LEGEND:

PROPOSED CONTOUR — 20
EXISTING EDGE OF PAVEMENT — EX. E/P
PROPOSED EDGE OF PAVEMENT — PROP. E/P
EXISTING CURB AND GUTTER — EX. C & G
PROPOSED CURB AND GUTTER — CG-6
TRANSITION FROM CG-6 TO CG-6R — CG-6 CG-6R
EXISTING TELEPHONE LINE — T
PROPOSED TELEPHONE LINE — T
EXISTING STORM SEWER — EX. 375 mm (15") RCP
PROPOSED STORM SEWER — PROP. 375 mm (15") RCP
EXISTING SANITARY SEWER
PROPOSED SANITARY SEWER
EXISTING ELECTRIC SERVICE — E
PROPOSED ELECTRIC SERVICE — E
EXISTING GAS LINE — G
PROPOSED GAS LINE — G
PROPERTY LINE
EASEMENT LINE
CENTERLINE
EXISTING TREE DRIP LINE
EXISTING TREE — 375 mm (15") OAK
EXISTING UTILITY POLE
PROPOSED UTILITY POLE
EXISTING WATERLINE W/ TEE — W
PROPOSED WATERLINE W/ TEE — W
EXISTING FIRE HYDRANT
PROPOSED FIRE HYDRANT
EXISTING WATER VALVE — W
PROPOSED WATER VALVE — W
PROPOSED WATER METER
EXISTING REDUCER — W
PROPOSED REDUCER — W
STOP SIGN
PARKING INDICATOR — 12
INDICATES THE NUMBER OF TYPICAL PARKING SPACES
TEST PIT LOCATION
CRITICAL SLOPE
SLOPES TO BE STABILIZED PURSUANT TO VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK
VEHICLES PER DAY COUNT — 100
PROPOSED BUILDING ENTRANCE
EXISTING STREET LIGHT
PROPOSED STREET LIGHT
PROPOSED STREET NAME SIGN
PROPOSED SANITARY LATERAL CLEANOUT
SANITARY MANHOLE INDENTIFIER — 12
STORM DRAIN STRUCTURE IDENTIFIER — 18
UNDERGROUND FIBER OPTIC LINE — FO
UNDERGROUND TELEPHONE LINE — UGT
OVERHEAD ELECTRIC LINE — OHE
RIGHT OF WAY
CREEK LINE
WATERLINE PLUG
WATERLINE CROSS
DENOTES ST'D. PG-2A DITCH
DENOTES ST'D. EC-2 DITCH
DENOTES ST'D. EC-3 DITCH
DENOTES ST'D. GRADED DITCH

SWAMP/WETLANDS

ABBREVIATIONS:

A.B.O.	– AIR BLOW OFF	MIN.	– MINIMUM
ACCMP	– ASPHALT COATED CORRUGATED METAL PIPE	M.J.	– MECHANICAL JOINT
ASS'Y	– ASSEMBLY	N.I.C.	– NOT IN CONTRACT
B	– BELL JOINT	PC	– POINT OF CURVATURE
BIT. CON.	– BITUMINOUS CONCRETE	PE	– PLAIN END
B.O.	– BLOW OFF	PI	– POINT OF INTERSECTION
C/L	– CENTERLINE	PT	– POINT OF TANGENT
CL	– CLASS	PVC	– POLYVINYL CHLORIDE
CMP	– CORRUGATED METAL PIPE	R/W	– RIGHT-OF-WAY
CONC.	– CONCRETE	R	– RESTRAINED JOINT
C.Y.	– CUBIC YARD	REQ'D	– REQUIRED
DATR	– DEEMED ACCURATE TO RECORD	RCP	– REINFORCED CONCRETE PIPE
DBC	– DIRECT BURIED CABLE	RT.	– RIGHT
D.I.P.	– DUCTILE IRON PIPE	SAN	– SANITARY SEWER
DR.	– DRIVE	SF	– SILT FENCE
E	– ELECTRIC	SFM	– SEWER FORCE MAIN
EA.	– EACH	SD	– STORM DRAIN
EQI	– ELECTRICAL	SS	– SANITARY SEWER CONNECTION
EP	– EDGE OF PAVEMENT	STA.	– STATION
E BOX	– ELECTRICAL BOX	STM	– STORM SEWER
EX.	– EXISTING	STMH	– STORM MANHOLE
F	– FLANGE JOINT	T	– TELEPHONE
G	– GAS	TCM	– TELECOMMUNICATIONS MANHOLE
LT	– LEFT	TP	– TEST PIT
		THB	– TELEPHONE
		TS&V	– TAPPING SLEEVE AND VALVE

