

# *A Grand Parkway Transportation Corporation Project*

State Highway 99  
Grand Parkway System  
Segments H, I-1 and I-2



Quarterly Construction Progress Report  
June 1 – August 31, 2018

**H and I PROJECT**

Submitted October 15, 2018

By HNTB as GEC

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Mr. Benjamin H. Asher  
Secretary/Treasurer  
Grand Parkway Transportation Corporation  
125 East 11th Street  
Austin, TX 78701

**Subject: Grand Parkway System – H and I Project**  
**Quarterly Construction Progress Report No. 1**

October 15, 2018

Dear Mr. Asher,

As the General Engineering Consultant to the Grand Parkway Transportation Corporation (GPTC) and in accordance with Section 407 of the Trust Agreement between GPTC and US Bank National Association, HNTB is pleased to submit the Quarterly Construction Progress Report for Grand Parkway Segments H, I-1 and I-2, collectively an additional System Segment. This is the first report and covers quarterly construction progress through August 31, 2018.

As described in the requirements set forth in the GPTC Trust Agreement Section 407, the General Engineering Consultant shall prepare a progress report at least quarterly during the acquisition and construction of any portion of the Grand Parkway System which is financed in whole or in part with Obligations, commencing within 120 days from the initial delivery of the initial Obligations or Obligations financing an additional System Segment. The quarters used for reporting is based on GPTC's fiscal year.

GPTC adheres to the requirements outlined in the Trust Agreement which governs the acquisition or construction of such System Segments financed with Obligations. As specified in the Trust Agreement, this report includes current estimates of: (i) the date on which such System Segment will be opened for traffic, unless such System Segment shall have been opened for traffic prior to such progress report (Refer to Page 19), (ii) the Estimated Date of Completion and an Estimated Date of Substantial Completion of such System Segment (Refer to Page 19), (iii) the cost of such System Segment, but excluding any Obligation discount, and the interest during construction and for one year after completion of construction (Refer to Pages 9-12), and (iv) the amount of funds required each six (6) months during the remaining estimated period of construction to meet the above described cost of such System Segment exclusive of funds provided for construction contingencies (Refer to Page 12), and accompanied by a progress schedule for such construction, and further including, as to construction, comparisons between the actual times elapsed and the actual costs, and the original estimates of such times and costs (Refer to Pages 19-21). This information, as well as other items relevant to each System Segment, is presented in greater detail within this report.

Best regards,



Stephen A. Hrncir, P.E.  
Program Manager  
General Engineering Consultant

## 1.0 INTRODUCTION

This report describes the State Highway 99 Grand Parkway Segment H and I (H and I Project) construction for the last quarter of Fiscal Year 2018, covering a period from June 1, 2018 through August 31, 2018. H and I Project is an extension of the existing Grand Parkway System and is being constructed by the Grand Parkway Transportation Corporation (GPTC). GPTC is a non-profit Texas corporation authorized by the Texas Transportation Commission (Commission) to develop, finance, refinance, design, construct, reconstruct, expand, operate, and maintain the Grand Parkway System. GPTC, was created under the authority of the Commission and issued bonds to finance development and construction of the System. The project is funded entirely from toll revenue bonds and other obligations issued by GPTC.

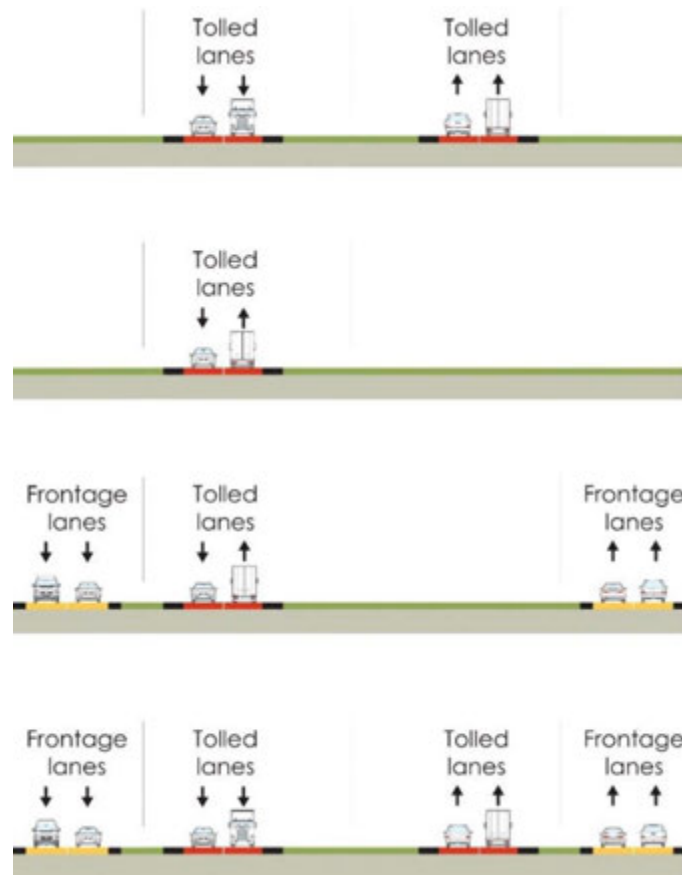
### 1.1 Project Description

The H and I Project is a 52.3-mile section of the overall Grand Parkway Project, a planned 184-mile highway facility around greater Houston extending from State Highway 146 in Galveston County to State Highway 146 in Baytown. It is spread across the seven counties including Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty and Montgomery. When completed Grand Parkway will provide a third outer loop around the Houston metropolitan area. The Grand Parkway is divided into 11 Segments designated A through I-2 as depicted on the map in Figure 1.1. Segment I-2 is further divided into Segments I-2A and I-2B. The Commission has designated Segments D (Harris County portion), E, F-1, F-2 and G that achieved final acceptance in 2017 and are open to tolled traffic and Segments H, I-1 and I-2 that are under construction as part of the Grand Parkway System.



