GENERAL NOTES

THIS CONSTRUCTION PROJECT MAY OR MAY NOT INCLUDE ALL ITEMS COVERED BY THESE NOTES AND SPECIFICATIONS, I.E. PAVING, GRADING, DRAINAGE LINES, WATER LINES, OR SANITARY SEWER LINES. SEE PLANS FOR DETAILED PROJECT SCOPE. NOTES AND SPECIFICATIONS ON THIS SHEET REFER TO PAVING, GRADING, DRAINAGE, WATER, AND SANITARY SEWER, AND ARE INTENDED FOR THIS PROJECTS SCOPE OF WORK AND FOR REFERENCE PURPOSES FOR OTHER WORK ITEMS THAT MAY BE REQUIRED DUE TO UNFORESEEN EXISTING CONDITIONS OR REQUIRED REMEDIAL WORK.

1. SPECIFIC SITE NOTES

1.1. COUNTY AND "CITY" IN THESE NOTES REFERS TO COUNTY AND CITY IN WHICH PROJECT RESIDES.

1.2. STATE IN THESE NOTES REFERS TO THE STATE OF FLORIDA.

1.3. EXISTING TOPOGRAPHIC INFORMATION IN THE PLANS IS BASED ON SURVEY DATA AND BEST AVAILABLE INFORMATION. SEE PROJECT SURVEY AND NOTES ON PLAN SHEETS REGARDING THE SOURCE OF THE TOPOGRAPHIC INFORMATION.

2. APPLICABLE CODES

2.1. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY, COUNTY, AND ALL OTHER JURISDICTIONAL, STATE AND NATIONAL CODES WHERE APPLICABLE.

2.2. IN THE EVENT OF A CONFLICT BETWEEN THE GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS IN THESE PLANS, AND THE CONTRACT DOCUMENTS AND SPECIFICATIONS IN THE SPECIFICATION BOOKLET, THE CONTRACTOR SHALL SUBMIT WRITTEN REQUEST FOR CLARIFICATION.

2.3. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER AND IN STRICT COMPLIANCE WITH ALL THE REQUIREMENTS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND ALL STATE AND JURISDICTIONAL SAFETY AND HEALTH REGULATIONS.

2.4. THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH FEDERAL, STATE, COUNTY, AND CITY LAWS, CODES, AND REGULATIONS.

2.5. ALL HANDICAP ACCESSIBLE AREAS TO CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA), STATE ADA CODES, AND FLORIDA BUILDING CODE ADA CODES LATEST EDITION.

2.6. TRENCH SAFETY ACT

2.6.1. ALL TRENCH EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 90-96 OF THE LAWS OF FLORIDA (THE TRENCH SAFETY ACT).

2.6.2. ALL TRENCH EXCAVATION IN EXCESS OF 5 FEET IN DEPTH SHALL BE UNDERTAKEN IN ACCORDANCE WITH O.S.H.A. STANDARD 29 CFR. SECTION 1926.650 SUBPART P.

2.6.3. THE CONTRACTOR SHALL SUBMIT WITH HIS CONTRACT A COMPLETED, SIGNED, AND NOTARIZED COPY OF THE TRENCH SAFETY ACT COMPLIANCE STATEMENT. THE CONTRACTOR SHALL ALSO SUBMIT A SEPARATE COST ITEM IDENTIFYING THE COST OF COMPLIANCE WITH THE APPLICABLE TRENCH SAFETY CODES.

2.6.4. A TRENCH SAFETY SYSTEM, IF REQUIRED, SHALL BE DESIGNED BY THE EXCAVATION CONTRACTOR UTILIZING A SPECIALTY ENGINEER AS REQUIRED.

3. CONSTRUCTION NOTES:

3.1. CONTRACTOR SHALL TIE TO EXISTING GRADE BY EVENLY SLOPING FROM CLOSEST PROPOSED GRADE PROVIDED TO EXISTING GRADE AT LIMITS OF CONSTRUCTION, UNLESS OTHERWISE NOTED ON THE PLANS. IF NO LIMIT OF WORK LINE IS INDICATED, SLOPE TO ADJACENT PROPERTY LINE OR RIGHT-OF-WAY LINE, AS APPLICABLE.

