

**AMENDMENT  
TO  
PROFESSIONAL ENGINEERING SERVICES AGREEMENT  
COMPLETE STREET DESIGN SERVICES  
FOR  
HEMISFAIR PARK AREA STREETS PROJECT**

This first amendment to the Professional Engineering Services Agreement for the Complete Street Design Services for Hemisfair Park Area Streets Project is entered into by and between the **City of San Antonio** ("City"), a home rule municipal corporation, and **Moore Iacofano Goltsman, Inc.**, ("Consultant"), referred to collectively herein as the "Parties".

**WHEREAS**, in November 2011, through Ordinance 2011-11-17-0928, the City and Consultant entered into a Professional Engineering Services Agreement for the Complete Street Design Services for Hemisfair Park Area Streets Project ("Project") in an amount not to exceed \$3,100,000.00 ("Original Agreement"); and

**WHEREAS**, the contract capacity of the Original Agreement has been increased through change orders to \$3,215,313.00; and

**WHEREAS**, this amendment adds additional scope to the Original Agreement and increases the contract capacity by \$671,121.55 for a revised contract capacity not to exceed \$3,886,434.55; and

**NOW THEREFORE**, in consideration of the terms, covenants, agreements and demises herein contained each to the other given, the sufficiency and receipt of which are hereby acknowledged, the Original Agreement is amended as follows:

1. **Contract Capacity.** The not to exceed contract capacity of the Original Agreement is hereby increased to a not to exceed amount of THREE MILLION EIGHT HUNDRED EIGHTY-SIX THOUSAND FOUR HUNDRED THIRTY-FOUR AND 55/100 DOLLARS (\$3,886,434.55).
2. **Consultant's Proposal/Fee Schedule.** The fee schedule attached hereto as Attachment A is hereby added to and incorporated into Exhibit 1 Consultant's Proposal/Fee Schedule of the Original Agreement.
3. **Additional Scope.** The scope attached hereto as Attachment B is hereby added to and incorporated into Exhibit 2 Scope of Services of the Original Agreement.

Except as amended hereby, all other provisions of the Agreement are hereby retained in their entirety and remain unchanged.

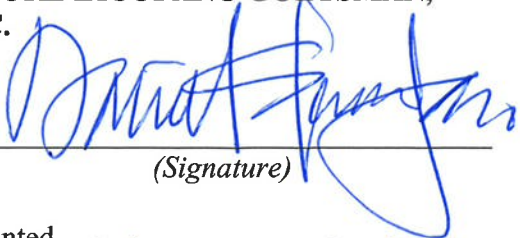
-----Signature to follow-----

**EXECUTED** and **AGREED** to as of the dates indicated below.

**CITY OF SAN ANTONIO**

**MOORE IACOFANO GOLTSMAN,  
INC.**

\_\_\_\_\_  
(Signature)

  
\_\_\_\_\_  
(Signature)

Razi Hosseini  
Interim Director

Printed  
Name:

DANIEL S. IACOFANO

Transportation & Capital  
Improvements  
Department  
Date:

Title:  
Date:

CEO  
12-12-19

Approved as to Form:

\_\_\_\_\_  
Assistant City Attorney

**ATTACHMENT A**  
**CONSULTANT'S PROPOSAL/FEE SCHEDULE**





Task	Material		Labor		Subcontract		Travel		Permit		Equipment		Specialty		Professional		Other		
	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	
	(\$)		(\$)		(\$)		(\$)		(\$)		(\$)		(\$)		(\$)		(\$)		
<b>Phase 6: Construction Administration</b>																			
6.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6.10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Phase 7: Project Close Out</b>																			
7.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Subtotal</b>																			
<b>Subcontractor Mark-up, 2%</b>																			
																			<b>Total</b>



## **ATTACHMENT B SCOPE OF SERVICES**

Consultant shall perform or be responsible for the performance of all tasks set out below. Consultant is designated as “MIG” below and the “MIG Team” is the Consultant and all of the subconsultants performing services under the Original Agreement and this Amendment thereto.

### **Phase 1: Stakeholder Engagement & Ongoing Project Coordination & Management**

#### **1.1 Ongoing Project Management & Direct Costs**

MIG will manage all aspects of the project to maintain schedule and budget, continuous liaison with City Staff, subconsultants, and other interested parties. MIG will provide communication and advice to City Staff on all matters related to the project. This task includes preparation of monthly invoices and coordination with the City and all participating consultants.

#### **1.2 Ongoing Project Coordination**

The MIG Team will participate in regularly scheduled telephone coordination calls with the City project manager. It is expected that regular calls will be scheduled bi-weekly. The day of the week, regular call time, and the length of the call can be assessed at the time. MIG will prepare and email agendas ahead of the call, when needed. MIG envisions an 8-month period for design phase of the project.

