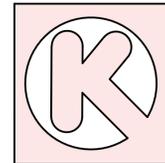


PSP / CONSTRUCTION & STORMWATER MANAGEMENT PLAN

FOR CIRCLE K

CONVENIENCE STORE & GAS STATION S.R. 54 AND BALLANTRAE BLVD. PASCO COUNTY, FLORIDA



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LEGAL DESCRIPTION:

A PARCEL OF LAND BEING LOCATED IN THE NORTHEAST 1/4 OF SECTION 29, TOWNSHIP 26 SOUTH, RANGE 18 EAST, PASCO COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF SAID SECTION 29; THENCE S 00°17'50" W, ALONG THE WEST LINE OF THE NORTHEAST 1/4 OF SAID SECTION 29, A DISTANCE OF 1574.31 FEET TO A POINT OF INTERSECTION WITH A LINE BEING PARALLEL WITH AND LYING 750.00 FEET NORTHERLY, AS MEASURED AT RIGHT ANGLES, FROM THE NORTHERLY RIGHT-OF-WAY LINE OF STATE ROAD 54 (F.D.O.T. SECTION NO. 14570-2521 - OFFICIAL RECORD BOOK 4110, PAGE 920 OF THE PUBLIC RECORDS OF PASCO COUNTY, FLORIDA); THENCE N 86°05'46" E, ALONG SAID PARALLEL LINE, A DISTANCE OF 698.14 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF BALLANTRAE BOULEVARD, OF BALLANTRAE VILLAGE 2A, AS PER MAP OR PLAT RECORDED IN PLAT BOOK 49, PAGES 33 THROUGH 46 INCLUSIVE OF THE PUBLIC RECORDS OF PASCO COUNTY, FLORIDA, ALSO BEING A POINT OF CURVATURE; THENCE ALONG SAID EASTERLY RIGHT-OF-WAY LINE, 66.10 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 03°34'22", SAID CURVE BEING CONCAVE TO THE NORTHWEST AND HAVING A RADIUS OF 1060.00 FEET SUBTENDED BY A CHORD BEARING S 22°50'44" W, 66.09 FEET TO A POINT OF TANGENCY; THENCE CONTINUE ALONG SAID EASTERLY RIGHT-OF-WAY LINE, S 24°37'55" W, A DISTANCE OF 221.56 FEET TO A POINT OF CURVATURE; THENCE CONTINUE ALONG SAID EASTERLY RIGHT-OF-WAY LINE 200.80 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 12°14'22", SAID CURVE BEING CONCAVE TO THE EAST AND HAVING A RADIUS OF 940.00 FEET SUBTENDED BY A CHORD BEARING S 18°30'44" W, 200.42 FEET TO A POINT OF CURVATURE ALSO BEING THE POINT OF BEGINNING; THENCE LEAVING SAID EASTERLY RIGHT-OF-WAY LINE 40.31 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 49°08'29", SAID CURVE BEING CONCAVE TO THE SOUTHEAST AND HAVING A RADIUS OF 47.00 FEET SUBTENDED BY A CHORD BEARING N 63°09'15" E, 39.09 FEET TO A POINT OF TANGENCY; THENCE N 87°43'30" E, A DISTANCE OF 102.93 FEET; THENCE N 82°14'29" E, A DISTANCE OF 121.87 FEET TO A POINT OF CURVATURE; THENCE 18.38 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 10°51'17", SAID CURVE BEING CONCAVE TO THE SOUTH AND HAVING A RADIUS OF 97.00 FEET SUBTENDED BY A CHORD BEARING N 87°40'08" E, 18.35 FEET TO A POINT OF TANGENCY; THENCE S 86°54'14" E, A DISTANCE OF 25.76 FEET; THENCE S 03°54'14" E, A DISTANCE OF 327.92 FEET TO A POINT OF INTERSECTION WITH THE AFOREMENTIONED NORTHERLY RIGHT-OF-WAY LINE OF STATE ROAD 54; THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY LINE, S 86°05'46" W, A DISTANCE OF 309.04 FEET TO A POINT ON SAID EASTERLY RIGHT-OF-WAY LINE OF BALLANTRAE BOULEVARD, ALSO BEING A POINT OF CURVATURE; THENCE ALONG SAID EASTERLY RIGHT-OF-WAY LINE, 56.81 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 93°00'03", SAID CURVE BEING CONCAVE TO THE NORTHEAST AND HAVING A RADIUS OF 35.00 FEET SUBTENDED BY A CHORD BEARING N 47°24'13" W, 50.78 FEET TO A POINT OF TANGENCY; THENCE CONTINUE ALONG SAID EASTERLY RIGHT-OF-WAY LINE, N 00°54'11" W, A DISTANCE OF 59.75 FEET TO A POINT OF CURVATURE; THENCE CONTINUE ALONG SAID EASTERLY RIGHT-OF-WAY LINE 218.13 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 13°17'44", SAID CURVE BEING CONCAVE TO THE EAST AND HAVING A RADIUS OF 940.00 FEET SUBTENDED BY A CHORD BEARING N 05°44'41" E, 217.64 FEET TO THE POINT OF BEGINNING, CONTAINING 2.471 ACRES MORE OR LESS.

LEGAL DESCRIPTION



LOCATION MAP
SECTION 29, TOWNSHIP 26 SOUTH, RANGE 18 EAST
N.T.S.

SURVEYOR:

DLB SURVEYING, INC.
25704 BRUFORD BLVD.
LAND O' LAKES, FL. 34639
TELEPHONE: (813) 783-1111

OWNER/APPLICANT:

CIRCLE K STORES INC.
12911 N. TELECOM PARKWAY
TAMPA, FLORIDA 33637
TELEPHONE: (813) 910-5304
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FLORIDA ENGINEERING
AND ENVIRONMENTAL SERVICES, INC.

CERTIFICATE OF AUTHORIZATION: EB 5804
4519 GEORGE ROAD, SUITE 130
TAMPA, FLORIDA 33634
PHONE: (813) 880-9106
FAX: (813) 880-9055
EMAIL: msullivan@flaengineering.com

SHEET C1
E15-017.07

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

CONSTRUCTION NOTES

GENERAL NOTES :

- 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.
- 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.
- 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.
- 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.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO COME 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 INSPECTION/ REQUIREMENTS.

- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, ON ALL PRECAST AND MANUFACTURED ITEMS, TO THE OWNERS ENGINEER FOR APPROVAL. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTORS EXPENSE.
- ALL UTILITY SERVICE STUB-OUTS (WATER, SANITARY SEWER, etc.) ARE TO BE INSTALLED TO WITHIN 5' OF BUILDING(S), UNLESS OTHERWISE NOTED ON PLANS.
- THE 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.
- 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 THE SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HISHER PERSONNEL.**
- LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.
- 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.
- 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.
- 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 CONTRACTORS INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.
- 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.
- 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.
- ALL SPECIFICATIONS AND DOCUMENTS REFERENCED HEREIN SHALL BE OF THE LATEST REVISION.
- ALL UNDERGROUND UTILITIES MUST BE IN-PLACE, TESTED AND INSPECTED PRIOR TO BASE AND SURFACE CONSTRUCTION.
- 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 HISHER ACTIVITIES ACCORDINGLY.

- AS BUILT:
- UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH THE OWNERS 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 ENGINEERS CERTIFICATIONS FOR CERTIFICATE OF OCCUPANCY (C.O.) PURPOSES WILL BE MADE UNTIL THIS INFORMATION HAS BEEN RECEIVED AND APPROVED BY THE OWNERS ENGINEER.

CLEARING AND SITE PREPARATION NOTES :

- 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.
- 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.
- THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. ALL DISTURBED AREAS MUST BE SEEDED, MULCHED, SOILED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL, IMMEDIATELY FOLLOWING CONSTRUCTION.
- THE TOP 4 TO 16" 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 DETERMINED SUITABLE BY THE OWNERS SOILS TESTING COMPANY. EXCESS MATERIAL IS TO EITHER BE STOCKPILED ON-SITE, AS DIRECTED BY THE OWNER OR OWNERS ENGINEER, OR REMOVED FROM THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING ANY EXCESS MATERIAL FROM THE SITE.
- 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.
- THE CONTRACTOR IS TO PREPARE THE SITE IN ACCORDANCE WITH THE SOILS REPORT PREPARED BY UNIVERSAL ENGINEERING SCIENCES, DATED 2-24-09 (UES REPORT #9076). A COPY IS INCLUDED IN THE PROJECT MANUAL.

EROSION CONTROL NOTES :

- CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIERS (HAY BALES OR SILTATION CURBS) 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 CONTRACTOR IS TO REMOVE SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES.
- THE CONTRACTOR SHALL LIMIT THE DISCHARGE OF TURBID WATER'S OFF-SITE, OR INTO ON-SITE/OFF-SITE WETLANDS (IF APPLICABLE), TO NO MORE THAN 50 FT/US (JACKSON TURBIDITY UNITS) OR 29 FT/US (NEPHELOMETRIC TURBIDITY UNITS), ABOVE BACKGROUND LEVELS.
- IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION OR OTHER ACCEPTABLE METHODS.
- CONTRACTOR SHALL INSPECT AND MAINTAIN ON A DAILY BASIS ALL EROSION/SEDIMENTATION CONTROL FACILITIES.
- 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.
- THE PROPOSED EROSION CONTROL BARRIERS MUST BE REMOVED FOLLOWING SOIL STABILIZATION.

PAVING AND GRADING NOTES :

- ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURNED DEBRIS, ETC.) IS TO BE EXCAVATED AND REPLACED WITH SUITABLE/COMPACTED SOILS, AS DIRECTED BY THE OWNER, THE OWNERS ENGINEER, OWNERS 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 ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.
- 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.
- ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNERS SOILS TESTING COMPANY OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS AND PROJECT SPECIFICATIONS.
- PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADES, UNLESS OTHERWISE NOTED.
- IT MAY BE NECESSARY TO FIELD ADJUST PAVEMENT ELEVATIONS TO PRESERVE THE ROOT SYSTEMS OF TREES SHOWN TO BE SAVED. CONTRACTOR TO COORDINATE WITH OWNERS ENGINEER PRIOR TO ANY ELEVATION CHANGES.
- CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.
- 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.
- PRIOR TO CONSTRUCTING CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE SOILS ENGINEER FOR APPROVAL.
- CONTRACTOR TO PROVIDE A 1/2" TO 1" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ADJUTMENT OF CONCRETE AND OTHER MATERIALS (STRUCTURES, OTHER POURED CONCRETE, ETC.)
- THE CONTRACTOR WILL STABILIZE BY SEED AND MULCH, SOD, OR OTHER APPROVED MATERIALS ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING COMPLETION 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) :

- 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 OWNERS ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.
- 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 :

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

- THE STORM DRAINAGE PIPING SYSTEM SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNERS ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION.
- 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 OWNERS 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 :

- SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS SHALL 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 LIEU 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 RECLAIMED WATER 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 (i.e. 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.

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 (i.e. STAGGERED JOINTS).

- 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.
- ALL PVC PIPE SHALL BE SOLID WALL POLY(VINYL 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 4" DIAMETER.
- ALL SANITARY SEWER MAINS, LATERALS AND FORCE MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER, UNLESS OTHERWISE NOTED ON PLANS.
- ALL SANITARY 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.
- 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 SPRALL 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.
- ALL DUCTILE IRON PIPE SHALL MEET REQUIREMENTS OF AWWA C151, ANSI SPEC. A21.51.
- ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE PROVIDED WITH A VIRGIN POLYETHYLENE INTERIOR 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.
- ALL SLOPES FOR GRAVITY SEWER MAINS AND SERVICE CONNECTIONS SHALL COMPLY WITH THE FOLLOWING MINIMUM GRADES: 6" @ 0.10%, 8" @ 0.40%, MAXIMUM SLOPE = 2.00%.
- ALL SANITARY SEWER WORK SHALL CONFORM WITH THE PASCO COUNTY UTILITY DEPARTMENT WASTE WATER STANDARDS AND SPECIFICATIONS.
- 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 OWNERS ENGINEER OF ANY CONFLICTS OR DISCREPANCIES.
- SANITARY SEWER MAINS SHALL HAVE SUITABLE MAGNETIC LOCATOR TAPE(S) BURIED AT LEAST 18 INCHES ABOVE THE MAIN LINES.
- FORCE MAINS SHALL HAVE SUITABLE MAGNETIC LOCATOR TAPE(S) BURIED AT LEAST 18 INCHES ABOVE THE FORCE MAIN.