MISS UTILITY OF VIRGINIA:

THE CONTRACTOR SHALL CALL "MISS UTILITY" 48 HOURS PRIOR TO THE START OF EXCAVATION. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT THE ENGINEER IMMEDIATELY IF THE LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON THE PLAN, IF THERE APPEARS TO BE A CONFLICT, AND/OR UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON PLAN. THE OWNER SHALL BE RESPONSIBLE FOR THE RELOCATION OF ANY UTILITY WITHIN EXISTING RIGHT OF WAY OR EASEMENTS AS REQUIRED BY THE PROJECT. CONTACT MISS UTILITY OF VIRGINIA: 1-800-552-7001 (TOLL FREE)

OWNER
PRINCE GEORGE COUNTY / ROLLS-ROYCE

ENGINEER
RINKER DESIGN ASSOCIATES, P.C.
927 MAPLE GROVE DRIVE, SUITE 105
FREDERICKSBURG, VA 22407
ATTN: DARELL FISCHER
VOICE: (540) 548-4470 x223
FAX: (540) 548-4471
EMAIL: DFISCHER@RDACIVIL.COM

PUBLIC WATER & SEWER
STEVEN MCBRIDE
ENGINEERING AND UTILITIES DEPARTMENT
6602 COURTS DRIVE
PRINCE GEORGE, VA 23875
(804)722-8687

TELEPHONE
KEN GILBERT
VERIZON VIRGINIA INC.
2600 BRITTONS HILL ROAD
RICHMOND, VA. 23230
(804)772-5963

ELECTRIC
MICHAEL E. MALANDRO
PRINCE GEORGE ELECTRIC COOPERATIVE
7103 GENERAL MAHONE HIGHWAY
POST OFFICE BOX 168
WAVERLY, VIRGINIA 23890
(804)834-2424

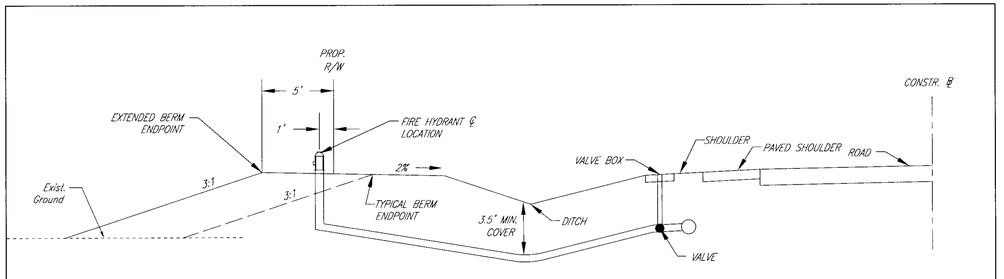
GAS TRANSMISSION
CEDRICK KLINE
COLUMBIA LINE TRANSMISSION
1596 BAXTER RD.
PRINCE GEORGE, VA. 23875
(804)733-2486

