#### The Enclosed Document Is Provided For Your Convenience.

# Please Email ALL Questions:

MailTo:ContractAdministration@TampaGov.net

Please Let Us Know If You Plan To Bid

City of Tampa
Contract Administration Department
306 E. Jackson St. #280A4N
Tampa, FL 33602
(813)274-8456

# TAMPA RIVERWALK DOYLE CARLTON SEGMENT

CIVIL ENGINEER:

DENNIS W. SYRJA, P.E.
LICENSE NO.: 43423

LANDSCAPE ARCHITECT SHIRLEY PEARSALL, RLA

STRUCTURAL ENGINEER EVAN BIRK, P.E. LICENSE NO.: 74988

GEORGE PAPADOPOULOS, P.E. LICENSE NO.: 55843

ELECTRICAL ENGINEER: SHAHZAD AHMED LICENSE NO.: 68863

ARCHITECT: WILLIAM H. S. MURRAY LICENSE NO.: 0014993 350 LAUREL ST. TAMPA, FL 33602

FINAL BIDDING DOCUMENTS 11/05/2014

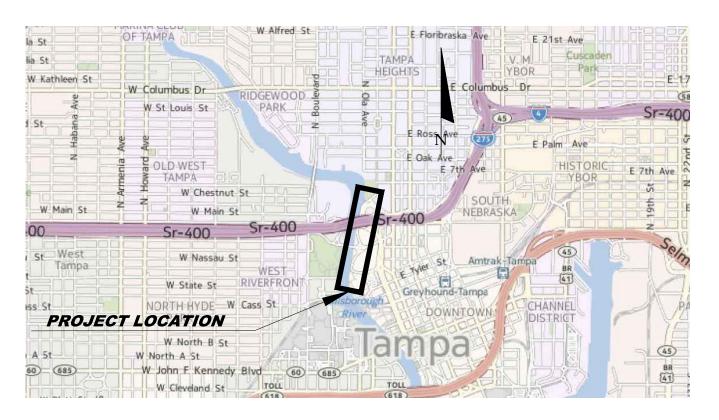
PREPARED FOR:

# CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION

FEDERAL GRANT # DTFH61-13-G-00001

PLANS PREPARED BY:

URS Corporation Southern 7650 West Courtney Campbell Causeway Tampa, FL 33607-1462 No. 00000002, NO. 000234



FDOT PROJECT ID 430752-1

**URS** 

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

SHEET NUMBER	SHEET TITLE				
	GENERAL				
G001	COVER SHEET				
G002	INDEX OF DRAWINGS				
G003	GENERAL NOTES				
G004	STANDARD MANATEE CONDITIONS FOR IN-WATER WORK				
G005	EQUIPMENT STAGING AREA				
	SURVEY				
V101	EXISTING CONDITIONS UPDATED TREE INVENTORY PLAN				
V101	EXISTING CONDITIONS UPDATED TREE INVENTORY PLAN				
V103	EXISTING CONDITIONS OF DATED TREE INVENTORY PLAN				
V104	EXISTING CONDITIONS OF DATED TREE INVENTORY PLAN				
V105	EXISTING CONDITIONS UPDATED TREE INVENTORY PLAN				
V106	EXISTING CONDITIONS UPDATED TREE INVENTORY PLAN				
V107	EXISTING CONDITIONS UPDATED TREE INVENTORY PLAN				
	CIVIL				
	CIVIL				
C111	EROSION & SEDIMENTATION CONTROL PLAN				
C112	CONSTRUCTION SURFACE WATER POLLUTION PREVENTION PLAN				
C121	TREE PROTECTION & SITE DEMOLITION PLAN				
C122	TREE PROTECTION & SITE DEMOLITION PLAN				
C123	TREE PROTECTION & SITE DEMOLITION PLAN				
C124	TREE PROTECTION & SITE DEMOLITION PLAN				
C125	TREE PROTECTION & SITE DEMOLITION PLAN				
C126	TREE PROTECTION & SITE DEMOLITION PLAN				
C127	TREE PROTECTION & SITE DEMOLITION PLAN				
C128	TREE PROTECTION & SITE DEMOLITION DETAILS				
C131 C132	GRADING PLAN GRADING PLAN				
C133	GRADING PLAN				
C134	GRADING PLAN				
C135	GRADING PLAN				
C135A	GRADING PLAN				
C135B	GRADING PLAN				
C136	GRADING PLAN				
C137	GRADING PLAN				
C138	VEHICULAR BARRIER WALL PLAN				
C139	LIGHT POLE DETAIL				
C141	QUICK COUPLER PLAN				
C142	QUICK COUPLER PLAN				
C143	QUICK COUPLER PLAN				
C144	QUICK COUPLER PLAN				
C145	QUICK COUPLER PLAN				
C146	QUICK COUPLER PLAN QUICK COUPLER PLAN				
C147 C301	TYPICAL SECTIONS				
C501	CIVIL DETAILS				
C502	CIVIL DETAILS				
C503	UTILITY DETAILS				
C504	UTILITY DETAILS				
C505	UTILITY DETAILS				
	HARDSCAPE				
H101	HARDSCAPE PLAN				
H102	HARDSCAPE PLAN				
H103	HARDSCAPE PLAN HARDSCAPE PLAN				
H104					
H105 H106	HARDSCAPE PLAN HARDSCAPE PLAN				
H107	HARDSCAPE PLAN				
H301	HARDSCAPE DETAILS				
H302	HARDSCAPE DETAILS				
H303	HARDSCAPE DETAILS				
H304	HARDSCAPE DETAILS				
H305	HARDSCAPE DETAILS				
H306	HARDSCAPE DETAILS				
H307	HARDSCAPE DETAILS				
H308	HARDSCAPE DETAILS				
H309	HARDSCAPE DETAILS				
H310	HARDSCAPE DETAILS				
H311	HARDSCAPE DETAILS				
H312	HARDSCAPE DETAILS				
H313	HARDSCAPE DETAILS				
H314	HARDSCAPE DETAILS				
<del></del>					

SHEET NUMBER	SHEET TITLE							
LANDSCAPE								
L101	LANDSCAPE PLAN							
L102	LANDSCAPE PLAN							
L103	LANDSCAPE PLAN							
L104	LANDSCAPE PLAN							
L105	LANDSCAPE PLAN							
L106	LANDSCAPE PLAN							
L107	LANDSCAPE PLAN							
L201	PLANT SCHEDULE							
	LANDSCAPE NOTES							
L202 L301	LANDSCAPE DETAILS							
1501	•							
	IRRIGATION							
IR101	IRRIGATION PLAN							
IR102	IRRIGATION PLAN							
IR103	IRRIGATION PLAN							
IR104	IRRIGATION PLAN							
IR105	IRRIGATION PLAN							
IR106	IRRIGATION PLAN							
IR107	IRRIGATION PLAN							
IR108	IRRIGATION PLAN							
IR201	IRRIGATION MATERIALS LIST							
IR301	IRRIGATION DETAILS							
IR302	IRRIGATION DETAILS							
	STRUCTURAL							
SD001	STRUCTURAL DEMOLITION NOTES & DETAILS							
SD101	STRUCTURAL DEMOLITION PLAN UNDER LAUREL STREET							
SD102	STRUCTURAL DEMOLITION PLAN UNDER 1-275							
S001	STRUCTURAL NOTES							
S101	CANTILEVER SIDEWALK SECTION UNDER LAUREL STREET							
S102	CANTILEVER SIDEWALK SECTION UNDER 1-275							
S501	CANTILEVER SIDEWALK CROSS SECTIONS							
S502	CANTILEVER SIDEWALK CROSS SECTIONS							
S510	ART SCULPTURE FOUNDATION (1)							
S511	ART SCULPTURE FOUNDATION (1)  ART SCULPTURE FOUNDATION (2)							
1-7								
H-/	EXISTING RIVERFRONT BULKHEAD PLANS (DATED DEC. 1967)							
	ELECTRICAL							
F001	LICCEND & NOTE							
E001	LEGEND & NOTE							
E101	ELECTRICAL SITE PLAN							
E102	ELECTRICAL SITE PLAN							
E103	ELECTRICAL SITE PLAN							
E104	ELECTRICAL SITE PLAN							
E105	ELECTRICAL SITE PLAN							
E106	ELECTRICAL SITE PLAN							
E107	ELECTRICAL SITE PLAN							
E501	ELECTRICAL DETAILS 1 OF 5							
E502	ELECTRICAL DETAILS 2 OF 5							
E503	ELECTRICAL DETAILS 3 OF 5							
E504	ELECTRICAL DETAILS 4 OF 5							
E505	ELECTRICAL DETAILS 5 OF 5							
	ARCHITECTURAL							
A501	SCREEN WALL DETAILS AT LAUREL STREET BRIDGE							
A502	SCREEN WALL DETAILS							
A503	SCREEN WALL DETAILS							
A504	SCREEN WALL DETAILS AT LAUREL STREET BRIDGE							
A505	SCREEN WALL DETAILS AT I-275 OVERPASS							
A506	BENCH SWING DETAILS							
A507	GUARD RAILING "BASIS OF DESIGN" DETAILS							
	<del> </del>							
-	<del> </del>							
-								
-								
-								
1								

URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-1711
Engineering Business No. 00000002

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT
FOR
CITY OF TAMPA

CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION



#### **GENERAL CONSTRUCTION NOTES**

- A. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES HAVING REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE PROPOSED IMPROVEMENTS, THE ENGINEER, LANDSCAPE ARCHITECT, AND THE ARCHITECT. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE ANY NECESSARY INSPECTIONS ACCORDING TO AGENCY INSTRUCTIONS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE DEWATERING PLAN APPROVED BY THE WATER MANAGEMENT DISTRICT, IF APPLICABLE.
- ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO IN THESE PLANS SHALL BE OF
- C. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK. ALL CONSTRUCTION, MATERIALS AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH CITY OF TAMPA LECHNICAL SPECI-ICALIONS AND FDOT SPECIFICATIONS CURRENT EDITION.
- D. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL PRE-CAST AND MANUFACTURED ITEMS TO THE OWNER'S ENGINEER FOR APPROVAL. FAILURE TO OBTAIN APPROVAL BEFORE FABRICATION AND/OR INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT
- E. WORK PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED BY OTHER CONTRACTORS AND UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES WHERE NECESSARY, WITH OTHER CONTRACTORS AND UTILITY COMPANIES (INCLUDING, BUT NOT LIMITED TO LIGHTING, POWER, TELEPHONE, CABLE, GAS, ETC...).
- F. THE WATER, SANITARY SEWER, AND STORM DRAINAGE FACILITIES ARE SUBJECT TO THE REVIEW AND APPROVAL OF APPLICABLE AGENCIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN THE REQUIRED PERMITS TO PERFORM WORD AN THE PUBLIC POLYT COMMENT.
- G. IT WILL BE NECESSARY TO EXAMINE, COORDINATE AND ADJUST ACCORDINGLY THE PROPOSED LOCATIONS OF THE VARIOUS COMPONENTS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SUBMIT COORDINATION DRAWINGS SHOWING PIPE SIZES, STRUCTURES, AND ELEVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SCHEDULING AND COORDINATION OF THE UNDERGROUND WORK ASSOCIATED WITH
- H. ALL MECHANICAL EQUIPMENT SHALL BE SCREENED FROM VIEW, WHEN POSSIBLE.
- I. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY ENVIRONMENTAL PROTECTION AGENCY PERMITTING WHERE REQUIRED. THIS INCLUDES FILING A NPDES NOTICE OF
- J. TOPOGRAPHIC SURVEY PREPARED BY ECHEZABEL & ASSOCIATES IS INCLUDED WITHIN THE CONSTRUCTION BID SET. CONTRACTOR SHALL VERIFY THE SURVEY DATUM USED FOR THE DESIGN OF THE PROJECT. THE SAME DATUM SHALL BE USED FOR CONSTRUCTION.
- K. A GEOTECHNICAL REPORT HAS BEEN PREPARED BY TIERRA, INC. TO INVESTIGATE SUBSURFACE SOIL CONDITIONS AND IS MADE PART OF THESE DOCUMENTS BY REFERENCE.
- L. 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 CALLED FOR IN THIS CONTRACT.
- M. ALL UNDERGROUND UTILITIES MUST BE IN PLACE AND TESTED OR INSPECTED PRIOR TO BASE AND PAVEMENT CONSTRUCTION.
- N. FORTY-EIGHT (48) HOUR NOTICE IS REQUIRED TO THE ENGINEER PRIOR TO SITE INSPECTIONS AND/OR WITNESSING OF STORM, WATER, AND SEWER TESTING
- O. THE CITY OF TAMPA CONSTRUCTION ADMINISTRATION CONSTRUCTION DIVISION WILL SCHEDULE AND COORDINATE A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR AND
- P. CONTRUCTION SHALL ADHERE TO APPLICABLE AGENCY CRITERIA, PERMIT CONDITIONS, AS WELL AS SPECIFICATIONS PROVIDED BY OWNER.
- Q. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE OWNER CONCERNING LIMITS OF CONSTRUCTION, TRANSITIONS, ETC. WHICH MAY NOT BE SHOWN ON
- R. CONTRACTOR SHALL VERIFY LOCATIONS AND DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE OWNER OR ENGINEER IMMEDIATELY FOR RESOLUTION.

#### SAFETY NOTES

- A. DURING THE CONSTRUCTION AND MAINTENANCE OF THIS PROJECT, ALL OSHA SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE
- B. THE CONTRACTOR'S MAINTENANCE OF TRAFFIC PLAN MUST BE SUBMITTED AND APPROVED BY APPLICABLE AGENCIES AND ENGINEER PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES.
- C. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION AND CONSTRUCTION WORK PER STANDARD 1910.12.
- D. CONTRACTOR SHALL PROVIDE AND MAINTAIN ITS OWN SAFETY EQUIPMENT IN ACCORDANCE WITH ITS HEALTH & SAFETY PROGRAM AND ALL OTHER APPLICABLE LEGAL AND HEALTH AND SAFETY REQUIREMENTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING ITS EMPLOYEES AND SUB CONTRACTORS WITH ADEQUATE INFORMATION AND TRAINING TO ENSURE THAT ALL EMPLOYEES AND SUB CONTRACTORS AND SUB CONTRACTOR'S EMPLOYEES COMPLY WITH ALL APPLICABLE REQUIREMENTS. CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH ALL OCCUPATION SAFETY AND HEALTH REGULATIONS AS WELL AS THE ENVIRONMENTAL PROTECTION LAWS. THE FOLLOWING IS NOT TO BE PERCEIVED AS THE ENTIRE SAFETY PROGRAM BUT JUST BASIC REQUIREMENTS.
- E. ALL EXCAVATIONS BY THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AND REGULATIONS AND FLORIDA TRENCH SAFETY ACT. PARTICULAR ATTENTION MUST BE PAID TO THE CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926, SUBPART P.

#### SAFETY NOTES (cont.)

- F. 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 WORKMEN FROM HAZARDS WITHIN THE PROJECT LIMITS.
- G. 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
- H. 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
- I. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE UTILITY COMPANIES PRIOR TO CONSTRUCTION TO OBTAIN FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES. CALL SUNSHINE STATE ONE CALL AT 800-432-4770.

#### PROJECT SPECIFIC NOTES

- 1. THE CONTRACTOR IS TO COORDINATE HIS WORK AND SITE ACCESS WITH THE OTHER ENTITIES THAT MAY BE WORKING ON SITE. ANY CONFLICTS ON COORDINATION ISSUES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND/OR ENGINEER FOR MUTUAL RESOLUTION.
- 2.FORTY-EIGHT (48) HOUR NOTICE IS REQUIRED BY THE ENGINEER PRIOR TO SITE INSPECTIONS AND/OR WITNESSING OF WATER AND/OR SEWER TESTING.
- 3. ALL EXISTING TREES TO REMAIN SHALL BE BARRICADE PROTECTED FROM DAMAGE BY EQUIPMENT AND/OR PERSONNEL
- 4. THE PROPOSED PROJECT WILL NOT ADVERSELY AFFECT SIGNIFICANT HISTORICAL OR ARCHEOLOGICAL RESOURCES UNDER THE PROVISIONS OF SECTION 267.061, F.S. IF EVIDENCE OF THE EXISTENCE OF HISTORIC OR ARCHEOLOGICAL RESOURCES IS DISCOVERED OR OBSERVED AT DEVELOPMENT SITES OR DURING DEVELOPMENT ACTIVITIES AFTER FINAL APPROVAL, ALL WORK SHALL CASES IN THE AREA OF EFFECT AS DETERMINED BY THE DIRECTOR. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER IMMEDIATELY, AND THE DEPARTMENT OF HISTORICAL RESOURCES WITHIN TWO WORKING DAYS. EXAMPLES OF EVIDENCE OF HISTORIC RESOURCES INCLUDE WHOLE OR FRAGMENTARY STONE TOOLS, SHELL TOOLS, ABORGIMAL OR HISTORIC POTTERY, HISTORIC GLASS, HISTORIC BOTTLES, BONE TOOLS, HISTORIC BUILDING FOUNDATIONS, SHELL MOUNDS, SHELL MIDDENS, OR SAND MOUNDS. THE DIRECTOR SHALL ASSESS THE SIGNIFICANCE OF THE FINDS AND MITIGATE ANY ADVERSE EFFECTS AS SOON AS POSSIBLE, BUT NO LATER THAN THREE WORKING
- 5. CONTRACTOR SHALL REFER TO MOFFAT & NICHOL "SEAWALL REPAIR PLANS" DATED AUGUST 2014, FOR PILE CAP RECONSTRUCTION DETAILS AND SPECIFICATIONS.
- 6.CONTRACTOR MUST EMPLOY A LICENSED LAND SURVEYOR TO STAKE OUT THE PROPOSED IMPROVEMENTS. AN AUTOCAD FILE WILL BE PROVIDED TO THE SURVEYOR
- 7. COORDINATION WITH COAST GUARD SECTOR, ST. PETERSBURG IS REQUIRED BEFORE THE PLACEMENT OF BARGES OR RIGGING OF EQUIPMENT IN NAVIGABLE WATERS OF THE LINITED STATES. THE LISCG CONTACT IS LIFLITENANT BRETT SILLMAN AT THE SECTOR HE MAY BE REACHED BY PHONE AT (813) 228-2191. FXT 8146 OR BY FMAIL AT BRETT.S.SILLMANGUSCG.MIL. ALSO COPY MICHAEL LIEBERUM OF THIS OFFICE. HE MAY BE REACHED AT (305) 415-6744 OR BY EMAIL AT MICHAEL.B.LIEBERUM GUSCG.MIL.
- 8. SOURCE OF SUPPLY STEEL (FEDERAL—AID CONTRACTS ONLY): FOR FEDERAL—AID CONTRACTS, ONLY USE STEEL AND IRON PRODUCED IN THE UNITED STATES, IN ACCORDANCE WITH THE BUY AMERICA PROVISIONS OF 23 CFR 635.410, AS AMENDED. ENSURE THAT ALL MANUFACTURING PROCESSES FOR THIS MATERIAL OCCUR IN THE UNITED STATES. AS USED IN THIS SPECIFICATION, A MANUFACTURING PROCESS IS ANY PROCESS THAT MODIFIES THE CHEMICAL CONTENT, PHYSICAL SHAPE OR SIZE, OR FINAL FINISH OF A PRODUCT, BEGINNING WITH THE INITIAL MELIDING AND MIXING AND CONTINUING THOUGH THE BENDING AND COATING STATES. A MANUFACTURED STEEL OR INAL FINISH OF A PRODUCT, BEGINNING WITH THE INITIAL MELIDING AND MIXING AND CONTINUING THOUGH THE BENDING AND COATING STATES. A MANUFACTURED PRODUCT INCORPORATED INTO THE PROJECT (E.G. CONCRETE PIPE, PRESTRESSED BEAMS, CORRUGATED STEEL PIPE, ETC.), THESE SAME PROVISIONS APPLY, EXCEPT THAT THE MANUFACTURED PRODUCT INCORPORATED INTO THE PROJECT (E.G. CONCRETE PIPE, PRESTRESSED BEAMS, CORRUGATED STEEL PIPE, ETC.), THESE SAME PROVISIONS APPLY, EXCEPT THAT THE MANUFACTURED WAY USE MINIMAL QUANTITIES OF FOREIGN SOURCE AND PROJECT OF ANY MANUFACTURED OF ANY MANUFACTURED ON THE CONTRACT AMOUNT OR \$2,500, WHICHEVER GREATER. THESE REQUIREMENTS ARE APPLICABLE TO ALL STEEL AND IRON MATERIALS INCORPORATED INTO THE FINISHED WORK, BUT ARE NOT APPLICABLE TO STEEL AND IRON MATERIALS INCORPORATED INTO THE FINISHED WORK, BUT ARE NOT APPLICABLE TO STEEL AND IRON THAT THAT THE CONTRACT AMOUNT OR \$2,500, WHICHEVER GREATER. THESE REQUIREMENTS ARE APPLICABLE TO ALL STEEL AND IRON MATERIALS INCORPORATED INTO THE FINISHED WORK, BUT ARE NOT APPLICABLE TO STEEL ON RICH THAT THE CONTRACT AMOUNT OR \$2,500, WHICHEVER GREATER. THESE REQUIREMENTS OF THIS SPECIFICATION AND THE BUY AMERICA PROVISIONS OF 23 CFR 635.410, AS AMENDED. SUCH CERTIFICATION SHALL ALSO INCLUDE (1) A STATEMENT THAT THE REPODUCT WAS PRODUCED ENTIRELY WITHIN THE UNITED STATES IN ACCORDANCE WITH THE REPODUCT WAS PRODUCED DETRINED. WITHIN THE UNITED STATES SECEPT FOR MITHIN THE UNITED STATES SECEPT

#### **TESTING SCHEDULE**

NOTE: REFER TO PLANS AND/OR SURVEY FOR ADDITIONAL ABBREVIATIONS NOT SHOWN IN THIS

	I I I I I I I I I I I I I I I I I I I	, L / .		
ITEM	TEST	-	TEST FREQUENCY	
PIPE TRENCH BACK FILL	OPTIMUM MOISTURE/MAXIMUM DENSITY	1	PER SOIL TYPE	
OVER PIPELINES AND AROUND STRUCTURES FROM R.D.W. LINE TO R.D.W. LINE AND IN STRUCTURAL AREAS	98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70)		(SEE NOTES 1 AND 2 BELOW)	
STABILIZED SUB GRADE	OPTIMUM MOISTURE/MAXIMUM DENSITY		PER MATERIAL TYPE	
	MINIMUM 40 LBR		PER MATERIAL TYPE	
	98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70)		(SEE NOTE 3 BELOW)	
BASE (OTHER THAN SOIL CEMENT)	OPTIMUM MOISTURE/MAXIMUM DENSITY		PER SOURCE	
	MINIMUM 100 LBR		PER SOURCE	
	98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557-70) - NO TOLERANCE		EACH LIFT(SEE NOTE 3 BELOW)	
	GRADATION, ATTERBURG LIMITS		PER SOURCE	
BASE	SDIL CEMENT SHALL BE PLANT MIX OR PUG MILL MIX - NO MIX IN PLAC	CE		
(SDIL CEMENT)	95% MAXIMUM DRY DENSITY AS DETERMINED BY AASHTO T-134	:	I PER 300 LF (MIN 1 PER STREET)	
	MINIMUM COMPRESSIVE STRENGTH AT 7 DAYS		3 SAMPLES COMPACTED DAILY (300 PS	
	THICKNESS TEST CORES		300 FT. INTERVALS (MIN 1 PER STREE	
CONCRETE (SEE NOTE 4 BELOW)	SLUMP TEST	1	ONE PER SET OF CYLINDERS	
(PER AASHT□ & ASTM SPECS)	MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS	:	3,500 PSI	
	COMPRESSIVE STRENGTH CYLINDERS		ONE SET OF THREE (3) CYLINDERS FO OO CUBIC YARDS OR FRACTION THERED	
	AIR CONTENT		ONE PER SET OF CYLINDERS	
ASPHALTIC CONCRETE (PER FDOT SECTION 320)	AGGREGATE ANALYSIS DESIGN MIX		INE PER DESIGN INE PER TYPE	
	BITUMEN CONTENT		ONE PER DAY	
	GRADATION STABILITY FLOW		ONE PER DAY	
	PROPERTIES OF IN-PLACE MATERIALS (MARSHALL) THICKNESS 95% OF LAB DENSITY		ONE PER DAY (SEE NOTE 3 BELOW) (SEE NOTE 3 BELOW)	

1. TESTS SHALL BE LOCATED NO MORE THAN 500 FEET APART. TESTS SHALL BE PERFORMED ON EACH LIFT, EXCEPT THAT TESTS SHALL NOT BE FURTHER APART THAN ONE (1) FOOT VERTICALLY, FIELD DENSITIES SHALL BE TAKEN OVER ALL ROAD CROSSINGS. FIELD DENSITIES FOR SANITARY LINES SHALL BE STAGGERED TO INCLUDE RESULTS OVER SERVICE LATERALS. THERE SHALL BE A MINIMUM OF ONE (1) TEST SERVICES FOR EACH 6 INCHES OF LIFT OVER PIPELINE BETWEEN MANHOLES. TESTS AROUND STRUCTURES SHALL BE SPIRALED IN 6 INCH LIFTS. TESTS AROUND BOX CULVERTS SHALL DECOM BOTH SIDES EVERY LIFT.

- 2. FOR FLEXIBLE PIPE (CORRUGATED STEEL OR ALUMINUM), 95% OF MAXIMUM DENSITY (AASHTO-T99) PER FDOT SUPPLEMENTAL SPECIFICATIONS SUB ARTICLE 125-8.3.2 AS MODIFIED. 3. TESTS SHALL BE LOCATED NO MORE THAN 300 FEET APART. THERE SHALL BE NO LESS THAN THREE (3) TESTS PER ROAD.
- 4. APPLIES TO SITE CONCRETE SUCH AS CURBS, GUTTERS, FLUMES, DRIVEWAYS AND SIDEWALKS.
- 5. ENGINEER OF RECORD SHALL RECEIVE MATERIAL TESTING REPORTS NO LATER THAN ONE (1) WEEK FROM THE TEST DATE. 6. TESTING FOR RCP SHALL BEGIN AT THE SPRING LINE OF THE PIPE.
- EMBANKMENT, FILL, AND BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED IN LIFTS NOT TO EXCEED TWELVE (12) INCHES VERTICALLY. EACH COMPACTED LIFT SHALL PASS THE AFOREMENTIONED TESTING CRITERIA BEFORE PROCEEDING TO THE
- 8. DENSITY TESTS SHALL BE PERFORMED AT A MINIMUM FREQUENCY OF ONE TEST PER EVERY 250 SQUARE YARDS OF FILL MATERIAL BEING PLACED, PER VERTICAL LIFT.
- 9. IF SUCCESSIVE VERTICAL LIFTS ARE PLACED, THE DENSITY TESTS SHALL BE STAGGERED SO AS TO NOT BE REPEATED IN THE SAME LOCATION.

CONTRACTOR SHALL CALL "SUNSHINE STATE ONE CALL" 1-800-432-4770 A MINIMUM OF 2-DAYS AND A MAXIMUM OF 5-DAYS PRIOR TO START OF CONSTRUCTION.

REVISIONS

URS Corporation Southern 7650 W. Courtney Campbell Cswy, Tampa, Florida 33607 (813) 286-17 Fortigenering Puripace Nr. 2008286

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

CITY OF TAMPA

CONTRACT NO. 14-C-00033

**GENERAL NOTES** 

DENNIS W. SYRJA, PE

#### STANDARD MANATEE CONDITIONS FOR IN-WATER WORK 2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or in Vero Beach (1-772-562-3909) for south Florida, and emailed to FWC at ImperiledSpecies@myFWC.com.
- Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads Caution: Boaters must be posted. A second sign measuring at least 8½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at http://www.myfwc.com/WILDLIFEHABITATS/manatee sign vendors.htm. Questions concerning these signs can be forwarded to the email address listed above.

CAUTION: MANATEE HABITAT

All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work all in-water activities must

SHUT DOWN

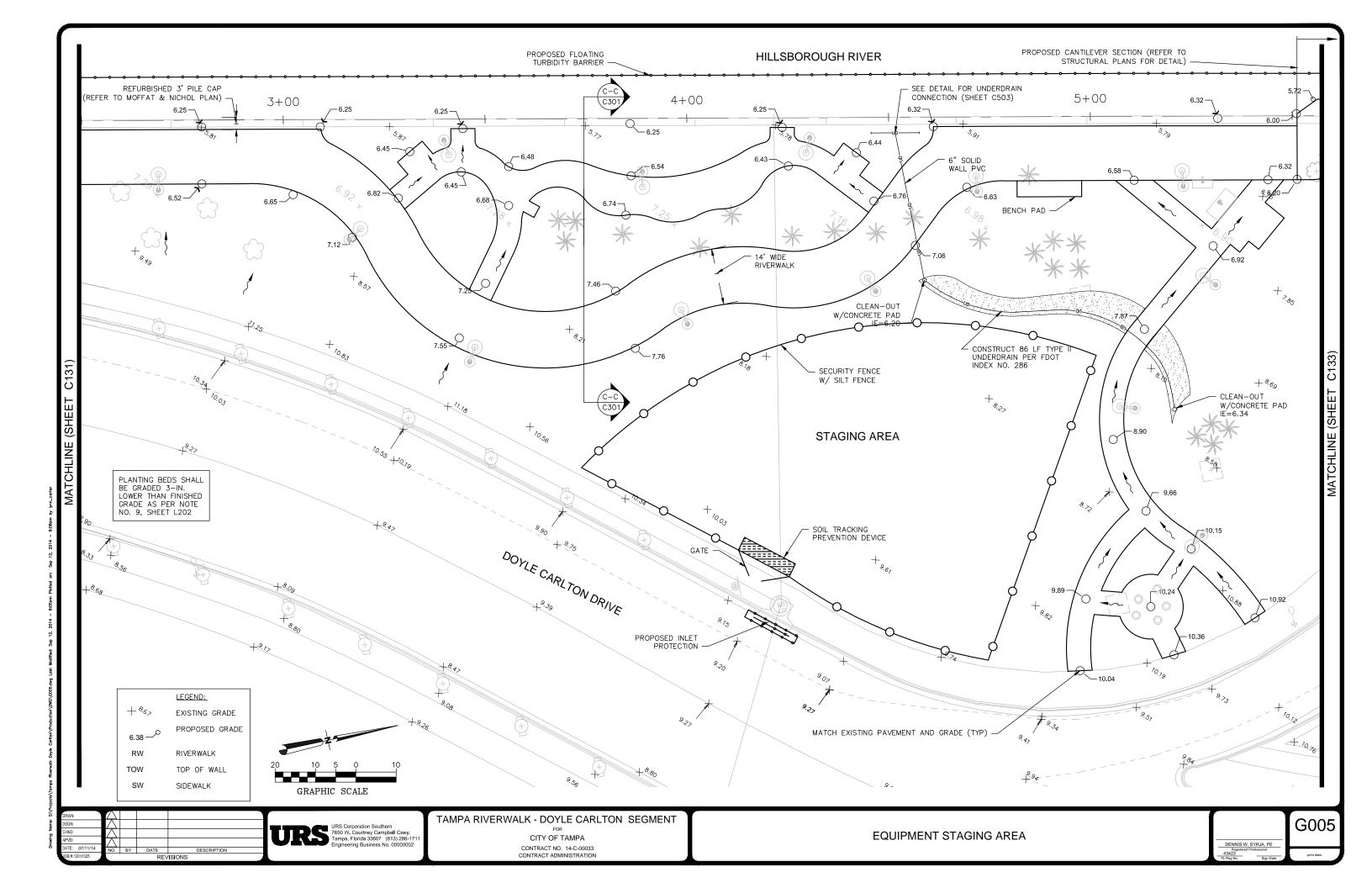
Report any collision with or injury to a manatee:

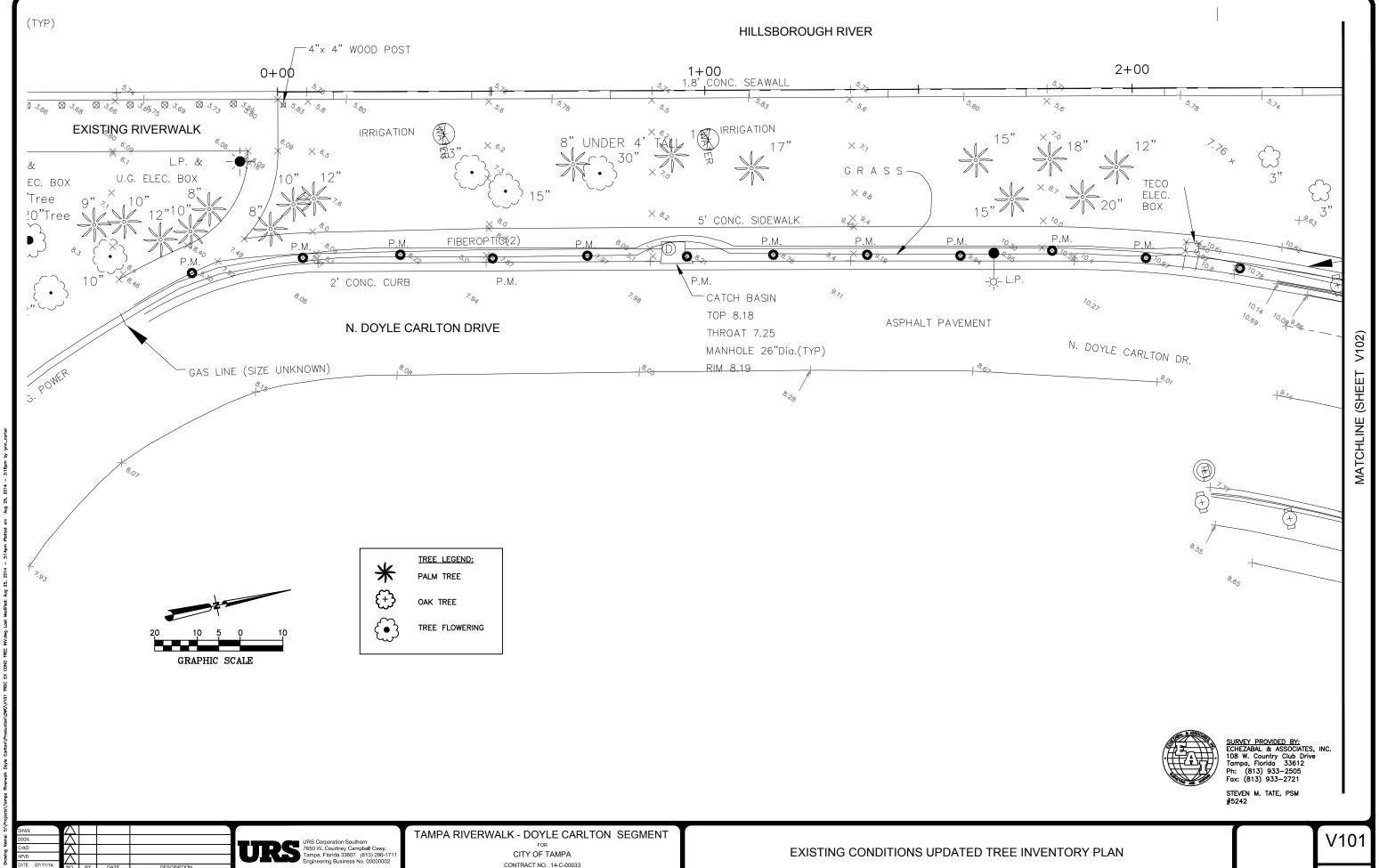


Wildlife Alert: 1-888-404-FWCC(3922)

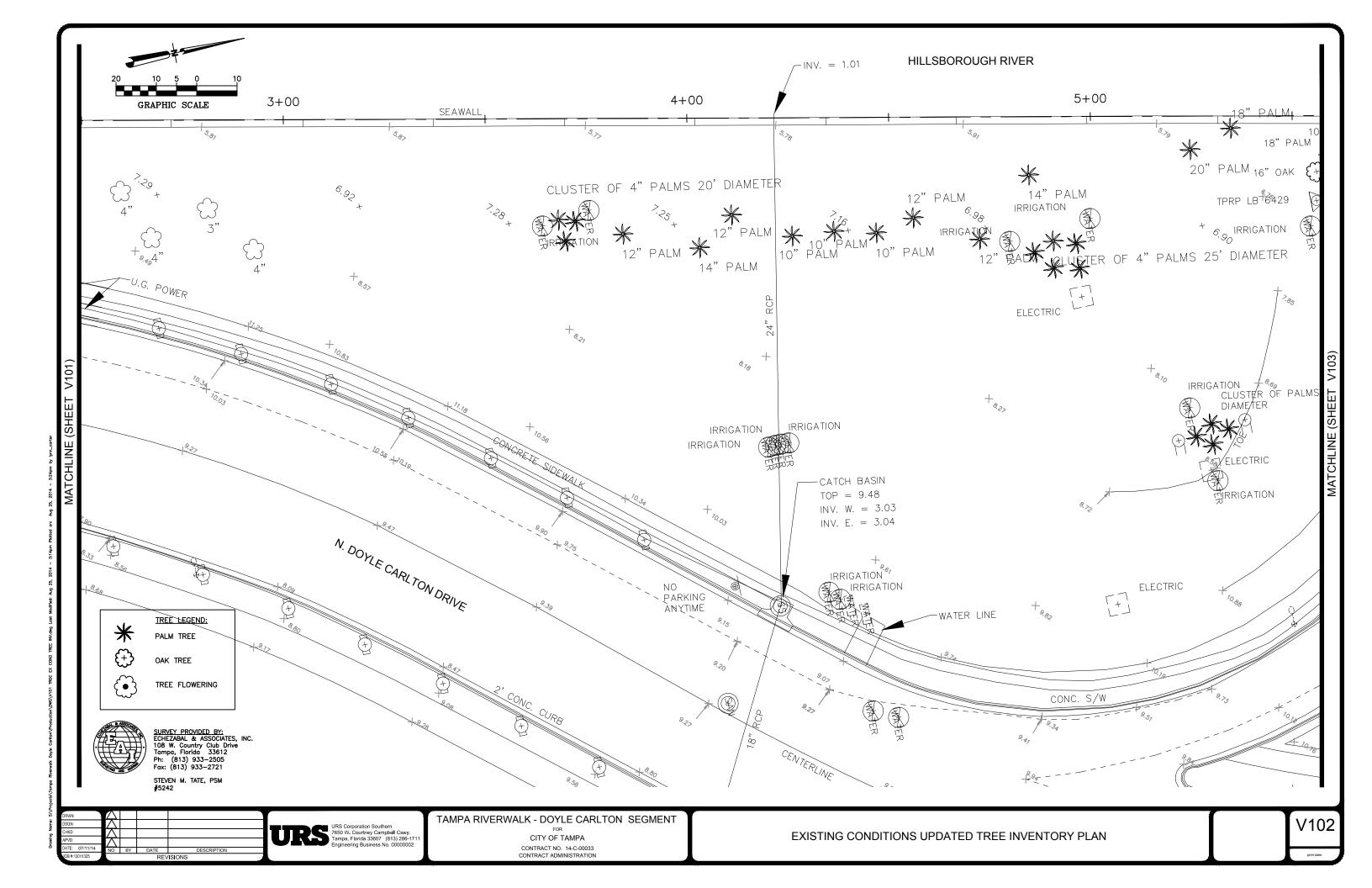
cell \*FWC or #FWC

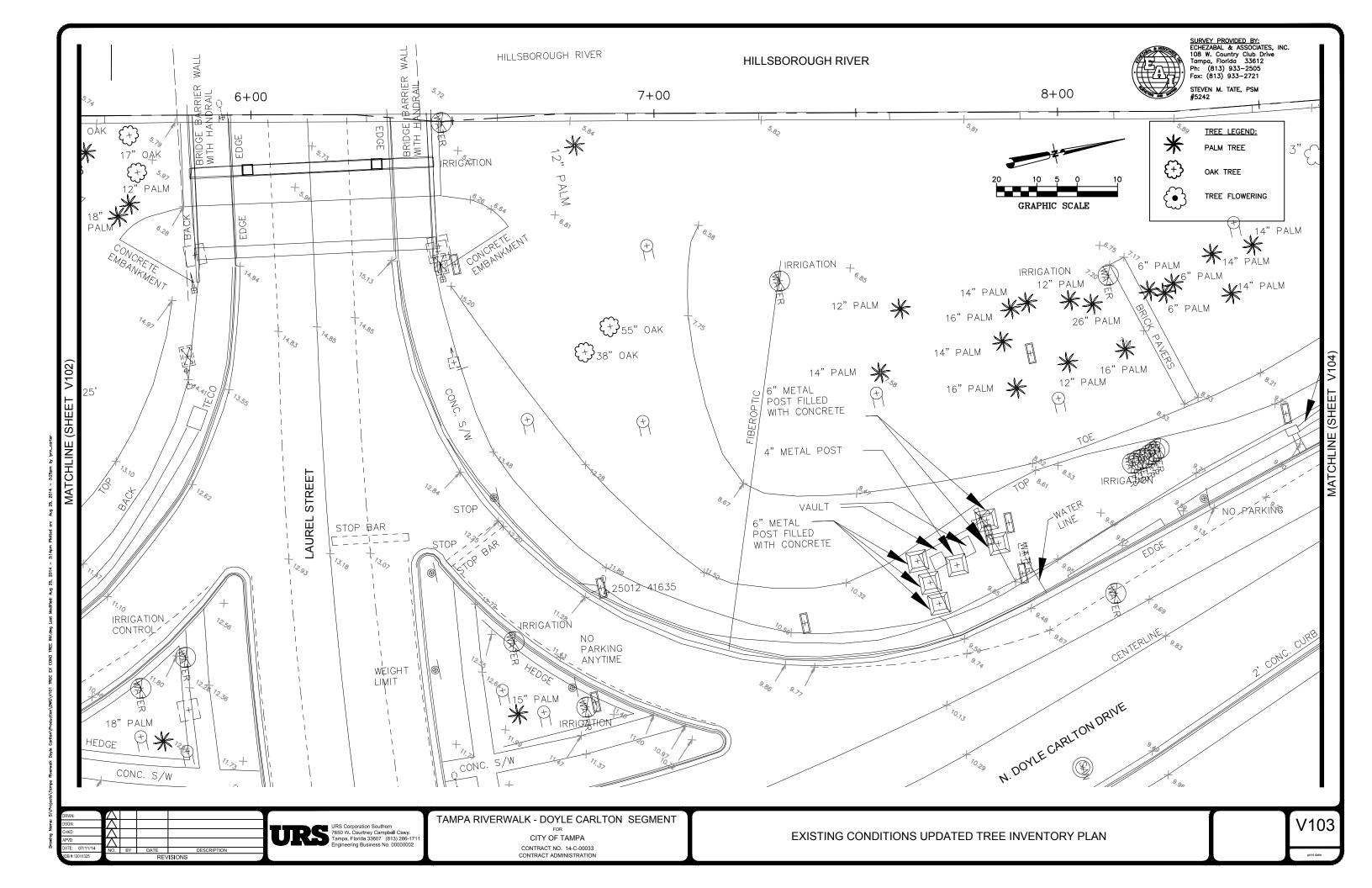
TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

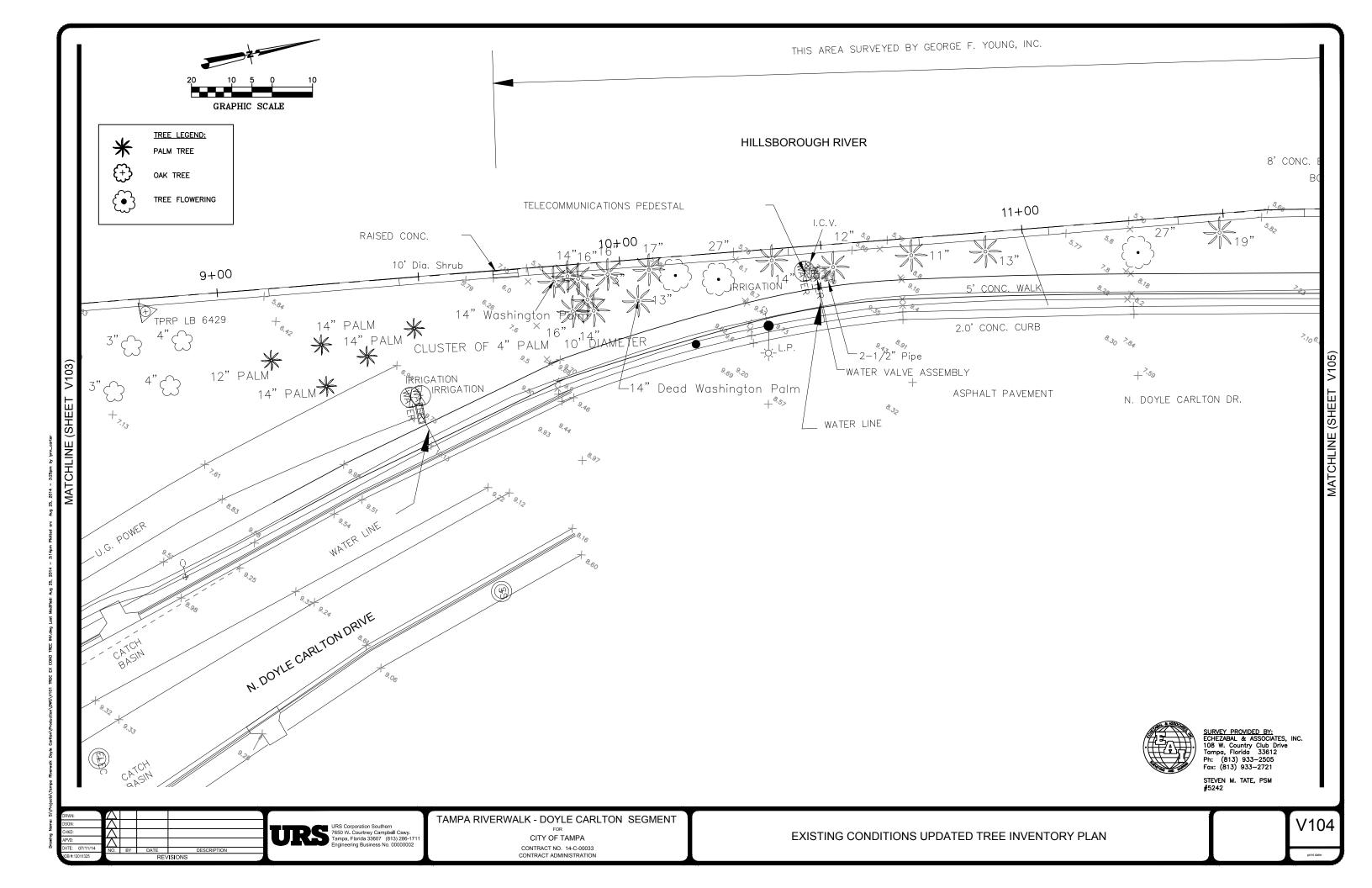


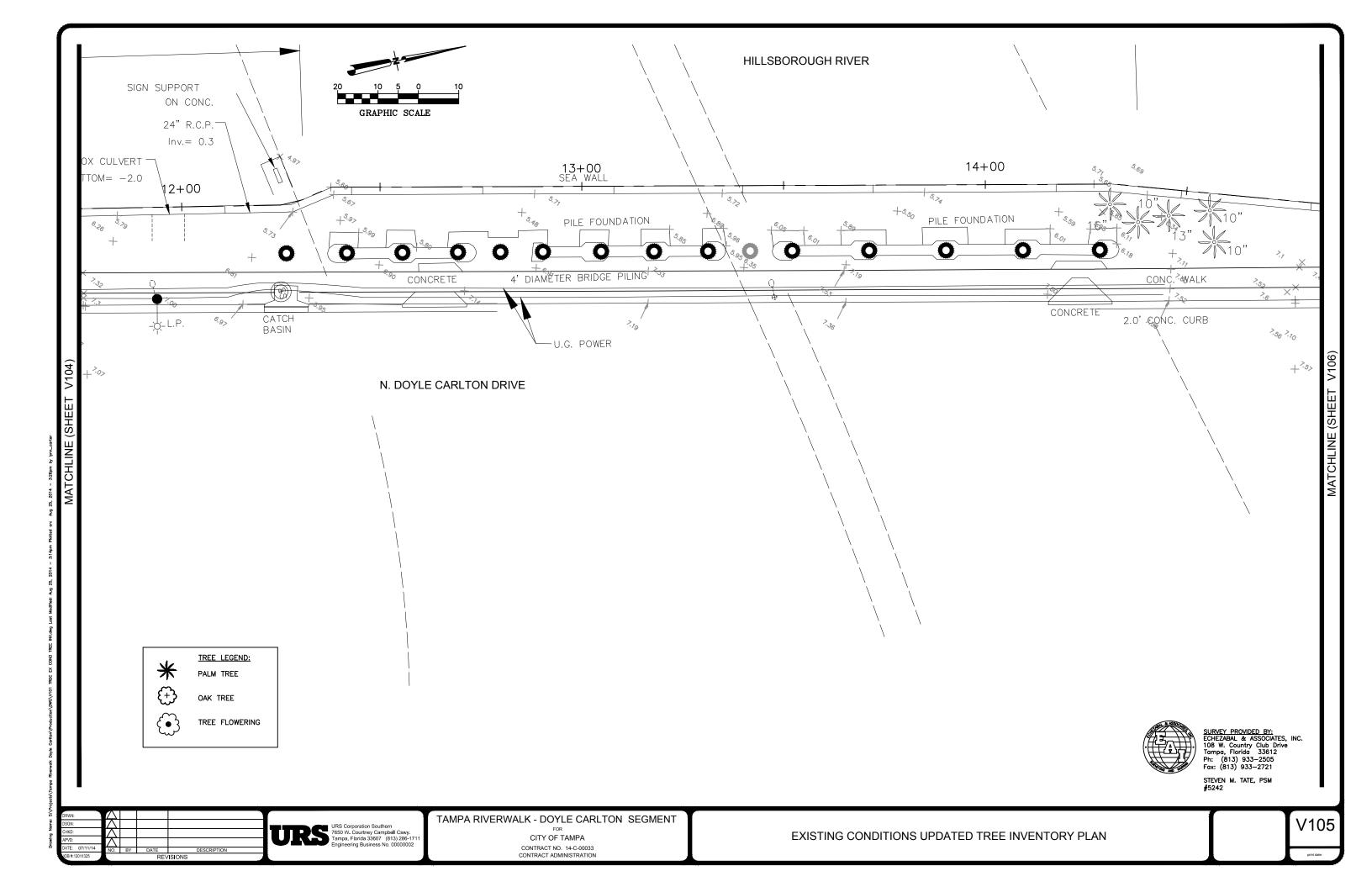


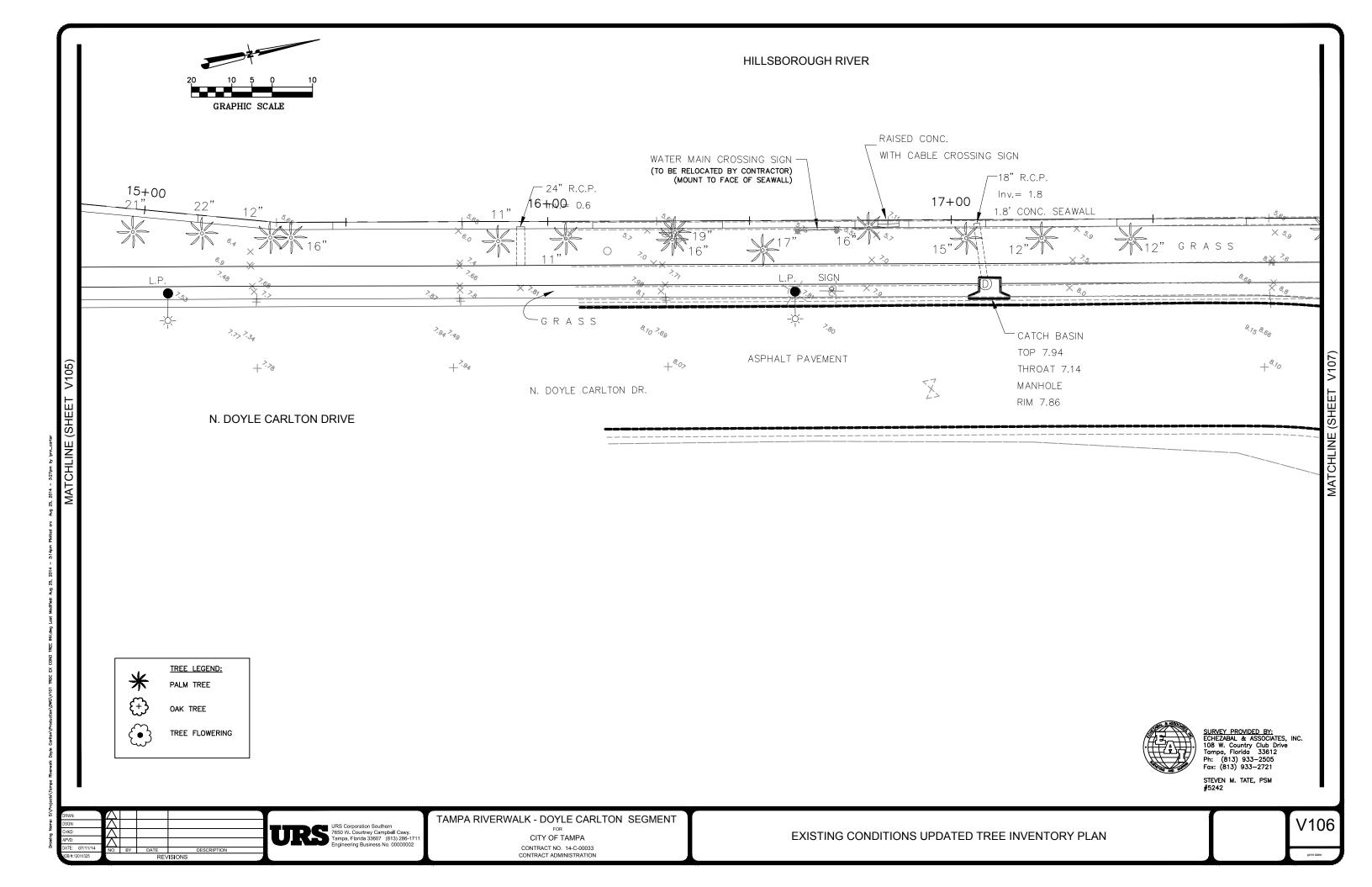
CONTRACT ADMINISTRATION

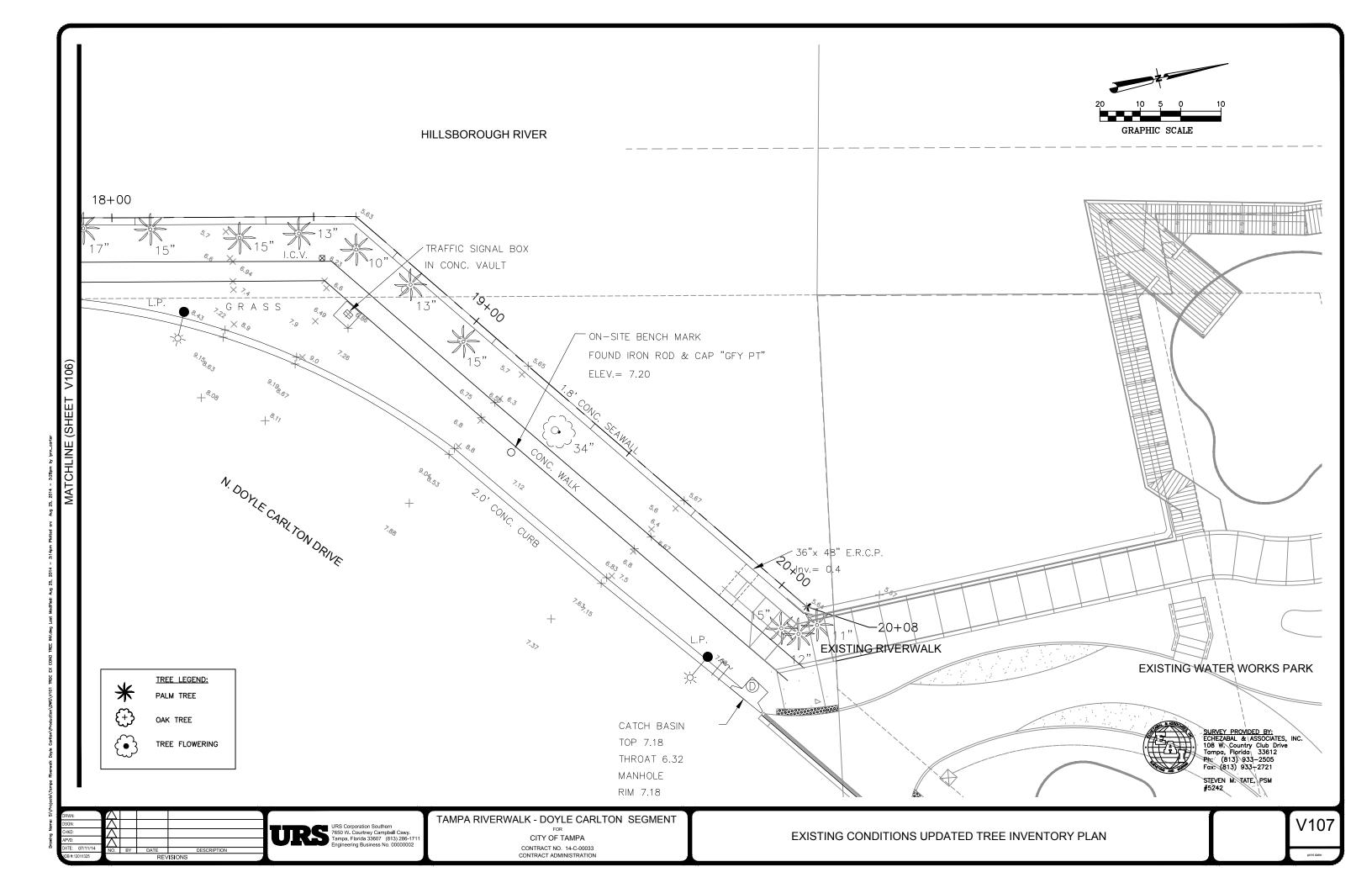


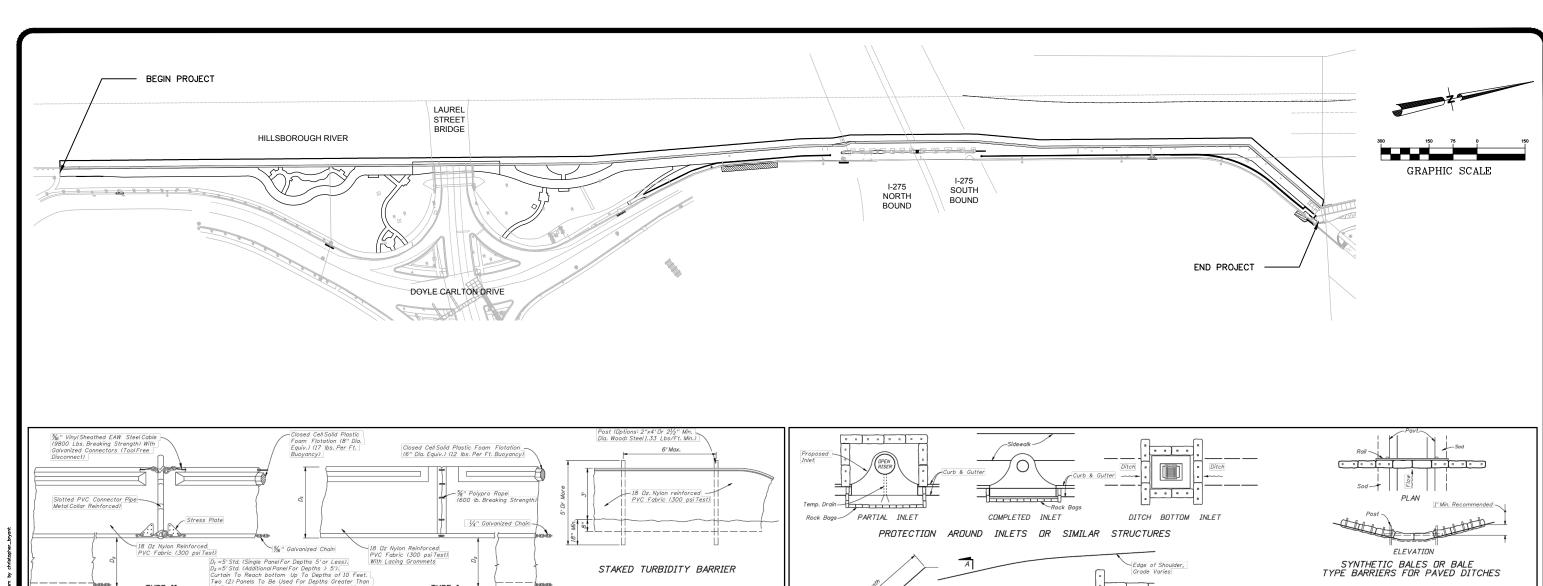












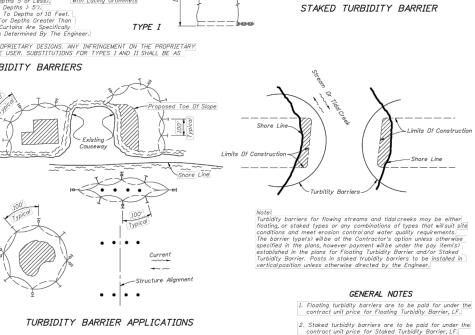


LEGEND Pile Locations Dredge Dr Fill Area —□→ Mooring Buoy w/Anchor - Anchor Barrier Movement Due

Notes: 1. Turbidity barriers are to <u>be used in all permanent bodies of water</u> regardless of water depth.

- 4. Navigation may require segmenting barrier during construction operations.
- 5. For additional information see Section 104 of the Standard Specifications

REVISIONS



# . . . . . . SECTION AA Note: Where the slope length exceeds 25 feet, construct one row of bale barriers at 0% longitudinal grade midway up the slope. Construct two rows of bale barriers where the slope length exceeds 50 feet. ELEVATION ALONG FILL SLOPE 50' On Centers (Typ.) FI FVATION TO BE USED WHERE THE NATURAL GROUD SLOPES AWAY FROM THE TOE OF SLOPE

BARRIERS FOR FILL SLOPES

Woven Filter Fabric In Absence Of Established Grass (Approx. 12'x12'). Secure Edges By Entrenching And Extend Under Bags and Bales. Fabric ELEVATION ELEVATION

TYPE I SYNTHETIC BALES OR BALE TYPE BARRIERS FOR UNPAVED DITCHES

#### NOTES FOR SYNTHETIC BALES OR BALE TYPE BARRIERS

TYPE II

- Bales shall be anchored with 2-1" x 2" (or 1" dia.) x 4' wood stakes. Stakes of other material or shape providing equivalent strength may be used if approved by the Engineer. Stakes other than wood shall be removed upon completion of the project.
- Rails and posts shall be  $2" \times 4"$  wood. Other materials providing equivlalent strength may be used if approved by the Engineer.
- 4. Adjacent bales shall be butted firmly together.
- 5. Where used in conjunction with silt fence, bales shall be placed on the upstream side of the fence.

#### FLOATING TURBIDITY BARRIER

N.T.S.

#### TEMPORARY SEDIMENTATION/EROSION CONTROL

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION **EROSION & SEDIMENTATION CONTROL PLAN** 

DENNIS W. SYRJA, PE

C111

URS Corporation Southern 7650 W. Courtney Campbell Cswy. Tamps, Florids 33607 (813) 266-171 Campbell Rusiness No. 000000000

#### CONSTRUCTION SURFACE WATER MANAGEMENT PLAN:

CONTAINED ON THESE PLANS AND WITHIN THE FOLLOWING NOTES IS A STORMWATER POLLUTION PREVENTION PLAN (THE PLAN) WHICH HAS BEEN DEVELOPED BY URS CORPORATION, INC. IN ACCORDANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY'S "NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM" (NPDES) GENERAL PERMIT.

THE FOLLOWING ENTITIES ARE IDENTIFIED AS TEAM MEMBERS OF "THE PLAN": URS CORPORATION, THE DEVELOPER AS IDENTIFIED IN THE TITLE BOX OF THESE PLANS, AND THE SITE CONTRACTOR AND HIS SUB-CONTRACTORS. EACH TEAM MEMBER HAS SPECIFIC RESPONSIBILITIES AND OBLIGATIONS. IN GENERAL, ALL TEAM MEMBERS, WITH REGARD TO THEIR INVOLVEMENT AND RESPONSIBILITIES ON THE PROJECT, ARE TO IMPLEMENT ALL NECESSARY STORMWATER MANAGEMENT CONTROLS TO ASSURE COMPLIANCE WITH STATE WATER POLICY OF FLORIDA (CHAPTER 17-40, FLORIDA ADMINISTRATIVE CODE), THE APPLICABLE STORMWATER REQUIREMENTS OF THE FLORIDA DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT (FDER 1988). MORE SPECIFICALLY, THE DUTIES AND RESPONSIBILITIES OF THE TEAM MEMBERS ARE AS FOLLOWS:

#### URS CORPORATION, INC.

A. DEVELOP A DESIGN FOR STORMWATER POLLUTION PREVENTION INCLUDING, BUT NOT LIMITED TO, RETENTION/DETENTION PONDS, CONTROL STRUCTURES, EROSION CONTROL METHODS AND LOCATIONS AND STABILIZATION CRITERIA. THIS DESIGN IS INCLUDED WITHIN THESE CONSTRUCTION PLANS.

- B. UPON NOTIFICATION BY THE CONTRACTOR, MODIFY THE PLAN AS REQUIRED TO PREVENT STORMWATER POLLUTION RUN-OFF.
- C. SUBMIT AND OBTAIN THE NECESSARY DESIGN RELATED STORMWATER PERMITS FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND OTHER APPLICABLE GOVERNMENTAL BODIES.

D. UPON NOTIFICATION BY THE DEVELOPER OF HIS INTENT TO COMMENCE CONSTRUCTION, SUBMIT A NOTICE OF INTENT PERMIT TO THE ENVIRONMENTAL PROTECTION AGENCY, ALONG WITH A NARRATIVE STATEMENT CERTIFYING THAT THE STORMWATER POLLUTION PREVENTION PLAN PROVIDES COMPLIANCE WITH APPROVED STATE OF FLORIDA ISSUED PERMITS, EROSION AND SEDIMENTATION CONTROL PLANS AND STORMWATER MANAGEMENT PLANS.

