

Port Authority of Guam  
TIGER IV  
Supplemental Photographs of  
Damages to the Container Yard  
Drainage and Payment

March 16, 2012









## **CONTAINER YARD DRAINAGE AND PAYMENT REPAIR**

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### **SCOPE OF WORK**

#### **Budget Narrative – Scope of Work**

To ensure that TIGER III funding is well spent, the Port, through a bid solicitation process, will work with its Contractor to design, build, and complete a secured facility that will be compliant to Maritime Security Regulations and Critical Infrastructure Requirements.

The projected cost includes all Design-Build expenses that will be incurred by the Contractor during the 18 - 24 months performance period. Project activities that are required but not limited to are: A/E design fees, project inspection fees, site work, demolition and removal activities, construction, construction management, administrative & legal fees, and all other related fees indicated in the preliminary SOW.

The Request for Proposal (RFP) will be coordinated with and through the Government of Guam's Department of Public Works (DPW) and local General Services Agency.

This project is to repair the dilapidated concrete storm drainage system in the container yard. Cast in place concrete mix shall have a compressive strength of 6000 psi.

All system shall meet the standard compliance of organizations for the American National Standard Institute (ANSI), American Society for Testing & Materials (ASTM), Underwriter Laboratories (UL), American Concrete Institute (ACI), American Welding Society (AWS) and the Occupational Safety & Health Association (OSHA).

#### **A) SCOPE OF WORK:**

The Port Authority of Guam shall award this project through a competitive bidding. Duration for this project is Ten (10) months from the Notice To Proceed, beginning with the removal works to the completion and acceptance of the project by the Port Authority of Guam. The contractor must be the prime bidder for this project that meets the Port requirement. Bid will be lump sum cost.

Prospective bidders are encouraged to visit the project site after the pre-bid conference. They may call the Port's Engineering/CIP Division at Tel. # 477-5931-35, ext. 415, 418 or 433 to arrange for the scheduled site visit.

#### **B) UP-GRADE PARAMETER:**

1. Attach is the existing concrete storm drain channel system design inside the Port container yard compiled by PAG Engineering/CIP Division for bidding purposes (approx-2,240 LF);
2. The contractor that is awarded on this project shall obtain the services of a structural engineer licensed by the PEALS Board of Guam, to affix seal, sign drawing plans, & to compute the safe load bearing concrete storm drain channel system;

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### **SCOPE OF WORK**

3. Contractor to submit drawing plans on the concept design by PAG. Plans shall meet all Government of Guam regulatory requirements for a building permit issuance;
4. Contractor to work with the license engineer's evaluation as per PAG recommendations on the repaired concrete storm drain channel system;
5. Drawing plans shall have but not be limited to the following:
  - a) Title sheet, vicinity map, project location and index of drawings;
  - b) Drawings shall indicate the complete storm drain channel runs and outfalls;
  - c) Cast in place concrete shall have a 28 day compressive strength of 6000 psi, ¾" aggregate size, & a 2" maximum slump, unless indicated or specified otherwise.
  - d) Reinforcing bars shall be ASTM A615M, Grade 60 unless otherwise specified. Top loader equipment & container have a combine minimum weight of 234,000 pounds;
  - e) Specifications and general notes can be indicated on the drawing plans. This project must conform with the ANSI, ASTM, UL, ACI, AWS, & OSHA requirements;
  - f) Port's Engineering/CIP Division shall review the drawing plans at 65%, 100% & final. Submit Four (4) sets of drawing plans for review. Upon approval of the final drawings, contractor shall apply for a DPW Building Permit. Drawing plans and building permit has Forty Five (45) calendar days for these works to be completed;

#### **C) REPAIR PHASE:**

1. Contractor awarded this project shall submit the required Performance & Payment Bonds before the Notice To Proceed shall be issued. Upon completion of the drawing plans and approval by PAG, the contractor shall obtain a DPW Building Permit prior to starting of work;
2. Contractor's personnel assign to this project are required to have a Transportation Worker Identification Credential (TWIC) card and a mandatory attendance for a MARSEC Level briefing. Inquire the Port Police Office for these requirements;
3. Contractor to submit insurance coverage on Comprehensive General Liability, Excess Liability Policy (1M minimum), Workers Compensation & Employer's Liability, and Builder's Risk. PAG shall be the additional insured;
4. Contractor shall submit the Submittal Status Log, Schedule of Values, Phasing Plan, and Construction Schedule to PAG Engineering/CIP Division for approval. Contractor has Ten (10) months or Three Hundred Sixty Seven (367) calendar days after the DPW Building Permit approval date to complete this project;
5. Contractor shall be responsible on all measurements. PAG shall not be held liable for contractor's miscalculations, under estimations and assumptions once the project is awarded;
6. Contractor to work with the engineer's evaluation design as per PAG recommendation on the concrete storm drain channel repair. Concrete storm drain channel shall be capable to

