

EXPLANATION OF CONSENT AGENDA ITEM E.1.c. (8) – April 15, 2015

ITEM:

Consideration of approving a purchase order to CH2MHill under their general engineering services contract for design services for a jetway style gangway at Cruise Terminal 5 in an amount not to exceed \$89,764 and authorize staff to solicit for proposals. (Perley/Hicks)

EXPLANATION:

Cruise Terminal 5 gangways currently are a fixed type gangway that can only fit certain ships at specific deck levels. At the March 18, 2015 Commission meeting, the Board approved an increase to the design purchase order to BEA to continue with phased renovation and expansion of CT5 (Item 3.b.1.). In order for a greater variety of ships to use the renovated CT5, the gangways will also have to be modified. Due to the limited pier space available at CT5, a jetway style gangway (similar to what is used at the airport) will provide greater flexibility to connect to a larger number of ships that could berth at CT5. A jetway style gangway will provide a larger number of manufacturers than a mobile passenger boarding bridge (PBB) style gangway where there are only 2 manufacturers of which neither are local or USA made.

This request is for CH2MHill to prepare the criteria specification for a jetway style gangway to be used at CT5 and once completed, authorizing staff to solicit for proposals for a design/build of the gangway.

Funding Review by Finance (Pat Poston):

The total NTE amount of \$89,764 is included in the FY15 Capital Budget and no increase is required. [Budget item 2030- CT5 Terminal Upgrades]

Staff Recommends Approval

Prepared by: David W. Perley AIC/CPE





CH2M HILL
445 Challenger Road
Suite 130
Cape Canaveral, FL 32920
Tel 321.799.1236
Fax 321.799.1183

March 31, 2015

Canaveral Port Authority
445 Challenger Road, Suite 301
Cape Canaveral, FL 32920

TOTAL FEE

\$ 89,764.00

Attn: Mr. David Perley, AIC/CPE
Senior Director, Port Construction and Infrastructure

RE: Proposal for CPA 2015-22 CT5 Radial Swing Mobile Gangway

In accordance with the Continuing Contract for Professional Services Associated with General Engineering Services, dated June 18, 2014, we are pleased to submit the following proposal for professional services in connection with designing, and preparing procurement documents for a Radial Swing Mobile Gangway for Cruise Terminal 5.

Project Description

Prepare the design and procurement documents for an enclosed radial swing mobile passenger boarding gangway (RSG) with the following general characteristics:

- The RSG will be rubber tired with the ability to be driven toward the vessel from a pivot point near the terminal.
- Fixed and adjustable tunnels will be used to transfer the passengers from an elevated landside concourse to the various vessel door elevations at the pier face. Slopes during normal tide ranges will be maintained within ADA requirements.
- Telescoping tunnels will be used to mate with the vessel doors. Fixed tunnels and ramps will be used to bridge between the rotunda and the terminal building.
- Tunnels and ramps will be enclosed and air conditioned.
- If two RSG's are procured, they will be arranged parallel to each other with a connecting fixed enclosed ramp.

Scope of Services

Engineering Services

1. Develop the basic concept for the mobile RSG, including the operational parameters and survival criteria.
2. Coordinate with the CT5 Landside consultants the interface between the RSG and the terminal building.

3. Contact one or more fabricators, obtain their comments, and request budgetary costs for fabrication and installation.
4. Prepare an Opinion of Probable Cost for the work.
5. Coordinate the necessary electrical power requirements with the CT5 Landside consultants. Upgrades and or modifications to the CT5 building electrical system shall be designed by the CT5 Landside Consultant.
6. Evaluate the estimated axle loads on the pier structure and design appropriate strengthening.
7. Obtain foundation loads from fabricators and design drilled shaft foundation for the RSG and auger-cast piling for the fixed ramps using previously obtained geotechnical borings and reports.
8. Perform a preliminary HVAC evaluation of the RSG and prepare a detailed performance requirement to be included in the gangway specification.
9. Attend up to four review/coordination meetings with Port staff. These meetings will include Port Operations staff who will provide input on equipment specifics, operational constraints, and standardization of various components. These meetings will be requested and conducted by Port staff.
10. Prepare the performance/procurement specification and assist Port staff with the development of the procurement front end documents. Printing and distribution of the tender documents will be in electronic form by Port staff.
11. Assist Port staff with bidders' questions during the bid and with the evaluation of the submitted bid proposals.
12. Review fabrication and installation shop drawings and other submittals. Verify the final loads on the pier and foundation structures.
13. Review fabricator's HVAC design calculations and equipment submittals.
14. Visit the fabricator's shop during fabrication, two visits. Fabrication shop visit travel expenses shall be paid by the RSG manufacturer.
15. Attend the site installation, testing, and commissioning.

Deliverables

It is anticipated that the following deliverables will be required:

Design plans and specifications at, 30%, 60%, 90% complete, and 100% complete; Opinion of Probable Cost; One set of Bid Document originals, hardcopy and PDF format; Review of submittals and requests for drawing clarifications during fabrication; Fabrication discrepancy reports; Updates to CH2M Hill AutoCAD drawings.

PROJECT SCHEDULE

It is estimated that it will require approximately eight weeks to complete the design and preparation of the procurement documents, assuming that CPA reviews are completed within 5 days of each progress submittal. The portion of the budget during PBB fabrication is based on the assumption that the PBB fabrication, delivery, and commissioning will not exceed twelve months. If there are protracted delays for reasons beyond our control, we would expect to negotiate with you an equitable adjustment of our not-to-exceed budgets and schedule taking into consideration the impact of such delay.

