# <u>LEGEND</u>

PROPOSED	DESC.	EXISTING
	CULVERT	
<del></del>	CURB	
	CURB & GUTTER	
	DRY CURB & GUTTER	
	PAVEMENT	
	CONCRETE	
· · · · · · · · · · · · · · · · · · ·	PAVED DITCH	
9"	DITCH	
	PROPERTY CORNER	
	EARTH DITCH	
	BORING	9 BM #1 NAIL II
	BENCH MARK	BM #1 NAIL II
$\langle \vee \vee \vee \vee \vee \vee \rangle$	EXISTING TREE LINE CLEARING LIMITS	
	CEEMINO LIMITO	
200 ——	CONTOUR	200 · —
240.55	PROPOSED SPOT ELEVATION	240.55
	TC DENOTES TOP/CURB PV DENOTES PAVEMENT OF	R CONCRETE
——ОНР—— <del>р</del> —ОНР——	OVERHEAD POWER LINE AND POWER POLE	
——————————————————————————————————————	UNDERGROUND POWER LINE UNDERGROUND FIBER OPTIC L	INE
——————————————————————————————————————	UNDERGROUND FIBER OFTIC L	
TELU	UNDERGROUND TELEPHONE LI	
TELO	OVERHEAD TELEPHONE LINE CABLE TV LINE	
TC	TRAFFIC CONTROL LINE	
DBS	DUCT BANK SYSTEM	19 1度200万米次で大型電視器 2013 (1915年大型電視器 1915年) 19 1度200万米次で大型電視器 2013 19 1度20 19 16 16 16 16 16 16 16 16 16 16 16 16 16
G	GAS LINE	Substitutive Tricks and Percentage of the Control o
	FENCE LINE	
	CONSTRUCTION EASEMENT LIN	IE
	PERMANENT EASEMENT LINE PROPERTY LINE	
Start, Advintor and the second	CREEK LINE	
<del></del>	CREEK LINE	
S S	SANITARY SEWER	THE REAL PROPERTY NAME OF PERSONS ASSESSED.
STA 0+64.86 N 2010.34 E 30022.52	M.H. NUMBER w/ COORDINATE LOCATION	
W W	WATER LINE	。 (1974年中国的中国(1974年)(1974年中国的中国的中国的中国的中国的中国的中国的中国的中国的中国的中国的中国的中国的中
	VALVE	
	REDUCER	
	PLUG	
<del></del>	CROSS	
<u> </u>	TEE	
	FIRE HYDRANT ASSEMBLY (INC 6" LINE, TEE, 6" VALVE AND I	LUDES HYDRANT)
	AIR RELEASE VALVE, COMBINA	
	AIR VALVE SWAMP/WETLANDS	
	STANT / WE TEXTEDS	
SF	SILT FENCE	
(CD)	CHECK DAM	3.20
OP OP	OUTLET PROTECTION	3.18
B/M	SOIL STABILIZATION MAT	3.36
RR RR	RIP RAP	3.19
CIP	CULVERT INLET PROTECTION	3.08
IP —	INLET PROTECTION	3.07
	- TREE PROTECTION	3.38
(TP) —	- INCE FROIECHON	
	CONSTRUCTION ENTRANCE	3.02

\* VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK SPECIFICATION NUMBER, THIRD EDITION, 1992.

## ABBREVIATIONS:

A.B.O.	_	AIR BLOW OFF	MIN.	_	MINIMUM
ACCMP	<del></del>	ASPHALT COATED	MJ	_	MECHANICAL JOINT
		CORRUGATED METAL PIPE	N.I.C.	<del></del>	NOT IN CONTRACT
ASS'Y	_	ASSEMBLY	PC	_	POINT OF CURVATURE
В	_	BELL JOINT	PE	_	PLAIN END
BIT. CON.		BITUMINOUS CONCRETE	Pl		POINT OF INTERSECTION
B.O.		BLOW OFF	PT		POINT OF TANGENT
C/L	_	CENTERLINE	PVC	_	POLYVINYL CHLORIDE
CĹ	_	CLASS	R/W		RIGHT-OF-WAY
CMP		CORRUGATED METAL PIPE	R <sup>′</sup>		RESTRAINED JOINT
CONC.	_	CONCRETE	REQ'D	_	REQUIRED
C.Y.		CUBIC YARD	RCP		REINFORCED CONCRETE PIPE
DATR		DEEMED ACCURATE	RT.	_	RIGHT
		TO RECORD	SAN		SANITARY SEWER
DBC	****	DIRECT BURIED CABLE	SF	_	SILT FENCE
D.I.	_	DUCTILE IRON	SFM	<del></del>	SEWER FORCE MAIN
DR.		DRIVE	SD		STORM DRAIN
E	_	ELECTRIC	SS		SANITARY SEWER CONNECTION
EA.	_	EACH	STA.	_	STATION
EOI	_	ELECTRICAL	STM	_	STORM SEWER
E/P		EDGE OF PAVEMENT	STMH	_	STORM MANHOLE
E BOX		ELECTRICAL BOX	T		TELEPHONE
EXIST.	_	EXISTING	TCM	_	TELECOMMUNICATIONS MANH
F	_	FLANGE JOINT	ΤH		TEST HOLE
G	_	GAS	THB		TELEPHONE
			TS&V	-101-	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)

