



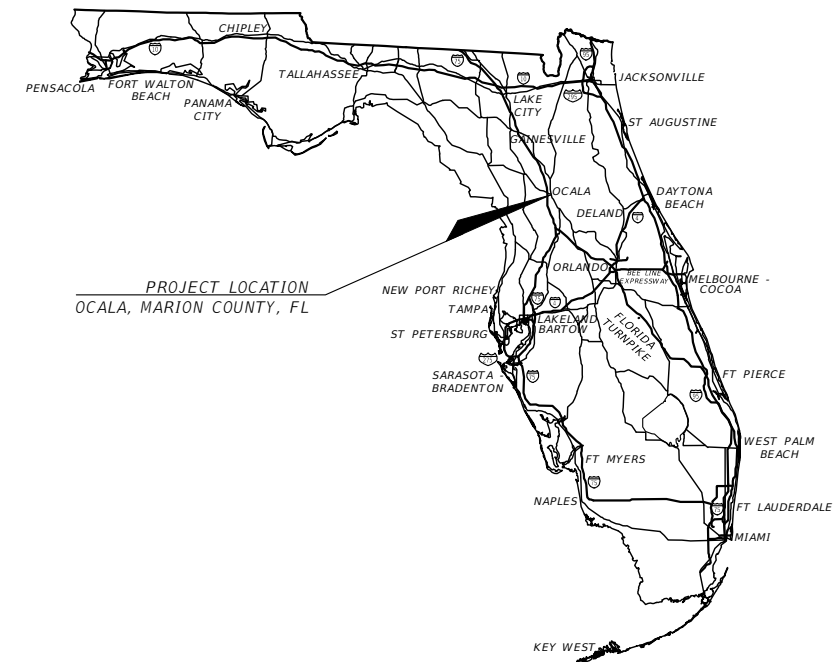
**CITY ENGINEER'S OFFICE**  
 1805 NE 30th AVE, BLDG #600  
 OCALA, FLORIDA 34470

# CONTRACT PLANS

ITB NO. 250268

## WTP #2 - UPPER AQUIFER WELLS #11 & #12

**100% PLANS**  
 FOR CONSTRUCTION  
 DATE: 2/5/25



**PROJECT LOCATION**  
 PID: 30597-008-00

### LOCAL UTILITIES

UTILITY COMPANY	PHONE NUMBER	EMERGENCY
OCALA PUBLIC WORKS (TRAFFIC)	(352) 351-6733	
OCALA ELECTRIC UTILITY	(352) 351-6650	(352) 351-6666 (LEAVE MESSAGE)
OCALA WATER RESOURCES	(352) 351-6772	(352) 351-6775
COX COMMUNICATIONS	(888) 269-9693	
CENTURYLINK	(352) 368-8817	
TECO GAS	(352) 622-0112	(352) 622-0111

### GOVERNING DOCUMENTS:

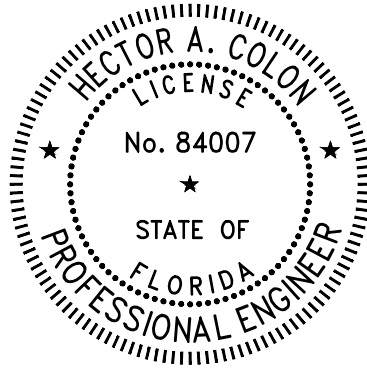
- U.S. Department of Transportation, Manual on Uniform Traffic Control Devices (2009 Version with Revisions)
- Florida Department of Transportation, Standard Plans for Road and Bridge Construction (FY 2022-2023 Version)
- Florida Department of Transportation, Standard Specifications for Road and Bridge Construction (July 2022 Version)
- Florida Department of Transportation, Manual of Uniform Minimum Standards for Design, Construction, & Maintenance of Streets & Highways "Florida Green Book" (2018 Version, Effective July 20 2021)
- City of Ocala, Land Development Code (FY 2021-2022 Version)
- City of Ocala, Standard Specifications For Construction of Streets, Stormwater, Traffic, Water & Sewer Infrastructure (JANUARY 2022 Version)

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REVISIONS				HECTOR A. COLON, PE P.E. LICENSE NUMBER 84007 CITY OF OCALA, FLORIDA 1805 NE 30TH AVENUE OCALA, FLORIDA 34470	PREPARED BY  CITY ENGINEER'S OFFICE	PROJECT NO. 22312 PROJECT NAME: WTP# 2 WELLS #11 & #12 <h2 style="font-size: 1.5em; margin: 0;">KEY SHEET</h2>	SHEET NO.  1
DATE	DESCRIPTION	DATE	DESCRIPTION				



CITY OF OCALA  
 CITY ENGINEER'S OFFICE  
 1805 NE 30TH AVE., BLDG. 300  
 OCALA, FL 34470

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

PLAN INDEX

- KEY SHEET
- SIGNATURE SHEET
- GENERAL NOTES
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REVISIONS				HECTOR A. COLON, PE P.E. LICENSE NUMBER 84007 CITY OF OCALA, FLORIDA 1805 NE 30TH AVENUE OCALA, FLORIDA 34470	PREPARED BY	PROJECT NO. 22312	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		PROJECT NAME: WTP #2 WELLS #11 & #12		
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**GENERAL NOTES:**


