIC SIGNALS

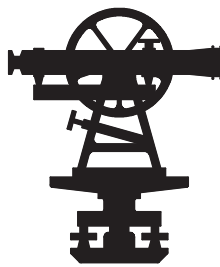


CONSTRUCTION NOTES



SHEET 2 OF 2

STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
STANDARD SYMBOLS				
REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
10-25-11	stdsyml_2		X	



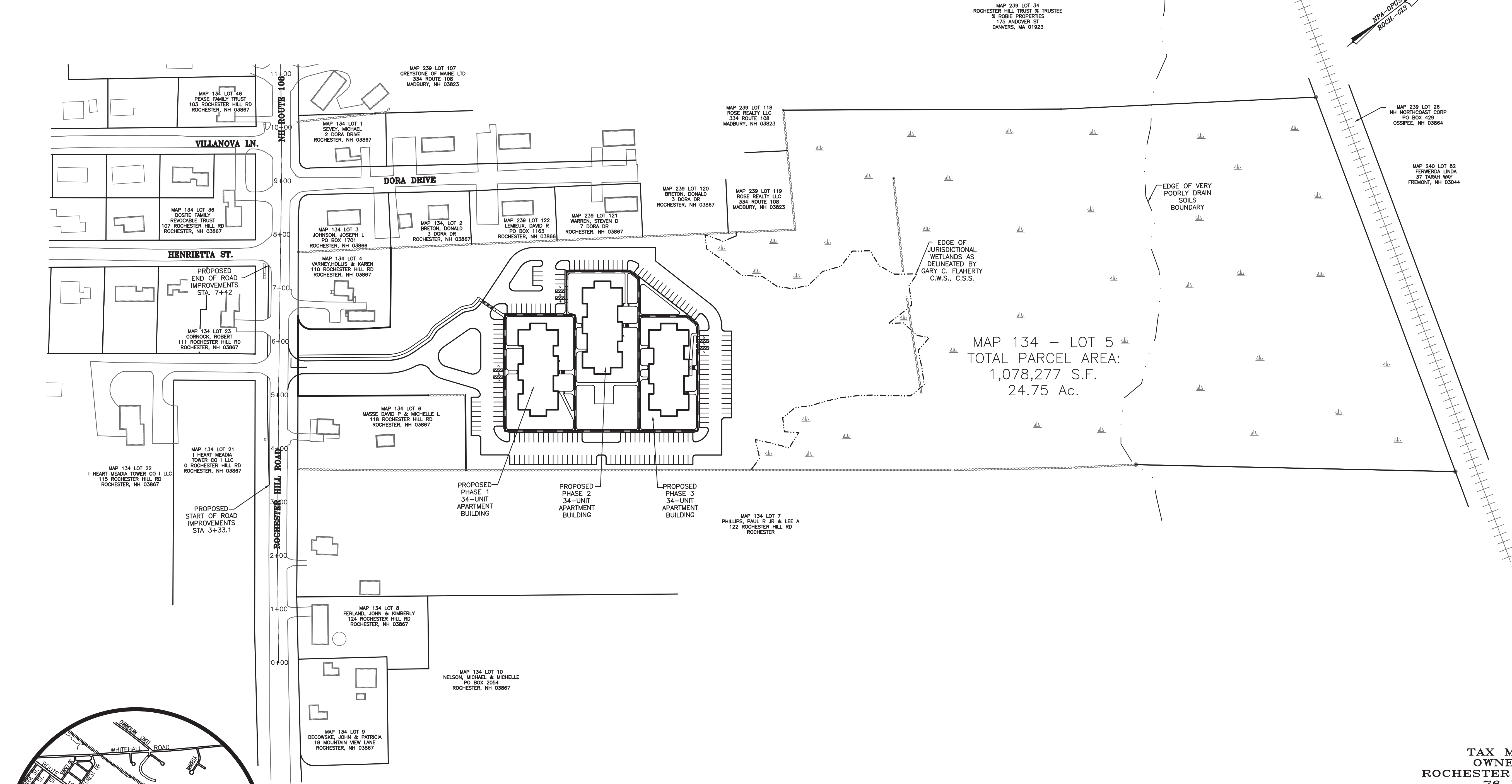
LEGEND

- PROPERTY LINE
- LIMITS OF JURISDICTIONAL WETLANDS
- EXISTING STONEWALLS
- EXISTING RAILROAD TRACKS
- EXISTING WETLANDS
- EXISTING UTILITY POLE
- EXISTING MONUMENT

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.

11/30/16 REVISE PROPOSED WIDEN SHOULDER WIDTH AND TAPER LENGTH AS REQUESTED BY NHDOT DISTRICT 6 ENGINEER

- GENERAL SITE PLAN NOTES
- THIS PARCELS ARE LOCATED IN THE RESIDENTIAL-2 (R2) ZONE.
 - TOTAL PARCEL AREA: 1,078,277 SQUARE FEET OR 24.75 ACRES.
 - THE PURPOSE OF THIS PLAN IS TO DEPICT THE OVERALL IMPROVEMENTS TO THE SUBJECT PARCEL AND NH ROUTE 108
 - ALL EXISTING UTILITIES LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATION PRIOR TO ANY WORK BEING PERFORMED.
 - THESE PLANS SHOW ONLY THOSE FEATURES THAT WERE VISUALLY PER REFERENCE PLAN 1.
 - DIMENSIONAL REGULATIONS PER ZONING ORDINANCE: RESIDENTIAL (R2) ZONE:
 - MINIMUM LOT AREA/DWELLING UNIT = 75,000 SF
 - MINIMUM LOT AREA = 30,000 SF
 - MINIMUM LOT FRONTAGE = 100 FEET
 - MINIMUM YARD SETBACKS:
 - FRONT = 15'
 - SIDE = 10'
 - REAR = 25'
 - MAXIMUM LOT COVERAGE = 30%
 - MAXIMUM BUILDING HEIGHT = 35'
 - ORIENTATION: HORIZONTAL AND VERTICAL DATUMS - CITY OF ROCHESTER GIS.
 - PARCEL IS NOT LOCATED WITHIN ZONE A (100YR FLOOD) AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY MAP, COMMUNITY #33017C0212D DATED MAY 17, 2005.



TAX MAP 134, LOT 5
OWNER OF RECORD:
ROCHESTER HILL HOLDINGS, LLC
76 EXETER ROAD
NEWMARKET, NH 03857
SCRD BOOK 4552, PAGE 648

OVERALL SITE IMPROVEMENT PLAN

TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH

PREPARED FOR: D.R. LEMIEUX BUILDERS, INC.

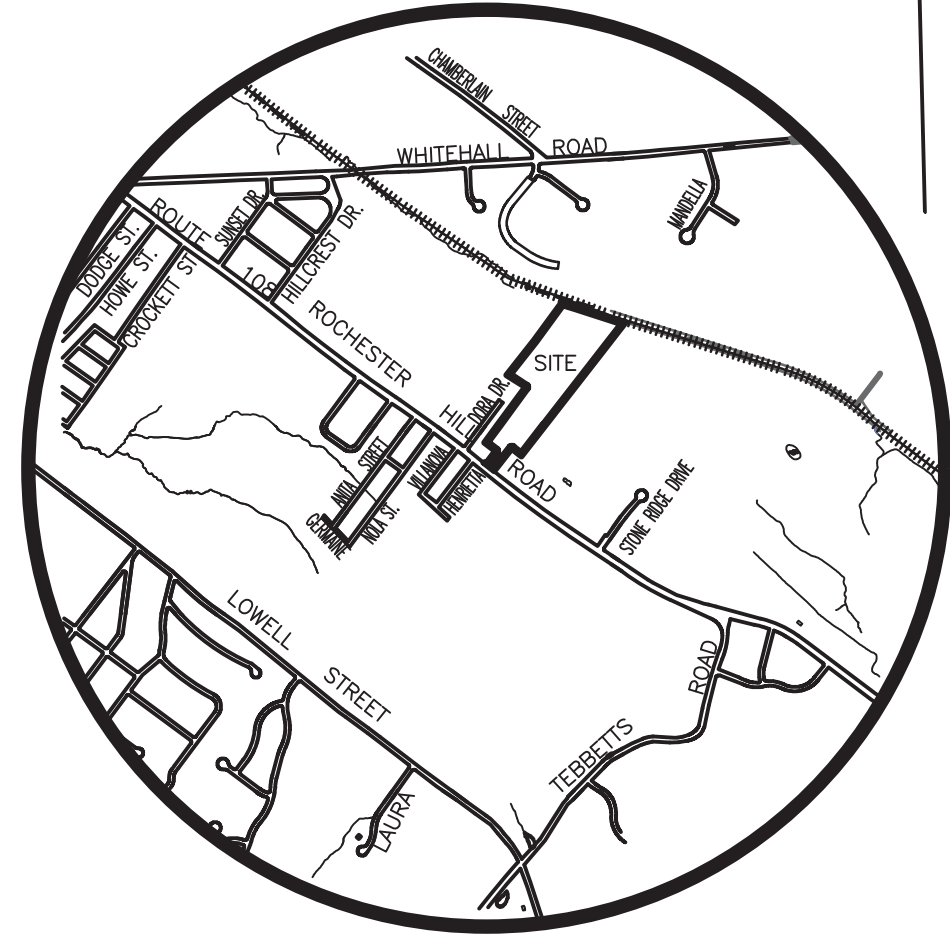
OWNER OF RECORD:
APPLE RIDGE ESTATES LLC

MAY 2016

GRAPHIC SCALE

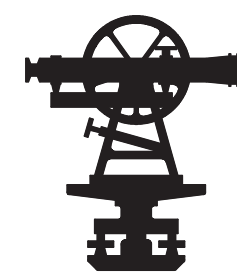


(IN FEET)
1 INCH= 100 FT.



