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

HILLSBOROUGH RIVER SEAWALL REPAIR

TAMPA, FLORIDA

TOWNSHIP 29S, RANGE 18E, SECTIONS 24 & 13

PW #7309

VICINITY MAP

NTS

DRAWING INDEX	
SHEET NUMBER	SHEET TITLE
GENERAL	
G–001	COVER SHEET AND DRAWING INDEX
G–002	GENERAL NOTES (SHEET 1 OF 2)
G–003	GENERAL NOTES (SHEET 2 OF 2)
SURVEY	
V–101	EXISTING CONDITIONS PLAN – SEAWALL S1 (SHEET 1 OF 4)
V–102	EXISTING CONDITIONS PLAN – SEAWALL S1 (SHEET 2 OF 4)
V–103	EXISTING CONDITIONS PLAN – SEAWALL S1 (SHEET 3 OF 4)
V–104	EXISTING CONDITIONS PLAN – SEAWALL S1 (SHEET 4 OF 4)
STRUCTURAL	
S–001	SHEET KEY PLAN
S–101	REPAIR PLAN – SEAWALL S1 (SHEET 1 OF 4)
S–102	REPAIR PLAN – SEAWALL S1 (SHEET 2 OF 4)
S–103	REPAIR PLAN – SEAWALL S1 (SHEET 3 OF 4)
S–104	REPAIR PLAN – SEAWALL S1 (SHEET 4 OF 4)
S–401	SEAWALL S1 – EXISTING WALL DETAILS
S–501	REPAIR DETAILS (SHEET 1 OF 5)
S–502	REPAIR DETAILS (SHEET 2 OF 5)
S–503	REPAIR DETAILS (SHEET 3 OF 5)
S–504	REPAIR DETAILS (SHEET 4 OF 5)
S–505	REPAIR DETAILS (SHEET 5 OF 5)
S–601	REPAIR SCHEDULE – SEAWALL S1

PROJECT SITE
Tampa
Riverfront Park
University of Tampa
Plant Park
MacDill Park
Tampa Park Plaza Playground
Tampa Bay Performing Arts Center
Tampa Amtrak
St Pete Times Forum
Tony Janus Park
Tampa General
W John F Kennedy Blvd
S Crosstown Expy
Channelside Dr
W Platt St
E Jackson St
E Laurel St
W Cass St
E Madison St
E Kennedy Blvd
N Franklin St
N Tampa St
N Ashley Dr
N Dale Mabry Hwy
N Nebraska Ave
N Florida Ave
N Boulevard
N Armenia Ave
N Dale Mabry Hwy
N Rome Ave
N Howard Ave
N Westshore Blvd
N Lois Ave
N Himes Ave
N Dale Mabry Hwy
N Manhattan Ave
N Mac Dill Ave
N Bayshore Blvd
N Dale Mabry Hwy
N Gomez Ave
N Dale Mabry Hwy

GENERAL NOTES

1. SITE VERIFICATION: PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL CHECK THE DRAWINGS AGAINST THE SITE WORK AND NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES IN DIMENSIONS OR SITE CONDITIONS. THE CONTRACTOR SHALL NOT BEGIN CONSTRUCTION IN ANY SUCH AFFECTED AREA UNTIL THE DISCREPANCY HAS BEEN RESOLVED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
2. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THESE PLANS AND THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT EDITION) WITH APPROVED SUPPLEMENTS THERETO. FDOT STANDARD SPECIFICATIONS ARE REFERENCED FOR MATERIAL SPECIFICATIONS AND CONSTRUCTION METHODS UNDER DIVISION II CONSTRUCTION DETAILS. DIVISION I GENERAL REQUIREMENTS AND COVENANTS OF THE FDOT STANDARD SPECIFICATIONS DOES NOT APPLY. THE CONTRACT WITH THE OWNER SHALL GOVERN OVER FDOT SPECIFICATIONS; MEANS OF MEASUREMENT AND PAYMENT SHALL BE AS STIPULATED BY THE OWNER AND THE CONTRACT.
3. NOTES ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. WHERE THERE IS A DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS, THE STRICTER SHALL APPLY.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BRINGING ALL ELEMENTS OF THE PROJECT INTO CONFORMANCE WITH THESE PLANS AND SPECIFICATIONS. IF ANY MODIFICATIONS ARE REQUIRED IN ANY ELEMENT, THE CONTRACTOR SHALL SUBMIT PROPOSED CHANGES TO THE ENGINEER FOR APPROVAL.
5. ALL SAFETY REGULATIONS ARE TO BE STRICTLY FOLLOWED.
6. METHODS OF CONSTRUCTION AND ERECTION OF STRUCTURAL MATERIAL ARE THE RESPONSIBILITY OF THE CONTRACTOR.
7. KNOWN DEBRIS AND EXISTING FOUNDATIONS AND OBSTRUCTIONS ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY UNKNOWN DEBRIS, FOUNDATIONS OR OBSTRUCTIONS UNCOVERED DURING CONSTRUCTION.
8. CONTRACTOR SHALL LOCATE ALL UTILITIES IN THE AREA OF CONSTRUCTION PRIOR TO COMMENCING WITH CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL CONFLICTS WITH EXISTING UTILITIES.
9. THE CONTRACTOR SHALL PLACE CONSTRUCTION DEBRIS CONTROL DEVICES, BOOMS, TARPAULINS, FLOATS, STAGING, AND OTHER DEVICES AS NECESSARY TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING THE RIVER, AND AIR BORNE MATERIALS FROM LEAVING THE IMMEDIATE VICINITY OF THE SITE.
10. THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE LOCAL ENVIRONMENTAL PROTECTION STANDARDS, LAWS, AND REGULATIONS.
11. TEMPORARY STOCKPILING OF EXCAVATED MATERIAL SHALL FOLLOW THE PROCEDURE OUTLINED IN SP-4.04 TEMPORARY STOCKPILING.
12. ALL TEMPORARY FENCING SHALL BE IN ACCORDANCE WITH STANDARD INDEX NO. 452 OF THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS 2008.
13. EROSION CONTROL DEVICES AND TURBIDITY BARRIERS SHALL BE IN ACCORDANCE WITH FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS INDEX NO. 102 AND 103 AND FDOT STANDARD SPECIFICATION 104.
14. THE CONTRACTOR SHALL ANTICIPATE TIDAL FLUCTUATIONS DURING THE COURSE OF WORK. THE CONTRACTOR SHALL DETERMINE WORK SCHEDULE FROM TIDE 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 SHORELINES DURING CONSTRUCTION.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO ALL PERMIT CONDITIONS AND REPORTING REQUIREMENTS. COPIES OF PERMITS CAN BE OBTAINED FROM THE CITY OF TAMPA.
16. 16. CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING A BID FOR THE PROJECT.
17. THE CONTRACTOR SHALL REMOVE ALL BARGES, WORK BOATS, STAGING, AND OTHER TEMPORARY PLATFORMS AT THE COMPLETION OF THE WORK.
18. CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY AND RED-LINED DRAWINGS OF COMPLETED WORK TO THE OWNER. SURVEY SHALL BE SIGNED AND SEALED BY SURVEYOR REGISTERED IN THE STATE OF FLORIDA. SURVEY AND RED-LINES SHALL BEAR THE STAMP OF THE CONTRACTOR AND THE DATE OF PROJECT COMPLETION. PROVIDE TWO SURVEYS AND ORIGINAL RED-LINE DRAWING SETS TO CITY. CONTRACTOR SHALL PROVIDE AN ELECTRONIC VERSION OF THE AS-BUILTS TO THE CITY.
19. ANY DAMAGE TO STATE, COUNTY OR LOCAL ROADS CAUSED BY THE CONSTRUCTION ACTIVITIES RELATED TO THE PROJECT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER.
20. CONTRACTOR SHALL RESTORE ANY ADJACENT UPLANDS DISTURBED DURING CONSTRUCTION ACTIVITIES TO THEIR CONDITION AT START OF PROJECT, UON.
21. CONTRACTOR SHALL ADHERE TO THE FFWCC STANDARD MANATEE CONDITIONS FOR IN-WATER WORK.
22. CONTRACTOR SHALL COORDINATE WITH CITY OF TAMPA REGARDING THE CONSTRUCTION OF THE TAMPA RIVERWALK AND THE PROTECTION AND REMOVAL OF EXISTING TREES. CONTRACTOR SHALL REFER TO URS TAMPA RIVERWALK DOYLE CARLTON SEGMENT CONSTRUCTION DRAWINGS.
23. 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 CEASE 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, ABORIGINAL 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 DAYS OF NOTIFICATION.

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

SUBMITTAL

SUBMIT SEVEN (7) COPIES EACH OF THE FOLLOWING TO THE CITY FOR REVIEW AND APPROVAL. ALLOW A MINIMUM OF FOURTEEN (14) DAYS FOR APPROVAL OF EACH.

1. SHOP DRAWINGS FOR CAP ENCASEMENT AND PANEL FASCIA
   a. FORMWORK b. REINFORCEMENT
2. MIX DESIGN FOR EACH TYPE USED
   a. CONCRETE
   b. POLYMER-MODIFIED PORTLAND CEMENT MORTAR/CONCRETE
3. MANUFACTURER'S CATALOG DATA
   a. MATERIALS FOR CURING CONCRETE
   b. BONDING AGENT
   c. EPOXY COATINGS
   d. CORROSION INHIBITOR
   e. CONCRETE ADMIXTURES
   f. EPOXY ADHESIVE
   g. EPOXY CONCRETE POLYMER-MODIFIED PORTLAND CEMENT MORTAR/CONCRETE
   h. DRAINAGE GEOCOMPOSITE
   i. GEOTEXTILE FABRIC
4. CONCRETE PLACEMENT EQUIPMENT AND METHODS
5. TEST REPORTS
   a. CONCRETE MIX DESIGN
   b. POZZOLAN
   c. AGGREGATE
   d. ADMIXTURES
   e. CONCRETE COMPRESSIVE STRENGTH (ASTM C31, FIELD TESTS)
   f. BONDING AGENT
   g. EPOXY RESIN BINDER
   h. EPOXY ADHESIVE
   i. DRAINAGE GEOCOMPOSITE (ASTM D-4716)
   j. GRAVEL FILL
6. CONCRETE BATCH TICKETS (ASTM C94)
7. STEEL MATERIAL CERTIFICATIONS
8. WELDER'S QUALIFICATIONS
9. MANUFACTURER'S INSTRUCTIONS
   a. CORROSION INHIBITOR
   b. BONDING AGENT
   c. EPOXY ADHESIVE
   d. POLYMER-MODIFIED PORTLAND CEMENT MORTAR/CONCRETE
   e. DRAINAGE GEOCOMPOSITE
10. MANUFACTURER'S WARRANTIES
    a. DRAINAGE GEOCOMPOSITE
    b. EPOXY ADHESIVE
    c. POLYMER-MODIFIED PORTLAND CEMENT MORTAR/CONCRETE
11. SAMPLES
    a. DRAINAGE GEOCOMPOSITE

DATUMS AND EXISTING CONDITIONS

1. THE FOLLOWING 1983-2001 EPOCH TIDAL DATUM RELATIONSHIPS ARE APPLICABLE:

   A. NOAA STATION 8726711 WEST TAMPA, HILLSBOROUGH RIVER

MHHW	= 1.81 FT	MHW	= 1.56 FT	NAVD 88	= 0.86 FT
MSL	= 0.59 FT	NGVD	= 0.00 FT	MLW	= -0.42 FT
MLLW	= -0.77 FT				

2. TOPOGRAPHIC SURVEYS PREPARED BY GEORGE F. YOUNG, INC (MAY 2007 AND FEBRUARY 2008) AND ONLY REPRESENT CONDITIONS AT TIME OF SURVEY. SURVEY OF TREES AND LANDSCAPING CONDUCTED BY MOFFATT & NICHOL IN OCTOBER 2012 AND ONLY REPRESENTS CONDITIONS AT TIME OF SURVEY.
3. HORIZONTAL CONTROL IS REFERENCED TO NAD 83, STATE PLANE COORDINATE SYSTEM, FLORIDA WEST ZONE IN FEET.
4. ALL CONTOURS AND ELEVATIONS SHOWN ON DRAWINGS ARE REFERENCED TO NGVD 1929 IN FEET.
5. THE CONTRACTOR SHALL ESTABLISH AND PROVIDE ALL VERTICAL AND HORIZONTAL CONTROL POINTS NECESSARY FOR THIS WORK.
6. REPAIR SCHEDULES BASED ON TOPSIDE SITE INVESTIGATIONS PERFORMED BY MOFFATT AND NICHOL, JULY 2006.

ABBREVIATIONS

ACI = AMERICAN CONCRETE INSTITUTE
AISC = AMERICAN INSTITUTE OF STEEL CONSTRUCTION
APPROX = APPROXIMATE
ASTM = AMERICAN SOCIETY FOR TESTING MATERIALS
AWG = AMERICAN WIRE GAUGE
AWPA = AMERICAN WOOD PRESERVERS ASSOCIATION
AWS = AMERICAN WELDING SOCIETY
BC = BARE CONDUCTOR
BF = BOTTOM FACE
BLDG = BUILDING
BOC = BOTTOM OF CONCRETE
BOTT = BOTTOM
CJ = CONSTRUCTION JOINT
CF = CUBIC FEET
CIP = CAST IN PLACE
CLR = CLEAR
CONC = CONCRETE
CONST = CONSTRUCTION
CONT = CONTINUOUS
CR = CRACK
CTS = CENTERS
CY = CUBIC YARDS
DBL = DOUBLE
DET = DETAIL
DISCONT = DISCONTINUOUS
DLM = DELAMINATION
DWG = DRAWING
E = EAST
EA = EACH
EC = ELECTRICAL CONTRACTOR
EL = ELEVATION
ELEC = ELECTRICAL
ELEV = ELEVATION
EMB = EMBEDMENT
EQ = EQUAL
EW = EACH WAY
EXIST. = EXISTING
EXP = EXPANSION
FAC = FLORIDA ADMINISTRATIVE CODE
FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION
FT = FEET
GALV = GALVANIZED
GRND = GROUND
HK = HOOK
HORIZ = HORIZONTAL
IN. = INCHES
INFO = INFORMATION
INV = INVERT ELEVATION
ISP = IMMINENT SPALL
JB = JUNCTION BOX
JT = JOINT
L = ANGLE
LB = POUND
LF = LINEAR FEET
LG = LONG
LT = LEFT
MAX = MAXIMUM
MH = MANHOLE
MHW = MEAN HIGH WATER
MHHW = MEAN HIGHER HIGH WATER
MIN = MINIMUM
MISC = MISCELLANEOUS
MLW = MEAN LOW WATER
MLLW = MEAN LOWER LOW WATER
MPH = MILES PER HOUR
MSL = MEAN SEA LEVEL
MTD = MOUNTED
N = NORTH
NAD = NORTH AMERICAN DATUM OF 1983
NAVD = NORTH AMERICAN VERTICAL DATUM OF 1988
NGVD = NATIONAL GEODETIC VERTICAL DATUM OF 1929
NIC = NOT IN CONTRACT
NTS = NOT TO SCALE
NO. = NUMBER
OC = ON CENTER
P/C = PRECAST
P/S = PRESTRESSED
PCF = POUNDS PER CUBIC FOOT
PK = PARK
PSI = POUND PER SQUARE INCH
PVC = POLYVINYL CHLORIDE
PW = POTABLE WATER
QTY = QUANTITY
RCP = REINFORCED CONCRETE PIPE
REINF = REINFORCEMENT
REQ'D = REQUIRED
RT = RIGHT
S = SOUTH
SHT = SHEET
SS = STAINLESS STEEL
ST = STREET
SP = SPALL
SPA = SPACES
SQ = SQUARE
STA = STATION
STD = STANDARD
T = TON
TBM = TIDAL BENCHMARK
TBR = TO BE REMOVED
TF = TOP FACE
TOC = TOP OF CONCRETE
TOD = TOP OF DECK
TOS = TOP OF STEEL
TYP = TYPICAL
U/G = UNDERGROUND
UON = UNLESS OTHERWISE NOTED
VERT = VERTICAL
W = WEST
W/ = WITH
WBC = WEST BOTTOM CORNER
WBF = WEST BOTTOM FACE
WF = WEST FACE
WTC = WEST TOP CORNER
WWF = WELDED WIRE FABRIC
□ = SQUARE
= NUMBER OR POUNDS
℄ = CENTERLINE
℄ = BASELINE
℄ = PLATE
ø = DIAMETER OR PHASE
' = FOOT
" = INCH

LEGEND:

TREE – OAK – UNSPECIFIED
TREE – LAUREL OAK
TREE – LIVE OAK
SHRUB – AMERICAN HOLLY
SHRUB – MISCELLANEOUS
PALM

15" TREE SIZE
LADDER
TRASH CAN
BENCH
LAMP POST – 5" DIAMETER
PILING
CONCRETE LIGHT/BASE – LIGHT REMOVED
+8.52 SPOT ELEVATION

INDICATES DETAIL/SECTION NUMBER
A4
S-401
ADDITIONAL SHEET WHERE REFERENCED
S-402
SHEET WHERE DETAIL OR SECTION TAKEN IS DRAWN/REFERENCED

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR

GENERAL NOTES (SHEET 1 OF 2)

1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813-258-8818
moffatt & nichol

CITY OF TAMPA
CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

Designed by: JAM		Date: JAN 2009	Rev. -
Dwn by:	Ckd by: DJMcc	M&N Project No. 5942-01	
Reviewed by: GWS		Drawing code:	
Submitted by: GARY W. SMITH MOFFATT & NICHOL		Drawing Scale: AS SHOWN	
		Plot scale: 1:1 (0 SHEET)	

SEAL
GARY W. SMITH, P.E.
FLORIDA Lic. No. 041212

Sheet
G-002
Sheet 2 of 19

P:\5942-01\CADD_ACTIVE_S1 BID REVISION\5942-01_G002; 12-Sep-14 1:34 PM; Thornton, Shayna

MATERIAL AND CONSTRUCTION NOTES
STRUCTURAL AND MISCELLANEOUS STEEL

1. ALL STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.

2. MATERIAL SHALL CONFORM TO THE FOLLOWING:

SHAPES, BARS AND PLATES	ASTM A 36
CHANNELS	ASTM A572, GRADE 50
ANCHOR BOLTS, ADHESIVE ANCHORS AND DOWELS	ASTM F1554
BOLTS	ASTM A307
PLATE WASHERS	ASTM F436
NUTS	ASTM A563

3. ALL MISCELLANEOUS METALS INCLUDING BOLTS, WASHERS, NUTS, ANGLES, INSERTS, AND PLATES SHALL BE ZINC–COATED OR GALVANIZED BY THE HOT–DIPPED PROCESS IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A123, A153 OR A525 GRADE 90 AS APPLICABLE AFTER FABRICATION, UON.

