Exhibit VGS-AG-127

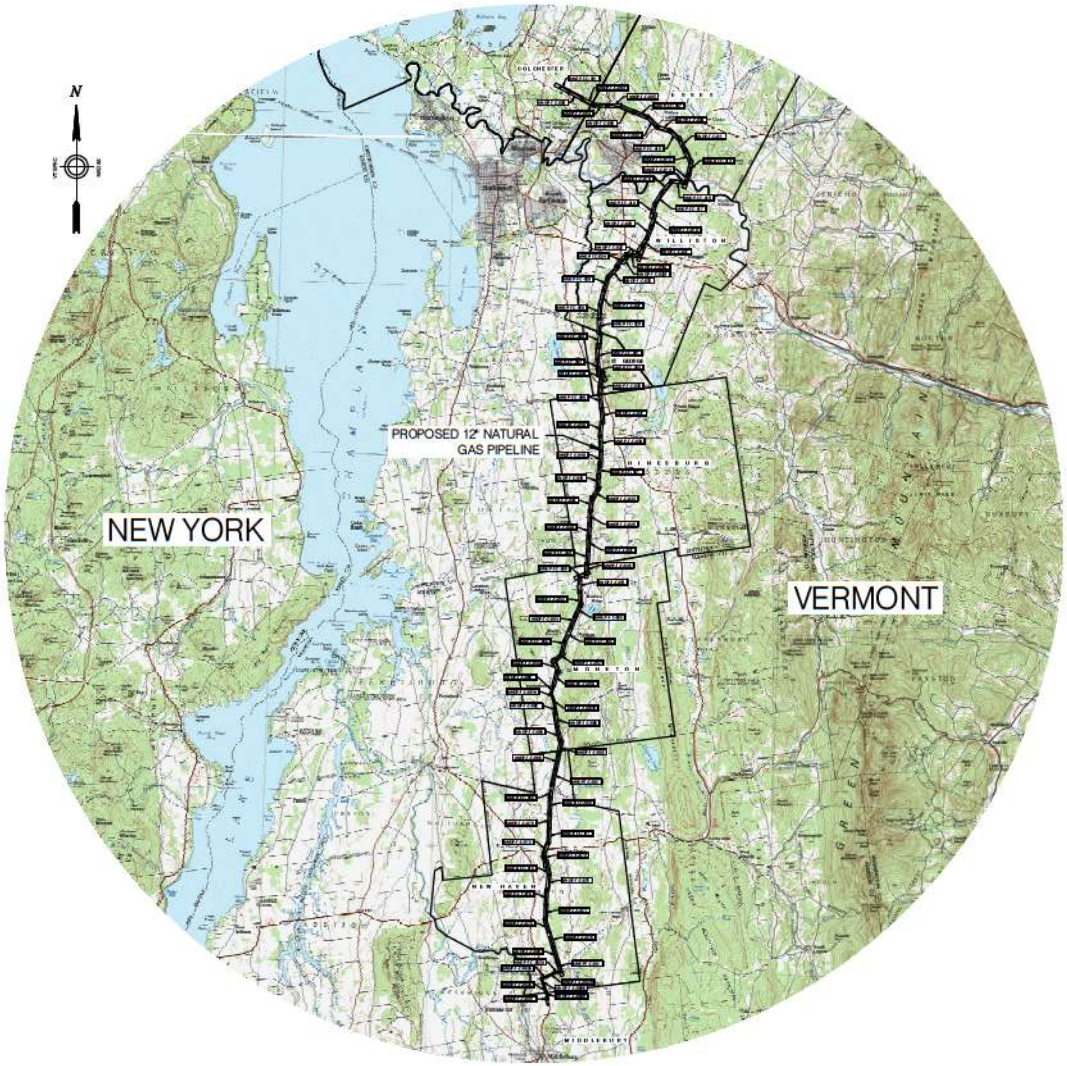
Exhibit Petitioner Supplement JH-3 (2/28/13)

Vermont Gas Systems, Inc.
Addison Natural Gas Project

Transmission Mainline Engineering Plans

ADDISON NATURAL GAS PROJECT
TRANSMISSION MAINLINE

CHITTENDEN AND ADDISON COUNTIES
VERMONT



SCALE 1" = 12,000'

DRAWING INDEX

DRAWING NUMBER	DRAWING TITLE
ANGP-T-G-001	COVER SHEET
ANGP-T-G-002	INDEX SHEET
ANGP-T-G-003	LEGEND & NOTES
ANGP-T-G-004 TO 006	CONSTRUCTION CONFIGURATION DETAILS
ANGP-T-G-007 TO 010	ACCESS ROAD DETAILS
ANGP-T-G-011	NOT INCLUDED
ANGP-T-G-012 TO 020	CONSTRUCTION DETAILS
ANGP-T-G-021	STATION AND VALVE DETAILS
ANGP-T-G-022	CONSTRUCTION PIPEYARD DETAILS

DRAWING #	DRAWING TITLE	DRAWING #	DRAWING TITLE
ANGP-T-C-001	ALIGNMENT SHEET	ANGP-T-C-045	ALIGNMENT SHEET
ANGP-T-C-002	ALIGNMENT SHEET	ANGP-T-C-046	ALIGNMENT SHEET
ANGP-T-C-003	ALIGNMENT SHEET	ANGP-T-C-047	ALIGNMENT SHEET
ANGP-T-C-004	ALIGNMENT SHEET	ANGP-T-C-048	ALIGNMENT SHEET
ANGP-T-C-005	ALIGNMENT SHEET	ANGP-T-C-049	ALIGNMENT SHEET
ANGP-T-C-006	ALIGNMENT SHEET	ANGP-T-C-050	ALIGNMENT SHEET
ANGP-T-C-007	ALIGNMENT SHEET	ANGP-T-C-051	ALIGNMENT SHEET
ANGP-T-C-008	ALIGNMENT SHEET	ANGP-T-C-052	ALIGNMENT SHEET
ANGP-T-C-009	ALIGNMENT SHEET	ANGP-T-C-053	ALIGNMENT SHEET
ANGP-T-C-010	ALIGNMENT SHEET	ANGP-T-C-054	ALIGNMENT SHEET
ANGP-T-C-011	ALIGNMENT SHEET	ANGP-T-C-055	ALIGNMENT SHEET
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ANGP-T-C-013	ALIGNMENT SHEET	ANGP-T-C-057	ALIGNMENT SHEET
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ANGP-T-C-044	ALIGNMENT SHEET	ANGP-T-C-085	ALIGNMENT SHEET

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
		0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
COVER SHEET

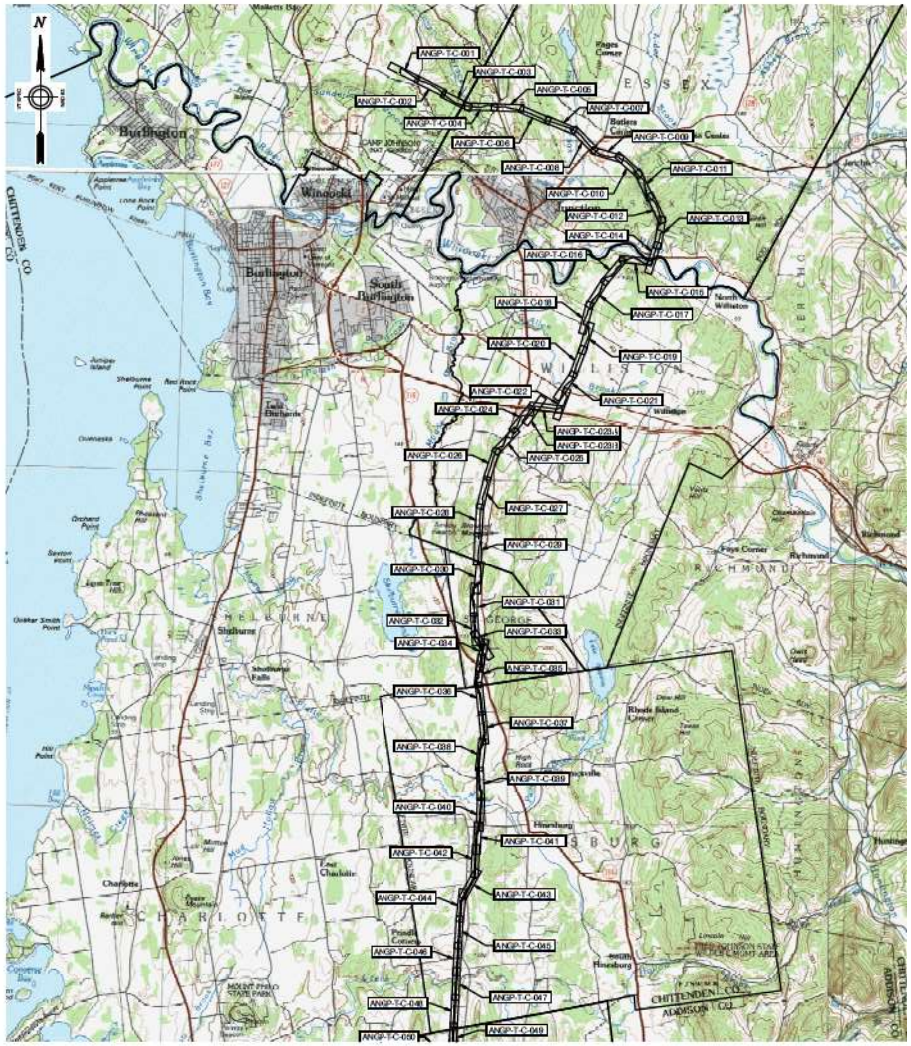
LOC. CHITTENDEN & ADDISON COUNTIES

YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP-T-G-001 | REV. 1

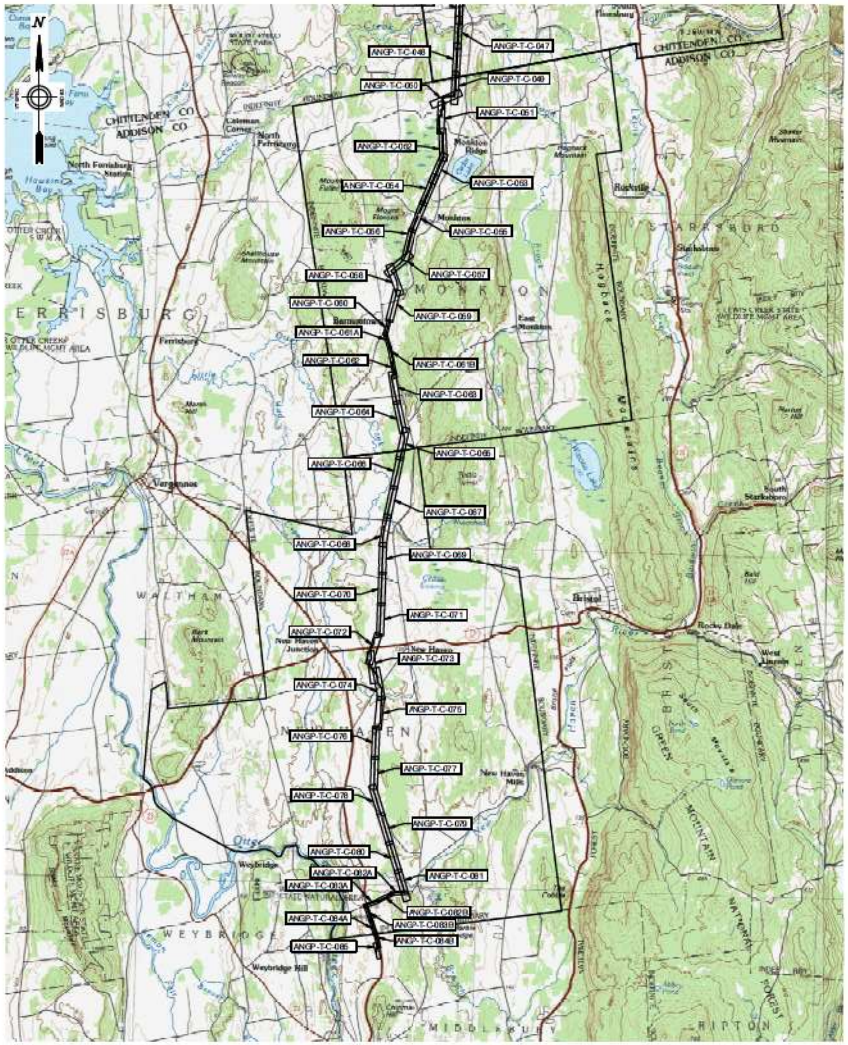
Vermont Gas

Tuesse Hagen Brustlin, Inc.
GHA
COLER & COLANTONIO, INC.

CHITTENDEN AND ADDISON COUNTIES
VERMONT



SCALE 1" = 500'



SCALE 1" = 500'

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DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

BID | CONSTRUCTION

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
INDEX SHEET

LOC. CHITTENDEN & ADDISON COUNTIES

YEAR: 2013 | W.O. | SCALE: 1"=500' | DWG. ANGP-T-C-002 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO, INC.

CHITTENDEN AND ADDISON COUNTIES
VERMONT

LEGEND

PROPOSED GAS LINE
GAS LINE STATIONING — 314+00
PROPERTY LINE
TOWN LINE
EDGE OF PAVEMENT
RAILROAD
CONTOUR (10-FOOT INT.)
CONTOUR (2-FOOT INT.)
FENCE
GUARD RAIL
OVERHEAD WIRES
DRAIN LINE
SEWER LINE
WATER LINE
GAS LINE
ELECTRICAL LINE
TELEPHONE LINE
STONE WALL
BRUSH LINE
TREE LINE
IRON PIN
CONCRETE/GRANITE BOUND
UTILITY MANHOLE
CATCH BASIN
ELECTRIC POLES (TRUCTURES)
UTILITY POLE
LIGHT POST
GUY ANCHOR
WATER GATE
WELL
GAS GATE
HYDRANT
MAIL BOX
TRAFFIC SIGN
TRAFFIC SIGNAL
GATE POST / BOLLARD
MARKER POST
VENT
DECIDUOUS TREE
CONIFEROUS TREE
EXISTING STRUCTURE
DITCH LINE
PROPOSED TEST STATION
PROPOSED GAS VALVE
SPOT GRADE — X.XX
SAND BAG
GEOTECHNICAL BOIL BORINGS — BB1
MILE POST — M.P. 3.9
LINE LIST — XXXXXX

FEMA AREAS HIGHWAY
TEMPORARY WORKSPACE
FEMA BLUE ZONE
CENTERLINE OF STREAM
TEMPORARY STREAM IMPACT
50' WETLAND BUFFER
TEMPORARY WETLAND IMPACT
TEMPORARY WETLAND BUFFER IMPACT
WETLAND AREA
PROPOSED EROSION AND SEDIMENT CONTROLS
WETLAND FLAG — WF1

ABBREVIATIONS

ABD.	ABANDON	MLV	MAIN LINE VALVE
ADJ.	ADJUST	MP	MARKER POST
AGR	AGRICULTURAL	M.P.	MILE POST
APPROX.	APPROXIMATE	MHD	MASS HIGHWAY BOUND
ATWS	ADDITIONAL TEMPORARY WORKSPACE	MPOST	METAL POST
BWF	BARBED WIRE FENCE	MWELL	MONITORING WELL
BND.	BOUND	NAD	NORTH AMERICAN DATUM
BCC	BITUMINOUS CONCRETE CURB	NTS	NOT TO SCALE
BIT. CONC.	BITUMINOUS CONCRETE	N/F	NOW OR FORMERLY
℄	BASELINE	ODWY	OTHER DIRT DRIVEWAY
BLDG.	BUILDING	OTFC	OTHER FENCE
BLSF	BORDERING LAND SUBJECT TO FLOODING	PAVT.	PAVEMENT
B.O.	BY OTHERS	PDWY	PAVED DRIVEWAY
B.W.	BOTTOM OF WALL	P.C.	POINT OF CURVATURE
BWLL	BROKEN WHITE LANE LINE	P.C.C.	POINT OF COMPOUND CURVATURE
CHH	CABLE HANDHOLE	PGL	PROFILE GRADE LINE
CMK	CABLE MARK	P.I.	POINT OF INTERSECTION
CPED	CABLE PEDESTAL	ℙ, P/L	PROPERTY LINE
C/O	CARE OF	PM	PARKING METER
CTB	CATCH BASIN	PWWY	PAVED WALKWAY
C.B.C.I.	CATCH BASIN WITH CURB INLET	P.R.C.	POINT OF REVERSE CURVATURE
CEM.	CEMENT	P.C.	POINT OF CURVATURE
CLDI	CEMENT LINED DUCTILE IRON PIPE	PLA	PLANTER
C.I.	CURB INLET	P.T.	POINT OF TANGENCY
℄	CENTERLINE	R	RADIUS OF CURVATURE/RIGHT
℄ CONST.	CENTERLINE OF CONSTRUCTION	RCP	REINFORCED CONCRETE PIPE
CONC.	CONCRETE	RD.	ROAD
CC	CONCRETE CURB	REM.	REMOVE
CDWY	CONCRETE DRIVEWAY	RET.	RETAIN
CHW	CONCRETE HEADWALL	RET. WALL	RETAINING WALL
CPD	CONCRETE PAD	RMDL	REMODEL
CON	CONIFEROUS TREE	R.O.W., R/W	RIGHT-OF-WAY
CONST.	CONSTRUCT(ION)	R&R	REMOVE AND RESET
CU	CONTINUATION UNKNOWN	R&S	REMOVE AND STACK
CMP	CORRUGATED METAL PIPE	S.B.	STONE BOUND
DSWL	DASHED SINGLE WHITE LINE	SMH	SEWER MANHOLE
DSYL	DASHED SINGLE YELLOW LINE	SMK	SEWER LINE - MARKED
DEC	DECIDUOUS TREE	S.W.	SIDEWALK
DDWY	DIRT DRIVEWAY	ST.	STREET
DDYL	DOUBLE DASHED YELLOW LINE	STA.	STATION
D	DRAIN	SWEL	SOLID WHITE EDGE LINE
DMH	DRAINAGE MANHOLE	SWLL	SOLID WHITE LANE LINE
DTWY	DIRT TRAVELED WAY	SYCL	SINGLE YELLOW CENTERLINE
DWY	DRIVEWAY	SYLL	SINGLE YELLOW LANE LINE
DYCL	DOUBLE YELLOW CENTER LINE	SHW	STONE HEADWALL
EOP	EDGE OF PAVEMENT	STPL	STOP LINE
E	ELECTRIC	T	TANGENT/TRUCK PERCENTAGE
EBOX	ELECTRIC BOX	TAN.	TANGENT DISTANCE OF CURVE
EHH	ELECTRIC HANDHOLE	TEMP.	TEMPORARY
EMK	ELECTRIC LINE - MARKED	TMH	TELEPHONE MANHOLE
ELEV. (OR EL)	ELEVATION	TMK	TELEPHONE LINE - MARKED
ELFC	ELECTRIC FENCE	TPED	TELEPHONE PEDESTAL
EXIST. (OR EX.)	EXISTING	TL	TEST LEAD
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY	TWR	TOWER
FOMK	FIBER OPTIC MARK	TWY	TRAVELED WAY
GG	GAS GATE	TSP	TRAFFIC SIGNAL POLE
GMK	GAS LINE - MARKED	T.W.	TOP OF WALL
GSO	GAS SHUT OFF	TYP.	TYPICAL
GRAN.	GRANITE	UTC	UTILITY COVER
GRV	GRAVEL	UTP, UP	UTILITY POLE
GDWY	GRAVEL DRIVEWAY	VT SPC	VERMONT STATE PLANE COORDINATE
GRL	GUARDRAIL	VELCO	VERMONT TRANSCO
HDPE	HIGH DENSITY POLYETHYLENE PIPE	VERT.	VERTICAL
HMA	HOT MIX ASPHALT	WMK	WATER LINE - MARKED
HOR.	HORIZONTAL	W.M.	WATER METER/WATER MAIN
HSE	HOUSE	WSO	WATER SHUT OFF
HYD.	HYDRANT	WV	WATER VALVE
L	LENGTH OF CURVE/LEFT	WIF	WIRE FENCE
LBS	POUNDS	WDFC	WOOD FENCE
L.P.	LIGHT POLE	WPOST	WOOD POST
L.F.	LINEAR FEET		
MH	MANHOLE		

CONSTRUCTION NOTES

1. PROPOSED PIPE IS 12.75" O.D. ITS WALL THICKNESS AND PROTECTIVE COATINGS VARY DEPENDING ON CLASS DETERMINATION AND SITE CONDITIONS.

2. ALL CONSTRUCTION MUST CONFORM TO FEDERAL SPECIFICATIONS, PART 192 IN TITLE 49 CFR AND APPLICABLE, STATE AND LOCAL REGULATIONS.

3. ALL CONSTRUCTION SIGNING, DRUMS, BARRICADES AND OTHER DEVICES SHALL CONFORM WITH PART VI OF THE 2003 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) REVISION 3 AND AS AMENDED.

4. ALL VEHICLES ARE TO BE HIGHLY VISIBLE USING ROTATING BEACONS AND BE MARKED BY USE OF TRAFFIC CONES.

5. VERMONT GAS SYSTEMS SHALL NOTIFY EACH ABUTTER AT LEAST 48 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY OBSTRUCTION OF ACCESS.

6. CONTRACTOR SHALL MAINTAIN 1-FOOT MINIMUM CLEARANCE BETWEEN PROPOSED PIPELINES AND OTHER UTILITIES.

7. CONTRACTOR SHALL REMOVE AND REPLACE EXISTING RIGHT OF WAY FENCE AS NECESSARY.

8. CONTRACTOR SHALL SUPPLY TEMPORARY ROAD SIGNS AS NECESSARY.

9. ALL TRENCH EXCAVATION PROTECTION SYSTEMS SHALL BE IN COMPLIANCE WITH OSHA SPECIFICATIONS.

GENERAL NOTES

1.TOPOGRAPHICAL DETAIL SHOWN HEREON IS THE RESULT OF SURVEY CONDUCTED BY COLER & COLANTONIO, INC IN THE SUMMER AND FALL OF 2012 AND THE COMPILATION OF EXISTING TOPOGRAPHIC DATA PROVIDED BY THE VERMONT AGENCY OF TRANSPORTATION (VTRANS) AND THE VERMONT TRANSMISSION COMPANY (VELCO).

2. PROPERTY LINES SHOWN HEREON ARE BASED ON TAX MAP AND DO NOT REPRESENT A PROPERTY LINE RETRACEMENT SURVEY EFFORT.

3. LOCATION OF ANY IDENTIFIED UNDERGROUND UTILITIES IS APPROXIMATE ONLY, AND IS NOT WARRANTED TO BE CORRECT. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT INDICATED ON THESE PLANS. ALL EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR FOR SERVICE, SIZE, INVERT ELEVATIONS, LOCATION, ETC. CONTRACTOR MUST NOTIFY DIG-SAFE NEW YORK AT 1-800-962-7962 AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION.

4. SURVEY WAS CONDUCTED IN VERMONT ZONE, NAD83 HORIZONTAL COORDINATE SYSTEM. ELEVATIONS ARE BASED ON NAVD 88 AND REFERENCED TO TEMPORARY BENCHMARKS AS SHOWN ON THE PLANS.

5. ENVIRONMENTAL CONDITIONS INFORMATION SHOWN IS THE RESULT OF SURVEY CONDUCTED BY VHB IN THE SPRING, SUMMER AND FALL OF 2012.

6. THE LOCUS LIES IN VARIOUS FIRM ZONES, DESCRIBED ON THE FOLLOWING COMMUNITY PANEL NUMBERS
0007C0143 D, 0007C0144 D, 0007C0168 D, 0007C0164 D, 0007C0277 D, 0007C0281 D, 0007C0279 D, 0007C0290 D, 5001670006 A, 5001670010 A, 5000000002 A, 5000000004 A, AND 5000000003 A

7. THE PURPOSE OF THIS PLAN SET IS TO IDENTIFY TO THE APPROPRIATE PERMITTING AGENCIES THE PROPOSED LOCATION FOR A NATURAL GAS PIPELINE AND ITS LOCATION RELATIVE TO TOPOGRAPHICAL FEATURES AND EXISTING UTILITIES.

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
		0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER				
DRAFTING SUPERVISOR				
DESIGN ENGINEER				
DESIGN MANAGER				
	INITIALS	DATE	INITIALS	DATE

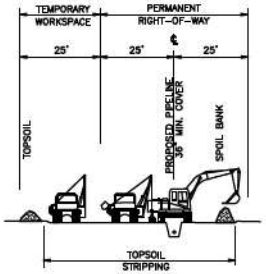
VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
LEGEND & NOTES

LOC. CHITTENDEN & ADDISON COUNTIES

YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP-T-G-003 | REV. 1

Vermont Gas

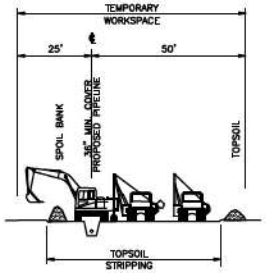
Tetra Tech Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO, INC.



CONSTRUCTION TYPE 1A
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 75' CONSTRUCTION SPACE AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

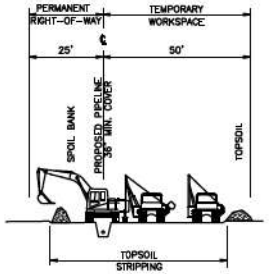
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 1B
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 75' CONSTRUCTION SPACE AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

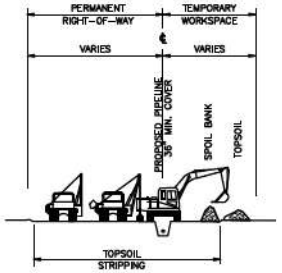
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 1C
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 75' CONSTRUCTION SPACE AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

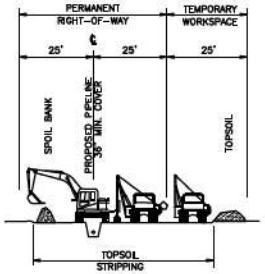
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 1D
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR VARIABLE CONSTRUCTION SPACE AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

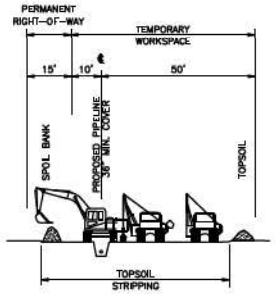
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 1E
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 75' CONSTRUCTION SPACE AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

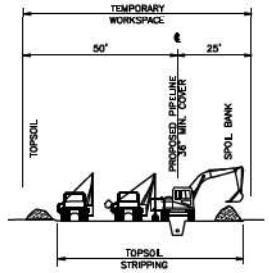
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 1F
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 75' CONSTRUCTION SPACE WHERE PIPE IS IN PUBLIC SPACE AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

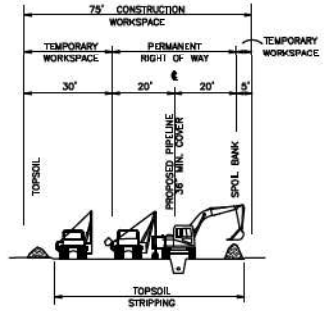
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 1G
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 75' CONSTRUCTION SPACE WHERE PIPE IS IN PUBLIC SPACE AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

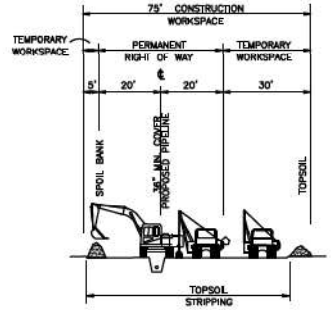
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 1H
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 75' CONSTRUCTION SPACE AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

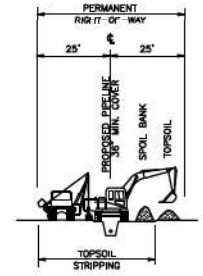
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 1J
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 75' CONSTRUCTION SPACE AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 2A
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 50' CONSTRUCTION SPACE AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
		0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

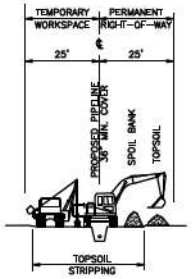
VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
CONSTRUCTION CONFIGURATION DETAILS

LOC. CHITTENDEN & ADDISON COUNTIES

Vermont Gas

Vanasse Hangen Brustlin, Inc.
VHB
COLER & COLANTONIO, INC.

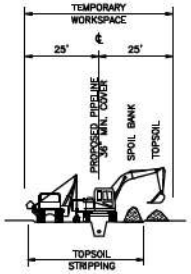
YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP-T-C-004 | REV. 1



CONSTRUCTION TYPE 2B
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 50' CONSTRUCTION SPACE AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

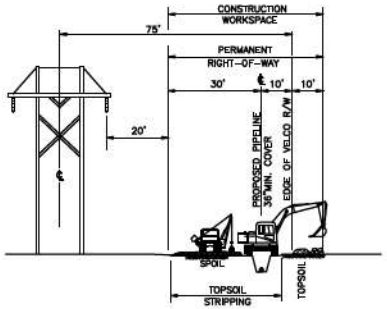
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 2C
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 50' CONSTRUCTION SPACE AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

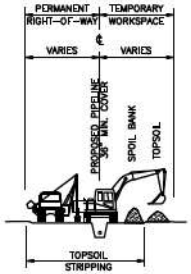
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 2D
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR 50' POWERLINE SIDE CONSTRUCTION AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

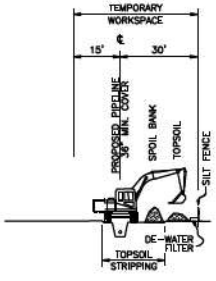
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 2E
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR VARIABLE CONSTRUCTION SPACE AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

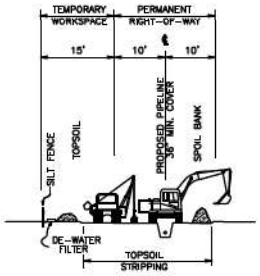
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 3
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION NEAR ROCK LEDGE AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

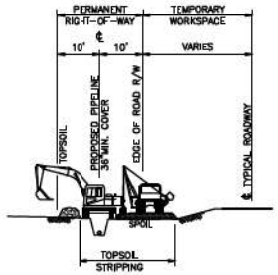
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 3A
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION NEAR ROCK LEDGE AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

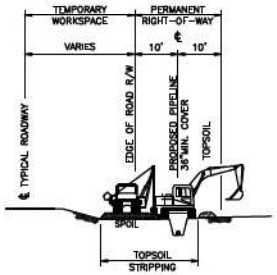
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 4A
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

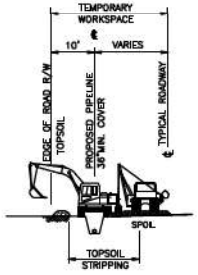
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 4B
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

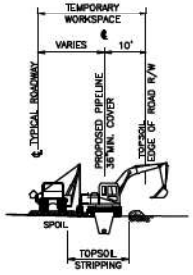
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 4C
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

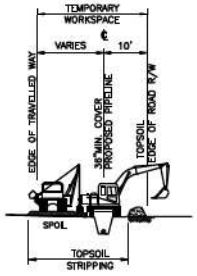
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 4D
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 4E
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
		0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

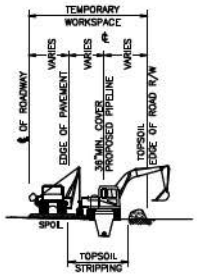
VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
CONSTRUCTION CONFIGURATION DETAILS

LOC. CHITTENDEN & ADDISON COUNTIES

Vermont Gas

Vanasse Hangen Brustlin, Inc.
GHA
COLER & COLANTONIO

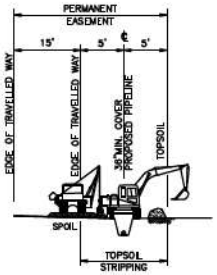
YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP-T-C-005 | REV. 1



CONSTRUCTION TYPE 4F
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



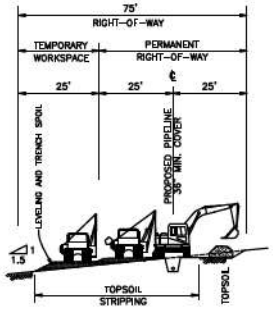
CONSTRUCTION TYPE 4G
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR ROADSIDE CONSTRUCTION AND DOES NOT INCLUDE ADDITIONAL TEMP. WORKSPACE FOR CROSSINGS, SIDE HILL SLOPE, OR WINDROW ROCK AND TOPSOIL SEGREGATION.

2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.

SPACE INTENTIONALLY LEFT BLANK

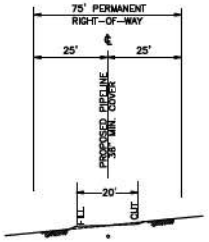
CONSTRUCTION TYPE 5
NOT TO SCALE



CONSTRUCTION TYPE 6A
NOT TO SCALE

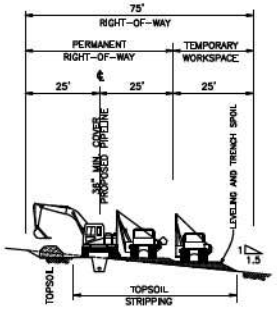
NOTE:
1. THIS CONFIGURATION IS FOR SIDE HILL SLOPE AND DOES NOT INCLUDE TEMPORARY WORKSPACE FOR CROSSINGS, WINDROW ROCK AND TOPSOIL SEGREGATION AND WETLANDS

2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 6B
NOT TO SCALE
POST CONSTRUCTION

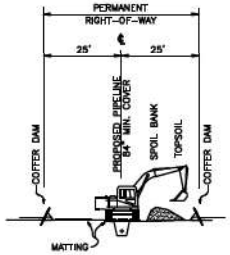
NOTE:
1. THIS CONFIGURATION IS FOR SIDE HILL SLOPE AND DOES NOT INCLUDE TEMPORARY WORKSPACE FOR CROSSINGS, WINDROW ROCK AND TOPSOIL SEGREGATION AND WETLANDS



CONSTRUCTION TYPE 6C
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR SIDE HILL SLOPE AND DOES NOT INCLUDE TEMPORARY WORKSPACE FOR CROSSINGS, WINDROW ROCK AND TOPSOIL SEGREGATION AND WETLANDS

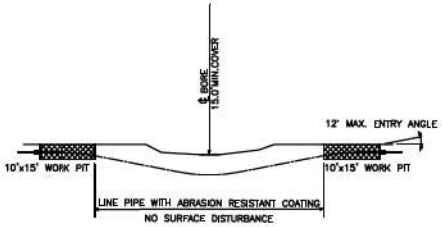
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION



CONSTRUCTION TYPE 7
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR STREAM CROSSING AND DOES NOT INCLUDE TEMPORARY WORKSPACE FOR CROSSINGS, WINDROW ROCK AND TOPSOIL SEGREGATION AND WETLANDS.

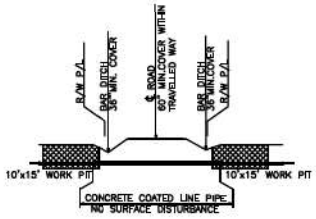
2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.



CONSTRUCTION TYPE 8
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR OPTIONAL STREAM OR ROAD CROSSING HORIZONTAL DIRECTIONAL DRILL.

2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.

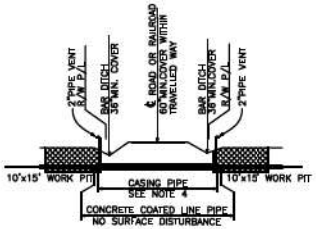


CONSTRUCTION TYPE 9
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR UNCASED ROAD CROSSING CONSTRUCTION.

2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION AND MATERIAL SPECIFICATIONS.

3. SEE SITE SPECIFIC SOIL BORING DETAILS FOR ADDITIONAL INFORMATION



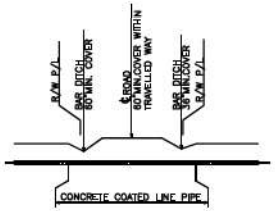
CONSTRUCTION TYPE 10
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR CASED ROAD AND RAILROAD CROSSING CONSTRUCTION.

2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION AND MATERIAL SPECIFICATIONS.

3. SEE SITE SPECIFIC SOIL BORING DETAILS FOR ADDITIONAL INFORMATION.

4. ANNULUS FILLED WITH DIELECTRIC MATERIAL PER VT GAS SPECIFICATIONS.



CONSTRUCTION TYPE 11
NOT TO SCALE

NOTE:
1. THIS CONFIGURATION IS FOR OPEN CUT ROAD CROSSING CONSTRUCTION.

2. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION AND MATERIAL SPECIFICATIONS.

3. SEE SITE SPECIFIC SOIL BORING DETAILS FOR ADDITIONAL INFORMATION.

4. COMPACTION AND RESTORATION TO TOWN AND VT GAS SPECIFICATIONS.

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
		0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

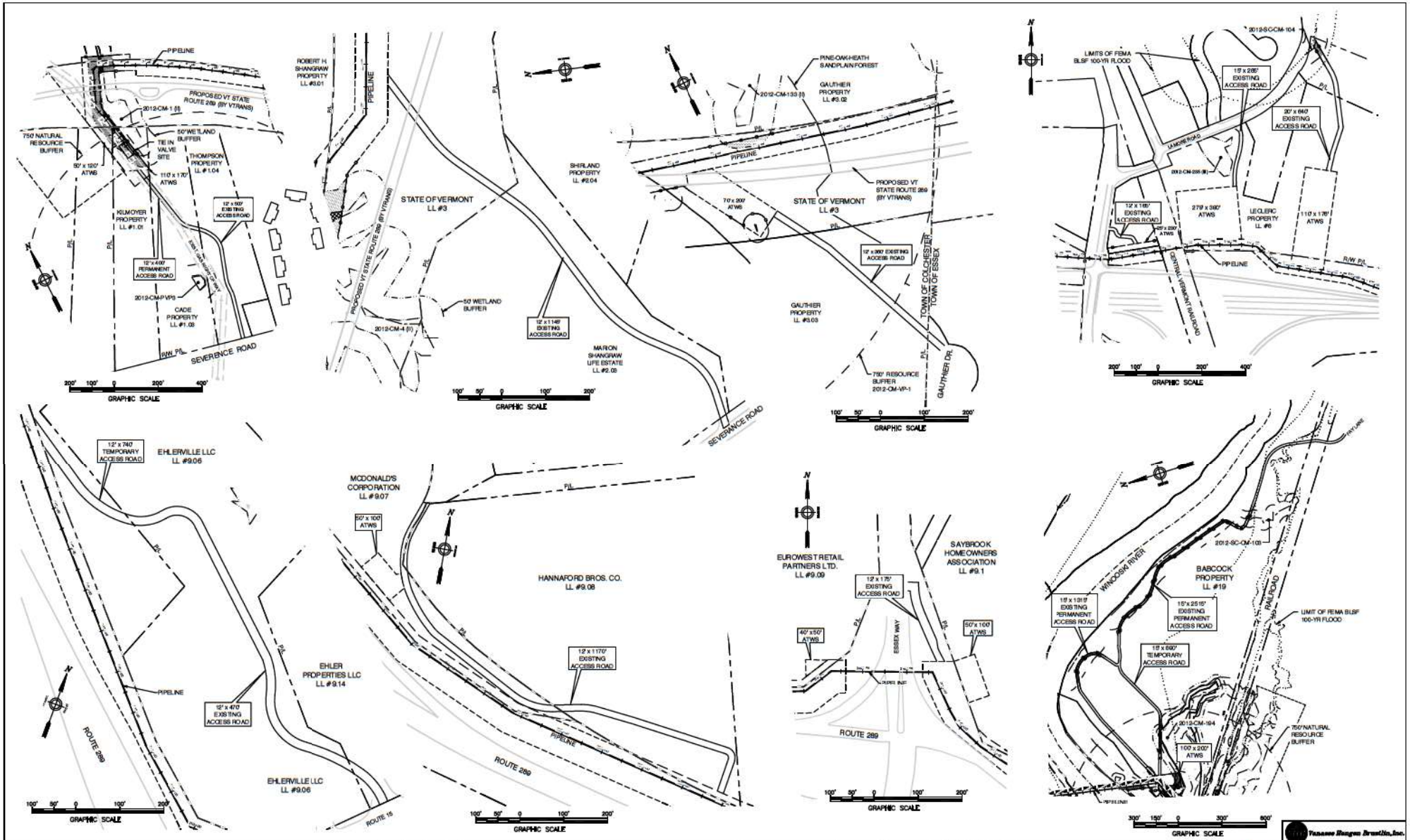
VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
CONSTRUCTION CONFIGURATION DETAILS

LOC. CHITTENDEN & ADDISON COUNTIES

Vermont Gas

YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP-T-C-006 | REV. 1

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO



DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION	INITIALS	DATE	INITIALS	DATE
						ENVIRONMENTAL			
						DRAFTING DESIGNER	GIL	02/28/13	
						DRAFTING SUPERVISOR	BZD	02/28/13	
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13	
		0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13	

BID — CONSTRUCTION

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ACCESS ROAD DETAILS

LOC. CHITTENDEN & ADDISON COUNTIES

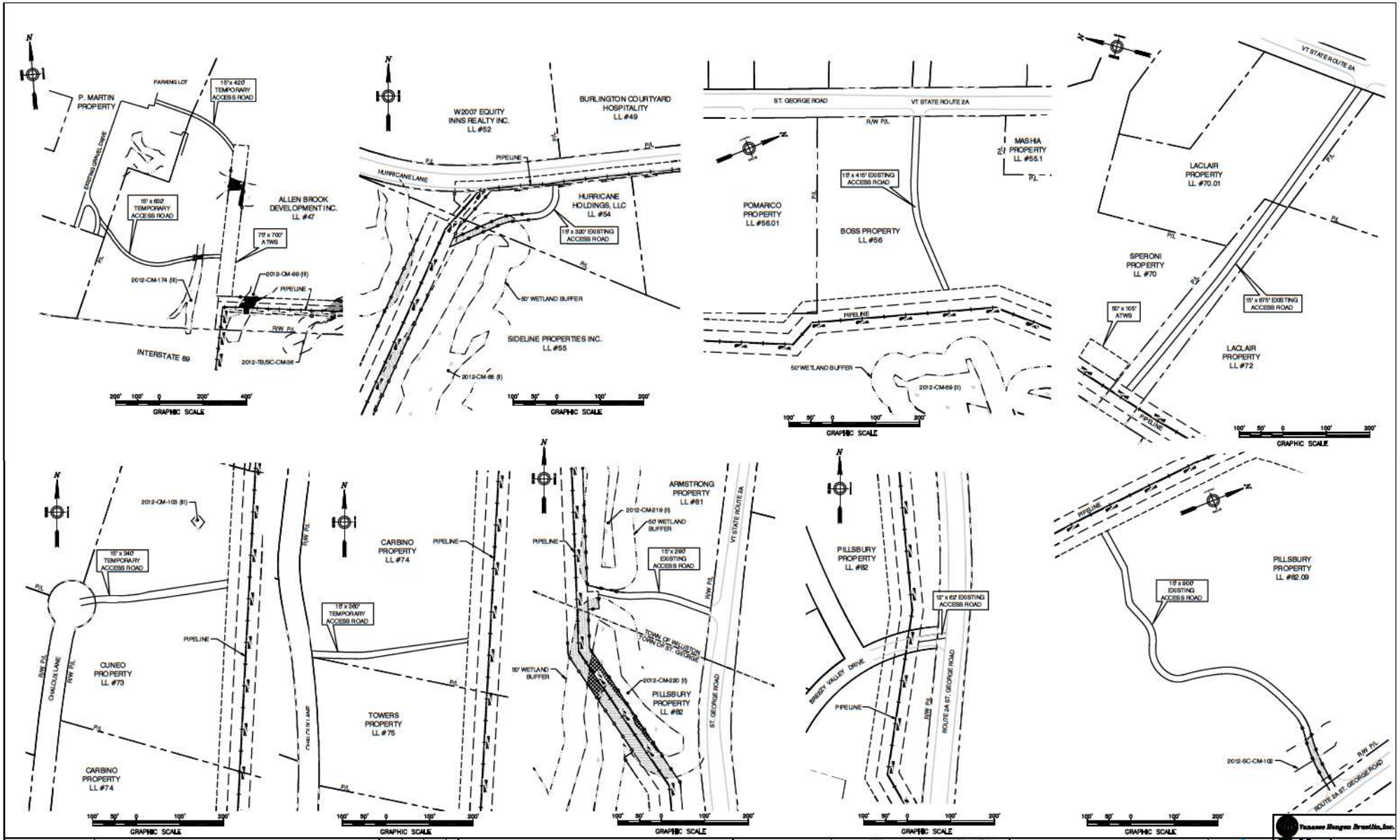
Vermont Gas

Vanasse Hangen Brustlin, Inc.

GHA

COLER & COLANTONIO, INC.

YEAR: 2013 | W.O. | SCALE: AS NOTED | DWG. ANGP-T-C-007 | REV. 1



DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
		0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ACCESS ROAD DETAILS

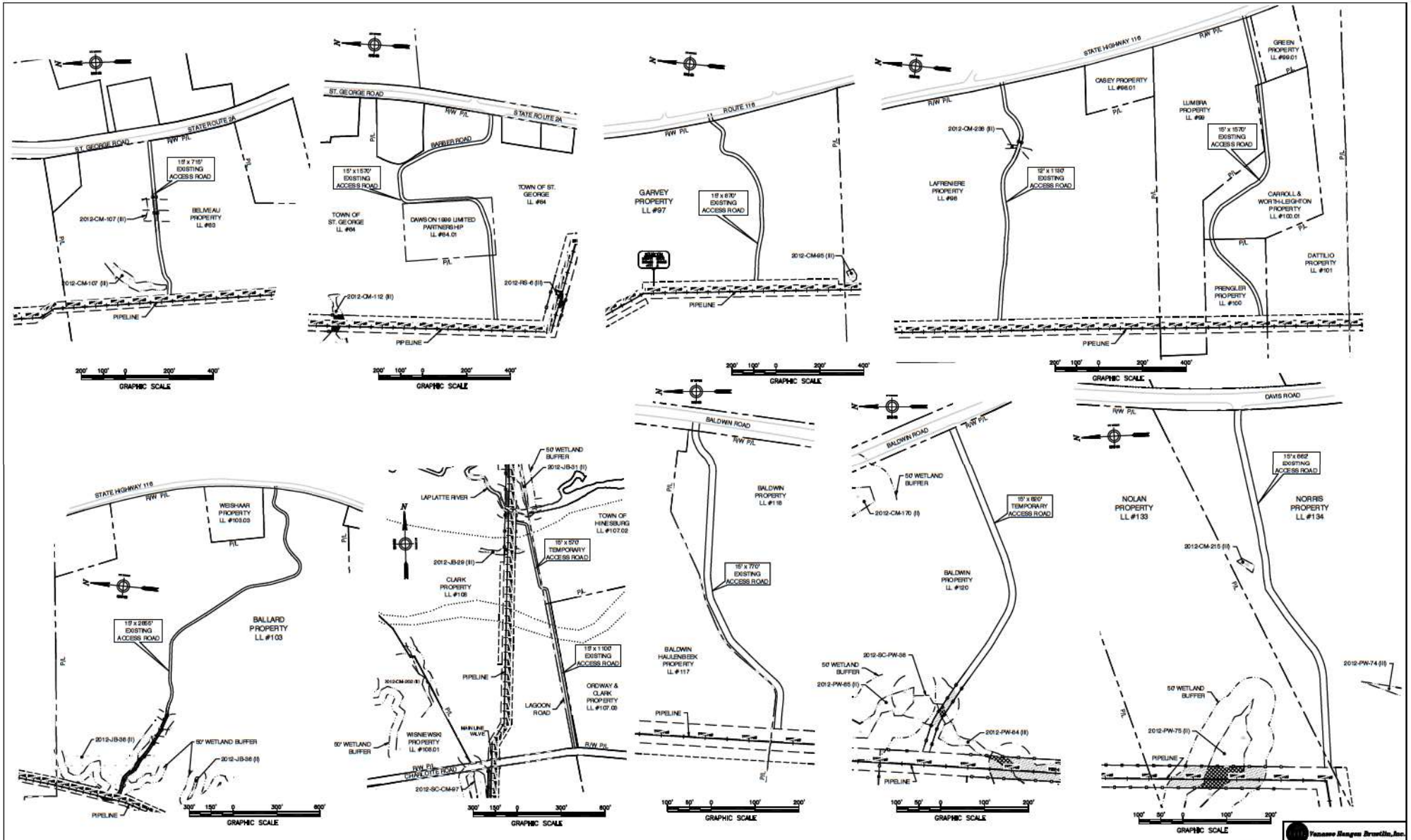
LOC. CHITTENDEN & ADDISON COUNTIES

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO, INC.