Figure 1.1: Map of State Highway 99 (Grand Parkway) Project

Segments H and I-1 together are approximately 37.5-mile long two-lane toll facility (one lane in each direction) with intermittent four-lane sections for passing in Montgomery, Liberty, Harris and Chambers Counties. Segment H includes H-West Option, which comprises construction of two additional tolled mainlanes for a total of four tolled mainlanes for the first 8 miles from its connection with Interstate Highway 69. Segment I-2B is approximately 6.1-mile four-lane toll facility in Chambers and Harris Counties. TxDOT is currently constructing improvements to the Segment I-2B non-tolled frontage roads as a separate construction project, which is separate and apart from the H and I Project and is being funded by TxDOT. Lastly, Segment I-2A is an existing 8.7-mile four-lane facility in Chambers County that was constructed by TxDOT in 2008. Segment I-2A will receive tolling equipment upgrades and other improvements as a part of H and I Project. Figure 1.2 shows the typical sections of H and I Project over its length.



**Figure 1.2: Typical Sections of H and I Project**

The development and construction tasks for H and I Project principally include: design development; right-of-way acquisitions; utility relocations; excavation and embankment; concrete pavement; bridges; retaining walls; drill shafts; rip rap; drainage structures; barricades, signs, and traffic handling; illumination; overhead sign supports; traffic signals; toll facilities; and ITS ducts. H and I Project design, coordination, and construction activities are carried out by a DB Contractor under a design build agreement and toll zones are developed by a Toll System Integrator under a statewide toll system integration and maintenance agreement.



## 1.2 Design Build Agreement

On July 31, 2014 TxDOT issued a request for qualifications (RFQ) to design, construct, and potentially maintain Segments H, I-1 and I-2 pursuant to a design build agreement. TxDOT subsequently determined that three of the four teams submitting qualifications statements in response to the RFQ were qualified to be on the short list to submit detailed proposals.

On April 30, 2015 TxDOT issued a request for proposals (RFP) to the short-listed teams. In October 2015, TxDOT received three design build proposals. On January 24, 2017, proposal revisions were received from the three short-list teams following a request for proposal revisions process. The Commission then conditionally awarded the design build agreement to Grand Parkway Infrastructure (GPI), LLC on March 28, 2017.

Equity member firms for GPI include Ferrovial Agroman (40%), Granite Construction Company (30%), and DBW Construction –Webber (30%).

## 1.3 Project Milestones

- Conditional Award occurred March 28, 2017
- Contract fully executed on June 30, 2017
- NTP1 issued on July 10, 2017
- Limited NTP2 issued on October 13, 2017
- Option NTP issued for H-West Option on October 27, 2017
- NTP2 (full) issued on October 27, 2017
- GPTC Revenue Bond Financing closed on May 30, 2018
- Start of construction in July 2018
- Substantial Completion to occur 1,674 days after NTP1
- Expected Substantial Completion date is February 26, 2022
- Expected Open to Traffic date is February 26, 2022
- Expected Revenue Commencement date per GPTC System T&R forecast is May 22, 2022
- Final Acceptance to occur 120 days after Substantial Completion
- Estimated date of Final Acceptance is June 26, 2022

## 1.4 Purpose of the Report

GPTC Trust Agreement Section 407 states that General Engineering Consultant shall prepare a progress report at least quarterly during the acquisition and construction of any portion of the Grand Parkway System which is financed in whole or in part with Obligations, commencing within 120 days from the delivery of the initial Obligations or Obligations financing an additional System Segment. The H and I Project is considered an additional System Segment to the Grand Parkway System as defined by the GPTC Trust Agreement.

This Quarterly Construction Progress Report complies with the reporting requirements of Section 407 of the Trust Agreement. This Quarterly Construction Progress Report provides the required information as of last calendar date of the GPTC Fiscal Year quarter preceding its submittal.



## 2.0 Project Costs

Table 2.1 provides: (a) a detailed breakdown of the H and I Project bond proceeds available and budgeted per the budget adopted by the GPTC board on August 21, 2018, (b) an adjusted budget showing an estimate of total project costs at completion, (c) actual costs-to-date as of end of August 2018, and (d) a forecast comprising an estimate of costs-to-complete. Table 2.2 provides a forecast of cost for each six-month period over the remaining duration of construction and extends one-year beyond the completion of construction date to ensure all costs are captured.

Actual costs paid-to-date and an estimate of funds required for processing of DB Contractor's draw for the remaining duration of construction are shown in Table 2.3 on a semiannual and cumulative basis. Estimate of funds required is based on the approved maximum payment schedule, including the H-West Option from the design build agreement, revised as per TxDOT letter dated July 27, 2018, and further adjusted for pending change orders. The DB Contractor's earned value for the work completed is as of the latest approved draw request received for the quarter. Paid-to-date represents the amount that has been disbursed and trails the cumulative earned value estimate of work completed because of constraints from the max payment schedule. Difference in earned value and paid-to-date amounts also accounts for the time it takes for DB Contractor to assemble and submit the draw request after the cut-off date, address TxDOT review comments, resubmit as necessary, and for TxDOT to approve and process the payment.