- E. SUBMIT TO EPA, ALONG WITH THE ABOVE CERTIFICATION, A COPY OF THE COVER PAGE OF THE STATE OF FLORIDA PERMIT ISSUED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION AND/OR THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT.
- F. SUBMIT TO EPA A COPY OF THE NOTICE OF INTENT TO THE APPLICABLE OPERATOR OF THE MUNICIPAL SEPARATE STORMWATER SYSTEM.
- G. COMPLETE THE APPROPRIATE FORMS FOR THE DEVELOPER'S SUBMISSION OF THE NOTICE OF TERMINATION TO THE ENVIRONMENTAL PROTECTION AGENCY AND ALL APPLICABLE GOVERNMENTAL ENTITIES UPON COMPLETION OF CONSTRUCTION AND FINAL STABILIZATION.

- A. DURING CONSTRUCTION, ASSURE COMPLIANCE WITH THE DESIGNED STORMWATER POLLUTION PREVENTION PLANS PREPARED BY URS CORPORATION.
- B. NOTIFY URS CORPORATION, INC. AND THE DEVELOPER IN WRITING OF ANY NON-STORMWATER POLLUTION SOURCES WHICH ARE BEING STORED, OR OTHERWISE USED DURING THE CONSTRUCTION OF THE PROJECT, I.E., FERTILIZERS, FUELS, PESTICIDES, OTHER CHEMICALS. THIS NOTIFICATION SHOULD BE ACCOMPANIED WITH THE CONTRACTOR'S DESIGN AND METHODS TO PREVENT POLLUTION RUN-OFF FROM THESE SOURCES.
- C. INSPECT ALL EROSION CONTROL DEVICES (MINIMUM WEEKLY), REPAIR AND/OR REPLACE AS NEEDED.
- D. INSPECT ALL STORMWATER POINTS OF DISCHARGE AND NOTIFY URS CORPORATION IN WRITING IF EROSION CONTROL AND STORMWATER MANAGEMENT MEASURES ARE INEFFECTIVE, AND IF REVISION TO THE STORMWATER MANAGEMENT PLAN ARE NEEDED.
- E. INITIATE SITE STABILIZATION MEASURES AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED.
- F. SUBMIT A CERTIFICATION, UTILIZING YOUR COMPANY LETTERHEAD, TO URS CORPORATION AND TO THE DEVELOPER AS FOLLOWS:
- "I CERTIFY UNDER PENALTY OF LAW, THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORMWATER DISCHARGES ASSOCIATED WITH ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION."

CONTRACTOR \_\_\_\_ADDRESS \_\_\_\_CITY, STATE, ZIP \_\_\_ TELEPHONE NUMBER

THIS CERTIFICATION SHALL BE MADE PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR IS ALSO RESPONSIBLE TO ASSURE THAT ALL SUB-CONTRACTORS SIGN THE ABOVE CERTIFICATION AND SUBMIT SAME TO THE DEVELOPER AND URS CORPORATION, INC.

- G. MAINTAIN A COPY OF THE CONSTRUCTION PLANS, WHICH INCLUDE THE STORMWATER POLLUTION PREVENTION PLANS, ON-SITE.
- H. UNDERTAKE ALL REASONABLE MEASURES TO ASSURE THAT SILTED OR OTHERWISE POLLUTED STORMWATER IS NOT ALLOWED TO DISCHARGE FROM THE SITE.
- I. USE THE DETENTION PONDS AS SEDIMENTATION BASINS OR CREATE SEDIMENTATION BASINS AS NEEDED

A. SIGN AND CERTIFY THE NOTICE OF INTENT FORM AS OPERATOR OF THE STORMWATER DISCHARGE FACILITY AND PERMITTEE.

B. SIGN AND SUBMIT A NOTICE OF TERMINATION FORM FOLLOWING CONSTRUCTION AND FINAL STABILIZATION OF THE SITE.

- 1. RECEIVING WATERS OR MUNICIPAL SEPARATE STORM WATER SYSTEM: HILLSBOROUGH RIVER.
- 2. ANTICIPATED START DATE: JANUARY 5, 2015
- 3. ANTICIPATED COMPLETION DATE: JANUARY 1, 2016
- 4. ANTICIPATED CONSTRUCTION SEQUENCE IS AS FOLLOWS: COMPLETE EROSION CONTROL INSTALLATION, CLEARING AND GRUBBING, EARTHWORK ACTIVITIES, STORMWATER SYSTEM CONSTRUCTION, UTILITY CONSTRUCTION, BASE AND PAVEMENT CONSTRUCTION, FINAL STABILIZATION.
- 5. TOTAL SITE ACRES: 1.00 ACRES  $\pm$
- 6. RUN-OFF COEFFICIENTS ('C' FACTORS) PRE-DEVELOPED: 0.20 POST-DEVELOPED: 0.78
- 7. THE STORMWATER MANAGEMENT SYSTEM, UPON COMPLETION OF CONSTRUCTION AND APPROPRIATE CERTIFICATION AND AS-BUILT SUBMITTALS, WILL BE OPERATED AND MAINTAINED BY THE CITY OF TAMPA.
- 8. THE POTENTIAL SOURCE OF POLLUTION FROM THIS PROJECT IS SOIL EROSION DURING CONSTRUCTION ACTIVITIES.

PRINT NAME:

AUTHORIZED AGENT FOR: CITY OF TAMPA

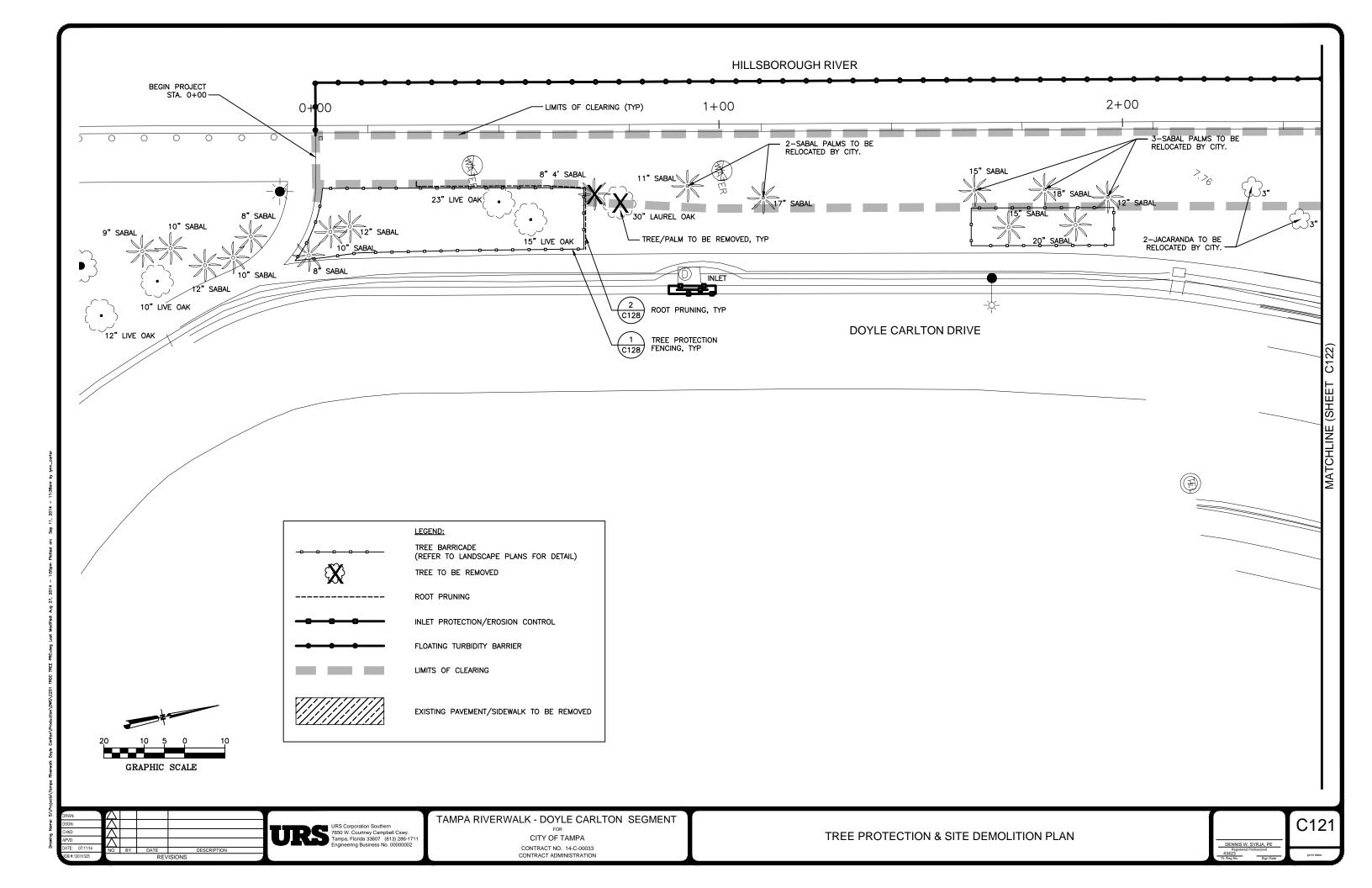
URS Corporation Southern 7650 W. Courtney Campbell Cswy. Tampa, Florida 33607 (813) 286-17

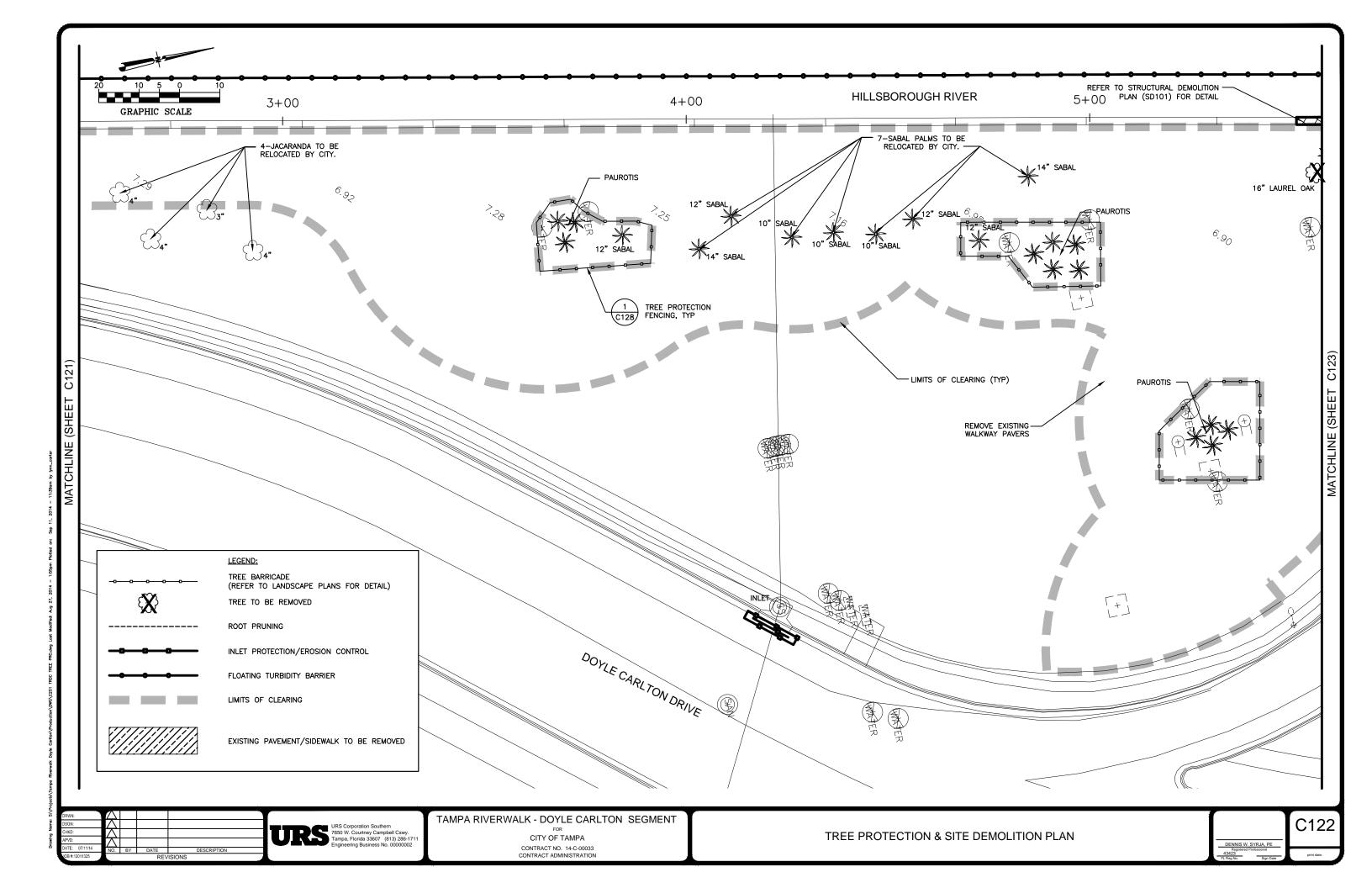
REVISIONS

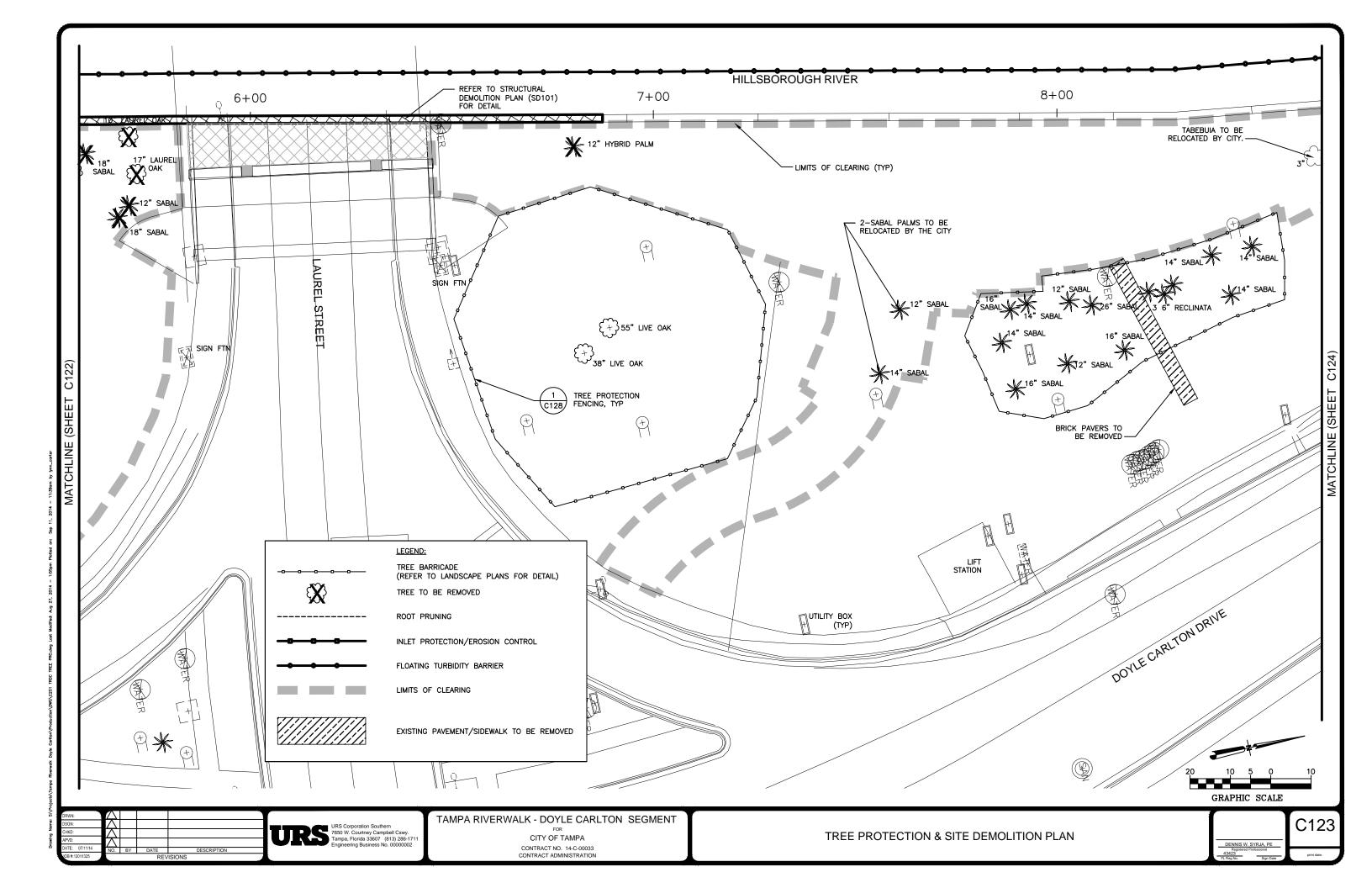
TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

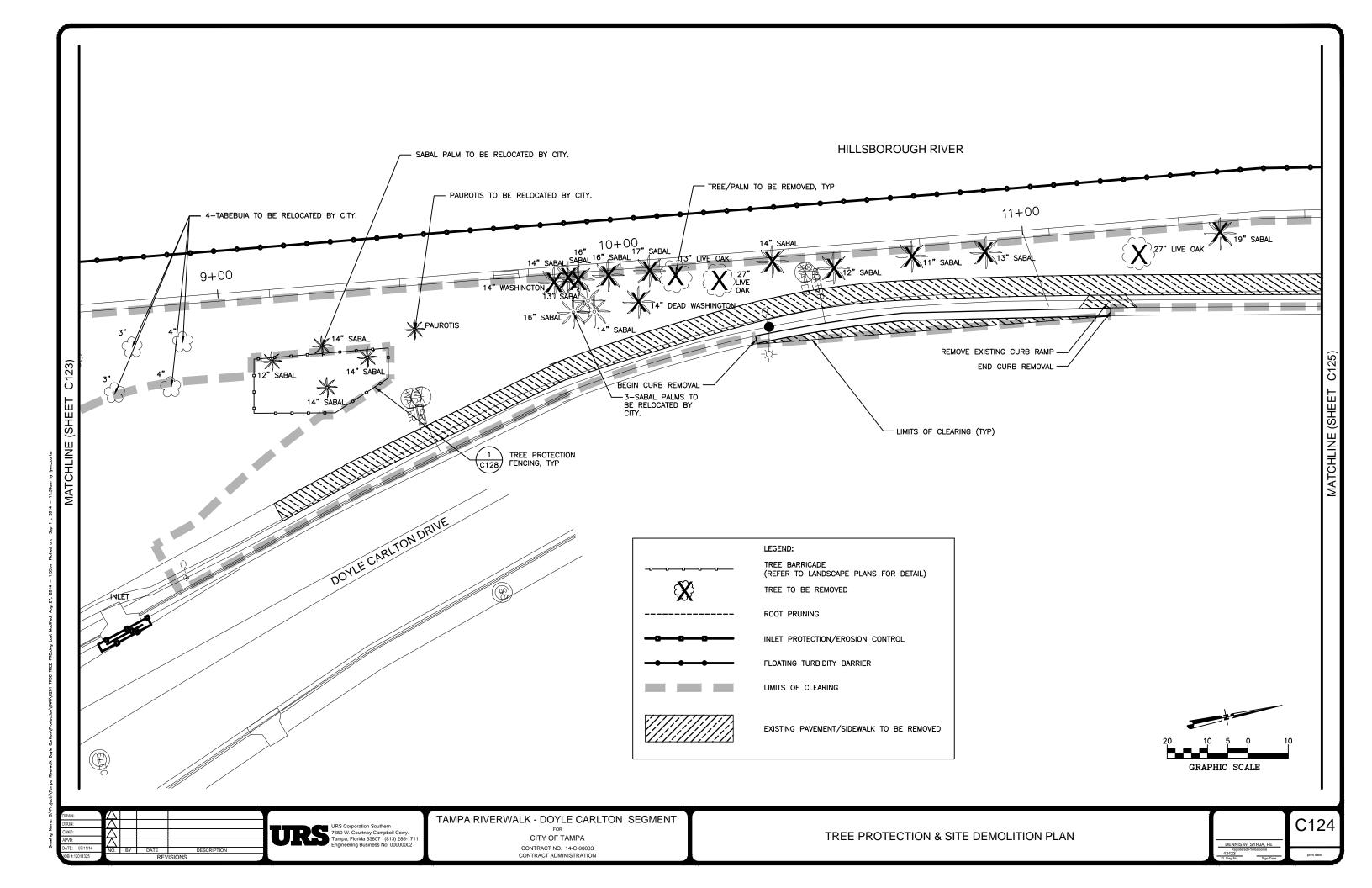
CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION CONSTRUCTION SURFACE WATER POLLUTION PREVENTION PLAN

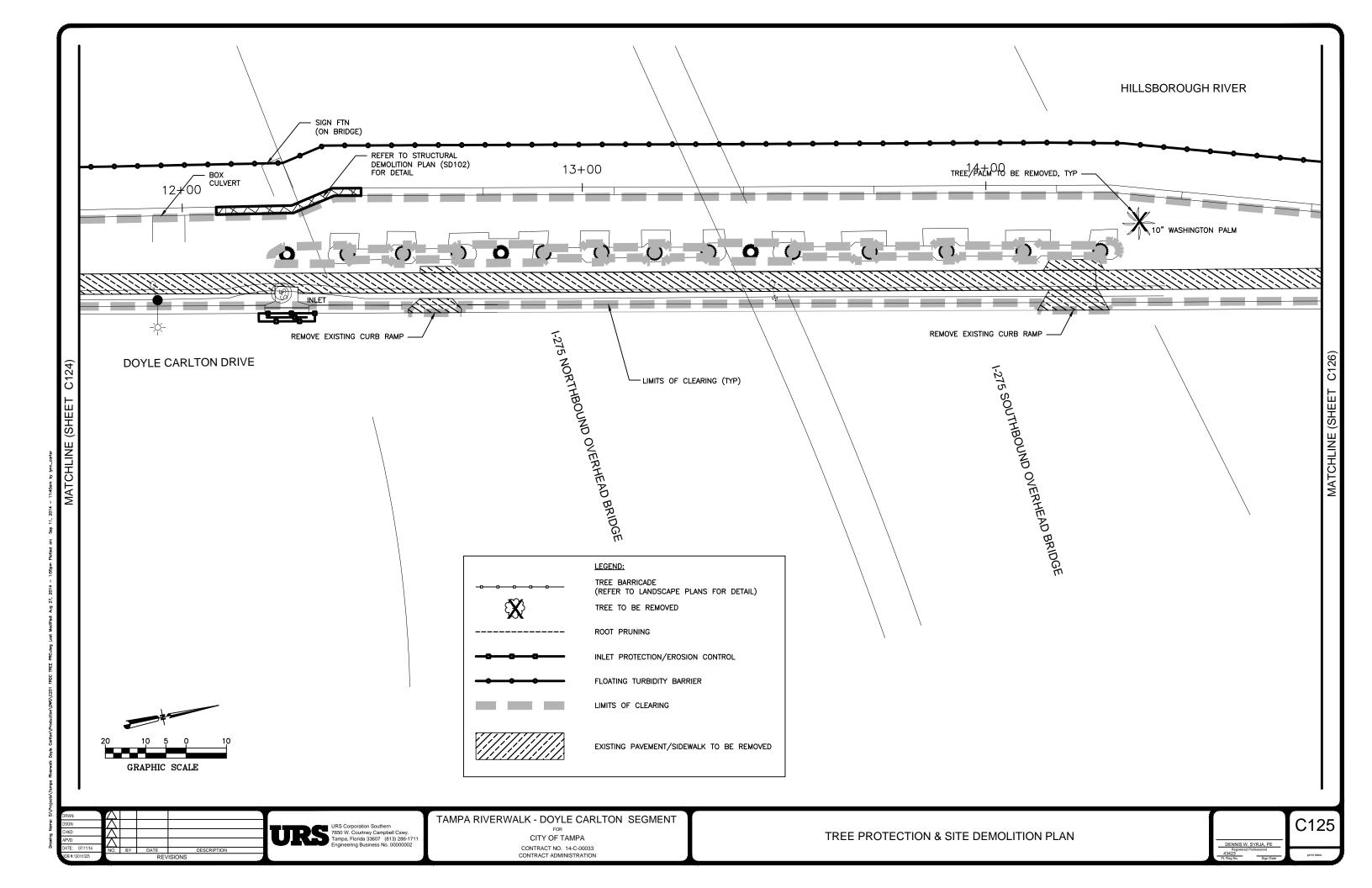
DENNIS W. SYRJA, PE

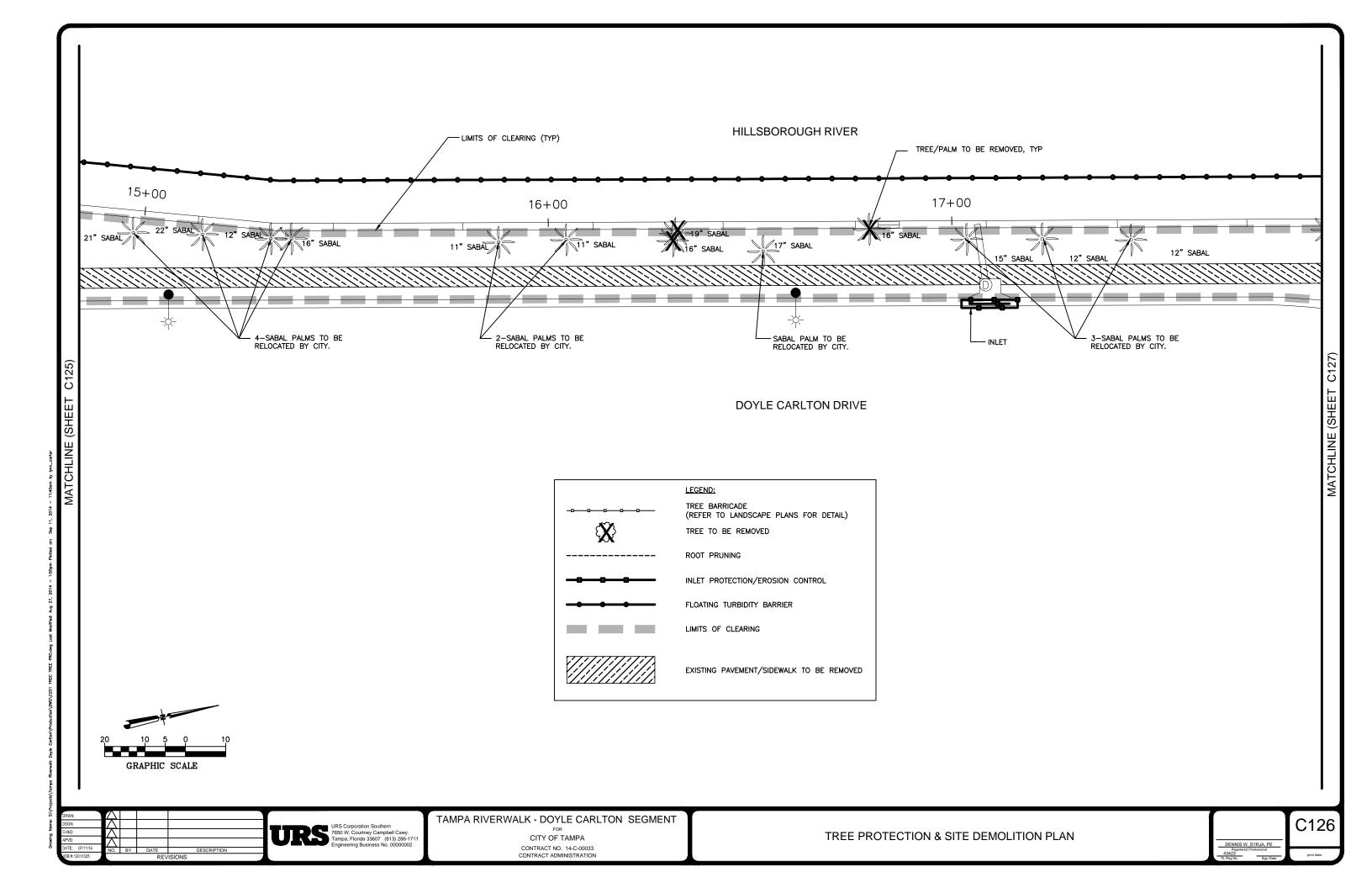


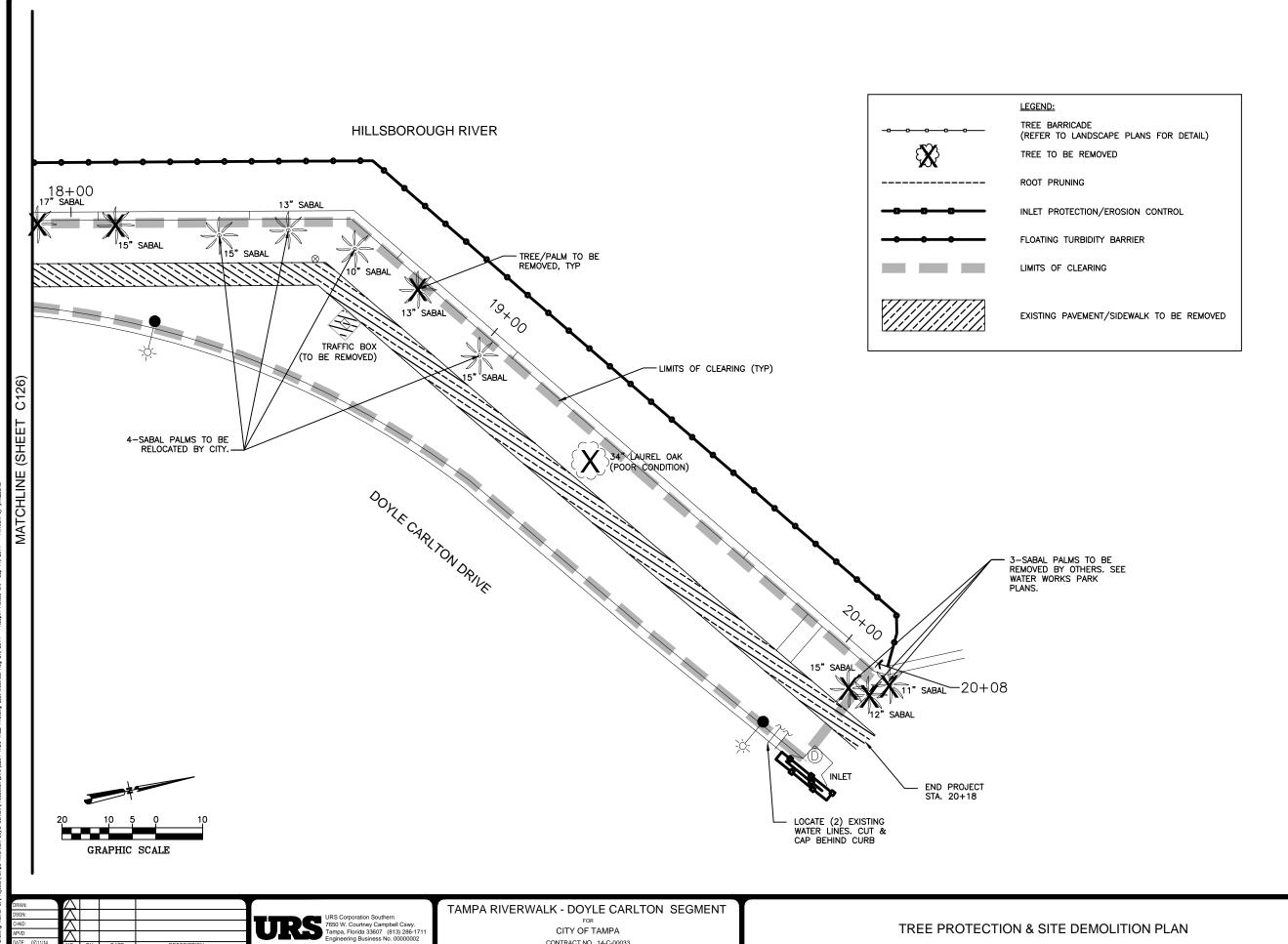












CITY OF TAMPA

CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION

C127

#### ROOT PRUNING/TREE BARRICADE NOTES:

- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF THE CITY OF TAMPA'S LAND DEVELOPMENT CODE (LDC), CHAPTER 13 AND CHAPTER 27, WHICH PERTAIN TO LANDSCAPING TREE PROTECTION/REMOVAL AND SITE CLEARING.
- PRIOR TO COMMENCEMENT OF SITE DEMOLITION AND CLEARING OR OTHER CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL COORDINATE WITH THE CITY OF TAMPA TO FACILITATE THE CITY'S RETRIEVAL AND RELOCATION OF SELECTED TREES PALMS AND SHRUBS FROM THE PROJECT SITE. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THIRTY (30) DAYS ADVANCE NOTICE OF ANY SCHEDULED SITE DEMOLITION ACTIVITIES TO KARLA PRICE, CITY PARKS AND RECREATION DEPARTMENT; (813) 274-5134. ANY PLANT MATERIAL TO BE RELOCATED SHALL BE IDENTIFIED BY SURVEY FLAGGING AND PROTECTED UNTIL RELOCATED BY THE CITY CONTRACTOR SHALL IDENTIFY TREES TO BE PRESERVED AND THOSE TO BE REMOVED. TREES TO BE REMOVED SHALL BE CLEARLY IDENTIFIED BY SURVEY FLAGGING A MINIMUM OF 72 HOURS PRIOR TO REMOVAL
- CONTRACTOR SHALL PROTECT TREES TO BE PRESERVED FROM DAMAGE BY PROVIDING TREE BARRICADES ERECTED PRIOR TO SITE CLEARING OR OTHER CONSTRUCTION ACTIVITIES, INCLUDING ROOT PRUNING. TREE BARRICADES SHALL BE INSPECTED BY OWNER'S REPRESENTATIVE. CONTRACTOR SHALL PROVIDE 72 HOURS ADVANCE NOTICE TO OWNER'S REPRESENTATIVE AND PROJECT CERTIFIED ARBORIST TO SCHEDULE AN INSPECTION OF BARRICADES AND ROOT PRUNING. DO NOT ROOT PRUNE OR INSTALL TREE BARRICADES BEYOND THE PROJECT LIMITS.
- TREE BARRICADES WILL REMAIN THROUGHOUT THE DURATION OF PROJECT CONSTRUCTION. CONTRACTOR SHALL MONITOR THE CONDITION OF THE BARRICADES DAILY AND REPAIR ANY BREACHES
- 5. CONTRACTOR SHALL PROTECT THE ROOT SYSTEMS OF TREES TO BE PRESERVED. CONSTRUCTION MATERIALS, FILL, DEBRIS, EXCAVATED MATERIALS AND CHEMICALS SHALL NOT BE STORED WITHIN THE TREE BARRICADE AREAS. EQUIPMENT SHALL NOT BE PARKED NOR OPERATED WITHIN BARRICADES UNLESS EXPRESSLY PERMITTED FOR IRRIGATION PIPE OR ELECTRICAL CONDUIT INSTALLATION. HAND EXCAVATE IRRIGATION TRENCHES OR TUNNEL UNDER EXISTING ROOTS OF PROTECTED TREES AND GRAND TREES.
- TREE BARRICADES MAY BE TEMPORARILY REMOVED TO ALLOW FOR LIMITED WORK INCLUDING INSTALLATION OF SITE LIGHTING FIXTURES OR IRRIGATION PIPING FOR IRRIGATION OF SHRUB BEDS LOCATED WITHIN TREE BARRICADES. EQUIPMENT ACCESS SHALL BE LIMITED TO THOSE AREAS WITHIN THE BARRICADES THAT ARE ABSOLUTELY ESSENTIAL TO COMPLETE THE WORK AND MUST BE APPROVED BY THE PROJECT CERTIFIED ARBORIST BARRICADES SHALL BE REINSTALLED IMMEDIATELY FOLLOWING COMPLETION OF THE WORK
- ALL TREE TRIMMING, ROOT PRUNING, FERTILIZER AND FUNGICIDE APPLICATIONS SHALL BE PERFORMED BY AN ISA CERTIFIED ARBORIST AND STATE LICENSED OPERATOR IN ACCORDANCE WITH FLORIDA STATUTES AND ANSI A300 PARTS 1-4, LATEST EDITIONS.
- THE CONTRACTOR SHALL EMPLOY AN ISA CERTIFIED ARBORIST TO PERFORM OR SUPERVISE ROOT PRUNING, TREE TRIMMING AND APPLICATION OF FERTILIZER AND FUNGICIDE. SUBMIT THE CERTIFIED ARBORIST'S INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) CERTIFICATION TO OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO PERFORMING THE WORK.
- CONTRACTOR SHALL LOCATE AND MARK ROOT-PRUNING LOCATIONS FOR APPROVAL BY THE OWNER'S REPRESENTATIVE AND PROJECT CERTIFIED ARBORIST PRIOR TO TRENCHING. CONTRACTOR SHALL ROOT PRUNE TREES TO BE PRESERVED AS LOCATED ON THF PLANS. ROOT PRUNING SHALL OCCUR AT LOCATIONS SHOWN ON THE PLAN IN A TRENCH 12 INCHES IN WIDTH MINIMUM AND 18 INCHES IN DEPTH. CONTRACTOR SHALL HAND PRUNE ANY ROOTS OVER 1 INCH IN DIAMETER ENCOUNTERED DURING SITE GRADING DEEPER THAN 14 INCHES TO THE LIMIT OF CUT. NO ROOT PRUNING SHALL OCCUR OUTSIDE OF PROJECT LIMITS.
- 10. A VERMEER ROOT—PRUNING MACHINE (OR APPROVED EQUAL) SHALL BE USED TO CUT THROUGH THE ROOTS. ALL ROOTS SHALL BE CUT CLEANLY WITH NO FRAYED OR JAGGED CUTS ALLOWED.
- . FOLLOWING COMPLETION OF ROOT PRUNING, CONTRACTOR SHALL BACKFILL THE TRENCH WITH NATIVE SOILS. BACKFILLING SHALL OCCUR AT THE END OF EACH DAY. A SOIL DRENCH FUNGICIDE SHALL BE APPLIED AT THE MANUFACTURER'S RECOMMENDED RATE TO THE TRENCH AREAS WITHIN FIVE DAYS FOLLOWING COMPLETION OF ROOT PRUNING.

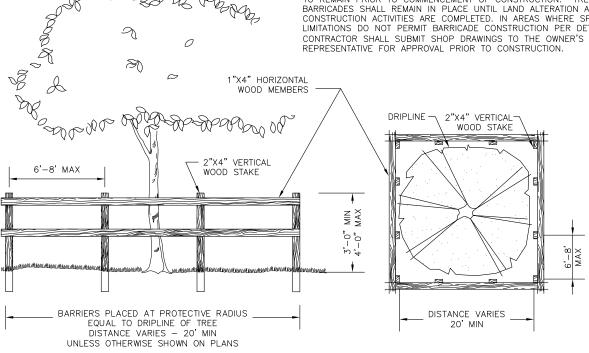
CITY OF TAMPA—TREE TABLES FOR CREDIT AND DEBIT									
DIAMETER (INCHES)	NO. RETAINED ON SITE		MULTIPLIER FOR CREDIT	CREDIT					
5" TO 7" DBH	0		0	0					
8" TO 12" DBH	0		1	0					
13" TO 19" DBH	1		2	2					
20" TO 29" DBH	1		4	4					
30" OR MORE	2		10	20					
ALL PALMS	27		1	27					
TOTAL	31			53					
DIAMETER (INCHES)	NO. REMOVED ON SITE		MULTIPLIER FOR DEBIT	DEBIT					
5" TO 7" DBH	0		0	0					
8" TO 12" DBH	1		1	1					
13" TO 19" DBH	3		2	6					
20" TO 29" DBH	2		4	8					
30" OR MORE	2 (30", 34")		INCH PER INCH		64				
PALMS (REMOVED)	PALMS (REMOVED)		1		23				
PALMS (RELOCATED)		33	1	33					
TOTAL	64			135					
PROPOSED TREES/PALMS (INCH PER INCH)									
PROPOSED 3" CALIPER	11 TREES @ 3" PER TREE			33					
PROPOSED 4" CALIPER	TREES	7 TREES @ 4" PER TREE			28				
PROPOSED PALMS 84 (1:1)					84				
TOTAL INCHES PROVIDED									

#### TREE TABLE NOTES:

- THERE ARE THIRTY-THREE (33) EXISTING PALMS IDENTIFIED ON THE TREE PROTECTION AND SITE DEMOLITION PLAN SHEETS FOR RELOCATION BY THE CITY OF TAMPA. THESE PALMS ARE INCLUDED IN THE TABLE AS DEBIT FOR THE NUMBER OF PALMS REMOVED FROM THE SITE.
- 2. THERE ARE A TOTAL OF SIX (6) EXISTING JACARANDA AND FIVE (5) EXISTING TABEBUIA TREES IDENTIFIED ON THE TREE PROTECTION AND SITE DEMOLITION PLAN SHEETS FOR RELOCATION BY THE CITY OF TAMPA. THESE TREES ARE NOT REFLECTED IN THE TREE TABLE SINCE THEY ARE LESS THAN 5" CALIPER.
- 3. THERE IS AN EXISTING 34" LAUREL OAK IDENTIFIED ON THE TREE PROTECTION AND SITE DEMOLITION PLAN SHEET C127 FOR REMOVAL, THE TREE IS IN POOR CONDITION, IT HAS BEEN INCLUDED IN THE TABLE, PER THE CITY OF TAMPA, AS A DEBIT FOR THE NUMBER OF TREES 30" AND LARGER REMOVED FROM

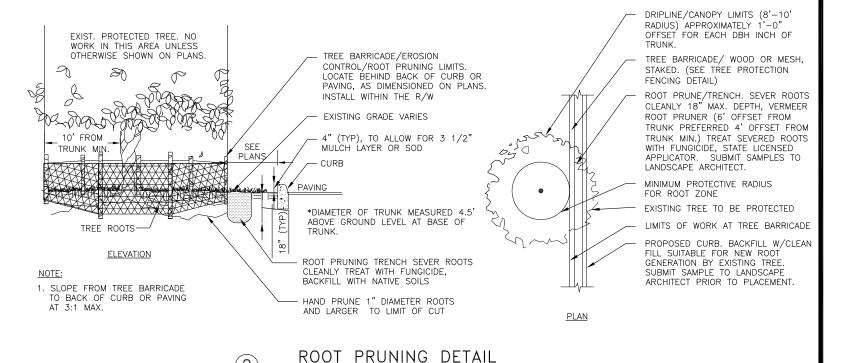
1. DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL NOT REMOVE VEGETATION BY GRUBBING OR PLACE SOIL DEPOSITS, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND WITHIN THE DRIPLINE OF A TREE THAT IS TO REMAIN ON THE SITE. TREE BARRICADES SHALL BE CONSTRUCTED AROUND ALL EXISTING TREES TO REMAIN PRIOR TO COMMENCEMENT OF CONSTRUCTION. BARRICADES SHALL REMAIN IN PLACE UNTIL LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE COMPLETED. IN AREAS WHERE SPACE LIMITATIONS DO NOT PERMIT BARRICADE CONSTRUCTION PER DETAIL, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO CONSTRUCTION.

<u>PLAN</u>



## TREE PROTECTION FENCING

**ELEVATION** 



7650 W. Courtney Campbell Cswy. Tampa, Florida 33607 (813) 286-1 REVISIONS

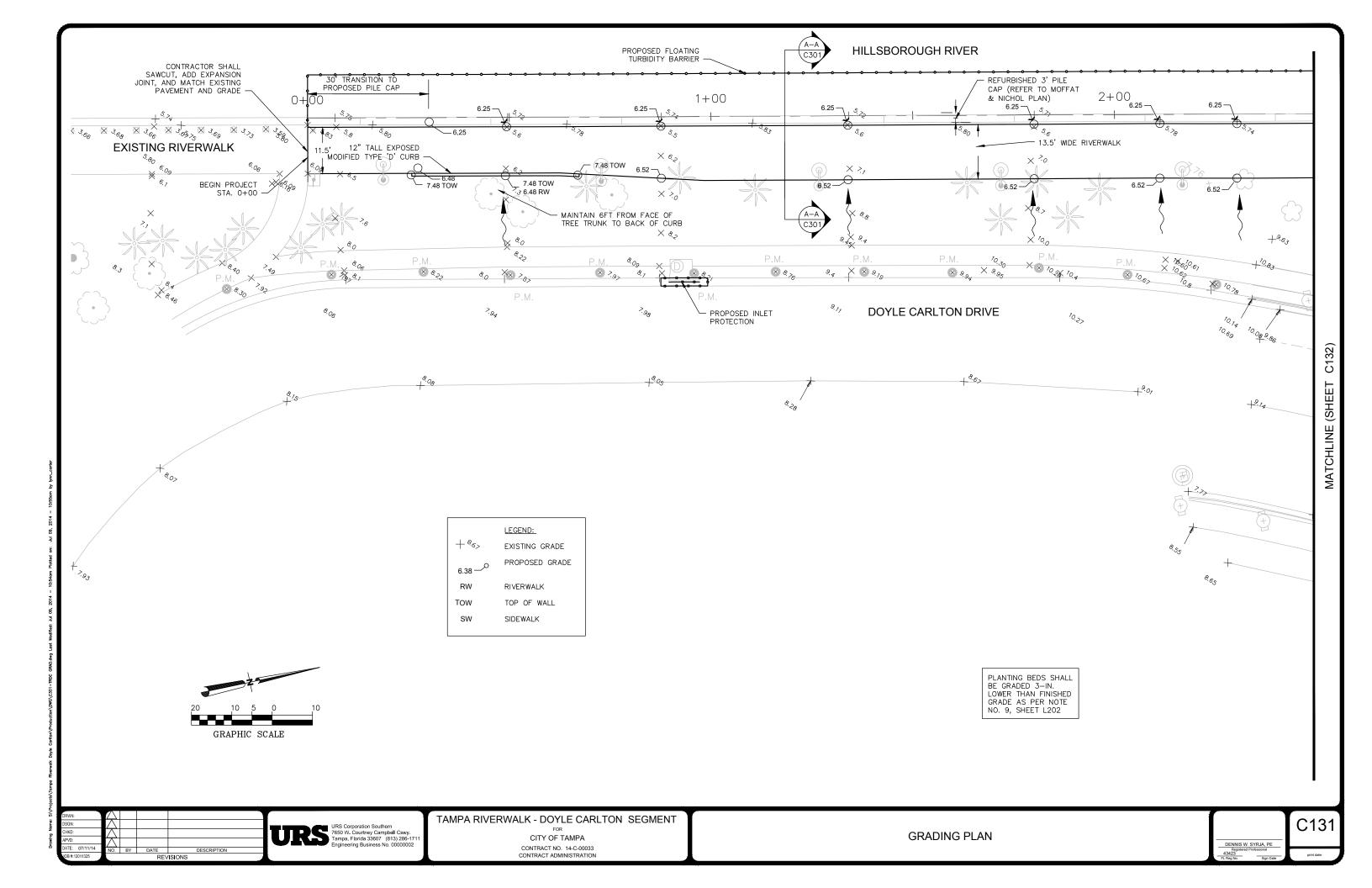
TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

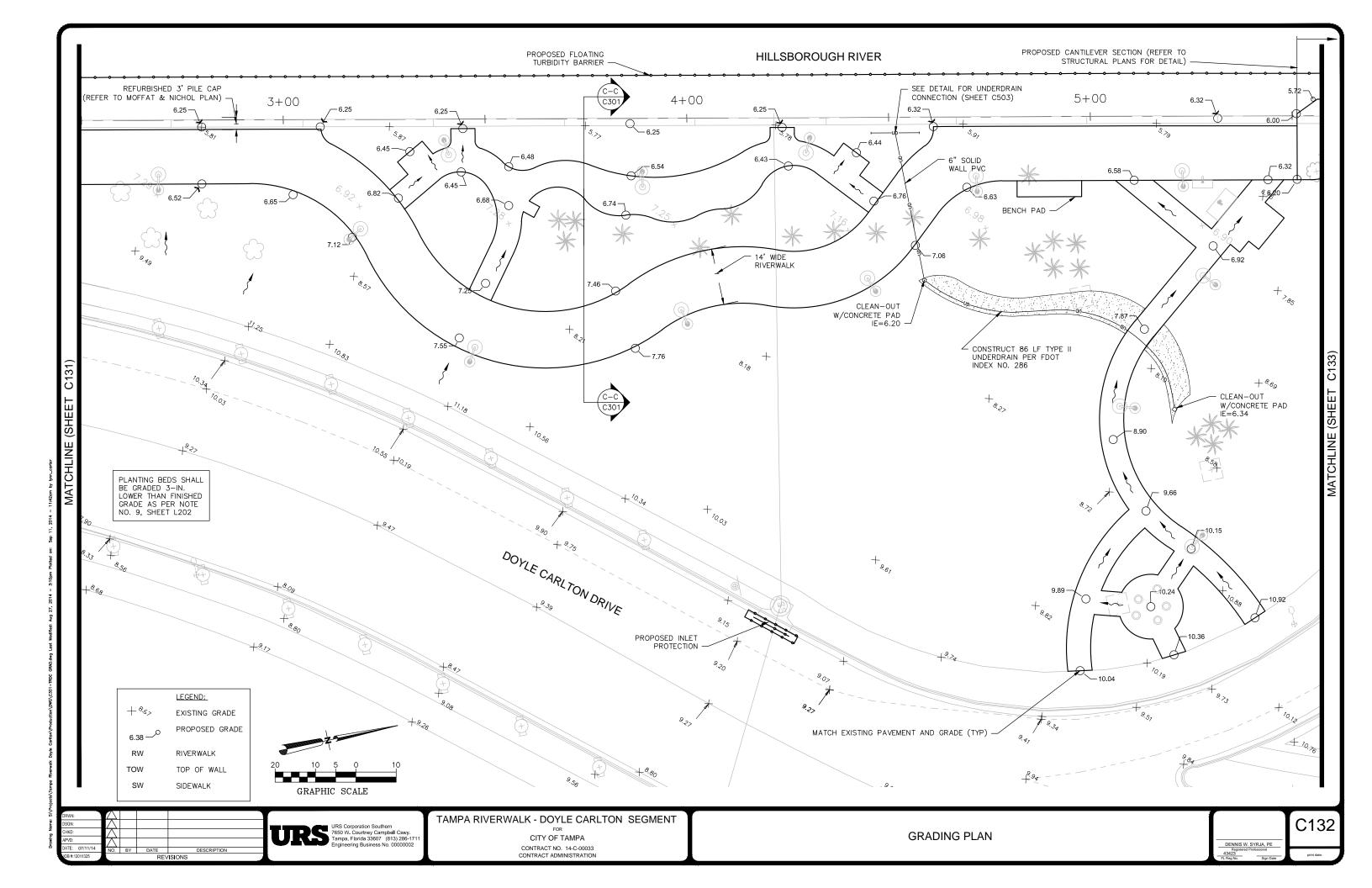
CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION

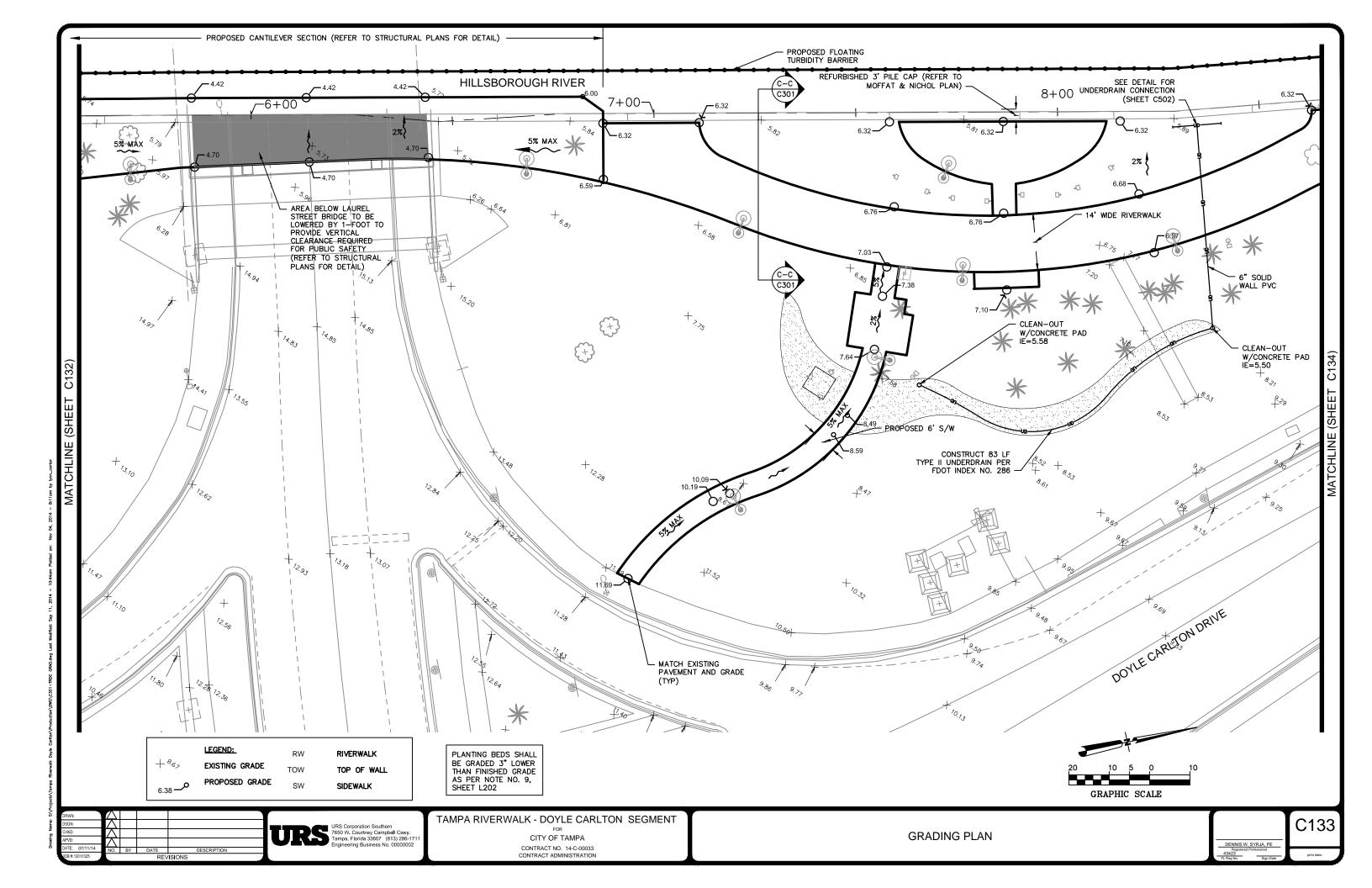
TREE PROTECTION & SITE DEMOLITION DETAILS

