

# MAJOR SUBDIVISION APPLICATION

r more lots) JUN 1 2 2018

(a total of four or more lots)

# City of Rochester, New Hampshire

[Unice use only. Check # Amount 5 Date paid]
Date: Jone 8, 2018 Is a conditional needed? Yes: No: Unclear: Unclear: (If so, we encourage you to submit an application as soon as possible.)
Property information  Tax map #: 37; Lot #('s): 3 8; Zoning district: POD
Property address/location: Fillmare Blud
Name of project (if applicable): HIGH FIELD Commons - Phase IB
Size of site: 90+ acres; Overlay zoning district(s)?
Property owner
Name (include name of individual): Chris Strickler
Mailing address: 746 D.W. HIGHWAY, UNITS MERRIMACK UH. 03054
Telephone #: 603 424 - 6904 Email: Chris @ CDCDH, COM
Applicant/developer (if different from property owner)
Name (include name of individual):
Mailing address:
Telephone #: Email:
Engineer/surveyor
Name (include name of individual): PATRICK COLLUTA
Mailing address: 10 Commerce PAIL DOITH, SULE 3B BELFOID DIH 03110
Telephone #: 603 627 288   Fax #:
Email address: Poolburn @ Keach pordstrom Professional license #:
Proposed project Com
Number of proposed lots: <u>24</u> ; estimated length of new roads: <u>1,150<i>LF</i></u>
Number of cubic yard of earth being removed from the site?
City water? yes X_ no; How far is city water from the site?
City sewer? yes X no; How far is city sewer from the site?
f city water, what are the est. total gal. per day? 120061) Are there pertinent covenants?
Where will stormwater be discharged? Deten him Pout

Page 1 (of 2 pages)

(Continued <i>Major Subdivision Plan</i> application Tax Map:	Lot: Zone)
Wetlands: Is any fill proposed? <u>VD</u> ; area to be fil	led:; buffer impact?
Comments	
Please feel free to add any comments, additional infe	ormation, or requests for waivers here:
<del></del>	
Submission of application	
This application must be signed by the property own property owner), <i>and/or</i> the agent.	er, applicant/developer (if different from
I(we) hereby submit this Subdivision application to the pursuant to the <u>City of Rochester Subdivision Regulation</u> knowledge all of the information on this application for materials and documentation is true and accurate. A property owner)/as agent, I attest that I am duly authorized	ations and attest that to the best of my orm and in the accompanying application as applicant/developer (if different from
Signature of property owner:	
	Date: \( \( \( \lambda \) \( \( \lambda \) \( \lambda \)
Signature of applicant/developer:	
Signature of agent:	Date: 6/11/18
Hillside Design Group Lice MATTHEN PERESON	Date: 6 11 18
Authorization to enter subject property	
I hereby authorize members of the Rochester Planning Conservation Commission, Planning Department, and boards and agencies to enter my property for the purpincluding performing any appropriate inspections during post-approval phase, construction phase, and occupa specifically to those particular individuals legitimately inspecting this specific application/project. It is understreasonable care, courtesy, and diligence when entering Signature of property owner:	d other pertinent City departments, pose of evaluating this application ing the application phase, review phase, ancy phase. This authorization applies involved in evaluating, reviewing, or stood that these individuals must use all
	Date: 6 (((()))

on d by the property owner ent.	r, applicant/developer (if different from
ter Subdivision Regulation on this application for true and accurate. As	City of Rochester Planning Board ions and attest that to the best of my m and in the accompanying application applicant/developer (if different from rized to act in this capacity.
Pa	
	Date: \( \lambda
er: <u> </u>	
	Date: 6/11/18
J	
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bject property	
nning Department, and ny property for the purpo priate inspections during ion phase, and occupan ndividuals legitimately in	g Board, Zoning Board of Adjustment, other pertinent City departments, ose of evaluating this application g the application phase, review phase, acy phase. This authorization applies avolved in evaluating, reviewing, or ood that these individuals must use all g the property.
	Date: 6 ((\(\)
PAGE 2 (0F2	



June 8, 2018

City of Rochester Planning Department Attn: Jim Campbell 31 Wakefield Street Rochester, New Hampshire 03867



Re: Subdivision Plan Narrative - "Highfield Commons Phase 1B"

Tax Map 237; Lot 3 & 8 – Eisenhower Drive

Rochester, New Hampshire 03867 HDG Project # 2010-0831-1

Dear Chairman and Board Members:

The above referenced project is being submitted for Subdivision Approval from the City of Rochester Planning Board. The proposed project is for Phase 1B of the Highfield Commons development. This phase consists of the permitting the second phase of our single-family homes project and calls for the next 24 single family lots on the subject parcel with all supporting infrastructure. This phase comes off the top of Fillmore Blvd and climbs the existing hill for about 1,200 feet with new homes on each side of the roadway.

The applicant has included all required supporting information for your review and comment of this project within the submittal package.

If you have any questions or comments please contact me at (603) 496-3684.

Sincerely,

Matthew J. Peterson - Project Manager

Development Consultant
Hillside Design Group, Inc.
746 D.W. Highway, Unit B
Merrimack, NH 03054

501 D.W. Highway, Unit F • Merrimack NH, 03054 • Office 603-424-1132 • Fax 603-424-8998

VICINITY PLAN NOT TO SCALE

#### ABUTTERS LIST

MAP 246 LOTS 3 & 4 CHESLEY HILL PARTNERS LLC 260 WASHINGTON STREET ROCHESTER, NH 03839-5426 MAP 237 LOT 1-1 DONALD N. JR. & PAULA MCCALLION 7 JODI LANE STRAFFORD, NH 03884

MAP 237 LOT 3-1 GARY & SHARON HUSSEY 24 HUSSEY HILL ROAD ROCHESTER, NH 03867-4205 MAP 246 LOT 5 CITY OF ROCHESTER 31 WAKEFIELD STREET ROCHESTER, NH 03867-1916

MAP 237 LOT 4 WOODBURY C. ARGEREOW, JR. 23 HUSSEY HILL ROAD ROCHESTER, NH 03867

MAP 237 LOT 5 JOSEPH J. MIGLIORE, III & ANGELES GETINO DIAZ 183 WASHINGTON STREET ROCHESTER, NH 03839~5506

MAP 237 LOT 6 STATE OF NEW HAMPSHIRE JOHN MORTON BUILDING PO BOX 483 CONCORD, NH 03301

MAP 237 LOT 6-1 WASHINGTON STREET PARTNERS, LLC c/o CHESAPEAKE DEVELOPMENT 746 D.W. HIGHWAY, UNIT B MERRIMACK, NH 03054

MAP 237 LOT 6-2 STATE OF NEW HAMPSHIRE JOHN MORTON BUILDING PO BOX 483 CONCORD, NH 03301

MAP 237 LOT 7
JONATHAN W. & HOLLY A. CLEMENT
30 BICKFORD ROAD
ROCHESTER, NH 03867-4288

MAP 236 LOT 1 GARY & ROBYNN JEWELL 73 BICKFORD ROAD ROCHESTER, NH 03867-4272

MAP 236 LOT 18 ROBERT A. & SUSAN COPP SILVA 129 ESTES ROAD ROCHESTER, NH 03867-4233

MAP 236 LOT 19 SCOTT & PAULA WENSLEY 125 ESTES ROAD ROCHESTER, NH 03B67-4248

MAP 236 LOT 20 GERALD & LORI CHASSE 123 ESTES ROAD ROCHESTER, NH 03867-4233

MAP 230 LOT 8
JAMES L. & SUZANNE H. THOMAS
25 BICKFORD ROAD
ROCHESTER, NH 03867-4272

MAP 246 LOT 7 BETTY BAUN 10 HUSSEY HILL ROAD ROCHESTER, NH 03867-4205

MAP 246 LOT 8 CHARLES W. HUSSEY & BETTY BAUN 10 HUSSEY HILL ROAD ROCHESTER, NH 03867—4205 MAP 247 LOTS 54 & 55 DAVID & JUDITH ROBBINS 111 ESTES ROAD ROCHESTER, NH 03867

MAP 237A LOT 3-147 ERIC SIRLES REVOCABLE TRUST

MAP 237A LOT 3-14B CHRISTOPHER & MICHELLE CIARLO-JONES 14 PIERCE DRIVE ROCHESTER, NH 03B67-4495

MAP 237A LOT 3-149 DAWNE H. WIMBROW 16 PIERCE DRIVE ROCHESTER, NH 03867-4495

MAP 130 LOT 39 ARTHUR & VICKI WALKER 174 WASHINGTON STREET ROCHESTER, NH 03839-5504 MAP 130 LOT 40 RONALD & PATRICIA LECLAIR 176 WASHINGTON STREET ROCHESTER, NH 03839-5504

MAP 130 LOT 42 PUBLIC SERVICE OF NH DBA EVERSOURCE ENERGY PO BOX 270 HARTFORD, CT 06141-0270

MAP 247 LOT 58 JULIE A. & ANDREW M. BRITTON 14 VINEWOOD LANE ROCHESTER, NH 03867

MAP 247 LOT 59 RYAN M & CRYSTAL TANGUAY 85 ESTES ROAD ROCHESTER, NH 03867

DWIGHT MEADER
71 ESTES ROAD
ROCHESTER, NH 03867-4232

MAP 247 LOT 61

MAP 130 LOT 43-1 ROUTE 202, LLC c/o JEAN M. KANE 117 BOW STREET PORTSMOUTH, NH 03801

MAP 237A LOT 3-141 ED POTTBERG 72 FILLMORE BLVD ROCHESTER, NH 03867-4497

746 D.W. HIGHWAY, UNIT B

OWNER/APPLICANT:

MAP 237A LOT 3-142 KENNETH MCMORRIS JR. 76 FILLMORE BLVD ROCHESTER, NH 03867-4497

MAP 237A LOT 3-143 WILLIAM & SHERRILL WOODY 1751 STATE ROUTE 32 ROUND POND, ME 04564-3607

MAP 237A LOT 3-144 MICHAEL MCCANN & CHRISTINE CALOGER 82 FILLMORE BOULEVARD ROCHESTER, NH 03B67-4497

MAP 237A LOT 3-146 HUNG & ANGELA NGUYEN 6 PIERCE DRIVE ROCHESTER, NH 03867-4495

c/o ERIC SIRLES, TRUSTEE
30 PARKER STREET
PORTSMOUTH, NH 03801-3934

MAP 237A LOT 3-150 JOSEPH & PHYLLIS BOUDREAU 20 PIERCE DRIVE ROCHESTER, NH 03867-4495

MAP 237A LOT 3-158 RUDOLF & JANET MAIR 5 PIERCE DRIVE ROCHESTER, NH 03867-4495

MAP 237A LOT 3-161 NATHANIEL & SANDRA BYRNE 118 FILLMORE BLVD. ROCHESTER, NH 03867

MAP 246 LOT 1 MICHAEL R. GAUTHIER 259 WASHINGTON STREET ROCHESTER, NH 03839-5425

MAP 246 LOT 2 RICHARD & NORMA HESELTON 251 WASHINGTON STREET ROCHESTER, NH 03839-5425

# MAP 237 LOT B-1 LAND (ME WAY JAND MANAGEMENT AND MA MAP 230 LOT 8 MAP 237 LOT 8 MAP 236 LOT 1 OIL. 4 - .M 000 MAP 237 LOT 3 MAP 237A LOT 3-11 TO LOT 3-2 MAP 237A LOT 3-122 7 00 0 & IF MAP 237 LOT 3-1 2/ 1 MAP 237 LOT 3-174

RESIDENTIAL SUBDIVISION PLAN

HIGHFIELD COMMONS

PHASE 1B

FILLMORE BOULEVARD

ROCHESTER, NEW HAMPSHIRE

MAP 237 LOTS 3 &

EXISTING TAX MAP SCALE: 1'' = 400

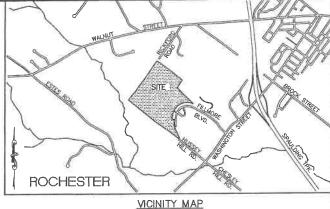






KEACH-NORDSTROM ASSOCIATES, INC. Civil Engineering Land Surveying Landscape Architecture

MAY 29, 2018 PROJECT NO. 17-0417-3



SCALE: 1'' = 2,000'

MAP 246 LOT 3-1 JAMES E. & MACKENZIE R. COLBY 247 WASHINGTON STREET ROCHESTER, NH 03839-5426

MAP 246 LOT 11 BENJAMIN & SARAI KRAMER 15 HUSSEY HILL ROAD ROCHESTER, NH 03867-4205

MAP 246 LOT 10 JOHN & VALERIE LEBRUN 17 HUSSEY HILL ROAD ROCHESTER, NH 03867-4205

MAP 237 LOTS 8-3 200 WASHINGTON STREET, LLC c/ochesapeake development 746 D.W. Highway Unit B MERRIMACK, NH 03054

MAP 237A LOT 3-130 MICHAEL P NUNZIATO 97 FILLMORE BLVD. ROCHESTER, NH 03867

MAP 237A LOT 3-131 LEANDRO & LETICIA BUENO 93 FILLMORE BLVD. ROCHESTER, NH 03867-4497 MAP 237A LOT 3-134

85 FILLMORE BLVD. ROCHESTER, NH 03867-4497 MAP 237A LOT 3-132 DAVID R. KINZIGER 91 FILLMORE BLVD. ROCHESTER, NH 03867-4497

MAP 237A LOT 3-133 DEROY & WANDA WILLIAMS 87 FILLMORE BLVD. ROCHESTER, NH 03867-449

MAP 237A LOT 3-135 MATTHEW & JENNIFER HAYDON 81 FILLMORE BLVD. ROCHESTER, NH 03867-4497

## ABUTTERS LIST

MAP 237A LOT 3-136 HETHER ROBERGE 79 FILLMORE BLVD. ROCHESTER, NH 03867-4497

MAP 237 LOT 8-1 183 WASHINGTON STREET, LLC c/o CHESAPEAKE DEVELOPMENT 746 D.W. HIGHWAY UNIT B MERRIMACK, NH 03054

MAP 246 LOT 3 183 WASHINGTON STREET, LLC c/o CHESAPEAKE DEVELOPMENT 746 D.W. HIGHWAY UNIT B MERRIMACK, NH 03054

MAP 246 LOT 9
183 WASHINGTON STREET, LLC
c/o CHESAPEAKE DEVELOPMENT
746 D.W. HIGHWAY UNIT B
MERRIMACK, NH 03054

MAP 237A LOT 3-145 CESAR & BESARES RIVERA 2 PIERCE DRIVE ROCHESTER, NH 03867-4495

MAP 237A LOT 3-151 CHERLY RYDIN 22 PIERCE DRIVE ROCHESTER, NH 03867-4495

MAP 237A LOT 3-160 NICHOLAS & REBECCA SIEGFRIED 114 FILLMORE BLVD. ROCHESTER, NH 03867-449

MAP 237A LOT 3-155 JASON MILLER 25 PIERCE DRIVE ROCHESTER, NH 03867-4495

JUN 1 2 2018

SHEET No.

X1 - X4

MAP 237A LOT 3-124

MAP 237A LOT 3-152 USA COLE

26 PIERCE DRIVE ROCHESTER, NH 03867-4495

MAP 237A LOT 3-156 KENNETH & JEANNE CARR 19 PIERCE DRIVE ROCHESTER, NH 03B67-4495

MAP 237A LOT 3-157 EBEN & WENDY RAMSDELL 11 PIERCE DRIVE ROCHESTER, NH 03867-4495

# SHEET TITLE

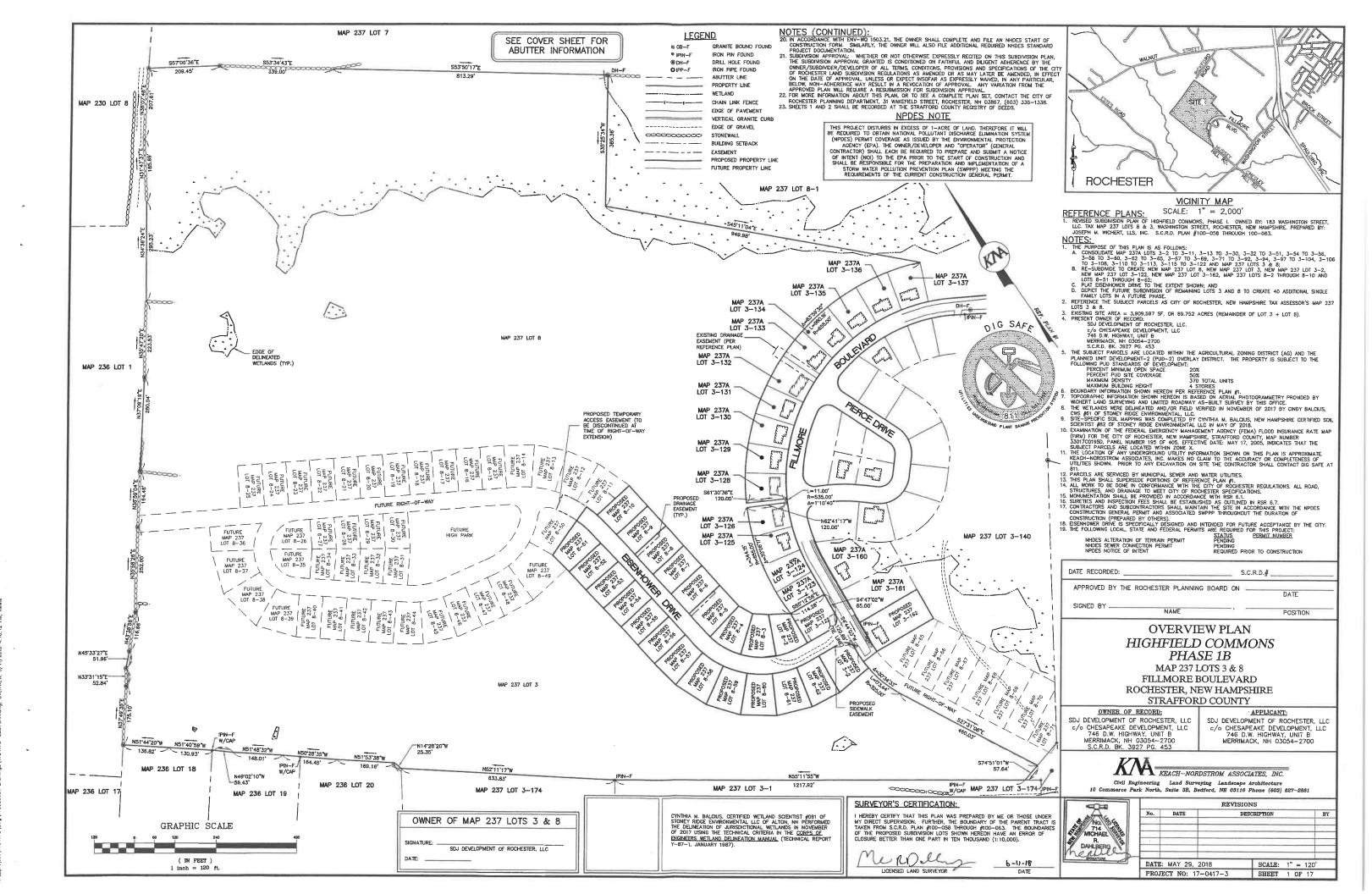
CROSS SECTIONS

OVERVIEW PLAN	1
RESIDENTIAL SUBDIVISION PLAN	2
TOPOGRAPHIC SUBDIVISION PLAN	3
ROADWAY PLAN	4 & 5
ROADWAY PROFILE	6 & 7
GRADING AND EROSION CONTROL PLAN	8
STORMWATER MANAGEMENT AREA PLAN	9
LANDSCAPE PLAN	10
DRAINAGE PROFILES	11
CONSTRUCTION DETAILS	12 - 17