Items to be furnished to CH2M Hill by CPA Engineering

1. Terminal Building elevations and interface details.
2. General cruise fleet information that will be used to set the PBB vertical geometry.

PRICE

The Consultant shall be paid on a cost basis in accordance with the approved 2015 Fee Schedule, per the following which includes reimbursable costs. This is a time and materials fee schedule.

Total Not-To-Exceed Budget: \$89,764.00

Opinions of Cost

In providing opinions of cost and schedules for the project, Consultant has no control over cost or price of labor and materials; unknown or latent conditions of existing equipment or structures that may affect operation or maintenance costs; competitive bidding procedures and market conditions; time or quality of performance by operating personnel or third parties; and other economic and operation factors that may materially affect the ultimate project costs or schedule. Therefore, Consultant makes no warranty that the Port's actual project cost or schedule will not vary from Consultant's opinions or estimates. If the Port wishes greater assurance as to any element of project cost or schedule, the Port will employ an independent cost estimator, contractor, or other appropriate advisor.

Services During Construction

The presence or duties of ENGINEER's personnel at a construction site, whether as onsite representatives or otherwise, do not make ENGINEER or ENGINEER's personnel in any way responsible for those duties that belong to OWNER and/or the construction contractors or other entities, and do not relieve the construction contractors or any other entity of their obligations, duties, and responsibilities, including, but not limited to, all construction methods, means, techniques, sequences, and procedures necessary for coordinating and completing all portions of

the construction work in accordance with the construction Contract Documents and any health or safety precautions required by such construction work.

ENGINEER and ENGINEER's personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions and have no duty for inspecting, noting, observing, correcting, or reporting on health or safety deficiencies of the construction contractor(s) or other entity or any other persons at the site except ENGINEER's own personnel.

The presence of ENGINEER's personnel at a construction site is for the purpose of providing to OWNER a greater degree of confidence that the completed construction work will conform generally to the construction documents and that the integrity of the design concept as reflected in the construction documents has been implemented and preserved by the construction contractor(s). ENGINEER neither guarantees the performance of the construction contractor(s) nor assumes responsibility for construction contractor's failure to perform work in accordance with the construction documents.

ACCEPTANCE OF PROPOSAL

Acceptance of this proposal may be indicated by the signature of a duly authorized official of the Port in the space provided below. One signed copy of this proposal returned to the Consultant will serve as an Agreement between the two parties and as Notice to Proceed. Should this proposal not be accepted within a period of thirty (30) days from the above date, it shall become null and void.

Acceptance is subject to CPA PO and Continuing Contract Terms and Conditions.



Max Mozo, P.E.
Geographic Operations Manager
CH2M HILL ENGINEERS, INC.

Accepted By:
CANAVERAL PORT AUTHORITY

David Perley, AIC/CPE
Senior Director, Port Construction and Infrastructure
Canaveral Port Authority
Approved at CPA Commission Meeting on _____

Date

HOURS BUDGET WORKSHEET

CPA 2015-22
 Proposal Type: T&M, NTE

TITLE:

CT5 Radial Swing Gangway
 3/31/2015

Tasks	Principal	Proj Dir	Gary	Sr Prof 2	HVAC	Tomaz Songtao Sr. PM	Andre Staff Prof	Denise Tech Staff	TOTAL
1 Concept drawings		8					8	2	
2 Meetings with CPA - lessons learned		8				8		2	
3 Coordinate with Landside Consultant		8				8		2	
4 Contact fabricators		2							
5 Cost Estimate		4							
6 HVAC Minimum Performance Requirements		4		40			16		
7 Pier loads - deck strengthening		2				16	8		
8 Drilled shaft and auger-cast pile design		2				24	8		
9 Performance spec, procurement docs		24				40	40	16	
10 Bid services - 2 step process		8				12		2	
11 Shop drawing and submittal review		16				24		8	
12 Fabrication shop visits		4				64		2	
13 CT5 shaft construction and pier strengthening		8				24		2	
14 Gangway and walkway erection		8				24		2	
15 Testing and commissioning		8				16		2	
TOTAL MH	0	106	0	40	260	88	40	59	534
HOURLY RATE	\$ 265	\$ 254	\$ 221	\$ 205	\$ 159	\$ 113	\$ 9,900	\$ 2,360	\$ 88,764
LABOR TOTAL	\$ -	\$ 26,924	\$ -	\$ 8,240	\$ 41,340	\$ 9,900	\$ 2,360	\$ -	\$ 88,764
Expenses									
Expenses (Travel)									\$ 1,000
Total Expenses									\$ 88,764

Expenses:
 Total Not to Exceed Budget

Drawing Sheets									
Cover sheet, location map	T1	4							
General Site Plan, Notes	G1	4							
Main Pier Deck Plan	S1.0	16							
Gangway plan, operational limits	S2.0	8							
Gangway elevation, operational limits	S2.1	12							
Gangway sections, details	S2.2	8							
Gangway sections, details	S2.3	16							
Drilled shaft foundation	S3.0	16							
Pier deck strengthening	S4.0	88							
									9 SHEETS cost/sht= \$ 9,973.78
									Estimated Gangway cost for two \$ 3,000,000
									Work Order Services as a percent of Project Cost 3.0%