3.2. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL EXISTING MANHOLES, CATCH BASINS, METERS AND OTHER STRUCTURES, WHETHER INDICATED ON THE PLANS OR NOT SHALL BE ADJUSTED TO MATCH THE NEW GRADE, BY THE CONTRACTOR.

3.3. THE CURB SHALL BE SLOPED TO ACCOMMODATE THE NEW PAVEMENT, CATCH BASIN AND GRATE, AND THE SURFACE FLOW PATTERN.

3.4. THE CONTRACTOR SHALL USE CARE WHEN CUTTING THE EXISTING ASPHALT PAVEMENT AND DURING EXCAVATIONS, SO THAT THE EXISTING CATCH BASINS AND GRATES THAT ARE TO REMAIN WILL NOT BE DAMAGED.

3.5. THE CONTRACTOR SHALL MAINTAIN THE ROADWAY SLOPE WHEN RESURFACING THE ROADWAY. THE EDGE OF PAVEMENT SHALL MATCH THE NEW GUTTER LIP PER FDOT INDEX 520-001.

3.6. THE NEW SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GIVEN ELEVATIONS AND AT THE PROPER SLOPES DEPICTED IN THE SPECIFICATIONS, DETAILS AND STANDARDS. EXISTING DRIVEWAYS AND OTHER FEATURES SHALL BE MATCHED WHEN POSSIBLE AS DIRECTED BY THE ENGINEER.

3.7. RADII SHOWN ARE TO THE EDGE OF PAVEMENT.

3.8. ALL BENCH MARK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED AND REFERENCED BY THE CONTRACTOR IN THE SAME WAY AS PUBLIC LAND CORNERS.

3.9. ALL EXCESS MATERIAL IS TO BE DISPOSED BY THE CONTRACTOR WITHIN 72 HOURS.

3.10. IN AREAS WHERE THE BASE IS EXPOSED BY THE MILLING OPERATION, THE CONTRACTOR SHALL RESTORE THE BASE TO ITS ORIGINAL THICKNESS AND STRUCTURAL CAPACITY BEFORE PAVING OVER SUCH AREAS. THIS INCLUDES BUT IS NOT LIMITED TO RESTORING ORIGINAL DEGREE OF COMPACTION, MOISTURE CONTENT, COMPOSITION, STABILITY, AND INTENDED SLOPE. IF PAVING WILL NOT TAKE PLACE THE SAME DAY THE BASE IS EXPOSED AND REWORKED, THE BASE SHALL BE SEALED ACCORDING TO THE GOVERNING STANDARDS AND SPECIFICATIONS. ANY ADDITIONAL WORK RESULTING FROM THE CONTRACTOR'S FAILURE TO PROTECT THE EXPOSED BASE AS STATED ABOVE IN ORDER TO RESTORE THE ORIGINAL STRUCTURAL CAPACITY SHALL BE THE CONTRACTOR'S COST.

3.11. THE CONTRACTOR IS TO MAINTAIN EXISTING SIGNAGE DURING CONSTRUCTION OPERATIONS, IN ORDER TO FACILITATE EMERGENCY VEHICLE TRAFFIC.

3.12. THE TOPOGRAPHIC SURVEY INCLUDED WITH THIS SET OF PLANS REFLECTS PRE-DEMOLITION CONDITIONS AND DOES NOT REFLECT THE SITE CONDITIONS AFTER DEMOLITION. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE IN DETERMINING THE REQUIRED EARTHWORK FOR THE PROPOSED DEVELOPMENT OF THE SITE. THIS INCLUDES, BUT IS NOT LIMITED TO, ANY EXCAVATION/DREDGE AND FILL ACTIVITIES REQUIRED AT ANY PHASE OF THE PROJECT. THE CONTRACTOR SHALL USE THE FINAL APPROVED (RELEASED FOR CONSTRUCTION) PLANS, SURVEYS, GEOTECHNICAL REPORTS, AND ANY OTHER AVAILABLE INFORMATION FOR DETERMINING THE AMOUNT OF EXCAVATION/DREDGING AND FILLING REQUIRED. ANY QUANTITIES INCLUDED IN THE APPROVED PERMITS WERE ESTIMATED BY THE ENGINEER FOR PURPOSES OF OBTAINING THE PERMIT AND UNDER NO CIRCUMSTANCES SHALL BE USED BY THE CONTRACTOR IN LIEU OF PERFORMING THEIR OWN EARTHWORK CALCULATIONS REQUIRED FOR COST ESTIMATING AND BIDDING THE PROJECT.