4. FIELD TREAT DAMAGED GALVANIZED FINISH AND EXPOSED THREADED SURFACES WITH TWO COATS OF ZINC RICH PAINT CONFORMING TO ASTM A780.

5. INSTALL ADHESIVE ANCHORS IN ACCORDANCE WITH FDOT SPECIFICATION 416.

6. INSTALL ANCHOR BOLTS IN ACCORDANCE WITH FDOT SPECIFICATION 460.

7. ANCHOR EMBEDMENT AND HOLE DIAMETER SHALL BE PER MANUFACTURER'S RECOMMENDATIONS TO DEVELOP 150% OF THE ANCHOR BOLT TENSILE CAPACITY.

8. NON–PRESSURE EPOXY GROUT FOR CEMENTING DOWELS SHALL COMPLY WITH ASTM C–881. USE SIKADUR INJECTION GEL BY SIKA CORPORATION, ULTRABOND 937 HSHV BY ADHESIVE TECHNOLOGIES CORPORATION, OR APPROVED EQUAL.

CONCRETE AND REINFORCING STEEL

1. ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH 2007 FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTIONS 346 AND 400.

2. ALL CONCRETE SHALL BE NORMAL WEIGHT WITH A MINIMUM DENSITY OF 145 PCF.

3. MATERIALS SHALL CONFORM TO THE FOLLOWING, UON:

A. CONCRETE	28 DAY MIN STRENGTH
CAST–IN–PLACE CONCRETE	5500 PSI, FDOT CLASS IV
REPAIR MORTAR/CONCRETE	5000 PSI, ASTM C109
B. REINFORCEMENT	
REINFORCING STEEL & DOWELS	ASTM A615, GRADE 60
WELDED WIRE FABRIC	ASTM A185
C. ADMIXTURES	FDOT 924

4. ALL CEMENT FOR CAST–IN–PLACE CONCRETE SHALL CONFORM TO FDOT TYPE II FOR AN EXTREMELY AGGRESSIVE ENVIRONMENT PER FDOT SPECIFICATION 346.

5. EPOXY ADHESIVE SHALL COMPLY WITH ASTM C881 WITH A MINIMUM COMPRESSIVE STRENGTH OF 10,000 PSI AND MINIMUM BOND STRENGTH OF 2,000 PSI. USE SIKADUR 35 HI–MOD LV BY SIKA CORPORATION, FX 751 LZ BY FOX INDUSTRIES, DENEPOX I–300 BY DE NEEF CHEMICALS OR APPROVED EQUAL.

6. CAST–IN–PLACE CONCRETE SHALL CONTAIN CORROSION INHIBITOR IN ACCORDANCE WITH FDOT SPECIFICATION 346 AND 924. ANY ADMIXTURES IN THE CONCRETE MIXTURES SHALL BE COMPATIBLE WITH CORROSION INHIBITOR. HRWR AND CORROSION INHIBITOR SHALL COME FROM SAME MANUFACTURER.

7. EPOXY COMPOUNDS SHALL CONFORM TO FDOT SPECIFICATION 926.

8. COARSE AGGREGATE FOR CAST–IN–PLACE CONCRETE SHALL CONFORM TO FDOT SPECIFICATION 901 NO. 57.

9. COARSE AGGREGATE FOR POLYMER–MODIFIED PORTLAND CEMENT MORTAR/CONCRETE SHALL CONFORM TO FDOT SPECIFICATION 901 NO. 8.

10. MINIMUM COVER TO REINFORCING STEEL SHALL BE 3". PLACEMENT TOLERANCE IS 1/4".

11. SEAWARD CORNERS SHALL BE CHAMFERED 3/4". LANDWARD FACE SHALL HAVE ROUNDED, TOOLED EDGES.

12. CONTRACTOR SHALL REPAIR ALL SURFACE BLEMISHES IN CONCRETE WITHIN 24 HOURS OF FORM REMOVAL.

13. ALL CONSTRUCTION JOINTS BETWEEN CAST–IN–PLACE CONCRETE SHALL BE CLEANED & BONDED WITH EPOXY BONDING AGENT WITH A ROUGHENED SURFACE OF 1/4" AMPLITUDE.

14. FASCIA REINFORCING STEEL SHALL BE CLEANED WITH FRESH WATER PRIOR TO PLACEMENT OF EPOXY BONDING AGENT AND CONCRETE.

15. SPLICING OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH FDOT SPECIFICATION 415 AND CONFORM TO AWS D1.4. DO NOT SPLICE AT POINTS OF MAXIMUM STRESS.

16. ADMIXTURES USED IN CONCRETE MIXTURE PRODUCTION SHALL BE FROM SAME MANUFATURER OR HAVE CERTIFICATE OF COMPLIANCE FROM EACH MANUFACTURER.

SUBSIDENCE REPAIR

1. FOR EXCAVATION, FILTER FABRIC, GRAVEL AND BACKFILL MATERIALS AND METHODS REFER TO FDOT SPECIFICATION 443, WITHOUT PIPE. REFER TO THE PLANS FOR DIMENSIONS.

2. GRAVEL FILL SHALL BE IN ACCORDANCE WITH FDOT SPECIFICATION 901, NO. 57 STONE.

3. FILTER FABRIC SHALL BE IN ACCORDANCE WITH FDOT SPECIFICATION 514.

4. DRAINAGE GEOCOMPOSITE SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS. MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE FOR FIRST DAY OF INSTALLATION FOR CONTRACTOR TRAINING ON INSTALLATION METHODS. DRAINAGE GEOCOMPOSITE SHALL BE SUITABLE FOR USE IN A FRENCH DRAIN SYSTEM BEHIND A CONCRETE SEAWALL IN A MARINE ENVIRONMENT. USE MIRADRAIN HC BY CARLISLE COATINGS AND WATERPROOFING, TENDRAIN 770–2 BY TENAX CORPORATION, TERRADRAIN 132 BY WEBTEC GEOSYNTHETICS, OR APPROVED EQUAL.

CONCRETE REPAIR

1. WHERE THE QUANTITY OF CONCRETE SPALL REPAIR VARIES MORE THAN 25% ABOVE OR BELOW STATED ESTIMATED QUANTITY REQUIRED, AN EQUITABLE ADJUSTMENT IN CONTRACT AMOUNT MAY BE MADE IN ACCORDANCE WITH THE BID UNIT PRICES FOR THE STATED REPAIR. THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY CHANGES IN THE CONCRETE SPALL REPAIR QUANTITY FOR EACH 100 LINEAR FEET ABOVE OR BELOW 25% OF THE ESTIMATED QUANTITY SHOWN ON THE REPAIR SCHEDULES BEFORE CONTINUING WITH REPAIR WORK.

2. THE FOLLOWING MATERIALS SHALL BE USED FOR CONCRETE REPAIRS:
   A. SIKA ARMATEC 110 EPOCEM BY SIKA CORPORATION, CORR–BOND BY EUCLID CHEMICAL COMPANY, FX–792LP BY FOX INDUSTRIES, OR APPROVED EQUAL FOR BONDING AGENT. BONDING AGENT SHALL HAVE A MINIMUM BONDING STRENGTH OF 1500 PSI (ASTM C882).
   B. CAST–IN–PLACE CONCRETE FOR CAP ENCASEMENT & PANEL FASCIA
   C. EPOXY ADHESIVE FOR PANEL CRACK REPAIR

3. CONCRETE SURFACE PREPARATION:
   A. REMOVE SPALLED CONCRETE BY HAND WITH SMALL PNEUMATIC CHIPPING HAMMERS TO CLEAN, SOUND CONCRETE A MINIMUM OF ONE (1) INCH BEHIND EXISTING REINFORCING STEEL.
   B. INSPECT THE CAVITY FOR REMAINING DEFECTIVE CONCRETE BY TAPPING WITH A HAMMER OR STEEL ROD. WHERE HOLLOW OR DULL SOUNDS ARE NOTED, REMOVE ADDITIONAL CONCRETE UNTIL TAPPING PRODUCES A SOLID TONE.
   C. SAW–CUT EDGES OF CAVITY (MINIMUM 1–INCH CUT) TO AVOID FEATHER EDGING AND ROUGHEN SURFACE TO MINIMUM 1/4" AMPLITUDE BY SANDBLASTING, GRINDING
   OR WATER BLASTING.
   D. ALL REMOVED CONCRETE AND STEEL SHALL BE RECOVERED AND NOT ALLOWED TO FALL INTO THE WATER.
   E. APPLY BONDING AGENT TO CAVITY SURFACE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
   F. FOR CRACK INJECTION REPAIRS, CLEAN AREA SURROUNDING CRACK OF ALL DETERIORATED CONCRETE, EFFLORESCENCE AND OTHER CONTAMINANTS DETRIMENTAL TO THE ADHESION OF THE EPOXY COMPOUND. CLEAN INTERIOR OF CRACK WITH AIR UNDER SUFFICIENT PRESSURE TO REMOVE LOOSE MATERIALS ENTRAPPED WITHIN CRACK INCLUDING EFFLORESCENCE.
   G. ALL CONCRETE SURFACES SHALL BE CLEANED WITH HIGH WATER, OR AS REQUIRED TO REMOVE ALL MARINE GROWTH PRIOR TO CONCRETE PLACEMENT.

4. FOR SPALLS ADJACENT TO JOINTS AND OTHER STRUCTURES, SUCH AS DOCKS, INSERT PREFORMED JOINT FILLER TO THE WORKING FACES OF THE SPALL AND TRIM TO FIT THE SHAPE OF THE WORKING FACES OF THE JOINT SO PATCH MATERIAL CAN NOT BYPASS THE FILLER. AFTER PATCH HAS CURED, SAW OUT THE TOP ONE (1) INCH OF THE FILLER AND INSTALL LIQUID JOINT SEALER.

5. FOR SPALLS ON PANELS, CLEAN SURROUNDING AREA TO BE REPAIRED OF ALL MARINE GROWTH FOLLOWING DAMAGED CONCRETE REMOVAL AND REINFORCEMENT CLEANING.

6. EXPOSED REINFORCEMENT SHALL BE SAND BLASTED UNTIL ALL CORROSION IS REMOVED. MEASURE THE BAR DIAMETER TO DETERMINE THE AMOUNT OF SECTION LOSS DUE TO CORROSION. REPLACE EXPOSED REINFORCEMENT IN–KIND IF CROSS–SECTIONAL AREA LOSS IS GREATER THAN 10%. WELDING FOR REINFORCEMENT REPLACEMENT SHALL BE IN ACCORDANCE WITH AWS D1.4. PROVIDE MINIMUM 3/4" CLEARANCE AROUND NEW REINFORCEMENT.

7. REPAIR MATERIAL PLACEMENT:
   A. MIX MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
   B. BONDING AGENT AND REINFORCEMENT PROTECTION: APPLY TO CAVITY SURFACE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. APPLY BONDING AGENT TO CAVITY SURFACE ON ALL CONCRETE REPAIRS, INCLUDING ENCASEMENT.
   C. CRACK INJECTION: PREP SURFACE AND INJECT EPOXY PER MANUFACTURER'S RECOMMENDATIONS.
   D. CEMENTING DOWELS: IMMEDIATELY PRIOR TO PLACING THE DOWEL, CLEAN HOLE OF DUST AND OTHER DELETERIOUS MATERIAL WITH A HIGH PRESSURE AIR HOSE. FILL HOLE HALFWAY WITH EPOXY. INSERT DOWEL IN HOLE BY ROTATING IT AT LEAST ONE (1) COMPLETE TURN WHILE TAPPING IT DOWN. IF NECESSARY ADD MORE EPOXY TO FILL HOLE.
   E. CAST–IN–PLACE CONCRETE: POUR CONCRETE INTO FORMS WHILE BONDING AGENT IS STILL TACKY. CONSOLIDATE CONCRETE IN ACCORDANCE WITH FDOT SPECIFICATION 400. FORMS SHALL REMAIN IN PLACE A MINIMUM OF 3 DAYS AND UNTIL THE COMPRESSIVE STRENGTH IS AT LEAST 70% OF THE 28 DAY DESIGN STRENGTH.

8. DO NOT FEATHER CONCRETE OUT ONTO ADJACENT SURFACES. REMOVE EXCESS CONCRETE AND EPOXY ON ADJACENT SURFACES BEFORE THE CONCRETE HARDENS.

9. RECORD DEMOLITION AND REPAIR VOLUMES ON A DAILY BASIS TO BE VERIFIED BY THE OWNER OR OWNER'S ENGINEER. DO NOT EXCEED THE TOTAL INDICATED QUANTITY OR VOLUME WITHOUT THE OWNER'S APPROVAL. 5% WASTE ALLOWANCE PERMITTED FOR REPAIR MATERIAL.

10. CONTRACTOR SHALL CHECK REPAIR AREAS FOR CRACKS, SPALLS, POP–OUTS, VOIDS, AND LOSS OF BOND BETWEEN REPAIRED AND SURROUNDING CONCRETE. IMMEDIATELY REPAIR ANY DEFECTS.

11. THE SAME PRODUCTS/MATERIALS SHALL BE USED FOR EACH TYPE OF CONCRETE REPAIR. WHERE THE SAME MANUFATURER IS NOT USED FOR MATERIALS IN CONTACT WITH EACH OTHER A CERTIFICATE OF COMPATABILITY FROM EACH MANUFACTURER SHALL BE INCLUDED WITH THE SUBMITTALS.

12. FOR ALL PROPRIETARY CONCRETE REPAIR PRODUCTS, MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE FOR FIRST DAY OF APPLICATION FOR TRAINING ON THE APPLICAITON METHODS.

PAY ITEM NOTES

1. PAYMENT FOR INCIDENDTAL RELATED ITEMS NOT SPECIFICALLY COVERED IN THE PLANS OR SPECIFICATIONS FOR THE ITEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE RELATED ITEM.

2. ITEM 400–4–8, CONCRETE CLASS IV (BULKHEAD), INCLUDES SELECTIVE DEMOLITION OF DETERIORATED CONCRETE AS INDICATED ON SHEET S–601; AND CONCRETE REPAIR NOTES ON SHEET G–003.

3. ITEM 443–70–06, FRENCH DRAIN, INCLUDES FURNISHING AND PLACEMENT OF THE DRAINAGE GEOCOMPOSITE.

4. ITEM 455–87, TIE–ROD REPAIR, INCLUDES ALL WORK REQUIRED FOR ASSESSMENT AND REPAIR OF TIE–RODS AS SHOWN ON SHEETS S–504 AND S–505. THE QUANTITY OF EACH TYPE OF TIE–ROD REPAIR METHOD WAS ESTIMATED TO BE 50% TYPE 1 AND 50% TYPE 2 FOR BIDDING PURPOSES. THE ACTUAL QUANTITY WILL BE DETERMINED DURING CONSTRUCTION.

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR

GENERAL NOTES (SHEET 2 OF 2)

merkel & sicko
1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813–258–8818

Designed by: JAM		Date: JAN 2009	Rev. –
Dwn by: JAG	Ckd by: DJMcc	M&N Project No. 5942–01	
Reviewed by: CWS		Drawing code:	
Submitted by: GARY W. SMITH MOFFATT & NICHOL		Drawing Scale: AS SHOWN	
		Plot scale: 1:1 (0 SHEET)	

