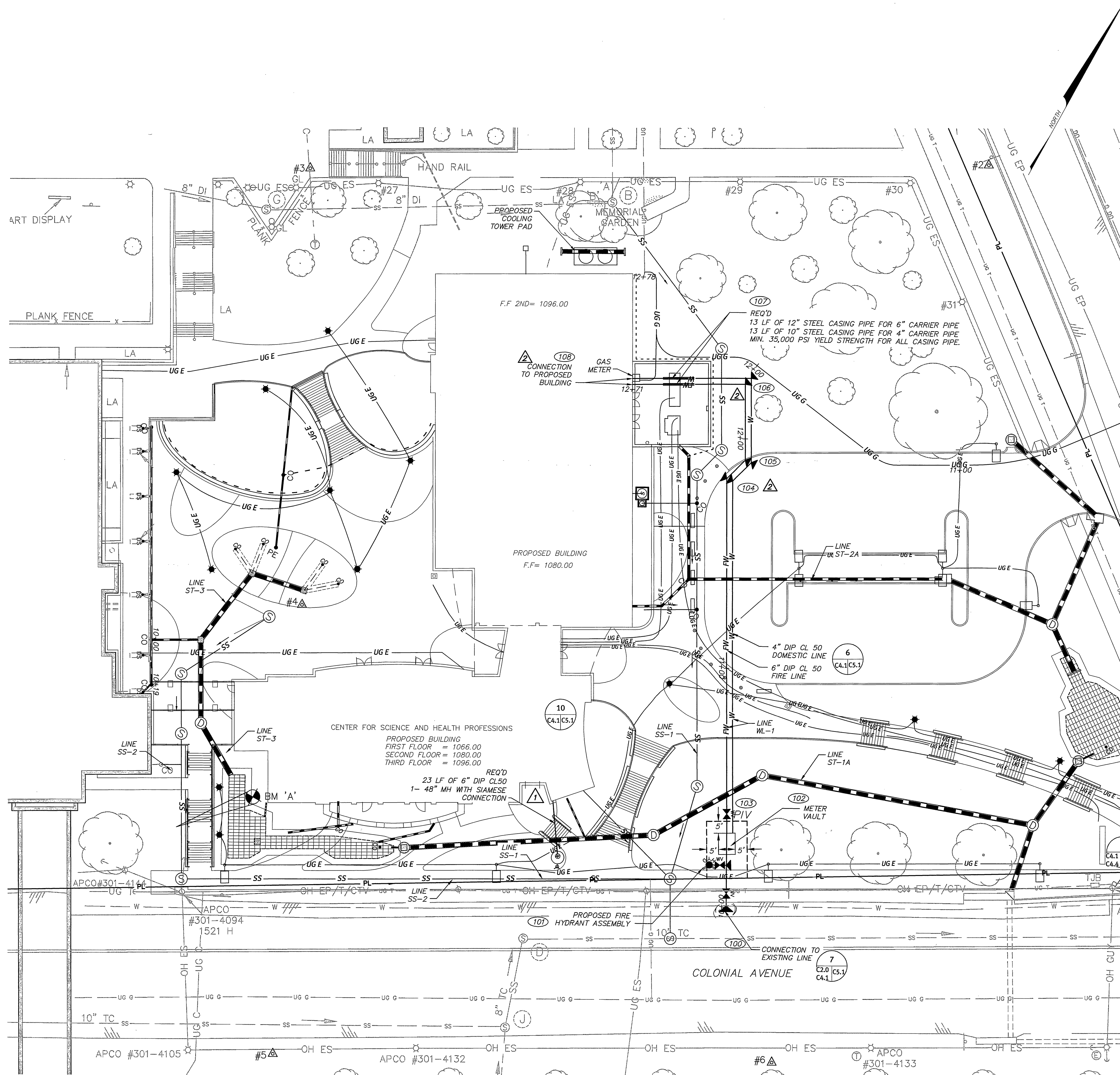


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Utility.dwg



WATER LINE WL-1
PLAN VIEW

UTILITY DRAWING REFERENCE

REFER TO DRAWING C4.1 FOR WATERLINE UTILITY LAYOUT.
REFER TO DRAWING C4.2 FOR SANITARY SEWER UTILITY LAYOUT.
REFER TO DRAWING C4.3 FOR STORM SEWER UTILITY LAYOUT.
REFER TO DRAWING C4.4 FOR UTILITY PROFILES.