As part of this task, HDR Engineering, Inc. (HDR) will coordinate with City Staff for up to 8 months (8 hours per month). HDR will attend up to 10 internal design review meetings (up to 30 minutes each) and take part in 20 bi-weekly coordination meetings (up to 30 minutes each).

#### **1.3 Stakeholder & Community Engagement**

MIG team will lead stakeholder engagement. Ximenes Associates (Ximenes) will prepare for up to two rounds of stakeholder meetings, one (1) at 70% and one (1) at 95% project completion. This will include a team meeting to discuss overall strategy, confirm, identify, and gather contact information for stakeholders, as well as conduct interviews, and documentation these stakeholder interviews.

Up to 10 stakeholder interviews will be prepared for over a two-day period. MIG will facilitate the meetings and prepare presentation materials.



HDR will meet with P3 developers (up to 4 meetings for the duration of 2 hours per meeting).

The team will organize (1) one public community meeting. As part of the preparation for this meeting, it will include a team meeting, which will include a site visit to the meeting venue, outreach to Ximenes databases, as well as set up and staff members to attend the public meeting.

It is assumed that the City will provide a space for the public meeting and refreshments during the public and stakeholder meetings. Any other outreach (besides Ximenes eblasts) will be provided by the City, as well as media relations and social media. All logistics (such as AV, venue, security, etc.) will be taken care of by the City. Ximenes will provide and prepare a room set up diagram, and exhibit and flip chart easels (as needed). Ximenes will also review exhibits and presentations to ensure ease of understanding by the general public and contribute to the design and formatting.

Up to two people from MIG will attend the public community meeting. MIG will also prepare key presentation materials, specifically PowerPoint and posters.

#### *Phase 1 - Deliverables:*

- Bi-monthly conference call agendas
- Monthly invoicing
- Documentation from stakeholder interviews
- Presentation materials for stakeholder interviews

### **Phase 2: Revised Design Layout**

## **2.1 Survey Update**

Fernandez Fraser White & Associates, Inc.(FFW) will provide a revised survey which includes current as-built conditions to the previously prepared topographic survey date for the Alamo Street Project. The area to be updated will be the area east of the curb line of Alamo Street at three locations:

1. The area south of Market Street adjacent to the old convention center.
2. The area generally across from Nueva Street south to the Majik Theater Building
3. The area at the Yanaguana Park

### *2.1.1 Traffic Analysis*

WSP will update the previous traffic operations analysis completed to evaluate revisions to the original Complete Streets design for Alamo Street. The revised analysis will include various traffic volume and geometric updates based on recent modifications within the study area. Development and geometric information will be obtained from Pape-Dawson Engineers and agreed upon by the City of San Antonio.

WSP will obtain and review any new P3 roadway network modifications that have occurred since the previous VISSIM analysis. Any future roadway network modifications along Alamo Street and Losoya Street will also be confirmed with the City. Future

roadway modifications in relationship to the Alamo will also be reviewed but not incorporated into the VISSIM model.

WSP will obtain proposed roadway plans or schematics showing improvements for the roadways in the study network. The geometry will be updated within the previously created VISSIM model. No new intersections will be added.

WSP will adjust the previously developed volumes for the Year 2025 AM/PM peak hour as necessary. Acceptable growth rates will be discussed with the City and used if necessary.

WSP will review any proposed land use changes that have occurred since the previous 2018 analysis. The previous trip generation calculations will be reviewed and adjusted if necessary. The project trips will be reassigned to the intersections for both AM and PM peak hours, based on locations of land uses, revised parking garage access points, roadway network, and trip distribution.

WSP will update Year 2025 AM & PM VISSIM peak hour volumes for intersections within the study area. The project trips will be assigned to the intersections for both AM and PM peak hours, based on locations of land uses, parking garage access points, roadway network, and trip distribution.

WSP will update Year 2025 AM & PM VISSIM peak hour models of the study area. The previously created VISSIM model developed by WSP will be used. 3D models will not be developed.

WSP will prepare a Technical Memorandum summarizing each of the tasks included above and will attend up to two (2) meetings with MIG and/or City staff via phone or in person to update the operational analysis.

MIG will work with WSP to review the draft traffic analysis findings and provide feedback that will then be incorporated in the final operational analysis. Modifications to the plan layout will be incorporated to address desirable mitigable impacts.

MIG will attend up to two (2) meetings with City Staff to review the operational analysis. MIG will help prepare the materials for the meeting with City Staff. This will include a PowerPoint to illustrate the analysis and the minor modifications to the plan layout.

### ***2.1.2 Revised Layout***

The MIG team will update the 40% design layout to include the latest feedback from P3 development Maverick Plaza and Civic Park design, as well as the results from traffic analysis and the updated survey. MIG will meet with City Staff to review the revised layout and make final edits.