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- withstand a minimum 234,000 pounds weight (top loader & container) traversing container yard;
7. Contractor shall abide with OSHA regulations and provide temporary barriers with safety warning signs around the work area for the safety of working personnel inside Port premises;
  8. Contractor shall coordinate all work with the Port's Engineering/CIP Division & the Terminal Operations. Contractor to work around with the Port's terminal activities in order not to hamper the Container Yard operations;
  9. Contractor shall provide labor, materials & equipment for the repair of concrete storm drain system as per approved drawing plans and conform to specifications. PAG Engineering personnel shall conduct daily inspection of the project;
  10. Contractor to remove existing steel gratings, saw-cut concrete channel wall base prior to chipping-off concrete drain channel walls. Expose vertical reinforcing bars to accommodate 20" lap minimum with the new reinforcing bars. New vertical reinforcing bars shall be drilled 6" deep on the removed channel wall, in-level with the existing concrete channel's finish grade. Provide epoxy anchor grout for the new vertical reinforcement bars (see attach shop drawings);
  11. Contractor to lay-out vertical & horizontal reinforcing bars & provide formwork. Reinforcing bars shall be ASTM A615M, Grade 60 unless otherwise specified. Request formwork inspection to PAG Engineering Office prior to concrete pouring;
  12. Contractor to apply concrete bonding on existing concrete surface in contact with the new concrete mix. Pour ready mix concrete on formwork (approx-517 cu.yd.). Ready mix concrete shall have a compressive strength of 6000 psi in 28 days. Contractor to provide vibrator while pouring ready mix concrete. Submit copy of the concrete trip ticket to PAG Engineering Office;
  13. Contractor shall be responsible for daily clean-up of project vicinity. Construction debris shall be disposed to a designated DPW dump site. Remove steel gratings shall be re-use and to be put in-place upon completion on the repaired storm drainage system;
  14. PAG shall process a monthly billing statement on this project with a 10% retention, to be release upon completion of project. Monthly billing shall attach the Billing Invoice, Cost Breakdown, Schedule of Values and Purchase Order;
  15. Request in writing for final inspection to PAG Engineering/CIP Division;
  16. Upon completion of all punch list, contractor shall submit the final billing with the As-Built Drawings in hard copy & electronic file in PDF format, Certificate of Completion, Warranty Certificate, & Release of Liabilities to the Port Authority of Guam associated with this project.

<b>Total Container Yard Drainage &amp; Pavement Repair <u>Raw Cost:</u></b>	<b>\$1,991,452.00</b>
<b>Total Container Yard Drainage &amp; Pavement Repair <u>Project Cost:</u></b>	<b>\$3,248,857.07</b>



### Port Modernization Program Project

DESCRIPTION	TYPE OF WORK	QUANTITY	UNIT	RAW COST
<i>Container Yard Drainage &amp; Pavement Repair</i>	Renovation	11,000	SF	\$ 1,991,452.00
<b>SUBTOTAL RAW COST</b>				<b>\$ 1,991,452.00</b>
COST ADJUSTMENT FACTORS				TOTAL COST
<b>SUBTOTAL</b>				<b>\$ 1,991,452.00</b>
<b>1. Area Cost Factor Adjustment</b>				<b>\$ 52,574.33</b>
<b>SUBTOTAL</b>				<b>\$ 2,044,026.33</b>
<b>2. Supervision, Inspection &amp; Overhead</b>				<b>\$ 132,861.71</b>
<b>SUBTOTAL</b>				<b>\$ 2,176,888.04</b>
<b>3. Contingency</b>				<b>\$ 653,066.41</b>
<b>TOTAL 1</b>				<b>\$ 2,829,954.46</b>
<b>4. Planning and Design</b>				<b>\$ 198,096.81</b>
<b>TOTAL 2</b>				<b>\$ 3,028,051.27</b>
<b>MARAD (3%)</b>				<b>\$ 90,841.54</b>
<b>TOTAL 3</b>				<b>\$ 3,118,892.81</b>
<b>Guam Receipt Tax (GRT) (4.167%)</b>				<b>\$ 129,964.26</b>
<b>TOTAL CONSTRUCTION COST (FY 2012)</b>				<b>\$ 3,248,857.07</b>
<b>TOTAL PROGRAM COST</b>				<b>\$ 3,248,857.07</b>

COST ADJUSTMENT FACTORS	% AMOUNT
1. Area Cost Factor	2.640
2. Supervision, Inspection and Overhead (SIOH) Factor (%)	6.500
3. Contingency Factor (%)	30.000
4. Planning and Design Factor (%)	7.000