1. ALL CONSTRUCTIONS SHALL BE IN ACCORDANCE TO THE LATEST EDITION OF THE CITY OF OCALA'S "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF STREETS, STORMWATER, TRAFFIC, WATER & SEWER INFRASTRUCTURE".
2. ALL UNSUITABLE MATERIALS ENCOUNTERED SHALL BE DISPOSED OF AND REPLACED WITH APPROVED MATERIALS.
3. ~~NEW WATER MAIN TO BE INSTALLED AT 36" DEEP (MIN.) TO TOP OF PIPE EXCEPT WHERE VERTICAL ADJUSTMENTS ARE REQUIRED TO AVOID CONFLICTS. SEE ALSO NOTES 14 AND 15 BELOW.~~
4. ALL UTILITIES SHOWN ON THESE PLANS HAVE BEEN PLOTTED FROM THE BEST AVAILABLE RECORDS. HOWEVER, IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THEIR LOCATIONS AND CONDITIONS FROM THE UTILITY AGENCIES PRIOR TO CONSTRUCTION.
5. EXCAVATED MATERIALS SHALL BE LOADED ONTO DUMP TRUCKS DIRECTLY BEHIND THE EQUIPMENT AND HAULED OFF TO THE DESIGNATED SITE. TRAFFIC CONTROL MEASURES SHALL BE PLACED ACCORDINGLY TO ACCOMMODATE THIS PROCESS.
6. INSTALL INLET PROTECTION DEVICES AT ALL INLETS TO MINIMIZE DEBRIS ENTERING THE STORM DRAIN SYSTEM. (AS APPROVED BY FDEP)
7. ~~THE TRAFFIC CONTROL PLAN FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD); THE FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS (STANDARD INDEXES) INDEXES #102-600 THROUGH #102-660, LATEST EDITION; AND ANY REQUIREMENTS OF THE CITY OF OCALA THAT MEET OR EXCEED ANY OF THE ABOVE.~~
8. ~~UNLESS OTHERWISE SPECIFIED ON THE PLANS, THE CONTRACTOR SHALL MAINTAIN TWO LANES OF TRAFFIC IN EACH DIRECTION FOR THE DURATION OF THE PROJECT. THE CONTRACTOR MAY, UPON APPROVAL OF THE ENGINEER IN CHARGE, RESTRICT TRAFFIC TO ONE-WAY OPERATION FOR SHORT PERIODS OF TIME PROVIDED THAT ADEQUATE MEANS OF TRAFFIC CONTROL ARE EFFECTED AND TRAFFIC IS NOT UNREASONABLY DELAYED.~~
9. ~~CONTRACTOR TO REPAIR OR REPLACE ALL PAVEMENT MARKINGS, TRAFFIC LOOPS OR HOMERUNS THAT ARE DAMAGED DURING CONSTRUCTION.~~
10. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ACCEPTABLE ACCESS TO ALL BUSINESSES AND RESIDENCES ALONG THE PROJECT ROUTE WHENEVER CONSTRUCTION INTERFERES WITH THE EXISTING MEANS OF ACCESS. FLAGMEN SHALL BE USED WHEN NO ALTERNATE ACCESS IS POSSIBLE.
11. ~~THE REQUIRED TRAFFIC CONTROL DEVICES, WARNING DEVICES, AND BARRIERS SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION WHICH MAY CREATE ANY HAZARDOUS CONDITION. THE CONTRACTOR SHALL IMMEDIATELY REMOVE OR COVER ANY DEVICE WHICH DOES NOT APPLY TO THE EXISTING CONDITIONS.~~
12. ~~THE CONTRACTOR SHALL HAVE A STATE OF FLORIDA CERTIFIED MAINTENANCE OF TRAFFIC SUPERVISOR WITH THE RESPONSIBILITY OF MAINTAINING THE POSITIONING AND CONDITION OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS THROUGHOUT THE DURATION OF THE PROJECT. THE ENGINEER IN CHARGE SHALL BE KEPT ADVISED AS TO THE IDENTIFICATION AND MEANS OF CONTACTING THIS EMPLOYEE ON A 24-HOUR BASIS.~~
13. ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION.
14. THE CONTRACTOR SHALL BE NOISE SENSITIVE FOR NIGHT OPERATIONS.
15. ~~CONTRACTOR TO PERFORM HYDROSTATIC TESTING OF WATER MAIN AND WATER SERVICES.~~
16. ~~NEW OR RELOCATED WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST 6 FEET AND PREFERABLY 10 FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING GRAVITY SEWER, SEWER FORCE MAIN, OR RECLAIMED WATER MAINS. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO 3 FEET WHERE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER. NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR NEW GRAVITY SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 6 INCHES AND PREFERABLY 12 INCHES ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPE LINE. IT IS PREFERABLE TO INSTALL THE WATER MAIN ABOVE OTHER PIPE LINES.~~
17. ~~AT THE UTILITY CROSSINGS, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE CROSSING PIPELINES, SO THAT WATER LINE JOINTS ARE AS FAR AS POSSIBLE FROM THE CROSSING PIPE. PIPE CROSSINGS SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST 3 FEET FROM JOINTS IN VACUUM-TYPE RECLAIMED WATER SEWER MAINS AND AT LEAST 6 FEET FROM ALL JOINTS IN GRAVITY SEWERS AND SEWER FORCE MAINS.~~
18. WATER METER SERVICES MAY BE REMOVED/ADDED BASED ON ACTUAL FIELD CONDITIONS.
19. ACTUAL LOCATIONS AND SIZES OF WATER MAINS AND METERS MAY VARY FROM WHAT IS SHOWN. CONTRACTOR IS RESPONSIBLE FOR FIELD VISIT PRIOR TO BID.
20. TAPS MAY BE DELETED IF NEW MAIN CAN BE CONNECTED DIRECTLY TO OLD MAIN VIA PIPE SLEEVES AND/OR EXISTING VALVES.
21. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE EXISTING SEWER LATERALS. CITY MAY PROVIDE AS-BUILTS IF REQUESTED.
22. ~~WHERE WATER METERS ARE TO BE RELOCATED, THE COST OF MATERIAL AND LABOR TO RELOCATE THE METER BOX TO THE NEW LOCATION SHALL BE CONSIDERED PART OF THE RELOCATION COST AND SHALL INCLUDE METER RELOCATIONS WITHIN 20' OF THE ORIGINAL LOCATION. FOR RELOCATIONS MORE THAN 20' FROM THE OLD LOCATION, THE COST OF LABOR AND MATERIAL SHALL BE INCLUDED IN THE COST PER FOOT FOR "EXTENDING CUSTOMER SERVICE TO RELOCATED METER".~~
23. ~~WHERE NON-STANDARD METER BOXES ARE FOUND, THE CONTRACTOR SHALL REPLACE THE EXISTING METER BOX WITH A STANDARD GULF BOX. UNIT PRICE SHALL INCLUDE ALL MATERIALS NECESSARY TO REMOVE AND REPLACE THE METER BOX.~~
24. ~~WHERE WATER MAINS AND APPURTENANCES ARE TO BE ABANDONED, THE CONTRACTOR SHALL ABANDON THE SYSTEM AS FOLLOWS:~~
25. ~~WATER VALVES — REMOVE ALL WATER VALVES ON ABANDONED WATER MAINS WHERE WATER MAINS CAN BE SHUT DOWN OR REDUCED TO A WORKABLE FLOW. FOR WATER MAINS THAT CANNOT BE SHUT DOWN FOR VALVE REMOVAL, THEN THE CONTRACTOR SHALL CLOSE THE VALVE, REMOVE VALVE BOX, CUT AND CAP PIPES ON DOWNSTREAM SIDE OF THE VALVE.~~
26. ~~FIRE HYDRANTS — REMOVE ALL FIRE HYDRANT ASSEMBLIES (FROM VALVE TO HYDRANT) ON EXISTING MAINS WHICH ARE TO BE ABANDONED AND CAP TEE.~~
27. ~~WATER SERVICES — CLOSE SERVICE VALVE AT WATER MAIN, THEN CUT AND CAP SERVICE PIPE AT SERVICE VALVE. REMOVE ALL METER BOXES, AND CAP ALL PIPES LEFT IN PLACE.~~
28. ~~WATER MAINS — REMOVE PIPE WHERE REQUIRED FOR CONSTRUCTION. WHERE PIPES ARE LEFT IN PLACE, CAP ALL EXPOSED PIPES. WHERE PIPES LEFT IN PLACE ARE CUT, BROKEN, OR DAMAGED, THE PIPE IS TO BE CUT AND PIPE ENDS TO BE CAPPED ACCORDINGLY. IF REQUIRED FOR PIPES IN FDOT RIGHT-OF-WAY, THEN GROUT ALL ABANDONED PIPES AND FILL WITH FLOWABLE FILL.~~
29. ~~WHERE PAVEMENT HAS TO BE REMOVED, REPLACE PAVEMENT IN ACCORDANCE WITH DETAIL 478-6.1B TO PROPERLY ABANDON THE WATER MAIN. PAVEMENT IN FDOT RIGHT-OF-WAY SHALL BE REPLACED TO FDOT STANDARDS IN ACCORDANCE WITH PERMIT REQUIREMENTS. RE-STRIPE PAVEMENT AS REQUIRED.~~
30. ~~WHERE 2" WATER MAINS ARE CALLED FOR ON THE PLANS, INSTALL STANDARD 2" PVC WATER MAINS IN ALL CITY RIGHT OF WAYS AND 2" HDPE IN ALL FDOT RIGHT OF WAYS. FOR ALL DRIVEWAY AND STREET CROSSINGS, CITY AND FDOT, DIRECTIONAL BORE 2" HDPE. AT THE DISCRETION OF THE ENGINEER, DIRECTIONAL BORES MAY BE EXTENDED BETWEEN REQUIRED BORES TO AVOID MULTIPLE TRANSITIONS BETWEEN PIPE MATERIALS IN A SHORT AREA OF PIPE.~~