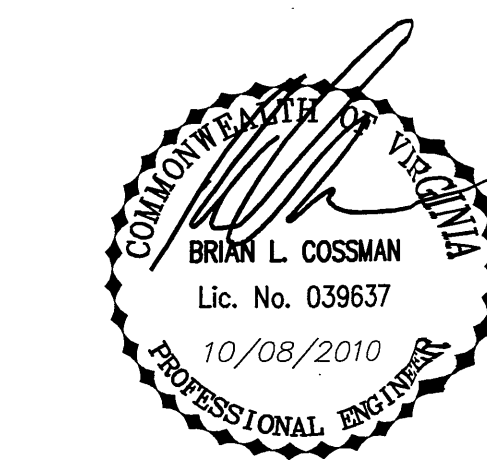
TEST HYDRANT (TAKEN AUGUST 2009)
3095 COLONIAL AVE. SW
STATIC PRESSURE: 108 PSI
PISTON PRESSURE: 78 PSI
RESIDUAL PRESSURE: 86 PSI
FLOW RATE: 1480 GPM

WATER NOTES:

1. ALL PIPE, FITTINGS AND APPURTENANCES SHALL BE RESTRAINED AND ANCHORED IN ACCORDANCE WITH THE WESTERN VIRGINIA WATER AUTHORITY (WVWA) DESIGN AND CONSTRUCTION STANDARD MANUAL. THRUST RESTRAINTS ARE REQUIRED FOR ALL BENDS AND TEES. IF MECHANICAL JOINT RESTRAINT SYSTEMS ARE USED, INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS RELATED TO NUMBER OF JOINTS RESTRAINED.
2. ALL WATER DISTRIBUTION PIPING AND ATTACHED APPURTENANCES SUBJECT TO SYSTEM WORKING PRESSURE SHALL BE HYDROSTATICALLY TESTED AT 200 PSI OR 50 PSI IN EXCESS OF THE SYSTEM WORKING PRESSURE WHICHEVER IS GREATER AND SHALL MAINTAIN THE PRESSURE AT ± 5 PSI FOR 2 HOURS.
3. THRUST BLOCKS SHALL BE REQUIRED ON ALL VERTICAL BENDS, SEE DETAILS 5 ON C5.1 FOR HORIZONTAL AND VERTICAL CONCRETE ANCHORS.
4. MAINTAIN 18" OF VERTICAL SEPARATION BETWEEN STORM SEWER LINES, WATER LINES AND THE SANITARY SEWER LINES.
5. ALL WATER MAIN TIE-IN SHALL BE DISINFECTED WITHIN ACCORDANCE WITH AWWA C651, SECTION 10. DISINFECTION PROCEDURES WHEN CUTTING INTO OR REPAIRING EXISTING MAINS. ALL JOINTS SHALL REMAIN EXPOSED UNDER "WORKING" PRESSURE FOR VISUAL INSPECTION BY THE WVWA'S UTILITIES INSPECTOR AND HIS APPROVAL PRIOR TO BACKFILLING.
6. ANY CHANGE TO THE PLAN MUST BE APPROVED BY THE ENGINEER AND THE WVWA PUBLIC UTILITIES MANAGER PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL COORDINATE PRESENCE OF THE WVWA'S UTILITY INSPECTOR DURING CONSTRUCTION OF ALL WATERLINE APPURTENANCES. ALL PUBLIC WATER INTERRUPTIONS MUST BE COORDINATED WITH THE WVWA AND PUBLIC UTILITIES PERSONNEL MUST OPERATE ALL EXISTING WATER VALVES.
8. THE CONTRACTOR SHALL COORDINATE PRESENCE OF THE WVWA'S UTILITY INSPECTOR DURING CONSTRUCTION WITHIN PUBLIC RIGHT OF WAYS AND SEWER EASEMENTS.
9. AFTER TESTING AND BEFORE FINAL INSPECTION OF THE COMPLETE SYSTEMS, WATER MAINS AND SERVICE LATERALS SHALL BE FLUSHED AND DISINFECTED IN ACCORDANCE WITH AWWA SPECIFICATION C651 LATEST REVISION. FLUSHING SHALL BE ACCOMPLISHED AT A FLOW VELOCITY OF NOT LESS THAN 2.5 FT PER SECOND.
10. ALL WATER METERS SHALL BE INSTALLED WVWA FORCES PER THE CURRENT BASIC CONNECTION FEE SCHEDULE.
11. WVWA SHALL PERFORM THE MET TAP INTO THE EXISTING WATER LINE. CONTRACTOR SHALL PROVIDE TAPPING SLEEVE AND VALVE.
12. THE WATER SERVICE FOR THIS PROJECT WILL REQUIRE A CONCRETE VAULT. PLEASE CONTACT CLEAR FLOW AT (540) 942-3300 TO ORDER THE VAULT. THE APPLICANT IS RESPONSIBLE FOR PAYMENT, DELIVERY AND COORDINATION OF THE VAULT, AND INSTALLATION OF THE WATER SERVICE BETWEEN THE AUTHORITY MAIN AND THE VAULT INCLUDING THE TAPPING SLEEVE AND VALVE. CONTRACTOR TO EXCAVATE AND INSTALL TAPPING SLEEVE AND VALVE. THE MET TAP WILL BE MADE BY THE AUTHORITY UPON PAYMENT AND SCHEDULING. CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION AND SHORING PER OSHA REGULATIONS.
13. ALL WATER AND SANITARY SEWER FACILITIES ARE TO BE INSTALLED ACCORDING TO THE WESTERN VIRGINIA WATER AUTHORITY DESIGN AND CONSTRUCTION STANDARDS.
14. THE DEVELOPER OR CONTRACTOR SHALL SUPPLY THE COUNTY AND THE WESTERN VIRGINIA WATER AUTHORITY WITH CORRECT AS-BUILT PLANS BEFORE FINAL ACCEPTANCE.
15. THE CONTRACTOR SHALL CONTACT THE WVWA PRIOR TO CONSTRUCTION.

