



SH 249 System Quarterly Construction Progress Report

December 1, 2019 through February 29, 2020

Prepared by:





30 April 2020

Mr. Benjamin H. Asher
TxDOT Director, Project Finance, Debt and Strategic Contracts Division
125 East 11th Street
Austin, TX 78701

RE: SH 249 System
Quarterly Construction Progress Report for Fiscal Quarter Ended February 29, 2020

Dear Mr. Asher,

As the General Engineering Consultant to the SH 249 System and in accordance with Section 407 of the Master Trust Agreement dated February 1, 2019 between the Texas Transportation Commission and U.S. Bank National Association, as Trustee (the "Master Trust Agreement"); BGE, Inc. submits the Quarterly Construction Progress Report for the SH 249 System. This report covers quarterly construction progress from December 1st, 2019 to February 29th, 2020.

As described in the requirements set forth in Section 407 of the Master Trust Agreement, the General Engineering Consultant shall prepare a progress report at least quarterly during the acquisition and construction of System Segments with Obligations, by the last day of the second month after each fiscal quarter, commencing with the first full fiscal quarter after delivery of the initial Obligations or Obligations financing such System Segment. The quarters used for reporting is based on the Department's fiscal year.

The Department adheres to the requirements outlined in the Master Trust Agreement which governs the acquisition or construction of such SH 249 System financed with Obligations. As specified in the Master Trust Agreement, this report includes current estimates of: (i) the date on which such System Segment will be opened for Traffic which is found in the Current Project Schedule section of the report (page 7), (ii) the Estimated Date of Completion and an estimated date of Substantial Completion of such System Segment, also discussed in the Current Project Schedule section (page 7), (iii) the cost of such System Segment, but excluding any Obligation

*State Highway 249 System
Quarterly Construction Progress Report*

discount, and the interest during construction and for one year after completion of construction found in the System Cost Status section of the report (page 16), (iv) the amount of funds required each six 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, 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 found in the System Cost Status section of the report (page 16), and (v) a general description of the construction progress and estimated completion date of Segment 2 found in Construction Status section (page 10).

Sincerely,

DocuSigned by:
Chris Kuykendall
6B1226E59CA346F...

Chris Kuykendall, PE

Vice President

BGE, Inc

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Acronyms and Abbreviations

BGE	Brown & Gay Engineers, Inc.
CMA	Capital Maintenance Agreement
CO	Change Order (revision to scope)
DB	Design-Build
DBA	Design-Build Agreement
DBE	Disadvantaged Business Enterprises
EJ	Engineering Judgement
FA	Final Acceptance
FHWA	Federal Highway Administration
FM	Farm to Market Road
FPAU	Financial Plan Annual Update
FY	Fiscal Year
GEC	General Engineering Consultant
HCTRA	Harris County Toll Road Authority
IQF	Independent Quality Firm
MCTRA	Montgomery Toll Road Authority
NCR	Non-Compliance Report
NTP	Notice to Proceed
O&M	Operations and Maintenance
OV	Owner's Verification Firm
PBS	Project Baseline Schedule
PUAA	Project Utility Adjustment Agreement
QA	Quality Assurance
QC	Quality Control
ROW	Right-of-Way
SC	Substantial Completion
SH	State Highway
SI	System Integrator
T&R	Toll & Revenue
TOD	Toll Operations Division (of TxDOT)
TxDOT	Texas Department of Transportation
UAAA	Utility Adjustment Agreement Amendment
UPRR	Union Pacific Railroad
USACE	United States Corps of Engineers
US	United States Highway
WOTUS	Waters of the United States

EXECUTIVE SUMMARY

The SH 249 Project (the “Project”) is a proposed 25.5-mile new-location roadway in Montgomery and Grimes Counties, located northwest of Houston, and developed by the Texas Department of Transportation (“TxDOT”). The Project begins at the current terminus of State Highway (SH) 249 frontage roads at Farm to Market (FM) 1774 in Pinehurst, Texas (Montgomery County) and extends to SH 105 near Navasota, Texas (Grimes County). The Project consists of (a) 14.8 miles of four new toll lanes from FM 1774 in Pinehurst to FM 1774 in Todd Mission (“Segment 1” or the “System”) and (b) an additional 10.7 miles of two non-tolled lanes from FM 1774 in Todd Mission to SH 105 near Navasota (“Segment 2”) which is not part of the System established pursuant to the Master Trust Agreement between the Texas Transportation Commission (the “Commission”) and U.S. Bank National Association, as Trustee (the “Master Trust Agreement”). The Project provides greater mobility for residents and travelers in northwest Houston to the portions of the Tomball Tollway being built by Montgomery County Toll Road Authority (MCTRA) and Harris County Toll Road Authority (HCTRA). When all portions of the freeway are connected, users will have improved access to other major freeways in northwest Houston including the Grand Parkway and the Sam Houston Tollway.

