

**HIDALGO COUNTY**  
**Professional Engineering Services**  
**Contract # C-08-031-02-12**  
**Work Authorization Form**

**WORK AUTHORIZATION NO. 2**

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between HIDALGO COUNTY, action herein by and through the Commissioner's Court, hereinafter called the "Owner," and, L & G Consulting Engineers, Inc. d/b/a L & G Engineering, professional engineers of Mercedes, Texas, hereinafter called "Engineer".

**PART 1. SCOPE OF WORK**

The purpose of this Work Authorization is for the Engineer to provide Engineering Services required for the preparation of the Right-of-Way Map and Coordinate the Management for the Compensable Utility Adjustments for the construction of La Homa Road from SH 495 (Mile 1) to FM 1924 (Mile 3).

The scope of services to be provided by the Owner is identified in *EXHIBIT "A" - Scope of Services to be Provided by the Owner* attached hereto.

The scope of services to be provided by the Engineer is identified in *EXHIBIT "B" - Scope of Services to be Provided by the Engineer* attached hereto.

**PART 2. ESTIMATED COST**

The estimated cost for services under this Work Authorization is \$454,244.56. This amount is based upon the costs outlined in the Estimated Cost Proposal attached hereto as *EXHIBIT "D"*.

**PART 3. PAYMENT**

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article/Part/Section\_\_\_\_\_ of the Agreement.

**PART 4. FUNDING**

This Work Authorization No. 2 shall be funded through funding source:

Account No. \_\_\_\_\_

Requisition Number \_\_\_\_\_ (MUST BE INCLUDED AFTER CC APPROVAL)

**PART 5. PERIOD OF SERVICE**

This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate upon completion of scopes of the work authorization as identified in *EXHIBIT "C" - Work Schedule*.

**PART 6. RESPONSIBILITIES AND OBLIGATIONS**

This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

**PART 7. ACKNOWLEDGEMENT AND CONFIRMATION**

Acknowledgement and confirmation by Hidalgo County Precint #3, Commissioner Joe Flores as to content and detail of this Work Authorization No. 2.

HIDALGO COUNTY

BY: 

**PART 8. ACCEPTANCE AND APPROVAL**

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on \_\_\_\_\_ as indicated below and effective as of \_\_\_\_ day of \_\_\_\_\_, 2009.

**THE ENGINEER:**

**THE OWNER:**

**HIDALGO COUNTY**

  
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By: Jacinto Garza, P.E.  
President

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By: Rene Ramirez, County Judge

