ST. PETERSBURG CITY COUNCIL

Meeting of October 4, 2018

Report

TO: The Honorable Lisa Wheeler-Bowman, Chair, and Members of City Council

SUBJECT: A resolution accepting Addendum No. 4 — Municipal North Yacht Basin Bulkhead Replacement in an amount not to exceed \$2,964,769 submitted by Skanska USA Building, Inc. ("Skanska") to the Guaranteed Maximum Price ("GMP") proposal dated April 3, 2018 for the construction of a new North Yacht Basin Seawall adjacent to the new St. Pete PierTM; providing that the total GMP for the Pier Approach Project shall not exceed \$19,847,966; authorizing the Mayor or his designee to execute the Sixth Amendment to the Construction Manager at Risk Agreement with a GMP between the City of St. Petersburg, Florida, and Skanska dated January 10, 2017, as amended, to incorporate Addendum No. 4 to the GMP proposal into such agreement, as amended; authorizing the City Attorney's office to make nonsubstantive changes to the Sixth Amendment; approving a transfer in the amount of \$2,964,769 from the unappropriated balance of the Downtown Redevelopment District Fund (1105) to the General Capital Improvement Fund (3001) to provide funding for new North Yacht Basin Seawall; authorizing a supplemental appropriation in the amount of \$2,964,769 from the increase in the unappropriated balance of the General Capital Improvement Fund (3001), resulting from the above transfer to the Pier Approach Project (ECID Project No. 09227-119; Oracle No. 15377); and providing an effective date.

EXPLANATION: The City of St. Petersburg, Florida ("City") and Skanska USA Building, Inc. ("Skanska") executed the Construction Manager at Risk Agreement with a Guaranteed Maximum Price ("GMP") on January 10, 2017 ("Contract") for Skanska to provide preconstruction and construction phase services for the Pier Approach Project. On April 19, 2018, City Council accepted a GMP Proposal dated April 3, 2018 in the amount of \$15,030,610 for construction of the Pier Approach and approved a First Amendment to the Skanska Agreement. City Council also approved a lease with Doc Ford providing that the City will design and construct the core and shell of an approximately 10,000 square foot restaurant and 2,000 square feet of administrative space.

On June 14, 2018, City Council accepted Addendum No. 1 to the GMP Proposal dated April 3, 2018 for the procurement of sixty-four (64) 14" precast concrete piles for the Doc Ford Restaurant in the amount of \$185,239 and the City and Skanska executed the Second Amendment. On July, 19, 2018 City Council accepted Addendum No. 2 to the GMP Proposal dated April 3, 2018 for the installation of the piles to support the Doc Ford structure in the amount of \$581,611 and the approval of the Third Amendment. On August 2, 2018 City Council approved the Fourth Amendment to the Skanska CMAR Agreement adding \$20,000 for preconstruction phase services for the Janet Echelman net sculpture infrastructure installation. On August 23, 2018 City Council accepted Addendum No. 3 to the GMP Proposal dated April 3, 2018 for the installation of the structural system for the Doc Ford's Restaurant and approved the Fifth Amendment to the Skanska CMAR Agreement in the amount of \$1,085,737.

Approval of this Addendum No. 4 to GMP Proposal dated April 3, 2018 and the Sixth Amendment to the agreement, as amended, will authorize Skanska to replace approximately 696 linear feet of existing seawall at the North Yacht Basin immediately adjacent to the northern Pier Approach upland. The existing seawall

Pier Approach – Sixth Amendment to the Skanska Agreement October 4, 2018 Page 2

has exceeded its useful service life and must be replaced. The performance of this work in conjunction with the improvements to the Pier Approach uplands will ensure this work is properly coordinated and avoids major disruption or damage to completed work in place. New steel sheet piles will be driven outboard of the existing wall and a new concrete cap at elevation of 6.00 feet above mean sea level will be constructed. The existing concrete cap at elevation 4.00 will be removed. An Owner's Contingency of \$100,000 for unforeseen conditions is included.

The Pinellas County Board of County Commissioners approved the First Amendment to the Amended and Restated Interlocal Agreement dated September 14, 2017, between the City of St. Petersburg, Florida and Pinellas County, Florida for the commitment of tax increment revenues in the Intown Redevelopment Area. This amendment added projects for Waterfront, Transit and Parking Improvements east of 8th in the Intown Redevelopment Area for an amount up to thirty five million dollars. Waterfront improvements include resiliency/adaptation infrastructure (i.e., seawalls).

The revised GMP for the Project includes the following:

Pier Approach GMP Proposal – First Amendment	\$15,030,610
Doc Ford Pile Procurement – Addendum No. 1	\$ 185,239
Doc Ford Pile Installation – Addendum No. 2	\$ 581,611
Doc Ford Structure Only – Addendum No. 3	\$ 1,085,737
North Basin seawall - Addendum No. 4	\$ 2,964,769

Revised Total GMP for Pier Approach Project \$19,847,966

After approval by City Council, the City and Skanska will execute the Sixth Amendment to the contract.

Recommendation: Administration recommends City Council approve the attached resolution accepting Addendum No. 4 — Municipal North Yacht Basin Bulkhead Replacement in an amount not to exceed \$2,964,769 submitted by Skanska USA Building, Inc. ("Skanska") to the Guaranteed Maximum Price ("GMP") proposal dated April 3, 2018 for the construction of a new North Yacht Basin Seawall adjacent to the new St. Pete PierTM; providing that the total GMP for the Pier Approach Project shall not exceed \$19,847,966; authorizing the Mayor or his designee to execute the Sixth Amendment to the Construction Manager at Risk Agreement with a GMP between the City of St. Petersburg, Florida, and Skanska dated January 10, 2017, as amended, to incorporate Addendum No. 4 to the GMP proposal into such agreement, as amended; authorizing the City Attorney's office to make non-substantive changes to the Sixth Amendment; approving a transfer in the amount of \$2,964,769 from the unappropriated balance of the Downtown Redevelopment District Fund (1105) to the General Capital Improvement Fund (3001) to provide funding for new North Yacht Basin Seawall; authorizing a supplemental appropriation in the amount of \$2,964,769 from the increase in the unappropriated balance of the General Capital Improvement Fund (3001), resulting from the above transfer to the Pier Approach Project (ECID Project No. 09227-119; Oracle No. 15377); and providing an effective date.

Pier Approach – Sixth Amendment to the Skanska Agreement October 4, 2018 Page 3

COST/FUNDING/ASSESSMENT INFORMATION: Funding in the amount of \$2,964,769 will be available after a transfer in the amount of \$2,964,769 from the unappropriated balance of the Downtown Redevelopment District Fund (1105) to the General Capital Improvement Fund (3001) and a supplemental appropriation in the amount of \$2,964,769 from the increase in the unappropriated balance of the General Capital Improvement Fund (3001), resulting from the above transfer to the Pier Approach Project (ECID Project No. 09227-119; Oracle No. 15377).

ATTACHMENTS: Resolution

Addendum No. 4
Sixth Amendment

APPROVALS:

Administrative

A RESOLUTION ACCEPTING ADDENDUM NO. 4 - MUNICIPAL NORTH YACHT BASIN BULKHEAD REPLACEMENT IN AN AMOUNT NOT TO EXCEED \$2,964,769 SUBMITTED BY SKANSKA USA BUILDING, INC. ("SKANSKA") TO THE GUARANTEED MAXIMUM PRICE ("GMP") PROPOSAL DATED APRIL 3, 2018 FOR THE CONSTRUCTION OF A NEW NORTH YACHT BASIN SEAWALL ADJACENT TO THE NEW ST. PETE PIERTM; PROVIDING THAT THE TOTAL GMP FOR THE PIER APPROACH PROJECT SHALL NOT EXCEED \$19,847,966; AUTHORIZING THE MAYOR OR HIS DESIGNEE TO EXECUTE THE SIXTH AMENDMENT TO THE CONSTRUCTION MANAGER AT RISK AGREEMENT WITH A GMP BETWEEN THE CITY OF ST. PETERSBURG, FLORIDA, AND SKANSKA DATED JANUARY 10, 2017, AS AMENDED, TO INCORPORATE ADDENDUM NO. 4 TO THE GMP PROPOSAL INTO SUCH AGREEMENT, AS AMENDED; AUTHORIZING THE CITY ATTORNEY'S OFFICE TO MAKE NON-SUBSTANTIVE CHANGES TO THE SIXTH AMENDMENT; APPROVING A TRANSFER IN THE AMOUNT OF \$2,964,769 FROM THE UNAPPROPRIATED BALANCE OF THE DOWNTOWN REDEVELOPMENT DISTRICT FUND (1105) TO THE GENERAL CAPITAL IMPROVEMENT FUND (3001) TO PROVIDE FUNDING FOR NEW NORTH YACHT BASIN SEAWALL; AUTHORIZING A SUPPLEMENTAL APPROPRIATION IN THE AMOUNT OF \$2,964,769 FROM THE INCREASE IN THE UNAPPROPRIATED BALANCE OF THE GENERAL CAPITAL IMPROVEMENT FUND (3001), RESULTING FROM THE ABOVE TRANSFER TO THE PIER APPROACH PROJECT (ECID PROJECT NO. 09227-119; ORACLE NO. 15377); AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of St. Petersburg, Florida ("City") and Skanska USA Building, Inc. ("Skanska") entered into a Construction Manager at Risk Agreement with a Guaranteed Maximum Price ("GMP") on January 10, 2017, for Skanska to provide preconstruction and construction phase services for the Pier Approach Project; and

WHEREAS, on April 19, 2018, the City and Skanska executed the First Amendment to incorporate the GMP Proposal in an amount not to exceed \$15,030,610 dated April 3, 2018, into agreement, to add additional preconstruction phase services, to revise the disadvantaged worker and apprentices provision to clarify good faith efforts and retainer, and to modify other necessary provisions; and

WHEREAS, on June 14, 2018, the City and Skanska executed the Second Amendment to increase the GMP by an additional \$185,239 for pile procurement for the Doc Ford's Restaurant (for a total GMP for the Pier Approach Project not to exceed \$15,215,849); and

WHEREAS, on July 19, 2018, City Council approved the Third Amendment to increase the GMP by an additional \$581,611 for installation of the piles procured for the Doc Ford's Restaurant (for a total GMP for the Pier Approach Project not to exceed \$15,797,460); and

WHEREAS, on August 2, 2018, City Council approved the Fourth Amendment for Skanska to provide additional preconstruction phase services related to the Janet Echelman net sculpture for an amount not to exceed \$20,000; and

WHEREAS, on September 7, 2018, the City and Skanska executed the Fifth Amendment to increase the GMP by an additional \$1,085,737 for the installation of the structural system for the Doc Ford's Restaurant (for a total GMP for the Pier Approach Project not to exceed \$16,883,197) and to revise the project schedule; and

WHEREAS, the City and Skanska desire to execute the Sixth Amendment to increase the GMP by an additional \$2,964,769 for the construction of the new North Yacht Basin Seawall adjacent to the New St. Pete Pier™ (for a total GMP for the Pier Approach Project not to exceed \$19,847,966).

NOW THEREFORE BE IT RESOLVED by the City Council of the City of St. Petersburg, Florida, that Addendum No. 4 – Municipal North Yacht Basin Bulkhead Replacement in an amount not to exceed \$2,964,769 submitted by Skanska USA Building, Inc. ("Skanska") to the Guaranteed Maximum Price ("GMP") proposal dated April 3, 2018 for the construction of a new North Yacht Basin Seawall Adjacent to the new St. Pete PierTM is hereby accepted.

BE IT FURTHER RESOLVED that the total GMP for the Pier Approach Project shall not exceed \$19,847,966.

BE IT FURTHER RESOLVED that the Mayor or his designee is authorized to execute the Sixth Amendment to the Construction Manager at Risk Agreement with a GMP between the City of St. Petersburg, Florida, and Skanska dated January 10, 2017, as amended, to incorporate Addendum No. 4 to the GMP proposal into such agreement, as amended.

BE IT FURTHER RESOLVED that the City Attorney's Office is authorized to make non-substantive changes to the Sixth Amendment.

BE IT FURTHER RESOLVED that there is hereby approved the following transfer for FY19:

Downtown Redevelopment District Fund (1105)

Transfer to: General Capital Improvement Fund (3001)

\$2,964,769

BE IT FURTHER RESOLVED that there is hereby approved from the increase in the unappropriated balance of the General Capital Improvement Fund (3001), resulting from the above transfer, the following supplemental appropriation for FY19:

General Capital Improvement Fund (3001)

Pier Approach Project (15377)

\$2,964,769

This resolution shall become effective immediately upon its adoption.

