Granite State Gas Transmission Company, Inc.
PUC Docket No. _____
Exhibit A
April 9, 2012

ATTORNEY GENERAL
DEPARTMENT OF JUSTICE

33 CAPITOL STREET
CONCORD, NEW HAMPSHIRE 03301-6397

MICHAEL A. DELANEY
ATTORNEY GENERAL

ANN M. RICE
DEPUTY ATTORNEY GENERAL

February 9, 2012

VIA FIRST CLASS MAIL & FAX (603.224.2318)

Maureen D. Smith, Esquire
Orr & Reno
One Eagle Square
P.O. Box 3550
Concord, New Hampshire 03302-3550

Dear Attorney Smith:

Pursuant to our conversation on February 2, 2012, this office has analyzed what authorizations would be required to construct a bedrock boring under the tidal waters between Newington and Dover for a natural gas line.

Under RSA 371:17-23, the utility owning the proposed gas line would be required to petition the Public Utilities Commission for a construction license. Such a license is a necessary prerequisite for the proposed directional drill, but it does not by itself function to convey a real property interest.

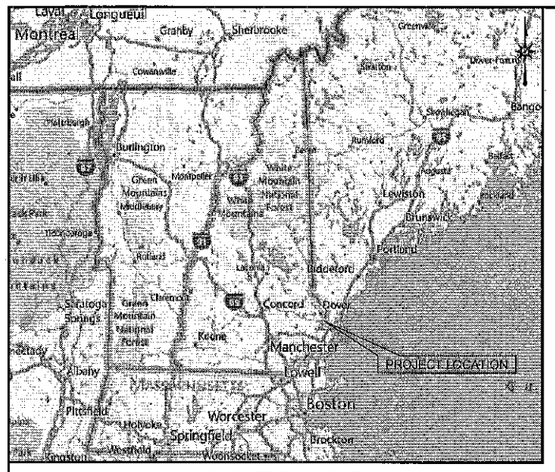
Pursuant to N.H. RSA 1:14 and case law, the land beneath tidal waters is owned by the State, subject to the public trust. Phillips Petroleum Co. v. Mississippi, 484 U.S. 469, 476, (1988) (qtd. in Opinion of the Justices, 139 N.H. 82 (1994)); Concord Manufacturing Co. v. Robertson, 66 N.H. 1 (1890). In order to legally drill through and under the submerged land in question, the driller would have to first obtain a grant of an easement to acquire a property right in the submerged land, which would remain subject to the public trust. The easement would have to be approved by the Governor and his Executive Council and be approved by the Long Range Capital Planning and Utilization Committee, with advice from the Council on Resources and Development, per RSA 4:40. The drilling proposal would also have to be submitted for comment to the appropriate River Management Advisory Committee, pursuant to RSA Ch. 483.

Please let me know if I can be of any assistance in drafting the easement.

Sincerely,

Evan J. Mulholland
Assistant Attorney General
Environmental Protection Bureau
(603) 271-3679

EJM/cmc
ec: Jacquie Colburn, Environmental Program Mgr., Watershed Management Bureau, DES
Gino Infascelli, Public Works Project Supervisor, Wetlands Bureau, DES
Dori Wiggin, East Region Supervisor, Wetlands Bureau, DES
cc: Steven Frank, Assistant Director, Gas & Water Division, PUC

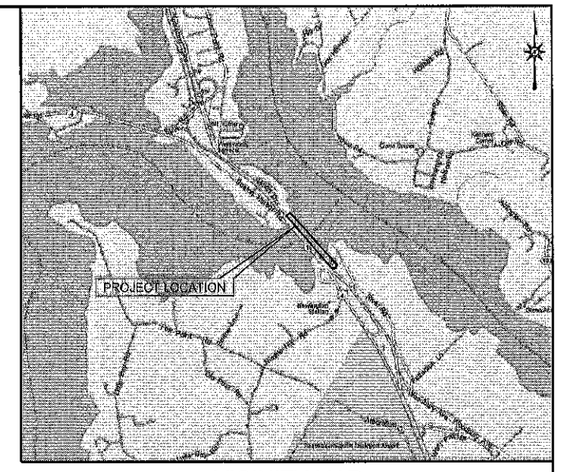


LOCATION MAP

N.T.S.

PERMITTING PLANS FOR SUBMISSION TO REGULATORY AGENCIES

UNITIL HORIZONTAL DRILL
AT LITTLE BAY BRIDGE
US ROUTE 4/NH ROUTE 16 (SPAULDING TURNPIKE)
NEWINGTON AND DOVER, NEW HAMPSHIRE



VICINITY MAP

Granite State Gas Transmission Company, Inc.
PUC Docket No. _____
Exhibit B
April 9, 2012

PREPARED FOR:

PROCESS PIPELINE SERVICES, INC.
1600 PROVIDENCE HIGHWAY, SUITE 124
WALPOLE, MASSACHUSETTS 02081

PREPARED BY:

BL Companies

ARCHITECTURE ENGINEERING PLANNING LANDSCAPE ARCHITECTURE

LAND SURVEYING ENVIRONMENTAL SCIENCES

355 RESEARCH PARKWAY
MERIDEN, CONNECTICUT 06450
(203) 630-1406
(203) 630-2615 Fax

FOR PERMITTING PURPOSES ONLY
NOT RELEASED FOR CONSTRUCTION

CONTENTS

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL SITE AND BUILDING CONDITIONS IN THE FIELD AND CONTACT THE SITE ENGINEER IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS.

2. DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED AND USED BY THE OWNER OR OTHERS DURING OCCUPIED HOURS EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE OWNER AND THE LOCAL MUNICIPALITIES. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY SERVICE HAS BEEN PROVIDED.

3. THE CONTRACTOR SHALL ABIDE BY ALL OSHA FEDERAL STATE AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOISTS, ETC. IN CLOSE PROXIMITY TO OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES, CONTACT POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS. ANY UTILITY COMPANY FEES SHALL BE PAID FOR BY THE CONTRACTOR.

4. THE CONTRACTOR SHALL PROVIDE RECORD DRAWINGS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES) TO THE OWNER AT THE END OF CONSTRUCTION.

5. THE ENGINEER IS NOT RESPONSIBLE FOR SITE SAFETY MEASURES TO BE EMPLOYED DURING CONSTRUCTION. THE ARCHITECT AND ENGINEER HAVE NO CONTRACTUAL DUTY TO CONTROL THE SAFEST METHODS OR MEANS OF THE WORK, JOB SITE RESPONSIBILITIES, SUPERVISION OR TO SUPERVISE SAFETY AND DOES NOT VOLUNTARILY ASSUME ANY SUCH DUTY OR RESPONSIBILITY.

6. INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE SYSTEMS HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE SYSTEMS ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE SYSTEMS INCLUDING SERVICES. PRIOR TO DEMOLITION OR CONSTRUCTION, THE CONTRACTOR SHALL CONTACT "DIG SAFE SYSTEM, INC." 72 HOURS BEFORE COMMENCEMENT OF WORK AT "(888)344-7233" AND VERIFY ALL UTILITY AND STORM DRAINAGE SYSTEM LOCATIONS.

7. DO NOT SCALE DRAWINGS. DIMENSIONS GOVERN OVER SCALED DIMENSIONS.

8. IF PLANS AND OR SPECIFICATIONS ARE IN CONFLICT, THE MOST COSTLY SHALL APPLY.

9. ALL CONTRACTORS AND SUBCONTRACTORS SHALL OBTAIN COMPLETE DRAWING PLAN SETS FOR BIDDING AND CONSTRUCTION. PLAN SETS SHALL NOT BE DISASSEMBLED INTO PARTIAL PLAN SETS FOR USE BY CONTRACTORS AND SUBCONTRACTORS OF INDIVIDUAL TRADES. IT SHALL BE THE CONTRACTOR'S AND SUBCONTRACTOR'S RESPONSIBILITY TO OBTAIN COMPLETE PLAN SETS FOR USE IN BIDDING AND CONSTRUCTION.

10. ALL NOTES AND DIMENSIONS DESIGNATED "TYPICAL" APPLY TO ALL LIKE OR SIMILAR CONDITIONS THROUGHOUT THE PROJECT.

11. CONTRACTOR(S) TO TAKE AND VERIFY ALL DIMENSIONS AND CONDITIONS OF THE WORK AND BE RESPONSIBLE FOR COORDINATION OF SAME. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK.

12. BL WILL PREPARE FINAL CONSTRUCTION DOCUMENTS SUITABLE FOR BIDDING AND CONSTRUCTION. PROGRESS SETS OF THESE DOCUMENTS ARE NOT SUITABLE FOR THOSE PURPOSES. IF CLIENT ELECTS TO SOLICIT BIDS OR ENTER INTO CONSTRUCTION CONTRACTS UTILIZING CONSTRUCTION DOCUMENTS THAT ARE NOT YET FINAL, CONSULTANT SHALL NOT BE RESPONSIBLE FOR ANY COSTS OR DELAY ARISING AS A RESULT.

12. THESE PLANS ARE FOR PERMITTING PURPOSES ONLY AND ARE NOT FOR CONSTRUCTION. NO CONSTRUCTION OR DEMOLITION SHALL BEGIN UNTIL APPROVAL OF THE FINAL PLANS IS GRANTED BY ALL GOVERNING AND REGULATORY AGENCIES.

CLIENT:

PROCESS PIPELINE SERVICES, INC.
1600 PROVIDENCE HIGHWAY, SUITE 124
WALPOLE, MA 02081
(781) 829-0524

OWNER:

STATE OF NEW HAMPSHIRE
NEW HAMPSHIRE DOT
7 HAZEN DRIVE
CONCORD, NH 03301
(603) 271-3734

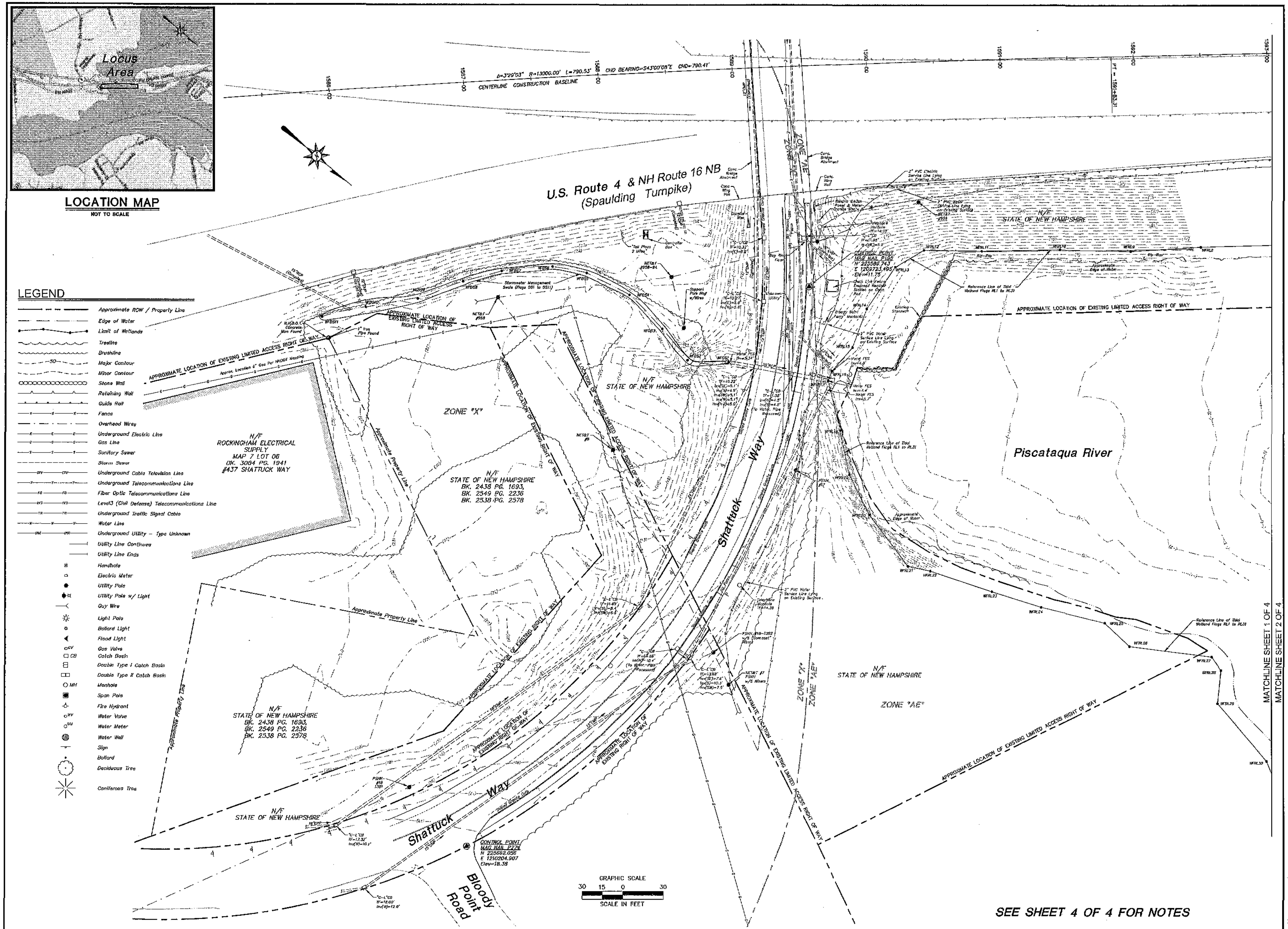
SUBCONSULTANTS:

NOBIS ENGINEERING, INC

DATES

ISSUE DATE: NOVEMBER 11, 2011
REVISION: March 30, 2012

CAD FILE: CV11C386001
XREF(S): XXXXXXXX


LOCATION MAP
NOT TO SCALE
Locus Area
LEGEND
Approximate ROW / Property Line
Edge of Water
Limit of Wetlands
Treeline
Brushline
Major Contour
Minor Contour
Stone Wall
Retaining Wall
Guide Rail
Fence
Overhead Wires
Underground Electric Line
Gas Line
Sanitary Sewer
Storm Sewer
Underground Cable Television Line
Underground Telecommunications Line
Fiber Optic Telecommunications Line
Level3 (Civil Defense) Telecommunications Line
Underground Traffic Signal Cable
Water Line
Underground Utility - Type Unknown
Utility Line Continues
Utility Line Ends
Handhole
Electric Meter
Utility Pole
Utility Pole w/ Light
Guy Wire
Light Pole
Bollard Light
Flood Light
Gas Valve
Catch Basin
Double Type I Catch Basin
Double Type II Catch Basin
Manhole
Span Pole
Fire Hydrant
Water Valve
Water Meter
Water Well
Sign
Bollard
Deciduous Tree
Coniferous Tree
U.S. Route 4 & NH Route 16 NB
(Spaulding Turnpike)
CENTERLINE CONSTRUCTION BASELINE
APPROXIMATE LOCATION OF EXISTING LIMITED ACCESS RIGHT OF WAY
N/F ROCKINGHAM ELECTRICAL SUPPLY MAP 7 LOT 06 BK. 3064 PG. 1941 #437 SHATTUCK WAY
ZONE "X"
N/F STATE OF NEW HAMPSHIRE BK. 2436 PG. 1693, BK. 2549 PG. 2236 BK. 2538 PG. 2578
N/F STATE OF NEW HAMPSHIRE
Approximate Property Line
Shattuck Way
Piscataqua River
ZONE "AE"
CONTROL POINT MAG NAIL P274
Bloody Point Road
GRAPHIC SCALE
SCALE IN FEET
MATCHLINE SHEET 1 OF 4
MATCHLINE SHEET 2 OF 4

SEE SHEET 4 OF 4 FOR NOTES

PROPOSED RELOCATED UNITIL GAS PIPELINE
NEWINGTON - DOVER
US ROUTE 4, NH ROUTE 16, AND SPAULDING TURNPIKE
OVER LITTLE BAY
TOWNS OF NEWINGTON & DOVER, STATE OF NEW HAMPSHIRE

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LAND SURVEYING
ENVIRONMENTAL SCIENCES

355 Research Parkway
Meriden, CT 06450
(203) 630-1406
(203) 630-2615 Fax

REVISIONS		
No.	Date	Desc.

Surveyed	D.A.S./R.H.R./J.P.
Drawn	D.A.S.
Checked	J.M.
Approved	M.G.
Scale	1"=30'
Project No.	11C3860
Date	09/13/2011
Field Book	455

CAD File:
EX11C386001

Title
EXISTING CONDITIONS & TOPOGRAPHIC SURVEY

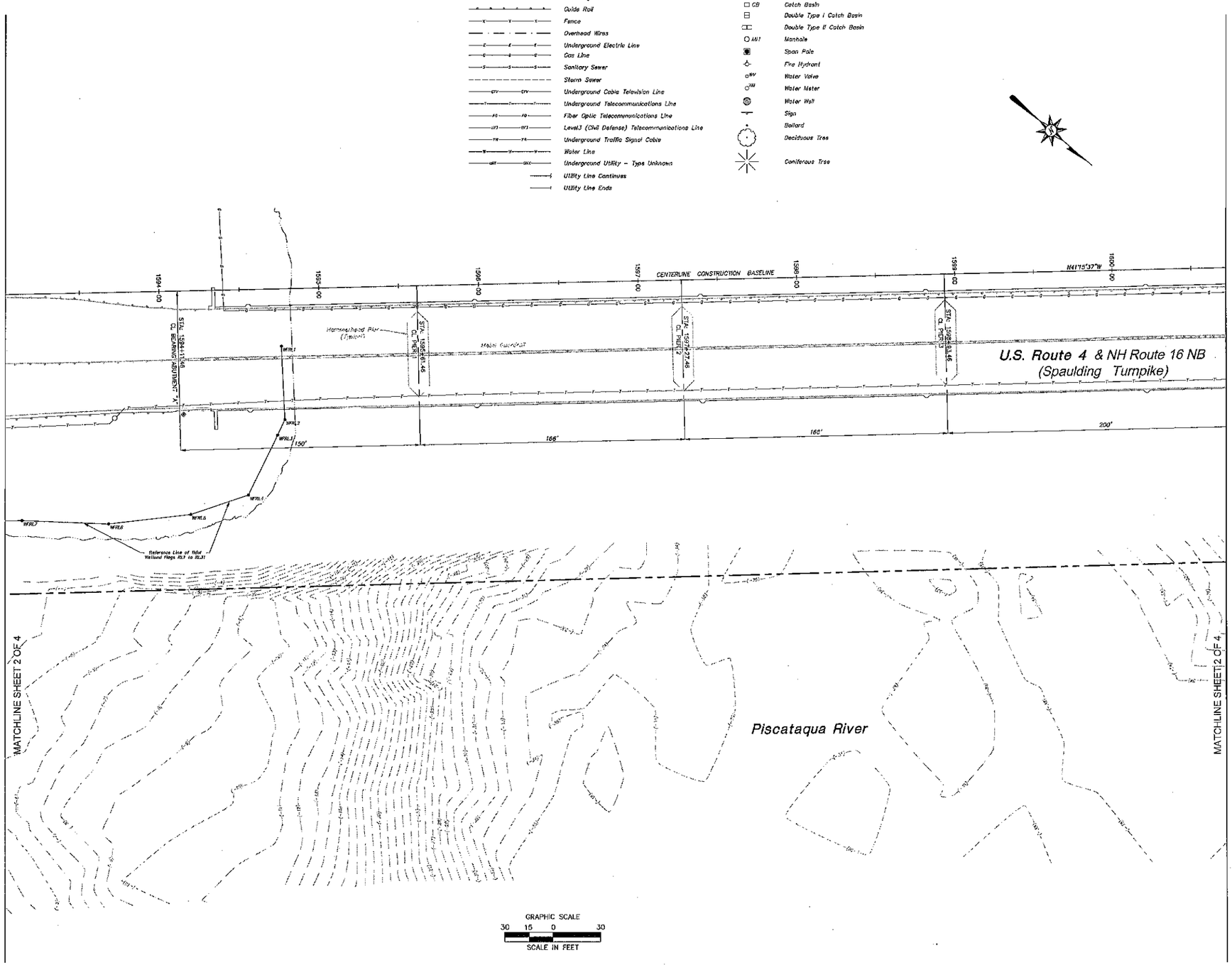
Sheet No. 1 of 4

EX-1

Xref (s): : XT11c386001

LEGEND

- Approximate ROW / Property Line
- Edge of Water
- Limit of Wetlands
- Treeline
- Brushline
- 50 Major Contour
- Minor Contour
- Stone Wall
- Retaining Wall
- Guide Rail
- Fence
- Overhead Wires
- Underground Electric Line
- Gas Line
- Sanitary Sewer
- Storm Sewer
- Underground Cable Television Line
- Underground Telecommunications Line
- Fiber Optic Telecommunications Line
- Level3 (Civil Defense) Telecommunications Line
- Underground Traffic Signal Cable
- Water Line
- Underground Utility - Type Unknown
- Utility Line Continues
- Utility Line Ends
- Handhole
- Electric Meter
- Utility Pole
- Utility Pole w/ Light
- Guy Wire
- Light Pole
- Bollard Light
- Flood Light
- GV Gas Valve
- CB Catch Basin
- Double Type I Catch Basin
- Double Type II Catch Basin
- MH Manhole
- Span Pole
- Fire Hydrant
- WV Water Valve
- WM Water Meter
- Water Well
- Sign
- Bollard
- Deciduous Tree
- Coniferous Tree



