

# HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY

## NOTICE OF AND AGENDA FOR A REGULAR MEETING TO BE HELD BY THE BOARD OF DIRECTORS

**DATE:** WEDNESDAY, JUNE 19, 2013  
**TIME:** 5:30 PM  
**PLACE:** PHARR CITY HALL  
2<sup>nd</sup> FLOOR, CITY COMMISSION CHAMBERS  
118 SOUTH CAGE BOULEVARD  
PHARR, TEXAS 78577

**PRESIDING: DENNIS BURLESON, CHAIRMAN**

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### CALL TO ORDER FOR WORKSHOP

1. Presentation of Value Engineering Study for State Highway 365 Project

### ADJOURNMENT OF WORKSHOP

### CALL TO ORDER FOR REGULAR MEETING

### PUBLIC COMMENT

#### 1. REPORTS

- A. Annual Report – Pilar Rodriguez, Executive Director
- B. Update on SH 365 Project – Louis Jones, Program Manager

2. **CONSENT AGENDA** *(All matters listed under Consent Agenda are considered to be routine by the Governing Body and will be enacted by one motion. There will be no separate discussion of these items; however, if discussion is desired, that item(s) will be removed from the Consent Agenda and will be considered separately. The Governing Body may also elect to go into Executive Session on any item, whether or not such item(s) are posted as an Executive Session Item, at any time during the meeting when authorized by provisions of the Open Meeting Act.)*

- A. Approval of Minutes for Regular Meeting held May 15, 2013 and Special Meeting held May 29, 2013.
- B. Approval of Project Expense Report for the period from May 8, 2013 to June 11, 2013.
- C. Approval of Financial Report for April 2013.

#### 3. REGULAR AGENDA

- A. Resolution 2013-20 – Approval of Budget Amendment in the amount of \$1,184,939 to fund a Value Engineering Study for the State Highway 365 Project, Schematic Design for US 281/Military Highway Overpass and a low level aerial flight and topographic survey for the International Border Trade Corridor.

#### 4. CHAIRMAN'S REPORT

- A. Update on the Texas 83<sup>rd</sup> Legislative Session – Rene Ramirez, Pathfinders.

#### 5. TABLED ITEMS

- A. None

#### 6. EXECUTIVE SESSION, CHAPTER 551, TEXAS GOVERNMENT CODE, SECTION 551.071 (CONSULTATION WITH ATTORNEY), SECTION 551.072 (DELIBERATION OF REAL PROPERTY), AND SECTION 551.074 (PERSONNEL MATTERS)

- A. Consultation with Board Attorney and Financial Advisor on legal issues pertaining to financial options, including current obligations (Section 551.071 T.G.C.)
- B. Annual performance evaluation of Pilar Rodriguez, Executive Director (Section 551.074 T.G.C.)

## ADJOURNMENT OF REGULAR MEETING

### PUBLIC COMMENT POLICY

Public Comment Policy: "At the beginning of each HCRMA meeting, the HCRMA will allow for an open public forum/comment period. This comment period shall not exceed one-half (1/2) hour in length and each speaker will be allowed a maximum of three (3) minutes to speak. All individuals desiring to address the HCRMA must be signed up to do so, prior to the open comment period. The purpose of this comment period is to provide the public an opportunity to address issues or topics that are under the jurisdiction of the HCRMA. For issues or topics which are not otherwise part of the posted agenda for the meeting, HCRMA members may direct staff to investigate the issue or topic further. No action or discussion shall be taken on issues or topics which are not part of the posted agenda for the meeting. Members of the public may be recognized on posted agenda items deemed appropriate by the Chairman as these items are considered, and the same time limitations (3 minutes) applies."

### CERTIFICATION

I, the Undersigned Authority, do hereby certify that the attached agenda of the Hidalgo County Regional Mobility Authority Board of Directors is a true and correct copy and that I posted a true and correct copy of said notice on the Hidalgo County Regional Mobility Authority Web Page ([www.hcrma.net](http://www.hcrma.net)) and the bulletin board in the Hidalgo County Court House (100 North Closner, Edinburg, Texas 78539), a place convenient and readily accessible to the general public at all times, and said Notice was posted on the 13<sup>th</sup> day of June, 2013 at 12:00 pm and will remain so posted continuously for at least 72 hours preceding the scheduled time of said meeting in accordance with Chapter 551 of the Texas Government Code.

Flor E. Koll  
Program Administrator

Note: If you require special accommodations under the Americans with Disabilities Act, please contact Flor E. Koll at 956-402-4762 at least 24 hours before the meeting.

**HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY**

**AGENDA RECOMMENDATION FORM**

<b>BOARD OF DIRECTORS</b>	<u>  X  </u>	<b>AGENDA ITEM</b>	<u>  1  </u>
<b>PLANNING COMMITTEE</b>	<u>          </u>	<b>DATE SUBMITTED</b>	<u>  6/10/13  </u>
<b>FINANCE COMMITTEE</b>	<u>          </u>	<b>MEETING DATE</b>	<u>  6/19/13  </u>
<b>TECHNICAL COMMITTEE</b>	<u>          </u>		

1. Agenda Item: **WORKSHOP – PRESENTATION OF VALUE ENGINEERING STUDY FOR STATE HIGHWAY 365 PROJECT**

2. Nature of Request: (Brief Overview) Attachments:   X   Yes      No

Presentation of Value Engineering Study for State Highway 365 Project. The Value Engineering Study was conducted on May 20-24, 2013.

3. Policy Implication: Board Policy, Local Government Code, Texas Government Code, Texas Transportation Code, TxDOT Policy

4. Budgeted:      Yes      No   X   N/A

5. Staff Recommendation: **Presentation Only.**

6. Program Manager's Recommendation:      Approved      Disapproved   X   None

7. Planning Committee's Recommendation:      Approved      Disapproved   X   None

8. Board Attorney's Recommendation:      Approved      Disapproved   X   None

9. Executive Director's Recommendation:      Approved      Disapproved   X   None



# Value Engineering Study Report

for



## SH 365 – Hidalgo County Toll Facility Project

Prepared by



HDR Engineering, Inc.  
1001 SW 5<sup>th</sup> Ave., Suite 1800  
Portland, OR 97204

**DRAFT**

May 20–24, 2013

## Disclaimer

The information contained in this report is the professional opinions of the team members during the Value Engineering study. These opinions were based on the information provided to the team at the time of the study. As the project continues to develop, new information will become available and this information will need to be evaluated on how it may effect the recommendations and findings in this report. All costs displayed in the report are based on best available information at the time of the study and, unless otherwise noted, are in current year dollars.

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# Executive Summary

## Introduction

This Value Engineering (VE) report summarizes the events of the VE study conducted for the Hidalgo County Regional Mobility Authority (HCRMA), which was facilitated by HDR. The subject of the study was the SH 365 – Hidalgo County Toll Facility Project. The VE study was conducted May 20–24, 2013.

The HCRMA, in cooperation with the Texas Department of Transportation (TxDOT), proposes to construct a controlled access tolled facility from Farm-to-Market Road (FM) 1016/Conway Avenue east to US 281/Military Highway in Hidalgo County. This project, referred to as SH 365, would initially be developed as a 4-lane divided controlled access tolled facility with right-of-way reserved for future widening. Construction would be conducted in two phases:

- Phase I construction would include a 13.4-mile toll facility from FM 396/Bryan Road to US 281/Military Highway, a new grade separated interchange at the SH 365/US 281/Military Highway intersection, and a non-tolled facility from 0.45 miles east of SP 600 to FM 2557/Stewart Road.
- Phase II construction would include a 3.13-mile toll facility from FM 1016/Conway Avenue to FM 396/Bryan Road.

Elements of the project include:

- A 13.4-mile toll facility from FM 396/Bryan Road to US 281/Military Highway.
- A 4,700-foot bridge across the IBWC floodway.
- A new grade-separated interchange at the SH 365/US 281/Military Highway intersection.
- A nontolled facility from 0.45 miles east of SP 600 to FM 2557/Stewart Road.

The purpose of the study, through execution of the VE job plan (see Appendix A), was to review and improve on various concepts for the identified section of the SH 365 – Hidalgo County Toll Facility Project. The primary objectives for this study included:

- Conducting a thorough review and analysis of the key project issues using a multidiscipline, cross-functional team.
- Reviewing and improving the proposed design by focusing on high cost items and specific areas.
- Improving the value of the project through innovative measures aimed at improving the performance while reducing costs of the project.

In addition, at the time of the study, the team was asked to explore options to reduce the capital cost of Phase 1 while maintaining its operational benefits and revenue generating capabilities. As a result, the VE team explored elements that could be deferred to Phase 2 without impacting Phase 1. This resulted in eight deferral recommendations with a potential value between \$27.35M and \$31.95M depending on implementation.

Fourteen subject-matter experts and stakeholders made up the study team.

## VE Recommendations

The VE team generated 53 ideas for the project. These concepts were compared against the baseline developed by the project team. The concepts that performed the best were further developed by the VE team.

**Table ES-1. Summary of Recommendations**

#	Description	Cost Delta (M)*	Value Improvement (%)
1	Redesign Pavement Sections	\$(5.16)	3
2	Vertically Stage Pavement (deferral)	(7.18)	2
3	Shorten Floodway Bridge	(2.63)	0
4	Simplify Bridge Aesthetics	(2.14)	2
5	Two-Lane Floodway Bridge (deferral)	(7.28)	16
6	Single 4-Lane Floodway Bridge	(0.33)	1
7	Shorter Bridge Spans	(1.31)	1
8	Shary Road – Defer West Side Ramps	(0.20)	3
9	Shary Road – Frontage Roads Only (deferral)	(7.22)	2
10	Shary Road – Two-Lane Main Line (deferral)	(2.62)	1
11	23 <sup>rd</sup> Street – Defer West Side Ramps	(6.05)	7
12	Build from the Middle (partial deferral)	(2.06)	0
13	Defer U-turns	(1.44)	-3
14	Develop Marketing Plan	0.00	N/A
15	Defer Frontage Roads I to Anaya	(2.58)	4

\* Cost savings are represented by parentheses.

The individual recommendations are summarized below; the detailed information about each recommendation is included in Section 7.0 of this report. It should be noted that several of the 15 recommendations are competing; as such they may not be able to be implemented concurrently. To address the competing recommendations, two sceneries were developed (see the Table ES-2, below) that show the lowest and highest potential cost savings associated with acceptance of the recommendations.

**Rec 1: Redesign Pavement Sections** – This recommendation suggests redesigning the pavement design based on tolled rather than nontolled vehicular demand.

**Rec 2: Vertically Stage Pavement Redesign Pavement** – This recommendation suggests redesigning the pavement design as stated in Recommendation 1, and also vertically staging the construction to defer a portion of the ultimate paving costs to the future.

**Rec 3: Shorten Floodway Bridge** – This recommendation suggests shortening the floodway bridge by matching the opening east of the bridge and using fill on the west end.

**Rec 4: Simplify Bridge Aesthetics** – This recommendation suggests simplifying the construction of bridge aesthetic treatment.

**Rec 5: Two-Lane Floodway Bridge** – This recommendation suggests building a single floodway bridge in the initial construction project and deferring the rest to a later phase.

**Rec 6: Single 4-Lane Floodway Bridge** – This recommendation suggests making the floodway bridge one 4-lane bridge instead of two 2-lane bridges.

**Rec 7: Shorter Bridge Spans** – This recommendation suggests shortening the outside spans of bridge structures by using MSE walls in front of the abutment caps.

**Rec 8: Shary Road – Defer West Side Ramps** – This recommendation suggests deferring the construction of the west side ramps at Shary Road until Phase 2.

**Rec 9: Shary Road – Frontage Roads Only** – This recommendation suggests building only the frontage roads from Shary Road west to FM 396 and deferring the main lanes and associated ramp pairs to Phase 2.

**Rec 10: Shary Road – 2-Lane Main Line** – This recommendation suggests only building 2-lane divided main lanes as opposed to 4-lane divided main lanes from Shary Road west to FM 396.

**Rec 11: 23<sup>rd</sup> Street – Defer West Side Ramps** – This recommendation suggests deferring the construction of the west side ramps on 23<sup>rd</sup> Street until Phase 2.

**Rec 12: Build from the Middle** – This recommendation would eliminate the grass median and separate the two directions with a concrete traffic barrier.

**Rec 13: Defer U-turns** – This recommendation suggests deferring select U-turn construction until traffic volumes warrant it.

**Rec 14: Develop Marketing Plan** – While it is assumed the current project will include a comprehensive marketing plan, this recommendation gives suggestions and ideas to be carried forward by the Public Involvement/Marketing team.

**Rec 15: Defer Frontage Roads – I Road to Anaya** – This recommendation suggests reversing the ramp pairs both east of the I-Road intersection and at the east side of Anaya Road, eliminating the frontage roads between this ramp pair.

**Table ES-2. Recommendation Cost Scenarios**

#	Description	Cost Delta (M)	Scenario 1	Scenario 2
1	Redesign Pavement Sections	\$(5.16)	\$(5.16)	
2	Vertically Stage Pavement (deferral)	(7.18)		\$(7.18)
3	Shorten Floodway Bridge	(2.63)	(2.63)	(2.63)
4	Simplify Bridge Aesthetics	(2.14)	(2.14)	(2.14)
5	Two-Lane Floodway Bridge (deferral)	(7.28)		(7.28)
6	Single 4-Lane Floodway Bridge	(0.33)	(0.33)	

**Table ES-2. Recommendation Cost Scenarios**

#	Description	Cost Delta (M)	Scenario 1	Scenario 2
7	Shorter Bridge Spans	(1.31)	(1.31)	(1.31)
8	Shary Road – Defer West Side Ramps	(0.20)	(0.20)	
9	Shary Road – Frontage Roads Only (deferral)	(7.22)		(7.22)
10	Shary Road – Two-Lane Main Line (deferral)	(2.62)	(2.62)	
11	23 <sup>rd</sup> Street – Defer West Side Ramps	(6.05)	(6.05)	(6.05)
12	Build from the Middle (partial deferral)	(2.06)	(2.06)	(2.06)
13	Defer U-turns	(1.44)	(1.44)	(1.44)
14	Develop Marketing Plan	0.00	0.00	0.00
15	Defer Frontage Roads I to Anaya	(2.58)	(2.58)	(2.58)
	<b>TOTAL</b>		<b>\$(21.35)</b>	<b>\$(32.70)</b>

Savings for Recommendation 12 would be reduced if Recommendation 10 were implemented.

## Implementation of Recommendations

To facilitate implementation, a Value Engineering Recommendation Approval Form is included as Appendix C. If the state elects to reject or modify a recommendation, please include a brief explanation of why.

The VE team wishes to express its appreciation to the project design managers for the excellent support they provided during the study. Hopefully, the recommendations and other ideas provided will assist in the management decisions necessary to move the project forward through the project delivery process.



Donald Owings, PE, CVS  
 VE Team Leader

# 1.0 Introduction

This VE report summarizes the events of the VE study conducted for the Hidalgo County Regional Mobility Authority (HCRMA), which was facilitated by HDR. The subject of the study was the SH 365 – Hidalgo County Toll Facility Project.

The VE study was conducted May 20–24, 2013.

## 1.1 Project Overview

The HCRMA, in cooperation with the Texas Department of Transportation (TxDOT), proposes to construct a controlled access tolled facility from Farm-to-Market Road (FM) 1016/Conway Avenue east to US 281/Military Highway in Hidalgo County. This project, referred to as SH 365, would initially be developed as a 4-lane divided controlled access tolled facility with right-of-way reserved for future widening. Construction would be conducted in two phases:

- Phase I construction would include a 13.4-mile toll facility from FM 396/Bryan Road to US 281/Military Highway, a new grade separated interchange at the SH 365/US 281/Military Highway intersection, and a non-tolled facility from 0.45 miles east of SP 600 to FM 2557/Stewart Road.
- Phase II construction would include a 3.13-mile toll facility from FM 1016/Conway Avenue to FM 396/Bryan Road.

Figure 1. Project Area



## 1.2 VE Approach

Value engineering has traditionally been perceived as an effective means for reducing project costs. This paradigm only addresses one part of the value equation, oftentimes at the expense of overlooking the role that value engineering can play to improve project performance. To address this issue, a performance-based VE approach was used.

The primary objective of any VE study is to improve the value of the project. A simple way to think of value in terms of an equation is shown at right.

$$\text{Value} = \frac{\text{Performance}}{\text{Cost}}$$

While project costs are fairly easy to quantify and compare through traditional estimating techniques, performance is not so easily quantifiable.

The use of performance measures provides the cornerstone of the performance-based VE process by giving a systematic and structured way of considering the relationship of a project's performance and cost as it relates to value. Project performance must be properly defined and agreed on by the stakeholders at the beginning of the VE study. The performance attributes and requirements that are developed are then used throughout the study to identify, evaluate, and document alternatives.

The application of performance-based VE consists of the following steps:

1. Identify key project (scope and delivery) performance attributes and requirements for the project.
2. Establish the hierarchy and impact of these attributes on the project.
3. Establish the baseline of the current project performance by evaluating and rating the effectiveness of the current design concepts.
4. Identify the change in performance of alternative project concepts generated by the study.
5. Measure the aggregate effect of alternative concepts relative to the baseline project's performance as a measure of overall value improvement.

The following are the key project performance attributes that were used in this VE study:

- Operational Impacts
- Revenue Impacts
- Maintainability
- Construction Impacts
- Environmental Impacts
- Project Schedule

A detailed definition of the performance attributes can be found in Section 3.5 of this report.

## 1.3 VE Study Timing

The VE study is being conducted while the project is in the 30% design phase. The draft Environmental Assessment is being finalized and is scheduled to be submitted in June.

## 1.4 Scope of the VE Study

The purpose of the study, through execution of the VE job plan (see Appendix A), was to review and improve on various concepts for the identified section of the SH 365 – Hidalgo County Toll Facility Project. The primary objectives for this study included:

- Conducting a thorough review and analysis of the key project issues using a multidiscipline, cross-functional team.
- Reviewing and improving the proposed design by focusing on high cost items and specific areas.
- Improving the value of the project through innovative measures aimed at improving the performance while reducing costs of the project.

In addition, at the time of the study, the team was asked to explore options to reduce the capital cost of Phase 1 while maintaining its operational benefits and revenue generating capabilities. As a result, the VE team explored elements that could be deferred to Phase 2 without impacting Phase 1.

## 1.5 VE Team Members

The VE team included:

- Johnny Abedrabbo, HDR
- Gus Baez, TxDOT
- Lori Buffington, HDR
- Tom Darnold, Dannenbaum
- Eric Davila, Dannenbaum
- Al Flores, Dannenbaum
- Ricardo Gallaga, L&G
- Norma Garza, TxDOT
- Clifford Hew, UCE
- Louis Jones, Dannenbaum
- Michel Maksoud, Dannenbaum
- Don Owings, HDR
- Marcela, Saenz, TxDOT
- Melba Schaus, TxDOT





## 2.0 Project Information

The proposed 16.53-mile project would consist of constructing a new toll facility that would provide for an ultimate 6-lane divided controlled access facility. The proposed improvements begin 0.5 mile west of FM 1016 (Conway Ave) and run east then parallel to San Juan Road until meeting US 281 (Military Highway) where nontoll improvements will take place from 0.45 miles east of Spur 600 to FM 2557 (Stewart Road) along US 281.

The project, referred to as State Highway 365 (SH 365), would initially be developed as a 4-lane divided controlled access toll facility, divided by a grassy median with overpasses, ramps, and 1-way frontage roads (where necessary). Based on a proposed design speed of 70 mph, the main lanes would consist of 4-foot-wide inside shoulders, two 12-foot-wide travel lanes, and 10-foot-wide outside shoulders in each direction. The frontage roads would consist of a 12-foot-wide travel lane, a 10-foot-wide outside shoulder, and 4-foot wide inside shoulder. A grade-separated interchange would occur at the SH 365 and US 281 intersection. The nontoll improvements consist of a 16-foot-wide turning lane, two 12-foot-wide travel lanes in each direction, and two 10-foot-wide outside shoulders contained within the existing 100-foot-wide right of way.

The proposed project would be constructed within a typical right-of-way width of 300 feet, varying occasionally to a minimum of 160 feet and a maximum of 400 feet of right-of-way where required at roadway interchanges. A total of 642 acres of right-of-way would be required, mainly from private landowners.

Approximately 125 acres of the proposed project lie within the 100-year floodplain. Of the 125 acres of floodplain, it is anticipated that levees would be relocated for approximately 31 acres; bridges would span approximately 20 acres; and culverts would be provided for approximately 48 acres. Therefore, impacts would be minimized for approximately 79 percent of floodplains.

The HCRMA is proposing development of SH 365 to address the problems related to connectivity from the Pharr-Reynosa and Anzalduas International Bridge to the local freight facilities and address safety concerns on the local street network. Due to travel restrictions on Mexican trucks within the U.S., much of the cross border truck traffic is destined to various freight transfer facilities destinations located along the border region where cargo may be transferred for distribution throughout the U.S. The proposed project will provide a route for freight trucks and other vehicular traffic between existing border crossings and local freight transfer facilities destinations south of the US 83 Expressway.

Presently there are five international bridges in Hidalgo County for cross border travel between the U.S. and Mexico. These bridges include:

- The Pharr International Bridge that connects to US 281 in Pharr. This facility serves noncommercial and commercial vehicle traffic and pedestrians. It was built to relieve congestion on the Hidalgo International Bridge specifically to relieve commercial traffic congestion.
- The Progreso International Bridge that connects Nuevo Progreso in Mexico with the towns of Progreso and Progreso lakes in the U.S. This facility serves noncommercial and commercial vehicle traffic and pedestrians.

- The Hidalgo International Bridge that connects McAllen, Texas, to Reynosa, Mexico, and primarily serves noncommercial vehicle and pedestrian traffic.
- The Anzalduas International Bridge that connects Mission and South McAllen international trade areas to the west end of Reynosa, where many maquiladoras and other cross-border businesses are located.
- The Donna International Bridge, which was constructed in December 2010, near US 281 and FM 493, to provide access to future commercial traffic. Once inspection stations are built and commercial traffic can utilize the Donna International Bridge, it would promote direct economic growth for the cities of Donna, Weslaco, and Mercedes, Texas, and the Rio Bravo region in Mexico.

## 2.1 Project History

**1996** – The Hidalgo County Metropolitan Planning Organization and TxDOT Pharr District agreed on the need to construct a loop within a corridor study area.

**2002** – Hidalgo County Commissioners Court conducted a route study to develop an entire loop highway system around the perimeter of the major cities near the outer Hidalgo County limits. This corridor was presented at various stakeholders meetings and public information workshops. The technically preferred corridors were approved in April 2003.

**2005** – The Texas Transportation Commission approved the creation of the HCRMA for the purpose of developing roads in Hidalgo County. Initially, the mission was to develop the Hidalgo Loop project and supplement the transportation network planned by TxDOT.

**2007** – In addition to developing more defined alternative alignments within the established corridors, the HCRMA decided to study a new mid-valley corridor study area. This new corridor would provide needed mobility from the newly proposed Donna International Bridge, presently under construction, to access US 83 and US 281 north of the county.

**2008** – The corridor study area was divided into six sections (A through F) of independent utility, which would not curtail or obligate improvements in other areas of the proposed Hidalgo Loop system.

**2009** – The feasibility of the original Hidalgo Loop concept was reevaluated. The results led to the removal of the Hidalgo Loop, as previously envisioned from the 2010-2035 Hidalgo County Metropolitan Transportation Plan. As a result, the HCRMA redefined and advanced two independent projects (the Hidalgo International Bridge Trade Corridor (IBTC) and the SH 365/Trade Corridor Connector) to address the regional transportation needs relating to border crossing traffic on the local street network and connectivity to the freeway system and local freight facilities.

**2010** – A public meeting was held to present to the public the evaluation of three alternatives for the SH 365/Trade Corridor Connector, present the matrix assessing the various environmental elements evaluated, and introduce the technically preferred alignment with the least impacts along this study area for consideration.

## 2.2 Project Purpose

The proposed project south of US 83 and between US 83 and US 281 would be developed to meet the needs identified within the study area and to be compatible with local, regional, and national planning efforts. The intent of the proposed project is to:

- Improve east-west mobility and interconnectivity necessary to effectively distribute traffic between exiting and planned border crossings, and local freight transfer facilities.
- Reduce community disruption south of US 83 associated with increasing freight movement originating from and destined to the border to access local freight transfer facilities.
- Address safety concerns regarding the mix of vehicle types and conflicting movements on the arterial and local street network.
- Construct the proposed project through the use of vehicle registration fees, toll fees, pass through toll agreement with TxDOT, state/federal funding, and/or transportation reinvestment zone, as the funding needs cannot be addressed through traditional nontolled funding sources.

## 2.3 Project Need

The need for the proposed project have been identified through the evaluation of existing transportation facilities, the assessment of social and economic conditions in the study area and region, consultation with local communities, and input from public meetings and the business community. The project needs are identified below.

- Lack of east-west interconnectivity south of US 83 to effectively distribute traffic between the Pharr-Reynosa International Bridge, Anzalduas International Bridge, and local freight transfer facilities/free trade zone destinations.
- Increased amount of truck traffic on local roads, which disrupts communities and increases the potential for traffic incidents.
- Degraded safety due to the mix of traffic on the existing 2- and 4-lane noncontrolled access streets.
- Insufficient funding to finance needed transportation improvements to serve the increasing movement of freight between the international bridges and the freight destinations south of US 83.

## 2.4 Constraints and Controlling Decisions

As part of the project briefing, the VE team was given the following project constraints and controlling decisions that needed to be taken into account when considering possible alternatives:

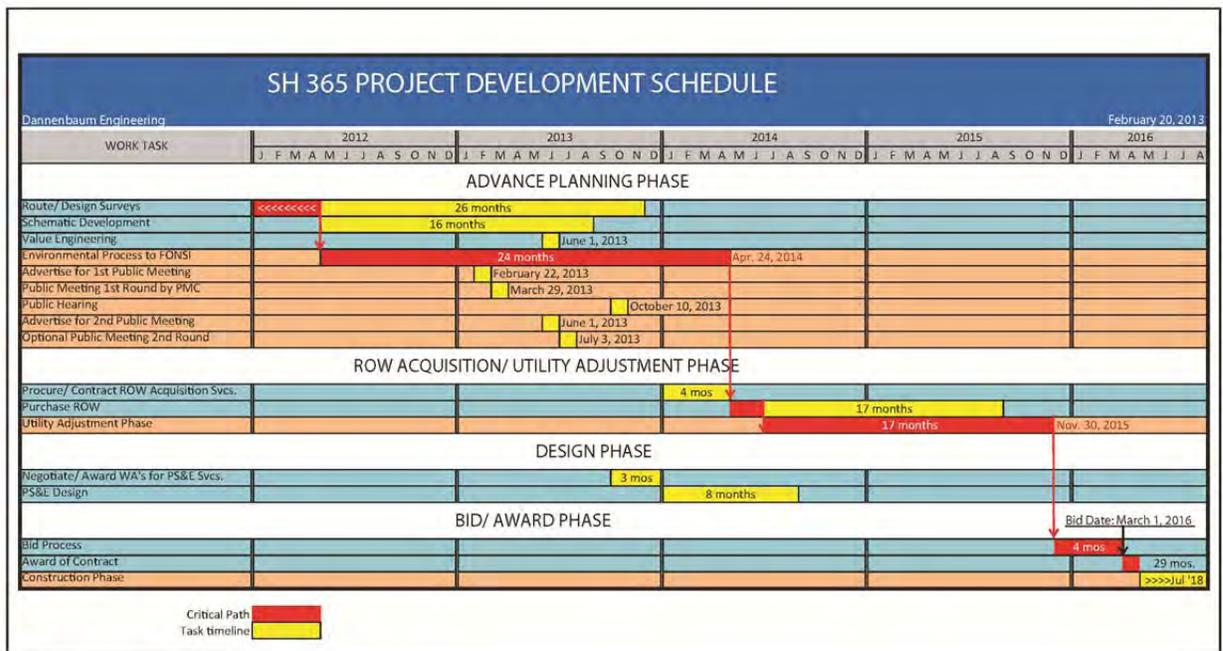
- Levee access had to be maintained.
- Project is intended to be under construction by October 2016.
- Impacts to the waterway (floodway) require Mexican approval.
- Access to the McAllen Foreign Trade Zone areas needs to be maintained.

## 2.5 Project Schedule

The project is currently at approximately 30% design and the Draft Environmental Assessment is scheduled to be completed by the end of June. It is currently anticipated that the project will be constructed using the design bid build (DBB) delivery method. It is anticipated to be let in March 2016 with construction being completed by July of 2018.

A project development schedule is shown below (Figure 2).

Figure 2: Project Development Schedule



## 2.6 Project Cost Estimate

At the time of the study, the VE team was provided a project estimate file that was developed based on TxDOT average bids and local knowledge. The expected Phase 1 construction costs (SH 365–FM 396 to US 281 and US 281–SP 600 to FM 2557) are shown below in Table 1 (see Appendix D for the full cost estimate utilized by the VE team).

Table 1. Expected Construction Costs (Including Toll Equipment)

Project	Cost	Miles
SH 365 Phase 1	\$146,844,006	13.40
US 281 Military Hwy	10,863,500	1.88
<b>TOTAL</b>	<b>157,707,506</b>	<b>15.28</b>

## 2.7 Information Provided to the VE Team

Table 10 lists the project documents that were provided to the VE team for their use during the study.

**Table 2. Information Provided to the VE Team**

Document	Date
Cost Estimates	Various
Hydraulic Models	Various
Maps:	
Preliminary Schematics	May 21, 2013
Proposed Typical Roadway Sections	July 3, 2013
Toll Trip Table	March 2013
US 281 Overpass at San Juan Road/SH 365 Alternative No. 1	March 2013
Pavement Design Submittals	Various
Public Meetings/Open House	
Notice of Open House	March 2013
Location Map	March 23, 2013
Public Meeting Exhibits	March 21, 2013
Reports:	
Capital Improvement Plan	April 18, 2012
Capital Improvement Plan, 2013 1Q Update	February 13, 2013
Design Summary Report	April 6, 2012
Draft Environmental Assessment with all appendices and figures	March 2013
Draft Intermediate Traffic and Revenue Study	February 2013
Draft SH 365 Level of Service Analysis	March 2013
Draft US 83/US 281 Interchange Microsimulation Report	March 2013
Hydrology and Hydraulic Report for SH 365 Trade Corridor Connector	July 20, 2012
PMC/GEC Report: HCRMA Project Status	December 11, 2012
Traffic Data Memo	February 8, 2013
VE Opening Presentation with flythrough	May 20, 2013



## 3.0 Project Analysis

### 3.1 Summary of Analysis

In addition to the project information (Section 2.0), the VE team used a series of tools to gain additional knowledge and a better understanding of the project. The following analysis tools were used to study the project, and are explained in greater detail in this chapter:

- Cost Model
- Functional Analysis
- FAST Diagram
- Value Matrix

### 3.2 Cost Model

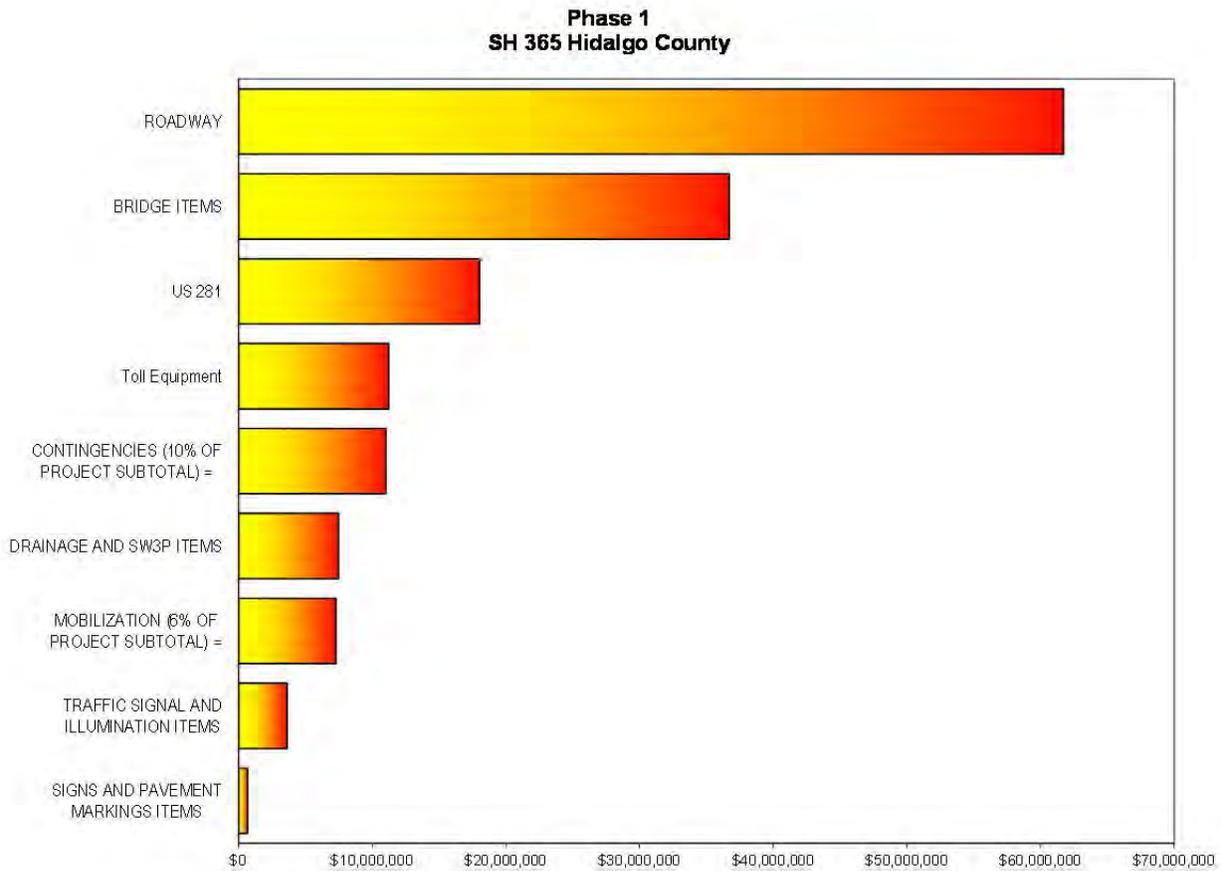
The VE team leader prepared a cost model from the cost estimate, which was provided by the project team. The model is organized to identify major construction elements or trade categories, the designer’s estimated costs, and the percent of total project cost for the significant cost items (see Table 3).

The cost model clearly showed the cost drivers for the project and was used to guide the team during the VE study.

**Table 3. Pareto Cost Model – Baseline Concept**

Cost Item	Cost	% of Total
Roadway	\$61,725,673	39
Bridge Items	36,698,695	23
US 281	18,024,773	11
Toll Equipment	11,222,000	7
Contingencies	11,017,216	7
Drainage and SW3P Items	7,467,679	5
Mobilization	7,271,362	5
Traffic Signal and Illumination Items	3,614,000	2
Signs and Pavement Markings	666,108	0
<b>Total</b>	<b>\$157,707,506</b>	<b>100</b>

Figure 3. Pareto Cost Model



### 3.3 Functional Analysis

Function analysis results in a unique view of the study project. It transforms project elements into functions, which moves the VE team mentally away from the original design and takes it toward a functional concept of the project. Functions are defined in verb-noun statements to reduce the needs of the project to their most elemental level (see Table 4). Identifying the functions of the major design elements of the project allows a broader consideration of alternative ways to accomplish the functions.

Table 4. Functional Analysis Noun-Verb Statements

Component	Verb	Noun
Earthwork	Move Support Widen Add	Earth Roadway Roadway Lanes
Roadway	Pave Smooth	Roadway Surface
Shoulder	Control Create	Erosion Pedestrian Path

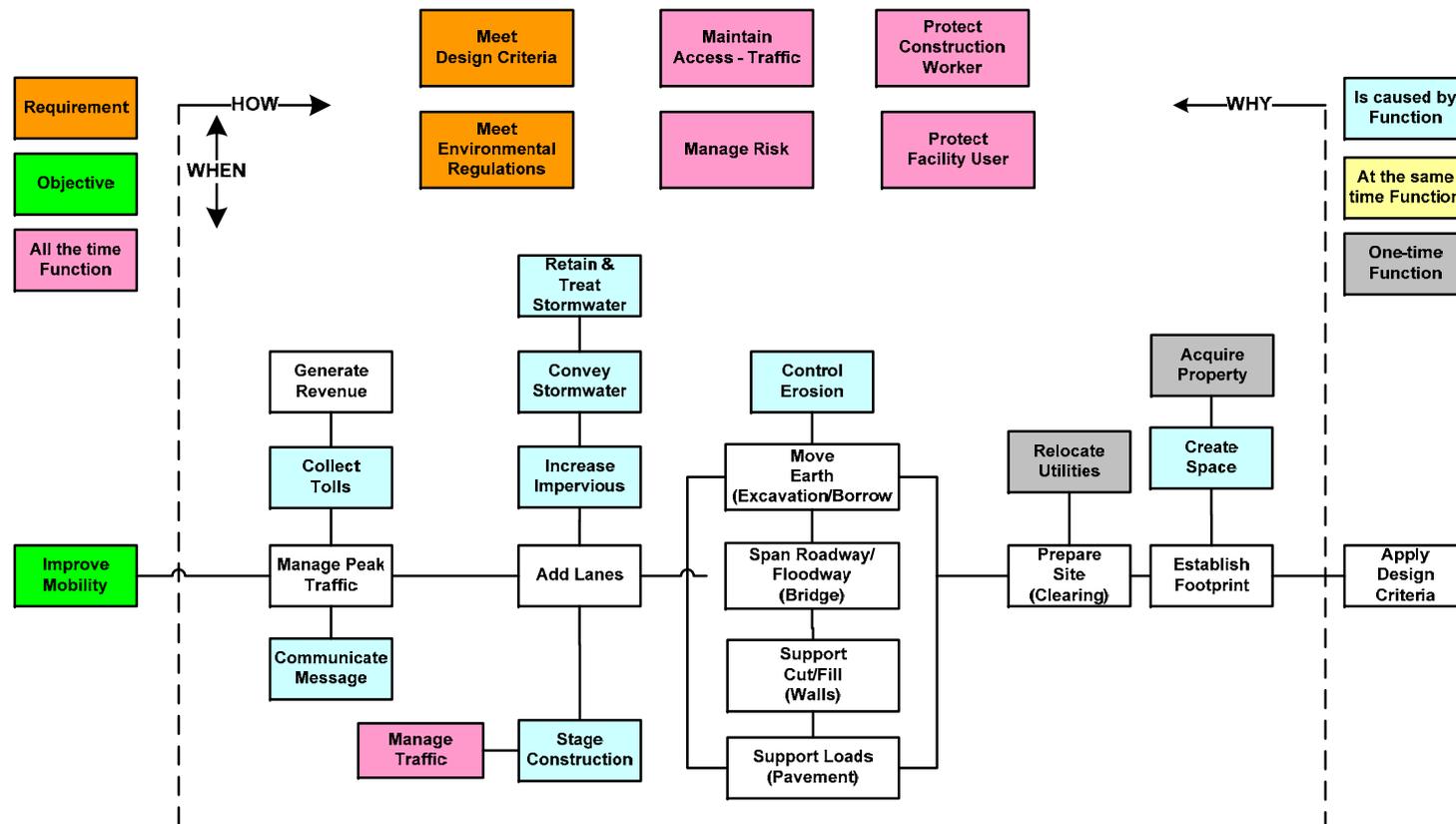
**Table 4. Functional Analysis Noun-Verb Statements**

Component	Verb	Noun
Right-of-Way	Create	Space
Contingencies	Mitigate	Risk
Drainage	Convey Prevent Treat Mitigate	Stormwater Flooding Runoff Environmental Issues
Mobilization	Mobilize	Equipment
Lighting	Illuminate	Roadway
Median	Create	Separation
Signalization	Control	Traffic
Permanent Signing	Convey	Message
Landscaping	Improve	Appearance
Traffic Control	Protect Protect Convey Maintain	Highway User Highway Worker Information Traffic
Bike Lane	Accommodate	Bicyclists
Sidewalk	Accommodate	Pedestrians

### 3.4 FAST Diagram

The FAST diagram arranges the functions in logical order so that when read from left to right, the functions answer the question “How?” If the diagram is read from right to left, the functions answer the question “Why?” Functions connected with a vertical line are those that happen at the same time as, or are caused by, the function at the top of the column. The FAST diagram provided the VE team with an understanding of which functions offer the best opportunity for cost or performance improvement.

Figure 4. Functional Analysis System Technique (FAST) Diagram



### 3.5 Performance Attributes

Performance attributes can generally be divided between project scope components (highway operations, environmental impacts, maintainability, and system preservation) and project delivery components. It is important to make a distinction between performance *attributes* and performance *requirements*. Performance requirements are mandatory and binary in nature. All performance requirements **MUST** be met by any VE alternative concept being considered. Performance attributes possess a range of acceptable levels of performance. For example, if the project was the design and construction of a new bridge, a performance requirement might be that the bridge must meet all current seismic design criteria. In contrast, a performance attribute might be project schedule, which means that a wide range of alternatives could be acceptable that had different durations.

For the purposes of this VE study, the performance attributes listed below were used. Specific definitions of each attribute can be found in Table 5.

- Operational Impacts
- Revenue Impacts
- Maintainability
- Construction impacts
- Environmental impacts
- Project schedule

**Table 5. Performance Attributes and Description: SH 365 – Hidalgo County Toll Facility Project**

Performance Attribute	Description of Attribute
Operational Impacts	An assessment of traffic operations and safety on the main line SH 365, frontage roads, and local facilities. Operational considerations include level of service relative to the 20-year traffic projections as well as geometric considerations such as design speed, sight distance, lane widths and shoulder widths, bicycle and pedestrian operations and access, including any shared use paths. The assessment also includes interchange spacing, ramp ingress and egress, as well as weaving.
Revenue Impacts	An assessment of long term revenue generation on the facility, including consideration of type of tolling system (manual vs. automatic), length of ramp-up period, toll enforcement and the level of toll evaders (International traffic), the types of rates for special purpose vehicles, operating cost, operating contract type and terms, ability to adjust rates, and approvals required.
Maintainability	An assessment of the long-term maintainability of the transportation facilities. Maintenance considerations include the overall durability, longevity and maintainability of pavements, structures and systems; ease of maintenance; accessibility and safety considerations for maintenance personnel.

**Table 5. Performance Attributes and Description: SH 365 – Hidalgo County Toll Facility Project**

Performance Attribute	Description of Attribute
Construction Impacts	An assessment of the temporary impacts to the public during construction related to traffic disruptions, detours and delays; impacts to businesses and residents relative to access, visual, noise, vibration, dust, and construction traffic. Includes an assessment of temporary environmental impacts related to water quality, air quality, soil erosion, and local flora and fauna.
Environmental Impacts	An assessment of the permanent impacts to the natural and built environment, including ecological (i.e., flora, fauna, air quality, water quality, visual, noise); socioeconomic impacts (i.e., environmental justice); impacts to cultural, recreational and historic resources.
Project Schedule	An assessment of the total project delivery as measured from the time of the VE study to completion of construction. Under construction by October 2016.

### 3.6 Performance Attribute Matrix

The performance attribute matrix was used to determine the relative importance of the performance attributes for the project. The project owner, design team, and stakeholders evaluated the relative importance of the performance attributes that would be used to evaluate the creative ideas.

These attributes were compared in pairs, asking the question: “An improvement to which attribute will provide the greatest benefit to the project relative to need and purpose?” The letter code (e.g., “A”) was entered into the matrix for each pair. After all pairs were discussed they were tallied (after normalizing the scores by adding a point to each attribute) and the percentages calculated (see Figure 5).

Figure 5. Performance Attribute Matrix

<b>SH 365 Hidalgo County</b>								
<i>Which attribute is more important to the project?</i>							<b>TOTAL</b>	<b>%</b>
<b>Operational Impacts</b>	<b>A</b>	A/B	A	A	A/E	F	4.0	<b>19.0%</b>
<b>Revenue Impacts</b>	<b>B</b>		B	B	B	F	4.5	21.4%
<b>Maintainability</b>	<b>C</b>		C	C/E	F	2.5	11.9%	
<b>Construction Impacts</b>	<b>D</b>			E	F	1.0	4.8%	
<b>Environmental Impacts</b>	<b>E</b>		E			4.0	<b>19.0%</b>	
<b>Project Schedule</b>	<b>F</b>					5.0	23.8%	
							<b>21.0</b>	<b>100%</b>

A	More Important
A/B	Equally Important



## 4.0 Speculation/Creative

During the speculation/creative phase the VE team, as a group, generated ideas on how to perform the various functions. The idea list was grouped by function or major project element. All of the ideas generated were recorded in Table 6, below. The final disposition of each idea is included at the end of Section 5.0, Idea Evaluation.

**Table 6. Creative Idea List**

Idea No.	Description
<i>Function: Support Loads</i>	
1.	Redesign pavement sections based on toll traffic volumes
2.	Vertically stage the pavement section
3.	Consider concrete pavement
4.	Reduce structural section of the shoulders
<i>Function: Span Roadway/Floodway</i>	
5.	Shorten floodway bridge by matching the opening east of the bridge
6.	Reduced the skew at floodway bridge
7.	Change alignment at floodway bridge to cross as perpendicular as possible
8.	Simplify bridge aesthetics
9.	Build 2-lane floodway bridge
10.	Use concrete girders on bridge crossing I Road
11.	Make floodway bridge one 4-lane bridge instead of two 2-lane
12.	Use longer spans on the floodway bridge
13.	Use single span bridges where you can
14.	For future U-turns, build bridge headers, using walls later
15.	Eliminate bridge headers and use MSE walls where U-turns are required
<i>Function: Establish Footprint</i>	
16.	Remove westbound ramp at Shary Road
17.	Remove ramps on 23 <sup>rd</sup> Street in both directions
18.	Only build frontage roads from Shary Road west
19.	Only build 2-lane main line from Shary Road west
20.	Reduce earthwork template at overpasses by going 3:1 with guardrail
21.	Use frontage road as levee where levee was being relocated

**Table 6. Creative Idea List**

Idea No.	Description
22.	Build bridge approaching Ware Street rather than relocate levee
23.	Remove frontage road between 23 <sup>rd</sup> and SH 336
24.	Use scraper dirt rather than hauling dirt
25.	Move alignment closer to floodway between Shary and Ware Road and use road as a levee
26.	Use multilane roundabout at Thomas Road and I Road
27.	Use split diamond at Thomas Road and I Road
28.	Use 2-lane rather than 4-lane under Phase 1
29.	Eliminate crossing at Las Milpas Road
30.	Run 365 over Las Milpas Road
31.	Build the middle rather than outside
32.	Build a "Super 2" rather than a 4-lane
33.	Eliminate future frontage roads at McColl Road
34.	Build on San Juan Road instead of beside it
35.	Eliminate U-turns where not needed (traffic volume)
36.	Don't build frontage roads as part of Phase 1
<b><i>Function: Drainage</i></b>	
37.	Extend syphon at San Juan Irrigation Channel
38.	Relocate irrigation channel between frontage road and main line at US 281
39.	Use adjacent properties for embankment material
<b><i>Function: Generate Revenue</i></b>	
40.	Move main line gantries to optimize revenue and toll equity
41.	Develop marketing plan
42.	Overweight corridor permit
43.	Develop enforcement plan for foreign and domestic
44.	Provide utility corridor for lease
45.	Reassess T&R Study to evaluate beginning toll rate
46.	Consider weight-based tolling on trucks
47.	Consider different contracting methods
48.	Consider variable pricing

**Table 6. Creative Idea List**

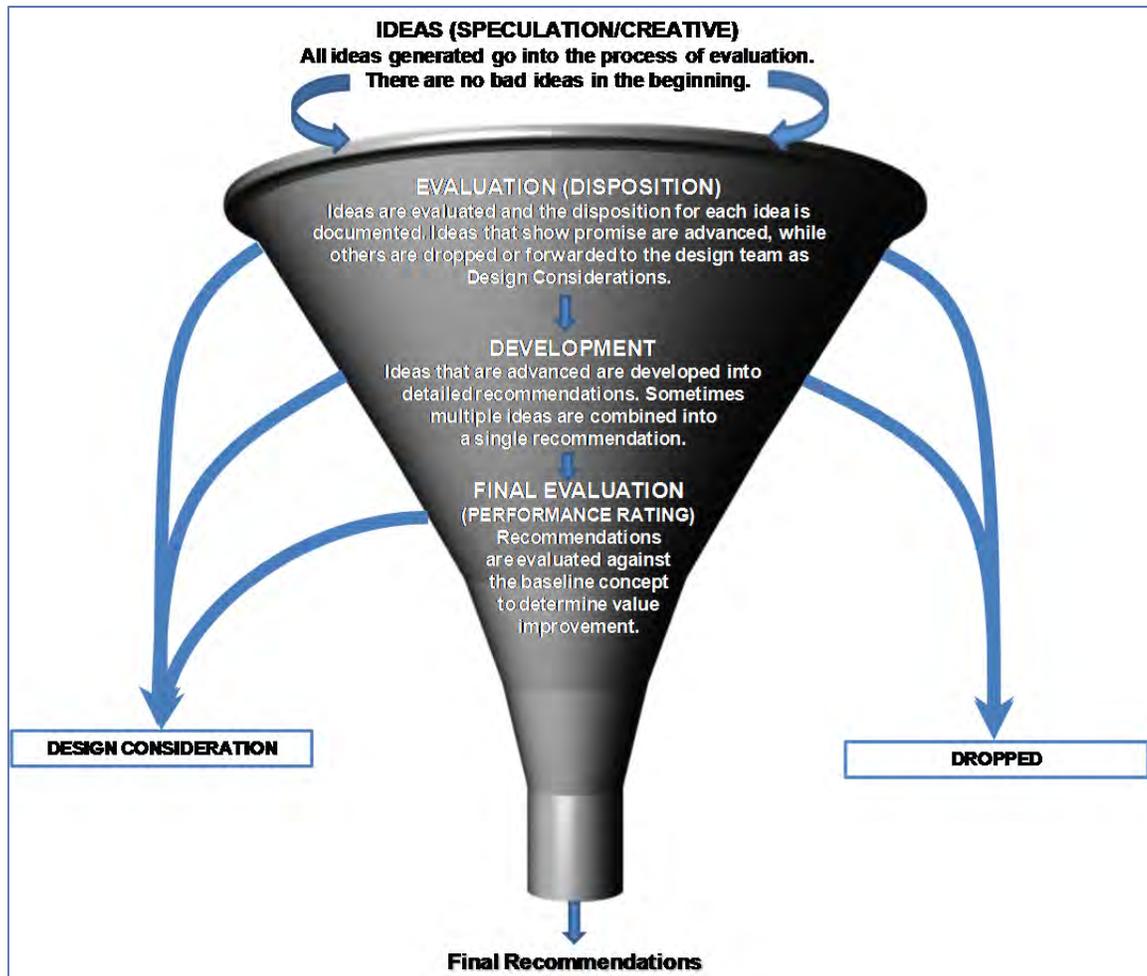
Idea No.	Description
49.	Shorter ramp-up period
50.	Build both phase 1 and 2
51.	Accelerate IBTC
52.	Collect toll on northbound traffic on the U.S. side of border outside of federal facilities
53.	Have RMA take over operation of the truck inspection stations



## 5.0 Idea Evaluation

Although each project is different, the evaluation process for each VE effort can be thought of in its simplest form as a way of combining, evaluating, and narrowing ideas until the VE team agrees on the recommendations to be forwarded. Figure 6 depicts the typical information flow for the VE process.

Figure 6. VE Process Information Flow



### 5.1 Evaluation Process

The evaluation process begins by going through the ideas brainstormed during the speculation/creative phase. Considering the information provided to the VE team at the time of the study, taking into consideration the constraints and controlling decisions that were also given to them, the team discussed the ideas and documented their advantages and disadvantages based on their relationship to the original concept.

The VE team also compared each idea with its original concept to determine whether the performance of the attribute (as introduced in Section 3.5) was better than ( $\uparrow$ ), equal to ( $\leftrightarrow$ ), or worse than ( $\downarrow$ ) the original concept.

Each idea was then carefully evaluated, with the VE team reaching consensus on the overall ranking of the idea (ranking values 1 through 5, as defined below).

5 = Great Opportunity

4 = Good Opportunity

3 = Design Consideration (comparable to project team's approach)

2 = Minor Value Degradation

1 = Major Value Degradation

0 = Withdrawn (unacceptable impact, doesn't meet the project purpose and need, or is already a design requirement)

This ranking resulted in the initial disposition of the idea. High-ranked ideas (those ranked four or higher) were developed further; low-ranked ones (those ranked two or lower) were dropped from further consideration; and those that were considered to be equivalent to the baseline (ranked three) were documented as design considerations.

## 5.2 Idea Evaluation Form

### Function: Support Loads

#	Description	Advantages			Disadvantages		
1	Redesign pavement sections based on projected toll traffic volumes	<ul style="list-style-type: none"> <li>Reduces initial cost</li> </ul>			<ul style="list-style-type: none"> <li>May not be acceptable to TxDOT</li> <li>Could require modification of the profile</li> </ul>		
		Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
		↔	↔	↔	↔	↔	↔
<i>Justification/Comments/Disposition:</i>							
Rating: 5	<i>The baseline is over designed because it's based on non-toll volumes. There is a risk if the volumes are underestimated, the maintenance could increase.</i>						
#	Description	Advantages			Disadvantages		
2	Vertically stage the pavement section (defer life cycle)	<ul style="list-style-type: none"> <li>Reduces initial costs</li> </ul>			<ul style="list-style-type: none"> <li>Shorter life cycle</li> <li>Deferring cost, so it may cost more later</li> <li>May not be acceptable to TxDOT</li> </ul>		
		Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
		↔	↔	↓	↔	↔	↔
<i>Justification/Comments/Disposition:</i>							
Rating: 4	<i>This will help reduce initial capital outlay.</i>						

Ranking Scale: 5 = Great Opportunity  
 4 = Good Opportunity  
 3 = Design Consideration (comparable to project team's approach)  
 2 = Minor value degradation  
 1 = Major value degradation  
 0 = Withdrawn (unacceptable impact, doesn't meet purpose and need, or is already a design requirement)

Performance Attributes: ↑ Improvement, ↔ No change, ↓ Degradation

■ = Advanced as recommendation  
■ = Forwarded as design consideration  
■ = Dropped from future consideration

#	Description	Advantages			Disadvantages	
3	Consider concrete pavement	<ul style="list-style-type: none"> <li>Longer life cycle</li> </ul>			<ul style="list-style-type: none"> <li>Higher initial cost</li> <li>Not common practice for local contractors</li> <li>May have spalling issues</li> <li>Difficult future expansion</li> <li>May not be feasible for tolling areas</li> </ul>	
	<b>Operations</b>	<b>Revenue</b>	<b>Maintainability</b>	<b>Construction Impacts</b>	<b>Environmental Impacts</b>	<b>Project Schedule</b>
	↔	↔	↑	↓	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 3	Concrete pavement may interfere with traffic loops used for traffic data. May want to reevaluate considering the overweight option.					
#	Description	Advantages			Disadvantages	
4	Reduce structural section of the outside shoulders	<ul style="list-style-type: none"> <li>Reduces initial cost</li> </ul>			<ul style="list-style-type: none"> <li>Exacerbates future constructibility issues</li> <li>May have trouble accommodating rumble strips</li> <li>More difficult to construct</li> <li>May result in increased maintenance</li> </ul>	
	<b>Operations</b>	<b>Revenue</b>	<b>Maintainability</b>	<b>Construction Impacts</b>	<b>Environmental Impacts</b>	<b>Project Schedule</b>
	↔	↔	↓	↓	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 3	May reduce cost, but may not result in a value improvement.					

**Ranking Scale:**  
 5 = Great Opportunity  
 4 = Good Opportunity  
 3 = Design Consideration (comparable to project team's approach)  
 2 = Minor value degradation  
 1 = Major value degradation  
 0 = Withdrawn (unacceptable impact, doesn't meet purpose and need, or is already a design requirement)

**Performance Attributes:** ↑ Improvement, ↔ No change, ↓ Degradation

■ = Advanced as recommendation  
■ = Forwarded as design consideration  
■ = Dropped from future consideration

**Function: Span Roadway/Floodway**

#	Description		Advantages		Disadvantages	
5	Shorten floodway bridge by matching the opening east of the bridge (use fill on west end)		<ul style="list-style-type: none"> <li>• May result in reduced cost</li> <li>• Shorter bridge length</li> <li>• Creates additional usable land</li> </ul>		<ul style="list-style-type: none"> <li>• Levee would need to be further extended</li> <li>• May require additional coordination IBWC</li> <li>• May have hydraulic impacts on floodway</li> <li>• Would need inclusion in the environmental document</li> <li>• Could impact design schedule</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↔	↔	↑	↔	↓	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 4	<i>Assumes levee reconstruction time is the same as the reduced structure time.</i>					
#	Description		Advantages		Disadvantages	
6	Reduce the skew at the floodway bridge		<ul style="list-style-type: none"> <li>•</li> </ul>		<ul style="list-style-type: none"> <li>• May not meet design standard</li> <li>• Would lose the 23<sup>rd</sup> Street ramps</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 2	<i>Reduce the length of the floodway bridge by shifting the west end and introducing an "S" curve. This was previously evaluated by the design team.</i>					

Ranking Scale: 5 = Great Opportunity  
 4 = Good Opportunity  
 3 = Design Consideration (comparable to project team's approach)  
 2 = Minor value degradation  
 1 = Major value degradation  
 0 = Withdrawn (unacceptable impact, doesn't meet purpose and need, or is already a design requirement)

Performance Attributes: ↑ Improvement, ↔ No change, ↓ Degradation

= Advanced as recommendation  
 = Forwarded as design consideration  
 = Dropped from future consideration

#	Description		Advantages		Disadvantages	
7	Change alignment at floodway bridge to cross as perpendicular as possible		•		•	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 2	Same as Idea No. 6					
#	Description		Advantages		Disadvantages	
8	Simplify bridge aesthetics		<ul style="list-style-type: none"> <li>Reduces cost</li> <li>Simplifies construction</li> </ul>		<ul style="list-style-type: none"> <li>May not be acceptable to the RMA</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↔	↔	↔	↑	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 4	Negative impact of simplifying aesthetics is not as great as the benefit of the reduced cost					
#	Description		Advantages		Disadvantages	
9	Build 2-lane floodway bridge in the initial construction project		<ul style="list-style-type: none"> <li>Reduces costs</li> </ul>		<ul style="list-style-type: none"> <li>May reduce traffic flow</li> <li>RMA board resolution to be 4 lanes</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↓	↔	↑	↑	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 4	Does not comply with the RMA board resolution of 4 lanes; however, to reduce initial capital costs, this idea is being forwarded to evaluate its performance.					

Ranking Scale: 5 = Great Opportunity  
 4 = Good Opportunity  
 3 = Design Consideration

2 = Minor value degradation  
 1 = Major value degradation  
 0 = Withdrawn (unacceptable impact, doesn't meet purpose and need, or is already a design requirement)

■ = Advanced as recommendation  
 ■ = Forwarded as design consideration  
 ■ = Dropped from future consideration

Performance Attributes: ↑ Improvement, ↔ No change, ↓ Degradation

#	Description		Advantages		Disadvantages	
10	Use concrete girders on bridge crossing I Road		•		•	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 3	<i>Baseline is estimated as a concrete girder bridge however, this crossing because of the skew is been identified as requiring steel. Refinements in design may allow for concrete.</i>					
#	Description		Advantages		Disadvantages	
11	Make floodway bridge one 4-lane bridge instead of two 2-lane bridges		<ul style="list-style-type: none"> <li>• Reduced cost</li> <li>• Improved constructibility (both initial and long term)</li> </ul>		<ul style="list-style-type: none"> <li>• Wider approach</li> <li>• Special transitions from roadway to bridge</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↔	↔	↔	↑	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 4	<i>The potential of reduced initial cost is greater than any reduction in performance.</i>					
#	Description		Advantages		Disadvantages	
12	Use longer spans on the floodway bridge		•		•	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 3	<i>This would be done anyway during final design.</i>					

Ranking Scale: 5 = Great Opportunity  
 4 = Good Opportunity  
 3 = Design Consideration (comparable to project team's approach)  
 2 = Minor value degradation  
 1 = Major value degradation  
 0 = Withdrawn (unacceptable impact, doesn't meet purpose and need, or is already a design requirement)

■ = Advanced as recommendation  
■ = Forwarded as design consideration  
■ = Dropped from future consideration

Performance Attributes: ↑ Improvement, ↔ No change, ↓ Degradation

#	Description		Advantages		Disadvantages	
13	Use single span bridges where possible		•		•	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 3	This would be done anyway during final design through evaluation of the U-turn.					
#	Description		Advantages		Disadvantages	
14	For future U-turns, build bridge headers, using walls later		<ul style="list-style-type: none"> <li>• Shorter bridge spans</li> <li>• Reduced initial cost</li> </ul>		<ul style="list-style-type: none"> <li>• Increased future costs</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↔	↔	↓	↔	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 4	This is an opportunity to defer initial construction costs.					
#	Description		Advantages		Disadvantages	
15	Eliminate bridge headers and use MSE walls where U-turns are required		<ul style="list-style-type: none"> <li>• Reduces structure length</li> <li>• Reduces initial cost</li> </ul>		<ul style="list-style-type: none"> <li>• MSE walls are not preferred locally—become a maintenance issue</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↔	↔	↓	↔	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 3	Don't know enough about the foundation soils.					

Ranking Scale: 5 = Great Opportunity  
 4 = Good Opportunity  
 3 = Design Consideration  
 (comparable to project team's approach)

2 = Minor value degradation  
 1 = Major value degradation  
 0 = Withdrawn (unacceptable impact, doesn't meet purpose and need, or is already a design requirement)

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Performance Attributes: ↑ Improvement, ↔ No change, ↓ Degradation

Function: Establish Footprint

#	Description		Advantages		Disadvantages	
16	Remove the west side ramps at Shary Road (defer to stage 2)		<ul style="list-style-type: none"> <li>Reduced cost</li> </ul>		<ul style="list-style-type: none"> <li>May not be acceptable to RMA</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↔	↔	↔	↔	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 4	The reduction of capital cost offsets the minor reduction in revenue. The ramp is deferred to Stage 2.					
#	Description		Advantages		Disadvantages	
17	Remove west side ramps on 23 <sup>rd</sup> Street (defer to future stage)		<ul style="list-style-type: none"> <li>Reduces cost</li> <li>Reduces structure</li> </ul>		<ul style="list-style-type: none"> <li>Might not be acceptable to the RMA</li> <li>Out-of-direction travel</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↓	↓	↑	↔	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 4	Significantly reduces cost for the minor degradation of the system.					
#	Description		Advantages		Disadvantages	
18	Only build frontage roads from Shary Road west (defer to stage 2)		<ul style="list-style-type: none"> <li>Reduces initial cost</li> </ul>		<ul style="list-style-type: none"> <li>Might not be acceptable to the RMA</li> <li>Local opposition</li> <li>Increased future cost</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↔	↔	↑	↓	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 4	This was carried forward into a recommendation.					

Ranking Scale:

5 = Great Opportunity

4 = Good Opportunity

3 = Design Consideration

(comparable to project team's approach)

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Performance Attributes: ↑ Improvement, ↔ No change, ↓ Degradation

#	Description		Advantages		Disadvantages	
19	Only build 2-lane main line from Shary Road west (defer to stage 2)		<ul style="list-style-type: none"> <li>Reduces initial cost</li> </ul>		<ul style="list-style-type: none"> <li>RMA board resolution to be 4 lanes</li> <li>Increased future cost</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↔	↔	↔	↔	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 4	Does not comply with the RMA board resolution of 4 lanes.					
#	Description		Advantages		Disadvantages	
20	Reduce earthwork template at overpasses by going 3:1 with guardrail		<ul style="list-style-type: none"> <li></li> </ul>		<ul style="list-style-type: none"> <li></li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 3	The benefit we'd see in the reduction in fill quantities is minor. Consider going forward					
#	Description		Advantages		Disadvantages	
21	Use frontage road/main line as levee where levee is being relocated		<ul style="list-style-type: none"> <li>Less encroachment into floodway</li> <li>Less embankment required</li> <li>Reduces cost</li> </ul>		<ul style="list-style-type: none"> <li>Access for levee maintenance may be an issue</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↔	↔	↓	↔	↑	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 4	This was carried forward into a recommendation.					

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Performance Attributes: ↑ Improvement, ↔ No change, ↓ Degradation

#	Description		Advantages		Disadvantages	
22	Build bridge approaching Ware Street rather than relocate levee		<ul style="list-style-type: none"> <li>Less encroachment into floodway</li> </ul>		<ul style="list-style-type: none"> <li>Increased cost (adds bridge)</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↔	↔	↓	↔	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 2	<i>Increased cost; there is no benefit.</i>					
#	Description		Advantages		Disadvantages	
23	Remove frontage road between 23 <sup>rd</sup> Street and SH 336 (defer to stage 2)		<ul style="list-style-type: none"> <li>Reduces initial capital costs</li> </ul>		<ul style="list-style-type: none"> <li>Cuts off access to the race track</li> <li>Local acceptance</li> <li>Not compatible with removing ramps on the bridge</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↔	↔	↔	↔	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 2	<i>Not compatible with removing the ramps on the bridge (higher cost reduction than this idea).</i>					

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#	Description		Advantages		Disadvantages	
24	Use localized excavation (scraper operation) from adjacent properties, rather than hauling operation		<ul style="list-style-type: none"> <li>Reduces cost in hauling</li> <li>Could facilitate future development</li> </ul>		<ul style="list-style-type: none"> <li>May increase future construction costs, depending on excavation location</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↔	↔	↔	↔	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 3	To be evaluated as the design is refined.					
#	Description		Advantages		Disadvantages	
25	Move alignment closer to floodway between Shary and Ware Road and use road as a levee		<ul style="list-style-type: none"> <li>Preserves more developable land</li> <li>Smoother alignment</li> </ul>		<ul style="list-style-type: none"> <li>Increased impacts to floodway</li> <li>Environmental documents would need to be revised</li> <li>Increased fill quantities</li> <li>Would eliminate detention areas currently identified</li> <li>May not be acceptable to stakeholders</li> <li>Increased cost</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↔	↔	↔	↓	↓	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 3	Should be evaluated as the design is refined.					

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Performance Attributes: ↑ Improvement, ↔ No change, ↓ Degradation

#	Description		Advantages		Disadvantages	
26	Use multilane roundabout at Thomas Road and I Road		<ul style="list-style-type: none"> <li>• Could reduce roadway infrastructure</li> </ul>		<ul style="list-style-type: none"> <li>• Driver expectancy</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↓	↔	↔	↔	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 2	<i>Not practical at this location.</i>					
#	Description		Advantages		Disadvantages	
27	Use split diamond at Thomas Road and I Road		<ul style="list-style-type: none"> <li>•</li> </ul>		<ul style="list-style-type: none"> <li>•</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 2	<i>Considered and determined to be unfeasible by project team previously</i>					
#	Description		Advantages		Disadvantages	
28	Use 2-lane rather than 4-lane under Phase 1		<ul style="list-style-type: none"> <li>•</li> </ul>		<ul style="list-style-type: none"> <li>•</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 1	<i>This has been evaluated and dismissed by TxDOT and RMA.</i>					

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Performance Attributes: ↑ Improvement, ↔ No change, ↓ Degradation

#	Description		Advantages		Disadvantages	
29	Eliminate crossing at Las Milpas Road		<ul style="list-style-type: none"> <li>Reduces cost</li> </ul>		<ul style="list-style-type: none"> <li>Elimination may not be accepted by stakeholders (requested by the city)</li> <li>Out-of-direction travel</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↓	↔	↑	↔	↑	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 3	Should be evaluated as the design is refined.					
#	Description		Advantages		Disadvantages	
30	Run 365 over Las Milpas Road		<ul style="list-style-type: none"> <li>Provides easier connectivity</li> <li>Consistent with the Master Plan</li> </ul>		<ul style="list-style-type: none"> <li>Increases cost</li> <li>Adds complexity because of drainage ditches</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↑	↔	↓	↔	↓	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 1	Determined this would be too complex and costly.					

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Performance Attributes: ↑ Improvement, ↔ No change, ↓ Degradation

#	Description		Advantages		Disadvantages	
31	Build the middle rather than outside		<ul style="list-style-type: none"> <li>Improves future constructibility</li> <li>Increases short-term water retention/detention area</li> <li>Could use slopes rather than walls</li> <li>Requires less dirt</li> <li>Reduces cost</li> <li>No median maintenance</li> <li>Eliminate median drainage</li> </ul>		<ul style="list-style-type: none"> <li>Would have some throw-away ramp pavement</li> <li>Concrete traffic barrier vs. cable barrier</li> <li>Perception about right-of-way width</li> <li>Would require redesign</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↕	↕	↕	↕	↕	↕
<i>Justification/Comments/Disposition:</i>						
Rating: 4	<i>This was carried forward into a recommendation.</i>					
#	Description		Advantages		Disadvantages	
32	Build a "Super 2" rather than a 4-lane		<ul style="list-style-type: none"> <li></li> </ul>		<ul style="list-style-type: none"> <li></li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 1	<i>This has been evaluated and dismissed by TxDOT and RMA.</i>					

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#	Description		Advantages		Disadvantages	
33	Eliminate future frontage roads at McColl Road		•		•	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 2	Already deferred and may not be acceptable.					
#	Description		Advantages		Disadvantages	
34	Build on San Juan Road instead of beside it		•		<ul style="list-style-type: none"> <li>• Severs San Juan Road</li> <li>• Politically unacceptable</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 2	Eliminates local circulation by severing San Juan Road.					
#	Description		Advantages		Disadvantages	
35	Defer U-turns until traffic volumes warrant		<ul style="list-style-type: none"> <li>• Reduces cost</li> <li>• Traffic volumes may never warrant</li> </ul>		<ul style="list-style-type: none"> <li>• May cause out-of-direction travel to local users</li> <li>• Potentially increases conflicts at intersections</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↓	↔	↔	↔	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 4	This was carried forward into a recommendation.					

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#	Description		Advantages		Disadvantages	
36	Don't build any frontage roads as part of Phase 1		<ul style="list-style-type: none"> <li></li> </ul>		<ul style="list-style-type: none"> <li>May not be compatible with current land use</li> <li>Don't provide access to parcels that currently have access</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 1		Not realistic given the current conditions of the corridor.				

**Function: Drainage**

#	Description		Advantages		Disadvantages	
37	Eliminate bridges at the San Juan Irrigation Channel		<ul style="list-style-type: none"> <li>Would eliminate two main line bridges and two frontage road bridges</li> <li>Reduces cost</li> <li>Could build ultimate drainage facility and avoid future coordination</li> </ul>		<ul style="list-style-type: none"> <li>May increase coordination required with irrigation district</li> <li>Irrigation district may require additional work if a culvert is used</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↔	↔	↔	↓	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 3		Requires coordination with the irrigation district to see if this is feasible.				

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#	Description		Advantages		Disadvantages	
38	Relocate irrigation channel between frontage road and main line at US 281		<ul style="list-style-type: none"> <li>• Would require less fill</li> <li>• Would reduce encroachment on floodway</li> </ul>		<ul style="list-style-type: none"> <li>• May not be acceptable to irrigation district because it would affect their right-of-way</li> <li>• Canal would require two crossings of the frontage road and guardrail</li> <li>• Usable space between frontage road and main line may not be big enough to accommodate the canal</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 1		<i>The probability of overcoming the disadvantages is slim.</i>				

**Function: Generate Revenue**

#	Description		Advantages		Disadvantages	
39	Analyze main line gantry locations to optimize revenue and toll equity		<ul style="list-style-type: none"> <li>• Would optimize transaction cost against the revenue</li> </ul>		<ul style="list-style-type: none"> <li>•</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 3		<i>This requires project team's analysis during the investment grade T&amp;R study.</i>				

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Performance Attributes: ↑ Improvement, ↔ No change, ↓ Degradation

#	Description		Advantages		Disadvantages	
40	Develop marketing plan		•		•	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 5	First toll facility in the county. A marketing plan is necessary to educate the public.					
#	Description		Advantages		Disadvantages	
41	Assign overweight corridor to SH 365		• Would generate additional revenue		<ul style="list-style-type: none"> <li>• Requires legislative action</li> <li>• Shorter life cycle</li> <li>• May be increased capital costs associated with heavier design loads</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↔	↑	↔	↔	↔	↔
<i>Justification/Comments/Disposition:</i>						
Rating: 3	Currently the overweight permit fee goes to TxDOT to maintain legislatively-designated routes. The concept is currently being studied while the creation of an overweight corridor is in legislation.					

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#	Description		Advantages		Disadvantages	
42	Develop and implement enforcement plan for bridge operators to assist in collecting foreign HCRMA toll violators		<ul style="list-style-type: none"> <li>Increased revenue</li> </ul>		<ul style="list-style-type: none"> <li>Increases capital cost</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 3						
#	Description		Advantages		Disadvantages	
43	Provide utility corridor for lease		<ul style="list-style-type: none"> <li>Potential source for revenue</li> </ul>		<ul style="list-style-type: none"> <li>Could have increased maintenance activities within the right-of-way</li> <li>Would require TxDOT approval</li> <li>Utilities already have the authority to be in state-owned right-of-way</li> <li>May require legislative action</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 3						

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Performance Attributes: ↑ Improvement, ↔ No change, ↓ Degradation

#	Description		Advantages		Disadvantages	
44	Reassess T&R Study to evaluate beginning toll rate		•		•	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 3	Will require an update to the market valuation waiver agreement with TxDOT.					
#	Description		Advantages		Disadvantages	
45	Consider weight-based tolling on trucks		<ul style="list-style-type: none"> <li>• Would generate more revenue</li> <li>• More equitable</li> </ul>		<ul style="list-style-type: none"> <li>• Would require installation of weigh-in motion</li> <li>• Would require increased initial capital cost</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 3	Currently cost is based on number of axles; this would be based on truck weight. Will require an update to the market valuation waiver agreement with TxDOT.					
#	Description		Advantages		Disadvantages	
46	Consider different contracting methods		•		•	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 2	TxDOT allows a variety of methods; RMA wants design-bid-build. P3 requires legislative action.					

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Performance Attributes: ↑ Improvement, ↔ No change, ↓ Degradation

#	Description		Advantages		Disadvantages	
47	Consider variable pricing		•		• Not enough traffic to warrant • More expensive to monitor	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 2	Too costly to monitor and there's not enough traffic to warrant implementing this.					
#	Description		Advantages		Disadvantages	
48	Shorter ramp-up period		•		•	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 2	Already necessary as part of the market investment grade study.					
#	Description		Advantages		Disadvantages	
49	Build both phase 1 and 2		•		• Don't have the capital to build both	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 1	Don't have the capital to build both.					

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Performance Attributes: ↑ Improvement, ↔ No change, ↓ Degradation

#	Description		Advantages		Disadvantages	
50	Accelerate IBTC		<ul style="list-style-type: none"> <li>Could increase revenue</li> </ul>		<ul style="list-style-type: none"> <li>Don't have the funds to accomplish without considering an alternate form of project delivery (P3)</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 3						
#	Description		Advantages		Disadvantages	
51	Collect toll on northbound traffic on the U.S. side of border outside of federal facilities		<ul style="list-style-type: none"> <li>Increases revenue</li> </ul>		<ul style="list-style-type: none"> <li>Would require legislative approval</li> <li>May be logistically impractical</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 2 <i>This is beyond the scope of this study.</i>						
#	Description		Advantages		Disadvantages	
52	Collect toll on southbound traffic on the U.S. side of border outside of federal facilities		<ul style="list-style-type: none"> <li>Increases revenue</li> </ul>		<ul style="list-style-type: none"> <li>Would require bridge owner approval</li> <li>May be logistically impractical</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 2 <i>This is beyond the scope of this study.</i>						

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Performance Attributes: ↑ Improvement, ↔ No change, ↓ Degradation

#	Description		Advantages		Disadvantages	
53	Take Shary Road over US 365 with a trumpet ramp		•		<ul style="list-style-type: none"> <li>• Would require additional right-of-way</li> <li>• Not truck friendly</li> <li>• May hinder future development</li> </ul>	
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
<i>Justification/Comments/Disposition:</i>						
Rating: 2	<i>Impacts the ability to develop the land west.</i>					

Ranking Scale: 5 = Great Opportunity  
 4 = Good Opportunity  
 3 = Design Consideration

2 = Minor value degradation  
 1 = Major value degradation  
 0 = Withdrawn (unacceptable impact, doesn't meet purpose and need, or is already a design requirement)

■ = Advanced as recommendation  
■ = Forwarded as design consideration  
■ = Dropped from future consideration

Performance Attributes: ↑ Improvement, ↔ No change, ↓ Degradation

## 6.0 Development

This phase of the process takes the concepts, or ideas, that ranked the highest in the idea evaluation phase and further develops them into full VE recommendations. In many cases, it is possible that one or more ideas are combined to form an overall recommendation, which were evaluated further by the VE team.

In the case of this project, of the original 53 ideas that were generated during the speculation phase, 15 of those ideas were taken forward, combined, and developed further (keeping in mind that some of the original 53 ideas were deemed more appropriate as a design consideration for the project team, rather than developed into a VE recommendation). For the development phase, narratives, drawings, calculations, and cost estimates were prepared for each recommendation.

### 6.1 Performance Assessment

As the VE team developed recommendations, the performance of each was compared to the baseline for potential value improvement. For this exercise, the baseline is given a score of 5. Table 7 shows the attribute scales used to evaluate the performance of the alternative concepts relative to the baseline concept.

**Table 7. Performance Attribute Rating Scale**

Rating	Performance Attribute Scales
10	Alternative concept is extremely preferred
9	Alternative concept is very strongly preferred
8	Alternative concept is strongly preferred
7	Alternative concept is moderately preferred
6	Alternative concept is slightly preferred
5	<i>Concepts are equally preferred</i>
4	Baseline concept is slightly preferred
3	Baseline concept is moderately preferred
2	Baseline concept is strongly preferred
1	Baseline concept is very strongly preferred
0	Baseline concept is extremely preferred

### 6.2 Performance Rating

The performance matrix permits the comparison of various recommendations against the baseline concept by organizing the data developed for the performance attributes into a matrix format to yield value indices.

The matrix is essential for understanding the performance and value of the baseline and VE concepts. Comparing the performance suggests which recommendations are potentially as good as or better than the original concept in terms of overall value. Comparison at the value index level suggests which recommendations have the best functionality or provides the project with the best value.

The performance rating and rationale for each alternative generated by the VE team is located on the individual recommendation forms found in Section 7.4.

