GENERAL CONSTRUCTION NOTES:

1. THE LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT NECESSARILY THE SAME. UTILITIES SHOWN ON THE PLAN ARE BASED ON LIMITED, ABOVE GROUND SURVEYED EVIDENCE AND AVAILABLE CONSTRUCTION PLANS FROM PAST PROJECTS. NO SUB-SURFACE UTILITY INVESTIGATION HAS BEEN PERFORMED, SO ALL UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND UTILITIES NOT SHOWN MAY BE PRESENT.
2. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY DISCREPANCIES, OMISSIONS OR VARIATIONS AS SOON AS HE IS AWARE, AND ANY WORK AFFECTED BY SUCH SHALL CEASE UNTIL ADDRESSED IN WRITING BY THE OWNER.
3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES AT ALL TIMES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A SAFE WORK ENVIRONMENT AT ALL TIMES, INCLUDING INSTALLATION AND MAINTENANCE OF TEMPORARY FENCING AND/OR OTHER SAFETY BARRIERS DURING ALL PHASES OF CONSTRUCTION.
5. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE CITY OF MEMPHIS STANDARD CONSTRUCTION SPECIFICATIONS, UNLESS A MORE STRINGENT REQUIREMENT IS SPECIFIED IN THESE PLANS.
6. ALL SITE RELATED CONCRETE SHALL BE 4,000 PSI, 28 DAY STRENGTH, UNLESS NOTED OTHERWISE.
7. ANY EXISTING UTILITY BOXES, MANHOLE COVERS OR OTHER FLAT PROTRUSIONS INTO THE PROPOSED SIDEWALK SHALL BE ADJUSTED TO BE FLUSH WITH THE FINAL SIDEWALK GRADE. JOINT SPACING AND EXPANSION AROUND FIRE HYDRANTS, POLES AND OTHER EXISTING IMPROVEMENTS SHALL BE IN ACCORDANCE WITH CITY OF MEMPHIS STANDARD CONSTRUCTION SPECIFICATIONS.

SANITARY SEWER NOTES:

1. ALL SANITARY SEWER, INCLUDING SERVICE CONNECTIONS, WITH LESS THAN 2' OF CLEARANCE (OUTSIDE OF PIPES) WITH DRAINAGE PIPES OR STRUCTURES SHALL BE CLASS 50 D.I.P. OR CONCRETE ENCASED, 10' EACH SIDE OF THE CROSSING. ALL DUCTILE IRON PIPE SHALL BE POLYETHYLENE LINED OR SHALL BE TREATED WITH PROTECTO 401 OR APPROVED EQUIVALENT.
2. ALL SANITARY SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF MEMPHIS STANDARDS CONSTRUCTION SPECIFICATIONS OR ACCORDING TO THESE PLANS, IF MORE STRINGENT. PVC PIPE SHALL BE SDR-26.
3. CONTRACTOR SHALL INSURE UNINTERRUPTED SEWER SERVICE ON EXISTING SEWER AND SERVICE CONNECTIONS BY PROVIDING AMPLE TEMPORARY WASTEWATER PUMPING AND/OR BYPASSING.
4. ALL SEWER LINES WILL BE PRESSURE TESTED WITH A CITY REPRESENTATIVE OR THE ENGINEER PRESENT.

WATER NOTES:

1. ALL WATER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF MEMPHIS STANDARDS.
2. ALL TEES, ELBOWS, FITTINGS, ETC. SHALL BE 250 LB CAST IRON WITH MECHANICAL JOINTS.
3. THE MINIMUM COVER OVER THE WATER MAIN SHALL BE THREE FEET (3').
4. ALL BENDS, TEES, ETC. SHALL BE BRACED WITH THRUST BLOCKS AS PER DETAIL SHOWN HEREIN.
5. ANY PVC PIPE SHALL BE INSTALLED WITH LOCATOR TAPE.
6. ALL WATER LINES WILL BE PRESSURE TESTED AND DOCUMENTED RESULTS PROVIDED TO OWNER AND ENGINEER.
7. ALL WATER VALVES AND HYDRANTS ARE TO BE PER CITY OF MEMPHIS CONSTRUCTION SPECIFICATIONS SPECIFICATIONS.
8. CASING ARE TO INCLUDE SPACERS AND END COVERS.
9. ALL WATER FITTINGS ARE TO HAVE MEGALUGS AND THRUST BLOCKS.
10. ALL WATER MAIN CONNECTIONS ARE TO BE CLASS K COPPER OR DUCTILE IRON.