**Table 2.1: GPTC H and I Project Budgets, Actuals and Total Costs (\$ Thousands)**

	H & I Bond Proceeds Budget			H & I Actuals	H & I Forecast	Estimate at Completion (Actuals and Forecast)
Element	Original Proceeds	Adjustments	Adjusted Total	Expended Thru Aug'18	Estimate to Complete	
Segments H, I-1, & I-2						
Design-Build Agreement Costs	894,702	923	895,625	51,890	843,735	895,625
Right-of-Way Acquisition	330,000	-	330,000	29,454	300,546	330,000
Toll Equipment & Integration	32,000	3,196	35,196	115	35,081	35,197
Environmental Mitigation	24,000	(12,000)	12,000	9,942	2,058	12,000
TxDOT Agency Costs	53,737	7	53,744	17,186	36,558	53,744
Project Contingencies	110,000	7,874	117,874	-	117,874	117,874
Subtotal Project Costs, before Financing Costs	\$ 1,444,438	-	\$ 1,444,438	\$ 108,587	\$ 1,335,852	\$ 1,444,438
Financing Costs						
Capitalized Interest (2018 Bonds/BANs)	309,855	-	309,855	-	309,855	309,855
Cost of Issuance (2018 Bonds/BANs)	11,537	-	11,537	10,185	1,352	11,537
Capitalized Interest (50% of Series 2013E)	29,639	-	29,639	29,639	-	29,639
Cost of Issuance (50% of Series 2013E)	958	-	958	958	-	958
Rate Stabilization Fund	50,000	-	50,000	50,000	-	50,000
Subtotal Financing Costs	\$ 401,988	-	\$ 401,988	\$ 90,782	\$ 311,207	\$ 401,988
Total Project and Financing Costs	\$ 1,846,427	-	\$ 1,846,427	\$ 199,369	\$ 1,647,059	\$ 1,846,427

Notes:

- Figures shown may not add to totals due to rounding.
- Table shows budgeted amounts and actual expenditures of the GPTC for the H and I project. It does not include expenditures by TxDOT supported through other sources for procurement, feasibility studies and District's frontage road project in Segment I-2B.
- The GPTC board adopts its Capital Construction Budget Segments H&I annually. The above represents updated estimates to the information found in the FY19 GPTC budget, adopted August 21, 2018.
- In addition to the GPTC board adopted H&I Budget, the Original Proceeds column also includes 50% of capitalized interest and 50% cost of issuance of Series 2013E Bonds.

**Table 2.2: H and I Project Forecast Costs (\$ Thousands)**

	H & I Forecast									Total Estimate to Complete
Element	Fiscal Year 2019		Fiscal Year 2020		Fiscal Year 2021		Fiscal Year 2022		FY 2023	
	First 6-mo.	Second 6-mo.	First 6-mo.	Second 6-mo.	First 6-mo.	Second 6-mo.	First 6-mo.	Second 6-mo.		
Segments H, I-1, & I-2										
Design-Build Agreement Costs	169,268	205,462	162,136	103,699	127,674	59,036	16,460	-	-	843,735
Right-of-Way Acquisition	100,000	100,000	37,500	37,500	9,661	9,661	2,750	2,750	725	300,546
Toll Equipment & Integration	434	651	3,948	5,921	4,201	6,302	5,450	8,175	-	35,081
Environmental Mitigation	629	607	400	220	110	52	27	13	-	2,058
TxDOT Agency Costs	7,357	7,357	6,250	6,250	3,000	3,000	1,672	1,672	-	36,558
Project Contingencies									117,874	117,874
Subtotal Project Costs, before Financing Costs	\$ 277,688	\$ 314,076	\$ 210,233	\$ 153,590	\$ 144,646	\$ 78,051	\$ 26,359	\$ 12,610	\$ 118,598	\$ 1,335,852
Financing Costs										
Capitalized Interest (2018 Bonds/BANs)	24,937	37,099	37,099	37,099	37,099	37,099	37,099	37,099	25,224	309,855
Cost of Issuance (2018 Bonds/BANs)	1,352	-	-	-	-	-	-	-	-	1,352
Capitalized Interest (50% of Series 2013E)	-	-	-	-	-	-	-	-	-	-
Cost of Issuance (50% of Series 2013E)	-	-	-	-	-	-	-	-	-	-
Rate Stabilization Fund	-	-	-	-	-	-	-	-	-	-
Subtotal Financing Costs	\$ 26,289	\$ 37,099	\$ 37,099	\$ 37,099	\$ 37,099	\$ 37,099	\$ 37,099	\$ 37,099	\$ 25,224	\$ 311,207
Total Project and Financing Costs	\$ 303,977	\$ 351,175	\$ 247,332	\$ 190,689	\$ 181,745	\$ 115,150	\$ 63,458	\$ 49,709	\$ 143,822	\$ 1,647,059

Note:

Figures shown may not add to totals due to rounding.

