SITE CONSTRUCTION PLANS

FOR

TACO BELL

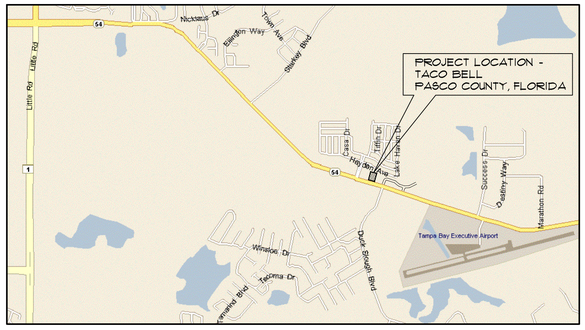
TRINITY

PASCO COUNTY, FLORIDA

TACO BELL - TRINITY, PASCO COUNTY, FLORIDA
PASCO COUNTY SUBMITTAL - APRIL 2014

INDEX

NORTH



LOCATION MAP
SECTION 30, TOWNSHIP 26 SOUTH, RANGE 17 EAST
N.T.S.

TRINITY TACO BELL PARCEL, SURVEYED PARCEL

A PARCEL OF LAND LYING IN A PORTION OF SECTION 30, TOWNSHIP 26 SOUTH, RANGE 17 EAST, PASCO COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF SECTION 30, TOWNSHIP 26 SOUTH, RANGE 17 EAST, PASCO COUNTY, FLORIDA; THENCE SOUTH 00°16'17" WEST, ALONG THE EASTERLY BOUNDARY LINE OF SAID SECTION 30, A DISTANCE OF 3,108.73 FEET; THENCE NORTH 71°57'42" WEST, DEPARTING SAID EASTERLY BOUNDARY LINE OF SAID SECTION 30, A DISTANCE OF 650.12 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED PARCEL; THENCE SOUTH 18°02'18" WEST, A DISTANCE OF 250.00 FEET TO A POINT ON THE NORTHERLY RIGHT OF WAY LINE OF STATE ROAD 54; THENCE NORTH 71°57'42 WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, A DISTANCE OF 174.24 FEET; THENCE NORTH 18°02'18" EAST, DEPARTING SAID NORTHERLY RIGHT OF WAY LINE OF STATE ROAD 54, A DISTANCE OF 250.00 FEET; THENCE SOUTH 71°57'42" EAST, A DISTANCE OF 174.24 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINING 43,560.0 SQUARE FEET OR 1.00 ACRES, MORE OR LESS.

LEGAL DESCRIPTION

811 Know what's below. Call before you dig.

SURVEYOR:

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OWNER/APPLICANT:

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SHEET C1
E13-030.07

MARK SULLIVAN, P.E.
PROFESSIONAL ENGINEER
NO. 41227

F:\projects\eng\13-030 TACO BELL TRINITY\E13030 C1 COVER.dwg, COVER, 4/29/2014 4:34:16 PM, Rich, 1:1, RWB

CONSTRUCTION NOTES

GENERAL NOTES :

1. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES, AFFECTING THIS WORK, PRIOR TO CONSTRUCTION.

2. PRIOR TO THE INITIATION OF SITE CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ANY EXISTING UTILITIES INCLUDING GAS, WATER, ELECTRIC, COMMUNICATIONS, CABLE TELEVISION, SANITARY AND STORM SEWERS, ON AND/OR ADJACENT TO THE SITE. REMOVE OR CAP SERVICES AS NECESSARY.

3. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL CALL "SUNSHINE" AT 1-800-432-4770, AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, TO ARRANGE FOR FIELD LOCATIONS OF BURIED UTILITIES.

4. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED, BY THE CONTRACTOR OR SUB-CONTRACTORS, AS CALLED FOR IN THESE CONTRACT DOCUMENTS.

5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES AND THE ENGINEER. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY INSPECTIONS/ REQUIREMENTS.

6. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, ON ALL PRECAST AND MANUFACTURED ITEMS, TO THE OWNER'S ENGINEER FOR APPROVAL. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.

7. ALL UTILITY SERVICE STUB-OUTS (WATER, SANITARY SEWER, etc.) ARE TO BE INSTALLED TO WITHIN 5' OF BUILDING(S), UNLESS OTHERWISE NOTED ON PLANS.

8. CONTRACTOR TO COORDINATE WITH THE APPLICABLE ELECTRIC UTILITY SUPPLIER REGARDING ANY NECESSARY RELOCATION(S) OF UNDERGROUND AND/OR OVERHEAD ELECTRIC FACILITIES, AND FOR THE LOCATION AND INSTALLATION OF TRANSFORMER PAD(S) AND ASSOCIATED ELECTRIC FACILITIES.

9. SAFETY:

   A. DURING THE CONSTRUCTION AND/OR MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELLING PUBLIC AND THE SAFETY OF HIS/HER PERSONNEL.

   B. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.

   C. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF "THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS" SHALL BE FOLLOWED IN THE DESIGN, APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND CONSTRUCTION PERSONNEL FROM HAZARDS WITHIN THE PROJECT LIMITS.

   D. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.

   E. ALL SUBSURFACE CONSTRUCTION SHALL COMPLY WITH THE "TRENCH SAFETY ACT". THE CONTRACTOR SHALL INSURE THAT THE METHOD OF TRENCH PROTECTION AND CONSTRUCTION IS IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS.

   IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.

10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN AN "ON-SITE PIPING PERMIT" (IF REQUIRED) FOR CONSTRUCTION OF THE PROPOSED UTILITIES. THIS PERMIT MUST BE OBTAINED BY A DULY LICENSED PLUMBING CONTRACTOR (OR CLASS A GENERAL CONTRACTOR) PRIOR TO THE START OF CONSTRUCTION. THESE PLANS AND ANY SUBSEQUENT REVISIONS TO THESE PLANS, THAT ARE ISSUED BY THE ENGINEER, WILL BE SUBJECT TO THE APPROVAL CONDITIONS OF THIS PERMIT.

11. THE GRAPHIC INFORMATION DEPICTED ON THESE PLANS HAS BEEN COMPILED TO PROPORTION BY SCALE AS ACCURATELY AS POSSIBLE. HOWEVER, DUE TO REPRODUCTIVE DISTORTION, REDUCTION, AND/OR REVISIONS, INFORMATION CONTAINED HEREIN IS NOT INTENDED TO BE SCALED FOR CONSTRUCTION PURPOSES.

12. ALL SPECIFICATIONS AND DOCUMENTS REFERENCED HEREIN SHALL BE OF THE LATEST REVISION.

13. ALL UNDERGROUND UTILITIES MUST BE IN-PLACE, TESTED AND INSPECTED PRIOR TO BASE AND SURFACE CONSTRUCTION.

14. WORK PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH ANY OTHER WORK BEING PERFORMED ON SITE BY OTHER CONTRACTORS/SUBCONTRACTORS AND UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE GENERAL CONTRACTOR TO COORDINATE AND SCHEDULE HIS/HER ACTIVITIES ACCORDINGLY.

AS BUILT:

UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH THE OWNER'S ENGINEER WITH COMPLETE "AS-BUILT" INFORMATION, CERTIFIED BY A REGISTERED LAND SURVEYOR. THIS "AS-BUILT" INFORMATION SHALL INCLUDE INVERT ELEVATIONS, LOCATIONS OF STRUCTURES FOR ALL UTILITIES INSTALLED, AS WELL AS GRADE BREAK LOCATIONS AND ELEVATIONS FOR PROPOSED CONSTRUCTION. NO ENGINEER'S CERTIFICATIONS FOR CERTIFICATE OF OCCUPANCY (C.O.) PURPOSES WILL BE MADE UNTIL THIS INFORMATION HAS BEEN RECEIVED AND APPROVED BY THE OWNER'S ENGINEER.

CLEARING AND SITE PREPARATION NOTES :

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION OF THE EROSION CONTROL DEVICES, AS SHOWN ON THE CONSTRUCTION PLANS, PRIOR TO ANY SITE CLEARING AND/OR DEMOLITION. REFER TO THE "EROSION CONTROL NOTES" SECTION CONTAINED HEREIN FOR ADDITIONAL REQUIREMENTS.

2. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN, AS INDICATED ON THE CONSTRUCTION PLANS, SHALL BE PROTECTED IN ACCORDANCE WITH LOCAL TREE ORDINANCES, AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE TREES IN GOOD CONDITION. NO TREE(S) SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM THE OWNER AND THE LOCAL AGENCY HAVING JURISDICTION OVER THESE ACTIVITIES.

3. THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. ALL DISTURBED AREAS MUST BE SEEDED, MULCHED, SODDED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL, IMMEDIATELY FOLLOWING CONSTRUCTION.

4. THE TOP 4" TO 6" OF GROUND REMOVED DURING CLEARING AND GRUBBING ACTIVITIES SHALL BE STOCKPILED, TO BE USED FOR LANDSCAPING PURPOSES, UNLESS OTHERWISE DIRECTED BY THE OWNER. REMAINING EARTHWORK THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED ON-SITE, PROVIDED THE MATERIAL IS DEEMED SUITABLE BY THE OWNER'S SOILS TESTING COMPANY. EXCESS MATERIAL IS TO EITHER BE STOCKPILED ON-SITE, AS DIRECTED BY THE OWNER OR OWNER'S ENGINEER, OR REMOVED FROM THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING ANY EXCESS MATERIAL FROM THE SITE.

5. ALL EXISTING DEBRIS (ABOVE OR BELOW GROUND), CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE, BY THE CONTRACTOR, IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS.

6. THE CONTRACTOR IS TO PREPARE THE SITE IN ACCORDANCE WITH THE SOILS REPORT PREPARD BY UNVIERSAL ENGINEERING SCIENCES, DATED 2-24-09 (UES REPORT #9076). A COPY IS INCLUDED IN THE PROJECT MANUAL.

EROSION CONTROL NOTES :

1. CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIERS (HAY BALES OR SILTATION CURTAINS) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL ON GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT SITE. IF, IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTORS IS TO REMOVE SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES.

2. THE CONTRACTOR SHALL LIMIT THE DISCHARGE OF TURBID WATERS OFF-SITE, OR INTO ON-SITE/OFF-SITE WETLANDS (IF APPLICABLE), TO NO MORE THAN 50 JTU's (JACKSON TURBIDITY UNITS) OR 29 NTU's (NEPHELOMETRIC TURBIDITY UNITS), ABOVE BACKGROUND LEVELS.

3. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION OR OTHER ACCEPTABLE METHODS.

4. CONTRACTOR SHALL INSPECT AND MAINTAIN ON A DAILY BASIS ALL EROSION/SEDIMENTATION CONTROL FACILITIES.

5. THE CONTRACTOR SHALL ENSURE THAT SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE-HALF THE DEPTH OF THE SILTATION CONTROL BARRIER SHALL BE IMMEDIATELY REMOVED AND PLACED IN UPLAND AREAS.

6. THE PROPOSED EROSION CONTROL BARRIERS MUST BE REMOVED FOLLOWING SOIL STABILIZATION.

PAVING AND GRADING NOTES :

1. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS, ETC.) IS TO BE EXCAVATED AND REPLACED WITH SUITABLE/COMPACTED SOILS, AS DIRECTED BY THE OWNER, THE OWNER'S ENGINEER, OWNER'S SOILS TESTING COMPANY, AND PROJECT SPECIFICATIONS. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR AQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.

3. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOIL TESTING COMPANY OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS AND PROJECT SPECIFICATIONS.

4. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADES, UNLESS OTHERWISE NOTED.

5. IT MAY BE NECESSARY TO FIELD ADJUST PAVEMENT ELEVATIONS TO PRESERVE THE ROOT SYSTEMS OF TREES SHOWN TO BE SAVED. CONTRACTOR TO COORDINATE WITH OWNER'S ENGINEER PRIOR TO ANY ELEVATION CHANGES.

6. CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.

7. CURBING SHALL BE PLACED AT THE EDGES OF ALL PAVEMENT, UNLESS OTHERWISE NOTED. REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS" FOR DETAILS AND SPECIFICATIONS OF ALL F.D.O.T. TYPE CURB AND GUTTERS CALLED FOR IN THESE PLANS.

8. PRIOR TO CONSTRUCTING CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE SOILS ENGINEER FOR APPROVAL.

9. CONTRACTOR TO PROVIDE A 1/2" TO 1" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ABUTMENT OF CONCRETE AND OTHER MATERIALS (STRUCTURES, OTHER POURED CONCRETE, ETC.)

10. THE CONTRACTOR WILL STABILIZE BY SEED AND MULCH, SOD, OR OTHER APPROVED MATERIALS ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE UTILITY SYSTEMS AND PAVEMENT AREAS. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER. CONTRACTOR TO COORDINATE WITH OWNER REGARDING TYPE OF MATERIAL, LANDSCAPING AND IRRIGATION REQUIREMENTS.

TESTING AND INSPECTION REQUIREMENTS : (PAVING/GRADING):

1. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH THE SOILS REPORT, TESTING SCHEDULE LOCATED ON THESE PLANS, AND PROJECT SPECIFICATIONS. UPON COMPLETION OF WORK THE SOILS ENGINEER WILL SUBMIT CERTIFICATIONS TO THE OWNER AND THE OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.

2. A QUALIFIED TESTING LABORATORY SHALL PERFORM ALL TESTING NECESSARY TO ASSURE COMPLIANCE OF THE IN-PLACE MATERIALS AS REQUIRED BY THESE PLANS, THE VARIOUS AGENCIES AND PERMIT CONDITIONS. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THE REQUIREMENTS, THE CONTRACTOR WILL BEAR ALL COSTS OF SAID RETESTING.

DRAINAGE SYSTEM NOTES :

1. STANDARD INDEXES REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS".

2. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (ASTM C-76) UNLESS OTHERWISE NOTED ON PLANS. ALL DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS UNLESS OTHERWISE NOTED ON PLANS.

3. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO CENTER OF DRAINAGE STRUCTURES, WITH THE EXCEPTION OF MITERED END AND FLARED END SECTIONS, WHICH ARE NOT INCLUDED IN LENGTHS.

4. ALL DRAINAGE STRUCTURE GRATES AND COVERS, EITHER EXISTING OR PROPOSED SHALL BE TRAFFIC RATED FOR H-20 LOADINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY UPGRADES TO EXISTING DRAINAGE STRUCTURES.

5. CONSTRUCTION OF THE STORMWATER MANAGEMENT SYSTEM MUST BE COMPLETE AND ALL DISTURBED AREAS STABILIZED IN ACCORDANCE WITH THE PERMITTED PLANS AND CONDITIONS PRIOR TO ANY OF THE FOLLOWING: ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY; INITIATION OF INTENDED USE OF THE INFRASTRUCTURE; OR TRANSFER OF RESPONSIBILITY FOR MAINTENANCE OF THE SYSTEM TO A LOCAL GOVERNMENT OR OTHER RESPONSIBLE ENTITY.

TESTING AND INSPECTION REQUIREMENTS: (DRAINAGE)

1. THE STORM DRAINAGE PIPING SYSTEM SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION.

2. THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC. THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE STORM SYSTEM WILL BE REINSPECTED BY THE OWNER'S ENGINEER PRIOR TO APPROVAL FOR CERTIFICATE OF OCCUPANCY PURPOSES. THE CONTRACTOR MAY BE REQUIRED TO RECLEAN PIPES AND INLETS FOR THESE PURPOSES.

SANITARY SYSTEM NOTES :

1. SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS SHOULD ALWAYS CROSS UNDERNEATH WATER MAINS. INSTALLATIONS OF SANITARY SEWERS, FORCE MAINS AND STORM SEWERS, AT CROSSINGS OF WATER MAINS, SHALL BE PERFORMED SO AS TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE, WHENEVER POSSIBLE. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS AND WATER JOINTS SHALL BE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN 10 FEET BETWEEN ANY TWO JOINTS.

   WHERE SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP), AT THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS IF IT IS NOT AVAILABLE IN THE SIZE PROPOSED.). SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF TEN (10) FEET BETWEEN ANY TWO (2) JOINTS. IN LEIU OF DIP, THE SANITARY SEWER MAY BE PLACED IN A SLEEVE FOR 20 FEET CENTERED ON THE POINT OF CROSSING. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE AND MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF SIX (6) INCHES MUST BE MAINTAINED AT THE CROSSING.

SANITARY SYSTEM NOTES (CON'T):

WHERE THERE IS NO ALTERNATIVE TO SEWER PIPES CROSSING OVER WATER MAINS, THE CRITERIA FOR MINIMUM SEPARATION OF 18 INCHES BETWEEN LINES, AND 10 FEET BETWEEN JOINTS, CENTERED AT THE POINT OF CROSSING SHALL BE REQUIRED. THE WATER MAIN SHALL BE PLACED IN A SLEEVE FOR 20 FEET CENTERED ON THE POINT OF CROSSING, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN.

ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (ie. PIPES CENTERED ON THE CROSSING).

WHERE A PROPOSED PIPE CONFLICTS WITH AN EXISTING PIPE, THE PROPOSED PIPE SHALL BE CONSTRUCTED OF DIP, AND THE CROSSING SHALL BE ARRANGED SO AS TO SATISFY THE REQUIREMENTS IDENTIFIED ABOVE.

WHEN THE RECLAIMED WATER LINE IS TRANSPORTING WATER FOR PUBLIC ACCESS IRRIGATION:
MAXIMUM OBTAINABLE SEPARATION OF RECLAIMED WATER LINES AND DOMESTIC WATER LINES SHALL BE PRACTICED. A MINIMAL HORIZONTAL SEPARATION OF FIVE FEET (CENTER TO CENTER) OR THREE FEET (OUTSIDE TO OUTSIDE) SHALL BE MAINTAINED BETWEEN RECLAIMED WATER LINES AND EITHER POTABLE WATER MAINS OR SEWAGE COLLECTION LINES. AN 18 INCH VERTICAL SEPARATION SHALL BE MAINTAINED AT CROSSINGS.

WHEN THE RECLAIMED WATER LINE IS TRANSPORTING WATER FOR NON-PUBLIC ACCESS IRRIGATION:
THE RECLAIMED WATER MAIN SHALL BE TREATED LIKE A SANITARY SEWER, AND A 10 FOOT HORIZONTAL AND 18 INCH VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN THE RECLAIMED WATER MAIN AND ALL EXISTING OR PROPOSED POTABLE WATER MAINS. NO MINIMUM SEPARATION IS REQUIRED BETWEEN THE RECLAIMED WATER MAIN AND SANITARY SEWERS, OTHER THAN NECESSARY TO ENSURE STRUCTURAL INTEGRITY AND PROTECTION OF THE LINES THEMSELVES.

2. A MINIMUM 10 FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER (INCLUDING FORCE MAINS) AND EXISTING OR PROPOSED WATER MAINS, IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. THE DISTANCE FOR SEPARATION SHALL BE MEASURED EDGE TO EDGE.

   IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE INSTALLED IN A SEPARATE TRENCH, OR IN AN UNDISTURBED EARTH SHELF, LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN, AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE, AND WATER AND SEWER JOINTS SHALL BE STAGGERED.

   WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES, IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR FORCE MAIN SHALL BE CONSTRUCTED OF DIP (IF AVAILABLE IN THE SIZE PROPOSED), WITH A MINIMUM VERTICAL DISTANCE OF SIX (6) INCHES. THE WATER MAIN SHOULD ALWAYS BE LOCATED ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (ie. STAGGERED JOINTS).

3. ALL DIP PIPE SHALL BE CLASS 50 OR HIGHER. REFER TO NOTE #'S: 6, 9 & 10 BELOW FOR ADDITIONAL DIP SPECIFICATIONS. ADEQUATE MEASURES AGAINST CORROSION SHALL BE UTILIZED.

4. ALL PVC PIPE SHALL BE SOLID WALL POLYVINYL CHLORIDE PIPE AND COMPLY WITH ASTM D 3034 AND ALL APPLICABLE ASTM DOCUMENTS AS COVERED IN SECTION No. 2 OF ASTM D 3034. MAIN LINES SHALL BE A MINIMUM OF 8" DIAMETER, AND LATERALS SHALL BE A MINIMUM 6 " DIAMETER.

5. ALL SANITARY SEWER MAINS, LATERALS AND FORCE MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER, UNLESS OTHERWISE NOTED ON PLANS.

6. ALL GRAVITY SEWERS MUST BE SDR 26 PVC PIPE. ELASTOMERIC GASKET JOINTS SHALL BE UTILIZED FOR PVC PIPE, AND SHALL COMPLY WITH ASTM F477, ASTM D3034 AND ASTM F679. JOINTS SHALL COMPLY WITH ASTM D3212.

7. ALL ON-SITE PVC FORCE MAINS (IF REQUIRED) SHALL BE CLASS 200, DR 14 FOR 4" DIAMETER, AND CLASS 150, DR 18 FOR 6" TO 12" DIAMETER PIPE, IN ACCORDANCE WITH AWWA C900 STANDARDS. PVC FORCE MAIN PIPE SMALLER THAN 4" DIAMETER SHALL BE CLASS 200, SDR 21, IN ACCORDANCE WITH ASTM D 2241. FORCE MAINS SHALL BE SPIRAL WRAPPED WITH 2 INCH WIDE DARK GREEN STICK-ON VINYL TAPE. FORCE MAINS WITHIN THE RIGHT-OF-WAY SHALL BE CLASS 52 DIP, MINIMUM 4" DIAMETER.

8. ALL SANITARY MANHOLES SHALL BE LOCATED NO MORE THAN 400 FEET APART AND SHALL CONFORM TO THE DETAILS CONTAINED HEREIN, AS WELL AS WITH ASTM C478.

9. ALL DUCTILE IRON PIPE SHALL MEET REQUIREMENTS OF AWWA C151, ANSI SPEC. A21.51.

10. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE PROVIDED WITH A VIRGIN POLYETHYLENE INTREIOR LINING COMPLYING WITH ASTM D 1248 (40 MILS THICK) HEAT BONDED TO THE INTERIOR OF ALL PIPES. ALL DIP PIPE SHALL HAVE A STANDARD OUTSIDE COATING COMPLYING WITH ASTM C151-8.1.

11. ALL SLOPES FOR GRAVITY SEWER MAINS AND SERVICE CONNECTIONS SHALL COMPLY WITH THE FOLLOWING MINIMUM GRADES: 6" @ 1.00%, 8" @ 0.40%, MAXIMUM SLOPE = 2.00%.

12. ALL SANITARY SEWER WORK SHALL CONFORM WITH THE PASCO COUNTY UTILITY DEPARTMENT WASTE WATER STANDARDS AND SPECIFICATIONS.

13. PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING PROPOSED FACILITIES TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION(S) OF EXISTING CONNECTION POINT(S) AND NOTIFY THE OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES.

14. SANITARY SEWER MAINS SHALL HAVE SUITABLE MAGNETIC LOCATOR TAPE(S) BURIED AT LEAST 18 INCHES ABOVE THE MAIN LINES.

15. FORCE MAINS SHALL HAVE SUITABLE MAGNETIC LOCATOR TAPE(S) BURIED AT LEAST 18 INCHES ABOVE THE FORCE MAIN.

TESTING AND INSPECTION REQUIREMENTS: (SANITARY):

1. ALL GRAVITY SEWER PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER AND APPLICABLE MUNICIPALITY/AGENCY. THE CONTRACTOR SHALL NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION(S). THE CONTRACTOR SHALL BE RESPONSIBLE FOR COSTS ASSOCIATED WITH A TELEVISED INSPECTION (TV) OF THE PROPOSED GRAVITY SEWER LINE CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE COPIES OF THE TV INSPECTION TAPE TO THE ENGINEER, THE OWNER AND THE APPLICABLE MUNICIPALITY/AGENCY.

2. THE CONTRACTOR SHALL PERFORM AN INFILTRATION/EXFILTRATION TEST ON ALL GRAVITY SEWERS IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. THE SCHEDULING, COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.

3. ALL FORCE MAINS (IF APPLICABLE) SHALL BE SUBJECT TO A HYDROSTATIC PRESSURE TEST IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. THE SCHEDULING, COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.

WATER SYSTEM NOTES :

1. SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS SHOULD ALWAYS CROSS UNDERNEATH WATER MAINS. INSTALLATIONS OF SANITARY SEWERS, FORCE MAINS AND STORM SEWERS, AT CROSSINGS OF WATER MAINS, SHALL BE PERFORMED SO AS TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE, WHENEVER POSSIBLE. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS AND WATER JOINTS SHALL BE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN 10 FEET BETWEEN ANY TWO JOINTS.

   WHERE SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP), AT THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS IF IT IS NOT AVAILABLE IN THE SIZE PROPOSED.). SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO (2) JOINTS IN LEIU OF DIP, THE SANITARY SEWER MAY BE PLACED IN A SLEEVE FOR 20 FEET CENTERED ON THE POINT OF CROSSING. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE, AND MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT THE CROSSING.

   WHERE THERE IS NO ALTERNATIVE TO SEWER PIPES CROSSING OVER WATER MAINS, THE CRITERIA FOR MINIMUM SEPARATION OF 18 INCHES BETWEEN LINES, AND 10 FEET BETWEEN JOINTS CENTERED AT THE POINT OF CROSSING SHALL BE REQUIRED. THE WATER MAIN SHALL BE PLACED IN A SLEEVE FOR 20 FEET CENTERED ON THE POINT OF CROSSING. ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN.

   ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (ie. PIPES CENTERED ON THE CROSSING).

   WHERE A PROPOSED PIPE CONFLICTS WITH AN EXISTING PIPE, THE PROPOSED PIPE SHALL BE CONSTRUCTED OF DIP, AND THE CROSSING SHALL BE ARRANGED SO AS TO SATISFY THE REQUIREMENTS IDENTIFIED ABOVE.

   WHEN THE RECLAIMED WATER LINE IS TRANSPORTING WATER FOR PUBLIC ACCESS IRRIGATION:
   MAXIMUM OBTAINABLE SEPARATION OF RECLAIMED WATER LINES AND DOMESTIC WATER LINES SHALL BE PRACTICED. A MINIMUM HORIZONTAL SEPARATION OF FIVE (5) FEET (CENTER TO CENTER) OR THREE (3) FEET (OUTSIDE TO OUTSIDE) SHALL BE MAINTAINED BETWEEN RECLAIMED WATER LINES AND EITHER POTABLE WATER MAINS OR SEWAGE COLLECTION LINES. AN 18 INCH VERTICAL SEPARATION SHALL BE MAINTAINED AT CROSSINGS.

WATER SYSTEM NOTES (CON'T):

WHEN THE RECLAIMED WATER LINE IS TRANSPORTING WATER FOR NON-PUBLIC ACCESS IRRIGATION:
THE RECLAIMED WATER MAIN SHALL BE TREATED LIKE A SANITARY SEWER, AND A 10-FT. HORIZONTAL AND 18 INCH VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN THE RECLAIMED WATER MAIN AND ALL EXISTING OR PROPOSED POTABLE WATER MAINS. NO MINIMUM SEPARATION IS REQUIRED BETWEEN THE RECLAIMED WATER MAIN AND SANITARY SEWERS, OTHER THAN NECESSARY TO ENSURE STRUCTURAL INTEGRITY AND PROTECTION OF THE LINES THEMSELVES.

2. A MINIMUM 10 FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER (INCLUDING FORCE MAINS) AND EXISTING OR PROPOSED WATER MAINS, IN PARALLEL INSTALLATIONS, WHENEVER POSSIBLE. THE DISTANCE FOR SEPARATION SHALL BE MEASURED EDGE TO EDGE.

   IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE INSTALLED IN A SEPARATE TRENCH, OR IN AN UNDISTURBED EARTH SHELF, LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN, AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE, AND WATER AND SEWER JOINTS SHALL BE STAGGERED.

   WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES, IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR FORCE MAIN SHALL BE CONSTRUCTED OF DIP (IF AVAILABLE IN THE SIZE PROPOSED), WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE LOCATED ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (ie. STAGGERED JOINTS).

3. ALL DIP PIPE SHALL BE CLASS 50 OR HIGHER. REFER TO NOTE #8 BELOW FOR ADDITIONAL DIP SPECIFICATIONS. ADEQUATE MEASURES AGAINST CORROSION SHALL BE UTILIZED.

4. ALL WATER MAIN PIPE FITTINGS AND APPURTENANCES SHALL BE INSTALLED TO COMPLY WITH THE PASCO COUNTY WATER, WASTEWATER, AND REUSE SYSTEM CODE.

5. ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 36 INCHES OF COVER.

6. ALL WATER SERVICE LINES, VALVES AND METERS SHALL BE INSTALLED TO COMPLY WITH THE PASCO COUNTY WASTEWATER AND REUSE SYTEMS CODE.

7. RESTRAINTS SHALL BE PROVIDED AT ALL FITTINGS AND HYDRANTS, IN ACCORDACE WITH THE PASCO COUNTY, WATERWATER AND REUSE SYSTEMS CODE.

8. ALL DUCTILE IRON PIPE SHALL BE MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C151/A21.51. PIPE SHALL BE FURNISHED IN 18 OR 20 FOOT SECTIONS, PIPE THICKNESS SHALL BE CLASS 51, UNLESS OTHERWISE SPECIFIED..

9. ALL WATER SYSTEM CONSTRUCTION, UP TO AND INCLUDING POINT OF METERING AND BACK FLOW PREVENTION (IF REQUIRED), SHALL BE BUILT ACCORDING TO THE PREVIOUSLY REFERENCED STANDARDS AND SPECIFICATIONS.

10. ALL ON-SITE FIRE HYDRANTS SHALL BE PAINTED WITH HIGH GRADE ENAMEL FEDERAL SAFETY YELLOW (OSHA APPROVED), AND MUST BE LOCATED A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT OR BACK OF CURB, OTHERWISE BOLLARDS WILL BE REQUIRED FOR PROTECTION ALL FIRE HYDRANTS SHALL COMPLY WITH AWWA STANDARDS C502-80 THEREOF.

11. CONTRACTOR TO INSTALL TEMPORARY BLOWOFFS, AT THE END(S) OF PROPOSED WATER MAINS AND SERVICE LATERALS TO BUILDING(S), TO ASSURE ADEQUATE FLUSHING AND DISINFECTION/CHLORINATION.

12. ALL WATER MAINS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH AWWA MANUAL M23, CONCERNING HYDROSTATIC TESTING OF PVC PIPING. OFF-SITE WATER SYSTEM HYDROSTATIC TESTING SHALL BE WITNESSED BY THE PASCO COUNTY INSPECTOR.

13. ALL WATER MAINS SHALL BE STERILIZED IN ACCORDANCE WITH THE APPLICABLE SECTION OF THE LATEST AWWA SPECIFICATION C651 AND APPLICABLE PASCO COUNTY WATER DEPARTMENT SPECIFICATIONS.

14. ALL PVC WATER MAIN, 4" TO 12" DIAMETER PIPING, SHALL CONFORM TO AWWA C900 (DR 18) STANDARD SPECIFICATIONS, PRESSURE CLASS 150 PSI. ALL PVC WATER MAIN PIPING LESS THAN 4" DIAMETER SHALL BE PER ASTM D2241 (SDR 21), PRESSURE CLASS 200 PSI.

15. ALL PVC WATER MAINS SHALL HAVE A SUITABLE MAGNETIC LOCATOR TAPE PLACED OVER THE WATER MAIN, BURIED NO LESS THAT 18 INCHES ABOVE MAIN LINES. THE TAPE SHALL BE AT LEAST 5-1/2 MILS THICK, 2 INCH MINIMUM WIDTH, AND MADE WITH AN ALUMINUM MATERIAL SANDWICHED BETWEEN 2 LAYERS OF POLYETHYLENE. IT SHALL HAVE IMPRINTED, IN PERMANENT BLACK INK WITH ONE (1) INCH TALL LETTERS, "CAUTION: WATER LINE BURIED BELOW", ON BLUE BACKGROUND. THE TAPE SHALL BE CONTINUOUS BETWEEN VALVES, AND SECURED TO EACH VALVE. WHERE OTHER LINES OR SERVICE LINES JOIN THE WATER MAIN, THE TAPE USED FOR DETECTION OF THESE LINES SHALL BE SECURED TO THE MAIN LINE TAPE.

16. FIRE LINES SHALL BE INSTALLED BY A CONTRACTOR, DULY LICENSED BY THE STATE OF FLORIDA FIRE MARSHALL'S OFFICE. CONTRACTOR TO VERIFY REQUIREMENTS PRIOR TO CONSTRUCTION OF THE FIRE PROTECTION SYSTEM.

17. FIRE PROTECTION SHALL MEET ALL THE REQUIREMENTS OF THE APPLICABLE MUNICIPALITY OR COUNTY.

TESTING AND INSPECTION REQUIREMENTS: (WATER)

1. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL REMAIN UNCOVERED UNTIL PROPERLY PRESSURE TESTED AND ACCEPTED BY THE OWNER'S ENGINEER. PRESSURE TESTS TO BE IN ACCORDANCE WITH OF THE PASCO COUNTY WATER, WASTEWATER AND REUSE SYSTEMS CODE. CONTRACTOR TO NOTIFY THE OWNER'S ENGINEER AND APPLICABLE AGENCY INSPECTORS 48 HOURS IN ADVANCE OF PERFORMING TESTS.

2. CONTRACTOR TO PERFORM CHLORINATION AND BACTERIOLOGICAL SAMPLING, AND OBTAIN CLEARANCE OF DOMESTIC AND FIRE LINE WATER SYSTEM(S). COPIES OF ALL BACTERIOLOGICAL TEST RESULTS ARE TO BE SUBMITTED TO THE OWNER'S ENGINEER FOR CERTIFICATION PURPOSES.

CONSTRUCTION SITE WORK TESTING :

1. ALL SITE WORK CONSTRUCTION TESTING SHALL BE PERFORMED BY A CERTIFIED / LICENSED GEOTECHNICAL ENGINEERING FIRM.

2. ALL SITE WORK CONSTRUCTION TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROJECT'S GEOTECHNICAL REPORT AND / OR THE TESTING PARAMETERS OF THE LOCAL MUNICIPALITY / AGENCY HAVING JURISDICTION OVER THE SITE WORK. THE MORE STRINGENT REQUIREMENTS SHALL APPLY.

3. COPIES OF PASSING TEST RESULTS SHALL BE PROVIDED TO THE OWNER, ENGINEER OF RECORD, CONTRACTOR AND LOCAL MUNICIPALITY / AGENCY FOR PURPOSES, SUCH AS BUT NOT LIMITED TO, CERTIFICATION, AND ACCEPTANCE OF FACILITIES BY THE OWNER AND / OR MUNICIPALITY / AGENCY.

4. THE SERVICES OF A CONSTRUCTION TESTING GEOTECHNICAL FIRM SHALL BE RETAINED BY THE OWNER, UNLESS OTHERWISE SPECIFIED IN THE BID DOCUMENTS.

5. F.E.E.S. WILL NOT BE RESPONSIBLE FOR SCHEDULING, COORDINATION OR EVALUATION OF THE SOILS TESTING AND CERTIFICATIONS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE OWNER / OWNER TO MAKE THE NECESSARY ARRANGEMENTS DIRECTLY WITH THE SOILS TESTING LABORATORY / GEOTECHNICAL FIRM AND THE SITE CONTRACTOR.

CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING ITEMS RELATED TO CONSTRUCTION AS-BUILT SURVEYING, TESTING, AND PROVISION OF DOCUMENTS FOR ENGINEERING CERTIFICATIONS. THIS SHALL BE THE MINIMUM REQUIRED, AND WILL BE SUBJECT TO MODIFICATION BASED ON PERMITTING REQUIREMENTS.

GENERAL:

1. CONTRACTOR SHALL BECOME FAMILIAR WITH THE SPECIFIC REQUIREMENTS OF ALL SITE DEVELOPMENT PERMITS.
2. CONTRACTOR SHALL PREPARE AND FILE THE NECESSARY EPA - NPDES PERMIT(S) FOR THIS PROJECT.

WATER DISTRIBUTION SYSTEM:

1. CONTRACTOR SHALL PROVIDE TWO (2) CONSECUTIVE DAYS OF PASSING BACTERIOLOGICAL TEST RESULTS FOR THE ONSITE WATER DISTRIBUTION SYSTEM.
2. CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS CERTIFIED BY A REGISTERED LAND SURVEYOR FOR THE WATER / FIRE DISTRIBUTION SYSTEM, WHICH MUST IDENTIFY THE LOCATION OF EACH CHLORINE INJECTION AND BACTERIOLOGICAL TEST SAMPLE POINT(S).
3. CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE TO ENGINEER OF RECORD AND APPROPRIATE CITY/COUNTY INSPECTOR TO SCHEDULE ATTENDANCE AT THE REQUIRED ONSITE WATER DISTRIBUTION SYSTEM (2 HOUR MINIMUM) PRESSURE TEST.

SANITARY SEWER COLLECTION / TRANSMISSION SYSTEM:

1. CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS CERTIFIED BY A REGISTERED LAND SURVEYOR FOR THE SANITARY SEWER GRAVITY COLLECTION. AS-BUILT DATA SHALL INCLUDE, BUT NOT LIMITED TO, RIM, INVERT, PIPE LENGTH, SLOPE AND SIZE.
2. CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE TO THE ENGINEER OF RECORD IN ORDER TO SCHEDULE ATTENDANCE AT THE TELEVISED VIDEO INSPECTION OF THE PROPOSED GRAVITY SEWER SYSTEM. THE CONTRACTOR SHALL ALSO SUPPLY THE ENGINEER OF RECORD WITH A COPY OF THE ONSITE VHS TAPE AND LOG REPORT OF THE GRAVITY SEWER COLLECTION SYSTEM.

PAVING, GRADING & DRAINAGE SYSTEM:

1. CONTRACTOR SHALL PROVIDE FOUR (4) SETS OF CERTIFIED AS-BUILT DRAWINGS FOR THE PAVING, GRADING AND STORMWATER MANAGEMENT SYSTEM INCLUDING, BUT NOT LIMITED TO, INLET GRATES, PIPE SIZE, SLOPE, LENGTH AND INVERT DATA, POND ELEVATIONS, OUTFALL STRUCTURE AND DISCHARGE PIPING, PAVEMENT GRADES AND MARKINGS, FINISH FLOOR ELEVATIONS. THESE AS-BUILT DRAWINGS SHALL INCLUDE ANY IMPROVEMENTS MADE ONSITE AS WELL AS OFF-SITE.
2. CONTRACTOR SHALL PROVIDE AS-BUILT BLUE PRINTS, AND MYLAR REPRODUCIBLE RECORD DRAWINGS CERTIFIED BY A REGISTERED LAND SURVEYOR OF THE OFF-SITE PORTION OF THE ROADWAY WITHIN PUBLIC R-O-W.

OTHER:

1. CONTRACTOR SHALL NOTE THAT THE REVIEW, APPROVAL AND ACCEPTANCE PROCESS FOR THE ENGINEERING CERTIFICATIONS BY THE APPROPRIATE AGENCIES TYPICALLY TAKES BETWEEN ONE (1) TO TWO (2) MONTHS. THIS PROCESS WILL AFFECT THE FINAL CERTIFICATE OF OCCUPANCY FOR THE PROJECT, AND CANNOT COMMENCE UNTIL THE SPECIFIC FACILITIES HAVE BEEN CONSTRUCTED, SURVEYED, INSPECTED, TESTED, AND ARE READY FOR CERTIFICATION.
2. THIS LIST OF REQUIREMENTS DOES NOT ADDRESS ANY TESTING OR INSPECTIONS (IF REQUIRED), WHICH MIGHT BE NECESSARY AS A RESULT OF ANY BUILDING PERMIT OR ONSITE PIPING PERMITS WHICH MAY NEED TO BE ACQUIRED BY THE CONTRACTOR, FOR PURPOSES OF CONSTRUCTING THE WATER DISTRIBUTION, SANITARY SEWER OR STORMWATER MANAGEMENT SYSTEM.

MARK SULLIVAN P.E.
PROFESSIONAL ENGINEER
NO. 41227

PR. NO.: E13-03001 DATE: 3-24-2014 RMB/MOS

DATE	REVISIONS	REVISED BY:	CHECKED BY:

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TACO BELL
TRINITY
PASCOCOUNTY, FLORIDA

CONSTRUCTION & TESTING NOTES

C2

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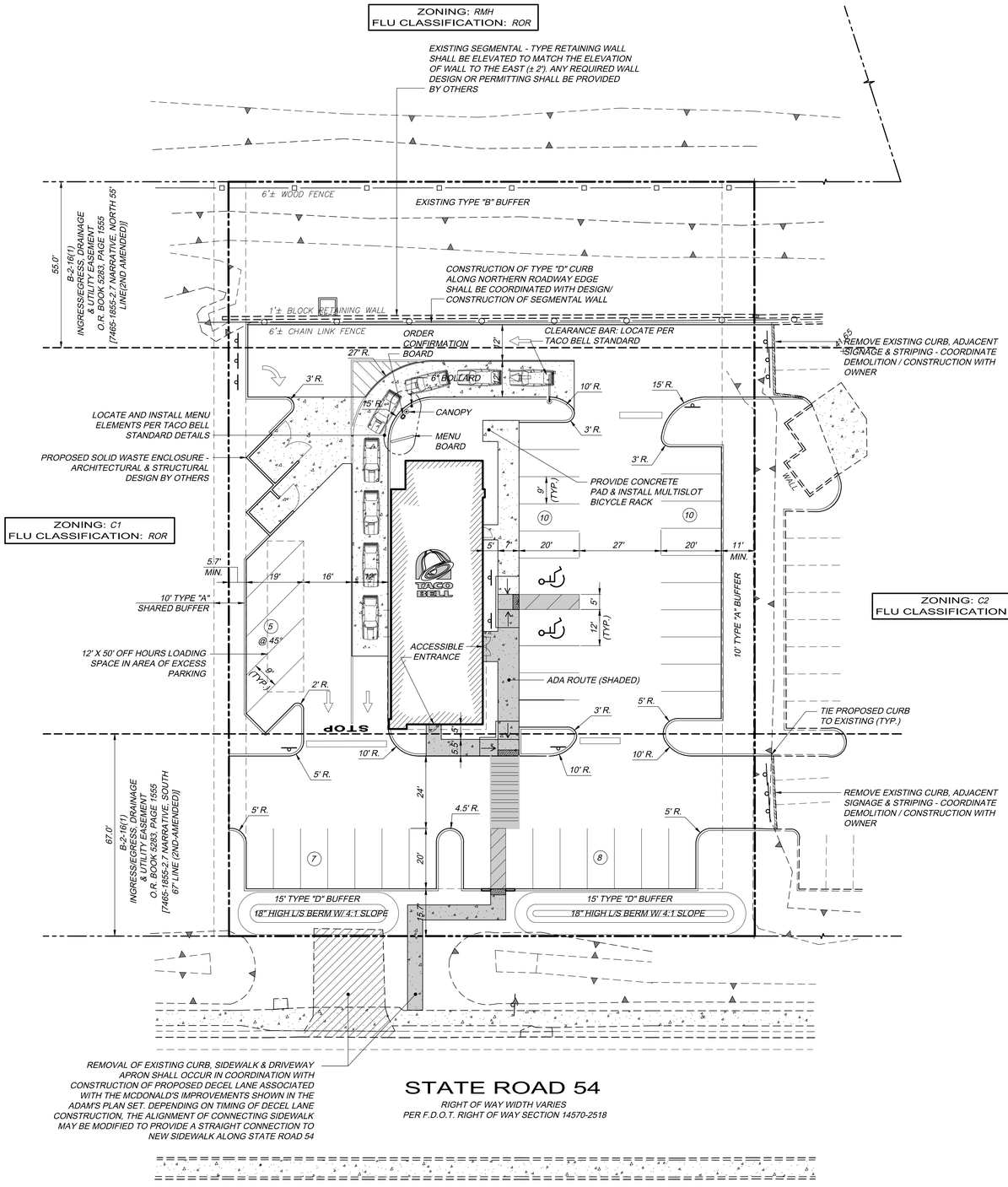

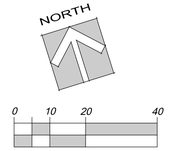

SCALE: 1" = 20'

LEGEND

- PROPERTY LINE
- PROPOSED BUILDING
- EXISTING CONCRETE PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- CONCRETE RAMP
- EXISTING CONCRETE CURB
- PROPOSED FDOT TYPE "D" CURB
- R-O-W — RIGHT-OF-WAY
- S.F. — SQUARE FEET
- E.O.P. — EDGE OF PAVEMENT
- DETECTABLE WARNING STRIP PER FDOT DESIGN INDEX 304

SITE DATA:

PARCEL NUMBER: 30-26-17-0000-00400-0020
SITE ADDRESS:
SITE AREA: 43,560 S.F. OR 1.00 ACRES MORE OR LESS
ZONING: C2
FUTURE LAND USE DESIGNATION: ROR
EXISTING USE: UNDEVELOPED
ABUTTING ZONING:

NORTH:	RMH (ROR)
SOUTH:	AC/ROW (ROR)
EAST:	C2 (ROR)
WEST:	C1 (ROR)

BUILDING HEIGHT: 32'-1" MAX.
PROPOSED USE: RESTAURANT WITH DRIVE-THROUGH
AUTOMOBILE PARKING:

REQUIRED: 1 SPACE / 150 S.F. GFA
2,835 S.F. / 150 S.F. = 19 SPACES

PROVIDED: STANDARD (9' x 20') = 38 SPACES
HANDICAP (12' x 18') = 2 SPACES
TOTAL = 40 SPACES

STACKING SPACES: 8 REQUIRED.
BICYCLE PARKING:

REQUIRED: 0.02 SPACES PER REQUIRED AUTOMOBILE PARKING SPACES
0.02 x 19 = 0.38 SPACES.

PROVIDED: (1) MULTI SLOT BICYLE RACK

FLOOD ZONE: THE PROPERTY SHOWN HEREON APPEARS TO LIE IN FLOOD ZONE "X" ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP, COMMUNITY NUMBER 120230, PANEL NUMBER 0360, SUFFIX D, EFFECTIVE SEPTEMBER 30,1992.

LANDSCAPE BUFFERING:

YARD	MINIMUM	PROPOSED
NORTH	N/A	———
SOUTH	15' - TYPE "D"	15' - TYPE "D"
EAST	10' - TYPE "A"	11' MIN. - TYPE "A"
WEST	10' - TYPE "A"	5' - TYPE "A" SHARED (10' TOTAL)

SITE AREAS:

	EXISTING			PROPOSED		
BUILDING(S):	0 S.F.	0 AC.	0%	2,835 S.F.	0.06 AC.	6%
ASPHALT / CURB:	0 S.F.	0 AC.	0%	21,500 S.F.	0.49 AC.	49%
CONCRETE:	0 S.F.	0 AC.	0%	4,158 S.F.	0.10 AC.	10%
TOTAL IMPERVIOUS:	0 S.F.	0 AC.	0%	28,493 S.F.	0.65 AC.	65%
TOTAL POND:	7,708 S.F.	0.18 AC.	18%	7,708 S.F.	0.18 AC.	18%
TOTAL PERVIOUS:	35,852 S.F.	0.82 AC.	82%	7,359 S.F.	0.17 AC.	17%
TOTAL SITE:	43,560 S.F.	1.00 AC.	100%	43,560 S.F.	1.00 AC.	100%

FLOOR AREA RATIO (FAR): 2,835 S.F. / 43,560 S.F. = 0.065
MAXIMUM ALLLOWABLE FAR = 0.50

ALL DIMENSIONS SHOWN AT PROPOSED CURBS ARE TO THE ADJACENT EDGE OF PAVEMENT.

DIMENSION CLARIFICATION

ALL SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.

SIGNAGE & PAVEMENT MARKING

1. ALL PROJECTS MUST COMPLY WITH PASCO COUNTY FIRE HYDRANT ORDINANCE NO. 46-51.
2. FIRE HYDRANTS SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.
3. PER THE NATIONAL FIRE PROTECTION ASSOCIATION, NFPA-1, 16.4.3.1.3: WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED AND IN SERVICE PRIOR TO CONSTRUCTION WORK.
4. PER NFPA-1, 18.3.4.1: CLEARANCES OF 7½ FEET IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANT WITH A 4-FOOT CLEARANCE TO THE REAR MUST BE MAINTAINED AT ALL TIMES.
5. GATED ENTRIES REQUIRE A SIREN OPERATING SYSTEM OR A 3M OPTICOM SYSTEM FOE EMERGENCY ACCESS.

PASCO COUNTY STANDARD FIRE PROTECTION NOTES

811 Know what's below. Call before you dig.

MARK SULLIVAN P.E.
PROFESSIONAL ENGINEER
NO. 41227

PR. NO.: 13-030.01	DATE: 3-5-2014	REVISIONS
		DATE
		REVISED BY:
		CHECKED BY:

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TACO BELL
TRINITY
PASCO COUNTY, FLORIDA

SITE PLAN

C3

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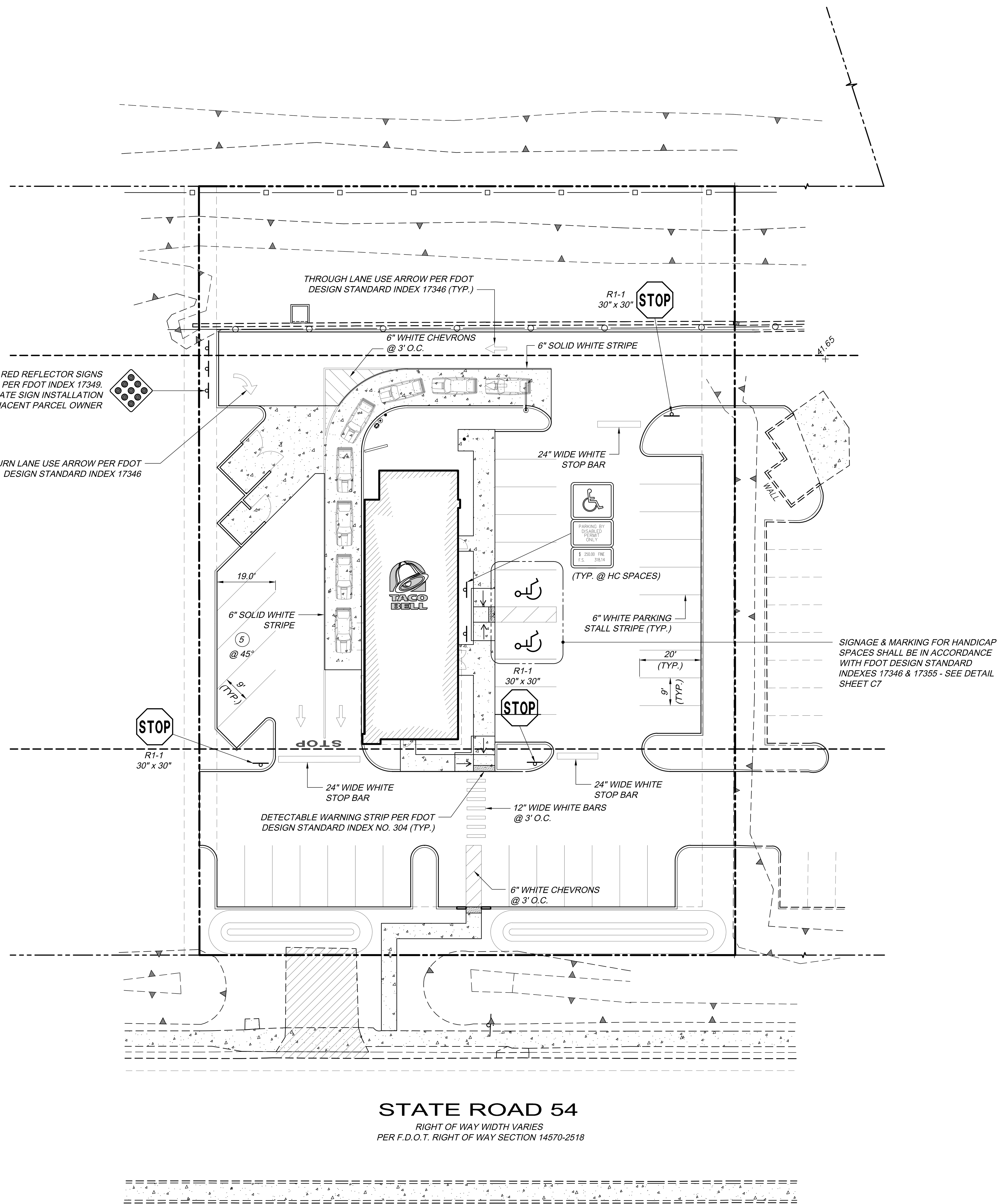

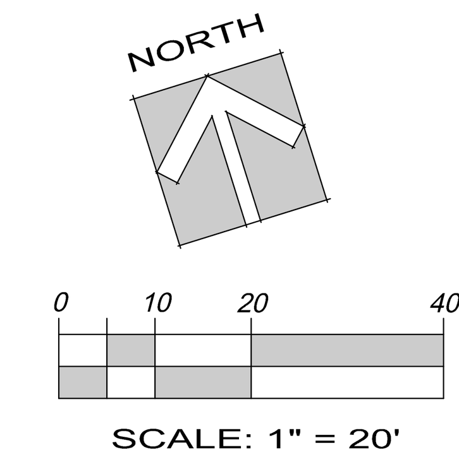

LEGEND

- PROPERTY LINE
- PROPOSED BUILDING
- EXISTING CONCRETE PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- CONCRETE RAMP
- EXISTING CONCRETE CURB
- PROPOSED FDOT TYPE "D" CURB
- R-O-W — RIGHT-OF-WAY
- S.F. — SQUARE FEET
- E.O.P. — EDGE OF PAVEMENT
- DETECTABLE WARNING STRIP PER FDOT DESIGN INDEX 304

ALL SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.