GENERAL UTILITY NOTES:

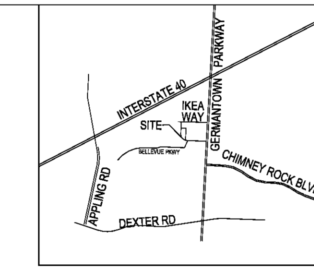
1. ALL UTILITIES SHOWN ARE APPROXIMATE LOCATIONS ONLY AND HAVE BEEN COMPILED FROM THE LATEST AVAILABLE MAPPING. THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
2. GENERAL CONTRACTOR TO COORDINATE WITH THE LOCAL UTILITY COMPANIES FOR ALL LOCATIONS AND CONNECTIONS. A PRE-CONSTRUCTION MEETING WITH THE VARIOUS UTILITY COMPANIES, IS REQUIRED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY.
3. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE ELEVATION AND LOCATION OF ALL UTILITIES BY VARIOUS MEANS PRIOR TO BEGINNING ANY EXCAVATION. TEST PITS SHALL BE DUG AT ALL LOCATIONS WHERE SEWERS CROSS EXISTING UTILITIES, AND THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES SHALL BE DETERMINED. THE CONTRACTOR SHALL CONTACT THE OWNER IN THE EVENT OF ANY UNFORESEEN CONFLICTS BETWEEN EXISTING AND PROPOSED UTILITIES SO THAT AN APPROPRIATE MODIFICATION MAY BE MADE.
4. THE CONTRACTOR SHALL INSURE THAT ALL UTILITY COMPANIES AND CITY STANDARDS FOR MATERIALS AND CONSTRUCTION METHODS ARE MET. THE CONTRACTOR SHALL PERFORM PROPER COORDINATION WITH THE RESPECTIVE UTILITY COMPANY. THE CONTRACTOR SHALL COORDINATE WORK TO BE PERFORMED BY THE VARIOUS UTILITY COMPANIES AND SHALL PAY ALL FEES FOR CONNECTIONS, DISCONNECTION, RELOCATION'S, INSPECTIONS, AND DEMOLITION.
5. ALL VALVE BOXES AND CURB BOXES SHALL BE ADJUSTED TO THE FINAL GRADES. ALL CURB BOXES SHALL BE LOCATED IN GRASSED AREAS UNLESS INDICATED OTHERWISE ON THE PLANS.
6. SANITARY LATERAL SHALL MAINTAIN (10' MIN. HORIZONTAL 1.5' VERTICAL MIN.) SEPARATION DISTANCE FROM WATER LINES UNLESS OTHERWISE SHOWN, OR ADDITIONAL PROTECTION MEASURES WILL BE REQUIRED. WHERE WATER LINE CROSSES ABOVE SANITARY LATERAL BY LESS THAN 2' VERTICAL, A CONCRETE ENCASEMENT SHALL BE INSTALLED, CONTRACTOR SHALL CENTER ONE JOINT OF PIPE AT CROSSING.
7. THIS PLAN DETAILS PIPES UP TO 5' FROM THE BUILDING FACE. REFER TO THE BUILDING DRAWINGS FOR BUILDING CONNECTIONS. SUPPLY AND INSTALL PIPE ADAPTERS AS NECESSARY.
8. ALL EXISTING PAVEMENT WHERE UTILITY PIPING IS TO BE INSTALLED SHALL BE SAW CUT AND REPLACED IN ACCORDANCE WITH THE PAVEMENT REPAIR REQUIREMENTS OF THE GOVERNING AUTHORITY.
9. ALL SANITARY SEWER MAIN LINES SHALL BE SCHEDULE 40 PVC PIPE (EXCEPT AS NOTED ON PLANS). ALL PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURE.

