

ELECTRICAL/COMMUNICATIONS NOTES:

1. ALL ELECTRICAL CONDUIT AND TELECOMMUNICATIONS CONDUIT SHOWN IS FOR REFERENCE ONLY. PLEASE SEE ELECTRICAL PLAN ES100 FOR DETAILED INFORMATION.

NOTE:

THE CONTRACTOR SHALL PROVIDE A "QUALIFIED SWPPP DEVELOPER" (QSD) WHO WILL BE RESPONSIBLE FOR DEVELOPING A STORMWATER POLLUTION PREVENTION PLAN FOR THIS PROJECT. THE QSD WILL ACT AS A DATA SUBMITTER FOR THE VA WITH THE PLANS OF THE NOTICE OF INTENT TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION FOR COVERAGE UNDER THE CONSTRUCTION GENERAL PERMIT. THE CONTRACTOR SHALL BE RESPONSIBLE TO PAY ALL FEES ASSOCIATED WITH THIS PERMIT, WHICH INCLUDE, BUT ARE NOT LIMITED TO, THE NOTICE OF INTENT FILING AND ANNUAL FEES FOR MAINTAINING COVERAGE UNDER THIS PERMIT. THE CONTRACTOR WILL BE RESPONSIBLE FOR REVIEWING AND IMPLEMENTING THE PROVISIONS SPECIFIED IN THE SWPPP AND THE EROSION CONTROL PLANS. THE CONTRACTOR SHALL ALSO PROVIDE A "QUALIFIED SWPPP PRACTITIONER" (QSP) WHO WILL BE RESPONSIBLE FOR IMPLEMENTING THE SWPPP, AND WILL ASSIST THE VA IN THE FILING OF A NOTICE OF TERMINATION TO THE STATE WATER RESOURCES CONTROL BOARD AT THE END OF THE PROJECT.

UTILITY SEPARATION NOTES

APPLICABLE NOTES FROM THE CURRENT IN-PLACE REQUIREMENTS FOR DEPARTMENT OF VETERANS AFFAIRS FACILITIES: "SITE DEVELOPMENT DESIGN MANUAL - FEBRUARY 2013"