#### **GENERAL NOTES:**

- CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION MEETING WITH PRINCE GEORGE COUNTY PUBLIC UTILITIES, VOOT INSPECTOR, AND ENGINEER PRIOR TO STARTING ANY WORK ON THIS PROJECT.
- 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.
- CONTRACTOR SHALL NOTIFY PROPERTY OWNERS (IN WRITING) OF ANY WORK SCHEDULED ADJACENT TO OR THROUGH THEIR PROPERTY A MINIMUM OF TWO WEEKS IN ADVANCE PRIOR TO THE COMMENCEMENT OF ANY STAKING OR CONSTRUCTION ACTIVITY.
- 4. HORIZONTAL DATUM: NAD 83, VERTICAL DATUM: NAVD 88
- STAKING FOR CONSTRUCTION, TO ASSURE PROPER LOCATION OF PROJECT COMPONENTS SHALL BE PERFORMED BY A CERTIFIED LAND SURVEYOR.
- . ALL EXISTING PROPERTY MARKERS ARE TO REMAIN UNDISTURBED. IF DISTURBANCE OCCURS, REPLACEMENT MUST BE PERFORMED BY A CERTIFIED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- 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
- 8. WORK AREAS SHALL BE KEPT FREE OF DEBRIS AND HAZARDOUS MATERIAL AT ALL TIMES.
- THE CONTRACTOR SHALL COORDINATE STORAGE OF MATERIALS, PARKING OF VEHICLES, AND RESTRICTIONS OF WORK WITH THE PRINCE GEORGE COUNTY PUBLIC UTILITIES AND VDOT INSPECTORS.
- 10. CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL EXISTING FEATURES, SUCH AS GUARDRAIL, SIDEWALKS, BRICKWORK, CULVERTS, FENCES, SHRUBS, PLANTERS, ETC. TO THEIR ORIGINAL LOCATION AND CONDITION WHICH EXISTED PRIOR TO CONSTRUCTION. TOTAL REPLACEMENT MAY BE NECESSARY.
- 11. 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.
- 12. 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.
- 13. ALL WORK SHALL BE SUBJECT TO INSPECTION BY VDOT AND PRINCE GEORGE COUNTY INSPECTORS.
- 14. 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
- 15. ALL WATERLINES SHALL HAVE A MINIMUM OF 3.5' OF COVER.
- 16. GRAVITY SEWER LINES, MANHOLES AND SEWER FORCE MAIN SHALL BE TESTED IN ACCORDANCE WITH SPECIFICATION SECTION 02530 - "SANITARY SEWER".
- 17. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESERVE THE EXISTING RIGHT-OF-WAY MONUMENTS. CERTIFIED BY LAND SURVEYOR.
- 18. EXCESS EXCAVATION TO BE DISPOSED OF AS DIRECTED BY THE OWNER AND/OR AS SHOWN ON THE EROSION CONTROL PLAN.
- 19. NO MORE THAN 500' OF TRENCH SHALL BE OPEN AT ONE TIME. ALL TRENCHES SHALL BE CLOSED AT THE END OF THE WORKDAY.
- 20. LAND DISTURBANCE WITHIN VOOT RIGHT-OF-WAY SHALL BE DRESSED UP, SEEDED AND MULCHED AT THE END OF EACH DAY AS WORK PROGRESSES.
- 24. CONTRACTOR TO SUPPLY WATER AS REQUIRED FOR ALL TESTING AND FLUSHING.
- 25. CONTRACTOR SHALL PROVIDE A CERTIFIED LAND DISTURBER FOR THE PROJECT CONSTRUCTION.
- 26. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST PRINCE GEORGE COUNTY SPECIFICATIONS.
- 27. ALL BALL CENTRIC VALVES TO BE MANUFACTURED BY CLOW VALVE COMPANY.

<u>OWNER</u> PRINCE GEORGE COUNTY PUBLIC UTILITIES 6602 COURTS DRIVE PRINCE GEORGE, VIRGINIA 23875 ATTN: STEVE McBRIDE, PE VOICE: 804-722-8687 FAX: 804-733-2779

EMAIL: SMCBRIDE@PRINCEGEORGEVA.ORG

1001 BOULDERS PARKWAY SUITE 300 RICHMOND, VA 23225 ATTN: STUART LITTLE VOICE: 804-200-6500 FAX: 804-560-1431 EMAIL: <u>stuart.little@timmons.com</u>

SEWER UTILITY
PRINCE GEORGE COUNTY PUBLIC UTILITIES 6602 COURTS DRIVE PRINCE GEORGE, VIRGINIA 23875 ATTN: STEVE McBRIDE, PE VOICE: 804-722-8687 FAX: 804-733-2779 EMAIL: SMCBRIDE@PRINCEGEORGEVA.ORG

# PRINCE GEORGE COUNTY PUBLIC UTILITIES STANDARD SEWER AND WATER NOTES

- 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.
- 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%).
- 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.
- . FALL 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
- 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
- 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).
- 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%).
- 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 R9001 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. PRESSURÉ 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.

M. ROBESON

DESIGNED BY M. ROBESON CHECKED BY

AS SHOWN