TESTING AND INSPECTION REQUIREMENTS: (SANITARY) :

- ALL GRAVITY SEWER PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNERS 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.
- 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.
- 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 :

- SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS MUST 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 DIP (IF AVAILABLE) IN THE SIZE PROPOSED, WITH A MINIMUM VERTICAL SEPARATION OF TEN (10) FEET BETWEEN ANY TWO (2) JOINTS, IN LIEU 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 RECLAIMED WATER 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 (i.e. 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-F' 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.

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 (i.e. STAGGERED JOINTS).

- ALL DIP PIPE SHALL BE CLASS 50 OR HIGHER. REFER TO NOTE #9 BELOW FOR ADDITIONAL DIP SPECIFICATIONS. ADEQUATE MEASURES AGAINST CORROSION SHALL BE UTILIZED.
- ALL WATER MAIN PIPE FITTINGS AND APPURTENANCES SHALL BE INSTALLED TO COMPLY WITH THE PASCO COUNTY WATER, WASTEWATER, AND REUSE SYSTEM CODE.
- ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 36 INCHES OF COVER.
- ALL WATER SERVICE LINES, VALVES AND METERS SHALL BE INSTALLED TO COMPLY WITH THE PASCO COUNTY WASTEWATER AND REUSE SYSTEMS CODE.
- RESTRAINTS SHALL BE PROVIDED AT ALL FITTINGS AND HYDRANTS, IN ACCORDANCE WITH THE PASCO COUNTY, WASTEWATER AND REUSE SYSTEMS CODE.
- 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.
- ALL WATER MAIN 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.
- ALL ON-SITE FIRE HYDRANTS SHALL BE PAINTED WITH HIGH GRADE ENAMEL FEDERAL SAFETY YELLOW (OSHA APPROVED), AND MUST BE FURNISHED IN 18 OR 20 FOOT SECTIONS. PIPE THICKNESS SHALL BE CLASS 51, UNLESS OTHERWISE SPECIFIED. TO ASSURE ADEQUATE FLUSHING AND DISINFECTION/CHLORINATION.
- 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.
- 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.
- 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.
- 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 D2421 (SDR 21), PRESSURE CLASS 200 PSI.
- ALL PVC WATER MAINS SHALL HAVE A SUITABLE MAGNETIC LOCATOR TAPE PLACED OVER THE WATER MAIN, BURIED NO LESS THAN 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, FITTINGS AND OTHER LINES. 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.
- ALL 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.
- FIRE PROTECTION SHALL MEET ALL THE REQUIREMENTS OF THE APPLICABLE MUNICIPALITY OR COUNTY.

TESTING AND INSPECTION REQUIREMENTS: (WATER)

- ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL REMAIN UNCOVERED UNTIL PROPERLY PRESSURE TESTED AND ACCEPTED BY THE OWNERS ENGINEER. PRESSURE TESTS TO BE CONDUCTED WITH THE PASCO COUNTY WATER, WASTEWATER AND REUSE SYSTEMS CODE. CONTRACTOR TO NOTIFY THE OWNERS ENGINEER AND APPLICABLE AGENCY INSPECTORS 48 HOURS IN ADVANCE OF PERFORMING TESTS.
 - CONTRACTOR TO PERFORM CHLORINATION AND BACTERIOLOGICAL SAMPLING, AND OBTAIN CLEARANCE OF DOMESTIC AND FIRE LINES (IF APPLICABLE). COPIES OF ALL BACTERIOLOGICAL TEST RESULTS ARE TO BE SUBMITTED TO THE OWNERS ENGINEER FOR CERTIFICATION PURPOSES.
- ### CONSTRUCTION SITE WORK TESTING :
- ALL SITE WORK CONSTRUCTION TESTING SHALL BE PERFORMED BY A CERTIFIED / LICENSED GEOTECHNICAL ENGINEERING FIRM.
 - 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.
 - 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.
 - THE SERVICES OF A CONSTRUCTION TESTING GEOTECHNICAL FIRM SHALL BE RETAINED BY THE OWNER, UNLESS OTHERWISE SPECIFIED IN THE BID DOCUMENTS.
 - 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:**
- CONTRACTOR SHALL BECOME FAMILIAR WITH THE SPECIFIC REQUIREMENTS OF ALL SITE DEVELOPMENT PERMITS.
 - CONTRACTOR SHALL PREPARE AND FILE THE NECESSARY EPA - NPDES PERMIT(S) FOR THIS PROJECT.

- WATER DISTRIBUTION SYSTEM:**
- CONTRACTOR SHALL PROVIDE TWO (2) CONSECUTIVE DAYS OF PASSING BACTERIOLOGICAL TEST RESULTS FOR THE ONSITE WATER DISTRIBUTION SYSTEM.
 - 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).
 - 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:**
- 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.
 - 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:**
- 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.
 - 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 WITH PUBLIC R-O-W.

OTHER:

- 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.
- 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 NOT BE ACQUIRED BY THE CONTRACTOR FOR PURPOSES OF CONSTRUCTING THE WATER DISTRIBUTION, SANITARY SEWER OR STORMWATER MANAGEMENT SYSTEM.

IF DURING CONSTRUCTION ACTIVITIES ANY EVIDENCE OF HISTORIC RESOURCES, INCLUDING BUT NOT LIMITED TO ABORIGINAL OR HISTORIC POTTERY, PREHISTORIC STONE TOOLS, BONE OR SHELL TOOLS, HISTORIC TRASH PITS, OR HISTORIC BUILDING FOUNDATION, ARE DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND THE FLORIDA DEPARTMENT OF HISTORIC RESOURCES (STATE HISTORIC PRESERVATION OFFICER) AND PASCO COUNTY SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE RESOURCES FOUND ON THE SITE.

FR. NO.:	EB-0107	DATE:	4-9-2009
5-02-19	SUBMITTAL TO PASCO COUNTY	TJEB705	TJEB705
REUSE OF DOCUMENT	THE INFORMATION CONTAINED HEREIN IS AN INSTRUMENT OF PROFESSIONAL SERVICE OF FLORIDA ENGINEERING AND ENVIRONMENTAL SERVICES, INC. (FEES) AND IS NOT TO BE REPRODUCED OR USED IN ANY MANNER WITHOUT THE WRITTEN AUTHORIZATION OF F.E.E.S.	DATE	REVISIONS

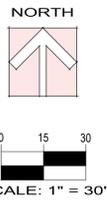
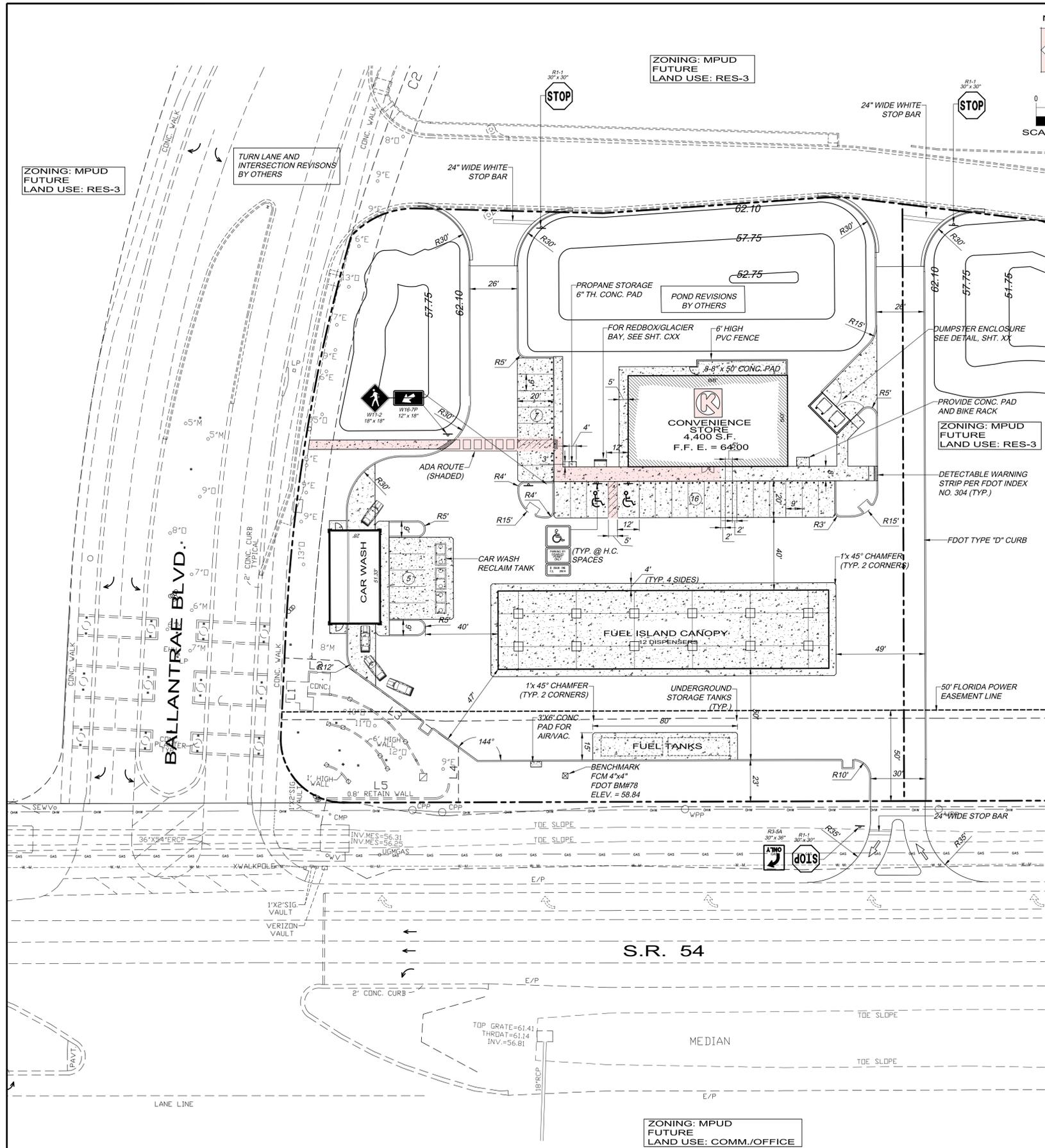
FLORIDA ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
CERTIFICATE OF AUTHORIZATION: EB 5804
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CIRCLE K CONSTRUCTION & TESTING NOTES
S.R. 54 & BALLANTRAE BLVD. PASCO COUNTY, FLORIDA

MARK SULLIVAN P.E.
PROFESSIONAL ENGINEER
NO. 41227

C2



SITE DATA:

PARCEL NUMBER: 29-26-18-0000-00200-0040, 29-26-18-0000-00500-0000
 SITE ADDRESS:
 SITE AREA: 107,595 S.F. OR 2.47 ACRES MORE OR LESS
 ZONING: MPUD
 FUTURE LAND USE DESIGNATION: PD (PLANNED DEVELOPMENT)
 CORRIDOR: STATE ROAD 54
 EXISTING USE: UNDEVELOPED
 RZ/SE/CU PETITION #:
 PETITION: DATE:
 RZ-6758 9/08/2013

TRAFFIC ANALYSIS ZONE: 199
 MOBILITY FEE ASSESSMENT DISTRICT: A1
 ABUTTING ZONING:

NORTH: MPUD (RES-3)
 SOUTH: MPUD (COMM. / OFFICE)
 EAST: MPUD (RES-3)
 WEST: MPUD (RES-3)

BUILDING HEIGHT: 1 FLOOR, 21' MAX.
 BUILDING SIZE: 4400 SF
 PROPOSED DEVELOPMENT TYPE: CONVENIENCE STORE W/ GAS CANOPY

AUTOMOBILE PARKING:
 REQUIRED: 1 SPACE / 250 S.F. GFA
 4,400 S.F. / 250 S.F. = 18 SPACES
 PROVIDED: STANDARD (9' x 20') = 26 SPACES
 HANDICAP (12' x 20') = 2 SPACES
 TOTAL = 28 SPACES

BICYCLE PARKING:
 REQUIRED: 0.02 SPACES PER REQUIRED AUTOMOBILE PARKING SPACES
 0.02 x 18 = 0.36 SPACE
 PROVIDED: (1) MULTI SLOT BICYCLE RACK

FLOOD ZONE: THE PROPERTY SHOWN HEREON APPEARS TO LIE IN FLOOD ZONE "X" & "AE" ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP, PANEL NUMBER 120230 0384 F, EFFECTIVE SEPTEMBER 28, 2014.