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PROPOSED RELOCATED UNITIL GAS PIPELINE
NEWINGTON - DOVER
US ROUTE 4, NH ROUTE 16, AND SPAULDING TURNPIKE
OVER LITTLE BAY
TOWNS OF NEWINGTON & DOVER, STATE OF NEW HAMPSHIRE

REVISIONS		Desc.
No.	Date	

Surveyed	D.A.S./R.H.R./A.P.
Drawn	D.A.S.
Checked	J.M.
Approved	M.G.
Scale	1"=30'
Project No.	11C3860
Date	09/13/2011
Field Book	455
CAD File: EX11C386001	

Title
EXISTING CONDITIONS & TOPOGRAPHIC SURVEY

Sheet No. 2 of 4

EX-1

Xref (s): ; XY11c386001

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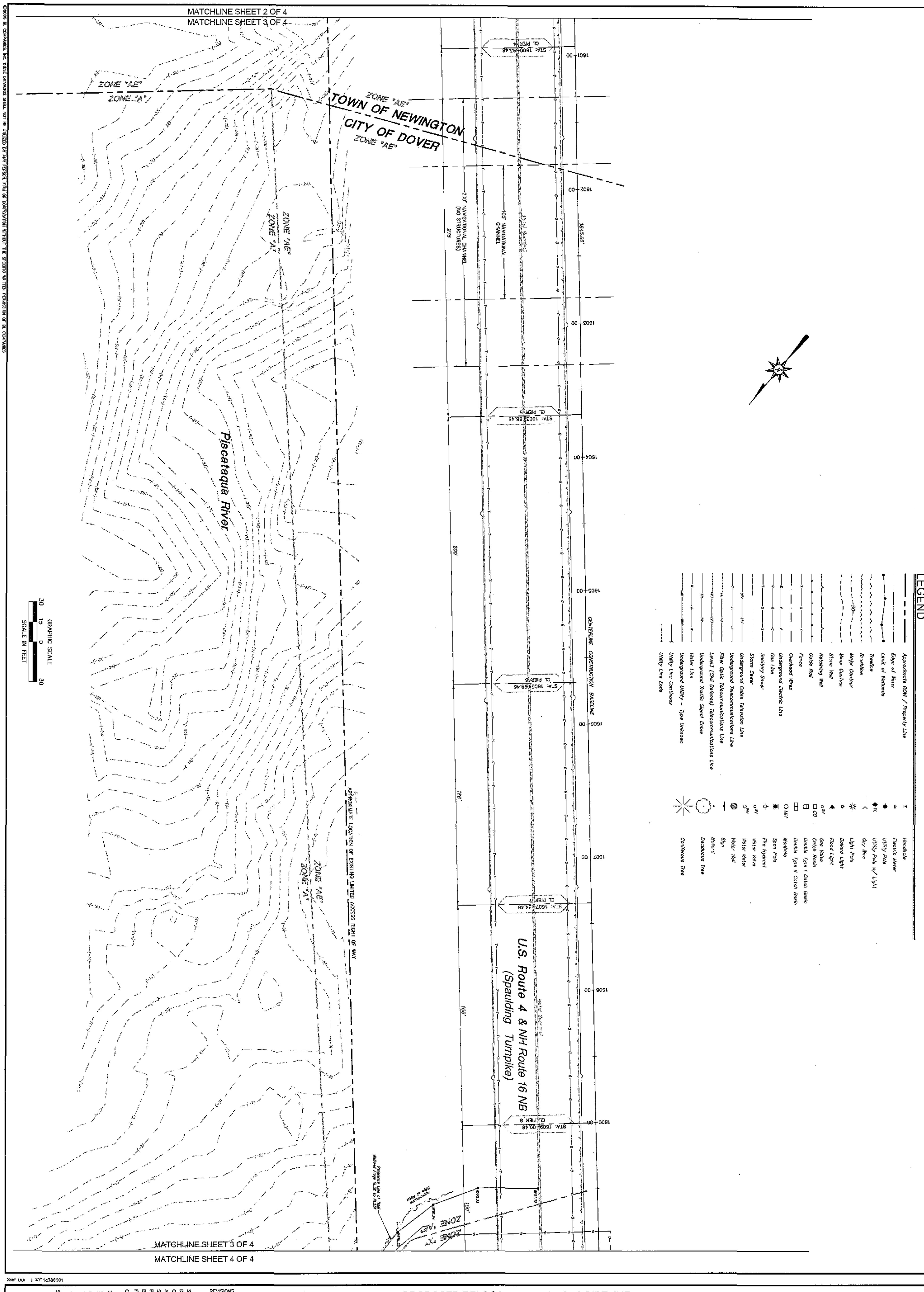
Layout: EX-1 24x36 40SC Sheet 3



Xref (s): ; XY11e386001

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Drawn	D.A.S.
Checked	J.M.
Approved	M.G.
Scale	1"=30'
Project No.	11C3860
Date	09/13/2011
Field Book	455
CAD File:	EX11C386001

REVISIONS
No. Date Desc.

Title
EXISTING CONDITIONS & TOPOGRAPHIC SURVEY
Sheet No. 3 of 4

EX-1

PROPOSED RELOCATED UNITIL GAS PIPELINE
NEWINGTON - DOVER
US ROUTE 4, NH ROUTE 16, AND SPAULDING TURNPIKE
OVER LITTLE BAY
TOWNS OF NEWINGTON & DOVER, STATE OF NEW HAMPSHIRE

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(203) 630-2615 Fax

LEGEND

Symbol	Description	Symbol	Description
	Approximate ROW / Property Line		Handhole
	Edge of Water		Electric Meter
	Limit of Wetlands		Utility Pole
	Treeline		Utility Pole w/ Light
	Brushline		Guy Wire
50	Major Contour		Light Pole
	Minor Contour		Bollard Light
	Stone Wall		Flood Light
	Retaining Wall	GV	Gas Valve
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	Overhead Wires		Double Type II Catch Basin
E	Underground Electric Line	MH	Manhole
G	Gas Line		Span Pole
S	Sanitary Sewer		Fire Hydrant
	Storm Sewer	WV	Water Valve
CTV	Underground Cable Television Line	WM	Water Meter
T	Underground Telecommunications Line		Water Well
FO	Fiber Optic Telecommunications Line		Sign
LV3	Level3 (Civil Defense) Telecommunications Line		Bollard
TS	Underground Traffic Signal Cable		Deciduous Tree
W	Water Line		Coniferous Tree
UNK	Underground Utility – Type Unknown		
	Utility Line Continues		
	Utility Line Ends		

UTILITY SERVICE PROVIDER CONTACT LIST

(As Depicted on Map Reference 5D)

INVOLVED UTILITY OWNERS

CATV
Comcast
Contact: George Kirkwood,
Project Coordinator
334B Calef Highway
Epping, NH 03042 2325
Phone: 603-679-5695x1007
Fax: 603-679-1823
Email: george_kirkwood@cable.comcast.com

WATER & FIRE
Portsmouth Public Works
Contact: Peter Rice, Engineer
680 Peverly Hill Rd.
Portsmouth, NH 03801-5356
Phone: 603-766-1416
Fax: 603-427-1539
Email: price@pw.cityofportsmouth.com

Portsmouth Public Works
Contact: Thomas V. Cravens,
Engineering Technician
680 Peverly Hill Rd.
Portsmouth, NH 03801-5356
Phone: 603-766-1413
Fax: 603-427-1539
Email: tvcravens@pw.cityofportsmouth.com

Portsmouth Public Works
Contact: David S. Allen,
Deputy Director of Public Works
680 Peverly Hill Rd.
Portsmouth, NH 03801-5356
Phone: 603-427-1530
Fax: 603-427-1539
Email: dsallen@pw.cityofportsmouth.com

GAS
M&N Operating Co. (Spectra Energy)
Contact: Lora F Bailey,
Right of Way Representative
947 Lincoln St.
Richmond, ME 04357
Phone: 207-737-8249 ext 233
Fax: 207-737-0949
Email: lfbailey@spectraenergy.com

Unitil Service Corporation
Contact: Frank Callahan,
Supervisor – Transmission Pipeline
325 West Rd.
Portsmouth, NH 03801
Phone: 800-642-0967
Fax: 603-427-6839
Email: callahan@unitil.com

Unitil Service Corporation
Contact: Phil Johnson,
Construction Supervisor
325 West Rd.
P.O. Box 508
Portsmouth, NH 03802-0508
Phone: 603-294-5157
Fax: 603-294-5257
Email: johnsonp@unitil.com
Email: (Mel Ciulla) ciulla@unitil.com)

Dover Community Services Department
Contact: Bill Boulanger,
Utility Systems Supervisor
288 Central Ave.
Dover NH 03820
Phone: 603-516-6459
Fax: 603-516-6504
Email: b.boulanger@ci.dover.nh.us

Dover Community Services Department
Contact: Douglas Steele,
Superintendent of Public Works & Utilities
288 Central Ave.
Dover NH 03820
Phone: 603-516-6070
Fax: 603-743-6068
Email: d.steele@ci.dover.nh.us

SEWER
Newington Waste Water Treatment Plant
Contact: Denis Messier, Plant Manager
115 Gosling Rd.
Newington, NH 03801
Phone: 603-431-4111
Fax: 603-431-0710

TELEPHONE
Fairpoint Communications
Contact: Jim Araujo,
SPOC-NHDOT Public Requirements
237 D Highway
Merrimack, NH 03054
Phone: 603-595-1152
Fax: 603-881-4072
Email: jaraujo@fairpoint.com

Fairpoint Communications
Contact: Gary Vickery,
Engineer/Specialist
207 Cross Rd.
Strafford, NH 03884
Phone: 603-335-8388
Fax: 603-742-2722
Email: gvickery@fairpoint.com

Bayring Communications
Contact: Danny Pelletier
359 Corporate Dr.
Portsmouth, NH 03801
Phone: 603-766-1316
Email: danny@bayring.com

FUEL LINE
US Airforce
Contact: M O'Lanna McCord, ACO/CEAN
129 Andrews St., Ste. 102
Langley AFB, VA 23665-2769
Phone: 757-764-9345

GENERAL NOTES

1. NORTH ARROW AND BEARINGS BASED ON NORTH AMERICAN DATUM 1983 (NAD83), HORIZONTAL COORDINATE VALUES FOR CONTROL POINTS PROVIDED BY THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION AS CONTROL POINTS: S301, S302 ,P196, AND P274 (DEPICTED HEREON)

   NOTE:PROPERTY AND RIGHT OF WAY LINES DEPICTED HEREON ARE COMPILED FROM DATA PROVIDED BY THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, IS APPROXIMATE IN NATURE, AND IS INTENDED TO GRAPHICALLY DEPICT THE APPROXIMATE LOCATION OF THE SUBJECT PREMISES.

2. ELEVATIONS AND CONTOURS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD29) AS PROVIDED BY THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION FOR CONTROL POINTS: S301,S302,P196, AND P274 (DEPICTED HEREON). THE PROJECT BENCHMARK IS A NHDPWH DISK STAMPED 331-0130 IN THE SOUTHEAST ABUTMENT OF THE NORTHBOUND BRIDGE OVER LITTLE BAY AND HAVING A PUBLISHED NGVD29 ELEVATION OF 12.549M (41.17 FEET) (DEPICTED HEREON – SEE SHEET 4 OF 4).

3. SUBJECT AREA WITHIN THE TOWN OF NEWINGTON NEW HAMPSHIRE IS PARTIALLY LOCATED IN FLOOD HAZARD ZONE "X" AREAS DETERMINED TO BE OUTSIDE THE 0.2% CHANCE FLOODPLAIN, AND PARTIALLY IN FLOOD HAZARD ZONE "AE" (SPECIAL FLOOD HAZARD AREAS SFHAs SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD, BASE FLOOD ELEVATIONS DETERMINED) AS DEPICTED ON F.I.R.M. MAP NUMBER 33015C0255E, PANEL NO. 255 OF 651, EFFECTIVE DATE: MAY 17, 2005.

   THE SUBJECT AREAS WITHIN THE CITY OF DOVER NEW HAMPSHIRE ARE PARTIALLY LOCATED IN FLOOD HAZARD ZONE "X" AREAS DETERMINED TO BE OUTSIDE THE 0.2% CHANCE FLOODPLAIN, PARTIALLY WITHIN FLOOD HAZARD ZONE "AE" (SPECIAL FLOOD HAZARD AREAS SFHAs SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD, BASE FLOOD ELEVATIONS DETERMINED), AND PARTIALLY WITHIN FLOOD HAZARD ZONE "A" (SPECIAL FLOOD HAZARD AREAS SFHAs SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD – NO BASE FLOOD ELEVATIONS DETERMINE) AS DEPICTED ON F.I.R.M. MAP NUMBER 33017C0405D, PANEL NO. 405 OF 405, EFFECTIVE DATE: MAY 17, 2005.

4. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING ELECTRONIC DRAWINGS AS PROVIDED BY THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED THOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF EXCAVATION.

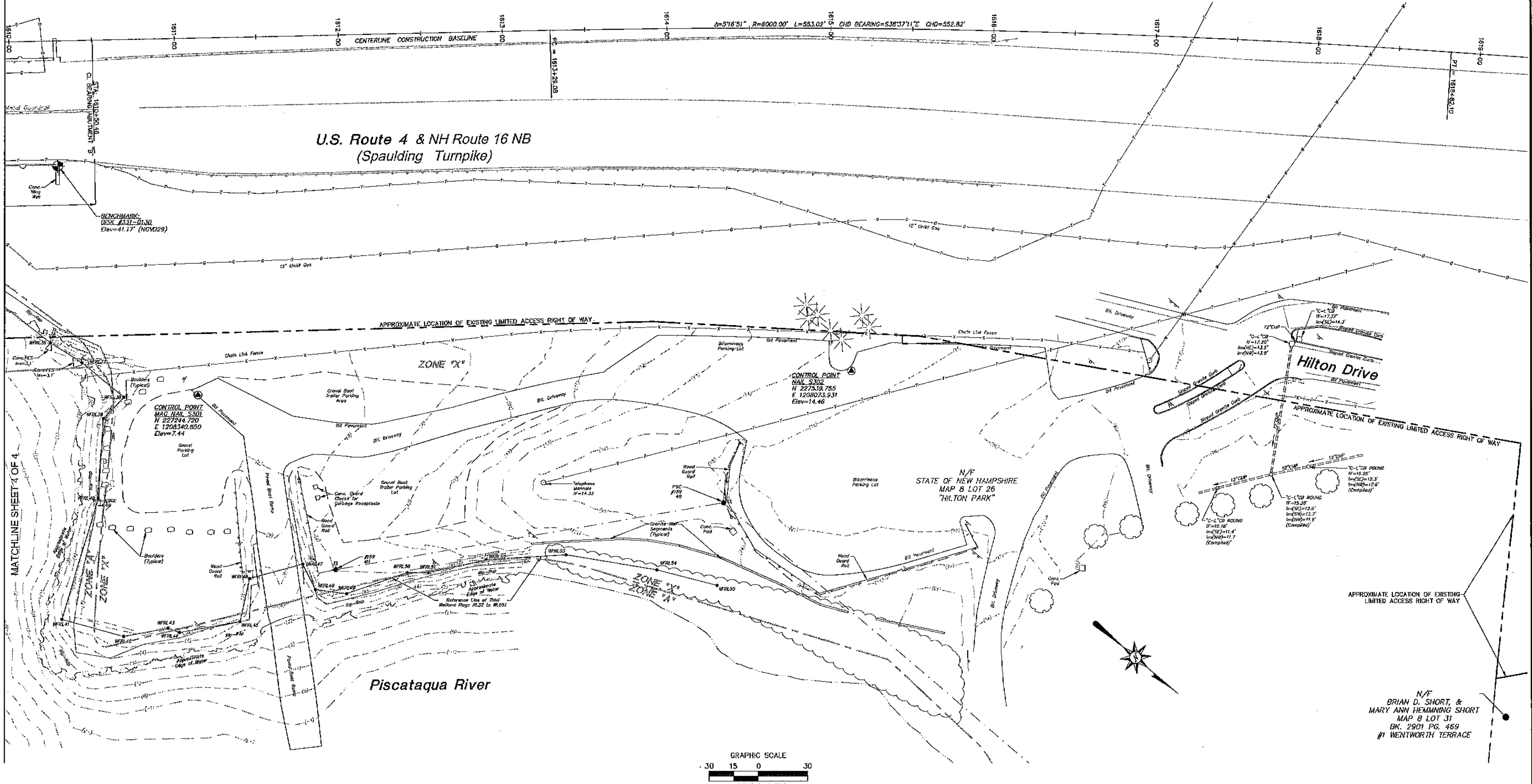
5. REFERENCE IS MADE TO THE FOLLOWING MAPS:
   A. "STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION – BUREAU OF BRIDGE DESIGN, TOWN NEWINGTON-DOVER, BRIDGE NO. 201/024 AND 201/025, STATE PROJECT 11238, LOCATION US ROUTE 4, NH ROUTE 16 AND SPAULDING TURNPIKE OVER LITTLE BAY, TEMPORARY ACCESS FOR BRIDGE CONSTRUCTION", BRIDGE SHEET 1 OF 3, SCALE: 1"=80', DATE:07-10-2009, PREPARED BY VANASSE HANGEN BRUSTLIN, INC.
   B. "STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DESIGN, GENERAL PLANS, STATE PROJECT NO. 11238M", PPS&E SUBMISSION PLANS SUBJECT TO CHANGE, SCALE:1"=60', DATE:07-16-2011, PREPARED BY VANASSE HANGEN BRUSTLIN, INC.
   C. "PRELIMINARY PLANS NEWINGTON-DOVER 11238Q FEBRUARY 2011, ROLL 1 OF 3", SCALE:1"=50', PREPARED BY CHA.
   D. "STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DESIGN SPAULDING TURNPIKE US ROUTE 4 & NH ROUTE 16, PROJECTNEWINGTON-DOVER 11238", SHEETS: 6-7 OF 12, SCALE:1"=50', PREPARED BY TEE GROUP, INC.
   E. "NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION –NOAA– NAVIGATIONAL CHART #13285, UNITED STATES – EAST COAST, MAINE-NEW HAMPSHIRE, PORTSMOUTH TO DOVER AND EXETER", MERCATOR PROJECTION, SCALE 1:20,000 AT LAT 43°08' NORTH AMERICAN DATUM OF 1983 (WORLD GEODETIC SYSTEM 1984), DATE: JUNE 2005.

