

ENGINEERING SERVICES AGREEMENT

THE STATE OF TEXAS §
 §
COUNTY OF HARRIS §

THIS AGREEMENT is between **Harris County**, a body corporate and politic under the laws of the State of Texas, hereinafter called "County", acting herein for the **Harris County Toll Road Authority (HCTRA)**, a division of the County, and **EPIC Transportation Group, LP**, hereinafter called the "Engineer" or "Company".

WITNESSETH:

WHEREAS, the County proposes to hire the Engineer to provide traffic modeling and engineering services for the corridor travel demand and system analysis for the Hardy Toll Road North Segment #9 in Harris County, Texas, hereinafter called the "Project";

WHEREAS, the Engineer has represented to the County that it is qualified and prepared to perform all of the services described in the Scope of Services, Appendix A, attached hereto and incorporated herein by reference as if copied herein verbatim (Scope of Services), and has submitted a proposal to provide professional engineering services for the Project;

WHEREAS, the County is satisfied that the Engineer is capable of performing the necessary services required for the Project and desires to contract with the Engineer to perform the services described in the Scope of Services;

WHEREAS, the provisions of Chapter 262, Texas Local Government Code, Competitive Bidding Law do not apply to the proposed agreement because the contract is for professional engineering services;

WHEREAS, the County has determined and found that it would be in the best interest of the County to delegate to the Executive Director of HCTRA supervisory and management authority over the Engineer; and

WHEREAS, the Engineer will control the methods and means in performing the work set out in the Scope of Services;

NOW, THEREFORE, in consideration of the mutual covenants and conditions set forth below, the parties agree as follows:

1. General
 - a. In performing professional engineering services under this Agreement, the Engineer will function solely and exclusively for the benefit of the County and not for the benefit of the contractors for the Project or any other party. All

services rendered by the Engineer under this Agreement shall be performed under the supervision of HCTRA. The Engineer shall render services in accordance with generally accepted professional standards and use the degree of care and skill reasonably necessary to ensure compliance with all applicable laws and regulations.

- b. The Engineer shall be responsible for the professional quality, technical accuracy and the coordination of all deliverable documents and services furnished by the Engineer under this Agreement. The Engineer shall, without additional compensation, correct or revise all errors and deficiencies in its documents.
- c. The Engineer will collaborate with the County's personnel to facilitate the implementation of a Project Database within the County's Electronic Document Management System known as "CAPTRAC". The Electronic Document Management System will provide electronic management that shall govern the distribution and file copies of all Project related correspondence, reports, plans, and technical data. The County and the Engineer will use "CAPTRAC" to facilitate the effective electronic exchange of Project information and documents with members of the design team and other interested stakeholders.
- d. The Engineer will collaborate with the County's personnel to facilitate the maintenance of the Project Database. Project files shall be entered into the database by the Engineer on a timely basis and made available by the County on "CAPTRAC" at all times for performance of daily Project activities. Other documents, including those used for legal review, audit requests/requirements, and open records request purposes, shall be entered by the County staff assisting the Engineer team. The Engineer shall also ensure that all Project files are appropriately entered into the database:
 1. At all critical milestones;
 2. At established periodic intervals; and
 3. Following completion of the work as a final Project record, including applicable record drawings.

2. Scope of Services

The services to be provided herein in regard to the Project are defined in Appendix A ("Scope of Services").

3. Compensation and Payment

- a. The Engineer shall be entitled to payments based on hourly rates and reimbursement as set forth in this section, and the Engineer agrees that such payment will constitute full compensation for the performance of services

under this Agreement. The County shall not be obligated to pay in excess of **\$900,000.00** and the Engineer shall not be obligated to perform further services hereunder once such sum has been earned, except to the extent that HCTRA has given prior written authorization to perform additional services and receive compensation therefore from funds in excess of such figure and within the maximum sum available under 3.c.

- (1) The Engineer shall be entitled to payments based upon hourly billing for defined services and any additional services not included in the Scope of Services under this Agreement, including changes in the contractual scope of work and revision of work satisfactorily performed, provided that such additional services will be performed only when approved in advance and authorized by the County, and will be reimbursed at the raw salary rates in effect at that time, times a multiplier as set forth below, to the extent that such direct salary costs and subcontracts are reasonable and necessary for the performance of such services. The reimbursable hourly raw salary rates cannot exceed those set forth in Appendix B. The Engineer shall also be entitled to expense reimbursement as set forth in Appendix B, provided that miscellaneous expenses, if any, may be reimbursed hereunder only when HCTRA determines that incurring such expenses is not required as part of the original Scope of Services and provides written approval of such expense in advance of it being incurred. Payment will be made on the basis of certified time and expense records and in accordance with those payment procedures set forth in subparagraph b., below. Billing rates will have a 3.0 multiplier on raw salary rates.
 - (2) Where subcontractors are employed by the Engineer to perform additional services not within the original Scope of Services, the Engineer will be reimbursed for subcontractors' salaries and hourly rates, including overtime rates, on the same basis as described for the Engineer's own personnel in subparagraph a. (1), of this Paragraph. Reimbursement to the Subcontractor for non-salary costs incurred by subcontractors will be on the same basis as if the costs were incurred by the Engineer. The Engineer will be paid a subcontract administrative fee equal to ten percent (10%) of all subcontractor invoiced amounts. Total contract amounts shall include subcontractor fees.
- b. It is understood and agreed that monthly payments will be made to the Engineer by the County based on the following procedures: On or about the fifteenth day of each month during the performance of services hereunder and on or about the fifteenth day of the month following completion of all services hereunder, the Engineer shall submit to the County two (2) copies of invoices showing the amounts due for services performed during the previous