**Figure 7. Performance Rating Matrix–Operational, Revenue, Maintainability**

Performance Rating													
SH 365 Hidalgo County													
Attribute	Attribute Weight	Concept	Performance Rating										Total Performance
			1	2	3	4	5	6	7	8	9	10	
Operational Impacts	19	Baseline					5						95
		1					5						95
		2					5						95
		3					5						95
		4					5						95
		5				4							76
		6					5						95
		7					5						95
		8					5						95
		9					4						76
		10					4						76
		11						5					95
		12						5					95
		13					4						76
		14											0
		15					4						76
Revenue Impacts	21	Baseline					5					107	
		1					5					107	
		2					5					107	
		3					5					107	
		4					5					107	
		5					5					107	
		6					5					107	
		7					5					107	
		8					5					107	
		9					4					86	
		10						5				107	
		11					4					86	
		12						5				107	
		13						5				107	
		14										0	
		15						5				107	
Maintainability	12	Baseline					5					60	
		1					5					60	
		2					4					48	
		3						6				71	
		4						5				60	
		5							7			83	
		6						5				60	
		7						5				60	
		8							6			71	
		9								7		83	
		10								6		71	
		11								6		71	
		12								6		71	
		13						5				60	
		14										0	
		15								6		71	

Figure 8. Performance Rating Matrix–Construction, Environmental, Schedule

Performance Rating SH 365 Hidalgo County													
Attribute	Attribute Weight	Concept	Performance Rating										Total Performance
			1	2	3	4	5	6	7	8	9	10	
Construction Impacts	5	Baseline					5						24
		1					5						24
		2					5						24
		3					5						24
		4						6					29
		5							7				34
		6						6					29
		7					5						24
		8					5						24
		9							6				29
		10							6				29
		11							6				29
		12							6				29
		13						5					24
		14											0
15						5					24		
Environmental Impacts	19	Baseline					5					95	
		1					5					95	
		2					5					95	
		3				4						76	
		4					5					95	
		5							7			133	
		6					5					95	
		7					5					95	
		8					5					95	
		9					5					95	
		10					5					95	
		11							6			114	
		12					5					95	
		13					5					95	
		14										0	
15							6			114			
Project Schedule	24	Baseline					5					119	
		1					5					119	
		2					5					119	
		3					5					119	
		4					5					119	
		5					5					119	
		6					5					119	
		7					5					119	
		8					5					119	
		9					5					119	
		10					5					119	
		11					5					119	
		12				4						95	
		13					5					119	
		14										0	
15					5					119			

Understanding the relationship of cost, performance, and value of the project baseline and VE concepts is essential in evaluating VE recommendations. Comparing the performance and cost suggests which recommendations are potentially as good as or better than the project baseline concept in terms of overall value.

**Figure 9. Value Matrix**

<b>SH 365 Hidalgo County</b>							
<b>OVERALL PERFORMANCE</b>		Performance (P)	% Change Performance	Cost (C)	% Change Cost	Value Index (P/C)	% Value Improvement
	Baseline	500		\$157.0		3.18	
1	Redesign Pavement Sections	500	0%	\$151.8	3.3%	3.29	3%
2	Vertically Stage Pavement	488	-2%	\$149.8	4.6%	3.25	2%
3	Shorten Floodway Bridge	492	-1%	\$154.4	1.7%	3.19	0%
4	Simplify Bridge Aesthetics	504	1%	\$154.9	1.4%	3.26	2%
5	Two-Lane Floodway Bridge	552	10%	\$149.7	4.6%	3.69	16%
6	Single 4-Lane Floodway Bridge	504	1%	\$156.7	0.2%	3.22	1%
7	Shorter Bridge Spans	500	0%	\$155.7	0.8%	3.21	1%
8	Shary Road - Defer West Side Ramps	511	2%	\$156.8	0.1%	3.26	3%
9	Shary Road West - Frontage Roads	488	-2%	\$149.8	4.6%	3.26	2%
10	Shary Road - Two-Lane Main Line	497	0%	\$154.4	1.7%	3.22	1%
11	23rd Street - Defer West Side Ramps	514	3%	\$151.0	3.9%	3.40	7%
12	Build from the Middle	492	-1%	\$154.9	1.3%	3.18	0%
13	Defer U-turns	481	-4%	\$155.6	0.9%	3.09	-3%
14	Develop Marketing Plan	N/A	N/A	\$157.0	N/A	N/A	N/A
15	Defer Frontage Roads I to Anaya	511	2%	\$154.4	1.6%	3.31	4%

## 7.0 Recommendations

### 7.1 Introduction

Evaluation of the 53 ideas generated by the team resulted in 15 individual recommendations to the original concept. The VE recommendation documents in this section are presented as written by the team during the VE study. While they have been edited from the draft VE report to correct errors or better clarify the recommendation, they represent the VE team’s findings during the VE study.

Each recommendation consists of a summary of the original concept, a description of the suggested change, a listing of its advantages and disadvantages, a cost comparison, change in performance, and a brief narrative comparing the original design with the recommendation. Sketches, calculations, and performance measure ratings are also presented. The cost comparisons reflect a comparable level of detail as in the original estimate.

### 7.2 Summary of Recommendations

Table 8 shows each recommendation and its cost savings (represented by parentheses) as well as its overall change in performance. Because it was important to not sacrifice operational performance or revenue generation opportunities, performance of the individual recommendations needed to be evaluated considering the interim condition – between Phase 1 and Phase 2. While some of the recommendations show a negative performance in this condition, the team felt that, given the low projected traffic volumes and unknown time between Phases 1 and 2, the actual impacts on operations would be insignificant. As such, the recommendation should be considered for implementation.

**Table 8. Summary of Recommendations**

#	Description	Cost Delta (M)	Performance Improvement (%)
1	Redesign Pavement Sections	\$(5.16)	0
2	Vertically Stage Pavement (deferral)	(7.18)	-2
3	Shorten Floodway Bridge	(2.63)	-1
4	Simplify Bridge Aesthetics	(2.14)	1
5	Two-Lane Floodway Bridge (deferral)	(7.28)	10
6	Single 4-Lane Floodway Bridge	(0.33)	1
7	Shorter Bridge Spans	(1.31)	0
8	Shary Road – Defer West Side Ramps	(0.20)	2
9	Shary Road – Frontage Roads Only (deferral)	(7.22)	-2
10	Shary Road – Two-Lane Main Line (deferral)	(2.62)	0
11	23 <sup>rd</sup> Street – Defer West Side Ramps	(6.05)	3
12	Build from the Middle (partial deferral)	(2.06)	-1

**Table 8. Summary of Recommendations**

#	Description	Cost Delta (M)	Performance Improvement (%)
13	Defer U-turns	(1.44)	-4
14	Develop Marketing Plan	0.00	N/A
15	Defer Frontage Roads I to Anaya	(2.58)	2

The VE team developed several recommendations that cannot be implemented concurrently (recommendations 1/2, 5/6, and 8/9/10). To avoid showing an increased (or duplicated) cost savings, Table 9 is a reflection of two scenarios: one taking into account the recommendations that would result in the lowest cost avoidance or deferral; the other showing the highest cost avoidance or deferral.

**Table 9. Recommendation Cost Scenarios**

#	Description	Cost Delta (M)	Scenario 1	Scenario 2
1	Redesign Pavement Sections	\$(5.16)	\$(5.16)	
2	Vertically Stage Pavement (deferral)	(7.18)		\$(7.18)
3	Shorten Floodway Bridge	(2.63)	(2.63)	(2.63)
4	Simplify Bridge Aesthetics	(2.14)	(2.14)	(2.14)
5	Two-Lane Floodway Bridge (deferral)	(7.28)		(7.28)
6	Single 4-Lane Floodway Bridge	(0.33)	(0.33)	
7	Shorter Bridge Spans	(1.31)	(1.31)	(1.31)
8	Shary Road – Defer West Side Ramps	(0.20)	(0.20)	
9	Shary Road – Frontage Roads Only (deferral)	(7.22)		(7.22)
10	Shary Road – Two-Lane Main Line (deferral)	(2.62)	(2.62)	
11	23 <sup>rd</sup> Street – Defer West Side Ramps	(6.05)	(6.05)	(6.05)
12	Build from the Middle (partial deferral)	(2.06)	(2.06)	(2.06)
13	Defer U-turns	(1.44)	(1.44)	(1.44)
14	Develop Marketing Plan	0.00	0.00	0.00
15	Defer Frontage Roads I to Anaya	(2.58)	(2.58)	(2.58)
	<b>TOTAL</b>		<b>\$(21.35)</b>	<b>\$(32.70)</b>

Savings for Recommendation 12 would be reduced if Recommendation 10 were implemented.

As mentioned earlier, one of the team objectives was to identify cost reductions (project elements that could be deferred to Phase 2) that would mitigate the estimated capital shortfall of \$20M to \$25M. Table 9 shows each recommendation and its cost avoidance or deferral (represented by parentheses).

### 7.2.1 FHWA Functional Benefit Criteria

Each year, State DOT's are required to report on VE recommendations to FHWA. In addition to cost implications, FHWA requires the DOT's to evaluate each approved recommendation in terms of the project feature or features that recommendation benefits. If a specific recommendation can be shown to provide benefit to more than one feature described below, count the recommendation in *each category that is applicable*. These same criteria can be found on each of the individual recommendations that follow.

- **Safety:** Recommendations that mitigate or reduce hazards on the facility
- **Operations:** Recommendations that improve real-time service and/or local, corridor, or regional levels of service of the facility.
- **Environment:** Recommendations that successfully avoid or mitigate impacts to natural and or cultural resources.
- **Construction:** Recommendations that improve work zone conditions, or expedite the project delivery.
- **Other:** Recommendations not readily categorized by the above performance indicators.

### 7.2.2 Value Engineering Recommendation Approval

The VE recommendation form is to aid in annual reporting of VE activities to FHWA. It is the intent that the project manager review and evaluate the VE team's alternatives included in the final report. The project manager would then complete the Recommendation Approval form shown in Appendix C.

Each alternative that is not approved or is modified by the project manager should include a justification (a summary statement containing the project manager's decision not to use the recommendation in the project).

The completed Value Engineering Recommendation Approval form, including justification for any recommendations not approved or modified, shall be sent to the Texas DOT State Value Engineer by October 1 of each year so the results can be included in the annual VE Report to the Federal Highway Administration (FHWA).

## 7.3 Other Considerations

At this stage of the project, it is difficult to quantify the impacts of revenue generation methods; however, several ideas were presented and are being combined and included as an overall recommendation for further investigation as the project progresses. These ideas include:

- Analyze main line gantry locations
- Assign overweight corridor to SH 365
- Develop and implement enforcement plan for bridge operators to assist in collecting foreign HCRMA toll violators
- Provide utility corridor for lease

- Reassess T&R Study to evaluate toll rate policy
- Consider weight-based tolling versus axle-based tolling on trucks
- Accelerate IBTC

**Analyze main line gantry locations to optimize revenue and toll equity** – At this time, the gantry locations are only approximate and will require the project team’s analysis during the investment grade T&R study in order to optimize transaction costs against revenue. Revenue optimization can be accomplished by doing the following:

- Minimizing the number of transactions, thereby resulting in a reduction of operation and maintenance costs.
- Re-evaluating the gantry locations to ensure toll equity for each user.

**Assign overweight corridor to SH 365** – Hidalgo County doesn’t currently have an overweight corridor, but legislation is in process to designate a number of major roadways across the county as overweight corridors. However, when this legislation is passed, overweight permit fees will go to TxDOT to maintain legislatively-designated routes that are run by TxDOT.

This concept envisages designating SH 365 as the only overweight corridor once it is built and operational, which would result in both higher traffic volumes and additional revenue from overweight permits.

The drawbacks of this are that such designation would require legislative action and would shorten the life cycle of SH 365 as well as increase capital costs associated with heavier design loads.

**Develop and implement an enforcement plan for bridge operators to assist in collecting foreign HCRMA toll violators** – This concept requires negotiations with bridge operators and would incur additional capital costs to set up compatible systems to transmit information.

**Provide utility corridor for lease** – Currently, utilities already have the authority to be in state-owned right-of-way and, given that right-of-way for SH 365 is owned by TxDOT, implementing this concept would require TxDOT approval, legislative action, and potentially partial purchase of part of the right-of-way from TxDOT. Additionally, if this concept is implemented, additional costs could be incurred due to added maintenance activity within the right-of-way.

**Reassess T&R Study to evaluate toll rate policy** – Reassess T&R study to evaluate toll rate policy consisting of the following: initial toll rate, frequency of toll rate increase, and escalation rate. The re-evaluation could potentially assist in bridging the funding shortfall to build the project. However, this concept will require an update to the market valuation waiver agreement with TxDOT.

**Consider weight-based tolling on trucks** – Toll rate is currently based solely on the number of axles and does not take into account the weight of the vehicle. This recommended concept would assess tolls based on vehicle weights and would require the installation of weigh-in motion sensors. This concept results in an increase in initial capital cost, operations and maintenance costs; however, the revenue potential of this concept could offset that cost.

Additionally, this concept would require an update to the market valuation waiver agreement with TxDOT.

**Accelerate IBTC** – While the IBTC is beyond the scope of this study, this concept is aimed at considering alternative funding sources or project delivery, including P3-type arrangements.

### 7.3.1 Design Validation

In the initial idea evaluation process, there was a recommendation to use the frontage road/main lane as the levee top where the levee is being relocated. As the idea was further developed, it became apparent that the original design was validated. The detailed design validation can be found at the end of this chapter.

### 7.3.2 Design Considerations

During the evaluation process, the VE team generated design suggestions for consideration by the project team. The table below is a summary of those ideas; a complete list of their advantages, disadvantages, and additional comments can be found in Section 5.2.

**Table 10. Additional Design Suggestions**

Idea #	Description
3	Consider concrete pavement
4	Reduce structural section of the outside shoulders
10	Use concrete girders on bridge crossing I Road
12	Use longer spans on the floodway bridge
13	Use single span bridges where possible
15	Eliminate bridge headers and use MSE walls where U-turns are required
20	Reduce earthwork template at overpasses by going 3:1 with guardrail
24	Use scraper dirt rather than hauling dirt
25	Move alignment closer to floodway between Shary and Ware Road and use road as a levee
27	Use split diamond at Thomas Road and I Road
29	Eliminate crossing at Las Milpas Road
37	Eliminate bridges at the San Juan Irrigation Channel

## 7.4 Individual Recommendations

Based on the evaluation process, individual recommendations were developed. Each recommendation consists of a summary of the baseline concept, a description of the recommendation, a listing of its advantages and disadvantages, and a brief narrative that includes justification, graphics, assumptions and estimates as developed by the VE team. Final recommendations can be found beginning on page 7-7.



<b>VE RECOMMENDATION NO. 1: REDESIGN PAVEMENT SECTIONS</b>		<b>IDEA NO. 1</b>		
<b>Baseline Concept</b>				
<p>The traffic data used for the SH 365 pavement design was based on TxDOT Transportation Planning and Programming Division (TP&amp;P) statistics, including beginning (2016) and ending (2036) year average daily traffic (ADT) volumes, the average 10 heaviest wheel loads daily (ATHWLD) statistic, the percent tandem axles in the ATHWLD, and one-direction cumulative 18-k Equivalent Single Axle Loads (ESAL) for flexible pavement design. The TP&amp;P traffic volumes were based on nontolled vehicular demand. The TP&amp;P traffic volumes assumed an ADT truck percentage of 17.8%.</p> <p>In the baseline concept, the full structural pavement section is built (less routine maintenance overlay(s)) at the time of initial construction.</p>				
<b>Recommendation Concept</b>				
<p>The recommended concept is to redesign the pavement design based on tolled rather than nontolled vehicular demand.</p> <p>The redesigned main lane pavement section will be based on the beginning (2016) and ending (2036) year Scenario 2 traffic volumes forecasted in the preliminary Traffic and Revenue Study (T&amp;R Study), Draft February 2013. The ATHWLD, percent tandem axles in the ATHWLD and ADT truck percentage will be based on the baseline TP&amp;P statistics. The TP&amp;P ADT truck percentage of 17.8% is slightly more conservative than the 16.5% of truck-related toll transactions forecasted in the T&amp;R Study. The ADT truck percentage will be based on the baseline TP&amp;P assumption.</p> <p>In the recommendation concept, the full structural pavement section is built (less routine maintenance overlay(s)) at the time of initial construction.</p>				
<b>Advantages</b>		<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>Reduces initial capital cost</li> </ul>		<ul style="list-style-type: none"> <li>Traffic statistics based on non-tolled vehicular demand may not be acceptable to TxDOT</li> <li>Could require modification of the roadway profile to adjust for the revised (shallower) pavement design</li> </ul>		
<b>Cost Summary</b>		<b>Cost</b>		
Original Concept		\$20,727,846		
Recommendation Concept		\$15,564,814		
Savings		\$5,163,033		
<b>FHWA Function Benefit</b>				
<b>Safety</b>	<b>Operations</b>	<b>Environment</b>	<b>Construction</b>	<b>Other</b>
	✓	✓		✓

<b>VE RECOMMENDATION NO. 1: REDESIGN PAVEMENT SECTIONS</b>	<b>IDEA NO. 1</b>
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**Discussion/Graphics/Assumptions/Estimates**

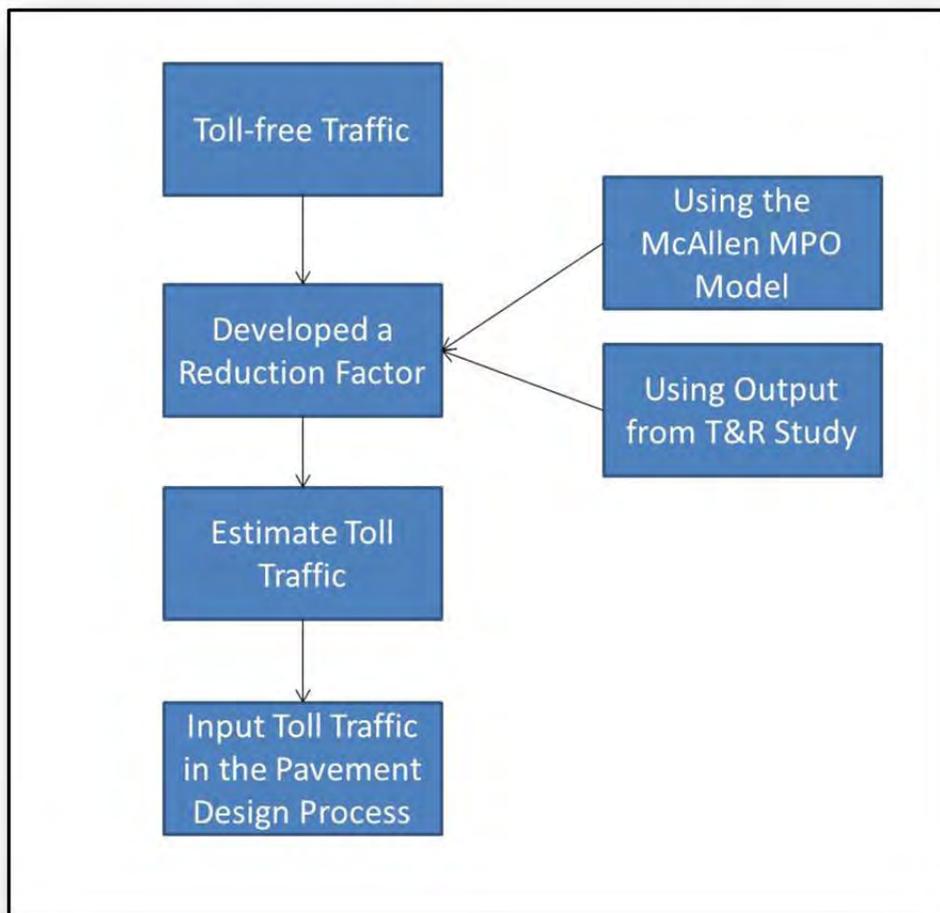
**Discussion**

Pavement design of SH 365 was based on traffic forecasted assuming toll-free traffic. Toll-free traffic is always higher than toll traffic. If toll traffic is used for pavement design, then the structural pavement typical section and related construction cost would be less expensive. Calculation of toll traffic for design pavement could be estimated using two different procedures:

1. Using the McAllen Metropolitan Planning Organization regional travel demand model, incorporating toll for the SH 365 project in the traffic assignment process.
2. Requesting the traffic and revenue consultant estimate toll traffic for the design pavement process.

Both procedures have been used in the Dallas-Fort Worth (DFW) region for toll projects. For example, traffic forecast produced by the DFW Metropolitan Planning Organization (MPO) for toll facilities, incorporate toll in the assignment process (traffic forecast represents toll traffic instead of toll-free traffic; however, TPP approval is required to use tolled traffic demand).

The process is represented in the following graphic.



**VE RECOMMENDATION NO. 1:  
REDESIGN PAVEMENT SECTIONS**

**IDEA NO.**  
1

**Baseline**

Baseline Pavement Design (see attached typical section and TxDOT FPS pavement design print outs)

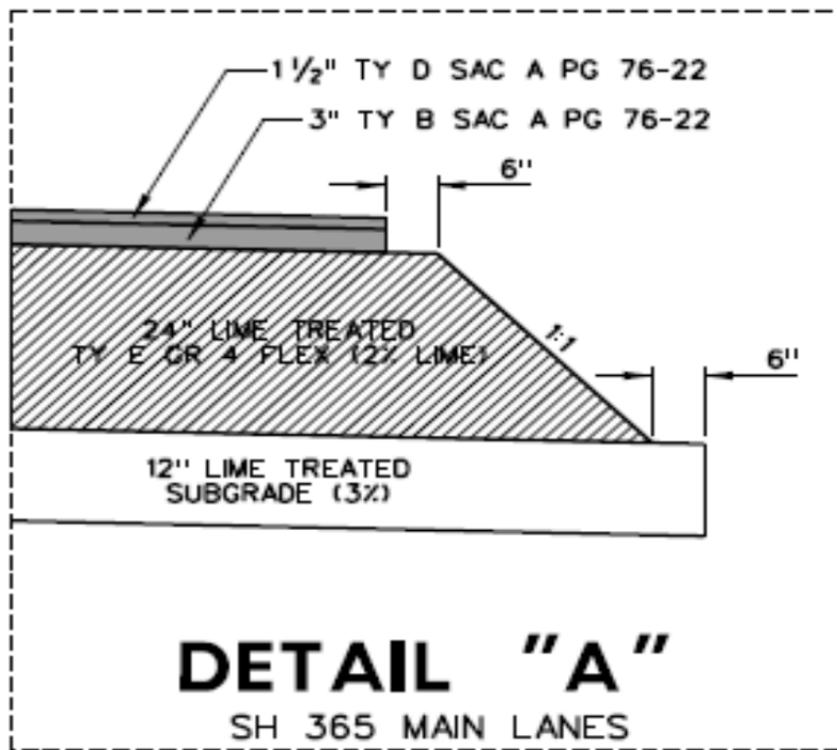
4.5" Asphaltic Concrete Pavement

24" Flexible Base

12" Lime Stabilized Subgrade

The full structural pavement section is built (less routine maintenance overlay(s)) at the time of initial construction.

**Baseline Typical Section**



<b>VE RECOMMENDATION NO. 1: REDESIGN PAVEMENT SECTIONS</b>			<b>IDEA NO. 1</b>				
<b><u>Baseline Construction Cost Estimate</u></b>							
			Baseline				
Station	Length	Pvmt SY	AC Pvmt D = 1.5" Tons	AC Pvmt D = 3" Tons	Flex Base D = 24" CY	Lime TRT New Base SY	Lime Slurry Tons
651+85							
	8034	67843	5851	11703	48799	73199	1383
732+19							
735+11							
	9676	81708	7047	14095	58773	88159	1666
831+87							
879+17							
	4495	37958	3274	6548	27303	40954	774
924+12							
927+04							
	2804	23678	2042	4084	17032	25548	483
955+08							
956+82							
	5729	48378	4173	8345	34798	52198	987
1014+11							
1017+03							
	6828	57659	4973	9946	41474	62211	1176
1085+31							
1088+23							
	6758	57068	4922	9844	41049	61573	1164
1155+81							
1160+51							
	3041	25680	2215	4430	18471	27707	524
1190+92							
1193+84							
	5116	43202	3726	7452	31075	46612	881
1245+00							
1248+00							
	2700	22800	1967	3933	16400	24600	465
1275+00							
1278+00							
	2168	18308	1579	3158	13169	19753	373
1299+68							
	<u>57349</u>		<u>41769</u>	<u>83538</u>	<u>348342</u>	<u>522513</u>	<u>9875</u>
	Unit Price		\$75.00	\$70.00	\$15.00	\$4.00	\$150.00
	Price		\$3,132,689	\$5,847,686	\$5,225,131	\$2,090,052	\$1,481,325
			Subtotal Pavement Price				\$17,776,884
			10% Contingency				\$1,777,688
			6% Mobilization				\$1,173,274
			Total Price - Baseline				<u>\$20,727,846</u>



**VE RECOMMENDATION NO. 1:  
REDESIGN PAVEMENT SECTIONS**

IDEA NO.  
1

**Recommended Concept**

**Recommended Concept Pavement Design**

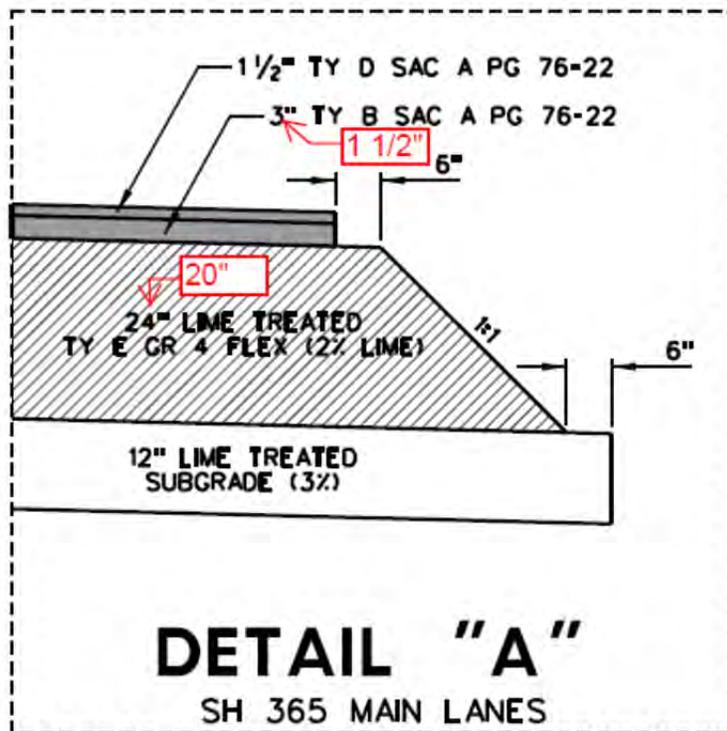
3" Asphaltic Concrete Pavement

20" Flexible Base

12" Lime Stabilized Subgrade

The full structural pavement section is built (less routine maintenance overlay(s)) at the time of initial construction.

**Recommended Concept Typical Section**



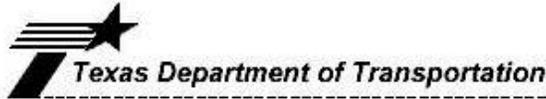
<b>VE RECOMMENDATION NO. 1: REDESIGN PAVEMENT SECTIONS</b>			<b>IDEA NO. 1</b>				
<b><u>Recommended Concept Construction Cost Estimate</u></b>							
			Recommended Concept				
			AC Pvmt D = 1.5" Tons	AC Pvmt D = 1.5" Tons	Flex Base D = 20" CY	Lime TRT New Base SY	Lime Slurry Tons
Station	Length	Pvmt SY					
651+85							
	8034	67843	5851	5851	40419	60629	957
732+19 735+11							
	9676	81708	7047	7047	48680	73020	1152
831+87 879+17							
	4495	37958	3274	3274	22614	33922	535
924+12 927+04							
	2804	23678	2042	2042	14107	21161	334
955+08 956+82							
	5729	48378	4173	4173	28823	43234	682
1014+11 1017+03							
	6828	57659	4973	4973	34352	51528	813
1085+31 1088+23							
	6758	57068	4922	4922	34000	51000	805
1155+81 1160+51							
	3041	25680	2215	2215	15299	22949	362
1190+92 1193+84							
	5116	43202	3726	3726	25739	38608	609
1245+00 1248+00							
	2700	22800	1967	1967	13584	20376	322
1275+00 1278+00							
	2168	18308	1579	1579	10907	16361	258
1299+68							
	57349		41769	41769	288525	432787	6830
		Unit Price	\$75.00	\$75.00	\$15.00	\$4.00	\$150.00
		Price	\$3,132,689	\$3,132,689	\$4,327,868	\$1,731,147	\$1,024,504
							Subtotal Pavement Price
							\$13,348,897
							10% Contingency
							\$1,334,890
							6% Mobilization
							\$881,027
							Total Price - Recommended Concept
							\$15,564,814

**VE RECOMMENDATION NO. 1:  
REDESIGN PAVEMENT SECTIONS**

**IDEA NO.  
1**

Pavement Design Printouts

Baseline Concept



**TEXAS DEPARTMENT OF TRANSPORTATION**

FPS21-12

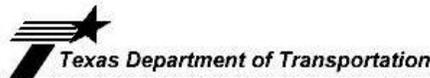
FLEXIBLE PAVEMENT SYSTEM

Release: 10-12-2011

PAVEMENT DESIGN TYPE #5 – ACP + FLEX BASE + STAB SBGR OVER SUBGRADE

PROB	DIST.	COUNTY	CONT.	SECT.	JOB	HIGHWAY	DATE	PAGE
006	Pharr	HIDALGO	3627	1	001	SH 365	3/21/2013	1

COMMENTS ABOUT THIS PROBLEM



**TEXAS DEPARTMENT OF TRANSPORTATION**

FPS21-12

From FH 1016 (Conway)  
To FH 3072 (Dicker)

FLEXIBLE PAVEMENT SYSTEM

Release: 10-12-2011

Hidalgo County

BASIC DESIGN CRITERIA

LENGTH OF THE ANALYSIS PERIOD (YEARS)	20.0
MINIMUM TIME TO FIRST OVERLAY (YEARS)	10.0
MINIMUM TIME BETWEEN OVERLAYS (YEARS)	8.0
DESIGN CONFIDENCE LEVEL ( 95.0%)	C
SERVICEABILITY INDEX OF THE INITIAL STRUCTURE	4.8
FINAL SERVICEABILITY INDEX P2	3.0
SERVICEABILITY INDEX P1 AFTER AN OVERLAY	4.0
DISTRICT TEMPERATURE CONSTANT	38.0
SUBGRADE ELASTIC MODULUS by COUNTY (ksi)	4.00
INTEREST RATE OR TIME VALUE OF MONEY (PERCENT)	6.0

PROGRAM CONTROLS AND CONSTRAINTS

NUMBER OF SUMMARY OUTPUT PAGES DESIRED ( 8 DESIGNS/PAGE)	3
MAX FUNDS AVAILABLE PER SQ. YD. FOR INITIAL DESIGN (DOLLARS)	80.00
MAXIMUM ALLOWED THICKNESS OF INITIAL CONSTRUCTION (INCHES)	50.0
ACCUMULATED MAX DEPTH OF ALL OVERLAYS (INCHES) (EXCLUDING LEVEL-UP)	2.0

TRAFFIC DATA

ADT AT BEGINNING OF ANALYSIS PERIOD (VEHICLES/DAY)	15000.
ADT AT END OF TWENTY YEARS (VEHICLES/DAY)	20600.
ONE-DIRECTION 20YEAR 18 kip ESAL (millions)	10.780
AVERAGE APPROACH SPEED TO THE OVERLAY ZONE (MPH)	60.0
AVERAGE SPEED THROUGH OVERLAY ZONE (OVERLAY DIRECTION) (MPH)	55.0
AVERAGE SPEED THROUGH OVERLAY ZONE (NON-OVERLAY DIRECTION) (MPH)	60.0
PROPORTION OF ADT ARRIVING EACH HOUR OF CONSTRUCTION (PERCENT)	6.0
PERCENT TRUCKS IN ADT	17.8

**VE RECOMMENDATION NO. 1:  
 REDESIGN PAVEMENT SECTIONS**
**IDEA NO.  
 1**

**Texas Department of Transportation**
**TEXAS DEPARTMENT OF TRANSPORTATION**
*F.P.S21-1.2*
*FLEXIBLE PAVEMENT SYSTEM*
*Release: 10-12-2011*

PAVEMENT DESIGN TYPE #5 - ACP + FLEX BASE + STAB SBGR OVER SUBGRADE

PROB	DIST.	COUNTY	CONT.	SECT.	JOB	HIGHWAY	DATE	PAGE
006	Pharr	HILDRGO	3627	1	001	SH 365	3/21/2013	2

INPUT DATA CONTINUED

**CONSTRUCTION AND MAINTENANCE DATA**

MINIMUM OVERLAY THICKNESS (INCHES)	1.5
OVERLAY CONSTRUCTION TIME (HOURS/DAY)	10.0
ASPHALTIC CONCRETE COMPACTED DENSITY (TONS/C.Y.)	2.05
ASPHALTIC CONCRETE PRODUCTION RATE (TONS/HOUR)	200.0
WIDTH OF EACH LANE (FEET)	12.0
FIRST YEAR COST OF ROUTINE MAINTENANCE (DOLLARS/LANE-MILE)	80.00
ANNUAL INCREMENTAL INCREASE IN MAINTENANCE COST (DOLLARS/LANE-MILE)	40.00

**DETOUR DESIGN FOR OVERLAYS**

TRAFFIC MODEL USED DURING OVERLAYING	3
TOTAL NUMBER OF LANES OF THE FACILITY	4
NUMBER OF OPEN LANES IN RESTRICTED ZONE (OVERLAY DIRECTION)	1
NUMBER OF OPEN LANES IN RESTRICTED ZONE (NON-OVERLAY DIRECTION)	2
DISTANCE TRAFFIC IS SLOWED (OVERLAY DIRECTION) (MILES)	0.50
DISTANCE TRAFFIC IS SLOWED (NON-OVERLAY DIRECTION) (MILES)	0.00
DETOUR DISTANCE AROUND THE OVERLAY ZONE (MILES)	0.00

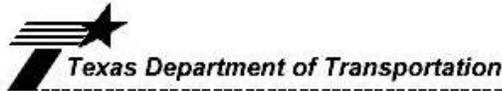
**PAVING MATERIALS INFORMATION**

LAYER CODE	MATERIALS NAME	COST PER CY	E MODULUS	POISSON RATIO	MIN. DEPTH	MAX. DEPTH	SALVAGE PCT.
1	A ASPH CONC PVMT	144.00	500000.	0.35	4.50	9.00	90.00
2	B FLEXIBLE BASE	31.00	45000.	0.30	8.00	60.00	85.00
3	C STABILIZED SUBGR	15.00	35000.	0.35	12.00	12.00	90.00
4	D SUBGRADE(200)	2.00	4000.	0.40	90.70	90.70	90.00

4. THE MAXIMUM ALLOWED CUMULATIVE OVERLAY THICKNESS

**VE RECOMMENDATION NO. 1:  
REDESIGN PAVEMENT SECTIONS**

**IDEA NO.  
1**



**TEXAS DEPARTMENT OF TRANSPORTATION**

F.P.S21-1.2

FLEXIBLE PAVEMENT SYSTEM

Release: 10-12-2011

PAVEMENT DESIGN TYPE #5 – ACP + FLEX BASE + STAB SBGR OVER SUBGRADE

PROB	DIST.	COUNTY	CONT.	SECT.	JOB	HIGHWAY	DATE	PAGE
006	Pharr	HILDAIGO	3627	1	001	SH 365	3/21/2013	3

C. LEVEL C SUMMARY OF THE BEST DESIGN STRATEGIES  
IN ORDER OF INCREASING TOTAL COST

	1	2	3	4	5	6	7	8
MATERIAL ARRANGEMENT	ABC							
INIT. CONST. COST	41.08	43.67	42.22	44.81	47.11	45.08	43.89	44.50
OVERLAY CONST. COST	5.27	3.34	5.27	3.34	0.00	3.54	5.27	4.97
USER COST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTINE MAINT. COST	0.43	0.50	0.43	0.50	0.66	0.48	0.43	0.44
SALVAGE VALUE	-13.49	-13.62	-13.83	-13.95	-12.84	-14.05	-14.45	-14.49
TOTAL COST	33.29	33.89	34.09	34.70	34.93	35.05	35.13	35.42
NUMBER OF LAYERS	3	3	3	3	3	3	3	3
LAYER DEPTH (INCHES)								
D (1)	4.50	4.50	5.00	5.00	4.50	5.50	8.00	6.00
D (2)	21.00	24.00	20.00	23.00	28.00	21.00	8.00	18.00
D (3)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
NO. OF PERF. PERIODS	2	2	2	2	1	2	2	2
PERF. TIME (YEARS)								
T (1)	11.	15.	11.	15.	21.	14.	11.	12.
T (2)	20.	24.	20.	24.		22.	20.	20.
OVERLAY POLICY (INCH) (INCLUDING LEVEL-UP)								
O (1)	2.5	2.0	2.5	2.0		2.0	2.5	2.5

THE TOTAL NUMBER OF FEASIBLE DESIGNS CONSIDERED WAS 167

**VE RECOMMENDATION NO. 1:  
 REDESIGN PAVEMENT SECTIONS**
**IDEA NO.  
 1**

**Texas Department of Transportation**
**TEXAS DEPARTMENT OF TRANSPORTATION**

F.P.S21-1.2

FLEXIBLE PAVEMENT SYSTEM

Release: 10-12-2011

## PAVEMENT DESIGN TYPE #5 - ACP + FLEX BASE + STAB SBGR OVER SUBGRADE

PROB	DIST.-21	COUNTY-109	CONT.	SECT.	JOB	HIGHWAY	DATE	PAGE
006	Pharr	HILDAGO	3627	1	001	SH 365	3/21/2013	4

C. LEVEL C

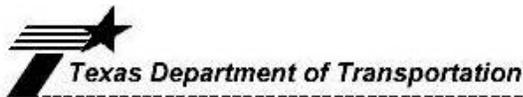
 SUMMARY OF THE BEST DESIGN STRATEGIES  
 IN ORDER OF INCREASING TOTAL COST

	9	10	11	12	13	14	15	16
MATERIAL ARRANGEMENT	ABC							
INIT. CONST. COST	46.22	48.25	44.78	45.92	47.36	49.39	49.67	47.89
OVERLAY CONST. COST	3.34	0.00	5.27	4.97	3.34	0.00	0.00	3.34
USER COST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTINE MAINT. COST	0.50	0.66	0.43	0.44	0.50	0.66	0.66	0.50
SALVAGE VALUE	-14.39	-13.18	-14.60	-14.93	-14.72	-13.51	-13.62	-15.02
TOTAL COST	35.68	35.74	35.88	36.40	36.48	36.54	36.71	36.72
NUMBER OF LAYERS	3	3	3	3	3	3	3	3
LAYER DEPTH (INCHES)								
D (1)	6.00	5.00	6.50	7.00	6.50	5.50	6.00	9.00
D (2)	20.00	27.00	16.00	15.00	19.00	26.00	24.00	8.00
D (3)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
NO. OF PERF. PERIODS	2	1	2	2	2	1	1	2
PERF. TIME (YEARS)								
T (1)	15.	21.	11.	12.	15.	22.	20.	15.
T (2)	23.		20.	20.	23.			24.
OVERLAY POLICY (INCH) (INCLUDING LEVEL-UP)								
O (1)	2.0		2.5	2.5	2.0			2.0

THE TOTAL NUMBER OF FEASIBLE DESIGNS CONSIDERED WAS 167

**VE RECOMMENDATION NO. 1:  
REDESIGN PAVEMENT SECTIONS**

**IDEA NO.  
1**



**TEXAS DEPARTMENT OF TRANSPORTATION**

FPS21-1.2

FLEXIBLE PAVEMENT SYSTEM

Release: 10-12-2011

PAVEMENT DESIGN TYPE #5 – ACP+ FLEX BASE+ STAB SBGR OVER SUBGRADE

PROB	DIST.-21	COUNTY-109	CONT.	SECT.	JOB	HIGHWAY	DATE	PAGE
006	Pharr	HILDRGO	3627	1	001	SH 365	3/21/2013	5

C. LEVEL C SUMMARY OF THE BEST DESIGN STRATEGIES  
IN ORDER OF INCREASING TOTAL COST

	17	18	19	20	21	22	23	24
MATERIAL ARRANGEMENT	ABC							
INIT. CONST. COST	47.64	47.06	48.47	48.78	50.81	49.06	51.94	53.08
OVERLAY CONST. COST	3.54	4.69	3.54	3.34	0.00	3.34	0.00	0.00
USER COST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTINE MAINT. COST	0.48	0.46	0.48	0.50	0.66	0.50	0.66	0.66
SALVAGE VALUE	-14.82	-15.26	-15.14	-15.16	-13.95	-15.26	-14.28	-14.61
TOTAL COST	36.83	36.94	37.35	37.46	37.52	37.64	38.33	39.13
NUMBER OF LAYERS	3	3	3	3	3	3	3	3
LAYER DEPTH (INCHES)								
D (1)	7.00	7.50	8.50	7.50	6.50	8.00	7.00	7.50
D (2)	17.00	14.00	11.00	16.00	23.00	14.00	22.00	21.00
D (3)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
NO. OF PERF. PERIODS	2	2	2	2	1	2	1	1
PERF. TIME (YEARS)								
T (1)	14.	13.	14.	15.	21.	15.	21.	21.
T (2)	22.	21.	23.	23.		23.		
OVERLAY POLICY (INCH) (INCLUDING LEVEL-UP)								
O (1)	2.0	2.5	2.0	2.0		2.0		

THE TOTAL NUMBER OF FEASIBLE DESIGNS CONSIDERED WAS 167

<b>VE RECOMMENDATION NO. 1: REDESIGN PAVEMENT SECTIONS</b>	<b>IDEA NO. 1</b>																																												
<p><b><u>Pavement Design Printouts</u></b></p> <p><b>Recommended Concept</b></p> <p style="margin-left: 40px;">VE Revised Design of SH 365 Based on Revised VE Traffic Data</p> <p style="text-align: center;">-----</p> <p><b><u>BASIC DESIGN CRITERIA</u></b></p> <table style="width: 100%; border: none;"> <tr><td style="padding-left: 40px;">LENGTH OF THE ANALYSIS PERIOD (YEARS)</td><td style="text-align: right;">20.0</td></tr> <tr><td style="padding-left: 40px;">MINIMUM TIME TO FIRST OVERLAY (YEARS)</td><td style="text-align: right;">10.0</td></tr> <tr><td style="padding-left: 40px;">MINIMUM TIME BETWEEN OVERLAYS (YEARS)</td><td style="text-align: right;">8.0</td></tr> <tr><td style="padding-left: 40px;">DESIGN CONFIDENCE LEVEL ( 95.0%)</td><td style="text-align: right;">C</td></tr> <tr><td style="padding-left: 40px;">SERVICEABILITY INDEX OF THE INITIAL STRUCTURE</td><td style="text-align: right;">4.8</td></tr> <tr><td style="padding-left: 40px;">FINAL SERVICEABILITY INDEX P2</td><td style="text-align: right;">3.0</td></tr> <tr><td style="padding-left: 40px;">SERVICEABILITY INDEX P1 AFTER AN OVERLAY</td><td style="text-align: right;">4.0</td></tr> <tr><td style="padding-left: 40px;">DISTRICT TEMPERATURE CONSTANT</td><td style="text-align: right;">38.0</td></tr> <tr><td style="padding-left: 40px;">SUBGRADE ELASTIC MODULUS by COUNTY (ksi)</td><td style="text-align: right;">4.00</td></tr> <tr><td style="padding-left: 40px;">INTEREST RATE OR TIME VALUE OF MONEY (PERCENT)</td><td style="text-align: right;">6.0</td></tr> </table> <p><b><u>PROGRAM CONTROLS AND CONSTRAINTS</u></b></p> <table style="width: 100%; border: none;"> <tr><td style="padding-left: 40px;">NUMBER OF SUMMARY OUTPUT PAGES DESIRED ( 8 DESIGNS/PAGE)</td><td style="text-align: right;">3</td></tr> <tr><td style="padding-left: 40px;">MAX FUNDS AVAILABLE PER SQ.YD. FOR INITIAL DESIGN (DOLLARS)</td><td style="text-align: right;">80.00</td></tr> <tr><td style="padding-left: 40px;">MAXIMUM ALLOWED THICKNESS OF INITIAL CONSTRUCTION (INCHES)</td><td style="text-align: right;">50.0</td></tr> <tr><td style="padding-left: 40px;">ACCUMULATED MAX DEPTH OF ALL OVERLAYS (INCHES) (EXCLUDING LEVEL-UP)</td><td style="text-align: right;">2.0</td></tr> </table> <p><b><u>TRAFFIC DATA</u></b></p> <table style="width: 100%; border: none;"> <tr><td style="padding-left: 40px;">ADT AT BEGINNING OF ANALYSIS PERIOD (VEHICLES/DAY)</td><td style="text-align: right;">7500.</td></tr> <tr><td style="padding-left: 40px;">ADT AT END OF TWENTY YEARS (VEHICLES/DAY)</td><td style="text-align: right;">10300.</td></tr> <tr><td style="padding-left: 40px;">ONE-DIRECTION 20YEAR 18 kip ESAL (millions)</td><td style="text-align: right;">5.390</td></tr> <tr><td style="padding-left: 40px;">AVERAGE APPROACH SPEED TO THE OVERLAY ZONE(MPH)</td><td style="text-align: right;">60.0</td></tr> <tr><td style="padding-left: 40px;">AVERAGE SPEED THROUGH OVERLAY ZONE (OVERLAY DIRECTION) (MPH)</td><td style="text-align: right;">55.0</td></tr> <tr><td style="padding-left: 40px;">AVERAGE SPEED THROUGH OVERLAY ZONE (NON-OVERLAY DIRECTION) (MPH)</td><td style="text-align: right;">60.0</td></tr> <tr><td style="padding-left: 40px;">PROPORTION OF ADT ARRIVING EACH HOUR OF CONSTRUCTION (PERCENT)</td><td style="text-align: right;">6.0</td></tr> <tr><td style="padding-left: 40px;">PERCENT TRUCKS IN ADT</td><td style="text-align: right;">17.8</td></tr> </table> <p style="text-align: center;">-----</p>		LENGTH OF THE ANALYSIS PERIOD (YEARS)	20.0	MINIMUM TIME TO FIRST OVERLAY (YEARS)	10.0	MINIMUM TIME BETWEEN OVERLAYS (YEARS)	8.0	DESIGN CONFIDENCE LEVEL ( 95.0%)	C	SERVICEABILITY INDEX OF THE INITIAL STRUCTURE	4.8	FINAL SERVICEABILITY INDEX P2	3.0	SERVICEABILITY INDEX P1 AFTER AN OVERLAY	4.0	DISTRICT TEMPERATURE CONSTANT	38.0	SUBGRADE ELASTIC MODULUS by COUNTY (ksi)	4.00	INTEREST RATE OR TIME VALUE OF MONEY (PERCENT)	6.0	NUMBER OF SUMMARY OUTPUT PAGES DESIRED ( 8 DESIGNS/PAGE)	3	MAX FUNDS AVAILABLE PER SQ.YD. FOR INITIAL DESIGN (DOLLARS)	80.00	MAXIMUM ALLOWED THICKNESS OF INITIAL CONSTRUCTION (INCHES)	50.0	ACCUMULATED MAX DEPTH OF ALL OVERLAYS (INCHES) (EXCLUDING LEVEL-UP)	2.0	ADT AT BEGINNING OF ANALYSIS PERIOD (VEHICLES/DAY)	7500.	ADT AT END OF TWENTY YEARS (VEHICLES/DAY)	10300.	ONE-DIRECTION 20YEAR 18 kip ESAL (millions)	5.390	AVERAGE APPROACH SPEED TO THE OVERLAY ZONE(MPH)	60.0	AVERAGE SPEED THROUGH OVERLAY ZONE (OVERLAY DIRECTION) (MPH)	55.0	AVERAGE SPEED THROUGH OVERLAY ZONE (NON-OVERLAY DIRECTION) (MPH)	60.0	PROPORTION OF ADT ARRIVING EACH HOUR OF CONSTRUCTION (PERCENT)	6.0	PERCENT TRUCKS IN ADT	17.8
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<b>VE RECOMMENDATION NO. 1: REDESIGN PAVEMENT SECTIONS</b>	<b>IDEA NO. 1</b>						
 <b><u>CONSTRUCTION AND MAINTENANCE DATA</u></b>							
MINIMUM OVERLAY THICKNESS (INCHES)	1.5						
OVERLAY CONSTRUCTION TIME (HOURS/DAY)	10.0						
ASPHALTIC CONCRETE COMPACTED DENSITY (TONS/C.Y.)	2.05						
ASPHALTIC CONCRETE PRODUCTION RATE (TONS/HOUR)	200.0						
WIDTH OF EACH LANE (FEET)	12.0						
FIRST YEAR COST OF ROUTINE MAINTENANCE (DOLLARS/LANE-MILE)	80.00						
ANNUAL INCREMENTAL INCREASE IN MAINTENANCE COST (DOLLARS/LANE-MILE)	40.00						
 <b><u>DETOUR DESIGN FOR OVERLAYS</u></b>							
TRAFFIC MODEL USED DURING OVERLAYING	3						
TOTAL NUMBER OF LANES OF THE FACILITY	4						
NUMBER OF OPEN LANES IN RESTRICTED ZONE (OVERLAY DIRECTION)	1						
NUMBER OF OPEN LANES IN RESTRICTED ZONE (NON-OVERLAY DIRECTION)	2						
DISTANCE TRAFFIC IS SLOWED (OVERLAY DIRECTION) (MILES)	0.50						
DISTANCE TRAFFIC IS SLOWED (NON-OVERLAY DIRECTION) (MILES)	0.00						
DETOUR DISTANCE AROUND THE OVERLAY ZONE (MILES)	0.00						
 <b><u>PAVING MATERIALS INFORMATION</u></b>							
LAYER CODE	MATERIALS NAME	COST PER CY	E MODULUS	POISSON RATIO	MIN. DEPTH	MAX. SALVAGE DEPTH	PCT.
1	A ASPH CONC PVMT	144.00	500000.	0.35	3.00	10.00	90.00
2	B FLEXIBLE BASE	31.00	45000.	0.30	8.00	30.00	85.00
3	C STABILIZED SUBGR	15.00	35000.	0.35	12.00	12.00	90.00
4	D SUBGRADE(200)	2.00	4000.	0.40	200.00	200.00	90.00

**VE RECOMMENDATION NO. 1:  
 REDESIGN PAVEMENT SECTIONS**
**IDEA NO.  
 1**

**Selected Strategy**

C. LEVEL C	SUMMARY OF THE BEST DESIGN STRATEGIES IN ORDER OF INCREASING TOTAL COST							
	1	2	3	4	5	6	7	8
MATERIAL ARRANGEMENT	ABC	ABC	ABC	ABC	ABC	ABC	ABC	ABC
INIT. CONST. COST	34.22	33.36	35.36	37.67	34.50	38.81	36.50	35.64
OVERLAY CONST. COST	3.54	4.97	3.54	0.00	4.97	0.00	3.75	4.97
USER COST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTINE MAINT. COST	0.48	0.44	0.48	0.66	0.44	0.66	0.46	0.44
SALVAGE VALUE	-11.02	-11.35	-11.35	-10.25	-11.68	-10.58	-11.68	-12.02
<b>TOTAL COST</b>	<b>27.22</b>	<b>27.42</b>	<b>28.03</b>	<b>28.08</b>	<b>28.23</b>	<b>28.89</b>	<b>29.02</b>	<b>29.03</b>
NUMBER OF LAYERS	3	3	3	3	3	3	3	3
LAYER DEPTH (INCHES)								
D(1)	3.00	3.00	3.50	3.00	3.50	3.50	4.00	4.00
D(2)	20.00	19.00	19.00	24.00	18.00	23.00	18.00	17.00
D(3)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
NO. OF PERF. PERIODS	2	2	2	1	2	1	2	2
PERF. TIME (YEARS)								
T(1)	14.	12.	14.	22.	12.	21.	13.	12.
T(2)	22.	22.	22.		21.		22.	21.
OVERLAY POLICY (INCH) (INCLUDING LEVEL-UP)								
O(1)	2.0	2.5	2.0		2.5		2.0	2.5

<b>VE RECOMMENDATION NO. 1: REDESIGN PAVEMENT SECTIONS</b>		<b>IDEA NO. 1</b>		
<b>PERFORMANCE MEASURES</b>		<i>Performance</i>	<i>Original</i>	<i>Alternative</i>
<b>Attributes and Rating Rationale for Proposal</b>				
<b>Operational Impacts</b> No change	<i>Rating</i>	5	5	
	<i>Weight</i>	19		
	<i>Contribution</i>	95	95	
<b>Revenue Impacts</b> No change	<i>Rating</i>	5	5	
	<i>Weight</i>	21		
	<i>Contribution</i>	105	105	
<b>Maintainability</b> No change	<i>Rating</i>	5	5	
	<i>Weight</i>	12		
	<i>Contribution</i>	60	60	
<b>Construction Impacts</b> No change	<i>Rating</i>	5	5	
	<i>Weight</i>	5		
	<i>Contribution</i>	25	25	
<b>Environmental Impacts</b> No change	<i>Rating</i>	5	5	
	<i>Weight</i>	19		
	<i>Contribution</i>	95	95	
<b>Project Schedule</b> No change	<i>Rating</i>	5	5	
	<i>Weight</i>	24		
	<i>Contribution</i>	120	120	
<b>Total Performance</b>		500	500	
<b>Net Change in Performance</b>		<b>0%</b>		

<b>VE RECOMMENDATION NO. 2: VERTICALLY STAGE PAVEMENT</b>		<b>IDEA NO. 2</b>		
<b>Baseline Concept</b>				
<p>The traffic data used for the SH 365 pavement design was based on TxDOT Transportation Planning and Programming Division (TP&amp;P) statistics, including beginning (2016) and ending (2036) year average daily traffic (ADT) volumes, the average 10 heaviest wheel loads daily (ATHWLD) statistic, the percent tandem axles in the ATHWLD, and one-direction cumulative 18-k Equivalent Single Axle Loads (ESAL) for flexible pavement design. The TP&amp;P traffic volumes were based on non-tolled vehicular demand. The TP&amp;P traffic volumes assumed an ADT truck percentage of 17.8%.</p> <p>In the baseline concept, the full structural pavement section is built (less routine maintenance overlay(s)) at the time of initial construction.</p>				
<b>Recommendation Concept</b>				
<p>The recommended concept is to redesign the pavement design based on tolled rather than nontolled vehicular demand as considered in Recommendation No. 1, and also vertically-stage construct the main lane pavement to defer a portion of the ultimate paving costs to the future.</p> <p>The redesigned main lane pavement section will be based on the beginning (2016) and ending (2036) year Scenario 2 traffic volumes forecasted in the preliminary Traffic and Revenue Study (T&amp;R Study), Draft February 2013. The ATHWLD, percent tandem axles in the ATHWLD, and ADT truck percentage will be based on the baseline TP&amp;P statistics. The TP&amp;P ADT truck percentage of 17.8% is slightly more conservative than the 16.5% of truck-related toll transactions forecasted in the T&amp;R Study. The ADT truck percentage will be based on the baseline TP&amp;P assumption.</p> <p>In the recommendation concept, the full structural pavement section is staged/built (less routine maintenance overlay(s)) over a period of the first approximately 5 to 8 years of toll road operations.</p>				
<b>Advantages</b>		<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>Reduces initial capital costs</li> </ul>		<ul style="list-style-type: none"> <li>Shorter life cycle</li> <li>Deferring initial cost, may result in a higher cost later</li> <li>Traffic statistics based on non-tolled vehicular demand may not be acceptable to TxDOT</li> <li>Could require modification of the roadway profile to adjust for the revised (shallower) pavement design</li> </ul>		
<b>Cost Summary</b>		<b>Cost</b>		
Original Concept		\$20,727,846		
Recommendation Concept		\$13,551,431		
Savings		\$7,176,415		
<b>FHWA Function Benefit</b>				
<b>Safety</b>	<b>Operations</b>	<b>Environment</b>	<b>Construction</b>	<b>Other</b>
	✓	✓		✓

**VE RECOMMENDATION NO. 2:  
VERTICALLY STAGE PAVEMENT**

IDEA NO.  
2

**Discussion/Graphics/Assumptions/Estimates**

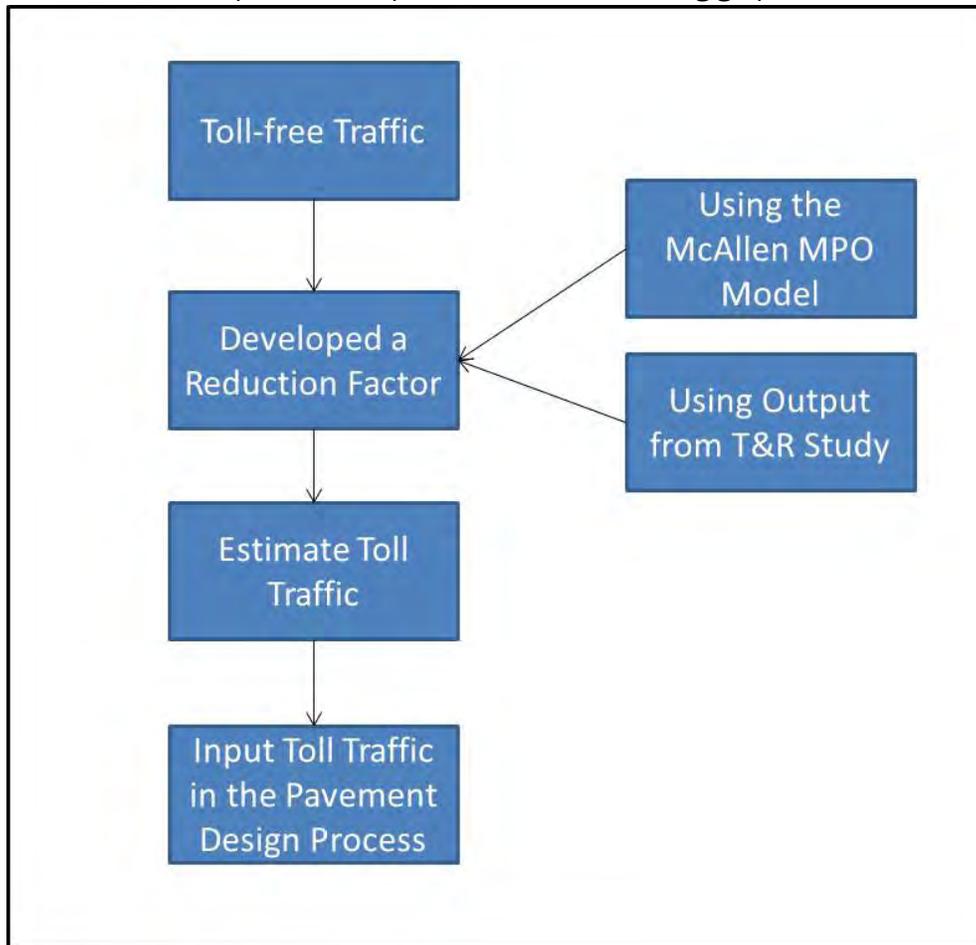
**Discussion**

Pavement design of SH 365 was based on traffic forecasted assuming toll-free traffic. Toll-free traffic volumes are always higher than tolled traffic. If toll traffic volumes are used for pavement design, then the structural pavement typical section and related-construction cost would be less expensive. Calculation of toll traffic for design pavement could be estimated using two different procedures:

1. Using the McAllen Metropolitan Planning Organization regional travel demand model incorporating toll for the SH 365 project in the traffic assignment process.
2. Requesting to the traffic and revenue consultant to estimate toll-traffic for the design pavement process.

Both procedures have been used in the Dallas-Fort Worth (DFW) region for toll projects. For example, traffic forecast produced by the DFW Metropolitan Planning Organization (MPO), for toll facilities, incorporate toll in the assignment process (traffic forecast represents toll traffic instead of toll-free traffic; however, TPP approval is required to use tolled traffic demand.)

The process is represented in the following graphic.



**VE RECOMMENDATION NO. 2:  
VERTICALLY STAGE PAVEMENT**

**IDEA NO.**  
2

In the recommendation concept, the full structural pavement section is staged/built (less routine maintenance overlay(s)) over a period of the first approximately 5 to 8 years of toll road operations. This reduces the initial capital cost (as well as necessary debt service costs) for the project and, therefore, improves the financial feasibility of the project by deferring the cost of the strengthening overlay necessary to achieve a 20-year design life.

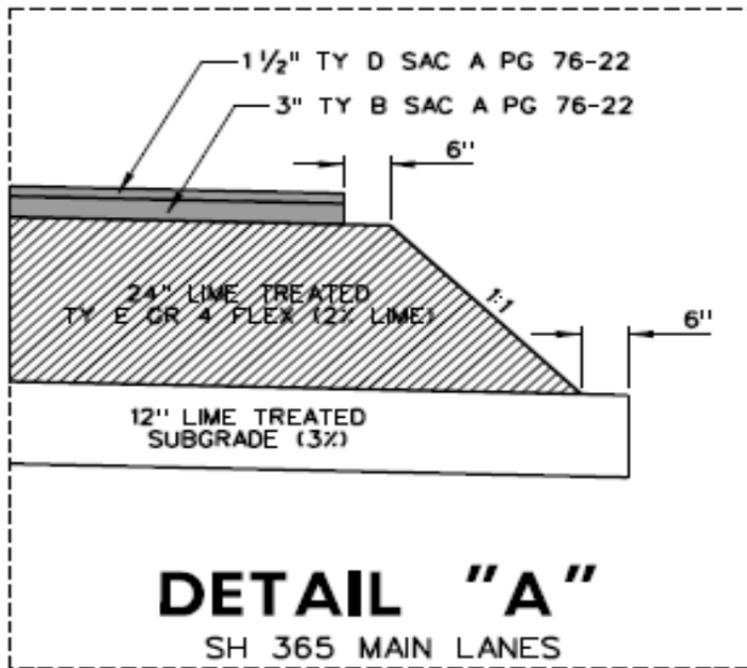
**Baseline**

Baseline Pavement Design (See attached typical section and TxDOT FPS pavement design print outs)

- 4.5" Asphaltic Concrete Pavement
- 24" Flexible Base
- 12" Lime Stabilized Subgrade

The full structural pavement section is built (less routine maintenance overlay(s)) at the time of initial construction.

**Baseline Typical Section**



<b>VE RECOMMENDATION NO. 2: VERTICALLY STAGE PAVEMENT</b>			<b>IDEA NO. 2</b>				
<b>Baseline Construction Cost Estimate</b>							
Station	Length	Pvmt SY	Baseline				
			AC Pvmt D = 1.5" Tons	AC Pvmt D = 3" Tons	Flex Base D = 24" CY	Lime TRT New Base SY	Lime Slurry Tons
651+85	8034	67843	5851	11703	48799	73199	1383
732+19 735+11	9676	81708	7047	14095	58773	88159	1666
831+87 879+17	4495	37958	3274	6548	27303	40954	774
924+12 927+04	2804	23678	2042	4084	17032	25548	483
955+08 956+82	5729	48378	4173	8345	34798	52198	987
1014+11 1017+03	6828	57659	4973	9946	41474	62211	1176
1085+31 1088+23	6758	57068	4922	9844	41049	61573	1164
1155+81 1160+51	3041	25680	2215	4430	18471	27707	524
1190+92 1193+84	5116	43202	3726	7452	31075	46612	881
1245+00 1248+00	2700	22800	1967	3933	16400	24600	465
1275+00 1278+00	2168	18308	1579	3158	13169	19753	373
1299+68							
	<u>57349</u>		<u>41769</u>	<u>83538</u>	<u>348342</u>	<u>522513</u>	<u>9875</u>
	Unit Price		<u>\$75.00</u>	<u>\$70.00</u>	<u>\$15.00</u>	<u>\$4.00</u>	<u>\$150.00</u>
	Price		\$3,132,689	\$5,847,686	\$5,225,131	\$2,090,052	\$1,481,325
							Subtotal Pavement Price \$17,776,884
							10% Contingency \$1,777,688
							6% Mobilization \$1,173,274
							<u>Total Price - Baseline \$20,727,846</u>



**VE RECOMMENDATION NO. 2:  
VERTICALLY STAGE PAVEMENT**

IDEA NO.  
2

**Recommended Concept**

**Recommended Concept Pavement Design**

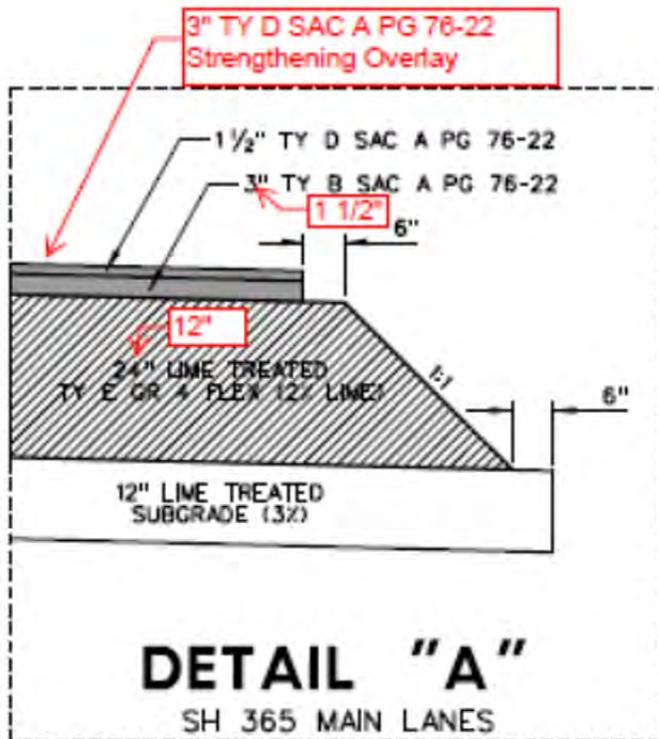
- 3" Asphaltic Concrete Pavement (initial construction)
- 3" Asphaltic Concrete Pavement (deferred strengthening overlay)
- 12" Flexible Base
- 12" Lime Stabilized Subgrade

The full structural pavement section is staged/built (less routine maintenance overlay(s)) over a period of the first approximately 6 to 8 years of toll road operations.

A 20-year pavement design based on a strategy that fixes the D2 Flex Base = 12" results in a pavement design of: D1 ACP = 8"/D2 Flex Base = 12"/D3 TRT Subgrade = 12". A 5- to 8-year pavement design based on a strategy that fixes the D2 Flex Base = 12" results in a 5 year pavement design of: D1 ACP = 3"/D2 Flex Base = 12"/D3 TRT Subgrade = 12" and 8 year pavement design of: D1 ACP = 4.5"/D2 Flex Base = 12"/D3 TRT Subgrade = 12".

Therefore, the strengthening overlay(s) would consist of approximately 5 to 3.5", respectively. The Recommended Concept is based on a pavement design of: D1 ACP = 3"/D2 Flex Base = 12"/D3 TRT Subgrade = 12".