PREPARED BY: KEACH-NORDSTROM ASSOCIATES, INC. 10 COMMERCE PARK NORTH, SUITE 3B BEDFORD, NEW HAMPSHIRE 03110 (603) 627-2881

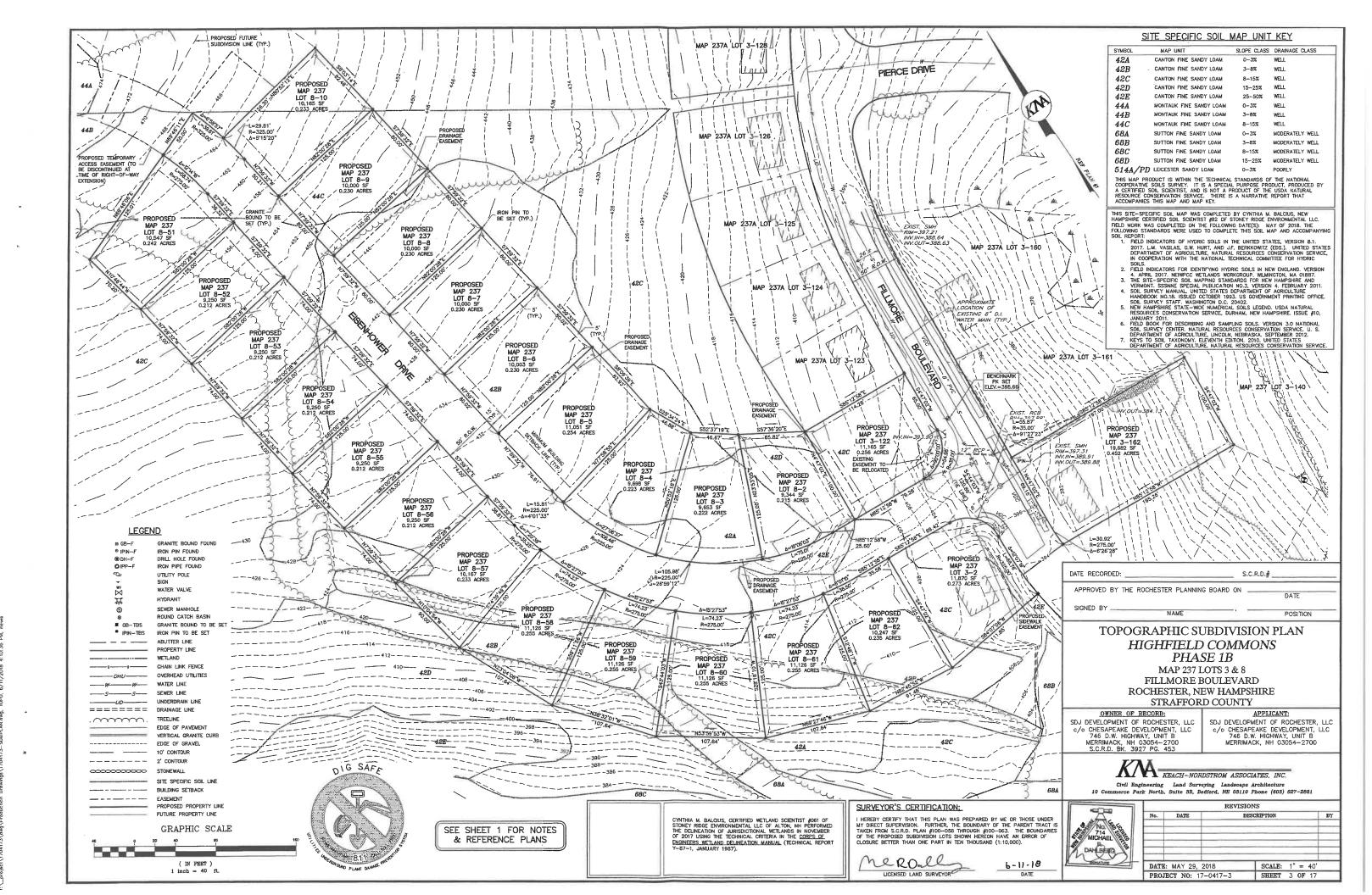
SDJ DEVELOPMENT OF ROCHESTER, LLC c/o CHESAPEAKE DEVELOPMENT, LLC

MERRIMACK, NEW HAMPSHIRE 03054-2700



PROJECT NO: 17-0417-3

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GRANITE BOUND FOUND

IRON PIN FOUND DRILL HOLE FOUND

IRON PIPE FOUND UTILITY POLE WATER VALVE HYDRANT

SEWER MANHOLE ROUND CATCH BASIN GRANITE BOUND TO BE SET

IRON PIN TO BE SET

CHAIN LINK FENCE OVERHEAD UTILITIES

UNDERDRAIN LINE

EDGE OF PAVEMENT VERTICAL GRANITE CURB

PROPOSED PROPERTY LINE FUTURE PROPERTY LINE
PROPOSED UNDERGROUND UTILITIES PROPOSED WATER LINE

PROPOSED SEWER LINE PROPOSED UNDERDRAIN PROPOSED DRAINAGE LINE

PROPOSED TREELINE PROPOSED EDGE OF PAVEMENT PROPOSED SLOPED GRANITE CURB

mm.

WATER LINE

ABUTTER LINE PROPERTY LINE

CONSTRUCTION NOTES:

1. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF ROCHESTER, AND SHALL

BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE STANDARD

SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION,

APPROVED AND ADDOPTED 2016 ARE HEREBY INCORPORATED BY REFERENCE.

PROAD AND DRABAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS,

AND SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS FOR ROAD CONSTRUCTION, PUBLIC WORKS DEPARTMENT,

BOCHESTER, NEW HAMPSHIRE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND LELVATION OF ALL

EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE STRAT OF ANY CONSTRUCTION,

AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROADEDING WITH THE WORK. THE CONTRACTOR SHALL BE

RESPONSIBLE FOR CONTACTING "DIG SAFE" AT BIT AT LEAST 72 HOURS BEFORE DIGRIGH.

ALL DRABHAGE PIPE SHALL BE INSTRIBUTED FROM ALL CUT AND FLANKED, AND REDSTRUCTIONS.

TOP SOIL SHALL BE STRIPPED FROM ALL CUT AND FLANKED, STOCKPILED, AND REDSTRUCTIONS.

TOP SOIL SHALL BE STRIPPED FROM ALL CUT AND FLANKED, STOCKPILED, AND REDSTRUCTIONS.

TOP SOIL SHALL BE STRIPPED FROM ALL CUT AND FLANKED, STOCKPILED, AND REDSTRUCTIONS.

THE STORM OF STRUCTURE SHALL BE HOUSENED STOCKPILED, AND REDISTRIBUTED OVER GRADED AREAS.

PROVIDE EROSION AND SEDMENTATION CONTROLS ARROWED STOCKPILED, AND REDISTRIBUTED OVER GRADED AREAS.

PROVIDE EROSION AND SEDMENTATION CONTROLS ARROWED STOCKPILES DIRING CONSTRUCTION.

THE STREAM OF SECTION OF SECTION OF SOIL SHALL BE HISTORY SLOPE AWAY FROM BEDILDING, WALKWAYS, AND STRUCTURES TO RECEIVE SECTION SECTION OF SALL SHALL BE SECTION OF SOIL SHALL BE STREAM OF SECTION OF SECTION OF SOIL SHALL BE ARROWED AND SEDMENTATION CONTROLS AND STOCKPILES DURING CONSTRUCTION.

THE STATEMENT OF SECTIONS AND STOCKPILES DURING CONSTRUCTION.

THE STATEMENT OF SALL SHALL BE AND SECTION OF SALL SHALL BE ARROWED AND

7. GRADE ALL AREAS TO MAINTAIN PUSHING SLUTE AWA! FROM BOULDING.

8. ALL GRADED AREAS TO RECEIVE SEED OR SOO, TOP SOL, STRAW, AND WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.

9. SEE ARCHITECTURAL DRAWINGS FOR SPECIFIC GRADING AND DRAINAGE REQUIREMENTS AT THE BUILDING, WALKWAYS, AND ENTRANCES. INSTALL STEPS, LANDINGS, RAILINGS, AND OTHER FEATURES PER APPLICABLE CODES.

10. ALL CATCH BASINS SHALL HAVE A 4'-0' SUMP.

11. ALL WORKMANSHIP AND MATERIALS INCORPORATED INTO THE CONSTRUCTION OF THE WATER LINES SHALL CONFORM TO ALL THE LOCAL PROVIDER.

12. ALL WORKMANSHIP AND MATERIALS INCORPORATED INTO THE CONSTRUCTION OF THE ELECTRIC AND TELEPHONE LINES SHALL CONFORM WITH THE STANDARDS OF THE LOCAL PROVIDER.

13. ALL UTILITY CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE CITY OF ROCHESTER STANDARDS OF INFRASTRUCTURE DESIGN SECTION 1 - POTABLE WATER DESIGN STANDARDS AND SECTION 1 - SANITARY SEWER DESIGN STANDARDS.

14. ONLY CONTRACTORS THAT HAVE BEEN GRANTED A WATER/SEWER LICENSE SHALL BE PERMITTED TO INSTALL ANY APPURTENANCE OR WATER/SEWER CONNECTION IN THE FILLINGSE BOULD FOR CITY FOR THE PROVIDER OF THE BOARD AND CITY ENGINEER BY THE ENGINEER OR LAND SURVEYOR INDICATING THE ONLY THE STANDARDS SHOWN ON THIS PLAN REPRESENT THE FIGURES SHALL BE INSPECTED BY A REPRESENT THE GRADES AS CONSTRUCTION, A PLAN SHALL BE SUBMITTED TO THE BOARD AND CITY ENGINEER BY THE ENGINEER OF LAND SURVEYOR INDICATING THEREON THE INVEST OR ALLS SOM MANHOLES. THE ENGINEER SHALL CERTIFY THAT THE GRADES SHOWN ON THIS PLAN REPRESENT THE GRADES AS CONSTRUCTED.

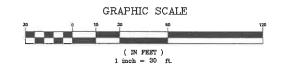
16. PER RSS 6.6.3, ALL UTILITIES WITHIN THE LIMITS OF FILLMORE BOULEVARD SHALL BE INSPECTED BY A REPRESENTATIVE OF THE CITY PRIOR TO BACKFILLING OF THE COVERING OF THE SERVICES.

SEE SHEETS 6 & 7 FOR ROADWAY PROFILES

LOAM & SEED ALL DISTURBED AREAS (TYP.)

SEE GRADING, DRAINAGE AND EROSION CONTROL PLANS FOR DETAILED POND INFORMATION



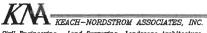


## **ROADWAY PLAN** HIGHFIELD COMMONS PHASE 1B

MAP 237 LOTS 3 & 8 FILLMORE BOULEVARD ROCHESTER, NEW HAMPSHIRE STRAFFORD COUNTY

OWNER OF RECORD: SDJ DEVELOPMENT OF ROCHESTER, LLC c/o CHESAPEAKE DEVELOPMENT, LLC 746 D.W. HIGHWAY, UNIT B MERRIMACK, NH 03054-2700 S.C.R.D. BK. 3927 PG. 453

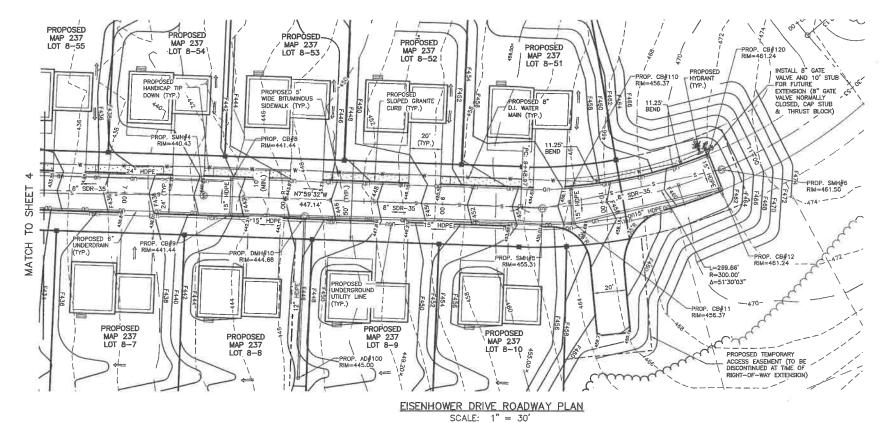
APPLICANT: SDJ DEVELOPMENT OF ROCHESTER, LLC c/o CHESAPEAKE DEVELOPMENT, LLC 746 D.W. HIGHWAY, UNIT B MERRIMACK, NH 03054-2700



Civil Engineering Land Surveying Landscape Architecture 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (803) 627-2881



		REVISI	ONS	
No.	DATE	, in	ESCRIPTION	BY
-				-
DATE	MAY 29,	2018	SCALE: 1" = 30	
PROJ	ECT NO: 1	7-0417-3	SHEET 4 OF 17	



#### LEGEND

⊕ GB-F GRANITE BOUND FOUND IRON PIN FOUND @ DH-F DRILL HOLF FOUND IRON PIPE FOUND UTILITY POLE ¥X¥ WATER VALVE HYDRANT SEWER MANHOLE (S) ROUND CATCH BASIN ■ GB-TBS GRANITE BOUND TO BE SET IPIN-TBS IRON PIN TO BE SET ABUTTER LINE PROPERTY LINE - WETLAND CHAIN LINK FENCE OHU OVERHEAD UTILITIES WATER LINE -----S-----SEWER LINE UNDERDRAIN LINE ====== DRAINAGE LINE . TREELINE EDGE OF PAVEMENT VERTICAL GRANITE CURB ----- EDGE OF GRAVEL ----- 10' CONTOUR \_\_\_\_\_ 2' CONTOUR COCCCCCCCC STONEWALL ------ BUILDING SETBACK --- EASEMENT PROPOSED PROPERTY LINE FUTURE PROPERTY LINE PROPOSED WATER LINE PROPOSED SEWER LINE PROPOSED DRAINAGE LINE PROPOSED TREELINE

PROPOSED EDGE OF PAVEMENT

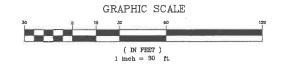
SEE SHEET 4 FOR CONSTRUCTION NOTES

SEE SHEETS 6 & 7 FOR ROADWAY PROFILES

LOAM & SEED ALL DISTURBED AREAS (TYP.)

SEE GRADING, DRAINAGE AND EROSION CONTROL PLANS FOR DETAILED POND INFORMATION





## **ROADWAY PLAN** HIGHFIELD COMMONS PHASE 1B

MAP 237 LOTS 3 & 8 FILLMORE BOULEVARD ROCHESTER, NEW HAMPSHIRE STRAFFORD COUNTY

OWNER OF RECORD: SDJ DEVELOPMENT OF ROCHESTER, LLC
c/o CHESAPEAKE DEVELOPMENT, LLC
746 D.W. HIGHWAY, UNIT B
MERRIMACK, NH 03054-2700
S.C.R.D. BK. 3927 PG. 453

APPLICANT: SDJ DEVELOPMENT OF ROCHESTER, LLC c/o CHESAPEAKE DEVELOPMENT, LLC 746 D.W. HIGHWAY, UNIT B MERRIMACK, NH 03054-2700



KEACH-NORDSTROM ASSOCIATES, INC.

Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2881



		REVISI	ONS		
No.	DATE	D	ESCRIPTION		BY
DATE	: MAY 29,	2018	SCALE:	1" = 30'	
PROJ	ECT NO: 1	7-0417-3	SHEET	5 OF 17	

SEE SHEET 4 FOR CONSTRUCTION NOTES

SEE SHEETS 4 & 5 FOR ROADWAY PLAN



## **ROADWAY PROFILE** HIGHFIELD COMMONS PHASE 1B

MAP 237 LOTS 3 & 8 FILLMORE BOULEVARD ROCHESTER, NEW HAMPSHIRE STRAFFORD COUNTY

OWNER OF RECORD:

SDJ DEVELOPMENT OF ROCHESTER, LLC c/o CHESAPEAKE DEVELOPMENT, LLC 746 D.W. HIGHWAY, UNIT B MERRIMACK, NH 03054–2700 S.C.R.D. BK. 3927 PG. 453

APPLICANT:
SDJ DEVELOPMENT OF ROCHESTER, LLC
c/o CHESAPEAKE DEVELOPMENT, LLC
746 D.W. HIGHWAY, UNIT B
MERRIMACK, NH 03054-2700

KEACH-NORDSTROM ASSOCIATES, INC. Civil Engineering Land Surveying Landscape Architecture 10 Commerce Park North, Suite 3B, Bedford, NH 05110 Phone (603) 627-2861



	REVISION	IS
DATE	DESC	CRIPTION BY
MAY 29,	2018	SCALE: 1" = 30'
ECT NO: 1	7-0417-3	SHEET 6 OF 17
	MAY 29,	

SEE SHEET 4 FOR CONSTRUCTION NOTES

SEE SHEETS 4 & 5 FOR ROADWAY PLAN



## ROADWAY PROFILE HIGHFIELD COMMONS PHASE 1B

MAP 237 LOTS 3 & 8
FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE
STRAFFORD COUNTY

OWNER OF RECORD:

SDJ DEVELOMENT OF ROCHESTER, LLC
c/o CHESAPEAKE DEVELOPMENT, LLC
746 D.W. HIGHWAY, UNIT B
MERRIMACK, NH 03054-2700
S.C.R.D. BK. 3927 PG. 453

SDJ DEVELOPMENT OF ROCHESTER, LLC
c/o CHESAPEAKE DEVELOPMENT, LLC
746 D.W. HIGHWAY, UNIT B
MERRIMACK, NH 03054-2700

KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite SB, Bedford, NH 03110 Phone (603) 627-2881



		REVISIONS
No.	DATE	DESCRIPTION B
-		
-		
DATE	MAY 29, 2018	SCALE: 1" = 30'
PROJ	ECT NO: 17-041	7-3 SHEET 7 OF 17

PROJECT NO: 17-0417-3

SHEET 8 OF 17

TV medical) 1704171 Alexa Decaduation Decadination Property Property Property and Section 100 and 100

**LEGEND** 

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COCCOCCOCCO STONEWALL

■ GB-TBS

IPIN-TBS

GRANITE BOUND FOUND IRON PIN FOUND DRILL HOLE FOUND

IRON PIPE FOUND

UTILITY POLE

WATER VALVE HYDRANT SEWER MANHOLE

ABUTTER LINE PROPERTY LINE

CHAIN LINK FENCE

OVERHEAD UTILITIES

UNDERDRAIN LINE

EDGE OF PAVEMENT VERTICAL GRANITE CURB

EDGE OF GRAVEL 10' CONTOUR

BUILDING SETBACK

PROPOSED PROPERTY LINE

FUTURE PROPERTY LINE

PROPOSED WATER LINE PROPOSED SEWER LINE PROPOSED UNDERDRAIN

PROPOSED DRAINAGE LINE

PROPOSED EDGE OF PAVEMENT

PROPOSED TREELINE

EASEMENT

WETLAND

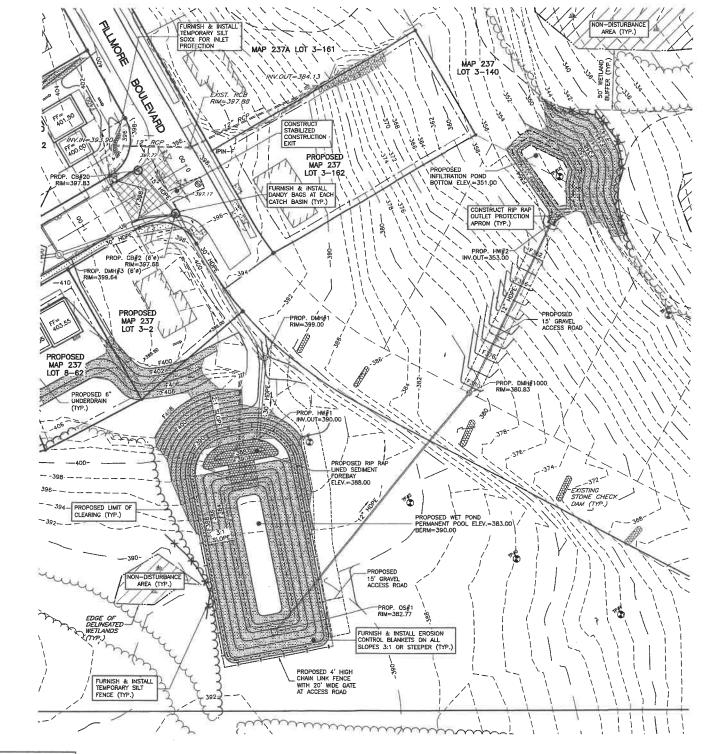
WATER LINE

SEWER LINE

TREELINE

ROUND CATCH BASIN

GRANITE BOUND TO BE SET IRON PIN TO BE SET



CONTROL NOTES LOAM & SEED ALL

SEE SHEET 8 FOR EROSION

DISTURBED AREAS (TYP.)

# STORWATER MANAGEMENT AREA PLAN HIGHFIELD COMMONS

PHASE 1B MAP 237 LOTS 3 & 8 FILLMORE BOULEVARD ROCHESTER, NEW HAMPSHIRE STRAFFORD COUNTY

OWNER OF RECORD: SDJ DEVELOPMENT OF ROCHESTER, LLC c/o CHESAPEAKE DEVELOPMENT, LLC
746 D.W. HIGHWAY, UNIT B
MERRIMACK, NH 03054-2700
S.C.R.D. BK. 3927 PG. 453

APPLICANT:
SDJ DEVELOPMENT OF ROCHESTER, LLC c/o CHESAPEAKE DEVELOPMENT, LLC 746 D.W. HIGHWAY, UNIT B MERRIMACK, NH 03054-2700

DIG SAFE

KA KEACH-NORDSTROM ASSOCIATES, INC.

Civil Engineering Land Surveying Landscape Architecture 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627–2881



GRAPHIC SCALE

( IN FEET )

		REVISI	ONS	
No.	DATE	D.	ESCRIPTION	BY
-				-
-				+
			-4	
DATE	MAY 29,	2018	SCALE: 1" = 4	0'
PROJ.	ECT NO: 17	7-0417-3	SHEET 9 OF	7





PERMANENT OUTLET PROTECTION APRON (RIP RAP)





\_\_\_\_\_\_\_\_\_ SILT FENCE



TEMPORARY SILT SOXX



STABILIZED CONSTRUCTION EXIT



NON DISTURBANCE AREA



STAGING AND STOCKPILE AREA



EROSION CONTROL BLANKETS

NPDES NOTE

THIS PROJECT DISTURBS IN EXCESS OF 1-ACRE OF LAND. THEREFORE IT MILL BE REQUIRED TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE AS ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA). THE COWIREN/DEVELOPER AND "OPERATION" (GENERAL CONTRACTOR) SHALL EACH BE REQUIRED TO PREPARE AND SUBMIT A NOTICE OF INTENT (NO) TO THE PPA PRIOR TO THE STATA OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE PREPARATION AND IMPLEMENTATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MEETING THE REQUIREMENTS OF THE CURRENT CONSTRUCTION GENERAL PERMIT.

PROJECT NO: 17-0417-3

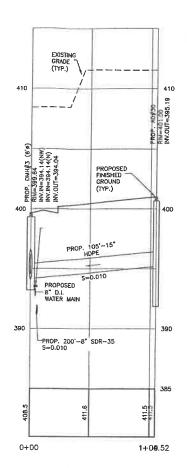
SHEET 10 OF 17

i: \\_pro|ect\1704173\dwg\Production Drowings\1704173-GRADE-EROSiON-PLAN.dwg, LANDSCAPE. 6/11/2018 4:12:15 PM. riewire

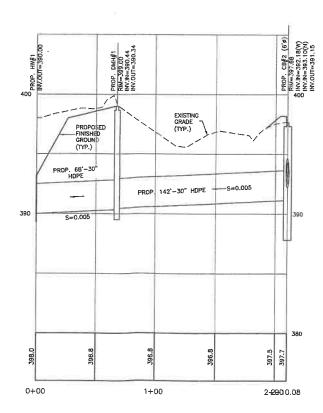
PROP. HW#2 TO PROP. OS#1

SCALE: 1" = 40' (HORIZ.)

1" = 4' (VERT.)



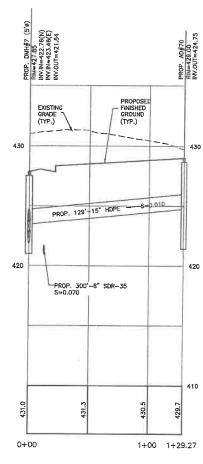
PROP. DMH#3 TO PROP. AD#30 SCALE: 1" = 40' (HORIZ.) 1" = 4' (VERT.)



PROP. HW#1 TO PROP. DMH#1

SCALE: 1" = 40' (HORIZ.)

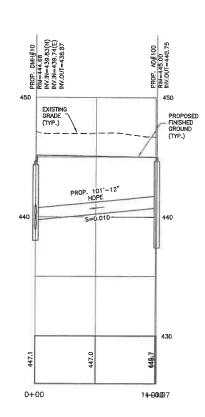
1" = 4' (VERT.)



PROP. DMH#7 TO PROP. AD#70

SCALE: 1" = 40' (HORIZ.)

1" = 4' (VERT.)



PROP. DMH#10 TO PROP. AD#100 SCALE: 1" = 40' (HORIZ.) 1" = 4' (VERT.)



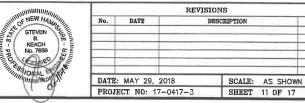
## DRAINAGE PROFILES HIGHFIELD COMMONS PHASE 1B

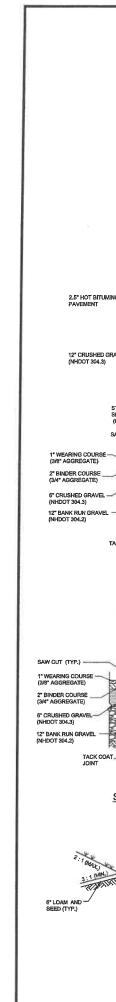
MAP 237 LOTS 3 & 8 FILLMORE BOULEVARD ROCHESTER, NEW HAMPSHIRE STRAFFORD COUNTY

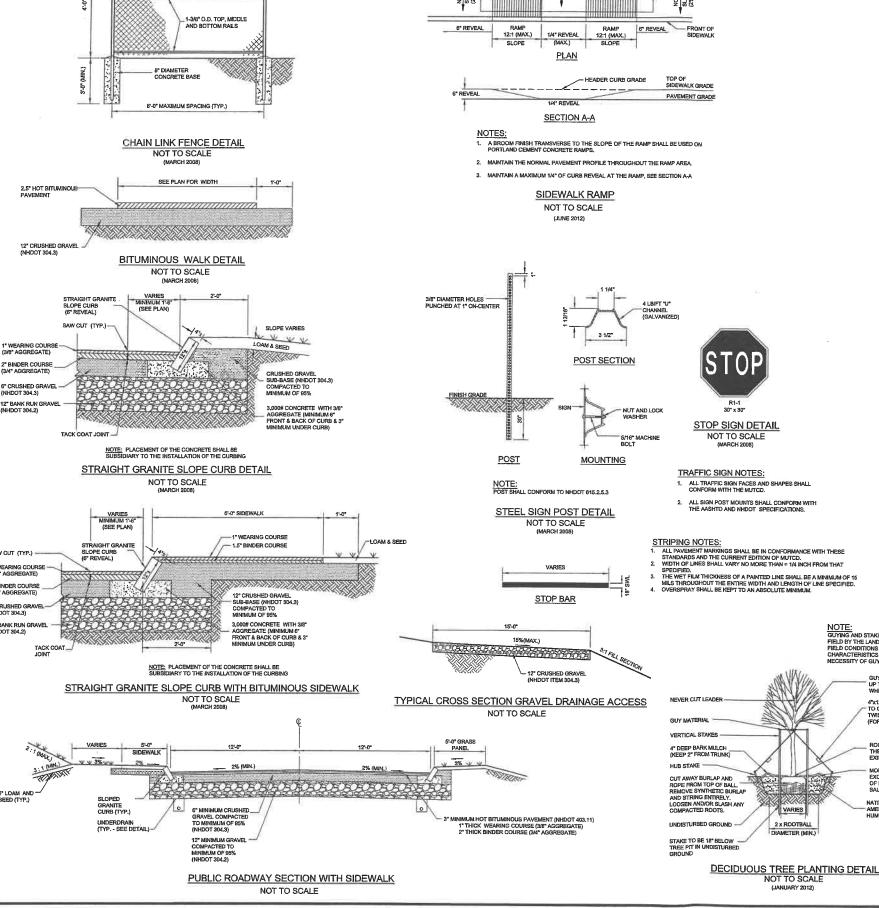
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2-1/2" O.D. HOT DIPPED

GALVANIZED STEEL POST AT END, CORNER AND PULL POINTS OR 2° O.D. HOT DIPPED

GALVANIZED STEEL LINE

9 GAUGE CORE MATERIA 2" MESH VINYL COATED CHAIN LINK

5'-0"

BACK OF

#### TURF ESTABLISHMENT SCHEDULE

PURPOSE:
TO ESTABLISH AND MAINTAIN PERMANENT AND TEMPORARY TURF AREAS, RESTORE

- PREPARATION AND EXECUTION:

  1. RAKE THE SUBGRADE OF ALL AREAS TO BE LOAMED AND SEEDED TO REMOVE RUBBISH, STICKS, ROOTS AND STONES LARGER THAN 1 NCH.

  2. PLACE LOAM OVER AREAS TO BE SEEDED AND SPREAD.

  3. FINE GRADE SURFACE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A LIMITEDUAL BY LIBERCAL SUBJECTACE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A LIMITEDUAL STREAKE STATE SUBJECTIVE TO SEATE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A LIMITEDUAL STREAKE STATE SUBJECTIVE STREAKE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A LIMITEDUAL STREAKE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A LIMITEDUAL STREAKE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A LIMITEDUAL STREAKE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A LIMITEDUAL STREAKE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A LIMITEDUAL STREAKE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A LIMITEDUAL STREAKE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A LIMITEDUAL STREAKE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A LIMITEDUAL STREAKE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A LIMITEDUAL STREAKE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A LIMITEDUAL STREAKE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A LIMITEDUAL STREAKE AND SUPPLEMENT WITH SUITABLE STREAKE STRE CREATE A UNIFORM SURFACE ACCORDING TO THE FINISH GRADES INDICATED; TOP AND BOTTOM OF SLOPES SHALL BE ROUNDED. NO LOAM SHALL BE SPREAD IF THE
- CREATE A UNIFORM SURFACE ACCORDING TO THE FINISH GRADES INDICATED; TOP AND BOTTOM OF SUOPES SHALL BE REPOLIDED. NO LOAM SHALL BE SPREAD IT THE SUBGRADE IS EXCESSIVELY WET OR FROZEN.

  4. IF THE pI OF THE SOIL NEEDED TO BE RASED, APPLY LIME EVENLY OVER LOAM SURFACE AND THOROUGHLY INCORPORATE LIME INTO THE LOAM BY HEAVY RAKING TO AT LEAST ONE-HALF THE DEPTH OF THE LOAM.

  5. APPLY FERTILIZER AND MIX WITH THE UPPER 2 INCHES OF LOAM.

  6. APPLY FERTILIZER AND MIX WITH THE UPPER 2 INCHES OF LOAM.

  7. DETERMINE APPROPRIATE MIXTURE FOR AREA TO BE SEEDED BASED ON EXAMINATION OF PROJECT PLANS. UNIFORMLY SPREAD THE SEED BY BROADCASTING, OR HYDROSEEDING, IF BROADCASTING, LIGHTLY RAKE BY THE PRECOMMENDED RATE OF INCOLULANT. AFTER SEED IS SPREAD, WATER THOROUGHLY WITH A PINE SPRAY.

  7. SEEDING AND INITIAL FERTILIZING SHALL BE DONE BETWEEN APPRIL 1 AND JUNE 1 OR BETWEEN AUGUST 15 AND COTOBER 14, OR AS PERMITTED. SEEDING SHALL NOT BE DONE DURING WINDY WEATHER OR WHEN THE GROUND IS FROZEN, EXCESSIVELY WET OR OTHERWISE UNTILLED.

  8. WITHIN 24 HOURS AFTER SEEDING OPERATION, UNIFORMLY MULCH HE AREA WITH STRAW. ANO-FOR MULCH ON ALL SLOPES EXCEEDING 3: 1 USING MULCH NEITTING STRAUE. ANO-FOR MULCH ON ALL SLOPES EXCEEDING 3: 1 USING MULCH NEITTING STRAUE AND PREVENT AGAINST WASHOUTS, ANY WASHOUTS WHICH OCCUR SHALL BE PROTECTED TO REPORT AND PREVENT AGAINST WASHOUTS, ANY WASHOUTS WHICH OCCUR SHALL BE PROTECTED AND PREVENT AGAINST WASHOUTS, ANY WASHOUTS WHICH OCCUR SHALL BE COVERED WITH SIX NO-HES OF MULCH FOR THE WINTER.

  AMAINTEE HE A TERM OF THE SEED MIXTURE SISTEMED AREA SHALL BE COVERED WITH SIX NO-HES OF MULCH FOR THE WINTER.

4"x12" PLASTIC FLAG SECURED TO GUY MATERIAL WITH

TWISTED WIRE AT EACH END (FOR MOWED AREAS ONLY)

NATIVE BACKFILL HUMUS AND TOPSOIL

MAINTENANCE:
ALL SECDED AREAS SHALL BE KEPT WATERED AND IN GOOD CONDITION. RESEED AS NECESSARY TO ESTABLISH HEALTHY UNIFORM GROWTH OVER THE ENTIRE SEEDED AREA. MANTAIN SEEDED AREAS, IN AN APPROVED CONDITION UNTIL FINAL ACCEPTANCE. MANTENANCE SHALL INCLUDE REPARES FOR DAMAGE CAUSED BY EROSION.