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

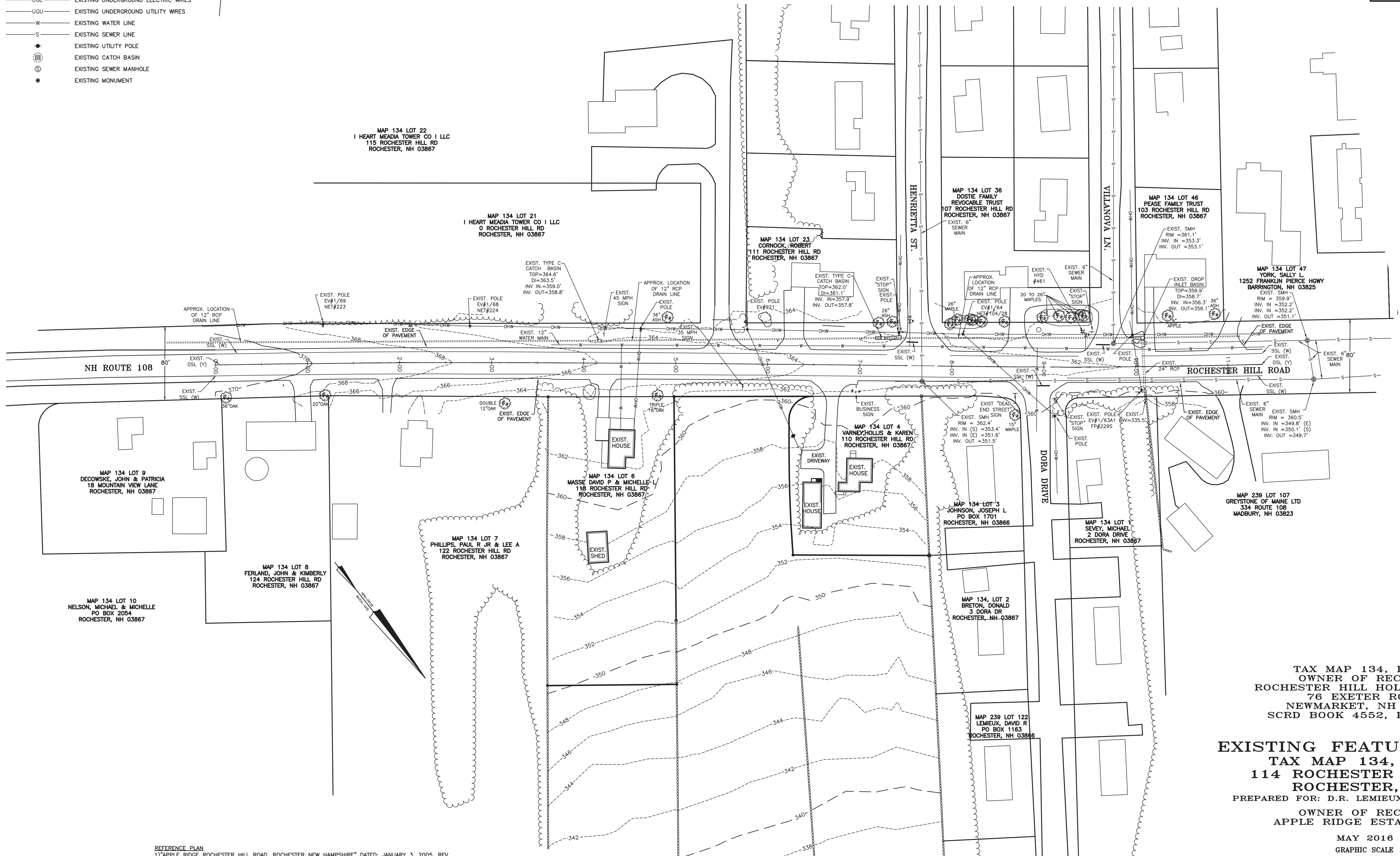
REFERENCE PLAN
1) APPLE RIDGE ROCHESTER HILL ROAD, ROCHESTER NEW HAMPSHIRE DATED: JANUARY 3, 2005, REV. TO 1-3-2006; BY CIVILWORKS, INC.
2) LOT LINE ADJUSTMENT PLAN LOTS 5 & 6, TAX ASSESSOR'S MAP 134, ROCHESTER HILL ROAD, ROCHESTER, NEW HAMPSHIRE, COUNTY OF STRAFFORD. SCALE 1"=100'; DATED: JANUARY 11, 2002, REV. TO 2-11-2002; BY CIVILWORKS, INC. RECORDED S.C.R.D. PLAN 64-76.



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- LEGEND
- PROPERTY LINE
 - LIMITS OF JURISDICTIONAL WETLANDS
 - EXISTING TREE LINE
 - EXISTING STONEWALLS
 - EXISTING CONTOUR LINE
 - EXISTING OVERHEAD WIRES
 - EXISTING UNDERGROUND ELECTRIC WIRES
 - EXISTING UNDERGROUND UTILITY WIRES
 - EXISTING WATER LINE
 - EXISTING SEWER LINE
 - EXISTING UTILITY POLE
 - EXISTING CATCH BASIN
 - EXISTING SEWER MANHOLE
 - EXISTING MONUMENT



TAX MAP 134, LOT 5
OWNER OF RECORD:
ROCHESTER HILL HOLDINGS, LLC
76 EXETER ROAD
NEWMARKET, NH 03857
SCRD BOOK 4552, PAGE 648

EXISTING FEATURES PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR: D.R. LEMIEUX BUILDERS, INC.

OWNER OF RECORD:
APPLE RIDGE ESTATES LLC

MAY 2016
GRAPHIC SCALE

50 0 25 50 100 200
(IN FEET)
1 INCH = 50 FEET

REFERENCE PLAN
1) "APPLE RIDGE ROCHESTER HILL ROAD, ROCHESTER NEW HAMPSHIRE" DATED: JANUARY 3, 2005, REV. TO 1-3-2006; BY CIVILWORKS, INC.
2) "LOT LINE ADJUSTMENT PLAN LOTS 5 & 6, TAX ASSESSOR'S MAP 134, ROCHESTER HILL ROAD, ROCHESTER, NEW HAMPSHIRE, COUNTY OF STRAFFORD" SCALE 1"=100', DATED: JANUARY 11, 2002, REV. TO 2-11-2002; BY CIVILWORKS, INC. RECORDED S.C.R.D. PLAN 64-76.

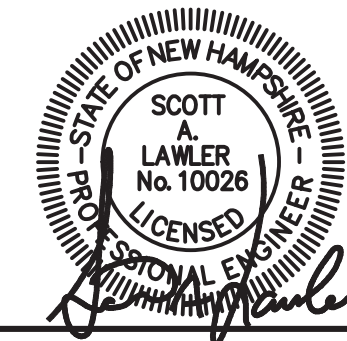
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PLAN NO. C-2780
DWG NO. 15225\SP-1
F.B. NO.

LEGEND

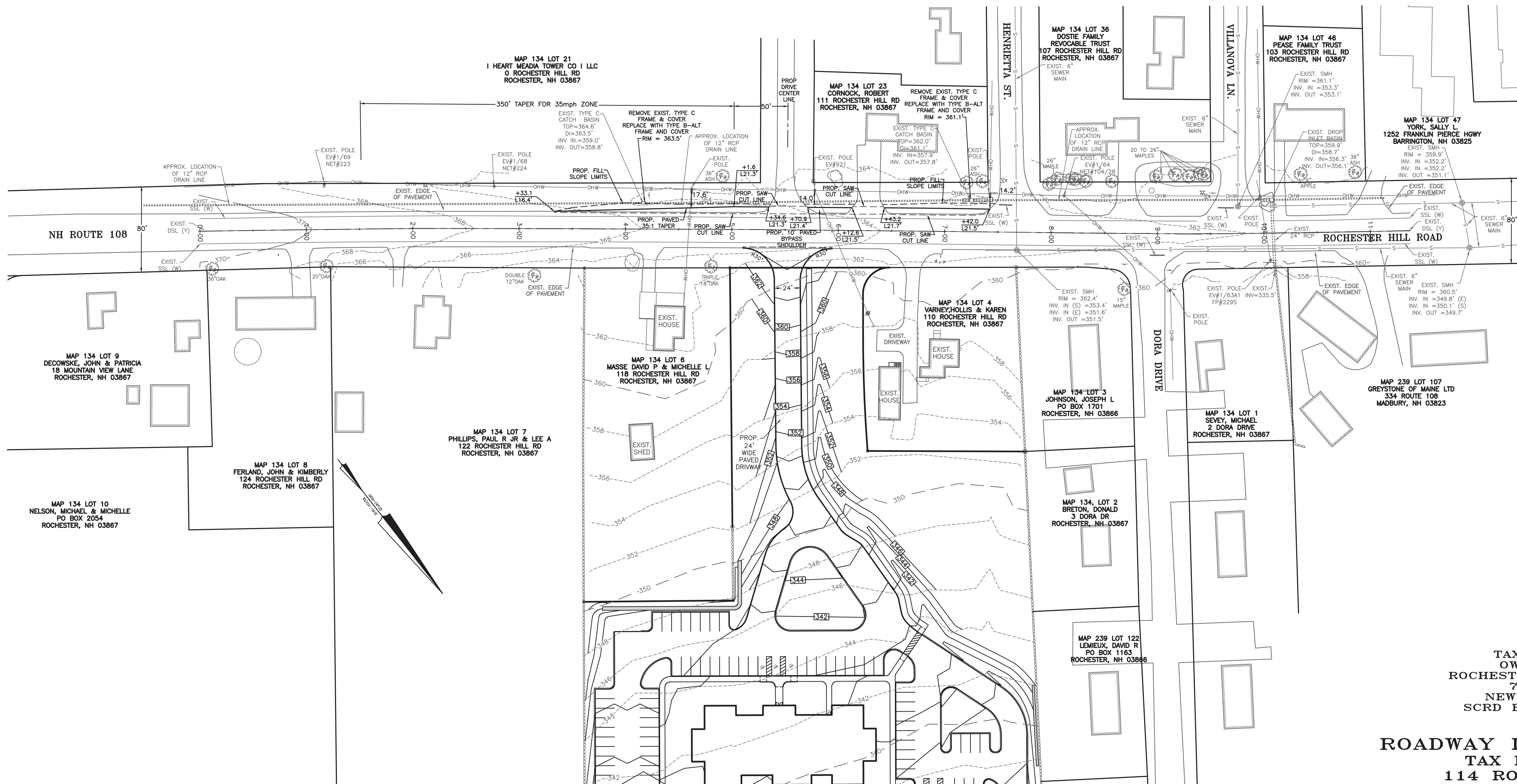
---	PROPERTY LINE
---	EXISTING TREE LINE
---	EXISTING STONEWALLS
---	EXISTING CONTOUR LINE
---	EXISTING DRAIN LINE
---	EXISTING OVERHEAD WIRES
---	EXISTING WATER LINE
---	EXISTING SEWER LINE
---	EXISTING UTILITY POLE
---	EXISTING SEWER MANHOLE
---	EXISTING MONUMENT
---	PROPOSED EDGE OF PAVEMENT W/ CURB
---	PROPOSED EDGE OF PAVEMENT
---	PROPOSED SIGN



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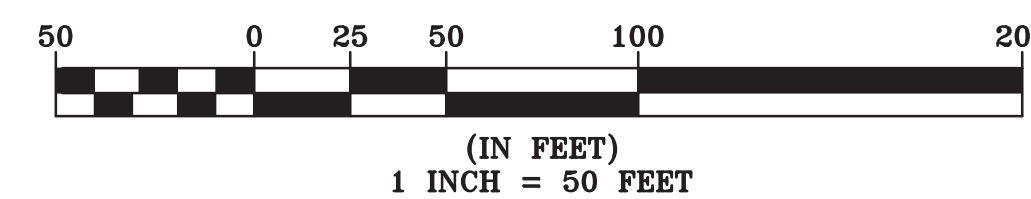
09/21/16 ADD EXISTING LANE MARKINGS AND DISTANCES FROM PROPOSED PAVEMENT TO UTILITY POLES
11/30/16 REVISE PROPOSED WIDEN SHOULDER WIDTH AND TAPER LENGTH AS REQUESTED BY NHDOT DISTRICT 6 ENGINEER



TAX MAP 134, LOT 5
OWNER OF RECORD:
ROCHESTER HILL HOLDINGS, LLC
76 EXETER ROAD
NEWMARKET, NH 03857
SCRD BOOK 4552, PAGE 648

ROADWAY IMPROVEMENT PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR: D.R. LEMIEUX BUILDERS, INC.