APPROVALS:

City Attorney (Designee)

2011

00400481 10-4-18 meeting

Brejesh Prayman, P.E., ENV SP

Engineering and Capital Improvements Director

SIXTH AMENDMENT

- **THIS SIXTH AMENDMENT** ("Sixth Amendment") is made and entered into on this _____ day of October, 2018, by and between the City of St. Petersburg, Florida ("City" or "Owner") and Skanska USA Building Inc. ("Construction Manager" or "Contractor").
- **WHEREAS**, the Owner and the Construction Manager entered into a Construction Manager at Risk Agreement with a Guaranteed Maximum Price ("GMP") on January 10, 2017, for Construction Manager to provide preconstruction and construction phase services for the Pier Approach Project; and
- **WHEREAS**, following execution of such agreement, the Owner authorized the Construction Manager to provide the preconstruction phase services in an amount not to exceed \$200,000; and
- **WHEREAS**, on April 19, 2018, the Owner and Construction Manager entered into the First Amendment to (i) incorporate the GMP Proposal in an amount not to exceed \$15,030,610 dated April 3, 2018, into the Contract, (ii) add additional preconstruction phase services, (iii) revise the disadvantaged worker and apprentices provision to clarify good faith efforts and retainer, and (iv) modify other necessary provisions; and
- **WHEREAS**, on June 14, 2018, the Owner and Construction Manager entered into the Second Amendment to increase the GMP by an additional \$185,239 for pile procurement for the Doc Ford's Restaurant; and
- **WHEREAS**, on July 19, 2018, City Council approved the Third Amendment and the Owner and Construction Manager entered into the Third Amendment to increase the GMP (as previously increased) by an additional \$581,611 for installation of the piles procured for the Doc Ford's Restaurant; and
- **WHEREAS**, on August 2, 2018, City Council approved the Fourth Amendment and the Owner and Construction Manager entered into the Fourth Amendment for Construction Manager to provide additional preconstruction phase services related to the Janet Echelman net sculpture for an amount not to exceed \$20,000; and
- **WHEREAS**, on September 7, 2018, the Owner and Construction Manager entered into the Fifth Amendment to increase the GMP (as previously increased) by an additional \$1,085,737 for the installation of the structural system for the Doc Ford's Restaurant and to revise the project schedule; and
- **WHEREAS**, the Owner and Construction Manager desire to execute the Sixth Amendment to increase the GMP (as previously increased) by an additional \$2,964,769 for the construction of the new North Yacht Basin Seawall adjacent to the New St. Pete PierTM (for a total GMP for the Pier Approach Project not to exceed \$19,847,966).
- **NOW, THEREFORE**, in consideration of the foregoing recitals (which are an integral part of this Sixth Amendment and are incorporated herein by reference) and the promises and covenants contained herein and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Owner and Construction Manager hereby agree as follows:

- 1. All capitalized terms in this Sixth Amendment shall have the same meaning specified in the Contract unless otherwise set forth herein.
- 2. Addendum No. 4 in the amount of \$2,964,769 to the GMP proposal dated April 3, 2018 for the construction of the new North Yacht Basin Seawall adjacent to the New St. Pete PierTM, which is attached hereto, is hereby accepted and incorporated in the Contract as Attachment 4 to Exhibit E. The total GMP shall not exceed \$19,847,966.
- 3. Any and all provisions of the Contract not specifically amended by this Sixth Amendment shall remain in full force and effect.

IN WITNESS WHEREOF, the City and Construction Manager have caused this Sixth Amendment to be executed by their duly authorized representatives on the date first above written.

CITY OF ST. PETERSBURG, FLORIDA	ATTEST
By:	
	City Clerk
Print:	(CEAL)
Title:	(SEAL)
Approved as to Form and Content:	
City Attorney (Designee)	
SKANSKA USA BUILDING, INC:	WITNESSES
By:	By:
Deine	Print:
Print:	Ву:
Title:	Print:
00400482 FINAL	

City of St. Petersburg

Addendum No. 4

Municipal Yacht Basin
Bulkhead Replacement



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- Basis of Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price
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- Site Logistics Plan (N/A)
- 5 Project Schedule
- 6 Appendix A

- Addendum No. 4 –
 Municipal North Yacht
 Basin Bulkhead
 Replacement Price
 Summary
 - Executive Summary
 - Cost Summary





Addendum No. 4 – Municipal North Yacht Basin Bulkhead Replacement Price

Executive Summary

Addendum No. 4 – Municipal North Yacht Basin Bulkhead Replacement Price is based upon the documents prepared by Cardno and their respective consultants (A/E Team) which are itemized in the Document List of this proposal. Further project scope definition has been developed by Skanska USA Building Inc., and various assumptions that are attached to this proposal.

Addendum No. 4 - Municipal North Yacht Basin Bulkhead Replacement Price is \$ 2,964,769.

Price components

• Addendum No. 4 – Municipal North Yacht Basin Bulkhead

Replacement Price

\$ 2,964,769

Project Description

This Addendum No. 4 – Municipal Marian Yacht Basin Bulkhead Replacement upon acceptance by the City of St. Petersburg, is intended to serve as the basis for an Amendment to the Construction Manager at Risk Agreement with a Guaranteed maximum Price, dated January 10, 2017, as amended ("Contract"), includes the +/- 700 lf of bulkhead replacement. This includes 290 lf of cantilevered wall and 406 lf of anchored wall replacement. Price includes partial dock removal as needed, core drilling existing seawall, cored pipe penetrations, sheetpile, concrete caps, earthwork, and helical anchors.

Skanska has developed and enclosed a Project Schedule, which indicates the schedule objectives for the project. The overall project schedule reflects a duration of 8 months; 4 months landside, 4 months waterside. The contractual dates are as follows:

• Substantial Completion (Landside Work)

January 11th, 2019

The following additional milestone dates are anticipated within the Project Schedule in order to achieve the contractual dates listed above:

•	NTP by Cit	y for Bulkhead Re	placement - Landside	October 5 th , 2018
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Permit issued for Bulkhead Replacement - Waterside March 14th, 2019

NTP by City for Bulkhead Replacement - Waterside March 21st, 2019

* The overall Pier Approach schedule will be affected by this work and a revised overall Substantial Completion date is anticipated.



Cost Summary

Following is the Cost Summary breakdown.

Municipal North Yacht Basin Bulkhead Replacement St. Petersburg, FL



Estimate

September 20, 2018

Pkg	Package Description	Estimate	Notes
Α	Control Survey	\$10,000	
В	Excavation/ Backfill		Price In Seawall Repair Work
С	Seawall Repair Work	\$2,315,000	
D	Dewatering (Allowance)	\$110,736	
Е	Monitoring And Testing (Allowance)	\$20,000	
Total:	Cost of Work	\$2,455,736	
Constru	uction Contingency	\$98,229	
Owner	Contingency		
	nds / Subcontractor Default Insurance (SDI)	\$34,871	
	g Permit		By City
	ermits/Fees (LDP, Tap Fees, Etc.)		By City
CCIP	l- Di-I-	\$73,911	
Builder	s Risk a P&P Bond	\$28,648 \$28,648	
		· ' ' '	
	l Conditions	\$44,459	Lump Sum
Precon	struction		Included in Separate Agreement
Design	Fees		Excluded / By City (Others)
Fee		\$100,267	
Total:	Construction Costs	\$2,864,769	
Owners	Allowance	\$100,000	Includes All Soft Costs
Final (Construction Costs	\$2,964,769	

Municipal North Yacht Basin Bulkhead Replacement

Monitoring And Testing (Allowance)

St. Petersburg, FL

Estimate



\$20,000

September 20, 2018 Qty Unit **Unit Cost** Total Notes Pkg# Description Control Survey Control Survey 1 LS \$10,000.00 \$10,000 \$10,000 **Control Survey Excavation/ Backfill** Included in Seawall Repair Work Below В Excavation/ Backfill \$0 Seawall Repair Work \$408,000.00 \$408,000 Furnish and Install Tie Backs - Helical Anchors, Remove 1 LS **Existing Deadmen** Sheetpile Material Cost 1 LS \$606,100.00 \$606,100 Demo of Existing Cap, Install New Cap, Installation Of Sheetpile 1 LS \$1,300,900.00 \$1,300,900 Seawall Repair Work \$2,315,000 С Dewatering (Allowance) Transport, Furnish and Install a 1,000' Sock Drain System, 1 - 8" 1 LS \$10,464.00 \$10,464 Operating Diesel Pumping Unit w/ GPS Telemetry, 1 - Pump Containment, 1 - 280 Gallon Fuel Tank, 1 - Fuel Tank Containment and 150' of 6" PVC Lay Flat Discharge Hose Allowance 1 - 8" Operating Diesel Pumping Unit w/ GPS Telemetry, 1 -4 MN \$4,278.00 \$17,112 Pump Containment, 1 - 280 Gallon Fuel Tank, 1 - Fuel Tank Containment and 150' of 6" PVC Lay Flat Discharge Hose Allowance Daily fuel and oil to the pumping unit 120 DY \$378.00 \$45,360 Allowance 120 DY \$315.00 \$37,800 Allowance Maintenance Alternate (Not In Base Bid) Labor, Material and Equipment to grout the Sock Lines in place **Dewatering (Allowance)** \$110,736 **Monitoring And Testing (Allowance)** Soil Densities 1 ALLOW \$20,000.00 \$20,000 Allowance Concrete Testing Included Above Excluded Vibration (Excluded)

- 2 Basis of Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price
 - Introduction
 - Insurances and Bonds
 - Standard Qualifications
 - Scope Specific Qualifications
 - Allowances



2

Basis of Addendum No. 4 – Municipal North Yacht Basin Bulkhead Replacement Price

Introduction

This section of the Addendum No. 4 – Municipal North Yacht Basin Bulkhead Replacement Price describes modifications, conceptualizations, and exclusions.

No cost or time has been accounted for in the Addendum No. 4 – Municipal North Yacht Basin Bulkhead Replacement Price to address the issue of any items identified as "excluded". For those items that are clarified, qualified and/or based upon an assumption, the Addendum No. 4 – Municipal North Yacht Basin Bulkhead Replacement Price reflects only the cost and time of the element as assumed or clarified.

Skanska's Addendum No. 4 – Municipal North Yacht Basin Bulkhead Replacement Price is based upon the following:

- 1. Document log provided in Section 3.
- 2. Skanska's Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price dated September 20th, 2018.
- 3. The qualifications mentioned in this proposal.

Insurances and Bonds

Insurances:

- 1. Builders Risk Insurance is carried as an allowance for the Municipal North Yacht Basin Bulkhead Replacement Price.
- 2. Skanska shall furnish a Contractor Controlled Insurance Program ("CCIP") providing for the insurance coverages identified below. The CCIP shall only cover on-site exposures and enrolled participants. Owner shall pay Skanska for CCIP premiums calculated as 2.58% of this Addendum.
 - On-Site General Liability, including Products & Completed Operations coverage for ten (10) years;
 - On-Site Workers Compensation and Employers Liability, including USL&H and Jones Act coverage;
 - \$100M in Excess Liability Limits Contractor Controlled Insurance Program (CCIP) Insurance is included at 2.58%.

Bonds:

- 1. Payment and Performance Bond is carried as an allowance for the Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price.
- 2. In lieu of bonding its Subcontractors, Skanska shall maintain subcontractor default



insurance ("SDI") for the protection of the Skanska and the Owner against the default of Subcontractors. The cost of the SDI program will be included in the Cost of the Work included in this Addendum calculation. Owner shall pay Skanska for SDI premiums calculated as 1.42% of the Cost of the Work less General Conditions Costs for SDI.

Coordination with other Contractors

This Addendum No. 4 – Municipal North Yacht Basin Bulkhead Replacement Price is based on the assumption that the Owner's contractors and all other parties performing construction work at the project site, not under direct contract with Skanska will:

- 1. Comply with Skanska's site specific safety program and maintain an injury free environment.
- 2. This Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price is based on the expectation that all pre-purchased items to be provided by the Owner will be provided without delay or disruption per Skanska's schedule attached.
- 3. This Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price assumes any separate contractors hired by the Owner will not interfere with the operation of Skanska.
- 4. This Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price relies on and assumes Owner's other contractors working according to Skanska's project schedule, and will achieve system and area completion dates according to that schedule.
- 5. This Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price relies on and assumes Owner's other contractors will perform work so as to not impact Skanska's ability to perform its work in accordance with its project logistics plan.
- 6. This Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price relies on and assumes Owner's other contractors will provide detailed schedule, logistics, and technical information, when and as requested by Skanska so as to enable Skanska to maintain or accelerate elements of its schedule, maintain its overall schedule and achieve necessary milestone completion dates.
- 7. This Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price ate relies on and assumes Owner's other contractors will provide and maintain insurance as required by the city, naming Skanska USA Building Inc. as an additional insured party.

Standard Qualifications

The following are the Standard Qualifications for the Addendum No. 4 – Municipal North Yacht Basin Bulkhead Replacement Price project:

- 1. Skanska has included Lump Sum GCs & GRs.
- 2. In preparing the Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price and the project schedule, Skanska relies on the construction documents to be fully designed, fully coordinated, code compliant, and accepted by the appropriate agencies and other applicable parties.
- 3. The cost of changes to the construction documents due to permit comments or conditions issued to Skanska following the delivery and acceptance of the Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price are excluded.
- 4. Property, business operations and other taxes related to the Project Site and the operation of the project have not been included.
- 5. All sales tax on material is included.
- 6. Third party agency testing and inspection services have not been included, unless otherwise noted.



Materials testing for soil densities, concrete, masonry, and testing of steel/welding as per drawings have been included as an allowance.

- 7. Due to turnaround requirements dictated by the City and the Schedule. No advertising took place for this work and this added work can be priced by existing subcontractors already engaged on the project and awarded as change orders to their work.
- 8. All extended warranties included in the specifications, including the material/labor warranties, shall be assigned to Owner following the Skanska's one year repair/replacement obligation under the Contract. Thereafter, Skanska shall only be responsible for assisting reasonably the Owner in enforcing those warranties provided by the manufacturers, suppliers and subcontractors.
- 9. No archaeological remediation is included.
- 10. Skanska assumes unfettered access to the Project Site at all times. The Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price does not anticipate any stoppage or interruption of work as a result of operations by others or other site restrictions or interferences. The City will provide written notice of any activities in downtown St. Petersburg that could result in disruptions to site ingress/egress and both parties will work cooperatively to resolve any potential disruptions.
- 11. All fees including utility company, public agency reviews or approvals and associated fees are not included.
- 12. Threshold inspection costs are not included.
- 13. The Owner shall be responsible for obtaining permits as set forth in Contract. Building permit costs are not included.
- 14. Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price is based on the City's acceptance and execution of the Amendment and issuance of the Notice to Proceed (NTP) October 5th, 2018. The Substantial Completion is directly linked to this date and shall adjust to a later date equal to the NTP being issued on a later date than noted above.
- 15. Use of union labor/prevailing wage is not included.
- 16. Delegated design is not included.
- 17. We exclude all unforeseen conditions related to underground obstructions from previous seawalls, buildings, buried debris and buried organics that might have been left in place as the land was developed and changed over time. These will be considered changes to the work and any direction / coordination regarding same will be coered out of the owner's contingency or change order.
- 18. Pier approach design modifications and costs for changes in that scope of work are excluded from this price and will be addressed as changes to the approach contract. This includes, but is not limited to electrical service utilities, water service, gas, reconfigure of parking lots, etc.
- 19. Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price assumes the Architect/ Engineers design complies with all requirements prescribed in Owner standards or guidelines.
- 20. Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price does not include any costs associated with reviews by insurance underwriters such as IRI or FM.
- 21. "Time is of the essence" clauses are only applicable to Substantial Completion of all work agreeable milestone dates.
- 22. Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price assumes working



hour restrictions are subject to existing city ordinances, applicable laws, and regulations.