6. NOTE: MEAN WATER ELEVATIONS DEPICTED BELOW PER MAP REFERENCE "A":
   M.H.W. ELEVATION =3.2'
   MEAN WATER ELEVATION=0.0'
   M.L.W. ELEVATION=-3.2

   NOTE: RIVER BOTTOM LOCATIONS OBSERVED ON 8-31-2011 THROUGH 9-1-2011. ALL ELEVATIONS RELATIVE TO PROJECT DATUM OF NGVD29.

7. BASE MAPPING OF EXISTING PIERS AND BRIDGE DETAIL OUTSIDE OF PROJECT SCOPE AREA DEPICTED HEREON WAS COMPILED FROM DIGITAL MAPPING PROVIDED BY COURTESY OF THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION AS REFERENCED IN MAP NOTES 5A – 5D.

8. WETLANDS DEPICTED HEREON WERE DELINEATED BY ALDEN BEAUCHEMIN, WETLAND SCIENTIST #29 FROM NOBIS ENGINEERING ON 10-28-2011 AND FIELD LOCATED BY BL COMPANIES ON 11-04-2011.



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OVER LITTLE BAY
TOWNS OF NEWINGTON & DOVER, STATE OF NEW HAMPSHIRE

REVISIONS

No.	Date	Desc.

Surveyed	D.A.S./R.H.R./J.P.
Drawn	D.A.S.
Checked	J.M.
Approved	M.G.
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Title
EXISTING CONDITIONS & TOPOGRAPHIC SURVEY

Sheet No. 4 of 4

EX-1

Xref (s): : XY11c386001

EROSION CONTROL NOTES

EROSION CONTROL NOTES – CONNECTICUT

SEDIMENT & EROSION CONTROL NARRATIVE
THE SEDIMENT AND EROSION CONTROL PLAN WAS DEVELOPED TO PROTECT THE EXISTING ROADWAY AND STORM DRAINAGE SYSTEMS, ADJACENT PROPERTIES, AND ANY ADJACENT WETLAND AREA AND ANY ADJACENT WATER COURSE FROM SEDIMENT LADEN SURFACE RUNOFF AND EROSION. A CONSTRUCTION SEQUENCE IS PROVIDED TO PROVIDE SURFACE RUNOFF EROSION CONTROLS PRIOR TO THE BEGINNING OF PROJECT DEMOLITION AND/OR CONSTRUCTION.

CONSTRUCTION SCHEDULE
THE ANTICIPATED STARTING DATE FOR CONSTRUCTION IS WINTER 2011 WITH COMPLETION ANTICIPATED SPRING 2012. APPROPRIATE EROSION CONTROL MEASURES AS DESCRIBED HEREIN, SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ALL DEMOLITION OR CONSTRUCTION ACTIVITY. SCHEDULE WORK TO MINIMIZE THE LENGTH OF TIME THAT BARE SOIL WILL BE EXPOSED.

CONTINGENCY EROSION PLAN
THE CONTRACTOR SHALL INSTALL ALL SPECIFIED EROSION CONTROL MEASURES AND WILL BE REQUIRED TO MAINTAIN THEM IN THEIR INTENDED FUNCTIONING CONDITION. THE AGENTS OF THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES (NHDES), U.S. ARM CORPS OR ENGINEERS NEW ENGLAND DISTRICT (ACOE), U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) AND/OR CIVIL ENGINEER SHALL HAVE THE AUTHORITY TO REQUIRE SUPPLEMENTAL MAINTENANCE OR ADDITIONAL MEASURES IF FIELD CONDITIONS ARE ENCOUNTERED BEYOND WHAT WOULD NORMALLY BE ANTICIPATED.

CONSTRUCTION SEQUENCE
THE FOLLOWING CONSTRUCTION SEQUENCE IS RECOMMENDED:
1. CONTACT NHDES, ACOE, AND EPA AGENTS AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO COMMENCEMENT OF ANY DEMOLITION, CONSTRUCTION OR REGULATED ACTIVITY ON THIS PROJECT.

2. CLEARING LIMITS SHALL BE PHYSICALLY MARKED IN THE FIELD AND APPROVED BY THEN NHDES, ACOE, AND EPA AGENTS PRIOR TO THE START OF WORK ON THE SITE. INSTALL TREE PROTECTION AND PERIMETER SILT FENCE.

3. CONSTRUCT STONE CONSTRUCTION ANTI-TRACKING PADS AT CONSTRUCTION ENTRANCES/EXITS AND WRAP FILTER FABRIC AROUND GRATES OF CATCH BASINS OR INSTALL SILT SACKS ON CATCH BASIN INLETS ON OFF SITE ROADS. INSTALL SILT FENCE AND OTHER EROSION CONTROL DEVICES INDICATED ON THESE PLANS AT PERIMETER OF PROPOSED SITE DISTURBANCE AND INSTALL ALL EROSION CONTROL MEASURES AND TREE PROTECTION INDICATED ON THESE PLANS. INSTALL SEDIMENT BASINS AND SEDIMENT TRAPS IF REQUIRED AT LOW AREAS OF SITE OR AS ORDERED BY THE ENGINEER OR AS SHOWN ON THESE PLANS.

4. CLEAR AND GRUB SITE. STOCKPILE CHIPS. STOCKPILE TOPSOIL. INSTALL EROSION CONTROLS AT STOCKPILES.

5. BUILDING AND SITE DEMOLITION AND REMOVAL. PAVEMENT REMOVAL.

6. INSTALL SILT FENCE, HAYBALES AND CONSTRUCT TEMPORARY DIVERSION BERMS.

7. COMMENCE STAGING OF MATERIALS AND SUPPORT SYSTEMS AND VEHICLES.

8. COMMENCE EXCAVATION AT HORIZONTAL DIRECTIONAL DRILLING JACKING AND RECEIVING PITS.

9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

10. THROUGHOUT CONSTRUCTION SEQUENCE, REMOVE SEDIMENT FROM BEHIND SILT FENCES, HAY BALES AND OTHER EROSION CONTROL DEVICES AS REQUIRED. REMOVAL SHALL BE ON A PERIODIC BASIS (EVERY SIGNIFICANT RAINFALL OF 0.25 INCH OR GREATER). INSPECTION OF EROSION CONTROL MEASURES SHALL BE ON A WEEKLY BASIS AND AFTER EACH RAINFALL OF 0.25 INCHES OR GREATER. SEDIMENT COLLECTED SHALL BE DEPOSITED AND SPREAD EVENLY UPLAND ON SLOPES DURING CONSTRUCTION.

11. COMMENCE HORIZONTAL DIRECTIONAL DRILLING.

12. COMPLETE HORIZONTAL DIRECTIONAL DRILLING.

13. COMMENCE BACKFILLING AND COMPACTION OF HORIZONTAL DIRECTIONAL DRILLING JACKING AND RECEIVING PITS. PAVEMENT SECTION SUBGRADE OR 4" TOPSOIL AS SHOWN ON PLANS.

14. CONSTRUCT PAVEMENT STRUCTURE MATCH TO EXISTING PAVEMENT.

15. PLACE 4" TOPSOIL AFTER FINAL GRADING IS COMPLETED. FERTILIZE SEED AND MULCH. SEED MIXTURE TO BE INSTALLED. USE EROSION CONTROL BLANKETS AS REQUIRED OR ORDERED FOR SLOPES GREATER THAN 3:1 AND AS SHOWN ON LANDSCAPE PLANS OR EROSION CONTROL PLANS. FOR TEMPORARY STABILIZATION BEYOND SEEDING DATES USE ANNUAL RYE AT 4.0 LBS/1,000 S.F. FERTILIZE WITH 10-10-10 AT 1.0 LBS. OF NITROGEN PER 1,000 S.F. AND LIME AT 100 LBS/1,000 S.F. (MAX.).

16. RESTORE DISTURBED AND STAGING AREAS AS NECESSARY TO ORIGINAL CONDITION OR BETTER.

17. UPON DIRECTION OF THE NHDES, ACOE, AND EPA AGENTS, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED FOLLOWING STABILIZATION OF THE SITE.

OPERATION REQUIREMENTS

CLEARING AND GRUBBING OPERATIONS
1. ALL SEDIMENTATION AND EROSION CONTROL MEASURES, INCLUDING THE CONSTRUCTION OF TEMPORARY SEDIMENTATION BASINS AND STONE CONSTRUCTION ENTRANCE ANTI-TRACKING PADS, WILL BE INSTALLED PRIOR TO THE START OF CLEARING AND GRUBBING AND DEMOLITION OPERATIONS.

2. FOLLOWING INSTALLATION OF ALL SEDIMENTATION AND EROSION CONTROL MEASURES, THE CONTRACTOR SHALL NOT PROCEED WITH GRADING, FILLING OR OTHER CONSTRUCTION OPERATIONS UNTIL THE ENGINEER HAS INSPECTED AND APPROVED ALL INSTALLATIONS.

3. THE CONTRACTOR SHALL TAKE EXTREME CARE DURING CLEARING AND GRUBBING OPERATIONS SO AS NOT TO DISTURB UNPROTECTED WETLAND AREAS OR SEDIMENTATION AND EROSION CONTROL DEVICES.

4. FOLLOWING THE COMPLETION OF CLEARING AND GRUBBING OPERATIONS, ALL AREAS SHALL BE STABILIZED WITH TOPSOIL AND SEEDING OR PROCESSED AGGREGATE STONE AS SOON AS PRACTICAL.

ROUGH GRADING OPERATIONS

1. DURING THE REMOVAL AND/OR PLACEMENT OF EARTH AS INDICATED ON THE GRADING PLAN, TOPSOIL SHALL BE STRIPPED AND APPROPRIATELY STOCKPILED FOR REUSE.

2. ALL STOCKPILED TOPSOIL SHALL BE SEEDED, MULCHED WITH HAY, AND ENCLOSED BY A SILTATION FENCE.

FILLING OPERATIONS

1. PRIOR TO FILLING, ALL SEDIMENTATION AND EROSION CONTROL DEVICES SHALL BE PROPERLY IMPLEMENTED, MAINTAINED AND FULLY INSTALLED, AS DIRECTED BY THE ENGINEER AND AS SHOWN ON THIS PLAN.

2. ALL FILL MATERIAL ADJACENT TO ANY WETLAND AREAS, IF APPLICABLE TO THIS PROJECT, SHALL BE GOOD QUALITY, WITH LESS THAN 5% FINES PASSING THROUGH A #200 SIEVE (BANK RUN), SHALL BE PLACED IN LIFT THICKNESSES NOT GREATER THAN THAT SPECIFIED IN PROJECT SPECIFICATIONS AND/OR THE PROJECT GEOTECHNICAL REPORT. LIFTS SHALL BE COMPACTED TO 95% MAX. DRY DENSITY MODIFIED PROCTOR OR AS SPECIFIED IN THE CONTRACT SPECIFICATIONS OR IN THE GEOTECHNICAL REPORT.

EXCAVATION AND HORIZONTAL DIRECTIONAL DRILLING CONSTRUCTION OPERATIONS.

1. SILT FENCES SHALL BE INSTALLED AT THE DOWNHILL SIDES OF EXCAVATIONS, MUD PUMP DISCHARGES, AND UTILITY TRENCH MATERIAL STOCKPILES. HAY BALES MAY BE USED IF SHOWN ON THE EROSION CONTROL PLANS OR IF DIRECTED BY THE CIVIL ENGINEER.

FINAL GRADING AND PAVING OPERATIONS

1. ALL INLET AND OUTLET PROTECTION SHALL BE PLACED AND MAINTAINED AS SHOWN ON EROSION CONTROL PLANS AND DETAILS, AND AS DESCRIBED IN SPECIFICATIONS AND AS DESCRIBED HEREIN.

2. PAVEMENT SUB-BASE AND BASE COURSES SHALL BE INSTALLED OVER AREAS TO BE PAVED AS SOON AS FINAL SUB-GRADES ARE ESTABLISHED AND UNDERGROUND UTILITIES AND STORM DRAINAGE SYSTEMS HAVE BEEN INSTALLED.

3. AFTER CONSTRUCTION OF PAVEMENT, TOPSOIL, FINAL SEED, MULCH AND LANDSCAPING, REMOVE ALL TEMPORARY EROSION CONTROL DEVICES ONLY AFTER ALL AREAS HAVE BEEN PAVED AND/OR GRASS HAS BEEN WELL ESTABLISHED AND THE SITE HAS BEEN INSPECTED AND APPROVED BY THE NHDES, ACOE, AND EPA.

INSTALLATION OF SEDIMENTATION AND EROSION CONTROL MEASURES
I. SILTATION FENCE
A. DIG A SIX INCH TRENCH ON THE UPHILL SIDE OF THE DESIGNATED FENCE LINE LOCATION.

B. POSITION THE POST AT THE BACK OF THE TRENCH (DOWNHILL SIDE), AND HAMMER THE POST AT LEAST 1.5 FEET INTO THE GROUND.

C. LAY THE BOTTOM SIX INCHES OF THE FABRIC INTO THE TRENCH TO PREVENT UNDERMINING BY STORM WATER RUN-OFF.

D. BACKFILL THE TRENCH AND COMPACT.

II. HAY BALES
A. BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE, ORIENTED PARALLEL TO THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.

B. BALES SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED THE WIDTH OF A BALE AND THE LENGTH OF THE PROPOSED BARRIER TO A MINIMUM DEPTH OF FOUR INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AGAINST THE BARRIER.

C. EACH BALE SHALL BE SECURELY ANCHORED BY AT LEAST TWO (2) STAKES.

D. THE GAPS BETWEEN BALES SHALL BE WEDGED WITH STRAW TO PREVENT WATER LEAKAGE.

E. THE BARRIER SHALL BE EXTENDED TO SUCH A LENGTH THAT THE BOTTOMS OF THE END BALES ARE HIGHER IN ELEVATION THAN THE TOP OF THE LOWEST MIDDLE BALE, TO ENSURE THAT RUN-OFF WILL FLOW EITHER THROUGH OR OVER THE BARRIER, BUT NOT AROUND IT.

OPERATION AND MAINTENANCE OF SEDIMENTATION AND EROSION CONTROL MEASURES
I. SILTATION FENCE
A. ALL SILTATION FENCES SHALL BE INSPECTED AS A MINIMUM WEEKLY OR AFTER EACH RAINFALL. ALL DETERIORATED FABRIC AND DAMAGED POSTS SHALL BE REPLACED AND PROPERLY REPOSITIONED IN ACCORDANCE WITH THIS PLAN.

B. SEDIMENT DEPOSITS SHALL BE REMOVED FROM BEHIND THE FENCE WHEN THEY EXCEED A HEIGHT OF ONE FOOT.

II. HAY BALES
A. ALL HAY BALE RINGS SHALL BE INSPECTED FOLLOWING EACH RAINFALL. REPAIR OR REPLACEMENT SHALL BE PROMPTLY MADE AS NEEDED.

B. DEPOSITS SHALL BE REMOVED AND CLEANED-OUT IF ONE HALF OF THE ORIGINAL HEIGHT OF THE BALES BECOMES FILLED WITH SEDIMENT.

EROSION AND SEDIMENT CONTROL PLAN
1. HAY BALE FILTERS OR SILTATION FENCE WILL BE INSTALLED AT ALL CULVERT OUTLETS IF CULVERT OUTLETS ARE APPLICABLE TO THIS PROJECT AND ALONG THE TOE OF ALL CRITICAL CUT AND FILL SLOPES.

2. CATCH BASINS WILL BE PROTECTED WITH HAY BALE FILTERS, SILT SACKS, SILTATION FENCE, OR OTHER INLET PROTECTION DEVICES PER DETAILS, THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED.

3. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION, DECEMBER 2008.

4. EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED PRIOR TO CONSTRUCTION WHENEVER POSSIBLE

5. ALL CONTROL MEASURES WILL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE DEMOLITION AND CONSTRUCTION PERIOD.

6. ADDITIONAL CONTROL MEASURES WILL BE INSTALLED DURING THE CONSTRUCTION PERIOD, IF NECESSARY OR REQUIRED OR AS DIRECTED BY THE CIVIL ENGINEER OR BY LOCAL GOVERNING OFFICIALS.

7. SEDIMENT REMOVED FROM EROSION CONTROL STRUCTURES WILL BE DISPOSED IN A MANNER WHICH IS CONSISTENT WITH THE INTENT AND REQUIREMENTS OF THE EROSION CONTROL PLANS, NOTES, AND DETAILS.

8. THE CONTRACTOR IS ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION AND SEDIMENT CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN, NOTIFICATION OF THE NHDES, ACOE, AND EPA OFFICE OR GOVERNING AUTHORITY OF ANY TRANSFER OF THIS RESPONSIBILITY AND FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED.

SEDIMENT AND EROSION CONTROL NOTES
1. THE SEDIMENT AND EROSION CONTROL PLAN IS ONLY INTENDED TO DESCRIBE THE SEDIMENT AND EROSION CONTROL TREATMENT FOR THIS SITE. SEE SEDIMENT AND EROSION CONTROL DETAILS AND CONSTRUCTION SEQUENCE. REFER TO SITE PLAN FOR GENERAL INFORMATION AND OTHER CONTRACT PLANS FOR APPROPRIATE INFORMATION.

2. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THIS SEDIMENT AND EROSION CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE PROPER INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED WITH CONSTRUCTION ON THE SITE OF THE REQUIREMENTS AND OBJECTIVES OF THIS PLAN, INFORMING THE GOVERNING AUTHORITY OR INLAND WETLANDS AGENCY OF ANY TRANSFER OF THIS RESPONSIBILITY, AND FOR CONVEYING A COPY OF THE SEDIMENT & EROSION CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED.

3. AN EROSION CONTROL BOND MAY BE REQUIRED TO BE POSTED TO ENSURE IMPLEMENTATION OF THE EROSION CONTROL MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE POSTING OF THIS BOND AND FOR INQUIRIES TO THE VARIOUS REGULATING AUTHORITIES FOR INFORMATION ON THE METHOD, TYPE AND AMOUNT OF THE BOND POSTING UNLESS OTHERWISE DIRECTED BY THE OWNER.

4. VISUAL SITE INSPECTIONS SHALL BE CONDUCTED WEEKLY, AND AFTER EACH MEASURABLE PRECIPITATION EVENT OF 0.25 INCHES OR GREATER BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL, TO ASCERTAIN THAT THE EROSION AND SEDIMENT CONTROL (E&S) BMPS ARE OPERATIONAL AND EFFECTIVE IN PREVENTING POLLUTION. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT, AND INCLUDE:
A)A SUMMARY OF THE SITE CONDITIONS, E&S BMPS, AND COMPLIANCE; AND
B)THE DATE, TIME, AND THE NAME OF THE PERSON CONDUCTING THE INSPECTION

5. THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT AND EROSION CONTROLS IN ACCORDANCE WITH THE NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION, DECEMBER 2008 OR LATEST EDITION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AND AS DIRECTED BY THE NHDES, ACOE AND EPA. THE CONTRACTOR SHALL KEEP A COPY OF THE GUIDELINES ON-SITE FOR REFERENCE DURING CONSTRUCTION.