CITY OF TAMPA
CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

SEAL

GARY W. SMITH, P.E.
FLORIDA Lic. No. 041212

Sheet
G-003
Sheet 3 of 19

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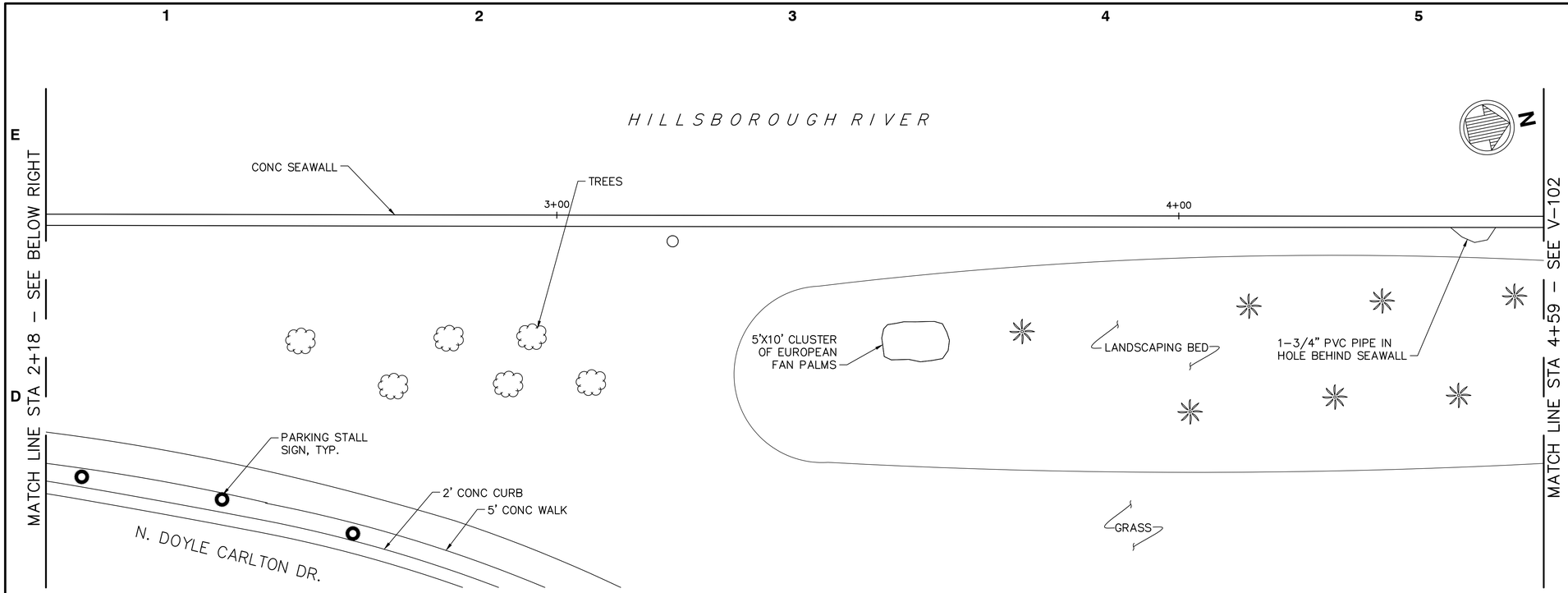
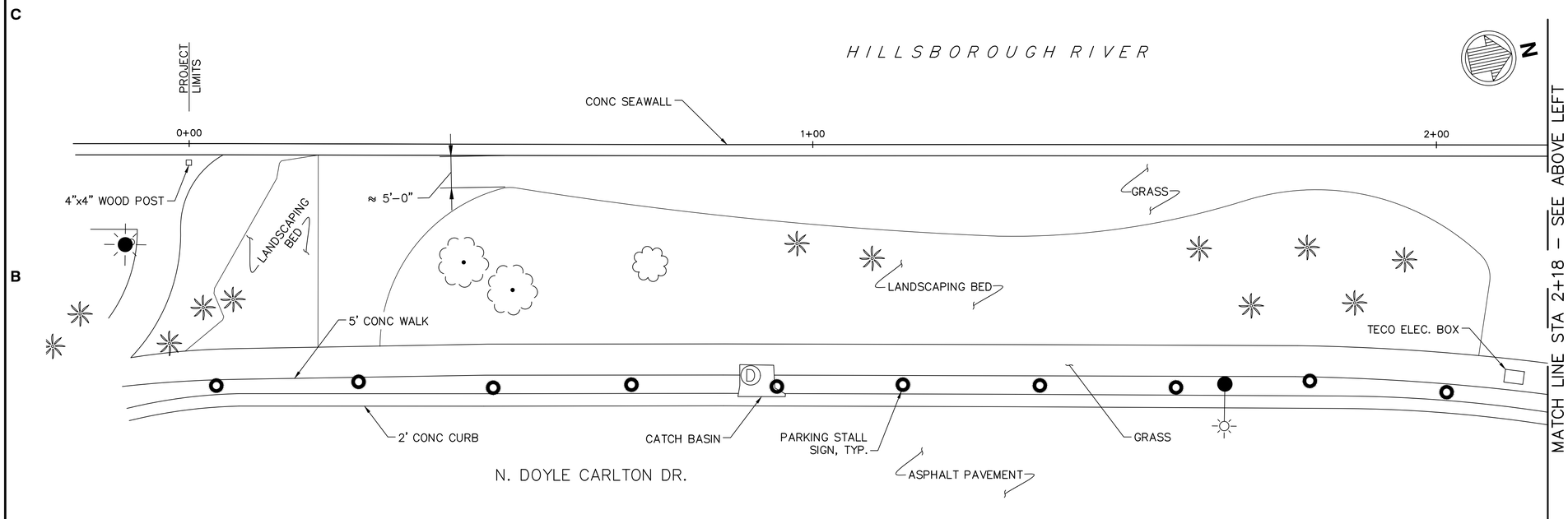
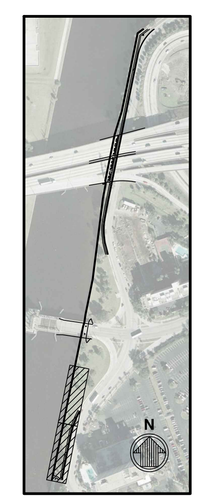


NOTES:

1. INFORMATION SHOWN ON THIS SHEET REFERENCES CONDITIONS AT TIME OF SURVEY (GFY MAY 2007; MOFFATT & NICHOL OCTOBER 2012).
2. ELEVATIONS REFERENCED TO NGVD 29.
3. CONTRACTOR SHALL REFER TO URS TAMPA RIVERWALK DOYLE CARLTON SEGMENT DRAWINGS FOR TREE PROTECTION AND REMOVAL.





SEAWALL S1
KEY PLAN
N.T.S.

10' 0' 10' 20'
SCALE: 1"=10'

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

HILLSBOROUGH RIVER SEAWALL REPAIR

EXISTING CONDITIONS PLAN - SEAWALL S1 (SHEET 1 OF 4)

Mark	Description	Date	Appr.

Designed by: JAM
Dwn by: AKS
Ckd by: DJMac
Reviewed by: GWS
Submitted by: GARY W. SMITH MOFFATT & NICHOL
Date: JAN 2009
M&N Project No. 5942-01
Drawing code:
Drawing Scale: AS SHOWN
Plot scale: 1:1 (0 SHEET)
Rev. -

1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813-258-8818

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CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

GARY W. SMITH, P.E.
FLORIDA Lic. No. 041212
SEAL

Sheet
V-101
Sheet 4 of 19

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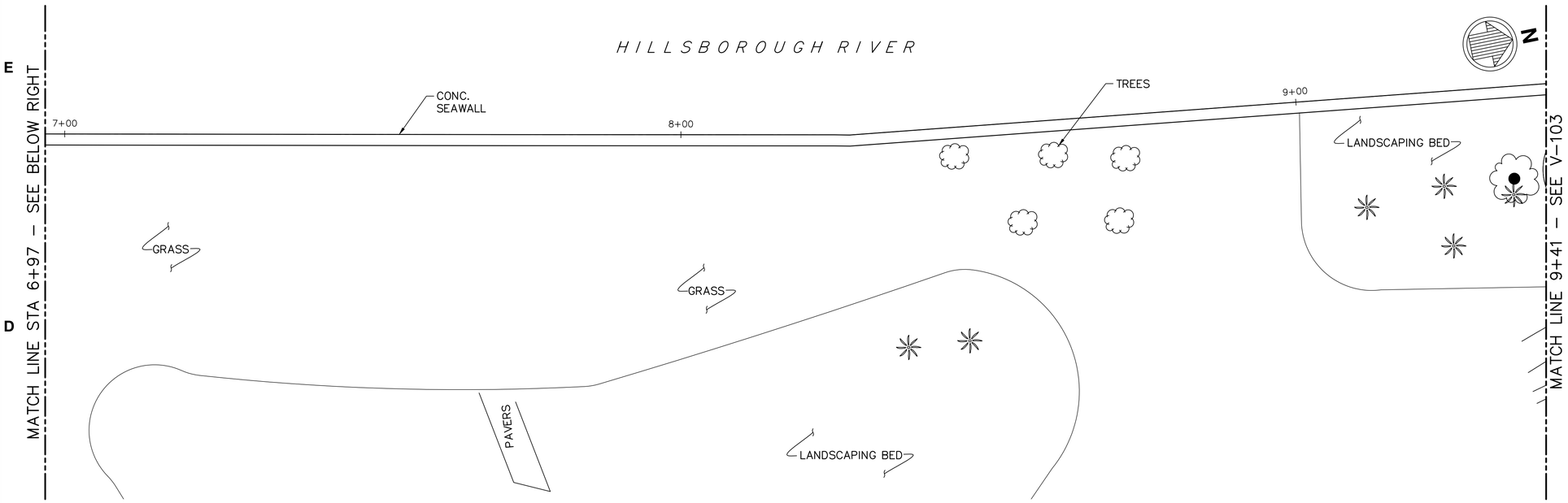

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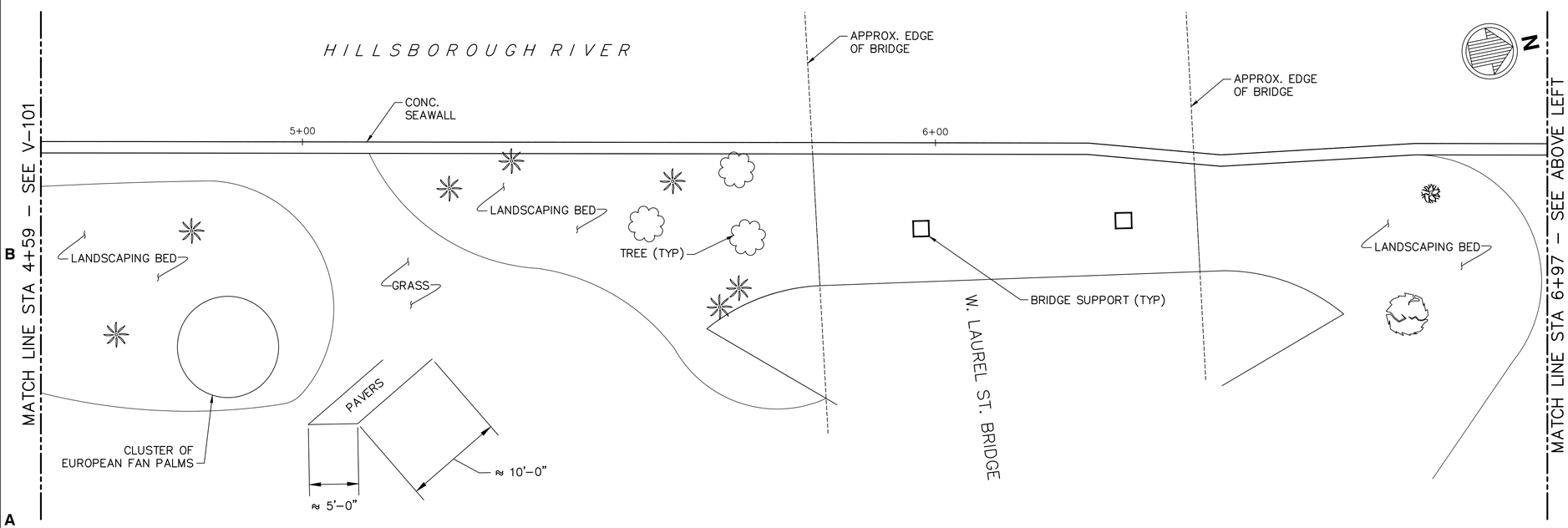

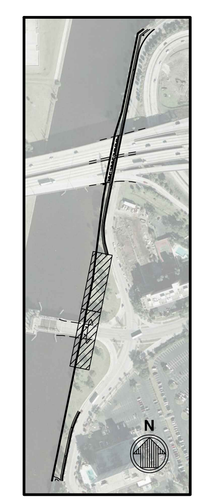

SEAWALL S1
KEY PLAN
N.T.S.

10' 0' 10' 20'
SCALE: 1"=10'

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR

EXISTING CONDITIONS PLAN - SEAWALL S1 (SHEET 2 OF 4)

Designed by: JAM | Date: JAN 2009 | Rev. –
Dwn by: AJS | Cad by: DJMac | M&N Project No. 5942-01
Reviewed by: GWS | Drawing code:
Submitted by: GARY W. SMITH MOFFATT & NICHOL | Drawing Scale: AS SHOWN | Plot scale: 1:1 (0 SHEET)

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TAMPA, FLORIDA 33606
813-258-8818

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CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

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Sheet
V-102
Sheet 5 of 19

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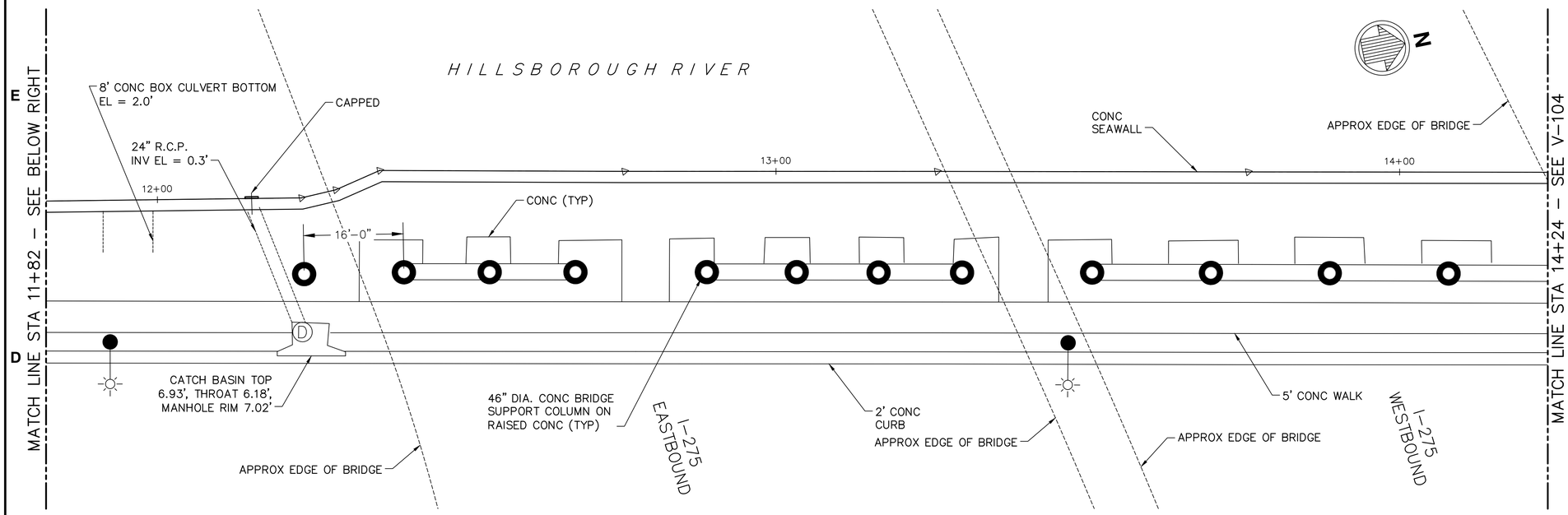

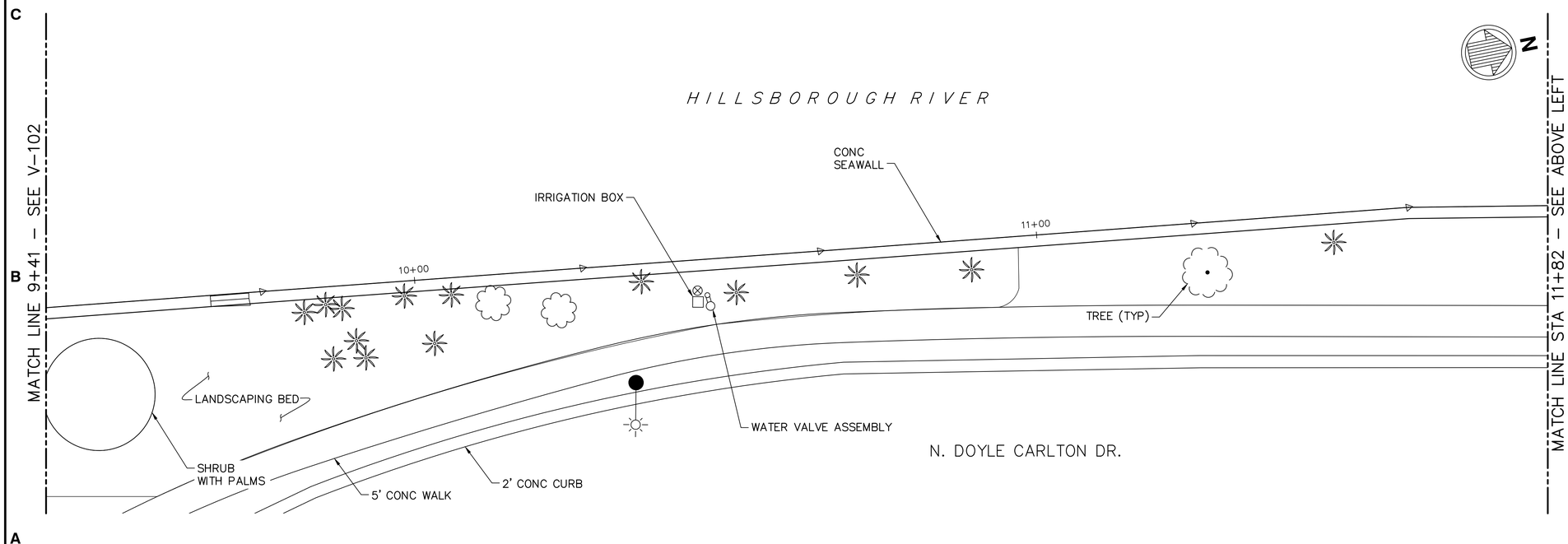

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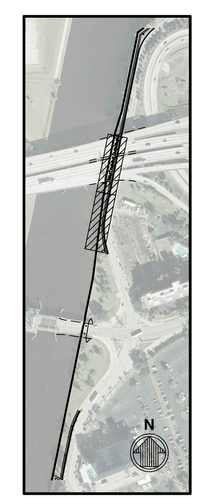

SEAWALL S1
KEY PLAN
N.T.S.

