

GENERAL UTILITY NOTES

- SUPPLY AND INSTALL ALL MATERIALS AND METHODS FOR WATERLINES, SANITARY SEWERS AND STORM DRAINAGE IN ACCORDANCE WITH THE SPECIFICATIONS AND REQUIREMENTS OF CRAIG COUNTY AND THE NATIONAL STANDARD OF TRANSPORTATION ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS, LATEST EDITION.
- OBTAIN ALL REQUIRED PERMITS AND NOTIFY APPROPRIATE OFFICIALS 48 HOURS PRIOR TO COMMENCEMENT OF WORK. OBTAIN INFORMATION FROM CRAIG COUNTY CONCERNING PERMITS AND CONNECTIONS TO EXISTING LINES.
- ALL WORK SHALL BE SUBJECT TO INSPECTION BY CRAIG COUNTY. NOTIFY APPROPRIATE OFFICIALS PRIOR TO INSTALLATION OF UTILITIES. ALL UTILITIES SHALL BE IN PLACE PRIOR TO PLACEMENT OF PAVEMENT BASE MATERIAL.
- USE SELECT MATERIAL FREE FROM FROST, LARGE CLOS, STONES, AND DEBRIS FOR BACK FILL FROM THE BOTTOM OF THE TRENCH TO TWELVE (12) INCHES ABOVE THE PIPE.
- MINIMIZE ANY OBSTURANCE TO EXISTING WATER SERVICE, SEWER LINES OR ANY OTHER UTILITY DURING CONSTRUCTION AND PROVIDE QUALITY WORKMANSHIP.
- MAKE ALL PIPE JOINTS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE CITY'S SPECIFICATIONS. MAKE JOINTS BETWEEN DIFFERENT PIPE MATERIALS WITH STANDARD FITTINGS MANUFACTURED FOR THE PURPOSE.
- MAINTAIN ALL WATER LINES AT TEN (10) FEET HORIZONTAL SEPARATION FROM SEWER LINES AND MANHOLES. MEASURE THE DISTANCE EDGE-TO-EDGE. WHEN LOCAL CONDITIONS PREVENT THE DESIRED HORIZONTAL SEPARATION, THE WATERLINE MAY BE LAID CLOSER TO THE SEWER OR MANHOLE PROVIDED THAT THE BOTTOM OF THE WATERLINE SHALL BE AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF THE SEWER. WHERE THIS VERTICAL SEPARATION CANNOT BE OBTAINED, CONSTRUCT THE SEWER OF AWWA APPROVED WATER PIPE AND PRESSURE TREAT IN PLACE PRIOR TO BACKFILLING. THE SEWER MANHOLE SHALL BE OF WATERTIGHT CONSTRUCTION TESTED IN PLACE.
- SEWER AND WATER TAPS SHALL BE LOCATED BY THE CONTRACTOR AND MADE BY THE COUNTY AT THE DEVELOPER'S EXPENSE.
- LOCATE AND UNCOVER VALVE VAULTS AND MANHOLES AFTER PAIVING AND ADJUST TO FINAL GRADE, IF NECESSARY.
- REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS WHERE UTILITIES ENTER THE BUILDING.
- VERIFY THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON THE PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT THE ENGINEER IMMEDIATELY IF:

ANY LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON THE PLANS.

IF THERE APPEARS TO BE ANY CONFLICT.

UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THE PLANS.

TO MISS UTILITIES, CALL "MISS UTILITY" OF VIRGINIA TOLL FREE 1-800-552-7001) 48 HOURS BEFORE YOU DIG. THE CONTRACTOR IS RESPONSIBLE FOR ALL

DAMAGE CAUSED TO ANY UTILITY, PUBLIC OR PRIVATE, AS A RESULT OF THIS WORK. EXISTING UTILITY LOCATIONS SHOWN ARE A RESULT OF A COMBINATION OF EXISTING INFORMATION AND FIELD LOCATION OF SURFACE FEATURES. LOCATIONS ARE APPROXIMATE.