6. ADDITIONAL AND/OR ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION PERIOD IF FOUND NECESSARY BY THE CONTRACTOR, OWNER, SITE ENGINEER, NHDES, ACOE AND EPA, OR GOVERNING AGENCIES. THE CONTRACTOR SHALL CONTACT THE OWNER AND APPROPRIATE GOVERNING AGENCIES FOR APPROVAL IF ALTERNATIVE CONTROLS OTHER THAN THOSE SHOWN ON THE PLANS ARE PROPOSED.

7. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROLS BEFORE AND AFTER EACH STORM (0.25 INCHES OR GREATER RAINFALL), OR AT LEAST WEEKLY, TO VERIFY THAT THE CONTROLS ARE OPERATING PROPERLY AND MAKE REPAIRS WHERE NECESSARY.

8. THE CONTRACTOR SHALL KEEP A SUPPLY OF EROSION CONTROL MATERIAL (HAY BALES, SILT FENCE, JUTE MESH,RIP RAP ETC.) ON-SITE FOR MAINTENANCE AND EMERGENCY REPAIRS.

9. PROTECT EXISTING TREES THAT ARE TO BE SAVED BY FENCING AT THE DRIP LINE OR AS SHOWN WITH SNOW FENCE, ORANGE SAFETY FENCE, OR EQUIVALENT FENCING. ANY LIMB TRIMMING SHOULD BE DONE BEFORE CONSTRUCTION BEGINS IN THAT AREA; FENCING SHALL BE MAINTAINED AND REPAIRED DURING CONSTRUCTION.

10. INSTALL PERIMETER SEDIMENT CONTROLS PRIOR TO CLEARING OR CONSTRUCTION. ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE LIMIT OF DISTURBANCE, WHICH SHALL BE MARKED WITH SILT FENCE, SAFETY FENCE, HAY BALES, RIBBONS, OR OTHER MEANS PRIOR TO CLEARING. CONSTRUCTION ACTIVITY SHALL REMAIN ON THE UPHILL SIDE OF THE SILT FENCE UNLESS WORK IS SPECIFICALLY CALLED FOR ON THE DOWNHILL SIDE OF THE FENCE.

11. STONE CONSTRUCTION ENTRANCE ANTI-TRACKING PADS SHALL BE INSTALLED AT START OF CONSTRUCTION AND MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION. THE LOCATION OF THE TRACKING PADS MAY CHANGE AS VARIOUS PHASES OF CONSTRUCTION ARE COMPLETED.

12. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR USE IN FINAL LANDSCAPING. ALL EARTH STOCKPILES SHALL HAVE HAY BALES OR SILT FENCE AROUND THE LIMIT OF PILE. PILES SHALL BE TEMPORARILY SEEDED IF PILE IS TO REMAIN IN PLACE FOR MORE THAN 2 MONTHS.

13. SEDIMENTATION BASINS SHALL PROVIDE 134 CUBIC YARDS OF SEDIMENT STORAGE PER DISTURBED ACRE CONTRIBUTING TO THE BASIN. PROVIDE BASIN VOLUMES FOR ALL DISTURBANCE ON SITE.

14. COMPLY WITH REQUIREMENTS OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY NPDES CONSTRUCTION GENERAL PERMIT, FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES, RECORD KEEPING AND INSPECTION REQUIREMENTS.

15. STONE CONSTRUCTION ENTRANCE ANTI-TRACKING PADS SHALL BE INSTALLED PRIOR TO ANY ON SITE EXCAVATION AND SHALL BE MAINTAINED DURING ALL EXCAVATION AND CONSTRUCTION ACTIVITIES.

16. MINIMIZE LAND DISTURBANCES. SEED AND MULCH DISTURBED AREAS WITH TEMPORARY MIX AS SOON AS PRACTICABLE (2 WEEK MAXIMUM UNSTABILIZED PERIOD) USING PERENNIAL RYEGRASS AT 40 LBS PER ACRE. MULCH ALL CUT AND FILL SLOPES AND SWALES WITH LOOSE HAY AT A RATE OF 2 TONS PER ACRE. IF NECESSARY, REPLACE LOOSE HAY ON SLOPES WITH EROSION CONTROL BLANKETS OR JUTE CLOTH. MODERATELY GRADED AREAS, ISLANDS, AND TEMPORARY CONSTRUCTION STAGING AREAS MAY BE HYDROSEEDED WITH TACKIFIER.

17. MAINTAIN EXISTING PAVED AREAS FOR CONSTRUCTION STAGING FOR AS LONG AS POSSIBLE. REMOVE AND REUSE BROKEN PAVEMENT LATER DURING ROUGH GRADING EARTHWORK PHASE IF INDICATED ON GRADING PLANS.

18. SILT FENCE AND OTHER SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH CONTRACT DRAWINGS AND MANUFACTURER'S RECOMMENDATIONS PRIOR TO WORK IN ANY UPLAND AREAS.

19. EXCAVATED MATERIAL FROM TEMPORARY SILT TRAPS MUST BE STOCKPILED ON UPHILL SIDE OF SILT FENCE.

20. INSTALL SILT FENCE ACCORDING TO MANUFACTURER'S INSTRUCTION, PARTICULARLY, BURY LOWER EDGE OF FABRIC INTO GROUND. SILT FENCE SHALL BE MIRAFI ENVIROFENCE, AMOCO SILT STOP OR EQUIVALENT APPROVED BY THE CIVIL ENGINEER. FILTER FABRIC USED SHALL BE MIRAFI 100X OR EQUIVALENT. SEE SPECIFICATIONS FOR FURTHER INFORMATION.

21. WHERE INDICATED ON EROSION CONTROL PLANS USE NEW HAY BALES AND REPLACE THEM WHENEVER THEIR CONDITION DETERIORATES BEYOND REASONABLE USABILITY. STAKE HAY BALES SECURELY INTO GROUND AND BUTT TIGHTLY TOGETHER TO PREVENT UNDERCUTTING AND BYPASSING.

22. INSTALL TEMPORARY DIVERSION DITCHES, PLUNGE POOLS, SEDIMENT BASINS, SEDIMENT TRAPS AND DEWATERING PITS AS SHOWN AND AS NECESSARY DURING VARIOUS PHASES OF CONSTRUCTION TO CONTROL RUNOFF UNTIL UPHILL AREAS ARE STABILIZED. LOCATION OF TEMPORARY SEDIMENT BASINS WILL REQUIRE REVIEW AND APPROVAL BY THE CIVIL ENGINEER AND GOVERNING OFFICIAL.

23. DIRECT ALL DEWATERING PUMP DISCHARGE TO A SEDIMENT CONTROL DEVICE SUCH AS TEMPORARY PITS, SEDIMENT TRAP, SEDIMENT BASINS OR GRASS FILTERS WITHIN THE APPROVED LIMIT OF DISTURBANCE. DISCHARGE TO STORM DRAINAGE SYSTEM OR SURFACE WATERS FROM SEDIMENT CONTROLS SHALL BE CLEAR.

24. SWEEP AFFECTED PORTIONS OF OFF SITE ROADS ONE OR MORE TIMES A DAY (OR LESS FREQUENTLY IF TRACKING IS NOT A PROBLEM) DURING CONSTRUCTION. OTHER DUST CONTROL MEASURES TO BE USED AS NECESSARY INCLUDE WATERING DOWN DISTURBED AREAS, USING CALCIUM CHLORIDE, AND COVERING LOADS ON DUMP TRUCKS.

25. CLEAN ACCUMULATED SEDIMENT FROM CATCH BASIN SUMPS AS NECESSARY AND AS DIRECTED BY THE CIVIL ENGINEER OR OWNER'S CONSTRUCTION REPRESENTATIVE. REMOVE ACCUMULATED SEDIMENT FROM BEHIND HAY BALES AND SILT FENCE WHEN LEVEL REACHES HALF THE HEIGHT OF THE HAY BALE OR ONE FOOT AT SILT FENCE. DISPOSE OF SEDIMENT LEGALLY EITHER ON OR OFF SITE.

26 .IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

27. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG OR EQUIVALENT SEDIMENT REMOVAL FACILITY, OVER UNDISTURBED VEGETATED AREAS.

28. ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF UTILITY AND STORM PIPE TRENCHES SO AS TO ALLOW THE TRENCH TO INTERCEPT ALL SILT LADEN RUNOFF.

29. CONTRACTOR SHALL ONLY EXCAVATE AS MUCH UTILITY AND STORM PIPE TRENCH WORK AS CAN BE COMPLETED, BACKFILLED AND STABILIZED IN ONE DAY SO AS TO LIMIT THE AMOUNT OF OPEN, DISTURBED TRENCHING.

30. ANY STOCKPILES OF STRIPPED MATERIALS ARE TO BE PERIODICALLY SPRAYED WITH WATER OR A CRUSTING AGENT TO STABILIZE POTENTIALLY WIND-BLOWN MATERIAL. HAUL ROADS BOTH INTO AND AROUND THE SITE ARE TO BE SPRAYED AS NEEDED TO SUPPRESS DUST. TRUCKS HAULING IMPORT FILL MATERIAL ARE TO BE TARPED TO AID IN THE CONTROL OF AIRBORNE DUST. DURING HIGH WIND EVENTS (20 TO 30 MPH SUSTAINED) CONSTRUCTION ACTIVITY SHALL BE LIMITED OR CEASED IF DUST CANNOT BE CONTROLLED BY WETTING.

31. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM OF 70% UNIFORM PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING OR OTHER MOVEMENTS.

32. MAINTAIN ALL PERMANENT AND TEMPORARY SEDIMENT CONTROL DEVICES IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD. UPON COMPLETION OF WORK SWEEP PARKING LOT AND REMOVE ALL TEMPORARY SEDIMENT CONTROLS WHEN AUTHORIZED BY LOCAL GOVERNING AUTHORITY. FILE NOT (NOTICE OF TERMINATION) WITH GOVERNING AUTHORITY RESPONSIBLE FOR REGULATING STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES PER NPDES.

DEMOLITION NOTES

DEMOLITION NOTES

1. SEDIMENT AND EROSION CONTROLS AS SHOWN ON THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE INSTALLED BY THE DEMOLITION CONTRACTOR PRIOR TO START OF DEMOLITION AND CLEARING AND GRUBBING OPERATIONS.

2. REMOVE AND DISPOSE OF ANY SIDEWALKS, FENCES, STAIRS, WALLS, DEBRIS AND RUBBISH REQUIRING REMOVAL FROM THE WORK AREA IN AN APPROVED OFF SITE LANDFILL, BY AN APPROVED HAULER. HAULER SHALL COMPLY WITH ALL REGULATORY REQUIREMENTS.

3. THE CONTRACTOR SHALL SECURE ALL PERMITS FOR HIS DEMOLITION AND DISPOSAL OF HIS DEMOLITION MATERIAL TO BE REMOVED FROM THE SITE, THE CONTRACTOR SHALL POST BONDS AND PAY PERMIT FEES AS REQUIRED.

4. ASBESTOS OR HAZARDOUS MATERIAL, IF FOUND ON SITE, SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIAL CONTRACTOR.

5. THE CONTRACTOR SHALL PREPARE ALL MANIFEST DOCUMENTS AS REQUIRED PRIOR TO COMMENCEMENT OF DEMOLITION.

6. THE CONTRACTOR SHALL PROTECT ALL IRON PINS, MONUMENTS AND PROPERTY CORNERS DURING DEMOLITION ACTIVITIES. ANY CONTRACTOR DISTURBED PINS, MONUMENTS, AND OR PROPERTY CORNERS, ETC. SHALL BE RESET BY A LICENSED LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.

7. THE DEMOLITION CONTRACTOR SHALL STABILIZE THE SITE AND KEEP EROSION CONTROL MEASURES IN PLACE UNTIL THE COMPLETION OF HIS WORK OR UNTIL THE COMMENCEMENT OF WORK BY THE SITE CONTRACTOR, WHICHEVER OCCURS FIRST, AS REQUIRED OR DEEMED NECESSARY BY THE ENGINEER OR OWNER'S REPRESENTATIVE. THE SITE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE MAINTENANCE OF EXISTING EROSION AND SEDIMENTATION CONTROLS AND FOR INSTALLATION OF ANY NEW EROSION AND SEDIMENTATION CONTROLS AS PER THE SEDIMENT AND EROSION CONTROL PLAN, AT THAT TIME.

8. THE CONTRACTOR SHALL PUMP OUT BUILDING FUEL AND WASTE OIL TANKS (IF ANY ARE ENCOUNTERED) AND REMOVE FUEL TO AN APPROVED DISPOSAL AREA BY A LICENSED WASTE OIL HANDLING CONTRACTOR IN STRICT ACCORDANCE WITH STATE REQUIREMENTS.

9. IF IMPACTED OR CONTAMINATED SOIL IS ENCOUNTERED BY THE CONTRACTOR, THE CONTRACTOR SHALL SUSPEND EXCAVATION WORK OF IMPACTED SOIL AND NOTIFY THE OWNER AND/OR OWNER'S ENVIRONMENTAL CONSULTANT PRIOR TO PROCEEDING WITH FURTHER WORK IN THE IMPACTED SOIL LOCATION UNTIL FURTHER INSTRUCTED BY THE OWNER AND/OR OWNER'S ENVIRONMENTAL CONSULTANT.

10. THE CONTRACTOR SHALL ADHERE TO ALL OSHA FEDERAL STATE AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOISTS, ETC. IN PROXIMITY OF OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES CONTACT POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS. ANY UTILITY PROVIDER FEES SHALL BE PAID BY THE CONTRACTOR.

11. CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC DEVICES FOR PROTECTION OF VEHICLES AND PEDESTRIANS CONSISTING OF DRUMS, BARRIERS, SIGNS, LIGHTS, FENCES AND UNIFORMED TRAFFIC CONTROLLERS AS REQUIRED OR AS ORDERED BY THE ENGINEER OR AS REQUIRED BY THE LOCAL GOVERNING AUTHORITIES, OR AS REQUIRED BY PERMIT STIPULATIONS. CONTRACTOR SHALL MAINTAIN ALL TRAFFIC LANES AND PEDESTRIAN WALKWAYS AT ALL TIMES UNLESS WRITTEN APPROVAL FROM THE APPROPRIATE GOVERNING AGENCY IS GRANTED.

12. INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY PROVIDER AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE SYSTEMS ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES AND STORM DRAINAGE SYSTEMS. PRIOR TO DEMOLITION OR CONSTRUCTION THE CONTRACTOR SHALL CONTACT DIG SAFE SYSTEM, INC." 72 HOURS BEFORE COMMENCEMENT OF WORK AT 1-888-344-7233 AND VERIFY ALL UTILITY AND STORM DRAINAGE SYSTEM LOCATIONS.

13. BACK FILL DEPRESSIONS, FOUNDATION HOLES AND REMOVED DRIVEWAY AREAS IN LOCATIONS NOT SUBJECT TO FURTHER EXCAVATION WITH SOIL MATERIAL APPROVED BY THE OWNER'S GEOTECHNICAL ENGINEER AND COMPACT, FERTILIZE, SEED AND MULCH DISTURBED AREAS NOT SUBJECT TO FURTHER SITE CONSTRUCTION. EMPLOY WATERING EQUIPMENT FOR DUST CONTROL.

14. THE CONTRACTOR SHALL REPAIR PAVEMENTS BY INSTALLING TEMPORARY AND PERMANENT PAVEMENTS IN PUBLIC RIGHTS OF WAYS AS REQUIRED BY LOCAL GOVERNING AUTHORITIES AND THE STATE OF NEW HAMPSHIRE AND PER PERMIT REQUIREMENTS DUE TO DEMOLITION.

15. THE CONTRACTOR SHALL RESTORE ANY UTILITY STRUCTURE, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, DRAINAGE STRUCTURE, SWALE OR LANDSCAPED AREAS DISTURBED DURING DEMOLITION TO THEIR ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE OWNER.

16. THE EXISTING PAVEMENT NOT MAY BE USED IN FILL AREAS.

17. NO WORK ON THIS SITE SHALL BE INITIATED BY THE CONTRACTOR UNTIL A PRE-CONSTRUCTION MEETING WITH OWNER AND THE CIVIL ENGINEER IS PERFORMED. THE CONTRACTOR SHOULD BE AWARE OF ANY SITE INFORMATION AVAILABLE SUCH AS GEOTECHNICAL AND ENVIRONMENTAL REPORTS. THE CONTRACTOR SHALL HAVE "DIG SAFE" MARK OUTS OF EXISTING UTILITIES COMPLETED PRIOR TO MEETING.

18. NO SALVAGE SHALL BE PERMITTED UNLESS PAID TO THE OWNER AS A CREDIT.

19. ENGINEER IS NOT RESPONSIBLE FOR SITE SAFETY MEASURES TO BE EMPLOYED DURING CONSTRUCTION. THE ENGINEER HAS NO CONTRACTUAL DUTY TO CONTROL THE SAFEST METHODS OR MEANS OF THE WORK, JOBSITE RESPONSIBILITIES, SUPERVISION OR TO SUPERVISE SAFETY, AND DOES NOT VOLUNTARILY ASSUME ANY SUCH DUTY OR RESPONSIBILITY.

20. THE CONTRACTOR SHALL COMPLY WITH CFR29 PART 1926 FOR EXCAVATION, TRENCHING, AND TRENCH PROTECTION REQUIREMENTS.

SITE PLAN NOTES

SITE PLAN NOTES

1. ALL CONSTRUCTION SHALL COMPLY WITH THESE PLANS; STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS, TOWN OF NEWINGTON, NH, TOWN OF DOVER, NH STANDARDS IN THE ABOVE REFERENCED INCREASING HIERARCHY. IF SPECIFICATIONS ARE IN CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL APPLY. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE OSHA, FEDERAL, STATE AND LOCAL REGULATIONS.

2. THE CONTRACTOR SHALL POST ALL BONDS, PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK.

3. REFER TO PLANS BY NOBIS ENGINEERING, INC, DETAILS AND PROJECT MANUAL FOR ADDITIONAL INFORMATION. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS IN THE FIELD AND CONTACT THE CIVIL ENGINEER IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO BIDDING. ANY CONFLICT BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE CONFIRMED WITH THE OWNER'S CONSTRUCTION MANAGER PRIOR TO BIDDING.

4. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS, MATERIALS PER PLANS AND SPECIFICATIONS TO THE OWNER AND CIVIL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY TO THE SITE. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW.

5. THE CONTRACTOR SHALL FOLLOW THE SEQUENCE OF CONSTRUCTION NOTES PROVIDED IN THE EROSION CONTROL PLAN NOTES (THIS SHEET).

7. SHOULD ANY UNCHARTED OR INCORRECTLY CHARTED, EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE CIVIL ENGINEER IMMEDIATELY FOR DIRECTIONS BEFORE PROCEEDING FURTHER WITH WORK IN THIS AREA.

8. DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED AND USED BY THE OWNER OR OTHERS DURING OCCUPIED HOURS EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE OWNER AND THE LOCAL MUNICIPALITIES. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY SERVICE HAS BEEN PROVIDED.

10. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC DEVICES FOR PROTECTION OF VEHICLES AND PEDESTRIANS CONSISTING OF DRUMS, BARRIERS, SIGNS, LIGHTS, FENCES, TRAFFIC CONTROLLERS AND UNIFORMED TRAFFIC OFFICERS AS REQUIRED OR AS ORDERED BY THE ENGINEER OR AS REQUIRED BY THE LOCAL GOVERNING AUTHORITIES OR AS REQUIRED BY PERMIT STIPULATIONS.