10' 0' 10' 20'
SCALE: 1"=10'

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR

EXISTING CONDITIONS PLAN - SEAWALL S1 (SHEET 3 OF 4)

Designed by: JAM | Date: JAN 2009 | Rev. -
Dwn by: AKS | Cad by: DJMac | M&N Project No. 5942-01
Reviewed by: GWS | Drawing code:
Submitted by: GARY W. SMITH MOFFATT & NICHOL | Drawing Scale: AS SHOWN
Plot scale: 1:1 (0 SHEET)

1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813-258-8818
moffatt & nichol

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CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

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FLORIDA Lic. No. 041212

Sheet
V-103
Sheet 6 of 19

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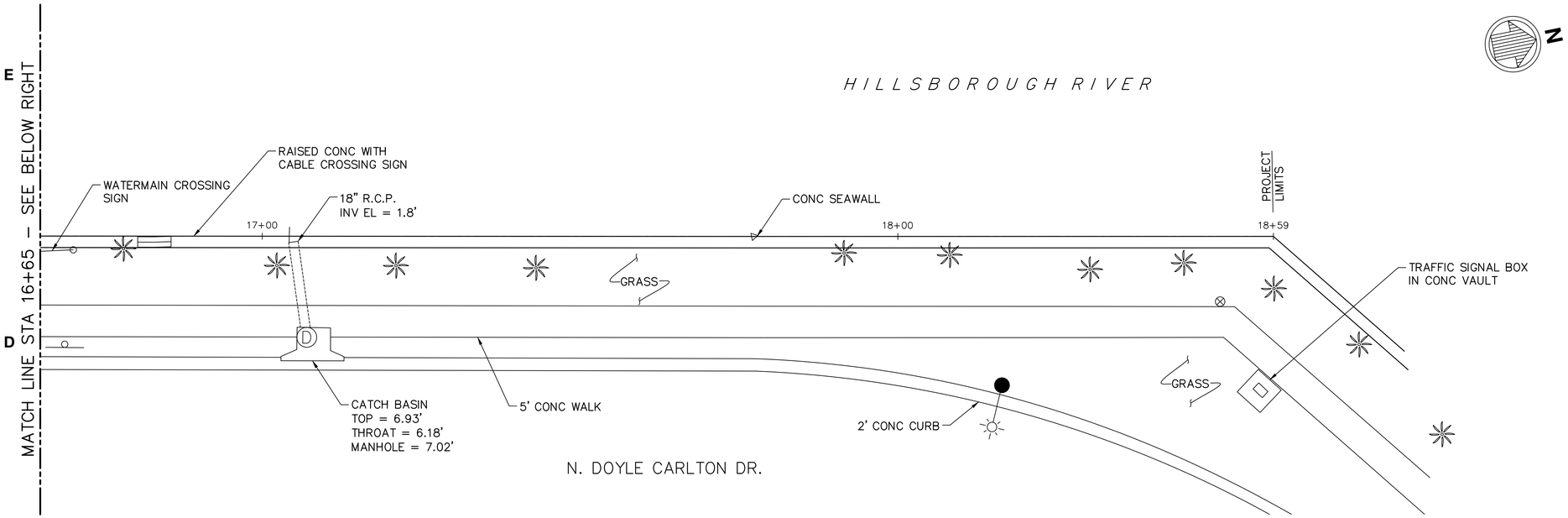

NOTES:

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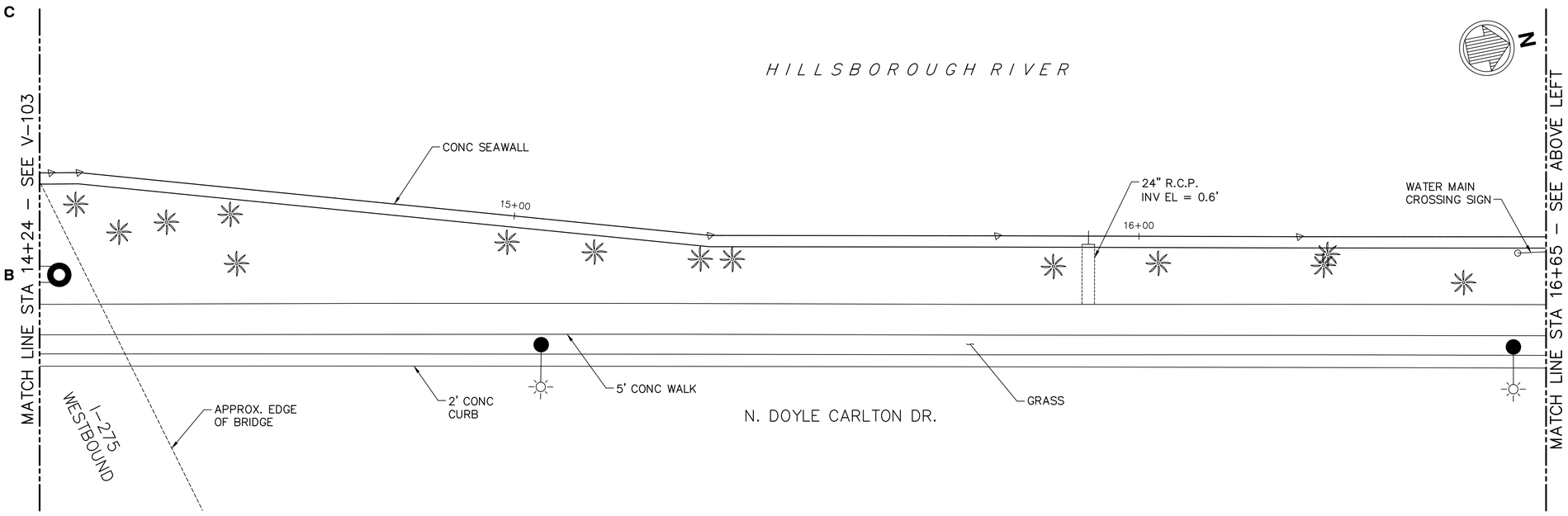

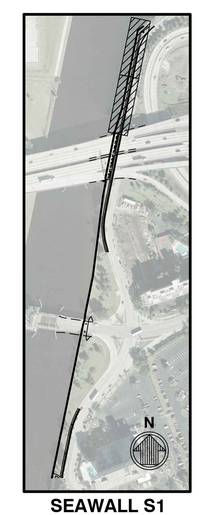

SEAWALL S1
KEY PLAN
N.T.S.

10' 0' 10' 20'
SCALE: 1"=10'

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR

EXISTING CONDITIONS PLAN - SEAWALL S1 (SHEET 4 OF 4)

Designed by: JAM | Date: JAN 2009 | Rev. –
Dwn by: AGS | Cad by: DJMac | M&N Project No: 5942-01
Reviewed by: GWS | Drawing code:
Submitted by: GARY W. SMITH MOFFATT & NICHOL | Drawing Scale: AS SHOWN | Plot scale: 1:1 (0 SHEET)

1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813-258-8818
m o f f a t t & n i c h o l

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CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

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GARY W. SMITH, P.E.
FLORIDA Lic. No. 041212

Sheet
V-104
Sheet 7 of 19

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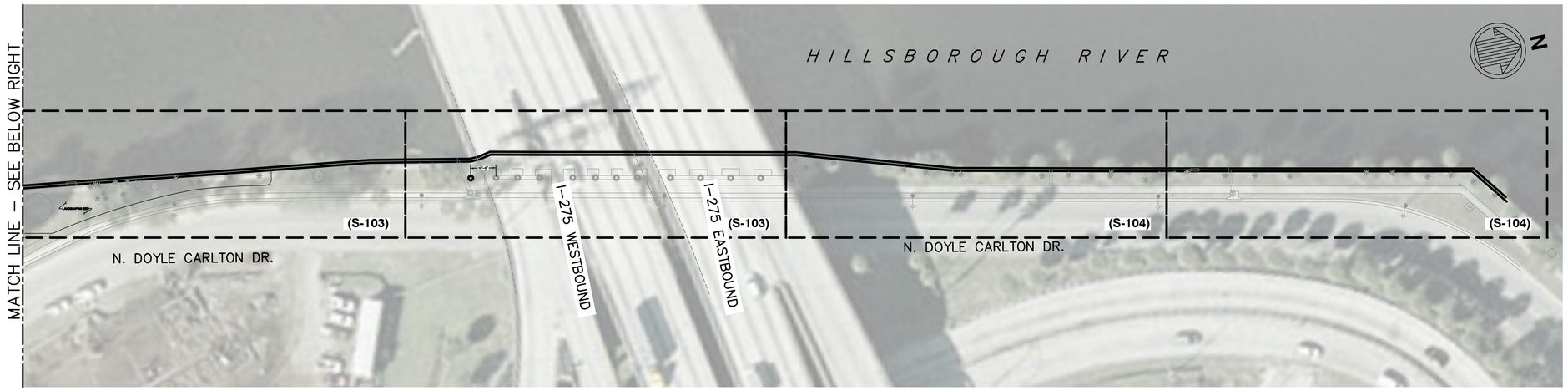
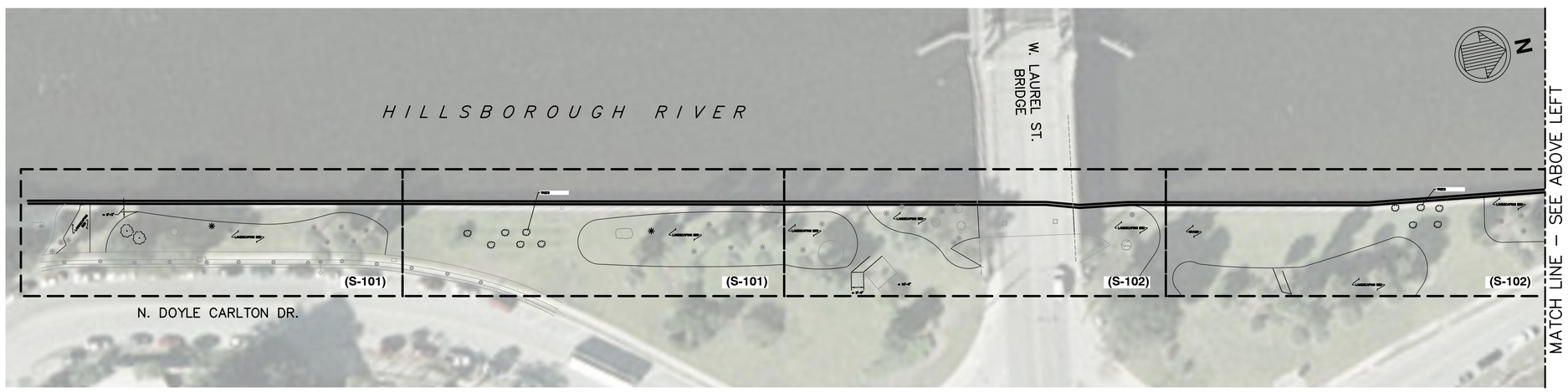




B1 / S-001 **PLAN – SEAWALL S1 (FORTUNE STREET TO WATERWORKS PARK)**
SCALE: 1"=40'

40' 0' 40' 80'
SCALE: 1"=40'

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR

SHEET KEY PLAN

1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813-258-8818
mafatt & nichol

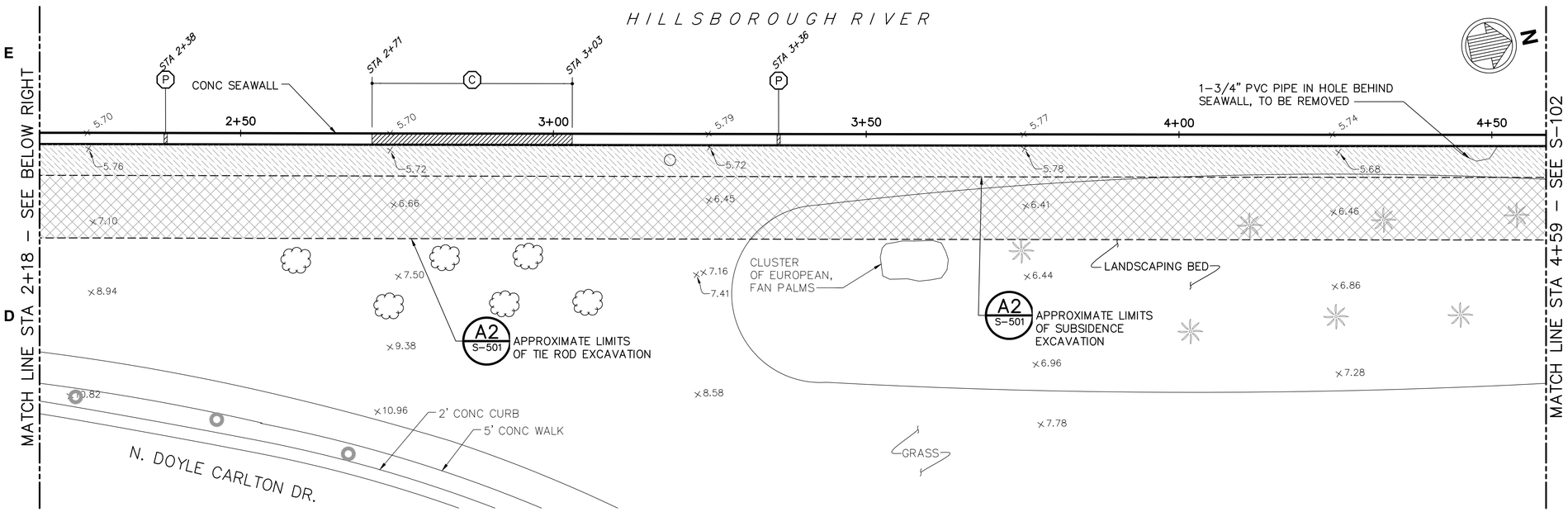
CITY OF TAMPA
CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

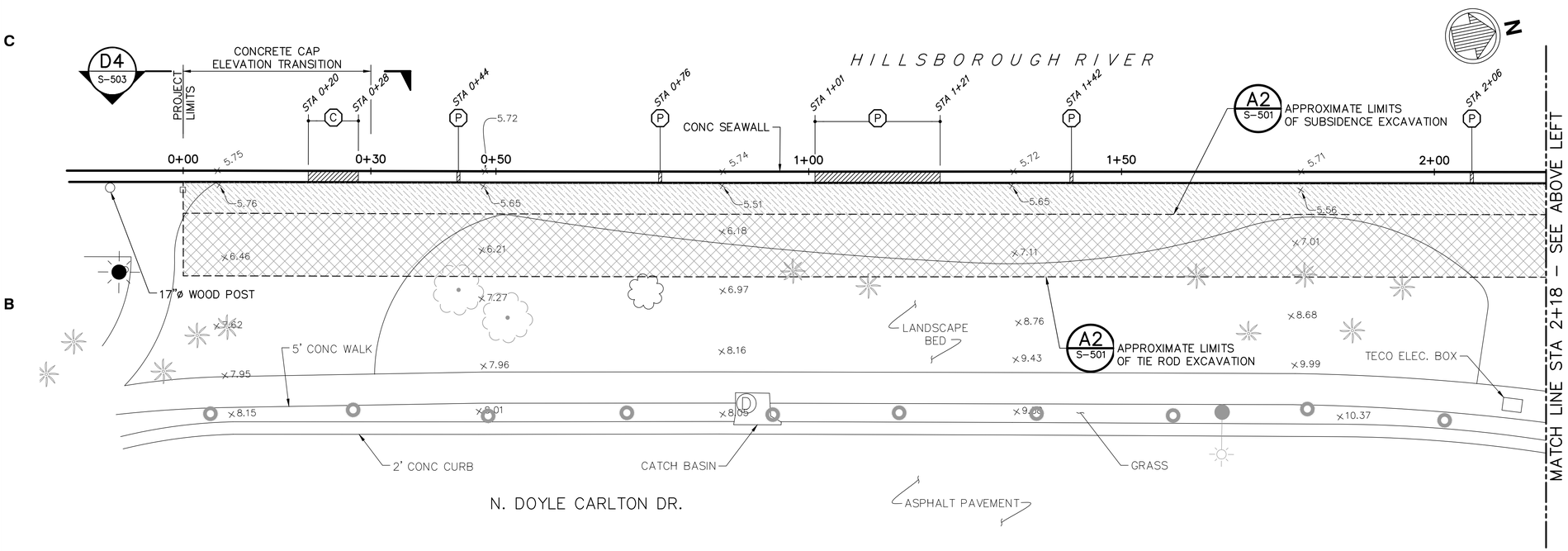
Designed by: JAM
Dwn by: JAM
Chd by: DuMac
Reviewed by: GWS
Submitted by: GARY W. SMITH MOFFATT & NICHOL
Date: JAN. 2009
M&N Project No. 5942-01
Drawing code:
Drawing Scale: AS SHOWN
Plot scale: 1:1 (0 SHEET)
Rev. –

SEAL
GARY W. SMITH, P.E.
FLORIDA Lic. No. 041212

Sheet
S-001
Sheet 8 of 19

P:\5942-01\CADD_ACTIVE_S1 BID REVISION\5942-01_S001; 12-Sep-14 1:35 PM; Thornton, Shayna



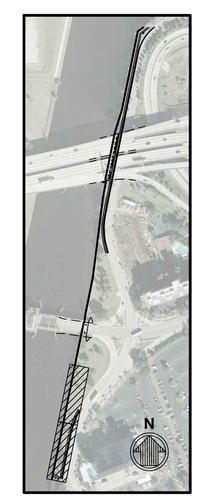


NOTES:

1. FOR EXISTING WALL DETAILS SEE S-401.
2. FOR REPAIR SCHEDULES SEE S-601.
3. INSTALL SUBSIDENCE REPAIR PER S-501 ALONG FULL LENGTH OF SEAWALL.
4. FOR TYPICAL REPAIR DETAILS SEE S-501.
5. FOR TYPICAL ENCASEMENT REPAIR DETAILS SEE S-503.
6. INFORMATION SHOWN ON THIS SHEET REFERENCES CONDITIONS AT TIME OF SURVEY.
7. EXISTING OUTFALLS, CULVERTS, PIPE, ETC. NEED TO BE PROTECTED UNLESS OTHERWISE DIRECTED BY THE CITY.
8. CONTRACTOR SHALL REFER TO URS TAMPA RIVERWALK DOYLE CARLTON SEGMENT DRAWINGS FOR TREE PROTECTION AND REMOVAL, AND FINISH GRADES BEHIND THE SEAWALL AFTER EXCAVATION AND BACKFILL.
9. ELEVATIONS REFERENCED TO NGVD 29.

LEGEND:

- APPROX LIMITS OF TIE ROD EXCAVATION
- APPROX LIMITS OF SUBSIDENCE EXCAVATION
- APPROX AREA TO BE REPAIRED
- (C) CAP REPAIR
- (P) PANEL REPAIR



SEAWALL S1 KEY PLAN
N.T.S.