3.13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR READING AND FAMILIARIZING THEMSELVES WITH ANY AND ALL AVAILABLE GEOTECHNICAL REPORTS PREPARED BY OTHERS AND/OR ANY RECOMMENDATIONS WRITTEN OR IMPLIED BY THE GEOTECHNICAL ENGINEER FOR THIS PROJECT. THE GEOTECHNICAL CONDITIONS AND RECOMMENDATIONS OUTLINED IN THESE REPORTS ARE IN FORCE AND IN FULL EFFECT AS PART OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL THE WORK ASSOCIATED WITH THIS PROJECT IS IN COMPLIANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. KEITH AND ASSOCIATES, INC. IS NOT RESPONSIBLE FOR THE SUITABILITY OR UNSUITABILITY OF THE SOILS ENCOUNTERED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE MEANS AND METHODS OF CONSTRUCTION USED CAN AND WILL ALLOW FOR THE SUCCESSFUL COMPLETION OF THE REQUIRED SITE IMPROVEMENTS.

3.14. THE CONTRACTOR SHALL ENSURE THAT THE AVAILABLE GEOTECHNICAL INFORMATION IS SUFFICIENT FOR HIS COMPLETE UNDERSTANDING OF THE SOIL CONDITIONS FOR THE SITE. IF ADDITIONAL GEOTECHNICAL INVESTIGATION IS REQUIRED BY THE CONTRACTOR, THIS ADDITIONAL WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

3.15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RESTORATION OF EXISTING PAVEMENT, PIPES, CONDUITS, SPRINKLER HEADS, CABLES, ETC., AND LANDSCAPED AREAS DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS AND/OR THOSE OF HIS SUBCONTRACTORS AND SHALL RESTORE AT NO ADDITIONAL COST.

3.16. THE CONTRACTOR SHALL NOT BRING ANY HAZARDOUS MATERIALS ONTO THE PROJECT. SHOULD THE CONTRACTOR REQUIRE SUCH FOR PERFORMING THE CONTRACTED WORK, THE CONTRACTOR SHALL REQUEST, IN WRITING, PERMISSION FROM THE OWNER, CITY AND ENGINEER. THE CONTRACTOR SHALL PROVIDE THE OWNER, CITY AND ENGINEER WITH A COPY OF THE MATERIAL SAFETY DATA SHEET (MSDS) FOR EACH HAZARDOUS MATERIAL PROPOSED FOR USE. THE PROJECT ENGINEER SHALL COORDINATE WITH THE OWNER AND CITY PRIOR TO ISSUING WRITTEN APPROVAL TO THE CONTRACTOR.

3.17. ANY KNOWN OR SUSPECTED HAZARDOUS MATERIAL FOUND ON THE PROJECT BY THE CONTRACTOR SHALL BE IMMEDIATELY REPORTED TO THE CITY AND/OR ENGINEER, WHO SHALL DIRECT THE CONTRACTOR TO PROTECT THE AREA OF KNOWN OR SUSPECTED CONTAMINATION FROM FURTHER ACCESS. THE CITY AND/OR ENGINEER ARE TO NOTIFY THE OWNER/ENGINEER OF THE DISCOVERY. THE OWNER/ENGINEER WILL ARRANGE FOR INVESTIGATION, IDENTIFICATION, AND REMEDIATION OF THE HAZARDOUS MATERIAL. THE CONTRACTOR SHALL NOT RETURN TO THE AREA OF CONTAMINATION UNTIL APPROVAL IS PROVIDED BY THE ENGINEER.

3.18. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE CITY, COUNTY, OR STATE ENGINEERING INSPECTOR AND ENGINEER 48 HOURS IN ADVANCE OF THE EVENT TO NOTIFY THE CITY OF CONSTRUCTION START UP, OR TO SCHEDULE ALL REQUIRED TESTS AND INSPECTIONS INCLUDING FINAL WALK-THROUGHS.