YEAR: 2013 | W.O. | SCALE: AS NOTED | DWG. ANGP-T-C-008 | REV. 1



DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
		0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ACCESS ROAD DETAILS

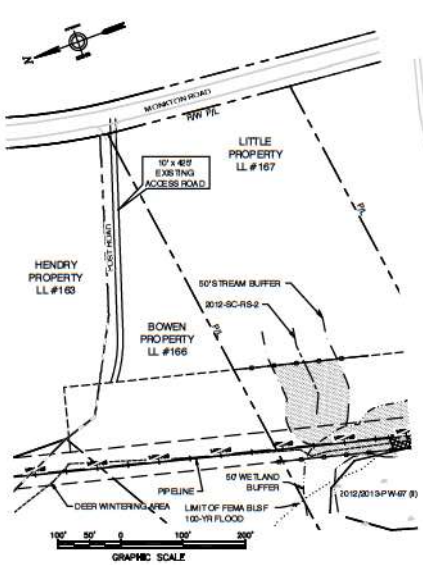
LOC. CHITTENDEN & ADDISON COUNTIES

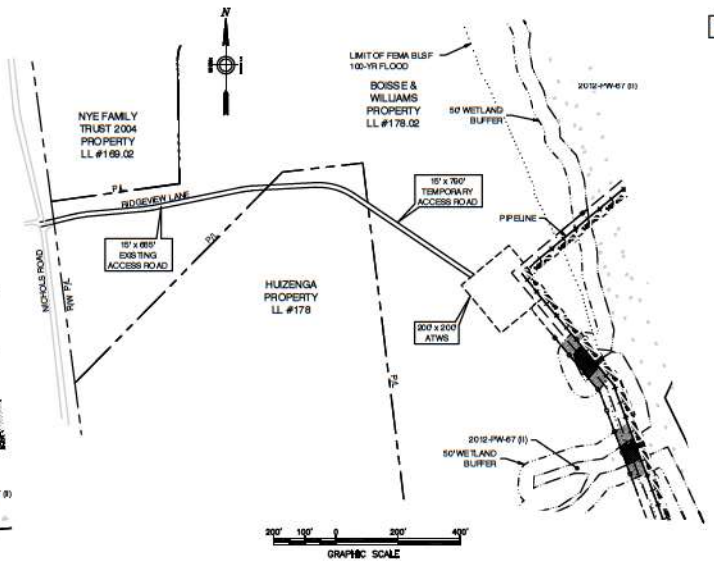
Vermont Gas

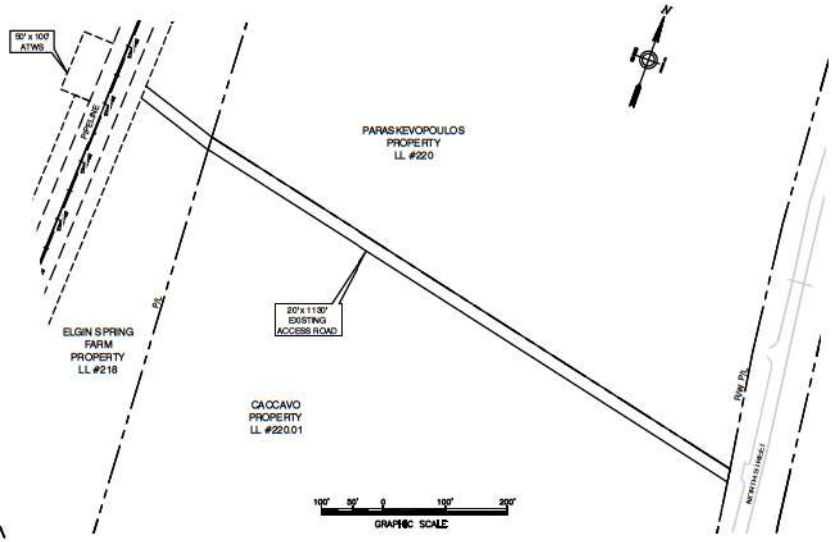
YEAR: 2013 | W.O. | SCALE: AS NOTED | DWG. ANGP-T-C-009 | REV. 1

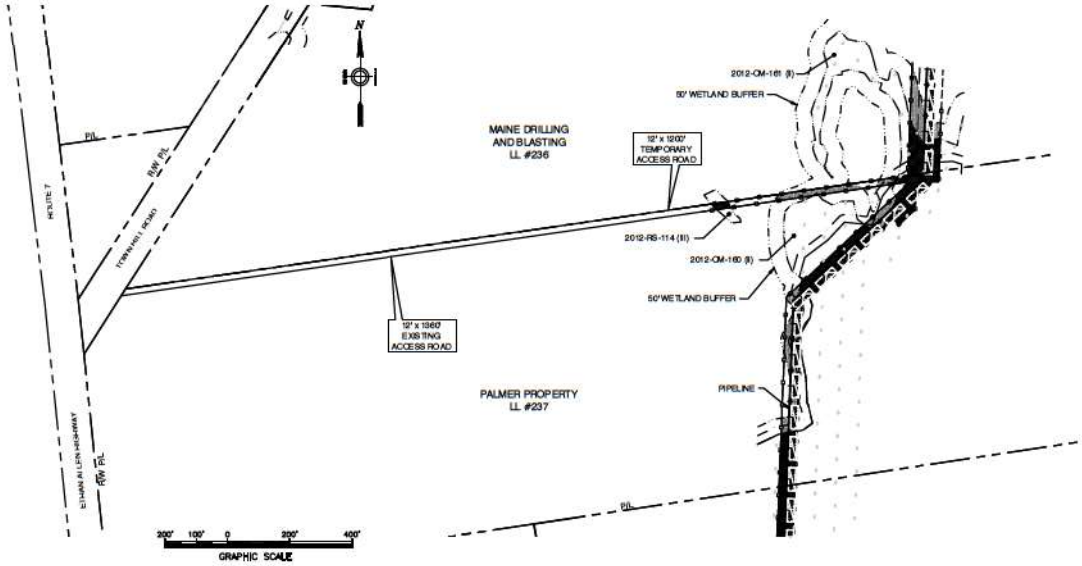
Vanasse Hangen Brustlin, Inc.

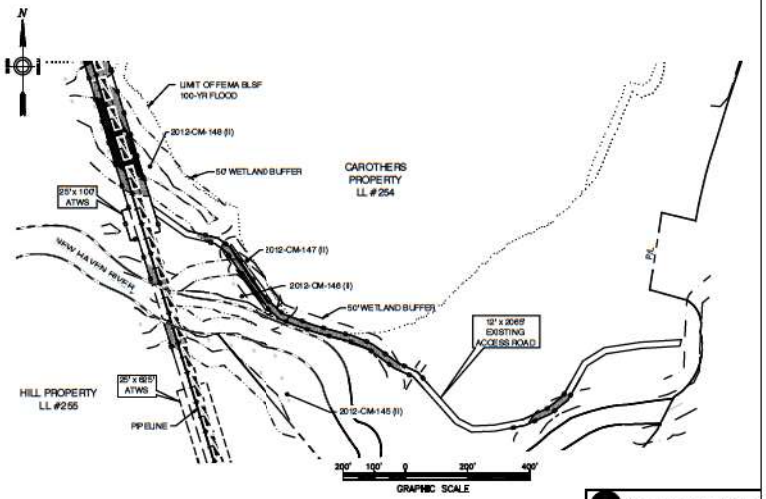
COLER & COLANTONIO, INC.











DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
		0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ACCESS ROAD DETAILS

LOC. CHITTENDEN & ADDISON COUNTIES

Vermont Gas

YEAR: 2013 | W.O. | SCALE: AS NOTED | DWG. ANGP-T-C-010 | REV. 1

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO

CONSTRUCTION DEMARCATION:

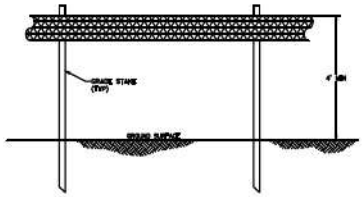
1. CONSTRUCTION DEMARCATION TO BE INSTALLED ALONG PERIMETER OF LIMITS OF DISTURBANCE PER THE EPSC PLAN.
2. DEMARCATION IS NOT TO CROSS ACTIVE ACCESS ROUTES.
3. WITHIN 50 FEET OF A WATER RESOURCE AREA, DEMARCATION MUST INCLUDE:
   a. 2 TO 3 ROWS OF STAKED (OR STAPLED) 3 INCH ORANGE BARRIER MESH TAPE,
   b. ORANGE CONSTRUCTION FENCE, OR
   c. ORANGE SNOW FENCE.
4. GREATER THAN 50 FEET FROM WATER RESOURCE AREAS, DEMARCATION MAY INCLUDE:
   a. ONE ROW OF STAKED (OR STAPLED) 3 INCH ORANGE BARRIER MESH TAPE, OR
   b. ORANGE FLAGGING.

1 **Construction Demarcation Table** 12/12
N.T.S. Source: VGS LD_

PERIMETER CONTROLS:

1. PERIMETER CONTROLS ARE TO BE INSTALLED ON DOWNSLOPE SIDE OF AREAS OF DISTURBANCE WHERE THERE IS POTENTIAL FOR SEDIMENT RUNOFF AND/OR SOIL EROSION.
2. PERIMETER CONTROLS ARE NOT TO CROSS ACTIVE ACCESS ROUTES OR ACTIVE FLOW PATHS (E.G., A STREAM).
3. PARTICULAR CARE IS TO BE TAKEN WHEN INSTALLING PERIMETER CONTROLS IN A WETLAND.
4. WITHIN 50 FEET OF WATER RESOURCE AREAS, PERIMETER CONTROLS MUST INCLUDE:
   a. REINFORCED SILT FENCE – TO BE REINFORCED WIRE MESH MESH, STAKED MANUALLY, STAKED FIBER ROLLS, EROSION CONTROL MIX BERMS, OR WOOD CHIP BERMS.
   b. STONE BERMS
   c. OTHER INTERCHANGEABLE AND/OR DEC APPROVED MEASURES.
5. GREATER THAN 50 FEET FROM WATER RESOURCE AREAS, PERIMETER CONTROLS MAY INCLUDE:
   a. SILT FENCE (NON-REINFORCED)
   b. STAKED FIBER ROLLS
   c. EROSION CONTROL MIX BERMS

2 **Perimeter Control Table** 12/12
N.T.S. Source: VGS LD_



Notes:

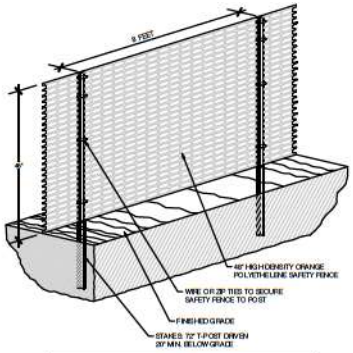
1. BARRIER MESH TAPE SHALL BE INSTALLED AROUND THE PERIMETER OF THE PROJECT TO DENOTE THE LIMIT OF DISTURBANCE. NO EARTHWORK OR STORAGE OF MATERIALS SHALL BE DONE OUTSIDE OF THIS LIMIT LINE.
2. USE 3" ORANGE BARRIER MESH TAPE OR 1/2" YELLOW POLYPROPYLENE ROPE.
3. WITHIN 50' OF WATER RESOURCE AREAS, USE 2–3 ROWS OF TAPE.
4. FEDERAL, STATE, AND/OR LOCAL REQUIREMENTS MAY OVERRIDE THESE SPECIFICATIONS AND/OR THE USE OF THIS MEASURE.

3 **Barrier Mesh Tape** 12/12
N.T.S. Source: VGS LD_

Notes:

1. BARRIER FLAGGING SHALL BE INSTALLED WHERE PROPOSED DISTURBANCE BORDERS ESTABLISHED WOODED AREAS.
2. MARK TREES ALONG LIMIT OF CLEARING W/FLAGGING RIBBON OR PAINT CORRESPONDING TO CORRIDOR LIMITS ON AUTHORIZED EPSC PLANS.

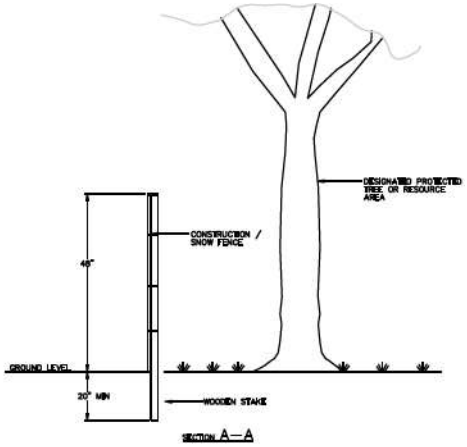
4 **Barrier Flagging** 12/12
N.T.S. Source: VGS LD_

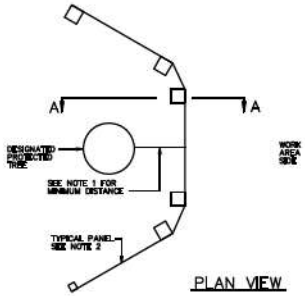


Notes:

1. FOR USE WHERE THE PROPOSED DISTURBANCE IS WITHIN 50' OF A WATER RESOURCE. (STREAM, BROOK, LAKE, POND, ETC.) UNLESS THE AREA IS DENSELY WOODED.
2. WHERE DENSELY WOODED, USE 2 TO 3 ROWS OF BARRIER MESH TAPE.
3. FENCE SHOULD BE CONTINUOUS AND PREVENT ACCESS BY MACHINERY.

5 **Construction/Snow Fence** 12/12
N.T.S. Source: VGS LD_SN

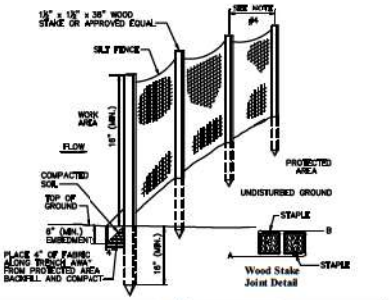




NOTES:

1. MINIMUM DISTANCE BETWEEN RESOURCE AND BARRIER SHALL BE 25'.
2. TREES REQUIRING PROTECTION FOR ALL SIDES WILL BE BOXED WITH A MINIMUM OF 4 PANELS OR AS DIRECTED IN THE FIELD BY THE COMPANY FORESTER.
3. COLORED FLAGGING IS TO BE ATTACHED TO TOP OF STAKES.
4. ALL BRANCHES TOO LARGE TO SUPPORT WITH ONE HAND SHALL BE PRECUT TO AVOID SPLITTING OR TEARING OF THE BARK. WHERE NECESSARY, ROPES OR OTHER EQUIPMENT SHOULD BE USED TO LOWER LARGE BRANCHES OR STUBS TO THE GROUND.

6 **Wetland, RTE, and Vegetation Protection Barrier** 12/12
N.T.S. Source: VGS LD_



Notes:

1. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUIVALENT.
2. FOR FILTER CLOTH FENCE WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4 FT. FOR FILTER CLOTH FENCE WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6 FT.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6 INCHES AND FOLDED.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT AND DISPOSED OF IN AN UPLAND AREA.

7 **Silt Fence** 12/12
N.T.S. Source: VGS LD_SSNT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
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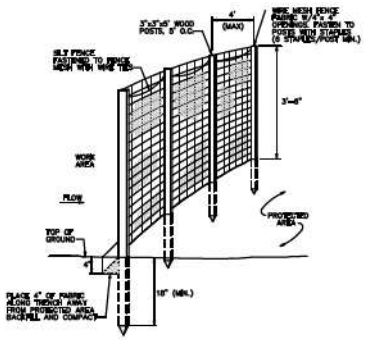
VERMONT GAS
PROPOSED 12" PIPELINE
ADDSON NATURAL GAS PROJECT
CONSTRUCTION DETAILS

LOC. CHITTENDEN & ADDISON COUNTIES

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO, INC.
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP-T-G-012 | REV. 1

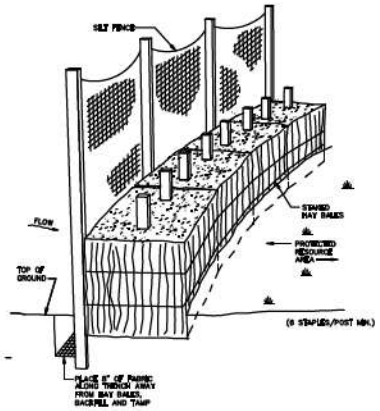


Notes:

1. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUIVALENT.
2. FOR FILTER CLOTH FENCE WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4 FT. FOR FILTER CLOTH FENCE WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6 FT.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6 INCHES AND FOLDED.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT AND DISPOSED OF IN AN UPLAND AREA.

1 Reinforced Silt Fence

12/12 N.T.S. Source: VHB LD_051

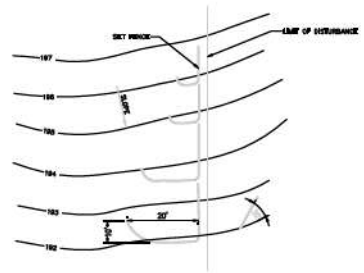


Notes:

1. SEE SILT FENCE NOTES FOR INSTALLATION SPECIFICATIONS.

2 Haybale and Silt Fence Erosion Control

12/12 N.T.S. Source: VHB LD_

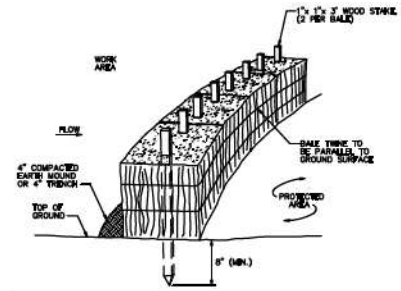


Notes:

1. SILT FENCE SHALL BE INSTALLED IN SHORTER RUNS WITH "J-HOOKS" TO AVOID CONCENTRATION OF FLOWS AT ONE LOCATION BY TRAPPING RUNOFF AT MULTIPLE POINTS ALONG A SLOPE.
2. MINIMUM WIDTH OF J-HOOK RECOMMENDED AT 20 FT WITH A DEPTH OF 10 FT. WHERE SPACE IS LIMITED (E.G., ALONG NARROW RIGHTS OF WAY), NARROWER HOOKS CAN BE USED WITH A HIGHER SPACING FREQUENCY.
3. START DOWN-GRADIENT SILT FENCE LINE AS CLOSE AS POSSIBLE TO UP-GRADIENT J-HOOK.
4. SEE SILT FENCE NOTES FOR INSTALLATION SPECIFICATIONS.

3 Silt Fence "J-Hooks"

12/12 N.T.S. Source: VHB LD_

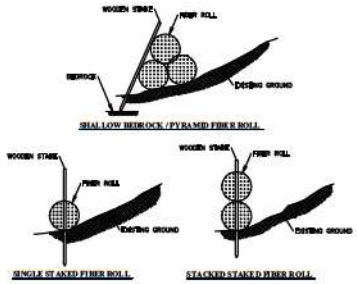


Notes:

1. ENSURE BALES ARE TRENCHED INTO THE GROUND (4" MIN) OR A 4" COMPACTED EARTH MOUND IS PRESENT ON UP GRADIENT SIDE OF BARRIER.
2. ENSURE BALES ARE INSTALLED SO ROPE RUNS PARALLEL TO GROUND.
3. ENSURE STAKES ARE PROPERLY HAMMERED IN, LEAVING ~ 4" OF EXPOSURE ABOVE THE BALE.
4. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES ½ OF THE OVERALL HEIGHT. DISPOSE OF IN AN UPLAND AREA AWAY FROM WATER FLOW.
5. MAINTAIN AND REPLACE HAY BALES AS NEEDED.

4 Staked Hay Bale

12/12 N.T.S. Source: VHB LD_053

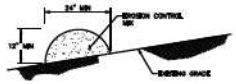


Notes:

1. FIBER ROLL SHALL BE PLACED IN SHALLOW TRENCH UP TO 4", WHERE FEASIBLE. PLACING SOIL REMOVED FROM TRENCH BEHIND THE ROLL.
2. FIBER ROLLS SHALL BE ANCHORED WITH 2" BY 2" WOODEN STAKES (36" LONG), OR SIMILAR, WHERE FEASIBLE.
3. STAKES TO BE PLACED 4 FT APART, MINIMUM.
4. SINGLE OR DOUBLE STACKED STAKED FIBER ROLLS TO BE INSTALLED WHERE SOIL DEPTH ALLOWS. WHERE SHALLOW TO BEDROCK, PYRAMID FIBER ROLLS TO BE UTILIZED WITH STAKES, AS FEASIBLE.
5. FIBER ROLLS TO BE REPLACED OR REPLENISHED AS NEEDED DURING ACTIVE EARTH WORK.
6. FEDERAL, STATE, AND/OR LOCAL REQUIREMENTS MAY OVERRIDE THESE SPECIFICATIONS AND/OR THE USE OF THIS MEASURE.

5 Staked Fiber Roll

12/12 N.T.S. Source: VHB LD_



Notes:

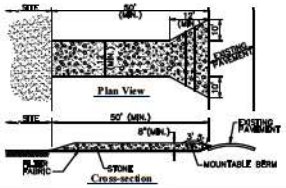
COMPOSITION:
EROSION CONTROL MIX BERM SHALL CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK AND/OR ACCEPTABLE MANUFACTURED PRODUCTS. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS, OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

INSTALLATION:

1. THE BARRIER MUST BE PLACED ALONG A RELATIVELY LEVEL CONTOUR.
2. EXISTING GROUND SHALL BE PREPARED AS NEEDED SUCH THAT THE BARRIER LIES NEARLY FLAT ALONG THE GROUND TO AVOID THE CREATION OF VOIDS AND BRIDGES IN ORDER TO MINIMIZE THE POTENTIAL OF WASH OUTS UNDER THE BARRIER.
3. ON SLOPES < 5% OR AT THE BOTTOM OF STEEPER SLOPES (<2:1) UP TO 20' LONG, THE BARRIER MUST BE A MINIMUM OF 12" HIGH, AS MEASURED ON THE UPHILL SIDE OF THE BARRIER, AND A MINIMUM OF 2 FT. WIDE. ON LONGER OR STEEPER SLOPES, THE BARRIER SHALL BE WIDER TO ACCOMMODATE ADDITIONAL FLOW.
4. EROSION CONTROL MIX MAY BE INSTALLED WHERE SILT FENCE IS ILLUSTRATED AND SCHEDULED ON THE DESIGN PLANS EXCEPT IN, BUT NOT LIMITED TO, THE FOLLOWING AREAS: WETLAND AREAS, AT POINTS OF CONCENTRATED FLOW, BELOW STORMWATER OUTFALLS, AROUND CATCH BASINS AND CLOSED STORM SYSTEMS AND AT THE BOTTOM OF STEEP SLOPES THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM. EROSION CONTROL MIX MAY BE USED IN WETLAND BUFFER AREAS BUT MAY NOT BE USED IN WETLANDS AREA.
5. FEDERAL, STATE, AND/OR LOCAL REQUIREMENTS MAY OVERRIDE THESE SPECIFICATIONS AND/OR THE USE OF THIS MEASURE.

6 Erosion Control Mix Berm

12/12 N.T.S. Source: VHB LD_



Notes:

1. STONE SIZE: USE 1 TO 4 INCH DIAMETER STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH: NOT LESS THAN 50 FEET.
3. THICKNESS: NOT LESS THAT 8 INCHES.
4. WIDTH: EXIT WIDTH SHALL BE A TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. GEOTEXTILE: MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. SURFACE WATER: ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION EXITS SHALL BE PIPED BENEATH THE EXIT. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE: THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. MAINTENANCE MAY REQUIRE TOP DRESSING W/ADDITIONAL AGGREGATE.
8. WHEN WHEEL/EQUIPMENT WASHING IS REQUIRED IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.
10. STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

7 Stabilized Construction Exit

12/12 N.T.S. Source: VHB LD_

SPACE INTENTIONALLY LEFT BLANK

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
		0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

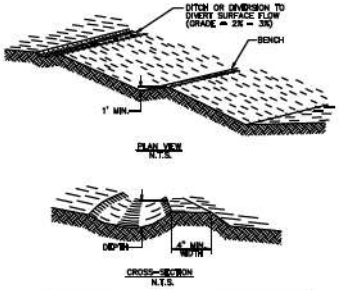
VERMONT GAS
PROPOSED 12" PIPELINE
ADDSON NATURAL GAS PROJECT
CONSTRUCTION DETAILS

LOC. CHITTENDEN & ADDISON COUNTIES

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP-T-G-013 | REV. 1

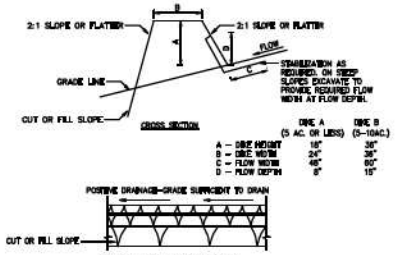


Notes:

1. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE DIVERSION.
2. THE DIVERSION SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET CRITERIA SPECIFIED HEREIN, AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
3. FILLS SHALL BE COMPACTED AS NEEDED TO PREVENT UNEQUAL SETTLEMENT THAT WOULD CAUSE DAMAGE IN THE COMPLETED DIVERSION.
4. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED FOLLOWING FINISHED GRADING.
5. SILT FENCE OR HAY BALES SHALL BE PLACED AT THE OUTLET OF EACH STRUCTURE.

1 Diversion Swale and Berm

N.T.S. Source: VHB 12/12 LD_



	DIKE A (5 AC. OR LESS)	DIKE B (5–10AC.)
A – DIKE HEIGHT	18"	36"
B – DIKE WIDTH	24"	36"
C – FLOW WIDTH	48"	60"
D – FLOW DEPTH	6"	15"

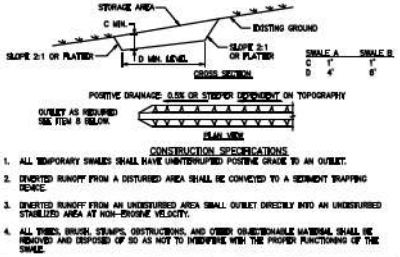
CONSTRUCTION SPECIFICATIONS

1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE NARROWER AND SIDE SLOPES BE FLATTER IF DESIRED TO FACILITATE CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR MULCH IF NOT IN SEEDING SEASON, (B) PER THE FOLLOWING CHART

TYPE OF TREATMENT	CHANNEL GRADE	ACS AC OR LESS)	BIG AC – 10 AC)
1	0.5%–3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1%–5.0%	SEED AND STRAW MULCH	SEED AND COVER USING RECP
3	5.1%–8.0%	SEED AND COVER WITH RECP	LINED WITH 4–6" RIP–RAP OR GEOTEXTILE
4	8.1%–20.0%	LINED WITH 4–6" RIP–RAP	ENGINEERED DESIGN

2 Earth Dike

N.T.S. Source: VHB 12/12 LD_



	SWALE A	SWALE B
C	1'	1'
D	4'	6'

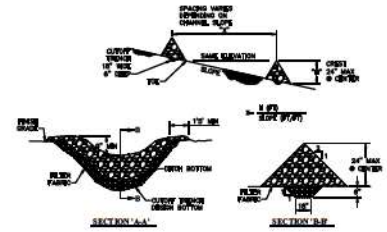
CONSTRUCTION SPECIFICATIONS

1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
5. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT NEEDED FOR CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
8. STABILIZATION SHALL BE AS PER THE FLOW CHANNEL STABILIZATION CHART BELOW:

TYPE OF TREATMENT	CHANNEL GRADE	ACS AC OR LESS)	BIG AC – 10 AC)
1	0.5%–3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1%–5.0%	SEED AND STRAW MULCH	SEED AND COVER USING RECP
3	5.1%–8.0%	SEED AND COVER WITH RECP	LINED WITH 4–6" RIP–RAP OR GEOTEXTILE
4	8.1%–20.0%	LINED WITH 4–6" RIP–RAP	ENGINEERED DESIGN

3 Temporary Swale

N.T.S. Source: VHB 12/12 LD_

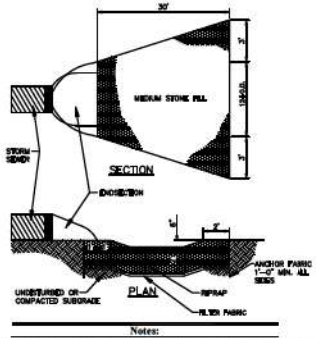


Notes:

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN USING A WELL GRADED STONE MATRIX 2 TO 9 INCHES IN SIZE.
2. SET SPACING OF CHECK DAMS TO ASSURE THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTENDING THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
6. FEDERAL, STATE, AND/OR LOCAL REQUIREMENTS MAY OVERRIDE THESE SPECIFICATIONS AND/OR THE USE OF THIS MEASURE.

4 Stone Check Dam

N.T.S. Source: VHB 12/12 LD_

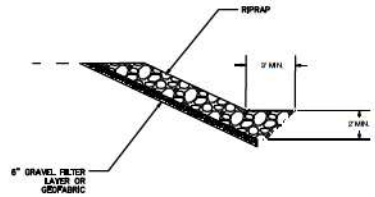


Notes:

1. OUTLET PROTECTION MAY BE DONE BY USING ROCK RIP–RAP, GROUTED RIP–RAP, OR GABIONS.
2. STONE SIZE SHALL BE A WELL GRADED MIXTURE SO THAT 50% OF THE STONE SIZE, BY WEIGHT, SHALL BE LARGER THAN THE d50 SIZE DETERMINED USING THE CHARTS.

5 Outlet Protection

N.T.S. Source: VHB 12/12 LD_

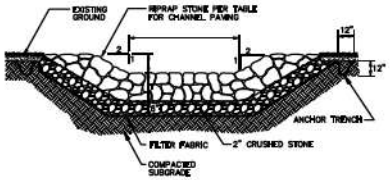


Notes:

1. MINIMUM THICKNESS SHALL BE 1.5X MAX STONE DIAMETER, BUT IN NO CASE < 6".
2. THE TOE OF RIP RAP SHALL BE KEYED IN STABLE FOUNDATION @ IT'S BASE.
3. STONE SIZE SHOULD BE BASED ON ANGLE OF REPOSE FOR SPECIFIC SIZE. (FIG 4.3 P 4.38)

6 Riprap Slope Protection

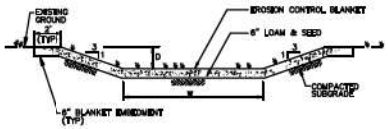
N.T.S. Source: VHB 12/12 LD_



6 Stone-lined Channel Swale

N.T.S. Source: VHB 12/12 LD_

SWALE DESIGNATION	W	D



7 Grassed Swale

N.T.S. Source: VHB 12/12

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
		0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDSON NATURAL GAS PROJECT
CONSTRUCTION DETAILS

LOC. CHITTENDEN & ADDISON COUNTIES

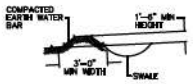
Vermont Gas

Vanasse Hangen Brustlin, Inc.

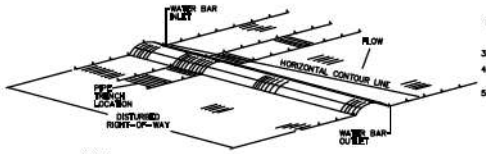
CHA

COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP–T–G–014 | REV. 1



4% SLOPE CHART	
HORIZONTAL DISTANCE BETWEEN WATER BAR INLET & OUTLET (FEET)	ELEVATION DISTANCE BETWEEN WATER BAR INLET & OUTLET (FEET)
75	3
100	4
125	5
150	6
175	7



NOTES:

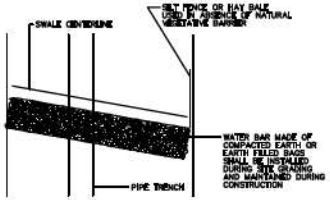
1. SPACE WATERBARS AS INDICATED IN TABLE OR AS DIRECTED BY OSPC.

Notes:

1. SPACE WATERBARS AS INDICATED IN TABLE OR AS DIRECTED BY OSPC.
2. COMPACT THE BAR.
3. THE OUTLET SHALL BE LOCATED ON AN UNDISTURBED AREA. OUTLET PROTECTION WILL BE PROVIDED WHEN NATURAL AREAS ARE NOT ADEQUATE.
4. EXPOSED AREAS SHALL BE IMMEDIATELY SEEDED AND STABILIZED.

NOTES:

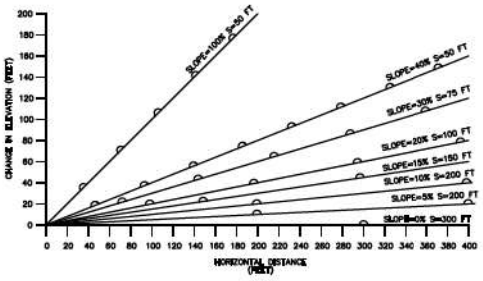
1. WATERBARS ARE TO BE SPACED ALONG THE RIGHT-OF-WAY IN ACCORDANCE WITH WATERBAR SPACING CHART OR AS SHOWN ON THE PLANS.
2. WATER SHALL BE DIVERTED OFF THE DISTURBED RIGHT-OF-WAY AT AN OUTSLOPE OF THREE TO FIVE PERCENT BY CONSTRUCTING WATERBARS ACCORDING TO THE FOLLOWING PROCEDURE:
   - 2.A. AT THE PROPOSED WATERBAR INTERCEPTOR LOCATION, ESTABLISH A HORIZONTAL CONTOUR LINE (USING A POCKET TRANSIT OR HAND HELD LEVEL) WHICH EXTENDS COMPLETELY ACROSS THE DISTURBED RIGHT-OF-WAY. THIS LINE WILL ALWAYS BE PERPENDICULAR TO THE DIRECTION OF WATER FLOW AND SHOULD BE PARALLEL TO MAP CONTOURS SHOWN ON THE PLAN DRAWINGS.
   - 2.B. DETERMINE WHICH SIDE OF THE RIGHT-OF-WAY IS BEST SUITED FOR THE WATERBAR OUTLET (EVALUATE VEGETATION DENSITY, LOCAL TOPOGRAPHY, ETC.) AND DEVIATE WATERBARS AWAY FROM THE HORIZONTAL CONTOUR LINE SLIGHTLY DOWNWARD TOWARD THE SELECTED OUTLET SIDE MAINTAINING A SLOPE TO FIVE PERCENT OUT SLOPE.
   - 2.C. WHEN OUTLETTING NEAR WATER BODIES, STREAMS, DITCHES AND CROP FIELDS, A SILT FENCE OR HAY BALES SHALL BE PLACED ON THE OUTLET END OF THE INTERCEPT WATERBAR.
3. PERMANENT TRENCH BREAKER SANDBAGS SHALL NOT BE FILLED WITH TOPSOIL.
4. SPACING SHOWN ARE RECOMMENDED GUIDELINES. OSPC REPRESENTATIVE MAY ADJUST SPACING IN THE FIELD.
5. ONE TRENCH BREAKER IS REQUIRED AT ALL STREAM BANKS AND AT WETLAND BOUNDARIES.



OVERHEAD VIEW OF WATERBAR AND SILTFENCE

1 Waterbar and Waterbar with Silt Fence

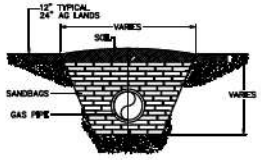
N.T.S. Source: VHB 12/12 LD



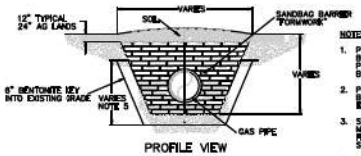
NOTE: S = WATERBAR SPACING

2 Waterbar Spacing Guideline

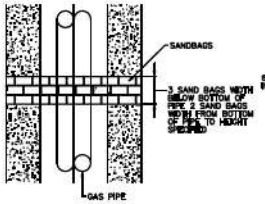
N.T.S. Source: VHB 12/12 LD



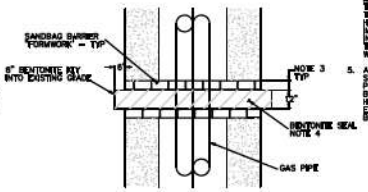
PROFILE VIEW



PROFILE VIEW



PLAN VIEW
SAND BAG TRENCH BREAKER



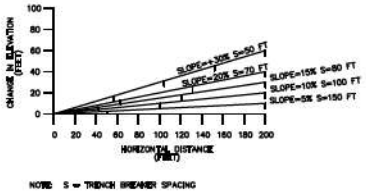
PLAN VIEW
TRENCH BREAKER WITH BENTONITE

NOTES:

1. PERMANENT TRENCH BREAKER WITH BENTONITE SEAL IS INTENDED TO PREVENT WATER FLOW THROUGH THE BREAKER.
2. PERMANENT TRENCH BREAKER WITH BENTONITE SEAL TO BE INSTALLED AT EDGE OF WETLANDS AND STREAMS.
3. SAND BAG BARRIER WIDTH SHALL BE MINIMUM 1 BAG WIDE AND/OR AS FIELD DETERMINED TO PROVIDE STABILITY.
4. BENTONITE IS TO BE INSTALLED IN THE VOID SPACE BETWEEN THE SANDBAG BARRIER "FORMWORK" IN SUCH A MANNER TO COMPLETELY SURROUND THE PIPE AND FILL THE VOID FROM THE BOTTOM OF THE TRENCH TO A HEIGHT 6" ABOVE THE LEVEL OF UNCOMPACTED PADDING MATERIAL WHICH IS INSTALLED ON THE EXTERIOR SIDE OF THE SANDBAG BARRIER IN THE WETLAND ZONE.
5. AFTER BENTONITE PLACEMENT, INSTALL SAND BAGS ON TOP OF THE PERMANENT TRENCH BREAKER AND BENTONITE SEAL TO THE REQUIRED HEIGHT PER DETAIL 2. AND BACKFILL EXTERIOR SIDES OF SAND BAG BARRIER.

3 Permanent Trench Break with Sandbags

N.T.S. Source: VHB 12/12 LD



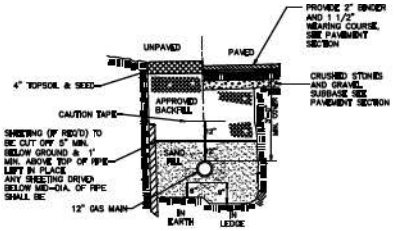
NOTE: S = TRENCH BREAKER SPACING

NOTES:

1. PERMANENT TRENCH BREAKER SANDBAGS SHALL NOT BE FILLED WITH TOPSOIL.
2. SPACINGS SHOWN ARE RECOMMENDED GUIDELINES. OSPC REPRESENTATIVE MAY ADJUST SPACING IN THE FIELD.
3. ONE TRENCH BREAKER IS REQUIRED AT ALL STREAM BANKS AND AT WETLAND BOUNDARIES.

4 Permanent Trench Break Spacing Guideline

N.T.S. Source: VHB 12/12 LD



BACKFILL MATERIAL TO CONSIST OF GRANULAR MATERIAL CONTAINING NO STONES OR CLODS LARGER THAN 3" IN GREATEST DIMENSION.

BACKFILL WITH CLEAN SAND TO 12" OVER PIPE.

REMOVE UNSUITABLE MATERIAL BELOW GRADE IF ENCOUNTERED, TO SUITABLE DEPTHS AS DIRECTED BY ENGINEER AND REPLACE WITH CLEAN GRANULAR FILL.

NOTES:

1. ALL TRENCH CONSTRUCTION TO CONFORM TO APPLICABLE FEDERAL STATE AND LOCAL REGULATIONS.
2. ALL BACKFILL MATERIAL SHALL BE COMPACTED AT NEAR OPTIMUM MOISTURE CONTENT IN LAYERS NOT EXCEEDING 6 INCHES IN COMPACTED THICKNESS BY PNEUMATIC TAMPERS, VIBRATOR COMPACTORS, OR OTHER APPROVED MEANS.
3. THE CONTRACTOR SHALL PROVIDE TESTING TO INSURE THAT THE INPLACE DENSITY OF THE BACKFILL MEETS THE ABOVE REQUIREMENTS.

5 Typical Trench Detail

N.T.S. Source: COLER & COLANTONIO, INC. 2/13 LD

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
		0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDSON NATURAL GAS PROJECT
CONSTRUCTION DETAILS

LOC. CHITTENDEN & ADDISON COUNTIES

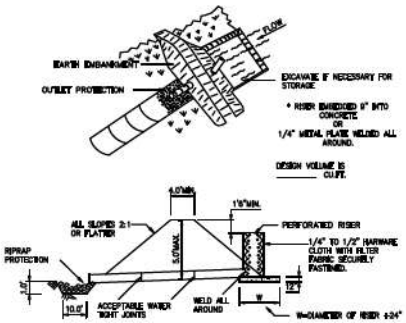
Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO, INC. ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP-T-G-015 | REV. 1



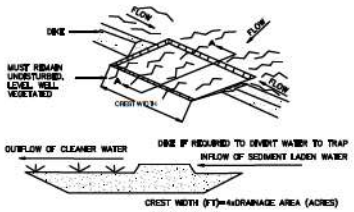
EMBANKMENT SECTION THRU RISER

CONSTRUCTION SPECIFICATIONS

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. VOLUME OF SEDIMENT STORAGE SHALL BE 3600 CUBIC FEET PER ACRE OF CONTRIBUTORY DRAINAGE.
4. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND STABILIZED.
5. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
6. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND SEDIMENT ARE CONTROLLED.
7. THE STRUCTURE SHALL BE REMOVED AND AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
8. ALL FILL SLOPES SHALL BE 2:1 OR FLATTER; CUT SLOPES 1:1 OR FLATTER.
9. ALL PIPE CONNECTIONS SHALL BE WATERTIGHT.
10. THE TOP 2/3 OF THE RISER SHALL BE PERFORATED WITH ONE (1) INCH DIAMETER HOLES OR SLITS SPACED SIX (6) INCHES VERTICALLY AND HORIZONTALLY AND PLACED IN THE CONCAVE PORTION OF PIPE. NO HOLES WILL BE ALLOWED WITHIN SIX (6) INCHES OF THE HORIZONTAL BARREL.
11. THE RISER SHALL BE WRAPPED WITH 1/4 TO 1/2 INCH HARDWARE CLOTH WHICH THEN WRAPPED WITH FILTER CLOTH (HAVING AN EQUIVALENT SIEVE SIZE OF 40-80). THE FILTER CLOTH SHALL EXTEND SIX (6) INCHES ABOVE THE HIGHEST HOLE AND SIX (6) INCHES BELOW THE LOWEST HOLE. WHERE ENDS OF THE FILTER CLOTH COME TOGETHER, THEY SHALL BE OVER-LAPPED, FOLDED AND STAPLED TO PREVENT BYPASS.
12. STRAPS OR CONNECTING BANDS SHALL BE USED TO HOLD THE FILTER CLOTH AND WIRE FABRIC IN PLACE. THEY SHALL BE PLACED AT THE TOP AND BOTTOM OF THE CLOTH.
13. FILL MATERIAL AROUND THE PIPE SPILLWAY SHALL BE HAND COMPACTED IN FOUR (4) INCH LAYERS. A MINIMUM OF TWO (2) FEET OF HAND COMPACTED BACKFILL SHALL BE PLACED OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT.
14. THE RISER SHALL BE ANCHORED WITH EITHER A CONCRETE BASE OR STEEL PLATE BASE TO PREVENT FLOTATION. FOR CONCRETE BASED THE DEPTH SHALL BE TWELVE (12) INCHES WITH THE RISER EMBEDDED NINE (9) INCHES. A 1/4 INCH MINIMUM THICKNESS STEEL PLATE SHALL BE ATTACHED TO THE RISER BY A CONTINUOUS WELD AROUND THE BOTTOM TO FORM A WATERTIGHT CONNECTION AND THEN PLACE TWO (2) FEET OF STONE, GRAVEL, OR TAMPED EARTH ON THE PLATE.

1 Pipe Outlet Sediment Trap

N.T.S. Source: VHB 12/12 LD_



SECTION A – A
EXCAVATED GRASS OUTLET SEDIMENT TRAP

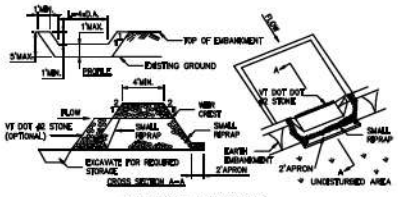
CONSTRUCTION SPECIFICATIONS

1. VOLUME OF SEDIMENT STORAGE SHALL BE 1800 CUBIC FEET PER ACRE OF CONTRIBUTORY DRAINAGE AREA.
2. MINIMUM CREST WIDTH SHALL BE 4 x DRAINAGE AREA
3. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
4. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
5. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION SHALL BE MINIMIZED.
6. THE SEDIMENT TRAP SHALL BE REMOVED AND AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
7. ALL CUT SLOPES SHALL BE 1:1 OR FLATTER.

MAXIMUM DRAINAGE AREA: 5 ACRES

2 Grass Outlet Sediment Trap

N.T.S. Source: VHB 12/12 LD_



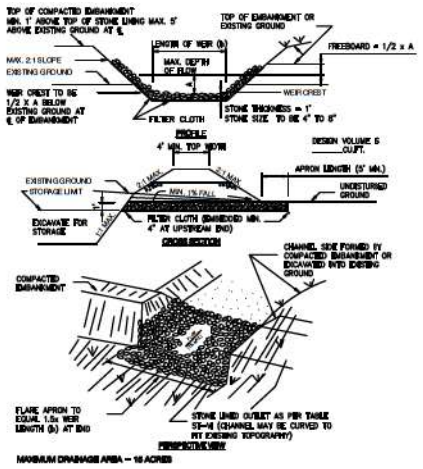
CONSTRUCTION SPECIFICATIONS

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
4. THE STONE USED IN THE OUTLET SHALL BE SMALL RIPRAP 4"-8" ALONG WITH A 1' THICKNESS OF 2" AGGREGATE PLACED ON THE UP-GRADE SIDE ON THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN THE RIPRAP.
5. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMEN- SIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP.
6. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND AS REQUIRED BY THE PERMIT.
7. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
8. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

MAXIMUM DRAINAGE AREA 5 ACRES

3 Stone Outlet Sediment Trap

N.T.S. Source: VHB 12/12 LD_



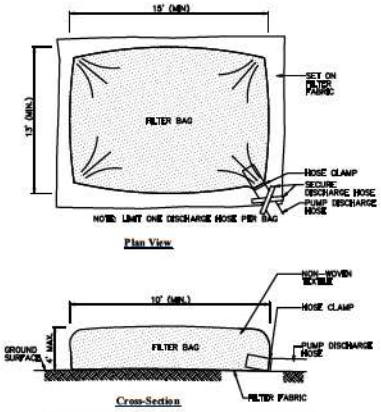
MAXIMUM DRAINAGE AREA – 15 ACRES

CONSTRUCTION SPECIFICATIONS

1. THE AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED. MAXIMUM HEIGHT OF EMBANKMENT SHALL BE FIVE (5) FEET, MEASURED AT CENTERLINE OF EMBANKMENT.
3. ALL FILL SLOPES SHALL BE 2:1 OR FLATTER. CUT SLOPES 1:1 OR FLATTER.
4. ELEVATION OF THE TOP OF ANY DIKE DIRECTING WATER INTO TRAP MUST EQUAL OR EXCEED THE CREST OF EMBANKMENT.
5. STORAGE AREA PROVIDED SHALL BE FIGURED BY COMPUTING THE VOLUME AVAILABLE BEHIND THE OUTLET CHANNEL UP TO AN ELEVATION OF ONE (1) FOOT BELOW THE LEVEL WEIR CREST.
6. FILTER CLOTH SHALL BE PLACED OVER THE BOTTOM AND SIDES OF THE OUTLET CHANNEL PRIOR TO PLACEMENT OF STONE. SECTIONS OF FABRIC MUST OVERLAP AT LEAST ONE (1) FOOT WITH SECTION NEAREST THE ENTRANCE PLACED ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST SIX (6) INCHES INTO EXISTING GROUND AT ENTRANCE OUTLET CHANNEL.
7. STONE USED IN THE OUTLET CHANNEL SHALL BE FOUR (4) TO EIGHT (8) INCH RIPRAP. TO PROVIDE A FILTERING EFFECT, A LAYER OF FILTER CLOTH SHALL BE EMBEDDED ONE (1) FOOT WITH SECTION NEAREST ENTRANCE PLACED ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST SIX (6) INCHES INTO EXISTING GROUND AT ENTRANCE OF OUTLET CHANNEL.
8. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
9. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRED AS NEEDED.
10. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND SEDIMENT ARE CONTROLLED.
11. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
12. DRAINAGE AREA FOR THIS PRACTICE IS LIMITED TO 15 ACRES OR LESS.

4 Riprap Outlet Sediment Trap

N.T.S. Source: VHB 12/12 LD_

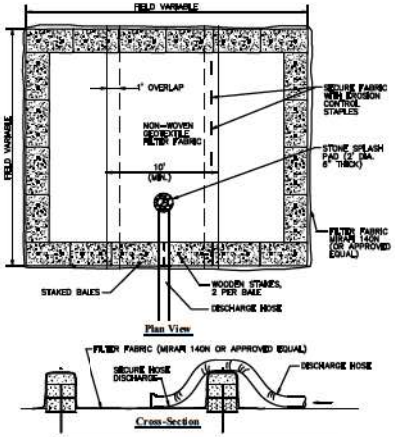


Notes:

1. BAG TO BE USED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
2. MUST BE PLACED MIN. OF 50' FROM WETLAND OR STREAM ON STONE PAD. INSTALL DOWNGRADIENT OF BMPS INCLUDING SILT FENCE OR COMPOST LOGS AS NECESSARY.
3. INSPECT AND MAINTAIN BAG AS NECESSARY. DISPOSE OF ACCUMULATED SEDIMENT IN AN UPLAND AREA > 50' FROM WETLAND OR STREAM. STABILIZE SEED, AND MULCH IMMEDIATELY.

5 Dewatering Filter Bag

N.T.S. Source: VHB 12/12 LD_



Notes:

1. NUMBERS OF BALES MAY VARY DEPENDING ON SITE CONDITIONS.
2. BASIN TO BE SEIZED TO PREVENT DISCHARGE WATER FROM OVERTOPPING BASIN.
3. MUST BE PLACED MIN OF 50' FROM WETLAND OR STREAM, PREFERABLY IN A VEGETATED AREA.

