SITE ACCESS - REFER TO EROSION AND SEDIMENT CONTROL PLAN FOR DETAILS

TRIBUTARY WGP: CONSTRUCT TWO STEP POOLS AS SHOWN. IN REMAINDER OF TRIBUTARY, PLACE 1 FT DEPTH OF CLASS II RIPRAP TO BANKFULL WIDTH. TOP DRESS RIPRAP WITH 4" OF SALVAGED COBBLE/GRAVEL/SAND SUBSTRATE. TOP OF SANITARY SEWER AT CROSSING IS AT ELEVATION 290.70 RESULTING IN OVER 10' OF COVER.

TEMPORARY ACCESS AND TEMPORARY PEDESTRIAN MULCH PATHS - REFER TO EROSION AND SEDIMENT CONTROL PLAN FOR DETAILS

TEMPORARY GATE - REFER TO EROSION AND SEDIMENT CONTROL PLAN FOR DETAILS

PRIOR TO CONSTRUCTION, LOC SHALL BE WALKED WITH WSSI STAFF AND CONTRACTOR TO CONFIRM TREE REMOVAL

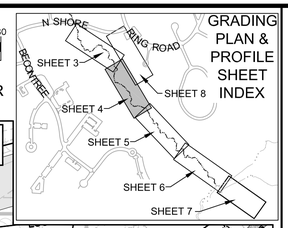
CONTACT MISS UTILITY (800-552-7001) PRIOR TO COMMENCING ANY WORK.

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

REFER TO TYPICAL CROSS SECTION SHEET FOR GRADING AND PROFILE LEGENDS AND NOTES.

WORK TO BE LIMITED TO WITHIN THE EXISTING CHANNEL AS MUCH AS POSSIBLE USING SUITABLE TRACKED EQUIPMENT TO LIMIT IMPACT TO TREES AND OTHERWISE STABLE BANKS.

GRADING PLAN & PROFILE SHEET INDEX



TRIBUTARY WGP

TEMPORARY ACCESS PATH

EXISTING ASPHALT PATH

EXISTING BRIDGE TO REMAIN. PLACE CLASS II RIPRAP FROM STATION 18+73 TO 19+07. SPREAD 4" OF SALVAGED STREAMBED MATERIAL IN STREAMBED AND FILL VOIDS IN RIPRAP ALONG BANKS WITH TOPSOIL AND SAND MIXTURE.

FOREST EDGE SOUTH

STABILIZE SANITARY SEWER CROSSING BY PLACING 1 FT DEPTH OF CLASS II RIPRAP UP TO BANKFULL FROM STATION 21+84 TO 22+07. 4" OF SALVAGED COBBLE, GRAVEL AND SAND SUBSTRATE SHALL BE PLACED OVER CLASS II RIPRAP.

CONTRACTOR SHALL TAKE EXTRA CARE WHEN WORKING AROUND THE EXISTING SANITARY SEWER LINES. CONTRACTOR SHALL NOT SIT EQUIPMENT ON THE LINE, EXCAVATE, OR POUND ROCKS INTO PLACE OVER THE LINE, ETC.

PROPOSED STREAM RESTORATION EASEMENT (PENDING COUNTY APPROVAL)

MATCHLINE A - SEE SHEET 3

MATCHLINE B - SEE SHEET 5

PLACE 2 FT DEPTH OF CLASS II RIPRAP TO BANKFULL WIDTH BETWEEN STATIONS 16+41 AND 18+56 TO PROVIDE PROTECTIVE LINING THROUGH GAS EASEMENT. PLACE 4" OF SALVAGED COBBLE, GRAVEL AND SAND SUBSTRATE OVER CLASS II RIPRAP.