GRADING & DRAINAGE NOTES:

1. PRIOR TO PLACEMENT OF ANY FILL, ALL VEGETATION, TOPSOIL, AND OTHER UNSUITABLE MATERIAL SHALL BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE. WET OR DRY, BUT SUITABLE SOILS, SHALL BE REMOVED OR MOISTURE CONDITIONED AND RECOMPACTED. IN WOODED AREAS, AFTER CLEARING AND PRIOR TO STRIPING, THE ENTIRE AREA IS TO BE WORKED OVER WITH SEVERAL RUNS OF A ROOT RAKE IN ORDER TO SEPARATE ROOTS AND OTHER ORGANIC MATERIAL FROM THE TOP SOIL.
2. AFTER STRIPPING AND GRUBBING, THE SUBGRADE SHALL BE PROOF ROLLED TO AID IN LOCATING LOOSE OR SOFT AREAS. PROOF-ROLLING SHALL BE PERFORMED WITH A LOADED TANDEM AXLE DUMP TRUCK. THE TRUCK SHALL BE OPERATED AT NORMAL WALKING SPEED DURING OBSERVATION BY THE GEOTECHNICAL ENGINEER.
3. SOFT, WEAK, AND/OR UNSUITABLE SOILS SHOULD BE UNDERCUT AT THE DIRECTION OF THE GEOTECHNICAL ENGINEER AND REPLACED WITH APPROVED ENGINEERED FILL OR STABILIZED IN PLACE. ALL UNDERCUT OPERATIONS SHALL BE AS DIRECTED BY THE GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER SHALL BE RESPONSIBLE FOR MEASURING UNDERCUT QUANTITIES.
4. MINIMUM COMPACTION REQUIREMENTS FOR FILL, INCLUDING TRENCHES, MAY BE ACHIEVED BY PLACING THE FILL IN 6" THICK, LOOSE LIFTS AND COMPACTING TO A MINIMUM OF 98 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY STANDARD PROCTOR TEST (ASTM D698). THE UPPER ONE FOOT (1') OF AREAS SUPPORTING SLAB-ON-GRADE SHALL BE COMPACTED A MINIMUM of 110% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY STANDARD PROCTOR TEST (ASTM D698). MOISTURE CONTENT SHALL BE CONTROLLED TO WITHIN A RANGE OF 2% BELOW AND 3% ABOVE OPTIMUM MOISTURE CONTENT AS DETERMINED BY STANDARD PROCTOR TEST AT TIME OF PLACEMENT AND COMPACTION.
5. ALL PROPOSED FILL MATERIAL SHALL BE TESTED TO VERIFY SUITABILITY FOR USE, GRADATION OF MATERIAL, MOISTURE-DENSITY RELATION PER D698 MODIFIED PROCTOR METHOD, ATTERBURG LIMITS, BEARING VALUE, AND PERCENT OF ORGANIC MATERIALS. EACH LIFT WILL BE TESTED TO VERIFY THAT COMPACTION MEETS SPECIFICATIONS. TEST RESULTS SHALL BE SENT TO THE CONTRACTOR, ARCHITECT, CIVIL ENGINEER AND STRUCTURAL ENGINEER.
6. IF FIELD TESTS INDICATE INSTALLED COMPACTED MATERIAL DOES NOT MEET THE SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACHIEVING THE SPECIFIED COMPACTION AND/OR REMOVE THE DEFECTIVE MATERIAL AND REPLACE IN ACCORDANCE WITH SPECIFICATIONS AS DIRECTED BY THE GEOTECHNICAL ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
7. IF ANY ACTIVE DRAINAGE LINES ARE UNCOVERED THAT ARE NOT SHOWN ON THE CONSTRUCTION PLANS, THE CIVIL ENGINEER IS TO BE NOTIFIED IMMEDIATELY AND ANY CONSTRUCTION AFFECTED BY SUCH, INCLUDING INSTALLATION OF PROPOSED DRAINAGE OR DEMOLITION OF EXISTING DRAINAGE WHICH COULD BE NECESSARY TO ADDRESS THE PROBLEM, MUST CEASE UNTIL WRITTEN DIRECTION IS GIVEN BY THE OWNER.
8. ALL DRAINAGE PIPE DESIGNATED RCP SHALL BE CLASS III REINFORCED CONCRETE PIPE. ALL DRAINAGE PIPE DESIGNATED HDPE OR PVC SHALL BE SDR 26 PVC PIPE, A-2000 PVC DRAIN PIPE, ADS N-12 WT DRAINAGE PIPE OR AN EQUAL APPROVED BY THE PROJECT ENGINEER. ALL PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ALL MANUFACTURER GUIDELINES AND REQUIREMENTS, INCLUDING PREFERRED BEDDING MATERIALS AND INSTALLATION PROCEDURES, NOT LIMITED TO BUT INCLUDING SPECIFIED COMPACTION AND INSTALLATION METHODS.