The Project is being designed and constructed utilizing a lump sum Design-Build Agreement (the “DBA”) executed on October 3, 2017 with the selected best value proposer, WBCCI, LLC (the “DB Contractor”), after a competitive selection process. The DB Contractor is responsible for the design, construction, and optional partial maintenance of the Project. The design-build delivery method is being implemented in accordance with TxDOT and Federal Highway Administration (FHWA) requirements and provides more cost and schedule certainty over traditional delivery projects. Segment 1 is anticipated to be open to traffic ahead of schedule and will open no later than March 15, 2021. Segment 2 is scheduled to be open to traffic on or before June 5, 2023. The Segment 2 scheduled opening date changed based on the date that the United States Corps of Engineers (USACE) issued the 404 Permit (as defined herein) for Segment 2. See “Current Project Schedule.”

The current estimated total cost to develop the Project is \$796.7M (Segment 1 - \$516.7M; Segment 2 - \$280.0M) as of February 29, 2020. This estimated cost includes the negotiated DBA price for design, construction, and all other services required to deliver the Project per the DBA; utility relocation; Right-of-Way (ROW) costs to acquire necessary property to design, construct, and maintain the Project; tolling equipment and integration; environmental mitigation; TxDOT administration costs; and reasonable Project contingency. Funding for the Project is a combination of Federal, State of Texas, and local government funds (Montgomery County) as well as proceeds of Obligations issued pursuant to the Master Trust Agreement for Segment 1 only (the tolled portion of the Project). Segments 1 (tolled) and 2 (non-tolled) are funded separately even though both segments are being constructed under the same DBA. Maintenance responsibilities will be shared between TxDOT and the DB Contractor pursuant to a Capital Maintenance Agreement (CMA) Notice to Proceed to the DB Contractor 180 days prior to the scheduled Substantial Completion. The costs for operations and maintenance (O&M) of the Project, including roadway and toll collection system elements, are not included in the total Project development cost estimate.

DATE OF THIS REPORT AND SUBSEQUENT EVENTS

The World Health Organization has declared a pandemic following the outbreak of COVID-19, a respiratory disease caused by a new strain of coronavirus which is currently affecting many parts of the world, including the United States and Texas. On January 31, 2020, the Secretary of the United States Health and Human Services Department declared a public health emergency for the United States in connection with COVID-19. On March 13, 2020, the President of the United States declared the pandemic a national emergency and the Texas Governor declared COVID-19 an imminent threat of disaster for all counties in Texas. The situation is rapidly developing; for additional information on these events in Texas, reference is made to the website of the Governor at <https://gov.texas.gov/> and the quarterly Bond Appendix and supplements thereto as prepared by the Texas Comptroller of Public Accounts which are on file with the Municipal Securities Rulemaking Board's Electronic Municipal Market Access System (EMMA). The Texas Transportation Commission and the Department continue to monitor the spread of COVID-19 and are working with local, state, and national agencies to address the potential impact of COVID-19.

The information contained in this report is provided as of February 29, 2020 and for the fiscal quarter ended February 29, 2020, unless otherwise specified herein, and the filing of this report does not, under any circumstances, imply that there has been no change in the affairs of the Project, the System, or TxDOT since the specified date or dates as of which such information is provided. The dates as of and the periods for which information is provided in this report occurred before the worldwide COVID-19 pandemic and the measures instituted to control the pandemic. The pandemic has adversely affected travel, commerce and financial markets globally and is expected to adversely affect economic output worldwide and in Texas, including within the counties traversed by the Project. While the COVID-19 pandemic has, as of the date of this report, had no impact to the current completion schedule, cost, or progress of the Project, no assurance can be provided as to any future impact the pandemic may have on the Project, the System, or TxDOT. Accordingly, the historical information set forth in this report is not indicative of future results or performance due to these and other factors.

Purpose of the Report

Per Section 407 of the Master Trust Agreement, the General Engineering Consultant (GEC) shall prepare a progress report by the last day of the second month after each fiscal quarter during the acquisition and construction of any portion of a System Segment which is financed in whole or in part with Obligations, commencing with the first full fiscal quarter after the delivery of the initial Obligations or Obligations financing an additional System Segment as defined in the Master Trust Agreement.

As the GEC to TxDOT for the System, and in accordance with the requirements set forth in Section 407 of the Master Trust Agreement, Brown and Gay Engineers, Inc. (BGE) prepared this Quarterly Construction Progress Report that describes the Project, schedule, construction progress, estimates of construction, and operations and maintenance costs of the proposed System (Segment 1). This report presents BGE's opinion on the reasonableness of the schedule and cost estimates for the Project (see "GEC Findings" herein.)