### ***Phase 2 – Deliverables:***

- Updated Survey
- Traffic Analysis
- Revised Layout

### **Phase 3. 70% PS&E**

#### **3.1 Design Team (Internal) & Project Coordination/Review Meetings**

MIG will attend project design coordination meetings with the design team and City Staff, as needed. For estimate purposes, HDR and Bender Wells Clark Design (BWDC) will attend the following meetings:

- Review meeting with City (1 meeting)
- Design coordination meetings (2 meetings)

The design team will meet with City staff at the completion of the 70% Construction Document phase to review comments. It is assumed that this is one combined meeting and that all comments have been consolidated into one formal word document for response. It is also anticipated any redlined drawings will be available in addition to the written comments.

#### **3.2 70% Civil, Electrical & Traffic Plans**

HDR will prepare all civil, electrical, and traffic plans for the limits of Alamo Street, from north of Market Street to South of Cesar Chavez Boulevard. The 40% design plans will be reviewed for consistency with current existing conditions, verified by a walkthrough and available as-built plans.

Current improvements at the intersections of E. Nueva Street, Market Street, Villita Street, and Cesar Chavez Boulevard will be incorporated into the design. The design will progress to the 70% phase and will then be issued along with an opinion of probable construction cost.

Findings from the Internal Streets PER that affect Alamo Street within the proposed project limits will be incorporated into the design. Hydraulics and Hydrology (H&H) analysis will be based on the PER drainage section; a drainage report will not be part of this scope.

Revisions will be needed for the following:

- Traffic Control Plan as a result of the removal of Cesar Chavez;
- Roadway geometry, drainage, and utility layouts as a result of improvements that have taken place since plans were placed on hold, convention center demolition, P3 developments, future plans for Alamo Street north of Market Street, and PER findings;
- Traffic signal layouts; and
- Intersection layouts

Original geotechnical investigation and report prepared for this project the original survey prepared as part of this project will be utilized for design by HDR. Any additional survey required will be considered additional services. Design of the E. Nueva and Alamo Street intersection will be per the Issue For Construction plan set dated: September 5, 2014.

Additional as-built survey provided by the City will be incorporated into design. Per City of San Antonio, location of utilities will remain in current alignment as shown in 40% design. HDR assumes a 10-calendar month design schedule and an 18-calendar month construction schedule.

### ***3.2.1 General sheets:***

HDR will prepare General sheets to include:

- Title and Index of Sheets
- Project Layout
- Existing Typical Sections
- Proposed Typical Sections
- General Notes

### ***3.2.2 Traffic Control sheets:***

HDR will prepare Traffic Control sheets to include:

- Traffic control plan
- Traffic control miscellaneous details
- Traffic control typical sections
- Traffic control narrative
- Traffic control advance warning signs
- Vehicular and Pedestrian detour layouts

### ***3.2.3 Roadway Plan sheets:***

HDR will prepare Roadway plan sheets to include:

- Horizontal and vertical control data
- Plan and profile sheets
- Intersection layouts
- Roadway miscellaneous details
- Roadway quantities

### ***3.2.4 Drainage Plan sheets:***

HDR will prepare Drainage Plan sheets to include:

- Drainage Area Map
- Storm drain plan and profile sheets
- Storm drain hydraulics

- LID elements drainage design
- SW3P plan
- SW3P narrative
- Drainage quantities

### ***3.2.5 Traffic Plan sheets:***

HDR will prepare Traffic Plan sheets to include:

- Existing signal at Market/Alamo
- Proposed signal at Market/Alamo
- Existing signal Nueva/Alamo
- Proposed signal Chavez/Alamo
- Temporary Traffic Signal Design (Developed at 95%)
- Signing and pavement marking plans
- Traffic quantities

### ***3.2.6 Prepare Design Cross Sections***

HDR will prepare Design Cross Sections to include:

- Roadway cross sections at 50-foot intervals
- Roadway cross sections at driveways

### ***3.2.7 Structural/ Architectural***

HDR will develop at 95%

### ***3.2.8 Electrical & Photometrics Plans:***

HDR will prepare Electrical & Photometrics Plans to include:

- Fieldwork and decorative pole design
- Lighting analysis and calculations
- Illumination layouts
- Coordination of electrical services
- Pedestrian features and landscape

### ***3.2.9 Utility Coordination***

HDR will do the following:

- Coordination meetings (up to 2 meetings)
- Prepare initial list of SUE needs
- Prepare utility conflict matrix
- Prepare utility layouts
- Coordinate and meet with individual utilities (Estimated 4 meetings)
- Prepare utility coordination report

FFW will provide field surveying associated with SUE Level A and “B” services and revisions to the previously prepared base plan for the City of San Antonio Alamo Street Project. The project limits will be as shown on utility layout included with HDR's April 22, 2016 email (South of Commerce St to South of Cesar Chavez Blvd).

