

**FEDERAL TRANSIT ADMINISTRATION**  
**PROJECT MANAGEMENT OVERSIGHT PROGRAM**

**Contract No. DTFT60-04-D-00013**  
**Project No. DC-27-5041**  
**Task Order No. 10**

**CLIN 0003: Monitoring of Grantee**  
**Subtask 12B: Specialized Monitoring Deliverable**

**Grantee: City and County of Honolulu**

**Honolulu High-Capacity Transit Corridor**  
**Project**  
**Specialized Monitoring Deliverable - August 2007**

**By: Booz Allen Hamilton**  
**8283 Greensboro Dr.**  
**McLean, VA 22102**

**TABLE OF CONTENTS**

LIST OF ACRONYMS .....	<u>ii</u>
I. Executive Summary .....	<u>424</u>
A. Technical Capacity and Capability .....	<u>424</u>
B. Project Schedule and Project Delivery .....	<u>424</u>
C. Request for Qualifications (RFQ) for PE Services .....	<u>525</u>
D. New Starts Submittal .....	<u>525</u>
E. Environmental Impact Statement (EIS) .....	<u>526</u>
III. Current Review .....	<u>10210</u>
A. Technical Capacity and Capability .....	<u>10210</u>
General Observations .....	<u>10210</u>
PMOC Concerns .....	<u>10210</u>
Action Items .....	<u>11211</u>
B. Project Schedule and Delivery .....	<u>11211</u>
General Observations .....	<u>11211</u>
PMOC Concerns .....	<u>11211</u>
Action Items .....	<u>12212</u>
C. RFQ for PE Services .....	<u>12212</u>
General Observations .....	<u>12212</u>
PMOC Concerns .....	<u>12212</u>
D. New Starts Submittal .....	<u>13213</u>
E. Environmental Impact Statement (EIS) .....	<u>Error! Bookmark not defined.</u>
General Observations .....	<u>Error! Bookmark not defined.</u>
APPENDIX A – Grantee Deliverables for Technical Capacity and Capability .....	<u>14214</u>
APPENDIX B – Overall Project Schedule .....	<u>15215</u>

## LIST OF ACRONYMS

AA	Alternatives Analysis
BAH	Booz Allen Hamilton
BFMP	Bus Fleet Management Plan
DB	Design/Build
DEIS	Draft Environmental Impact Statement
DOT	State of Hawaii Department of Transportation
DTS	City & County of Honolulu Dept. of Transportation Services
EIS	Environmental Impact Statement
FD	Final Design
FFGA	Full Funding Grant Agreement
FMP	Fleet Management Plan
FTA	Federal Transit Administration
GEC	General Engineering Consultant
GET	General Excise Tax
HCTCP	High-Capacity Transit Corridor Project
IC	InfraConsult, LLC
ITS	Intelligent Transportation Systems
LONP	Letter of No Prejudice
LPA	Locally Preferred Alternative
MOS	Minimum Operating Segment
NEPA	National Environmental Policy Act
NTP	Notice to Proceed
PB	PB Americas, Inc.
PBQD	Parsons Brinckerhoff Quade & Douglas, Inc.
PE	Preliminary Engineering
PMO	Project Management Oversight
PMOC	Project Management Oversight Contractor
PMP	Project Management Plan
PMSC	Project Management Support Consultant
QMP	Quality Management Plan
RAMP	Real Estate Acquisition Management Plan
RFQ	Request for Qualifications
ROD	Record-of-Decision
SCC	Standard Cost Categories
SSCP	Safety and Security Certification Plan
SSMP	Safety and Security Management Plan
SSPP	Safety and Security Program Plan
SSOO	State Safety Oversight Office
TOD	Transit Oriented Development
UH	University of Hawai'i

## **I. EXECUTIVE SUMMARY**

The information provided in this report was obtained from *phone conversations and e-mail correspondence with the City and County of Honolulu (the City) staff during the month of August 2007.*

### **A. Technical Capacity and Capability**

- Deliverables:

The City continues to work with the Project Management Oversight Contractor (PMOC) to develop the deliverables needed for technical capacity and capability. The City is currently working on the second draft of the Project Management Plan (PMP) and the Bus Fleet Management Plan (BFMP), as well as the first draft of the Safety and Security Management Plan (SSMP). *The General Engineering Consultant (GEC), PB Americas, Inc. (PB), has been tasked with taking the lead in developing the Federal Transit Administration (FTA) required deliverables. The GEC contract was executed on August 24, 2007, and staff mobilization is underway.* The updated delivery dates are reflected in Appendix A.