- 5.2 GENERAL UTILITY DESIGN REQUIREMENTS
5.2.1 CLEARANCES AND CROSSINGS
5.2.1.1 THE CONTRACTOR SHALL DESIGN THE SITE WITH THE FEWEST CROSSINGS OF UTILITIES POSSIBLE. THE A/E SHALL CONSIDER THE FOLLOWING ORDER OF PRIORITY FOR UNDERGROUND FACILITIES:
• SANITARY SEWER
• STORM SEWER
• WATER MAIN
• OTHER UTILITIES
5.2.2 MINIMUM DEPTH OF COVER
INDICATED BY NOTES ON DRAWINGS OR DETAIL SECTION, THE MINIMUM DEPTH OF COVER REQUIRED OVER EACH SPECIFIC UTILITY SYSTEM. ALL BURIED UTILITIES SHALL HAVE UNDERGROUND DETECTABLE WARNING TAPE INSTALLED IN THE TRENCH.
5.2.2.1 TRENCHES: GENERALLY, DO NOT INSTALL MORE THAN ONE UTILITY SYSTEM IN THE SAME TRENCH HOWEVER, DUE TO SITE CONSTRAINTS AND VALUE ENGINEERING CONCEPTS, MULTIPLE UTILITIES IN THE SAME TRENCH WILL BE EVALUATED BY THE GOVERNMENT ON A PER CASE BASIS. PRIOR TO APPROVING ANY MULTIPLE LINE TRENCH, THE A/E SHALL DOCUMENT THAT THE USE OF THE MULTIPLE LINE TRENCH WILL NOT NEGATIVELY IMPACT THE UTILITY SYSTEM, ADEQUATE CLEARANCES ARE PROVIDED FOR THE OPERATION AND MAINTENANCE OF THE SYSTEMS, AND THAT THE TRENCH WILL NOT POSE ANY CONTRACTIBILITY CONSTRAINTS. THERE MUST BE A MINIMUM OF 12" (300 MM) BETWEEN THE OUTSIDE DIAMETERS OF ALL PIPES TO OBTAIN THE REQUIRED COMPACTION.
5.2.2.2 HORIZONTAL CLEARANCE
THE HORIZONTAL CLEARANCE SHALL BE MEASURED BETWEEN THE OUTSIDE DIMENSION OF THE PIPE, DUCT BANK, OR STRUCTURE.
5.2.2.1 WATER AND SANITARY SEWER
MAINTAIN A HORIZONTAL CLEARANCE BETWEEN POTABLE WATER MAINS AND GRAVITY FLOW SANITARY SEWERS/SANITARY SEWER MAINS OF AT LEAST 10 FEET (3M). THE HORIZONTAL CLEARANCE BETWEEN POTABLE WATER MAINS AND SANITARY SEWER MAINS MAY BE REDUCED TO 6'-0" (1800 MM) WHEN LOCAL CONDITIONS PREVENT A HORIZONTAL CLEARANCE OF 10' (3.0 M). THE WATER MAIN INVERT IS A MINIMUM OF 12" (400 MM) ABOVE THE CROWN OF THE SEWER, AND THE WATER MAIN IS IN A TRENCH, SEPARATED BY UNDISTURBED SOIL. WHEN THE SPECIFIED HORIZONTAL CLEARANCE CANNOT BE MET, THE WATER MAIN SHALL BE CONSTRUCTED WITH MECHANICAL JOINT DUCTILE IRON PIPE PER SPECIFICATION 33 10.0 - WATER UTILITIES, AND THE SANITARY SEWER SHALL BE CONSTRUCTED WITH MECHANICAL JOINT DUCTILE IRON PIPE PER SPECIFICATION 33 30.00 - SANITARY SEWER UTILITIES. HORIZONTAL CLEARANCES SHALL COMPLY WITH THE REQUIREMENTS OF THE STATE HEALTH DEPARTMENT, DEPARTMENT OF ENVIRONMENTAL QUALITY, OR AGENCY GOVERNING THE FACILITY OF POTABLE WATER MAINS AND SYSTEMS.
5.2.2.2 WATER AND CHILLED WATER
MAINTAIN A HORIZONTAL CLEARANCE OF AT LEAST 6'-0" (1800MM) BETWEEN POTABLE WATER MAINS AND RECLAIMED/REUSE AND CHILLED WATER MAINS.
5.2.2.3 WATER AND STORM SEWER
MAINTAIN A HORIZONTAL CLEARANCE OF AT LEAST 5'-0" (1500MM) BETWEEN POTABLE WATER MAINS AND STORM SEWERS.
5.2.2.4 DUCT BANKS AND PIPED UTILITIES
MAINTAIN A HORIZONTAL CLEARANCE OF AT LEAST 3'-0" (900 MM) BETWEEN DUCT BANKS AND PIPED UTILITIES.
5.2.3 VERTICAL CLEARANCE
THE VERTICAL CLEARANCE SHALL BE MEASURED BETWEEN THE OUTSIDE DIMENSION OF THE PIPE, DUCT BANK, OR STRUCTURE. FOR INSULATED PIPING, THE CLEARANCE SHALL BE MEASURED TO THE INSULATION. AT UTILITY CROSSINGS WHERE ADEQUATE COMPACTION OF THE BEDDING MATERIAL CANNOT BE OBTAINED, USE FLOWABLE FILL IN THE ZONES WHERE COMPACTION IS IMPOSSIBLE OR IMPRACTICAL.
• MAINTAIN A MINIMUM VERTICAL CLEARANCE OF AT LEAST 1'-0" (300 MM) BETWEEN ALL UTILITIES AT CROSSINGS UNLESS OTHERWISE SPECIFIED BELOW.
• AT CROSSINGS OF POTABLE WATER MAINS AND SANITARY SEWERS, STORM SEWERS, FORCE MAINS, RECLAIMED/REUSE MAINS, OR CHILLED WATER MAINS, WHERE THE POTABLE WATER MAIN CROSSES ABOVE THE OTHER UTILITY, THE MINIMUM VERTICAL SEPARATION SHALL BE 18" (450 MM), OR AS REQUIRED BY THE STATE HEALTH DEPARTMENT, DEPARTMENT OF ENVIRONMENTAL QUALITY, OR AGENCY GOVERNING THE FACILITY OF POTABLE WATER, WHICHEVER IS GREATER.
• WHERE 18" (450 MM) CANNOT BE MAINTAINED OR WHERE POTABLE WATER LINES CROSS UNDER GRAVITY SEWERS, RECLAIMED/REUSE MAINS, OR CHILLED WATER MAINS, ADDITIONAL PROTECTION SHALL BE PROVIDED AS REQUIRED BY THE AGENCY GOVERNING THE FACILITY OF POTABLE WATER. ADDITIONAL PROTECTION SHALL CONSIST OF CONSTRUCTING BOTH PIPING SYSTEMS WITH DUCTILE IRON PIPE WITH RESTRAINED MECHANICAL JOINTS OR USE OF CONCRETE ENCASEMENT. THE ADDITIONAL PROTECTION SHALL EXTEND A MINIMUM DISTANCE OF 10'-0" (3 M) OUTSIDE THE LIMITS OF THE CROSSING.
• SANITARY SEWER FORCE MAINS SHALL ONLY CROSS UNDER POTABLE WATER MAINS WITH A MINIMUM VERTICAL CLEARANCE OF 18" (450 MM). WHEN THE VERTICAL CLEARANCE BETWEEN THE POTABLE WATER MAIN AND THE FORCE MAIN IS LESS THAN 18" (450 MM), BOTH THE WATER MAIN AND THE FORCE MAIN SHALL BE CONSTRUCTED WITH RESTRAINED MECHANICAL JOINT DUCTILE IRON PIPE AS INDICATED ABOVE FOR ADDITIONAL PROTECTION.
• THE PREFERRED VERTICAL CLEARANCE BETWEEN DUCT BANKS AND PIPED UTILITIES SHALL BE 2'-0" (600 MM) AND THE MINIMUM VERTICAL CLEARANCE SHALL BE 18" (450 MM).
• THE MINIMUM VERTICAL CLEARANCE TO ALL STEAM, PUMPS, CONDENSATE, AND HOT WATER, AND OTHER UTILITIES SHALL BE AT LEAST 18" (450 MM). WHEN THE VERTICAL CLEARANCE CANNOT BE MAINTAINED, THE INSULATION THICKNESS AND THE STEAM CONDENSATE, OR HOT WATER MAIN SHALL BE INCREASED BY 50%.