13. REPAIR ALL DAMAGE CAUSED TO ANY UTILITY, PUBLIC OR PRIVATE, AS A RESULT OF THIS WORK AT NO ADDITIONAL COST TO OWNER.

14. PROVIDE A CONTINUOUS AND UNIFORM BEDDING IN THE TRENCH FOR ALL PIPE.

(6) INCHES BELOW THE BOTTOM OF THE PIPE AND TAMP SELECT FILL BEDDING PROVIDED. AFTER THE PIPE HAS BEEN PLACED IN THE TRENCH, BACK FILL THE TRENCH WITH SELECT MATERIAL, THOROUGHLY COMPACT TO 90% (95% UNDER PAVEMENT OR CONCRETE SLAB) OF THE STANDARD PROCTOR (ASTM D-699) USING CARE NOT TO DAMAGE THE PIPE. USE VOT STANDARD PB-1 TRENCH FOR STORM SEWER AND UB-1 FOR SANITARY SEWER AND WATER.

15. PLACE BACK FILL FOR ALL UTILITIES IN ACCORDANCE WITH THE COUNTY'S SPECIFICATIONS, AND THE FOLLOWING CRITERIA:

(1) BACK FILL NO TRENCH UNTIL AUTHORIZED BY THE COUNTY. MATERIALS USED FOR BACK FILL FROM THE BOTTOM OF THE TRENCH TO TOP OF THE PIPE SHALL BE CRUSHER RUN, OR APPROVED EQUAL MATERIAL, THOROUGHLY AND CAREFULLY COMPACT THE BACK FILL MATERIAL.

(2) COMPACT BACK FILL BY MECHANICAL TAMPING THROUGHOUT THE DEPTH OF THE TRENCH TO INSURE A SUFFICIENT SUBGRADE ACCEPTABLE TO THE ROAD ENGINEER. IF THE MATERIAL TAKEN FROM THE DITCH IS NOT SUITABLE FOR BACK FILLING, REMOVE IT AND USE AN ACCEPTABLE MATERIAL FOR BACK FILLING THE TRENCH.

16. IN AREAS OF WATER LINE CONSTRUCTION, GRADES SHALL BE WITHIN SIX (6) INCHES OF FINISHED SUB GRADE PRIOR TO THE COMMENCEMENT OF THIS WORK.

17. MINIMUM COVER OVER WATER AND SANITARY SEWER LINES SHALL BE THREE (3) FEET.

18. THE COUNTY SHALL MAKE ALL CONNECTIONS TO EXISTING WATER MAINS.

19. THE CONTRACTOR SHALL INSTALL ALL WATER SERVICE CONNECTIONS AND METER BOXES.

20. WATER PIPE SHALL BE DUCTILE IRON.

21. CONNECT PIPE TO MANHOLES THROUGH PRE CAST OPENINGS AND JOIN WITH EITHER A FLEXIBLE BOOT ADAPTER OR A PIPE SEAL GASKET.

NOTES:

- OWNERS OF RECORD: WALTER F. SULLIVAN, BISHOP OF THE ROMAN CATHOLIC DIOCESE OF RICHMOND
- LEGAL REFERENCE: DEED BOOK 113, PAGE 644
- TAX MAP #S: 47A3-1-19-1, 47A3-1-12-1 & 47A3-1-12-1A
- TAX MAP #S: 47A3-1-12-1, 47A3-1-12-1 & 47A3-1-12-1A
- THE ALLEHANY AVENUE (RTE. 670) AND THE VACATED PORTION OF COLUMBIA AVENUE (RTE. 670) THE TOTAL ACREAGE FOR THIS TAX PARCEL IS 1.095 ACRES.
- ELEVATIONS SHOWN ARE BASED ON AN ASSUMED DATUM X UNSHADOWED
- PROPERTY IS IN FEMA DETERMINED FLOOD HAZARD ZONE X UNSHADOWED
- ST. JOHN THE EVANGELIST CATHOLIC CHURCH
- FEBRUARY 2, 1990.