PRINCE GEORGE COUNTY PUBLIC UTILITIES STANDARD SEWER AND WATER NOTES

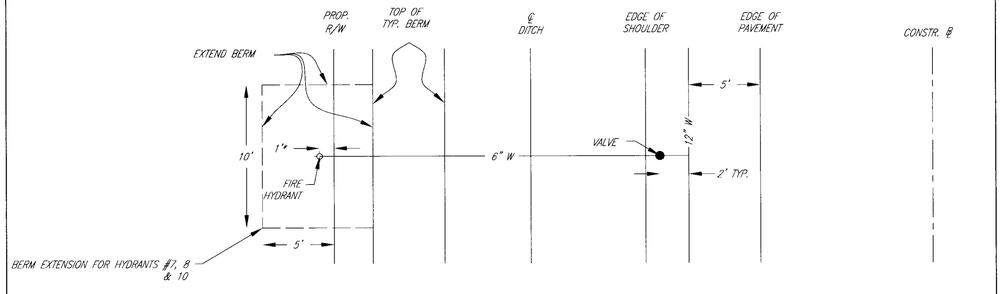
1. ALL MATERIALS FOR SEWER AND WATER SYSTEMS SHOWN SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH THE LATEST SPECIFICATIONS OF PRINCE GEORGE COUNTY APPLICABLE AT THE TIME OF NOTICE TO PROCEED.
2. FOR SEWER AND WATER INSTALLATION WITHIN EXISTING VDOT R/W; UTILITY CONTRACTORS MUST NOTIFY VDOT WHEN INSTALLATION BEGINS SO THAT DENSITY CAN BE TESTED ON TRENCH BACKFILL (95% ASTM D-698 @ OPTIMUM MOISTURE ±2%).
3. THE INSTALLATION OF A SEWER BACKFLOW DEVICE IS REQUIRED FOR ALL SERVICE CONNECTIONS WHERE THE FINISHED FLOOR ELEVATION IS LOWER THAN THE NEAREST DOWNGRADE AND/OR UPGRADE MANHOLE TOP ELEVATIONS. THIS DEVICE WILL BE INSPECTED BY THE BUILDING INSPECTION DEPARTMENT.
4. ALL WATER SERVICE CONNECTIONS BELOW THE ELEVATION CONTOUR OR WHERE THE PRESSURE IS GREATER THAN 80 P.S.I. WILL REQUIRE INDIVIDUAL PRESSURE REGULATORS AS REQUIRED BY BOCA CODE.
5. VERTICAL DATUM IS BASED ON MEAN SEA LEVEL (UCS & GS DATUM). HORIZONTAL CONTROLS ARE BASED ON VIRGINIA STATE PLANE COORDINATE GRID, SOUTH ZONE, NORTH AMERICAN DATUM OF 1983 (NAD 83).
6. CONTRACTOR SHALL PROPERLY NOTIFY ALL PROPERTY OWNERS TWO (2) WEEKS PRIOR TO THE START OF ANY CONSTRUCTION (INCLUDING LAND CLEARING). NOTIFICATION SHALL BE IN THE FORM OF A LETTER SIMILAR TO THE "SAMPLE" REFLECTED IN THE COUNTY;S LATEST WATER AND SEWER SPECIFICATIONS (NOT-1).
7. THE ENGINEER WILL CERTIFY THAT THE ROADS ARE WITHIN 6-INCHES OF SUBGRADE BEFORE WATERLINE CONSTRUCTION CAN BEGIN.
8. FOR SEWER AND WATER INSTALLATION WITHIN EXISTING VDOT R/W; UTILITY CONTRACTORS SHALL NOTIFY VDOT 48 HOURS IN ADVANCE WHEN INSTALLATION BEGINS SO THAT DENSITY CAN BE TESTED (95% @ OPTIMUM MOISTURE +20%).
9. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON THE PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING THE WORK. CONTACT ENGINEER IMMEDIATELY, IF: LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON THE PLAN, OR IF: THERE APPEARS TO BE CONFLICT, AND UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THE PLAN CALL MISS UTILITY OF VIRGINIA AT 1-800-552-7001 (TOLL FREE).
10. THE INSTALLATION OF A BACKFLOW DEVICE IS REQUIRED IN ALL HOUSES WHERE THE FINISHED FLOOR ELEVATION IS LOWER THAN THE TOP UPGRADE MANHOLE. THIS DEVICE WILL BE INSPECTED BY THE COUNTY PUBLIC BUILDING INSPECTOR.
11. INDIVIDUAL WATER SERVICES SHALL BE 3/4".
12. ALL WATERLINE VALVES MUST BE LOCATED ON THE TEE OR CROSS WHEN APPLICABLE.