**ENVIRONMENTAL NOTES:**

1. THE CITY OF OCALA OPERATES UNDER A FDEP NPDES 'GENERAL PERMIT' THAT REQUIRES THE CITY AND, IN TURN, ITS CONTRACTORS TO FOLLOW CERTAIN ENVIRONMENTAL PRACTICES AND PROCEDURES TO PREVENT THE POLLUTION OF THE CITY'S GROUNDWATER AND STORMWATER SYSTEM.
  2. ALL WATER COLLECTED AND PUMPED DURING TRENCH DEWATERING ACTIVITIES SHALL BE DISPOSED OF IN UPLAND AREAS INTO DISCHARGE LOCATIONS THAT SHALL BE A MINIMUM OF 75 FEET FROM THE NEAREST WATER BODY OR WETLAND AREA TO ALLOW FOR MAXIMUM OVERLAND FILTRATION OF SOIL PARTICLES.
  3. STAKED SILT SCREEN, TURBIDITY BARRIERS OR OTHER PERIMETER CONTROL METHODS APPROVED BY FDEP SHALL BE UTILIZED AS SILT BARRIERS AND PLACED IN LOCATIONS SHOWN ON THE PLANS AND AT OTHER LOCATIONS AS REQUIRED TO KEEP SEDIMENT FROM REACHING PRIVATE PROPERTY. THESE BARRIERS SHALL BE INSTALLED BEFORE COMMENCING WITH ANY CONSTRUCTION WITHIN OR ADJACENT TO PRIVATE PROPERTY. THE CONTRACTOR SHALL MONITOR AND MAINTAIN ALL SILT BARRIERS AND FENCING INCLUDING DAILY INSPECTIONS TO CHECK THEIR INTEGRITY. ANY LOOSE OR DAMAGED SILT BARRIERS AND FENCING SHALL BE IMMEDIATELY REPAIRED OR REPLACED AS NECESSARY. ONCE CONSTRUCTION IS COMPLETED AND FINISHED GRADING AND STABILIZATION HAS BEEN ACHIEVED, SILT BARRIERS AND FENCING SHALL BE COMPLETELY REMOVED TO THE SATISFACTION OF THE ENGINEER AND BEFORE FINAL ACCEPTANCE.
  4. THE CONTRACTOR SHALL NOT REMOVE ANY TREES WITHOUT COORDINATING SUCH REMOVAL WITH THE ENGINEER. IF ANY TREES ARE REMOVED IN WETLAND JURISDICTIONAL, OR NATIVE VEGETATION AREAS WITHOUT PROPER AUTHORIZATION, CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A DETAILED RESTORATION AND/OR MITIGATION PLAN, SUBMITTING PLAN TO AND OBTAINING APPROVAL FROM FDEP, WATER MANAGEMENT DISTRICT, CITY, OWNER AND ENGINEER, AND COMPLETING ANY MONITORING AND MAINTENANCE REQUIREMENTS IMPOSED AS A RESULT OF TREE REMOVAL.
- THE CONTRACTOR SHALL:**
5. HANDLE, COLLECT, AND DISPOSE OF HAZARDOUS MATERIALS, SANITARY WASTE, AND CONSTRUCTION WASTE MATERIALS ACCORDING TO THE APPLICABLE STATE LAWS AND REGULATIONS, CITY ORDINANCES, OR AS DIRECTED BY THE CITY.
  6. DESIGNATE AN AREA FOR DISCHARGE OF SURPLUS CONCRETE AN CONCRETE TRUCK DRUM WASH WATER. INSTALL A CONTAINMENT BERM AROUND THIS DESIGNATED AREA TO PREVENT RUNOFF BEYOND THE DESIGNATED AREA. ALL SURPLUS CONCRETE SHALL BE REMOVED FROM THE PROJECT SITE PRIOR TO FINAL INSPECTION.
  7. STORE AND USE PETROLEUM AND OTHER HAZARDOUS PRODUCTS ACCORDING TO RECOMMENDED PROCEDURES.
  8. FOLLOW GOOD HOUSEKEEPING PRACTICES TO MINIMIZE THE RISK OF SPILLS OR UNINTENDED EXPOSURE OF PETROLEUM AND OTHER HAZARDOUS MATERIALS TO STORMWATER RUNOFF OR SEEPAGE INTO THE GROUNDWATER.
  9. HAVE PRE-PREPARED PROCEDURES CLEARLY POSTED FOR SPILL CONTAINMENT AND CLEAN-UP.
  10. HAVE READILY AVAILABLE REMEDIATION MATERIALS FOR SPILL CONTAINMENT AND CLEAN-UP.
  11. UPON RELEASE, IMMEDIATELY INITIATE RECOMMENDED METHODS FOR SPILL CONTAINMENT AND CLEAN-UP.
  12. WITHIN 24-HOURS OF THE SPILL/RELEASE, NOTIFY THE 'STATE WARNING POINT' (AT 1.800.320.0519 OR 1.850.413.9911) OF ALL RELEASES EQUAL TO OR EXCEEDING THE REPORTABLE QUANTITY.