MAY 2016
GRAPHIC SCALE



REFERENCE PLAN
1) APPLE RIDGE ROCHESTER HILL ROAD, ROCHESTER NEW HAMPSHIRE DATED: JANUARY 3, 2005, REV. TO 1-3-2006; BY CIVILWORKS, INC.
2) LOT LINE ADJUSTMENT PLAN LOTS 5 & 6, TAX ASSESSOR'S MAP 134, ROCHESTER HILL ROAD, ROCHESTER, NEW HAMPSHIRE, COUNTY OF STRAFFORD, SCALE 1"=100', DATED: JANUARY 11, 2002, REV. TO 2-11-2002; BY CIVILWORKS, INC. RECORDED S.C.R.D. PLAN 64-76.

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

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

NORWAY PLAINS ASSOCIATES, INC.

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

DOT-5

NHDOT ITEM NO.	MUTCD ID NO.	SIGN SIZE		TEXT (COLOR)	NO. SIGNS REQ'D	POST TYPE
		HEIGHT	WIDTH			
615.03	R1-1	36"	36"	STOP	2	1 U-CHANNEL

PAVEMENT MARKING LEGEND	
SYMBOL	DESCRIPTION
①	PROPOSED 18" SOLID WHITE LINE (T)
②	PROPOSED 4" DOUBLE SOLID YELLOW LINE
(T)	THERMOPLASTIC

- PAVEMENT MARKING NOTES:
- ALL FINAL PAVEMENT MARKINGS SHALL BE RETROREFLECTIVE PAINT UNLESS OTHERWISE NOTED.
 - ALL SYMBOLS, WORDS, TRANSVERSE MARKINGS (STOP BARS, CROSSWALK LINES, AND RAILROAD SYMBOLS), CHANNELIZATION LANE LINES AND ALL OTHER MARKINGS NOTED WITH (T) SHALL BE THERMOPLASTIC.
 - THE CONTRACTOR SHALL CONTACT MIKE O'DONNELL AT THE N.H.D.O.T BUREAU OF TRAFFIC AT (603) 271-2291 ONE WEEK PRIOR TO PAVEMENT MARKINGS.
 - THE CONTRACTOR SHALL MAKE A NARRATED VIDEOTAPE OF THE PROPOSED CONSTRUCTION AREA PRIOR TO COMMENCING WORK DESCRIBING THE LOCATION AND CONDITION OF EXISTING TRAFFIC CONTROL DEVICES, WHICH SHALL BE TURNED OVER TO THE N.H.D.O.T ENGINEER PRIOR TO COMMENCING WORK. ANY EXISTING TRAFFIC CONTROL DEVICES MISSING OR DAMAGED DUE TO THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED WITH NEW DEVICES AT THE CONTRACTOR'S EXPENSE.
 - THE PAVEMENT MARKINGS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE N.H.D.O.T "STANDARD PLANS FOR ROAD CONSTRUCTION." THE STANDARD PLANS BOOK IS AVAILABLE FROM N.H.D.O.T BUREAU OF HIGHWAY DESIGN RECORDS SECTION [TEL. (603)271-2171]. THE CONTRACTOR IS RESPONSIBLE FOR LAYOUT OF ALL PAVEMENT MARKINGS.
 - THE PROPOSED STOP BAR AND DRIVEWAY PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH NHDOT STANDARD NO. PM-9, PAVEMENT MARKINGS AT MINOR INTERSECTIONS.

SIGNING LEGEND	
1 N R1-1	NEW SIGN INSTALLATION WITH LABEL
1 RET R1-1	RETAIN EXISTING SIGN WITH LABEL
1 R R4-7a	RESET/RELOCATE EXISTING SIGN WITH LABEL

- SIGNAGE NOTES:
- SIGNS SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND NHDOT STANDARD PLANS FOR ROAD CONSTRUCTION.



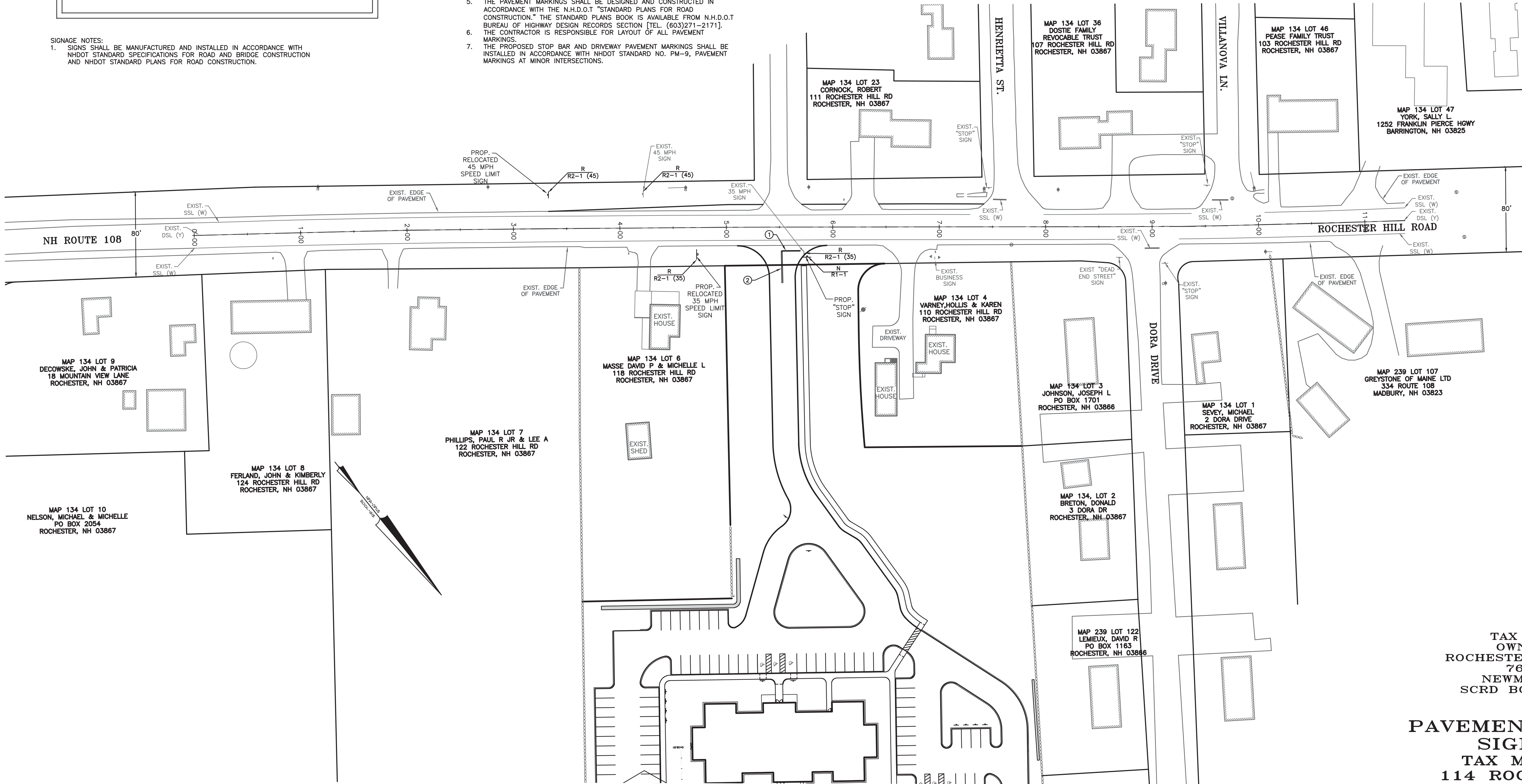
LEGEND

- PROPERTY LINE
- EXISTING TREE LINE
- EXISTING STONEWALLS
- EXISTING CONTOUR LINE
- EXISTING DRAIN LINE
- EXISTING OVERHEAD WIRES
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING UTILITY POLE
- EXISTING SEWER MANHOLE
- EXISTING MONUMENT
- PROPOSED EDGE OF PAVEMENT W/ CURB
- PROPOSED EDGE OF PAVEMENT
- PROPOSED SIGN

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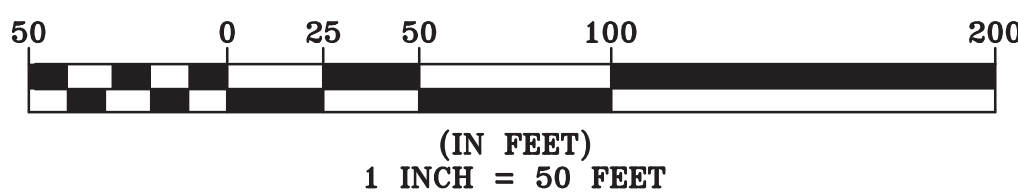
11/30/16 REVISE PROPOSED WIDEN SHOULDER WIDTH AND TAPER LENGTH AS REQUESTED BY NHDOT DISTRICT 6 ENGINEER
01/05/16 REVISE PER COMMENTS FROM NHDOT DISTRICT 6
01/24/16 REVISE PROPOSED SIGN PLACEMENT PER COMMENTS FROM NHDOT BUREAU OF TRAFFIC DATED 1-20-17.