SIGNAGE & PAVEMENT MARKING

Know what's below. Call before you dig. 811

MARK SULLIVAN P.E.
PROFESSIONAL ENGINEER
NO. 41227

PR. NO.: E13-03007 | DATE: 3-5-2014 | RMB/MOS

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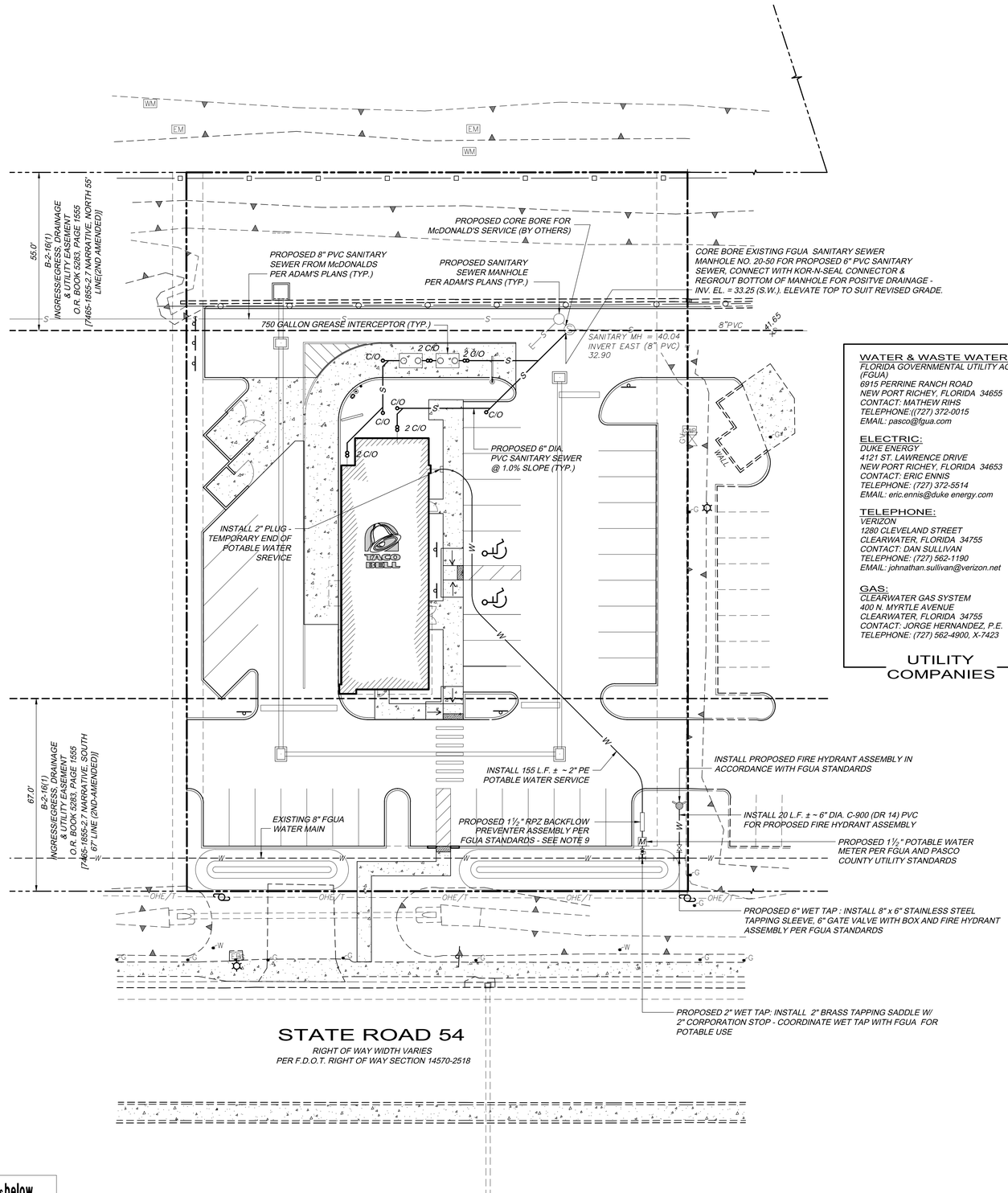
TACO BELL
TRINITY
PASCO COUNTY, FLORIDA

SIGNAGE & PAVEMENT MARKING PLAN

C4



NORTH

0 10 20 40

SCALE: 1" = 20'

LEGEND

- PROPERTY LINE
- PROPOSED BUILDING
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- PROPOSED WATER LINE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING SANITARY SEWER LINE
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER LINE
- C/O — PROPOSED CLEANOUT
- 2 C/O — PROPOSED BIDIRECTIONALCLEANOUT
- EXISTING STORM SEWER LINE
- D — EXISTING STORM SEWER MANHOLE

WATER & WASTE WATER:
FLORIDA GOVERNMENTAL UTILITY AGENCY (FGUA)
6915 PERRINE RANCH ROAD
NEW PORT RICHEY, FLORIDA 34655
CONTACT: MATTHEW RIHS
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TELEPHONE: (727) 562-1190
EMAIL: johnathan.sullivan@verizon.net

GAS:
CLEARWATER GAS SYSTEM
400 N. MYRTLE AVENUE
CLEARWATER, FLORIDA 34755
CONTACT: JORGE HERNANDEZ, P.E.
TELEPHONE: (727) 562-4900, X-7423

UTILITY COMPANIES

1. ALL CONSTRUCTION SHALL MEET PASCO COUNTY STANDARDS AND SPECIFICATIONS AS APPLICABLE.
2. AN FGUA REPRESENTATIVE IS TO BE PRESENT DURING CONNECTIONS TO EXISTING FACILITIES WITH 72 HOUR NOTIFICATION.
3. ALL UTILITIES WITHIN THE PROPERTY LINES WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER.
4. ANY UTILITIES (PIPES, VALVES, BACKFLOW PREVENTORS AND ASSOCIATED HARDWARE) TO BE CONVEYED TO FGUA WILL BE LOCATED WITHIN AN EXISTING PUBLIC UTILITY EASEMENT, RIGHT-OF-WAY (ROW) AND/OR A DEDICATED FGUA UTILITY EASEMENT.
5. ANY REAL PROPERTY (LIFT STATIONS, PUMP HOUSES, WELLS, ETC.) WILL NOT BE LOCATED WITHIN THE ROW AND WILL BE CONVEYED TO FGUA VIA A SPECIFIC WARRANTY DEED.
6. LOW PRESSURE AIR TEST, AND TVING ARE REQUIRED (GRAVITY SYSTEM).
7. INSTALL 3M MAGNETIC MARKERS AT EACH VALVE. MARKERS TO BE INSTALLED BESIDE VALVE BOX 12" MIN-18" MAX AND OVER ALL BENDS AND EVERY 50' OVER CENTERLINE OF WATER MAINS AND FORCE MAINS AT A DEPTH OF 12" MIN-18" MAX BELOW FINAL GRADE.
8. ALL WATER AND/OR WASTEWATER LINES CROSSING DOT RIGHT-OF-WAYS WILL BE CONSTRUCTED WITH A CASING.
9. A REDUCED PRESSURE ZONE (RPZ), BACKFLOW PREVENTION ASSEMBLY (BFP) IS REQUIRED. ACCEPTABLE MODELS FEBCO 825Y, WATTS 909, WILKINS 975XL, OR CONBRACO 400.
10. STAINLESS STEEL TAPPING SLEEVE AND VALVE FOR PROPOSED WATER AND FORCE MAIN CONNECTIONS TO BE USED.
11. WATER TAPPING SADDLES TO BE BRASS.
12. ALL FIRE FLOW LINES WILL RUN SEPARATE FROM THE DOMESTIC WATER MAINS AND HAVE A FIRE DETECTION METER AND A FIRE LINE BACKFLOW PREVENTION ASSEMBLY (BFP) ASSEMBLY SHALL INCLUDE A LOW FLOW BY-PASS METER W/ RPZ.
13. MANHOLE FRAMES & COVERS, AND CO CAPS ARE TO BE WATER TIGHT, IF NEEDED EXISTING MANHOLE TOPS ARE TO BE ADJUSTED TO PROPOSED GRADE.
14. THE FGUA SHALL OWN AND MAINTAIN ALL WATER SERVICE LINES UP TO THE POINT OF CONNECTION. ALL WATER MAINS SHALL BE A MINIMUM OF FOUR INCHES (4") IN DIAMETER AND ALL SUCH WATER MAINS SHALL BE CONSTRUCTED IN DEDICATED RIGHTS-OF-WAY OR APPROPRIATE UTILITY EASEMENTS DEDICATED TO THE FGUA.
15. ALL SEWER FORCE MAIN LINES AND GRAVITY SERVICE LINES ACCEPTED MUST BE AT LEAST FOUR INCHES (4") IN DIAMETER AND EIGHT INCHES (8"), RESPECTIVELY, EXCEPT LATERAL SEWER SERVICE LINES WHICH SHALL BE NO LESS THAN SIX INCHES (6") IN DIAMETER AND ACCEPTED BY THE FGUA TO A CLEANOUT LOCATED ON THE EDGE OF THE RIGHT-OF-WAY OR AN EASEMENT.
16. A BALL CHECK VALVE FOLLOWED BY A PLUG VALVE WILL BE PROVIDED ON FORCE MAINS LEAVING FROM PRIVATELY OWNED LIFT STATIONS CONNECTING INTO THE UTILITY MAINS.
17. CONNECTION TO EXISTING MANHOLES AND/OR LIFT STATIONS SHALL BE BY CORE BORE WITH KOR-N-SEAL CONNECTORS.
18. ALL CONNECTIONS WILL BE MADE AS WET TAPS. ANY EXCEPTIONS TO THIS WILL REQUIRE FGUA APPROVAL.

FGUA GENERAL NOTES

GREASE INTERCEPTOR CALCULATION
(FLORIDA PLUMBING CODE TABLE 1003.5.1)

MINIMUM GREASE INTERCEPTOR SIZE FORMULA =
S x GS x HR/12 x LF
WHERE:

S = NUMBER OF SEATS IN DINING AREA;

GS = GALLONS OF WASTE WATER PER SEAT (USE 25 GALLONS FOR ORDINARY RESTAURANTS; USE 10 GALLONS FOR SINGLE SERVICE ARTICLE RESTAURANTS);

HR = NUMBER OF HOURS ESTABLISMNET IS OPEN;

LF = LOAD FACTOR
(USE 2.0 FOR INTERSTATE HIGHWAY; 1.50 FOR OTHER FREEWAYS; 1.25 RECREATIONAL AREA; 1.00 MAIN HIGHWAY; 0.75 OTHER ROADS)

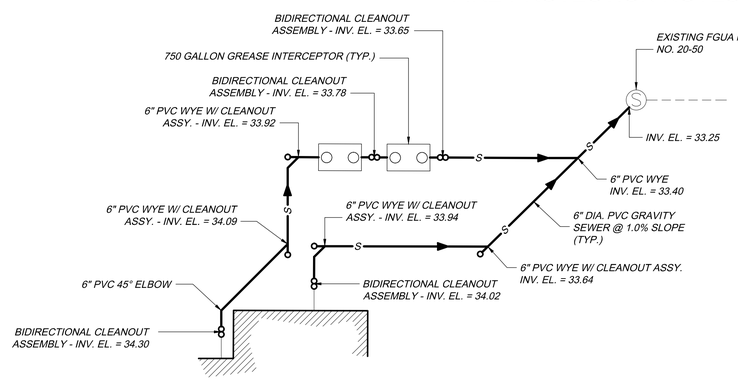
MINIMUM GREASE INTERCEPTOR SIZE =

50 SEATS x 10 GALLONS x 24 HOURS/12 x 1.00 MAIN HIGHWAY = 1,000 GALLONS

USE TWO (2) 750 GALLON INTERCEPTORS IN SERIES

1. ALL PROJECTS MUST COMPLY WITH PASCO COUNTY FIRE HYDRANT ORDINANCE NO. 46-51.
2. FIRE HYDRANTS SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.
3. PER THE NATIONAL FIRE PROTECTION ASSOCIATION, NFPA-1, 16.4.3.1.3: WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED AND IN SERVICE PRIOR TO CONSTRUCTION WORK.
4. PER NFPA-1, 18.3.4.1: CLEARANCES OF 7½ FEET IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANT WITH A 4-FOOT CLEARANCE TO THE REAR MUST BE MAINTAINED AT ALL TIMES.
5. GATED ENTRIES REQUIRE A SIREN OPERATING SYSTEM OR A 3M OPTICOM SYSTEM FOE EMERGENCY ACCESS.

PASCO COUNTY STANDARD FIRE PROTECTION NOTES



SANITARY SEWER SCHEMATIC
NOT TO SCALE

MARK SULLIVAN P.E.
PROFESSIONAL ENGINEER
NO. 41227

811 Know what's below. Call before you dig.

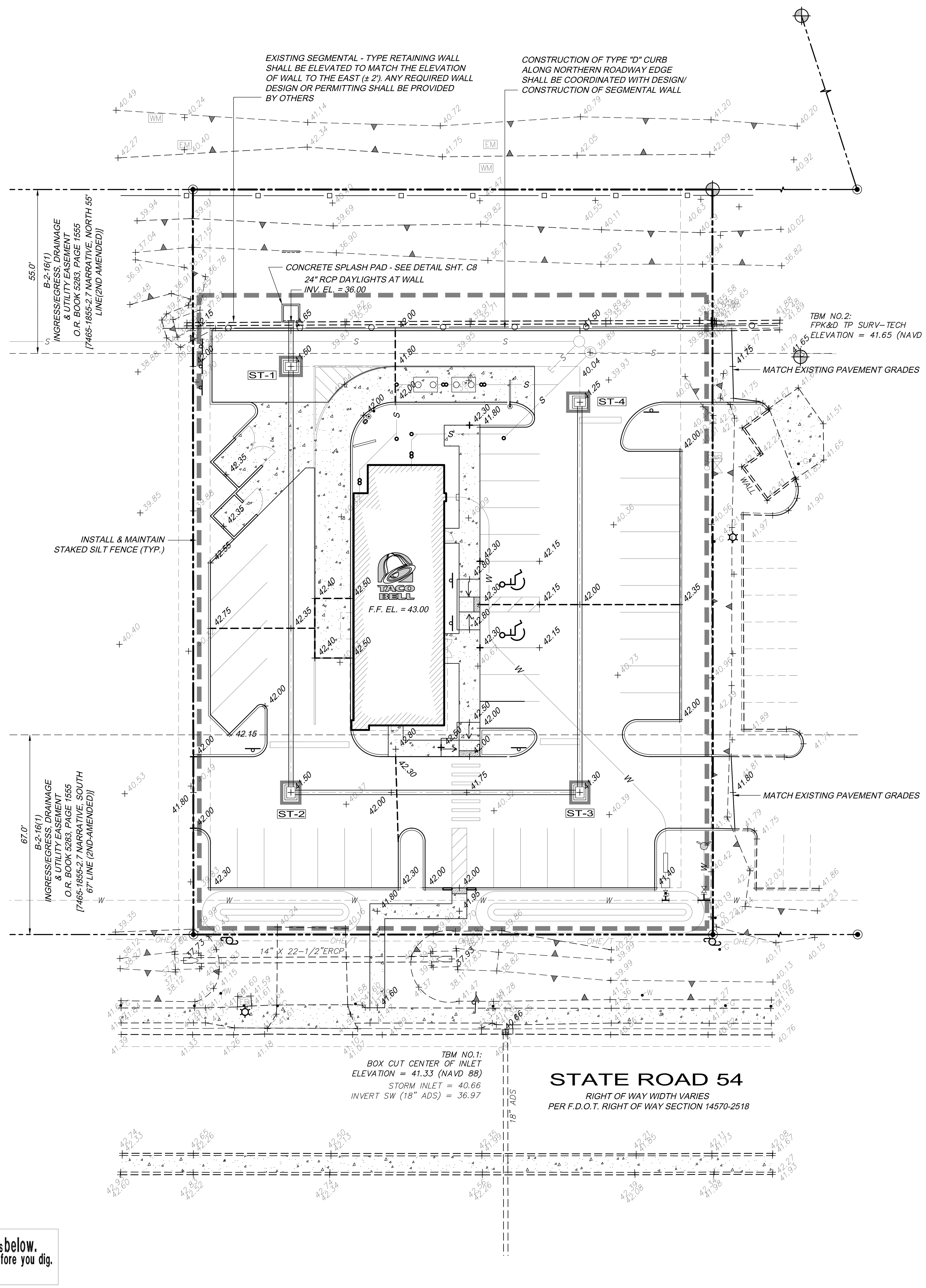
PR. NO.: 13-0300	DATE: 3-5-2014	REVISIONS
		DATE
		REVISED BY:
		CHECKED BY:

FLORIDA ENGINEERING
AND ENVIRONMENTAL SERVICES, INC.
CERTIFICATE OF AUTHORIZATION: EB 5804
4519 George Road Suite 330
Tampa, FL 33634
Tel (813) 880-9106 Fax (813) 880-9055

TACO BELL
TRINITY
PASCO COUNTY, FLORIDA

UTILITY PLAN

C5



NORTH

0 10 20 40

SCALE: 1" = 20'

LEGEND

- PROPERTY LINE
- S.F. — SQUARE FEET
- R-O-W — RIGHT-OF-WAY
- E.O.P. — EDGE OF PAVEMENT
- PROPOSED BUILDING
- PROPOSED CONCRETE
- EXISTING FDOT TYPE "F" CURB & GUTTER
- EXISTING FDOT TYPE "D" CURB
- PROPOSED FDOT TYPE "D" CURB
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING WATER LINE
- PROPOSED WATER LINE
- EXISTING SANITARY SEWER LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED SANITARY SEWER GREASE TRAP
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER CLEANOUT
- PROPOSED SANITARY SEWER BIDIRECTIONAL CLEANOUT
- EXISTING STORM SEWER LINE
- PROPOSED STORM SEWER LINE
- PROPOSED GRATE INLET
- EXISTING LIGHT POLE
- OHW — EXISTING OVERHEAD WIRES
- 000.00 — EXISTING SPOT EL.
- 000.00 — PROPOSED SPOT EL.
- PROPOSED SURFACE WATER FLOW
- ST-0 — PROPOSED STORM STRUCTURE NO.
- PROPOSED STAKED SILT FENCE
- PROPOSED INLET PROTECTION BARRIER

VERTICAL DATUM

VERTICAL DATUM FOR THIS SURVEY IS REFERENCED TO BSI & ASSOCIATES BENCHMARK NO.1. BENCHMARK NO. 1 AS BEING A NAIL & DISK STAMPED BSI LB 7078. LOCATED NEAR THE INTERSECTION OF STATE ROAD 54 & DUCK SLOUGH BOULEVARD IN A FIVE FOOT SIDEWALK, APPROXIMATELY 500 FEET WEST FROM THE CENTERLINE OF DUCK SLOUGH BOULEVARD AND APPROXIMATELY 69 FEET SOUTH OF THE INTERSECTION OF STATE ROAD 54. 1 FOOT NORTH OF SOUTH EDGE OF SIDEWALK ELEVATION 41.79' (NAVD88) AS PROVIDED BY PASCO COUNTY, FLORIDA FOR TRINITY VILLAGE CENTER A COMMERCIAL SUBDIVISION, PER PLAT BOOK 61, PAGE 119.

STORM STRUCTURE TABLE

STRUCTURE NUMBER	DESCRIPTION	ELEVATIONS	PIPE SIZE OUT	PIPE LENGTH OUT	PIPE SLOPE OUT
ST-1	GRATE INLET - MODIFIED FDOT TYPE "D" PER FDOT DESIGN INDEX NO. 232	GRATE EL. = 41.50 INV. EL. = 36.03 (S.) INV. EL. = 36.03 (N.)	24" RCP	15 L.F.	0.20%
ST-2	GRATE INLET - MODIFIED FDOT TYPE "D" PER FDOT DESIGN INDEX NO. 232	GRATE EL. = 41.50 INV. EL. = 36.31 (W.) INV. EL. = 33.31 (N.)	24" RCP	143 L.F.	0.20%
ST-3	GRATE INLET - MODIFIED FDOT TYPE "D" PER FDOT DESIGN INDEX NO. 232	GRATE EL. = 41.30 INV. EL. = 36.50 (N.) INV. EL. = 36.50 (E.)	18" RCP	96 L.F.	0.20%
ST-4	GRATE INLET - MODIFIED FDOT TYPE "D" PER FDOT DESIGN INDEX NO. 232	GRATE EL. = 41.25 INV. EL. = 36.76 (S.)	18" RCP	131 L.F.	0.20%

MARK SULLIVAN P.E.
PROFESSIONAL ENGINEER
NO. 41227

PR. NO.: E13-030.07 DATE: 3-5-2014 RMB/MOS

DATE	REVISIONS	REVISED BY:	CHECKED BY:

FLORIDA ENGINEERING
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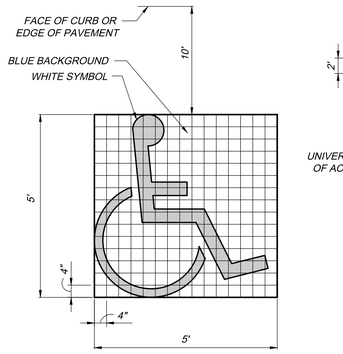
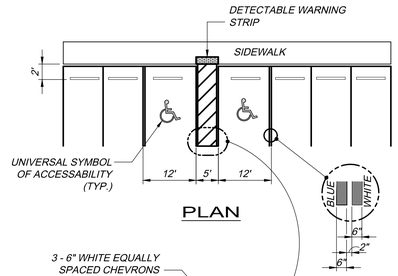
TACO BELL
TRINITY
PASCO COUNTY, FLORIDA

GRADING, PAVING & DRAINAGE PLAN

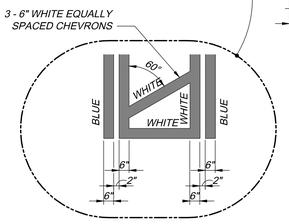
C6



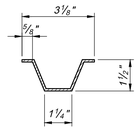
UNIVERSAL SYMBOL OF ACCESSIBILITY DETAIL



PLAN

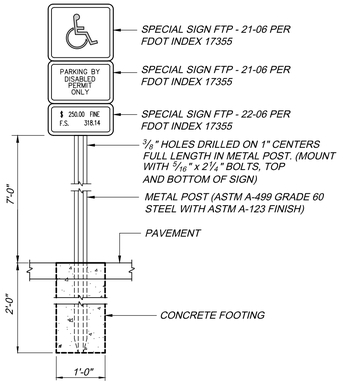


STRIPING DETAILS



METAL POST DETAIL

WEIGHT OF POST SHALL BE 2 LBS. / FT. MIN.



ELEVATION

SIGN NOTES:

1. *METAL POST TO BE GALVANIZED. ALL BOLTS, NUTS, WASHERS AND SCREWS MUST BE RUSTPROOF.*
2. *CONCRETE FOR FOOTING SHALL BE PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I.*
3. *SIGNS WILL BE FABRICATED BY USING REFLECTING COATING IN THE SYMBOL, MESSAGE AND BORDER APPLIED TO A SHEET ALUMINUM BACKING (.080) IN THICKNESS.*
4. *MESSAGE LETTERING SHALL BE UPPER CASE (WHITE)(SERIES B) 2" HIGH IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.*
5. *THE SYMBOL IS COMPOSED OF TWO ELEMENTS, A WHITE WHEELCHAIR FIGURE (WHICH SHOULD ALWAYS FACE RIGHT) ON A SQUARE BACKGROUND, INTERNATIONAL BLUE IN COLOR (FED. STD. 595a, COLOR #15180).*
6. *SIGN POST SHALL BE MIN. 2'-0" CLEAR FROM BACK OF CURB.*

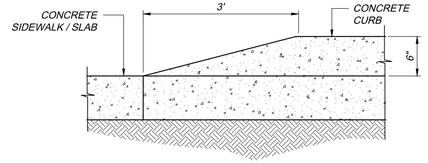
SIGN DETAILS

R1-1
30" x 30"

STOP SIGN DETAIL

NOT TO SCALE

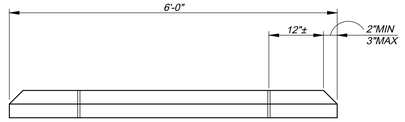
NOTE: SEE SITE PLAN FOR LOCATION OF STOP SIGN.



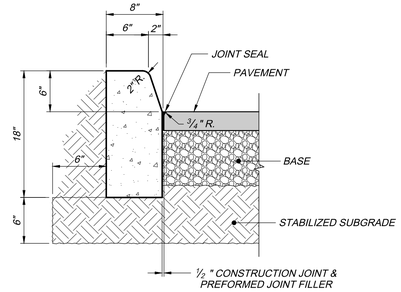
CURB TRANSITION DETAIL

ELEVATION VIEW

N.T.S.



ELEVATION VIEW



TYPE 'D' CURB

CROSS SECTION

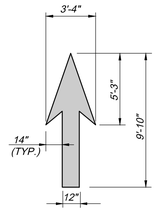
N.T.S.

HANDICAP PARKING DETAILS

N.T.S.

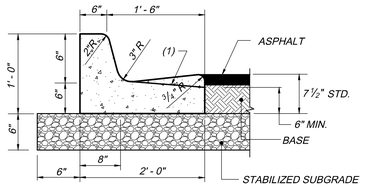
NOTES:

1. *ALL WORK SHALL CONFORM TO LATEST REVISION OF FDOT INDEXES 17346 & 17355.*
2. *PAVEMENT SLOPE @ HANDICAP PARKING & LOADING AISLES SHALL NOT EXCEED 2% IN ALL DIRECTIONS.*



TRAFFIC ARROW

N.T.S.

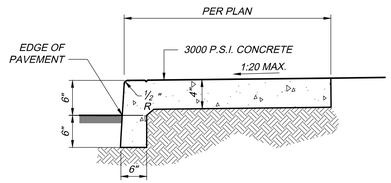


NOTE (1) : WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.

TYPE "F" CURB

CROSS SECTION

N.T.S.



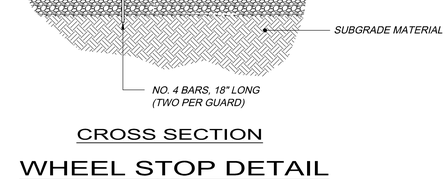
TYPICAL INTEGRAL CURB / SIDEWALK DETAIL

CROSS SECTION

(N.T.S.)

NOTES:

1. *FORMED CONSTRUCTION JOINTS 5'-0" CENTERS.*
2. *½ " EXPANSION JOINTS ON 20'-0" CENTERS.*

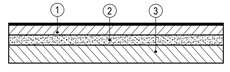


CROSS SECTION

WHEEL STOP DETAIL

N.T.S.

NOTE: CENTER WHEELSTOP IN PARKING SPACE.



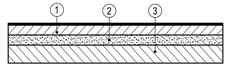
1. *1.5" ASPHALTIC CONCRETE (FDOT TYPE "SP 12.5/9.5")*
2. *6" BASE COURSE, CRUSHED CONCRETE, COMPACTED TO 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY PER ASTM D 1557. LBR = 100 MIN.*
3. *12" COMPACTED SUBGRADE TO 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557). LBR = 40 MIN.*

STANDARD DUTY ASPHALT PAVEMENT DETAIL

(APPLICABLE TO PARKING STALLS ONLY)

CROSS SECTION

(N.T.S.)



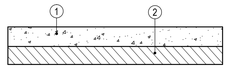
1. *2" ASPHALTIC CONCRETE (FDOT TYPE "SP 12.5/9.5")*
2. *8" BASE COURSE, CRUSHED CONCRETE, COMPACTED TO 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY PER ASTM D 1557. LBR = 100 MIN.*
3. *12" COMPACTED SUBGRADE TO 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557). LBR = 40 MIN.*

HEAVY DUTY ASPHALT PAVEMENT DETAIL

(APPLICABLE TO ALL AREAS OTHER THAN PARKING STALLS)

CROSS SECTION

(N.T.S.)



1. *7" THICK , 4,000 PSI CONCRETE @ 28 DAYS.*
2. *12" COMPACTED, WELL DRAINING GRANULAR SUBGRADE COMPACTED TO AT LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY PER ASTM D 1557. LBR = 30 MIN.*

CONCRETE PAVEMENT DETAIL

CROSS SECTION

(N.T.S.)