LANDSCAPE BUFFERING:

YARD	MINIMUM	PROPOSED
NORTH	15'- TYPE "B"	15'- TYPE "B"
SOUTH	15'- TYPE "D"	15'- TYPE "D"
EAST	15'- TYPE "B"	15'- TYPE "B"
WEST	15'- TYPE "D"	15'- TYPE "D"

FLOOR AREA RATIO (FAR): 4,400 S.F. / 107,595 S.F. = 0.04
 MAXIMUM ALLOWABLE FAR = 0.60

SITE AREAS:

	EXISTING		PROPOSED	
BUILDING(S)	0 S.F.	0 AC.	4,400 S.F.	0.10 AC.
ASPHALT / CURB	0 S.F.	0 AC.	38,497 S.F.	0.88 AC.
CONCRETE	0 S.F.	0 AC.	21,698 S.F.	0.50 AC.
TOTAL IMPERVIOUS:	0 S.F.	0 AC.	51,076 S.F.	1.17 AC.
TOTAL PERVIOUS:	107,595 S.F.	2.47 AC.	43,00 S.F.	0.99 AC.
TOTAL SITE:	107,595 S.F.	2.47 AC.	107,595 S.F.	2.47 AC.

LEGEND

- PROPERTY LINE
- PROPOSED BUILDING
- 36" x 54" RCP
- EX. 8" W.M.
- EX. 8" SAN. SEWER
- EXISTING CONCRETE CURB
- PROPOSED FOOT TYPE "D" CURB
- R-O-W
- S.F.
- E.O.P.
- PROPOSED CONCRETE PAVEMENT
- 15' 0"
- 6' 0"
- 5' 0"
- EXISTING TREE (OAK)
- EXISTING TREE (EVERGREEN)
- EXISTING TREE (MAGNOLIA)

IF DURING CONSTRUCTION ACTIVITIES ANY EVIDENCE OF THE PRESENCE OF STATE AND FEDERALLY PROTECTED PLANT AND/OR ANIMAL SPECIES IS DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND PASCO COUNTY SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE PLANT AND/OR ANIMAL SPECIES FOUND ON THE SITE.

STATEMENT

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.

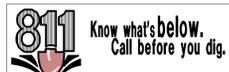
SIGNAGE & PAVEMENT MARKING

- ALL PROJECTS MUST COMPLY WITH PASCO COUNTY FIRE HYDRANT ORDINANCE NO. 46-51.
 - FIRE HYDRANTS SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.
 - 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.
 - PER NFPA-1, 18.3.4.1: CLEARANCES OF 7 1/2 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.
 - GATED ENTRIES REQUIRE A SIREN OPERATING SYSTEM OR A 3M OPTICOM SYSTEM FOR EMERGENCY ACCESS.
- PASCO COUNTY STANDARD
FIRE PROTECTION NOTES**

FACILITIES SHOWN AS "EXISTING" ON THESE PLANS REFLECT THE CONSTRUCTION PROPOSED AS PART OF THE SHOPPING OF BALLANTRAE VILLAGE PLANS.

EXISTING CONDITION NOTE

- ALL UTILITY CONSTRUCTION SHALL COMPLY WITH THE PASCO COUNTY STANDARDS FOR DESIGN AND CONSTRUCTION OF WATER AND WASTEWATER FACILITIES SPECIFICATIONS, LATEST EDITION.
 - ALL ON-SITE WATER AND SEWER FACILITIES SHALL BE OWNED AND MAINTAINED BY THE OWNER-DEVELOPER.
 - INSTALLATION OF FUEL STORAGE TANKS REQUIRES REVIEW AND APPROVAL BY THE FIRE MARSHAL AND THE ISSUANCE OF A SEPARATE BUILDING PERMIT. APPROVAL OF THE SITE PLAN DOES NOT CONSTITUTE APPROVAL OF THE LOCATION OF THE FUEL TANKS.
 - ALL PROPOSED SIGNS MUST BE APPLIED FOR, APPROVED, AND PERMITTED ON AN INDIVIDUAL BASIS APART FROM ANY ULTIMATELY APPROVED SITE PLAN. APPROVAL OF THIS SITE PLAN DOES NOT CONSTITUTE APPROVAL OF ANY SIGNAGE.
 - HANDICAP PARKING SPACES WILL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH FLORIDA STATUTE 316, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, OR OTHER APPLICABLE STANDARDS.
 - THE ARCHITECT/ENGINEER CERTIFIES THAT THE SITE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT.
 - ALL ON-SITE PARKING SPACES WILL BE STRIPED AND SIGNED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. PARKING SPACES, DIRECTIONAL ARROWS, AND STOP BARS SHALL BE STRIPED IN WHITE. IT SHALL BE THE OWNER/DEVELOPER'S RESPONSIBILITY TO PROPERLY SIGN AND STRIPE IN ACCORDANCE WITH APPLICABLE STANDARDS.
 - THE OWNER/DEVELOPER ACKNOWLEDGES THAT THIS APPROVAL DOES NOT INCLUDE ANY WORK IN THE COUNTY RIGHT-OF-WAY. ALL RIGHT-OF-WAY WORK SHALL BE A FUNCTION OF AN APPROVED PASCO RIGHT-OF-WAY USE PERMIT.
 - ALL CLEAR-SITE AREAS SHALL BE KEPT FREE OF ANY SIGNAGE PLANTINGS, TREES, ETC. IN EXCESS OF THREE-AND-A-HALF (3-1/2) FEET IN HEIGHT.
 - NO IRRIGATION SYSTEM OR LANDSCAPING SHALL BE INSTALLED IN ANY COUNTY OR STATE RIGHT-OF-WAY WITHOUT ISSUANCE OF APPROPRIATE RIGHT-OF-WAY USE PERMIT.
 - THE OWNER/DEVELOPER ACKNOWLEDGES THAT THE SITE AND ITS SUBSEQUENT BUILDING PERMITS SHALL COMPLY WITH ALL REZONING/MPUD/PUD CONDITIONS.
 - ALL STRUCTURES, INCLUDING BUFFER WALLS, RETAINING WALLS, SIGNAGE, ETC. REQUIRE BUILDING PERMITS.
- PASCO COUNTY - STANDARD SITE PLAN NOTES**



PR. NO.: E15-017.07 DATE: 3/24/2015
 5/29/13, SUBMITAL TO PASCO COUNTY

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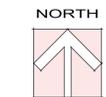
**CIRCLE K
S.R. 54 & BALLANTRAE BLVD.
PASCO COUNTY, FLORIDA**

SITE PLAN

C3

MARK SULLIVAN P.E.
 PROFESSIONAL ENGINEER
 NO.41227

NOTE: ORIGINAL POND CONFIGURATION, POND STRUCTURES AND POND PIPING ARE PART OF THE MASTER DRAINAGE PLAN OF THE "SHOPPES OF BALLANTRAE VILLAGE" PREVIOUSLY SUBMITTED BY PLANENG, INC. REVISIONS AS NEEDED TO ACCOMMODATE CIRCLE "K" SITE ARE BEING PERMITTED BY OTHERS.



SCALE: 1" = 30'

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
- ST --- PROPOSED STORM SEWER LINE
- PROPOSED GRATE INLET
- EXISTING LIGHT POLE
- EXISTING OVERHEAD WIRES
- EXISTING SPOT EL.
- PROPOSED SPOT EL.
- PROPOSED SPOT EL.
- PROPOSED SURFACE WATER FLOW
- ST-0 --- PROPOSED STORM STRUCTURE NO.
- PROPOSED STAKED SILT FENCE
- PROPOSED INLET PROTECTION BARRIER

ELEVATIONS SHOWN HEREON ARE REFERENCED TO FDOT BM #78, FOUND 4" x 4" CONCRETE MONUMENT, ELEVATION 58.84 AND FDOT BM# 79, FOUND 4" x 4" CONCRETE MONUMENT, ELEVATION 60.59 BASED ON NGVD 1929 DATUM. ALL ELEVATIONS SHOWN ARE IN FEET. THE CONVERSION FROM NGVD 1929 DATUM TO NAVD 1988 DATUM IS MINUS 0.84'.

BENCHMARKS

HEAVY DUTY ASPHALT (DRIVE AISLES)
2" ASPHALTIC CONCRETE
8" CRUSHED CONCRETE BASE
12" COMPACTED SUBGRADE

STRUCTURAL NUMBER CALCULATION:
(2 x 0.44) + (8 x 0.18) + (12 x 0.04) = 2.80

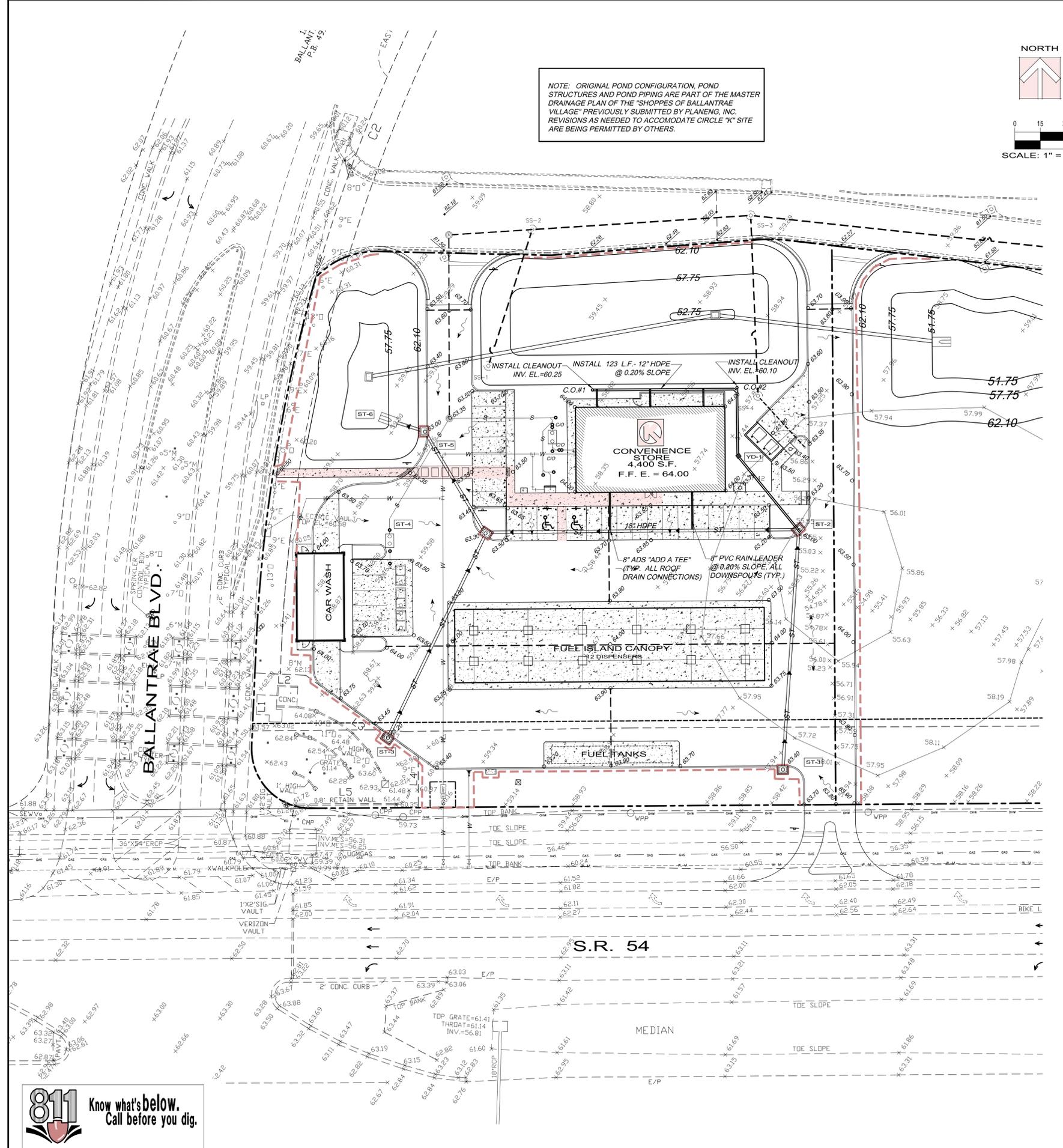
STRUCTURAL NUMBER

THE PROJECT SITE WAS INCLUDED IN MASTER STORMWATER DESIGN FOR THE SHOPPES OF BALLANTRAE VILLAGE STORMWATER DISCHARGE IS TO THE COMBINED STORMWATER MANAGEMENT FACILITIES FOR THAT DEVELOPMENT. DEVELOPMENT PARAMETERS INCLUDED IN THE MASTER DESIGN ALLOWED FOR A MAXIMUM ALLOWABLE IMPERVIOUS PERCENTAGE OF 80% FOR THIS 2.47 ACRE PROJECT SITE. AS NOTED ON THE SITE DATA TABLE, (SHT. C3) THIS PROPOSED PROJECT HAS A MAXIMUM IMPERVIOUS AREA OF 60%, WHICH IS WITHIN THE ALLOWABLE FOR THE ASSOCIATED SWFWMD PERMIT.