Scope Specific Qualifications

B Excavation/ Backfill

1. All excavated materials are suitable for backfill. Import of select fill material is not included.

C Seawall Repair Work

- 1. Clearing and grubbing in the pier approach. Not included in this price.
- 2. Sheet pile section is ZZ26-700 hot rolled steel. No Coating.
- 3. Includes limited demolition of two existing docks from the bulkhead out only as necessary to install new seawall.
- 4. 700' of sheet pile will be 35' long sheets.
- 5. No borings provided, no use of impact hammer included, sheets to be vibrated to grade.
- 6. Includes selective demolition of the existing cap as required to install new seawall cap (cap only, no wall panels).
- 7. Helical anchors will be chance SS5 Helical (1.5"x1.5" solid square shaft) x 32'L. Quantity 64 each.
- 8. Includes temporary support of existing wall utilized the new helical tiebacks to support existing until new wall is installed at west (+/-) 400' of seawall.
- 9. New tieback rods will have coupler to attach existing supported wall to new wall at west 400' of seawall.
- 10. Does not include engineering of helical anchors.
- 11. Concrete cap is 700', cap is 2'-6"x2', encapsulation is 7.5" off face of sheet and extends to a -2.5.
- 12. Cap consists of #4 u-bands at 1' o.c. with #4 and #5 longitudinal bars (#5 8 each, #4 1 each). Encapsulation consists of #4 verticals at 1' o.c. and #4 long bars at 1' o.c.
- 13. Concrete is class IV 5500 psi pump mix.
- 14. Rebar is grade 60 bare deformed bars.
- 15. Does not include hazardous waste materials if encountered.
- 16. Based on helical anchors being completed by land and seawall components being completed by water on spud barge.
- 17. Army corps permit has not been issued and as such any requirements are excluded.
- 18. If second phase, water side work, is not awarded by December 1st, 2018 an added cost of \$85,000 will be assessed for material escalations.



D Dewatering

- 1. Treatment of the dewatering system effluent is excluded.
- 2. Chemical treatment or discharge structure is excluded.
- 3. All dewatering equipment at the end of the dewatering operations will be removed. The Sock Drains will not be removed and will remain in place.
- 4. A conventional sock drain for the surficial aquifer dewatering is proposed, if needed, through an allowance.
- 5. At the completion of the dewatering operations all dewatering equipment will be removed from the site, excluding the sock drains which remain in place.

E Monitoring and Testing

1. Vibration testing is excluded.



ALLOWANCES

In order to provide the Addendum No. 4 – Municipal North Yacht Basin Bulkhead Replacement Price per Owner's requested delivery date, a number of cost allowances had to be established. These allowances are intended to provide for all direct construction costs associated with each of these items. Indirect costs are not included in allowances.

1. Builders Risk Allowance: \$28,648

2. Bond: \$28,648

3. Soil Densities/ Concrete Testing: \$20,000

4. Dewatering: \$110,736

5. Owners Allowance: \$100,000



3 Document Log

The Document Log that follows represents the information that forms the Addendum No. 4 – Municipal North Yacht Basin Bulkhead Replacement Price and associated clarifications defined herein.

North Basin Bulkhead Seawall Replacement for DD (bidding)

DRAWINGS & SKETCHES, SPECIFICATIONS, ADDENDA and OTHER DOCUMENTS

The Contract Documents include the following documents, attached as separate sheets.

Specifications Section	Description	Issued Date
01 23 00	ALTERNATES	11/01/2017
01 25 00	SUBSTITUTION PROCEDURES	11/01/2017
01 31 00	PROJECT MANAGEMENT AND CORDINATION	11/01/2017
01 33 00	SUBMITTAL PROCEDURES	11/01/2017
01 40 00	QUALITY REQUIREMENTS	11/01/2017
01 50 00	TEMPORARY FACILITIES AND CONTROLS	11/01/2017
01 56 39	TREE AND PLANT PROTECTION	11/01/2017
01 60 00	PRODUCT REQUIREMENTS	11/01/2017
01 73 00	EXECUTION	11/01/2017
01 74 19	CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL	11/01/2017
01 77 00	CLOSEOUT PROCEDURES	11/01/2017
01 78 23	OPEATION AND MAINTENANCE DATA	11/01/2017
01 78 39	PROJECT RECORD DOCUMENTS	11/01/2017
01 79 00	DEMONSTRATION AND TRAINING	11/01/2017
02 41 19	SELECTIVE DEMOLITION	11/01/2017
03 30 00	CAST-IN-PLACE CONCRETE AWARDED SPO	11/01/2017
03 33 00.01	MARKET CONCRETE FOOTING	11/01/2017
03 45 00	PRECAST ARCHITECTURAL CONCRETE	11/01/2017
03 45 00.01	MARKET PRECAST ARCHITECTURAL CONCRETE	11/01/2017
04 21 00	CONCRETE UNIT MASONRY	11/01/2017
05 05 13	FACTORY-APPLIED METAL COATINGS	11/01/2017
05 12 00	STRUCTURAL STEEL	11/01/2017
05 50 00	METAL FABRICATIONS	11/01/2017
05 52 13	PIPE AND TUBE RAILINGS	11/01/2017
06.10.00	ROUGH CARPENTRY	11/01/2017
06 15 00	EXTERIOT WOOD DECKING	11/01/2017
09 96 00	HIGH PERFORMANCE PAINTING AND COATING	03/21/2018
09 96 23	GRAFFITI RESISTANT COATINGS	03/21/2018
10 80 00	SPECIALITIES	11/01/2017
26 01 00	BASIC ELECTRICAL REQUIREMENTS	11/01/2017
26 05 00	COMMON WORK RESULTS FOR ELECTRICAL	11/01/2017
26 05 19	CONDUCTORS AND CABLES	11/01/2017
26 05 26	GROUNDING AND BONDING	11/01/2017
26 05 29	HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS	11/01/2017
26 05 33	RACEWAYS AND BOXES	11/01/2017

North Basin Bulkhead Seawall Replacement for DD (bidding)

26 05 53	ELECTRICAL IDENTIFICATION	11/01/2017
26 22 00	LOW-VOLTAGE TRANSFORMERS	11/01/2017
26 24 16	PANELBOARDS	11/01/2017
26 27 26	WIRING DEVICES	11/01/2017
26 28 16	ENCLOSED SWITCHES AND CIRCUIT BREAKER	11/01/2017
26 43 13	SURGE PROTECTION DEVICES	11/01/2017
26 56 00	EXTERIOR LIGHTING	11/01/2017
26 56 00	EXTERIOR LIGHTING LUMINAIRE SPECIFICATIONS SHEETS	11/01/2017
31 00 00	EARTHWORK	11/01/2017
31 11 00	CLEARING AND GRUBBING	11/01/2017
32 13 16	DECORATIVE CONCRETE PAVING	11/01/2017
32 13 15	CONCRETE JOINT SEALERS	11/01/2017
32 31 13	CUSTOM FENCES AND GATES	11/01/2017
32 91 13	STRUCTURAL SOIL	11/01/2017

Municipal Marina North Yacht Basin Bulkhead Replacement Drawings:

Drawing No.	Drawing Title	Revision No.	Date	Set Name
18088-01	DESCRIPTION	0	07/30/2018	NORTH YACHT
				BASIN BULKHEAD
				REPLACEMENT
18088-02	GENERAL NOTES	0	07/30/2018	NORTH YACHT
				BASIN BULKHEAD
				REPLACEMENT
18088-03	PLAN &	0	07/30/2018	NORTH YACHT
	ELEVATION (1 OF			BASIN BULKHEAD
	2)			REPLACEMENT
18088-04	PLAN &	0	07/30/2018	NORTH YACHT
	ELEVATION (2 OF			BASIN BULKHEAD
	2)			REPLACEMENT
18088-05	TYPICAL SECTIONS	0	07/30/2018	NORTH YACHT
				BASIN BULKHEAD
				REPLACEMENT
18088-06	WALL DETAILS	0	07/30/2018	NORTH YACHT
				BASIN BULKHEAD
				REPLACEMENT
18088-07	PIPE	0	07/30/2018	NORTH YACHT
	PENETRATION			BASIN BULKHEAD
	DETAILS			REPLACEMENT

Reference Approach Drawings:

Drawing No. Drawing Title Revision No. Date Set Name

G-0.10	DRAWING INDEX	3	03/21/2018	ADDENDUM 3
C-1.00	COVER	0	11/01/2017	100 % CD
C-1.05	GFY SURVEY – PIER APPROACH	0	11/01/2017	100% CD
C-1.06	GFY SURVEY – THE PIER	0	11/01/2017	100% CD
C-1.07	GFY SURVEY – SPA BEACH	0	11/01/2017	100% CD
C-1.08	GFY SURVEY – THE LENS	0	11/01/2017	100% CD
C-2.00	SWPPP PHASE I	1	03/21/2018	ADDENDUM 3
C-2.01	SWPPP PHASE II	1	03/21/2018	ADDENDUM 3
C-2.02	SWPPP DETAILS	0	11/01/2017	100% CD
C-2.10	PAVEMENT PLAN	1	03/21/2018	ADDENDUM 3
C-3.00	MASTER KEY SITE PLAN	1	01/05/2018	VE PRICING ADDENDUM
C-3.01	DEMOLITION PLAN	1	01/05/2018	VE PRICING ADDENDUM
C-3.02	DEMOLITION PLAN	1	01/05/2018	VE PRICING ADDENDUM
C-3.03	DEMOLITION PLAN	1	01/05/2018	VE PRICING ADDENDUM
C-3.04	DEMOLITION PLAN	1	01/05/2018	VE PRICING ADDENDUM
C-3.05	DEMOLITION PLAN	1	01/05/2018	VE PRICING ADDENDUM
C-4.00	MASTER KEY GRADING PLAN	1	03/21/2018	ADDENDUM 3
C-4.01	SITE PLAN	2	03/21/2018	ADDENDUM 3
C-4.02	SITE PLAN	2	03/21/2018	ADDENDUM 3
C-4.03	SITE PLAN	2	03/21/2018	ADDENDUM 3
C-4.04	SITE PLAN	2	03/21/2018	ADDENDUM 3
C-4.05	SITE PLAN	2	03/21/2018	ADDENDUM 3
C-4.06	INTERSECTION PLAN	0	11/01/2017	100% CD
C-5.00	MASTER KEY GRADING PLAN	1	03/21/2018	ADDENDUM 3
C-5.01	GRADING PLAN	2	03/21/2018	ADDENDUM 3
C-5.02	GRADING PLAN	1	03/21/2018	ADDENDUM 3
C-5.03	GRADING PLAN	2	03/21/2018	ADDENDUM 3
C-5.04	GRADING PLAN	2	03/21/2018	ADDENDUM 3
C-5.05	GRADING PLAN	4	06/25/2018	ADDENDUM 4
C-5.06	GRADING PLAN	2	03/21/2018	ADDENDUM 3
C-5.10	STORM DRAINAGE SCHEDULE	2	03/21/2018	ADDENDUM 3
C-5.11	STORM DRAINAGE DETAILS	2	03/21/2018	ADDENDUM 3
	CITY OF ST. PETE DRAINAGE		03/21/2018	ADDENDUM 3
C-5.12	DETAILS	2	03/21/2016	ADDLINDOW 5
	CITY OF ST. PETE DRAINAGE	_	03/21/2018	ADDENDUM 3
C-5.13	DETAILS 2	2		
C-6.00	MASTER KEY UTILITY PLAN	1	03/21/2018	ADDENDUM 3
C-6.01	UTILITY PLAN	2	03/21/2018	ADDENDUM 3
C-6.02	UTILITY PLAN	3	03/21/2018	ADDENDUM 3
C-6.03	UTILITY PLAN	2	03/21/2018	ADDENDUM 3
C-6.04	UTILITY PLAN	2	03/21/2018	ADDENDUM 3
C-6.05	UTILITY PLAN	4	06/25/2018	ADDENDUM 4