NOTE:

ALL PAVEMENT MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CONESTOGA-ROVERS & ASSOCIATES GEOTECHNICAL REPORT "SUBSURFACE EXPLORATION AND GEOTECHNICAL EVALUATION SERVICES TACO BELL - TRINITY PASCO COUNTY, FLORIDA", REFERENCE NUMBER 099232, DATED FEBRUARY 17, 2014

811 Know what's below. Call before you dig.

MARK SULLIVAN, P.E.
PROFESSIONAL ENGINEER
NO. 41227

DATE	REVISIONS	REVISED BY:	CHECKED BY:

PR. NO.: 13-030 | DATE: 3-24-2014 | RMB/MOS

FLORIDA ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
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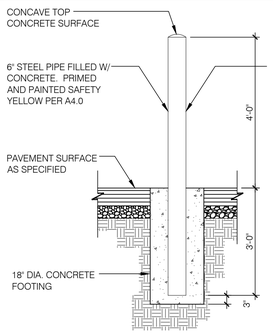
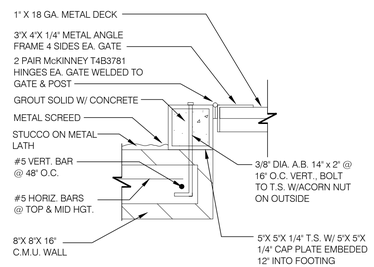
TACO BELL
TRINITY
PASCO COUNTY, FLORIDA

CONSTRUCTION DETAILS

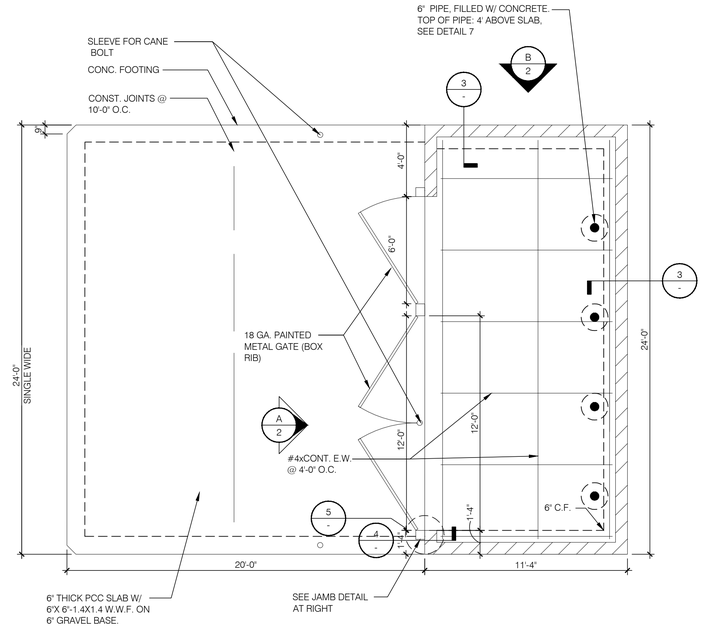
C7



BOLLARD DETAIL 1/2" = 1'-0" | **7**



JAMB DETAIL 1 1/2" = 1'-0" | **5**



NOTE:
ENCLOSURE SHALL BE CONSTRUCTED WITH DUMPSTER CUBICLES STAGGERED AS SHOWN ON PLANS.

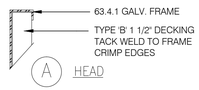
PLAN VIEW 1/4"=1'-0" | **1**

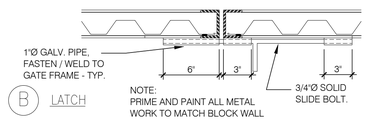
GATE NOTES:

(2) EQUAL (±6'-0") WIDE x 6'-0" HIGH MTL. GATES, TYPE 'B' 1 1/2" DECKING, 22GA. W/ T.S. 5 X 5 X .1875 BAR CROSS BRACING WELD AND GRIND SMOOTH ALL CONNECTIONS, TYP. PRIME AND PAINT COLOR TO MATCH PLASTER.

GATE HARDWARE:

1. ALL HARDWARE AND ACCESSORIES SHALL BE HEAVY GALVINIZED.
2. GATE STOP - MUSHROOM TYPE OR FLUSH PLATE WITH ANCHORS SET IN CONCRETE TO ENGAGE THE CENTER DROP ROD OR PLUNGER BAR.





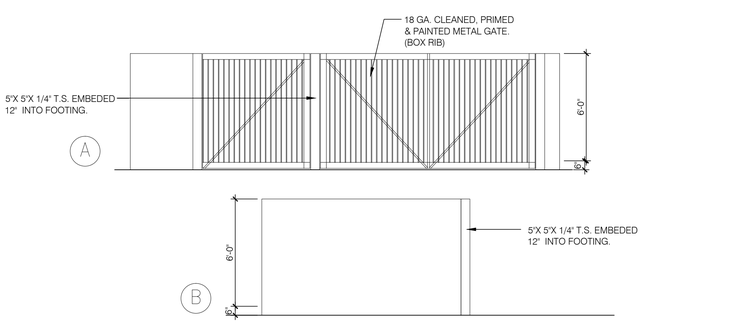
NOTES:
1. LOCATION SHALL BE APPROVED BY THE PUBLIC WORKS DEPARTMENT.
2. AREAS SHALL BE ACCESSIBLE FOR DELIVERY AND COLLECTION.
3. GATES SHALL BE CORRUGATED METAL DOORS AND MUST BE APPROVED BY PUBLIC WORKS DEPARTMENT PRIOR TO INSTALLATION.
4. GATE LATCHES SHALL BE OF THE PLUNGER BAR TYPE OR EQUIVALENT AS APPROVED BY THE PUBLIC WORKS DEPARTMENT.
5. SEE ATTACHED SPECIFICATIONS, NOTES AND PROCEDURES

TRASH ENCLOSURE DETAIL MATERIAL SPECIFICATIONS:
1. CONCRETE BLOCK: 6" MINIMUM IN SIZE. ASTM C90.
2. REINFORCING STEEL: ASTM 615. GRADE 40.
3. ACCEPTABLE SOIL TYPES:
A. MIN. ALLOWABLE BEARING: 1000 LBS/SQ. FT
B. MIN. LATERAL BEARING: *100* LBS/SQ. FT./FT.
C. MAX EXPANSION INDEX: 20
4.CONCRETE: 2000 LBS/SQ. IN. IN 28 DAYS.
5. MORTAR: 1: 1/4:3 (PORTLAND CEMENT: HYDRATED LIME OR LIME PUTTY: SAND. BY VOLUME). MIXED TO PLASTIC CONSISTENCY. REFER TO UBC TABLE 24-A FOR OTHER TYPES OF CEMENT.
6. GROUT: 1:1/10:3 (PORTLAND CEMENT: HYDRATED LIME OR LIME PUTTY: SAND BY VOLUME).MIX TO FLOW WITHOUT SEGREGATION. GROUT MAY CONTAIN 2 PARTS PEA GRAVEL (3/8" MAX. SIZE).
MINIMUM COMPRESSIVE STRENGTH: 2000 LBS/SQ. IN. REFER TO UBC TABLE 24-B FOR OTHER TYPES OF CEMENT.,

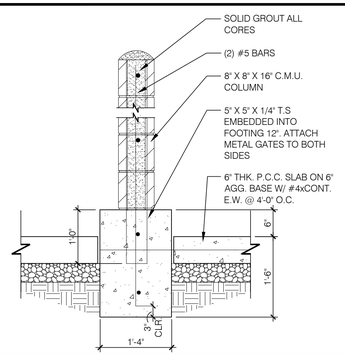
GENERAL NOTES:
1. THIS DESIGN IS FOR AVERAGE CONDITIONS AND MAY NOT BE SUITABLE FOR ALL CASES. IT IS RECOMMENDED THAT A LICENSED CIVIL OR STRUCTURAL ENGINEER BE CONSULTED.
2. FOOTINGS SHALL BE IN NATURAL SOIL OR CERTIFIED FILL..
3. BLOCKS TO BE STAGGERED (RUNNING BOND).
4. ALL CELLS CONTAINING REINFORCING STEEL SHALL BE GROUTED.
5. APPROVED GROUT STOPS ARE REQUIRED BELOW HORIZONTAL STEEL IN PARTIALLY GROUTED WALLS. BAGS. NEWSPAPERS, ETC. ARE NOT APPROVED GROUT STOPS.
6. INITIAL BED JOINT SHALL BE 1/4"MIN. 1 "MAX. SUBSEQUENT BED JOINTS SHALL BE ½"- MIN., ⅝" *MAX.*
7. VERTICAL CONTINUITY OF CELLS SHALL BE UNOBSTRUCTED. MORTAR PROJECTIONS SHALL NOT EXCEED ½" FOR 6" AND LARGER BLOCK. MORTAR DROPPINGS OR OTHER FOREIGN MATTER ARE NOT PERMITTED IN CELLS AND MUST BE REMOVED.
8. EXPANSION JOINTS REQUIRED AT 60'-0· MAX. INTERVALS.
9. REQUIRED BAR LAPS:
A. VERTICAL STEEL : 30 BAR DIAMETERS.
B. HORIZONTAL STEEL: 40 BAR DIAMETERS.
C. WIRE JOINT REINFORCEMENT IN THE MORTARED BED JOINT: 75 WIRE DIAMETERS OR IN ALTERNATE BED JOINTS OF RUNNING BOND. 54 DIAMETERS PLUS TWICE THE BED JOINT SPACING.
10. WHERE HORIZONTAL WIRE JOINT REINFORCEMENT IS REQUIRED OR UTILIZED. IT SHALL BE EQUIVALENT TO TWO 3/16' DIAMETER BARS CONNECTED AT 16" INTERVALS BY NO. 9 GAUGE WELDED WIRE.
11. FOR PIPES AND CONDUIT EMBEDDED IN MASONRY, REFER TO SEC. 24-07(g). UBC.
12. 3" MIN. COVER REQUIRED FOR REINFORCEMENT IN CONCRETE WHICH IS CAST AGAINST EARTH.

INSPECTION PROCEDURES:
1. FOUNDATION: AFTER TRENCHES ARE DUG, STEEL IS TIED IN PLACE AND BEFORE ANY CONCRETE IS POURED.
2. PREGROUT: AFTER ALL BLOCKS (EXCEPT CAP) ARE IN PLACE. VERTICAL AND HORIZONTAL STEEL IS IN PLACE, GROUT STOPS (FOR PARTIALLY GROUTED MASONRY) ARE IN PLACE. AND PRIOR TO GROUTING.
3. FLNAL: AFTER GROUT IS IN PLACE AND PRIOR TO PLACEMENT OF CAP.

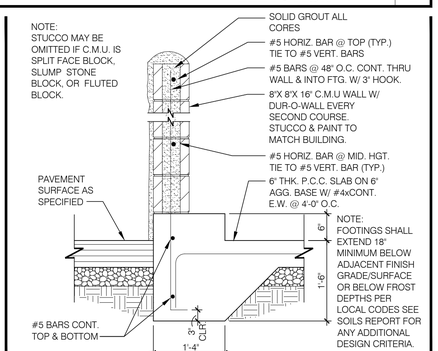
GATE DETAILS N.T.S. | **6**



ELEVATION 1/4"=1'-0" | **2**



SECTION 3/4" = 1'-0" | **4**



SECTION 3/4" = 1'-0" | **3**

811 Know what's below. Call before you dig.

F:\projects\eng\13-030 TACO BELL TRINITY\E13030 DETAILS.dwg, C8, 4/29/2014 4:27:49 PM, Rich, 1:1, RMB

REVISIONS

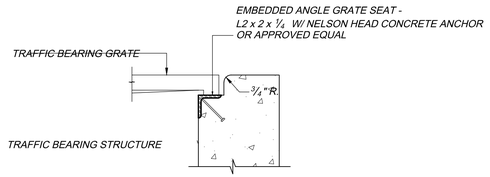
DATE	REVISED BY:	CHECKED BY:
PR. NO.: E13-030	DATE: 3-24-2014	RMB/MOS

FLORIDA ENGINEERING
AND ENVIRONMENTAL SERVICES, INC.
CERTIFICATE OF AUTHORIZATION: EB 5804
4519 George Road Suite 130
Tampa, Florida 33634
Tel (813) 880-9106 Fax (813) 880-9055

TACO BELL
TRINITY
PASCO COUNTY, FLORIDA

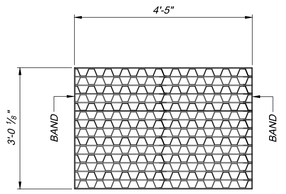
TACO BELL
DUMPSTER ENCLOSURE
DETAILS

C8



ANGLE SEAT DETAIL

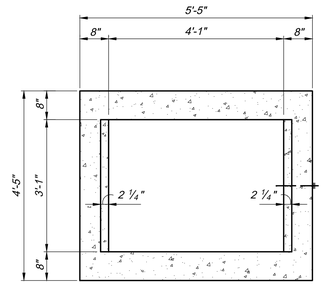
N.T.S.



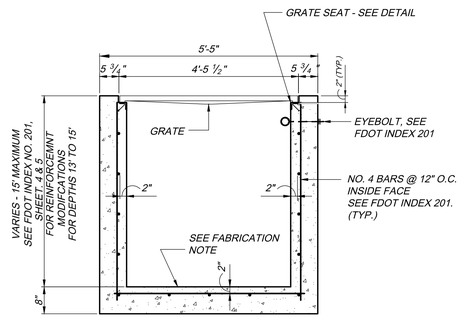
GRATE DETAIL

TYPE `D' INLET *(MODIFIED)*

GRATE SHALL BE DESIGNED TO SATISFY H20 LOADING CRITERIA.



PLAN



SECTION

TYPE `D' INLET *(MODIFIED)*

N.T.S.

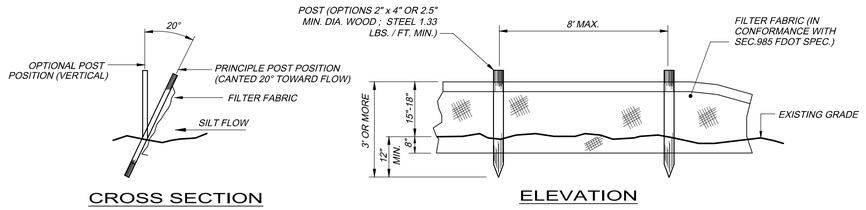
RECOMMENDED MAXIMUM PIPE SIZE:

3'-1" INTERIOR WALL - 24" PIPE

4'-1" INTERIOR WALL - 36" PIPE

STRUCTURE SHALL BE DESIGNED TO SATISFY H20 LOADING CRITERIA.

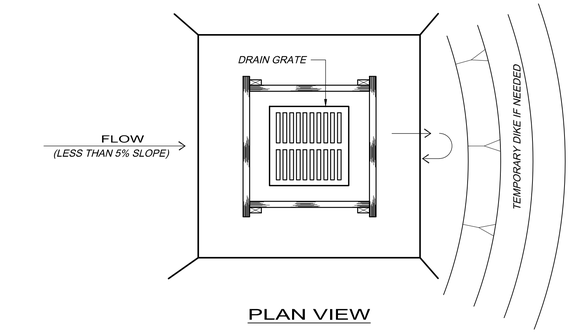
811 Know what's below. Call before you dig.



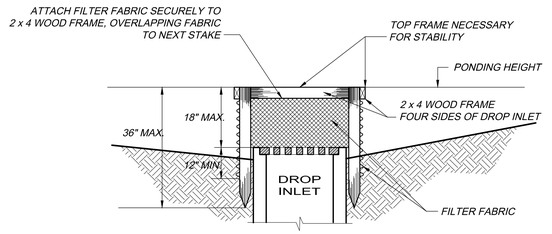
CROSS SECTION ELEVATION

STAKED SILT FENCE DETAIL

(N.T.S.)



PLAN VIEW



CROSS SECTION

STORM INLET PROTECTION DETAIL

N.T.S.

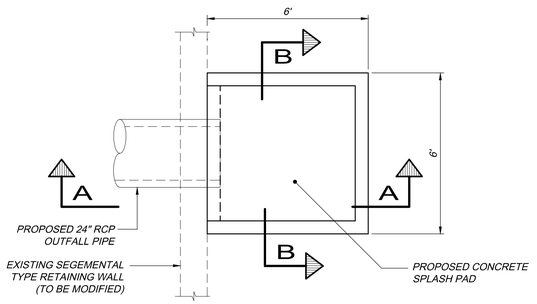
REFERENCE: *THE FLORIDA STORMWATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL*
(http://www.dep.state.fl.us/water/nonpoint/ero_man.htm)

STORM INLET PROTECTION NOTES:

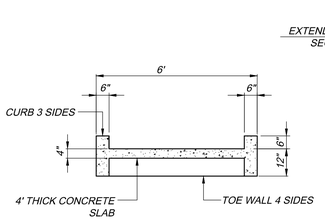
1. *DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS (LESS THAN 5%.)*
2. *USE 2 x 4 WOOD OR EQUIVALENT METAL STAKES (3 FOOT MIN. LENGTH.)*
3. *INSTALL 2 x 4 WOOD TOP FRAME TO INSURE STABILITY.*
4. *THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY OM THE DOWNSLOPE SIDE OF THE STRUCTURE.*

FABRIC DROP INLET SEDIMENT FILTER NOTES:

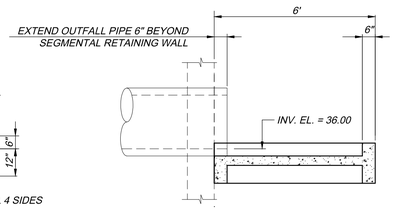
1. *FABRIC SHALL BE CUT FROM A CONTINUOUS ROLL TO AVOID JOINTS.*
2. *STAKES SHALL BE 2" x 4" (5CM x 10CM) WOOD (PREFERRED) OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3 FEET (90 CM.)*
3. *STAPLES SHALL BE OF HEAVY DUTY WIRE AT LEAST ½" (13MM) LONG.*
4. *STAKES SHALL BE PLACED AROUND THE PERIMETER OF THE INLET A MAXIMUM OF 3 FEET (90 CM) APART AND SECURELY DRIVEN INTO THE GROUND A MINIMUM OF 8 INCHES (20 CM). A FRAME OF 2" x 4" (5CM x 10 CM) WOOD SHALL BE CONSTRUCTED AROUND THE TOP OF THE STAKES FOR PROPER STABILITY.*
5. *A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4" (10 CM) WIDE AND 4" (10 CM) DEEP AROUND THE OUTSIDE PERIMETER OF THE STAKES.*
6. *THE BURLAP SHALL BE STAPLED TO THE WOODEN STAKES AND 8 INCHES (20 CM) OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE HEIGHT OF THE FILTER BARRIER SHALL BE A MINIMUM OF 15 INCHES (38 CM) AND SHALL NOT EXCEED 18 INCHES (45 CM.)*
7. *THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE BURLAP.*



PLAN



SECTION "B-B"



SECTION "A-A"

SPLASH PAD DETAIL

(N.T.S.)

MARK SULLIVAN, P.E.
PROFESSIONAL ENGINEER
NO. 41227

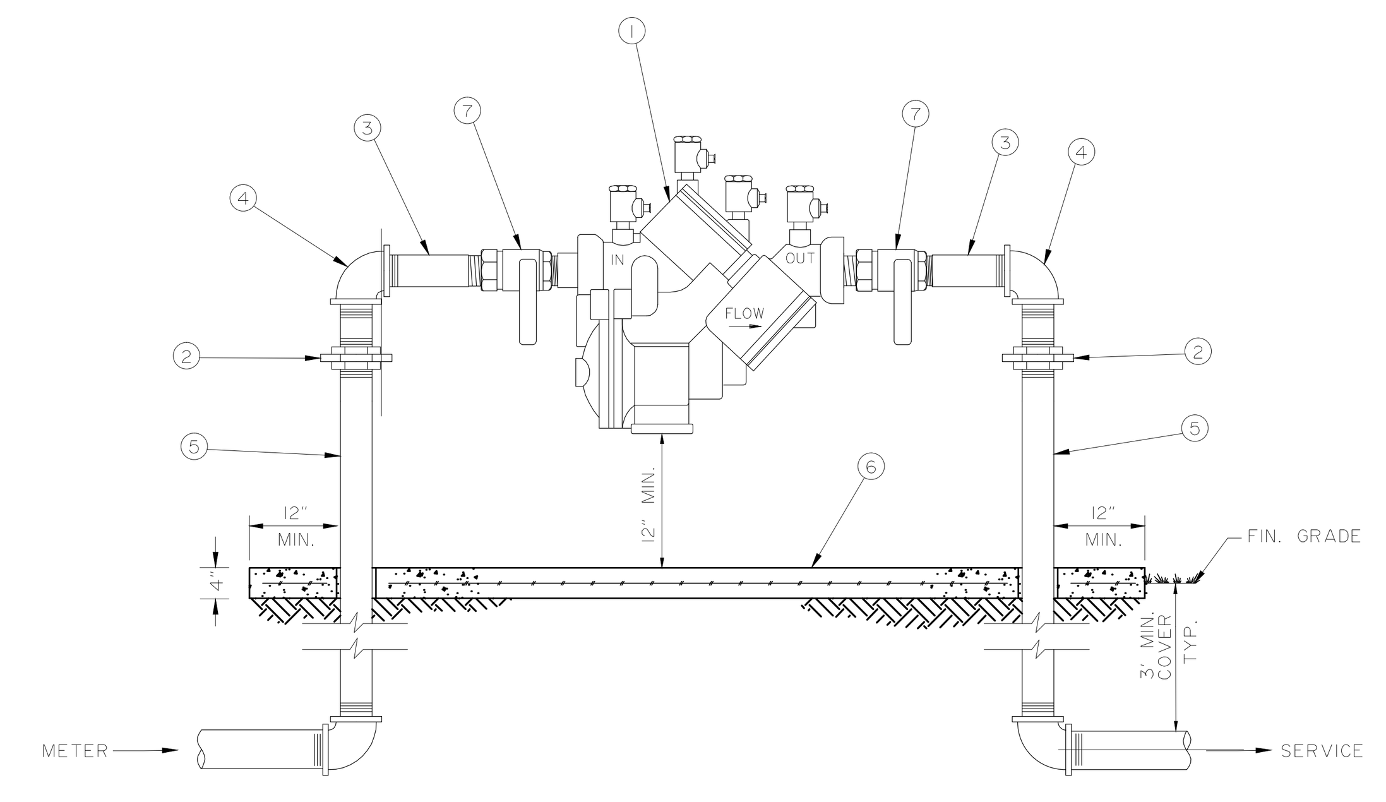
PR. NO.: EI3-030.01	DATE: 3-24-2014	RMB/MOS
DATE	REVISIONS	REVISED BY: CHECKED BY:

FLORIDA ENGINEERING
AND ENVIRONMENTAL SERVICES, INC.
CERTIFICATE OF AUTHORIZATION: EB 5804
4519 George Road Suite 130
Tampa, Florida 33634
Tel (813) 880-9106 Fax (813) 880-9055

TACO BELL
TRINITY
PASCO COUNTY, FLORIDA

STORM SEWER & EROSION CONTROL DETAILS

C9



MATERIALS		
ITEM	QUANT.	DESCRIPTION
1	1	BACKFLOW PREVENTER ASSEMBLY, REDUCED PRESSURE ZONE
2	2	UNIONS - GALV.
3	2	NIPPLES - BRASS
4	2	ELBOWS - GALV. 90°
5	2	RISER - GALV. OR MAY NEED BRASS IN SALT WATER
6	×	CONCRETE SLAB
7	2	BALL VALVES - BRASS OR S.S. (PROVIDED WITH BFP ASS'Y)

NOTE:
- FIELD ADJUST AND CUT ITEM 5 TO THE PROPER LENGTH.
- MINIMUM CLEARANCE OF 24" TO BE MAINTAINED AROUND DEVICE FOR TESTING.
- ENTIRE ASSEMBLY TO BE PAINTED SAFETY BLUE.
- CONCRETE SLAB TO EXTEND 12" MIN. AROUND ENTIRE DEVICE.
- DEVICE MUST BE LISTED WITH THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH.
- NO ABOVE GROUND PLASTIC PIPING

REDUCED PRESSURE BACKFLOW PREVENTER (SINGLE SERVICE: 3/4", 1", 1-1/2", 2")

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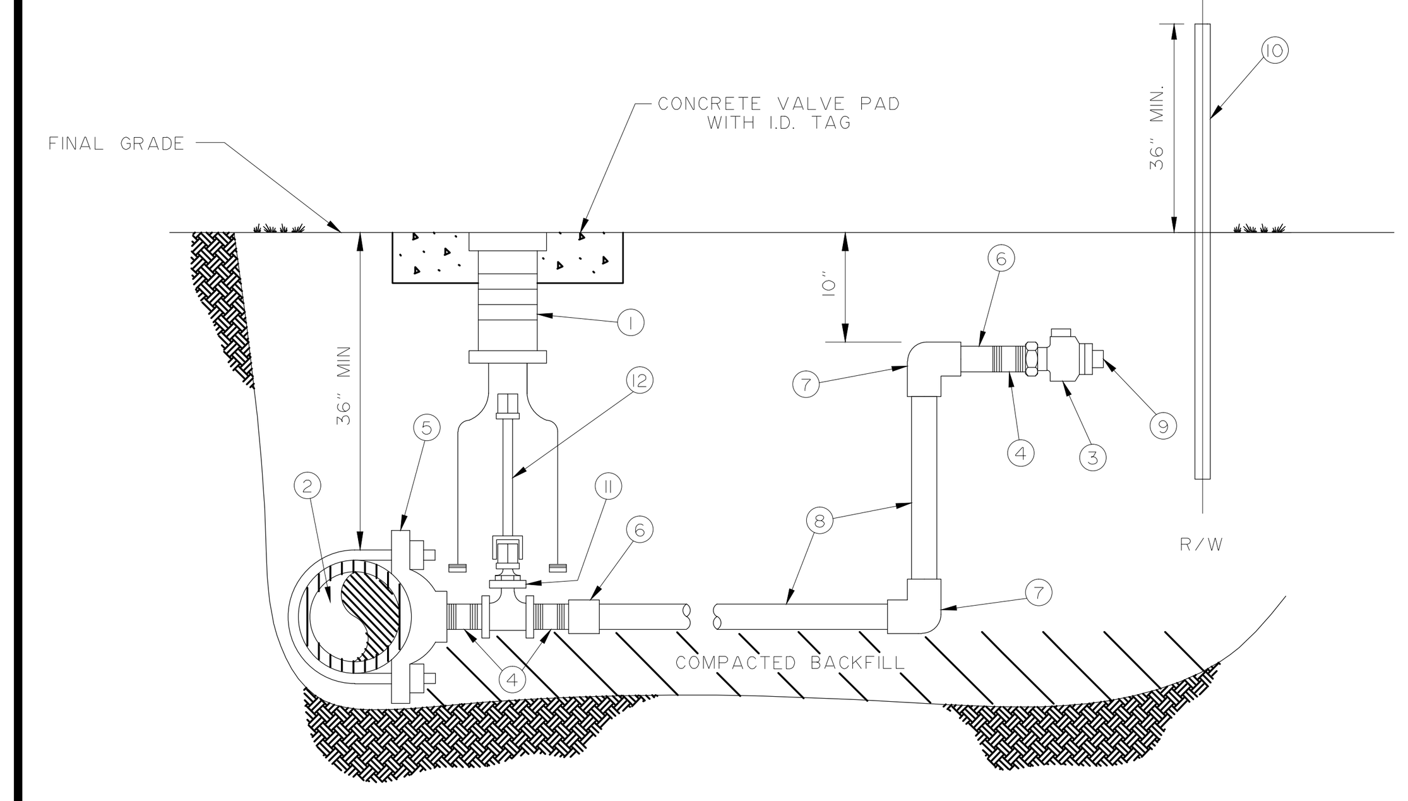
Florida Governmental Utility Authority