MASTER STORMWATER DESIGN

FACILITIES SHOWN AS "EXISTING" ON THESE PLANS REFLECT THE CONSTRUCTION PROPOSED AS PART OF THE SHOPPES OF BALLANTRAE VILLAGE. PLANS FOR THIS DEVELOPMENT WERE PREVIOUSLY SUBMITTED TO PASCO COUNTY FOR REGULATORY REVIEW.

EXISTING CONDITIONS NOTE



STORM STRUCTURE TABLE

STRUCTURE NUMBER	DESCRIPTION	ELEVATIONS	PIPE SIZE OUT	PIPE LENGTH OUT	PIPE SLOPE OUT
ST-1	GRATE INLET FDOT TYPE "C" PER FDOT DESIGN INDEX NO. 232	GRATE EL. = 63.40 INV. EL. = 59.90 (NE)	18" RCP	140 L.F.	0.20%
ST-2	GRATE INLET FDOT TYPE "C" PER FDOT DESIGN INDEX NO. 232	GRATE EL. = 63.00 INV. EL. = 59.62 (W) INV. EL. = 59.62 (SW) INV. EL. = 59.70 (NW)	18" HDPE 12" HDPE	184 L.F.	0.20%
ST-3	GRATE INLET FDOT TYPE "C" PER FDOT DESIGN INDEX NO. 232	GRATE EL. = 63.20 INV. EL. = 59.60 (NE)	18" RCP	132 L.F.	0.20%
ST-4	GRATE INLET FDOT TYPE "C" PER FDOT DESIGN INDEX NO. 232	GRATE EL. = 63.30 INV. EL. = 59.25 (E) INV. EL. = 59.25 (NW) INV. EL. = 59.34 (SW)	18" RCP	70 L.F.	1.07%
ST-5	GRATE INLET FDOT TYPE "C" PER FDOT DESIGN INDEX NO. 232	GRATE EL. = 63.00 INV. EL. = 58.00 (NW) INV. EL. = 58.50 (SE)	18" RCP	25 L.F.	1.0%
ST-6	MITERED END SECTION, PER FDOT DESIGN INDEX NO. 272	INV. EL. = 57.75			
YD-1	YARD DRAIN "ADS" TYPE OR APPROVED EQUAL	GRATE EL. = 63.75 INV. EL. = 60.00 (N) INV. EL. = 59.81 (SE)	12" HDPE	38 L.F.	0.20%

NOTE: CONTRACTOR SHALL SUBMIT SHOP DRAWINGS THROUGH THE OWNER FOR REVIEW BY THE ENGINEER PRIOR TO PRE-CASTING OR CONSTRUCTION. SHOP DRAWINGS SHALL INCLUDE ANY REQUIRED OPENINGS IN THOSE SPECIFIC STRUCTURES WHICH WILL CONNECT WITH ROOF DRAIN MANIFOLDS.

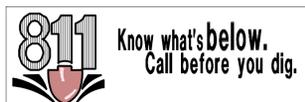
PR. NO.:	E15-017.07	DATE:	3/24/2015
TUB/MS			
REVISIONS			
DATE			

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Tampa, FL 33634
Tel: (813) 880-9106 Fax: (813) 880-9055



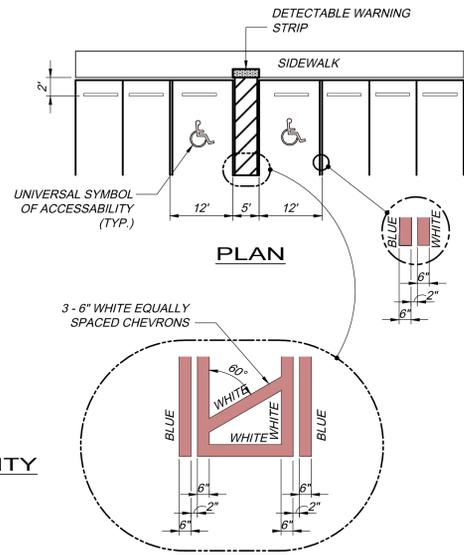
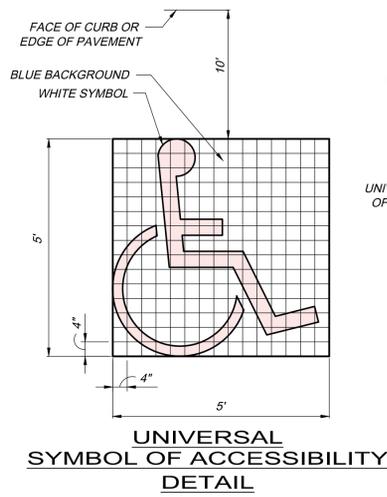
CIRCLE K
S.R. 54 & BALLANTRAE BLVD.
PASCO COUNTY, FLORIDA

PAVING, GRADING & DRAINAGE PLAN

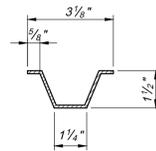


MARK SULLIVAN P.E.
PROFESSIONAL ENGINEER
NO.41227

C6



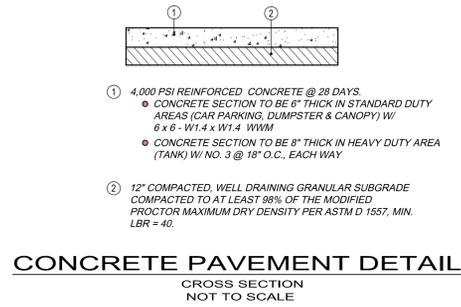
STRIPING DETAILS



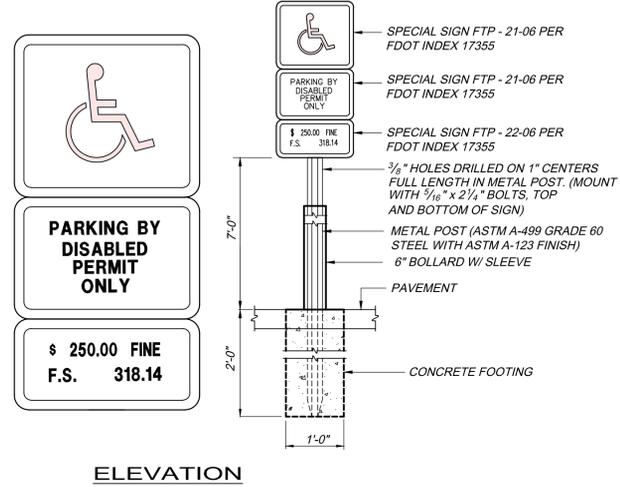
WEIGHT OF POST SHALL BE 2 LBS. / FT. MIN.

HANDICAP PARKING DETAILS

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



- 4,000 PSI REINFORCED CONCRETE @ 28 DAYS.
 - CONCRETE SECTION TO BE 6" THICK IN STANDARD DUTY AREAS (CAR PARKING, DUMPSTER & CANOPY) W/ 6x6 - W/ 4x4 W/ 4 W/ 4
 - CONCRETE SECTION TO BE 8" THICK IN HEAVY DUTY AREA (TANK) W/ NO. 3 @ 18" O.C., EACH WAY
- 12" COMPACTED, WELL DRAINING GRANULAR SUBGRADE COMPACTED TO AT LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY PER ASTM D 1557, MIN. LBR = 40.



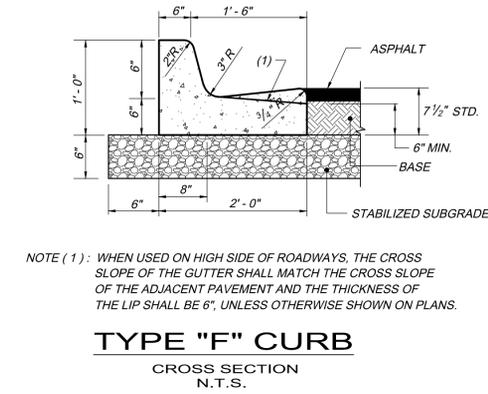
SIGN NOTES:

- METAL POST TO BE GALVANIZED. ALL BOLTS, NUTS, WASHERS AND SCREWS MUST BE RUSTPROOF.
- CONCRETE FOR FOOTING SHALL BE PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I.
- SIGNS WILL BE FABRICATED BY USING REFLECTING COATING IN THE SYMBOL, MESSAGE AND BORDER APPLIED TO A SHEET ALUMINUM BACKING (.080) IN THICKNESS.
- MESSAGE LETTERING SHALL BE UPPER CASE (WHITE)(SERIES B) 2" HIGH IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- 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).
- SIGN POST SHALL BE MIN. 2'-0" CLEAR FROM BACK OF CURB.

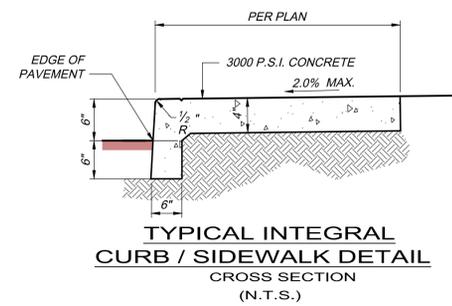
SIGN DETAILS



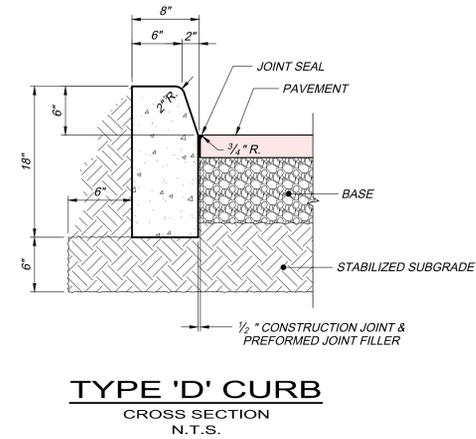
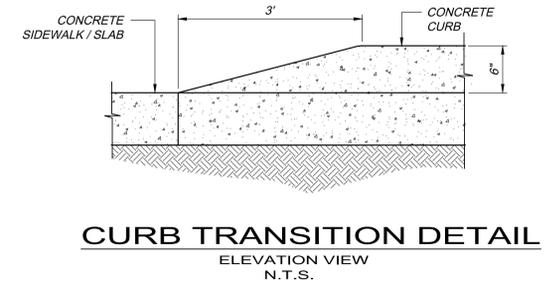
- 2" TYPE SP-9.5 ASPHALTIC CONCRETE
- 8" BASE: CRUSHED CONCRETE OR LIMEROCK COMPACTED TO 98% MODIFIED PROCTOR MAXIMUM DRY DENSITY, MIN LBR 150
- 12" COMPACTED SUBGRADE TO A MIN. OF 98% MODIFIED PROCTOR MAXIMUM DRY DENSITY, LBR = 40



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.



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



R1-1
30" x 30"
STOP SIGN DETAIL
NOT TO SCALE
NOTE: SEE SITE PLAN FOR LOCATION OF STOP SIGN.