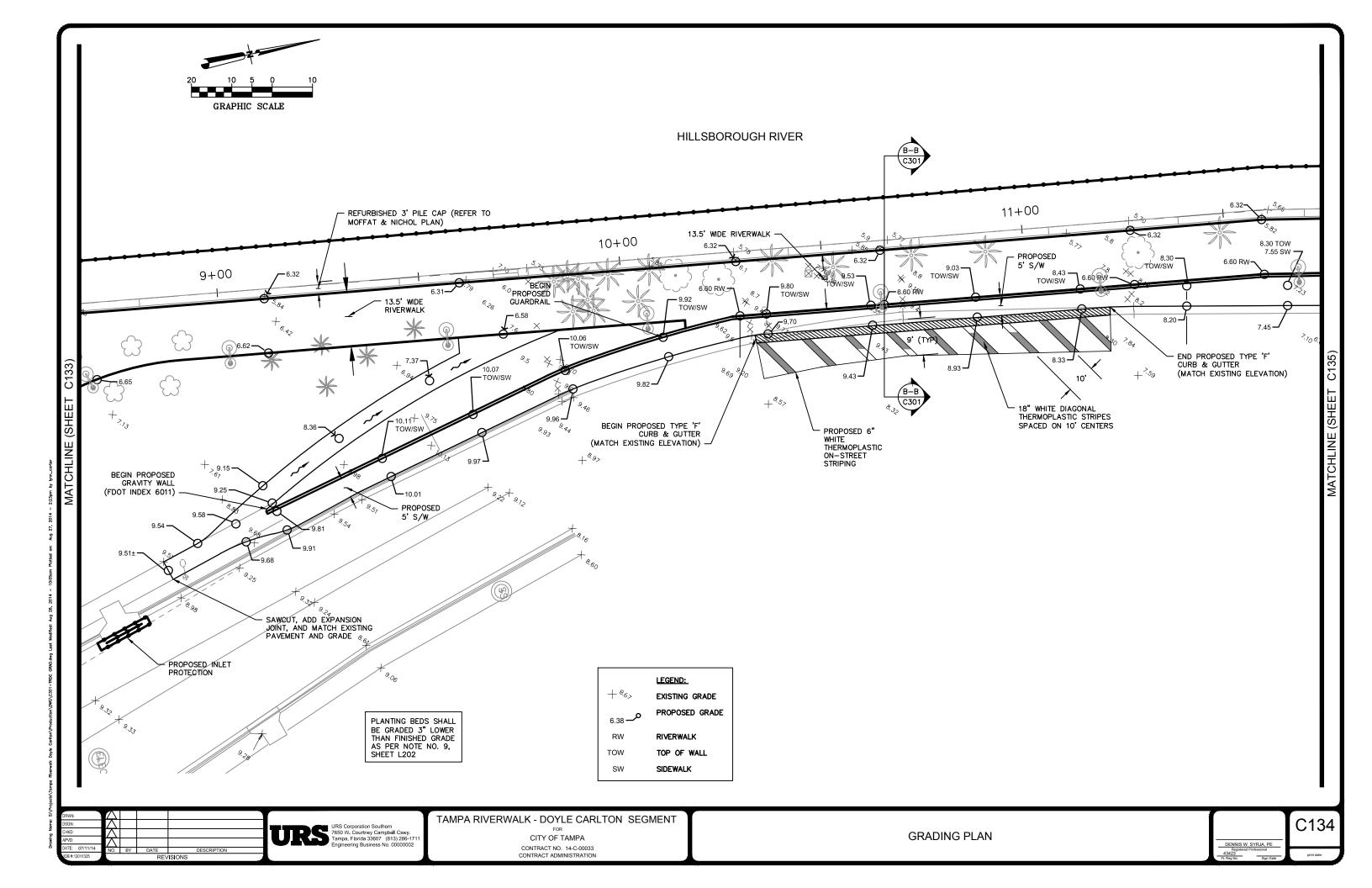
DENNIS W. SYRJA, PE

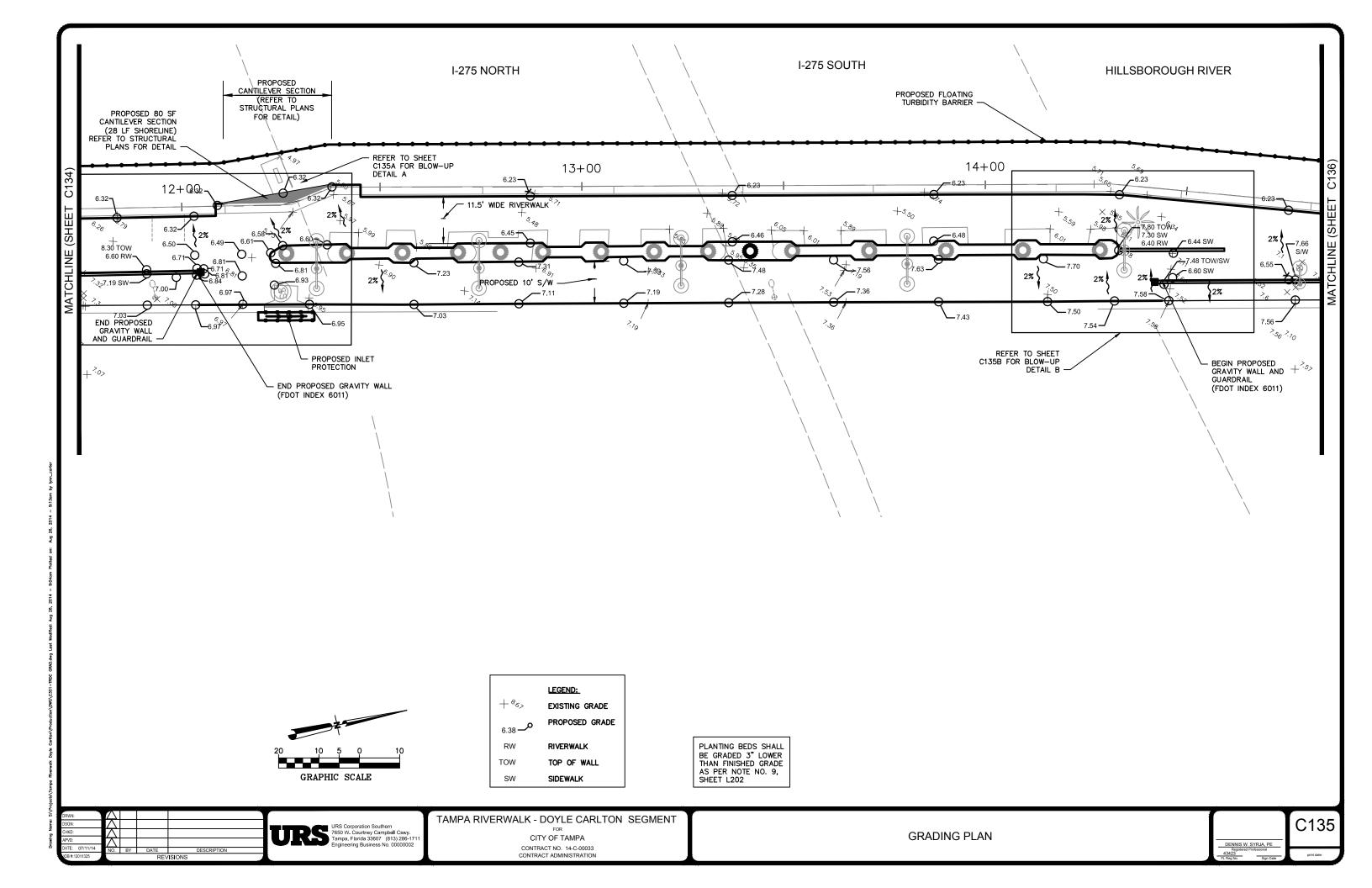
C128

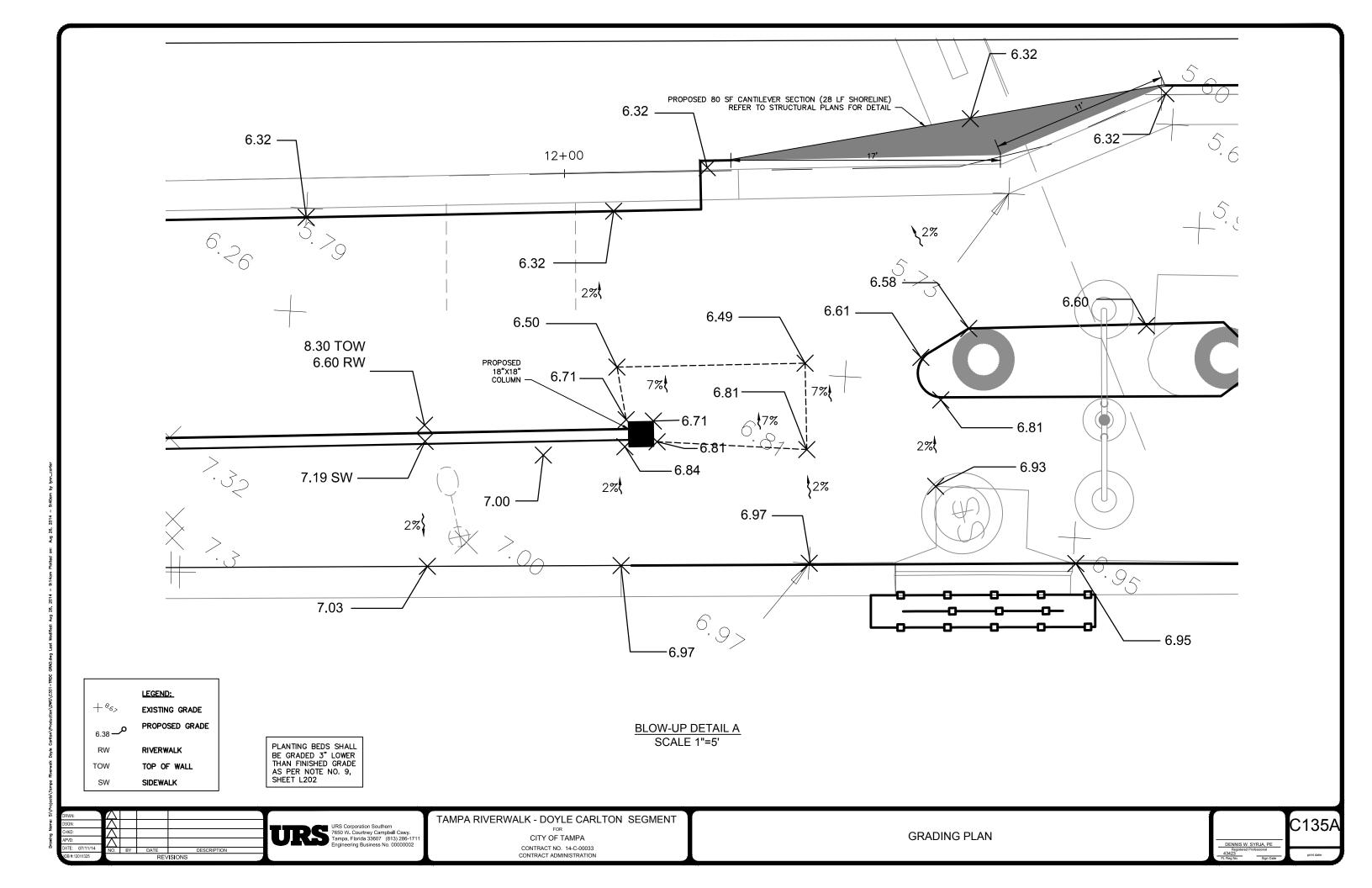


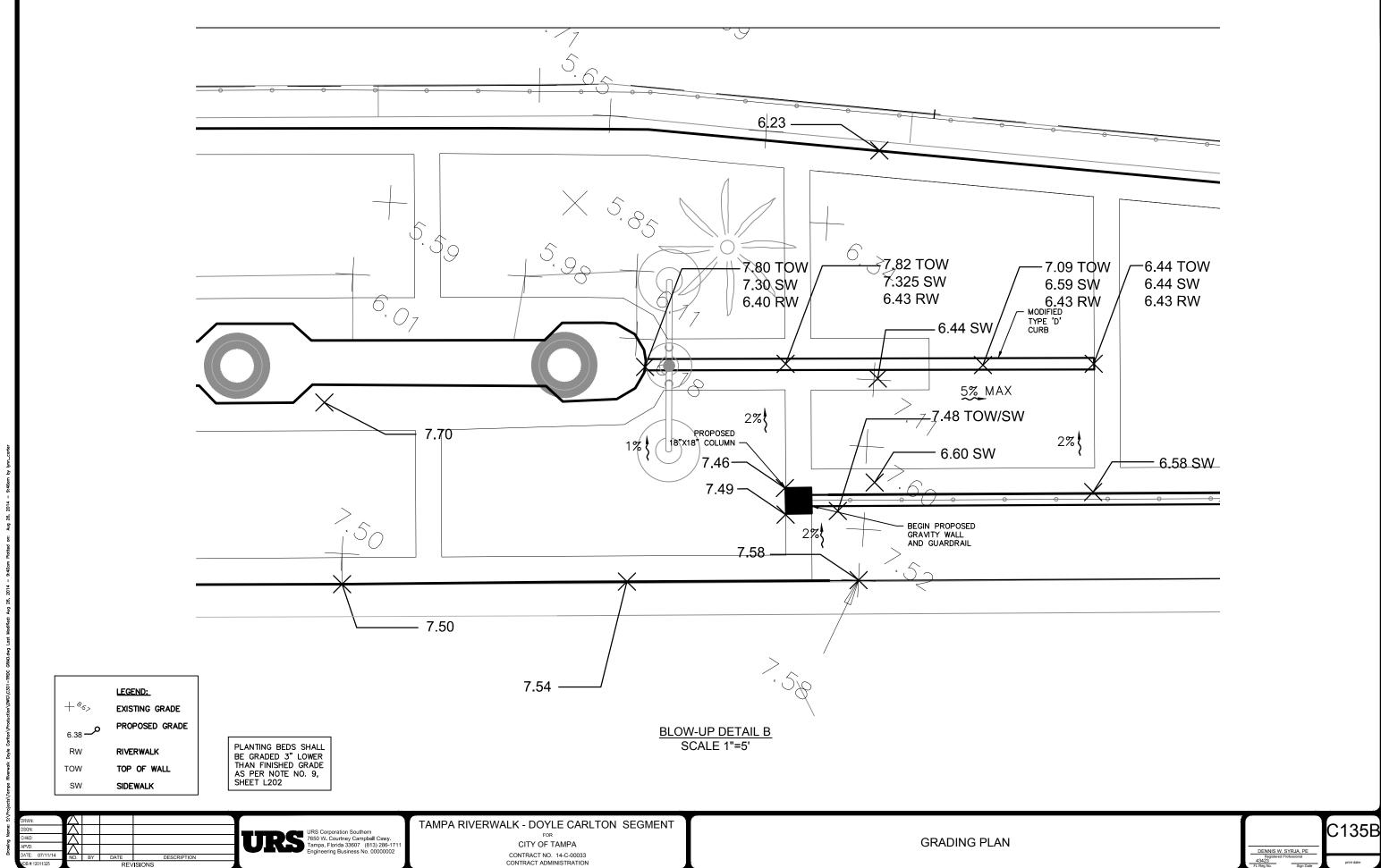


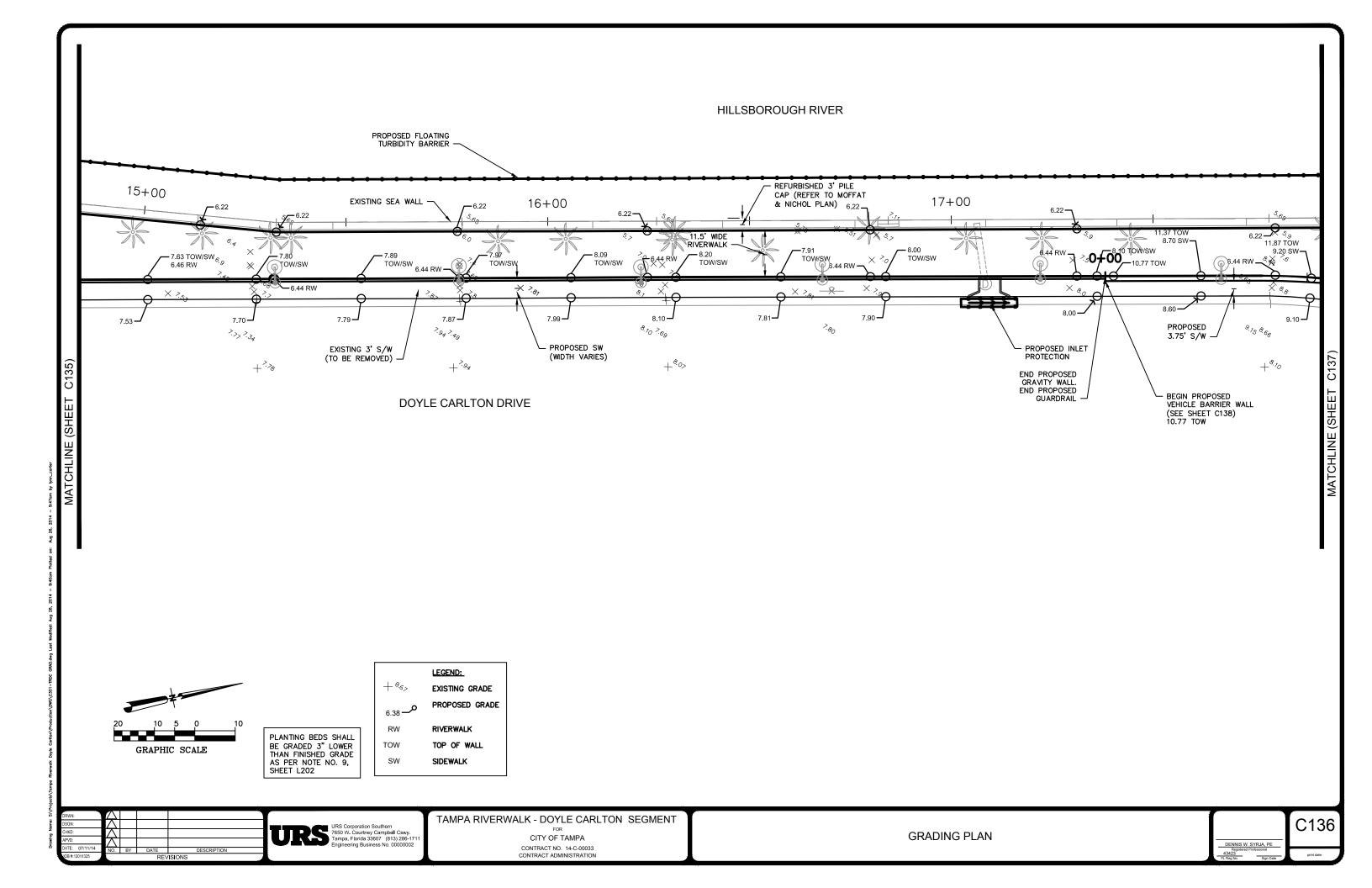


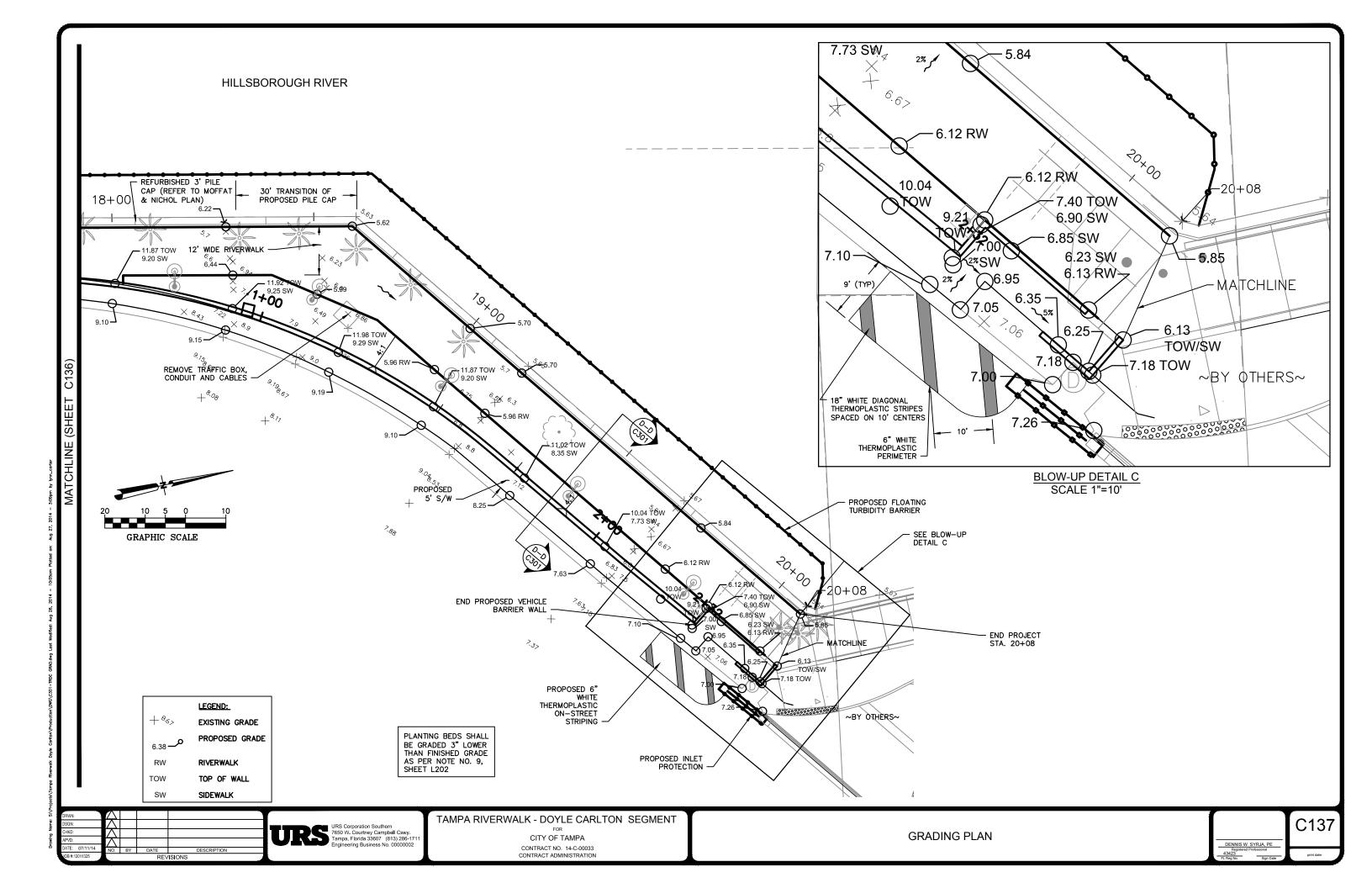


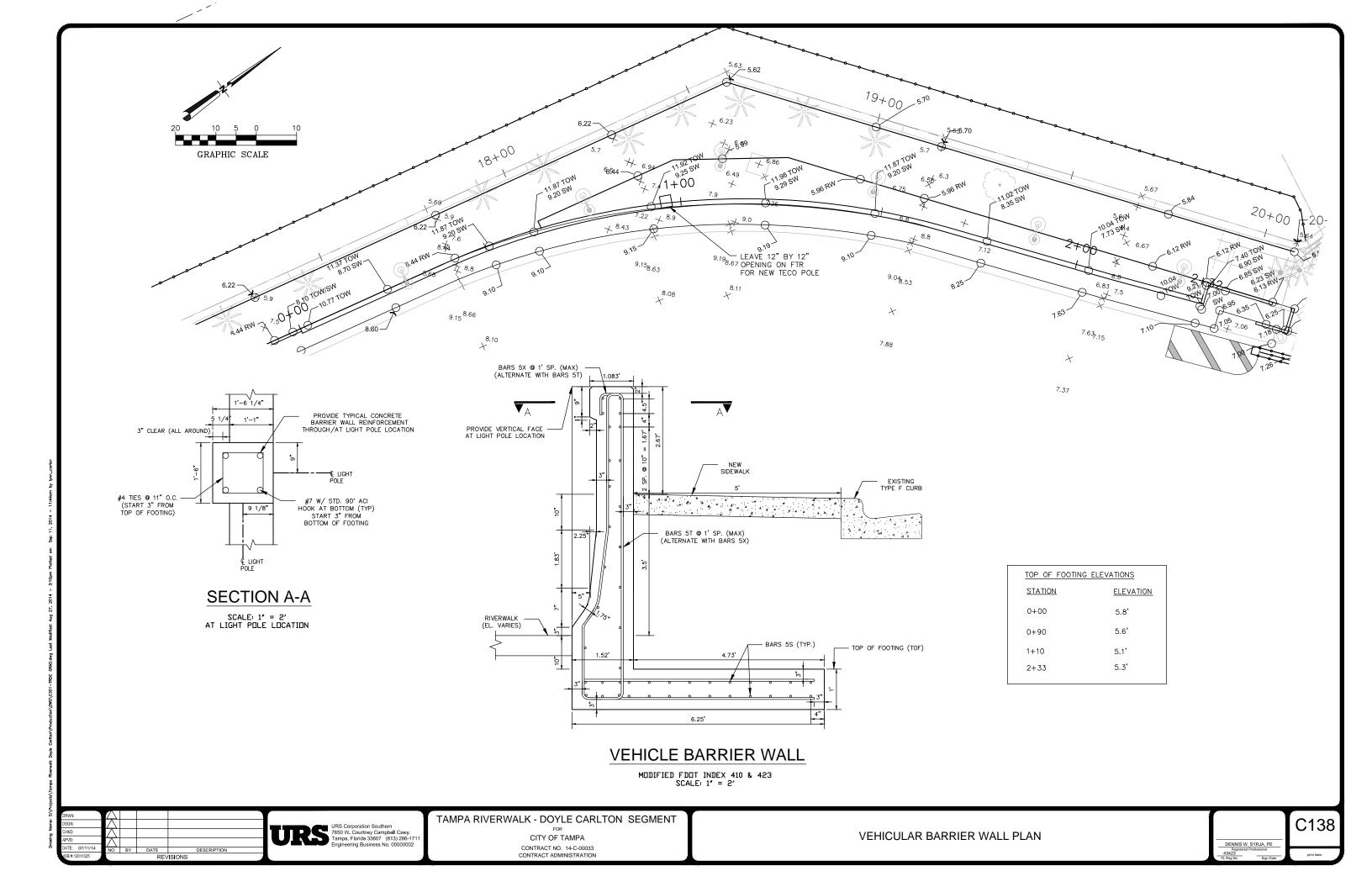






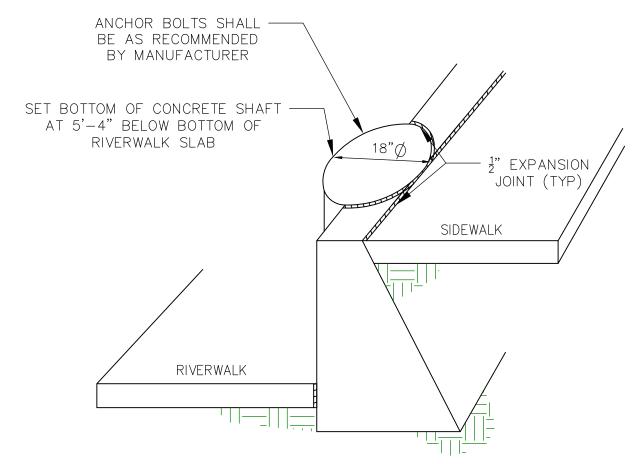






#### **GRAVITY WALL LIGHT POLE PLAN**

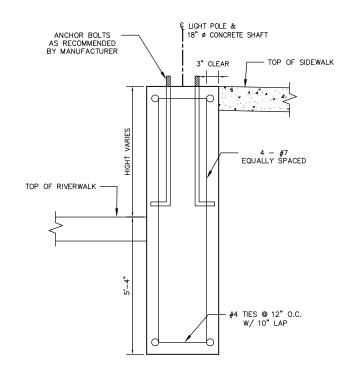
NTS



### GRAVITY WALL LIGHT POLE DETAIL

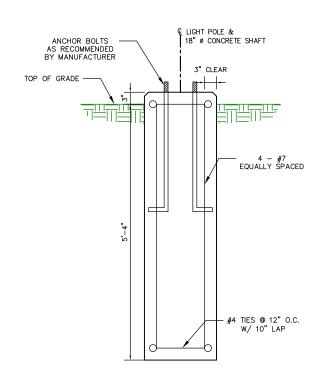
NTS

NOTE: REFER TO E504 AND E505 FOR ELECTRICAL DETAILS



#### **GRAVITY WALL LIGHT POLE PROFILE**

ОТИ



### TYPICAL LIGHT POLE PROFILE

STN

RWIN. -SGN: -HKD: -PPU: -NO. BY DATE DESCRIPTION

REVOITING

URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-171
Engineering Business No. 000000021

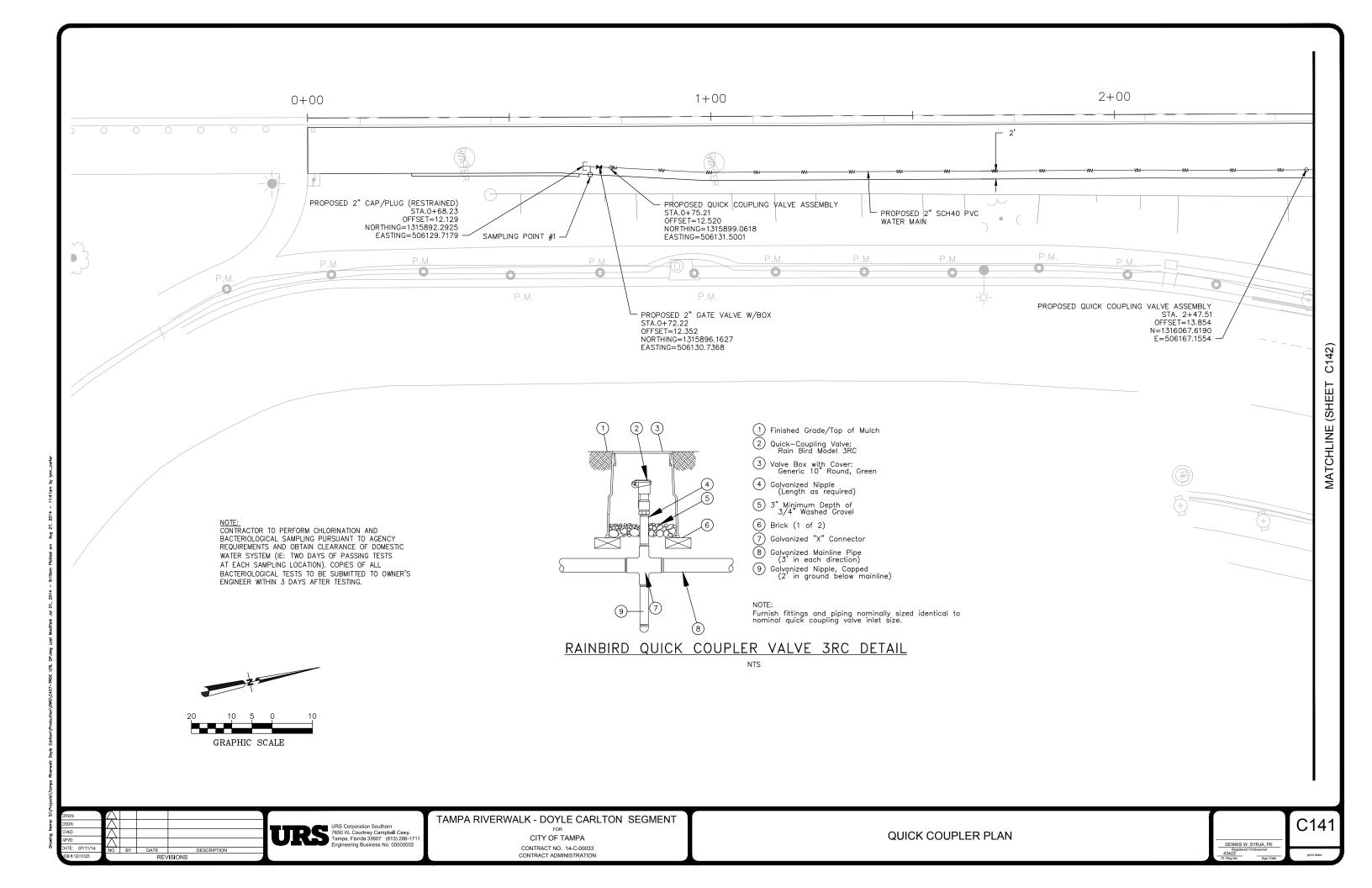
TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

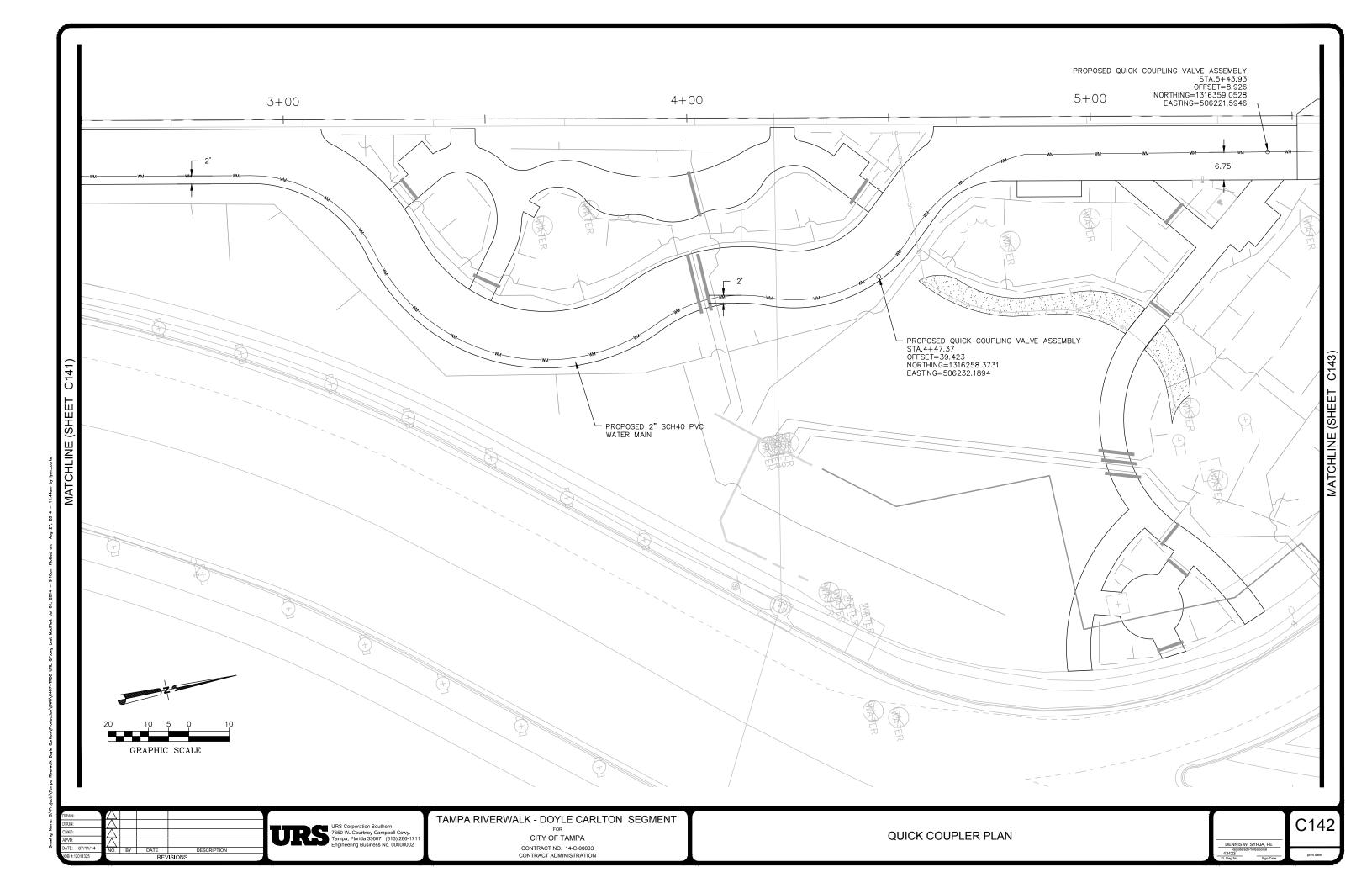
FOR
CITY OF TAMPA
CONTRACT NO. 14-C-00033
CONTRACT ADMINISTRATION

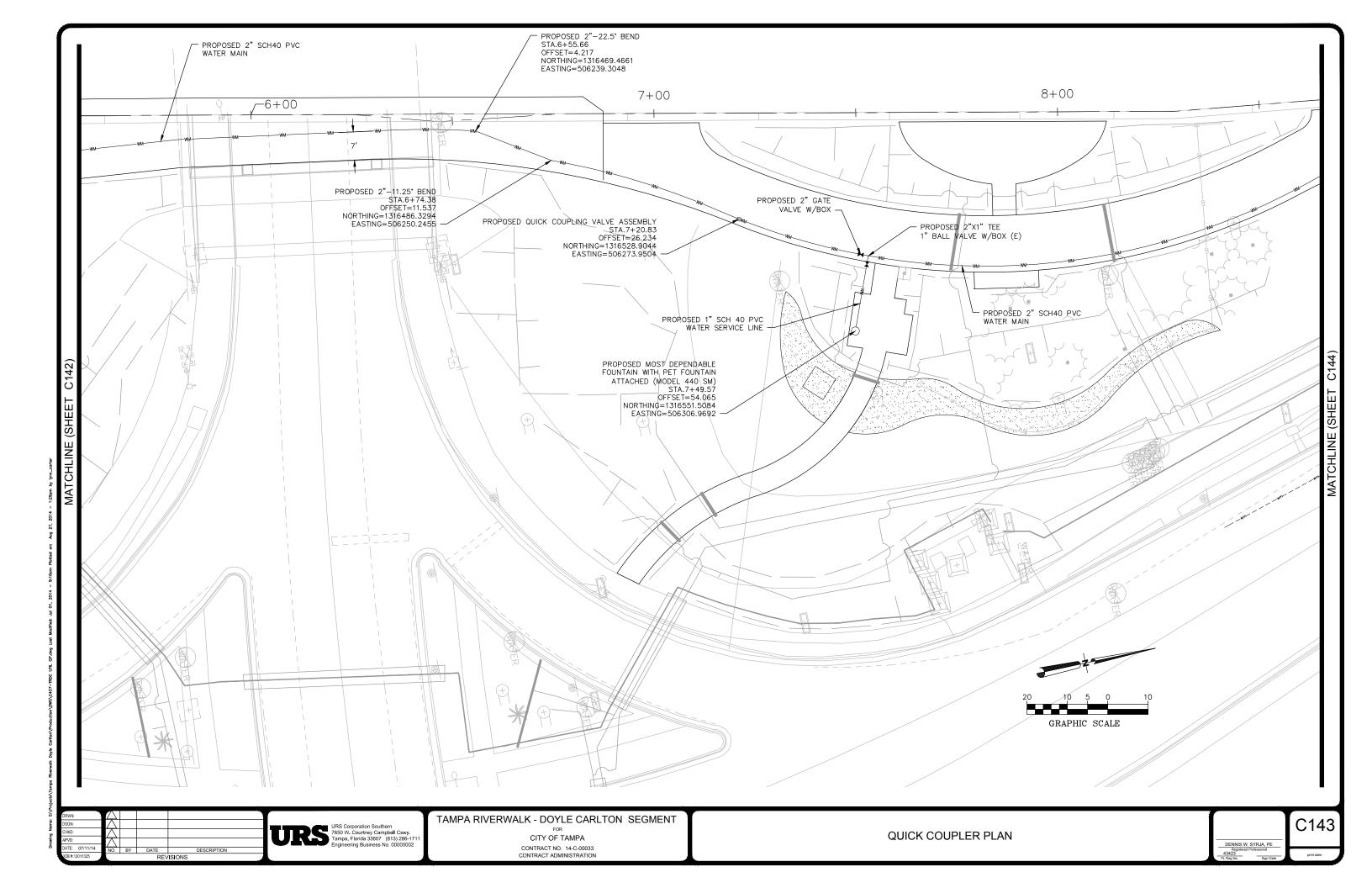
LIGHT POLE DETAIL

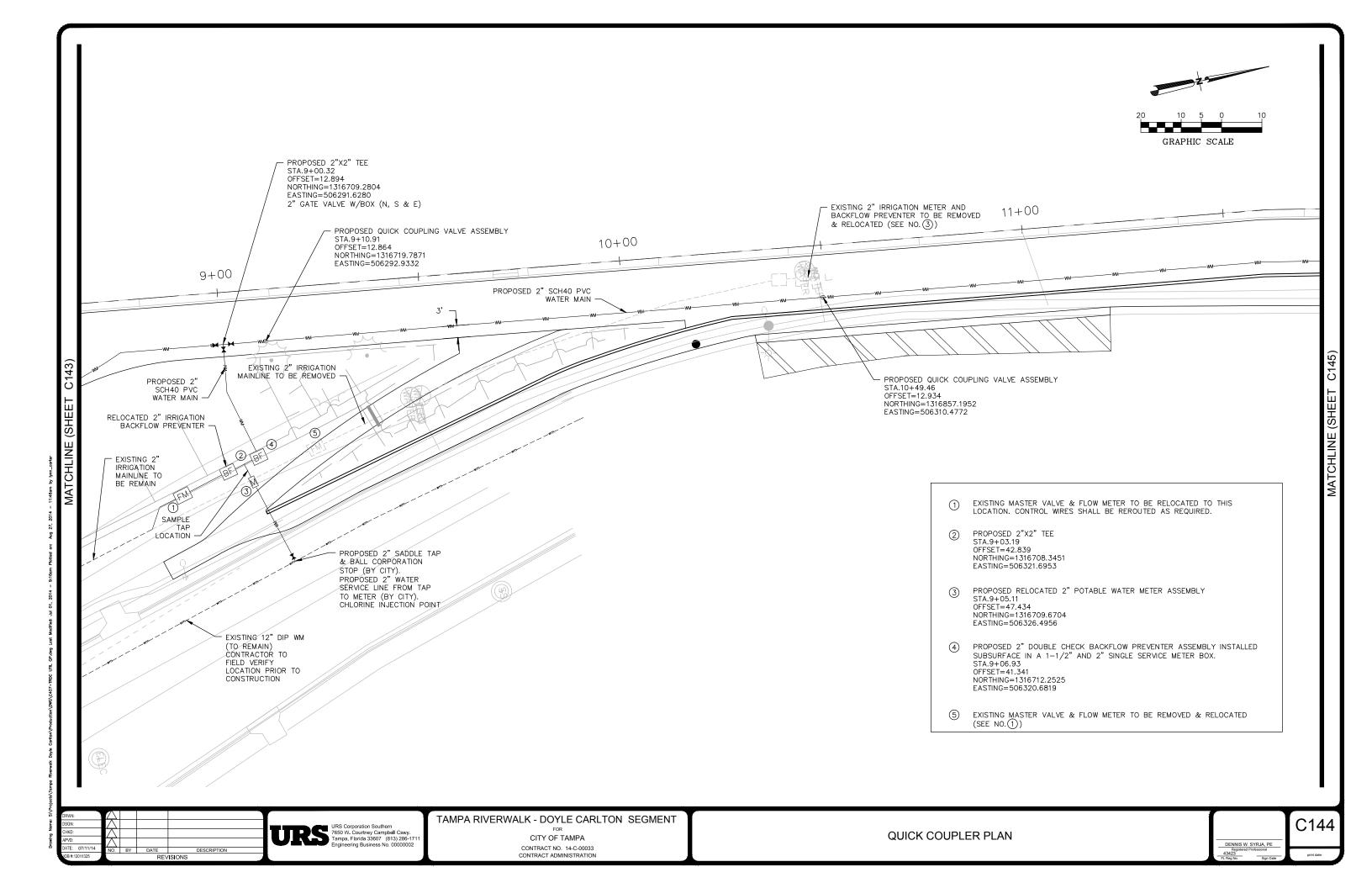
DENNIS W. SYRJA, PE
Registered Professional
43423
FL Reg No. Sign Date

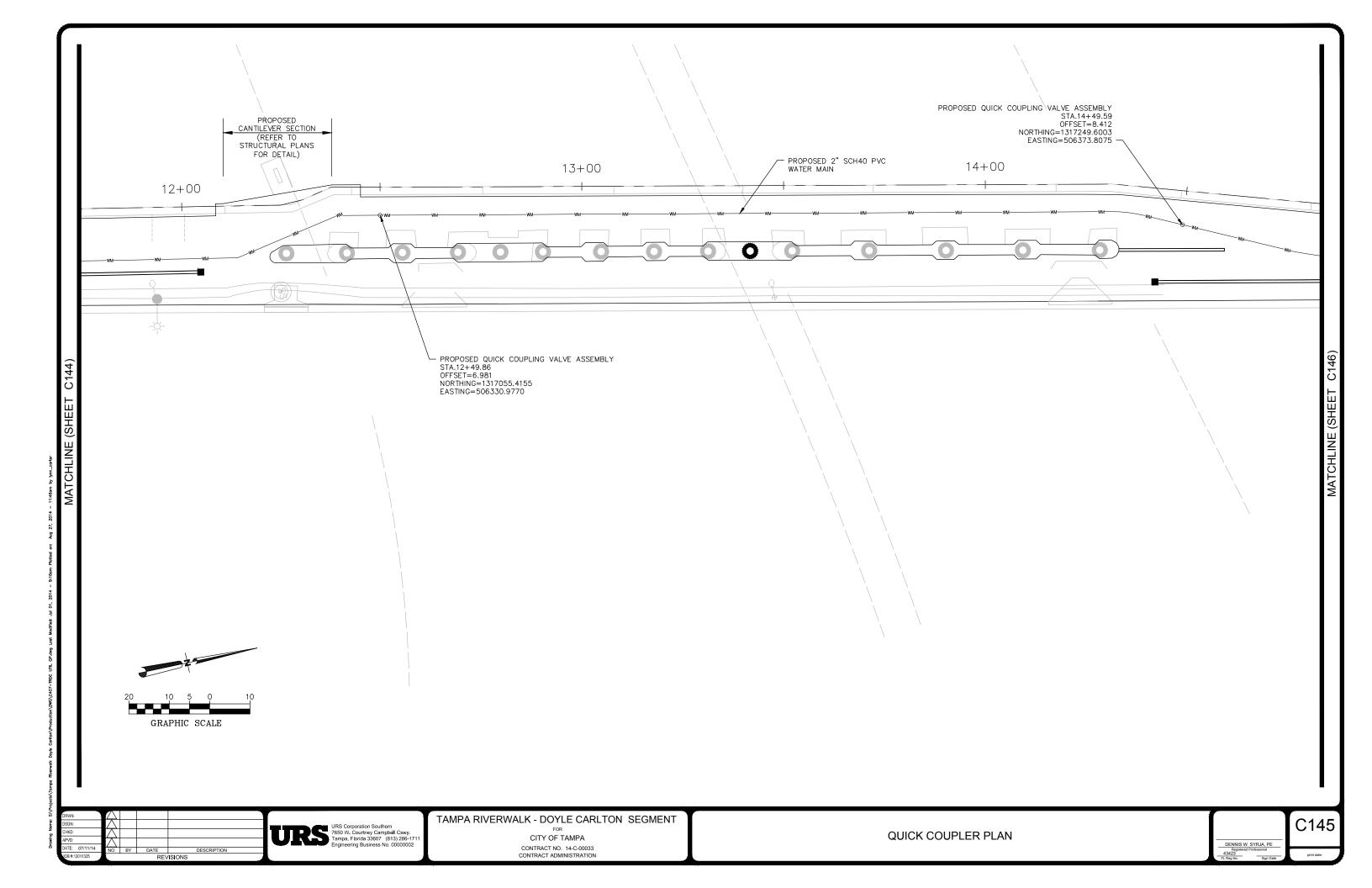
C139

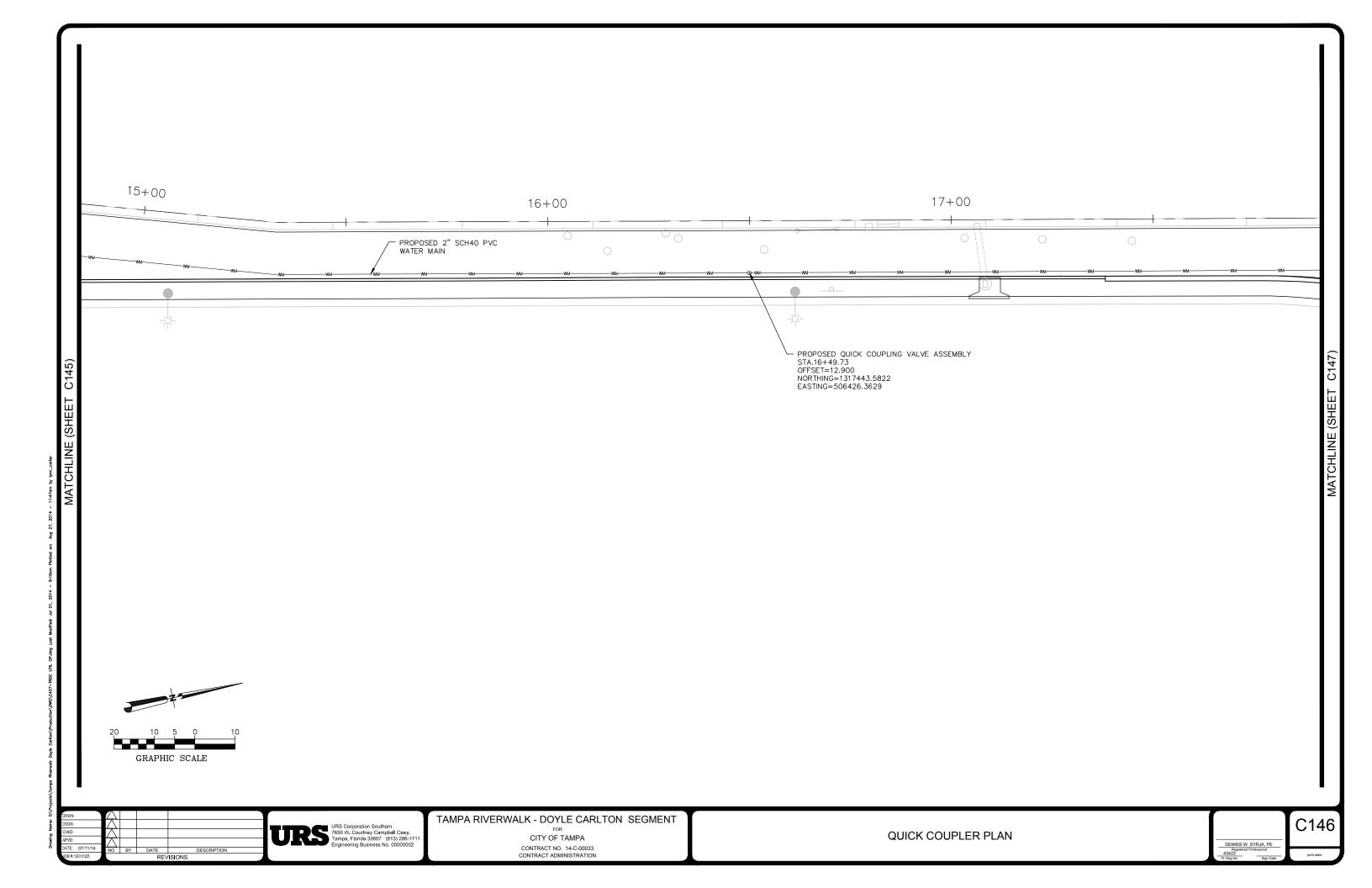


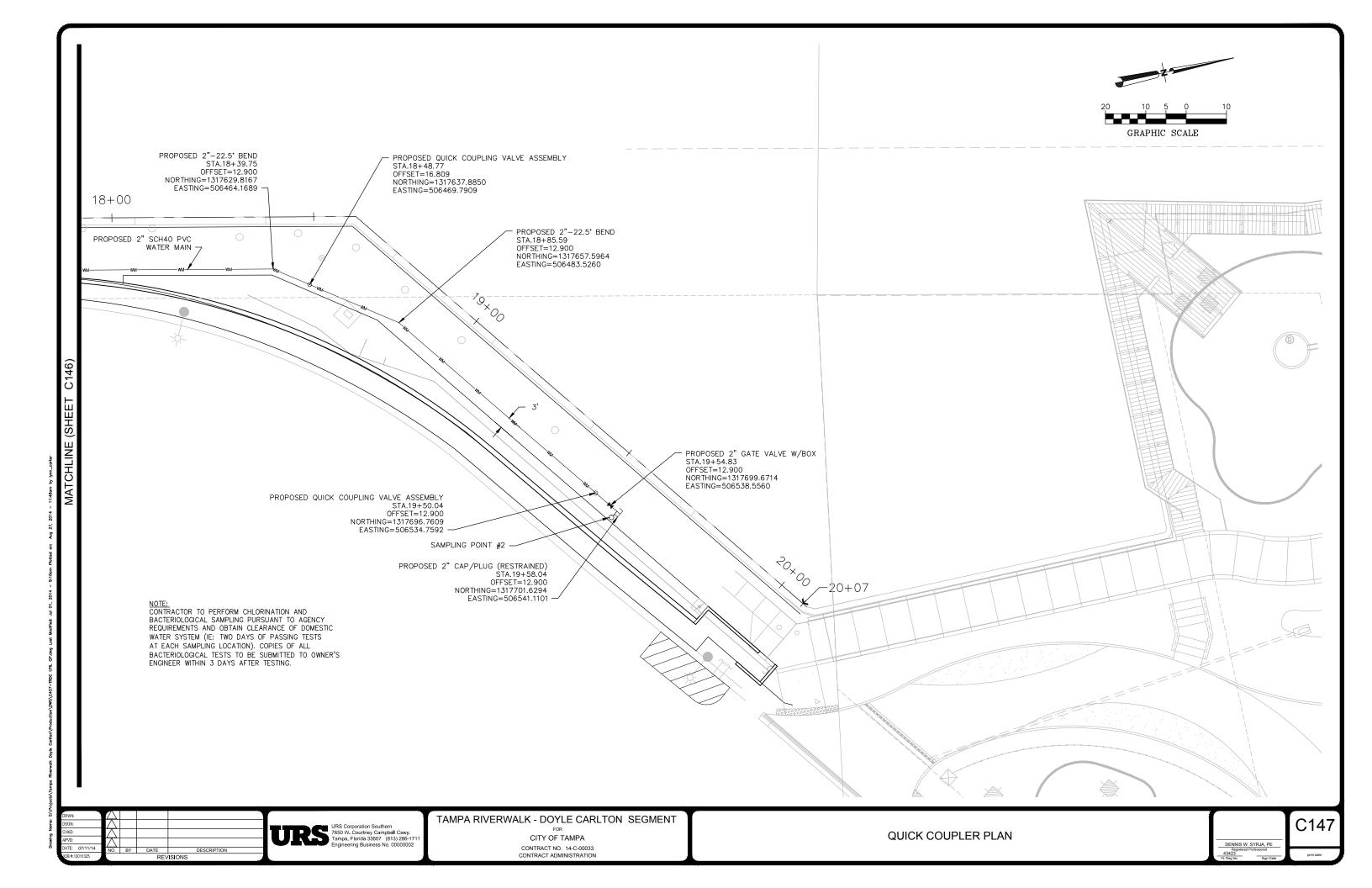


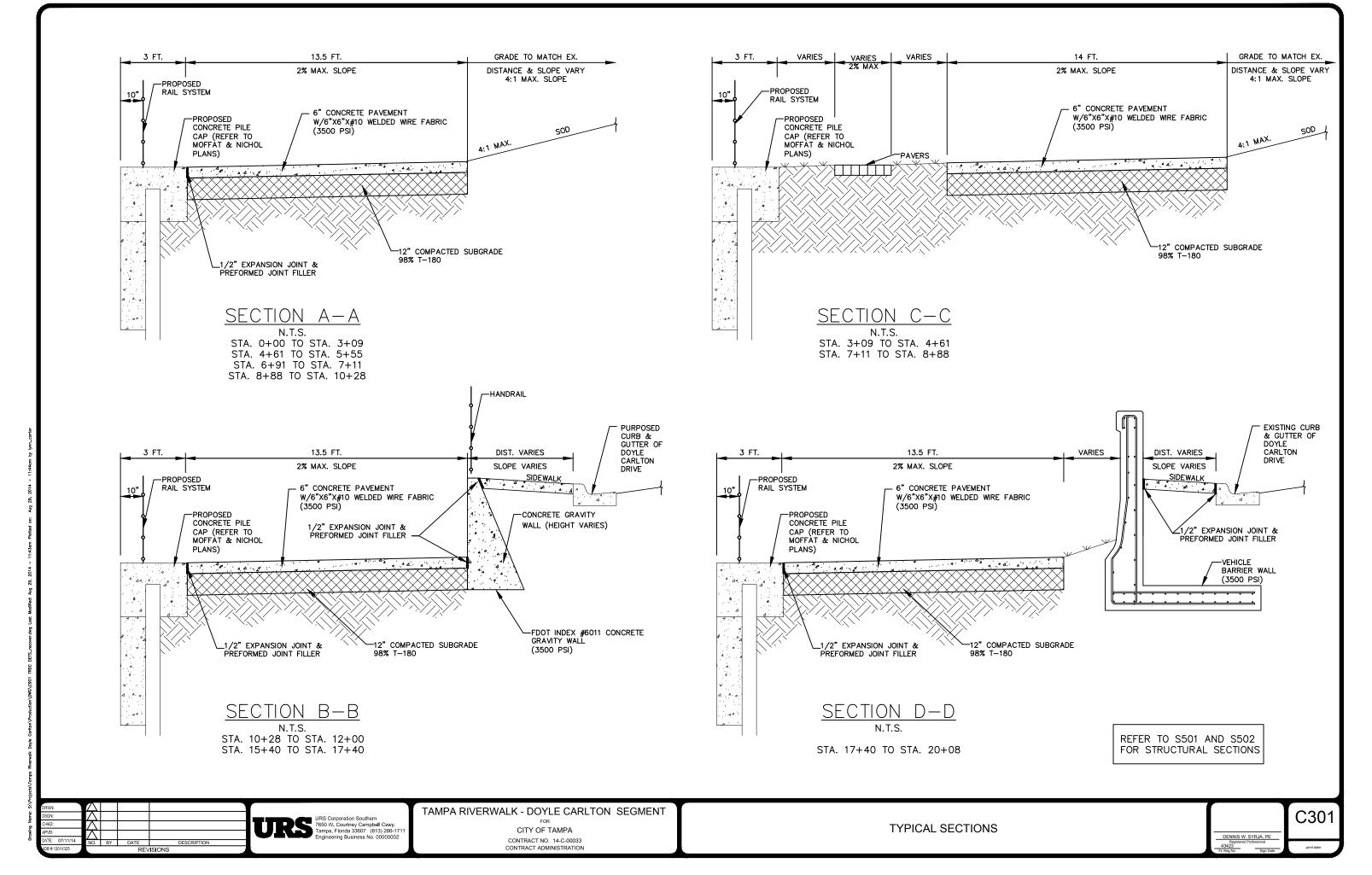


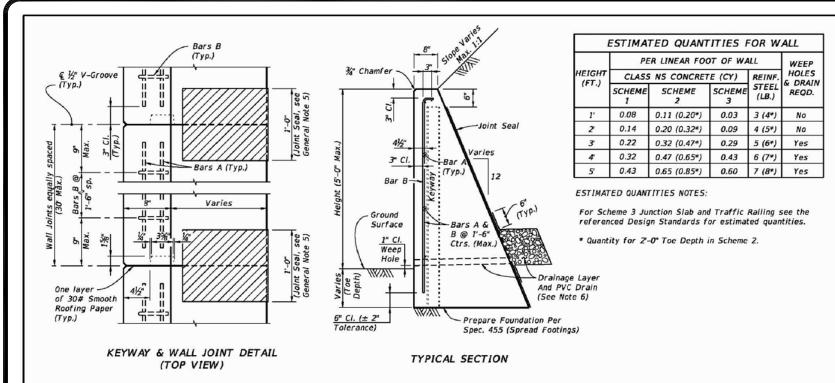








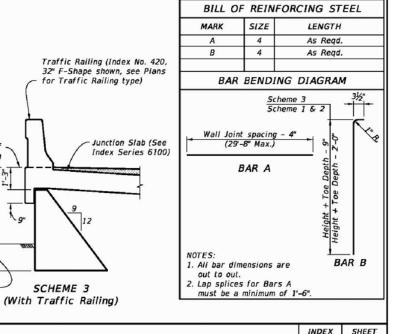


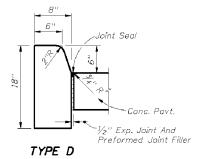


### GENERAL NOTES

- Gravity walls constructed as extensions of reinforced concrete retaining walls, except walls of proprietary designs, shall have the same face texture and finish as the reinforced concrete retaining wall.

  Concrete for Gravity Wall shall be Class NS per Section 347.
- Concrete for Scheme 3 Junction Slab and Traffic Railing shall be Class II per Section 346, unless otherwise specified in the plans.
- Reinforcing steel shall be ASTM A615, Grade 40 or 60 provided at the max. spacings shown. ASTM A185 Smooth or ASTM A497 Deformed Welded Wire Reinforcement (WWR) may be substituted on an equal area basis. Do not increase bar/wire spacing for Grade 60 reinforcing steel or WWR.
- When required, for adjunct guiderail see the plans, Index No. 870 or 880 as appropriate. For adjunct Type B fence see Index No. 802.
- Joint seal to be two layers of 30# smooth roofing paper or Type D-5 geotextile fabric in accordance with Index No. 199. Mop all contact surfaces of concrete and roofing paper or geotextile fabric with cut-back asphalt. Stop roofing paper or geotextile fabric 6" below top of wall).
- Provide a continuous 1'x1' clean gravel or crushed rock drain for wall heights 3 ft. and higher. Wrap drainage layer as shown, with Type D-3 geotextile fabric in accordance with Index No. 199. Provide 8"x8" galvanized mesh with ¼" openings, at the inside end of the PVC Drain Pipe Provide 2" Ø PVC Drain Pipe (Sch. 40) at 10 ft. max. spacing (When Drainage Layer required). Locate minimum
- 7. Cost of reinforcing steel, face texture, finish, joint seal, drain pipes, drainage layer, galvanized mesh and geotextile fabric to be included in the Contract Unit Price for Concrete Class NS, Gravity Wall. Cost of concrete for Junction Slab in Scheme 3, to be included in Contract Unit Price for Concrete Traffic Railing Barrier With Junction Slab. Adjunct railings or fences to be paid for separately.





Note:

For use adjacent to concrete or flexible pavement, concrete shown. Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only, see Sheet 2.

CONCRETE CURB

### FDOT TYPE 'D' CURB



SCHEME 2

(With Traffic Loading or Slopes > 1:11/2)

3'-6" Min. Offset

3'-6" ≤ Offset < 7'-3"

3'-6" ≤ Offset < 6'-6"

-Siones un

FDOT DESIGN STANDARDS

2013

to Max. 1:1

Live Load Limit

N.T.S.

1:1½ < Slopes ≤ 1:1

1:6 < Slopes ≤ 1:1½

See General

Note 4

1'-0" For Slopes ≤ 1:1½ 2-0" For Slopes > 1:1½

Slopes ≤ 1:6

URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (313) 286-17 REVISIONS

Edge of payed shoulder

7'-3" Min. offset

6'-6" Min. offset Live Load Limit

-Slones un

to Max. 1:1

or face of curb

SCHEME 1

(No Traffic Loading Effects)

1:6 < 5lopes ≤ 1:1½

See General

1'-0" Min. to SHW

steeper than 1:2

REVISION

01/01/11

(Except for slopes

with wall heights > 3' then 2'-0" Min.)

Slopes ≤ 1:6

-1'-0"

DESCRIPTION:

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION

- Edge of paved shoulder

Coping

SCHEME 3

C-I-P GRAVITY WALL

or face of curb

Soil Reinforcement

I'-O" Min. to SHW

2'-0" Min. to SHW

for Wall Height ≤ 2'-0"

for Wall Height > 2'-0

I'-0" For Wall Height ≤ 2'-0"

2'-0" For Wall Height > 2'-0

when required

CIVIL DETAILS

INDEX

NO.

6011

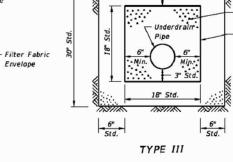
NO.

1

DENNIS W. SYRJA, PE

C501

TYPE I



- Fine Aggregate

Coarse Aggregate

### **DESIGN NOTES**

- The type of underdrain should be selected to meet design water removal rate and soil conditions. Caution is
  prescribed in the use of these typical sections since special designs may be required to satisfy project
  conditions.
- 2. Type I underdrain is intended for minimum water removal conditions.

TYPE II

- Type II underdrain is intended for moderate water removal conditions. Where reactive conditions may create chemical clogging, the use of an inert material and/or elimination of the filter fabric may be necessary.
- 4. Type III underdrain is intended for maximum water removal conditions. Filter fabric is required between the coarse aggregate or fine aggregate including those described in general notes 2 and 3. Design note 3 applies for reactive conditions.
- 5. Type V underdrain is intended for use in detention basins and other locations which require a filtration system. The standard fine aggregate specified for Type V underdrain conforms to filtration gradation requirements of Chapter 62-25 FAC.
- 6. The designer should detail in the plans, the location of: (a) Type V underdrain, (b) nonstandard locations of Type I, II, and III underdrain, (c) underdrain inspection boxes, (d) cleanouts for Type V underdrain, and (e) underdrain outlet pipes.
- The designer should specify the flow line elevations at the beginning, bends, junctions and ends of underdrain pipes and outlet pipes.
- 8. The designer should evaluate whether an external filter fabric envelope is required around underdrain Types 1 and III. When required, fabric shall be specified in the plans.

### **GENERAL NOTES**

- The underdrain pipe shall be either 4" smooth or 5" corrugated tubing unless otherwise shown in the plans.
  The size to be furnished will be based on the nominal internal diameter of a pipe with a smooth interior
  wall. Except when prohibited by the plans, the special provisions or this standard, pipe with a corrugated
  interior wall may be provided based on the following size equivalency.
  - 4" smooth Interior equivalent to 5" corrugated Interior 5" smooth interior equivalent to 6" corrugated interior 6" smooth interior equivalent to 8" corrugated interior 8" smooth interior equivalent to 10" corrugated interior
- Fine aggregate shall be quartz sand meeting the requirements of Sections 902-4 of the Standard Specifications.
- Coarse aggregate shall be gravel or stone meeting the requirements of Sections 901-2 or 901-3. The
  gradation shall meet Section 901, Grades 4, 467, 5, 56 or 57 stone unless otherwise shown restricted in
  the plans.
- 4. Underdrain Type I, II, III and V shall be in accordance with Section 440.
- Filter fabric shall be Type D-3 (See Index No. 199). The internal filter fabric of Type V underdrain shall have a permittivity of 0.7 /sec. and an AOS of #40 sieve.
- 6. When Type I is used, a filter fabric sock meeting Section 948 is required.
- See Index No. 500 for the standard location of Type I, II, and III underdrain. The location of Type V underdrain and nonstandard locations of Type I, II, and III underdrain will be as detailed in the plans.
- All filter fabric joints shall overlap a minimum of 1'. The internal filter fabric of Type V underdrain shall overlap into the coarse aggregate or the fine aggregate a minimum of 1'.
- 9. Underdrain outlet pipes shall be nonperforated and all bends shall be made using % (45 deg.) elbows. 90 deg. bends shall be constructed with two % elbows separated by at least 1' of straight pipe. Outlet pipes stubbed into inlets or other drainage structures shall be not less than 6" above the structure flow line. Outlet pipes discharging to grassed areas shall have concrete aprons, hardware cloth, and bordering sod as shown in index No. 287 for Edgedrain outlets.
- 10. Pay Item shall be based on the size of the smooth interior products. The contract unit price for Underdrain, LF, shall include the cost of pipe, fittings, aggregate, sock, filter fabric, underdrain cleanouts,

The contract unit price for Underdrain Outlet Pipe, LF, shall be full compensation for trench excavation, pipe and fittings, concrete aprons, hardware cioth for concrete aprons, stubbing into drainage structures, backfill in place, and disposal of excess materials.

The contract unit price for Underdrain Inspection Box, EA. shall be for the number completed and accepted.

3 FT. CONCRETE PILE CAP

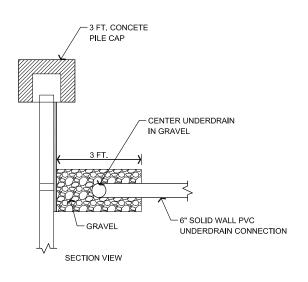
6" PERFORATED PVC
6" PERFORATED PVC
6" PERFORATED PVC
6" AP

6" CAP

GRAVEL

6" SOLID WALL PVC
UNDERDRAIN CONNECTION
PLAN VIEW

NOTE: REFER TO HILLSBOROUGH RIVER SEAWALL REPAIR PLANS PREPARED BY MOFFATT & NICHOL (SHEET S-501) FOR ADDITIONAL DETAIL



UNDERDRAIN CONNECTION DETAIL

LAST REVISION 07/01/07

DESCRIPTION:

FDOT 2014 DESIGN STANDARDS

UNDERDRAIN

NO. 286 NO. 1 of 2

Nk: -Nk: -D: -

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

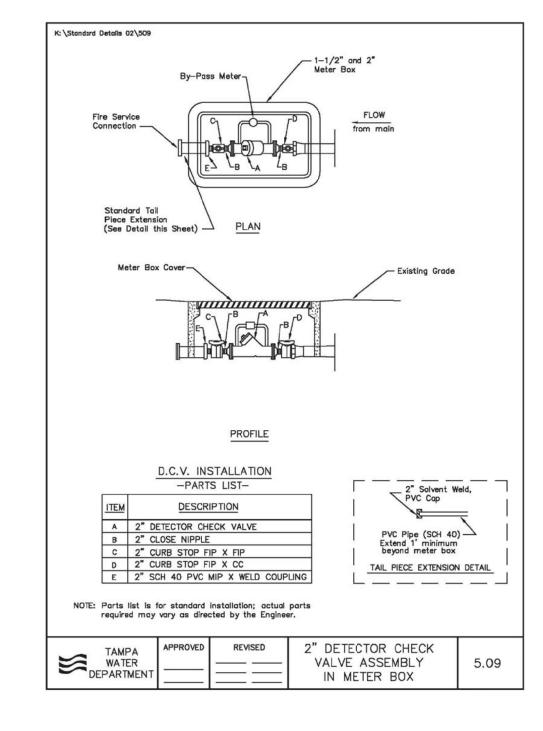
FOR
CITY OF TAMPA
CONTRACT NO. 14-C-00033
CONTRACT ADMINISTRATION

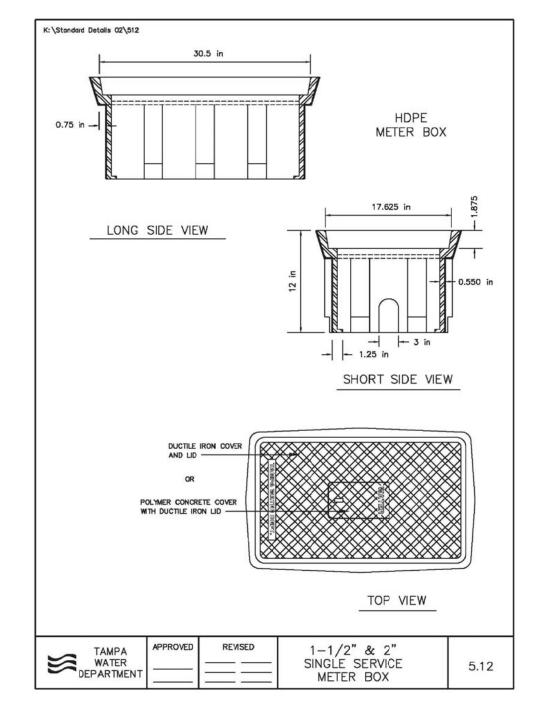
CIVIL DETAILS

DENNIS W. SYRJA, PE
Registered Professional
43423
FI. Reg No. Sign Date

C502

A, PE





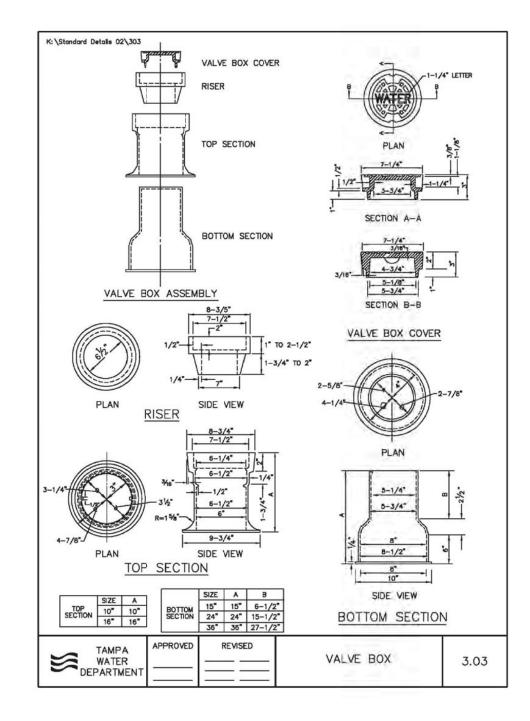
URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-171
Engineering Business No. 00000002

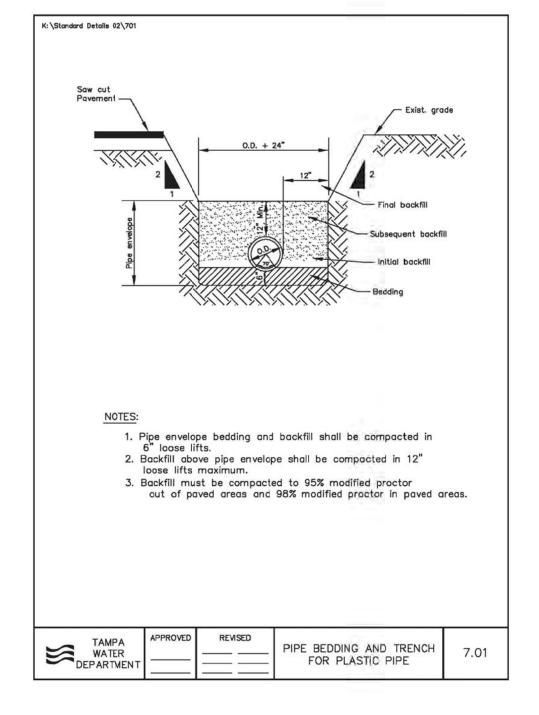
TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION UTILITY DETAILS

DENNIS W. SYRJA, PE Registered Professional

C503





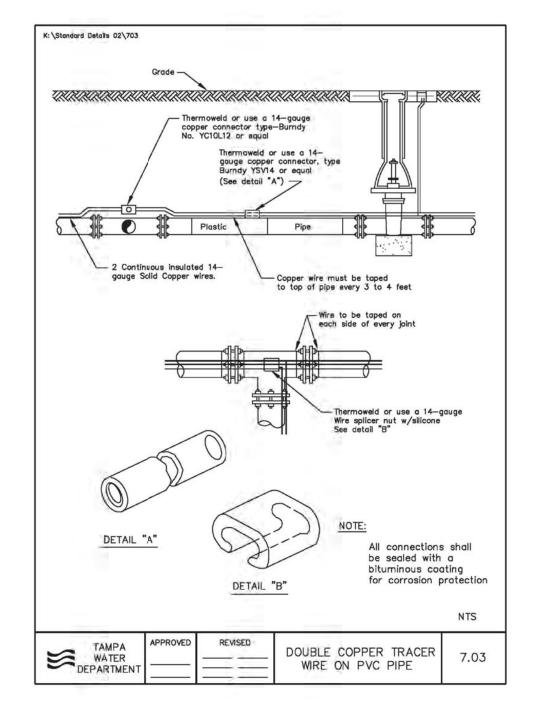
URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-171
Engineering Business No. 00000002

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION UTILITY DETAILS

DENNIS W. SYRJA, PE

K: \Standard Details 02\702



DRWNL -DSGN: -CHKD: -APVD: -NO. BY DATE DESCRIPTION

REVISIONS

URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-17
Engineering Business No. 00000002

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

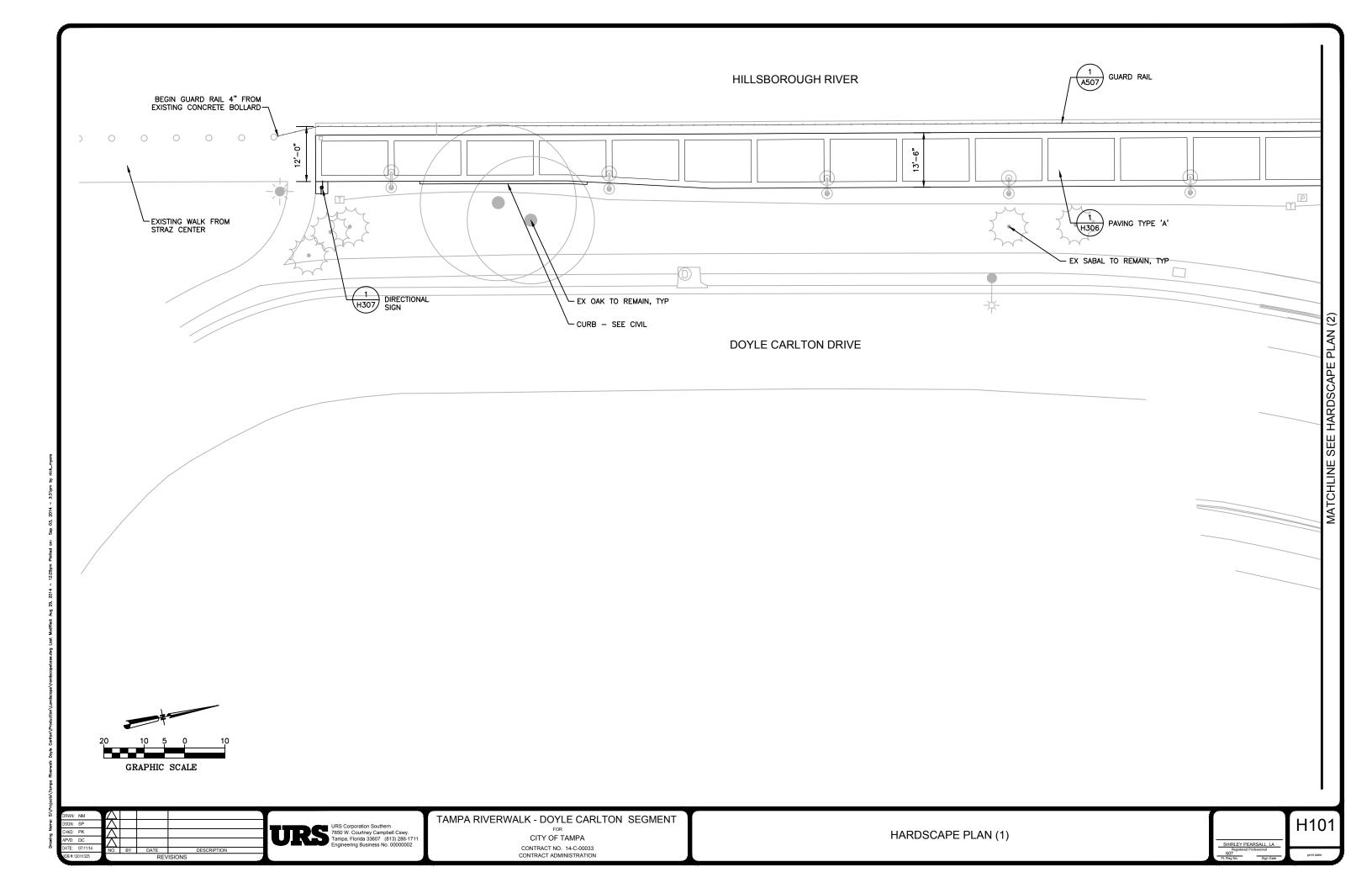
CITY OF TAMPA
CONTRACT NO. 14-C-00033
CONTRACT ADMINISTRATION

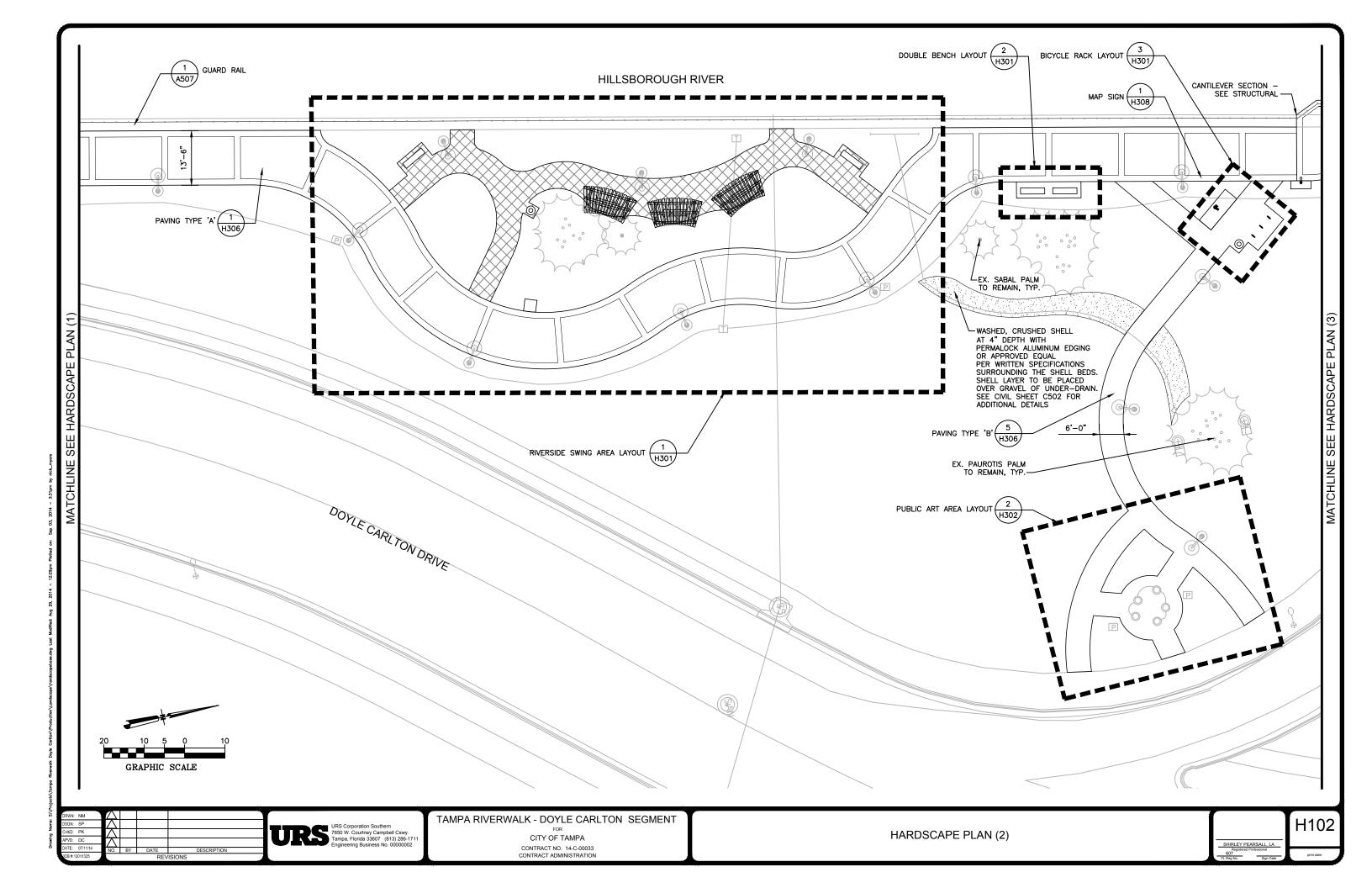
UTILITY DETAILS

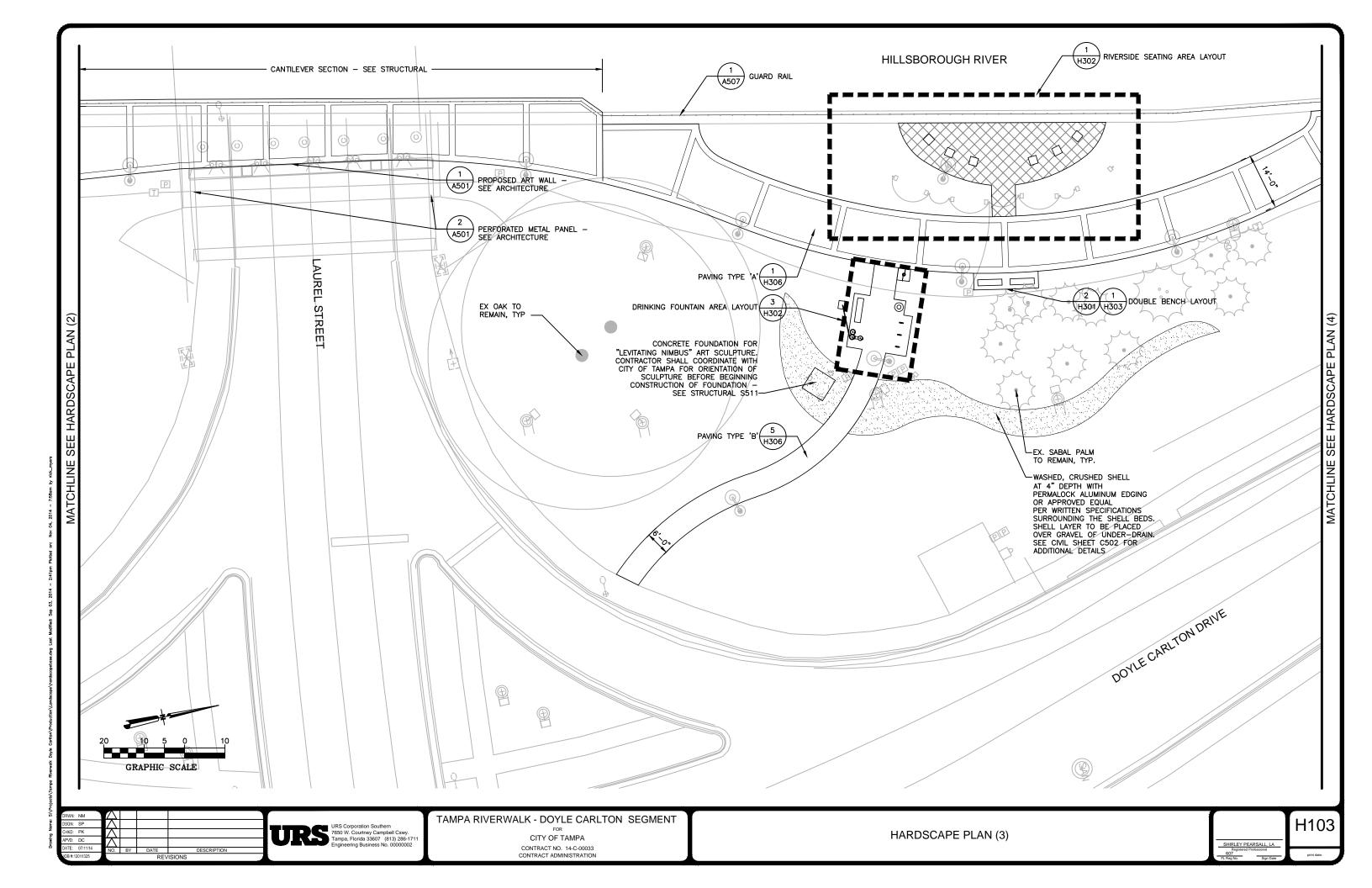
DENNIS W. SYRJA, PE
Registered Professional
43423
El Para Ms. Sign Date.