month, set forth separately for work under this Agreement and for additional services (accompanied by supporting certified time and expense records of such charges in a form acceptable to the County Auditor). It is specifically understood that any requests for travel reimbursements shall comply with those procedures for travel reimbursement to County employees established by the Harris County Auditor. HCTRA shall review such invoices and approve them within ten (10) calendar days with such modifications as are consistent with this Agreement and forward same to the County Auditor. The County shall pay each such invoice as approved by the County Auditor within twenty (20) calendar days after the County Auditor's approval of same. Invoices are due and payable net 30 days from receipt.

- c. It is expressly understood and agreed that the County has available the total maximum sum of **\$1,000,000.00** as hereinafter certified available for the purpose of satisfying the County's obligations under the terms and provisions of this Agreement. The County shall not be liable under any circumstances or any interpretations hereof for any costs under the Agreement except for those certified available for this Agreement by the Harris County Auditor, as evidenced by the issuance of a purchase order by the Harris County Purchasing Agent for the certified amount. Once the funds are expended for the purpose of satisfying the County's obligations under the terms and provisions of this Agreement, the County shall have no further obligations nor shall the Engineer be required to perform further services hereunder.

4. Time of Performance

It is understood and agreed that the time for performance of the Engineer's services under this Agreement shall begin with receipt of the Notice to Proceed and end **1460** calendar days from that date, except to the extent continued performance after that date is authorized in writing by the Executive Director of HCTRA or his designee. The Engineer is responsible for notifying HCTRA thirty days prior to the end of the contract.

5. The County's Option to Terminate

- a. The County has the right to terminate this Agreement at its sole option at any time, with or without cause, by providing written notice of such intention to terminate and by stating in said notice the "Termination Date." Upon such termination, the County shall compensate the Engineer in accordance with Paragraph 3., above, for those services that were provided under this Agreement prior to its termination and that have not been previously invoiced to the County. The Engineer's final invoice for said services will be presented to and paid by the County in the same manner set forth in Paragraph 3. b., above.

- b. Termination of this Agreement and payment in settlement as described in subparagraph a. of this Paragraph shall extinguish all rights, duties, obligations, and liabilities of the County and the Engineer under this Agreement and this Agreement shall be of no further force and effect; provided, however, such termination shall not act to release the Engineer from liability for any previous default either under this Agreement or under any standard of conduct set by law. No termination of this Agreement shall have the effect of terminating the Engineer's obligations under Sections 7 (Delays and Damages), 8 (Inspection of the Engineer's Books and Records), 12 (Appearance as Witness), or 15 (Indemnification).
- c. If the County shall terminate this Agreement as provided in this Paragraph, no fees of any type, other than fees due and payable at the Termination Date, shall thereafter be paid to the Engineer.
- d. The County's rights and options to terminate this Agreement, as provided in any provision of this Agreement shall be in addition to, and not in lieu of, any and all rights, actions and privileges otherwise available under law or equity to the County by virtue of this Agreement or otherwise. Failure of the County to exercise any of its rights, actions, options or privileges to terminate this Agreement as provided in any provision of this Agreement shall not be deemed a waiver of any rights, actions or privileges otherwise available under the law or equity with respect to any continuing or subsequent breaches of this Agreement or of any other standard of conduct set by law.
- e. Copies of all completed and partially completed documents prepared under this Agreement shall be delivered to the County upon the Engineer's receipt of termination payment when and if this Agreement is terminated.

6. Source of Fee Payments

The County intends to pay for design and construction with the proceeds from the sale and issuance of bonds and a yearly revenue fund account. It is expressly acknowledged that all payments owing for Engineering services performed under this Agreement shall be made solely from these sources of funds for financing design and construction of the Project. The County shall be under no liability under this Agreement to make payment to the Engineer from any other source. In addition, the County reserves the right, at its sole discretion, at any time prior to issuance by the County of the written notice to proceed as provided in Paragraph 4., above, to cancel this Agreement and in the event of such cancellation, the Engineer shall not be entitled to any payment, nor have any claim for compensation or damages resulting from such cancellation. In no event shall the liability of the County under this Agreement exceed the amount hereunder certified as available by the County Auditor.

7. Delays and Damages

Except as otherwise provided herein, the Engineer agrees that no other charges or claims for damage shall be made by it against the County for any delays or hindrances occurring during the progress of the Engineer in providing to the County the services specified in this Agreement.