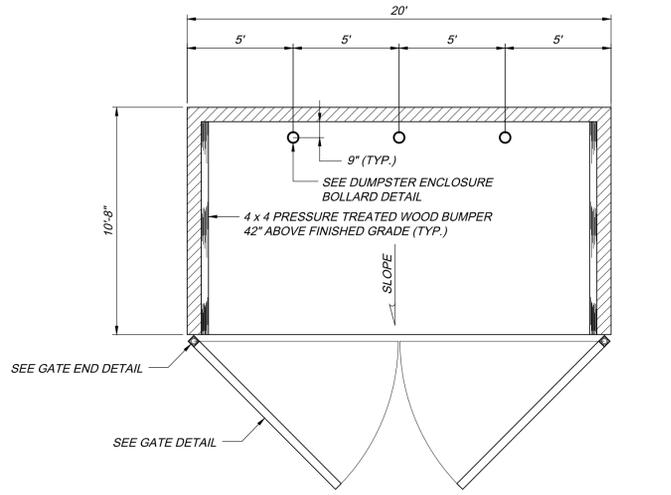


MARK SULLIVAN, P.E.
PROFESSIONAL ENGINEER
NO. 41227

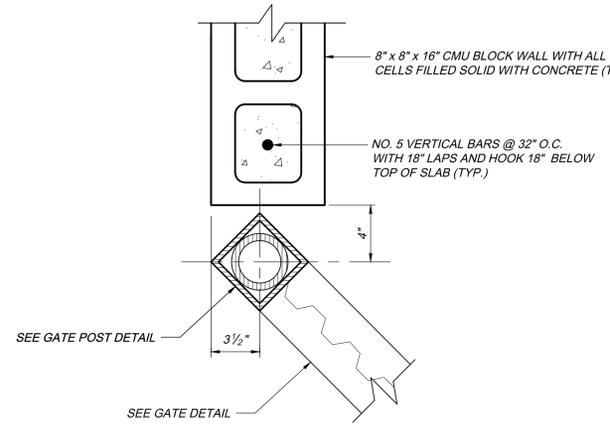
CIRCLE K
S.R. 54 & BALLANTRAE BLVD.
PASCO COUNTY, FLORIDA
CONSTRUCTION DETAILS
C8

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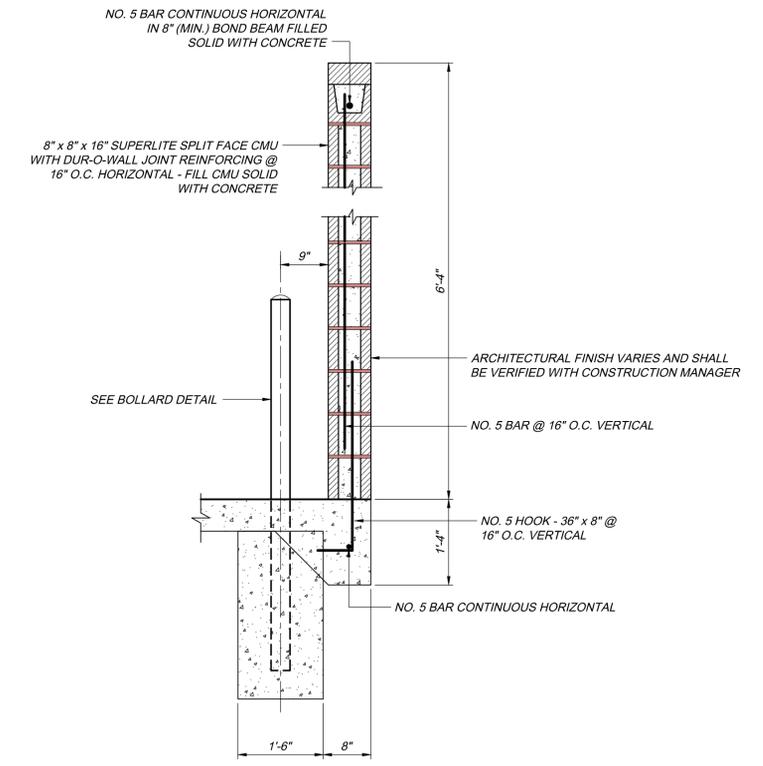
PR. NO.: EB-071201 DATE: 4-9-2015
 SUBMITTED TO PASCO COUNTY
 TJB/MOS
 TJB
 MOS
 REVISIONS
 DATE
 REVISED BY: CHECKED BY:



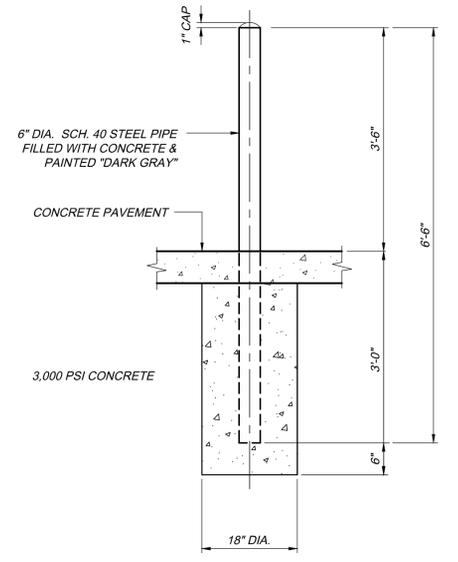
DUMPSTER ENCLOSURE PLAN
NOT TO SCALE



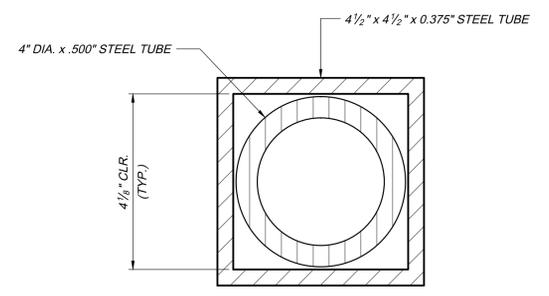
GATE END DETAIL
NOT TO SCALE



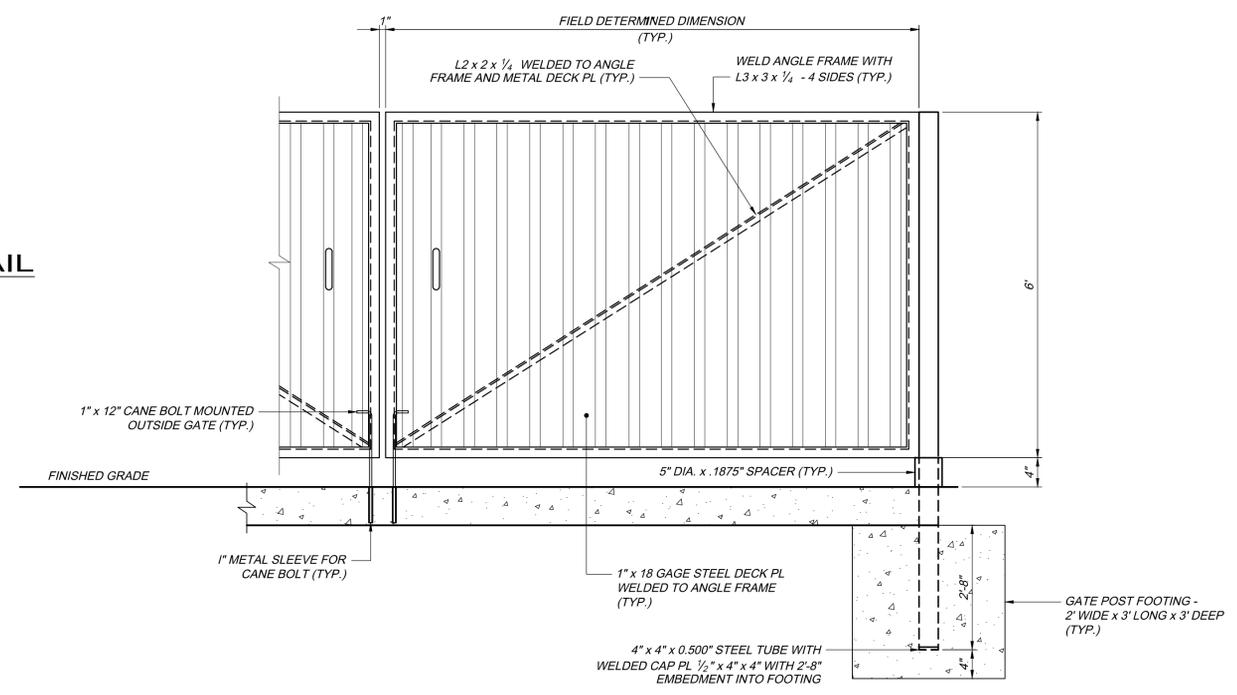
DUMPSTER ENCLOSURE WALL SECTION
NOT TO SCALE



DUMPSTER ENCLOSURE BOLLARD DETAIL
NOT TO SCALE



GATE POST DETAIL
NOT TO SCALE



GATE DETAIL
NOT TO SCALE

PR. NO.: EB-071.071	DATE: 4-9-2015	TUB	NO. OF DOCUMENT
B-05-19 SUBMITTAL TO PASCO COUNTY		TUB	INCORPORATED HEREON AS AN ADDENDUM TO THE PROPERTY OF FLORIDA ENGINEERING AND ENVIRONMENTAL SERVICES, INC. (F.E.E.S.) AND IS NOT TO BE REPRODUCED OR USED WITHOUT AUTHORIZATION OF F.E.E.S.
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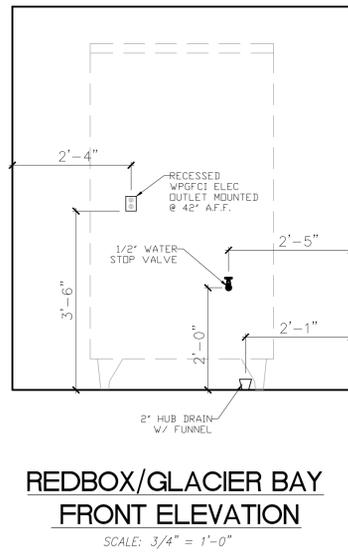


CIRCLE K
S.R. 54 & BALLANTRAE BLVD.
PASCO COUNTY FLA.

CIRCLE K DUMPSTER ENCLOSURE DETAILS

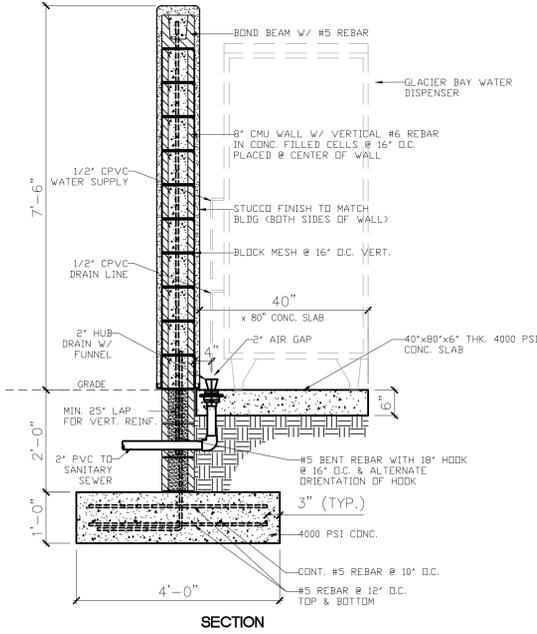
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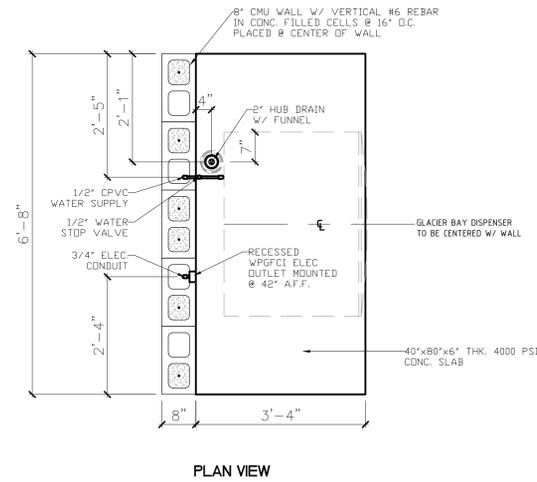
**REDBOX/GLACIER BAY
FRONT ELEVATION**

SCALE: 3/4" = 1'-0"