MATERIALS		
ITEM	QUANT.	DESCRIPTION
1	1	BOX, VALVE CAST IRON SLIP TYPE
2	*	4" & LARGER PIPE, PVC (DR-18) OR D.I.P. (CLASS 50)
3	2	1 1/2", 2" CURB STOP BALL VALVE W/ LOCK WINGS (FIP x FIP OR FIP x CTS)
4	3	1 1/2", 2" NIPPLE, BRASS OR STAINLESS STEEL
5	1	1 1/2", 2" SADDLE, SERVICE (I.P. THREADS)
6	2	1 1/2", 2" ADAPTER (PVC SCH 40 / SLIP x FPT OR BRASS MIP x CTS)
7	2	1 1/2", 2" 90° ELBOW (SLIP x SLIP) SCH 40 (NOT REQUIRED FOR HDPE)
8	*	1 1/2", 2" PIPE, PVC (SCH 40) OR HDPE (3408) - LENGTH VARIES
9	1	1 1/2", 2" PLUG, THREADED (W/ TEFLON TAPE)
10	1	2" x 4" P.T. MARKER STAKE
11	1	2" GATE VALVE, IRON BODY W/ SQUARE NUT
12	1	VALVE EXTENSION ROD, AS REQUIRED (3' MAX. BELOW GRADE)

NOTE:
- A VALVE BOX SHALL BE REQUIRED ON ALL GATE VALVES.
- SERVICE SADDLES SHALL BE INSTALLED ON ALL TAPS TO P.V.C. (DR-18) WATER MAINS.
- 2" GATE VALVE TO BE RESILIENT WEDGE IRON BODY TYPE WITH 2" OPERATING UNIT.
- SADDLES 4" AND LARGER TO BE DUCTILE IRON DUAL STRAP TYPE.
- 1 1/2" BRASS REDUCER BUSHING REQUIRED WITH ITEM NO. 11 FOR 1 1/2" SERVICE.
- MARKER STAKES PAINTED SAFETY BLUE FOR WATER, PURPLE FOR REUSE.
- 4" DIAMETER CASING REQUIRED FOR ROAD CROSSINGS

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WATER AND REUSE LATERAL SERVICE 1 1/2" OR 2" SERVICE LATERAL PVC (SCHEDULE 40)

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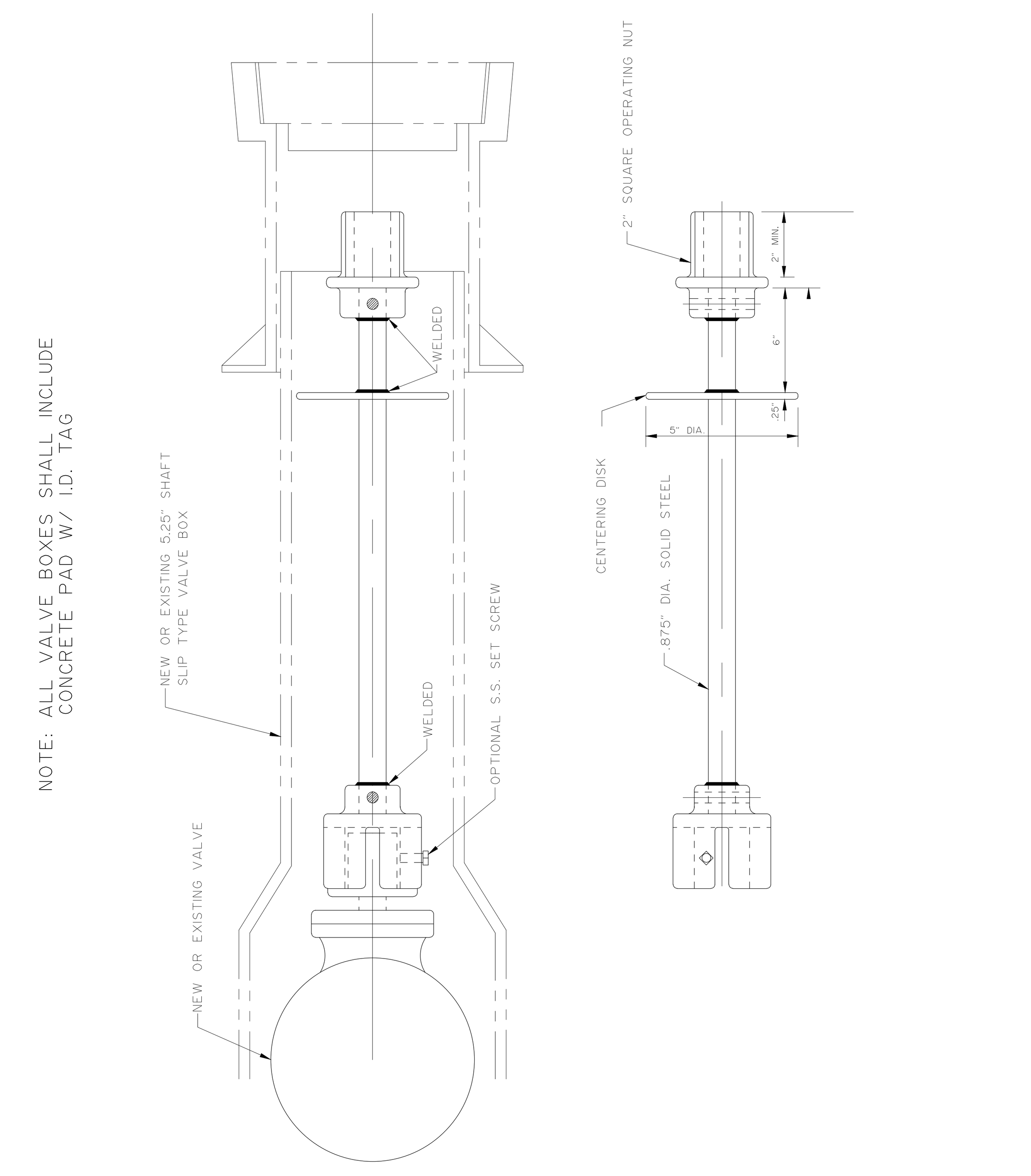
PASCO COUNTY UTILITIES — DETAIL 21

NOTE: ALL VALVE BOXES SHALL INCLUDE CONCRETE PAD W/ I.D. TAG



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VALVE EXTENSION RODS

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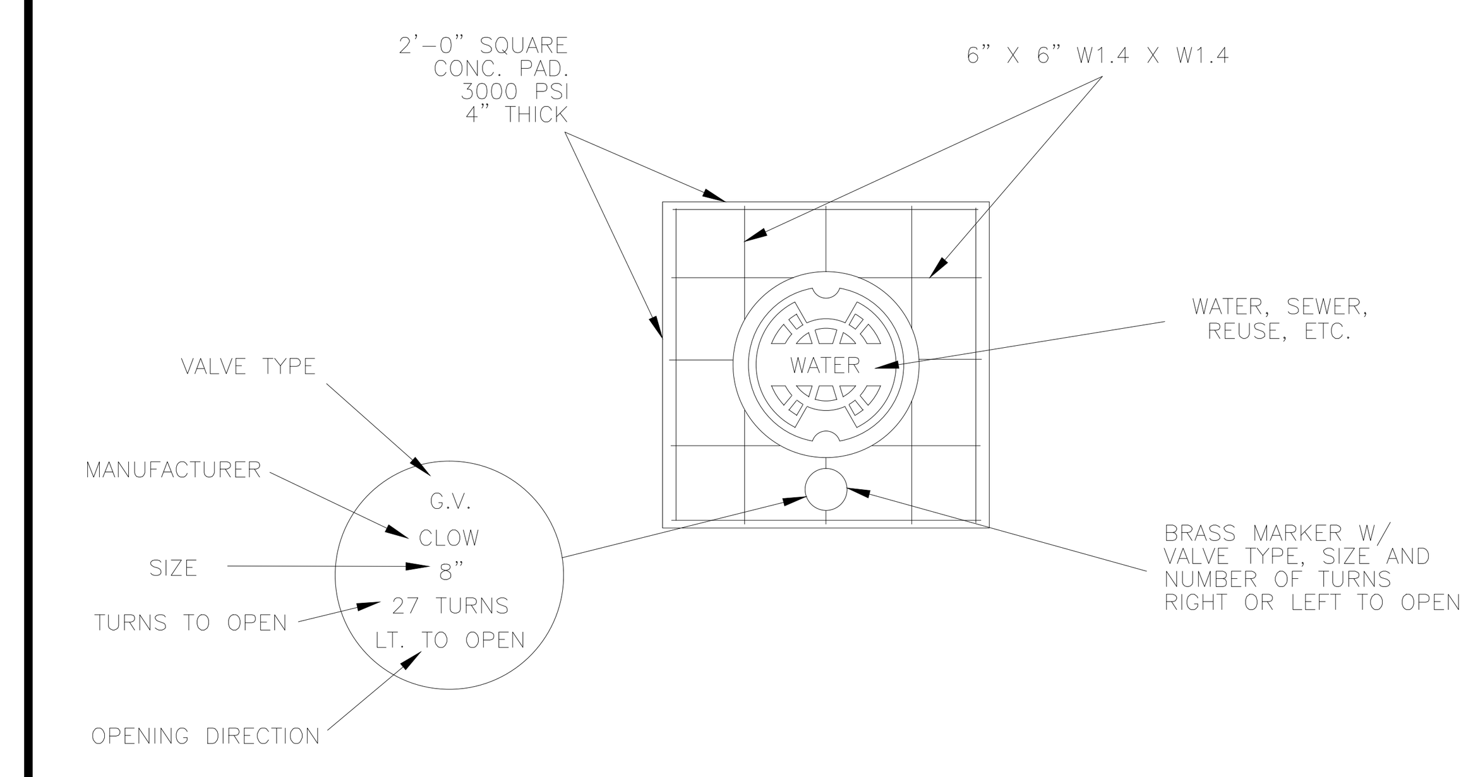
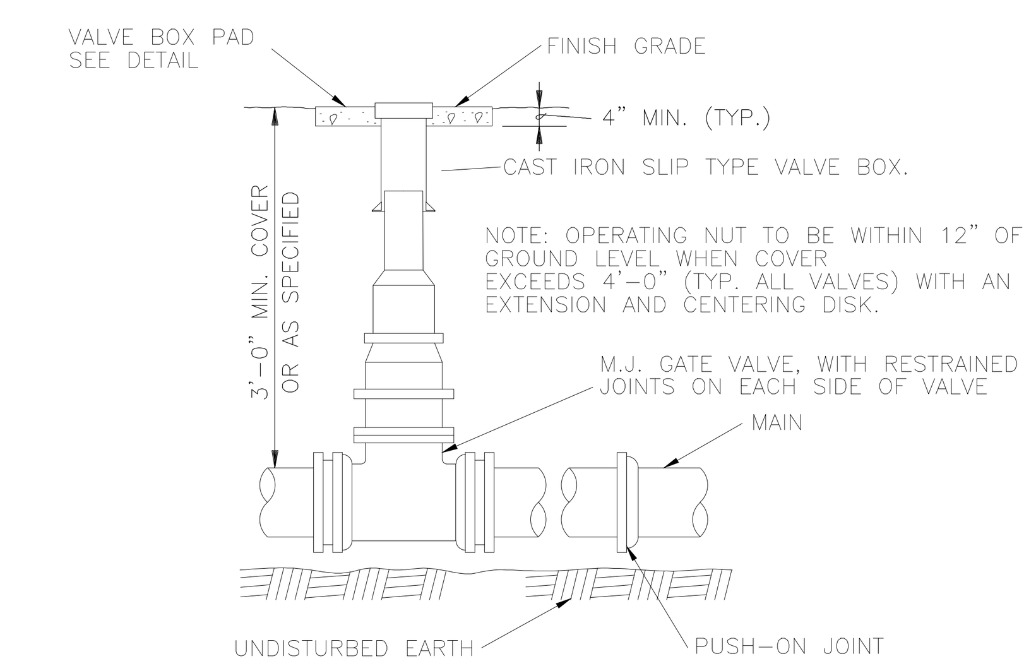
PASCO COUNTY UTILITIES — DETAIL 29



TYPICAL CONCRETE VALVE PAD



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VALVE BOX DETAIL SLIP TYPE

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PASCO COUNTY UTILITIES — DETAIL 30

PIPE RESTRAINT LENGTHS IN FEET COMMON FITTINGS

WATER MAINS - TEST PRESSURE 150 PSI						
		FITTING TYPE				
		11-1/4°	22-1/2°	45°	90°	DEAD END
PIPE SIZE	4"	2'	4'	8'	20'	45'
	6"	3'	6'	12'	28'	63'
	8"	4'	7'	15'	36'	82'
	10"	4'	9'	18'	43'	98'
	12"	5'	10'	21'	50'	116'
	16"	6'	13'	26'	63'	148'
	20"	7'	15'	31'	76'	179'
	24"	9'	17'	36'	87'	208'

FORCE MAINS - TEST PRESSURE 100 PSI						
		FITTING TYPE				
		11-1/4°	22-1/2°	45°	90°	DEAD END
PIPE SIZE	4"	1'	3'	6'	13'	30'
	6"	2'	4'	8'	19'	42'
	8"	2'	5'	10'	24'	55'
	10"	3'	6'	12'	29'	66'
	12"	3'	7'	14'	34'	77'
	16"	4'	8'	18'	42'	99'
	20"	5'	10'	21'	50'	119'
	24"	6'	11'	24'	58'	139'

RESTRAINT LENGTHS ARE MEASURED FROM THE CENTER LINE OF THE FITTING ALONG THE PIPE IN BOTH DIRECTIONS (EXCEPT DEAD ENDS).

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RESTRAINED JOINT TABLE COMMON FITTINGS

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PASCO COUNTY UTILITIES — DETAIL 31

PIPE RESTRAINT LENGTHS IN FEET TEES (BRANCH SIDE)

WATER MAINS - TEST PRESSURE 150 PSI										
		BRANCH SIZE								
		3"	4"	6"	8"	10"	12"	16"	20"	24"
RUN SIZE	3"	6'	14'	30'	—	—	—	—	—	—
	4"	2'	11'	28'	44'	—	—	—	—	—
	6"	1'	2'	22'	40'	52'	—	—	—	—
	8"	1'	1'	16'	35'	48'	62'	—	—	—
	10"	1'	1'	10'	30'	44'	58'	83'	—	—
	12"	1'	1'	3'	25'	40'	55'	80'	103'	—
	16"	1'	1'	1'	14'	31'	48'	75'	98'	119'
	20"	1'	1'	1'	2'	22'	40'	69'	94'	116'
	24"	1'	1'	1'	1'	11'	31'	63'	89'	111'

RESTRAINT LENGTHS ARE MEASURED FROM THE CENTER LINE OF THE TEE ALONG THE BRANCH FOR THE DISTANCE INDICATED. A MINIMUM OF 5 FEET OF RESTRAINED PIPE MUST BE INSTALLED ON BOTH RUNS OF THE TEE. MEGALUG TYPE RESTRAINERS ARE REQUIRED ON ALL JOINTS.

CREATED 02/24/03
REVISED

RESTRAINED JOINT TABLE TEES (BRANCH SIDE)

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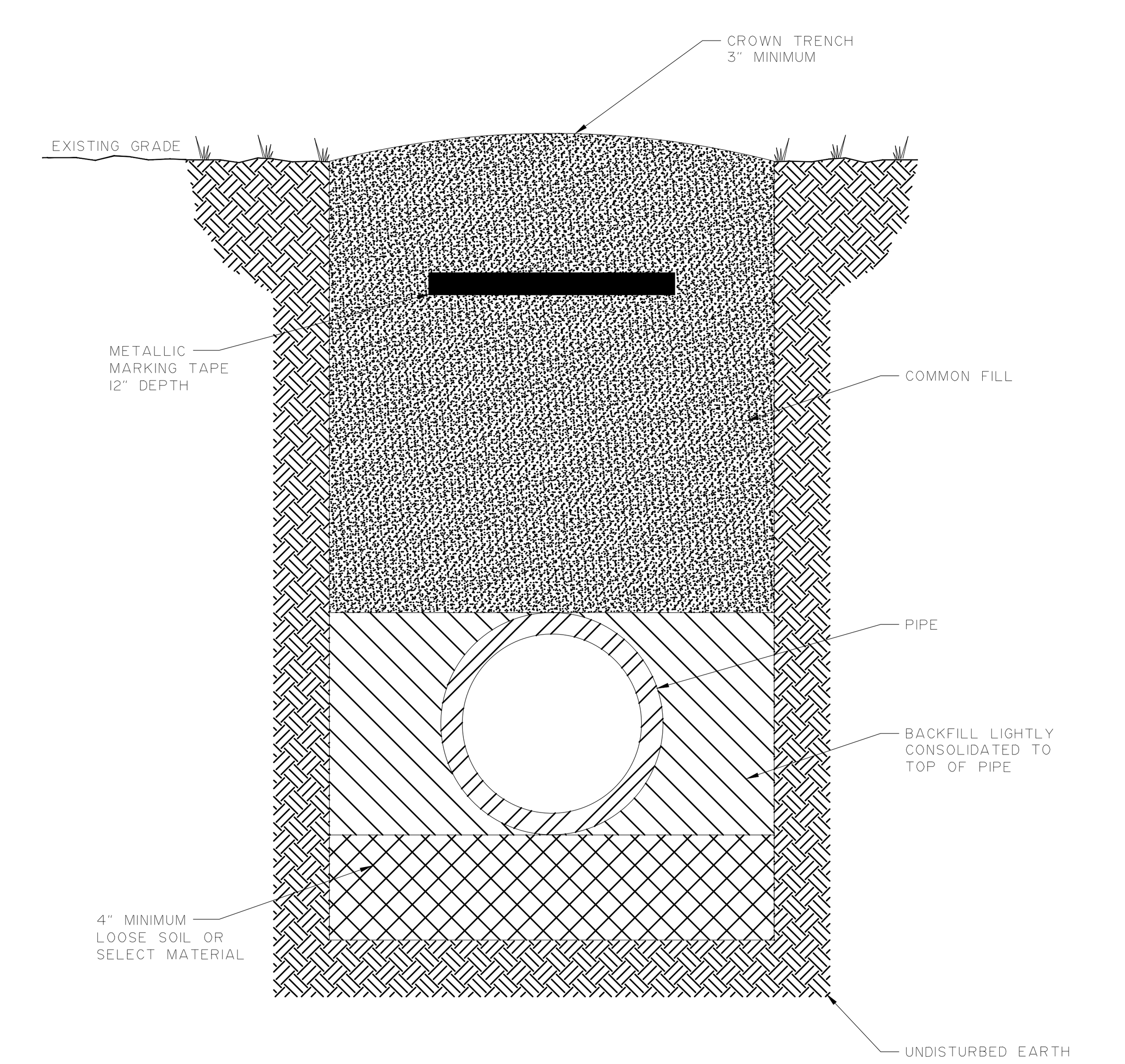
PASCO COUNTY UTILITIES — DETAIL 32



NOTES:
- LOOSE SOIL OR SELECT MATERIAL IS NATIVE SOIL EXCAVATED FROM THE TRENCH FREE OF ROCKS AND FOREIGN MATERIAL.
- COMMON FILL TO BE PLACED AND COMPACTED IN 12" LAYERS. ROLLING EQUIPMENT SHALL NOT BE USED FOR COMPACTION UNTIL A MINIMUM OF 18" OF COMMON FILL HAS BEEN PLACED AND COMPACTED OVER THE PIPE. THREE FEET OF FILL SHALL BE PLACED BEFORE A HYDROHAMMER MAY BE USED FOR COMPACTION.

NTS

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PIPE LAYING CONDITIONS STANDARD UNPAVED AREAS

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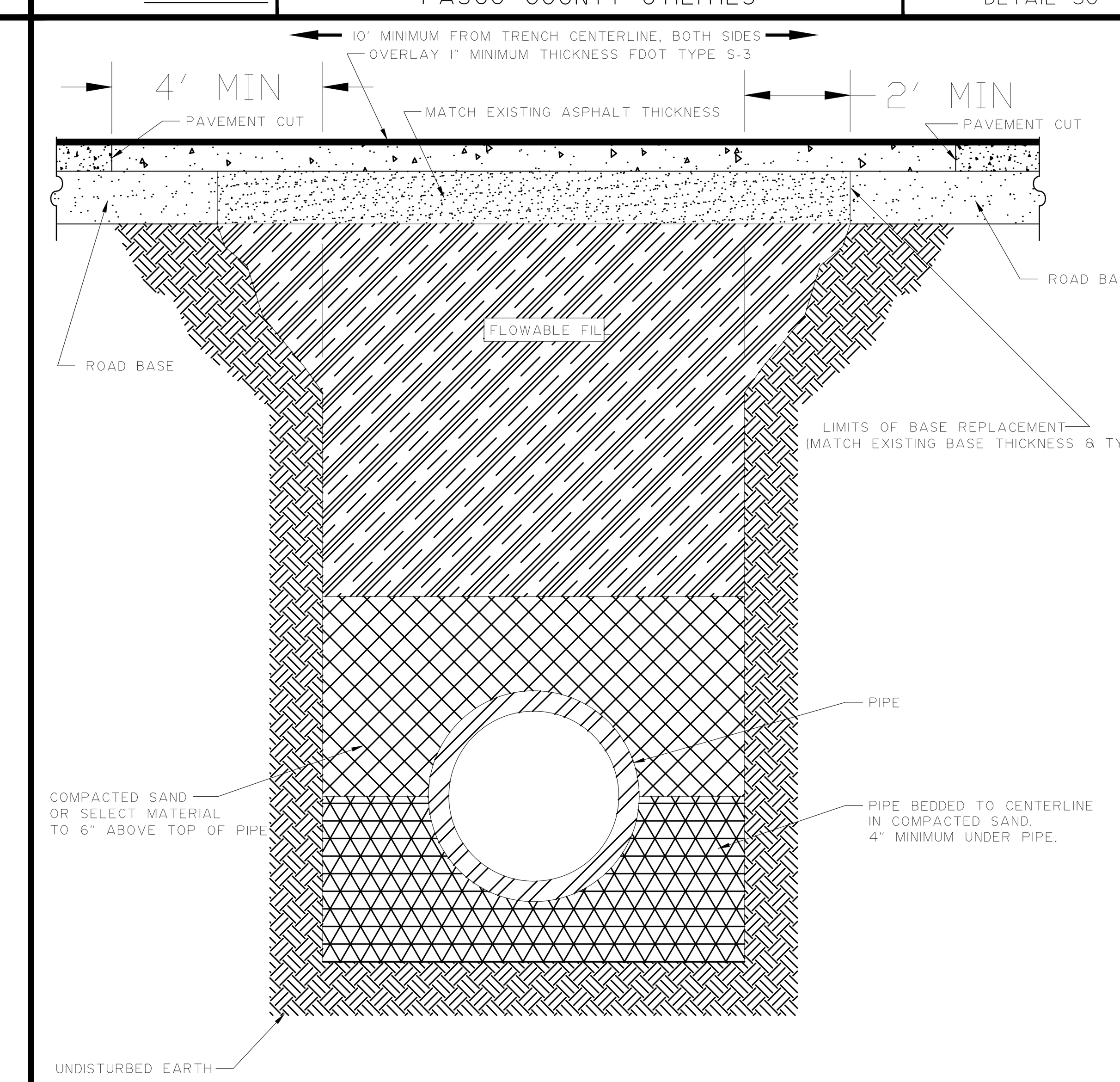
PASCO COUNTY UTILITIES — DETAIL 35



NOTE:
- SELECT MATERIAL IS NATIVE SOIL EXCAVATED FROM THE TRENCH FREE OF ROCKS AND FOREIGN MATERIAL.
- COMPACTION TO TOP OF PILE IS TO BE APPROXIMATELY 90% STANDARD PROCTOR, AASHTO T-99.
- EXISTING CONCRETE/ASPHALT PAVEMENT SURFACE AND BASE TO BE CUT SQUARE WITH CONCRETE SAW.

NTS

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PIPE LAYING CONDITIONS FLOWABLE FILL BACKFILL STANDARD EXISTING PAVED AREAS & ROADWAYS

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PASCO COUNTY UTILITIES — DETAIL 36

811 Know what's below. Call before you dig.

ARMANDO CABRE P.E.
PROFESSIONAL ENGINEER
NO. 66807

PR. NO.: E13-030.07 DATE: 3-24-2014 RMB/AC

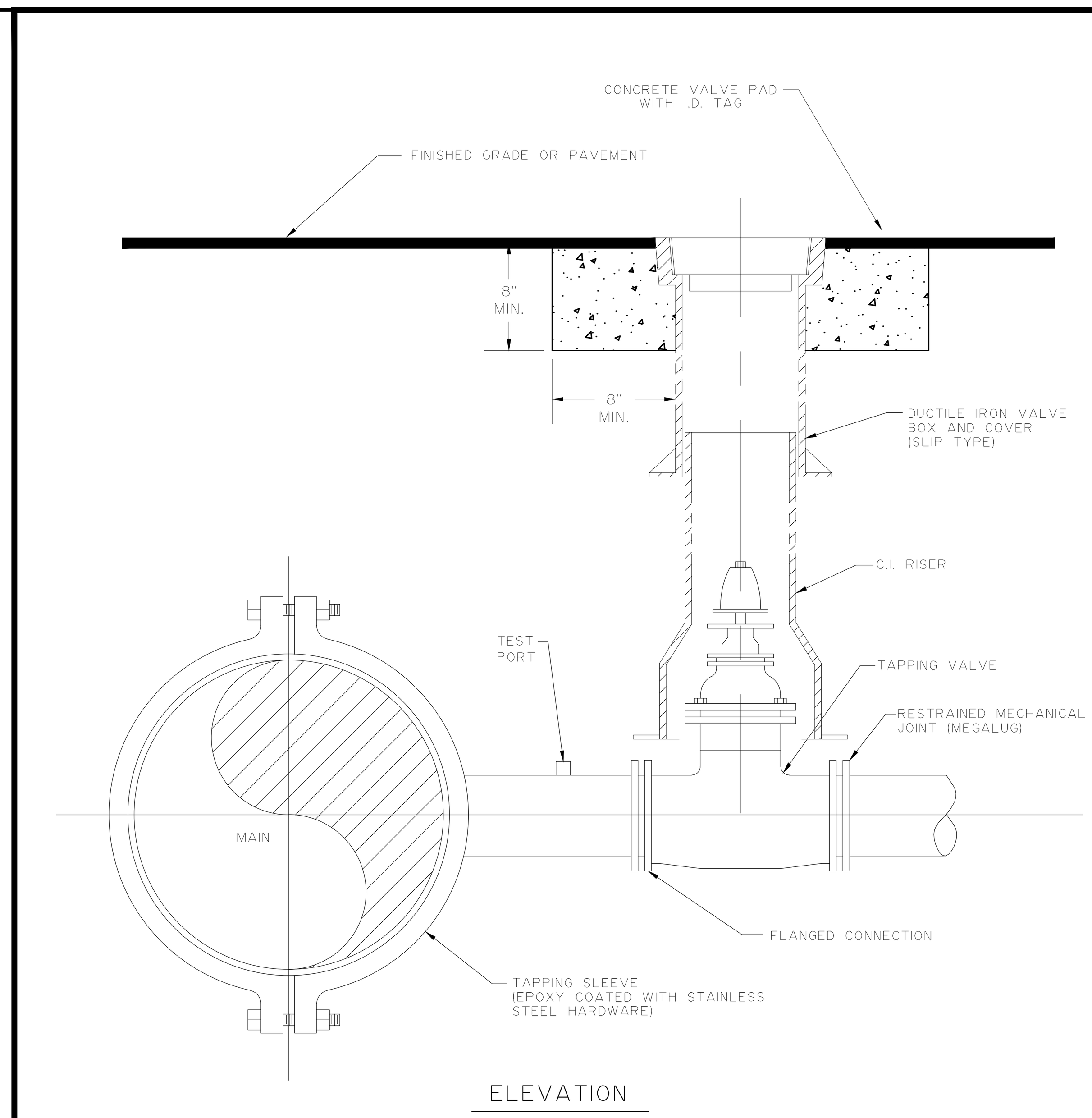
DATE | REVISIONS | REVISED BY: CHECKED BY:

FLORIDA ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
CERTIFICATE OF AUTHORIZATION: EB 5804
4519 George Road Suite 130
Tampa, Florida 33634
Tel (813) 880-9106 Fax (813) 880-9055

TACO BELL TRINITY PASCO COUNTY, FLORIDA

UTILITY CONSTRUCTION DETAILS

C10



ELEVATION

NOTES:

- SADDLE CONNECTION WILL BE TESTED TO 150 PSI PRIOR TO TAPPING MAIN.
- MECHANICAL JOINTS/UNDERGROUND PIPING SHALL BE RESTRAINED AS SPECIFIED BY COUNTY/ENGINEER.
- VALVE EXTENSION ROD SHALL BE UTILIZED, AS NECESSARY, SO THAT VALVE OPERATING NUT IS A MAXIMUM OF 3' BELOW GRADE.