FFW fees include surveying 10 SUE Level “A” locates. FFW will survey the Quality Level B SUE surface locate marks placed by the SUE consultant. The services of the SUE consultant are not included in FFW’s scope. FFW will then revise the utility locations in the project base plan as necessary based on the SUE surface markings.

FFW anticipates field work being completed within 3 days of completion of marking by the SUE Consultant, and will coordinate with the SUE consultant as work progresses. The FFW field crew will make periodic trips to the site during the SUE marking phase to survey the location of recent markings. After all SUE marks have been surveyed, adjustment of the CADD drawing utilities (ACAD14 version) by FFW office staff will be completed within 15 business days. Surveying of Level “A” potholes in addition to 10 locations is an additional service.

FFW will utilize flagmen as they did in the topographic survey portion of the project. Should the City of San Antonio require additional traffic control or law enforcement, a separate proposal will be provided by FFW for these costs when identified.

FFW requests that the City of San Antonio Project Manager contact the City of San Antonio Center City Development and Operations Department and notify them that FFW will be conducting land surveying operations within the Alamo Street Right of Way.

FFW will provide a 30-day written notice to the Project Manager on a start date after receiving a Notice to Proceed. During the topographic survey phase, we encountered delays and potential shut down of our work because the previous department, Downtown Operations, staff had not authorized our work in the area.

If possible, FFW requests a location in or near the project area to park survey vehicle(s) during the time of locating the SUE marks and/or potholes.

Should City of San Antonio Right-of-Way (ROW) Permits be required for this project, FFW will provide a separate proposal for those fees.

FFW will have an RPLS sign and seal a QL-B-SUE roll plot so that the drawing depicts the utilities as marked by the SUE firm in the project area. An ACAD14 version drawing will also be provided.

Underground Services and Softdig will provide routinely and normally carried cones and warning signs for Maintenance of Traffic. Traffic conditions, location of test holes in roadway and permit requirements may require other devices (T.M.A., arrow boards, etc.) and/or flaggers or police detail. Such costs will be invoiced as an expense, as stated in Exhibit A. The consultant will coordinate with utility company inspectors as required by the resultant agreement and by law. Neatly cut and removal of existing paving, with the

cut area not exceeding 12 in. x 12 in. and excavation using the SoftDig vacuum excavation system.

Underground Services, Inc. and Softdig will excavate test holes with care as to prevent damage to utilities, however, any damage resulting from the condition of the utility due to age, burial conditions, covering, etc. is not the responsibility of SoftDig. Softdig will provide backfill with excavated material and compact in 6-inch lifts and furnish, install and color- code a permanent above-ground marker directly above the centerline of the structure, as well as “down the hole” color-coded plastic ribbon.

Softdig will provide a bituminous cold patch of pavement within the limits of the original cut at the time of backfill. Pavement restoration is guaranteed for 3 years. If the test hole is excavated in an area other than the roadway pavement, the area disturbed will be restored to the condition prior to excavation. Excluded from this provision would be any disturbance to sub soil and ground water conditions that may result in a “quick condition” or “bubbling” of water to the surface from hydrostatic pressure release resulting from excavation and through no fault of SoftDig. Also excluded is restoring pavement with hot mixed/hot laid bituminous pavement or keyholing operations.

Softdig will designate, record, and mark the approximate horizontal location of existing utilities by geophysical prospecting techniques (for up to 80 hours of Surface locates Quality Level B) and Subsurface locates Quality Level A for 10 potholes which will provide the following test hole information:

- Elevation of top and/or bottom of utility tied to vertical control
- Locate test hole by swing ties to 3 physical objects.
- Elevation of existing grade over utility at test hole to within 0.01 ft.
- Outside diameter of pipe or width of duct banks and configuration of noncased multi-conduit systems.
- Utility structure material compositions, and condition when possible.
- Pavement thickness, generalized soil type and unusual conditions.

Field mark and field sketches of utilities are detected in area(s) shown and as directed. SoftDig will not be liable for any claims resulting from damage to public utilities not field marked by 811/Miss Utility Call Center because of non-notification by client to the Call Center subsequent to SoftDig markouts.

Softdig will excavate by air/vacuum excavation at locations as directed, provide field test hole data reports, notify One-Call center. Anyone-Call fees will be invoiced to client, secure all required permits. Permit fees will be invoiced to client.

The client will provide site access including mechanical rooms/basements, field direct areas of work and work activity, provide all available utility records and/or site facility contact, provide base map showing work area(s), exact site address and site contact representative with phone number prior to SoftDig’s mobilization.