**Recommended Concept Typical Section**

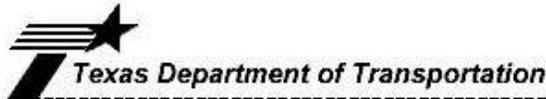


<b>VE RECOMMENDATION NO. 2: VERTICALLY STAGE PAVEMENT</b>			<b>IDEA NO. 2</b>				
<b><u>Recommended Concept Construction Cost Estimate</u></b>							
Station	Length	Pvmt SY	Recommended Concept				
			AC Pvmt D = 1.5" Tons	AC Pvmt D = 1.5" Tons	Flex Base D = 12" CY	Lime TRT New Base SY	Lime Slurry Tons
651+85	8034	67843	5851	5851	23804	72610	686
732+19 735+11	9676	81708	7047	7047	28670	87450	826
831+87 879+17	4495	37958	3274	3274	13319	40625	384
924+12 927+04	2804	23678	2042	2042	8308	25342	239
955+08 956+82	5729	48378	4173	4173	16975	51777	489
1014+11 1017+03	6828	57659	4973	4973	20231	61710	583
1085+31 1088+23	6758	57068	4922	4922	20024	61077	577
1155+81 1160+51	3041	25680	2215	2215	9010	27484	260
1190+92 1193+84	5116	43202	3726	3726	15159	46237	437
1245+00 1248+00	2700	22800	1967	1967	8000	24402	231
1275+00 1278+00	2168	18308	1579	1579	6424	19594	185
1299+68							
	<u>57349</u>		<u>41769</u>	<u>41769</u>	<u>169923</u>	<u>518308</u>	<u>4898</u>
	Unit Price		\$75.00	\$75.00	\$15.00	\$4.00	\$150.00
	Price		\$3,132,689	\$3,132,689	\$2,548,844	\$2,073,230	\$734,701
							Subtotal Pavement Price \$11,622,154
							10% Contingency \$1,162,215
							6% Mobilization \$767,062
							<u>Total Price - Recommended Concept \$13,551,431</u>

**VE RECOMMENDATION NO. 2:  
VERTICALLY STAGE PAVEMENT**

IDEA NO.  
2

Pavement Design Printouts  
Baseline Concept



TEXAS DEPARTMENT OF TRANSPORTATION  
F.P.S21-12 FLEXIBLE PAVEMENT SYSTEM Release: 10-12-2011

PAVEMENT DESIGN TYPE #5 – ACP + FLEX BASE + STAB SBGR OVER SUBGRADE

PROB	DIST.	COUNTY	CONT.	SECT.	JOB	HIGHWAY	DATE	PAGE
006	Pharr	HIDALGO	3627	1	001	SH 365	3/21/2013	1

COMMENTS ABOUT THIS PROBLEM



TEXAS DEPARTMENT OF TRANSPORTATION  
F.P.S21-12 FLEXIBLE PAVEMENT SYSTEM Release: 10-12-2011  
From FM 1016 (Conway)  
To FM 3072 (Dicker)  
Hidalgo County

**BASIC DESIGN CRITERIA**

LENGTH OF THE ANALYSIS PERIOD (YEARS)	20.0
MINIMUM TIME TO FIRST OVERLAY (YEARS)	10.0
MINIMUM TIME BETWEEN OVERLAYS (YEARS)	8.0
DESIGN CONFIDENCE LEVEL ( % 95.0%)	C
SERVICEABILITY INDEX OF THE INITIAL STRUCTURE	4.8
FINAL SERVICEABILITY INDEX P2	3.0
SERVICEABILITY INDEX P1 AFTER AN OVERLAY	4.0
DISTRICT TEMPERATURE CONSTANT	38.0
SUBGRADE ELASTIC MODULUS by COUNTY (ksi)	4.00
INTEREST RATE OR TIME VALUE OF MONEY (PERCENT)	6.0

**PROGRAM CONTROLS AND CONSTRAINTS**

NUMBER OF SUMMARY OUTPUT PAGES DESIRED ( 8 DESIGNS/PAGE)	3
MAX FUNDS AVAILABLE PER SQ.YD. FOR INITIAL DESIGN (DOLLARS)	80.00
MAXIMUM ALLOWED THICKNESS OF INITIAL CONSTRUCTION (INCHES)	50.0
ACCUMULATED MAX DEPTH OF ALL OVERLAYS (INCHES) (EXCLUDING LEVEL-UP)	2.0

**TRAFFIC DATA**

ADT AT BEGINNING OF ANALYSIS PERIOD (VEHICLES/DAY)	15000.
ADT AT END OF TWENTY YEARS (VEHICLES/DAY)	20600.
ONE-DIRECTION 20YEAR 18 kip ESAL (millions)	10.780
AVERAGE APPROACH SPEED TO THE OVERLAY ZONE(MPH)	60.0
AVERAGE SPEED THROUGH OVERLAY ZONE (OVERLAY DIRECTION) (MPH)	55.0
AVERAGE SPEED THROUGH OVERLAY ZONE (NON-OVERLAY DIRECTION) (MPH)	60.0
PROPORTION OF ADT ARRIVING EACH HOUR OF CONSTRUCTION (PERCENT)	6.0
PERCENT TRUCKS IN ADT	17.8

**VE RECOMMENDATION NO. 2:  
 VERTICALLY STAGE PAVEMENT**
**IDEA NO.  
 2**

**Texas Department of Transportation**
**TEXAS DEPARTMENT OF TRANSPORTATION**

FPS21-12

FLEXIBLE PAVEMENT SYSTEM

Release: 10-12-2011

PAVEMENT DESIGN TYPE #5 - ACP + FLEX BASE + STAB SBGR OVER SUBGRADE

PROB	DIST.	COUNTY	CONT.	SECT.	JOB	HIGHWAY	DATE	PAGE
006	Pharr	HILDRAGO	3627	1	001	SH 365	3/21/2013	2

INPUT DATA CONTINUED

**CONSTRUCTION AND MAINTENANCE DATA**

MINIMUM OVERLAY THICKNESS (INCHES)	1.5
OVERLAY CONSTRUCTION TIME (HOURS/DAY)	10.0
ASPHALTIC CONCRETE COMPACTED DENSITY (TONS/C.Y.)	2.05
ASPHALTIC CONCRETE PRODUCTION RATE (TONS/HOUR)	200.0
WIDTH OF EACH LANE (FEET)	12.0
FIRST YEAR COST OF ROUTINE MAINTENANCE (DOLLARS/LANE-MILE)	80.00
ANNUAL INCREMENTAL INCREASE IN MAINTENANCE COST (DOLLARS/LANE-MILE)	40.00

**DETOUR DESIGN FOR OVERLAYS**

TRAFFIC MODEL USED DURING OVERLAYING	3
TOTAL NUMBER OF LANES OF THE FACILITY	4
NUMBER OF OPEN LANES IN RESTRICTED ZONE (OVERLAY DIRECTION)	1
NUMBER OF OPEN LANES IN RESTRICTED ZONE (NON-OVERLAY DIRECTION)	2
DISTANCE TRAFFIC IS SLOWED (OVERLAY DIRECTION) (MILES)	0.50
DISTANCE TRAFFIC IS SLOWED (NON-OVERLAY DIRECTION) (MILES)	0.00
DETOUR DISTANCE AROUND THE OVERLAY ZONE (MILES)	0.00

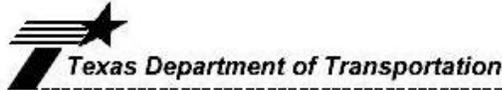
**PAVING MATERIALS INFORMATION**

LAYER CODE	MATERIALS NAME	COST PER CY	E MODULUS	POISSON RATIO	MIN. DEPTH	MAX. DEPTH	SALVAGE PCT.
1	A ASPH CONC PVMT	144.00	500000.	0.35	4.50	9.00	90.00
2	B FLEXIBLE BASE	31.00	45000.	0.30	8.00	60.00	85.00
3	C STABILIZED SUBGR	15.00	35000.	0.35	12.00	12.00	90.00
4	D SUBGRADE(200)	2.00	4000.	0.40	90.70	90.70	90.00

4. THE MAXIMUM ALLOWED CUMULATIVE OVERLAY THICKNESS

**VE RECOMMENDATION NO. 2:  
VERTICALLY STAGE PAVEMENT**

**IDEA NO.  
2**



**TEXAS DEPARTMENT OF TRANSPORTATION**

F.P.S21-1.2

FLEXIBLE PAVEMENT SYSTEM

Release: 10-12-2011

PAVEMENT DESIGN TYPE #5 – ACP + FLEX BASE + STAB SBGR OVER SUBGRADE

PROB	DIST.-21	COUNTY-109	CONT.	SECT.	JOB	HIGHWAY	DATE	PAGE
006	Pharr	HILDAIGO	3627	1	001	SH 365	3/21/2013	3

C. LEVEL C SUMMARY OF THE BEST DESIGN STRATEGIES  
IN ORDER OF INCREASING TOTAL COST

	1	2	3	4	5	6	7	8
MATERIAL ARRANGEMENT	ABC							
INIT. CONST. COST	41.08	43.67	42.22	44.81	47.11	45.08	43.89	44.50
OVERLAY CONST. COST	5.27	3.34	5.27	3.34	0.00	3.54	5.27	4.97
USER COST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTINE MAINT. COST	0.43	0.50	0.43	0.50	0.66	0.48	0.43	0.44
SALVAGE VALUE	-13.49	-13.62	-13.83	-13.95	-12.84	-14.05	-14.45	-14.49
TOTAL COST	33.29	33.89	34.09	34.70	34.93	35.05	35.13	35.42
NUMBER OF LAYERS	3	3	3	3	3	3	3	3
LAYER DEPTH (INCHES)								
D (1)	4.50	4.50	5.00	5.00	4.50	5.50	8.00	6.00
D (2)	21.00	24.00	20.00	23.00	28.00	21.00	8.00	18.00
D (3)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
NO. OF PERF. PERIODS	2	2	2	2	1	2	2	2
PERF. TIME (YEARS)								
T (1)	11.	15.	11.	15.	21.	14.	11.	12.
T (2)	20.	24.	20.	24.		22.	20.	20.
OVERLAY POLICY (INCH) (INCLUDING LEVEL-UP)								
O (1)	2.5	2.0	2.5	2.0		2.0	2.5	2.5

THE TOTAL NUMBER OF FEASIBLE DESIGNS CONSIDERED WAS 167

**VE RECOMMENDATION NO. 2:  
 VERTICALLY STAGE PAVEMENT**
**IDEA NO.  
 2**

**Texas Department of Transportation**
**TEXAS DEPARTMENT OF TRANSPORTATION**

F P S21-1.2

FLEXIBLE PAVEMENT SYSTEM

Release: 10-12-2011

## PAVEMENT DESIGN TYPE #5 - ACP + FLEX BASE + STAB SBGR OVER SUBGRADE

PROB	DIST.-21	COUNTY-109	CONT.	SECT.	JOB	HIGHWAY	DATE	PAGE
006	Pharr	HILDRAGO	3627	1	001	SH 365	3/21/2013	4

## C. LEVEL C

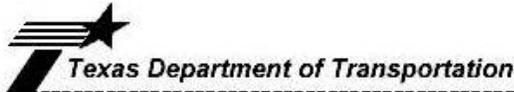
 SUMMARY OF THE BEST DESIGN STRATEGIES  
 IN ORDER OF INCREASING TOTAL COST

	9	10	11	12	13	14	15	16
MATERIAL ARRANGEMENT	ABC							
INIT. CONST. COST	46.22	48.25	44.78	45.92	47.36	49.39	49.67	47.89
OVERLAY CONST. COST	3.34	0.00	5.27	4.97	3.34	0.00	0.00	3.34
USER COST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTINE MAINT. COST	0.50	0.66	0.43	0.44	0.50	0.66	0.66	0.50
SALVAGE VALUE	-14.39	-13.18	-14.60	-14.93	-14.72	-13.51	-13.62	-15.02
TOTAL COST	35.68	35.74	35.88	36.40	36.48	36.54	36.71	36.72
NUMBER OF LAYERS	3	3	3	3	3	3	3	3
LAYER DEPTH (INCHES)								
D (1)	6.00	5.00	6.50	7.00	6.50	5.50	6.00	9.00
D (2)	20.00	27.00	16.00	15.00	19.00	26.00	24.00	8.00
D (3)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
NO. OF PERF. PERIODS	2	1	2	2	2	1	1	2
PERF. TIME (YEARS)								
T (1)	15.	21.	11.	12.	15.	22.	20.	15.
T (2)	23.		20.	20.	23.			24.
OVERLAY POLICY (INCH) (INCLUDING LEVEL-UP)								
O (1)	2.0		2.5	2.5	2.0			2.0

THE TOTAL NUMBER OF FEASIBLE DESIGNS CONSIDERED WAS 167

**VE RECOMMENDATION NO. 2:  
VERTICALLY STAGE PAVEMENT**

IDEA NO.  
2



**TEXAS DEPARTMENT OF TRANSPORTATION**

FP S21-1.2

FLEXIBLE PAVEMENT SYSTEM

Release: 10-12-2011

PAVEMENT DESIGN TYPE #5 – ACP + FLEX BASE + STABS BGR OVER SUBGRADE

PROB	DIST.	COUNTY	CONT.	SECT.	JOB	HIGHWAY	DATE	PAGE
006	Pharr	HIDALGO	3627	1	001	SH 365	3/21/2013	5

C. LEVEL C

SUMMARY OF THE BEST DESIGN STRATEGIES  
IN ORDER OF INCREASING TOTAL COST

	17	18	19	20	21	22	23	24
MATERIAL ARRANGEMENT	ABC							
INIT. CONST. COST	47.64	47.06	48.47	48.78	50.81	49.06	51.94	53.08
OVERLAY CONST. COST	3.54	4.69	3.54	3.34	0.00	3.34	0.00	0.00
USER COST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ROUTINE MAINT. COST	0.48	0.46	0.48	0.50	0.66	0.50	0.66	0.66
SALVAGE VALUE	-14.82	-15.26	-15.14	-15.16	-13.95	-15.26	-14.28	-14.61
TOTAL COST	36.83	36.94	37.35	37.46	37.52	37.64	38.33	39.13
NUMBER OF LAYERS	3	3	3	3	3	3	3	3
LAYER DEPTH (INCHES)								
D (1)	7.00	7.50	8.50	7.50	6.50	8.00	7.00	7.50
D (2)	17.00	14.00	11.00	16.00	23.00	14.00	22.00	21.00
D (3)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
NO. OF PERF. PERIODS	2	2	2	2	1	2	1	1
PERF. TIME (YEARS)								
T (1)	14.	13.	14.	15.	21.	15.	21.	21.
T (2)	22.	21.	23.	23.		23.		
OVERLAY POLICY (INCH) (INCLUDING LEVEL-UP)								
O (1)	2.0	2.5	2.0	2.0		2.0		

THE TOTAL NUMBER OF FEASIBLE DESIGNS CONSIDERED WAS 167

**VE RECOMMENDATION NO. 2:  
VERTICALLY STAGE PAVEMENT**

**IDEA NO.**  
2

**Pavement Design Printouts  
Recommended Concept**



Texas Department of Transportation

**TEXAS DEPARTMENT OF TRANSPORTATION**

FPS FLEXIBLE PAVEMENT SYSTEM Version:FPS21 1.1

PAVEMENT DESIGN TYPE # 5 -- ACP + FLEX BASE + STAB SBGR OVER SUBGRADE

PROB	DIST.-21	COUNTY-109	CONT.	SECT.	JOB	HIGHWAY	DATE	PAGE
006	Pharr	HILDAGO	3627	01	001	SH 365	5/23/2013	1

COMMENTS ABOUT THIS PROBLEM

VE Revised Design of SH 365  
Based on Revised VE Traffic Data

**BASIC DESIGN CRITERIA**

LENGTH OF THE ANALYSIS PERIOD (YEARS)	8.0
MINIMUM TIME TO FIRST OVERLAY (YEARS)	4.0
MINIMUM TIME BETWEEN OVERLAYS (YEARS)	4.0
DESIGN CONFIDENCE LEVEL ( 95.0%)	C
SERVICEABILITY INDEX OF THE INITIAL STRUCTURE	4.8
FINAL SERVICEABILITY INDEX F2	3.0
SERVICEABILITY INDEX F1 AFTER AN OVERLAY	4.0
DISTRICT TEMPERATURE CONSTANT	38.0
SUBGRADE ELASTIC MODULUS by COUNTY (ksi)	4.00
INTEREST RATE OR TIME VALUE OF MONEY (PERCENT)	6.0

**PROGRAM CONTROLS AND CONSTRAINTS**

NUMBER OF SUMMARY OUTPUT PAGES DESIRED ( 8 DESIGNS/PAGE)	3
MAX FUNDS AVAILABLE PER SQ.YD. FOR INITIAL DESIGN (DOLLARS)	80.00
MAXIMUM ALLOWED THICKNESS OF INITIAL CONSTRUCTION (INCHES)	50.0
ACCUMULATED MAX DEPTH OF ALL OVERLAYS (INCHES) (EXCLUDING LEVEL-UP)	2.0

**TRAFFIC DATA**

ADT AT BEGINNING OF ANALYSIS PERIOD (VEHICLES/DAY)	7500.
ADT AT END OF TWENTY YEARS (VEHICLES/DAY)	10300.
ONE-DIRECTION 20YEAR 18 kip ESAL (millions)	5.390
AVERAGE APPROACH SPEED TO THE OVERLAY ZONE(MPH)	60.0
AVERAGE SPEED THROUGH OVERLAY ZONE (OVERLAY DIRECTION) (MPH)	55.0
AVERAGE SPEED THROUGH OVERLAY ZONE (NON-OVERLAY DIRECTION) (MPH)	60.0
PROPORTION OF ADT ARRIVING EACH HOUR OF CONSTRUCTION (PERCENT)	6.0
PERCENT TRUCKS IN ADT	17.8

**VE RECOMMENDATION NO. 2:  
VERTICALLY STAGE PAVEMENT**

**IDEA NO.  
2**



Texas Department of Transportation

**TEXAS DEPARTMENT OF TRANSPORTATION**

FPS

FLEXIBLE PAVEMENT SYSTEM

Version:FPS21 1.1

PAVEMENT DESIGN TYPE # 5 -- ACP + FLEX BASE + STAB SBGR OVER SUBGRADE

PROB	DIST.-21	COUNTY-109	CONT.	SECT.	JOB	HIGHWAY	DATE	PAGE
006	Pharr	HILDAGO	3627	01	001	SH 365	5/23/2013	2

INPUT DATA CONTINUED

**CONSTRUCTION AND MAINTENANCE DATA**

MINIMUM OVERLAY THICKNESS (INCHES)	1.5
OVERLAY CONSTRUCTION TIME (HOURS/DAY)	10.0
ASPHALTIC CONCRETE COMPACTED DENSITY (TONS/C.Y.)	2.05
ASPHALTIC CONCRETE PRODUCTION RATE (TONS/HOUR)	200.0
WIDTH OF EACH LANE (FEET)	12.0
FIRST YEAR COST OF ROUTINE MAINTENANCE (DOLLARS/LANE-MILE)	80.00
ANNUAL INCREMENTAL INCREASE IN MAINTENANCE COST (DOLLARS/LANE-MILE)	40.00

**DETOUR DESIGN FOR OVERLAYS**

TRAFFIC MODEL USED DURING OVERLAYING	3
TOTAL NUMBER OF LANES OF THE FACILITY	4
NUMBER OF OPEN LANES IN RESTRICTED ZONE (OVERLAY DIRECTION)	1
NUMBER OF OPEN LANES IN RESTRICTED ZONE (NON-OVERLAY DIRECTION)	2
DISTANCE TRAFFIC IS SLOWED (OVERLAY DIRECTION) (MILES)	0.50
DISTANCE TRAFFIC IS SLOWED (NON-OVERLAY DIRECTION) (MILES)	0.00
DETOUR DISTANCE AROUND THE OVERLAY ZONE (MILES)	0.00

**PAVING MATERIALS INFORMATION**

LAYER CODE	MATERIALS NAME	COST PER CY	E MODULUS	POISSON RATIO	MIN. DEPTH	MAX. DEPTH	SALVAGE PCT.
1	A ASPH CONC PVMT	144.00	500000.	0.35	3.00	9.00	90.00
2	B FLEXIBLE BASE	31.00	45000.	0.30	12.00	12.00	85.00
3	C STABILIZED SUBGR	15.00	35000.	0.35	12.00	12.00	90.00
4	D SUBGRADE(200)	2.00	4000.	0.40	200.00	200.00	90.00

**VE RECOMMENDATION NO. 2:  
VERTICALLY STAGE PAVEMENT**

**IDEA NO.  
2**



Texas Department of Transportation

**TEXAS DEPARTMENT OF TRANSPORTATION**

FPS

FLEXIBLE PAVEMENT SYSTEM

Version:FPS21 1.1

PAVEMENT DESIGN TYPE # 5 -- ACP + FLEX BASE + STAB SBGR OVER SUBGRADE

PROB	DIST.-21	COUNTY-109	CONT.	SECT.	JOB	HIGHWAY	DATE	PAGE
006	Pharr	HILDAGO	3627	01	001	SH 365	5/23/2013	3

C. LEVEL C SUMMARY OF THE BEST DESIGN STRATEGIES  
IN ORDER OF INCREASING TOTAL COST

	1	2	3
MATERIAL ARRANGEMENT	ABC	ABC	ABC
INIT. CONST. COST	33.33	27.33	29.33
OVERLAY CONST. COST	0.00	7.47	5.64
USER COST	0.00	0.00	0.00
ROUTINE MAINT. COST	0.19	0.13	0.15
SALVAGE VALUE	-18.50	-19.63	-19.63
<b>TOTAL COST</b>	<b>15.03</b>	<b>15.31</b>	<b>15.49</b>
NUMBER OF LAYERS	3	3	3
LAYER DEPTH (INCHES)			
D(1)	4.50	3.00	3.50
D(2)	12.00	12.00	12.00
D(3)	12.00	12.00	12.00
NO.OF PERF.PERIODS	1	2	2
PERF. TIME (YEARS)			
T(1)	8.	5.	6.
T(2)		9.	10.
OVERLAY POLICY (INCH) (INCLUDING LEVEL-UP)			
O(1)		2.5	2.0

THE TOTAL NUMBER OF FEASIBLE DESIGNS CONSIDERED WAS 13

<b>VE RECOMMENDATION NO. 2: VERTICALLY STAGE PAVEMENT</b>		<b>IDEA NO. 2</b>		
<b>PERFORMANCE MEASURES</b>		<i>Performance</i>	<i>Original</i>	<i>Alternative</i>
<b>Attributes and Rating Rationale for Proposal</b>				
<b>Operational Impacts</b> No change	<i>Rating</i>	5	5	5
	<i>Weight</i>	19		
	<i>Contribution</i>	95	95	95
<b>Revenue Impacts</b> No change	<i>Rating</i>	5	5	5
	<i>Weight</i>	21		
	<i>Contribution</i>	105	105	105
<b>Maintainability</b> Increased maintenance frequency (shorter life cycle)	<i>Rating</i>	5	4	4
	<i>Weight</i>	12		
	<i>Contribution</i>	60	48	48
<b>Construction Impacts</b> No change	<i>Rating</i>	5	5	5
	<i>Weight</i>	5		
	<i>Contribution</i>	25	25	25
<b>Environmental Impacts</b> No change	<i>Rating</i>	5	5	5
	<i>Weight</i>	19		
	<i>Contribution</i>	95	95	95
<b>Project Schedule</b> No change	<i>Rating</i>	5	5	5
	<i>Weight</i>	24		
	<i>Contribution</i>	120	120	120
<b>Total Performance</b>		500	488	488
<b>Net Change in Performance</b>			-2%	-2%

<b>VE RECOMMENDATION NO. 3: SHORTEN FLOODWAY BRIDGE</b>		<b>IDEA NO. 5</b>		
<b>Baseline Concept</b>				
Span the whole floodway with the floodway bridge.				
<b>Recommendation Concept</b>				
Shorten floodway bridge by matching the opening east of the bridge (use fill on west end).				
<b>Advantages</b>		<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>• May result in reduced cost</li> <li>• Shorter bridge length</li> <li>• Creates additional usable land</li> </ul>		<ul style="list-style-type: none"> <li>• Levee would need to be further extended</li> <li>• May require additional coordination IBWC</li> <li>• May have hydraulic impacts on floodway</li> <li>• Would need inclusion in the environmental document</li> <li>• Could impact design schedule</li> </ul>		
<b>Cost Summary</b>		<b>Cost</b>		
Original Concept				
Recommendation Concept				
Savings		\$762,596		
<b>FHWA Function Benefit</b>				
<b>Safety</b>	<b>Operations</b>	<b>Environment</b>	<b>Construction</b>	<b>Other</b>
		✓		✓

**VE RECOMMENDATION NO. 3:  
SHORTEN FLOODWAY BRIDGE**

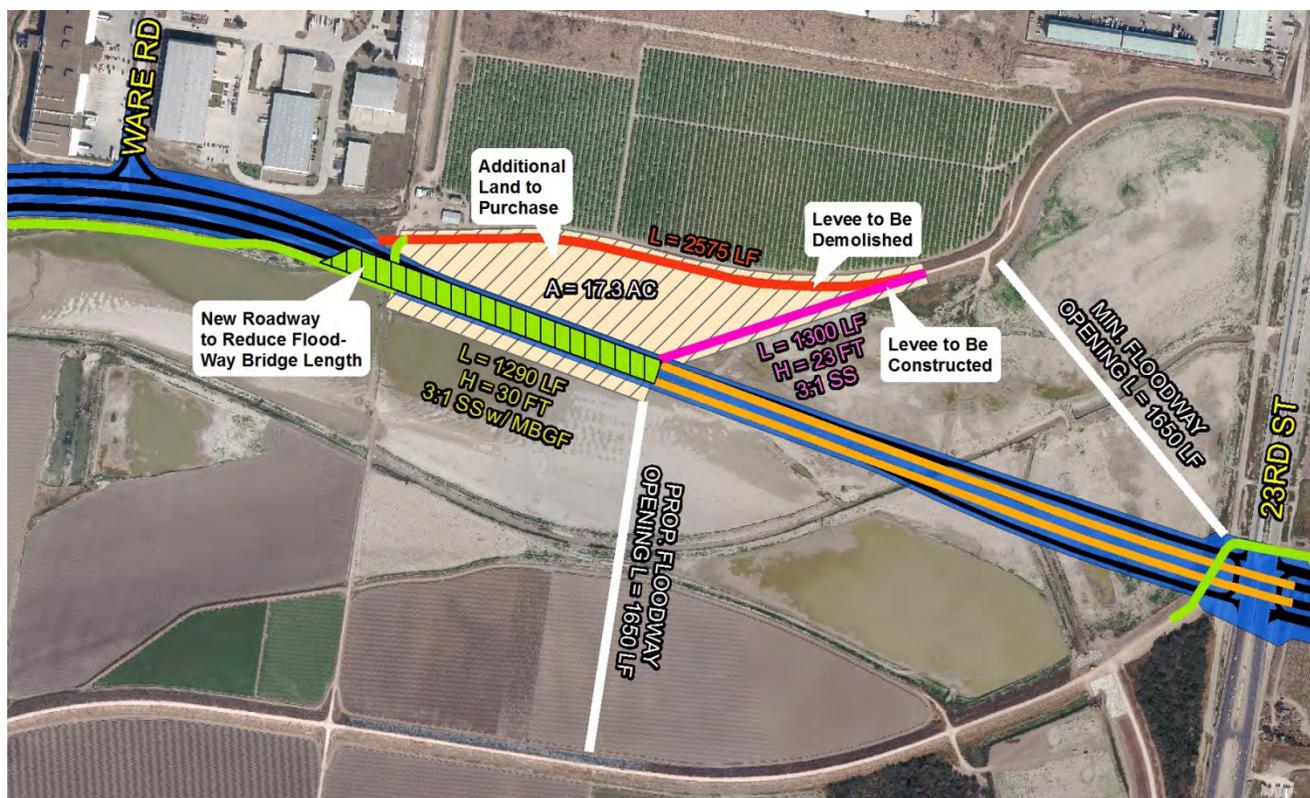
IDEA NO.  
5

**Discussion/Graphics/Assumptions/Estimates**

For this recommendation, the VE team assumed that the construction required for the levee is equal to the construction time required for the reduced bridge. It was also assumed that, because the floodway downstream of the bridge is narrower, the floodway could be filled to the same width without considerably affecting the hydraulics.

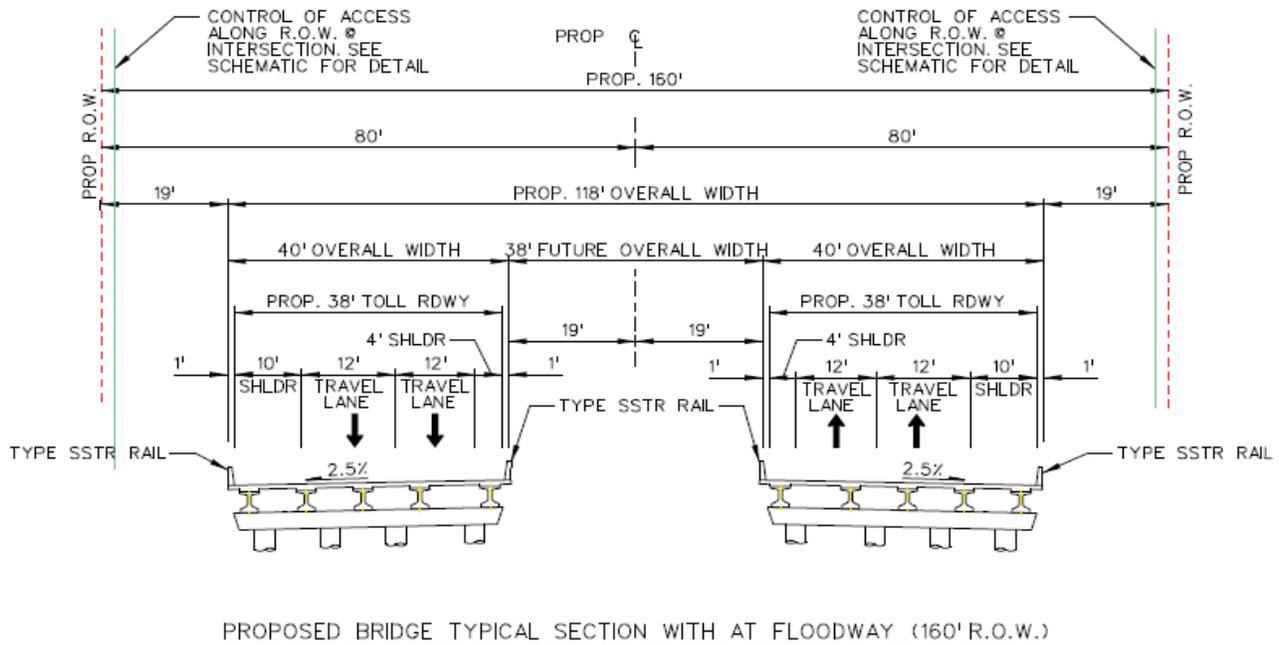
The bridges in the baseline concept across the floodway are on a large skew of 20° and are approximately 4,750 feet long. The cross section of the floodway through this section varies in width with one of the narrowest sections (1,650 feet) being just downstream of the proposed structure.

The general concept is to build the embankment in the floodway to carry traffic and move the levee to meet the embankment without narrowing the floodway. The area between the old levee and the new levee will need to be purchased. That area can be backfilled and then resold in the future. Expected project costs are listed below. Holding the same alignment, bridges shorter than the originals by 1,290 feet each can be built if the downstream width of the floodway can be matched at the beginning of the new bridge as shown in the proposed floodway opening in the figure below. Shortening the bridges would simplify construction (e.g., ramps at the beginning of the bridges would now be on fill rather on structure).



**VE RECOMMENDATION NO. 3:  
SHORTEN FLOODWAY BRIDGE**

**IDEA NO.  
5**



This concept results in a net savings of \$762,595 without considering the benefit of selling the additional acreage that is acquired.

A variation on this concept is to just build the roadway as a finger into the floodway. This scenario will require erosion protection around the finger and likely along the existing levee slopes. The resulting savings would be estimated at about \$2.6M when accounting for levee access roads and other contingencies.

**VE RECOMMENDATION NO. 3:  
 SHORTEN FLOODWAY BRIDGE**
**IDEA NO.  
 5**

ITEM No.	DESC CODE	ITEM DESCRIPTION	UNITS	QUANTITY	AGREED UNIT BID PRICE	TOTAL
<b>ROADWAY</b>						
<b>MAINLANE ITEMS</b>						
132	2006	EMBANKMENT (FINAL)(DENS CONT)(TY C)	CY	301,000.00	\$4.50	\$1,354,500.00
247	2225	FL BS (RDWY DEL)(TY E GR 4)(FNAL POS)(MAINLANES)	CY	11,860.00	\$15.00	\$177,900.00
260	2002	LIME (HYDRATED LIME (SLURRY)) (MAINLANES)	TON	269.00	\$150.00	\$40,350.00
260	2011	LIME TRT (EXST MATL) (12") (MAINLANES)	SY	18,081.00	\$1.30	\$23,505.30
260	2076	LIME TRT (NEW BASE) (24") (MAINLANES)	SY	17,789.44	\$4.00	\$71,157.78
310	2001	PRIME COAT (MC-30) (MAINLANES)	GAL	3,558.00	\$4.50	\$16,011.00
540	2001	MTL W-BEAM GD FEN (TIM POST)	LF	2,580.00	\$18.00	\$46,440.00
544	2001	GUARDRAIL END TREATMENT (INSTALL)	EA	2.00	\$2,000.00	\$4,000.00
1127	2001	GEOGRID BASE REINFORCEMENT (TY I) (MAINLANES)	SY	18,081.00	\$2.30	\$41,586.30
3224	2047	D-GR HMA (QCQA) TY-D SAC-A PG76-22 (MAINLANES)	TON	1,509.00	\$75.00	\$113,175.00
3224	2067	D-GR HMA (QCQA) TY-B SAC A PG76-22 (MAINLANES)	TON	3,018.00	\$70.00	\$211,260.00
<b>MAINLANE ITEMS SUBTOTAL =</b>						<b>\$2,099,885.38</b>
<b>PARTIAL BRIDGE REMOVAL</b>						
		Floodway Bridge (Mainlanes)	SF	103,200.00	\$55.00	<b>(\$5,676,000.00)</b>
<b>BRIDGE ITEMS SUBTOTAL =</b>						<b>(\$5,676,000.00)</b>
<b>LEVEE ITEMS</b>						
<b>EXISTING LEVEE DEMOLITION</b>						
110	2001	EXCAVATION (LEVEE)	CY	95,418.00	\$0.00	\$0.00
		LAND PURCHASE	AC	20.00	\$15,000.00	\$300,000.00
<b>LEVEE DEMOLITION ITEMS SUBTOTAL =</b>						<b>\$300,000.00</b>
<b>NEW LEVEE CONSTRUCTION</b>						
132	2006	EMBANKMENT (LEVEE) (INCLUDING DIRT FROM EXCAVATION OF EXIST LEVEE)	CY	96,640.00	\$20.00	\$1,932,800.00
132	2006	EMBANKMENT (FINAL)(DENS CONT)(TY C) (LAND FILL)	CY	125,325.00	\$5.50	\$689,287.50
<b>NEW LEVEE CONSTRUCTION SUBTOTAL =</b>						<b>\$2,622,087.50</b>
<b>CONSTRUCTION TOTALS</b>						
<b>PROJECT SUBTOTAL =</b>						<b>(\$654,027.12)</b>
<b>CONTINGENCIES (10% OF PROJECT SUBTOTAL) =</b>						<b>(\$65,402.71)</b>
<b>MOBILIZATION (6% OF PROJECT SUBTOTAL) =</b>						<b>(\$43,165.79)</b>
<b>TOTAL CONSTRUCTION COST =</b>						<b>(\$762,595.62)</b>

**VE RECOMMENDATION NO. 3:  
 SHORTEN FLOODWAY BRIDGE**
**IDEA NO.  
 5**

ITEM No.	DESC CODE	ITEM DESCRIPTION	UNITS	QUANTITY	AGREED UNIT BID PRICE	TOTAL
<b>ROADWAY</b>						
<b>MAINLANE ITEMS</b>						
132	2006	EMBANKMENT (FINAL)(DENS CONT)(TY C)	CY	301,000.00	\$4.50	\$1,354,500.00
247	2225	FL BS (RDWY DEL)(TY E GR 4)(FNAL POS)(MAINLANES)	CY	11,860.00	\$15.00	\$177,900.00
260	2002	LIME (HYDRATED LIME (SLURRY)) (MAINLANES)	TON	269.00	\$150.00	\$40,350.00
260	2011	LIME TRT (EXST MATL) (12") (MAINLANES)	SY	18,081.00	\$1.30	\$23,505.30
260	2076	LIME TRT (NEW BASE) (24") (MAINLANES)	SY	17,789.44	\$4.00	\$71,157.78
310	2001	PRIME COAT (MC-30) (MAINLANES)	GAL	3,558.00	\$4.50	\$16,011.00
540	2001	MTL W-BEAM GD FEN (TIM POST)	LF	2,580.00	\$18.00	\$46,440.00
544	2001	GUARDRAIL END TREATMENT (INSTALL)	EA	2.00	\$2,000.00	\$4,000.00
1127	2001	GEOGRID BASE REINFORCEMENT (TY I) (MAINLANES)	SY	18,081.00	\$2.30	\$41,586.30
3224	2047	D-GR HMA(QCQA) TY-D SAC-A PG76-22 (MAINLANES)	TON	1,509.00	\$75.00	\$113,175.00
3224	2067	D-GR HMA(QCQA) TY-B SAC A PG76-22 (MAINLANES)	TON	3,018.00	\$70.00	\$211,260.00
<b>MAINLANE ITEMS SUBTOTAL =</b>						<b>\$2,099,885.38</b>
<b>PARTIAL BRIDGE REMOVAL</b>						
		Floodway Bridge (Mainlanes)	SF	103,200.00	\$55.00	<b>(\$5,676,000.00)</b>
<b>BRIDGE ITEMS SUBTOTAL =</b>						<b>(\$5,676,000.00)</b>
<b>ARMORING OF ROADWAY WITHIN FLOODWAY</b>						
432	2021	RIPRAP (STONE PROTECTION)(18 IN)	CY	15,555.56	\$85.00	\$1,322,222.22
<b>CONSTRUCTION SUBTOTAL =</b>						<b>\$1,322,222.22</b>
<b>CONSTRUCTION TOTALS</b>						
<b>PROJECT SUBTOTAL =</b>						<b>(\$2,253,892.40)</b>
CONTINGENCIES (10% OF PROJECT SUBTOTAL) =						<b>(\$225,389.24)</b>
MOBILIZATION (6% OF PROJECT SUBTOTAL) =						<b>(\$148,756.90)</b>
<b>TOTAL CONSTRUCTION COST =</b>						<b>(\$2,628,038.54)</b>

<b>VE RECOMMENDATION NO. 3: SHORTEN FLOODWAY BRIDGE</b>		IDEA NO. 5		
<b>PERFORMANCE MEASURES</b>				
<b>Attributes and Rating Rationale for Proposal</b>		<i>Performance</i>	<i>Original</i>	<i>Alternative</i>
<b>Operational Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	19	
		<i>Contribution</i>	95	95
<b>Revenue Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	21	
		<i>Contribution</i>	105	105
<b>Maintainability</b> Less bridge to maintain		<i>Rating</i>	5	6
		<i>Weight</i>	12	
		<i>Contribution</i>	60	72
<b>Construction Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	5	
		<i>Contribution</i>	25	25
<b>Environmental Impacts</b> Impacting floodway with additional levee Would require inclusion in the environmental documents		<i>Rating</i>	5	4
		<i>Weight</i>	19	
		<i>Contribution</i>	95	76
<b>Project Schedule</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	24	
		<i>Contribution</i>	120	120
		<b>Total Performance</b>	500	493
		<b>Net Change in Performance</b>	<b>-1%</b>	

<b>VE RECOMMENDATION NO. 4: SIMPLIFY BRIDGE AESTHETICS</b>		<b>IDEA NO. 8</b>		
<b>Baseline Concept</b>				
Bridge aesthetics are slated to follow the RMA's aesthetic design guidelines.				
<b>Recommendation Concept</b>				
Simplify the bridge aesthetics.				
<b>Advantages</b>		<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>• Reduces cost</li> <li>• Simplifies construction</li> </ul>		<ul style="list-style-type: none"> <li>• May not be acceptable to the RMA</li> </ul>		
<b>Cost Summary</b>		<b>Cost</b>		
Original Concept				
Recommendation Concept				
Savings		\$2,136,088		
<b>FHWA Function Benefit</b>				
<b>Safety</b>	<b>Operations</b>	<b>Environment</b>	<b>Construction</b>	<b>Other</b>
	✓	✓		✓

**VE RECOMMENDATION NO. 4:  
SIMPLIFY BRIDGE AESTHETICS**

**IDEA NO.**  
8

**Discussion/Graphics/Assumptions/Estimates**

Negative impact of simplifying aesthetics is not as great as the benefit of the reduced cost.

TxDOT enjoys one of the lowest costs per square foot of new bridge construction in the country. They were able to build economical bridges in part by using standardized, simplified, and time tested details.

There are different levels of aesthetic treatment that can be developed and used. The more intricate the scheme the more expensive it is to implement it. Schemes are typically divided between high visibility and low visibility.

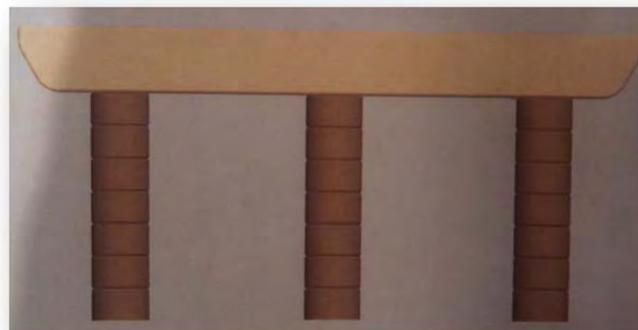
HCRMA's low visibility bridges use a simple scheme. The simple scheme may add about 0.5% to the bridge cost. For low visibility bridges, it is recommended to use standard TxDOT details that will yield the most economical designs. Surface Area = 484,729 SF. Estimated cost at \$55/SF = \$26,660,095. Estimated savings for low visibility bridges = 0.5% x \$26,660,095 = \$1,333,000.

HCRMA's high visibility bridges use a more intricate scheme. It is reported that similarly intricate aesthetic schemes to that of the HCRMA, such as the ones described in TxDOT's Houston District Green Ribbon report, yield about a 10% increase in cost for the bridges. A simplified aesthetic scheme identifying HCRMA structures can be developed with a lower premium that is in the range of 1%-2%. Surface Area = 182,520 SF. Estimated cost at \$55/SF = \$10,038,600. Estimated savings for high visibility bridges = 8% x \$10,038,600 = \$803,088.

Total estimated savings for bridges = \$1,333,000 + \$803,088 = \$2,136,088.

Aesthetics may not be included in the base estimate.

An example bent from the HCRMA's Aesthetic design guidelines for low visibility bridges is shown at right.



**VE RECOMMENDATION NO. 4:  
SIMPLIFY BRIDGE AESTHETICS**

**IDEA NO.  
8**

An example bent from the HCRMA's Aesthetic design guidelines for high visibility bridges is shown below left, and an example bent from the Green Ribbon Project is shown at right.



Below is an idea that could be used to simplify bridge aesthetics.



<b>VE RECOMMENDATION NO. 4: SIMPLIFY BRIDGE AESTHETICS</b>		<b>IDEA NO. 8</b>		
<b>PERFORMANCE MEASURES</b>				
<b>Attributes and Rating Rationale for Proposal</b>		<i>Performance</i>	<i>Original</i>	<i>Alternative</i>
<b>Operational Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	19	
		<i>Contribution</i>	95	95
<b>Revenue Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	21	
		<i>Contribution</i>	105	105
<b>Maintainability</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	12	
		<i>Contribution</i>	60	60
<b>Construction Impacts</b> Simplified construction		<i>Rating</i>	5	6
		<i>Weight</i>	5	
		<i>Contribution</i>	25	30
<b>Environmental Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	19	
		<i>Contribution</i>	95	95
<b>Project Schedule</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	24	
		<i>Contribution</i>	120	120
		<b>Total Performance</b>	500	505
		<b>Net Change in Performance</b>	1%	

<b>VE RECOMMENDATION NO. 5: 2-LANE FLOODWAY BRIDGE</b>		<b>IDEA NO. 9</b>		
<b>Baseline Concept</b>				
The floodway bridge current baseline concept includes two separate bridges, each carrying two lanes of traffic in each main lane direction.				
<b>Recommendation Concept</b>				
The recommended concept is to build a single floodway bridge to provide two divided lanes (one lane in each direction) in the initial construction project. Deferring the rest to later phase.				
<b>Advantages</b>		<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>Reduces costs</li> </ul>		<ul style="list-style-type: none"> <li>May reduce traffic flow</li> <li>RMA board resolution to be four lanes</li> <li>Bridge approaches have two lanes, which will transit to one lane in each direction.</li> <li>Transition of lanes from outside to inside at bridge.</li> </ul>		
<b>Cost Summary</b>		<b>Cost</b>		
Original Concept	\$24,266,792	<i>Cost Deferred</i>		
Recommendation Concept	\$16,986,754			
Savings	\$7,280,038			
<b>FHWA Function Benefit</b>				
<b>Safety</b>	<b>Operations</b>	<b>Environment</b>	<b>Construction</b>	<b>Other</b>
	✓	✓		✓

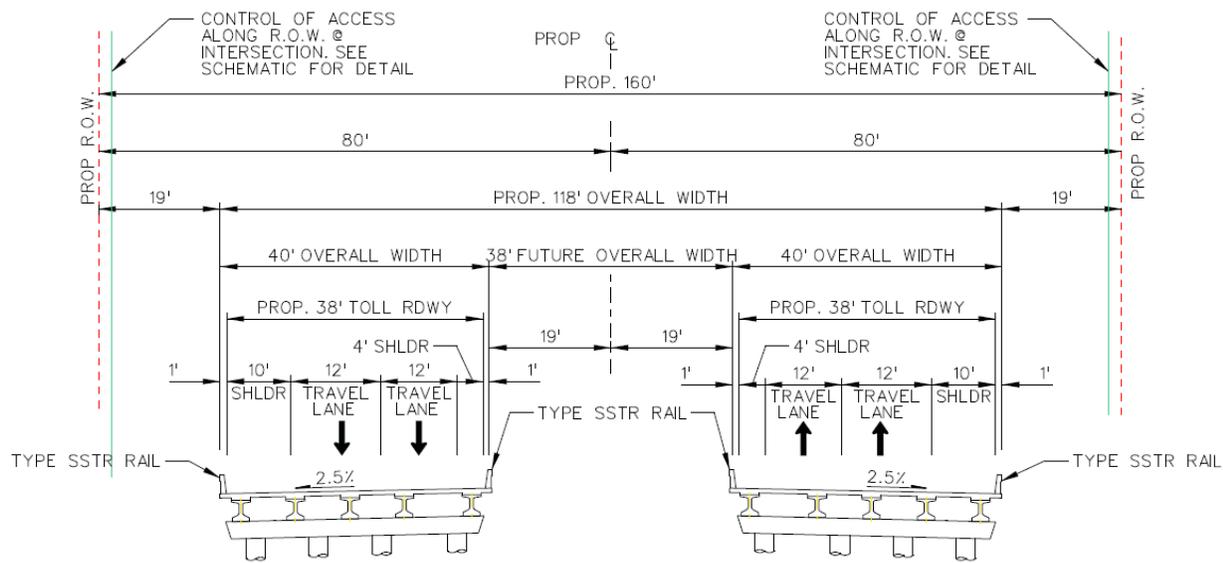
**VE RECOMMENDATION NO. 5:  
2-LANE FLOODWAY BRIDGE**

**IDEA NO.  
9**

**Discussion/Graphics/Assumptions/Estimates**

The floodway bridge current baseline concept includes two separate bridges, each carrying two lanes of traffic in each main lane direction. Each bridge is 40 feet wide with two SSTR rails, one 10-foot shoulder, two 12-foot lanes, and one 4-foot shoulder. The bridges begin at Sta 831+87 and end at Sta 879+17; each bridge total length is 4,730 feet.

The recommended concept is to build a single floodway bridge to provide two divided lanes in the initial construction project. The bridge is 56 feet wide with two SSTR rails, one 10-foot shoulder, one 12-foot lane, one 4-foot shoulder, one 2-foot SSCB barrier, one 4-foot shoulder, one 12-foot lane, and one 10-foot shoulder.

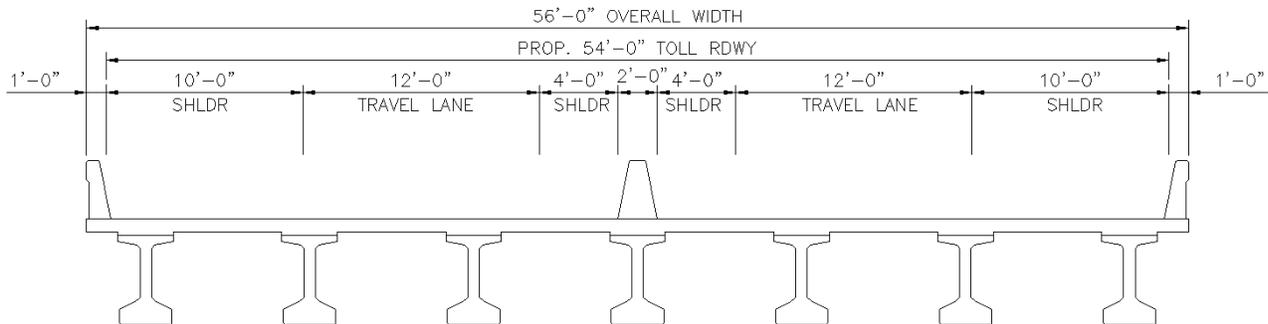


PROPOSED BRIDGE TYPICAL SECTION WITH AT FLOODWAY (160' R.O.W.)

**Figure 1: Current Baseline Section**

**VE RECOMMENDATION NO. 5:  
2-LANE FLOODWAY BRIDGE**

**IDEA NO.  
9**



**Figure 2: Recommended Section**

**Cost Estimate**

Unit cost is based on the original concept fee estimate.

**Original Concept (Current Baseline Concept)**

**Bridge Cost:**

Bridge deck area = 4730 feet \* 40 \* 2 = 378,400 sq ft.

Cost = \$55.00 / sq ft

Total cost = 378,400 sq ft \* \$55.00 / sq. ft = \$20,812,000

10% contingency = \$20,812,000 \* 0.1 = \$2,081,200

6% mobilization = (\$20,812,000 + \$2,081,200) \* .06 = \$1,373,592

Total cost = \$20,812,000 + \$2,081,200 + \$1,373,592 = \$24,266,792

**Recommended Concept**

**Bridge Cost:**

Bridge deck area = 4,730 feet \* 56 = 264,880 sq ft.

Cost = \$55.00 / sq ft

Total cost = 264,880 sq ft \* \$55.00 / sq. ft = \$14,568,400

10% contingency = \$14,568,400 \* 0.1 = \$1,456,840

6% mobilization = (\$14,568,400 + \$1,456,840) \* .06 = \$961,514

Total cost = \$14,568,400 + \$1,456,840 + \$961,514 = \$16,986,754

These costs are for structural only. There would be some additional savings from reduced embankment; the amount is not significant compared to bridge savings.

<b>VE RECOMMENDATION NO. 5: 2-LANE FLOODWAY BRIDGE</b>		<b>IDEA NO. 9</b>		
<b>PERFORMANCE MEASURES</b>				
<b>Attributes and Rating Rationale for Proposal</b>		<i>Performance</i>	<i>Original</i>	<i>Alternative</i>
<b>Operational Impacts</b> May reduce traffic flow		<i>Rating</i>	5	4
		<i>Weight</i>	19	
		<i>Contribution</i>	95	76
<b>Revenue Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	21	
		<i>Contribution</i>	105	105
<b>Maintainability</b> Reduced structure to maintain		<i>Rating</i>	5	7
		<i>Weight</i>	12	
		<i>Contribution</i>	60	84
<b>Construction Impacts</b> Reduced construction in the floodway		<i>Rating</i>	5	7
		<i>Weight</i>	5	
		<i>Contribution</i>	25	35
<b>Environmental Impacts</b> Less impact in the floodway		<i>Rating</i>	5	7
		<i>Weight</i>	19	
		<i>Contribution</i>	95	133
<b>Project Schedule</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	24	
		<i>Contribution</i>	120	120
<b>Total Performance</b>			500	553
<b>Net Change in Performance</b>				<b>11%</b>

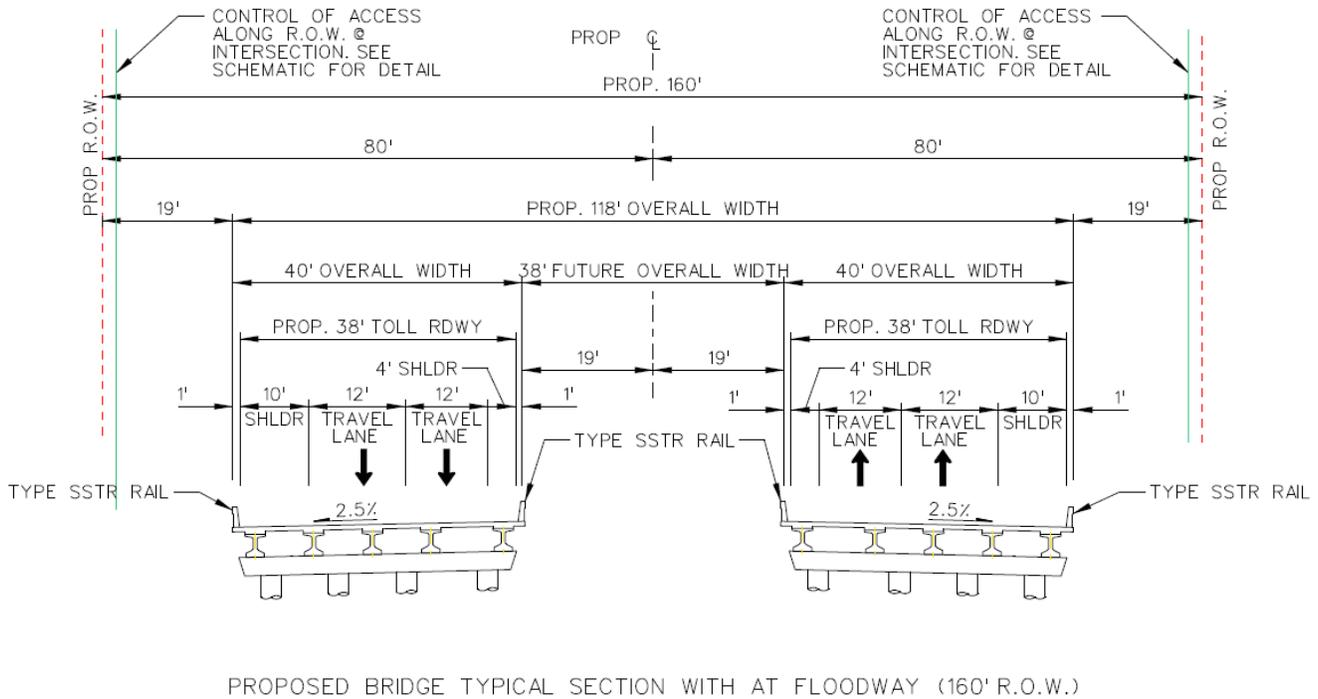
<b>VE RECOMMENDATION NO. 6: SINGLE 4-LANE FLOODWAY BRIDGE</b>		<b>IDEA NO. 11</b>		
<b>Baseline Concept</b>				
The floodway bridge current baseline concept includes two separate bridges, each carrying two lanes of traffic in each main lane direction.				
<b>Recommendation Concept</b>				
The recommended concept is to make the floodway bridge one 4-lane bridge instead of two 2-lane bridges. The bridge is 80 feet wide with two SSTR rails, one 10-foot shoulder, two 12-foot lane, one 4-foot shoulder, one 2-foot SSCB barrier, one 4-foot shoulder, two 12-foot lane, and one 10-foot shoulder.				
<b>Advantages</b>		<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>• Reduced cost</li> <li>• Improved constructibility (both initial and long term)</li> </ul>		<ul style="list-style-type: none"> <li>• Wider approach</li> <li>• Special transitions from roadway to bridge</li> </ul>		
<b>Cost Summary</b>		<b>Cost</b>		
Original Concept				
Recommendation Concept				
Savings		\$330,910		
<b>FHWA Function Benefit</b>				
<b>Safety</b>	<b>Operations</b>	<b>Environment</b>	<b>Construction</b>	<b>Other</b>
	✓	✓		✓

**VE RECOMMENDATION NO. 6:  
SINGLE 4-LANE FLOODWAY BRIDGE**

**IDEA NO.  
11**

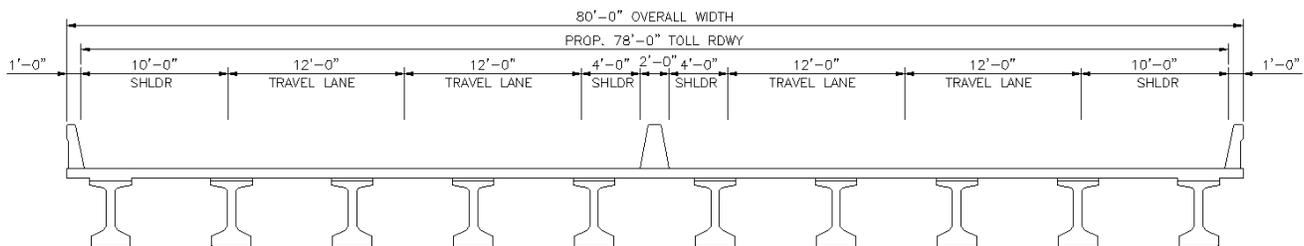
**Discussion/Graphics/Assumptions/Estimates**

The floodway bridge current baseline concept includes two separate bridges, each carrying two lanes of traffic in each main lane direction. Each bridge is 40 feet wide with two SSTR rails, one 10-foot shoulder, two 12-foot lanes, and one 4-foot shoulder. The bridges begin at Sta 831+87 and end at Sta 879+17; each bridge total length is 4,730 feet.



**Figure 1: Current Baseline Section**

The recommended concept is to make the floodway bridge one 4-lane bridge instead of two 2-lane bridges. The bridge is 80 feet wide with two SSTR rails, one 10-foot shoulder, two 12-foot lane, one 4-foot shoulder, one 2-foot SSCB barrier, one 4-foot shoulder, two 12-foot lane, and one 10-foot shoulder.



**Figure 2: Recommended Section**

**VE RECOMMENDATION NO. 6:  
SINGLE 4-LANE FLOODWAY BRIDGE**

**IDEA NO.  
11**

Making the two bridges into one bridge provides some savings in construction cost, simplifies construction, and shortens construction time.

The potential of reduced initial cost is greater than any reduction in performance.

If two bridges are built as per the baseline concept:

1. There will be two mobilizations to build the slabs versus one mobilization to build one bridge.
2. There will be additional time required to set the overhang brackets and place forms versus a quick setting of prestressed concrete panels between girders.
3. There will be two bridge rails used versus a single traffic barrier down the middle.
4. There will be a lesser efficiency in substructures' column/foundation in two bridges as compared to one bridge.

From a pure construction cost standpoint, one would expect to save about \$60.00 per linear foot of bridge in one bridge construction. However, the main advantages are construction simplification and reduction in construction time that are not quantified here.

**Cost Estimate**

**Original Concept (Current Baseline Concept)**

Rail Cost (2~SSTR rail for 4,730 feet):

Original concept cost estimate.

**Recommended Concept**

Rail Cost (1~SSCB barrier for 4,730 feet):

Total cost saving = 4,730 ft \* \$60.00 / ft = \$283,800

10% contingency = \$283,800 \* 0.1 = \$28,380

6% mobilization = (\$283,800 + \$28,380) \* 0.06 = \$18,730

Total cost = \$283,800 + \$28,380 + \$18,730 = \$330,910

<b>VE RECOMMENDATION NO. 6: SINGLE 4-LANE FLOODWAY BRIDGE</b>		<b>IDEA NO. 11</b>		
<b>PERFORMANCE MEASURES</b>		<i>Performance</i>	<i>Original</i>	<i>Alternative</i>
<b>Attributes and Rating Rationale for Proposal</b>				
<b>Operational Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	19	
		<i>Contribution</i>	95	95
<b>Revenue Impacts</b> No Change		<i>Rating</i>	5	5
		<i>Weight</i>	21	
		<i>Contribution</i>	105	105
<b>Maintainability</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	12	
		<i>Contribution</i>	60	60
<b>Construction Impacts</b> Simplified construction		<i>Rating</i>	5	6
		<i>Weight</i>	5	
		<i>Contribution</i>	25	30
<b>Environmental Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	19	
		<i>Contribution</i>	95	95
<b>Project Schedule</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	24	
		<i>Contribution</i>	120	120
		<b>Total Performance</b>	500	505
		<b>Net Change in Performance</b>	1%	

<b>VE RECOMMENDATION NO. 7: SHORTER BRIDGE SPANS</b>		<b>IDEA NO. 14</b>		
<b>Baseline Concept</b>				
For the SH 365/Trade Corridor Connector, the typical overpass bridge structures that SH 365 goes over the existing local streets are designed with a typical three span bridge.				
<b>Recommendation Concept</b>				
Shorten the outside spans by using MSE walls in front of the abutment caps.				
<b>Advantages</b>		<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>• Shorter bridge spans for the outside spans.</li> <li>• Reduced initial cost</li> </ul>		<ul style="list-style-type: none"> <li>• Slight inconvenience to the turnaround traffic.</li> </ul>		
<b>Cost Summary</b>		<b>Cost</b>		
Original Concept		\$7,387,776		
Recommendation Concept		\$6,075,886		
Savings		\$1,311,890		
<b>FHWA Function Benefit</b>				
<b>Safety</b>	<b>Operations</b>	<b>Environment</b>	<b>Construction</b>	<b>Other</b>
	✓	✓		✓

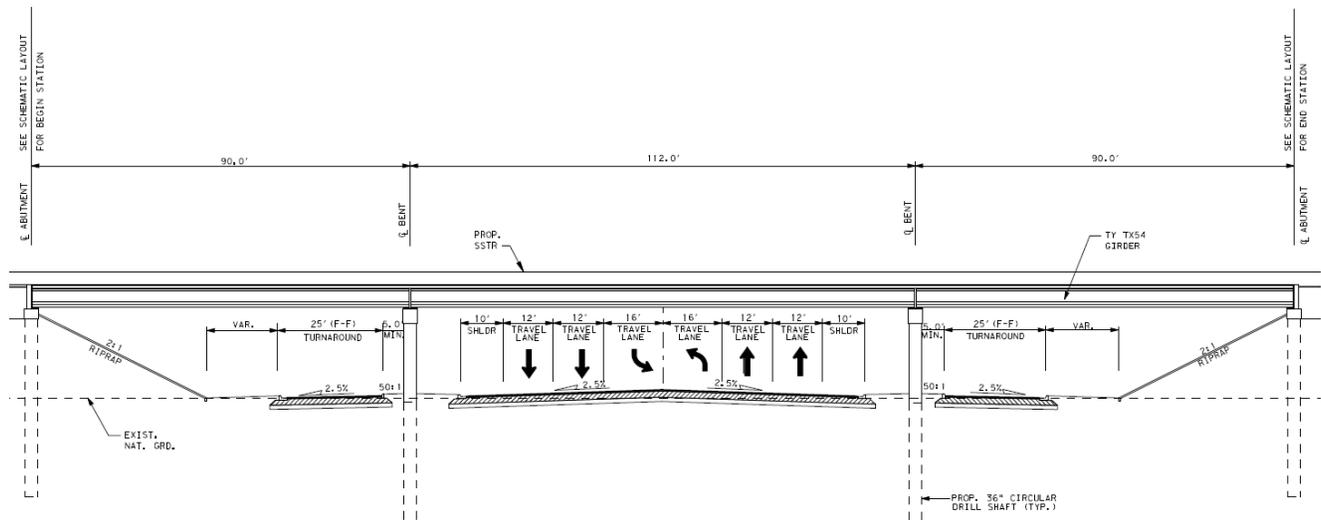
**VE RECOMMENDATION NO. 7:  
SHORTER BRIDGE SPANS**

**IDEA NO.  
14**

**Discussion/Graphics/Assumptions/Estimates**

For the SH 365, the typical SH 365 overpass bridge structures that spanning the existing local streets are designed with a typical three span bridge. The nominal spans are 90 feet, 112 feet and 90 feet; for a total bridge length of 292 feet without considering any skews. At each overpass, there are two separate bridges, each carrying two lanes of traffic in each main lane direction. Each bridge has a width of 40 feet. The outside spans are for turnaround and the center span is for the local street traffic.

This recommendation suggests that we shortening the span length of the outside spans and provide MSE wall to retain the embankment. We apply the changes to overpass at FM 396, FM 494, SP 115 (23<sup>rd</sup> Street), SH 336 (10<sup>th</sup> Street), US 281, FM 2061 (Jackson Road), I Road, and FM 3072 (Dicker Road); that will be a total of 8 crossings.



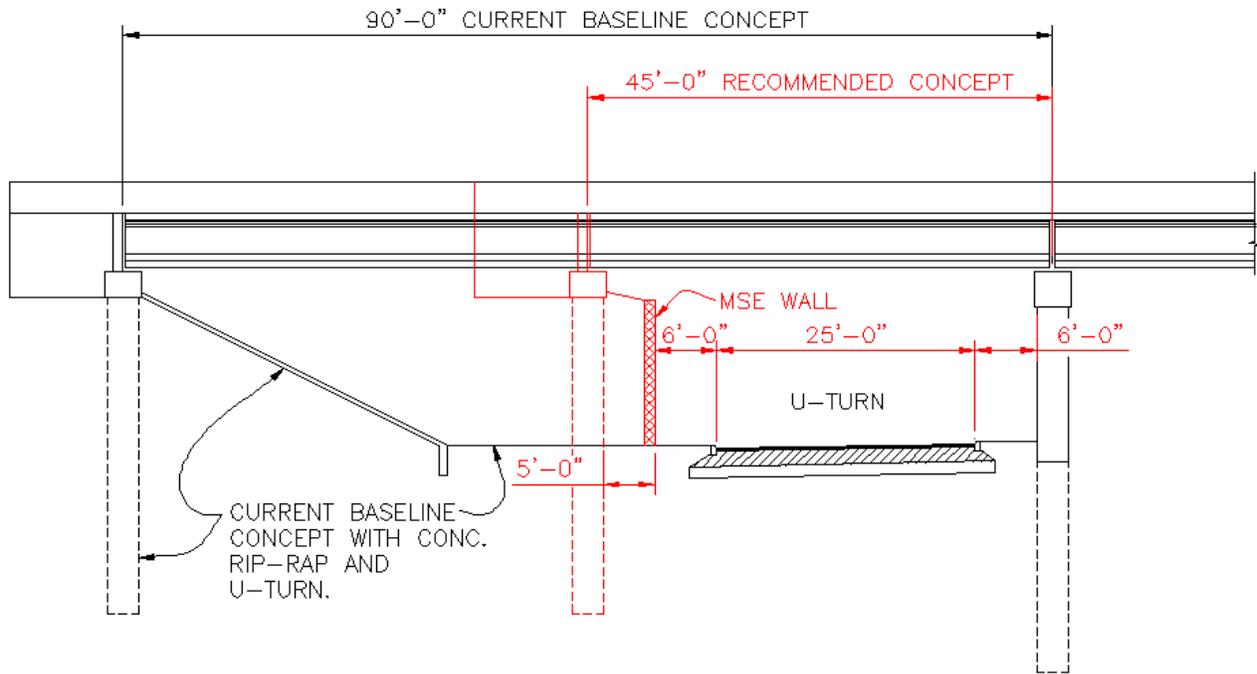
TYPICAL ULTIMATE GRADE SEPARATION  
STRUCTURE DETAILS AT OVERPASS

**Figure 1: Current Baseline Section**

The spans are 90 feet, 112 feet, and 90 feet.

See Figure 2 for proposed outside span length and MSE wall locations. The outside spans can be reduced from 90 feet to 45 feet.

<b>VE RECOMMENDATION NO. 7: SHORTER BRIDGE SPANS</b>	<b>IDEA NO.</b> 14
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**Figure 2: Recommended Section**

In Figure 2, the black areas drawn are the current baseline concept. The red areas are the recommended concept. Figure 2 shows one outside span only.

**Cost Estimate**

Unit cost is based on the original concept fee estimate.

**Original Concept (Current Baseline Concept)**

**Bridge Cost:**

Bridge deck area = 90 feet \* 40 \* 2 = 7200 sq ft.

Cost = \$55.00 / sq ft

Total cost per U-turn= 7200 sq ft \* \$55.00 / sq. ft = \$396,000

Total structural cost for 8 overpass with 2 outside spans = \$396,000 \* 8 \* 2 = \$6,336,000

10% contingency = \$6,336,000\* 0.1 = \$633,600

6% mobilization = (\$6,336,000+\$633,600) \* .06 = \$418,176

Total cost =\$6,336,000+ \$633,600+\$418,176= \$7,387,776

<b>VE RECOMMENDATION NO. 7: SHORTER BRIDGE SPANS</b>	<b>IDEA NO. 14</b>
<p><b>Recommended Concept</b></p> <p><u>Bridge Cost:</u></p> <p>Bridge deck area = 45 feet * 40 * 2 = 3600 sq ft.</p> <p>Cost = \$55.00 / sq ft</p> <p>Total bridge cost per U-turn= 3600 sq ft * \$55.00 / sq. ft = \$198,000</p> <p>Total bridge structural cost for 8 overpass with 2 outside spans = \$198,000* 8 * 2 = \$3,168,000</p> <p><u>MSE Wall Cost:</u></p> <p>Wall area per side = (½ * 72ft * 24ft)*2 + 16ft * 120ft = 3648 sq ft.</p> <p>Cost = \$35.00 / sq ft</p> <p>Total MSE wall cost per U-turn= 3648 sq ft * \$35.00 / sq. ft = \$127,680</p> <p>Total MSE wall cost for 8 overpass with 2 outside spans = \$127,680 * 8 * 2 = \$2,042,880</p> <p>Total basic cost = \$3,168,000 + \$2,042,880 = \$5,210,880</p> <p>10% contingency = \$5,210,880 * 0.1 = \$521,088</p> <p>6% mobilization = (\$5,210,880 + \$521,088 ) * .06 = \$343,918</p> <p>Total cost = \$5,210,880 + \$521,088 + \$343,918 = \$6,075,886</p>	

<b>VE RECOMMENDATION NO. 7: SHORTER BRIDGE SPANS</b>		<b>IDEA NO. 14</b>		
<b>PERFORMANCE MEASURES</b>				
<b>Attributes and Rating Rationale for Proposal</b>		<i>Performance</i>	<i>Original</i>	<i>Alternative</i>
<b>Operational Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	19	
		<i>Contribution</i>	95	95
<b>Revenue Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	21	
		<i>Contribution</i>	105	105
<b>Maintainability</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	12	
		<i>Contribution</i>	60	60
<b>Construction Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	5	
		<i>Contribution</i>	25	25
<b>Environmental Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	19	
		<i>Contribution</i>	95	95
<b>Project Schedule</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	24	
		<i>Contribution</i>	120	120
<b>Total Performance</b>			500	500
<b>Net Change in Performance</b>				<b>0%</b>



<b>VE RECOMMENDATION NO. 8: SHARY ROAD – DEFER WEST SIDE RAMPS</b>		<b>IDEA NO. 16</b>		
<b>Baseline Concept</b>				
The current baseline concept shows a westbound entrance ramp located on the west side of the FM 494 (Shary Road) intersection, and an eastbound exit ramp located on the west side of the FM 494 (Shary Road) intersection.				
<b>Recommendation Concept</b>				
Remove the west side ramps at FM 494 (Shary Road) (defer to phase 2).				
<b>Advantages</b>		<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>Reduced capital and maintenance cost to Phase 1 project</li> </ul>		<ul style="list-style-type: none"> <li>May not be acceptable to RMA</li> </ul>		
<b>Cost Summary</b>		<b>Cost</b>		
Original Concept				
Recommendation Concept		<i>Cost Deferred</i>		
Savings		\$203, 654		
<b>FHWA Function Benefit</b>				
<b>Safety</b>	<b>Operations</b>	<b>Environment</b>	<b>Construction</b>	<b>Other</b>
	✓	✓		✓

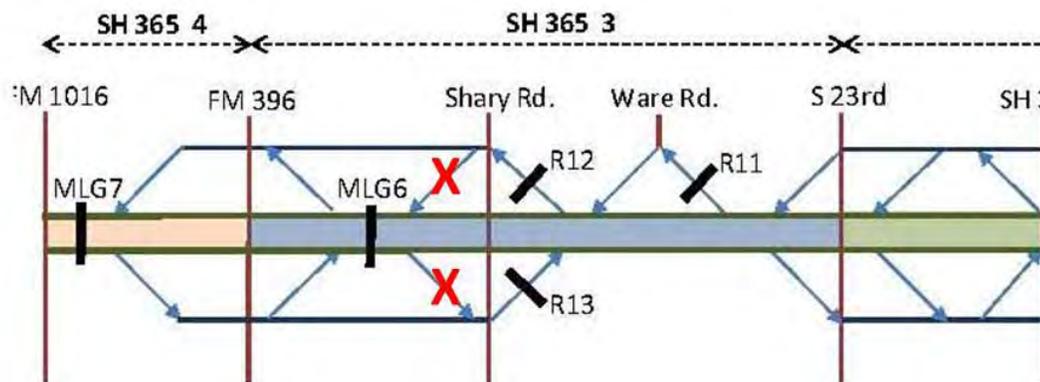
**VE RECOMMENDATION NO. 8:  
SHARY ROAD – DEFER WEST SIDE RAMPS**

IDEA NO.  
16

**Discussion/Graphics/Assumptions/Estimates**

The current baseline concept shows a westbound entrance ramp located on the west side of the FM 494 (Shary Road) intersection, and an eastbound exit ramp located on the west side of the Shary Road intersection. The intent of the Shary road ramp pair (on the west side) is to provide access to and from the future phase 2 project. Initially, the intent of the project was to build phase 1 and phase 2 of the project at the same time; thereby, warranting this set of ramps. However, the baseline concept is to build phase 1 first, followed by phase 2 at a later date. The stakeholders may be opposed to the elimination of the ramp pair west of Shary road, since it eliminates the SH 365 westbound movement from FM 494 (Shary Road).

Under Phase 1, the ramp pair provides access between FM 396 and FM 494 (Shary Road), which is approximately a distance of 1.6 miles. Additionally, the baseline concept provides a frontage road that is a free alternative between the two cross streets. Toll road users pay a toll for travel time savings; this ramp pair movement would not provide sufficient travel time savings to the user. With the competing frontage roads in this vicinity, it is very likely the ramp volumes will be very low, and the additional revenue generated will be lower than the expected capital and maintenance cost of the ramp pair. Therefore, it is recommended that the ramp pair be deferred to Phase 2. The reduction of capital and maintenance cost offsets the minor reduction in revenue. The illustration below depicts the location of the ramp pair west of the FM 494 (Shary Road) intersection as shown in the baseline concept.



**VE RECOMMENDATION NO. 8:  
SHARY ROAD – DEFER WEST SIDE RAMPS**

**IDEA NO.  
16**

Delaying the ramp pair to Phase 2 will result in a reduction of capital and maintenance costs, which will offset the expected revenue. The capital cost breakdown is shown below.

#16 Remove West Side Ramps of Shary Rd (defer to stage 2)											
Location	AC/PT(D)				LIME TREATMENT		LIME			Contingencies (10%)	Mobilization (6%)
	MC-30	AC-10	AGREGATE	FLEX	SUBGRADE	FLEXBASE (2%)	SUBGRADE	FLEXBASE			
Unit Cost (\$)	TONS	GAL	GAL	CY	SY	SY	TON	TON	CY		
Ramps W. of Shary Rd.	459.68	1075.27	1612.90	44.80	6048.39	6272.40	136.09	93.15	4032.26	\$ 17,556.35	\$ 10,533.81
<b>SubTotal</b>	<b>\$ 34,475.82</b>	<b>\$ 4,838.71</b>	<b>\$ 5,000.00</b>	<b>\$ 4,032.26</b>	<b>\$ 24,193.56</b>	<b>\$ 8,154.13</b>	<b>\$ 20,413.32</b>	<b>\$ 13,971.78</b>	<b>\$ 60,483.90</b>		
<b>TOTAL SAVINGS</b>	<b>\$ 203,653.64</b>										

<b>VE RECOMMENDATION NO. 8: SHARY ROAD – DEFER WEST SIDE RAMPS</b>		<b>IDEA NO. 16</b>		
<b>PERFORMANCE MEASURES</b>		<i>Performance</i>	<i>Original</i>	<i>Alternative</i>
<b>Attributes and Rating Rationale for Proposal</b>				
<b>Operational Impacts</b> Eliminates ingress and egress	<i>Rating</i>	5	5	
	<i>Weight</i>	19		
	<i>Contribution</i>	95	95	
<b>Revenue Impacts</b> Lose ability for users to enter a toll facility	<i>Rating</i>	5	5	
	<i>Weight</i>	21		
	<i>Contribution</i>	105	105	
<b>Maintainability</b> Eliminate the ramps	<i>Rating</i>	5	6	
	<i>Weight</i>	12		
	<i>Contribution</i>	60	72	
<b>Construction Impacts</b> No change	<i>Rating</i>	5	5	
	<i>Weight</i>	5		
	<i>Contribution</i>	25	25	
<b>Environmental Impacts</b> No change	<i>Rating</i>	5	5	
	<i>Weight</i>	19		
	<i>Contribution</i>	95	95	
<b>Project Schedule</b> No change	<i>Rating</i>	5	5	
	<i>Weight</i>	24		
	<i>Contribution</i>	120	120	
<b>Total Performance</b>		500	512	
<b>Net Change in Performance</b>		<b>2%</b>		

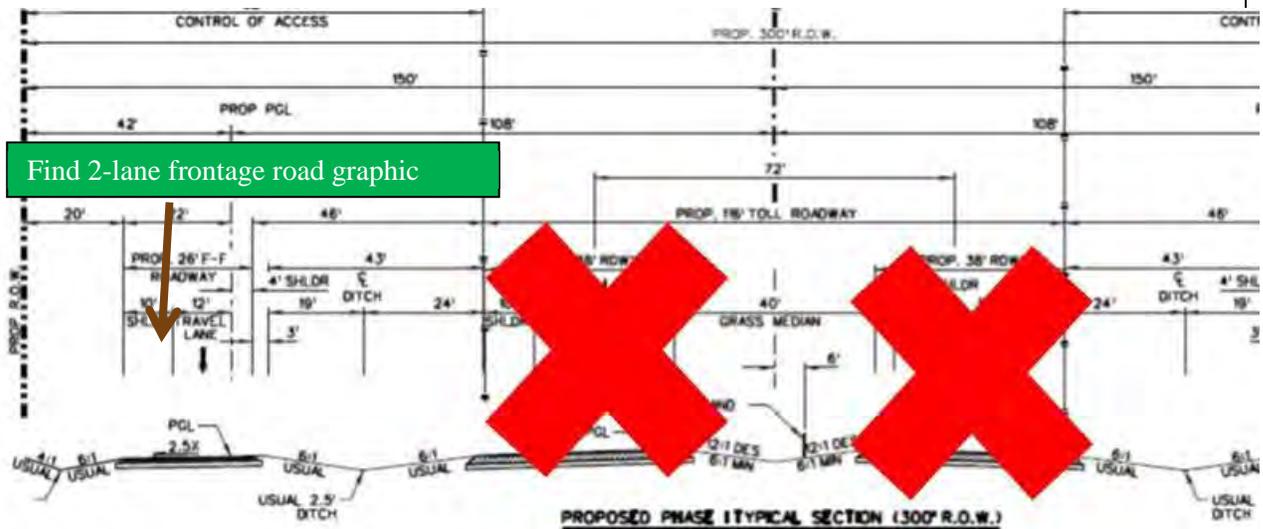
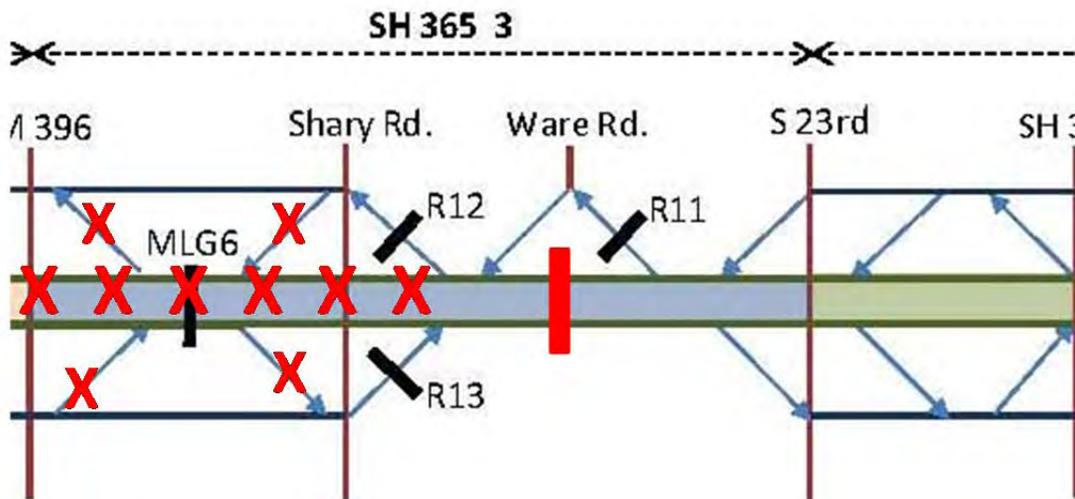
<b>VE RECOMMENDATION NO. 9: SHARY ROAD WEST - FRONTAGE ROADS ONLY</b>		<b>IDEA NO. 18</b>		
<b>Baseline Concept</b>				
The baseline concept consists of 4-lane divided main lanes and 2-lane frontage roads in each direction from FM 494 (Shary Road) west to FM 396. Within these limits there are two sets of ramps.				
<b>Recommendation Concept</b>				
Only build frontage roads from FM 494 (Shary Road) west to FM 396 and defer the main lanes and associated ramp pairs to Phase 2.				
<b>Advantages</b>		<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>Reduces initial capital and maintenance cost</li> </ul>		<ul style="list-style-type: none"> <li>Might not be acceptable to the RMA</li> <li>Local opposition</li> <li>Will require traffic and revenue numbers to be re-run</li> </ul>		
<b>Cost Summary</b>		<b>Cost</b>		
Original Concept				
Recommendation Concept		<i>Cost Deferred</i>		
Savings		\$7,218,183		
<b>FHWA Function Benefit</b>				
<b>Safety</b>	<b>Operations</b>	<b>Environment</b>	<b>Construction</b>	<b>Other</b>
	✓	✓		✓

**VE RECOMMENDATION NO. 9:  
SHARY ROAD WEST – FRONTAGE ROADS ONLY**

IDEA NO.  
18

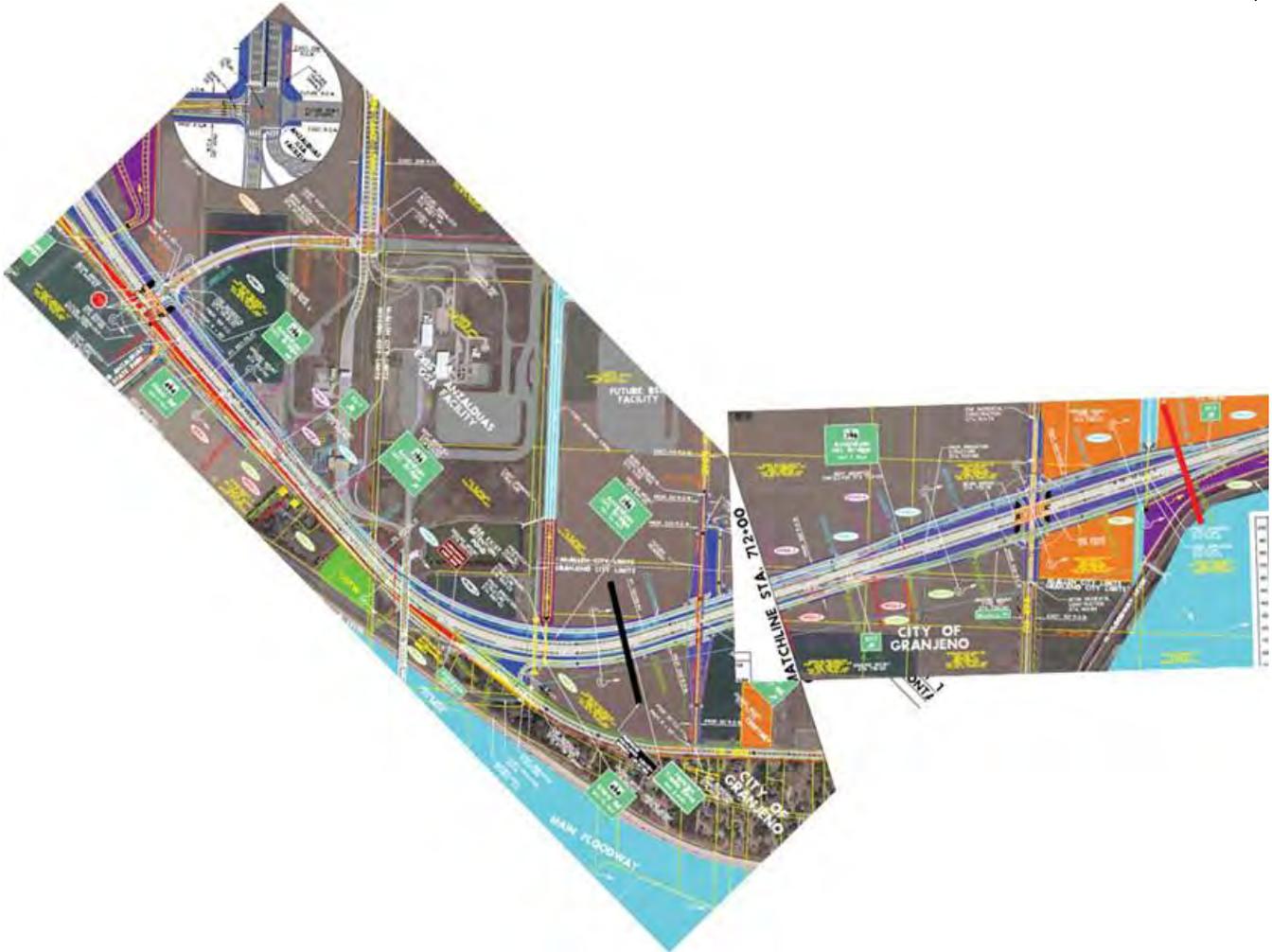
**Discussion/Graphics/Assumptions/Estimates**

The baseline concept consists of 4-lane divided main lanes and 2-lane frontage roads in each direction from FM 494 (Shary Road) west to FM 396. Additionally, within these limits there are two sets of ramps. The distance between Shary Road and FM 396 is 1.6 miles. The recommended concept is to only build frontage roads from FM 494 (Shary Road) west to FM 396 and defer the main lanes and associated ramp pairs to Phase 2. The main lane gantry located in this section will be relocated east of Shary Road as part of Phase 1. See illustration below.



**VE RECOMMENDATION NO. 9:  
SHARY ROAD WEST - FRONTAGE ROADS ONLY**

**IDEA NO.  
18**



The recommended concept results in a significant cost savings, as it results in a cost reduction associated with the removal of the following:

- Main lanes (two in each direction) from Shary Road to FM 396
- Ramp pairs within these two intersections
- Embankment
- Bridge overpass at FM 494

The recommended concept has minimal operational impacts (if any) as the frontage roads provide continuous nontolled access between Shary Road and FM 396. The main lanes and ramp pairs will be deferred until Phase 2 or until traffic volumes warrant it. See below for cost savings.