**Table 2.3: H and I Project Design Build Agreement Construction Draw (\$ Thousands)**

Period Ending	Estimate of Construction Draw		Earned Value		Paid-to-Date	
	Semiannual	Cumulative	Semiannual	Cumulative	Semiannual	Cumulative
8/31/2017	12,403	12,403	12,403	12,403	12,403	12,403
2/28/2018	25,125	37,528	40,711	53,114	25,125	37,528
8/31/2018	42,806	80,334	32,605	85,719	14,362	51,890
2/28/2019	140,824	221,158				
8/31/2019	205,462	426,620				
2/29/2020	162,136	588,756				
8/31/2020	103,699	692,455				
2/28/2021	127,674	820,129				
8/31/2021	59,036	879,165				
2/28/2022	16,460	895,625				

Notes:

1. Estimate of Construction Draw is based on the maximum payment schedule, including the H-West Option, revised as per TxDOT letter dated July 27, 2018 with adjustments for pending change orders.
2. Earned Value is based on construction work completed per the latest draw request for the quarter.
3. Paid-to-Date represents amounts that were disbursed as of the end of the quarter.

### 3.0 Overall Progress of Construction

Construction activities have started on the project this quarter. Leading up to the start of construction DB Contractor has been primarily engaged on pre-construction activities such as environmental coordination, permitting, right-of-way, utilities and public outreach. Design has been progressed and submittals made to TxDOT for review and comment, leading to release-for-construction for some early start packages in this reporting period. A summary of overall progress since the effective date is summarized below and illustrated in construction photographs included with Appendix A.

### 3.1 Public Information & Communications

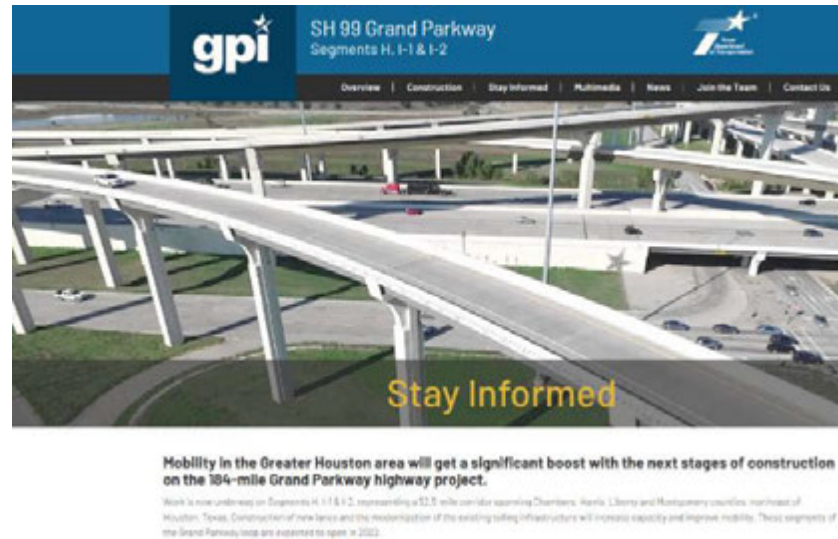
SH99 Grand Parkway Segment H, I-1 and I-2 project website is up and running – Domain name: [www.sh99grandpkwy.com](http://www.sh99grandpkwy.com)

DB Contractor has established Public Information Office located at 7560 FM 1960, Dayton, TX in Summer 2018

DB Contractor has held outreach and made presentations regarding the project to various interested parties such as:

- Rotary Club of East Montgomery County
- Crosby Huffman, Liberty Dayton Area, Cleveland, and Greater East Montgomery Chambers of Commerce
- Mont Belvieu, Baytown and East Montgomery County Emergency Responders
- Chambers County Development Council

- First Baptist Church in Porter



**Figure 3.1: Grand Parkway Segment H and I Website**

## 3.2 Utilities

DB Contractor continues to negotiate PUAA'S with utility owners and has completed sending out the PUAA's to all known affected utility owners. Eight PUAA's have been fully executed. One PUAA (Centerpoint Gas) is currently being reviewed by TxDOT. The remaining PUAA's are currently being reviewed by the utility owners. Overall status of the utility coordination is shown in the following table.

**Table 3.1: Status of Utilities Work**

Utility Status	
Anticipated Utility Adjustments	346
<b>PUAA's</b>	
Anticipated	39
Executed	8
<b>UAAA's</b>	
Anticipated	62
Executed	0

DB Contractor is continually verifying civil design impacts and working on completing AUA's with Utility Owners for utilities that are not in conflict and its right of way team is currently pursuing the required easement documents.

DB Contractor is developing UAAA's for upcoming water, sewer, electrical and telecommunication work. Its designer is progressing the water, sewer and telecommunication design.

Bid packages for water and sewer were released in June. Bid packages for communication were released in July. The DB Contractor is currently contacting approved subcontractors for participation.

DB Contractor has conducted design kickoff meetings with City of Baytown, Entergy, Century Link, CenterPoint, Comcast, Enterprise Products and Undine.

DB Contractor is currently pursuing design proposals for air bridge construction over pipelines at 3 locations. Colonial Pipe Line has requested coating their pipe line.

Status of DB Contractor managed design is as follows:

- New Caney MUD - Plan and Profile were developed and 100% design sent to New Caney and pending approval
- Undine - Investigated alternative water plant sites, created site alternate exhibits, performed engineering calculations and submitted 90% PER report
- City of Baytown - 100% Plans- Signed by City of Baytown
- Mt. Belvieu - Plans are at 60% Design
- Plum Creek - 60% design drawings with comments have been received from Plum Creek. DB Contractor is incorporating the comments into the 90% drawings

Status of utility owner managed design is as follows:

- Entergy - M&S Engineering continues to research easement opportunities. Design for priority areas is underway for distribution and transmission conflicts
- Comcast – Utility owner provided record and reference drawings. Design and coordination with electrical relocations is in process

### **3.3 Permits/Environmental**

DB Contractor completed joint field inspection documentation for Segments H, I-1 and I-2 documenting existing conditions.