APPLICATION RATES:

1. LOAN SHALL BE APPLIED AT A MINIMUM COMPACTED THICKNESS OF 6 INCHES.

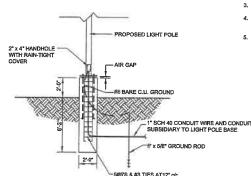
2. LIME SHALL BE USED WHEN INCESSARY TO RAISE THE PH OF THE SOIL AND APPLIED AT ONE OF THE FOLLOWING RATES:

EXISTING SOIL Ph	TONS/ACRE	POUNDS/CUBIC YARD
4.0 - 4.4	3	12
4.5 - 4.9	2	8
5.0 - 5.4	1	4

CERTILIZED QUALL DE ADDI IED AT THE COLLOWING DAT

INITIAL APPLICATION	POUNDS/1,000 SF	MEASUREMENT FACTOR
10-10-10	20.0	1.0
15-15-15	13.4	1,5
19-19-19	10.5	1.9
REFERTILIZATION	POUNDS/1,000 SF	MEASUREMENT FACTOR
10-3-6	20.0	1.0
10-3-6 12-2-8	20.0 16.7	1.0

MULCH SHALL BE APPLIED AT A RATE OF 13 CUBIC YARDS PER 1,000 S.F. OF



## CONCRETE LIGHT POLE BASE DETAIL NOT TO SCALE NOTE: GUYING AND STAKING TO BE DETERMINED IN THE FIELD BY THE LANDSCAPE ARCHITECT. LOCAL FIELD CONDITIONS AS WELL AS PLANT

PHASE 1B MAP 237 LOTS 3 & 8 FILLMORE BOULEVARD

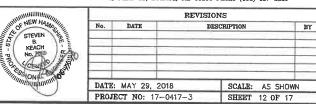
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MATERIALS:

1. LOAM SHALL CONSIST OF LOOSE, FRIABLE TOPSOIL WITH NO ADMIXTURE OF REPUSE OR MATERIAL TOXIC TO PLANT GROWTH. LOAM SHALL BE FREE OF VIOLE PARTS OF PROHIBITED INVASE PLANTS AND BE GENERALLY FREE OF STONES, LUMPS, STUMPS AND SMIGHT, ROBLECTS LARGER THAN 2 INCHES IN GREATEST DIAMETER, SUBSOIL, ROOTS AND WEEDS. THE MINIMUM AND MAXIMUM SHIP VALUE SHALL BE FROM 5.5 TO 7.8.

2. LIME SHALL BE A CALCIO OR DOLOMITIC GROUND AGRICULTURAL LIMESTONE CONTAINING NOT LESS THAN SWY, OF EITHER CALCIUM OR MAGNESIUM CARBONATE, OR BOTH. IT SHALL CONFORM TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS AND SHALL CONFORM TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS AND SHALL CONFORM TO THE FERTILIZER CONFORMING TO ALL STATE AND FERTILIZER AND SHALL BE STANDARD COMMERCIAL GRADE FERTILIZER CONFORMING TO ALL STATE AND FERDER URLES AND SHALL BE STANDARD COMMERCIAL GRADE FERTILIZER CONFORMING TO ALL STATE AND FERDER URLES AND SHALL BE STANDARD COMMERCIAL GRADE FERTILIZER CONFORMING TO ALL STATE AND FERDER URLES AND SHALL BE STANDARD COMMERCIAL GRADE FERTILIZER CONFORMING TO ALL STATE AND FERDER URLES AND SHALL BE STANDARD COMMERCIAL GRADE FERTILIZER CONFORMING TO ALL STATE AND FERDER URLES AND SHALL BE STANDARD COMMERCIAL GRADE FERTILIZER CONFORMING TO ALL STATE AND FERDER URLES AND SHALL STANDARD COMMERCIAL GRADE FERTILIZER CONFORMING TO ALL STATE AND PERMITTED, THE ANALYSIS RATIO SHALL SE 1:11 FOR INTIAL APPLICATION. AND STANDARD COMMERCIAL GRADE FERTILIZER CONFORMING TO ALL STATE AND SHALL SHALL

KIND OF SEED	MINIMUM PURITY (%)	MINIMUM GERMANATION (%)	POUNDS/ACRE (TOTAL 120 POUNDS)
CREEPING RED FESCUE	96	85	40
PERENNIAL RYEGRASS	98	90	50
KENTUCKY BLUEGRASS	97	85	25
REDTOP	96	80	5

6. SEED MIXTURE FOR SLOPE AREAS SHALL CONSIST OF THE FOLLOWING:

KIND OF SEED	MINIMUM PURITY (%)	MINIMUM GERMANATION (%)	POUNDS/ACRE (TOTAL 95 POUNDS)
CREEPING RED FESCUE	96	85	35
PERENNIAL RYEGRASS	98	90	30
REDTOP	95	80	5
ALSIKE CLOVER	97	90	5
BIRDSFOOT TREFOIL	98	80	5
ANCE-LEAVED COREOPSIS	95	80	4
OXEYE DAISY	95	80	3
BLACKEYED SUSAN	95	80	4
WILD LUPINE	95	80	4

WILD LUPINE 95 80 4

7. TEMPORARY SEEDING MIXTURE SHALL BE APPLIED AT A RATE OF 2 POUNDS PER 1,000 SF AND SHALL BE AN APPROVED CONSERVATION MIX OR CONSIST OF THE FOLLOWING:
15% BLACKWELL OR SHELTER SWITCHGRASS
30% NAGRAG OR KAW BIG BLUESTEM
30% CAMPER OR BLAZE SAND LOVEGRASS
115% VIGNOS BROSPOOT TREFOIL.
115% HAZE OR BLAZE SAND LOVEGRASS
115% VIGNOS BROSPOOT TREFOIL.
115% CREEPING BROSPOOT TREFOIL.
115% VIGNOS BROSPOOT TRE

SOD SPECIFICATIONS:

1. SOD SHALL BE PROVIDED WITH A STRONG ROOT SYSTEM, NOT LESS THAN TWO YEARS OLD AND SHALL BE PREE OF ANY UNDESIRABLE NATIVE GRASSES OR WEEDS.

2. SOD SHALL BE MACHINE CUT TO A THICKNESS NOT LESS THAN 34", EXCLUDING THATCH, AND SHALL BE MACHINE CUT TO A THICKNESS NOT LESS THAN 34", EXCLUDING THATCH, AND SHALL BE CAPABLE OF VICOROUS GROWTH WHEN PLANTED.

3. SOD PADS SHALL BE OF UNIFORM SIZE AND COMPOSED OF AT LEAST TWO LOCAL GRASS VARIETIES.

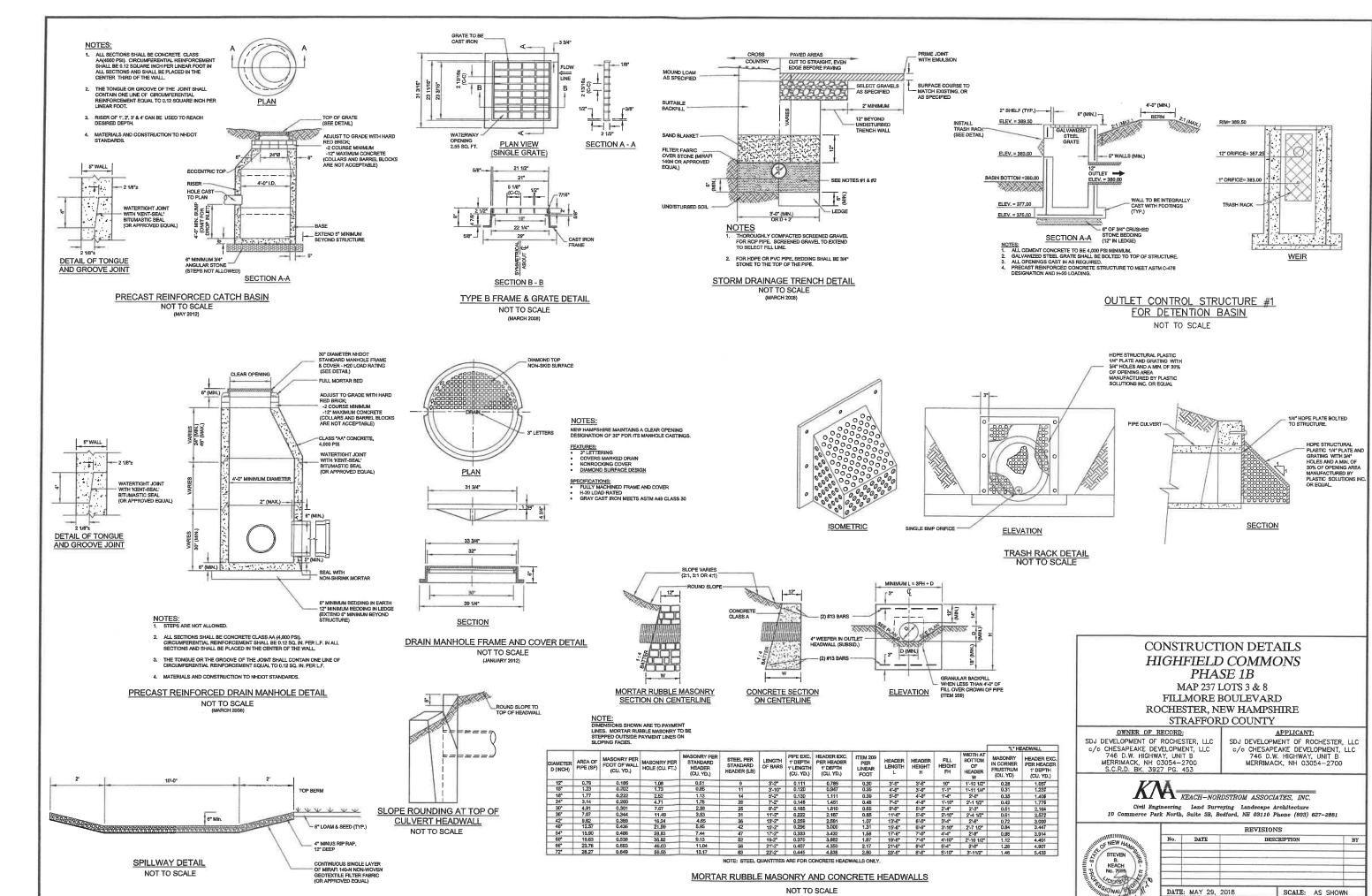
4. LAY SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS, DO NOT OVERLAP, STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. TAMP SOD TO ENSURE CONTACT WITH

WITH SOIL.

5. WATER WITHIN ONE HOUR OF PLANTING WITH A FINE SPRAY.

# CONSTRUCTION DETAILS HIGHFIELD COMMONS

ROCHESTER, NEW HAMPSHIRE STRAFFORD COUNTY



(MARCH 2008)

PROJECT NO: 17-0417-3

SHEET 13 OF 17

#### INFILTRATION POND DETAIL NOT TO SCALE

## STORMWATER PONDS CONSTRUCTION SEQUENCE

- CONTRACTOR TO NOTIFY DIG-SAFE 72 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
  CUT AND CLEAR TREES AND BRUSH FROM CONSTRUCTION AREAS TO THE EXTENT NECESSARY. ALL BRANCHES, TOPS AND BRUSH

- CUT AND CLEAR TREES AND BRUSH FROM CONSTRUCTION AREAS TO THE EXTENT NECESSARY. ALL BRANCHES, TOPS AND BRUSH TO BE PROPERTY DISPOSED OF BY CONTRACTOR.
  PRIOR TO GRUBBING OF CLEARED AREAS, ALL SILTATION BARRIERS DESIGNED FOR USE AS TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED AS CALLED FOR ON PROJECT PLANS.
  COMPLETE GRUBBING OPERATIONS. ALL STUMPS AND SIMILAR DEBRIS SHALL BE PROPERLY DISPOSED OF BY CONTRACTOR.
  ORGANIC MATERIAL SUTHALE FOR USE AS TOPSOIL SHALL BE STOCKPILED IN UPLAND AREAS. ALL STOCKPILES SHALL BE SEEDED WITH WINTER RYE AND, IF NECESSARY, SURROUNDED WITH HAY BALES IN ORDER TO PREVENT LOSS DUE TO EROSION.
  CONSTRUCT TEMPORARY CULVERTS AS NECESSARY TO FACILITATE CONSTRUCTION ACTIVITIES. ALL SUCH CROSSINGS SHALL BE PROTECTED WITH HAY BALE BARRIERS TO LIMIT EROSION.
  CONSTRUCT CULT-OFT TRENCH (PART OF ZONE I).
  CONSTRUCT CULT-OFT TRENCH (PART OF ZONE I).
  CONSTRUCT OUTLET AND OVERFLOW STRUCTURE, CULVERT, ANTI SEEP COLLARS, HEADWALL, AND RIP RAP OUTLET PROTECTION AS SHOWN ON PLANS.

- CONSTRUCT OUTLET AND OVERFLOW STRUCTURE, CLIVERT, ANTI SEEP COLLARS, HEADWALL, AND RIP RAP OUTLET PROTECTION AS SHOWN ON PLANS.
  CONSTRUCT ZONE I PORTION OF EARTH EMBANIGMENT.
  CONSTRUCT ZONE I PORTION OF EARTH EMBANIGMENT.
  CONSTRUCT ZONE II PORTION OF EARTH EMBANIGMENT.
  APPLY TOPSOIL TO SLOPES AND OTHER AREAS DISTURBED BY CONSTRUCTION. TOPSOIL USED MAY BE NATIVE ORGANIC
  MATERIAL SCREENED SO AS TO BE FIREE OF ROOTS, BRANCHES, STONES, AND OTHER DELETERIOUS MATERIALS. TOPSOIL SHALL
  BE APPLIED SO AS TO PROVIDE A MINIMUM OF A 4-INCH COMPACTED THICKNESS. UPON COMPLETION OF TOPSOILLINE, FINISHED
  SECTIONS ARE TO BE LIMBED, SEEDED AND MALCHED, CONSTRUCTION PERSONNES, SHALL INSPECT COMPLETED SECTIONS) OF
  WORK ON A REGULAR BASIS AND REMEDY ANY PROBLEM AREAS UNTIL A HEALTHY STAND OF GRASS HAS BECOME STRAILSHED
  OF THE AMERICES OIL SIDENTIST, PROFESSIONALE NINH AND ROOTS OF TESTING.
  OF THE AMERICES OIL IN ACCORDANCE WITH SHAND ROOMS OF TESTING.
  MANAGEMENT OF THE AMERICES HAS BEEN AND RESEARCH OF THE AMERICES HAS BEEN AND RESEARCH OF THE AMERICES HAS BEEN AND RESEARCH OF THE AMERICES HAS DEPOKED AND RESEARCH OF THE AMERICES HAS BEEN AND RESEARCH OF THE AMERICAN HAS BEEN AND RESEARCH OF THE AMERICAN HAS BEEN AND RESEARCH OF THE PROPESSION OF THE TESTING.

  MANAGEMENT HAS BEEN AND REPERATE AND REPORTS AND RESEARCH THE PROPERTY OF CONTROL HERS HAVE HERE AND RESEARCH THE PROPERTY OF CONTROL HERE HAS BEEN AND RESEARCH THE PROPERTY OF CONTROL HERE HAS BEEN AND RESEARCH THE PROPERTY OF T
- 12. MAINTAIN, REPAIR, AND REPLACE AS NECESSARY TEMPORARY EROSION CONTROL MEASURES UNTIL SUCH TIME AS THE ENTIRE
- ONISTRUCTION AREA HAS BEEN STABLIZED (A MINIMUM OF ONE WINTER SHALL HAVE PASSED).

  AFTER STABLIZATION, REMOVE AND SUITABLY DISPOSE OF TEMPOPARY EROSION CONTROL MEASURES.

  MONITOR CONSTRUCTION ACTIVITIES TO INSURE CONSTRUCTION ACTIVITIES ARE BEING PERFORMED IN SUCH A WAY AS NOT TO ENDANGER THE INTEGRITY OF EARTH EMBANKMENTS, STORMWATER CONTROL STRUCTURE, CULVERT AND RIP RAP OUTLET PROTECTION.

# NOTES: 1. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE WHILLTRATION BASIN. 2. DO NOT TRAFFIC EXPOSED SOIL SURFACES WITH CONSTRUCTION EQUIPMENT, IF FEASIBLE, PERFORM EXCAVATIONS WITH

- DO NOT TRAFFIC EXPOSED SOIL SURFACES WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PIERFORM EXCAVATIONS WITH
  EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILITATION BASIN.
   AFTER THE BASIN IS EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY
  TILLER OR DISC HARROW TO RESTORE INFILITATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
   VEGETATION SHOULD BE ESTABLISHED IMMEDIATELY.
   DO NOT PLACE INFILITATION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

#### MATERIAL TYPE/SPECIFICATIONS

 $\begin{tabular}{ll} \hline ZONE I \\ \hline \end{tabular} \begin{tabular}{ll} WELL GRADED MIXTURE OF GRAVEL, SAND, SILT OR CLAY WITH \\ \hline \end{tabular}$ MAX. 6-INCH SIZE STONE AND GEADATION AS INDICATED BELOW. PLACE IN MAX, 12-INCH THICK LIFTS TO 95% OF MAX, DRY DENSITY IN ACCORDANCE WITH

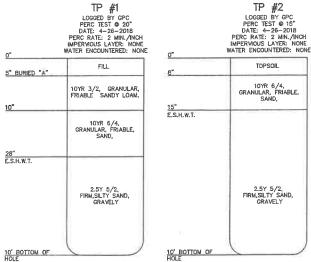
ASTM D1557. SCARIFY SURFACE PRIOR TO PLACING SUBSEQUENT LIFT. IN ADDITION, REMOVE ORGANIC SOILS.

SIEVE SIZE PERCENT BY WEIGHT PASSING

ZONE II DRAINAGE LAYER: PLACE IN MAX, 12-INCH THICK LIFTS TO 95% OF MAX, DRY
DENSITY IN ACCORDANCE WITH ASTM D1557.

SIEVE SIZE PERCENT BY WEIGHT PASSING

70-100 0-12 (IN SAND PORTION ONLY)



FINISH GRADE

SUBGRADE

1'-6"

PIPE UNDERDRAIN

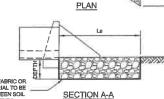
NOT TO SCALE

OVERLAP FABRIC 6" (MIN.)