C-7.00	CITY OF ST PETERSBURG DETAILS	1	01/05/2018	VE PRICING ADDENDUM
C-7.01	CITY OF ST PETERSBURG DETAILS	1	01/05/2018	VE PRICING ADDENDUM
C-4	2 ND AVENUE SITE PLAN	1	01/05/2018	VE PRICING ADDENDUM
C-10	2 ND AVENUE DRAINAGE PLAN	1	01/05/2018	VE PRICING ADDENDUM
L-0.01	SITE LANDSCAPE NOTES	2	03/21/2018	ADDENDUM 3
	KEY PLAN - LAYOUT & MATERIAL		02/24/2040	400511011140
L-1.00	PLAN	2	03/21/2018	ADDENDUM 3
	KEY PLAN - LAYOUT & MATERIAL		02/24/2040	ADDENIDUM 2
L-1.10	PLAN	3	03/21/2018	ADDENDUM 3
	KEY PLAN - LAYOUT & MATERIAL		02/21/2019	ADDENDUM 2
L-1.20	PLAN	3	03/21/2018	ADDENDUM 3
	KEY PLAN - LAYOUT & MATERIAL		02/21/2010	ADDENDUM 2
L-1.30	PLAN	3	03/21/2018	ADDENDUM 3
	KEY PLAN - LAYOUT & MATERIAL		02/21/2010	ADDENDUM 3
L-1.40	PLAN	3	03/21/2018	ADDENDUN 3
	KEY PLAN - LAYOUT & MATERIAL		02/21/2010	ADDENDUM 3
L-1.50	PLAN	3	03/21/2018	ADDENDUM 3
TM-1.00	TREE MITIGATION INDEX	0	11/01/2017	100% CD
TM-1.01	TREE MITIGATION PLAN	1	01/05/2018	VE PRICING ADDENDUM
TM-1.02	TREE MITIGATION PLAN	0	11/01/2017	100% CD
TM-1.03	TREE MITIGATION PLAN	0	11/01/2017	100% CD
TM-1.04	TREE MITIGATION PLAN	0	11/01/2017	100% CD
TM-1.05	TREE MITIGATION PLAN	0	11/01/2017	100% CD
TM-1.06	TREE MITIGATION PLAN	1	01/05/2018	VE PRICING ADDENDUM
TM-1.07	TREE MITIGATION PLAN	1	01/05/2018	VE PRICING ADDENDUM
L-2.00	LANDSCAPE INDEX PLAN	0	11/01/2017	100% CD
L-2.01.0	LANDSCAPE PLAN-TREE LAYOUT	1	01/05/2018	VE PRICING ADDENDUM
L-2.01.1	LANDSCAPE PLAN – UNDERSTORY	1	01/05/2018	VE PRICING ADDENDUM
L-2.02.0	LANDSCAPE PLAN- TREE LAYOUT	1	01/05/2018	VE PRICING ADDENDUM
L-2.02.1	LANDSCAPE PLAN-UNDERSTORY	1	01/05/2018	VE PRICING ADDENDUM
L-2.03.0	LANDSCAPE PLAN –TREE LAYOUT	1	01/05/2018	VE PRICING ADDENDUM
L-2.03.1	LANDSCAPE PLAN – UNDERSTORY	0	11/01/2017	100% CD
L-2.04.0	LANDSCAPE PLAN- TREE LAYOUT	2	03/21/2018	ADDENDUM 3
L-2.04.1	LANDSCAPE PLAN – UNDERSTORY	2	03/21/2018	ADDENDUM 3
L-2.05.0	LANDSCAPE PLAN- TREE LAYOUT	2	03/21/2018	ADDENDUM 3
L-2.05.1	LANDSCAPE PLAN – UNDERSTORY	2	03/21/2018	ADDENDUM 3
L-2.06	LANDSCAPE SCHEDULE	2	03/21/2018	ADDENDUM 3
L-2.50	LANDSCAPE NOTES	0	11/01/2017	100%CD
L-2.51	LANDSCAPE DETAILS	0	11/01/2017	100%CD
L-3.00	KEY PLAN-CONCRETE LAYOUT PLAN	2	03/21/2018	ADDENDUM 3
L-3.10	CONCRETE LAYOUT PLAN	2	03/21/2018	ADDENDUM 3
L-3.20	CONCRETE LAYOUT PLAN	2	03/21/2018	ADDENDUM 3
L-3.30	CONCRETE LAYOUT PLAN	3	03/21/2018	ADDENDUM 3
L-3.40	CONCRETE LAYOUT PLAN	2	03/21/2018	ADDENDUM 3
L-3.50	CONCRETE LAYOUT PLAN	2	03/21/2018	ADDENDUM 3

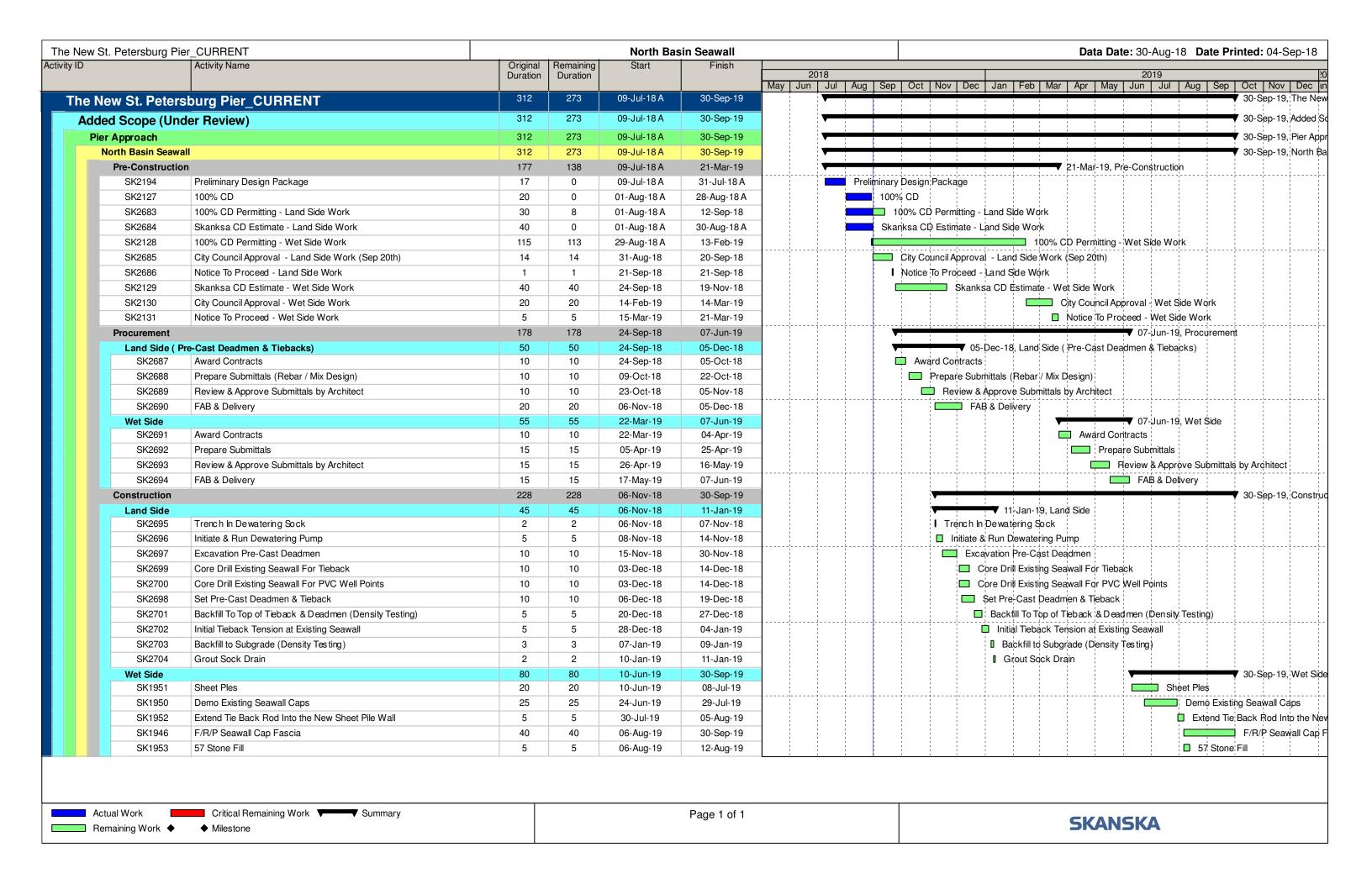
L-4.00	SITE SECTIONS	1	01/05/2018	VE PRICING ADDENDUM
L-5.20	KEY PLAN –FURNITURE PLAN	2	03/21/2018	ADDENDUM 3
L-5.21	FURNITURE PLAN	2	03/21/2018	ADDENDUM 3
L-5.22	FURNITURE PLAN	2	03/21/2018	ADDENDUM 3
L-5.23	FURNITURE PLAN	2	03/21/2018	ADDENDUM 3
L-5.24	FURNITURE PLAN	2	03/21/2018	ADDENDUM 3
L-5.25	FURNITURE PLAN	2	03/21/2018	ADDENDUM 3
	ENLARGEMENT PLAN-THE LINK	1	04 /05 /0040	VE DDICINIC ADDENIDURA
L-6.00	NORTH		01/05/2018	VE PRICING ADDENDUM
	ENLARGEMENT PLAN-THE LINK	1	04 /05 /2040	VE DDICINIC ADDENIDURA
L-6.10	SOUTH		01/05/2018	VE PRICING ADDENDUM
L-6.20	ENLARGEMENT PLAN-GARDEN	1	01/05/2018	VE PRICING ADDENDUM
	ENLARGEMENT PLAN-	1	04 /05 /2040	VE DDICING ADDENDUM
L-6.21	PLAYGROUND		01/05/2018	VE PRICING ADDENDUM
	ENLARGEMENT PLAN-VIEW EDGE &	1	04 /05 /2010	VE DDICING ADDENDUM
L-6.30	TREE RING PRECAST		01/05/2018	VE PRICING ADDENDUM
	ELEVATIONS- VIEW EDGE & TREE	1	04 /05 /2010	VE PRICING ADDENDUM
L-6.31	RING PRECAST		01/05/2018	VE PRICING ADDENDUM
L-6.40	ENLARGEMENT PLAN – OVERLOOK	2	03/21/2018	ADDENDUM 3
	OVERLOOK -SECTIONS +	2	02/21/2010	ADDENDUM 3
L-6.50	ELEVATIONS		03/21/2018	ADDENDUM 3
L-6.60	SUNDECK+BRIDGE-ENLARGEMENT PLAN	2	03/21/2018	ADDENDUM 3
L-6.61	BRIDGE ENLARGEMENT PLAN	1	01/05/2018	VE PRICING ADDENDUM
	WETPOND BRIDGE ENLARGEMENT	1	01/05/2018	VE PRICING ADDENDUM
L-6.62	PLAN		01/03/2018	VE PRICING ADDENDOM
	ENLARGEMENT PLAN-TRASH	1	01/05/2018	VE PRICING ADDENDUM
L-6.70	ENCLOSURE		01/03/2018	VE FRICING ADDENDOM
L-7.00	TYPICAL SITE PAVEMENT DETAILS	1	01/05/2018	VE PRICING ADDENDUM
	TYPICAL CAST IN PLACE STAIR	2	03/21/2018	ADDENDUM 3
L-7.10	DETAILS		03/21/2016	ADDLINDOW 3
	TYPICAL CAST IN PLACE STAIR	1	01/05/2018	VE PRICING ADDENDUM
L-7.11	DETAILS			VET MICHIO ABBENDOM
L-7.12	TYPICAL PRECAST DETAILS	1	01/05/2018	VE PRICING ADDENDUM
L-7.20	TYPICAL OVERLOOK DETAILS	2	03/21/2018	ADDENDUM 3
	TYPICAL SUN DECK+REMOVABLE	1	01/05/2018	VE PRICING ADDENDUM
L-7.21	TREE PIT DETAILS			VET MONTO / ISSENS ON
L-7.30	TYPICAL FURNITURE DETAILS	0	11/01/2017	100%CD
I-2.00	IRRIGATION INDEX PLAN	0	11/01/2017	100%CD
I-2.01	IRRIGATION PLAN	0	11/01/2017	100%CD
I-2.02	IRRIGATION PLAN	0	11/01/2017	100%CD
I-2.03	IRRIGATION PLAN	0	11/01/2017	100%CD
I-2.04	IRRIGATION PLAN	1	03/21/2018	ADDENDUM 3
I-2.05	IRRIGATION PLAN	1	03/21/2018	ADDENDUM 3
I-2.50	IRRIGATION NOTES	1	03/21/2018	ADDENDUM 3
	DRAWING LEGEND, BUILDING		03/21/2018	ADDENDUM 3
A-0.1	DATA AND INDEX	1	00, 21, 2010	, 1552.1501113

A-1.10	MARKET PROMENADE SITE PLAN	0	11/01/2017	100%CD
A-2.10	SHADESTRUCTURE PLANS	0	11/01/2017	100%CD
A-2.20	MARKET STALLS & BENCHES	1	03/21/2018	ADDENDUM 3
A-3.0	SHADE STRUCTURE ELEVATIONS	1	03/21/2018	ADDENDUM 3
A-3.1	SHADE STRUCTURE SECTIONS	0	11/01/2017	100%CD
A-3.10	MARKET SHADE STRUCTURE SOLAR	0	11/01/2017	100%CD
	STUDY SHADE STRUCTURE DETAILS		02/24/2010	ADDENDUM 3
A-3.11	MARKET PROMENADE AND	1	03/21/2018 03/21/2018	ADDENDUM 3 ADDENDUM 3
A-3.20	MARKET STALL PRESPECTIVES	1	03/21/2018	ADDLINDOW 3
A-4.1	COLUMN SET OUT	0	11/01/2017	100%CD
A-4.2	PV RAIL SET OUT	0	11/01/2017	100%CD
A-4.3	PV PANELSET OUT	0	11/01/2017	100%CD
	ABBREVIATIONS AND DRAWING		44/04/2047	4000/CD
S-0.01	LIST	0	11/01/2017	100%CD
S-0.02	GENERAL NOTES	0	11/01/2017	100%CD
	KEY PERSPECTIVE AND			
S-1.01	FOUNDATION PLAN	3	03/21/2018	ADDENDUM 3
S-1.02	CANOPY ROOF PLAN	2	02/23/2018	ADDENDUM 2
S-2.00	ELEVATIONS	0	11/01/2017	100%CD
L-5.00	SITE LIGHTING PLAN	1	01/05/2018	VE PRICING ADDENDUM
L-5.01	LIGHTING CALCULATION PLAN	0	11/01/2017	100%CD
L-5.02	L POLE SCHEDULE	1	01/05/2018	VE PRICING ADDENDUM
L-5.03	L LUMINAIRE SCHEDULE	1	01/05/2018	VE PRICING ADDENDUM
L-5.10	L LIGHTING DETAILS	0	11/01/2017	100%CD
L-5.11	L-LIGHTING DETAILS	0	11/01/2017	100%CD
L-5.12	L CATENARY LIGHTING DETAILS	1	01/05/2018	VE PRICING ADDENDUM
E-0.00	ELECTRICAL LEGEND	0	01/05/2018	
E-1.00	OVERALL SITE PLAN-ELECTRICAL	2	03/21/2018	ADDENDUM 3
L 1.00	ENLARGED SITE PLAN-ELECTRICAL	2	03/21/2010	ABBENDOW 3
E-1.10	DEMOLITION	1	01/05/2018	VE PRICING ADDENDUM
L-1.10	ENLARGED SITE PLAN-ELECTRICAL	1		
E-1.20	DEMOLITION	1	01/05/2018	VE PRICING ADDENDUM
E-1.20	ENLARGED SITE PLAN-ELECTRICAL	1		
Г 1 20		1	01/05/2018	VE PRICING ADDENDUM
E-1.30	DEMOLITION	1		
F 4 40	ENLARGED SITE PLAN-ELECTRICAL	0	11/01/2017	100%CD
E-1.40	DEMOLITION	0		
	ENLARGED SITE PLAN-ELECTRICAL		11/01/2017	100%CD
E-1.50	DEMOLITION	0	, - , -	
	ENLARGED SITE PLAN-ELECTRICAL		01/05/2018	VE PRICING ADDENDUM
E-2.10	RENOVATION	1	0-/ 00/ -0-0	
	ENLARGED SITE PLAN-ELECTRICAL		01/05/2018	VE PRICING ADDENDUM
E-2.20	RENOVATION	1	01,00,2010	. I This is a fibre of the offi
	ENLARGED SITE PLAN-ELECTRICAL		01/05/2018	VE PRICING ADDENDUM
E-2.30	RENOVATION	1	01/05/2010	. E TINGING ADDENDON