The invoice will be based on schedule of fees applied to actual quantity of work performed by Underground Services/SoftDig. Time estimates for project completion are based on the consultant's best judgment, experience and work involved. Actual site conditions such as pavement thickness, depth of utility, soil conditions, type and material of utility, weather, etc. could adversely affect time estimates.

For budget purposes only, this project is estimated as follows:

Subsurface locates (QL-A) for up to 10 potholes, up to 40 hours for 1 officer, for 10 permits, and for 10 Lane closures. Surface locates (QL-B) is an additional service and can be provided for up to 80 hours.

### ***3.2.10 Complete 70% QA/QC***

HDR will complete 70% QA/QC

### ***3.2.11 70% submittal, Opinion of Probable Construction Costs, & Direct Costs***

HDR will do the following:

- Cost Estimates
- Specifications, Special provisions, Special Specifications
- Project schedule
- Project manual

## **3.3 70% Landscape Site, Irrigation and Planting Plans**

Based on the 40% CD comments and the revised layout plan, MIG team will prepare 70% Landscape Site, Planting & Irrigation Plans for Alamo St. The plans will comply with the latest City of San Antonio Standards, applicable local agency standards, and appropriate industry standards. The work will include the following plans at approximately the 70% completion level:

- Landscape site plans and details, including any site furnishings and special paving construction details
- Landscape planting plans and details
- Landscape irrigation plans and details, identifying the POS and the main line location

One (1) full-size electronic PDF and one (1) half-size electronic PDF of the 70% Submittal will be provided and will be uploaded to Primelink for the City's use.

### ***3.3.1 70% Landscape Site Plans & Details***

MIG will develop 70% complete landscape site plans showing the location and layout of all site furnishings and planting areas. Details will include necessary information for the installation and/or construction of seatwalls or other site furnishings. BWCD and Garza consulting will develop 70% irrigation plans and will prepare hydrological calculations, water use demands, and verification of point of connection and main line size.

### ***3.3.2 70% Landscape Irrigation Plans & Details***



Based on the 70% planting plan, MIG team will develop 70% Irrigation Plans. These will show the POC and main line location for all planting areas. Plans will include:

- the irrigation water point of connection locations and service size information
- electrical power point of connection locations
- hydrological calculations, water use demands
- designed booster pump system, if required.

BWCD & Garza will develop landscape irrigation details to clearly show the project's required irrigation equipment. Irrigation detail sheets will also include any necessary notes, legends, or schedules. MIG will provide design oversight and QA/QC of irrigation plans to ensure plans meet City's design and quality requirements.

BWCD will be responsible for providing the plant list and will incorporate modifications as directed by MIG or the City. BWCD will be responsible for researching and reviewing any local planting codes or requirements, including City arborist recommendations or maintenance staff requirements. BWCD prepare Planting Plan sheets based on City Staff's 40% Review Comments and MIG's review comments. MIG will provide any design change direction via sketches. MIG will provide QC review of all landscape and planting plans, and BWCD will make any requested edits to planting plans prior to client delivery.

### ***3.3.3 70% Landscape Planting Plans & Details***

BWCD will develop 70% complete planting plans for all proposed planting areas. The 70% plans will show all tree locations and any lawn areas, and they will indicate shrub and groundcover locations. Per the City of San Antonio's landscape ordinance, the plant list will include all plant materials to be used in planting areas, including plant names (common and botanical), container installation size, heights, spread, and spacing. MIG will provide design oversight and QA/QC of planting plans, per the City's design and quality requirements.

### ***3.3.4 70% Landscape Enlarged Detail Plans***

MIG will develop enlarged detail plans for any key signature design areas, or areas where greater detail is needed to clarify design intent.

### ***3.3.5 70% Landscape Coordination with Civil, Lighting & Traffic Design & Submittal***

MIG will regularly communicate with the other design team consultants for coordination during this phase.

### ***3.3.6 70% Landscape Site, Irrigation & Planting Specifications***

MIG will provide technical specifications in the CSI 2004 format, detailing the landscape furnishings, materials, colors, and finishes to be used for this project. BWCD will be responsible for providing Planting Technical Specifications in CSI 2004 format and will be responsible for reviewing other Landscape specifications provided by MIG for coordination with local standards. MIG will provide QC review of all landscape and planting technical specifications, and BWCD will make any requested edits prior to client delivery.

MIG and BWCD will provide technical specifications in the CSI 2004 format, detailing the landscape furnishings, materials, colors, and finishes; planting; and irrigation equipment and materials to be used for this project. HDR will provide special specifications as needed, compile the specifications and upload to Primelink for the City's use.

