The Enclosed Document Is Provided For Your Convenience.

Please Email ALL Questions:

MailTo:ContractAdministration@TampaGov.net

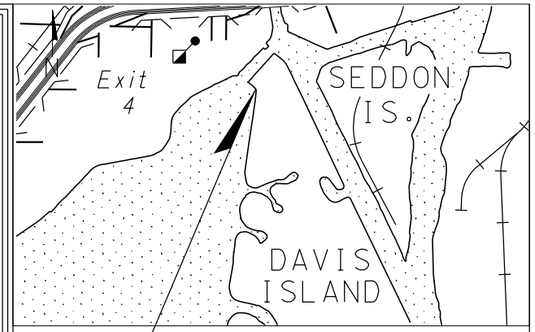
Please Let Us Know If You Plan To Bid

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

CITY OF TAMPA

STRUCTURES PLANS

DAVIS ISLANDS SEAWALL REPAIR



PROJECT LOCATION

VICINITY MAP

0 1000 2000
FT

INDEX OF DRAWINGS

LIST OF REVISED INDEX DRAWINGS

INDEX NO.	SHEET NO.

GOVERNING STANDARDS & SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION, 2015
DESIGN STANDARDS AND REVISED INDEX DRAWINGS
AS APPENDED HEREIN, AND 2015 STANDARD
SPECIFICATIONS FOR ROAD AND BRIDGE
CONSTRUCTION, AS AMENDED BY CONTRACT DOCUMENTS

FOR DESIGN STANDARDS CLICK ON THE "DESIGN STANDARDS"
LINK AT THE FOLLOWING WEB SITE:
http://www.dot.state.fl.us/rddesign/

FOR THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE
CONSTRUCTION CLICK ON THE "SPECIFICATIONS" LINK
AT THE FOLLOWING WEBSITE:
http://www.dot.state.fl.us/specificationsoffice/

JANUARY 2015

CITY OF TAMPA

DEPARTMENT OF TRANSPORTATION

AND STORMWATER SERVICES

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA

Kisinger Campo & Associates Corp.
One Tampa City Center
201 N. Franklin St., Suite 400
Tampa, Florida 33602
Florida Certificate of Authorization No 02317

APPROVED BY:

ALTAF BUKARI, P.E.
PROJECT ENGINEER

CERTIFICATION

Sheet 1 to 11 Inclusive, Certified By:

KIPLING LASKARIS, P.E.
P.E. No 75005

PRIMARY SCOPE OF WORK

SEAWALL REPAIR

DRAWINGS AND DIMENSIONS

1. DO NOT SCALE DRAWINGS FOR DIMENSIONS NOT GIVEN.
2. VERIFY ALL EXISTING FIELD CONDITIONS AND DIMENSIONS PRIOR TO COMMENCING REPAIRS OR ORDERING ANY MATERIALS. NOTIFY ENGINEER OF ANY DISCREPANCIES FOUND.
3. ALL DIMENSIONS ARE IN FEET AND INCHES.
4. ALL DIMENSIONS IN THESE PLANS ARE GIVEN EITHER HORIZONTALLY OR VERTICALLY, UNLESS OTHERWISE NOTED.

REINFORCING STEEL

1. ALL REINFORCING STEEL SHALL BE ASTM A615-96, GRADE 60.
2. ALL DIMENSIONS PERTAINING TO LOCATION OF REINFORCEMENT ARE TO CENTERLINE OF BARS EXCEPT WHERE THE CLEAR DIMENSION IS SHOWN TO FACE OF CONCRETE.
3. REINFORCEMENT DETAIL DIMENSIONS ARE OUT-TO-OUT OF BARS.
4. TYPICAL REINFORCING BARS ARE DESIGNATED THUS:

4 - 8 B1 ← MARK

QUANTITY — SIZE

ENVIRONMENT

LOCATION = COASTAL (SALT-WATER) EXTREMELY AGGRESSIVE

UTILITIES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT (800) 432-4770 AND ANY OTHER LOCAL UTILITIES TO VERIFY EXISTING UTILITIES AT SITE OF CONSTRUCTION. IF ANY EXISTING UTILITIES CONFLICT WITH PROPOSED CONSTRUCTION METHODS, MATERIALS, OR EQUIPMENT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

DATUM

CONTRACTOR SHALL VERIFY ALL EXISTING SURVEY DATA AND DIMENSIONS IN THE FIELD.

PAY ITEM NOTE

REPLACEMENT OF ANCHOR BOLTS AND NUTS IN NEW CAP AND REPLACEMENT OF NUTS AND COLD GALVANIZING OF ANCHOR BOLTS IN CAP TO REMAIN IS INCIDENTAL TO PAY ITEM 400-4-8, CONCRETE CLASS IV, BULKHEAD.

INCIDENTAL ITEMS

PAYMENT FOR INCIDENTAL ITEMS NOT SPECIFICALLY COVERED IN THE INDIVIDUAL PAY ITEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR BID ITEMS CONTAINED IN THIS CONTRACT.

SITE CONDITIONS

THE CONTRACTOR SHALL BE AWARE OF THE SITE CONDITIONS WITH REGARD TO WATER DEPTH. SEA GRASS BEDS (WHILE NONE WERE OBSERVED) AND OTHER HABITAT SHALL NOT BE DISTURBED.

MATERIAL PRODUCTS

MATERIALS MEETING THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS SHALL BE INSTALLED IN ACCORDANCE WITH APPROVED MANUFACTURER'S RECOMMENDATIONS.

RIPRAP

1. RIPRAP SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 530 OF THE SPECIFICATIONS.
2. RIPRAP PLACEMENT SHALL BE FROM LAND.

CONCRETE RESTORATION

FOR REQUIREMENTS ON SURFACE PREPARATION MIXING, PLACING, FINISHING, MATERIALS, AND OTHER RELATED ITEMS, REFER TO THE SPECIFICATIONS.

COAST GUARD

THE UNITED STATES COAST GUARD SHALL BE CONTACTED 60 DAYS IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES FOR APPROVAL BEFORE CONSTRUCTION COMMENCES.

CONCRETE

ALL CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 346 OF THE FDOT SPECIFICATIONS.

CLASS	MINIMUM 28-DAY COMPRESSIVE STRENGTH (PSI)	LOCATION IN STRUCTURE
IV	5500	BULKHEAD CAP/RAILING

ADDITIONAL CORROSION PROTECTION MEASURES IN THE CLASS IV CONCRETE SHALL INCLUDE THE USE OF ADMIXTURES. THESE ADMIXTURES SHALL BE USED IN ACCORDANCE WITH SECTION 346 OF THE FDOT SPECIFICATIONS AND SHALL INCLUDE SILICA FUME AND CALCIUM NITRATE. THE QUANTITY OF CEMENTITOUS MATERIALS REPLACED WITH SILICA FUME SHALL BE 7% TO 9% BY WEIGHT, AND CALCIUM NITRATE SHALL BE ADDED TO THE CONCRETE MIXTURE PER SECTION 924-2.7 OF THE FDOT SPECIFICATIONS.

JOINTS IN CONCRETE

CONSTRUCTION JOINTS WILL BE PERMITTED ONLY AT LOCATIONS INDICATED ON THE PLANS. ADDITIONAL CONSTRUCTION JOINTS OR ALTERATIONS TO THOSE SHOWN SHALL REQUIRE APPROVAL OF THE ENGINEER.

CONCRETE FINISHES

FINISH IN ACCORDANCE WITH SECTION 400-15 OF THE FDOT SPECIFICATIONS UNLESS OTHERWISE NOTED. PROVIDE 3/4" CHAMFERS ON ALL EXPOSED EDGES UNLESS OTHERWISE NOTED.