LEGEND

Table with columns for EXISTING and NEW, listing various utility types and their symbols.

CONSTRUCTION NOTES LEGEND

- (1) CONSTRUCT CONCRETE ELECTRICAL DUCT BANK - SEE DETAIL E, SHEET E-501
(2) CONSTRUCT CONCRETE COMMUNICATION DUCT BANK - SEE DETAIL E, SHEET E-501
(3) CONSTRUCT ELECTRICAL/TELECOM MANHOLE - SEE DETAIL E, SHEET CG502
(4) CONSTRUCT COMMUNICATION PULLBOX - SEE DETAIL B3, SHEET CG502
(5) CONSTRUCT 6" ELBOW W/ 6"X2" REDUCER AND CAP FOR IRR CONNECTION - SEE DETAIL F1, SHEET CG505
(6) CONSTRUCT 6" PVC SANITARY SEWER LATERAL - SEE DETAIL B3, SHEET CG501
(7) CONSTRUCT 6" SANITARY SEWER CONNECTION TO EXISTING 6" SEWER MAIN
• W/ FERRICO 6" WYE TAP SADDLE TSW4 OR APPROVED EQUIV. - SEE DETAIL C3, SHEET CG504
(8) CONSTRUCT 6" PVC STORM DRAIN PIPE - SEE DETAIL B3, SHEET CG501
(9) CONSTRUCT 12" DIAMETER, 4" THICK CONCRETE COLLAR AROUND STAND PIPE AT FINISH GRADE
(10) CONSTRUCT 3" TYPE "K" COPPER WATER SERVICE LATERAL - SEE DETAIL C8, SHEET CG502
(11) CONSTRUCT DOMESTIC WATER SERVICE CONNECTION - SEE DETAIL C8, SHEET CG502
(12) CONSTRUCT FIRE HYDRANT CONNECTION - SEE DETAIL F1, SHEET CG502
(13) CONSTRUCT RELOCATION FIRE HYDRANT AS INDICATED ON SHEET C001 - SEE DETAIL F1, SHEET CG502
(14) CONSTRUCT FIRE DEPARTMENT CONNECTION - SEE SHEET F510 FOR ADDITIONAL INFORMATION
(15) CONSTRUCT POST INDICATOR VALVE - SEE DETAIL F6, SHEET CG502
(16) CONSTRUCT 6" DUCTILE IRON FIRE CONNECTION AND 6" DUCTILE IRON FIRE LINE
(17) CONSTRUCT 48" STORM DRAIN MANHOLE - SEE DETAIL C1, SHEET CG504
(18) CONSTRUCT 6" PVC SANITARY OR 8" PVC STORM DRAIN CLEAN-OUT - SEE DETAIL C3, SHEET CG504
(19) CONSTRUCT 18"X18" CATCH BASIN - SEE DETAIL E5, SHEET CG504
(20) CONSTRUCT 100W STREET LIGHT - SEE DETAIL B5, SHEET CG500
(21) CONSTRUCT 12" PVC ELECTRICAL CONDUIT - SEE DETAIL B3, SHEET CG501
(22) CONSTRUCT 3/4" PVC ELECTRICAL CONDUIT - SEE DETAIL B3, SHEET CG501
(23) FREE STANDING ELECTRICAL/TELECOMMUNICATIONS CABINET ON CONCRETE PAD - SEE SHEET ES100
(24) CONSTRUCT 6" PVC STORM DRAIN PIPE UNDER SIDEWALK - SEE DETAIL E5, SHEET CG503
(25) CONNECT S.D. PIPE TO EXISTING STORM DRAIN MANHOLE - SEE DETAIL C1, SHEET CG504
(26) CONSTRUCT 1" PVC ELECTRICAL CONDUIT - SEE DETAIL B3, SHEET CG501
(27) CONNECT NEW CONCRETE ELECTRICAL / TELECOM DUCT TO EXISTING CONC. DUCT - SEE DETAIL F5, SHEET CG506
(28) CONSTRUCT NEW CONDUCTORS WITHIN EXISTING CONCRETE ELECTRICAL DUCT - SEE SHEET ES100A
(29) CONSTRUCT NEW LIGHTED BOLLARD - SEE SHEET L201 FOR ADDITIONAL INFORMATION
(30) CONSTRUCT NEW PLANTER BOLLARDS AND DECORATIVE BOLLARDS - SEE SHEETS LP101 AND LP301