### ***3.3.7 70% Landscape Site, Irrigation & Planting Opinion of Probable Construction Costs***

BWCD will be responsible for preparing a cost estimate for all landscape and irrigation elements. They will be responsible for providing unit costs for all elements. Garza Consulting will work with BWCD to provide quantities (in excel sheet format) for irrigation. MIG will provide quantities for site furnishings, and specialty items related to paving design. BWCD will be responsible for developing quantities for planting. MIG will work with BWCD to clarify any assumptions or expectations that may affect the landscape and irrigation cost estimate.

#### ***Phase 3- Deliverables:***

- General Sheets
- Traffic Control Sheets
- Roadway Plan sheets
- Drainage Plan sheets
- Traffic Plan sheets
- Design Cross Sections
- Electrical and Photometrics plans
- Utility conflict matrix
- Utility layouts
- Utility coordination report
- One (1) full-size electronic PDF and one (1) half-size electronic PDF for 70% irrigation plans

### ***Phase 4: 95% PS&E & 100% Submittal***

#### **4.1 Design Team (Internal) & Project Coordination, Review Meetings**

HDR, in consultation with MIG, will lead and attend on-going project design coordination meetings with the design team and City Staff as needed. For estimate purposes, HDR and BWCD will attend the following meetings:

- Constructability Review Meeting with COSA (1 meeting)
- Design coordination meetings (2 meetings)

The design team will meet with City staff at the completion of the 95% Construction Document phase to review comments. It is assumed that this will be one combined meeting and that all comments will have been consolidated into one formal word

document. It is also anticipated any redlined drawings will be available in addition to the written comments. MIG will attend one design team meeting. Incorporating the comments received at this meeting will lead to the 100% submittal.

## **4.2 95% & 100% Civil, Electrical & Traffic Plans**

### ***Task 4.2.1 General Sheets***

HDR will do the following:

- Finalize title sheet and an index of sheets
- Finalize project layout
- Survey control sheet
- Finalize existing typical sections
- Finalize proposed typical sections
- Finalize general notes
- Finalize summary sheet

### ***4.2.2 Traffic Control***

HDR will do the following:

- Traffic control layout
- Traffic control typical sections
- Finalize traffic control narrative
- Finalize traffic control advance warning signs
- Develop detour layout (vehicular and pedestrian)
- Finalize traffic control miscellaneous details
- Finalize traffic control standards
- Finalize traffic control quantities

### ***4.2.3 Roadway***

HDR will do the following:

- Horizontal and vertical control data
- Plan and Profile sheets
- Intersection layouts
- Finalize roadway miscellaneous details
- Finalize roadway standards
- Finalize roadway quantities
- Removal plans

### ***4.2.4 Drainage***

HDR will do the following:

- Finalize drainage Area map & Hydrologic Summary
- Finalize storm drain system plan and profile sheets
- Finalize storm drain system hydraulic calculations
- Finalize Conceptual LID elements drainage design
- Finalize storm water pollution prevention plan narrative
- Finalize storm water pollution prevention plan
- Prepare EPIC
- Finalize drainage miscellaneous details
- Finalize drainage standards
- Finalize drainage quantities

#### ***Task 4.2.5 Traffic Plan***

HDR will do the following:

- Existing signal at Market/Alamo
- Proposed signal at Market/Alamo
- Existing signal Nueva/Alamo
- Proposed signal Chavez/Alamo
- Temporary Traffic Signal Design (Developed at 95%)
- Signing and pavement marking plans
- Traffic quantities

#### ***4.2.6 Street Cross Sections***

HDR will do the following:

- Finalize roadway cross sections at 50-foot intervals
- Finalize roadway cross sections at driveways

#### ***4.2.7 Structural/Architectural***

HDR will do the following:

- Finalize structural design for LID components
- Finalize structural design for shade structure and foundation
- Finalize foundation plans and details for architectural

#### ***4.2.8 Electrical & Photometrics***

HDR will do the following:

- Finalize Roadway illumination layout and electrical design
- Finalize Pedestrian and Landscape illumination layout and electrical design
- Finalize Pole, Conductor, Conduit, Circuit and Load Center Schedule
- Finalize COSA/Utility Company Standards
- Finalize Illumination Quantities

#### ***4.2.9 Utility Coordination***

HDR will do the following:

- Resolve remaining utility conflict resolutions
- Conduct meetings with utility companies (up to 2 meetings)
- Finalize Utility Layout, Conflict Matrix and Evidence Binder
- Finalize Utility Coordination Report

#### ***4.2.10 Complete 95% & 100% QA/QC***

HDR will complete the QA/QC

#### ***4.2.11 Produce Submittal + Direct Cost***

HDR will do the following:

- Cost Estimates
- Specifications, Special provisions, Special Specifications
- Project schedule
- Project manual

### **4.3 95% & 100% Landscape Site, Irrigation & Planting Plans**

Based on the 70% CD's comments, MIG, in coordination with BWCD, will prepare 95% Landscape Site, Planting & Irrigation Plans. The plans will comply with the latest City of San Antonio Standards, applicable local agency standards, and appropriate industry standards. The work will include the following plans at approximately the 95% completion level:

- Landscape site plans and details, including any site furnishings and special paving construction details
- Landscape planting plans and details
- Landscape irrigation plans and details, identifying the POS and the main line location

#### ***4.3.1 95% & 100% Landscape Site Plans and Details***

Based on the 70% Landscape Site Plans and Details, and incorporating the City's 70% Submittal comments, MIG will develop 95% complete landscape site plans showing the location and layout of all site furnishings and planting areas. Details will include necessary information for the installation and/or construction of seatwalls or other site furnishings.

