RECEIVED
MAR - 5 2013
Planning

RESIDENTIAL SITE PLAN APPLICATION (townhouses, apts., etc.)

City of Rochester, New Hampshire

Date: March 5, 2013 [office use only. fee paid _____ amount $_____ date paid _____]

Property information

Tax map #: 237; Lot #('s): 8-1; Zoning district: PUD

Property address/location: Fillmore Boulevard

Name of project (if applicable): Presidential Estates

Size of site: 21.90 acres; overlay zoning district(s)? _____

Property owner

Name (include name of individual): 183 Washington Street LLC

Mailing address: 501 D.W. Highway, Unit F, Merrimack, NH 03054

Telephone #: 603-424-6904 Fax #: 603-424-8998

Applicant/developer (if different from property owner)

Name (include name of individual): Same as Above

Mailing address: _____

Telephone #: _____ Fax #: _____

Engineer/designer

Name (include name of individual): Keach Nordstrom Associates

Mailing address: 10 Commerce Park North, Suite 3B

Telephone #: 603-627-2881 Fax #: 603-627-2915

Email address: jmerritt@keachnordstrom.com Professional license #: 11778

Proposed use

The applicant is not bound by information on bedrooms and ownership arrangement unless that is a condition of approval.

Total number of proposed dwelling units: 16 ; number of existing dwelling units: 0

Proposed bedrooms/unit: 2; total number of proposed bedrooms: 32

(continued *Residential Site Plan* application Tax Map: _____ Lot: _____)

New building(s)? __2___ addition(s)/modifications to existing building(s)? _____

Townhouses/rowhouses:__8_ flats:_8__ duplexes:____ freestanding detached units:____

Proposed ownership - leasehold: _X__ fee simple conveyance: ____ condominiums: _X__

Utility information

City water? yes _X_ no ___; How far is City water from the site? ___on site_____

City sewer? yes _X_ no ___; How far is City sewer from the site? ___on site_____

If City water, what are the estimated total daily needs? _4800_____ gallons per day

Where will stormwater be discharged? ___Detention basins_____

Other information

parking spaces: existing:_0__ total proposed:____; Are there pertinent covenants? _____

Describe existing conditions/use (vacant land?): __Currently vacant land_____

_____

Check any that are proposed: variance ____; special exception ____; conditional use ____

Wetlands: Is any fill proposed? ____; area to be filled: _____; buffer impact? _____

Proposed *post-development* disposition of site (should total 100%)		
	Square footage	% overall site
Building footprint(s) – give for each building	14,794SF	1.55%
Parking and vehicle circulation	24,339SF	2.55%
Planted/landscaped areas (excluding drainage)	30,797SF	3.22%
Natural/undisturbed areas (excluding wetlands)	499,400SF	52.34%
Wetlands	175,780SF	18.42%
Other – drainage structures, outside storage, etc.	209,031SF	21.90

Comments

Please feel free to add any comments, additional information, or requests for waivers here:

_____

_____

_____

Submission of application

This application must be signed by the property owner, applicant/developer (if different from property owner), *and/or* the agent.

I(we) hereby submit this Site Plan application to the City of Rochester Planning Board pursuant to the City of Rochester Site Plan Regulations and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant/developer (if different from property owner)/as agent, I attest that I am duly authorized to act in this capacity.

Signature of property owner: _____

Date: 3/5/2013

Signature of applicant/developer: _____

Date: 3/5/2013

Signature of agent: _____

Date: 3/5/2013

Authorization to enter subject property

I hereby authorize members of the Rochester Planning Board, Zoning Board of Adjustment, Conservation Commission, Planning Department, and other pertinent City departments, boards and agencies to enter my property for the purpose of evaluating this application including performing any appropriate inspections during the application phase, review phase, post-approval phase, construction phase, and occupancy phase. This authorization applies specifically to those particular individuals legitimately involved in evaluating, reviewing, or inspecting this specific application/project. It is understood that these individuals must use all reasonable care, courtesy, and diligence when entering the property.

Signature of property owner: _____

Date: _____

Hillside
Design Group, LLC

March 5, 2013

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

MAR - 5 2013

Re: Site Plan Narrative - "Presidential Estates"
Tax Map 237; Lot 8-1 – Fillmore Blvd.
Rochester, New Hampshire 03867
HDG Project # 2010-0831-1

Dear Chairman and Board Members:

The above referenced project is being submitted for Site Plan Approval from the City of Rochester Planning Board. The proposed project is for Phase 2 of the Highfield Commons development. This phase consist of the permitting the first 16 residential townhouse units on the subject parcel with all supporting infrastructure.

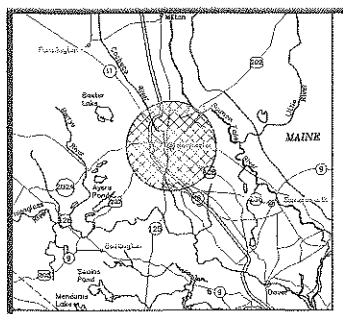
As some members of the planning board may remember this section of the Highfield Commons planned unit development was originally designed for 144 garden style apartments on site. Based on our current product and our vision for the full build out of this project we would prefer to construct a more aesthetically pleasing structure that still yields a reasonable density and fits with the character of our product. This initial submittal is for 16 units however our goal is for a total of 96 units at this location.

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) 424-1132.

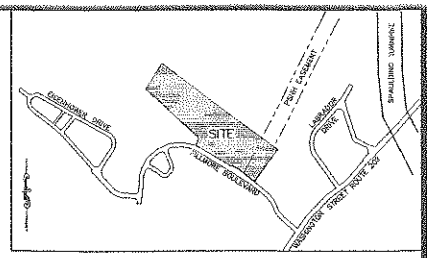
Sincerely,

Matthew J. Peterson - Project Manager
Hillside Design Group, Inc.
501 D.W. Highway, Unit F
Merrimack, NH 03054



VICINITY PLAN
NOT TO SCALE

RESIDENTIAL SITE PLAN
PRESIDENTIAL ESTATES
MAP 237; LOT 8-1
59 FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE



VICINITY MAP
SCALE: 1" = 800'±

MAR - 5 2013

OWNER/APPLICANT:
183 WASHINGTON STREET , LLC
501 D.W. HIGHWAY, SUITE F
MERRIMACK, NH 03054

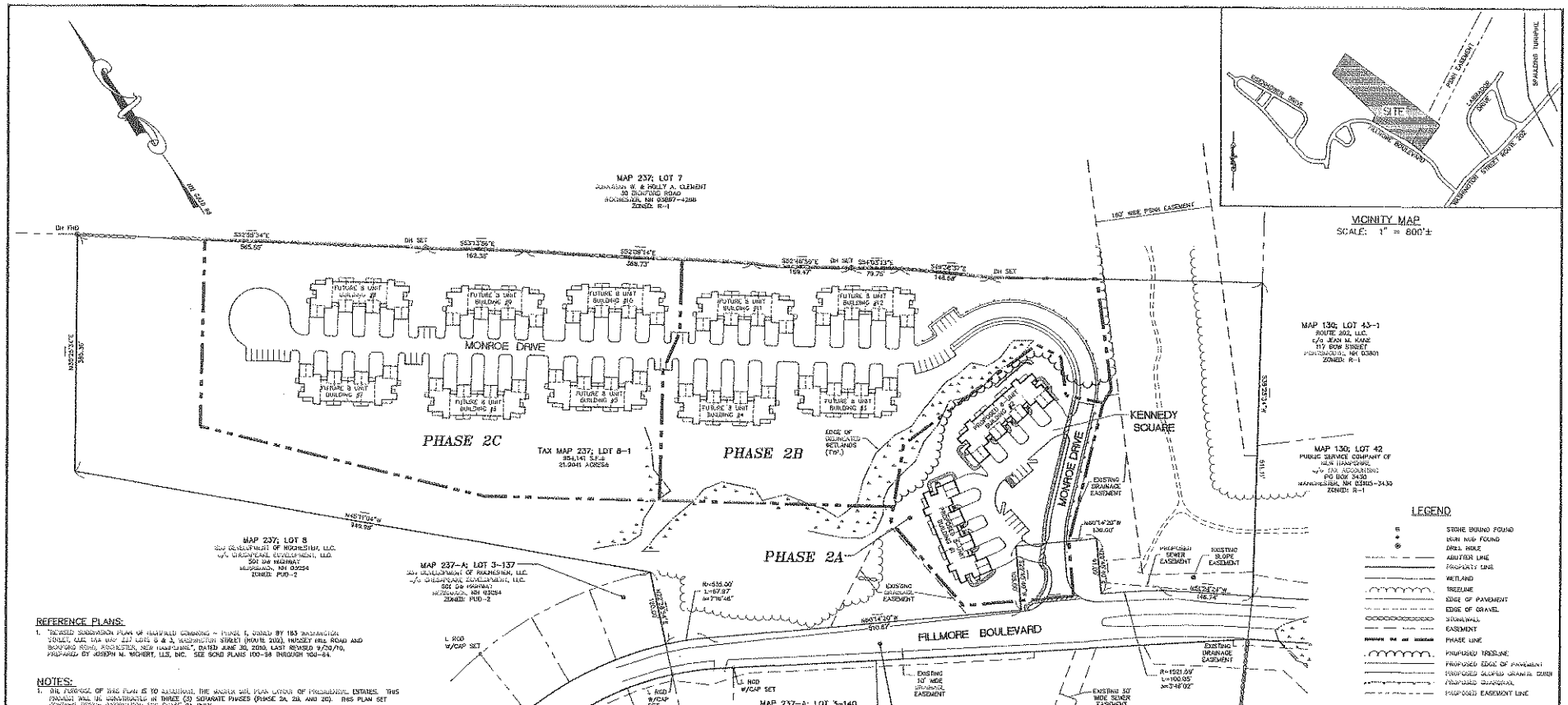
PREPARED BY:
KEACH-NORDSTROM ASSOCIATES, INC.
10 COMMERCE PARK NORTH, SUITE 3B
BEDFORD, NEW HAMPSHIRE 03110
(603) 627-2881

DIG SAFE

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

FEBRUARY 18, 2013
PROJECT NO. 12-1212-1

SHEET TITLE	SHEET No.
MASTER PLAN	1
EXISTING CONDITIONS PLAN	2
RESIDENTIAL SITE LAYOUT PLAN	3
RESIDENTIAL CONDOMINIUM PLAN	4
GRADING AND DRAINAGE PLAN	5
EROSION CONTROL PLAN	6
UTILITY PLAN	7
LANDSCAPE PLAN	8
LIGHTING PLAN	9
ROADWAY PROFILES	10
DRAINAGE PROFILES	11
SEWER PROFILE	12
CONSTRUCTION DETAILS	13 - 20



VICINITY MAP
SCALE: 1" = 800'±

REFERENCE PLANS:

1. "PROPOSED SUBDIVISION PLAN OF PRATFALLS CROSSING – PHASE I, OWNED BY 183 WASHINGTON STREET, LLC. (TAX MAP 237 LOTS 8 & 3, WASHINGTON STREET (ROUTE 202), HUSSEY HILL ROAD AND SKATING POND, ROCHESTER, NEW HAMPSHIRE", DATED JUNE 30, 2010, LAST REVISED 9/20/10, PREPARED BY JOSEPH M. MONERT, LLS, INC. SEE SCND PLANS 100-98 THROUGH 100-84.

NOTES:

1. THE PURPOSE OF THIS PLAN IS TO SUBMIT THE MASTER SITE PLAN OPTION OF PRESIDENTIAL ESTATES. THIS PROJECT WILL BE CONSTRUCTED IN THREE (3) SEPARATE PHASES (PHASE 2A, 2B AND 2C). THIS PLAN SET CONTAINS DESIGN INFORMATION FOR PHASE 2A ONLY.
2. REFERENCE THE SUBJECT PARCEL AS CITY OF ROCHESTER NEW HAMPSHIRE TAX ASSESSOR'S MAP 237; LOT 8-1.
3. TOTAL SITE AREA: 954,141± SF, 21.904± ACRES
4. PRESENT OWNER OF RECORD:
   183 WASHINGTON STREET, LLC.
   501 D.W. HIGHWAY, SUITE F
   MERRIMACK, NH 03054
5. THE SUBJECT PARCEL IS LOCATED WITHIN THE RESIDENTIAL 1 ZONING DISTRICT (R-1) AND THE PLANNED UNIT DEVELOPMENT-2 (PUD-2) OVERLAY DISTRICT. THE PROPERTY IS SUBJECT TO THE FOLLOWING PUD STANDARDS OF DEVELOPMENT:

	REQUIRED	PROPOSED
MINIMUM OPEN SPACE	20%	+68.0%
PERCENT PUD SITE COVERAGE	50%	+22.5%
MAXIMUM DENSITY	8 UNITS/ACRE	+0.73 UNITS/ACRE
MAXIMUM BUILDING HEIGHT	4 STORIES	2 STORIES

   * REFERTO PHASE 2A ONLY.
6. EXISTING INFORMATION SHOWN HEREON IS BASED UPON AN ACTUAL FIELD SURVEY PERFORMED BY JOSEPH M. MONERT LLS, INC. BETWEEN 2003 AND FEBRUARY 2013. THE CONDITIONS, SYSTEM AND BEARINGS ARE BASED ON A DE 2010 SR. SET OF ROCHESTER GIS STREAM, ZONE NFS DESCRIPTION PUBLISHED BY JOSEPH M. MONERT LLS, INC.
7. TOPOGRAPHIC INFORMATION IS TAKEN FROM AN ACTUAL SURVEY PREPARED BY SANBORN MAP CO., INC. ON MAY 5, 2002 AND FIELD SURVEY PERFORMED BY JOSEPH M. MONERT LLS, INC. IN JANUARY AND FEBRUARY OF 2013.
8. THE WETLANDS WERE ORIGINALLY DELINEATED IN JUNE, 2003 AND AGAIN IN DECEMBER 2003 BY MICHAEL SERAKAS, CWS #8. SOME OF THE WETLANDS WERE RE-FLAGGED BY CINDY HALSUS, CWS #61 OF STONEY RIDGE ENVIRONMENTAL, LLC. IN 2013 AND FIELD LOCATED BY JOSEPH M. MONERT LLS, INC.
9. EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) FOR THE CITY OF ROCHESTER, NEW HAMPSHIRE, STRAFFORD COUNTY, MAP NUMBER 33017C0293D, PANEL NUMBER 193 OF 625, EFFECTIVE DATE: MAY 17, 2005, INDICATES THAT THE SUBJECT PARCEL IS LOCATED WITHIN ZONE X.
10. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNLISTED SIGNAL. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-344-7233.
11. LOT IS SERVICED BY MUNICIPAL SEWER AND WATER UTILITIES.
12. PARKING CALCULATIONS:
    REQUIRED: 2 SPACES/UNIT x 16 UNITS = 2
    → 32 SPACES REQUIRED
    PROPOSED: 2 SPACES/UNIT (1 GARAGE SPACE + 1 STACKED SPACE) + 9 VISITOR SPACES
    → 41 SPACES PROVIDED (INCLUDES 1 HANDICAP SPACE)
13. ALL WORK TO BE DONE IN CONFORMANCE WITH THE CITY OF ROCHESTER REGULATIONS. ALL ROAD, STRUCTURES, AND DRAINAGE TO MEET CITY OF ROCHESTER SPECIFICATIONS.
14. PLOWED SNOW FROM THE PARKING, DRIVEWAYS, PARKING LOTS AND SIDEWALK SHALL BE STORED IN THE DESIGNATED AREAS SHOWN ON THIS PLAN SET. WHEN THE SNOW STORAGE AREAS ARE AT CAPACITY, SUBSEQUENT SNOW SHALL BE HAULED OFF-SITE AND DISPOSED OF IN AN ENVIRONMENTALLY SOUND FASHION AND IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
15. SEE ARCHITECTURAL PLANS FOR WALKWAYS AND OTHER FEATURES AT THE BUILDINGS. CONTRACTOR TO PERFORM ANY WORK AS DIRECTED BY THE OWNER.
16. EXISTING UTILITY INFORMATION IS APPROXIMATE AND SHOULD BE VERIFIED BY THE SITE CONTRACTOR BEFORE ANY EXCAVATIONS OR PIPES ARE ORDERED.

GRAPHIC SCALE
(IN FEET)
1 inch = 80 ft.

NPDES NOTE

THE PROJECT DISTURBS IN EXCESS OF 1-ACRE OF LAND. THEREFORE IT WILL BE REQUIRED TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE AS ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA). THE OWNER/DEVELOPER AND OPERATOR (GENERAL CONTRACTOR) SHALL EACH BE REQUIRED TO PREPARE AND SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA PRIOR TO THE START 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.

MASTER PLAN
PRESIDENTIAL ESTATES

MAP 237, LOT 8-1
59 FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE
STRAFFORD COUNTY

OWNER OF RECORD:	APPLICANT:
183 WASHINGTON STREET, LLC.	183 WASHINGTON STREET, LLC.
501 D.W. HIGHWAY, SUITE F	501 D.W. HIGHWAY, SUITE F
MERRIMACK, NH 03054	MERRIMACK, NH 03054

KNA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-8091

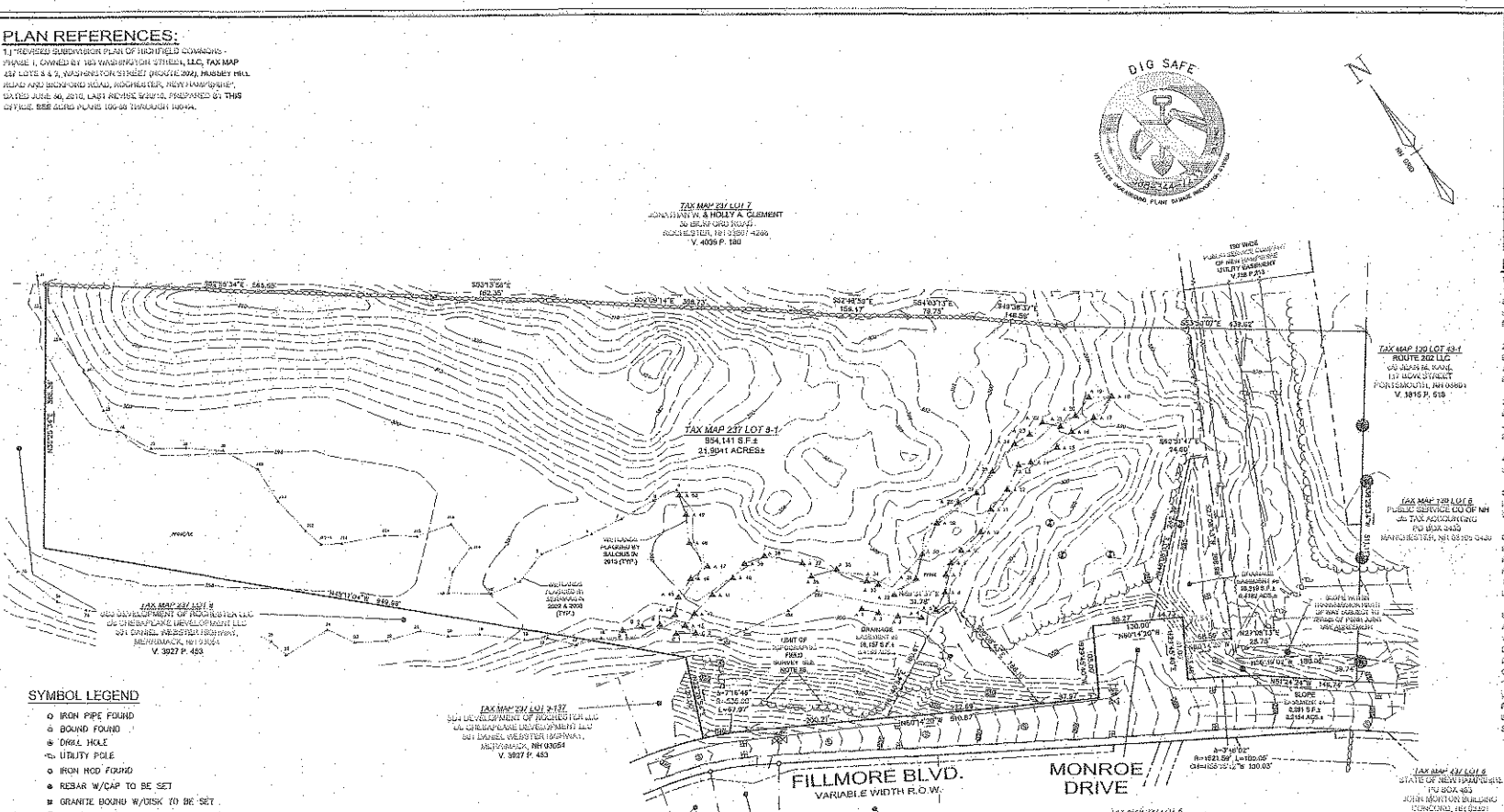
REVISIONS

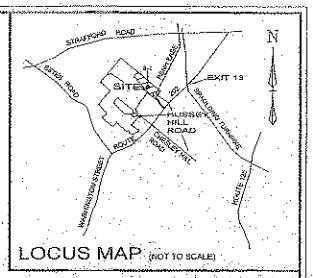
No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 18, 2013 | SCALE: 1" = 80'
PROJECT NO: 12-1712-1 | SHEET 1 OF 20

PLAN REFERENCES:

1.) REVISED SUBDIVISION PLAN OF NORTHFIELD COMMONS - PHASE 1, OWNED BY 183 WASHINGTON STREET, LLC, TAX MAP 237 LOTS 8 & 9, WASHINGTON STREET (ROUTE 202), HASSEY HILL ROAD AND BRADFORD ROAD, ROCHESTER, NEW HAMPSHIRE", DATED JUNE 30, 2010, LAST REVISE 9/20/10, PREPARED BY THIS OFFICE. SEE SLRD PLANE 100-38 THROUGH 100-44.