TAX MAP 134, LOT 5
OWNER OF RECORD:
ROCHESTER HILL HOLDINGS, LLC
76 EXETER ROAD
NEWMARKET, NH 03857
SCRD BOOK 4552, PAGE 648

PAVEMENT MARKING AND
SIGNAGE PLAN
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH

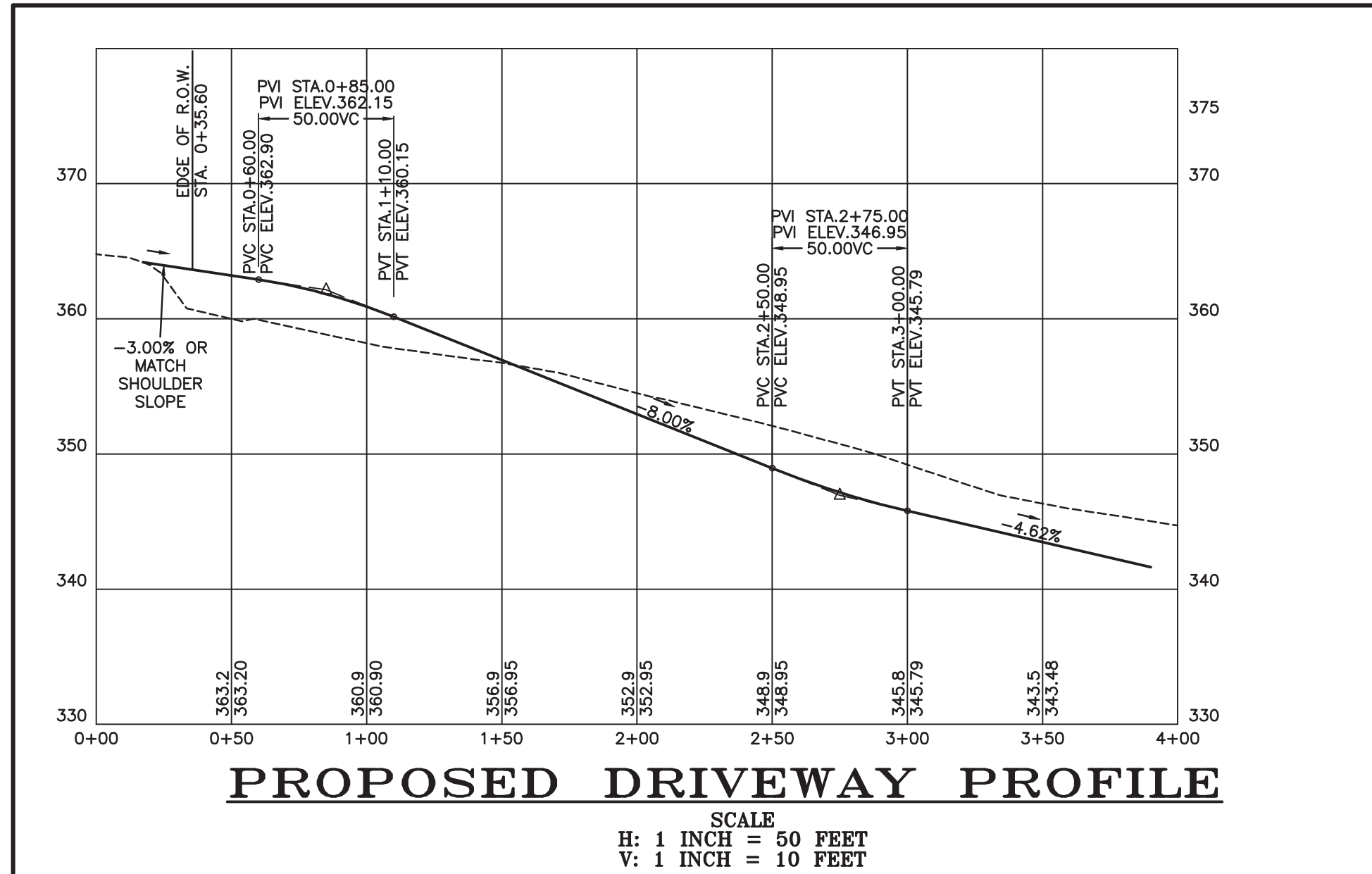
PREPARED FOR: D.R. LEMIEUX BUILDERS, INC.
MAY 2016
GRAPHIC SCALE



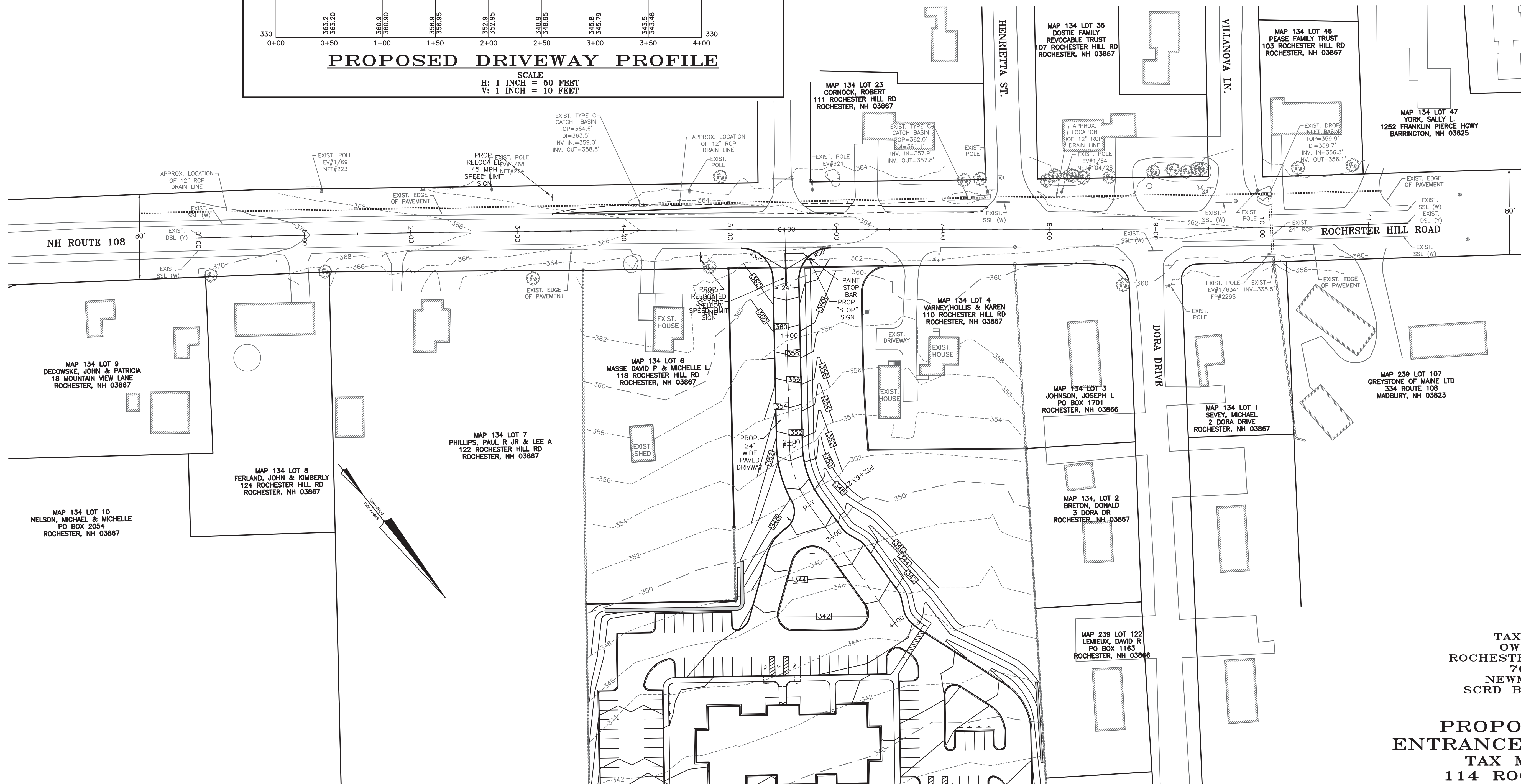
FILE NO. 104
PLAN NO. C-2780
DWG NO. 15225\SP-1
F.B. NO.

LEGEND

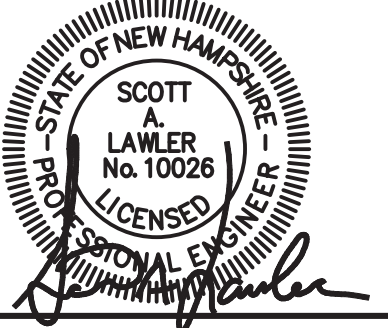
- PROPERTY LINE
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- EXISTING CONTOUR LINE
- EXISTING DRAIN LINE
- EXISTING OVERHEAD WIRES
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING UTILITY POLE
- EXISTING SEWER MANHOLE
- EXISTING MONUMENT
- PROPOSED EDGE OF PAVEMENT W/ CURB
- PROPOSED EDGE OF PAVEMENT
- PROPOSED SIGN



SCALE
H: 1 INCH = 50 FEET
V: 1 INCH = 10 FEET



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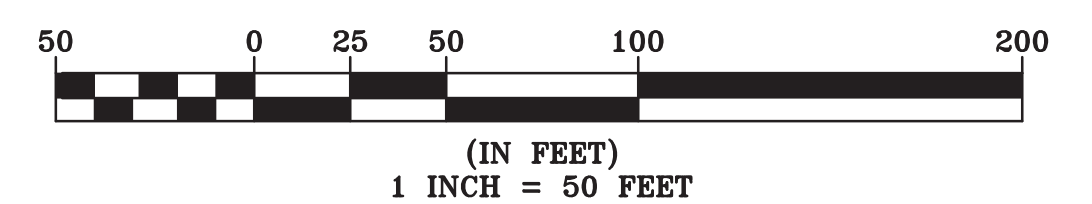


11/30/16 REVISE PROPOSED WIDEN SHOULDER WIDTH AND
TAPER LENGTH AS REQUESTED BY NHDOT DISTRICT 6 ENGINEER
01/05/17 REVISE PER COMMENTS FROM NHDOT DISTRICT 6.

TAX MAP 134, LOT 5
OWNER OF RECORD:
ROCHESTER HILL HOLDINGS, LLC
76 EXETER ROAD
NEWMARKET, NH 03857
SCRD BOOK 4552, PAGE 648

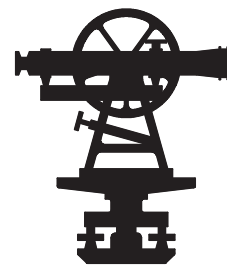
PROPOSED DRIVEWAY
ENTRANCE PLAN & PROFILE
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR: D.R. LEMIEUX BUILDERS, INC.

