## SITE UTILITY NOTES

- 1. SEE GENERAL NOTES ON THE SITE PLAN. SEE UTILITY CONTACTS, THIS
- IN THE EVENT THESE NOTES CONFLICT WITH THE REQUIREMENTS OF THE LOCAL UTILITY AUTHORITY. THE LOCAL UTILITY'S REQUIREMENTS SHALL
- 3. CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES (LOCATION AND INVERT) PRIOR TO ANY SITE CONSTRUCTION OR DEMOLITION. THIS SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, BOTH MAIN AND

POTABLE WATER LINES SANITARY SEWER LINES ELECTRIC LINES (OVERHEAD AND UNDERGROUND) TELEPHONE LINES

- 4. LOCATIONS AND TOP ELEVATIONS OF STRUCTURES WILL BE ADJUSTED IN THE FIELD BY THE CONTRACTOR WHERE NECESSARY AND SHALL BE APPROVED BY THE ENGINEER.
- CONSTRUCTION OF THE SANITARY SEWER SYSTEM AND CONNECTION TO THE EXISTING SEWER SYSTEM SHALL MEET THE REQUIREMENTS/SPECIFICATIONS AND SHALL BE INSTALLED UNDER THE DIRECTION OF THE LOCAL UTILITY
- 6. PVC SANITARY SEWER PIPE SHALL MEET THE REQUIREMENTS OF ASTM D3034, LATEST REVISION (SDR-35) IN SIZES SPECIFIED.
- SANITARY SEWER LINES NOT HAVING 36" OF COVER SHALL BE DUCTILE IRON PIPE, LOCAL UTILITY APPROVED ADAPTERS SHALL BE CONSTRUCTED AT ANY PVC CONNECTIONS.
- CONTRACTOR SHALL CONFIRM LOCATION AND INVERT ELEVATION OF SEWER TIE-IN POINT PRIOR TO ANY SITE OR BUILDING CONSTRUCTION
- ROOF DRAINS, FOUNDATION DRAINS OR OTHER STORM WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
- 10. CONSTRUCTION OF THE WATER SYSTEM AND CONNECTION TO THE EXISTING WATER SYSTEM SHALL MEET THE REQUIREMENTS OF AND SHALL BE INSTALLED UNDER THE DIRECTION OF THE LOCAL UTILITY AUTHORITY.
- 11. INSTALLATION OF THE PRIVATE FIRE SERVICE MAINS AND APPURTENANCES SHALL BE IN ACCORDANCE WITH NFPA 24 AND THE REQUIREMENTS OF THE LOCAL / STATE FIRE JURISDICTION.
- 12. COPPER WATER PIPE AND FITTINGS SHALL BE TYPE "K" COPPER.
- 13. DUCTILE IRON WATER PIPE AND FITTINGS SHALL BE CLASS 350, AS SPECIFIED BY AWWA C150 AND C151 FOR LAYING CONDITION TYPE 2. FITTINGS SHALL BE RATED TO 250 PSI. PIPE JOINTS AND FITTINGS SHALL BE RESTRAINED.
- 14. PVC WATER PIPE AND FITTINGS LESS THAN 4" SHALL BE CLASS 200 WITH DIMENSION RATIO 21 OR LOWER CONFORMING TO ASTM D2241.
- 15. PVC WATER PIPE 4" AND LARGER SHALL MEET AWWA C-900 (SDR-18). ASSOCIATED FITTINGS SHALL BE DUCTILE IRON. PIPE JOINTS AND FITTINGS SHALL BE RESTRAINED.
- 16. ALL MECHANICAL JOINTS ARE TO BE RESTRAINED USING "MEGALUG" OR "FORD" EQUIVALENT.
- 17. ALL WATER LINES SHALL BE BELOW THE FROST LINE OR HAVE 36" (MIN) COVER FROM FINISHED GRADE, WHICHEVER IS THE GREATER DEPTH.
- 8. WATER METERS, BOXES, VAULTS AND BACKFLOW PREVENTORS SHALL MEET ALL REQUIREMENTS OF THE UTILITY COMPANY. CONTRACTOR SHALL CONFIRM ALL ITEMS AGAINST CURRENT UTILITY LIST OF APPROVED DEVICES PRIOR TO ORDERING.
- 19. WATER WORK SHALL NOT BEGIN UNTIL AREAS OF WATERLINE CONSTRUCTION ARE ROUGH GRADED (WITHIN 1 FOOT OF FINISHED GRADE) AND FILL AREAS ARE COMPLETED AND COMPACTED.
- 20. ALL PIPE AND APPURTENANCES INSTALLED ON A DEPRESSURIZED WATERMAIN ARE TO BE WIPED CLEAN AND ALL INTERIOR SURFACES SATURATED WITH A MINIMUM 1% CHLORINE SOLUTION.
- 21. CHLORINATED DISINFECTION WATER SHALL NOT BE DISCHARGED DIRECTLY INTO A STORM DRAINAGE SYSTEM OR SURFACE WATERS WITHOUT THE PRIOR USE OF APPROPRIATE DE-CHLORINATION METHODS.
- 22. A MINIMUM OF 5 FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN UTILITY CONDUIT CROSSOVER AND WATERLINE APPURTENANCES. I.E., HYDRANTS, VALVES, TEES, ETC.
- 23. WATER LINES CROSSING ANY AND ALL SEWERS SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 18" BETWEEN THE OUTSIDE OF THE WATER MAIN PIPE AND THE SEWER PIPE. ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SUCH THAT BOTH JOINTS WILL BE EQUIDISTANT AND AS FAR FROM THE SEWER AS POSSIBLE. IF WATER CROSSES BELOW SANITARY SEWERS, THE SEWER MUST BE WATER MAIN MATERIAL FOR THAT SPAN.
- 24. SITE CONTRACTOR IS RESPONSIBLE FOR MAKING TIE-IN TO WATER AND SANITARY SEWER CONNECTIONS AT BUILDING. SEE ARCHITECTURAL PLANS FOR EXACT LOCATIONS FOR BUILDING STUB-OUTS AND FLOOR DRAINS.
- 25. THERE SHALL BE NO TAPS, PIPING BRANCHES, UNAPPROVED BYPASS PUMPING, HYDRANTS, FIRE DEPARTMENT CONNECTION POINTS, OR OTHER WATER USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND ANY REQUIRED BACKFLOW PREVENTOR.
- 26. CONTRACTOR SHALL COORDINATE THE RELOCATION OF ANY EXISTING POWER/TELEPHONE POLES OR LINES WITH THE LOCAL UTILITY COMPANY AND NOTIFY THE CORRESPONDING PROPERTY OWNER PRIOR TO COMMENCEMENT OF ANY WORK INCLUDING STATE DOT ENCROACHMENT PERMITS WHERE APPLICABLE.
- 27. SITE CONTRACTOR SHALL COORDINATE WITH IRRIGATION CONTRACTOR FOR INSTALLATION OF NECESSARY SLEEVES UNDER THE PARKING LOT, ETC.