WATER LINE
STRUCTURE SCHEDULE

- | NO. | DESCRIPTION |
|-----|---|
| 1 | STA: 10+00; LINE WL-1
CONNECT TO EXISTING WATER LINE
REQ'D:
1-8"X6" TAPPING VALVE-
SLEEVE & VALVE BOX |
| 2 | STA: 10+17; 2.0' LT; WL-1
REQ'D:
1-FIRE HYDRANT ASSEMBLY
1-CONCRETE ANCHOR BLOCK |
| 3 | STA: 10+21; WL-1
REQ'D:
1-METER VAULT |
| 4 | STA: 10+38; WL-1
REQ'D:
1-6" POST INDICATOR
VALVE & VALVE BOX |
| 5 | STA: 11+80; WL-1
REQ'D:
1-4" 45° BEND
1-6" 45° BEND
2-CONCRETE ANCHOR |
| 6 | STA: 11+88; WL-1
REQ'D:
1-4" 45° BEND
1-6" 45° BEND
2-CONCRETE ANCHOR |
| 7 | STA: 12+20; WL-1
REQ'D:
2-4" 45° BEND
2-6" 45° BEND
2-CONCRETE ANCHOR |
| 8 | STA: 12+44 BEGIN STEEL CASING PIPE
STA: 12+57 END STEEL CASING PIPE |
| 9 | STA: 12+71; WL-1
TIE INTO BUILDING |



revisions	
07/16/2010	ADDENDUM #2
08/17/2010	ADDENDUM #3

VIRGINIA WESTERN
COMMUNITY COLLEGE
CENTER FOR
SCIENCE AND HEALTH
PROFESSIONS

PC# 260-177 07
Calloway Johnson Moore & West, P.A.
CONSTRUCTION DOCUMENTS

C4.1
WATER LINE PLAN

date: August 17, 2010
commission: 08-1220
drawn by: RKM