CONCRETE COVER

CONCRETE COVER SHOWN IN THE PLANS DOES NOT INCLUDE PLACEMENT OR FABRICATION TOLERANCES UNLESS SHOWN AS "MINIMUM COVER." SEE FDOT SPECIFICATIONS FOR ALLOWABLE TOLERANCES. UNLESS OTHERWISE SHOWN ON THE PLANS, THE FOLLOWING CONCRETE COVERS SHALL BE USED:

CIP SUBSTRUCTURE = 4" FOR EXTERNAL FORMED SURFACES

SPECIAL SEA TURTLE AND SMALLTOOTH SAWFISH CONDITIONS:

1. ALL PERSONNEL ASSOCIATED WITH THE PROJECT SHALL BE INSTRUCTED OF THE POTENTIAL PRESENCE OF THESE SPECIES AND THE NEED TO AVOID COLLISIONS WITH SEA TURTLES AND SMALLTOOTH SAWFISH. ALL CONSTRUCTION PERSONNEL ARE RESPONSIBLE FOR OBSERVING WATER-RELATED ACTIVITIES FOR THE PRESENCE OF THESE SPECIES.
2. ADVISE ALL CONSTRUCTION PERSONNEL THERE THERE ARE CIVIL AND CRIMINAL PENALTIES FOR HARMING, HARASSING, OR KILLING SEA TURTLES OR SMALLTHOOTH SAWFISH, WHICH ARE PROTECTED UNDER THE ENDANGERED SPECIES ACT OF 1973.
3. SILTATION BARRIERS SHALL BE MADE OF MATERIAL IN WHICH A SEA TURTLE OR SMALLTOOTH SAWFISH CANNOT BECOME ENTANGLED, BE PROPERLY SECURED, AND BE REGULARLY MONITORED TO AVOID PROTECTED SPECIES ENTRAPMENT. BARRIERS MAY NOT BLOCK SEA TURTLE OR SMALLTOOTH SAWFISH ENTRY TO OR EXIT FROM DESIGNATED CRITICAL HABITAT WITHOUT PRIOR AGREEMENT FROM THE NATIONAL MARINE FISHERIES SERVICE'S PROTECTED RESOURCES DIVISION, ST. PETERSBURG, FLORIDA.
4. ALL VESSELS ASSOCIATED WITH THE CONSTRUCTION PROJECT SHALL OPERATE AT "NO WAKE/IDLE" SPEEDS AT ALL TIMES WHILE IN THE CONSTRUCTION AREA AND WHILE WATER DEPTHS WHERE DRAFT OF VESSEL PROVIDES LESS THAN A FOUR FOOT CLEARANCE FROM THE BOTTOM. ALL VESSELS WILL PREFERENTIALLY FOLLOW DEEP-WATER ROUTES (E.G., MARKED CHANNELS) WHENEVER POSSIBLE.
5. IF A SEA TURTLE OR SMALLTOOTH SAWFISH IS SEEN WITHIN 100 YARDS OF THE ACTIVE DAILY CONSTRUCTION/DREDGING OPERATION OR VESSEL MOVEMENT, ALL APPROPRIATE PRECAUTIONS SHALL BE IMPLEMENTED TO ENSURE ITS PROTECTION. THESE PRECAUTIONS INCLUDE CESSATION OF OPERATION OF ANY MOVING EQUIPMENT CLOSER THAN 50 FEET OF A SEA TURTLE OR SMALLTOOTH SAWFISH. OPERATION OF ANY MECHANICAL CONSTRUCTION EQUIPMENT SHALL CEASE IMMEDIATELY IF A SEA TURTLE OR SMALLTOOTH SAWFISH IS SEEN WITHIN A 50 FEET RADIUS OF THE EQUIPENT. ACTIVITIES MAY NOT RESUME UNTIL THE PROTECED SPECIES HAS DEPARTED THE PROJECT AREA OF ITS OWN VOLITION.
6. ANY COLLISION WITH AND/OR INJURY TO A SEA TURTLE OR SMALLTOOTH SAWFISH SHALL BE REPORTED IMMEDIATELY TO THE NATIONAL MARINE FISHERIES SERVICE'S PROTECTED RESOURCES DIVISION (727-824-5312) AND THE LOCAL AUTHORIZED SEA TURTLE STRANDING/RESCUE ORGANIZATION.
7. ANY SPECIAL CONSTRUCTION CONDITIONS, REQUIRED OF THE PROJECT, OUTSIDE THESE GENERAL CONDITIONS WILL BE ADDRESSED IN THE PRIMARY CONSULTATION.

SPECIAL MANATEE PROTECTION CONDITIONS:

MANATEES MAY BE PRESENT IN THE AREA. THE CONTRACTOR SHALL COMPLY WITH THE FLORIDA FISH AND WILDLIFE CONVERSATION COMMISSION'S STANDARD MANATEE PROTECTION CONSTRUCTION CONDITIONS FOR IN-WATER WORK:

A. 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.
B. 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.
C. 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.
D. ALL ON-SITE PROJECT PERSONNEL ARE RESPONSIBLE FOR OBSERVING WATER-RELATED ACTIVITES 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.
E. ANY COLLISION WITH OR INJURY TO A MANATEE SHALL BE REPORTED IMMEDIATELY TO THE FWC HOTLINE AT 1-888-404-FWCC. 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 VERO BEACH (1-772-562-3909) FOR SOUTH FLORIDA.
F. 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. AWARENESS SIGNS THAT HAVE ALREADY BEEN APPROVED FOR THIS USE BY THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC) MUST BE USED. ONE SIGN MEASURING AT LEAST 3 FT. BY 4 FT. 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.

ALL SIGNS ARE TO BE REMOVED BY THE CONTRACTOR UPON COMPLETION OF THE PROJECT.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kisinger Campo & Associates Corp.
201 N. Franklin Street
Suite 400
Tampa, FL 33602
Florida C.O.A. No.02317
Kipling Laskaris, PE No. 75005

