

**DANNENBAUM ENGINEERING CORPORATION**

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Stacy Slawinski, P.E.  
Fort Bend County  
301 Jackson Street  
Richmond, Texas 77469-3108

Invoice Date: January 14, 2020  
Invoice Period: 12/01/19 Through 12/31/19  
Invoice Number: 479701/10/II

For Professional Services:

In connection with PS&E for FM 521 Expansion Project from FM 2234 to SH 6  
**P.O. Number 174087**

| DESCRIPTION OF WORK TASK                          | TOTAL<br>CONTRACT<br>AMOUNTS | PERCENT<br>COMPLETE<br>TO DATE | AMOUNTS<br>EARNED<br>TO DATE | PREVIOUSLY<br>INVOICED<br>AMOUNTS | CURRENT<br>INVOICE<br>AMOUNTS |
|---|------------------------------|--------------------------------|------------------------------|-----------------------------------|-------------------------------|
| <b>Final PS&amp;E Engineering</b>                 |                              |                                |                              |                                   |                               |
| Roadway Design (Dannenbaum)                       | \$ 597,188.93                | 49.99%                         | \$ 298,536.51                | \$ 255,671.92                     | \$ 42,864.59                  |
| Drainage Design (Dannenbaum)                      | \$ 496,261.25                | 45.00%                         | \$ 223,317.54                | \$ 173,691.42                     | \$ 49,626.12                  |
| Traffic - Signing & Pavement Marking (Infratech)  | \$ 125,958.58                | 60.09%                         | \$ 75,692.38                 | \$ 55,592.13                      | \$ 20,100.25                  |
| Traffic - Signals (Infratech)                     | \$ 256,812.30                | 55.19%                         | \$ 141,741.94                | \$ 104,042.57                     | \$ 37,699.37                  |
| Traffic - Illumination (Infratech)                | \$ 91,926.66                 | 20.11%                         | \$ 18,483.36                 | \$ 5,158.00                       | \$ 13,325.36                  |
| Misc. Roadway & TCP (Dannenbaum)                  | \$ 518,672.45                | 48.58%                         | \$ 251,957.83                | \$ 203,481.01                     | \$ 48,476.82                  |
| Structural Design - Broadway Bridge (LJA)         | \$ 282,225.00                | 59.43%                         | \$ 167,734.58                | \$ 132,187.95                     | \$ 35,546.63                  |
| Structural Design - Misc. Structures (Dannenbaum) | \$ 119,876.74                | 47.50%                         | \$ 56,941.46                 | \$ 47,950.70                      | \$ 8,990.76                   |
| Management (Dannenbaum)                           | \$ 226,646.78                | 39.97%                         | \$ 90,592.84                 | \$ 79,260.50                      | \$ 11,332.34                  |
| Management (LJA)                                  | \$ 83,960.00                 | 19.68%                         | \$ 16,523.75                 | \$ 16,523.75                      | \$ -                          |
| Management (Infratech)                            | \$ 33,415.36                 | 50.21%                         | \$ 16,779.48                 | \$ 11,993.98                      | \$ 4,785.50                   |
| <b>Extras</b>                                     |                              |                                |                              |                                   |                               |
| Survey (LJA)                                      | \$ 230,114.99                | 55.66%                         | \$ 128,092.40                | \$ 117,492.15                     | \$ 10,600.25                  |
| ROW Parcel Mapping (LJA)                          | \$ 313,925.00                | 45.87%                         | \$ 143,988.50                | \$ 143,988.50                     | \$ -                          |
| Geotechnical (Associated Testing Laboratories)    | \$ 284,997.00                | 94.34%                         | \$ 268,863.00                | \$ 260,359.00                     | \$ 8,504.00                   |
| Drainage Impact Study (LJA)                       | \$ 457,220.00                | 45.25%                         | \$ 206,876.90                | \$ 194,360.00                     | \$ 12,516.90                  |
| Utility Coordination (Dannenbaum)                 | \$ 225,379.39                | 4.00%                          | \$ 9,015.18                  | \$ 6,761.39                       | \$ 2,253.79                   |
| SUE (LJA)   | \$ 214,405.00                | 73.88%                         | \$ 158,405.00                | \$ 158,405.00                     | \$ -                          |
| Project Initiation & Planning (Dannenbaum)        | \$ 30,000.00                 | 100.00%                        | \$ 30,000.00                 | \$ 30,000.00                      | \$ -                          |
| Items as Authorized by County                     | \$ 40,000.00                 | 0.00%                          | \$ -                         | \$ -                              | \$ -                          |
| Direct Expenses (Dannenbaum)                      | \$ 26,725.00                 | 3.27%                          | \$ 872.87                    | \$ 867.07                         | \$ 5.80                       |
| Direct Expenses (LJA)                             | \$ 24,750.00                 | 2.60%                          | \$ 642.30                    | \$ 642.30                         | \$ -                          |
| Direct Expenses (Infratech)                       | \$ 612.00                    | 55.96%                         | \$ 342.50                    | \$ 100.00                         | \$ 242.50                     |
| <b>Bid/Construction Phase Services</b>            |                              |                                |                              |                                   |                               |
| Post Design Services (Dannenbaum)                 | \$ 80,340.29                 | 0.00%                          | \$ -                         | \$ -                              | \$ -                          |
| Post Design Services (LJA)                        | \$ 72,540.00                 | 0.00%                          | \$ -                         | \$ -                              | \$ -                          |
| Post Design Services (Infratech)                  | \$ 34,935.12                 | 0.00%                          | \$ -                         | \$ -                              | \$ -                          |
| <b>Total Management &amp; Engineering Fees</b>    | \$ 4,868,887.84              | 47.35%                         | \$ 2,305,400.32              | \$ 1,998,529.34                   | \$ 306,870.98                 |