- Staffing:

*A number of new staff members ~~wasere~~ added to the City's organization through InfraConsult during the month of August 2007. Names and titles of new staff are detailed in Section III. The City advised that PB was selected as the GEC to perform PE services and the contract with PB was executed on August 24, 2007. PB has started mobilization and the key managers are on site. The PMOC is awaiting the transmittal of a revised organizational chart for the City (including InfraConsult) as well as an organization chart for PB. Again, the PMOC has some concern that the City, along with the GEC, may encounter difficulty acquiring the experienced staff needed for the long-term assignment given Hawaii's cost of living and proximity to the mainland.*

### **B. Project Schedule and Project Delivery**

The City and County of Honolulu (the City) continues to actively pursue an aggressive project schedule. The *last schedule received (June 2007)* calls for receiving approval to enter Preliminary Engineering (PE) in October 2007, Record\_of\_Decision (ROD) by mid 2009, start of construction by December 2009 and Revenue Service for the initial phase of the "First Project" (Phase I) by December 2012.

The proposed "First Project" constitutes the minimum operating segment (MOS) and is a 20-mile route between East Kapolei and Ala Moana Center via Salt Lake Boulevard with 19 stations. Phase I is approximately 6 miles long and includes 6 stations. The proposed limits of Phase I are from the future site of the Kroc Center development at North-South Road to the vicinity of Waipahu.

The Project Management Oversight Contractor's (PMOC) assessment is that the overall project schedule continues to be exceedingly optimistic in response to the political mandate to have the Phase I in operation by December 2012. As a result, the City will need to balance their political

agenda with efficient project delivery methods. The City is contemplating implementing the project using an incremental approach. It is the City's intent to begin construction of Phase I after the ROD is issued using a Design/Build method of delivery with local funds. The City continues to evaluate its options regarding project delivery.

A fully integrated schedule for delivering [the](#) First Project still needs to be developed in order to evaluate the overall project schedule and any potential impacts the construction of Phase I may have on the remaining project. The City has been evaluating the schedule and delivery method, however, a 'final' schedule and delivery method will not be completed until the [GECPE contractor](#) is onboard.

### **C. Request for Qualifications (RFQ) for PE Services**

The City issued a RFQ for the National Environmental Policy Act (NEPA)/Preliminary Engineering (PE) work on June 5, 2007. Statements of qualifications were received on July 5, 2007 and the City selected PB for the PE Services General Engineering Consultant (GEC). Negotiations with PB began on July 26, 2007, and the City *executed* a contract for \$86 million on August 24, 2007. The City *combined* the activities needed to support NEPA into the GEC contract with separate Notices to Proceed (NTP's). The NTP #1, *issued on August 24, 2007, is* for technical support to the Draft Environmental Impact Statement (DEIS) process, including the development of project plans and procedures, evaluation of system alignment, station locations and technology, preparation of documentation needed for a competitive vehicle technology selection and procuring fixed guideway revenue vehicles, and conducting public involvement activities. NTP #2 would cover the PE effort needed once the Federal Transit Administration (FTA) has approved entry into PE.

From the City's perspective, the GEC contract covers all of the required and necessary design functions, and with the Cost Plus Fixed Fee contract approach, it gives the City the ability to add additional scope and deliverables. FTA expressed concern that the scope of services did not expressly specify the requirement for the GEC to evaluate the economic impact the project schedule and delivery will have on the State's labor, equipment and material supply. The City has advised that it is their intent to include this requirement in the negotiated scope of services. *The PMOC has not received a copy of the executed contract for review.*

### **D. New Starts Submittal**

FTA indicated that the City does not have to complete the New Starts submittal because it is not yet in Preliminary Engineering. Nevertheless, the City has submitted most of the elements to support a rating, with the exception of the Financial Plan, which are being reviewed and finalized by the City prior to transmittal to FTA.