LOCUS MAP (NOT TO SCALE)

NOTES:

1.) THE SUBJECT PARCEL IS LOT 8-1 ON THE CITY OF ROCHESTER TAX MAP 237. THE OWNER OF RECORD IS 183 WASHINGTON STREET, LLC JO CHESAPEAKE DEVELOPMENT LLC OF 501 DANIEL WEBSTER HIGHWAY, MERRIMACK, NEW HAMPSHIRE 03054. SEE SCRD V. 3743 P. 583.

2.) THE SUBJECT PARCEL IS ZONED FLD AS APPROVED BY THE ROCHESTER PLANNING BOARD ON JANUARY 7, 2003 AND AS AMENDED. SEE OVERALL PUD NOTICE OF DECISION FOR LOTAL REQUIREMENTS.

3.) THIS PLAN IS THE RESULT OF AN ACTUAL FIELD SURVEYS PERFORMED BY THIS OFFICE BETWEEN 2000 AND FEBRUARY 2013 I, JOSEPH M. WICHERT, NH LS #783, CERTIFY THAT THE WORK WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION.

4.) THE INTENT OF THIS PLAN IS TO SHOW THE BOUNDARY OF THE SUBJECT PARCEL AND THE EXISTING CONDITIONS ON IT.

5.) THE COORDINATE SYSTEM AND BEARINGS ARE BASED ON A TIE INTO THE CITY OF ROCHESTER GIS SYSTEM, USING GPS OBSERVATIONS.

6.) THE TOPOGRAPHY IS TAKEN FROM AN AERIAL SURVEY PREPARED BY SANBORN MAP CO., INC. 34 KAYLAN DRIVE, ROCHESTER, NY. DATE OF PHOTOGRAPHY : MAY 5, 2002, EXCEPT FOR THE PORTIONS OF THE SUBJECT PARCEL FIELD SURVEYED BY THIS OFFICE IN JANUARY AND FEBRUARY OF 2013. SEE PLAN FOR LOCATION OF FIELD SURVEY.

7.) THE WETLANDS WERE ORIGINALLY DELINEATED IN JUNE, 2002 AND AGAIN IN DECEMBER, 2003 BY MICHAEL SERVIANS, CWS #5. WETLANDS WERE DELINEATED IN ACCORDANCE WITH THE DOCUMENT ENTITLED "CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, JANUARY 1987". THE WETLANDS WERE CLASSIFIED IN ACCORDANCE WITH THE DOCUMENT ENTITLED "CLASSIFICATION OF WETLAND AND DEEP WATER HABITATS OF THE UNITED STATES", (COWARDIN, 1979). SOME THE WETLANDS WERE RE FLAGGED BY CINDY BALCOM, CWS #61, OF STONEY BROOK ENVIRONMENTAL LLC. IN 2013 AND FIELD LOCATED BY THIS OFFICE. SEE PLAN VIEW FOR DESIGNATION OF OLD AND NEW FLAG LINES.

SYMBOL LEGEND

- IRON PIPE FOUND
- BOUND FOUND
- DRILL HOLE
- UTILITY POLE
- IRON ROD FOUND
- REBAR W/CAP TO BE SET
- GRANITE BOUND W/DISK TO BE SET
- CONIFEROUS TREE W/ WIRE
- DECIDUOUS TREE W/ WIRE
- STONE WALL
- ABUTTING PROPERTY LINE

I CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE WITH A TOPCON GPS SYSTEM. THE ERROR OF CLOSURE ON ALL LOT LINES WITHIN AND BORDERING THE SUBJECT PROPERTY IS BETTER THAN 1 IN 10,000.

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

I HEREBY CERTIFY THAT A COPY OF THIS PLAN HAS BEEN FILED WITH THE ROCHESTER PLANNING BOARD IN ACCORDANCE WITH RSA 676:18(I).

4 MARCH 2013
DATE

NH 783 JOSEPH M. WICHERT
SIGNATURE

COPYRIGHT 2013 JOSEPH M. WICHERT, LLS, INC.

NO.	DATE	DESCRIPTION	BY

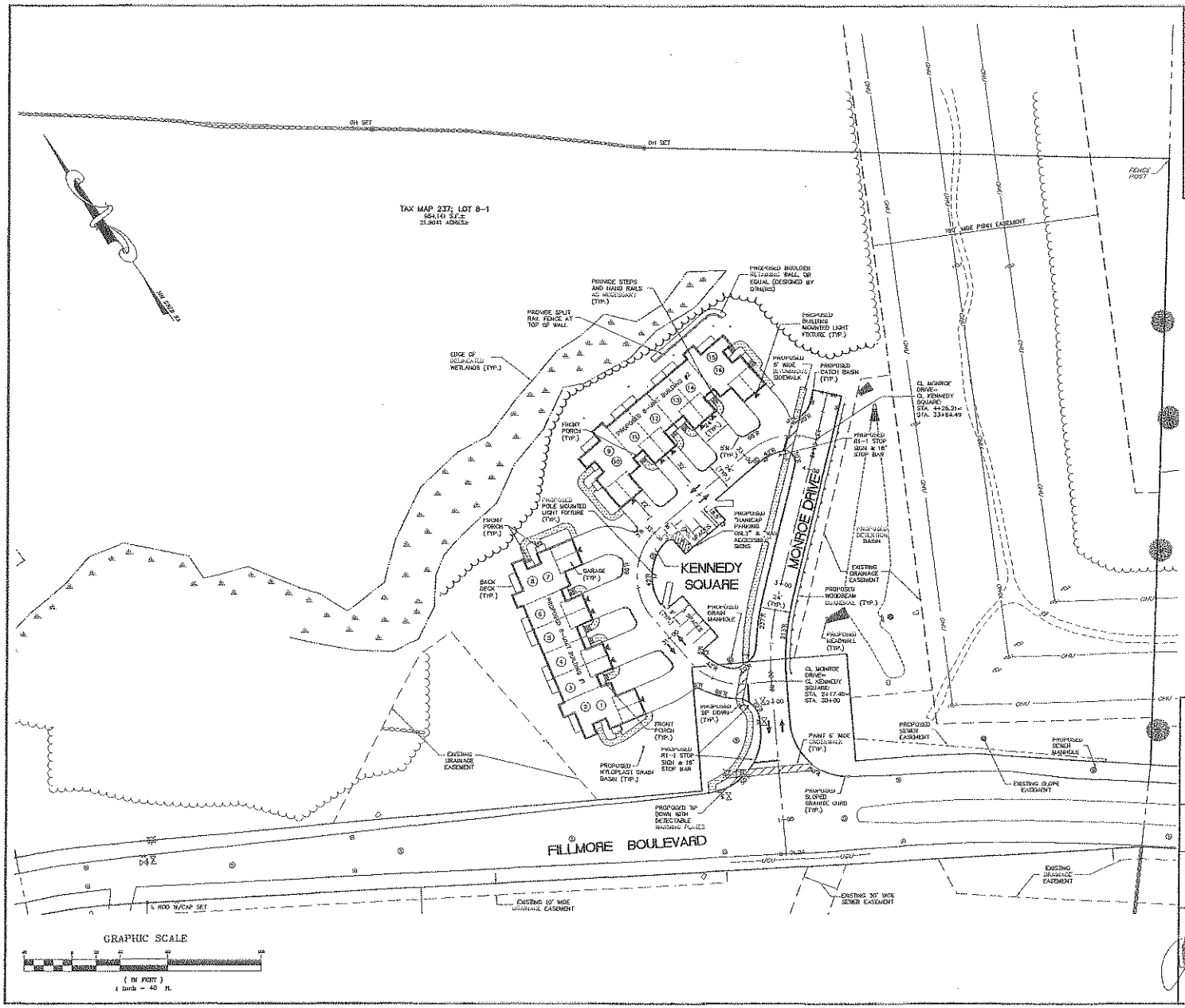
EXISTING CONDITIONS PLAN FOR
"PRESIDENTIAL ESTATES"
PHASE 2 MULTI-FAMILY DEVELOPMENT
OWNED BY 183 WASHINGTON STREET, LLC
TAX MAP 237 LOTS 8-1
59 FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE

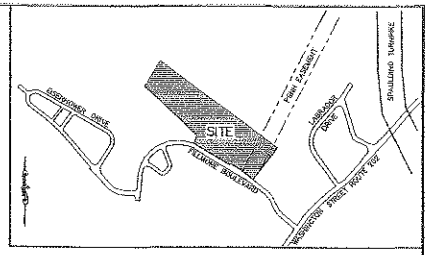
DATE: FEBRUARY 22, 2013 SCALE: 1" = 60'

SURVEY PLAN BY:

302 AMHERST STREET
MANCHESTER, NH 03104
TEL: (603) 647-4282 OR 730-8203
FAX: (603) 623-1916
WEB: WWW.JMWLLS.COM
Joseph M. Wichert LLS, INC.
LAND SURVEYOR & SEPTIC SYSTEM DESIGNER

SHEET S1 SHEET 1 OF 1 F.B. P. JOB #2003150





VICINITY MAP
SCALE: 1" = 800'±

SEE SHEET 1 FOR NOTES

LEGEND

- IRON PIN FOUND
- STONE BOUND FOUND
- DRILL HOLE
- UTILITY POLE
- SIGN
- GAS VALVE
- WATER VALVE
- HYDRANT
- WATER SHUT OFF
- SEWER MANHOLE
- DRAINAGE MANHOLE
- CATCH BASIN
- PROP. BUILDING MOUNTED LIGHT
- PROP. POLE MOUNTED LIGHT
- DENOTES UNIT NUMBER
- ABUTTER LINE
- PROPERTY LINE
- WETLAND
- OVERHEAD UTILITIES
- TREELINE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- STONEWALL
- EASEMENT
- PROPOSED CONTOURS
- PROPOSED SPLIT RAIL FENCE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED SLOPED GRANITE CURB
- PROPOSED TREELINE
- PROPOSED EASEMENT LINE

DIG SAFE
DIGSAFE.COM
1-888-344-7233
UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM

RESIDENTIAL SITE LAYOUT PLAN

PRESIDENTIAL ESTATES

MAP 237; LOT 8-1
59 FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE
STRAFFORD COUNTY

OWNER OF RECORD:
183 WASHINGTON STREET, LLC.
501 D.W. HIGHWAY, SUITE F
MERRIMACK, NH 03054

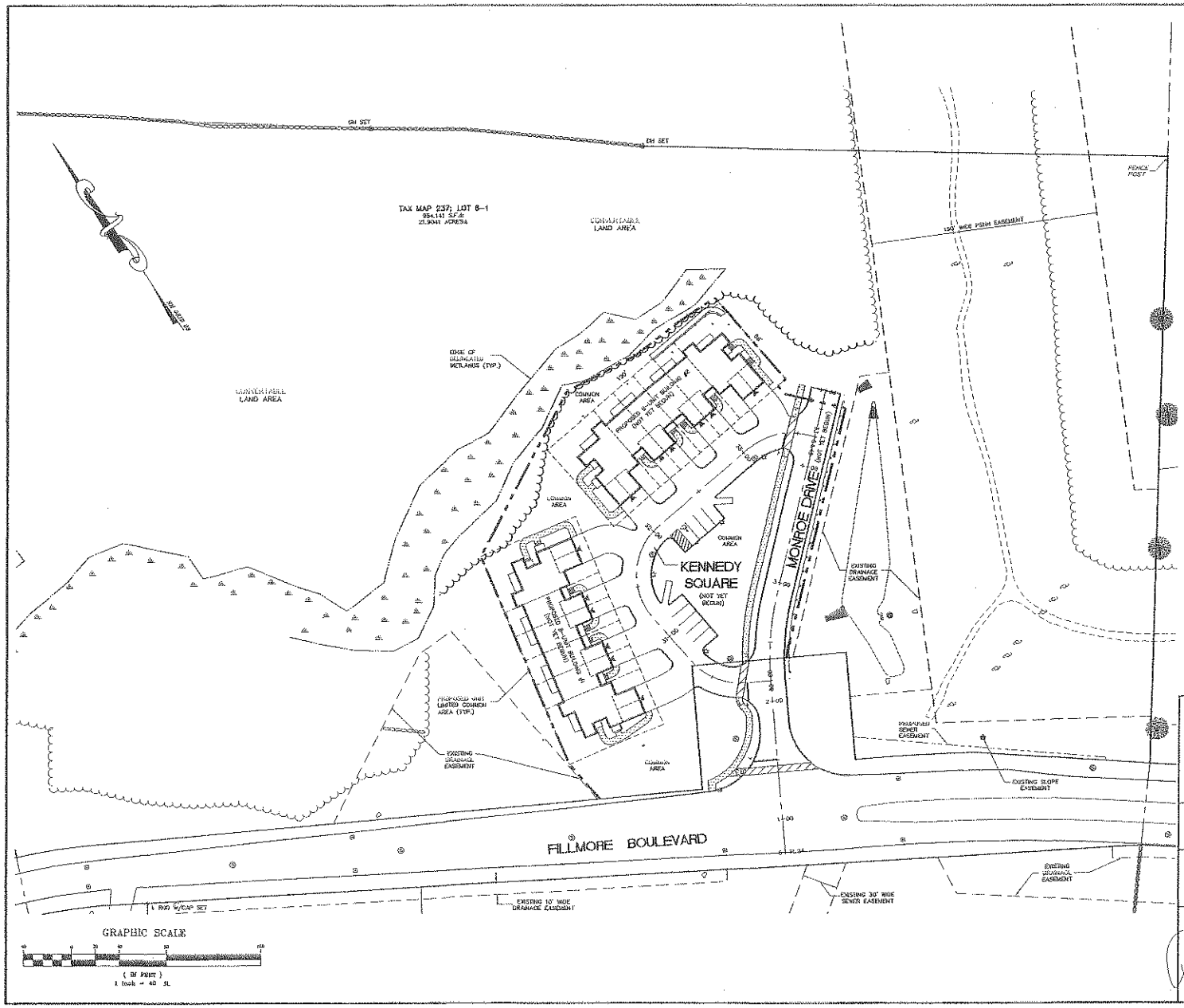
APPLICANT:
183 WASHINGTON STREET, LLC.
501 D.W. HIGHWAY, SUITE F
MERRIMACK, NH 03054

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

REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 18, 2013
SCALE: 1" = 40'
PROJECT NO: 12-1212-1
SHEET 3 OF 20



I HEREBY CERTIFY THAT THIS PLAN IS ACCURATE AND IN COMPLIANCE WITH THE PROVISIONS OF NEW HAMPSHIRE RSA 356-B:32, & AND V, AND FURTHER CERTIFY NONE OF THE UNITS DEPICTED HEREON ARE CURRENTLY COMPLETE OR SUBSTANTIALLY COMPLETE.

DATE

I, ANTHONY M. BIASSA, LICENSED LAND SURVEYOR, HEREBY CERTIFY THAT THIS PLAN FULLY AND ACCURATELY DEPICTS THE LOCATION AND DIMENSIONS OF THE LAND AND EXISTING IMPROVEMENTS SHOWN THEREON AND, TO THE EXTENT REASONABLE ALL REASONABLE APPURTENANT THERETO, AND THAT ALL UNITS DEPICTED HEREON HAVE NOT BEEN SUBSTANTIALLY COMPLETED, UNLESS OTHERWISE NOTED, AND THAT THIS PLAN COMPLIES WITH THE PROVISIONS OF RSA 356-B: 30 J AND V.

PURSUANT TO RSA 676:18,IV AND RSA 672:14

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS RSA AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN

AND FURTHER

I CERTIFY THAT PURSUANT TO RSA 676:18, SECT. IV, THAT A COPY OF THIS PLAT HAS BEEN FORWARDED TO THE CITY/TOWN PLANNING BOARD FOR THEIR INFORMATION.

DATE: _____

_____
LICENSED LAND SURVEYOR

LEGEND

- STONE BOUND FOUND
- IRON PIN FOUND
- DRILL HOLE
- UTILITY POLE
- SIGN
- GAS VALVE
- WATER VALVE
- HYDRANT
- WATER SHUT OFF
- SEWER MANHOLE
- DRAINAGE MANHOLE
- CATCH BASIN
- ABUTTER LINE
- PROPERTY LINE
- WETLAND
- OVERHEAD UTILITIES
- TREELINE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- STONE WALL
- EASEMENT
- PROPOSED CONTOUR
- PROPOSED EDGE OF PAVEMENT
- PROPOSED SLOPED GRANITE CURB
- PROPOSED TREELINE
- PROPOSED EASEMENT LINE

DIG SAFE

RESIDENTIAL CONDOMINIUM PLAN

PRESIDENTIAL ESTATES

MAP 237, LOT 8-1
59 FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE
STRAFFORD COUNTY

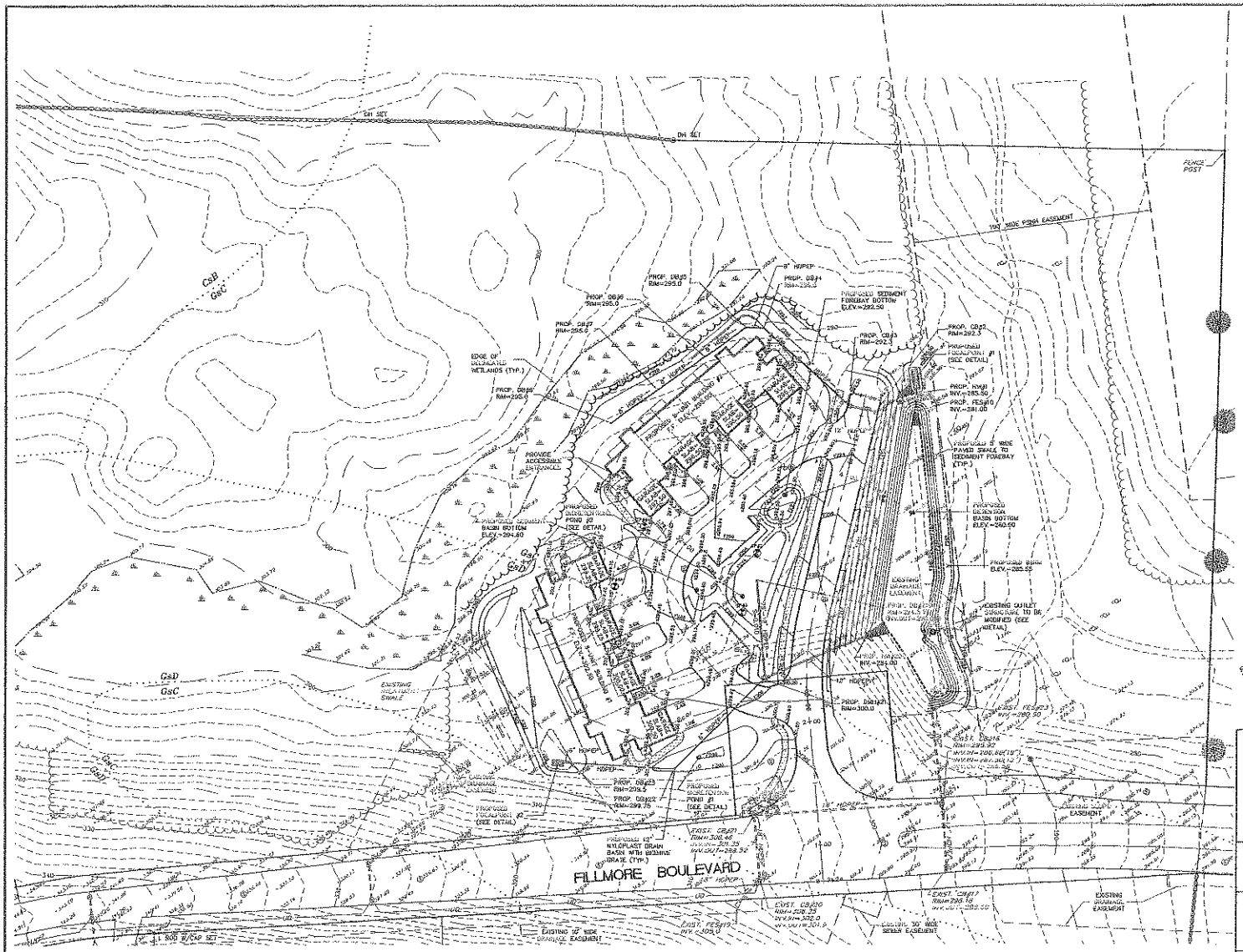
OWNER OF RECORD:	APPLICANT:
183 WASHINGTON STREET, LLC. 501 D.W. HIGHWAY, SUITE F MERRIMACK, NH 03054	183 WASHINGTON STREET, LLC. 501 D.W. HIGHWAY, SUITE F MERRIMACK, NH 03054