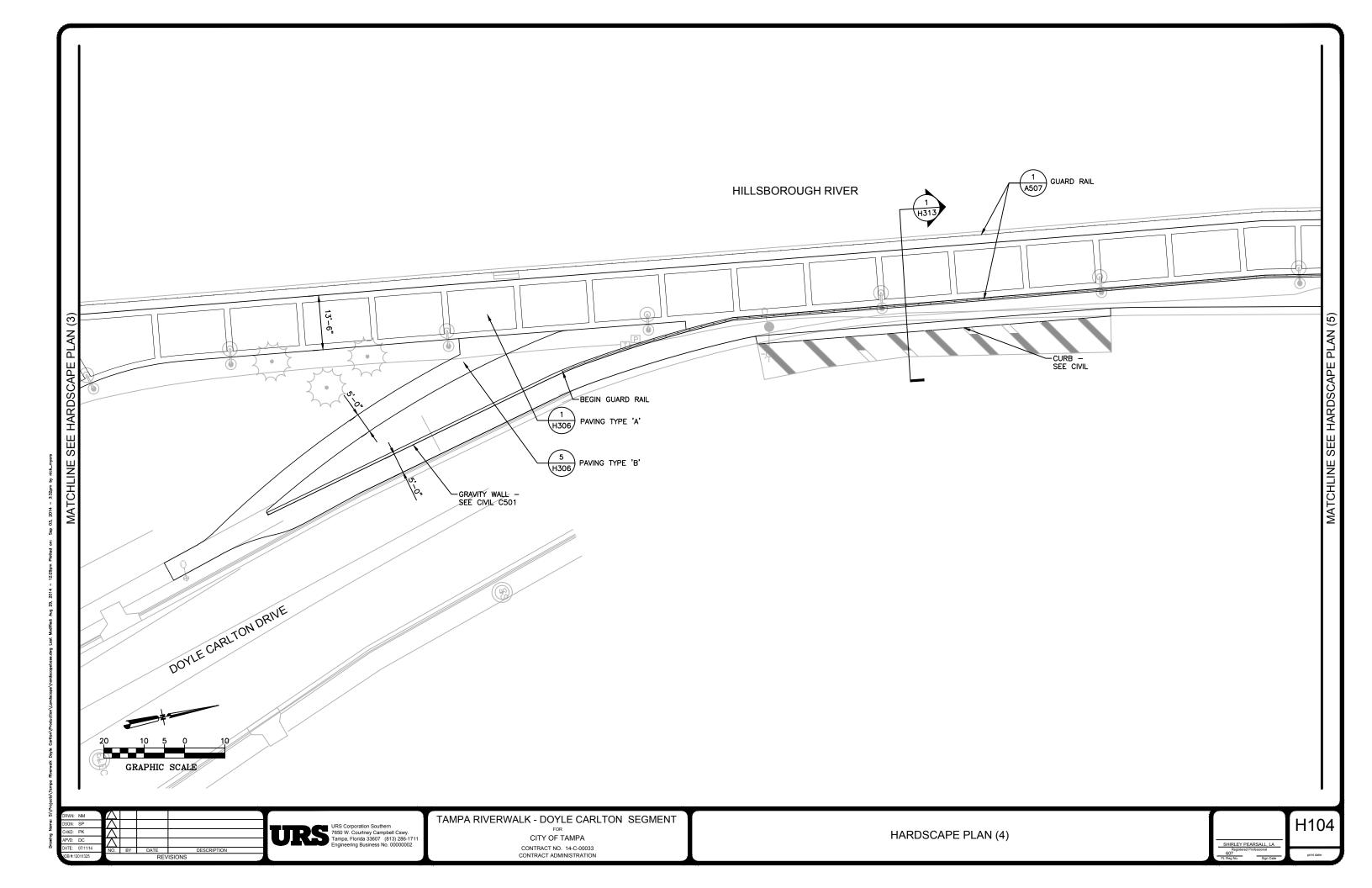
C505

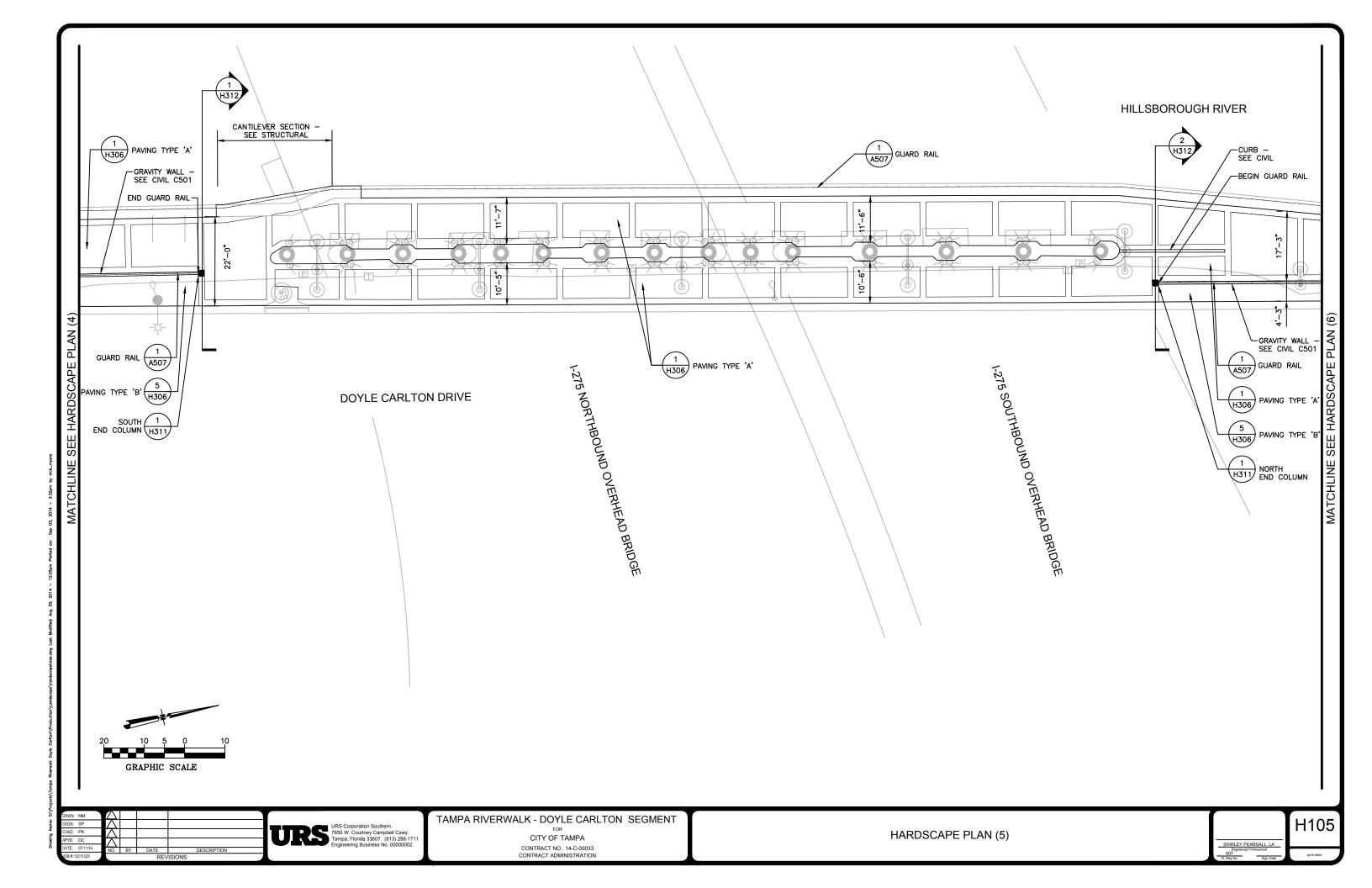
YRJA, PE offessional

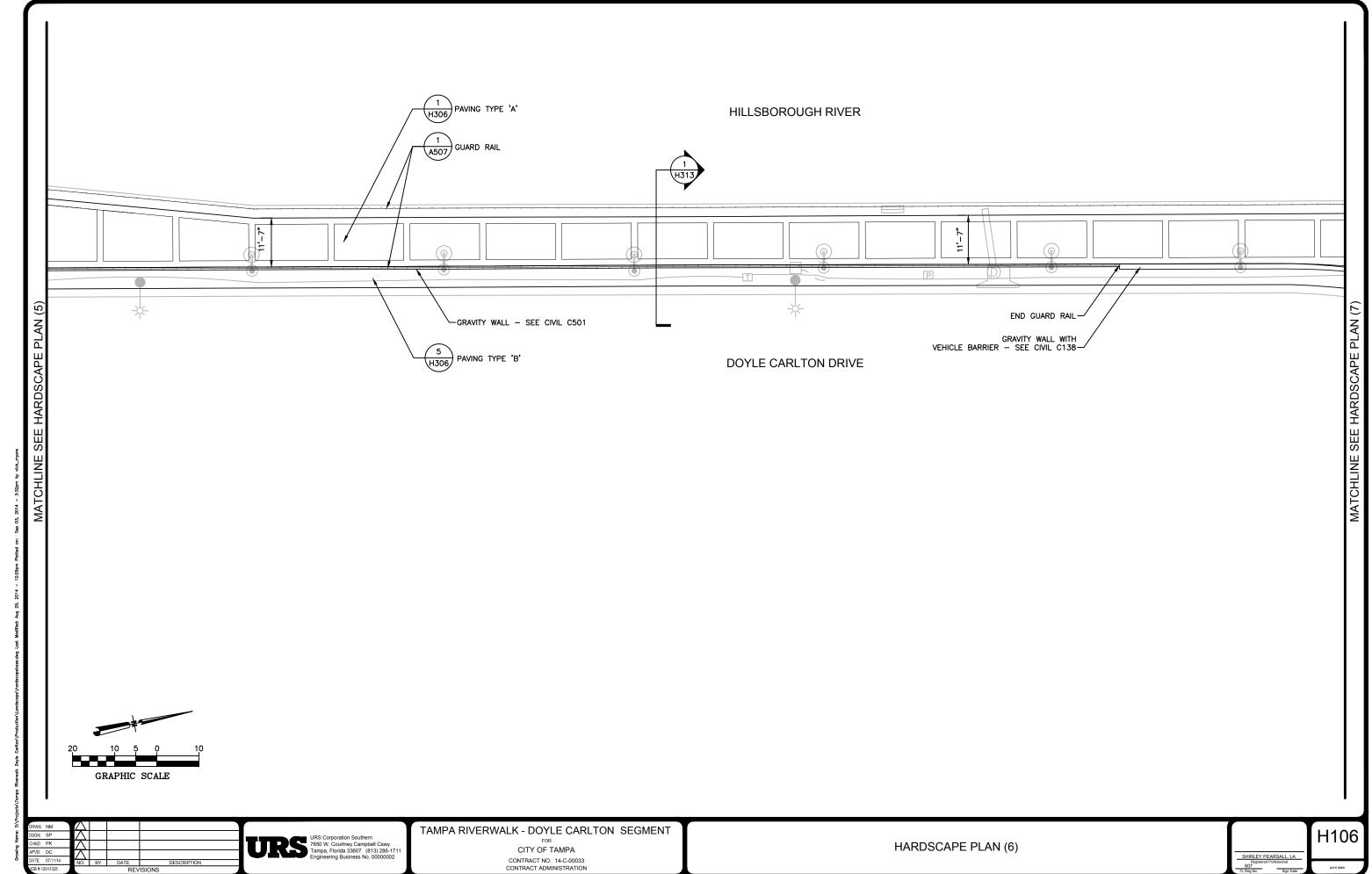


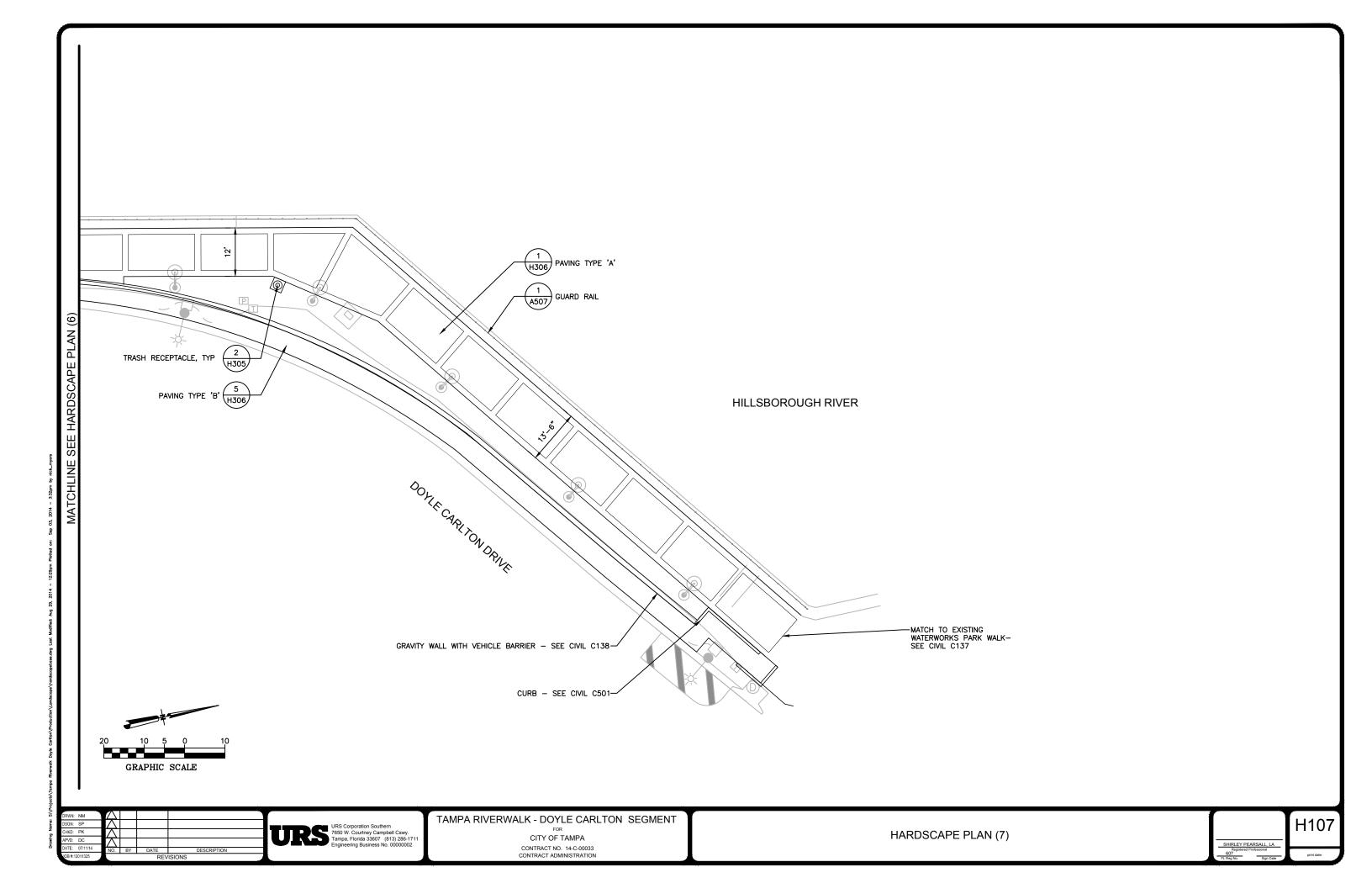


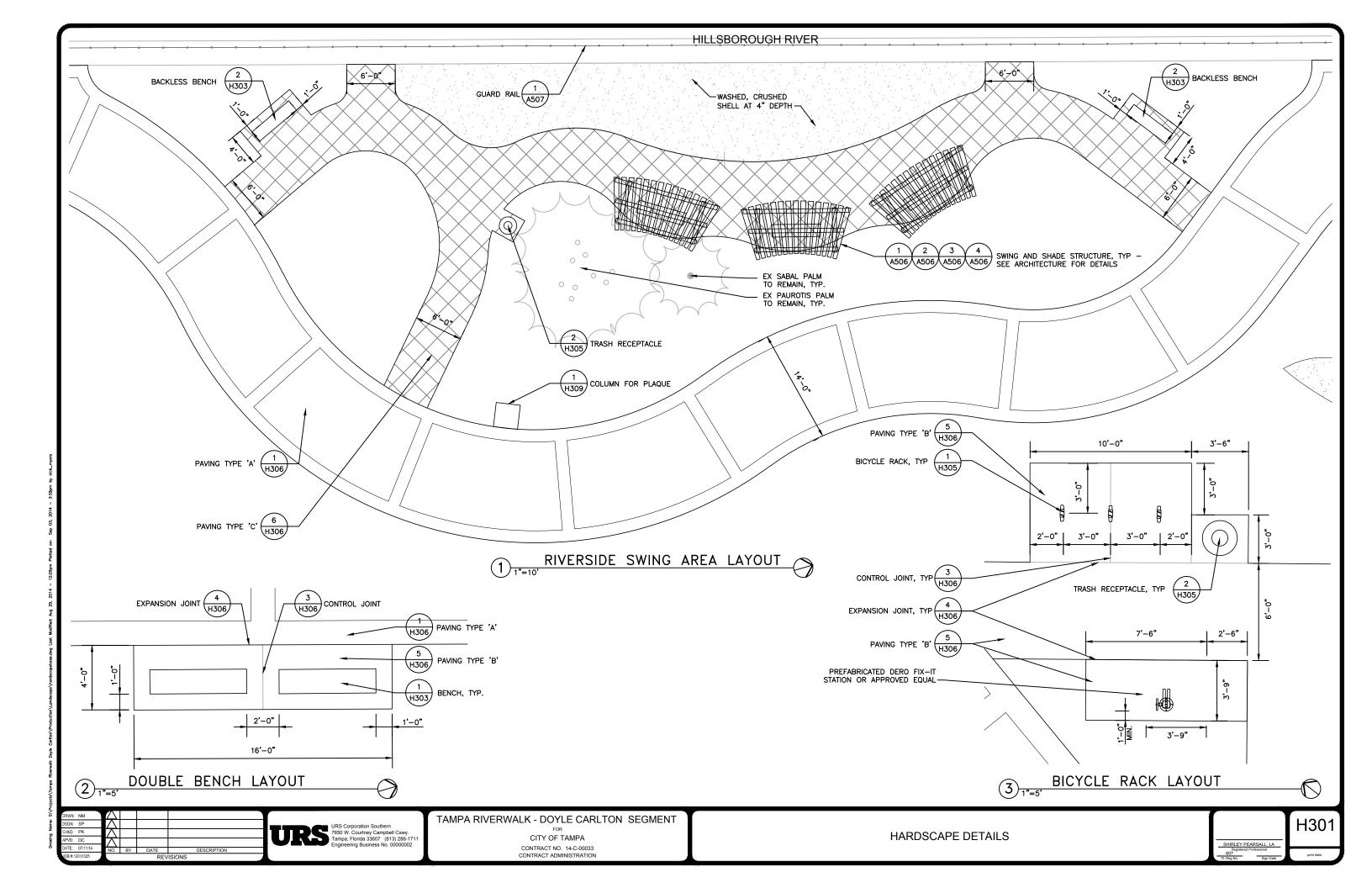


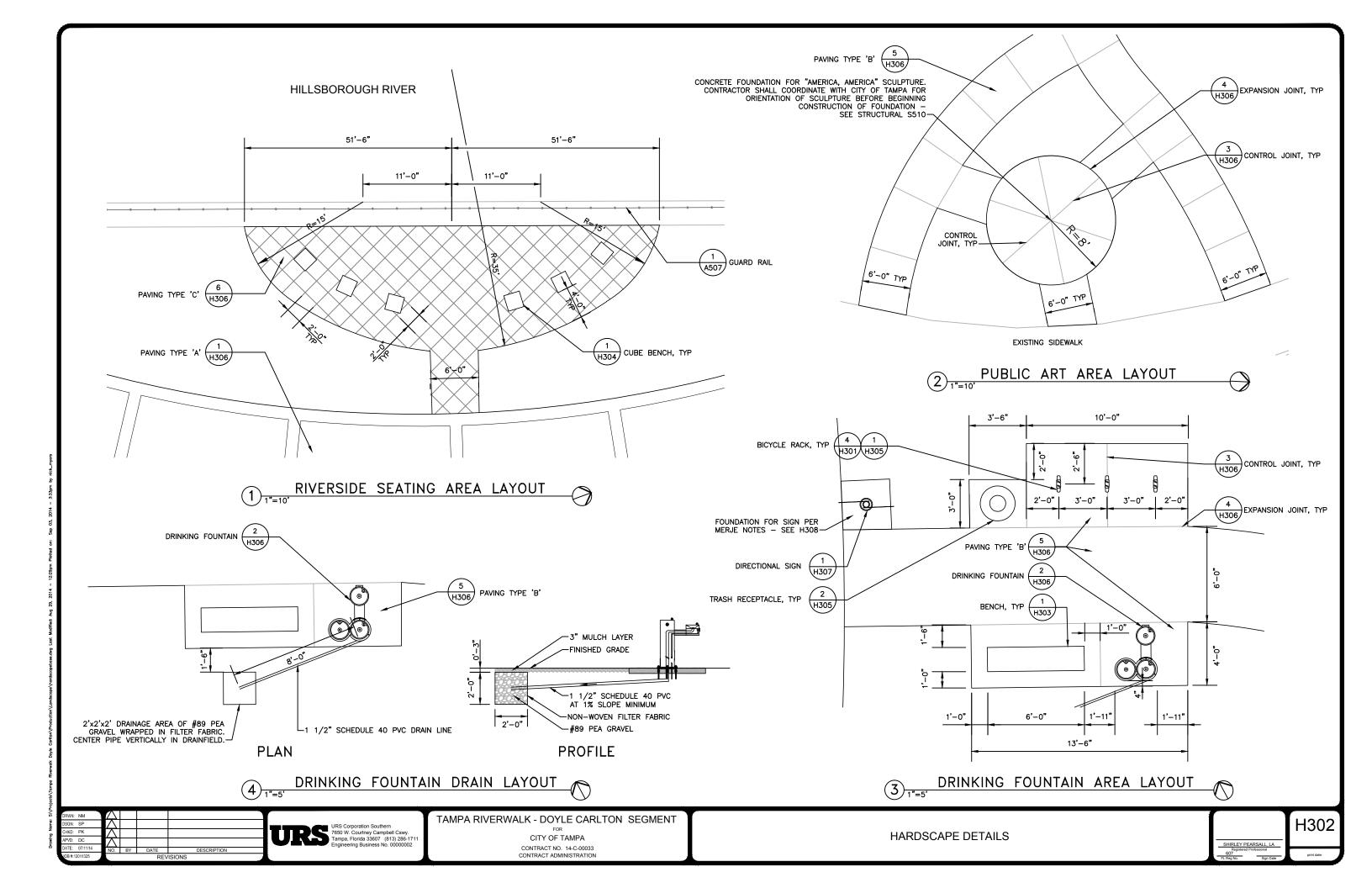


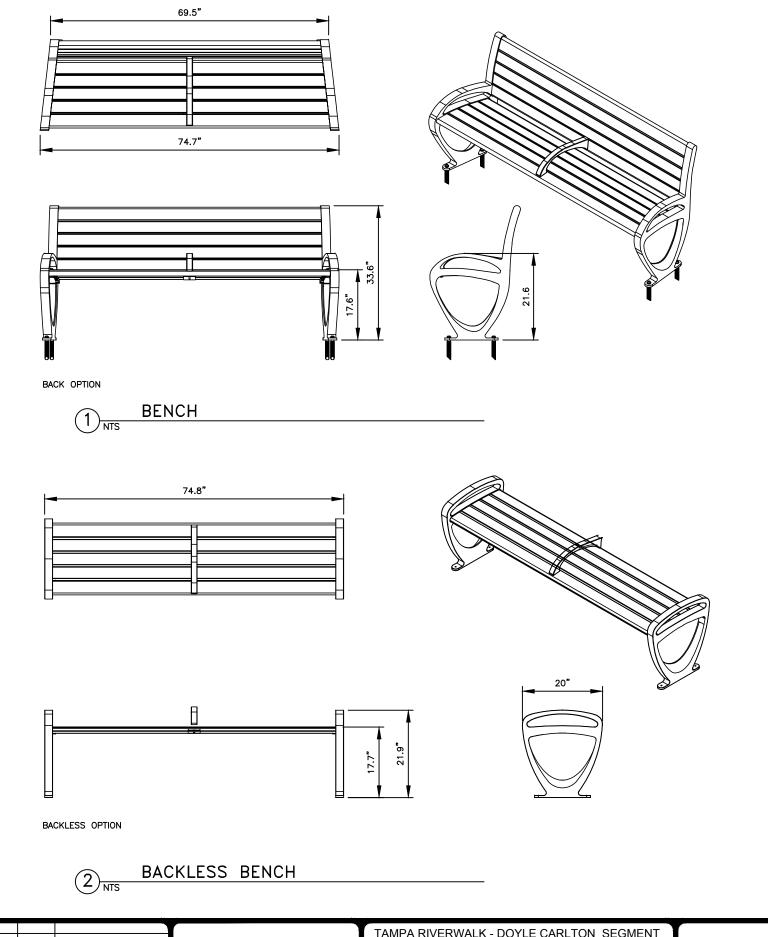














INSPIRATION IMAGE

- NOTES:

  1. BENCHES SHALL BE TRIO BY FORMS + SURFACES, MODEL SBTRO—72BW (BACK) AND MODEL SBTRO—72NW OR APPROVED EQUAL. BENCHES SHALL HAVE ONE INTERMEDIATE ARMREST INSTALLED IN THE CENTER OF THE BENCHES.

  2. SURFACE MOUNT BENCH TO CONCRETE PAD PER MANUFACTURER'S SPECIFICATIONS.

  3. COLOR AND FINISH SHALL BE SILVER TEXTURE POWDER COATED. SLATS SHALL BE FSC 100% IPE HARDWOOD.

  4. SUBMIT SHOP DRAWINGS FOR APPROVAL.



INSPIRATION IMAGE

URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-1711
Engineering Business No. 00000002

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

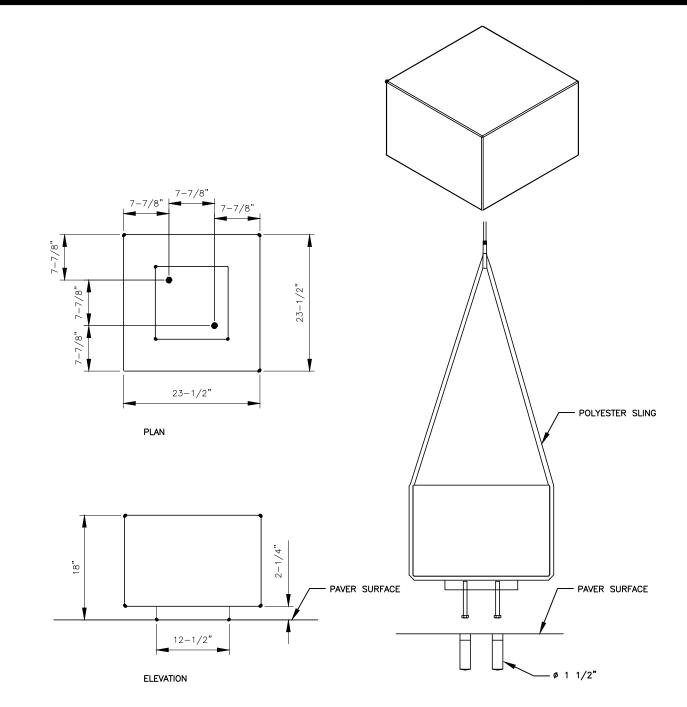
CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION HARDSCAPE DETAILS

SHIRLEY PEARSALL, LA
Registered Professional
607
FL Reo No. Sign Date



INSPIRATION IMAGE





- NOTES:

  1. BENCH SHALL BE SOCRATES BY LANDSCAPE FORMS OR APPROVED EQUAL, 24" LENGTH.

  2. INSTALLATION SHALL BE IN ACCORDANCE TO MANUFACTURER'S SPECIFICATIONS FOR EMBEDDED INSTALLATION.

  3. COLOR SHALL BE GREY.

  4. CONTRACTOR TO STAKE LOCATION OF BENCH FOR APPROVAL PRIOR TO INSTALLATION.

  5. SUBMIT SHOP DRAWINGS FOR APPROVAL.

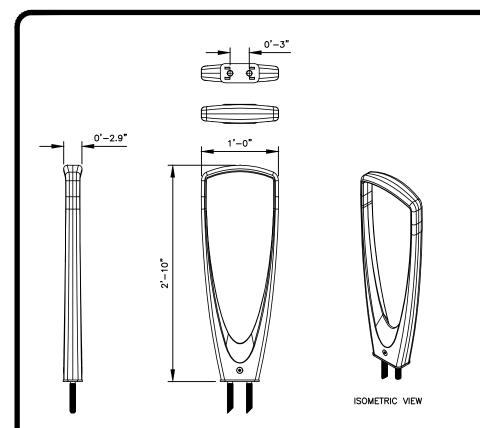
URS Corporation Southern 7650 W. Courtney Campbell Cswy. Tampa, Florida 33607 (813) 286-1711 Engineering Business No. 00000002

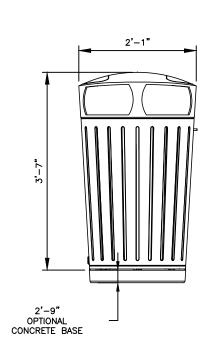
TAMPA RIVERWALK - DOYLE CARLTON SEGMENT
FOR
CITY OF TAMPA

CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION

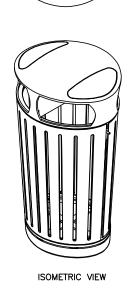
HARDSCAPE DETAILS













INSPIRATION IMAGE



INSPIRATION IMAGE

NOTES:

1. BICYCLE RACK SHALL BE TRIO BY FORMS + SURFACES, MODEL SKTRO OR APPROVED EQUAL.

2. TRASH RECEPTACLE SHALL BE DISPATCH BY FORMS + SURFACES, MODEL SLDIS-136 WITH CONCRETE BASE AND LITTER OPENING OPTION OR APPROVED EQUAL.

3. SURFACE MOUNT BICYCLE RACK AND LITER RECEPTACLE TO CONCRETE PAD (SEE SHEET H107 FOR SIZE) PER MANUFACTURER'S SPECIFICATIONS.

4. COLOR AND FINISH OF BIKE RACK AND TRASH RECEPTACLE SHALL BE SILVER TEXTURE POWDER COATED.

5. SUBMIT SHOP DRAWINGS FOR APPROVAL.

TRASH RECEPTACLE

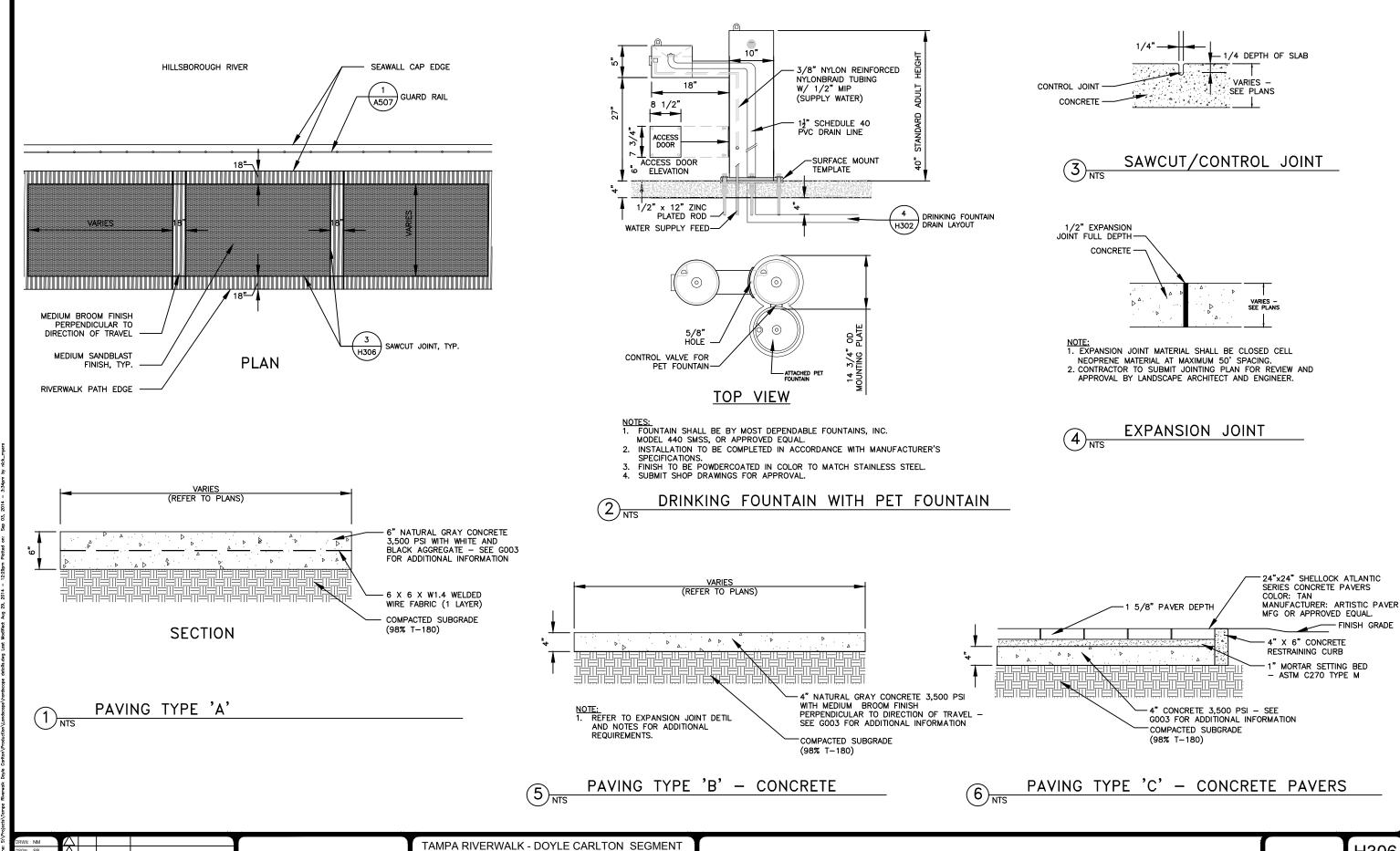
BICYCLE RACK

URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-1711
Engineering Business No. 00000002

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

FOR CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION HARDSCAPE DETAILS

SHIRLEY PEARSALL, LA
Registered Professional
607
FL Reo No. Sign Date



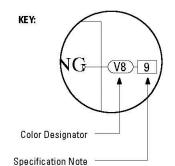
CITY OF TAMPA

CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION

URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-171;
Tenipaering Business Na Conconcer

SHIRLEY PEARSALL, LA GOT FIL Rieg No. Sign Date print date:

### C. Design Intent Drawings



The Color Designator Chart is found in the Graphic Standards section A under "Colors". The Specification Notation is found on the same page as the drawings.

# 1) DIRECTIONAL SIGN - AS DESIGNED BY MERJE

CONTRACTOR TO OBTAIN THE WAY FINDING AND INTERPRETIVE SIGNAGE DESIGN FROM THE CITY OF TAMPA. DRAWINGS AND SPECIFICATIONS PREPARED BY MERJE ARE SHOWN ARE FOR REFERENCE ONLY.

## NOTES:

- TEXT AND SIGN CONTENT TO BE PROVIDED BY THE CITY OF TAMPA.
- 2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR PROPOSED FOUNDATION DESIGN FOR APPROVAL.
- 3. COORDINATE WITH THE CITY OF TAMPA FOR SPECIFIC FINISHES.



TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

FOR

CITY OF TAMPA

CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION HARDSCAPE DETAILS

SHIRLEY PEARSALL, LA
Registered Professional
607
FL Reg No. Sign Date

## MAP SIGN - AS DESIGNED BY MERJE

CONTRACTOR TO OBTAIN THE WAY FINDING AND INTERPRETIVE SIGNAGE DESIGN FROM THE CITY OF TAMPA. DRAWINGS AND SPECIFICATIONS PREPARED BY MERJE ARE SHOWN ARE FOR REFERENCE ONLY.

## NOTES:

- 1. TEXT AND SIGN CONTENT TO BE PROVIDED BY THE CITY OF TAMPA.
- 2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR PROPOSED FOUNDATION DESIGN FOR APPROVAL.
- 3. COORDINATE WITH THE CITY OF TAMPA FOR SPECIFIC FINISHES.

GRIVE NM

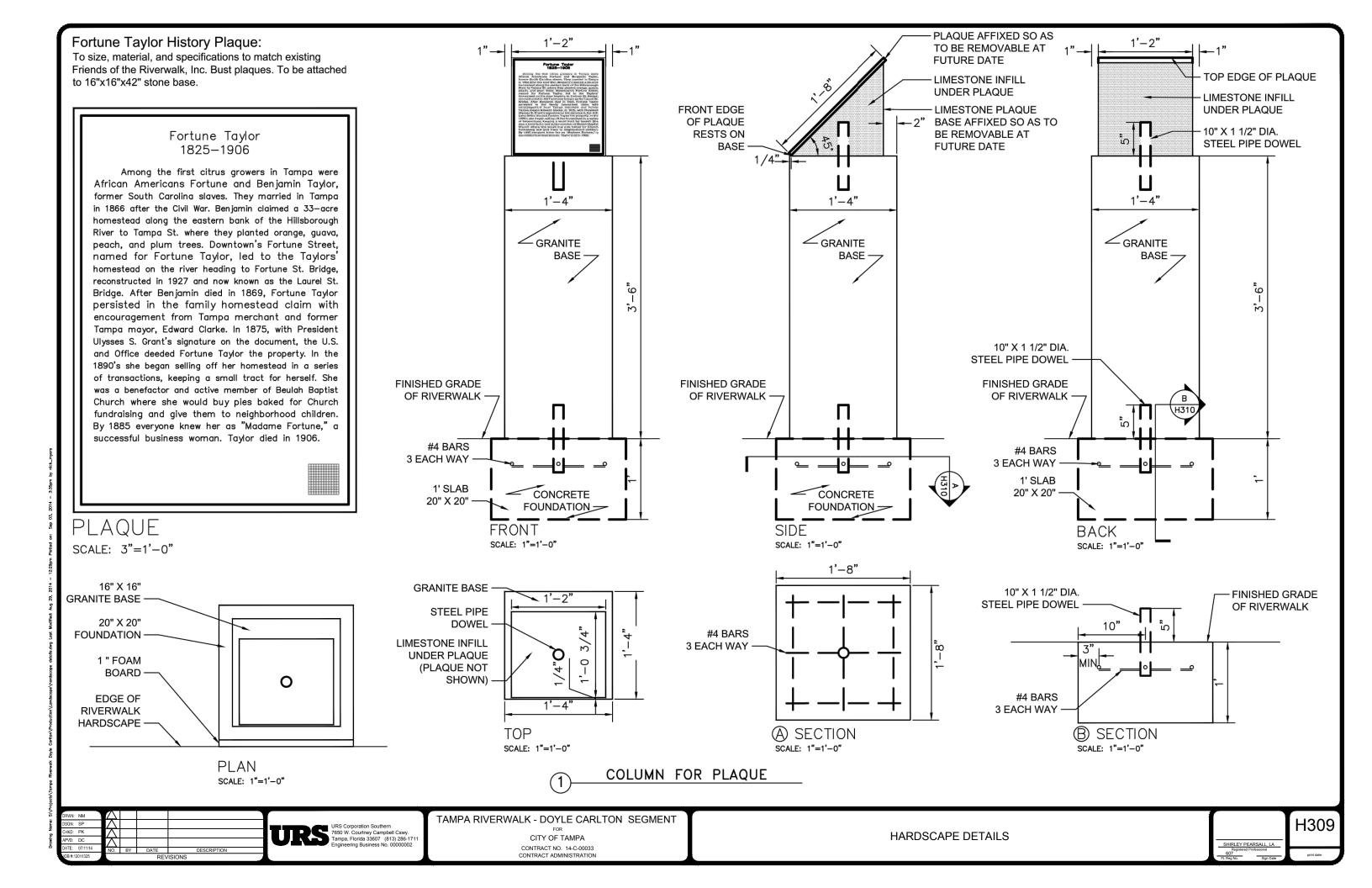
GRIVE OF K

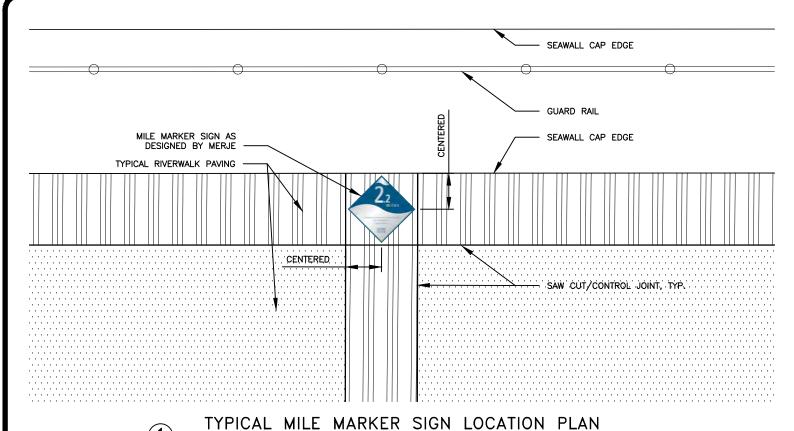
FIXED OF

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT
FOR
CITY OF TAMPA
CONTRACT NO. 14-C-00033

CONTRACT ADMINISTRATION

SHIRLEY PEARSALL LA
Registered Professional
OFF
FL Reg No.
Sign Date
print date:

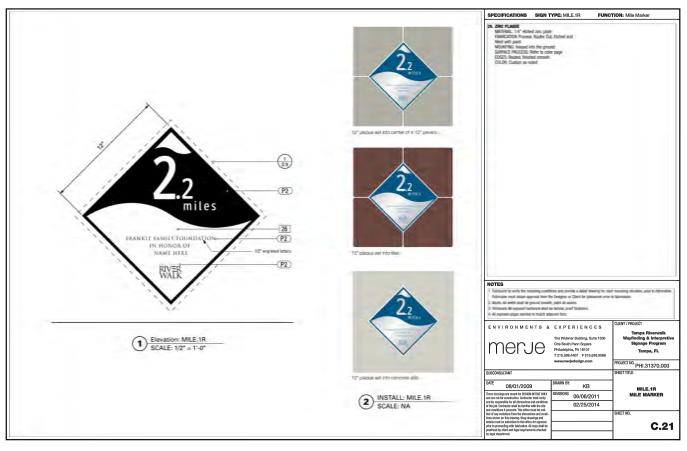




SIGN LOCATIONS TO BE COORDINATED WITH CITY OF TAMPA FOR BEGINNING AND SIGN INTERVAL DISTANCES.

NOTES:

- 1. CONTRACTOR TO OBTAIN MILE MARKER SIGNS FROM THE CITY OF TAMPA.
- 2. THE WAY FINDING SIGNAGE DRAWINGS AND SPECIFICATIONS PREPARED BY MERJE ARE SHOWN FOR REFERENCE ONLY.
- 3. CONTRACTOR TO SUBMIT PLACEMENT AND INSTALLATION SHOP DRAWINGS FOR APPROVAL.



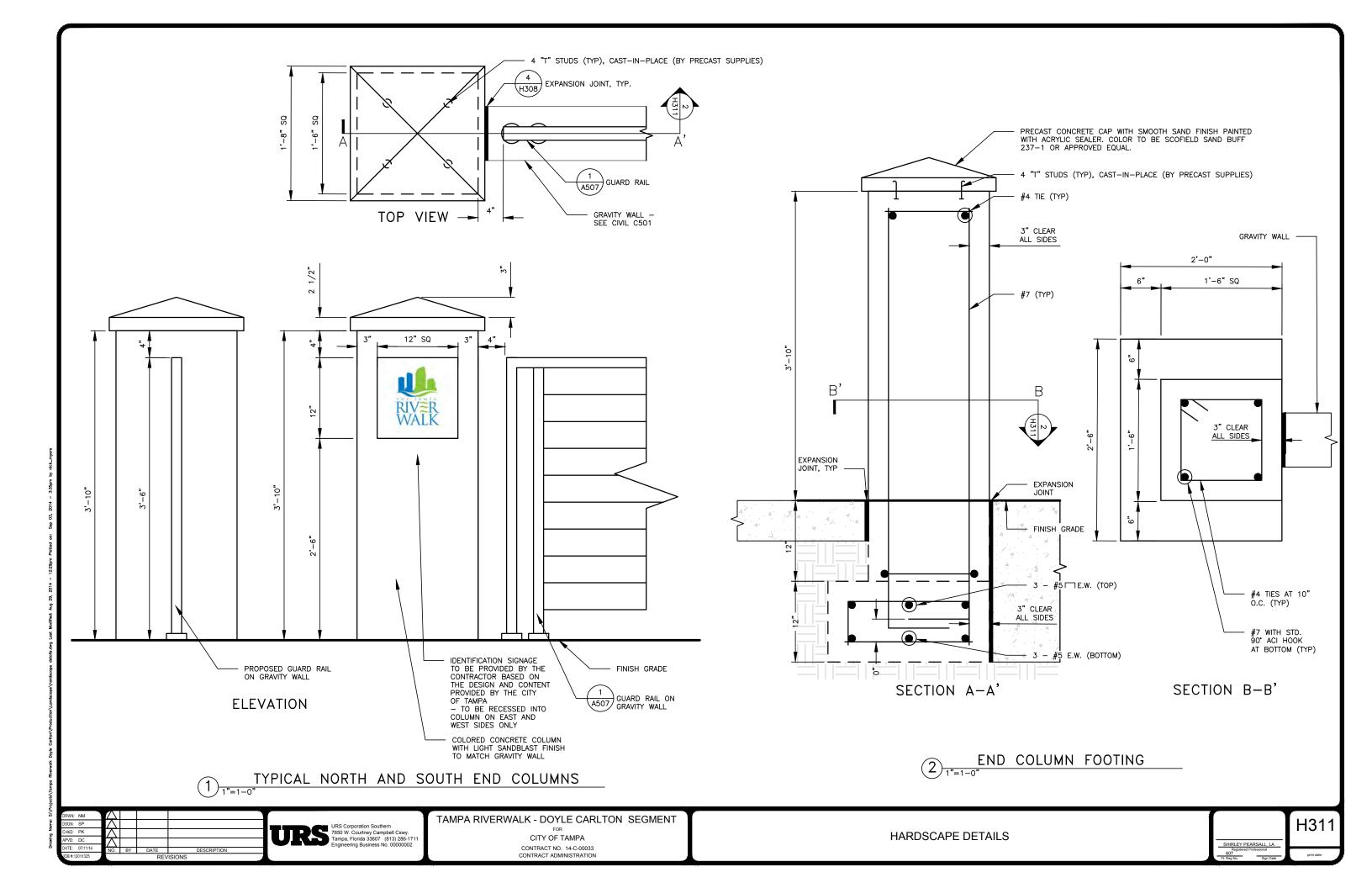
MILE MARKERS - AS DESIGNED BY MERJE

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

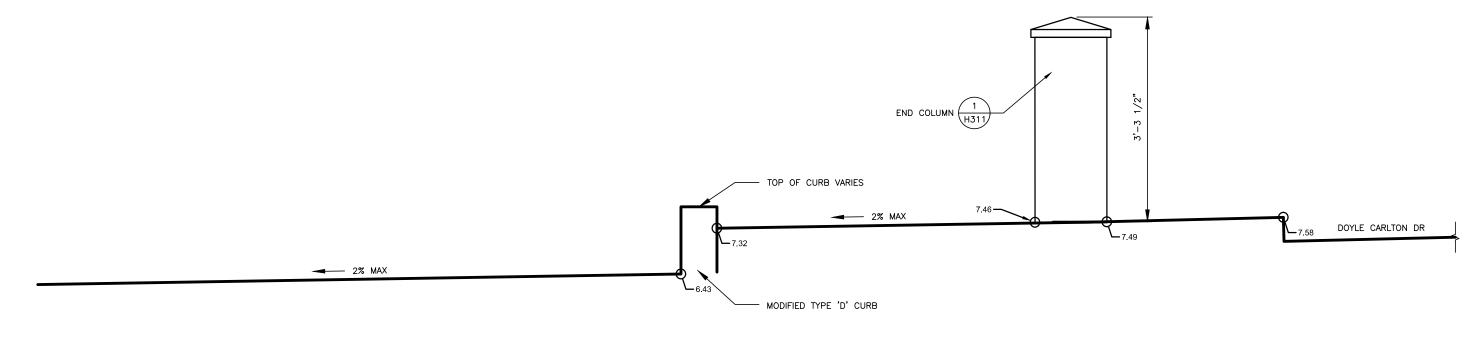
CITY OF TAMPA CONTRACT NO. 14-C-00033

HARDSCAPE DETAILS

H310 SHIRLEY PEARSALL, LA



SOUTH END COLUMN - SOUTH OF I-275 (VIEW LOOKING NORTH) - SEE SHEET C135 FOR MORE INFORMATION



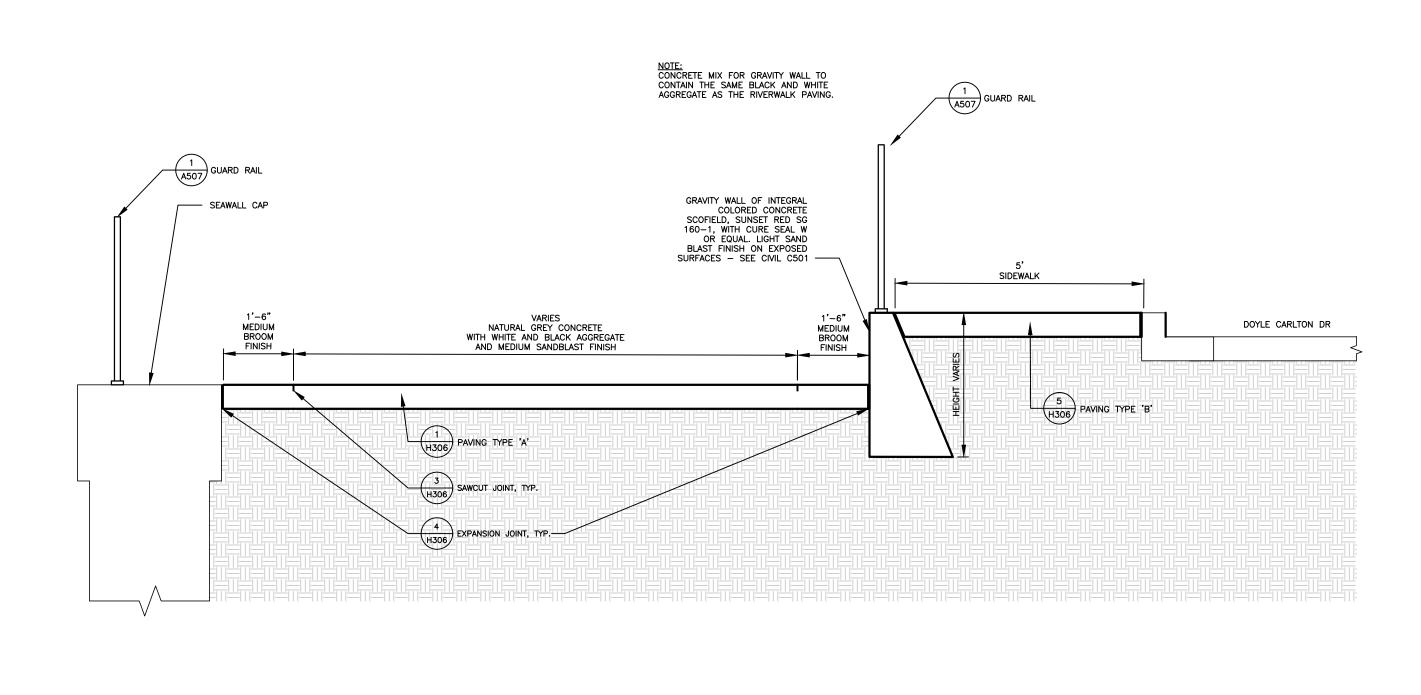
NORTH END COLUMN - NORTH OF I-275 (VIEW LOOKING NORTH) - SEE SHEET C135 FOR MORE INFORMATION

DRW: NM | DSGN: SP | A | URS Corporation Southern 7650 W. Courtney Campbell Cswy. APVD: DC | A | DATE | DESCRIPTION | Engineering Business No. 00000002

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT
FOR
CITY OF TAMPA
CONTRACT NO. 14-C-00033
CONTRACT ADMINISTRATION

HARDSCAPE DETAILS

SHIRLEY PEARSALL, LA
Registered Professional
7 F. Reg No.
Sign Date
Print date:



TYPICAL HARDSCAPE SECTION FOR SURFACE FINISHES ALONG GRAVITY WALL

DRINE NIM
DSGN: SP
CHKD: PK
APVO: DC
DATE: 0711/4
NO. BY DATE DESCRIPTION

NO. BY DATE DESCRIPTION

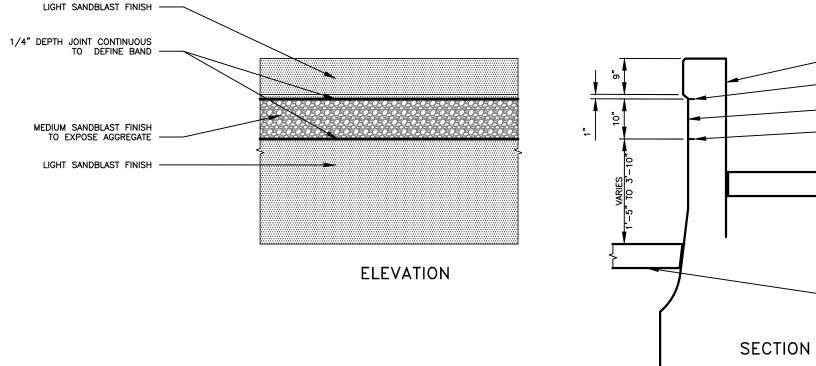
DESCRIPTI

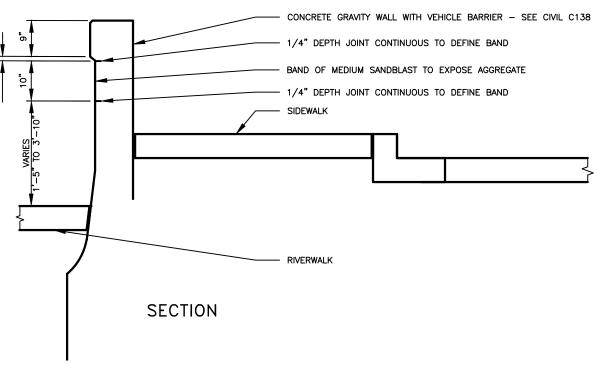
TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

FOR
CITY OF TAMPA
CONTRACT NO. 14-C-00033
CONTRACT ADMINISTRATION

HARDSCAPE DETAILS

SHIRLEY PEARSALL, LA
Registered Professional
607
FL Reg No. Sign Date





1. INTEGRAL COLOR: SCOFIELD, SUNSET RED (SG160-1) WITH CURESEAL W OR EQUAL
2. AGGREGATE TO MEET FDOT STANDARD SPECIFICATION 346.2.4 FOR CONCRETE
EXCEPT AGGREGATE SHALL BE SIZE NO. 89 STONE MIX OF LIMESTONE AND BLACK
GRANITE. INTENT IS FOR THE LARGER AGGREGATE TO BE WHITE AND SMALLER
AGGREGATE TO BE BLACK.