**VE RECOMMENDATION NO. 9:  
SHARY ROAD WEST – FRONTAGE ROADS ONLY**

**IDEA NO.  
18**

#18 Only build frontage roads from FM 494 (Shary Rd) to FM 396 (Bryan Rd)

Location	ACPT(TY D)		ACPT(TY B)		MC-30		AC-10		AGREGATE		LIME TREATMENT		LIME		FLEXBASE	SUBGRADE	FLEXBASE	SUBGRADE	FLEXBASE	GEOGRID	Contingencies (10%)	Mobilization (6%)	
	TONS	TONS	TONS	TONS	GAL	GAL	CY	CY	SY	SY	TON	TON	CY	SY									
Unit Cost (\$)	75	70	4.5	3.1	90	4	1.3	150	150	15	2.3												
Ramps W. of Shary Rd.	459.68	n/a	1075.27	1612.90	44.80	6048.39	6272.40	136.09	93.15	4032.26	N/A												
Ramps W. of FM 396	604.75	n/a	1414.61	2121.92	58.94	7957.20	8251.91	179.04	122.54	5304.80	N/A												
Mainlanes (EB)	3784.80	7569.60	8853.33	n/a	n/a	47033.33	47955.56	1058.25	712.14	31355.56	47955.56									\$	446,382.13	\$	267,829.28
Mainlanes (WB)	3784.80	7569.60	8853.33	n/a	n/a	47033.33	47955.56	1058.25	712.14	31355.56	47955.56												
Turnarounds (East side)	207.39	N/A	485.11	727.67	20.21	2877.22	3027.78	64.74	44.96	1918.15	N/A												
Turnarounds (West side)	207.39	N/A	485.11	727.67	20.21	2877.22	3027.78	64.74	44.96	1918.15	N/A												
Bid Item Savings	\$ 678,659.61	\$ 1,059,744.00	\$ 95,250.47	\$ 16,089.49	\$ 12,975.39	\$ 455,306.80	\$ 143,284.15	\$ 384,165.12	\$ 259,483.66	\$ 1,138,267.01	\$ 220,595.56												
<b>Subtotal Savings</b>	<b>\$ 5,178,032.67</b>																						

Location	Length (ft)	Width (ft)	Area (sf)	Bridge Cost/SF	BRIDGE COST	Contingencies (10%)	Mobilization (6%)
O/P @ FM 494 (Shary Rd)	292	40	11680	55	\$ 642,400.00	\$ 64,240.00	\$ 38,544.00
<b>Subtotal Savings</b>					<b>\$ 745,184.00</b>		

Embankment									
BEG STA.	END STA.	LENGTH (FT)	WIDTH (FT)	DEPTH (FT)	DEPTH W/DEDUCT 2.5'	3:1 SIDE SLOPE (FT)	VOLUME (CY)	UNIT COST	
72000	73219	1219	124	25.32	22.82	68.46	134410.4254	4.5	
73511	74900	1389	124	25.34	22.84	68.52	153359.6398		
<b>Subtotal Savings</b>								<b>\$ 1,294,966.19</b>	

<b>TOTAL SAVINGS</b>	<b>\$ 7,218,182.86</b>
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<b>VE RECOMMENDATION NO. 9: SHARY ROAD WEST - FRONTAGE ROADS ONLY</b>		<b>IDEA NO. 18</b>		
<b>PERFORMANCE MEASURES</b>				
<b>Attributes and Rating Rationale for Proposal</b>		<i>Performance</i>	<i>Original</i>	<i>Alternative</i>
<b>Operational Impacts</b> Out of direction travel		<i>Rating</i>	5	4
		<i>Weight</i>	19	
		<i>Contribution</i>	95	76
<b>Revenue Impacts</b> Not tolling the frontage road		<i>Rating</i>	5	4
		<i>Weight</i>	21	
		<i>Contribution</i>	105	84
<b>Maintainability</b> No main lines or ramps Lost bridge to maintain		<i>Rating</i>	5	7
		<i>Weight</i>	12	
		<i>Contribution</i>	60	84
<b>Construction Impacts</b> Easier construction because it's only frontage roads		<i>Rating</i>	5	6
		<i>Weight</i>	5	
		<i>Contribution</i>	25	30
<b>Environmental Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	19	
		<i>Contribution</i>	95	95
<b>Project Schedule</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	24	
		<i>Contribution</i>	120	120
<b>Total Performance</b>			500	489
<b>Net Change in Performance</b>				-2%



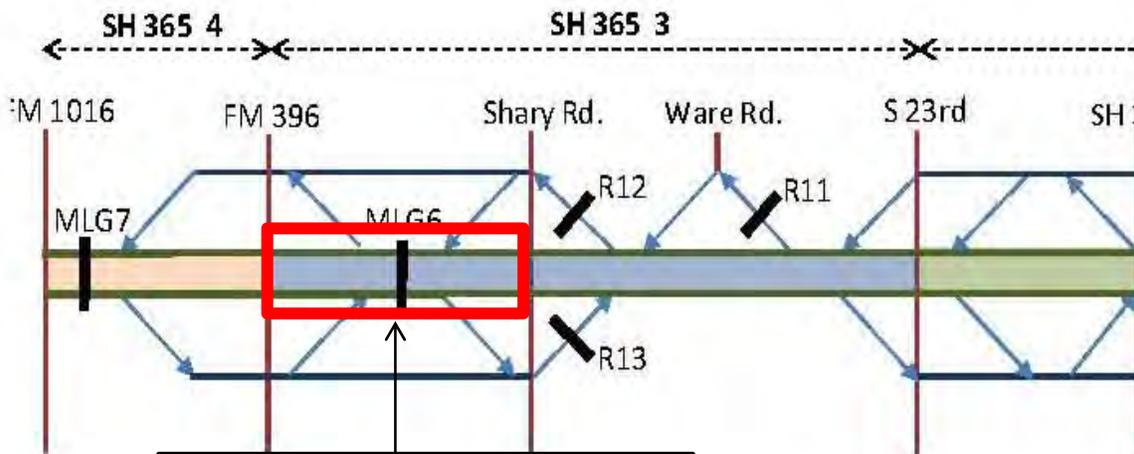
<b>VE RECOMMENDATION NO. 10: SHARY ROAD - TWO-LANE MAIN LINE</b>		<b>IDEA NO. 19</b>		
<b>Baseline Concept</b>				
The baseline concept consists of 4-lane divided main lanes and 2-lane frontage roads in each direction from FM 494 (Shary Road) west to FM 396. Within these limits there are two sets of ramps.				
<b>Recommendation Concept</b>				
Only build 2-lane divided main lanes, as opposed to 4-lane divided main lanes from Shary Road west to FM 396. Defer additional two main lanes to Phase 2 or until traffic volumes warrant them.				
<b>Advantages</b>		<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>Reduces initial cost</li> </ul>		<ul style="list-style-type: none"> <li>RMA board resolution to be 4 lanes</li> </ul>		
<b>Cost Summary</b>		<b>Cost</b>		
Original Concept		<i>Cost Deferred</i>		
Recommendation Concept				
Savings		\$2,618,228		
<b>FHWA Function Benefit</b>				
<b>Safety</b>	<b>Operations</b>	<b>Environment</b>	<b>Construction</b>	<b>Other</b>
	✓	✓		✓

**VE RECOMMENDATION NO. 10:  
SHARY ROAD – TWO-LANE MAIN LINE**

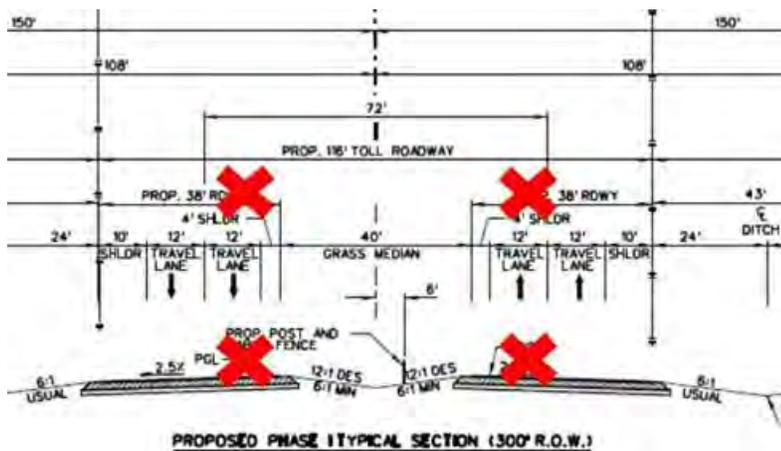
IDEA NO.  
19

**Discussion/Graphics/Assumptions/Estimates**

The baseline concept consists of 4-lane divided main lanes and 2-lane frontage roads in each direction from FM 494 (Shary Road) west to FM 396. Additionally, within these limits there are two sets of ramps. The distance between Shary Road and FM 396 is 1.6 miles. The recommended concept is to only build 2-lane divided main lanes, as opposed to 4-lane divided main lanes from Shary Road west to FM 396. It is assumed that the outside main lanes would be built first in Phase 1, followed by inside main lanes in Phase 2. Defer additional two main lanes to Phase 2 or until traffic volumes warrant them. See illustration below



One lane in each direction  
as opposed to two lanes in  
each direction



**VE RECOMMENDATION NO. 10:  
SHARY ROAD - TWO-LANE MAIN LINE**

**IDEA NO.**  
19



The recommended concept results in a cost savings, as it results in a cost reduction associated with the construction and maintenance of two main lanes (one in each direction) as opposed to four main lanes (two in each direction), as shown in the baseline concept, from Shary Road to FM 396. The recommended concept has minimal impacts to operations as there is not sufficient demand at this time to warrant four main lanes in this section. However, it does not comply with the RMA board resolution of four main lanes. The additional two main lanes will be deferred until Phase 2 or until traffic volumes warrant them. Below is the cost savings realized by this recommended concept.

**VE RECOMMENDATION NO. 10:  
SHARY ROAD – TWO-LANE MAIN LINE**

**IDEA NO.  
19**

#19 Only build 2 lane mainlanes from FM 494 (Shary Rd) to FM 396 (Bryan Rd)

Location	ACP(TY D)	ACP(TY B)	MC-30	AC-10	AGREGATE	LIME TREATMENT		LIME		FLEXBASE	GEOGRID	Contingencies (10%)	Mobilization (6%)
	TONS	TONS	GAL	GAL	CY	FLEX	SUBGRADE	FLEXBASE	SUBGRADE	CY	SY		
Unit Cost (\$)	75	70	4.5	3.1	90	4	1.3	150	150	15	2.3		
Mainlanes (EB) (1 travel in w/shldr)	2050.10	4100.20	4795.56	7193.33	199.81	26744.44	27666.67	601.75	410.85	17829.63	27666.67	\$ 225,709.28	\$ 135,425.57
Mainlanes (WB) (1 travel in w/shldr)	2050.10	4100.20	4795.56	7193.33	199.81	26744.44	27666.67	601.75	410.85	17829.63	27666.67		
Bid Item Savings	\$ 307,515.00	\$ 574,028.00	\$ 43,160.00	\$ 44,598.67	\$ 35,966.67	\$ 213,955.56	\$ 71,933.33	\$ 180,525.00	\$ 123,255.00	\$ 534,888.89	\$ 127,266.67		
<b>TOTAL SAVINGS</b>	<b>\$ 2,618,227.62</b>												

<b>VE RECOMMENDATION NO. 10: SHARY ROAD - TWO-LANE MAIN LINE</b>		<b>IDEA NO. 19</b>		
<b>PERFORMANCE MEASURES</b>				
<b>Attributes and Rating Rationale for Proposal</b>		<i>Performance</i>	<i>Original</i>	<i>Alternative</i>
<b>Operational Impacts</b> May reduce traffic flow		<i>Rating</i>	5	4
		<i>Weight</i>	19	
		<i>Contribution</i>	95	76
<b>Revenue Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	21	
		<i>Contribution</i>	105	105
<b>Maintainability</b> Reduced roadway to maintain		<i>Rating</i>	5	6
		<i>Weight</i>	12	
		<i>Contribution</i>	60	72
<b>Construction Impacts</b> Less roadway to construct		<i>Rating</i>	5	6
		<i>Weight</i>	5	
		<i>Contribution</i>	25	30
<b>Environmental Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	19	
		<i>Contribution</i>	95	95
<b>Project Schedule</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	24	
		<i>Contribution</i>	120	120
<b>Total Performance</b>			500	498
<b>Net Change in Performance</b>				<b>0%</b>



<b>VE RECOMMENDATION NO. 11: 23<sup>RD</sup> STREET – DEFER WEST SIDE RAMPS</b>		<b>IDEA NO. 17</b>		
<b>Baseline Concept</b>				
The current baseline concept shows a westbound entrance ramp located on the west side of the 23 <sup>rd</sup> Street intersection, and an eastbound exit ramp located on the west side of the 23 <sup>rd</sup> Street intersection.				
<b>Recommendation Concept</b>				
Remove west side ramps on 23 <sup>rd</sup> Street from Phase 1 project (defer to Phase 2).				
<b>Advantages</b>		<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>• Reduces cost</li> <li>• Reduces bridge structure width</li> </ul>		<ul style="list-style-type: none"> <li>• Might not be acceptable to the RMA</li> <li>• Traffic from 23<sup>rd</sup> street wanting to access WB SH 365 will have to access via SH 336.</li> </ul>		
<b>Cost Summary</b>		<b>Cost</b>		
Original Concept				
Recommendation Concept		<i>Cost Deferred</i>		
Savings		\$6,054,620		
<b>FHWA Function Benefit</b>				
<b>Safety</b>	<b>Operations</b>	<b>Environment</b>	<b>Construction</b>	<b>Other</b>
	✓	✓		✓

**VE RECOMMENDATION NO. 11:  
23<sup>RD</sup> STREET – DEFER WEST SIDE RAMPS**

**IDEA NO.**  
17

**Discussion/Graphics/Assumptions/Estimates**

This recommendation would significantly reduce the cost for the minor degradation of the traffic operations.

The current baseline concept shows a westbound entrance ramp located on the west side of the 23<sup>rd</sup> Street intersection, and an eastbound exit ramp located on the west side of the 23<sup>rd</sup> Street intersection. The 23<sup>rd</sup> Street ramp pair (on the west side) is redundant as there is a duplicate ramp pair providing the same movement, on the east side of 23<sup>rd</sup>. Given that the distance between the ramp pairs is 0.5 miles, the ramp pair located east of 23<sup>rd</sup> Street will satisfy the movements provided by the ramp pair on the east side. As a result, the ramp pair can be deferred until Phase 2, or until traffic is warranted. The stakeholders may be opposed to the elimination of the ramp pair as it eliminates the westbound movement from 23<sup>rd</sup> Street to SH 365. The illustration below depicts the location of the ramp pair west of the 23<sup>rd</sup> Street intersection as shown in the baseline concept.



Delaying the ramp pair to Phase 2 will result in a reduction of capital and maintenance costs, which will offset the expected revenue. The reduction in capital costs is significant because the ramp pair is located on a bridge structure. The capital cost breakdown is shown below.

Location	Length (ft)	Width (ft)	Area (sf)	Bridge Cost/SF	BRIDGE COST	Contingencies (10%)	Mobilization (6%)
Ramps W. of SP 115	3650	26	94900	\$ 55.00	\$ 5,219,500.00	\$ 521,950.00	\$ 313,170.00
<b>TOTAL CONCEPT COST</b>	<b>\$6,054,620.00</b>						

**VE RECOMMENDATION NO. 11:  
 23<sup>RD</sup> STREET – DEFER WEST SIDE RAMPS**
**IDEA NO.  
 17**

<b>PERFORMANCE MEASURES</b>	<i>Performance</i>	<i>Original</i>	<i>Alternative</i>
<b>Attributes and Rating Rationale for Proposal</b>			
<b>Operational Impacts</b> Eliminates ingress and egress	<i>Rating</i>	5	5
	<i>Weight</i>	19	
	<i>Contribution</i>	95	95
<b>Revenue Impacts</b> Lose ability for users to enter a toll facility	<i>Rating</i>	5	4
	<i>Weight</i>	21	
	<i>Contribution</i>	105	84
<b>Maintainability</b> Eliminate the ramps	<i>Rating</i>	5	6
	<i>Weight</i>	12	
	<i>Contribution</i>	60	72
<b>Construction Impacts</b> Eliminates the bridge ramps Won't impact 23rd Street	<i>Rating</i>	5	6
	<i>Weight</i>	5	
	<i>Contribution</i>	25	30
<b>Environmental Impacts</b> Reducing footprint in the floodway	<i>Rating</i>	5	6
	<i>Weight</i>	19	
	<i>Contribution</i>	95	114
<b>Project Schedule</b> No change	<i>Rating</i>	5	5
	<i>Weight</i>	24	
	<i>Contribution</i>	120	120
<b>Total Performance</b>		500	515
<b>Net Change in Performance</b>		3%	



<b>VE RECOMMENDATION NO. 12: BUILD FROM THE MIDDLE</b>		<b>IDEA NO. 31</b>		
<b>Baseline Concept</b>				
Each direction carries a 4 foot inside shoulder, a 12 foot inside lane, a 12- or 14-foot outside lane, and a 10 foot outside shoulder. The two directions are separated by a 40 foot grass median.				
<b>Recommendation Concept</b>				
Eliminate the grass median and separate the two directions with a concrete traffic barrier.				
<b>Advantages</b>		<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>• Improves future constructibility</li> <li>• Increases short-term water retention/detention area</li> <li>• Could use slopes rather than walls</li> <li>• Requires less dirt</li> <li>• Reduces cost</li> <li>• No median maintenance</li> <li>• Eliminate median drainage</li> </ul>		<ul style="list-style-type: none"> <li>• Would have some throw-away ramp pavement</li> <li>• Concrete traffic barrier vs. cable barrier</li> <li>• Perception about right-of-way width</li> <li>• Would require redesign</li> </ul>		
<b>Cost Summary</b>		<b>Cost</b>		
Original Concept				
Recommendation Concept				
Savings		\$2,057,531		
<b>FHWA Function Benefit</b>				
<b>Safety</b>	<b>Operations</b>	<b>Environment</b>	<b>Construction</b>	<b>Other</b>
	✓	✓		✓



**VE RECOMMENDATION NO. 12:  
 BUILD FROM THE MIDDLE**
**IDEA NO.  
 31**

From a pure construction cost standpoint, one would expect to save about \$60 per linear foot of bridge; however, the main advantages are construction simplification and reduction in construction time that are not quantified here.

One also has to factor in that there will be additional engineering time and effort required to change the schematics as they are essentially complete at this time with the baseline concept.

The following construction estimate reflects the net change in quantities between the baseline and recommended concepts:

SCOPE ITEM	QTY	UM	UNIT PRICE	TOTAL PRICE
132 Embankment (Rdwy)	666370	CY	\$ 4.50	\$ 2,998,665
260 Lime Treated Subgrade	27060	SY	\$ 1.30	\$ 35,178
260 Lime Subgrade	405	TON	\$ 150.00	\$ 60,750
247 Flexbase	3608	CY	\$ 15.00	\$ 54,120
260 Lime Flexbase	122	TON	\$ 150.00	\$ 18,300
260 Flexbase LT	5412	SY	\$ 4.00	\$ 21,648
450 Rail (SSCB)	-64944	LF	\$ 30.00	\$ (1,948,320)
340 ACP TY B	-2777	TON	\$ 70.00	\$ (194,390)
464 RCP 18"	2300	LF	\$ 50.00	\$ 115,000
465 Inlet TY C	23	EA	\$ 4,000.00	\$ 92,000
5214 geogrid	5412	SY	\$ 2.30	\$ 12,448
5367 Cable Barrier	64944	LF	\$ 10.00	\$ 649,440
Bridge savings	8241	LF	\$ 60.00	\$ 494,460
Additional Length for Ramps	-15278	SY	\$ 41.60	\$ (635,565)
<b>Sub Total</b>				<b>\$ 1,773,734</b>
10% contingency				\$ 177,373.38
6% mobilization				\$ 106,424.03
<b>Total</b>				<b>\$ 2,057,531</b>

<b>VE RECOMMENDATION NO. 12: BUILD FROM THE MIDDLE</b>		<b>IDEA NO. 31</b>		
<b>PERFORMANCE MEASURES</b>		<i>Performance</i>	<i>Original</i>	<i>Alternative</i>
<b>Attributes and Rating Rationale for Proposal</b>				
<b>Operational Impacts</b> No change	<i>Rating</i>	5	5	
	<i>Weight</i>	19		
	<i>Contribution</i>	95	95	
<b>Revenue Impacts</b> No change	<i>Rating</i>	5	5	
	<i>Weight</i>	21		
	<i>Contribution</i>	105	105	
<b>Maintainability</b> No median maintenance required	<i>Rating</i>	5	6	
	<i>Weight</i>	12		
	<i>Contribution</i>	60	72	
<b>Construction Impacts</b> Less embankment to build Need concrete barriers	<i>Rating</i>	5	6	
	<i>Weight</i>	5		
	<i>Contribution</i>	25	30	
<b>Environmental Impacts</b> No change	<i>Rating</i>	5	5	
	<i>Weight</i>	19		
	<i>Contribution</i>	95	95	
<b>Project Schedule</b> Would require the design concept to be revisited and re-evaluated	<i>Rating</i>	5	4	
	<i>Weight</i>	24		
	<i>Contribution</i>	120	96	
<b>Total Performance</b>		500	493	
<b>Net Change in Performance</b>		<b>-1%</b>		

<b>VE RECOMMENDATION NO. 13: DEFER U-TURNS</b>		<b>IDEA NO. 35</b>		
<b>Baseline Concept</b>				
The baseline concept includes U-turn construction for all built frontage roads.				
<b>Recommendation Concept</b>				
The recommended concept defers select U-turn construction until traffic volumes warrant the construction of a U-turn rather than traffic continuing to use the adjacent arterial cross street to make the U-turns.				
<b>Advantages</b>		<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>• Reduces capital and maintenance costs</li> <li>• Traffic volumes may never warrant construction of U-turns</li> </ul>		<ul style="list-style-type: none"> <li>• Increases turning movement conflicts at cross street intersections</li> </ul>		
<b>Cost Summary</b>		<b>Cost</b>		
Original Concept				
Recommendation Concept				
Savings		\$1,435,222		
<b>FHWA Function Benefit</b>				
<b>Safety</b>	<b>Operations</b>	<b>Environment</b>	<b>Construction</b>	<b>Other</b>
	✓	✓		✓

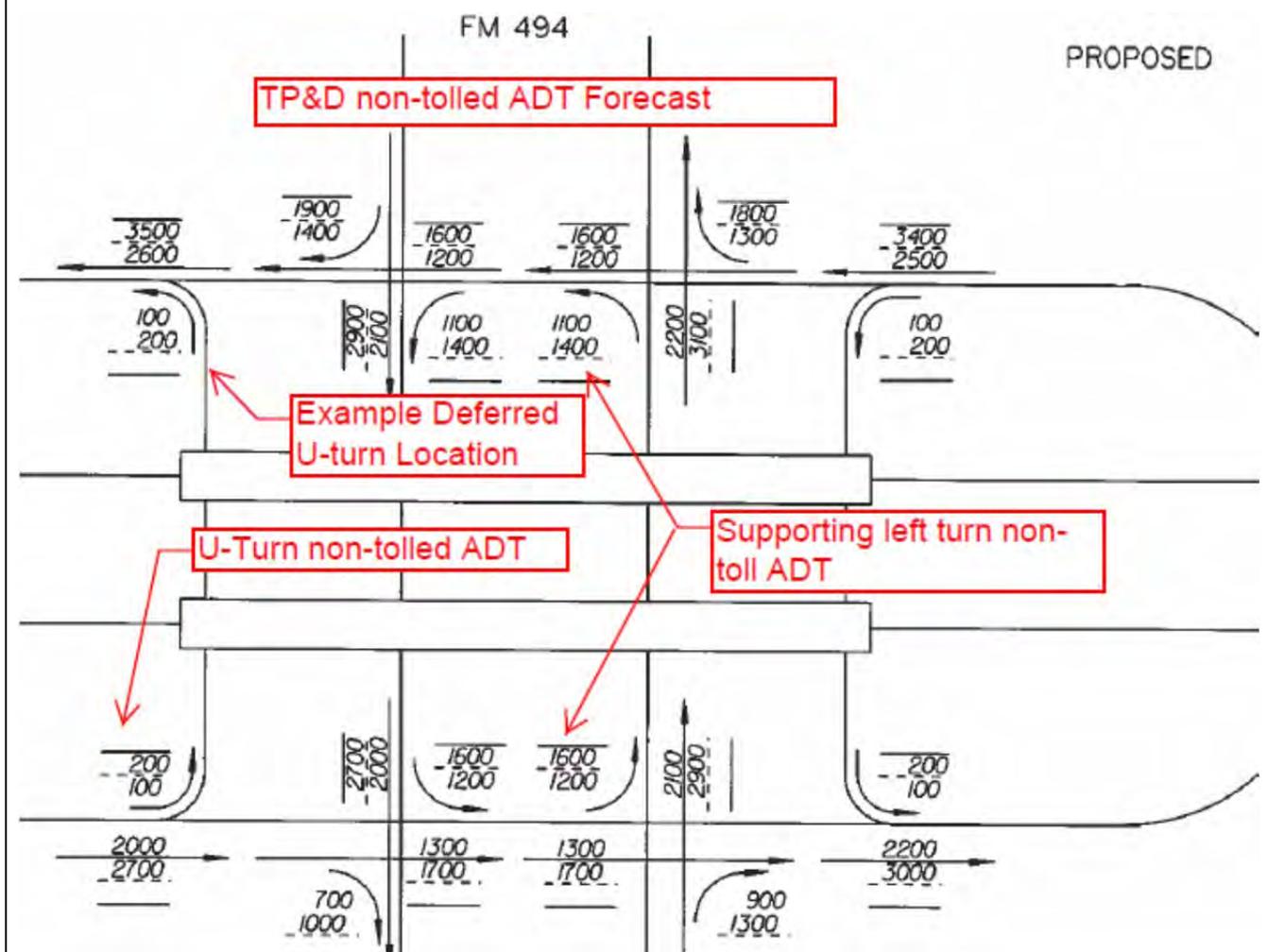
**VE RECOMMENDATION NO. 13:  
DEFER U-TURNS**

**IDEA NO.**  
35

**Discussion/Graphics/Assumptions/Estimates**

The baseline concept includes U-turn construction for all frontage roads built with SH 365, Phase 1. The practice of building U-turns is particularly necessary in fully developed corridors, but in essentially green field toll corridors or in areas with relatively low opening year traffic volumes / high level of service arterial cross streets, then the U-turn movement may be made on the adjacent arterial cross street without imposing significant travel delay.

Key U-turns, such as FM 396 (South), are warranted as they support the functionality of the adjacent interchange. In this case, the FM 396 (South) U-turn supports the access from the McAllen Foreign Trade Zone. But for the remainder of the U-turn locations, the TxDOT Transportation Planning Division (TP&D) Average Daily Traffic (ADT) U-turn movements were reviewed to determine the approximate magnitude of the U-turn design hour volumes (DHV). TP&D traffic volumes indicated that the majority of the U-turns had non-tolled demand ADTs of 100 ADT (10 DHV) in 2016 and 200 ADT (20 DHV) in 2036. A few locations had non-tolled demand ADTs of 200 ADT (20 DHV) in 2016 and 300 ADT (30 DHV) in 2036. The actual tolled demand of these U-turn locations would be lower than the reported non-tolled demand.



**VE RECOMMENDATION NO. 13:  
DEFER U-TURNS**

**IDEA NO.  
35**

Second, the ADT of the supporting left-turn movement on the arterial cross street were reviewed to determine the approximate magnitude of the U-turn DHV. TP&D traffic volumes indicated that the majority of the left turns had non-tolled demand ADTs of less than 3000 ADT (300 DHV) in 2016 and 4000 ADT (400 DHV) in 2036. The actual tolled and non-tolled demand of these locations would be lower than the reported non-tolled demand. Therefore, if the TP&D non-tolled demand of the U-turn is less than 200 ADT and the supporting left-turn movement is less than 3000 ADT, then the adjacent arterial cross street would have adequate capacity to serve the deferred U-turn movements.

**Candidate Locations for Deferred U-turn**

U-turn Sta.	U-Turn Locations	#. U-turns
732+19	FM 494 (N)	1
924+12	10th (N)	1
927+04	10th (S)	1
1014+11	Jackson (N)	1
1017+03	Jackson (S)	1
1085+30	US 281 (N)	1
1088+23	US 281 (S)	1
1155+81	I RD (N)	1
1160+51	I RD (S)	1
1190+92	Dicker (N)	1
1193+84	Dicker (S)	1
NA	Anaya (N)	1
NA	Anaya (S)	1
NA	Hi Line (N)	1
NA	Hi Line (S)	1

Note:

Deferred U-turn locations which all have less than 100 ADT in opening year

and

Support left-turn ADTs which all have less than 3000 ADT in opening year

Total	15
Savings per U-Turn	\$95,681
<b>Total Savings</b>	<b>\$1,435,222</b>



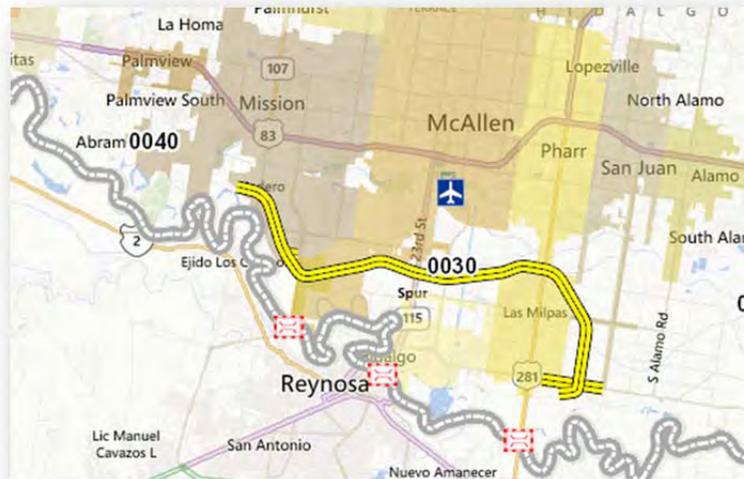
<b>VE RECOMMENDATION NO. 13: DEFER U-TURNS</b>		<b>IDEA NO. 35</b>	
<b>PERFORMANCE MEASURES</b>			
<b>Attributes and Rating Rationale for Proposal</b>		<i>Performance</i>	<i>Original</i>
			<i>Alternative</i>
<b>Operational Impacts</b>		<i>Rating</i>	<i>5</i>
In the interim, U-turns must occur on adjacent cross streets, which may result in minor operational issues with the signalized intersections		<i>Weight</i>	<b>19</b>
		<i>Contribution</i>	<b>95</b>
		<b>76</b>	
<b>Revenue Impacts</b>		<i>Rating</i>	<i>5</i>
No change		<i>Weight</i>	<b>21</b>
		<i>Contribution</i>	<b>105</b>
		<b>105</b>	
<b>Maintainability</b>		<i>Rating</i>	<i>5</i>
No change		<i>Weight</i>	<b>12</b>
		<i>Contribution</i>	<b>60</b>
		<b>60</b>	
<b>Construction Impacts</b>		<i>Rating</i>	<i>5</i>
No change		<i>Weight</i>	<b>5</b>
		<i>Contribution</i>	<b>25</b>
		<b>25</b>	
<b>Environmental Impacts</b>		<i>Rating</i>	<i>5</i>
No change		<i>Weight</i>	<b>19</b>
		<i>Contribution</i>	<b>95</b>
		<b>95</b>	
<b>Project Schedule</b>		<i>Rating</i>	<i>5</i>
No change		<i>Weight</i>	<b>24</b>
		<i>Contribution</i>	<b>120</b>
		<b>120</b>	
<b>Total Performance</b>		<b>500</b>	<b>481</b>
<b>Net Change in Performance</b>			<b>-4%</b>



<b>VE RECOMMENDATION NO. 14: DEVELOP MARKETING PLAN</b>		<b>IDEA NO. 40</b>		
<b>Baseline Concept</b>				
It is assumed that the base case will include a comprehensive marketing plan for the first tolled road in Hidalgo County.				
<b>Recommendation Concept</b>				
This recommendation is aimed at developing thoughts and ideas to be carried forward by the Public Involvement/Marketing team into development of a complete marketing plan.				
<b>Advantages</b>		<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>• Increases toll road usage, thereby increasing revenues</li> <li>• Improves safety across county roads</li> <li>• Reduces emissions</li> </ul>		<ul style="list-style-type: none"> <li>• Costs associated with the marketing campaign</li> </ul>		
<b>Cost Summary</b>		<b>Cost</b>		
Original Concept		N/A		
Recommendation Concept		N/A		
Savings		N/A		
<b>FHWA Function Benefit</b>				
<b>Safety</b>	<b>Operations</b>	<b>Environment</b>	<b>Construction</b>	<b>Other</b>
✓		✓		✓

**VE RECOMMENDATION NO. 14:  
 DEVELOP MARKETING PLAN**
**IDEA NO.  
 40**
**Discussion/Graphics/Assumptions/Estimates**

As the first tolled road in Hidalgo County, SH 365 should be promoted as a safer, faster, and more efficient alternative to traveling and transporting goods across the valley. The HCRMA has done a good job developing a public outreach program and it would be important to maintain this support through the promotion of relationships with stakeholders, the public, and the media, especially during the construction stages.



*(Highlighting the importance of the new toll road as an important economic driver for the Valley)*

The marketing plan should highlight the benefits of the new toll road. This can be accomplished through a variety of methods, including:

- Highlighting the importance of the new toll road as an important economic driver for the Valley.
- Providing a faster and more reliable travel option to local county roads.
- Improving safety across local roads in the valley.
- Reducing emissions and environmental benefits.
- Generating toll revenues that will stay in the area.
- Increasing local tax dollars that will go toward other projects in the valley.
- Creating a bilingual document
- Advertising in Mexico as an outreach

In addition, a number of incentives can be incorporated into the operations of the toll road, some on a permanent basis, while others can be implemented during the ramp-up period. Such incentives may include:

- Providing discounted tolls for disabled veterans (if the HCRMA board approves it).
- Offering toll-free weekends during the initial period, or 2-week toll-free introductory period

**VE RECOMMENDATION NO. 14:  
DEVELOP MARKETING PLAN**

**IDEA NO.  
40**

- Toll tags (TxTag)
- Sign-up promotions.
- Monthly promotions and reward programs.



*(Renderings of tolling features and gantries help stakeholders visualize the project)*

Given that SH 365 is the first toll road in the region, public outreach and marketing campaigns should involve extensive market research that is based on:

- Stakeholder and community leader interviews.
- Trucker interviews.
- Focus groups.
- Public opinion polls.
- Renderings of tolling features and gantries.
- Utilizing multiple media outlets, including local TV, social media, radio alerts, and local print.

The public outreach and marketing campaigns should involve educational campaigns educating the public on the following:

- Proposed tolling point locations.
- Proposed toll rates at each location.
- Proposed annual escalation policies.
- Toll Tag Basics which includes how to obtain a toll tag, open a toll tag account, managing toll tag account, etc.



<b>VE RECOMMENDATION NO. 15: DEFER FRONTAGE ROADS: I ROAD TO ANAYA</b>		<b>IDEA NO.</b> N/A		
<b>Baseline Concept</b>				
<p>The current baseline concept shows a westbound entrance ramp located on the east side of the I Road intersection, and an eastbound exit ramp located on the east side of the I Road intersection. Additionally, at the intersection of Anaya Road, the baseline concept shows an eastbound entrance and westbound exit west side of Anaya Road.</p>				
<b>Recommendation Concept</b>				
<p>Reverse the ramp pair east of the I-Road intersection, and reverse the ramp pair at the west side of Anaya Road. Eliminating frontage roads between this ramp pair. (defer to phase 2).</p>				
<b>Advantages</b>		<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>Reduced capital and maintenance cost to Phase 1 project</li> </ul>		<ul style="list-style-type: none"> <li>May not be acceptable to RMA</li> </ul>		
<b>Cost Summary</b>		<b>Cost</b>		
Original Concept				
Recommendation Concept				
Savings		\$2,581,900		
<b>FHWA Function Benefit</b>				
<b>Safety</b>	<b>Operations</b>	<b>Environment</b>	<b>Construction</b>	<b>Other</b>
	✓	✓		✓

**VE RECOMMENDATION NO. 15:  
DEFER FRONTAGE ROADS: I ROAD TO ANAYA**

IDEA NO.  
N/A

**Discussion/Graphics/Assumptions/Estimates**

The current baseline concept shows a westbound entrance ramp located on the east side of the I Road intersection, and an eastbound exit ramp located on the east side of the I Road intersection. Additionally, at the intersection of Anaya Road, the baseline concept shows an eastbound entrance and westbound exit west side of Anaya Road.

The recommended concept reverses the ramp pair east of the I-Road intersection, and reverses the ramp pair at the west side of Anaya Road. Additionally, under the recommended concept, the frontage roads will be eliminated between these ramp pairs. (defer to phase 2). To avoid toll free movements, reevaluation and relocation of the gantry structures is required; however, it is assumed that no additional gantries will be needed.

The illustration below depicts the location of the ramp pair east of I road intersection and west of Anaya Road.



**VE RECOMMENDATION NO. 15:  
 DEFER FRONTAGE ROADS: I ROAD TO ANAYA**
**IDEA NO.  
 N/A**

Switching the ramp pairs is a break even condition, to Phase 1 capital costs; however, eliminating the frontage roads will result in a reduction of capital and maintenance costs associated with the frontage roads between the ramp pairs. The capital cost breakdown is shown below.

<b>REMOVE SERVICE RDS FROM STA 1170+00 TO 1240+00 &amp; 2 SRVC RD BRIDGES</b>						
<b>ITEM No.</b>	<b>DESC CODE</b>	<b>ITEM DESCRIPTION</b>	<b>UNITS</b>	<b>QUANTITY</b>	<b>AGREED UNIT BID PRICE</b>	<b>TOTAL</b>
<b>REMOVE 2 SERVICE ROADS</b>						
<b>FRONTAGE ROAD ITEMS</b>						
247	2225	FL BS (RDWY DEL)(TY E GR 4)(FNAL POS)(FRTG RDS/RAMPS)	CY	41,378.00	\$15.00	\$620,670.00
260	2002	LIME (HYDRATED LIME (SLURRY)) (FRTG RDS/RAMPS)	TON	1,397.00	\$150.00	\$209,550.00
260	2011	LIME TRT (EXST MA TL) (12") (FRTG RDS/RAMPS)	SY	65,022.22	\$1.30	\$84,528.89
260	2076	LIME TRT (NEW BASE) (24") (FRTG RDS/RAMPS)	SY	65,022.22	\$4.00	\$260,088.89
310	2001	PRIME COAT (MC-30) (FRTG RDS/RAMPS)	GAL	12,413.00	\$4.50	\$55,858.50
316	2174	AGGR(TY-B GR-4 SAC-B) (FRTG RDS/RAMPS)	CY	591.00	\$90.00	\$53,190.00
316	2421	ASPH (AC-10 OR HFRS-2P) (FRTG RDS/RAMPS)	GAL	20,689.00	\$3.10	\$64,135.90
1127	2001	GEOGRID BASE REINFORCEMENT (TY I) (FRTG RDS/RAMPS)	SY	65,022.22	\$2.30	\$149,551.11
3224	2047	D-GR HMA (QCQA) TY-D SAC-A PG76-22 (FRTG RDS/RAMPS)	TON	5,098.00	\$75.00	\$382,350.00
<b>FRONTAGE RD/RAMPS ITEMS SUBTOTAL =</b>						<b>\$1,879,923.29</b>
<b>REMOVE 2 SERVICE ROAD BRIDGES</b>						
		South Levee Bridge (2 Ea at Srvc Rds)	SF	6,080.00	\$55.00	\$334,400.00
<b>BRIDGE ITEMS SUBTOTAL =</b>						<b>\$334,400.00</b>
<b>CONSTRUCTION TOTALS</b>						
<b>PROJECT SUBTOTAL =</b>						<b>\$2,214,323.29</b>
CONTINGENCIES (10% OF PROJECT SUBTOTAL) =						<b>\$221,432.33</b>
MOBILIZATION (6% OF PROJECT SUBTOTAL) =						<b>\$146,145.34</b>
<b>TOTAL CONSTRUCTION COST =</b>						<b>\$2,581,900.95</b>

<b>VE RECOMMENDATION NO. 15: DEFER FRONTAGE ROADS: I ROAD TO ANAYA</b>		IDEA NO. N/A		
<b>PERFORMANCE MEASURES</b>		<i>Performance</i>	<i>Original</i>	<i>Alternative</i>
<b>Attributes and Rating Rationale for Proposal</b>				
<b>Operational Impacts</b> Out of direction travel for locals		<i>Rating</i>	5	4
		<i>Weight</i>	19	
		<i>Contribution</i>	95	76
<b>Revenue Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	21	
		<i>Contribution</i>	105	105
<b>Maintainability</b> Less roadway to maintain		<i>Rating</i>	5	6
		<i>Weight</i>	12	
		<i>Contribution</i>	60	72
<b>Construction Impacts</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	5	
		<i>Contribution</i>	25	25
<b>Environmental Impacts</b> Fewer permanent impacts		<i>Rating</i>	5	6
		<i>Weight</i>	19	
		<i>Contribution</i>	95	114
<b>Project Schedule</b> No change		<i>Rating</i>	5	5
		<i>Weight</i>	24	
		<i>Contribution</i>	120	120
<b>Total Performance</b>			500	512
<b>Net Change in Performance</b>				<b>2%</b>

<b>VE DESIGN VALIDATION: USE FRONTAGE AND MAIN LINE AS LEVEE</b>		<b>IDEA NO. 21</b>		
<b>Baseline Concept</b>				
<p>The baseline concept of the SH 65 alignment encroaches into the IBWC floodway to make room for the proposed road. It encroaches on the existing levee (horizontally) from 50 to 500 feet at the widest point. The concept proposes to relocate the existing levee at three locations, including near Ware Road, Jackson Road, and US 281.</p>				
<b>Recommendation Concept</b>				
<p>Use frontage road/main line as levee top where levee is being relocated. In addition, a 20-foot-wide maintenance road will be maintained. The recommended concept will apply to three locations where encroachment occurs. The first reach goes from ST 798+77 to ST 831+54 (3,277 ft.) near Ware Road; the second reach goes from ST 1013+00 to ST 1052+00 (3,900 feet) east of Jackson Road; the third reach goes from ST 1081+00 to ST 1105+00 (2,400 ft.) east of US 281.</p>				
<b>Advantages</b>		<b>Disadvantages</b>		
<ul style="list-style-type: none"> <li>• Less encroachment into floodway</li> <li>• Less embankment required</li> <li>• Reduces cost</li> </ul>		<ul style="list-style-type: none"> <li>• Access for levee maintenance may be an issue</li> </ul>		
<b>Cost Summary</b>		<b>Cost</b>		
Original Concept		Not Applicable		
Recommendation Concept		Not Applicable		
Savings		Not Applicable		
<b>FHWA Function Benefit</b>				
<b>Safety</b>	<b>Operations</b>	<b>Environment</b>	<b>Construction</b>	<b>Other</b>
	✓	✓		✓

**VE DESIGN VALIDATION:  
 USE FRONTAGE AND MAIN LINE AS LEVEL**

**IDEA NO.  
 21**

**Discussion/Graphics/Assumptions/Estimates**

**First Reach: ST 798+77 to ST 831+54**

After closer examination of the cross section near the levee, it was determined that moving the levee closer to the road to save fill volume and cost would result in some challenges:

1. The top of the proposed road would need to be raised to match the existing levee elevation, adding fill volume to the project.
2. A 20-foot maintenance road is proposed adjacent to the raised road.
3. Actual savings after the levee is moved is small because the levee only moves in 30 feet (average) toward the road. Some of this savings are negated by the extra fill of the road.
4. It was discovered that the levee does not have continuous access due to the proposed floodway bridge. The proposed concept has the levee maintenance road going under the floodway bridge to gain clearance. Under rain events, vehicular traffic would not be possible due to high water. A couple of entities need to be contacted; a) the IBWC for maintenance, and b) the CBP for security reasons to make sure the baseline concept is acceptable..



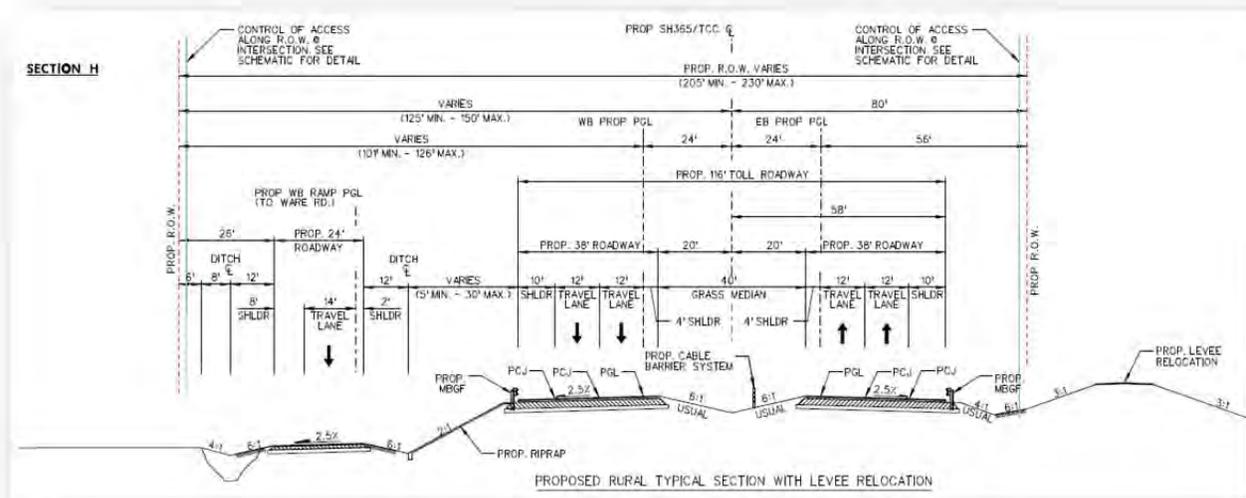


**VE DESIGN VALIDATION:  
USE FRONTAGE AND MAIN LINE AS LEVEL**

IDEA NO.  
21



**Phase I Typical Sections**



# **Appendix A**

## **Value Engineering Process**



## Appendix A. Value Engineering Process

Value Engineering (VE) is a systematic process using a multidisciplinary team to improve the value of a project through the analysis of its functions. The VE process incorporates, to the extent possible, the values of design, construction, maintenance, contractor, state, local, and federal approval agencies, other stakeholders, and the public.

The primary objective of a VE study is value improvement. Value improvements might relate to scope definition, functional design, constructability, coordination (both internal and external), or the schedule for project development. Other possible value improvements are reduced environmental impacts, reduced public (traffic) inconvenience, or reduced project cost.

### *Pre-VE Study*

Prior to the start of a VE study, the project manager and the VE team leader carry out the following activities:

- Initiate study – Identify study project and define study goals
- Organize study – Conduct pre-VE study meeting and select team members
- Prepare data – Collect and distribute data and prepare cost models.

All of the information gathered prior to the VE study is given to the team members for their use.

### *Value Engineering Job Plan*

The VE team employed the six-phase VE Job Plan in analyzing the project. This process is recommended by SAVE International and is composed of the following phases:

**Investigation/Information** – The objective of this phase was to obtain a thorough understanding of the project’s design criteria and objectives by reviewing the project’s documents and drawings, cost estimates, and schedules.

**Function** – The purpose of this phase was to identify and define the primary and secondary functions of the project. A Functional Analysis System Technique (FAST) was used to quickly define the functions of the project.

**Speculation/Creative** – During this phase the team employed creative techniques such as team brainstorming to develop a number of alternative concepts that satisfy the project’s primary functions.

**Evaluation** – The purpose of this phase was to evaluate the alternative concepts developed by the VE team during the brainstorming sessions. The team used a number of tools to determine the qualitative and quantitative merits of each concept.

**Development** – Those concepts that ranked highest in the evaluation were further developed into VE recommendations. Narratives, drawings, calculations, and cost estimates were prepared for each recommendation.

**Presentation** – The VE team presented their finding in the form of a written report. In addition, an oral presentation was made to the owner and the design team to discuss the VE recommendations.

### *Performance-Based Value Engineering*

Performance measures an integral part of the VE process. It provides the cornerstone of the VE process by giving a systematic and structured way of considering the relationship of a project's performance and cost as they relate to value. Project performance must be properly defined and agreed on by the stakeholders at the beginning of the VE study. The performance attributes and requirements that are developed are then used throughout the study to identify, evaluate, and document alternatives.

### *Introduction*

Value engineering has traditionally been perceived as an effective means for reducing project costs. This paradigm only addresses one part of the value equation, oftentimes at the expense of overlooking the role that VE can play with regard to improving project performance. Project costs are fairly easy to quantify and compare through traditional estimating techniques. Performance is not so easily quantifiable.

The VE team leader will lead the team and external stakeholders through the methodology, using the power of the process to distill subjective thought into an objective language that everyone can relate to and understand. The dialogue that develops forms the basis for the VE teams understanding of the performance requirements of the project and to what degree the current design concept is meeting those requirements. From this baseline, the VE team can focus on developing alternative concepts that will quantify both performance and cost and contribute to overall project value.

Performance-based VE yields the following benefits:

- Builds consensus among project stakeholders (especially those holding conflicting views)
- Develops a better understanding of a project's goals and objectives
- Develops a baseline understanding of how the project is meeting performance goals and objectives
- Identifies areas where project performance can be improved through the VE process
- Develops a better understanding of a VE alternative's effect on project performance
- Develops an understanding of the relationship between performance and cost in determining value
- Uses value as the true measurement for the basis of selecting the right project or design concept
- Provides decision-makers with a means of comparing costs and performance (i.e., costs vs. benefits) in a way that can assist them in making better decisions.

## Methodology

The application of performance-based VE consists of the following steps:

1. Identify key project (scope and delivery) performance attributes and requirements for the project.
2. Establish the hierarchy and impact of these attributes on the project.
3. Establish the baseline of the current project performance by evaluating and rating the effectiveness of the current design concepts.
4. Identify the change in performance of alternative project concepts generated by the study.
5. Measure the aggregate effect of alternative concepts relative to the baseline project's performance as a measure of overall value improvement.

The primary goal of value engineering is to improve the value of the project. A simple way to think of value in terms of an equation is as follows:

$$Value = \frac{Performance}{Cost}$$

## Assumptions

Before embarking on the details of this methodology, some assumptions need to be identified. The methodology described in the following steps assumes the project functions are well established. Project functions are defined as what the project delivers to its users and stakeholders; a good reference for the project functions can be found in the environmental document's purpose and need statement. Project functions are generally well defined prior to the start of the VE study. In the event that project functions have been substantially modified, the methodology must begin anew (Step 1).

### STEP 1 – DETERMINE THE MAJOR PERFORMANCE ATTRIBUTES

Performance attributes can generally be divided between project scope components (highway operations, environmental impacts, and system preservation) and project delivery components. It is important to make a distinction between performance *attributes* and performance *requirements*. Performance requirements are mandatory and binary in nature. All performance requirements **MUST** be met by any VE alternative concept being considered. Performance attributes possess a range of acceptable levels of performance. For example, if the project was the design and construction of a new bridge, a performance requirement might be that the bridge meets all current seismic design criteria. In contrast, a performance attribute might be project schedule, which means that a wide range of alternatives could be acceptable that had different durations.

The VE team leader will initially request representatives from project team and external stakeholders identify performance attributes that they feel are essential to meeting the overall need and purpose of the project. Usually four to seven attributes are selected. It is important that all potential attributes be thoroughly discussed. The information that comes out of this discussion will be valuable to both the VE team and the project owner.

It is important that each attribute be discretely defined and be quantifiable in some form. The vast majority of performance attributes that typically appear in transportation VE studies have been standardized. This standardized list can be used “as is” or adopted with minor adjustments as required.

Typical standardized project performance attributes are shown below. Specific definitions of each attribute can be found below.

- Main Line Operations
- Local Operations
- Maintainability
- Construction Impacts
- Environmental Impacts
- Project Schedule
- Risk

PERFORMANCE ATTRIBUTE AND DEFINITIONS	
Performance Attribute	Description of Attribute
Main Line Operations	An assessment of traffic operations and safety on the project. Operational considerations include level of service relative to the 20-year traffic projections as well as geometric considerations such as design speed, sight distance, and lane and shoulder widths.
Local Operations	An assessment of traffic operations and safety on the local roadway infrastructure. Operational considerations include level of service relative to the 20-year traffic projections; geometric considerations such as design speed, sight distance, lane widths; bicycle and pedestrian operations and access, including shared use path.
Maintainability	An assessment of the long-term maintainability of the transportation facility(s). Maintenance considerations include the overall durability, longevity, and maintainability of pavements, structures, and systems; ease of maintenance; accessibility and safety considerations for maintenance personnel.
Construction Impacts	An assessment of the temporary impacts to the public during construction related to traffic disruptions, detours and delays; impacts to businesses and residents relative to access, visual, noise, vibration, dust, and construction traffic. Temporary environmental impacts related to water quality, air quality, soil erosion, and local flora and fauna.
Environmental Impacts	An assessment of the permanent impacts to the environment, including ecological (i.e., flora, fauna, air quality, water quality, visual, noise); socioeconomic impacts (i.e., environmental justice, business, residents); impacts to cultural, recreational and historic resources.
Project Schedule	An assessment of the total project delivery as measured from the time of the VE study to completion of construction.
Risks	An assessment of the identified risks of the project.

## STEP 2 – DETERMINE THE RELATIVE IMPORTANCE OF THE ATTRIBUTES

Once the group has agreed on the project’s performance attributes, the next step is to determine their relative importance in relation to each other. This is accomplished through the use of an evaluative tool termed in this report as the “Performance Attribute Matrix.” This matrix compares the performance attributes in pairs, asking the question: “An improvement in which attribute will provide the greatest benefit to the project relative to purpose and need?”

A letter code (e.g., “A”) is entered into the matrix for each pair, identifying which of the two is more important. If a pair of attributes is considered to be of essentially equal importance, both letters (e.g., “A/B”) are entered into the appropriate box. This, however, should be discouraged, as it has been found that in practice a tie usually indicates that the pairs have not been adequately discussed. When all pairs have been discussed, the number of “votes” for each is tallied and percentages (which will be used as weighted multipliers later in the process) are calculated. It is not uncommon for one attribute to not receive any “votes.” If this occurs, the attribute is given a token “vote”, as it made the list in the first place and should be given some degree of importance.

An example of this exercise is shown below.

<b>PERFORMANCE ATTRIBUTE MATRIX</b>							<b>TOTAL</b>	<b>%</b>	
<i>An improvement in which attribute will provide the greatest benefit to the project relative to purpose and need?</i>									
<b>Main Line Operations</b>	<b>A</b>	A	A	A	A/E	A	A	6.5	24%
<b>Local Operations</b>	<b>B</b>	B	B	B	B/E	B	B	5.5	20%
<b>Maintainability</b>	<b>C</b>	C	C	E	C	C		4.0	14%
<b>Construction Impacts</b>	<b>D</b>	D	E	D/F	G			1.5	5%
<b>Environmental Impacts</b>	<b>E</b>	E	E	E	E			6.0	21%
<b>Project Schedule</b>	<b>F</b>	F	G					1.5	5%
<b>Risks</b>	<b>G</b>	G						3.0	11%
							<b>28.0</b>	<b>100%</b>	

A	More Important
A/B	Equally Important

For the example project above, the project owner, design team, and stakeholders determined that main line operations, followed by environmental, gave the greatest improvement relative to the projects purpose and need, while construction impacts and project schedule gave the least improvement.

### STEP 3 – ESTABLISH THE PERFORMANCE BASELINE FOR THE ORIGINAL DESIGN

The next step in the process is to document the project-specific elements for the performance attributes developed in Step 1. This step establishes a baseline against which the VE alternative concepts can be compared. An example of project-specific elements is shown below.

Evaluation of Baseline Project		
Standard Performance Attribute	Description of Attribute	Baseline Design Rating Rational
Main Line Operations	An assessment of traffic operations and safety on the project. Operational considerations include level of service relative to the 20-year traffic projections as well as geometric considerations such as design speed, sight distance, lane widths and shoulder widths.	Design Speed - 55 MPH Bridge - 12' Lanes, 8' shoulders Roadway - 12' Lanes, 6' shoulders Bridge HL93 Loading
Local Operations	An assessment of traffic operations and safety on the local roadway infrastructure. Operational considerations include level of service relative to the 20 year traffic projections; geometric considerations such as design speed, sight distance, lane widths; bicycle and pedestrian operations and access.	Revisions will need to be made to the existing streets & private approaches due to the vertical alignment of TH 1 & SH 54.
Maintainability	An assessment of the long-term maintainability of the transportation facility(s). Maintenance considerations include the overall durability, longevity and maintainability of pavements, structures and systems; ease of maintenance; accessibility and safety considerations for maintenance personnel.	Baseline design assumes a replacement bridge 30" total depth for frost - 5" bituminous over 12" crushed surfacing over 13" sand Illumination from the levee through the bridge Bridge design – 2" low slump overlay on a 7" deck Steel welded plate girder 100' - 150' - 250' - 250' - 150' - 100' spans
Construction Impacts	An assessment of the temporary impacts to the public during construction related to traffic disruptions, detours and delays; impacts to businesses and residents relative to access, visual, noise, vibration, dust and construction traffic; environmental impacts.	Maintain traffic across river Noise permit required from Oslo Assume work trestle to construct center pier Short term detour to construct tie-ins to existing highways
Environmental Impacts	An assessment of the permanent impacts to the environment including ecological (i.e., flora, fauna, air quality, water quality, visual, noise); socioeconomic impacts (i.e., environmental justice, business, residents); impacts to cultural, recreational and historic resources.	In-Water window - can't be in water March 15 to June 15 Considered a navigable body of water Existing bridge #9100 is under consideration for historical significance although this study only looked at the bridge replacement alternative
Project Schedule	An assessment of the total project delivery from the time as measured from the time of the CRAVE™ Study to completion of construction.	Advertisement date - October 1, 2012 Construction start of January 2013 26 month overall construction duration
Risks	An assessment of the identified risks of the project.	See the risk management plan

Once the baseline definitions for the various attributes have been established, their total performance should be calculated by multiplying the attribute’s weight (which was developed in Step 2) by its rating. While one could assign a 0 to 10 rating for each attribute, using the definitions and scales developed in Step 1, a baseline rating of 5 is typically used as a mid point so that alternatives can be evaluated – better than or worse than the baseline.

Total baseline performance is calculated by multiplying the attribute’s weight (which was developed in Step 2) by its rating (5). The baseline design’s total performance of 500 points can be calculated by adding all of the scores for the attributes. This numerical expression of the original designs performance forms the baseline against which all alternative concepts will be compared.

#### STEP 4 – EVALUATE THE PERFORMANCE OF THE VE ALTERNATIVE CONCEPTS

Once the performance of the baseline has been established for the original design concept, it can be used to help the VE team develop performance ratings for individual VE alternative concepts as they are developed during the course of the study. The Performance Measures Form is used to capture this information. This form allows a side-by-side comparison of the original design and VE alternative concepts to be performed.

It is important to consider the alternative concept’s impact on the entire project (rather than on discrete components) when developing performance ratings for the alternative concept.

Recommendations are evaluated against the baseline for all attributes to compare and contrast the potential for value improvement. As discussed in Step 3, the baseline is given a rating of 5. The following ratings are used to evaluate the performance of the alternative concepts relative to the baseline concept.

Rating	Performance Attribute Scale
10	Alternative concept is extremely preferred
9	Alternative concept is very strongly preferred
8	Alternative concept is strongly preferred
7	Alternative concept is moderately preferred
6	Alternative concept is slightly preferred
5	<b><i>Baseline</i></b>
4	Baseline concept is slightly preferred
3	Baseline concept is moderately preferred
2	Baseline concept is strongly preferred
1	Baseline concept is very strongly preferred
0	Baseline concept is extremely preferred

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## STEP 5 – COMPARE THE PERFORMANCE RATINGS OF ALTERNATIVE CONCEPTS TO THE BASELINE PROJECT

As the VE team develops alternatives, the performance of each is rated against the original design concept (baseline). Changes in performance are always based on the overall impact to the total project. Once performance and cost data have been developed by the VE team, the net change in value of the VE alternatives can be compared to the original design concept. The resulting “Value Matrix” provides a summary of these changes and allows a way for the project team to assess the potential impact of the VE recommendations on total project value.

The VE team groups the VE alternatives into a strategy (or strategies) to provide the decision-makers a clear picture of how the alternatives fit together into possible solutions. At least one strategy is developed to present the VE team’s consensus of what should be implemented. Additional strategies are developed as necessary to present other combinations to the decision-makers that should be considered. The strategy(s) of VE alternatives are rated and compared against the original concept. The performance ratings developed for the VE strategies are entered into the matrix, and the summary portion of the Value Matrix is completed. The summary provides details on net changes to cost, performance, and value, using the following calculations:

- % Performance Improvement =  $\frac{\Delta \text{Performance VE Strategy}}{\text{Total Performance Original Concept}}$
- Value Index =  $\frac{\text{Total Performance}}{\text{Total Cost (in Millions)}}$
- % Value Improvement =  $\frac{\Delta \text{Value Index VE Strategy}}{\text{Value Index Original Concept}}$ .

The following is an example of a Value Matrix worksheet.

VALUE MATRIX													
Attribute	Attribute Weight	Concept	Performance Rating										Total Performance
			1	2	3	4	5	6	7	8	9	10	
Mainline Operations	25.0	Baseline					5						125
		B1					5						125
		B2					5						125
		B3									8		200
Local Operations	20.0	Baseline					5						100
		B1					5						100
		B2					5						100
		B3									7		140
Maintainability	14.0	Baseline					5						70
		B1					5						70
		B2					5						70
		B3				4							56
Construction Impacts	14.0	Baseline					5						70
		B1									9.5		133
		B2									8		112
		B3								6			84
Environmental Impacts	7.0	Baseline					5						35
		B1					5						35
		B2								5.5			39
		B3					5						35
Project Schedule	16.0	Baseline					5						80
		B1					5						80
		B2					5						80
		B3					5						80
Risks	4.0	Baseline					5						20
		B1					5						20
		B2								6			24
		B3				4.5							18

OVERALL PERFORMANCE		Performance (P)	% Change Performance	Cost (C)	% Change Cost	Value Index (P/C)	% Value Improvement
	Baseline	500		\$5.0		100.00	
B1	I-96 Railroad Bridge Removal—Traffic Staging	563	13%	\$5.1	-1%	111.05	11%
B2	Combine RR Removal with New M-231 Interchange Structure	550	10%	\$4.7	5%	116.17	16%
B3	112th Avenue and Cleveland Road at I-96	613	23%	\$6.5	-30%	94.31	-6%



# **Appendix B**

**VE Study Memo, Agenda, and Attendees**



**Date:** May 10, 2013  
**To:** VE Team Members  
**From:** Don Owings, PE, CVS  
**Subject:** Value Engineering Study  
**SH 365 – Hidalgo County**

This memo is intended to start laying some of the expectations for the upcoming Value Engineering (VE) Study. I'm looking forward to working with you on this endeavor. My hope is that this memo will provide information to you about the project and our work together.

If you have any questions, please direct them to me, Don Owings, at 503-423-3856 (office), 360-601-3061 (cell), e-mail: [donald.owings@hdrinc.com](mailto:donald.owings@hdrinc.com).

## 1.1 Project Background

The proposed project would consist of constructing a toll facility that would provide for a 6-lane divided controlled access facility within a variable right-of-way width of a minimum of 160 feet and a maximum of 400 feet with a right of way of approximately 615 acres. The proposed project is approximately 16.5 miles with toll improvements beginning 0.5 mile west of FM 1016 (Conway Ave) and runs east then runs parallel to San Juan Road until meeting US 281 (Military Highway) where non-toll improvements will take place from 0.45 miles East of Spur 600 to FM 2557 (Stewart Road) along US 281 (Military Highway).

## 1.2 VE Study Dates and Location

The VE Study will be held May 20 through May 24, 2013 at the McAllen Convention Center:

700 Convention Center Blvd.  
McAllen, TX 78501  
Rooms 103 AB and Board Room 1

## 1.3 What to Bring

Be sure to bring your normal tools of the trade (e.g., calculator, laptop computer [if possible], scale, etc.). Bring a creative and open mind. VE studies are a lot of work, but if you bring your sense of humor you will have a good time and a rewarding experience.

## 1.4 Ground Rules

A VE study follows a prescribed process that has been proven over many years to produce the best results. This process needs the team members to be fully engaged in the study during the week.

To maintain our schedule and provide the best results to the project team, I ask that we follow some basic ground rules:

1. **Please be prepared to attend all five days.** You were selected to assist on this team based on your expertise. If you cannot be in attendance for the entire time, then please contact me prior to the study so we can make the appropriate arrangements.  
  
When team members leave part way through, or come and go frequently, the VE team can lose its momentum and cohesiveness.
2. **Please turn your cell phones to vibrate mode during the study.** Unless it is information to assist the team, please try to wait until breaks to return phone calls, check on messages, or sort through e-mails.
3. **No dress code.** I want everyone to be comfortable. The first day does include a site visit, so please dress accordingly. The rest of the time the appropriate dress is what some would call business casual (no ties required).
4. **If you have a laptop please bring it.** I have found most team members are more comfortable developing their write-ups on a computer. The facilities we use don't always have network connections, so the memory stick is usually the network of choice for sharing files.
5. **Our success will be evaluated based on the level of contribution that we bring to the project.** Remember that the goal of any VE study is to "add value" to the project and saving money is just a byproduct. We want to make recommendations based on solid engineering judgment that will result in an improved overall project.

## Value Engineering Job Plan

The Value Engineering (VE) team will employ the six-phase VE job plan in analyzing the project. This process is recommended by SAVE International and is composed of the following phases:

**Investigation/Information** – The objective of this phase is to obtain a thorough understanding of the project's design criteria and objectives by reviewing the project's documents and drawings, cost estimates, and schedules. Elements include:

- Process overview
- Project team presentation
- Understanding of study objectives
- Identification of constraints or controlling decisions
- Development of FAST diagram
- Review of cost model

**Function** – The purpose of this phase is to identify and define the primary and secondary functions of the project. A Functional Analysis System Technique (FAST) is used to quickly define the functions of the project.

**Speculation/Creative** – During this phase the team will employ creative techniques such as team brainstorming to develop a number of alternative concepts that satisfy the project's primary functions and risks.

**Evaluation** – The purpose of this phase is to evaluate the alternative concepts developed by the VE team during the brainstorming sessions. The team will use a number of tools to determine the qualitative and quantitative merits of each concept.

**Development** – Those concepts that ranked highest in the evaluation are further developed into VE recommendations. Narratives, drawings, calculations, and cost estimates will be prepared for each recommendation. The final step in the development phase is to review the risk register, re-quantify based on the VE team recommendations, and re-run the risk model (post-response).

**Presentation** – The VE team presents their finding in the form of a written report. In addition, an oral presentation will be made to the owner and the project team to discuss the VE recommendations.

I'm looking forward to working with you on this VE Study and I really appreciate each of you blocking time out of your busy schedule to participate. Please don't hesitate to call or e-mail me if you have any questions.

**Don Owings, PE, CVS**

Vice President

**HDR ONE COMPANY | *Many Solutions***

1001 SW 5th Avenue, Suite 1800 | Portland, OR 97204

Direct (503) 423-3856

Cell (360) 601-3061

Email | [donald.owings@hdrinc.com](mailto:donald.owings@hdrinc.com)

**SH 365 Hidalgo County****Monday May 20<sup>th</sup>****Objective for the day:** Learn about the project and begin brainstorming solutions.

- 8:00 a.m. Team meet and greet
- Process presentation
  - Performance attributes and scales
  - Attribute weighting
- Project team presentation/briefing of the project
  - Purpose and need/goals and objectives
  - Existing conditions/deficiencies
  - Schedule, estimate, etc.
  - Constraints and controlling decisions - environmental
- 10:30 a.m. Site visit
- 12:00 p.m. Lunch while on site visit
- 2:00 p.m. Site visit debrief
- Cost model and functional analysis (FAST diagram)
- Continue investigation phase
- 4:00 p.m. Begin speculation (brainstorming)
- +/-4:30 p.m. Adjourn for the day

**Tuesday May 21<sup>st</sup>****Objective for the day:** Complete brainstorming and begin to evaluate ideas.

- 8:00 a.m. Continue speculation phase (brainstorming)
- 10:00 a.m. Begin evaluation phase
- 12:00 p.m. Lunch
- 1:00 p.m. Return to speculation phase
- 2:00 p.m. Continue evaluation phase
- 4:30 p.m. Adjourn for the day

**Wednesday May 22<sup>nd</sup>****Objective for the day:** Develop alternatives.

- 8:00 a.m. Continue evaluation phase – begin development phase
- 10:00 a.m. Mid-point review (Project Manager and VE Team Leader)
- 12:00 p.m. Lunch
- 1:00 p.m. Continue development phase
- 4:30 p.m. Adjourn for the day

**Thursday May 23<sup>rd</sup>****Objective for the day:** Develop and evaluate performance.

- 8:00 a.m. Continue development
- 12:00 p.m. Lunch
- 1:00 p.m. Complete development and team review
- Define and evaluate performance of recommendations
- Prepare presentation
- 4:30 p.m. Adjourn for the day

**Friday May 24<sup>th</sup>****Objective for the day:** Develop and present solutions.

- 8:00 a.m. Review final recommendations
- 8:30 a.m. Team revise and rehearse presentation
- 10:00 a.m. Presentation of solutions developed

					<b>VE Study Attendees (Team and Presentations)</b> <i>SH 365 – Hidalgo County Toll Facility Project</i>				
2013					NAME	ORGANIZATION	POSITION/DISCIPLINE	TELEPHONE	CELL
May								E-MAIL	
20	21	22	23	24					
✓	✓	✓	✓	✓	Abedrabbo, Johnny	HDR	Tolling	212.316.9827	240.485.2636
								<a href="mailto:johnny.abedrabbo@hdrinc.com">johnny.abedrabbo@hdrinc.com</a>	
				✓	Badan, Homer	TxDOT			
								<a href="mailto:hbadan@txdot.gov">hbadan@txdot.gov</a>	
✓					Badiozzamani, Behrooz	L&G	Engineering	956.212.4562	
								<a href="http://Behatengineering.com">Behatengineering.com</a>	
✓	✓	✓	✓	✓	Baez, Gustavo	Baez Consulting	Toll Operations	214.864.9619	
								<a href="mailto:gbaez@baezconsulting.com">gbaez@baezconsulting.com</a>	
✓	✓	✓	✓	✓	Buffington, Lori	HDR	Team Assistant	403.423.3893	503.260.3167
								<a href="mailto:lori.buffington@hdrinc.com">lori.buffington@hdrinc.com</a>	
✓				✓	Burleson, Dennis	HCRMA Board	Chairman	956.402.4762	
								<a href="mailto:dburleson@hcrma.net">dburleson@hcrma.net</a>	
✓					Corbitt, Mark	TEDSI	Engineering	956.424.7898	
								<a href="mailto:mcorbitt@tedsi.com">mcorbitt@tedsi.com</a>	
✓	✓	✓	✓	✓	Darnold, Tom	Dannenbaum	Traffic Engineering	281.630.2814	
								<a href="mailto:Thomas.darnold@dannebaum.com">Thomas.darnold@dannebaum.com</a>	
✓	✓	✓	✓	✓	Davila, Eric	Dannenbaum	Project Development/Cost Analysis	956.682.3677	956.605.8193.
								<a href="mailto:eric.davila@dannenbaum.com">eric.davila@dannenbaum.com</a>	
✓	✓	✓	✓	✓	Flores, Alejandro	Dannenbaum	H&H		713.724.5031
								<a href="mailto:Al.flores@dannenbaum.com">Al.flores@dannenbaum.com</a>	

					<b>VE Study Attendees (Team and Presentations)</b> <i>SH 365 – Hidalgo County Toll Facility Project</i>				
2013					NAME	ORGANIZATION	POSITION/DISCIPLINE	TELEPHONE	CELL
May								E-MAIL	
20	21	22	23	24					
		✓	✓	✓	Galindo, David	Dannenbaum	Project Development/Cost Analysis	956.682.3677	
								<a href="mailto:david.galindo@dannenbaum.com">david.galindo@dannenbaum.com</a>	
✓	✓	✓	✓	✓	Gallaga, Ricardo	L&G	Engineering	956.685.1909	
								<a href="mailto:ricardo@lgengineer.com">ricardo@lgengineer.com</a>	
✓					Garces, Daniel	S&B	Engineering	956.926.5004	
								<a href="mailto:dgarces@sbinfra.com">dgarces@sbinfra.com</a>	
✓	✓	✓			Garza, Norma	TxDOT	Advance Planning	956.702.6180	
								<a href="mailto:Norma.garza@txdot.gov">Norma.garza@txdot.gov</a>	
✓	✓	✓	✓	✓	Hew, Clifford	S&B	Engineering	210.641.6003	210.849.9176
								<a href="mailto:chew@sbinfra.com">chew@sbinfra.com</a>	
✓	✓	✓	✓	✓	Jones, Louis	Dannenbaum	Program Manager	956.682.3677	832.771.4904
								<a href="mailto:Louis.jones@dannenbaum.com">Louis.jones@dannenbaum.com</a>	
				✓	Koll, Flor	HCRMA	Administrative Manager		
								<a href="mailto:fkoll@hcrma.net">fkoll@hcrma.net</a>	
✓				✓	Lopez, Gustavo	Dannenbaum	QA/QC	956.682.3677	956.929.7782
								<a href="mailto:Gustavo.lopez@dannenbaum.com">Gustavo.lopez@dannenbaum.com</a>	
✓	✓	✓	✓	✓	Maksoud, Michel	Dannenbaum	Bridge/Retaining Walls	713.527.6420	
								<a href="mailto:Michel.maksoud@dannenbaum.com">Michel.maksoud@dannenbaum.com</a>	
✓	✓	✓	✓	✓	Owings, Don	HDR	Team Leader/Facilitation	503.423.3856	360.601.3061
								<a href="mailto:donald.owings@hdrinc.com">donald.owings@hdrinc.com</a>	

					<b>VE Study Attendees (Team and Presentations)</b> <i>SH 365 – Hidalgo County Toll Facility Project</i>				
2013					NAME	ORGANIZATION	POSITION/DISCIPLINE	TELEPHONE	CELL
May								E-MAIL	
20	21	22	23	24					
✓				✓	Pawelek, Phillip	S&B	Engineering	956.926.5004	956.342.1649
				✓	Ramon, George			<a href="mailto:pjpawelek@sbinfra.com">pjpawelek@sbinfra.com</a>	
				✓	Reyes, Josue	HCRMA Board	Director		
✓	✓	✓	✓	✓	Rodriguez, Pilar	HCRMA	Executive Director	956.402.4762	
								<a href="mailto:prodriguez@hcrma.net">prodriguez@hcrma.net</a>	
✓	✓	✓	✓	✓	Saenz, Marcella	TxDOT	Toll Operations	512.874.9708	
								<a href="mailto:marcy.saenz@txdot.gov">marcy.saenz@txdot.gov</a>	
✓	✓	✓	✓	✓	Schaus, Melba	TxDOT	Advance Planning	956.702.6181	
								<a href="mailto:Melba.schaus@txdot.gov">Melba.schaus@txdot.gov</a>	
				✓	Stong, Craig	TEDSI	Engineering	956.424.7898	
								<a href="mailto:cstong@tedsi.com">cstong@tedsi.com</a>	



# **Appendix C**

## **VE Recommendation Approval Form**



## Appendix C. VE Recommendation Approval Form

To: \_\_\_\_\_ VE Study Date: May 20–24, 2013  
Subject: \_\_\_\_\_ Facilitator: Don Owings  
Limits: \_\_\_\_\_ CVS Firm: HDR Engineering, Inc.  
CSJ(s): \_\_\_\_\_

### EXECUTIVE DECISION SUMMARY VE Team Recommendations

VE Team Recommendation No. 1: [Recommendation Title]

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Approval: \_\_\_\_\_  
Transportation Planning and Development Engineer

Approval: \_\_\_\_\_  
District Design Engineer

Approval: \_\_\_\_\_  
District Engineer



# **Appendix D**

## **Project Estimate**



# SH 365 CONSTRUCTION ESTIMATE

From FM396 (GSA Access Rd) to McColl Rd

Prepared by: **L&G Engineering**

Date: **December 10, 2012**

ITEM No.	DESC CODE	ITEM DESCRIPTION	UNITS	QUANTITY	AGREED UNIT BID PRICE	TOTAL
<b>ROADWAY</b>						
100	2002	PREPARING ROW	STA	339.00	\$1,500.00	\$508,500.00
110	2001	EXCAVATION (ROADWAY)	CY	297,861.00	\$5.00	\$1,489,305.00
110	2002	EXCAVATION (CHANNEL)	CY	492,771.00	\$5.00	\$2,463,855.00
132	2006	EMBANKMENT (FINAL)(DENS CONT)(TY C)	CY	780,126.00	\$4.50	\$3,510,567.00
247	2225	FL BS (RDWY DEL)(TY E GR 4)(FNAL POS)	CY	301,017.00	\$15.00	\$4,515,255.00
260	2002	LIME (HYDRATED LIME (SLURRY))	TON	16,864.00	\$150.00	\$2,529,600.00
260	2011	LIME TRT (EXST MATL) (12")	SY	482,454.00	\$1.30	\$627,190.20
260	2076	LIME TRT (NEW BASE) (24")	SY	451,525.00	\$4.00	\$1,806,100.00
310	2001	PRIME COAT (MC-30)	GAL	83,201.00	\$4.50	\$374,404.50
400	2005	CEM STABIL BKFL	CY	2,590.00	\$70.00	\$181,300.00
400	2006	CUT & RESTORING PAV	SY	45.00	\$60.00	\$2,700.00
400	2007	STRUCT EXCAV (SPECIAL)	CY	958.00	\$50.00	\$47,900.00
402	2001	TRENCH EXCAVATION PROTECTION	LF	14,922.00	\$1.35	\$20,144.70
423	2001	RETAINING WALL (MSE)	SF	130,241.00	\$35.00	\$4,558,435.00
432	2001	RIPRAP (CONC)(4 IN)	CY	26.00	\$380.00	\$9,880.00
432	2002	RIPRAP (CONC)(5 IN)	CY	625.00	\$340.00	\$212,500.00
450	2013	RAIL (TY SSTR)	LF	8,422.00	\$40.00	\$336,880.00
502	2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	30.00	\$6,500.00	\$195,000.00
530	2002	INTERSECTIONS (ACP)	EA	4.00	\$4,000.00	\$16,000.00
530	2008	DRIVEWAYS (ACP)	EA	7.00	\$950.00	\$6,650.00
540	2001	MTL W-BEAM GD FEN (TIM POST)	LF	2,900.00	\$18.00	\$52,200.00
540	2011	MTL BEAM GD FEN TRANS (THRIE-BEAM)	EA	28.00	\$1,300.00	\$36,400.00
540	2044	DOWNSTREAM ANCHOR TERMINAL(DAT)SECTION	EA	15.00	\$1,000.00	\$15,000.00
544	2001	GUARDRAIL END TREATMENT (INSTALL)	EA	14.00	\$2,000.00	\$28,000.00
545	2001	CRASH CUSH ATTEN (INSTL)	EA	3.00	\$12,000.00	\$36,000.00
4035	2001	REINF CON LOW-HEAD PRSR PIPE(CL III)54"	LF	740.00	\$250.00	\$185,000.00
4061	2010	IRRIGATION WELL (36")	EA	10.00	\$4,500.00	\$45,000.00
4061	2014	WELL GATE (24")	EA	10.00	\$3,000.00	\$30,000.00
4269	2003	PRESS IRRIG PVC PIPE (24 IN)	LF	1,520.00	\$85.00	\$129,200.00
5214	2001	GEOGRID BASE REINFORCEMENT (TY I)	SY	451,525.00	\$1.50	\$677,287.50
3224	2047	D-GR HMA(QCQA) TY-D SAC-A PG76-22	TON	47,425.00	\$75.00	\$3,556,875.00
3224	2067	D-GR HMA(QCQA) TY-B SAC A PG76-22	TON	53,975.00	\$70.00	\$3,778,250.00