CONTINUOUS SINGLE LAYER OF MIRAFI 140-N NON-WOVEN GEOTEXTILE FILTER FABRIC (OR APPROVED EQUAL)

TP #2

# TABLE 7-24 -- RECOMMENDED RIP RAP GRADATION RANGES



#### PIPE OUTLET TO FLAT AREA WITH NO DEFINED CHANNEL NOT TO SCALE

LOCATION	Le	W1	W2	d50	DEPTI
PROP, HW#1	26'	8,	33'	6"	15"
PROP. HW#2	9'	3'	12"	4"	10°

PERCENT OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE
100%	1.5 TO 2.0 d50
85%	1.3 TO 1,8 d50
50%	1.0 TO 1.5 d50
15%	0,3 TO 0,5 d50

## CONSTRUCTION SPECIFICATIONS:

- 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 THE ROCK RIP RAP. DAMAGE 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 PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
- 4. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL STORE FOR THE RIP FOR MAY BE PLACE BY EQUIPMENT AND SPALE BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.

THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUAL AND AFTER EVERY MAJOR RAIN EVENT. IF THE RIP RAP HAS BEEN DISPLACED, UNDERMINED, OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUT MMEDIA LELT. THE CHARMEL IMMEDIAL ELT SELLOW THE OUTLE!

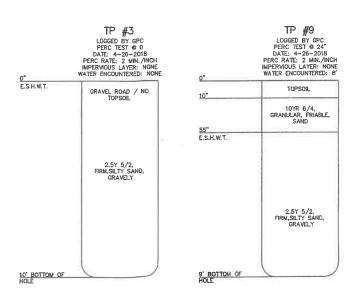
SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE

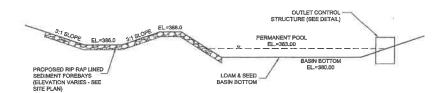
DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS

SUCH AS FALLEN TREES, DEBRIS, AND SEDMENT THAT COLUD CHANGE

FLOW PATTERNS ANDIOR TAILWATER DEPTHS ON THE PIPES. REPAIR

MUST BE CARRIED OUT MINED TELT YOU ADDITIONAL DAMAGE





#### STORMWATER WET POND DETAIL

#### NOT TO SCALE

## STORMWATER PONDS CONSTRUCTION SEQUENCE

- STORMIVAY FER PONDS CONSTRUCTIONS DEQUESTORS
  CONTRACTOR TO NOTIFY DIG-SAFE 72 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
  CUT AND CLEAR TREES AND BRUSH FROM CONSTRUCTION AREAS TO THE EXTERT NECESSARY. ALL BRANCHES, TOPS AND BRUSH TO BE PROPERTY DISPOSED OF BY CONTRACTOR.
  PRIOR TO GRUBBING OF CLEARED AREAS, ALL SILTATION BARRIERS DESIGNED FOR USE AS TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLE AS CALLED FOR ONE AND SIMILAR DESRIS SHALL BE PROPERLY DISPOSED OF BY CONTRACTOR.
  COMPLETE GRUBBING OPERATIONS. ALL STUMPS AND SIMILAR DESRIS SHALL BE PROPERLY DISPOSED OF BY CONTRACTOR.
  ORGANIC MATERIAL SUTHALE FOR USE AS TOPSOIL SHALL BE STOCKPILED IN UPLAND AREAS. ALL STOCKPILES SHALL BE SECED WITH WINTER RYE AND, IF NECESSARY, SURROUNDED WITH HAY BALES IN ORDER TO PREVENT LOSS DUE TO EROSION.
  CONSTRUCT TEMPORARY CULVERTS AS NECESSARY TO FACILITATE CONSTRUCTION ACTIVITIES, ALL SUCH CROSSINGS SHALL BE PROTECTED WITH HAY BALE BARRIERS TO LIMIT EROSION.
  CONSTRUCT CUT-OFF TERMOR (PART OF ZONE I).
  CONSTRUCT CUT-OFF TERMOR (PART OF ZONE I).
  CONSTRUCT OUTLET AND OVERFLOW STRUCTURE, CULVERT, ANTI SEEP COLLARS, HEADWALL, AND RIP RAP OUTLET PROTECTION AS SHOWN ON PLANS.

- CONSTRUCT CUTLET A NEW OVERTOW STRUCTURE, CULVERT, ANTI SEEP COLLARS, HEADWALL, AND RIP RAP OUTLET PROTECTION AS SHOWN ON PLANS.

  S SHOWN ON PLANS.

  CONSTRUCT ZONE I PORTION OF EARTH EMBANKMENT.

  CONSTRUCT ZONE I PORTION OF EARTH EMBANKMENT.

  APPLY TOPSOIL TO SLOPES AND OTHER AREAS DISTURBED BY CONSTRUCTION. TOPSOIL USED MAY BE NATIVE ORGANIC MATERIALS. TOPSOIL SHAPPING OF TOPSOILING, RINISHED STATE OF THE AMERICAN OF THE ANOTHER DELETERIOUS MATERIALS. TOPSOIL SHALL BE APPLIED SO AS TO PROVIDE A MINIMUM OF A 4-INCH COMPACTED THICKNESS. UPON COMPLETION OF TOPSOILING, RINISHED SECTIONS ARE TO BE LIMBED, SEEDED AND MULCHED. CONSTRUCTION PERSONNEL SHALL INSPECT COMPLETED SECTIONS OF WORK ON A REGULAR BASIS AND REMIEDY ANY PROBLEM AREAS UNTIL A HEALTHY STAND OF GRASS HAS BECOME STALLING. A CERTIFIED SOIL SCHEMTS, PROFESSIONAL ENGLINE OR PROFESSIONAL GENDLAID MUST MEASURE THE INFLITATION RATE OF THE AMENDED SOIL IN ACCORDANCE WITH SIX VIV. 40 1501.14(6). THE RESULTS MUST BE SUBMITTED TO THE INFLITATION RATE OF THE AMENDED SOIL IN ACCORDANCE WITH SIX VIV. 40 1501.14(6). THE RESULTS MUST BE SUBMITTED TO THE INFLITATION RATE OF THE AMENDED SOIL IN ACCORDANCE WITH SIX VIV. 40 1501.14(6). THE RESULTS MUST BE SUBMITTED TO THE INFLITATION RATE OF THE AMENDED SOIL IN ACCORDANCE WITH SIX VIV. 40 1501.14(6). THE RESULTS MUST BE SUBMITTED TO THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES WITHIN SEVEN (7) DAYS OF TESTING.

  MAINTAIN, REPAIR, AND REPLACE AS NECESSARY TEMPORARY EROSION CONTROL MEASURES UNTIL SUCH TIME AS THE ENTIRE CONSTRUCTION AREA HAS BEEN STABILIZED A MINIMUM OF ONE WITHER SHALL HAVE PASSED.

  AFTER STABILIZATION, REMOVE AND SUITABLY DISARCE CONSTRUCTION ACCORDANCE OF THE PROPORARY EROSION CONTROL STRUCTURE, ULTWITTET SO IN SURVER CONSTRUCTION ACCORDANCE ON STRUCTURE, CULVERT AND RIP RAP OUTLET PROFECTION.

- PROTECTION.

  NOTES:

  DO NOT DISCHARGE SEDIMENTLADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE INFILITATION BASIN.

  DO NOT TRAFFIC EXPOSED SOIL SURFACES WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILITATION BASIN.

  AFTER THE BASIN IS EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR DISCHARGNOW TO RESTORE INFILITATION ARTES, FOLLOWED BY A PASS WITH A LEVELING DRAG.

  VEGETATION SHOULD BE ESTABLISHED IMMEDIATELY.

  DO NOT PLACE INFILITATION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

TP #10

LOGGED BY GPC
PERC TEST © 24"
DATE: 4-26-2018
PERC RATE: 2 MIN./INCH

IMPERVIOUS LAYER: NONE WATER ENCOUNTERED: 16"

TOPSOIL

2.5Y 5/2, FIRM, SILTY SAND, GRAVELY W/ REDOX

16" E.S.H.W.T.

48" BOTTOM OF

#### MATERIAL TYPE/SPECIFICATIONS

ZONE I WELL GRADED MIXTURE OF GRAVEL, SAND, SILT OR CLAY WITH SIZE STONE AND GEADATION AS INDICATED BELOW, PLACE IN

MAX. 12-INCH THICK LIFTS TO 95% OF MAX. DRY DENSITY IN ACCORDANCE WITH

ASTM D1557. SCARIFY SURFACE PRIOR TO PLACING SUBSEQUENT LIFT. IN ADDITION, REMOVE ORGANIC SOILS.

SIEVE SIZE PERCENT BY WEIGHT PASSING

DRAINAGE LAYER: PLACE IN MAX. 12-INCH THICK LIFTS TO 95% OF MAX. DRY
DENSITY IN ACCORDANCE WITH ASTM D1557.

SIEVE SIZE PERCENT BY WEIGHT PASSING 1-INCH 100

70-100 0-12 (IN SAND PORTION ONLY)

## **CONSTRUCTION DETAILS** HIGHFIELD COMMONS PHASE 1B MAP 237 LOTS 3 & 8 FILLMORE BOULEVARD ROCHESTER, NEW HAMPSHIRE

STRAFFORD COUNTY

OWNER OF RECORD: SDJ DEVELOPMENT OF ROCHESTER, LLC c/o CHESAPEAKE DEVELOPMENT, LLC 746 D.W. HIGHWAY, UNIT B MERRIMACK, NH 03054–2700 S.C.R.D. BK. 3927 PG. 453

APPLICANT: SDJ DEVELOPMENT OF ROCHESTER, LLC c/o CHESAPEAKE DEVELOPMENT, LLC 746 D.W. HIGHWAY, UNIT B MERRIMACK, NH 03054-2700



Civil Engineering Land Surveying Landscape Architecture 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (803) 627-2881



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Į	DATE: MAY	29, 2018	SCALE: AS SHO	NWC	
I	PROJECT N	IO: 17-0417-3	SHEET 14 OF	17	

EXISTING SURFACE SOCIATION (AWWA):
AWWA C151/A21.51-02 - FOR DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL OR SAND-LINED MOLDS, FOR WATER OR OTHER LIQUIDS; AWWA C150/A21,50-02 - FOR THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A536-84 (2004) DUCTILE IRON CASTINGS;

3. JOINTS SHALL BE MECHANICAL PUSH-ON OR BALL-AND-SOCKET TYPE.

9. JOINTS SHALL BE MECHANICAL PUSH-ON OR BALL-AND-SOCKET TYPE.

PLASTIC GRAVITY SEWER PIPE AND FITTINGS SHALL COMPLY WITH THE FOLLOWING STANDARDS:

1. ASTIM D3034-04A-PVC, SOLIO WALL;

2. AT LEAST 46 PSIAT 5% PIPE DIAMETER DEFLECTION, AS MEASURED IN ACCORDANCE WITH ASTIM D2414-02 DURING 2. AT LEAST 46 PSI AT 5'K PIPE DIMMETER DEFLECTION, AS MEASURED IN ACCORDANCE WITH ASTIM D2414-02 DURING MANUFACTURING; AND MANUFACTURING AND MATCHED WITH THE PRIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE PROPERLY MATCHED WITH THE PROPERTIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURIED ADAPTERS SHALL BE USED. SERVICE CONNECTIONS SHALL DETER THE TOP HALF OF THE SEWER. ANY SERVICE CONNECTION, THE CENTERING OF ALL BUILDING CONNECTIONS SHALL DETER THE TOP HALF OF THE SEWER. ANY SERVICE CONNECTION WITH A VERTICAL RISE UP TO 4 FEET MAY HAVE THE SEWER FITTING SET VERTICALLY. ANY SERVICE CONNECTION WITH A VERTICAL RISE UP TO 2 FEET SHALL EMPLOY NON-BROASED RISESTS THAT PROTECT AGAINST PIPE PENETRATION OR FAILURE AT THE FITTING BY THE USE OF BELL-ON-BELL CONNECTIONS. FOR EXISTING SEWER WHERE FITTINGS CANNOT BE INSTALLED, SADDLE CONNECTIONS SHALL BE SEXUED AT THE PROPERTY LINE. IF A CHECK VALVE IS USED AT THE PROPERTY LINE, THE VALVE SHALL BE INSTALLED WITHIN A VALUT TO FACILITATE MANITENANCE. ROOF DOWNSOUTS, EXTERNED OR BILL HAVE THE VALVE SHALL BE INSTALLED WITHIN A VALUT TO FACILITATE MANITENANCE. ROOF DOWNSOUTS, EXTERNED OR BUILDING CON FOUNDATION OR PRIVED PURPS OR OTHER SOURCE OF SUFFACE WATER RUN-OFF OR GROUND WATER SHALL NOT BE DIRECTLY ON INDIRECTLY CONNECTED TO A PUBLIC SEWER. MANUFACTURER.

B. PIPES SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL.

BEDDING AND RE-FILL, FOR A DEBTH OF 12 INCHES ABOVE THE TOP OF THE PIPE, SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH THE APPROPRISE 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 16 INCH PER FOOT.

PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO

> WOODEN 2 X 4 TO GRADE 45° RELL AND

WODDEN 2 X 4 TO GRADE

**ELEVATION VIEW** 

SPIGOT ELBOW

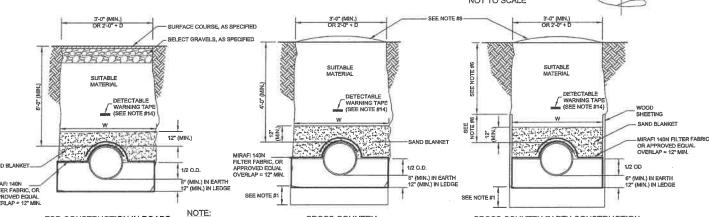
SLOPE =1/4" /FOOT

FOR FUTURE CONNECTION, TERMINATE AND PLUG LATERAL AT STREETLINE OR STORM

6" OF 3/4" CRUSHED STONE

PLAN VIEW SANITARY SEWER SERVICE DETAIL -MAIN SEWER NOT TO SCALE BRICK / JOINT DETAIL

WYE BRANCH



## SANITARY SEWER TRENCH DETAIL NOT TO SCALE

ED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. REFILL ORDERED EXCAVATION OF UNSUITABLE WAS WITH BEDDING MATERIAL, ALSO SEE NOTE #7. BEDDING: CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33/C33M STONE SIZE NO. 67.

FOR CONSTRUCTION IN ROADS,

ROAD SHOULDER AND WALKWAYS

MINIMUM BEDDING DEPTH AND

- 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 10% PASSING # 4 SIEVE
  0 5% PASSING # 5 SIEVE
  WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE,
  GRADED CRUSHED STONE 1/2 INCH TO 1-1/2 INCHES SHALL BE USED.
  SAND BLANKET: GRADED CLEAN SAND PREE FROM ORGANIC MATTER, SO
  THAT 100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 15% WILL PASS A
  200 SIEVE. BLANKET MAY BE OMITTED FOR CAST IRON, DUCTILE IRON AND
  REINFORCED CONCRETE PIPE PROVIDED, HOWEVER, THAT NO STONE
  LARGER THAN 2 INCHES IS IN CONTACT WITH THE PIPE
  MIRARI 140 N FILTER FABRIC, OR APPROVED EQUAL, SHALL BE INSTALLED
  ABOVE PIPE.

- 3. MINAPI 1910 IN THE LET KRAINS, OF A THAT ABOVE PIPE.
  4. SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL AND ALL ROCKS OVER 6 INCHES IN LARGEST DIMENSION, OR MY MATERIAL, WHICK, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUPPICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE FOODERING.
- STABLE CONDITION.

  IN CROSS COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMITTHE USE OF TOP SOIL, LOAM, MUCK OR PEAT IF HEISHE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTRILLY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER WILL BE PRESERVED FOR MAINTENANCE AND POSSIBLY RECONSTRUCTION, WHEN NECESSARY.

- 6. BASE COURSE, IF ORDERED BY THE ENGINEER, SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS." (a) WOOD SHEETING, IF REQUIRED, WHERE PLACED ALONGSIDE THE PIPE AND EXTENDING BELOW MID-DIAMETER, SHALL BE CLUT OFF AND LEFT IN PLACE TO.
- EXTENDING BELOW MID-DIAMETER, SHALL BE CUIT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE. WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUIT OFF AT LEAST 3 FEET BELOW FINISHED GRADE, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.

  \*\*YE = MAXIMUM ALLOWABLE TERNICH WIDTH TO A PLANE 12 NICHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 3 SINCHES. FOR PIPES GRADE THAN 15 NICHES MOBINAL DIAMETER, W SHALL BE NO MORE THAN 5 SINCHES. FOR PIPES GRADE THAN 15 NICHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR CROBERED EXCAVATION BELOW GRADE.

  FOR CROSS COUNTRY CONSTRUCTION, BACKFILL OR FILL SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- SURFACE.

  NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES DESIGN
  STANDARDS REQUIRE 10 FEET OF SEPARATION BETWEEN WATER AND
  SEWER. HOWEVER, SHOULD CONSTRUCTION REVEAL OR EXPOSE A
  WATERLINE (MAIN OR SERVICE) RUNNING APPROXIMATELY PARALLE, AND
  LESS THAN 10 FEET HORIZONTALLY FROM THE PROPOSED SEWER LESS INAM 10 FEET INDIKLONTALLY FROM THE PROPOSED SEWER INSTALLATION AND WHERE IT IS NOT PRACTICAL TO RELOCATE THE SEWER, A DEVIATION MAY BE GRANTED PROVIDED THAT THE SEWER IS CONSTRUCTED IN ACCORDANCE WITH THE FORCE MAIN CONSTRUCTION REQUIREMENT
- FORCE MAINS SHALL BE CONSTRUCTED FROM DUCTILE IRON, HIGH ENDILI FULTELITIENE, UR PVC PER ENV-WQ 704.08(a).
  PVC SHALL CONFORM TO ASTM D2241-05 OR ASTM D1785-05
  HDPE SHALL CONFORM TO ASTM D3038-03a
  D.I. SHALL BE CORROSION PROTECTED IN CORROSIVE ENVIRONMENTS

10. WHERE WATER LINES AND SEWER LINES CROSS, THEY SHOULD CROSS AS PERPENDICULAR AS POSSIBLE AND THE WATER MAIN SHALL CROSS AT LE. 18" INCHES ABOVE THE SEWER. FURTHER, THE SEWER JOINTS SHALL BE LOCATED AT LEAST 6 FEET HORIZONTALLY FROM THE WATER MAIN.