### **E. Environmental Impact Statement (EIS)**

The EIS was discussed during the conference call on July 25, 2007 *with FTA and the City staff who attended FTA's New Starts Roundtable in San Francisco, CA.* A number of concepts were discussed including the limits of the alignment to be included in the EIS and the requirements for FTA approval. *At this time, no final determination has been made regarding whether ROD*

| *could be issued on the 20-mile First Project or the 14-mile Federally-funded section.*

## **II. PROJECT DESCRIPTION**

The Honolulu High-Capacity Transit Corridor Project (HCTCP) is a twenty-nine (29) mile elevated fixed guideway rail system along O`ahu's south shore between Kapolei and the University of Hawai'i (UH) at Mānoa, including a spur to Waikiki. The proposed "First Project" constitutes the minimum operating segment (MOS) and is a 20-mile route between East Kapolei and Ala Moana Center via Salt Lake Boulevard with 19 stations. Initial fleet size is anticipated to be 66 vehicles. There is currently no Full Funding Grant Agreement (FFGA) for this project.

The Honolulu High-Capacity Transit Corridor Project (HCTCP) serves to improve mobility in the corridor between Kapolei and the University of Hawai'i (UH) at Mānoa on the island of O`ahu. The City and County of Honolulu (City) Department of Transportation Services (DTS), in coordination with the Federal Transit Administration (FTA), has performed an Alternatives Analysis (AA) to evaluate alternatives in this corridor, which serves the largest percent of population and employment in O`ahu. Four alternatives were evaluated in the AA process:

- No-Build
- Transportation System Management
- Managed Lanes
- Fixed Guideway

The AA report states the Managed Lane alternative studied two operational options, while the Fixed Guideway alternative reviewed several alignment options.

Alternatives Analysis (AA) was initiated in August 2005 and the AA report was presented to the Honolulu City Council in October 2006. In November and December 2006, public meetings were held on the Alternatives Analysis, and on December 22, 2006, the City Council selected the Fixed Guideway as the Locally Preferred Alternative (LPA). In selecting the Fixed Guideway as the LPA, the City Council left some areas/alignments open, to be decided on as the project progresses: West Kapolei, Salt Lake Boulevard vs. Airport alignment, and the Waikiki/UH at Mānoa branches. The total LPA alignment is approximately 29- miles long.

The City Council also identified and selected a minimum operable segment, (hereinafter "the First Project"), which would be built first with the current funding/revenue available. This "First Project" is a 20-mile alignment from East Kapolei, through Salt Lake Boulevard and downtown, and with an eastern terminus at the Ala Moana (Shopping) Center. The "First Project" does not include the alignment from West Kapolei to East Kapolei, or from Ala Moana Center to Waikīkī or to the UH at Mānoa.

With regards to funding, the State enabled legislation for a 0.5% General Excise Tax (GET) Surcharge and the City Ordinance enacted the GET Surcharge in July and August 2005, respectively. The GET Surcharge will be a source of revenue to build the corridor project. The GET surcharge went into effect on January 1, 2007 and has a limited duration with an end date of December 22, 2022.