Figure 1: Project Location Map

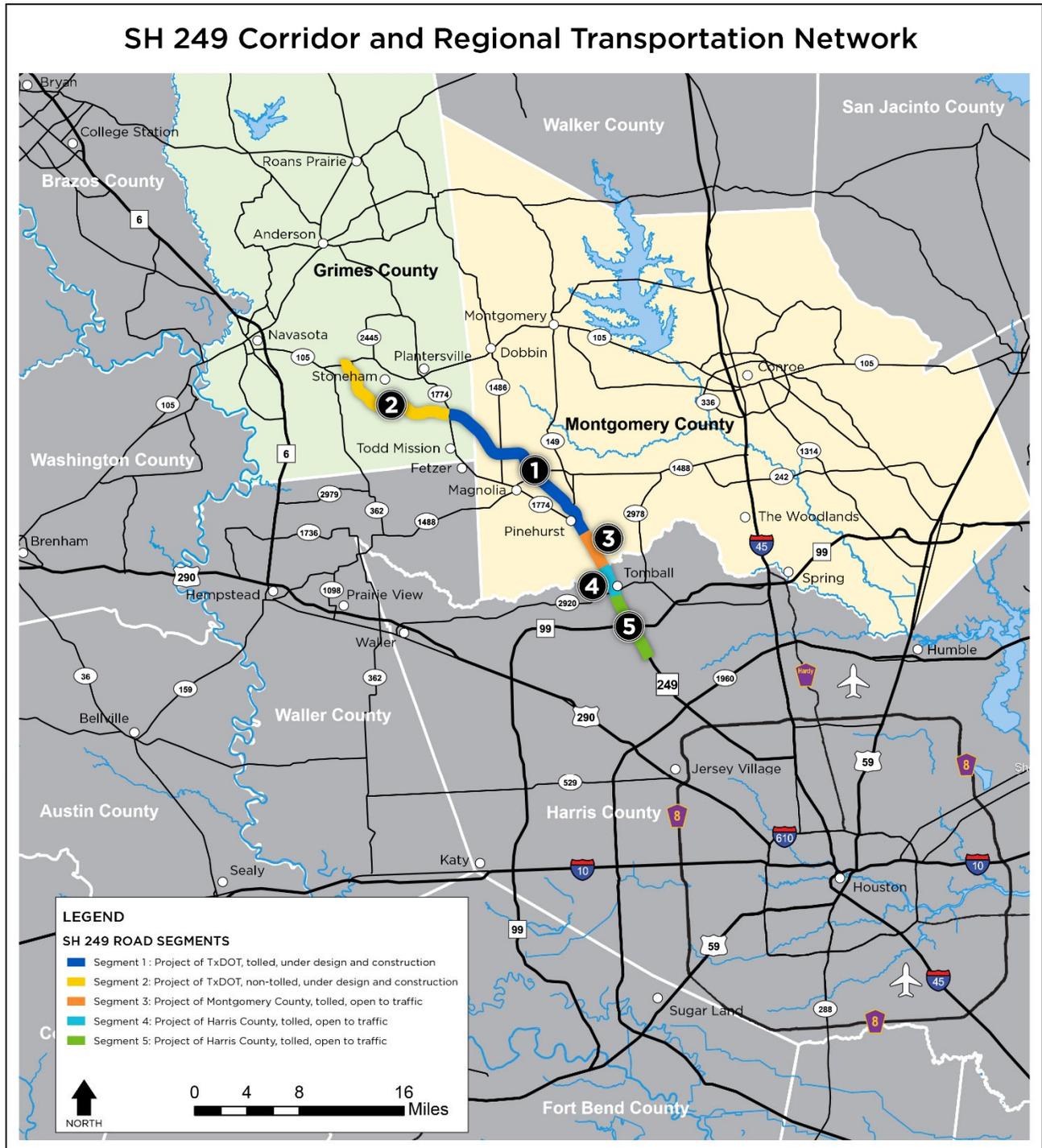
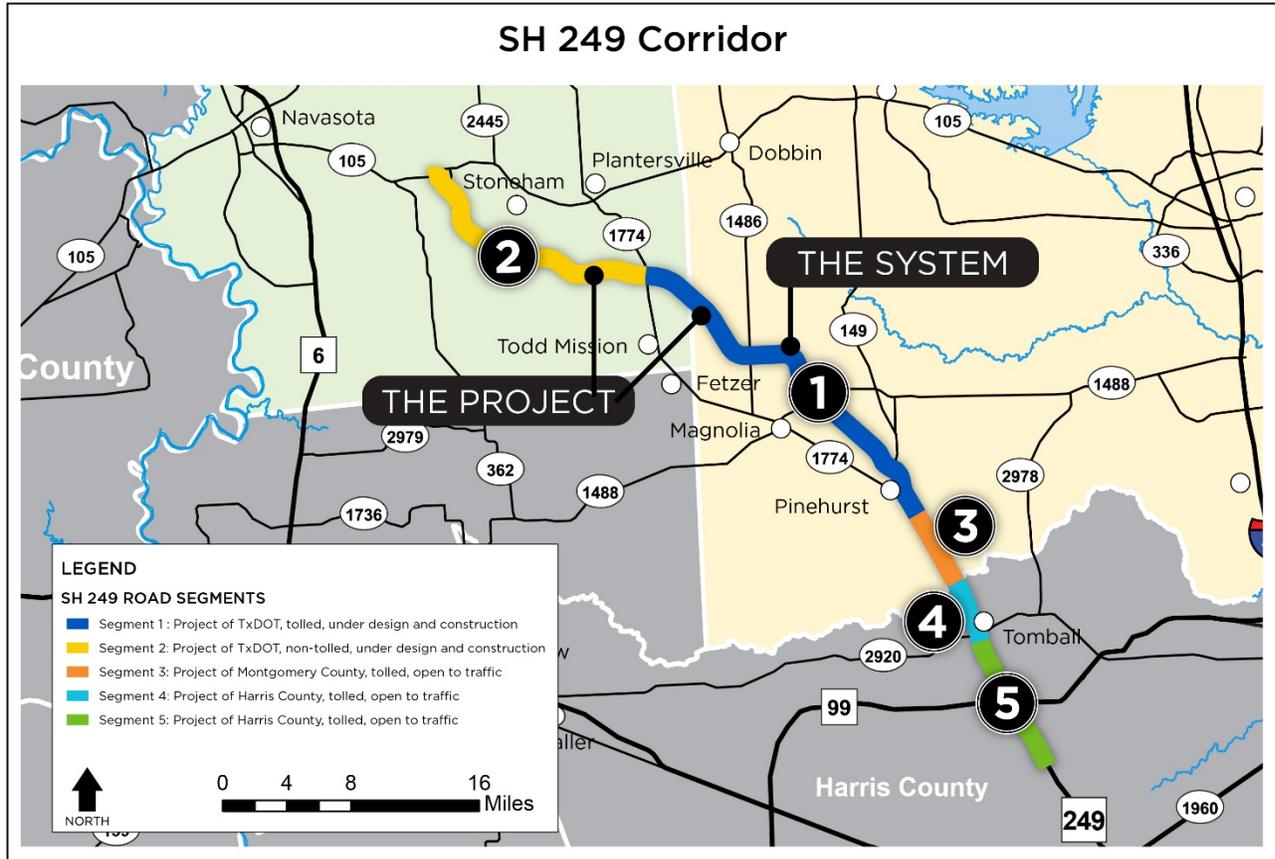