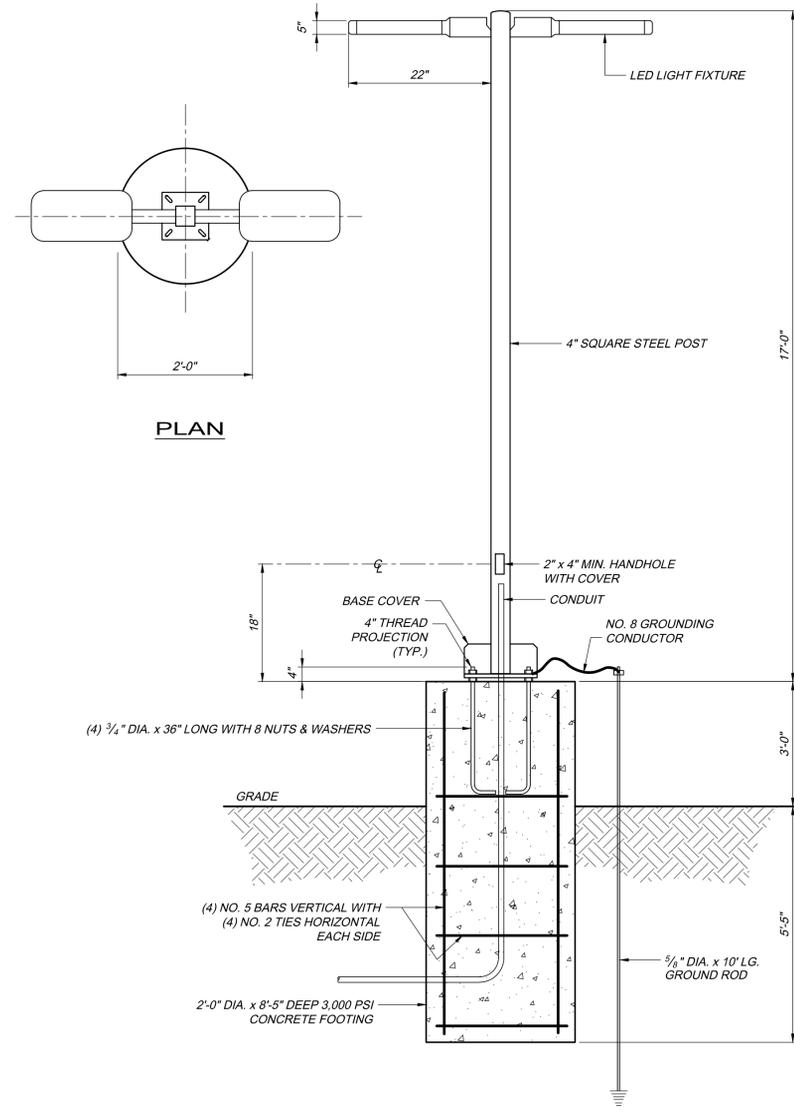


**TYPICAL REDBOX/GLACIER BAY
WALL/SLAB DETAIL**

SCALE: 3/4" = 1'-0"

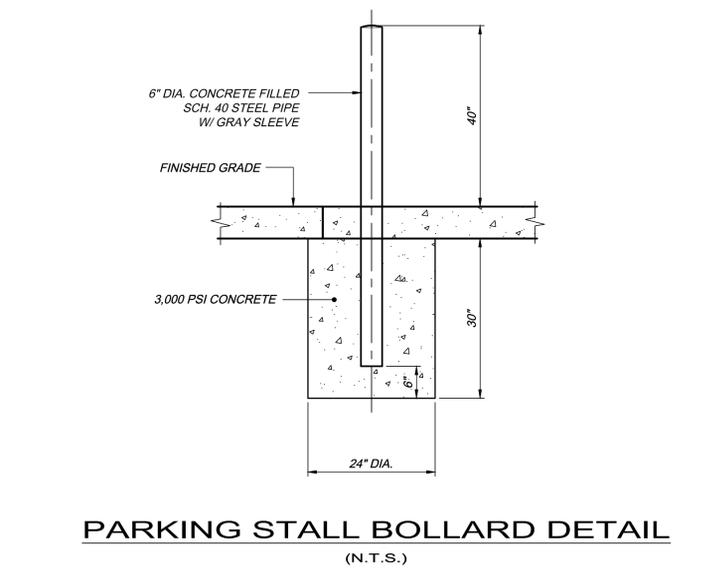


PLAN VIEW

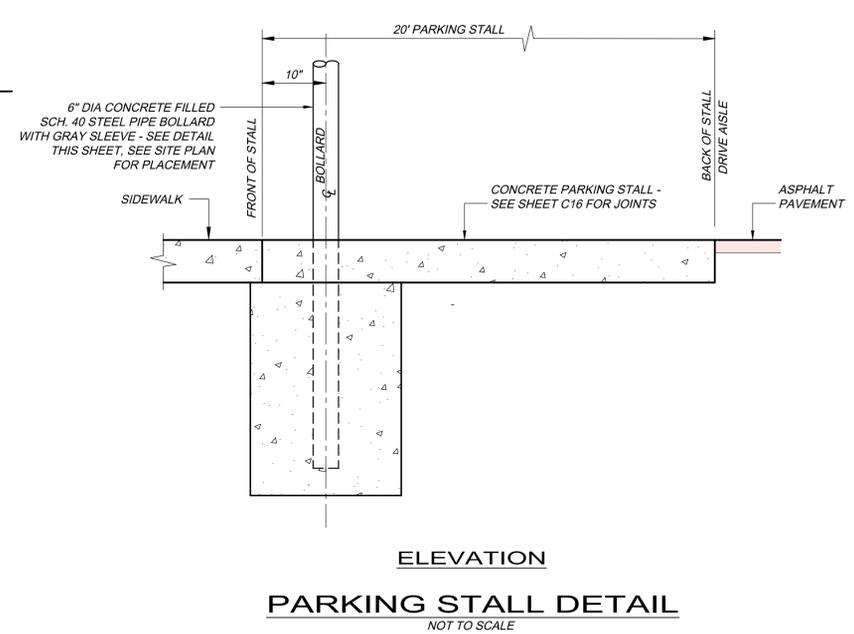


**ELEVATION
AREA LIGHT DETAIL**

NOT TO SCALE



**PARKING STALL BOLLARD DETAIL
(N.T.S.)**



**ELEVATION
PARKING STALL DETAIL**

NOT TO SCALE

PR. NO.: E13-011071	DATE: 4-9-2015	TUB	TCOS
B-08-B1	SUBMITTAL TO PASCO COUNTY	TUB	TCOS
DATE	REVISIONS	DRAWN	CHECKED
		B1	B1

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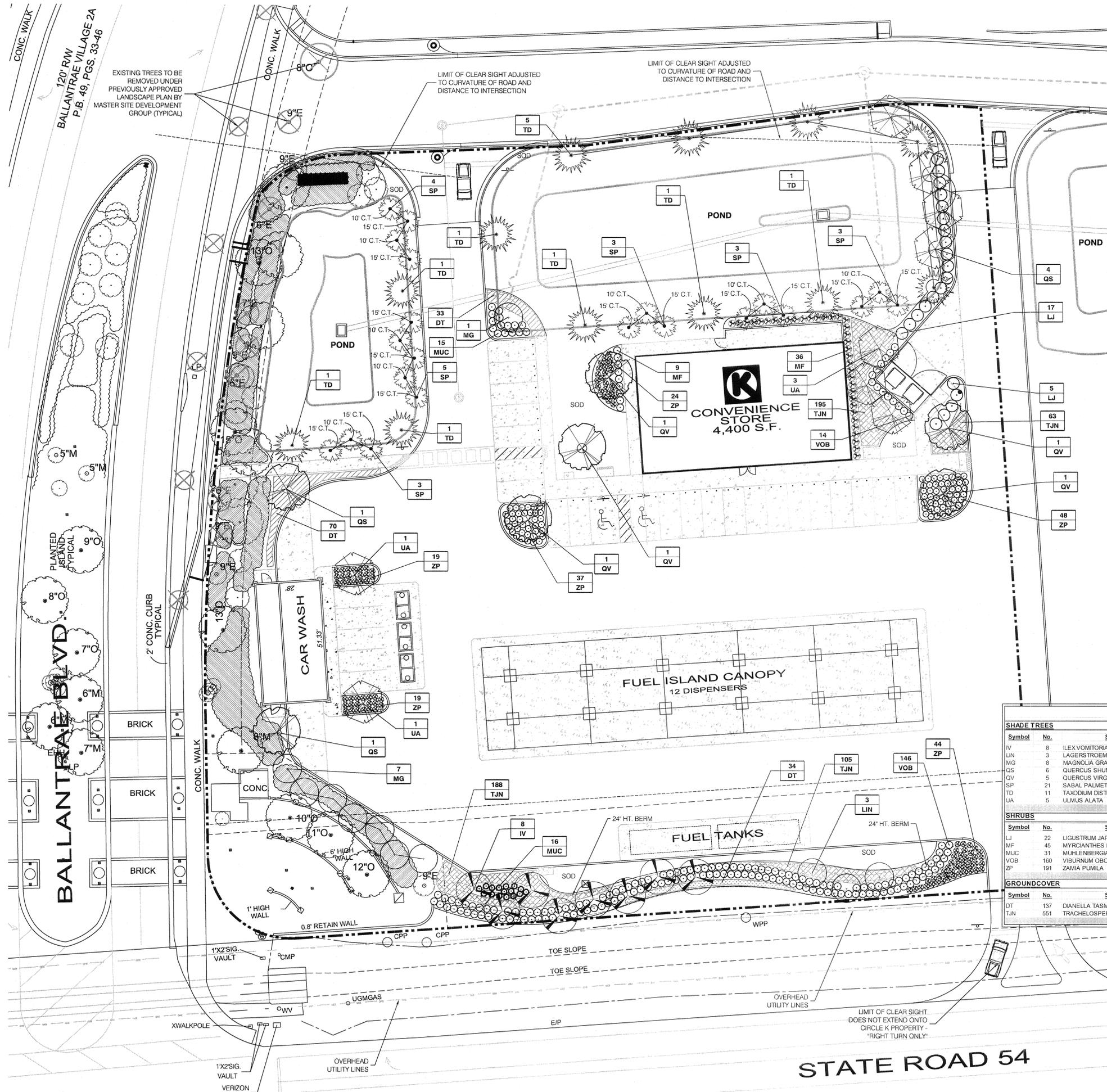


CIRCLE K
S.R. 54 & BALLANTRAE BLVD.
PASCO COUNTY FLA.

MISCELLANEOUS
CIRCLE K DETAILS

C13

P:\5017 CIRCLE K BALLANTRAE ENGINEERING DESIGN\5017-CIRCLE K DETAILS\C13.MSC-CIRCLE K, 5/20/15 11:28:04 AM, 11



PASCO COUNTY LANDSCAPE STANDARD NOTES

1. MAINTENANCE RESPONSIBILITY. The County is not responsible for maintenance of any landscaping unless approved through a County maintenance agreement. (LDC 905.2-C.1.a)
2. CLEAR-SIGHT TRIANGLE. Where a driveway/accessway intersects a road right-of-way or where two (2) road rights-of-way intersect, vegetation, structures, and non-vegetative visual screens shall not be located so as to interfere with the clear sight triangle as defined in this Code or the Florida Department of Transportation, Manual of Uniform Minimum Standards, most recent edition (Green Book), whichever is more restrictive. (LDC 905.2-C.1.c)
3. SUSTAINABLE PRACTICES. Landscaping shall be installed so that landscaping materials meet the concept of right material/right place. Installed trees and plants shall be grouped into zones according to water, soil, climate, and light requirements. Plant groupings based on water requirements are drought tolerant, natural, and oasis. (LDC 905.2-C.1.c)
4. DIVERSITY. A maximum of 50 percent of the plant materials used, other than trees, may be non-drought tolerant. A minimum of 30 percent of the plant materials, other than trees and turfgrass, used to fulfill the requirements of this subsection shall be native Floridian species, suitable for growth in Pasco County. (LDC 905.2-C.1.d)
5. DIVERSITY. No one plant species of shrubs or groundcover plants, excluding turfgrass shall constitute more than 25 percent coverage of the overall landscape area. (LDC 905.2-C.1.d.5)
6. AVOID EASEMENTS. Trees shall not be planted within any easement so as to interfere with the use of that easement, nor under any present or planned overhead utility, nor in any rights-of-way without County approval through the associated review process. (LDC 905.2-C.3.c)
7. Mulch shall be installed to minimum depth of three (3) inches. The mulch should not be placed directly against the plant stem or tree trunk. Mulch shall not be required for annual flower beds. Stone or gravel may be used to cover a maximum of 20 percent of the landscaped area. (LDC 905.2-C.3.d)
8. All portions of a lot upon which development has commenced, but not continued for a period of 30 days, shall be planted with a grass species or groundcover to prevent erosion and encourage soil stabilization. Adequate coverage, so as to suppress fugitive dust, shall be achieved within 45 days. (LDC 905.2-C.3.g)
9. All required landscaping shall be maintained in a healthy condition in perpetuity in accordance with this Code. (LDC 905.2-E.2)
10. Ongoing maintenance to prevent the establishment of prohibited exotic species is required. (LDC 905.2-E.4)

LANDSCAPE CODE REQUIREMENTS

BUFFER REQUIREMENTS:
 WEST BUFFER - 20' WIDE TYPE 'G' BUFFER
 BUFFER SHOWN IS A GENERAL REPRESENTATION OF THE APPROVED LANDSCAPE PLAN SUBMITTED BY THE MASTER SITE DEVELOPER.