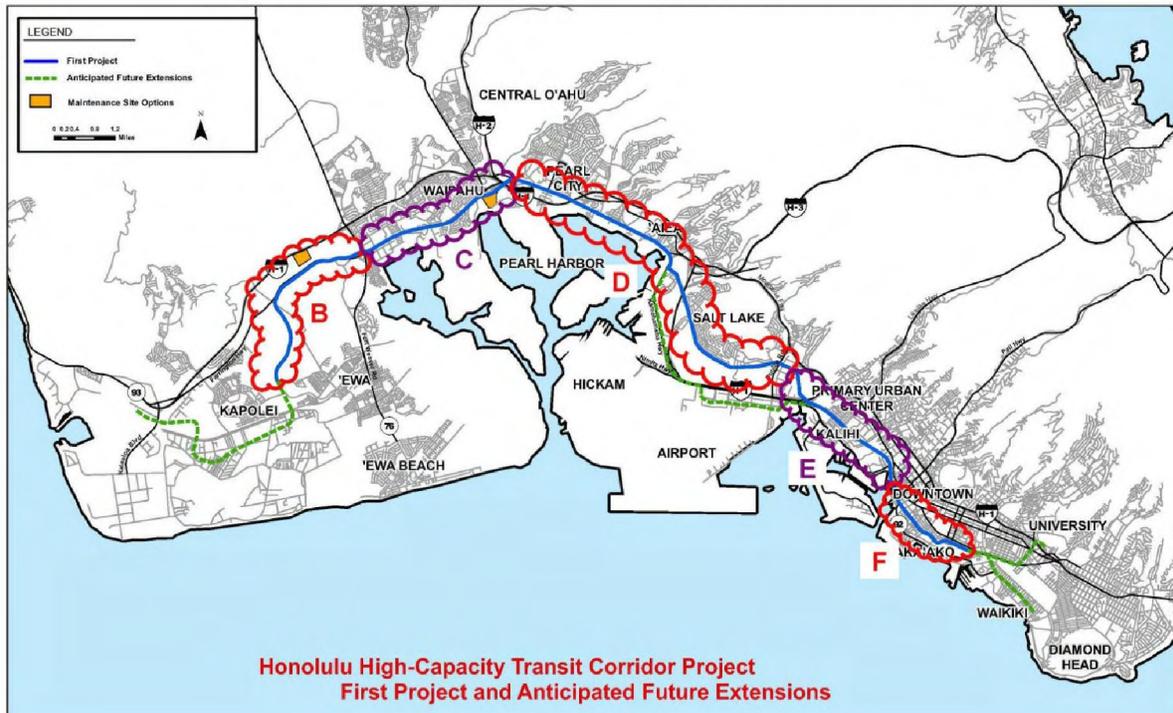
The assumptions made for the Fixed Guideway in the AA report were:

- System will operate from 4 a.m. to 12 a.m., with 3-10 minute headways.
- Maximum speed will be 65 mph, in a fully dedicated right-of-way with dedicated vehicles, mainly on aerial/elevated guideway with columns in existing roadway medians, although at-grade may be possible at some areas.
- Guideway is less than 30 feet wide between stations, and approximately 50 feet plus vertical circulation at stations.
- Stations will be spaced approximately at every mile, and are approximately 270 feet long.
- Cost to ride will be the same as “TheBus” with transfer available from one to the other.

At present the City is contemplating implementing the project using an incremental approach as shown in Figure 1 below. It is the City’s intent to perform the Final Design and begin construction of the initial phase of the “First Project” (Phase I) after the ROD is issued using a Design/Build method of delivery with local funds. Phase I is comprised of Segments B and C, and is approximately 6 miles long and includes 6 stations. The proposed limits of Phase I are from the future site of the Kroc Center development at North-South Road to the vicinity of Waipahu. Phase I is scheduled to be in operation at the end of 2012.

The remaining limits of the “First Project”, Segments D, E and F, are from Waipahu through Salt Lake Boulevard and downtown, with an eastern terminus at the Ala Moana (Shopping) Center. These segments (phases) of the “First Project” consist of approximately 14 additional miles, include 13 stations, and could be opened as construction is completed; the final section of the “First Project” is scheduled for operation until 2017, five years after Phase I is placed into service. The City is evaluating other options, such as Phase I operations on a demonstration basis during limited hours.

**Figure 1. First Project and Anticipated Future Extensions**



The current schedule is in the preliminary phase and provides most start and completion dates in quarterly increments. The fully integrated schedule should further define schedule activities and begin to identify critical path activities and associated milestone dates.

### **Project Management Oversight Contractor**

In March 2007, FTA assigned Booz Allen Hamilton (BAH) to serve as the Project Management Oversight Contractor (PMOC). The Project Management Oversight “kick-off” meeting for Honolulu’s proposed High-Capacity Transit Corridor Project was convened on April 3, 2007, with representatives from the City and County of Honolulu, FTA and the PMOC, including Mayor Mufi Hannemann and members of his staff, representatives from Parsons Brinckerhoff Quade & Douglas (PBQD), the AA consultant, and from InfraConsult, LLC, (IC) the Project Management Support Consultant (PMSC) under contract with the City.