CROSS COUNTRY EARTH CONSTRUCTION

WITH SHEETING

- WAITER MINING STRUE, BE FRESSIVE AVAILED FIRE ANYAND OF 100 PSI, TESTED PER AWMA C800-04 AT 1.5 TIMES DESIGN PRESSURE OF 100 PSI, WHICHEVER IS GREATER, WITH NO JOINTS WITHIN 9 FEET OF THE CROSSING POINT AND 18\* MINIMEM VERTICAL SEPARATION. PREGNATED MARKING TAPE OR TRACER WIRE THAT CAN BE LOCATED USING METAL DISTECTION EQUIPMENT.
- GRAVITY PIPE SEWER TESTING: A. ALL NEW GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY
- AIR;" OR

  2. UNI-BELL PVC PIPE ASSOCIATION UNI-B-6, "LOW-PRESSURE AIR TESTING
- AND GRADE FOLLOWING INSTALLATION AND PRIOR TO USE. ALL PLASTIC SEWER PIPE SHALL BE DEFLECTION TESTED NOT LESS THAN 30

LOCATED AT LEAST 6 FEET HORIZONTALLY PROM THE WATER MAIN.
ALL SEWERS AT 8 PERCENT SLOPE, OR GREATER, SHALL HAVE IMPERVIOUS
TRENCH DAMS CONSTRUCTED EVERY 300 FEET.
UNLESS OTHERWISE NOTED, ALL GRANULAR MATERIAL, SHALL BE PLACED IN 12\*
LIFTS AND COMPACTED TO 85%, OF THE MODIFIED PROCTOR TEST.
WHERE WATER MAINS CROSS UNIDER SEWER MAINS, BOTH THE SEWER AND
WATER MAINS SHALL BE FRESSURE RATED PIPE PER ENV-WQ 704.06 AND

THE USE OF LOW-PRESSURE ARR TESTS.

LOW-PRESSURE ARE TESTING SHALL BE IN CONFORMANCE WITH:

1. ASTM FHAT-92(2005) "STANDARD TEST METHOD FOR INSTALLATION

ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW-PRESSURE

2. ONFREEL FOR PERSONANT OFFICE.
OF INSTALLED SEWER PIPE" (1998).
ALL NEW GRAVITY SEWERS SHALL BE CLEANED AND VISUALLY INSPECTED
USING A LAMP TEST AND BY INTRODUCING WATER TO DETERMINE THAT
THERE IS NO STANDING WATER IN THE SEWER AND SHALL BE TRUE TO LINE

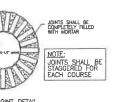
ALL PLASTIC SEWER PIPE SHALL BE DEPLECTION TESTED NOT LESS TIMM 30 DAYS NOR MORE THAN 90 DAYS FOLLOWING INSTALLATION. THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5 PERCENT OF AVERAGE INSIDE DIAMETER. FA RIGID BALL OF MANDREL WITH A DIAMETER OF AT LEAST 85 PERCENT OF THE AVERAGE INSIDE PIPE DIAMETER SHALL BE USED FOR TESTING PIPE DEFLECTION. THE DEPLECTION TEST SHALL BE CONDUCTED WITHOUT MECHANICAL PULLING

2 0 -PLASTIC MANHOLE STEPS 12" O. C. PRECAST REINFORCED CONCRETE
MANHOLE TOP SECTION PREMOLDED JOINT FILLER OR BIT, MASTIC SEAL SLOPED SHELF PREMOLDED JOINT FILLER OR BIT. MASTIC SEAL PRECAST CONCRETE BOTTOM SECTION WITH PIPE OPENINGS PROVIDED AS REQUIRED. SET TO CRADES SHOWN ON PLAN CONCRETE OR MASONRY FILL SHAPE INVERT AS REQUIRED OR USE PREFORMED CHANNE 6" CRUSHED STONE (LEVELED TO RECEIVE BASE UNIT) SECTION A - A - PIPE DIMENSION DOUBLE MASTIC -SEAL REQUIRED

DOUBLE MASTIC SEAL REQUIRED

PORTLAND CEMENT MORTAR

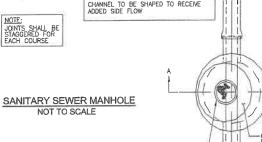
ADJUST TO GRADE WITH BRICK (3 COURSES MIN.; B COURSES MAX.)

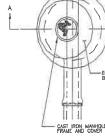


WYE BRANCH

NOTE: MANHOLE CHANNELS REQUIRING CHANGE IN ALIGNMENT, TO BE BUILT ON SMOOTH RADIUS. IF SIDE PIPES ENTER,

JOINT/MASTIC DETAIL

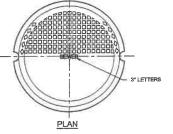


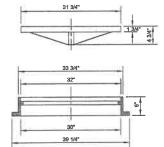


PLAN

SHELF DETAIL

--- AS SPECIFIED





NOTES:

- NONROCKING COVER DIAMOND SURFACE DESIGN
- SPECIFICATIONS:

  \* FULLY MACHINED FRAME AND COVER
- H-20 LOAD RATED GRAY CAST IRON MEETS ASTM A48 CLASS 30

SECTION SEWER MANHOLE FRAME AND COVER DETAIL NOT TO SCALE

NOTES: (NHDES ENV WQ700 - 2015)

ALL COMPONENT PARTS OF MANHOLE STRUCTURES SHALL HAVE THE STRENGTH, LEAK RESISTANCE AND SPACE NECESSARY FOR THE INTENDED SERVICE.

NECESSARY FOR THE INTENDED SERVICE.

MANHOLE STRUCTURES SHALL HAVE A LIFE EXPECTANCY IN EXCESS OF 25 YEARS.

MANHOLE STRUCTURES SHALL HAVE A LIFE EXPECTANCY IN EXCESS OF 25 YEARS.

MANHOLE STRUCTURES SHALL BE DESIGNED TO WITHSTAND H-20 LOADING AND SHALL NOT LEAK IN EXCESS OF ONE GPD PER VERTICAL FOOT OF MANHOLE FOR THE LIFE OF THE STRUCTURE.

BARRELS, CONCRETE GRADE RINGS AND CONE SECTIONS SHALL BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE AND SHALL LONFORM TO ASTM C478.

BEDDING: GRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33

BEDDING: CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33
100%, PASSING 3 INCH SCREEN
90%, PASSING 3 IN CH SCREEN
20-55%, PASSING 38 INCH SCREEN
0-10%, PASSING 48 SIEVE
0-5%, PASSING 48 SIEVE
WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, CRUSHED STONE 1/2 INCH TO 1-1/2 INCH SHALL BE

BASE SECTIONS SHALL BE OF MONOLITHIC CONSTRUCTION TO A POINT AT LEAST 6 INCHES ABOVE THE CROWN

OF THE INCOMING PIPE.

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.

PIPE TO MANHOLE JOINTS SHALL BE AS FOLLOWS.

A. ELASTOMERIC, RUBBER SLEEVE WITH WATERTIGHT JOINTS AT THE MANHOLE OPENING AND PIPE

USTAINED.

MANHOLE COME SECTIONS SHALL BE ECCENTRIC IN SHAPE.

10. ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL.

11. ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING.

12. MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE

12. MANHOLES SHALL HAVE A BRICK PAYED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW, AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAD 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 SLOPED TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY. INVERTS AND SHELVES SHALL BE PLACED AFTER TESTING.
13. MATERIALS OF CONSTRUCTION FOR MANHOLES SHALL BE AS FOLLOWS.

LS OF CONSTRUCTION FOR MANHOLES SHALL BE AS FOLLOWS.

CONCRETE FOR PRECAST BASES OR GRADE RINGS SHALL CONFORM TO THE REQUIREMENTS FOR CLASS AA CONCRETE IN THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATIONS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTIONS.

REINFORCING FOR PRECAST CONCRETE SHALL BE STEEL OR STRUCTURAL FIBERS THAT CONFORM TO THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATIONS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL BE CERTIFIED BY THEIR MANHOLE COVER SHALL PROVIDE A SOUNCH DIAMETER CLEAR OPENING:

THE MANHOLE FRAME AND COVER SHALL PROVIDE A SOUNCH DIAMETER CLEAR OPENING:

THE MANHOLE COVER SHALL HAVE THE WORD "SEWER" IN SINCH LETTERS CAST INTO THE TOP SURFACE.

SURFACE; THE CASTINGS SHALL BE OF EVEN-GRAINED CAST IRON, SMOOTH AND FREE FROM SCALE, LUMPS,

F. THE CASTINGS SHALL BE OF EVER-GRAINED CAST IRON, SMOOTH AND FREE FROM SCALE, LUMPS, BIJSTERS, SAND HOLES AND DEFECTS;

G. CONTACT SURFACES OF COVERS AND FRAMES SHALL BE MACHINED AT THE FOUNDRY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION;

H. CASTINGS SHALL BE EQUAL TO CLASS 30, BE CERTIFIED BY THEIR MANUFACTURE(S) AS CONFORMING TO ASTIN AGBIBM;

I. BRICK MASONRY FOR SHELF, INVERT AND GRADE ADJUSTMENT SHALL BE CERTIFIED BY THEIR MANUFACTURE(S) AS CONFORMING TO ASTIN CASE, CLAY OR SHALE, FOR GRADE SIS HARD BRICK;

J. MORTAR SHALL BE COMPOSED OF TYPE II PORTLAND CEMENT AND SAND WITH OR WITHOUT MYDRAFFI IME ADDITION.

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:

1. 4.5 PARTS SAND AND 1.5 PARTS GEMENT; OR

2. 4.5 PARTS SAND, ONE PART CEMENT AND 0.5 PARTS HYDRATED LIME;
CEMENT SHALL BE TYPE I PORTLAND CEMENT CONFORMING TO ASTM C150/C150M;
HYDRATED LIME SHALL BE TYPE S CONFORMING TO THE ASTM C207 "STANDARD SPECIFICATIONS FOR 
HYDRATED LIME SHALL BE TYPE S CONFORMING TO THE ASTM C207 "STANDARD SPECIFICATIONS FOR 
HYDRATED LIME FOR MASORY PURPOSES."
SAND SHALL CONSIST OF INERT AUTURAL SAND CONFORMING TO THE ASTM C33 "STANDARD 
SPECIFICATIONS FOR CONCRETE. FINE AGGREGATES",
CONCRETE FOR INDEP SUPPORTS SHALL CONFORMING THE REQUIREMENT FOR CLASS ANA CONCRETE 
CONCRETE FOR INDEP SUPPORTS SHALL CONFORMING THE REQUIREMENT FOR CLASS ANA CONCRETE 
CONCRETE FOR INDEP SUPPORTS SHALL CONFORMING THE REQUIREMENT FOR CLASS ANA CONCRETE 
CONCRETE FOR INDEP SUPPORTS SHALL CONFORMING THE REQUIREMENT FOR CLASS ANA CONCRETE 
CONCRETE FOR INDEP SUPPORTS OF THANSPORTATIONS "STANDARD SPECIFICATIONS FOR 
SHALL AND BRIDGE CINSTER LYTTON."

ROAD AND BRIDGE CONSTRUCTION"; SUBJECT TO (Q) BELOW, A FLEXIBLE PIPE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING

DISTANCES FROM ANY MANHOLE CONNECTION:

1. WITHIN 48-INCHES FOR REINFORCED CONCRETE (RC) PIPE; AND

2. WITHIN 69-INCHES FOR PVC PIPE LARGER THAN 15-INCH DIAMETER;

0. NO FLEXIBLE JOINT SHALL BE REQUIRED FOR D.I. PIPE OR FOR PVC PIPE UP THROUGH 16-INCH DIAMETER;

1. PIPE OR FOR PVC PIPE UP THROUGH 16-INCH DIAMETER;

DIAMETER; AND WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED

IN LIEU OF A COME SECTION, PROVIDED THE SLAB HAS AN ECCENTRIC ENTRANCE OPENING AND IS CAPABLE OF SUPPORTING H-20 LOADS.

HOLE STEPS SHALL:

A. BE PERMITTED ONLY AT THE REQUEST OF THE SYSTEM OWNER;

B. BE MANUFACTURED OF STAINLESS, PLASTIC-COVERED STEEL OR PLASTIC;
C. BE SHAPED SO THAT THEY CANNOT BE PULLED OUT OF THE CONCRETE WALL INTO WHICH THEY ARE

BE SHIPPED SO THAT THEY CANNOT BE PULLED OUT OF THE CONCRETE WAS INTO WHICH THE THAT SECURED.

BE CERTIFIED BY THEIR MAUTHACTURES(S) AS CONFORMING TO ASTM C478 FOR LOAD CARRYING CAPACITY AND PULL-OUT RESISTANCE;

CAPACITY AND PULL-OUT RESISTANCE;

HOTE BESCURED WITH MONEY.

HOTE BOOK SECTION OR RAISED ABILITIATINGT TO PREVENT SIDEWAYS SLIPPAGE OFF THE STEP; AND HAVE A DAYS AND SAFETY SERRATIONS ON THE FOOT CONTACT SURFACES.

H. HAVE NON-SKIU SATELLI GETSCHAUGE SING A VACUUM TEST.

5. MANHOLE SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST.

B. THE MANHOLE VACUUM TEST SHALL CONFORM TO THE FOLLOWING:

1. THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES Hg: AND

2. THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR A 1-INCH Hg PRESSURE DROP TO 9 INCH Hg SHALL GE.

BE:

B. NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP IN DEPTH;

b. NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP, AND

C. NOT LESS THAN 3.5 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP.

C. THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (8) ABOVE.

D. 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 UNALITHORIZED PERSONS, CHILDREN OR ANIMALS UNTIL THE CONTRACTOR IS READY TO MAKE FINAL AD HISTRANTS TO GREAT

CONSTRUCTION DETAILS HIGHFIELD COMMONS PHASE 1B

MAP 237 LOTS 3 & 8 FILLMORE BOULEVARD ROCHESTER, NEW HAMPSHIRE STRAFFORD COUNTY

OWNER OF RECORD: SDJ DEVELOPMENT OF ROCHESTER, LLC c/o CHESAPEAKE DEVELOPMENT, LLC 746 D.W. HIGHWAY, UNIT B MERRIMACK, NH 03054-2700

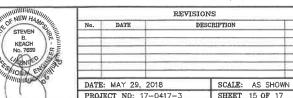
SDJ DEVELOPMENT OF ROCHESTER, LLC c/o CHESAPEAKE DEVELOPMENT, LLC 746 D.W. HIGHWAY, UNIT B MERRIMACK, NH 03054-2700

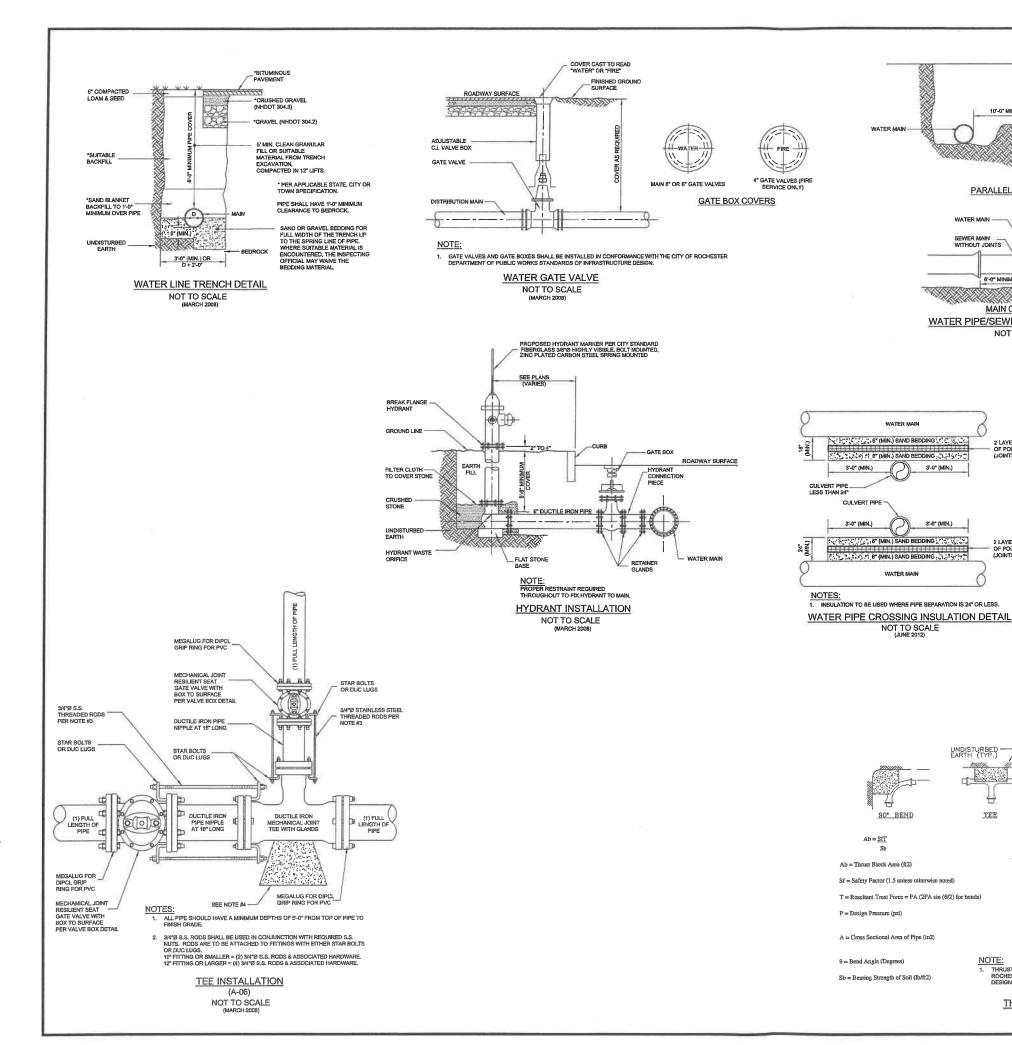
BY

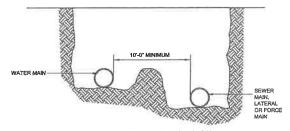


S.C.R.D. BK. 3927 PG. 453

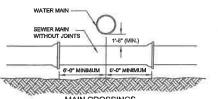
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3E, Bedford, NE 03110 Phone (603) 627-2861



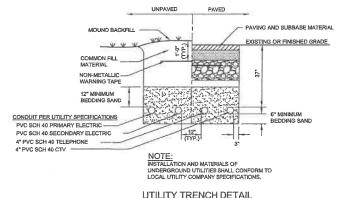




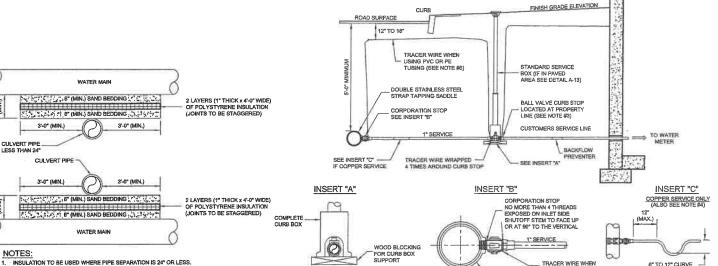
PARALLEL INSTALLATION



MAIN CROSSINGS WATER PIPE/SEWER PIPE SEPARATION NOT TO SCALE



UTILITY TRENCH DETAIL NOT TO SCALE



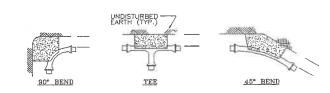
ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO CITY OF ROCHESTER DPW TECHNICAL SPECIFICATIONS.