10' 0' 10' 20'
SCALE: 1"=10'

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR
REPAIR PLAN - SEAWALL S1 (SHEET 1 OF 4)

Designed by: JAM | Dwn by: PJS | Ckd by: DuMoc | Reviewed by: GWS | Submitted by: GARY W. SMITH MOFFATT & NICHOL
Date: JANE 2009 | M&N Project No. 5942-01 | Drawing code: | Drawing Scale: AS SHOWN | Plot scale: 1:1 (0 SHEET) | Rev. –

moffatt & nichol
1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813-258-8818

CITY OF TAMPA
CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

SEAL
GARY W. SMITH, P.E.
FLORIDA Lic. No. 041212

Sheet
S-101
Sheet 9 of 19

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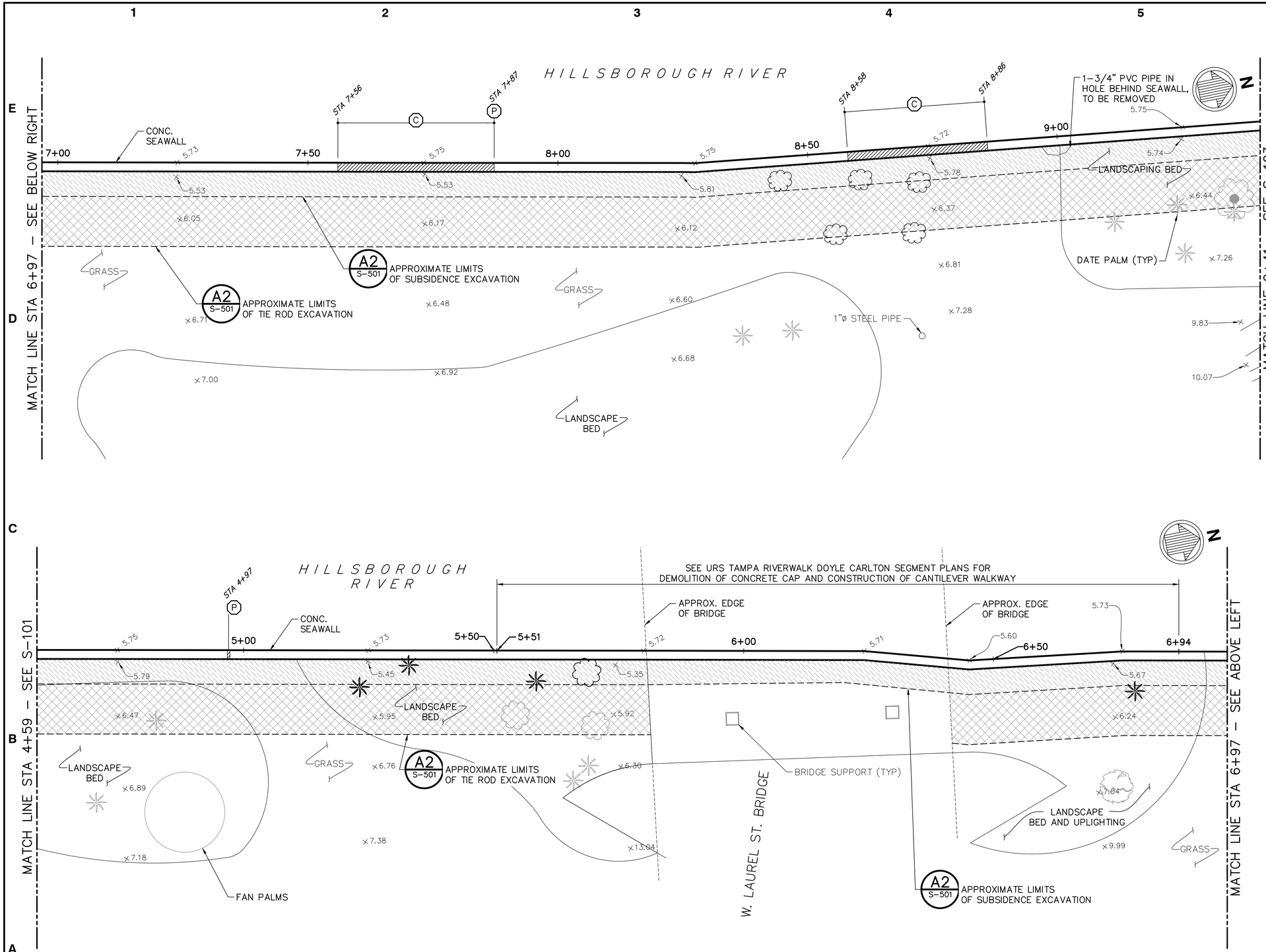

NOTES:

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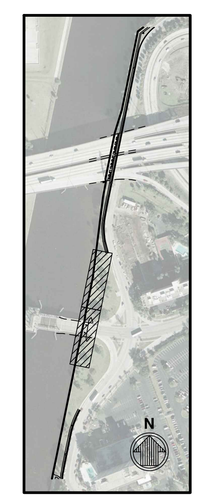
- APPROX LIMITS OF SUBSIDENCE EXCAVATION
- APPROX AREA TO BE REPAIRED
- (C) CAP REPAIR
- (P) PANEL REPAIR



SEAWALL S1
KEY PLAN
N.T.S.

10' 0' 10' 20'
SCALE: 1"=10'

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR

REPAIR PLAN - SEAWALL S1 (SHEET 2 OF 4)

Designed by: JAM | Date: JAN 2009 | Rev. –
Dwn by: ASS | Ckd by: DJMcc | M&N Project No: S942-01
Reviewed by: GWS | Drawing code:
Submitted by: GARY W. SMITH MOFFATT & NICHOL | Drawing Scale: AS SHOWN | Plot scale: 1:1 (0 SHEET)

1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813-258-8818
moffatt & nichol

CITY OF TAMPA
CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

SEAL
GARY W. SMITH, P.E.
FLORIDA Lic. No. 041212

Sheet
S-102
Sheet 10 of 19

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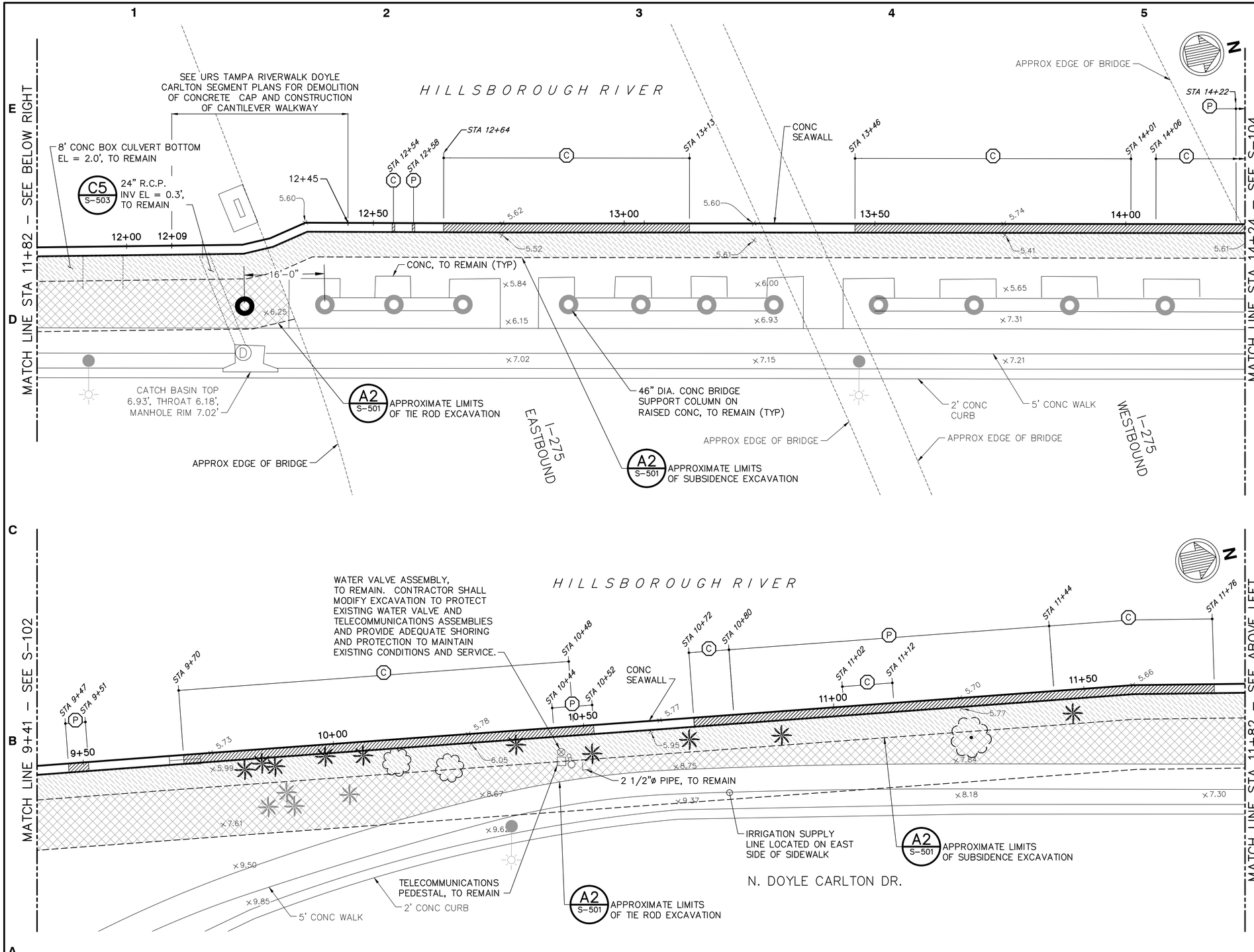

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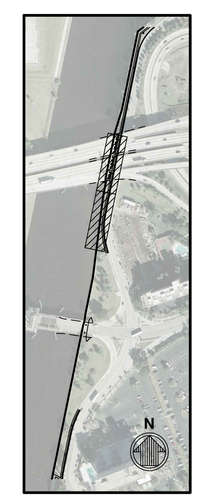
6. INFORMATION SHOWN ON THIS SHEET REFERENCES CONDITIONS AT TIME OF SURVEY.
7. EXISTING OUTFALLS, CULVERTS, PIPE, ETC. NEED TO BE PROTECTED UNLESS OTHERWISE DIRECTED BY THE CITY.
8. CONTRACTOR SHALL REFER TO URS TAMPA RIVERWALK DOYLE CARLTON SEGMENT DRAWINGS FOR TREE PROTECTION AND REMOVAL, AND FINISH GRADES BEHIND THE SEAWALL AFTER EXCAVATION AND BACKFILL.
9. ELEVATIONS REFERENCED TO NGVD 29.

LEGEND:

- APPROX LIMITS OF TIE ROD EXCAVATION
- APPROX LIMITS OF SUBSIDENCE EXCAVATION
- APPROX AREA TO BE REPAIRED
- (C) CAP REPAIR
- (P) PANEL REPAIR



SEAWALL S1
KEY PLAN
N.T.S.

10' 0' 10' 20'
SCALE: 1"=10'

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR
REPAIR PLAN - SEAWALL S1 (SHEET 3 OF 4)

Designed by: JAM | Date: JAN 2009 | Rev. –
Dwn by: JCS | Ckd by: DJMcc | M&N Project No: 5942-01
Reviewed by: GWS | Drawing code:
Submitted by: GARY W. SMITH MOFFATT & NICHOL | Drawing Scale: AS SHOWN | Plot scale: 1:1 (D SHEET)

moffatt & nichol
1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813-258-8818

CITY OF TAMPA
CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

SEAL
GARY W. SMITH, P.E.
FLORIDA Lic. No. 041212

Sheet
S-103
Sheet 11 of 19

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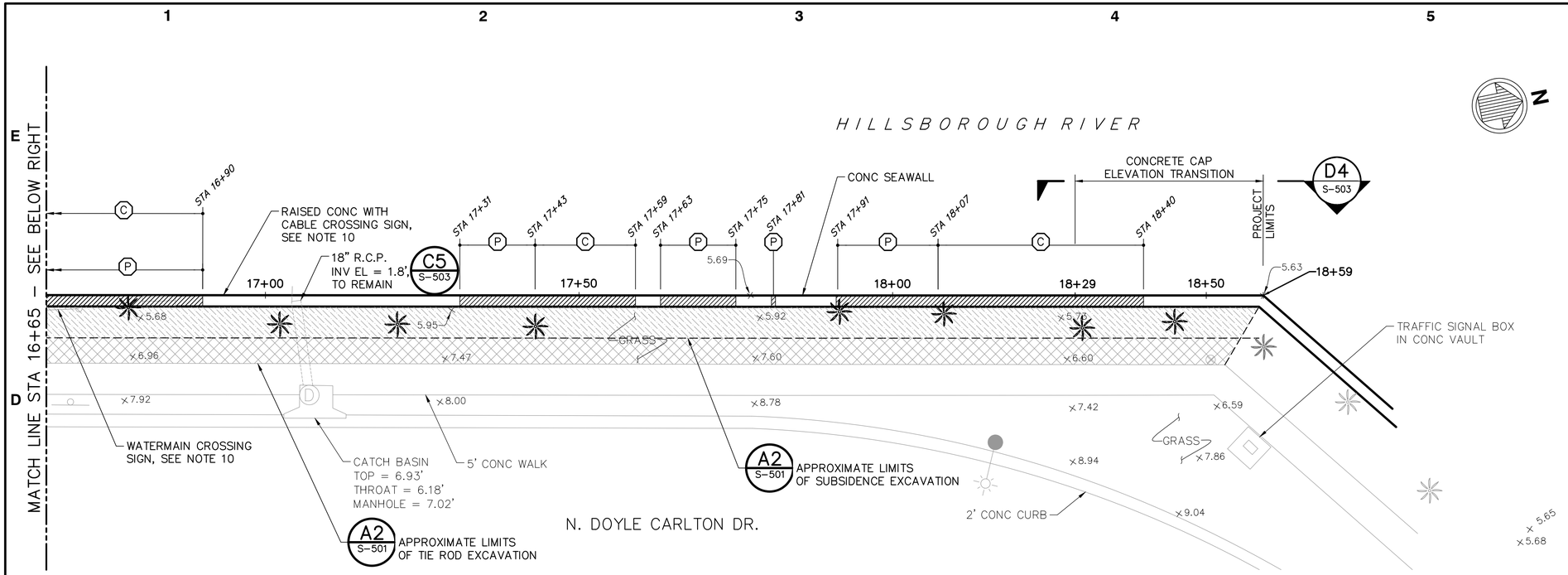
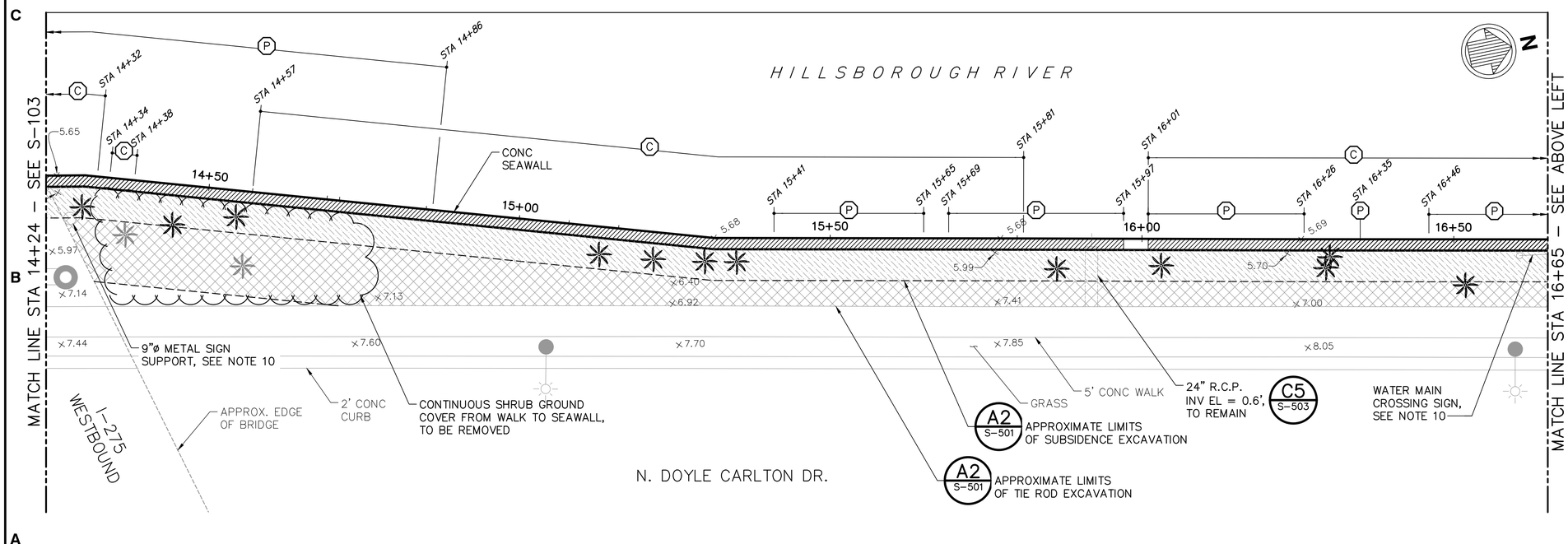


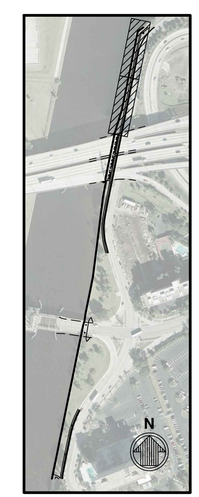


NOTES:

1. FOR EXISTING WALL DETAILS SEE S-401.
2. FOR REPAIR SCHEDULES SEE S-601.
3. INSTALL SUBSIDENCE REPAIR PER S-501 ALONG FULL LENGTH OF SEAWALL.
4. FOR TYPICAL REPAIR DETAILS SEE S-501.
5. FOR TYPICAL ENCASEMENT REPAIR DETAILS SEE S-503.
6. INFORMATION SHOWN ON THIS SHEET REFERENCES CONDITIONS AT TIME OF SURVEY.
7. EXISTING OUTFALLS, CULVERTS, PIPE, ETC. NEED TO BE PROTECTED UNLESS OTHERWISE DIRECTED BY THE CITY.
8. CONTRACTOR SHALL REFER TO URS TAMPA RIVERWALK DOYLE CARLTON SEGMENT DRAWINGS FOR TREE PROTECTION AND REMOVAL, AND FINISH GRADES BEHIND THE SEAWALL AFTER EXCAVATION AND BACKFILL.
9. ELEVATIONS REFERENCED TO NGVD 29.
10. SIGNS SHALL BE REMOVED, STORED, AND REINSTALLED.