CREATED 02/24/03
REVISED

WATER, REUSE, AND FORCE MAIN
TAPPING DETAIL W/ VALVE LOCATION

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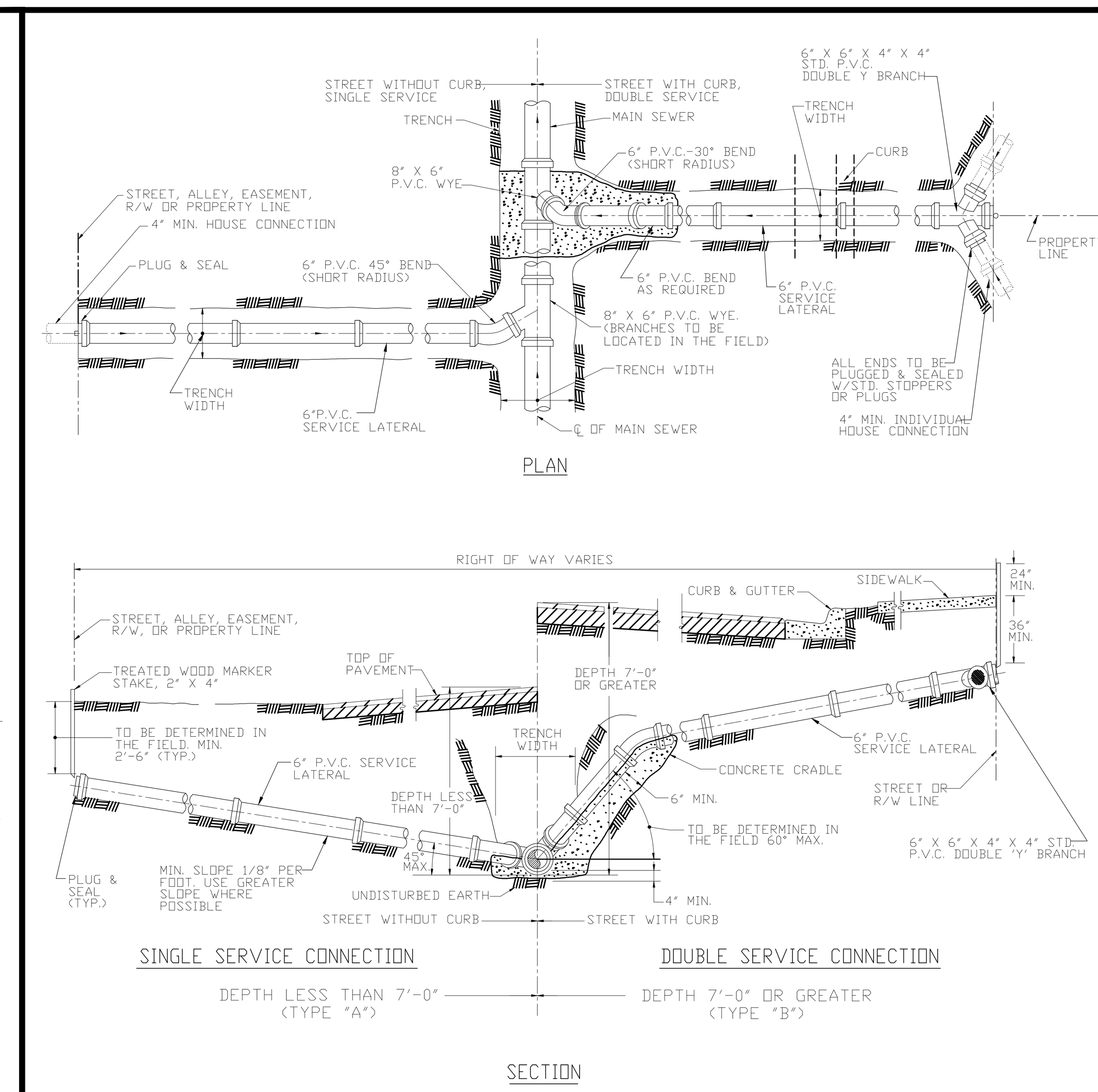
PASCO COUNTY UTILITIES — DETAIL 37



SINGLE SERVICE CONNECTION — DEPTH LESS THAN 7'-0" (TYPE "A")

DOUBLE SERVICE CONNECTION — DEPTH 7'-0" OR GREATER (TYPE "B")

SECTION

NOTE:
- CONTRACTOR SHALL MAKE, ON A CLEAN SET OF PLANS, THE FINAL STATIONING OR DISTANCE AND DIRECTION FROM MANHOLE OF EACH SERVICE LATERAL AND THEN GIVE TO ENGINEER FOR RECORD PURPOSES.
- PROVIDE 2" x 4" PRESSURE TREATED WOOD MARKER STAKE AT ALL SANITARY SERVICES (INCLUDE IN PIPE PRICE), TOP OF STAKE TO BE PAINTED WITH GREEN PAINT.
- THE MINIMUM DIAMETER OF ALL SERVICE LATERALS SHALL BE 6 INCHES.

CREATED 02/24/03
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SEWER LATERAL
CONNECTION

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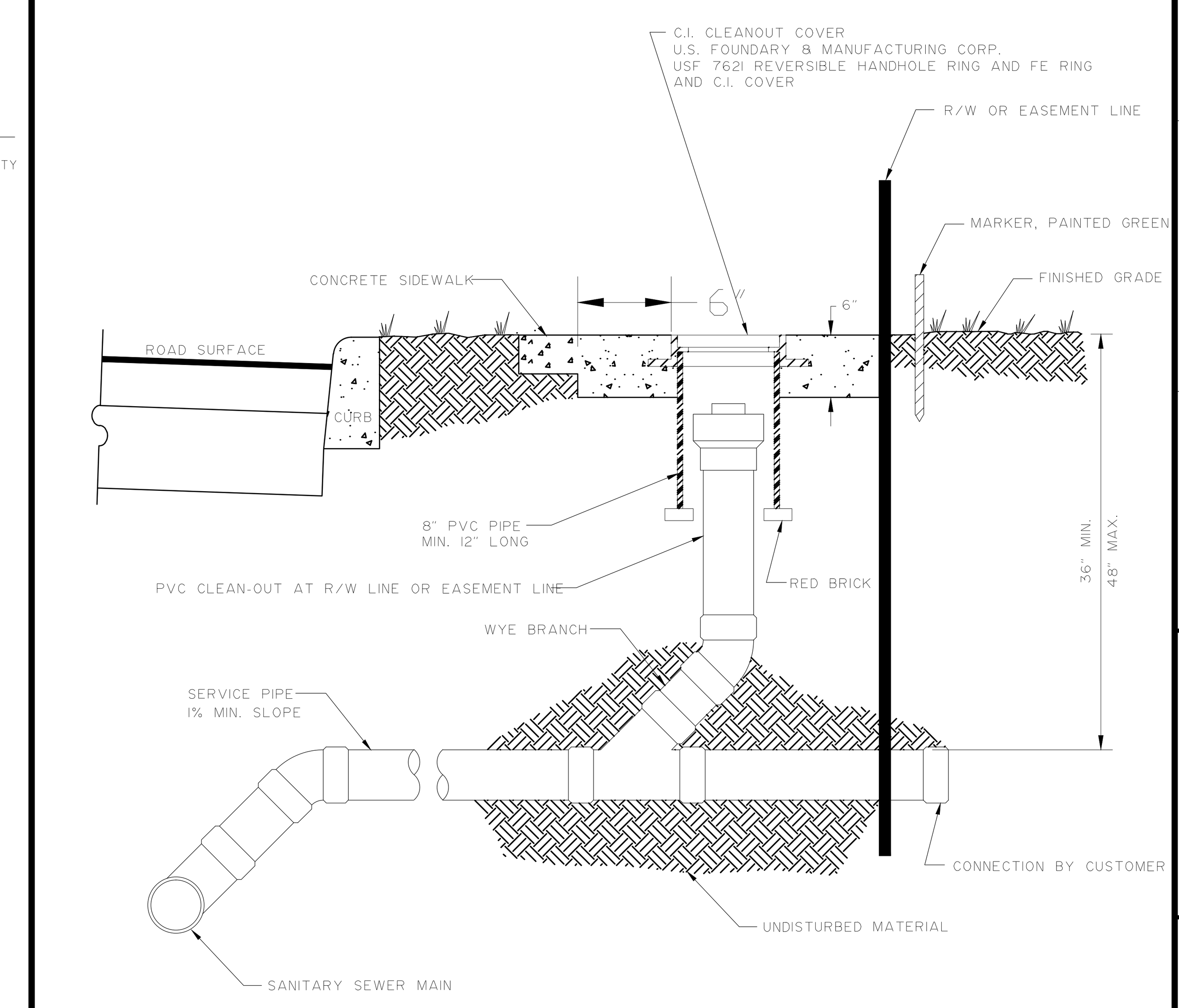
PASCO COUNTY UTILITIES — DETAIL 44



NTS

CREATED 02/24/03
REVISED

SANITARY SEWER - SINGLE WYE CONNECTION
AND TYPICAL CLEAN-OUT

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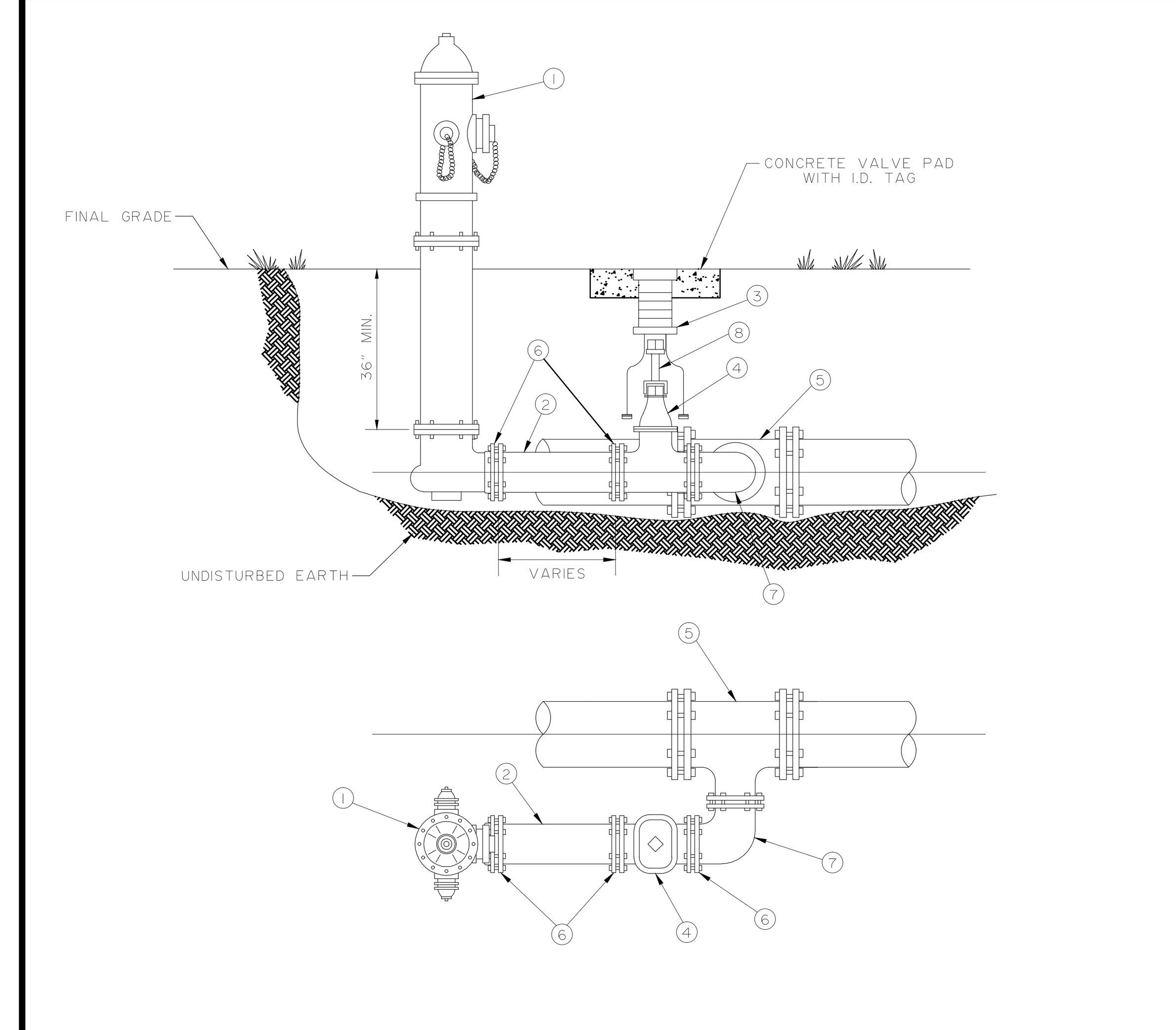
PASCO COUNTY UTILITIES — DETAIL 45



MATERIALS		
ITEM	QUANT.	DESCRIPTION
1	1	HYDRANT, FIRE (5 1/4" VALVE MIN.), PAINTED YELLOW
2	*	6" PIPE, P.V.C. (DR-18)
3	1	BOX, VALVE SLIP TYPE
4	1	6" VALVE, GATE, M.J. RESILIENT WEDGE
5	1	TEE, ANCHORING, M.J.
6	*	6" RESTRAINER GLAND (MEGALUG)
7	1	BEND, ANCHORING, D.I.
8	*	VALVE EXTENSION ROD, AS NECESSARY (3' MAX. BELOW GRADE)

CREATED 02/24/03
REVISED

FIRE HYDRANT
PARALLEL TO THE MAIN

PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN PCU APPROVAL

PASCO COUNTY UTILITIES — DETAIL 26

811 Know what's below. Call before you dig.

ARMANDO CABRE P.E.
PROFESSIONAL ENGINEER
NO. 66807

FLORIDA ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
CERTIFICATE OF AUTHORIZATION: EB 5804
4519 George Road Suite 130
Tampa, Florida 33634
Tel (813) 880-9106 Fax (813) 880-9055

PR. NO.: E3-030.07 DATE: 3-24-2014

DATE	REVISIONS	REVISED BY:	CHECKED BY:
		RMB	AC

TACO BELL TRINITY
PASCO COUNTY, FLORIDA

UTILITY CONSTRUCTION DETAILS

C11

GENERAL LANDSCAPE NOTES

1. All plant material to be Florida #1 or better quality, as specified in the current edition of the IFAS 'Grades and Standards for Nursery Stock'.
2. Tree caliper measurements shall be taken at six (6") inches above natural grade. Measurements for trees over four (4") inches of caliper shall be taken at twelve (12") above natural grade. Diameter breast height (DBH) measurements to be taken at 4.5 feet above natural grade.
3. The Plant Material Schedule included with the Plans is provided only for the Contractor's convenience; it shall not be construed as to conflict or predominate over the Plans.
4. In the event of discrepancies in the quantities shown on the Plant Material Schedule/Bid Form and those shown on the Plans, the Contractor shall bid the quantity shown on the Plant Material Schedule/Bid Form and provide a note as to the quantity shown on the Plans.
5. If a conflict between the Plans and the Specifications exists, the Plans shall predominate and be considered the controlling document.
6. Contractor shall provide documentation of plant 'variety' when specified. Plants specified by Genus and Species alone shall not require documentation.
7. All materials shall be installed as specified on the Plans. If material and labor do not adhere to the Details and Specifications, they will be rejected by the Landscape Architect. Rejected materials will be replaced by the Landscape Contractor at no additional cost.
8. All necessary permits are to be provided by the installing contractor for work shown on the Plans (unless otherwise specifically stated in the Specifications or Bid Documents).
9. The Contractor shall be responsible for verification and protection of all underground and overhead utilities. Plant material shown on the Plans that conflict with the utilities shall be brought to the attention of the Landscape Architect prior to installation.
10. The Owner or Owners Representative shall provide site grading to within 0.1 foot of finish grade. The Contractor shall provide fine grading to produce a positive drainage condition on the site. Surface water shall be directed to engineered drainage structures/swales with smooth grading transitions. Debris larger than 1.5 inches shall be removed from surface of landscape beds and sodded areas.
11. All plant material shall be installed and maintained in the highest standard of workmanship and in accordance with the Details and Specifications. Plant material shall be maintained by the Contractor until Final Acceptance is granted by the Owner.
12. All B&B trees shall have strings, twine or rope removed from the top of the basket. All flagging tape, identification tags, and other objects shall be removed from the plant material prior to calling for a Substantial Completion inspection.
13. Mulch shall be Pine Bark mini-nuggets. Sod shall be 'Argentine' Bahia.
14. The Contractor shall remove existing vegetation necessary to complete the work shown on the plans. Use of herbicide shall be in accordance to manufacturer's recommendations and supervised by licensed applicators. The Contractor is solely responsible for the means to remove existing vegetation and responsible to ensure that re-growth does not occur.
15. The Contractor shall keep a neat and orderly job site. Paved surfaces necessary for egress shall be kept clear of debris. Debris generated by the work shown on the Plans shall be removed from the site.
16. The Contractor shall provide a replacement warranty for trees of one year's duration and shrub/groundcover for three month's duration from Final Acceptance.
17. Sod shall be laid with tight joints. Sodded areas shall be rolled within three days after installation. Contractor shall apply proper irrigation water quantities prior to rolling to insure proper soil/root contact but not produce indentations from pedestrians.
18. All questions concerning the Plans, Details, or Specifications shall be directed to the Landscape Architect, (727-343-1809).

FERTILIZATION SCHEDULE

1. All plant material shall be fertilized upon installation but prior to mulching. Plant material adjacent to open bodies of water shall be mulched immediately following fertilization to reduce translocation of the granules.
2. Fertilizer shall be Scotts Osmocote 'Classic' 19-6-12 in the twelve(12) month release formulation. Contractor may use the Standard or Lo-Start mixes depending on the level of existing fertilizer from plant nursery applications.
3. Each containerized plant shall receive fertilization at the rates shown for each container size. One (1) cup equals two hundred eighty (280) grams of Scotts Osmocote 'Classic' 19-6-12 fertilizer.

1 Gallon Container	15 plants per cup
3 Gallon Container	1/4 cup
7 Gallon Container	1/2 cup
15 Gallon Container	3/4 cup
25 Gallon Container	1-1/2 cups
30 Gallon Container	1-3/4 cups
45 Gallon Container	2-1/4 cups
65 Gallon Container	2-1/4 cups
100 Gallon Container	3 cups

4. Each balled and burlapped plant shall receive one half (0.5) cup of Scotts Osmocote 'Classic' 19-6-12 in the twelve (12) month release formulation for every caliper inch of trunk. One (1) cup equals two hundred eighty (280) grams of Osmocote 'Classic' 19-6-12 fertilizer.
5. Scotts Osmocote 'Classic' 19-6-12 in the twelve (12) month release formulation shall be applied to sodded or seeded areas at a rate of ten (10) pounds per one thousand (1000) square feet.
6. Scotts Osmocote 'Plus' 15-9-12 in the twelve (12) month release formulation shall be applied to palms at a rate of five (5) cups per one hundred (100) square feet of palm canopy. One (1) cup equals two hundred fifty (250) grams of Osmocote 'Plus' 15-9-12 fertilizer. If dripline of palm extends into lawn or other shrub/groundcover areas, the palm fertilizer shall be the only fertilizer applied to the area under the dripline of the palm.

OPTIONAL FERTILIZATION TECHNIQUES

1. The Contractor may substitute Scotts Agriform 20-10-5 Planting Tablets Plus Minors for fertilization of trees, and large containers. The application rate shall be three (3) twenty-one (21) gram tablets per inch of caliper. Use Manufacturer's recommendations for palm fertilizer tablet application rate. Contractor shall notify Landscape Architect of the election to use fertilizer tablets prior to substantial completion inspection.
2. Sodded or seeded areas over one half (0.5) acre may be fertilized (at contractor's choice) with a quick release granular fertilizer with the formulation that delivers three and one half (3.5) pounds of nitrogen, one half (0.5) pound of phosphate and one and one half (1.5) pounds of potash per one thousand (1000) square feet.
3. Palms may be fertilized (at contractor's choice) with Florikan 8-2-12 Plus Magnesium under entire drip line of palm. The application rate to be fifteen (15) pounds per one thousand (1000) square feet.

LANDSCAPE CODE REQUIREMENTS

TREE PROTECTION REQUIREMENTS
NO PROTECTED TREES ARE TO BE REMOVED ON SITE
NO TREE PROTECTION BARRIERS ARE REQUIRED ON SITE- EROSION CONTROL FENCING SHALL PROVIDE PROTECTION TO TREES LOCATED ADJACENT TO THE PROPERTY LINES

VEHICULAR USE AREA (VUA) REQUIREMENTS
TOTAL VUA = 21,500 SQ. FT.
TOTAL LANDSCAPE AREA REQUIRED = 21,500 x 0.1 = 2,150 SQ. FT,
TOTAL LANDSCAPE AREA PROVIDED = 2,790 SQ.FT.
TOTAL VUA SHADE TREES REQUIRED = 11 TREES
TOTAL VUA SHADE TREES PROVIDED = 11 TREES

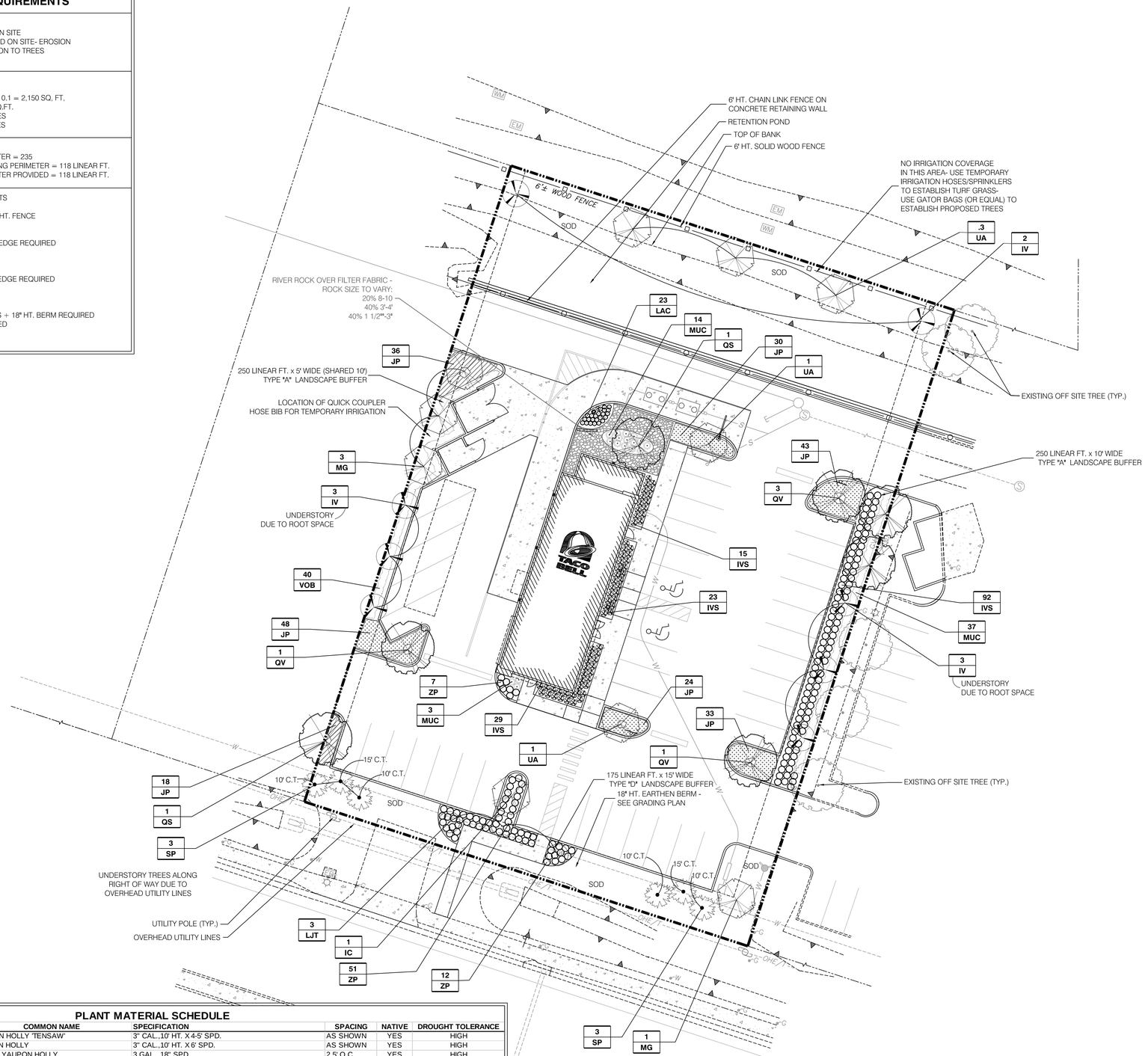
BUILDING PERIMETER REQUIREMENTS
TOTAL LINEAR FOOTAGE OF BUILDING PERIMETER = 235
TOTAL REQUIRED LANDSCAPE AREA AT BUILDING PERIMETER = 118 LINEAR FT.
TOTAL LANDSCAPE AREA AT BUILDING PERIMETER PROVIDED = 118 LINEAR FT.