Figure 2: SH 249 Corridor Segments 1 – 5



Current Project Schedule

Segment 1 and Segment 2 are following different design and construction schedules which allows Segment 1 to open to traffic before Segment 2. Segment 1, the tolled segment of the Project, is referred to as the System pursuant to the Master Trust Agreement.

While developing the Toll & Revenue (T&R) study, TxDOT's consultants accounted for the staggered opening dates. TxDOT is moving forward with two separate opening dates for the different segments.

Table 1: Project Milestones

Project Milestone	Original Milestones	Q3, FY 2019	Q4, FY 2019	Q1, FY 2020	Q2, FY 2020
Contract Execution	October 3, 2017	October 3, 2017	October 3, 2017	October 3, 2017	October 3, 2017
NTP1 ¹	October 4, 2017	October 4, 2017	October 4, 2017	October 4, 2017	October 4, 2017
Segment 1 Limited NTP2	October 25, 2017	October 25, 2017	October 25, 2017	October 25, 2017	October 25, 2017
Segment 1 NTP2	March 15, 2018	March 15, 2018	March 15, 2018	March 15, 2018	March 15, 2018
Segment 2 Limited Design NTP	June 7, 2018	June 7, 2018	June 7, 2018	June 7, 2018	June 7, 2018
Segment 2 Limited Construction NTP	October 15, 2018	October 15, 2018	October 15, 2018	October 15, 2018	October 15, 2018
Segment 2 NTP2	Spring 2019	Q1 FY 2020 ²	August 5, 2019	August 5, 2019	August 5, 2019
Segment 1 SC (Open to Traffic)	March 15, 2021	March 15, 2021	March 15, 2021	March 15, 2021 ³	March 15, 2021 ³
Segment 1 FA	July 2021	July 13, 2021	July 13, 2021	July 13, 2021	July 13, 2021
Segment 2 SC (Open to Traffic)	September 2022	Q2 FY 2023 ²	January 6, 2023	June 5, 2023 ⁴	June 5, 2023 ⁴
Segment 2 FA (Anticipated)	Q3 FY 2022	Q3 FY 2023 ²	May 6, 2023	Oct 3, 2023 ⁴	Oct 3, 2023 ⁴

¹ Notice to Proceed (NTP) is TxDOT's formal correspondence to the DB Contractor to proceed with a major work item.
² Q3 represents tentative dates that became contractual when NTP2 for Segment 2 was issued.
³ Section 1A is anticipated to open in 2020 to align with the opening to traffic of Segment 3 by MCTRA.
⁴ TxDOT provided the DB Contractor an additional 150 days for Segment 2 construction via a Directive Letter dated September 18, 2019.

Each month, BGE reviews the DB Contractor's construction Project Baseline Schedule (PBS) to verify that the schedule accurately reflects work completed during the previous pay period. During this review, BGE's staff compares the schedule to contractual requirements, prior months and other factors such as weather. BGE then reviews the reported construction progress to field observations and inspection reports to verify that the progress reported by the DB Contractor is accurate.

Based on the PBS dated February 2020, the DB Contractor is on track to meet the Project Milestones shown above in [Table 1](#) and as noted, likely to complete work ahead of schedule.