# SH 365 CONSTRUCTION ESTIMATE

From FM396 (GSA Access Rd) to McColl Rd

Prepared by: **L&G Engineering**

Date: **December 10, 2012**

ITEM No.	DESC CODE	ITEM DESCRIPTION	UNITS	QUANTITY	AGREED UNIT BID PRICE	TOTAL
<b>ROADWAY ITEMS SUBTOTAL =</b>						<b>\$31,981,378.90</b>
<b>DRAINAGE AND SW3P ITEMS</b>						
462	2005	CONC BOX CULV (4 FT X 4 FT)	LF	0.00	\$185.00	\$0.00
462	2008	CONC BOX CULV (5 FT X 4 FT)	LF	0.00	\$300.00	\$0.00
462	2011	CONC BOX CULV (6 FT X 4 FT)	LF	0.00	\$325.00	\$0.00
462	2013	CONC BOX CULV (6 FT X 6 FT)	LF	0.00	\$350.00	\$0.00
464	2003	RC PIPE (CL III)(18 IN)	LF	0.00	\$50.00	\$0.00
464	2005	RC PIPE (CL III)(24 IN)	LF	3,868.00	\$60.00	\$232,080.00
464	2007	RC PIPE (CL III)(30 IN)	LF	1,520.00	\$70.00	\$106,400.00
464	2009	RC PIPE (CL III)(36 IN)	LF	7,923.00	\$85.00	\$673,455.00
464	2010	RC PIPE (CL III)(42 IN)	LF	1,930.00	\$100.00	\$193,000.00
464	2012	RC PIPE (CL III)(54 IN)	LF	721.00	\$180.00	\$129,780.00
464	2013	RC PIPE (CL III)(60 IN)	LF	0.00	\$270.00	\$0.00
465	2001	INLET (COMPL)(TY C)	EA	18.00	\$4,000.00	\$72,000.00
465	2005	MANH (COMPL)(TY M)	EA	2.00	\$6,000.00	\$12,000.00
465	2113	INLET (COMPL)(TY CC)	EA	47.00	\$4,000.00	\$188,000.00
467	2286	SET (TY II)(18 IN)(RCP)(6:1)(P)	EA	14.00	\$900.00	\$12,600.00
476	2007	JACK BOR OR TUN PIPE(54 IN)(RC)(CL III)	LF	214.00	\$650.00	\$139,100.00
		SW3P ITEMS (2.1% of Total Construction Cost)	LS	1.00		\$1,371,971.26
<b>DRAINAGE ITEMS SUBTOTAL =</b>						<b>\$3,130,386.26</b>
<b>SIGNS AND PAVEMENT MARKINGS ITEMS</b>						
666	2003	REFL PAV MRK TY I (W) 4" (BRK)(100MIL)	LF	24,020.00	\$0.35	\$8,407.00
666	2012	REFL PAV MRK TY I (W) 4" (SLD)(100MIL)	LF	126,276.00	\$0.35	\$44,196.60
666	2036	REFL PAV MRK TY I (W) 8" (SLD)(100MIL)	LF	23,692.00	\$0.75	\$17,769.00
666	2042	REFL PAV MRK TY I (W) 12"(SLD)(100MIL)	LF	2,100.00	\$3.35	\$7,035.00
666	2048	REFL PAV MRK TY I (W) 24"(SLD)(100MIL)	LF	2,563.00	\$6.50	\$16,659.50
666	2111	REFL PAV MRK TY I (Y) 4" (SLD)(100MIL)	LF	125,020.00	\$0.40	\$50,008.00
666	2132	REFL PAV MRK TY I (Y) 24"(SLD)(100MIL)	LF	747.00	\$5.50	\$4,108.50
668	2064	PREFAB PAV MRK TY B (W) (ARROW)	EA	32.00	\$230.00	\$7,360.00
668	2073	PREFAB PAV MRK TY B (W) (UTURN ARROW)	EA	10.00	\$320.00	\$3,200.00
668	2074	PREFAB PAV MRK TY B (W) (WORD)	EA	32.00	\$350.00	\$11,200.00
672	2015	REFL PAV MRKR TY II-A-A	EA	947.00	\$3.50	\$3,314.50
672	2017	REFL PAV MRKR TY II-C-R	EA	3,568.00	\$3.20	\$11,417.60

# SH 365 CONSTRUCTION ESTIMATE

From FM396 (GSA Access Rd) to McColl Rd

Prepared by: **L&G Engineering**

Date: **December 10, 2012**

ITEM No.	DESC CODE	ITEM DESCRIPTION	UNITS	QUANTITY	AGREED UNIT BID PRICE	TOTAL
		SMALL SIGNS	LS	1.00		\$0.00
		LARGE SIGNS	LS	1.00	\$400,000.00	\$400,000.00
<b>SIGNS AND PAVEMENT MARKINGS ITEMS SUBTOTAL =</b>						<b>\$584,675.70</b>
<b>TRAFFIC SIGNAL AND ILLUMINATION ITEMS</b>						
		SAFETY LIGHTING PER RAMP	EA	12.00	\$28,000.00	\$336,000.00
		HIGH-MAST ILLUMINATION PER INTERSECTION	EA	3.00	\$150,000.00	\$450,000.00
		BRIDGE OVERPASS SAFETY LIGHTING/INTERSECTION	EA	4.00	\$17,000.00	\$68,000.00
		TRAFFIC SIGNAL COST PER INTERSECTION	EA	3.00	\$250,000.00	\$750,000.00
<b>TRAFFIC SIGNAL AND ILLUMINATION ITEMS SUBTOTAL =</b>						<b>\$1,604,000.00</b>
<b>BRIDGE ITEMS</b>						
		FM494 (Shary Rd) Overpass	SF	23,360.00	\$55.00	\$1,284,800.00
		Floodway Bridge (Mainlanes)	SF	378,400.00	\$55.00	\$20,812,000.00
		Floodway Off Ramp (to Spur 115 / 23rd St)	SF	33,095.00	\$55.00	\$1,820,225.00
		Floodway On Ramp (at Spur 115 / 23rd St)	SF	33,414.00	\$55.00	\$1,837,770.00
		Floodway Off Ramp (to Ware Rd.)	SF	13,100.00	\$55.00	\$720,500.00
		10th St. Overpass	SF	23,360.00	\$55.00	\$1,284,800.00
		Pharr San Juan Irrigation Canal Bridge	SF	13,920.00	\$55.00	\$765,600.00
		McColl Rd Underpass	SF	15,960.00	\$55.00	\$877,800.00
<b>BRIDGE ITEMS SUBTOTAL =</b>						<b>\$29,403,495.00</b>
<b>CONSTRUCTION TOTALS</b>						
<b>PROJECT SUBTOTAL =</b>						<b>\$66,703,935.86</b>
CONTINGENCIES (10% OF PROJECT SUBTOTAL) =						<b>\$6,670,393.59</b>
MOBILIZATION (6% OF PROJECT SUBTOTAL) =						<b>\$4,402,459.77</b>
<b>TOTAL CONSTRUCTION COST =</b>						<b>\$77,776,789.21</b>



## US 281 BREAKOUT

### BRIDGE

Bridge		\$	1,783,320.42
Bridge Embankments	155,556 CY	\$	583,335.00
		\$	2,366,655.42

### BSIF ROAD PAVEMENT

	QUANTITY	UNIT	COST	AMOUNT
HMAC 3" TY D SURF (PG76-22)	1596	TONS	\$65.00	= \$ 103,740.00
HMAC 4 1/2" TY B	2419	TONS	\$60.00	= \$ 145,152.00
PRIME COAT @ 0.3 GAL/SY	2772	GAL	\$4.00	= \$ 11,088.00
20" LIME TREATED FLEX BASE CALICHE	5926	CY	\$22.00	= \$ 130,370.37
2% FLEX BASE LIME STABILIZATION	10667	SY	\$3.00	\$ 32,000.00
5% SUBGRADE LIME STABILIZATION	11333	SY	\$1.50	\$ 17,000.00
FLEX BASE LIME @ 36 LBS/SY (US-281)	192	TON	\$175.00	\$ 33,600.00
SUBGRADE LIME @ 54 LBS/SY	306	TON	\$175.00	\$ 53,550.00
GEOGRID BASE REINF TYII	10666.66667	SY		2 \$ 21,333.33
<b>TOTAL</b>				<b>\$ 547,833.70</b>

### BSIF ROAD GRADING

ITEM	DESCRIPTION	QUANTITY	UNIT	COST	AMOUNT
100	PREP ROW	30	STA	\$ 3,700.00	= \$111,000.00
110	ROADWAY EXCAVATION	20,000	CY	\$ 2.25	= \$45,000.00
132	EMBANKMENT	700	CY	\$ 3.75	= \$2,625.00
432	5" RIPRAP(CONC)	40	CY	\$ 350.00	= \$14,000.00
432	4" RIPRAP(CONC)(MOW STRIP)	40	CY	\$ 240.00	= \$9,600.00
502	BARR & TRAF HANDLING	4	MO	\$ 3,500.00	= \$12,600.00
540	MBGF	800	LF	\$ 17.00	= \$13,600.00
544	GET	2	EA	\$ 2,300.00	= \$4,600.00
				<b>TOTAL</b>	<b>= \$213,025.00</b>

### BSIF DRAINAGE AND EROSION CONTROL

**\$ 284,785.82**

### BSIF TRAFFIC

**\$ 252,316.00**

<b>ACCESS ROADWAY PAVEMENT</b>					
	QUANTITY		UNIT	COST	AMOUNT
HMAC 3" TY D SURF (PG76-22)	5386.5		TONS	65 = \$	350,122.50
HMAC 4 1/2" TY B	8164.8		TONS	60 = \$	489,888.00
PRIME COAT @ 0.3 GAL/SY	9355.5		GAL	4 = \$	37,422.00
20" LIME TREATED FLEX BASE CALICHE	19266.85185		CY	22 = \$	423,870.74
2% FLEX BASE LIME STABILIZATION	34611.11111		SY	3 \$	103,833.33
5% SUBGRADE LIME STABILIZATION	36166.66667		SY	1.5 \$	54,250.00
FLEX BASE LIME @ 36 LBS/SY (US-281)	623		TON	175 \$	109,025.00
SUBGRADE LIME @ 54 LBS/SY	976.5		TON	175 \$	170,887.50
GEOGRID BASE REINF TYII	34611.11111		SY	2 \$	69,222.22
<b>TOTAL</b>					<b>\$ 1,808,521.30</b>

<b>BSIF ROAD GRADING</b>					
ITEM	DESCRIPTION	QUANTITY	UNIT	COST	AMOUNT
100	PREP ROW	35	STA	X \$ 3,700.00 =	\$129,500.00
110	ROADWAY EXCAVATION	25,000	CY	\$ 2.25 =	\$56,250.00
132	EMBANKMENT	875	CY	\$ 3.75 =	\$3,281.25
432	5" RIPRAP(CONC)	50	CY	X \$ 350.00 =	\$17,500.00
432	4" RIPRAP(CONC)(MOW STRIP)	50	CY	X \$ 240.00 =	\$12,000.00
502	BARR & TRAF HANDLING	5	MO	X \$ 3,500.00 =	\$15,750.00
540	MBGF	1,000	LF	X \$ 17.00 =	\$17,000.00
544	GET	2	EA	X \$ 2,300.00 =	\$4,600.00
				<b>TOTAL =</b>	<b>\$255,881.25</b>

GRAND TOTAL \$ 5,729,018.49  
MOBILIZATION 10% \$ 572,901.85  
CONTINGENCY 15% \$ 859,352.77

Cost of US 281 Improvements = \$10,863,500.00  
Cost of BSIF Connector = \$ 7,161,273.00

Original Project Cost = \$18,024,773.00

# **Appendix E**

## **Report-out Presentation**



# Hidalgo County Regional Mobility Authority SH 365 – Hidalgo Toll Facility Project Value Engineering Study



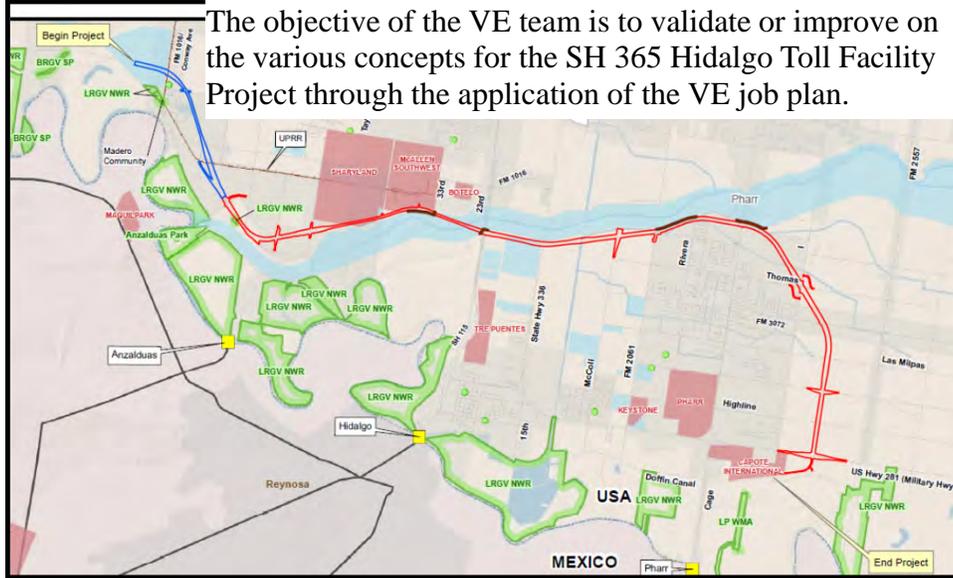
May 20<sup>th</sup> through May 24<sup>th</sup>, 2013



## *Value Engineering Team*



## Objective of the Study



## Value Engineering Study Phases



Investigation (Function)



Speculation



Presentation



Evaluation



Development



## Performance Based VE



Performance-based VE consists of the following steps:

- Identify key project performance attributes and requirements.
- Establish the hierarchy and impact of these attributes on the project.
- Establish the baseline of the current project performance.
- Identify the change in performance of alternative project concepts generated by the study.
- Measure the aggregate effect of alternative concepts relative to the baseline project's performance.

Investigation (Function)



## Performance Attributes



Value Engineering has traditionally been perceived as an effective means for reducing project costs. This paradigm only addresses one part of the value equation, often times at the expense of overlooking the role that VE can play with regard to improving project performance.

- Operational Impacts
- Revenue Impacts
- Maintainability
- Construction Impacts
- Environmental Impacts
- Project Schedule

$$\text{Value} = \frac{\text{Performance} \uparrow}{\text{Cost} \downarrow}$$



## Performance Attributes



$$\text{Value} = \frac{\text{Performance}}{\text{Cost}}$$

PERFORMANCE ATTRIBUTE AND DESCRIPTION SH 365 Hidalgo County Toll Facility Project	
Performance Attribute	Description of Attribute
Operations	An assessment of traffic operations and safety on the mainline SH 365, frontage roads and local facilities. Operational considerations include level of service relative to the 20 year traffic projections as well as geometric considerations such as design speed, sight distance, lane widths and shoulder widths, bicycle and pedestrian operations and access, including any shared use paths. The assessment also includes interchange spacing, ramp ingress and egress as well as weaving.
Revenue	An assessment of long term revenue generation on the facility, including consideration of type of tolling system (manual vs. automatic), length of ramp-up period, toll enforcement and the level of toll evaders (International traffic), the types of rates for special purpose vehicles, operating cost, operating contract type and terms, ability to adjust rates, and approvals required.
Maintainability	An assessment of the long-term maintainability of the transportation facilities. Maintenance considerations include the overall durability, longevity and maintainability of pavements, structures and systems; ease of maintenance; accessibility and safety considerations for maintenance personnel.



## Performance Attributes



$$\text{Value} = \frac{\text{Performance}}{\text{Cost}}$$

PERFORMANCE ATTRIBUTE AND DESCRIPTION SH 365 Hidalgo County Toll Facility Project	
Performance Attribute	Description of Attribute
Construction Impacts	An assessment of the temporary impacts to the public during construction related to traffic disruptions, detours and delays; impacts to businesses and residents relative to access, visual, noise, vibration, dust, and construction traffic.  Includes an assessment of temporary environmental impacts related to water quality, air quality, soil erosion, and local flora and fauna.
Environmental Impacts	An assessment of the permanent impacts to the natural and built environment including ecological (i.e., flora, fauna, air quality, water quality, visual, noise); socioeconomic impacts (i.e., environmental justice); impacts to cultural, recreational and historic resources.
Project Schedule	An assessment of the total project delivery as measured from the time of the VE study to completion of construction.  Under Construction by Oct 2016



## Performance Attributes



### PERFORMANCE ATTRIBUTE MATRIX SH 365 Hidalgo County

Which attribute is more important to the project?

						TOTAL	%	
Operational Impacts	A	A/B	A	A	A/E	F	4.0	19.0%
Revenue Impacts	B		B	B	B	F	4.5	21.4%
Maintainability	C		C	C/E	F		2.5	11.9%
Construction Impacts	D		E	F			1.0	4.8%
Environmental Impacts	E		E				4.0	19.0%
Project Schedule	F						5.0	23.8%
							21.0	100%



## Speculation Phase

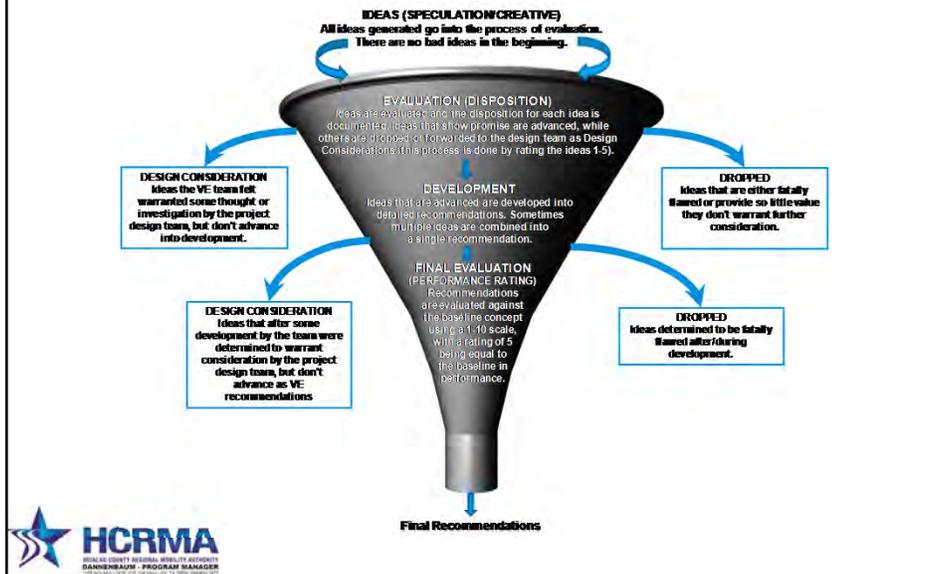


Idea No.	Description
<i>Function: Support Loads</i>	
1.	Redesign pavement sections based on toll traffic volumes
2.	Vertically stage the pavement section
3.	Consider concrete pavement
4.	Reduce structural section of the shoulders
<i>Function: Span Roadway/Floodway</i>	
5.	Shorten floodway bridge by matching the opening east of the bridge
6.	Reduced the skew at floodway bridge
7.	Change alignment at floodway bridge to cross as perpendicular as possible

Speculation



## Evaluation Process



## Initial Evaluation



#	Description	Advantages		Disadvantages		
1	Redesign pavement sections based on projected toll traffic volumes	<ul style="list-style-type: none"> <li>Reduces initial cost</li> </ul>		<ul style="list-style-type: none"> <li>May not be acceptable to TxDOT</li> <li>Could require modification of the profile</li> </ul>		
	Operations	Revenue	Maintainability	Construction Impacts	Environmental Impacts	Project Schedule
	↔	↔	↔	↔	↔	↔
Justification/Comments/Disposition:						
Rating: 5	The baseline is over designed because it's based on non-toll volumes. There is a risk if the volumes are underestimated, the maintenance could increase.					

Evaluation



## Development Phase



Development



VE RECOMMENDATION NO. XX:		IDEA NO. XX	
Baseline Concept			
Recommendation Concept			
Advantages		Disadvantages	
•		•	
Cost Summary		Cost	
Original Concept			
Recommendation Concept			
Savings			
Discussion/ Graphics/ Assumptions/ Estimates			



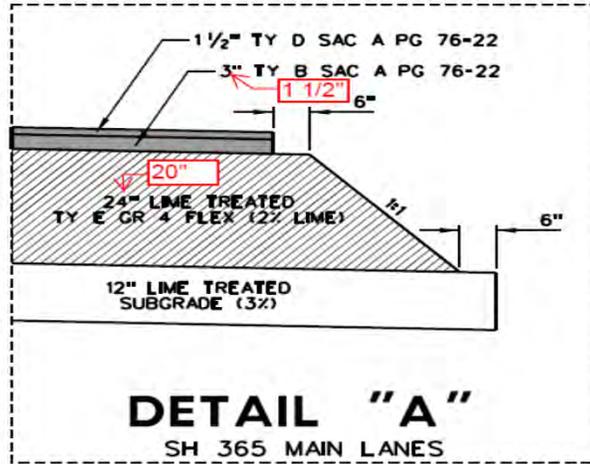
## Secondary Evaluation Phase



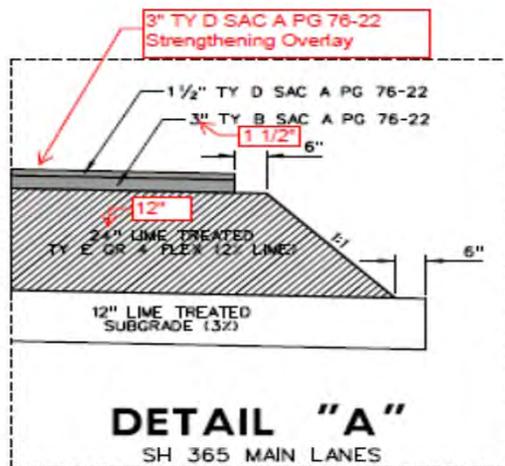
VE RECOMMENDATION NO. 5 Two-Lane Floodway Bridge	IDEA NO. 9		
<b>PERFORMANCE MEASURES</b>	<i>Performance</i>	<i>Original</i>	<i>Alternative</i>
<b>Attributes and Rating Rationale for Proposal</b>			
<b>Operational Impacts</b> May reduce traffic flow	<i>Rating</i>	5	4
	<i>Weight</i>	19	
	<i>Contribution</i>	95	76
<b>Revenue Impacts</b> No change	<i>Rating</i>	5	5
	<i>Weight</i>	21	
	<i>Contribution</i>	105	105
<b>Maintainability</b> Reduced structure to maintain	<i>Rating</i>	5	7
	<i>Weight</i>	12	
	<i>Contribution</i>	60	84
<b>Construction Impacts</b> Reduced construction in the floodway	<i>Rating</i>	5	7
	<i>Weight</i>	5	
	<i>Contribution</i>	25	35
<b>Environmental Impacts</b> Less impact in the floodway	<i>Rating</i>	5	7
	<i>Weight</i>	19	
	<i>Contribution</i>	95	133
<b>Project Schedule</b> No change	<i>Rating</i>	5	5
	<i>Weight</i>	24	
	<i>Contribution</i>	120	120
<b>Total Performance</b>		500	553
<b>Net Change in Performance</b>		11%	



**Recommendation # 1**  
**Redesign Pavement Sections**



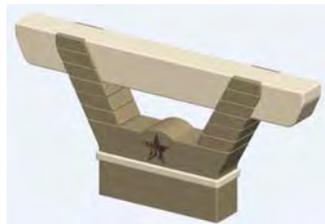
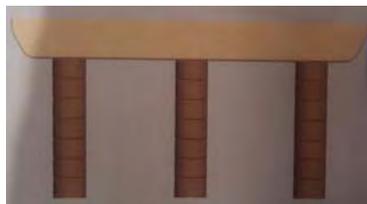
**Recommendation # 2**  
**Vertically Stage Pavement**



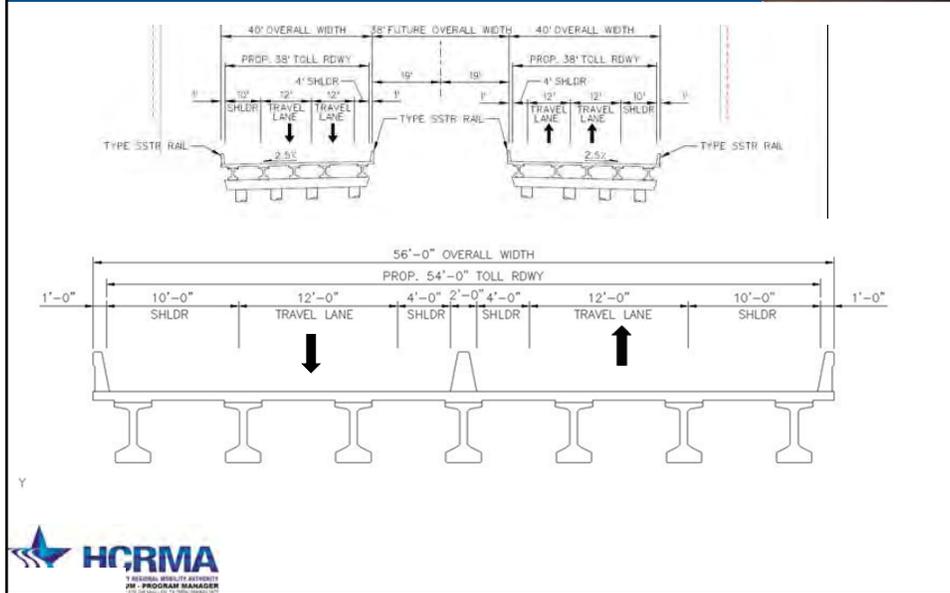
### Recommendation # 3 Shorten Floodway Bridge



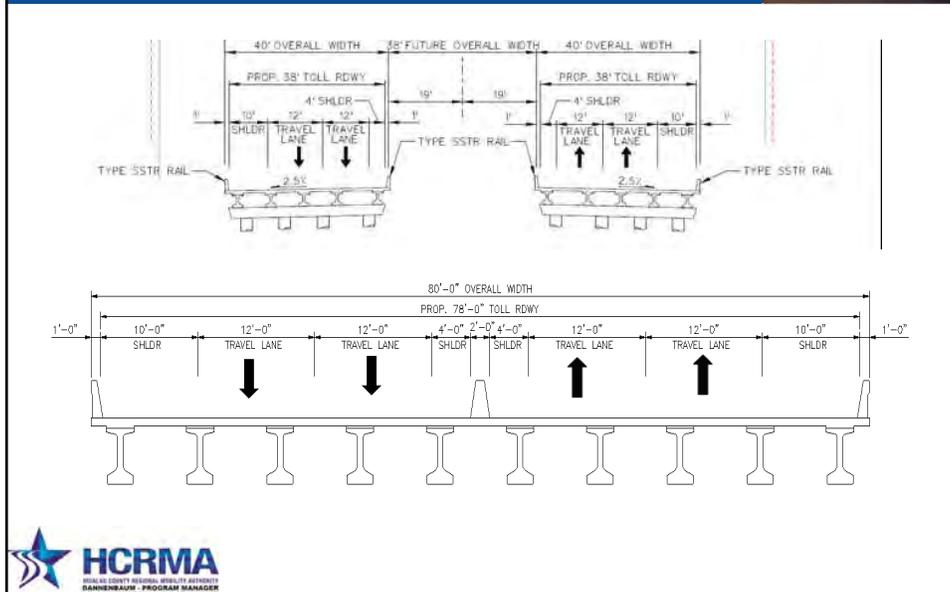
### Recommendation # 4 Simplify Bridge Aesthetics



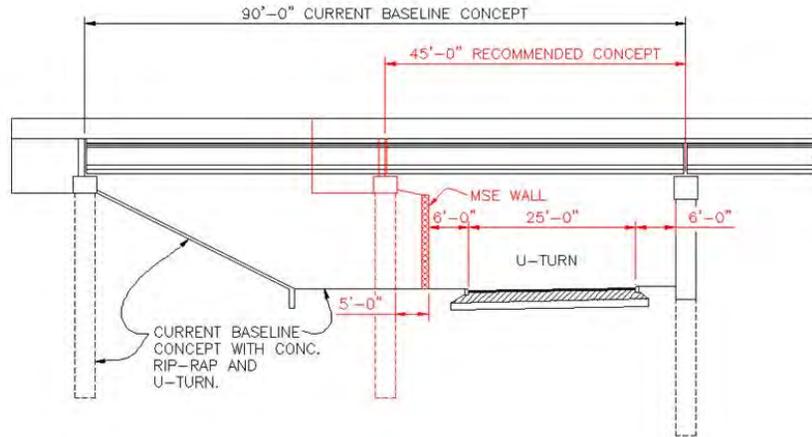
## Recommendation # 5 Two-lane Floodway Bridge



## Recommendation # 6 Single 4-Lane Floodway Bridge



## Recommendation # 7 Shorter Bridge Spans



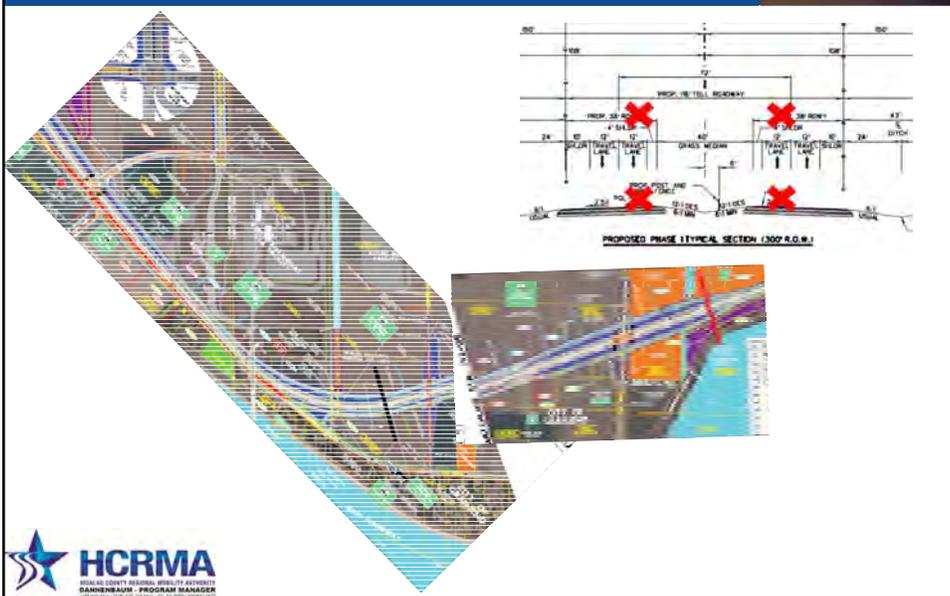
## Recommendation # 8 Shary Road – Defer West Side Ramps



*Recommendation # 9  
Shary Road West – Frontage Roads Only*



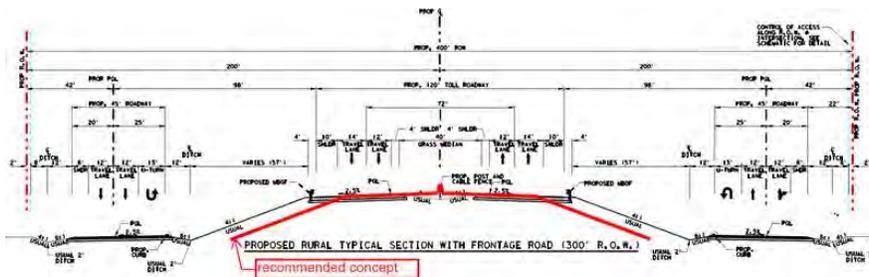
*Recommendation # 10  
Shary Road – Two-Lane Main Line*



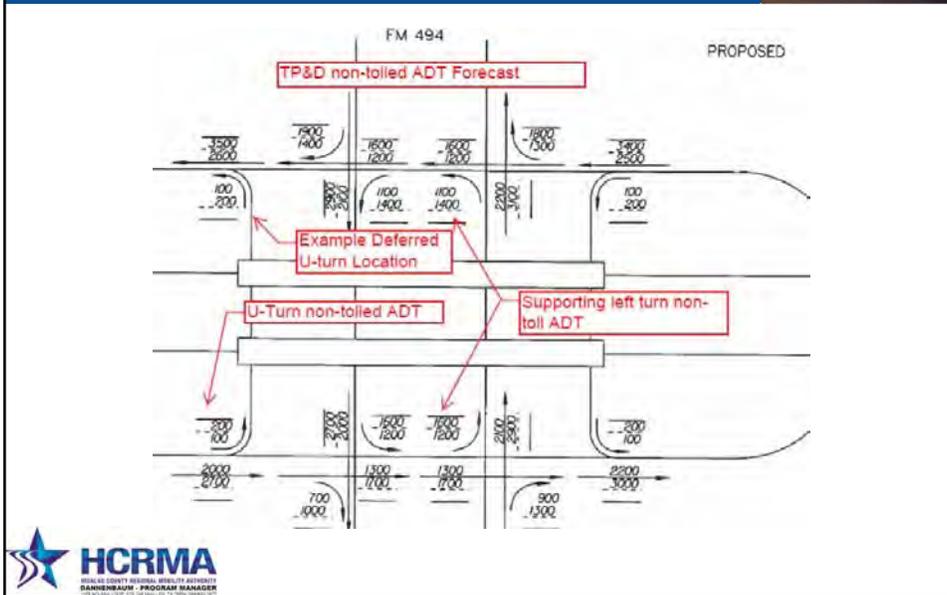
## Recommendation # 11 23<sup>rd</sup> Street – Defer West Side Ramps



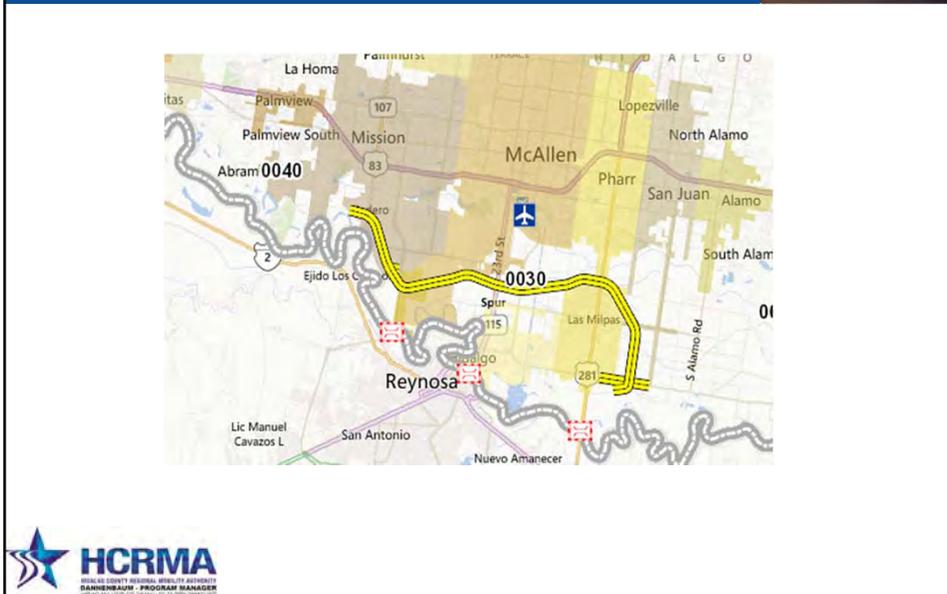
## Recommendation # 12 Build From the Middle



## Recommendation # 13 Defer U-turns



## Recommendation # 14 Develop Marketing Plan



## Recommendation # 15 Defer Frontage Roads – I to Anaya



## Revenue



## VE Recommendation Summary



VALUE MATRIX							
SH 365 Hidalgo County							
OVERALL PERFORMANCE	Performance (P)	% Change Performance	Cost (C)	% Change Cost	Value Index (P/C)	% Value Improvement	
Baseline	500		\$157.0		3.18		
1	Redesign Pavement Sections	500	0%	\$151.8	3.3%	3.29	3%
2	Vertically Stage Pavement	488	-2%	\$149.8	4.6%	3.25	2%
3	Shorten Floodway Bridge	492	-1%	\$154.4	1.7%	3.19	0%
4	Simplify Bridge Aesthetics	504	1%	\$154.9	1.4%	3.26	2%
5	Two-Lane Floodway Bridge	552	10%	\$149.7	4.6%	3.69	16%
6	Single 4-Lane Floodway Bridge	504	1%	\$156.7	0.2%	3.22	1%
7	Shorter Bridge Spans	500	0%	\$155.7	0.8%	3.21	1%
8	Shary Road - Defer West Side Ramps	511	2%	\$156.8	0.1%	3.26	3%
9	Shary Road West - Frontage Roads	488	-2%	\$149.8	4.6%	3.26	2%
10	Shary Road - Two-Lane Main Line	497	0%	\$154.4	1.7%	3.22	1%
11	23rd Street - Defer West Side Ramps	514	3%	\$151.0	3.9%	3.40	7%
12	Build from the Middle	492	-1%	\$154.9	1.3%	3.18	0%
13	Defer U-turns	481	-4%	\$155.6	0.9%	3.09	-3%
14	Develop Marketing Plan	N/A	N/A	\$157.0	N/A	N/A	N/A
15	Defer Frontage Roads I to Anaya	511	2%	\$154.4	1.6%	3.31	4%



## VE Recommendation Summary



Summary of Recommendations				
No.	Description	Cost Delta	Scenario 1	Scenario 2
1	Redesign Pavement Sections	(\$5.16)	(\$5.16)	
2	Vertically Stage Pavement	D (\$7.18)		(\$7.18)
3	Shorten Floodway Bridge	(\$2.63)	(\$2.63)	(\$2.63)
4	Simplify Bridge Aesthetics	(\$2.14)	(\$2.14)	(\$2.14)
5	Two-Lane Floodway Bridge	D (\$7.28)		(\$7.28)
6	Single 4-Lane Floodway Bridge	(\$0.33)	(\$0.33)	
7	Shorter Bridge Spans	(\$1.31)	(\$1.31)	(\$1.31)
8	Shary Road - Defer West Side Ramps	D (\$0.20)	(\$0.20)	
9	Shary Road West - Frontage Roads Only	D (\$7.22)		(\$7.22)
10	Shary Road - Two-Lane Main Line	D (\$2.62)	(\$2.62)	
11	23rd Street - Defer West Side Ramps	D (\$6.05)	(\$6.05)	(\$6.05)
12	Build from the Middle	PD (\$2.06)	(\$2.06)	(\$2.06)
13	Defer U-turns	D (\$1.44)	(\$1.44)	(\$1.44)
14	Develop Marketing Plan	\$0.00	\$0.00	\$0.00
15	Defer Frontage Roads I to Anaya	D (\$2.58)	(\$2.58)	(\$2.58)
	<b>Total</b>		<b>(\$21.35)</b>	<b>(\$32.70)</b>

Savings for Recommendation 12 would be reduced if Recommendation 10 were implemented



**HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY**

**AGENDA RECOMMENDATION FORM**

BOARD OF DIRECTORS	<u>  X  </u>	AGENDA ITEM	<u>  1A  </u>
PLANNING COMMITTEE	<u>          </u>	DATE SUBMITTED	<u>  6/10/13  </u>
FINANCE COMMITTEE	<u>          </u>	MEETING DATE	<u>  6/19/13  </u>
TECHNICAL COMMITTEE	<u>          </u>		

2. Agenda Item: **ANNUAL REPORT**
  
2. Nature of Request: (Brief Overview) Attachments:   X   Yes      No  
Report from Executive Director on activities and progress for Fiscal Year 2012
  
3. Policy Implication: Board Policy, Local Government Code, Texas Government Code, Texas Transportation Code, TxDOT Policy
  
4. Budgeted:      Yes      No   X   N/A
  
5. Staff Recommendation: **Report Only.**
  
6. Program Manager's Recommendation:      Approved      Disapproved   X   None
  
7. Planning Committee's Recommendation:      Approved      Disapproved   X   None
  
8. Board Attorney's Recommendation:      Approved      Disapproved   X   None
  
9. Executive Director's Recommendation:      Approved      Disapproved   X   None

**HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY**

**AGENDA RECOMMENDATION FORM**

<b>BOARD OF DIRECTORS</b>	<u>  X  </u>	<b>AGENDA ITEM</b>	<u>  1B  </u>
<b>PLANNING COMMITTEE</b>	<u>          </u>	<b>DATE SUBMITTED</b>	<u>  6/10/13  </u>
<b>FINANCE COMMITTEE</b>	<u>          </u>	<b>MEETING DATE</b>	<u>  6/19/13  </u>
<b>TECHNICAL COMMITTEE</b>	<u>          </u>		

- 3. Agenda Item: **PROGRAM MANAGER UPDATE ON SH 365 PROJECT**
  
- 2. Nature of Request: (Brief Overview) Attachments:   X   Yes    No  
Report from Program Manager on progress with SH 365 Project
  
- 3. Policy Implication: Board Policy, Local Government Code, Texas Government Code, Texas Transportation Code, TxDOT Policy
  
- 4. Budgeted:    Yes    No   X   N/A
  
- 5. Staff Recommendation: **Report Only.**
  
- 6. Program Manager's Recommendation:    Approved    Disapproved   X   None
  
- 7. Planning Committee's Recommendation:    Approved    Disapproved   X   None
  
- 8. Board Attorney's Recommendation:    Approved    Disapproved   X   None
  
- 9. Executive Director's Recommendation:    Approved    Disapproved   X   None

**HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY**

**AGENDA RECOMMENDATION FORM**

BOARD OF DIRECTORS	<u>  X  </u>	AGENDA ITEM	<u>  2A  </u>
PLANNING COMMITTEE	<u>          </u>	DATE SUBMITTED	<u>  6/10/13  </u>
FINANCE COMMITTEE	<u>          </u>	MEETING DATE	<u>  6/19/13  </u>
TECHNICAL COMMITTEE	<u>          </u>		

1. Agenda Item: **APPROVAL OF MINUTES FOR REGULAR MEETING HELD MAY 15, 2013 AND SPECIAL MEETNG HELD MAY 29, 2013**
  
2. Nature of Request: (Brief Overview) Attachments:   X   Yes      No  
  
Consideration and approval of minutes for the Hidalgo Count Regional Mobility Authority Board of Directors Regular Meeting held May 15, 2013 and Special Meeting held May 29, 2013.
  
3. Policy Implication: Board Policy, Local Government Code, Texas Government Code, Texas Transportation Code, TxDOT Policy
  
4. Budgeted:      Yes      No   X   N/A
  
5. Staff Recommendation: **Motion to approve the minutes for the Board of Director's Regular Meeting held May 15, 2013 and Special Meeting held May 29, 2013.**
  
6. Program Manager's Recommendation:      Approved      Disapproved   X   None
  
7. Planning Committee's Recommendation:      Approved      Disapproved   X   None
  
8. Board Attorney's Recommendation:   X   Approved      Disapproved      None
  
9. Executive Director's Recommendation:   X   Approved      Disapproved      None

**STATE OF TEXAS  
COUNTY OF HIDALGO  
HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY**

The Hidalgo County Regional Mobility Authority Board of Directors convened a Regular Meeting on **Wednesday, May 15, 2013**, at 5:30 pm at the Pharr City Hall, City Commission Chamber, 2<sup>nd</sup> Floor, 118 South Cage Boulevard, Pharr, Texas, with the following present:

Board Members:	Dennis Burleson, Chairman	HCRMA
	Ricardo Perez, Secretary/Treasurer	HCRMA
	Forrest Runnels, Director	HCRMA
	David Guerra, Director	HCRMA
	Josue Reyes, Director	HCRMA
Absent	Michael G. Cano, Vice-Chairman	HCRMA
	Alonzo Cantu, Director	HCRMA
Staff:	Pilar Rodriguez, Executive Director	HCRMA
	Flor E. Koll, Program Administrator	HCRMA
	Dan Rios, Legal Counsel	HCRMA
	Louis Jones, Program Manager	HCRMA

**CALL TO ORDER FOR REGULAR MEETING**

Chairman Burleson called the regular meeting to order.

**PUBLIC COMMENT**

*None*

**1. REPORTS**

- A. Update of SH 365 Project – Louis Jones, Program Manager  
*Louis Jones, Program Manager, provided a summary update on the progress for the SH 365 Project. Mr. Jones also presented the schedule for the Value Engineering session for SH 365. No action taken.*

- 2. **CONSENT AGENDA** (All matters listed under the Consent Agenda are considered to be routine by the Governing Body and will be enacted by one motion. There will be no separate discussion of these items; however, if discussion is desired, that item(s) will be removed from the Consent Agenda and will be considered separately. The Governing Body may also elect to go into Executive Session on any item, whether or not such item(s) are posted as an Executive Session Item, at any time during the meeting when authorized by provisions of the Open Meetings Act.)

***Motion by David Guerra, with a second by Forrest Runnels, to approve the Consent Agenda. Motion carried unanimously.***

- A. Approval of Minutes for Regular Meeting held April 17, 2013.  
*Approved the Minutes for Regular Meeting held April 17, 2013 as presented.*
- B. Approval of Project Expense Report for the Period from April 10, 2013 to May 7, 2013.  
*Approved the Project Expense Report for the Period from April 10, 2013 to May 7, 2013.*

- C. Approval of Financial Report for March 2013.  
*Approved the Financial Report for March 2013 as presented.*
- D. Resolution 2013-18 – Approval of Budget Amendment in the amount of \$81,309 to fund a Sketch Level Traffic & Revenue Study for Overweight Truck Traffic at the Pharr International Bridge and State Highway 365 Project.  
*Approved Resolution 2013-18 – Approval of Budget Amendment in the amount of \$81,309 to fund a Sketch Level Traffic & Revenue Study for Overweight Truck Traffic at the Pharr International Bridge and State Highway 365 Project as presented.*

### 3. REGULAR AGENDA

- A. Resolution 2013-16 – Approval of Supplemental No. 2 to Work Authorization No. 6 of Professional Service Agreement with Dannenbaum Engineering to provide a Value Engineering Study for the State Highway 365 Project.  
***Motion by David Guerra, with a second by Josue Reyes, to approve Resolution 2013-16 – Approval of Supplemental No. 2 to Work Authorization No. 6 of Professional Service Agreement with Dannenbaum Engineering to provide a Value Engineering Study for the State Highway 365 Project in the amount of \$149,120.30, leaving a maximum fee balance of \$1,648,432.89. Motion carried unanimously.***
- A. Resolution 2013-17 – Approval of Supplemental No. 3 to Work Authorization No. 6 of Professional Service Agreement with Dannenbaum Engineering to provide a low level aerial flight and topographic survey for the International Border Trade Corridor.  
***Motion by David Guerra, with a second by Josue Reyes, to approve Resolution 2013-17 – Approval of Supplemental No. 3 to Work Authorization No. 6 of Professional Service Agreement with Dannenbaum Engineering to provide a low level aerial flight and topographic survey for the International Border Trade Corridor in the amount of \$346,720.31, leaving a maximum fee balance of \$1,301,712.58. Motion carried unanimously.***

### 4. CHAIRMAN'S REPORT

- A. Report on Value Engineering Study for SH 365 Project to be held on May 20 -24, 2013, at the McAllen Convention Center.  
*Chairman Burlison reported on the Value Engineering Study to be held for the SH 365 Project. No action taken.*
- B. Election of Vice Chairman and Secretary/Treasurer  
***Michael G. Cano was nominated for Vice Chairman and Ricardo Perez for Secretary/Treasurer. Motion by Forrest Runnels, with a second by David Guerra, to elect Michael G. Cano as Vice Chairman and Ricardo Perez as Secretary/Treasurer. Motion carried unanimously.***

### 5. TABLED ITEMS

- A. None

6. EXECUTIVE SESSION, CHAPTER 551, TEXAS GOVERNMENT CODE, SECTION 551.071 (CONSULTATION WITH ATTORNEY), SECTION 551.072 (DELIBERATION OF REAL PROPERTY) AND SECTION 551.074 (PERSONNEL MATTERS)

*The Board of Directors did not enter into Executive Session on any item(s).*

A. Consultation with Board Attorney and Financial Advisor on legal issues pertaining to financial options, including current obligations (Section 551.071 T.G.C.).

***No action taken.***

B. Annual performance evaluation of Pilar Rodriguez, Executive Director (Section 551.074 T.G.C.)

***No action taken.***

**ADJOURNMENT**

*There being no other business to come before the Board of Directors, the meeting was adjourned at 5:55 pm.*

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*Dennis Burleson, Chairman*

*Attest:*

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*Ricardo Perez, Secretary/Treasurer*

**STATE OF TEXAS  
COUNTY OF HIDALGO  
HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY**

The Hidalgo County Regional Mobility Authority Board of Directors convened a Special Meeting on **Thursday, May 29, 2013**, at 4:32 pm at the Pharr City Hall, City Commission Chambers, 2<sup>nd</sup> Floor, 118 South Cage Boulevard, Pharr, Texas, with the following present:

Board Members:	Dennis Burleson, Chairman	HCRMA
	Michael G. Cano, Vice-Chairman	HCRMA
	Ricardo Perez, Secretary/Treasurer	HCRMA
	Forrest Runnels, Director	HCRMA
	David Guerra, Director	HCRMA
	Alonzo Cantu, Director	HCRMA
	Josue Reyes, Director	HCRMA
Staff:	Pilar Rodriguez, Executive Director	HCRMA
	Flor E. Koll, Program Administrator	HCRMA
	Dan Rios, Legal Counsel	HCRMA
	Louis Jones, Program Manager	HCRMA

**CALL TO ORDER FOR SPEICAL MEETING**

Chairman Burleson called the special meeting to order.

**PUBLIC COMMENT**

*None*

**1. REPORTS**

- A. Value Engineering Study for State Highway 365 Project – Louis Jones, Program Manager  
*Louis Jones, Program Manager, provided a brief report on the Value Engineering Study conducted for SH 365 on May 20-24, 2013. No action taken.*

**2. REGULAR AGENDA**

- A. Resolution 2013-19 – Approval of 2012 Annual Compliance Report to the Texas Department of Transportation.  
***Motion by Michael Cano, with a second by Josue Reyes, to approve Resolution 2013-19 – Approval of 2012 Annual Compliance Report to the Texas Department of Transportation. Motion carried unanimously.***

**3. CHAIRMAN'S REPORT**

- A. None

**4. TABLED ITEMS**

- A. None

**5. EXECUTIVE SESSION, CHAPTER 551, TEXAS GOVERNMENT CODE, SECTION 551.071 (CONSULTATION WITH ATTORNEY), SECTION 551.072 (DELIBERATION OF REAL PROPERTY) AND SECTION 551.074 (PERSONNEL MATTERS)**

A. None

**ADJOURNMENT FOR SPECIAL MEETING**

*There being no other business to come before the Board of Directors, the meeting was adjourned at 4:53 pm.*

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*Dennis Burleson, Chairman*

*Attest:*

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*Ricardo Perez, Secretary/Treasurer*

**HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY**

**AGENDA RECOMMENDATION FORM**

<b>BOARD OF DIRECTORS</b>	<u>  X  </u>	<b>AGENDA ITEM</b>	<u>  2B  </u>
<b>PLANNING COMMITTEE</b>	<u>          </u>	<b>DATE SUBMITTED</b>	<u>  6/10/13  </u>
<b>FINANCE COMMITTEE</b>	<u>          </u>	<b>MEETING DATE</b>	<u>  6/19/13  </u>
<b>TECHNICAL COMMITTEE</b>	<u>          </u>		

1. Agenda Item: **APPROVAL OF PROJECT EXPENSE REPORT FROM MAY 8, 2013 THROUGH JUNE 11, 2013**

2. Nature of Request: (Brief Overview) Attachments:   X   Yes      No

Consideration and approval of project expense report for the period from May 8, 2013 to June 11, 2013.

3. Policy Implication: Board Policy, Local Government Code, Texas Government Code, Texas Transportation Code, TxDOT Policy

4. Budgeted:   X   Yes      No    N/A

Funding Source:      Vehicle Registration Fund Balance after Expenses   \$3,588,844.44

General Account	\$ 28,374.69
Loop Account	\$808,225.83
Debt Service Account	<u>\$148,347.02</u>
<b>Total Project Expenses for Reporting Period</b>	<b><u>\$984,947.54</u></b>

5. Staff Recommendation: **Motion to approve the project expense report for the period from May 8, 2013 to June 11, 2013 as presented.**

6. Program Manager's Recommendation:   X   Approved      Disapproved      None

7. Planning Committee's Recommendation:      Approved      Disapproved   X   None

8. Board Attorney's Recommendation:      Approved      Disapproved   X   None

9. Executive Director's Recommendation:   X   Approved      Disapproved      None



**HCRMA**  
HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY

## Memorandum

To: Dennis Burleson, Chairman  
From: Pilar Rodriguez, PE, Executive Director  
Date: June 10, 2013  
Re: **Expense Report for the Period from May 8, 2013 to June 11, 2013**

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Attached is the expense report for the period commencing on May 8, 2013 and ending on June 11, 2013.

Expenses for the General Account total \$28,374.69, Loop Account total \$808,225.83, and for the Debt Service Account total \$148,347.02. The aggregate expense for the reporting period is \$984,947.54.

Based on review by this office, **approval of expenses for the reporting period is recommended in the aggregate amount of \$984,947.54.**

This leaves a balance in the Vehicle Registration Fund after expenses of \$3,588,844.44.

If you should have any questions or require additional information, please advise.



# EXPENSE REPORT

June 19, 2013

## General Account - 280003536

	Make Check Payable to	Date	Memo:	Amount	Ck #
Salaries & Wages					
	16200.000 City of McAllen	5/15/2013	Payroll 10 4/49/13-5/12/13	\$ 10,967.04	10517
	16200.000 City of McAllen	5/29/2013	Payroll 11 5/13/13-5/26/13	\$ 9,634.12	10518
	17000.000 One Stop Staffing				
Supplies					
	16620.000				
	17140.000				
Travel & Training					
	16660.000 A Fast Delivery	5/16/2013	2013001830	\$ 183.00	10515
	16660.000 A Fast Delivery	6/3/2013	2013002017	\$ 114.25	10516
	16660.000 Dennis Burleson	4/17/2013	Travel to Austin	\$ 834.05	10520
	16660.000 Dennis Burleson	5/13/2013	Travel to Austin	\$ 630.97	10521
	16660.000				
Dues & Subscriptions					
	16100.000				
Rental Contractual					
	17150.000 City of Pharr	5/31/2013	HC053113 Rent June 2013	\$ 1,000.00	10519
	17150.000 Wells Fargo	5/29/2013	5000126415 05/25/13-06/24/13	\$ 330.02	10527
Professional Services					
	17210.000 Pena Designs	5/31/2013	Invoice 12	\$ 150.00	10523
	17050.000 Salinas Allen Schmitt	5/22/2013	101559 - Apr-May Svcs & Audit Svc	\$ 2,075.00	10524
	17100.000 Tuggey Fernandez	5/7/2013	11144	\$ 918.26	10525
	17100.000 Tuggey Fernandez	6/6/2013	11219	\$ 220.00	10526
	17310.000 First National Bank	5/31/2013	Visa - Closing date 5/31/13	\$ 1,317.98	10522
				<b>\$ 28,374.69</b>	

## Loop Account - 280003609

Engineering Services					
	28000.000 L&G Engineering	5/31/2013	11324463 SH365/Seg1/WA1	\$ 52,429.32	10473
	28000.000 S&B Infrastructure	5/15/2013	U1695.100-06	\$ 173,602.23	10475
	28000.000 Teds	4/29/2013	20131525	\$ 3,621.37	10481
	28000.000 Teds	5/21/2013	20131535	\$ 3,515.38	10477
	28000.000 Teds	5/14/2013	20131536	\$ 25,928.27	10478
Surveying Services					
	28000.000 Dos Land Surveying	6/4/2013	02 TCC Supp	\$ 34,623.21	10472
	28000.000 Quintanilla, Headly & Assoc	6/3/2013		8266 \$ 60,623.75	10474
Environmental					
	28000.000 Atkins	3/14/2013	1163036 SH365	\$ 54,965.13	10468
	28000.000 Atkins	5/13/2013	1167694 SH365	\$ 27,991.36	10469
	28000.000 Atkins	5/13/2013	1167791 IBTC	\$ 895.48	10470
Legal Services					
	27100.000 Dan Rios				
	27100.000 Tuggey Fernandez	5/7/2013	11143	\$ 2,392.50	10479
	27100.000 Tuggey Fernandez	6/6/2013	1128.5	\$ 1,128.50	10480
Program Management					
	28000.000 Dannenbaum	6/5/2013	4652-01/19/XV WA#6 Sup 1,2&3	\$ 366,509.33	10471
Acquisition Services					
Financial Services					
	28000.000 First Southwest				
	28000.000 First Southwest				
				<b>\$ 808,225.83</b>	

## Debt Service - 280003862

	47320.000 First National Bank		Loan # 1286007585	\$ 148,347.02	10054
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**Total \$ 984,947.54**

## TRANSFERS

Loop - 280003609	23000.000 Hidalgo County RMA		Reimbursement to General Acct		
Vehicle - 280003617	33000.000 Hidalgo County RMA		Transfer to Debt Service Acct	\$ 148,347.02	10090

Recommend Approval/Pilar Rodriguez, E.D.

Date Approved

Ricardo Perez, Secretary/Treasurer

Dennis Burleson, Chairman



## Memorandum

To: Flor E. Koll

From: Abel Carbajal  
Assistant Payroll Manager

Date: May 15, 2013

Re: Payroll for Pilar Rodriguez and Flor E. Koll

Please submit a check in the amount of \$ 10,967.04 to the Finance Department. This is to cover the following: payroll from 4/29/2013 through 5/12/2013

The following is a breakdown:

RA	Salary	9,334.90
RB	Overtime	0.00
RC		
RD	FICA	700.44
RE	TMRS	588.10
RF	TWC	0.00
RG	Group Term Life Ins	7.92
RH	Health Insurance Emp plus Fam	335.68
RI	Workers Compensation	0.00
Total amount invoiced for:		\$ 10,967.04

If you should have any questions, please feel free to contact me at 956-681-1041.

Thank you.



## Memorandum

To: Flor E. Koll

From: Abel Carbajal  
Assistant Payroll Manager

Date: May 29, 2013

Re: Payroll for Pilar Rodriguez and Flor E. Koll

Please submit a check in the amount of \$ 9,634.12 to the Finance Department. This is to cover the following: payroll from 5/13/2013 through 5/26/2013

The following is a breakdown:

RA	Salary	8,421.67
RB	Overtime	35.31
RC		
RD	FICA	644.35
RE	TMRS	532.79
RF	TWC	0.00
RG	Group Term Life Ins	0.00
RH	Health Insurance Emp plus Fam	0.00
RI	Workers Compensation	0.00
Total amount invoiced for:		\$ 9,634.12

If you should have any questions, please feel free to contact me at 956-681-1041.

Thank you.

A-FAST DELIVERY, LLC  
 P.O. Box 530402  
 Harlingen, TX 78553  
 Phone: (956) 425-7333  
 Fax: (956) 425-3075  
 Tax I.D. 27-1584703

**A FAST DELIVERY HAS NOW BECOME A FAST DELIVERY LLC AND OUR NEW FEDERAL IDENTIFICATION NUMBER IS 27-1584703 AS OF 01/01/10 .**

HCRMA  
 118 S CAGE  
 PHARR, TX 78577

This Invoice includes Completed Jobs delivered on or before 5/15/2013.

**ITEMIZED LISTING**

JobNumber	Priority	Legs	Drop Date	Requestor	Reference	Amount Due
<b>2013011917</b>	<b>REGULAR</b>		<b>5/6/2013</b>	<b>TS/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	DANNEN BAUM ENGINEERING - 1109 NOLANA LOOP STE 208 - MCALLEN, TX 78501					
Released:	5/6/2013 10:20 am		Dropped Off:	5/6/2013 12:40 pm		
<b>2013012289</b>	<b>REGULAR</b>		<b>5/9/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	EIA PROPERTIES - 506 E CANTON - EDINBURG, TX					
Released:	5/9/2013 9:20 am		Dropped Off:	5/9/2013 12:25 pm		
<b>2013012290</b>	<b>REGULAR</b>		<b>5/9/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	HIDALGO CO JUDGE RAMON GARCIA - 302 W UNIVERSITY - EDINBURG, TX 78539					
Released:	5/9/2013 9:20 am		Dropped Off:	5/9/2013 12:00 pm		
<b>2013012291</b>	<b>REGULAR</b>		<b>5/9/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	LINEBARGER GOGGENS BLAIR & SAM - 205 S PIN OAK AVE - EDINBURG, TX 78539					
Released:	5/9/2013 9:21 am		Dropped Off:	5/9/2013 11:50 am		
<b>2013012292</b>	<b>REGULAR</b>		<b>5/9/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	HIDALGO CO PCT4 JOSEPH PALACIO - 1051 N DOOLITTLE - EDINBURG, TX					
Released:	5/9/2013 9:21 am		Dropped Off:	5/9/2013 12:20 pm		
<b>2013012293</b>	<b>REGULAR</b>		<b>5/9/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	CANTU CONSTRUCTION - 5221 N MCCOLL - MCALLEN, TX					
Released:	5/9/2013 9:21 am		Dropped Off:	5/9/2013 10:59 am		
<b>2013012294</b>	<b>REGULAR</b>		<b>5/9/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	IBC BANK - 1 S BROADWAY - MCALLEN, TX 78501					
Released:	5/9/2013 9:21 am		Dropped Off:	5/9/2013 10:35 am		
<b>2013012295</b>	<b>REGULAR</b>		<b>5/9/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	DANNEN BAUM ENGINEERING - 1109 NOLANA LOOP STE 208 - MCALLEN, TX 78501					
Released:	5/9/2013 9:22 am		Dropped Off:	5/9/2013 10:43 am		
<b>2013012296</b>	<b>REGULAR</b>		<b>5/9/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	LAW OFFICE OF DANIEL RIOS - 323 NOLANA - MCALLEN, TX					
Released:	5/9/2013 9:22 am		Dropped Off:	5/9/2013 10:56 am		

JobNumber	Priority	Legs	Drop Date	Requestor	Reference	Amount Due
<b>2013012297</b>	<b>REGULAR</b>		<b>5/9/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	TEXAS DEPT OF TRANSPORTATION - 600 W EXPWY 83 - PHARR, TX 78577					
Released:	5/9/2013 9:22 am		Dropped Off: 5/9/2013 10:24 am			
<b>2013012298</b>	<b>REGULAR</b>		<b>5/9/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	HIDALGO CO PCT2 TITO PALACIOS - 300 HALL ACRES - PHARR, TX					
Released:	5/9/2013 9:22 am		Dropped Off: 5/9/2013 10:10 am			
<b>2013012299</b>	<b>REGULAR</b>		<b>5/9/2013</b>	<b>SG/FLOR</b>		<b>\$7.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	HIDALGO CO PCT3 JOE FLORES - 724 N BREYFOGAL - MISSION, TX 78572					
Released:	5/9/2013 9:23 am		Dropped Off: 5/9/2013 11:10 am			
<b>2013012300</b>	<b>REGULAR</b>		<b>5/9/2013</b>	<b>SG/FLOR</b>		<b>\$8.25</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	HIDALGO CO PCT 1 - 1902 JOE STEPHENS - JOEL QUINTANILLA - WESLACO, TX 78596					
Released:	5/9/2013 9:23 am		Dropped Off: 5/9/2013 1:30 pm			
<b>2013012301</b>	<b>REGULAR</b>		<b>5/9/2013</b>	<b>SG/FLOR</b>		<b>\$7.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	RIO BANK - 495 BENTSON RD - MISSION, TX					
Released:	5/9/2013 9:23 am		Dropped Off: 5/9/2013 11:15 am			
<b>2013012379</b>	<b>REGULAR</b>		<b>5/10/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	EIA PROPERTIES - 506 E CANTON - EDINBURG, TX					
Released:	5/10/2013 8:00 am		Dropped Off: 5/10/2013 10:27 am			
<b>2013012380</b>	<b>REGULAR</b>		<b>5/10/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	HIDALGO CO JUDGE RAMON GARCIA - 302 W UNIVERSITY - EDINBURG, TX 78539					
Released:	5/10/2013 8:00 am		Dropped Off: 5/10/2013 10:12 am			
<b>2013012381</b>	<b>REGULAR</b>		<b>5/10/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	HIDALGO CO PCT4 JOSEPH PALACIO - 1051 N DOOLITTLE - EDINBURG, TX					
Released:	5/10/2013 8:00 am		Dropped Off: 5/10/2013 10:19 am			
<b>2013012382</b>	<b>REGULAR</b>		<b>5/10/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	LINEBARGER GOGGENS BLAIR & SAM - 205 S PIN OAK AVE - EDINBURG, TX 78539					
Released:	5/10/2013 8:00 am		Dropped Off: 5/10/2013 10:04 am			
<b>2013012383</b>	<b>REGULAR</b>		<b>5/10/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	CANTU CONSTRUCTION - 5221 N MCCOLL - MCALLEN, TX					
Released:	5/10/2013 8:00 am		Dropped Off: 5/10/2013 10:05 am			
<b>2013012384</b>	<b>REGULAR</b>		<b>5/10/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	IBC BANK - 1 S BROADWAY - MCALLEN, TX 78501					
Released:	5/10/2013 8:00 am		Dropped Off: 5/10/2013 12:22 pm			
<b>2013012385</b>	<b>REGULAR</b>		<b>5/10/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	DANNEN BAUM ENGINEERING - 1109 NOLANA LOOP STE 208 - MCALLEN, TX 78501					
Released:	5/10/2013 8:00 am		Dropped Off: 5/10/2013 9:49 am			
<b>2013012386</b>	<b>REGULAR</b>		<b>5/10/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	LAW OFFICE OF DANIEL RIOS - 323 NOLANA - MCALLEN, TX					
Released:	5/10/2013 8:00 am		Dropped Off: 5/10/2013 9:55 am			
<b>2013012387</b>	<b>REGULAR</b>		<b>5/10/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	TEXAS DEPT OF TRANSPORTATION - 600 W EXPWY 83 - PHARR, TX 78577					
Released:	5/10/2013 8:00 am		Dropped Off: 5/10/2013 9:20 am			

JobNumber	Priority	Legs	Drop Date	Requestor	Reference	Amount Due
<b>2013012388</b>	<b>REGULAR</b>		<b>5/10/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	HIDALGO CO PCT2 TITO PALACIOS - 300 HALL ACRES - PHARR, TX					
Released:	5/10/2013 8:00 am		Dropped Off: 5/10/2013 9:05 am			
<b>2013012389</b>	<b>REGULAR</b>		<b>5/10/2013</b>	<b>SG/FLOR</b>		<b>\$7.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	HIDALGO CO PCT3 JOE FLORES - 724 N BREYFOGAL - MISSION, TX 78572					
Released:	5/10/2013 8:00 am		Dropped Off: 5/10/2013 9:50 am			
<b>2013012390</b>	<b>REGULAR</b>		<b>5/10/2013</b>	<b>SG/FLOR</b>		<b>\$7.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	RIO BANK - 495 BENTSON RD - MISSION, TX					
Released:	5/10/2013 8:00 am		Dropped Off: 5/10/2013 10:00 am			
<b>2013012391</b>	<b>REGULAR</b>		<b>5/10/2013</b>	<b>SG/FLOR</b>		<b>\$8.25</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	HIDALGO CO PCT 1 - 1902 JOE STEPHENS - JOEL QUINTANILLA - WESLACO, TX 78596					
Released:	5/10/2013 8:00 am		Dropped Off: 5/10/2013 12:25 pm			

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<b>Number of Jobs: 27</b>	<b>Total Charges:</b>	<b>\$183.00</b>
	<b>Total Credits:</b>	<b>\$0.00</b>
	<b>Amount Due:</b>	<b>\$183.00</b>

A-FAST DELIVERY, LLC  
 P.O. Box 530402  
 Harlingen, TX 78553  
 Phone: (956) 425-7333  
 Fax: (956) 425-3075  
 Tax I.D. 27-1584703

**A FAST DELIVERY HAS NOW BECOME A FAST DELIVERY LLC AND OUR NEW FEDERAL IDENTIFICATION NUMBER IS 27-1584703 AS OF 01/01/10 .**

HCRMA  
 118 S CAGE  
 PHARR, TX 78577

This Invoice includes Completed Jobs delivered on or before 5/31/2013.

**ITEMIZED LISTING**

JobNumber	Priority	Legs	Drop Date	Requestor	Reference	Amount Due
<b>2013012978</b>	<b>REGULAR</b>		<b>5/16/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	DANNEN BAUM ENGINEERING - 1109 NOLANA LOOP STE 208 - MCALLEN, TX 78501					
Released:	5/16/2013 10:50 am		Dropped Off:	5/16/2013 12:33 pm		
<b>2013012987</b>	<b>REGULAR</b>		<b>5/16/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	LINEBARGER GOGGENS BLAIR & SAM - 205 S PIN OAK AVE - EDINBURG, TX 78539					
Released:	5/16/2013 11:11 am		Dropped Off:	5/16/2013 12:14 pm		
<b>2013012988</b>	<b>REGULAR</b>		<b>5/16/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	CANTU CONSTRUCTION JOB SITE - 5501 S MCCOLL - MCALLEN, TX					
Released:	5/16/2013 11:11 am		Dropped Off:	5/16/2013 12:18 pm		
<b>2013013633</b>	<b>REGULAR</b>		<b>5/24/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	EIA PROPERTIES - 506 E CANTON - EDINBURG, TX					
Released:	5/24/2013 8:00 am		Dropped Off:	5/24/2013 10:44 am		
<b>2013013634</b>	<b>REGULAR</b>		<b>5/24/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	HIDALGO CO JUDGE RAMON GARCIA - 302 W UNIVERSITY - EDINBURG, TX 78539					
Released:	5/24/2013 8:00 am		Dropped Off:	5/24/2013 10:18 am		
<b>2013013635</b>	<b>REGULAR</b>		<b>5/24/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	HIDALGO CO PCT4 JOSEPH PALACIO - 1051 N DOOLITTLE - EDINBURG, TX					
Released:	5/24/2013 8:00 am		Dropped Off:	5/24/2013 10:27 am		
<b>2013013636</b>	<b>REGULAR</b>		<b>5/24/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	LINEBARGER GOGGENS BLAIR & SAM - 205 S PIN OAK AVE - EDINBURG, TX 78539					
Released:	5/24/2013 8:00 am		Dropped Off:	5/24/2013 10:13 am		
<b>2013013637</b>	<b>REGULAR</b>		<b>5/24/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	CANTU CONSTRUCTION - 5221 N MCCOLL - MCALLEN, TX					
Released:	5/24/2013 8:00 am		Dropped Off:	5/24/2013 9:10 am		
<b>2013013638</b>	<b>REGULAR</b>		<b>5/24/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	IBC BANK - 1 S BROADWAY - MCALLEN, TX 78501					
Released:	5/24/2013 8:00 am		Dropped Off:	5/24/2013 11:36 am		

JobNumber	Priority	Legs	Drop Date	Requestor	Reference	Amount Due
<b>2013013639</b>	<b>REGULAR</b>		<b>5/24/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	DANNEN BAUM ENGINEERING - 1109 NOLANA LOOP STE 208 - MCALLEN, TX 78501					
Released:	5/24/2013 8:00 am		Dropped Off: 5/24/2013 9:30 am			
<b>2013013640</b>	<b>REGULAR</b>		<b>5/24/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	LAW OFFICE OF DANIEL RIOS - 323 NOLANA - MCALLEN, TX					
Released:	5/24/2013 8:00 am		Dropped Off: 5/24/2013 9:20 am			
<b>2013013641</b>	<b>REGULAR</b>		<b>5/24/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	TEXAS DEPT OF TRANSPORTATION - 600 W EXPWY 83 - PHARR, TX 78577					
Released:	5/24/2013 8:00 am		Dropped Off: 5/24/2013 8:55 am			
<b>2013013642</b>	<b>REGULAR</b>		<b>5/24/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	HIDALGO CO PCT2 TITO PALACIOS - 300 HALL ACRES - PHARR, TX					
Released:	5/24/2013 8:00 am		Dropped Off: 5/24/2013 8:30 am			
<b>2013013643</b>	<b>REGULAR</b>		<b>5/24/2013</b>	<b>SG/FLOR</b>		<b>\$7.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	HIDALGO CO PCT3 JOE FLORES - 724 N BREYFOGAL - MISSION, TX 78572					
Released:	5/24/2013 8:00 am		Dropped Off: 5/24/2013 9:43 am			
<b>2013013644</b>	<b>REGULAR</b>		<b>5/24/2013</b>	<b>SG/FLOR</b>		<b>\$7.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	RIO BANK - 495 BENTSON RD - MISSION, TX					
Released:	5/24/2013 8:00 am		Dropped Off: 5/24/2013 9:40 am			
<b>2013013645</b>	<b>REGULAR</b>		<b>5/24/2013</b>	<b>SG/FLOR</b>		<b>\$8.25</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	HIDALGO CO PCT 1 - 1902 JOE STEPHENS - JOEL QUINTANILLA - WESLACO, TX 78596					
Released:	5/24/2013 8:00 am		Dropped Off: 5/24/2013 2:25 pm			
<b>2013013727</b>	<b>REGULAR</b>		<b>5/24/2013</b>	<b>SG/FLOR</b>		<b>\$6.50</b>
From:	HCRMA - 118 S CAGE 4TH FLOOR - PHARR, TX					
To:	HIDALGO CO ADMINISTRATION - 2802 S BUS HWY 281 - EDINBURG, TX					
Released:	5/24/2013 9:49 am		Dropped Off: 5/24/2013 3:40 pm			

Number of Jobs: 17

Total Charges: \$114.25  
 Total Credits: \$0.00  
 Amount Due: \$114.25



# LODGING COMPUTATIONS

Dennis Burlison

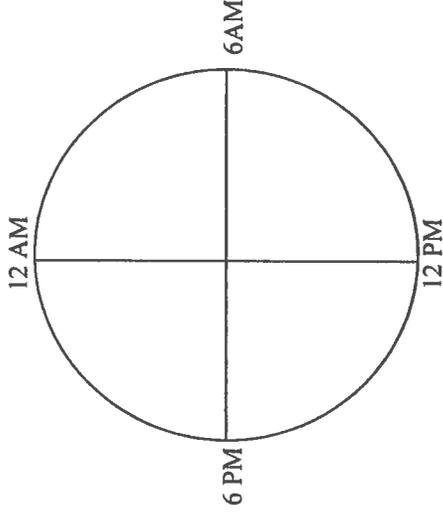
IN-STATE		OUT-OF-STATE	
	Reimbursable Lodging Rate		Reimbursable Lodging Rate (based on out-of-state federal computations)
Date of Lodging	Actual Lodging Rate	Date of Lodging	Actual Lodging Rate
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
<b>TOTAL LODGING RATE (EXCL. TAXES)</b>	_____	<b>TOTAL LODGING RATE (EXCL. TAXES)</b>	_____
\$ _____		<b>LODGING TAXES</b>	_____

## IN-STATE MEALS PER DIEM

DATE	# OF QUARTERS				
4/15/13	2		35.50		
4/16/13	4		71.00		
_____	_____		_____		
_____	_____		_____		
<b>TOTAL QUARTERS</b>	_____	<b>6</b>	<b>X \$17.75</b>	<b>=</b>	<b>\$ 106.50</b>
		QUARTERS			PER DIEM

## OUT-OF-STATE MEALS PER DIEM

DATE	# OF QUARTERS				
_____	_____		_____		
_____	_____		_____		
_____	_____		_____		
_____	_____		_____		
<b>TOTAL QUARTERS</b>	_____	<b>X \$</b>	<b>=</b>	<b>\$</b>	<b>PER DIEM</b>
		QUARTERS			PER DIEM



\$ = Allowable Rate to be computed by use of the "Out-of-State Meal and Lodging Rates for Current Fiscal Year." from the Texas Comptroller of Public Accounts.

# Flor Koll

**From:** Dennis Burleson <BURLESON.D.A@SBCGLOBAL.NET>  
**Sent:** Sunday, April 14, 2013 3:45 PM  
**To:** Flor Koll  
**Subject:** Fwd: Southwest Airlines Confirmation-BURLESON/DENNIS AARON-Confirmation: G4IT0J

Begin forwarded message:

**From:** "Southwest Airlines" <[SouthwestAirlines@luv.southwest.com](mailto:SouthwestAirlines@luv.southwest.com)>  
**Subject:** Southwest Airlines Confirmation-BURLESON/DENNIS AARON-Confirmation: G4IT0J  
**Date:** April 14, 2013 3:41:20 PM CDT  
**To:** [BURLESON.D.A@SBCGLOBAL.NET](mailto:BURLESON.D.A@SBCGLOBAL.NET)  
**Reply-To:** "Southwest Airlines" <[no-reply@luv.southwest.com](mailto:no-reply@luv.southwest.com)>

You're all set for your trip!



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## Ready for takeoff!



Thanks for choosing Southwest for your trip! You'll find everything you need to know about your reservation below. Happy travels!



Save up to 35%  
plus earn up to 2,400  
Rapid Rewards® points.

[BOOK NOW](#)

**AVIS**



AIR Itinerary

**AIR Confirmation: G4IT0J**

Confirmation Date: 04/14/2013

Passenger(s)	Rapid Rewards #	Ticket #	Expiration	Est. Points Earned
BURLESON/DENNIS AARON	00000449382846	5262122109062	Apr 14, 2014	5424

Rapid Rewards points earned are only estimates. Visit your (MySouthwest, [Southwest.com](http://Southwest.com) or Rapid Rewards) account for the most accurate totals - including A-List & A-List Preferred bonus points.

Date	Flight	Departure/Arrival
Mon Apr 15	1017	Depart <b>HARLINGEN TX (HRL)</b> on Southwest Airlines at <b>1:55 PM</b> Arrive in <b>AUSTIN TX (AUS)</b> at <b>3:00 PM</b> Travel Time 1 hrs 5 mins <a href="#">Business Select</a>



**Find a Hotel**

See ratings, photos and rates for over 40,000 hotels.

[Book a Hotel](#)

Tue Apr 16 3058 Depart **AUSTIN TX (AUS)** on Southwest Airlines at **3:55 PM**  
 Arrive in **HOUSTON HOBBY (HOU)** at 4:50 PM  
[Business Select](#)

117 Change planes to Southwest Airlines in **HOUSTON HOBBY (HOU)**  
 at 7:05 PM  
 Arrive in **HARLINGEN TX (HRL)** at **8:00 PM**  
 Travel Time 4 hrs 5 mins  
[Business Select](#)



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 Explore your destination on the perfect set of wheels.