**EROSION CONTROL NOTES:**

1. THE CONTRACTOR SHALL PREVENT THE DISCHARGE OF SEDIMENT DUE TO CONSTRUCTION OPERATIONS. ALL NEW AND EXISTING DRAIN PIPES AND STRUCTURES SHALL BE FLUSHED CLEAN PRIOR TO FINAL PAYMENT.
2. ALL STORM SEWER INLETS SHALL BE PROTECTED SO THAT SEDIMENT LADEN WATER WILL NOT ENTER THE STORM SYSTEM WITHOUT FIRST BEING FILTERED.
3. ALL DISTURBED AREAS ARE TO BE SODDED. ALL STABILIZATION PRACTICES SHALL BE PERFORMED AS SOON AS PRACTICAL AT LOCATIONS WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL GROUND COVER IS ACHIEVED AND, IN THE OPINION OF THE ENGINEER, PROVIDES ADEQUATE COVER AND IS MATURE ENOUGH TO CONTROL SOIL EROSION SATISFACTORILY, TO SURVIVE ADVERSE WEATHER CONDITIONS.
4. STAKED SILT FENCE SHALL BE PLACED IN ACCORDANCE WITH CITY OF OCALA SPECIFICATIONS.
5. THE CONTRACTOR WILL PROVIDE LITTER CONTROL AND COLLECTION WITHIN THE PROJECT BOUNDARIES DURING CONSTRUCTION ACTIVITIES. ALL FERTILIZERS, HYDROCARBON, OR OTHER CHEMICAL CONTAINERS SHALL BE DISPOSED OF BY THE CONTRACTOR ACCORDING TO EPA'S STANDARD PRACTICES AS DETAILED BY THE MANUFACTURER.
6. LOADED HAUL TRUCKS SHALL BE COVERED WITH TARPULIN. EXCESS DIRT ON THE ROAD SHALL BE REMOVED DAILY. AREAS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE DAMPENED WITH WATER AS REQUIRED FOR DUST CONTROL.
7. THE CONTRACTOR WILL ADHERE TO ALL STATE AND LOCAL REGULATIONS.
8. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE MAINTENANCE AND REPAIRS OF EROSION AND SEDIMENT CONTROL DEVICES, AND REMOVAL OF EROSION AND SEDIMENT CONTROL DEVICES AFTER THE NOTICE OF TERMINATION. MAINTENANCE AND REPAIR REQUIRED FOR THE CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION SHALL BE INCLUDED IN THE PROJECT COST.
9. TOXIC SUBSTANCES SHALL BE DISPOSED OF BY THE CONTRACTOR ACCORDING TO THE EPA'S STANDARD PRACTICES.
10. THE FOLLOWING PRACTICES WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS:
  - A. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER.
  - B. IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
  - C. ALL POLLUTION CONTROLS SHALL BE MAINTAINED AT ALL TIMES.
  - D. BUILT UP SEDIMENT WILL BE REMOVED FROM STAKED SILT FENCE WHEN IT HAS REACHED ONE-HALF THE HEIGHT OF THE SILT FENCE.
11. POLLUTION CONTROL MEASURES SHALL BE INSPECTED DAILY. WRITTEN DOCUMENTATION OF INSPECTIONS SHALL BE WRITTEN EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF A RAIN EVENT OF 0.5 INCHES OR GREATER.
12. THE CONTRACTOR WILL PROVIDE THE CITY OF OCALA WITH AN EROSION CONTROL PLAN THAT WILL INCLUDE SPILL REPORTING AND RESPONSE. IF CONTAMINATED SOIL OR GROUNDWATER IS ENCOUNTERED, CONTACT THE PROJECT ENGINEER.