8. Inspection of the Engineer's Books and Records

The Engineer will permit the County, or any duly authorized agent of HCTRA, to inspect and examine the pertinent books and records of the Engineer, but only for the purpose of verifying the direct salary costs, overtime work, and out-of-pocket expenses for additional services charged to the Project described in and contemplated by Paragraph 3. a., above.

9. Personnel, Equipment, and Material

- a. The Engineer represents that it presently has, or is able to obtain, adequate qualified personnel in its employment for performance of the services required under this Agreement and that the Engineer shall furnish and maintain, at its own expense, adequate and sufficient personnel and equipment, in the opinion of HCTRA, to perform the services when and as required and without delays. It is understood that HCTRA will approve assignment and release of all key engineering personnel and that the Engineer shall submit written notification of all key engineering personnel changes monthly for HCTRA's approval prior to the implementation of such changes. Services described in this Agreement shall be performed under the direction of an engineer licensed to practice professional engineering in the State of Texas.
- b. All employees of the Engineer or a subcontractor of the Engineer shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of the Engineer or a subcontractor of the Engineer who, in the opinion of HCTRA, is incompetent or by his conduct becomes detrimental to the Project shall, upon request of HCTRA, immediately be removed from association with the Project.
- c. Except as otherwise specified, the Engineer shall furnish all equipment, transportation, supplies, and materials required for its operations under this Agreement.

10. Subletting

The Engineer shall not sublet, assign, or transfer all or any part of the services in this Agreement without the prior written approval of HCTRA. Responsibility to HCTRA for sublet work shall remain with the Engineer.

11. Conferences

At the request of HCTRA, the Engineer shall provide appropriate personnel for conferences at its offices, or attend conferences at the various offices of HCTRA, or at the site of the Project, and shall permit inspections of its offices by HCTRA, or others when requested by HCTRA.

12. Appearance as Witness

If requested by the County, or on its behalf, the Engineer shall prepare such engineering exhibits and plats as may be requested for all hearings and trials related to the Project and, further, it shall prepare for and appear at conferences and shall furnish competent expert engineering witnesses to provide such oral testimony and to introduce such demonstrative evidence as may be needed throughout all trials and hearings with reference to any litigation relating to the Project. Compensation for trial preparation and appearance by the Engineer in courts regarding litigation matters will be made in accordance with the provisions of Paragraph 3. a. (1), above.

13. Compliance with Laws

The Engineer shall comply with all federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any matter affecting the performance of this Agreement, including, without limitation, Worker's Compensation laws, minimum and maximum salary and wage statutes and regulations, licensing laws and regulations. When required, the Engineer shall furnish the County with certification of compliance with said laws, statutes, ordinances, rules, regulations, orders, and decrees specified above.

The Engineer shall strictly comply with Section 2251.022 Texas Government Code, and shall require that its subcontractors fully comply with Section 2251.023 Texas Government Code.

14. Insurance

The Engineer shall obtain, keep and maintain any and all insurance that may be required by law or that may be required by any agreement the County has with any other party concerning the Project. The Engineer's insurance policies shall be the primary policies. Under no circumstances will the County be liable for any policy premiums or deductibles. The Minimum Insurance Requirements are attached hereto as Appendix C.

15. Indemnification

TO THE EXTENT ALLOWED BY LAW, THE ENGINEER AGREES TO INDEMNIFY AND HOLD HARMLESS THE COUNTY, ITS OFFICERS, EMPLOYEES, AND AGENTS FROM LIABILITY, LOSSES, EXPENSES, DEMANDS, REASONABLE ATTORNEYS' FEES, AND CLAIMS FOR BODILY INJURY (INCLUDING DEATH) AND PROPERTY DAMAGE TO THE EXTENT CAUSED BY THE NEGLIGENCE, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT OF THE ENGINEER (INCLUDING THE ENGINEER'S AGENTS, EMPLOYEES, VOLUNTEERS, AND SUBCONTRACTORS/CONSULTANTS UNDER CONTRACT, OR ANY OTHER ENTITY OVER WHICH THE ENGINEER EXERCISES CONTROL) IN THE PERFORMANCE OF THE SERVICES DEFINED IN THIS AGREEMENT. THE ENGINEER SHALL ALSO SAVE THE COUNTY HARMLESS FROM AND AGAINST ANY AND ALL EXPENSES, INCLUDING REASONABLE ATTORNEYS' FEES, IN PROPORTION TO THE ENGINEER'S LIABILITY, THAT MIGHT BE INCURRED BY THE COUNTY, IN LITIGATION OR OTHERWISE RESISTING SUCH CLAIMS OR LIABILITIES.

16. Delivery of Notices, Etc.

- a. All routine written notices, invoices, change orders, etc. are to be delivered to the Deputy Director, Tolling Operations at the Harris County Toll Road Authority, 7701 Wilshire Place Drive, Houston, Texas 77040, or at such other place or places as the County may designate by written notice delivered to the Engineer.