Key staff for this project are listed in the table below.

<b>Name</b>	<b>Organization</b>	<b>Position/Title</b>	<b>Phone</b>	<b>Email</b>
<b>City and County of Honolulu</b>				
Melvin Kaku	City – DTS	Director	808-768-8303	<a href="mailto:mkaku@honolulu.gov">mkaku@honolulu.gov</a>
Toru Hamayasu	City – DTS	Project Manager, Honolulu High-Capacity Transit Corridor Project.	808-768-8344	<a href="mailto:thamayasu@honolulu.gov">thamayasu@honolulu.gov</a>
Phyllis Kurio	City – DTS	Transportation Planner	808-768-8347	<a href="mailto:pkurio@honolulu.gov">pkurio@honolulu.gov</a>
Faith Miyamoto	City – DTS	Environmental Planner	808-768-8350	<a href="mailto:fmiyamoto@honolulu.gov">fmiyamoto@honolulu.gov</a>
<b>FTA Region IX</b>				
Leslie Rogers	FTA	Regional Administration	415-744-3133	<a href="mailto:leslie.rogers@dot.gov">leslie.rogers@dot.gov</a>
Ed Carranza	FTA	Deputy Regional Administration	415-744-2741	<a href="mailto:edward.carranza@dot.gov">edward.carranza@dot.gov</a>
Nadeem Tahir	FTA	Director, Office of Program Management and Oversight	415-744-3113	<a href="mailto:nadeem.tahir@dot.gov">nadeem.tahir@dot.gov</a>
Catherine Luu	FTA	General Engineer	415-744-2730	<a href="mailto:catherine.luu@dot.gov">catherine.luu@dot.gov</a>
<b>Booz Allen Hamilton (PMOC)</b>				
Frank McCarron	BAH	PMOC Program Manager	703-625-9274	<a href="mailto:mccarron_francis@bah.com">mccarron_francis@bah.com</a>
Justine Belizaire	BAH	PMOC Task Order Manager	786-586-0026	<a href="mailto:belizaire_justine@bah.com">belizaire_justine@bah.com</a>

### III. CURRENT REVIEW

The information provided in this report was obtained from e-mail correspondence with City staff regarding activities in the month of August 2007.

#### **A. Technical Capacity and Capability**

##### General Observations

- The overall list of documents required by the grantee to demonstrate technical capacity and capability and the current status of these documents is illustrated in **Appendix A – Grantee Deliverables for Technical Capacity and Capability**.
- *Several staff members were added to InfraConsult's organization during the month of August 2007. The following is a listing of new staff and their respective titles:*
  - ▶ *Elisa Yadao, Chief Public Information Officer*
  - ▶ *Harvey Berliner, Chief Facilities Engineer*
  - ▶ *Jurgen Suman, Chief Systems Engineer*
  - ▶ *Robert Badelbau, Chief of Project Controls*
  - ▶ *Susan Robbins, Chief of Environmental Planning*
  - ▶ *Sharon Greene, Financial Planning*
  - ▶ *Geri Tennessen, Secretary* *(Note: [Geri also left during August](#))*
  - ▶ *Anne Chai, Secretary*

*Also of note, William Stead, Chief Facilities Engineer, left the project due to personal reasons and has been replaced by Harvey Berliner.*

- The City stated that they are currently working with the PMOC to develop the deliverables needed ~~to demonstrate for the~~ technical capacity and capability. The PMOC transmitted examples of a PMP, BFMP and ~~an~~ SSMP from projects being developed by other city grantees as ~~a~~ guides for the City. *Introductory workshops for the development of the SSMP and the Real Estate Acquisition Management Plan (RAMP) will be held by the PMOC during the next scheduled visit to Honolulu. The PMOC has tentatively scheduled the next visit in October 2007 pending receipt of documentation from the City.*
- At present, the City is working on the second draft of the PMP, the second draft of the BFMP and the first draft of the SSMP. The City anticipates *that the PMP will be transmitted to the PMOC for review in mid-September 2007 and the SSMP is currently scheduled for [transmittal on December 01, 2007](#). No deliverables were received from the City during the month of August 2007.*

##### PMOC Concerns

- As discussed in the project schedule and delivery section of this report, the overall schedule for delivery of this project is still in the development stage. The specific timeline for FTA approval to enter PE is not fixed, hence, the required dates for submittal, review

and approval of documentation to support a technical capacity and capability determination are still in a state of flux.