6 Dewatering Straw Bale Basin

N.T.S. Source: VHB 12/12 LD_

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		INITIALS	DATE	INITIALS	DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
		0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

BID | CONSTRUCTION

VERMONT GAS
PROPOSED 12" PIPELINE
ADDSON NATURAL GAS PROJECT
CONSTRUCTION DETAILS

LOC. CHITTENDEN & ADDISON COUNTIES

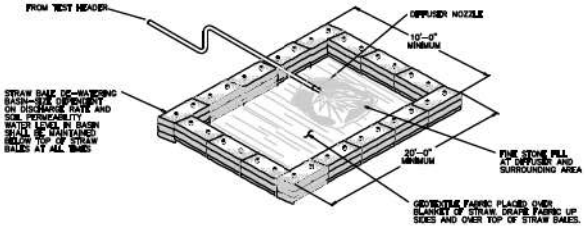
Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO, INC.
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP-T-G-016 | REV. 1

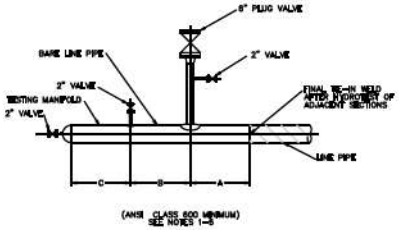


Notes:

1. MUST BE PLACED MIN. 50' FROM WETLAND OR STREAM
2. HAY BALES TO BE STAKED IN PLACE.

1 Hydrotest Discharge Detail

N.T.S. Source: VHB 12/12 LD_

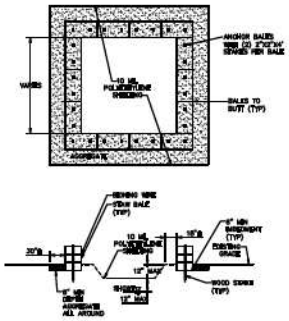


NOTES:

1. DIMENSIONS A, B & C ARE DEPENDENT ON PIPE DIAMETER & PIG LENGTH AND ARE TO BE DETERMINED BY CONTRACTOR.
2. FOR MANIFOLD TEST LOCATIONS & DISCHARGE LOCATIONS REFER TO IB&CP DRAWINGS.
3. TEST WATER SHALL BE TRANSFERRED BY PUMPING FROM ONE TEST SECTION TO THE NEXT ADJACENT TEST SECTION THROUGH THE 6" PIPE BRANCH AND MAKE-UP PIPING BETWEEN TEST SECTIONS. USE OF "HARD PIPING" & UNIONS IS RECOMMENDED.
4. FINAL TIE-IN WELD(S) BETWEEN TEST SECTIONS TO BE 100% RADIOGRAPHED.
5. TAP AND BRANCH SERIES AND VALVES FOR MANIFOLD ARE CONCEPTUAL AND SHALL BE DESIGNED BY CONTRACTOR TO BE COMPATIBLE WITH TEST EQUIPMENT AND PIPING.

2 Typical Hydrastatic Test Manifold Detail

N.T.S. Source: VHB 12/12 LD_

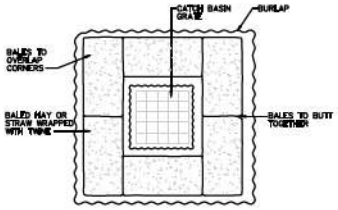


Notes:

1. CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
2. CONTAINMENT DEVICES MUST BE SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
3. WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL.
4. WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
5. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
6. AT LEAST WEEKLY REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.
7. PLACE 50' FROM RIVER OR STREAM.

3 Concrete Washout Area Detail

N.T.S. Source: VHB 12/12 LD_



Notes:

1. SURROUND STREET DRAINAGE STRUCTURE INLET WITH HAY BALES PRIOR TO CONSTRUCTION AND MAINTAIN UNTIL CONSTRUCTION IS COMPLETED. ACCUMULATED SEDIMENTS SHALL BE REMOVED AND DISPOSED OF IN AN UPLAND AREA >50' FROM WETLANDS OR STREAM.
2. HAYBALES PLACED ON PAVEMENT SHALL HAVE BURLAP PLACED BETWEEN PAVEMENT AND HAY BALE.

4 Storm Drain Inlet Protection

N.T.S. Source: VHB 12/12 LD_

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SPACE INTENTIONALLY LEFT BLANK

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DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
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		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
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VERMONT GAS
PROPOSED 12" PIPELINE
ADDSON NATURAL GAS PROJECT
CONSTRUCTION DETAILS

LOC. CHITTENDEN & ADDISON COUNTIES

YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP-T-G-017 | REV. 1

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MULCH MATERIAL AND APPLICATION

MULCH MATERIAL	QUALITY STANDARDS	PER 1,000 SQ-FT	PER ACRE	DEPTH OF APPLICATION
WOOD CHIPS OR SHAVINGS	AIR DRIED, FREE OF OBJECTIONABLE MATERIAL	500 – 900 LBS	10 – 20 TONS	2" – 7"
WOOD FIBER CELLULOSE (PARTIALLY DIGESTED WOOD FIBERS)	MADE FROM NATURAL WOOD USUALLY WITH GREEN DYE AND DISPERSING AGENT	50 LBS	2,000 LBS	N/A
GRAVEL, CRUSHED STONE OR SLAG	SIZE 2B OR 3A – 1 1/2"	8 CY	405 CY	3"
HAY OR STRAW	AIR-DRIED, FREE OF UNDESIRABLE SEEDS AND COARSE MATERIALS	90 – 100 LBS 2–3 BALES	2 TONS (100–120 BALES)	COVER ABOUT 90% SURFACE
COMPOST	UP TO 3" PIECES, MODERATELY TO HIGHLY STABLE	3 – 9 CY	3 – 9 CY	1–3"
Erosion Control Mix	WELL-GRADED MIXTURE OF PARTICLE SIZES, ORGANIC CONTENT BETWEEN 80–100% DRY WEIGHT. PARTICLE SIZE SHALL PASS 6" SCREEN (100%)	*Slopes 3(Hz.):1(Vert.) – 2 inch depth plus additional 1/2 inch depth per 20 ft. of slope up to 100 ft. **Slopes between 3(Hz.):1(Vert.) and 2(Hz.):1(Vert.) – 2 inch depth plus additional 1/2 inch per 20 ft. of slope up to 120 ft. ***Slopes steeper than 2(Hz.):1(Vert.) opportunity to specify site and mulch depth to be reviewed and approved prior to use by DPSC or DPSC Specialist		

Notes:

1. APPLY TACKIFIER AS NEEDED TO MINIMIZE POTENTIAL FOR MULCH TO BLOW AWAY.
2. MULCH MUST NOT CONTAIN INVASIVE PLANT SPECIES. (SEEDS OR SEEDLINGS)
3. TACKIFIER MAY BE WATER, NETTING, OR SIMILAR.
4. OTHER THAN EROSION CONTROL MIX, MULCH IS NOT TO BE INSTALLED ON SLOPES > 3:1.

1 Mulch Table 12/12
N.T.S. Source: VHB LD_

TEMPORARY SEEDING

IF SPRING, SUMMER, OR EARLY FALL, SEED WITH PERENNIALS (ANNUAL OR PERENNIAL) AT 50 LBS/AC (APPROX 0.5 LBS/1,000 SF OR USE 1 LB/1,000 SF).
IF LATE FALL OR EARLY WINTER, SEED WITH DORMANT "MOODSWOOD" WINTER RYE AT 90 LBS/AC (APPROX 2 LBS/1,000 SF).

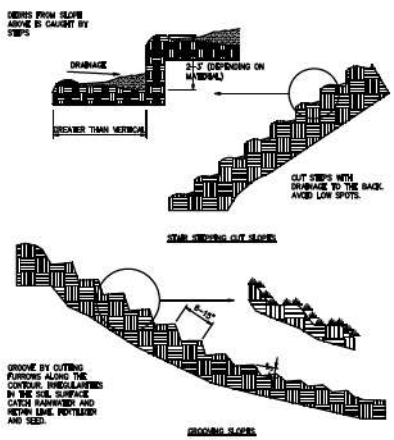
1. AREA TO BE SEEDED MUST BE ROUGH GRADED AND SLOPES PHYSICALLY STABLE.
2. SEEDING METHOD TO RESULT IN GOOD SOIL TO SEED CONTACT.
3. AFTER SEEDING, MULCH THE AREA WITH HAY OR STRAW AT 2 TONS/AC (APPROX 90 LBS/1,000 SF OR 2 BALES/1,000 SF); SEE MULCH DETAIL AND SPECIFICATIONS.
4. MULCH ANCHORING MAY BE NEEDED WHERE WIND OR AREAS OF CONCENTRATED WATER ARE POSSIBLE.
5. WOOD FIBER HYDROMULCH OR OTHER SPRAYABLE PRODUCTS APPROVED FOR EROSION CONTROL MAY BE USED IF APPLIED ACCORDING TO MANUFACTURERS' SPECIFICATIONS.

PERMANENT SEEDING

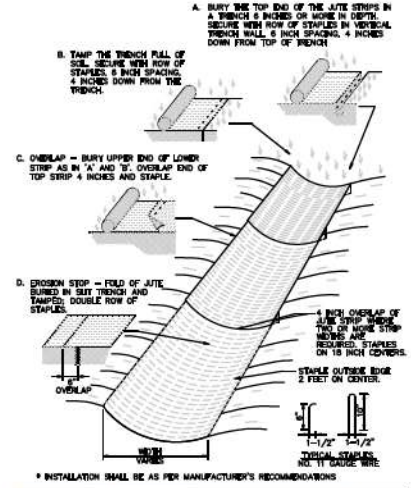
SHADEFOOT TREFOIL AT 5 LBS/AC (APPROX 0.10 LBS/1,000 SF)
OR
COMMON WHITE CLOVER AT 5 LBS/AC (APPROX 0.20 LBS/1,000 SF)
PLUS
TALL FESCUE AT 10 LBS/AC (APPROX 0.25 LBS/1,000 SF)
PLUS
REDTOP AT 5 LBS/AC (APPROX 0.05 LBS/1,000 SF)
OR
RYEGRASS (PERENNIAL) AT 5 LBS/AC (APPROX 0.10 LBS/1,000 SF)

1. THE VERMONT STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AND SEDIMENT CONTROL FOR ANNUAL SEED MIXTURES.
2. AREA TO BE SEEDED MUST BE ROUGH GRADED AND SLOPES PHYSICALLY STABLE. CHISELING OR DISKING MAY BE NEEDED IF SOIL IS COMPACTED.
3. SEEDING METHOD TO RESULT IN GOOD SOIL TO SEED CONTACT.
4. PERMANENT SEEDING TO OCCUR PRIOR TO SEPTEMBER 15TH UNLESS WEATHER PERMITS SEEDING BEYOND SEPTEMBER 15TH.
5. AFTER SEEDING, MULCH THE AREA WITH HAY OR STRAW AT 2 TONS/AC (APPROX 90 LBS/1,000 SF OR 2 BALES/1,000 SF); SEE MULCH DETAIL AND SPECIFICATIONS.
6. MULCH ANCHORING MAY BE NEEDED WHERE WIND OR AREAS OF CONCENTRATED WATER ARE POSSIBLE.
7. WOOD FIBER HYDROMULCH OR OTHER SPRAYABLE PRODUCTS APPROVED FOR EROSION CONTROL MAY BE USED IF APPLIED ACCORDING TO MANUFACTURERS' SPECIFICATIONS.
8. IRRIGATION MAY BE NEEDED TO FACILITATE GRASS GROWTH AND ESTABLISH ADEQUATE GRASS COVER.

2 Seeding Specifications 12/12
N.T.S. Source: VHB LD_

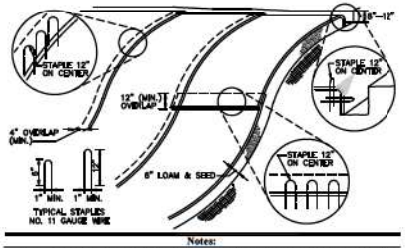


3 Surface Roughening 12/12
N.T.S. Source: VHB LD_



* INSTALLATION SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS

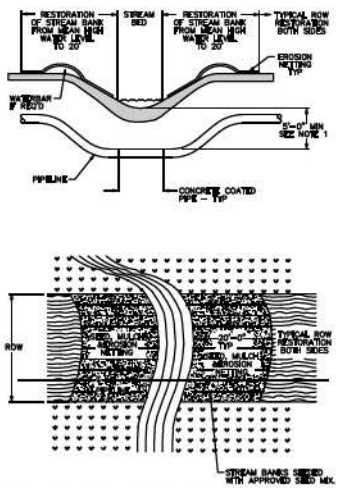
4 Rolled Erosion Control Blanket - Swale Installation 12/12
N.T.S. Source: VHB LD_SS1



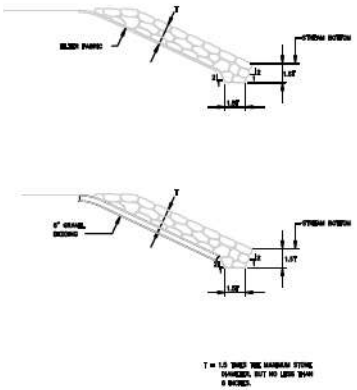
Notes:

1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY TOP SOIL, FERTILIZER, LIME AND SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'x225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'x150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION PREVENTION AND SEDIMENT CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH AND ENSURE CLOSE CONTACT WITH THE GROUND SURFACE.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12' INTERVALS.
6. BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6" TO 12" DEEP TRENCH BACKFILL AND COMPACT TRENCH AFTER STAPLING.
7. ROLL THE BLANKET DOWN IN THE DIRECTION OF THE WATER FLOW.
8. THE EDGES OF BLANKETS MUST BE STAPLED WITH APPROX. 4" OVERLAP WHERE 2 OR MORE STRIP WIDTHS ARE REQUIRED.
9. WHEN BLANKETS MUST BE SPLICED, PLACE UPPER BLANKET END OVER LOWER END WITH 12" (MIN.) OVERLAP AND STAPLE BOTH TOGETHER.
10. METHOD OF INSTALLATION SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS.

5 Rolled Erosion Control Blanket - Slope Installation 12/12
N.T.S. Source: VHB LD_SS0-rt



6 Streambank Restoration with RECP 12/12
N.T.S. Source: VHB LD_



7 Streambank Stabilization with Rip Rap 12/12
N.T.S. Source: VHB LD_

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DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
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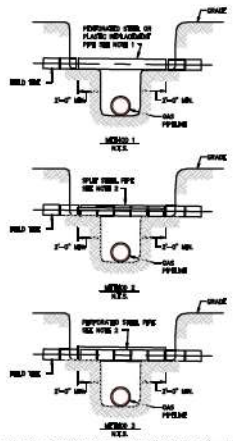
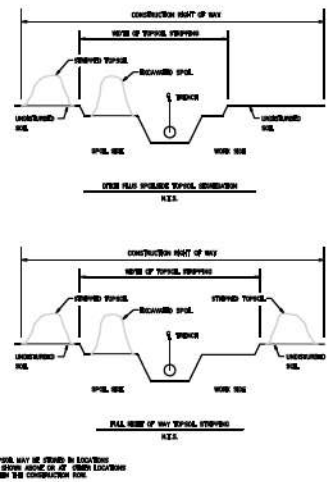


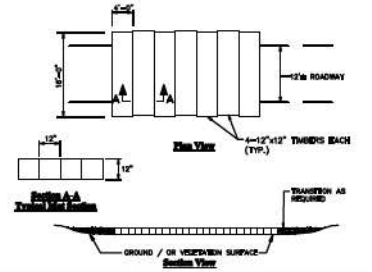
NOTES:
1. REPLACEMENT PIPE TO BE AS NEAR AS POSSIBLE TO THE DIAMETER OF THE FIELD TILE.
2. STEEL CASING PIPE TO EQUAL DOUBLE DIAMETER AS NEAR AS POSSIBLE TO THE OUTSIDE DIAMETER OF THE FIELD TILE.
3. MAINTAIN ORIGINAL FLOW LINE OF FIELD TILE IN ALL METHODS.

1 Typical Drain Tile Protection 12/12
N.T.S. Source: VHB LD_

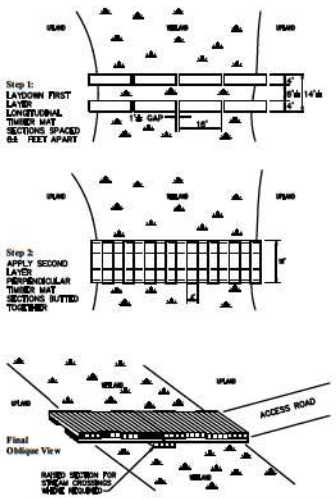


NOTE: TOPSOIL MAY BE STRIPPED IN LOCATIONS AS SHOWN ABOVE OR AT OTHER LOCATIONS WITHIN THE CONSTRUCTION ZONE.

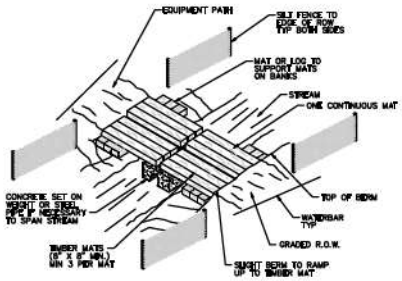
2 Topsoil Segregation 12/12
N.T.S. Source: VHB LD_



Notes:
1. TO BE INSTALLED WHERE NECESSARY IN WETLAND FOR ACCESS FOR CONSTRUCTION. ALTERNATIVE CONSTRUCTION MATTING MAY BE SUBSTITUTED FOR TIMBER MATTING.
2. PREPARATION FOR INSTALLATION OF TIMBER MATS WILL CONSIST OF CUTTING TALL WOODY SPECIES AND TRIMMING SHRUBS IF CONDITIONS REQUIRE. VEGETATION ROOT MASS IS TO REMAIN UNDISTURBED. MATS TO BE PLACED TO MAINTAIN NATURAL SOIL CONTOURS/CONDITIONS.
3. TIMBER SECTIONS TO BE SECURED TOGETHER WITH NO SPACES BY BOLTS, NAILS, STRAPS OR OTHER APPROPRIATE METHODS.
4. TIMBER MATS TO BE REMOVED UPON COMPLETION OF PROJECT AND AREA RESTORED TO NEAR ORIGINAL CONDITIONS PER EPSC PLANS
5. SNOW/ICE REMOVAL BY MECHANICAL METHODS: NO DEICING SALT OR CHEMICALS TO BE USED. LIGHT APPLICATION OF SAND FOR TRACTION ACCEPTABLE SO AS RESIDUE DOES NOT ACCUMULATE IN WETLAND.

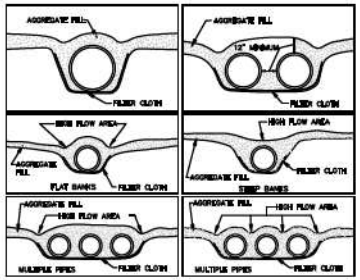


3 Construction Matting - Timber Mat Typ. 12/12
N.T.S. Source: VHB LD_



NOTES:
1. THERE IS TO BE NO UNNECESSARY MOVEMENT OF EQUIPMENT THROUGH WATER.
2. TIMBER MATS TO BE POSITIONED TO RUN FROM TOP OF BANK TO TOP OF BANK.
3. TIMBER MATS SHALL BE CLEANED OF SEDIMENT PRIOR TO EACH INSTALLATION.
4. TIMBER MATS SHOULD BE INSTALLED SO THERE ARE NO GAPS BETWEEN MATS.

4 Timber Mat Bridge 12/12
N.T.S. Source: VHB LD_



5 Temporary Acces Culverts 12/12
N.T.S. Source: VHB LD_

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SPACE INTENTIONALLY LEFT BLANK

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
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YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP-T-G-019 | REV. 1

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NOTES:

1. USE DIVERSION FLUME STREAM CROSSING ON WATER COURSES WITH LIMITED STREAM FLOW TO PREVENT SEDIMENTATION AND INTERRUPTION OF STREAM FLOW DURING CONSTRUCTION. THIS METHOD IS APPROPRIATE IN LOCATIONS WHERE FISH PASSAGE IS A CONCERN.

2. SCHEDULE CONSTRUCTION DURING LOW FLOW PERIOD, IF POSSIBLE.

3. THIS DETAIL REPRESENTS ONE POSSIBLE CONFIGURATION OF CONSTRUCTION ELEMENTS WITHIN THE TEMPORARY AND PERMANENT ROW. ALTERNATE CONFIGURATIONS OF CONSTRUCTION ELEMENTS BETWEEN THE UPSTREAM AND DOWNSTREAM DIVERSION STRUCTURES ARE ALLOWABLE SO LONG AS APPROPRIATE MEASURES ARE MAINTAINED TO PROTECT WATER QUALITY.

4. SET UP STEEL OR HDPE PIPE AS SHOWN, OR USE PRACTICAL ALTERNATIVES. PIPE (OR PIPES) MUST BE SIZED TO HAVE TWICE THE CAPACITY OF ANTICIPATED FLOW. DEPENDING ON STREAM FLOW, DIG SUMP HOLE TO CONCENTRATE WATER AT INTAKE.

5. INSTALL UPSTREAM DAM COMPOSED OF SANDBAGS, METAL PLATING OR A COMBINATION OF BOTH. INSTALL DOWNSTREAM DAM, IF REQUIRED, TO KEEP STREAM BED DRY.

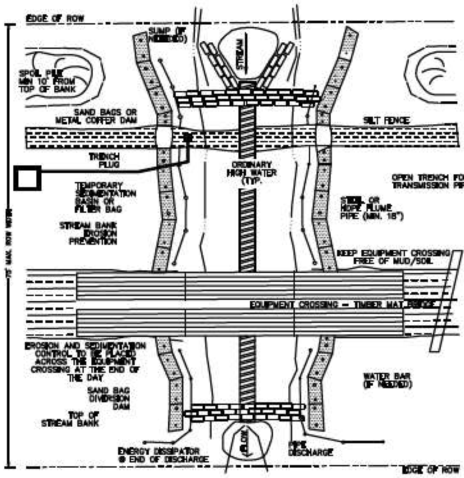
6. AFTER DAMS ARE IN PLACE, IT MAY BE NECESSARY TO USE A SUMP PUMP AND DEWATERING FILTER BAG TO KEEP WORK AREA DRY.

7. ALL MECHANIZED EQUIPMENT TO PERFORM WORK FROM ADJACENT TOP OF BANK AREAS. MAT STREAM IF WORK TO OCCUR IN STREAM CHANNEL.

8. EXCAVATE TRENCH AND LOWER IN PIPE UNDER DIVERSION FLUME. MOVE FLUME AS REQUIRED OR DISCONNECT IF TEMPORARY FLOW BLOCKAGE IS ACCEPTABLE. BACKFILL TRENCH.

9. DISMANTLE DOWNSTREAM DAM, THEN UPSTREAM DAM.

10. RESTORE DISTURBED CHANNEL, STREAM BANKS AND APPROACHES FOR A MINIMUM DISTANCE OF AT LEAST 50 FT. FROM THE STREAM EDGES AND PERMANENTLY STABILIZE WITHIN 1 DAY OF INITIAL RESTORATION. REFER TO THE STREAMBANK RESTORATION DETAIL FOR RESTORATION REQUIREMENTS.



1 Diversion Flume Stream Crossing

N.T.S. Source: VHB 12/12

NOTES:

1. USE DAM AND PUMP METHOD ON WATER COURSES WITH LIMITED STREAM FLOW TO PREVENT SEDIMENTATION AND INTERRUPTION OF STREAM FLOW DURING CONSTRUCTION.

2. SCHEDULE CONSTRUCTION DURING LOW FLOW PERIOD, IF POSSIBLE.

3. THIS DETAIL REPRESENTS ONE POSSIBLE CONFIGURATION OF CONSTRUCTION ELEMENTS WITHIN THE TEMPORARY AND PERMANENT ROW. ALTERNATE CONFIGURATIONS OF CONSTRUCTION ELEMENTS BETWEEN THE UPSTREAM AND DOWNSTREAM DIVERSION STRUCTURES ARE ALLOWABLE SO LONG AS APPROPRIATE MEASURES ARE MAINTAINED TO PROTECT WATER QUALITY.

4. SET UP PUMP AND HOSE AS SHOWN, OR USE PRACTICAL ALTERNATIVES. PUMP SHOULD HAVE TWICE THE PUMPING CAPACITY OF ANTICIPATED FLOW. HAVE STANDBY PUMP ON SITE. DEPENDING ON STREAM FLOW, DIG SUMP HOLE TO CONCENTRATE WATER AT INTAKE.

5. USE TEMPORARY SEDIMENTATION BASIN OR FILTER BAG PRIOR TO DISCHARGING WATER BACK TO STREAM.

6. INSTALL UPSTREAM DAM COMPOSED OF SANDBAGS, METAL PLATING OR A COMBINATION OF BOTH. INSTALL DOWNSTREAM DAM, IF REQUIRED, TO KEEP STREAM BED DRY.

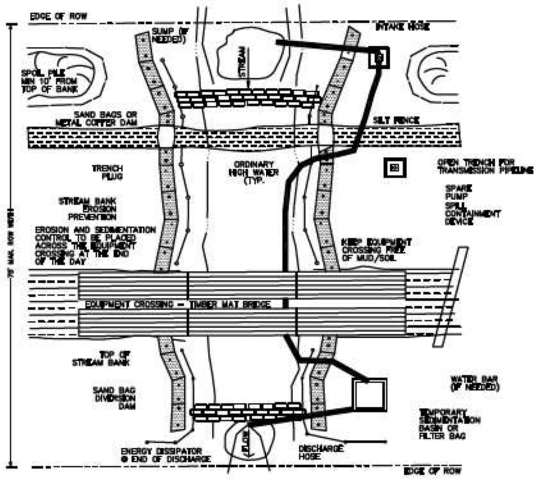
7. AFTER DAMS ARE IN PLACE, IT MAY BE NECESSARY TO USE ADDITIONAL PUMPS TO HANDLE STREAM FLOW.

8. EXCAVATE TRENCH AND LOWER IN PIPE UNDER HOSE. BACKFILL TRENCH.

9. ALL MECHANIZED EQUIPMENT TO PERFORM WORK FROM TEMPORARY BRIDGE OR ADJACENT TOP OF BANK AREAS. USE TIMBER MATS IS TO OCCUR IN STREAM CHANNEL.

10. DISMANTLE DOWNSTREAM DAM, THEN UPSTREAM DAM.

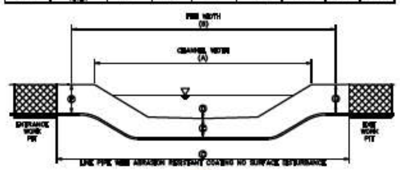
11. RESTORE DISTURBED CHANNEL, STREAM BANKS AND APPROACHES FOR A MINIMUM DISTANCE OF AT LEAST 50 FT. FROM THE STREAM EDGES AND PERMANENTLY STABILIZE WITHIN 1 DAY OF INITIAL RESTORATION. REFER TO THE STREAMBANK RESTORATION DETAIL FOR RESTORATION REQUIREMENTS.



2 Open Trench Stream Crossing - Dam and Pump Around Detail

N.T.S. Source: VHB 12/12

MILEPOST	STREAM NAME	CHANNEL WIDTH (A)	FISH WIDTH (B)	HDD LENGTH (C)	CHANNEL ELEV. (D)	ELEV. BELOW CHANNEL (E)	ENTRY ELEV. (F)	EXIT ELEV. (G)
1.52	INDIAN BROOK	15	125	850	196	< 189	< 196	< 196
3.62	INDIAN BROOK	7	N/A (185)	550	432	< 425	< 432	< 432
6.85	WINOOSKI RIVER	330	N/A (1,185)	1,100	275	< 268	< 275	< 275
10.32	ALLEN BROOK	35	360	850	381	< 374	< 374	< 374
19.57	LAPLATTE RIVER	30	360	550	315	< 308	< 315	< 315
22.88	LEWIS CREEK	80	N/A (250)	1,100	310	< 303	< 310	< 310
24.75	UNNAMED TRIB. TO LEWIS CREEK	6	384	2,400	455	< 448	< 455	< 455
33.13	LITTLE OTTER CREEK	25	N/A (330)	550	276	< 269	< 276	< 276
38.64–38.72	UNNAMED TRIB. TO LITTLE OTTER CREEK	4	640	850	303	< 296	< 303	< 303
40.21	NEW HAVEN RIVER	120	755	800	245	< 238	< 245	< 245



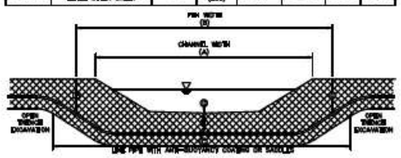
Notes:

1. THIS CONFIGURATION IS FOR HORIZONTAL DIRECTIONAL DRILL OF STREAM CROSSINGS AS SHOWN ON PROJECT PLANS. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.
2. TOP OF PIPELINE MUST BE AT LEAST AS DEEP AS THE CHANNEL BOTTOM (DIMENSION D) THROUGHOUT THE FLUVIAL EROSION HAZARD (FEH) CORRIDOR.
3. MINIMUM SEPARATION BETWEEN THE TOP OF PIPELINE AND THE CHANNEL BOTTOM (DIMENSION E) MUST BE AT LEAST 7 FEET.
4. ELEVATIONS PROVIDED ARE BASED ON APPROXIMATE NAVD 88 DATUM AND MUST BE FIELD VERIFIED PRIOR TO INSTALLATION OF PIPELINE.
5. FEH CORRIDOR IS LISTED AS NOT APPLICABLE (N/A) WHERE THE STREAM CROSSES OR IS ADJACENT TO AN EXISTING ROADWAY OR OTHER INFRASTRUCTURE THAT RESULTS IN RIVER MANAGEMENT CONSTRAINTS AT THAT LOCATION. FEH CORRIDOR WIDTHS AT THESE LOCATIONS ARE SHOWN FOR INFORMATION PURPOSES ONLY.

3 Horizontal Directional Drill Stream Crossing - Typical Section

N.T.S. Source: VHB 12/12

MILEPOST	STREAM NAME	CHANNEL WIDTH (A)	FISH WIDTH (B)	CHANNEL ELEV. (D)	ELEV. BELOW CHANNEL (E)	ENTRY ELEV. (F)	EXIT ELEV. (G)
5.04	ALDER BROOK	50	N/A (80)	N/A – NOT CROSSING IN CHANNEL			
6.14	ALDER BROOK	40	N/A (190)	N/A – NOT CROSSING IN CHANNEL			
6.23	ALDER BROOK	40	N/A (190)	295	< 288	< 295	< 295
13.79	SUCKER BROOK	15	120	367	< 360	< 367	< 367
18.99	UNNAMED TRIBUTARY TO LAPLATTE RIVER	4	N/A (310)	329	< 322	< 329	< 329
19.63	UNNAMED TRIBUTARY TO LAPLATTE RIVER	4	N/A (135)	328	< 321	< 328	< 328
28.43	UNNAMED TRIBUTARY TO LITTLE OTTER CREEK	8	N/A (200)	372	< 365	< 372	< 372
29.63	UNNAMED TRIBUTARY TO LITTLE OTTER CREEK	8	N/A (200)	363	< 356	< 363	< 363
31.34	UNNAMED TRIBUTARY TO LITTLE OTTER CREEK	4	N/A (200)	287	< 280	< 287	< 287



Notes:

1. THIS CONFIGURATION IS FOR OPEN TRENCH EXCAVATION OF STREAM CROSSINGS AS SHOWN ON PROJECT PLANS. SEE ALIGNMENT SHEETS FOR LOCATIONS OF THIS CONFIGURATION.
2. TOP OF PIPELINE MUST BE AT LEAST AS DEEP AS THE CHANNEL BOTTOM (DIMENSION D) THROUGHOUT THE FLUVIAL EROSION HAZARD (FEH) CORRIDOR.
3. MINIMUM SEPARATION BETWEEN THE TOP OF PIPELINE AND THE CHANNEL BOTTOM (DIMENSION E) MUST BE AT LEAST 7 FEET.
4. ELEVATIONS PROVIDED ARE BASED ON APPROXIMATE NAVD 88 DATUM AND MUST BE FIELD VERIFIED PRIOR TO INSTALLATION OF PIPELINE.
5. FEH CORRIDOR IS LISTED AS NOT APPLICABLE (N/A) WHERE THE STREAM CROSSES OR IS ADJACENT TO AN EXISTING ROADWAY OR OTHER INFRASTRUCTURE THAT RESULTS IN RIVER MANAGEMENT CONSTRAINTS AT THAT LOCATION. FEH CORRIDOR WIDTHS AT THESE LOCATIONS ARE SHOWN FOR INFORMATION PURPOSES ONLY.
6. RESTORE DISTURBED CHANNEL, STREAM BANKS, AND APPROACHES FOLLOWING PIPELINE INSTALLATION.

4 Open Trench Stream Crossing - Typical Section

N.T.S. Source: VHB 12/12

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SPACE INTENTIONALLY LEFT BLANK

REV	DSN	CK	DESCRIPTION
1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

DWG. NO. | REFERENCE DWG.

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
CONSTRUCTION DETAILS

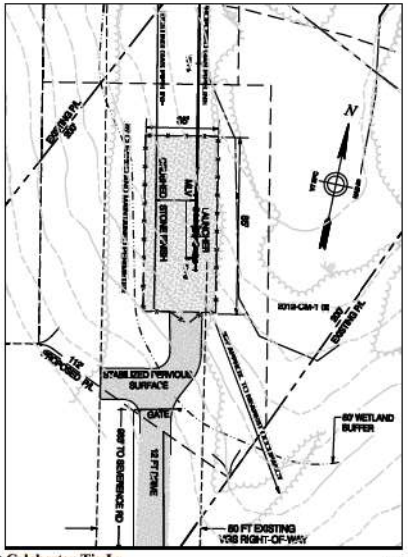
LOC. CHITTENDEN & ADDISON COUNTIES

Vermont Gas

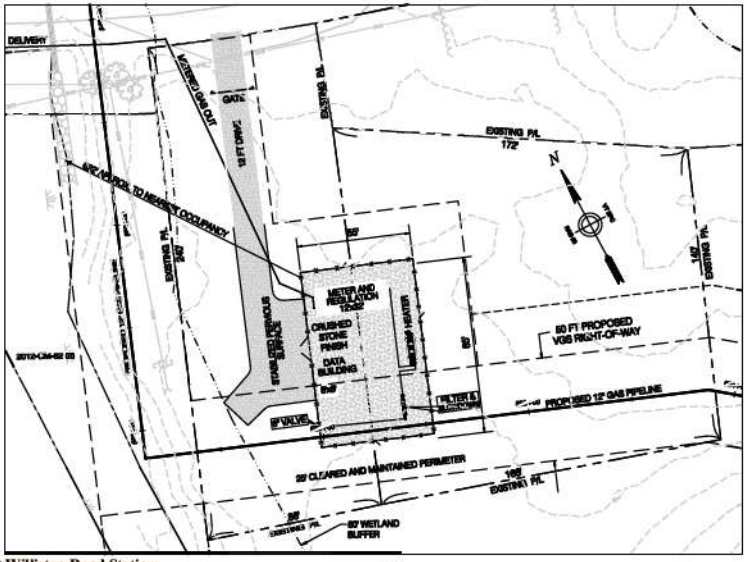
Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO

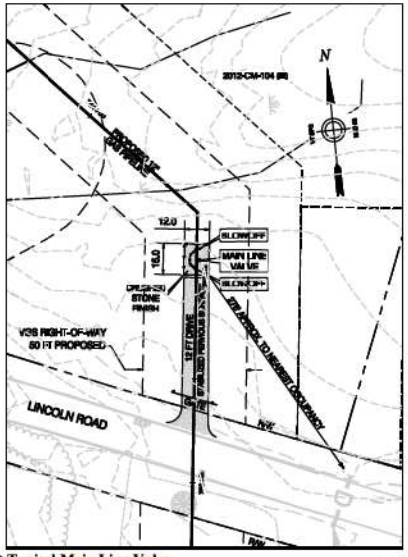
YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP–T–G–020 | REV. 1



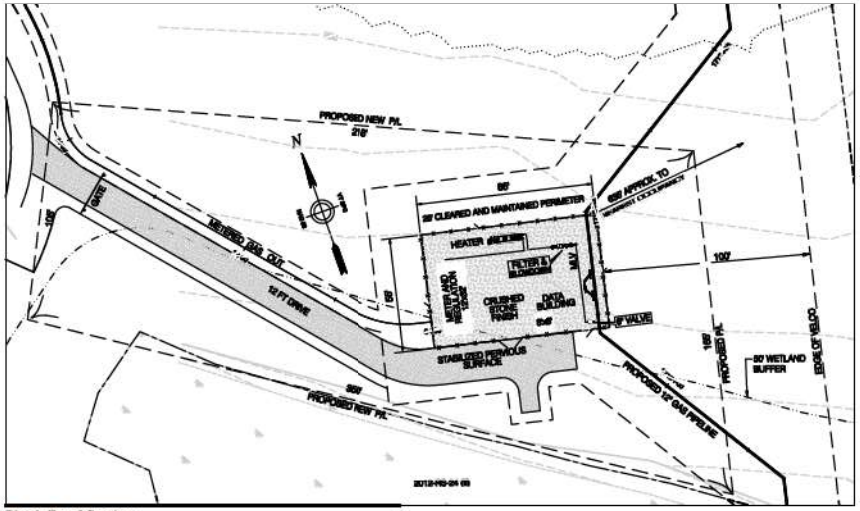
1 **Colchester Tie-In** 2/28
Scale: 1"=30' Source: Colar & Colantonio, Inc.



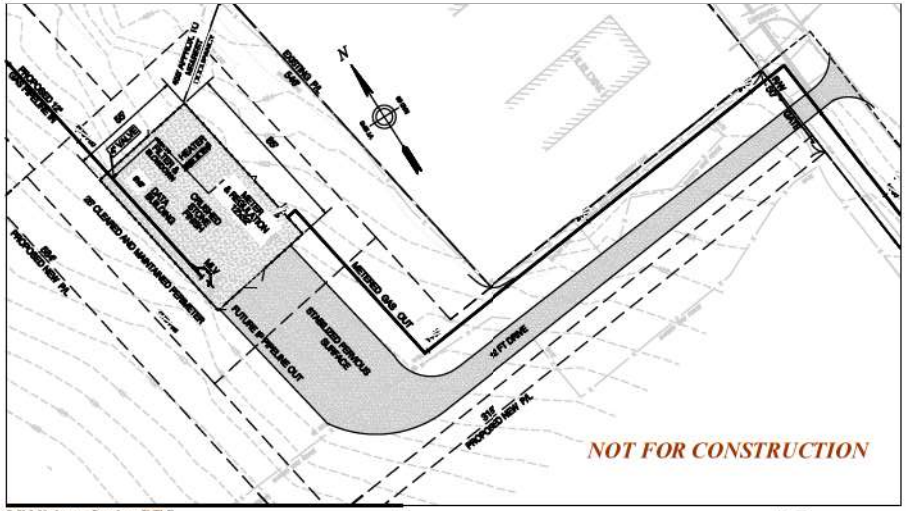
2 **Williston Road Station** 2/28
1"=30' Source: Colar & Colantonio, Inc.



3 **Typical Main Line Valve** 2/28
1"=30' Source: Colar & Colantonio, Inc.



4 **Plank Road Station** 2/28
Scale: 1"=30' Source: Colar & Colantonio, Inc.



5 **Middlebury Station RT 7** 2/28
Scale: 1"=30' Source: Colar & Colantonio, Inc.

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
15-713-G-500	TYPICAL MAIN LINE VALVE				
15-713-G-400	COLCHESTER TIE IN				
15-713-G-300	MIDDLEBURY STATION RT 7				
15-713-G-200	PLANK ROAD STATION	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
15-713-G-100	WILLISTON ROAD STATION	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

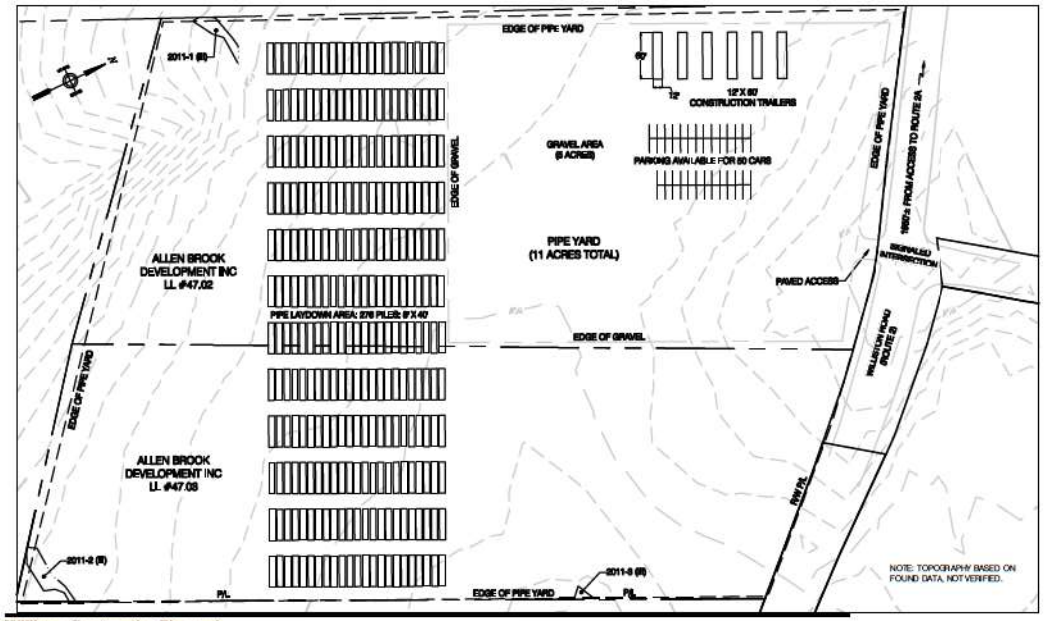
VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
STATION AND VALVE DETAILS

LOC. CHITTENDEN & ADDISON COUNTIES

Vermont Gas

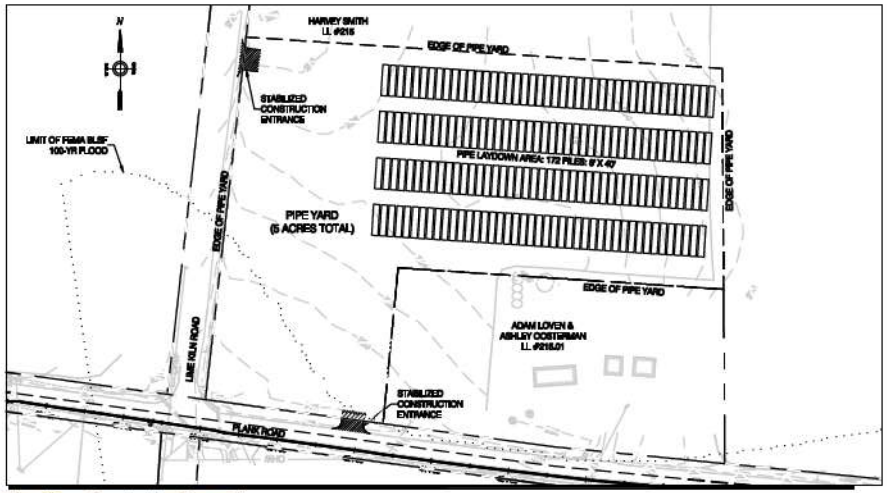
YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP-T-G-021 | REV. 1

Tetra Tech Tetraguen Brunelle, Inc.
CHA
COLER & COLANTONIO



1 **Williston Construction Pipeyard**

Scale: 1"=80' Source: Coler & Colantonio, Inc. 2/28 LD



2 **New Haven Construction Pipeyard**

Scale: 1"=80' Source: Coler & Colantonio, Inc. 2/28 LD

NOT FOR CONSTRUCTION

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
		0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
CONSTRUCTION PIPEYARD DETAILS

LOC. CHITTENDEN & ADDISON COUNTIES

Vermont Gas

YEAR: 2013 | W.O. | SCALE: NOTED | DWG. ANGP-T-C-022 | REV. 1

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO, INC.

RIGHT-OF-WAY

0+00.0 | 1.01 N/F KILMOYER, RALPH OTTEN, AMY | 1.02 N/F PAGE, GARY & SUSAN | 1 N/F THIBAULT, JO ANN | 2 N/F STATE OF VERMONT | 2.01 N/F LINOIS, MICHAEL & ELIZABETH | MATCHLINE

SURVEY DATA

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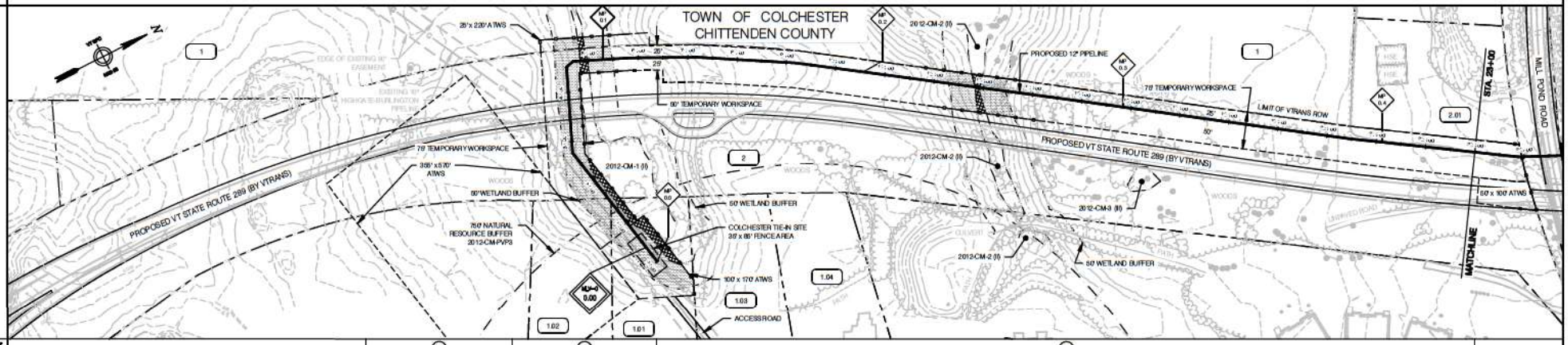
ALIGNMENT DETAIL



CONST. TYPE | 1A | 1G | 1B

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

0+00 | 1 — 540 FT | 1 — 681 FT | 1 — 116 FT | 1 — 986 FT | MATCHLINE

COATING	C	A	C	A
CLASSIFICATION	3			
DESIGN FACTOR	0.5			
ROCK PROB.	0% - 5%			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 80 0 100 200 300 feet
100 80 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,300 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 1,637 FT — 663 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-T-G-021	STATION AND VALVE DETAILS				
ANGP-EPSC-001	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO !!