SW3P sheets for Segment H1-C and portions of Segment I-1 and I-2 were provided to TxDOT and work on other SWPPP sheets is ongoing.

Reevaluation of ATC 21 in Segment H was approved by TxDOT. DB Contractor is coordinating with USACE on the design change for this location to determine if any additional mitigation is required.

Reevaluation of ATC 18 in Segment I-2 was approved by TxDOT. This design change is currently being coordinated with the USCG and USACE.

DB Contractor is working on a reevaluation package in Segments H and I-1. Design changes include:

- ATC 24 (Big Ditch Canal) - proposed Bridge to Culvert Design
- Dayton Canal - proposed Bridge to Culvert design change
- Church House Gully – proposed Bridge to Culvert
- West Dayton Ditch – proposed Bridge to Culvert
- Passing Lanes Redesign between SH 146 and Future Langston Road

DB Contractor is working on a reevaluation in Segment I-2. Design changes include:

- ML Wismer Drive – Additional ROW/corner clips
- Lee Drive – Additional ROW/corner clips

DB Contractor preparing to begin work on lead based paint mitigations at UPRR Overpass and lift bridge, and conducting Phase II investigations at Parcel 332 (Placid Tank Farm).

DB Contractor continues to coordinate with USACE and USCG to complete the wetland verification process.

Environmental surveys for areas not surveyed during the TxDOT NEPA approval process are ongoing

For potential borrow source locations, DB Contractor is in the process of completing the necessary environmental field studies to satisfy Special Condition 2 and 4 of the USACE IP and Nation-Wide Permit (NWP).

### **3.4 Right of Way**

In accordance with the terms of the design build agreement the DB Contractor is responsible for right-of-way surveys, appraisals, environmental phase I assessments, acquisition packages, title searches and relocation packages. Overall the schedule of right-of-way acquisitions and associated costs are tracking against the DB Contractor's baseline schedule. The following table provides a detailed status of progress made towards releasing parcels for construction through this reporting period.



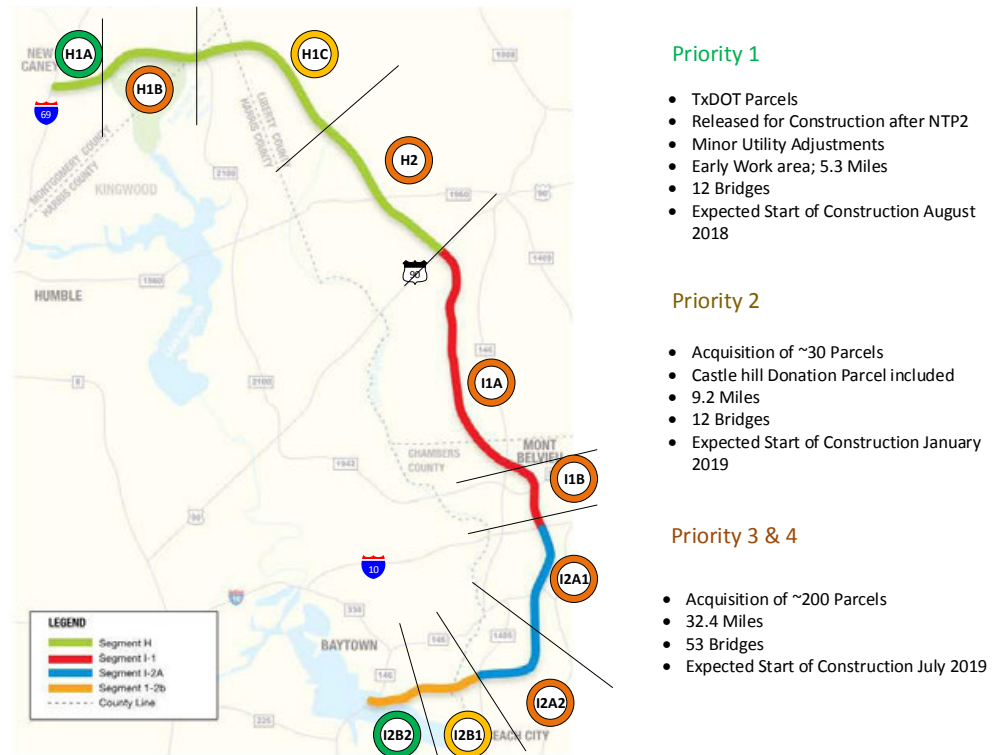
**Table 3.2: Status of Right of Way Work**

Item	Activities Completed Previous Period	Activities In-Progress	Activities Completed Current Period	Total Completed Activities
Pre-Acquisition (Title Searches, ROEs, etc.)	315	0	0	315
Appraisals (prep, approval for initial and ED update)	215	75	46	336
Surveys (prep, review, approval)	460	0	7	467
ESA Phase I's	202	5	23	230
Acquisition Packages (prep, review, approval)	134	16	59	209
Initial Offers Made	37	18	16	71
Final Offers to Made	17	1	17	35
Closing Payment Packages (prep, approval, funding for PUA's and signed deeds)	21	9	3	33
Closings	2	0	0	2
Relocation, Relocation Payment Packages and 90-Day NTV's	13	15	2	30
ED Packages (prep, review, approval)	10	0	0	10
ED Proceedings (AAG approval and setting hearing)	10	0	0	10
ED Payment Packages (prep, approval, funding, deposit and 30-day NTV)	21	0	1	22
Released for Construction	8	0	0	8