All formal notices and demands under this Agreement shall be delivered to the Harris County Toll Road Authority, 7701 Wilshire Place Drive, Houston, Texas 77040, Attention: Executive Director.

- b. All written notices, demands, and other papers or documents to be delivered to the Engineer under this Agreement shall be delivered EPIC Transportation Group, LP, 800 Wilcrest Drive, Suite 240, Houston, Texas 77042, Attn: Harish Narayanappa, PE, or at such other place or places as the Engineer may designate by written notice delivered to the County.

17. Reports of Accidents, Etc.

Within 24 hours after the occurrence of any accident or other event which results in, or might result in, injury to the person or property of any third person (other than an employee of the Engineer), whether or not it results from or involves any action or failure to act by the Engineer or any employee or agent of the Engineer and which arises in any manner from the performance of this Agreement, the Engineer shall send a written report of such accident or other event to the County, setting forth a full and concise statement of the facts pertaining thereto.

The Engineer shall also immediately send the County a copy of any summons, subpoena, notice, or other documents served upon the Engineer, its agents, employees, or representatives, or received by it or them, in connection with any matter before any court arising in any manner from the Engineer's performance of work under this Agreement.

18. The County's Acts

Anything to be done under this Agreement by the County may be done by such persons, corporations, or firms as the County may designate.

19. Limitations

Notwithstanding anything herein to the contrary, all covenants and obligations of the County under this Agreement shall be deemed to be valid covenants and obligations only to the extent authorized by the Act creating the County and permitted by the laws and the Constitution of the State of Texas.

20. Captions Not a Part Hereof

The captions or subtitles of the several sections and divisions of this Agreement constitute no part of the content hereof, but are only labels to assist in locating and reading the provisions hereof.

21. Controlling Law, Venue

This Agreement shall be governed and construed in accordance with the laws of the State of Texas. This Agreement shall be performed entirely in Harris County, Texas and the parties hereto acknowledge that venue is proper in Harris County, Texas, for all disputes arising hereunder and waive the right to sue or be sued elsewhere.

22. Successors and Assigns

The County and the Engineer bind themselves and their successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of the other party, in respect to all covenants of this Agreement.

23. Independent Contractor

Notwithstanding any provision of this Agreement, the Engineer shall at all times act as an independent contractor, and not as an employee of the County, and the Engineer shall be responsible for the means and methods employed in performing services hereunder.

24. Certificate of Interested Parties (Form 1295)

Texas law requires all parties who enter into any contract with the County that must be approved by Commissioners Court to disclose all Interested Parties. Texas Ethics Commission Form 1295 must be completed in its entirety. If changes to this Form are necessary during this Agreement, the Engineer will notify and send the County an updated and complete version.

25. Additional Statutory Requirements

Company represents and certifies that, at the time of execution of this Agreement, Company (including any wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of the same) is not listed by the Texas Comptroller of Public Accounts pursuant to Chapters 2252 or 2270 of the Texas Government Code, nor will Company engage in scrutinized business operations or other business practices that would cause it to be listed during the term of this Agreement.

26. Historically Underutilized Business Requirements

The State of Texas maintains a Historically Underutilized Business Program, which identifies any business at least 51 percent owned by an Asian Pacific American, African American, Hispanic American, Native American, woman and/or Service Disabled Veteran, who reside in Texas and actively participate in the control, operations and management of the entity's affairs as a Historically Underutilized Business.

In accordance with Section 284.007 of the Texas Transportation Code, the County shall make a good faith effort to meet or exceed goals provided under Section 284.007(b) for awarding contracts and subcontracts associated with a project it operates, maintains, or constructs to historically underutilized businesses. For purposes of this section, the term "historically underutilized business" has the meaning given to such term in subsection (d) of Section 284.007, Transportation Code.

The Engineer agrees to reasonably assist the County in its efforts to meet or exceed the goals provided under Section 284.007(b) for awarding contracts or subcontracts to historically underutilized businesses.

The Engineer will take affirmative steps to assure that minority firms and specifically women's business enterprises are used when possible and will not be discriminated against on the grounds of race, color, religious creed, sex, or national origin in consideration for an award.

Affirmative steps shall include:

1. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
2. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
3. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises; and
4. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises.

The Engineer shall submit evidence of compliance to Appendix X when requested by County.

[SIGNATURE PAGE FOLLOWS]

APPROVED AS TO FORM:

CHRISTIAN D. MENEFEE
County Attorney

HARRIS COUNTY

DocuSigned by:
Marcy Linebarger
By: 0B97D5E185374E3...
MARCY LINEBARGER
Assistant County Attorney

By: _____
LINA HIDALGO
County Judge

Date: _____

EPIC TRANSPORTATION GROUP, LP

DocuSigned by:
Harish Narayanappa
By: 723ABE466DAD401...
Name: Harish Narayanappa
Title: President
Date: 9/14/2022

APPENDIX A

TRAFFIC MODELING AND ENGINEERING

SCOPE OF SERVICES

GENERAL

Engineering and Planning Services to provide corridor travel demand and system analysis for the Hardy Toll Road for existing and future conditions.