DRAWN BY: JWG 7-14
CHECKED BY: KL 8-14
DESIGNED BY: JWG 7-14
CHECKED BY: KL 8-14

CITY OF TAMPA

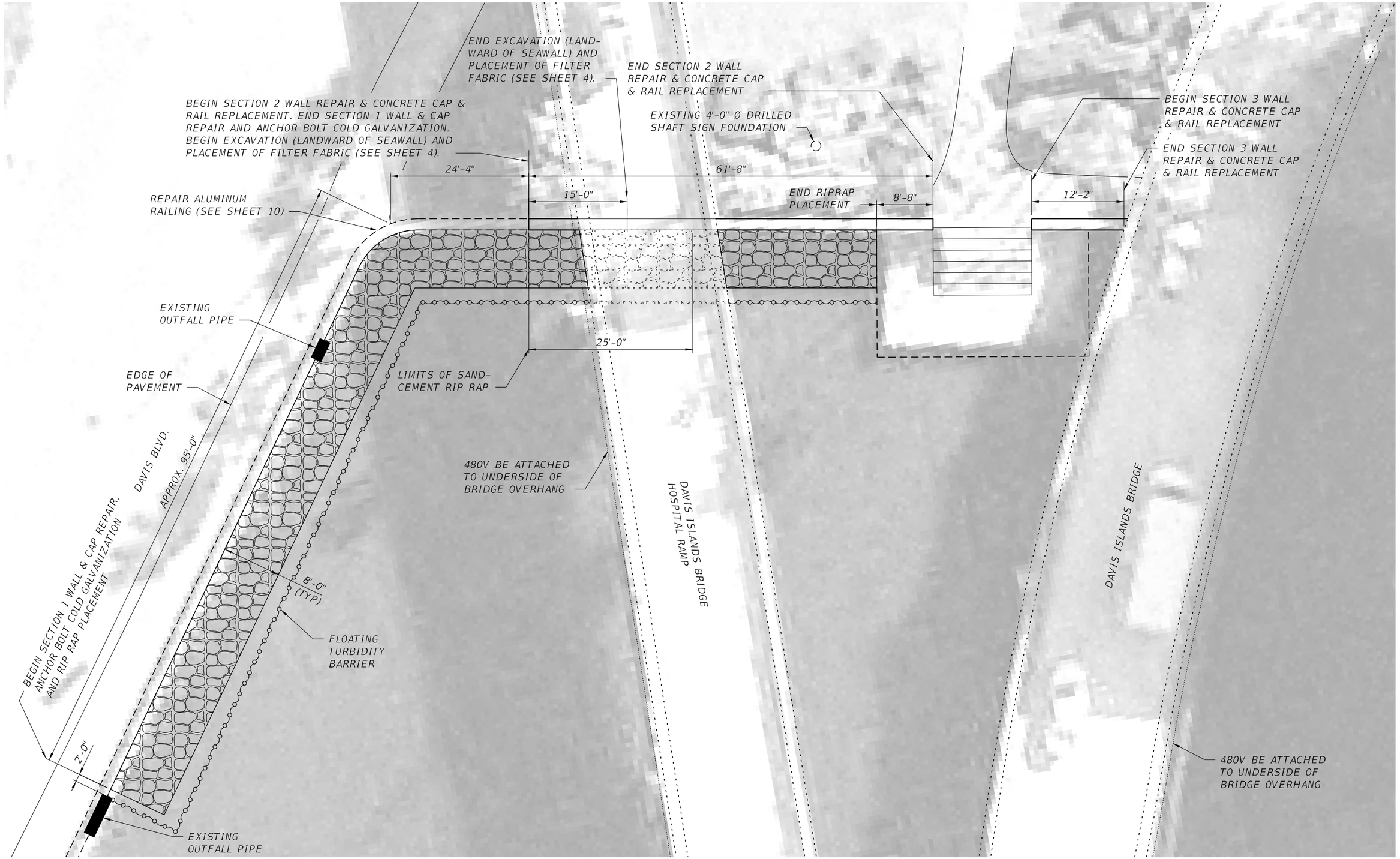
SHEET TITLE: GENERAL NOTES

REF. DWG. NO.:

PROJECT NAME: DAVIS ISLANDS SEAWALL REPAIR

SHEET NO.: 2

klaskarls 11/5/2014 3:44:25 PM G:\2014\328 COT Trans Project Eng Svcs\WO 3 DavisIslandsSeawall\Structures\GeneralNotes01.DGN



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kisinger Campo & Associates Corp.
201 N. Franklin Street
Suite 400
Tampa, FL 33602
Florida C.O.A. No.02317
Kipling Laskaris, PE No. 75005

DRAWN BY:	JBH 8-14
CHECKED BY:	KL 8-14
DESIGNED BY:	JWG 7-14
CHECKED BY:	KL 8-14

CITY OF TAMPA

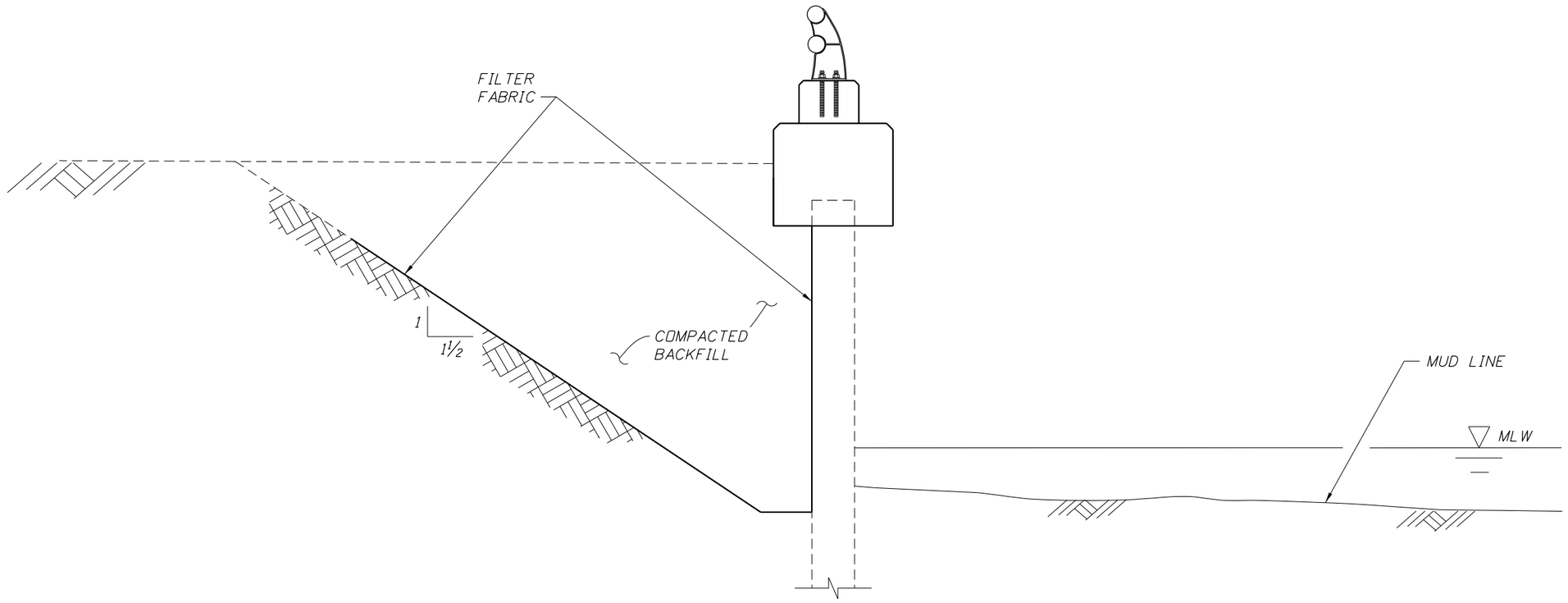
SHEET TITLE: PLAN VIEW

REF. DWG. NO.:

PROJECT NAME: DAVIS ISLANDS SEAWALL REPAIR

SHEET NO.: 3

klaskarls 12/16/2014 9:17:53 AM G:\2013\28 COT Trans Project Eng Svcs\WO 3 DavisIslandsSeawall\Structures\BPlanElev01.dgn



SECTION

(AT EXCAVATION LIMITS)

NOTES:

1. EXCAVATE TO APPROXIMATELY 6" BELOW THE MUD LINE.
2. SLOPE SHOULD BE 1½:1.
3. BE AWARE OF SIGN SHAFT APPROXIMATELY 10'-3" FROM THE BACK OF THE CAP. ALLOW FOR ADEQUATE SPACE FOR STABILITY OF SHAFT DURING EXCAVATION.
4. ANY SPRINKLERS DAMAGED IN EXCAVATION WILL BE REPLACED IN KIND.
5. ANY PLANTS OR LANDSCAPING DISTURBED BY EXCAVATION WILL BE REPLACED.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kisinger Campo & Associates Corp.
201 N. Franklin Street
Suite 400
Tampa, FL 33602
Florida C.O.A. No.02317
Kipling Laskaris, PE No. 75005

DRAWN BY:	JWG 7-14
CHECKED BY:	KL 8-14
DESIGNED BY:	JWG 7-14
CHECKED BY:	KL 8-14

CITY OF TAMPA

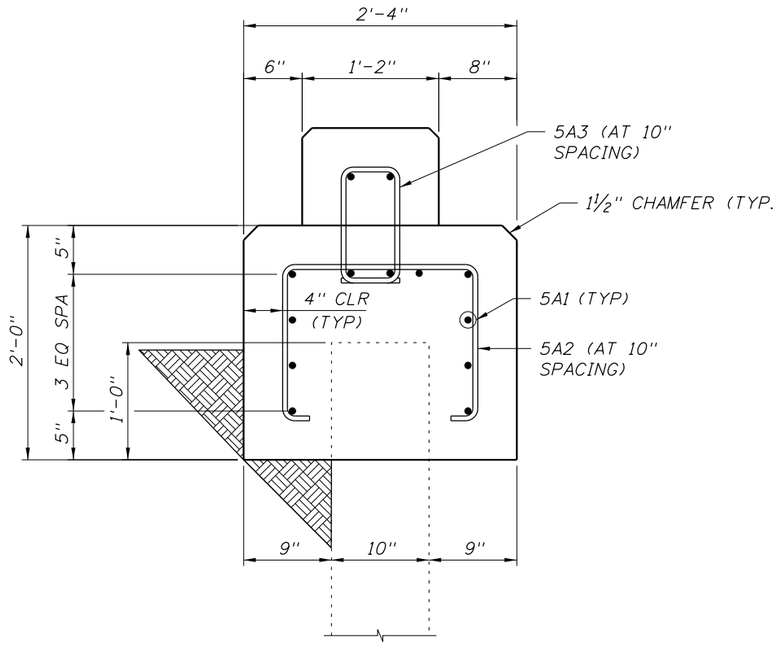
SHEET TITLE: EXCAVATION DETAILS

REF. DWG. NO.:

PROJECT NAME: DAVIS ISLANDS SEAWALL REPAIR

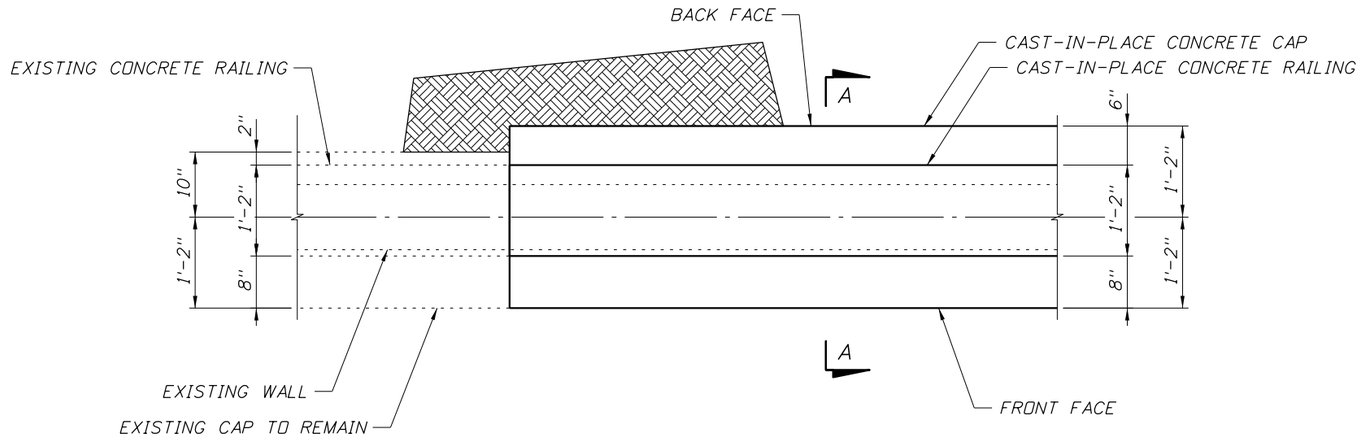
SHEET NO.: 4

klaskarls 8/20/2014 9:22:40 AM G:\2014328 COT Trans Project Eng Svcs\WO 3 DavisIslandsSeawall\Structures\ExcavationDetail.dgn

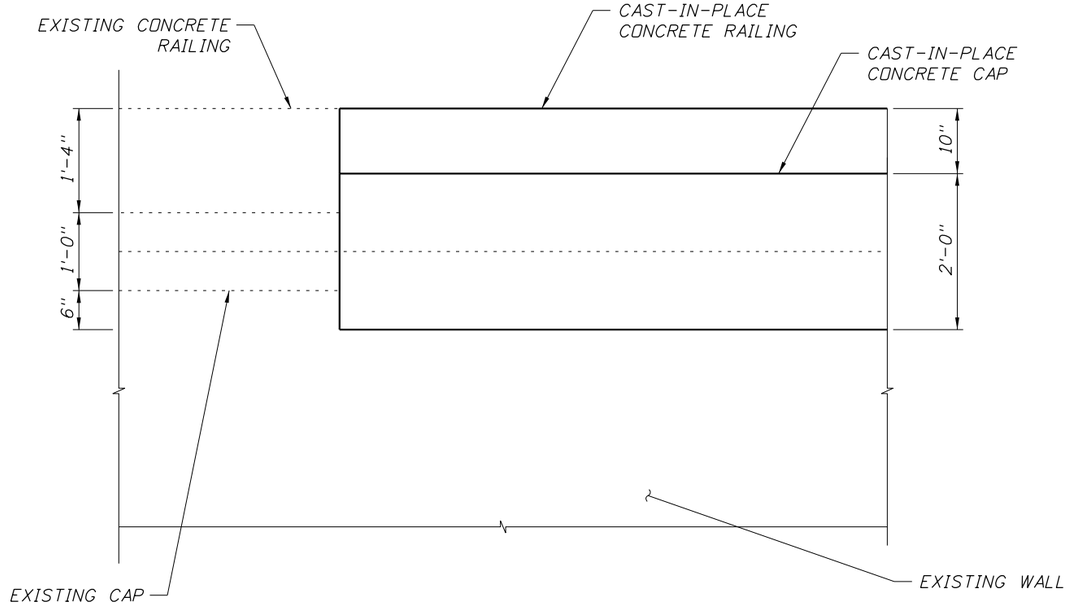


SECTION A-A

(METAL HANDRAIL NOT SHOWN FOR CLARITY)



PLAN



PARTIAL ELEVATION

NOTES:

1. CENTERLINE OF EXISTING WALL IS TO ALIGN WITH THE CENTERLINE OF THE NEW CONCRETE CAP.
2. FACE OF NEW CAP SHALL ALIGN WITH THAT OF THE EXISTING CAP TO BE REPAIRED.
3. NEW CAST-IN-PLACE CONCRETE RAILING ELEVATION IS TO BE LEVEL WITH EXISTING CONCRETE RAILING ELEVATION.
4. PROVIDE ½" JOINTS IN CAST-IN-PLACE CONCRETE CAP AND RAILING AT 25'-0" MAXIMUM SPACING. FILL JOINTS IN CONCRETE CAP WITH PRE-MOULDED EXPANSION JOINT MATERIAL.
5. CUT TOP OF EXISTING WALL AS NEEDED TO CONSTRUCT NEW CAP.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kisinger Campo & Associates Corp.
201 N. Franklin Street
Suite 400
Tampa, FL 33602
Florida C.O.A. No.02317
Kipling Laskaris, PE No. 75005