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-001 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 2.01 N/F LINCKS, MICHEAL & ELIZABETH | 2 N/F STATE OF VERMONT | 2.02 MILL POND ROAD | 3.01 N/F ROBERT H. SHANGRAW; MARION SHANGRAW LIFE ESTATE | 3.01 N/F ROBERT H. SHANGRAW; MARION SHANGRAW LIFE ESTATE | 3 N/F STATE OF VERMONT | 3.01 N/F ROBERT H. SHANGRAW; MARION SHANGRAW LIFE ESTATE | 3.02 N/F GAUTHER, THERESA LEO & KEVIN | 3.02 N/F GAUTHER, THERESA, LEO & KEVIN | MATCHLINE

SURVEY DATA

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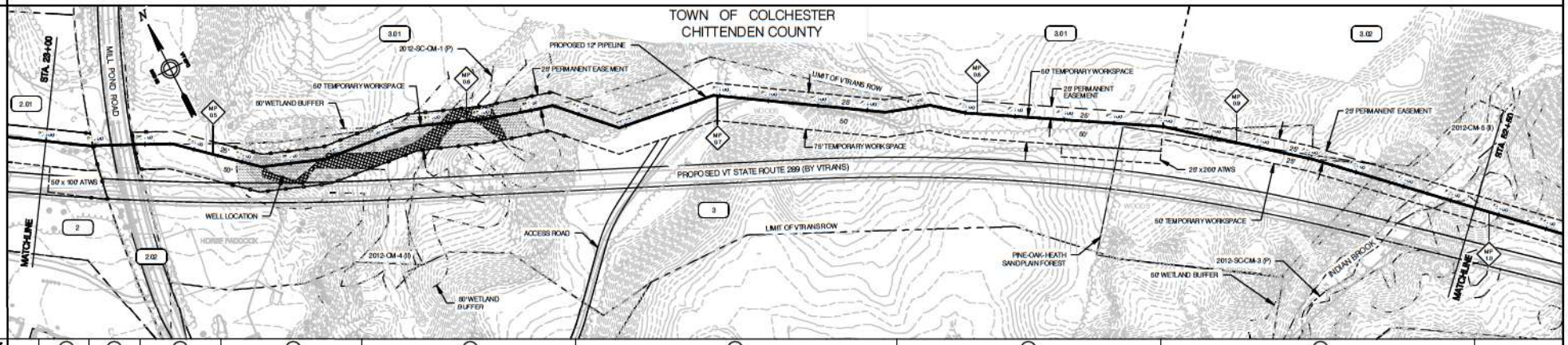
ALIGNMENT DETAIL



CONST. TYPE | 1B | 9 | 1C | 1B | 1C | 1B | 1C | 8

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	1	1	MATCHLINE
		96 FT	83 FT	211 FT	590 FT	1,329 FT	641 FT	
COATING		A	B	A	C	A	B	
CLASSIFICATION		3						
DESIGN FACTOR		0.5						
ROCK PROB.		0% - 5%					25% - 50%	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
100 50 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,950 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,636 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 724 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 590 FT

							BID		CONSTRUCTION	
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-002	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-002 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		
DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-002 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 3.02 N/F GAUTHIER, THERESA, LEO & KEVIN | 3 N/F STATE OF VERMONT | 3.02 N/F GAUTHIER, THERESA, LEO & KEVIN | LIMIT OF COLCHESTER/ TOWN OF ESSEX | 4 N/F GAUTHIER, THERESA, LEO & KEVIN | 6 N/F STATE OF VERMONT | MATCHLINE

SURVEY DATA

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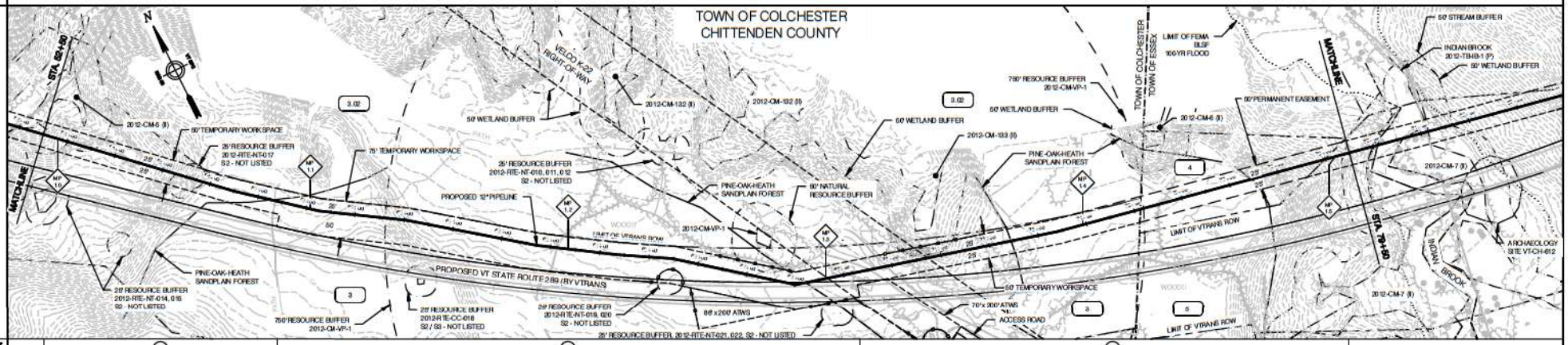
ALIGNMENT DETAIL



CONST. TYPE | 6 | 10 | 6

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	MATCHLINE
		500 FT	1,174 FT	1,026 FT	
COATING		B	A	B	
CLASSIFICATION		3			
DESIGN FACTOR		0.5			
ROCK PROB.		0% - 5%			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMIDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 80 0 100 200 300 feet
100 80 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,700 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,174 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 1,526 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-003	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-002 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-003 | REV. 1

RIGHT-OF-WAY

MATCHLINE

4.01
N/F
TOWN OF ESSEX

6
N/F
STATE OF VERMONT

MATCHLINE

SURVEY DATA

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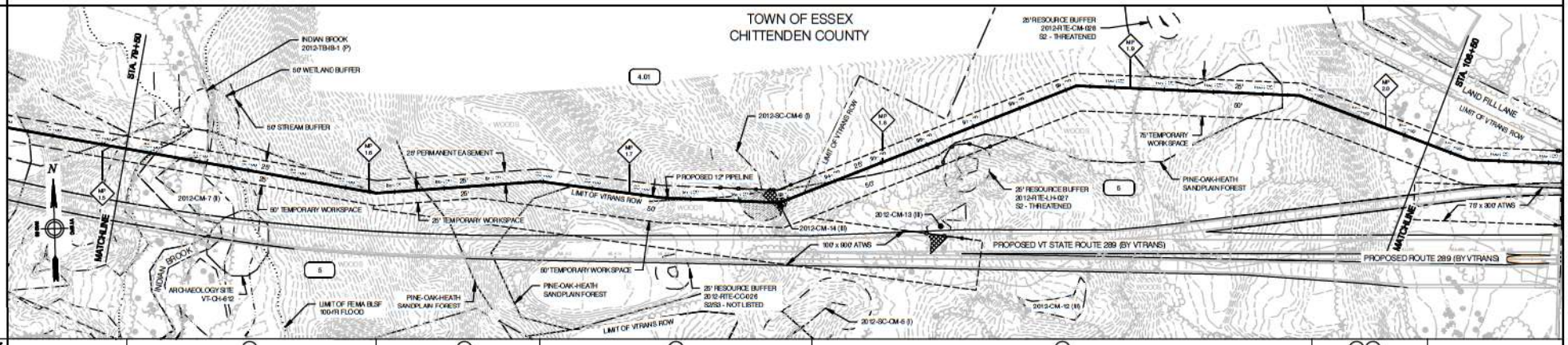
ALIGNMENT DETAIL



CONST. TYPE: (B) (2E) (1C) (1B) (1B)(B)

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	(1) 560 FT	(1) 600 FT	(1) 100 FT	(1) 1,352 FT	
COATING		B	A	C	A	
CLASSIFICATION		3				
DESIGN FACTOR		0.6				
ROCK PROB.		25% - 50%	0% - 5%		25% - 50%	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 80 0 100 200 300 feet
100 80 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,700 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 2,040 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 560 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 100 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-004	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-004 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 5 N/F STATE OF VERMONT | 5.01 COLCHESTER ROAD ROUTE 2A | 5.01 N/F SISTERS AND BROTHERS INVEST GROUP LLC / 6 N/F STATE OF VERMONT | 7 N/F CENTRAL VERMONT RAILROAD | 8 N/F LECLERC, LINDA & ARMAND A. | 9 N/F STATE OF VERMONT | MATCHLINE

SURVEY DATA

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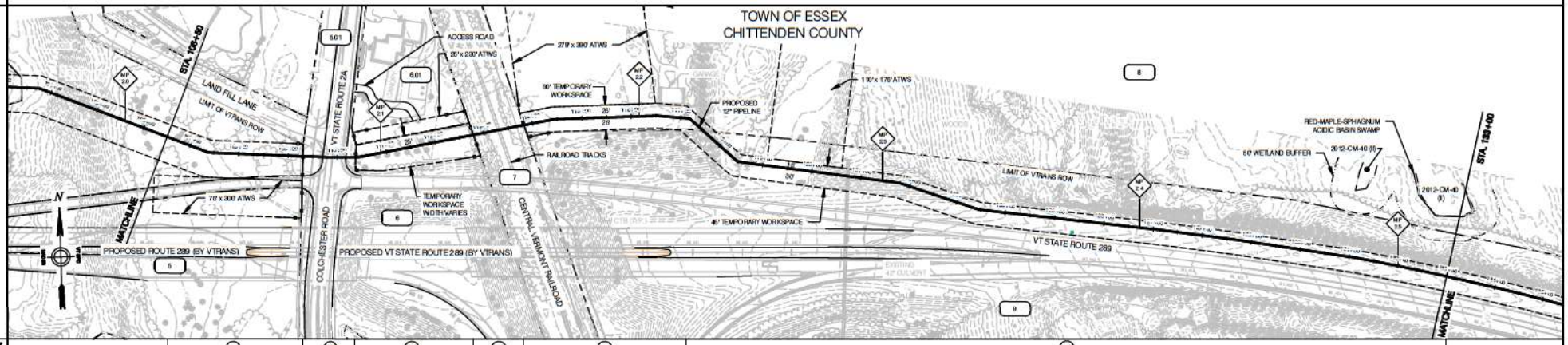
ALIGNMENT DETAIL



CONST. TYPE: 1B | 8 | 1B | 10 | 2C | 3

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1 3	1	MATCHLINE
		279 FT	108FT	241 FT	104 FT	1,918 FT	
COATING		A	B	A	B	A	
CLASSIFICATION		3					
DESIGN FACTOR		0.5					
ROCK PROB.		0% - 5%				5% - 25%	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMIDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 80 0 100 200 300 feet
VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,650 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 104 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 2,436 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 212 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-005	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-005 | REV. 1

RIGHT-OF-WAY

MATCHLINE — 9 — N/F STATE OF VERMONT — MATCHLINE

SURVEY DATA

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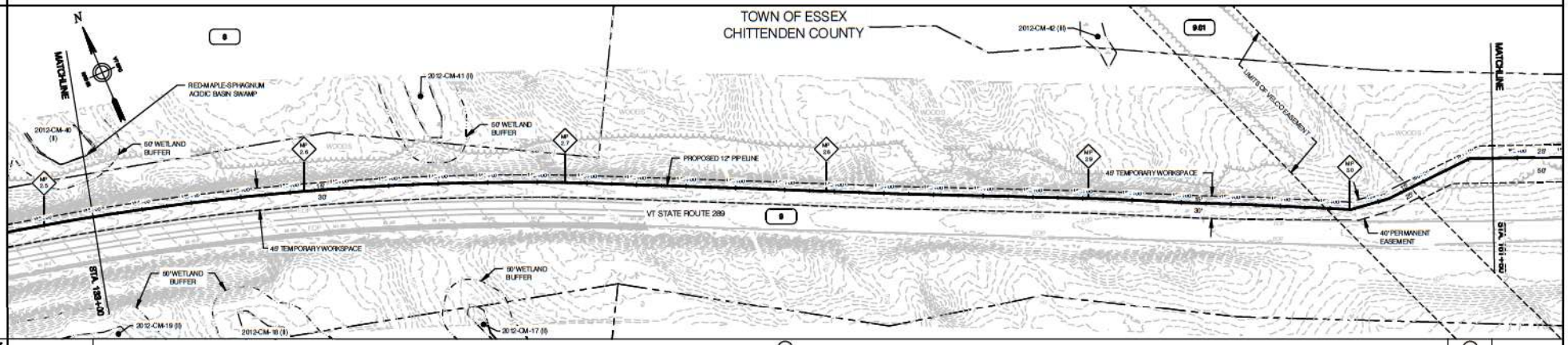
ALIGNMENT DETAIL



CONST. TYPE — 3 — 10

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	1	
	2,850 FT	
COATING	A	
CLASSIFICATION	3	
DESIGN FACTOR	0.5	
ROCK PROB.	5% - 25%	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 80 0 100 200 300 feet

VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,850 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 2,850 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-006	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-006 | REV. 1

RIGHT-OF-WAY

MATCHLINE

9
N/F
STATE OF VERMONT

9.02
N/F
MARSHALL, LORRAINE E.

9.03
N/F
BARBER, EDWARD G.

MATCHLINE

SURVEY DATA

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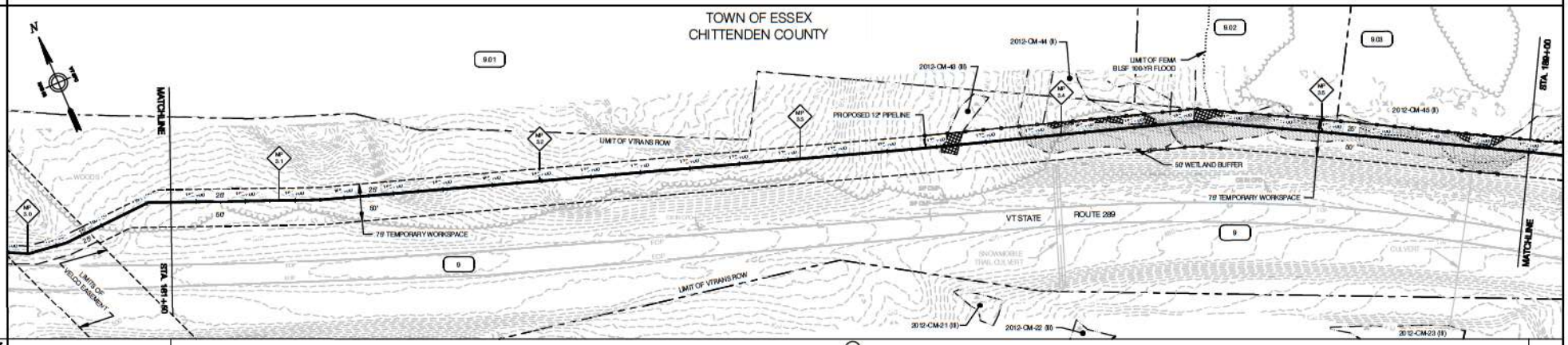
ALIGNMENT DETAIL



CONST. TYPE

18

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	1 — 1,561 FT	1 — 35 FT	1 — 120 FT	1 — 1,026 FT
COATING	A	C	A	C
CLASSIFICATION	3			
DESIGN FACTOR	0.5			
ROCK PROB.	5% - 20%		50% - 75%	5% - 25%

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
100 50 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,750 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,689 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 1,061 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-007	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-007 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 9.03 N/F EDWARD, BARBER | 9.05 N/F THIBAULT, JEAN | 9.06 N/F EHLERMILL LLC | MATCHLINE

9 N/F STATE OF VERMONT

SURVEY DATA

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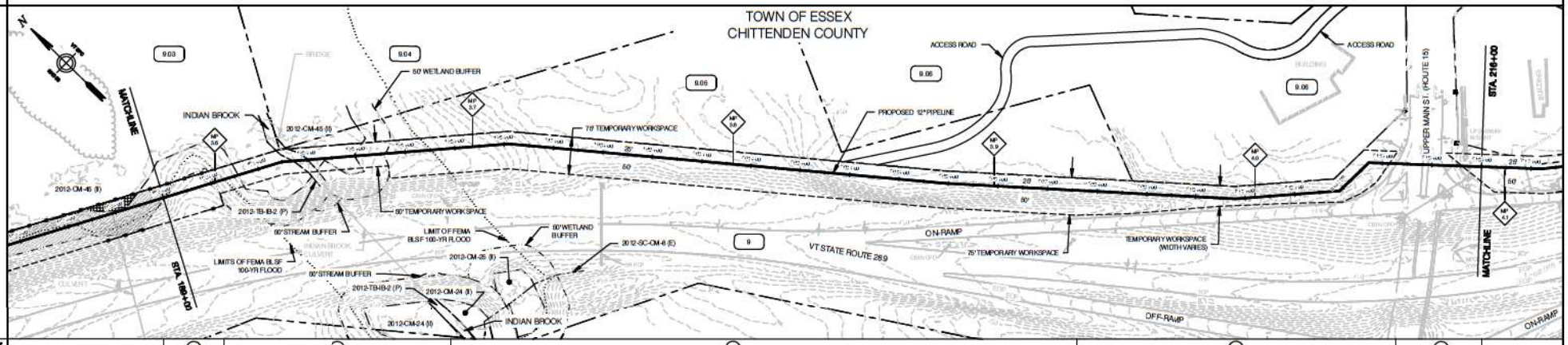
ALIGNMENT DETAIL



CONST. TYPE: 18 | 6 | 18 | 46 | 9

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	MATCHLINE
		100 FT	100 FT	1,972 FT	226 FT	
COATING		A	B	A	B	
CLASSIFICATION		3				
DESIGN FACTOR		0.5				
ROCK PROB.		50% - 75%	25% - 50%	50% - 95%	25% - 50%	

LEGEND

SYMBOL	DESCRIPTION
○	PERMANENT INTERCEPTOR DIKE.
△	TRENCH PLUG (AS REQUIRED).
	INTERMIDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).

INTERCEPTOR DIKE/TRENCH PLUG SPACING

SLOPE	SPACING
< 5%	NO STRUCTURE
5 – 15%	300 FT
16 – 30%	200 FT
> 30%	100 FT

HORIZONTAL SCALE: 100 80 0 100 200 300 feet

VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,700 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 2,072 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 628 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-008	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-008 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO II

RIGHT-OF-WAY

MATCHLINE | 9.07 N/F NAPOLI GROUP | 9.08 N/F HANNAFORD BROS. CO. | 9.09 N/F EUROWEST RETAIL PARTNERS LTD. | 9.10 N/F SAYBROOK HOMEOWNERS ASSOCIATION | MATCHLINE

9 N/F STATE OF VERMONT

SURVEY DATA

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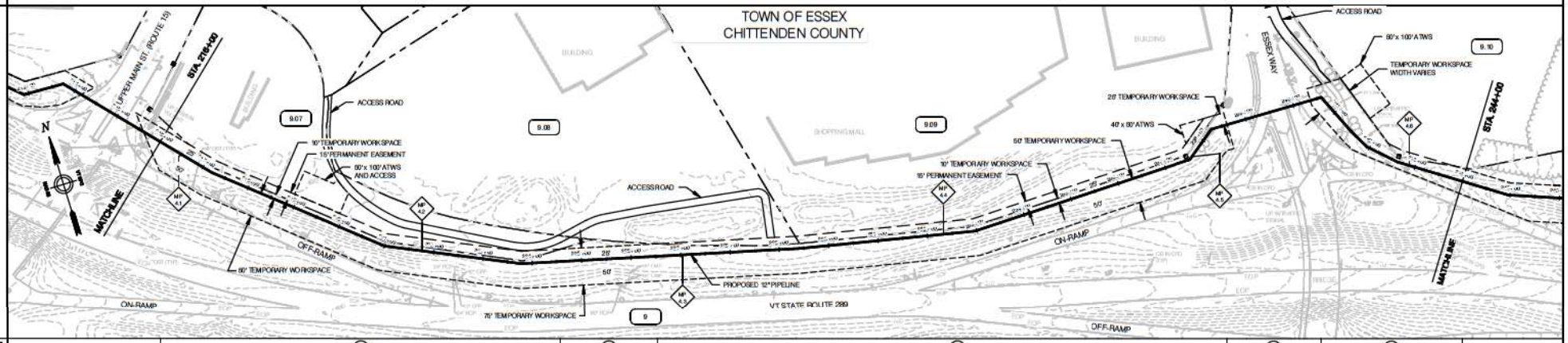
ALIGNMENT DETAIL



CONST. TYPE: 1F | 1B | 1F | 9 | 1B

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	MATCHLINE
		2,261 FT	196 FT	341 FT	
COATING		A	B	A	
CLASSIFICATION		3			
DESIGN FACTOR		0.5			
ROCK PROB.		25% - 50%			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMIDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 80 0 100 200 300 feet

VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,800 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 2,802 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 196 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-009	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-009 | REV. 1

RIGHT-OF-WAY

MATCHLINE

9
N/F
STATE OF VERMONT

9.10
N/F
SAYBROOK HOMEOWNER'S ASSOCIATION

MATCHLINE

SURVEY DATA

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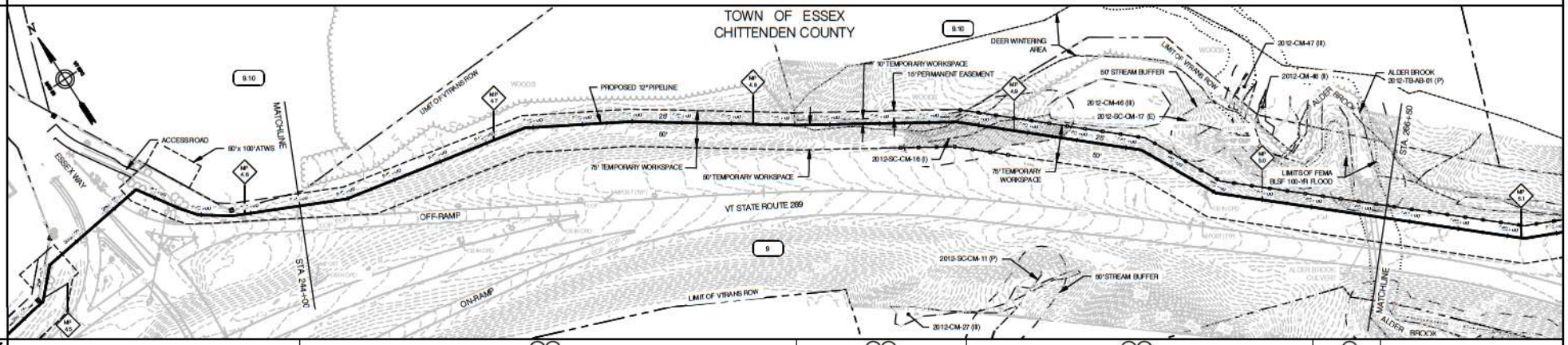
ALIGNMENT DETAIL



CONST. TYPE: 1B 6A | 1F 6A | 1B 6A | 1B

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	MATCHLINE
		1,267 FT	297 FT	616 FT	
COATING		A	C	A	
CLASSIFICATION		3			
DESIGN FACTOR		0.5			
ROCK PROB.		0% - 5%			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMITTANT STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	16 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,250 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,953 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 297 FT

							BID		CONSTRUCTION	
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-0010	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		
DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-010 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO, INC.
ENGINEERS AND SURVEYORS

RIGHT-OF-WAY

MATCHLINE — 9 — NF STATE OF VERMONT — MATCHLINE

SURVEY DATA

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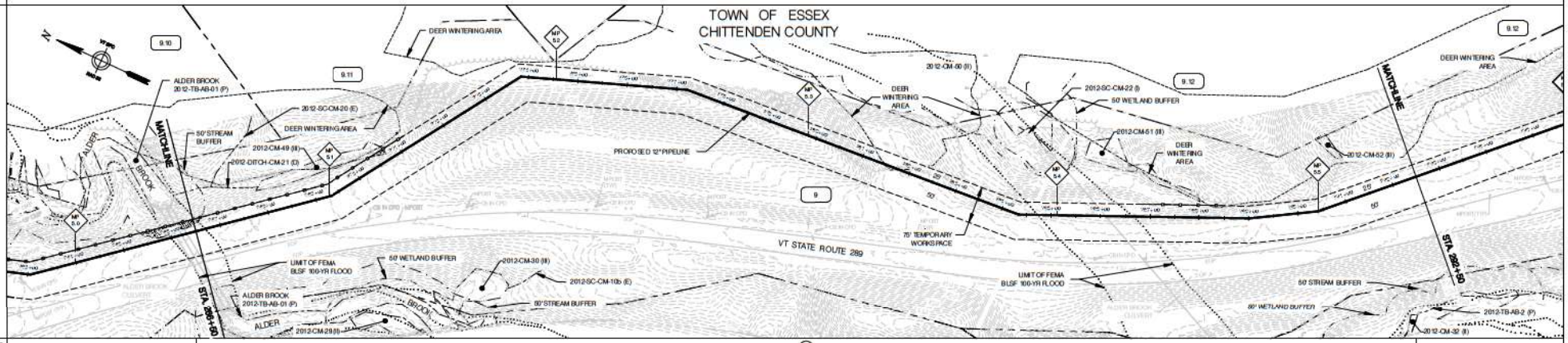
ALIGNMENT DETAIL



CONST. TYPE — 10

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS — MATCH LINE — 1 — 2,600 FT — MATCHLINE

COATING	A
CLASSIFICATION	3
DESIGN FACTOR	0.5
ROCK PROB.	0% - 15%

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet
VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,600 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 2,600 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-011	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-011 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO

RIGHT-OF-WAY

MATCHLINE

9
N/F
STATE OF VERMONT

11
N/F
FOREST DALE GROUP, LLC

MATCHLINE

SURVEY DATA

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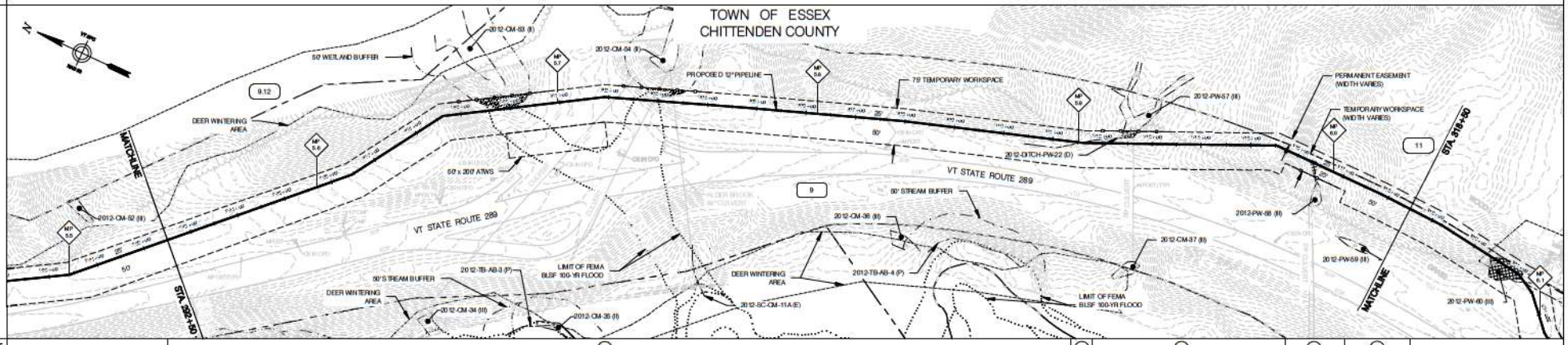
ALIGNMENT DETAIL



CONST. TYPE

18 | 7 | 18 | 26 | 10

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	1	MATCHLINE
		730 FT	40 FT	1,606 FT	14 FT	210 FT	
COATING		A	C	A	C	A	
CLASSIFICATION		3					
DESIGN FACTOR		0.5					
ROCK PROB.		0% - 5%					

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
100 50 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 2,600 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL 2,548 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT 54 FT

							BID		CONSTRUCTION	
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-012	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		
DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-012 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO

RIGHT-OF-WAY

MATCHLINE | 11 N/F FORESTDALE GROUP, LLC | 9 N/F STATE OF VERMONT | 10 N/F PINEWOOD MANOR INC. | 11 N/F FORESTDALE GROUP, LLC | 12 N/F STURGESS, COLIN M. & DONNA J. | 13 N/F SCHAEFER, PAUL ULRICH A SUF | 14 N/F STEINER, PAUL M. | 15 N/F ESSEX GREEN COMMON LAND | MATCHLINE

SURVEY DATA

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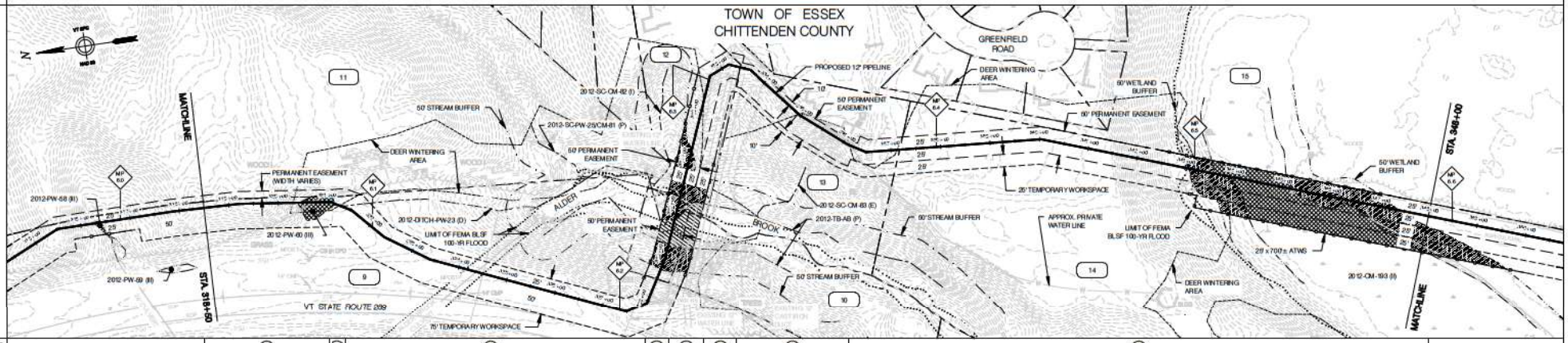
ALIGNMENT DETAIL



CONST. TYPE | 1D | 7 | 1B | 1E | 7 | 1E | 8C | 1E

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	1	1	1	MATCHLINE
		193 FT	72 FT	754 FT	248 FT	1,189 FT	432 FT	82 FT	
COATING		A	C	A	C	A	C	A	
CLASSIFICATION		3							
DESIGN FACTOR		0.5							
ROCK PROB.		0% - 5%							

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,950 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 2,198 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 752 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		INITIALS	DATE	INITIALS	DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-013	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

BID | CONSTRUCTION

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO
ENGINEERS AND SCIENTISTS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-013 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 15 N/F ESSEX GREEN COMMON LAND | 14 N/F STEINER, PAUL M. | 14.01 N/F MIKALONIS, DONNA & BESSIE | 16 RIVER ROAD ROUTE 117 | 17 N/F ESSEX GREEN COMMON LAND | 17.01 N/F RAYMOND, FRANCISE., ELAINE B., PETER W. & LINDA | 18 WINOOSKI RIVER TOWN OF ESSEX / TOWN OF WILLISTON | 19 N/F BABCOCK, JAMES | MATCHLINE

SURVEY DATA

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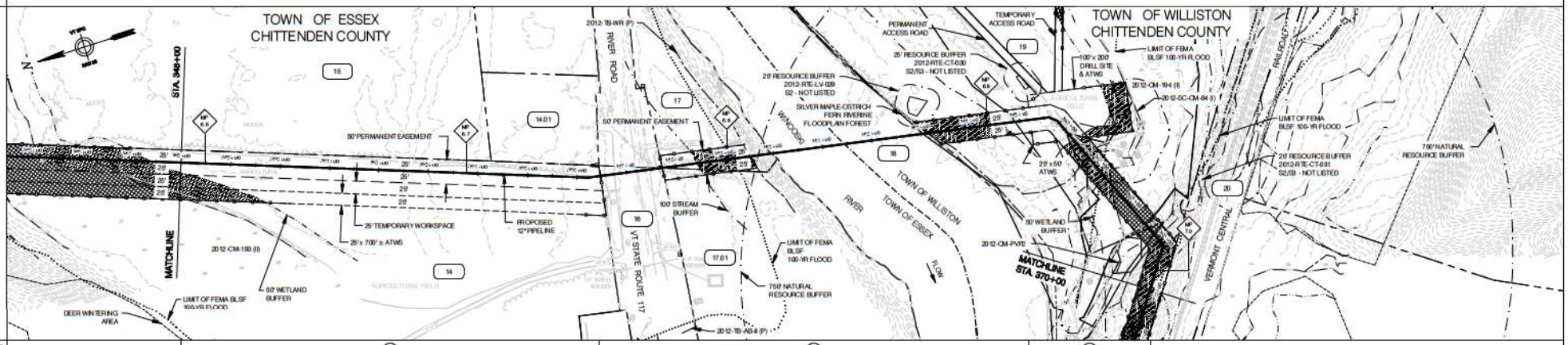
ALIGNMENT DETAIL



CONST. TYPE | 1E | 8 | 2A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	MATCHLINE
		847 FT	982 FT	371 FT	
COATING		A	B	C	
CLASSIFICATION		3			
DESIGN FACTOR		0.5			
ROCK PROB.		0% - 5%			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,200 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 847 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 982 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 371 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-014	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-014 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO

RIGHT-OF-WAY

MATCHLINE | 19 N/F BABCOCK, JAMES | 20 N/F VERMONT CENTRAL RAILROAD | 21 N/F CHITTENDEN SOLID WASTE DISTRICT | 22 N/F STATE OF VERMONT, AGENCY OF TRANSPORTATION | 23 N/F CHITTENDEN SOLID WASTE DISTRICT / 23.01 N/F BURLINGTON TRANSFER STATION | 23.01 N/F BURLINGTON TRANSFER STATION | 23 N/F CHITTENDEN SOLID WASTE DISTRICT | MATCHLINE

SURVEY DATA

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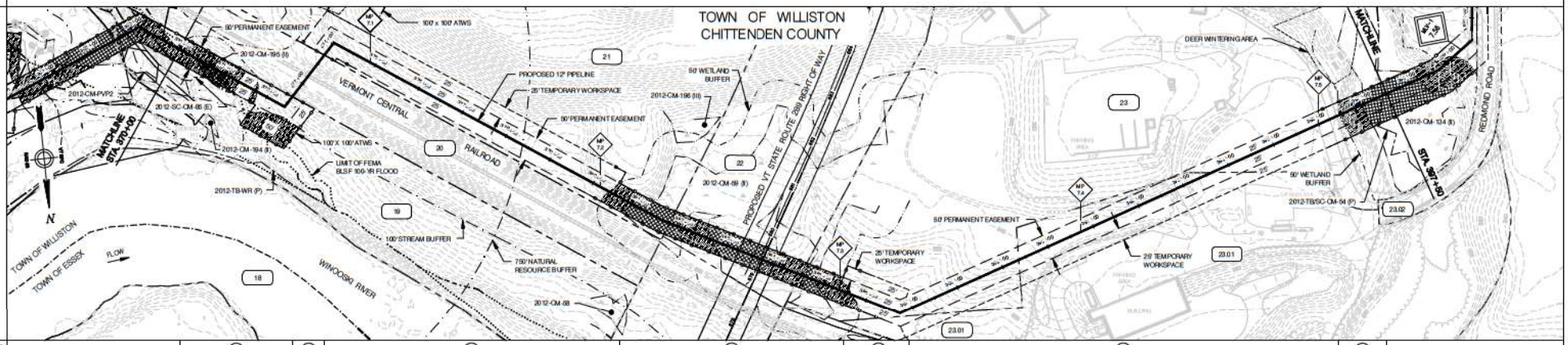
ALIGNMENT DETAIL



CONST. TYPE	2A	10	1A	2A	1A	1E	7

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	1	1	1	MATCHLINE
		179 FT	87 FT	106 FT	684 FT	587 FT	1,052 FT	105 FT	
COATING		C	A	B	A	C	A	C	
CLASSIFICATION	3								
DESIGN FACTOR	0.5								
ROCK PROB.	0% - 5%								

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:	
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2	2,750 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B	0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B	0 FT
PIPE COATING:	
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL	1,803 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL	106 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT	841 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-015	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-015 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 23 N/F CHITTENDEN SOLID WASTE DISTRICT | 24 N/F CHITTENDEN SOLID WASTE DISTRICT | 25 N/F CHITTENDEN SOLID WASTE DISTRICT | 26 N/F CHITTENDEN SOLID WASTE DISTRICT | 24 N/F CHITTENDEN SOLID WASTE DISTRICT | 26 N/F CHITTENDEN SOLID WASTE DISTRICT | MATCHLINE

23.02 REDMOND ROAD

SURVEY DATA

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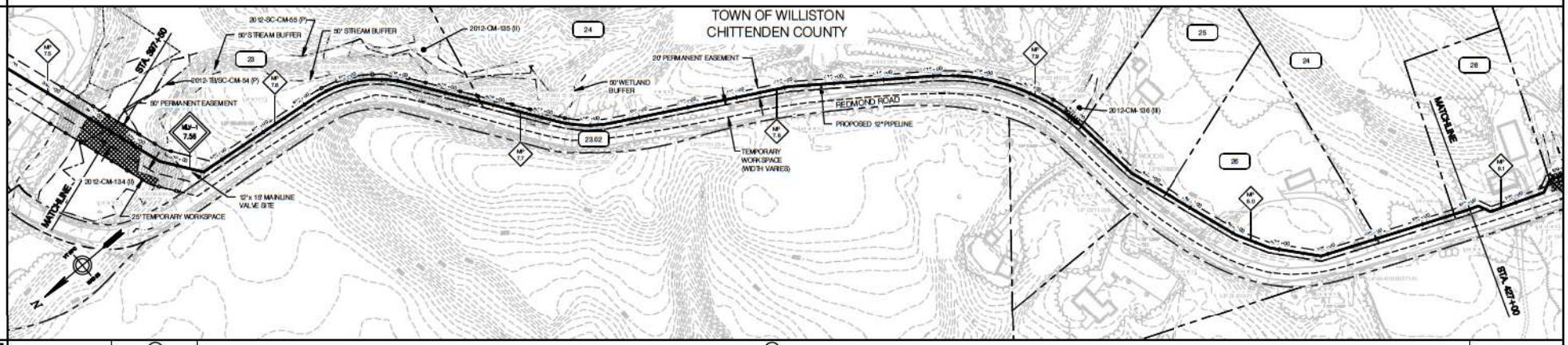
ALIGNMENT DETAIL



CONST. TYPE: (1E) | (4A)

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	(1) 165 FT	(1) 1,855 FT	(1) 30 FT	(1) 990 FT	MATCHLINE
COATING		C	A	C	A	
CLASSIFICATION		3				
DESIGN FACTOR		0.5				
ROCK PROB.		0% - 5%				

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,950 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESCO OR APPROVED EQUAL — 2,765 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRESCO OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 185 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK
ANGP-T-G-021	STATION AND VALVE DETAILS			
ANGP-EPSC-016	EPSC PLAN	1	SAB	JEO
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO

DESCRIPTION	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ISSUED FOR AMENDED ARTICLE 248 FILING				
ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING				

	BID INITIALS	BID DATE
ENVIRONMENTAL		
DRAFTING DESIGNER	GIL	02/28/13
DRAFTING SUPERVISOR	BZD	02/28/13
DESIGN ENGINEER	SAB	02/28/13
DESIGN MANAGER	JEO	02/28/13

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO II
ENGINEERS AND SCIENTISTS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-016 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 28 N/F CHITTENDEN SOLID WASTE DISTRICT | 29 N/F CHITTENDEN SOLID WASTE DISTRICT | 30 N/F CHITTENDEN SOLID WASTE DISTRICT | 31 N/F CHITTENDEN SOLID WASTE DISTRICT | 30 N/F CHITTENDEN SOLID WASTE DISTRICT | MATCHLINE

23.02 REDMOND ROAD

SURVEY DATA

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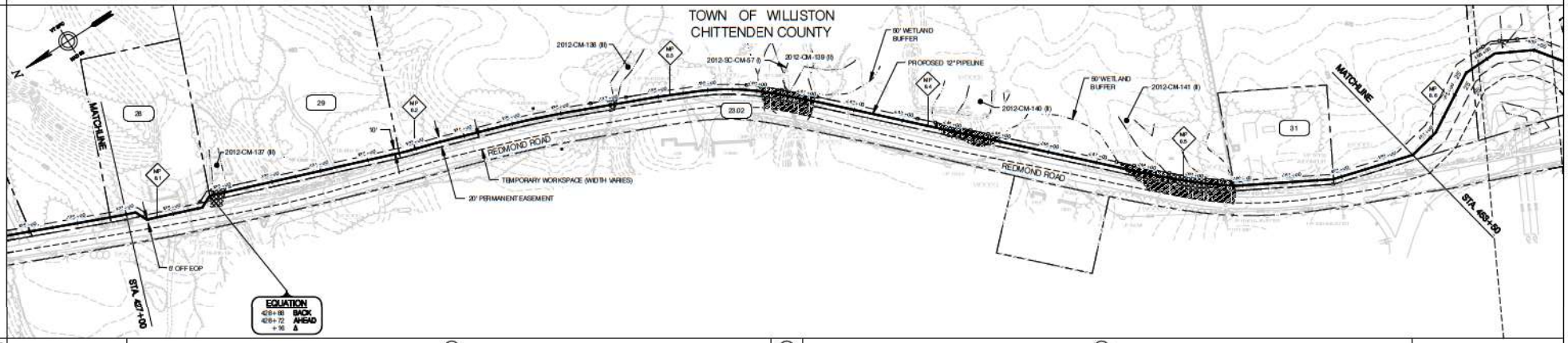
ALIGNMENT DETAIL



CONST. TYPE | 4A | 7 | 4A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	1	1	1	1	1	1	MATCHLINE
		176 FT	27 FT	799 FT	12 FT	294 FT	109 FT	254 FT	127 FT	259 FT	226 FT	367 FT
COATING		A	C	A	C	A	C	A	C	A	C	A
CLASSIFICATION		3										
DESIGN FACTOR		0.5										
ROCK PROB.		0% - 5%										

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,850 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 2,149 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 501 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-017	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-017 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 30 N/F CHITTENDEN SOLID WASTE DISTRICT | 23.02 REDMOND ROAD | 33 N/F VERMONT TRANSCO., LLC | 23.02 REDMOND ROAD | 22 N/F STATE OF VERMONT | 35 N/F STATE OF VERMONT | 23.02 REDMOND ROAD | 36 MOUNTAIN VIEW ROAD | MATCHLINE

SURVEY DATA

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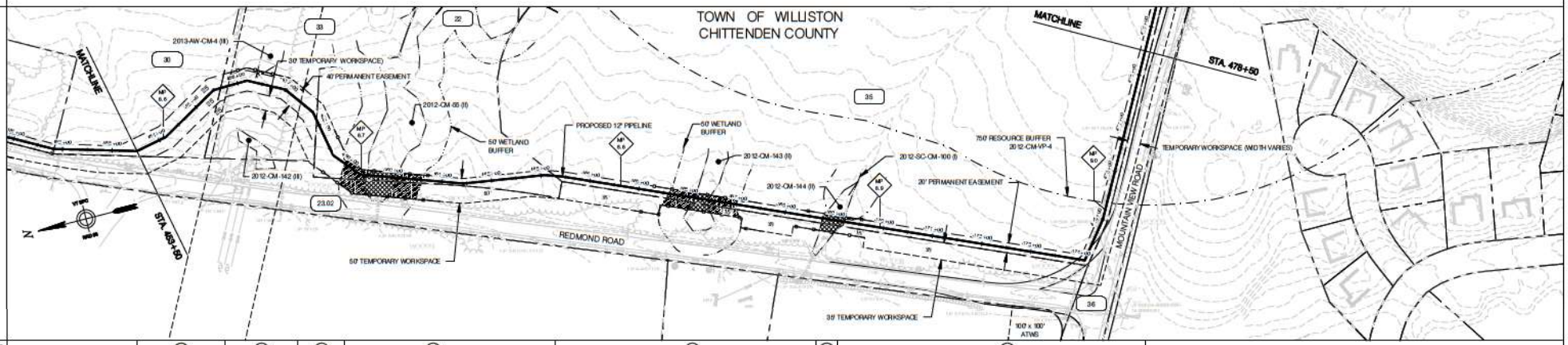
ALIGNMENT DETAIL



CONST. TYPE | IE | IJ | IE | 4C | 4A | 7 | 4A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	1	1	MATCHLINE
		544 FT	167 FT	500 FT	136 FT	179 FT	44 FT	910 FT
COATING		A	C	A	C	A	C	A
CLASSIFICATION		3						
DESIGN FACTOR		0.5						
ROCK PROB.		0% - 5%						

LEGEND

SYMBOL	DESCRIPTION
○	PERMANENT INTERCEPTOR DIKE.
△	TRENCH PLUG (AS REQUIRED).
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).

INTERCEPTOR DIKE/TRENCH PLUG SPACING

SLOPE	SPACING
< 5%	NO STRUCTURE
5 – 15%	300 FT
15 – 30%	200 FT
> 30%	100 FT

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,500 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 2,153 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 347 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-018	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-018 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO

RIGHT-OF-WAY

MATCHLINE | 35 N/F STATE OF VERMONT | 36 MOUNTAIN VIEW ROAD | 37 N/F BRENNAN WOODS HOMEOWNERS ASSOCIATION | 38 N/F STATE OF VERMONT | MATCHLINE

SURVEY DATA

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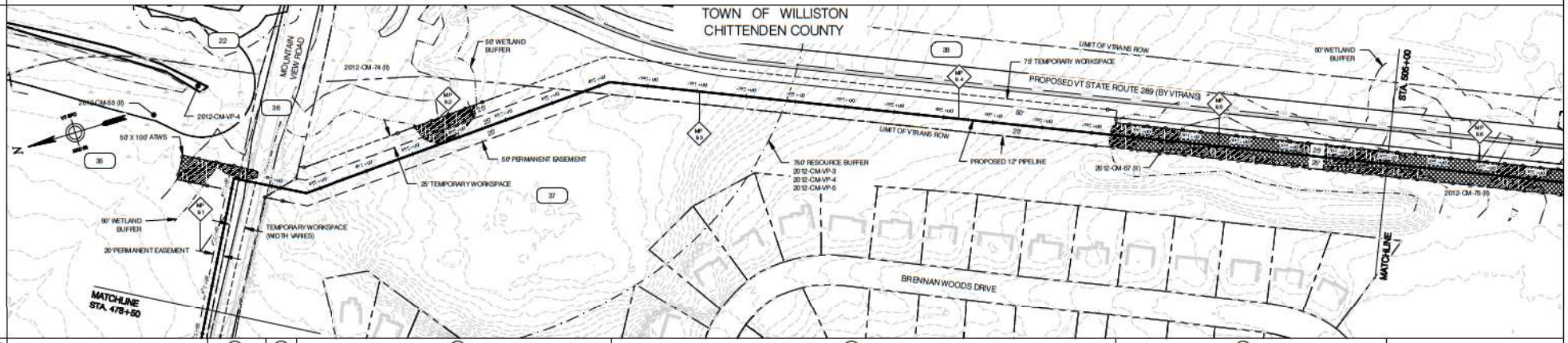
ALIGNMENT DETAIL



CONST. TYPE | 4A | 9 | 1A | 1G | 2C

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	1	1	MATCHLINE
		281 FT	86 FT	306 FT	133 FT	1,281 FT	569 FT	
COATING		A	B	A	C	A	C	
CLASSIFICATION		3						
DESIGN FACTOR		0.5						
ROCK PROB.		50% - 75%		90% - 95%				

LEGEND

SYMBOL	DESCRIPTION
○	PERMANENT INTERCEPTOR DIKE.
△	TRENCH PLUG (AS REQUIRED).
◊	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.
◊	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.
△	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).