MAY 2016
GRAPHIC SCALE



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

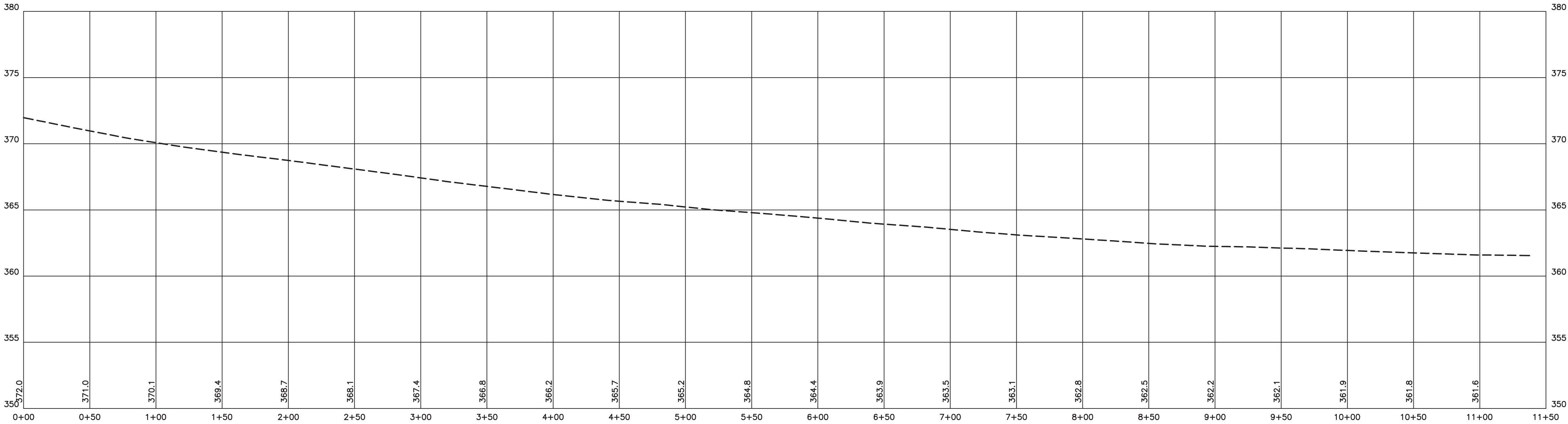
REFERENCE PLAN
1) APPLE RIDGE ROCHESTER HILL ROAD, ROCHESTER NEW HAMPSHIRE DATED: JANUARY 3, 2005, REV. TO 1-3-2006; BY CIVILWORKS, INC.
2) LOT LINE ADJUSTMENT PLAN LOTS 5 & 6, TAX ASSESSOR'S MAP 134, ROCHESTER HILL ROAD, ROCHESTER, NEW HAMPSHIRE, COUNTY OF STRAFFORD, SCALE 1"=100', DATED: JANUARY 11, 2002, REV. TO 2-11-2002; BY CIVILWORKS, INC. RECORDED S.C.R.D. PLAN 64-76.



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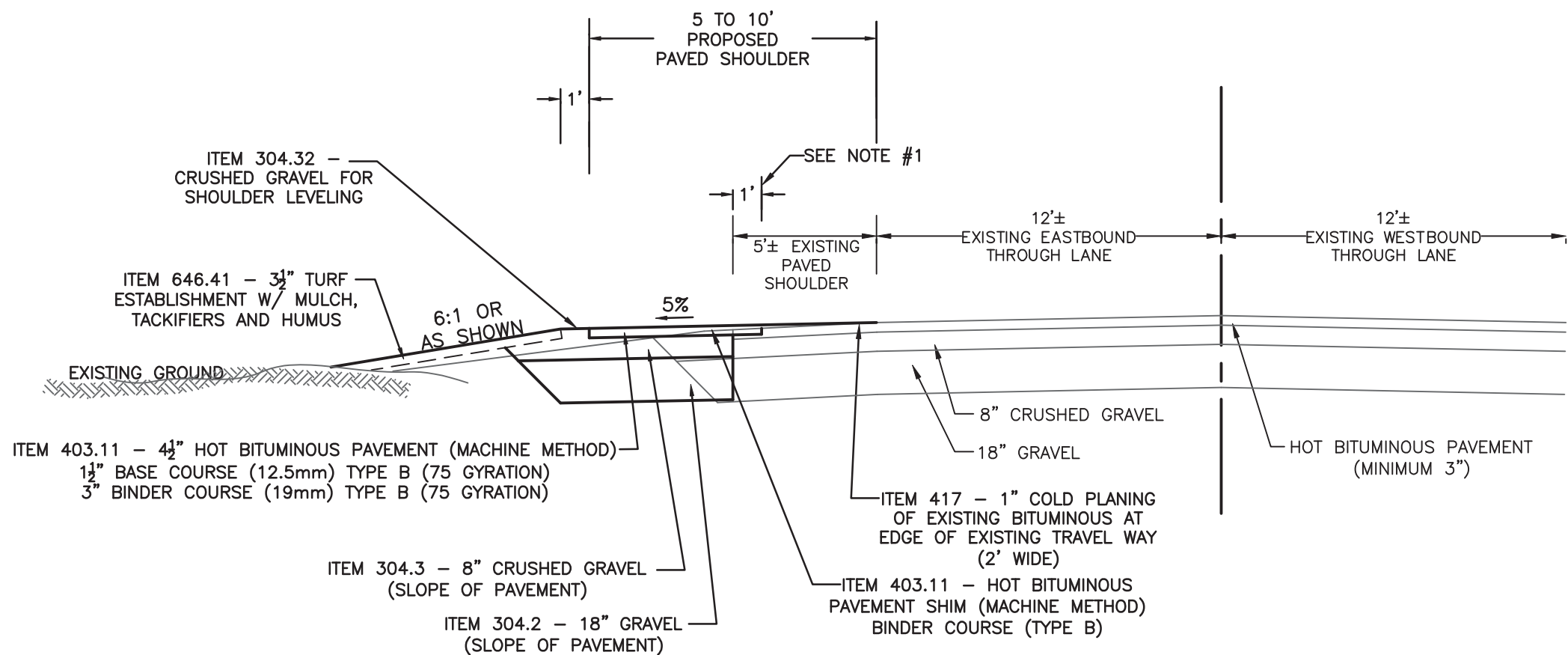


11/30/16 REVISE PROPOSED WIDEN SHOULDER WIDTH ON THE TYPICAL CROSS SECTION. ADD CATCH BASIN FRAME AND GRATE DETAILS.
01/24/16 REVISE TYPICAL CROSS SECTION PAVEMENT DEPTHS



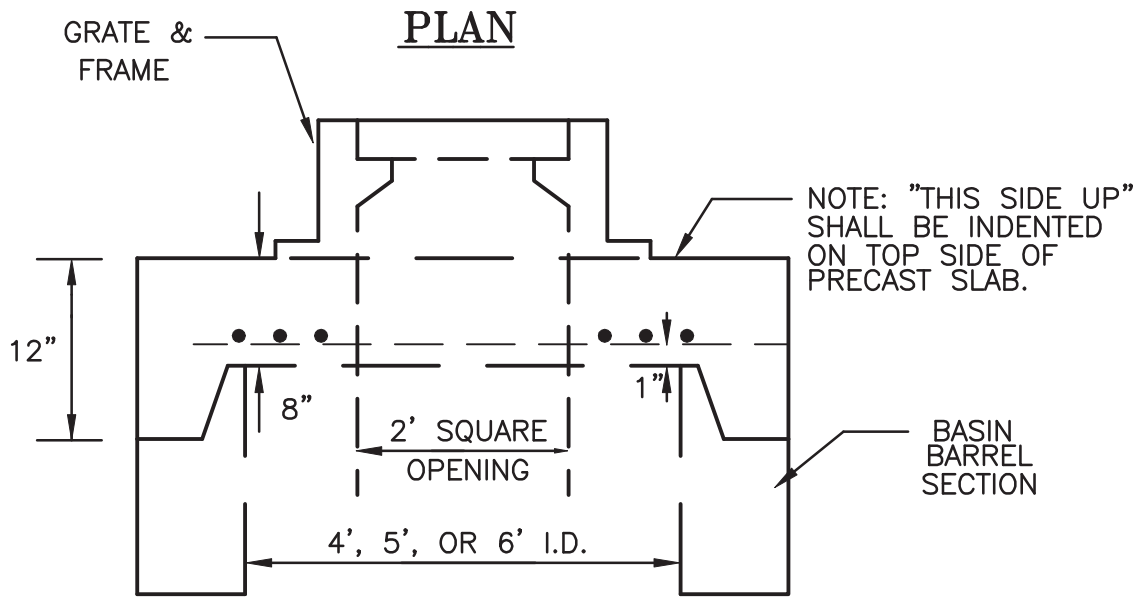
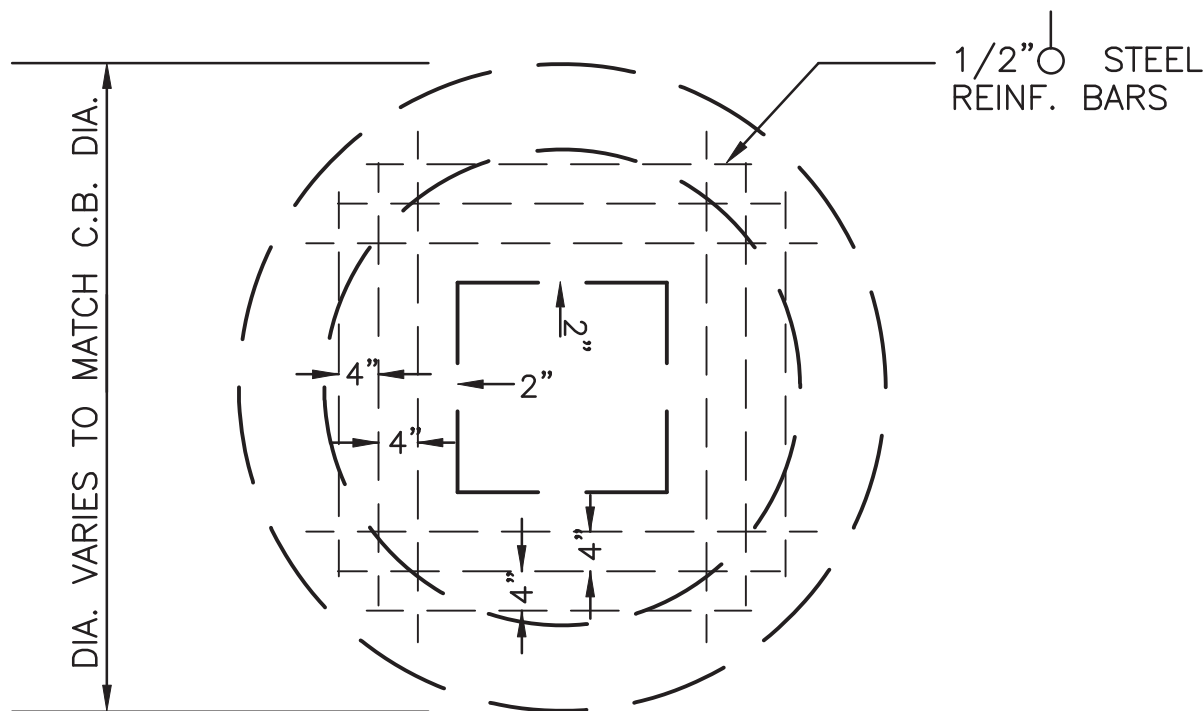
ROADWAY PROFILE
SCALE: 1" = 50' (HORZ.)
1" = 5' (VERT.)