DRAWN BY:	JWG 7-14
CHECKED BY:	KL 8-14
DESIGNED BY:	JWG 7-14
CHECKED BY:	KL 8-14

CITY OF TAMPA

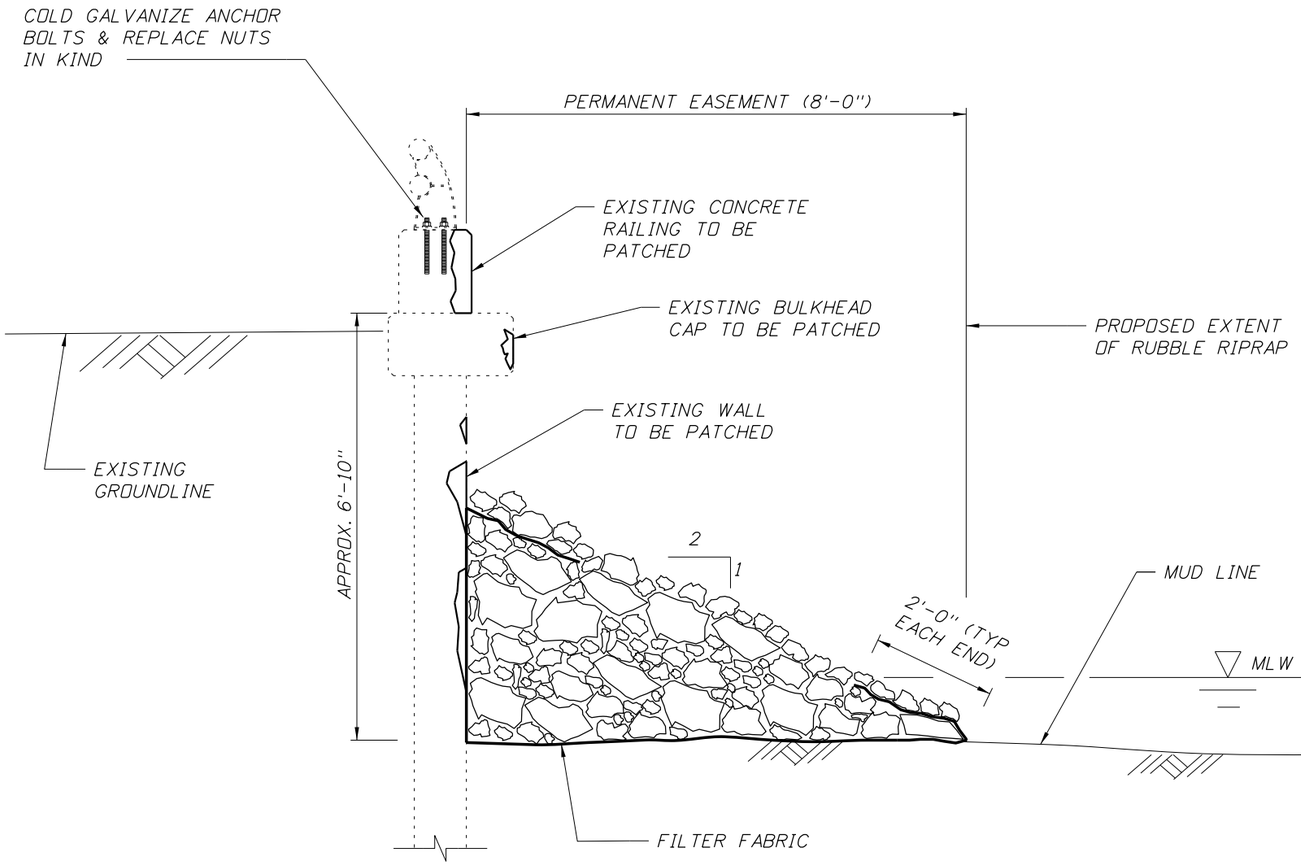
SHEET TITLE: WALL AND CAP DETAILS

REF. DWG. NO.:

PROJECT NAME: DAVIS ISLANDS SEAWALL REPAIR

SHEET NO.: 5

klaskarls 10/27/2014 3:37:24 PM G:\2013\328 COT Trans Project Eng Svcs\WO 3 DavisIslandsSeawall\Structures\CapDet.DGN



SECTION 1

NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE WALL AT ALL TIMES DURING CONSTRUCTION.
2. RUBBLE RIPRAP SHALL BE BANK & SHORE TYPE. REFER TO STANDARD SPECIFICATIONS SECTION 530 FOR GRADATION AND OTHER PROPERTIES UNLESS NOTED OTHERWISE IN THESE PLANS.
3. FOR CONCRETE REPAIR REFER TO SHEET 9.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kisinger Campo & Associates Corp.
201 N. Franklin Street
Suite 400
Tampa, FL 33602
Florida C.O.A. No.02317
Kipling Laskaris, PE No. 75005

DRAWN BY: JWG 7-14
CHECKED BY: KL 8-14
DESIGNED BY: JWG 7-14
CHECKED BY: KL 8-14

CITY OF TAMPA

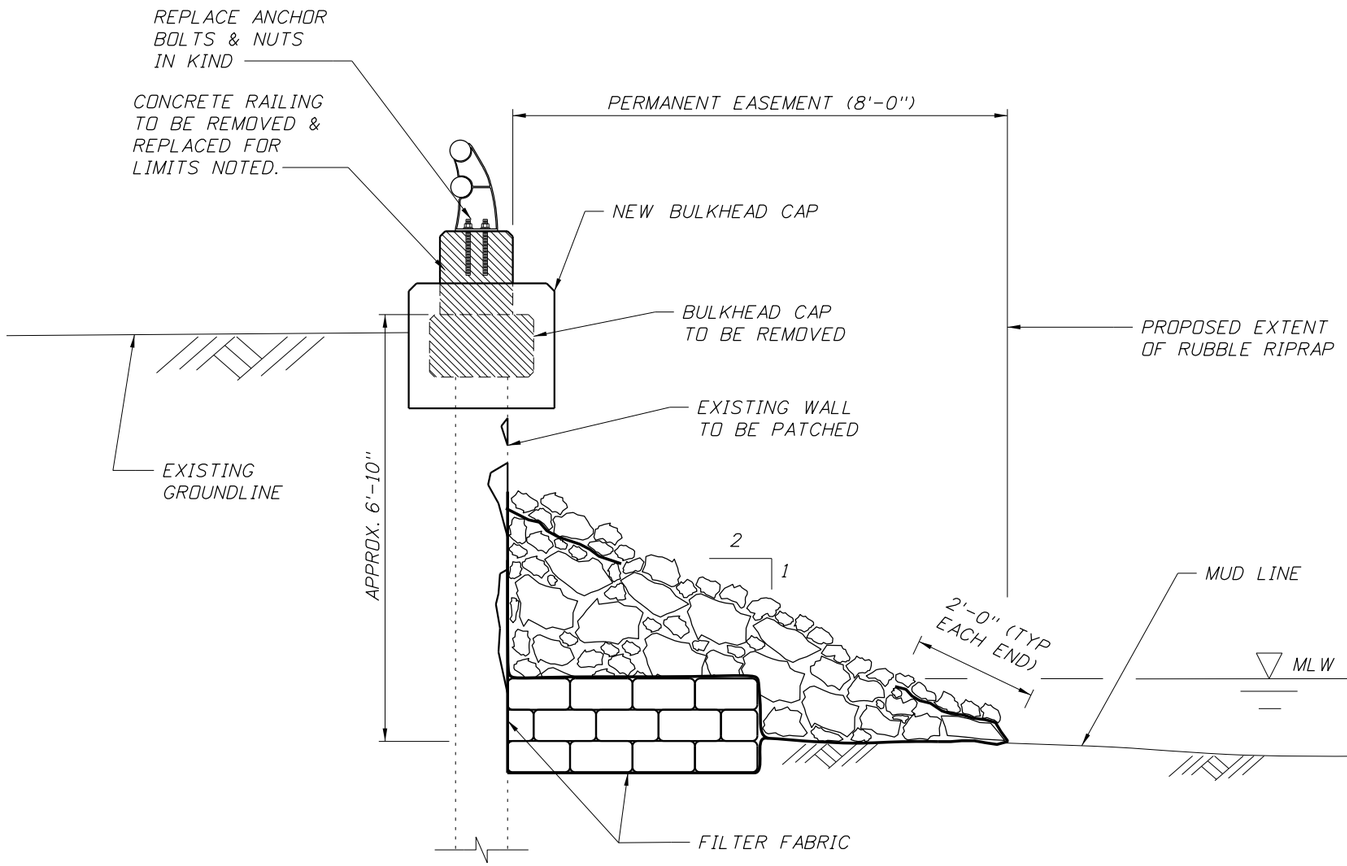
SHEET TITLE: PROPOSED TYPICAL SECTION 1

REF. DWG. NO.:

PROJECT NAME: DAVIS ISLANDS SEAWALL REPAIR

SHEET NO.: 6

klaskarls 10/23/2014 4:15:46 PM G:\2013\28 COT Trans Project Eng Svcs\WO 3 DavisIslandsSeawall\Structures\ProposedSection01.dgn



SECTION 2

(SECTION 3 SIMILAR)

NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE WALL AT ALL TIMES DURING CONSTRUCTION.
2. RUBBLE RIPRAP SHALL BE BANK & SHORE TYPE. REFER TO STANDARD SPECIFICATIONS SECTION 530 FOR GRADATION AND OTHER PROPERTIES UNLESS NOTED OTHERWISE IN THESE PLANS.
3. FOR DETAILS OF RAILING AND CAP REPLACEMENT REFER TO SHEET 5.
4. FOR CONCRETE REPAIR REFER TO SHEET 9.
5. METAL HANDRAILING TO BE REMOVED DURING REPLACEMENT OF CAP AND CONCRETE RAILING AND SALVAGED FOR REATTACHMENT UPON COMPLETION.