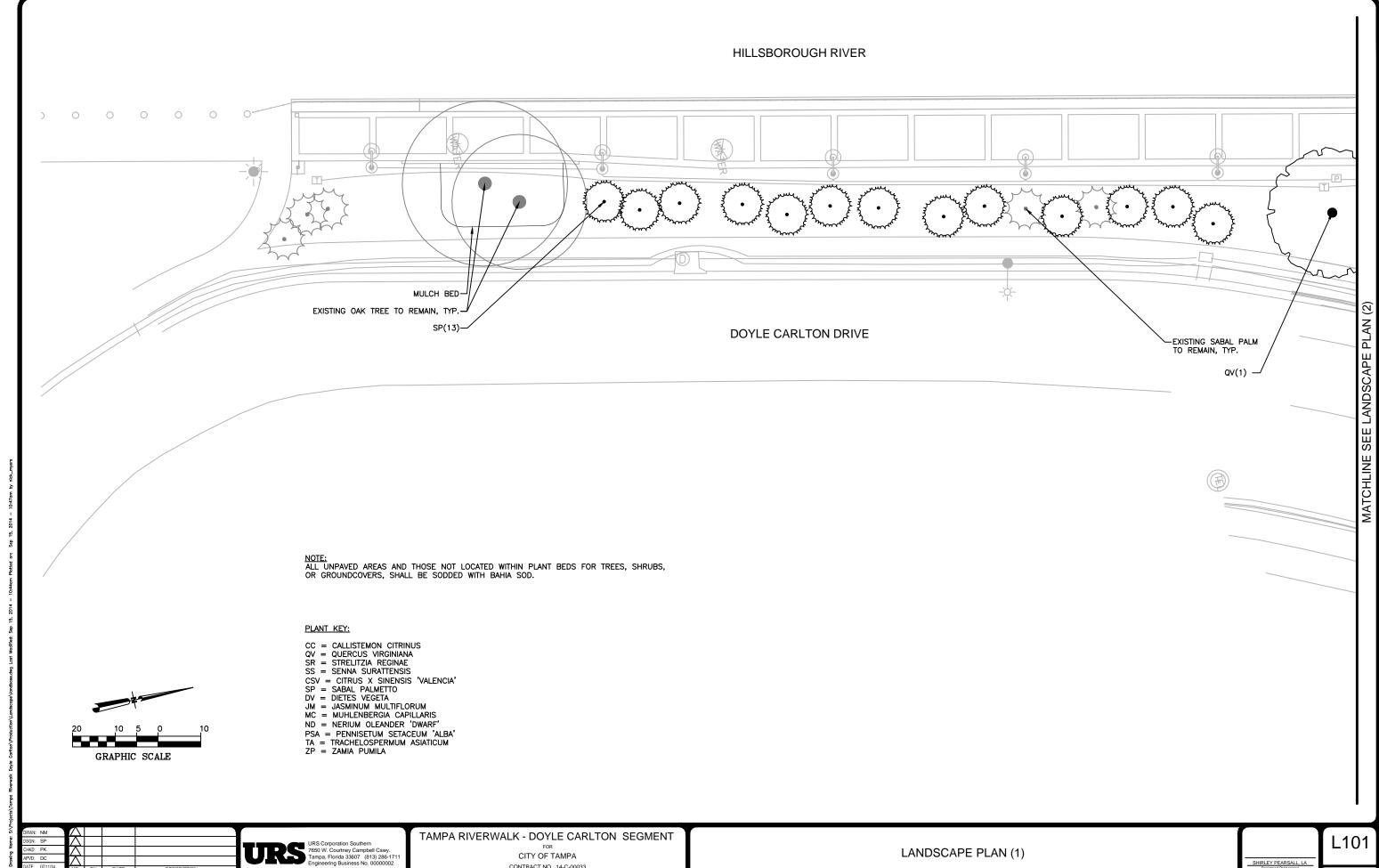
TYPICAL HARDSCAPE SECTION FOR SURFACE FINISHES ALONG GRAVITY WALL WITH VEHICLE BARRIER SEE CIVIL C136-C138

URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-1711
Engineering Business No. 00000002

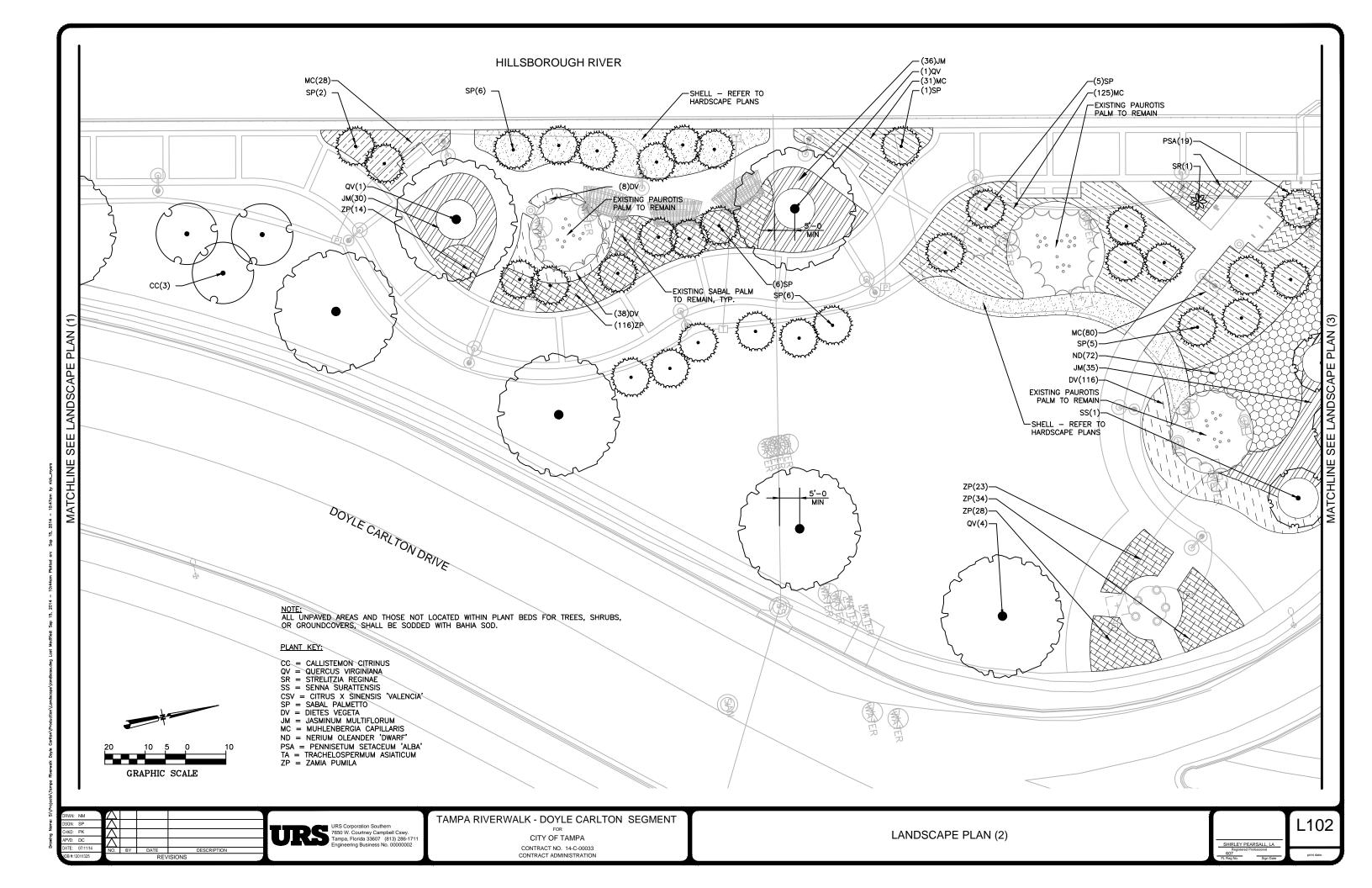
TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

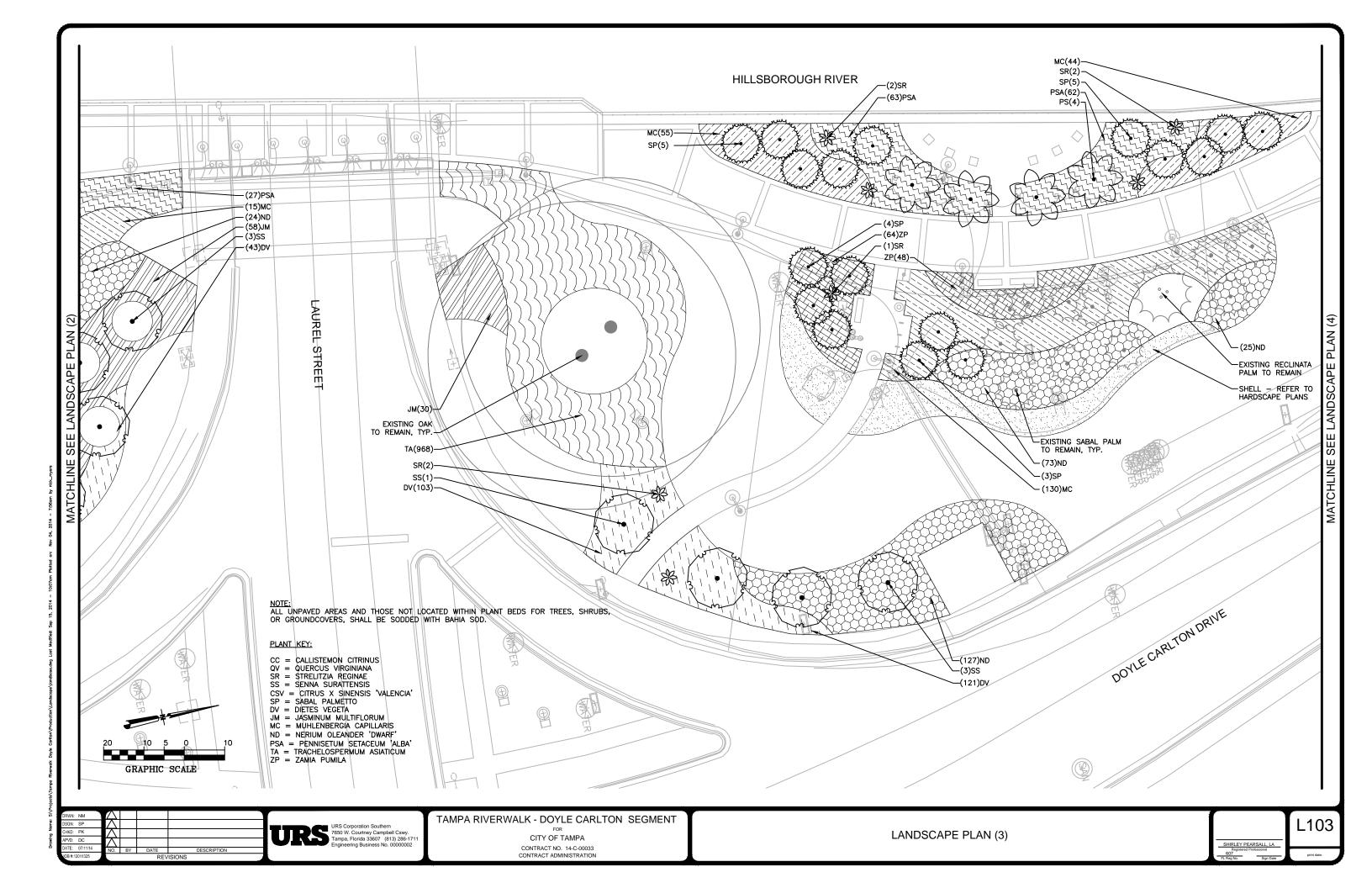
CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION HARDSCAPE DETAILS

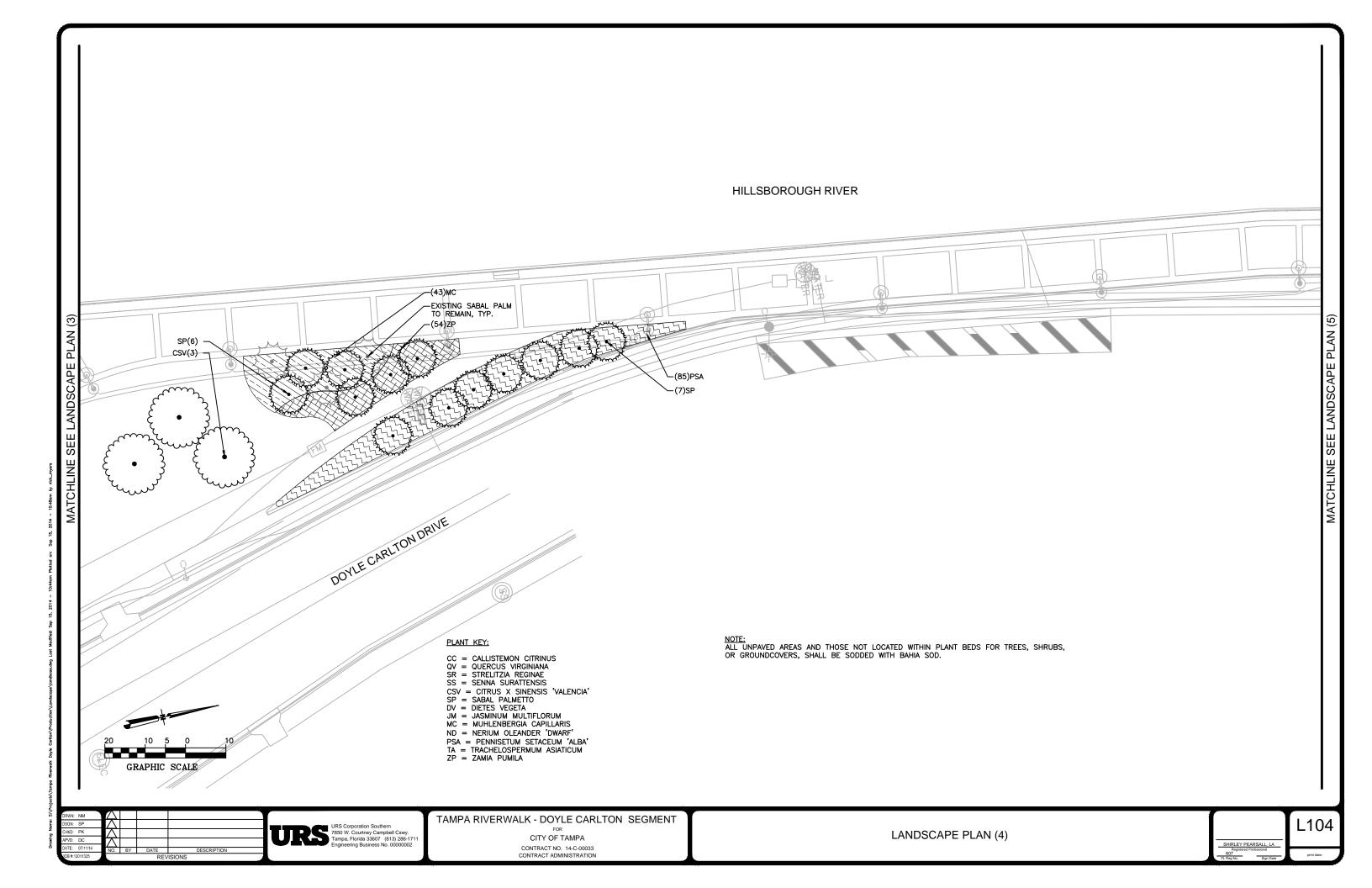
SHIRLEY PEARSALL, LA
Registered Professional
607
FL Reo No. Sign Date

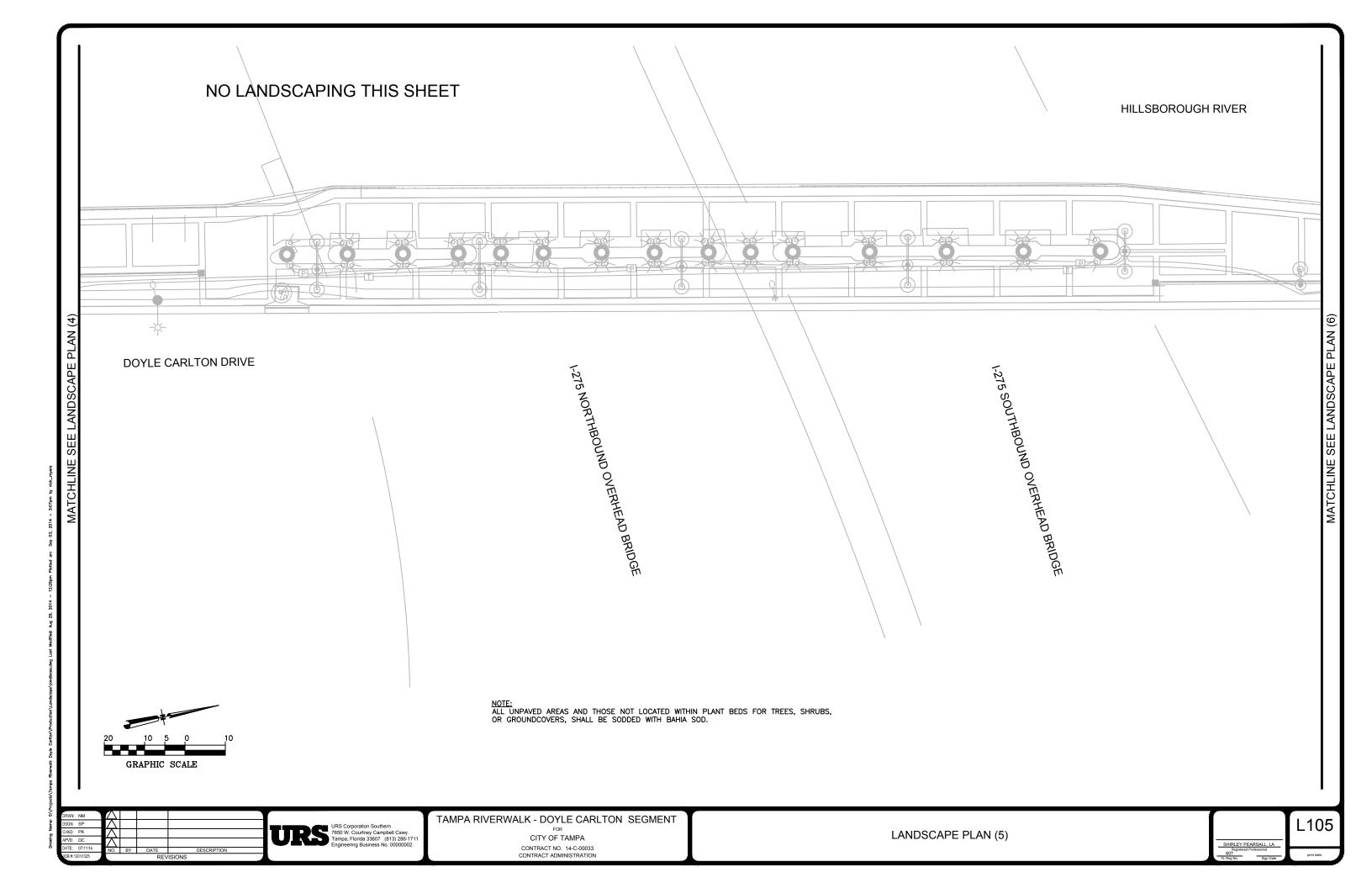


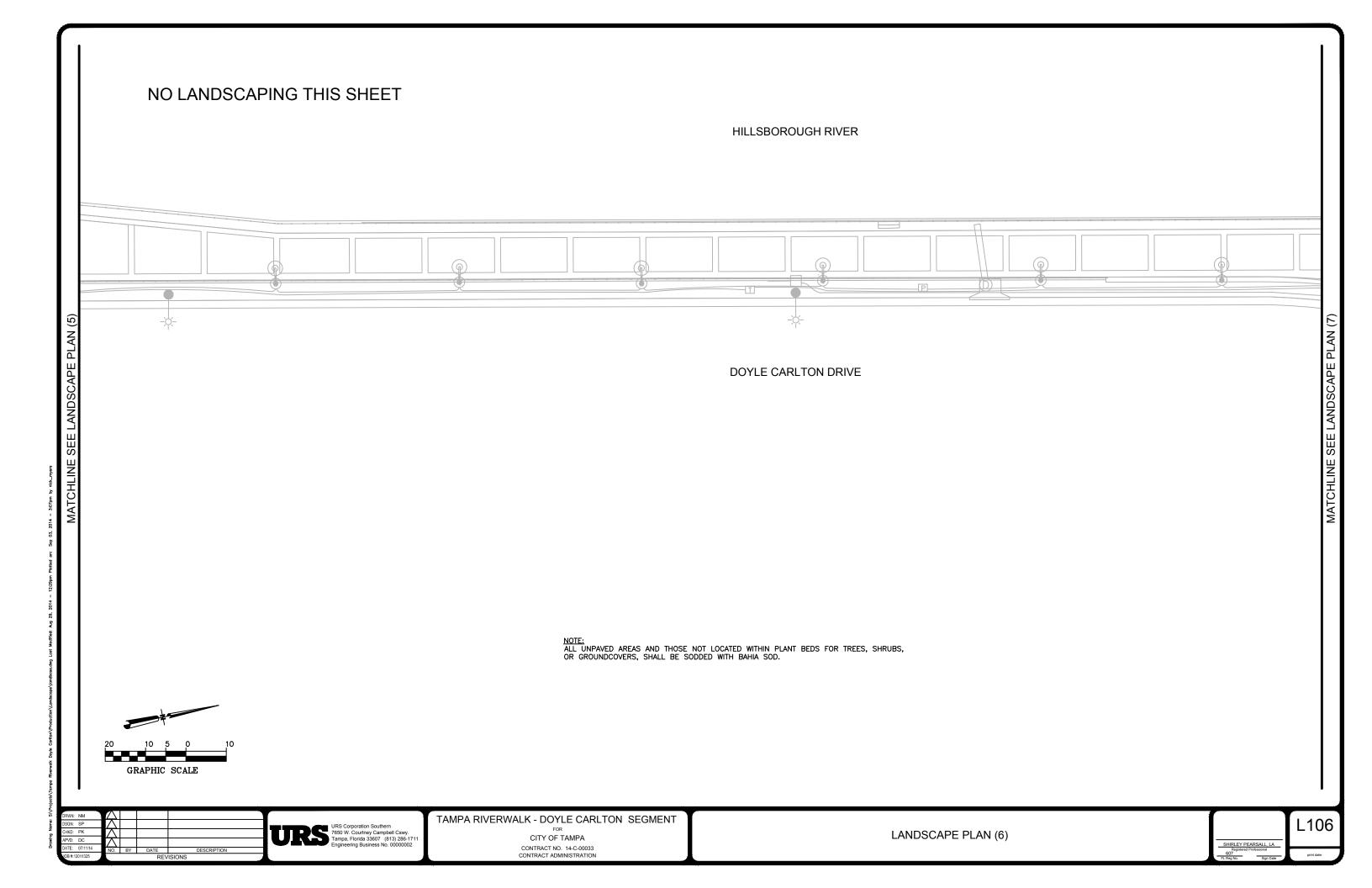
CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION SHIRLEY PEARSALL, LA
Registered Professional
607
FL Reg No. Sign Date

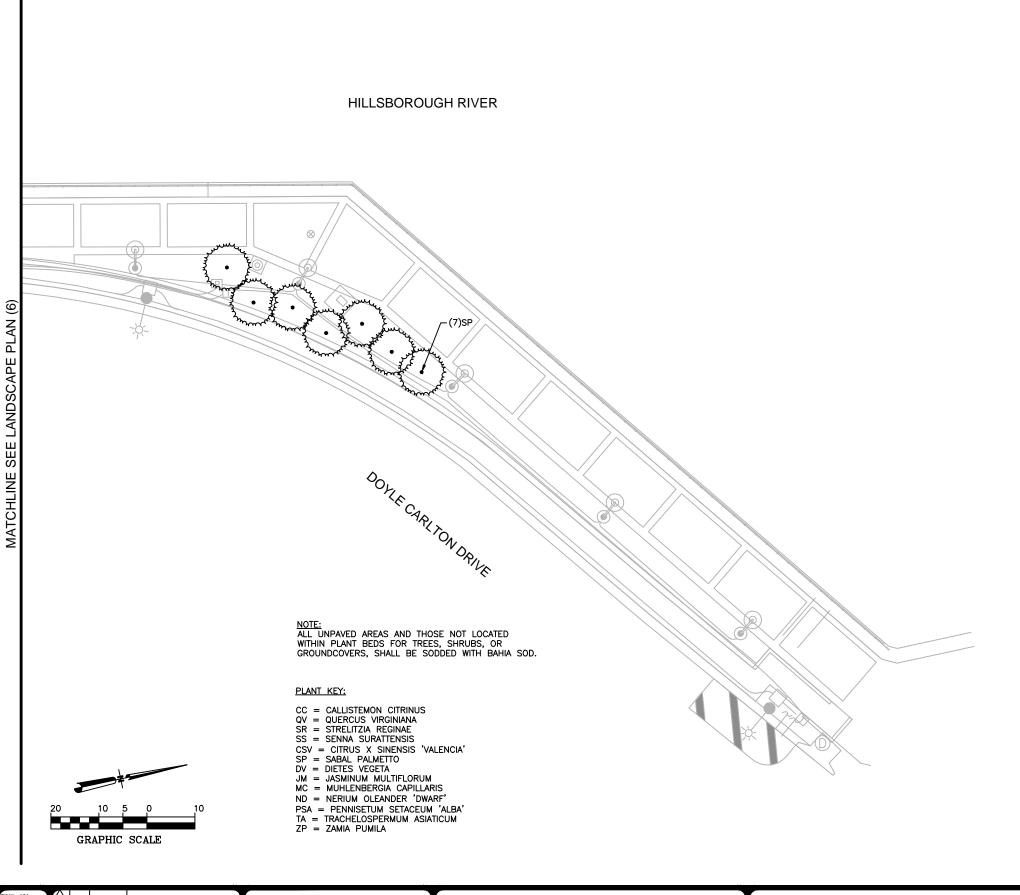












RNN: NM
SGN: SP
HKO: PK
PVD: DC
ATE: 07/11/14
NO. BY DATE DESCRIPTION

RNN: NM
URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-1711
Engineering Business No. 00000002

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION LANDSCAPE PLAN (7)

SHIRLEY PEARSALL, LA
Registered Professional
607
FL Reg No. Sign Date

L107

print date:

PLANT_SCHEDUL	E							ABBREVIATIONS:
IREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT		REMARKS	CAL = CALIPER CT = CLEAR TRUNK FG = FIELD GROWN
	сс	3	CALLISTEMON CITRINUS	RED BOTTLEBRUSH	45 GAL		3" CAL, 11'-12' HT X 5'-6' SPR, STANDARD OR MAX. 3 TRUNKS, TREE FORM 5' CT, AS SHOWN	FTG = FULL TO GROUND  GAL = GALLON  HT = HEIGHT  ML = MULTI-TRUNK  OA = OVER ALL  SPR = SPREAD
	QV	7	QUERCUS VIRGINIANA	LIVE OAK	100 GAL		4" CAL, 14'-16' HT X 6'-8' SPR	STD = STANDARD TYP = TYPICAL OC = ON CENTER FF = FLORIDA FANCY
**	SR	8	STRELITZIA REGINAE	BIRD OF PARADISE	15 GAL		24" X 24", FULL	
2 • E	SS	8	SENNA SURATTENSIS	SCRAMBLED EGG TREE	45 GAL		3" CAL, 12'-14' HT X 5'-6' SPR, STANDARD, FF, 5' CT	
FRUIT TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT		<u>REMARKS</u>	
£ • }	CSV	3	CITRUS X SINENSIS 'VALENCIA'	VALENCIA ORANGE	45 GAL		7'-8' HT X 4'-5' SPR	
PALM TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT		REMARKS	
£3	PS	4	PHOENIX SYLVESTRIS	WILD DATE PALM	FG		12' CT, MATCH SPECIMENS WILD DATE PALMS SHALL BE INOCULATED FOR TEXAS PHOENIX PALM CONTRACTOR SHALL PROVIDE RECORD OF INOCULATION DATES.	DECLINE (TPPD).
3 o Co	SP	81	SABAL PALMETTO	SABAL PALM	FG		16'-20' CT, NO BOOTS, REGENERATED ROOTS & LEAVES SABAL PALMS TO BE PLANTED IN INFORMAL GROUPINGS AS SHOWN HEIGHTS FROM 16' TO 20' CT SUCH THAT NO TWO (2) ADJACENT P.	ON PLANS WITH VARYING ALMS ARE OF EQUAL HEIGHT.
GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	<u>SPACING</u>	REMARKS	
 	DV	429	DIETES VEGETA	AFRICAN IRIS	1 GAL	24" o.c.	18" HT, FULL	
	JM	189	JASMINUM MULTIFLORUM	DOWNEY JASMINE	3 GAL	36" o.c.	SHALL NOT BE PLANTED CLOSER THAN 5' FROM TRUNKS OF TREES.	
	МС	551	MUHLENBERGIA CAPILLARIS	MUHLY GRASS	3 GAL	36" o.c.	18" HT, FULL	
	ND	321	NERIUM OLEANDER 'DWARF'	DWARF OLEANDER	3 GAL	36" o.c.		
	PSA	256	PENNISETUM SETACEUM 'ALBA'	WHITE FOUTAIN GRASS	3 GAL	36" o.c.	18" HT, FULL	
	* TA	968	*TRACHELOSPERMUM ASIATICUM	ASIAN JASMINE	1 GAL	18" o.c.	12" RUNNERS, FULL	*NOTE: INFILL ASIAN JASMINE UNDER EXISTING OAK CANOPY ON NADTH SIDE OF LAUREL STREET TO PROVIDE A UNIFORM
	ZP	401	ZAMIA PUMILA	COONTIE	3 GAL	30" o.c.	18" HT, FULL	NORTH SIDE OF LAUREL STREET TO PROVIDE A UNIFORM COVERAGE AT MINIMUM 18" O.C. WITHIN BEDLINE. ACTUA QUANTITIES MAY VARY.
DRW: NM  DSGN: SP  CHKD: PK  APPO: DC  DATE: 07/1/14  NO. BY DATE DESCRIPTION	UR	URS Co 7650 W Tampa, Enginee	TAMPA RIV proporation Southern . Courtney Campbell Cswy. Florida 33607 (813) 286-1711 ering Business No. 00000002	VERWALK - DOYLE C FOR CITY OF TAMPA CONTRACT NO. 14-C-0	4	SEGMEN		SCHEDULE

CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION

L201 SHIRLEY PEARSALL, LA
Registered Professional
607
FL Reg No. Sign Date

- 2. THE CONTRACTOR SHALL BE FULLY ACQUAINTED WITH THE RELATED PAVING, LIGHTING, WATER SUPPLY, ELECTRICAL SUPPLY, AND OTHER UTILITIES TO PREVENT ANY MISUNDERSTANDING AND TO FACILITATE A TROUBLE FREE INSTALLATION. CALL THE SUNSHINE STATE ONE CALL OF FLORIDA 1-800-432-4770 PRIOR TO ANY CONSTRUCTION FOR UTILITY COORDINATION. IN ADDITION, NOTIFY THE UTILITY OWNER A MINIMUM OF 72 HOURS IN
- THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGES TO EXISTING FACILITIES THAT MAY RESULT FROM WORK PERFORMED BY THE CONTRACTOR. THE WORK PERFORMED UNDER THIS CONTRACT WILL INTERFACE WITH OTHER WORK BEING PERFORMED BY OTHER CONTRACTORS. IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE ACTIVITIES WITH OTHER CONTRACTORS AND THEIR SUBCONTRACTORS.
- NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION OF THE LANDSCAPE ARCHITECT OF RECORD AND OWNER'S REPRESENTATIVE, PRIOR TO INSTALLATION OF SUCH MATERIALS.
- 5. IN THE EVENT DISCREPANCIES ARE NOTED BETWEEN THE PLANT LIST AND THE ACTUAL NUMBER OF PLANTS SHOWN ON THE PLANS, THE PLANS SHALL CONTROL. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY IF DISCREPANCIES ARE FOUND.
- PLANT MATERIALS WILL BE INSPECTED AT THE JOB SITE BY THE OWNER'S REPRESENTATIVE. AFTER INSPECTION, IF THE WORK DOES NOT COMPLY WITH PROJECT REQUIREMENTS, CONTRACTOR SHALL REPLACE REJECTED WORK AND CONTINUE SPECIFIED MAINTENANCE UNTIL WORK IS REINSPECTED AND FOUND TO BE ACCEPTABLE. REMOVE REJECTED PLANTS AND MATERIALS FROM THE SITE WITHIN 48 HOURS AND REPLACE WITH ACCEPTABLE MATERIALS. ALL TREES AND PALMS SHALL BE TAGGED AT THE NURSERY BY THE LANDSCAPE ARCHITECT PRIOR TO SHIPPING AND INSTALLATION, CONTRACTOR TO CONTACT THE LANDSCAPE ARCHITECT TWO (2) WEEKS IN ADVANCE TO SCHEDULE NURSERY TAGGING TRIPS WITH THE LANDSCAPE ARCHITECT AND SUPPLIER GROWERS.
- ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO DIRECT THE REMOVAL AND REPLACEMENT OF ANY ITEMS WHICH DO NOT REPRESENT SUCH AN INSTALLATION.
- ALL PLANT MATERIALS SHALL BE GRADE FLORIDA NO. 1, OR BETTER AS OUTLINED UNDER GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, FLORIDA DIVISION OF PLANT INDUSTRY, AND SHALL CONFORM TO ANSI STANDARDS FOR NURSERY STOCK (ANSI Z60.1-LATEST
- 9. ALL PLANTING BEDS SHALL BE MULCHED IN ACCORDANCE WITH THE PLANTING DETAILS. NO CYPRESS MULCH SHALL BE USED ON THIS PROJECT SITE. NEW MULCH SHALL BE MINI PINE BARK NUGGETS. INSTALLED TO A WETTED DEPTH OF 3" IN ALL AREAS AS INDICATED ON PLANS.
- 10. AFTER INITIAL PLANTINGS HAVE BEEN COMPLETED AND PRIOR TO MULCHING, APPLY "CHIPCO RONSTAR G" WITH A PROPERLY CALIBRATED GRANULAR APPLICATOR . APPLY AT A RATE AS DIRECTED BY MANUFACTURER'S RECOMMENDATIONS, FOR PLANTED AREAS SPECIFIED. DO NOT APPLY PRE-EMERGENT CHEMICAL DIRECTLY ON ANY PLANT MATERIALS. SUBMIT MSDS AND APPLICATION RATE INFORMATION TO THE LANDSCAPE ARCHITECT OF RECORD FOR APPROVAL PRIOR TO APPLICATION.
- 11. PLANTING SOIL;

  - A. PLANTING SOIL FOR ALL TREES, SHRUBS, AND GROUND COVERS SHALL CONSIST OF 50% TOPSOIL AND 50% PEAT.
    B. PLANTING SOIL MIXTURE FOR ALL PALMS SHALL CONSIST OF THREE (3) PARTS SILICA SAND AND ONE (1) PART NATIVE SOIL BACKFILL.
  - C. PLANTING SOIL MIXTURE SAMPLES SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT OF RECORD FOR APPROVAL. NO PLANTING SHALL OCCUR UNTIL PLANTING SOILS ARE APPROVED. CONTRACTOR SHALL TAKE RESPONSIBILITY FOR PERFORMING PERCOLATION TESTS PRIOR TO BACKFILLING WITH APPROVED PLANTING SOIL. NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY IF PERCOLATION DOES NOT SUPPORT HEALTHY GROWTH OF PLANTINGS.
- ALL PLANT MATERIALS AND SOD SHALL BE WATERED AND MAINTAINED BY THE CONTRACTOR FROM TIME OF INITIAL PLANTING UNTIL 90 DAYS AFTER FINAL ACCEPTANCE BY THE OWNER. THE CONTRACTOR SHALL MAINTAIN IN ACCORDANCE WITH SECTION 3.4 OF WRITTEN SPECIFICATION 02900 WHICH CONTAINS DETAILED MAINTENANCE REQUIREMENTS. ALL PLANT MATERIALS SHALL BE ADEQUATELY WATERED AND MAINTAINED TO REMAIN IN FLORIDA NO. 1 GRADE CONDITION THROUGHOUT THE MAINTENANCE PERIOD.
- 13. ALL SOD (GRASS) DAMAGED BY THE CONTRACTOR SHALL BE REPLACED WITH ARGENTINE BAHIA SOD BY CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- 14. SOD TYPE SHALL BE SAND GROWN, ARGENTINE BAHIA, UNLESS OTHERWISE SHOWN, AND SHALL BE WELL MATTED WITH ROOTS. THE SOD SHALL BE TAKEN UP IN RECTANGLES, PREFERABLY 12" X 24" AND SHALL BE LIVE, FRESH AND UNINJURED AT THE TIME OF PLANTING. SOD SHALL BE REASONABLY FREE OF WEEDS AND OTHER GRASS AND SHALL HAVE A SOIL MAT OF SUFFICIENT THICKNESS ADHERING FIRMLY TO THE ROOTS TO WITHSTAND ALL NECESSARY HANDLING. THE SOD SHALL BE SHADED AND KEPT MOIST UNTIL IT IS PLANTED. DUMPING FROM VEHICLES WILL NOT BE PERMITTED. DAMAGED SOD WILL BE REJECTED. REPLANTING SHALL BE DONE WITHIN 48 HOURS AFTER TIME OF HARVESTING OR SOD SHALL BE KEPT DAMP UNTIL PLANTED. SOD SHALL BE FULLY IRRIGATED.
- 15. SODDING SCHEDULE:
  - A. SOFT SPOTS AND INEQUITIES IN GRADE SHALL BE CORRECTED BEFORE BEGINNING SOD WORK.

  - GROUND SHALL BE SUFFICIENTLY MOIST PRIOR TO LAYING OF SOD. CONTRACTOR SHALL WATER AS NEEDED PRIOR TO LAYING SOD. LAY SOD WITHOUT VOIDS, THEN TAMP OR ROLL SOD. SOD SHALL BE THOROUGHLY WATERED. THE SURFACE SHALL BE TRUE TO FINISHED GRADE LINES; EVEN AND FIRM AT ALL POINTS.
  - D. PLACE SOD WITH STAGGERED JOINTS CLOSELY BUTTED, TAMPED OR ROLLED TO AN EVEN SURFACE TO THE REQUIRED FINISHED GRADE. AVOID CONTINUOUS SEAM ALONG LINES OF WATER FLOW IN SWALES. PLACE SOD IN ROWS AT RIGHT ANGLES TO SLOPE
  - FERTILIZE WITH A SLOW RELEASE FERTILIZER. SUBMIT FERTILIZER GUARANTEED ANALYSIS AND APPLICATION RATES TO THE LANDSCAPE ARCHITECT OF RECORD PRIOR TO APPLICATION.
  - SOD ALL AREAS WITHIN 5 FEET OF ANY PAVEMENT, STRUCTURE, PAS, INLET, OR SIMILAR HARDSCAPE
- 16. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY CONFLICT OR DISCREPANCY IN PLANS AND/OR ACTUAL FIELD CONDITIONS PRIOR TO PERFORMING ANY WORK IN THE AFFECTED AREA.
- CONTRACTOR SHALL CLEAN UP AND REMOVE ALL SURPLUS AND DISCARDED MATERIALS AND RUBBISH FROM HIS CONSTRUCTION ON A DAILY BASIS.
- 18. ALL NEW PLANT MATERIAL SHALL BE WARRANTEED BY THE CONTRACTOR FOR ONE (1) YEAR AND ALL SOD SHALL BE WARRANTEED FOR 90 DAYS AFTER FINAL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.
- 19. FINAL INSPECTION WILL NOT TAKE PLACE UNTIL ALL MATERIALS ARE PLANTED/INSTALLED CORRECTLY. CONTRACTOR SHALL REQUEST A FINAL INSPECTION BY OWNER'S REPRESENTATIVE IN WRITING.

- 20. CONTRACTOR WILL BE NOTIFIED BY LETTER OF FINAL ACCEPTANCE WITHIN TEN DAYS AFTER FINAL INSPECTION OR TEN DAYS AFTER
- 21. THE OWNER WILL ASSUME MAINTENANCE 90 DAYS AFTER FINAL ACCEPTANCE AT WHICH TIME CONTRACTOR SHALL REQUEST A FIELD MAINTENANCE INSPECTION. THE CONTRACTOR'S ONE (1) YEAR WARRANTY PERIOD BEGINS THEREAFTER.
- 22. SABAL PALMS (SABAL PALMETTO):
  - A. SPECIFIED AS HAVING "REGENERATED ROOTS AND LEAVES" AS SHOWN ON THE PLANT SCHEDULE (L201) SHALL BE MINIMUM FLORIDA NO. 1 GRADE UNLESS NOTED OTHERWISE. THE ROOT BALLS SHALL HAVE NEW, REGENERATED, ROUND-TIPPED ROOTS THAT HAVE EMERGED FROM THE ROOT INITIATION ZONE. ROOTS SHALL BE WHITISH-YELLOW IN COLOR, HAVE TAPERED ENDS AND BE PRESENT ON ALL SIDES OF THE ROOT BALL. TO QUALIFY AS "REGENERATED ROOTS" SABAL PALMS, AFTER FIELD HARVESTING AND DURING THE ROOT REGENERATION PERIOD, SABAL PALM ROOT BALLS SHALL HAVE BEEN PLACED IN CONTAINERS OR BE CONTAINED WITHIN "PLASTIC FABRIC OR FILM MATERIAL". OR APPROVED EQUAL. THEY SHALL HAVE A MINIMUM OF THREE FULLY EXPANDED NEW FRONDS THAT HAVE NOT BEEN PRUNED. FULLY EXPANDED NEW FRONDS SHALL MEET THE MINIMUM REQUIREMENTS TO BE CONSIDERED "EXCELLENT LEAVES", AS DEFINED BY THE GLOSSARY OF TERMS IN THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES GRADES AND STANDARDS FOR NURSERY PLANTS - PALMS AND CYCADS.
  - COLOR PHOTOGRAPHS OF "REGENERATED ROOTS" SABAL PALMS SHALL BE PROVIDED BY THE CONTRACTOR AND SUBMITTED TO THE CITY OF TAMPA AND LANDSCAPE ARCHITECT OF RECORD FOR APPROVAL PRIOR TO DELIVERY AND INSTALLATION ON THE PROJECT CONSTRUCTION SITE. PHOTOS SHALL CLEARLY DEPICT: THE CLEAR TRUNK HEIGHT; THE TRUNK DIAMETER MEASURED AT THE BASE; THE ROOT BALL MEASUREMENTS; REGENERATED ROOTS ON ALL SIDES OF THE ROOT BALL; THREE FULLY EXPANDED NEW FRONDS. ALL MEASUREMENTS AND REQUIREMENTS NOTED HEREIN SHALL BE CLEARLY IDENTIFIABLE IN THE COLOR PHOTOGRAPH SUBMITTALS. UPON DELIVERY TO THE PROJECT CONSTRUCTION SITE OR HOLDING AREA "REGENERATED ROOTS" SABAL PALMS WILL BE SUBJECT TO INSPECTION BY THE LANDSCAPE ARCHITECT OF RECORD AND THE CITY TO CONFIRM COMPLIANCE WITH THESE SPECIFICATIONS BEFORE INSTALLATION, SABAL PALMS THAT DO NOT MEET THE MINIMUM REQUIREMENTS NOTED HEREIN WILL NOT BE APPROVED. REJECTED MATERIALS SHALL BE REMOVED FROM THE PROJECT CONSTRUCTION SITE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY.
- 23. PRIOR TO SITE DEMOLITION AND CLEARING OR OTHER CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL COORDINATE WITH THE CITY OF TAMPA TO FACILITATE THE CITY'S RETRIEVAL AND RELOCATION OF SELECT TREES, PALMS, AND SHRUBS FROM THE PROJECT SITE PRIOR TO COMMENCEMENT OF DEMOLITION. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF FORTY-FIVE (45) DAYS ADVANCE NOTICE OF ANY SCHEDULED SITE DEMOLITION ACTIVITIES TO KARLA PRICE, CITY PARKS AND RECREATION DEPARTMENT; (813) 274-5134.
- 24. WILD DATE PALMS (PHOENIX SYLVESTRIS)
  - A. UNTIE FRONDS OF WILD DATE PALMS IMMEDIATELY AFTER INSTALLATION. REMOVE AND DISPOSE OF ANY TWINE, ROPE, TAGS, FLAGGING MATERIAL, ETC. PROPERLY.
  - PRIOR TO START OF WORK, CONTRACTOR TO FURNISH THE LANDSCAPE ARCHITECT WITH A NOTARIZED CERTIFICATION FORM THAT PROJECT DATE PALMS ARE TRUE TO VARIETY, (I.E. GENUS: PHOENIX SPECIES: SYLVESTRIS)
  - WILD DATE PALM TRUNKS TO BE DIAMOND CUT. WILD DATE PALMS TO BE FERTILIZED WITH 8-2-12+4 MAGNESIUM SLOW RELEASE FERTILIZER WITH MICRONUTRIENTS UNDER ENTIRE DRIP LINE OF PALM
  - E. WILD DATE PALMS TO BE SOURCED FROM NURSERIES WITH NO HISTORY OF TEXAS PHOENIX PALM DECLINE (TPPD)
  - WILD DATE PALM CANOPIES SHALL BE TREATED WITH INSECTICIDE AT THE NURSERY/SUPPLIER SOURCE PRIOR TO SHIPMENT TO THE PROJECT SITE. PROVIDE WRITTEN DOCUMENTATION TO THE ENGINEER OF THE CHEMICAL TREATMENT AND A COPY OF THE MANUFACTURER'S LABEL
  - G. WILD DATE PALMS TO BE INOCULATED FOR TPPD. CONTRACTOR TO PROVIDE RECORD OF INOCULATION DATES.
- 25. PROPER SPACING OF PLANTS SHALL TAKE PRECEDENCE OVER PLANT QUANTITIES IN THE PLANT SCHEDULE OR ON PLANS, ANY EXTRA PLANTS THAT WILL NOT FIT ON SITE DUE TO UNFORESEEN CONDITIONS SHALL BECOME CITY OF TAMPA PROPERTY. THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE TO THE CITY THAT UNUSED PLANTS ARE AVAILABLE FOR THE CITY TO PICK UP.
- 26. FERTILIZER SHALL NOT BE APPLIED BETWEEN JUNE 1ST AND OCTOBER 1ST IN COMPLIANCE WITH CITY OF TAMPA FERTILIZER BAN.

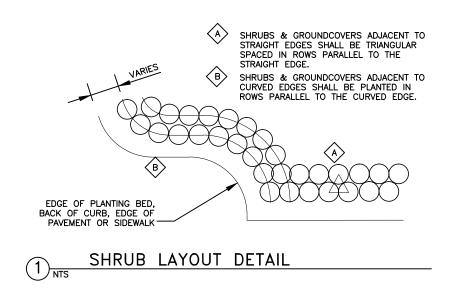
URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-171

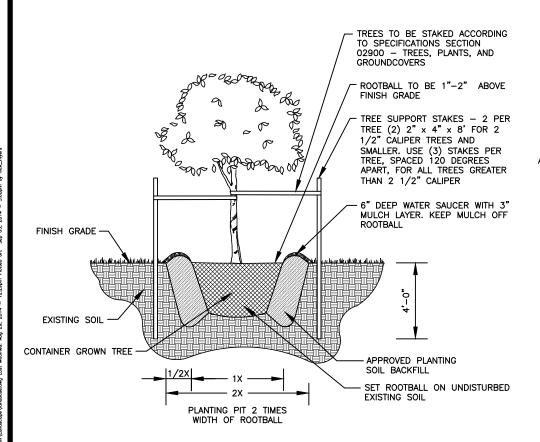
TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

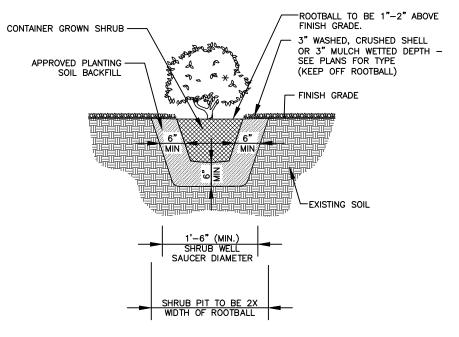
CITY OF TAMPA CONTRACT NO. 14-C-00033

LANDSCAPE NOTES

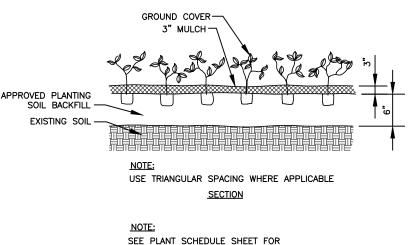
SHIRLEY PEARSALL, LA







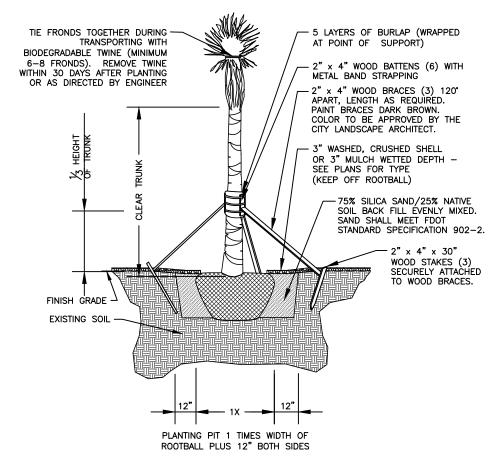
SHRUB PLANTING DETAIL



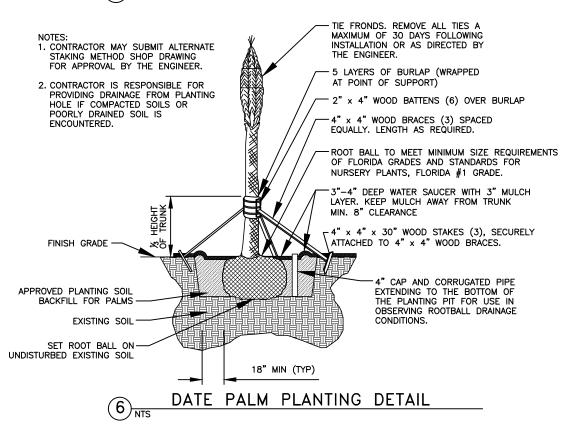
SPACING REQUIREMENTS 

<u>PLAN</u>

GROUND COVER PLANTING DETAIL



SABAL PALM PLANTING DETAIL



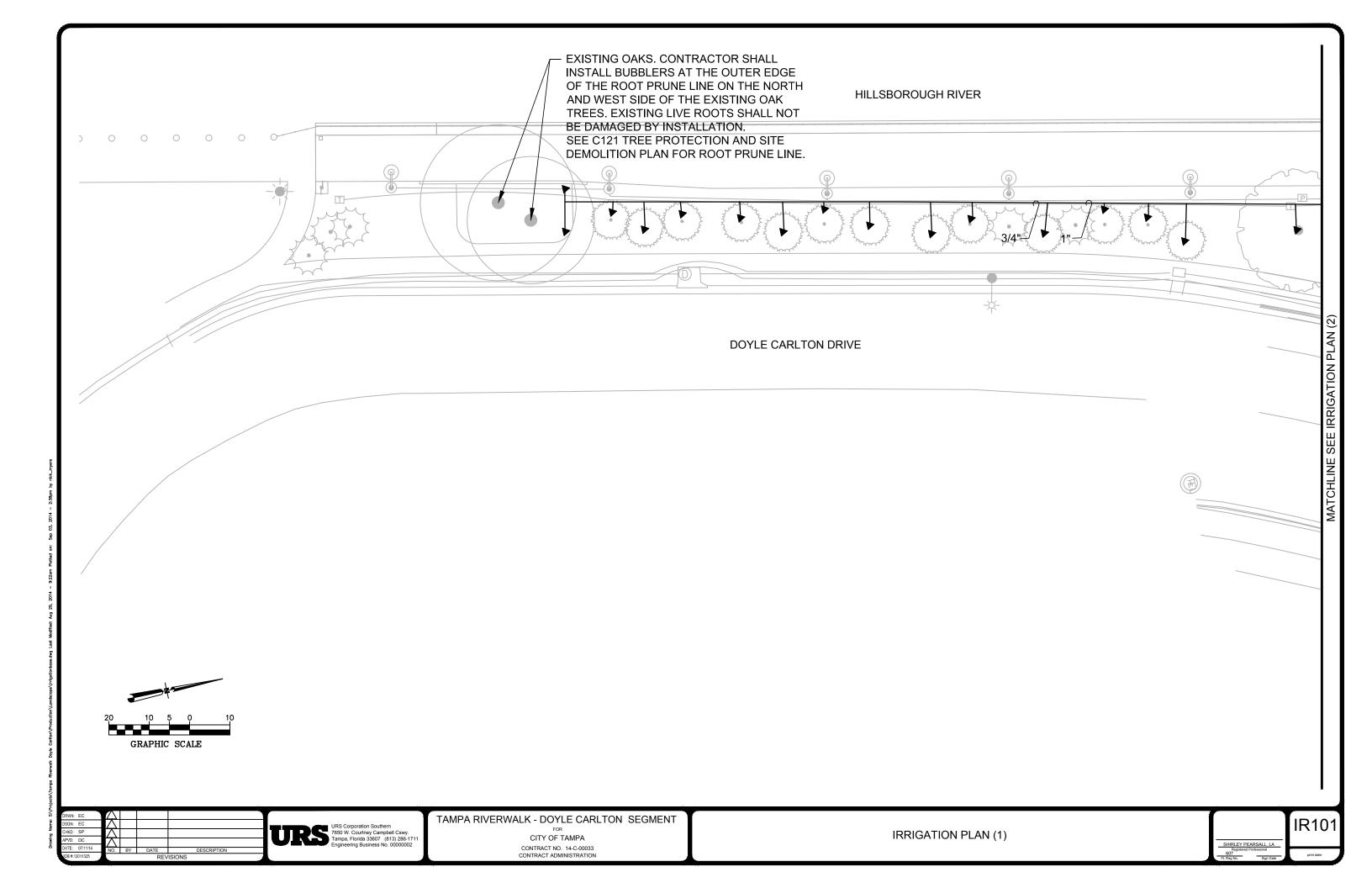
URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-1717
Finingaring Resigned No. 2003202

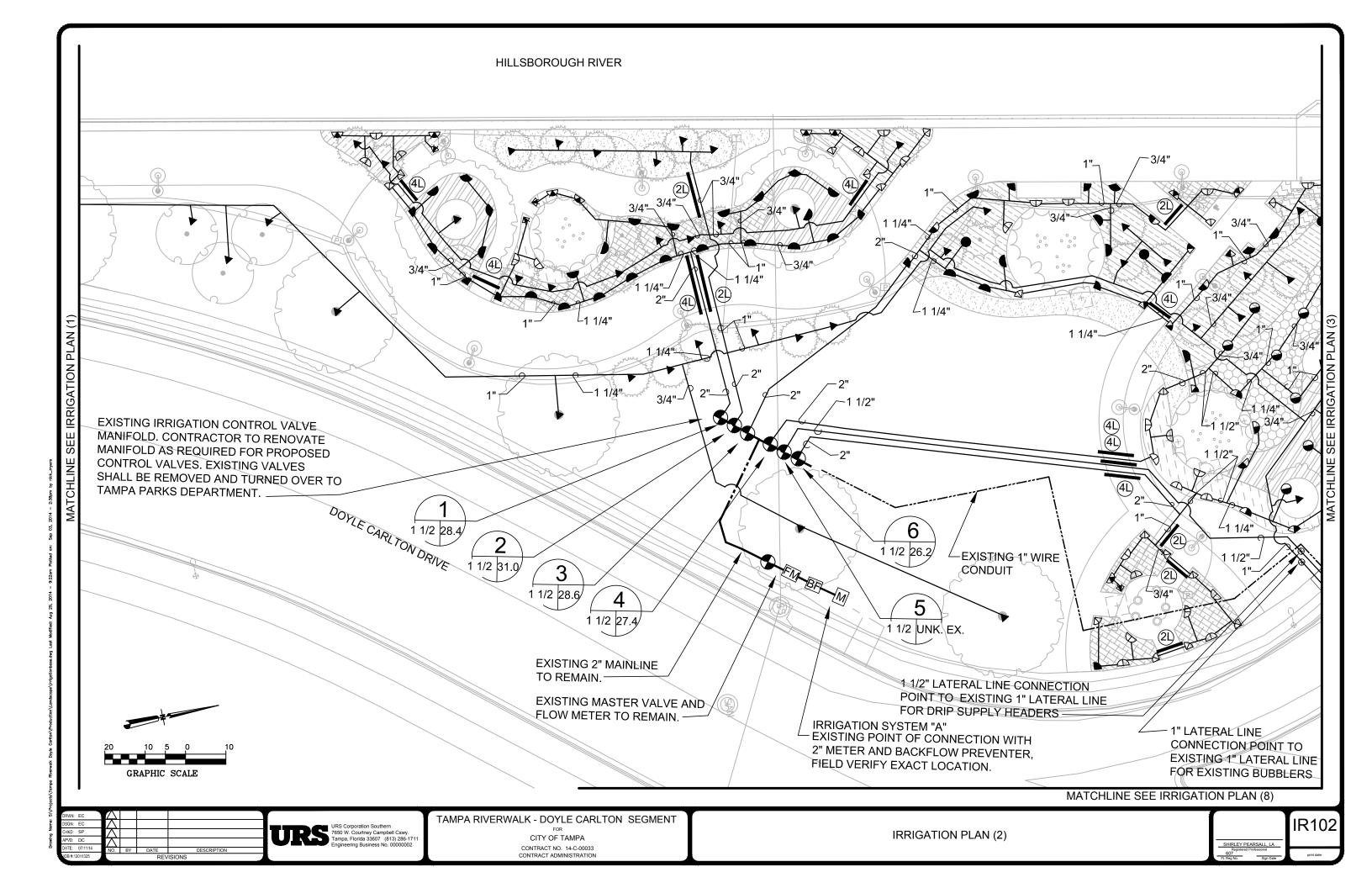
TREE PLANTING DETAIL

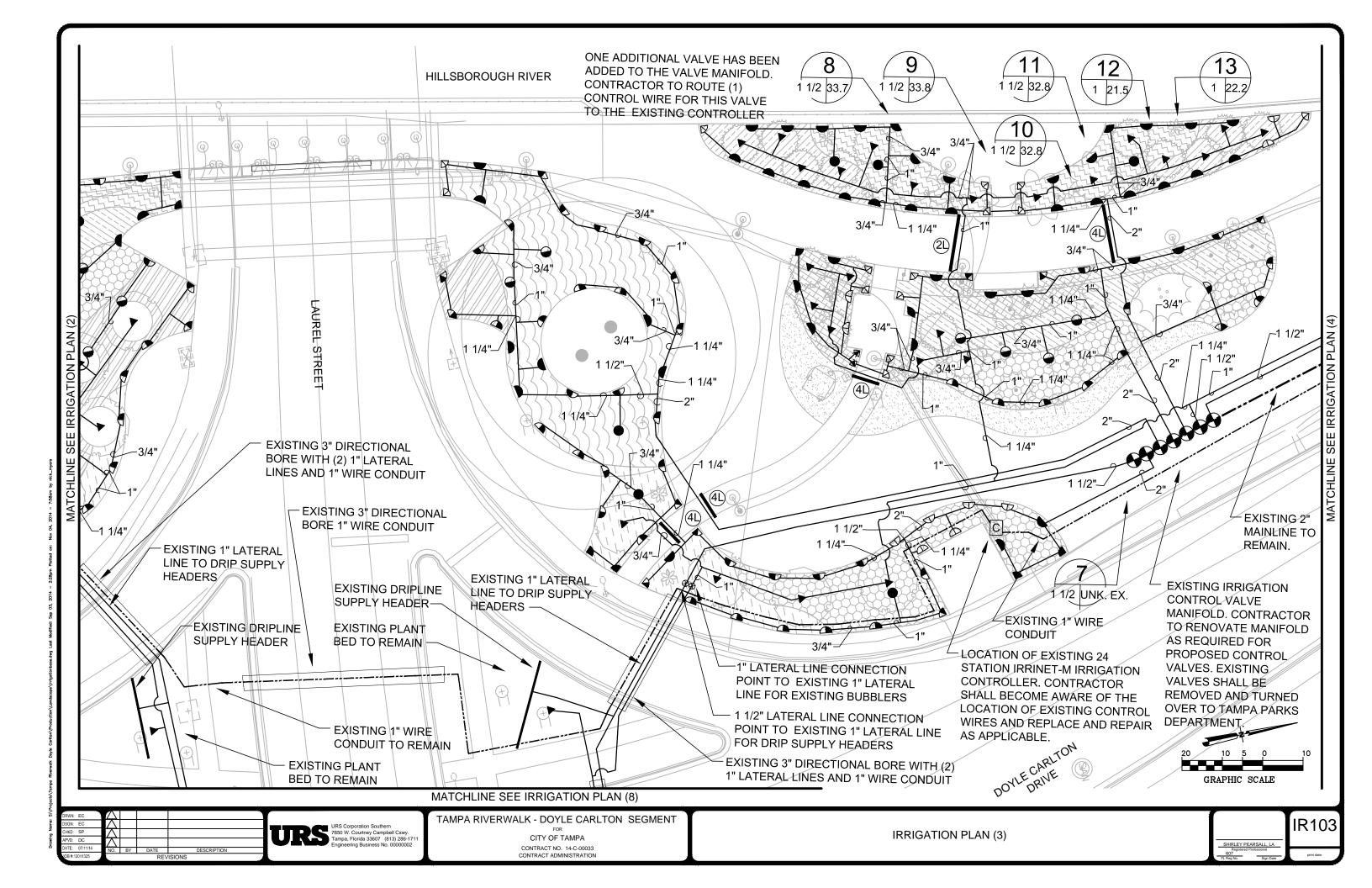
TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

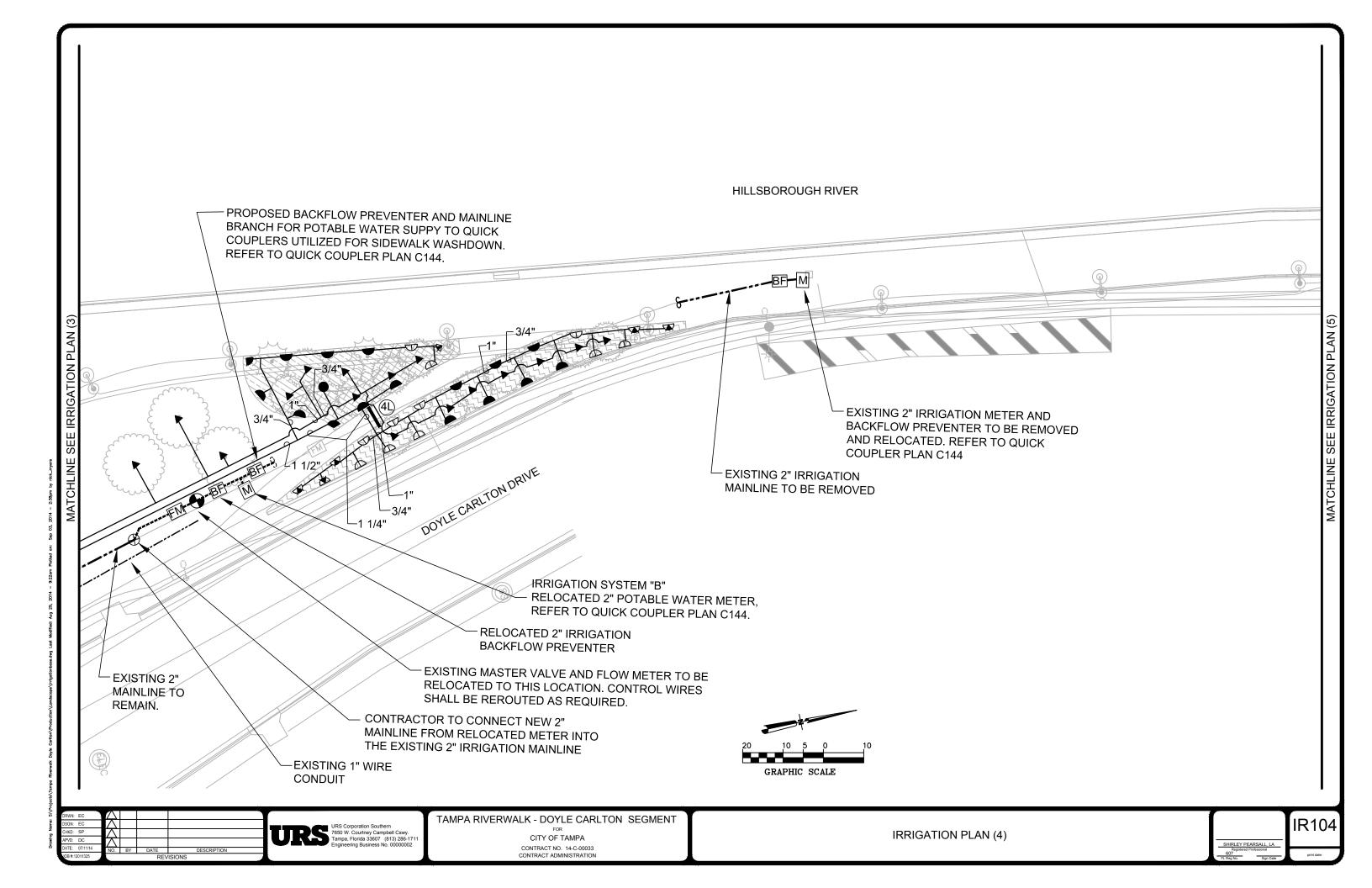
CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION LANDSCAPE DETAILS