	ENLARGED SITE PLAN-ELECTRICAL		01/05/2018	VE PRICING ADDENDUM
E-2.40	RENOVATION	1	01/05/2018	VE PRICING ADDENDUM
	ENLARGED SITE PLAN-ELECTRICAL		03/21/2018	ADDENDUM 3
E-2.50	RENOVATION	2	03/21/2018	ADDLINDOW 3
	POWER RISER DIAGRAM & PANEL		11/01/2017	100%CD
E-3.01	SCHEDULES	0	11,01,201,	100/000
	POWER RISER DIAGRAM & PANEL		01/05/2018	VE PRICING ADDENDUM
E-3.02	SCHEDULES	1	- , ,	
5 2 22	POWER RISER DIAGRAM & PANEL	•	11/01/2017	100%CD
E-3.03	SCHEDULES	0		
F 2 04	POWER RISER DIAGRAM & PANEL SCHEDULES	0	11/01/2017	100%CD
E-3.04	POWER RISER DIAGRAM & PANEL	U		
E-3.05	SCHEDULES	1	03/21/2018	ADDENDUM 3
E-4.00	MARKET STRUCTURE PV ARRAY	0	11/01/2017	100%CD
L 4.00	WARREL STRUCTURE I V ARROYT	U	11/01/2017	100/000
	ASD/SKY 2 nd Avenue Connection Sit	e Plan (for S	storm Water work	only)
	ASD/SKY 2 nd Avenue Connection Sit	e Plan (for S		only) 2 ND AVENUE
C-4	ASD/SKY 2 nd Avenue Connection Sit	e Plan (for S	torm Water work 11/17/2017	
C-4		-	11/17/2017	2 ND AVENUE
C-4 C-10		-		2 ND AVENUE CONNECTION
	SITE PLAN	0	11/17/2017 11/17/2017	2 ND AVENUE CONNECTION 2 ND AVENUE
	SITE PLAN DRAINAGE PLAN Proposed Utility Proposed Utility Color Map	0 0 i ty Color M a 2	11/17/2017 11/17/2017 1p 02/23/2018	2 ND AVENUE CONNECTION 2 ND AVENUE
C-10 EX-2	SITE PLAN DRAINAGE PLAN Proposed Utility Proposed Utility Color Map 2 ND Avenue NE Seawall Inspe	0 i ty Color M a 2 e ction and R	11/17/2017 11/17/2017 ip 02/23/2018 epair Final Plans	2 ND AVENUE CONNECTION 2 ND AVENUE CONNECTION Bidding Addendum 2
C-10 EX-2 17097-01	SITE PLAN DRAINAGE PLAN Proposed Utility Proposed Utility Color Map 2 ND Avenue NE Seawall Inspec	0 ity Color Ma 2 ection and R	11/17/2017 11/17/2017 1p 02/23/2018 epair Final Plans 03/27/2018	2 ND AVENUE CONNECTION 2 ND AVENUE CONNECTION Bidding Addendum 2 2 ND Avenue NE Seawall
C-10 EX-2 17097-01 17097-02	SITE PLAN DRAINAGE PLAN Proposed Utility Proposed Utility Color Map 2 ND Avenue NE Seawall Inspector COVER SHEET & INDEX GENERAL NOTES	0 i ty Color M a 2 ction and R 0 0	11/17/2017 11/17/2017 1p 02/23/2018 epair Final Plans 03/27/2018 03/27/2018	2 ND AVENUE CONNECTION 2 ND AVENUE CONNECTION Bidding Addendum 2 2 ND Avenue NE Seawall 2 ND Avenue NE Seawall
C-10 EX-2 17097-01 17097-02 17097-03	SITE PLAN DRAINAGE PLAN Proposed Utility Proposed Utility Color Map 2 ND Avenue NE Seawall Inspectover SHEET & INDEX GENERAL NOTES PLAN & SECTIONS	0 ity Color Ma 2 iction and R 0 0 0	11/17/2017 11/17/2017 1p 02/23/2018 epair Final Plans 03/27/2018 03/27/2018 03/27/2018	2 ND AVENUE CONNECTION 2 ND AVENUE CONNECTION Bidding Addendum 2 2 ND Avenue NE Seawall 2 ND Avenue NE Seawall 2 ND Avenue NE Seawall
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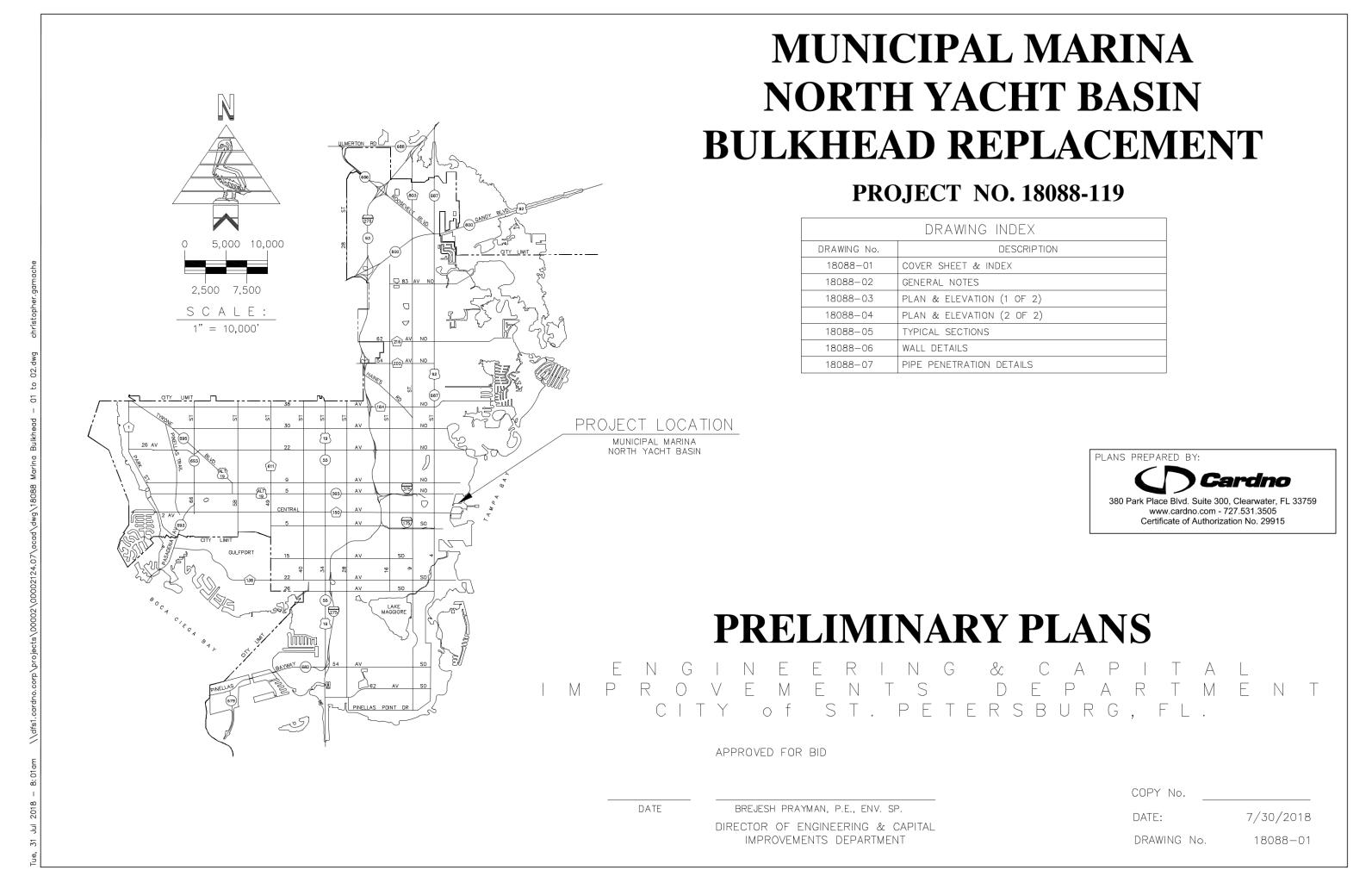


5 Project Schedule



6 Appendix - A

- Addendum No. 4 Municipal North Yacht Basin Bulkhead Replacement Price Drawings
- 18088-119 North Bulkhead Helical Anchor E-mail



THE CONTRACTOR IS HEREBY NOTIFIED THAT ABOVE GROUND OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT AND ARE TO BE ADJUSTED BY OTHERS AS DIRECTED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR UTILITY COORDINATION.

UTI	LITY	OWNERS:			
COMPANY					

COMPANY	CONTACT	TELEPHONE NO.
CITY OF ST. PETERSBURG	MICHAEL GEBLER	(727) 893-7197
CSX RAILROAD	TONY MOHLER	(813) 664-6259
DUKE ENERGY (DISTRIBUTION)	ARTHUR GILMORE	(727) 893-9255
DUKE ENERGY (TRANSMISSION)	JENNY WILLIAMS	(813) 909-1210
FLORIDA GAS TRANS.	JOE SANCHEZ	(407) 838-7171
FRONTIER, INC.	RAUL G. RIVERA	(727) 562-1130
TECO - PEOPLES GAS	RAY ZWIEGLER	(727) 423-7140
BRIGHTHOUSE NETWORKS/SPECTRUM	DON ANTHONY	(727) 329-2845
VERIZON MEDIA V.	TIM KIMBERLY	(727) 217-2620
WOW!	JAY YOUNG	(727) 235-1553
OF ST PETERSRURG:		

- TELEPHONE NO. DEPARTMENT CONTACT WATER RESOURCES JOHN PARKS (727) 892-5629 ENG. CONST. MIKE RYLE (727) 893-7707 STORMWATER/TRANSPORTATION OPS TFFNA SMITH (727) 892-5546 NEIGHBORHOOD TRANS MICHAEL FREDRICK (727) 893-7843 SANITATION BEN SHIRLEY (727) 893-7960
- THE CONTRACTOR SHALL SECURE THE NECESSARY PERMITS/RIGHT OF ENTRY FROM THE CITY OF ST. PETERSBURG FOR ANY WORK WITHIN THE CITY'S RIGHT-OF-WAY AND EASEMENTS. THE CONTRACTOR SHALL ALSO NAME THE CITY OF ST. PETERSBURG AS ADDITIONAL PARTY TO THE INSURANCE COVERAGE.
- TREES WITHIN THE LIMITS OF THIS PROJECT THAT ARE TO REMAIN SHALL BE TRIMMED TO CONFORM TO SECTION 110, APPLICABLE ADA REQUIREMENTS AND STANDARD INDEX 546. COST TO BE INCLUDED IN STANDARD CLEARING AND GRUBBING.
- THE CONTRACTOR SHALL PROVIDE AND IMPLEMENT SITE SPECIFIC EROSION AND SEDIMENT CONTROL PROCEDURES SUCH AS SYNTHETIC BALES. STAKED SILT BARRIERS, FLOATING TURBIDITY BARRIER. OR OTHER APPROVED METHODS AS REQUIRED TO PREVENT THE TRANSPORTATION OF SEDIMENT INTO THE YACHT BASIN.
- ALL FIELD LAYOUT AND SURVEYING FOR CONSTRUCTION OF THIS PROJECT SHALL BE PROVIDED BY THE CONTRACTOR AT THEIR EXPENSE, UNDER THE DIRECTION OF A LICENSED PROFESSIONAL LAND SURVEYOR.
- VERTICAL CONTROL IS BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988
- 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, UTILITES.
- PLAN DIMENSIONS ARE MEASURED IN FEET AND INCHES EITHER HORIZONTALLY OR VERTICALLY UNLESS OTHERWISE NOTED.
- EXISTING DIMENSIONS ARE BASED ON EXISTING PLANS AND MAY VARY IN THE FIELD. FIELD VERIFY DIMENSIONS PRIOR TO THE START OF WORK AND NOTIFY THE ENGINEER IF DIFFERENCES ARE FOUND.

STRUCTURAL NOTES:

DESIGN CRITERIA: DESIGN IN ACCORDANCE WITH THE FLORIDA BUILDING CODE.