ANY WORK WITHIN THE TRANSCONTINENTAL GAS PIPELINE CORP EASEMENT SHALL BE COORDINATED WITH WILLIAMS GAS PIPELINE PRIOR TO ANY DISTURBANCE WITHIN THE EASEMENT

TRIBUTARY 4

TRIBUTARY 4 - CONSTRUCT SERIES OF 3 ROCK STEPS (WITHOUT POOLS) AND A ROCK WALL AS SHOW. FLOW SHALL CASCADE OVER ROCK STEPS, WALL AND STRUCTURE ARM INTO RIPRAP LINED STRUCTURE POOL.

TEMPORARY GATE - REFER TO EROSION AND SEDIMENT CONTROL PLAN FOR DETAILS

STA 16+40.81 BEGIN MEANDERING RIFFLE

STA 18+48.83 END MEANDERING RIFFLE

STREAM RESTORATION EASEMENTS D.B. 19148, PG. 131 D.B. 19148, PG. 143 D.B. 19148, PG. 183

EX. TRANSCONTINENTAL GAS PIPE LINE CORP. ESMT. (D.B 2163, PG 388 AND D.B.3274, PG.298)

LONGITUDINAL PROFILE – FOREST EDGE SOUTH (STA 16+00 TO 22+00)

LONGITUDINAL PROFILE
SCALE: H: 1"=20'
V: 1"= 2'

CHANNEL SHALL BE STABILIZED WITH 2.0' OF CLASS II RIPRAP BETWEEN STATIONS 16+41 AND 18+56.

EX. TRANSCONTINENTAL GAS PIPE LINE CORP. EASEMENT

LOG J-HOOK 5.74% 18.00'

MEANDERING RIFFLE

CLASS II RIPRAP - SEE NOTE ABOVE ON GRADING PLAN FOR PLACEMENT

EX. GRADE ALONG PROPOSED CENTERLINE (SHOWN THROUGH GAS EASEMENT)

2.0%

MOD 2-STEP CROSS-VANE 3.04% 22.00'

3 STEP POOL

1.9%

1.8%

1.0' OF REINFORCED BED MATERIAL (SEE CONSTRUCTION SEQUENCE, SEDIMENT SIZING, AND TYPICAL CROSS SECTIONS FOR SPECIFICATIONS)

MOD 2-STEP CROSS-VANE 2.70% 22.00'

PROPOSED STREAM INVERT

2 STEP POOL

MODIFIED CROSS-VANE 4.34% 22.00'

1.5%

1.8%

EXISTING PEDESTRIAN BRIDGE TO REMAIN UPSTREAM STA 18+87

EX. STREAM INVERT

EXISTING 30" WGP GAS MAIN (B)
TOP OF PIPE EL = 296.37
INVERT EL = 293.83
DISTANCE BELOW INVERT = 4.9'

EXISTING 30" WGP GAS MAIN (A)
TOP OF PIPE EL = 297.89
INVERT EL = 295.35
DISTANCE BELOW INVERT = 2.6'

EXISTING ANODE ELECTRIC LINE
APPROX. INVERT EL = 295.0
DISTANCE BELOW INVERT = 3+'

EXISTING WGP 36" GAS MAIN (C)
TOP OF PIPE EL = 295.61
INVERT EL = 292.56
DISTANCE BELOW INVERT = 3.2'

EXISTING WGP 42" GAS MAIN (D)
TOP OF PIPE EL = 294.57
INVERT EL = 291.01
DISTANCE BELOW INVERT = 3.6'

EXISTING 8" SANITARY TOP OF PIPE EL = 284.89
INVERT EL = 284.14
DISTANCE BELOW INVERT = 3.0'

CENTERLINE CURVE LABELS

CENTERLINE PC & PT LOCATIONS

PT = 16+04.17
MEANDER LEFT
PC = 18+43.65
PT = 18+92.46
MEANDER LEFT
PC = 19+60.34
MEANDER RIGHT
PT = 20+51.41
MEANDER LEFT
PC = 20+70.25
PT = 20+92.43
MEANDER RIGHT
PC = 21+18.16
PT = 21+43.17
MEANDER LEFT
PC = 21+85.00