LEGEND:

- APPROX LIMITS OF TIE ROD EXCAVATION
- APPROX LIMITS OF SUBSIDENCE EXCAVATION
- APPROX AREA TO BE REPAIRED
- (C) CAP REPAIR
- (P) PANEL REPAIR



SEAWALL S1
KEY PLAN
N.T.S.

10' 0' 10' 20'
SCALE: 1"=10'

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR

REPAIR PLAN - SEAWALL S1 (SHEET 4 OF 4)

Designed by: JAM | Date: JAN 2009 | Rev. –
Dwn by: JVS | Ckd by: DJMcc | M&N Project No: 5942-01
Reviewed by: GWS | Drawing code:
Submitted by: GARY W. SMITH MOFFATT & NICHOL | Drawing Scale: AS SHOWN
Plot scale: 1:1 (D SHEET)

1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813-258-8818
moffatt & nichol

CITY OF TAMPA
CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

SEAL

GARY W. SMITH, P.E.
FLORIDA Lic. No. 041212

Sheet
S-104
Sheet 12 of 19

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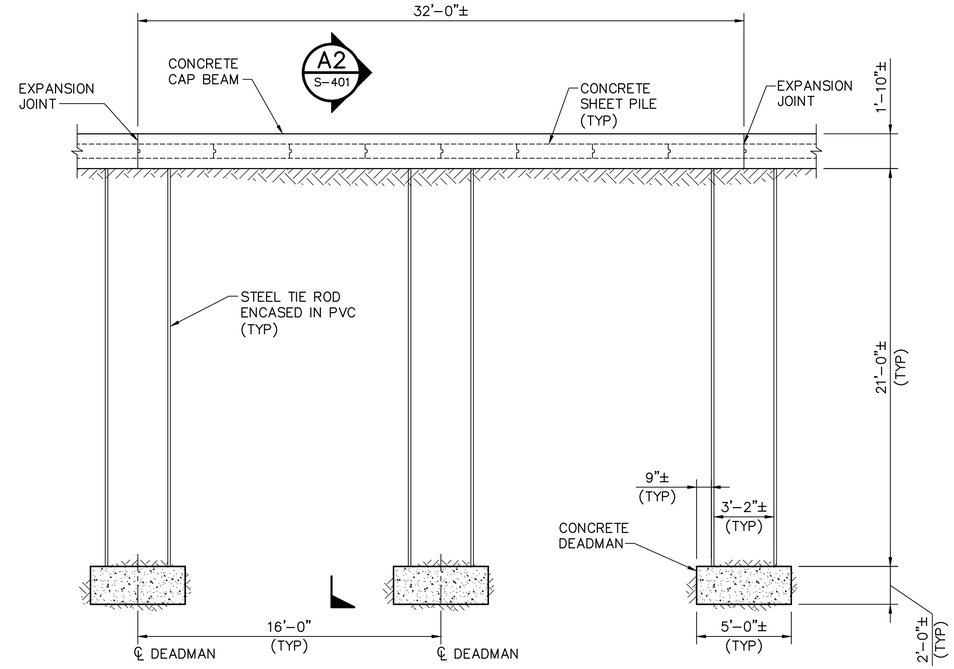
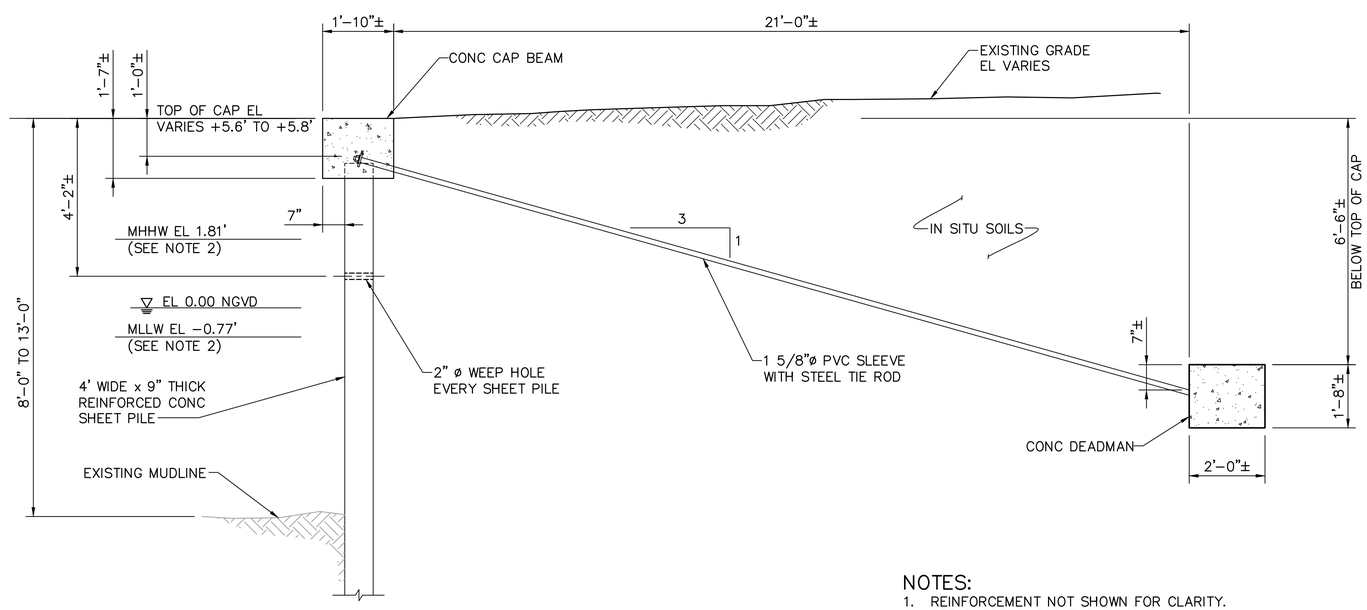


D2 / S-104 PLAN – SEAWALL S1

SCALE: 3/16"=1'-0"

S-101,S-102,S-103



A2 / S-401 SECTION – SEAWALL S1

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

NOTES:
1. REINFORCEMENT NOT SHOWN FOR CLARITY.
2. SEE SHEET G-002 FOR TIDAL DATUM RELATIONSHIP.

2'-0" 0'-0" 2'-0" 4'-0"
SCALE: 1/2"=1'-0"

4'-0" 0'-0" 4'-0" 8'-0"
SCALE: 1/4"=1'-0"

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR

SEAWALL S1 - EXISTING WALL DETAILS

Designed by: JAM | Date: JAN 2009 | Rev. -
Dwn by: AGS | Cad by: DuMoc | M&N Project No. 5942-01
Reviewed by: GWS | Drawing code:
Submitted by: GARY W. SMITH MOFFATT & NICHOL | Drawing Scale: AS SHOWN | Plot scale: 1:1 (0 SHEET)

moffatt & nichol
1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813-258-8818

CITY OF TAMPA
CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

SEAL
GARY W. SMITH, P.E.
FLORIDA Lic. No. 041212

Sheet
S-401
Sheet 13 of 19

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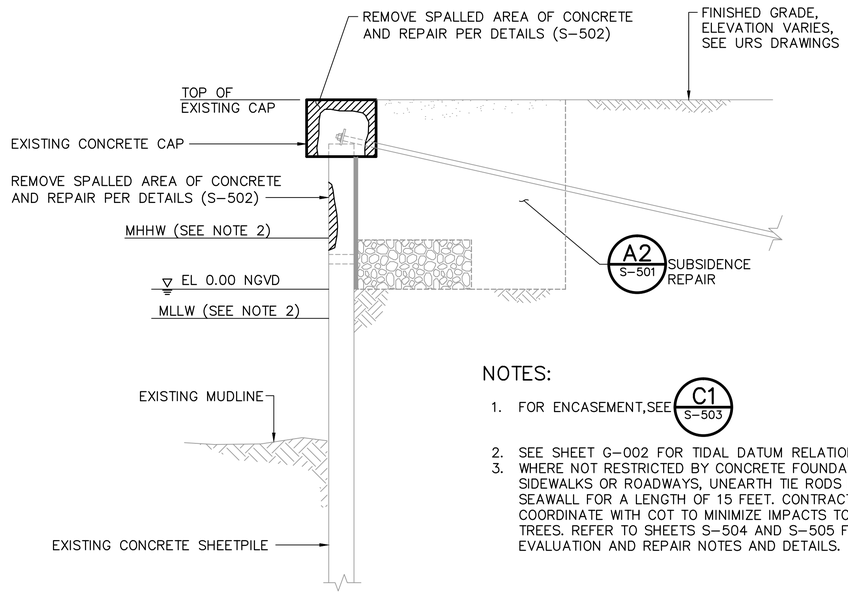


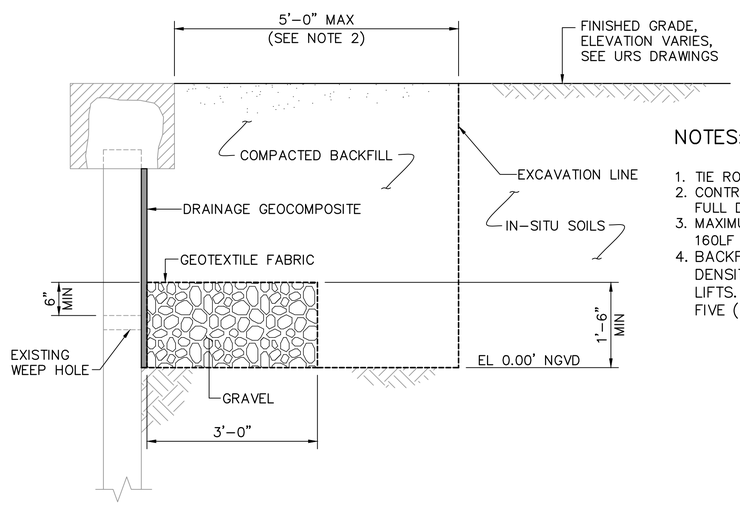
NOTES:

1. FOR ENCASEMENT, SEE C1 / S–503
2. SEE SHEET G–002 FOR TIDAL DATUM RELATIONSHIP.
3. WHERE NOT RESTRICTED BY CONCRETE FOUNDATIONS, SIDEWALKS OR ROADWAYS, UNEARTH TIE RODS FROM SEAWALL FOR A LENGTH OF 15 FEET. CONTRACTOR SHALL COORDINATE WITH COT TO MINIMIZE IMPACTS TO NEARBY TREES. REFER TO SHEETS S–504 AND S–505 FOR TIE ROD EVALUATION AND REPAIR NOTES AND DETAILS.

C2 / S–104 SECTION – TYPICAL REPAIR

SCALE: 1/2"=1'–0"

S–101,S–102,S–103



NOTES:

1. TIE ROD NOT SHOWN FOR CLARITY.
2. CONTRACTOR SHALL BRACE EXCAVATION TO MINIMIZE FULL DEPTH EXCAVATION FOR SUBSIDENCE REPAIR.
3. MAXIMUM LENGTH OF EXCAVATION ALONG SEAWALL = 160LF (5 SEGMENTS).
4. BACKFILL AND COMPACT TO 98% STANDARD PROCTOR DENSITY IN ACCORDANCE WITH ASTM D1557 IN 6" LIFTS. USE HAND TAMPING FOR COMPACTION WITHIN FIVE (5) FEET OF EXISTING WALL.

A2 / S–503 TYPICAL SUBSIDENCE REPAIR

SCALE: 3/4"=1'–0"

S–101,S–102,S–103,S–104,S–501

1'–0" 0'–0" 1'–0" 2'–0"
SCALE: 1"=1'–0"

2'–0" 0'–0" 2'–0" 4'–0"
SCALE: 1/2"=1'–0"

2'–0" 0'–0" 1'–0" 2'–0"
SCALE: 3/4"=1'–0"

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR

REPAIR DETAILS (SHEET 1 OF 5)

Designed by: JAM
Dwn by: ACS
Ckd by: DJMcc
Reviewed by: CWS
Submitted by: GARY W. SMITH MOFFATT & NICHOL
Date: JAN 2009
M&N Project No. 5942-01
Drawing code:
Drawing Scale: AS SHOWN
Plot scale: 1:1 (0 SHEET)
Rev. –

moffatt & nichol
1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813-258-8818

CITY OF TAMPA
CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

SEAL
GARY W. SMITH, P.E.
FLORIDA Lic. No. 041212

Sheet
S-501
Sheet 14 of 19

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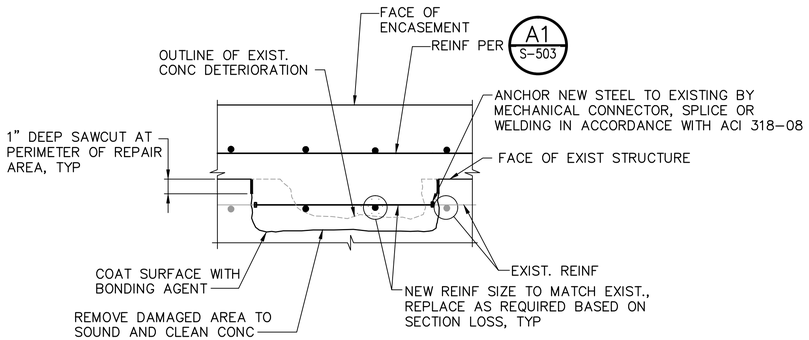
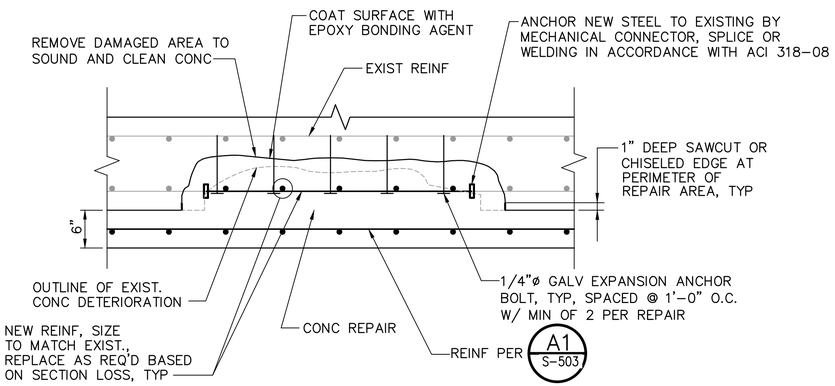


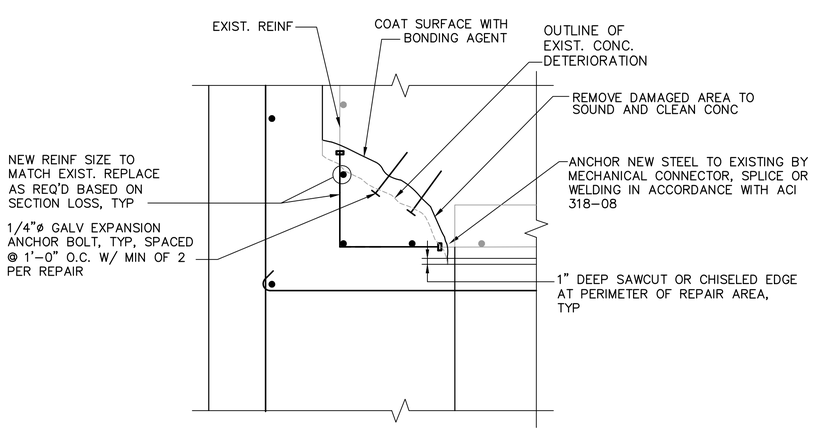
D1 S-601 DETAIL – TYPICAL TOPSIDE SPALL REPAIR

SCALE: 1"=1'-0"



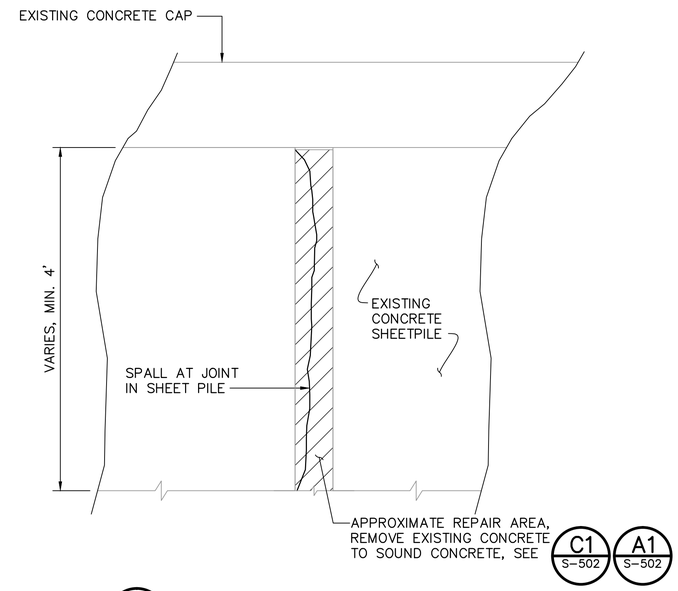
C1 S-601 DETAIL – TYPICAL VERTICAL AND UNDERSIDE SPALL REPAIR

SCALE: 1"=1'-0"



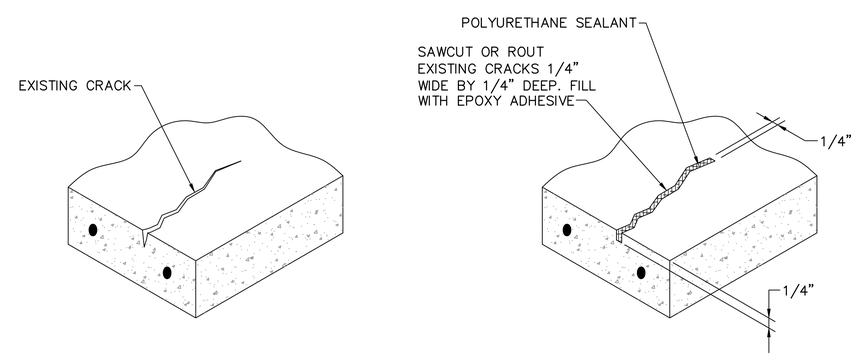
A1 S-601 DETAIL – TYPICAL CORNER SPALL REPAIR