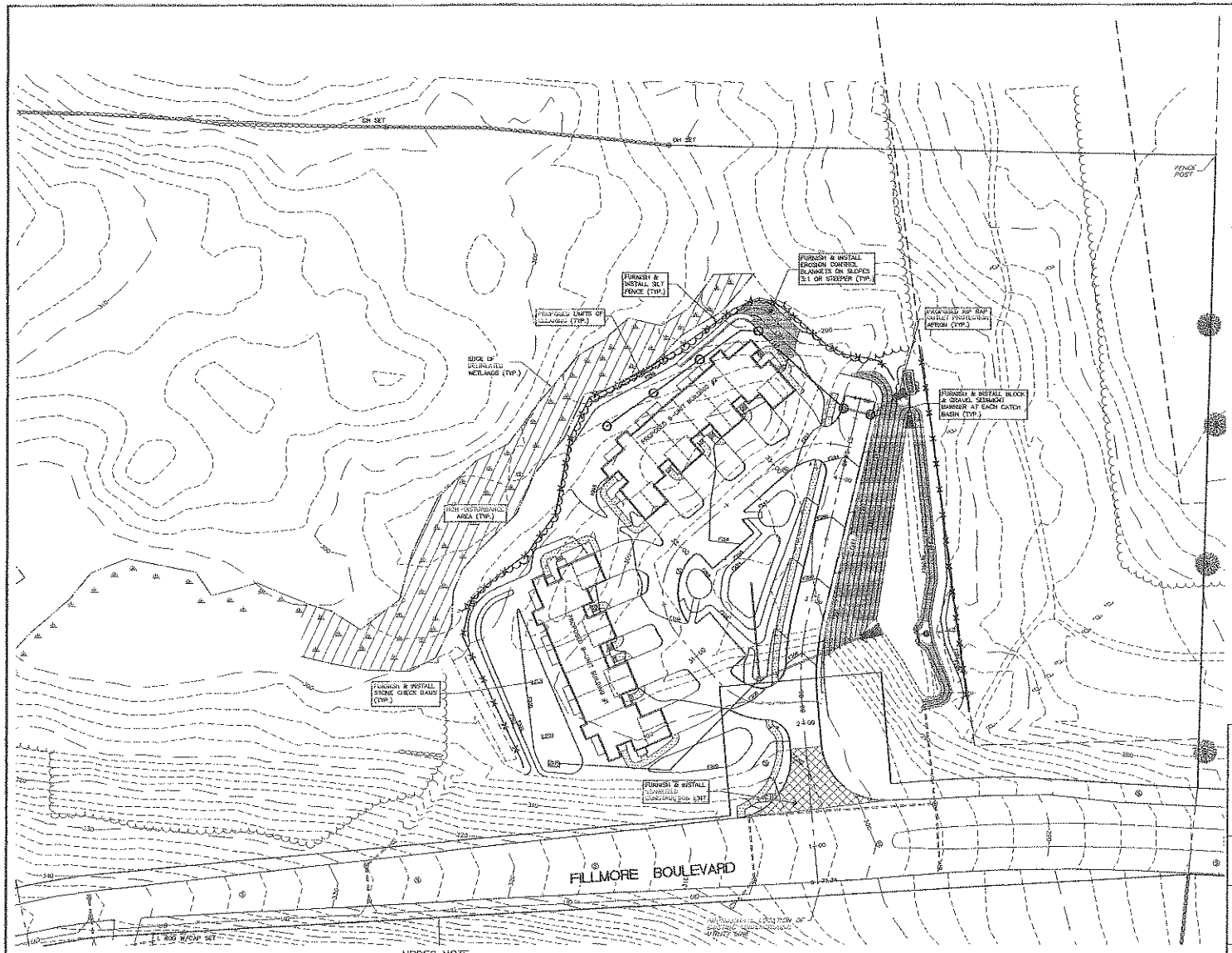
KNA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 18, 2013 | SCALE: 1" = 40'
DRAWING NO: 12-1212-1 | SHEET 4 OF 20


FILLMORE BOULEVARD
EDGE OF DELINEATED WETLANDS (TYP.)
PROVIDE ACCESSIBLE RAMP(S)
PROPOSED SEDIMENT FOREBAY BOTTOM ELEV.=292.50
PROPOSED BIORETENTION BASIN BOTTOM ELEV.=290.50
PROPOSED BIORETENTION BASIN BOTTOM ELEV.=285.55
EXISTING OUTLET STRUCTURE TO BE MODIFIED (SEE DETAIL)
EXISTING 30' WIDE SEWER EASEMENT
EXISTING 10' WIDE DRAINAGE EASEMENT
EXISTING 50' WIDE EASEMENT
EXISTING DRAINAGE EASEMENT
EXISTING DRAINAGE SWALE
PROPOSED 5' WIDE PAVED SWALE TO SEDIMENT FOREBAY (TYP.)
PROPOSED 12" HDPE PERFORATED PIPE
PROPOSED 12" NYLOPLAST DRAIN BASIN WITH DEBRIS GRATE (TYP.)
PROPOSED 6" HDPE
PROPOSED 8" HDPE
PROPOSED 10" HDPE
PROPOSED 15" HDPE
PROPOSED 18" HDPE
PROPOSED 24" HDPE
PROPOSED 30" HDPE
PROPOSED 36" HDPE
PROPOSED 48" HDPE
PROPOSED 60" HDPE
PROPOSED 72" HDPE
PROPOSED 96" HDPE
PROPOSED 108" HDPE
PROPOSED 120" HDPE
PROPOSED 144" HDPE
PROPOSED 168" HDPE
PROPOSED 192" HDPE
PROPOSED 216" HDPE
PROPOSED 240" HDPE
PROPOSED 264" HDPE
PROPOSED 288" HDPE
PROPOSED 312" HDPE
PROPOSED 336" HDPE
PROPOSED 360" HDPE
PROPOSED 384" HDPE
PROPOSED 408" HDPE
PROPOSED



CONSTRUCTION NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE REQUIRED INITIAL TEMPORARY CONSTRUCTION EROSION CONTROL MEASURES AS WELL AS THE PERMANENT EROSION CONTROL MEASURES.
2. ALL MEASURES IN THE PLAN SHALL MEET AS A MINIMUM THE BEST MANAGEMENT PRACTICES SET FORTH IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL FIELD "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION," DATED DECEMBER 2008, AS AMENDED FROM TIME TO TIME.
3. WHENEVER PRACTICAL, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED OR SUPPLEMENTED. THE STRIPPING OF VEGETATION, WHEN NECESSARY, SHALL BE DONE IN A MANNER THAT MINIMIZES SOIL EROSION.
4. APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE.
5. THE AREA OF DISTURBANCE SHALL BE KEPT TO A MINIMUM. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 30 DAYS SHALL BE STABILIZED.
6. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA USING APPROVED MEASURES. WETLAND AREAS AND SURFACE WATERS SHALL BE PROTECTED FROM SEDIMENT.
7. OFFSITE SURFACE WATER AND RUNOFF FROM UNDISTURBED AREAS SHALL BE DIVERTED AWAY FROM DISTURBED AREAS WHERE FEASIBLE OR CARRIED NON-ERODIBLY THROUGH THE PROJECT AREA. INTEGRITY OF DOWNSTREAM DRAINAGE SYSTEMS SHALL BE MAINTAINED.
8. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL FINAL SITE STABILIZATION IS ACCOMPLISHED.
9. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS UNLESS CONDITIONS DICTATE OTHERWISE.
10. THE OWNER OR ENGINEER SHALL REVISE THE PLAN TO DESIGN FURTHER EROSION CONTROL PRACTICES DURING CONSTRUCTION SHOULD THEY PROVE TO BE NECESSARY.

LOAM & SEED ALL DISTURBED AREAS (TYP.)

DIG SAFE

EROSION & SEDIMENT CONTROL LEGEND

- PERMANENT SUMP PROTECTION APRON (RIP RAP)
- TEMPORARY BLOCK AND GRAVEL SEDIMENT BARRIERS AT ALL CATCH BASINS
- SILT FENCE
- TEMPORARY STONE CHECK DAM
- LIMITS OF CLEARING
- 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 WILL BE REQUIRED TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE AS ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA). THE OWNER/DEVELOPER AND "OPERATOR" (GENERAL CONTRACTOR) SHALL EACH BE RESPONSIBLE TO PREPARE AND SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA PRIOR TO THE START 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.

EROSION CONTROL PLAN

PRESIDENTIAL ESTATES

MAP 237; LOT 8-1
59 FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE
STRAFFORD COUNTY

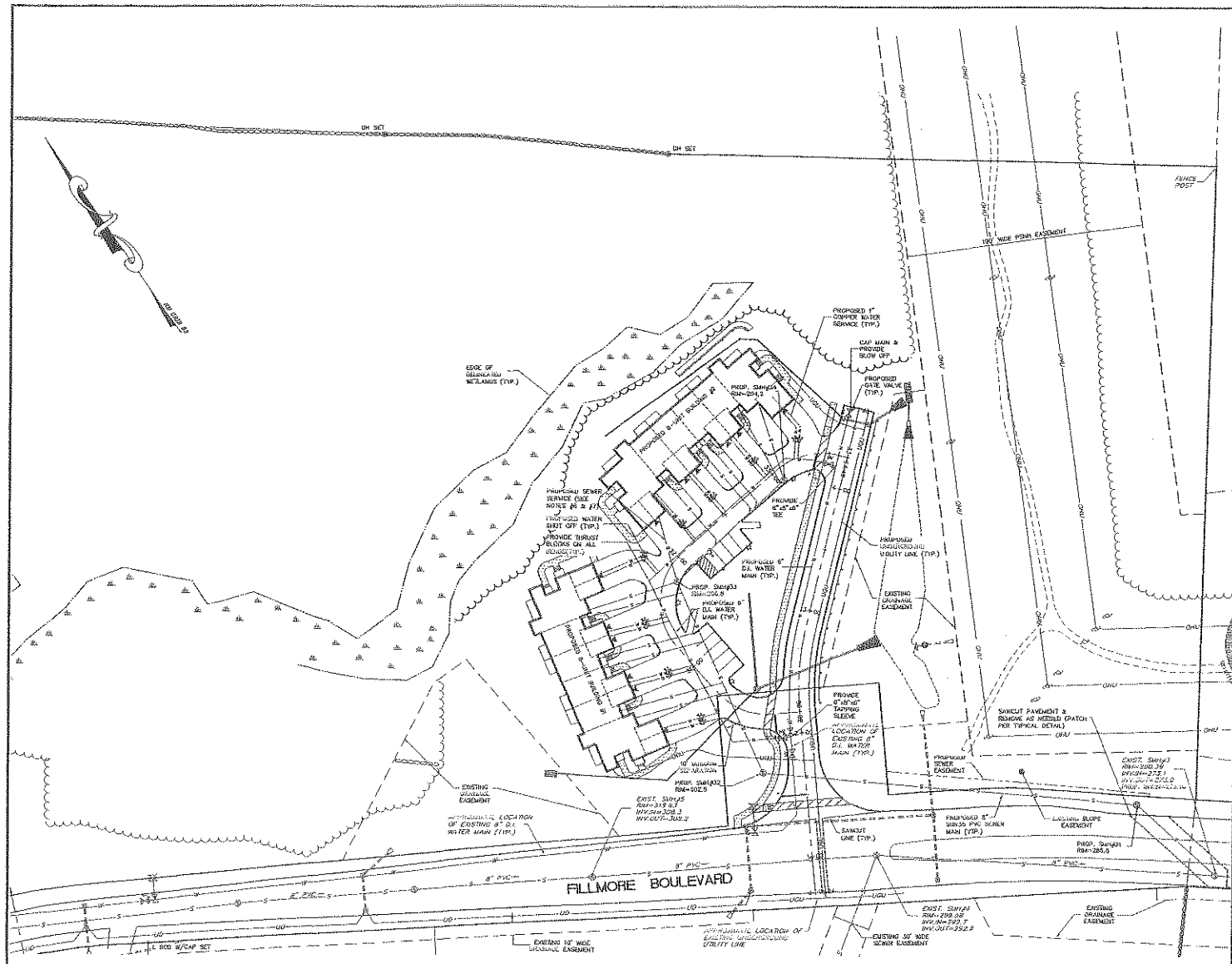
OWNER OF RECORD:	APPLICANT:
163 WASHINGTON STREET, LLC. 501 D.W. HIGHWAY, SUITE F MERRIMACK, NH 03054	163 WASHINGTON STREET, LLC. 501 D.W. HIGHWAY, SUITE F MERRIMACK, NH 03054

KNA
KRACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commercial Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-5661

REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 18, 2013 | SCALE: 1" = 40'
PROJECT NO: 12-1212-1 | SHEET 6 OF 20



CONSTRUCTION NOTES:

1. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF ROCHESTER, AND SHALL BE DONE 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 ADOPTED 2010 AND HEREBY INCORPORATED BY REFERENCE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 1-888-344-7233 AT LEAST 72 HOURS BEFORE DIGGING.
3. UNDERGROUND ELECTRICAL SHALL BE PROVIDED TO ALL SITE LIGHT POLES. SEE ELECTRICAL PLANS FOR DETAILS AND FINAL CONNECTION.
4. ALL WORKMANSHIP AND MATERIALS INCORPORATED INTO THE CONSTRUCTION OF THE WATER LINES SHALL CONFORM TO ALL THE LOCAL PRECINCT'S STANDARDS, SPECIFICATIONS, RULES, AND REGULATIONS.
5. ALL WORKMANSHIP AND MATERIALS INCORPORATED INTO THE CONSTRUCTION OF THE ELECTRIC AND TELEPHONE LINES SHALL CONFORM WITH THE STANDARDS OF THE LOCAL PROVIDER.
6. SEWER SERVICES FOR PROPOSED UNITS 1-2, 7-8, 9-10, AND 15-16 SHALL BE A 6" DIAMETER PVC SERVICE WITH A MINIMUM SLOPE OF 0.020 FT/FT.
7. SEWER SERVICES FOR PROPOSED UNITS 3-6 AND 11-14 SHALL BE A 4" DIAMETER PVC WITH A MINIMUM SLOPE OF 0.020 FT/FT.

SEE SEWER PROFILE FOR SEWER INVERTS

LEGEND

- IRON PIN FOUND
- STONE BOUND FOUND
- DRILL HOLE
- UTILITY POLE
- SIGN
- GAS VALVE
- WATER VALVE
- HYDRANT
- WATER SHUT OFF
- SEWER MANHOLE
- DRAINAGE MANHOLE
- CATCH BASIN
- PROP. BUILDING MOUNTED LIGHT
- PROP. POLE MOUNTED LIGHT
- ABUTTER LINE
- PROPERTY LINE
- WETLAND
- OHU — OVERHEAD WIRES
- W — WATER LINE
- S — SEWER LINE
- DRAINAGE LINE
- TREELINE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- 10' CONTOUR
- 2' CONTOUR
- STONEWALL
- SOIL LINE
- EASEMENT
- PROPOSED DRAINAGE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED SLOPED GRANITE CURB
- PROPOSED TREELINE
- PROPOSED DRAINAGE LINE
- OHU — PROPOSED OVERHEAD UTILITIES
- UGU — PROPOSED UNDERGROUND UTILITIES
- G — PROPOSED GAS LINE
- W — PROPOSED WATER LINE
- S — PROPOSED SEWER LINE
- SAWCUT LINE
- PROPOSED SAWCUT LINE

DIG SAFE
1-888-344-7233
UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM

UTILITY PLAN

PRESIDENTIAL ESTATES

MAP 237; LOT 8-1
59 FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE
STRAFFORD COUNTY

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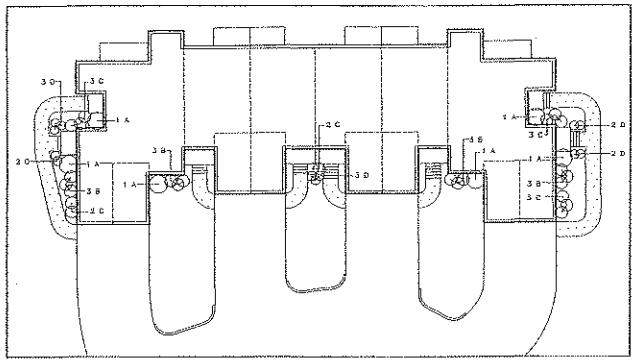
REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 15, 2013 | SCALE: 1" = 40'
PROJECT No. 12-1212-1 | SHEET 7 OF 20



TYPICAL UNIT PLANTING DETAIL
SCALE: 1" = 20'

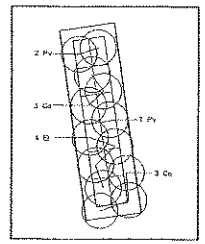
PLANT SCHEDULE

CATEGORY	BOTANICAL NAME	COMMON NAME	SIZE
A	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	2-2.5'
	HYDRANGEA 'WILSON'	WILSON HYDRANGEA	2-2.5' B&B
	TAXUS MEDIA 'TAUNTONII'	TAUNTON YEW	2-2.5' B&B
B	CLETHRA ALNIFOLIA 'COMPACTA'	COMPACT SUMMERSWEET	#3
	HYDRANGEA ARBORESCENS 'BELLA ANNA'	BELLA ANNA SMOOTH HYDRANGEA	#5
	SPIRAEA BUMALDA 'ANTHONY WATERER'	ANTHONY WATERER SPIREA	#5
C	AZALEA 'DELAWARE VALLEY WHITE'	DELAWARE VALLEY AZALEA	#5
	PHYSOCARPUS OPULIFOLIUS 'LITTLE DEVIL'	LITTLE DEVIL NINEBARK	#5
	PIERIS JAPONICA 'CAVATINE'	CAVATINE ANDROMEDA	2-2.5' B&B
D	ASTILBE 'BRIDAL VEIL'	BRIDAL VEIL ASTILBE	#2
	HEMEROCALLIS FULVA	ORANGE DAYLILY	#2
	HOSTA 'SAGAE'	SAGAE PLANTAIN LILLY	#2

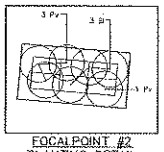
NOTE:
THE PURPOSE OF THESE DETAILS IS TO DEPICT A SUGGESTED PLANTING LAYOUT FOR THE PROPOSED DWELLING UNITS. THE INTENT IS TO CREATE A VARIETY OF PLANT MATERIALS AMONG ADJACENT DWELLING UNITS. THE LANDSCAPE CONTRACTOR MAY MAKE SUBSTITUTIONS ADDRESSING TO SEASONAL AVAILABILITY AT HIS/HER DISCRETION.

LANDSCAPE NOTES:

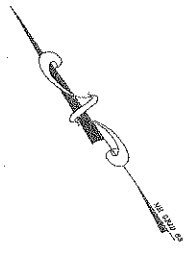
1. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED SITE LANDSCAPE WHICH PROVIDES COMMON BELIEF AND AESTHETIC APPEAL.
2. ALL PLANT MATERIALS USED SHALL BE NURSERY STOCK AND SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF INSTALLATION. ANY MATERIAL WHICH DIES OR GOES INTO STUNTED HEALTHY APPEARANCE WITHIN THIS TIME SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, WITH SAME WARRANTY RECOMMENCING AS THE ORIGINAL. WARRANTIES TYPically DO NOT COVER LOSS DUE TO INSECT INFESTATION OR MECHANICAL DAMAGE (I.E. SNOW STORAGE).
3. IF THE SOIL CONDITIONS ARE EXTREMELY SANDY, ALL TREES SHALL HAVE A 6" LAYER OF COMPACTED TOPSOIL PLACED IN THE BASE OF THE PLANT PIT AS A MOISTURE RETENTION LAYER. THE PLANT PIT SHOULD BE OVER EXCAVATED BY AN ADDITIONAL 12" BEYOND THE NORMAL DEPTH RADIUS OF THE HOLE. A TOPSOIL MIXTURE SHALL BE USED TO BACKFILL THE HOLE AS FOLLOWS: ORGANIC TOPSOIL AMENDED WITH 10% WOOD ASH, 10% MANURE, 30% PEATMOSS AND A GRANULAR FERTILIZER TO ASSIST AND RETAIN WATER.
4. PLANTING BEDS AND BARRIERS SHALL RECEIVE A 4" MINIMUM THICKNESS OF PINE/HEMLOCK BARK MULCH OVER A 3mil POLYPROPYLENE WEED CONTROL FABRIC.
5. PAVEMENT AND ROAD BASE MATERIAL ENCOUNTERED IN ANY LAWN OR PLANTING BED SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SUITABLE AMENDED SOIL INSTALLED AS SPECIFIED IN THE 1ST ESTABLISHMENT SCHEDULE.