EROSION CONTROL NOTES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLAN ARE INTENDED AS A MINIMUM GUIDE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING ADDITIONAL OR ALTERNATE EROSION AND SEDIMENT CONTROL MEASURES AS NECESSARY TO MEET ALL APPLICABLE LOCAL, STATE AND FEDERAL GUIDELINES REGULATING STORM WATER DISCHARGES FROM CONSTRUCTION SITES.
2. IN ADDITION TO IMPLEMENTING THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS, THE CONTRACTOR WILL BE RESPONSIBLE FOR IMPLEMENTING AND FOLLOWING ALL EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES AS SET FORTH IN THE STORM WATER POLLUTION PREVENTION PLAN FILED WITH THE TENNESSEE DEPARTMENT OF ENVIRONMENT DIVISION OF WATER POLLUTION CONTROL IN ASSOCIATION WITH THE PROJECT.
3. ALTERNATIVE MEASURES CAN BE USED IN LIEU OF MEASURES PROPOSED ON THE PLANS, BUT THEY MUST BE APPROVED IN WRITING BY THE OWNER AND MUST BE EQUALLY OR MORE EFFECTIVE THAN THE MEASURES PROPOSED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MITIGATING ANY OFF-SITE POLLUTED DISCHARGES WHICH RESULT FROM THE FAILURE TO IMPLEMENT AND MAINTAIN ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES. ANY SUCH MITIGATION AND ANY FINES IMPOSED BY REGULATORY AGENCIES ASSOCIATED WITH SAID DISCHARGE SHALL BE THE CONTRACTOR'S RESPONSIBILITY WITHOUT ANY ADDITIONAL COST TO THE OWNER.
5. ALL CLEARING AND GRUBBING AND EARTHWORK ACTIVITIES SHALL BE DONE IN A SEQUENTIAL MANNER AND KEPT A MINIMUM AS NECESSARY FOR ACTIVE GRADING AND CONSTRUCTION ACTIVITIES IN ORDER TO MINIMIZE THE EXPOSURE TIME.
6. AS MUCH AS POSSIBLE, AVOID GRADING ACTIVITIES DURING PERIODS OF HIGHLY EROSIVE RAINFALL.
7. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND FUNCTIONAL BEFORE EARTH DISTURBANCE ACTIVITIES ASSOCIATED WITH SAID MEASURES BEGIN.
8. EROSION AND SEDIMENT CONTROL MEASURES MUST BE PROPERLY INSTALLED, MAINTAINED, ADJUSTED AND RELOCATED AS NECESSARY THROUGHOUT CONSTRUCTION TO ADDRESS CHANGING SITE CONDITIONS.
9. STABILIZE ANY DISTURBED AREAS WHERE CONSTRUCTION IS COMPLETE OR NO CONSTRUCTION ACTIVITY WILL BE ON GOING FOR MORE THAN FOURTEEN (14) DAYS.
10. CHECK ALL EROSION AND SEDIMENT CONTROL MEASURES AT LEAST TWICE WEEKLY, A MINIMUM OF 72 HOURS APART, AND AFTER EACH RAINFALL, AS WELL AS PRIOR TO ANTICIPATED RAINFALL EVENTS. DAILY INSPECTION IS REQUIRED DURING PROLONGED RAINFALL EVENTS.
11. DO NOT DESTROY, REMOVE OR DISTURB VEGETATIVE COVER MORE THAN FOURTEEN (14) DAYS PRIOR TO GRADING.
12. AS SOON AS POSSIBLE AFTER FINAL GRADING AND CONSTRUCTION, APPLY PERMANENT SOIL STABILIZATION WITH PERENNIAL VEGETATION.
13. USE A STABILIZED PAD OF CLEAN, PROPERLY SIZED ROCK FOR CONSTRUCTION ACCESS AS INDICATED ON THE PLANS AND IN ACCORDANCE WITH THE CURRENT EDITION OF THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK.
14. MAINTENANCE AND OPERATION OF ALL EROSION PROTECTION AND SEDIMENT CONTROL MEASURES SHALL BE INCLUDED IN THE COST FOR SAID MEASURES, AND SHALL BE CONSIDERED INCIDENTAL TO EPSC. THIS WILL INCLUDE THE REMOVAL AND PROPER DISPOSAL OF ACCUMULATED SEDIMENT AT ANY TIME IT REACHES THE MAXIMUM ALLOWABLE HEIGHT AS PER THE PLANS AND/OR STORM WATER POLLUTION PREVENTION PLAN ON FILE WITH TDEC, AS WELL ONCE THE ACTUAL MEASURES ARE NO LONGER REQUIRED AND READY TO BE REMOVED. REMOVAL OF THE ACTUAL SAID MEASURES, SUCH AS REMOVAL OF SILT FENCE AND INLET BARRIERS SHALL BE INCIDENTAL AS WELL.