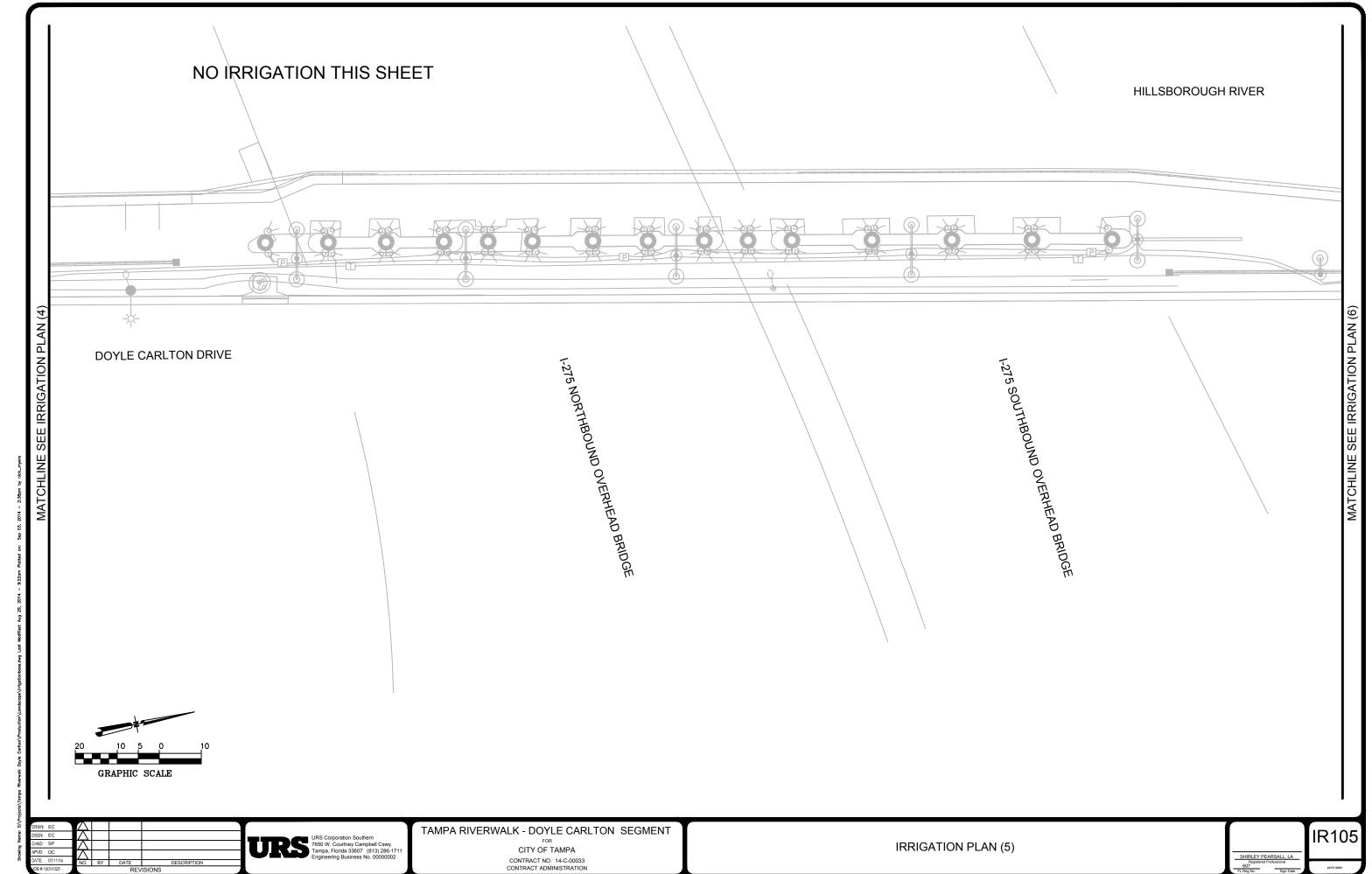
L301 SHIRLEY PEARSALL, LA

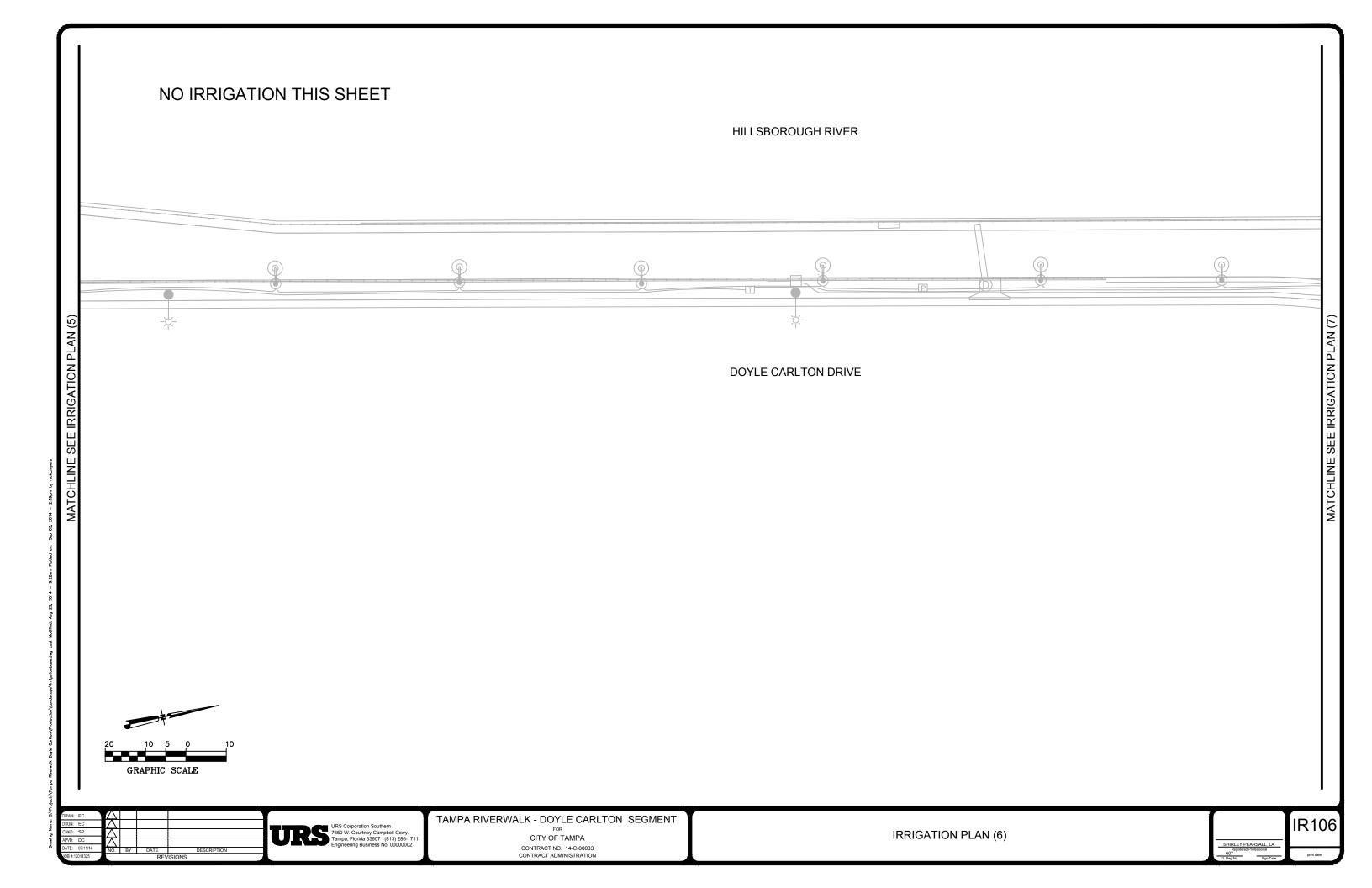


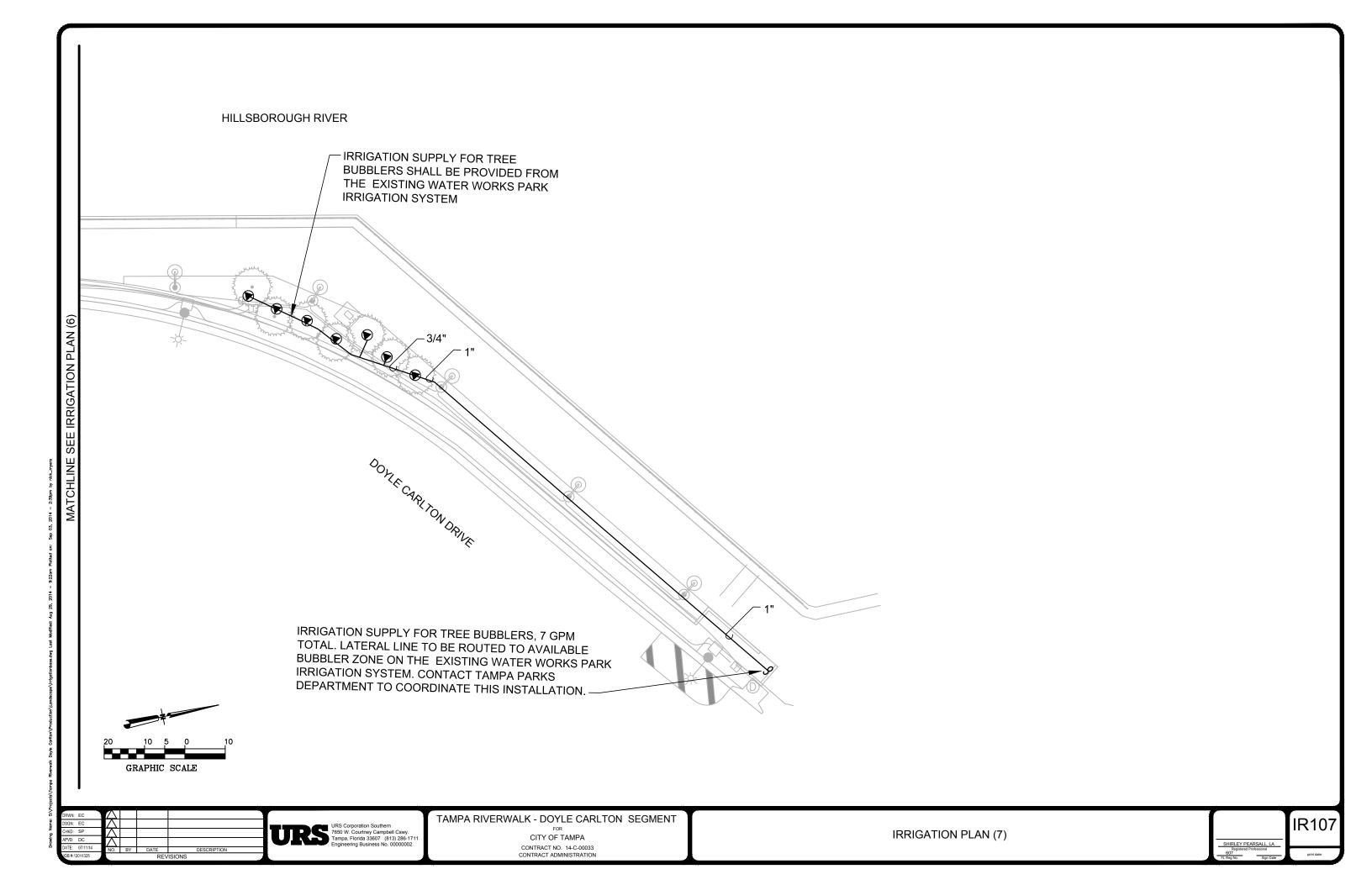


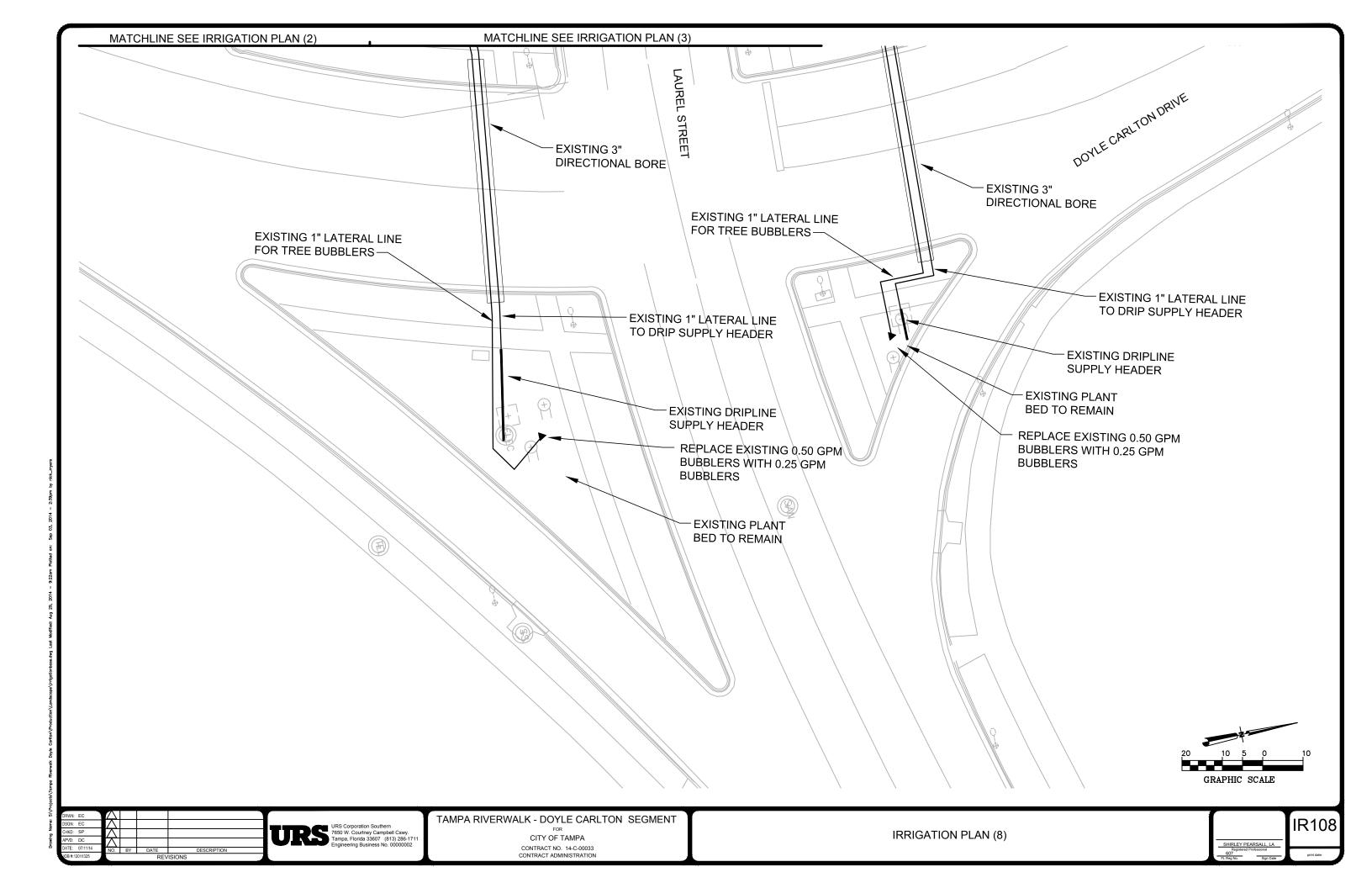












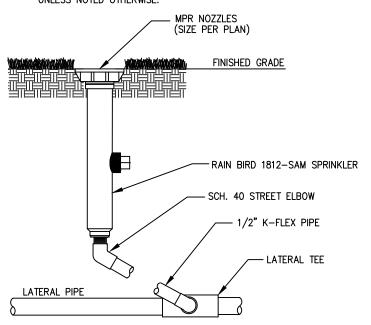
DESCRIPTION	UNIT	TOTAL
IRRITROL 214B 1" CONTROL VALVE 24V SOLENDID WITH VALVE BOX	EA.	2
IRRITROL 216B 1 1/2" CONTROL VALVE 24V SOLENDID WITH VALVE BOX	EA.	11
VALVE CONTROL WIRE 14/1 GAUGE WITH WIRE CONNECTORS	LF.	70
VALVE COMMON WIRE 14/1 GAUGE WITH WIRE CONNECTORS	LF.	0
RAIN BIRD 1812-SAM SPRINKLER WITH RAIN BIRD NOZZLE AND 1/2" K-FLEX PIPE @ 24" LONG	EA.	315
RAIN BIRD 1401 PC BUBBLER W/ 1/2" K-FLEX PIPE @ 5' LONG	EA.	210
RAIN BIRD 1402 PC BUBBLER W/ 1/2" K-FLEX PIPE @ 5' LONG	EA.	14
2" PVC SCHEDULE 40 MAINLINE, SOLVENT WELD	LF.	40
2" PVC SCHEDULE 40 LATERAL LINE, SOLVENT WELD	LF.	665
1 1/2" PVC SCHEDULE 40 LATERAL LINE, SOLVENT WELD	LF.	410
1 1/4" PVC SCHEDULE 40 LATERAL LINE, SOLVENT WELD	LF.	560
1" PVC SCHEDULE 40 LATERAL LINE, SOLVENT WELD	LF.	1,155
3/4" PVC SCHEDULE 40 LATERAL LINE, SOLVENT WELD	LF.	3,315
4" PVC SCHEDULE 40 SLEEVE	LF.	145
2" PVC SCHEDULE 40 SLEEVE	LF.	90
RELOCATION OF BACKFLOW PREVENTER, FLOW METER AND MASTER VALVE	EA.	1

DRWN: EC
DSGN: EC
CHIO: SP
APVID: DC
NO. BY
DATE
DESCRIPTION
REVISIONS
URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-171
Engineering Business No. 00000002

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT
FOR
CITY OF TAMPA
CONTRACT NO. 14-C-00033
CONTRACT ADMINISTRATION

IRRIGATION MATERIALS LIST

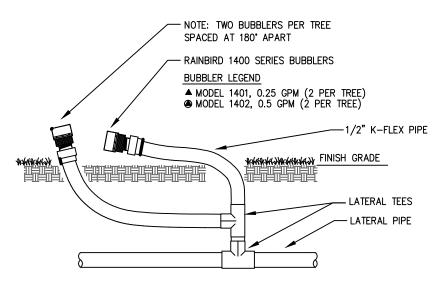
SHIRLEY PEARSAL (607 projector probaso)
Regulated Probasol (70 projector proj



# RAIN BIRD 1812-SAM SPRINKLER

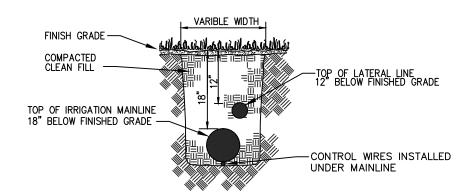
NTS

- 1. BUBBLERS SHALL BE PLACED ON THE UPHILL SIDE OF ANY SLOPES & ON THE OPPOSING SIDES OF EACH ROOTBALL WITHIN THE SAUCER
- 2. BUBBLERS TO BE INSTALLED ADJACENT TO ROOTBALL PERIMETER, DO NOT INSTALL BUBBLER ON TOP OF ROOTBALL OR NEXT TO TRUNK



# RAIN BIRD 1400 SERIES BUBBLER APPLICATION

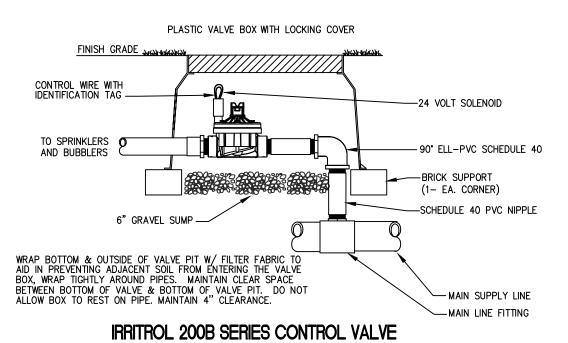
NTS

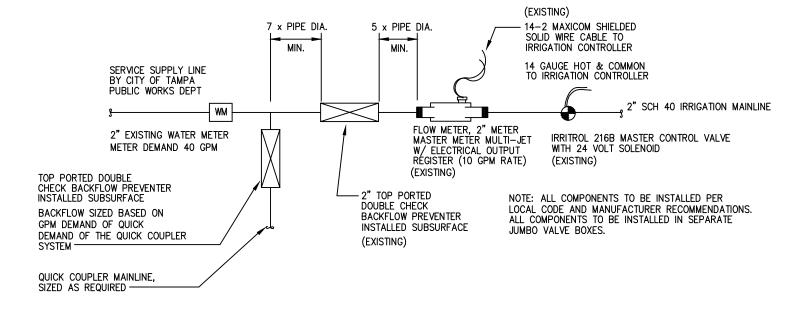


- 1. DEPTH MEASUREMENTS ARE TO BE DONE FROM FINISH GRADE TO TOP OF PIPE.
- 2.PROVIDE A 6" MINIMUM VERTICAL SEPARATION BETWEEN MAINLINES AND LATERAL LINES.
- 3.ALL TRENCHES SHALL BE BACKFILLED WITH CLEAN SOIL FREE OF DEBRIS & NOXIOUS WEEDS. TRENCHES SHALL BE COMPACTED TO A 90% STANDARD PROCTOR DENSITY, ASTMD698-78.

# TRENCHING DETAIL

NTS





METER ASSEMBLY SCHEMATIC

URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-1717
Finingaring Resigned No. 2003202

NTS

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION

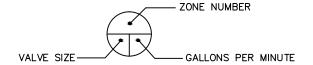
**IR301** SHIRLEY PEARSALL, LA

**IRRIGATION DETAILS** 

ZONE	GPM	VALVE SIZE	TYPE
1	28.4	1 1/2"	SPRAY
2	31.0	1 1/2"	BUBBLER
3	28.6	1 1/2"	SPRAY
4	27.4	1 1/2"	SPRAY
5	UNKNOWN	1 1/2"	EX. DRIP
6	26.2	1 1/2"	SPRAY
23	SYSTEM "	A" MASTEI	R VALVE
INPUT	FLOW SEN	ISOR SYST	EM "A"

### **IRRIGATION SYSTEM 'B'**

7	UNKNOWN	1 1/2"	EX. DRIP
8	33.7	1 1/2"	SPRAY
9	33.8	1 1/2"	SPRAY
10	32.8	1 1/2"	SPRAY
11	32.8	1 1/2"	SPRAY
12	21.5	1"	BUBBLER
13	22.2	1"	SPRAY
24	SYSTEM "	B" MASTE	R VALVE
INPUT	FLOW SEN	SOR SYST	ΈМ "В"



# **IRRIGATION NOTES**

- ALL IRRIGATION COMPONENTS AND INSTALLATION SHALL CONFORM
  TO THE CITY TAMPA IRRIGATION SPECIFICATIONS
- 2) THE HEAD LAYOUT HAS BEEN DESIGNED TO PROVIDE 100% COVERAGE. ANY CHANGES MADE IN THE HEAD LAYOUT DUE TO FIELD CONDITIONS SHALL BE IN ACCORDANCE WITH THESE STANDARDS.
- SET SPRAY HEADS 3" AND ROTORS 6" IN FROM BACK OF CURB OR 12" IF PAVEMENT HAS NO CURB.
- 4) VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. MAINLINE SHALL NOT BE LOCATED WITHOUT PRIOR APPROVAL OF THE PROJECT MANAGER AND THE LANDSCAPE ARCHITECT. ALL UTILITIES AND STRUCTURES MAY NOT BE SHOWN ON THESE PLANS—CONTRACTOR SHALL VERIFY.
- 5) ALL PRESSURE MAINLINES UNDER ASPHALT PAVEMENT SHALL BE WITHIN SLEEVES AS NOTED. IRRIGATION COMMUNICATION CABLE SHALL HAVE ITS OWN SEPARATE SLEEVE. LATERAL LINES SHALL BE CONTAINED WITHIN THEIR OWN SLEEVE WHERE SHOWN ON THE PLAN.
- ALL SLEEVES UTILIZED BY THE IRRIGATION CONTRACTOR, WHETHER INSTALLED BY HIM OR NOT, SHALL BE LOCATED ON THE "AS-BUILT" DRAWINGS. THE DEPTH BELOW FINISH GRADE, TO THE NEAREST FOOT OF EACH END OF EACH SLEEVE SHALL BE NOTED AT EACH SLEEVE LOCATION ON THE "AS-BUILT" DRAWINGS. ALL SLEEVES ON PLAN FOR WALL PENETRATIONS AND UNDER SIDEWALKS SHALL BE SIZED TWO PIPE SIZES GREATER THAN PIPE IT CARRIES.
- 7) MAINLINE AND VALVES ARE SHOWN IN SCHEMATIC FORM.
  LOCATE AS NOTED ON PLANS.
- 8) LOCATE ALL VALVES A MINIMUM OF 24" FROM BACK OF CURB OR EDGE OF PAVEMENT, UNLESS NOTED OTHERWISE.
- 9) ALL UNSIZED PIPE SHALL BE 3/4" UNLESS OTHERWISE NOTED.
- 10) ALL VALVES SHALL BE INSTALLED IN AN AMETEK PLASTIC VALVE BOX WITH LOCKING LID.
- 11) IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT OF HIS OPERATIONS ON—SITE. COPIES OF THE PERMITS SHALL BE SENT TO THE OWNER/GENERAL CONTRACTOR. WORK IN THE R.O.W. SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF LOCAL AND/OR STATE HIGHWAY JURISDICTION.
- 12) VERIFY EXISTING MAINLINE POINT OF CONNECTIONS AND EXISTING IRRIGATION CONTROLLER AT PROJECT SITE WITH OWNER.
- DURING INSTALLATION AND UPON COMPLETION OF THE IRRIGATION SYSTEM, VALVES AND FLOW METER WIRING SHALL BE NUMBERED PER THE PLAN AND ROUTED INTO THE APPROPRIATE CONTROLLER CABINET. ALL CONNECTIONS AND PROGRAMMING TO BE DONE BY CITY OF TAMPA.
- 4) ALL 24 VAC WRING SHALL BE OF DIRECT BURIAL COPPER WIRE AS FOLLOWS:
  CONTROL WIRES #14-1 RED
  COMMON WIRE #14-1 WHITE
  EXTRA WIRE #14-1 BLACK
  MASTER VALVE WIRE #14-1 BLUE
  - EXISTING CONTROL WIRES TO BE UTILIZED WHERE POSSIBLE.
- INSTALLATION OF WORK SHALL BE COORDINATED WITH OTHER CONTRACTORS IN SUCH A MANNER AS TO ALLOW FOR A SPEEDY AND ORDERLY COMPLETION OF ALL WORK ON THE SITE.
- 16) CONTACTOR TO BE KNOWLEGABLE OF BOTH EXISTING IRRIGATION SYSTEMS PRIOR TO CONSTRUCTION
- 17) PRODUCTS SHALL BE AS SPECIFIED.

# IRRIGATION LEGEND

RAIN BIRD MPR SPRAY NOZZLES UNLESS NOTED OTHERWISE

15-Q 30° TRAJECTORY

15-T 30° TRAJECTORY **○**○○○ 15-H 30° TRAJECTORY 15-T0 30° TRAJECTORY 15-F 30° TRAJECTORY 12-0 30° TRAJECTORY 12-T 30° TRAJECTORY 12-H 30° TRAJECTORY 12-TQ 30° TRAJECTORY 12-F 30° TRAJECTORY 10-Q 15° TRAJECTORY 10-T 15° TRAJECTORY 15° TRAJECTORY 10-F 15° TRAJECTORY  $\triangleright$ 8-0 10° TRAJECTORY  $\triangle$ 8-T 10° TRAJECTORY  $\triangle$ 10° TRAJECTORY 8-H 4-Q VAN 0° TRAJECTORY 4-H VAN 0° TRAJECTORY 15EST 15SST

RAIN BIRD 1401 PC BUBBLER, 0.25 GPM (2 PER TREE) RAIN BIRD 1402 PC BUBBLER, 0.50 GPM (2 PER TREE) IRRITROL 200B SERIES CONTROL VALVE

PVC BALL VALVE INSTALLED IN 12" VALVE BOX
SCHEDULE 40 PVC MAINLINE, SOLVENT WELD

- SCHEDULE 40 PVC LATERAL LINE, SOLVENT WELD

SCHEDULE 40 PVC SLEEVE

2 2 LATERAL SLEEVE

4" LATERAL SLEEVE

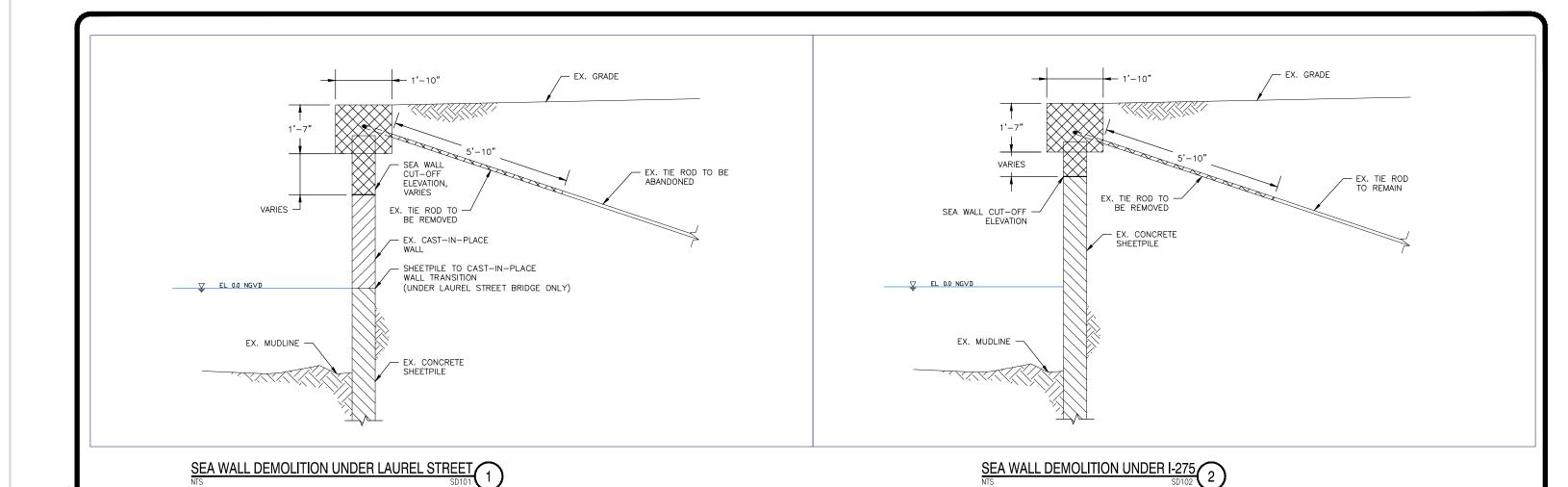
NOTE: SOME SLEEVES HAVE BEEN SIZED TO ACCOMMODATE
TWO LATERAL LINES.

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

CITY OF TAMPA
CONTRACT NO. 14-C-00033
CONTRACT ADMINISTRATION

IRRIGATION DETAILS

SHIRLEY PEARSALL, LA
Registered Professional
607



**SEQUENCE OF DEMOLITION:** 

1. CONTRACTOR WILL EXCAVATE BEHIND AND UNLOAD SEA WALL BEFORE REMOVING ANY PORTION OF THE TIE ROD.

2. EXISTING TIE ROD WILL BE REMOVED TO DISTANCE SHOWN ON DETAIL SHEETS. REMAINING TIE ROD TO REMAIN OR BE ABANDONED IN PLACE.

3. REMOVE SEA WALL CAP AND CONCRETE SHEET PILE OR CAST—IN—PLACE WALL TO CUT OFF ELEVATION AS SHOWN.

4. EXISTING CONCRETE AT CONSTRUCTION JOINT BETWEEN EXISTING SEA WALL AND NEW CAP SHALL BE CLEANED AND ROUGHENED WITH A SURFACE AMPLITUDE OF 1/4".

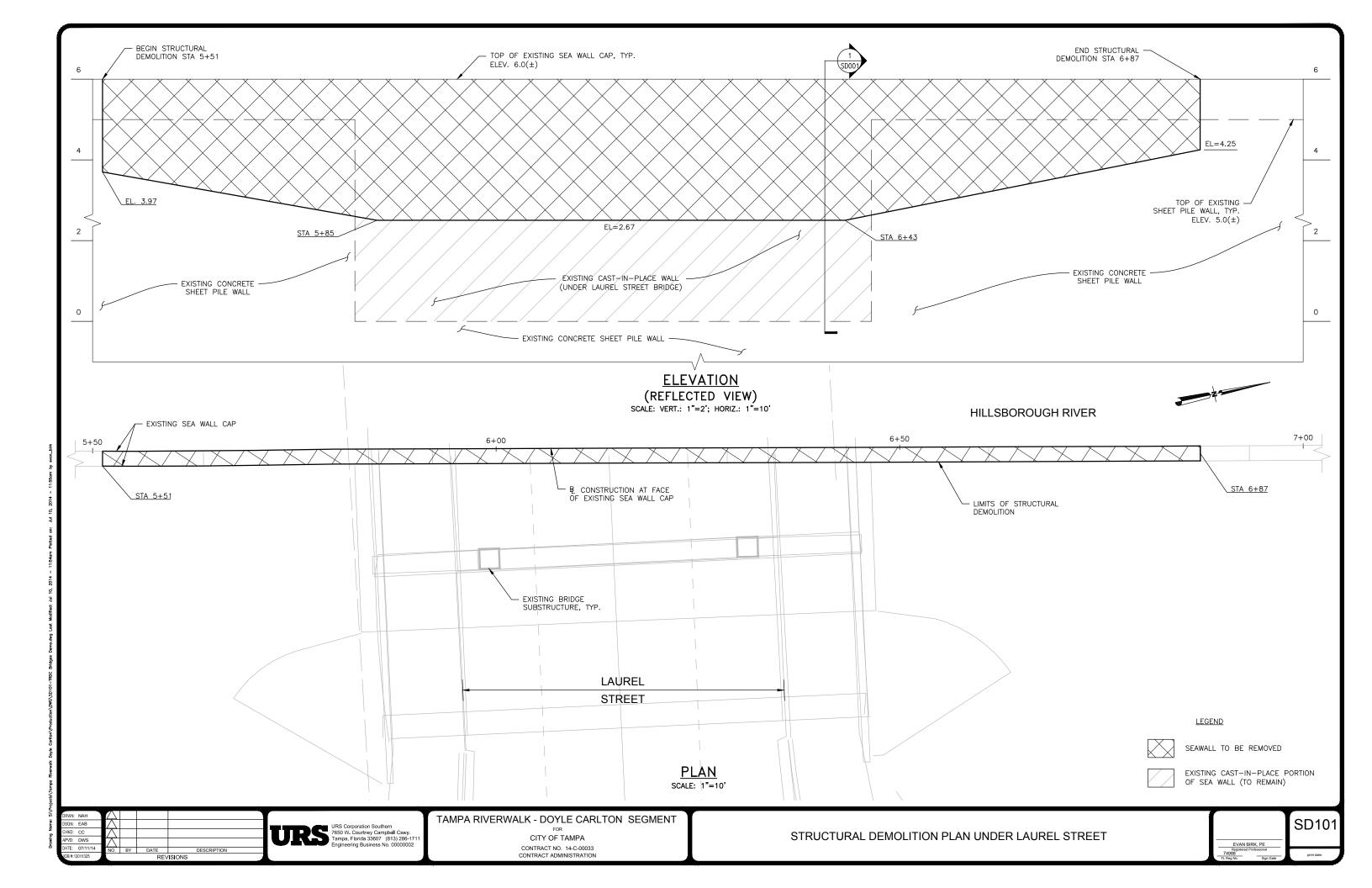
5. SEE EXISTING SEA WALL PLANS DATED 1967 FOR LOCATION OF EXISTING TIE—BACKS, SEA WALL CAP REINFORCEMENT, AND DETAILS.

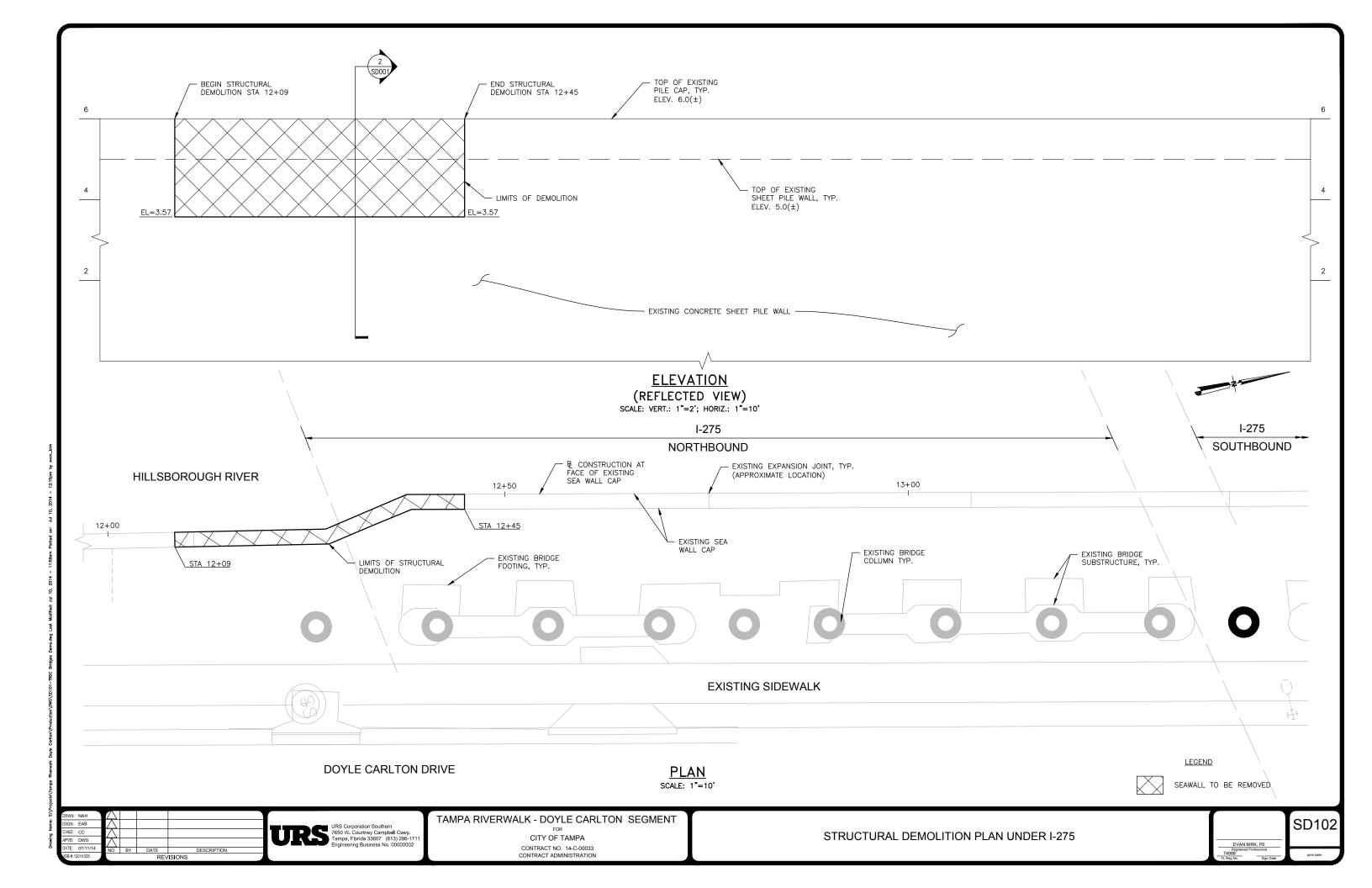
URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-171¹
Engineering Business No. 00000002

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION STRUCTURAL DEMOLITION NOTES & DETAILS







- GENERAL SPECIFICATIONS:

  1. FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, AS AMENDED BY CONTRACT DOCUMENTS.
- CITY OF TAMPA SPECIFIC PROVISIONS FOR THIS PROJECT.

- <u>DESIGN SPECIFICATIONS:</u>
  1. AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO), LRFD BRIDGE DESIGN SPECIFICATION (6TH EDITION)
- 2009 AASHTO LRFD GUIDE SPECIFICATIONS FOR DESIGN OF PEDESTRIAN BRIDGES, 2ND EDITION.
- 3. AASHTO GUIDE DESIGN SPECIFICATIONS FOR BRIDGE TEMPORARY WORKS (LATEST EDITION).
- 4. AASHTO CONSTRUCTION HANDBOOK FOR TEMPORARY WORKS (LATEST EDITION).

 $\underline{\text{DESIGN LOADING:}}$  1. 10,000 LB. H-5 TRUCK, AASHTO LRFD GUIDE SPECIFICATIONS FOR DESIGN OF PEDESTRIAN BRIDGES, 2ND EDITION.

#### **CONCRETE AND REINFORCING STEEL:**

- ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTIONS 346 AND
- INTERFACE BETWEEN STRUCTURAL CANTILEVER SIDEWALK SECTION AND ANY EXISTING CONCRETE WILL
  RECEIVE APPLICATION OF EPOXY BONDING AGENT FROM FDOT QUALIFIED PRODUCTS LIST AND BE IMPLEMENTED PER FDOT SPECIFICATION 926 AND THE MANUFACTURER'S RECOMMENDATIONS.
- ENVIRONMENTAL CONDITION: EXTREMELY AGGRESSIVE PER FDOT STRUCTURES DESIGN GUIDELINES SECTION
- 4. MATERIALS SHALL CONFORM TO THE FOLLOWING: 4.1. CONCRETE 28-DAY STRENGTH
- SLAB ON GRADE SIDEWALK.
- CANTILEVER SIDEWALK SECTION... ... 5500 PSI (CLASS IV)\*
- \*CONCRETE SHALL CONTAIN ADMIXTURE FOR CORROSION PROTECTION WITH SILICA FUME, METAKAOLIN, OR LILTRAFINE FLY ASH
- REINFORCING STEEL AND DOWELS SHALL BE IN ACCORDANCE WITH ASTM A615, GRADE 60 OR ASTM A706, GRADE 60.
- 5.1. ALL DIMENSIONS PERTAINING TO LOCATION OF REINFORCING STEEL ARE TO CENTERLINE OF
- BARS EXCEPT WHERE THE CLEAR DIMENSION IS SHOWN TO FACE OF CONCRETE OR OTHER. MINIMUM COVER TO REINFORCING STEEL SHALL BE 4.5" UNLESS NOTED OTHERWISE IN THIS PLAN SET. CONCRETE COVER SHOWN IN THE PLANS DOES NOT INCLUDE REINFORCEMENT PLACEMENT AND FABRICATION TOLERANCES UNLESS SHOWN AS "MINIMUM COVER". SEE FDOT SPECIFICATIONS FOR ALLOWABLE TOLERANCES.
- ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4".
- CONTRACTOR SHALL REPAIR ALL SURFACE BLEMISHES IN CONCRETE WITHIN 24 HOURS AFTER FORM REMOVAL
- ALL DETAILING, FABRICATION, AND ERECTION OF REINFORCING STEEL SHALL CONFORM TO THE ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, ACI 315-99.
- ALL REINFORCING BAR SPLICES AND HOOKS SHALL BE IN ACCORDANCE WITH ACI 318-05.
   ALL CONSTRUCTION JOINTS BETWEEN EXISTING CONCRETE AND CAST IN PLACE CONCRETE SHALL BE COATED WITH EPOXY BONDING AGENT. EPOXY BONDING AGENT MAY BE OMITTED, IF HARDENED CONCRETE HAS BEEN PLACED WITHIN THE PREVIOUS 24 HOURS. EPOXY BONDING AGENT SHALL CONFORM TO FOOT STANDARD SPECIFICATION SECTION 400.
- LOCATE CONSTRUCTION JOINTS AS INDICATED IN THIS PLAN SET.
- 12. EXPOSED CONCRETE SURFACES TO RECEIVE SURFACE TREATMENT AS SPECIFIED IN THIS PLAN SET AND IMPLEMENTED IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS.

- MISCELLANEOUS STRUCTURAL MATERIAL NOTES:
  1. ALL MISCELLANEOUS METALS INCLUDING BOLTS, WASHERS, NUTS, ANGLES, INSERTS, AND PLATES SHALL BE ZINC-COATED OR HOT-DIPPED GALVANIZED.
  FIELD TREAT DAMAGED GALVANIZED FINISH AND EXPOSED SURFACES IN ACCORDANCE WITH FDOT
- SPECIFICATION 562 AND 975.
- INSTALL ADHESIVE ANCHORS AND DOWELS IN ACCORDANCE WITH FDOT SPECIFICATION 416, 926, AND 937.
- INSTALL ANCHOR BOLTS IN ACCORDANCE WITH FDOT SPECIFICATION 460.
- ANCHOR BOLT EMBEDMENT AND HOLE DIAMETER SHALL BE PER THE MANUFACTURER'S RECOMMENDATIONS TO DEVELOP 150% OF THE ANCHOR BOLT TENSILE CAPACITY.
- MECHANICAL COUPLERS AND TURNBUCKLES SHALL BE PER THE MANUFACTURER'S RECOMMENDATIONS AND DEVELOP 125% OF THE STEEL REINFORCEMENT TENSILE CAPACITY.
- EPOXY GROUT FOR BONDING DOWELS SHALL COMPLY WITH ASTM C-881 AND FDOT SPECIFICATION 926.
- COMPRESSIBLE JOINT FILLER SHALL BE DURAboardHD100 AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS OR APPROVED EQUAL LOW-LOAD TRANSFER JOINT MATERIAL.

### CONSTRUCTION NOTES:

- 1. ALL FIELD LAYOUT AND SURVEYING FOR CONSTRUCTION OF THIS PROJECT SHALL BE PROVIDED BY THE CONTRACTOR AT HIS EXPENSE; UNDER THE DIRECTION OF A LICENSED PROFESSIONAL LAND SURVEYOR.
- VERTICAL CONTROL IS BASED UPON N.G.V.D. 1929. REFER TO GENERAL NOTES AND SURVEY PLAN SHEETS FOR VERTICAL AND HORIZONTAL CONTROL AND TIDAL DATA.
- CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING STRUCTURES, IMPROVEMENTS, UTILITIES, PROPERTY LINES AND CONFIRM ALL PROPOSED DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION OR ORDERING ANY MATERIALS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE JOB SITE PRIOR TO PREPARING HIS BID FOR THE PURPOSE OF FAMILIARIZING HIMSELF WITH THE NATURE AND THE EXTENT OF THE WORK AND LOCAL CONDITIONS, EITHER SURFACE OR SUB-SURFACE, WHICH MAY AFFECT THE WORK TO BE PERFORMED AND THE EQUIPMENT, LABOR AND MATERIAL REQUIRED. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE PERFORMANCE UNDER THIS CONTRACT
- 5. SHOULD THE SURFACE OR SUBSURFACE CONDITIONS VARY FROM WHAT IS SHOWN ON THESE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
- 6. ALL UNDERGROUND UTILITIES MUST BE INSTALLED PRIOR TO PREPARATION OF SUBGRADE FOR PAVEMENT
- THE CONTRACTOR SHALL PROVIDE ALL DEWATERING EQUIPMENT NECESSARY TO KEEP EXCAVATIONS DRY AND SHALL PROVIDE ALL SHORING, SHEETING, AND BRACING NECESSARY TO PROTECT WORKMEN, ADJACENT STRUCTURES, UTILITIES, EXISTING PAVEMENT, OR TO MINIMIZE TRENCH WIDTH AT NO ADDITIONAL COST.
- 8. CONTRACTOR SHALL CONSTRUCT A CONTINUOUS DRAINAGE LAYER BEHIND THE SEA WALL COMPRISED OF COARSE AGGREGATE TO THE DIMENSIONS SHOWN SHEETS S501 AND S502. THE COARSE AGGREGATE SHALL BE GRAVEL OR STONE MEETING THE REQUIREMENTS OF SECTIONS 901-2 OR 901-3 OF THE 2013 FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE GRADATION OF THE COARSE AGGREGATE SHALL MEET SECTION 901, GRADES 2, 467, 5, 56 OR 57 STONE OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. WRAP THE DRAINAGE LAYER AS SHOWN, WITH TYPE D-3 GEOTEXTILE FABRIC IN ACCORDANCE WITH INDEX 199 OF THE 2013 FDOT DESIGN STANDARDS. ALL FILTER FABRIC JOINTS SHALL OVERLAP A MINIMUM OF 1'. CORE DRILL THE NEW SEA WALL CAP AND/OR EXISTING SHEET PILE WALLS AT THE APPROPRIATE DIAMETER TO ACCOMMODATE THE INSTALLATION OF A 3" DIAMETER PVC PIPE (SCH 40). INSTALL A 3" DIAMETER PRE-FABRICATED STEEL FILTER AS FLUSH MOUNTED ON THE NEW SEA WALL AT THE WATERSIDE. END OF THE PVC DRAIN PIPE. THE 3" DIAMETER STEEL FILTER SHALL BE MANUFACTURED BY JET FILTER SYSTEM L.L.C. OR AN APPROVED EQUAL
- 9. THE CONTRACTOR SHALL ANTICIPATE TIDAL FLUCTUATIONS DURING THE COURSE OF THE WORK.
  THE CONTRACTOR SHALL DETERMINE WORK SCHEDULE FROM THE TABLES FOR THE PERIOD OF CONSTRUCTION. THE SITE IS SUBJECT TO VARIABLE WAVE CONDITIONS AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE TEMPORARY SUPPORT FOR THE STRUCTURES AND SHORELINE DURING CONSTRUCTION.

  10. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING ADEQUACY OF THE EXISTING WALL WITH
- RESPECT TO ANY LOADS RESULTING FROM THE CONTRACTOR'S CONSTRUCTION PROCEDURES OR
- 11. SUPPLEMENTAL REINFORCEMENT TO STABILIZE AND SUPPORT THE REQUIRED REINFORCEMENT SHOWN IN THESE PLANS IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS NOT INCLUDED IN THE PLANS OR QUANTITIES
- 12. ALL BORROW MATERIAL REQUIRED FOR CONSTRUCTION OF THE PROJECT SHALL BE PROVIDED BY THE CONTRACTOR.
- 13. THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL AND SAFETY DEVICES, IN ACCORDANCE WITH THE U.S. DEPARTMENT OF TRANSPORTATION "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND THE CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION "DESIGN STANDARDS"
- 14. ALL ACTIVITIES WITHIN RIGHT-OF-WAY WILL REQUIRE CONFORMANCE TO THE "MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS". (CHAPTER 316 FLORIDA STATUES).
- 10. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF TAMPA STANDARDS, DETAILS, AND **SPECIFICATIONS**
- 11. ALL WORK AREAS SHALL BE COMPLETED IN A SAFE MANNER. ALL SAFETY RULES AND GUIDELINES OF OSHA SHALL BE FOLLOWED. THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ANY INJURIES OF HIS EMPLOYEES AND ANY DAMAGE TO PRIVATE PROPERTY OR PERSONS RESULTING FROM THIS JOB.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL/DISPOSAL OF ALL BROKEN CONCRETE, ROOTS, TREES, MUCK, SOIL BEHIND EXISTING SEA WALL, ETC. FROM HIS OPERATION, AND FURNISHING AND COMPACTING SUITABLE REPLACEMENT BACKFILL MATERIAL, AND FILL MATERIAL
- 13. ALL EXCAVATION AND BACKFILLING SHALL ADHERE FDOT SPECIFICATIONS 120, 125, AND 455.
  BACKFILL UNDER CANTILEVER SIDEWALK SECTION SHALL BE COMPACTED TO 95% STANDARD
  PROCTOR DENSITY IN ACCORDANCE WITH ASTM D1557 IN 6". HAND TAMPING FOR COMPACTION
  SHALL BE USED WITHIN FIVE (5) FEET OF EXISTING SEA WALL.

  14. CONTRACTOR SHALL SUBMIT FOR APPROVAL A CASTING SEQUENCE IF THE STRUCTURAL
- CANTILEVER SIDEWALK SECTION CANNOT BE COMPLETED AT ONE TIME. SUBMITTAL SHALL INCLUDE A PLAN VIEW SHOWING THE LOCATION OF THE PROPOSED CONSTRUCTION JOINTS AND COORDINATED WITH THE LANDSCAPE ARCHITECT OF RECORD.

- REMOVAL OF EXISTING STRUCTURES:

  1. NO EXPLOSIVES SHALL BE PERMITTED DURING ANY PHASE OF THE PROPOSED CONSTRUCTION FOR SEA WALL REMOVAL.
- CONTRACTOR SHALL DISPOSE OF SPOILS OFF SITE AND NOT IN THE RIVER
- ALL CONSTRUCTION/DEMOLITION AND DISPOSAL TO BE IN ACCORDANCE WITH APPLICABLE CODES AND ENVIRONMENTAL RULES AND REGULATIONS.
- 4. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL SUBMIT A DEMOLITION PLAN TO THE CITY FOR
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO STRICTLY CONTAIN THE DEMOLITION WITHIN THE LIMITS OF THE REQUIRED CONSTRUCTION AND AVOID ANY DAMAGE TO EXISTING STRUCTURES
- 6. PRIOR TO GENERAL DEMOLITION, THE CONTRACTOR SHALL SAW CUT WHERE NOTED, OR OTHERWISE PROVIDE A SMOOTH CLEAN BREAK FROM ALL CONNECTING LINKS TO THE REMAINING STRUCTURE
- 7. ANY DAMAGE INCURRED IN EXECUTION OF THIS CONTRACT TO ANY PART OF THE PROPERTY AND/OR STRUCTURE NOT SPECIALLY DESIGNATED FOR DEMOLITIONS SHALL BE REPAIRED. REPLACED, AND/OR RECONSTRUCTED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE, TO ITS ORIGINAL CONDITION AS DIRECTED BY THE OWNER.
- 8. THE CONTRACTOR SHALL USE METHODS/PROCEDURES DEEMED APPROPRIATE FOR REPAIR/REPLACEMENT OF STRUCTURAL COMPONENTS SHOWN.
- 9. EXISTING STRUCTURE AND/OR COMPONENTS TEMPORARILY REMOVED TO FACILITATE SUCH
- REPAIRS/REPLACEMENT SHALL BE REPAIRED, RESTORED, OR RECONSTRUCTED AS NOTED ABOVE. 10. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE STABILITY OF THE SEA WALL AND
- EMBANKMENT DURING ALL CONSTRUCTION OPERATIONS.

  11. THE CONTRACTOR SHALL LIMIT THE EXTENT OF THE SEA WALL CAP AND SHEET PILE REMOVAL AND PROVIDE TEMPORARY SHORING AND BRACING, AS DEEMED NECESSARY BY THE CONTRACTOR, TO MAINTAIN THE SEA WALL'S STABILITY.
- 12. THE PORTIONS OF SEA WALL CAP AND SHEET PILE TO BE REMOVED SHALL BE DONE TO AVOID DAMAGE TO EXISTING TIE BACK ANCHORS THAT ARE DESIGNATED TO REMAIN. ANY DAMAGE TO THE PORTION OF THE SEA WALL CAP, SHEET PILE, OR TIE BACKS NOT SCHEDULED FOR DEMOLITION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- 13. THE CONTRACTOR SHALL EXPOSE AND LOCATE ALL TIE BACK ANCHORS AT THE SEA WALL CAP PRIOR TO ANY CAP AND/OR TIE BACK REMOVAL OPERATIONS.
- 14. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY TIE BACK ANCHORS THAT EXHIBIT DETERIORATION DUE TO CORROSION FOR POSSIBLE ADDITIONAL REMEDIAL REPAIRS.

#### HELICAL PILE & TIE-BACK SPECIFICATIONS:

1. THE CONTRACTOR SHALL ANTICIPATE THAT DIFFICULT INSTALLATION OF PILES AND TIE-BACKS MAY BE ENCOUNTERED DUE TO SOIL CONDITIONS, EXISTING STRUCTURES, AND/OR BURIED DEBRIS. REFER TO SPECIFICATIONS FOR PILES AND TIE-BACKS FOR FURTHER INFORMATION.

URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-177
Fortingering Puripose No. 20000005 REVISIONS

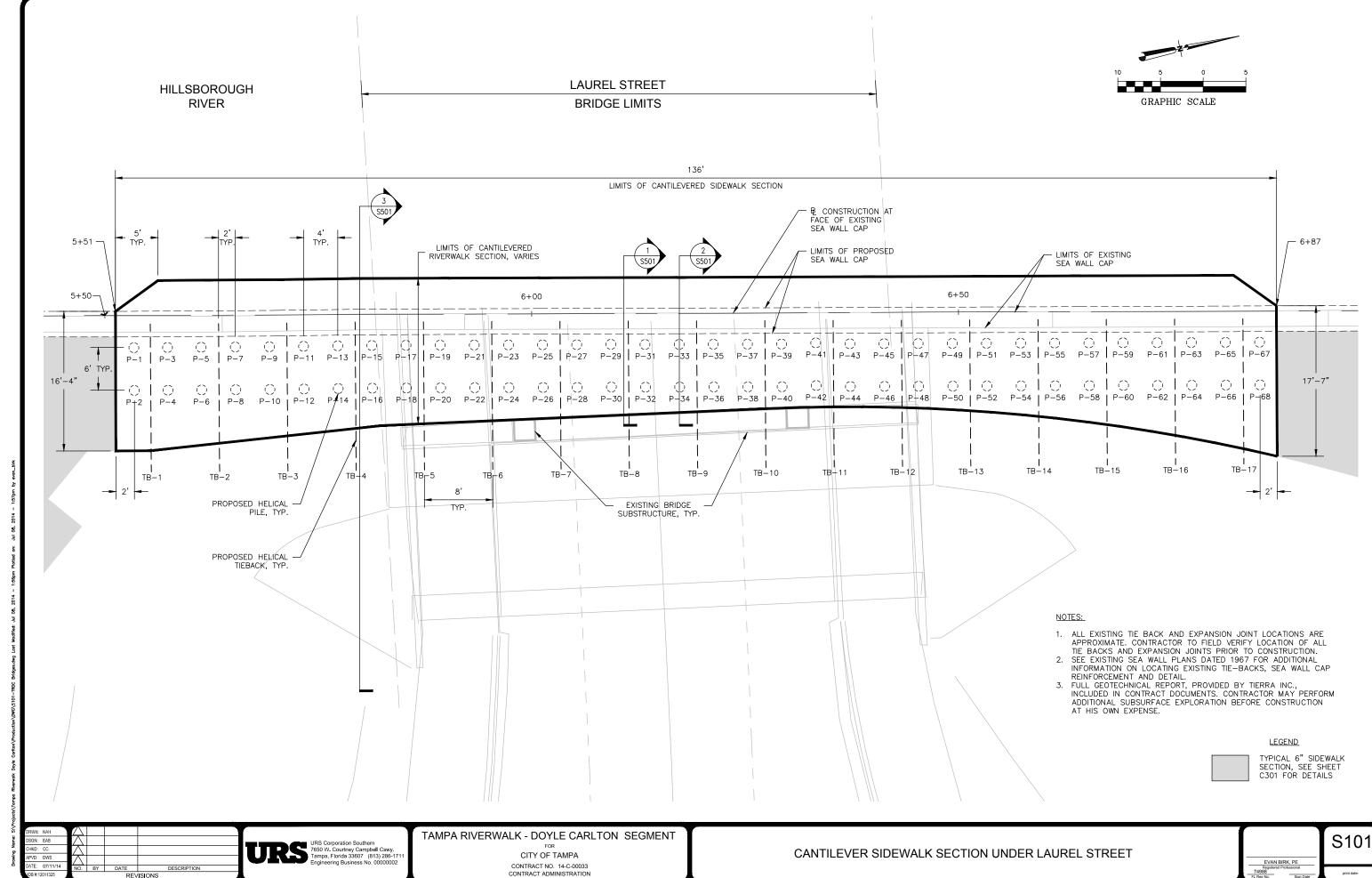
TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

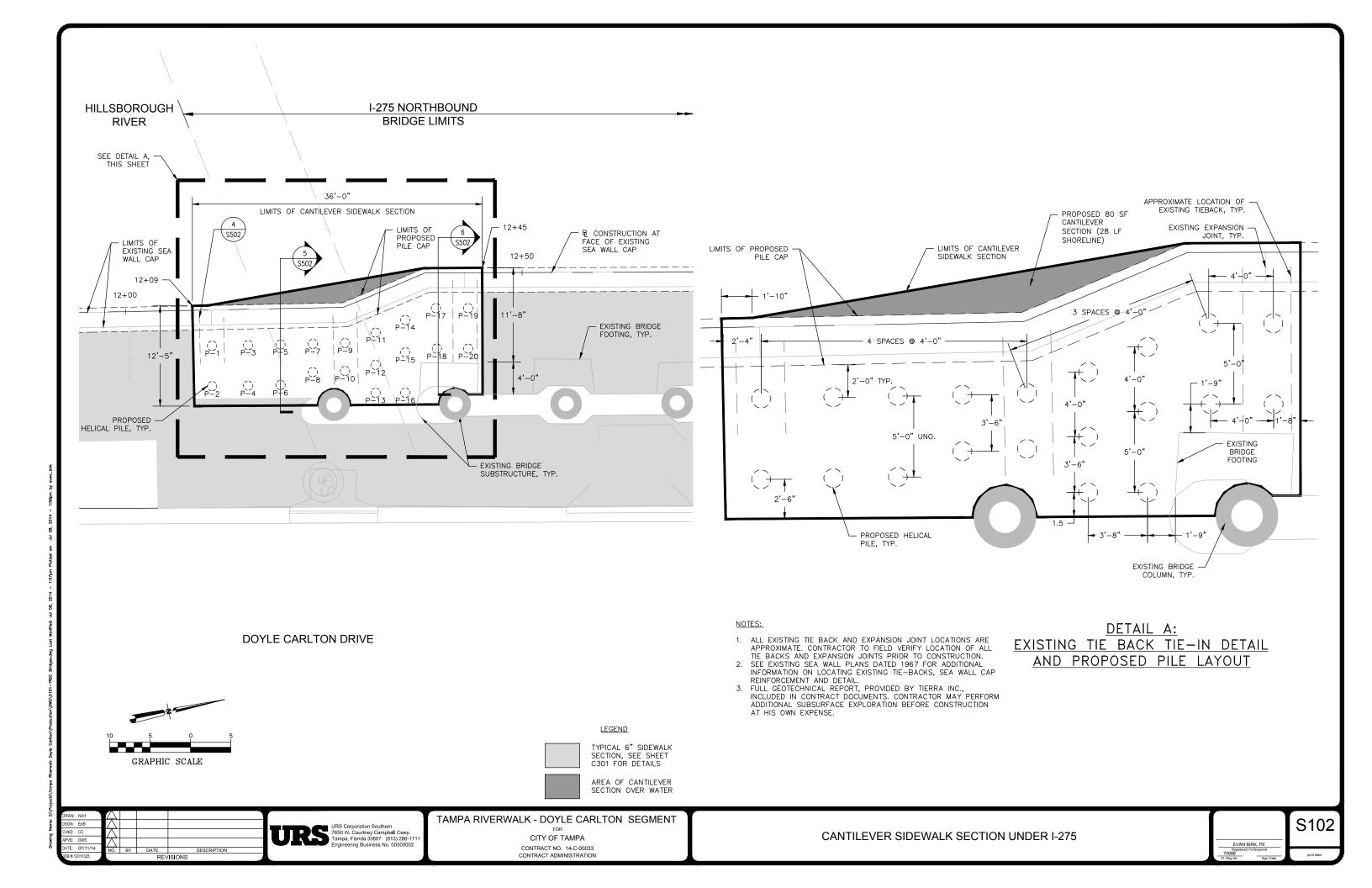
CITY OF TAMPA

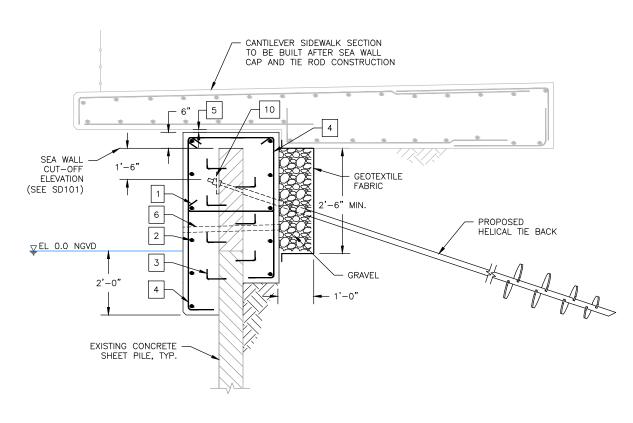
CONTRACT NO. 14-C-00033



S001







STRUCTURAL NOTES

1. #4 STIRRUP @ 6" O.C.

2. #6 BAR, TYP.

3. DRILL AND EPOXY GROUT #4 DOWELS @ 12" O.C. WITH 6" EXTENSION INTO FASCIA, TYP.

4. #4 STIRRUP @ 6" O.C.

5. 1" CONSTRUCTION JOINT. SEE MISCELLANEOUS STRUCTURAL MATERIALS NOTE #8 ON SHEET SOO1.

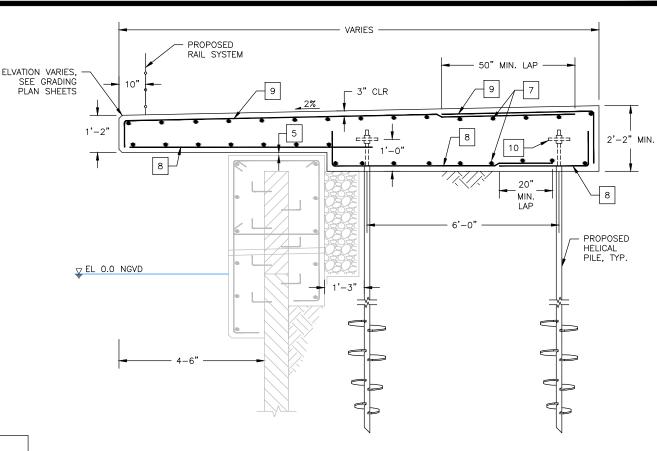
6. 3" PVC WEEP HOLE TO MATCH EXISTING WEEP HOLE LOCATIONS AND ELEVATIONS. SEE CONSTRUCTION NOTE #8
ON SHEET SO01

7. #4 BAR @ 12" O.C., TYP.

8. #4 BAR @ 12" O.C.

9. #7 BAR @ 6" O.C.

10.1-½"x10"x10" ANCHOR BEARING PLATE, TYP.