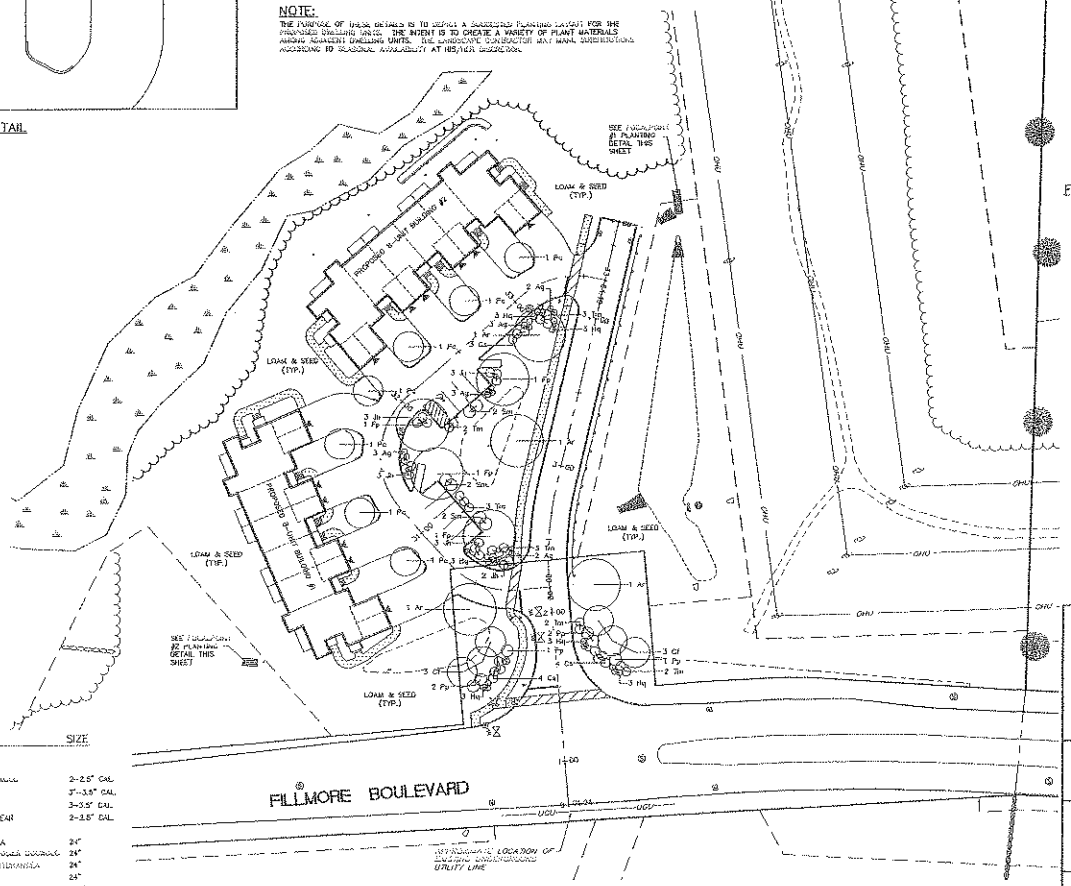


FOCALPOINT #1 PLANTING DETAIL
SCALE: 1" = 5'



FOCALPOINT #2 PLANTING DETAIL
SCALE: 1" = 5'





NOTES FOR PLANTING BIO RETENTION PONDS:

1. FOR THE PLANTING OF THE BIO RETENTION POND, THE CONTRACTOR SHALL CHOOSE A MINIMUM OF 7 DIFFERENT SPECIES FROM THE FOLLOWING LIST:
   - ASTER (CARLA BERRYONE)
   - ALLEN'S COMPACT DOGWOOD (CORNUS SERICEA 'ALLEN'S COMPACTA')
   - GARLANT JOE-PYE WEED (EUPATORIUM MACULATUM 'GATEWAY')
   - DWARF INKBERRY (ILEX GLABRA 'COMPACTA')
   - RED SATIN WHITEBERRY (ILEX VERTICILLATA 'RED SPRITE')
   - CORAL REEF RED BARK DOGWOOD (CORNUS SERICEA 'CORAL REEF')
   - MAHOGANY BIRCH GRASS (PANICUM VIRGATUM 'MAHOGANY')
   - HEARTLEAF BLUEBERRY (VACCINIUM CORYMBOSUM)
   - #1 HEAD VIBURNUM (VIBURNUM CASSINOIDES)
   - CLETHRA ALNIFOLIA 'COMPACTA' (COMPACT SUMMERSWEET)
   - DUTCHMAN'S (DIRPHILAMERICA DIOECIA)
   - SWEET LAUREL (KALMIA ANGUSTIFOLIA)
2. TO ACHIEVE A DESIRABLE DENSITY OF COVER, THE WOODY SHRUBS SHOULD BE PLANTED 3FT-FEET ON CENTER.
3. NO LESS THAN 30 PLANTS FROM THE VARIETIES LISTED ABOVE, OF WHICH 40 MUST BE WOODY SHRUBS SHALL BE PLANTED IN BIO RETENTION POND #1.
4. NO LESS THAN 70 PLANTS FROM THE VARIETIES LISTED ABOVE, OF WHICH 35 MUST BE WOODY SHRUBS, SHALL BE PLANTED IN BIO RETENTION POND #2.
5. WHEN PLACING THE PROPOSED PLANTS, CONTRACTOR SHALL TAKE INTO CONSIDERATION THE SIGHT LINE OF MOTORISTS EXITING THE SITE FROM THE NORTHERN DRIVEWAY. PLANT SPECIES SHALL BE PLACED SO A CLEAR FIELD OF VISION IS MAINTAINED AND THE PLANTS MATURE HEIGHT WILL NOT INTERFERE.

PLANT LIST

SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE
TREES				
Cf	8	CORNUS FLORIDA 'APPALACHIAN SPRING'	APPALACHIAN SPRING DOGWOOD	2-2.5" CAL.
Ar	4	ACER RUBRUM 'REDPOINTE'	REDPOINTE RED MAPLE	3"-3.5" CAL.
Fp	4	FRAXINUS PENNSYLVANICA 'PATMORE'	PATMORE GREEN ASH	3-3.5" CAL.
Pc	7	PYRUS CALLERYANA 'CHANTICLEER'	CHANTICLEER FLOWERING PEAR	2-2.5" CAL.
SHRUBS				
Ag	13	AZALEA 'GIRARD'S HOT SHOT'	GIRARD'S HOT SHOT AZALEA	24"
Cs	11	CORNUS SERICEA 'ALLEN'S COMPACTA'	ALLEN'S COMPACT RED-OSIER DOGWOOD	24"
Hq	16	HYDRANGEA Q. 'RUBY SLIPPERS'	RUBY SLIPPERS OAKLEAF HYDRANGEA	24"
Jd	14	JUNIPERUS HORIZONTALIS 'BAR HARBOR'	BAR HARBOR JUNIPER	24"
Pp	6	PICEA PUNGENS 'BABY BLUE EYES'	BABY BLUE EYES SPRUCE	3-4' B&B
Sm	6	SYRINGA MEYERI 'PALIBIN'	DWARF KOREAN LILAC	2-3' B&B
Tm	15	TAXUS MEDIA 'BLACK KNIGHT'	BLACK KNIGHT YEW	2-3' B&B
FOCALPOINT PLANTINGS				
Co	6	CLETHRA ALNIFOLIA 'COMPACTA'	COMPACT SUMMERSWEET	#2
Ej	7	EUPATORIUM 'LITTLE JOE'	LITTLE JOE JOE PYE WEED	#2
Pv	7	PANICUM VIRGATUM 'PRAIRIE SKY'	PRAIRIE SKY SWITCH GRASS	#2

LEGEND

- STONE ROUND FEMIO
- IRON PIN FOUND
- DRILL HOLE
- UTILITY POLE
- SIGN
- GAS VALVE
- WATER VALVE
- HYDRANT
- WATER SHUT OFF
- SEWER MANHOLE
- DRAINAGE MANHOLE
- CATCH BASIN
- PROP. BUILDING MOUNTED LIGHT
- PROP. POLE MOUNTED LIGHT
- ABUTTER LINE
- PROPERTY LINE
- WETLAND
- OVERHEAD UTILITIES
- TREELINE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- SIDEWALK
- EASEMENT
- PROPOSED DRAINAGE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED SLOPED GRANITE CURB
- PROPOSED TREELINE
- PROPOSED EASEMENT LINE

DIG SAFE
CALL 1-888-DIG-SAFE (344-7233) 48 HOURS BEFORE YOU DIG
NEW HAMPSHIRE PLANT SAFE PROTECTION SYSTEM

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

LANDSCAPE PLAN
PRESIDENTIAL ESTATES

MAP 237; LOT 8-1
59 FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE
STRAFFORD COUNTY

OWNER OF RECORD:
183 WASHINGTON STREET, LLC
501 D.W. HIGHWAY, SUITE F
MERRIMACK, NH 03054

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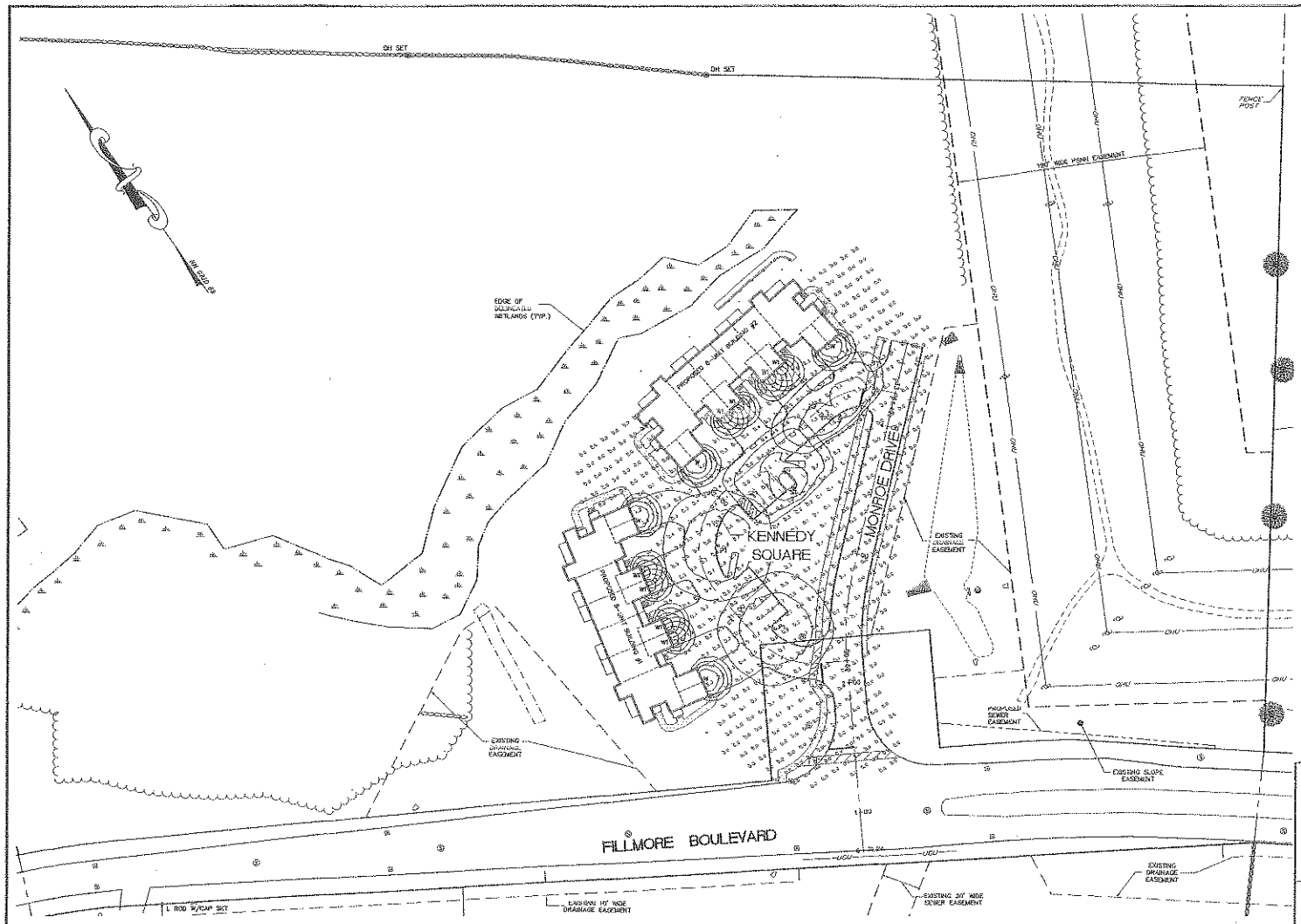
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

ROMY N. DIAZ-NOGUERAS
NEW HAMPSHIRE

REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 18, 2013 | SCALE: 1" = 40'
PROJECT NO: 12-1212-1 | SHEET 8 OF 20

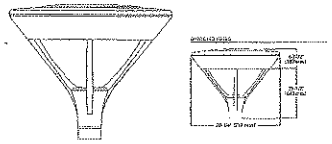


STAYAREA
PARKING AND DRIVE
MINIMUM: 0.1
AVERAGE = 0.19
MAXIMUM = 2.5
MINIMUM = 0.2
AVG./MIN. RATIO = 1.95
MAX./MIN. RATIO = 10.00

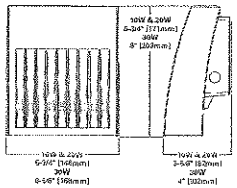
LUMINAIRE SCHEDULE

SYMBOL	QUANTITY	LABEL	MOUNTING	DESCRIPTION
	2	P1	SINGLE	MGA-SQ2-LED-[illegible]-3-3-[illegible]/ MTD 10' AFG
	1	S	SINGLE	MGA-SQ2-LED-[illegible]-3-3/ 15' POLE
	1	S1	SINGLE	MGA-SQ2-LED-[illegible]-3-3/ 15' AFG
	4	W	SINGLE	MGA-SQ2-LED-D-[illegible]-3-3/ 15' AFG
	8	W1	SINGLE	XTORIA/ WALL MTD 10' AFG

CONSTRUCTION NOTES:
1. SEE ELECTRICAL PLANS FOR ADDITIONAL INFORMATION REGARDING LIGHT INSTALLATION AND WIRING REQUIREMENTS.



INVUE MESA LED
SCALE: 1" = 800'±



LUMARK CROSSTOUR LED WALL PACK
SCALE: 1" = 800'±

DIG SAFE

LIGHTING PLAN

PRESIDENTIAL ESTATES

MAP 237; LOT 8-1
59 FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE
STRAFFORD COUNTY

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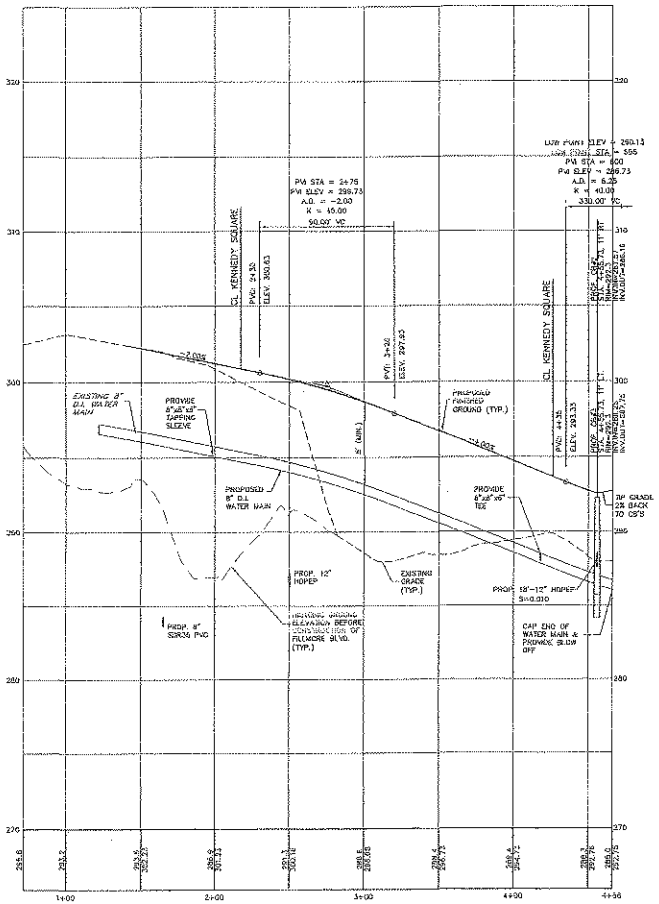
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

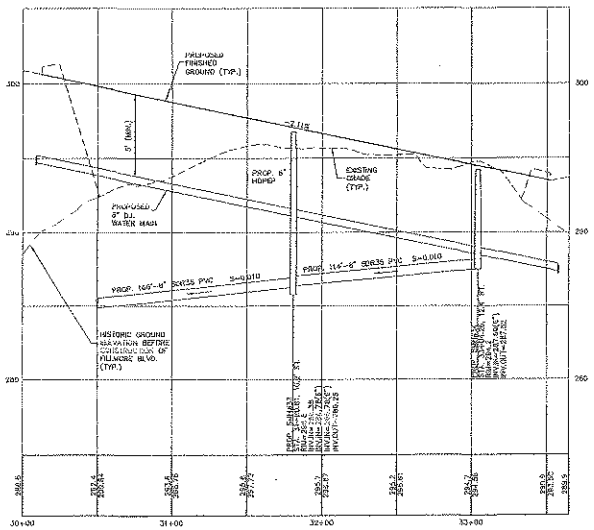
LICENSED PROFESSIONAL ENGINEER No. 11196

REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 18, 2013 | SCALE: 1" = 40'
PROJECT NO: 12-1212-1 | SHEET 9 OF 20



MONROE DRIVE ROADWAY PROFILE
SCALE: 1" = 40'(HORIZ.)
1" = 4'(VERT.)



KENNEDY SQUARE ROADWAY PROFILE
SCALE: 1" = 40'(HORIZ.)
1" = 4'(VERT.)

DIG SAFE
WELL TO UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM

ROADWAY PROFILES

PRESIDENTIAL ESTATES

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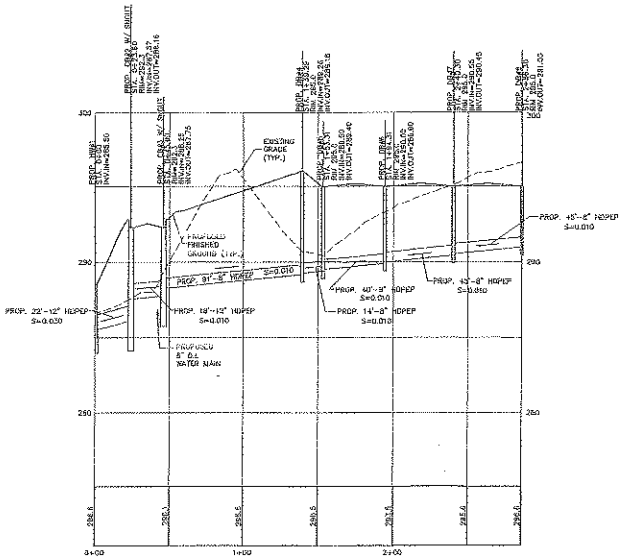
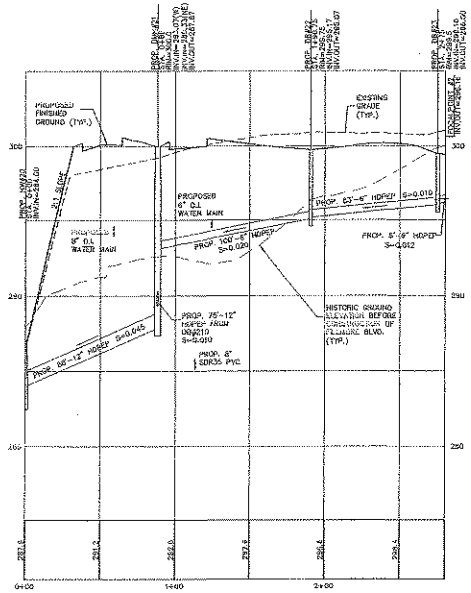
REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 18, 2013	SCALE: AS SHOWN
PROJECT NO: 12-1212-1	SHEET 10 OF 20



DRAINAGE PROFILE
(PROP. HW#1 TO PROP. DB#8)
SCALE: 1" = 40'(HORIZ.)
1" = 4'(VERT.)



DRAINAGE PROFILE
(PROP. HW#20 TO PROP. FOCALPOINT #2)
SCALE: 1" = 40'(HORIZ.)
1" = 4'(VERT.)

DIG SAFE
1-888-344-7233
MILLION GALLONS PLANT DRAINS INTO STORM

DRAINAGE PROFILES

PRESIDENTIAL ESTATES

MAP 237; LOT 8-1
59 FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE
STRAFFORD COUNTY

OWNER OF RECORD:	APPLICANT:
183 WASHINGTON STREET, LLC. 501 D.W. HIGHWAY, SUITE F MERRIMACK, NH 03054	183 WASHINGTON STREET, LLC. 501 D.W. HIGHWAY, SUITE F MERRIMACK, NH 03054

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

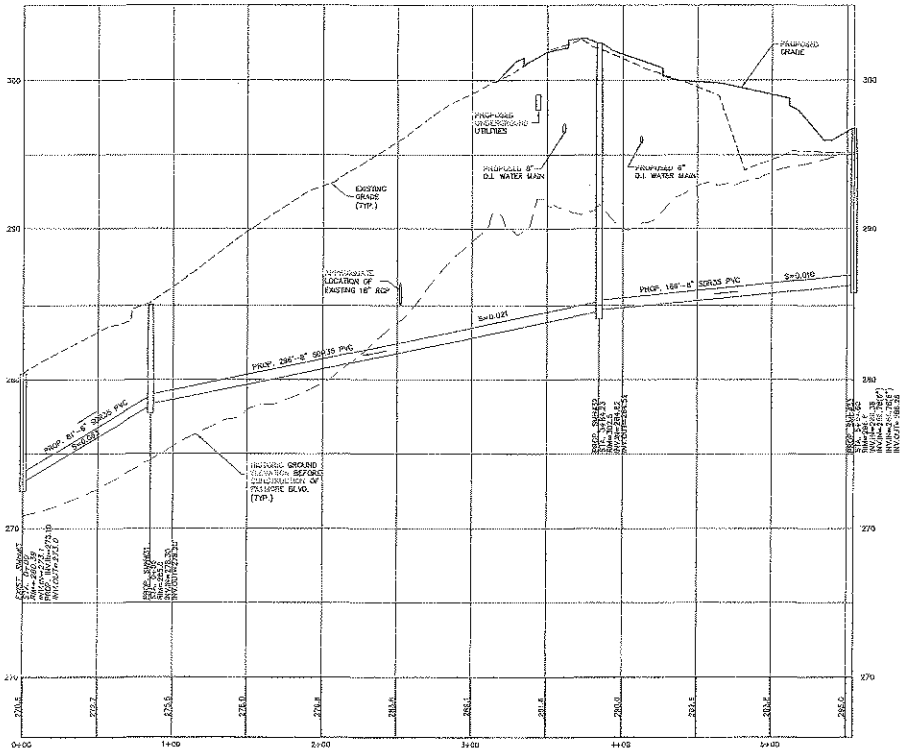
REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 18, 2013 | SCALE: AS SHOWN
PROJECT NO: 12-1212-1 | SHEET 11 OF 20

NOTES:

1. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF ROCHESTER, AND SHALL BE SUCH AS 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 ADOPTED 2010 ARE HEREBY INCORPORATED BY REFERENCE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION, AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 1-888-344-7233 AT LEAST 72 HOURS BEFORE DIGGING.



SEWER PROFILE
(EXIST. SMH#3 TO PROP. SMH#33)
SCALE: 1" = 40'(HORIZ.)
1" = 4'(VERT.)