#### MAP NOTE:

ALL EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS HAS BEEN TAKEN FROM THE "SITE DEVELOPMENT PLANS FOR HOME DEPOT", PREPARED FOR FAISON BY MATTERN & CRAIG. NO SITE SPECIFIC BOUNDARY OR TOPOGRAPHIC SURVEY HAS BEEN PERFORMED FOR THIS PROJECT AT THE TIME OF THESE PLANS. SOME ITEMS NOTED AS EXISTING ARE ITEMS THAT ARE PROPOSED TO BE CONSTRUCTION BY FAISON CONTRACTOR AND ARE INTENDED TO BE COMPLETE AT THE COMMENCEMENT OF THE STARBUCKS SITE CONSTRUCTION WORK.

## **CONTRACTOR NAMING CONVENTION:**

FOR THE PURPOSES OF THESE SITE DEVELOPMENT PLANS, THE FOLLOWING NAMING CONVENTION IS USED TO DISTIGUISH BETWEEN THE DIFFERENT

FAISON CONTRACTOR: SHALL REFER TO THE GENERAL CONTRACTOR AND ALL ASSOCIATED SUB-CONTRACTORS HIRED BY EITHER FAISON OR HOME DEPOT, PRIMARILY FOR THE SHOPPING CENTER CONSTRUCTION, BUT PERFORMING SOME EARLY GRADING AND UTILITY WORK ON THIS SITE.

LANDLORD CONTRACTOR: SHALL REFER TO THE GENERAL CONTRACTOR AND ALL ASSOCIATED SUB-CONTRACTORS HIRED BY MOSELEY REA PRIMARILY FOR THE SITE WORK AND BUILDING SHELL CONSTRUCTION ASSOCIATED WITH THIS SITE

TENANT CONTRACTOR: SHALL REFER TO THE GENERAL CONTRACTOR AND ALL ASSOCIATED SUB-CONTRACTORS HIRED BY STARBUCKS PRIMARILY FOR TENANT UPFIT CONSTRUCTION RELATED TO THIS SITE AND BUILDING.