### Action Items

- *The City needs to provide for PMOC review a revised organizational chart, including resumes, for the additional staff added to the City's organization.*
- The City is to take a look at the overall project schedule and when FTA's approval to enter PE is needed. The City will then put together a schedule for delivering the technical capacity and capability documentation, including appropriate durations for FTA and PMOC review. The PMOC will then review the schedule and come to an agreement with the City on the schedule and how to best achieve it.

### **B. Project Schedule and Delivery**

Overall, the City continues to evaluate the project schedule and delivery method. The City intends to have the GEC perform a schedule and delivery schedule review. **Appendix B** presents the project schedule dates for key milestones as presented in April 2007 and the latest June 2007 schedule, as well as actual dates for completed milestones.

### General Observations

- The GEC contract *combines the* activities needed to support NEPA and then moving into ~~the~~ PE with separate NTP's. NTP #1 will provide technical support for the DEIS process and NTP #2 will cover the PE effort needed once FTA has approved Entry into PE.
- At this time, Phase I (Segments B and C) of the "First Project" is planned to be Design/Build using local funds only. Construction is scheduled to begin after an ROD is issued. The City wants something visible to happen on the project within five (5) years, including revenue operation by 2012. The City is still reviewing phases and methods of design and construction for follow-on phases.
- The limits of Phase I, Segment B (North-South Road to Fort Weaver Road) are not currently within the high-demand areas, although the UH West O'ahu campus is expected to be completed before 2012.
- The current schedule shows final phases of work to come on line by mid 2016, starting with Segment D, followed by Segment E in January 2017 and Segment F by mid 2017, which is five (5) years after the first phase is operational.

### PMOC Concerns

- The PMOC expressed some concerns with regards to the current schedule. Overall, the schedule is optimistic, with a 'start of construction' by December 2009 and Phase I opening for revenue service by 2012.

- There are concerns regarding the process that will be used to communicate specific design elements being developed by the Design/Build (DB) contractor for Phase I to the Final Design (FD) consultants working on the FD for the Segments D, E and F, and the timing and oversight of the process.
- There are general concerns that the schedule was developed by establishing milestones for the start of Phase I construction activities and completion of Phase I construction, and working backwards to establish dates for the EIS, PE and related activities. Concerns arise regarding the resultant durations for these activities.
- The City must receive guidance from FTA on the interrelationship between PE design activities to support the Final EIS and New Starts PE design activities conducted prior to FD authorization.

#### Action Items

- The City should continue to monitor/develop the project schedule and delivery method. It is recognized that the City will be unable to finalize the project schedule and delivery method until after the award of the PE contract.
- The City will explore delivery method options and contract packaging options for Segments D, E and F.
- The City will explore opportunities to eliminate gaps in the Vehicles and Systems procurement schedules.
- The City will specifically develop a communication process for communicating design information from the Design/Build contractor for Phase I to the FD consultants for Segments D, E and F if this contracting approach is finally selected.

### **C. RFQ for PE Services**

#### General Observations

- The City issued an RFQ for the *General Engineering Consultant for PE Services including the NEPA/PE work* on June 5, 2007. Statements of qualifications were received on July 5, 2007 and negotiations with PB began on July 26, 2007. The City executed the contract *and issued NTP #1 for technical support to the DEIS process, including the development of project plans and procedures, evaluation of system alignment, station locations and technology, preparation of documentation needed for a competitive vehicle technology selection and procuring fixed guideway revenue vehicles, and conducting public involvement activities on August 24, 2007.*

#### PMOC Concerns

- PMOC has some concern that the City, along with the GEC, may encounter difficulty acquiring the experienced staff needed for the long-term assignment given Hawaii's cost

of living and proximity to the mainland.