[Rent a Car](#) ↗

**What you need to know to travel:**

- Don't forget to check in for your flight(s) 24 hours before your trip on [southwest.com](#) or your mobile device. This will secure your boarding position on your flights.
- Southwest Airlines does not have assigned seats, so you can choose your seat when you board the plane. You will be assigned a boarding position based on your checkin time. The earlier you check in, within 24 hours of your flight, the earlier you get to board.

Air Cost: 483.20

Carry-on Items: 1 Bag + small personal item are free [see full details](#). Checked Items: First and second bags are free, [size and weight limits apply](#).

Fare Rule(s): 5262122109062: NONTRANSFERABLE.  
 Valid only on Southwest Airlines. All travel involving funds from this Confirmation Number must be completed by the expiration date. Unused travel funds may only be applied toward the purchase of future travel for the individual named on the ticket. Any changes to this itinerary may result in a fare increase.

HRL WN AUS210.23KZBP WN X/HOU WN HRL210.23KZBP 420.46 END ZPHRLAUSHOU  
 XFHRL4.5AUS4.5HOU3 AY7.50\$HRL2.50 AUS2.50 HOU2.50

**Important Check-In Reminder**

Be sure to arrive at the departure gate with your boarding pass at least 10 minutes before your scheduled departure time. Otherwise, your reserved space may be cancelled and you won't be eligible for denied booking compensation.

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**Cost and Payment Summary**

<input checked="" type="checkbox"/> AIR - G4IT0J		
Base Fare	\$ 420.46	<b>Payment Information</b>
Excise Taxes	\$ 31.54	Payment Type: Visa XXXXXXXXXXXX4728
Segment Fee	\$ 11.70	Date: Apr 14, 2013
Passenger Facility Charge	\$ 12.00	Payment Amount: \$483.20
September 11th Security Fee	\$ 7.50	
<b>Total Air Cost</b>	<b>\$ 483.20</b>	



## Flight Status Alerts

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- [Cancel Air Reservation](#)
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<sup>1</sup> All travel involving funds from this Confirmation Number must be completed by the expiration date.  
<sup>2</sup> Security Fee is the government-imposed September 11th Security Fee.

See [Southwest Airlines Co. Notice of Incorporation](#)  
See [Southwest Airlines Limit of Liability](#)

Southwest Airlines  
P.O. Box 36647-1CR  
Dallas, TX 75235

[Contact Us](#)

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303 WEST 15TH  
 AUSTIN, TX 78701  
 TELEPHONE (512) 478-7000 • FAX (512) 478-3562  
 RESERVATIONS  
 www.doubletree.com or 1-800-222-TREE

**NAME & ADDRESS**

BURLESON, DENNIS  
 PO BOX 1768  
 PHARR, TX 78577  
 US

ROOM 1205/NQ2K  
 ARRIVAL DATE 4/15/2013 3:15:00PM  
 DEPARTURE DATE 4/16/2013 7:16:00AM  
 ADULT/CHILD 1/0  
 ROOM RATE \$169.00  
 RATE PLAN L-GV5  
 Hhonor #  
 AL:

CONFIRMATION NUMBER : 85769383

4/18/2013 PAGE 1

DATE	DESCRIPTION	ID	REF NO	CHARGES	CREDITS	BALANCE
4/15/2013	15TH STREET CAFE LOUNGE # 1597	LINTR	3082412	\$12.00		
4/15/2013	GUEST ROOM	KSASSER	3082496	\$169.00		
4/15/2013	STATE TAX	KSASSER	3082496	\$10.14		
4/15/2013	CITY TAX	KSASSER	3082496	\$15.21		
4/16/2013	MC *5347	BWELDON	3082750		\$206.35	
	BALANCE					\$0.00

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ACCOUNT NO MC *5347	DATE OF CHARGE 04/15/13 11:34:00PM	FOLIO 550890 A
CARD MEMBER NAME BURLESON, DENNIS	AUTHORIZATION 06619P	INITIAL
ESTABLISHMENT NO & LOCATION	ESTABLISHMENT AGREES TO TRANSMIT TO CARD HOLDER FOR	
	PURCHASES & SERVICES	
	TAXES	
	TIPS & MISC	
	TOTAL AMOUNT	

MERCHANDISE AND/OR SERVICES PURCHASED ON THIS CARD SHALL NOT BE RETURNED FOR A CASH REFUND  
 PAYMENT DUE UPON RECEIPT

ce



Republic Parking VIA  
3030 Rebel Drive  
Harlingen, TX 78550

(956) 430-8694

Rcpt# 33362

04/16/13 14:16 L# 2 AH 5 Txn#124440

04/15/13 13:03-In 04/16/13 14:16 Out

Tkt# 235347

08 Long Term	\$ 8.00
Total Fee	\$ 8.00
CASH PAID	\$ 8.00-
Cash Tender	\$ 8.00
Change Due	\$ 0.00
Thank You	

Payable to: Republic Parking VIA

Account: 280003536

Code: 16600.000

Description: Travel - Airfare

Date: 04/16/2013

Amount: \$8.00

Purpose: Reimburse Dennis Burleson -  
parking during travel to Austin to testify  
at TXDOT Transportation Cmte Mtg

Purchased by (staff): F. E. Koll



**Fare Receipt**

(512) 452-9999

YellowCabAustin.com



Date 4/16/13

Received of Dennis Burleson

the Sum of \$30.00

from 300 W 15<sup>th</sup>

to Airport

Independent Contractor Driver:

No. \_\_\_\_\_ Name \_\_\_\_\_

Payable to: Yellow Cab

Account: 280003536

Code: 16600.000

Description: Travel - Lodging

Date: 04/06/2013

Amount: \$30.00

Purpose: Reimburse Dennis Burleson -

cab to airport during travel to Austin to

testify at TxDOT Transportation Cmte Mtg

Purchased by (staff): F. E. Koll





**DOUBLETREE SUITES**  
BY HILTON  
AUSTIN

303 West 15th Street  
Austin, TX 78701  
Tel: (512) 478-7000 • Fax: (512) 478-5103

Name & Address

BURLESON, DENNIS  
1504 DONS DR  
MISSION, TX 78572  
US

Room 1004/NK1K  
Arrival Date 5/12/2013 8:47:00PM  
Departure Date 5/13/2013

Adult/Child 1/0  
Room Rate \$169.00

RATE PLAN L-GV5  
HH# 978135661 SILVER  
AL UA #RP261549  
BONUS AL CAR

Confirmation: 84969454

5/13/2013 PAGE 1

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DATE	REFERENCE	DESCRIPTION	AMOUNT
5/12/2013	3100382	VALET PARKING	\$25.00
5/12/2013	3100382	TAXES	\$2.06
5/12/2013	3100383	GUEST ROOM	\$169.00
5/12/2013	3100383	STATE TAX	\$10.14
5/12/2013	3100383	CITY TAX	\$15.21
WILL BE SETTLED TO MC *5347			\$221.41
EFFECTIVE BALANCE OF			\$0.00
ESTIMATED CURRENCY TOTAL			

**EXPRESS CHECK-OUT**

Good Morning ! We hope you enjoyed your stay. With Express Check-Out there is no need to stop at the Front Desk to check out.

- Please review this statement. It is a record of your charges as of late last evening.
  - For any charges after your account was prepared, you may:
    - + pay at the time of purchase.
    - + charge purchases to your account, then stop by the Front Desk for an updated statement.
    - + or request an updated statement be mailed to you within two business days.
- Simply call the Front Desk from your room and tell us when you are ready to depart. Your account will be automatically checked out and you may use this statement as your receipt. Feel free to leave your key(s) in the room.  
*Please call the Front Desk if you wish to extend your stay or if you have any questions about your account.*

DATE OF CHARGE	FOLIO NO./CHECK NO.	
	554157	A
AUTHORIZATION	INITIAL	
PURCHASES & SERVICES		
TAXES		
TIPS & MISC.		
TOTAL AMOUNT	0.00	



# INVOICE

City of Pharr, Texas  
Attn: Lizette Gomez, Treasury Coordinator

DATE: MAY 31, 2013

P.O. Box 1729  
Pharr, Texas 78577  
Phone 956-402-4150 ext. 1908  
Fax 956-702-5318

TO HCRMA  
Attn: Pilar Rodriguez, Executive Director  
118 S. Cage Blvd., 4<sup>th</sup> Floor  
Pharr, TX 78577  
(956)607-8330

CONTACT PERSON	PAST DUE	CURRENT	AMOUNT TO PAY	DUE DATE	INVOICE NUMBER
Lizette Gomez		\$ 1,000.00	\$ 1,000.00	6/15/13	HC053113

QTY	ITEM #	DESCRIPTION	UNIT PRICE	DISCOUNT	LINE TOTAL
1		Rent for Office and Public Meeting Space- JUNE 2013	\$ 1,000.00		\$ 1,000.00
TOTAL DISCOUNT				0.00	0.00
				SUBTOTAL	\$ 1,000.00
				SALES TAX	0.00
				TOTAL	\$ 1,000.00

***Make all checks payable to: City of Pharr***

**THANK YOU!**



Customer Service

Invoice

FLOR KOLL
HIDALGO COUNTY OF
PO BOX 1766
PHARR TX 78577-1633

Hours of operation: M - F, 7am - 6pm Central Time
Telephone: 866-497-6661
Payments: PO Box 6434, Carol Stream, IL 60197-6434
Fax: 888-241-4382
Correspondence: Leasing Customer Service, MAC F4031-050, 800 Walnut Street, Des Moines, IA 50309-3605
Federal Tax ID#: 42-1074725

Summary

Account number: 603-0115570-001
Invoice number: 5000126415
Due date: 06/25/13
Invoice date: 05/29/13
Current period covered: 05/25/13 - 06/24/13
Total due: \$330.02
Last payment \$330.02 posted on 05/20/13.

Please have your Federal Tax ID available when contacting us.

Table with columns: Account number, Asset description, Item description, Amount, Tax, Item total, Due date, Subtotal. Row 1: 603-0115570-001, XEROX COPIER Model WC7545P SN XKP540379, Lease Payment, 330.02, Total: 603-0115570-001, \$330.02

001622/001635 ACQBUG S1-ET-M1-C001 12

Detach and return the bottom remittance portion with your payment in the enclosed envelope. Include invoice number on check.

WFF14CF

Account number 603-0115570-001 Due date 06/25/13
Invoice number 5000126415 Invoice date 05/29/13
Total due \$330.02

Wells Fargo Financial Leasing
PO Box 6434
Carol Stream, IL 60197-6434

Amount enclosed



Check here and see reverse side for billing address and/or asset address change.

Please make check payable to Wells Fargo Financial Leasing



1MB 01622/001622/001635 0008 1 ACQBUG



WELLS FARGO FINANCIAL LEASING
PO BOX 6434
CAROL STREAM IL 60197-6434



FLOR KOLL
HIDALGO COUNTY OF
PO BOX 1766
PHARR TX 78577-1633

001113817212060350001264152201306250000000330020





# SALINAS, ALLEN & SCHMITT, LLP

Certified Public Accountants ♦ Business and Tax Consultants

ID: 108066

Invoice: 101559

Date: 05/22/2013

Hidalgo County Regional Mobility Authority

Due Date: 05/29/2013

P. O. Box 1766

Pharr, TX 78577

---

For professional service rendered as follows:

Monthly bookkeeping in April & May, 2013. ( 2 @ \$850 ) 1,700.00

Preparation of Management Discussion and Analysis Report. 375.00

Billed Time & Expenses \$2,075.00

Invoice Total \$2,075.00

**Please include your Client ID with your payment. Thank you.**

*It has been said that the highest compliment you can pay any business is through client referrals. As our client, the trust you place in us is emphasized when you call us with a client referral. We welcome your referrals and treat them with extra care knowing they come directly from you. Be assured that all accounts are maintained in strict confidence. We look forward to serving your referrals.*

*...providing support & solutions to problems*

---

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www.sasllpcpa.com

HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY  
2013 PAYMENT SUMMARY

First National Bank - Visa  
Authorized cardholder - Flor E. Koil  
Account ##### ### 8954

		Credit Card Statement				Total Paid to Date	
Closing Date		1/31/2013	2/28/2013	3/31/2013	4/30/2013	5/31/2013	\$8,066.08
Monthly Billing		\$328.93	\$3,452.82	\$1,688.83	\$1,277.52	\$1,317.98	
						<u>\$1,317.98</u>	

Amount Approved for Payment



Approved for Payment  
Pilar Rodriguez  
Executive Director

4/10/2013  
Date

Account Number: ##### 8954  
Closing Date: 05/31/13  
Credit Limit: \$5,000.00  
Available Credit: \$3,682.02  
Cash Advance Limit: \$2,500.00  
Cash Advance Available: \$2,500.00

**Account Inquiries**



Customer Service: (866) 809-8409  
Lost or Stolen Card: (866) 809-8412



Please Direct Written Inquiries to:  
CUSTOMER SERVICE  
PO BOX 30495  
TAMPA, FL 33630-3495



To pay on-line:  
www.webfnb.com

**Account Summary**

Previous Balance	\$	1,277.52
Purchases	+	1,449.66
Cash	+	0.00
Special	+	0.00
Credits	-	131.68
Payments	-	1,277.52
Other Debits	+	0.00
Finance Charges	+	0.00
<b>NEW BALANCE</b>	<b>\$</b>	<b>1,317.98</b>

*Score*  
Card  
**Bonus Points Available**  
**14,035**

*1,317.98*  
*6/10/2013*

**Payment Information**



**Total Minimum Payment Due \$40.00**  
**Payment Due Date 06/25/13**

Minimum Payment \$ 40.00

Mail Payments to: FIRST NATIONAL BANK PO BOX 31021 TAMPA FL 33631-3021

**Important News**  
**PUT AN EXTRA SPRING IN YOUR STEP WITH MORE BONUS POINTS! YOUR SCORECARD REWARDS CARD GIVES YOU EXTRA BONUS POINTS - 2X,3X,4X OR MORE - THROUGH THE SCOREMORE MALL WITH PARTICIPATING RETAILERS ONLINE AND IN-STORE. MORE POINTS MEANS MORE GREAT MERCHANDISE AND TRAVEL REWARDS! VISIT WWW.SCORECARDREWARDS.COM TODAY FOR MORE DETAILS!**

**Account Activity Since Your Last Statement**

Trans Date	Post Date	Plan Name	Reference Number	Description	Amount
05/01	05/02	BUS003	24164073121091008397582	TARGET 00008243 MCALLEN TX	\$ 31.82 ✓
05/01	05/03	BUS003	24473013122900013820894	CITY OF MCALLEN T01 OF 01 956-6883400 TX	35.00 ✓
05/08	05/09		74906043128040200072091	CREDIT VOUCHER	131.68 -
				HILTON HOTEL NO SHOW AUSTIN TX	
05/09	05/12	BUS003	24445743130100434413430	OFFICE DEPOT #161 MCALLEN TX	101.11 ✓
05/09	05/12	BUS003	24473013130900014321033	CITY OF MCALLEN T01 OF 01 956-6883400 TX	1,200.00 ✓
05/29	05/30	BUS003	24692163150000681584816	ICINGS CUPCAKE SHOP MCALLEN TX	28.70 ✓
05/28	05/30	BUS003	24445743149100394788382	OFFICE DEPOT #161 MCALLEN TX	53.03 ✓
<b>Payments, Adjustments and Others</b>					
05/21	05/21		74447363141001270373232	PAYMENT - THANK YOU	1,277.52 -

**ScoreCard Bonus Points Information as of 05/30/2013**

Beginning Balance	Points Earned	Points Adjusted	Points Redeemed	Ending Balance
12,799	1,236	0	0	14,035

PLEASE DETACH COUPON AND RETURN PAYMENT USING THE ENCLOSED ENVELOPE - ALLOW 5 DAYS FOR MAIL DELIVERY 5154

FIRST NATIONAL BANK  
PO BOX 2049  
EDINBURG TX 78540-2049



**Account Number**  
##### 8954

Check box to indicate name/address change on back of this coupon

AMOUNT OF PAYMENT ENCLOSED

<b>Closing Date</b> 05/31/13	<b>New Balance</b> \$1,317.98	<b>Total Minimum Payment Due</b> \$40.00	<b>Payment Due Date</b> 06/25/13
---------------------------------	----------------------------------	---	-------------------------------------

\$

FLOR E KOLL  
H C R M A  
PO BOX 1766  
PHARR TX 78577-1633



7361

MAKE CHECK PAYABLE TO:

FIRST NATIONAL BANK  
PO BOX 31021  
TAMPA FL 33631-3021

HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY  
PAYMENT SUMMARY

L&G Engineering - SH 365 Segment 1 - FM 1016 to McColl Road  
\$5,887,542.43 Maximum payable fee

Maximum fee minus approved WA \$4,577,810.89

	Invoice Date												WA Total Billed	WA Balance
	5/25/2012	7/5/2012	8/1/2012	9/4/2012	10/3/2012	10/31/2012	11/30/2012	12/31/2012	1/31/2013	2/28/2013	3/31/2013			
Approved WA	\$111,770.62	\$114,043.63	\$110,921.36	\$108,063.46	\$114,434.74	\$102,011.62	\$47,242.33	\$31,200.52	\$35,448.02	\$41,622.86	\$37,737.61	\$752,485.15	\$246,352.52	
Amount	\$310,893.87						\$58,549.48	\$40,718.83	\$13,102.79	\$15,462.88	\$13,220.34	\$243,065.94	\$67,827.93	
Supp#1	\$1,309,731.54											\$995,551.09	\$314,180.45	

	4/30/2013		WA Total Billed	WA Balance
	Approved WA	Amount		
WA#1	\$43,725.40	\$44,978.07	\$841,188.62	\$157,649.05
Supp#1	\$16,130.53	\$7,451.25	\$266,647.72	\$44,246.15
		<b>\$52,429.32</b>	<b>\$1,107,836.34</b>	<b>\$201,895.20</b>

Amount Approved for Payment

  
Approved for Payment  
Date 6/11/2013

Loop Account # 280003609

Prepared by:  
P. Rodriguez, PE  
Tx PE #85,567  
6/11/2013



**HCRMA**  
HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY

### REQUEST FOR RECOMMENDATION ON PAYMENT

To: Dannenbaum Engineering  
Attn: Louis Jones, HCRMA Project Manager  
1109 Nolana Loop, Suite 208  
McAllen, Texas 78504

Month and Year	May 2013
Contractor	L&G Consulting Engineers Inc
Project/WA	SH365/Seg 1/WA 1
Invoice #	11324463
Amount	\$52,429.32
Date Sent	06/05/2013

Date Received	
Received by	
Recommendation:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Disapproval
Comments (if any):	
	Approved for Payment LJ 6/11/2013
	
Louis Jones, HCRMA Program Manager	Date 6/10/13

Please return this form via email to [fkoll@hcrma.net](mailto:fkoll@hcrma.net)

**L & G Consulting Engineers Inc**  
**2100 W. Expressway 83**  
**Mercedes, TX 78570**  
**(956)565-9813 Fax (956)565-9018**

**INVOICE#: 11324463**  
**INVOICE DATE: 5/31/2013**

**BILL TO:**

Hidalgo County RMA  
 118 S. Cage Blvd, 4th Floor  
 Pharr, TX 78577

**JOB:120301**

**SH365/TCC - Segment #1**  
**WA#1**

DESCRIPTION	CONTRACT	PREVIOUS APPLICATIONS	CURRENT COMPLETED	TOTAL COMPLETED	% COMPL	BALANCE TO FINISH
<b>Engineering services for the month of May 2013.</b>						
Task 1 - Value Eng Participation	20,521.20		20,521.20	20,521.20	100.0	
Task 2 - 2 Schematics	310,479.89	279,431.90		279,431.90	90.0	31,047.99
Task 3 - Public Involment	15,209.14	13,688.23		13,688.23	90.0	1,520.91
Task 4 - ROW Coordination	21,998.73			0.00	0.0	21,998.73
Task 5 - Pavement Design	29,831.96	22,373.97	4,474.79	26,848.76	90.0	2,983.20
Task 6 - Special Coordination	64,970.12	55,224.60		55,224.60	85.0	9,745.52
Task 7 - Geo Laboratory/Sub	50,000.00	42,500.00		42,500.00	85.0	7,500.00
Task 8 - Route & Design Studies	44,871.07	40,383.96		40,383.96	90.0	4,487.11
Task 9 - Utility Adjustment	175,523.69	140,418.95	17,552.37	157,971.32	90.0	17,552.37
Task 10- Field Survey	24,297.10	15,793.12	2,429.71	18,222.83	75.0	6,074.27
FC 161 - Drainage	232,994.77	186,395.82		186,395.82	80.0	46,598.95
Direct Expenses	8,140.00			0.00	0.0	8,140.00
<b>TOTALS:</b>	<b>998,837.67</b>	<b>796,210.55</b>	<b>44,978.07</b>	<b>841,188.62</b>	<b>84.2</b>	<b>157,649.05</b>
<b>Supplemental #1 to Work Authorization #1</b>						
Task 2 - 2 Schematics	100,202.09	90,181.88		90,181.88	90.0	10,020.21
Task 3 - Public Involment	6,399.68	5,759.71		5,759.71	90.0	639.97
Task 4 - ROW Coordination	1,964.17			0.00	0.0	1,964.17
Task 6 - Special Coordination	9,155.39	7,782.08		7,782.08	85.0	1,373.31
Task 7 - Geo Laboratory/Sub	20,000.00	17,000.00		17,000.00	85.0	3,000.00
Task 8 - Route & Design Studies	12,940.08	11,646.07		11,646.07	90.0	1,294.01
Task 9 - Utility Adjustment	65,450.90	52,360.72	6,545.09	58,905.81	90.0	6,545.09
Task 10- Field Survey	9,061.58	5,890.03	906.16	6,796.19	75.0	2,265.39
FC 161 - Drainage	85,719.98	68,575.98		68,575.98	80.0	17,144.00
<b>TOTALS:</b>	<b>310,893.87</b>	<b>259,196.47</b>	<b>7,451.25</b>	<b>266,647.72</b>	<b>85.8</b>	<b>44,246.15</b>
<b>GRAND TOTAL:</b>	<b>1,309,731.54</b>	<b>1,055,407.02</b>	<b>52,429.32</b>	<b>1,107,836.34</b>		<b>201,895.20</b>

ORIGINAL CONTRACT SUM \$ 998,837.67 ✓  
 CHANGE BY CHANGE ORDER \$ 310,893.87 ✓  
 CONTRACT SUM TO DATE \$ 1,309,731.54 ✓  
 TOTAL COMPLETED TO DATE \$ 1,107,836.34 ✓  
 LESS PREVIOUS INVOICES \$ 1,055,407.02 ✓

*Behnam Bahryzamani*  
 PROJECT MANAGER'S SIGNATURE

CURRENT PAYMENT DUE

52,429.32 ✓  
 Pay Only

1 - 12  
 6/11/2013  
 Loop Account #  
 28 000 3609



June 5, 2013

Mr. Pilar Rodriguez, P.E. – Executive Director HCRMA  
Attn: **Mr. Louis Jones, P.E. – Program Manager HCRMA**  
Hidalgo County Regional Mobility Authority  
118 S. Cage Blvd., 4<sup>th</sup> Floor  
Pharr, Texas 78577

**RE: Work Authorization #1 on SH365 Segment #1 - Invoice #11324463**

Dear Mr. Jones,

Attached for your review and approval is our invoice for the services rendered during the month of May 2013 on the subject referenced project. The below referenced work product deliverables have been electronically uploaded to the PM's FTP site in a folder named "L&G Upload 6-5-13".

The following is attached:

- L & G's Invoice #11324463
- Copies of 'Request for Utility Exposure' Letters
- Utility Correspondence – Emails
- Utility Spreadsheet – Summary Table (Updated)
- Pavement Design Correspondence & Typical Section (Mtg. w/ GEC & TxDOT)
- Pavement Design Report – Draft 90% Submittal

TASK		% COMPL
<b>TASK #1 – Value Engineering Participation</b>	<b>L&amp;G</b>	<b>100%</b>
<p><b>Updated - SH 365 Value Engineering Workshop</b> was held from May 20 – 24, 2013 at the McAllen Convention Center. L&amp;G staff members, Behrooz Badioznanmani, Robert Macheska and Ricardo Gallaga attended May 20<sup>th</sup> for Project Description and Technical Information presentations. Design teams members from L&amp;G, S&amp;B and TEDSI each presented to VE team a description of the design details used on their portion of the project. Mr. Badioznanmani presented to the VE team L&amp;G's portion of the schematic and provided information pertinent to their task. Key topics mentioned were critical issues encountered during the development of schematic, possible areas for VE topics for consideration and provided details including criteria used in the pavement designs. Mr. Badioznanmani also mentioned possibilities of VE consideration in this pavement design area.</p> <p>L&amp;G staff member Ricardo Gallaga was a member of the Value Engineering Team and participated throughout the length of the workshop. Mr. Gallaga compiled and provided VE members and other attendees a copy of information L&amp;G used in the Route Study development. A copy of this information was given to GEC Dannenbaum team member Eric Davila to be included as part of workshop weeklong submittals. Mr. Gallaga not only participated daily as a VE team member, he was also a liaison for</p>		

<p>the VE group when requesting project information from L&amp;G on topics being considered as VE recommendations. As requested by various team members, L&amp;G staff member Robert Macheska and design engineers worked closely with VE team members to provide a variation of pavement designs being presented as Value Engineering recommendation. Mr. Macheska executed several variations of the pavement by modifying traffic variables as requested by VE team. Also, L&amp;G staff member, Mr. Reza Badiozzamani, provided a copy of the Aesthetics Report done by L&amp;G for the HCRMA to VE team members in order to provide recommendations for possible VE considerations. L&amp;G staff also provided an electronic copy of this report to Eric Davila to compiled as part as the VE information used to provide recommendation. L&amp;G staff also provided bid item information needed to estimate potential savings for some VE consideration. Mr. Gallaga participated in the development of 15 recommendations to be presented to HCRMA planning committee on the final day. As part of the final day presentation, Mr. Gallaga worked on and presented Recommendation #12 to HCRMA planning committee, HCRMA Chairman and Director and other attendees. L&amp;G Staff members Robert Macheska and Anthony Garza also attended the final presentation and provided some input and questions to VE team members during the presentation.</p>		
<p><b>TASK #2 – Schematics (4 Lane Facility) (Original Contract &amp; Supplemental #1)</b></p>	<p>L&amp;G</p>	<p>90%</p>
<p>No Update – (See Progress Report Dated 12-5-12)</p>		
<p><b>TASK #3 – Public Involvement (Original Contract &amp; Supplemental #1)</b></p>	<p>L&amp;G</p>	<p>90%</p>
<p>No Update – (See Progress Report Dated 4-3-13)</p>		
<p><b>TASK #5 – Pavement Design (Entire Project Limits)</b></p>	<p>L&amp;G</p>	<p>90%</p>
<p><b>Updated</b> – L&amp;G received final traffic data from TxDOT (from FM 1016 to US 281 Military) and completed the pavement design for Mainlanes, Ramps and Frontage Roads. On May 14, 2013, L&amp;G submitted a ‘Proposed Pavement Design Typical Section’ for the SH 365. The typical section of the roadway submitted detailed the proposed thicknesses of ACP (including SAC and PG Binder), Flexible Base (including recommended types and % Lime Treat) and Stabilized Subgrade (including % Lime Treat). The task of pavement design and all pertinent geotechnical testing are complete. L&amp;G awaits comments from GEC and/or TxDOT and will implement &amp; incorporate into final report.</p>		
<p><b>TASK #6 – Special Coordination &amp; Tasks (Original Contract &amp; Supplemental #1)</b></p>	<p>L&amp;G</p>	<p>85%</p>
<p>No Update – (See Progress Report Dated 4-3-13)</p>		
<p><b>TASK #7 – Geotechnical Drilling &amp; Testing (Original Contract &amp; Supplemental #1)</b></p>	<p>L&amp;G Lab</p>	<p>85%</p>
<p>No Update – (See Progress Report Dated 1-4-13)</p>		

<b>TASK #8 – Route &amp; Design Studies (Original Contract &amp; Supplemental #1)</b>	<b>L&amp;G</b>	<b>90%</b>
<b>No Update – (See Progress Report Dated 12-5-12)</b>		
<b>TASK #9 – Utility Adjustments (Original Contract &amp; Supplemental #1)</b>	<b>L&amp;G</b>	<b>90%</b>
<b>Updated</b> – As mentioned in the previous progress report dated 5-1-13, L&G has continued the utility coordination identifying possible conflicts with the proposed alignment. We have received responses from Mission Pipeline LP and DCP Midstream LP in which the utility company has pot-holed their line and we have forwarded them to the GEC for the surveyor to pick up. We have recently received a Reimbursement Agreement with Cost Estimate from MCI/Verizon, in order to do their exposures. They want to sign the agreement with the RMA to get compensated for their work. L&G also has received some communications from Sprint, Sharyland Utilities, Level 3 Communications, Dewbre Petroleum Corporation asking for the Contact person to sign reimbursement agreements for their exposures. L&G has coordinated with the PM to have a meeting to go over these communications. L&G has prepared a package to be delivered to the Surveyor showing the approximate locations of the exposures that need to be tied-down.		
<b>TASK #10 – Field Survey (Original Contract &amp; Supplemental #1)</b>	<b>L&amp;G</b>	<b>75%</b>
<b>Updated</b> – L&G continues to update the roadway schematic and utility schematic with the revised survey data. We continue to incorporate the topographic & utility data to finalize all of the plan & profile figures. The potholing information has been submitted to the surveyors for field pick-ups and once received can be placed on the final schematic.		
<b>FC161 – Drainage (Original Contract &amp; Supplemental #1)</b>	<b>L&amp;G</b>	<b>80%</b>
<b>No Update – (See Progress Report Dated 5-1-13)</b>		

Should you have any questions regarding this submittal or would like clarification on any aspect of the project, please do not hesitate to call me at (956) 585-1909.

Sincerely,



Behrooz Badiozzamani, P.E.  
 Executive VP / Project Manager  
 L&G Engineering

HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY  
PAYMENT SUMMARY

S&B Infrastructure - SH 365 Segment 2 - McColl Road to US 281/Military Highway  
\$4,363,952.51 Maximum payable fee

Maximum fee minus approved WA \$3,476,665.00

WA#1	Approved WA Amount	Invoice Date					WA Total Billed	WA Balance
		8/29/2012	10/3/2012	12/6/2012	1/29/2013	3/19/2013		
	\$887,287.51	\$167,442.06	\$74,917.69	\$108,098.03	\$88,228.68	\$47,434.99	\$659,723.68	\$227,563.83
						<u>\$173,602.23</u>		
						<u>\$173,602.23</u>		

Amount Approved for Payment

  
 Approved for Payment \_\_\_\_\_  
 Date 6/11/2013

Loop Account # 280003609

Prepared by:  
P. Rodriguez, PE  
Tx PE #85,567  
6/11/2013



**HCRMA**  
 HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY



**REQUEST FOR RECOMMENDATION ON PAYMENT**

To: Dannenbaum Engineering  
 Attn: Louis Jones, HCRMA Project Manager  
 1109 Nolana Loop, Suite 208  
 McAllen, Texas 78504

Month and Year	3/10/13 - 5/11/13
Contractor	S&B Infrastructure, LTD
Project/WA	SH365/Seg2/WA1
Invoice #	U1695.100-06
Amount	\$173,602.23
Date Sent	05/21/2013

Date Received	
Received by	
Recommendation:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Disapproval
Comments (if any):	
Approved for Payment RTR	
 Louis Jones, HCRMA Program Manager	Date <u>5/21/13</u>

Please return this form via email to [fkoll@hcrma.net](mailto:fkoll@hcrma.net)



INVOICE

May 15, 2013

**Regional Mobility Authority**  
Hidalgo County RMA  
PO Box 1766  
Pharr, TX 78577

Attention: Flor E. Koll

Project Description: SH365/TCC Modified Segment 2

WORK AUTHORIZATION NO. 1 AMOUNT: \$887,287.51 ✓ TYPE: LS

Invoice No.: U1695.100-06

Invoice Period: 03/10/13 through 05/11/13

FUNCTION CODE	AUTHORIZED LIMIT	PERCENT COMPLETE	INVOICED TO DATE	PREVIOUSLY INVOICED	AMOUNT THIS INVOICE
PS&E					
110	251,248.08	75.92%	190,739.93	190,739.93	0.00
120	25,675.44	100.00%	25,675.44	3,398.22	22,277.22
130	133,030.69	74.49%	99,097.06	44,043.14	55,053.92
161	377,193.88	75.67%	285,415.86	189,144.77	96,271.09
162	10,260.43	90.00%	9,234.39	9,234.39	-
163	17,419.93	64.00%	11,148.34	11,148.34	-
164	72,459.06	53.01%	38,412.66	38,412.66	(0.00)
	<u>887,287.51</u> ✓		<u>659,723.68</u> ✓	<u>486,121.45</u> ✓	<u>173,602.23</u>

AMOUNT DUE THIS INVOICE:

\$ 173,602.23

Pay Only ↑

P-12  
6/11/2013  
loop Account #  
280003609



*I hereby certify that the attached invoice is true and correct, and that all services indicated have been provided.*

S & B INFRASTRUCTURE, LTD.

A handwritten signature in black ink, appearing to read 'Daniel O. Rios', is written in a cursive style.

Daniel O. Rios, P.E., Senior Vice President  
Project Manager

IN ACCORDANCE WITH OUR CONTRACT,  
PLEASE REMIT: **\$173,602.23**

S & B INFRASTRUCTURE, LTD.  
JP MORGAN CHASE BANK  
ABA/ROUTING NUMBER 111000614  
BANK ACCOUNT # 22900007104

Payment Due: June 14, 2013



FUNCTION CODE	DESCRIPTION	FIRM	PERCENT COMPLETE	ESTIMATED FEE	INVOICED TO DATE	PREVIOUSLY INVOICED	AMOUNT DUE THIS INVOICE
	from Exhibit "B"	S&B	75%	\$10,920.72	\$8,190.54	\$1,092.07	\$7,098.47
	Scour Calculation at pilot channel	S&B	75%	\$85,508.68	\$64,131.51	\$17,101.74	\$47,029.77
	Bridge Modeling within Floodway	S&B	60%	\$13,955.92	\$8,373.55	\$0.00	\$8,373.55
	Hydraulic Reports (Floodway and Levee Relocation)	S&B	0%	\$18,966.56	\$0.00	\$0.00	\$0.00
	IBWC Coordination			\$377,193.88	\$285,415.86	\$189,144.77	\$96,271.09
	Sub Total (F.C. 161) Labor						
162	SIGNING, MARKINGS AND SIGNALIZATION	S&B	90%	\$10,260.43	\$9,234.39	\$9,234.39	\$0.00
	Signing Layouts			\$10,260.43	\$9,234.39	\$9,234.39	\$0.00
	Sub Total (F.C. 162) Labor						
163	MISCELLANEOUS ROADWAY	S&B	90%	\$6,095.93	\$5,486.34	\$5,486.34	\$0.00
	Traffic Control Plan	S&B	50%	\$11,324.00	\$5,662.00	\$5,662.00	\$0.00
	Estimates for Utilities			\$17,419.93	\$11,148.34	\$11,148.34	\$0.00
	Sub Total (F.C. 163) Labor						
164	GENERAL COORDINATION	S&B	70%	\$10,688.56	\$7,481.99	\$7,481.99	\$0.00
	Project Manager (Proj Coord)(3 HRS/WK)	S&B	70%	\$3,485.40	\$2,439.78	\$2,439.78	\$0.00
	Project Manager Weekly Meeting (Prog. Rpts)	S&B	40%	\$1,887.90	\$755.16	\$755.16	\$0.00
	Proj. Meetings (30% & 100% Submittals)	S&B	70%	\$10,486.00	\$7,340.20	\$7,340.20	\$0.00
	Project Meetings and Monthly Coordination	S&B	60%	\$1,463.92	\$878.35	\$878.35	\$0.00
	Prepare Proj. Meetings Notes	S&B	70%	\$11,316.08	\$7,921.26	\$7,921.26	\$0.00
	Project Secretary/CLERICAL (2 hrs/week)			\$39,327.86	\$26,816.74	\$26,816.74	\$0.00
	Sub Total (F.C. 164) Labor			\$854,156.31	\$648,127.76	\$474,525.53	\$173,602.23
	Total (F.C. 110-170) Labor						
	NON LABOR						
	FedEx Courier	S & B (nl)	80%	\$660.00			
	Schematic Plots for Submittal	S & B (nl)	80%	\$3,000.00			
	Reimbursable Expenses	DOS	50%	\$9,000.00			
	Reimbursable Expenses	UCE	100%	\$1,300.00			
	Schematic for Public Meeting	S & B (nl)	50%	\$2,500.00			
	Outside Reproduction Reports	S & B (nl)		\$0.00			
	Newspaper Advertisements for Bidding	S & B (nl)		\$0.00			
	Posting of Bidding Documents on Website	S & B (nl)		\$0.00			
	Paper Copies of 30% and 100% Submittals	S & B (nl)		\$408.00			
	Mylar Plots Outside reproduction (Plan Sets)	S & B (nl)	50%	\$163.20			
	Travel-Mileage	S & B (nl)	50%	\$1,200.00			
	Travel to District & RMA Office-Mileage	S & B (nl)		\$0.00			
	Travel-Lodging	S & B (nl)		\$9,000.00			
	Travel-Meals	S & B (nl)		\$900.00			
	Travel -Airfare 4 trips to El Paso	S & B (nl)					
	Travel-Rental Vehicle	S & B (nl)					
	Sub Total (F.C. 164) Non-Labor		35%	\$33,131.20	\$11,595.92	\$11,595.92	\$0.00
	PROJECT TOTAL			\$887,287.51	\$659,723.68	\$486,121.45	\$173,602.23

HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY  
PAYMENT SUMMARY

TEDSI - SH 365 Segment 3  
\$1,430,733.00 Maximum payable fee

Maximum fee minus approved WA \$541,258.80

WA#1	WA#2	Approved WA Amount	8/23/2012	9/28/2012	10/19/2012	11/20/2012	12/13/2012	1/22/2013	2/27/2013	4/29/2013	5/14/2013	5/21/2013	WA Total Billed	WA Balance	
		\$142,735.06	\$28,547.01	\$28,547.01	\$14,273.51	\$14,273.51	\$21,516.26	\$14,273.50	\$14,167.51	\$3,621.37	\$25,928.27	\$3,515.38	\$142,735.06	\$0.00	
		\$746,739.14											\$25,928.27	\$720,810.87	
		\$889,474.20													
										<b>\$3,621.37</b>		<b>\$25,928.27</b>		<b>\$3,515.38</b>	
										<b>Amounts Approved for Payment</b>					



Approved for Payment

Loop Account # 280003609

  
Date

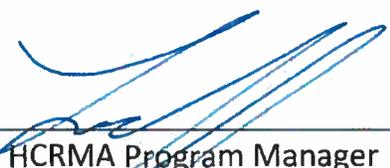
Prepared by:  
P. Rodriguez, PE  
Tx PE #85,567  
6/10/2013



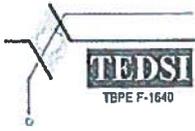
**REQUEST FOR RECOMMENDATION ON PAYMENT**

To: Dannenbaum Engineering  
 Attn: Louis Jones, HCRMA Project Manager  
 1109 Nolana Loop, Suite 208  
 McAllen, Texas 78504

Month and Year	April 2013
Contractor	Tedsi Infrastructure Group
Project/WA	SH365/Seg 3
Invoice #	20131536
Amount	\$25,928.27
Date Sent	06/05/2013

Date Received	
Received by	
Recommendation:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Disapproval
Comments (if any):	<p align="right"> <i>Approved for            Payment            P-R            6/10/2013</i> </p>
 Louis Jones, HCRMA Program Manager	Date <i>6/10/13</i>

Please return this form via email to [fkoll@hcrma.net](mailto:fkoll@hcrma.net)



**TEDSI INFRASTRUCTURE GROUP**

**Consulting Engineers**

1201 East Expressway 83 • Mission, Texas 78572  
 Tel: (956) 424-7898  
 Fax: (956) 424-7022

May 14, 2013

Project No: 2012-1115-02

Invoice No: 20131536

Ms. Pilar Rodriguez  
 Hidalgo County Regional Mobility Authority  
 P. O. Box 1766  
 Pharr, TX 78577

Project 2012-1115-02 HCRMA SH 365 Segment 3 at US 281 Military Highway - W.A. No. 2

**Work Authorization No. 2 to Professional Engineering Services Agreement  
 SH 365 Segment 0033 at US 281 Military Highway**

Professional Services from April 20, 2013 to April 30, 2013

**Fee**

Billing Phase	Fee	Percent Complete	Earned	Previous Fee Billing	Current Fee Billing
FC 110 - Route & Design Studies (TEDSI)	152,759.93	5.00	7,638.00	0.00	7,638.00
FC 120 - Env and Public Involv (TEDSI)	25,167.82	5.00	1,258.39	0.00	1,258.39
FC 130 - ROW and Utility (TEDSI)	55,749.12	5.00	2,787.46	0.00	2,787.46
FC 150 - Design Survey (TEDSI)	7,179.56	5.00	358.98	0.00	358.98
FC 161 - H & H (TEDSI)	4,536.48	5.00	226.82	0.00	226.82
FC 162 - Signing and Pavement Marking (TEDSI)	14,671.34	5.00	733.57	0.00	733.57
FC 162 -Traffic Signal Warrants (TEDSI)	130,303.70	5.00	6,515.19	0.00	6,515.19
FC 163 - Miscellaneous Roadway (TEDSI)	24,410.24	5.00	1,220.51	0.00	1,220.51
FC 163 - Illumination Warrants (TEDSI)	103,786.94	5.00	5,189.35	0.00	5,189.35
FC 170 - Bridge (TEDSI)	1,512.16	0.00	0.00	0.00	0.00
FC 110 - Route and Design Studies (L&G)	49,835.40	0.00	0.00	0.00	0.00
FC 130 - ROW and Utility (G&M)	40,766.88	0.00	0.00	0.00	0.00
FC 150 - Design Survey (G&M)	65,355.86	0.00	0.00	0.00	0.00
FC 161 - H & H (Cortran)	59,830.37	0.00	0.00	0.00	0.00
FC 170 - Bridge (Unitech)	10,873.34	0.00	0.00	0.00	0.00
<b>Total Fee</b>	<b>746,739.14</b>		<b>25,928.27</b>	<b>0.00</b>	<b>25,928.27</b>
		<b>Total Fee</b>			

25,928.27  
 Pay Only

6/10/2013  
 Loop Account #  
 280003609

Billing Summary	Current	Prior	To-Date
Total Billings	25,928.27	0.00	25,928.27
Total Fee			746,739.14
Remaining Fee			720,810.87
		<b>Total this Invoice</b>	<b><u>\$25,928.27</u></b>

**PLEASE REMIT PAYMENT TO:**  
**TEDSI Infrastructure Group, Inc.**  
**738 Highway 6 South, Suite 430**  
**Houston, Texas 77079**

Authorized By:  Date: 5/14/13  
Craig F. Stong, P.E.  
Project Manager



**HCRMA**  
HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY



### REQUEST FOR RECOMMENDATION ON PAYMENT

To: Dannenbaum Engineering  
Attn: Louis Jones, HCRMA Project Manager  
1109 Nolana Loop, Suite 208  
McAllen, Texas 78504

Month and Year	April 2013
Contractor	Teds Infrastructure Group
Project/WA	SH 365/Seg 3
Invoice #	20131535
Amount	<del>\$7,136.75</del> <b>\$3515.38</b>
Date Sent	06/05/2013

Date Received	
Received by	
Recommendation:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Disapproval
Comments (if any):	<p>Approved for Payment PJ 6/10/2013</p>
	Date <u>6/12/13</u>
Louis Jones, HCRMA Program Manager	

Please return this form via email to [fkoll@hcrma.net](mailto:fkoll@hcrma.net)



**TEDSI INFRASTRUCTURE GROUP**

**Consulting Engineers**

1201 East Expressway 83 • Mission, Texas 78572  
 Tel: (956) 424-7898  
 Fax: (956) 424-7022

May 21, 2013

Project No: 2012-1115-01

Invoice No: 20131535

Ms. Pilar Rodriguez  
 Hidalgo County Regional Mobility Authority  
 P. O. Box 1766  
 Pharr, TX 78577

Project 2012-1115-01 HCRMA SH 365 Segment 3 at US 281 Military Highway

- Limits of Proposed Work:**
1. Along US 281 from Spur 600 to FM 2557
  - 2.1 Road from BSIF connection to Highline Road
  3. San Juan Road from BSIF connection to Highline Road

Professional Services from April 01, 2013 to April 30, 2013

Fee

Billing Phase	Fee	Percent Complete	Earned	Previous Fee Billing	Current Fee Billing
Route & Design Studies (FC 110)	140,615.06	100.00	140,615.06	137,099.68	3,515.38
Direct Expenses	2,120.00	100.00	2,120.00	2,120.00	0.00
<b>Total Fee</b>	<b>142,735.06</b>		<b>142,735.06</b>	<b>139,219.68</b> ✓	<b>3,515.38</b>
<b>Total Fee</b>					<b>3,515.38</b> ✓

**Billing Summary**

	Current	Prior	To-Date
Total Billings	3,515.38	139,219.68 ✓	142,735.06 ✓
Total Fee			142,735.06

Total this Invoice

**\$3,515.38**

*paid this amount TEK*

**Outstanding Invoices**

Number	Date	Balance
20131525	4/30/2013	3,621.37
<b>Total</b>		<b>3,621.37</b>
<b>Total Now Due</b>		<b>\$7,136.75</b>

**PLEASE REMIT PAYMENT TO:**  
 TEDSI Infrastructure Group, Inc.  
 738 Highway 6 South, Suite 430  
 Houston, Texas 77079

Authorized By: \_\_\_\_\_

*[Signature]*  
 Craig F. Stong, P.E.  
 Project Manager

Date: \_\_\_\_\_

*5/21/13*



REQUEST FOR RECOMMENDATION ON PAYMENT

To: Dannenbaum Engineering  
Attn: Louis Jones, HCRMA Project Manager  
1109 Nolana Loop, Suite 208  
McAllen, Texas 78504

Month and Year	2/1/13 - 3/31/13
Contractor	Tedsi Infrastructure Group
Project/WA	SH365/Seg3
Invoice #	20131525
Amount	\$3,621.37
Date Sent	05/21/2013

Date Received	
Received by	
Recommendation:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Disapproval
Comments (if any):	<p>Approved for Payment. LR LR 6/10/2013</p> <p></p> <p>_____ Louis Jones, HCRMA Program Manager</p> <p>Date <u>6/10/13</u></p>

Please return this form via email to [fkoll@hcrma.net](mailto:fkoll@hcrma.net)



**TEDSI INFRASTRUCTURE GROUP**

*Consulting Engineers*

1201 East Expressway 83 • Mission, Texas 78572  
Tel: (956) 424-7898  
Fax: (956) 424-7022

April 29, 2013

Project No:

2012-1115-01

Invoice No:

20131525

Ms. Pilar Rodriguez  
Hidalgo County Regional Mobility Authority  
P. O. Box 1766  
Pharr, TX 78577

Project 2012-1115-01 HCRMA SH 365 Segment 3 at US 281 Military Highway

**Limits of Proposed Work:**

1. Along US 281 from Spur 600 to FM 2557
2. 1 Road from BSIF connection to Highline Road
3. San Juan Road from BSIF connection to Highline Road

Professional Services from February 1, 2013 to March 31, 2013

**Fee**

Billing Phase	Fee	Percent Complete	Earned	Previous Fee Billing	Current Fee Billing
Route & Design Studies (FC 110)	140,615.06	97.50	137,099.88	133,584.31	3,515.37
Direct Expenses	2,120.00	100.00	2,120.00	2,014.00	106.00
<b>Total Fee</b>	<b>142,735.06</b>		<b>139,219.88</b>	<b>135,598.31</b>	<b>3,621.37</b>

**Total Fee**

**3,621.37**

**Billing Summary**

Total Billings  
Total Fee  
Remaining Fee

**Current**

**Prior**

**To-Date**

3,621.37

135,598.31

139,219.68

142,735.06

3,515.38

**Total this Invoice**

**\$3,621.37**

**PLEASE REMIT PAYMENT TO:**  
**TEDSI Infrastructure Group, Inc.**  
 738 Highway 6 South, Suite 430  
 Houston, Texas 77079

*Pay Only*

*PR*  
*6/10/2013*

*Loop Account*

*280003609*

Authorized By:

*[Signature]*  
 Craig F. Stong, P.E.  
 Project Manager

Date:

*5/1/13*

## Cynthia Luera

---

**From:** Flor Koll <fkoll@hcrma.net>  
**Sent:** Wednesday, June 05, 2013 10:23 AM  
**To:** Louis Jones  
**Cc:** Eric Davila; Cynthia Luera; Analy Diaz  
**Subject:** HCRMA Vendor Invoice -  
**Attachments:** Tedsí 20131525 Payment Recommendation Form.pdf

Louis,

Please review and reply with recommendation.

\*Cynthia, I can't remember if I sent this or not but I cannot find an email showing that I ever did send it – and I haven't paid it. They included the amount in Invoice # 20131535, I just need Louis approval to include it in that payment. Sorry for the confusion, if any. ☺

Thank you,

**FLOR E. KOLL**

Program Administrator

Hidalgo County Regional Mobility Authority

**Physical Address:**

118 S. Cage Blvd., 4<sup>th</sup> Floor

Pharr, Texas 78577

Ofc. (956) 402-4762

Fax. (956) 402-4762

Cell. (956) 310-3766

[fkoll@hcrma.net](mailto:fkoll@hcrma.net)

[www.hcrma.net](http://www.hcrma.net)

**Mailing Address:**

P.O. Box 1766

Pharr, Texas 78577

SENT VIA -- GW1.PHARR-TX.GOV -- CITY OF PHARR, TEXAS

HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY  
PAYMENT SUMMARY

DOS Land Surveying - SH 365 from FM 1016 to SH 336  
\$653,264.75 Maximum payable fee

Maximum fee minus approved WA \$0.00

	12/7/2011	1/26/2012	10/31/2012	12/6/2012	Invoice Date	WA Total Billed	WA Balance
Approved WA Amount					*		
WA#1	\$603,264.75	\$75,789.31	\$171,756.57	\$71,504.72	*	\$319,050.60	\$284,214.15
WA#2	\$50,000.00	\$40,000.00			*	\$40,000.00	\$10,000.00
						<u>\$359,050.60</u>	<u>\$294,214.15</u>

DOS Land Surveying - SH 365 from FM 1016 to SH 336  
\$774,772.17 Revised Maximum payable fee approved March 20, 2013 - Resolution 2013-10  
\$418,108.36 Revised Work Authorizatio No. 1 approved March 20, 2013 -Resolution 2013-10  
Maximum fee minus approved WA \$356,663.81

	3/22/2013	6/4/2013	Invoice Date	WA Total Billed	WA Balance
Approved WA Amount					
WA#1	\$418,108.36	\$48,152.50		\$441,826.31	-\$23,717.95
		<u>\$34,623.21</u>			

Amount Approved for Payment



Approved for Payment

Loop Account # 280003609

 Date

- Resolution 2012-39 amend and restate Professional Surveying Service Agreement with DOS Land Surveying with no change to maximum payable amount of \$653,263.00 and consolidated WA # 1 & 2 into WA #1 in the amount of \$653,263.
- Resolution 2013-10 approved Supplemental # 1 to Professional Surveying Service Agreement with DOS Land Surveying with an revised to the maximum payable amount of \$774,772.17 and a revised WA # 1 in the amount of \$418,108.36 (deduct).

Prepared by:  
P. Rodriguez, PE  
Tx PE #85,567  
6/11/2013



REQUEST FOR RECOMMENDATION ON PAYMENT

To: Dannenbaum Engineering  
 Attn: Louis Jones, HCRMA Project Manager  
 1109 Nolana Loop, Suite 208  
 McAllen, Texas 78504

Month and Year	
Contractor	Dos Land Surveying
Project/WA	SH 365/Seg 1
Invoice #	02 TCC Supp
Amount	\$34,623.21
Date Sent	06/05/2013

Date Received	
Received by	
Recommendation:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Disapproval
Comments (if any):	<p>Need submittal of Final          Proposed DTM before          next months billing.</p> <p><i>[Signature]</i>          Louis Jones, HCRMA Program Manager</p> <p>Date <u>6/10/13</u></p>

Please return this form via email to [fkoll@hcrma.net](mailto:fkoll@hcrma.net)

Approved for  
 Payment  
*[Signature]*  
 6/11/2013



<b>INVOICE</b>
<b>No.: 02 TCC Supp</b>
<b>Date: Tuesday, June 04, 2013</b>

**Bill To:**  
 Hidalgo County Regional Mobility Authority  
 510 S. Pleasantview Drive  
 Weslaco, Tx 78596

**Attention:**  
 Flor E. Koll  
 Transportation Planner I

**Professional Surveying Services**  
 SH 365 / Trade Corridor Connector (West Section)  
 Limits: Between Shary Rd. & GSA Connector  
 Supplemental Agreement to Main Contract

*R. P. Owens*  
*[Signature]*

Scope of Work	CONTRACT AMOUNT	% ADVANCE	CURRENT ADVANCE	REMAINING BALANCE	PAID TO DATE	CURRENT AMOUNT DUE
3.2 In-Fill Topo & Planimetrics	\$19,314.22	100.00%	\$19,314.22	\$0.00	\$0.00	\$19,314.22
Section 6 - Special or Mitigation Surveys:	\$15,308.99	100.00%	\$15,308.99	\$0.00	\$0.00	\$15,308.99
6.1 Surveys for Engineering Design						
6.1.2 Cross Culverts/Bridges						
6.1.3 Drainage Ditch/Irrigation Canal/Flood Control Structures						
6.1.4 Utilities						
6.1.5 Additional Topography and/or Planimetrics						
<b>Total</b>	<b>\$34,623.21</b>		<b>\$34,623.21</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$34,623.21</b>

*Pay Only ↑*

<b>CURRENT AMOUNT DUE</b>	<b>\$34,623.21</b>
Please remit to:	
Dos Land Surveying 1002 E. Exp. 83 Weslaco, Texas 78596	

THANK YOU FOR YOUR BUSINESS!

*PR*  
*6/11/2013*  
 Keep Account #  
 28 0003609

HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY  
PAYMENT SUMMARY

Quintanilla, Headley & Associates - SH 365 from SH 336 to FM 3072  
\$440,438.75 Maximum payable fee

Maximum fee minus approved WA \$0.00

Approved WA Amount	Invoice Date	WA Total Billed	WA Balance
Various	3/4/2013		
\$415,438.75	\$207,922.50	\$24,062.50	\$183,453.75
\$25,000.00		\$0.00	\$25,000.00
<u>\$440,438.75</u>		<u>\$231,985.00</u>	<u>\$208,453.75</u>

QHA - SH 365 from SH 336 to FM 3072  
\$794,192.50 Revised Maximum payable fee approved March 20, 2013 - Resolution 2013-09  
\$422,496.25 Revised Work Authorization fee approved March 20, 2013 - Resolution 2013-09  
Maximum fee minus approved WA \$371,696.25

Approved WA Amount	Invoice Date	WA Total Billed	WA Balance
Various	6/3/2013		
\$422,496.25	\$60,623.75	\$292,608.75	\$129,887.50
<u>\$422,496.25</u>	<u>\$60,623.75</u>		

Amount Approved for Payment

  
Date 6/11/2013

Approved for Payment  
Loop Account # 280003609

- Resolution 2012-40 amend and restate Professional Surveying Service Agreement with QHA with no change to maximum payable amount of \$440,438.75 and consolidated WA # 1 & 2 into WA #1 in the amount of \$653,263.
- Resolution 2013-09 approved Supplemental # 1 to Professional Surveying Service Agreement with QHA with an revised to the maximum payable amount of \$794,192.50 and a revised WA # 1 in the amount of \$422,496.25 (deduct).



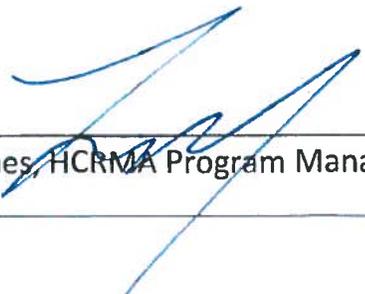
**HCRMA**  
 HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY



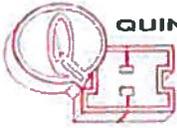
**REQUEST FOR RECOMMENDATION ON PAYMENT**

To: Dannenbaum Engineering  
 Attn: Louis Jones, HCRMA Project Manager  
 1109 Nolana Loop, Suite 208  
 McAllen, Texas 78504

Month and Year	
Contractor	Quintanilla, Headley and Associates
Project/WA	SH 365/Seg 2
Invoice #	8266
Amount	\$60,623.75
Date Sent	06/05/2013

Date Received	
Received by	
Recommendation:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Disapproval
Comments (if any):	<p>Need submitted of Final          Processed DTM before          next months billing.</p> <p style="text-align: right;">Approved for          Payment          6/11/2013</p>
 Louis Jones, HCRMA Program Manager	Date <u>6/10/13</u>

Please return this form via email to [fkoll@hcrma.net](mailto:fkoll@hcrma.net)



QUINTANILLA, HEADLEY AND ASSOCIATES, INC.

Consulting Engineers \* Land Surveyors

Engineering Firm Registration No. F-1913  
Surveying Firm Registration No. 100411-00

124 E. Sabin, Edinburg, Texas 78539  
Phone 956/381-6480 Fax 956/381-0527

DATE	INVOICE No.
6/3/2013	8266

**BILL TO**

Hidalgo County RMA  
 Attn: Ms. Flor Koll  
 118 South Cage Blvd, 4th Floor  
 Pharr, Texas 78577

*Approved*  
*[Signature]*  
*[Signature]*

DESCRIPTION OF SERVICES	AMOUNT
<p><b>PROJECT: HIDALGO COUNTY TRADE CORRIDOR CONNECTOR SH 365 FROM 10TH STREET TO U.S. 281-MILITARY RD</b>  <b>WORK AUTHORIZATION No. 1- SUPPLEMENTAL No. 1</b>  <b>PAYMENT REQUEST No. 4</b></p> <p>1.2 SECONDARY CONTROL (FROM 10TH STREET TO U.S. 281-MILITARY RD) EXCLUDING THE TCC/IBTC INTERCHANGE.            1.2.1 COORDINATION, ADMIN., RESEARCH AND ABSTRACTING TASKS            1.2.2 FIELD WORK TASKS  <b>TOTAL TASK COST \$8,208.78</b></p> <p>3.2 IN-FILL TOPO AND PLAINMETRICS (FROM LAS MILPAS RD TO U.S. HWY 281)            3.2.1 COORDINATION, ADMIN., RESEARCH AND ABSTRACTING TASKS            3.2.2 FIELD WORK TASKS            3.2.3 OFFICE WORK/DELIVERY PREPARATION TASKS  <b>TOTAL TASK COST: \$ 24,310.00</b></p> <p>5. UTILITY SURVVEY (FROM LAS MILPAS RD TO U.S.HWY 281)            5.2 FIELD WORK TASKS  <b>TOTAL TASK COST: \$ 8,250.00</b></p> <p>6. SPECIAL OR MITIGATION SURVEYS (FROM LAS MILPAS RD TO U.S. HWY 281)            6.1.2 CROSS CULVERTS/BRIDGES            6.1.2.1 COORDINATION, ADMIN., RESEARCH AND ABSTRACTING TASKS            6.1.2.2 FIELD WORK TASKS            6.1.2.3 OFFICE WORK/DELIVERY PREPARATION TASKS  <b>TOTAL TASK COST: \$ 9,927.50</b></p>	<p>60,623.75</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 20px auto;"> <p>PAYMENT IS EXPECTED WITHIN 30 DAYS FROM INVOICE DATE UNLESS OTHERWISE SPECIFIED IN CONTRACT.</p> </div>





REQUEST FOR RECOMMENDATION ON PAYMENT

To: Dannenbaum Engineering  
 Attn: Louis Jones, HCRMA Project Manager  
 1109 Nolana Loop, Suite 208  
 McAllen, Texas 78504

Month and Year	1/28/13 - 3/3/13
Contractor	Atkins
Project/WA	SH 365
Invoice #	1163036
Amount	\$54,965.13
Date Sent	05/29/2013

Date Received	
Received by	
Recommendation:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Disapproval
Comments (if any):	<p style="text-align: right;"> <i>Approved for            Payment            PIR            6/11/2013</i> </p>
 Louis Jones, HCRMA Program Manager	Date <i>5/21/13</i>

Please return this form via email to [fkoll@hcrma.net](mailto:fkoll@hcrma.net)



Atkins North America, Inc.  
6504 Bridge Point Parkway, Suite 200  
Austin, Texas 78730

Telephone: +1.512.327.6840  
Fax: +1.512.327.2453

[www.atkinsglobal.com/northamerica](http://www.atkinsglobal.com/northamerica)

March 14, 2013

Ms. Flor Koll  
Hidalgo County Regional Mobility Authority (HCRMA)  
P.O. Box 1766  
Pharr, Texas 78577  
VIA EMAIL: [fkoll@hcrma.net](mailto:fkoll@hcrma.net)

RE: **February 2013 Invoice**  
State Highway 365 (SH 365)

(Project No. 100020726)

Dear Ms. Koll:

Enclosed please find the invoice and progress report for work completed for the period 01/28/2013 through 03/03/2013. The total amount due for this period is \$54,965.13.

If you have any questions or need additional information, please contact me directly at (512) 342-3332.

Sincerely,

Sharon Becca  
Project Manager

Enclosures

cc: Larry Cox (Cox McLain)  
Project File




---

## PROGRESS REPORT

---

**To** Flor Koll (HCRMA)  
**From** Sharon Becca  
**Date** March 14, 2013  
**Project** State Highway 365 (SH 365) [Project No: 100020726]  
**Reference** Environmental Progress Report (For Period: 1/28/2013 – 3/3/2013)

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Task	Description	Progress Report
1.0	Project Management & Administration	<ul style="list-style-type: none"> <li>• Coordination with HCRMA PMC and CMEC.</li> <li>• Project coordination</li> <li>• Monthly invoicing</li> </ul>
2.0	Agency Coordination & Public Involvement	No action
3.0	Right of Entry	<ul style="list-style-type: none"> <li>• ROE coordination</li> <li>• ROE mapping</li> </ul>
4.0	Environmental Classification Letter	Task complete
5.0	Environmental Document	<ul style="list-style-type: none"> <li>• EA update and coordination               <ul style="list-style-type: none"> <li>▪ Socioeconomics section update</li> <li>▪ Ecology sections</li> <li>▪ Hazmat update</li> <li>▪ Noise modeling; noise study document</li> <li>▪ Indirect and cumulative impacts (ICI) coordination</li> <li>▪ NRCS coordination</li> </ul> </li> </ul>
6.0	Section 404 Delineation	<ul style="list-style-type: none"> <li>• Finalized T&amp;E Evaluation per PMC comments and submitted for District review</li> <li>• Finalized Wetlands Report per PMC comments</li> <li>• Prepared and submitted USACE request for jurisdictional determination</li> </ul>
7.0	Cultural Resources	
7.01	Archaeology	<ul style="list-style-type: none"> <li>• ROE coordination – identified parcels requiring access</li> <li>• Finalized research design per TxDOT ENV comments</li> <li>• Research design approval coordination</li> <li>• Coordinated field survey efforts</li> <li>• Field surveys conducted week of 02/22/13 and week of 03/01/13</li> </ul>
7.02	Historic Resources	<ul style="list-style-type: none"> <li>• ROE coordination – identified parcels requiring access</li> <li>• Research design approval coordination</li> <li>• Field survey conducted week of 02/18/13</li> </ul>
8.0	IBWC Permit	No associated budget
9.0	Section 4(f) Evaluation	De minimis information request coordination.
10.0	Archaeology Survey Reports	Continued preparation of comprehensive survey report.
15.0	Expenses	Expenses accrued this period.
16.0	Subconsultant (CMEC)	Project and ICI coordination (to be invoiced next month)

# ATKINS

Hidalgo County RMA  
Attn: Godfrey Garza  
510 S. Pleasantview Drive  
Westaco, TX 78596

Invoice Date: March 14, 2013  
Project #: 100020726  
Invoice #: 1163036

Project Description : HCRMA SH 365  
Invoice Comments:  
Invoicing Period : January 28, 2013 to March 03, 2013

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<b>Basic Services</b>	<b>Current</b>
Lump Sum	54,965.13

**Total Invoice** 54,965.13

**Total Due this Invoice**

Contract Amount :	534,092.60
Previous Billed:	228,194.53
Billed to Date	283,159.66
Contract Balance :	250,932.94

USD 54,965.13

Pay Only ↑

1 - 1 R

6/11/2013

loop Account #

Remit to:  
Atkins North America, Inc  
PO Box 848176  
Dallas, TX 75284-8176  
Tax ID: 59-0896138

Wire Payments: Routing No. 026009593, Acct No 005481516927  
ACH EFT Payments: ABA Routing 063100277, Acct No 005481516927

280003609

Hidalgo County RMA  
SH 365/ENV Services726

Project Number 100020726  
Invoice Number 1163036  
Date 14-MAR-13

Task Number	Task Name	Contract Fee	Percent Complete	Total Earned	Previous Earned	Current Billing
01	Project Management &	101,393.62	69.51	70,478.71	67,426.76	3,051.95
02	Agency Coord & Publi	23,955.30	3.26	780.62	780.62	
03	Right of Entry	14,219.16	61.43	8,735.46	7,143.63	1,591.83
04	ENV Classification	15,235.64	100	15,235.64	15,235.64	
05	ENV Document	109,437.76	55.96	61,246.49	39,415.01	21,831.48
06	Section 404 Dellneat	34,707.03	60.89	21,132.35	12,683.02	8,449.33
07	Cultural Resources	132,962.29	62.34	82,887.34	63,965.80	18,921.54
08	IBWC Permit					
09	Section 4(f) Evaluat	14,696.53	39.93	5,867.86	5,707.68	160.18
10	Archaeology Survey R	21,186.91	14.25	3,018.52	2,059.70	958.82
15	Expenses	38,233.22	14.83	5,668.09	5,668.09	
16	Subconsultant	28,065.14	28.89	8,108.58	8,108.58	
<b>TOTAL</b>		<b>534,092.60</b>		<b>283,159.66</b>	<b>228,194.53</b>	<b>54,965.13</b>



**HCRMA**  
HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY



**REQUEST FOR RECOMMENDATION ON PAYMENT**

To: Dannenbaum Engineering  
Attn: Louis Jones, HCRMA Project Manager  
1109 Nolana Loop, Suite 208  
McAllen, Texas 78504

Month and Year	April 2013
Contractor	Atkins
Project/WA	SH 365
Invoice #	1167694
Amount	\$27,991.36
Date Sent	05/22/2013

Date Received	
Received by	
Recommendation:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Disapproval
Comments (if any):	<p style="text-align: right;"> <i>Approved for Payment P. R. 6/11/2013</i> </p> <p style="text-align: right;"> <i>5/29/13</i> </p>
<hr/> Louis Jones, HCRMA Program Manager	<hr/> Date

Please return this form via email to [fkoll@hcrma.net](mailto:fkoll@hcrma.net)



Atkins North America, Inc.  
6504 Bridge Point Parkway, Suite 200  
Austin, Texas 78730

Telephone: +1.512.327.6840  
Fax: +1.512.327.2453

[www.atkinsglobal.com/northamerica](http://www.atkinsglobal.com/northamerica)

May 13, 2013

Ms. Flor Koll  
Hidalgo County Regional Mobility Authority (HCRMA)  
P.O. Box 1766  
Pharr, Texas 78577  
VIA EMAIL: [fkoll@hcrma.net](mailto:fkoll@hcrma.net)

RE: **April 2013 Invoice**  
State Highway 365 (SH 365)

(Project No. 100020726)

Dear Ms. Koll:

Enclosed please find the invoice and progress report for work completed for the period 04/01/2013 through 04/28/2013. The total amount due for this period is \$27,991.36.

If you have any questions or need additional information, please contact me directly at (512) 342-3332.

Sincerely,

Sharon Becca  
Project Manager

Enclosures

cc: Larry Cox (Cox McLain)  
Project File



## PROGRESS REPORT

**To** Flor Koll (HCRMA)  
**From** Sharon Becca  
**Date** May 13, 2013  
**Project** State Highway 365 (SH 365) [Atkins Project No: 100020726]  
**Reference** Environmental Progress Report (For Period: 4/1/2013 – 4/28/2013)

Task	Description	Progress Report
1.0	Project Management & Administration	<ul style="list-style-type: none"> <li>• Coordination with HCRMA PMC and CMEC.</li> <li>• Project coordination (biweekly telecons)</li> <li>• Monthly invoicing</li> <li>• Coordination related to 04/04/2013 Request for Information (RFI) Memo</li> </ul>
2.0	Agency Coordination & Public Involvement	<ul style="list-style-type: none"> <li>• No action</li> </ul>
3.0	Right of Entry	<ul style="list-style-type: none"> <li>• No action</li> </ul>
4.0	Environmental Classification Letter	Task complete
5.0	Environmental Document	<ul style="list-style-type: none"> <li>• EA update and coordination               <ul style="list-style-type: none"> <li>▪ Updated EA per materials provided per 04/04/13 RFI Memo</li> <li>▪ Ecology sections update</li> <li>▪ Noise study coordination/response to comments</li> <li>▪ Indirect and cumulative impacts (ICI) coordination</li> <li>▪ Reformatted T&amp;E Evaluation Memo and prepared Biological Evaluation (BE) report per Pharr District's request. Submitted BE on 04/17/13.</li> </ul> </li> </ul>
6.0	Section 404 Delineation	<ul style="list-style-type: none"> <li>• Responded to USACE request for information on the preliminary jurisdictional determination.</li> <li>• Submitted responses on 04/24/13.</li> </ul>
7.0	Cultural Resources	
7.01	Archaeology	<ul style="list-style-type: none"> <li>• Archaeological survey report mapping and coordination.</li> </ul>
7.02	Historic Resources	<ul style="list-style-type: none"> <li>• Responded to PMC's comments on the Draft Survey Report.</li> <li>• Submitted revised draft HRSR on 04/17/13</li> </ul>
8.0	IBWC Permit	No associated budget
9.0	Section 4(f) Evaluation	<ul style="list-style-type: none"> <li>• Review of DOS Logistics Irrigation Report</li> </ul>
10.0	Archaeology Survey Reports	<ul style="list-style-type: none"> <li>• Preparation and submittal of comprehensive survey report (including Sections A &amp; C, and IBTC). Submitted for PMC's review on 04/01/13.</li> <li>• Responded to PMC's comments on the Draft Survey Report on 04/19/13.</li> <li>• Submitted revised Draft Survey Report to ENV on 04/23/13.</li> </ul>
15.0	Expenses	Expenses accrued this period.
16.0	Subconsultant (CMEC)	<ul style="list-style-type: none"> <li>• No action</li> </ul>

# ATKINS

Hidalgo County RMA  
Attn: Flor Koll  
P.O. Box 1766  
Pharr, TX 78577

Invoice Date: May 13, 2013  
Project #: 100020726  
Invoice #: 1167694

Project Description : HCRMA SH 365  
Invoice Comments:  
Invoicing Period : April 01, 2013 to April 28, 2013

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<b>Basic Services</b>	<b>Current</b>
Lump Sum	27,991.36

<b>Total Invoice</b>	<b>27,991.36</b>
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**Total Due this Invoice**

USD 27,991.36

Contract Amount :	534,092.60
Previous Billed:	352,811.20
Billed to Date	380,802.56
Contract Balance :	153,290.04

Pay Only

P.R.  
4/11/2013

Loop Account #

280003609

Remit to:  
Atkins North America, Inc  
PO Box 848176  
Dallas, TX 75284-8176  
Tax ID: 59-0896138

Wire Payments: Routing No. 026009593, Acct No 005481516927  
ACH EFT Payments: ABA Routing 063100277, Acct No 005481516927

Hidalgo County RMA  
 SH 365/ENV Services726

Project Number 100020726  
 Invoice Number 1167694  
 Date 13-MAY-13

Task Number	Task Name	Contract Fee	Percent Complete	Total Earned	Previous Earned	Current Billing
01	Project Management &	101,393.62	73.87	74,899.47	72,192.26	2,707.21
02	Agency Coord & Publi	23,955.30	36.31	8,698.17	8,698.17	
03	Right of Entry	14,219.16	62.83	8,934.34	8,934.34	
04	ENV Classification	15,235.64	100	15,235.64	15,235.64	
05	ENV Document	109,437.76	76.62	83,947.88	75,024.98	8,822.90
06	Section 404 Delineat	34,707.03	86.61	30,059.15	23,051.11	7,008.04
07	Cultural Resources	132,962.29	74.74	99,378.32	96,434.59	2,943.73
08	IBWC Permit					
09	Section 4(f) Evaluat	14,696.53	42.99	6,317.32	6,085.52	231.80
10	Archaeology Survey R	21,186.91	63.78	13,512.01	12,446.65	1,065.36
15	Expenses	38,233.22	38.35	14,661.68	9,449.36	5,212.32
16	Subconsultant	28,065.14	90	25,258.58	25,258.58	
<b>TOTAL</b>		<b>534,092.60</b>		<b>380,802.56</b>	<b>352,811.20</b>	<b>27,991.36</b>



**HCRMA**  
 HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY



REQUEST FOR RECOMMENDATION ON PAYMENT

To: Dannenbaum Engineering  
 Attn: Louis Jones, HCRMA Project Manager  
 1109 Nolana Loop, Suite 208  
 McAllen, Texas 78504

Month and Year	April 2013
Contractor	Atkins
Project/WA	IBTC
Invoice #	1167791
Amount	\$895.48
Date Sent	05/22/2013

Date Received	
Received by	
Recommendation:	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Disapproval
Comments (if any):	<p><i>This is part of the remaining          lump sum to local client          IBTC.</i></p> <p style="text-align: right;"><i>Approved for          Payment          P. R.          5/28/13 4/11/2013</i></p>
 Louis Jones, HCRMA Program Manager	Date

Please return this form via email to [fkoll@hcrma.net](mailto:fkoll@hcrma.net)



Atkins North America, Inc.  
6504 Bridge Point Parkway, Suite 200  
Austin, Texas 78730

Telephone: +1.512.327.6840  
Fax: +1.512.327.2453

[www.atkinsglobal.com/northamerica](http://www.atkinsglobal.com/northamerica)

May 14, 2013

Ms. Flor Koll  
Hidalgo County Regional Mobility Authority (HCRMA)  
P.O. Box 1766  
Pharr, Texas 78577  
VIA EMAIL: [fkoll@hcrma.net](mailto:fkoll@hcrma.net)

RE: **April 2013 Invoice**  
International Bridge Trade Corridor (IBTC) (Project No. 100011499)  
US 83 Connector to SH 495 (Project No. 100014846)

Dear Ms. Koll:

Enclosed please find the invoices and progress report for work completed for the period 04/01/2013 through 04/28/2013 for the subject HCRMA projects. The total amount due for this period for the IBTC project is \$895.48.

- |                                |          |
|--------------------------------|----------|
| • IBTC (100011499):            | \$895.48 |
| • US 83 Connector (100014846): | \$0.00   |

If you have any questions or need additional information, please contact me directly at (512) 342-3332.

Sincerely,

Sharon Becca  
Project Manager

Enclosures

cc: Velma Garcia (L&G)  
Project File



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## STATUS REPORT

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**To** Flor Koll (HCRMA)  
**From** Sharon G. Becca  
**Date** May 13, 2013  
**Projects** International Bridge Trade Corridor (IBTC); and  
US 83 Connector to SH 495  
**Reference** Environmental Progress Report (For Period: 04/01/2013 – 04/28/2013)

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### International Bridge Trade Corridor Project No: 100011499

Task	Description	Progress Report
B2.2	N&P and Alternatives	No action
B2.3	Public Involvement	No action
B2.4	Environmental Document	<ul style="list-style-type: none"><li>Invoicing and subconsultant coordination</li><li>Submitted IBTC federalization fee estimate on 04/03/13</li></ul>
B2.5	Section 404 Delineation	No action
B2.6	Cultural Resources	No action
B2.7	NEPA/Environmental Management	No action
B3.0	Phase II ESA Oversight	No action
B8.1	Direct Expenses	No charges
B9	Sub consultant (L&G)	No charges

### US 83 Connection to SH 495 Project No: 100014846

Task	Description	Progress Report
2.3	Public Involvement	No action
2.4	Environmental Document	No action
2.5	Section 404 Delineation	No action
2.6	Cultural Resources	No action
2.7	NEPA/Environmental Management	No action
2.8X	Direct Expenses	No charges
2.9	Sub consultant (L&G)	No action

# ATKINS

Hidalgo County RMA  
Attn: Flor Koll  
P.O. Box 1766  
Pharr, TX 78577

Invoice Date: May 14, 2013  
Project #: 100011499  
Invoice #: 1167791

Project Description : Hidalgo International Bridge Trade \*CORRIDOR\* Engineering Services  
Invoice Comments:  
Invoicing Period : April 01, 2013 to April 28, 2013

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<b>Basic Services</b>	<b>Current</b>
Lump Sum	895.48

<b>Total Invoice</b>	<b>895.48</b>
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**Total Due this Invoice**

Contract Amount :	1,280,817.85
Previous Billed:	1,208,584.97
Billed to Date	1,209,480.45
Contract Balance :	71,337.40

USD 895.48

Pay Only

17-12  
6/11/2013

Remit to:  
Atkins North America, Inc  
PO Box 848176  
Dallas, TX 75284-8176  
Tax ID: 59-0896138

Loop Account #

Wire Payments: Routing No. 026009593, Acct No 005481516927  
ACH EFT Payments: ABA Routing 063100277, Acct No 005481516927

280003609

Hidalgo County RMA  
 HCRMA-HIBT \*(CORRIDOR)\*499

Project Number 100011499  
 Invoice Number 1167791  
 Date 14-MAY-13

Task Number	Task Name	Contract Fee	Percent Complete	Total Earned	Previous Earned	Current Billing
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B2.1	Data Collection					
B2.2	N&P and Alternatives	2,108.00	100	2,108.00	2,108.00	
B2.3	Public Involvement	18,893.00	100	18,893.00	18,893.00	
B2.4	Environmental Docume	105,350.65	65.03	68,509.53	67,614.05	895.48
B2.5	Section 404 Delineat	42,555.79	100	42,555.79	42,555.79	
B2.6	Cultural Resources	138,964.43	100	138,964.43	138,964.43	
B2.7	NEP/Environmental T	82,330.14	100	82,330.14	82,330.14	
B3.1	Phase II Oversight	11,013.00	100	11,013.00	11,013.00	
B8.1	Direct Expenses	63,520.00	52.02	33,043.22	33,043.22	
B9.1	Subconsultant - L&G	816,082.84	99.51	812,063.34	810,063.34	
<b>TOTAL</b>		<b>1,280,817.85</b>		<b>1,209,480.45</b>	<b>1,208,584.97</b>	<b>895.48</b>



## TUGGEY FERNANDEZ LLP

SAN ANTONIO

3707 N. St. Mary's St., Suite 200 • San Antonio, TX 78212  
Tel 210.538.9933 • Fax 888.330.7890 • www.tuggeyllp.com

June 6, 2013

Mr. Pilar Rodriguez  
Executive Director  
Hidalgo County Regional Mobility Authority  
P.O. Box 1766  
Pharr, Texas 78577

Re: Legal Services

Dear Mr. Rodriguez:

On behalf of Tuggey Fernandez LLP, I want to thank you for your confidence in our firm to represent you in the above referenced matter.