#### X UTILITY PLAN KEY NOTES:

1A. EXISTING 12" PUBLIC WATER MAIN.

CONTRACTORS WORKING ON THIS PROJECT.

- 1B. EXISTING FIRE HYDRANT
- 1C. EXISTING 11/2" DOMESTIC WATER SERVICE. WATER METER WILL NOT BE IN PLACE AT THE COMMENCEMENT OF STARBUCKS SITE CONSTRUCTION. WESTERN VIRGINIA WATER AUTHORITY (WVWA) WILL INSTALL A 1 1/8" METER AS PART OF THE STARBUCKS CONSTRUCTION.
- 1D. 1" SEWER SUBTRACTION METER. SEE DETAIL W-06 1E. 1" RPZ IRRIGATION BACKFLOW PREVENTOR. SEE DETAIL W-06. 1F. TERMINATE IRRIGATION SERVICE. MARK LOCATION FOR EXTENSION BY
- LANDLORD IRRIGATION CONTRACTOR. IRRIGATION PIPING FROM THE CONNECTION AT THE DOMESTIC SERVICE TO THE TERMINATION POINT SHALL BE 1" TYPE 'K' COPPER. 1G. 1½" x 2" REDUCER

1H. 2" TYPE 'K' COPPER DOMESTIC WATER PIPING.