TxDOT anticipates the System opening to traffic on March 15, 2021 which is the scheduled Substantial Completion (SC) date. Opening the System allows TxDOT to collect tolls as traffic

utilizes the roadway. TxDOT determines that SC is met when the roadway is generally complete and safe for the traveling public. The DB Contractor may finish minor cleanup/punch list work for items such as painting, landscaping or other aesthetic finishes between SC and Final Acceptance (FA).

The DB Contractor is required to complete the System by March 15, 2021 so that TxDOT may open the System to traffic. If the DB Contractor fails to complete SC by this date, it is obligated to pay daily liquidated damages to TxDOT to cover any loss of revenue which TxDOT can use to satisfy its obligations under the Master Trust Agreement. The March 15, 2021 SC deadline date can only change by either the revision of the current contract scope via Change Order or by the occurrence of a Force Majeure event as outlined in DBA Section 13.8.

The scheduled System FA is July 13, 2021 and represents the date that all construction and close-out activities must be finished.

The schedule for the construction of Segment 2 is linked to final approval of an environmental permit (the 404 Permit) from the USACE. TxDOT received the 404 Permit from the USACE and issued the NTP2 for Segment 2 on August 5, 2019. The 404 Permit was expected in April 2019 but was delayed when the USACE requested additional investigation of a potentially historic site on an effected parcel outside of the Project's ROW limits. NTP 2 authorized the DB Contractor to move forward with all construction activities on Segment 2.

As of February 29, 2020, the SC for Segment 2 is scheduled to occur on June 5, 2023, the same date that TxDOT plans to open Segment 2 to traffic. The GEC anticipates the DB Contractor will achieve Segment 2 FA by October 3, 2023.

Based on our review of the current PBS, BGE, Inc. believes that the DB Contractor and TxDOT can meet the milestones shown in [Table 1](#) of this Report.

Current Project Progress

For the Project, the design and construction activities are divided between Segment 1 (the System) and Segment 2. The Obligations were issued to finance the System; however, the opening of Segment 2 will impact the traffic volume on the System, therefore this section includes the status of both Segments.

The progress of the Project is discussed in greater detail in the following “Status” sections.

Design Status

The design for Segment 1 began when TxDOT issued NTP1 on October 4, 2017, authorizing the DB Contractor to begin the design of all elements of Segment 1. As of February 29, 2020; the status of Segment 1 design is 99% complete. The remaining 1% is withheld for any revisions based on unknown field conditions that require design changes prior to TxDOT accepting the final, as-built plan set. BGE currently anticipates that the DB Contractor will fully open Segment 1 to traffic by the contractual deadline of March 15, 2021.

The design for Segment 2 began on June 7, 2018. As of February 29, 2020, the design for Segment 2 is approximately 90% complete and the design efforts are progressing as expected. The Segment 2 open to traffic date shifted to June 5, 2023 for a pending CO for additional roadway widening and bridge overpasses. The additional work is accounted for in the current design; however, the CO is pending execution. TxDOT provided the DB Contractor an additional 150 days for Segment 2 design and construction via a Directive Letter dated September 18, 2019 with the follow up CO anticipated to be executed in June 2020.

Right-of-Way Status

As of February 29, 2020, all parcels required for Segment 1 and 2 are in TxDOT possession. There are some Segment 2 parcels remaining in the acquisition process; however, the ROW is accessible and cleared for construction. ROW acquisition will not have impact on the System or the remaining schedule.

Utility Status

The DB Contractor continues to work with TxDOT and the various utility owners in Segment 1 and Segment 2 of the Project to finalize the utility agreements so that utility owners can be

reimbursed for the respective portions of their work. These agreements are executed to allow TxDOT to review the utility adjustment plans, cost estimates, and land rights for the eventual execution of the utility work. From December 1, 2019 thru February 29, 2020 (Q2 FY 2020), no new utilities were identified within Segment 1 limits.

As of February 29, 2020, the utility status for Segment 1 is shown in [Table 2](#):

Table 2: Utility Status

Segment 1 Utility Status								
	PUAA				UAAA			
	Q3 FY '19	Q4 FY '19 ¹	Q1 FY '20 ¹	Q2 FY '20 ¹	Q3 FY '19	Q4 FY '19	Q1 FY '20	Q2 FY '20
Anticipated	20	21	21	21	3	3	3	3
Executed	17	19	20	21	3	3	3	3
% Executed	85%	90%	95%	100%	100%	100%	100%	100%

¹ Multiple Project Utility Adjustment Agreements under common Utility provider were combined.

Construction Status

The DB Contractor began construction activities in Segment 1 on March 15, 2018 and is aggressively progressing the work. The DB Contractor started by clearing trees, grasses and underbrush. The ROW clearing work was followed by rough grading work to create a stiff, dense general roadway profile. Once the rough grade was established, heavy equipment arrived to place drainage pipe at water crossings and to build the foundations for bridge structures. Currently, the DB Contractor has completed 77% of all construction work activities for Segment 1. Moving forward, the DB Contractor will focus on the placement of bridge deck, bridge rail and the placement of concrete pavement.