SPECIFICATIONS: FLORIDA DEPARTMENT OF TRANSPORTATION, JULY 2018 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AT THE FOLLOWING WEBSITE: HTTP://WWW.DOT.STATE.FL.US/PROGRAMMANAGEMENT/IMPLEMENTED/SPECBOOKS

ENVIRONMENT:

EXTREMELY AGGRESSIVE

CONCRETE:

CONCRETE CLASS	MINIMUM 28-DAY COMPRESSIVE STRENGTH (KSI)	LOCATION OF CONCRETE IN STRUCTURE
IV	f'c = 5.5	BULKHEAD, DEAD MEN

- REINFORCING STEEL SHALL BE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS SECTION 931, GRADE 60.
- 6. SHEET PILE STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A572, GRADE 50.
- 7. TIE BACK SHALL CONFORM TO THE REQUIREMENT OF ASTM A615, GRADE 75, AND BE GALVANIZED IN ACCORDANCE WITH ASTM A153. PVC TUBE SHALL HAVE A MINIMUM THICKNESS OF 0.035".
- STEEL PLATES SHALL BE IN ACCORDANCE WITH ASTM A572, GRADE 36, AND BE GALVANIZED IN ACCORDANCE WITH ASTM A123.
- 9. NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A563 AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F436. NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153.
- 10. STUD SHEAR CONNECTORS SHALL BE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS SECTION 502.
- 11. EXPANSION JOINTS SHALL CONSIST OF 3" THICK PREFORMED JOINT FILLER PER FDOT STANDARD SPECIFICATION SECTION 932-1.1.

	ITEM	BY	REMARKS		NAME	DATE	REVISIONS	BY	DATE	P
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CHRISTOPHER P. GAMACHE, PE LIC. NO.: 82122

GENERAL NOTES

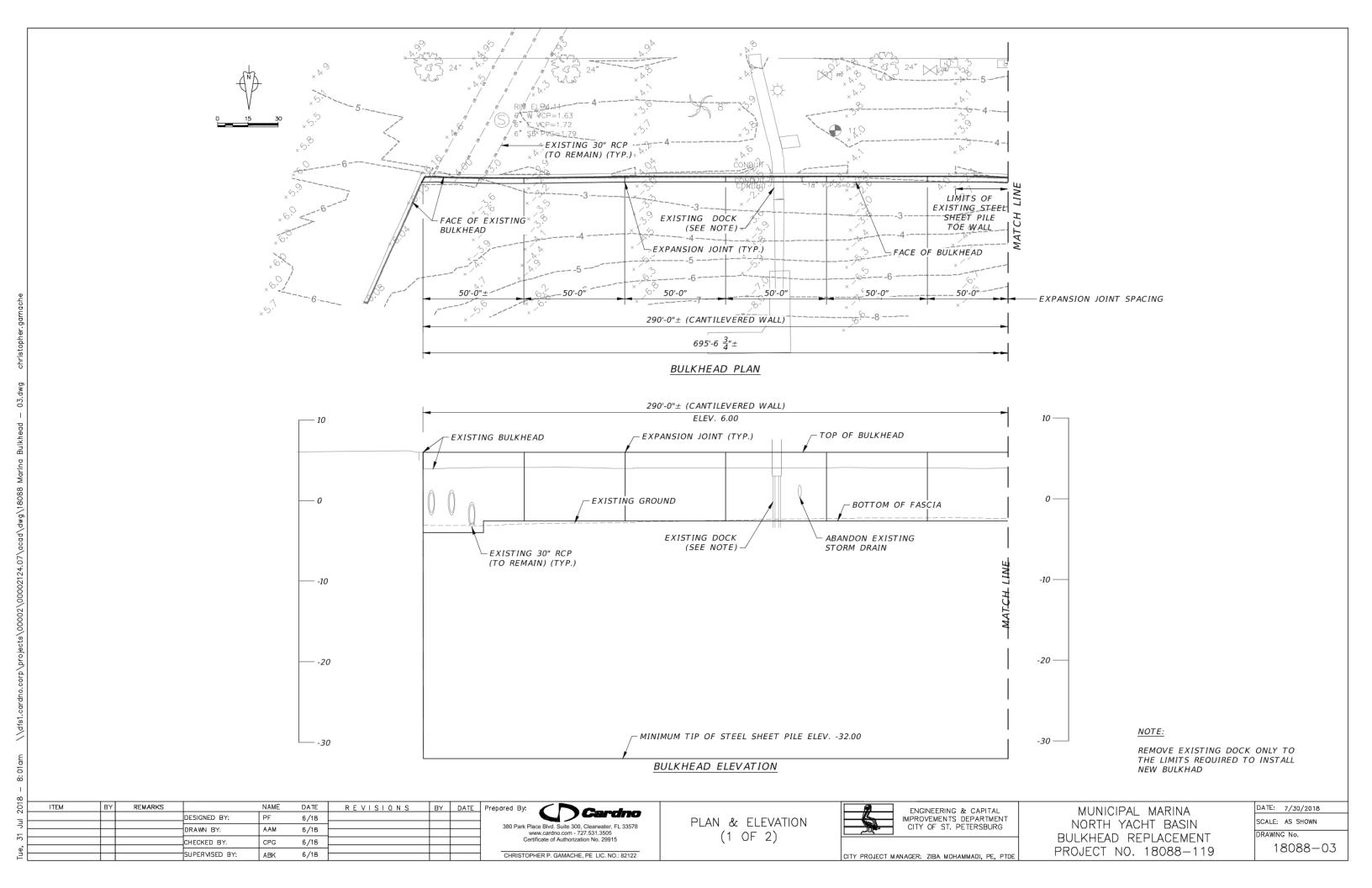


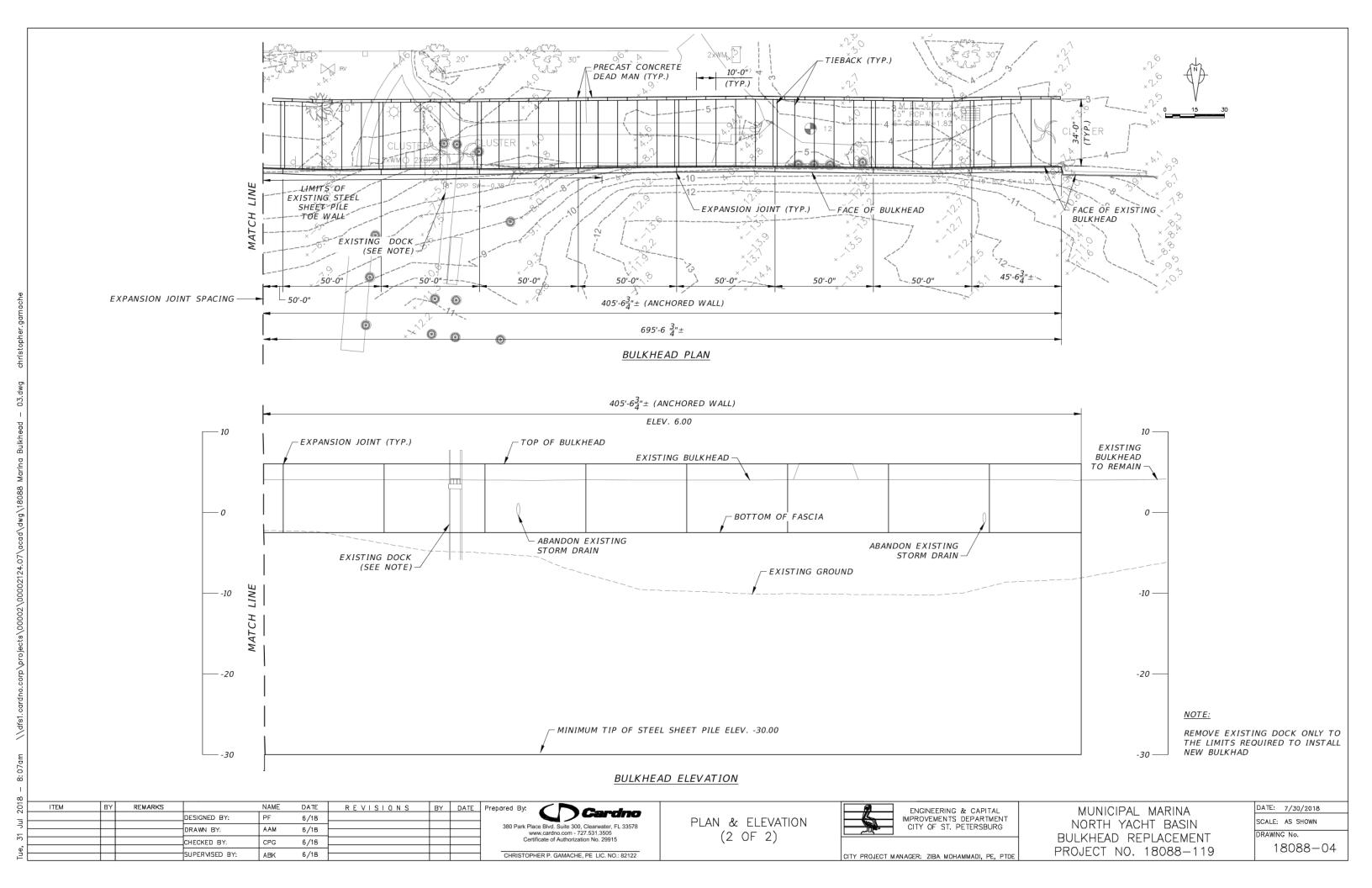
ENGINEERING & CAPITAL IMPROVEMENTS DEPARTMENT CITY OF ST. PETERSBURG

MUNICIPAL MARINA NORTH YACHT BASIN BULKHEAD REPLACEMENT PROJECT NO. 18088-119 DATE: 7/30/2018 SCALE: AS SHOWN

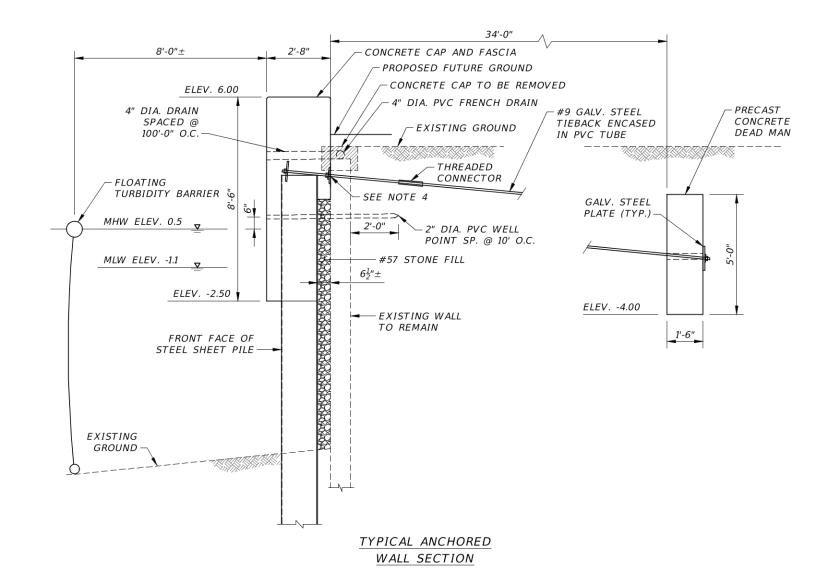
DRAWING No. 18088-02

CITY PROJECT MANAGER: ZIBA MOHAMMADI, PE, PTOE





TYPICAL CANTILEVERED WALL SECTION



NOTES:

- 1. THE PROPOSED SHEET PILE SHALL BE TYPE AZ 26-700 OR APPROVED EQUIVALENT.
- 2. THE MINIMUM WALL TIP ELEVATION SHALL BE AT SHOWN ON BULKHEAD ELEVATION (SHEETS 18088-03 & 18088-04)
- 3. INSTALL PROPOSED SHEET PILE 2"± IN FRONT OF EXISTING STEEL SHEET PILE TOE WALL WHERE IT EXISTS.
- 4. WHERE CONFLICTS WITH EXISTING DEAD MEN OCCUR, CORE THROUGH EXISTING WALL AND INSTALL TEMPORARY BEARING PLATE ON NEW TIEBACK ANCHOR.

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201	ITEM	BY	REMARKS		NAME	DATE	REVISIONS	BY	DATE	Prep
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2				SUPERVISED BY:	ABK	6/18				

380 Park Place Blvd. Suite 300, Clearwater, FL 33578 www.cardno.com - 727.531.3505 Certificate of Authorization No. 29915

CHRISTOPHER P. GAMACHE, PE LIC. NO.: 82122

TYPICAL SECTIONS

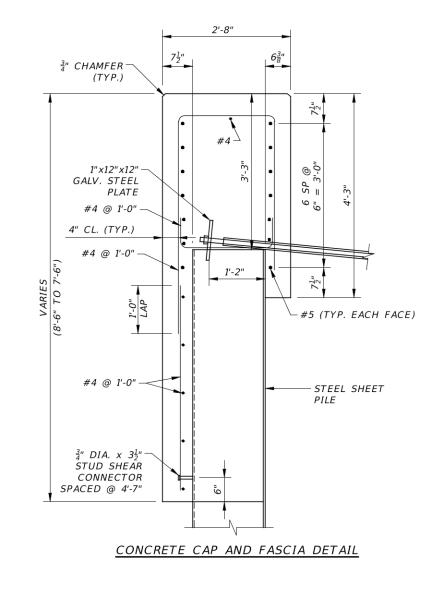


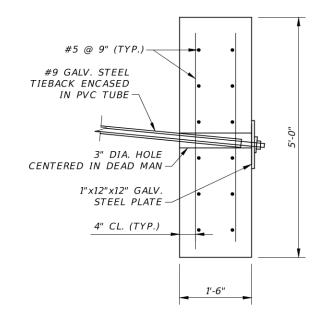
ENGINEERING & CAPITAL IMPROVEMENTS DEPARTMENT CITY OF ST. PETERSBURG

MUNICIPAL MARINA NORTH YACHT BASIN BULKHEAD REPLACEMENT PROJECT NO. 18088-119 DATE: 7/30/2018 SCALE: AS SHOWN

DRAWING No. 18088-05

CITY PROJECT MANAGER: ZIBA MOHAMMADI, PE, PTOE





PRECAST CONCRETE DEAD MAN TYPICAL SECTION

REMARKS NAME DATE ITEM REVISIONS BY DATE Prepared By: DESIGNED BY: 6/18 AAM 6/18 DRAWN BY: CPG 6/18 CHECKED BY: SUPERVISED BY: 6/18 ABK

Prepared By.