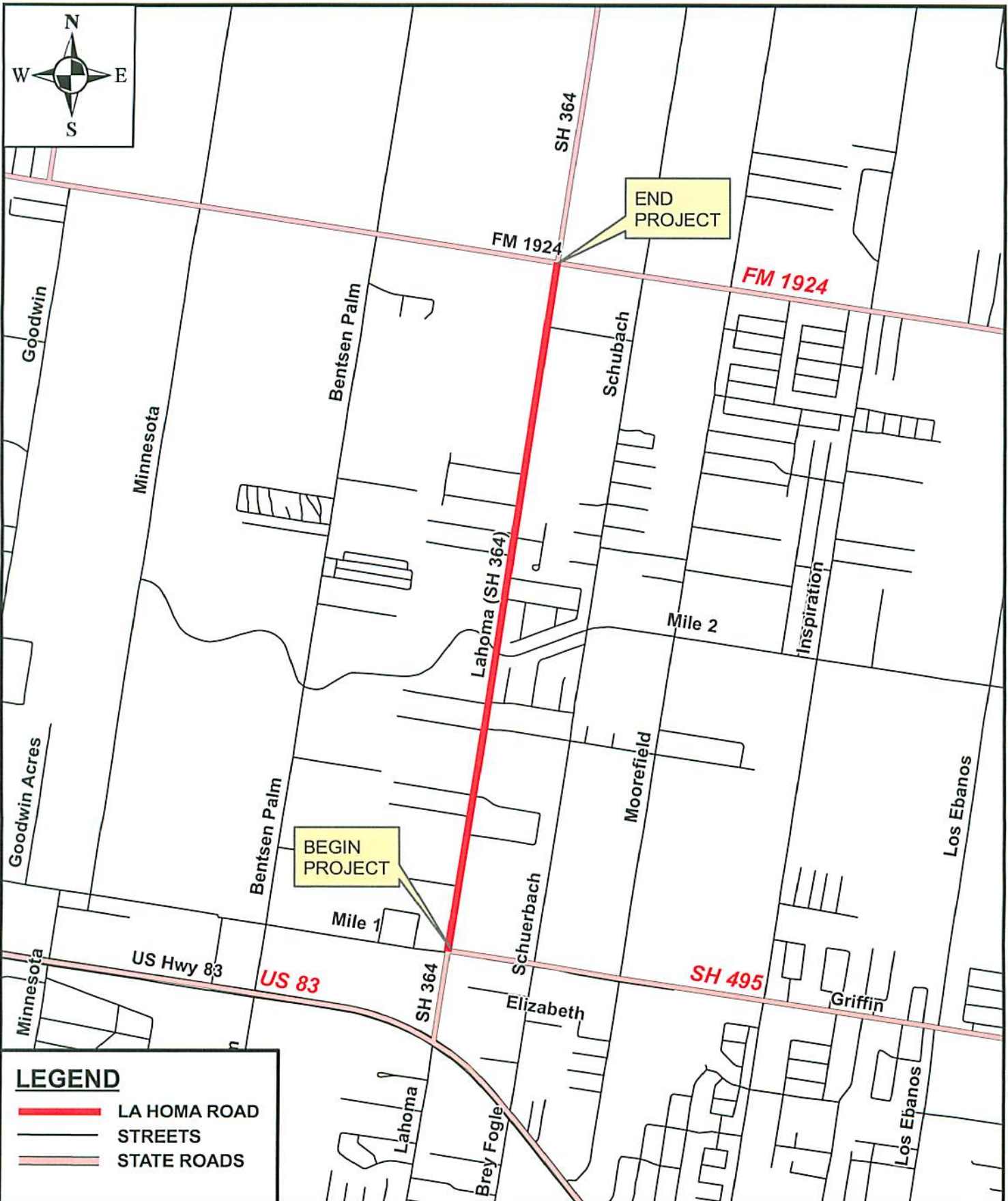
**ATTEST:**

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By: Arturo Guajardo, Jr., County Clerk

**LIST OF ATTACHMENTS**

Location Map

- EXHIBIT "A" - Service to be Provided by the Owner
- EXHIBIT "B" - Services to be Provided by the Engineer
- EXHIBIT "C" - Work Schedule
- EXHIBIT "D" - Cost Proposal



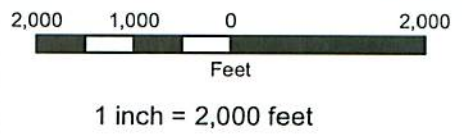
**LEGEND**

- LA HOMA ROAD
- STREETS
- STATE ROADS

**LA HOMA RD  
(SH 364)**



**L & G Engineering**  
Transportation Consultants



**EXHIBIT "A"**

**Services to be provided by the Hidalgo County Precinct #3**

1. Hidalgo County Precinct #3 will issue work authorization to initiate all required services and designate the authorized representative of the coordination of each work authorization.
2. The Hidalgo County Precinct #3 will provide the Engineer with on-going guidance, timely reviews, and decisions necessary to complete services required by the work authorization in order to permit the Engineer to maintain an agreed upon project schedule.
3. Hidalgo County Precinct #3 will process all acceptable requests for payment in a timely manner.
4. Hidalgo County Precinct #3 will coordinate with its Right-of-Way (ROW) Department for the acquisition of the needed ROW and any relocations as identified on the delivered ROW map.
5. Hidalgo County Precinct #3 will be responsible for the costs associated with the compensable utilities and all ROW costs.