The DB Contractor began construction activities in Segment 2 on October 15, 2018 on parcels that were both in TxDOT possession and not impacted by the 404 Permit. To date, the construction activities include clearing, rough grading, utility relocation, and some bridge foundation installation work. TxDOT received the 404 Permit and issued NTP 2 on August 5, 2019. With the 404 Permit & NTP 2, the DB Contractor received full authority to move forward with all construction activities within Segment 2. Currently, the DB Contractor has completed 18% of the Segment 2 construction activities; which is less than previously reported due to the additional Segment 2 scope from the Directive Letter dated September 18, 2019 referenced above.

Construction of the Tolling System

TxDOT's Toll Operations Division (TOD) contracted TransCore, LP, as the System Integrator (SI), to install the Segment 1 tolling system. During Q4 of FY 2019 Atkins North America, Inc, TOD's design consultant, completed the design efforts for the tolling system and transmitted the tolling system design to the DB Contractor and TransCore. Per the DBA, the DB Contractor is responsible for the toll zone civil site work including earthwork, paving, power, and communications. TransCore is responsible for the toll gantry construction and supporting infrastructure, and the installation and testing of the tolling equipment.

TxDOT conducted a toll kick-off coordination meeting on April 30, 2019 to ensure that TxDOT, the SI, and the DB Contractor understand the timelines and turnover requirements. TxDOT determined that follow up meetings would occur so that all parties can discuss the current status and scheduling of the SI's construction activities.

As of February 29, 2020, the SI has completed construction on portions of the tolling system work. The SI is coordinating directly with the DB Contractor for access to specific sites to avoid conflicting operations and damage to each other's work. The SI completed the toll gantries, equipment cabinet and generator installations in Section 1A (the southern portion of Segment 1 from FM 1774 in Pinehurst to FM 1488) and the gantries in Section 1B (the northern portion of Segment 1 from FM 1488 to FM 1774 in Todd Mission). The DB Contractor completed the electrical infrastructure to the Section 1A gantries and power is connected and operational at these locations; the DB Contractor expects communication connections by April 30, 2020. Upcoming Section 1A toll work includes finalizing the pad site, installing the access turnout, and the tolling equipment installation and testing.

Construction Quality Status

TxDOT and the DB Contractor work together with the QA/QC Independent Quality Firm (IQF) and the Owner's Verification Firm (OV) to ensure that all materials pass a strict inspection and testing program. The DB Contractor is responsible for the QA/QC for all material placed within in the Project limits. The IQF firm conducts official inspections and materials sampling and testing and is responsible for the official acceptance of materials. To ensure accurate reporting, TxDOT hired a separate firm, the OV testing firm, that conducts random inspections and testing of material on behalf of TxDOT. The IQF firm for the DB Contractor is Raba Kistner, a company with significant work experience in Texas. The OV firm hired by TxDOT for the Project is SAM-Construction Services LLC. SAM-CS is a Texas based company with an experienced inspection and testing staff.

During Q2 FY 2020, IQF conducted 2,221 inspections and the OV firm conducted 260 inspections. During this period, the IQF team took 1,795 material samples while OV firm made 330 material samples.

During Q2 FY 2020 eight Non-Conformance Reports (NCRs) for inspections or materials did not pass all the standards. Of the eight reports, seven were closed with the replacement or repair of the material. The one NCR that was left open will be addressed when all information is collected, and final strength is determined.

Finally, during Q2 FY 2020, the Project had three IQF Engineering Judgements (EJ). An EJ is an approval process for a sample that presents minor irregularities which do not fully meet the material standards. All three of the Project EJs are related to sieve analysis for aggregate gradation on a sieve. This is a common occurrence on all transportation projects, is simple to address, and does not lead to impacts to the overall final quality.

Public Information Status

The DB Contractor is responsible for the daily public outreach for the Project. In this role, the DB Contractor hired a third-party public relations firm with local ties to ensure the DB Contractor meets with key shareholders in a way that is best for the local stakeholders. The public information team conducts routine outreach for all lane closures, changes to existing intersecting roadway alignments, and upon request, to local organizations or governmental groups. During Q2 FY 2020 the public information team held three meetings to discuss the general construction progress. The public information team remains focused on answering calls, questions and emails from citizens and local officials as they come to the Project office.

Executed Change Orders

TxDOT executed three Change Orders (CO) for the Project between December 1, 2019 and February 29, 2020. [Table 3](#) below shows the current change orders.

The first Change Order, CO #15, was executed on December 11, 2019. TxDOT executed CO #15 as a price adjustment linked to the final approval of the 404 Permit and issuance of Segment 2 NTP 2. This CO increased the Segment 2 cost by \$9,063,740.00 and was funded thru the State Highway Fund.

The second Change Order, CO #16, was executed on December 16, 2019, and was based on the need to comply with the AASHTO/FHWA Joint Implementation Agreement for Manual for Assessing Safety Hardware (MASH) memorandum dated January 6, 2016. This memorandum requires all new installations of safety hardware on the National Highway System to be evaluated using the 2016 edition of MASH. CO #16 accounts for the implementation of the newly released MASH compliant TxDOT Standards for safety hardware including updating permanent installations of safety hardware using MASH 2016 criteria. This CO increased the Segment 1 cost by \$77,352.19 with no impact to the completion schedule.