PERIMETER LANDSCAPE BUFFER REQUIREMENTS
NORTH BUFFER:
175' LINEAR FT. TYPE "B" - 3 TREE + EXISTING 6' HT. FENCE

EAST BUFFER:
250' LINEAR FT. TYPE "A" - 5 TREES + BUFFER HEDGE REQUIRED
5 TREES + BUFFER HEDGE PROVIDED

WEST BUFFER:
250 LINEAR FT. TYPE "A" - 5 TREES + BUFFER HEDGE REQUIRED
5 TREES + BUFFER HEDGE PROVIDED

SOUTH BUFFER:
175 LINEAR FT. TYPE "D" - 6 TREES + 30 SHRUBS + 18" HT. BERM REQUIRED
6 TREES + 63 SHRUBS + 18" HT. BERM PROVIDED



PLANT MATERIAL SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATION	SPACING	NATIVE	DROUGHT TOLERANCE
IC	3	ILEX CASSINE 'TENSAW'	DAHOON HOLLY 'TENSAW'	3" CAL.,10' HT. X 4-5' SPD.	AS SHOWN	YES	HIGH
IV	6	ILEX VOMITORIA	YAUPON HOLLY	3" CAL.,10' HT. X 6' SPD.	AS SHOWN	YES	HIGH
IVS	159	ILEX VOMITORIA SHILLINGS	DWARF YAUPON HOLLY	3 GAL., 18" SPD.	2.5' O.C.	YES	HIGH
JP	232	JUNIPERUS PARSONII	PARSON'S JUNIPER	1 GAL., 10-12" SPD.	2' O.C.	NO	HIGH
LAC	23	LANTANA CAMARA	DWARF YELLOW LANTANA	1 GAL., 12-14" SPD.	18" O.C.	YES	HIGH
LJT	3	LIGUSTRUM JAPONICUM TREE	TREE-FORM LIGUSTRUM	6' HT. X 5' SPD., MULTI TRUNK 3" COMBINED CALIPER	AS SHOWN	NO	LOW
MG	4	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	3" CAL.,10' HT. X 5' SPD.	AS SHOWN	YES	MEDIUM
MUC	54	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	3 GAL., 18-24" SPD.	3' O.C.	YES	MEDIUM
QS	2	QUERCUS SHUMARDII	SHUMARD RED OAK	3" CAL., 10-12' HT. X 5' SPD.	AS SHOWN	YES	MEDIUM
QV	5	QUERCUS VIRGINIANA	LIVE OAK	3" CAL., 12' HT. X 4.5' SPD.,	AS SHOWN	YES	HIGH
SP	6	SABAL PALMETTO	CABBAGE PALM	SEE PLAN FOR C.T. HT.	AS SHOWN	YES	HIGH
UA	5	ULMUS ALATA	WINGED ELM	3" CAL., 10' HT. X 5' SPD.,	AS SHOWN	YES	HIGH
VOB	40	VIBURNUM OBOVATUM	WALTER'S VIBURNUM 'WITHLACOOCHEE'	3 GAL., 24" HT. X 18" SPD.	3' O.C.	YES	HIGH
ZP	70	ZAMIA PUMILA	COONTIE	3 GAL., 16-18" SPD.	2.5' O.C.	YES	HIGH

THIRTY (30) TREES ARE PROVIDED TO OFFSET LAND DEVELOPMENT CODE REQUIREMENTS (SABAL PALMS COUNTED AT 3:1 RATIO)
EIGHT (8) TREE SPECIES ARE PROVIDED TO PROVIDE SPECIES DIVERSITY ON THE SITE

811 Know what's below. Call before you dig.

SCALE: 1" = 20'
NORTH
0 10' 20' 40' 80'

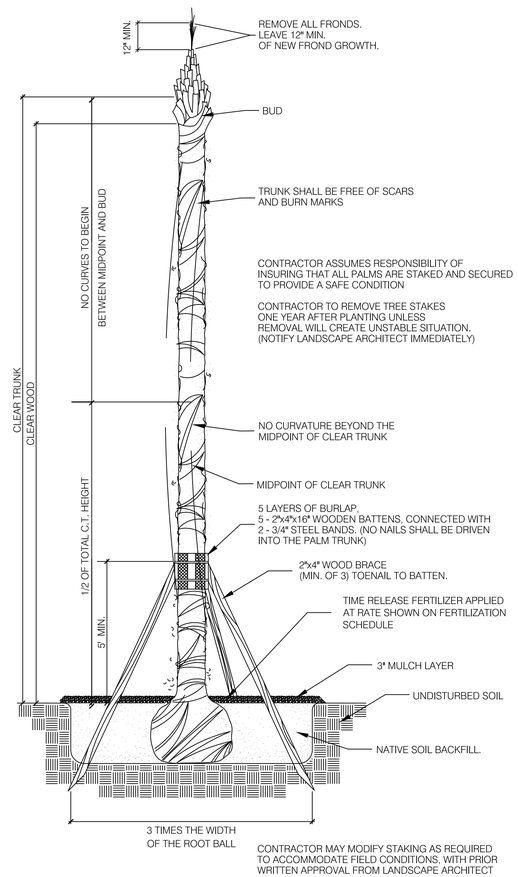
HEARTWOOD and BARK PLC
LANDSCAPE ARCHITECTURE • URBAN DESIGN
7117 Park Street S. St. Petersburg, FL 33707 (727) 343-1809
JACOB ZIMMERMAN, RLA
REG. NO. FL LA 0001653
LANDSCAPE ARCHITECT

TACO BELL
RESTAURANT
STATE ROAD 54
TRINITY, PASCO COUNTY, FL

REVISIONS:
1.
2.
3.
4.

DRAWN BY: JAZ
DATE: 4/16/14
14015

LANDSCAPE PLAN
LS1

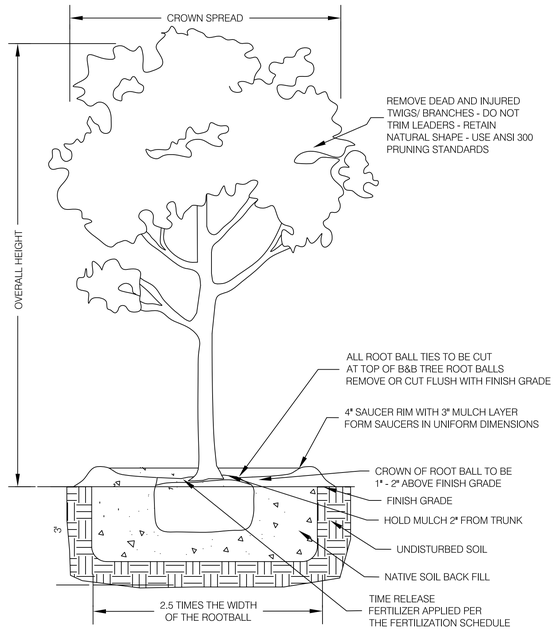


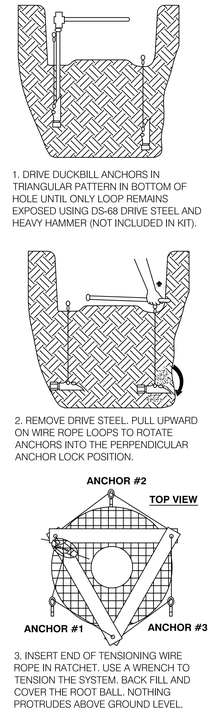
1 LS2 **SABAL PALM PLANTING DETAIL**

NOT TO SCALE

STAKING NOTES:

1. STAKING DETAIL ONLY FOR TREES WITH 3 INCH OR GREATER THAN 3" CALIPER MEASUREMENTS. SEE ALTERNATE STAKING DETAIL FOR TREES LESS THAN 3 INCH CALIPER (SMALL TREE PLANTING/STAKING).
2. DUCKBILL ROOT BALL STRAP ANCHORS MODEL # 68 RBK BY FORESIGHT PRODUCTS, LLC. (800) 325-5360 www.earthanchor.com - OTHER TREE STAKING SYSTEMS MAY BE ACCEPTABLE IF APPROVED BY THE LANDSCAPE ARCHITECT.
3. LANDSCAPE CONTRACTOR SHALL REMOVE STAKING AND GUYING MATERIALS AFTER ONE GROWING SEASON.
4. STAKING TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.



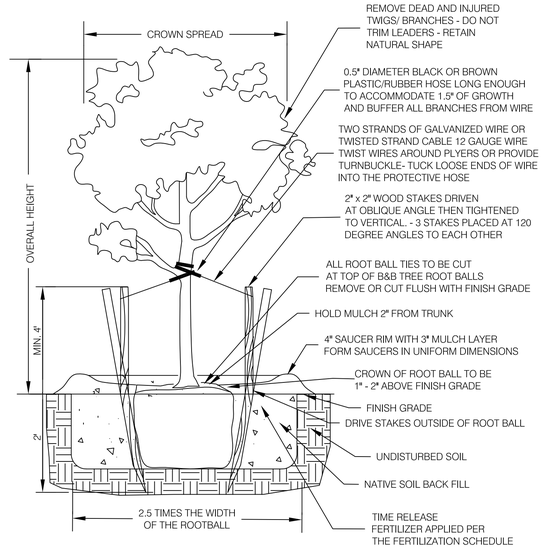


2 LS2 **LARGE TREE PLANTING DETAIL (3" OR GREATER CALIPER)**

NOT TO SCALE

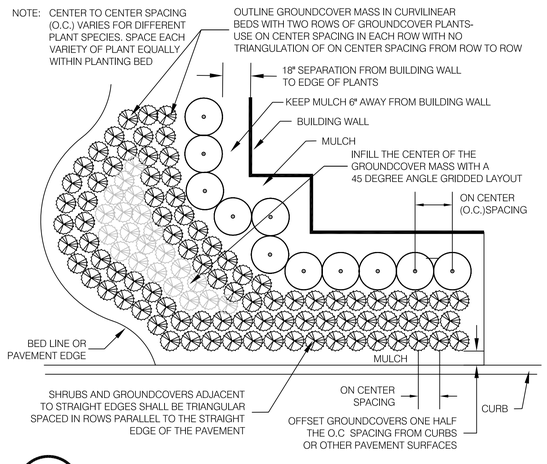
NOTES:

1. STAKING DETAIL ONLY FOR TREES WITH LESS THAN 3" CALIPER MEASUREMENTS. SEE ALTERNATE STAKING DETAIL FOR TREES 3 INCH OR GREATER CALIPER (LARGE TREE PLANTING/STAKING).
2. OTHER TREE STAKING SYSTEMS MAY BE ACCEPTABLE IF APPROVED BY THE LANDSCAPE ARCHITECT (727) 343-1809.
3. LANDSCAPE CONTRACTOR SHALL REMOVE STAKING AND GUYING MATERIALS AFTER ONE YEAR.



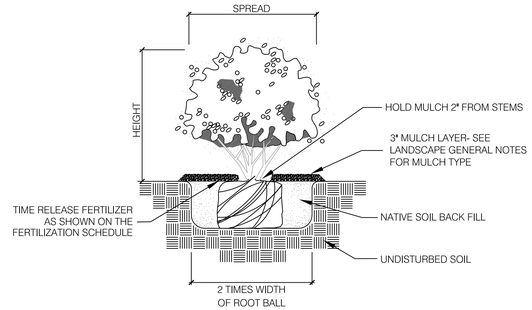
3 LS2 **SMALL TREE PLANTING DETAIL (<3" CALIPER)**

NOT TO SCALE



LS2 4 **SHRUB AND GROUNDCOVER LAYOUT DETAIL**

NOT TO SCALE



5 LS2 **SHRUB & GROUNDCOVER PLANTING DETAIL**

NOT TO SCALE

HEARTWOOD and BARK PLC
LANDSCAPE ARCHITECTURE • URBAN DESIGN
717 Park Street S. St. Petersburg, FL 33707 (727) 343-1809

TACO BELL

RESTAURANT
STATE ROAD 54
TRINITY, PASCO COUNTY, FL

REVISIONS:
1.
2.
3.
4.

JACOB ZIMMERMAN, RLA
REG. NO. FL LA 0001653
LANDSCAPE ARCHITECT

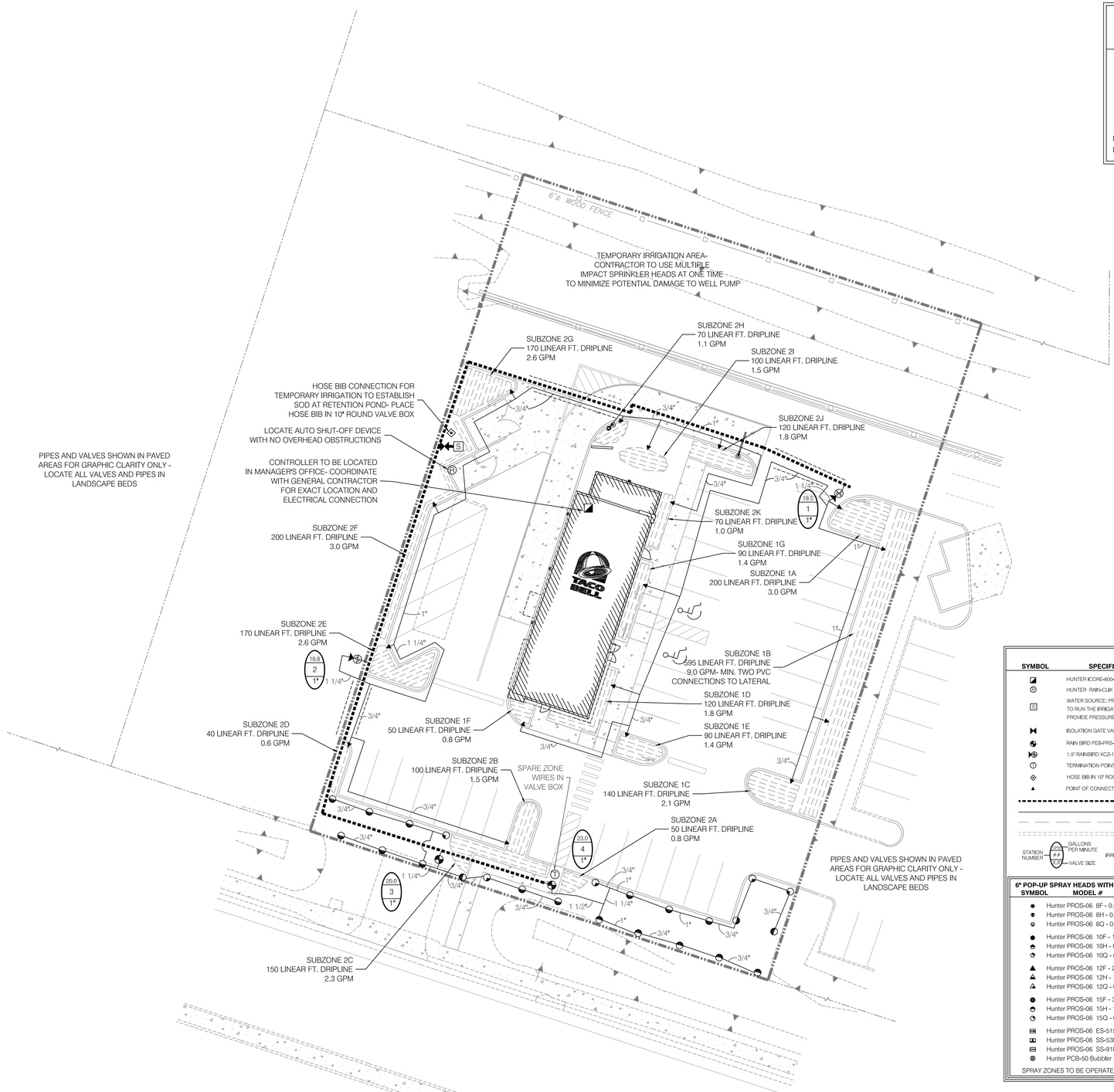
DRAWN BY: JAZ
DATE: 4/16/14
14015

LANDSCAPE DETAILS
LS2

GENERAL IRRIGATION NOTES

1. The Contractor shall provide a fully functional irrigation system as shown on the Plans. Irrigation heads shall provide 100% coverage of the area to be irrigated.
2. The source of water for the irrigation system shall be: PROPOSED 4" WELL
3. The Contractor shall field verify the capability of the water source to deliver a minimum pressure (30 PSI) and volume (35 GPM) to operate the irrigation systems as designed. In the event of discrepancies contact the Landscape Architect prior to installation.
4. All questions concerning the Plans, Details or Specifications shall be directed to the Landscape Architect, (727) 343-1809.
5. All necessary permits (Including Right of Way Use Permit) are to be provided by the installing contractor for work shown on the Plans.
6. All components of the proposed irrigation system shall meet the federal, state and local codes, regulations and ordinances concerning irrigation construction.
7. In an effort to create graphic clarity, irrigation mainline, lateral line, valves and other components of the irrigation system may be shown in paved areas or inside buildings on the Plans. These components are to be installed in appropriate landscape areas to carry out the intent of the Plans.
8. The Contractor shall be responsible for verification and protection of all underground and overhead utilities.
9. The Contractor shall review the Landscape Plans prior to installing the irrigation system. Coordinate installation locations of pipes, valves and other equipment with the installation locations of trees and shrubs.
10. As-Built drawings are to be provided by the Contractor. Drawings shall be on Owner furnished base plans in hard copy or electronic versions. Contractor shall note all deviations from the Irrigation Plans as noted in Section 32 8423 of the Specifications.
11. Mainline is to be installed with a minimum of 18" depth of cover, and lateral lines are to be installed with a minimum of 12" depth of cover.
12. Sleeving is to be provided by the Contractor (unless otherwise specifically stated in the Specifications or Bid Documents).
13. The Contractor shall provide operating maintenance instructions and operation manuals to the Owner prior to acceptance of the project.
14. Owner shall provide 110 Volt power to the controller location. Electrical connection from power source to control clock is to be provided by the Contractor (unless otherwise specifically stated in the Specifications or Bid Documents). Contractor shall coordinate installation location of control clock with Owner or Owner's Representative.
15. When the irrigation system Source is a proposed well, the well and pump locations shall be coordinated with the Owner or Owner's Representative prior to installation. The Owner shall provide power to the pump location. Contractor shall coordinate voltage and phase of available power with the local electrical utility and the Owner prior to ordering of the pump. Contractor shall coordinate pump ordering lag time with the irrigation and landscape work schedules to ensure timely supply of water to the project site.
16. Contractor shall install an inline 120VAC-15A lightning surge protector between the power source and the controller. Ground each controller to a 5/8" x 8' copper clad ground rod with AWG #6 bare solid copper wire. A proper ground shall have 10 ohms or less resistance to earth. Use of multiple ground rods may be necessary to achieve the desired resistance reading.
17. Contractor shall label location and head type for each zone in the irrigation system on the inside of the controller door. Suggested zone run time shall be indicated. All zone valves shall have permanent (plastic or metal) tags attached to the valve corresponding to the number of the zone on the controller.
18. Control Clocks shall be programmed to include a watering schedule that provides 1" of water per week during the months April to November and provides 1" of water every two weeks during the months December to March. The zone run time shall be sequenced for the local watering restrictions as Program 'A'. Program 'B' shall be set as the water establishment period watering schedule in cooperation with the Landscape Contractor.
19. The rain shut-off device shall be installed to meet local codes. Contractor shall locate device so that obstructions do not alter the accurate monitoring of rainfall at the project site. All wiring to the device shall be enclosed in 1/2" PVC electrical conduit.
20. 12" pop-up spray (or rotor) heads shall be installed in all groundcover beds and masses of shrubs not exceeding 22 inches height.
21. 6" pop-up spray heads shall be installed in all turf areas. Rotor heads in turf areas to be 6" pop-ups with the exception of Hunter PGP Series (4").
22. All Hunter PGJ and PGP Rotor and Spray heads shall have heavy walled PVC IPS flex pipe for the connection between lateral line and each head. Provide adequate slack for minor head adjustment. All Hunter I-20 Rotor heads shall have rigid PVC swing joints. See Details for Shrub Riser and 12" pop-up head applications.
23. The Contractor shall adjust all heads to provide optimum coverage and minimize overthrow onto paved surfaces. Adjustable nozzles shall be used in areas where fixed spray patterns will result in overthrow onto paved surfaces. Adjust pressure regulating valves to prevent misting from heads.
24. Valve boxes shall be sized to accommodate installation and maintenance of zone valve(s). The valve box shall have a 3" deep layer of 1/2" diameter gravel as a sump installed 2" below the bottom of the valve. Valve boxes shall be installed so that the top of the box is no more than 1.5 inch above finish grade and set parallel to the surrounding grade.
25. All 24 Volt control wiring shall be UL Listed, single strand, Type UF 600 Volt control cable. Common wires to be white,AWG #12 or larger wire. Hot wires to be red, AWG #14 or larger wire. Spare wires to be any color wire except green, red or white, AWG #14 or larger wire.
26. All splices to the 24 Volt control wiring shall be made with King Technology (King 6) silicone filled safety connectors.
27. Shrub risers shall only be installed in hedges or mass plantings abutting vertical walls or objects and not extend more than 6" above the height of the shrubs. In no case shall risers be installed directly adjacent to curbs, sidewalks or other vehicular access ways. If risers are to be used in hedges abutting parking areas without concrete wheel stops, they must be placed a minimum of 30 inches away from the edge of pavement to protect the riser from damage by vehicular overhang. All risers are to be painted black.
28. Mainline piping shall have thrust blocks sized and placed in accordance with the pipe manufacturer's recommendations. Thrust blocks shall be installed at all changes in direction, reduction in pipe size, and end caps on the Mainline.
29. Irrigation Systems designed with Reclaimed Water as the Source shall include purple marking caps for all valve boxes, valves, quick couplers, hose bibs and spray or rotor heads. Purple pipe is not required but acceptable for installation. Rainbird PESBR-PRS-D zone valves with self cleaning scrubber shall be used on all systems connected to Reclaimed Water.

PIPES AND VALVES SHOWN IN PAVED AREAS FOR GRAPHIC CLARITY ONLY - LOCATE ALL VALVES AND PIPES IN LANDSCAPE BEDS



IRRIGATION ZONE SCHEDULE

ZONE #	GPM	HEAD TYPE	WATER USAGE ZONE
1	18.8	DRIPLINE	LOW
2	19.5	DRIPLINE	LOW
3	20.0	SPRAY	HIGH
4	23.0	SPRAY	HIGH
5	SPARE WIRE		
6	SPARE WIRE		

NOTE: DRIPLINE ZONES DO NOT INCLUDE GPM FOR DBC-025 EMITTERS
PROVIDE TWO (2) EMITTERS PER TREE SHOWN ON LANDSCAPE PLAN

IRRIGATION LEGEND

SYMBOL	SPECIFICATION
	HUNTER ICORE-600-PL IRRIGATION CONTROLLER (SEE GENERAL IRRIGATION NOTES FOR INSTRUCTIONS)
	HUNTER RAIN-CLIK - RAIN SENSOR
S	WATER SOURCE: PROPOSED 4" WELL - CONTRACTOR SHALL SIZE WELL PUMP TO PROVIDE ADEQUATE PRESSURE AND VOLUME TO RUN THE IRRIGATION SYSTEM SHOWN ON THE PLANS. PROVIDE NEMA 3R SIZE 1 PANEL WITH 1CE CUBE PUMP START RELAY. PROVIDE PRESSURE TANK AND CYCLE STOP VALVE.
	ISOLATION GATE VALVE - LINE SIZE
	RAIN BIRD PEB-PRS-D 24 VOLT REMOTE CONTROL VALVE (SEE IRRIGATION ZONE TAG FOR VALVE SIZE)
	1.5" RAINBIRD XCZ-150-COM PESB-PRS-D VALVE WITH (2) RAINBIRD 150 MESH BASKET FILTERS(QKCHK-150M)
	TERMINATION POINT OF SPARE ZONE WIRE FROM CONTROLLER
	HOSE BIB IN 10" ROUND VALVE BOX
	POINT OF CONNECTION - PVC TO DRIP TUBING
	MAINLINE: 1 1/2" SCHEDULE 40 PVC
	LATERAL LINE: MINIMUM 160 PSI PVC (MINIMUM PIPE SIZE TO BE 3/4")
	RAIN BIRD #XFD-09-12 IN-LINE PRESSURE COMPENSATING DRIP TUBING (1.5 GPM/100' TUBING)
	SLEEVING: SCHEDULE 40 PVC (TWO NOMINAL SIZES LARGER THAN PIPE TO BE SLEEVED)
STATION NUMBER ## / ##	GALLONS PER MINUTE; VALVE SIZE; IRRIGATION ZONE TAG

6" POP-UP SPRAY HEADS WITH PLASTIC RISER SYMBOL	MODEL #
	Hunter PROS-06 8F - 0.97 GPM
	Hunter PROS-06 8H - 0.47 GPM
	Hunter PROS-06 8Q - 0.24 GPM
	Hunter PROS-06 10F - 1.59 GPM
	Hunter PROS-06 10H - 0.88 GPM
	Hunter PROS-06 10Q - 0.42 GPM
	Hunter PROS-06 12F - 2.70 GPM
	Hunter PROS-06 12H - 1.30 GPM
	Hunter PROS-06 12Q - 0.67 GPM
	Hunter PROS-06 15F - 3.75 GPM
	Hunter PROS-06 15H - 1.86 GPM
	Hunter PROS-06 15Q - 0.97 GPM
	Hunter PROS-06 ES-515 - .65 GPM
	Hunter PROS-06 SS-530 - 1.30 GPM
	Hunter PROS-06 SS-918 - 1.72 GPM
	Hunter PCB-50 Bubbler - 0.5 GPM

SPRAY ZONES TO BE OPERATED AT 30 PSI

6" POP-UP ROTOR HEADS WITH STAINLESS STEEL RISER SYMBOL	MODEL #
18' O.C. SPACING WITH SHORT RADIUS NOZZLES (BLACK # 466100)	
	Hunter I-20-36S-2.0SR 2.0 Short Radius Nozzle 2.00 GPM
	Hunter I-20-ADS-1.0SR 1.0 Short Radius Nozzle 1.00 GPM
	Hunter I-20-ADS-0.5SR 0.5 Short Radius Nozzle 0.50 GPM
25' O.C. SPACING WITH SHORT RADIUS NOZZLES (BLACK # 466100)	
	Hunter I-20-36S-3.0 3.0 Short Radius Nozzle 3.0 GPM
	Hunter I-20-ADS-1.5 1.5 Short Radius Nozzle 1.5 GPM
	Hunter I-20-ADS-0.75 0.75 Short Radius Nozzle 0.75 GPM
40' O.C. SPACING WITH STANDARD NOZZLES	
	Hunter I-20-6P-36S-8.0 8.0 Nozzle 8.50 GPM
	Hunter I-20-6P-ADS-4.0 4.0 Nozzle 4.25 GPM
	Hunter I-20-6P-ADS-3.0 3.0 Nozzle 3.25 GPM
	Hunter I-20-6P-ADS-1.5 1.5 Nozzle 1.65 GPM

ROTOR ZONES TO BE OPERATED AT 50 PSI

811 Know what's below. Call before you dig.

SCALE: 1" = 20'

NORTH

0 10' 20' 40' 80'

JACOB ZIMMERMAN, RLA
REG. NO. FL LA 0001653
LANDSCAPE ARCHITECT

HEARTWOOD and BARK PLC
LANDSCAPE ARCHITECTURE • URBAN DESIGN
717 Park Street S. St. Petersburg, FL 33707 (727) 343-1809

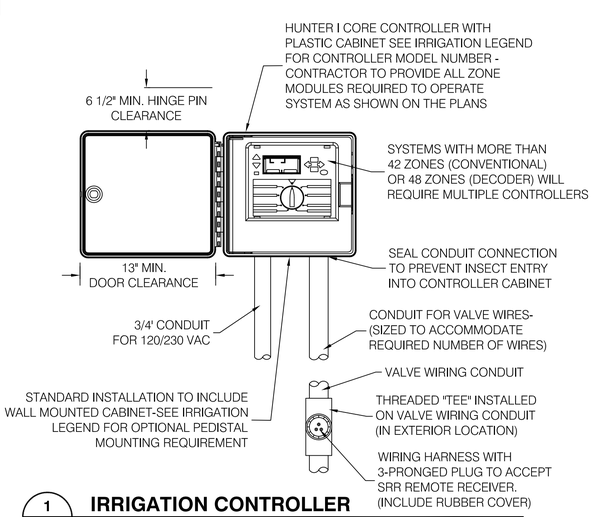
TACO BELL

RESTAURANT
STATE ROAD 54
TRINITY, PASCO COUNTY, FL

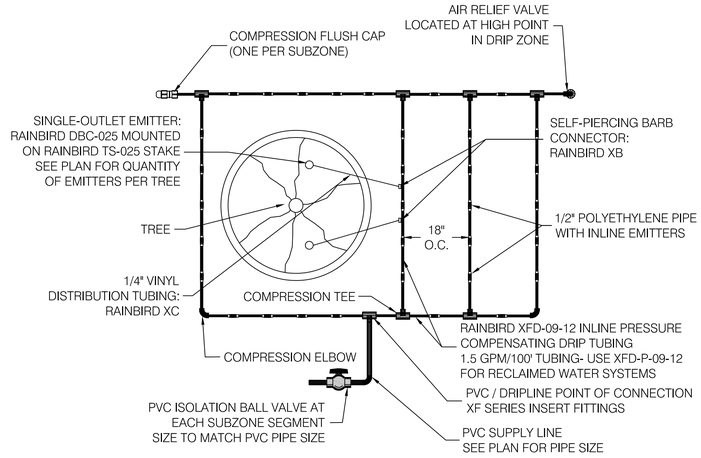
REVISIONS:
1.
2.
3.
4.