4. PRECONSTRUCTION RESPONSIBILITIES

4.1. ALL UTILITY / ACCESS EASEMENTS TO BE SECURED PRIOR TO CONSTRUCTION.

4.2. NO CONSTRUCTION MAY COMMENCE UNTIL THE APPROPRIATE PERMITS HAVE BEEN OBTAINED FROM ALL MUNICIPAL, STATE, COUNTY, AND FEDERAL AGENCIES AND A PRE-CONSTRUCTION MEETING HAS BEEN CONDUCTED.

4.3. ALL REQUIRED GOVERNMENTAL AGENCY BUILDING PERMITS TO BE OBTAINED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION ACTIVITY.

4.4. CONTRACTOR TO COORDINATE CONSTRUCTION SCHEDULING FOR CONNECTION TO THE EXISTING WATER AND SEWER LINES WITH THE UTILITY DEPARTMENT THAT OWNS AND/OR MAINTAINS THE WATER AND SEWER LINES.

4.5. PRIOR TO THE START OF CONSTRUCTION, THE OWNER SHALL SUBMIT AN NPDES CONSTRUCTION GENERAL PERMIT (CGP) "NOTICE OF INTENT (N.O.I.) TO USE GENERIC PERMIT FOR STORM WATER DISCHARGE FROM CONSTRUCTION ACTIVITIES FORM (DEP FORM 62-621.300(4)(B)) TO FDEP NOTICES CENTER. THE CONTRACTOR WILL BE RESPONSIBLE FOR (1) IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) THAT WAS REQUIRED TO BE DEVELOPED PRIOR TO NOI SUBMITTAL, AND (2) RETENTION OF RECORDS REQUIRED BY THE PERMIT, INCLUDING RETENTION OF A COPY OF THE SWPPP AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL SITE STABILIZATION. A "NOTICE OF TERMINATION (N.O.T.) OF GENERIC PERMIT COVERAGE" FORM (DEP FORM 62-621.300(6)) MUST BE SUBMITTED TO FDEP TO DISCONTINUE PERMIT COVERAGE, SUBSEQUENT TO COMPLETION OF CONSTRUCTION. FOR ADDITIONAL INFORMATION SEE FDEP WEBSITE: HTTP://FLORIDADEP.GOV/WATER/STORMWATER.

4.6. PRIOR TO CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AS REQUIRED FOR THE FOLLOWING ITEMS LISTED BELOW, BUT NOT LIMITED TO:

- DRAINAGE: CATCH BASINS, MANHOLES, HEADWALLS, GRATES/TOPS, YARD DRAINS.
- WATER: FIRE HYDRANTS, VALVES, BACKFLOW PREVENTER, DDCV, METER BOX.
- SEWER: MANHOLES, LIFT STATIONS (WETWELL, HATCHES, VALVES, PUMP DATA, ELECTRICAL PANEL)

4.6.1 CATALOGUE LITERATURE SHALL BE SUBMITTED FOR DRAINAGE, WATER AND SEWER PIPES, FITTINGS, AND APPURTENANCES.

4.6.2 PRIOR TO SUBMITTING SHOP DRAWINGS TO THE ENGINEER, THE CONTRACTOR SHALL REVIEW AND APPROVE THE DRAWINGS, AND SHALL NOTE IN RED ANY DEVIATIONS FROM THE ENGINEER'S PLANS OR SPECIFICATIONS.

4.6.3 INDIVIDUAL SHOP DRAWINGS FOR ALL PRECAST STRUCTURES ARE REQUIRED. CATALOGUE LITERATURE WILL NOT BE ACCEPTED FOR PRECAST STRUCTURES.

4.7 CONTRACTOR TO SUBMIT MAINTENANCE OF TRAFFIC PLAN(S) IN ACCORDANCE WITH APPROPRIATE CITY, COUNTY, OR STATE REQUIREMENTS, AND SUBMIT FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION.