PROJECT LOCATION / DESCRIPTION

The proposed Project is located in Harris County, along the Hardy Toll Road from Sam Houston Tollway to I-45 North, and the Hardy Toll Road Airport Extension from Hardy Toll Road to John F. Kennedy Boulevard.

SERVICES TO BE PROVIDED BY THE ENGINEER

SCOPE OF SERVICES

The Engineer shall provide engineering and planning services required to provide corridor and area-wide travel demand including traffic forecasting and origin-destination analysis and system operations analysis and to recommend corridor and system improvements within the corridor, including additional access ramps and connections for the existing and long-term time periods.

(Function Code 102 - Feasibility Studies)

DATA COLLECTION AND STAKEHOLDER COORDINATION

The purpose of this task is to obtain the available data, including existing traffic data, existing models, and existing and projected land use and population data. Coordinate the data-gathering effort with the All Electronic Toll (AET) PMC, H-GAC, TxDOT and other project stakeholders as needed.

Conduct traffic counts at representative locations within the project area. Listed below are the count type and locations:

- A. 4-Hour (2 hour AM and 2 hour PM) 3 Vehicle Classification Counts (Total 60)**
1. NBD N Fwy. Service Rd. at Northgate Crossing Blvd. North
 2. NBD Hardy at Springwoods Village Pkwy.

3. NBD N Fwy. Service Rd. at Springwoods Village Pkwy.
4. SBD N Fwy. Service Rd. at Springwoods Village Pkwy.
5. Energy Dr. at Springwoods Village Pkwy.
6. NBD Hardy at Northgate Crossing Blvd. South
7. SBD Hardy at Northgate Crossing Blvd. South
8. Aldine Westfield Rd. at Riley Fuzzel Rd.
9. SBD Hardy at Riley Fuzzel Rd.
10. NBD Hardy at Riley Fuzzel Rd.
11. Aldine Westfield Rd. at E Louetta Rd.
12. SBD Hardy Rd. at E Louetta Rd.
13. Aldine Westfield Rd. at Bellchase Dr.
14. W Hardy Rd. at E Cypress Dr. North
15. W Hardy Rd. at E Cypress Rd. South
16. Aldine Westfield Rd. at Cypress Dr.
17. SBD Hardy at FM 1960 Diamond - 2 counts
18. NBD Hardy at FM 1960 Diamond - 2 counts
19. Imperial Valley Dr. at Cypress Creek Pkwy.
20. Imperial Valley Dr. at Bammel Rd.
21. W Hardy Rd. at Bammel Rd.
22. E Hardy Rd. at Bammel Rd.
23. FM 1960 at Aldine Westfield Rd.
24. Imperial Valley Dr. at E Richey Rd.
25. Hardy at E Richey Rd. Diamond - 2 counts
26. Imperial Valley Dr. at E Airtex Dr.
27. E Hardy Rd. at E Airtex Dr.
28. Imperial Valley Dr. at Rankin Rd.
29. E Hardy Rd. at Rankin Rd.
30. Hardy at Rankin Rd. Diamond - 2 counts
31. Aldine Westfield Rd. at Rankin Rd.
32. Imperial Valley Dr. at Greens Rd.
33. Hardy St. at Greens Rd.
34. Central Green Blvd. at Hardy Airport Connector Diamond - 4 counts
35. Aldine Westfield Rd. at Hardy Airport Connector
36. Aldine Westfield Rd. at Greens Rd.
37. John F Kennedy Blvd. at Greens Rd.
38. John F Kennedy Blvd. at Tug Rd.
39. Imperial Valley Rd. at Beltway 8 Frontage Rd. Diamond - 2 counts
40. Hardy St. at Beltway 8 Frontage Rd. Diamond
41. Hardy Toll Rd. at Beltway 8 Frontage Rd. Box Diamond - 2 counts
42. John F Kennedy Blvd. at Beltway 8 Frontage Rd. Box Diamond - 4 counts
43. E Hardy Rd. ay E Richey Rd.
44. Aldine Westfield Rd. at Richey Rd.
45. Aldine Westfield Rd. at Beltway 8 Frontage Rd. Diamond - 2 counts

B. 24-Hour 3 Vehicle Classification Counts - Direct Connectors (Total 17)

1. SBD I-45 to SBD Hardy DC - 2 lane

2. NBD Hardy to NBD I-45 DC - 2 lane
3. EBD SH 99 to SBD Hardy DC - 1 lane
4. NBD Hardy to WBD SH 99 DC - 1 lane
5. WBD SH 99 to SBD Hardy DC - 1 lane
6. NBD Hardy to EBD SH 99 DC - 1 lane
7. SBD Hardy to EBD Hardy-Airport DC - 1 lane
8. WBD Hardy-Airport to NBD Hardy DC - 1 lane
9. WBD Hardy-Airport to SBD Hardy DC - 1 lane
10. NBD Hardy to EBD Hardy-Airport DC - 1 lane
11. EBD Hardy-Airport to NBD JFK DC - 2 lane
12. SBD JFK to WBD Hardy-Airport DC - 2 lane
13. EBD Sam Houston to NBD Hardy DC - 1 lane