STA 16+09.81 INV = 301.98 (R)
STA 16+11.71 INV = 300.56 (P)
STA 16+30.81 INV = 300.31 (P)
STA 16+40.81 INV = 301.58 (R)
STA 16+50 GAS EASEMENT
STA 16+58.24 EX WGP 30" GAS LINE "B"
STA 16+93.23 INV = 300.53 (R)
STA 16+95.66 EX WGP 30" GAS LINE "A"
STA 17+38.04 EX WGP ANODE LINE
STA 17+61.00 INV = 299.18 (R)
STA 17+78.59 EX WGP 36" GAS LINE "C"
STA 18+09.33 EX WGP 42" GAS LINE "D"
STA 18+22 GAS EASEMENT
STA 18+48.83 INV = 297.42 (R)
STA 18+59.40 INV = 297.23 (R)
STA 18+61.30 INV = 295.26 (P)
STA 18+68.50 INV = 295.00 (P)
STA 18+73.40 INV = 296.83 (W)
STA 18+75.30 INV = 294.88 (P)
STA 18+90.90 INV = 294.51 (P)
STA 19+02.90 INV = 296.13 (R)
STA 19+10.00 INV = 296.03 (W)
STA 19+11.88 INV = 294.00 (P)
STA 19+23.13 INV = 293.25 (P)
STA 19+28.00 INV = 294.83 (W)
STA 19+29.50 INV = 292.83 (P)
STA 19+38.50 INV = 292.23 (P)
STA 19+43.00 INV = 293.83 (W)
STA 19+45.25 INV = 291.85 (P)
STA 19+58.75 INV = 291.40 (P)
STA 19+61.00 INV = 293.13 (W)
STA 19+83.14 INV = 292.78 (R)
STA 19+85.04 INV = 290.80 (P)
STA 19+93.24 INV = 290.46 (P)
STA 19+98.14 INV = 292.28 (W)
STA 20+00.04 INV = 290.33 (F)
STA 20+13.14 INV = 289.95 (P)
STA 20+19.14 INV = 291.68 (R)
STA 20+56.74 INV = 291.03 (W)
STA 20+58.62 INV = 289.05 (P)
STA 20+69.87 INV = 288.55 (P)
STA 20+74.74 INV = 290.23 (W)
STA 20+76.99 INV = 288.25 (P)
STA 20+90.49 INV = 287.73 (P)
STA 20+92.74 INV = 289.43 (W)
STA 21+32.15 INV = 288.88 (R)
STA 21+34.05 INV = 286.96 (P)
STA 21+57.15 INV = 286.63 (P)
STA 21+67.15 INV = 288.38 (R)
STA 21+92 SANITARY SEWER CROSSING

ELEVATION (FT)
306 304 302 300 298 296 294 292 290 288 286 284

16+00 16+50 17+00 17+50 18+00 18+50 19+00 19+50 20+00 20+50 21+00 21+50 22+00

DISTANCE ALONG BASELINE (FT)

Wetland Studies and Solutions, Inc.
5300 Wellington Branch Drive, Suite 100 • Gainesville, VA 20155
Phone 703 679 5600 • Fax 703 679 5601
wetlandstudies.com

Northern Virginia Stream Restoration Bank
Colvin Run - Forest Edge South
Fairfax County, Virginia

Grading Plan and Longitudinal Profile

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COMMONWEALTH OF VIRGINIA
FRANK R. GRAZIANO
Lic. No. 032099
PROFESSIONAL ENGINEER

REVISIONS

No.	Date	Description	Rev. By	App. By

SCALE: 1" = 20'

DATE: JULY 2010

Horizontal Datum: VCS NAD 83

Vertical Datum: NGVD 29

Boundary and Topo Source: WSSI and Fairfax Digital Data

Design	Draft	Approved
MSM	MSM	FRG

Sheet # 4 of 70

Computer File Name:
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