The last Change Order, CO #17, is for the performance of the study, design, construction, and associated work for an at grade eastbound to westbound turnaround along SH 105 for access to driveways along the north side of SH 105 for eastbound traffic. This CO increased the Segment 2 cost by \$406,681.63 with no impact to the completion schedule.

Table 3: Executed and Pending Change Orders

Change Order No.	Project Segment	Description	Status	Date Executed	Time Impact (days)	Cost Impact (\$)
1	1	Audubon Driveways	Executed	Aug. 16, 2018	-	\$ 724,451.72
2	1	98 Day Extension	Executed	Aug. 16, 2018	98	-
3	1	Floodway Bridges	Executed	Nov. 16, 2018	150	12,772,814.77
4	1	CCTV Pole Spacing	Executed	Sept. 19, 2018	-	(146,415.00)
5	1	Terra Utility Sleeves	Executed	Dec. 24, 2018	-	633,898.09
6	1	Montgomery Co. Future Crossing	Executed	Jan. 30, 2019	-	182,962.50
7	2	WOTUS Design	Executed	Mar. 18, 2019	90	1,212,612.98
8	2	SH 105 ROW Designation	Executed	June 2, 2019	-	146,025.00
9	2	Bridge Aesthetic Revisions	Executed	June 10, 2019	-	(33,409.00)
10	1	Additional Tolling Fiber	Executed	June 19, 2019	-	199,001.07
11	1	Traffic Signals @ FM 149 & FM 1486 (design only)	Executed	June 27, 2019	-	140,070.00
12	1	Acceptance of Non-Conforming Work CSBE	Executed	June 29, 2019	-	(64,039.11)
13	1	Audubon Ramp Relocation & Driveways	Executed	August 9, 2019	-	1,115,296.47
14	1	Traffic Signals @ FM 149 & FM 1486 (construction only)	Executed	August 21 2019	-	701,260.69
N/A	1 & 2	Key Personnel Change	Executed	Sept. 3, 2019	-	(100,000.00)
15	2	Segment 2 Price Adjustment	Executed	Dec. 11, 2019	-	9,063,740.00
16	1	MASH Compliance	Executed	Dec. 16, 2019	-	77,352.19
17	2	SH 105 Turnaround	Executed	Dec. 20, 2019	-	406,681.63
Subtotal for Executed Change Orders					338	\$ 27,032,304.00
18	1	Intersection Improvements	Pending		-	1,355,823.44
19	1	FM 1774 Bridge at Todd Mission	Pending		-	14,388,024.11
20	2	WOTUS Construction/Grade Separations/Passing Lanes	Pending		150	43,230,369.60
Subtotal for Pending Change Orders					150	\$ 58,974,217.15
Total for Executed and Pending Change Orders					488	\$ 86,006,521.15

Pending Change Orders

Given the current status of the Project, BGE, Inc does not anticipate any additional change orders for Segment 1 beyond those noted here.

In Segment 1, there are two change orders under review. CO #18 is based on compliance with the Advance Funding Agreement between TxDOT and Montgomery County to add curbed concrete U-turns and pedestrian elements for the future thoroughfare and FM 1488 intersections. This will increase the Segment 1 cost by \$1,355,823.44 with no impacts to the project schedule. CO #19 is a modification to the design and construction of the FM 1774 (Segment 1, Section 1B) grade separation intersections for an additional cost of \$14,388,024.11 and no impacts to the project schedule. TxDOT will fund this additional construction. BGE does not anticipate any impacts to the opening of Segment 1 to the public by March 15, 2021.

In Segment 2, there is one change order under review. CO #20 accounts for mitigating the construction impacts on the Waters of the United States (WOTUS), new grade separations requested by Grimes County officials to improve safety at select intersections, and passing lanes in select locations to again improve safety for an additional cost of \$43,230,369.60. When executed, CO #20 will supersede the Directive Letter dated September 18, 2019 and add 150 days to Segment 2 which extends the anticipated opening to traffic date to June 5, 2023.

System Cost Status

Table 4 provides the most accurate cost information that is currently available for the System and reflects the construction and financing costs of Segment 1 for the current period.