INTERCEPTOR DIKE/TRENCH PLUG SPACING

SLOPE	SPACING
< 5%	NO STRUCTURE
5 – 15%	300 FT
15 – 30%	200 FT
> 30%	100 FT

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,850 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,866 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 86 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 698 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-019	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-019 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO

RIGHT-OF-WAY

MATCHLINE | 38 N/F STATE OF VERMONT; AGENCY OF TRANSPORTATION | MATCHLINE

37 N/F BRENNAN WOODS HOMEOWNERS' ASSOCIATION | 37.01 N/F TOWN OF WILLISTON

SURVEY DATA

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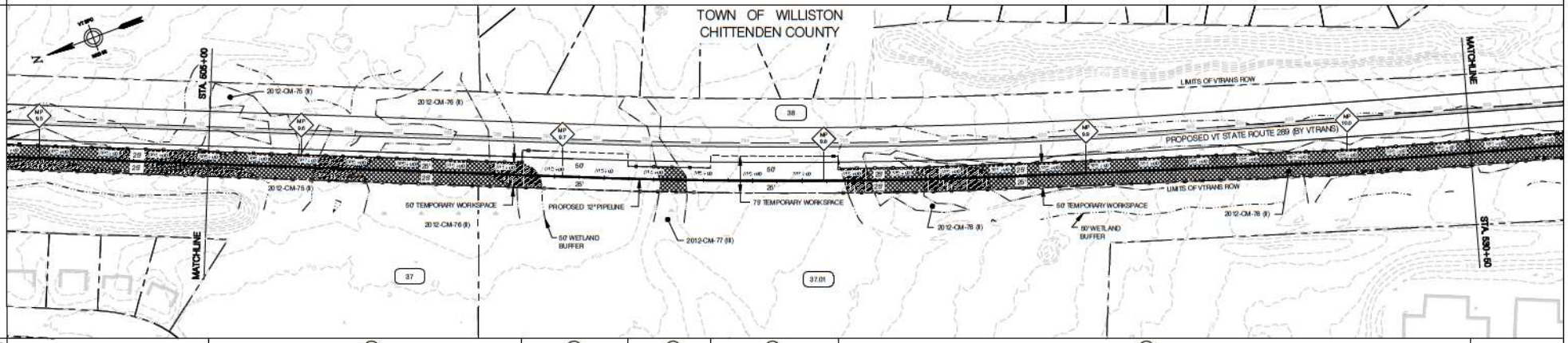
ALIGNMENT DETAIL



CONST. TYPE: 2C | KG | 2C | KG | 2C

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	1	MATCHLINE
		668 FT	244 FT	53 FT	320 FT	1,265 FT	
COATING		C	A	C	A	C	
CLASSIFICATION		3					
DESIGN FACTOR		0.5					
ROCK PROB.		50% - 75%	25% - 50%		0% - 5%		

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,550 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 564 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 1,986 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION	INITIALS	DATE	INITIALS	DATE
ANGP-EPSC-020	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING				
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING				

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-020 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO

ENGINEERS AND SCIENTISTS

RIGHT-OF-WAY

MATCHLINE | 37.01 N/F TOWN OF WILLISTON | 38 N/F STATE OF VERMONT | 39 WILLISTON ROAD ROUTE 2 | 41 N/F TOWN OF WILLISTON | 41.01 N/F ARMS, STEVEN; ARMS, LISA | 41.02 N/F STATE OF VERMONT | MATCH LINE

SURVEY DATA

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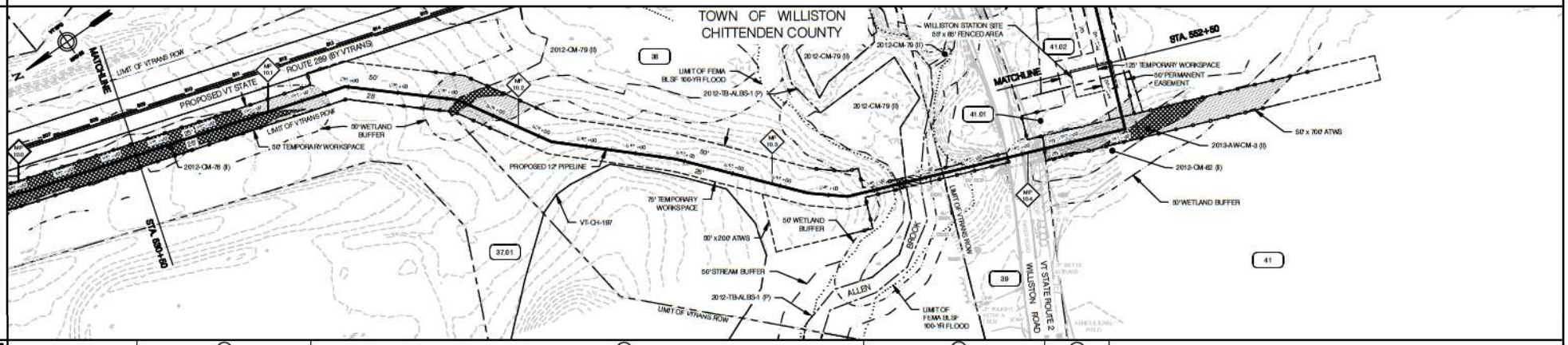
ALIGNMENT DETAIL



CONST. TYPE: 2C | 1G | 8 | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	1	1	MATCHLINE
		402 FT	209 FT	161 FT	760 FT	374 FT	304 FT	
COATING		C	A	C	A	B	A	
CLASSIFICATION		3						
DESIGN FACTOR		0.5						
ROCK PROB.		0% - 5%			SURVEY SKIP			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
100 50 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 3,200 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 1,263 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 374 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 563 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION	INITIALS	DATE	INITIALS	DATE
					ENVIRONMENTAL				
					DRAFTING DESIGNER	GIL	02/28/13		
ANGP–T–G–021	STATION AND VALVE DETAILS				DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP–EPSC–021	EPSC PLAN	1	SAB	JEO	DESIGN ENGINEER	SAB	02/28/13		
G–001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	DESIGN MANAGER	JEO	02/28/13		
						BID		CONSTRUCTION	

ISSUED FOR AMENDED ARTICLE 248 FILING
ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP–T–C–021 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO, INC.
ENGINEERS AND SURVEYORS

RIGHT-OF-WAY

MATCHLINE | 41.02 N/F STATE OF VERMONT | 41 N/F TOWN OF WILLISTON | 40 N/F STATE OF VERMONT; AGENCY OF TRANSPORTATION | MATCH LINE

SURVEY DATA

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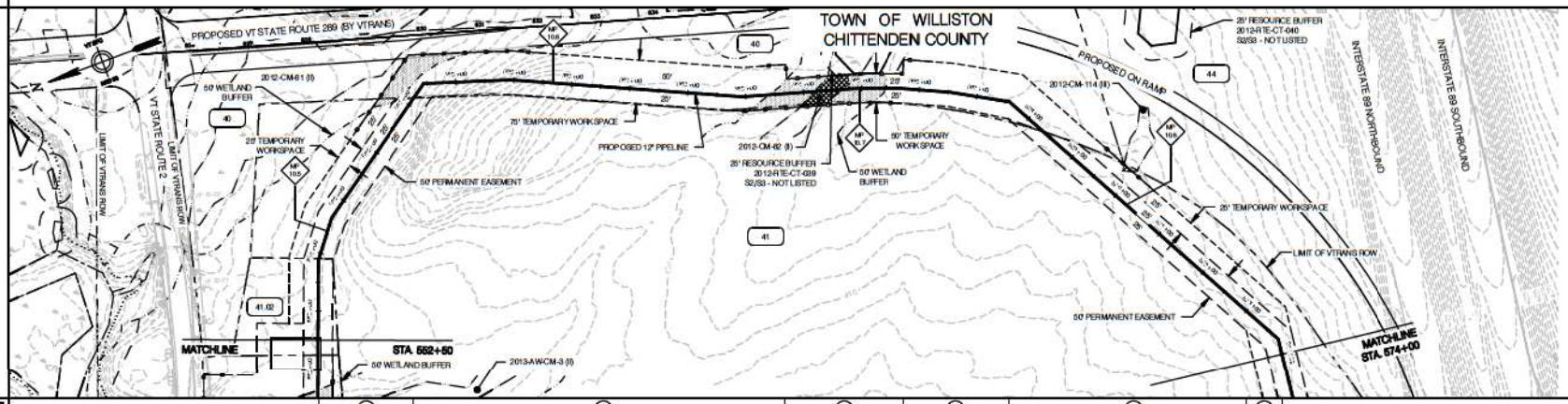
ALIGNMENT DETAIL



CONST. TYPE | 1A | XG | 2C | XG | 1A | 1E

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	MATCHLINE
		1091 FT	202 FT	667 FT	
COATING		A	C	A	
CLASSIFICATION		3			
DESIGN FACTOR		0.5			
ROCK PROB.	SURVEY SKIP	90% - 95%	25% - 50%		

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
100 50 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,150 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRIOR OR APPROVED EQUAL — 1,948 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRIOR OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 202 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-T-G-021	STATION AND VALVE DETAILS				
ANGP-EPSC-022	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
COLER & COLANTONIO
ENGINEERS AND SCIENTISTS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-022 | REV. 1

RIGHT-OF-WAY

MATCHLINE

44 N/F STATE OF VERMONT

41 N/F TOWN OF WILLISTON

47 N/F ALLEN BROOK DEVELOPMENT INC.

MATCH LINE

SURVEY DATA

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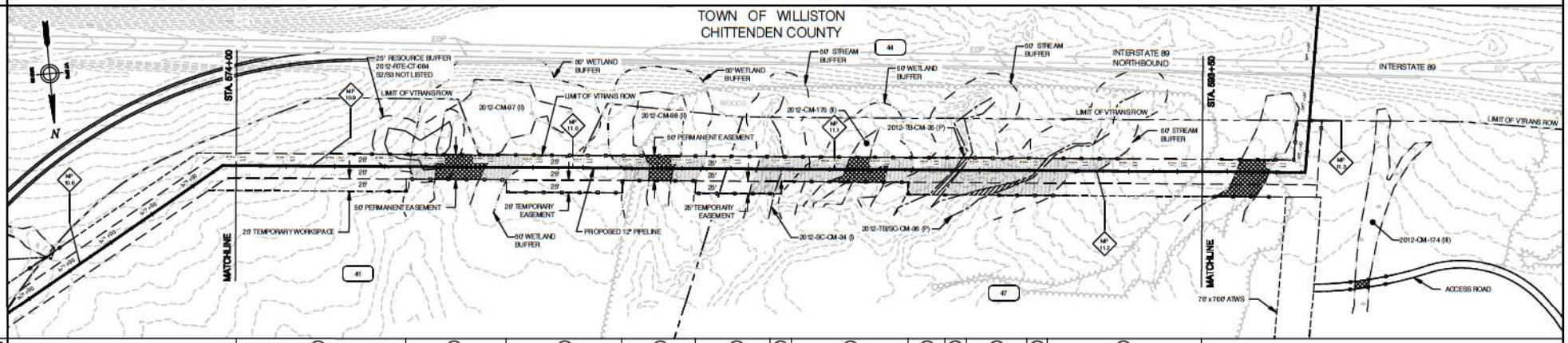
ALIGNMENT DETAIL



CONST. TYPE: 1E | 2A | 1E | 2A | 1E | 7 | 2A | 1E | 7 | 1E | 7 | 1E

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	1	1	1	1	1	1	1
	369 FT	223 FT	206 FT	158 FT	111 FT	677 FT	222 FT
COATING	A	C	A	C	A	C	A
CLASSIFICATION	3						
DESIGN FACTOR	0.6						
ROCK PROB.	0% - 5%						

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMIDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 80 0 100 200 300 feet

VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 1,950 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 892 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 1,058 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION	INITIALS	DATE	INITIALS	DATE
ANGP-EPSC-023A	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING				
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING				

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO II

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-023A | REV. 1

RIGHT-OF-WAY

MATCHLINE | 41 N/F TOWN OF WILLISTON | 44 N/F STATE OF VERMONT | 50.02 N/F 291 HURRICANE LANE, LLC | 50.01 N/F DUNN, WILLIAM | 54.03 N/F DUNN, WILLIAM | 54.02 N/F HILLSIDE EAST CO. | 54.01 N/F DUNN, WILLIAM | 53 HURRICANE LANE | MATCH LINE

SURVEY DATA

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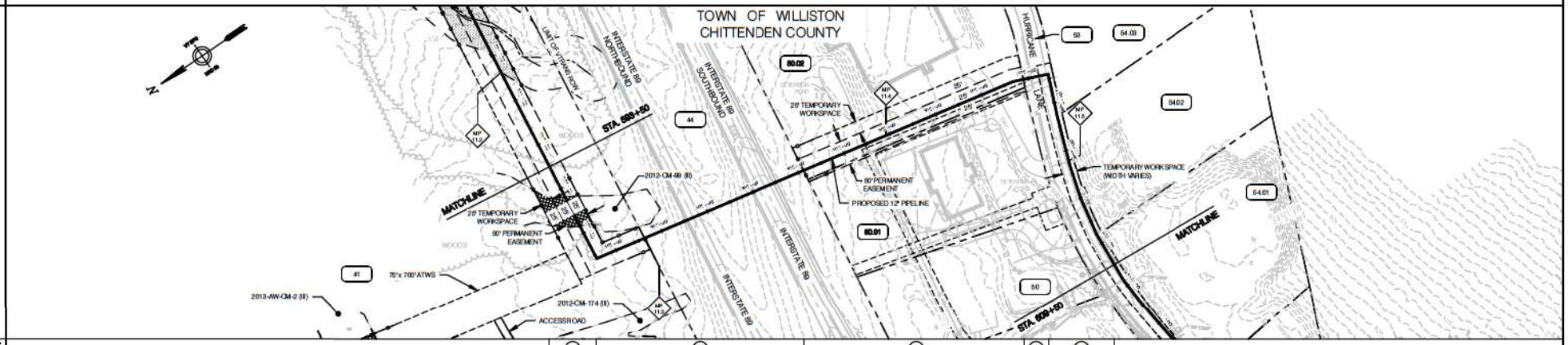
ALIGNMENT DETAIL



CONST. TYPE | E | B | 1A | 9 | 4C

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

MATERIALS	MATCHLINE	1	1	1	1	1	1	MATCHLINE
		68 FT	68 FT	178 FT	349 FT	429 FT	400 FT	
COATING		A	C	A	B	A	B	
CLASSIFICATION		3						
DESIGN FACTOR		0.5						
ROCK PROB.		SURVEY SKIP						

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMIDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	16 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 80 0 100 200 300 feet
VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 1,800 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 725 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 806 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 66 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-023B	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-023B | REV. 1

RIGHT-OF-WAY

MATCHLINE | 54.01 DUNN, WILLIAM | 54 N/F HURRICANE HOLDINGS, LLC | 53 HURRICANE LANE | 55 N/F SIDELINE PROPERTIES LLC; WILLIAM DUNN | 56 N/F BOSS, BRADLEY | MATCH LINE

SURVEY DATA

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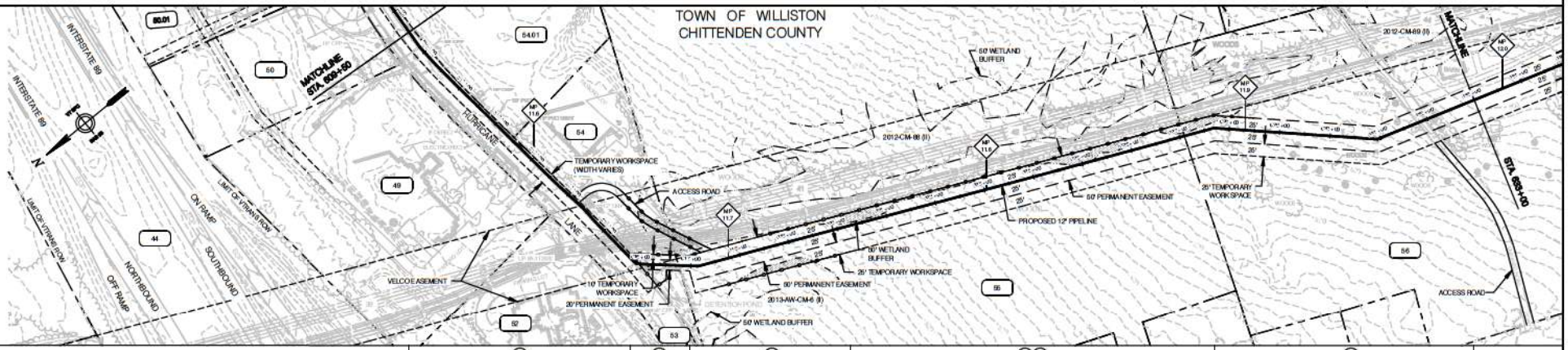
ALIGNMENT DETAIL



CONST. TYPE | 4C | 4B | 1E | 1E 6 | 1E

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	MATCHLINE
		648 FT	609 FT	35 FT	761 FT	
COATING		B	A	C	A	
CLASSIFICATION		3				
DESIGN FACTOR		0.5				
ROCK PROB.		25% - 50%	50% - 75%			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMIDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
100 50 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,350 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,670 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 648 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 32 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-024	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-024 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 56.01 N/F POMARICO, STEPHEN | 56 N/F BOSS, BRADLEY | 57 N/F OAK HILL ESTATES ASSOCIATION | 58 ST. GEORGE ROAD ROUTE 2A | 62.01 N/F PALMER, DAVID | 61 N/F BLACKBERRY RIDGE HOMEOWNERS ASSOCIATION | 62 N/F LUNNA, STEPHEN R. & JENNIFER J. | MATCHLINE

SURVEY DATA

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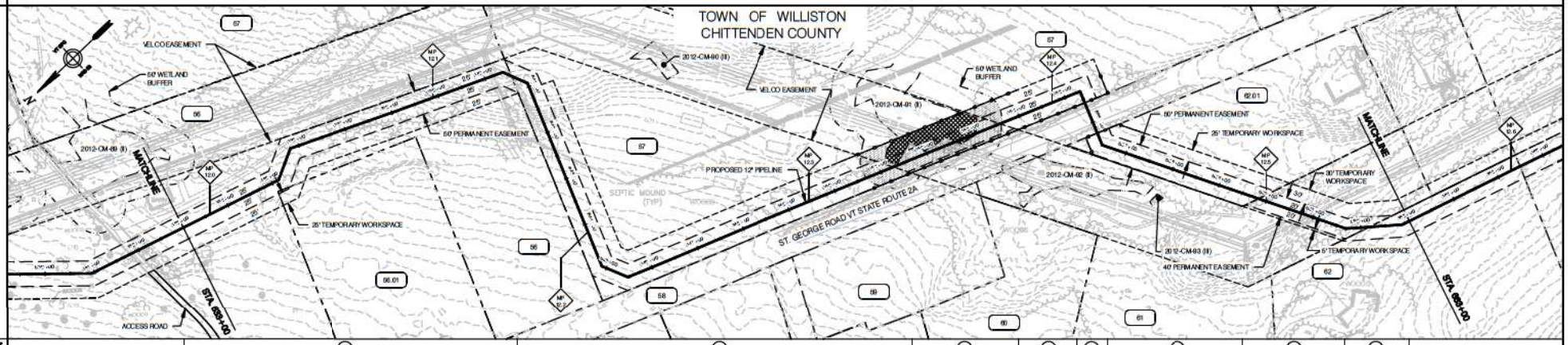
ALIGNMENT DETAIL



CONST. TYPE: 1E | 1A | 1H | 1A | 1I | 1A | 1H | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	1	MATCHLINE
		1,769 FT	293 FT	196 FT	56 FT	676 FT	
COATING		A	C	A	B	A	
CLASSIFICATION		3					
DESIGN FACTOR		0.5					
ROCK PROB.		90% - 95%	75% - 90%			90% - 95%	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMIDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 80 0 100 200 300 feet
VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 3,000 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 2,641 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 56 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 293 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-025	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-025 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 61 N/F BLACKBERRY RIDGE HOMEOWNERS ASSOCIATION | 61.01 N/F POCOCK, ROBERT & JUNE | 62 N/F LUNNA, STEPHEN R. & JENNIFER J. | 63 N/F MARCOTTE, NORMAN & RITA A. | 64 N/F BRODERICK, CLAUDE R. | 65 N/F ROBEAR, LEONARD P. & MARY D. | 63 N/F MARCOTTE, NORMAN & RITA A. | MATCH LINE

SURVEY DATA

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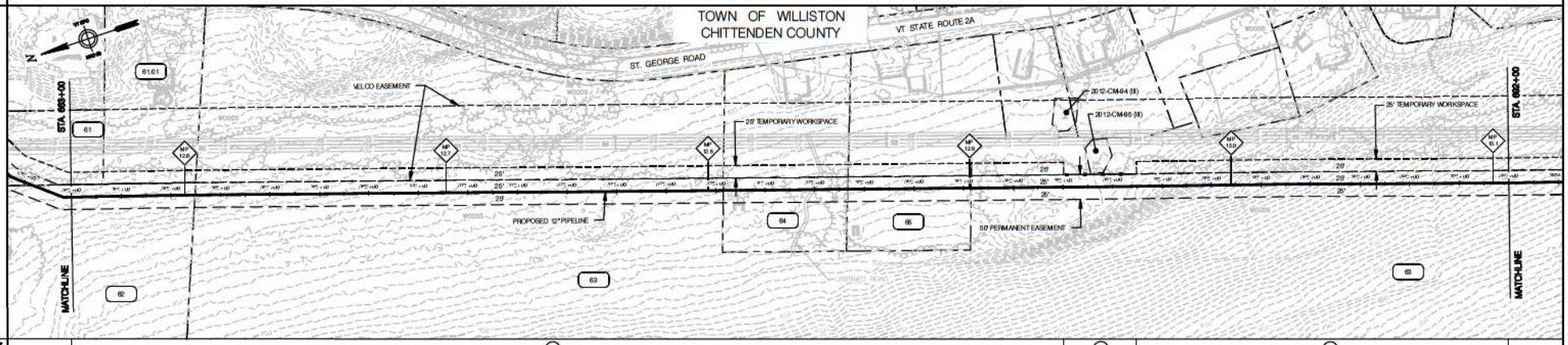
ALIGNMENT DETAIL



CONST. TYPE | 1A | 2A | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

MATCHLINE	1 — 2,900 FT		MATCHLINE
COATING	A		
CLASSIFICATION	3		
DESIGN FACTOR	0.5		
ROCK PROB.	75% - 90%	90% - 95%	75% - 90%

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ALONG OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (21 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 80 0 100 200 300 feet

VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,900 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 2,900 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-026	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-026 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 63 N/F MARCOTTE, NORMAN & RITA A. | 63.01 N/F JOHNSON, ROBERT III & SHIRLEY | 67 N/F SPENCER, REBECCA | 68 N/F TANDAN, RUP & PATRICIA | 69 N/F MORIN, JOHN M.; PELKEY-MORIN, LAUREL | 70 N/F SPERONI, ALDO E. & MARY L. | 71 N/F VERMONT TRANSCO LLC | 72 N/F LACLAIR, KERMIT E., DIANE D. & RANDALL | MATCHLINE

SURVEY DATA

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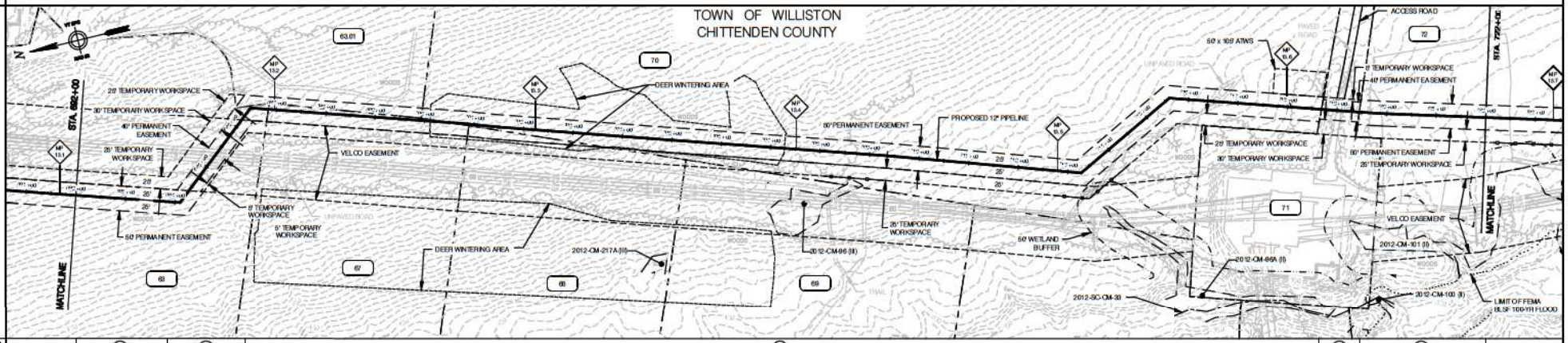
ALIGNMENT DETAIL



CONST. TYPE | 1A | 1H | 1E | 1I | 1E

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	MATCHLINE
		2,669 FT	76 FT	255 FT	
COATING		A	B	A	
CLASSIFICATION		3			
DESIGN FACTOR		0.5			
ROCK PROB.		75% - 90%		90% - 95%	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 80 0 100 200 300 feet
100 80 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 3,000 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 2,924 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 76 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-027	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-027 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 72 N/F LACLAIR, KERMITE., DIANE D. & RANDALL | 72.01 N/F LACLAIR, STEPHEN D. & JUDY | 73 N/F CUNEO, TERRENCE & KARI | 74 N/F THERESE M. CARBINO REVOCABLE TRUST; C/O CARBINO, THERESE M. | 75 N/F TOWERS, LEE R. & JUDITH A. | MATCH LINE

SURVEY DATA

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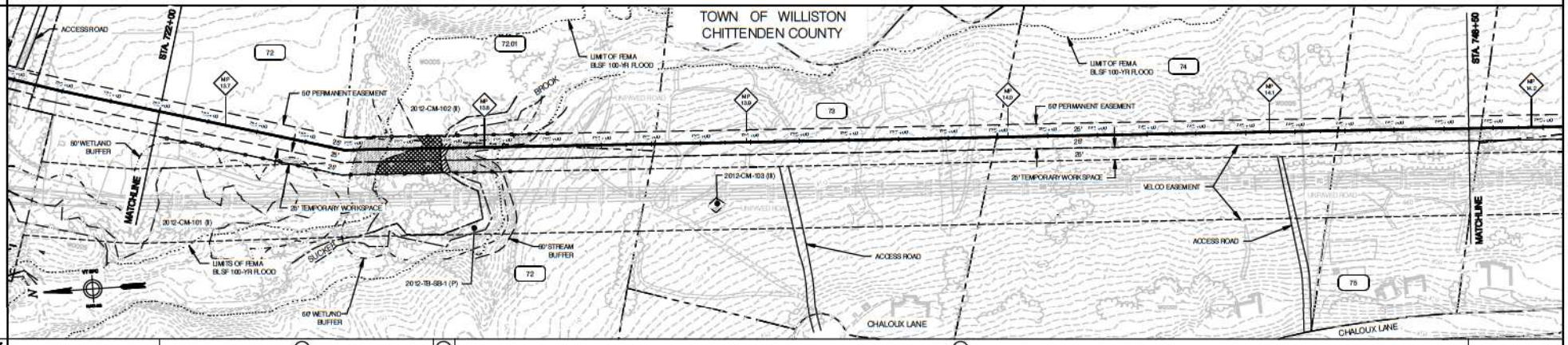
ALIGNMENT DETAIL



CONST. TYPE | (16) | (7) | (16)

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	(1) 410 FT	(1) 300 FT	(1) 1,940 FT	MATCHLINE
COATING		A	C	A	
CLASSIFICATION		3			
DESIGN FACTOR		0.6			
ROCK PROB.		75% - 90%		SURVEY SKIP	

LEGEND

SYMBOL	DESCRIPTION
○	PERMANENT INTERCEPTOR DIKE.
△	TRENCH PLUG (AS REQUIRED).
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).

INTERCEPTOR DIKE/TRENCH PLUG SPACING

SLOPE	SPACING
< 5%	NO STRUCTURE
5 – 15%	300 FT
16 – 30%	200 FT
> 30%	100 FT

HORIZONTAL SCALE: 100 80 0 100 200 300 feet

VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,850 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 2,350 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 300 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-028	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-028 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 75 N/F TOWERS, LEE R. & JUDITH A. | 76 N/F HAKIZIMANA, SEBASTIAN; MUKANDORI, MARTHA | 77 N/F CAMPBELL, ELLEN | 78 N/F CHALOUX, YVETTE C/O FRENCH, MARY | 78.01 N/F CHALOUX, YVETTE C/O FRENCH, MARY | 79 LINCOLN ROAD | 80 N/F CAVANAUGH, WILLIAM F. & CHRISTINE | 81 N/F ARMSTRONG, KEVIN & PHILLANE | TOWN OF WILLISTON TOWN OF ST. GEORGE | 82 N/F PILLSBURY, DANIEL | MATCHLINE

SURVEY DATA

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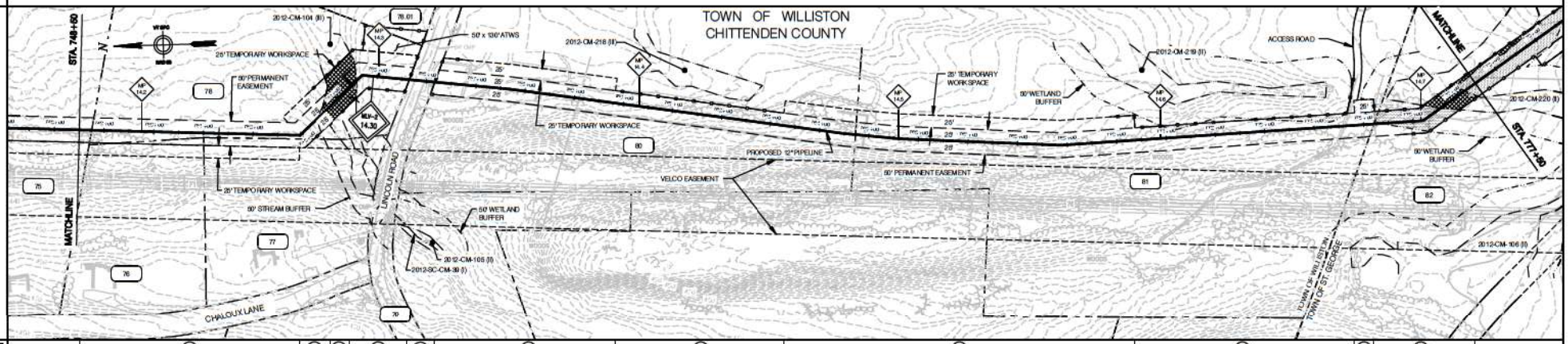
ALIGNMENT DETAIL



CONST. TYPE: 1E | 1A | 7 | 9A | 11 | 9A | 2A | 1A | 2A | 1A | 3A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	1	1	MATCHLINE
		510 FT	14 FT	111 FT	52 FT	1,918 FT	216 FT	
COATING		A	C	A	B	A	C	
CLASSIFICATION	3							
DESIGN FACTOR	0.5							
ROCK PROB.	SURVEY SKIP	75% - 90%			90% - 95%	75% - 90%	50% - 75%	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 3,900 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 2,539 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 52 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 309 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK
ANGP-T-G-021	STATION AND VALVE DETAILS			
ANGP-EPSC-029	EPSC PLAN	1	SAB	JEO
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO

DESCRIPTION
ISSUED FOR AMENDED ARTICLE 248 FILING
ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-029 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLLER & COLANTONIO, INC.
ENGINEERS AND ECONOMISTS

RIGHT-OF-WAY

MATCHLINE | 82 N/F PILLSBURY, DANIEL | ACCESS RIGHT OF WAY | 82 N/F PILLSBURY, DANIEL | 58.01 ST. GEORGE ROAD VT STATE ROUTE 2A | 82.08 N/F PILLSBURY, LARRY & CAROLYN | 82.09 N/F PILLSBURY, DANIEL | MATCHLINE

SURVEY DATA

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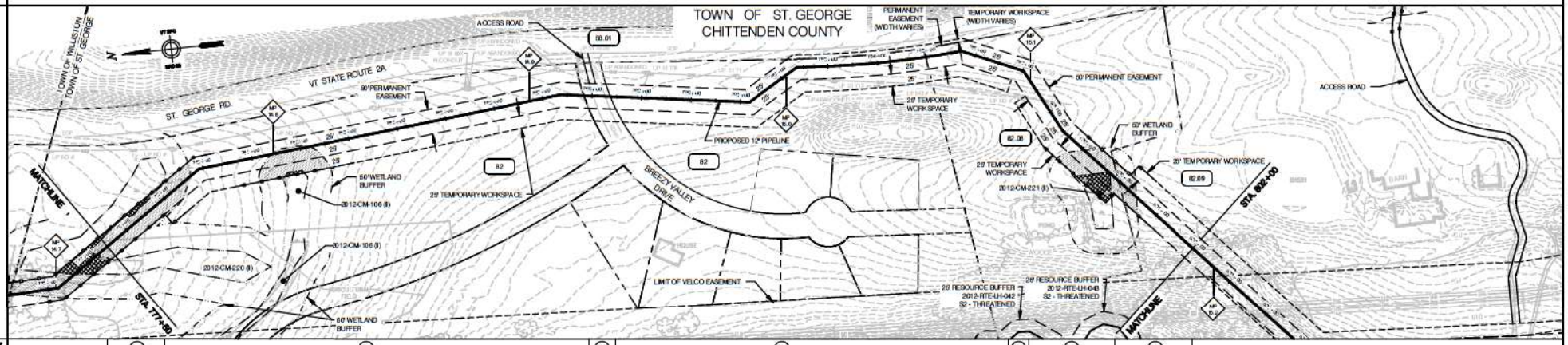
ALIGNMENT DETAIL



CONST. TYPE: 2A | 1E | 1I | 1E | 2A | 1E | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	1	1	1	1	MATCHLINE
		218 FT	137 FT	148 FT	632 FT	53 FT	1,067 FT	141 FT	154 FT	
COATING		C	A	C	A	B	A	C	A	
CLASSIFICATION	3									
DESIGN FACTOR	0.5									
ROCK PROB.	50% - 75%						90% - 95%			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 80 0 100 200 300 feet
VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,450 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,890 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 53 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 507 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-030	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-030 | REV. 1

RIGHT-OF-WAY

MATCH LINE | 82.09 N/F PILLSBURY, DANIEL & JUDITH | 83 N/F BELIVEAU PHILIP | MATCH LINE

SURVEY DATA

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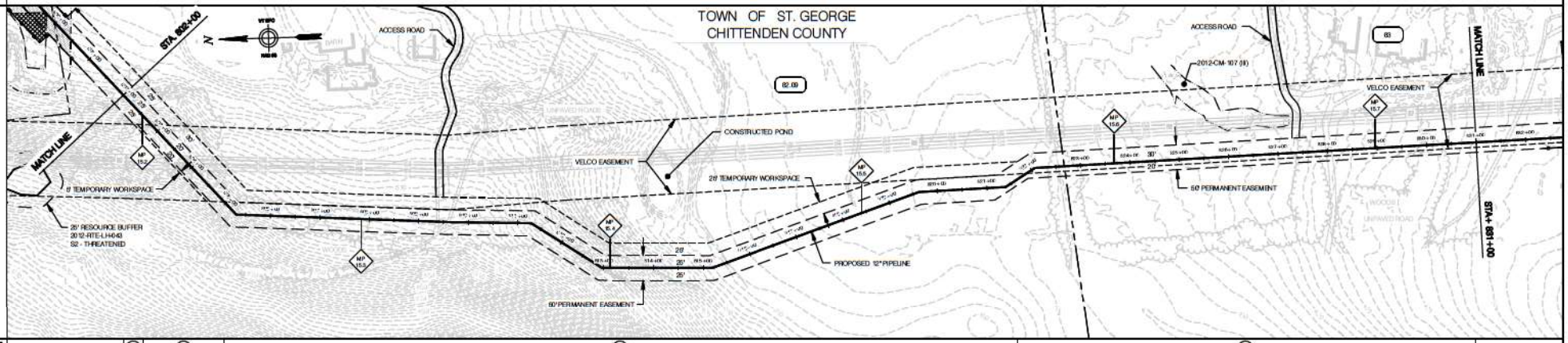
ALIGNMENT DETAIL



CONST. TYPE | 1A | 3H | 1A | 2D

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

MATCH LINE | 1 | MATCH LINE

2,900 FT

COATING	A	
CLASSIFICATION	3	
DESIGN FACTOR	0.6	
ROCK PROB.	70% - 90%	0% - 5%

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 18%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	18 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, SUMP PIPE ACROSS DRAIN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (21 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 80 0 100 200 300 feet
100 80 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,900 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X .500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL — 2,900 FT
B ABRASION RESISTANT COATING, 40 MILS, WARSBOW 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-031	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-031 | REV. 1

RIGHT-OF-WAY

MATCH LINE | 83 N/F BELMEAU, PHILIP | 84 N/F TOWN OF ST. GEORGE | MATCH LINE

SURVEY DATA

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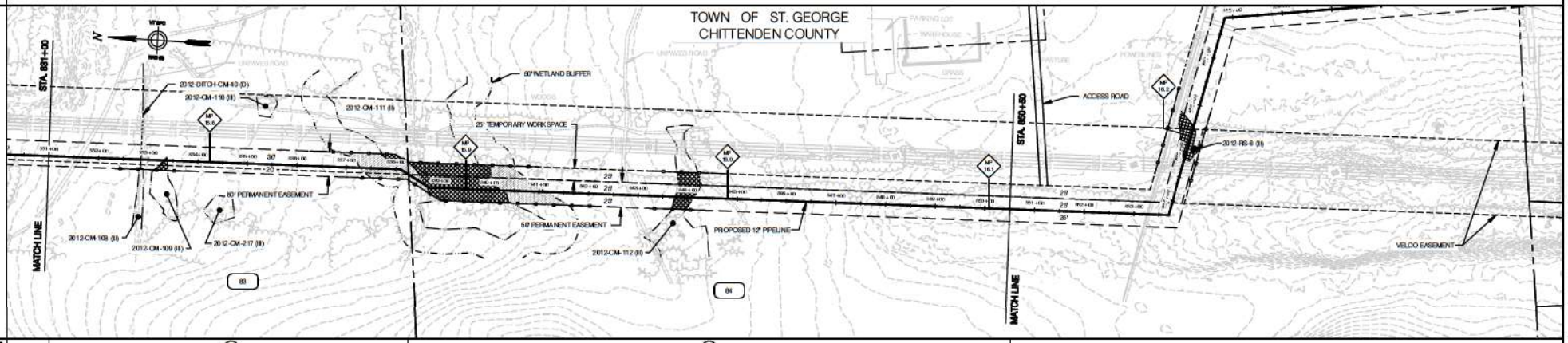
ALIGNMENT DETAIL



CONST. TYPE | 2D | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	1	1	1	1	1	1	1	1	1
	193 FT	5 FT	43 FT	5 FT	390 FT	396 FT	261 FT	37 FT	630 FT
COATING	A	C	A	C	A	C	A	C	A
CLASSIFICATION	3								
DESIGN FACTOR	0.5								
ROCK PROB.	0% - 5%							90% - 95%	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, SLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 80 0 100 200 300 feet
100 80 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 1,950 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X .500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL — 1,515 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 435 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-032	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-032 | REV. 1

RIGHT-OF-WAY

MATCH LINE | 84 N/F TOWN OF ST. GEORGE | 84.02 N/F PHELPS, LOUIS D. IV | 88.01 ROUTE 2A | 85 N/F BOVAT, CLYDE & MARY ANN | MATCH LINE

SURVEY DATA

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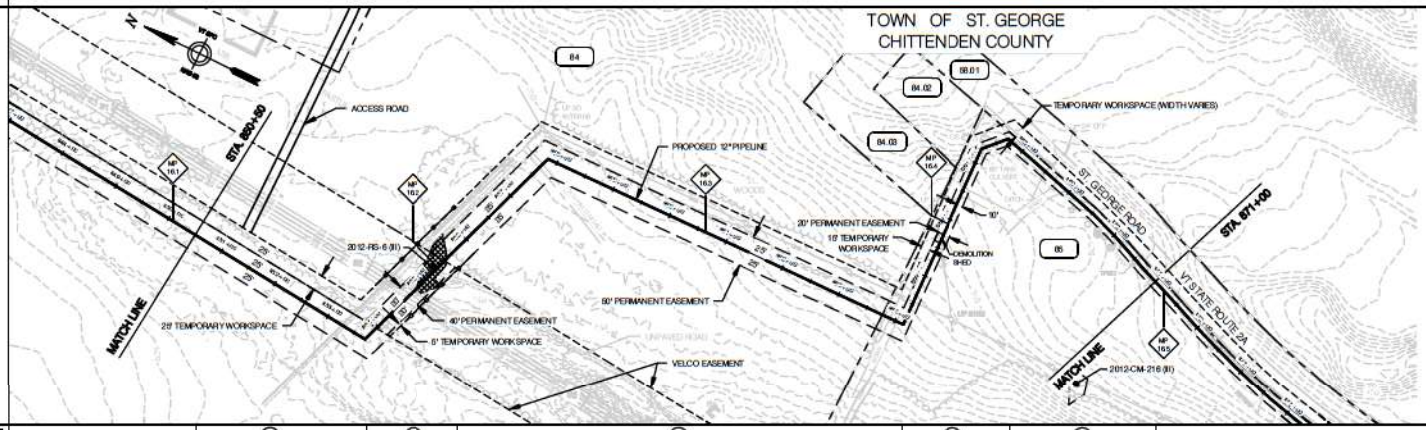
ALIGNMENT DETAIL



CONST. TYPE	1A	1B	1A	3A	4B

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCH LINE	1	1	1	MATCH LINE
		437 FT	68 FT	1,545 FT	
COATING		A	C	A	
CLASSIFICATION		3			
DESIGN FACTOR		0.6			
ROCK PROB.		75% - 90%			

LEGEND

SYMBOL	DESCRIPTION
○	PERMANENT INTERCEPTOR DIKE.
△	TRENCH PLUG (AS REQUIRED).
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.
	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).

INTERCEPTOR DIKE/TRENCH PLUG SPACING

SLOPE	SPACING
< 5%	NO STRUCTURE
5 – 15%	300 FT
15 – 30%	200 FT
> 30%	100 FT

HORIZONTAL SCALE: 100 80 0 100 200 300 feet

VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,050 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X .500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL — 1,982 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 68 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-033	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-033 | REV. 1

RIGHT-OF-WAY

MATCH LINE | 88.01 ST. GEORGE ROAD ROUTE 2A | 86.04 ROCKY RIDGE CIRCLE | 85.05 N/F BOVAT, CLYDE & MARY ANN | MATCH LINE

86 N/F BOVAT, CLYDE & MARY ANN | 86 N/F PEET, TIMOTHY | 87 N/F BISSONETTE, JOHN P. & MELISSA A. | 86 N/F PEET, TIMOTHY | 90 N/F FROST, ROBERT & ANNE | 88.01 ST. GEORGE ROAD ROUTE 2A

SURVEY DATA

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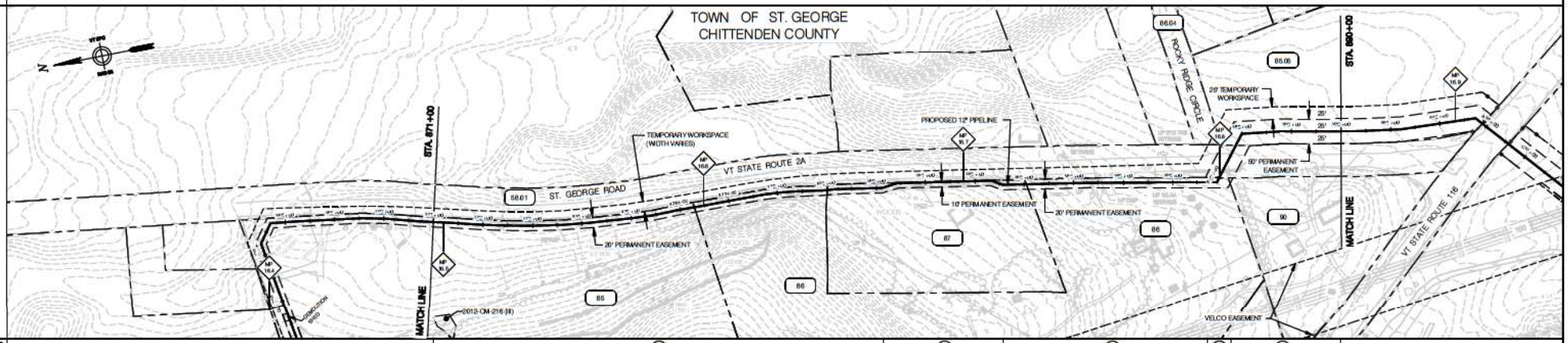
ALIGNMENT DETAIL



CONST. TYPE: 4G | 4D | 4B | 1I | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCH LINE	1	1	1	MATCH LINE
		1,600 FT	78 FT	226 FT	
COATING		A	B	A	
CLASSIFICATION		3			
DESIGN FACTOR		0.5			
ROCK PROB.	50% - 70%	70% - 90%	50% - 70%	SURVEY SKIP	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 1,900 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL — 1,826 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 74 FT
C EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-034	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-034 | REV. 1

RIGHT-OF-WAY

MATCH LINE | 86.05 N/F BOVAT, CLYDE & MARY ANN | 86.01 ST. GEORGE ROAD ROUTE 2A | 91 ROUTE 116 | 93 N/F BURNETT, JENIFER M. & NORMAN I. | 96 N/F LAXXICE, SUZANNE | MATCH LINE

SURVEY DATA

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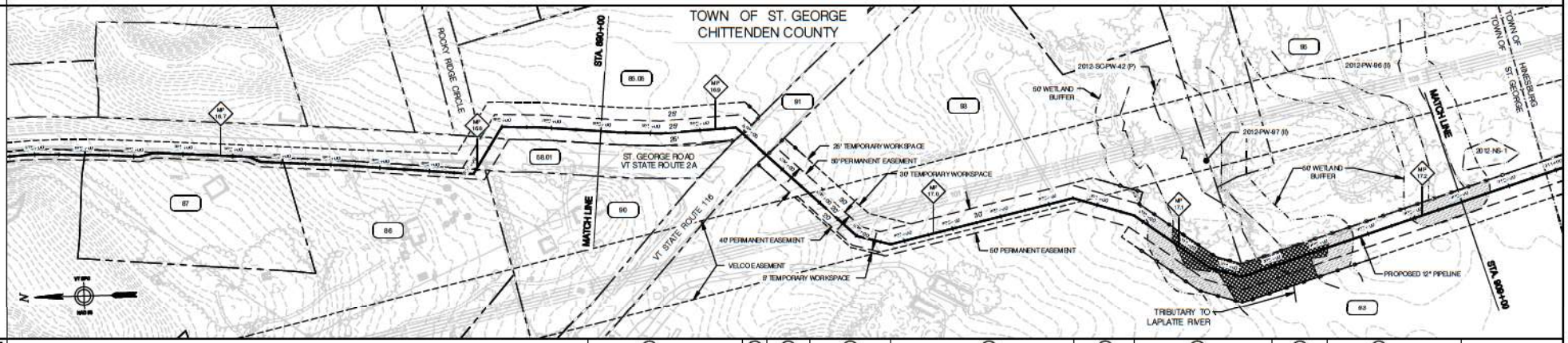
ALIGNMENT DETAIL



CONST. TYPE	1A	11	1A	9H	2D	1A	1E	7	1E

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCH LINE	1	1	1	1	1	1	MATCH LINE
		291 FT	66 FT	762 FT	531 FT	117 FT	113 FT	
COATING		A	B	A	C	A	C	
CLASSIFICATION		3						
DESIGN FACTOR		0.5						
ROCK PROB.		SURVEY SKIP						

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 80 0 100 200 300 feet
100 80 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 1,900 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL — 1,190 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 66 FT
C EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 644 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-035	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-035 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

RIGHT-OF-WAY

MATCH LINE | 95 N/F LAJOICE, SUZANNE | 93 N/F BURNETT, NORMAN L. & JENIFER M. | TOWN OF ST. GEORGE / TOWN OF HINESBURG | 96 N/F FORTIN, LIONEL & MARY | 97 N/F GARVEY, LARRY | 98 N/F LAFRENIERE, SISTER JOANNE T., TRUSTEE; LAFRENIERE FAMILY IRREVOCABLE TRUST | MATCH LINE

SURVEY DATA

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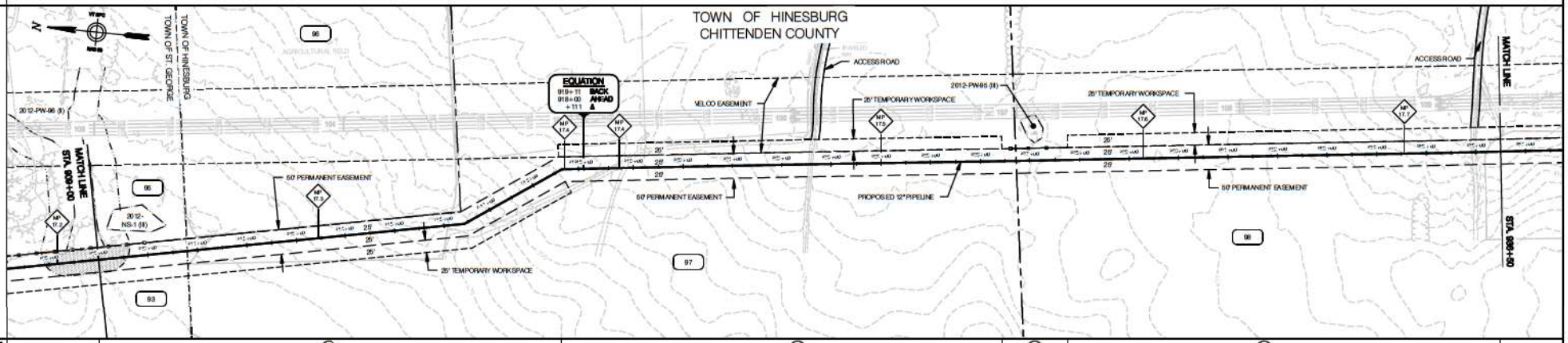
ALIGNMENT DETAIL



CONST. TYPE: 1E | 1A | 2A | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

MATCH LINE — 1 — 2,750 FT — MATCH LINE

COATING	A	
CLASSIFICATION	3	
DESIGN FACTOR	0.5	
ROCK PROB.	SURVEY SKIP	0% - 5%

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 18%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	18 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, SUMP PIPE ADJACENT BEDM TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (21 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 80 0 100 200 300 feet
VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,750 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL — 2,750 FT
B ABRASION RESISTANT COATING, 40 MILS, WASSERK 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-036	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO II
ENGINEERS AND ARCHITECTS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-036 | REV. 1

RIGHT-OF-WAY

MATCH LINE | 98 N/F LARRENIERE, JOANNE T. | 99 N/F LUMBRA, LINDA P. | 100 N/F PRENGLER, HERSCHEL | 101 N/F DATTILO, DANA & KIMBERLY | 102 N/F LAVALETTE, BERNARD & EI | 103 N/F BALLARD, TIMOTHY & KAY | MATCH LINE

SURVEY DATA

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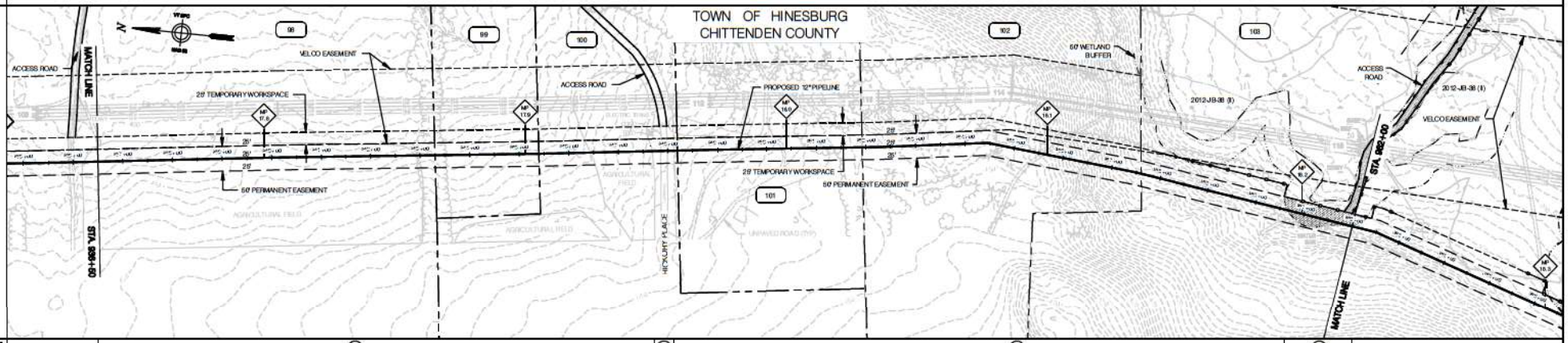
ALIGNMENT DETAIL



CONST. TYPE: 1A | 1I | 1A | 2A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCH LINE	1	1	2	MATCH LINE
		1,336 FT	13 FT	1,401 FT	
COATING		A	B	A	
CLASSIFICATION		3		3	
DESIGN FACTOR		0.6		0.6	
ROCK PROB.		0% - 5%		90% - 95%	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇓	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇑	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
⊥	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 80 0 100 200 300 feet
VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 1,149 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 1,401 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL — 2,537 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 13 FT
C EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-037	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-037 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO

RIGHT-OF-WAY

MATCH LINE | 103 N/F BALLARD, TIMOTHY | 104 N/F TOWN OF HINESBURG | MATCH LINE

SURVEY DATA

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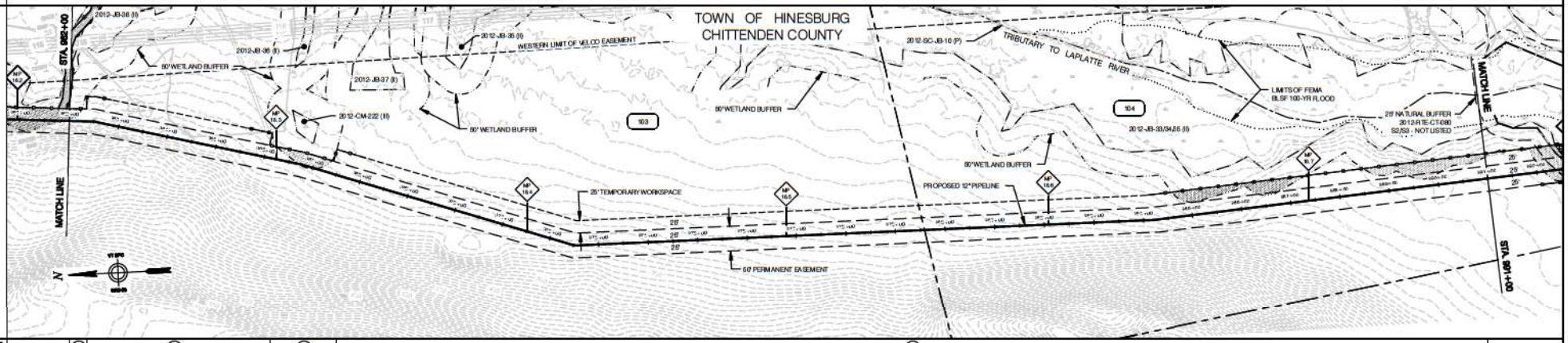
ALIGNMENT DETAIL



CONST. TYPE: 2A | 1A | 2A | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

MATCH LINE | (2) 2,900 FT | MATCH LINE

COATING	A	
CLASSIFICATION	3	
DESIGN FACTOR	0.6	
ROCK PROB.	60% - 75%	5% - 25%

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

NOTES:

HORIZONTAL SCALE: 100 80 0 100 200 300 feet
VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,900 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL — 2,900 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-038	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-038 | REV. 1

RIGHT-OF-WAY

MATCH LINE | 104 N/F TOWN OF HINESBURG | 105 SHELBURNE FALLS ROAD | 106 N/F FORTIN, MICHAEL A. & LINDA N. | 107 N/F HAYSTACK CROSSING LLC | MATCH LINE

SURVEY DATA

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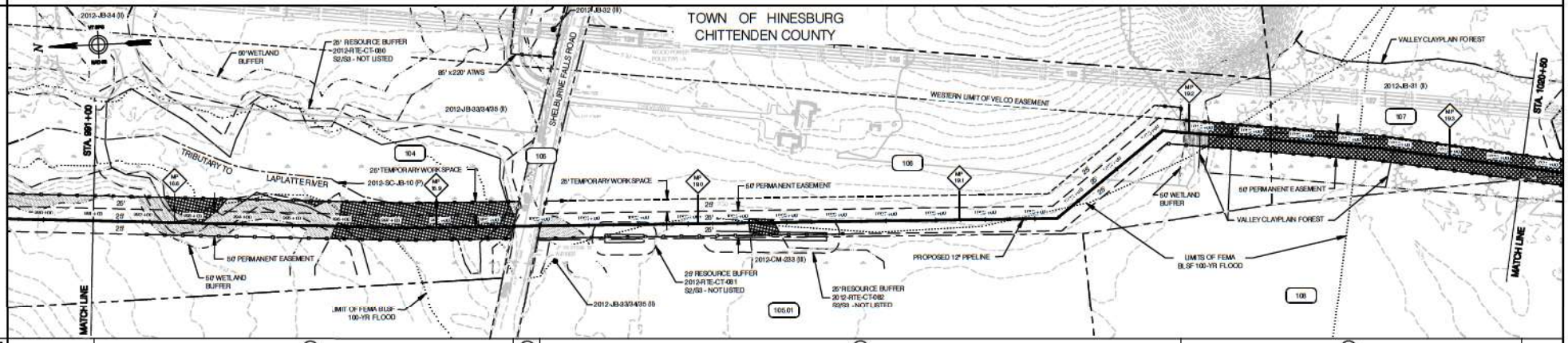
ALIGNMENT DETAIL



CONST. TYPE | 1A | 9 | 1A | 2A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCH LINE	2	2	2	2	1	2	2	2	2	2	MATCH LINE
		115 FT	177 FT	116 FT	409 FT	54 FT	54 FT	308 FT	52 FT	890 FT	685 FT	
COATING		A	C	A	C	B	C	A	C	A	C	
CLASSIFICATION		2				3	2					
DESIGN FACTOR		0.6				0.5	0.6					
ROCK PROB.		0% - 5%									5% - 25%	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMIDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	16 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 80 0 100 200 300 feet

VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 54 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,696 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,479 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 54 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 1,417 FT

						BID		CONSTRUCTION	
					ENVIRONMENTAL				
					DRAFTING DESIGNER	GIL	02/28/13		
					DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-039	EPSC PLAN	1	SAB	JEO	DESIGN ENGINEER	SAB	02/28/13		
C-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	DESIGN MANAGER	JEO	02/28/13		
DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-039 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO, INC.