11. REFER TO DETAIL SHEETS FOR PAVEMENT INFORMATION.

12. TRAFFIC CONTROL SIGNAGE SHALL CONFORM TO THE STATE DOT STANDARD DETAIL SHEETS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. SIGNS SHALL BE INSTALLED PLUMB WITH THE EDGE OF THE SIGN 2' OFF THE FACE OF THE CURB, AND WITH 7' VERTICAL CLEARANCE UNLESS OTHERWISE DETAILED OR NOTED.

13. THE CONTRACT LIMIT IS THE PROPERTY LINE UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE CONTRACT DRAWINGS.

14. THE CONTRACTOR SHALL ABIDE BY ALL OSHA FEDERAL STATE AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOISTS, ETC. IN CLOSE PROXIMITY TO OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES, CONTACT POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS. ANY UTILITY COMPANY FEES SHALL BE PAID FOR BY THE CONTRACTOR.

18. THE CONTRACTOR SHALL RESTORE ANY DRAINAGE STRUCTURE, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, LANDSCAPED AREAS OR SIGNAGE DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AS APPROVED BY THE CIVIL ENGINEER.

19. THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES) TO THE OWNER AT THE END OF CONSTRUCTION.

20. THE ENGINEER IS NOT RESPONSIBLE FOR SITE SAFETY MEASURES TO BE EMPLOYED DURING CONSTRUCTION. THE ARCHITECT AND ENGINEER HAVE NO CONTRACTUAL DUTY TO CONTROL THE SAFEST METHODS OR MEANS OF THE WORK, JOB SITE RESPONSIBILITIES, SUPERVISION OR TO SUPERVISE SAFETY AND DOES NOT VOLUNTARILY ASSUME ANY SUCH DUTY OR RESPONSIBILITY.

21. THE CONTRACTOR SHALL COMPLY WITH CFR 29 PART 1926 FOR EXCAVATION TRENCHING AND TRENCH PROTECTION REQUIREMENTS.

22. EXISTING BOUNDARY AND TOPOGRAPHY IS BASED ON DRAWING TITLED "EXISTING CONDITIONS & TOPOGRAPHIC SURVEY – PROPOSED RELOCATED UNITIL GAS PIPELINE, NEWINGTON – DOVER, US ROUTE 4, NH ROUTE 16, AND SPAULDING TURNPIKE, OVER LITTLE BAY, TOWNS OF NEWINGTON & DOVER, STATE OF NEW HAMPSHIRE" SCALE 1"=30' DATED 09/13/2011 BY " BL COMPANIES, INC." NUMBER EX-1 SHEETS 1 OF 4 THROUGH 4 OF 4.

23. ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY THE OWNER, CIVIL ENGINEER, AND APPROPRIATE REGULATORY AGENCY PRIOR TO INSTALLATION DURING THE BIDDING PROCESS.

24. INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE SYSTEMS HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY PROVIDER AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE SYSTEMS ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE SYSTEMS INCLUDING SERVICES. PRIOR TO DEMOLITION OR CONSTRUCTION, THE CONTRACTOR SHALL CONTACT "DIG SAFE SYSTEM, INC." 72 HOURS BEFORE COMMENCEMENT OF WORK AT "(888) 344-7233" AND VERIFY ALL UTILITY AND STORM DRAINAGE SYSTEM LOCATIONS.

27. AN EROSION CONTROL BOND IS REQUIRED TO BE POSTED BY THE CONTRACTOR BEFORE THE START OF ANY ACTIVITY ON OR OFF SITE. THE AMOUNT OF THE EROSION CONTROL BOND IS TO BE DETERMINED BY THE STATE OF NEW HAMPSHIRE.

THE PROJECT LIMIT OF DISTURBANCE IS LOCATED WITHIN A FEMA DESIGNATED FLOOD HAZARD AREA "X" AREAS DETERMINED TO BE OUTSIDE THE 0.2% CHANCE FLOODPLAIN.

33. THERE ARE WETLANDS LOCATED ON THE SITE AS DELINEATED BY NOBIS ENGINEERING, INC. AND SHOWN ON THE SURVEY PLANS (EX-1).

FOR PERMITTING PURPOSES ONLY
NOT RELEASED FOR CONSTRUCTION

GRADING AND UTILITIES NOTES

GRADING AND DRAINAGE NOTES

1. SEE COVER SHEET FOR ADDITIONAL GENERAL NOTES.

2. THE CONTRACTOR SHALL PRESERVE EXISTING VEGETATION WHERE POSSIBLE AND/OR AS NOTED ON DRAWINGS. REFER TO EROSION CONTROL PLAN FOR LIMIT OF DISTURBANCE AND EROSION CONTROL NOTES.

3. TOPSOIL SHALL BE STRIPPED AND STOCKPILED ON SITE FOR USE IN FINAL LANDSCAPING.

4. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS REQUIRED BY GOVERNMENT AND LOCAL AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY CONSTRUCTION PERMITS FROM THE STATE OF NEW HAMPSHIRE, TOWN OF NEWINGTON, NH AND TOWN OF DOVER, NH REQUIRED TO PERFORM ALL REQUIRED WORK, INCLUDING FOR STREET CUTS.

5. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC DEVICES FOR PROTECTION OF VEHICLES AND PEDESTRIANS CONSISTING OF DRUMS, BARRIERS, SIGNS, LIGHTS, FENCES AND UNIFORMED TRAFFIC CONTROLLERS AS REQUIRED, ORDERED BY THE ENGINEER OR REQUIRED BY THE STATE AND LOCAL GOVERNING AUTHORITIES.

6. THE CONTRACTOR SHALL COMPACT FILL IN 8" MAXIMUM LIFTS UNDER ALL PARKING, BUILDING, AND DRIVE AREAS TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557 (MODIFIED PROCTOR TEST), OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.

7. UNDERDRAINS SHALL BE ADDED, IF DETERMINED NECESSARY IN THE FIELD BY THE OWNER/GEOTECHNICAL ENGINEER, AFTER SUBGRADE IS ROUGH GRADED.

8. VERTICAL DATUM IS NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD29).

9. CLEARING LIMITS SHALL BE PHYSICALLY MARKED IN THE FIELD AND APPROVED BY THE NHDES AGENT PRIOR TO THE START OF WORK ON THE SITE.

10. PROPER CONSTRUCTION PROCEDURES SHALL BE FOLLOWED ON ALL IMPROVEMENTS WITHIN THIS PARCEL SO AS TO PREVENT THE SILTING OF ANY WATERCOURSE OR WETLANDS IN ACCORDANCE WITH THE REGULATIONS OF THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES STORMWATER MANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL STRICTLY ADHERE TO THE "EROSION CONTROL PLAN" CONTAINED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE TO POST ALL BONDS AS REQUIRED BY THE LOCAL MUNICIPALITIES, OR STATE OF NEW HAMPSHIRE WHICH WOULD GUARANTEE THE PROPER IMPLEMENTATION OF THE PLAN.

11. ALL SITE WORK, MATERIALS OR CONSTRUCTION, AND CONSTRUCTION METHODS FOR EARTHWORK WORK SHALL CONFORM TO THE PLANS AND DETAILS. OTHERWISE THIS WORK SHALL CONFORM TO THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION AND PROJECT GEOTECHNICAL REPORT IF THERE IS NO PROJECT SPECIFICATIONS MANUAL. ALL FILL MATERIAL UNDER STRUCTURES AND PAVED AREAS SHALL BE PER THE ABOVE STATED APPLICABLE SPECIFICATIONS, AND/OR PROJECT GEOTECHNICAL REPORT, AND SHALL BE PLACED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL ENGINEER. MATERIAL SHALL BE COMPACTED IN 8" LIFTS TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1557 AT 95 PERCENT OF OPTIMUM MOISTURE CONTENT.

12. ALL DISTURBANCE INCURRED TO TOWN, COUNTY, STATE PROPERTY DUE TO CONSTRUCTION SHALL BE RESTORED TO ITS PREVIOUS CONDITION OR BETTER, TO THE SATISFACTION OF THE TOWN OF NEWINGTON, NH, TOWN OF DOVER, NH AND AND STATE OF NEW HAMPSHIRE.

13. ALL CONSTRUCTION WITHIN A DOT RIGHT OF WAY SHALL COMPLY WITH ALL DEPARTMENT OF TRANSPORTATION STANDARDS. WHERE SPECIFICATIONS OR STANDARDS ARE IN CONFLICT, THE MORE STRINGENT SPECIFICATION OR STANDARD SHALL BE SUPERIOR.

14. IF IMPACTED OR CONTAMINATED SOIL IS ENCOUNTERED BY THE CONTRACTOR, THE CONTRACTOR SHALL SUSPEND EXCAVATION WORK OF IMPACTED SOIL AND NOTIFY THE OWNER AND/OR OWNER'S ENVIRONMENTAL CONSULTANT PRIOR TO PROCEEDING WITH FURTHER WORK IN THE IMPACTED SOIL LOCATION UNTIL FURTHER INSTRUCTED BY THE OWNER AND/OR OWNER'S ENVIRONMENTAL CONSULTANT.

UTILITY CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC DEVICES FOR PROTECTION OF VEHICLES AND PEDESTRIANS CONSISTING OF DRUMS, BARRIERS, SIGNS, LIGHTS, FENCES AND UNIFORMED TRAFFIC CONTROLLERS AND UNIFORMED TRAFFIC OFFICERS AS REQUIRED, OR AS ORDERED BY THE ENGINEER OR AS REQUIRED BY THE LOCAL GOVERNING AUTHORITIES OR AS REQUIRED BY PERMIT STIPULATIONS.

2. MANHOLE RIMS AND CATCH BASIN GRATES SHALL BE SET TO ELEVATIONS SHOWN. SET ALL EXISTING MANHOLE RIMS AND VALVE COVERS TO BE RAISED OR LOWERED FLUSH WITH FINAL GRADE AS NECESSARY.

3. THE CONTRACTOR SHALL RESTORE ANY UTILITY STRUCTURE, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, DRAINAGE STRUCTURE, SWALE OR LANDSCAPED AREAS DISTURBED DURING CONSTRUCTION, TO THEIR ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE OWNER (STATE OF NEW HAMPSHIRE), TOWN OF NEWINGTON, NH AND TOWN OF DOVER, NH.

4. INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY PROVIDER AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE INCLUDING SERVICES. CONTACT "DIG SAFE SYSTEMS, INC." AT (888) 344-7233 72 HOURS PRIOR TO CONSTRUCTION AND VERIFY ALL UNDERGROUND AND OVERHEAD UTILITY AND STORM DRAINAGE LOCATIONS. THE CONTRACTOR SHALL EMPLOY THE USE OF A UTILITY LOCATING COMPANY TO PROVIDE SUBSURFACE UTILITY ENGINEERING CONSISTING OF DESIGNATING UTILITIES AND STORM PIPING ON PRIVATE PROPERTY WITHIN THE CONTRACT LIMIT AND CONSISTING OF DESIGNATING AND LOCATING WHERE PROPOSED UTILITIES AND STORM PIPING CROSS EXISTING UTILITIES AND STORM PIPING WITHIN THE CONTRACT LIMITS.

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(203) 630-1406
(203) 630-2615 Fax

UNITIL HORIZONTAL DRILL
AT LITTLE BAY BRIDGE
NEWINGTON-DOVER, NEW HAMPSHIRE

REVISIONS
No. Date Desc.
1 03/30/2012 ISSUED FOR PERMIT SUBMITTAL

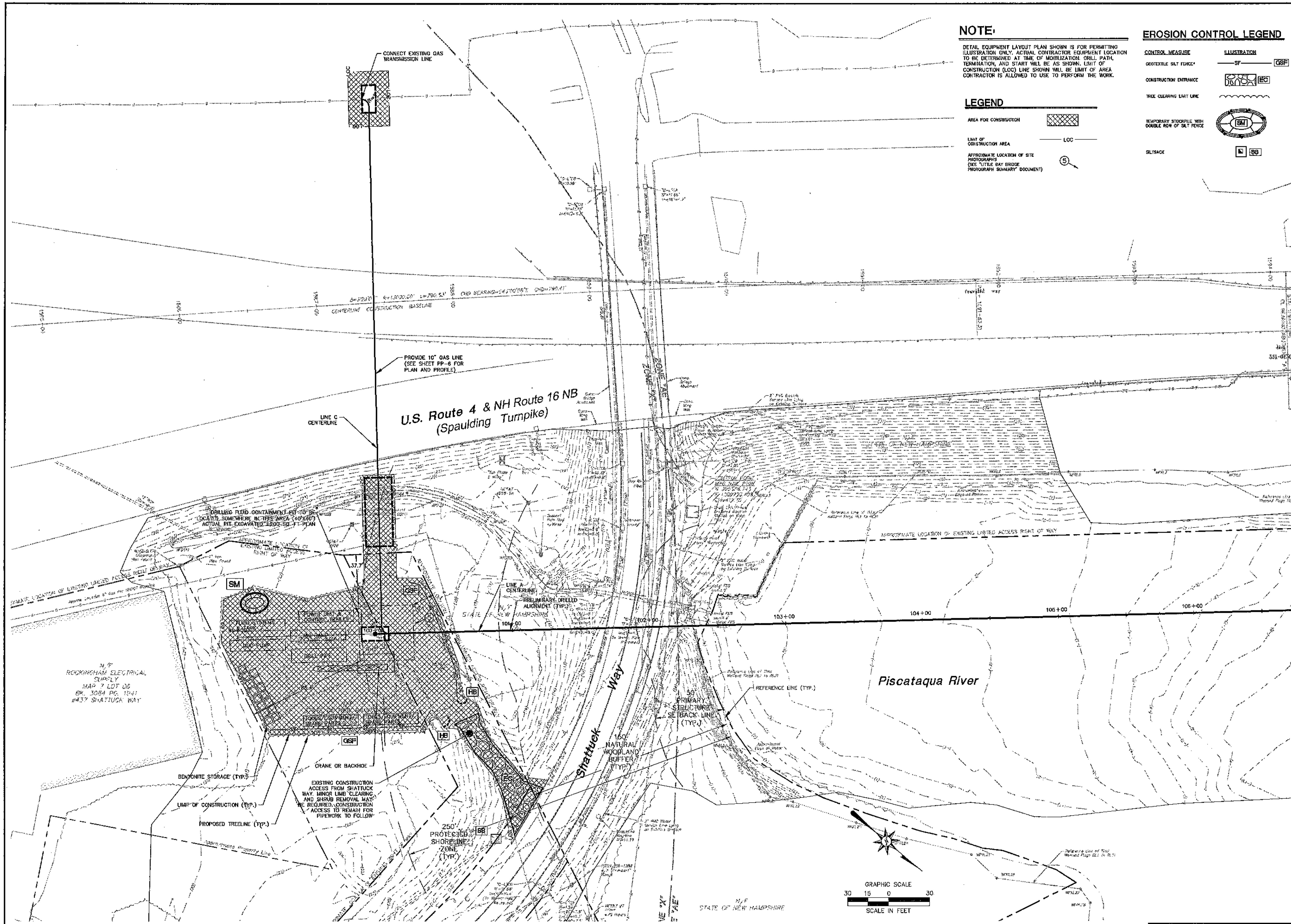
Designed B.S.S.
Drawn B.S.S.
Checked
Approved
Scale N.T.S.
Project No. 11C3860
Date 11/11/11
CAD File: GN11C386001

Title
GENERAL NOTES

Sheet No.
GN-1

Xref (s): : BD11C388001

Mar 30, 2012 1:26pm JWhitcomb X:\Jobs11\11C3880\DWG\GN11C386001.dwg
Layout: GN-1 24x36 NTS



CONNECT EXISTING GAS TRANSMISSION LINE
PROVIDE 10" GAS LINE (SEE SHEET PP-6 FOR PLAN AND PROFILE)
LINE C CENTERLINE
U.S. Route 4 & NH Route 16 NB (Spaulding Turnpike)
DRILLING FLUID CONTAINMENT PIT TO BE LOCATED SOMEWHERE IN THIS AREA (40'x40') ACTUAL PIT EXCAVATED 1200 SQ. FT PLAN
LINE A CENTERLINE
PRELIMINARY DRILLED ALIGNMENT (TYP.)
APPROXIMATE LOCATION OF EXISTING LIMITED ACCESS RIGHT OF WAY
N/F ROCKINGHAM ELECTRICAL SUPPLY MAP 7 LOT 06 BK. 3084 PG. 1041 #437 SHATTUCK WAY
Shattuck Way
Piscataqua River
REFERENCE LINE (TYP.)
50' PRIMARY STRUCTURE SETBACK LINE (TYP.)
150' NATURAL WOODLAND BUFFER (TYP.)
250' PROTECTED SHORELINE ZONE (TYP.)
BENTONITE STORAGE (TYP.)
LIMIT OF CONSTRUCTION (TYP.)
PROPOSED TREELINE (TYP.)
CRANE OR BACKHOE
EXISTING CONSTRUCTION ACCESS FROM SHATTUCK WAY. MINOR LIMB CLEARING AND SHRUB REMOVAL MAY BE REQUIRED. CONSTRUCTION ACCESS TO REMAIN FOR PIPEWORK TO FOLLOW
103+00
104+00
105+00
106+00
STATE OF NEW HAMPSHIRE
GRAPHIC SCALE
30 15 0 30
SCALE IN FEET

NOTE:

DETAIL EQUIPMENT LAYOUT PLAN SHOWN IS FOR PERMITTING ILLUSTRATION ONLY. ACTUAL CONTRACTOR EQUIPMENT LOCATION TO BE DETERMINED AT TIME OF MOBILIZATION. DRILL PATH, TERMINATION, AND START WILL BE AS SHOWN. LIMIT OF CONSTRUCTION (LOC) LINE SHOWN WILL BE LIMIT OF AREA CONTRACTOR IS ALLOWED TO USE TO PERFORM THE WORK.