SCALE: 1"=1'-0"



C4 S-601 DETAIL – TYPICAL JOINT SPALL REPAIR

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



A4 S-601 DETAIL – TYPICAL PANEL CRACK INJECTION

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

1'-0" 0'-0" 1'-0" 2'-0"
SCALE: 1"=1'-0"

2'-0" 0'-0" 1'-0" 2'-0"
SCALE: 3/4"=1'-0"

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR

REPAIR DETAILS (SHEET 2 OF 5)

Designed by: JAM | Date: JAN 2009 | Rev. –
Dwn by: ACS | Ckd by: DJMcc | M&N Project No. S942-01
Reviewed by: CWS | Drawing code:
Submitted by: GARY W. SMITH MOFFATT & NICHOL | Drawing Scale: AS SHOWN | Plot scale: 1:1 (0 SHEET)

moffatt & nichol
1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813-258-8818

CITY OF TAMPA
CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

SEAL
GARY W. SMITH, P.E.
FLORIDA Lic. No. 041212

Sheet
S-502
Sheet 15 of 19

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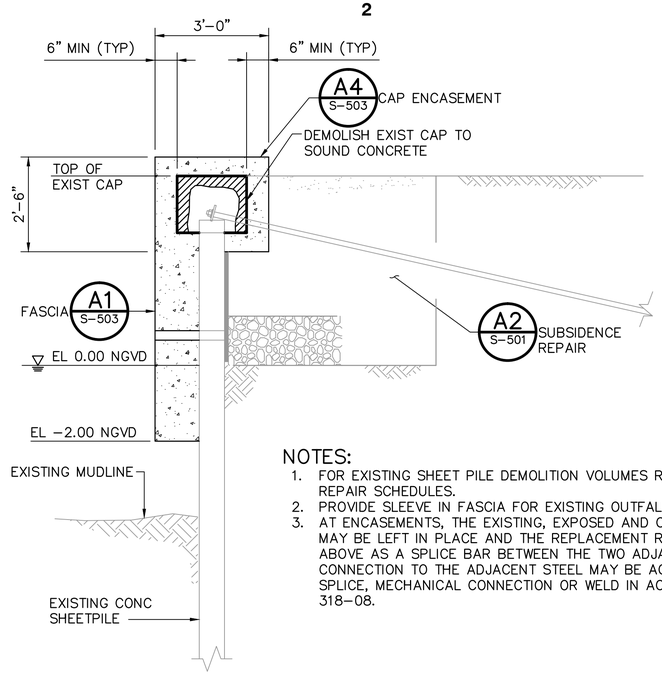
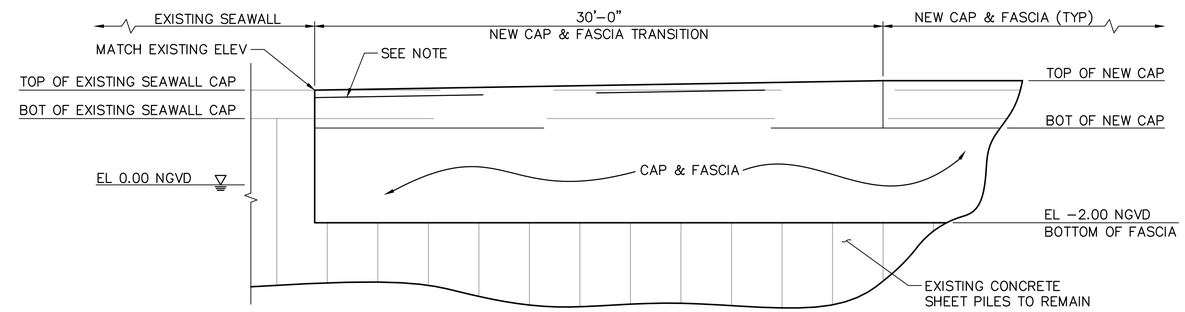


NOTES:
1. FOR EXISTING SHEET PILE DEMOLITION VOLUMES REFER TO SHEET S-601, REPAIR SCHEDULES.
2. PROVIDE SLEEVE IN FASCIA FOR EXISTING OUTFALLS AND WEEP HOLES.
3. AT ENCASEMENTS, THE EXISTING, EXPOSED AND CLEANED REINFORCEMENT MAY BE LEFT IN PLACE AND THE REPLACEMENT REINFORCEMENT PLACED ABOVE AS A SPLICE BAR BETWEEN THE TWO ADJACENT STEEL PIECES. CONNECTION TO THE ADJACENT STEEL MAY BE ACCOMPLISHED WITH A SPLICE, MECHANICAL CONNECTION OR WELD IN ACCORDANCE WITH ACI 318-08.

C1 S-501 SECTION – TYPICAL ENCASEMENT

S-101,S-102,S-103,S-104

SCALE: 1/2"=1'-0"

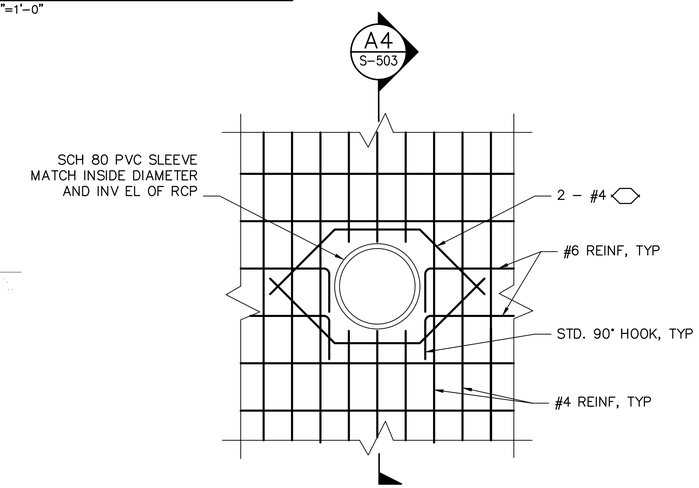


NOTE: DEMOLISH TOP OF EXISTING CAP TO PROVIDE 1-INCH MINIMUM CLEAR BELOW NEW #6 BAR AND EXISTING CONCRETE TO REMAIN. IF EXISTING TIE ROD ANCHORAGE MAY BE EXPOSED DURING CAP DEMOLITION, NOTIFY ENGINEER PRIOR TO DEMOLITION OF EXISTING CAP.

D4 S-501 ELEVATION – CAP TRANSITION

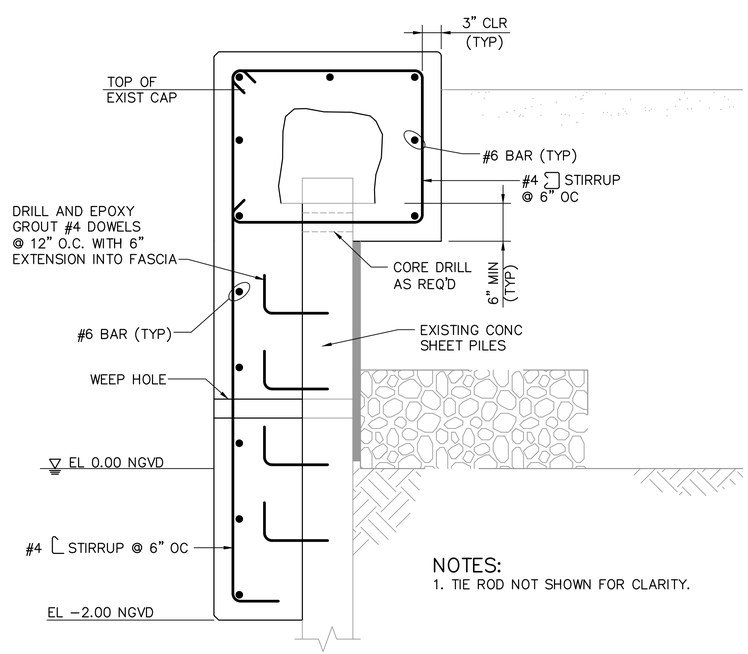
S-101,S-104

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



C5 S-503 ELEVATION – OUTFALL PENETRATION AT FASCIA

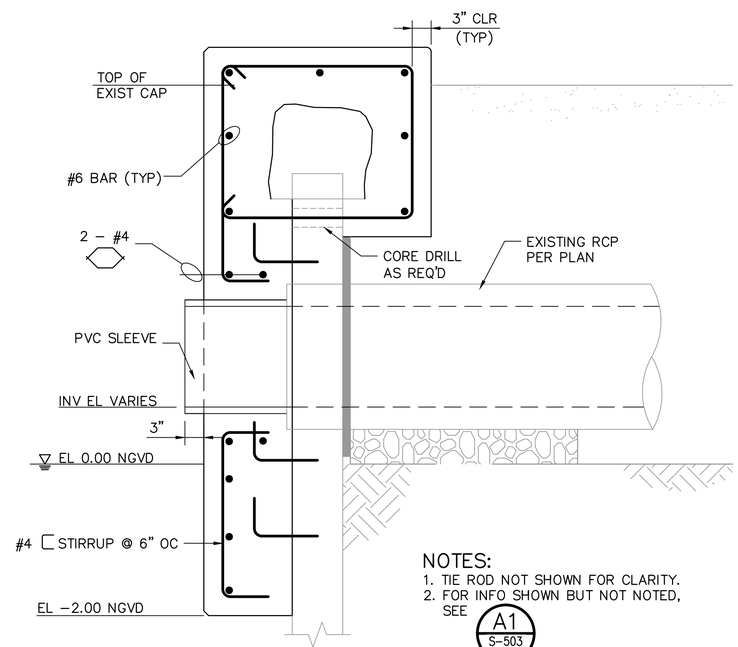
SCALE: 3/4" = 1'-0"



NOTES:
1. TIE ROD NOT SHOWN FOR CLARITY.

A1 S-503 DETAIL – CAP ENCASEMENT AND FASCIA

SCALE: 1"=1'-0"



NOTES:
1. TIE ROD NOT SHOWN FOR CLARITY.
2. FOR INFO SHOWN BUT NOT NOTED, SEE A1 S-503

A4 S-503 DETAIL – OUTFALL PENETRATION AT FASCIA

SCALE: 1" = 1'-0"

4'-0" 0'-0" 4'-0" 8'-0"
SCALE: 1/4"=1'-0"

2'-0" 0'-0" 2'-0" 4'-0"
SCALE: 1/2"=1'-0"

1'-0" 0'-0" 1'-0" 2'-0"
SCALE: 1"=1'-0"

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR

REPAIR DETAILS (SHEET 3 OF 5)

Designed by: JAM
Dwn by: KS
Ckd by: DJMcc
Reviewed by: GWS
Submitted by: GARY W. SMITH MOFFATT & NICHOL
Date: JAN 2 2009
M&N Project No. 5942-01
Drawing code: S-503
Drawing Scale: AS SHOWN
Plot scale: 1:1 (0 SHEET)
Rev. –

moffatt & nichol
1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813-258-8818

CITY OF TAMPA
CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

SEAL
GARY W. SMITH, P.E.
FLORIDA Lic. No. 041212

Sheet
S-503
Sheet 16 of 19

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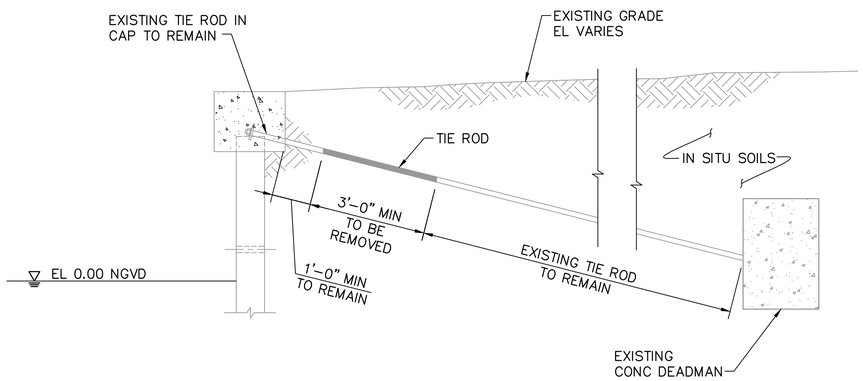
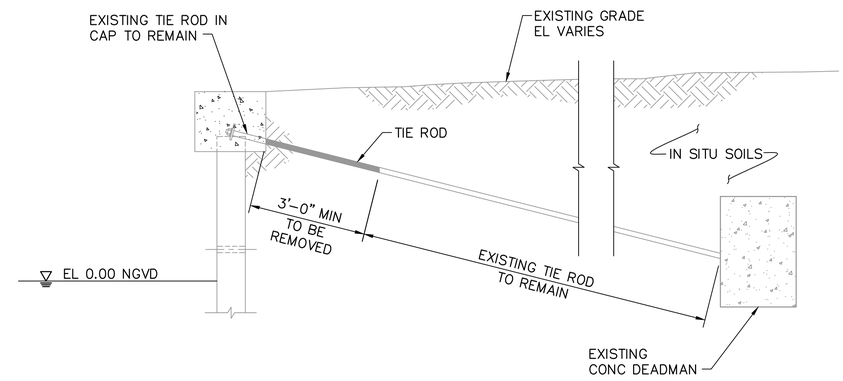


D1 / S-504 — S-501

DETAIL – TIE ROD DEMOLITION (TYPE 1)

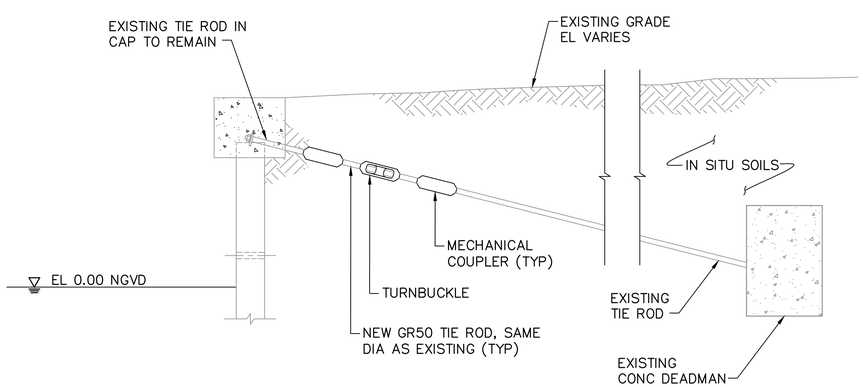
SCALE: 1/2"=1'-0"



D3 / S-504 — S-501

DETAIL – TIE ROD DEMOLITION (TYPE 2)

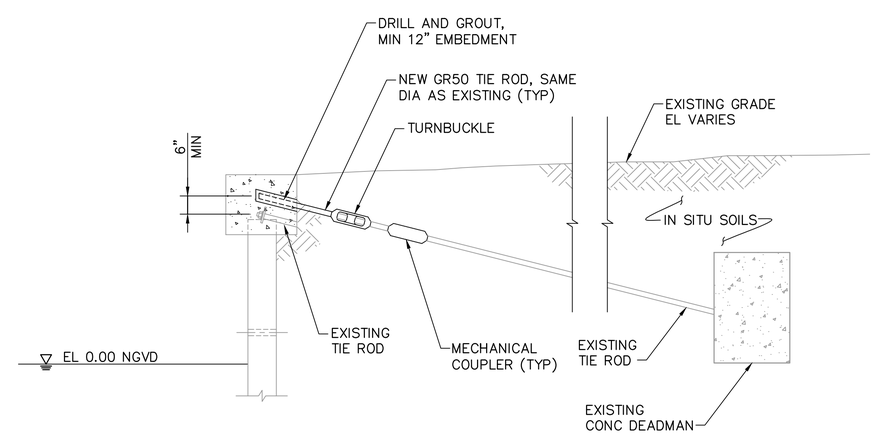
SCALE: 1/2"=1'-0"



A1 / S-504 — S-501

DETAIL – TIE ROD REPAIR (TYPE 1)

SCALE: 1/2"=1'-0"



A3 / S-504 — S-501

DETAIL – TIE ROD REPAIR (TYPE 2)

SCALE: 1/2"=1'-0"

NOTE:
FOR TIE ROD REPAIR NOTES SEE SHEET S-505.

2'-0" 0'-0" 2'-0" 4'-0"
SCALE: 1/2"=1'-0"

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR

REPAIR DETAILS (SHEET 4 OF 5)

1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813-258-8818
mafell & nichol

CITY OF TAMPA
CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

Designed by: JAM
Cad by: DuMoc
Date: JAN 2009
Rev. -
Dwn by: AJS
Reviewed by: GWS
M&N Project No. 5942-01
Drawing code:
Submitted by: GARY W. SMITH MOFFATT & NICHOL
Drawing Scale: AS SHOWN
Plot scale: 1:1 (0 SHEET)

SEAL
GARY W. SMITH, P.E.
FLORIDA Lic. No. 041212

Sheet
S-504
Sheet 17 of 19

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TIE ROD REPAIR

1. WHERE NOT LIMITED BY CONCRETE FOUNDATIONS, SIDEWALK OR ROADWAYS, EXPOSE MINIMUM OF 15 FEET OF TIE ROD FROM SEAWALL LANDWARD. IF DETERIORATION IS NOTED ON EXPOSED SECTION, EXPOSE TIE ROD UNTIL NONE IS EVIDENT.

2. DO NOT EXCAVATE MORE THAN TEN PAIRS OF TIE RODS (160 LF OF SEAWALL) AT A TIME. LIMIT ADDITIONAL CONSTRUCTION LOADS IN THE VICINITY OF EXPOSED TIE RODS.

3. WHERE FULL LENGTH OF A PAIR OF TIE RODS IS UNEARTHED, DO NOT EXCAVATE ADJACENT TIE RODS.

4. FOR TIE RODS ENCASED IN PVC, INSPECT EXPOSED PVC SLEEVE. IF NO CRACKING, HOLIDAYS, BULGING OR OTHER DETERIORATION IS PRESENT, NO REPAIRS OR FURTHER INSPECTION IS REQUIRED. IF DETERIORATION OF PVC IS EVIDENT, REMOVE DETERIORATED SECTION OF PVC PLUS AT LEAST ONE (1) FOOT ON EITHER SIDE TO EXPOSE TIE ROD FOR EVALUATION.