RIGHT-OF-WAY

MATCH LINE | 107 N/F HAYSTACK CROSSING LLC | 108 N/F CLARK, GARY C. | MATCH LINE

SURVEY DATA

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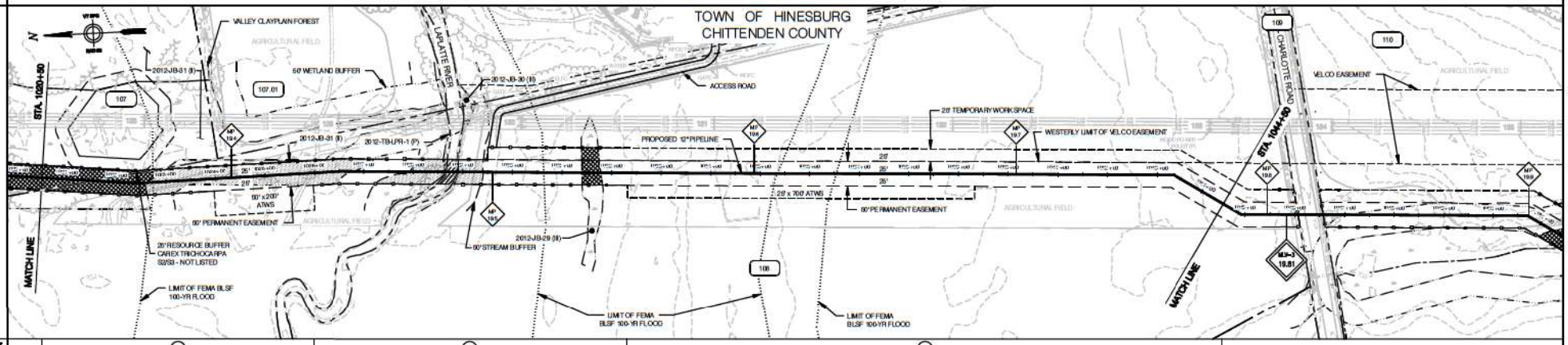
ALIGNMENT DETAIL



CONST. TYPE: 2A | B | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	2	2	2
	848 FT	632 FT	1220 FT
COATING	C	B	A
CLASSIFICATION	2		
DESIGN FACTOR	0.6		
ROCK PROB.	0% - 5%		

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, SLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 80 0 100 200 300 feet

VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,400 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,220 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 632 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 848 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-040	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-040 | REV. 1

Vermont Gas

Tetra Tech Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO II

RIGHT-OF-WAY

MATCH LINE | 108 N/F CLARK, GARY C. | 109 CHARLOTTE ROAD | 110 N/F CARSE, DAVID | MATCH LINE

SURVEY DATA

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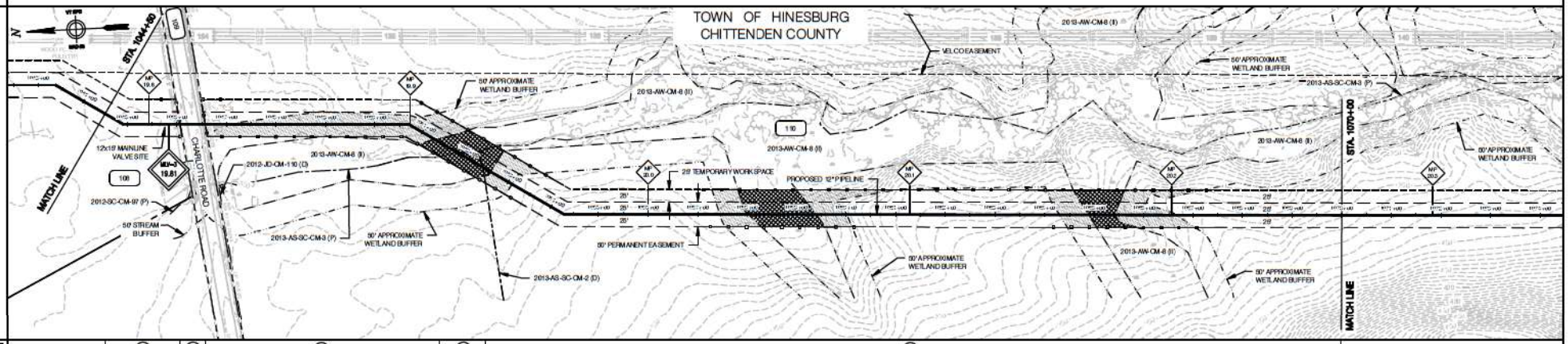
ALIGNMENT DETAIL



CONST. TYPE: 1A | 9 | 1A | 7 | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCH LINE	2	1	2	2	2	2	2	2	2	MATCH LINE
		156 FT	51 FT	50 FT	602 FT	496 FT	257 FT	494 FT	233 FT	331 FT	
COATING		A	B	A	C	A	C	A	C	A	
CLASSIFICATION		2	3			2					
DESIGN FACTOR		0.6	0.5			0.6					
ROCK PROB.		0% - 5%				SURVEY SKIP					

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 51 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,469 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 1,407 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 51 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 1,092 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-T-G-021	STATION AND VALVE DETAILS				
ANGP-EPSC-041	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-041 | REV. 1

RIGHT-OF-WAY

MATCH LINE | 110 N/F CARSE, DAVID | 111 N/F HAZEN, ELIZABETH M. | MATCH LINE

SURVEY DATA

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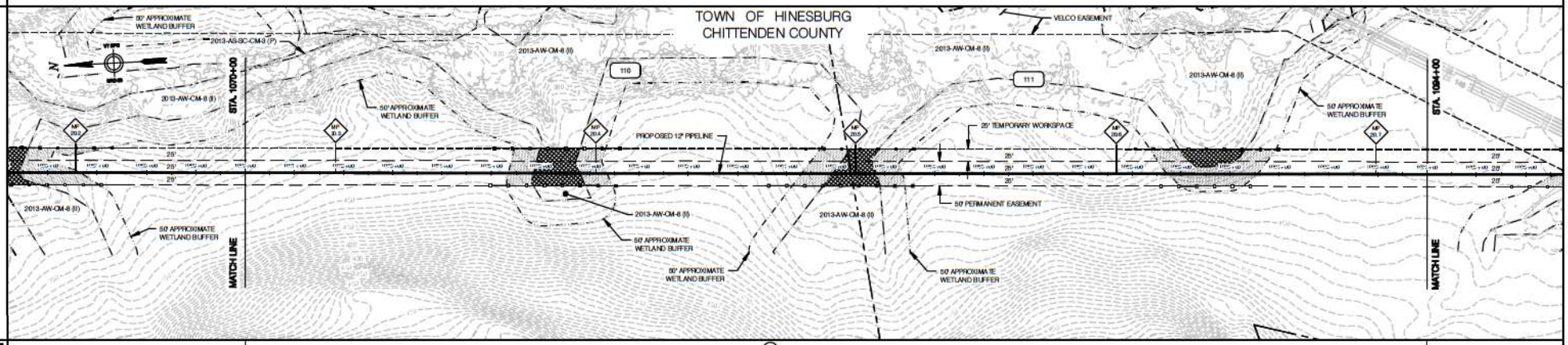
ALIGNMENT DETAIL



CONST. TYPE

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCH LINE	2	2	2	2	2	2	2	MATCH LINE
		530 FT	215 FT	359 FT	230 FT	541 FT	185 FT	340 FT	
COATING		A	C	A	C	A	C	A	
CLASSIFICATION		2							
DESIGN FACTOR		0.6							
ROCK PROB.		SURVEY SKIP							

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
O	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇑	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇑	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE, ACROSS DEEP TRENCH.	> 30%	100 FT
⅄	ROAD CROSSING / CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (21% SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
100 50 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,400 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 1,770 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 630 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-042	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-042 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO

ENGINEERS AND SCIENTISTS

RIGHT-OF-WAY

MATCH LINE | 111 N/F HAZEN, ELIZABETH M. | 112 N/F CARRE LAND COMPANY, LLC | 113 N/F LAVALLEE, RONALD & CONSTANCE | 114 BALDWIN ROAD | 116 N/F THIBAULT FARM PROPERTIES, LLC | MATCH LINE

SURVEY DATA

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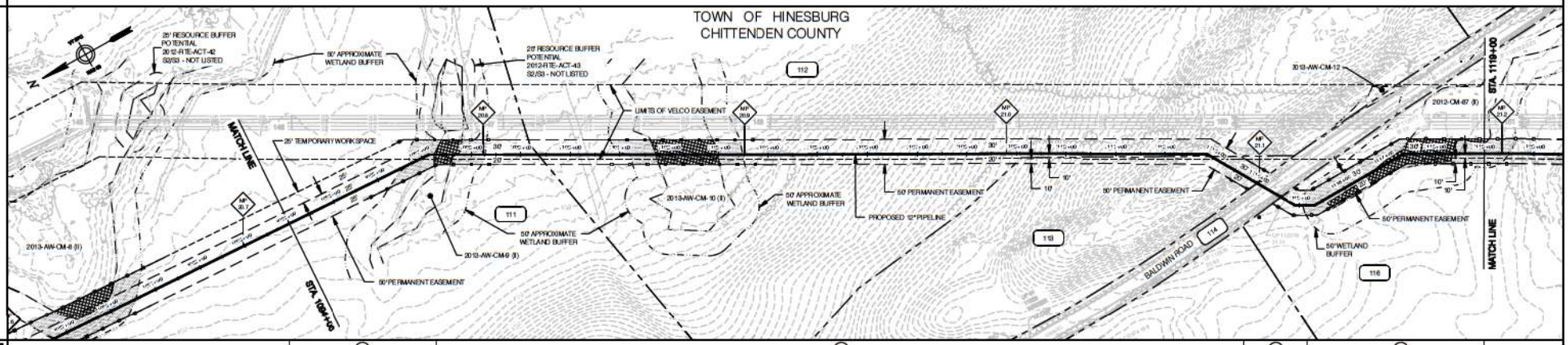
ALIGNMENT DETAIL



CONST. TYPE | 1A | 2D | 1I | 2D

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCH LINE	2	2	1	1	1	1	1	1	2	2	1	MATCH LINE
		268 FT	25 FT	135 FT	264 FT	236 FT	867 FT	97 FT	56 FT	46 FT	211 FT	162 FT	
COATING		A	C	C	A	C	A	A	B	A	C	C	
CLASSIFICATION		2	3					2	3		2	3	
DESIGN FACTOR		0.6	0.5					0.6	0.5		0.6	0.5	
ROCK PROB.		SURVEY SKIP											

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 56 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,444 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYTEKNLINE 10/40, PRESC OR APPROVED EQUAL — 1,835 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 56 FT
C EPOXY POLYTEKNLINE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 769 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-043	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLLER & COLANTONIO, INC. ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-043 | REV. 1

RIGHT-OF-WAY

MATCHLINE

116
N/F
THIBAULT FARM PROPERTIES, LLC

117
N/F
BALDWIN-HAULENBEEK, ANDREA
DONELLY-HAULENBEEK, FREDERICK

MATCHLINE

SURVEY DATA

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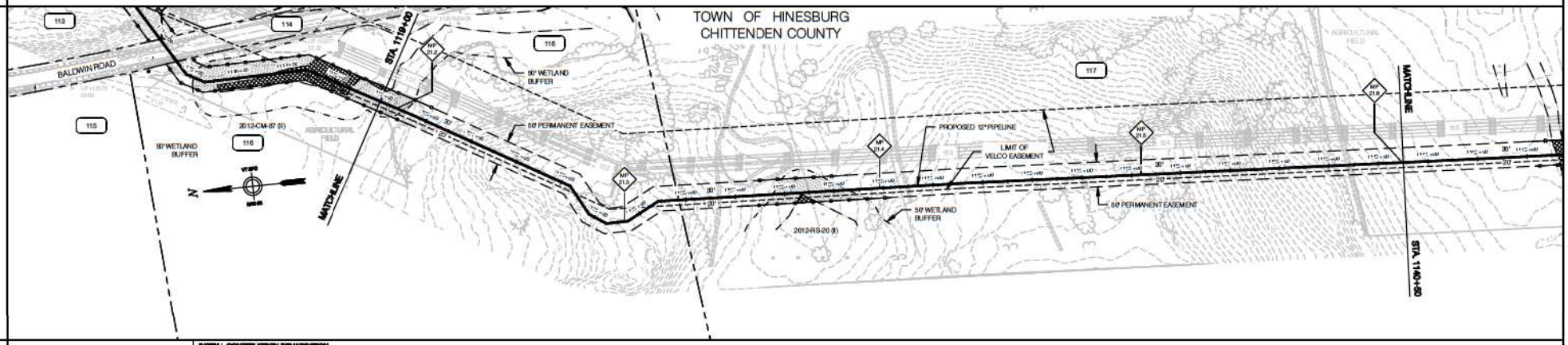
ALIGNMENT DETAIL



EROSION PREVENTION & SEDIMENT CONTROL

LEGEND

- *PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- CENTERLINE OF STREAM
- TEMPORARY STREAM CROSSING
- MP 214
- 50' WETLAND BUFFER
- TEMPORARY MATS AND MATTING
- WETLAND BUFFER WITHIN *PROJECT AREA
- *REINFORCED CONSTRUCTION DEMARCATION AND REINFORCED *PERIMETER CONTROL

INSTALL CONSTRUCTION DEMARCATION:
STA. 1119+00 TO 1140+50 RT - 20' FROM NEW 12" PIPE ℄
STA. 1119+00 TO 1140+50 LT - 30' FROM NEW 12" PIPE ℄

INSTALL REINFORCED PERIMETER CONTROL:
STA. 1119+00 TO 1119+76 RT - 20' FROM NEW 12" PIPE ℄
STA. 1119+00 TO 1120+12 LT - 30' FROM NEW 12" PIPE ℄

INSTALL REINFORCED PERIMETER CONTROL:
STA. 1127+11 TO 1130+34 RT - 20' FROM NEW 12" PIPE ℄
STA. 1127+46 TO 1129+28 LT - 30' FROM NEW 12" PIPE ℄

INSTALL MATTING:
STA. 1128+28 TO 1128+64

REINFORCED CONSTRUCTION DEMARCATION AND REINFORCED PERIMETER CONTROLS ARE ONLY SHOWN WITHIN 50 FT. OF WATER RESOURCE AREAS AND AT CONSTRUCTION ENTRANCES - SEE *CONSTRUCTION EPSC NOTES* - NOTE #6. CONSTRUCTION DEMARCATION AND PERIMETER CONTROLS ARE NOT TO CROSS ACCESS WAYS OR ACTIVE FLOW PATHS. FOR AREAS THAT ARE > 50 FT. FROM WATER RESOURCE AREAS, CONSTRUCTION DEMARCATION IS TO BE INSTALLED ALONG PERIMETER OF PROJECT AREA / LIMITS OF DISTURBANCE AND PERIMETER CONTROLS ARE TO BE INSTALLED ON THE DOWNSLOPE SIDE OF AREAS OF DISTURBANCE WHERE THERE IS POTENTIAL FOR SOIL EROSION AND/OR SEDIMENT RUNOFF - SEE NOTE #6.

NOT FOR CONSTRUCTION

HORIZONTAL SCALE
100 50 0 100 200 300 feet
VERTICAL SCALE
100 50 0 100 200 300 feet

CONST. TYPE					(20)		
SOIL TYPE		3eB	FsE	FsC	SuB	GeB	SuD
LC/LU		RESIDENTIAL				GRASS / AGRICULTURAL	
STREAMS							
WETLANDS	MATCH LINE	WETLAND 2012-CM-67 - STATION 1119+00 TO 1119+65 CLASS II				WETLAND 2012-RS-20 - STATION 1127+61 TO 1129+64 CLASS III	MATCH LINE
VERNAL POOLS							
SIGNIFICANT NATURAL COMMUNITIES							
RTE SPECIES							
NRC WILDLIFE HABITAT							
ARCHAEOLOGY SITES							

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
ANGP-T-C-044	ALIGNMENT SHEET	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
EPSC PLAN

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-EPSC-044 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO II
ENGINEERS AND SCIENTISTS

RIGHT-OF-WAY

MATCHLINE

117
N/F
BALDWIN-HAULENBEEK, ANDREA;
DONELLY-HAULENBEEK, FREDERICK

118
N/F
BALDWIN, DANIEL P.

MATCHLINE

SURVEY DATA

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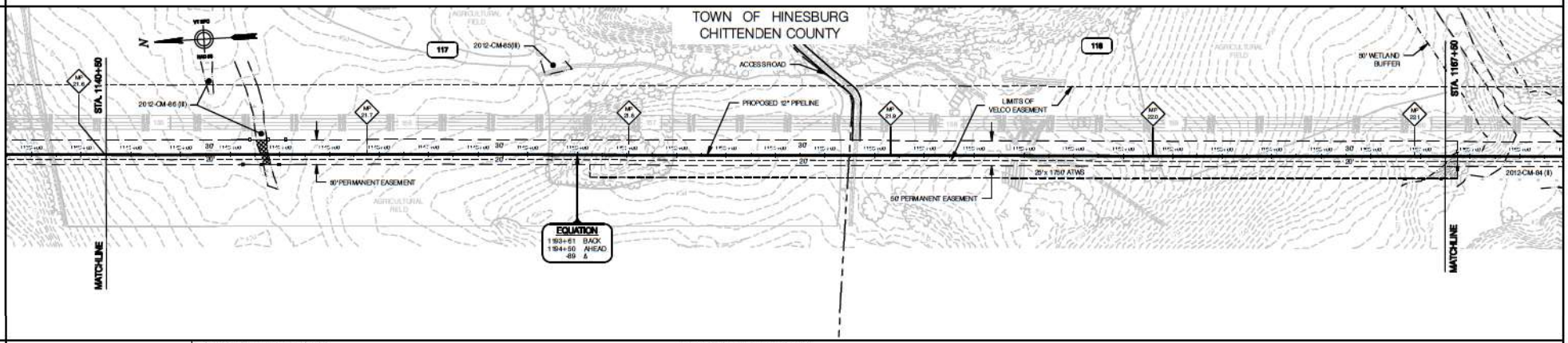
ALIGNMENT DETAIL



EROSION PREVENTION & SEDIMENT CONTROL

LEGEND

- PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- CENTERLINE OF STREAM
- TEMPORARY STREAM CROSSING
- WETLAND
- TEMPORARY MATS AND MATTING
- WETLAND BUFFER WITHIN PROJECT AREA
- REINFORCED CONSTRUCTION DEMARCATION AND REINFORCED PERIMETER CONTROL

INSTALL CONSTRUCTION DEMARCATION:
STA. 1140+50 TO 1156+25 RT - 20' FROM NEW 12" PIPE ℄
STA. 1140+50 TO 1167+50 LT - 30' FROM NEW 12" PIPE ℄

INSTALL REINFORCED PERIMETER CONTROL:
STA. 1143+16 TO 1144+31 RT - 20' FROM NEW 12" PIPE ℄
STA. 1143+02 TO 1144+23 LT - 30' FROM NEW 12" PIPE ℄

INSTALL MATTING:
STA. 1143+52 TO 1143+61

INSTALL CONSTRUCTION DEMARCATION:
STA. 1156+25 TO 1167+50 RT - 40' FROM NEW 12" PIPE ℄

INSTALL STABILIZED CONSTRUCTION ENTRANCE:
STA. 1156+63

INSTALL REINFORCED PERIMETER CONTROL:
STA. 1156+61 TO 1167+50 RT - 40' FROM NEW 12" PIPE ℄
STA. 1167+46 TO 1167+50 LT - 30' FROM NEW 12" PIPE ℄

REINFORCED CONSTRUCTION DEMARCATION AND REINFORCED PERIMETER CONTROLS ARE ONLY SHOWN WITHIN 50 FT. OF WATER RESOURCE AREAS AND AT CONSTRUCTION ENTRANCES - SEE "CONSTRUCTION EPSC NOTES" - NOTE #6. CONSTRUCTION DEMARCATION AND PERIMETER CONTROLS ARE NOT TO CROSS ACCESS WAYS OR ACTIVE FLOW PATHS. FOR AREAS THAT ARE > 50 FT. FROM WATER RESOURCE AREAS, CONSTRUCTION DEMARCATION IS TO BE INSTALLED ALONG PERIMETER OF PROJECT AREA / LIMITS OF DISTURBANCE AND PERIMETER CONTROLS ARE TO BE INSTALLED ON THE DOWNSLOPE SIDE OF AREAS OF DISTURBANCE WHERE THERE IS POTENTIAL FOR SOIL EROSION AND/OR SEDIMENT RUNOFF - SEE NOTE #6.

NOT FOR CONSTRUCTION

HORIZONTAL SCALE
100 50 0 100 200 300 feet
100 50 0 100 200 300 feet
VERTICAL SCALE

CONST. TYPE	20										
SOIL TYPE	BuB	WgB	WaC	FaC	WaB	WaC					
LC/LU	GRASS	FORESTED	GRASS	AGRICULTURAL							
STREAMS											
WETLANDS	WETLAND 2012-CM-86 - STATION 1143+52 TO 1144+61 CLASS II	WETLAND 2012-CM-84 - STATION 1167+11 TO 1167+50 CLASS II									
VERNAL POOLS											
SIGNIFICANT NATURAL COMMUNITIES											
RTE SPECIES											
NRC WILDLIFE HABITAT											
ARCHAEOLOGY SITES											

MATCH LINE

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
		1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
ANGP-T-C-045	ALIGNMENT SHEET	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
EPSC PLAN

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-EPSC-045 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

GHA

COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

RIGHT-OF-WAY

MATCHLINE | 118 N/F BALDWIN, DANIEL P. | 119 DRINKWATER ROAD | 120 N/F BALDWIN, MATTHEW T. | MATCHLINE

SURVEY DATA

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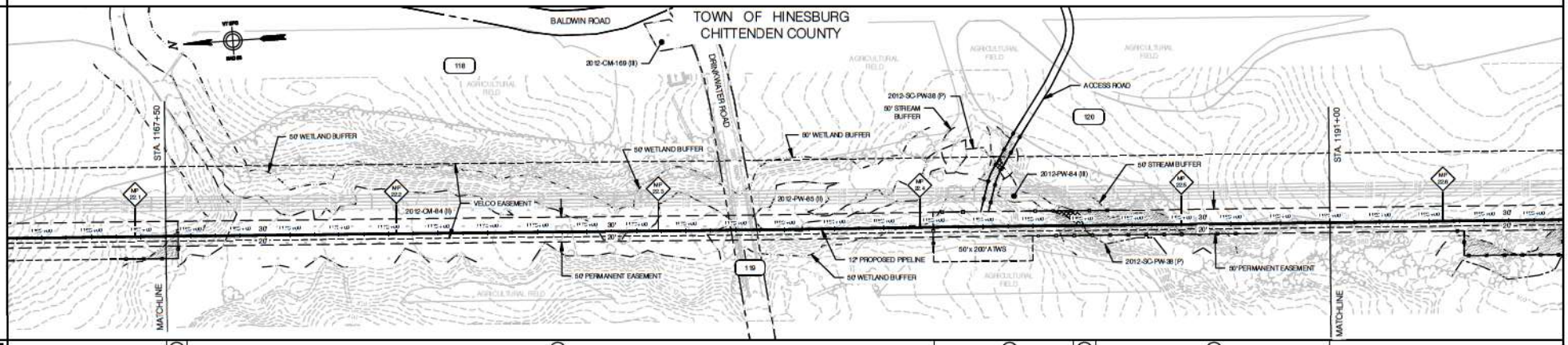
ALIGNMENT DETAIL



CONST. TYPE: 2D | 8 | 2D | 7 | 2D | MATCHLINE

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	1	MATCHLINE
		25 FT	1,525 FT	267 FT	350 FT	208 FT	
COATING		A	B	A	C	A	
CLASSIFICATION		3					
DESIGN FACTOR		0.5					
ROCK PROB.		SURVEY SKIP					

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇑	INTERMITTENT STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇓	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE, ADDING DEPTH TRENCH.	> 30%	100 FT
⚠	ROAD CROSSING / CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,350 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 475 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 1,525 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 350 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-046	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO, INC.
ENGINEERS AND SURVEYORS

YEAR: 2013	W.O.	SCALE: 1" = 100'	DWG.	ANGP-T-C-046	REV. 1

RIGHT-OF-WAY

MATCHLINE | 120 N/F BALDWIN, MATTHEW T. | 121 N/F BALDWIN, DANIEL P. | 122 N/F LAROCK, BRIAN | 123 N/F DAVIS, REBECCA L. | MATCHLINE

SURVEY DATA

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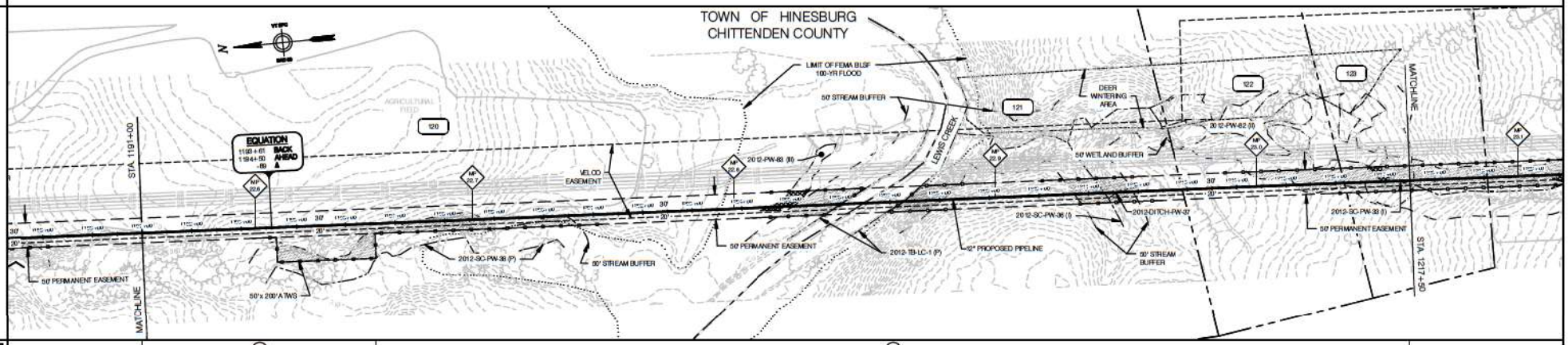
ALIGNMENT DETAIL



CONST. TYPE: 2D | 6

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	MATCHLINE
		559 FT	2,091 FT	
COATING		A	B	
CLASSIFICATION		3		
DESIGN FACTOR		0.5		
ROCK PROB.		SURVEY SKIP		

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,650 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 559 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 2,091 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-047	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO, INC.
ENGINEERS AND SURVEYORS

YEAR: 2013	W.O.	SCALE: 1" = 100'	DWG.	ANGP-T-C-047	REV. 1

RIGHT-OF-WAY	MATCHLINE	123 N/F DAVIS, REBECCA L.	124 N/F AMES, MARK A.	125 N/F MCCAY, CAROLE H.	126 N/F MENEILLEY, JILL	127 N/F LEUSCHNER, EDWARD T. JR. & DAWN	MATCHLINE

SURVEY DATA

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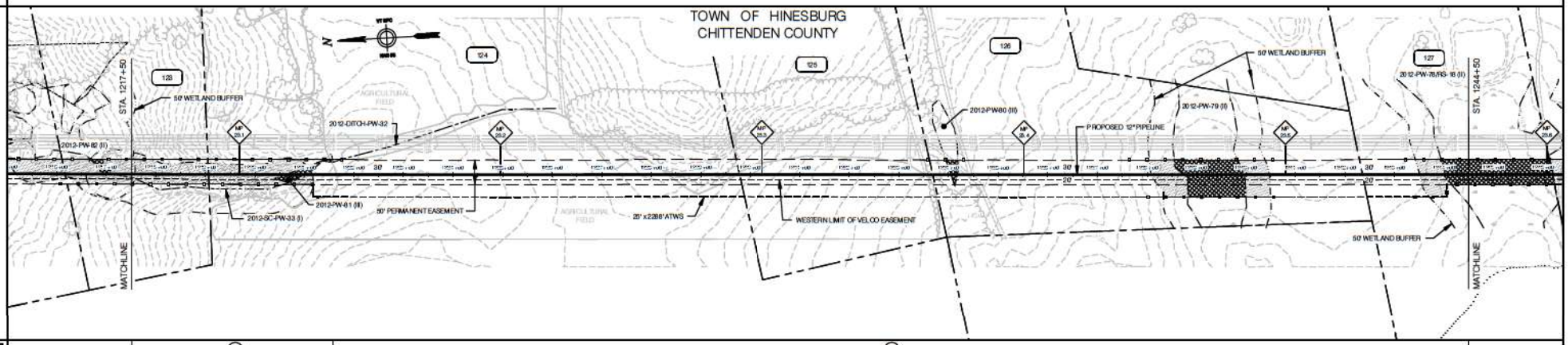
ALIGNMENT DETAIL



CONST. TYPE	8	20

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

MATCHLINE	1	1	1	1	1	1	1	MATCHLINE
	400 FT	1,255 FT	13 FT	392 FT	238 FT	304 FT	98 FT	
COATING	B	A	C	A	C	A	C	
CLASSIFICATION	3							
DESIGN FACTOR	0.5							
ROCK PROB.	SURVEY SKIP							

LEGEND

SYMBOL	DESCRIPTION
○	PERMANENT INTERCEPTOR DIKE.
△	TRENCH PLUG (AS REQUIRED).
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.
△	ROAD CROSSING / CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).

INTERCEPTOR DIKE/TRENCH PLUG SPACING

SLOPE	SPACING
< 5%	NO STRUCTURE
5 – 15%	300 FT
16 – 30%	200 FT
> 30%	100 FT

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,700 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYURETHANE 10/40, PRESC OR APPROVED EQUAL — 1,951 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 400 FT
C EPOXY POLYURETHANE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 348 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-048	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-048 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO II
ENGINEERS AND SCIENTISTS

RIGHT-OF-WAY

MATCH LINE | 127 N/F LEUSCHNER, EDWARD T. JR. & DAWN | 128 N/F DERRICK, DIANE M. | TOWN OF HINESBURG / TOWN OF MONKTON | 129 N/F WEAVER, TODD & TAMMY | 130 N/F ALMOND, DAVID | 131 N/F STEIN, PHILIP J. | 132 N/F MAY, PETER M. & SANDRA | 133 N/F NOLAN, KATHLEEN | 134 N/F NORRIS, NORMA | 133 N/F NOLAN, KATHLEEN | MATCH LINE

SURVEY DATA

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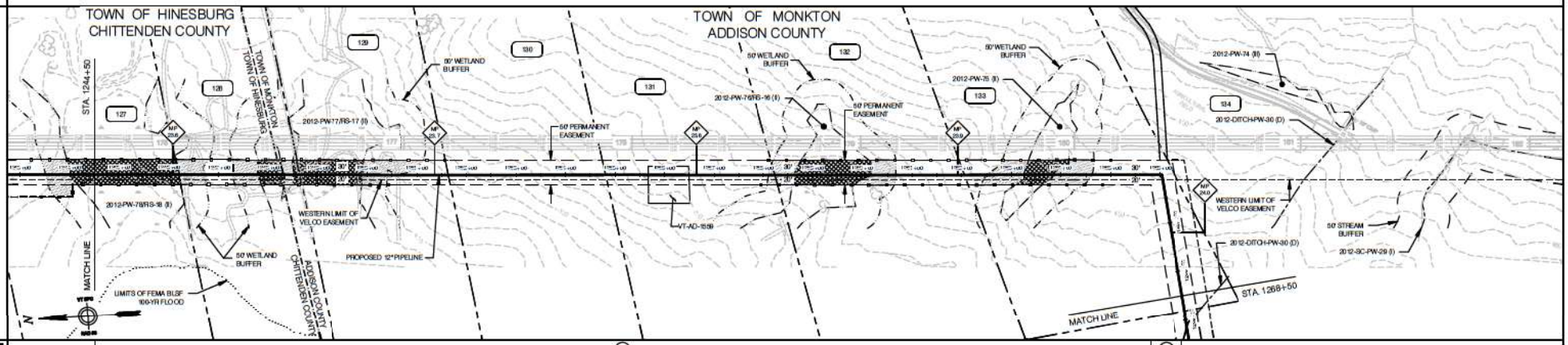
ALIGNMENT DETAIL



CONST. TYPE: 2D | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCH LINE	1	1	1	1	1	1	1	1	2	MATCH LINE
		220 FT	58 FT	312 FT	770 FT	257 FT	183 FT	211 FT	152 FT	237 FT	
COATING		C	A	C	A	C	A	C	A	A	
CLASSIFICATION					3					2	
DESIGN FACTOR					0.5					0.6	
ROCK PROB.					SURVEY SKIP						

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMITTENT STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE, ADDING DEPTH TRENCH.	> 30%	100 FT
	ROAD CROSSING / CRUSHED STONE ROADS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,163 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 237 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYTEMPLINE 10/40, PREEC OR APPROVED EQUAL — 1,400 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYTEMPLINE 10/40, PREEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 1,000 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-049	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-049 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO, INC.
ENGINEERS AND SURVEYORS

RIGHT-OF-WAY

MATCH LINE | 133 N/F NOLAN, KATHLEEN | 134 N/F NORRIS, NORMA | 134.05 N/F PALMER, NATHAN & JANE | 134.05 N/F PALMER, NATHAN & JANE | MATCH LINE

SURVEY DATA

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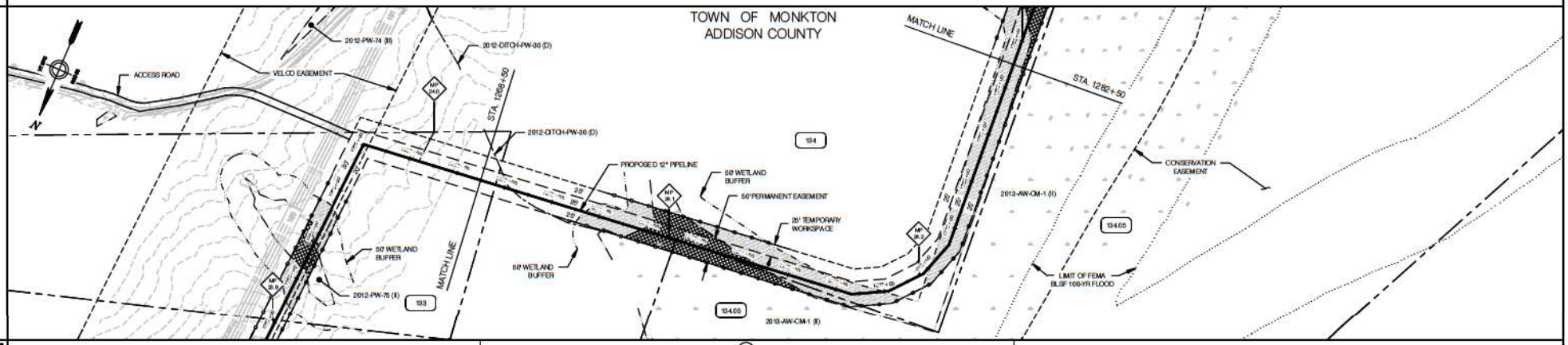
ALIGNMENT DETAIL



CONST. TYPE: 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCH LINE	2 — 340 FT	2 — 1,060 FT	MATCH LINE
COATING		A	C	
CLASSIFICATION		2		
DESIGN FACTOR		0.6		
ROCK PROB.		SURVEY SKIP		

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 1,400 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYTEMPLINE 10/40, PRESC OR APPROVED EQUAL — 340 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYTEMPLINE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 1,060 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION	INITIALS	DATE	INITIALS	DATE
ANGP-EPSC-050	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING				
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING				

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-050 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO

RIGHT-OF-WAY	MATCH LINE	134 N/F NORRIS, NORMA	134.05 N/F PALMER, NATHAN & JANE	137 ROTAK ROAD	138 N/F LATRIELLE, LEONARD & BEVERLY	140 N/F BAILEY, GEORGE	MATCH LINE

SURVEY DATA

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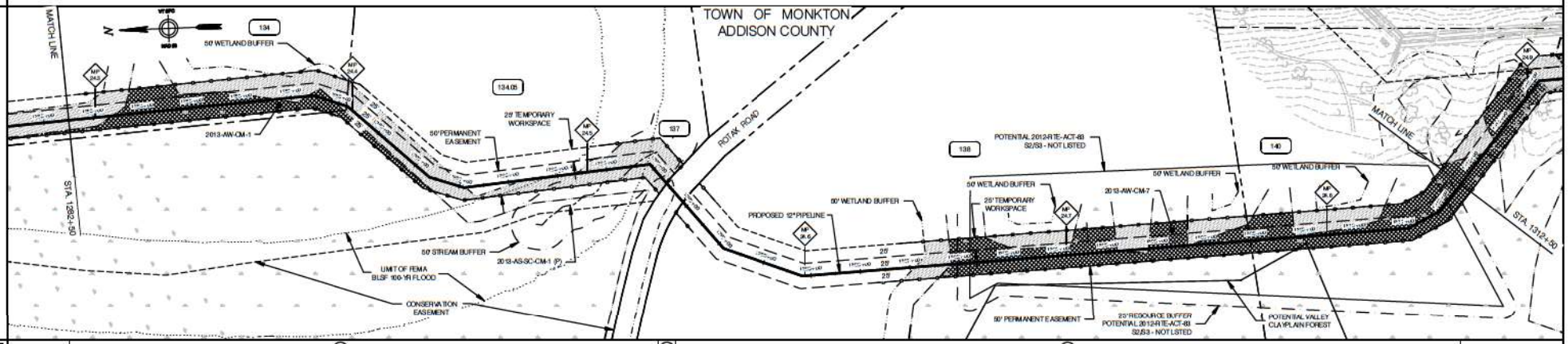
ALIGNMENT DETAIL



CONST. TYPE	1A	11	1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCH LINE	2	1	2	2	MATCH LINE
		1,250 FT	70 FT	613 FT	1067 FT	
COATING		C	B	A	C	
CLASSIFICATION		2	3	2		
DESIGN FACTOR		0.6	0.5	0.6		
ROCK PROB.		SURVEY SKIP				

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING - CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
100 50 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 70 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,930 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 613 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 70 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 2,317 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-051	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLLER & COLANTONIO II
ENGINEERS AND SCIENTISTS

YEAR: 2013	W.O.	SCALE: 1" = 100'	DWG.	ANGP-T-C-051	REV. 1

RIGHT-OF-WAY

MATCH LINE | 140 N/F BAILEY, GEORGE | 141 N/F BUSIER, MARK & SARAH | 142 N/F ADAMS, ERICH. & HEATHER | 143 N/F CLARK, RONALD S. & DAJIT | 144 N/F STETSON, PAUL B. & JOANN | 140 N/F BAILEY, GEORGE | MATCH LINE

SURVEY DATA

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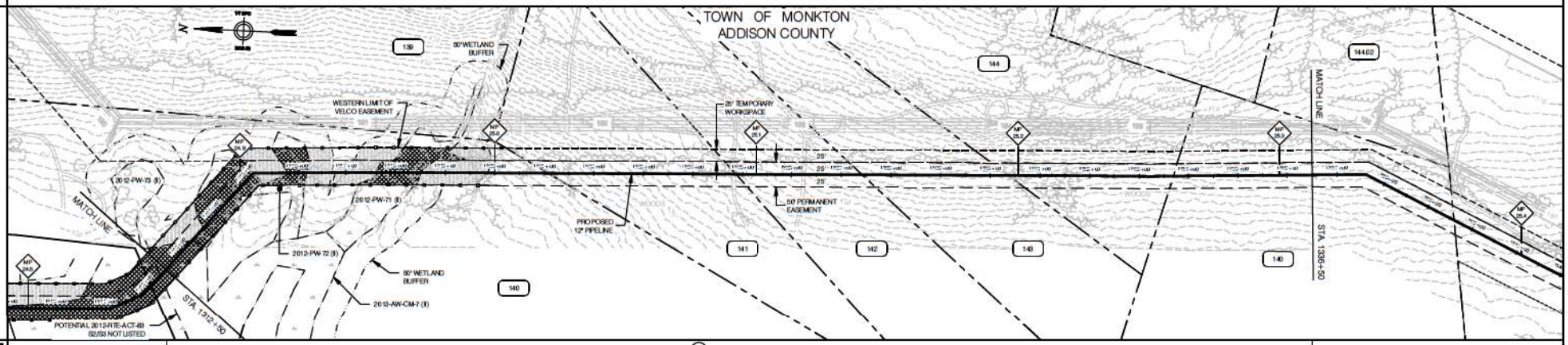
ALIGNMENT DETAIL



CONST. TYPE: 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCH LINE	2	2	MATCH LINE
		735 FT	1,665 FT	
COATING		C	A	
CLASSIFICATION		2		
DESIGN FACTOR		0.6		
ROCK PROB.		SURVEY SKIP	0% - 5%	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
100 50 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,400 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 1,665 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 735 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		INITIALS	DATE	INITIALS	DATE
ANGP-EPSC-052	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	ENVIRONMENTAL				
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
						DESIGN ENGINEER	SAB	02/28/13		
						DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-052 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO, INC.
ENGINEERS AND SURVEYORS

RIGHT-OF-WAY	MATCH LINE	140 N/F BAILEY, GEORGE	146 N/F MALZAC, PAUL E. & KATHY	147 N/F BURRITT, MARK A. & MICHELLE	148 N/F NICOLAY, WILLIAM & HELENA	149 N/F BROUGHTON, CLAIRE TRUSTEE	150 N/F MORROW, JAMES F.	151 N/F MEJIA, JOHNY; LAUER, JESSE	MATCH LINE

SURVEY DATA

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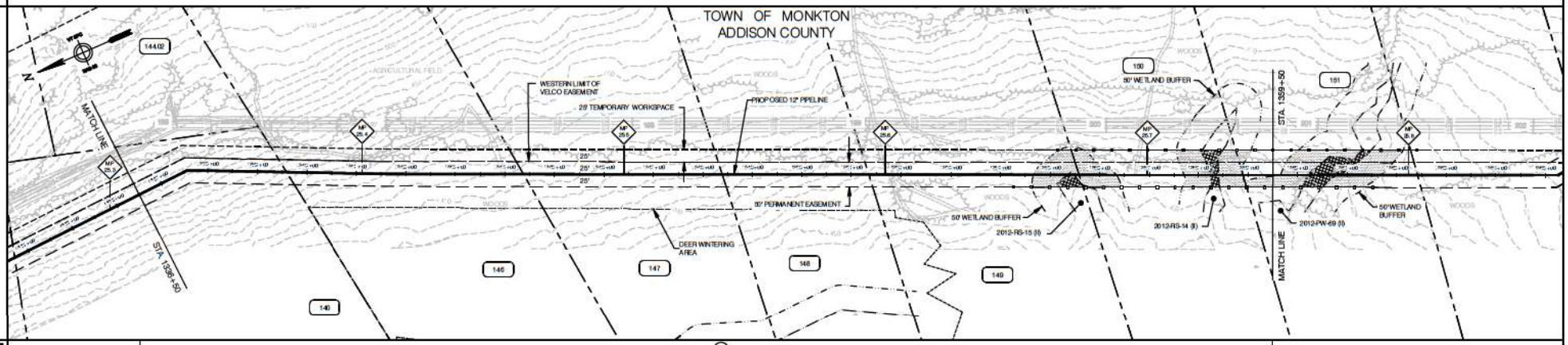
ALIGNMENT DETAIL



CONST. TYPE	1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCH LINE	2	2	2	2	2	MATCH LINE
		1,817 FT	166 FT	138 FT	120 FT	50 FT	
COATING		A	C	A	C	A	
CLASSIFICATION		2					
DESIGN FACTOR		0.6					
ROCK PROB.		0% - 5%					

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
⊥	ROAD CROSSING - CRUSHED STONE ACCESS CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
VERTICAL SCALE
100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,300 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYTEMPLINE 10/40, PRESC OR APPROVED EQUAL — 2,014 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYTEMPLINE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 288 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-053	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO, INC.
ENGINEERS AND SCIENTISTS

YEAR: 2013	W.O.	SCALE: 1" = 100'	DWG.	ANGP-T-C-053	REV. 1

RIGHT-OF-WAY

MATCHLINE | 161 N/F MEJIA JOHNY & LAUER, JESSE | 162 N/F LESAGE, RICHARD L; RICHARD E. LESAGE REVOCABLE LIVING TRUST | 163 N/F PEYSER, LOUISE SELINA | 164 STILLSON ROAD | 165 N/F PEYSER, LOUISE SELINA | 166 N/F MENARD, GERALD & NANCY | MATCH LINE

SURVEY DATA

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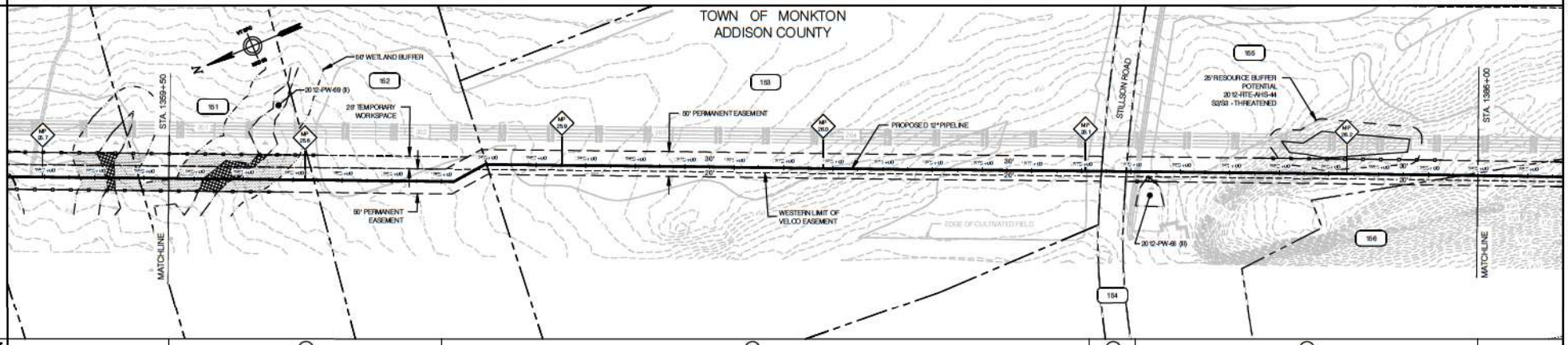
ALIGNMENT DETAIL



CONST. TYPE | 14 | 20 | 11 | 20

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	2	1	1	1	MATCHLINE
		627 FT	1,261 FT	52 FT	710 FT	
COATING		A	A	B	A	
CLASSIFICATION		2	3			
DESIGN FACTOR		0.6	0.5			
ROCK PROB.		SURVEY SKIP				

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	16 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 80 0 100 200 300 feet

VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,023 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 627 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 2,588 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 52 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-054	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-054 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

RIGHT-OF-WAY

MATCHLINE | 155 N/F PEYSER, LOUISE SELINA | 156 N/F MENARD, GERALD; MENARD, NANCY | 157 N/F PEYSER, LOUISE SELINA | 158 N/F MENARD, GERALD; MENARD, NANCY | 159 HOLLOW ROAD | 160 N/F COUSINO, VICKI A. | 161 N/F WAGEMAN, EDWIN J.; WAGEMAN, CAROLE | 162 N/F BEAUPRE, MARC; BEAUPRE, GRETCHEN | 163 N/F HENDRY, MARTHA M. | MATCH LINE

SURVEY DATA

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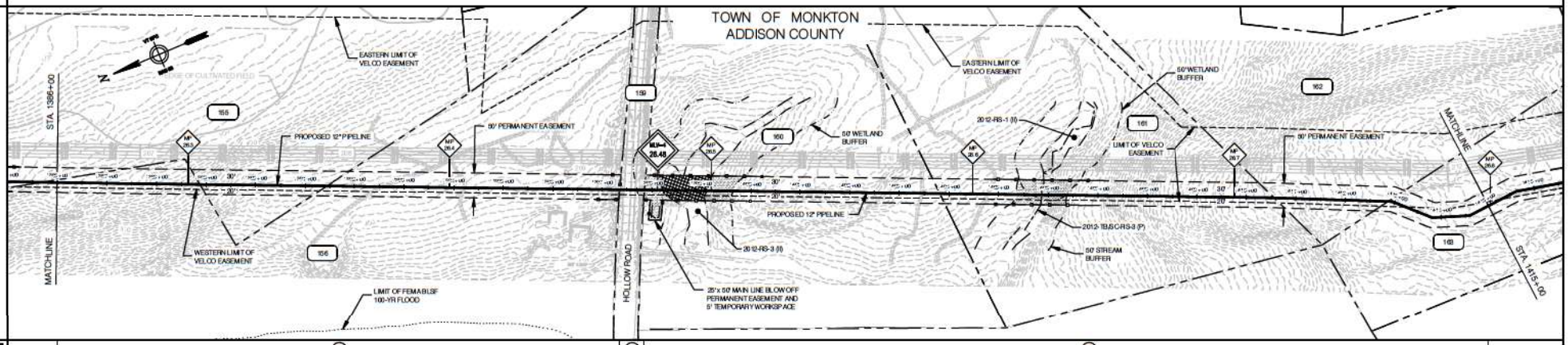
ALIGNMENT DETAIL



CONST. TYPE: 20 | 9 | 20

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	2	MATCHLINE
		1,135 FT	50 FT	201 FT	1,514 FT	176 FT	
COATING		A	B	C	A	A	
CLASSIFICATION		3				2	
DESIGN FACTOR		0.5				0.6	
ROCK PROB.		SURVEY SHP					

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,724 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 176 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 2,849 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 50 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 201 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION	INITIALS	DATE	INITIALS	DATE
					ENVIRONMENTAL				
					DRAFTING DESIGNER	GIL	02/28/13		
ANGP-T-G-021	STATION AND VALVE DETAILS				DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-055	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13	
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13	

BID | CONSTRUCTION

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO, INC.
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-055 | REV. 1

RIGHT-OF-WAY	MATCHLINE	163 N/F HENDRY, MARTHA M.	164 N/F RADLER, ROBERT & BUSCAGLIA, CATHIE M.	165 N/F CHARNLEY, JACQUELINE & THOMAS A.	POST ROAD	166 N/F BOWEN, MICHAEL H. & ELLEN L.	167 N/F LITTLE, ROBERT A. & FAITH E.	168 N/F COTA, ROGER & ALYSON	169 N/F CLARK, RICKY D. & MARENE.	170 N/F ALDERMAN, MICHAEL J.	MATCH LINE

SURVEY DATA

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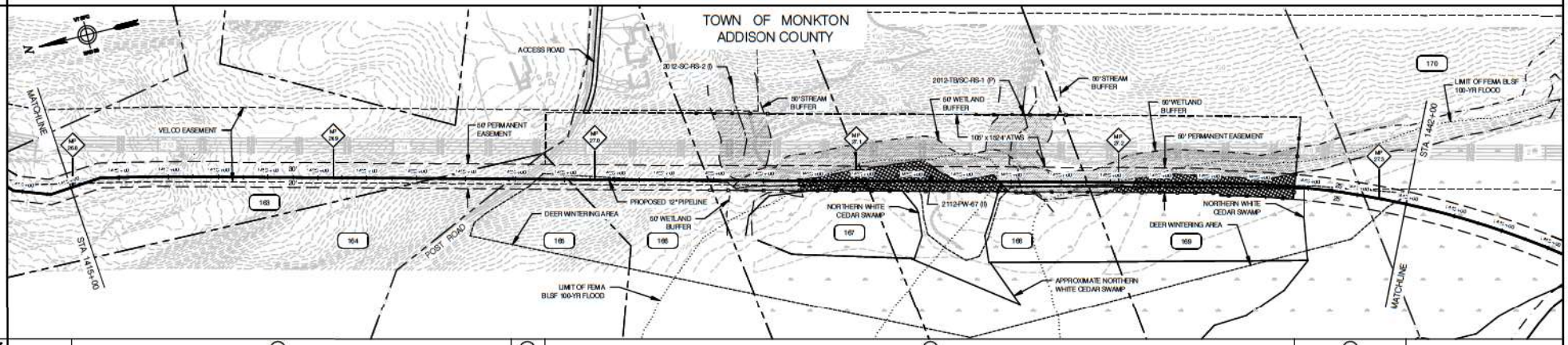
ALIGNMENT DETAIL



CONST. TYPE	20	11	20	8

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	2	1	1	1	1	1	1	1	2	MATCHLINE
		29 FT	862 FT	58 FT	511 FT	406 FT	272 FT	152 FT	164 FT	216 FT	
COATING		A	A	B	A	C	A	C	B	B	
CLASSIFICATION		3								2	
DESIGN FACTOR		0.5								0.5	
ROCK PROB.		SURVEY SKIP									

LEGEND

SYMBOL	DESCRIPTION
○	PERMANENT INTERCEPTOR DIKE.
△	TRENCH PLUG (AS REQUIRED).
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.
	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).