REVISIONS				HECTOR A. COLON, PE P.E. LICENSE NUMBER 84007 CITY OF OCALA, FLORIDA 1805 NE 30TH AVENUE OCALA, FLORIDA 34470	PREPARED BY 	PROJECT NO. 22312 PROJECT NAME: WTP #2 WELLS #11 & #12	SHEET NO.  <i>GENERAL NOTES</i>
DATE	DESCRIPTION	DATE	DESCRIPTION				
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**FDOT NOTES:**

1. ~~ALL CONSTRUCTION WITHIN THE FDOT RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE LATEST FDOT DESIGN STANDARDS, AND THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE UTILITY ACCOMMODATION (UAM).~~
2. ~~RESTORE AND RE-SOD ALL DISTURBED AREAS WITH ARGENTINE BAHIA IN ACCORDANCE WITH THE FDOT STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL MAINTAIN THAT PORTION OF THE RIGHT-OF-WAY AFFECTED BY THE PERMIT UNTIL VEGETATION IS ESTABLISHED. PERFORM ALL WORK NECESSARY, INCLUDING WATERING AND FERTILIZING, TO SUSTAIN AN ESTABLISHED TURF UNTIL FINAL ACCEPTANCE, AT NO ADDITIONAL EXPENSE TO FDOT OR THE CITY OF OCALA. PROVIDE FILLING, LEVELING, AND REPAIRING OF ANY WASHED OR ERODED AREAS, AS MAY BE NECESSARY.~~
3. ~~AT SUCH LOCATIONS WHERE FDOT SIGNS, REFLECTORS, OR OTHER STRUCTURES WILL INTERFERE WITH PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE LOCAL MAINTENANCE OFFICE OR PROJECT ENGINEER 48 HOURS PRIOR TO CONSTRUCTION. ALL ITEMS THAT REQUIRE RELOCATION OR REPLACEMENT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. IF THE WORK IS WITHIN 500' OF THE TRAFFIC SIGNAL CONTRACTOR SHALL CONTACT THE CITY OF OCALA PUBLIC WORKS DEPT. - TRAFFIC OPERATIONS (352) 351-6733~~
4. ~~THE CONTRACTOR IS RESPONSIBLE FOR MOWING, AT NO ADDITIONAL EXPENSE TO FDOT OR THE CITY OF OCALA, ANY AREA WITHIN PUBLIC RIGHT-OF-WAYS WHERE THE PERMITTED WORK OR WHERE UTILITY LOCATE FLAGS PLACED FOR PERMITTED WORK CREATES A HINDRANCE FOR OR INTERFERES WITH MAINTENANCE ENTITY'S REGULAR MOWING OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MOWING UNTIL ALL SUCH HINDRANCES ARE REMOVED SO THAT REGULAR MAINTENANCE ENTITY MOWING CAN BE RESUMED. THE CONTRACTOR SHALL MEET THE MOWING REQUIREMENTS ESTABLISHED BY THE DEPARTMENT'S MAINTENANCE RATING PROGRAM (MRP). CONTACT THE LOCAL FDOT MAINTENANCE OFFICE FOR DETAILS (352.732.1338)~~
5. ~~ALL UTILITY LOCATE FLAGS SHALL BE REMOVED BY THE CONTRACTOR WHEN THEY ARE NO LONGER NEEDED.~~
6. ~~REVIEW AND COMPLY WITH THE "SPECIAL PROVISIONS" AND OTHER ATTACHMENTS TO THE FDOT PERMIT FOR THIS PROJECT.~~
7. ~~CALL "FLORIDA SUNSHINE ONE-CALL" FOR UTILITY LOCATION SERVICES AT LEAST 2 BUSINESS DAYS PRIOR TO CONSTRUCTION (1-800-432-4770).~~
8. ~~MAINTENANCE OF TRAFFIC (MOT) PLAN & TRAFFIC CONTROL THROUGHOUT THE WORK ZONE SHALL BE PER THE FDOT STANDARD INDEX 102-600 SERIES.~~
9. ~~COORDINATE ALL UTILITY CLEARANCES WITH THE OWNER OF SUCH UTILITIES PRIOR TO CONSTRUCTION COMMENCEMENT.~~
10. ~~CONTRACTOR SHALL CONDUCT A SIDEWALK SURVEY TO DETERMINE THE EXISTING CONDITION OF AFFECTED SIDEWALKS AND SUBMIT SAID SURVEY TO FDOT AND THE CITY OF OCALA'S ENGINEER OF RECORD PRIOR TO CONSTRUCTION.~~
11. ~~CONTRACTOR SHALL NOTIFY ALL PROPERTY OWNERS AFFECTED BY PROPOSED CONSTRUCTION ACTIVITIES IN ADVANCE OF SUCH OPERATIONS IN ACCORDANCE WITH FDOT NOTIFICATION REQUIREMENTS.~~
12. ~~A PRE-CONSTRUCTION CONFERENCE SHALL BE CONDUCTED BY THE CITY OF OCALA WITH THE CONTRACTOR, FDOT PERSONNEL AND MARION COUNTY PERSONNEL.~~

**SURVEY & MAPPING NOTES:**

1. COORDINATES AND BEARINGS SHOWN HEREON ARE BASED ON FLORIDA STATE PLANE COORDINATES, WEST ZONE AND WERE DERIVED FROM GPS OBSERVATIONS REFERENCED TO THE FDOT PERMANENT REFERENCE NETWORK.
2. ELEVATIONS SHOWN HEREON ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 AND ARE REFERENCED TO CITY CONTROL POINTS SHOWN ON THIS DRAWING.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, TO ENSURE ALL EXISTING SURVEY MARKERS ARE LOCATED, CLEARLY MARKED AND PROTECTED, BY THE CONTRACTORS SURVEYOR.
4. ANY SURVEY MARKER, INCLUDING, BUT NOT LIMITED TO, PUBLIC LAND SURVEY SECTION CORNER MARKERS, BENCH MARKS, PROPERTY CORNERS, ETC., WHICH ARE DISTURBED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE PRIOR TO FINAL PAYMENT.
5. ADDITIONALLY, SURVEY STAKES PLACED MARKING THE LOCATIONS OF MARKERS, PROPERTY LINES, RIGHT-OF-WAY LINES, OR ANY OTHER POINT, PLACED FOR CONSTRUCTION AND SUBSEQUENTLY DISTURBED OR DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AS NEEDED AT THE RESPONSIBILITY OF THE CONTRACTOR.
6. RESETTING OF MONUMENTS AND MARKERS SHALL BE PERFORMED BY A PROFESSIONAL LAND SURVEYOR, LICENSED TO PRACTICE IN THE STATE OF FLORIDA AND SHOWN AS RE-SET ON AS-BUILT PLANS.
7. UNLESS PRIOR AGREEMENT IS MADE, IT SHALL NOT BE THE RESPONSIBILITY OF THE CITY SURVEYOR TO REPLACE ANY SURVEY MARKERS.