#### ***4.3.2 95% & 100% Landscape Irrigation Plans and Details***

Based on the 95% planting plan, MIG will develop 95% Irrigation Plans. These will show the POC and main line location for all planting areas, as well as:

- the final irrigation water point of connection locations and service size information
- final electrical power point of connection locations
- final hydrological calculations, water use demands and irrigation water schedule
- designed booster pump system, if required.

BWCD and Garza Consulting will develop 95% landscape irrigation details to clearly show the project's required irrigation equipment. Irrigation detail sheets will also include any necessary notes, legends, or schedules. MIG will provide design oversight and QA/QC of irrigation plans to ensure plans meet City's design and quality requirements.

#### ***4.3.3 95% & 100% Landscape & Planting Plans, Details + Tree Survey and Mitigation Plan***

BWCD will develop 95% complete planting plans for all planting areas. The 95% plans will show all tree locations and any lawn areas, and they will indicate shrub and groundcover locations. Per the City of San Antonio's landscape ordinance, the plant list will include all plant materials to be used in planting areas, including plant names (common and botanical), container installation size, heights, spread, and spacing. In addition, BWCD will do a tree survey and mitigation plan. The tree affidavit, tree protection plan and details for this task include:

1. Calculation of Existing Tree Canopy (based on tree survey provided by others)
2. Preparation of the Tree Preservation Plan including tables and details
3. Preparation of tree protection specifications or use of standard City specifications
4. Preparation of tree transplantation specifications if necessary
5. Preparation of a Tree Affidavit for submittal with permit application

#### ***4.3.4 95% & 100% Landscape Enlarged Detail Plans***

MIG will develop enlarged detail plans for any key signature design areas, or areas where greater detail is needed to clarify design intent.

#### ***4.3.5 95% & 100% Landscape Coordination with Civil, Lighting & Traffic Design & Submittal***

The design team will regularly communicate to ensure plans are coordinated for construction.

#### ***4.3.6 95%& 100% Landscape Site, Irrigation and Planting Specifications***

MIG and BWCD will provide technical specifications in the CSI 2004 format, detailing the landscape furnishings, materials, colors, and finishes; planting; and irrigation equipment and materials to be used for this project. HDR will provide special specifications as needed, compile the specifications and upload to Primelink for the City's use.

#### ***4.3.7 95% & 100% Landscape Site, Irrigation & Planting Opinion of Probable Construction Costs***

In coordination with BWCD, MIG will provide unit costs and quantities (in excel sheet format) for 95% Submittal items related to planting, irrigation, site furnishings, and specialty items related to paving design. BWCD will provide unit costs and quantity take-offs for the planting and irrigation system, while MIG will provide unit costs and quantities for site furnishings and landscape site specialties. MIG will work with BWCD to clarify any assumptions or expectations that may affect the landscape and irrigation cost estimate.

#### ***Phase 4 – Deliverables:***

- General Sheets
- Traffic Control Sheets
- Roadway Sheets
- Drainage Sheets
- Traffic Plans
- Street Cross Sections
- Structural/Architectural designs
- Electrical and photometrics sheets
- Finalized utility coordination report
- Finalized utility layout, conflict matrix, and evidence binder
- Cost estimates, project schedule and manual
- Landscape Site, Planting & Irrigation Plans
- Finalized Traffic Control Unit Costs and Quantities in Excel
- CD with PDF's of all construction plans, cost estimates, summary sheet, and notes

## ***Phase 5: Bid Phase***

### **5.1 Attend Pre-bid Conference**

The design team will provide one representative from each discipline to attend the pre-bid conference and provide technical support regarding the information provided in the construction documents.

### **5.2 Prepare Agenda, Pre-bid Minutes**

HDR will prepare the agenda and any pre-bid meeting minutes.

### **5.3 Furnish Plans for Issuance**

HDR will prepare and provide one set of the bid package, including plans, specifications, and instructions to bidders, general provisions, proposal, cost estimates, and other documents necessary for City to advertise for bids for construction.