LEGEND

- DENOTES NEW CAP & RAILING
- DENOTES EXISTING CAP & RAILING TO BE REMOVED
- DENOTES EXISTING CONCRETE TO REMAIN

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kisinger Campo & Associates Corp.
201 N. Franklin Street
Suite 400
Tampa, FL 33602
Florida C.O.A. No.02317
Kipling Laskaris, PE No. 75005

DRAWN BY:	JWG 7-14
CHECKED BY:	KL 8-14
DESIGNED BY:	JWG 7-14
CHECKED BY:	KL 8-14

CITY OF TAMPA

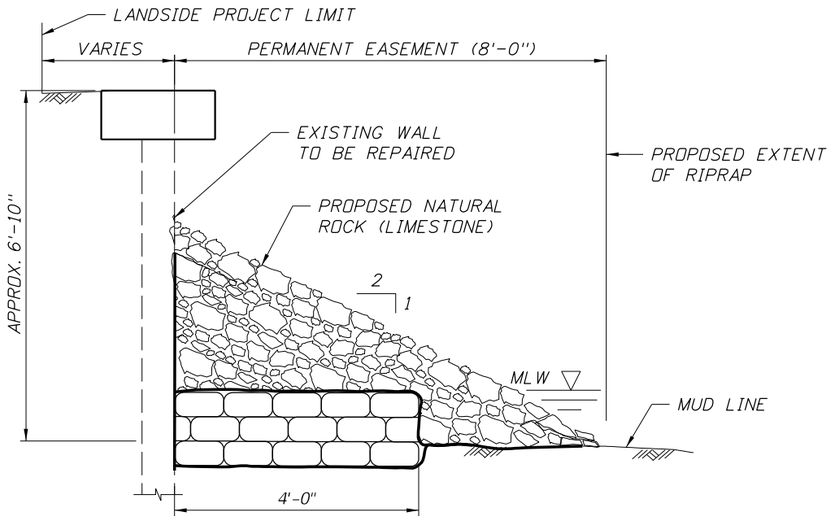
SHEET TITLE: PROPOSED TYPICAL SECTION 2

REF. DWG. NO.:

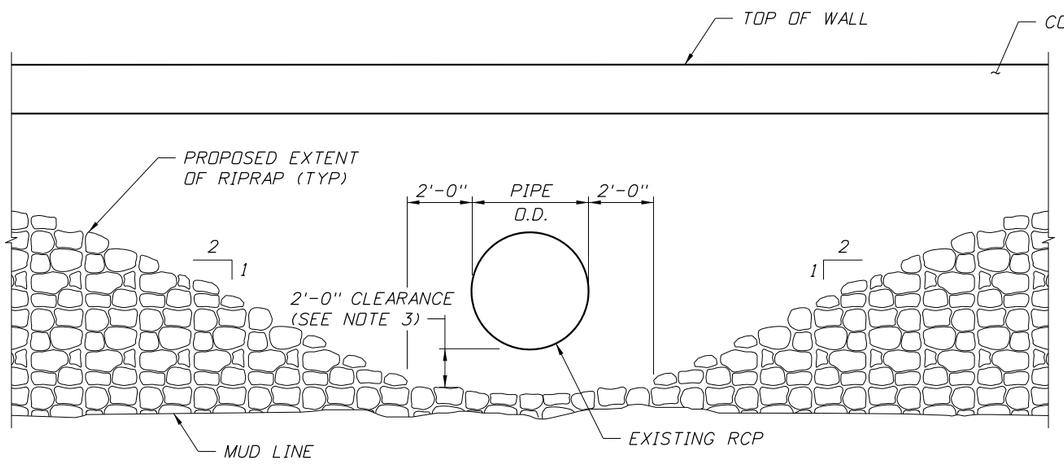
PROJECT NAME: DAVIS ISLANDS SEAWALL REPAIR

SHEET NO.: 7

klaskarls 10/23/2014 4:17:33 PM G:\201328 COT Trans Project Eng Svcs\WO 3 DavisIslandsSeawall\Structures\ProposedSection02.dgn

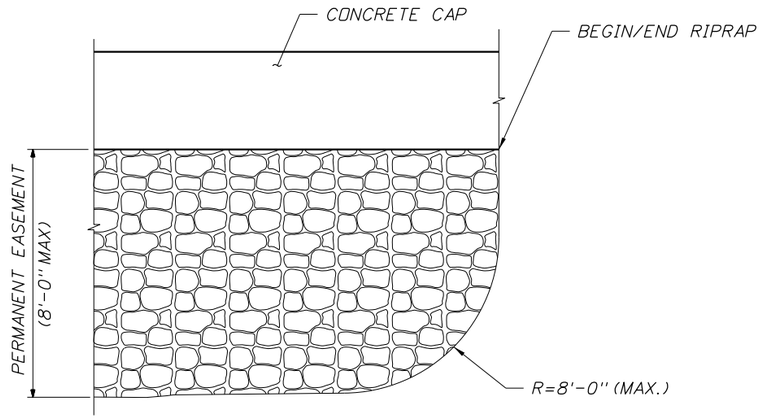


SECTION VIEW

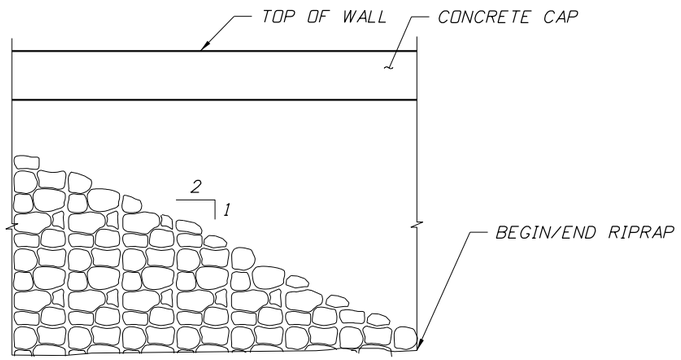


ELEVATION VIEW

(ELEVATED OUTFALL)

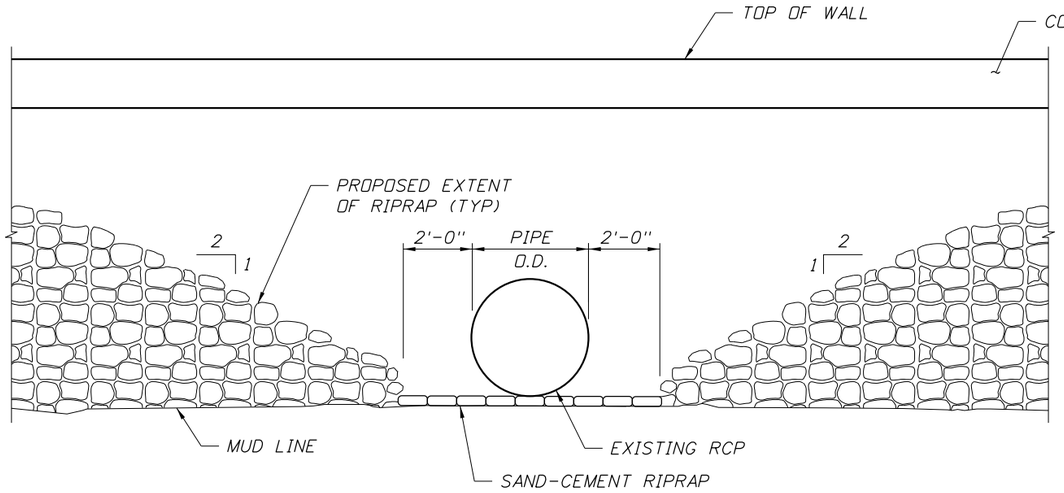


PLAN



ELEVATION VIEW

(BEGIN/END RIPRAP DETAIL)



ELEVATION VIEW

(OUTFALL NEAR MUD LINE)

NOTES

1. SAND-CEMENT RIPRAP SHALL BE PLACED ATOP FILTER FABRIC 6" BELOW THE MUD LINE TO PREVENT ANY UNDERMINING. ANOTHER LAYER OF FILTER FABRIC WILL BE PLACED ON TOP OF THE SAND-CEMENT AND RUBBLE RIPRAP WILL BE PLACED AT THE TOP.
2. CLEAN INTERIOR OF EXISTING OUTFALL PIPES (SHOWN ON EXISTING SEAWALL PLAN DRAWINGS) OF MARINE GROWTH. LENGTH OF CLEANING TO BE 6' FROM THE OUTFALL END OF PIPE AND ANY EXPOSED EXTERIOR OF PIPE. COST TO BE INCIDENTAL TO RIPRAP PAY ITEM SP 18.01.
3. WHERE 2'-0" CLEARANCE FROM OUTFALL CANNOT BE MAINTAINED, PROVIDE SAND-CEMENT RIPRAP EMBEDDED IN MUD LINE FROM SEAWALL TO TOE OF RUBBLE RIPRAP.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kisinger Campo & Associates Corp.
201 N. Franklin Street
Suite 400
Tampa, FL 33602
Florida C.O.A. No.02317
Kipling Laskaris, PE No. 75005