C. 24-Hour 3 Vehicle Classification 1-way Ramp Counts (Total 24)

1. On Ramp to SBD Hardy - S of Northgate Crossing - 1 lane
2. Off Ramp from NBD Hardy - S of Northgate Crossing - 1 lane
3. Off Ramp from NBD Hardy - S of Riley Fuzzel - 1 lane
4. On Ramp to SBD Hardy - S of Riley Fuzzel - 1 lane
5. On Ramp to SBD Hardy - S of Louetta - 1 lane
6. Off Ramp from NBD Hardy - S of Louetta - 1 lane
7. Off Ramp from SBD Hardy - N of FM 1960 - 1 lane
8. On Ramp to NBD Hardy - N of FM 1960 - 1 lane
9. On Ramp to SBD Hardy - S of FM 1960 - 1 lane
10. Off Ramp from NBD Hardy - S of FM 1960 - 1 lane
11. Off Ramp from SBD Hardy - N of Richey - 1 lane
12. On Ramp to NBD Hardy - N of Richey - 1 lane
13. Off Ramp from NBD Hardy - S of Richey - 1 lane
14. On Ramp to SBD Hardy - S of Richey - 1 lane
15. Off Ramp from SBD Hardy - N of Rankin - 1 lane
16. On Ramp to NBD Hardy - N of Rankin - 1 lane
17. On Ramp to SBD Hardy - S of Rankin - 1 lane
18. Off Ramp from NBD Hardy - S of Rankin - 1 lane
19. Off Ramp from NBD Hardy - to Central Green - 1 lane
20. On Ramp to EBD Hardy-Airport - E of Central Green - 1 lane
21. Off Ramp from Hardy-Airport - E of Central Green - 1 lane
22. Off Ramp from EBD Hardy-Airport - W of Aldine Westfield - 1 lane
23. On Ramp to WBD Hardy-Airport - W of Aldine Westfield - 1 lane
24. Off Ramp from SBD Hardy - North of Beltway 8 - 1 lane

D. 24-Hour 13 Vehicle Classification Main Lane Counts (Total 10)

1. NBD Hardy – Main Lane Plaza - 3 lanes
2. SBD Hardy – Main Lane Plaza - 3 lanes
3. EBD Hardy-Airport Connector Main Plaza - 2 lanes
4. WBD Hardy-Airport Connector Main Plaza - 2 lanes

E. 24-Hour Automated Tube Counts (Total 16)

Screen 1 - Count 1 (2-way)
Screen 1 - Count 2 (2-way)
Screen 1 - Count 3 (2-way)
Screen 1 - Count 4 (2-way)
Screen 2 - Count 1 (2-way)
Screen 2 - Count 2 (2-way)
Screen 2 - Count 3 (2-way)
Screen 2 - Count 4 (2-way)
Screen 2 - Count 5 (2-way)
Screen 3 - Count 1 (2-way)
Screen 3 - Count 2 (2-way)
Screen 3 - Count 3 (2-way)
Screen 3 - Count 4 (2-way)
Screen 3 - Count 5 (2-way)
Screen 3 - Count 6 (2-way)

F. Travel Time Runs

Conduct three main lane runs per direction in the AM peak and three main lane runs per direction in the PM peak in vehicle(s) equipped with Distance Measuring Instrument (DMI).

TRAVEL DEMAND MODELING

The work to be performed by the Engineer consists of modeling current and future travel demand within the corridor including Hardy Toll Road (HTR) and major thoroughfares intersecting HTR and parallel to HTR. Transportation investment examples for consideration to include:

- SHT Elevated Expansion
- SHT Depressed Expansion
- SHT At-Grade Expansion
- SHT Collector-Distributor Road Systems
- Transportation System Management and Operations (TSMO)
- Telecommuting
- Transit
- Bike
- High Occupancy Vehicles (HOV)
- Travel Demand Management
- Frontage Road Expansion
- Parallel Road Expansion

FUTURE TRAVEL DEMAND PROJECTIONS

The work to be performed by the Engineer consists of utilizing travel demand models and regional growth data to develop projected future traffic volumes for HTR and

intersecting/parallel thoroughfares. This work will include refining the model for proposed improvements.

DEFINE CORRIDOR NEEDS AND FINAL MODEL REFINEMENT

The work to be performed by the Engineer consists of identifying corridor improvement needs and proposed improvements based on projected travel demand for HTR and intersecting/parallel thoroughfares. The Engineer will refine model and perform operational analysis to define and confirm the needs and benefits of the proposed improvements.

SUMMARY REPORT

The Engineer will prepare a report documenting the modeling and analysis methodology used, findings (identify system deficiencies and needs, including additional access to HTR), and recommendations for the long-term time period.