DIG SAFE

SEWER PROFILE

PRESIDENTIAL ESTATES

MAP 237; LOT 8-1
59 FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE
STRAFFORD COUNTY

OWNER OF RECORD:	APPLICANT:
153 WASHINGTON STREET, LLC. 501 D.W. HIGHWAY, SUITE F MERRIMACK, NH 03054	153 WASHINGTON STREET, LLC. 501 D.W. HIGHWAY, SUITE F MERRIMACK, NH 03054

KNA KEACH-NORDSTROM ASSOCIATES, INC.
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REVISIONS

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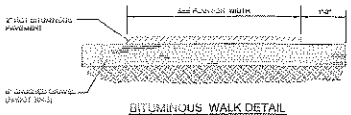
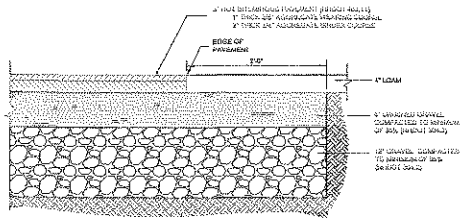
DATE: FEBRUARY 18, 2013 | SCALE: AS SHOWN
PROJECT NO: 12-1212-1 | SHEET 12 OF 20



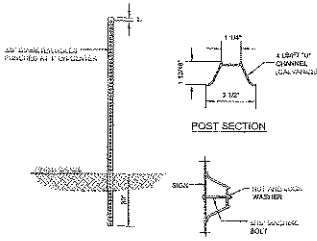
BITUMINOUS WALK DETAIL
NOT TO SCALE



DRIVEWAY AND PARKING LOT SECTION
NOT TO SCALE

HANDICAP PARKING SIGN DETAIL
NOT TO SCALE

STOP SIGN DETAIL
NOT TO SCALE



POST SECTION

POST

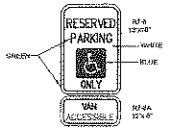
MOUNTING

NOTE:
POST SHALL CONFORM TO MANUAL 411.2.3

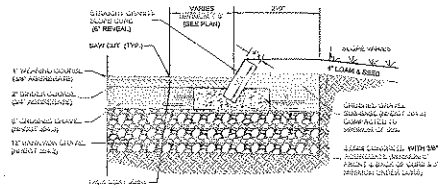
STEEL SIGN POST DETAIL
NOT TO SCALE

TRAFFIC SIGN NOTES:

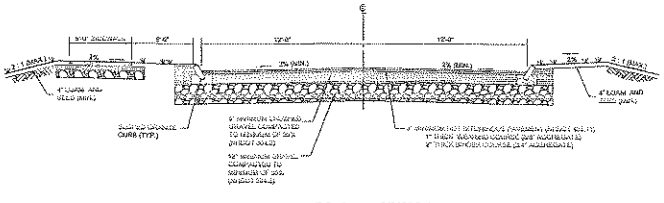
1. ALL TRAFFIC SIGN FACES AND SUPPORTS SHALL CONFORM WITH MUTCD.
2. ALL SIGN POST MOUNTS SHALL CONFORM WITH THE MOUNTING AND PRIDE SPECIFICATIONS.



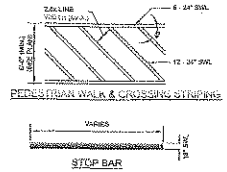
VAN ACCESSIBLE HANDICAP PARKING SIGN DETAIL
NOT TO SCALE



STRAIGHT GRANITE SLOPE CURB DETAIL
NOT TO SCALE

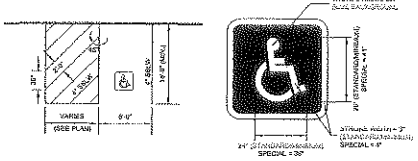


PRIVATE ROADWAY SECTION
NOT TO SCALE



PEDESTRIAN WALK & CROSSING STRIPING

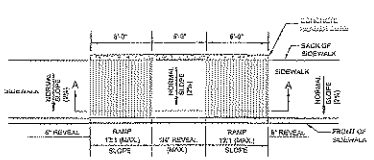
STOP BAR



HANDICAP STRIPING DETAIL
NOT TO SCALE

STRIPING NOTES:

1. ALL PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH STATE STANDARDS AND THE CURRENT EDITION OF MUTCD.
2. SHEETS OF LINE STRIPE AND MESSAGE SHALL BE FREE FROM SLAG SPATTER.
3. THE PAINT FILM THICKNESS OF A PAINTED LINE SHALL BE A MINIMUM OF 15 MILS THROUGHOUT THE ENTIRE WIDTH AND LENGTH OF LINE SPECIFIED.
4. OVERSPRAY SHALL BE KEPT TO A REASONABLE MINIMUM.



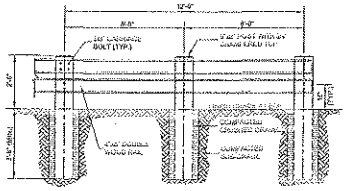
PLAN

SECTION A-A

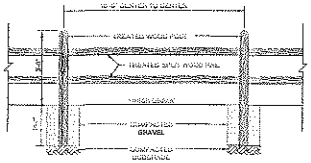
NOTES:

1. [illegible]
2. [illegible]
3. [illegible]

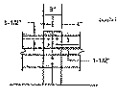
SIDEWALK RAMP
NOT TO SCALE
(JUNE 2013)



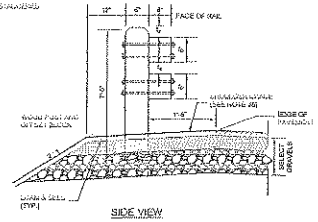
ELEVATION



SPLIT RAIL FENCE DETAIL
NOT TO SCALE



BOLT DETAIL

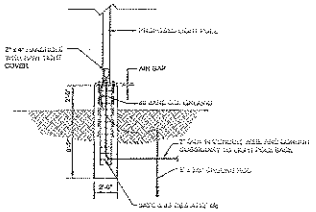


SIDE VIEW

NOTES:

1. ALL [illegible] SHALL BE PRESSURE TREATED.
2. [illegible]
3. ALL [illegible] SHALL BE FREE OF [illegible].

WOOD BEAM GUARDRAIL
NOT TO SCALE
(MARCH 2013)



CONCRETE LIGHT POLE BASE DETAIL
NOT TO SCALE
(MARCH 2013)

CONSTRUCTION DETAILS

PRESIDENTIAL ESTATES

MAP 237; LOT 8-1
59 FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE
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REVISIONS

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DATE: FEBRUARY 18, 2013 | SCALE: AS SHOWN
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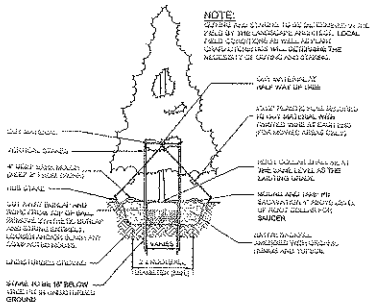
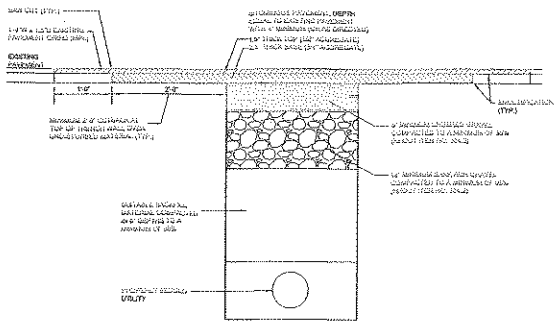
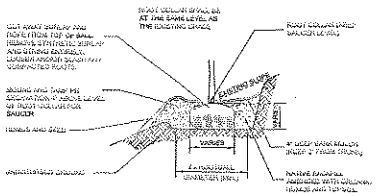


EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE
(JANUARY 2013)





TYPICAL PLANTING PIT ON SLOPE 4:1 OR GREATER
NOT TO SCALE
(JANUARY 2013)

TURF ESTABLISHMENT SCHEDULE

PURPOSE:

TO ESTABLISH AND MAINTAIN PERMANENT AND DENSE TURF AND/OR GRASSES GROWN TO EXISTING TURF AREAS DISTURBED DURING CONSTRUCTION AND CONTROL SOIL EROSION.

PREPARATION AND EXECUTION:

1. REMOVE THE BUILDING OF ALL AREAS TO BE MOWED AND ALLOW TO REMOVE RUBBISH, STONES, ROOTS AND STONES LARGER THAN 1 INCH.
2. PLACE LOAM ON AREAS TO BE SEEDED AND STRAW.
3. FINE GRADE SURFACE AND SUPPLEMENT WITH SUITABLE LOAM IN NEED NEEDED TO CREATE A UNIFORM SURFACE ACCORDING TO THE FINISH GRADES INDICATED. TOP AND BOTTOM OF SLOPES SHALL BE ROUNDED. NO LOAM SHALL BE SPREAD IN THE SUBGRADE IS EXCESSIVELY WET OR FROZEN.
4. 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 RAKE INTO THE UPPER 2 INCHES OF LOAM.
6. DETERMINE APPROPRIATE MIXTURE FOR AREA TO BE SEEDED BASED ON EXPOSURE OF INTENDED PLANTS. UNIFORMLY SPREAD THE SEED BY BROADCASTING OR HYDROSEEDING. IF BROADCASTING, LIGHTLY RAKE INTO THE PREPARED SURFACE AND ROLL. IF HYDROSEEDING, USE A THICK MIX RECOMMENDED RATE OF BROADCAST. AFTER SEED IS SPREAD, WATER THOROUGHLY WITH A FINE SPRAY.
7. SEEDING FOR PERMANENT COVER SHALL NOT BE MADE BETWEEN SEPTEMBER 15 AND OCTOBER 15 AND BETWEEN APRIL 15 AND JUNE 15. SEEDING SHALL NOT BE DONE DURING WINDY WEATHER, WHEN THE GROUND IS FROZEN OR EXCESSIVELY WET OR OTHERWISE UNTIMELY.
8. WITHIN 21 DAYS AFTER SEEDING OPERATION, UNIFORMLY SPREAD THE MULCH WITHIN ANCHOR MULCH ON ALL SLOPES EXCEEDING 3:1. FOLLOW MULCH INSTALL INSTALLED IN ACCORDANCE WITH THE MANUFACTURER.
9. PROTECT AND PERMANENT AGAINST RAINFALL, ANY WASH OUTS WHICH OCCUR SHALL BE PROMPTLY REPAIRED AND RESEEDED.
10. WHEN IT IS IMPRACTICAL TO ESTABLISH PERMANENT GROWTH ON DISTURBED EARTH BY OCTOBER 15, A TEMPORARY SEED BEARING SHALL BE USED. WHEN TEMPORARY MULCHING CANNOT ESTABLISH VIABLE GROWTH, THE DISTURBED AREA SHALL BE COVERED WITH SEA MULCHES OR MULCH FOR THE WINTER.

MATERIALS:

1. LOAM SHALL BE TOPSOIL SHALL BE FRIABLE, FERTILE, NATURAL FREE DRAINED LOAM, FREE OF ROOTS, GRASS, STONES, WEEDS, CLAY, SUB LOAMS, GRASS AND STONES LARGER THAN 2 INCHES IN ANY DIMENSION. SOIL SHALL NOT BE EXCESSIVELY ACID OR ALKALINE AND CONTAIN NO TOXIC RESIDUES.
2. LIME SHALL BE GROUND LIMESTONE CONTAINING NO LESS THAN 90% CALCIUM AND MAGNESIUM CARBONATES.
3. FERTILIZER SHALL BE PROVIDE COMMERCIAL GRADE.
4. SEED MIXTURE FOR LAWN AREAS SHALL BE 50% PURE LIVE SEED AND CONSIST OF THE FOLLOWING:

   30% CREEPING RED FESCUE
   20% KENTUCKY BLUEGRASS
   20% REDTOP
   20% NORMAL PERENNIAL RYEGRASS

5. HYDROSEED SEEDING MIXTURE SHALL BE AN APPROVED CONVERSATION GRASS CONSIST OF THE FOLLOWING:

   10% BUCKWHEAT OR SHELTER GRAIN GRASS
   30% KENTUCKY BLUE GRASS
   30% CREEPING RED FESCUE
   30% CARPET OR WEEPING LOVEGRASS
   10% NE 10 OR BLACK SAND LOVEGRASS
   10% VARIAN BROMGRASS TRIFOLIA

   BUCKWHEAT SPECIES TO BREAKOUT WHEREVER MORE SEEDING WITH THIS MIXTURE. IF HEDGING STRAW, A STRAWING AGENT SHALL BE USED. IF SEEDING WITH A HYDROSEEDER, USE FOUR TIMES THE RECOMMENDED AMOUNT OF INGREDIENT.

6. SEED MIXTURE FOR DEEPER WHERE SHALL BE 90% PURE LIVE SEED AND SHALL CONSIST OF THE FOLLOWING:

   30% CREEPING RED FESCUE
   40% PERENNIAL RYE GRASS
   10% REDTOP
   10% BROMGRASS TRIFOLIA

   IN ADDITION TO THE MIX SPECIFIED ABOVE, CROWN VETCH SHALL BE USED ON ALL SLOPES STEEPER THAN 2:1. CROWN VETCH SHALL BE APPLIED AT A RATE OF 50 POUNDS PER ACRE AND INOCULUM SPECIFIC TO CROWN VETCH MUST BE USED.

7. SEED MIXTURE FOR STORMWATER MANAGEMENT AREAS, INCLUDING DETENTION BASINS AND VEGETATED TREATMENT SWALES SHALL CONSIST OF THE FOLLOWING:

   20% CREEPING RED FESCUE
   10% SWITCH GRASS
   10% FOX SEDGE
   10% CREEPING BENTGRASS
   10% FLATPEA
   20% WILD LUPINE (ARNETT)

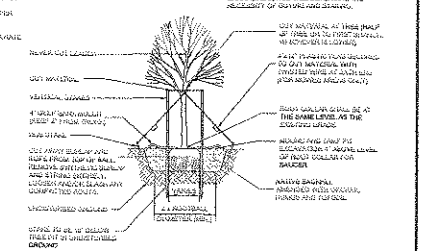
8. HAY USED FOR MULCH SHALL CONSIST OF MOWED AND PARTIALLY CURED GRASS OR LEGUME MIXTURES, FREE FROM WEEDS, TWIGS, SLUDGE OR OTHER OBJECTIONABLE MATERIAL AND NOT OR MOLD.

MAINTENANCE:

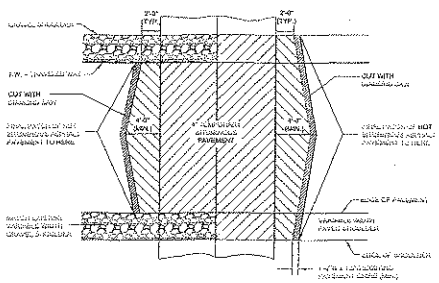
ALL SEEDED AREAS SHALL BE KEPT WATERED AND IN GOOD CONDITION. RESEED AS NECESSARY TO ESTABLISH A TURF OR GRASS GROWTH OVER THE ENTIRE SEEDED AREA. MAINTAIN SEEDED AREAS IN AN APPROVED CONDITION UNTIL FINAL ACCEPTANCE. MAINTENANCE SHALL INCLUDE REPAIRS FOR DAMAGE CAUSED BY EROSION.

APPLICATION RATES:

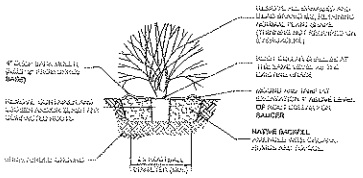
1. LOAM SHALL BE APPLIED IN A MINIMUM COMPACTED THICKNESS OF 4 INCHES.
2. LIME SHALL BE APPLIED AT A RATE OF 75 TO 100 POUNDS PER 1000 SF.
3. FERTILIZER SHALL BE APPLIED AT A RATE OF 20 POUNDS PER 1000 SF.
4. SEED MIXTURE FOR LAWN AREAS SHALL BE APPLIED AT A RATE OF AT LEAST 90 POUNDS PER ACRE OR 2 POUNDS PER 1000 SF.
5. NONFORMATE SEED MIXTURE SHALL BE APPLIED AT A RATE OF 25 POUNDS PER 1000 SF.
6. SEED MIXTURES FOR SLOPE AREAS SHALL BE APPLIED AT A RATE OF 50 POUNDS PER ACRE OR 1.2 POUNDS PER 1000 SF.
7. SEED MIXTURE FOR STORMWATER MANAGEMENT AREAS SHALL BE APPLIED AT A RATE OF 25 POUNDS PER ACRE, OR 1 POUNDS PER 1000 SF.
8. MULCH SHALL BE APPLIED AT A RATE OF 2 TO 3 TONS PER 1000 SF.



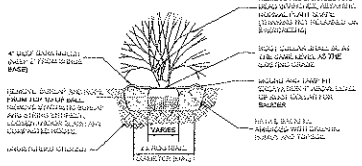
DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE
(JANUARY 2013)



PERMANENT PAVEMENT REPAIR
NOT TO SCALE
(JANUARY 2013)



CONTAINER SHRUB PLANTING DETAIL
NOT TO SCALE
(JANUARY 2013)



BALLED & BURLAP SHRUB PLANTING DETAIL
NOT TO SCALE
(JANUARY 2013)

CONSTRUCTION DETAILS

PRESIDENTIAL ESTATES

MAP 237; LOT 8-1
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ROCHESTER, NEW HAMPSHIRE
STRAFFORD COUNTY

OWNER OF RECORD:	APPLICANT:
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REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 18, 2013 | SCALE: AS SHOWN
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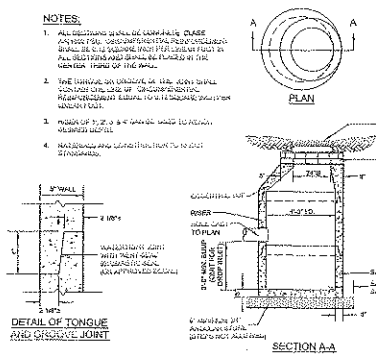
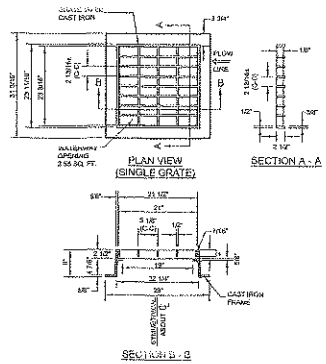
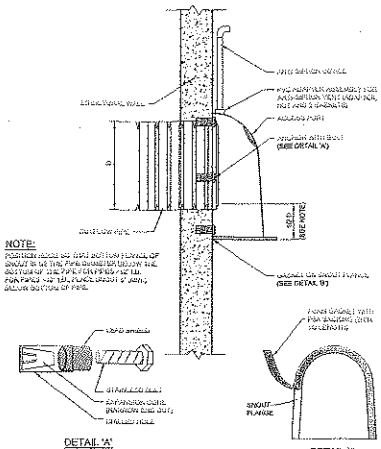


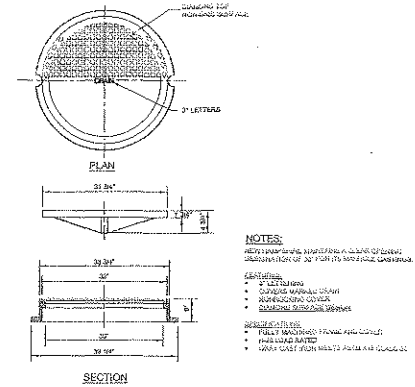
PRECAST REINFORCED CATCH BASIN
NOT TO SCALE
(MAY 2012)



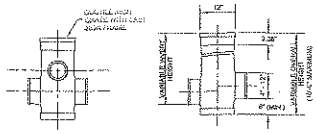
TYPE B FRAME & GRATE DETAIL
NOT TO SCALE
(MARCH 2006)



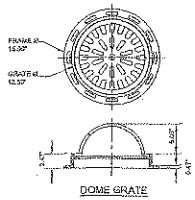
SNOUT OIL AND DEBRIS STOP DETAIL (OR EQUAL)
NOT TO SCALE
(MARCH 2006)



DRAIN MANHOLE FRAME AND COVER DETAIL
NOT TO SCALE
(MARCH 2012)

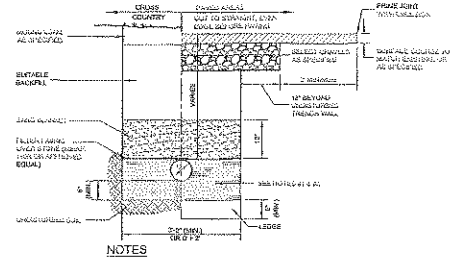


12" DRAIN BASIN
NOT TO SCALE
(MARCH 2006)

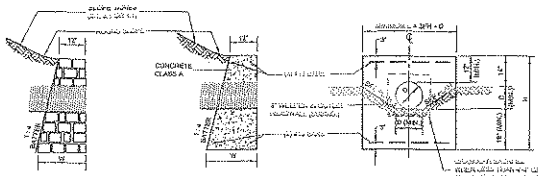


DOME GRATE

NYLOPLAST 12" GRATES
NOT TO SCALE

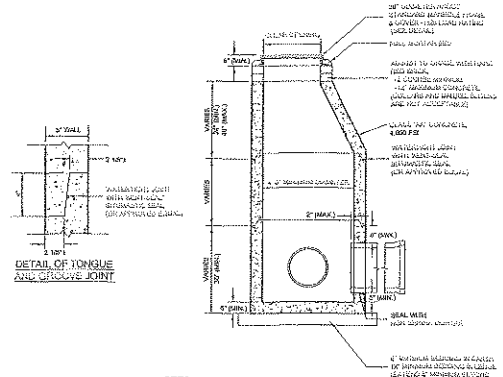


STORM DRAINAGE TRENCH DETAIL
NOT TO SCALE
(MARCH 2006)



NOTE:

MORTAR RUBBLE MASONRY AND CONCRETE HEADWALLS
NOT TO SCALE
(MARCH 2006)



NOTES:

PRECAST REINFORCED DRAIN MANHOLE DETAIL
NOT TO SCALE
(MARCH 2006)

CONSTRUCTION DETAILS

PRESIDENTIAL ESTATES

MAP 237; LOT 8-1
59 FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE
STRAFFORD COUNTY

OWNER OF RECORD:	APPLICANT:
153 WASHINGTON STREET, LLC 501 D.W. HIGHWAY, SUITE F MERRIMACK, NH 03054	153 WASHINGTON STREET, LLC. 501 D.W. HIGHWAY, SUITE F MERRIMACK, NH 03054

KMA KEACHE-MORRISTROM ASSOCIATES, INC.
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REVISIONS

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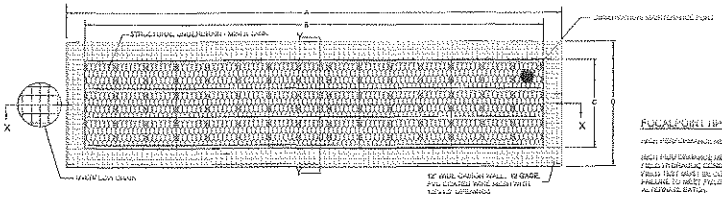
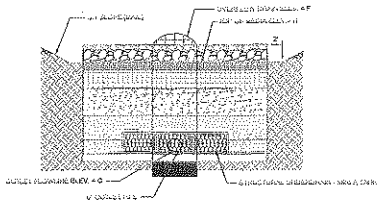


PLAN VIEW - WITH GABION WALL UPSTREAM OF SYSTEM



SECTION Y-Y

FOCALPOINT CONSTRUCTION GUIDE
NOT TO SCALE

FOCALPOINT TIP PERFORMANCE SPECIFICATION:

HIGH PERFORMANCE MEDIA:

HIGH PERFORMANCE MEDIA MUST MEET A MINIMUM OF TIN PER FORM 24 ELIMINATIONS.
FIELD HYDRAULIC CONDUCTIVITY TESTING MUST BE CONDUCTED WITH NO SIGNS OF BREAKTHROUGH.
FIELD TEST MUST BE CONDUCTED WITH PHOSPHORUS INFLUENT WATER MIX (SEE SPECIFICATION).
FAILURE TO MEET TWO FIELD TESTS WILL RESULT IN THE REMOVAL OF MEDIA AND REPLACEMENT FROM ALTERNATE SOURCE.