**EXHIBIT "B"**  
**Services to be provided by the Engineer**

**PROJECT LIMITS:**

**La Homa Road: From SH 495 (Mile 1) to FM 1924 (Mile 3)**

**GENERAL SCOPE OF WORK:**

The work to be performed by the Engineer under this Work Authorization No. 2 shall consist of providing Engineering Services required for the preparation of ROW Mapping and Surveying for LA HOMA from Mile 1 to Mile 3.

The Engineer will furnish all equipment, materials, supplies, and incidentals as needed to perform the services required by this Work Authorization, except as otherwise specified in Exhibit A, "Services to be Provided by the State".

***GENERAL SCOPE OF WORK:***

The Scope of Work for this Work Authorization will be identified as follows:

- ***FC130 ~ Existing Right-of-Way Determination***
- ***FC164 ~ Contract Management***
- ***FC 610 ~ Utility Adjustment Coordination***

**FC 130 ~ PRELIMINARY ROW DETERMINATION**

(SERVICES TO BE PROVIDED BY JAVIER HINOJOSA ENGINEERING)

Services

Provided By:

Surveyor Engineer

**NOTE:** No work involving right-of-way (ROW) data is to be performed until the state has given the engineer written approval of the final location of the proposed ROW lines.

**YES**

1. Ownership Data in a .dgn file
  - a. Ownership Information shall be determined (Preliminary Title Data) for a distance of 3/4 miles before and after each existing or proposed overpass.
  - b. Compensable utility ownership rights on TxDOT ROW shall be researched and provided.
  - c. For each drainage outfall property preliminary ROW identification will be shown.
  - d. For each irrigation structure pipe.
  - e. Mailing list of owners on both side of the expressway for the project limits.

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- YES            2. Parcel plats & Right-of-Way Map
- a. A ROW map, parcel plats and field notes shall be prepared and furnished.
  - b. ROW map and field notes shall be revised as required due to changes in Highway Design, Ownership Changes or Revised Parcel Numbering. All plats and field notes must be signed and sealed by a Registered Professional Land Surveyor (RPLS).
  - c. ROW map must depict all improvements affecting ROW.
- YES            3. Utility Adjustments
- a. Highway Design Data shall be furnished by the Engineer to the County and TxDOT for joint coordination with Utility Companies of the needed Utility Adjustments.
- YES            4. Field Notes
- a. Field notes and plats, signed and sealed by a Registered Professional Land Surveyor, for all parcels on the ROW Map (metric and english units)
  - b. Control of Access Descriptions for all parcels on Designated Controlled Access Highways.
  - c. Computation Sheets for Survey Closure and Area for Each Parcel.
  - d. Ground surveys and preparation of parcel maps, legal descriptions, and right of way maps.
- YES            5. Survey and Stake Right-of-Way
- YES            6. Records as Required by the County and TxDOT
- a. Records used to establish ownership
- YES            7. General Guidelines for Preparation of Right-of-Way Maps
- a. All procedures involving ROW maps, surveys and field notes shall be in conformance with the State's Right-of-Way, Book I and Book II, except as provided herein and in accordance with the Texas Board of Professional Land Surveying Practices Act.
  - b. The **Engineer** shall be responsible for completing the title sheet as required and formatted by TxDOT and as discussed in Book II of the Right of Way Manual.
  - c. Preliminary and completed work shall be submitted as requested by the district.
  - d. The **Engineer** shall maintain a direct line of communication and coordinate very closely with the district's design staff, through the district engineer, throughout the project.
  - e. (1) Minimum mathematical calculations relative to field note data are: (a) area of taking, if expressed in metric, will be carried to three decimal places or, if expressed in square feet, will be rounded to the square foot, (b) distances will be given to the nearest metric units and hundredth of a foot and (c) bearings will be carried to the nearest