380 Park Place Blvd. Suite 300, Clearwater, FL 33578 www.cardno.com - 727.531.3505
Certificate of Authorization No. 29915

CHRISTOPHER P. GAMACHE, PE LIC. NO.: 82122

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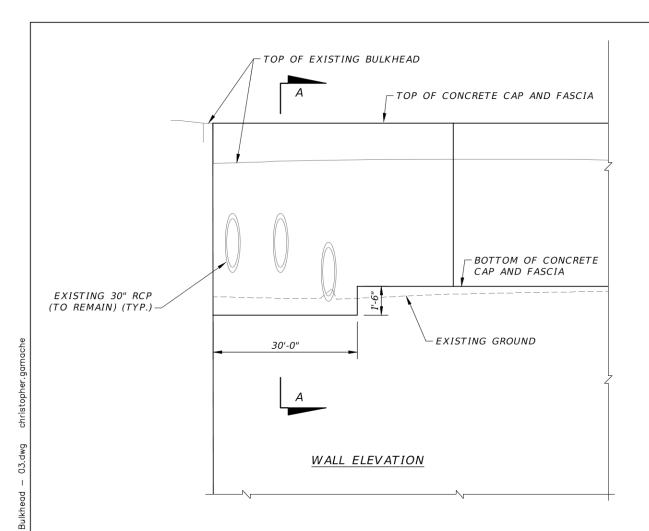
ENGINEERING & CAPITAL
IMPROVEMENTS DEPARTMENT
CITY OF ST. PETERSBURG

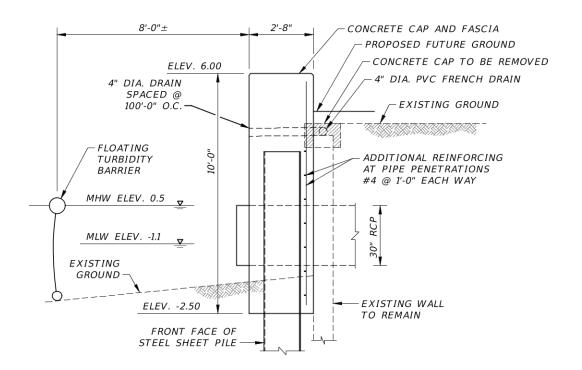
MUNICIPAL MARINA NORTH YACHT BASIN BULKHEAD REPLACEMENT PROJECT NO. 18088-119 DATE: 7/30/2018 SCALE: AS SHOWN

DRAWING No. 18088-06

WALL DETAILS

CITY PROJECT MANAGER: ZIBA MOHAMMADI, PE, PTOE





SECTION A-A

NOTE:

AFTER NEW SHEET PILES HAVE BEEN INSTALLED. CUT HOLE THROUGH STEEL SHEET PILES AND EXTEND 30" RCP.

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201	ITEM	BY	REMARKS		NAME	DATE	REVISIONS	BY	DATE	F
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CHRISTOPHER P. GAMACHE, PE LIC. NO.: 82122



PIPE PENETRATION DETAILS

Kabasin, David

From: Duty lii, Kenneth

Sent: Wednesday, September 12, 2018 8:34 AM

To: Kabasin, David

Cc: Jablon, Chuck; Meese, Jonathan **Subject:** FW: 18088-119 North Bulkhead

Attachments: Mimecast Attachment Protection Instructions; Pages from Chance-Anchors.pdf;

Sketch.pdf

Importance: High

David:

Include this e-mail clarification in the Appendix for the Helical Anchors they have asked us to price.

Add to the Qualifications my comments in Red below.

From: Christopher Gamache <christopher.gamache@cardno.com>

Sent: Friday, August 31, 2018 1:53 PM

To: Duty Iii, Kenneth < Kenneth. Duty Iii@skanska.com>

Cc: Ananda Kelley <Ananda.Kelley@cardno.com>; Evan A. Birk <Evan.Birk@stpete.org>; David.Hugglestone@stpete.org;

Jose.Quintana@stpete.org; Brejesh Prayman <Brejesh.Prayman@stpete.org>; Freeman, Grady <grady.freeman@skanska.com>; Davis, Scott A. <Scott.Davis@skanska.com>; Ziba Mohammadi

<Ziba.Mohammadi@stpete.org>

Subject: RE: 18088-119 North Bulkhead

Mimecast Attachment Protection has deemed this file to be safe, but always exercise caution when opening files.

[External Email]

Hi Ken,

- For the helical anchors, I've attached the cut sheet that we referenced. We don't need to use that exact model. If you have a preference with a particular type or manufacturer, let us know and we can see what works.
- The preliminary length that we've determined is 32 ft measured from the tip of the helical anchor. We assumed an installation angle of 15 degrees down from horizontal, which should put the end of the anchor about 10 ft below the ground surface. Our proposal is based on 32 feet of Anchor and does not include any allowance for additional. If Additional length is required, it will be added cost.
- We've only run preliminary calculations at this point, but they're showing that an anchor at 6'-3" will need a safe working load of 26 kips for the new wall. We haven't run any numbers on the existing wall, but it will be less than what's needed for the new wall. Our proposal is based on a quantity of 64 Helical Anchors to be used in 400' of the wall. If additional anchors are required due to a tighter spacing it will be added cost.
- The use of helical piles does will not affect the timing of the permit. Our proposal relies on this and the ability
 to start the landside work immediately upon release. Based on this, it is understood the City has obtained all
 needed permits for the landside work.
- We don't believe that a permit is necessary to install the helicals. The work is associated with stabilizing an existing seawall, there are no permanent or temporary impacts in the water, and there's no seagrass near the tieback locations. Our proposal relies on this and the ability to start the landside work immediately upon release. Based on this, it is understood the City has obtained all needed permits for the landside work.



SS5 (SQUARE-SHAFT) SCREW ANCHORS

Square-Shaft "SS" multi-helix screw anchors are designed for heavy-guy loading. They have $1\frac{1}{2}$ " square steel shafts. Extension shafts must be coupled to the helix section for installation to the proper depth. For installation tool options, see catalog Section 4A.

SS screw anchors consist of three galvanized components: the lead section, the extension shaft, which includes an integral coupling, and the guy adapter. Extensions and guy adapters include a high-strength bolt and nut.

LEAD SECTIONS

			†Std.	¹ Holding Capacity - (lb.)					
			Pkg./			vs. Soi	l Class		
Catalog No.	Length	Helix Combinations	Pallet	Class 7	Class 6	Class 5	Class 4	Class 3	Class 2
012642AE*	3 ft.	8" - 10"	1/20	19,000	23,000	27,000	32,000	36,000	41,000
012642EJ	$3^{1/2}$ ft.	10" - 12"	1/20	21,000	26,000	31,000	36,000	41,000	46,000
012642AEJ*	$5^{1/2}$ ft.	8" - 10" - 12"	1/20	26,000	32,000	39,000	46,000	51,000	58,000
012642EJN*	7 ft.	10" - 12" - 14"	1/20	29,000	37,000	45,000	53,000	61,000	69,000
012642AEJN	$10^{1/2}$ ft.	8" - 10" - 12" - 14"	1/20	31,000	40,000	49,000	58,000	67,000	N/A
012642EJNS*	$10^{1/2}$ ft.	10" - 12" - 14" - 14"	1/20	40,000	51,000	62,000	70,000	N/A	N/A

Mechanical Properties	SS5 1.50" Square Shaft
Max. Installation Torque	5,500 ftlb.
Min. Ultimate Tension Strength	70,000 lb.

EXTENSIONS

Catalog No.	Nominal Length	Helix Diameter	‡Std. Pkg./Pallet
12655	3½ ft.	N/A	1/50
12656	5 ft.	N/A	1/50
12657	7 ft.	N/A	1/40
12658	10 ft.	N/A	1/30
12656N	5 ft.	14"	1/20
12655J	$3\frac{1}{2}$ ft.	12"	1/20

EXTRA BOLT & NUT for Extensions & Guy Adapters Standard Package: 10 each

otaniaara r ac	otaniaara r aokago. To oaon								
Catalog No.	Description								
	Extra SS5 Bolt								
	Extra SS5 Nut								

GUY ADAPTERS: 18" overall length, 17" L₃ length

Eye Configuration	WITHOUT Pulling Eye	WITH Pulling Eye	Strand Eye Rating*	Pulling Eye Rating	#Std. Package per Pallet
Thimbleye [®]	C1020023	N/A		N/A	5/200
Twineye [®]	C1020024A	C1020024	70,000	12,000	F/000
Tripleye®	C1020025A	C1020025	lb	lb	5/200
Ovaleye	C1100041	N/A		N/A	4/160

[#]Guy adapters are shipped in corrugated cartons.

Thimbleye® & Ovaleye WITHOUT Pulling Eye

LEAD SECTION & GUY ADAPTER COMBINATIONS*

Catalog No.	Guy Adapter	Helix Combinations
126541AE	Thimbleye® without Pulling Eye	8" - 10"
126541EJ	THIMBLEYE® without Pulling Eye	10" - 12"
126541AEJ	THIMBLEYE® without Pulling Eye	8" - 10" - 12"
126541EJN	Thimbleye® without Pulling Eye	10" - 12" - 14"
126541EJNS	THIMBLEYE® without Pulling Eye	10" - 12" - 14" - 14"
126542AE	Twineye® with Pulling Eye	8" - 10"
126542EJ	Twineye® with Pulling Eye	10" - 12"
126542AEJ	Twineye® with Pulling Eye	8" - 10" - 12"
126542EJN	Twineye® with Pulling Eye	10" - 12" - 14"
126542EJNS	Twineye® with Pulling Eye	10" - 12" - 14" - 14"
126543AE	Tripleye® with Pulling Eye	8" - 10"
126543EJ	TRIPLEYE® with Pulling Eye	10" - 12"
126543AEJ	Tripleye® with Pulling Eye	8" - 10" - 12"
126543EJN	TRIPLEYE® with Pulling Eye	10" - 12" - 14"
126543EJNS	TRIPLEYE® with Pulling Eye	10" - 12" - 14" - 14"
*Doolsoning note	. I and anotions one handed to wood b	la alza ta fa ailitata famblifi

^{*}Packaging note: Lead sections are banded to wood blocks to facilitate forklift handling. Guy adapters are shipped in separate corrugated cartons.



Twineye® & Tripleye®
Guy Adapters
WITH Pulling Eye
NOTE: Guy wire should not
be attached to Pulling Eye.



Lead Section

LOAD CAPACITY¹ BASED ON INSTALLATION TORQUE² LOAD CAPACITY OF SS ANCHORS IN SOIL (POUNDS TENSION)

		Helix		Installation Torque (ft-lb)								
Catalog No.	Length	Combinations	1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000	5,500	
012642AE*	3 ft.	8" - 10"	17,000	23,000	29,000	34,000	40,000	46,000	52,000	58,000	63,000	
012642EJ	$3^{1/2}$ ft.	10" - 12"	18,000	24,000	30,000	36,000	42,000	48,000	54,000	60,000	66,000	
012642AEJ*	$5^{1/2}$ ft.	8" - 10" - 12"	19,000	25,000	31,000	38,000	44,000	50,000	56,000	62,000	68,000	
012642EJN*	7 ft.	10" - 12" - 14"	20,000	26,000	32,000	39,000	46,000	52,000	58,000	65,000	70,000	
012642AEJN	$10^{1}/_{2}$ ft.	8" - 10" - 12" - 14"	20,000	27,000	34,000	40,000	47,000	54,000	61,000	68,000	70,000	
012642EJNS*	$10^{1/2}$ ft.	10" - 12" - 14" - 14"	21,000	28,000	35,000	42,000	49,000	56,000	63,000	70,000	70,000	

¹ Holding capacites are based on average test data and are offered as an application guide only. Ultimate strength ratings apply to properly installed anchors only. Failure to install within 5° of alignment with the guy load will significantly lower strength. Load capacities listed above are ultimate values based on average test data and are offered as an application guide. Typical deflection at ultimate load ranges between 2 and 4 inches. The listed values should be reduced by an appropriate factor of safety. Minimum vertical depth is five times the diameter of the largest helix. More specific data on soils and anchor performance in any site condition can be obtained by contacting Hubbell Power Systems.