5. INSPECTIONS / TESTING:

5.1. THE CONTRACTOR SHALL NOTIFY IN WRITING THE OWNER, CITY, COUNTY, ENGINEER OF RECORD, AND ANY OTHER GOVERNMENTAL AGENCIES HAVING JURISDICTION AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION AND PRIOR TO REQUIRED INSPECTIONS OF THE FOLLOWING ITEMS, WHERE APPLICABLE:

- CLEARING AND EARTHWORK
- STORM DRAINAGE SYSTEMS
- SANITARY SEWER SYSTEMS
- WATER DISTRIBUTION SYSTEMS
- SUBGRADE
- LIMEROCK BASE
- ASPHALT OR CONCRETE PAVEMENT
- SIDEWALKS, CONCRETE FLATWORK/CURBING
- LANDSCAPING
- PAVEMENT MARKING AND SIGNAGE
- SIGNALIZATION
- SITE LIGHTING
- ELECTRICAL AND COMMUNICATION LINES
- UTILITY CONDUITS
- IRRIGATION
- FINAL

5.2 THE OWNER, ENGINEER, AND JURISDICTIONAL PERMITTING AGENCIES MAY MAKE INSPECTIONS OF THE WORK AT ANY TIME. THE CONTRACTOR SHALL COOPERATE FULLY WITH ALL INSPECTIONS.

5.3 TESTING - ALL TESTING REQUIRED BY THE PLANS AND SPECIFICATIONS SHALL BE PERFORMED BY A LICENSED / FDOT QUALIFIED TESTING COMPANY. REQUIRED TEST FOR ASPHALT AND LIMEROCK SHALL BE TAKEN AT THE DIRECTION OF THE ENGINEER OR THE JURISDICTIONAL GOVERNMENTAL AGENCY IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

6. TEMPORARY FACILITIES

6.1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, COMMUNICATIONS, AND ELECTRICITY, FOR HIS OPERATIONS AND WORKS, COST INCLUDED UNDER MOBILIZATION.

6.2. CONTRACTOR SHALL CONSTRUCT TEMPORARY FENCING TO SECURE CONSTRUCTION AREAS AT ALL TIMES, COST INCLUDED IN MOBILIZATION.

6.3. CONTRACTOR TO OBTAIN A SECURE STAGING AREA AND OBTAIN ALL NECESSARY APPROVALS FROM THE OWNER.

6.4. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN TEMPORARY LIGHTING AS REQUIRED TO LIGHT THE CONSTRUCTION PROJECT LIMITS AT ALL TIMES, TO AT LEAST THE SAME LIGHTING INTENSITY LEVELS AS THE EXISTING CONDITIONS.

6.5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES.

7. PROJECT PROGRESS AND CLOSEOUT

7.1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER, AND UPON FINAL CLEAN-UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE BROOM SWEPT CLEAN.

7.2. THE CONTRACTOR SHALL RESTORE OR REPLACE ANY PUBLIC OR PRIVATE PROPERTY (SUCH AS HIGHWAY, DRIVEWAY, WALKWAY, AND LANDSCAPING), DAMAGED BY HIS WORK, EQUIPMENT, OR EMPLOYEES, TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF CONSTRUCTION. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.

7.3. MATERIAL OR DEBRIS SHALL BE HAULED IN ACCORDANCE WITH NPDES PERMIT AND JURISDICTIONAL LAWS.

7.4. ALL LAND SURVEY PROPERTY MONUMENTS OR PERMANENT REFERENCE MARKERS, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.

7.5. ALL UNPAVED SURFACES DISTURBED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE GRADED, SODDED, & RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED BEFORE THE CONSTRUCTION.

8. PROJECT RECORD DOCUMENTS:

8.1. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE LOCATION, LENGTH, MATERIAL AND ELEVATION OF ANY FACILITY NOT BUILT ACCORDING TO PLANS. THIS COPY OF THE "AS-BUILT" SHALL BE SUBMITTED TO THE ENGINEER FOR FINAL PROJECT RECORD.

8.2. UPON COMPLETION OF MAIN LINE IMPROVEMENTS AND LIMEROCK BASE CONSTRUCTION (AT LEAST 48 HOURS BEFORE PLACING ASPHALT PAVEMENT) THE CONTRACTOR SHALL FURNISH THE ENGINEER OF RECORD "AS-BUILT" PLANS FOR THESE IMPROVEMENTS, SHOWING THE LOCATIONS AND PERTINENT GRADES OF ALL DRAINAGE INSTALLATIONS AND THE FINISHED ROCK GRADES OF THE ROAD CROWN AND EDGES OF PAVEMENT AT 50 FOOT INTERVALS, INCLUDING LOCATIONS AND ELEVATIONS OF ALL HIGH AND LOW POINTS.