ON CALL TRAFFIC MODELING

The Engineer shall provide on call traffic modeling support as directed by HCTRA. The Engineer shall work with the segment schematic designer as well as Harris County precincts to model alternative scenarios as necessary to evaluate and provide feedback on proposed traffic alternatives. These alternatives may be from the planning or schematic design phases of the AET program. Feedback may be informal or formal, up to and including reports and/or presentations, as directed by HCTRA.

(Function Code 145 – Project Management)

I. PROJECT MANAGEMENT

A. Prepare and submit monthly progress reports and invoices to HCTRA through the PMC for review and approval. The invoices will include the progress report, invoice, and schedule, and will be confirmed by the PMC based on in-progress deliverables received. The Engineer's written progress report shall describe activities performed during the reporting period by scope task; activities planned for the following period, problems encountered and actions taken to remedy them, a list of meetings attended, a list of deliverables submitted in the reporting period, a list outstanding issues that need resolution, overall status including a physical percent complete, and a financial percent complete by scope task, and estimated completion dates for the work.

B. Invoices are to be submitted on a monthly basis. The Engineer will prepare each invoice in the format provided by the PMC. When directed by the PMC and/or HCTRA, the Engineer shall modify the information and/or format. Hard copies of the invoice shall be delivered to the PMC and/or emailed. For contracts with Time and Materials and/or contingency work, certified timesheets shall be submitted with the invoice.

C. The Engineer will be responsible for internal documentation and administration of the Project files.

II. MEETINGS AND CONFERENCES

A. Engineer shall attend coordination meetings with staff from the PMC team and HCTRA as necessary to provide updates on the status of the work being performed and to obtain input and consensus on project issues. At a minimum we anticipate monthly progress meetings, and at certain points the meetings may be more frequent due to design progress. Prepare and distribute meeting minutes within five working days after the meeting.

B. Engineer shall attend meeting with PMC team and HCTRA following completion of projected no-build traffic modeling to discuss areas in corridor in need of improvements based on the results of the models and to determine what improvements may be feasible. Engineer shall also meet with PMC team and HCTRA following the alternatives analysis modeling to discuss the results of the modeling and to show how the corridor would operate with each improvement.

C. Engineer shall prepare phone call logs and document design decisions for the project as work proceeds.

(Function Code 200 – Reporting)

SCHEDULE AND SCHEDULE UPDATES REPORTING

A. The Engineer shall prepare an overall Project schedule detailing the progression of the work. This schedule will include review dates by HCTRA and the PMC, submittal dates for deliverables, and an estimated time frame to complete the work. Changes or adjustments in the schedule caused by delays in tasks or reviews will be discussed by the PMC with HCTRA.

B. The Engineer shall maintain this detailed schedule of design activities in Primavera P6 or Microsoft Project format.

C. The activity coding shall follow the WBS structure prescribed by the PMC. Appropriate milestones for design delivery shall be maintained.

D. A baseline schedule shall be created and submitted for approval. The subsequent progress schedules shall be updated monthly, and any updates shall be reported against the baseline. Any variance from the baseline shall be accompanied with an explanation in the monthly report along with a recovery schedule. Changes to the schedule, including changes in logic and addition or deletion of activities, shall be clearly identified as part of the monthly update/submission.

E. The baseline schedules and subsequent updates shall be submitted to the PMC as part of the Engineer's monthly report in PDF format (11x17) and also as a file in its P6 native format (.XER) or Microsoft Project (.MPP).

F. Schedules shall be cost loaded to allow the PMC to generate cash flow curves for the Program.

APPENDIX B

Maximum Raw Salary Rates

JOB CLASSIFICATION	Maximum Raw Salary Rate
Senior Project Manager	\$90.00
Project Manager	\$86.00
Senior Project Engineer	\$74.00
Project Engineer	\$56.00
Graduate Engineer	\$49.00
CADD Technician	\$44.00
Administrative/Clerical	\$32.00
Note: Maximum Raw Salary Rates shown above are effective for the first year of the approved contract and are subject to an annual escalation rate of 4% effective on the contract anniversary date.	

Maximum Reimbursable Expense		
Mileage	Per mile	IRS Approved Rate
Parking	Per Day	\$20.00
Lodging/Hotel (Taxes/Fees not included)	Day/person	\$167.00
Lodging/Hotel – Taxes and Fees	Day/person	\$50.00
Meals	Day/person	\$55.00
Plots (color on bond)	SF	At Cost
Photocopies B/W (8 ½" x 11")	Each	At Cost
Photocopies B/W (11" x 17")	Each	At Cost
Photocopies Color (8 ½" x 11")	Each	At Cost
Photocopies Color (11" x 17")	Each	At Cost
Plots (B/W on Bond)	SF	At Cost
Plots (Color on Bond)	SF	At Cost
Plots (Color on Photographic Paper)	SF	At Cost
Report Printing	Each	At Cost
Report Binding and Tabbing	Each	At Cost
Reproduction of CD/DVD	Each	At Cost
Delivery	Each	At Cost
Standard Postage	Each	At Cost
City of Houston Utility Records	Sheet	At Cost
CenterPoint Energy Records	Set	At Cost
24-Hour Automated Tube Counts - Volume	Each	\$225.00
Travel Time Runs in DMI-Equipped Vehicle	Hour	\$110.00
Miovision 4-Hour (2 hour AM and 2 hour PM)		
3 Vehicle Classification Counts, Minor Intersection	Each	\$400.00
24 Hour 3 Vehicle Classification Main Lane Count (Direct Connectors)	Per Lane/Day	\$200.00
24 Hour 3 Vehicle Classification 1-way Ramp Count	Per Lane/Day	\$200.00
24 Hour 13 Vehicle Classification Main Lane Count	Per Lane/Day	\$335.00