**CITY OF OCALA STANDARD DETAILS REQUIRED:**

1. SILT FENCE DETAIL #E-1

**IMPORTANT NOTE TO CONTRACTOR:**

1. THESE PLANS HAVE BEEN PREPARED BASED UPON THE CITY OF OCALA'S 2009 PLANIMETRIC DRAWINGS PREPARED BY AERIAL CARTOGRAPHICS, INC. WITH AERIAL PHOTOGRAPHY DATES OF 3/29/09 AND 3/30/09. HORIZONTAL DATUM IS BASED ON THE CITY OF OCALA G.P.S. DERIVED THREE MILE CONTROL GRID, UTILIZING THE NORTH AMERICAN DATUM 1983, 1990 ADJUSTMENT OF THE STATE PLANE COORDINATES, FLORIDA WEST ZONE (902). VERTICAL DATUM IS BASED ON THE CITY OF OCALA G.P.S. DERIVED THREE MILE CONTROL GRID, UTILIZING THE NORTH AMERICAN VERTICAL DATUM OF 1988.
2. THE CONTRACTOR SHALL FIELD-VERIFY ALL EXISTING UTILITIES IN THE PROJECT AREA AND OTHER UTILITIES WHICH MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION ACTIVITIES. THE CITY OF OCALA WILL MAKE AVAILABLE TO THE CONTRACTOR AWARDED THE PROJECT ALL RELEVANT UTILITY INFORMATION IN THE AREA WITHIN ITS POSSESSION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RUNNING POWER TO THE WELL SITE. THE CITY WILL PROVIDE A GENERATOR AND THE FUEL.
4. THE CONTRACTOR IS RESPONSIBLE FOR LEVELING THE SITE BEFORE THE WELL RIG IS SET.
5. THE CONTRACTOR WILL NEED TO APPLY FOR A WATER METER.
6. THE CONTRACTOR MUST USE A "DRILLING MUD AND SOLIDS RECOVERY REUSE SYSTEM". PUMPING SOLIDS ON THE GROUND WILL NOT BE ALLOWED.
7. THE CONTRACTOR SHALL SUPPLY THEIR OWN FILL MATERIAL FOR ANY CAVITIES THAT MAY APPEAR.
8. THE CONTRACTOR MUST PROVIDE A GEOPHYSICAL REPORT INCLUDING: CALIPER, GAMMA RAY, DUAL INDUCTION, BOREHOLE COMPENSATED SONIC, TEMPERATURE, FLOW AND VIDEO.
9. THE CONTRACTOR MUST PROVIDE BACTERIA TESTING WITH 2 PASSING SAMPLES IN CONSECUTIVE DAYS.
10. CALIPER LOGGING SHALL BE PERFORMED BEFORE SETTING THE CASINGS.
11. ALL MATERIAL MUST BE AMERICAN STEEL.