2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE

SEE NOTE #3

10 GAUGE TRACER WIRE AS MANUFACTURED BY BMS, DIVISION OF ALBESTAR CORP., AVON, MA OR EQUIVALENT.

1" SERVICE AND VALVE BOX INSTALLATION DETAIL NOT TO SCALE



$Ab = \underline{SFT}$ $Sb$	Soil	Bearing Strength, Sb (lb/ft2)
Ab = Thrust Block Area (ft2)	Muck	0
Sf = Safety Factor (1.5 unless otherwise noted)	Soft Clay	1,000
T = Resultant Trust Force = PA (2PA sin (θ/2) for bends	Silt	1,500
1 = Resultant Trust Porce = PA (2PA Sin (6/2) for beings	Sandy Silt	3,000
P = Design Pressure (psi)	Sand	4,000
	Sandy Clay	6,000
A = Cross Sectional Area of Pipe (in2)	Hard Clay	9,000
$\theta = \text{Bend Angle (Degrees)}$	NOTE:	
Sb = Bearing Strength of Soil (lb/ft2)		ED IN CONFORMANCE WITH THE CITY O LIC WORKS STANDARDS OF INFRASTRUC

THRUST BLOCK DETAIL

## **CONSTRUCTION DETAILS** HIGHFIELD COMMONS PHASE 1B

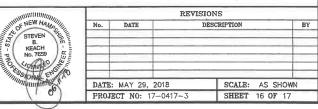
MAP 237 LOTS 3 & 8 FILLMORE BOULEVARD ROCHESTER, NEW HAMPSHIRE STRAFFORD COUNTY

OWNER OF RECORD: SDJ DEVELOPMENT OF ROCHESTER, LLC c/o CHESAPEAKE DEVELOPMENT, LLC 746 D.W. HIGHWAY, UNIT B MERRIMACK, NH 03054-2700 S.C.R.D. BK. 3927 PG. 453

APPLICANT: SDJ DEVELOPMENT OF ROCHESTER, LLC c/o CHESAPEAKE DEVELOPMENT, LLC 746 D.W. HIGHWAY, UNIT B MERRIMACK, NH 03054-2700

6" TO 12" CURVE FROM HORIZONTAL IN HORIZONTAL PLANS

KA KEACH-NORDSTROM ASSOCIATES, INC. Civil Engineering Land Surveying Landscape Architecture 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881



NOT TO SCALE

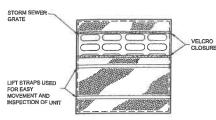
#### CONSTRUCTION SPECIFICATIONS:

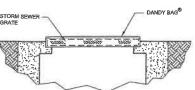
- THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES.
- 2. THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
- WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIE OR STAPLES WHERE NOTED OR AS DIRECTED BY DESIGN ENGINEER.
- WOVEN WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP, MIDSECTION AND BOTTOM.
- 5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
- FENCE POSTS SHALL BE A MINIMUM OF 36 INCHES LONG AND DRIVEN A MINIMUM OF 16 INCHES INTO THE GROUND. WOOD POSTS SHALL BE OF SOUND QUALITY HARDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT

#### MAINTENANCE:

- SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
- IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE
- SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED. TO CONFORM WITH THE EXISTING TOPOGRAPHY AND

DO NOT STRETCH.

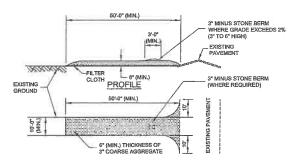




#### HI-FLOW DANDY BAG® (SAFETY ORANGE)

MECHANICAL PROPERTIES	TEST METHOD	UNITS	MARV
GRAB TENSILE STRENGTH	ASTM D 4632	kN (lbs)	1.62 (365) x 0.89 (200)
GRAB TENSILE ELONGATION	ASTM D 4632	%	24 x 10
PUNCTURE STRENGTH	ASTM D 4833	kN (ibs)	0.40 (90)
MULLEN BURST STRENGTH	ASTM D 3786	kPa (psl)	3097 (450)
TRAPEZOID TEAR STRENGTH	ASTM D 4533	kN (lbs)	0.51 (115) x 0.33 (75)
UV RESISTANCE	ASTM D 4355	%	90
APPARENT OPENING SIZE	ASTM D 4751	Mm (US Std Sleve)	0.425 (40)
FLOW RATE	ASTM D 4491	1/mln/m² (gal/mln/ft²)	5907 (145)
PERMITTIVITY	ASTM D 4491	Sec-1	2.1

NOT TO SCALE



#### PLAN VIEW

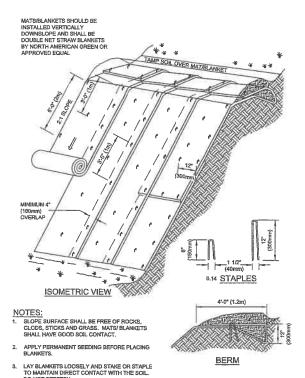
## STABILIZED CONSTRUCTION EXIT DETAIL NOT TO SCALE (APRIL 2018)

MUD AND SOIL PARTICLES WILL EVENTUALLY CLOG THE VOIDS IN THE CRUSHED STONE AND THE EFFECTIVENESS OF THE CRUSHED STONE PAD WILL NOT BE SATISFACTORY. WHEN THIS COCURS, THE DISHOULD BE TOPPORESSED WITH HER CRUSHED STONE OR COMPLETE REPLACEMENT OF THE PAD BY SECRED SOMPLETELY.

IF WASHING FACILITIES ARE USED, THE SEDIMENT TRAPS SHOULD BE CLEANED OUT AS OFTEN AS NECESSARY TO ASSURE THAT ADEQUATE TRAPPING EFFICIENCY AND STORAGE VOLUME IT AVAILABLE. VEGETATIVE FILTER STRIPS SHOULD BE MAINTAINED TO INSURE A VIGOROUS STAND OF VEGETATION AT ALL TIMES.

#### CONSTRUCTION SPECIFICATIONS:

- STONE FOR A STABILIZED CONSTRUCTION EXIT SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE OR RECYCLED CONCRETE EQUIVALENT.
- THE LENGTH OF THE STABILIZED EXIT SHALL, NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
- 3. THE THICKNESS OF THE STONE FOR THE STABILIZED EXIT SHALL NOT BE LESS THAN 6 INCHES.
- 4. THE WIDTH OF THE EXIT SHALL NOT BE LESS THAN THE FULL WIDTH OF THE AREA WHERE INGRESS OR EGRESS
- GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
- ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION EXIT SHALL BE PIPED BENEATH
  THE EXIT. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE
  SUBSTITUTED FOR THE PIPE.
- THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-0F-WAY. THIS MAY REQUIRE PERIODIC TOPPRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/FOR CLEANDIT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED OR TRACKED ONTO PUBLIC RIGHT-0F-WAY MUST BE REMOVED PROMPTLY.
- WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.



**EROSION CONTROL BLANKETS - SLOPE INSTALLATION** 

NOT TO SCALE

#### **DEWATERING NOTES:**

1. THE PROPOSED PROJECT IS SCHEDULED TO TAKE PLACE IN THE "DRY" SEASON AND DOES NOT ANTICIARTE ANY DEWATERING ACTIVITIES. HOWEVER, SHOULD DEWATERING ACTIVITIES BECOME NECESSARY DUE TO ACTUAL WET FIELD CONDITIONS, THE SITE CONTRACTOR SHALL BE REQUIRED TO PREPARE A DEWATERING PLAN FOR APPROVAL BY THE MUNICIPALITY, PRIOT TO PERFORMING ANY DEWATERING ACTIVITIES.

2. SHOULD A DEWATERING PLAN BE RECUIRED, THE PLAN SHALL CONTAIN THE MINIMUM ITEMS:

A. PLAN SKETCH: (PEPARED TO SCALE: I-NIDICATING THE FOLLCWING).

-ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL BMP'S

- BYPASS CHAINEL OR PIPE LOCATION, ELEZ-AND MATERIAL TYPE

- PUMP SIZE, TYPE, LOCATION, OPERATING PARAMETERS (POWER, CAPACITY)

- INTAKE LIME: SIZE ALOCATION

- TEMPORARY MIPOUNDMENT VOLUME

- DISCHARGE LIME: SIZE AND LOCATION

- DISCHARGE LINE SIZE AND LOCATION
- IDISJANDEL INE: SIZE AND LOCATION
   TEMPORARY DISJOHANGE SCOUR PROTECTION

  B. OPERATIONS & EMERGENCY CONTACT LIST: (NAME, ADDRESS, PHONE)
   CONTRACTOR AND TOWN OFFICIALS (RIGHWAY AGENT, FIRE, POLICE, RESCUE)

  C. DEWATERING SCHEDULE:
   ANTICIPATED START DATE AND END DATE
   ANTICIPATED START DATE AND END DATE
- DAILY HOURS OF OPERATION

#### REFERENCE CONSTRUCTION STANDARDS/SPECIFICATIONS: THE FOLLOWING CONSTRUCTION STANDARDS/SPECIFICATIONS/REFERENCES ARE TO BE UTILIZED IN CONCERT WITH THE POVED PLANS

- 2. NHDOT STANDARD PLANS FOR ROAD CONSTRUCTION, LATEST EDITION.
- 3. CITY OF ROCHESTER CONSTRUCTION STANDARDS, LATEST REVISION
- 4. AASHTO A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, LATEST EDITION.
- 5. FHWA THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.

#### CONSTRUCTION SEQUENCE

- CONTRACTOR TO NOTIFY DIG-SAFE 73-HOURS PRIDE TO COMMENCEMENT OF CONSTRUCTION.
  PRIOR TO GRUBBING OF CLEARED AREAS, ALL SILTATION BARRIERS DESIGNED FOR USE AS TEMPORARY EROSION
  CONTROL MEASURES SHALL BE INSTALLED AS CALLED FOR ON PROJECT FLANS. INSTALL STABILIZED CONSTRUCTION
  EXIT AT LOCATION OF CONSTRUCTION ACCESS AT LOCATION OF INTERSECTION WITH EASTING PAVEMENT.
  CUT AND CLEAR TREES AND BRUSH FROM CONSTRUCTION AREAS TO THE EXTENT NECESSARY. ALL BRANCHES, TOPS
  AND BRUSH TO BE PROPERLY DISPOSED OF BY CONTRACTOR. THIS PROJECT IS MANAGED TO MEET THE
  REQUIREMENTS AND INTENT OF RISA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
  COMPLETE GRUBBING OPERATIONS UNDER THE RODOWY AND SLOPE SECTIONS. ALL STUMPS AND SIMILAR DEBRIS
  SHALL BE PROPERLY DISPOSED OF BY CONTRACTOR. ORGANIC MATERIAL SUITABLE FOR USE AS TOPSOIL SHALL BE
  STOCKPILED IN UPLAND AREAS. ALL STOCKPILED BE SEEDED WITH WINTER RYS AND, IF NECESSARY,
  SURROUNDED WITH HAY BALES IN GROER TO PREVENT LOSS DUE TO EROSION.
  CONSTRUCT TEMPORARY CULVERTS AS NECESSARY TO FACILITATE CONSTRUCTION ACTIVITIES. ALL SUCH
  CROSSINGS SHALL BE PROTECTED WITH HAY BALE BARRIERS TO LIMIT EROSION.

- 6. STABILIZE ALL DITCHLINES AND PONDS PRIOR TO DIRECTING FLOW INTO THEM, CONSTRUCT DRAINAGE SYSTEM
- STABLIZE ALL DITCHLINES AND PONDS PRIOR TO DIRECTING FLOW INTO THEM, CONSTRUCT DRAINAGE SYSTEM SEWER AND OTHER SUBSURFACE UTILITIES. COMMENCE CONSTRUCTION OF ROAD/WAY, PERFORM EXCAVATION ACTIVITIES REQUIRED TO ACHIEVE SUBGRADE ELEVATION. ALL EXCAVATED EMBANKMENTS, DITCHES, SWALES AND ROAD/WAY CROSS CULVERTS SHALL BE INSTALLED AND STABILIZED. ALL SWALES AND DITCHLINES SHALL BE PROTECTED FROM EROSION BY MPLEMENTATION OF HAY BALL SEL SILATION FENCES AS SHOWN ON PROJECT PLANS. DIVERT STORMWAYER RUNOFF THROUGH THE USE OF TEMPORARY CULVERTS, OR OTHER MEANS INCESSARY PRIOR TO THE COMPLETIONS OF A FUNCTIONAL STORM DRAINGE SYSTEM. SLOPES AND EMBANKMENTS SHALL BE STABILIZED BY TRACKING AND TEMPORARY SEEDING WITH WINTER RYE PRIOR TO TURE ESTABLISHMENT. ALL DITCHES AND SWALES SHALL BE STABILED BY TRACKING RUNOFF DIRECTED TO THEM.
- APPLY TOPSOIL TO ROADWAY SLOPES AND OTHER AREAS DISTURBED BY CONSTRUCTION. TOPSOIL USED MAY BE 9. APPLY TORSOIL TO ROADWAY SLOPES AND OTHER AREAS DISTURBED BY CONSTRUCTION. TOPSOIL USED MAY BE NATIVE ORGANIC MATERIAL SCREENED SO AS TO BE FREE OF ROOTS, RRANCHES, STONES AND OTHER LETERIOUS MATERIALS. TOPSOIL SHALL BE APPLIED SO AS TO PROVIDE A MINIMUM OF A 4-NICH COMPACTED THICKNESS, UPON COMPLETION OF TOPSOIL SHALL BIS APPLIED SO AS TO PROVIDE A MINIMUM OF A 4-NICH COMPACTED THICKNESS, UPON COMPLETION OF TOPSOIL SHALL INSPECT COMPLETED SECTIONS OF WORK ON A REGULAR BASIS AND REMEDY ANY PROBLEM AREAS UNITL. A HEALTHY STAND OF GRASS HAS BECOME ESTABLISHED.
  10. PERFORM FINE GRADING OF ROADWAY BASE MATERIALS.
  11. MAINTAIN, REPARA AND REPLACE AS NECESSARY TEMPORARY EROSION CONTROL MEASURES UNTIL SUCH TIME AS THE ENTIRE CONSTRUCTION AREA HAS BEEN STABILIZED (A MINIMUM OF ONE WINTER SHALL HAVE PASSED).
  12. AFTER STABILIZATION, REMOVE AND SUITBELY DISPOSE OF TEMPORARY PEROSION CONTROL MEASURES.
  13. MONITOR CONSTRUCTION ACTIVITIES ON INDIVIDUAL LOTS TO INSURE CONSTRUCTION ACTIVITIES ARE BEING PERFORMED IN SUCH A WAY AS NOT TO ENDANGER THE INTEGRITY OF ROADWAY EMARMEMENTS, STORMWATER SYSTEMS AND UTILITIES. ALL DRIVEWAYS ACROSS DITCHLINES SHALL HAVE CULVERTS INSTALLED IN ACCORDANCE WITH LOCAL REQUIREMENTS.

- WITH LOCAL REQUIREMENTS AND THAT SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE ASSE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMMENCE UNTIL AFTER THE ROADWAY HAS THE ASSE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMMETTE AND STABLE

#### EROSION CONTROL NOTES

- L EXPOSED EARTHWORK SHALL BE CONFINED TO AS LIMITED AN AREA AS IS PRACTICAL AT ANY GIVEN TIME THROUGHOUT THE CONSTRUCTION SEQUENCE. AT NO TIME SHALL MORE THAN FIVE (5) ACRES OF SITE AREA BE IN AN UNSTABLE CONDITION. NO GIVEN AREA OF THE SITE SHALL BE LEFT IN AN UNSTABLEZED CONDITION FOR A PERIOD OF TIME EXCEEDING THIRTY (30) CALENDAR DAYS.

  TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH PROJECT PLANS. IN ADDITION, SMILLAR MEASURES SHALL BE INSTALLED WHERE AND WHEN THE FIELD CONDITION, OR FILED OPERATION OF THE INDIVIDUAL SITE CONTRACTOR, MAY WARRANT, ALL TEMPORARY EROSION CONTROL MEASURES USED SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER 0.25 OF ANINFALL OR MORE. THEY SHALL BE CLEANED AND MAINTAINED AND OTHERWISE KEPT IN AN EFFECTIVE OPERATING MANNER THROUGHOUT THE CONSTRUCTION FOR ID.

- SHALL BE CLEANED AND MAINTAINED AND OTHERWISE KEPT IN AN EFFECTIVE OPERATING MANNER THROUGHOUT THE CONSTRUCTION PERIOD.

  3. ALL DISTURBED AREAS DESIGNATED TO BE TURP, SHALL RECEIVE A MINIMUM APPLICATION OF 4 INCHES OF LOAM (COMPACTED THICKNESS), PRIOR TO FINAL SEEDING AND MULCHING.