### 3.5 Design

DB Contractor is designing the project in priority areas as depicted in Figure 3.2. These areas represent the priority for start of construction based on availability of right-of-way. The sections that have top priority are shown in green and consist of Section H-1A; US-69 to East of LP 494 and Section I-2B2; SH 146 to Cedar Bayou. These are then followed by those shown in yellow and red. The progress up to end of the current quarter is as is as follows:

- Design has been progressing and is approximately 60% complete



**Figure 3.2: DB Contractor Priority Areas for Design Development**

- DB Contractor continues to review and develop the design, both in terms of technical compliance and value-engineering opportunities
- Geotechnical field investigation continues, with 97% of the boring locations completed to date
- Regular meetings with the design consultants are ongoing to progress the design submittals
- DB Contractor continues to coordinate design development with TxDOT through meetings and RFI submittals
- Preliminary design submittals are made in H-1B, H-1C, H-2, and I-2B2
- Some final design submittals have been made in H-1A and I-2B1
- Submittals are made for Final Geotechnical Engineering / Pavement Reports in I-2A1, I-2B1, and I-2B2
- Illumination reports are submitted in H, I-1B, I-2A, and I-2B
- DB Contractor continues to respond to TxDOT submittal comments

### 3.6 Tolling Systems

Coordination is on-going between the DB Contractor and TransCore for design at tolling locations. TransCore is responsible for design and construction of tolling infrastructure in the toll zones.

### 3.7 Quality

DB Contractor has mobilized its quality control staff as well as Independent Quality Firm staff to perform inspection and testing. Construction quality control and hold point inspections for drilled shaft construction were performed. DB Contractor has instituted a process for reporting non-conforming work and is maintaining a log of non-conformance reports and of Construction Deficiencies.

### 3.8 Maintenance During Construction

With the issuance of full NTP2, the DB Contractor is responsible for maintaining all existing roadways within the project right-of-way of Segments H and I-1, and is responsible for elements modified or constructed by the DB Contractor in Segment I-2. The DB Contractor has developed procedures under its Maintenance Management Plan to inspect and repair facilities on an ongoing basis. Debris removal and sign straightening have been the main items of maintenance work in this quarter.

### 3.9 Construction

The DB Contractor is constructing the project in three segments. Figure 3.3 shows the correlation of design priority areas to the three construction segments.

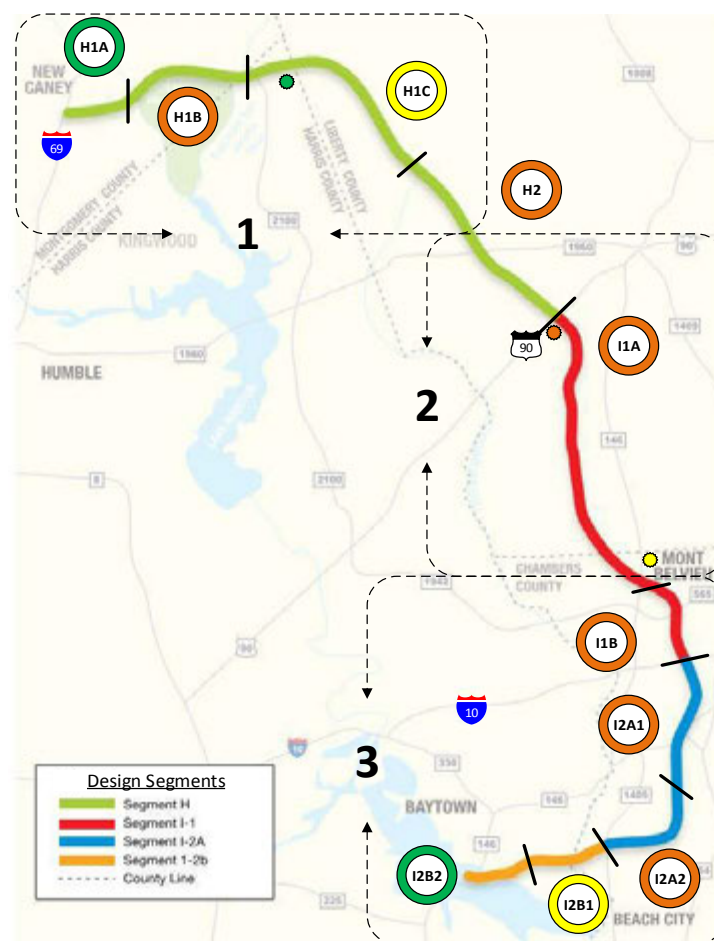


Figure 3.3: Construction Segments and Priority Design Areas

## Construction Segments

#### Construction Segment 1:

- Segment Manager: Jason Pittenger (Webber)
- From Segment G Tie-In near US 59 to North of FM 1960 (17.1 Miles)
- 45 Bridges with 871k SF of Deck; 14k CY Substructure
- 1.35M CY EX and 3.3M CY EMB; 1.9M CY to Borrow