13. ALL MANHOLES IN UTILITY EASEMENTS ARE TO HAVE THE CONCRETE SECTION EXTENDED ONE FOOT ABOVE THE GROUND OR DETAIL MAN-2B SHALL BE USED.
14. A SMOOTH TRANSITION OF A DROP MANHOLE MUST BE PROVIDED FOR EACH LATERAL OR SANITARY SEWER ENTERING A SANITARY MANHOLE.
15. ALL FIRE HYDRANTS SHALL BE O.S.H.A. RED IN COLOR.
16. METER BOXES PROVIDED SHALL BE CAST IRON 12"x18"x24" HIGH WITH CAST IRON LIDS. THE METER ASSEMBLIES ARE TO BE SUPPLIED WITH NEPTUNE PROREAD ENCODERS AND R900I PIT MIU (RF) ATTACHED TO THE LID. METERS ARE TO BE COMPATIBLE WITH THE PROPOSED SYSTEM. A WAND TYPE VISUAL READER COMPATIBLE WITH THE PROREAD SYSTEM WILL BE SUPPLIED TO THE UTILITY DEPARTMENT WITH THE WATER METERS.
17. ALL SANITARY SEWER LATERALS THAT ARE INSTALLED OUTSIDE OF THE R/W ARE TO HAVE THE CLEANOUT INSTALLED AT THE EDGE OF THE EASEMENT. A CARSONITE MARKER SHALL ALSO BE INSTALLED TO INDICATE THEIR LOCATION.
18. ALL HYDRANTS AND BENDS SHALL BE EQUIPPED WITH MEGA LUGS, KICKERS AND THRUST BLOCKS.
19. PRESSURE REDUCING VALVES SHALL BE USED ON LOTS WHERE THE STATIC PRESSURE IN THE SYSTEM EXCEEDS 80 P.S.I. OR AS REQUIRED BY BUILDING CODE.
20. CLEANOUTS ARE TO BE INSTALLED ON ALL SANITARY LATERALS IN ACCORDANCE WITH PRINCE GEORGE COUNTY SPECIFICATIONS. THESE CLEANOUTS SHOULD BE INSTALLED AT THE EDGE OF THE R/W.
21. UTILITY INSPECTOR SHALL BE CONTACTED BEFORE INDIVIDUAL SERVICE CONNECTIONS ARE COVERED.
22. ALL MANHOLES WITHIN 1,000 FEET OF A FORCE MAIN DISCHARGE SHALL BE COATED AS REQUIRED IN THE LATEST COUNTY SPECIFICATIONS.
23. ALL INDIVIDUAL WATER AND SEWER CONNECTIONS SHALL BE MADE USING DOUBLE BANDED, STAINLESS STEEL, EPOXY COATED SADDLES.
24. A 'W' AND 'S' SHALL BE STAMPED IN THE CURB WHILE THE CONCRETE IS STILL WET. THESE MARKS SHALL INDICATE THE ACTUAL LOCATION OF WATER AND SEWER CONNECTIONS FOR EACH LOT.
25. ALL MANHOLES SHALL BE SEALED AT THE JOINTS WITH AN EXTERNAL RUBBER SLEEVE SIMILAR TO THE INFI-SHIELD SEAL WRAP AS MANUFACTURED BY SEALING SYSTEMS, INC. THE SEAL SHALL BE MADE OF EPDM (ETHYLENE PROPYLENE DIENE MONOMER) RUBBER WITH A MINIMUM THICKNESS OF 65 MILS. EACH UNIT SHALL HAVE A 2-INCH WIDE MASTIC STRIP ON THE TOP AND BOTTOM EDGE OF THE RUBBER WRAP. THE MASTIC SHALL BE NON-HARDENING BUTYL RUBBER SEALANT, WITH A MINIMUM THICKNESS OF 125 MILS.
26. THE BOXES FOR THE SEWER CONNECTIONS MUST BE MARKED AS SEWER CONNECTIONS RATHER THAN WATER METER.
27. ALL GATE VALVE BOXES LOCATED OUTSIDE THE PAVEMENT NEED TO BE ENCLOSED IN A 12"x12"x6" CONCRETE ENCLOSURE.