### **5.4 Respond to RFI's and Prepare Addenda**

As needed and requested by City staff, the design team will provide technical assistance to the City to coordinate issues and provide clarifications as needed during the bid period. The design team will provide technical clarifications and/or information to the City for packaging and distribution. At the City's request, the design team will also prepare or assist the City in preparing any addenda to the construction contract documents. The City will sign and issue any addenda to the plan holders. HDR will respond to RFI's (up to 50 RFI's).

### **5.5 Complete Bid Tabulation & Recommendations + Miscellaneous Expenses+ Reproduction Cost**

Attend the formal opening of bids by City and tabulate and furnish to City an original and five copies of the bid tabulation together with written recommendation regarding the award of the contract.

#### ***Phase 5 - Deliverables:***

- Prepare pre-bid meeting agenda and minutes
- Prepare 1 set of bid package
- Respond to RFI's and prepare addenda
- Prepare bid tabulation and recommendation of award

## **Phase 6: Construction Administration**

### **6.1 Attend pre-construction Conference & Prepare Pre-construction Minutes**

HDR, BWCD, and MIG will attend the pre-construction conference. HDR will prepare the minutes.

### **6.2 Pre-construction Community Meeting**

Before the start of construction, the City will host a public pre-construction meeting. At this meeting, the citizens will be once again told about the goals and benefits of the project as well the overall timeline for construction project. The City will bring the contractor to talk about the construction activities and schedule. 1 member from MIG and BWCD will attend the community meeting.

### **6.3 Attend Construction Meetings & Prepare Minutes**

HDR will attend weekly construction meetings and prepare necessary minutes (up to 4 meetings per month). MIG and BWCD will attend bi-weekly construction meetings.

### **6.4 Periodic Visits & Monthly Report**

HDR will perform periodic site visits (once a month for 18 months) to observe the progress of the executed work, and to determine if the work is proceeding in accordance with the plans and specifications. During such visits and based on on-site observations, HDR will consult and advise the City during construction, and submit monthly reports to the City relating to such visits. HDR's efforts will be directed towards providing judgment to the City whether the completed Project will reasonably conform to the plans and specifications. Any deficiencies in the work will be reported to the City. During the visits and based on periodic observations, HDR will consult and advise the City during construction.

BWCD will perform periodic site visits in coordination with MIG to observe construction and contractor's compliance with landscape (including signage and art) elements of the Construction Documents.

### **6.5 Respond to RFI's Shop Drawing, Submittal Review, & Response**

The design team will assist the City with the resolution of issues and provide clarifications and/or interpretations of the Construction Documents prepared by the design team. The design team will respond in writing to Contractor Requests for Information (RFI's) in a timely manner in accordance with the project's established criteria.

After Contractor's approval, HDR will review and take appropriate action (approve with modifications, reject, etc.) in response to the Contractor's submittals such as shop



drawings, product data and samples, but only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents. Such action will be taken with reasonable promptness to minimize delay.

BCWD will review and approve shop drawings, samples and submittals in coordination with MIG.

#### **6.6 Review Monthly Estimates and Recommend Approval**

HDR will review the monthly estimates and recommend appropriate approval to the City.

#### **6.7 Complete Change Orders & Field Alterations**

HDR will complete change orders/field alterations.

#### **6.8 Complete Final Inspection & Punch List**

The design team will assist the City in conducting final observations and prepare a list of construction deficiencies for resolution by the Contractor. (1 site visit)

#### **6.9 Warranty Walk Through**

HDR will direct a warranty walk through at the end of the project. MIG, BWCD, and Garza will also attend the meeting.

#### **6.10 Create Exhibits for Contractor Information & Direct Costs**

HDR will prepare up to 10 exhibits for contractor's information.

##### ***Phase 6 – Deliverables:***

- Pre-construction minutes
- Construction meeting minutes
- Monthly Reports
- Response to RFI's and shop drawings
- Change orders and field alterations
- Punch list
- Exhibits for contractor information

## **Phase 7: Project Close Out**

### **7.1 Complete Project Record Drawings/As-Built Plans**

After completion of the work, and before final payment to the Contractor, the City will receive from the Contractor two sets of “Record Drawings.” These will comprise the Contractor’s as-constructed red-line drawings maintained in the field by the Contractor. The MIG Team (led by BWCD for the landscape architecture drawings, Garza for irrigation, and HDR for all engineering drawings), after receiving the Record Drawings, shall transfer the information to a set of “Mylar” material or an approved equal, plus CADD files (CD’s) compatible to Microstation showing items of work actually installed in the Project (hereinafter called “Plan of Record”) for the City’s permanent file.

### **7.2 Prepare Final Field Alteration Recapitulations + Reproduction Cost**

HDR will prepare final field alteration recapitulations.

#### ***Phase 7 - Deliverables:***

- As-built plans
- Final field alteration recapitulations