8.3. UPON COMPLETION OF CONSTRUCTION, AND PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD ONE COMPLETE SET OF ALL "AS-BUILT" CONTRACT DRAWINGS. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES, DIMENSIONS, LOCATIONS, AND ELEVATIONS OF ALL IMPROVEMENTS.

8.4. "AS-BUILT" DRAWINGS OF WATER LINES AND FORCE MAINS SHALL INCLUDE THE FOLLOWING INFORMATION:

8.4.1. TOP OF PIPE ELEVATIONS EVERY 100 LF.

8.4.2. LOCATIONS AND ELEVATIONS OF ALL FITTINGS INCLUDING BENDS, TEES, GATE VALVES, DOUBLE DETECTOR CHECK VALVES, FIRE HYDRANTS, AND APPURTENANCES.

8.4.3. ALL CONNECTIONS TO EXISTING LINES.

8.4.4. ENDS OF ALL WATER SERVICES AT THE BUILDINGS WHERE THE WATER SERVICE TERMINATES.

8.5. "AS-BUILT" DRAWINGS OF GRAVITY SANITARY SEWER LINES SHALL INCLUDE THE FOLLOWING INFORMATION:

8.5.1. RIM ELEVATIONS, INVERT ELEVATIONS, LENGTH OF PIPING BETWEEN STRUCTURES, AND SLOPES.

8.5.2. THE STUB ENDS AND CLEANOUTS OF ALL SEWER LATERALS SHALL BE LOCATED HORIZONTALLY AND VERTICALLY.

8.6. "AS-BUILT" DRAWINGS OF ALL DRAINAGE LINES SHALL INCLUDE THE FOLLOWING INFORMATION:

8.6.1. RIM ELEVATION, INVERT ELEVATION, LENGTH OF PIPING BETWEEN STRUCTURES, AND CONTROL STRUCTURE ELEVATIONS IF APPLICABLE.

8.6.2. THE SIZE OF THE LINES.

8.6.3. DRAINAGE WELL STRUCTURE SHALL INCLUDE, BUT NOT BE LIMITED TO, TOP OF CASING ELEVATION, TOP AND BOTTOM ELEVATIONS OF THE STRUCTURE AND BAFFLE WALLS, RIM ELEVATIONS AND PIPE INVERTS.

8.7. "AS-BUILT" DRAWINGS OF CONSTRUCTION AREAS SHALL INCLUDE THE FOLLOWING:

8.7.1. ROCK ELEVATIONS AT ALL HIGH, AND LOW POINTS, AND AT ENOUGH INTERMEDIATE POINTS TO CONFIRM SLOPE CONSISTENCY.

8.7.2. ROCK ELEVATIONS AND CONCRETE BASE ELEVATIONS SHALL BE TAKEN AT ALL LOCATIONS WHERE THERE IS A FINISH GRADE ELEVATION SHOWN ON THE DESIGN PLANS.

8.7.3. ALL CATCH BASIN AND MANHOLE RIM ELEVATIONS.

8.7.4. FINISH GRADE ELEVATIONS IN ISLAND AREAS.

8.7.5. "AS-BUILT" ELEVATIONS SHALL BE TAKEN ON ALL PAVED AND UNPAVED SWALES, AT ENOUGH INTERMEDIATE POINTS TO CONFIRM SLOPE CONSISTENCY AND CONFORMANCE TO THE PLAN DETAILS.

8.7.6. LAKE AND CANAL BANK "AS-BUILT" DRAWINGS SHALL INCLUDE A KEY SHEET OF THE LAKE FOR THE LOCATION OF CROSS SECTIONS. LAKE AND CANAL BANK CROSS SECTIONS SHALL BE PLOTTED AT A MINIMUM OF EVERY 100 LF, UNLESS OTHERWISE SPECIFIED. "AS-BUILT" DRAWINGS SHALL CONSIST OF THE LOCATION AND ELEVATION OF THE TOP OF BANK, EDGE OF WATER, AND THE DEEP CUT LINE, WITH THE DISTANCE BETWEEN EACH SHOWN ON THE DRAWING.

8.7.7. RETENTION AREA "AS-BUILT" ELEVATIONS SHALL BE TAKEN AT THE BOTTOM OF THE RETENTION AREA AND AT THE TOP OF BANK. IF THERE ARE CONTOURS INDICATED ON THE DESIGN PLANS, THEN THEY SHALL BE INCLUDED IN "AS-BUILT" DRAWINGS AS WELL.