5. REMOVE CORROSION ON EXPOSED TIE ROD BY SAND BLASTING. MEASURE BAR DIAMETER TO DETERMINE AMOUNT OF SECTION LOSS DUE TO CORROSION. IF MORE THAN 30% LOSS IS MEASURED ON TIE ROD AT ANY LOCATION, TIE ROD SHALL BE REPAIRED PER NOTE 6.

6. THE FOLLOWING DESCRIBES THE REPAIR SCHEDULE FOR TIE RODS:

   A. AT LEAST 12–INCH EXTENSION FROM CAP TO REMOVAL LIMIT, USE TYPE 1 REPAIR DETAILS D1 AND A1, SHEET S–504.

   B. LESS THAN 12–INCH EXTENSION FROM CAP TO REMOVAL LIMIT, USE TYPE 2 REPAIR DETAILS D3 AND A3, SHEET S–504.

7. TIE ROD PARTIAL DEMOLITION:

   A. LENGTH OF SECTION TO BE REMOVED SHALL BE THE GREATER OF 3'–0" OR LIMITS OF CORROSION PLUS 6" EACH SIDE.

   B. NO MORE THAN ONE (1) TIE ROD SHALL BE REPAIRED AT A TIME.

   C. UNLOAD WALL BEFORE REMOVING ANY PORTION OF TIE ROD.

8. TIE ROD REPAIR:

   A. SPLICING SHALL BE IN ACCORDANCE WITH FDOT SPECIFICATION 415.

   B. MECHANICAL COUPLER SHALL BE BARLOCK S SERIES BY DAYTON SUPERIOR, ZAP SCREWLOCK TYPE 2 BY SPLICE PRODUCTS, INC. OR APPROVED EQUAL.

   C. COUPLERS AND TURNBUCKLES SHALL BE APPROPRIATE SIZE FOR TIE ROD DIAMETER.

   D. AFTER SYSTEM IS IN PLACE, TIGHTEN TURNBUCKLE.

   E. EMBEDMENT OF NEW TIE ROD IN EXISTING CAP PER GROUT MANUFACTURER'S RECOMMENDATIONS TO DEVELOP 150% TENSILE CAPACITY OF NEW TIE ROD.

   F. WHERE PVC SLEEVE HAS BEEN REMOVED, REPAIR BY COATING TIE ROD (NEW OR EXISTING) WITH COAL TAR EPOXY AND WRAPPING EXPOSED TIE ROD PLUS ONE (1) FOOT ON EITHER SIDE WITH TAPECOAT H35 GRAY OR APPROVED EQUAL.

9. BACKFILL AND COMPACT TO 95% STANDARD PROCTOR DENSITY IN ACCORDANCE WITH ASTM D1557 IN 6" LIFTS. USE HAND TAMPING FOR COMPACTION WITHIN FIVE (5) FEET OF EXISTING WALL.

4'–0" 0'–0" 4'–0" 8'–0"
SCALE: 1/4"=1'–0"

2'–0" 0'–0" 2'–0" 4'–0"
SCALE: 1/2"=1'–0"

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR

REPAIR DETAILS (SHEET 5 OF 5)

moffatt & nichol
1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813–258–8818

Designed by: JAM
Dwn by: AKS
Ckd by: DJMcc
Reviewed by: GWS
Submitted by: GARY W. SMITH MOFFATT & NICHOL
Date: JAN 2009
M&N Project No. 5942–01
Drawing code:
Drawing Scale: AS SHOWN
Plot scale: 1:1 (0 SHEET)
Rev. –

CITY OF TAMPA
CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

SEAL
GARY W. SMITH, P.E.
FLORIDA Lic. No. 041212

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S-505
Sheet 18 of 19

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SEAWALL S1 PANEL REPAIR SCHEDULE

STATION			DEFICIENCY					REPAIR	
START	END	DESCRIPTION	TYPE	#	LENGTH (FT)	WIDTH (IN)	DEPTH (IN)	VOLUME (CF)	DETAIL
00+44		VERTICAL CRACK, WEST FACE OF PANELS, EACH SIDE OF JOINT, STARTS ~2' FROM BASE OF CAP TO BELOW WATER LINE, 1/2" WIDE AT WATER LINE	CR	2	3	1/2		6.0	C4/S502
00+76		VERTICAL CRACK, WEST FACE OF PANELS, EACH SIDE OF JOINT, STARTS ~2' FROM BASE OF CAP TO BELOW WATER LINE, 1/2" WIDE AT WATER LINE	CR	2	3	1/2		6.0	C4/S502
01+01	01+21	TRANSVERSE CRACK, WEST FACE OF PANEL, ~3' FROM BASE OF CAP (AT WATER LINE), 1/8-1/4" WIDE, 4 PANELS	CR	1	20	1/4		1.3	A4/S502
01+42		VERTICAL CRACK, WEST FACE OF PANELS, EACH SIDE OF JOINT, STARTS ~2' FROM BASE OF CAP TO BELOW WATER LINE, 1/2" WIDE AT WATER LINE	CR	2	3	1/2		6.0	C4/S502
02+06		VERTICAL CRACK, WEST FACE OF PANELS, EACH SIDE OF JOINT, STARTS ~2' FROM BASE OF CAP TO BELOW WATER LINE, 1/2" WIDE AT WATER LINE	CR	2	3	1/2		6.0	C4/S502
02+38		VERTICAL CRACK, WEST FACE OF PANELS, NORTH SIDE OF JOINT, STARTS ~2' FROM BASE OF CAP TO BELOW WATER LINE, 1/2" WIDE AT WATER LINE	CR	1	3	1/2		3.0	C4/S502
03+36		VERTICAL CRACK, WEST FACE OF PANELS, NORTH SIDE OF JOINT, STARTS ~2' FROM BASE OF CAP TO BELOW WATER LINE, 1/2" WIDE AT WATER LINE	CR	1	3	1/2		3.0	C4/S502
04+97		VERTICAL CRACK, WEST FACE OF PANELS, SOUTH SIDE OF JOINT, STARTS ~2' FROM BASE OF CAP TO BELOW WATER LINE, 1/16" WIDE AT TOP & 1/4" WIDE AT WATER LINE	CR	1	3	1/4		3.0	C4/S502
06+79	06+83	DELAMINATION, WEST FACE OF PANEL, TOP HALF, RUST STAINS	DLM	1	4	48		12.0	C1/S502
07+87		VERTICAL CRACK, WEST FACE OF PANELS, EACH SIDE OF JOINT, STARTS ~2' FROM BASE OF CAP TO BELOW WATER LINE, 1/16" WIDE AT TOP & 1/4" WIDE AT WATER LINE	CR	2	3	1/4		6.0	C4/S502
09+47	09+51	IMMINENT SPALL, WEST FACE OF PANEL, NORTH SIDE OF JOINT, 4' LONG X 1/2" WIDE CRACK	ISP	1	4	1/2		3.0	C4/S502
10+44	10+52	TRANSVERSE CRACK, WEST FACE OF PANEL, ~3' FROM BASE OF CAP (AT WATER LINE), 1/8-1/4" WIDE, 4 PANELS	CR	1	8	1/4		0.5	A4/S502
10+80	11+44	TRANSVERSE CRACK, WEST FACE OF PANEL, ~3' FROM BASE OF CAP (AT WATER LINE), 1/8-1/4" WIDE	CR	1	64	1/4		4.0	A4/S502
12+58		SPALL, WEST FACE OF PANEL, 6"X2"X3"	SP	1	0.5	2	3	1.0	C1/S502
14+22	14+86	TRANSVERSE CRACK, WEST FACE OF PANEL, ~3' FROM BASE OF CAP (AT WATER LINE), 1/8-1/4" WIDE, 16 PANELS	CR	1	64	1/4		4.0	A4/S502
15+41	15+61	TRANSVERSE CRACK, WEST FACE OF PANEL, ~3' FROM BASE OF CAP (AT WATER LINE), 1/8-1/4" WIDE, 5 PANELS	CR	1	20	1/4		2.4	A4/S502
15+61	15+65	TRANSVERSE CRACK, WEST FACE OF PANEL, ~1.5' FROM BASE OF CAP, 1/8" WIDE, FULL WIDTH OF PANEL	CR	1	4	1/8		0.5	A4/S502
15+69	15+97	TRANSVERSE CRACK, WEST FACE OF PANEL, ~3' FROM BASE OF CAP (AT WATER LINE), 1/8-1/4" WIDE, 7 PANELS	CR	1	28	1/4		3.3	A4/S502
16+01	16+26	TRANSVERSE CRACK, WEST FACE OF PANEL, ~3' FROM BASE OF CAP (AT WATER LINE), 1/8-1/4" WIDE, 6 PANELS	CR	1	24	1/4		1.5	A4/S502
16+35		SPALL AT WATER LINE, WEST FACE OF PANEL AT JOINT, 3"X2"X1"	SP	1	0.25	2	1	1.0	C1/S502
16+46	16+90	TRANSVERSE CRACK, WEST FACE OF PANEL, ~3' FROM BASE OF CAP (AT WATER LINE), 1/8-1/4" WIDE, 4 PANELS	CR	1	44	1/4		2.8	A4/S502
17+31	17+43	TRANSVERSE CRACK, WEST FACE OF PANEL, ~3' FROM BASE OF CAP (AT WATER LINE), 1/8-1/4" WIDE, 3 PANELS	CR	1	12	1/4		1.4	A4/S502
17+43		OFFSET IN PANEL & CAP EXPANSION JOINTS, IMMINENT SPALL ON PANEL AT BASE OF CAP	ISP	1	1	6		1.0	C1/S502
17+63	17+75	TRANSVERSE CRACK, WEST FACE OF PANEL, ~3' FROM BASE OF CAP (AT WATER LINE), 1/8-1/4" WIDE, 3 PANELS	CR	1	12	1/4		1.4	A4/S502
17+81		OUTFALL, 15" DIA., TOP OF OUTFALL 15" FROM BASE OF CAP, RUST STAINS AROUND OUTFALL & CRACKS ON EACH SIDE (1/8" WIDE)	CR	4	1.25	1/8		4.0	C1/S502
17+91	18+07	TRANSVERSE CRACK, WEST FACE OF PANEL, ~3' FROM BASE OF CAP (AT WATER LINE), 1/8-1/4" WIDE, 4 PANELS	CR	1	16	1/4		1.9	A4/S502
TOTAL CRACK INJECTION SEAWALL S1 PANELS								**316**	**LF**
TOTAL JOINT REPAIRS SEAWALL S1 PANELS								**42**	**CF**
TOTAL SPALL REPAIRS SEAWALL S1 PANELS								**19**	**CF**

SEAWALL S1 CAP REPAIR SCHEDULE

STATION			DEFICIENCY						REPAIR	
START	END	DESCRIPTION	LOCATION	TYPE	#	LENGTH (FT)	WIDTH (IN)	DEPTH (IN)	VOLUME (CF)	DETAIL
00+20	00+28	LONGITUDINAL CRACK, WEST FACE OF CAP, 3" FROM BASE OF CAP, 1/8-1/4" WIDE	BWF	CR	1	8	1/4		6.0	A1/S502
02+71	03+03	LONGITUDINAL CRACK, WEST FACE OF CAP, 3" FROM BASE OF CAP, 1/8-1/4" WIDE	BWF	CR	1	32	1/4		23.0	A1/S502
06+36		SPALL, TOP FACE OF CAP, 1' LONG X 1' WIDE X 1/2" DEEP	TF	SP	1	1	12	1/2	2.0	D1/S502
~~06+32~~	~~06+46~~	~~SPALL WITH EXPOSED REBAR, BASE OF CAP, ~6' LONG, NO COVER~~	~~WBF~~	~~SP~~	~~1~~	~~14~~	~~3~~	~~1~~	~~15.0~~	~~A1/S502~~
07+56	07+87	IMMINENT SPALL/LONGITUDINAL CRACK, WEST & BOTTOM FACES OF CAP, 2-3" FROM CORNER	WBC	ISP	1	31	3	3	23.0	A1/S502
08+58	08+86	LONGITUDINAL CRACK, WEST FACE OF CAP, 3" FROM BASE OF CAP, 1/8-1/4" WIDE & IMMINENT SPALL, WEST & BOTTOM FACES	WBC	ISP	1	28	3	3	20.0	A1/S502
09+70	10+48	IMMINENT SPALL/LONGITUDINAL CRACK, WEST FACE OF CAP, 3" FROM BASE OF CAP, 1/8-1/4" WIDE	WBC	ISP	1	78	1/4		55.0	A1/S502
10+72	10+80	LONGITUDINAL CRACK, WEST FACE OF CAP, 3" FROM BASE OF CAP, 1/8-1/4" WIDE	BWF	CR	1	8	1/4		6.0	A1/S502
11+02	11+12	LONGITUDINAL CRACK, TOP FACE OF CAP, WEST SIDE OF EXPANSION JOINT, ~3" FROM WEST FACE	WTF	CR	1	10	1/8		8.0	A1/S502
11+12		SPALL & IMMINENT SPALL, WEST FACE OF CAP, NORTH OF JOINT, EXPOSED REBAR, FULL DEPTH X 1' LONG	WF	SP	1	1	19	2	3.0	C1/S502
11+44	11+76	IMMINENT SPALL, WEST & BOTTOM FACES OF CAP, 2-3" FROM CORNER	WBC	ISP	1	31.5	3	3	23.0	A1/S502
11+76		IMMINENT SPALL, WEST FACE TOP CORNER OF CAP, 6"X4"	TWF	ISP	1	0.5	4		1.0	A1/S502
12+54		SHALLOW SPALLS (3), WEST FACE OF CAP, EXPOSED STIRRUPS, ~6-18" LONG, 2 PATCHED/PAINTED	WF	SP	3	1.5			3.0	C1/S502
12+64	13+13	IMMINENT SPALL, WEST & BOTTOM FACES OF CAP, 2-3" FROM CORNER	WBC	ISP	1	49	3	3	35.0	A1/S502
13+04		TOP NORTH EDGE, SPALL 6"X2"X3",NO EXPOSED REBAR	TF	SP	1	0.5	2	3	1.0	A1/S502
13+46	14+01	IMMINENT SPALL, PREVIOUS REPAIR, TOP & WEST FACES OF CAP, 1/8-1/4" WIDE CRACKS	WF	ISP	1	55	19	3	83.0	A1/S502
13+49	13+53	SPALL, WEST FACE OF CAP, EXPOSED STIRRUP, 6"X6"X1" DEEP	WF	SP	1	4	6	1	4.0	C1/S502
14+06	14+32	LONGITUDINAL CRACK, WEST FACE OF CAP, 3" FROM BASE OF CAP, <1/16" WIDE	WBC	CR	1	26	1/8		19.0	A1/S502
14+34	14+38	SHALLOW SPALLS (3), WEST FACE OF CAP, EXPOSED STIRRUPS, ~6" LONG	WF	SP	3	4	6		12.0	C1/S502
14+57	14+85	LONGITUDINAL CRACK, WEST FACE OF CAP, 3" FROM BASE OF CAP, 1/8-1/4" WIDE	WBC	CR	1	28	1/4		20.0	A1/S502
14+69	14+71	SPALL, EXPOSED CAP, NORTH SIDE OF JOINT, 2' LONG X 1/2 CAP, EXPOSED REBAR (3 STIRRUPS & 2 BARS)	WF	SP	1	2	9		3.0	C1/S502
14+69	15+16	LONGITUDINAL CRACK, WEST FACE OF CAP, 1-2" FROM TOP OF CAP, 1/8" WIDE	TWF	CR	1	47	1/8		34.0	A1/S502
15+08	15+49	LONGITUDINAL CRACK, WEST FACE OF CAP, 3" FROM BASE OF CAP, 1/8-1/4" WIDE	WBC	CR	1	41	1/4		30.0	A1/S502
15+49		NORTH SIDE OF EXPANSION JOINT START OF CRACK, 1/8" WIDE X 12" LONG, ~4" FROM WEST FACE	WTF	CR	1	1	1/8		1.0	D1/S502
15+49		SPALL, TOP FACE OF CAP, EAST SIDE, 4" LONG X 4" WIDE X 1/2" DEEP	ETC	SP	1	0.333	4	1/2	1.0	D1/S502
15+49	15+81	IMMINENT SPALL/LONGITUDINAL CRACK, WEST FACE OF CAP, 3" FROM BASE OF CAP, 1/8-1/4" WIDE	WBC	ISP	1	32	1/4		23.0	A1/S502
16+01	16+90	LONGITUDINAL CRACK, WEST FACE OF CAP, 3" FROM BASE OF CAP, 1/8-1/4" WIDE	WBC	CR	1	89	1/4		63.0	A1/S502
17+43	17+59	IMMINENT SPALL, BOTTOM WEST FACE, 16' LONG X 3" WIDE X 2" DEEP	WBC	ISP	1	16	3	2	12.0	A1/S502
18+07	18+40	LONGITUDINAL CRACK, WEST FACE OF CAP, 3" FROM BASE OF CAP, 1/8-1/4" WIDE	BWF	CR	1	33	1/4		24.0	A1/S502
TOTAL SPALL REPAIRS SEAWALL S1 CAP									**553**	**CF**

BID SUBMITTAL - SEAWALL S1
12 SEPTEMBER 2014

Mark	Description	Date	Appr.

HILLSBOROUGH RIVER SEAWALL REPAIR

REPAIR SCHEDULE - SEAWALL S1

Designed by: JAM | Date: JAN 2009 | Rev. –
Dwn by: AJS | Ckd by: DJMcc | M&N Project No. S942-01
Reviewed by: GWS | Drawing code: | Drawing Scale: AS SHOWN
Submitted by: GARY W. SMITH MOFFATT & NICHOL | Plot scale: 1:1 (0 SHEET)

1509 W. SWANN AVENUE, SUITE 225
TAMPA, FLORIDA 33606
813-258-8818
moffatt & nichol

CITY OF TAMPA
CONTRACT ADMINISTRATION DEPARTMENT
PW #7309

SEAL

GARY W. SMITH, P.E.
FLORIDA Lic. No. 041212

Sheet
S-601
Sheet 19 of 19

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