**IMPORTANT NOTE TO CONTRACTOR #2:**

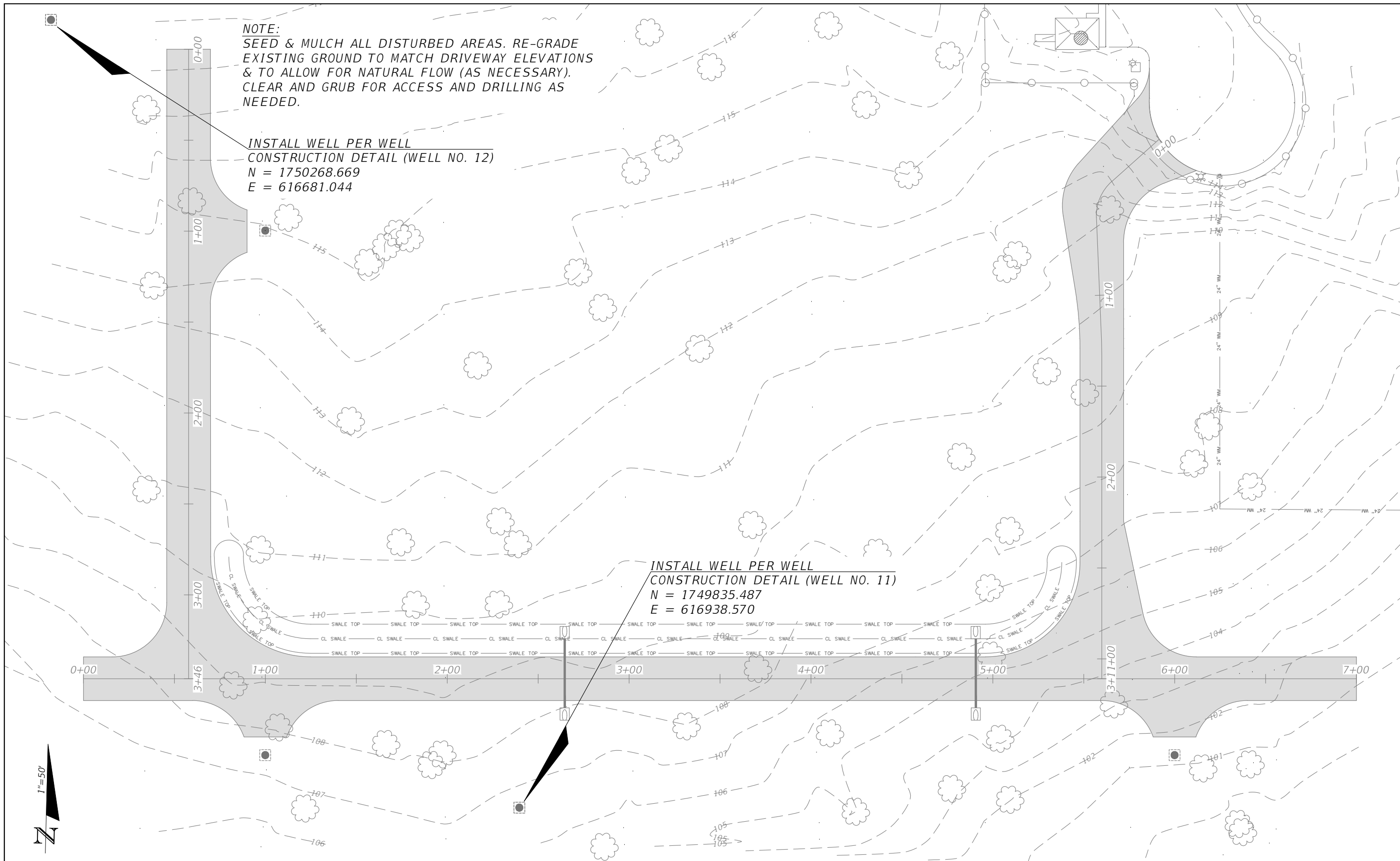
1. WELL DEVELOPMENT
  - A. UPON REACHING TARGET WELL DEPTH, THE WELL SHALL BE DEVELOPED TO CLEAN THE BOREHOLE AND CASING OF DEBRIS AND DRILLING FLUID. THE CONTRACTOR SHALL DEVELOP THE WELL BY PUMPING AT A MINIMUM RATE OF 100% OF THE DESIGN FLOW. THE CONTRACTOR SHALL MONITOR TURBIDITY AND CONDUCT ROSSUM SAND TESTING AT APPROPRIATE INTERVALS DURING WELL DEVELOPMENT. WELL DEVELOPMENT SHALL CONTINUE UNTIL TURBIDITY LEVELS ARE LESS THAN 1.0 NTU AND ROSSUM SAND MEASUREMENTS ARE LESS THAN 5 MG/L FOR A CONTINUOUS PERIOD OF 15 MINUTES.
2. TESTING FOR YIELD AND DRAWDOWN, RECOVERY AND PERFORMANCE (SINGLE-WELL SPECIFIC CAPACITY TEST):
  - A. AFTER THE WELL HAS BEEN COMPLETELY CONSTRUCTED AND DEVELOPED, AND ITS DEPTH ACCURATELY MEASURED, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER, AND SHALL MAKE THE NECESSARY ARRANGEMENTS FOR CONDUCTING A SPECIFIC WELL CAPACITY TEST.
  - B. A TEST PUMP, EITHER SUBMERSIBLE OR VERTICAL TURBINE TYPE, OF ADEQUATE CAPACITY AS DEFINED BY THE ENGINEER, WILL BE PROVIDED BY THE CONTRACTOR FOR THE PURPOSE OF PERFORMING SPECIFIC CAPACITY TESTS AND AN AQUIFER PERFORMANCE TEST. THE CONTRACTOR SHALL PROVIDE A SOURCE OF AUXILIARY POWER AND FUEL FOR PUMP OPERATION. THE PUMP DISCHARGE HEADER SHALL HAVE THROTTLE CAPABILITY AND A FLOW METER AND PRESSURE GAUGE OR SHARP CRESTED WEIR ORIFICE AND MANOMETER TUBE FOR MEASUREMENT OF FLOW AND PRESSURE. THE DISCHARGE HEADER SHALL ALSO INCLUDE A 3/4 INCH HOSE BIB FOR WATER SAMPLING CAPABILITY.
  - C. IN THE CASE OF A POORLY CONFINED AQUIFER THE DISCHARGE WATER FROM THE WELL SHALL BE DIRECTED 500 FEET AWAY FROM THE WELL, UTILIZING A COMBINATION OF CLOSED CONDUIT AND/OR TRENCH. FOR LEAKY CONFINED AQUIFER THE DOWN GRADIENT DISTANCE MAY BE REDUCED TO 100 FEET.
  - D. THE TOP OF CASING MUST HAVE ADEQUATE MEANS TO INSERT AN ELECTRIC WATER LEVEL MEASURING PROBE WHILE THE PUMP TEST IS CONDUCTED. CONTRACTOR SHALL SUPPLY METER PROBE TESTING EQUIPMENT.
  - E. A CONSTANT RATE DRAWDOWN TEST SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:
    1. AN INITIAL STATIC WATER LEVEL MEASUREMENT SHALL BE MADE PRIOR TO PUMPING COMMENCEMENT.
    2. PUMPING SHALL BE PERFORMED AT A DISCHARGE RATE OF 100% OF THE WELL DESIGN FLOW.
    3. WATER LEVEL MEASUREMENTS SHALL BE MEASURED IN ONE SECOND INTERVALS USING AN ELECTRONIC PRESSURE TRANSDUCER WITH DATA LOGGER. IF APPROVED BY THE ENGINEER, MANUAL WATER LEVEL MEASUREMENTS MAY BE RECORDED USING A SOUNDING PROBE WITH ONE-TENTH (0.1) OF A FOOT MEASURING TAPE GRADUATIONS PROVIDED THAT MEASUREMENTS ARE RECORDED TO THE TO THE NEAREST FIVE HUNDRETH (0.05) OF A FOOT AT THE FOLLOWING TIME INTERVALS:
      - A. 30 SECOND INTERVALS FOR THE FIRST FIVE (5) MINUTES.
      - B. 1 MINUTE INTERVALS FROM 5- 15 MINUTES
      - C. 5 MINUTE INTERVALS FROM 15- 50 MINUTES
      - D. 10 MINUTE INTERVALS FROM 50- 90 MINUTES
      - E. 30 MINUTE INTERVALS FROM 90- TO END OF PUMP TEST.
4. PUMPING SHALL BE PERFORMED UNTIL STABILIZATION TO WITHIN ONE-TENTH FOOT FOR 15 CONTINUOUS MINUTES. ONCE STABILIZATION OCCURS, THE PUMP SHALL BE TURNED OFF AND THE WATER LEVEL ALLOWED TO RECOVER TO THE STATIC WATER LEVEL BEFORE CONDUCTING ADDITIONAL DRAWDOWN TESTING. IMMEDIATELY AFTER PUMP SHUT-DOWN, THE RECOVERY TEST SHALL BE PERFORMED UTILIZING THE SAME TIME-MEASUREMENT INTERVALS AS DESCRIBED IN THE DRAWDOWN TEST. MEASUREMENTS SHALL BE MADE UNTIL RECOVERY IS COMPLETE TO WITHIN ONE-TENTH OF THE PRE-PUMPING STATIC WATER LEVEL.
5. IF ANY INTERRUPTION OF PUMPING OCCURS DURING THE AQUIFER PUMP TEST, THE ENTIRE TEST MUST BE REPEATED.