Enclosed you will find our invoices for legal services rendered and disbursements incurred on your behalf through May 31, 2013. Separate invoices for your general matters (\$220.00) and project matters (\$1,128.50) are attached. Your outstanding balance from April 2013 is \$3,310.76.

If you have any questions regarding this invoice, please do not hesitate to contact me at (210) 538-9935 or [bfernandez@tuggeyllp.com](mailto:bfernandez@tuggeyllp.com).

Very truly yours,

Blakely L. Fernandez

Enclosure  
copy: File  
cc: Flor Koll via email [fkoll@hcrma.net](mailto:fkoll@hcrma.net)

Approved for  
Payment  
P-12  
6/11/2013

HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY  
PAYMENT SUMMARY

Dannenbaum Engineering - Program Management  
\$5,000,000 Maximum payable fee

Maximum fee minus approved WA \$2,490,563.59

Invoice Date	Approved WA		Amount	Invoice Date	Approved WA		Amount	Billed to Date		
	12/12/2011	1/13/2012			2/14/2012	3/9/2012			4/9/2012	5/8/2012
WA#1	\$909,960.63	\$255,645.93	\$226,404.86	\$155,211.93	\$145,740.60	\$81,955.77	\$45,001.54	\$909,960.63		
WA#2	\$0.00							\$5,775.00		
WA#3	\$57,750.00							\$694,355.85		
WA#4	\$694,355.85							\$168,865.92		
WA#5	\$847,369.93							\$1,778,957.40		
			\$2,509,436.41							

\* Note: WA #2 for the La Joya Relief Route was not necessary and cancelled.  
 May 8, 2012 billing for WA#1 reduced by \$5,459.01 to meet approved amount.  
 August 6, 2012 billing for WA#4 credited \$70.00 due to overpayment on July 7, 2012 invoice.  
 Balance for WA#4 was deducted from approved amount of \$891,814.61 by Supplemental 1 in the amount of \$197,458.76 and closed out  
 WA#5 amended and restated to add \$45,000 for public outreach for a revised WA#5 amount of \$847,369.93  
 Balance for WA#5 was deducted from approved amount of \$847,369.93 by supplemental 1 in the amount \$78,132.97 and closed out  
 Supplemental No. 1 to WA#6 added a T&R Study for Overweight Trucks on SH 365 in the amount of \$81,309.04  
 Supplemental No. 2 to WA#6 added a Value Engineering Study for SH 365 in the amount of \$149,120.30  
 Supplemental No. 3 to WA#6 added a low level aerial flight and topographic survey for IBTC in the amount of \$346,720.31

  
 Approved for Payment  
 Date: 6/11/2013

Loop Account # 280003609

HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY  
PAYMENT SUMMARY

Dannenbaum Engineering - Program Management  
\$5,000,000 Maximum payable fee

Maximum fee minus approved WA \$1,301,712.58

	Approved WA Amount	11/7/2012	12/3/2012	1/2/2013	1/5/2013	Invoice Date			WA Balance
						3/11/2013	4/2/2013	5/6/2013	
WA#1	\$909,960.63								\$0.00
WA#2	\$0.00								\$0.00
WA#3	\$57,750.00	\$13,282.50	\$38,692.50						\$0.00
WA#4 *	\$694,355.85								\$0.00
WA#5 *	\$769,236.96	\$192,547.60	\$204,374.94	\$203,448.50					\$0.00
WA#6	\$689,834.33								\$114,995.36
S#1 to WA#6	\$81,309.04				\$97,110.61	\$132,811.94	\$114,994.62	\$114,995.38	\$114,926.42
S#2 to WA#6	\$149,120.30								\$32,523.62
S#3 to WA#6	\$346,720.31								\$106,700.09
									\$112,359.20
									<u>\$366,509.33</u>
									<b>Amount Approved for Payment</b>
									<u>\$3,257,725.32</u>
									<u>\$440,562.10</u>

Prepared by:  
P. Rodriguez, PE  
Tx PE #85,567  
6/11/2013

**DANNENBAUM ENGINEERING CORPORATION**

1109 NOLANA LOOP, SUITE 208 McALLEN, TEXAS 78504 (956) 682-3677

ENGINEERING  
EXCELLENCE  
SINCE  
1945

June 5, 2013

Dennis Burleson, Chairman  
HCRMA  
118 S. Cage Blvd, 4<sup>th</sup> Floor  
Pharr, Texas 78577

**Re: Hidalgo County Regional Mobility Authority (HCRMA) –  
Invoice for Work Authorization No. 1 (4652-01/19/XV)**

Dear Mr. Burleson,

Enclosed please find Invoice 465201/19/XV for W.A. No. 6 totaling \$366,509.33,  
which includes:

- \$114,926.42 for original W.A. No. 6
- \$32,523.62 for S.W.A. No. 1 to W.A. No. 6
- \$106,700.09 for S.W.A. No. 2 to W.A. No. 6
- \$112,359.20 for S.W.A. No. 3 to W.A. No. 6

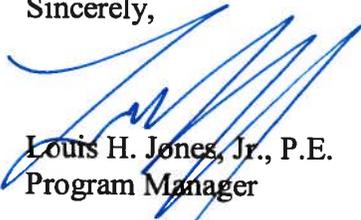
for Program Management Consultant Services performed for the Hidalgo County  
Regional Mobility Authority (HCRMA). The Progress Report will follow within  
the next few days.

The billing cycle is from May 1, 2013 through May 31, 2013.

**Total due this invoice is \$366,509.33.**

If you have any questions, please feel free to contact me at (956) 682-3677 or  
(832) 771-4904.

Sincerely,



Louis H. Jones, Jr., P.E.  
Program Manager

Enclosure(s)

Cc: Richard D. Seitz, P.E. - Dannenbaum Engineering Corporation  
Eric Davila, EIT – Dannenbaum Engineering Corporation

Approved for  
Payment  
P R  
4/11/2013

# DANNENBAUM ENGINEERING CORPORATION

1109 NOLANA LOOP, SUITE 208 MCALLEN, TEXAS 78504 (956) 682-3677 (956) 686-1822

June 5, 2013

Dennis Burleson, Chairman  
 Hidalgo County Regional Mobility Authority  
 510 South Pleasantview Drive  
 Weslaco, Texas 78596

Project Name: HCRMA Program Management Consultant Contract  
 Work Authorization No. 1 through No. 6

Invoice Number:  
 Invoice Period:

465201/19/XV  
 05/01/2013 - 05/31/2013

## INVOICE SUMMARY

WORK ORDER NO.	DESCRIPTION OF WORK TASK	TOTAL COST	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
1	Research Planning/Immediate Operations Phase	\$909,960.63	100.00%	\$909,960.63	\$909,960.63	\$0.00
2	Advanced Planning for La Joya Relief Route (NOT APPROVED)	\$0.00	0.00%	\$0.00	\$0.00	\$0.00
3	Title Reports for TCC	\$57,750.00	100.00%	\$57,750.00	\$57,750.00	\$0.00
4	Engineering Management/Partial Operations Implementation/Public Outreach	\$694,355.85	100.00%	\$694,355.85	\$694,355.85	\$0.00
5	Engineering Management/Partial Operations Implementation/Public Outreach	\$769,236.96	100.00%	\$769,236.96	\$769,236.96	\$0.00
6	Engineering Management/Partial Operations Implementation/Public Outreach	\$689,834.33	83.33%	\$574,838.97	\$459,912.55	\$114,926.42
SWA 1 to WO 6	Sketch Level Assessment of Potential Truck Diversion from Nogales Poo to Texas	\$81,309.04	40.00%	\$32,523.62	\$0.00	\$32,523.62
SWA 2 to WO 6	Value Engineering Report for SH 365	\$149,120.30	71.55%	\$106,700.09	\$0.00	\$106,700.09
SWA 3 to WO 6	IBTC Low Level Flight	\$346,720.31	32.41%	\$112,359.20	\$0.00	\$112,359.20
<b>TOTALS</b>		<b>\$3,698,287.42</b>	<b>88.09%</b>	<b>\$3,257,725.32</b>	<b>\$2,891,215.99</b>	<b>\$366,509.33</b>

TOTAL DUE THIS INVOICE:

\$366,509.33

Pay Only

TR

4/11/2013

loop Account #

280003409

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

June 5, 2013

Dennis Burlison, Chairman  
Hidalgo County Regional Mobility Authority  
510 South Pleasantview Drive  
Weslaco, Texas 78596

Work Order No. 1:  
Research Planning/Immediate Operations Phase

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

TASK CODE	DESCRIPTION OF WORK TASK	TOTAL COST	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
1	Research/Analyze/Gather all documents and develop Prog. Mgt. Plan (4 Months)	\$605,919.26	100.00%	\$605,919.26	\$605,919.26	\$0.00
2	Review/Monitor/Report/Implement All TxDOT Pass Thru / Toll Agreements (4 mo)	\$11,546.14	100.00%	\$11,546.14	\$11,546.14	\$0.00
3	Rev./Analyze TRZ for the entire HCRMA Rdwy. Sys. Includ. La Joya Relief Rte.	\$18,983.62	100.00%	\$18,983.62	\$18,983.62	\$0.00
4	Gen. Eng. Consult. (GEC) Mgt. including contract negotiations (4 months)	\$173,210.21	100.00%	\$173,210.21	\$173,210.21	\$0.00
5	Procurement / Negotiations of Prof. Svcs.	\$27,248.50	100.00%	\$27,248.50	\$27,248.50	\$0.00
ODC	Direct Expenses	\$73,052.90	100.00%	\$73,052.90	\$73,052.90	\$0.00
	<b>TOTALS</b>	<b>\$909,960.63</b>	<b>100.00%</b>	<b>\$909,960.63</b>	<b>\$909,960.63</b>	<b>\$0.00</b>

TOTAL DUE WORK ORDER NO. 1:

\$0.00 ✓

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 1:  
Research Planning/Immediate Operations Phase

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>TASK 1 Research/Analyze/Gather all documents and develop Prog. Mgt. Plan (4 Months)</b>					
<b>A. Research/Analyze/Gather all existing documents</b>					
1. Organize/Analyze all documents received	\$ 35,455.62	100.00%	\$35,455.62	\$35,455.62	\$0.00
2. Review/Comment all consultant contracts	\$ 3,709.14	100.00%	\$3,709.14	\$3,709.14	\$0.00
3. Review/Analyze all schematics including North of US 83	\$ 75,561.96	100.00%	\$75,561.96	\$75,561.96	\$0.00
5. Review/Analyze/Comment on all financial studies	\$ 8,122.08	100.00%	\$8,122.08	\$8,122.08	\$0.00
6. Review/Analyze/Comment on all TxDOT comments on all existing documents	\$ 6,868.84	100.00%	\$6,868.84	\$6,868.84	\$0.00
<b>B. Review Exist. Quantities/Estimates and Prep.Cursive Review of Proj. Dev. Cost Est. on all projects</b>					
1. SH 365 / TCC (All Sections)	\$ 18,708.04	100.00%	\$18,708.04	\$18,708.04	\$0.00
2. IBTC All Sections	\$ 10,997.72	100.00%	\$10,997.72	\$10,997.72	\$0.00
3. US 281 Military Highway Overpass	\$ 10,875.76	100.00%	\$10,875.76	\$10,875.76	\$0.00
4. US 83 Connector to FM 495	\$ 6,917.40	100.00%	\$6,917.40	\$6,917.40	\$0.00
5. La Joya Relief Route Segment No. 1	\$ 11,046.28	100.00%	\$11,046.28	\$11,046.28	\$0.00
6. All Segments - North of US 83	\$ 19,838.44	100.00%	\$19,838.44	\$19,838.44	\$0.00
<b>C. Develop Program Management Plan which includes the following components:</b>					
2. Quality Control Plan	\$ 7,727.18	100.00%	\$7,727.18	\$7,727.18	\$0.00
3. Cost Control Plan	\$ 40,535.94	100.00%	\$40,535.94	\$40,535.94	\$0.00
4. Schedule Management /Tracking Plan	\$ 13,402.16	100.00%	\$13,402.16	\$13,402.16	\$0.00
5. Document Control Plan	\$ 11,459.16	100.00%	\$11,459.16	\$11,459.16	\$0.00
6. Financial Implementation Plan	\$ 74,782.58	100.00%	\$74,782.58	\$74,782.58	\$0.00
7. Right-of-way Acquisition Management Plan (Refer to Aranda & Associates)	\$ 11,098.50	100.00%	\$11,098.50	\$11,098.50	\$0.00
8. Utility Relocation Plan	\$ 8,301.76	100.00%	\$8,301.76	\$8,301.76	\$0.00
10. Environmental Document/Clearance/Permit Plan	\$ 6,502.26	100.00%	\$6,502.26	\$6,502.26	\$0.00
- SH365/TCC-Environmental-Atkins (formerly PBSJ)	\$ 20,194.80	100.00%	\$20,194.80	\$20,194.80	\$0.00
- IBTC-Environmental-Atkins (formerly PBSJ)	\$ 8,855.48	100.00%	\$8,855.48	\$8,855.48	\$0.00
- La Joya Bypass Phase I-B/TxDOT/Atkins	\$ 14,282.10	100.00%	\$14,282.10	\$14,282.10	\$0.00
12. Project Development / Capital Improvement Plan / Strategic Plan (CIP)	\$ 146,529.12	100.00%	\$146,529.12	\$146,529.12	\$0.00
13. General Engineering Consultant Plan Management (GEC Plan)	\$ 3,687.16	100.00%	\$3,687.16	\$3,687.16	\$0.00
14. Develop Budget for PMC Program for next 7 years	\$ 30,459.78	100.00%	\$30,459.78	\$30,459.78	\$0.00
<b>TASK 2 Review/Monitor/Report/Implement All TxDOT Pass Thru / Toll Agreements (4 mo)</b>					
<b>A. Review/Monitor/Report/Implement All TxDOT Pass Thru / Toll Agreements which includes:</b>					
1. SH 365/ Trade Corr. Conn. (TCC)(14.9 Mi.), includ. 1.97 mi. Anzalduas GSA Fac. Connect.	\$ 1,379.80	100.00%	\$1,379.80	\$1,379.80	\$0.00
- Review Agreement	\$ 750.62	100.00%	\$750.62	\$750.62	\$0.00
- Monitor Agreement (4 months)					
2. US 281 / Military Hwy Overpass	\$ 1,379.80	100.00%	\$1,379.80	\$1,379.80	\$0.00
- Review Agreement	\$ 750.62	100.00%	\$750.62	\$750.62	\$0.00
- Monitor Agreement					
3. La Joya Relief Route (Phase I)(8.3 Miles)	\$ 1,379.80	100.00%	\$1,379.80	\$1,379.80	\$0.00
- Review Agreement	\$ 5,154.88	100.00%	\$5,154.88	\$5,154.88	\$0.00
- Negotiate Agreement (1 meeting / 8 hrs / mtg) - Austin	\$ 750.62	100.00%	\$750.62	\$750.62	\$0.00
- Monitor Agreement					
4. US 281 - Fairburns Toll Road	\$ -	0.00%	\$0.00	\$0.00	\$0.00
- Review Agreement	\$ -	0.00%	\$0.00	\$0.00	\$0.00
- Negotiate Agreement (2 meeting / 8 hrs / mtg) - Austin	\$ -	0.00%	\$0.00	\$0.00	\$0.00
- Monitor Agreement	\$ -	0.00%	\$0.00	\$0.00	\$0.00

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 1:  
Research Planning/Immediate Operations Phase

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>TASK 3 Rev/Analyze TRZ for the entire HCRMA Rdwy. Sys. Includ. La Joya Relief Rte.</b>					
A. Rev/Analyze Trans.Reinvest. Zone (TRZ) for the entire Loop Proj. Includ. the La Joya Relief Rte.	\$	100.00%	\$5,044.16	\$5,044.16	\$0.00
1. Meet w/ Authority / County (2 mtgs @ 4 hrs / mtg)	\$	100.00%	\$6,344.34	\$6,344.34	\$0.00
2. Prepare Exhibit / Hold One Public Mtg (1 mtg @ 4 hrs / mtg)	\$	100.00%	\$7,595.12	\$7,595.12	\$0.00
3. Modify Metes & Bounds for TRZ Boundary (paper only)					
<b>TASK 4 Gen. Eng. Consult. (GEC) Mgt. Including contract negotiations (4 months)</b>					
A. General Project Management / Governmental Liaison (4 Months)	\$	100.00%	\$9,362.32	\$9,362.32	\$0.00
1. Prepare/Review PMC Team consultant contract	\$	100.00%	\$4,399.04	\$4,399.04	\$0.00
2. Prepare monthly PMC invoice	\$	100.00%	\$5,939.02	\$5,939.02	\$0.00
3. Prepare monthly PMC progress reports	\$	100.00%	\$7,559.36	\$7,559.36	\$0.00
4. Attend monthly HCRMA board meetings (4 hrs / mtg / mo)	\$	100.00%	\$4,265.44	\$4,265.44	\$0.00
5. Attend monthly HCRMA planning meetings (2 hrs / mtg / mo)	\$	100.00%	\$3,779.68	\$3,779.68	\$0.00
6. Attend monthly HCRMA exed comm meetings (2 hrs / mtg / mo)	\$	100.00%	\$3,779.68	\$3,779.68	\$0.00
7. Attend monthly MPO meetings (2 hrs / mtg / mo)	\$	100.00%	\$11,329.84	\$11,329.84	\$0.00
8. Attend monthly TxDot meetings (Austin) (8 hrs / mtg / mo)	\$	100.00%	\$7,195.04	\$7,195.04	\$0.00
9. Attend various meetings (local/state) (4 per month) (2 hrs / mtg / mo)	\$	0.00%	\$0.00	\$0.00	\$0.00
10. Attend meeting in Washington DC (one meeting per 4 months) (3 days / mtg)	\$	100.00%	\$5,060.84	\$5,060.84	\$0.00
11. Governmental Liaison	\$	100.00%	\$17,344.00	\$17,344.00	\$0.00
12. Assisit/plan/meet/negotiate with all cities in Hidalgo Co. on ordinance to increase truck usage of Toll Facilities	\$	100.00%			
<b>B. General Engineering Consultant (GEC) Management of the following (4 Months)</b>					
1. SH365/TCC - Environmental - Atkins (formerly PBSJ)	\$	100.00%	\$1,084.58	\$1,084.58	\$0.00
- Review / Analyze / Comment on Consultant Contracts	\$	100.00%	\$1,713.76	\$1,713.76	\$0.00
- Review / Analyze / Comment on all existing schematics; plans; reports; design parameters, etc.	\$	100.00%	\$2,709.56	\$2,709.56	\$0.00
- Oversee / Manage contract from 10/01/11 to 02/01/12					
2. IBTC - Environmental - Atkins (formerly PBSJ)	\$	0.00%	\$0.00	\$0.00	\$0.00
- Review / Analyze / Comment on Consultant Contracts	\$	0.00%	\$0.00	\$0.00	\$0.00
- Review / Analyze / Comment on all existing schematics; plans; reports; design parameters, etc.	\$	0.00%	\$0.00	\$0.00	\$0.00
- Oversee / Manage contract from 10/01/11 to 02/01/12					
3. SH365/TCC (FM 1016 to E 23rd) - Survey/R.O.W. - DOS Logistics, Inc.	\$	100.00%	\$2,311.78	\$2,311.78	\$0.00
- Review / Analyze / Comment on Consultant Contracts	\$	100.00%	\$7,817.78	\$7,817.78	\$0.00
- Review / Analyze / Comment on all existing schematics; plans; reports; design parameters, etc.	\$	100.00%	\$5,761.03	\$5,761.03	\$0.00
- Oversee / Manage contract from 10/01/11 to 02/01/12					
4. SH365/TCC (E 23rd to IBTC) - Survey/R.O.W. - Quintanilla Headley	\$	100.00%	\$3,364.88	\$3,364.88	\$0.00
- Review / Analyze / Comment on Consultant Contracts	\$	100.00%	\$4,551.21	\$4,551.21	\$0.00
- Review / Analyze / Comment on all existing schematics; plans; reports; design parameters, etc.	\$	100.00%	\$5,035.57	\$5,035.57	\$0.00
- Oversee / Manage contract from 10/01/11 to 02/01/12					
5. SH 365 / TCC (Toll / Pass Thru) - Seq. 1- FM1016 to Anzalduas - Eng. / Geotech - L&G Eng.	\$	100.00%	\$1,893.58	\$1,893.58	\$0.00
- Review / Analyze / Comment on Consultant Contracts	\$	100.00%	\$7,559.36	\$7,559.36	\$0.00
- Review / Analyze / Comment on all existing schematics; plans; reports; design parameters, etc.	\$	100.00%	\$3,473.54	\$3,473.54	\$0.00
- Oversee / Manage contract from 10/01/11 to 02/01/12	\$	100.00%	\$1,563.16	\$1,563.16	\$0.00
- Review / Analyze / Prepare independent construction cost estimates	\$	100.00%			

**MONTHLY PROGRESS PAYMENT INVOICE - DANINENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 1: 465201/19/XV  
Research Planning/Immediate Operations Phase

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>TASK 4 Gen. Eng. Consult. (GEC) Mgt. including contract negotiations (4 months) Continued</b>					
<b>B. General Engineering Consultant (GEC) Management of the following (4 Months)(Cont.)</b>					
6. SH365/TCC at Anzaiduas - Engineering/Geotech - L&G Engineering 1A					
- Review / Analyze / Comment on Consultant Contracts	\$ 3,381.24	100.00%	\$3,381.24	\$3,381.24	\$0.00
- Review / Analyze / Comment on all existing schematics; plans; reports; design parameters, etc.	\$ 3,916.50	100.00%	\$3,916.50	\$3,916.50	\$0.00
- Oversee / Manage contract from 10/01/11 to 02/01/12	\$ 2,359.24	100.00%	\$2,359.24	\$2,359.24	\$0.00
7. SH 365 / TCC (Toll / Pass Thru) - Seg. 1B - Anz. GSA Conn. to E. of 23rd - Eng. / Geo. - L&G Eng.					
- Review / Analyze / Comment on Consultant Contracts	\$ 2,298.96	100.00%	\$2,298.96	\$2,298.96	\$0.00
- Review / Analyze / Comment on all existing schematics; plans; reports; design parameters, etc.	\$ 7,775.94	100.00%	\$7,775.94	\$7,775.94	\$0.00
- Oversee / Manage contract from 10/01/11 to 02/01/12	\$ 2,988.42	100.00%	\$2,988.42	\$2,988.42	\$0.00
8. SH 365 / TCC (Toll / Pass Thru) - Seg. 2 - E. of 23rd to IBTC - Eng. / Geo. - S&B Infra.					
- Review / Analyze / Comment on Consultant Contracts	\$ 3,186.94	100.00%	\$3,186.94	\$3,186.94	\$0.00
- Review / Analyze / Comment on all existing schematics; plans; reports; design parameters, etc.	\$ 6,107.56	100.00%	\$6,107.56	\$6,107.56	\$0.00
- Oversee / Manage contract from 10/01/11 to 02/01/12	\$ 4,775.06	100.00%	\$4,775.06	\$4,775.06	\$0.00
9. US 281/Military Overpass - Engineering/Geotech/Survey - TEDSI Infrastructure					
- Review / Analyze / Comment on Consultant Contracts	\$ 3,186.94	100.00%	\$3,186.94	\$3,186.94	\$0.00
- Review / Analyze / Comment on all existing schematics; plans; reports; design parameters, etc.	\$ 2,153.24	100.00%	\$2,153.24	\$2,153.24	\$0.00
- Oversee / Manage contract from 10/01/11 to 02/01/12	\$ 2,226.12	100.00%	\$2,226.12	\$2,226.12	\$0.00
10. US 83 Connector to FM 495 - Eng./Geotech/Survey - S&B Infrastructure					
- Review / Analyze / Comment on Consultant Contracts	\$ -	0.00%	\$0.00	\$0.00	\$0.00
- Review / Analyze / Comment on all existing schematics; plans; reports; design parameters, etc.	\$ -	0.00%	\$0.00	\$0.00	\$0.00
- Oversee / Manage contract from 10/01/11 to 02/01/12	\$ -	0.00%	\$0.00	\$0.00	\$0.00
<b>TASK 5 Procurement / Negotiations of Prof. Svcs.</b>					
<b>A. Procurement/Negotiations of Prof. Svcs. of the following: (4 months)</b>					
1. SH 365 / TCC - Seg. 1 - ROW Acquisition/Title Company	\$ -	0.00%	\$0.00	\$0.00	\$0.00
2. SH 365 / TCC - Seg. 1A - ROW Acquisition/Title Company	\$ -	0.00%	\$0.00	\$0.00	\$0.00
3. SH 365 / TCC - Seg. 1B - ROW Acquisition/Title Company	\$ -	0.00%	\$0.00	\$0.00	\$0.00
4. SH 365 / TCC - Seg. 2 - ROW Acquisition/Title Company	\$ -	0.00%	\$0.00	\$0.00	\$0.00
5. IBTC Seg. 1-5 - Engineering (One Procurement up to Five(5) Firms)	\$ 10,628.66	100.00%	\$10,628.66	\$10,628.66	\$0.00
6. IBTC Seg. 1-5 - Survey (One Procurement up to Five(5) Firms)	\$ 10,628.66	100.00%	\$10,628.66	\$10,628.66	\$0.00
7. IBTC Seg. 1-5 - ROW Acquisition/Title Company	\$ -	0.00%	\$0.00	\$0.00	\$0.00
8. IBTC Geotech Total Project	\$ -	0.00%	\$0.00	\$0.00	\$0.00
9. US 83 Connector to SH 495 - ROW Acquisition/Title Company	\$ -	0.00%	\$0.00	\$0.00	\$0.00
10. US 281 (Military) Overpass at San Juan - ROW Acquisition/Title Company	\$ -	0.00%	\$0.00	\$0.00	\$0.00
11. La Joya Relief Route Corridor Seg. 1 - Environmental/Schematic (Update / Finalize)/Engineering	\$ 5,991.18	100.00%	\$5,991.18	\$5,991.18	\$0.00
12. La Joya Relief Route Corridor Seg. 1 - Geotech	\$ -	0.00%	\$0.00	\$0.00	\$0.00
13. La Joya Relief Route Corridor Seg. 1 - Survey	\$ -	0.00%	\$0.00	\$0.00	\$0.00
14. La Joya Relief Route Corridor Seg. 1 - ROW Acquisition/Title Co.	\$ -	0.00%	\$0.00	\$0.00	\$0.00
15. Toll Consultant / Traffic Management - system wide	\$ -	0.00%	\$0.00	\$0.00	\$0.00

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 1:  
Research Planning/Immediate Operations Phase

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>DIRECT EXPENSES</b>					
Lodging / Hotel (\$100.00 / DAY)	\$ 1,235.00	100.00%	\$1,235.00	\$1,235.00	\$0.00
Meals (\$30.00 / DAY)	\$ 834.00	100.00%	\$834.00	\$834.00	\$0.00
Rental Car	\$ 1,770.00	100.00%	\$1,770.00	\$1,770.00	\$0.00
Air Travel	\$ 2,750.00	100.00%	\$2,750.00	\$2,750.00	\$0.00
Parking	\$ 154.00	100.00%	\$154.00	\$154.00	\$0.00
Overnight Mail - letter size	\$ 3,450.00	100.00%	\$3,450.00	\$3,450.00	\$0.00
Photocopies B/W (8.5 X 11)	\$ 709.90	100.00%	\$709.90	\$709.90	\$0.00
Photocopies B/W (11 X 17)	\$ 620.00	100.00%	\$620.00	\$620.00	\$0.00
Photocopies Color (8.5 X 11)	\$ 710.00	100.00%	\$710.00	\$710.00	\$0.00
Photocopies Color (11 X 17)	\$ 750.00	100.00%	\$750.00	\$750.00	\$0.00
Color Graphics on Foam Board	\$ 70.00	100.00%	\$70.00	\$70.00	\$0.00
Public Outreach Liaison	\$ 60,000.00	100.00%	\$60,000.00	\$60,000.00	\$0.00
CPA/Accounting Support Services	\$ -	0.00%	\$0.00	\$0.00	\$0.00
IT Support Services	\$ -	0.00%	\$0.00	\$0.00	\$0.00
Appraiser	\$ -	0.00%	\$0.00	\$0.00	\$0.00
<b>Totals</b>	<b>\$ 909,960.63</b>		<b>\$ 909,960.63</b>	<b>\$ 909,960.63</b>	<b>\$ -</b>

Amount Due This Invoice

\$

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

June 5, 2013

Dennis Burleson, Chairman  
Hidalgo County Regional Mobility Authority  
510 South Pleasantview Drive  
Weslaco, Texas 78596

Work Order No. 3:  
Title Report for TCC

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

TASK CODE	DESCRIPTION OF WORK TASK	TOTAL COST	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
1	Provide Title Reports	\$57,750.00	100.00%	\$57,750.00	\$57,750.00	\$0.00
	<b>TOTALS</b>	<b>\$57,750.00</b>	<b>100.00%</b>	<b>\$57,750.00</b>	<b>\$57,750.00</b>	<b>\$0.00</b>

**TOTAL DUE WORK ORDER NO. 3:**

\$0.00 ✓

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

June 5, 2013

Dennis Burleson, Chairman  
Hidalgo County Regional Mobility Authority  
510 South Pleasantview Drive  
Weslaco, Texas 78596

Work Order No. 4:  
Engineering Management/Partial Operations Implementation/Public Outreach

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

TASK CODE	DESCRIPTION OF WORK TASK	TOTAL COST	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
A	Coordinate / Update / Assist Executive Director	\$8,958.03	100.00%	\$8,958.03	\$8,958.03	\$0.00
B	Attend / Prepare Data / Report on Various Meetings (4.0 Months)	\$58,185.85	100.00%	\$58,185.85	\$58,185.85	\$0.00
C	Coordinate With HCMPO to Modify Short/ Long Term TIP to Account for Approved Strategy	\$2,711.90	100.00%	\$2,711.90	\$2,711.90	\$0.00
D	Negotiate / Coordinate with TxDOT on Pass Thru Agreement Modifications for SH 365 TCC / La Joya Relief Route / US 281	\$18,512.54	100.00%	\$18,512.54	\$18,512.54	\$0.00
E	Implement Interim Cost Accounting System Utilizing Dannenbaum Cost Accounting System	\$22,926.32	100.00%	\$22,926.32	\$22,926.32	\$0.00
F	Organize / Develop HCRMA Files By Project (Electronic and Hardcopy) - RMA Will Provide Flor Koll and Temporary Secretaries	\$19,183.08	100.00%	\$19,183.08	\$19,183.08	\$0.00
G	Coordinate with Hidalgo County Appraisal District on TRZ Inputs and Agreements	\$15,564.04	100.00%	\$15,564.04	\$15,564.04	\$0.00
H	Implement Public Outreach Program Managing with Assistance from Consultant (Pathfinder) and others	\$20,830.08	100.00%	\$20,830.08	\$20,830.08	\$0.00
I	Public Outreach Meetings including Negotiations of Truck Restrictions with the following Cities (including Travel and Preparation for Meeting) (4.0 Months): Oversee C&M Associates, inc., in Developing the Update of the T&R Studies / Financing Alternatives (FSW) (4.0 Months)	\$19,983.36	100.00%	\$19,983.36	\$19,983.36	\$0.00
J	IBTC (3.0 Months)	\$74,767.90	100.00%	\$74,767.90	\$74,767.90	\$0.00
K	SH 365 / TCC (Modified) (Inc. TCC at GSA Anzalduas Bridge)(4.0 Months)	\$25,337.35	100.00%	\$25,337.35	\$25,337.35	\$0.00
L	US 281 / Military (3.0 Months)	\$216,358.43	100.00%	\$216,358.43	\$216,358.43	\$0.00
M	Direct Expenses	\$24,156.47	100.00%	\$24,156.47	\$24,156.47	\$0.00
ODC		\$166,880.50	100.00%	\$166,880.50	\$166,880.50	\$0.00
	<b>TOTALS</b>	<b>\$694,355.85</b>	<b>100.00%</b>	<b>\$694,355.85</b>	<b>\$694,355.85</b>	<b>\$0.00</b>

TOTAL DUE WORK ORDER NO. 4:

\$0.00

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

Work Order No. 4:  
Engineering Management/Partial Operations Implementation/Public Outreach

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>A. Coordinate / Update / Assist Executive Director</b>					
1.) Educate Executive Director on Historical Activities / Budgets / Cost Accounting / Program Management Plan and QA/QC Plan (Including Bi-Monthly Migs (2 hrs/Wk x 9 Wks)	\$ 8,958.03	100.00%	\$8,958.03	\$8,958.03	\$0.00
<b>B. Attend / Prepare Data / Report on Various Meetings (4.0 Months)</b>					
1. HCRMA Board Meetings Including Presentation (Monthly) (5 Mts @ 4 hrs/Mtg) (Inc. Prep Time)	\$ 16,401.80	100.00%	\$16,401.80	\$16,401.80	\$0.00
2. HCRMA Planning Committee Meetings (5 Mts @ 2 hrs/Mtg) (Inc. Prep Time)	\$ 4,694.28	100.00%	\$4,694.28	\$4,694.28	\$0.00
3. HCRMA Finance Committee Meetings (5 Mts @ 2 hrs/Mtg) (Inc. Prep Time)	\$ 4,694.28	100.00%	\$4,694.28	\$4,694.28	\$0.00
4. HCRMA MPO Policy Committee Meeting (5 Mts @ 2 hrs/Mtg) (Inc. Prep Time)	\$ 4,694.28	100.00%	\$4,694.28	\$4,694.28	\$0.00
5. HCRMA MPO Tech Committee Meeting (5 Mts @ 2 hrs/Mtg) (Inc. Prep Time)	\$ 4,694.28	100.00%	\$4,694.28	\$4,694.28	\$0.00
6. Various Individual HCRMA Migs w/ Board (3 Mts @ 2 hrs/Mtg) (Inc. Prep Time)	\$ 2,130.42	100.00%	\$2,130.42	\$2,130.42	\$0.00
7. Hidalgo County Meetings w/Staff (2 Migs. @2 hr. / Mtg.) (Inc. Prep Time)	\$ 2,023.44	100.00%	\$2,023.44	\$2,023.44	\$0.00
8. Hidalgo County Commissioner Precinct No. 1 (2 Migs. @ 2 hrs. / Mtg.)	\$ 1,379.80	100.00%	\$1,379.80	\$1,379.80	\$0.00
9. Hidalgo County Commissioner Precinct No. 2 (2 Migs. @ 2 hrs. / Mtg.)	\$ 1,379.80	100.00%	\$1,379.80	\$1,379.80	\$0.00
10. Hidalgo County Commissioner Precinct No. 3 (2 Migs. @ 2 hrs. / Mtg.)	\$ 1,379.80	100.00%	\$1,379.80	\$1,379.80	\$0.00
11. Hidalgo County Commissioner Precinct No. 4 (2 Migs. @ 2 hrs. / Mtg.)	\$ 4,371.02	100.00%	\$4,371.02	\$4,371.02	\$0.00
12. Attend Meetings TxDOT-Pharr (3 Migs. @ 2 hrs. / Mtg.) (Inc. Prep Time)	\$ 6,777.56	100.00%	\$6,777.56	\$6,777.56	\$0.00
13. Attend Meetings TxDOT-Austin includes Travel (3 Migs. @ 10 hrs. / Mtg.)	\$ 2,185.29	100.00%	\$2,185.29	\$2,185.29	\$0.00
14. Attend Meetings With Senator Hinojosa (3 Migs. @ 2 hrs. / Mtg.)	\$ 2,711.90	100.00%	\$2,711.90	\$2,711.90	\$0.00
<b>C. Coordinate With HCMPO to Modify Short/ Long Term TIP to Account for Approved Strategy</b>					
<b>D. Negotiate / Coordinate with TxDOT on Pass Thru Agreement Modifications for SH 365 TCC / La Joya Relief Route / US 281</b>					
1. Meet / Coordinate With TxDOT Pharr (2 Migs. @ 4 hrs. / Mtg.)	\$ 3,954.36	100.00%	\$3,954.36	\$3,954.36	\$0.00
2. Meet / Coordinate With TxDOT Austin (1 Mig @ 10 hrs. / Mtg.)	\$ 4,694.28	100.00%	\$4,694.28	\$4,694.28	\$0.00
3. Finalize Pass Thru Agreements	\$ 9,863.90	100.00%	\$9,863.90	\$9,863.90	\$0.00
<b>E. Implement Interim Cost Accounting System Utilizing Dannenbaum Cost Accounting System</b>					
1. Input Data for Development of Monthly Reports for HCRMA Board	\$ 12,042.32	100.00%	\$12,042.32	\$12,042.32	\$0.00
2. Modify Monthly Reports for HCRMA Needs	\$ 5,697.02	100.00%	\$5,697.02	\$5,697.02	\$0.00
3. Input Monthly Data and Produce Final Reports for May, June, July and August 2012	\$ 5,186.98	100.00%	\$5,186.98	\$5,186.98	\$0.00
<b>F. Organize / Develop HCRMA Files By Project (Electronic and Hardcopy) - RMA Will Provide Flor Koll and Temporary Secretaries)</b>					
<b>G. Coordinate with Hidalgo County Appraisal District on TRZ Inputs and Agreements</b>					
<b>H. Implement Public Outreach Program Managing with Assistance from Consultant (Pathfinder) and others</b>					
	\$ 20,830.08	100.00%	\$20,830.08	\$20,830.08	\$0.00

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

Work Order No. 4:  
Engineering Management/Partial Operations Implementation/Public Outreach

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>I. Public Outreach Meetings Including Negotiations of Truck Restrictions with the following Cities (Including Travel and Preparation for Meeting) (4.0 Months):</b>					
1. City of Pharr (2 Mtgs)	\$ 3,976.32	100.00%	\$3,976.32	\$3,976.32	\$0.00
2. San Juan (1 Mtg)	\$ 2,013.60	100.00%	\$2,013.60	\$2,013.60	\$0.00
3. Donna (1 Mtg)	\$ 2,013.60	100.00%	\$2,013.60	\$2,013.60	\$0.00
4. Weslaco (1 Mtg)	\$ 2,013.60	100.00%	\$2,013.60	\$2,013.60	\$0.00
5. City of Mercedes (1 Mtg)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
6. City of Edcouch (0 Mtg)	\$ 3,976.32	100.00%	\$3,976.32	\$3,976.32	\$0.00
7. City of McAllen (2 Mtgs.)	\$ 3,976.32	100.00%	\$3,976.32	\$3,976.32	\$0.00
8. City of Mission (2 Mtgs.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
9. City of Penitas (0 Mtg)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
10. City of Palmview (0 Mtg)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
11. City of La Joya (0 Mtg)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
<b>J. Oversee C&amp;M Associates, Inc., in Developing the Update of the T&amp;R Studies / Financing Alternatives (F-SW) (4.0 Months)</b>					
1. SH 365 TCC / IBTC / Segment D & La Joya Relief Route (Assisted by HDR)	\$ 60,035.90	100.00%	\$60,035.90	\$60,035.90	\$0.00
2. Update Strategic Plan for New T&R No. 1 (Work with First Southwest)	\$ 14,732.00	100.00%	\$14,732.00	\$14,732.00	\$0.00
<b>K. IBTC (3.0 Months)</b>					
1. Modify RFP and Procure Engineering Services (Including Environmental and Low Level Flight)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
2. Oversee Local Environmental Clearance (Assisted by Blanton - Lead) (3.0 Months)	\$ 24,234.55	100.00%	\$24,234.55	\$24,234.55	\$0.00
3. Oversee IBTC Drainage Studies from 8/1/2012 to 8/31/2012 (1 Month)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
4. Oversee Low Level Flight (8/1/2012 to 8/31/2012) (1 Month) (Assisted by Aranda & Associates - Lead)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
5. QA/QC Drainage Study (60%) (Next Work Authorization)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
6. QA/QC Low Level Flight (Aranda) (1 Month)	\$ 1,102.80	100.00%	\$1,102.80	\$1,102.80	\$0.00
7. Attend Meeting with USBWC (1) (Combined with TCC)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
8. Attend Meeting with USACOE (1) (Combined with TCC)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
9. Attend Meeting with US Fish and Wildlife (1)(Combined with TCC)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
<b>L. SH 365 / TCC (Modified) (Inc. TCC at GSA Anzalduas Bridge)(4.0 Months)</b>					
1. Oversee Environmental Clearance By Atkins (EA) (Assisted by Blanton & Assoc. - Lead)(5 Months)	\$ 60,919.52	100.00%	\$60,919.52	\$60,919.52	\$0.00
2. Oversee Drainage Studies Produced By L&G Engineering / S&B Infrastructure	\$ 17,089.64	100.00%	\$17,089.64	\$17,089.64	\$0.00
3. QA/QC Drainage Study (60%)	\$ 9,158.68	100.00%	\$9,158.68	\$9,158.68	\$0.00
4. Attend Meeting With USBWC (1 Mtg. - El Paso)	\$ 4,046.88	100.00%	\$4,046.88	\$4,046.88	\$0.00
5. Attend Meeting With USACOE (1 Mtg. - HST)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
6. Attend Meeting With US Fish & Wildlife (1 Mtg. - RGV)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
7. Attend Meeting With TxDOT Austin / FHWA (1 Mtg. - Austin)	\$ 3,227.59	100.00%	\$3,227.59	\$3,227.59	\$0.00
8. Oversee / Development of 4-Lane Schematic and Update Super Two Schematic / Utilities / Final Design Review TCC at GSA	\$ 72,546.95	100.00%	\$72,546.95	\$72,546.95	\$0.00
9. QA/QC Schematic (60%)	\$ 4,380.10	100.00%	\$4,380.10	\$4,380.10	\$0.00
10. Prepare Decision Matrix for Environmental Consultant	\$ 1,489.67	100.00%	\$1,489.67	\$1,489.67	\$0.00
11. Oversee Surveyors (DOS Logistics / Quintanilla) (Assisted by Aranda and Associates - Lead)	\$ 36,669.24	100.00%	\$36,669.24	\$36,669.24	\$0.00
12. Hold / Lead Public Involvement Meeting (1 Mtg.) Including Prepare Exhibits	\$ -	0.00%	\$0.00	\$0.00	\$0.00
13. Prepare Land Plan to Assist Hunt Development / City of McAllen to Evaluate Alternative Thru Hunt Property	\$ -	0.00%	\$0.00	\$0.00	\$0.00
14. Meet with Hunt Development (Mission - 2 Mtgs) (2 hrs / Mtg)(Inc. Prep Time)	\$ 6,830.16	100.00%	\$6,830.16	\$6,830.16	\$0.00

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 4: 465201/19/XV  
 Engineering Management/Partial Operations Implementation/Public Outreach  
 Invoice Number: 05/01/2013 - 05/31/2013  
 Invoice Period:

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>M. US 281 / Military (3.0 Months)</b>					
1. Oversee Environmental Clearance by Atkins (Categorical Exclusion -CE)(Assisted by Blanton & Associates) (4.0 Months)	\$ 5,034.52	100.00%	\$5,034.52	\$5,034.52	\$0.00
2. Oversee Engineer in Development of Route Studies / Schematic / Survey / PS&E Development (4.0 Months)	\$ 11,776.60	100.00%	\$11,776.60	\$11,776.60	\$0.00
3. QA/QC Route Study	\$ 1,277.95	100.00%	\$1,277.95	\$1,277.95	\$0.00
4. Meet With City of Pharr Including Development of Exhibits to Analyze US 281 / I Road / San Juan Area (2 Mths @ 2 hrs / Mth)	\$ 6,067.40	100.00%	\$6,067.40	\$6,067.40	\$0.00
<b>DIRECT EXPENSES</b>					
Lodging / Hotel (\$100.00 / DAY)	\$ 1,537.50	100.00%	\$1,537.50	\$1,537.50	\$0.00
Meals (\$30.00 / DAY)	\$ 495.00	100.00%	\$495.00	\$495.00	\$0.00
Rental Car	\$ 675.00	100.00%	\$675.00	\$675.00	\$0.00
Air Travel	\$ 6,750.00	100.00%	\$6,750.00	\$6,750.00	\$0.00
Parking	\$ 63.00	100.00%	\$63.00	\$63.00	\$0.00
Overnight Mail - letter size	\$ 1,150.00	100.00%	\$1,150.00	\$1,150.00	\$0.00
Courier Services	\$ 1,250.00	100.00%	\$1,250.00	\$1,250.00	\$0.00
Photocopies B/W (8.5 X 11)	\$ 2,320.00	100.00%	\$2,320.00	\$2,320.00	\$0.00
Photocopies B/W (11 X 17)	\$ 915.00	100.00%	\$915.00	\$915.00	\$0.00
Photocopies Color (8.5 X 11)	\$ 700.00	100.00%	\$700.00	\$700.00	\$0.00
Photocopies Color (11 X 17)	\$ 625.00	100.00%	\$625.00	\$625.00	\$0.00
Color Graphics on Foam Board	\$ 200.00	100.00%	\$200.00	\$200.00	\$0.00
Newspaper Advertisement	\$ -	0.00%	\$0.00	\$0.00	\$0.00
Court Reporter (Public Hearings & Transcription)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
Translator (English to Spanish or Sign Language)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
Public Involvement Facility Rental	\$ -	0.00%	\$0.00	\$0.00	\$0.00
Public Outreach Liaison	\$ 75,000.00	100.00%	\$75,000.00	\$75,000.00	\$0.00
Accounting Support Services	\$ 4,000.00	100.00%	\$4,000.00	\$4,000.00	\$0.00
IT / Support Services	\$ 3,200.00	100.00%	\$3,200.00	\$3,200.00	\$0.00
Management Support Services	\$ 32,000.00	100.00%	\$32,000.00	\$32,000.00	\$0.00
Community Action Support	\$ 36,000.00	100.00%	\$36,000.00	\$36,000.00	\$0.00
<b>Totals</b>	\$ 694,355.85		\$ 694,355.85	\$ 694,355.85	\$ -

Amount Due This Invoice \$

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

June 5, 2013

Dennis Burleson, Chairman  
Hidalgo County Regional Mobility Authority  
510 South Pleasantview Drive  
Weslaco, Texas 78596

Work Order No. 5:  
Engineering Management/Partial Operations Implementation/Public Outreach

Invoice Number:  
Invoice Period:

465201/19/XV  
05/01/2013 - 05/31/2013

TASK CODE	DESCRIPTION OF WORK TASK	TOTAL COST	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
A	Coordinate / Update / Assist Executive Director	\$6,123.52	100.00%	\$6,123.52	\$6,123.52	\$0.00
B	Attend / Prepare Data / Report on Various Meetings (4.0 Months)	\$59,425.62	100.00%	\$59,425.62	\$59,425.62	\$0.00
C	Continue to Coordinate With HCMPO to Modify Short/ Long Term TIP to Account for Approved Strategy including Updating Strategy (Two (2) Updates)	\$8,484.08	100.00%	\$8,484.08	\$8,484.08	\$0.00
D	Continue to Negotiate / Coordinate with TxDOT on Pass Thru Agreement- Modifications or other TxDOT Funding Modification (availability payments- CAT12) for SH 365 Segment 1,2,3 and 4) / Segment No. 4 (US 281 / Military)	\$3,838.98	100.00%	\$3,838.98	\$3,838.98	\$0.00
E	Continue to Implement Interim Cost Accounting System Utilizing Dannenbaum Cost Accounting System	\$20,012.60	100.00%	\$20,012.60	\$20,012.60	\$0.00
F	Continue to Organize / Develop HCRMA Files By Project (Electronic and Hardcopy)	\$10,314.08	100.00%	\$10,314.08	\$10,314.08	\$0.00
G	Continue to Coordinate with Hidalgo County Appraisal District on TRZ Inputs and Agreements and Finalize Agreements with each entity	\$13,878.78	100.00%	\$13,878.78	\$13,878.78	\$0.00
H	Continue to Finalize and Implement Public Outreach Program with Assistance from Consultant (Pathfinder) and others	\$37,776.61	100.00%	\$37,776.61	\$37,776.61	\$0.00
I	Continued Public Outreach Meetings (Formal Presentation to Council) with the Appropriate Cities (Including Travel and Preparation for Meeting) (4.0 Months):	\$11,150.84	100.00%	\$11,150.84	\$11,150.84	\$0.00
J	Continue the Oversight of C&M Associates, Inc., in Developing the Update of the T&R Studies / Financing Alternatives (F-SW) (4.0 Months)	\$74,552.28	100.00%	\$74,552.28	\$74,552.28	\$0.00
K	Continue to Oversee IBTC (4.0 Months)	\$1,220.88	100.00%	\$1,220.88	\$1,220.88	\$0.00
L	Continue to Oversee SH 365 (Segment 1,2 and 3) (Inc. SH 365 at GSA Anzalduas Bridge)(4.0 Months)	\$250,916.15	100.00%	\$250,916.15	\$250,916.15	\$0.00
M	SH 365 Segment No. 4 (US 281 / Military) (4.0 Months)	\$34,334.89	100.00%	\$34,334.89	\$34,334.89	\$0.00
N	Implementation of GIS Tools - Phase IA	\$20,646.28	100.00%	\$20,646.28	\$20,646.28	\$0.00
O	Implementation of Project Wise	\$46,343.58	100.00%	\$46,343.58	\$46,343.58	\$0.00
ODC	Direct Expenses	\$170,217.79	100.00%	\$170,217.79	\$170,217.79	\$0.00
<b>TOTALS</b>		<b>\$769,236.96</b>	<b>100.00%</b>	<b>\$769,236.96</b>	<b>\$769,236.96</b>	<b>\$0.00</b>

TOTAL DUE WORK ORDER NO. 5:

\$0.00

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 5:  
Engineering Management/Partial Operations Implementation/Public Outreach

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>A. Coordinate / Update / Assist Executive Director</b>					
1.) Educate Executive Director on Historical Activities / Budgets / Cost Accounting / Program Management Plan and QA/QC Plan (Including Weekly Mtgs)	\$ 6,123.52	100.00%	\$6,123.52	\$6,123.52	\$0.00
<b>B. Attend / Prepare Data / Report on Various Meetings (4.0 Months)</b>					
1. HCRMA Board Meetings Including Presentation (Monthly) (4 Mtgs) (Inc. Prep Time)	\$ 16,448.84	100.00%	\$16,448.84	\$16,448.84	\$0.00
2. HCRMA Planning Committee Meetings (4 Mts @ 2 hrs/Mtg) (Inc. Prep Time)	\$ 8,483.22	100.00%	\$8,483.22	\$8,483.22	\$0.00
3. HCRMA Finance Committee Meetings (4 Mts @ 2 hrs/Mtg) (Inc. Prep Time)	\$ 8,483.22	100.00%	\$8,483.22	\$8,483.22	\$0.00
4. HCRMA MPO Policy Committee Meeting (4 Mts @ 2 hrs/Mtg) (Inc. Prep Time)	\$ 3,939.90	100.00%	\$3,939.90	\$3,939.90	\$0.00
5. HCRMA MPO Tech Committee Meeting (4 Mts @ 2 hrs/Mtg) (Inc. Prep Time)	\$ 3,418.56	100.00%	\$3,418.56	\$3,418.56	\$0.00
6. Various HCRMA Mtgs w/ Individual Board Members / Special Board Meetings (1 Mtg @ 2 hrs/Mtg) (Inc. Prep Time)	\$ 1,849.66	100.00%	\$1,849.66	\$1,849.66	\$0.00
7. Hidalgo County Meetings w/Staff (2 Mtgs. @2 hr. / Mtg.) (Inc. Prep Time)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
8. Hidalgo County Commissioner Precinct No. 1 (2 Mtgs. @ 2 hrs. / Mtg.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
9. Hidalgo County Commissioner Precinct No. 2 (2 Mtgs. @ 2 hrs. / Mtg.)	\$ 2,109.60	100.00%	\$2,109.60	\$2,109.60	\$0.00
10. Hidalgo County Commissioner Precinct No. 3 (2 Mtgs. @ 2 hrs. / Mtg.)	\$ 2,109.60	100.00%	\$2,109.60	\$2,109.60	\$0.00
11. Hidalgo County Commissioner Precinct No. 4 (2 Mtgs. @ 2 hrs. / Mtg.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
12. Attend Meetings TxDOT-Pharr (2 Mtgs. @ 2 hrs. / Mtg.) (Inc. Prep Time)	\$ 3,073.90	100.00%	\$3,073.90	\$3,073.90	\$0.00
13. Attend Meetings TxDOT-Austin includes Travel (1 Mtg. @ 10 hrs. / Mtg.)	\$ 6,534.68	100.00%	\$6,534.68	\$6,534.68	\$0.00
14. Attend Meetings With Senator Hinojosa (1 Mtgs. @ 2 hrs. / Mtg.)	\$ 1,011.72	100.00%	\$1,011.72	\$1,011.72	\$0.00
15. Attend Meeting - 3 days in Washington to Visit Congress/TIFA (1 Mtg.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
16. Attend Hidalgo County Commissioners' Court Meeting (2 Monthly Mtgs.) (2 Mtgs. X 2 hr./Mtg.)	\$ 1,962.72	100.00%	\$1,962.72	\$1,962.72	\$0.00
<b>C. Continue to Coordinate With HCMPO to Modify Short/ Long Term TIP to Account for Approved Strategy, Including Updating Strategy (Two (2) Updates)</b>	\$ 8,484.08	100.00%	\$8,484.08	\$8,484.08	\$0.00
<b>D. Continue to Negotiate / Coordinate with TxDOT on Pass Thru Agreement Modifications or other TxDOT Funding Modification (availability payments-CAT12) for SH 365 (Segment 1,2,3 and 4) / Segment No. 4 (US 281 / Military)</b>					
1. Meet / Coordinate With TxDOT Pharr (1 Mtgs. @ 2 hrs. / Mtg.)	\$ 1,728.22	100.00%	\$1,728.22	\$1,728.22	\$0.00
2. Meet / Coordinate With TxDOT Austin (0 Mtg @ 10 hrs. / Mtg.)	\$ 382.54	100.00%	\$382.54	\$382.54	\$0.00
3. Finalize Pass Thru Agreements and/or availability payments	\$ 1,728.22	100.00%	\$1,728.22	\$1,728.22	\$0.00
<b>E. Continue to implement Interim Cost Accounting System Utilizing Dannenbaum Cost Accounting System</b>					
1. Continue to Input Data for Development of Monthly Reports for HCRMA Board (September 1, 2012 thru December 31, 2012)	\$ 7,636.32	100.00%	\$7,636.32	\$7,636.32	\$0.00
2. Continue to Modify Monthly Reports for HCRMA Needs	\$ 5,007.12	100.00%	\$5,007.12	\$5,007.12	\$0.00
3. Continue to Input Monthly Data and Produce Final Reports for Sept., Oct., Nov. and Dec. 2012	\$ 7,369.16	100.00%	\$7,369.16	\$7,369.16	\$0.00
<b>F. Continue to Organize / Develop HCRMA Files By Project (Electronic and Hardcopy)</b>	\$ 10,314.08	100.00%	\$10,314.08	\$10,314.08	\$0.00
<b>G. Continue to Coordinate with Hidalgo County Appraisal District on TRZ inputs and Agreements and Finalize Agreements with each entity</b>	\$ 13,878.78	100.00%	\$13,878.78	\$13,878.78	\$0.00

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 5:  
Engineering Management/Partial Operations Implementation/Public Outreach

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>H. Continue to Finalize and Implement Public Outreach Program Managing with Assistance from Consultant (Pathfinder) and others</b>					
1. Finalize / Implement Public Outreach	\$ 27,226.64	100.00%	\$27,226.64	\$27,226.64	\$0.00
2. Review / Update Website	-	0.00%	\$0.00	\$0.00	\$0.00
3. Develop Monthly Newsletter (Assist Subs)	-	0.00%	\$0.00	\$0.00	\$0.00
4. Begin Development of Branding Loop Project (Assist Subs)	-	0.00%	\$0.00	\$0.00	\$0.00
5. Assist / Develop Support Resolution From All Cities (Total 5 Mtgs.)	-	0.00%	\$0.00	\$0.00	\$0.00
6. Meet with Large Property Owners (SH 365)(Total 3 Mtgs. Including Preparation)	\$ 5,909.51	100.00%	\$5,909.51	\$5,909.51	\$0.00
7. Meet with EDC for the Cities of McAllen / Mission (Total 1 Mtg.)	\$ 3,173.34	100.00%	\$3,173.34	\$3,173.34	\$0.00
8. Meet with Trade Association / Civic Association (US / Mexico) (Total 1 Mtg.)	\$ 1,467.12	100.00%	\$1,467.12	\$1,467.12	\$0.00
<b>I. Continue Public Outreach Meetings (Formal Presentation to Council) with the following Cities (Including Travel and Preparation for Meeting) (4.0 Months):</b>					
1. City of Pharr (2 Mtgs)	\$ 2,742.60	100.00%	\$2,742.60	\$2,742.60	\$0.00
2. City of Granjeno (1 Mtg)	\$ 1,587.62	100.00%	\$1,587.62	\$1,587.62	\$0.00
3. City of Donna (1 Mtg)	-	0.00%	\$0.00	\$0.00	\$0.00
4. City of Weslaco (1 Mtg)	-	0.00%	\$0.00	\$0.00	\$0.00
5. City of Mercedes (1 Mtg)	-	0.00%	\$0.00	\$0.00	\$0.00
6. City of Edcouch (1 Mtg)	-	0.00%	\$0.00	\$0.00	\$0.00
7. City of McAllen (2 Mtgs.)	\$ 3,410.31	100.00%	\$3,410.31	\$3,410.31	\$0.00
8. City of Mission (2 Mtgs.)	\$ 3,410.31	100.00%	\$3,410.31	\$3,410.31	\$0.00
9. City of Pecos (1 Mtg)	-	0.00%	\$0.00	\$0.00	\$0.00
10. City of Palmview (1 Mtg)	-	0.00%	\$0.00	\$0.00	\$0.00
11. City of La Joya (1 Mtg)	-	0.00%	\$0.00	\$0.00	\$0.00
12. City of Edinburg (2 Mtgs)	-	0.00%	\$0.00	\$0.00	\$0.00
13. City of Sullivan City (1 Mtg)	-	0.00%	\$0.00	\$0.00	\$0.00
<b>J. Continue the Oversight of C&amp;M Associates, Inc., in Developing the Update of the T&amp;R Studies / Financing Alternatives (FSW) (4.0 Months)</b>					
1. SH 365 Segment 1,2,3 and 4 / IBTC / Segment D & La Joya Relief Route (Assisted by HDR)	\$ 33,936.84	100.00%	\$33,936.84	\$33,936.84	\$0.00
2. Update Strategic Plan for New Funding (Modification in Limits / Schedule / Funding Type)	\$ 19,894.84	100.00%	\$19,894.84	\$19,894.84	\$0.00
2. Update Strategic Plan after New T&R Numbers (Work with First Southwest)	\$ 20,720.60	100.00%	\$20,720.60	\$20,720.60	\$0.00
<b>K. Continue to Oversee IBTC (4.0 Months)</b>					
1. Modify RFP and Procure Engineering Services (Including Environmental and Low Level Flight)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
2. Continue to Oversee Local Environmental Clearance (Assisted by Blanton - Lead) (4.0 Months)	\$ 1,220.88	100.00%	\$1,220.88	\$1,220.88	\$0.00
3. Oversee IBTC Drainage Studies	-	0.00%	\$0.00	\$0.00	\$0.00
4. Oversee Low Level Flight (Assisted by Aranda & Associates - Lead)	-	0.00%	\$0.00	\$0.00	\$0.00
5. QA/QC Drainage Study (60%)	-	0.00%	\$0.00	\$0.00	\$0.00
6. QA/QC Low Level Flight (Aranda)	-	0.00%	\$0.00	\$0.00	\$0.00
7. Attend Meeting with USBWC (1) (Combined with SH 365)	-	0.00%	\$0.00	\$0.00	\$0.00
8. Attend Meeting with USACOE (1) (Combined with SH 365)	-	0.00%	\$0.00	\$0.00	\$0.00
9. Attend Meeting with US Fish and Wildlife (1)(Combined with SH 365)	-	0.00%	\$0.00	\$0.00	\$0.00

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 5:  
Engineering Management/Partial Operations Implementation/Public Outreach

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>L. Continue to Oversee SH 365 (Segment 1, 2 &amp; 3) (Inc. SH 365 at GSA AnzaIduvas Bridge)(4.0 Months)</b>					
1. Continue to Oversee Environmental Clearance By Atkins (EA) includes Negotiating Limits to FM 1016 (Assisted by Blanton & Assoc. - Lead)	\$ 52,943.45	100.00%	\$52,943.45	\$52,943.45	\$0.00
2. Continue to Oversee Drainage Studies Produced By L&G Engineering / S&B Infrastructure including Segment No. 3. Also, Includes Negotiating Limits to FM 1016.	\$ 60,223.91	100.00%	\$60,223.91	\$60,223.91	\$0.00
3. Continue to QA/QC Drainage Study (90%)	\$ 7,756.42	100.00%	\$7,756.42	\$7,756.42	\$0.00
4. Attend Meeting With USBWC (1 Mtg. - El Paso)	\$ 1,114.94	100.00%	\$1,114.94	\$1,114.94	\$0.00
5. Attend Meeting With USACOE ( 1 Mtg. - HST)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
6. Attend Meeting With US Fish & Wildlife (1 Mtg. - RGV)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
7. Attend Meeting With TxDOT Austin / FHWA (1 Mtg. - Austin)	\$ 4,694.28	100.00%	\$4,694.28	\$4,694.28	\$0.00
8. Continue to Oversee / Development of 4-Lane Schematic (L&G Engineering and S&B Infrastructure) and Negotiate Limits to FM 1016	\$ 39,860.87	100.00%	\$39,860.87	\$39,860.87	\$0.00
9. QA/QC Schematic (90%)	\$ 28,128.05	100.00%	\$28,128.05	\$28,128.05	\$0.00
10. Prepare Decision Matrix for Environmental Consultant (in Work Authorization 4)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
11. Continue to Oversee Surveyors including Right of Entry Assistance for 52 Parcels (DOS Logistics / Quintanilla) (Assisted by Aranda and Associates - Lead)	\$ 48,346.44	100.00%	\$48,346.44	\$48,346.44	\$0.00
12. Hold / Lead Public Involvement Meeting (1 Additional Mtg.) Including Prepare Exhibits	\$ 4,277.88	100.00%	\$4,277.88	\$4,277.88	\$0.00
13. Prepare Land Plan to Assist Hunt Development / City of McAllen to Evaluate Alternative Thru Hunt Property	\$ -	0.00%	\$0.00	\$0.00	\$0.00
14. Meet with Hunt Development (Mission - 2 Migs) (2 hrs / Mtg)(Inc. Prep Time)	\$ 3,569.91	100.00%	\$3,569.91	\$3,569.91	\$0.00
15. Assist HDR in Developing TIFIA Application	\$ -	0.00%	\$0.00	\$0.00	\$0.00
<b>M. SH 365 Segment No. 4 (US 281 / Military) (4.0 Months)</b>					
1. Oversee Environmental Clearance by Atkins (Included in Item L.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
2. Oversee Engineer in Development of Route Studies / Schematic / Survey / PS&E Development (4.0 Months)	\$ 22,084.47	100.00%	\$22,084.47	\$22,084.47	\$0.00
3. Finalize QA/QC Route Study	\$ 7,390.21	100.00%	\$7,390.21	\$7,390.21	\$0.00
4. Continue to Meet With City of Pharr Including Development of Exhibits to Analyze SH 365 (Segment No. 4) (US 281 / I Road / San Juan Area) (2 Migs)	\$ 4,860.21	100.00%	\$4,860.21	\$4,860.21	\$0.00
<b>N. Implementation of GIS Tools - Phase IA</b>					
1. Conduct Stakeholder and Program Management Team GIS user requirements meeting	\$ 5,256.06	100.00%	\$5,256.06	\$5,256.06	\$0.00
2. Develop GIS user requirements documentation and implementation plan	\$ 4,323.28	100.00%	\$4,323.28	\$4,323.28	\$0.00
3. Present user requirements and implementation plan to Stakeholders and Program Management Team	\$ 2,766.54	100.00%	\$2,766.54	\$2,766.54	\$0.00
4. Acquire and integrate Bing Map services	\$ 3,788.88	100.00%	\$3,788.88	\$3,788.88	\$0.00
5. Acquire and integrate existing GIS base map data from local government sources into an ArcGIS Server / SQL Server central database hosted from Dannenbaum's GIS hosting facility	\$ 4,511.52	100.00%	\$4,511.52	\$4,511.52	\$0.00
6. Tile up to three large existing GIS databases acquired from local Government sources for efficient web map rendering of large datasets (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
7. Design, load and integrate HCRMA specific GIS data into an ArcGIS Server / SQL Server central database hosted from Dannenbaum's GIS hosting facility (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
8. QA/QC existing and HCRMA specific GIS database for compliance with Task 1 - Requirements (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
9. Develop login page user interface (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
10. QA/QC login page user interface for compliance with Task 1 - Requirements (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 5:  
Engineering Management/Partial Operations Implementation/Public Outreach

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>N. Implementation of GIS Tools - Phase IA (Continued)</b>					
11. Develop ArcGIS Service, map services, Arc MAP, MXD projects files including map symbology (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
12. QA/QC ArcGIS Service, map services, Arc MAP, MXD projects files checking for quality of map symbology and compliance with Task 1 - Requirements (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
13. Develop GIS website map and legend tools on Dannenbaum's application development server (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
14. QA/QC / unit testing of the GIS website map and legend tools (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
15. Migrate GIS website map and legend tools from Dannenbaum's application development server to Dannenbaum's production ArcGIS Server hosting environment (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
16. Develop GIS website map and legend user manual documentation and conduct user training (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
<b>O. Implementation of Project Wise</b>					
1. Project Wise Overview Training (x1 initial kickoff meeting to go over Project Wise functionality and general use in an engineering project office environment)	\$ 2,668.23	100.00%	\$2,668.23	\$2,668.23	\$0.00
2. Project Wise Implementation (Install and configuration hardware and software onsite within DEC McAllen / HCRMA PMO)	\$ 1,803.40	100.00%	\$1,803.40	\$1,803.40	\$0.00
3. Project Wise End User Training (x4 brown bag training sessions to teach PMO users how to manage documents in a Project Wise document controlled environment)	\$ 3,638.60	100.00%	\$3,638.60	\$3,638.60	\$0.00
4. Inventory HCRMA Project Data by Type, User, Organization, Etc.	\$ 13,005.23	100.00%	\$13,005.23	\$13,005.23	\$0.00
5. Conduct Project Wise / GIS Data Maintenance Business Process Workshop (x1 Day for Project Wise / x1 Day for GIS - include time estimate for key subcontractor participation)	\$ 10,803.64	100.00%	\$10,803.64	\$10,803.64	\$0.00
6. Develop HCRMA Project Wise and GIS data management business process documentation	\$ 10,916.43	100.00%	\$10,916.43	\$10,916.43	\$0.00
7. Data Management End User Training (x4 brown bag training sessions to teach HCRMA PMO Project Wise and GIS data management business processes)	\$ 3,508.05	100.00%	\$3,508.05	\$3,508.05	\$0.00
<b>DIRECT EXPENSES</b>					
Lodging / Hotel (\$100.00 / DAY)	\$ 770.00	100.00%	\$770.00	\$770.00	\$0.00
Meals (\$30.00 / DAY)	\$ 240.00	100.00%	\$240.00	\$240.00	\$0.00
Rental Car	\$ 360.00	100.00%	\$360.00	\$360.00	\$0.00
Air Travel	\$ 4,000.00	100.00%	\$4,000.00	\$4,000.00	\$0.00
Parking	\$ 28.00	100.00%	\$28.00	\$28.00	\$0.00
Overnight Mail - letter size	\$ 1,150.00	100.00%	\$1,150.00	\$1,150.00	\$0.00
Courier Services	\$ 900.00	100.00%	\$900.00	\$900.00	\$0.00
Photocopies B/W (8.5 X 11)	\$ 1,969.79	100.00%	\$1,969.79	\$1,969.79	\$0.00
Photocopies B/W (11 X 17)	\$ 775.00	100.00%	\$775.00	\$775.00	\$0.00
Photocopies Color (8.5 X 11)	\$ 700.00	100.00%	\$700.00	\$700.00	\$0.00
Photocopies Color (11 X 17)	\$ 625.00	100.00%	\$625.00	\$625.00	\$0.00
Color Graphics on Foam Board	\$ 200.00	100.00%	\$200.00	\$200.00	\$0.00
Newspaper Advertisement	\$ -	0.00%	\$0.00	\$0.00	\$0.00
Court Reporter (Public Hearings & Transcription)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
Translator (English to Spanish or Sign Language)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
Public Involvement Facility Rental	\$ -	0.00%	\$0.00	\$0.00	\$0.00
Public Outreach Liaison (4 Months - September, October, November & December 2012)	\$ 60,000.00	100.00%	\$60,000.00	\$60,000.00	\$0.00

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 5:  
Engineering Management/Partial Operations Implementation/Public Outreach

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>DIRECT EXPENSES (Continued)</b>					
Accounting Support Services	\$ 20,000.00	100.00%	\$20,000.00	\$20,000.00	\$0.00
IT / Support Services (includes time on Project Wise Implementation / Data Organization @ 55 hrs)	\$ 8,000.00	100.00%	\$8,000.00	\$8,000.00	\$0.00
Bing Maps Annual Subscription Fee	\$ 7,000.00	100.00%	\$7,000.00	\$7,000.00	\$0.00
Management Support Services	\$ 32,000.00	100.00%	\$32,000.00	\$32,000.00	\$0.00
Community Action Support	\$ 31,500.00	100.00%	\$31,500.00	\$31,500.00	\$0.00
<b>Totals</b>	<b>\$ 769,236.96</b>		<b>\$ 769,236.96</b>	<b>\$ 769,236.96</b>	<b>\$ -</b>

Amount Due This Invoice

\$

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

June 5, 2013

Dennis Burleson, Chairman  
Hidalgo County Regional Mobility Authority  
510 South Pleasantview Drive  
Weslaco, Texas 78596

Work Order No. 6:  
Engineering Management/Partial Operations Implementation/Public Outreach

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

TASK CODE	DESCRIPTION OF WORK TASK	TOTAL COST	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
A	Coordinate / Update / Assist Executive Director	\$6,123.52	83.33%	\$5,102.73	\$4,082.55	\$1,020.18
B	Attend / Prepare Data / Report on Various Meetings (6.0 Months)	\$55,067.18	83.33%	\$45,887.50	\$36,713.27	\$9,174.23
C	Continue to Coordinate With HCMPO to Modify Short/ Long Term TIP to Account for Approved Strategy including Updating Strategy (One (1) Updates)	\$2,687.60	83.33%	\$2,239.58	\$1,791.82	\$447.76
D	Continue to Negotiate / Coordinate with TxDOT on Pass Thru Agreement- Modifications or other TxDOT Funding Modification (availability payments- CAT12) for SH 365 Segment 1,2,3 and 4) / Segment No. 4 (US 281 / Military)	\$6,984.88	83.33%	\$5,820.51	\$4,656.81	\$1,163.70
E	Continue to Implement Interim Cost Accounting System Utilizing Dannenbaum Cost Accounting System	\$17,620.24	83.33%	\$14,682.94	\$11,747.42	\$2,935.52
F	Continue to Organize / Develop HCRMA Files By Project (Electronic and Hardcopy)	\$9,684.90	83.33%	\$8,070.43	\$6,456.92	\$1,613.51
G	Continue to Coordinate with Hidalgo County Appraisal District on TRZ inputs and Agreements and Finalize Agreements with each entity	\$0.00	0.00%	\$0.00	\$0.00	\$0.00
H	Continue to Finalize and Implement Public Outreach Program with Assistance from Consultant (Pathfinder) and others	\$22,648.44	83.33%	\$18,872.94	\$15,099.72	\$3,773.22
I	Continued Public Outreach Meetings (Formal Presentation to Council) with the Appropriate Cities (including Travel and Preparation for Meeting) (4.0 Months)	\$11,941.12	83.33%	\$9,950.53	\$7,961.15	\$1,989.38
J	Continue the Oversight of C&M Associates, inc., in Developing the Update of the T&R Studies / Financing Alternatives (FSW) (4.0 Months)	\$3,240.18	83.33%	\$2,700.04	\$2,160.23	\$539.81
K	Continue to Oversee IBTC (4.0 Months)	\$4,802.28	83.33%	\$4,001.74	\$3,201.68	\$800.06
L	Continue to Oversee SH 365 (Segment 1,2 and 3) (inc. SH 365 at GSA Anzalduas Bridge)(6.0 Months)	\$309,653.23	83.33%	\$258,034.04	\$206,445.81	\$51,588.23
M	SH 365 Segment No. 4 (US 281 / Military) (6.0 Months)	\$38,917.76	83.33%	\$32,430.17	\$25,946.47	\$6,483.70
N	Implementation of GIS Tools - Phase IA	\$0.00	0.00%	\$0.00	\$0.00	\$0.00
O	Implementation of Project Wise	\$0.00	0.00%	\$0.00	\$0.00	\$0.00
ODC	Direct Expenses	\$200,463.00	83.33%	\$167,045.82	\$133,648.70	\$33,397.12
<b>TOTALS</b>		<b>\$689,834.33</b>	<b>83.33%</b>	<b>\$574,838.97</b>	<b>\$459,912.55</b>	<b>\$114,926.42</b>

**TOTAL DUE WORK ORDER NO. 6:**

**\$114,926.42**

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 6:  
Engineering Management/Partial Operations Implementation/Public Outreach

Invoice Number: 465201/19XV  
Invoice Period: 05/01/2013 - 05/31/2013

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>A. Coordinate / Update / Assist Executive Director</b>					
1.) Educate Executive Director on Historical Activities / Budgets / Cost Accounting / Program Management Plan and QA/QC Plan (Including Weekly Mtgs)	\$ 6,123.52	83.33%	\$5,102.73	\$4,082.55	\$1,020.18
<b>B. Attend / Prepare Data / Report on Various Meetings (6.0 Months)</b>					
1. HCRMA Board Meetings Including Presentation (Monthly) (6 Mtgs) (Inc. Prep Time)	\$ 11,571.60	83.33%	\$9,642.61	\$7,714.79	\$1,927.82
2. HCRMA Planning Committee Meetings (6 Mts @ 2 hrs/Mtg) (Inc. Prep Time)	\$ 6,313.20	83.33%	\$5,260.79	\$4,209.01	\$1,051.78
3. HCRMA Finance Committee Meetings (6 Mts @ 2 hrs/Mtg) (Inc. Prep Time)	\$ 6,313.20	83.33%	\$5,260.79	\$4,209.01	\$1,051.78
4. HCRMA MPO Policy Committee Meeting (6 Mts @ 2 hrs/Mtg) (Inc. Prep Time)	\$ 3,939.90	83.33%	\$3,283.12	\$2,626.73	\$656.39
5. HCRMA MPO Tech Committee Meeting (6 Mts @ 2 hrs/Mtg) (Inc. Prep Time)	\$ 3,108.90	83.33%	\$2,590.65	\$2,072.70	\$517.95
6. Various HCRMA Mtgs w/ Individual Board Members / Special Board Meetings (6 Mtg @ 2 hrs/Mtg) (Inc. Prep Time)	\$ 4,540.16	83.33%	\$3,783.32	\$3,026.92	\$756.40
7. Hidalgo County Meetings w/Staff (2 Mtgs. @2 hr. / Mtg.) (Inc. Prep Time)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
8. Hidalgo County Commissioner Precinct No. 1 (2 Mtgs. @ 2 hrs. / Mtg.)	\$ 1,902.00	83.33%	\$1,584.94	\$1,268.06	\$316.88
9. Hidalgo County Commissioner Precinct No. 2 (2 Mtgs. @ 2 hrs. / Mtg.)	\$ 1,902.00	83.33%	\$1,584.94	\$1,268.06	\$316.88
10. Hidalgo County Commissioner Precinct No. 3 (2 Mtgs. @ 2 hrs. / Mtg.)	\$ 1,902.00	83.33%	\$1,584.94	\$1,268.06	\$316.88
11. Hidalgo County Commissioner Precinct No. 4 (2 Mtgs. @ 2 hrs. / Mtg.)	\$ 1,902.00	83.33%	\$1,584.94	\$1,268.06	\$316.88
12. Attend Meetings TxDOT-Pharr (2 Mtgs. @ 2 hrs. / Mtg.) (Inc. Prep Time)	\$ 5,905.50	83.33%	\$4,921.05	\$3,937.20	\$983.85
13. Attend Meetings TxDOT-Austin includes Travel (1 Mtg. @ 10 hrs. / Mtg.)	\$ 1,011.72	83.33%	\$843.07	\$674.51	\$168.56
14. Attend Meetings With Senator Hinojosa (1 Mtgs. @ 2 hrs. / Mtg.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
15. Attend Meeting - 3 days in Washington to Visit Congress/TIFA (1 Mtg.)	\$ 2,853.00	83.33%	\$2,377.40	\$1,902.10	\$475.30
16. Attend Hidalgo County Commissioners' Court Meeting (2 Monthly Mtgs.) (3 Mtgs. X 2 hr./Mtg.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
<b>C. Continue to Coordinate With HCMPPO to Modify Short/ Long Term TIP to Account for Approved Strategy, Including Updating Strategy (One (1) Update)</b>	\$ 2,687.60	83.33%	\$2,239.58	\$1,791.82	\$447.76
<b>D. Continue to Negotiate / Coordinate with TxDOT on Pass Thru Agreement Modifications or other TxDOT Funding Modification (availability payments-CAT12) for SH 365 (Segment 1,2,3 and 4) / Segment No. 4 (US 281 / Military)</b>					
1. Meet / Coordinate With TxDOT Pharr (1 Mtgs. @ 2 hrs. / Mtg.)	\$ 1,728.22	83.33%	\$1,440.13	\$1,152.20	\$287.93
2. Meet / Coordinate With TxDOT Austin (1 Mtg @ 10 hrs. / Mtg.)	\$ 3,528.44	83.33%	\$2,940.25	\$2,352.41	\$587.84
3. Finalize Pass Thru Agreements and/or availability payments	\$ 1,728.22	83.33%	\$1,440.13	\$1,152.20	\$287.93
<b>E. Continue to Implement Interim Cost Accounting System Utilizing Dannenbaum Cost Accounting System</b>					
1. Continue to Input Data for Development of Monthly Reports for HCRMA Board (January 1, 2013 thru July 1, 2013)	\$ 6,069.74	83.33%	\$5,057.91	\$4,046.70	\$1,011.21
2. Continue to Modify Monthly Reports for HCRMA Needs	\$ 5,826.86	83.33%	\$4,855.52	\$3,884.77	\$970.75
3. Continue to Input Monthly Data and Produce Final Reports for January 1, 2013 thru July 1, 2013	\$ 5,723.64	83.33%	\$4,769.51	\$3,815.95	\$953.56
<b>F. Continue to Organize / Develop HCRMA Files By Project (Electronic and Hardcopy)</b>	\$ 9,684.90	83.33%	\$8,070.43	\$6,456.92	\$1,613.51
<b>G. Continue to Coordinate with Hidalgo County Appraisal District on TRZ Inputs and Agreements and Finalize Agreements with each entity</b>	\$ -	0.00%	\$0.00	\$0.00	\$0.00