SOUTH BUFFER - 20' WIDE TYPE 'G' BUFFER
 1 SHADE TREE REQUIRED FOR EACH 30 LINEAR FEET OF FRONTAGE
 BUFFER LENGTH: 345' LESS 19' EGRESS = 325'
 325 LINEAR FT. / 30 = 11 TREES REQUIRED
 11 TREES PROVIDED: (3) GRAPE MYRTLE, (8) CASSINE HOLLY
 CONTINUOUS STAGGERED DOUBLE ROW HEDGE REQUIRED AND PROVIDED
 24" HT. UNDULATING EARTHEN BERM REQUIRED AND PROVIDED

EAST BUFFER - 15' WIDE TYPE 'B' BUFFER
 1 SHADE TREE REQUIRED FOR EACH 60 LINEAR FEET
 BUFFER LENGTH: 328' LESS 133' EGRESS = 195 LINEAR FT.
 195 LINEAR FT. / 60 = 4 TREES REQUIRED
 4 TREES PROVIDED: (4) SHUMARD OAK
 6' HT. VISUAL SCREEN REQUIRED AND PROVIDED

NORTH BUFFER - STORMWATER RETENTION BASINS THAT ARE VISIBLE FROM ROW ARE SCREENED BY SHADE TREES AT 1 TREE/50'

BUILDING PERIMETER REQUIREMENTS:
 SQUARE FOOTAGE OF GROUND FLOOR = 4400 SQ. FT.
 10% OF AREA TO BE BUILDING PERIMETER LANDSCAPE BEDS = 440 SQ. FT.
 BUILDING PERIMETER LANDSCAPE PROVIDED = 1460 SQ. FT.

VEHICULAR USE AREA (VUA) REQUIREMENTS:
 SQUARE FOOTAGE OF VUA = 53,485 SQ. FT.
 10% OF VUA AREA TO BE LANDSCAPE BEDS = 5,349 SQ. FT.
 VUA LANDSCAPE PROVIDED = xx SQ. FT.
 1 TREE / 200 SQ. FT. OF VUA LANDSCAPE BEDS = 27 TREES
 TREES PROVIDED: 27

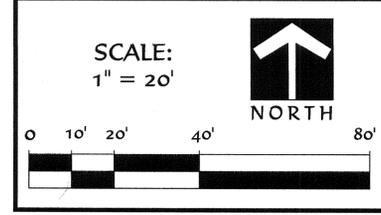
TREE DIVERSITY REQUIREMENTS:
 TREE SPECIES DIVERSITY REQUIRED (TABLE 905.2-B) = MINIMUM 8 SPECIES
 EIGHT VARIETIES PROVIDED ON PLANT MATERIAL LIST

NATIVE AND DROUGHT TOLERANT PLANT REQUIREMENTS
 DROUGHT TOLERANT PLANT PERCENTAGE = 100 %
 NATIVE PLANT PERCENTAGE = 39 %

PLANT LIST

SHADE TREES		Symbol	No.	Scientific Name	Common Name	Size Requirements	Native Florida	Drought Tolerant
IV	8			ILEX VOMITORIA	YAUPON HOLLY	7' HT. X 4' SPD., 2" CAL.	YES	YES
LIN	3			LAGERSTROEMIA INDICA 'NATCHEZ	GRAPE MYRTLE 'WHITE'	7' HT. X 4' SPD., 3" COMBINED TRUNKS	NO	YES
MG	8			MAGNOLIA GRANDIFLORA 'BRACKEN BROWN'	BRACKENS BROWN BEAUTY MAGNOLIA	8' HT. X 3-4' SPD., 2" CAL.	YES	NO
QS	6			QUERCUS SHUMARDII	SHUMARD RED OAK	10' HT. X 3-4' SPD., 2" CAL.	YES	YES
QV	5			QUERCUS VIRGINIANA	LIVE OAK	10' HT. X 3-4' SPD., 2" CAL.	YES	YES
SP	21			SABAL PALMETTO	CABBAGE PALM	SEE PLANS FOR C.T. HTS	YES	YES
TD	11			TAXODIUM DISTICHUM	BALD CYPRESS	10' HT. X 3' SPD., 2" CAL.	YES	NO
UA	5			ULMUS ALATA	WINGED ELM	8' HT. X 3-4' SPD., 2" CAL.	YES	YES
SHRUBS		Symbol	No.	Scientific Name	Common Name	Size Requirements	Native Florida	Drought Tolerant
LJ	22			LIGUSTRUM JAPONICUM	GREEN LIGUSTRUM	MIN. 6' HT. - FULL TO GROUND, 5' O.C.	NO	YES
MF	45			MYRSINUS FRAGRANS	SIMPSONS STOPPER	3 GAL., 18" HT. X 16" SPC., 3" O.C.	YES	YES
MUC	31			MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	3 GAL., 18-24" SPD., 3" O.C.	YES	YES
VOB	180			VIBURNUM OBOVATUM	WALTERS VIBURNUM 'DWARF'	20" HT. X 18" SPC., 3" O.C.	YES	YES
ZP	191			ZAMIA FUMIDA	COONTE	3 GAL., 16-18" SPD., 2.5" O.C.	YES	YES
GROUND COVER		Symbol	No.	Scientific Name	Common Name	Size Requirements	Native Florida	Drought Tolerant
DT	137			DIANELLA TASMANICA 'ALBO-MARGINATA'	BLUEBERRY FLAX LILY	1 GAL., 12" HT. X 10" SPD., 2" O.C.	NO	YES
TJN	551			TRACHELOSPERMUM ASIATICUM 'MINIMA'	'DWARF' CONFEDERATE JASMINE	1 GAL., 10-12" SPD., 18" O.C.	NO	YES

THE MAINTENANCE OF THE LANDSCAPE AND IRRIGATION AT THIS SITE IS THE RESPONSIBILITY OF: CIRCLE K STORES, INC. PO BOX 52085 PHOENIX, AZ 85072-2085



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

HEARTWOOD AND BARK
 LANDSCAPE ARCHITECTURE - URBAN DESIGN
 200 2nd St. S. #433 St. Petersburg, FL 33701
 (727) 348-1809 Web: www.heartwoodandbark.com
 License Number: LC2600025

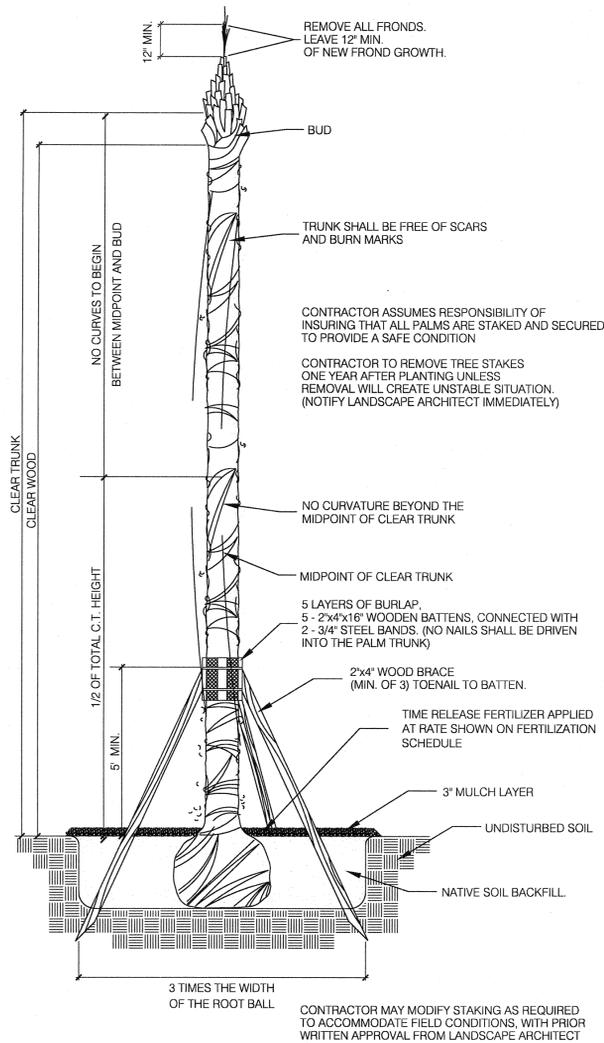


CIRCLE K STORE
 STATE ROAD 54 AT BALLENTRAE BLVD.
 PASCO COUNTY, FLORIDA

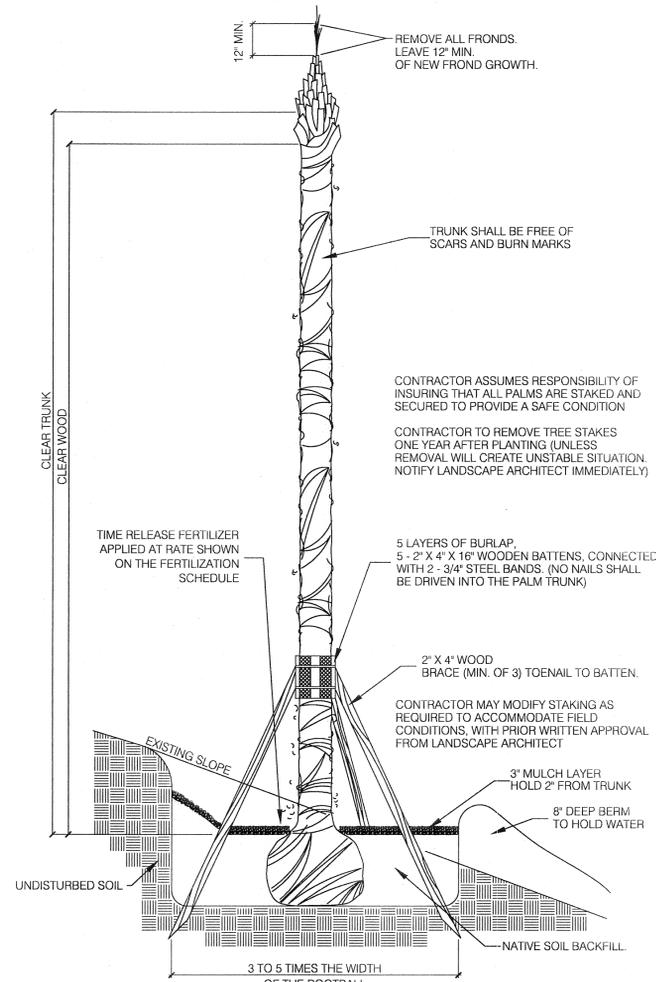
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 DATE: 5/1/15