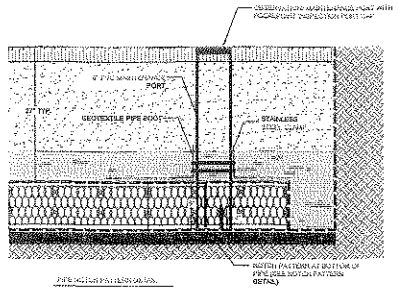
HIGH PERFORMANCE STRUCTURAL UNDERDRAINS:

MUST HAVE A MINIMUM OF 15 SQUARE FEET PER FOOT OF UNDERDRAIN OPENING PER SQUARE FOOT.
MUST MEET HDPE LOADING REQUIREMENTS.
MUST BE MODULAR IN NATURE AND ASSEMBLED ON-SITE.
MUST HAVE MINIMUM 36" INTERIOR WIDTH.

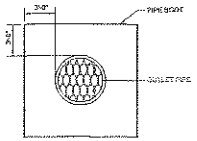
FOCALPOINT TIP CONSTRUCTION GUIDE

		#1	#2
A	FOCALPOINT LENGTH	18.08'	9.54'
B	# UNDERDRAIN LOWS	4	3
C	FOCALPOINT WIDTH	4.82'	4.82'
D	# UNDERDRAIN WIDE	2	2
F	OVERFLOW ELEVATION	*285	*280.5
G	OUTLET FLOWLINE	284.44	278.16
H	TOP OF MEDIA	284.09	278.79
I	TOP OF GABION (OPTIONAL)	284.59	279.29

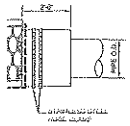
* OVERFLOW PIPE EXISTS BY EARTH WEIR
** OVERFLOW PROVIDED BY GABION



FOCALPOINT OBSERVATION PORT DETAIL
NOT TO SCALE

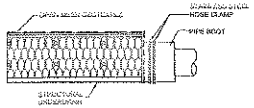


FRONT VIEW

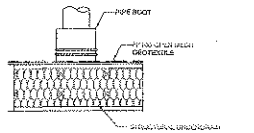


SIDE VIEW

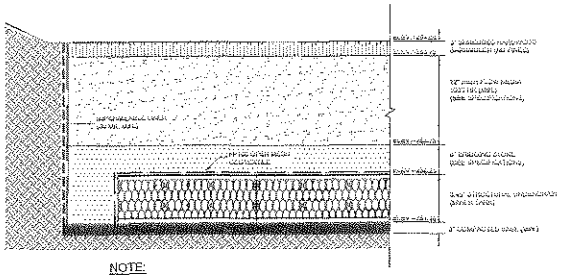
PIPE BOOT DETAIL
NOT TO SCALE



OUTLET/INLET PIPE CONNECTION
NOT TO SCALE

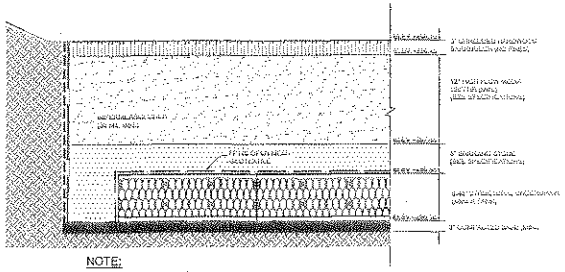


OBSERVATION/ MAINTENANCE PORT CONNECTION
NOT TO SCALE



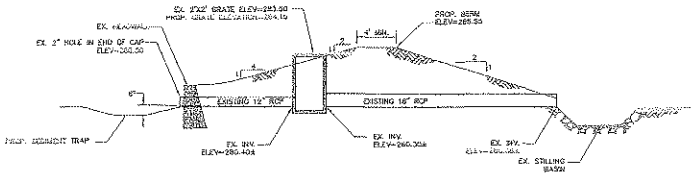
NOTE:
1. INSTALL ONE OBSERVATION/ MAINTENANCE PORT IN BOX.

FOCALPOINT #1 DETAILED CROSS SECTION
NOT TO SCALE



NOTE:
1. INSTALL ONE OBSERVATION/ MAINTENANCE PORT IN BOX.

FOCALPOINT #2 DETAILED CROSS SECTION
NOT TO SCALE



DETENTION POND OUTLET CONTROL STRUCTURE
NOT TO SCALE

CONSTRUCTION DETAILS

PRESIDENTIAL ESTATES

MAP 237; LOT 8-1
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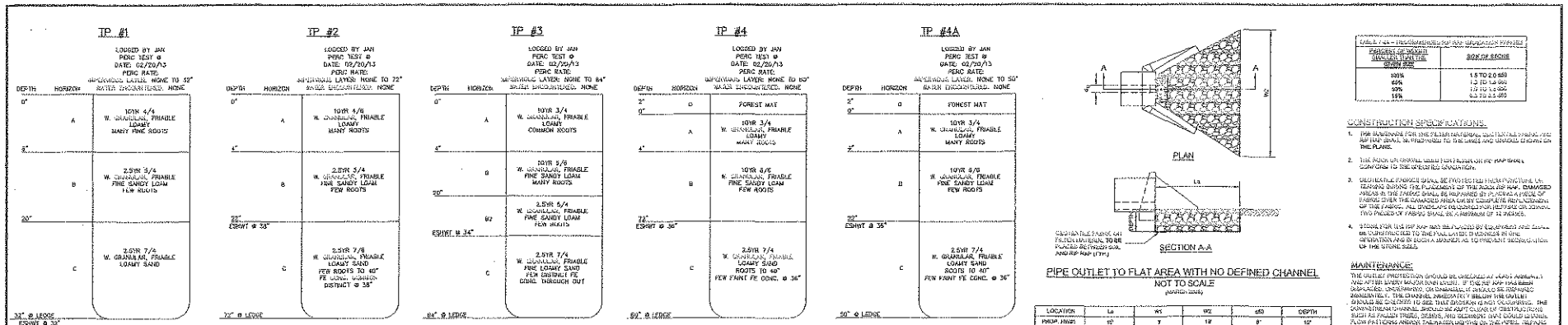


PIPE OUTLET TO FLAT AREA WITH NO DEFINED CHANNEL
NOT TO SCALE
(MARCH 2008)

LOCATION	La	W1	W2	d50	DEPTH
PROP. PIPES	10'	7	18'	6"	12"
PROP. PIPES	16'	9'	12'	6"	18"
PROP. PIPES	20'	9'	11'	6"	18"
PROP. PIPES	28'	9'	22'	6"	18"

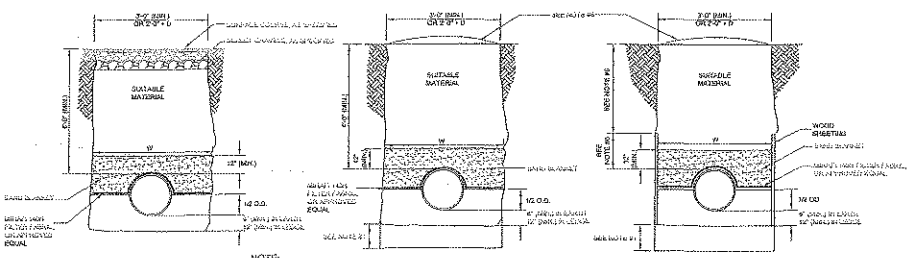
TABLE 7.4A – RECOMMENDED RIP RAP GRADATION RANGES	
PERCENT OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE
100%	1.5 TO 2.0 d50
85%	1.3 TO 1.8 d50
50%	1.0 TO 1.5 d50
15%	0.5 TO 0.8 d50

CONSTRUCTION SPECIFICATIONS:

1. THE SUBGRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE RIP RAP OR GRAVEL MUST FIT CLOSELY ON THE RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
3. GEOTEXTILE FABRIC SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE 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 OR JOINTS MUST BE MADE WITH TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
4. STONE FOR THE RIP RAP MUST BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LINES, DIMENSIONS IN THE GRADATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.

MAINTENANCE:

THE OUTLET PROTECTION SHOULD BE CHECKED AT YEARLY INTERVALS AND AFTER EVERY MAJOR RAIN EVENT. IF DAMAGE HAS HAS BEEN DISPLACED, UNDERMINED, OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET 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 SEDIMENT THAT COULD DEVIATE FLOW PATTERNS AWAY FROM BEGINNING OF THE APRON. DEBRIS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION APRON.



FOR CONSTRUCTION IN ROADS, ROAD SHOULDER AND WALKWAYS

NOTE:
BEDDING SHOULD BE ON AND BACKFILL MATERIAL DEPTH OR TRENCH EXCAVATION, WHICHEVER IS GREATER

CROSS COUNTRY EARTH CONSTRUCTION

CROSS COUNTRY EARTH CONSTRUCTION WITH SHEETING

SANITARY SEWER TRENCH DETAIL
NOT TO SCALE
(MARCH 2011)

NOTES:

1. UNDERCUT EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. INSTALL WITH BEDDING MATERIAL, AS SEE NOTE #7.

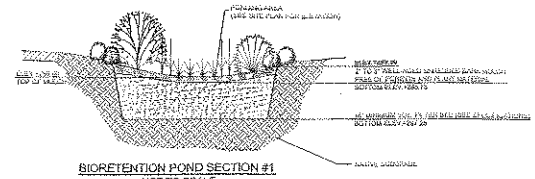
   ALTERNATE: UNDERCUT STONE FREE FROM LARGE, HARD, UNCRUSHED STONE AND MEETING AS CLOSE TO STONE SIZE NO. 67.

   NEW PAVEMENT 1 INCH OVERLAY
   25 - NEW PAVEMENT 24 INCH BELOW
   30 - NEW PAVEMENT 36 INCH BELOW
   0 - NEW PAVEMENT 4 SEWER
   0 - EX. PAVEMENT 4 SEWER

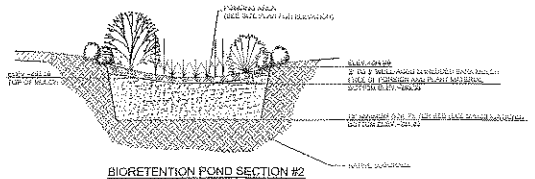
   WHERE EXISTING EX. THE CONTRACTOR TO OTHERWISE THE PREPARE SOIL UNDERCUT OTHERWISE SHOWN, AS PER TO THE STRUCTURE SHALL BE USED.

2. SAND BEDDING: UNDERCUT SAND FREE FROM BORDERING MATERIAL SO THAT 100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 10% WILL PASS A #200 SIEVE. BEDDING MAY BE OMITTED FOR PVC PIPE, DUCTILE IRON AND IRON GRADE CONCRETE PIPE PROVIDED, HOWEVER, THERE MUST BE SOME UNIFORM TYPE 3 BEDDING TO BE COMPACT WITH THE PIPE.
3. BEDDED IN NEW PAVEMENT AREAS, OR PAVEMENT SHOULD BE INSTALLED ABOVE PIPE.
4. BACKFILL & MATERIAL: IN ROADS, ROAD SHOULDERS, SIDEWALKS AND COVERED WITH PAVEMENT MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL NATURAL EXCAVATED SUITABLE THE DEPTH OF CONSTRUCTION, NO STONE EXCEEDING 6 INCHES, FREEZE OF PAVEMENT, ORGANIC MATTER, POP SOIL, ALL NOT OR SOFT MUCK, PEAT OR CLAY. ALL EXCAVATED LOOSE MATERIAL AND ALL ROCKS OVER 6 INCHES IN LARGEST DIMENSION OR OTHER MATERIAL WHERE IS DETERMINED BY THE ENGINEER WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION.

   IN CROSS COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS EXCAVATED ABOVE, EXCEPT THAT THE ENGINEER MAY REJECT ROCKS OF THE SOIL, LOAMY MATERIAL OR PIECES IN DIMENSION AS DETERMINED THAT THE COMPLETED CONSTRUCTION WILL BE ULTIMATELY STABLE AND PROVIDED THAT EACH PIECE TO THE SEWER WILL BE PROVIDED BY THE MAINTENANCE AND FLEXIBILITY RECONSTRUCTION, WHEN NECESSARY.
5. BASE COURSE: IN CONSTRUCTION BY THE CONTRACTOR SHALL MEET THE REQUIREMENTS OF DIVISION 300 AND 26 AND WATER MATERIAL OF THE "STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION" OF THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS.
6. WHERE IN SECTION 7 OF ADDITIONAL WORK IS PLACED ALONGSIDE THE PIPE AND EXCAVATED BELOW THE PIPE, THE PIPE SHALL BE SET AND MAY BE PLACED TO AN ELEVATION NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE. WHEN DIRECTED BY THE ENGINEER, IN THE PLACEMENT OF THE PIPE, IT SHALL BE SET ON AT LEAST 6 INCHES MINIMUM OF GRAVEL, BUT NOT LESS THAN 12 INCHES ABOVE THE TOP OF THE PIPE.
7. IN A SEWER TRENCH WITH A TRENCH WIDTH OF 3 FEET OR 1 FOOT ABOVE THE PIPE, FOR PIPES 18 INCHES IN DIAMETER OR LESS, IN SHALL BE NO MORE THAN 18 INCHES. FOR PIPES GREATER THAN 18 INCHES IN DIAMETER, IN SHALL BE 1 FOOT MORE THAN PIPE DIAMETER. IN SHALL ALSO BE THE PAYMENT MADE FOR LEDGE EXCAVATION AND FOR UNDERCUT EXCAVATION BELOW GRADE.
8. FOR CROSS COUNTRY CONSTRUCTION, STAKES OR FILL SHALL BE REMOVED TO A DEPTH OF 2 FEET BELOW THE GROUND SURFACE.
9. NEW PAVEMENT SHALL BE PLACED IN ACCORDANCE WITH DIVISION 300 STANDARDS REGARDING 10 FEET OF DEPARTURE AS PAVEMENT MATERIAL, DEPTH, THICKNESS, BASE CONSTRUCTION REQUIRED, OR OTHERWISE WITHIN THE PAVEMENT REMOVED, PAVEMENT APPROXIMATELY PAVEMENT, AND LESS THAN 10 FEET HORIZONTALLY FROM THE PROPOSED SEWER CONSTRUCTION AND WHERE, IT IS NOT PRACTICAL TO PRESERVE THE SURFACE, A DEPARTURE MAY BE GRANTED PROVIDED THAT THE SEWER IS CONSTRUCTED IN ACCORDANCE WITH THE PROPER MAIN CONSTRUCTION TECHNOLOGY SPECIFIED BELOW.
   A. FOR CLEANING SHALL BE CONSTRUCTED FROM SUITABLE FILL, FINE DENSITY BOULDERS, OR SYC PER ASTM 1556 (ASTM).
      THE SHALL COMPACTION TO NATURAL AS GRANTED STATES AS NOTED SHALL CONFORM TO AS OF LOOSE CAN.
      IS SHALL BE CONSIDERED ASTM ACTED IN CONFORMS ENVIRONMENTS.
10. MATERIAL TRANSPORTED AND SEWER MAKE SHALL THAT SHALL CONTAIN AN REPRODUCIBLE PURPOSE AND THE WATER MAKE SHALL MAKE AS LEAST 18 INCHES ABOVE THE SEWER. FURTHER, THE SEWER MAKE SHALL BE LOCATED AT LEAST 6 FEET HORIZONTALLY FROM THE WATER MAIN.
11. ALL MATERIALS AS SPECIFIED IN SECTION 7, OR EQUAL, SHALL MEET APPROVED SPECIFICATIONS CONSTRUCTION SHEET AND MEET.
12. UNLESS OTHERWISE NOTED, ALL GRANULAR MATERIAL SHALL BE PACKED IN 12" LIFTS AND COMPACTED TO 95% OF THE MODIFIED PROCTOR TEST.
13. WHERE TRANSPORTS CROSS UNDER SEWER MAKE, BOTH THE SANITARY WATER MAKE SHALL BE PROVIDED PROPERTIES FOR DRY WATER MAKE FOSTER PERFORMANCE LEVEL AS AT 10 TIMES DESIGN PRESSURE OR 150 PSI, WHICHEVER IS GREATER, POSITIVE CONTROL OF 18 FEET OF THE GROUND FOREST AND OF MINIMUM VERTICAL SEPARATION.
14. SEWERS PER SEWER TESTING:
   A. GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY THE USE OF LOW-PRESSURE AIR TESTS.
   B. LOW PRESSURE AIR TESTING SHALL BE BY LOW SEWERS WITH:
      1. ASTM F 1417 TESTING STANDARD NOT MENTIONS FOR WATER EXCAVATION ROAD TRACE OF PLASTIC GRAVITY SEWER LINES USING LOW PRESSURE AIR, OR
      2. USE SHALL FOR PIPE ASSOCIATION UNDER LOW PRESSURE AIR TESTING OF PRESSURED SEWER PIPE (TBM).
   C. ALL NEW GRAVITY SEWERS SHALL BE CLEANED AND VISUALLY INSPECTED AND SHALL BE FREE TO LINE AND GRADE FOLLOWING INSTALLATION AND PRIOR TO USE.
   D. ALL PLASTIC SEWER PIPE SHALL BE EXPOSED FOR TESTING NOT LESS THAN 30 DAYS FOLLOWING INSTALLATION.
   E. THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE STRUCTURE SHALL BE 7.5 PERCENT OF AVERAGE SEWER DIAMETER.



BIORETENTION POND SECTION #1
NOT TO SCALE



BIORETENTION POND SECTION #2
NOT TO SCALE

NOTE:
TEST PIT FOR SHALL TEST PIT FOR ELEVATION, CONTROL THE EXPOSURE IN ACTUAL ARE INSTALLED AND THE CONTRACTOR SHALL ALL AREA IS STABILIZED.