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DATE	DESCRIPTION	DATE	DESCRIPTION				
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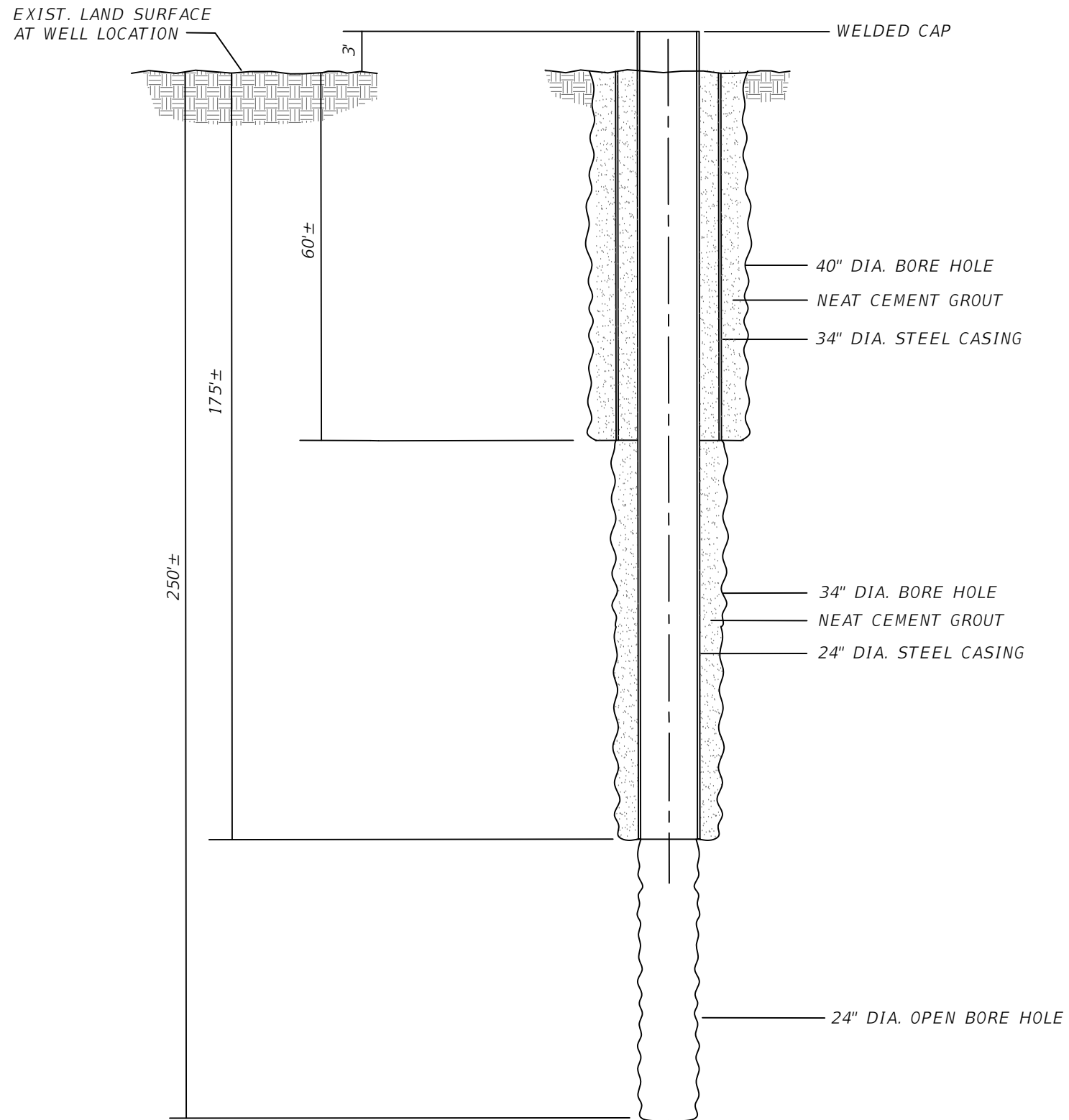
**NOTE:**  
 SEED & MULCH ALL DISTURBED AREAS. RE-GRADE  
 EXISTING GROUND TO MATCH DRIVEWAY ELEVATIONS  
 & TO ALLOW FOR NATURAL FLOW (AS NECESSARY).  
 CLEAR AND GRUB FOR ACCESS AND DRILLING AS  
 NEEDED.

**INSTALL WELL PER WELL  
 CONSTRUCTION DETAIL (WELL NO. 12)**  
 N = 1750268.669  
 E = 616681.044

**INSTALL WELL PER WELL  
 CONSTRUCTION DETAIL (WELL NO. 11)**  
 N = 1749835.487  
 E = 616938.570



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DATE	DESCRIPTION	DATE	DESCRIPTION			
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**WELL #11 & WELL #12 CONSTRUCTION DETAIL**

N.T.S.

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DATE	DESCRIPTION	DATE	DESCRIPTION			<i>DETAIL SHEET</i>	6
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