#### Construction Segment 2:

- Segment Manager: Brais Saurez (Ferroval)
- From North of FM 1960 to SH 146
- STA 1920+00 to STA 2812+00 (16.5 Miles)
- 19 Bridges with 523k SF of Deck; 10k CY Substructure (includes a 4,000+ LF Bridge over Railroad)
- 602k CY EX and 3.5M CY EMB; 2.9M CY to Borrow
- Segment will also oversee work in Luce Bayou

#### Construction Segment 3:

- Segment Manager: Chris Allen (Granite)
- From SH 146 to Southern Terminus of the Project
- STA 2812+00 to STA 2141+19 (6.2 Miles)
- STA 445+31 to STA 617+93 (1.4 Miles)
- STA 74+00 to STA 351+48 (5.3 Miles)
- 25 Bridges with 235k SF of Deck; 4.5k CY Substructure
- 400k CY EX and 3.2 CY EMB; 2.8M CY to Borrow
- Segment will oversee the Cedar Bayou Lift Bridge

For the reporting period, the DB Contractor continued its pre-construction reporting activities including setting up subcontracts and developing pre-activity plans for early work packages. Construction activities in each of the three construction segments is as follows:

#### Construction Segment 1

- Pre-activity plans for early work packages is ongoing
- Borrow pit sampling of potential sources continued
- Initiated structures work on Bridges 201 & 202
- Continued with clearing trees East of Loop 494, and at the Plum Grove Road field office site
- Developed segment field office site and lab

#### Construction Segment 2

- Completed installing water well, electrical service and finalize field office trailers at the field office at US 90
- Completed installing entrance driveway, flex base, ditches for drainage, sediment controls, chain-link fence and entrance gate at the field office

#### Construction Segment 3

- Initiated Bridge 20 (FM 1405) drilled shafts construction, and presently have completed with the drilled shafts for bent 3
- Field Office site received water and sanitary connections and is presently waiting on internet connections

### 4.0 Substantial Completion

Substantial Completion and opening to traffic is anticipated concurrently in February 2022. According to the most recent progressed schedule submitted by the DB Contractor, Substantial Completion of H and I Project is expected on February 26, 2022. This date is within the 1,674 calendar days after issuance of NTP1 available to the DB Contractor under the DB Agreement and 19 days that are pending under Change Order No. 1. This Substantial Completion date is consistent with the target date included with the Financial Plan. Project completion through Final Acceptance is projected to be 120 days after Substantial Completion on June 26, 2022.

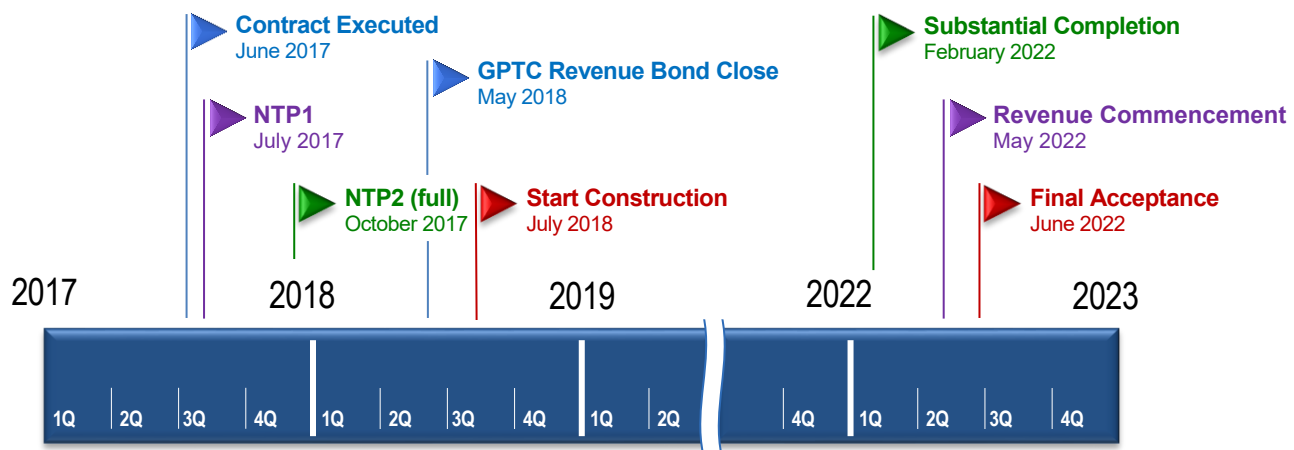
DB Contractor has an interim milestone requirement to complete work in Toll Zones 180 days prior to Substantial Completion Deadline and handover to Toll System Integrator. Latest schedule from the DB Contractor indicates this to be October 1, 2021 which meets with the requirements of the design build agreement. TxDOT continues to monitor the schedule for turning over the Toll Zone and facilitates DB Contractor and Toll System Integrator in coordinating their efforts to meet the target date.

### 5.0 Material Problems Encountered

As of August 21, 2018, when the latest draw submittal was made by the DB Contractor (for this reporting period), schedule percent complete was 8.9% and total project was reported at over 9.6% complete. An assessment of the DB Contractor's progress against the Project Baseline

CPM (Critical Path Method) schedule for the reporting period indicates that the Contractor is maintaining schedule and forecasting Substantial Completion on February 26, 2022. There are no identified threats to the schedule at this time. The Project is currently on target to meet contractually required completion date.