WATER NOTES

- IN AREAS OF WATERLINE CONSTRUCTION, GRADES SHALL BE WITHIN SIX (6) INCHES OF FINISHED SUBGRADE PRIOR TO THE COMMENCEMENT OF THIS WORK.
- ALL CONNECTIONS TO EXISTING WATER MAINS SHALL BE MADE BY THE CRAIG COUNTY.
- WATER PIPE SHALL BE DUCTILE IRON WITH PUSH-ON JOINTS. DUCTILE IRON PIPE SHALL CONFORM TO AWWA C-151/ANSI 21.7/1 AND FITTINGS SHALL CONFORM TO AWWA C-110/ANSI 21.7/1. ALL WATER LINES SHALL BE INSTALLED IN ACCORDANCE WITH AWWA C-151/ANSI 21.7/1. THE PIPE SHALL BE SPECIFIED OR INDICATED OTHERWISE.
- MINIMUM CLEAR COVER OVER ALL WATER PIPE SHALL BE THREE (3) FEET.
- THE COUNTY SHALL INSTALL ALL WATER SERVICE CONNECTIONS AND METER BOXES.

SEWER NOTES

- PIPE AND FITTINGS SHALL BE POLYVINYL CHLORIDE (PVC) SDR 35 AND SHALL CONFORM TO ASTM D-3034. BEDDING SHALL BE CLASS "B" MINIMUM.
- CONNECT PIPE TO MANHOLES THROUGH PRECAST OPENINGS AND JOIN WITH EITHER A FLEXIBLE BOOT ADAPTER OR A PIPE SEAL GASKET.