#### Action Items

- *The City needs to provide for PMOC ~~information review~~ an organizational chart, including resumes for key staff, for the GEC Consultant, PB Americas, Inc.*
- *A copy of the schedule used for the purposes of negotiations with PB needs to be provided for ~~information review by~~ to the PMOC.*

#### **D. New Starts Submittal**

##### *General Observations*

- FTA indicated that the City is not required to complete the New Starts submittal in September 2007 for inclusion in the FTA New Starts report to be issued in February 2008 because the project is not in PE. The City has submitted most of the requirements for the application to enter into PE. FTA advised the City that it takes approximately 3 to 4 months to receive approval to enter into PE ~~by~~ for FTA Region IX.
- FTA advised that the City has submitted most of the elements to support a rating, with the exception of the Financial Plan. The City ~~related~~ advised that the Financial Plan is currently being reviewed prior to transmittal. *The City has also completed and transmitted the land use templates.*
- The City advised that they are in the \$18 range for cost effectiveness for the HCTCP.

**APPENDIX A – GRANTEE DELIVERABLES FOR TECHNICAL CAPACITY AND CAPABILITY**

**HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR  
Technical Capacity and Capability To Enter PE – Grantee Checklist**

	Activity / Deliverable	Delivery Dates					
		April 2007 Submittal Date	Planned Submittal Date	Actual Submittal Date	FTA Review Comments Due	Revised Submittal Date	FTA Accepted
		mm/dd/yy	Mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy
1	Project Management Plan (PMP)	06/01/07	Sept. 2007*				
2	Bus Fleet Management Plan (BFMP)	06/01/07	TBD*				
3	Quality Management Plan (QMP)	06/18/07	TBD				
4	Real Estate Acquisition Management Plan (RAMP)	06/01/07 (part of PMP)	06/01/07 (part of PMP)				
5	Third-Party Agreement Plans	06/01/07 (part of PMP)	06/01/07 (part of PMP)				
6	Safety and Security Management Plan (SSMP)	TBD	12/01/07				
7	Safety and Security Certification Plan (SSCP)	TBD	TBD				
8	Risk Assessment ( <i>To Be Determined</i> )	TBD	TBD				
9	Financial Plan		TBD				
10	Request to Enter Preliminary Engineering (PE)	07/01/2007	TBD				
11	Establish a State Safety Oversight Office (SSOO)		TBD				
12	Safety and Security Program Plan (SSPP)	TBD	TBD				

*Revised 08/12/2007*

**NOTES:**

\* *Initial submittals provided by the City on 06/12/07. Comments provided by PMOC during meeting on 06/13/07. Resubmittal pending.*

**APPENDIX B – OVERALL PROJECT SCHEDULE**

<b>HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR Project Schedule Analysis</b>			
Activity Description	SCHEDULE DATES		
	April 2007 Schedule	June 2007 Schedule	Actual
RFQ – Advertise	06/01/2007	06/05/2007	<b>06/05/2007</b>
RFQ – Contract Award (NTP#1)	08/01/2007	08/15/2007	
Start Vehicle Procurement	4 <sup>th</sup> Qtr 2008	08/15/2007	
Start Preliminary Engineering (NTP #2)	Mid 2007	10/2007	
Select Vehicle Technology	Mid 2007	Mid 2008	
Record of Decision (ROD)	Mid 2009	Mid 2009	
Start Utility Relocation		Mid 2009	
Start Right-of-Way Relocation and Acquisition	4 <sup>th</sup> Qtr 2007	Mid 2009	
Start Phase I Design	4 <sup>th</sup> Qtr 2009	3 <sup>rd</sup> Qtr 2009	
Start Phase I Construction	4 <sup>th</sup> Qtr 2009	1 <sup>st</sup> Qtr 2010	
FD Authorization	1 <sup>st</sup> Qtr 2009	3 <sup>rd</sup> Qtr 2010	
Start Remaining Design	N/A	3 <sup>rd</sup> Qtr 2010	
FFGA		3 <sup>rd</sup> Qtr 2011	
Start Remaining Construction	N/A	3 <sup>rd</sup> Qtr 2012	
Complete Phase I Construction	Mid 2012	Mid 2013	