APPROX. UTILITY QUANTITIES

Table with columns for DESCRIPTION, QUANTITY, and UNITS, listing utility items and their estimated quantities.

UTILITY NOTES

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL WORK RELATED TO MECHANICAL UTILITIES AS SHOWN ON THIS PLAN INCLUDING TRENCHING, BACKFILL, SUPPORTS, CLEANOUT PADS, SERVICE STOPS AND BOXES, SERVICE LINES, TESTING, CLEANING AND STERILIZING. ANY WORK NOT ACCREDITED BY THE ARCHITECT OR ENGINEER DUE TO PROPER WORKMANSHIP OR LACK OF PROPER COORDINATION SHALL BE REMOVED AND CORRECTLY RE-INSTALLED AT THE CONTRACTOR'S EXPENSE, AS DIRECTED.
2. MINIMUM DEPTH OF COVER SHALL BE 3' FOR WATER MAINS AND 4' FOR SEWER, EXCEPT AT BUILDING CONNECTION.
3. ALL WORK DETAILED ON THIS PLAN IS TO BE PERFORMED UNDER CONTRACT, UNLESS OTHERWISE STATED OR PROVIDED HEREON. BE CONSTRUCTED IN ACCORDANCE WITH THE IAPMO UNIFORM PLUMBING CODE & MPA 24, LATEST EDITION.
4. UTILITY LINES SHALL BE INSTALLED PRIOR TO PAVEMENT, CURB AND GUTTER, AND/OR SIDEWALK, AS APPLICABLE.
5. ROUTING OF SITE (14'-0") SHALL BE COMPLETED PRIOR TO INSTALLATION OF UTILITY LINES.
6. CONTRACTOR WILL BE RESPONSIBLE FOR CONNECTIONS TO NEW AND EXISTING BUILDING DRAIN LINES AND ALL NECESSARY FITTINGS.
7. ALL UTILITIES SHALL BE ANCHORED PER DETAIL F1, SHEET CG505.
8. FIRE LINES SHALL USE PIPE MATERIALS UNDERWRITERS LABORATORIES LISTED AND APPROVED FOR FIRE SERVICE.
9. UTILITY LINES SHALL BE INSTALLED FROM A MASTER UTILITY PLAN. CONTRACTOR SHALL VERIFY ANCHORS AND LOCATIONS OF EXISTING UTILITY LINES PRIOR TO BEGINNING OF WORK. ALL CONFLICTS SHALL BE BROUGHT TO ATTENTION OF THE C.O.R. AND RESOLVED PRIOR TO BEGINNING OF WORK.
10. CONTRACTOR SHALL NOTIFY THE AUTHORITY HAVING JURISDICTION PRIOR TO INSTALLATION OF FIRE SERVICE LINES, AND PRIOR TO TESTING OF ALL WATER LINES. CONTRACTOR SHALL COMPLETE, SIGN, AND SUBMIT THE CONTRACTOR'S MATERIAL TEST CERTIFICATE FOR UNDERGROUND PIPING IN ACCORDANCE WITH MPA 24.
11. PROTECT ALL SITE DRAINAGE WITH FITTED FILTER FABRIC AND SILT FENESTRA TO REDUCE AND CONTAIN SILT RUNOFF FROM ENTERING THE DRAIN. FABRIC MUST BE CLEANED ON A DAILY BASIS.
12. NEW TRANSFORMER REQUIRES UPDATE TO SPLINT, PREVENTION, CONTAINMENT, AND CONTROL (SP3C) PLAN. COORDINATE WITH COR.
13. BOTTOM OF GENERATOR DAY TANK TO BE AT LEAST 1' ABOVE CONCRETE PAD.