**TOTAL AMOUNT DUE THIS INVOICE: \$306,870.98**

479701/MJK/II

**Progress Report No. 10**  
**From December 01, 2019 to December 31, 2019**  
**Report Date: January 13, 2020**

**Project: FM 521 Expansion Project, Precinct 1**  
**FM 2234 to SH 6**

**Activities this Billing Period:**

**Project Management (Dannenbaum)**

- Held weekly progress conference calls with Project Design Team.
- Coordinated and managed surveying, geotechnical, drainage, and PS&E design efforts.
- Coordinated with Fort Bend County Engineering and TxDOT Project Manager.
- Coordinated with RODS Surveying to obtain Survey Control Package for submittal to TxDOT.

**PS&E Design (Dannenbaum)**

- Continued to advance design from 30% toward 60% PS&E.
- Continued Project Layouts, Typical Sections, Roadway Plans, and Intersection Layouts.
- Continued Roadway Design. Focused on ditch design, driveways, and intersections.
- Continued Traffic Control Plans, Construction Staging, Detour Plans, and TCP Narrative.
- Continued Corridor Model and design Cross Sections, including Broadway and Access Roads.
- Continued Retaining Wall Plan & Profile Sheets for Broadway Overpass, Clear Creek, FBC Ditch A, American Canal, and Mustang Bayou.
- Continued Drainage Design. Adjusted inlet locations according to profile adjustments and to meet ponded width requirements. Focused on Broadway overpass and Access Roads.
- Continued Drainage Area Maps and Drainage Plan & Profile Sheets.
- Continued Bridge design for drainage crossings.
- Received 30% additional comments from TxDOT Austin Bridge Division. Coordinated with TxDOT to address all comments.
- Continued development of quantities and cost estimate.
- Began list of standards and specifications.
- Continued development of UPRR Exhibit A.
- Complete Bike form (new from TxDOT) to select Bike Facility on FM 521.

**Survey (LJA)**

- Processed latest survey results and updated topo DGN and TIN files, including additional survey on Broadway.
- Submitted updated Abstract Map and Preliminary ROW Maps to TxDOT on 12/05/2019

- Coordinated with Dannenbaum and RODS Survey to complete Survey Control submittal. Note that this effort was included in LJA's schematic scope, but was not submitted or approved by TxDOT. Submitted Survey Control Package to TxDOT on 12/05/2019.

### **Geotechnical (Associated Testing Laboratories)**

- Submitted Geotechnical Report to TxDOT for review on 01/08/2020.

### **Drainage Study (LJA)**

- Continued development of existing and proposed SWMM and Geopak Drainage Models.
- Coordinated with Dannenbaum to update major conveyance system and profiles.
- Updated Drainage Study report based on comments from TxDOT and Dannenbaum.
- Submitted final Drainage Analysis Impact Report to TxDOT on 12/19/2019.

### **Traffic Design (infraTECH)**

- Continued development of Signing & Pavement Marking plans.
- Continued development of Traffic Signals Layouts.
- Continued Illumination and CTMS plans.

### **Activities Next Month:**

#### **Project Management (Dannenbaum)**

- Attend Meetings with TxDOT and Fort Bend County.
- Continue weekly conference calls with Project Design Team.
- Continue coordination with sub consultants.

#### **PS&E Design (Dannenbaum)**

- Continue design development toward 60% submittal to TxDOT and Fort Bend County.
- Continue development of UPRR Exhibit A.
- Continue Traffic Control Plan and Construction Staging.
- Continue review of intersections, side streets, driveways, and existing UPRR crossings.
- Continue 3D Corridor Model and design Cross Sections.
- Continue drainage design, focusing on ditch design.
- Continue developing quantities and updated cost estimate.
- Continue list of project standards and specifications.
- Begin utility conflict analysis.

**Survey (LJA)**

- Develop initial plans for QL A SUE work.
- Address TxDOT comments on Abstract Maps and Preliminary Mapping submittal
- Continue Property Descriptions and Parcel Plats for submittal to TxDOT for review and County to begin ROW Acquisition.

**Geotechnical (Associated Testing Laboratories)**

- Address any comments from TxDOT on draft report.

**Drainage Study (LJA)**

- Address any comments from TxDOT on final report.

**Traffic Design (infraTECH)**

- Continue development of Signing & Pavement Marking plans toward 60% submittal.
- Continued development of Traffic Signals Layouts toward 60% submittal.
- Continue Illumination and CTMS plans toward 60% submittal.

**Approvals and Planned Deliverables next Month:**

- Continue 60% PS&E with planned submittal to TxDOT in late January.
- Submit UPRR Exhibit A to TxDOT in January.
- Plan for 30% Utility Coordination meeting at TxDOT in early February.



Michael J. Kaspar, P.E.  
Dannenbaum Engineering Corporation