- second. Data contained in the field notes and shown on the map shall be identical. More precise calculations may be requested by TxDOT.
- (2) Calls within the body of the field notes shall be written to identify property lines and the existing and proposed ROW lines.
- f. Project base line is to be drawn and stationed on the ROW map.
  - g. Minimum size lettering is to be 4 millimeters (5/32 inch) height for hand lettering and 140 for lettering by computer-aided design and drafting (CADD) on all ROW maps, unless otherwise authorized in writing by TxDOT.
  - h. As soon as property lines and parent tracts can be determined, the engineer shall submit a preliminary map for review of parcel numbers and guidance early in the development process.
  - i. Zip-a-tone or similar products shall not be used on map sheets.
  - j. All field notes and plats shall be signed, dated and sealed by a Registered Professional Land Surveyor or Licensed State Land Surveyor.
  - k. The ROW map sheets shall be ink or Mylar type tracing film or as otherwise authorized by TxDOT.
  - l. Field note data for all parcels shall be furnished on diskettes or tapes that are compatible with TxDOT.
  - m. THE SURVEYOR SHALL BE LIABLE FOR ALL SURVEYING MISTAKES AND SHALL BE RESPONSIBLE AT HIS SOLE EXPENSE FOR CORRECTION OF ALL ERRORS.
  - n. TxDOT Plan Checklist will be adhered to.

### **FC 164 – CONTRACT MANAGEMENT**

(SERVICES TO BE PROVIDED BY L&G ENGINEERING)

The Engineer will be required to meet with designated Hidalgo County representatives on a regularly scheduled basis to report on progress. A typewritten progress report will be required, together with evidence of the work accomplished during the period since the previous report. A bar chart indicating the percentage of completion of each task shown on Attachment "C" will also be required. Formal progress reports with bar charts will be required on a monthly basis.

The Engineer will establish a separate cost accounting system for each control-section-job (C-S-J) number to properly allocate all labor and expenses incurred. The Engineer shall invoice monthly according to Function Code breakdowns.

L&G will coordinate on a monthly basis with the County Right-of-Way Department to keep track of the Right-of-Way Acquisition so that project stays on schedule.

**FC 610 – UTILITY ADJUSTMENT COORDINATION**  
(SERVICES TO BE PROVIDED BY L&G ENGINEERING)

**1) Utility Project Administration**

- a) Negotiation of Scope of Services for Work Authorization
  - i) Utility Coordination Provider will visit project site with County personnel if necessary.
- b) Project Presence at L&G Consultant Office Headquarters
  - i) Full Project Office
    - (1) No Joint Use of County or TxDOT facilities
    - (2) Open during normal County and State work hours
    - (3) Personnel available to answer questions
    - (4) Availability of Project Files
    - (5) At least one office staff member is required to be a current commissioned notary public.
- c) Overhead Costs
  - i) Administrative costs
- d) Communication
  - i) Provide monthly progress reports with invoice.
  - ii) Participate in project review meetings as determined by the County.
  - iii) Prepare initial utility owner contact list for use by the County in distribution of Utility Coordination Provider introduction letters.
- e) File Management
  - i) Project and parcel files will be kept in the County's Office, if necessary. Working files will be kept in the Utility Coordination Provider's project administrative office, but documents generated or received by the Utility Coordination Provider will be forwarded to the County office as they are generated or received by the Utility Coordination Provider, if necessary.
  - ii) Prepare payment transmittal request utilizing standard payment submissions forms with supporting documentation.
  - iii) Maintain records of all payments including check number, amount, and date paid, etc.
  - iv) Provide copies of all incoming and outgoing correspondence as generated if requested by County at provider conference.
  - v) Maintain copies of all correspondence and contacts with utility owners.

**2) Utilities**

- a) Determine the ownership of the existing utilities on the subject project.

- b) Contact the utility owners and locate (horizontally and vertically) existing utilities on the ground.
- c) Evaluate utility conflicts with proposed construction. Prepare and submit drawings to the County Utility Companies and copies to TxDOT, for required utility adjustment. The following information will be submitted for each required utility adjustment.
  - d) i) A reproducible drawing 8-1/2" x 11", 11" x 17", or 22" x 34" (as appropriate) for each utility adjustment
  - e) ii) Drawing will include the following:
    - f) a) Existing and/or proposed ROW lines.
    - b) Existing and/or proposed roadways.
    - c) Proposed drainage structure
    - d) Existing underground utility in plan and profile.
    - e) Owner of utility
    - f) Benchmark
  - iii) Provide copies to County/TxDOT of correspondence with utility companies and County. If initial contact was made by phone, provide name of company and representative's name and phone number.
  - iiii) Prepare a detailed list to County/TxDOT of all conflicts with existing utilities during the drainage structure design phase. List must include the following:
    - a) Highway station number
    - b) Name of utility company and type of facility.
    - c) Proposed highway facility- the conflict with: storm sewer, roadway, etc.
  - iiii) The Engineer will be responsible for notifying all utility owners, early in the design phase, regarding any utility adjustments