INTERCEPTOR DIKE/TRENCH PLUG SPACING

SLOPE	SPACING
< 5%	NO STRUCTURE
5 – 15%	300 FT
16 – 30%	200 FT
> 30%	100 FT

HORIZONTAL SCALE
100 80 0 100 200 300 feet
100 80 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,455 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 245 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,574 FT
B ABRASION RESISTANT COATING, 40 MILS, WARREN 100 OR APPROVED EQUAL — 488 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 558 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-056	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013	W.O.	SCALE: 1" = 100'	DWG. ANGP-T-C-056	REV. 1

RIGHT-OF-WAY

MATCHLINE | 170 N/F ALDERMAN, MICHAEL J. | 178.02 N/F BOISSE, JOSEPH A.; WILLIAMS, DAVID L. | MATCHLINE

SURVEY DATA

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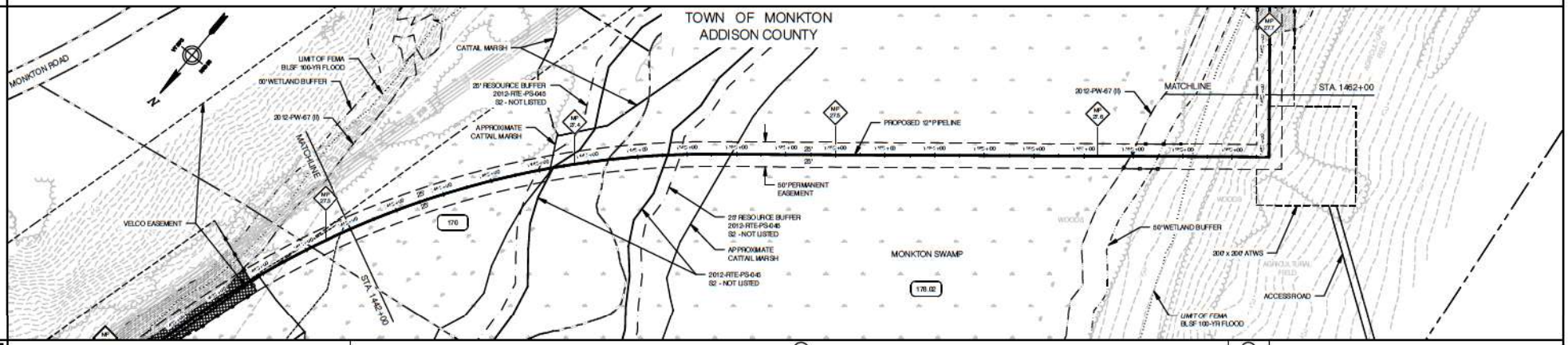
ALIGNMENT DETAIL



CONST. TYPE | 8 | 2A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	2	2	MATCHLINE
		1,875 FT	125 FT	
COATING		B	A	
CLASSIFICATION		2		
DESIGN FACTOR		0.6		
ROCK PROB.		SURVEY SKIP		

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
100 50 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,000 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYURETHANE 10/40, PRESC OR APPROVED EQUAL — 125 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 1,875 FT
C EPOXY POLYURETHANE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-057	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO
ENGINEERS AND SCIENTISTS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-057 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 176.02 N/F BOISSE, JOSEPH A.; WILLIAMS, DAVID L. | 178 N/F HUIZENGA, CHARLES; HUIZENGA, RAYMOND | MATCH LINE

SURVEY DATA

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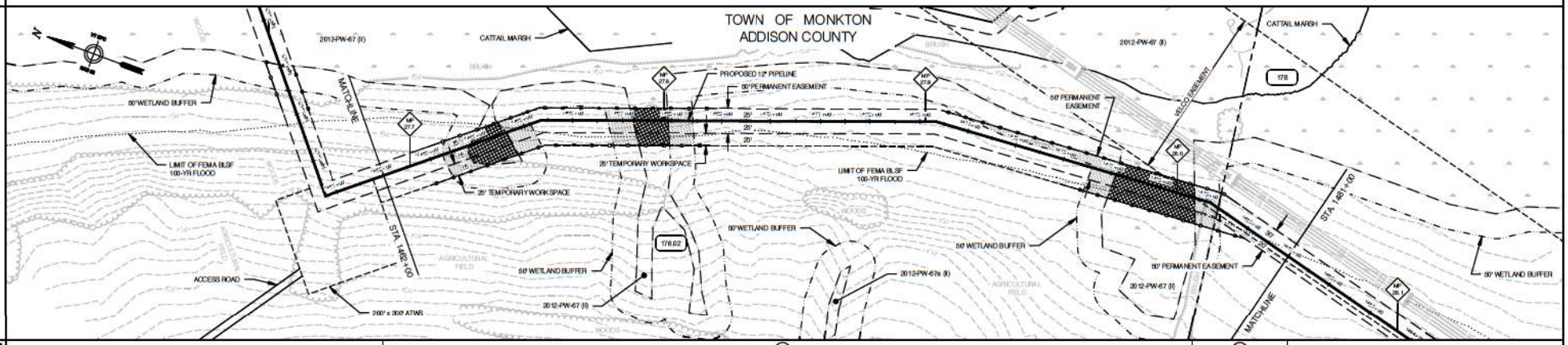
ALIGNMENT DETAIL



CONST. TYPE: 1E | 2D

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	2	2	2	2	2	2	1	MATCHLINE
		176 FT	94 FT	245 FT	76 FT	916 FT	186 FT	208 FT	
COATING		A	C	A	C	A	C	A	
CLASS/DIVISION		2						3	
DESIGN FACTOR		0.6						0.5	
ROCK PROB.		SURVEY SKIP							

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
O	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 - 15%	300 FT
	INTERMEDIATE STREAM CROSSING: CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 - 30%	200 FT
	MINOR STREAM CROSSING: CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FILTER FIBS ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING: CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC @ 1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 1,900 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 1,545 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 355 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-058	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 - 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
	INITIALS	DATE	INITIALS	DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO II
ENGINEERS AND SCIENTISTS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-058 | REV. 1

RIGHT-OF-WAY

MATCHLINE

178 N/F HUZIENGA, CHARLES; HUZIENGA, RAYMOND

182 MONKTON ROAD

176 N/F HUZIENGA, CHARLES; HUZIENGA, RAYMOND

MATCH LINE

SURVEY DATA

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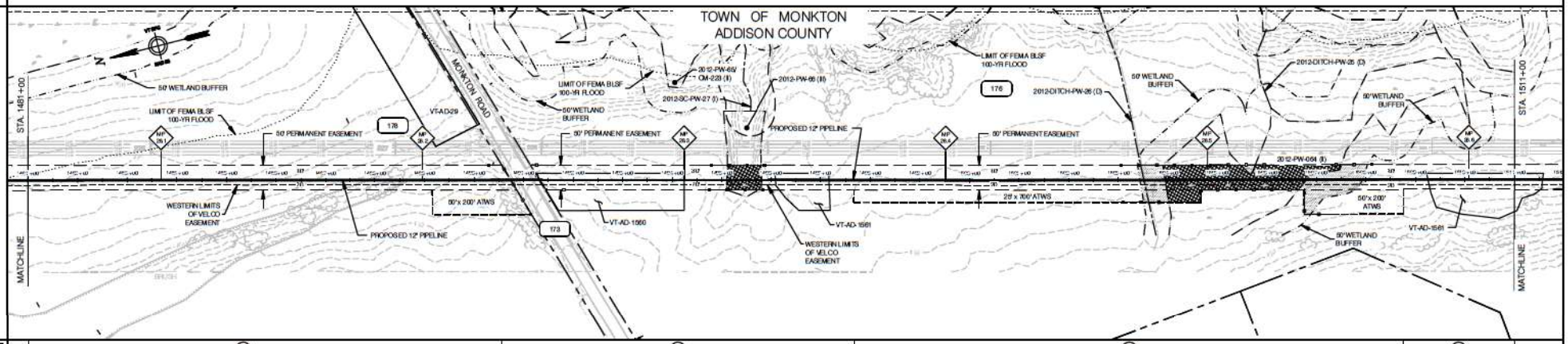
ALIGNMENT DETAIL



CONST. TYPE: 2D | B | 2D | B

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

MATCHLINE	1	1	1	1	1	1	MATCHLINE
	966 FT	711 FT	627 FT	367 FT	125 FT	224 FT	
COATING	A	B	A	C	A	B	
CLASSIFICATION	3						
DESIGN FACTOR	0.5						
ROCK PROB.	SURVEY SHOP						

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 - 15%	200 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 - 30%	200 FT
⇧	MINOR STREAM CROSSING - CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FILTER FIBE ACROSS OPEN TRENCH.	> 30%	100 FT
⚠	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC @ 1 SLOPES OR GREATER).		

HORIZONTAL SCALE

100 50 0 100 200 300 feet

100 50 0 100 200 300 feet

VERTICAL SCALE

PIPE MATERIAL:

1	12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2	3,000 FT
2	12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S	0 FT
3	18" O.D. X 0.500" WT, API-5L, GR. B	0 FT

PIPE COATING:

A	EPOXY POLYTHYLENE 10/40, PRESC OR APPROVED EQUAL	1,706 FT
B	ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL	935 FT
C	EPOXY POLYTHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT	357 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-059	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 - 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-059 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO II
ENGINEERS AND SCIENTISTS

RIGHT-OF-WAY

MATCHLINE

176
N/F
HUZIENGA, CHARLES;
HUZIENGA, RAYMOND

181
N/F
HURLBURT, HERRICK & CHARLOTTE

MATCHLINE

SURVEY DATA

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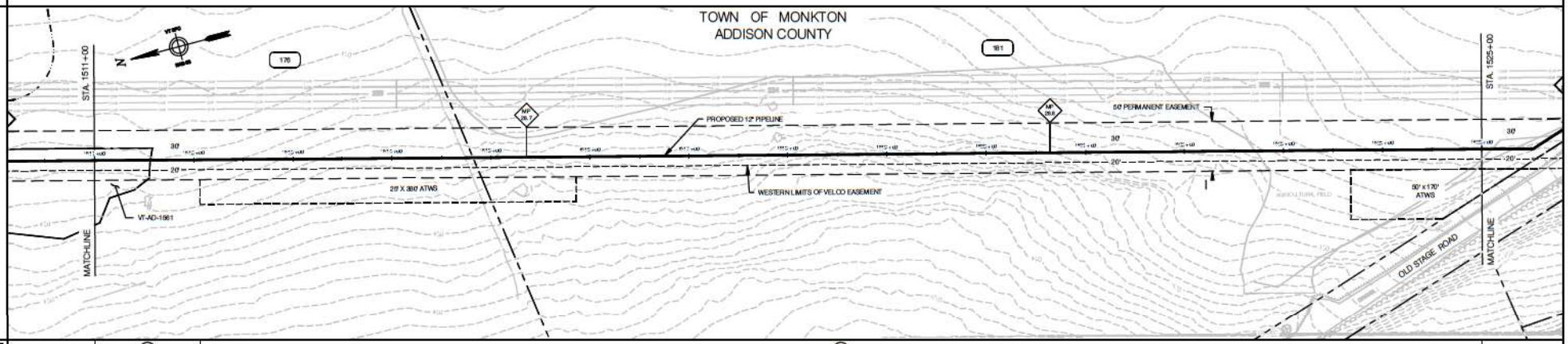
ALIGNMENT DETAIL



CONST. TYPE: 8 | 20

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1 (105 FT)	1 (1,294 FT)	MATCHLINE
COATING		B	A	
CLASSIFICATION			3	
DESIGN FACTOR			0.5	
ROCK PROB.			SURVEY SKIP	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
50 25 0 50 100 150 feet
50 25 0 50 100 150 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 1,400 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 1,294 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 105 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION	INITIALS	DATE	INITIALS	DATE
ANGP-EPSC-060	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING				
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING				

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 50' | DWG. ANGP-T-C-060 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO, INC.
ENGINEERS AND SCIENTISTS

RIGHT-OF-WAY

MATCHLINE — 181 NF HURLBURT, HERRICK & CHARLOTTE — 182 OLD STAGE ROAD — MATCH LINE

SURVEY DATA

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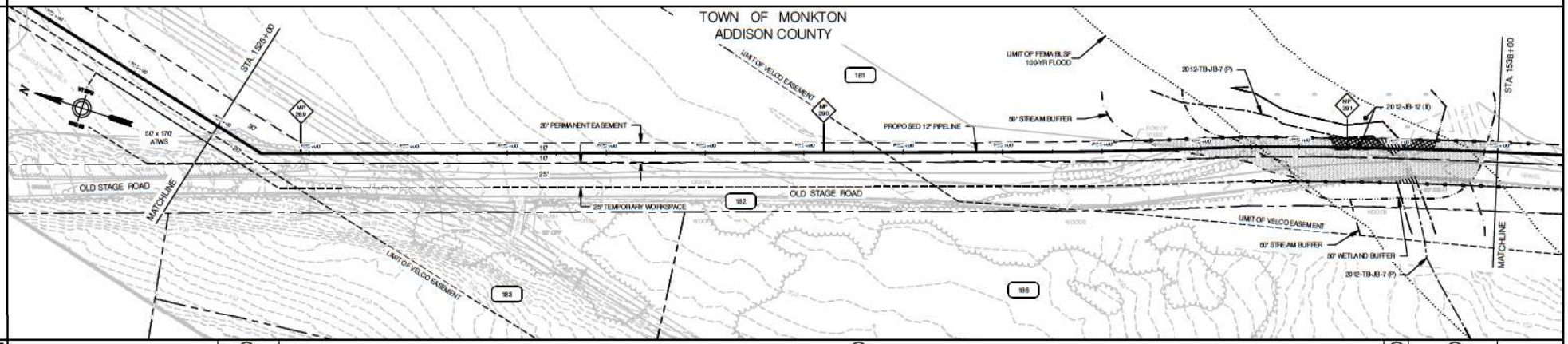
ALIGNMENT DETAIL



CONST. TYPE: 20 — 4A — 7 — 4A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	2	2	2	MATCHLINE
		759 FT	162 FT	348 FT	11 FT	
COATING		A	A	C	A	
CLASSIFICATION		3	2			
DESIGN FACTOR		0.5	0.6			
ROCK PROB.	SURVEY SKIP	75% - 90%				

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 50 25 0 50 100 150 feet

VERTICAL SCALE: 50 25 0 50 100 150 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 759 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 541 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 952 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 348 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION	INITIALS	DATE	INITIALS	DATE
ANGP-EPSC-061A	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING				
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING				

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO II
ENGINEERS AND SCIENTISTS

YEAR: 2013 | W.O. | SCALE: 1" = 50' | DWG. ANGP-T-C-061A | REV. 1

RIGHT-OF-WAY

MATCHLINE

181

NF
HURLBURT, HERRICK & CHARLOTTE

182

OLD STAGE ROAD

MATCH LINE

SURVEY DATA

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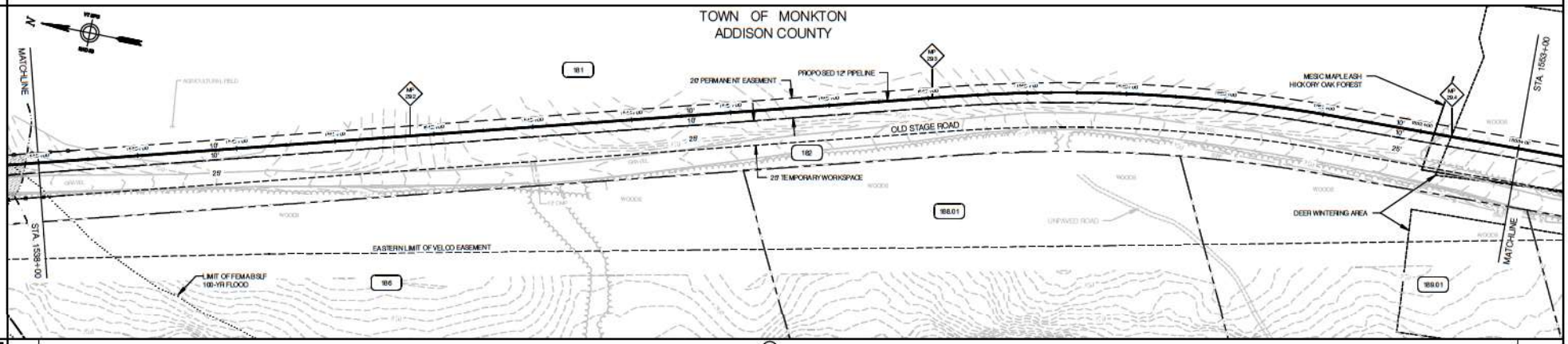
ALIGNMENT DETAIL



CONST. TYPE

4A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

MATCHLINE

2

1,500 FT

COATING	A
CLASSIFICATION	2
DESIGN FACTOR	0.6
ROCK PROB.	75% - 90%

MATCHLINE

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇑	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇑	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE

50 25 0 50 100 150 feet

VERTICAL SCALE

50 25 0 50 100 150 feet

PIPE MATERIAL:

1	12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2	0 FT
2	12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S	1,500 FT
3	18" O.D. X 0.500" WT, API-5L, GR. B	0 FT

PIPE COATING:

A	EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL	1,500 FT
B	ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL	0 FT
C	EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT	0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION	INITIALS	DATE	INITIALS	DATE
ANGP-EPSC-061B	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING				
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING				

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO II
ENGINEERS AND SCIENTISTS

YEAR: 2013 | W.O. | SCALE: 1" = 50' | DWG. ANGP-T-C-061B | REV. 1

RIGHT-OF-WAY

MATCHLINE — 181 N/F HURLBURT, HERRICK & CHARLOTTE — 182 OLD STAGE ROAD — 192 N/F HURLBURT, HERRICK & CHARLOTTE — MATCH LINE

SURVEY DATA

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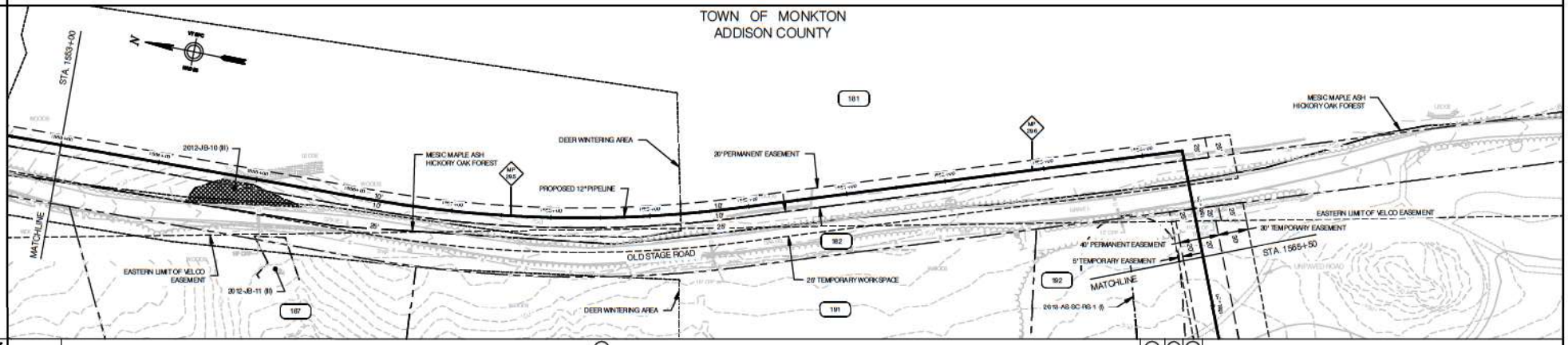
ALIGNMENT DETAIL



CONST. TYPE — 4A — 11 — 15 — 191

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE			MATCHLINE
	2	1	1	
	1,151 FT	50 FT	49 FT	
COATING	A	B	A	
CLASSIFICATION	2	1		
DESIGN FACTOR	0.6	0.5		
ROCK PROB.	75% - 90%	SURVEY SKIP		

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 50 25 0 50 100 150 feet
VERTICAL SCALE: 50 25 0 50 100 150 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 50 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 1,151 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,200 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 50 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-062	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 50' | DWG. ANGP-T-C-062 | REV. 1

RIGHT-OF-WAY	MATCHLINE	192 N/F HURLBURT, HERRICK & CHARLOTTE	194 N/F GRACE, LAWRENCE JR. & SANDRA L	195 PARKS-HURLBURT ROAD	196 N/F HURLBURT, HERRICK & CHARLOTTE	MATCH LINE

SURVEY DATA

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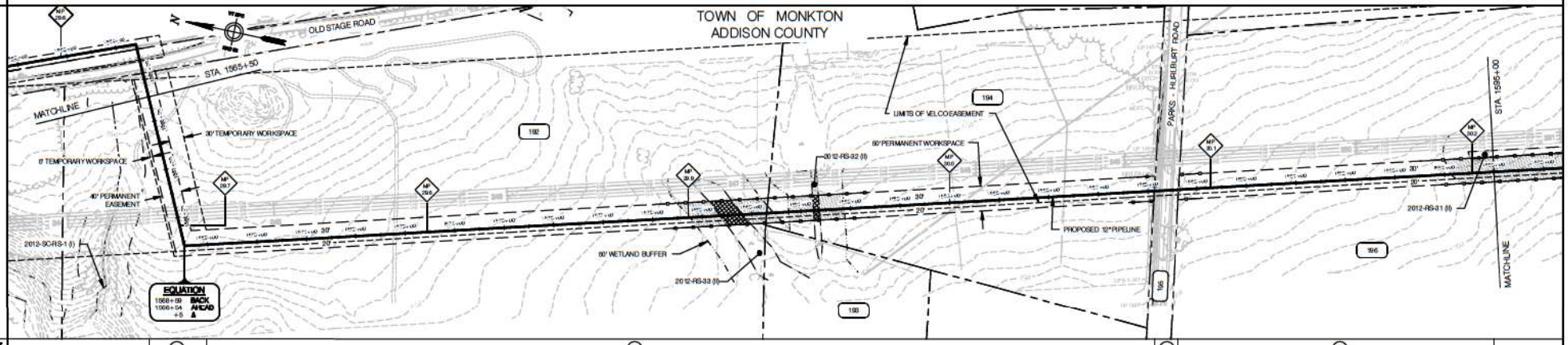
ALIGNMENT DETAIL



CONST. TYPE	1H	2D	1I	2D

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS	MATCHLINE	1	1	1	1	1	1	MATCHLINE
		1,301 FT	341 FT	626 FT	30 FT	539 FT	98 FT	
COATING		A	C	A	B	A	C	
CLASSIFICATION		3						
DESIGN FACTOR		0.5						
ROCK PROB.		SURVEY SKIP						

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	1 - 15%	300 FT
	INTERMEDIATE STREAM CROSSING. CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	5 - 30%	200 FT
	MINOR STREAM CROSSING. CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, PLUME BREAKERS, DRAIN DIKES.	> 30%	100 FT
	ROAD CROSSING 1. CRUSHED STONE ACCESS, SILT FENCE (AS REQD), EROSION CONTROL FABRIC (≥ 15 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
100 50 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:	
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2	2,955 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S	0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B	0 FT
PIPE COATING:	
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL	2,465 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL	50 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT	439 FT

							BID		CONSTRUCTION	
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-063	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-001 - 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		
DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-063 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

RIGHT-OF-WAY

MATCHLINE

196

N/F
HURLBURT, HENRICK & CHARLOTTE

MATCH LINE

SURVEY DATA

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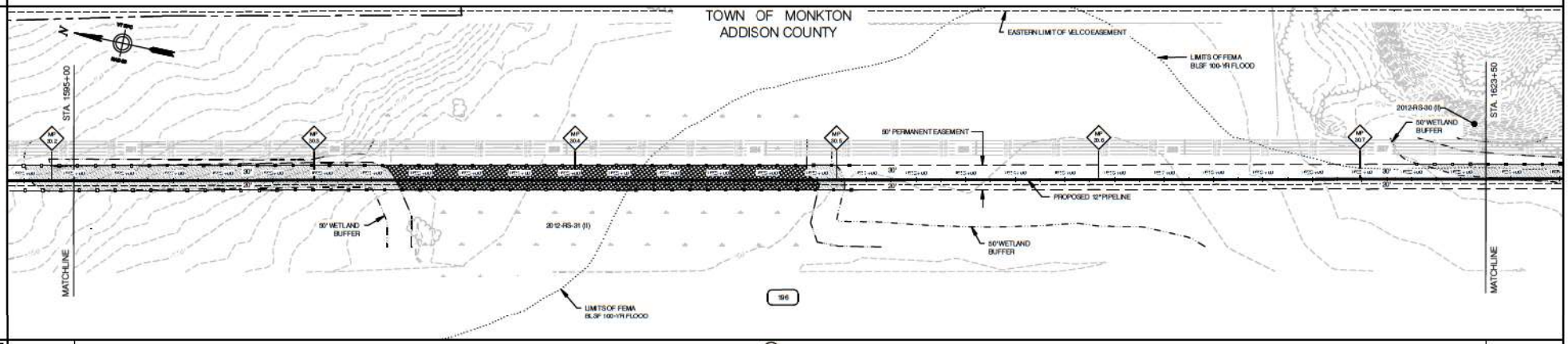
ALIGNMENT DETAIL



CONST. TYPE

20

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	MATCHLINE
		1,667 FT	1,159 FT	134 FT	
COATING		C	A	C	
CLASSIFICATION		3			
DESIGN FACTOR		0.5			
ROCK PROB.		SURVEY SKIP			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED.	5 - 15%	200 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 - 30%	200 FT
⇧	MINOR STREAM CROSSING - CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FILTER FIBER ACROSS OPEN TRENCH.	> 30%	100 FT
⚠	ROAD CROSSING : CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC @ 1:1 SLOPES OR GREATER).		

HORIZONTAL SCALE

100 50 0 100 200 300 feet

100 50 0 100 200 300 feet

VERTICAL SCALE

PIPE MATERIAL:

1	12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2	0 FT
2	12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S	2,850 FT
3	18" O.D. X 0.500" WT, API-5L, GR. B	0 FT

PIPE COATING:

A	EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL	1,159 FT
B	ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL	0 FT
C	EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT	1,891 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION	INITIALS	DATE	INITIALS	DATE
ANGP-EPSC-064	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING				
G-001 - 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING				

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-064 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO II
ENGINEERS AND SCIENTISTS

RIGHT-OF-WAY

MATCHLINE | 196 N/F HURLBERT, HERRICK, HURLBURT, CHARLOTTE | TOWN OF MONKTON / TOWN OF NEW HAVEN | 197 N/F MERRITT, MARGARET | 198 N/F MERRITT, MARGARET | 199 N/F MERRITT, MARGARET | 200 N/F MERRITT, MARGARET | 201 N/F MERRITT, MARGARET | 202 N/F EVEREST, DOUGLAS A. | MATCH LINE

SURVEY DATA

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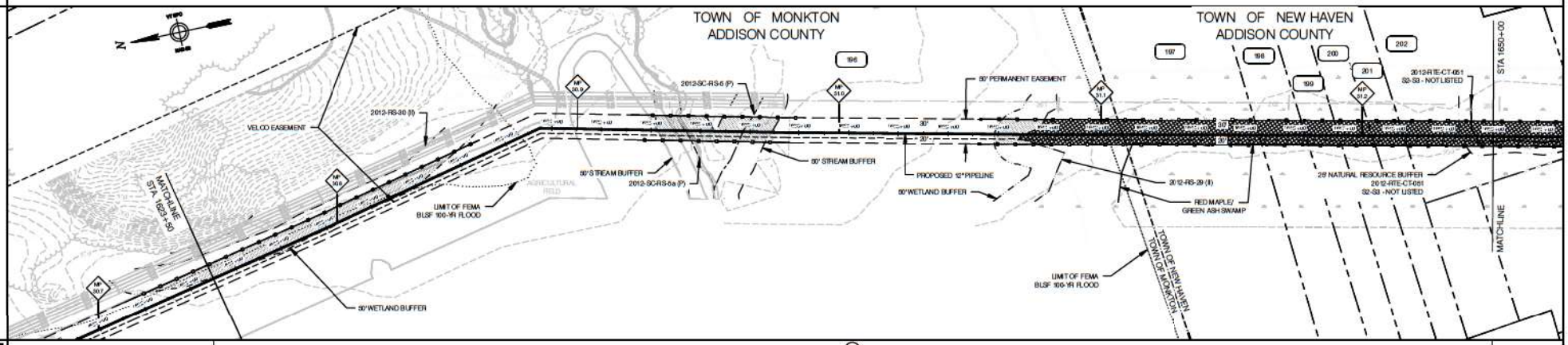
ALIGNMENT DETAIL



CONST. TYPE | 20

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	1	1	1	1	MATCHLINE
		555 FT	404 FT	252 FT	431 FT	1,008 FT	
COATING		C	A	C	A	C	
CLASSIFICATION		3					
DESIGN FACTOR		0.5					
ROCK PROB.		SURVEY SKIP					

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
O	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
↑	INTERMITTENT STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
↓	MAJOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE, ADDING DEEP TRENCH.	> 30%	100 FT
▲	ROAD CROSSING / CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (5% SLOPE OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
100 50 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 2,650 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 835 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 1,815 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-065	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-065 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO II
ENGINEERS AND SCIENTISTS

RIGHT-OF-WAY

MATCHLINE | 202 N/F EVEREST, JEFFREY | 206 N/F MERRITT, MARGARET | 205 N/F PECK, JOHN | 207 N/F MERRITT, MARGARET | 208 N/F PECK, JOHN | 211 N/F LEGAULT, JOHN & ANN | 212 N/F MERRITT, MARGARET | 213 N/F CHONIERE, JAMES & SHERRY | MATCHLINE

SURVEY DATA

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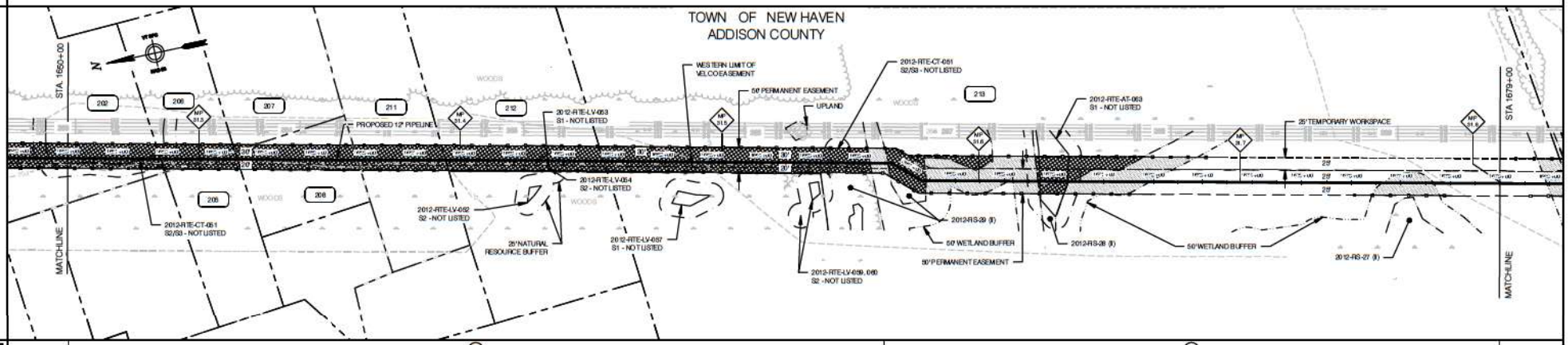
ALIGNMENT DETAIL



CONST. TYPE: 2D | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	1	2	2	2	2	MATCHLINE
		1,684 FT	509 FT	470 FT	103 FT	134 FT	
COATING		C	C	A	C	A	
CLASSIFICATION		3	2				
DESIGN FACTOR		0.5	0.6				
ROCK PROB.		SURVEY SKIP					

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING / CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (21 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MANIFOLD:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 1,684 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B — 1,216 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYURETHANE 10/40, PRESC OR APPROVED EQUAL — 604 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYURETHANE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 2,296 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-066	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

GHA

COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-066 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 213 N/F CHOINIERE, JAMES & SHERRY | 214 N/F ELGIN SPRING FARM | 215 N/F SMITH, HARVEY | 216 N/F FOUR HILLS FARM PARTNERSHIP | MATCH LINE

SURVEY DATA

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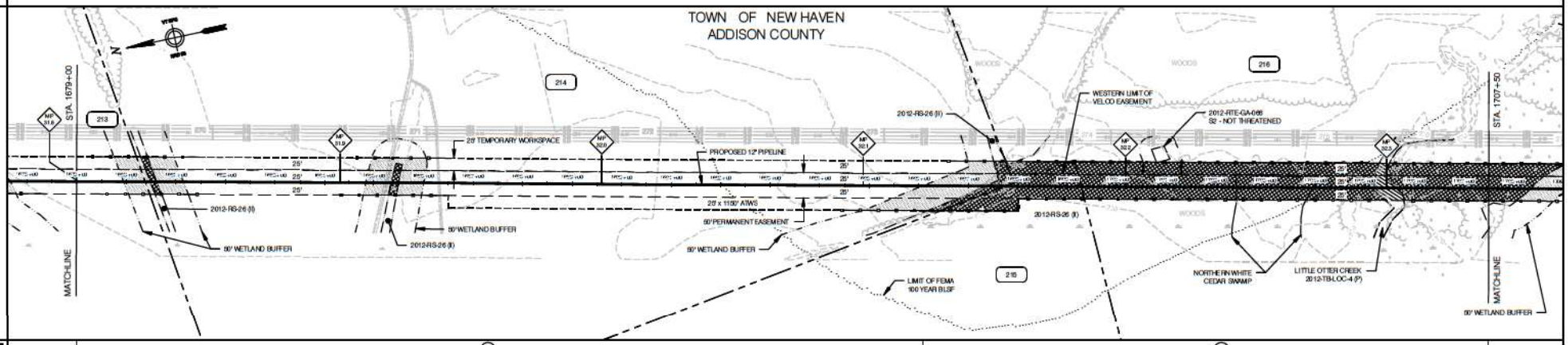
ALIGNMENT DETAIL



CONST. TYPE: 1A | B

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

MATCHLINE	2	2	2	2	2	2	MATCHLINE
	95 FT	120 FT	368 FT	118 FT	1,007 FT	1,542 FT	
COATING	A	C	A	C	A	B	
CLASSIFICATION	2						
DESIGN FACTOR	0.6						
ROCK PROB.	SURVEY SKIP						

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS, SILT FENCE (AS REQ'D), EROSION CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,850 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 1,470 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 1,142 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 238 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-067	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-067 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 216 N/F FOUR-HILLS FARM | 216.01 PLANK ROAD | 217 N/F ELGIN SPRING FARM | 219 N/F LUTTON, DAVID | 218 N/F ELGIN SPRING FARM | MATCHLINE

SURVEY DATA

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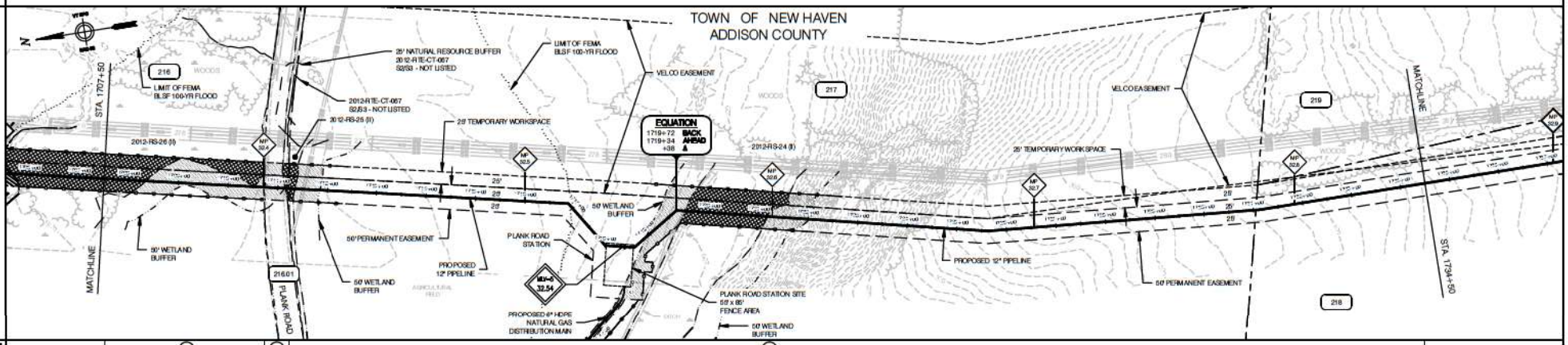
ALIGNMENT DETAIL



CONST. TYPE: 1A | 11 | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	2	1	2	2	2	2	MATCHLINE
		340 FT	50 FT	50 FT	660 FT	304 FT	1,246 FT	
COATING		C	B	C	A	C	A	
CLASSIFICATION		2	3		2			
DESIGN FACTOR		0.6	0.5		0.6			
ROCK PROB.		SURVEY SKIP			0% - 5%			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇑	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇑	MAJOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE, ACROSS DEEP TRENCH.	> 30%	100 FT
▲	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (21% SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 50 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,650 FT
3 18" O.D. X .500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 1,926 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 50 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 724 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-V001	EPSC PLAN				
ANGP-T-G-021	STATION AND VALVE DETAILS				
ANGP-EPSC-068	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO, INC. ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-068 | REV. 1

RIGHT-OF-WAY

MATCHLINE

218
NF
ELGIN SPRING FARM

MATCHLINE

SURVEY DATA

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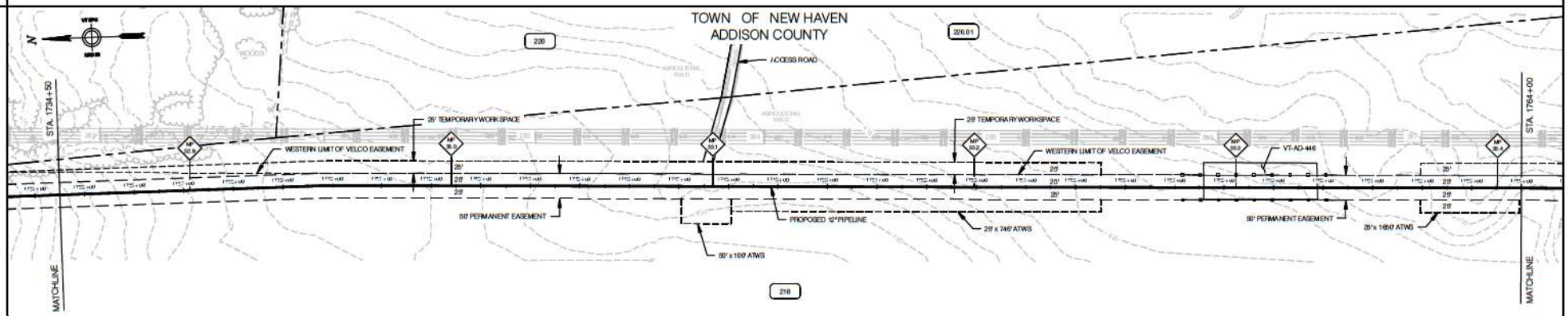
ALIGNMENT DETAIL



CONST. TYPE: 1A | B | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

MATCHLINE | 2 | 2 | 2 | MATCHLINE

	2,100 FT	648 FT	202 FT
COATING	A	B	A
CLASSIFICATION	2		
DESIGN FACTOR	0.6		
ROCK PROB.	0% - 5%		

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
⚠	ROAD CROSSING - CRUSHED STONE ACCESS CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
100 50 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,950 FT
3 18" O.D. X .500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYTHYLENE 10/40, PRESC OR APPROVED EQUAL — 2,302 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 648 FT
C EPOXY POLYTHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-069	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-069 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 218 N/F ELGIN SPRING FARM | 220.02 QUARRY ROAD | 221 N/F FARNSWORTH, RALPH & YVONNE | 222 N/F SMITH, JEAN | MATCHLINE

SURVEY DATA

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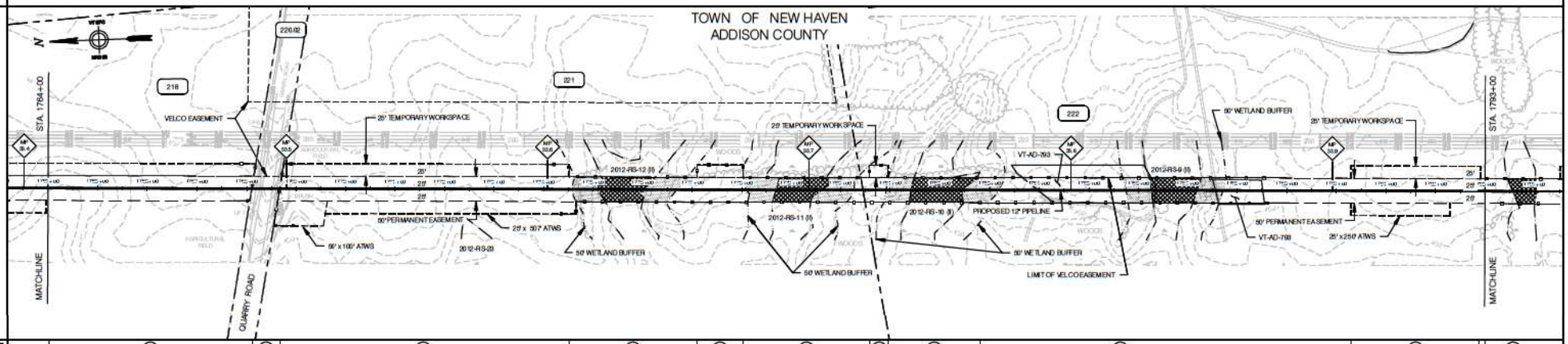
ALIGNMENT DETAIL



CONST. TYPE	1A	11	1A	2A	1A	2A	1A	2A	B	1A	2A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	2	1	2	2	2	2	2	2	2	2	MATCHLINE
		410 FT	57 FT	690 FT	212 FT	140 FT	218 FT	54 FT	169 FT	749 FT	271 FT	
COATING		A	B	A	C	A	C	A	C	B	A	
CLASSIFICATION		2	3	2								
DESIGN FACTOR		0.6	0.5	0.6								
ROCK PROB.		0% - 5%										

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 57 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,843 FT
3 16" O.D. X .500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 1,475 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 606 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 619 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION	INITIALS	DATE	INITIALS	DATE
ANGP-EPSC-070	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING				
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING				

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO, INC.
ENGINEERS AND SCIENTISTS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-070 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 222 N/F SMITH JEAN | 223 N/F SMITH JEAN | 224 N/F FOUR-HILLS FARM | 225 N/F FOUR-HILLS FARM | MATCHLINE

SURVEY DATA

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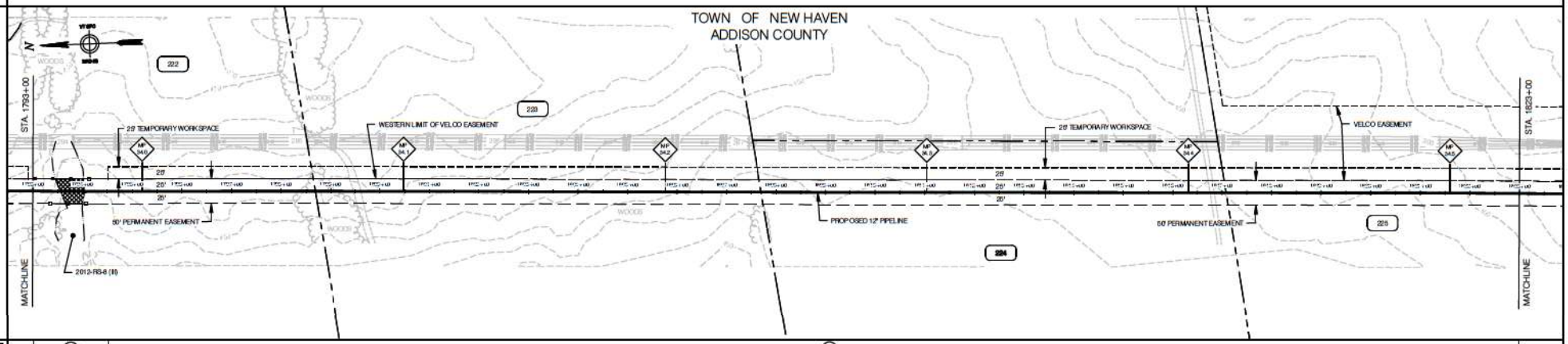
ALIGNMENT DETAIL



CONST. TYPE: 2A | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	2	2	2	MATCHLINE
		56 FT	48 FT	2,896 FT	
COATING		A	C	A	
CLASSIFICATION				2	
DESIGN FACTOR				0.6	
ROCK PROB.				0% - 5%	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
⊥	ROAD CROSSING - CRUSHED STONE ACCESS CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 3,000 FT
3 18" O.D. X .500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 2,952 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 48 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-071	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-071 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO, INC.
ENGINEERS AND SURVEYORS