SUBSTRATE MATERIAL	PERCENT OF MIXTURE BY VOLUME	GRADATION OF MATERIAL	
		SIEVE NO.	PERCENT BY WEIGHT PASSING SIEVE (%)
	FILTER MEDIA UP TO 24"		
ASTM C-33 UNIFORM FINE SAND	50 TO 55		
LOAMY SAND TOPSOIL, WITH LESS OR EQUAL	20 TO 30	200	15 TO 25
MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH, WITH LESS OR EQUAL	20 TO 30	200	45
	FILTER MEDIA UP TO 6"		
MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH, WITH LESS OR EQUAL	20 TO 30	200	45
	20 TO 30	10	80 TO 100
LOAMY COARSE SAND		20	70 TO 100
		60	15 TO 45
		200	0 TO 15

CONSTRUCTION DETAILS

PRESIDENTIAL ESTATES

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STATE OF NEW HAMPSHIRE JAN DEPUTY NO. 11776 LICENSED PROFESSIONAL ENGINEER

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DATE: FEBRUARY 18, 2013 | SCALE: AS SHOWN
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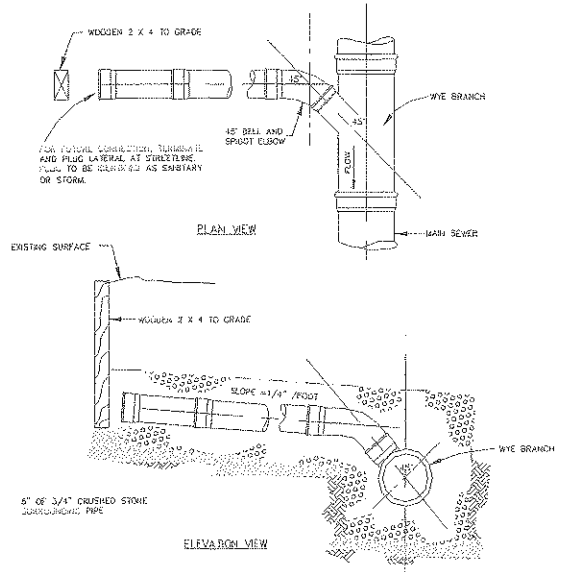
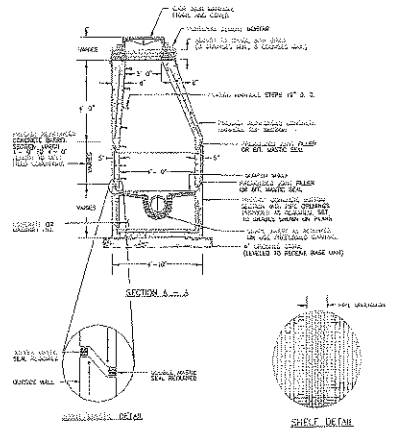
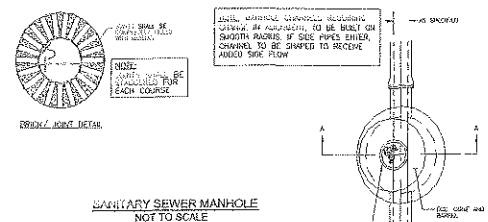


NOTES:

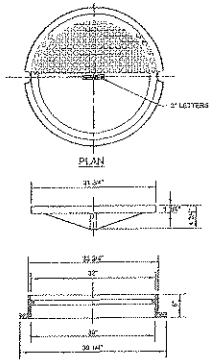
1. MINIMUM SIZE PIPE FOR UNIT DWELLING SHALL BE 4 INCHES UNLESS OTHERWISE NOTED. MINIMUM SIZE FOR STREET SEWER LINES SHALL BE 8 INCHES.
2. PIPE AND JOINT MATERIALS:
   A. SANITARY SEWER PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION (AWWA):
      1. AWWA C151/A21.51-96 - FOR DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL OR SAND-LINED MOLDS, FOR WATER OR OTHER LIQUIDS;
      2. AWWA C900/C905-97 - FOR PRESSURE DESIGN OF DUCTILE IRON PIPE AND WITH INSTALLATION IN UNSTABLE SOIL CONDITIONS;
      3. JOINTS SHALL BE MECHANICAL, PUSH-ON OR BELL AND SPIGOT TYPE.
   B. PLASTIC GRAVITY SEWER PIPE AND FITTINGS SHALL COMPLY WITH THE FOLLOWING STANDARDS:
      1. ASTM D3034-94a - PVC SOLID WALL;
      2. AT LEAST 10 INCH AT 8" PIPE DIAMETER (SDR 35) AND AS NECESSARY IN ACCORDANCE WITH ASTM D2321 TO DEPTHS NEAREST FEASIBLE; AND
      3. JOINT SEALS FOR FITTINGS SHALL BE ON SMALL PIPE CONFORMING TO ASTM D3212 "EMPLOYING NATURAL CORE GASKETS TO ASTM D2212 PACKAGED AND SHALL BE PUSH ON BELL AND SPIGOT TYPE.
3. GRAVITY PIPE SHALL BE INSTALLED AND BACKFILLED FROM THE END MAIN.
4. JOINTS SHALL BE DEPENDENT UPON PROPER ALIGNMENT AND WATER TIGHT WATER TIGHTNESS. ANY NON-CONFORMING OR IMPERFECT MATERIAL WITH THE PIPE MATERIALS USED. WHERE DEFECTIVE MATERIALS ARE TO BE CONNECTED, AS IN THE STREET SEWER AND ON THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTORS SHALL BE USED.
5. ALL NEW CONNECTIONS SHALL BE CONSTRUCTED AS SHOWN ON THE DRAWINGS. IN EXISTING CONSTRUCTION WHERE A HOLE OR WYE BRANCH AVAILABLE THE INTERCONNECTION SHALL BE MADE BY CAREFULLY THE MANUFACTURER'S INSTRUCTIONS USING ADJUSTABLE COUPLER OR SPIGOT-CHARACTER MARKED, PAPPLIED WITH A GENERATOR SPIGOT OR SIMILAR DEVICE IN THE MANNER THE MANUFACTURER RECOMMENDS AND WITH A SUITABLE PACKER, APPLYING CONTROLLED HEAT TO SEAL THE CONNECTION OR ANY OTHER SIMILAR CHARACTERISTICS AS MAY BE PERMITTED. SPECIAL CONNECTIONS SHALL BE CONCRETE, CALKED & DIRECTED BY THE AUTHORITY CONTROL SUPERVISION ONLY.
6. PIPE BEDDING:
   A. THE PIPE SHALL BE BEDDED, PLACED AND JOINED IN ACCORDANCE WITH THE CONDITIONS OF THE APPROPRIATE WATER PRACTICE.
   B. PIPE SHALL BE CAREFULLY BEDDED ON A FOUNDATION OF CRUSHED STONE AROUND GRAVEL.
   C. BEDDING SHALL BE FELT FOR A DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE. SHALL BE CARED FOR AND COMPACTED. DEPTH IS FIXED ON THE APPROPRIATE MEASUREMENT DRAWING.
   D. THE PIPE SHALL BE LAID IN A CONTINUOUS AND UNIFORM GRADE FROM THE STREET SEWER CONNECTION TO THE HOUSE FOUNDATION AT A GRADE OF NOT LESS THAN 1% (1 INCH PER FOOT).
   E. PIPE JOINTS MUST BE SEAL UNDER ALL CONDITIONS. IF MATERIAL PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.
7. TESTING: THE COMPLETED HOUSE SEWER SHALL BE SUBJECTED TO A LEAKAGE TEST PRIOR TO THE FOLLOWING MANNER, (PRIOR TO BACKFILLING):
   A. AN ABBREVIATION THE SHALL BE PROVIDED AS SHOWN AND FIRST HOLES FOR TESTING. AN INFLATABLE BLOCKER OR PLUG SHALL BE INSERTED INTO THE PIPE IN THE SEWER AT THE TEE. AFTER DIVISION, WATER SHALL BE INTRODUCED INTO THE SYSTEM ABOVE THE FOOT TO A HEIGHT OF 6 FEET ABOVE THE LEVEL OF THE PLUG.
   B. THE PIPE SHALL BE LEFT EXPOSED AND UNBROKEN FOR 24 HOURS. WITH WATER TO SATURATE AN INFINITY AS POSSIBLE, THE TRENCH CONTRACTOR ON, IF THE TRENCH IS FULL THE GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. INSPECTIONS FOR LEAKS SHALL BE MADE. A PROBE TO BE CLEAR OUT WITH A FLASHLIGHT.
   C. ANY INCONSISTENCIES OVER SHALL BE CHANGED INTO THE TRENCH OVER THE PIPE. IF THE BRANCH IS DRY, THE PIPE SHALL BE LIBERALLY FLOODED WITH WATER, OR IF THE BRANCH IS WET, GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. OBSERVATION FOR LEAKS SHALL BE MADE BY THE FIRST CONTRACTOR'S REPRESENTATIVE.
   D. LEAKAGE OBSERVED IN ANY OF THE ABOVE TESTS SHALL BE CORRECTED FOR NON-ALLOWED LEAKAGE. THE PIPE SHALL BE DRY OR, IF NECESSARY, AND RE-TEST SHALL BE REPEATED UNTIL ACCEPTABLE.
8. MAINTENANCE CONNECTIONS, INSTALLING SANITARY WASTE FLOW FROM CLOSETS, SINKS, LAUNDRY, ETC. PIPES, DEPENDENT ON, HOUSE LEAKING, WATERING DRAINS, SUMP PUMPS OR ANY OTHER SIMILAR CONNECTION CONTAINING RAINWATER, GROUNDWATER OR UNCLEAN WATER, SHALL NOT BE PERMITTED.
9. WATER SERVICE SHALL NOT BE LAID IN THE SAME TRENCH AS THE SEWER. SERVICE LINES INTERSECT AND OPTIMIZED TO THE SEWER TRENCH. NECESSARY, THE WATER SERVICE SHALL BE PLACED ABOVE AND TO THE SIDE OF THE SEWER SERVICE, AS SHOWN.
10. ELEVATIONS: THE LOCATION OF THE WYE SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A TEMPORARY BENCH MARK SHALL BE PLACED ON THE WYE IN ACCORDANCE WITH THE BENCH PLAN AND PROFILE DRAWINGS.
11. CONNECTIONS: CONNECTIONS AND CONSTRUCTION OF THE PIPE, ANY REPAIRS, AND WARRANTY FROM A FIRST SHALL BE PROVIDED WITH ANNUAL DEPOSIT BY CHECKING THE FITTINGS AND INSPECTION PERFORMED CONCRETE OF 10 SPEED OF VERTICAL RISE ON A SLOPE BE DESIGNED BY PROPER INCHES AS LONG AS IT CONNECTS OR PROVIDED SHALL CONSTRUCTION FROM SELF PROJECTED PROJECTS PIPE PENETRATION AND IT IS IN ACCORDANCE WITH THE APIS.
12. UNUSED SEWER WYE INSTALLED STANDARD WYE SHALL BE PLUGGED BY 12" MORTAR OUTER AND CONCRETE TO MAKE THE SEWER PIPE FOR TEST SEWER.

SANITARY SEWER SERVICE DETAIL
NOT TO SCALE





SANITARY SEWER MANHOLE
NOT TO SCALE



NOTES:

THE MANHOLE MUST HAVE A CLEAR OPENING DIMENSION OF 22" TO ALLOW MANHOLE COVERING.

FEATURES:
- FLAT BOTTOM
- STATING WATER SEWER
- MANHOLE RING COVER
- SEWER SYSTEM BRANCH

MATERIAL REQUIRED:
- PUBLIC WORKS FORM AND COVER
- FOR MANHOLE
- SEWER CAST IRON MEETS ASTM A48 CLASS 30

SEWER MANHOLE FRAME AND COVER DETAIL
NOT TO SCALE

NOTES: (NH DES ENV WQ700 - 2006)

1. ALL COMPONENT PARTS OF MANHOLE STRUCTURES SHALL HAVE THE STRENGTH, DURABILITY AND STRUCTURAL INTEGRITY FOR THE INTENDED SERVICE.
2. MANHOLE STRUCTURES SHALL HAVE A LIFE EXPECTANCY IN EXCESS OF 25 YEARS.
3. MANHOLE STRUCTURES SHALL BE DESIGNED TO WITHSTAND IN EXCESS AND SHALL NOT DEFORM UNDER ONE-STEP PRESSURE, POST OF MANHOLE FOR THE USE OF THE STRUCTURE.
4. MANHOLE AND CONC SECTIONS SHALL BE UNDERPINNED OF PRECAST REINFORCED CONCRETE AND SHALL CONFORM TO ASTM C478.
5. BEDDING: CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC DEBRIS AND MATERIAL AS:
   100% PASSING 1 INCH SCREEN
   90% PASSING 3/4 INCH SCREEN
   20 SEA PASSING 3/8 INCH SCREEN
   0 NOT PASSING #4 SIEVE
   0 NOT PASSING #8 SIEVE
   0 NOT PASSING #16 SIEVE
   THE BEDDING BY THE ENGINEER TO SUBMIT THE SAME CRUSHED STONE, IN THIS 3 INCH SHALL BE USED.
6. SHAPE BEDDING SHALL BE OF MONOLITHIC CONSTRUCTION TO A HEIGHT AT LEAST 1/4 INCH ABOVE THE CROWN OF THE EXTERNAL PIPE.
7. HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE MANHOLES SHALL BE OF AN OVERLAPPING TYPE, SEALED FOR WATER TIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-TYPE SEALANT.
8. PIPE TO MANHOLE JOINTS SHALL BE AS FOLLOWING:
   A. ELASTOMERIC, FLEXIBLE SEALS WITH AN EXCELLENT JOINTS AS TO MANHOLE OPENING AND PIPE SURFACES;
   B. CAST INTO THE WALL OR SEALED WITH STAINLESS STEEL CLAMPS;
   C. ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH SEALS OVER AN THE CONTOUR OF THE PIPE OF COMPRESSION OF THE RING AND
   D. NON SHRINK, GROUTED JOINTS WHERE WATERTIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.
9. MANHOLE CORE SECTIONS SHALL BE ECCENTRIC IN SHAPE.
10. ALL PRECAST SECTIONS AND RINGS SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL.
11. MANHOLES SHALL HAVE A BENCH PARTS SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OR TO CONNECT WITH A POSSIBLE TANGENT TO THE CENTER LINE OF THE OUTGOING PIPE. BENCHES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPED TO DRAIN TOWARDS THE FLOWING TURBULENT CHANNEL. UNDERMINING OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY. INVERTS AND SHELVES SHALL BE PLACED AFTER TESTING.
12. MATERIALS OF CONSTRUCTION FOR MANHOLES SHALL BE AS FOLLOWING:
   A. CONCRETE FOR CAST IN PLACE BASES OR COMPLETE MANHOLES SHALL CONFORM TO THE REQUIREMENTS FOR CLASS AA CONCRETE IN THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION";
   B. REINFORCING FOR CAST IN PLACE CONCRETE SHALL BE STEEL OR STRUCTURAL FIBERS THAT CONFORM TO THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION";
   C. PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478-90;
   D. THE MANHOLE FRAME AND COVER SHALL PROVIDE A 22 INCH DIAMETER CLEAR OPENING;
   E. THE MANHOLE COVER SHALL HAVE THE WORD "SEWER" IN 4 INCH LETTERS CAST INTO THE SURFACE;
   F. THE EXTERIOR SURFACE OF CONCRETE CAST SHALL BE SMOOTH AND FREE FROM HOLES, CRACKS, BLISTERS, SAND HOLES AND DEFECTS;
   G. CONTACT SURFACE OF COVERS AND FRAMES SHALL BE MACHINED AT THE FACTORY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION;
   H. CASTINGS SHALL BE SOUND TO CLASS 30 CONFORMING TO ASTM A48/A48 M;
   I. GROUT MASONRY FOR SHELF, INVERT AND VARIOUS ADJUSTMENT SHALL CONSIST WITH ATTIC OR AL, CLAY OR SHALL FOR UNDER OR PIPE BASE;
   J. MORTAR SHALL BE COMPOSED OF PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME AND PLAN;
   K. PROPORTIONS OF MORTAR OF PARTS BY MATERIAL SHALL BE:
      1. 1:4 PARTS SAND AND 1:3 PARTS CEMENT, OR
      2. 4.5 PARTS SAND, ONE PART CEMENT AND 0.5 PARTS HYDRATED LIME;
   L. CEMENT SHALL BE TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150 OR "STANDARD SPECIFICATIONS FOR HYDRATED LIME FOR MASONRY PURPOSES";
   M. LIMES SHALL CONSIST OF SHEET MATERIAL SAND CONFORMING TO THE ASTM C144 "STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES";
   O. CONCRETE FOR DROP SUPPORTS SHALL CONFORM TO THE REQUIREMENTS FOR CLASS AA CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION";
   P. SUBJECT TO CONSENT, AT A MANHOLE PIPE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES FROM ANY BOND AND CONNECTIONS:
      1. WITHIN 18 INCHES FOR NON-REINFORCED CONCRETE PIPE, AND
      2. WITHIN 48 INCHES FOR PVC PIPE LARGER THAN 18 INCH DIAMETER.
   Q. NO PIPE OR JOINT SHALL BE REQUIRED FOR OPTIONS OR CONNECTIONS TO PIPE OF 18 INCHES DIAMETER, AND
   R. WHEN MANHOLE DEPTH IS LESS THAN 8 FEET, A NON-REINFORCED CONCRETE SLAB COVER MAY BE USED IN LIEU OF A CONE SECTION, PROVIDED THE SLAB HAS AN EQUIVALENT STRENGTH OF BEARING AND IS CAPABLE OF 10,000 POUNDS IN 28 LOADS.
13. MANHOLE STEPS SHALL:
   A. BE PERMITTED ONLY AT THE PRESENT OF THE SYSTEM OWNER;
   B. BE MADE AS FOLLOWS OF STAINLESS, PLASTIC COATED STEEL OR PLASTIC;
   C. BE SPACED NO SUCH THEY CANNOT BE PULLED OUT OF THE CONCRETE WALL BY 12 INCH TEST PULL SPACING;
   D. MEET THE REQUIREMENTS OF ASTM C478-90 FOR LOAD CAPACITY AND PULL OUT RESISTANCE;
   E. NOT BE SLOPED WITH INVERTS;
   F. BE APPROXIMATELY 14 INCHES BY 12 INCHES PROPORTION;
   G. HAVE A DROP SECTION ON HANDS ALTERNATE TO PREVENT SLIPPING OFF THE STEP; AND
   H. HAVE NON SKID SAFETY SURFACES ON THE FOOT SUPPORTED SURFACES.
14. MANHOLE TESTING:
   A. MANHOLES 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 TIME TEST FOR 1 FOOT OF 1 INCH HG PRESSURE DROP TO 9 INCH HG SHALL BE:
         a. NOT LESS THAN 1 MINUTES FOR MANHOLES WITH DEPTH OF 8 FEET DEEP OR LESS;
         b. NOT LESS THAN 2 MINUTES FOR MANHOLES OF 10 TO 15 FEET DEEP; AND
         c. NOT LESS THAN 3 MINUTES FOR MANHOLES DEEPER THAN 15 FEET DEEP.
   C. THE MANHOLE TEST SHALL BE REPEATED IF THE TEST FAILS TWICE TRIAL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (B) ABOVE.
   D. FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON TOP OF THE MANHOLE ON SOME OTHER MEANS USED TO PREVENT INCORRECT, BRING BY UNAUTHORIZED PERSONS, OR EVENTS OF MANHOLE UNTIL THE CONSTRUCTION IS READY TO INSTALL THE REMAINING ELEMENTS TO GRADE.

CONSTRUCTION DETAILS

PRESIDENTIAL ESTATES

MAP 237; LOT 8-1
59 FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE
STRAFFORD COUNTY

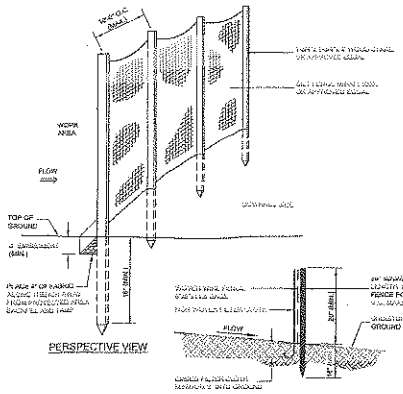
OWNER OF RECORD:	APPLICANT:
163 WASHINGTON STREET, LLC 501 D.W. HIGHWAY, SUITE F MERRIMACK, NH 03054	163 WASHINGTON STREET, LLC 501 D.W. HIGHWAY, SUITE F MERRIMACK, NH 03054

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

REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 18, 2013 | SCALE: AS SHOWN
PROJECT NO: 12-1212-1 | SHEET 18 OF 20



PERSPECTIVE VIEW

SILT FENCE DETAIL

NOT TO SCALE

(MARCH 2006)

CONSTRUCTION SPECIFICATIONS:

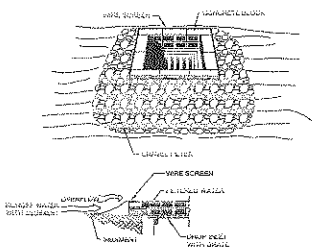
1. THE CONSTRUCTION FENCE SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES.
2. THE FENCE SHALL BE ERECTED A MINIMUM OF 6 INCHES INTO THE GROUND AND THE SOIL COMPACTED OVER THE UNDERMED FABRIC.
3. POSTS FOR THE FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES OR STAPLES WHERE NOTED OR AS DIRECTED BY DESIGN ENGINEER.
4. FENCE POSTS SHALL BE POSITIONED ADJACENT TO THE WORK AREA SPACE WITH THE SPACE FACING AS NOTED 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.
6. FENCE POSTS SHALL BE A MINIMUM OF 36 INCHES LONG AND DRIVEN A MINIMUM OF 16 INCHES INTO THE GROUND. WOOD FENCE POSTS SHALL BE OF SOUND QUALITY HARDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 20 SQUARE INCHES.
7. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

MAINTENANCE:

1. 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.
2. IF THE FENCE ON A SILT FENCE BECOMES DECOMPOSED OR BECOMES WEAK DURING THE EXPECTED LIFE OF THE FENCE, THE FENCE SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
4. SEDIMENT DEPOSITS THAT ARE REMOVED DURING THE PROJECT SHALL BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SEDIMENTATION.

WINTER CONSTRUCTION NOTES:

1. ALL PROPOSED PERMANENT VEGETATED AREAS WHICH DO NOT REACH A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY MULCHING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLANTING A TEMPORARY MIXTURE PREFERRED TO ANNUAL RYE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND MATERIALS SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF SNOW OR STORM MELT EVENTS.
2. ALL SLOPES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN CONDITIONS.
3. AFTER NOVEMBER 15TH, INCOMPLETE ROADS OR PARKING AREAS SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL. PERTINENT REMARKS AND CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON, BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.
4. ALL AREAS SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
   A. BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED.
   B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
   C. A MINIMUM OF 3" OF NON ERODIBLE MATERIAL SUCH AS STONE OR HAY MULCH HAS BEEN INSTALLED, OR
   D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.