SURVEY DISCLAIMER

SURVEY INFORMATION OF SITE DETERMINED FROM VA SUPPLIED AS-BUILT DRAWINGS AND, PHOTOGRAPHIC, VISUAL, AND LIDAR SURVEY CONDUCTED BY TRIPLE C. CONSTRUCTION HAS OCCURRED ON THIS SITE SINCE THE SURVEY WAS COMPLETED. THE CONDITION OF THE SITE MAY VARY FROM THE SURVEYED CONDITION. UTILITY LOCATIONS ARE IN APPROXIMATE LOCATION. CONTRACTOR TO PROVIDE UTILITY LOCATION SERVICE PRIOR TO EXCAVATION FOR VERIFICATION OF LOCATION AND DEPTH OF ALL UTILITIES TO PROVIDE MINOR INTERRUPTION OF SERVICE. ENSURE PROPER CLEARANCE SEPARATION, AND TO AVOID DAMAGE TO THESE UTILITIES DAMAGED THROUGH NEGLIGENCE OF THE CONTRACTOR TO OBTAIN LOCATION OF SAME SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

CIVIL SHEET ABBREVIATIONS

Table of abbreviations for civil engineering terms, including AC, AD, ADP, AGSP, APPROX, ASP, ASSE, AVE, BC, BENT, BITUM, BLDG, BLVD, BM, BRG, CB, CIP, CL, CLASS, CMP, CMU, COC, CONCR, COORD, CORR, CFT, CO, DA, DAT, DEMO, DEPT, DESCR, DET, DIA, DIFF, DIM, DIR, DIST, DWG, E, EA, EC, EL, ENR, EP, EQUIP, EX, EXIST, EXIST, EXIST.

CONTRACTOR NOTE

GENERAL CONTRACTOR TO RETAIN SERVICE FROM INDEPENDENT CONTRACTOR TO VERIFY AND MARK ON CONSTRUCTION DRAWINGS AND ON SITE THE LOCATION OF ALL UNDERGROUND UTILITIES ASSOCIATED WITH THIS PROJECT. CONTRACTOR SHALL PROVIDE ONE HARD AND ONE ELECTRONIC COPY OF SURVEY TO THE VA.

EXCAVATION NOTE

CONTRACTOR TO HAND DIG WITHIN 5' OF KNOWN UTILITIES.

CONTRACTOR: DO NOT ACCESS SITE THROUGH PARKING LOT

EXISTING BUILDING 6 FF=116.90 @ CONNECTING CORRIDOR

CONTRACTOR TO CONSTRUCT 4" TEMPORARY WALKWAY CONSISTING OF LARGE CONCRETE PAVERS LAID OUT ON THE GRASS CONNECTING THE ORIGINAL WALKWAY. WALKWAY TO BE LEVEL AND UNDISTURBED EGRESS - 2% MAX. SLOPE. TEMPORARY PATH TO BE REMOVED AFTER CONSTRUCTION COMPLETION AND RESTORE LANDSCAPE TO ORIGINAL CONDITION.



FIRE HYDRANT #15 TEST RESULTS

TEST DATE: 10/24/2020
RESIDUAL PRESSURE: -50 PSI
APPROXIMATE GPM: -1190 GPM

DEDUCTIVE ALTERNATES

SEE SHEET CS103 FOR DEDUCTIVE ALTERNATES

F1 CIVIL UTILITY PLAN

1-30
CONTRACTOR - USE EXISTING DRIVE FOR ACCESS

CONSULTANT: HINMAN, CS.Davidson, Inc., MES GROUP. Protective Design Specialist, Structural, MEP.

ARCHITECT/ENGINEER OF RECORD: TRIPLE C - THE A/E GROUP, 201 E. Jefferson Street, Suite 200, Syracuse, NY 13202. 315.484.5958. Mat Perkins.

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