CONSTRUCTION



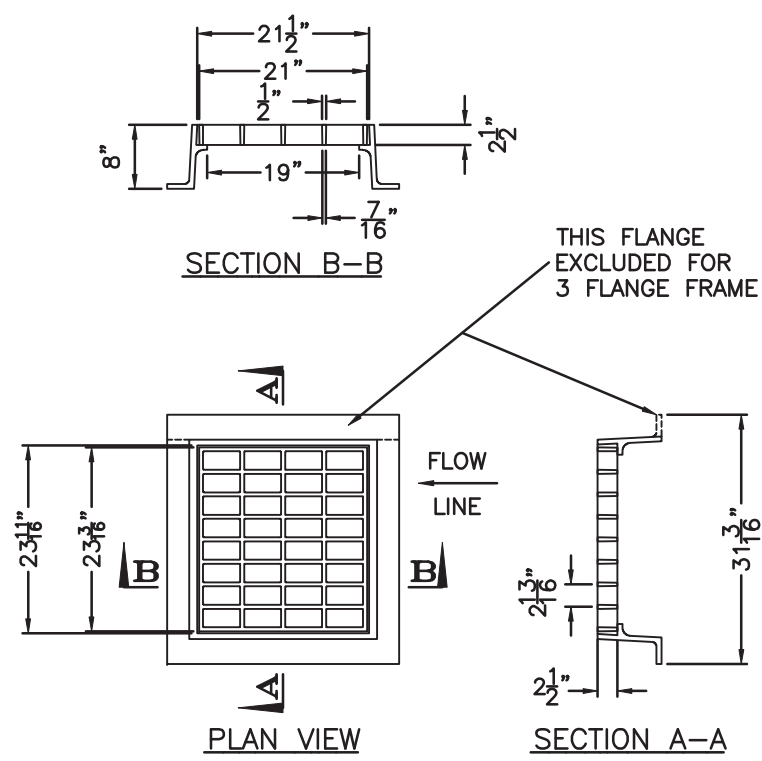
TYPICAL CROSS SECTION
STA. 3+33.1 TO 7+43.0 (LT.)
SCALE: 1" = 5'

- NOTES:
- 1. SAW CUT PAVEMENT AT ONE FOOT INSIDE OF THE EXISTING EDGE OF PAVEMENT.
 - 2. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE NHDOT "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION, AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
 - 3. ALL DISTURBED SLOPES SHALL BE LOAMED AND SEEDED AS SHOWN.



NOTE:
SLAB TO BE PLACED IN LIEU OF TAPERED SECTION WHERE PIPE WOULD OTHERWISE ENTER INTO TAPERED SECTION OF THE STRUCTURE AND WHERE PERMITTED.

REINFORCED CONCRETE SLAB COVER
NOT TO SCALE

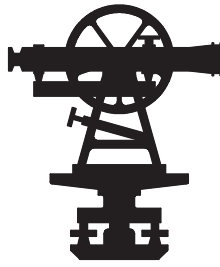


- NOTES:
- 1. FRAME AND GRATE SHALL BE CAST IRON. FRAME AND GRATE SHALL BE NHDOT TYPE 'B'.
 - 2. USE 3 FLANGE FRAME IF INSTALLED ADJACENT TO GRANITE CURB.

CATCH BASIN TYPE 'B'
FRAME AND GRATE DETAIL
NOT TO SCALE

ROADWAY PROFILE AND
TYPICAL CROSS SECTION
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR: D.R. LEMIEUX BUILDERS, INC.
MAY 2016

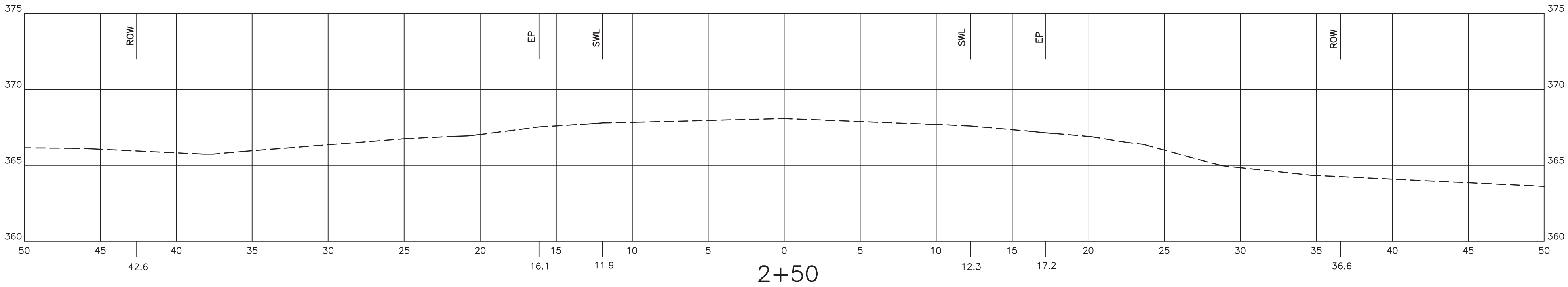
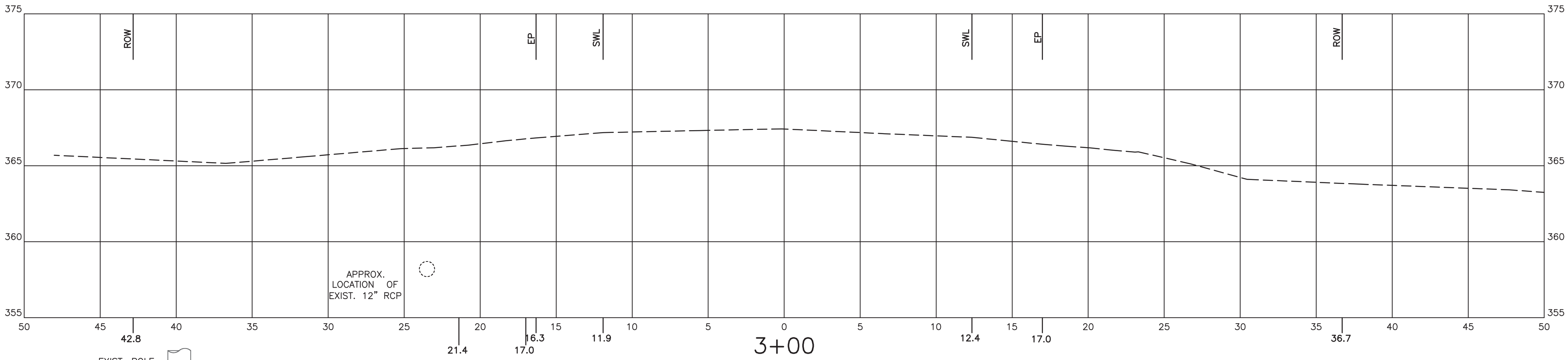
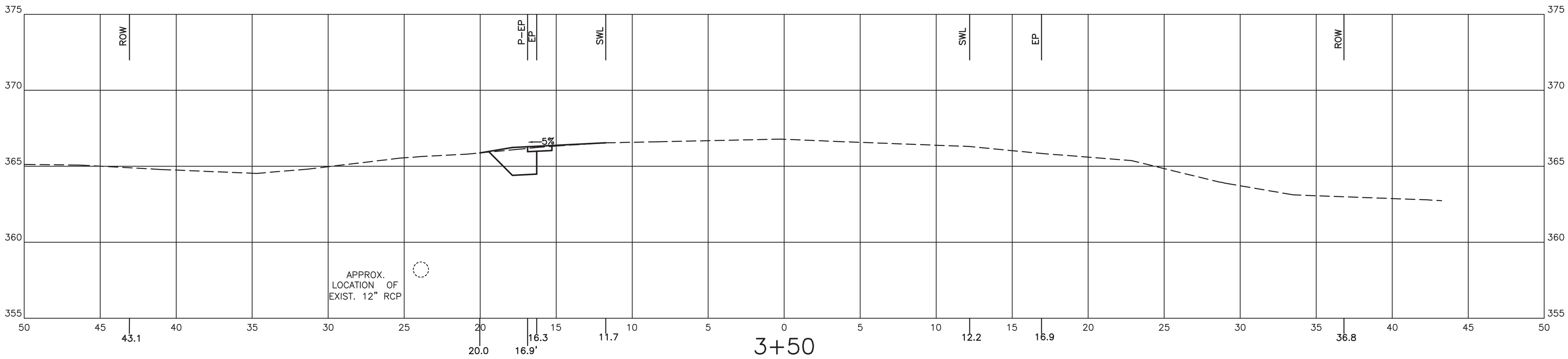
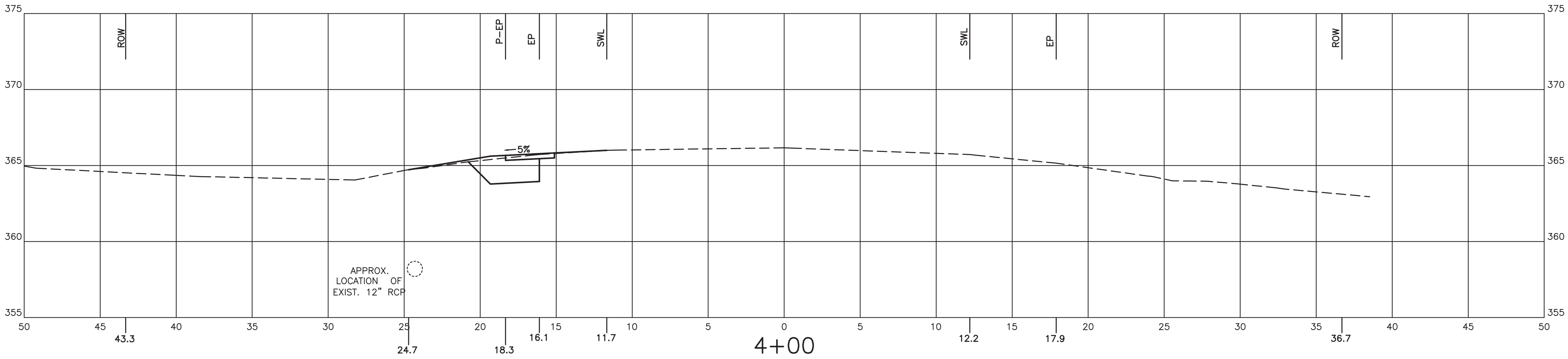
FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.