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 6:  
Engineering Management/Partial Operations Implementation/Public Outreach

Invoice Number: 465201/19XV  
Invoice Period: 05/01/2013 - 05/31/2013

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>H. Continue to Finalize and Implement Public Outreach Program Managing with Assistance from Consultant (Pathfinder) and others</b>					
1. Finalize / Implement Public Outreach	\$ 15,510.90	83.33%	\$12,925.23	\$10,341.12	\$2,584.11
2. Review / Update Website	-	0.00%	\$0.00	\$0.00	\$0.00
3. Develop Monthly Newsletter (Assist Subs)	-	0.00%	\$0.00	\$0.00	\$0.00
4. Begin Development of Branding Loop Project (Assist Subs)	-	0.00%	\$0.00	\$0.00	\$0.00
5. Assist / Develop Support Resolution From All Cities (Total 5 Mtgs.)	\$ 3,778.26	83.33%	\$3,148.42	\$2,518.97	\$629.45
6. Meet with Large Property Owners (SH 365)(Total 2 Mtgs. Including Preparation)	\$ 1,892.16	83.33%	\$1,576.74	\$1,261.50	\$315.24
7. Meet with EDC for the Cities of McAllen / Mission (Total 1 Mtg.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
8. Meet with Trade Association / Civic Association (US / Mexico) (Total 1 Mtg.)	\$ 1,467.12	83.33%	\$1,222.55	\$978.13	\$244.42
<b>I. Continue Public Outreach Meetings (Formal Presentation to Council) with the following Cities (Including Travel and Preparation for Meeting) (4.0 Months):</b>					
1. City of Pharr (2 Mtgs)	\$ 2,739.94	83.33%	\$2,283.19	\$1,826.72	\$456.47
2. City of Granjeno (1 Mtg)	\$ 1,758.58	83.33%	\$1,465.42	\$1,172.45	\$292.97
3. City of Donna (1 Mtg)	-	0.00%	\$0.00	\$0.00	\$0.00
4. City of Weslaco (1 Mtg)	-	0.00%	\$0.00	\$0.00	\$0.00
5. City of Mercedes (1 Mtg)	-	0.00%	\$0.00	\$0.00	\$0.00
6. City of Edcouch (1 Mtg)	-	0.00%	\$0.00	\$0.00	\$0.00
7. City of McAllen (2 Mtgs.)	\$ 3,721.30	83.33%	\$3,100.96	\$2,480.99	\$619.97
8. City of Mission (2 Mtgs.)	\$ 3,721.30	83.33%	\$3,100.96	\$2,480.99	\$619.97
9. City of Pecos (1 Mtg)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
10. City of Palmview (1 Mtg)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
11. City of La Joya (1 Mtg)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
12. City of Edinburg (2 Mtgs)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
13. City of Sullivan City (1 Mtg)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
<b>J. Continue the Oversight of C&amp;M Associates, Inc., in Developing the Update of the T&amp;R Studies / Financing Alternatives (FSW) (4.0 Months)</b>					
1. SH 365 Segment 1,2,3 and 4 / IBTC / Segment D & La Joya Relief Route (Assisted by HDR)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
2. Update Strategic Plan for New Funding (Modification in Limits / Schedule / Funding Type)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
3. Verify Revised Strategic Plan after New T&R Numbers (Work with First Southwest)	\$ 3,240.18	83.33%	\$2,700.04	\$2,160.23	\$539.81
<b>K. Continue to Oversee IBTC (4.0 Months)</b>					
1. Modify RFP and Procure Engineering Services (Including Environmental and Low Level Flight)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
2. Continue to Oversee Local Environmental Clearance (Assisted by Blanton - Lead) (4.0 Months)	\$ 4,802.28	83.33%	\$4,001.74	\$3,201.68	\$800.06
3. Oversee IBTC Drainage Studies	-	0.00%	\$0.00	\$0.00	\$0.00
4. Oversee Low Level Flight (Assisted by Aranda & Associates - Lead)	-	0.00%	\$0.00	\$0.00	\$0.00
5. QA/QC Drainage Study (60%)	-	0.00%	\$0.00	\$0.00	\$0.00
6. QA/QC Low Level Flight (Aranda)	-	0.00%	\$0.00	\$0.00	\$0.00
7. Attend Meeting with USBWC (1) (Combined with SH 365)	-	0.00%	\$0.00	\$0.00	\$0.00
8. Attend Meeting with USACOE (1) (Combined with SH 365)	-	0.00%	\$0.00	\$0.00	\$0.00
9. Attend Meeting with US Fish and Wildlife (1) (Combined with SH 365)	-	0.00%	\$0.00	\$0.00	\$0.00

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

Work Order No. 6:  
Engineering Management/Partial Operations Implementation/Public Outreach

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>L. Continue to Oversee SH 365 (Segment 1, 2 &amp; 3) (Inc. SH 365 at GSA Anzalduas Bridge)(6.0 Months) (Assisted by Blanton &amp; Assoc. - Lead)</b>					
1. Continue to Oversee Drainage Studies / Utilities Produced By L&G Engineering / S&B Infrastructure including Segment No. 3. Also, (W.A. No. 1)	\$ 65,179.51	83.33%	\$54,314.09	\$43,455.18	\$10,858.91
2. Continue to Oversee Drainage Studies / Utilities Produced By L&G Engineering / S&B Infrastructure including Segment No. 3. Also, (W.A. No. 1)	\$ 64,918.66	83.33%	\$54,096.72	\$43,281.27	\$10,815.45
3. Continue to QA/QC Drainage Study (90%)	\$ 3,938.40	83.33%	\$3,281.87	\$2,625.73	\$656.14
4. Attend Meeting With USBWC (1 Mtg. - El Paso)	\$ 4,459.76	83.33%	\$3,716.32	\$2,973.32	\$743.00
5. Attend Meeting With USACOE ( 1 Mtg. - HST)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
6. Attend Meeting With US Fish & Wildlife (1 Mtg. - RGV)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
7. Attend Meeting With TxDOT Austin / FHWA (1 Mtg. - Austin)	\$ 4,694.28	83.33%	\$3,911.74	\$3,129.68	\$782.06
8. Continue to Oversee / Development of 4-Lane Schematic (L&G Engineering and S&B Infrastructure) (W.A. No. 1)	\$ 49,511.86	83.33%	\$41,258.23	\$33,009.56	\$8,248.67
9. QA/QC Schematic (100%)	\$ 32,907.94	83.33%	\$27,422.19	\$21,939.72	\$5,482.47
10. Prepare Decision Matrix for Environmental Consultant (in Work Authorization 4)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
11. Continue to Oversee Surveyors including Right of Entry Assistance for 52 Parcels (DOS Logistics / Quintanilla) (Assisted by Aranda and Associates - Lead)	\$ 57,702.70	83.33%	\$48,083.66	\$38,470.39	\$9,613.27
12. Hold / Lead Public Involvement Meeting (1 Additional Mtg.) Including Prepare Exhibits	\$ 19,200.30	83.33%	\$15,999.61	\$12,800.84	\$3,198.77
13. Prepare Land Plan to Assist Hunt Development / City of McAllen to Evaluate Alternative Thru Hunt Property	\$ -	0.00%	\$0.00	\$0.00	\$0.00
14. Meet with Hunt Development (Mission - 2 Mtgs) (2 hrs / Mtg)(Inc. Prep Time)	\$ 7,139.82	83.33%	\$5,949.61	\$4,760.12	\$1,189.49
15. Assist HDR in Developing TIFIA Application	\$ -	0.00%	\$0.00	\$0.00	\$0.00
<b>M. SH 365 Segment No. 4 (US 281 / Military) (6.0 Months)</b>					
1. Oversee Environmental Clearance by Atkins (Included in Item L.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
2. Oversee Engineer in Development of Route Studies / Schematic / Survey / PS&E Development (4.0 Months)	\$ 25,845.54	83.33%	\$21,537.09	\$17,231.22	\$4,305.87
3. Finalize QA/QC Route Study	\$ 6,591.94	83.33%	\$5,493.06	\$4,394.85	\$1,098.21
4. Continue to Meet With City of Pharr including Development of Exhibits to Analyze SH 365 (Segment No. 4) (US 281 / I Road / San Juan Area) (2 Mtgs)	\$ 6,480.28	83.33%	\$5,400.02	\$4,320.40	\$1,079.62
<b>N. Implementation of GIS Tools - Phase IA</b>					
1. Conduct Stakeholder and Program Management Team GIS user requirements meeting	\$ -	0.00%	\$0.00	\$0.00	\$0.00
2. Develop GIS user requirements documentation and implementation plan	\$ -	0.00%	\$0.00	\$0.00	\$0.00
3. Present user requirements and implementation plan to Stakeholders and Program Management Team	\$ -	0.00%	\$0.00	\$0.00	\$0.00
4. Acquire and integrate Bing Map services	\$ -	0.00%	\$0.00	\$0.00	\$0.00
5. Acquire and integrate existing GIS base map data from local government sources into an ArcGIS Server / SQL Server central database hosted from Dannenbaum's GIS hosting facility	\$ -	0.00%	\$0.00	\$0.00	\$0.00
6. Tile up to three large existing GIS databases acquired from local Government sources for efficient web map rendering of large datasets (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
7. Design, load and integrate HCRMA specific GIS data into an ArcGIS Server / SQL Server central database hosted from Dannenbaum's GIS hosting facility (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
8. QA/QC existing and HCRMA specific GIS database for compliance with Task 1 - Requirements (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
9. Develop login page user interface (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
10. QA/QC login page user interface for compliance with Task A - Requirements (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 6: 465201/19/XV  
Engineering Management/Partial Operations Implementation/Public Outreach

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>N. Implementation of GIS Tools - Phase IA (Continued)</b>					
11. Develop ArcGIS Service, map services, Arc MAP, MXD projects files including map symbology (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
12. QA/QC ArcGIS Service, map services, Arc MAP, MXD projects files checking for quality of map symbology and compliance with Task 1 - Requirements (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
13. Develop GIS website map and legend tools on Dannenbaum's application development server (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
14. QA/QC / unit testing of the GIS website map and legend tools (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
15. Migrate GIS website map and legend tools from Dannenbaum's application development server to Dannenbaum's production ArcGIS Server hosting environment (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
16. Develop GIS website map and legend user manual documentation and conduct user training (Future W.A.)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
<b>O. Implementation of Project Wise</b>					
1. Project Wise Overview Training (x1 initial kickoff meeting to go over Project Wise functionality and general use in an engineering project office environment)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
2. Project Wise Implementation (Install and configuration hardware and software onsite within DEC McAllen / HCRMA PMO)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
3. Project Wise End User Training (x4 brown bag training sessions to teach PMO users how to manage documents in a Project Wise document controlled environment)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
4. Inventory HCRMA Project Data by Type, User, Organization, Etc.	\$ -	0.00%	\$0.00	\$0.00	\$0.00
5. Conduct Project Wise / GIS Data Maintenance Business Process Workshop (x1 Day for Project Wise / x1 Day for GIS - include time estimate for key subcontractor participation)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
6. Develop HCRMA Project Wise and GIS data management business process documentation	\$ -	0.00%	\$0.00	\$0.00	\$0.00
7. Data Management End User Training (x4 brown bag training sessions to teach HCRMA PMO Project Wise and GIS data management business processes)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
<b>DIRECT EXPENSES</b>					
Lodging / Hotel (\$100.00 / DAY)	\$ 200.00	83.33%	\$166.66	\$133.34	\$33.32
Meals (\$30.00 / DAY)	\$ 60.00	83.33%	\$50.00	\$40.00	\$10.00
Rental Car	\$ 180.00	83.33%	\$149.99	\$120.01	\$29.98
Air Travel	\$ 1,000.00	83.33%	\$833.30	\$666.70	\$166.60
Parking	\$ 28.00	83.33%	\$23.33	\$18.67	\$4.66
Overnight Mail - letter size	\$ 1,150.00	83.33%	\$958.30	\$766.71	\$191.59
Courier Services	\$ 500.00	83.33%	\$416.65	\$333.35	\$83.30
Photocopies BW (8.5 X 11)	\$ 2,000.00	83.33%	\$1,666.60	\$1,333.40	\$333.20
Photocopies B/W (11 X 17)	\$ 750.00	83.33%	\$624.98	\$500.03	\$124.95
Photocopies Color (8.5 X 11)	\$ 700.00	83.33%	\$583.31	\$466.69	\$116.62
Photocopies Color (11 X 17)	\$ 625.00	83.33%	\$520.81	\$416.69	\$104.12
Color Graphics on Foam Board	\$ 270.00	83.33%	\$224.99	\$180.01	\$44.98
Newspaper Advertisement	\$ -	0.00%	\$0.00	\$0.00	\$0.00
Court Reporter (Public Hearings & Transcription)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
Translator (English to Spanish or Sign Language)	\$ -	0.00%	\$0.00	\$0.00	\$0.00
Public Involvement Facility Rental	\$ -	0.00%	\$0.00	\$0.00	\$0.00
Public Outreach Liaison (6 Months - Jan., Feb., Mar., Apr., May, June, 2013)	\$ 90,000.00	83.33%	\$74,997.00	\$60,003.00	\$14,994.00

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 6:  
Engineering Management/Partial Operations Implementation/Public Outreach

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>DIRECT EXPENSES (Continued)</b>					
Accounting Support Services	\$ 10,000.00	83.33%	\$8,333.00	\$6,667.00	\$1,666.00
IT / Support Services (Includes time on Project Wise Implementation / Data Organization @ 55 hrs)	\$ 8,000.00	83.33%	\$6,666.40	\$5,333.60	\$1,332.80
Bing Maps Annual Subscription Fee	\$ -	0.00%	\$0.00	\$0.00	\$0.00
Management Support Services	\$ 40,000.00	83.33%	\$33,332.00	\$26,668.00	\$6,664.00
Community Action Support	\$ 45,000.00	83.33%	\$37,498.50	\$30,001.50	\$7,497.00
<b>Totals</b>	\$ 689,834.33		\$ 574,838.97	\$ 459,912.55	\$ 114,926.42

Amount Due This Invoice \$ 114,926.42

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 6: Supplemental Agreement No. 1 to WO 6 - Sketch Level Assessment of Potential Truck Diversion from Nogales Poo to Texas  
 Invoice Number: 465201/19/XV Invoice Period: 05/01/2013 - 05/31/2013

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
A. Oversight of Sketch Level Assessment	\$ 5,654.52	40.00%	\$2,261.81	\$0.00	\$2,261.81
B. Review/Comment of Sketch Level Assessment	\$ 5,654.52	40.00%	\$2,261.81	\$0.00	\$2,261.81
C&M Associates, Inc. - Traffic and Revenue	\$ 70,000.00	40.00%	\$28,000.00	\$0.00	\$28,000.00
<b>Totals</b>	\$ 81,309.04	✓	\$32,523.62	\$0.00	\$32,523.62

Amount Due This Invoice

\$ 32,523.62 ✓

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 6:  
Supplemental Agreement No. 2 to WO 6 - Value Engineering Report for SH 365

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>A. Pre- and Post-Workshop</b>					
1) Project Management	\$ 3,714.78	80.00%	\$2,971.82	\$0.00	\$2,971.82
2) Pre-Workshop planning, information review, draft functional analysis	\$ 6,481.36	100.00%	\$6,481.36	\$0.00	\$6,481.36
3) Prepare Draft VE report, circulate for comment, finalize VE report	\$ 19,097.92	70.00%	\$13,368.54	\$0.00	\$13,368.54
<b>B. Value Engineering Workshop (Mon-Fri)</b>					
1) Travel time allowance	\$ 16,378.40	70.00%	\$11,464.88	\$0.00	\$11,464.88
2) VE Workshop	\$ 93,399.84	70.00%	\$65,379.89	\$0.00	\$65,379.89
<b>DIRECT EXPENSES</b>					
Lodging / Hotel (\$100.00 / DAY)	\$ 2,000.00	70.00%	\$1,400.00	\$0.00	\$1,400.00
Meals (\$30.00 / DAY)	\$ 900.00	70.00%	\$630.00	\$0.00	\$630.00
Rental Car	\$ 780.00	70.00%	\$546.00	\$0.00	\$546.00
Air Travel	\$ 4,900.00	70.00%	\$3,430.00	\$0.00	\$3,430.00
Parking	\$ 300.00	70.00%	\$210.00	\$0.00	\$210.00
Overnight Mail - letter size	\$ 163.00	70.00%	\$114.10	\$0.00	\$114.10
Courier Services	\$ 100.00	70.00%	\$70.00	\$0.00	\$70.00
Photocopies B/W (8.5 X 11)	\$ 50.00	70.00%	\$35.00	\$0.00	\$35.00
Photocopies B/W (11 X 17)	\$ 20.00	70.00%	\$14.00	\$0.00	\$14.00
Photocopies Color (8.5 X 11)	\$ 360.00	70.00%	\$245.00	\$0.00	\$245.00
Photocopies Color (11 X 17)	\$ 125.00	70.00%	\$87.50	\$0.00	\$87.50
Presentation Boards 30" x 40" Color Mounted	\$ 360.00	70.00%	\$252.00	\$0.00	\$252.00
<b>Totals</b>	\$ 149,120.30	✓	\$106,700.09	\$0.00	\$ 106,700.09

Amount Due This Invoice

\$ 106,700.09 ✓

**MONTHLY PROGRESS PAYMENT INVOICE - DANNENBAUM ENGINEERING CORPORATION  
FOR CONSULTING ENGINEER'S SERVICES**

Work Order No. 6:  
Supplemental Agreement No. 3 to WO 6 - IBTC Low Level Flight

Invoice Number: 465201/19/XV  
Invoice Period: 05/01/2013 - 05/31/2013

DESCRIPTION OF WORK TASK	COST PER TASK	PERCENT COMPLETE TO DATE	AMOUNT EARNED TO DATE	PREVIOUSLY BILLED	CURRENT BILLING
<b>FC 145 - PROJECT MANAGEMENT AND ADMINISTRATION (FC 110 TO FC 160) (5 MONTHS)</b>					
Project Management	\$ 3,218.16	40.00%	\$1,287.26	\$0.00	\$1,287.26
Coordination/Prepare Sub Contracts (1-Total)	\$ 1,396.56	100.00%	\$1,396.56	\$0.00	\$1,396.56
Manage Subconsultant Contracts (1-Total x 2-Mhrs/Mo Ea. x 5 Mos)	\$ 3,096.72	40.00%	\$1,238.69	\$0.00	\$1,238.69
Preparation of Invoices and Progress Reports (1 Per Mo X 5 Mos = 5 EA)	\$ 2,307.36	25.00%	\$576.84	\$0.00	\$576.84
Monitor Subproviders' Schedules on Monthly Basis (1 EA FOR 4 MONTHS)	\$ 2,307.36	25.00%	\$576.84	\$0.00	\$576.84
Prepare Monthly Project Schedule Update (5 EA)	\$ 1,366.20	25.00%	\$341.55	\$0.00	\$341.55
Organize and Upload Electronic File Deliverables	\$ 3,388.16	0.00%	\$0.00	\$0.00	\$0.00
QC/QA - Revised Draft Schematic ( 1 Submittal)	\$ 6,046.04	0.00%	\$0.00	\$0.00	\$0.00
QC/QA - Final Schematic ( 1 Submittal)	\$ 5,331.48	0.00%	\$0.00	\$0.00	\$0.00
QC/QA - Survey	\$ 8,841.36	0.00%	\$0.00	\$0.00	\$0.00
<b>FC 150 - FIELD SURVEYING AND PHOTOGRAMMETRY</b>					
Remove Existing DTM from Original Flight	\$ 922.92	0.00%	\$0.00	\$0.00	\$0.00
Update and Verify New Flight DTM File	\$ 3,367.98	0.00%	\$0.00	\$0.00	\$0.00
Right of Entry - Coordination, Administration, Research and Abstracting	\$ 48,900.00	41.00%	\$20,049.00	\$0.00	\$20,049.00
Preliminary Data Acquisition - Update Ownership Information and Maps	\$ 5,783.36	100.00%	\$5,783.36	\$0.00	\$5,783.36
Establish Primary Control Network	\$ 33,502.80	45.00%	\$15,076.26	\$0.00	\$15,076.26
Establish Secondary Control Network Along Proposed Centerline	\$ 25,269.56	40.00%	\$10,107.82	\$0.00	\$10,107.82
Establish Aerial Target Network for Design Level Photogrammetry	\$ 60,902.08	41.00%	\$24,969.85	\$0.00	\$24,969.85
Alignment Control	\$ 42,585.95	70.00%	\$29,810.17	\$0.00	\$29,810.17
Aerial Survey	\$ 63,885.56	0.00%	\$0.00	\$0.00	\$0.00
<b>FC 160 - UPDATE SCHEMATIC BASED ON NEW DTM</b>					
Update Horizontal Alignment Based on New DTM	\$ 4,930.36	0.00%	\$0.00	\$0.00	\$0.00
Update Vertical Alignment Based on New DTM	\$ 4,930.36	0.00%	\$0.00	\$0.00	\$0.00
Update ROW File Based on Revised Corner Clips	\$ 3,084.52	0.00%	\$0.00	\$0.00	\$0.00
Update Roadway Master Design File	\$ 5,515.34	0.00%	\$0.00	\$0.00	\$0.00
Verify and Update Topo File	\$ 3,550.12	0.00%	\$0.00	\$0.00	\$0.00
<b>DIRECT EXPENSES</b>					
Overnight Mail - letter size	\$ 400.00	50.00%	\$200.00	\$0.00	\$200.00
Courier Services	\$ 1,000.00	50.00%	\$500.00	\$0.00	\$500.00
Photocopies Color (11 X 17)	\$ 250.00	50.00%	\$125.00	\$0.00	\$125.00
Plots (Color on Bond) (4 Plots @ 40' each)	\$ 640.00	50.00%	\$320.00	\$0.00	\$320.00
<b>Totals</b>	\$ 346,720.31		\$ 112,359.20	\$ -	\$ 112,359.20

Amount Due This Invoice \$ 112,359.20

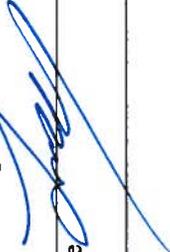
**ATTACHMENT H-3**  
**Subprovider Monitoring System for Federally Funded Contracts**  
**Progress Assessment Report for month of (Mo./Yr.) May / 2013**

Contract #: HCRMA Program Mgmt Consultant Project Original Contract Amount: \$ 5,000,000.00  
 Date of Execution: October 27, 2011 Approved Supplemental Agreements: \$ 0.00  
 Prime Provider: Dannenbaum Engineering Corporation Total Contract Amount: \$ 5,000,000.00  
 Work Authorization No. 1 Work Authorization Amount: \$ 909,960.63  
*If no subproviders are used on this contract, please indicate by placing "N/A" on the 1<sup>st</sup> line under Subproviders.*

DBE	All Subproviders	Category of Work	Total Subprovider Amount	% Total Contract Amount	Amount Paid This Period	Amount Paid To Date	Subcontract Balance Remaining
*	HDR Engineering, Inc.	Program Mgmt	\$ 57,705.85	6.34%	\$ 0.00	\$ 57,705.85	\$ 0.00
*	Blanton & Associates, Inc.	Program Mgmt	\$ 20,928.44	2.30%	\$ 0.00	\$ 20,928.44	\$ 0.00
*	Guzman Munoz Engineering and Surveying, Inc.	Program Mgmt	\$ 20,848.54	2.29%	\$ 0.00	\$ 20,848.54	\$ 0.00
*	Barrera Torres Infrastructure, PLLC	Program Mgmt	\$ 0.00	0%	\$ 0.00	\$ 0.00	\$ 0.00
*	Aranda & Associates, Inc.	Program Mgmt	\$ 44,620.72	4.90%	\$ 0.00	\$ 44,620.72	\$ 0.00

Fill out Progress Assessment Report with each estimate/invoice submitted, for all subcontracts, and forward as follows:  
**1 Copy with Invoice – Hidalgo County Regional Mobility Authority Office**

I hereby certify that the above is a true and correct statement of the amounts paid to the firms listed above.

Louis H. Jones, Jr., P.E.  Signature \_\_\_\_\_ Date June 5, 2013  
 Print Name - Company Official / DBE Liaison Officer  
 shari.bricarell@dannenbaum.com Phone 713-520-9570  
 Email \_\_\_\_\_ Fax 713-527-6442



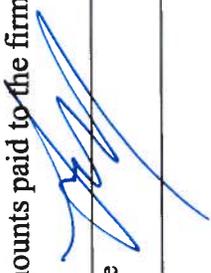
**ATTACHMENT H-3**  
**Subprovider Monitoring System for Federally Funded Contracts**  
**Progress Assessment Report for month of (Mo./Yr.) May / 2013**

Contract #: HCRMA Program Mgmt Consultant Project Original Contract Amount: \$ 5,000,000.00  
 Date of Execution: \_\_\_\_\_ Approved Supplemental Agreements: \$ 0.00  
 Prime Provider: Dannenbaum Engineering Corporation Total Contract Amount: \$ 5,000,000.00  
 Work Authorization No. 4 Work Authorization Amount: \$ 694,355.85  
*If no subproviders are used on this contract, please indicate by placing "N/A" on the 1<sup>st</sup> line under Subproviders.*

DBE	All Subproviders	Category of Work	Total Subprovider Amount	% Total Contract Amount	Amount Paid This Period	Amount Paid To Date	Subcontract Balance Remaining
*	HDR Engineering, Inc.	Program Mgmt	\$ 14,300.17	2.06%	\$ 0.00	\$ 14,300.17	\$ 0.00
*	Blanton & Associates, Inc.	Program Mgmt	\$ 12,024.80	1.73%	\$ 0.00	\$ 12,024.80	\$ 0.00
*	Aranda & Associates, Inc.	Program Mgmt	\$ 31,765.36	4.57%	\$ 0.00	\$ 31,765.36	\$ 0.00
*	Barrera Torres Infrastructure, PLLC	Program Mgmt	\$ 40,256.28	5.80%	\$ 0.00	\$ 40,256.28	\$ 0.00
*	Unitech Consulting Engineers	Program Mgmt	\$ 0.00	0.00%	\$ 0.00	\$ 0.00	\$ 0.00

Fill out Progress Assessment Report with each estimate/invoice submitted, for all subcontracts, and forward as follows:  
**1 Copy with Invoice – Hidalgo County Regional Mobility Authority Office**

I hereby certify that the above is a true and correct statement of the amounts paid to the firms listed above.

Louis H. Jones, Jr., P.E.  Signature \_\_\_\_\_ Date June 5, 2013  
 Print Name - Company Official /DBE Liaison Officer \_\_\_\_\_ Phone 713-520-9570  
 shari.bricarell@dannenbaum.com \_\_\_\_\_ Fax 713-527-6442  
 Email \_\_\_\_\_



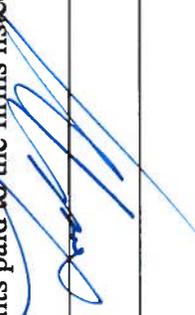
**ATTACHMENT H-3**  
**Subprovider Monitoring System for Federally Funded Contracts**  
**Progress Assessment Report for month of (Mo./Yr.) May / 2013**

Contract #: HCRMA Program Mgmt Consultant Project Original Contract Amount: \$ 5,000,000.00  
 Date of Execution: \_\_\_\_\_ Approved Supplemental Agreements: \$ 0.00  
 Prime Provider: Dannenbaum Engineering Corporation Total Contract Amount: \$ 5,000,000.00  
 Work Authorization No. 6 Work Authorization Amount: \$ 1,266,983.98  
*If no subproviders are used on this contract, please indicate by placing "N/A" on the 1<sup>st</sup> line under Subproviders.*

DBE	All Subproviders	Category of Work	Total Subprovider Amount	% Total Contract Amount	Amount Paid This Period	Amount Paid To Date	Subcontract Balance Remaining
*	Blanton & Associates, Inc.	Program Mgmt	\$ 37,409.49	2.95%	\$ 3,226.25	\$ 26,775.94	\$ 10,633.55
*	Aranda & Associates, Inc.	Program Mgmt	\$ 261,585.23	20.65%	\$ 7,260.62	\$ 30,559.27	\$ 231,025.96
*	Barrera Torres Infrastructure, PLLC	Program Mgmt	\$ 22,933.66	1.81%	\$ 0.00	\$ 0.00	\$ 22,933.66
*	C&M Associates, Inc.	Program Mgmt	\$ 70,000.00	5.52%	\$ 0.00	\$ 0.00	\$ 70,000.00
*	Aerial Data Service	Program Mgmt	\$ 63,885.56	5.04%	\$ 0.00	\$ 0.00	\$ 63,885.56
	HDR Engineering, Inc.	Program Mgmt	\$ 62,216.38	4.91%	\$ 0.00	\$ 0.00	\$ 62,216.38

Fill out Progress Assessment Report with each estimate/invoice submitted, for all subcontracts, and forward as follows:  
**1 Copy with Invoice – Hidalgo County Regional Mobility Authority Office**

I hereby certify that the above is a true and correct statement of the amounts paid to the firms listed above.

Louis H. Jones, Jr., P.E.  Signature \_\_\_\_\_ Date June 5, 2013  
 Print Name - Company Official / DBE Liaison Officer  
 shari.bricarell@dannenbaum.com Phone 713-520-9570  
 Email \_\_\_\_\_ Fax 713-527-6442

**HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY**

**AGENDA RECOMMENDATION FORM**

BOARD OF DIRECTORS	<u>  X  </u>	AGENDA ITEM	<u>  2C  </u>
PLANNING COMMITTEE	<u>          </u>	DATE SUBMITTED	<u>  6/10/13  </u>
FINANCE COMMITTEE	<u>          </u>	MEETING DATE	<u>  6/19/13  </u>
TECHNICAL COMMITTEE	<u>          </u>		

1. Agenda Item: **APPROVAL OF THE FINANCIAL REPORT FOR THE MONTH OF APRIL 2013**
2. Nature of Request: (Brief Overview) Attachments:   X   Yes      No  
Consideration and approval of financial report for the month of April 2013.
3. Policy Implication: Board Policy, Local Government Code, Texas Government Code, Texas Transportation Code, TxDOT Policy
4. Budgeted:      Yes      No   X   N/A  
Funding Source:
5. Staff Recommendation: **Motion to approve the Financial Report for the Month of April 2013 as presented.**
6. Program Manager's Recommendation:      Approved      Disapproved   X   None
7. Planning Committee's Recommendation:      Approved      Disapproved   X   None
8. Board Attorney's Recommendation:      Approved      Disapproved   X   None
9. Executive Director's Recommendation:   X   Approved      Disapproved      None



## ACCOUNTANT'S COMPILATION REPORT

To the Board of Directors  
Hidalgo County Regional Mobility Authority  
Weslaco, TX

We have compiled the accompanying Statement of Net Assets of Hidalgo County Regional Mobility Authority (a governmental authority) and the related Statement of Activities (accrual basis) and the Statement of Revenues, Expenditures and Changes in Fund Balances (modified accrual basis) as of and for the four months ended April 30, 2013. We have not audited or reviewed the accompanying financial statements and, accordingly, do not express an opinion or provide any assurance about whether the financial statements are in accordance with accounting principles generally accepted in the United States of America.

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America and for designing, implementing, and maintaining internal control relevant to the preparation and fair presentation of the financial statements.

Our responsibility is to conduct the compilation in accordance with Statements on Standards for Accounting and Review Services issued by the American Institute of Certified Public Accountants. The objective of a compilation is to assist management in presenting financial information in the form of financial statements without undertaking to obtain or provide any assurance that there are no material modifications that should be made to the financial statements.

Management has elected to omit substantially all of the disclosures required by accounting principles generally accepted in the United States of America. If the omitted disclosures were included in the financial statements, they might influence the user's conclusions about the Authority's financial position, results of operations, and cash flows. Accordingly, these financial statements are not designed for those who are not informed about such matters.

Also, management has not presented the statement of cash flows, management's discussion and analysis information or the budgetary comparison supplementary information that the Governmental Accounting Standards Board has determined is required to supplement, although not required to be a part of, the basic financial statements.

We are not independent with respect to Hidalgo County Regional Mobility Authority.

*Salinas, Allen + Schmitt, LLP*  
Salinas, Allen & Schmitt, L.L.P.

June 11, 2013

*...providing support and solutions to problems*

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY  
STATEMENT OF NET ASSETS  
APRIL 30, 2013**

**ASSETS**

Cash - Unrestricted	\$	149,875.89
Cash - Restricted		4,654,175.11
Office Equipment, net		8,629.64
Accounts Receivable - VR Fees		545,050.00
Debt Issuance Cost		112,421.24
Capital Assets Not Being Depreciated		<u>32,260,561.48</u>
<b>TOTAL ASSETS</b>	<b>\$</b>	<b><u>37,730,713.36</u></b>

**LIABILITIES AND NET ASSETS**

**LIABILITIES**

Due to LRGVDC	\$	1,027.86
Accrued Interest		102,655.78
Note Payable - Hidalgo County		200,000.00
Note Payable - First National Bank		<u>11,430,597.97</u>
<b>Total Liabilities</b>		<u>11,734,281.61</u>

**NET ASSETS**

Investment in Capital Assets, Net of Related Debt		20,951,014.39
Restricted for:		
Debt Service		152,763.00
Loop Project		4,792,869.03
Unrestricted		<u>99,785.33</u>
<b>Total Net Assets</b>		<u>25,996,431.75</u>

<b>TOTAL LIABILITIES AND NET ASSETS</b>	<b>\$</b>	<b><u>37,730,713.36</u></b>
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See accountant's compilation report.

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY  
STATEMENT OF ACTIVITIES  
FOUR MONTHS ENDED APRIL 30, 2013**

	Function/Program		Total Combined
	Administration	Capital Projects	
<b>EXPENSES:</b>			
<b>Loop Project:</b>			
Dues & Subscriptions	\$ 106.40	\$ -	\$ 106.40
Postage & Delivery	3.63	-	3.63
MPO Wages & Benefits	693.85	-	693.85
Insurance & Bonding	8.00	-	8.00
Travel	44.61	-	44.61
Printing & Publications	20.96	-	20.96
Wages	6.00	-	6.00
Bank Service Charges	0.24	-	0.24
Accounting Fees	50.00	-	50.00
Legal & Professional	28.73	-	28.73
Financial Consulting Fees	100.00	-	100.00
Rental Expense	53.20	-	53.20
Utilities	7.77	-	7.77
Miscellaneous	54.95	-	54.95
<b>Total Expenses</b>	<b>1,178.34</b>	<b>-</b>	<b>1,178.34</b>
<b>PROGRAM REVENUES:</b>			
Operating Grants:			
Vehicle Registration Fees	-	2,120,510.00	2,120,510.00
<b>CHANGE IN NET ASSETS</b>	<b>(1,178.34)</b>	<b>2,120,510.00</b>	<b>2,119,331.66</b>
Net Assets, January 1, 2013	5,280,575.40	18,596,524.69	23,877,100.09
<b>NET ASSETS, APRIL 30, 2013</b>	<b>\$ 5,279,397.06</b>	<b>\$ 20,717,034.69</b>	<b>\$ 25,996,431.75</b>

See accountant's compilation report.

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY  
STATEMENT OF REVENUES, EXPENDITURES, AND  
CHANGES IN FUND BALANCES  
(MODIFIED ACCRUAL)  
AS OF APRIL 30, 2013**

	Capital Projects				<u>Total Combined</u>
	<u>General Operating Fund</u>	<u>Loop Project Fund</u>	<u>Vehicle Registration Fund</u>	<u>Debt Service Fund</u>	
<b>REVENUES:</b>					
Vehicle Registration Fees	\$ 0.00	\$ 0.00	\$ 2,120,510.00	\$ 0.00	\$ 2,120,510.00
<b>Total Revenues</b>	<u>0.00</u>	<u>0.00</u>	<u>2,120,510.00</u>	<u>0.00</u>	<u>2,120,510.00</u>
<b>EXPENDITURES:</b>					
Administrative	92,463.36	86.69	0.00	0.00	92,550.05
Accounting Fees	5,000.00	0.00	0.00	0.00	5,000.00
Consulting & Engineering	0.00	719,006.28	0.00	0.00	719,006.28
Financial Consulting Fees	10,000.00	0.00	0.00	0.00	10,000.00
Insurance & Bonding	800.00	0.00	0.00	0.00	800.00
Interest Expense	0.00	5,666.68	0.00	117,660.55	123,327.23
Legal & Professional	2,873.50	12,661.46	0.00	0.00	15,534.96
Rental Expense	5,320.08	0.00	0.00	0.00	5,320.08
Wages	600.00	0.00	0.00	0.00	600.00
<b>Total Expenditures</b>	<u>117,056.94</u>	<u>737,421.11</u>	<u>0.00</u>	<u>117,660.55</u>	<u>972,138.60</u>
<b>NET REVENUES</b>	<u>(117,056.94)</u>	<u>(737,421.11)</u>	<u>2,120,510.00</u>	<u>(117,660.55)</u>	<u>1,148,371.40</u>
<b>OTHER FINANCING SOURCES (USES)</b>					
Transfers In (Out)	0.00	500,000.00	(796,694.04)	296,694.04	0.00
<b>Total Other Financing Sources (Uses)</b>	<u>0.00</u>	<u>500,000.00</u>	<u>(796,694.04)</u>	<u>296,694.04</u>	<u>0.00</u>
<b>NET CHANGE IN FUND BALANCE</b>	<u>\$ (117,056.94)</u>	<u>\$ (237,421.11)</u>	<u>\$ 1,323,815.96</u>	<u>\$ 179,033.49</u>	<u>\$ 1,148,371.40</u>

See accountant's compilation report.

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY  
STATEMENT OF REVENUES, EXPENDITURES, AND  
CHANGES IN FUND BALANCES  
FOR THE ONE MONTH ENDED APRIL 30, 2013**

	<u>General Operating Fund</u>	<u>Capital Projects</u>			<u>Total Combined</u>
		<u>Loop Project Fund</u>	<u>Vehicle Registration Fund</u>	<u>Debt Service Fund</u>	
<b>REVENUES:</b>					
Vehicle Registration Fees	\$ 0.00	\$ 0.00	\$ 545,050.00	\$ 0.00	\$ 545,050.00
<b>Total Revenues</b>	0.00	0.00	545,050.00	0.00	545,050.00
<b>EXPENDITURES:</b>					
Administrative	34,222.11	0.00	0.00	0.00	34,222.11
Accounting Fees	1,700.00	0.00	0.00	0.00	1,700.00
Consulting & Engineering	0.00	261,540.06	0.00	0.00	261,540.06
Financial Consulting Fees	10,000.00	0.00	0.00	0.00	10,000.00
Interest Expense	0.00	1,416.67	0.00	34,317.59	35,734.26
Legal & Professional	28.50	3,465.00	0.00	0.00	3,493.50
Rental Expense	1,329.84	0.00	0.00	0.00	1,329.84
Wages	600.00	0.00	0.00	0.00	600.00
<b>Total Expenditures</b>	<u>47,880.45</u>	<u>266,421.73</u>	<u>0.00</u>	<u>34,317.59</u>	<u>348,619.77</u>
<b>NET REVENUES</b>	(47,880.45)	(266,421.73)	545,050.00	(34,317.59)	196,430.23
<b>OTHER FINANCING SOURCES (USES)</b>					
<b>Total Other Financing</b>					
<b>NET CHANGE IN FUND BALANCE</b>	<u>(47,880.45)</u>	<u>(266,421.73)</u>	<u>545,050.00</u>	<u>(34,317.59)</u>	<u>196,430.23</u>

See accountant's compilation report

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY**  
**General Ledger April 2013**

Date	Reference	T	Description	Beginning Balance	Current Amount	Period End Amount	YTD Balance
<b>11010.000 FNB-General Operating</b>				197,882.34			
04/10/13	1		Cash Disbursements		(600.00)		
04/16/13	1		Cash Disbursements		(47,382.45)		
04/30/13	2.0		To record FNB Secure Token Fee		(24.00)		
				April	(48,006.45)	149,875.89	
					(48,006.45)		149,875.89
<b>11120.000 Due from LRGVDC</b>				(1,027.86)			
					0.00		(1,027.86)
<b>11140.000 Interfund Receivables</b>				102,792.81			
04/30/13	4.7	J	To record interfund accounts for April allocations		48,331.69		
				April	48,331.69	151,124.50	
					48,331.69		151,124.50
<b>11200.000 Equipment</b>				3,394.72			
					0.00		3,394.72
<b>11210.000 Furniture &amp; Fixtures</b>				3,425.84			
					0.00		3,425.84
<b>11220.000 Computer equipment/software</b>				3,185.33			
					0.00		3,185.33
<b>11230.000 Accumulated Depreciation</b>				(1,376.25)			
					0.00		(1,376.25)
<b>12135.000 Interfund Payables</b>				(187.20)			
					0.00		(187.20)
<b>12140.000 Note Payable-Hidalgo Co</b>				(200,000.00)			
					0.00		(200,000.00)
<b>14000.000 Fund Balance</b>				(5,280,575.40)			
					0.00		(5,280,575.40)
<b>16100.000 Dues &amp; Subscriptions</b>				10,640.00			
					0.00		10,640.00
<b>16110.000 Postage &amp; Delivery</b>				246.75			
04/16/13	10486	V	A Fast Delivery		107.75		
04/16/13	10487	V	A Fast Delivery		8.25		
				April	116.00	362.75	
					116.00		362.75

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY**  
**General Ledger April 2013**

Date	Reference	T	Description	Beginning Balance	Current Amount	Period End Amount	YTD Balance
<b>16200.000 MPO Wages &amp; Benefits</b>				38,189.34			
04/16/13	10488	V	City of McAllen		10,288.53		
04/16/13	10489	V	City of McAllen		10,980.42		
04/16/13	10490	V	City of McAllen		9,926.39		
				April	<u>31,195.34</u>	69,384.68	
					<u>31,195.34</u>		69,384.68
<b>16220.000 Insurance &amp; Bonding</b>				800.00			
					<u>0.00</u>		800.00
<b>16600.000 Travel</b>				3,475.87			
04/16/13	10494	V	Josue Reyes		270.35		
04/16/13	10497	V	Pilar Rodriguez		714.96		
				April	<u>985.31</u>	4,461.18	
					<u>985.31</u>		4,461.18
<b>16620.000 Printing &amp; Publications</b>				1,907.54			
04/16/13	10492	V	Copy It, Inc.		188.63		
				April	<u>188.63</u>	2,096.17	
					<u>188.63</u>		2,096.17
<b>17000.000 Wages</b>				0.00			
04/10/13	10485	V	Flor E Koll		600.00		
				April	<u>600.00</u>	600.00	
					<u>600.00</u>		600.00
<b>17030.000 Bank Service Charges</b>				0.00			
04/30/13	2.0		To record FNB Secure Token Fee		24.00		
				April	<u>24.00</u>	24.00	
					<u>24.00</u>		24.00
<b>17050.000 Accounting Fees</b>				3,300.00			
04/16/13	10498	V	Salinas Allen & Schmitt		1,700.00		
				April	<u>1,700.00</u>	5,000.00	
					<u>1,700.00</u>		5,000.00
<b>17100.000 Legal &amp; Professional</b>				2,845.00			
04/16/13	10499	V	Tuggey Fernandez, LLP		28.50		
				April	<u>28.50</u>	2,873.50	
					<u>28.50</u>		2,873.50
<b>17120.000 Financial Consulting Fees</b>				0.00			
04/16/13	10495	V	Long Chilton, LLP		10,000.00		
				April	<u>10,000.00</u>	10,000.00	
					<u>10,000.00</u>		10,000.00

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY**  
**General Ledger April 2013**

<u>Date</u>	<u>Reference T</u>	<u>Description</u>	<u>Beginning Balance</u>	<u>Current Amount</u>	<u>Period End Amount</u>	<u>YTD Balance</u>
<b>17150.000 Rental Expense</b>			3,990.24			
04/16/13	10491 V	City of Pharr		1,000.00		
04/16/13	10500 V	Wells Fargo		329.84		
			April	1,329.84	5,320.08	
				<u>1,329.84</u>		5,320.08
<b>17210.000 Utilities</b>			575.81			
04/16/13	10496 V	Pena Designs		150.00		
04/30/13	2.1	04/01 Bestbuy		10.81		
04/30/13	2.1	04/08 Verizon		30.00		
04/30/13	2.1	04/30 BestBuy		10.81		
			April	201.62	777.43	
				<u>201.62</u>		777.43
<b>17310.000 Miscellaneous</b>			3,781.75			
04/16/13	10493 V	First National Bank		1,688.83		
04/30/13	2.1	04/17 Sugar-Mission		24.00		
			April	1,712.83	5,494.58	
				<u>1,712.83</u>		5,494.58
<b>21020.000 FNB-Loop Project</b>			72,844.49			
04/11/13	36	To record transfer from veh registration acct		500,000.00		
04/16/13	1	Cash Disbursements		(265,005.06)		
			April	234,994.94	307,839.43	
				<u>234,994.94</u>		307,839.43
<b>21150.000 Debt Issuance Cost</b>			112,421.24			
				<u>0.00</u>		112,421.24
<b>21180.000 Loop Project</b>			31,288,752.98			
				<u>0.00</u>		31,288,752.98
<b>22135.000 Interfund Payables</b>			(102,792.81)			
04/30/13	4.7 J	To record interfund accounts for April allocations		(48,331.69)		
			April	(48,331.69)	(151,124.50)	
				<u>(48,331.69)</u>		(151,124.50)
<b>22145.000 Accrued Expenses</b>			0.00			
				<u>0.00</u>		0.00
<b>22146.000 Accrued Interest</b>			(101,239.11)			
04/30/13	4.3 J	To accrue interest on Hidalgo Co. note		(1,416.67)		
			April	(1,416.67)	(102,655.78)	
				<u>(1,416.67)</u>		(102,655.78)

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY**  
**General Ledger April 2013**

Date	Reference	T	Description	Beginning Balance	Current Amount	Period End Amount	YTD Balance
<b>22150.000 Note Payable - FNB</b>				(11,544,627.40)			
04/30/13	4.4	J	To reclassify principal portion of FNB note payment made in April		114,029.43		
				April	114,029.43	(11,430,597.97)	
					<u>114,029.43</u>		(11,430,597.97)
<b>23000.000 Bank Transfers</b>				(500,000.00)			
04/10/13	10087	V	HCRMA		500,000.00		
04/11/13	36		To record transfer from veh registration acct		(500,000.00)		
				April	0.00	(500,000.00)	
					<u>0.00</u>		(500,000.00)
<b>24000.000 Fund Balance</b>				(15,165,931.74)			
					<u>0.00</u>		(15,165,931.74)
<b>26600.000 Travel</b>				86.69			
					<u>0.00</u>		86.69
<b>27100.000 Legal &amp; Professional</b>				9,196.46			
04/16/13	10460	V	Tuggey Fernandez, LLP		3,465.00		
				April	3,465.00	12,661.46	
					<u>3,465.00</u>		12,661.46
<b>27320.000 Interest Expense</b>				4,250.01			
04/30/13	4.3	J	To accrue interest on Hidalgo Co. note		1,416.67		
				April	1,416.67	5,666.68	
					<u>1,416.67</u>		5,666.68
<b>28000.000 Consulting &amp; Engineering</b>				457,466.22			
04/16/13	10455	V	Dannenbaum		114,994.62		
04/16/13	10456	V	DOS LAND SURVEYING		4,687.96		
04/16/13	10457	V	DOS LAND SURVEYING		43,464.54		
04/16/13	10458	V	L&G Consulting Engineers, Inc		50,957.95		
04/16/13	10459	V	S&B Infrastructure, LTD		47,434.99		
				April	261,540.06	719,006.28	
					<u>261,540.06</u>		719,006.28
<b>31030.000 FNB-Vehicle Registration</b>				4,263,905.32			
04/10/13	1		Cash Disbursements		(500,000.00)		
04/15/13	36.1	V	Hidalgo Co. MPO		578,090.00		
04/16/13	1		Cash Disbursements		(148,347.02)		
04/30/13	2.1		To record debits made to Veh Reg Account		(75.62)		
				April	(70,332.64)	4,193,572.68	
					<u>(70,332.64)</u>		4,193,572.68
<b>31130.000 Accounts Receivable - VR Fees</b>				578,090.00			

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY**  
**General Ledger April 2013**

Date	Reference	T	Description	Beginning Balance	Current Amount	Period End Amount	YTD Balance
<b>31130.000 Accounts Receivable - VR Fees (cont.)</b>							
04/30/13	4.1	J	To reverse VR fees accrued in March		(578,090.00)		
04/30/13	4.2	J	To accrue VR fees for April		545,050.00		
				April	(33,040.00)	545,050.00	
					<u>(33,040.00)</u>		545,050.00
<b>31140.000 Interfund Receivables</b>				187.20	<u>0.00</u>		187.20
<b>33000.000 Bank Transfers</b>				796,694.04			
04/16/13	10088	V	HCRMA		148,347.02		
04/22/13	36.2		To record transfer from Veh Registration		(148,347.02)		
				April	<u>0.00</u>	796,694.04	
					<u>0.00</u>		796,694.04
<b>34000.000 Fund Balance</b>				(535,892.02)	<u>0.00</u>		(535,892.02)
<b>35040.000 Vehicle Registration Fees</b>				(1,575,460.00)			
04/15/13	36.1	V	Hidalgo Co. MPO		(578,090.00)		
04/30/13	4.1	J	To reverse VR fees accrued in March		578,090.00		
04/30/13	4.2	J	To accrue VR fees for April		(545,050.00)		
				April	<u>(545,050.00)</u>	(2,120,510.00)	
					<u>(545,050.00)</u>		(2,120,510.00)
<b>37140.000 Office Supplies</b>				40.81	<u>0.00</u>		40.81
<b>37220.000 Telephone</b>				30.00	<u>0.00</u>		30.00
<b>41040.000 FNB- Debt Service Account</b>				152,763.00			
04/16/13	1		Cash Disbursements		(148,347.02)		
04/22/13	36.2		To record transfer from Veh Registration		148,347.02		
				April	<u>0.00</u>	152,763.00	
					<u>0.00</u>		152,763.00
<b>43000.000 Bank Transfers</b>				(296,694.04)	<u>0.00</u>		(296,694.04)
<b>44000.000 Fund Balance</b>				(2,894,700.93)	<u>0.00</u>		(2,894,700.93)
<b>47320.000 Interest Expense</b>				83,342.96			
04/16/13	10052	V	First National Bank		148,347.02		
04/30/13	4.4	J	To reclassify principal portion of FNB note				

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY  
General Ledger April 2013**

<u>Date</u>	<u>Reference T</u>	<u>Description</u>	<u>Beginning Balance</u>	<u>Current Amount</u>	<u>Period End Amount</u>	<u>YTD Balance</u>
47320.000	Interest Expense (cont.)					
		payment made in April		(114,029.43)		
			April	34,317.59	117,660.55	
				<u>34,317.59</u>		117,660.55

Range of Periods Specified:

Total Profit/(Loss) 196,228.61

Number of Transactions 54

The General Ledger is in balance 0.00

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY**  
**April 2013 Trial Balance (Cash Basis)**

General Operating Fund			4 Months Ended
Account	T	Account Description	Apr 30, 2013
11010.000	A	FNB-General Operating	149,875.89
11020.000	A	FNB-Loop Project	0.00
11030.000	A	FNB-Vehicle Registration	0.00
11040.000	A	FNB- Debt Service Account	0.00
11100.000	A	Returned Checks	0.00
11120.000	A	Due from LRGVDC	(1,027.86)
11130.000	A	Accounts Receivable - VR Fees	0.00
11140.000	A	Interfund Receivables	151,124.50
11180.000	A	Loop Project	0.00
11190.000	A	Land	0.00
11200.000	A	Equipment	3,394.72
11210.000	A	Furniture & Fixtures	3,425.84
11220.000	A	Computer equipment/software	3,185.33
11230.000	A	Accumulated Depreciation	(1,376.25)
12120.000	L	FICA & WH Payable	0.00
12130.000	L	FUTA Tax Payable	0.00
12135.000	L	Interfund Payables	(187.20)
12140.000	L	Note Payable-Hidalgo Co	(200,000.00)
12145.000	L	Accrued Expenses	0.00
12146.000	L	Accrued Interest	0.00
12150.000	L	Note Payable - FNB	0.00
13000.000	R	Bank Transfers	0.00
14000.000	L	Fund Balance	(5,280,575.40)
15000.000	R	Local Contributions-Special	0.00
15010.000	R	Local Contributions	0.00
15020.000	R	Local Contribution Loan	0.00
15030.000	R	FNB Line of Credit	0.00
15040.000	R	Vehicle Registration Fees	0.00
15050.000	R	Revenue 6	0.00
15060.000	R	Interest Income	0.00
16070.000	E	Administrative	0.00
16080.000	E	Construction	0.00
16100.000	E	Dues & Subscriptions	10,640.00
16110.000	E	Postage & Delivery	362.75
16120.000	E	MPO Indirect Costs	0.00
16200.000	E	MPO Wages & Benefits	69,384.68
16210.000	E	Insurance-Health	0.00
16220.000	E	Insurance & Bonding	800.00
16300.000	E	Meals & Entertainment	0.00
16400.000	E	Advertising	0.00
16500.000	E	Training	0.00
16600.000	E	Travel	4,461.18
16610.000	E	Travel- Out of Region/State	0.00
16620.000	E	Printing & Publications	2,096.17
17000.000	E	Wages	600.00
17030.000	E	Bank Service Charges	24.00
17050.000	E	Accounting Fees	5,000.00
17100.000	E	Legal & Professional	2,873.50
17110.000	E	Loop Project	0.00
17120.000	E	Financial Consulting Fees	10,000.00
17130.000	E	Loan Advance Fees	0.00
17140.000	E	Office Supplies	0.00
17150.000	E	Rental Expense	5,320.08
17170.000	E	Repairs & Maintenance	0.00
17180.000	E	Permits & License	0.00
17190.000	E	Depreciation	0.00
17210.000	E	Utilities	777.43
17220.000	E	Telephone	0.00
17250.000	E	Payroll Taxes	0.00
17260.000	E	Property Taxes	0.00
17270.000	E	Penalty Fees	0.00
17310.000	E	Miscellaneous	5,494.58
17320.000	E	Interest Expense	0.00
17360.000	E	Suspense	0.00
18000.000	E	Consulting & Engineering	0.00
19990.000	E	Undistributed	0.00
		<b>Total</b>	<b>(5,054,326.06)</b>

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY**  
**April 2013 Trial Balance (Cash Basis)**

General Operating Fund			4 Months Ended
Account	T	Account Description	Apr 30, 2013
		Period Profit/(Loss)	<u>(117,834.37)</u>

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY**  
**April 2013 Trial Balance (Cash Basis)**

Loop Project Fund		Account Description	4 Months Ended
Account	T		Apr 30, 2013
21010.000	A	FNB-General Operating	0.00
21020.000	A	FNB-Loop Project	307,839.43
21030.000	A	FNB-Vehicle Registration	0.00
21040.000	A	FNB- Debt Service Account	0.00
21100.000	A	Returned Checks	0.00
21120.000	A	Due from LRGVDC	0.00
21130.000	A	Accounts Receivable - VR Fees	0.00
21140.000	A	Interfund Receivables	0.00
21150.000	A	Debt Issuance Cost	112,421.24
21180.000	A	Loop Project	31,288,752.98
21190.000	A	Land	0.00
21200.000	A	Equipment	0.00
21210.000	A	Furniture & Fixtures	0.00
21220.000	A	Computer equipment/software	0.00
21230.000	A	Accumulated Depreciation	0.00
22120.000	L	FICA & WH Payable	0.00
22130.000	L	FUTA Tax Payable	0.00
22135.000	L	Interfund Payables	(151,124.50)
22140.000	L	Note Payable-Hidalgo Co	0.00
22145.000	L	Accrued Expenses	0.00
22146.000	L	Accrued Interest	(102,655.78)
22150.000	L	Note Payable - FNB	(11,430,597.97)
23000.000	R	Bank Transfers	(500,000.00)
24000.000	L	Fund Balance	(15,165,931.74)
25000.000	R	Local Contributions-Special	0.00
25010.000	R	Local Contributions	0.00
25020.000	R	Local Contribution Loan	0.00
25030.000	R	FNB Line of Credit	0.00
25040.000	R	Vehicle Registration Fees	0.00
25050.000	R	Revenue 6	0.00
25060.000	R	Interest Income	0.00
26070.000	E	Administrative	0.00
26080.000	E	Construction	0.00
26100.000	E	Dues & Subscriptions	0.00
26110.000	E	Postage & Delivery	0.00
26120.000	E	MPO Indirect Costs	0.00
26200.000	E	MPO Wages & Benefits	0.00
26210.000	E	Insurance-Health	0.00
26220.000	E	Insurance & Bonding	0.00
26300.000	E	Meals & Entertainment	0.00
26400.000	E	Advertising	0.00
26500.000	E	Training	0.00
26600.000	E	Travel	86.69
26610.000	E	Travel- Out of Region/State	0.00
26620.000	E	Printing & Publications	0.00
27000.000	E	Wages	0.00
27030.000	E	Bank Service Charges	0.00
27050.000	E	Accounting Fees	0.00
27100.000	E	Legal & Professional	12,661.46
27110.000	E	Loop Project	0.00
27120.000	E	Financial Consulting Fees	0.00
27130.000	E	Loan Advance Fees	0.00
27140.000	E	Office Supplies	0.00
27150.000	E	Rental Expense	0.00
27170.000	E	Repairs & Maintenance	0.00
27180.000	E	Permits & License	0.00
27190.000	E	Depreciation	0.00
27195.000	E	Amortization Expense	0.00
27210.000	E	Utilities	0.00
27220.000	E	Telephone	0.00
27250.000	E	Payroll Taxes	0.00
27260.000	E	Property Taxes	0.00
27270.000	E	Penalty Fees	0.00
27310.000	E	Miscellaneous	0.00
27320.000	E	Interest Expense	5,666.68
27360.000	E	Suspense	0.00
28000.000	E	Consulting & Engineering	719,006.28
29990.000	E	Undistributed	0.00
		<b>Total</b>	<b>5,096,124.77</b>

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY**  
**April 2013 Trial Balance (Cash Basis)**

<u>Loop Project Fund</u>			<u>4 Months Ended</u>
<u>Account</u>	<u>T</u>	<u>Account Description</u>	<u>Apr 30, 2013</u>
		Period Profit/(Loss)	<u>(237,421.11)</u>

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY**  
**April 2013 Trial Balance (Cash Basis)**

Vehicle Registration Fund			4 Months Ended
Account	T	Account Description	Apr 30, 2013
31010.000	A	FNB-General Operating	0.00
31020.000	A	FNB-Loop Project	0.00
31030.000	A	FNB-Vehicle Registration	4,193,572.68
31040.000	A	FNB- Debt Service Account	0.00
31100.000	A	Returned Checks	0.00
31120.000	A	Due from LRGVDC	0.00
31130.000	A	Accounts Receivable - VR Fees	545,050.00
31140.000	A	Interfund Receivables	187.20
31180.000	A	Loop Project	0.00
31190.000	A	Land	0.00
31200.000	A	Equipment	0.00
31210.000	A	Furniture & Fixtures	0.00
31220.000	A	Computer equipment/software	0.00
31230.000	A	Accumulated Depreciation	0.00
32120.000	L	FICA & WH Payable	0.00
32130.000	L	FUTA Tax Payable	0.00
32135.000	L	Interfund Payables	0.00
32140.000	L	Note Payable-Hidalgo Co	0.00
32145.000	L	Accrued Expenses	0.00
32146.000	L	Accrued Interest	0.00
32150.000	L	Note Payable - FNB	0.00
33000.000	R	Bank Transfers	796,694.04
34000.000	L	Fund Balance	(535,892.02)
35000.000	R	Local Contributions-Special	0.00
35010.000	R	Local Contributions	0.00
35020.000	R	Local Contribution Loan	0.00
35030.000	R	FNB Line of Credit	0.00
35040.000	R	Vehicle Registration Fees	(2,120,510.00)
35050.000	R	Revenue 6	0.00
35060.000	R	Interest Income	0.00
36070.000	E	Administrative	0.00
36080.000	E	Construction	0.00
36100.000	E	Dues & Subscriptions	0.00
36110.000	E	Postage & Delivery	0.00
36120.000	E	MPO Indirect Costs	0.00
36200.000	E	MPO Wages & Benefits	0.00
36210.000	E	Insurance-Health	0.00
36220.000	E	Insurance & Bonding	0.00
36300.000	E	Meals & Entertainment	0.00
36400.000	E	Advertising	0.00
36500.000	E	Training	0.00
36600.000	E	Travel	0.00
36610.000	E	Travel- Out of Region/State	0.00
36620.000	E	Printing & Publications	0.00
37000.000	E	Wages	0.00
37030.000	E	Bank Service Charges	0.00
37050.000	E	Accounting Fees	0.00
37100.000	E	Legal & Professional	0.00
37110.000	E	Loop Project	0.00
37120.000	E	Financial Consulting Fees	0.00
37130.000	E	Loan Advance Fees	0.00
37140.000	E	Office Supplies	40.81
37150.000	E	Rental Expense	0.00
37170.000	E	Repairs & Maintenance	0.00
37180.000	E	Permits & License	0.00
37190.000	E	Depreciation	0.00
37210.000	E	Utilities	0.00
37220.000	E	Telephone	30.00
37250.000	E	Payroll Taxes	0.00
37260.000	E	Property Taxes	0.00
37270.000	E	Penalty Fees	0.00
37310.000	E	Miscellaneous	0.00
37320.000	E	Interest Expense	0.00
37360.000	E	Suspense	0.00
38000.000	E	Consulting & Engineering	0.00
39990.000	E	Undistributed	0.00
		<b>Total</b>	<b>2,879,172.71</b>

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY**  
**April 2013 Trial Balance (Cash Basis)**

Vehicle Registration Fund			4 Months Ended
Account	T	Account Description	Apr 30, 2013
		Period Profit/(Loss)	<u>1,323,745.15</u>

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY**  
**April 2013 Trial Balance (Cash Basis)**

Debt Service Fund			4 Months Ended
Account	T	Account Description	Apr 30, 2013
41010.000	A	FNB-General Operating	0.00
41020.000	A	FNB-Loop Project	0.00
41030.000	A	FNB-Vehicle Registration	0.00
41040.000	A	FNB- Debt Service Account	152,763.00
41100.000	A	Returned Checks	0.00
41120.000	A	Due from LRGVDC	0.00
41130.000	A	Accounts Receivable - VR Fees	0.00
41140.000	A	Interfund Receivables	0.00
41180.000	A	Loop Project	0.00
41190.000	A	Land	0.00
41200.000	A	Equipment	0.00
41210.000	A	Furniture & Fixtures	0.00
41220.000	A	Computer equipment/software	0.00
41230.000	A	Accumulated Depreciation	0.00
42120.000	L	FICA & WH Payable	0.00
42130.000	L	FUTA Tax Payable	0.00
42135.000	L	Interfund Payables	0.00
42140.000	L	Note Payable-Hidalgo Co	0.00
42145.000	L	Accrued Expenses	0.00
42146.000	L	Accrued Interest	0.00
42150.000	L	Note Payable - FNB	0.00
43000.000	R	Bank Transfers	(296,694.04)
44000.000	L	Fund Balance	(2,894,700.93)
45000.000	R	Local Contributions-Special	0.00
45010.000	R	Local Contributions	0.00
45020.000	R	Local Contribution Loan	0.00
45030.000	R	FNB Line of Credit	0.00
45040.000	R	Vehicle Registration Fees	0.00
45050.000	R	Revenue 6	0.00
45060.000	R	Interest Income	0.00
46070.000	E	Administrative	0.00
46080.000	E	Construction	0.00
46100.000	E	Dues & Subscriptions	0.00
46110.000	E	Postage & Delivery	0.00
46120.000	E	MPO Indirect Costs	0.00
46200.000	E	MPO Wages & Benefits	0.00
46210.000	E	Insurance-Health	0.00
46220.000	E	Insurance & Bonding	0.00
46300.000	E	Meals & Entertainment	0.00
46400.000	E	Advertising	0.00
46500.000	E	Training	0.00
46600.000	E	Travel	0.00
46610.000	E	Travel- Out of Region/State	0.00
46620.000	E	Printing & Publications	0.00
47000.000	E	Wages	0.00
47030.000	E	Bank Service Charges	0.00
47050.000	E	Accounting Fees	0.00
47100.000	E	Legal & Professional	0.00
47110.000	E	Loop Project	0.00
47120.000	E	Financial Consulting Fees	0.00
47130.000	E	Loan Advance Fees	0.00
47140.000	E	Office Supplies	0.00
47150.000	E	Rental Expense	0.00
47170.000	E	Repairs & Maintenance	0.00
47180.000	E	Permits & License	0.00
47190.000	E	Depreciation	0.00
47210.000	E	Utilities	0.00
47220.000	E	Telephone	0.00
47250.000	E	Payroll Taxes	0.00
47260.000	E	Property Taxes	0.00
47270.000	E	Penalty Fees	0.00
47310.000	E	Miscellaneous	0.00
47320.000	E	Interest Expense	117,660.55
47360.000	E	Suspense	0.00
48000.000	E	Consulting & Engineering	0.00
49990.000	E	Undistributed	0.00
		<b>Total</b>	<b>(2,920,971.42)</b>

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY**  
**April 2013 Trial Balance (Cash Basis)**

<u>Debt Service Fund</u>			<u>4 Months Ended</u>
<u>Account</u>	<u>T</u>	<u>Account Description</u>	<u>Apr 30, 2013</u>
		<u>Period Profit/(Loss)</u>	<u>179,033.49</u>

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY  
VENDOR ACTIVITY REPORT APRIL 2013**

<u>Date</u>	<u>Reference</u>	<u>Account</u>	<u>Amount</u>	<u>Reference Total</u>	<u>Period Total</u>
		<b>A Fast Delivery</b>			
04/16/13	10486	16110.000	107.75	107.75	
04/16/13	10487	16110.000	8.25	8.25	116.00
				Transaction Total	<u>116.00</u>
		<b>City of McAllen</b>			
04/16/13	10488	16200.000	10,288.53	10,288.53	
04/16/13	10489	16200.000	10,980.42	10,980.42	
04/16/13	10490	16200.000	9,926.39	9,926.39	31,195.34
				Transaction Total	<u>31,195.34</u>
		<b>City of Pharr</b>			
04/16/13	10491	17150.000	1,000.00	1,000.00	1,000.00
				Transaction Total	<u>1,000.00</u>
		<b>Copy It, Inc.</b>			
04/16/13	10492	16620.000	188.63	188.63	188.63
				Transaction Total	<u>188.63</u>
		<b>Dannenbaum</b>			
04/16/13	10455	28000.000	114,994.62	114,994.62	114,994.62
				Transaction Total	<u>114,994.62</u>
		<b>DOS LAND SURVEYING</b>			
04/16/13	10456	28000.000	4,687.96	4,687.96	
04/16/13	10457	28000.000	43,464.54	43,464.54	48,152.50
				Transaction Total	<u>48,152.50</u>
		<b>First National Bank</b>			
04/16/13	10052	47320.000	148,347.02	148,347.02	
04/16/13	10493	17310.000	1,688.83	1,688.83	150,035.85
				Transaction Total	<u>150,035.85</u>
		<b>Flor E Koll</b>			
04/10/13	10485	17000.000	600.00	600.00	600.00
				Transaction Total	<u>600.00</u>

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY  
VENDOR ACTIVITY REPORT APRIL 2013**

<u>Date</u>	<u>Reference</u>	<u>Account</u>	<u>Amount</u>	<u>Reference Total</u>	<u>Period Total</u>
		<b>HCRMA</b>			
04/10/13	10087	23000.000	500,000.00	500,000.00	
04/16/13	10088	33000.000	148,347.02	148,347.02	648,347.02
				Transaction Total	<u>648,347.02</u>
	<b>Hidalgo</b>	<b>Hidalgo Co. MPO</b>			
04/15/13	36.1	35040.000	-578,090.00		
04/15/13	36.1	31030.000	578,090.00	0.00	0.00
				Transaction Total	<u>0.00</u>
		<b>Josue Reyes</b>			
04/16/13	10494	16600.000	270.35	270.35	270.35
				Transaction Total	<u>270.35</u>
		<b>L&amp;G Consulting Engineers, Inc</b>			
04/16/13	10458	28000.000	50,957.95	50,957.95	50,957.95
				Transaction Total	<u>50,957.95</u>
		<b>Long Chilton, LLP</b>			
04/16/13	10495	17120.000	10,000.00	10,000.00	10,000.00
				Transaction Total	<u>10,000.00</u>
		<b>Pena Designs</b>			
04/16/13	10496	17210.000	150.00	150.00	150.00
				Transaction Total	<u>150.00</u>
		<b>Pilar Rodriguez</b>			
04/16/13	10497	16600.000	714.96	714.96	714.96
				Transaction Total	<u>714.96</u>
		<b>S&amp;B Infrastructure, LTD</b>			
04/16/13	10459	28000.000	47,434.99	47,434.99	47,434.99
				Transaction Total	<u>47,434.99</u>

**HIDALGO CO. REGIONAL MOBILITY AUTHORITY  
VENDOR ACTIVITY REPORT APRIL 2013**

<u>Date</u>	<u>Reference</u>	<u>Account</u>	<u>Amount</u>	<u>Reference Total</u>	<u>Period Total</u>
04/16/13	10498	<b>Salinas Allen &amp; Schmitt</b> 17050.000	1,700.00	1,700.00	1,700.00
				Transaction Total	<u>1,700.00</u>
04/16/13	10460	<b>Tuggey Fernandez, LLP</b> 27100.000	3,465.00	3,465.00	
04/16/13	10499	17100.000	28.50	28.50	3,493.50
				Transaction Total	<u>3,493.50</u>
04/16/13	10500	<b>Wells Fargo</b> 17150.000	329.84	329.84	329.84
				Transaction Total	<u>329.84</u>

**HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY**

**AGENDA RECOMMENDATION FORM**

BOARD OF DIRECTORS	<u>  X  </u>	AGENDA ITEM	<u>  3A  </u>
PLANNING COMMITTEE	<u>          </u>	DATE SUBMITTED	<u>  6/10/13  </u>
FINANCE COMMITTEE	<u>          </u>	MEETING DATE	<u>  6/19/13  </u>
TECHNICAL COMMITTEE	<u>          </u>		

1. Agenda Item: **RESOLUTION 2013-20 – APPROVAL OF A BUDGET AMENDMENT IN THE AMOUNT OF \$1,184,939 TO FUND A VALUE ENGINEERING STUDY FOR STATE HIGHWAY 365, SCHEMATIC DESIGN FOR US 281/MILITARY HIGHWAY OVERPASS AND A LOW LEVEL AERIAL FLIGHT AND TOPOGRAPHIC SURVEY FOR THE INTERNATIONAL BORDER TRADE CORRIDOR.**
  
2. Nature of Request: (Brief Overview) Attachments:   X   Yes    No  
  
Consideration and approval of a Budget Amendment in the amount of \$1,184,939 to fund a Value Engineering Study for State Highway 365, Schematic Design for US 281/Military Highway Overpass and a low level aerial flight and topographic survey for the International Border Trade Corridor.
  
3. Policy Implication: Board Policy, Local Government Code, Texas Government Code, Texas Transportation Code, TxDOT Policy
  
4. Budgeted:    Yes    No   X   N/A  
  
Funding Source:    Fund Balance
  
5. Staff Recommendation: **Motion to approve Resolution 2013-20 – Approval of a Budget Amendment in the amount of \$1,184,939 to fund a Value Engineering Study for State Highway 365, Schematic Design for US 281/Military Highway Overpass and a low level aerial flight and topographic survey for the International Border Trade Corridor.**
  
6. Program Manager Recommendation:    Approved    Disapproved   X   None
  
7. Planning Committee Recommendation:    Approved    Disapproved   X   None
  
8. Board Attorney Recommendation:    Approved    Disapproved   X   None
  
9. Executive Director's Recommendation:   X   Approved    Disapproved    None



**HCRMA**  
HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY

## Memorandum

To: Dennis Burleson, Chairman

From: Pilar Rodriguez, PE, Executive Director

Date: June 10, 2013

Re: **Approval of a Budget Amendment in the amount of \$1,184,939 to Fund a Value Engineering Study for State Highway 365, Schematic Design for US 281/Military Highway Overpass and a Low Level Aerial Flight and Topographic Survey for the International Border Trade Corridor**

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On December 18, 2012, the HCRMA Board of Directors adopted the Fiscal Year 2013 Operating and Capital Budget in the amount of \$5,774,415. The adopted budget is divided into three sections; revenues, expenditures and details. On April 17, 2013 and May 15, 2013, the Board of Directors amended the budget and increased it in the amount of \$40,000 and \$81,309 respectively for a revised Fiscal Year 2013 Budget of \$5,895,724.

In coordination with requirements from the Texas Department of Transportation to perform a Value Engineering Study for State Highway 365, a budget amendment in the amount of \$149,121 is necessary to fund the work approved by the Board of Directors on May 15, 2013.

Additionally, the Board of Directors approved the Schematic Design of US 281/Military Highway Overpass and a low level aerial flight and topographic survey for the International Border Trade Corridor on April 17, 2013 and May 15, 2013 respectively. A budget amendment in the amount of \$1,035,818 is also necessary.

The aggregate amount for the proposed budget amendment is \$1,184,939. Attached is a draft budget amendment, which details the line item to be added to accommodate the proposed increase.

The proposed amendment increases the Fiscal Year Budget from \$5,895,724 to \$7,080,633.

This budget will be appropriated from the Vehicle Registration Fee Fund Balance.

**Based on review by this office, adoption of the proposed budget amendment for Fiscal Year 2013 is recommended in the amount of \$1,184,939 for a revised budget of \$7,080,633.**

If you should have any questions or require additional information, please advise.

HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY  
BOARD RESOLUTION NO. 2013-20

AMENDMENT OF FISCAL YEAR 2013 OPERATING AND CAPITAL BUDGET IN THE  
AMOUNT OF \$1,184,939 TO FUND A VALUE ENGINEERING STUDY FOR STATE  
HIGHWAY 365 PROJECT, SCHEMATIC DESIGN FOR US 281/MILITARY HIGHWAY  
OVERPASS PROJECT AND A LOW LEVEL AERIAL FLIGHT AND TOPOGRAPHIC  
SURVEY FOR THE INTERNATIONAL BORDER TRADE CORRIDOR PROJECT

THIS RESOLUTION is adopted this 19<sup>TH</sup> day of June, 2013 by the Board of Director of the Hidalgo County Regional Mobility Authority.

WHEREAS, the Hidalgo County Regional Mobility Authority (the "Authority"), acting through its Board of Directors (the "Board"); is a regional mobility authority created pursuant to Chapter 370, Texas Transportation Code, as amended (the "Act"); and

WHEREAS, the Authority was created by Order of Hidalgo County (the "County") dated October 26, 2004; Petition of the County dated April 21, 2005; and a Minute Order of the Texas Transportation Commission (the "Commission") dated November 17, 2005, pursuant to provisions under the Act the Authority; and

WHEREAS, the Authority is required to report to the Texas Department of Transportation the annual operating and capital budget adopted and any amendments pursuant to the Texas Administrative Code, Title 43, Part 1, Chapter 26, Subchapter G (Regional Mobility Authority Reports and Audits), as amended; and

WHEREAS, the Authority's fiscal year commences on January 1, 2013 and ends on December 31, 2013; and

WHEREAS, the Authority adopted the Fiscal Year 2013 Operating and Capital Budget on December 18, 2012 in the amount of \$5,774,415; and

WHEREAS, the Authority amended the Fiscal Year 2013 Operating and Capital Budget on April 17, 2013 in the amount of \$40,000 for a revised budget of \$5,854,415; and

WHEREAS, the Authority amended the Fiscal Year 2013 Operating and Capital Budget on May 15, 2013 in the amount of \$81,309 to fund a sketch level Traffic & Revenue Study for overweight trucks at the Pharr International Bridge and State Highway 365 Project; and

WHEREAS, the Board has determined it is in the best interest of the Authority to increase the Fiscal Year 2013 Budget in the amount of \$1,184,939 to fund a Value Engineering Study for State Highway 365 Project, Schematic Design for US 281/Military Highway Overpass Project and a Low Level Aerial Flight and Topographic Survey for the International Border Trade Corridor Project; and

WHEREAS, the Authority's Fiscal Year 2013 Operating and Capital Budget is amended in the amount of \$1,184,939 for an increase to and revised budget of \$7,080,633;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTOR OF THE HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY THAT:

Section 1. The recital clauses are incorporated in the text of this Resolution as if fully restated.

Section 2. The Board amends the Fiscal Year 2013 Operating and Capital Budget in the amount of \$1,184,939 for an increase to and revised budget of \$7,080,633, hereto attached as Exhibit A.

Section 3. The Board of Directors authorize the Executive Director to manage and administer the amended Fiscal Year 2013 Operating and Capital Budget.

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Passed and Approved as to be effective immediately this 19<sup>th</sup> day of June 2013, at a regular meeting of the Board of Directors of the Hidalgo County Regional Mobility Authority at which a quorum was present and which was held in accordance with the provisions of Chapter 551, Texas Government Code.

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Dennis Burleson, Chairman

Attest:

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Ricardo Perez, Secretary/Treasurer

EXHIBIT A

HIDALGO COUNTY REGIONAL MOBILITY AUTHORITY  
AMENDED FISCAL YEAR 2013 OPERATING AND CAPITAL BUDGET