Table 4: Segment 1 Actuals

Element	System Budget			Actuals			Forecast	Estimate at Completion (Actuals and Forecast) ⁵
	Original Budget	Adjustments	Adjusted Total	Spent thru Nov 2019	Spent this Quarter	Spent thru Feb 2020	Estimate to Complete	
Segment 1 (\$ millions)								
Design-Construction (DBA) ¹	\$ 359.76	\$ 11.15	\$ 370.91	\$ 271.77	\$ 18.59	\$ 290.36	\$ 80.55	\$ 370.91
Locally funded CO ²	2.88	3.45	6.33	-	-	-	6.33	6.33
Contingency (DBA) ³	21.36	-	21.36	3.82	9.54	13.36	8.00	21.36
Toll Integrator	11.00	2.00	13.00	3.04	3.83	6.87	6.13	13.00
ROW	81.00	-	81.00	39.00	1.16	40.16	40.84	81.00
Environmental Mitigation	16.00	-	16.00	-	-	-	16.00	16.00
Contingency (ROW)	8.10	-	8.10	-	-	-	8.10	8.10
Construction Subtotal (\$ millions)	\$ 500.10	\$ 16.60	\$ 516.70	\$ 317.63	\$ 33.12	\$ 350.75	\$ 165.95	\$ 516.70
Financing Costs								
Capitalized Interest	\$ 29.99	\$ -	\$ 29.99	\$ 3.36	\$ 3.90	\$ 7.26	\$ 22.73	\$ 29.99
Cost of Issuance ⁴	1.59	(0.01)	1.58	1.58	-	1.58	-	1.58
Debt Service Reserve Funds	24.93	-	24.93	24.93	-	24.93	-	24.93
Rate Stabilization Fund	10.00	-	10.00	10.00	-	10.00	-	10.00
Subtotal Financing Costs	\$ 66.51	\$ (0.01)	\$ 66.50	\$ 39.87	\$ 3.90	\$ 43.77	\$ 22.73	\$ 66.50
Total System & Financing Costs	\$ 566.61	\$ 16.59	\$ 583.20	\$ 357.49	\$ 37.02	\$ 394.51	\$ 188.68	\$ 583.20
<p>¹ Includes CO 1-6, 10-14, & 16 which apply to the System and \$13.87M via a Directive Letter dated September 18, 2019.</p> <p>² Locally funded CO increased as local funding became available for CO. As local funding was added, the total State funding decreased. Additionally, TxDOT adjusted the Locally funded CO adjustment down by \$0.1M to account for the change in Key Staff.</p> <p>³ A portion of the Contingency maybe used to cover a portion of the CO costs.</p> <p>⁴ Cost of Issuance Expense included transactions funded by Bond Proceeds only.</p> <p>⁵ The DB Contractor payment is the sum of the DBA & Locally funded CO which totals \$377.24M.</p>								

Table 5 reflects the projected spending for the remainder of the System’s construction timeline. TxDOT may use contingency funds for the additional scope (COs #18, #19, & #20) unless other State funds become available. TxDOT began payments to the System Integrator when they started work on the System. Payments will continue until the complete tolling system for Segment 1 is finished and in operation.

Table 5: Segment 1 Forecasts

Element	FY 2020	FY 2021		Total Estimate to Complete
	6 month	6 month	6 month	
Design Build Agreement Cost ¹	\$ 26.85	\$ 26.85	\$ 26.85	\$ 80.55
ROW Costs	13.61	13.61	13.61	40.84
Toll Equipment & Integration ²	2.42	2.42	1.29	6.13
Environmental Mitigation	5.33	5.33	5.33	16.00
System Contingencies	5.37	5.37	5.37	16.10
Subtotal System Costs	\$ 53.58	\$ 53.58	\$ 52.45	\$ 159.62
Financing Costs				
Capitalized Interest ³	\$ 3.90	\$ 3.90	\$ 3.90	\$ 22.73
Cost of Issuance	0.00	0.00	0.00	0.00
Subtotal Financing Costs	\$ 3.90	\$ 3.90	\$ 3.90	\$ 22.73
Total System & Financing Costs	\$ 57.48	\$ 57.48	\$ 56.35	\$ 182.35

¹ The DBA Costs are the sum of Table 4 DBA and Locally funded CO

² The Tolling System cost for O&M are not shown in this table

³ Total Estimate to Complete includes \$11.04M for FY 2022 projection.

Table 6 reflects the actual draws thru the end of February 29, 2020 and the projected draws thru the end of the Project. Please note that as pending Change Orders are executed the total Project cost and the estimated Construction Draw may change to reflect the new scope of work.

Table 6: Segment 1 DBA Construction Draws

Period (MM-DD-YYYY)		Estimate of Construction Draw (\$ millions)		Paid-to-Date (\$ millions)	
Begin	End	Period	Cumulative	Period	Cumulative
NTP1	02-28-2018			71.08	71.08
03-01-2018	08-31-2018			59.86	130.94
09-01-2018	02-28-2019			52.99	183.93
03-01-2019	08-31-2019			62.16	246.09
09-01-2019	02-29-2020			44.26	290.36
03-01-2020	08-31-2020			30.66	30.66
09-01-2020	02-28-2021	30.66	61.32		
03-01-2021	07-13-2021	25.56	86.88		
Total		\$86.88		\$290.36	
				\$377.24	

GEC Findings

BGE, Inc, reviewed the System’s overall design and construction progress and finds that the Project is currently on track to finish within the projected schedule and budget. BGE, Inc. believes that the DB Contractor should have no issues with the delivery of the Project. It appears that TxDOT should plan to open the System (Segment 1) to traffic by March 15, 2021.

Appendix A: Photographs of Current Construction

Picture #1: Pavement Installation at the Southern Limit of the Project



Picture #2: Conduit Installation under Segment 1 Bridge



Picture #3: Finished Pavement at Future Terra Blvd.



Picture #4: Intersection with FM 149



Picture #5: Segment 1A Mainlane Gantry



Picture #6: Segment 1 Final Grading at Median



Picture #7: Section 1B Bridge Construction over FM 1774 (Todd Mission)