LEGEND

AREA FOR CONSTRUCTION	(crosshatch)
LIMIT OF CONSTRUCTION AREA	—— LOC ——
APPROXIMATE LOCATION OF SITE PHOTOGRAPHS (SEE "LITTLE BAY BRIDGE PHOTOGRAPH SUMMARY" DOCUMENT)	(5)

EROSION CONTROL LEGEND

CONTROL MEASURE	ILLUSTRATION
GEOTEXTILE SILT FENCE*	—SF— GSF
CONSTRUCTION ENTRANCE	EC
TREE CLEARING LIMIT LINE	
TEMPORARY STOCKPILE WITH DOUBLE ROW OF SILT FENCE	SM
SILTSACK	SS

SEE SHEET GN-1 FOR NOTES, SEE SHEET DN-1 FOR DETAILS

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UNITIL HORIZONTAL DRILL AT LITTLE BAY BRIDGE
NEWINGTON-DOVER, NEW HAMPSHIRE

REVISIONS

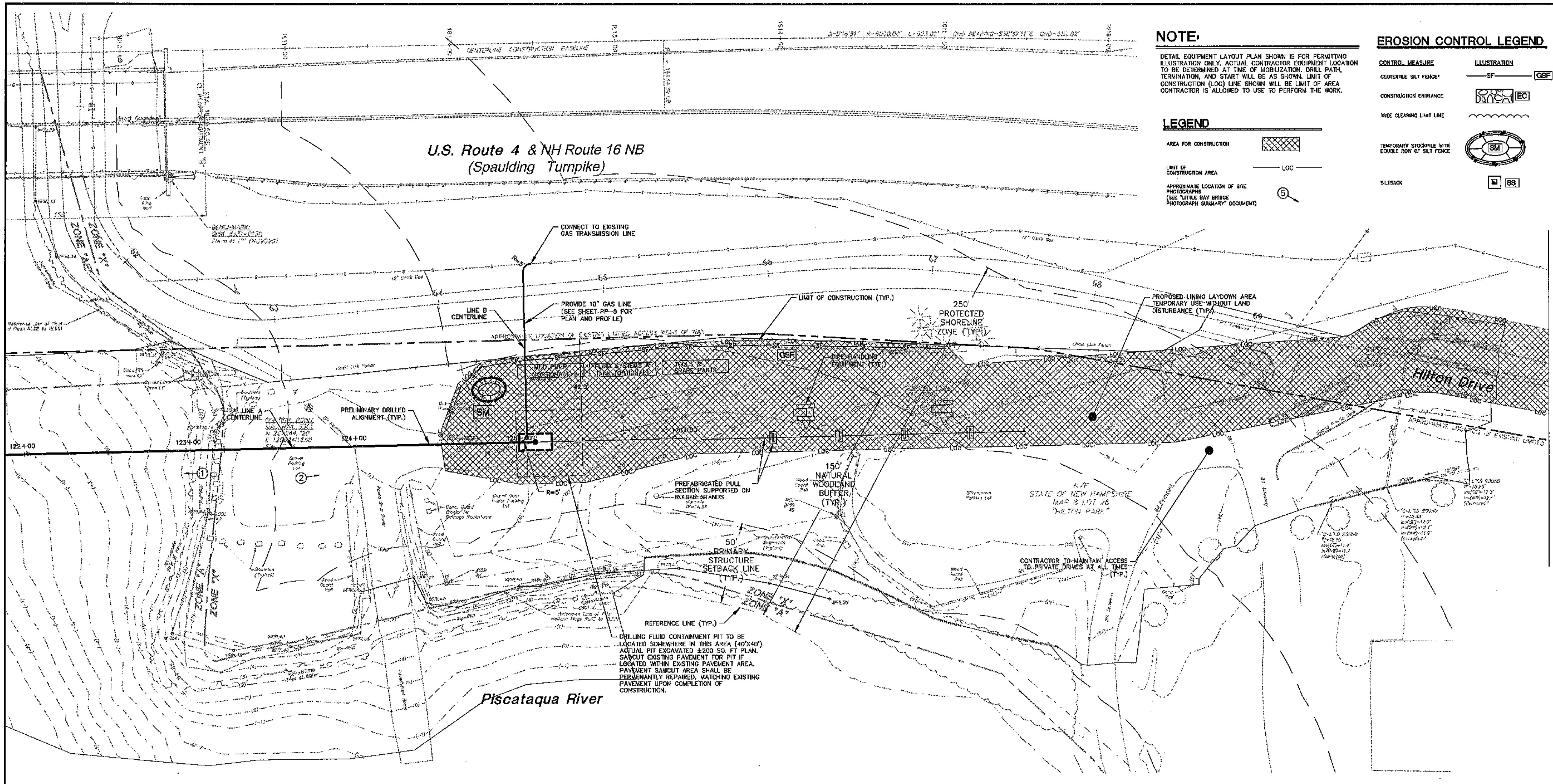
No.	Date	Desc.
1	03/30/2012	ISSUED FOR PERMIT SUBMITTAL.

Designed	B.S.S.
Drawn	B.S.S.
Checked	
Approved	
Scale	1"=30'
Project No.	11C3860
Date	11/11/11
CAD File:	SP11C386001

Xref (s): ; XY11C386001 ; BD11C386001 ; XC11C386004 ; XC11C386001 ; XZ11C386001 ; XC11C386020

Title
PERMITTING CONSTRUCTION PLAN (NEWINGTON)

Sheet No.
SP-1
(1 OF 2)



NOTE:

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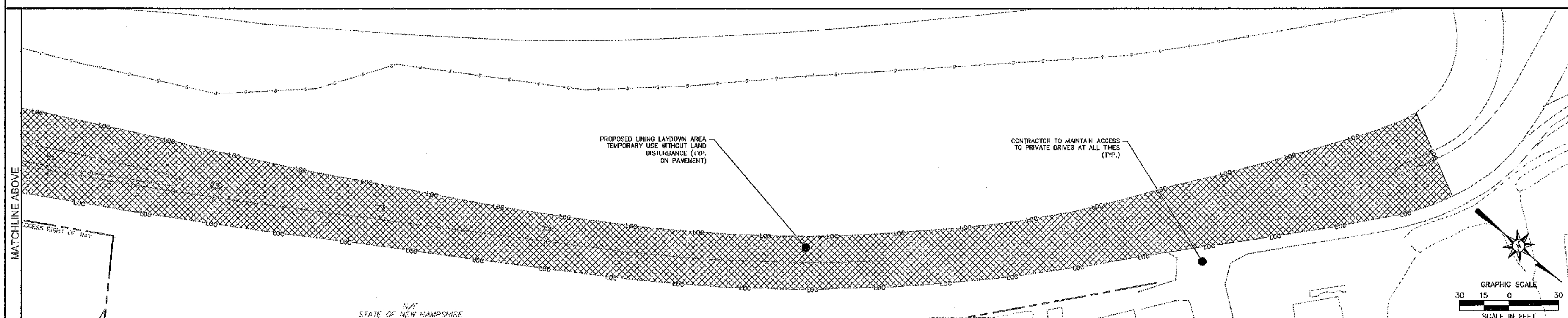
LEGEND

- AREA FOR CONSTRUCTION
- LIMIT OF CONSTRUCTION AREA — LOC —
- APPROXIMATE LOCATION OF SITE PHOTOGRAPHS (SEE "LITTLE BAY BRIDGE PHOTOGRAPH SUMMARY" DOCUMENT)

EROSION CONTROL LEGEND

CONTROL MEASURE	ILLUSTRATION
GEOTEXTILE SILT FENCE*	—SF— GSF
CONSTRUCTION ENTRANCE	EC
TREE CLEARING LIMIT LINE	
TEMPORARY STOCKPILE WITH DOUBLE ROW OF SILT FENCE	SM
SILTSACK	SS



SEE SHEET GN-1 FOR NOTES, SEE SHEET DN-1 FOR DETAILS

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UNITIL HORIZONTAL DRILL AT LITTLE BAY BRIDGE
NEWINGTON-DOVER, NEW HAMPSHIRE

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Drawn	B.S.S.
Checked	
Approved	
Scale	1"=30'
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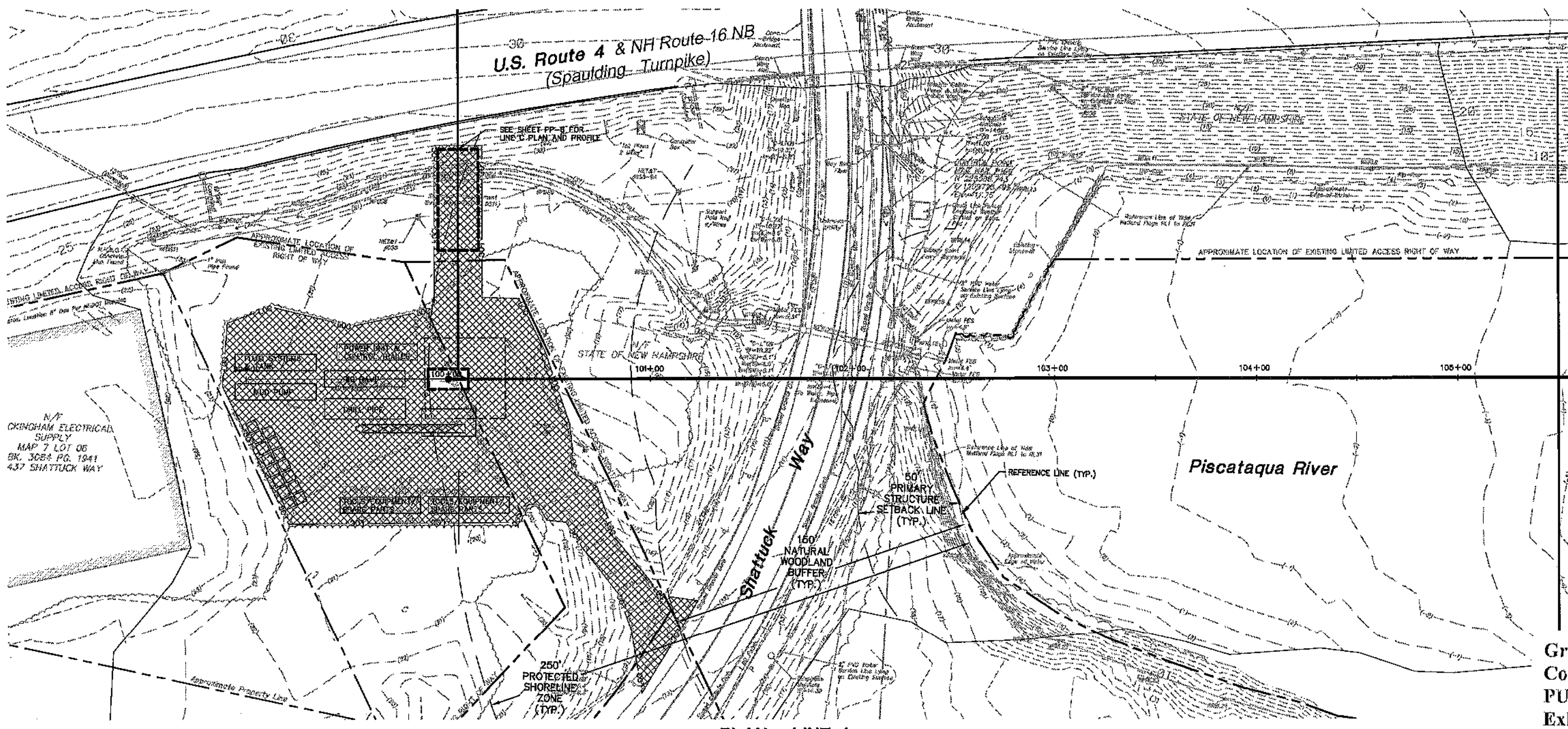
CAD File:	SP11C386001

Title
PERMITTING CONSTRUCTION PLAN (DOVER)

Sheet No.
SP-1
(2 OF 2)

Xref (s): ; XY11c386001 ; BD11C386001 ; XC11C386004 ; XC11C386001 ; XZ11c386001 ; XC11C386020

Mar 30, 2012 1:25pm Layout: SP-1 24x36 30SC Sheet 2



PLAN - LINE A

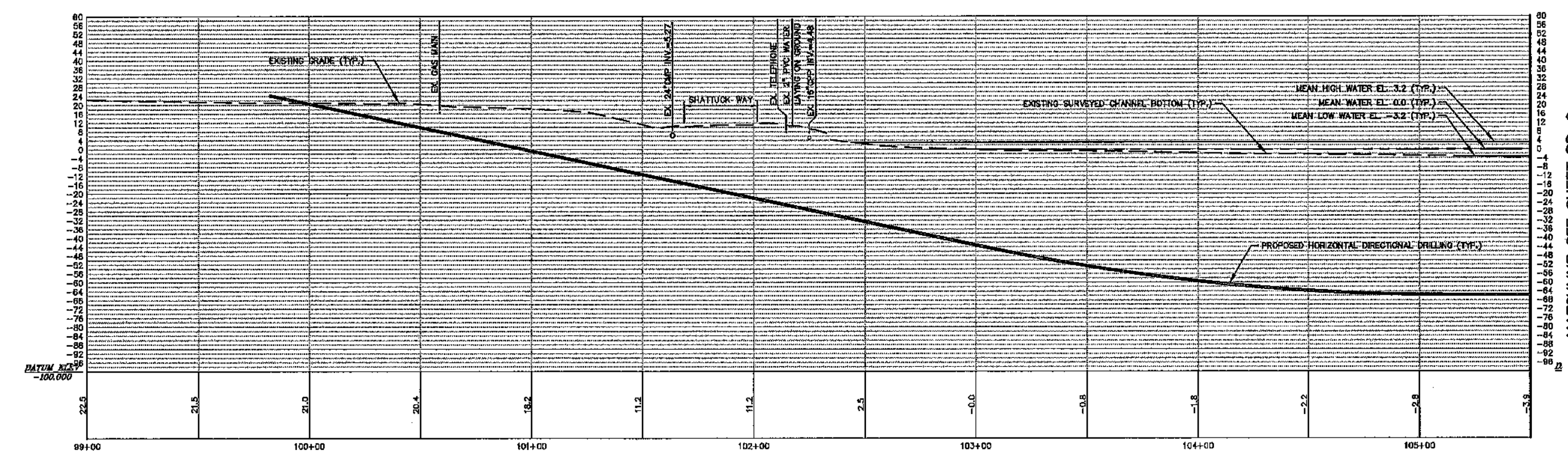
SCALE: 1"=30'

LEGEND

AREA FOR CONSTRUCTION

LIMIT OF CONSTRUCTION AREA — LOC —

Granite State Gas Transmission Company, Inc.
PUC Docket No. ___________
Exhibit B
April 9, 2012



PROFILE - LINE A

SCALE: VERTICAL 1"=30'
HORIZONTAL 1"=30'

GRAPHIC SCALE
30 15 0 30
SCALE IN FEET

FOR PERMITTING PURPOSES ONLY
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NEWINGTON-DOVER, NEW HAMPSHIRE

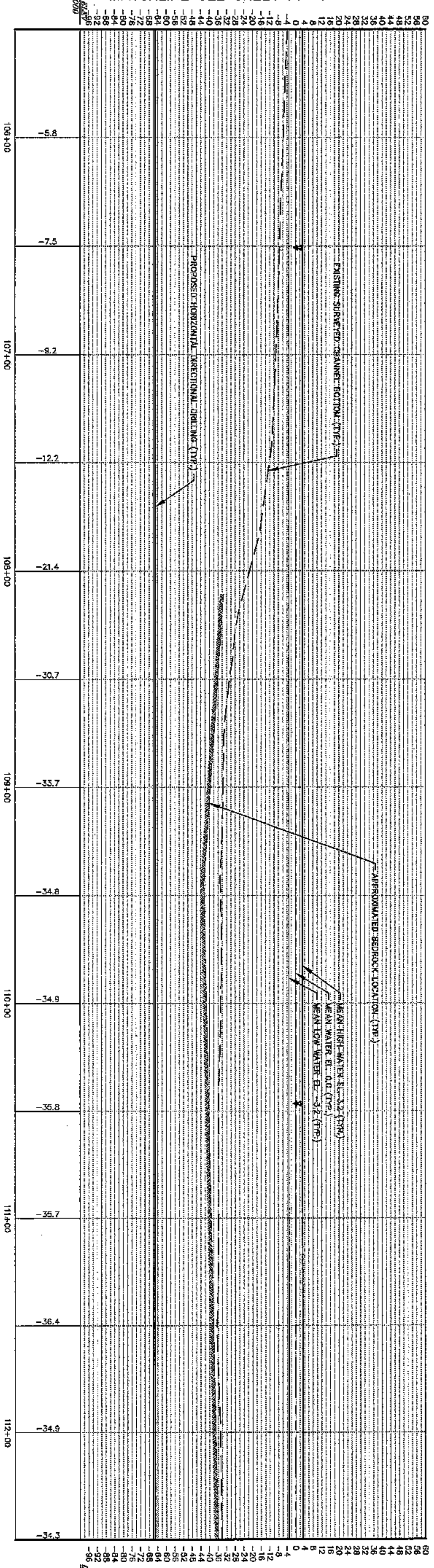
REVISIONS No.	Date	Desc.
1	03/30/2012	ISSUED FOR PERMIT SUBMITTAL

Designed	B.S.
Drawn	X.X.X.
Checked	
Approved	
Scale	1"=30'
Project No.	11C3860
Date	11/11/11
CAD File:	PP11C386001

Title
PLAN AND PROFILE LINE A

Sheet No.
PP-1

MATCHLINE SEE SHEET PP-1

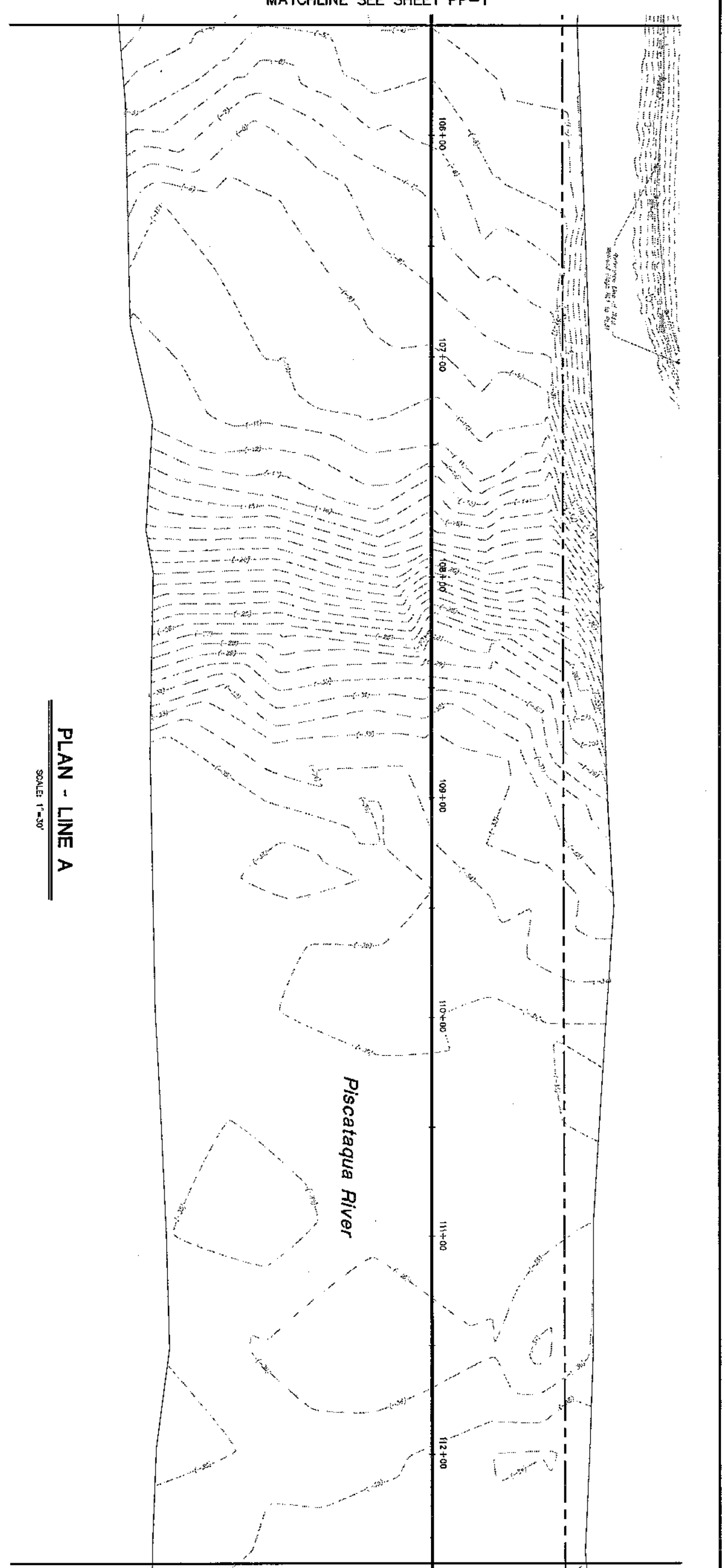


MATCHLINE SEE SHEET PP-3

PROFILE - LINE A

SCALE: VERTICAL 1"=30'
HORIZONTAL 1"=30'

MATCHLINE SEE SHEET PP-1



MATCHLINE SEE SHEET PP-3

PLAN - LINE A

SCALE: 1"=30'

GRAPHIC SCALE
30 15 0 30
SCALE IN FEET

FOR PERMITTING PURPOSES ONLY
NOT RELEASED FOR CONSTRUCTION

Xref (s): ; XY11c386001 ; SD11C386001 ; XC11C386001 ; XC11C386020 ; XZ11c386001 ; XX11C386001

REVISIONS

No.	Date	Desc.
1	03/30/2012	ISSUED FOR PERMIT SUBMITTAL.