8.8. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PREPARE "AS-BUILT" DRAWINGS ON FULL SIZE, 24" X 36" SHEETS. ALL "AS-BUILT" INFORMATION SHALL BE PUT ON THE LATEST ENGINEERING DRAWINGS. A FULL SET OF PDF "AS-BUILT" DRAWINGS SHALL BE SUBMITTED. THESE DRAWINGS SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR.

8.9. AN ELECTRONIC COPY OF THESE "AS-BUILT" DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD IN AUTOCAD, VERSION 2008 OR LATER.

9. UTILITY NOTES

9.1. CONTRACTOR IS RESPONSIBLE FOR UTILITY VERIFICATION PRIOR TO FABRICATION.

9.2. THE CONTRACTOR IS ADVISED THAT PROPERTIES ADJACENT TO THE PROJECT HAVE ELECTRIC, TELEPHONE, GAS, WATER AND/OR SEWER SERVICE LATERALS WHICH MAY NOT BE SHOWN IN PLANS. THE CONTRACTOR MUST REQUEST THE LOCATION OF THESE LATERAL SERVICES FROM THE UTILITY COMPANIES.

9.3. THE CONTRACTOR SHALL USE HAND DIGGING WHEN EXCAVATING NEAR EXISTING UTILITIES. EXTREME CAUTION SHALL BE EXERCISED BY THE CONTRACTOR WHILE EXCAVATING, INSTALLING, BACKFILLING OR COMPACTING AROUND THE UTILITIES.

9.4. THE CONTRACTOR SHALL NOTIFY AND OBTAIN AN UNDERGROUND CLEARANCE FROM ALL UTILITY COMPANIES AND GOVERNMENTAL AGENCIES AT LEAST 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN A SUNSHINE811.COM CERTIFICATION CLEARANCE NUMBER AND FIELD MARKINGS AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION.

- PRIOR TO COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH FLORIDA STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.

9.5 FOR STREET EXCAVATION OR CLOSING OR FOR ALTERATION OF ACCESS TO PUBLIC OR PRIVATE PROPERTY, THE CONTRACTOR SHALL NOTIFY:

- ROADWAY JURISDICTIONAL ENGINEERING / PUBLIC WORKS AUTHORITY.
- COUNTY TRANSIT AUTHORITY
- SCHOOL BOARD TRANSPORTATION AUTHORITY
- JURISDICTIONAL FIRE DEPARTMENT DISPATCH
- JURISDICTIONAL POLICE DEPARTMENT(S)

9.6 THE CONTRACTOR SHALL USE EXTREME CAUTION WORKING UNDER, OVER, AND AROUND EXISTING ELECTRIC LINES. THE CONTRACTOR SHALL CONTACT THE ELECTRIC PROVIDER COMPANY TO VERIFY LOCATIONS, VOLTAGE, AND REQUIRED CLEARANCES, ONSITE, IN RIGHT-OF-WAYS, AND IN EASEMENTS, PRIOR TO ANY CONSTRUCTION IN THE VICINITY OF EXISTING LINES.

9.7 LOCATION AND SIZE OF ALL EXISTING UTILITIES AND TOPOGRAPHY (FACILITIES) AS SHOWN ON CONSTRUCTION DRAWINGS ARE DRAWN FROM AVAILABLE RECORDS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE FACILITIES SHOWN OR FOR ANY FACILITY NOT SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION (VERTICAL & HORIZONTAL) OF ANY EXISTING UTILITIES AND TOPOGRAPHY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE ELEVATIONS AND LOCATIONS OF ALL EXISTING FACILITIES, IN COORDINATION WITH ALL UTILITY COMPANIES, PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. IF AN EXISTING FACILITY IS FOUND TO CONFLICT WITH THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SO THAT APPROPRIATE MEASURES CAN BE TAKEN TO RESOLVE THE CONFLICT.

9.8 THE CONTRACTOR SHALL COORDINATE THE WORK WITH OTHER CONTRACTORS IN THE AREA AND ANY OTHER UNDERGROUND UTILITY COMPANIES REQUIRED. THE CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING UTILITIES WITH APPLICABLE UTILITY COMPANIES.