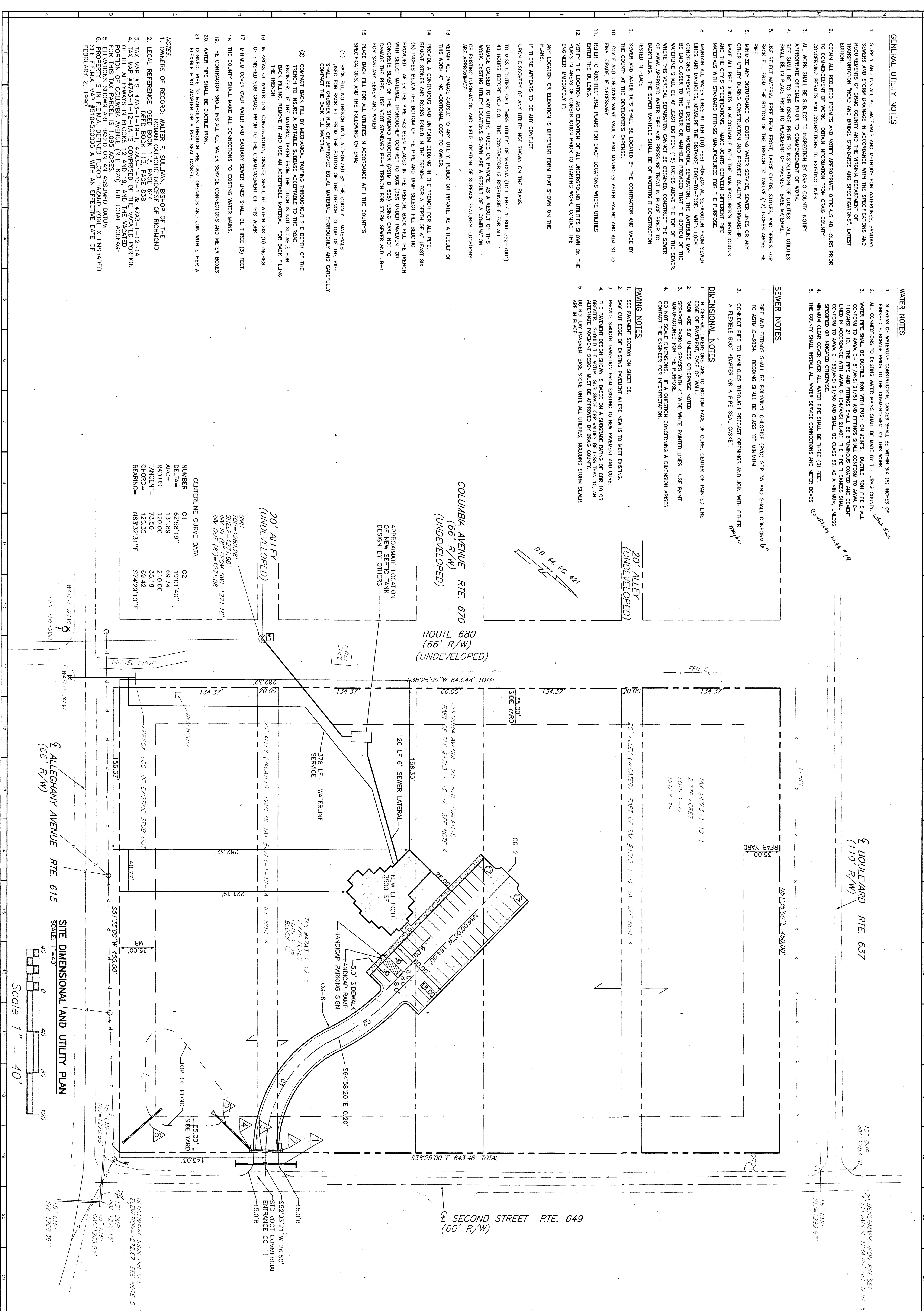
DIMENSIONAL NOTES

- IN GENERAL, DIMENSIONS ARE TO BOTTOM FACE OF CURB, CENTER OF PAINTED LINE, EDGE OF PAVEMENT, FACE OF WALL.
- RADI ARE 5.0' UNLESS OTHERWISE NOTED.
- SEPARATE PARKING SPACES WITH 4" WIDE WHITE PAINTED LINES. USE PAINT MANUFACTURED FOR THE PURPOSE.
- DO NOT SCALE DIMENSIONS. IF A QUESTION CONCERNING A DIMENSION ARISES, CONTACT THE ENGINEER FOR INTERPRETATION.

PAVING NOTES

- SEE PRECAST SECTION ON SHEET C8.
- SAW OUT EDGE OF EXISTING PAVEMENT WHERE NEW IS TO MEET EXISTING.
- PROVIDE SMOOTH TRANSITION FROM EXISTING TO NEW PAVEMENT AND CURB.
- THE PAVEMENT DESIGN SHOWN IS BASED ON A SURGRADE FINISH OF CBR 10 OR GREATER. SHOULD THE ACTUAL SUB GRADE CBR VALUES BE LESS THAN 10, AN ALTERNATE PAVEMENT DESIGN MUST BE APPROVED BY CRAIG COUNTY.
- DO NOT LAY PAVEMENT BASE STONE UNTIL ALL UTILITIES, INCLUDING STORM SEWER, ARE IN PLACE.

CENTERLINE CURVE DATA		
NUMBER	C1	C2
TOP=1282.28'		
SHELF=1271.68'		
INV IN (8" FROM SW)=1271.18'		
INV OUT (8")=1271.08'		
DELTA=	62°58'19"	19°01'40"
ARC=	131.89	69.74
RADIUS=	120.00	210.00
TANGENT=	73.50	35.19
CHORD=	125.35	69.42
BEARING=	N83°32'31"E	S74°29'10"E



PLANNERS • ARCHITECTS
ENGINEERS • SURVEYORS

1208 Corporate Circle
Roanoke, Virginia 24018
Phone: 540/772-8850
FAX: 540/772-8850

501 Broadway Road
Richmond, Virginia 23236
Phone: 804/794-0571
FAX: 804/794-2635

11028 Lakeside Parkway
Suite 1
Richmond, Virginia 23005
Phone: 804/650-2889
FAX: 804/650-2057

ST. JOHN THE EVANGELIST
CATHOLIC CHURCH
SITE DIMENSIONAL AND UTILITY PLAN
CRAIG COUNTY
NEW CASTLE, VIRGINIA

DRAWN BY: DRB
DESIGNED BY: DRB
CHECKED BY: FIS
DATE: MAR. 22, 2001
REVISIONS:
SCALE: AS SHOWN
SHEET NO. C2
JOB NO. R00000326