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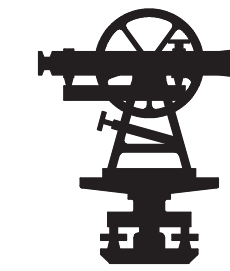


09/21/16 - ADD UTILITY POLE LOCATIONS TO CROSS SECTIONS
11/23/16 - REVISE PROPOSED PAVEMENT WIDTH AND FILL SLOPES

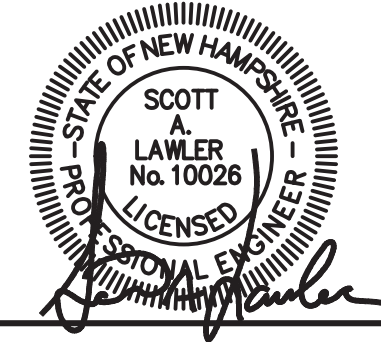


ROADWAY CROSS SECTIONS
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR: D.R. LEMIEUX BUILDERS, INC.
MAY 2016
1 INCH = 10 FEET

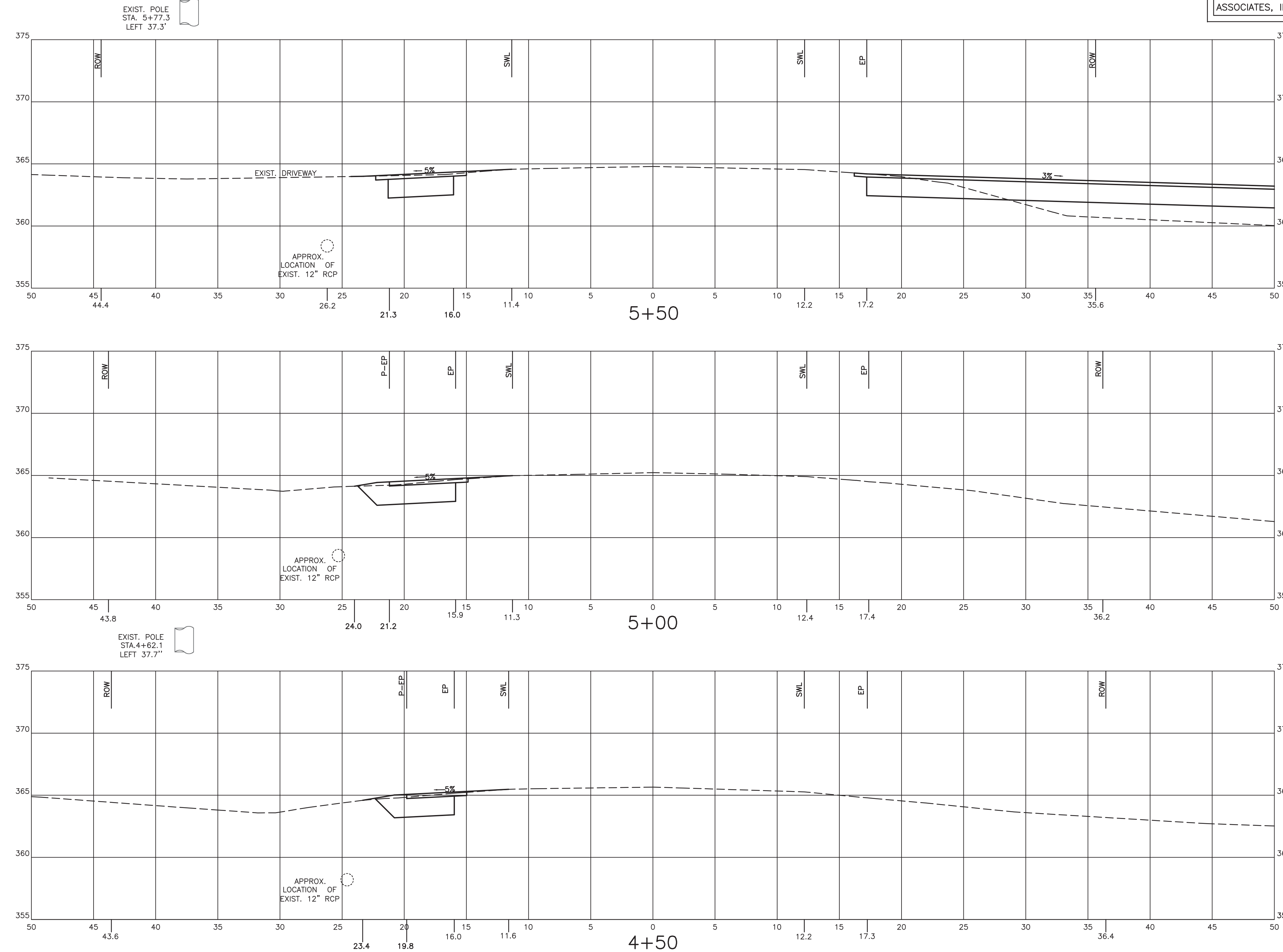
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11/23/16 - REVISE PROPOSED PAVEMENT WIDTH AND FILL SLOPES

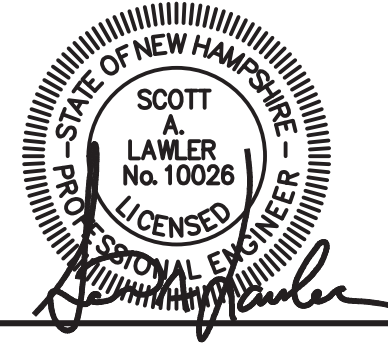


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DWG. NO. 15225/SP-2
F.B. NO.

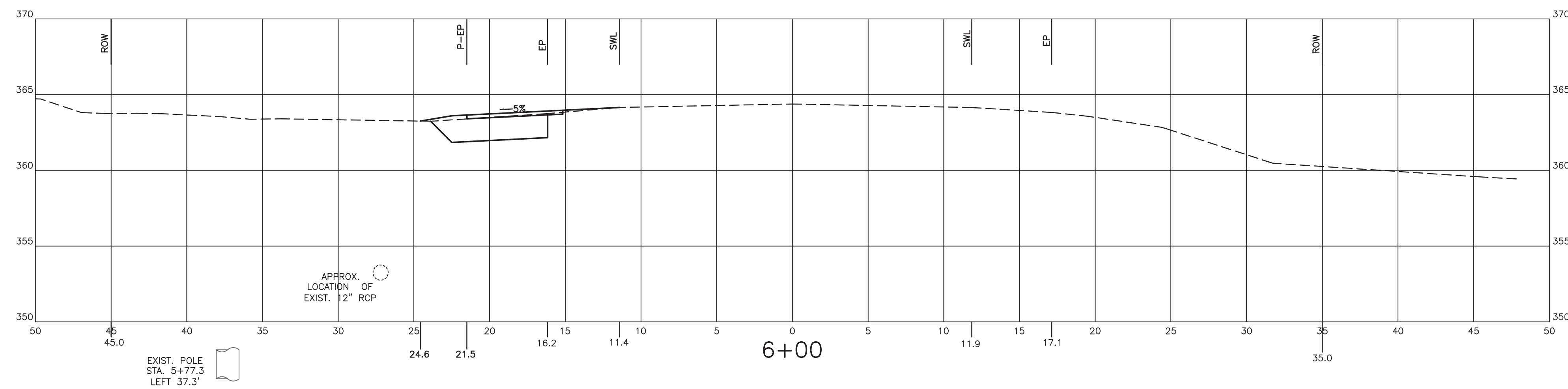
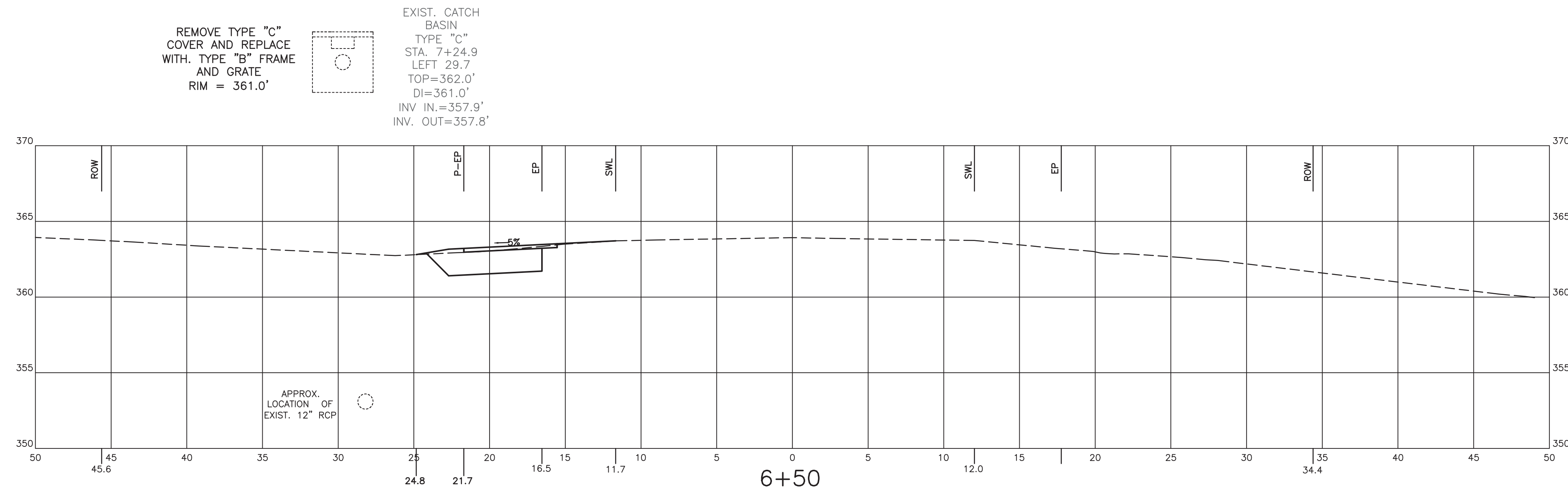
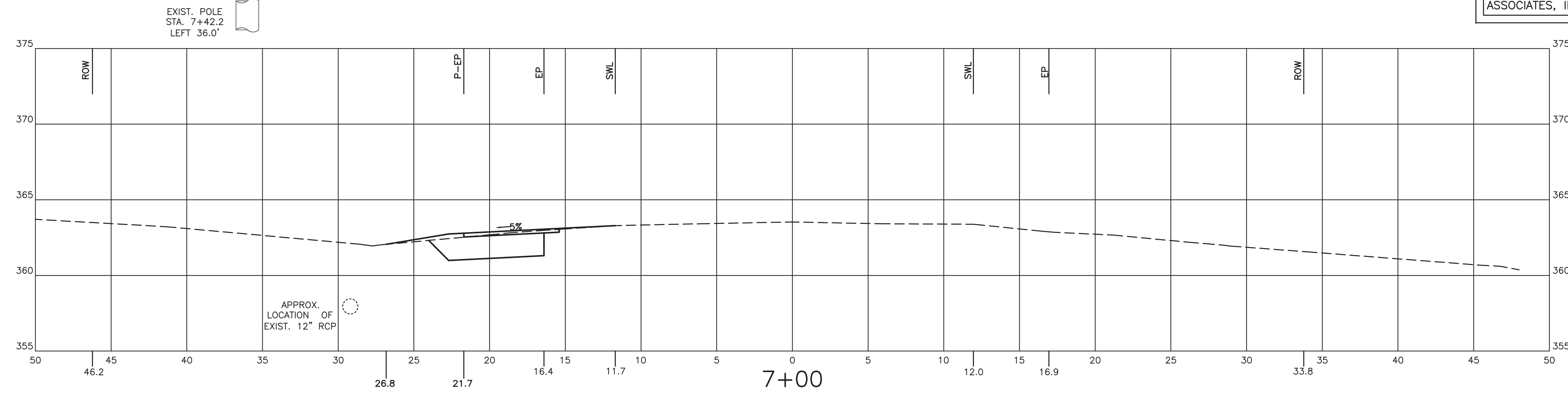
ROADWAY CROSS SECTIONS
TAX MAP 134, LOT 5
114 ROCHESTER HILL RD
ROCHESTER, NH
PREPARED FOR: D.R. LEMIEUX BUILDERS, INC.
MAY 2016
1 INCH = 10 FEET



CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE GEOTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITHIN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)-335-3948.

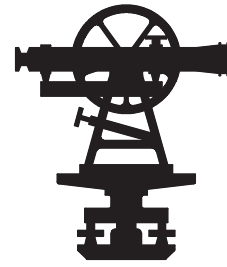


09/21/16 - ADD UTILITY POLE LOCATIONS TO CROSS SECTIONS
11/23/16 - REVISE PROPOSED PAVEMENT WIDTH AND FILL SLOPES, PROPOSED REPLACEMENT OF EXISTING CATCH BASIN FRAME AND COVER



FILE NO. 104
PLAN NO. C-2780
DWG. NO. 15225/SP-2
F.B. NO.

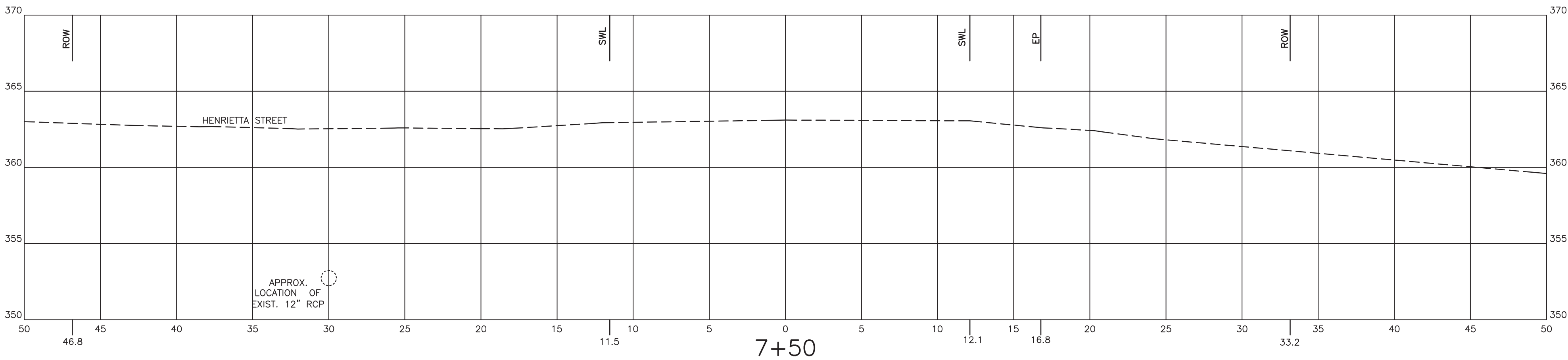
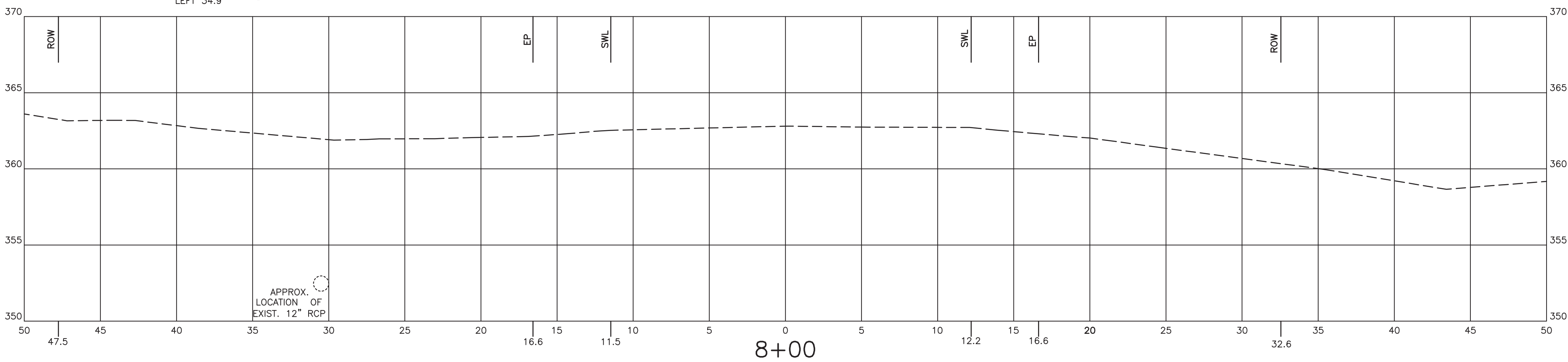
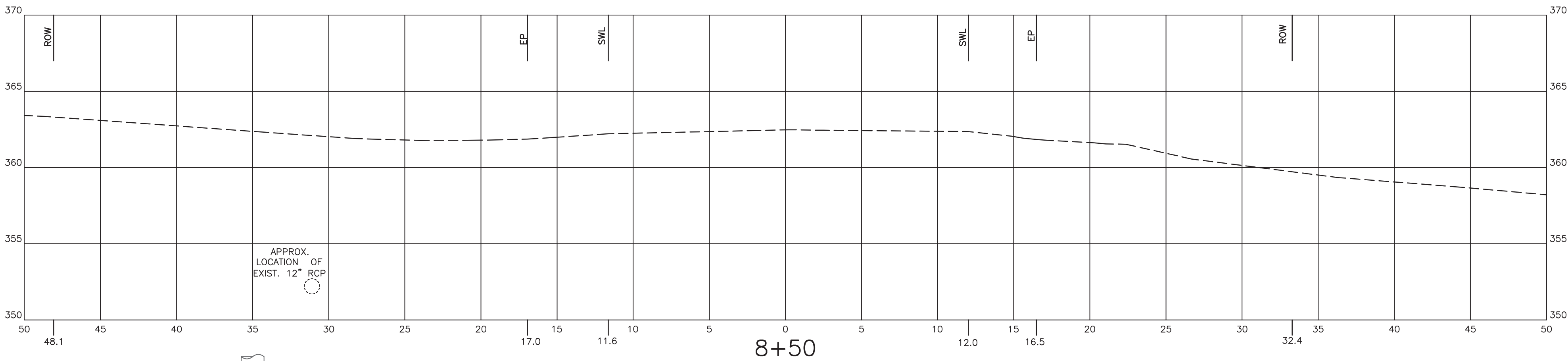
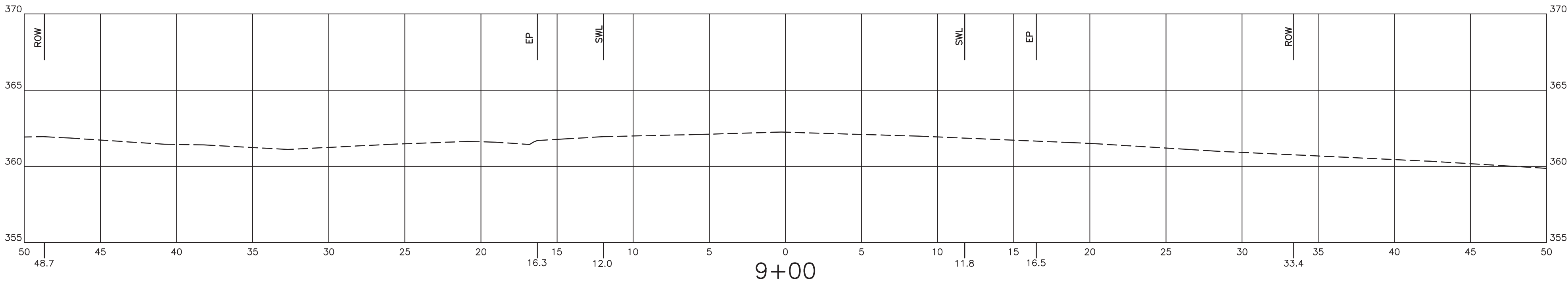
ROADWAY CROSS SECTIONS
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09/21/16 - ADD UTILITY POLE LOCATIONS TO CROSS SECTIONS
11/23/16 - REVISE PROPOSED PAVEMENT WIDTH AND FILL SLOPES



ROADWAY CROSS SECTIONS
TAX MAP 134, LOT 5
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PLAN NO. C-2780
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F.B. NO.