  4. ALL SWALES AND DITCHLINES SHALL BE PERIODICALLY CLEANED OF DEPOSITED SEDIMENT SO AS TO MAINTAIN AN EFFECTIVE GRADE AND CROSS SECTION. ALL SWALES AND DITCHLINES SHALL BE FULLY STABILIZED PRIOR TO HAVING STORMWATER DIRECTED TOWARDS THEM.

  5. IN THE EVENT THAT, DURING CONSTRUCTION OF ANY PORTION OF THIS PROJECT, A WINTER SHUTDOWN IS NECESSARY, THE CONTRACTOR SHALL STABILIZE ALL INCOMPLETE WORK AND PROVIDE FOR SUITABLE METHODS OF DIVERTING RUNOFF IN ORDER TO ELIMINATE SHEETE FLOW ACROSS FROZEN SUPPRACES.

  6. AN AREA SHALL BE CONSIDERED STABILE IF ONE OF THE FOLLOWING HAS OCCURRED:

  A BASE COLIESE FRAMES AS PRINSTAIL FIN A BEAS TO ITS POATOR.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

  A. BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAYED;

  B. A MINIMUM OF BOTA VEGETATED GROWTH HAS BEEN ESTABLISHED;

  C. A MINIMUM OF BOTA VEGETATED GROWTH HAS BEEN ESTABLISHED;

  D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

  D. EROSION CONTROLLED BY THE USE OF WATER AS NECESSARY THROUGHOUT THE CONSTRUCTION PERIOD, IN ACCORDANCE WITH ENAY 4 100.
- 7. DUST SHALL BE CONTROLLED BY THE USE OF WATER AS NECESSARY HYROLOHOUT THE LUDRI RULL HOT PERMAN, IN ACCORDANCE WITH ENVA 1000.

  8. IN NO WAY ARE THOSE TEMPORARY EROSION CONTROL MEASURES INDICATED ON THESE PLANS TO BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL USE JUDGEMENT IN INSTALLING SUPPLEMENTARY EROSION CONTROL MEASURES WHERE AND WHEN SPECIFIC SITE CONDITIONS AND/OR CONSTRUCTION METHODOLOGISM MY WARRANT, OR 15 SO OR 3.1 OR STEEPERS, HALL BE STABLIZED WITH JUTE MATTING WHEN AND IF FIELD CONDITIONS WARRANT, OR IF SO ORDERED. JUTE MATTING INSTALLED TO CONFORM WITH THE RECOMMENDED BEST MANAGEMENT PRACTICE OUTLINED IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION."

  ALL DETENTION PRONDS AND TREATMENT SWALES SHALL BE CONSTRUCTED PRIOR TO ANY EARTH MOVING ACTIVITIES THAT WILL INFLUENCE STORMWATER RUNOFF.

  1. ALL RODWAYS AND PARKING AREAS SHALL BE ETABLIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

  12. ALL CUT AND FILL SLOPES SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

- WINTER CONSTRUCTION NOTES:

  1. ALL PROPOSED POST-DEVELOPMENT VISCETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 58% VINCETATIVE OR FORWARD VISCETATIVE AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 58% VINCETATIVE OR FORWAYTH BY COTOSER 115TH, OR WHICH ARE DISTORDED ATTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS OR GREATER THAN 41, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE. SECURED WITH ANCHORED INSTITUS, ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCHA AND RETTING SHALL NOT OCCUR OVER ACCUMULATED SHOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
- OR ON MOJECH SHUURD AND STANE BE COME LETTER AT THE MOST AND THE STAND OF SSY, VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS. AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKINGS SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHOOT ITEM 304.3 OR, IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON, BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.

  AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

  A BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAYED;

  E A MINIMUM OF SSY, VEGETATED GROWTH HAS BEEN ESTSALURHED;

- A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   AMINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   AMINIMUM OF 3° OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED;
   EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

## CONSTRUCTION DETAILS HIGHFIELD COMMONS PHASE 1B

MAP 237 LOTS 3 & 8 FILLMORE BOULEVARD ROCHESTER, NEW HAMPSHIRE STRAFFORD COUNTY

OWNER OF RECORD: SDJ DEVELOPMENT OF ROCHESTER, LLC c/o CHESAPEAKE DEVELOPMENT, LLC
746 D.W. HIGHWAY, UNIT B
MERRIMACK, NH 03054-2700

S.C.R.D. BK. 3927 PG. 453

APPLICANT: SDJ DEVELOPMENT OF ROCHESTER, LLC c/o CHESAPEAKE DEVELOPMENT, LLC 746 D.W. HIGHWAY, UNIT B MERRIMACK, NH 03054-2700

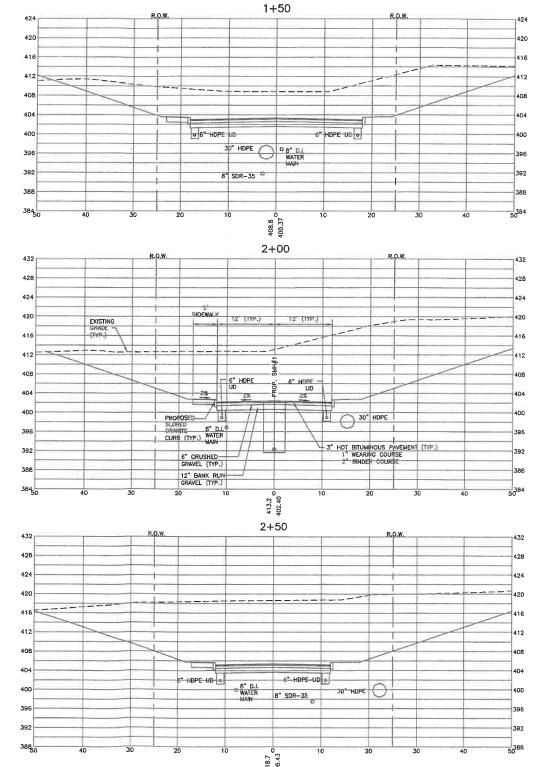


KA KEACH-NORDSTROM ASSOCIATES, INC.

Civil Engineering Land Surveying Landscape Architecture erce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2861



REVISIONS BY DATE DESCRIPTION DATE: MAY 29, 2018 SCALE: AS SHOWN PROJECT NO: 17-0417-3 SHEET 17 OF 17





## **CROSS SECTIONS** HIGHFIELD COMMONS PHASE 1B

MAP 237 LOTS 3 & 8 FILLMORE BOULEVARD ROCHESTER, NEW HAMPSHIRE STRAFFORD COUNTY

SDJ DEVELOPMENT OF ROCHESTER, LLC
c/o CHESAPEAKE DEVELOPMENT, LLC
746 D.W. HIGHWAY, UNIT B
MERRIMACK, NH 03054–2700
S.C.R.D. BK. 3927 PG. 453

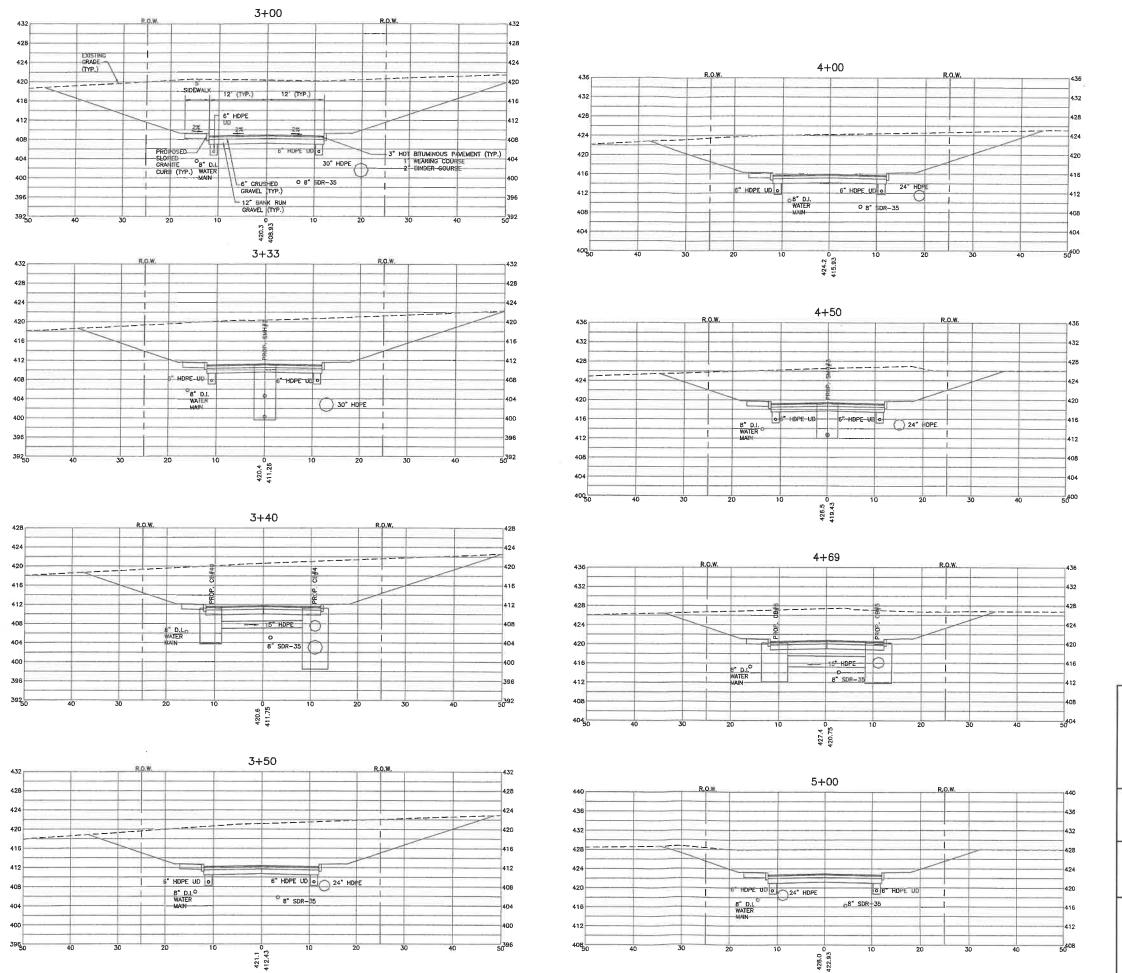
APPLICANT:

SDJ DEVELOPMENT OF ROCHESTER, LLC
c/o CHESAPEAKE DEVELOPMENT, LLC
746 D.W. HIGHWAY, UNIT B
MERRIMACK, NH 03054-2700

KEACH-NORDSTROM ASSOCIATES, INC. Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881



		REVISI	ONS	
No.	DATE	D	ESCRIPTION	BY
DATE	MAY 29,	2018	SCALE: 1" = 10'	
PROJ.	ECT NO: 1	7-0417-3	SHEET X1 OF X4	





## **CROSS SECTIONS** HIGHFIELD COMMONS PHASE 1B MAP 237 LOTS 3 & 8

FILLMORE BOULEVARD ROCHESTER, NEW HAMPSHIRE STRAFFORD COUNTY

OWNER OF RECORD:

OWNER OF RECORDS

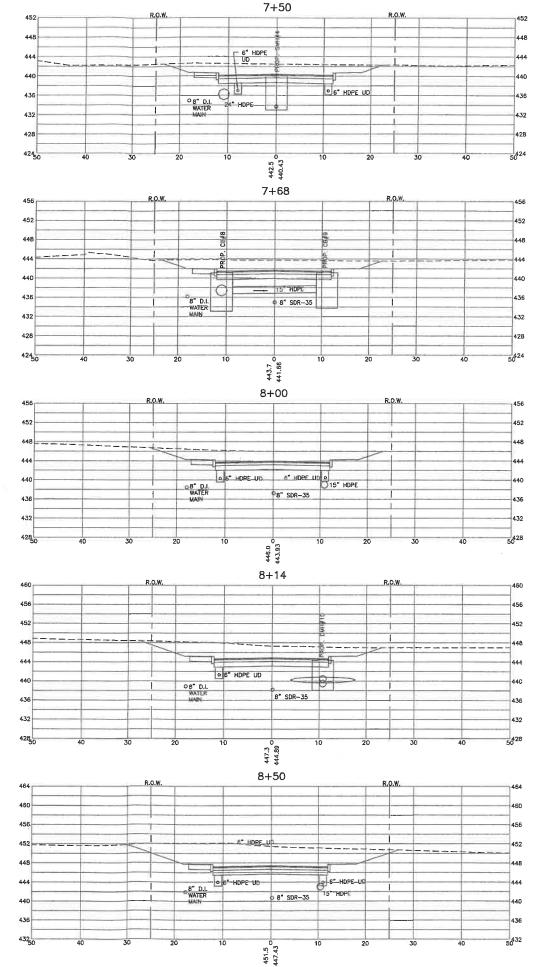
SDJ DEVELOPMENT OF ROCHESTER, LLC
c/o CHESAPEAKE DEVELOPMENT, LLC
746 D.W. HIGHWAY, UNIT B
MERRIMACK, NH 03054-2700
S.C.R.D. BK. 3927 PG. 453

APPLICANT:
SDJ DEVELOPMENT OF ROCHESTER, LLC
c/o CHESAPEAKE DEVELOPMENT, LLC
746 D.W. HIGHWAY, UNIT B
MERRIMACK, NH 03054-2700

KEACH-NORDSTROM ASSOCIATES, INC. Civil Engineering Land Surveying Landscape Architecture 10 Commerce Park North, Suite 3E, Bedford, NH 03110 Phone (603) 627-2881



		REVISI	ONS		
No.	DATE	DESCRIPTION			
				-	
-					
DATE	: MAY 29,	2018	SCALE: 1" = 1	0'	
PROJ	ECT NO: 1	7-0417-3	SHEET X2 OF	X4	





## CROSS SECTIONS HIGHFIELD COMMONS PHASE 1B

MAP 237 LOTS 3 & 8
FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE
STRAFFORD COUNTY

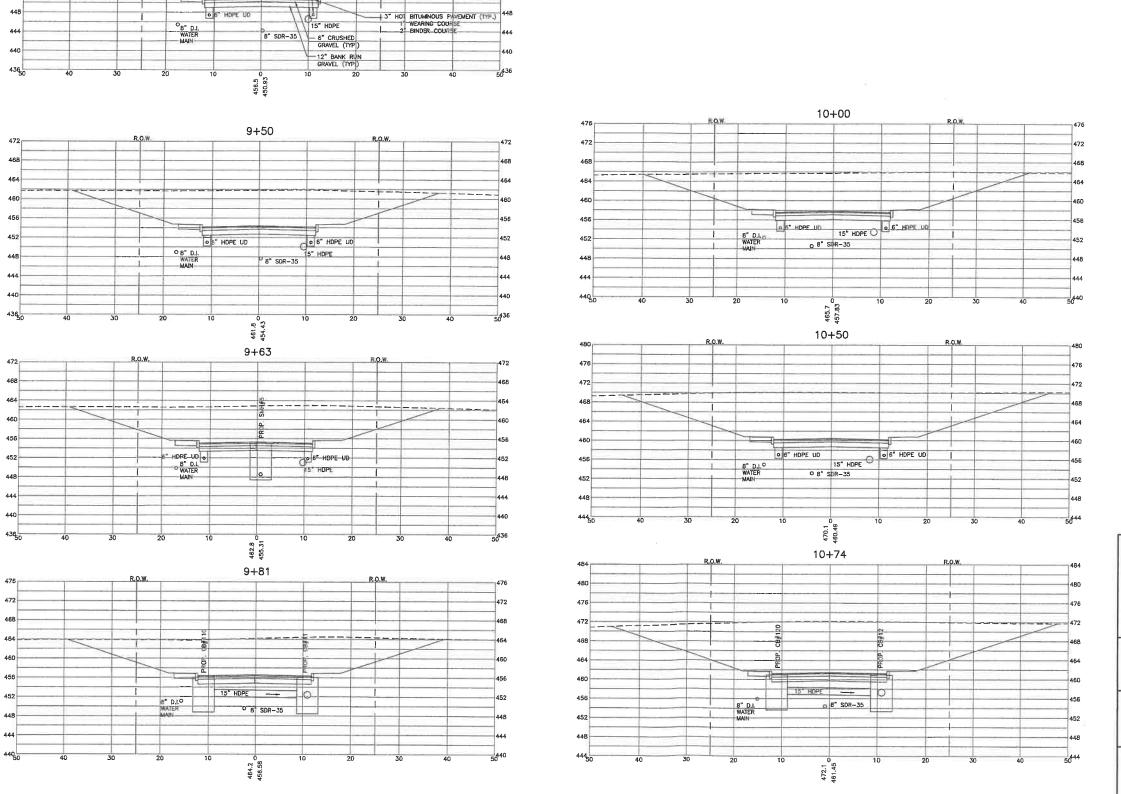
SDJ DEVELOPMENT OF ROCHESTER, LLC
c/o CHESAPEAKE DEVELOPMENT, LLC
746 D.W. HIGHWAY, UNIT B
MERRIMACK, NH 03054—2700
S.C.R.D. BK. 3927 PG. 453

SDJ DEVELOPMENT OF ROCHESTER, LLC
c/o CHESAPEAKE DEVELOPMENT, LLC
746 D.W. HIGHWAY, UNIT B
MERRIMACK, NH 03054-2700

KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (803) 627-2881



		REVISI	ONS	
No.	DATE	Δ	ESCRIPTION	BY
DATE:	MAY 29,	2018	SCALE: 1" = 10	-
PROJECT NO: 17-0417-3		SHEET X3 OF X	4	



9+00

SIDEWALK 12' (TYP.)



## CROSS SECTIONS HIGHFIELD COMMONS PHASE 1B

MAP 237 LOTS 3 & 8 FILLMORE BOULEVARD ROCHESTER, NEW HAMPSHIRE STRAFFORD COUNTY

OWNER OF RECORD:
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MERRIMACK, NH 03054-2700
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SDJ DEVELOPMENT OF ROCHESTER, LLC
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Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Fhone (603) 627-2881



		REVISI	IONS	
No.	DATE	I	ESCRIPTION	B
		-		-
DATE	: MAY 29,	2018	SCALE: 1" = 10	-
PROJ	ECT NO:	17-0417-3	SHEET X4 OF X4	4