SECTIONS APPLY TO: STA. 5+51 TO STA. 6+87

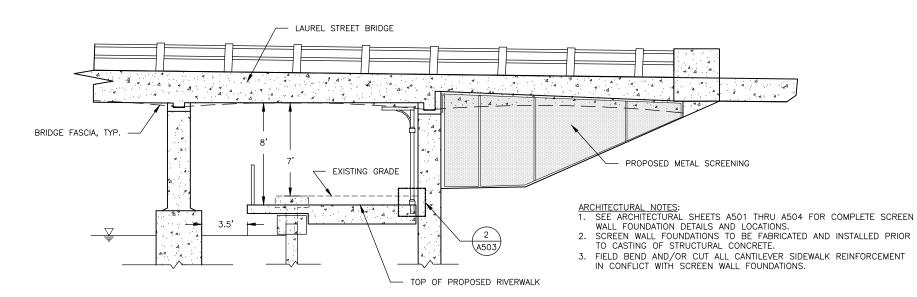
PILES UNDER LAUREL ST

TIEBACK UNDER LAUREL ST

TIE-BACK NOTES:
ANCHOR TYPE: CHANCE® SQUARE SHAFT HELICAL ANCHOR SHAFT MATERIAL: TYPE SS5 (1.5"x1.5" SOLID SQUARE SHAFT) HELICAL CONFIGURATION: 8"x10"x12"x14" INSTALLATION ANGLE: 30° ESTIMATED LENGTH: 43–48 FT MIN. FREE LENGTH: 15 FT DESIGN LOAD: 26 KIPS ULTIMATE LOAD: 39 KIPS TEST LOAD (PERFORMANCE & PROOF TESTS): 33 KIPS (125% DESIGN LOAD) MIN. INSTALLATION TORQUE: 4,000 FT—LBS MAX. INSTALLATION TORQUE: 5,500 FT—LBS

PILE NOTES: PILE TYPE: CHANCE®HELICAL PULLDOWN™PILE SHAFT MATERIAL: TYPE SS175 (1.75"x1.75" SOLID SQUARE SHAFT) HELICAL CONFIGURATION: 8"x10"x12"x14" GROUT COLUMN DIAMETER: 5" ESTIMATED LENGTH: 30-35 FT MIN. OVERALL LENGTH: 25 FT DESIGN LOAD: 62 KIPS COMPRESSION 14 KIPS TENSION ULTIMATE LOAD: 124 KIPS COMPRESSION

28 KIPS TENSION TEST LOAD (PRE-PRODUCTION): 124 KIPS (200% DESIGN LOAD) TEST LOAD (PRODUCTION): 62 KIPS (100% DESIGN LOAD) MIN. INSTALLATION TORQUE: 10,000 FT-LBS MAX. INSTALLATION TORQUE: 11,00 FT-LBS



SECTION/ELEVATION

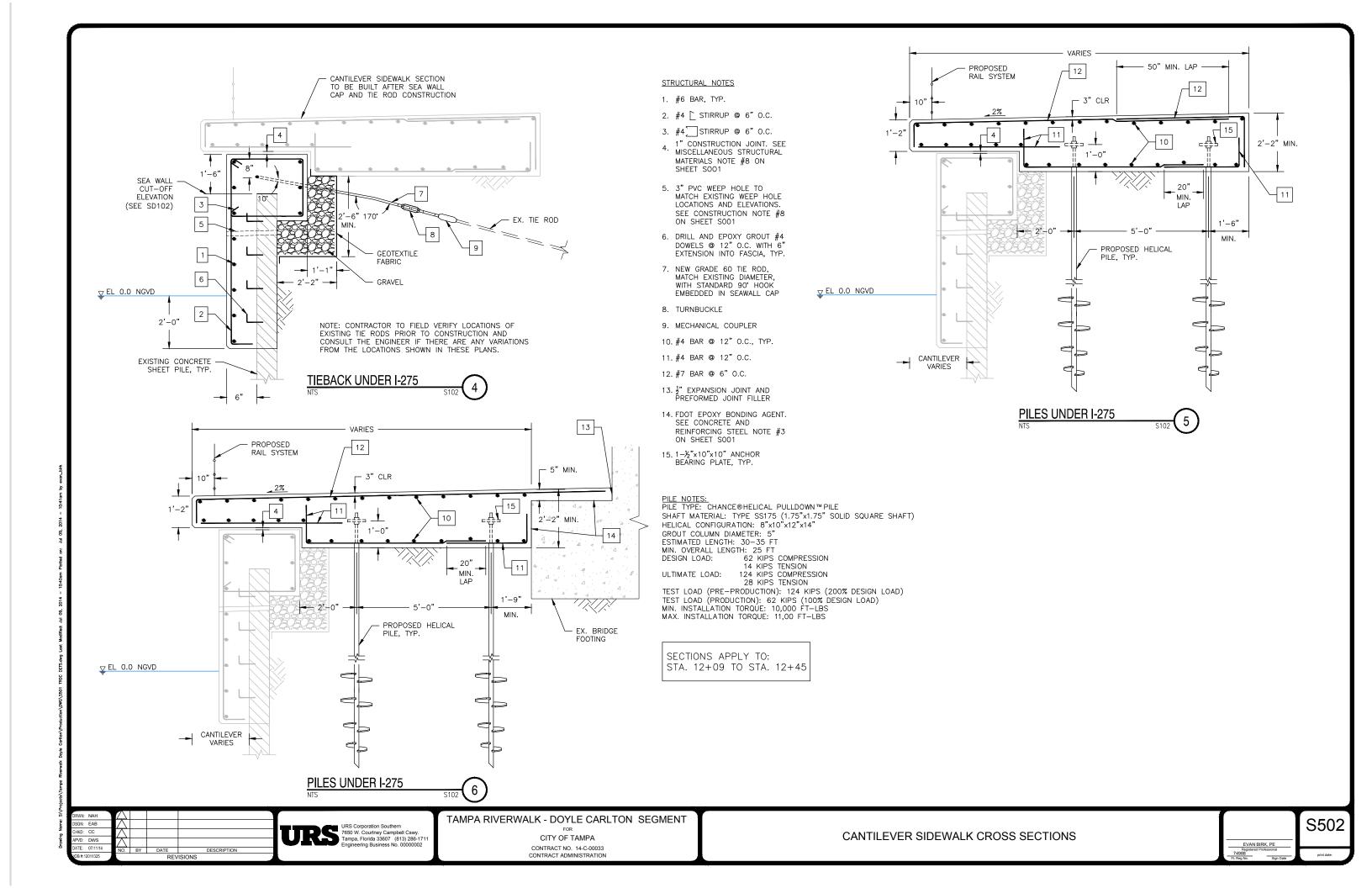
URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Florida 33607 (813) 286-171
Endineering Rusinees No. 000000000

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION



CANTILEVER SIDEWALK CROSS SECTIONS



#### NOTES FOR ART SCULPTURE FOUNDATION: AMERICA, AMERICA

#### A. BUILDING CODES

1. FLORIDA BUILDING CODE, 2010 EDITION WITH 2012 SUPPLEMENT. 2.ACI 318-08 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.

#### B. BASIS OF DESIGN

- 1. THE DIMENSIONS OF THE METAL SCULPTURE ARE BASED ON THE ENGINEERING DRAWING BY J. AGUERO & CO. DATED JANUARY 19, 1978.
- 2.WIND LOADS PER ASCE 7-10 FOR AN ULTIMATE DESIGN WIND SPEED (3-SECOND GUST) OF 145 MPH AND NOMINAL DESIGN WIND SPEED OF 112 MPH.
  - a.RISK CATEGORY II
  - b.EXPOSURE "C
  - c.OPEN STRUCTURE WITH A GUST-EFFECT FACTOR = 1.14 AND FORCE COEFFICIENTS RANGING FROM 1.60 TO 1.63.
  - d.NOMINAL WIND DESIGN PRESSURE = 24.57 PSF.
- 3.THE DESIGN WAS BASED ON THE ASSUMPTION THAT THE METAL SCULPTURE HAS BEEN PROPERLY FABRICATED, ERECTED, MAINTAINED, CONNECTIONS ARE IN PLACE, AND THAT THE STRUCTURAL INTEGRITY OF THE METAL SCULPTURE HAS NOT BEEN COMPROMISED DUE TO DAMAGE OR CORROSION OF LOAD CARRYING MEMBERS.

#### C. CONSTRUCTION MATERIALS

- 1. CAST-IN-PLACE CONCRETE FOR THE FOUNDATION SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF F'C = 4000 PSI AT 28 DAYS.
- 2.CAST-IN-PLACE CONCRETE FOR THE "PROTECTION POUR" LAYER AND SIDEWALK SHALL HAVE A MINIMUN COMPRESSIVE STRENGTH OF F'C = 3000 PSI AT 28 DAYS.
- 3.REINFORCING STEEL FOR CONCRETE SHALL BE ASTM A 615, GRADE 60, UNCOATED.
- 4.WELDED WIRE FABRIC FOR THE "PROTECTION POUR" LAYER SHALL BE ASTM A 1064. SIZE SHALL BE W.W.F. 6X6-W1.4XW1.4. FLAT SHEETS SHALL BE USED. ROLLED WELDED WIRE FABRIC IS NOT

### D. FOUNDATION SOIL

- 1.NET MAXIMUM ALLOWABLE BEARING CAPACITY OF SOIL = 2000 PSF.
- 2.REFER TO THE MAY 6, 2014 GEOTECHNICAL REPORT BY TIERRA, INC. (TIERRA PROJECT NO. 6511-13-025)
- 3.ALL EARTHWORK AND COMPACTION SHALL BE AS DETAILED IN THE "GENERAL RECOMMENDATIONS -SHALLOW SPREAD FOOTING ALTERNATIVE" SECTION OF THE GEOTECHNICAL REPORT. THE GROUNDWATER SHALL BE ASSUMED TO BE AT THE GROUND SURFACE. THE CONTRACTOR SHALL EXPECT TO PERFORM DEWATERING AS PART OF THE WORK. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT THE FLOTATION OF METAL SCULPTURE AND FOUNDATION UNTIL CONSTRUCTION IS COMPLETE.

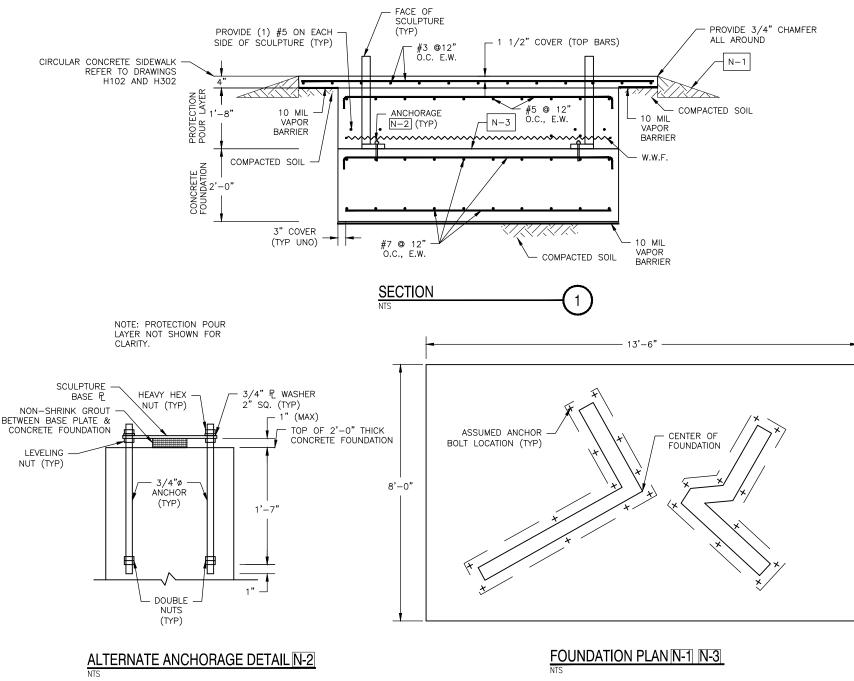
#### E. MISCELLANEOUS NOTES

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ACTIVITIES NECESSARY TO PROCURE, TRANSPORT AND INSTALL TWO SCULPTURE PIECES: THE "AMERICA, AMERICA" SCULPTURE CURRENTLY LOCATED AT THE JOHN F. GERMANY PUBLIC LIBRARY, 900 N. ASHLEY DR., TAMPA, AND THE "LEVITATING NIMBUS" SCULPTURE CURRENTLY LOCATED AT THE TAMPA MUSEUM OF ART. 120 W. GASPARILLA PLAZA, TAMPA AND FOR COORDINATING ALL ACTIVITIES REGARDING THESE RELOCATIONS WITH THE CITY OF TAMPA
- 2.THE STRUCTURAL DRAWING(S) SHALL BE COORDINATED WITH THE OTHER DRAWINGS FOR THIS PROJECT. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- 3.CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION.
- 4. THE METAL SCULPTURE AND ALL RELATED EQUIPMENT SHALL BE PROTECTED DURING ALL STAGES OF CONSTRUCTION.
- 5.FOR ALL OTHER ITEMS, REFER TO "STRUCTURAL NOTES" ON DRAWING S001.
- 6.THE DISTANCE AND GEOMETRIC LOCATION OF THE TWO PORTIONS OF THE SCULPTURE, RELATIVE TO EACH OTHER, SHALL MATCH THE EXISTING PLACEMENT AS MUCH AS POSSIBLE. THE CONTRACTOR SHALL SURVEY THE EXISTING PLACEMENT OF THE ART SCULPTURE PRIOR TO REMOVING IT FROM ITS PRESENT LOCATION. A COPY OF THIS SURVEY SHALL BE SUBMITTED AS PART OF THE "SHOP DRAWING" PROCESS.
- 7.PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT THEIR PROPOSED FINAL ORIENTATION OF THE ART SCULPTURE AND ITS FOUNDATION FOR APPROVAL. THIS SHALL BE PART OF THE "SHOP DRAWING" PROCESS.

N-1: SLOPE THE SIDEWALK AND GRADE AWAY FROM THE CONCRETE FOUNDATION. REFER TO CIVIL DRAWINGS.

N-2: INSTALL NEW ANCHORS FOR THE METAL SCULPTURE AT THE LOCATION OF THE EXISTING HOLES IN THE BASE PLATE. THE CONTRACTOR SHALL EXPECT TO SLIGHTLY "REAM" ALL OF THE EXISTING HOLES IN ORDER TO INSTALL THE NEW ANCHORS. ANCHORS ARE TO BE HILTI HSL-3 EXPANSION ANCHORS. SIZE M20 WITH A HOLE DEPTH OF 6 1/8 INCHES. THE CONTRACTOR SHALL FOLLOW ALL OF THE INSTALLATION RECOMMENDATIONS OF THE EXPANSION ANCHOR MANUFACTURER. UNLESS SPECIFIED OTHERWISE BY THE MANUFACTURER, WAIT A MINIMUM OF 7 DAYS AFTER CONCRETE PLACEMENT BEFORE INSTALLING EXPANSION ANCHORS. AS AN ALTERNATIVE, THE CONTRACTOR MAY ELECT TO USE CAST-IN-PLACE ANCHOR BOLTS. IF CAST-IN-PLACE ANCHOR BOLTS ARE USED, THEY SHALL BE ASTM F 1554, GRADE 55. REFER TO THE "ALTERNATE ANCHORAGE DETAIL". THE NON-SHRINK GROUT SHALL BE NON-METALLIC WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI.

N-3: THE CONCRETE FOUNDATION SHALL BE LEVEL



REVISIONS

**URS** 7650 W. Courtney Campbell Cswy. Tampa, Florida 33607 (813) 286-17 TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION ART SCULPTURE FOUNDATION (1)

EORGE PAPADOPOULOS, PI

S510

### NOTES FOR ART SCULPTURE FOUNDATION: LEVITATING NIMBUS

#### A. BUILDING CODES

1. FLORIDA BUILDING CODE, 2010 EDITION WITH 2012 SUPPLEMENT. 2. ACI 318-08 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.

#### B. BASIS OF DESIGN

- 1. BASE OF SCULPTURE ASSUMED TO BE 3'-3" BY 2'-1"
- 2. WIND LOADS PER ASCE 7-10 FOR AN ULTIMATE DESIGN WIND SPEED (3-SECOND GUST) OF 145 MPH AND NOMINAL DESIGN WIND SPEED OF 112 MPH.
  - a.RISK CATEGORY II
  - b.EXPOSURE "C"
  - c.OPEN STRUCTURE WITH A GUST-EFFECT FACTOR = 1.14 AND FORCE COEFFICIENTS = 1.55 d.NOMINAL WIND DESIGN PRESSURE = 23.20 PSF.
- 3. THE DESIGN WAS BASED ON THE ASSUMPTION THAT THE METAL SCULPTURE HAS BEEN PROPERLY FABRICATED, ERECTED, MAINTAINED, CONNECTIONS ARE IN PLACE, AND THAT THE STRUCTURAL INTEGRITY OF THE SCULPTURE HAS NOT BEEN COMPROMISED DUE TO DAMAGE OR CORROSION OF LOAD CARRYING MEMBERS.

### C. CONSTRUCTION MATERIALS

- 1. CAST-IN-PLACE CONCRETE FOR THE FOUNDATION SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF F'C = 4000 PSI AT 28 DAYS.
- 2.REINFORCING STEEL FOR CONCRETE SHALL BE ASTM A 615, GRADE 60, UNCOATED. 3.STEEL PLATE TO BE ASTM A36.

#### D. FOUNDATION SOIL

- 1. NET MAXIMUM ALLOWABLE BEARING CAPACITY OF SOIL = 2000 PSF.
- 2.REFER TO THE MAY 6, 2014 GEOTECHNICAL REPORT BY TIERRA, INC. (TIERRA PROJECT NO. 6511-13-025)
- 3.ALL EARTHWORK AND COMPACTION SHALL BE AS DETAILED IN THE "GENERAL RECOMMENDATIONS —SHALLOW SPREAD FOOTING ALTERNATIVE" SECTION OF THE GEOTECHNICAL REPORT. THE GROUNDWATER SHALL BE ASSUMED TO BE AT THE GROUND SURFACE. THE CONTRACTOR SHALL EXPECT TO PERFORM DEWATERING AS PART OF THE WORK. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT THE FLOTATION OF THE SCULPTURE AND FOUNDATION UNTIL CONSTRUCTION IS COMPLETE.

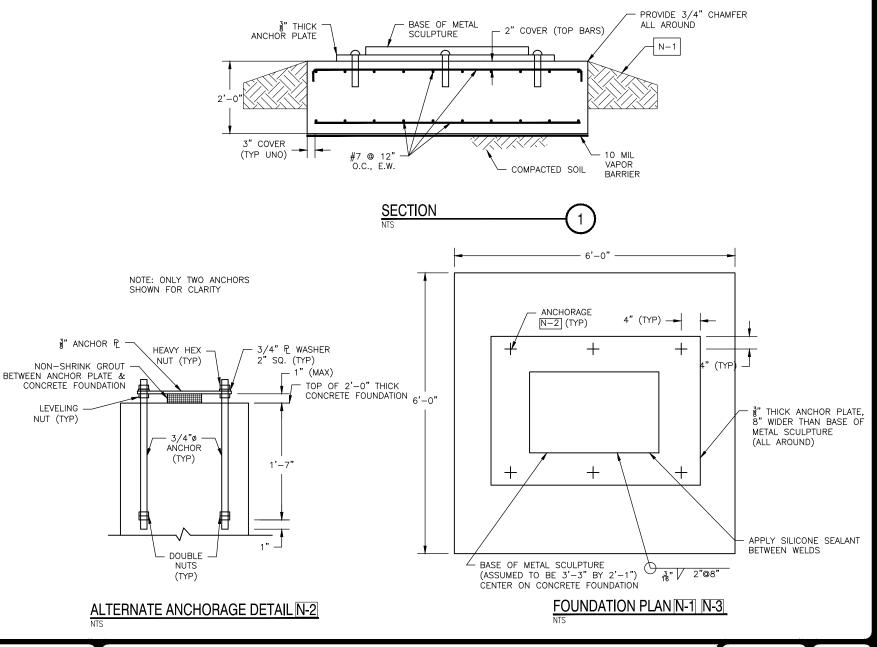
#### E. MISCELLANEOUS NOTES

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ACTIVITIES NECESSARY TO PROCURE, TRANSPORT AND INSTALL TWO SCULPTURE PIECES; THE "AMERICA, AMERICA" SCULPTURE CURRENTLY LOCATED AT THE JOHN F. GERMANY PUBLIC LIBRARY, 900 N. ASHLEY DR., TAMPA, AND THE "LEVITATING NIMBUS" SCULPTURE CURRENTLY LOCATED AT THE TAMPA MUSEUM OF ART, 120 W. GASPARILLA PLAZA, TAMPA AND FOR COORDINATING ALL ACTIVITIES REGARDING THESE RELOCATIONS WITH THE CITY OF TAMPA.
- 2.THE STRUCTURAL DRAWING(S) SHALL BE COORDINATED WITH THE OTHER DRAWINGS FOR THIS PROJECT. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- 3. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION.
- 4. THE METAL SCULPTURE AND ALL RELATED EQUIPMENT SHALL BE PROTECTED DURING ALL STAGES OF CONSTRUCTION.
- 5.FOR ALL OTHER ITEMS, REFER TO "STRUCTURAL NOTES" ON DRAWING S001.
- 6.PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT THEIR PROPOSED FINAL ORIENTATION OF THE ART SCULPTURE AND ITS FOUNDATION FOR APPROVAL. THIS SHALL BE PART OF THE "SHOP DRAWING" PROCESS.

N-1: SLOPE THE SIDEWALK AND GRADE AWAY FROM THE CONCRETE FOUNDATION. REFER TO CIVIL DRAWINGS.

N-2: INSTALL NEW ANCHORS FOR THE SCULPTURE IN THE ANCHOR PLATE. ANCHORS ARE TO BE HILTI HSL-3 EXPANSION ANCHORS, SIZE M20 WITH A HOLE DEPTH OF 6 1/8 INCHES. THE CONTRACTOR SHALL FOLLOW ALL OF THE INSTALLATION RECOMMENDATIONS OF THE EXPANSION ANCHOR MANUFACTURER. UNLESS SPECIFIED OTHERWISE BY THE MANUFACTURER, WAIT A MINIMUM OF 7 DAYS AFTER CONCRETE PLACEMENT BEFORE INSTALLING EXPANSION ANCHORS. AS AN ALTERNATIVE, THE CONTRACTOR MAY ELECT TO USE CAST-IN-PLACE ANCHOR BOLTS. IF CAST-IN-PLACE ANCHOR BOLTS ARE USED, THEY SHALL BE ASTM F 1554, GRADE 55. REFER TO THE "ALTERNATE ANCHORAGE DETAIL". THE NON-SHRINK GROUT SHALL BE NON-METALLIC WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI.

N-3: THE CONCRETE FOUNDATION SHALL BE LEVEL.







TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

CITY OF TAMPA
CONTRACT NO. 14-C-00033
CONTRACT ADMINISTRATION

## INDEX OF SHEETS

TITLE SHEET	Sheet
LOCATION MAP AND LAYOUT PLAN	
SUMMARY OF QUANTITIES	_ 3
PLAN AND PROFILE - EAST BULKHEAD_	4-11
PLAN AND PROFILE - WEST BULKHEAD	_12-19
LAYOUT DATA - EAST BULKHEAD	_ 20
LAYOUT DATA - WEST BULKHEAD	_ 2!
TIEBACK AND CAP JOINT SCHEDULE - EAST	22
TIEBACK AND CAP JOINT SCHEDULE-WEST	23
SHEET PILE AND CAP LAYOUT - EAST	24
SHEET PILE AND CAP LAYOUT - WEST	25
TYPICAL BULKHEAD SECTIONS	26
PILE CAP DETAILS	27-28
DETAILS - ANC. BKS, CAP & CAST IN PLACE BULKH	D. 29
ANCHOR BLOCK & PILE CAP DETAILS	30
DETAILS - BULKHEAD AT CASS ST.	31
SHEET PILE DETAILS	32-33
BOX CULVERT EAST STA. 20+36.66	34
BOX CULVERT WEST STA. I + 38.3	35
DRAINAGE PIPE DETAILS AT BULKHEAD	36
MANHOLE LAYOUT PLANS	37
STANDARD MANHOLE DETAILS	38
STANDARD PIPELINE FOUNDATIONS	39
CDOSC CECTIONS	

# RIVERFRONT BULKHEAD

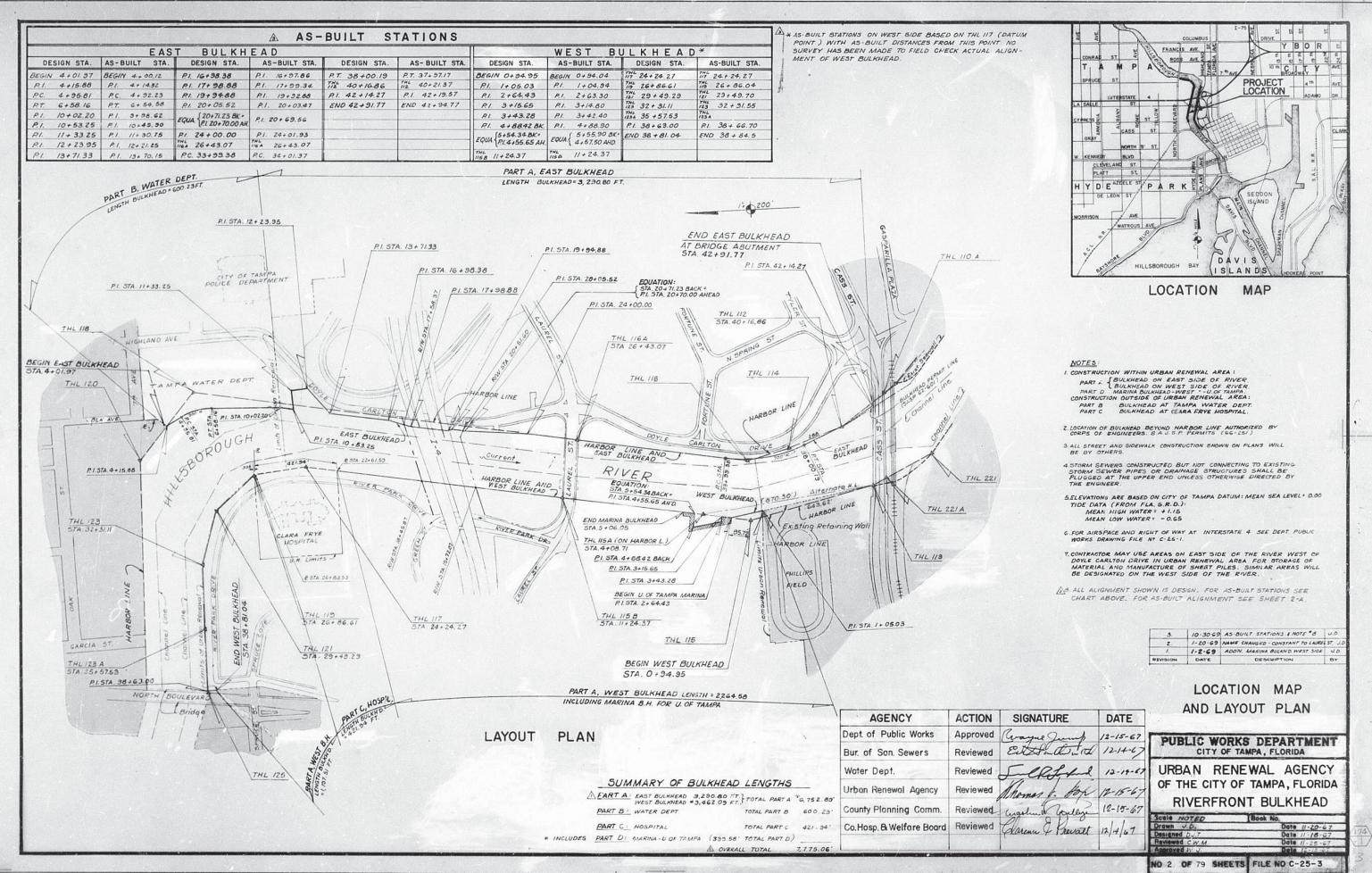
RIVERFRONT URBAN RENEWAL PROJECT FLA. R-2 TAMPA, FLORIDA

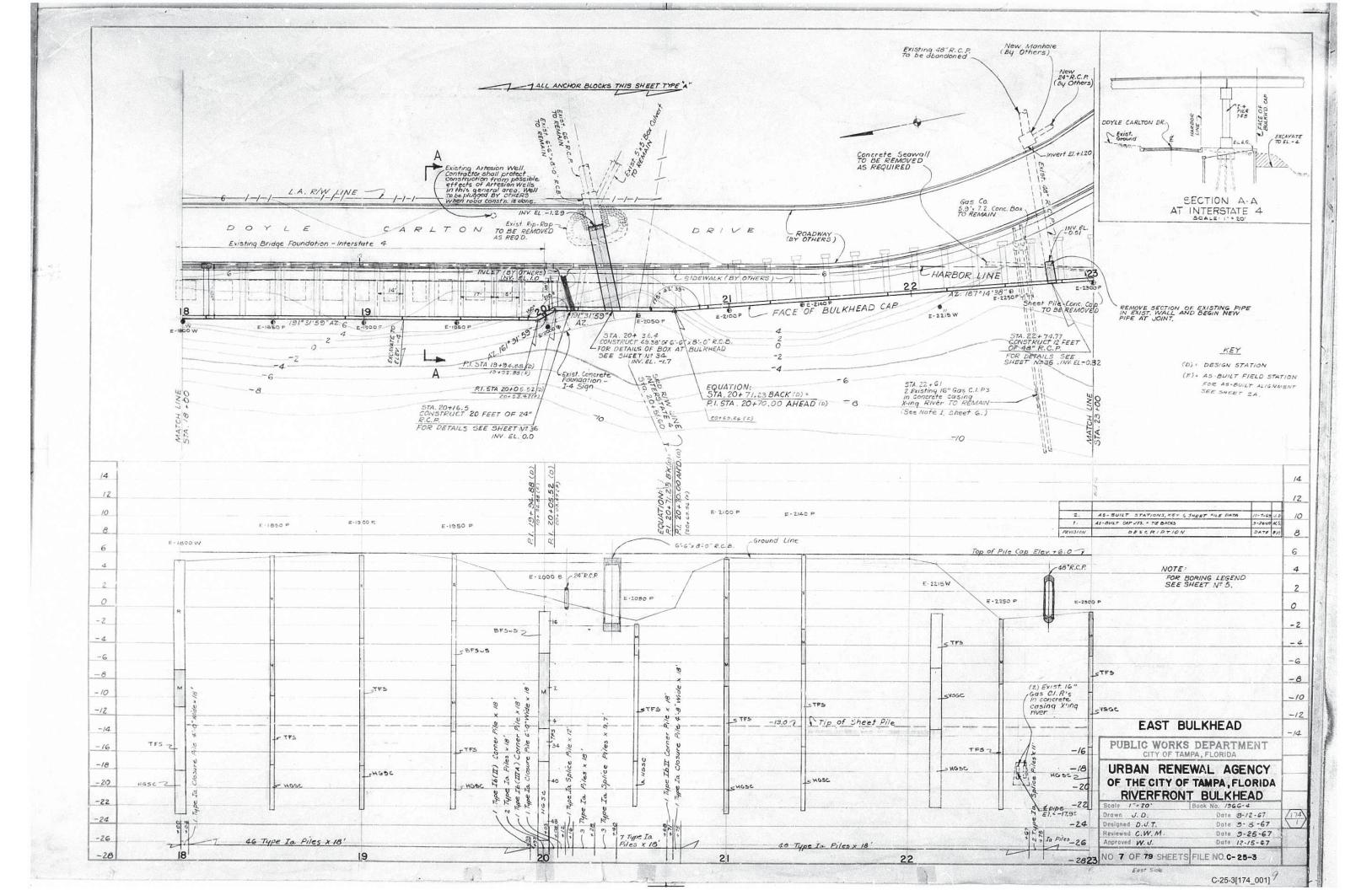
SPONSOR

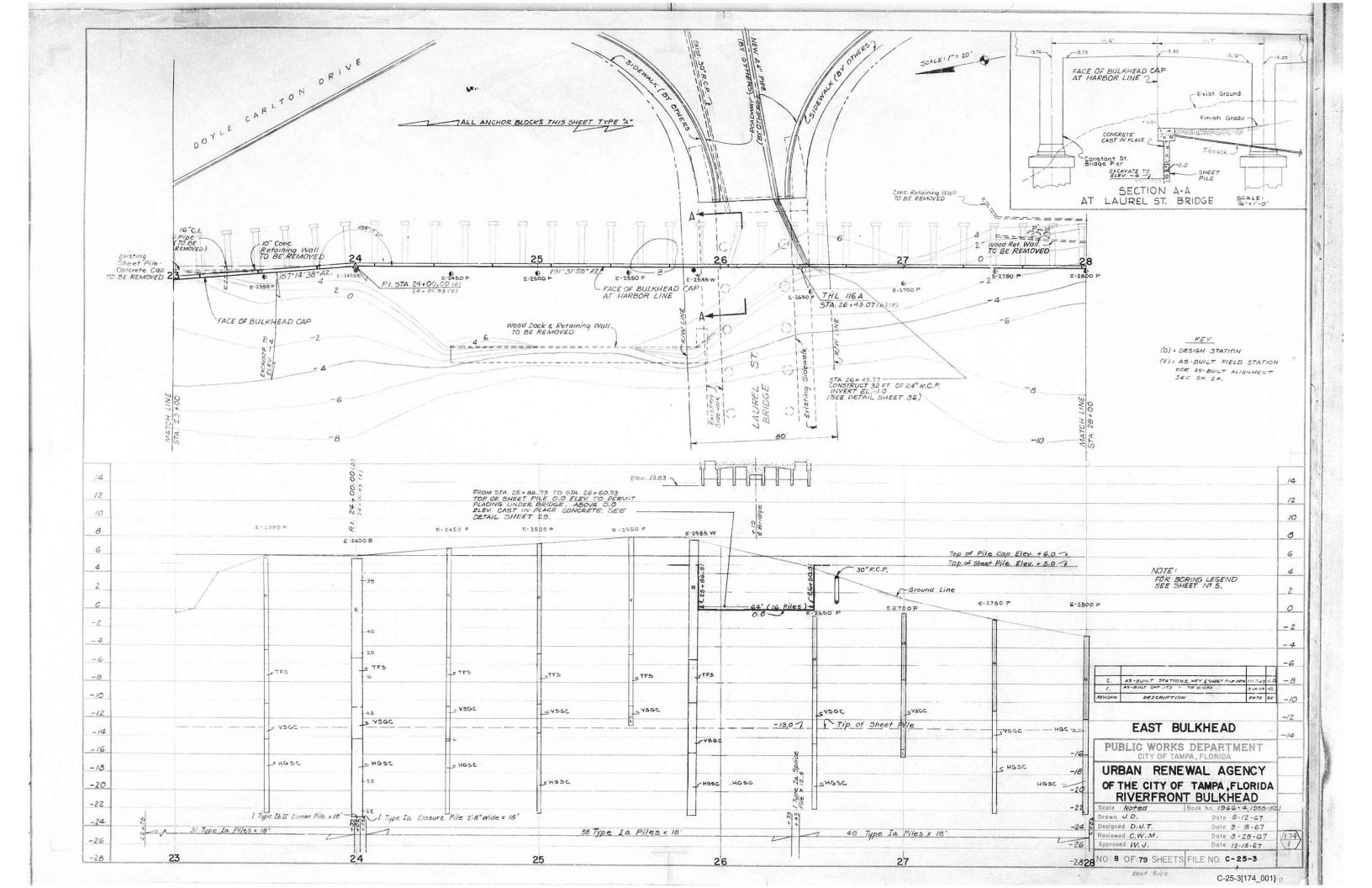
URBAN RENEWAL AGENCY TAMPA, FLORIDA ENGINEERS

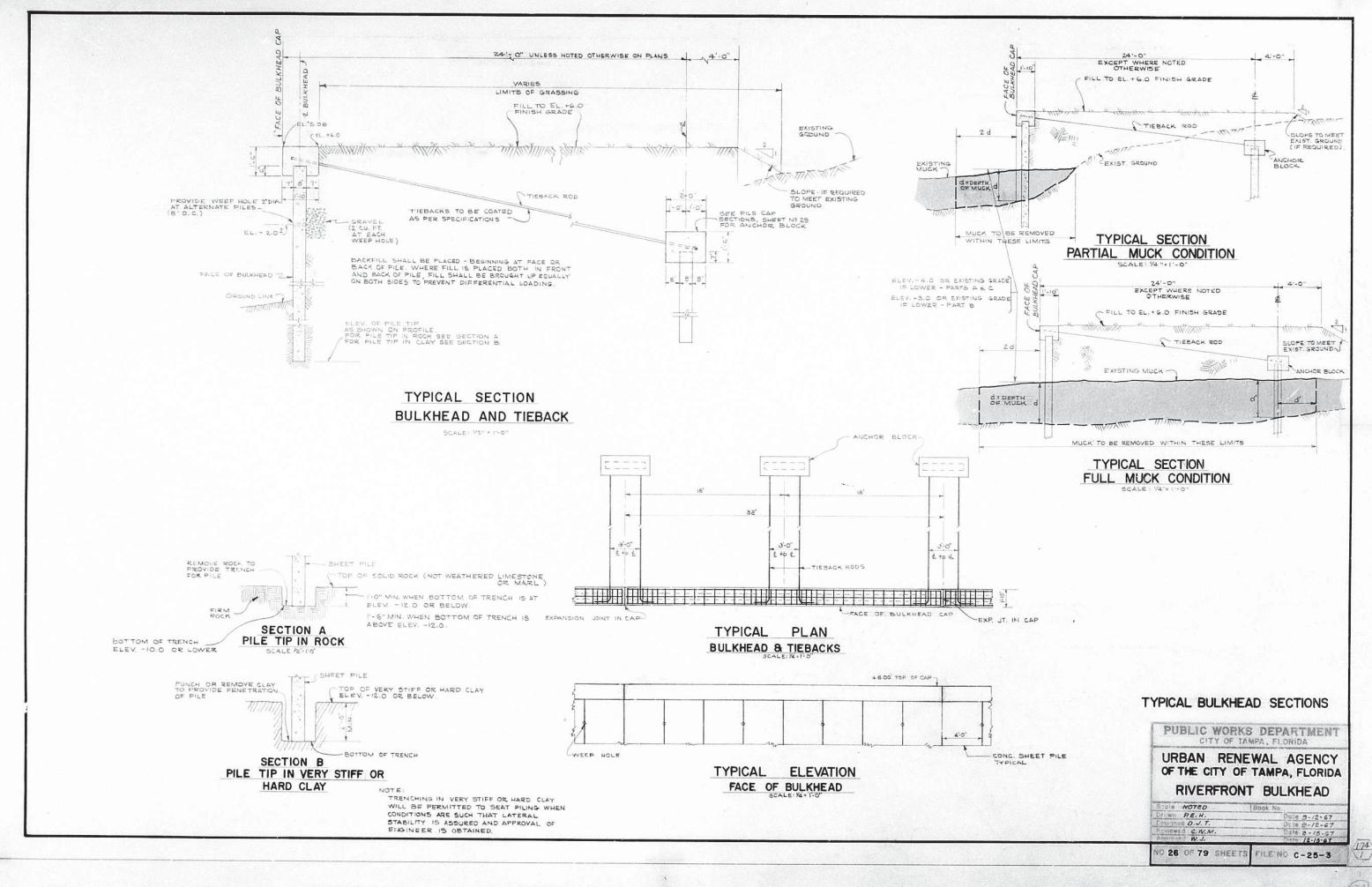
DEPARTMENT OF PUBLIC WORKS
TAMPA, FLORIDA

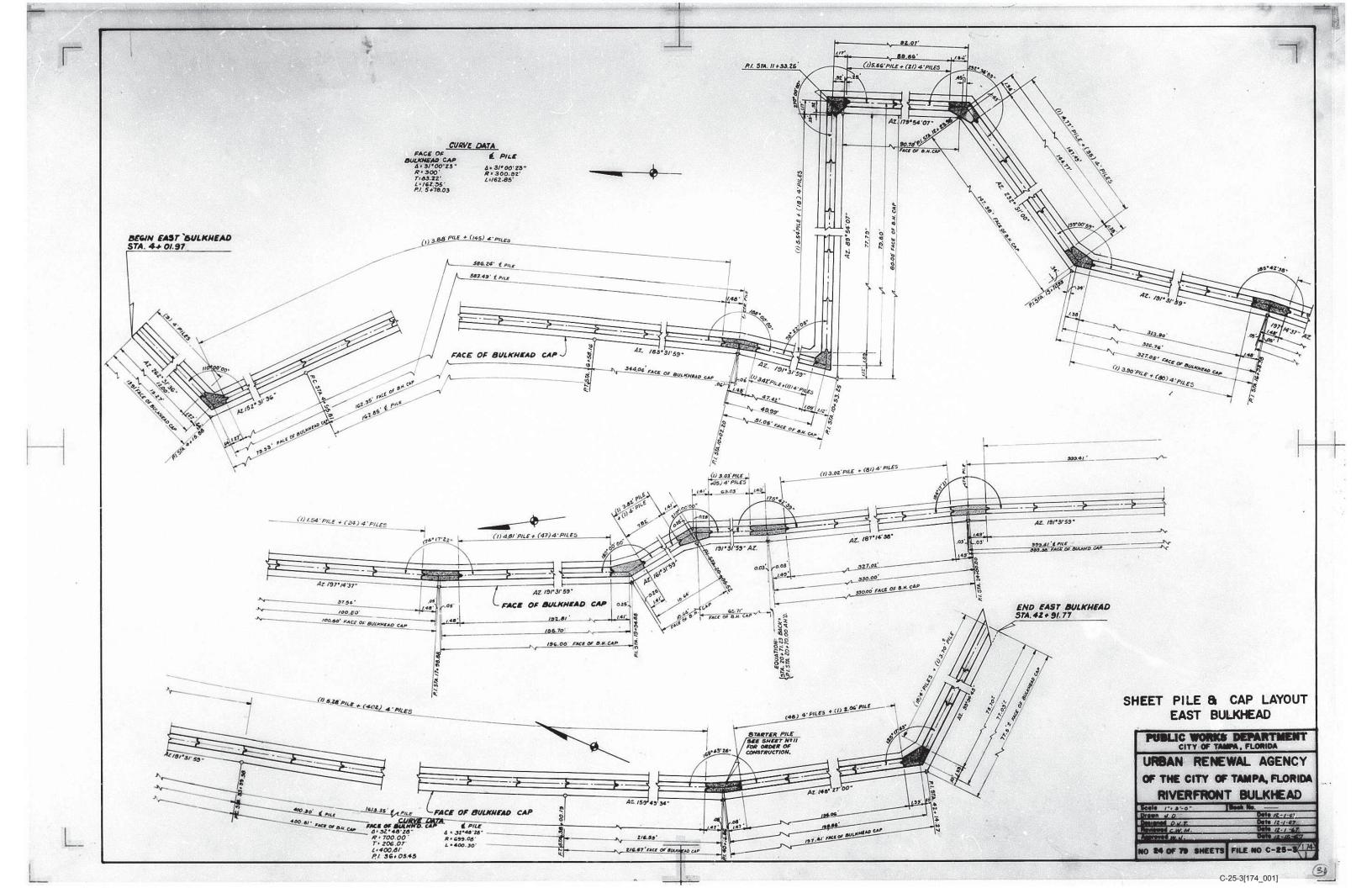


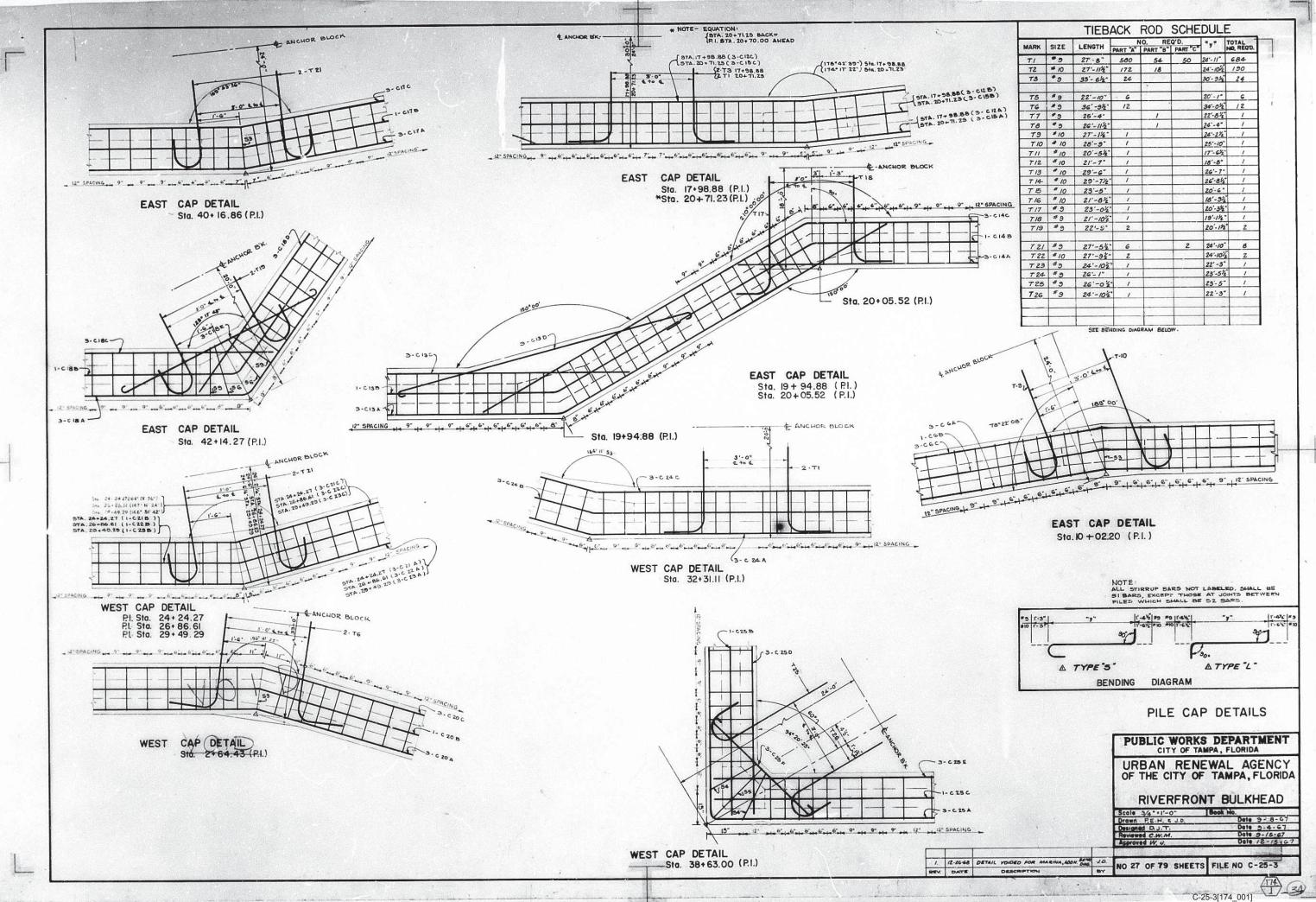












### **ABBREVIATIONS**

- AMPS
- AFG ABOVE FINISH GRADE
- CONDUIT
- СВ CIRCUIT BREAKER
- COMM. COMMUNICATION
- DN DOWN
- DWG DRAWING
- EX. **FXISTING**
- FT-XFIXTURE TYPE "X"
- GFI GROUND FAULT INTERRUPTER
- GND GROUND
- HORSEPOWER ΗP
- KVA KILOVOLTAME
- ΚW KILOWATT
- LTG LIGHTING
- MIN MINIMUM MNT MOUNTED
- N.T.S. NOT TO SCALE
- ОН OVERHEAD
- REC RECEPTACLE
- RGS RIGID GALVANIZED STEEL
- SCH SCHEDULE
- SPD SURGE PROTECTION DEVICE
- TYP **TYPICAL**
- UON UNLESS OTHERWISE NOTED
- VOLT
- WP WEATHERPROOF (NEMA 3R)

### **GENERAL NOTES**

- ELECTRICAL INSTALLATIONS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NFPA 70), THE NATIONAL ELECTRICAL SAFETY CODE (ANSI C2) AND ALL LOCAL LAWS, CODES AND STANDARDS CURRENTLY ENFORCED BY AUTHORITIES HAVING JURISDICTION.
- THE CONTRACTOR SHALL ASCERTAIN THAT ALL LIGHTING SYSTEM COMPONENTS FURNISHED BY HIM ARE COMPATIBLE IN ALL RESPECTS WITH EACH OTHER AND THE REMAINDER OF THE NEW/EXISTING SYSTEM.
- IN CASE THE CONTRACTOR SELECTS TO FURNISH AND INSTALL ANY LIGHTING EQUIPMENT REQUIRING ADDITIONAL WIRING, TRANSFORMERS, ADAPTERS, MOUNTINGS, ETC. TO THOSE SHOWN ON THE DRAWINGS AND/OR LISTED IN THE SPECIFICATIONS, ANY COST FOR THESE ITEMS SHALL BE INCIDENTAL TO THE **FOUIPMENT COST**
- ANY AND ALL INSTRUCTIONS FROM THE ENGINEER TO THE CONTRACTOR REGARDING CHANGES IN OR DEVIATIONS FROM THE PLANS AND SPECIFICATIONS SHALL BE IN WRITING. THE CONTRACTOR SHALL NOT ACCEPT ANY VERBAL INSTRUCTIONS FROM THE ENGINEER REGARDING ANY CHANGES FROM THE PLANS AND SPECIFICATIONS
- COLOR CODE ALL PHASE WIRING BY THE USE OF COLORED WIRE INSULATION AND/OR COLORED TAPE. WHERE TAPE IS USED, THE WIRE INSULATION SHALL BE BLACK. BLACK AND RED SHALL BE USED FOR SINGLE-PHASE, THREE WIRE SYSTEMS. NEUTRAL CONDUCTORS, SIZE NO. 6 AWG OR SMALLER, SHALL BE IDENTIFIED BY A CONTINUOUS WHITE OR NEUTRAL GRAY OUTER FINISH ALONG ITS ENTIRE LENGTH. NEUTRAL CONDUCTORS LARGER THAN NO. 6 AWG SHALL BE IDEN-TIFIED EITHER BY A CONTINUOUS WHITE OR NATURAL GRAY OUTER FINISH ALONG ITS ENTIRE LENGTH OR BY THE USE OF WHITE TAPE AT ITS TERMINATIONS AND INSIDE ACCESSIBLE
- ALL BRANCH CIRCUIT CONDUCTORS CONNECTED TO A PARTICULAR PHASE SHALL BE IDENTIFIED WITH THE SAME COLOR. THE COLOR CODING SHALL BE EXTENDED TO THE POINT OF UTILIZA—
- IN CONTROL WIRING, THE SAME COLOR SHALL BE USED THROUGHOUT THE SYSTEM FOR THE SAME FUNCTION.
- ALL POWER AND CONTROL CIRCUIT CONDUCTORS SHALL BE COPPER: ALUMINUM SHALL NOT BE ACCEPTED. THIS INCLUDES WIRE, CABLE, BUSSES, TERMINALS, SWITCH/PANEL COMPO-
- CONTROL AND POWER CIRCUIT CONDUCTORS SHALL BE INSTALLED IN SEPARATE CONDUITS.
- NEATLY LACE WIRING IN DISTRIBUTION PANELS, WIREWAYS, 10. SWITCHES AND JUNCTION/PULL BOXES.
- 11. EQUIPMENT CABINETS SHALL NOT BE USED AS PULL/JUNCTION BOXES. ONLY WIRING TERMINATING AT THE EQUIPMENT SHALL BE BROUGHT INTO THESE ENCLOSURES.
- 12. SPLICES AND JUNCTION POINTS SHALL BE PERMITTED ONLY IN JUNCTION BOXES, DUCTS EQUIPPED WITH REMOVABLE COVERS AND AT EASILY ACCESSIBLE LOCATIONS.
- 13. CIRCUIT BREAKERS IN POWER DISTRIBUTION PANEL(S) SHALL BE THERMAL—MAGNETIC, MOLDED CASE, PERMANENT TRIP WITH KAIC RATING AS SHOWN.
- 14. PVC CONDUIT SHALL BE USED WHEN INSTALLING EQUIPMENT UNLESS OTHERWISE SPECIFIED. THE MINIMUM TRADE SIZE SHALL BE 3/4 INCH.
- 15. ALL EXPOSED CONDUITS SHALL BE RIGID STEEL PVC COATED AND RUN PARALLEL TO OR AT RIGHT ANGLES WITH THE LINES OF STRUCTURE.
- ALL STEEL CONDUITS, FITTINGS, NUTS, BOLTS, ETC. SHALL BE GALVANIZED.
- 17. BOTH ENDS OF EACH CONTROL CONDUCTOR SHALL BE TERMINATED AT A TERMINAL BLOCK. THE TERMINAL BLOCKS SHALL BE OF PROPER RATING AND SIZE FOR THE FUNCTION INTENDED AND THEY SHALL BE LOCATED IN EQUIPMENT ENCLOSURES OR SPECIAL TERMINAL CABINETS.
- ALL CONTROL CONDUCTOR TERMINATIONS SHALL BE OF THE OPEN-EYE CONNECTOR/SCREW TYPE. SOLDERED, CLOSED-EYE TERMINATIONS, OR TERMINATIONS WITHOUT CONNECTORS, ARE NOT ACCEPTABLE.

- 19. IN TERMINAL BLOCK CABINETS, THE MINIMUM SPACING BETWEEN PARALLEL TERMINAL BLOCKS SHALL BE SIX INCHES. THE MINIMUM SPACING BETWEEN TERMINAL BLOCK SIDES/ENDS AND CABINET SIDES/BOTTOM/TOP SHALL BE FIVE INCHES. MINIMUM SPACING WILL BE INCREASED AS REQUIRED BY THE NUMBER OF CONDUCTORS. ADDITIONAL SPACING SHALL BE PROVIDED AT CONDUCTOR ENTRANCES.
- BOTH ENDS OF ALL CONTROL CONDUCTORS SHALL BE IDENTIFIED AS TO THE CIRCUIT, TERMINAL BLOCK AND TERMINAL NUMBER.
- PROVIDE ALL ELECTRICAL MATERIALS, TOOLS AND TRANSPORTATION, AND PERFORM ALL SERVICES AND LABOR REQUIRED TO COMPLETE FLECTRICAL INSTALLATIONS
- 22. PROVIDE ALL FITTINGS, SUPPORTS, TRIMS, RELATED COMPONENTS AND APPURTENANCES NECESSARY FOR COMPLETE, OPERATIONAL AND FULLY FUNCTIONAL ELECTRICAL INSTALLATIONS.
- COMPLY WITH THE GENERAL REQUIREMENTS OF THE CONTRACT GOVERNING SUBMITTALS. CLEARLY IDENTIFY ALL SUBMITTALS WITH PROJECT NAME AND LOCATION, PRODUCT MANUFACTURER'S NAME, PRODUCT CATALOG NUMBER, COMPANY NAME (CONTRACTOR), PROJECT MANAGER (CONTRACTOR) AND DATE REVIEWED. REVIEW AND APPROVE ALL SUBMITTALS PRIOR TO SUBMITTING TO THE ENGINEER. SUBMITTALS NOT SO MARKED AND APPROVED WILL BE REJECTED AND RESUBMITTAL REQUIRED. SUBMIT PRODUCT DATA CONSISTING OF CATALOG CUT SHEETS, BROCHURES, CIRCULARS, SPECIFICATIONS, PERFORMANCE DATA, INSTALLATION INSTRUCTIONS. CONTROL AND WIRING DIAGRAMS, DRAWINGS AND PRINTED INFORMATION IN SUFFICIENT DETAIL TO VERIFY COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT. CLEARLY MARK PRODUCT DATA TO IDENTIFY PERTINENT PRODUCTS, MODELS, PART NUMBERS, FEATURES AND OPTIONS BEING PROPOSED. IDENTIFY PERFORMANCE CHARACTERISTICS, CAPACITIES, DIMENSIONS AND REQUIRED CLEARANCES.
- 24. PROVIDE ALL ELECTRICAL MATERIALS, TOOLS AND TRANSPORTATION, AND PERFORM ALL SERVICES AND LABOR REQUIRED TO COMPLETE ELECTRICAL INSTALLATIONS.
- 25. ELECTRICAL MATERIALS SHALL BE NEW AND SHALL BE UL (UNDERWRITER'S, INC.) LISTED AND LABELED AS CONFORMING TO ITS STANDARDS, WHERE SUCH A STANDARD HAS BEEN ESTABLISHED BY UL FOR THE PARTICULAR TYPE OF FLECTRICAL MATERIAL IN QUESTION INSTALL FLECTRICAL MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS USING THE BEST METHODS KNOWN TO THE TRADE.
- PROVIDE TWO (2) SPARE LIGHT FIXTURES (TYPE USED FOR LIGHT POLE MOUNTING) TO THE OWNER AS PART OF THIS PROJECT.
- 27. AFTER TWO WEEKS OF COMPLETE INSTALLATION, CONTACT AND COORDINATE WITH THE CITY OF TAMPA ENGINEER FOR THE ORIENTATION, TILT, VISOR POSITIONS AND OTHER ADJUSTMENTS OF THE NEW LIGHTING SYSTEM AND FIXTURES, PROVIDED AS PART OF THIS PROJECT
- ALL PROPOSED UNDERGROUND CONDUITS SHALL BE MIN. 1.5" OR AS SHOWN IN THE PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO INVESTIGATE THE EXISTING UTILITIES IN THE PROJECT AREA BEFORE ANY EXCAVATION OR BORING, IT SHALL BE CONTRACTOR'S RESPONSIBILITY TO RESEARCH AND INVESTIGATE THE EXISTING UTILITIES IN THE WORK AREA. THE UTILITIES SHOWN IN THE PLANS ARE THE BEST OF INFORMATION AVAILABLE TO THE ENGINEER AND DRAWN FOR THE CONTRACTOR INFORMATION. THE CONTRACTOR SHALL FIELD VERIFY THE UTILITIES BEFORE ANY DIGGING, EXCAVATION OR BORINGS.
- COORDINATE WITH SITE DRAWINGS, OTHER DISCIPLINES, AND EXISTING CONDITIONS TO AVOID INTERFERENCE AND CONDITIONS THAT WILL NOT ALLOW THE INSTALLATION OF MATERIALS, AS INDICATED.
- 31. PULL BOXES SHALL BE SIZED WITH AT LEAST 50% MORE CAPACITY ABOVE AND BEYOND THE MINIMUM REQUIRED BY THE NEC LION
- FURNISH LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO INSTALL, 32. COMPLETE AND OPERABLE, THE ITEM OR SYSTEM INDICATED.
- PROVIDE ALL FITTINGS, SUPPORTS, JUNCTION BOXES, CLIPS, CONDULETS, RELATED COMPONENTS AND APPURTENANCES NECESSARY FOR MOUNTING UNDER-DECK AND ARTWORK LIGHTING. INSTALL UNDER-DECK LIGHT FIXTURES IN THE CENTER OF THE TWO BEAMS ON THE CEILING WITH WALL ADOPTERS AT LAUREL STREET BRIDGE COMPLETE AND FULLY FUNCTIONAL INSTALLATIONS.
- CONDUITS FOR CCTV FIBER OPTIC AND LIGHTING SHALL SHARE THE SAME TRENCH UON. PROVIDE PULL-STRING INSIDE THE EMPTY CCTV FIBER OPTIC CONDUIT FOR FUTURE USE. PULL-STRING SHALL BE CAPABLE OF PULLING FUTURE 12 STRAND FIBER OPTIC CABLE BETWEEN ADJACENT PULL BOXES.
- THE CONTRACTOR SHALL STAKE PROPOSED LIGHT POLE LOCATIONS IN THE FIELD FOR APPROVAL BY ELECTRICAL ENGINEER AND LANDSCAPE ARCHITECT

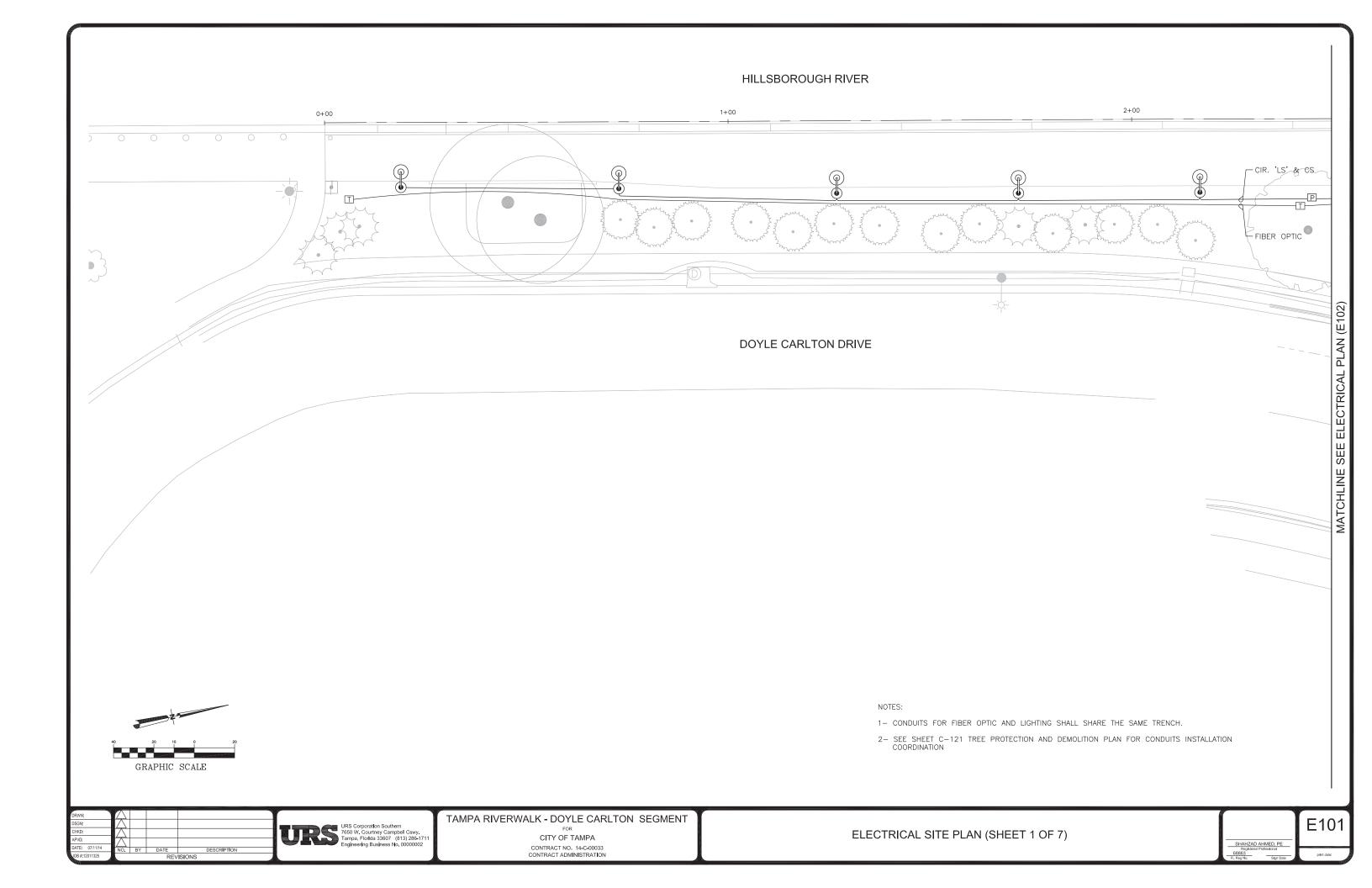


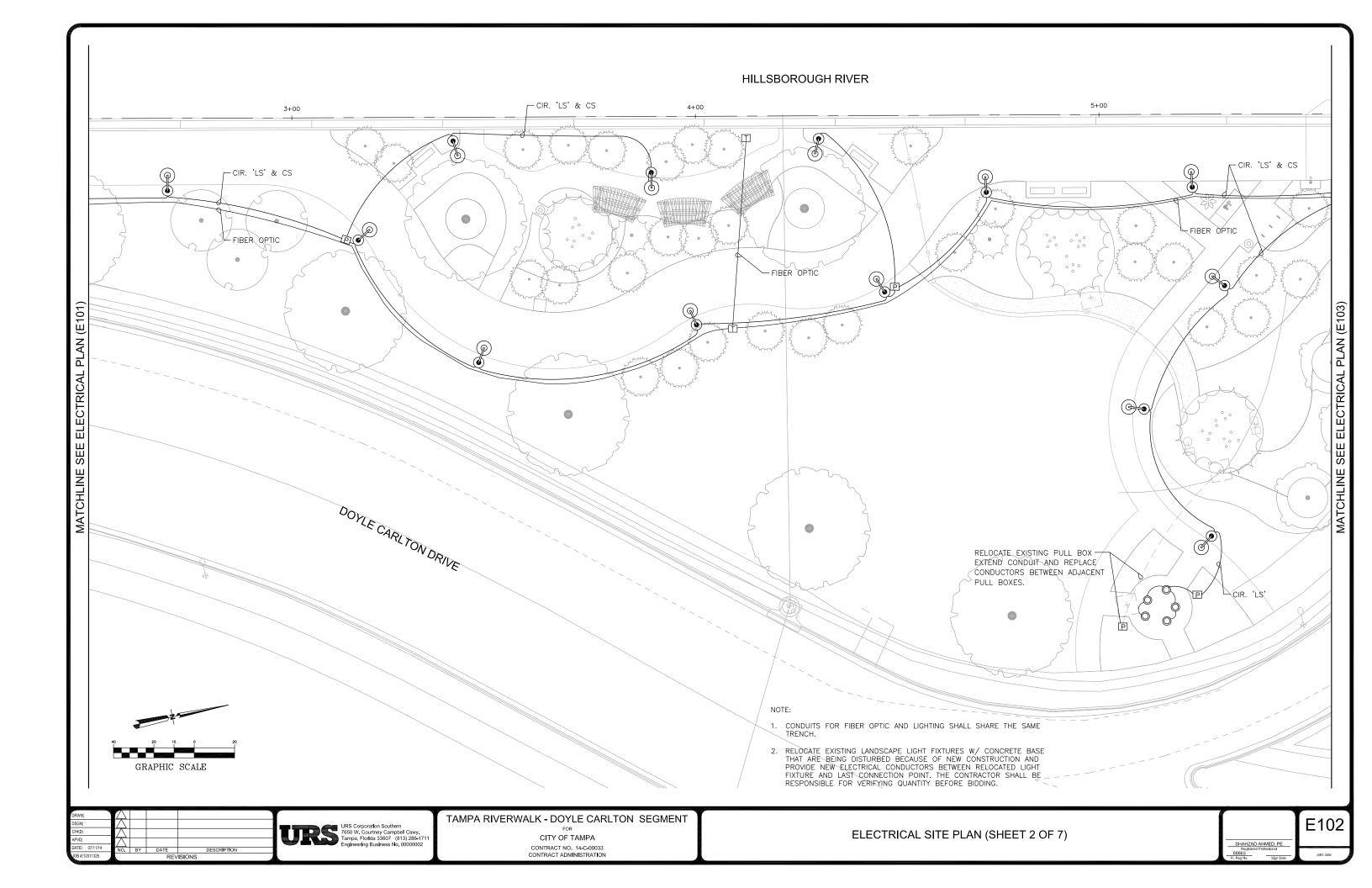


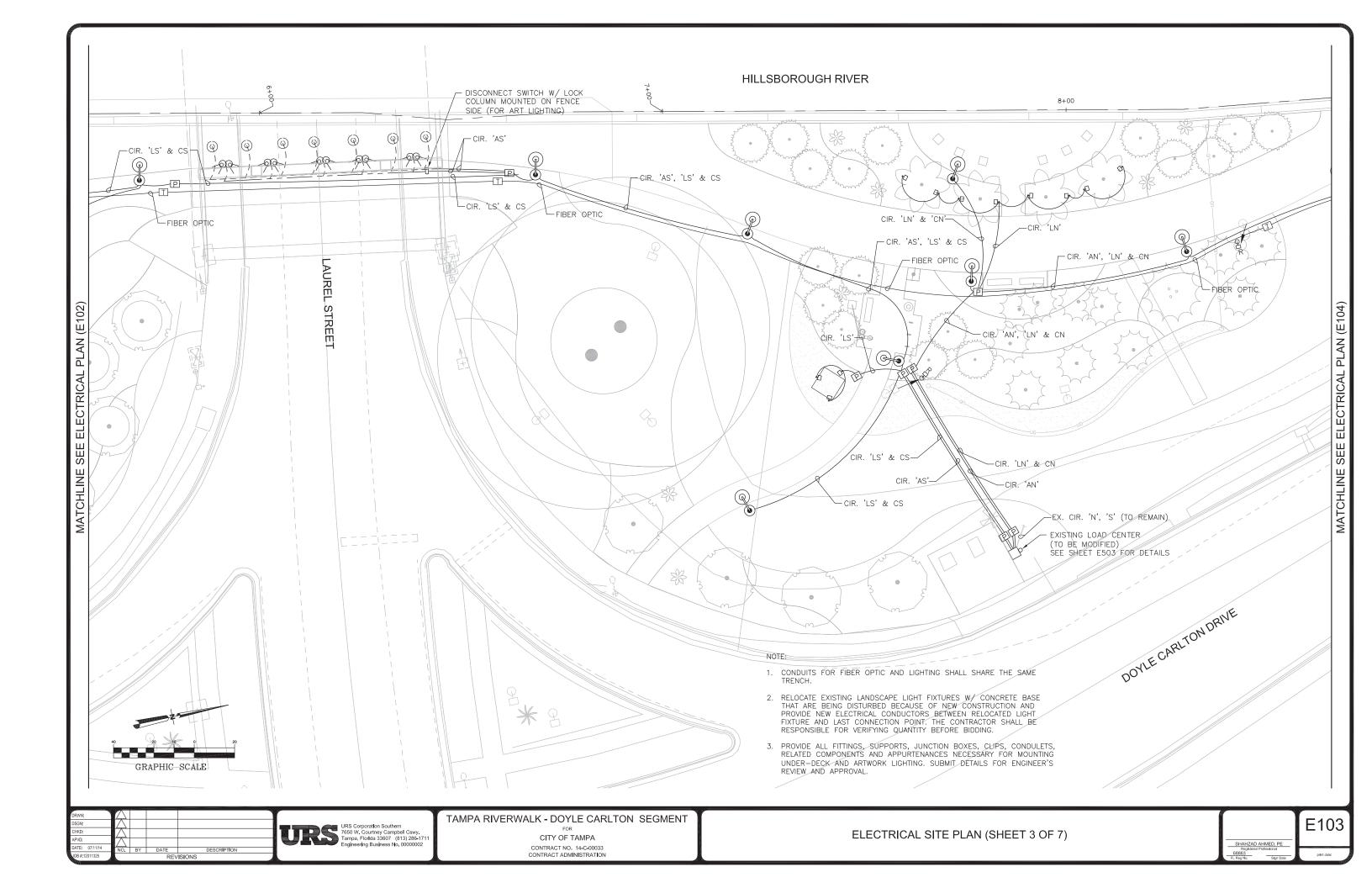
TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