DRAWN BY:	JWG 7-14
CHECKED BY:	KL 8-14
DESIGNED BY:	JWG 8-14
CHECKED BY:	KL 8-14

CITY OF TAMPA

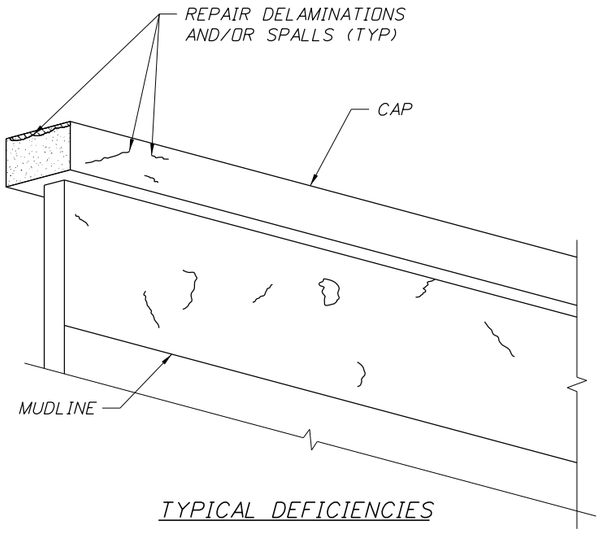
SHEET TITLE: RIPRAP DETAILS

REF. DWG. NO.:

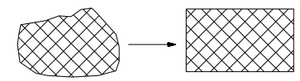
PROJECT NAME: DAVIS ISLANDS SEAWALL REPAIR

SHEET NO.: 8

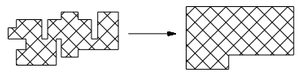
klaskarls 8/20/2014 12:56:57 PM G:\2014328 COT Trans Project Eng Svcs\WO 3 DavisIslandsSeawall\Structures\RIprapDetail01.dgn



TYPICAL DEFICIENCIES



PREFERRED



PREFERRED

SIMPLE PATCH CONFIGURATION

AT CORNER LOCATIONS PROVIDE RIGHT ANGLE SAW CUTS. PATCH CONFIGURATIONS SHALL BE KEPT AS SIMPLE AS POSSIBLE. INDIVIDUAL REPAIR AREAS WITHIN 2 FEET SHALL BE JOINED AT THE DIRECTION OF THE ENGINEER.

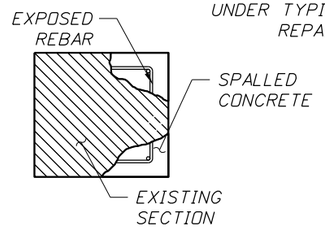
LAP SPLICE TABLE	
REBAR SIZE	LAP SPLICE LENGTH
BARS 4 THRU 6	24 TIMES BAR DIAMETER
7	28 TIMES BAR DIAMETER
8	32 TIMES BAR DIAMETER
9	36 TIMES BAR DIAMETER
10	41 TIMES BAR DIAMETER
11	45 TIMES BAR DIAMETER

GENERAL NOTE:

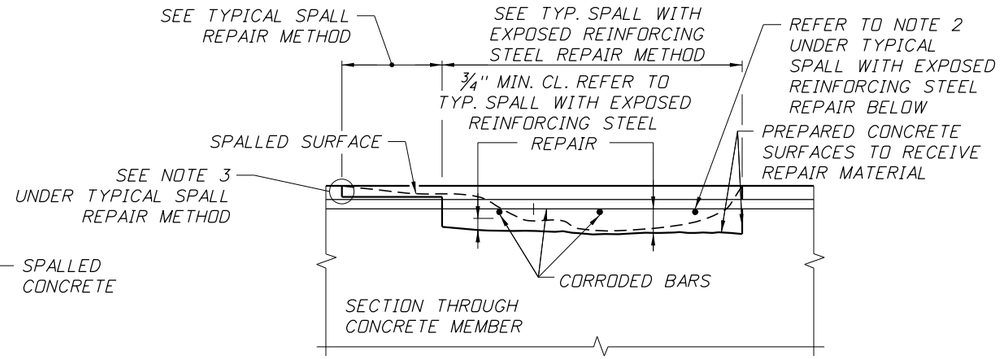
DEFICIENCIES SHOWN ARE FOR ILLUSTRATION ONLY, ALL DIMENSIONS ARE APPROXIMATE. IN THE PRESENCE OF THE ENGINEER, THE CONTRACTOR SHALL CLEARLY OUTLINE ALL AREAS IN NEED OF REPAIR WITH AN APPROVED PAINT OR MARKER PRIOR TO DEMOLITION. NO DEMOLITION OF ANY AREA OR MEMBER OF THE SEAWALL SHALL BE PERFORMED UNTIL THE CONTRACTOR RECEIVES APPROVAL FROM THE ENGINEER.

WORK IDENTIFICATION

(1) REPAIR SPALLS AND DELAMINATIONS

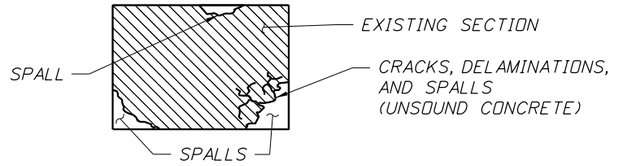


TYPICAL SPALL WITH EXPOSED REBARS



EXPOSING AND UNDERCUTTING REINFORCING STEEL

APPLICABLE TO HORIZONTAL, VERTICAL, AND OVERHEAD LOCATIONS



TYPICAL DELAMINATIONS AND SPALLS

TYPICAL CRACK REPAIR METHOD:

1. REMOVE UNSOUND CONCRETE FROM CRACK AREA.
2. OBTAIN ENGINEER'S APPROVAL TO CARRY OUT CRACK REPAIR (IN LIEU OF SPALL REPAIR) FOR CASES WHERE ADJACENT CONCRETE IS OTHERWISE SOUND AND CRACKING IS NOT A RESULT OF CORRODING REINFORCEMENT.
3. APPLY CLASS II FINISH AT CRACK REPAIR TO REMOVE FINS OR KNOBS.
4. FOR CRACKS UP TO ⅛" USE AN EPOXY RESIN WITH MINIMUMS OF VISCOSITY OF 325 CPS, 28 DAY COMPRESSIVE STRENGTH OF 13000 PSI. FOR CRACKS ⅛" TO ¼", USE AN INJECTION GEL OR EQUAL NON-SAG PASTE WITH 28 DAY COMPRESSIVE STRENGTH OF 10000 PSI.
5. FOR CAP SEAL, USE INJECTION GEL WITH MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 12000 PSI.
6. ENGINEER TO APPROVE CRACK AND CAP SEAL MATERIAL PRIOR TO BEGINNING CONSTRUCTION.

TYPICAL SPALL REPAIR METHOD

1. REMOVE UNSOUND CONCRETE FROM AREAS TO BE REPAIRED.
2. CLEAN CONCRETE SURFACES AND FILL VOIDS WITH REPAIR MATERIAL IN ACCORDANCE WITH THE SPECIFIC PROVISIONS FOR CONCRETE RESTORATION.
3. FEATHERING OF REPAIRS WILL NOT BE PERMITTED. SAW CUT EDGES TO ¾" DEPTH IN NEAT LINES

TYPICAL SPALL WITH EXPOSED REINFORCING STEEL REPAIR

1. FOR CONCRETE RESTORATION, REMOVE AND REPAIR UNSOUND CONCRETE FROM AREAS TO BE REPAIRED IN ACCORDANCE WITH THIS SHEET AND THE SPECIFIC PROVISIONS. AREAS WELL ADHERED TO EXISTING STRAND OR REINFORCEMENT SHALL REMAIN.
2. ANY REINFORCEMENT WHICH IS LOOSE SHALL BE SECURED IN PLACE BY TYING TO OTHER SECURED BARS OR BY OTHER APPROVED METHODS. IF EXPOSED REINFORCING STEEL HAS GREATER THAN 20% SECTION LOSS, PROVIDE LAP SLICE PER TABLE, THIS SHEET.
3. CLEAN EXPOSED REBARS AND ANY LOOSE CONCRETE OR ABRASIVES BY SANDBLASTING.
4. FILL VOIDS WITH REPAIR MATERIAL IN ACCORDANCE WITH THE SPECIFIC PROVISIONS FOR CONCRETE RESTORATION.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kisinger Campo & Associates Corp.
201 N. Franklin Street
Suite 400
Tampa, FL 33602
Florida C.O.A. No.02317
Kipling Laskaris, PE No. 75005