10. SIGNING AND PAVEMENT MARKINGS

10.1. ALL SIGNING AND PAVEMENT MARKINGS INSTALLED AS PART OF THESE PLANS SHALL CONFORM TO THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), COUNTY TRAFFIC DESIGN STANDARDS AND FDOT DESIGN STANDARDS AS A MINIMUM CRITERIA.

10.2. MATCH EXISTING PAVEMENT MARKINGS AT THE LIMITS OF CONSTRUCTION.

10.3. REMOVAL OF THE EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY WATER BLASTING OR OTHER APPROVED METHODS DETERMINED BY THE ENGINEER.

10.4. INCORRECTLY PLACED PAINT OR THERMOPLASTIC PAVEMENT MARKINGS OVER FRICTION COURSE WILL BE REMOVED BY MILLING AND REPLACING THE FRICTION COURSE A MINIMUM WIDTH OF 18 IN AT THE CONTRACTOR'S EXPENSE. THE ENGINEER MAY APPROVE AN ALTERNATIVE METHOD IF IT CAN BE DEMONSTRATED TO COMPLETELY REMOVE THE MARKINGS WITHOUT DAMAGING THE ASPHALT.

10.5. PLACE ALL RETRO-REFLECTIVE PAVEMENT MARKERS IN ACCORDANCE WITH FDOT STANDARD INDEX 706-001 AND / OR AS SHOWN IN THE PLANS.

10.6. CAUTION SHOULD BE EXERCISED WHILE RELOCATING EXISTING SIGNS TO PREVENT UNNECESSARY DAMAGE TO SIGNS. IF THE SIGN IS DAMAGED BEYOND USE, AS DETERMINED BY THE ENGINEER, SIGNS SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

10.7. ALL EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS SHALL BE REMOVED, STOCKPILED, AND RELOCATED BY THE CONTRACTOR. SIGN REMOVAL SHALL BE DIRECTED BY THE ENGINEER.

10.8. RELOCATED SIGN SUPPORT SYSTEM MUST MEET THE CURRENT DESIGN STANDARD.

10.9. THE CONTRACTOR SHALL PROVIDE AN INVENTORY OF EXISTING SIGNS TO REMAIN OR TO BE RELOCATED PRIOR TO STARTING THE JOB AND FORWARD THIS LIST TO THE ENGINEER. CONTRACTOR SHALL NOTIFY IF THERE ARE ANY MISSING OR DAMAGE SIGNS THAT THE PLANS SHOW TO REMAIN OR TO BE RELOCATED.

10.10. ALL ROADWAY PAVEMENT MARKINGS SHALL BE THERMOPLASTIC IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 711.

10.11. HAND DIG THE FIRST FOUR FEET OF SIGN FOUNDATION.

10.12. ALL SIGNS SHALL MEET ALL OF THE FOLLOWING:

- MEET THE CRITERIA OUTLINED IN SECTION 2A.08 OF THE 2009 MUTCD
- MEET THE SPECIFICATIONS OUTLINED IN SECTION 700 AND 994 OF THE LATEST FDOT STANDARD SPECIFICATIONS.
- CONSIST OF MATERIALS CERTIFIED TO MEET THE RETROREFLECTIVE SHEETING REQUIREMENTS OUTLINED IN THE CURRENT VERSION OF ASTM D4956 FOR TYPE-XI RETROREFLECTIVE SHEETING MATERIALS MADE WITH PRISIMS, EXCEPT FOR SCHOOL ZONE AND PEDESTRIAN SIGNS WHICH SHALL BE COMPRISED OF RETROREFLECTIVE FLUORESCENT YELLOW-GREEN SHEETING CERTIFIED TO MEET ASTM D4956 TYPE IV RETROREFLECTIVE SHEETING MATERIALS.
- CONSIST OF RETROREFLECTIVE SHEETING MATERIALS THAT HAVE A VALID FDOT APPROVED PRODUCT LIST (APL) CERTIFICATION FOR SPECIFICATION 700 HIGHWAY SIGNING FOR FDOT SHEETING TYPE XI (OR TYPE IV FOR SCHOOL AND PEDESTRIAN SIGNS).

10.13 PATCH ATTACHMENT HARDWARE, SUCH AS COUNTERSUNK SCREWS OR RIVET HEADS, WITH RETRO REFLECTIVE BUTTONS THAT MATCH THE COLOR AND SHEETING MATER