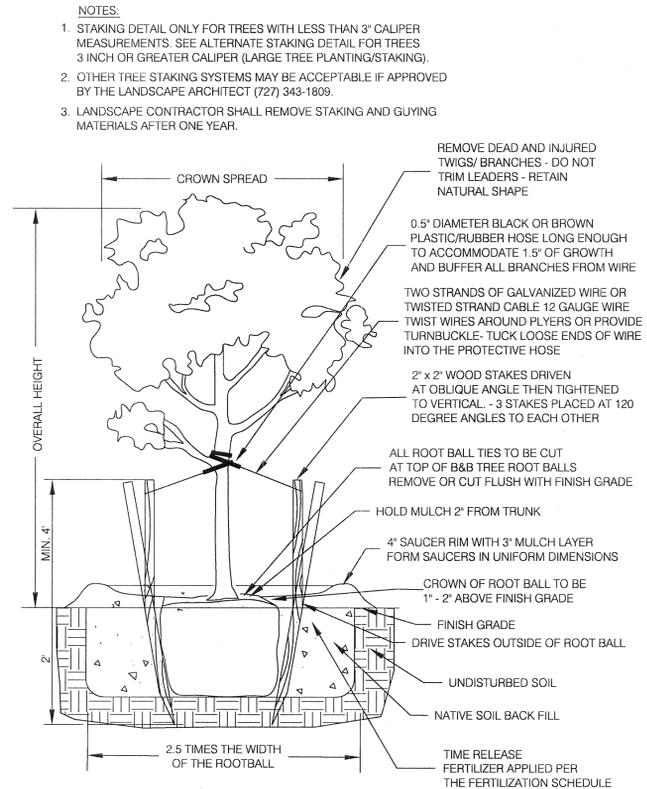
15023
 LANDSCAPE PLAN
 LS1



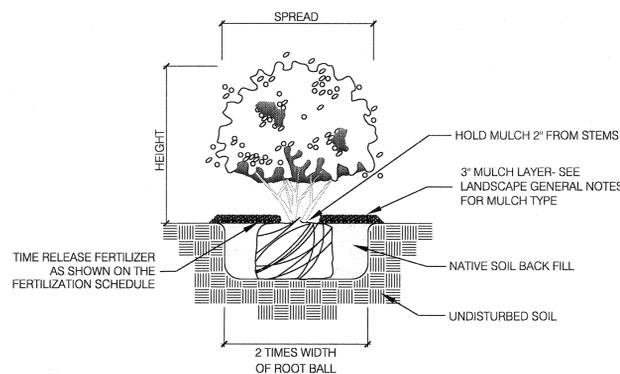
1 SABAL PALM PLANTING DETAIL
LS2 NOT TO SCALE



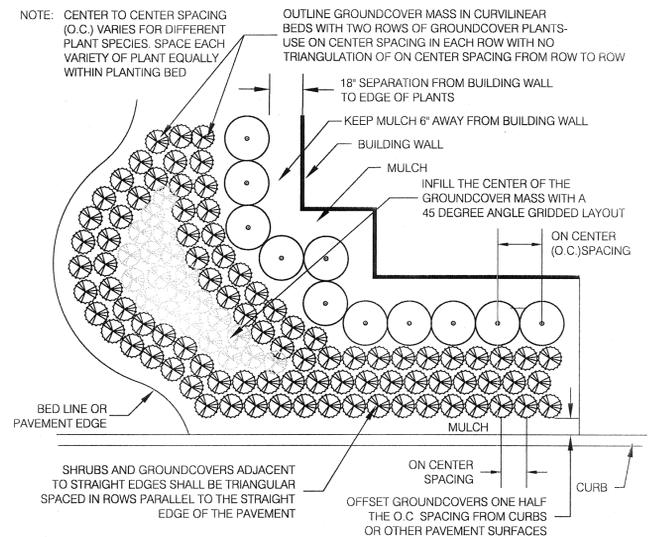
2 SABAL PALM SLOPE PLANTING DETAIL
LS2 NOT TO SCALE



3 SMALL TREE PLANTING DETAIL (<3" CALIPER)
LS2 NOT TO SCALE



4 SHRUB & GROUNDCOVER PLANTING DETAIL
LS2 NOT TO SCALE



5 SHRUB AND GROUNDCOVER LAYOUT DETAIL
LS2 NOT TO SCALE

- ### GENERAL LANDSCAPE NOTES
- 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.
 - 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) inches above natural grade. Diameter breast height (DBH) measurements to be taken at 4.5 feet above natural grade.
 - 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.
 - 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.
 - If a conflict between the Plans and the Specifications exists, the Plans shall predominate and be considered the controlling document.
 - Contractor shall provide documentation of plant variety when specified. Plants specified by Genus and Species alone shall not require documentation.
 - 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.
 - 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).
 - 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.
 - 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.
 - 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.
 - All B&B trees shall have strings, twine or rope removed from the top of the basket. All flagging tags, identification tags, and other objects shall be removed from the plant material prior to calling for a Substantial Completion inspection.
 - Mulch shall be Pine Bark mini-nuggets. Sod shall be St. Augustine Floratam. Retention ponds to be sodded to top of bank with 'Argentine' Bahia sod.
 - 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.
 - 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.
 - 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.
 - 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.
 - All questions concerning the Plans, Details, or Specifications shall be directed to the Landscape Architect, (727-343-1809).
 - An irrigation system is proposed for this property. The proposed irrigation system will comply with Section 905.4 of the Pasco County Development Standards.

- ### FERTILIZATION SCHEDULE
- 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.
 - 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.
 - 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
 - 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.
 - 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.
 - 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
- 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.
 - 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.
 - 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.

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

5/1/15

DRAWN BY: JAZ
DATE: 5/1/15
15023
LANDSCAPE DETAILS
LS2

HEARTWOOD AND BARK P.C.
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License Number: LC26000325



CIRCLE K STORE

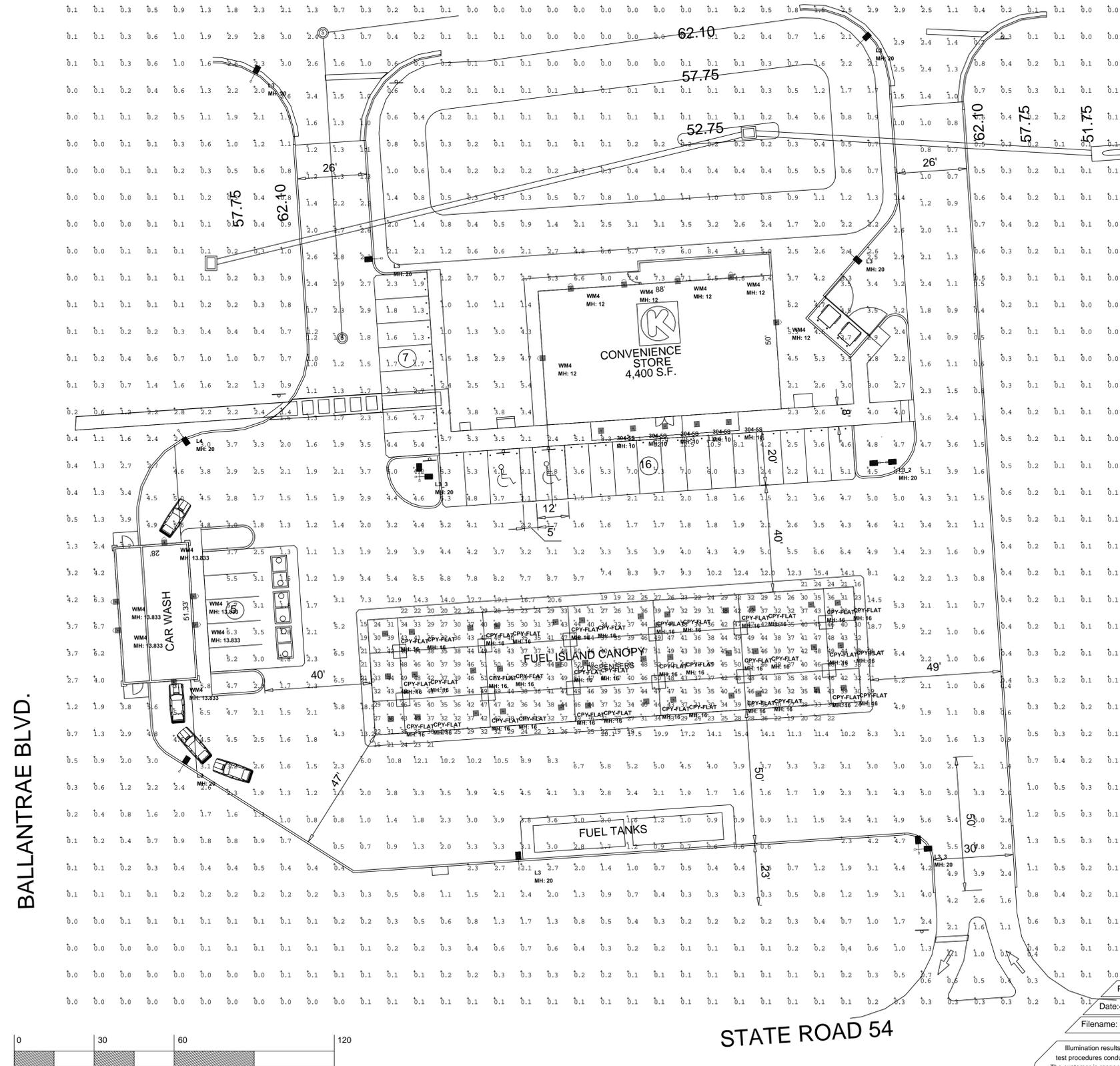
STATE ROAD 54 AT BALLENTRAE BLVD.
PASCO COUNTY, FLORIDA

REVISIONS:

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Symbol	Qty	Label	Arrangement	Lumens/Lamp	LLF	Lum. Watts	Description
[Symbol]	5	304-5S	SINGLE	5308	0.920	46	CAN-304-5S-04-E-UL-XX-350
[Symbol]	36	CPY-FLAT	SINGLE	13000	0.960	122	CPY250-A-DM-F-B-UL-XX
[Symbol]	6	L3	SINGLE	11076	0.890	134	STR-LWY-3M-XX-06-E-UL-XX-700
[Symbol]	1	L3_2	BACK-BACK	11076	0.890	134	STR-LWY-3M-XX-06-E-UL-XX-700
[Symbol]	2	L3_3	2 @ 90 DEGREES	11076	0.890	134	STR-LWY-3M-XX-06-E-UL-XX-700
[Symbol]	1	L4	SINGLE	11683	0.890	134	STR-LWY-4M-XX-06-E-UL-XX-700
[Symbol]	12	WM4	SINGLE	6216	0.900	70	SEC-EDG-4M-WM-04-E-UL-XX-525

Footcandles calculated using predicted lumen values after 50K hours of operation				
Label	Avg	Max	Min	Avg/Min
Overall Site	1.63	21.0	0.0	N.A.
Paved Areas	2.79	12.7	0.3	9.30
Under Canopy	36.60	52	15	2.44



FIXTURE MOUNTING HEIGHTS:
 POLE MOUNTED - 20' AFG (17' POLE + 3' CONCRETE BASE)
 WALL MOUNTED: STORE - 12' AFG
 CAR WASH - 13' 10" AFG
 GAS CANOPY - 16' AFG
 BUILDING CANOPY - 10' AFG

ADDITIONAL EQUIPMENT REQUIRED:
 (10) PS4S17CTxx (17' x 4" x 0.125" STEEL SQUARE POLE, TENON MOUNT)
 (7) PD1H4xx (SINGLE MOUNT LEDWAY TENON FOR 4" POLE)
 (1) PD2H4(180)xx (2@180 LEDWAY TENON FOR 4" POLE)
 (2) PD2H4(180)xx (2@90 LEDWAY TENON FOR 4" POLE)
 PROPOSED POLES MEET 140MPH SUSTAINED WINDS

***CUSTOMER TO VERIFY MOUNTING, VOLTAGE, AND COLOR PRIOR TO PLACING ORDER



1200 92nd Street - Sturtevant, WI 53177
www.cree.com - (800) 236-6800

Project Name: CIRCLE K - S.R. 54 AND BALLANTRAE

Customer No: 09361

Date: 4/20/2015

Scale: 1"=30'

Footcandles calculated at grade

Filename: RJ150415PAFLJER1.AGI

Layout by: JACOB EDLER

Illumination results shown on this lighting design are based on project parameters provided to Cree, Inc. used in conjunction with luminaire test procedures conducted under laboratory conditions. Actual project conditions differing from these design parameters may affect field results. The customer is responsible for verifying dimensional accuracy along with compliance with any applicable electrical, lighting, or energy code.