Designed	B.S.
Drawn	X.X.X.
Checked	
Approved	
Scale	1"=30'
Project No.	11C3860
Date	11/11/11
CAD File:	PP11C386001

Title
PLAN AND PROFILE LINE A

Sheet No.
PP-2

UNITIL HORIZONTAL DRILL AT LITTLE BAY BRIDGE

NEWINGTON-DOVER, NEW HAMPSHIRE

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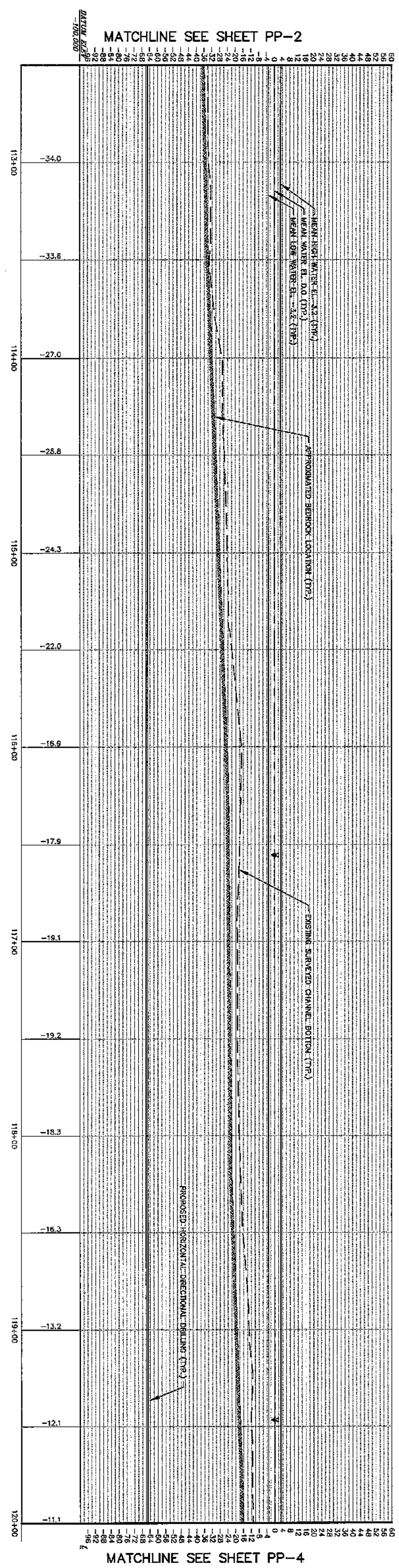
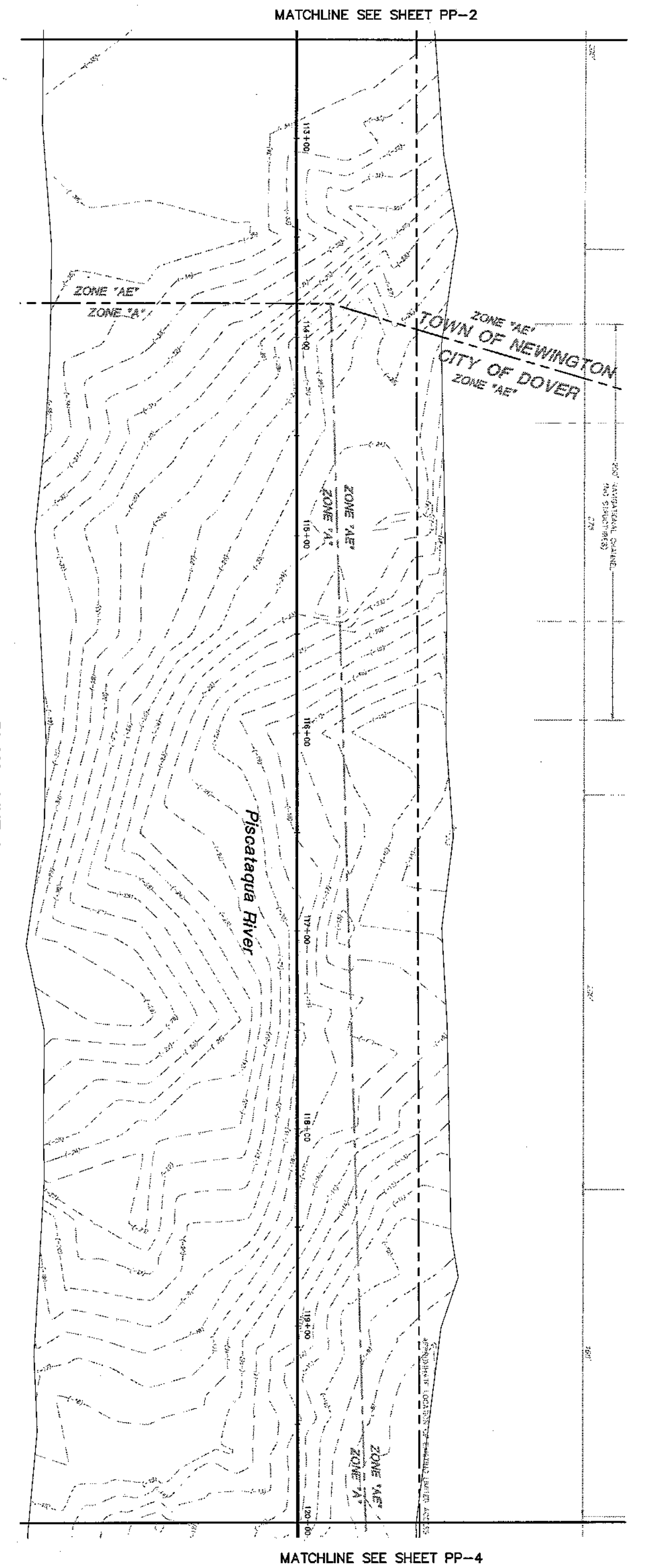
16

Mar 30, 2012 1:22pm JWhitcomb K:\Jobs11\11C3860\DWG\PP11C386001.dwg
Layout: PP-3 24X36 30SC



PROFILE - LINE A

SCALE: VERTICAL 1"=30'
HORIZONTAL 1"=30'



PLAN - LINE A

SCALE: 1"=30'

GRAPHIC SCALE
30 15 0 30
SCALE IN FEET

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Xref (s): XY11c386001 ; BO11C386001 ; XC11C386001 ; XC11C386020 ; X211c386001 ; XX11C386001

REVISIONS		
No.	Date	Desc.
1	03/30/2012	ISSUED FOR PERMIT SUBMITTAL

Designed B.S.
Drawn X.X.X.
Checked
Approved
Scale 1"=30'
Project No. 11C3860
Date 11/17/11
CAD File: PP11C386001

Title
PLAN AND
PROFILE
LINE A

Sheet No.
PP-3

UNITIL HORIZONTAL DRILL AT LITTLE BAY BRIDGE

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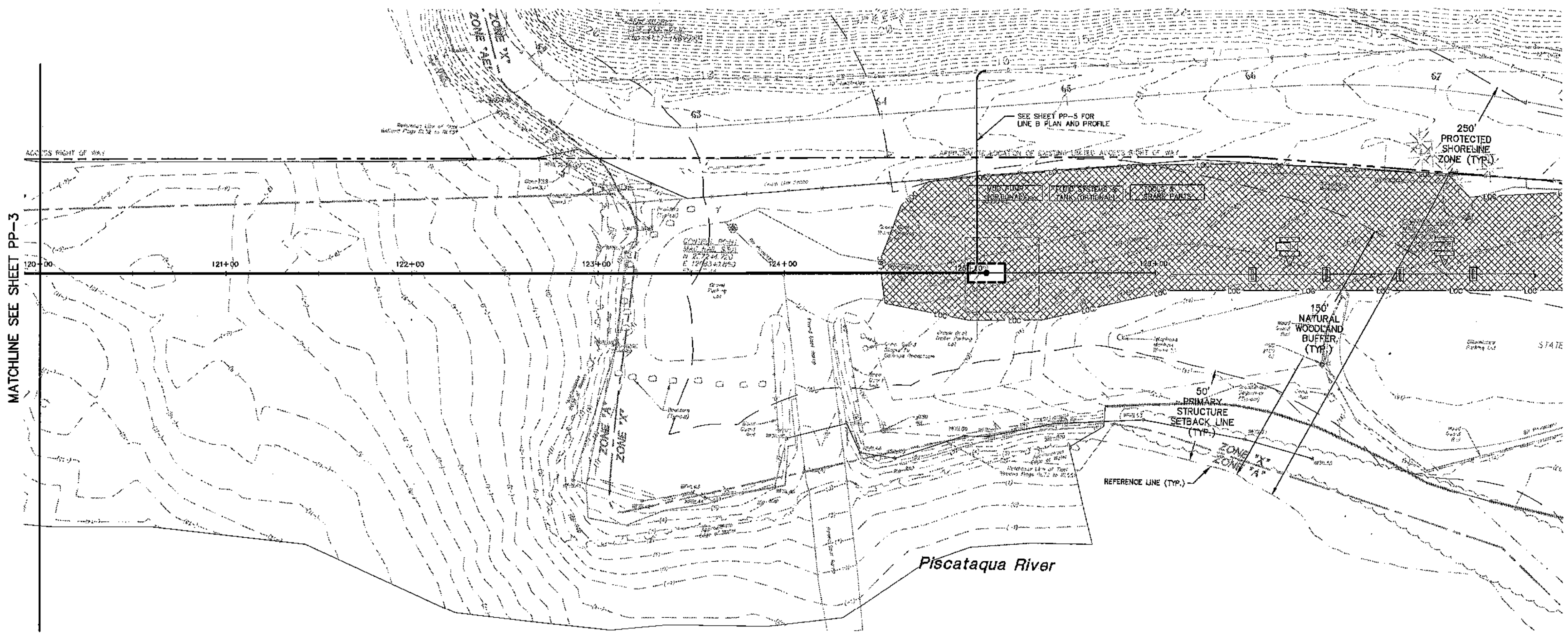
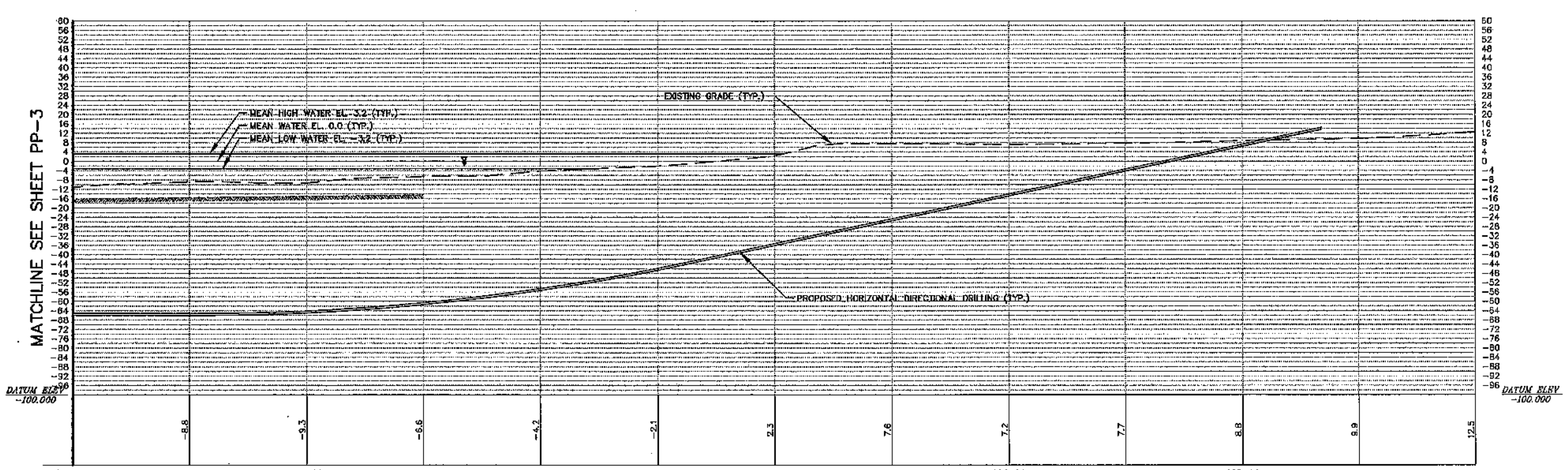


PLAN - LINE A

SCALE: 1"=30'



PROFILE - LINE A

SCALE: VERTICAL 1"=30'
HORIZONTAL 1"=30'

LEGEND

AREA FOR CONSTRUCTION

LIMIT OF CONSTRUCTION AREA — LOC —

GRAPHIC SCALE
30 15 0 30
SCALE IN FEET

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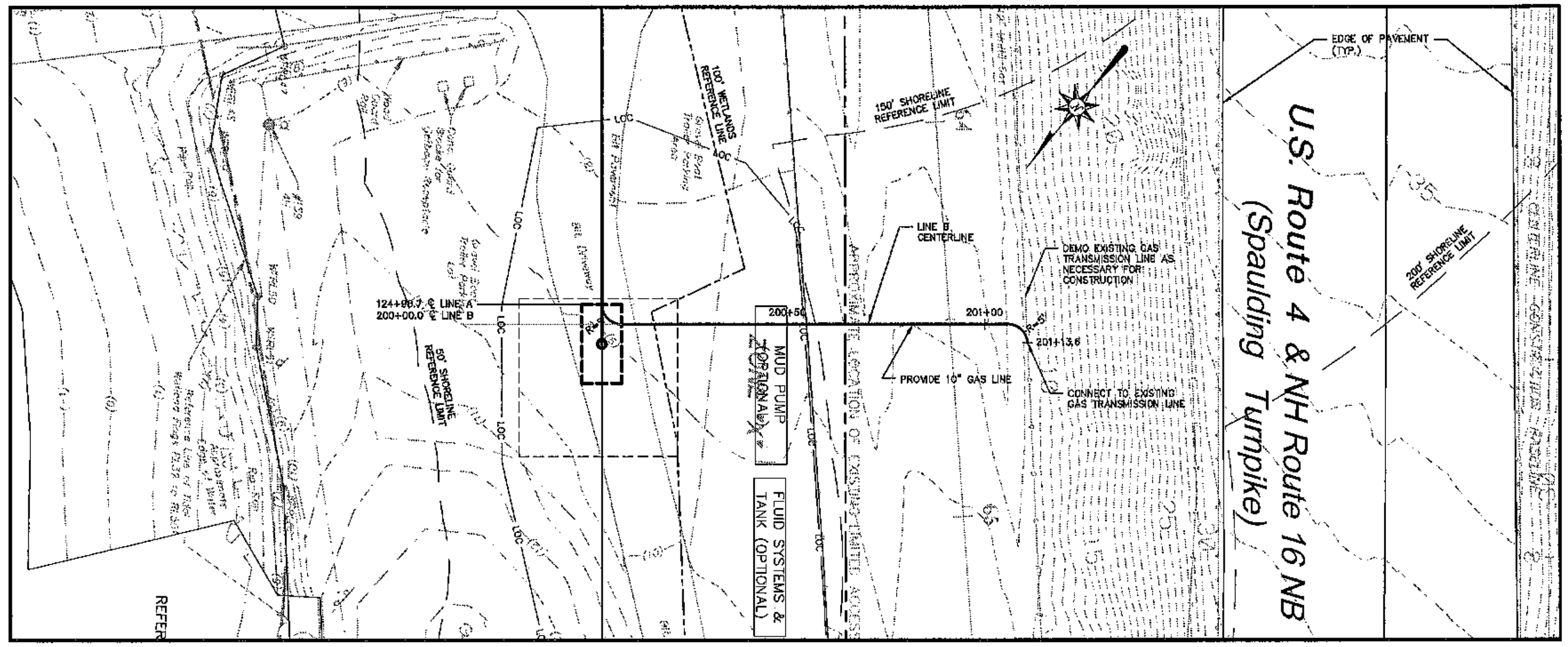
REVISIONS

No.	Date	Desc.
1	03/30/2012	ISSUED FOR PERMIT SUBMITTAL

Designed	B.S.
Drawn	X.X.X.
Checked	
Approved	
Scale	1"=30'
Project No.	11C3560
Date	11/11/11
CAD File:	PP11C356001

Title
PLAN AND PROFILE LINE A

Sheet No.
PP-4



PLAN - LINE B DOVER CONNECTION

SCALE: 1"=20'

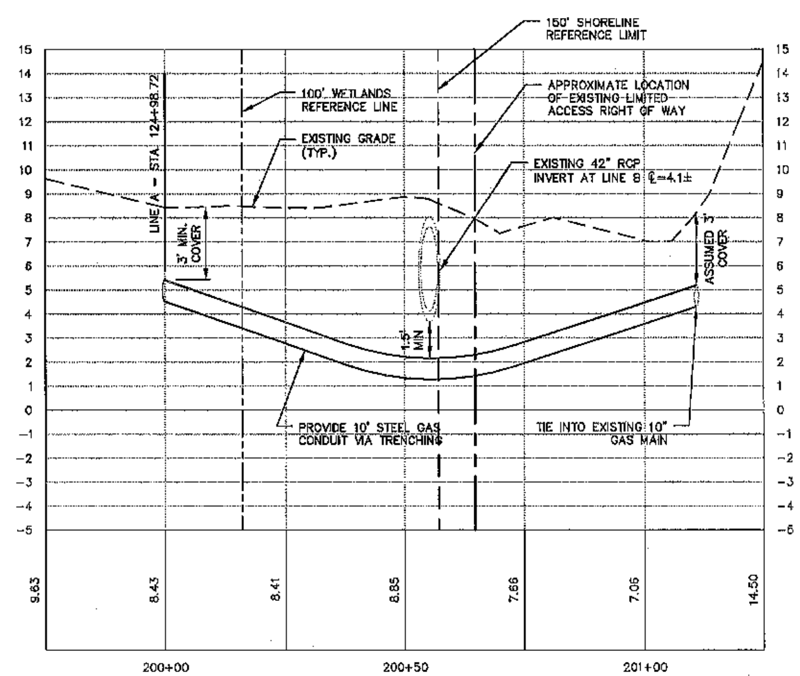
GRAPHIC SCALE

20 10 0 20

SCALE IN FEET

LEGEND

LIMIT OF CONSTRUCTION AREA —— LOC ——



PROFILE - LINE B DOVER CONNECTION

SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=4'

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REVISIONS		
No.	Date	Desc.
1	03/30/2012	ISSUED FOR PERMIT SUBMITTAL

Designed	CJB
Drawn	CJB
Checked	JW
Approved	
Scale	AS NOTED
Project No.	11C3860
Date	11/11/11
CAD File:	PP11C386001

Title

PLAN AND PROFILE LINE B

Sheet No.