VICINITY MAP NTS

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TownPlace Suites

Survey Provided by:
Milestone Land Surveying, Inc.
Surveyed on June 8th, 2018

ITEM NO.	DESCRIPTION OF	APPROVAL DATE

ISSUED FOR BID
MATTHEW B. R... OF TENNESSEE 113947
02/25/2019

GALLERIA OF MEMPHIS, PD 13-313; AREA D, PHASE 18
DEVELOPER: UHG HOSPITALITY, LLC
ENGINEER: FISHER ARNOLD

FISHER ARNOLD
ENGINEERS | ARCHITECTS | CONSULTANTS | PLANNERS
9180 Crestwyn Hills Drive
Memphis, Tennessee 38125-8538
901.748.1811 | Fax: 901.748.3115
www.fisherarnold.com

SHEET 1 OF 1
DIVISION OF ENGINEERING

GENERAL NOTES

LOCATION: EAST SIDE OF MARKET FARMS DR. AND APPROX. 1,100' SOUTH OF IKEA WAY

MEMPHIS, TENNESSEE

SURVEY: FA DATE: 05/18 PROJECT NO: UHGHOSPI.0001NA
DESIGNED BY: FA DATE: 06/18 BOOK:
DRAWN BY: FA DATE: 06/18 SCALE:

REVIEWED

DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

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Filename: Z:\UHGHOSPI\0001NA\Nashville\CAD\Plans\civil plans.dwg
Layout Name: C-2.1
Plotted: Tuesday, February 26, 2019 - 8:50 am
By: mregenold