DRAWN BY:	JWG 7-14
CHECKED BY:	KL 8-14
DESIGNED BY:	JWG 7-14
CHECKED BY:	KL 8-14

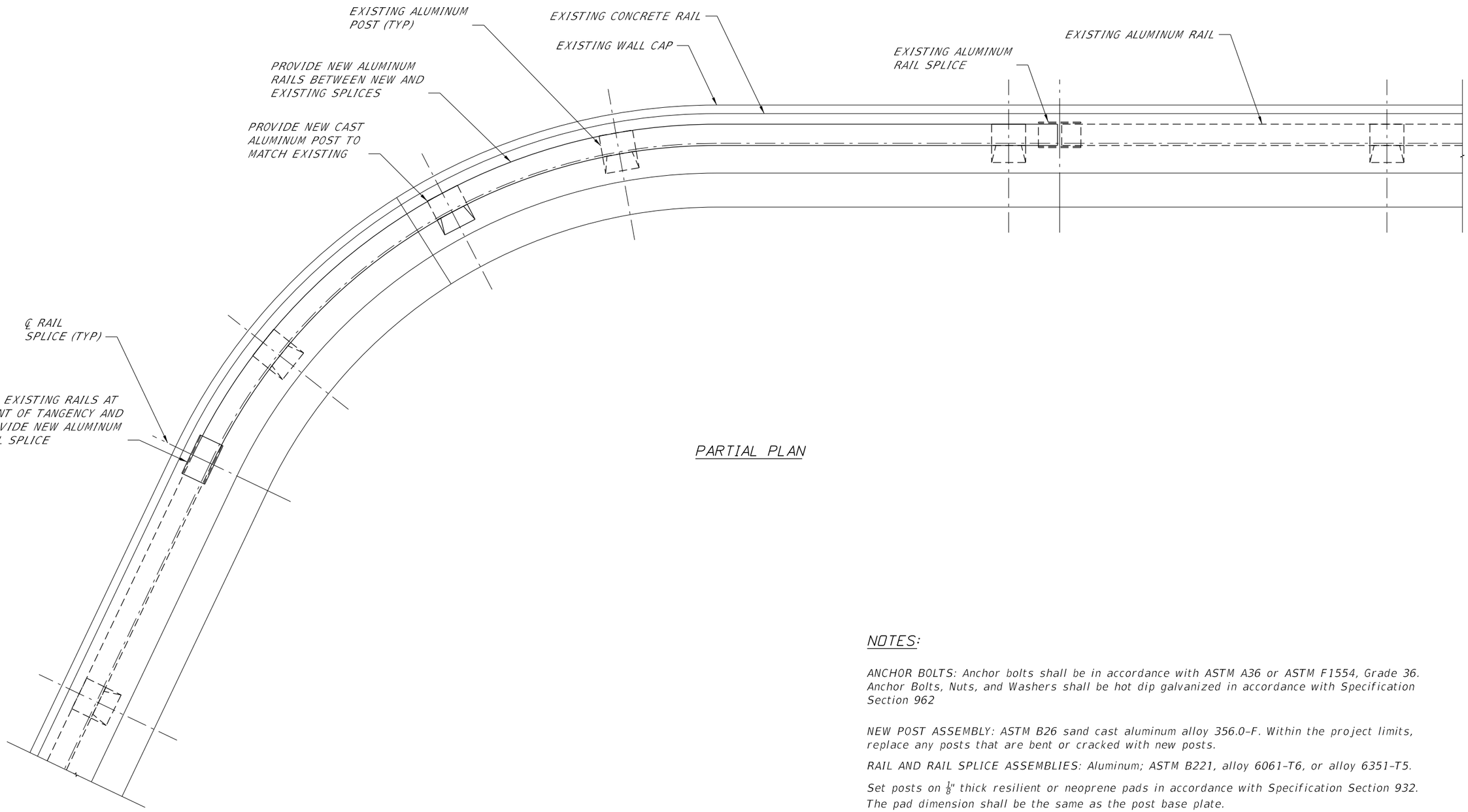
CITY OF TAMPA

SHEET TITLE: CONCRETE REPAIR PLAN

REF. DWG. NO.:

PROJECT NAME: DAVIS ISLANDS SEAWALL REPAIR

SHEET NO.: 9



PARTIAL PLAN

NOTES:

ANCHOR BOLTS: Anchor bolts shall be in accordance with ASTM A36 or ASTM F1554, Grade 36. Anchor Bolts, Nuts, and Washers shall be hot dip galvanized in accordance with Specification Section 962

NEW POST ASSEMBLY: ASTM B26 sand cast aluminum alloy 356.0-F. Within the project limits, replace any posts that are bent or cracked with new posts.

RAIL AND RAIL SPLICE ASSEMBLIES: Aluminum; ASTM B221, alloy 6061-T6, or alloy 6351-T5.

Set posts on $\frac{1}{8}$" thick resilient or neoprene pads in accordance with Specification Section 932. The pad dimension shall be the same as the post base plate.

RESILIENT AND NEOPRENE PADS: Resilient and Neoprene Pads shall be in accordance with the Specifications except that testing of the finished pads is not required. Neoprene pads shall be durometer hardness 60 or 70. All existing posts reinstalled on the new concrete rail shall use new pads.

SHOP DRAWINGS: Submit complete details for post and rail installation, including post and rail splice locations of the proposed railing for the Engineer's approval prior to fabrication.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kisinger Campo & Associates Corp.
201 N. Franklin Street
Suite 400
Tampa, FL 33602
Florida C.O.A. No.02317
Kipling Laskaris, PE No. 75005

DRAWN BY:	JWG 7-14
CHECKED BY:	KL 8-14
DESIGNED BY:	JWG 7-14
CHECKED BY:	KL 8-14

CITY OF TAMPA

SHEET TITLE: ALUMINUM RAIL DETAILS

REF. DWG. NO.:

PROJECT NAME: DAVIS ISLANDS SEAWALL REPAIR

SHEET NO.: 10

klaskarls 10/23/2014 4:19:44 PM G:\2013\28 COT Trans Project Eng Svcs\WO 3 DavisIslandsSeawall\Structures\RailDet.DGN

MARK		LENGTH		NO	TYP	STY		B			C			D			E			F			H			J			K			N	Ø
SIZE	DES	FT	IN	BARS	BAR	A	G	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	NO	ANG
LOCATION SECTION 3 WALL CAP																				NO. REQUIRED = 1													
5	A1	11- 6		13	1			11- 6																									
5	A2	4-10		15	5			1- 4			1- 8			0- 3			0- 3																
5	A3	4- 0		15	4	4	4	1- 0			0- 6																						
LOCATION SECTION 2 WALL CAP																				NO. REQUIRED = 1													
5	A1	63- 2		13	2			2- 2			61- 0																					1	
5	A2	4-10		75	5			1- 4			1- 8			0- 3			0- 3																
5	A3	4- 0		75	4	4	4	1- 0			0- 6																						

END OF LIST

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kisinger Campo & Associates Corp.
201 N. Franklin Street
Suite 400
Tampa, FL 33602
Florida C.O.A. No.02317
Kipling Laskaris, PE No. 75005

DRAWN BY,	KL 8-14
CHECKED BY,	DBT 8-14
DESIGNED BY,	KL 8-14
CHECKED BY,	DBT 8-14

CITY OF TAMPA

SHEET TITLE,
REINFORCING BAR LIST

REF. DWG. NO.

PROJECT NAME,
DAVIS ISLANDS SEAWALL REPAIR

SHEET NO.
11

klaskaris 10/23/2014 4:20:44 PM G:\2013\28 COT Trans Project Eng Svcs\WO 3 DavisIslandsSeawall\Structures\RebarList01.DGN