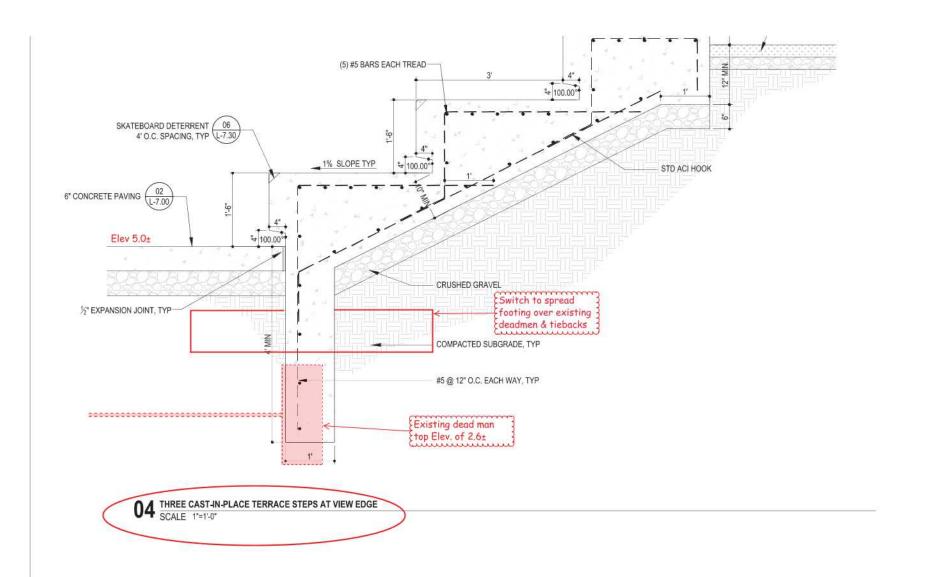
²The torque values shown are steady values in homogeneous soils, not peak values that can occur in non-homogeneous soils such as glacial till or other rocky soils. The torque values shown are obtained by averaging the readings from the last 2 feet of anchor penetration.

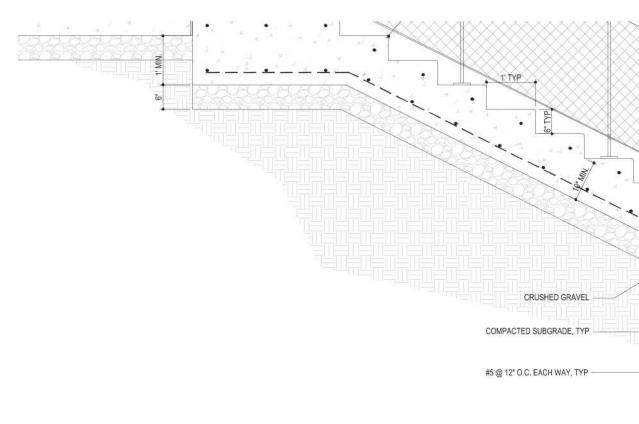


Phone: 573-682-5521 Email: hpsliterature@hubbell.com Web: hubbellpowersystems.com

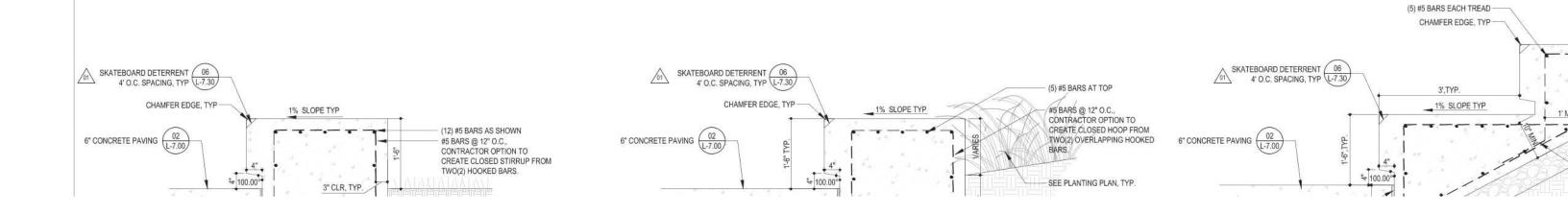
Page 4-12 June 2016

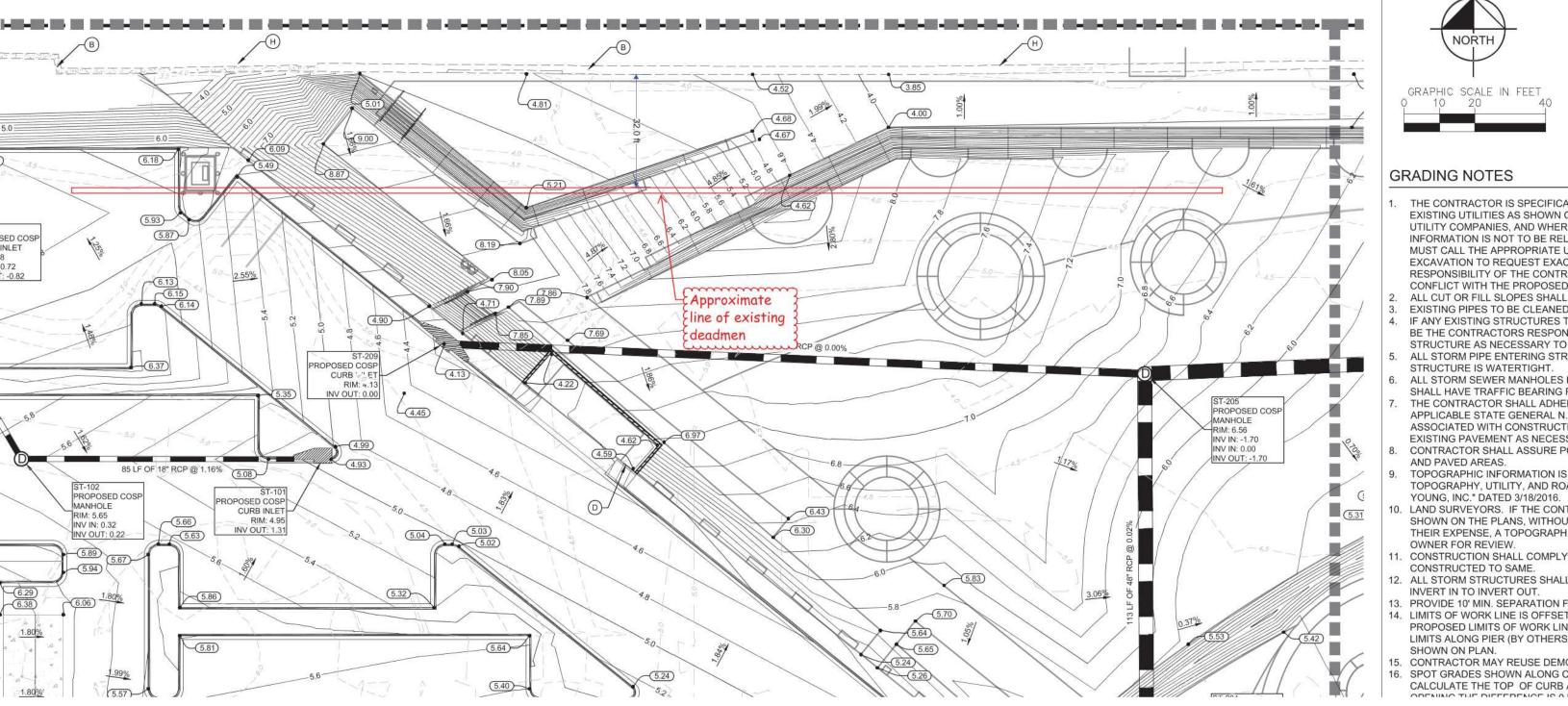
^{*}RUS Accepted. †Lead sections are banded to wood blocks to facilitate forklift handling.

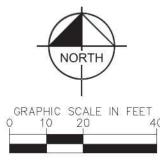




05 CAST-IN-PLACE STAIRS AT VIEW EDGE SCALE 1"=1"-0"







GRADING NOTES

- 1. THE CONTRACTOR IS SPECIFICA EXISTING UTILITIES AS SHOWN O UTILITY COMPANIES, AND WHER INFORMATION IS NOT TO BE REL MUST CALL THE APPROPRIATE U **EXCAVATION TO REQUEST EXAC** RESPONSIBILITY OF THE CONTR CONFLICT WITH THE PROPOSED
 - EXISTING PIPES TO BE CLEANED
- IF ANY EXISTING STRUCTURES T BE THE CONTRACTORS RESPON STRUCTURE AS NECESSARY TO
- ALL STORM PIPE ENTERING STR STRUCTURE IS WATERTIGHT.
- ALL STORM SEWER MANHOLES I SHALL HAVE TRAFFIC BEARING F
- 7. THE CONTRACTOR SHALL ADHE APPLICABLE STATE GENERAL N. ASSOCIATED WITH CONSTRUCT **EXISTING PAVEMENT AS NECESS** 8. CONTRACTOR SHALL ASSURE PO
- AND PAVED AREAS.
- TOPOGRAPHIC INFORMATION IS TOPOGRAPHY, UTILITY, AND ROA YOUNG, INC." DATED 3/18/2016.
- 10. LAND SURVEYORS. IF THE CONT SHOWN ON THE PLANS, WITHOU THEIR EXPENSE, A TOPOGRAPH OWNER FOR REVIEW. 11. CONSTRUCTION SHALL COMPLY
- CONSTRUCTED TO SAME. 12. ALL STORM STRUCTURES SHALL
- INVERT IN TO INVERT OUT.
- 13. PROVIDE 10' MIN. SEPARATION F 14. LIMITS OF WORK LINE IS OFFSET PROPOSED LIMITS OF WORK LIN
 - LIMITS ALONG PIER (BY OTHERS SHOWN ON PLAN.
- 15. CONTRACTOR MAY REUSE DEMO 16. SPOT GRADES SHOWN ALONG C
- CALCULATE THE TOP OF CURB /

Regarding the conflict with the existing deadmen. Can the upland work be completed without disrupting them? **No** I know that there is a conflict with the foundation of the steps, but are there other issues? Would it be possible to change the vertical foundation of the steps to a spread footing? **No, do not recommend.** If so, this would allow the existing deadmen to stay in place during upland construction and tiebacks could be installed with the sheet pile. I've attached a sketch of my thoughts. Let us know if you think this is viable or not.

If not, we could use helicals just at the tree locations and develop anchorage details at the existing wall. **Our proposal is** based on Helical Anchors for the entire wall length and not just at the Tree locations.

Thanks, Chris

Christopher Gamache PE

SENIOR STRUCTURES ENGINEER CARDNO

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From: Ananda Kelley < Ananda. Kelley@cardno.com >

Sent: Friday, August 31, 2018 11:11 AM

To: Christopher Gamache <christopher.gamache@cardno.com>

Subject: Fwd: 18088-119 North Bulkhead

Begin forwarded message:

From: "Duty lii, Kenneth" < Kenneth.Dutylii@skanska.com

Date: August 31, 2018 at 11:03:36 AM EDT

To: "Evan A. Birk" <Evan.Birk@stpete.org>, Ananda Kelley <Ananda.Kelley@cardno.com>

Cc: "David A. Hugglestone" < <u>David.Hugglestone@stpete.org</u>>, Raul Quintana

<<u>Jose.Quintana@stpete.org</u>>, Brejesh Prayman <<u>Brejesh.Prayman@stpete.org</u>>, "Freeman, Grady"

<grady.freeman@skanska.com>, "Davis, Scott A." <<u>Scott.Davis@skanska.com</u>>

Subject: RE: 18088-119 North Bulkhead

Evan / Ananda:

Understood.

The questions around schedule are still applicable and we need information from you if we go to helical anchors, either totally replacing the tiebacks or deadmen or just at the trees in order to save them, we need to know how this will influence the permit and how fast we can get the permit to install from the water...; additionally, I imagine we will still need to anchor at the existing wall ahead of the new sheetpile and then extend through new sheetpile. This allowing the balance of the landside work to

continue as fast as possible. The best approach might be the current design working 20' at a time and only using the helicals at the trees...

I have reached out to Atlas and it appears as if you are looking at a catalog that is 10-15 years old but they are chasing it down for me. You indicate the spacing at 6'-3" but what lengths? How far will they have to be installed? What restraint / resistance are we needing at the existing wall with them and then the new and, will the existing wall be able to withstand installing new helicals?

Thanks

Ken

From: Evan A. Birk < Evan.Birk@stpete.org Sent: Friday, August 31, 2018 10:02 AM

To: Duty Iii, Kenneth < Kenneth. Duty Iii@skanska.com >

Cc: David A. Hugglestone < <u>David.Hugglestone@stpete.org</u>>; Raul Quintana < Jose.Quintana@stpete.org>; Brejesh Prayman < Brejesh.Prayman@stpete.org>

Subject: FW: 18088-119 North Bulkhead

[External Email]

Good morning Ken,

Just following up with you to see if the information Ananda provided below is enough for you to start pricing the helical option and weighing its impact to the schedule. Please let me know if you need more information or if you need further coordination with Cardno. Thank you.

Evan Birk, P.E. Engineering & Capital Improvements City of St. Petersburg One 4th Street North St. Petersburg, FL 33701 727.551.3499

From: Ananda Kelley [mailto:Ananda.Kelley@cardno.com]

Sent: Wednesday, August 29, 2018 4:57 PM

To: Duty lii, Kenneth < Kenneth.Dutylii@skanska.com

Cc: Evan A. Birk < Evan.Birk@stpete.org>; Ziba Mohammadi < Ziba.Mohammadi@stpete.org>;

Christopher Gamache < christopher.gamache@cardno.com >

Subject: 18088-119 North Bulkhead

Good afternoon Ken,

We had a brief discussion with Ziba and Evan while at the City yesterday afternoon and it sounds like we need to take another look at preserving the two trees compromised by the wall construction, rather than moving forward with replacing them.

We ran some numbers today and it looks an alternative option that could preserve the trees would be to use helical anchors (Atlas 14" dia - 012642EJNS) spaced at 6'-3" which would coincide with every other 3'-1 $\frac{1}{2}$ " wall section.

One hang-up we recall with this approach is that as detailed, the architect's step footing still conflicts with the existing deadmen. We would need these deadmen to remain during construction as they would support the existing wall. These existing deadmen would not be in conflict with the helical anchors as the anchors would penetrate below the deadmen.

Please let us know how you would like us to proceed and if the architect is willing to modify their footing detail to avoid impacts to the existing deadmen.

Thank you,

Ananda

Ananda Kelley PE

PRACTICE GROUP MANAGER
SENIOR PRINCIPAL - TRANSPORTATION STRUCTURES
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