RIGHT-OF-WAY	MATCHLINE	225 N/F FOUR-HILLS FARM	226 N/F ELGIN SPRING FARM	226.01 ROUTE 17	229 N/F VERMONT TRANSCO, LLC	231 N/F VERMONT TRANSCO, LLC	MATCHLINE

SURVEY DATA

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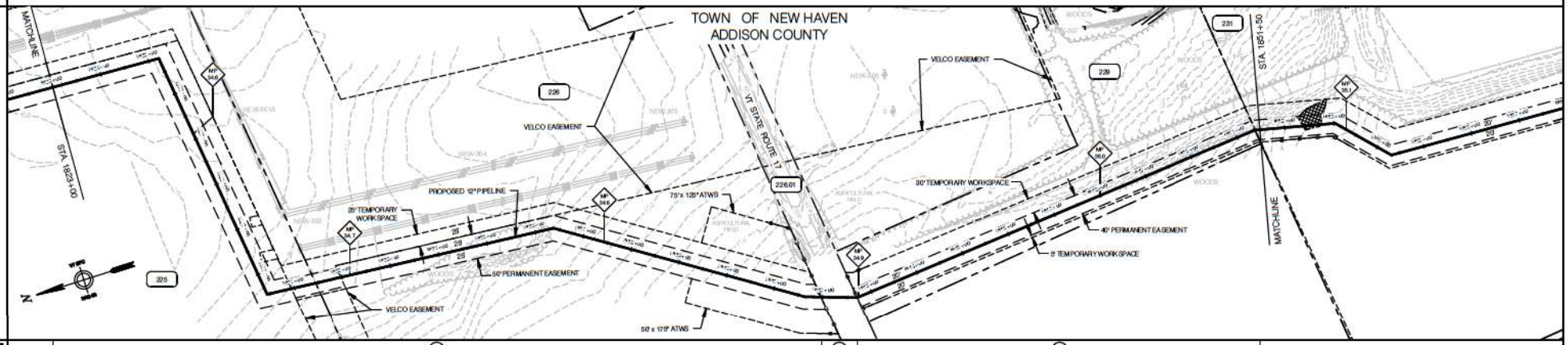
ALIGNMENT DETAIL



CONST. TYPE		1A	9	9A	

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS	MATCHLINE	2	1	1	MATCHLINE
		1,840 FT	76 FT	934 FT	
COATING		A	B	A	
CLASSIFICATION		2		3	
DESIGN FACTOR		0.6		0.5	
ROCK PROB.		0% - 5%		SURVEY SKIP	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇑	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇑	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
100 50 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 1,010 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 1,840 FT
3 16" O.D. X .500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 2,774 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 76 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-072	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO, INC.
ENGINEERS AND SCIENTISTS

YEAR: 2013	W.O.	SCALE: 1" = 100'	DWG.	ANGP-T-C-072	REV. 1

RIGHT-OF-WAY

MATCHLINE — 231 N/F VERMONT TRANSCO — MATCHLINE

SURVEY DATA

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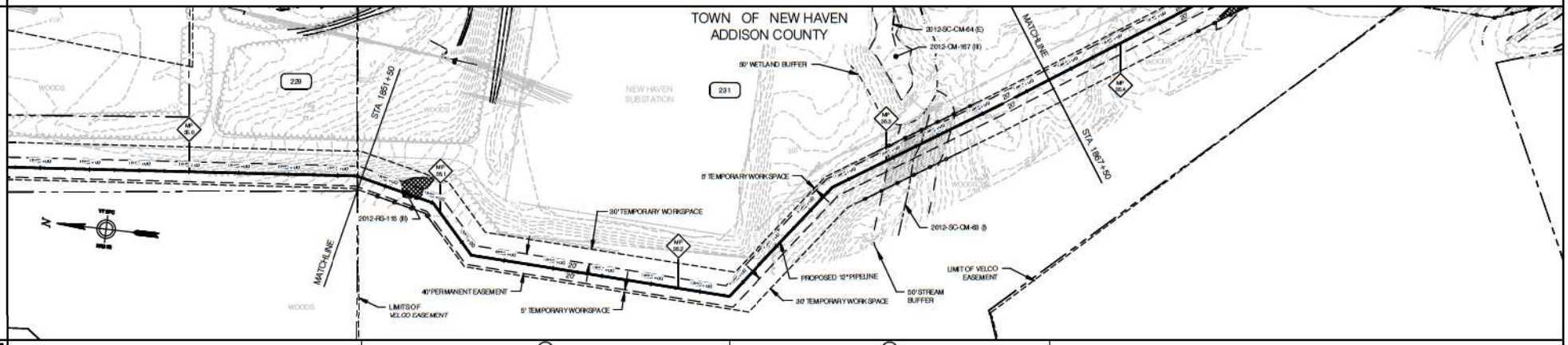
ALIGNMENT DETAIL



CONST. TYPE: (1H) (1J)

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	(1)	(1)	(1)	(1)	(1)	MATCHLINE
		76 FT	48 FT	1,051 FT	154 FT	269 FT	
COATING		A	C	A	C	A	
CLASSIFICATION		3					
DESIGN FACTOR		0.5					
ROCK PROB.		SURVEY SKIP		0% - 5%			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
⚠	ROAD CROSSING - CRUSHED STONE ACCESS CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 1,600 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 0 FT
3 18" O.D. X .500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 1,398 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 202 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION	INITIALS	DATE	INITIALS	DATE
ANGP-EPSC-073	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING				
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING				

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-073 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO II
ENGINEERS AND SCIENTISTS

RIGHT-OF-WAY

MATCHLINE | 231 N/F VERMONT TRANSCO | 232 N/F COUSINO, EUGENE & LINDA | 233.01 TOWN HILL ROAD | 234.01 N/F SHORTSLEEVE, GEORGE & JANIE | 234 N/F SHORTSLEEVE, GEORGE & JANIE | 236 N/F MAINE DRILLING AND BLASTING | MATCHLINE

SURVEY DATA

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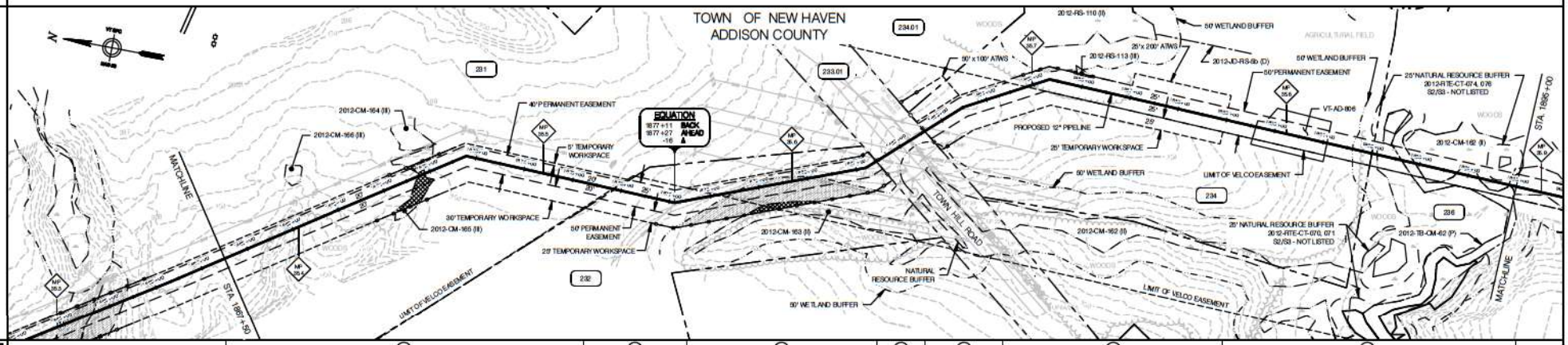
ALIGNMENT DETAIL



CONST. TYPE: 1J | 1E | 1J | 1I | 1J | 1E | 8

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

MATCHLINE	1	1	1	2	1	1	1	1	1	2	2	MATCHLINE
	423 FT	19 FT	391 FT	215 FT	40 FT	163 FT	127 FT	118 FT	219 FT	417 FT	602 FT	
COATING	A	C	A	A	A	C	A	B	A	A	B	
CLASSIFICATION	3			2	3					2		
DESIGN FACTOR	0.5			0.6	0.5					0.6		
ROCK PROB.	0% - 5%											

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING - CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L GR. X65, PSL-2 — 1,500 FT
2 12.75" O.D. X 0.250" WT, API-5L GR. X65, PSL-2S — 1,234 FT
3 18" O.D. X .500" WT, API-5L GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL — 1,832 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 720 FT
C EPOXY POLYETHYLENE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 182 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-074	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO, INC.
ENGINEERS AND SCIENTISTS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-074 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 236 N/F MAINE DRILLING AND BLASTING | 237 N/F PALMER, JOHN & CARMEN | MATCHLINE

SURVEY DATA

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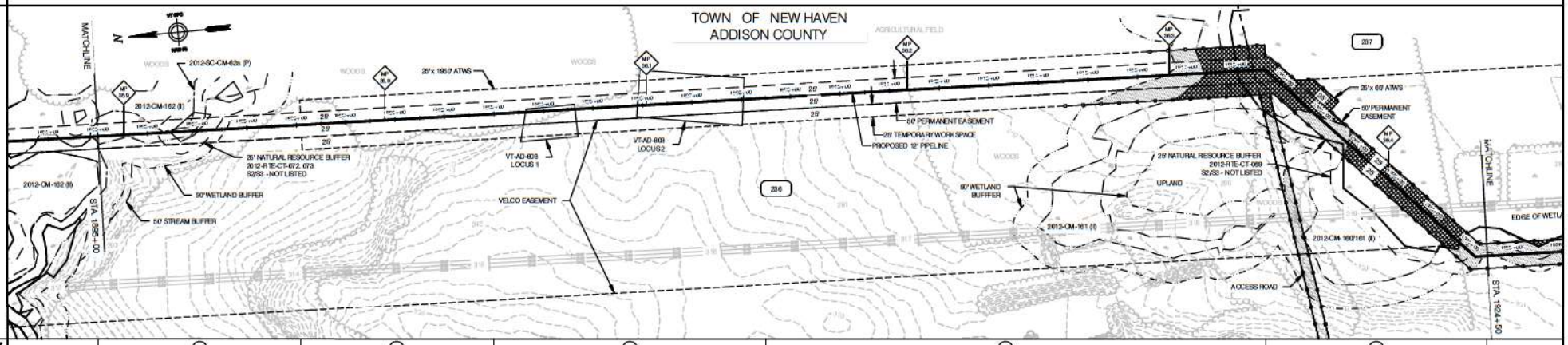
ALIGNMENT DETAIL



CONST. TYPE: 8 | 1E | 8 | 1E | 2A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	2	2	2	2	2	1	2	MATCHLINE
		410 Ft	390 Ft	590 Ft	608 Ft	236 Ft	496 Ft	69 Ft	
COATING		B	A	B	A	C	C	C	
CLASSIFICATION		2					3	2	
DESIGN FACTOR		0.6					0.5	0.6	
ROCK PROB.		25% - 50%		0% - 5%	5% - 25%			0% - 5%	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMIDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	16 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 80 0 100 200 300 feet

VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 496 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,454 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,198 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 950 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 792 FT

							BID		CONSTRUCTION	
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-075	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		
DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-075 | REV. 1

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

RIGHT-OF-WAY

MATCHLINE | 237 N/F PALMER, JOHN & CARMEN | 238 N/F MIDDLEBURY AREA LAND TRUST | 239 N/F SARAH VIRGINIA DeGANAHL VENTURE I LLC | 240 N/F LIVINGSTON, PHIL | MATCHLINE

SURVEY DATA

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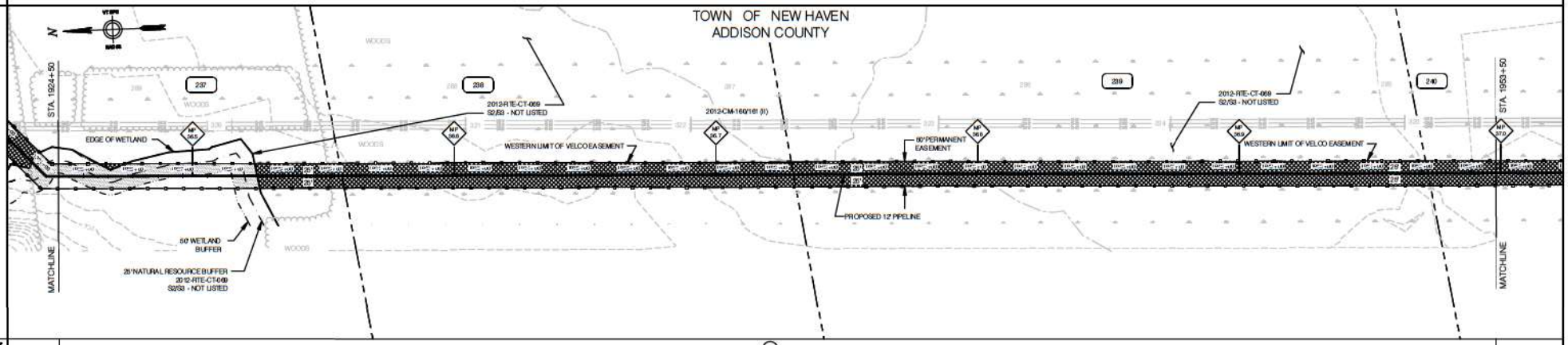
ALIGNMENT DETAIL



CONST. TYPE: 2A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	2 — 2,900 ft
COATING	C
CLASSIFICATION	2
DESIGN FACTOR	0.6
ROCK PROB.	0% - 5%

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	16 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 80 0 100 200 300 feet
VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,900 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 0 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT³ — 2,900 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-076	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-076 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 240 N/F LIVINGSTON, PHIL | 241 N/F PIDGEON, DAVID | 242 N/F HALL, DOUG | 246 N/F SWEENEY, MICHAEL & LINDA | 244 N/F GREEN, DARIN, HAYES & NANCY | MATCHLINE

SURVEY DATA

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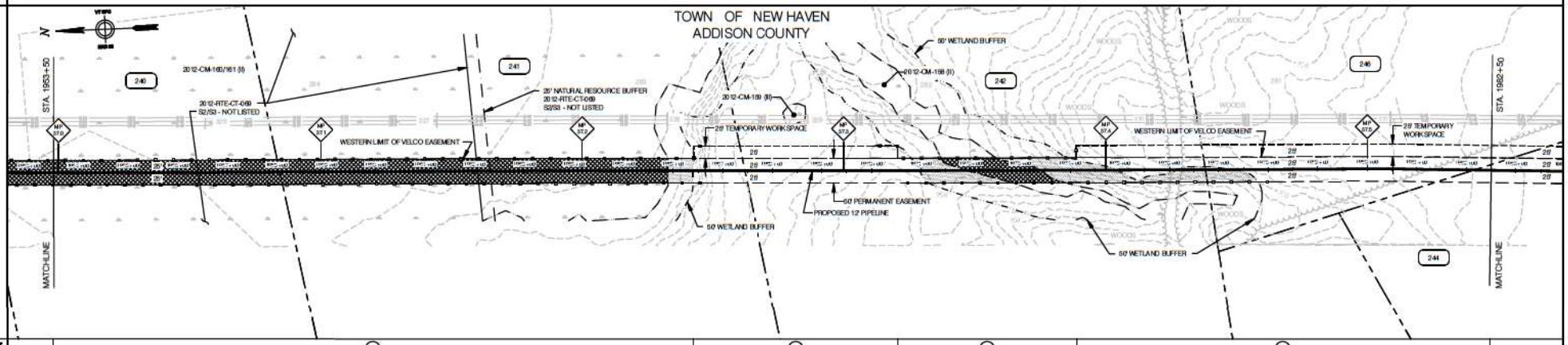
ALIGNMENT DETAIL



CONST. TYPE | 2A | 1A | 2A | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	2	2	2	2	MATCHLINE
		1,269 Ft	468 Ft	630 Ft	523 Ft	
COATING		C	A	C	A	
CLASSIFICATION		2				
DESIGN FACTOR		0.6				
ROCK PROB.		0% - 5%				

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	16 – 30%	200 FT
⇧	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
△	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 80 0 100 200 300 feet
100 80 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,900 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 981 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 1,818 FT

							BID		CONSTRUCTION	
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-077	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		
DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-077 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 246 N/F SWEENEY, MICHAEL & LINDA | 244 N/F GREEN, DARIN, HAYES& NANCY | 245 N/F REISS, SCOTT & LYNDA | 246 N/F SWEENEY, MICHAEL & LINDA | MATCHLINE

SURVEY DATA

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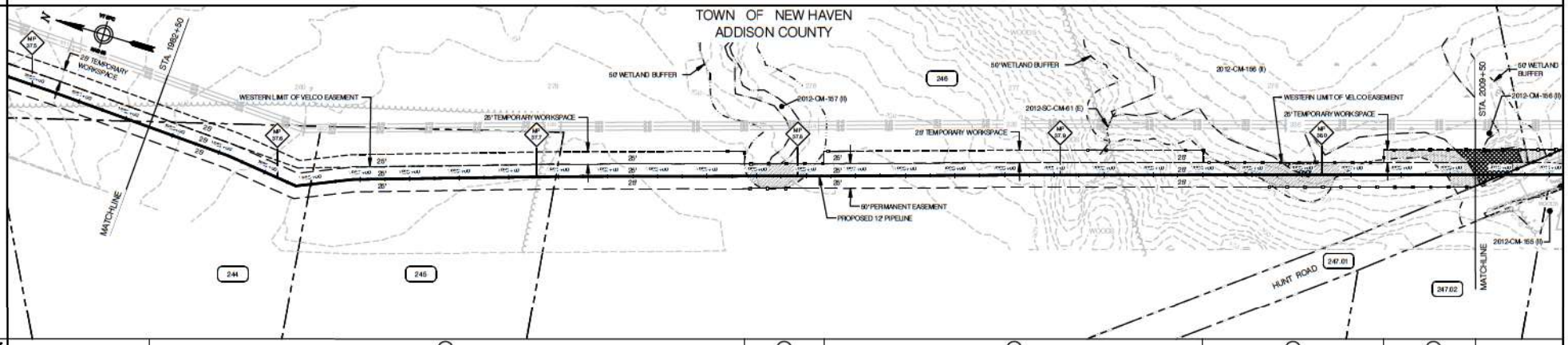
ALIGNMENT DETAIL



CONST. TYPE	1A	2A	1A	2A	1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	2	2	2	2	2	2	MATCHLINE
		1,232 Ft	118 Ft	898 Ft	180 Ft	212 Ft	50 Ft	
COATING		A	C	A	C	A	C	
CLASSIFICATION		2						
DESIGN FACTOR		0.6						
ROCK PROB.		0% - 5%						

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMIDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	16 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 80 0 100 200 300 feet
100 80 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,700 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 2,342 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 358 FT

						BID			CONSTRUCTION	
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-078	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		
DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-078 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 246 N/F SWEENEY, MICHAEL & LINDA | 247 N/F COUSINO, AMBROSE & STARLYN | 247.01 HUNT ROAD | 248 N/F STURTEVANT, ROGER | 249 N/F HILL, RON, BRIAN, KEVIN & JOANNE dba FOUR HILLS FARM | 252 N/F HILL, RON, BRIAN, KEVIN & JOANNE dba FOUR HILLS FARM | MATCHLINE

SURVEY DATA

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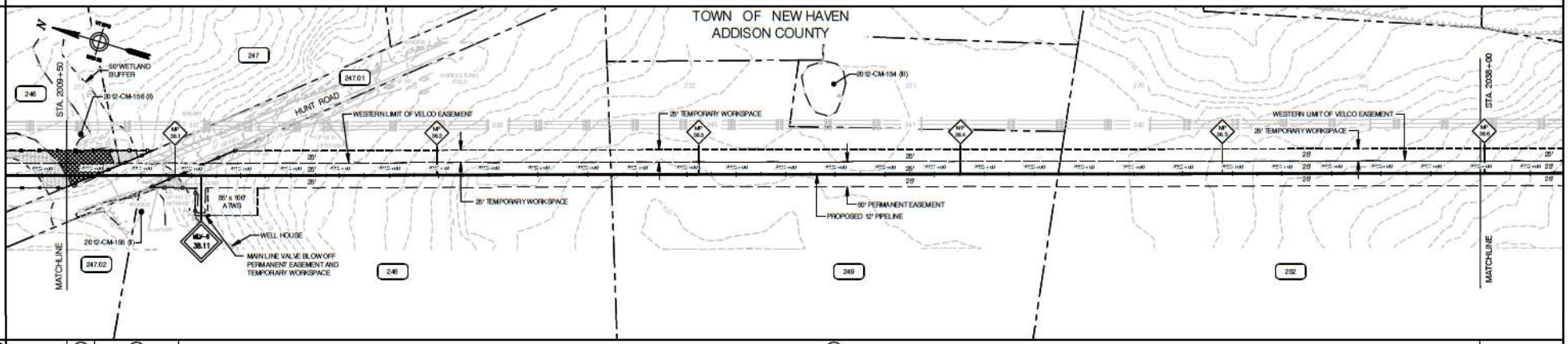
ALIGNMENT DETAIL



CONST. TYPE: 1A | 11 | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	2	1	2	MATCHLINE
		56 Ft	167 Ft	2,627 Ft	
COATING		C	B	A	
CLASSIFICATION		2	3	2	
DESIGN FACTOR		0.6	0.5	0.6	
ROCK PROB.		0% - 0%			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
⇧	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
⇧	MINOR STREAM CROSSING / CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
⊥	ROAD CROSSING / CRUSHED STONE ACCESS.		
⊥	CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 50 0 100 200 300 feet

VERTICAL SCALE: 100 50 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 167 Ft.
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,683 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYURETHANE 10/40, PRESC OR APPROVED EQUAL — 2,627 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 167 FT
C EPOXY POLYURETHANE 10/40, PRESC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 56 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-T-G-021	STATION AND VALVE DETAILS				
ANGP-EPSC-079	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID		CONSTRUCTION	
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		
	INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

COLER & COLANTONIO II
ENGINEERS AND SCIENTISTS

YEAR: 2013	W.O.	SCALE: 1" = 100'	DWG.	ANGP-T-C-079	REV. 1

RIGHT-OF-WAY

MATCHLINE | 252 N/F HILL, RON, BRIAN, KEVIN & JOANNE d/b/a FOUR HILLS FARM | 253 N/F PALMER, PATRICK, MICHAEL & CATHERINE | 254 N/F CAROTHERS, PETER F. | MATCHLINE

SURVEY DATA

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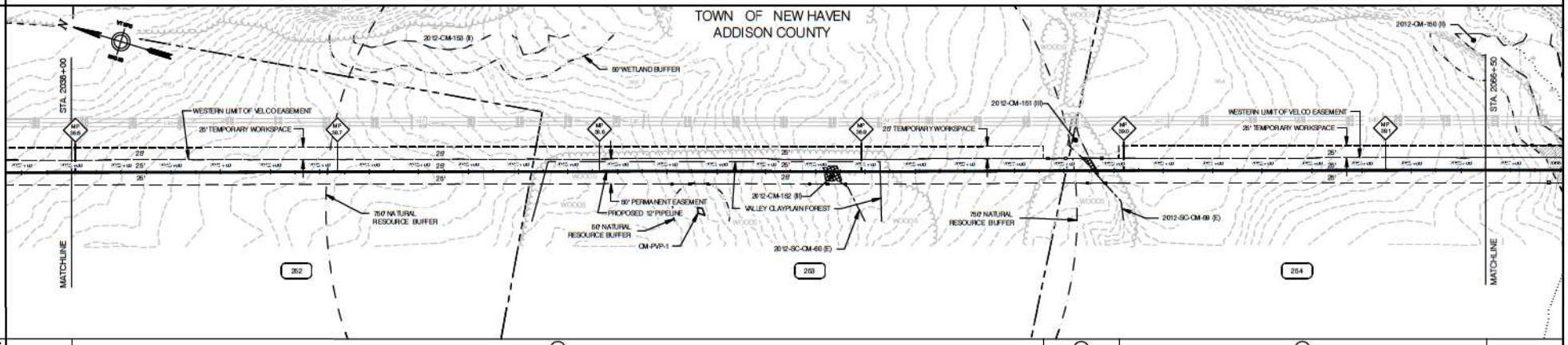
ALIGNMENT DETAIL



CONST. TYPE | 1A | 2A | 1A

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	252	253	253	254
	1,017 Ft	30 Ft	512 Ft	8 Ft / 783 Ft
COATING	A	C	A	C / A
CLASSIFICATION	2			
DESIGN FACTOR	0.6			
ROCK PROB.	0% - 5%			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 100 80 0 100 200 300 feet

VERTICAL SCALE: 100 80 0 100 200 300 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 Ft.
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,550 FT
3 16" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 2,812 Ft.
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 38 Ft.

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-080	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-080 | REV. 1

RIGHT-OF-WAY

MATCHLINE | 254 N/F CAROTHERS, PETER F. | 254.01 NEW HAVEN RIVER | 255 N/F HILL, RON, BRIAN, KEVIN & JOANNE dba FOUR HILLS FARM | 255.01 RIVER ROAD | MATCHLINE

SURVEY DATA

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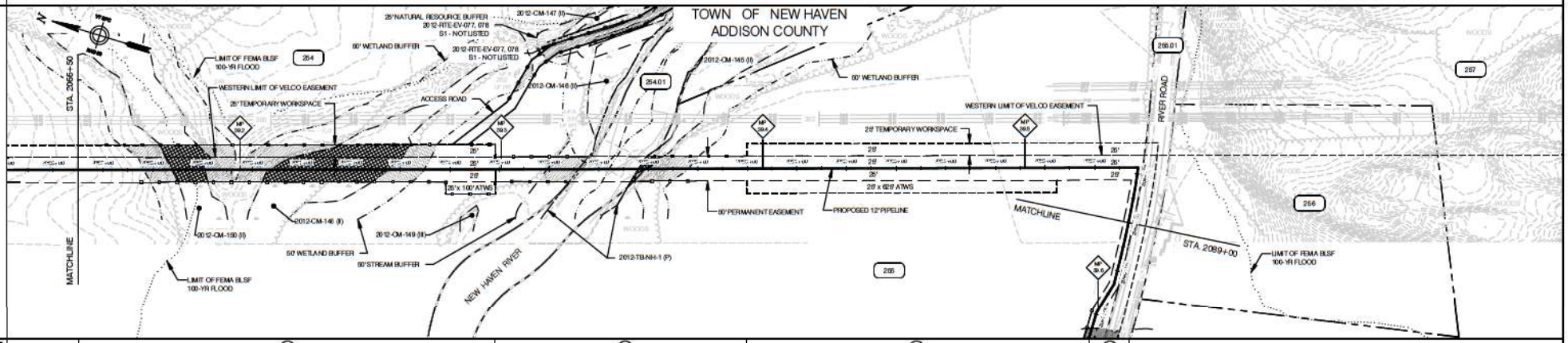
ALIGNMENT DETAIL



CONST. TYPE	1A	B	1A	4B

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	2	2	2	2	2	1	MATCHLINE
		133 Ft	566 Ft	156 Ft	607 Ft	775 Ft	113 Ft	
COATING		A	C	C	B	C	A	
CLASSIFICATION		2					3	
DESIGN FACTOR		0.6					0.5	
ROCK PROB.		0% - 5%					5% - 25%	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
100 50 0 100 200 300 feet
100 50 0 100 200 300 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 113 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2S — 2,137 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL — 1,400 FT
B ABRASION RESISTANT COATING, 40 MILS, WASSERK 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 850 FT

							BID		CONSTRUCTION	
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-081	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		
DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		INITIALS	DATE	INITIALS	DATE

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. CHITTENDEN COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO II
ENGINEERS AND SURVEYORS

YEAR: 2013 | W.O. | SCALE: 1" = 100' | DWG. ANGP-T-C-081 | REV. 1

RIGHT-OF-WAY

MATCHLINE — 255.01 RIVER ROAD — 256 N/F FOUR-HILLS FARM PARTNERSHIP — MATCHLINE

SURVEY DATA

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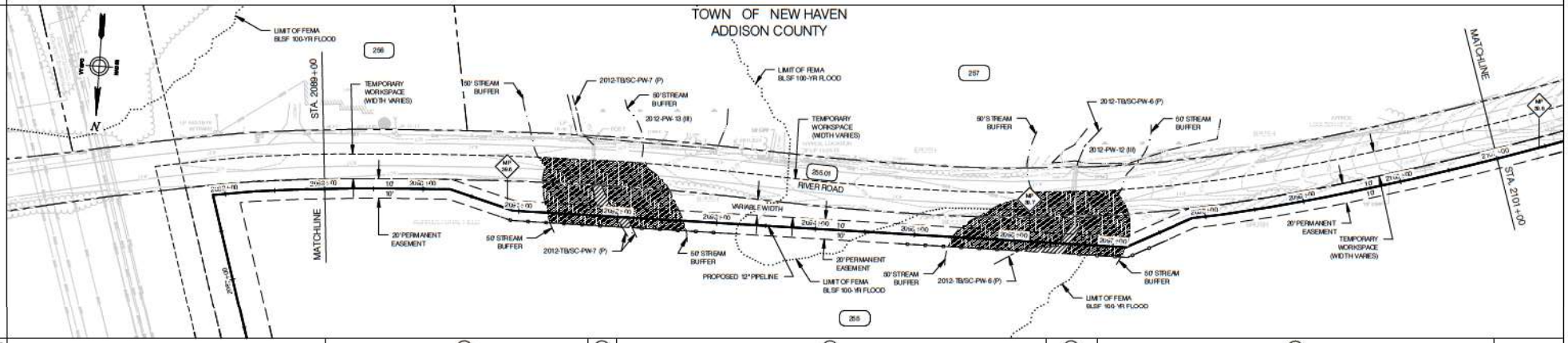
ALIGNMENT DETAIL



CONST. TYPE: 48 | 7 | 48 | 7 | 48

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	2	2	2	2
	420 FT	136 FT	257 FT	387 FT
COATING	C	A	C	A
CLASSIFICATION	2			
DESIGN FACTOR	0.6			
ROCK PROB.	5% -25%			50% - 75%

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 18%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	18 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH. ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (≥1 SLOPES OR GREATER).	> 30%	100 FT

HORIZONTAL SCALE: 50 25 0 50 100 150 feet

VERTICAL SCALE: 50 25 0 50 100 150 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B — 1,200 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 523 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 677 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-082A	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: 1" = 50' | DWG. ANGP-T-C-082A | REV. 1

RIGHT-OF-WAY

MATCHLINE | 256 N/F FOUR-HILLS FARM PARTNERSHIP | 257.01 N/F LANDON, BEVERLY; & WILLIAM | 258 N/F FOUR-HILLS FARM PARTNERSHIP | 259.01 N/F CUNNINGHAM, BARBARA | MATCHLINE

255.01 RIVER ROAD

SURVEY DATA

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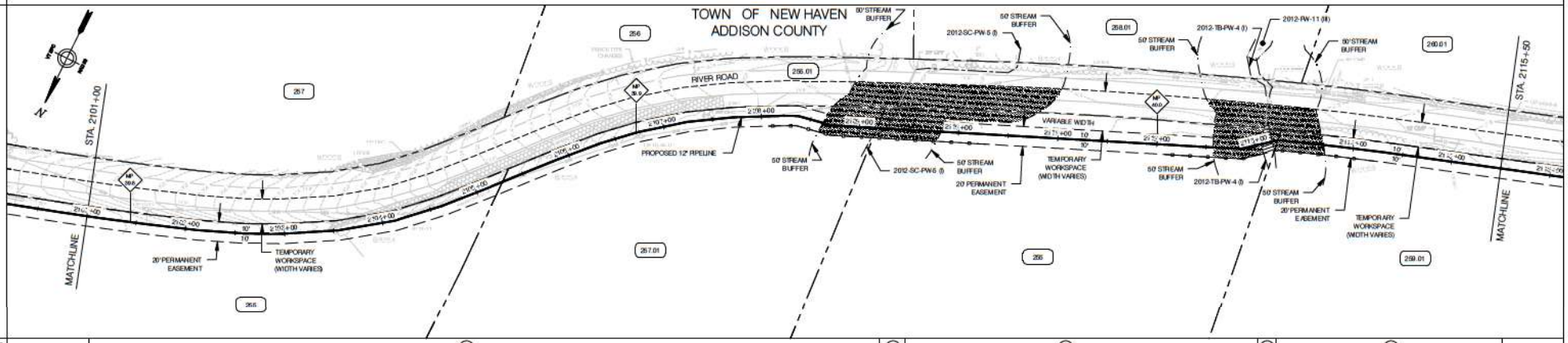
ALIGNMENT DETAIL



CONST. TYPE: 40 | 7 | 40 | 7 | 40

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	2	2	2	2	2	MATCHLINE
		760 FT	120 FT	274 FT	118 FT	178 FT	
COATING		A	C	A	C	A	
CLASSIFICATION		2					
DESIGN FACTOR		0.6					
ROCK PROB.		50% - 75%	75% - 90%			25% - 50%	

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 50 25 0 50 100 150 feet

VERTICAL SCALE: 50 25 0 50 100 150 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B — 1,450 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,212 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 238 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-082B	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: 1" = 50' | DWG. ANGP-T-C-082B | REV. 1

RIGHT-OF-WAY

MATCHLINE | 259.01 N/F CUNNINGHAM, BARBARA | 261.01 N/F LARRAMBOISE, EDWARD: & BONNIE | 263.01 N/F MANN, BRUCE: & BECKY | 265.01 RIVER ROAD | 267.01 NBRL ANTHONY: & NANCY | 271.01 BELDON ROAD | 273.01 N/F DUPOISE, STEPHEN: & MARCIA | 265.01 ROUTE 7 | MATCHLINE

SURVEY DATA

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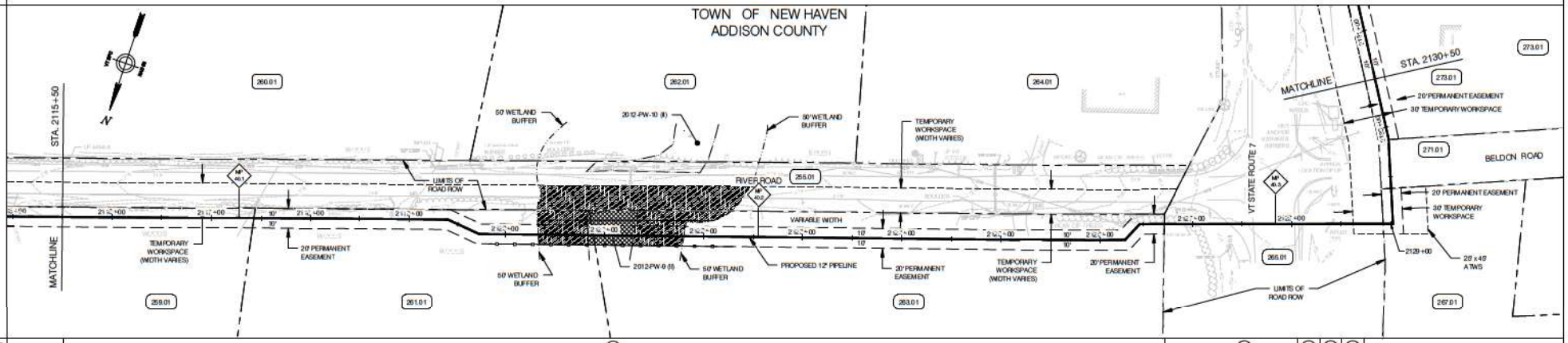
ALIGNMENT DETAIL



CONST. TYPE | 4B | 9 | 4B | 11 | 4B

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	2	2	2	1	2	1	2	MATCHLINE
		400 FT	150 FT	490 FT	221 FT	40 FT	36 FT	63 FT	
COATING		A	C	A	B	A	B	A	
CLASSIFICATION		2			3	2	3	2	
DESIGN FACTOR		0.6			0.5	0.6	0.5	0.6	
ROCK PROB.		25% - 50%				SURVEY SKIP			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
50 25 0 50 100 150 feet
VERTICAL SCALE
50 25 0 50 100 150 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 277 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B — 1,223 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,073 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 277 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 150 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-083A	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: 1" = 50' | DWG. ANGP-T-C-083A | REV. 1

RIGHT-OF-WAY

MATCHLINE

265.01
ROUTE 7

273.01
N/F
DUPOISE, STEPHEN
& MARCIA

MATCH LINE

SURVEY DATA

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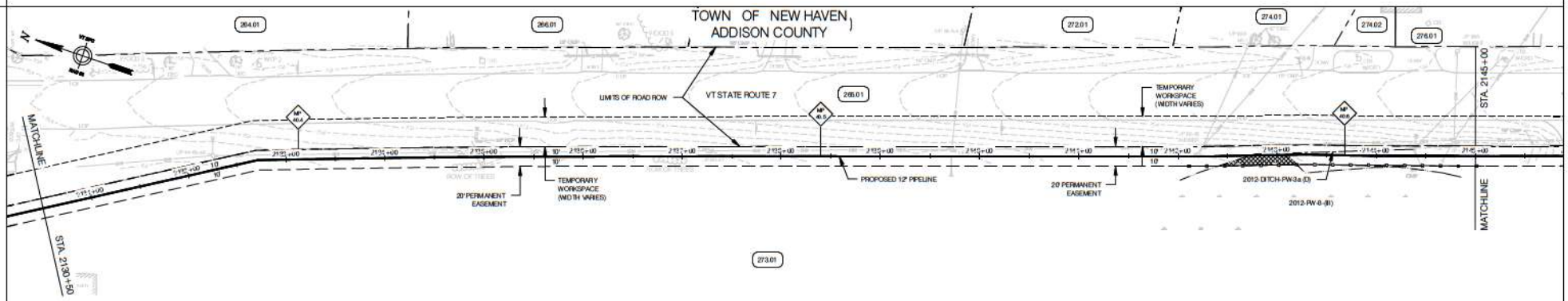
ALIGNMENT DETAIL



CONST. TYPE

49

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

MATCHLINE

	2	2	2	MATCHLINE
	1,190 FT	196 FT	64 FT	
COATING	A	C	A	
CLASSIFICATION	2			
DESIGN FACTOR	0.6			
ROCK PROB.	SURVEY SKIP			

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
50 25 0 50 100 150 feet
50 25 0 50 100 150 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B — 1,450 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,254 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 196 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION		BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
						ENVIRONMENTAL				
						DRAFTING DESIGNER	GIL	02/28/13		
						DRAFTING SUPERVISOR	BZD	02/28/13		
ANGP-EPSC-083B	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING	DESIGN ENGINEER	SAB	02/28/13		
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING	DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: 1" = 50' | DWG. ANGP-T-C-083B | REV. 1

RIGHT-OF-WAY

MATCHLINE

265.01
ROUTE 7

273.01
N/F
DUPOISE, STEPHEN;
A MARCIA

275.01
N/F
DELINEATION CORPORATION;
WEBER, STEVE

MATCHLINE

SURVEY DATA

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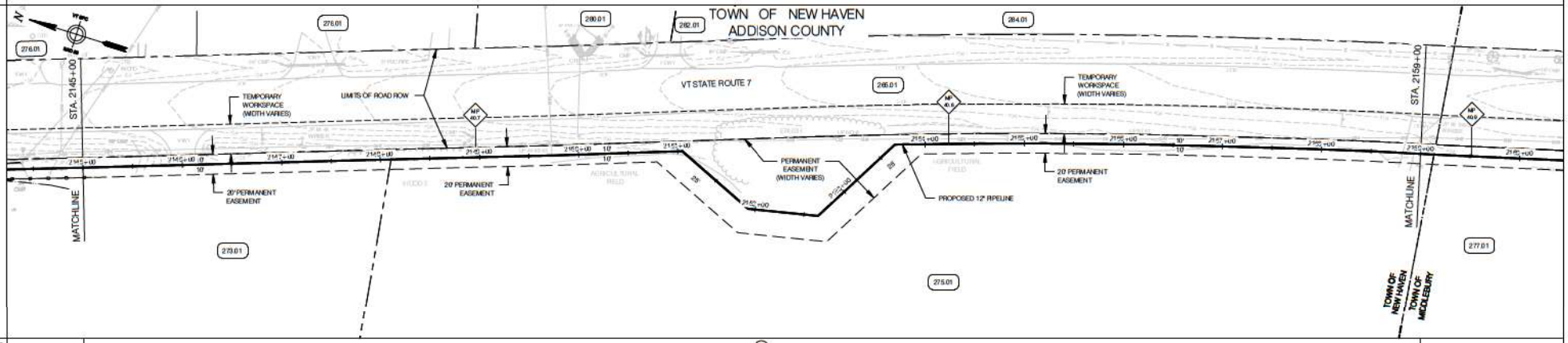
ALIGNMENT DETAIL



CONST. TYPE

48

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

MATCHLINE

2

1,400 FT

COATING	A
CLASSIFICATION	2
DESIGN FACTOR	0.6
ROCK PROB.	SURVEYSKIP

MATCHLINE

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE
50 25 0 50 100 150 feet
50 25 0 50 100 150 feet
VERTICAL SCALE

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B — 1,400 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,400 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-084A	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: 1" = 50' | DWG. ANGP-T-C-084A | REV. 1

RIGHT-OF-WAY

MATCHLINE | 265.01 ROUTE 7 | 275.01 N/F DELINEATION CORPORATION; CORBIN, THOMAS | TOWN OF NEW HAVEN / TOWN OF MIDDLEBURY | 277.01 N/F DELINEATION CORPORATION; CORBIN, THOMAS | 265.02 ROUTE 7 | 279.01 N/F DRAGON, SANDRA JEANNE | 277.01 N/F DELINEATION CORPORATION; CORBIN, THOMAS | MATCHLINE

SURVEY DATA

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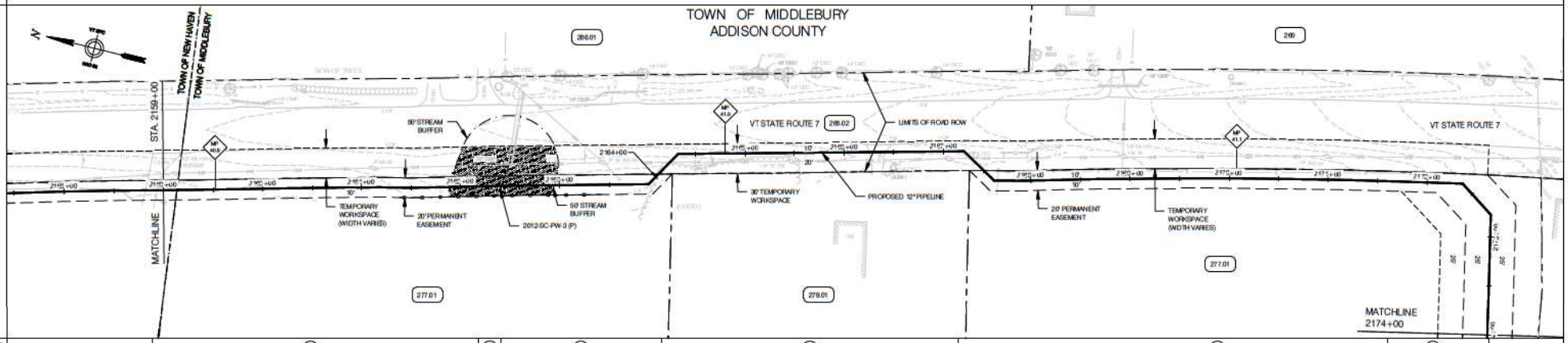
ALIGNMENT DETAIL



CONST. TYPE	4B	7	4B	4F	4B	1E

PROFILE

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NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE	2	2	2	1	2	MATCHLINE
		276 FT	127 FT	100 FT	343 FT	652 FT	
COATING		A	C	A	A	A	
CLASSIFICATION		2			3	2	
DESIGN FACTOR		0.6			0.5	0.6	
ROCK PROB.		SURVEY SKIP					

LEGEND

SYMBOL	DESCRIPTION
○	PERMANENT INTERCEPTOR DIKE.
△	TRENCH PLUG (AS REQUIRED).
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, ELIANE PIPE ACROSS OPEN TRENCH.
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).

INTERCEPTOR DIKE/TRENCH PLUG SPACING

SLOPE	SPACING
< 5%	NO STRUCTURE
5 – 15%	300 FT
15 – 30%	200 FT
> 30%	100 FT

HORIZONTAL SCALE: 50 25 0 50 100 150 feet

VERTICAL SCALE: 50 25 0 50 100 150 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 343 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B — 1,157 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL — 1,373 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITEC OR APPROVED EQUAL, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 127 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-084B	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.

CHA

COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: 1" = 50' | DWG. ANGP-T-C-084B | REV. 1

RIGHT-OF-WAY

MATCHLINE — 277.01 N/F DELINEATION CORPORATION CORBIN, THOMAS — END

SURVEY DATA

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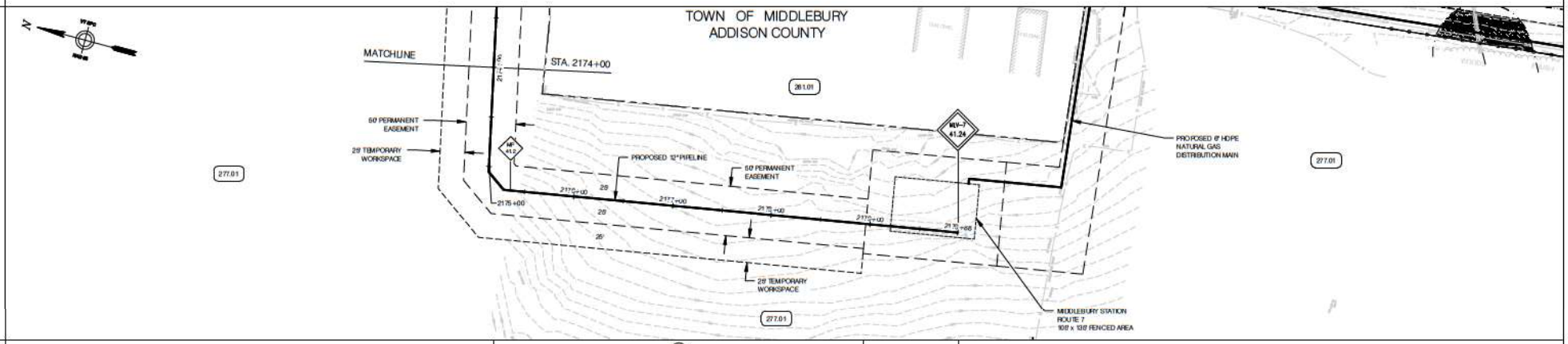
ALIGNMENT DETAIL



CONST. TYPE — 1E

PROFILE

INTENTIONALLY LEFT BLANK

NOT FOR CONSTRUCTION

MATERIALS

	MATCHLINE — 2 — END
	588 FT
COATING	A
CLASSIFICATION	2
DESIGN FACTOR	0.6
ROCK PROB.	SURVEY SKIP

LEGEND		INTERCEPTOR DIKE/TRENCH PLUG SPACING	
SYMBOL	DESCRIPTION	SLOPE	SPACING
○	PERMANENT INTERCEPTOR DIKE.	< 5%	NO STRUCTURE
△	TRENCH PLUG (AS REQUIRED).	5 – 15%	300 FT
	INTERMEDIATE STREAM CROSSING CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, TRENCH PLUGS, INTERCEPTOR DIKES.	15 – 30%	200 FT
	MINOR STREAM CROSSING : CULVERT WITH CRUSHED STONE BRIDGE, SILT FENCE, FLUME PIPE ACROSS OPEN TRENCH.	> 30%	100 FT
	ROAD CROSSING : CRUSHED STONE ACCESS, CONTROL FABRIC (2:1 SLOPES OR GREATER).		

HORIZONTAL SCALE: 50 25 0 50 100 150 feet
VERTICAL SCALE: 50 25 0 50 100 150 feet

PIPE MATERIAL:
1 12.75" O.D. X 0.312" WT, API-5L, GR. X65, PSL-2 — 0 FT
2 12.75" O.D. X 0.250" WT, API-5L, GR. X65, PSL-2B — 588 FT
3 18" O.D. X 0.500" WT, API-5L, GR. B — 0 FT

PIPE COATING:
A EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL — 588 FT
B ABRASION RESISTANT COATING, 40 MILS, WARRIOR 100 OR APPROVED EQUAL — 0 FT
C EPOXY POLYETHYLENE 10/40, PRITED OR APPROVED EQUAL, W/ 1-1/2" REINFORCED CONCRETE W/ 140 LBS/FT — 0 FT

DWG. NO.	REFERENCE DWG.	REV	DSN	CK	DESCRIPTION
ANGP-EPSC-M001	EPSC PLAN				
ANGP-T-G-021	STATION AND VALVE DETAILS				
ANGP-EPSC-085	EPSC PLAN	1	SAB	JEO	ISSUED FOR AMENDED ARTICLE 248 FILING
G-001 – 010	COVER, INDEX, LEGEND & NOTES, AND CONSTRUCTION DETAILS	0	SAB	JEO	ISSUED FOR VERMONT STATUTES ARTICLE 248 FILING

	BID INITIALS	BID DATE	CONSTRUCTION INITIALS	CONSTRUCTION DATE
ENVIRONMENTAL				
DRAFTING DESIGNER	GIL	02/28/13		
DRAFTING SUPERVISOR	BZD	02/28/13		
DESIGN ENGINEER	SAB	02/28/13		
DESIGN MANAGER	JEO	02/28/13		

VERMONT GAS
PROPOSED 12" PIPELINE
ADDISON NATURAL GAS PROJECT
ALIGNMENT SHEET

LOC. ADDISON COUNTY, VERMONT

Vermont Gas

Vanasse Hangen Brustlin, Inc.
CHA
COLER & COLANTONIO

YEAR: 2013 | W.O. | SCALE: 1" = 50' | DWG. ANGP-T-C-085 | REV. 1