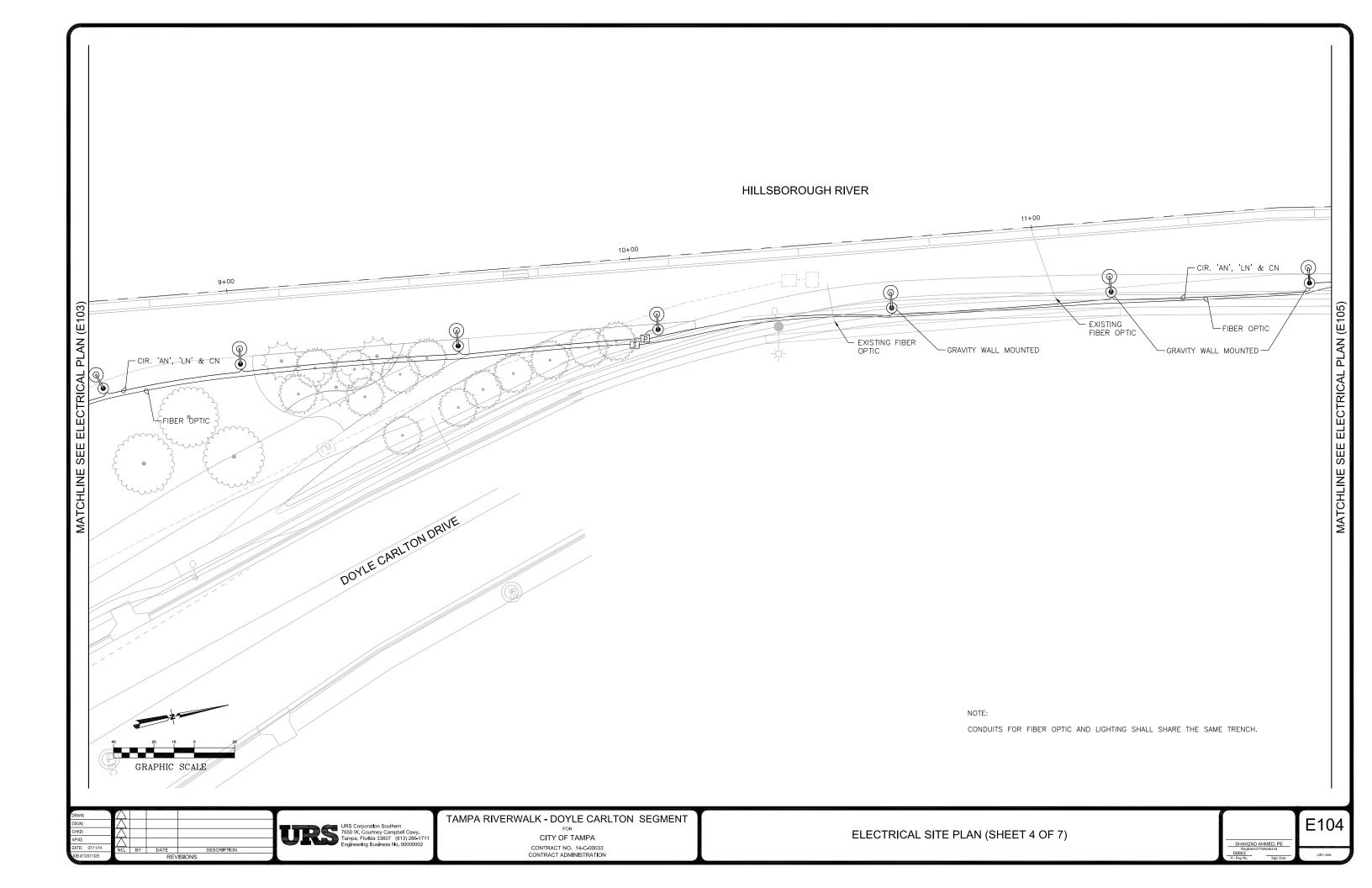
CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION **LEGEND & NOTE** 

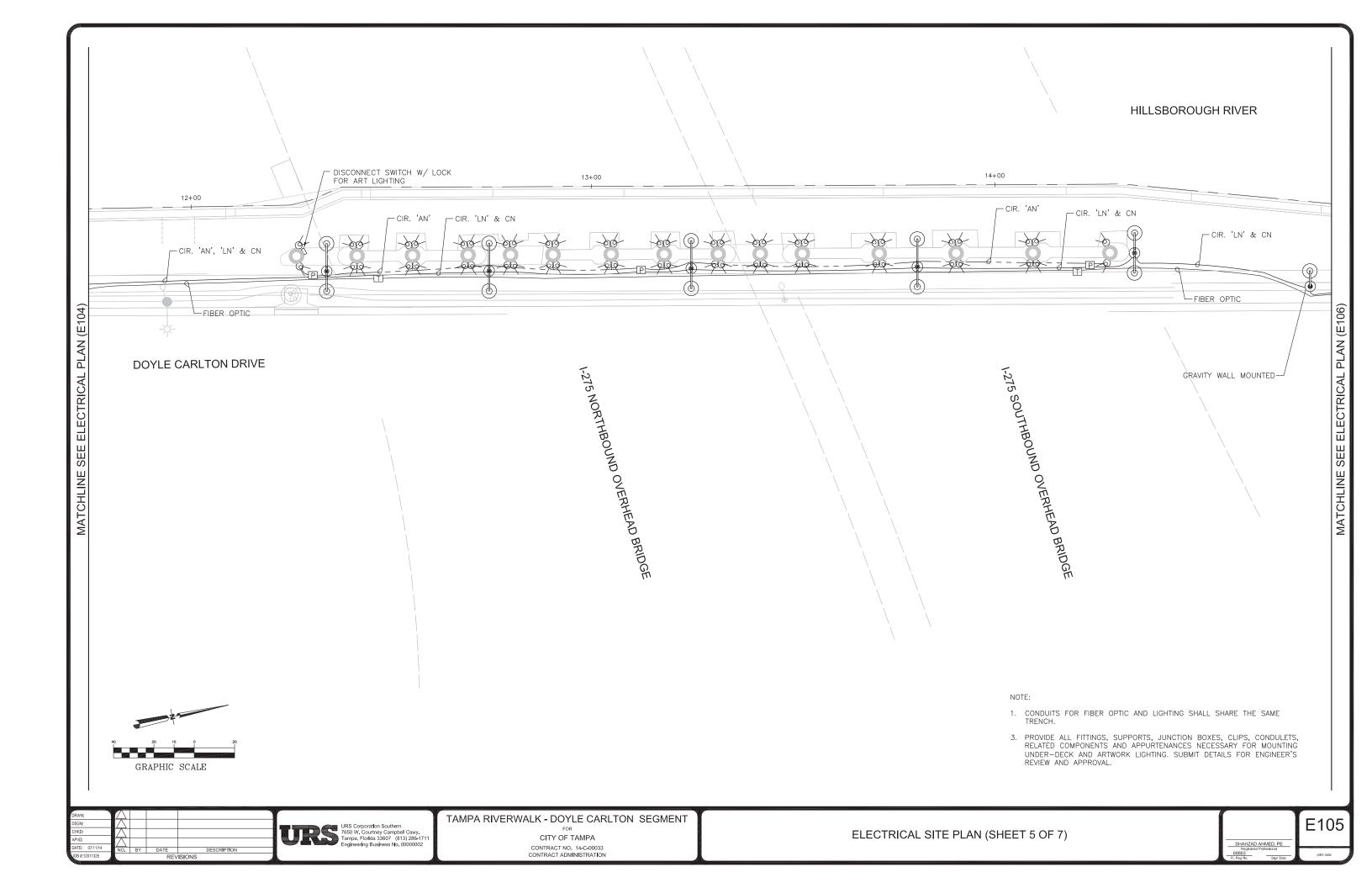
SHAHZAD AHMED, PE

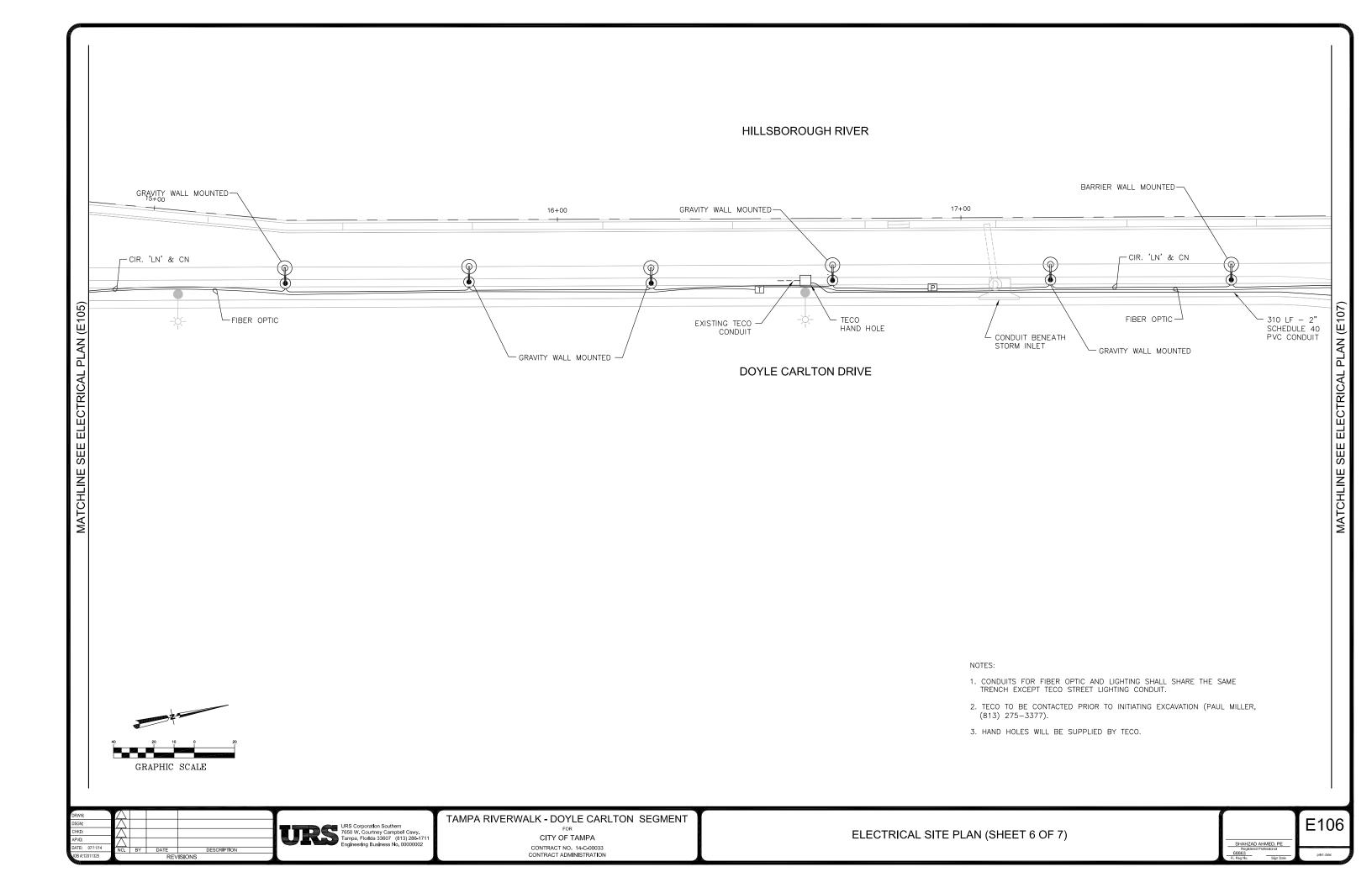


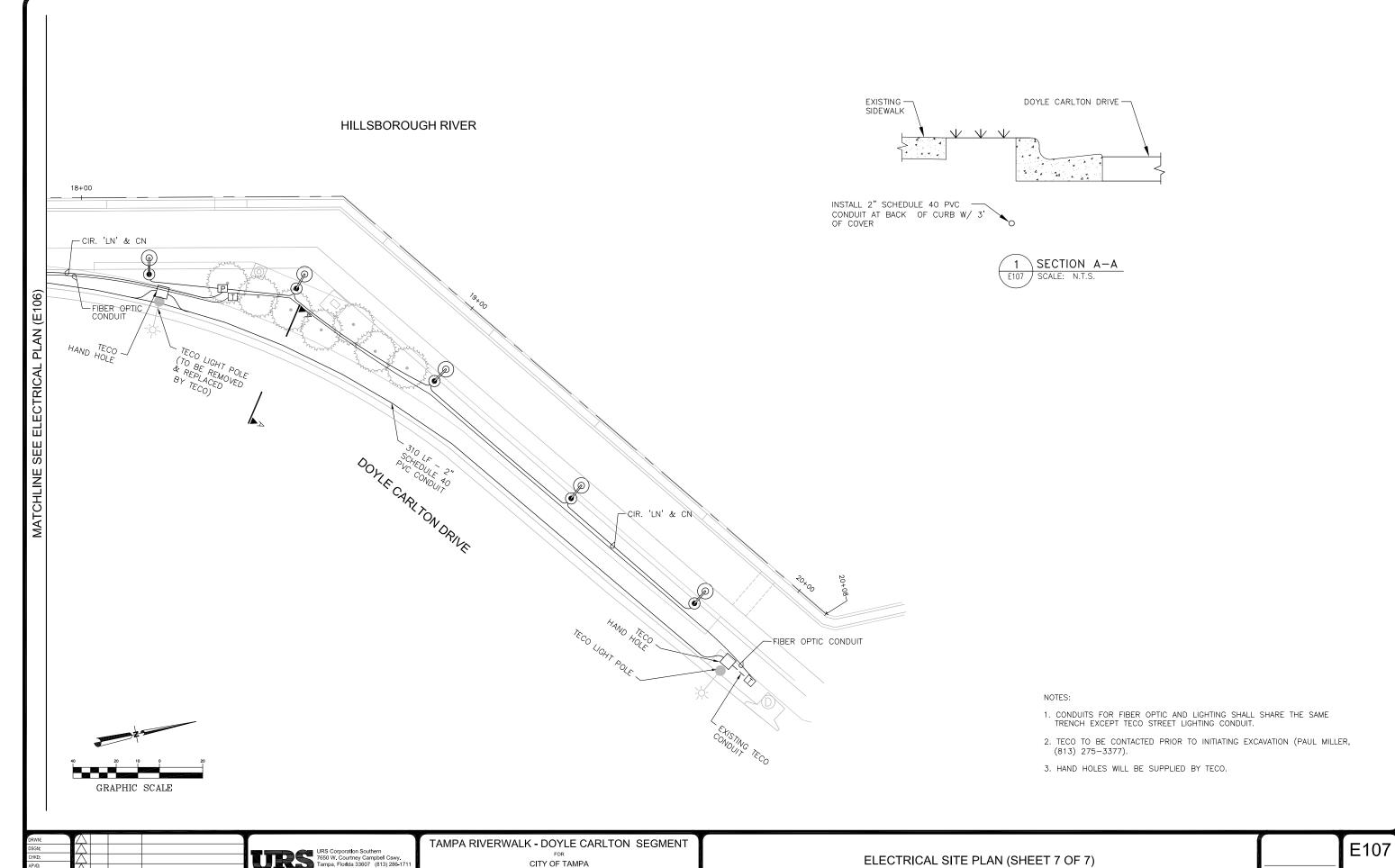












URS Corporation Southern 7650 W. Courtney Campbell Cswy. Tampa, Flodda 33007 (813) 286-171 Engineering Business No. 00000002

CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION

SHAHZAD AHMED, PE Registered Professional

LIGHTING FIXTURE SCHEDULE								
FIXT. TYPE	FIXTURE DESCRIPTION	MANUFACTURER & BASIS OF DESIGN	MODEL #	VOLT	MOUNTING	REMARKS		
SINGLE	POLE MOUNTED LED 4500K PENDANT LIGHT FIXTURE WITH TYPE II DISTRIBUTION. PROVIDE DOUBLE FUSE, BANNER ARMS, RECEPTACLE, SINGLE CLUSTER AND COLOR SILVER.	SELUX LIGHTING — BETA PENDANT LED LIGHTING — TYPE II DISTRIBUTION 40W, SILVER COLOR OR APPROVED EQUAL	BPL-R2-1C- 4TL0-45-SV-208	208	SINGLE LIGHT FIXTURE PER POLE — 14' MOUNTING HEIGHT	PROVIDE RECEPTACLE AND DUAL BANNER MOUNTING WITH ARMS		
DOUBLE	POLE MOUNTED LED 4500K (WHITE) DOUBLE PENDANT LIGHT FIXTURES WITH TYPE II DISTRIBUTION. PROVIDE DOUBLE FUSE, SINGLE CLUSTER AND COLOR SILVER.	SELUX LIGHTING — BETA PENDANT LED LIGHTING — TYPE II DISTRIBUTION 40W, SILVER COLOR OR APPROVED EQUAL	BPL-R2-2C- 4TL0-45-SV-208	208	DOUBLE LIGHT FIXTURE PER POLE - 14' MOUNTING HEIGHT	PROVIDE RECEPTACLE.		
DOUBLE	POLE MOUNTED LED 4500K (WHITE) DOUBLE PENDANT LIGHT FIXTURES WITH TYPE II DISTRIBUTION. PROVIDE DOUBLE FUSE, SINGLE CLUSTER AND COLOR SILVER.	SELUX LIGHTING — BETA PENDANT LED LIGHTING — TYPE II DISTRIBUTION 40W, SILVER COLOR OR APPROVED EQUAL	BPL-R2-2C- 4TL0-45-SV-208	208	DOUBLE LIGHT FIXTURE PER POLE — 14' MOUNTING HEIGHT	PROVIDE RECEPTACLE.		
UNDER DECK	UNDER DECK LIGHTING FIXTURE SURFACE MOUNTED, 4100K, NATURAL ALUMINUM COLOR, DOUBLE FUSE, TAMPER RESISTANT SCREWS	LITHONIA GATEWAY LIGHTING — SURFACE FIXTURE LED LIGHTING, ROUND OPEN FACE, CEILING MOUNTED OR APPROVED EQUAL	VGR5C-40LED-41- MVOLT-DNAT-DF- TRS-LPI	208	SURFACE MOUNT, CENTER THE LIGHT FIXTURE BETWEEN BRIDGE BEAMS	PROVIDE WALL ADOPTER, MOUNT UNDER THE BRIDGE CENTERED BETWEEN TWO BEAMS		
SCULPTURE#1 LIGHTING	IN-GRADE LED FIXTURE WITH MEDIUM FLOOD DISTRIBUTION. 4100 NEUTRAL WHITE, STAINLESS STEEL, FLAT ANTI-SLIP LENS, RATED IP67, UL LISTED, STAINLESS STEEL	HYDREL LIGHTING — IN-GRADE PARADOX 10 SERIES LED ARCHITECTURAL — MEDIUM FLOOD DISTRIBUTION OR APPROVED EQUAL	PDX10-SS-18LED- WHT41K-MVOLT-MFL- FLCAS-34S-LP	208	IN-GRADE	THE LIGHT FIXTURE SHALL BE PLACED AND ADJUSTED IN THE FIELD TO PROVIDE THE MAX. LIGHTING EFFECT FOR THE AMERICA—AMERICA ART PIECE. CONSULT ENGINEER AND CITY BEFORE FINAL PLACEMENT AND ADJUST IF REQUIRED.		
SCULTURE#2 AND TREE LIGHTING  •	STANCHION MOUNTED LED FLOOD FOR METAL ART LIGHTING AND PALM TREE UP-LIGHTING	LITHONIA LIGHTING, D-SERIES SIZE 2 LED FLOOD LUMINAIRE, UPPER/BOTTOM VISOR OR APPROVED EQUAL	DSXF2 LED — THREE COB ENGINES — A530/40K — FL — 208—IS—UBV—DNAXD	208	STANCHION — PROVIDE MOUNTING AS REQUIRED FOR 8" ABOVE GRADE	THE LIGHT FIXTURE SHALL BE PLACED AND ADJUSTED IN THE FIELD TO PROVIDE THE MAX. LIGHTING EFFECT FOR THE ART PIECE AND PALM TREES PLACED NORTH OF LAUREL STREET. CONSULT ENGINEER AND CITY BEFORE FINAL PLACEMENT AND MAKE ADJUSTMENTS AS REQUIRED.		
ART WORK LIGHTING	SIDE MOUNTED LED FLOOD FOR ART WORK LIGHTING, SEE DETAILS OF COLUMNS FOR MOUNTING ON ARCHITECT PLANS.	WINIONA BLANCA SERIES FLOOD SPOT LED LIGHTING, ROUND OPEN FACE OR APPROVED EQUAL	BSP-715-60-40K 120-277-A1-SIT-ST[	208	YOKE OR KNUCKLE AS REQUUIRED	PROVIDE MOUNTING INCLUDING HARDWARE AT LOCATIONS SHOWN ON ARCHITECTURE PLAN		

## NOTES :

- 1) LIGHT POLE SHALL BE SELUX ALUMINUM WITH STANDARD BASE COVER OR APPROVED EQUAL. ALL LIGHTING POLES SHALL BE ROUND STRAIGHT ALUMINUM IN THE HEIGHTS SHOWN, ALL POLES SHALL BE RATED AT FDOT RECOMMENDED STANDARDS FOR WIND SPEED AND PROVIDED WITH FLORIDA SIGNED AND SEALED ENGINEERED DRAWINGS. ALL POLES SHALL HAVE FULL BASE COVERS, NUT COVERS ALONE ARE NOT ACCEPTABLE. THREADED STEEL COLLAR REQUIRED FOR MOUNTING OF FIXTURE TO ARMS. SET SCREW TYPE MOUNTING OR ANY OTHER TYPE IS NOT ACCEPTABLE. SIDE BRACKET MOUNTING DESIGN FROM ARM TO POLE IS MANDATORY, TENON MOUNTING IS NOT ACCEPTABLE. BANNER ARM MOUNTING IS THRU THE USE OF A THREADED HUB, CLAMP BRACKETS OF ANY TYPE ARE NOT ACCEPTABLE.
- 2) SCULPTURE LIGHTING FIXTURES SHALL HAVE FINAL OPTICS DETERMINED ONCE AWARD OF PROJECT IS MADE. THERE SHALL NOT BE A COST DIFFERENCE BETWEEN DIFFERENT OPTICAL CHOICES FOR THIS TYPE. A SAMPLE FIXTURE MAY BE REQUIRED TO DETERMINE BEST REFLECTOR TYPE FOR THIS INSTALLATION, TO BE FIELD MODELED.
- 3) ART WORK LIGHTING MOUNTING BRACKET(S) DRAWINGS SHALL BE PROVIDED BY CONTRACTOR TO DETERMINE BEST METHOD OF INSTALLING THESE TYPES. A SUBMITTED DRAWING SHALL BE MADE AFTER AWARD FOR APPROVAL BY CONSULTING ENGINEER.
- 4) POLE RECEPTACLES SHALL BE GFCI TYPE AND HAVE WEATHERPROOF COVERS.
- 5) THE SPECIFIED LIGHTING PACKAGE HAS BEEN ENGINEERED AND SELECTED FOR PERFORMANCE AND AESTHETIC PURPOSES. ANY PROPOSED SUBSTITUTIONS SHALL BE REQUESTED IN WRITING, THRU CHANNELS, TO THE APPROPRIATE PERSON HANDLING THIS PROJECT. PRODUCT SAMPLES, PHOTOMETRIC CALCULATIONS, AND OTHER INFORMATION MAY/WILL BE REQUIRED FOR CONSIDERATION OF OTHER MANUFACTURERS. ONLY MANUFACTURERS BEING PRIOR APPROVED WILL BE CONSIDERED, NO APPROVAL OF OTHER FIRMS WILL BE CONSIDERED ONCE PROJECT HAS BEEN BID. MINIMUM 14 DAYS PRIOR TO BID REQUIRED FOR ANY SUBSTITUTION REQUESTS. ANY SUBSTITUTION REQUESTS MAY REQUIRE ENGINEERING COSTS TO BE BORNE BY SUBMITTING COMPANY AND/OR THE CONTRACTOR.
- 6) THE CONTRACTOR SHALL FACTOR ALL THE REQUIRED FILED ADJUSTMENTS AND HARDWARE AT THE TIME OF BID.



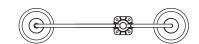
TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

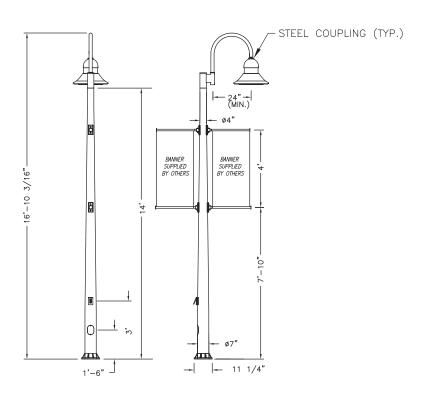
FOR
CITY OF TAMPA
CONTRACT NO. 14-C-00033
CONTRACT ADMINISTRATION

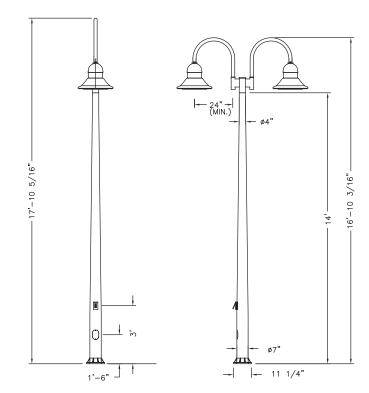
E501

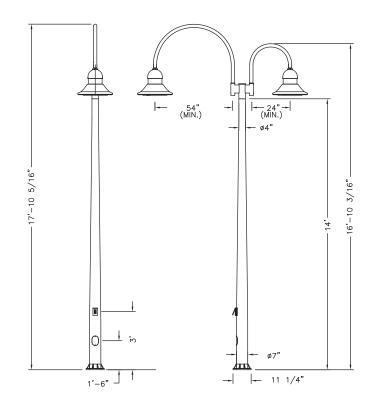












\LIGHT FIXTURE - SINGLE LUMINAIRE E502 | SCALE: N.T.S.

2 LIGHT FIXTURE - DOUBLE LUMINAIRE E502 SCALE: N.T.S.

3 LIGHT FIXTURE - DOUBLE LUMINAIRE (ONE ARM LONGER THAN OTHER)
SCALE: N.T.S.





(IN-GRADE)

4 LIGHT FIXTURE - UNDERDECK E502 | SCALE: N.T.S.

5 LIGHT FIXTURE - ART LIGHTING SCALE: N.T.S.

6 LIGHT FIXTURE - SCULPTURE LIGHTING

URS Corporation Southern
7650 W. Courtney Campbell Cswy.
Tampa, Floidda 33607 (813) 286-1711
Engineering Business No. 00000002

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

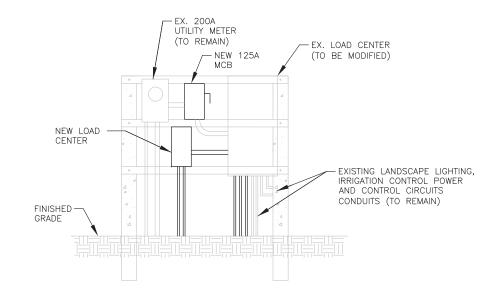
CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION

SCALE: N.T.S.

E502 SHAHZAD AHMED, PE Registered Professional

## **REFERENCE NOTES:**

- $\fbox{1}$  Existing meter with power service connection from teco power service 120/208V, single phase, 3 wire to remain.
- (2) EXISTING 3#1/0 AWG SERVICE CONDUCTORS CONDUIT TO REMAIN.
- (3) REPLACE EXISTING 60A SERVICE RATED MAIN DISCONNECT WITH MAIN CIRCUIT BREAKER 125A, 2P, SINGLE PHASE, 240V, 22KAIC, SERVICE RATED IN NEMA TYPE 4X ENCLOSURE WITH SOLID NEUTRAL KIT. PROVIDE TYPE 2 SURGE PROTECTION DEVICE (SPD) ON SECONDARY SIDE OF MAIN BREAKER
- 4 USE EXISTING COPPER GROUNDING ELECTRODE CONDUCTOR FOR
- (5) PROVIDE NEUTRAL GROUND BOND IN THE DISCONNECT.
- (6) 3 #1/0 AWG, 1#4 AWG GND IN 2"C.
- T EXISITING 24"X36"X10" NEMA 4X STAINLESS STEEL ENCLOSURE WITH BACKPANEL TO REMAIN. REMOVE EXISTING RECEPTACLE INSIDE THE ENCLOSURE, CONDUCTORS, AND RELATED CIRCUIT BREAKER. ARRANGE THE EXISTING AND PROPOSED CIRCUIT BREAKERS, CONTACTOR, CONDUCTORS, AND OTHER ITEMS IN THE ENCLOSURE FOR A CLEAN INSTALLATION.
- (8) EXISTING PANEL MOUNT POWER DISTRIBUTION BLOCKS (PDB) TO REMAIN.
- (9) EXISTING TWO 20A BACKPANEL MOUNTED CIRCUIT BREAKERS FOR LANDSCAPE LIGHTING CIRCUIT 'N' AND 'S' TO REMAIN.
- (10) REPLACE EXISTING ELECTRICALLY HELD 6 POLE LIGHTING CONTACTOR WITH 12 POLE 100A, 240V RATED CONTACTS AND 24V COIL VOLTAGE. USE TWO POLES FOR 208V WALKWAY, ART LIGHTING UNDER 1-275, AND EXISTING LANDSCAPE LIGHTING CIRCUITS. CONTACTOR SHALL BE OPERATED BY 24V SIGNAL FROM THE EXISTING IRRIGATION CONTROLLER FROM LANDSCAPE
- (11) EXISTING 2#14AWG CONDUCTORS (24V SIGNAL CIRCUIT) IN CONDUIT FROM IRRIGATION CONTROLLER TO THE LIGHTING CONTACTOR TO REMAIN.
- (12) EXISTING 208V CIRCUIT FOR EXISTING LANDSCAPE LIGHTING CIRCUITS TO
- (13) EXISTING IRRIGATION SYSTEM POWER CIRCUIT TO BE CONNECTTED TO NEW CONTACOTR.
- (14) PROVIDE 600V TIN PLATED COPPER PANEL MOUNT POWER DISTRIBUTION BLOCKS (PDB) SUITABLE FOR USE WITH COPPER CONDUCTORS. PROVIDE ONE 2P PDB (A AND B PHASE).
- THREE 20A, 2P, 240V, 10 KAIC, BACKPANEL MOUNTED CIRCUIT BREAKERS FOR WALKWAY LIGHTING CIRCUITS 'LN', 'LS', AND 'AN' ART LIGHTING UNDER I-275 BRIDGE.
- (16) 60A, 2P, 208V, 10 KAIC, BACKPANEL MOUNTED CIRCUIT BREAKER TO THE NEW LOAD CENTER. PROVIDE 2 #4 AWG, 1#4 AWG GND TO NEW LOAD
- (T) NEW 60A, 240V, SINGLE PHASE, NEMA RATED 4X ENCLOSURE, NEUTRAL AND GROUND BARS LOAD CENTER WITH SIX 20A, 1P, 10 KAIC, CIRCUIT BREAKERS. USE THREE 20A CIRCUIT BREAKERS FOR RECEPTACLE CIRCUITS 'CN', 'CS', AND 'AS' ART/UNDERDECK LIGHTING AND THREE CIRCUIT BREAKERS SPARES.
- (18) 2#6 AWG, 120V CIRCUIT FOR RECEPTACLES.
- $\overleftarrow{\mbox{(9)}}$  2#6 AWG, 120V CIRCUIT FOR ART LIGHTING UNDER I-275 BRIDGE. PROVIDE 1#6 AWG GND CONDUCTOR WHERE CIRCUIT IS NOT IN SHARED CONDUIT.
- (20) 2#6 AWG, 120V CIRCUIT FOR ART AND UNDERDECK LIGHTING UNDER LAUREL STREET BRIDGE. PROVIDE 1#6 AWG GND CONDUCTOR WHERE CIRCUIT IS NOT IN SHARED CONDUIT.
- 21) 2 #4 AWG, 1#6 AWG GND, 208V CIRCUIT FOR WALKWAY LIGHTING CIRCUITS 'LN' AND 'LS'





EXISTING AND PROPOSED SERVICE LOAD SU	JMMARY
EXISTING LANDSCAPE LIGHTING	2.0 KW
EXISTING IRRIGATION SYSTEM	0.2 KW
PROPOSED LIGHTING	7.3 KW
PROPOSED RECEPTACLES	6.0 KW
PROJECTED DEMAND AFTER PROJECT (KVA)	15.5 KVA
PROJECTED DEMAND AFTER PROJECT @ 208V (AMPERES)	74.5 AMPERES

URS Corporation Southern 7650 W. Courtney Campbell Cswy. Tampa, Florida 33607 (813) 286-171

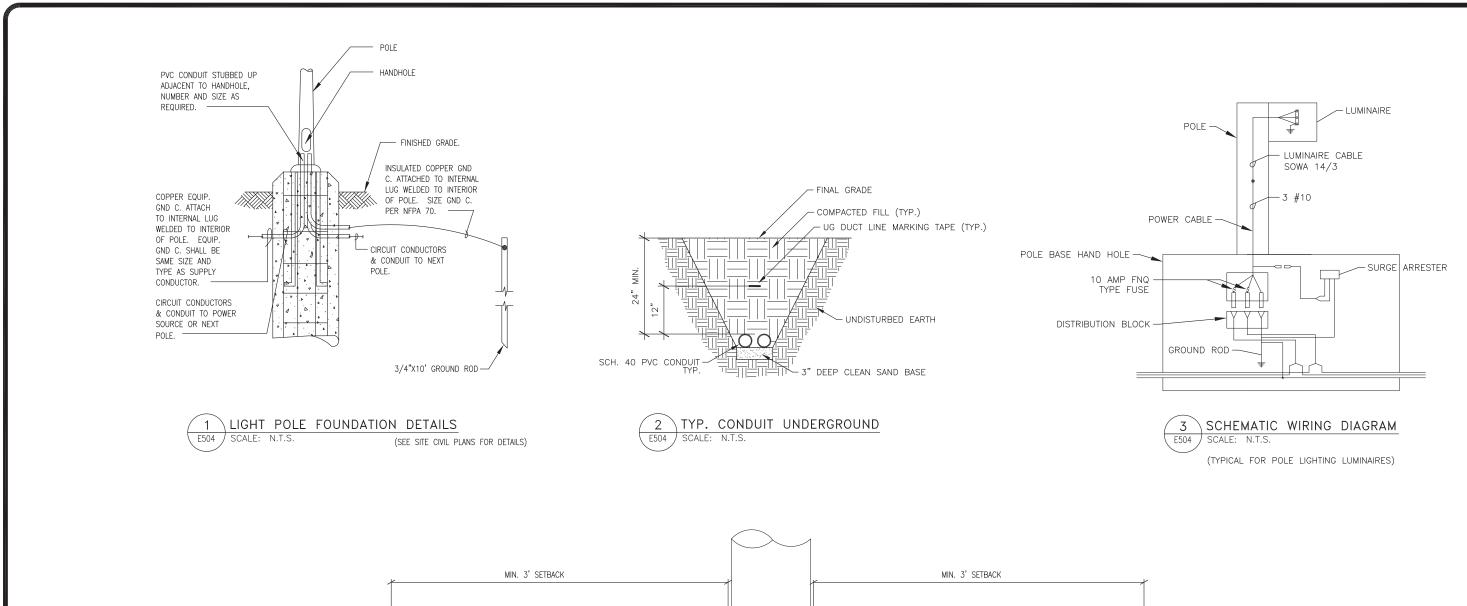
TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

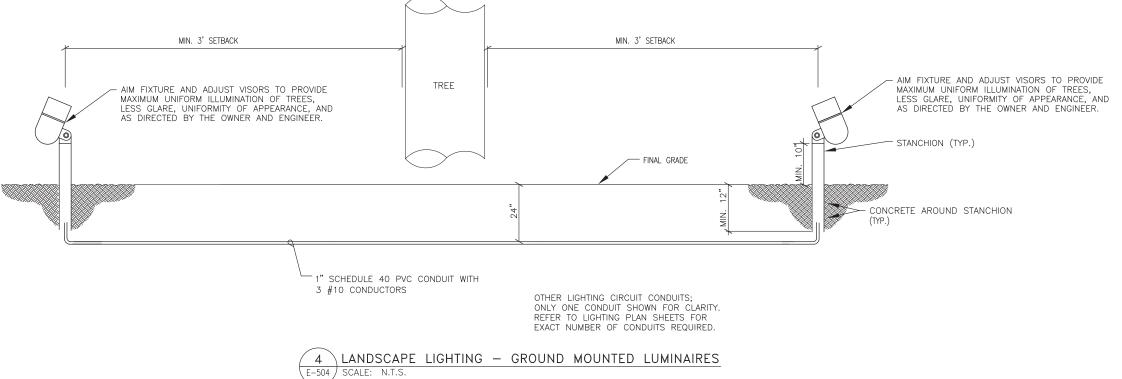
CONTRACT ADMINISTRATION

CITY OF TAMPA CONTRACT NO. 14-C-00033

ELECTRICAL DETAILS (3 OF 5)

E503 SHAHZAD AHMED, PE





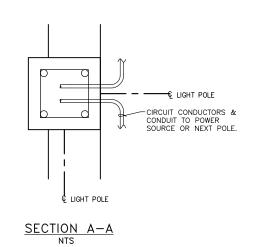
URS Corporation Southern 7650 W. Courtney Campbell Cswy. Tampa, Florida 33607 (813) 286-171

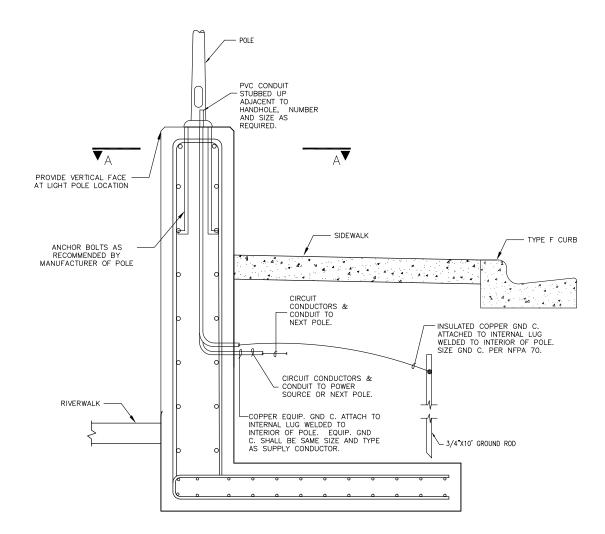
TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

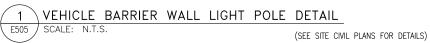
CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION ELECTRICAL DETAILS (4 OF 5)

SHAHZAD AHMED, PE Registered Professional

E504

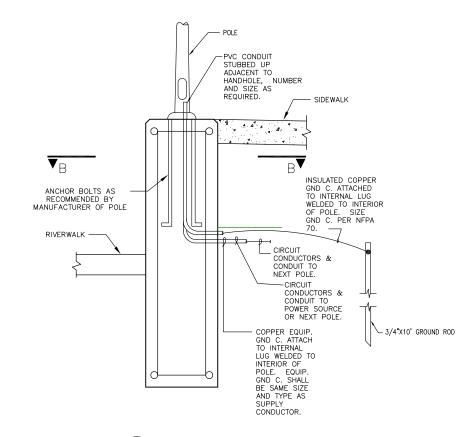






© LIGHT POLE & 18" Ø CONCRETE SHAFT 18" Ø CONCRETE SHAFT CIRCUIT CONDUCTORS & CONDUIT TO POWER SOURCE OR NEXT POLE.

 $\frac{\text{SECTION} \ \ B-B}{\text{NTS}}$ 



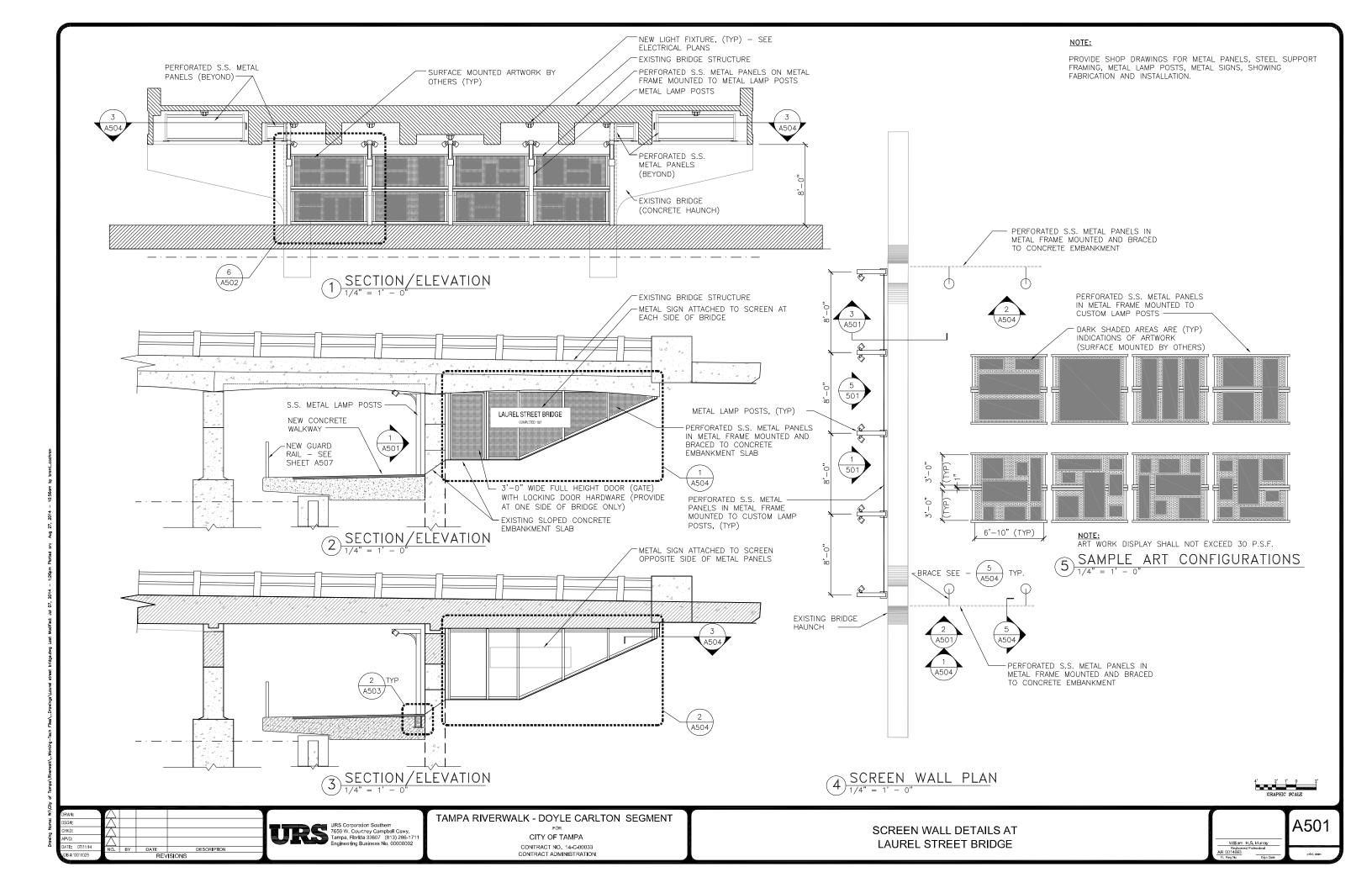
2 GRAVITY WALL LIGHT POLE DETAIL E505 | SCALE: N.T.S. (SEE SITE CIVIL PLANS FOR DETAILS)

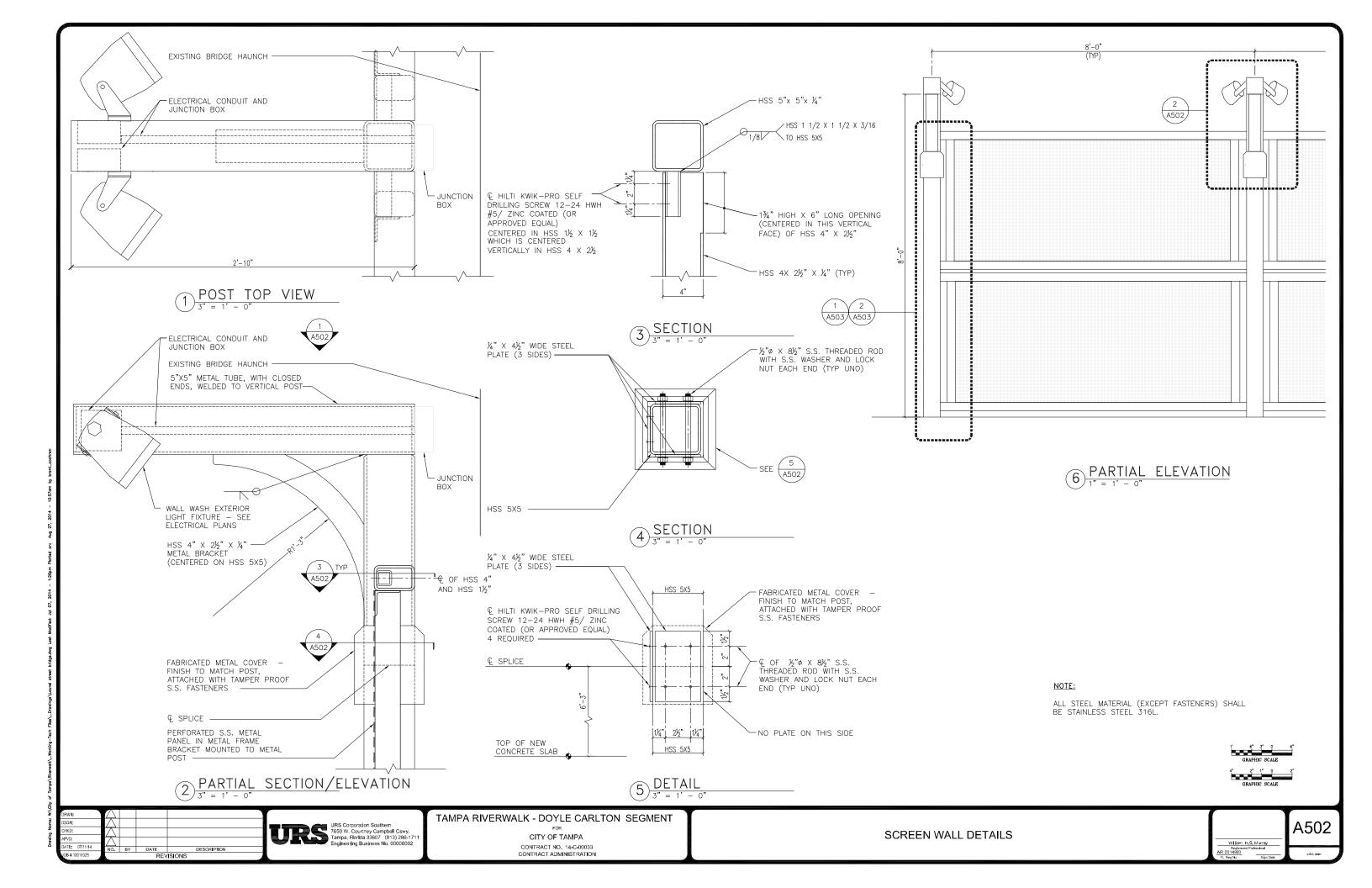
URS Corporation Southern 7650 W. Courtney Campbell Cswy. Tampa, Florida 33607 (813) 286-171 Engineering Business No. 00000002

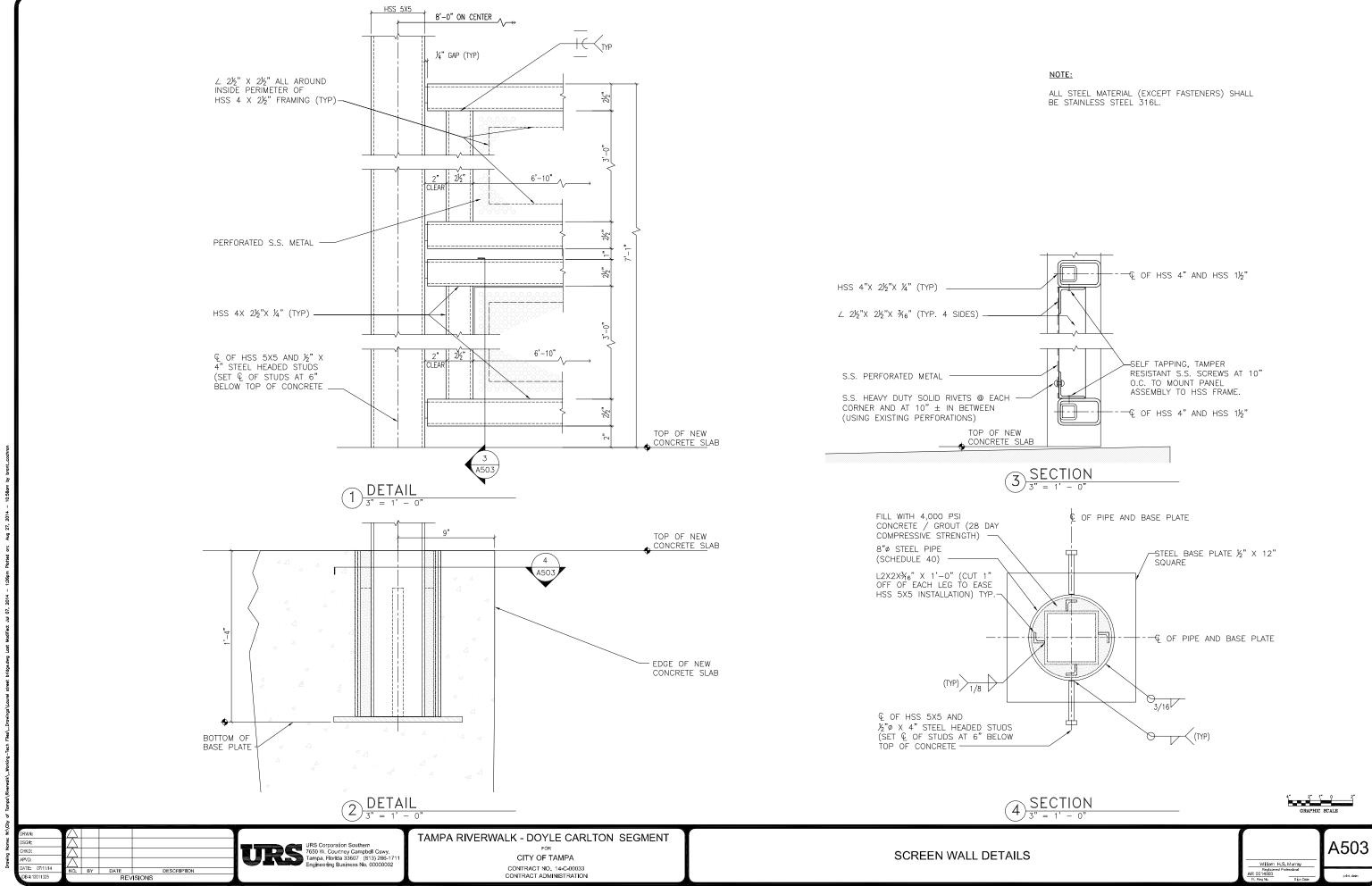
TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

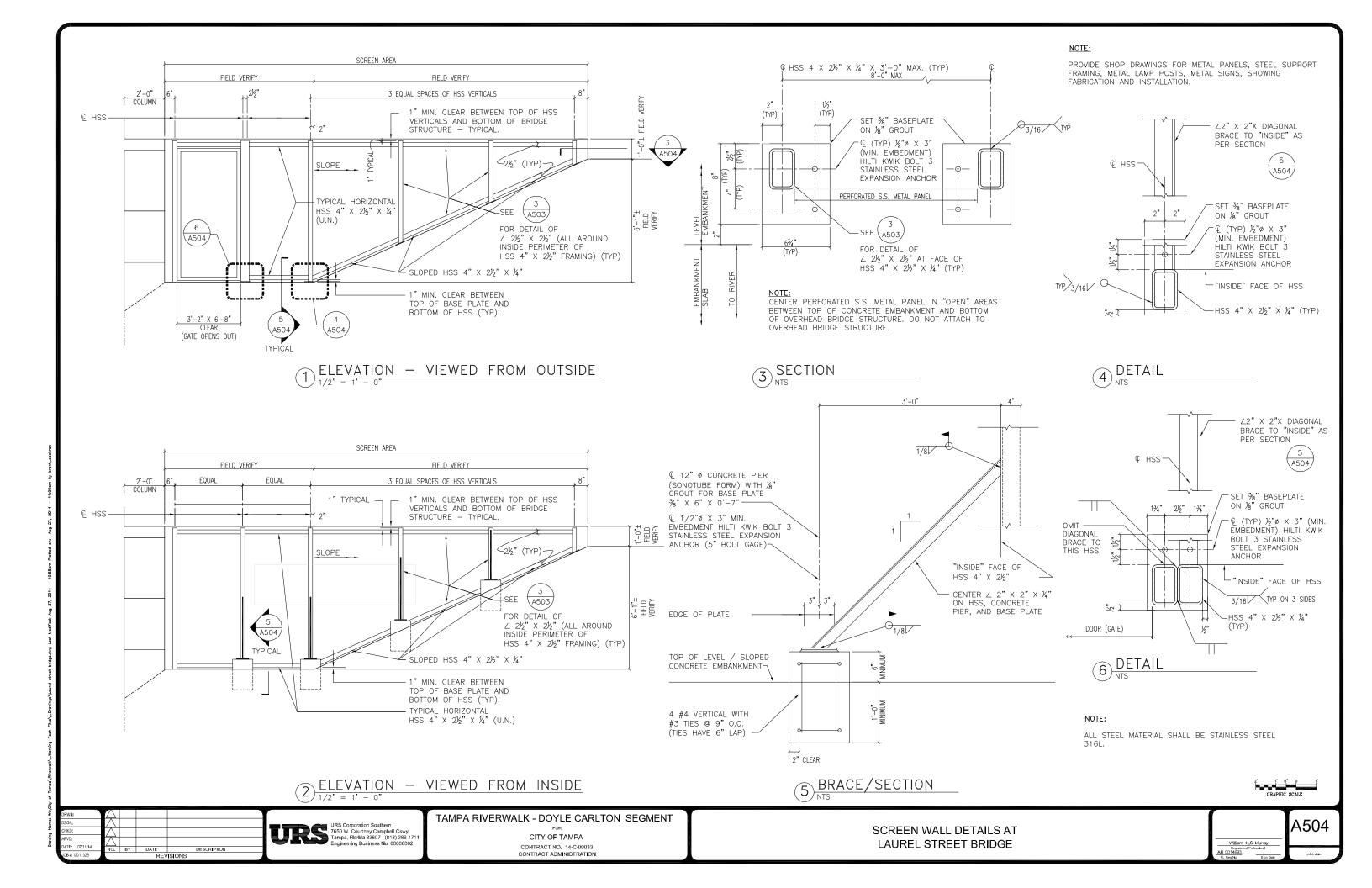
CITY OF TAMPA CONTRACT NO. 14-C-00033 CONTRACT ADMINISTRATION **ELECTRICAL DETAILS 5 OF 5** 

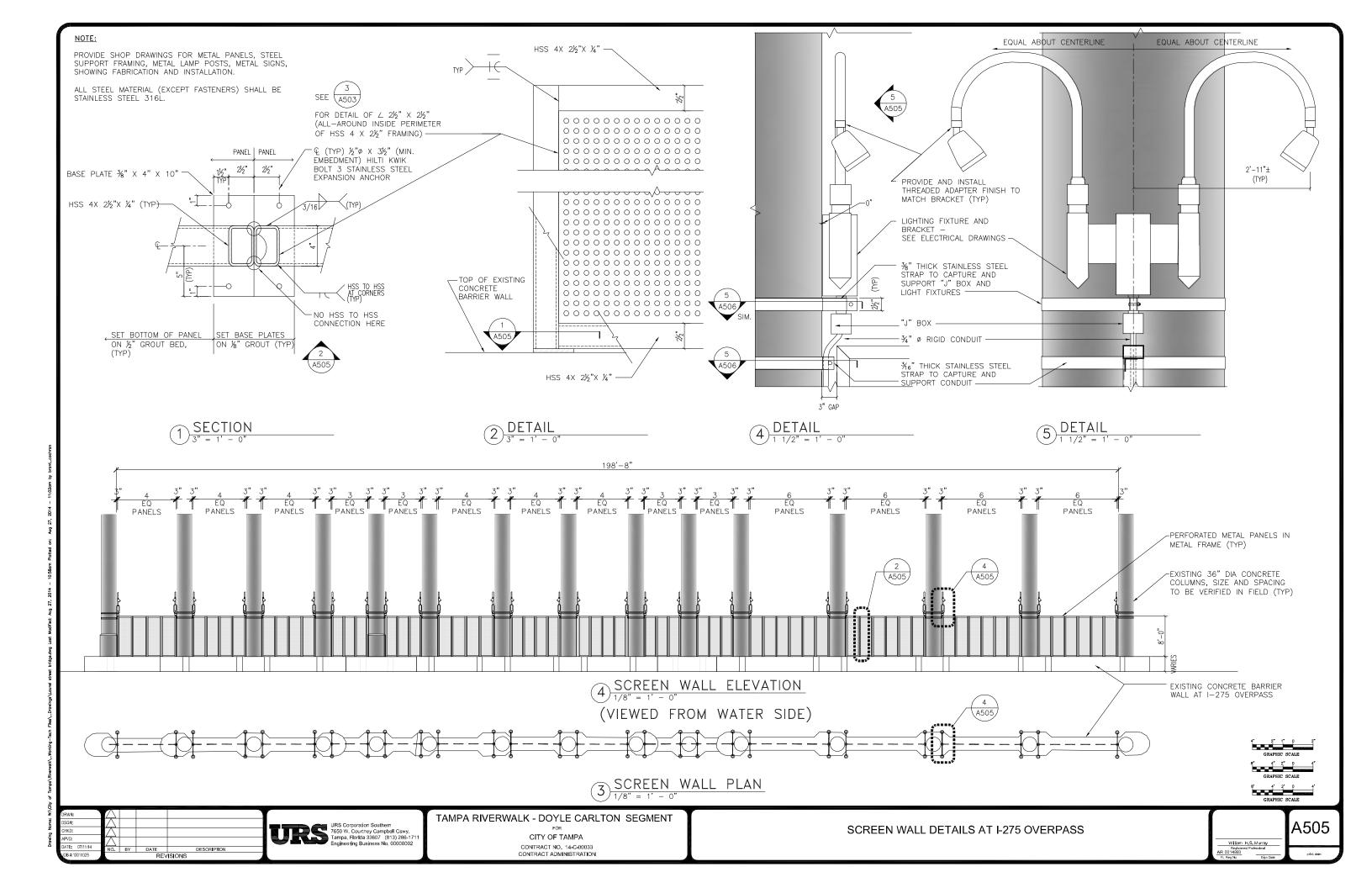
E-505

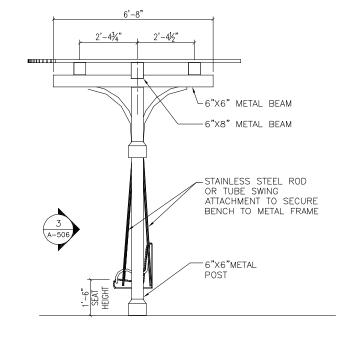


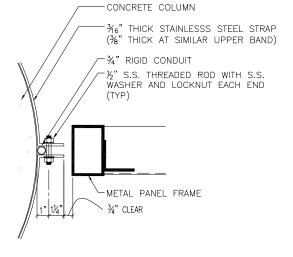












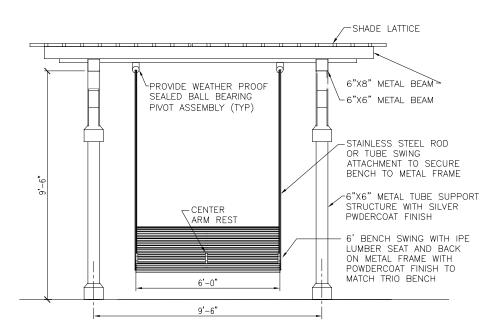
5 STAINLESS STEEL STRAP DETAIL

 $\underbrace{1) \frac{\text{BENCH SWING PLAN}}{1/2" = 1' - 0"}}$ 

2 BENCH SWING ELEVATION

1/2" = 1' - 0"

NOTE: SEE ARCHITECTURAL PERFORMANCE SPECIFICATIONS FOR ADDITIONAL BENCH SWING INFORMATION



(4) BENCH SWING PERSPECTIVE

BENCH SWING ELEVATION

1/2" = 1' - 0"

GRAPHIC SCALE

2 1 6 0 1

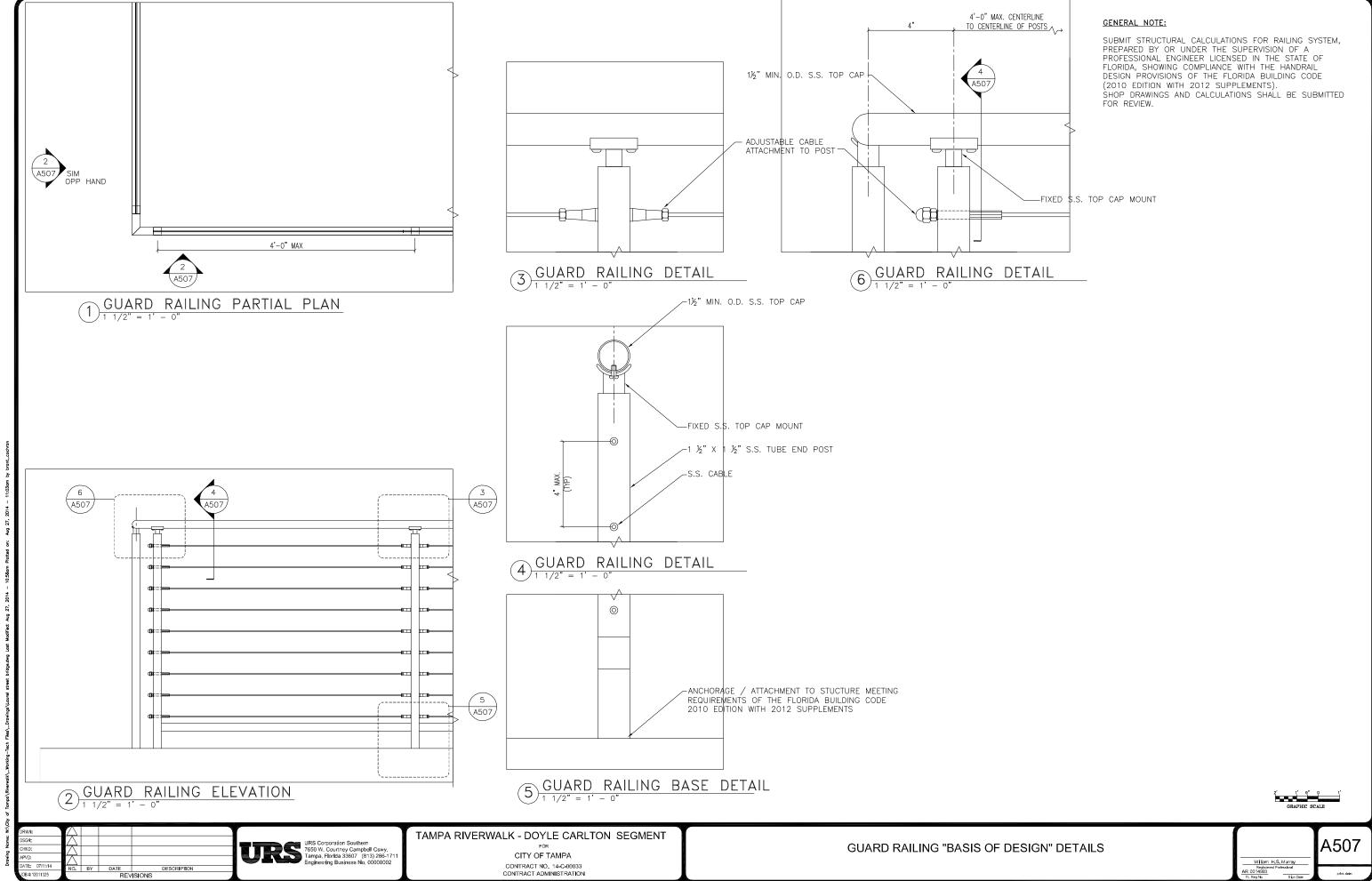
GRAPHIC SCALE

TAMPA RIVERWALK - DOYLE CARLTON SEGMENT

CITY OF TAMPA
CONTRACT NO. 14-C-00033
CONTRACT ADMINISTRATION

BENCH SWING DETAILS

William H.S. Murray
Replatiend Protested
AR DOT 148 No. Sejn Date
print date:



William H.S. Murray
Registered Professional
R 0014993
FL Reg No. 2000