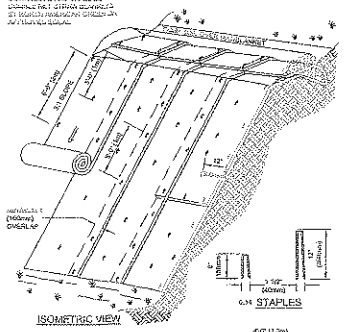
NOTES:

1. CONCRETE BLOCKS SHALL BE PLACED LENGTHWISE ON THREE SIDES OF THE INLET AROUND THE PERIMETER OF THE INLET. THE BLOCKS SHALL BE PLACED SO THE HEIGHT OF THE BARRIER CAN BE VARIED DEPENDING ON THE DESIGN OF DRAINAGE EROSION CONDITIONS OR DEPTH OF DITCH SHOULD. THE BARRIER SHALL BE A MINIMUM OF 12 INCHES HIGH AND A MAXIMUM OF 24 INCHES HIGH.
2. CONCRETE CLOTH OR WIRE MESH SHOULD BE PLACED OVER OPENINGS OF THE CONCRETE BLOCKS AND EXTENDED AT LEAST 12 INCHES AROUND THE OPENING TO PREVENT SEDIMENTS FROM BEING TRANSPORTED THROUGH THE BARRIER IN THE BLOCKS.
3. GRAVEL SHOULD BE CLEAN CRUSHED AGGREGATE, SIZE #3 OR #4 PLACED AGAINST THE BLOCKS TO THE TOP OF THE BARRIER.

BLOCK & GRAVEL DROP INLET SEDIMENT FILTER

NOT TO SCALE

(MARCH 2006)



NOTES:

1. SHAPE DITCH FREE OF ROCKS, CLODS, STICKS OR OTHER SOIL DISTURBANCES THAT WILL HINDER SOIL CONTACT.
2. APPLY FERTILIZER, SEEDING AND THEN PLACE BLANKETS.
3. LAY BLANKETS LOOSELY AND STAKE OR STAPLE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ENSURE GOOD SOIL CONTACT.

EROSION CONTROL BLANKETS - SLOPE INSTALLATION

NOT TO SCALE

(MARCH 2006)

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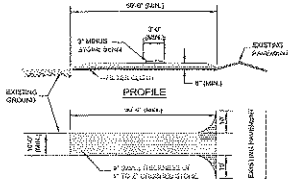


STABILIZED CONSTRUCTION EXIT DETAIL

NOT TO SCALE

(MARCH 2006)

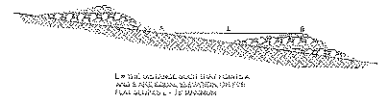
MAINTENANCE:

DUST AND MUD PRODUCED WILL EVENTUALLY FILL THE VOIDS IN THE CRUSHED STONE AND THE EFFECTIVENESS OF THE CRUSHED STONE PAD WILL NOT BE SATISFACTORY. WHEN THIS OCCURS, THE TOP 2 INCHES OF THE STONE SHALL BE TOP DRESSED WITH FRESH STONE OR COMPLETE REPLACEMENT OF THE PAD MAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY CLOGGED.

IF MOVING PADDING IS NEEDED, THE SEDIMENT TRAPS SHOULD BE CLEANED OUT WHEN THE AVAILABLE STORAGE VOLUME IS REDUCED BY HALF. VEGETATIVE FILTER STRIPS SHOULD BE MAINTAINED TO ENSURE POSSIBLE SHEET OF VEGETATION AT ALL TIMES.

CONSTRUCTION SPECIFICATIONS:

1. STONE FOR A STABILIZED CONSTRUCTION EXIT SHALL BE 1" TO 2" INCH STONE, RECLAIMED STONE OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED EXIT SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHICH IS 30 FEET 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 ALL AREAS WHERE VEHICLES GAIN ACCESS ON TO THE SITE, 10 FEET IS REQUIRED.
5. 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.
6. 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 A MINIMUM SIZE CAN BE ERECTED BY VEHICLES MAY BE ALLOWED FOR THE PIPE.
7. THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED OR WASHED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.
8. ALL TRUCKS SHALL BE CLEANED TO REMOVE ANY PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. THEY ARE TO BE DIRECTED TO DUMP THE LOAD ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR BASIN.

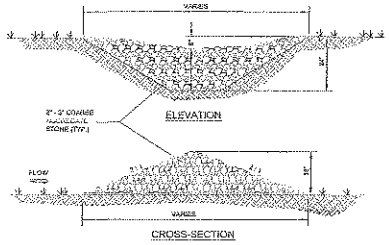


L = THE DISTANCE BETWEEN THE POINTS A AND B AT EQUAL ELEVATION, OR FOR FLAT SLOPES = 10 MINIMUM

STONE CHECK DAM SPACING DETAIL

NOT TO SCALE

(MARCH 2006)



STONE CHECK DAM DETAIL

NOT TO SCALE

(MARCH 2006)

CONSTRUCTION SEQUENCE

1. FIRST CUT AND CLEAR BRUSH AND GRASS ONLY WITHIN DESIGNATED AREAS OF CLEARING AS NECESSARY TO FACILITATE PRELIMINARY CONSTRUCTION. ALL SMALL BRANCHES AND OTHER VEGETATION MATERIALS SHALL BE PROPERLY DISPOSED OF OFF SITE BY THE CONTRACTOR. THE PROJECT IS MANAGED TO MEET THE HOUSEKEEPING AND EFFORT OF AREA CLEARED AND ARE ARE RELATIVE TO INVASIVE SPECIES.
2. PRIOR TO COMMENCEMENT OF ANY EARTH MOVING OPERATIONS, INSTALL PERIMETER EROSION CONTROL MEASURES, INCLUDING SPECIFIED PERIMETER SEDIMENT FENCING AND STABILIZED CONSTRUCTION EXIT SHOWN ON THE PROJECT PLANS.
3. COMPLETE GROUBING OPERATIONS. ALL STUMPS AND BRUSH/TREES DEEMED SHALL BE REMOVED. THE GOAL OF BY THE CONTRACTOR. NATIVE GROUND SOIL MATERIALS SUITABLE FOR USE AS TOP SOIL SHALL BE STOCKPILED WITHIN AREAS OUT OF THE WAY OF OTHER CONSTRUCTION ACTIVITIES AND DRAINAGE PLANS. STOCKPILES SHALL BE TEMPORARILY SEEDED WITH WINTER RYE AND BE SURROUNDED WITH HAY BALES AND/OR FABRIC SILTATION FENCE IN ORDER TO PREVENT LOSS DUE TO EROSION.
4. BEGIN EARTHMOVING OPERATIONS, COMMENCING WITH WORK NEEDED TO BALANCE CUTS AND FILLS FOR BUILDING FOUNDATION AND RETAINING WALL CONSTRUCTION. PERMANENT DRAINAGE WORK SHALL BE INSTALLED FROM DOWNHILL TO UPHILL AS THE CONSTRUCTION OF TEMPORARY GARDEN DIKES IS COMPLETED SHALES.
5. ONCE BUILDING FOUNDATION WORK IS COMPLETED, COMPLETE EARTHMOVING OPERATIONS UNTIL DESIGN SUBGRADE IS ACHIEVED.
6. INSTALL DRAINAGE STORM SYSTEMS AND OTHER UTILITIES. PERFORM PROBATION TESTING. INCOMPLETE WORK SHALL BE PROTECTED FROM SEDIMENTATION BY THE USE OF SILTATION BARRIERS AND/OR BALE DATA. THE SITE IS BEGINNING TO BE STABILIZED.
7. PLACE GRAVEL AND CRUSHED STONE OVER PREPARED SUBGRADE AREAS AND PARKING AREAS AND COMPACT TO SPECIFIED LIFT THICKNESS.
8. COMPLETE DEEP ATTENTION EROSION CONTROL ACTIVITIES. WHEN COMPLETE, IMMEDIATELY BEGIN THE WORK PROPOSED PLAN AREAS WITH STOCKPILED LOAM SUPPLEMENTED WITH BORROW LOAM, IF NECESSARY, TO ACHIEVE A THICKNESS OF 4 INCHES OF FINISHED LOAM.
9. FINE GRADE ALL FUTURE LOT AREAS AND HYDROSEED WITH THE SPECIFIED SEED MIXTURE IMMEDIATELY AFTER FINE GRADING IS COMPLETED. ALL AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
10. INSTALL THE BITUMINOUS COURSE OF PAVEMENT OVER ALL DESIGNATED AREAS.
11. CONTINUE TO MONITOR AND MAINTAIN EROSION CONTROL AND SLOPE EROSION UNTIL ENTIRE SITE IS FULLY TO BE COMPLETELY STABILIZED AND VEGETATED WITH A HEALTHY STAND OF TURF OR GROUND COVER. MONITOR SEDIMENT BASIN EROSION CONTROL MEASURES THROUGH ONE WINTER.
12. INSTALL THE BITUMINOUS WEARING COURSE OF PAVEMENT OVER THE BINDER COURSE.
13. COMPLETE INSTALLATION OF LANDSCAPING, DRIVEWAYS AND OTHER SITE FINISHES.

EROSION CONTROL NOTES

1. DISTURBED EARTH AREAS SHALL BE COMPLETED AS RESTRICTED AS AREAS AS PRACTICAL AT ANY GIVEN TIME THROUGHOUT THE CONSTRUCTION SEQUENCE. AT ANY TIME SHALL MORE THAN FIVE (5) ACRES OF SITE AREA BE IN AN UNSTABLE CONDITION. NO OPEN AREA OF THE SITE SHALL REMAIN IN AN UNSTABLE CONDITION FOR A PERIOD OF TIME EXCEEDING FORTY FIVE (45) CALENDAR DAYS.
2. TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH PROJECT PLANS. IN ADDITION, SIMILAR MEASURES SHALL BE INSTALLED WHERE AND WHEN THE FIELD CONDITION, ON GOOD OPERATION OF THE INTENDED SITE CONSTRUCTION, MAY DEMAND. ALL TEMPORARY EROSION CONTROL MEASURES USED SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER END OF ANY RAIN OF 0.5 INCHES. THEY SHALL BE CLEANED AND MAINTAINED AND CONTINUE PERFORM EFFECTIVE OPERATING MAINTAIN THROUGHOUT THE CONSTRUCTION PERIOD.
3. ALL DISTURBED AREAS DESIGNATED TO BE TURF, SHALL RECEIVE A MINIMUM APPLICATION OF 4 BALES OF HAY (COMPACTED THICKNESS), PRIOR TO PLOW, SEEDING AND MULCHING.
4. ALL SWALES AND DITCHES SHALL BE THOROUGHLY CLEANED OF UNSUITABLE SEDIMENT OR BE RESTORED AS EFFECTIVE GRADE AND CROSS SECTION. ALL SWALES AND DITCHES SHALL BE FULLY ESTABLISHED PRIOR TO HAVING STORMWATER DIRECTED TOWARDS THEM.
5. IN THE EVENT THAT DURING CONSTRUCTION OF ANY PORTION OF THE PROJECT A MINOR DEVIATION IS NECESSARY, THE CONTRACTOR WILL STABILIZE ALL INCOMPLETE WORK AND PROVIDE FOR SUITABLE METHODS OF DIVERTING RUNOFF IN ORDER TO ELIMINATE SHEET FLOW ACROSS FRESHLY GRAVELED.
6. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
   A. BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED.
   B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
   C. A MINIMUM OF 3" OF NON ERODIBLE MATERIAL SUCH AS STONE OR HAY MULCH HAS BEEN INSTALLED, OR
   D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
7. DUST SHALL BE CONTROLLED ON THE SITE OF WATER AS NECESSARY THROUGHOUT THE CONSTRUCTION PERIOD, IN ACCORDANCE WITH ENVIRA 1000.
8. ALONG WITH ANY OTHER EROSION CONTROL MEASURES INDICATED ON THESE PLANS TO BE CONSIDERED AS REQUIRED. THE CONTRACTOR SHALL USE MULCHING IN INSTALLING BOTH TEMPORARY EROSION CONTROL MEASURES BEFORE AND WITH ON SITE SITE CONDITIONS AND/OR CONSTRUCTION METHODOLOGIES ARE APPROVED.
9. AREAS HAVING FINISH GRADE SLOPES OF 3:1 OR STEEPER, SHALL BE STABILIZED WITH JUTE MATTING WHEN AND IF FIELD CONDITIONS APPROVE, OR IF AS ORDERED. ATTACH JUTE MATTING TO COVER AREA WITH THE RECOMMENDED SEED MANAGEMENT PRACTICE OUTLINED IN VOLUME 2 OF THE NEW HAMPSHIRE STORMWATER MANUAL. EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION.
10. ALL DETENTION PONDS SHALL BE CONSTRUCTED PRIOR TO ANY EARTH MOVING ACTIVITIES THAT WILL BE DRAINED STORMWATER SEWER.
11. ALL AGGREGATE AND PAVING AREAS SHALL BE FINISHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
12. ALL DAY AND FILL SLOPES SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

CONSTRUCTION DETAILS

PRESIDENTIAL ESTATES

MAP 237; LOT 8-1
59 FILLMORE BOULEVARD
ROCHESTER, NEW HAMPSHIRE
STRAFFORD COUNTY

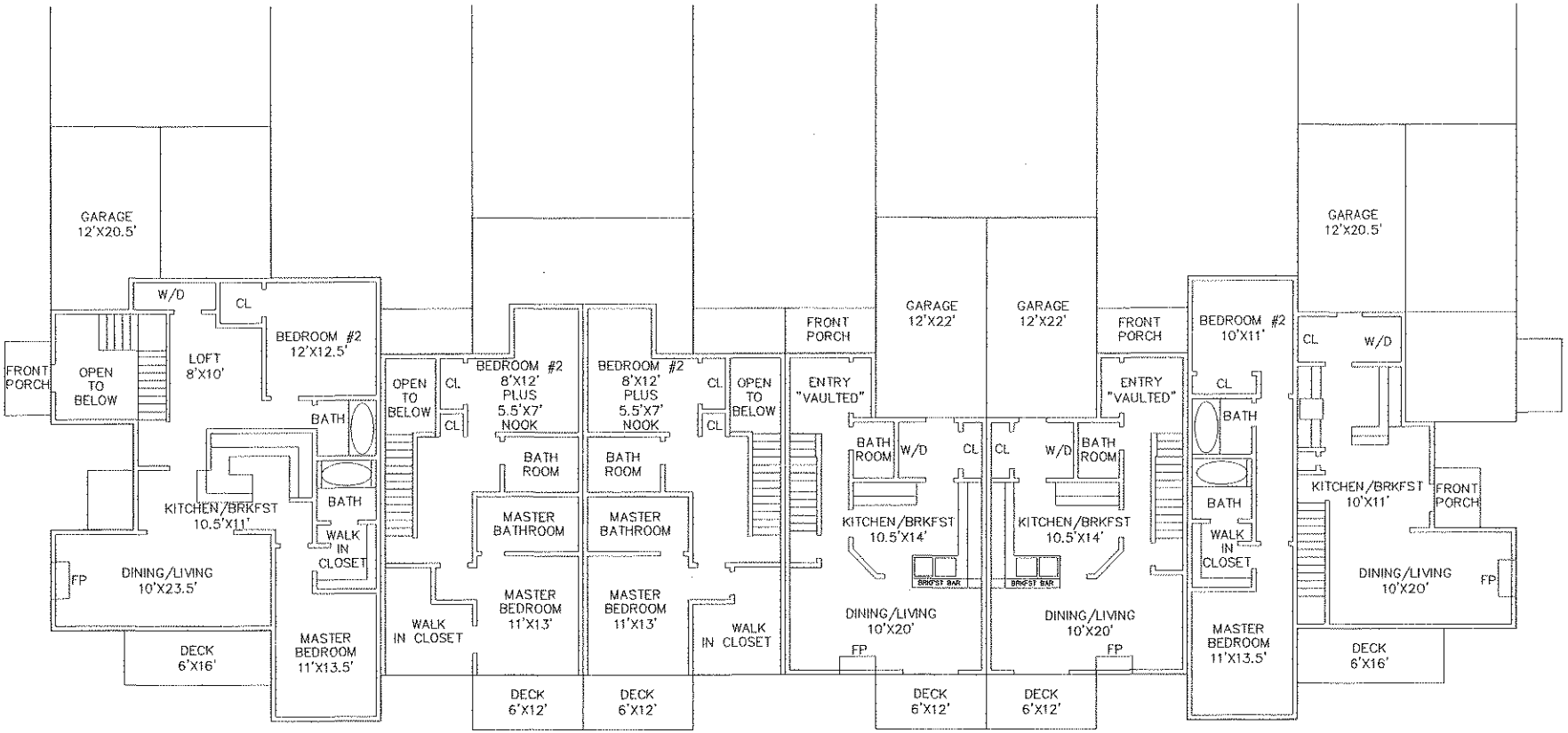
OWNER OF RECORD:	APPLICANT:
183 WASHINGTON STREET, LLC 501 D.W. HIGHWAY, SUITE F MERRIMACK, NH 03054	183 WASHINGTON STREET, LLC. 501 D.W. HIGHWAY, SUITE F MERRIMACK, NH 03054

KNA
KNOWLES-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
Consulting Park North, Suite 30, Bedford, NH 03110 Phone (603) 627-8881

REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 18, 2013 | SCALE: AS SHOWN
PROJECT NO: 12-1212-1 | SHEET 20 OF 20



PROP.
UNIT #1
1,372±SF
1-STORY

PROP.
UNIT #2
1,500±SF
2-STORIES

PROP.
UNIT #3
1,162±SF
1-STORY

DIG SAFE
1-888-344-7233 (TOLL FREE)
UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM

PROJECT NO. 2010-0831-1

REVISIONS	
DATE	DESCRIPTION

PRELIMINARY INTERNAL BUILDING LAYOUT PLAN PREPARED FOR:

"PRESIDENTIAL ESTATES" – PHASE 2 MULTI-FAMILY DEVELOPMENT

TAX MAP 237; LOT 8-1
MONROE DRIVE, NEW HAMPSHIRE

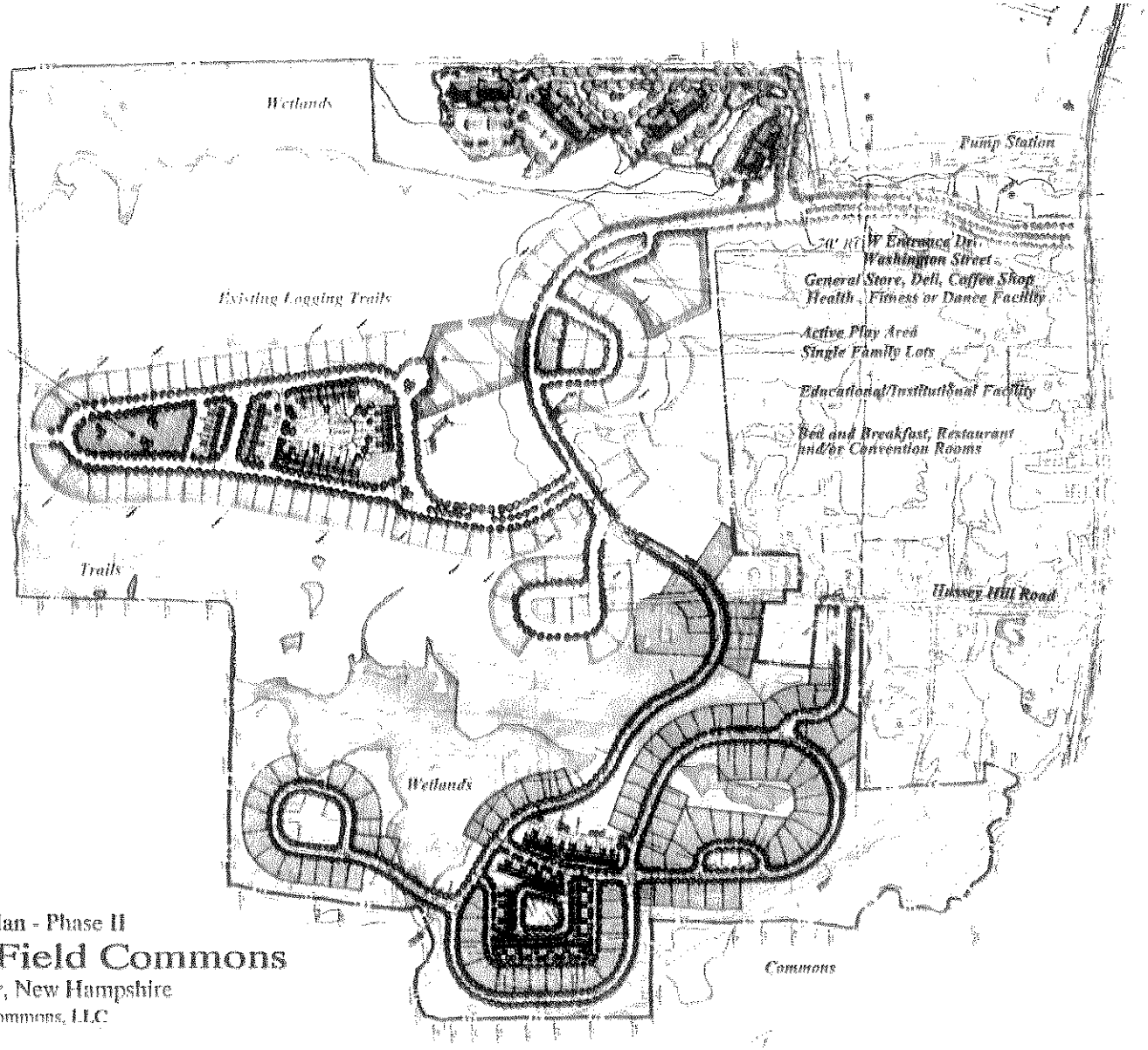
PREPARED FOR:
SDJ DEVELOPMENT, LLC
501 D.W. HIGHWAY UNIT F
MERRIMACK, NH 03054

SCALE: NONE
DATE: MARCH 4, 2013

60 0 30 60 120 240
SCALE IN FEET

Hillside
Design Group, LLC

SHEET NO. 1 OF 1



Revised Plan - Phase II

HighField Commons

Rochester, New Hampshire

Highfield Commons, LLC

November 17, 2005

OVERALL PLAN
HIGHFIELD COMMONS

ROBERT G. HOOK, P.E.
Consulting Engineer