### **3) Contract Management**

The Engineer will be required to meet with designated County/TxDOT representatives on a regularly scheduled basis to report on progress. A typewritten report will be required together with evidence of the work accomplished during the period since the previous report.

Exhibit C  
WORK SCHEDULE

TASK AND DESCRIPTION	2009	2010		
	DEC	JAN	FEB	MAR
<b>ROW Mapping</b>				
Final ROW Map, Parcel Sketches and Field Notes				



**EXHIBIT D "COST PROPOSAL"**

**WITH REVISED PROJECT FACT SHEET FOR LA HOMA ROAD PROJECT #2 (As per Location Map)**

ROADWAY PROJECT: .....	SH 364 (La Homa) PROJECT 2	
LIMITS: .....	SH 495 (Mile 1) to FM 1924 (Mile 3)	
EXISTING ROADWAY SECTION: .....	variable 20' - 22' - Rural	
EXISTING ROW WIDTH: .....	50-80 Varies	
PROPOSED ROADWAY SECTION: .....	4-lane urban (64' f-f)	
PROPOSED ROW WIDTH: .....	80-ft	
ESTIMATED CONSTRUCTION COST.....	\$7,875,000.00	
LENGTH: .....	2.25 Miles	
<b>ESTIMATED PROJECT COSTS</b>	<b>STATE</b>	<b>LOCAL</b>
ROADWAY CONSTRUCTION COST	\$7,875,000.00	\$ -
Construction Cost		
<b>PHASE I - PLANNING&amp; DESIGN</b>		
Schematic		\$ 157,500.00
Field Surveys for Schematic		\$ 36,000.00
Environmental Assessment (includes Historical and Archival)		\$ 75,000.00
Public Involvement for County (1 public meeting and 1 public hearing)		\$ 25,000.00
Field Surveys for Design and Construction		\$ 50,000.00
PS&E Development (8% of Const)		\$ 630,000.00
Signal Design		\$ 60,000.00
<b>PHASE II - RIGHT OF WAY COSTS</b>		
Compensible Utilities, Management Oversight	\$ -	\$ 259,244.56
ROW Map		\$ 195,000.00
**Roadway Right-of-Way Costs - (8.65 acres @ \$3.0/sq ft)		\$ 1,130,382.00
6 Relocated Homes/Businesses		\$ 175,000.00
Roadway Right-of-Way Costs - Acq.Services @ (est. 80 Parcels @ \$12,000/Parcel Avg.)		\$ -
2900 lf of 24" irrg line PVC @\$50/lf		\$ 145,000.00
AEP tension pole adjustment		\$ 241,195.00
<b>PHASE III - CONSTRUCTION</b>		
TxDOT Construction Inspection (11%)	\$ 866,250.00	
L&G Construction Management		\$ 36,000.00
<b>SUB-TOTAL</b>	<b>\$ 8,741,250.00</b>	<b>\$ 3,215,321.56</b>
<b>TOTAL CONSTRUCTION COST</b>		<b>\$ 11,956,571.56</b>

**\*\* ASSUMING COUNTY STAFF WILL ACQUIRE THE ROW**

**L&G Engineering Proposed Engineering Fee and County expenses for project Per Phases**

**SH 364 (La Homa) PROJECT 2**

Phase I	<b>FY 08</b>	\$ 1,033,500.00
Phase II	<b>FY 09</b>	\$ 454,244.56
Phase II	<b>FY 10</b>	\$ 1,691,577.00
Phase III	<b>FY 10</b>	\$ 36,000.00
<b>TOTAL</b>		<b>\$ 3,215,321.56</b>

- State Estimated Cost
- Local Estimated Cost
- Total Project Estimated Cost