APPENDIX C

MINIMUM INSURANCE REQUIREMENTS

During the term of the Contract, the Contractor at its sole cost and expense shall provide primary commercial insurance of such type and with such terms and limits as may be reasonably associated with the Contract. As a minimum, the Contractor shall provide and maintain the following coverage and limits:

- A. Workers Compensation**, as required by the laws of Texas, **and Employers' Liability**, as well as All States, USL&H (United States Longshore & Harbor Workers Compensation Act) and other endorsements if applicable to the project, and in accordance with state law.

Employers' Liability

- Each Accident: \$1,000,000
- Disease—Each Employee: \$1,000,000
- Policy Limit: \$1,000,000

- B. Commercial General Liability**, including but not limited to the coverage indicated below. Coverage shall not exclude or limit Products/Completed Operations, Contractual Liability, or Cross Liability. Where exposure exists, the County may require coverage for watercraft, blasting, collapse, explosions, blowout, cratering, underground damage, pollution, or other coverage. *Harris County shall be named Additional Insured on primary/non-contributory basis.*

- Each Occurrence: \$1,000,000
- Personal and Advertising Injury: \$1,000,000
- Products/Completed Operations: \$1,000,000
- General Aggregate (per project): \$2,000,000

- C. Automobile Liability**, including coverage for all owned, hired, and non-owned vehicles used in connection with the contract. *Harris County shall be named Additional Insured on primary/non-contributory basis.*

- Combined Single Limit-Each Accident: \$1,000,000

- D. Umbrella/Excess Liability** (*Harris County shall be named Additional Insured on primary/non-contributory basis*)

- Each Occurrence/Aggregate: \$1,000,000

- E. Professional/Errors & Omissions Liability**

- Per Claim/Aggregate: \$1,000,000

The County reserves the right to require additional insurance if necessary. Coverage shall be issued by companies licensed by the Texas Department of Insurance (TDI) to do business in Texas and who have an A.M. Best rating of at least A-. Contractor shall furnish

evidence of such insurance to the County in the form of unaltered insurance certificates. If any part of the contract is sublet, insurance shall be provided by or on behalf of any subcontractor, and shall be sufficient to cover their portion of the contract. Contractor shall furnish evidence of such insurance to the County as well.

Policies of insurance required by the contract shall waive all rights of subrogation against the County, its officers, employees and agents. If any applicable insurance policies are cancelled, materially changed, or non-renewed, contractor shall give written notice to the County at least 30 days prior to such effective date and within 30 days thereafter, shall provide evidence of suitable replacement policies. Failure to keep in force the required insurance coverage may result in termination of the contract. Upon request, certified copies of original insurance policies shall be furnished to the County.

The requirements stipulated in this attachment do not establish limits of contractor liability.

Rev. 10/2011

ORDER OF COMMISSIONERS COURT
Authorizing an Agreement with EPIC Transportation Group, LP

The Commissioners Court of Harris County, Texas, met in regular session at its regular term at the Harris County Administration Building in the City of Houston, Texas, on _____, with all members present except _____.

A quorum was present. Among other business, the following was transacted:

**ORDER AUTHORIZING AN AGREEMENT WITH
EPIC TRANSPORTATION GROUP, LP TO PROVIDE TRAFFIC MODELING
AND ENGINEERING SERVICES FOR THE CORRIDOR TRAVEL DEMAND
AND SYSTEM ANALYSIS FOR THE HARDY TOLL ROAD NORTH SEGMENT #9**

Commissioner _____ introduced an order and moved that Commissioners Court adopt the order. Commissioner _____ seconded the motion for adoption of the order. The motion, carrying with it the adoption of the order, prevailed by the following vote:

	Yes	No	Abstain
Judge Lina Hidalgo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Rodney Ellis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Adrian Garcia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Tom S. Ramsey, P.E.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. R. Jack Cagle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The County Judge thereupon announced that the motion had duly and lawfully carried and that the order had been duly and lawfully adopted. The order adopted follows:

IT IS ORDERED that:

1. The Harris County Judge is authorized to execute on behalf of Harris County an agreement in an amount not to exceed \$1,000,000.00 with EPIC Transportation Group, LP to provide traffic modeling and engineering services for the corridor travel demand and system analysis for the Hardy Toll Road North Segment #9. The Agreement is incorporated by reference and made a part of this order for all intents and purposes as though set out in full word for word.
2. All Harris County officials and employees are authorized to do any and all things necessary or convenient to accomplish the purposes of this order.