PP-5

Xref (s): : XT11c386001 ; BD11C386001 ; XC11C386001 ; XC11C386020 ; XZ11c386001 ; XX11C386001

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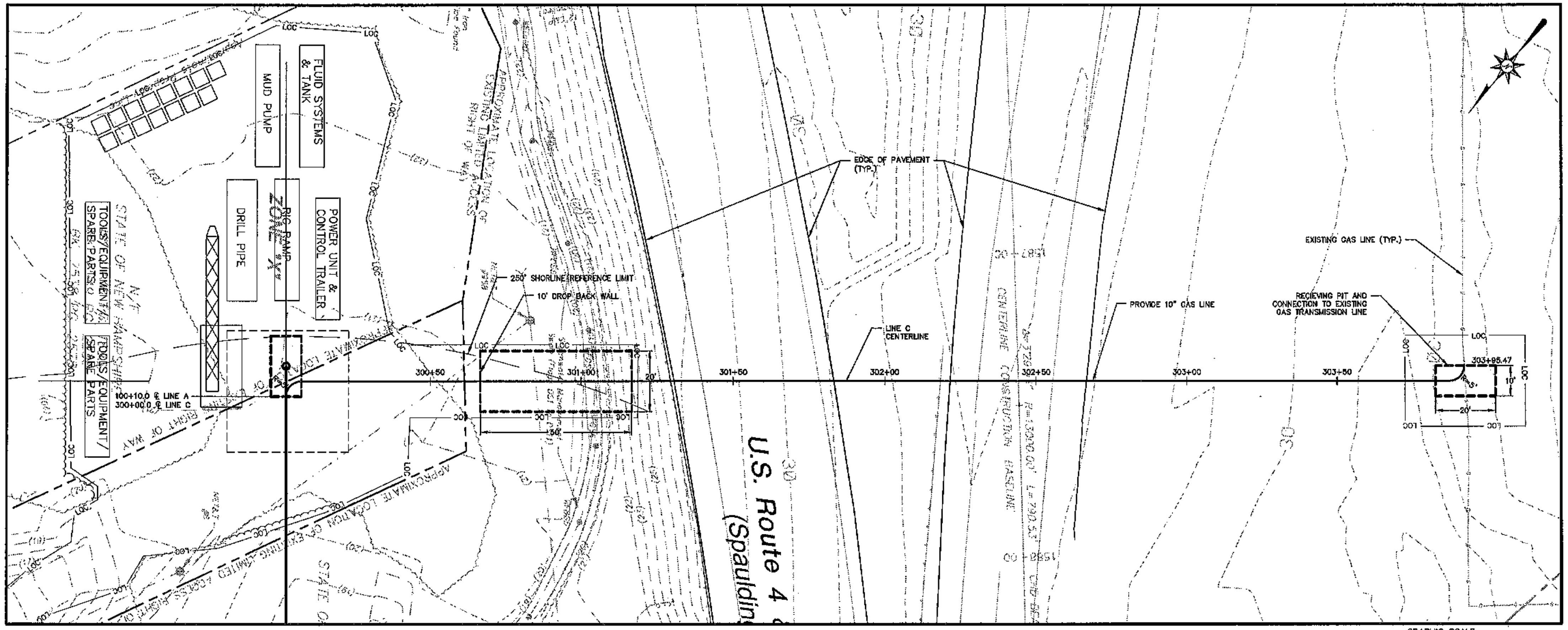


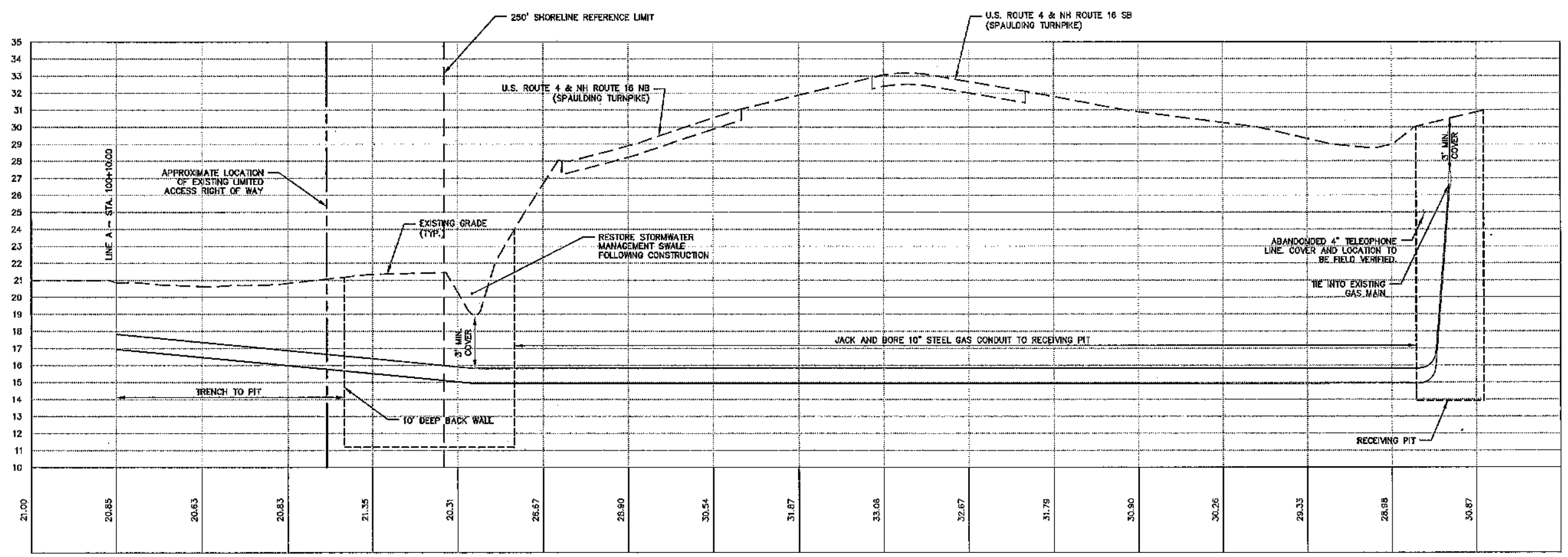
PLAN - LINE C NEWINGTON CONNECTION

SCALE: 1"=20'

GRAPHIC SCALE
20 10 0 20
SCALE IN FEET

LEGEND

LIMIT OF CONSTRUCTION AREA ——LOC——



PROFILE - LINE C NEWINGTON CONNECTION

SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=4'

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UNITIL HORIZONTAL DRILL AT LITTLE BAY BRIDGE
NEWINGTON-DOVER, NEW HAMPSHIRE

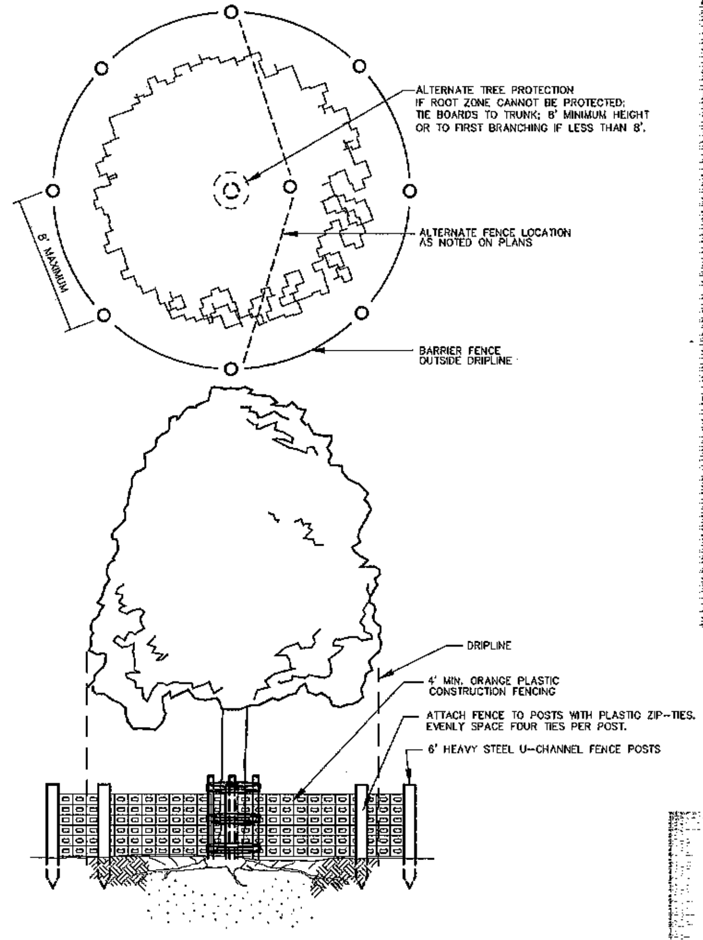
REVISIONS No.	Date	Desc.
1	03/30/2012	ISSUED FOR PERMIT SUBMITTAL

Designed	CJB
Drawn	CJB
Checked	JW
Approved	
Scale	AS NOTED
Project No.	11C3860
Date	11/11/11
CAD File:	PP11C386001

Title
PLAN AND PROFILE LINE C

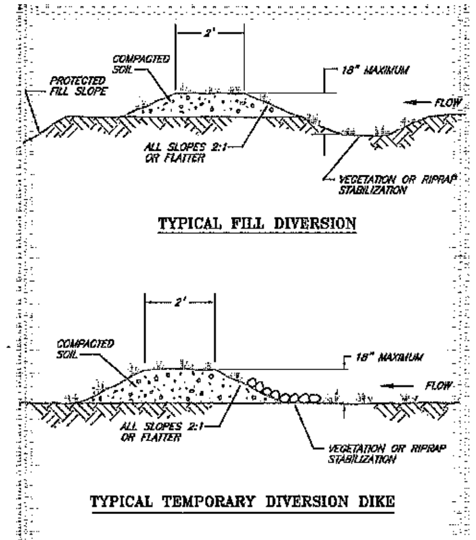
Sheet No.
PP-6

Xref (s): XY11c386001 ; B011C386001 ; XC11C386001 ; XC11C386020 ; XZ11c386001 ; XX11C386001



TREE PROTECTION

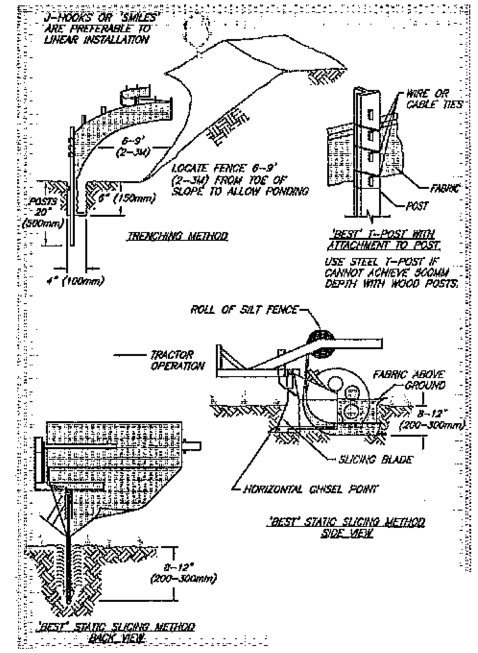
N.T.S. BLLD-001



NOTES:
1. THE CHANNEL BEHIND THE DIKE SHALL HAVE POSITIVE GRADE TO A STABILIZED OUTLET.
2. THE DIKE SHALL BE ADEQUATELY COMPACTED TO PREVENT FAILURE.
3. THE DIKE SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT SEEDING OR RIPRAP.

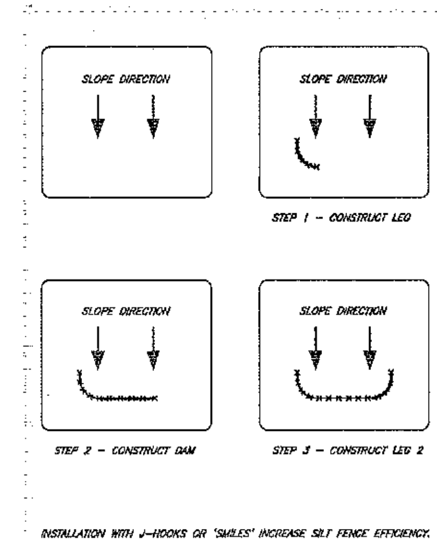
TEMPORARY DIVERSION

N.T.S.



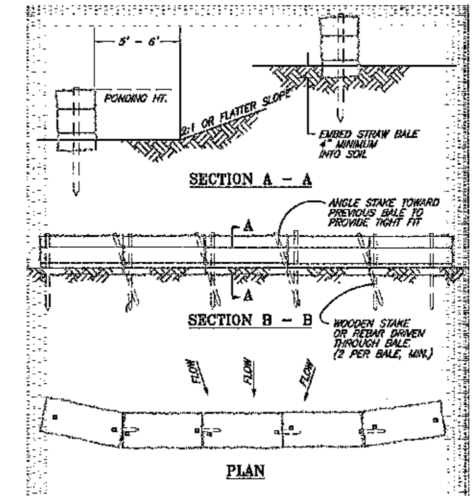
SILT FENCE INSTALLATION

N.T.S.



SILT FENCE
TYPICAL PLACEMENT-ONE SLOPE

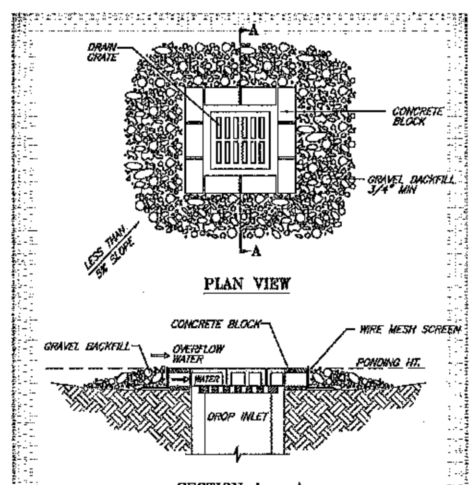
N.T.S.



NOTES:
1. THE BALES SHALL BE PLACED ON SLOPE CONTOUR.
2. BALES TO BE PLACED IN A ROW WITH THE ENDS TIGHTLY ABUTTING.
3. KEY IN BALES TO PREVENT EROSION OR FLOW UNDER BALES.
4. REFER TO DESCRIPTION OF "SILT FENCE" FOR DIAGRAMS ILLUSTRATING PLACEMENT OF BARRIERS FOR EFFECTIVE SEDIMENT CONTROL.

STRAW OR HAY
BALE BARRIER

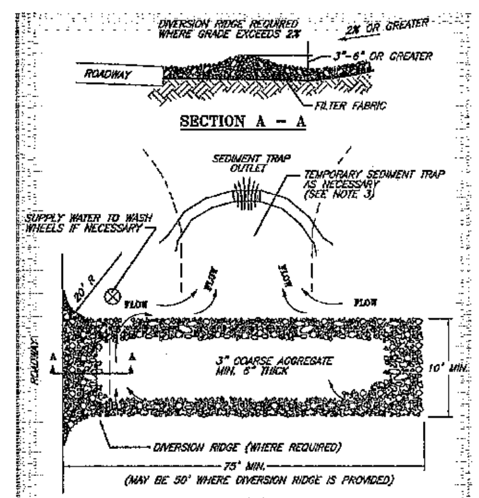
N.T.S.



NOTES:
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%)
2. EXCAVATE A BASIN OF SUFFICIENT SIZE ADJACENT TO THE DROP INLET.
3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

CONCRETE BLOCK AND GRAVEL
DROP INLET SEDIMENT BARRIER

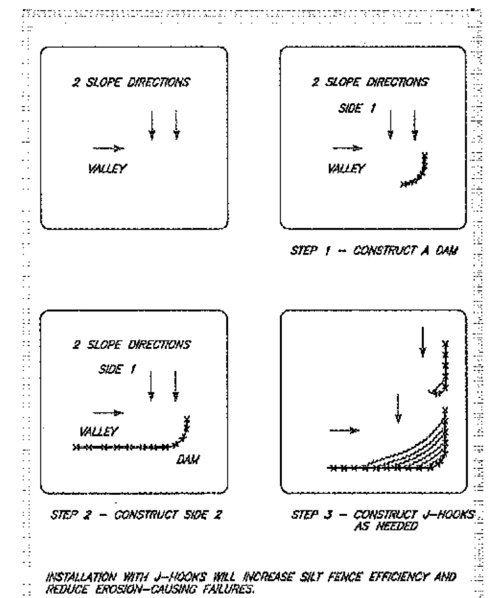
N.T.S.



NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

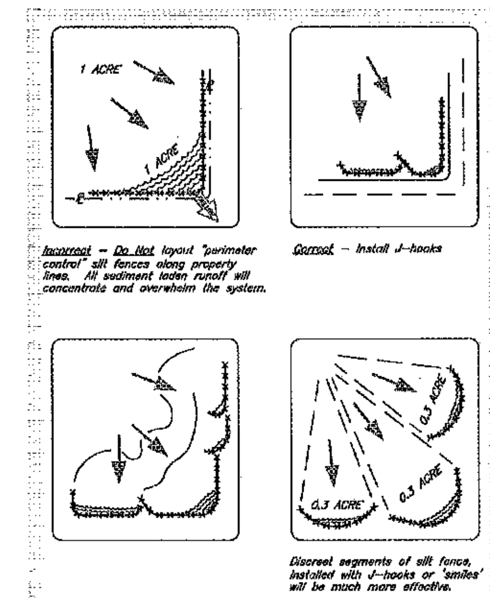
TEMPORARY GRAVEL
CONSTRUCTION EXIT

N.T.S.



SILT FENCE
TYPICAL PLACEMENT-TWO SLOPES

N.T.S.



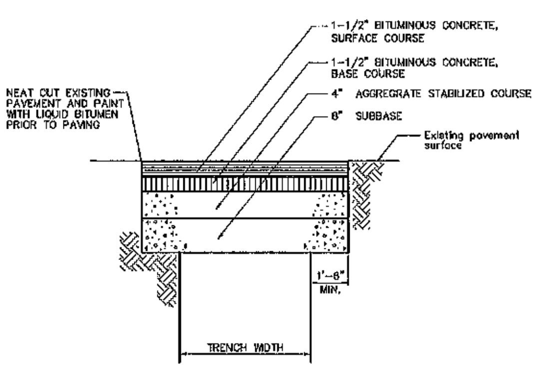
SILT FENCE PLACEMENT
FOR PERIMETER CONTROL

N.T.S.

NOTE TO DESIGNER:
MODIFY THIS DETAIL TO COMPLY WITH LOCAL REQUIREMENTS FOR PAVEMENT SECTION.

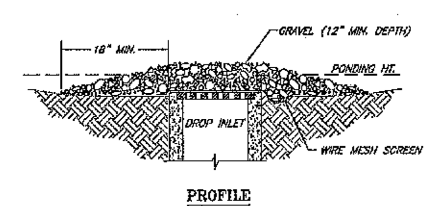
NOTE: 1) ALL BITUMINOUS CONCRETE, AGGREGATE STABILIZED COURSE, SUBBASE AND LIQUID BITUMEN SHALL CONFORM TO THE MATERIALS, EQUIPMENT AND CONSTRUCTION REQUIREMENTS AS PER STATE SPECS..

2) THE CONTRACTOR SHALL MAINTAIN A MINIMUM 15' WIDE TRAVELWAY AT ROAD CROSSINGS AT ALL TIMES DURING CONSTRUCTION. THE USE OF STEEL PLATES IS PERMITTED.



PAVEMENT REPAIR

N.T.S.



GRAVEL AND WIRE MESH DROP
INLET SEDIMENT BARRIER

N.T.S.

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NEWINGTON-DOVER, NEW HAMPSHIRE

REVISIONS
No. Date Desc.

Designed	B.S.S.
Drawn	B.S.S.
Checked	
Approved	
Scale	N.T.S.
Project No.	11C3860
Date	11/11/11
CAD File:	DN11C386001

Title
LANDSCAPE DETAILS

Sheet No.
DN-1

Xref (s): ; BD11C386001