- 11. DOMESTIC WATER SERVICE ENTRY POINT. REFER TO THE LANDLORD AND TENANT BUILDING PLUMBING PLANS FOR EXACT LOCATION AND CONTINUATION. PER THE CITY OF ROANOKE CROSS CONNECTION INSPECTOR, THE DOMESTIC WATER SERVICE DOES NOT REQUIRE A BACKFLOW PREVENTOR SO LONG AS ALL EQUIPMENT HAS ADEQUATE POINT-SOURCE BACKFLOW PREVENTION MEETING CODE REQUIREMENTS 2A, EXISTING 12" PUBLIC SANITARY SEWER MAIN.
- 2B. EXISTING 6" SANITARY SEWER LATERAL.
- 2C, CONNECT NEW SANITARY SEWER SERVICE TO EXISTING LATERAL AT EXISTING CLEAN-OUT.
- 2D, 6" D.I.P. SANITARY SEWER SERVICE PIPING @ 1.00%. 2E, 6" PVC SANITARY SEWER CLEAN-OUT. INVERT AS SHOWN. TOP SHALL BE
- FLUSH WITH FINISHED PAVING GRADES. SEE DETAILS S-08 AND S-13.
- 2F. 6" PVC SANITARY SEWER SERVICE PIPING @ 1.00%. 2G. SANITARY SEWER SAMPLING STRUCTURE. SEE DETAIL S-07.
- 2H. 1000 GALLON GREASE TRAP. SEE LANDLORD BUILDING PLUMBING PLANS FOR SIZE, DETAILS AND VENTING REQUIREMENTS. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL FOWARD SHOP DRAWINGS OF THE GREASE INTERCEPTOR TO CASSIE ALTICE, 601 S. JEFFERSON STREET, SUITE 300, ROANOKE, VA 24011. GREASE INTERCEPTORS MUST BE EXAMINED AND APPROVED BY AN AUTHORITY INSPECTOR PRIOR TO INSTALLATION. FOURTY-EIGHT (48) HOURS PRIOR TO INSTALLATION. CONTRACTOR SHALL CALL (540) 853-5698 TO SCHEDULE INSPECTION. WATER SERVICES WILL NOT BE PROVIDED UNTIL GREASE INSPECTOR
- INSTALLATION IS APPROVED BY THE AUTHORITY. . SANITARY SEWER AND GREASE WASTE SERVICE ENTRY POINTS. THE LANDLORD AND TENANT BUILDING PLUMBING PLANS FOR EXACT LOCATION AND CONTINUATION.
- 3. EXISTING UTILITY POLE.
- 4. UNDERGROUND ELECTRIC SERVICE. SERVICE SHALL BE 400 AMP, 120/208 VOLT, 3 PHASE, 4 WIRE. LANDLORD CONTRACTOR SHALL PROVIDE AND INSTALL (2)-4" CONDUITS WITH PULL STRINGS FROM EXISTING UTILITY POLE TO BUILDING MOUNTED CT CABINET. CONDUITS SHALL BE GREY SCHEDULE 40 PVC WITH LONG RADIUS BENDS, BURIED 36" MINIMUM. LANDLORD CONTRACTOR SHALL PROVIDE AND INSTALL CT CABINET. AMERICAN ELECTRIC POWER (AEP) WILL PROVIDE AND INSTALL POLE MOUNTED TRANSFORMERS AS NECESSARY, SECONDARY WIRING FROM POLE TO CT CABINET, THE CT AND METER BASE. LANDLORD CONTRACTOR SHALL BE PESPONSIBLE FOR COORDINATION OF ELECTRIC SERVICE WITH LANDLORD. TENANT, TENANT CONTRACTOR AND AEP. REFER TO LANDLORD AND TENANT BUILDING ELECTRICAL PLANS FOR ADDITIONAL INFORMATION.
- UNDERGROUND TELEPHONE/DSL SERVICE. LANDLORD CONTRACTOR SHALL PROVIDE AND INSTALL (1)-4" PVC CONDUIT WITH PULL STRING FROM EXISTING UTILITY POLE TO A POINT INSIDE THE BUILDING AS SHOWN ON THE LANDLORD OR TENANT BUILDING PLANS. LANDLORD CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF TELEPHONE/DSL SERVICE WITH LANDLORD, TENANT, TENANT CONTRACTOR AND VERIZON.
- 6. NATURAL GAS SERVICE. SERVICE SHALL BE PER LANDLORD AND TENANT BUILDING PLUMBING PLANS. ROANOKE GAS COMPANY (RGC) WILL PROVIDE AND INSTALL SERVICE PIPING FROM THE MAIN TO THE METER, MAKE THE CONNECTION AT THE MAIN, AND PROVIDE AND SET THE METER. LANDLORD PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE PIPING FROM THE METER TO A POINT INSIDE THE BUILDING AS SHOWN ON THE LANDLORD OR TENANT BUILDING PLUMBING PLANS. LANDLORD CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF NATURAL GAS SERVICE WITH LANDLORD, TENANT, TENANT CONTRACTOR AND RGC.
- TENANT SIGNS, ORDER BOARD, ETC. LANDLORD CONTRACTOR SHALL INSTALL ALL NECESSARY CONDUITS FOR POWER AND COMMUNICATION TO THESE ITEMS INCUDING THE DETECTOR LOOP IN THE DRIVE-THRU CONCRETE. REFER TO LANDLORD AND TENANT BUILDING PLANS FOR ADDITIONAL INFORMATION REGARDING SIZE AND ROUTING OF THESE CONDUITS. REFER TO SHEETS C16, C17, RECO-1, RECO-2 AND RECO-3 FOR INSTALLATION GUIDELINES FOR THESE CONDUITS WITH REGARD TO EXISTING RETAINING WALL REINFORCEMENT.
- SITE LIGHTING FIXTURE. LANDLORD CONTRACTOR SHALL INSTALL ALL NECESSARY CONDUITS FOR POWER AND CONTROL OF THESE FIXTURES. REFER TO SITE LIGHTING PLAN FOR FIXTURE INFORMATION AND TO LANDLORD AND TENANT BUILDING ELECTRICAL PLANS FOR INFORMATION REGARDING SIZE AND ROUTING OF THESE CONDUITS. REFER TO SHEETS C16, C17, RECO-1, RECO-2 AND RECO-3 FOR INSTALLATION GUIDELINES FOR LIGHT POLE FOUNDATIONS AND FOR CONDUITS WITH REGARD TO EXISTING RETAINING WALL REINFORCEMENT.
- 9. MAINTAIN 18" VERTICAL CLEARANCE AT UTILITY CROSSING.

WESTERN VIRGINIA WATER AUTHORITY 601 SOUTH JEFFERSON STREET, SUITE 300

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# FIRE DEPARTMENT

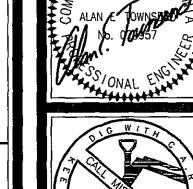
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GRAPHIC SCALE 1" = 20'



NOTE: THIS SCALE APPLIES ONLY FOR 24"X36" SHEETS



**OUNG**,  $\Box$ (5)

DESIGNED DRAWN CHECKED

AET GFJ | GFJ

OB NO. 405105988 SCALE: 1" = 20'

DRAWING NUMBER