The current Substantial Completion date is 18 days beyond the Substantial Completion deadline included in the design build agreement. This is not a concern at this time since the DB Contractor is at the beginning stages of construction. Furthermore, there is a pending change order that will add 19 days to the contractual time for delays encountered in issuance of NTP2. There is enough time remaining on the project to allow for changes in sequencing and allocation of resources in order for the work to be completed by the required Substantial Completion date. Lastly, commencement of toll revenues are expected ahead of the date included in the T&R study. The GPTC System T&R forecast and CDM Smith 2018 Bring Down Letter assume that Segments H, I-1 and I-2B will be open to tolled traffic on May 22, 2022.



Note:  
Future dates are subject to change

**Figure 5.1: H and I Project Milestones**

As with the schedule, there are no material problems encountered with costs. One issue that is of concern is the escalation in domestic steel prices for reinforcement steel. The DB Contractor has made a request for partnering discussion in accordance with the provisions of the design build agreement to discuss whether there is any entitlement to a relief through change order.

## 6.0 Delivery Status of Equipment

No issues with equipment deliveries from the DB Contractor or the Toll System Integrator are currently anticipated. DB Contractor will procure the ITS and Traffic Signal equipment which is routine for such project.

TransCore is responsible for installing Tolling Equipment such as transponder readers and cameras, and has done so on other projects for TxDOT on a statewide basis.

## 7.0 Change Orders

### 7.1 Approved Change Orders

As of the period covered in this progress report, there are no change orders that have been approved on the project. Change orders currently being negotiated and pending approval are discussed in the next section.

### 7.2 Pending Change Orders

#### Pending Change Order #1

- Delay in issuance of full NTP2 for the project
  - Amount = \$0
  - Days = 19-day delay

#### Pending Change Order #2

- Castle Hill CH Partners Utility Casings
  - Amount = \$849,097.00
  - Days = 0
- Remove RR Track from UPRR Structures
  - Amount = \$73,941.00
  - Days = 0
- Total for Pending Change Order #2
  - Amount = \$923,038.00
  - Days = 0

Upon approval of the pending change orders, the total construction cost for the design build agreement will increase from \$894,701,621.55 to \$895,624,659.55 and total days will increase from 1,674 to 1,693.

A few other change orders are in early phases of review. This includes Bridge #8 over Rail Yard/Speer Property and requirement from Coastal Water Authority to construct a siphon system at Luce Bayou. DB Contractor has also made a request for partnering discussion regarding escalation in domestic steel prices due to tariffs on imported steel.

## 8.0 Right of Way Acquisition

TxDOT carried out early right of way acquisition activities prior to issuance of NTP2. With the issuance of the NTP2, the DB Contractor is made responsible for all right of way acquisitions. Based on progress reporting from the DB Contractor, to date status of acquisitions is as follows:

**Table 8.1: Progress on Right of Way Acquisitions**

ROW Status	
Estimated Number of Parcels	231
Surveys Submitted for TxDOT Approval	230
Right of Entry (ROE) - Signed	226
Parcels in Possession and cleared for construction	8

## 9.0 Discussion of Other Matters

There are no matters related to the H and I Project Construction that have been requested.



## APPENDIX A – Construction Photos for the Quarter



**Figure A.1: Drilled Shaft Construction at Bridge 201 in Segment H**



**Figure A.2: Drilled Shaft Construction at Bridge 201 in Segment H**



**Figure A.3: View of Clearing and Grubbing in Segment H looking East**



**Figure A.4: View of Clearing and Grubbing in Segment H near IH69**





**Figure A.5: Drilled Shaft Construction at Bridges 201 and 202 in Segment H**



**Figure A.6: Drilled Shaft Rebar at Bridges 201 and 202 in Segment H**



**Figure A.7: Drilled Shaft Construction at Bridge 20 (FM 1405) in Segment I-2B**



**Figure A.8: Drilled Shaft Construction at Bridge 20 (FM 1405) in Segment I-2B**

## APPENDIX B – Change Orders List

Change Order No.	Description	Status	Date Executed	Time Impact (days)	Cost Impact (\$)
1	NTP2 Delay	pending	NA	19	0.00
2a	Castle Hill CH Partners Utility Casings	pending	NA	0	849,097.00
2b	Remove RR Track from UPRR Structures	pending	NA	0	73,941.00
		Total		19	923,038.00

Project has pending change orders, and none have been executed at this time.

## APPENDIX C – Acronyms and Abbreviations

ATC	Alternate Technical Concept
AUA	Abbreviated Utility Agreement
CPM	Critical Path Method
DB	Design-Build
DBA	Design-Build Agreement
ED	Eminent Domain
ESA	Environmental Site Assessment
FHWA	Federal Highway Administration
FM	Farm to Market Road
GEC	General Engineering Consultant
GPI	Grand Parkway Infrastructure, LLC
GPTC	Grand Parkway Transportation Corporation
IH	Interstate Highway
IP	Individual Permit
ITS	Intelligent Transportation Systems
NEPA	National Environmental Policy Act
NTP	Notice to Proceed
NWP	Nationwide Permit
PUA	Possession and Use Agreement
PUAA	Project Utility Adjustment Agreement
RFI	Request for Information
ROE	Right of Entry
ROW	Right of Way
SH	State Highway
SI	Systems Integrator
SW3P	Storm Water Pollution Prevention Plan
TIFIA	Transportation Infrastructure Finance and Innovation Act
TTC	Texas Transportation Commission
UPRR	Union Pacific Railroad
US	United States Highway
USCG	United States Coast Guard
USACE	United States Army Corps of Engineers
T&R	Toll and Revenue
TxDOT	Texas Department of Transportation
UAAA	Utility Adjustment Agreement Amendment