GENERAL NOTES:

1. CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION MEETING WITH PRINCE GEORGE COUNTY PUBLIC UTILITIES, VDOT INSPECTOR, AND ENGINEER PRIOR TO STARTING ANY WORK ON THIS PROJECT.
2. THE CONTRACTOR SHALL PAY FOR AND OBTAIN ALL REQUIRED PERMITS AND DELIVER COPIES TO PRINCE GEORGE COUNTY PUBLIC UTILITIES AND THE ENGINEER AT THE PRE-CONSTRUCTION MEETING.
3. HORIZONTAL DATUM: NAD 83, VERTICAL DATUM: NAVD 88
4. STAKING FOR CONSTRUCTION, TO ASSURE PROPER LOCATION OF PROJECT COMPONENTS SHALL BE PERFORMED BY A CERTIFIED LAND SURVEYOR.
5. PREVIOUSLY ARRANGED ACCESS EASEMENTS, STAGING AREAS, STORAGE AREAS, ETC., IF ANY, ARE SHOWN ON THE DRAWINGS. ADDITIONAL LAND USE RIGHTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
6. WORK AREAS SHALL BE KEPT FREE OF DEBRIS AND HAZARDOUS MATERIAL AT ALL TIMES.
7. THE CONTRACTOR SHALL COORDINATE STORAGE OF MATERIALS, PARKING OF VEHICLES, AND RESTRICTIONS OF WORK WITH THE PRINCE GEORGE COUNTY PUBLIC UTILITIES AND VDOT INSPECTORS.
8. THE LOCATION OF EXISTING UTILITIES ACROSS OR ALONG THE ROUTE OF THE PROPOSED WORK IS NOT NECESSARILY SHOWN ON THE PLANS, AND WHEN SHOWN, IS ONLY APPROXIMATELY CORRECT. IN ADDITION TO CONTACTING MISS UTILITY PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL, LOCATE ALL EXISTING UNDERGROUND LINES, FACILITIES, AND STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY UNDERGROUND LINES, FACILITIES, AND STRUCTURES DAMAGED.
9. CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY COMPANIES PRIOR TO CONSTRUCTING PORTIONS OF WORK IMMEDIATELY ADJACENT TO UTILITY STRUCTURES. THE COSTS OF POLE AND/OR OTHER STRUCTURE STABILIZATION DURING WORK SHALL BE BORNE BY THE CONTRACTOR.
10. ALL WORK SHALL BE SUBJECT TO INSPECTION BY VDOT AND PRINCE GEORGE COUNTY INSPECTORS.
11. FINAL ACCEPTANCE BY PRINCE GEORGE COUNTY AND STATE WILL NOT BE MADE UNTIL ALL WORK SHOWN ON THE APPROVED CONTRACT DOCUMENTS IS COMPLETED, INCLUDING PAVING, GRADING AND ALL ADJUSTMENTS.
12. ALL WATERLINES SHALL HAVE A MINIMUM OF 3.5' OF COVER.
13. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESERVE THE EXISTING RIGHT-OF-WAY MONUMENTS. CERTIFIED BY LAND SURVEYOR.
14. EXCESS EXCAVATION TO BE DISPOSED OF AS DIRECTED BY THE OWNER AND/OR AS SHOWN ON THE EROSION CONTROL PLAN.
15. NO MORE THAN 500' OF TRENCH SHALL BE OPEN AT ONE TIME. ALL TRENCHES SHALL BE CLOSED AT THE END OF THE WORKDAY.
16. CONTRACTOR TO SUPPLY WATER AS REQUIRED FOR ALL TESTING AND FLUSHING.
17. CONTRACTOR SHALL PROVIDE A CERTIFIED LAND DISTURBER FOR THE PROJECT CONSTRUCTION.
18. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST PRINCE GEORGE COUNTY SPECIFICATIONS.
19. EROSION & SEDIMENT CONTROL PLANS ARE A PART OF THE CROSSPOINTE CENTRE ROADWAY CONSTRUCTION PLANS AS PREVIOUSLY SUBMITTED.
20. ALL FUTURE WATERLINE TAPS MUST BE BACK TAPPED AND BORED UNDER THE ROAD IF THEY MUST CROSS THE ROAD.



CROSS SECTION
(NTS)



NOTE: EXTENSION BERM IS 10' WIDE WITH 3:1 SLOPES DOWN TO EXISTING GRADE.

PLAN
(NTS)

TYPICAL HYDRANT & VALVE LOCATION

*NOTE: HYDRANT #5A & #13 IS 9' OUTSIDE ROW.

Rinker Design Associates, P.C.
Engineering * Surveying * Land Planning * Transportation * Environmental Services
927 Maple Grove Drive, Suite 105, Fredericksburg, Virginia 22407
on the web @ www.rdacivil.com
Telephone: (540) 548-4470 , Fax: (540) 548-4471
"Turning Challenges into Opportunities"

CROSSPOINTE CENTRE
WATERLINE & SANITARY SEWER DESIGN
Prince George County, Virginia

PROJECT MANAGER TIM WELSH, RCCI (540)898-7464
SURVEYED BY TIMMONS GROUP (PROVIDED BY PRINCE GEORGE CO.)
DESIGN SUPERVISED BY DARELL FISCHER P.E., RDA
DESIGNED BY KRISTINA T. HARRIS P.E., RDA