DRAWN BY: JAZ
DATE: 4/16/14
14015

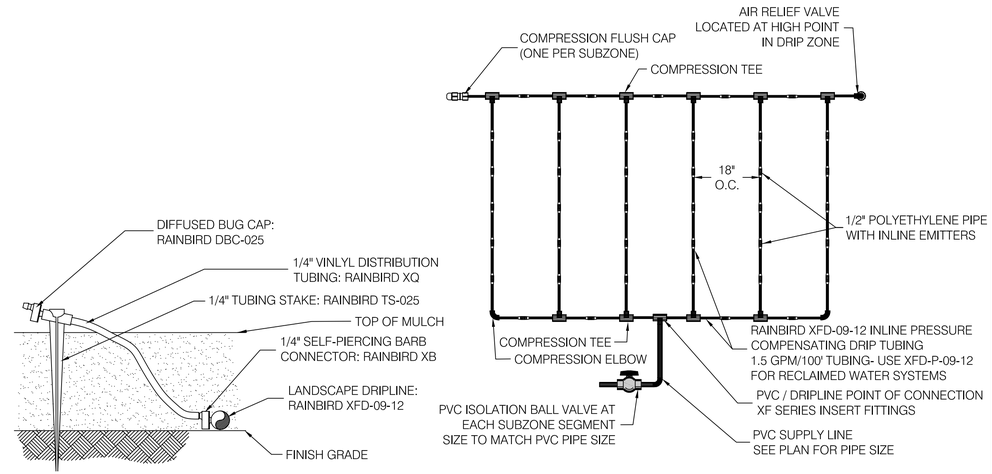
IRRIGATION PLAN
IR1



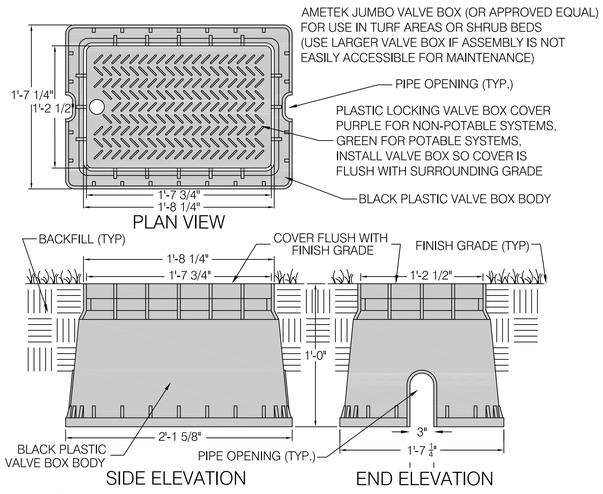
1 IR2 **IRRIGATION CONTROLLER**
N.T.S.



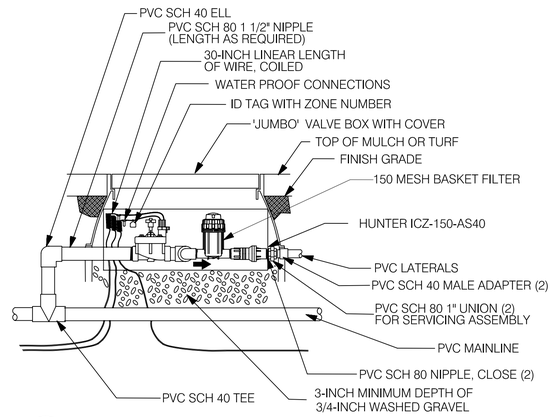
2 IR2 **DRIP IRRIGATION TREE EMITTER(S)**
N.T.S.



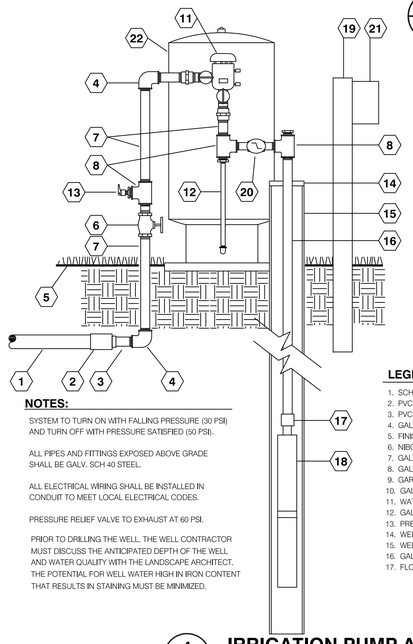
3 IR2 **DRIP IRRIGATION TUBING LAYOUT**
N.T.S.



4 IR2 **JUMBO VALVE BOX DETAIL (DRIP ZONES)**
N.T.S.



5 IR2 **DRIP ZONE VALVE**
N.T.S.



NOTES:
SYSTEM TO TURN ON WITH FALLING PRESSURE (30 PSI) AND TURN OFF WITH PRESSURE SATISFIED (50 PSI).

ALL PIPES AND FITTINGS EXPOSED ABOVE GRADE SHALL BE GALV. SCH 40 STEEL.

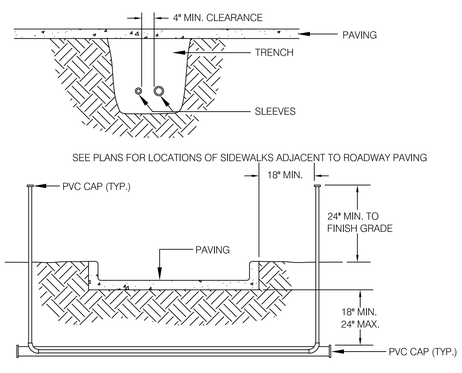
ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT TO MEET LOCAL ELECTRICAL CODES.

PRESSURE RELIEF VALVE TO EXHAUST AT 60 PSI.

PRIOR TO DRILLING THE WELL, THE WELL CONTRACTOR MUST DISCUSS THE ANTICIPATED DEPTH OF THE WELL AND WATER QUALITY WITH THE LANDSCAPE ARCHITECT. THE POTENTIAL FOR WELL WATER HIGH IN IRON CONTENT THAT RESULTS IN STAINING MUST BE MINIMIZED.

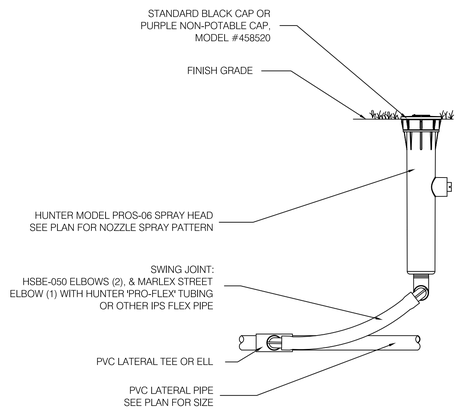
LEGEND:
1. SCH 80 PVC PIPE TO IRR. SYSTEM- SEE PLAN FOR SIZE
2. PVC SCH 80 COUPLING AND BUSHING
3. PVC SCH 80 TOE NIPPLE - 2" X 4"
4. GALV. SCH 40 90 DEG. ELL - 2"
5. FINISH GRADE
6. NIBCO T-113 GATE VALVE - 2"
7. GALV. SCH 40 NIPPLE (LENGTH AS REQ'D) - 2"
8. GALV. SCH 40 TEE - 2"
9. GARDEN VALVE - 3/4"
10. GALV. SCH 40 UNION - 2"
11. WATTS 800M4QT PVB - 2"
12. GALV. SCH 40 NIPPLE (LENGTH AS REQ'D) - 1-1/4"
13. PRESSURE RELIEF VALVE - 1"
14. WELL SEAL - 5" X 2"
15. WELL CASING (LENGTH AS REQ'D) - 5"
16. GALV. SCH 40 DROP PIPE (LENGTH AS REQ'D) 2"
17. FLOMATIC #80 BRASS CHECK VALVE 2"
18. SUBMERSIBLE PUMP- SIZE PUMP FOR SYSTEM
19. 4" X 4" CONCRETE POST (LENGTH AS REQ'D)
20. #CSV3R CYLCE STOP PUMP CONTROL VALVE
21. MAGNETIC STARTER IN NEMA 3R ENCLOSURE
22. WELL-X-TROL PRESSURE TANK #WX-350-TK
23. PRE-FABBED CONCRETE PAD - 30" X 30"
24. GALV. SCH 40 90 DEG ELL - 1-1/4"
25. SQUARE D PRESSURE SWITCH #FSG-2
26. LIQUID FILLED PRESSURE GAUGE / 2-1/2" DIAL / 0-160 PSI
27. GALV. SCH 40 TEE - 1-1/4"
28. WATTS FBV-1 BRASS BALL VALVE - 1/4"
29. GALV. SCH 40 TEE - 1-1/4"
30. GALV. SCH 40 UNION - 1-1/4"

4 IR2 **IRRIGATION PUMP AND WELL**
N.T.S.

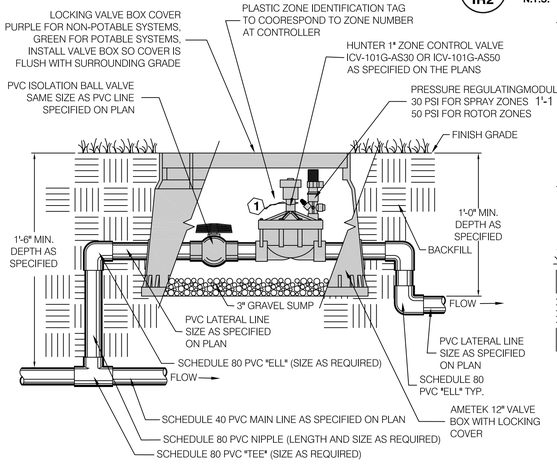


NOTES:
1. ALL IRRIGATION SLEEVES TO BE SCHEDULE 40 PVC PIPE.
2. ALL JOINTS TO BE SOLVENT WELDED AND WATERTIGHT.
3. WHERE THERE IS MORE THAN ONE SLEEVE, EXTEND THE SMALLER SLEEVE TO 24-INCHES MIN. ABOVE FINISH GRADE.
4. MECHANICALLY TAMP TO 95% PROCTOR.

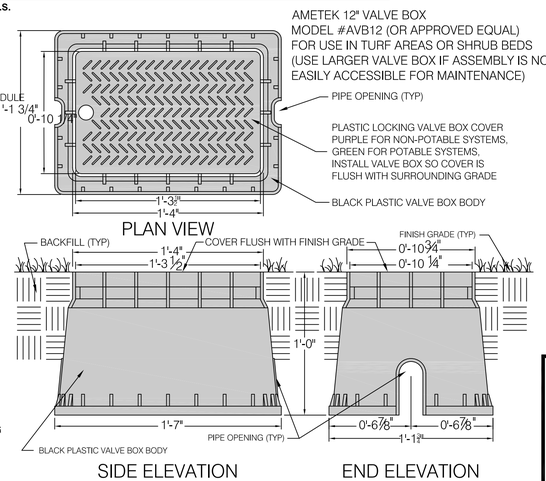
7 IR2 **SLEEVING DETAIL**
N.T.S.



8 IR2 **6" POP-UP SPRAY HEAD- HUNTER PROS-06**
N.T,S,



9 IR2 **1" ZONE CONTROL VALVE**
N.T.S.



10 IR2 **VALVE BOX DETAIL (SPRAY & ROTOR ZONES)**
N.T.S.

HEARTWOOD and BARK PLC
LANDSCAPE ARCHITECTURE • URBAN DESIGN
717 Park Street S. St. Petersburg, FL 33707 (727) 345-1809

TACO BELL
RESTAURANT
STATE ROAD 54
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REVISIONS:
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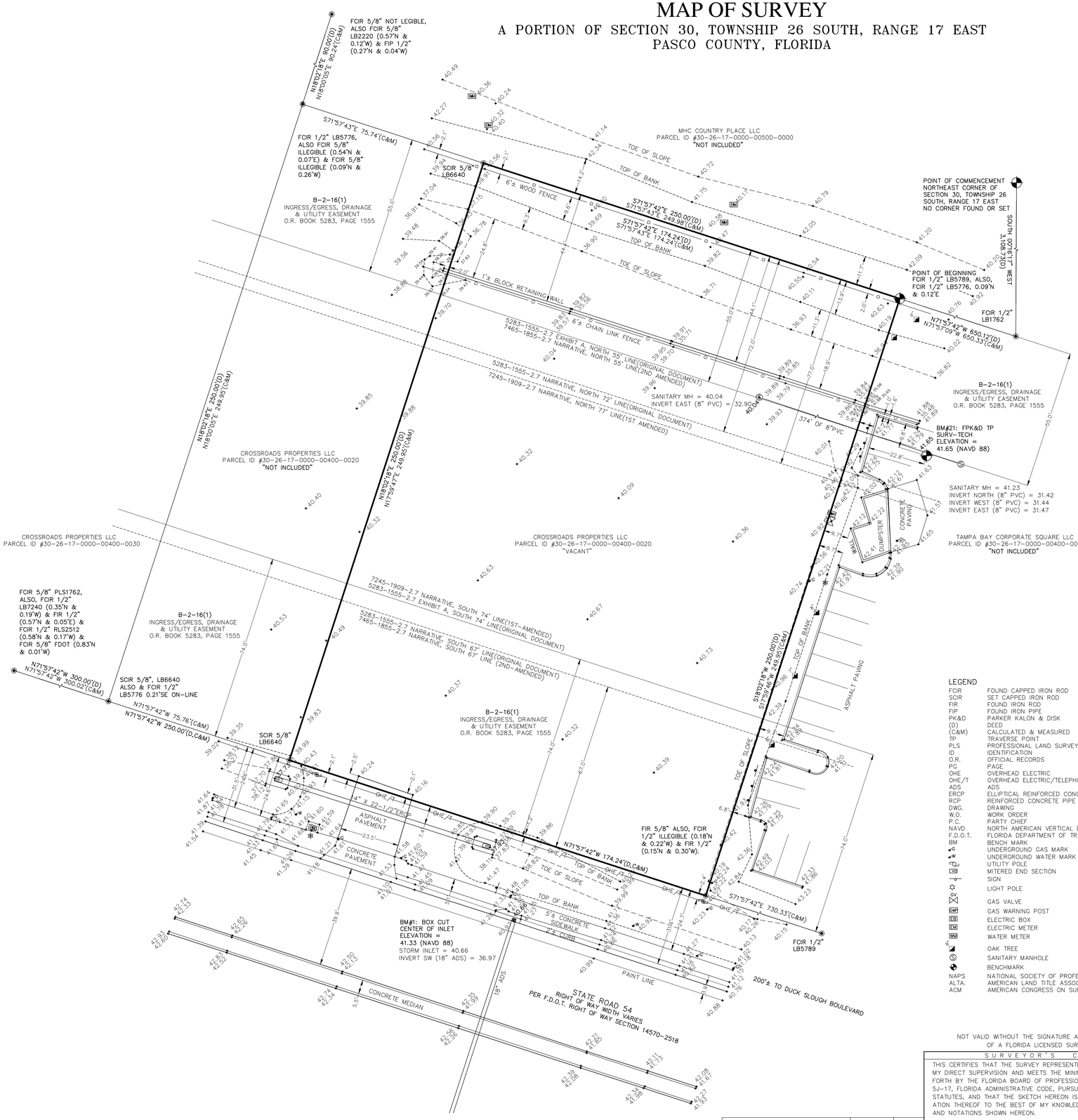
JACOB ZIMMERMAN, RLA
REG. NO. FL LA 0001653
LANDSCAPE ARCHITECT

DRAWN BY: JAZ
DATE: 4/16/14
14015

IRRIGATION DETAILS
IR2

MAP OF SURVEY

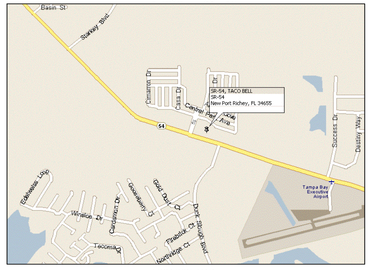
A PORTION OF SECTION 30, TOWNSHIP 26 SOUTH, RANGE 17 EAST
PASCO COUNTY, FLORIDA



GRAPHIC SCALE

20' 0 10' 20' 40' 80'

(IN FEET)
1 inch = 20' ft.



LOCATION MAP
NOT TO SCALE

SURVEYOR'S NOTES:

1. BEARINGS BASED ON THE NORTHERLY RIGHT OF WAY LINE OF STATE ROAD 54, ALSO BEING THE SOUTHERLY BOUNDARY OF SUBJECT PARCEL, AS NORTH 71°57'42" WEST.

2. ONLY ABOVE GROUND UTILITIES AND IMPROVEMENTS WERE LOCATED, NO UNDERGROUND UTILITIES, FOUNDATION OR ENCROACHMENTS LOCATED.

3. ADDITIONS OR DELETIONS TO THIS SURVEY OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTIES.

4. THE PROPERTY APPEARS TO BE LOCATED IN FLOOD ZONE "X", BASED ON THE FLOOD INSURANCE RATE MAPS AT A SCALE OF 1" = 1000' AS ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FIRM MAP COMMUNITY PANEL NO. 120230 0360 D, DATED: SEPTEMBER 30, 1992.

5. VERTICAL DATUM FOR THIS SURVEY IS REFERENCED TO BSI & ASSOCIATES BENCHMARK #1. BM#1 AS BEING A NAIL & DISK STAMPED BSI LB 7078. LOCATED NEAR THE INTERSECTION OF STATE ROAD 54 & DUCK SLOUGH BOULEVARD IN A FIVE FOOT SIDEWALK, APPROXIMATELY 500 FEET WEST FROM THE CENTERLINE OF DUCK SLOUGH BOULEVARD AND APPROXIMATELY 69 FEET SOUTH OF THE INTERSECTION OF STATE ROAD 54. 1 FOOT NORTH OF SOUTH EDGE OF SIDEWALK ELEVATION 41.79' (NAVD88) AS PROVIDED BY PASCO COUNTY, FLORIDA FOR TRINITY VILLAGE CENTER A COMMERCIAL SUBDIVISION, PER PLAT BOOK 61, PAGE 119.

6. THIS SURVEY WAS PREPARED WITH THE BENEFIT OF A TITLE COMMITMENT PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY, CUSTOMER REFERENCE NUMBER: 133088; FILE NUMBER: 2061-3118705; COMMITMENT DATE: FEBRUARY 02, 2014 @ 8:00 A.M.. THE BELOW REFERENCED ITEMS ARE NUMBERED AS THEY APPEAR IN THE FURNISHED TITLE BINDER, SCHEDULE B, SECTION 2:

ITEM 10. AGREEMENT RECORDED IN OFFICIAL RECORDS BOOK 667, PAGE 123, OF THE PUBLIC RECORDS OF PASCO COUNTY, FLORIDA. (NOT A MATTER OF SURVEY)

ITEM 11. GRANT OF EASEMENT IN FAVOR OF ALOHA UTILITIES, INC., A FLORIDA CORPORATION, RECORDED IN OFFICIAL RECORDS BOOK 747, PAGE 115, OF THE PUBLIC RECORDS OF PASCO COUNTY, FLORIDA. (DOES NOT APPLY TO PARCEL)

ITEM 12. AGREEMENT RECORDED IN OFFICIAL RECORDS BOOK 992, PAGE 1488, OF THE PUBLIC RECORDS OF PASCO COUNTY, FLORIDA. (NOT A MATTER OF SURVEY)

ITEM 13. DEDICATION OF AVIATION EASEMENT RECORDED IN OFFICIAL RECORDS BOOK 1260, PAGE 1, OF THE PUBLIC RECORDS OF PASCO COUNTY, FLORIDA.

ITEM 14. RECIPROCAL EASEMENT AGREEMENT RECORDED IN OFFICIAL RECORDS BOOK 1362, PAGE 1456, OF THE PUBLIC RECORDS OF PASCO COUNTY, FLORIDA. (DOES NOT APPLY TO PARCEL)

ITEM 15. INTENTIONALLY DELETED.

ITEM 16. RESTRICTIONS, COVENANTS, CONDITIONS AND EASEMENTS, BUT OMITTING ANY COVENANTS OF RESTRICTIONS, IF ANY, BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAR STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, CONTAINED IN THAT CERTAIN DECLARATION OF PROTECTIVE COVENANTS AND GRANT OF EASEMENT FOR COMMERCIAL 54 CENTER RECORDED IN OFFICIAL RECORD BOOK 5283, PAGE 1555, AS AMENDED BY AMENDED AND RESTATED DECLARATION OF PROTECTIVE COVENANTS AND GRANT OF EASEMENT FOR COMMERCIAL 54 CENTER "A" RECORDED IN OFFICIAL RECORDS BOOK 7245, PAGE 1909, AND FURTHER AMENDED AND ASSIGNED BY INSTRUMENT RECORDED IN OFFICIAL RECORDS BOOK 7465, PAGE 1855, ALL OF THE PUBLIC RECORDS OF PASCO COUNTY, FLORIDA.

7. THIS SURVEY WAS PREPARED WITH THE BENEFIT OF OTHER SURVEYS PREPARED BY FORESIGHT SURVEYORS, PROJECT #22493, DATED, 09/17/03; EAGLE CONSULTANTS FILE #050123, DATED 10/28/05; WIMBROW YOUNG, INC., PROJECT #D-07.1005, DATED 05/15/07; GEOPOINT SURVEYING, ORDER #KHA-TS-005, DATED 06/11/12; FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAPS FOR STATE ROAD 54, WPI #256336, DATED 4/20/99.

8. THE LEGAL DESCRIPTION FOR THIS SURVEYED PARCEL WAS CREATED FROM A PORTION OF THE LAND DESCRIBED IN OFFICIAL RECORDS BOOK 5594, PAGES 981-982 OF THE PUBLIC RECORDS OF PASCO COUNTY, FLORIDA.

9. TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THE SOUTHERLY BOUNDARY OF THE PARCEL IS LYING ADJACENT TO THE NORTHERLY RIGHT OF WAY OF STATE ROAD 54 PER MONUMENTATION FOUND FOR THIS PROJECT.

Legal Description: (Trinity TACO Bell Parcel, Surveyed Parcel)

A parcel of Land lying in a portion of Section 30, Township 26 South, Range 17 East, Pasco County, Florida, being more particularly described as follows:

Commence at the Northeast Corner of Section 30, Township 26 South, Range 17 East, Pasco County, Florida; thence South 00°16'17" West, along the Easterly boundary line of said Section 30, a distance of 3,108.73 feet; thence North 71°57'42" West, departing said Easterly boundary line of said Section 30, a distance of 650.12 feet to the Point of Beginning of the herein described parcel; thence South 18°02'18" West, a distance of 250.00 feet to a point on the Northerly right of way line of State Road 54; thence North 71°57'42 West, along said Northerly right of way line, a distance of 174.24 feet; thence North 18°02'18" East, departing said Northerly right of way line of State Road 54, a distance of 250.00 feet; thence South 71°57'42" East, a distance of 174.24 feet to the Point of Beginning.

Said parcel containing 43,560.0 square feet or 1.00 acres, more or less.

SURVEYOR'S CERTIFICATON:

TO JEM RESTAURANT GROUP OF FLORIDA, INC., A FLORIDA CORPORATION, BMO HARRIS BANK, N.A., FIRST AMERICAN TITLE INSURANCE COMPANY, AND TRENAM, KEMKER, SCHARF, BARKIN, FRYE, O'NEILL & MULLIS, P.A.:

THIS IS TO CERTIFY, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 8, 9, 11(a), 13, 14, 16, 17, 18 and 19 OF TABLE A THEREOF. PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA AND NSPS AND IN EFFECT ON THE DATE OF THIS CERTIFICATION, THE UNDERSIGNED FURTHER CERTIFIES THAT IN MY PROFESSIONAL OPINION, AS A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA, THE MAXIMUM RELATIVE POSITIONAL ACCURACY IS 1 : 565,586.667 FEET.

LEGEND

FCIR	FOUND CAPPED IRON ROD
SCIR	SET CAPPED IRON ROD
FIR	FOUND IRON ROD
FIP	FOUND IRON PIPE
PK&D	PARKER KALON & DISK
(D)	DEED
(C&M)	CALCULATED & MEASURED
TP	TRAVERSE POINT
PLS	PROFESSIONAL LAND SURVEYOR
ID	IDENTIFICATION
O.R.	OFFICIAL RECORDS
PG	PAGE
OHE	OVERHEAD ELECTRIC
OHE/T	OVERHEAD ELECTRIC/TELEPHONE
ADS	ADS
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE
RCP	REINFORCED CONCRETE PIPE
DWG.	DRAWING
W.O.	WORK ORDER
P.C.	PARTY CHIEF
NAVD	NORTH AMERICAN VERTICAL DATUM
F.D.O.T.	FLORIDA DEPARTMENT OF TRANSPORTATION
BM	BENCH MARK
	UNDERGROUND GAS MARK
	UNDERGROUND WATER MARK
	UTILITY POLE
	MITERED END SECTION
	SIGN
	LIGHT POLE
	GAS VALVE
GWP	GAS WARNING POST
EB	ELECTRIC BOX
EM	ELECTRIC METER
WM	WATER METER
	OAK TREE
S	SANITARY MANHOLE
	BENCHMARK
NAPS	NATIONAL SOCIETY OF PROFESSIONAL SURVEYORS
ALTA.	AMERICAN LAND TITLE ASSOCIATION
ACM	AMERICAN CONGRESS ON SURVEYING AND MAPPING

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER

REVISIONS	DATE	BY

SURVEYOR'S CERTIFICATE

THIS CERTIFIES THAT THE SURVEY REPRESENTED HEREON WAS PERFORMED UNDER MY DIRECT SUPERVISION AND MEETS THE MINIMUM TECHNICAL STANDARDS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES, AND THAT THE SKETCH HEREON IS A TRUE AND ACCURATE REPRESENTATION THEREOF TO THE BEST OF MY KNOWLEDGE AND BELIEF, SUBJECT TO NOTES AND NOTATIONS SHOWN HEREON.

DATE OF FIELD SURVEY 02/18/14

CHARLES DAVID FERRARO – REGISTERED LAND SURVEYOR
FLORIDA CERTIFICATION NO. 4768

ALTA/ACSM LAND TITLE SURVEY, BOUNDARY AND TOPOGRAPHIC SURVEY

FLD&E SURVEYING
4519 GEORGE RD. SUITE 130, TAMPA, FL 33634 * (813) 880-9623 * FAX: (813) 880-9055
LICENSE BUSINESS #6640

JEM RESTAURANT GROUP OF FLORIDA

DWG: 2014-001					
DRAWN BY: C.D.F.	DATE: 02/12/14	FIELD BOOK: 665	PAGE: 66-70	W.O. NUMBER 2014-001	SHEET 1 OF 1
CHECKED BY: C.D.F.	DATE: 02/18/14	SCALE: 1" = 20'	P.C. T. SPITLER		

F:\projects\eng\13-030 TACO BELL TRINITY\SURVEY\02\210147TACO.dwg, FLD&E 24x36, 5/9/2014 2:08:29 PM, Rich, 1:1, RMB