

PBOT

PORTLAND BUREAU OF TRANSPORTATION

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Dan Saltzman Commissioner Leah Treat Director
 Flexible Service Task Order

Contract # 30005277

Project: Outer Division Multi Modal Safety Project Task Order #: 2
 SAP Cost Object: T00629.D42 Consultant: CH2M Hill Engineers, Inc
 (PBOT)Project
 Manager: Liz Mahon Phone: 503.823.0396
 (Consultant)Task
 Order Manager: Kristin Hull Phone: 503.235.5000
 Bureau / Division: Project Management
 Funding Source: General Funds Total Contract Value: \$ 625,000.00
 Effective date of Work Order: As signed by all Original Task Order NTE Value: \$ 292,209.45
 Expiration Date: 02/28/2018 Revised Task Order NTE Value: _____
 Previous Task Order Funds Encumbered to Date: \$ 200,407.12
 Total of all Task Order Funds Encumbered to Date: \$ 492,616.57

Statement / Scope of Work is attached hereto and incorporated herein by this reference.
 The City of Portland pays on a net 30 day basis after receipt of invoice.
 Please reference Contract # / Purchase Order # / Task Order # on all invoices submitted for payment.

Approved by:

[Signature] 7/3/17
 Division Manager Date
[Signature] 7/13/17
 Financial Analyst Date
[Signature] 7/5/17
 Contracts Date

Acceptance of Terms by Consultant:

David Simmons Digitally signed by David Simmons
 Date: 2017.07.03 14:03:14 -07'00'
 Name Date
2020 SW 4th Avenue, Suite 300
 Address
Portland, OR 97201
 City, State, Zipcode
Dave.Simmons@CH2M.com
 E-Mail address:



The Portland Bureau of Transportation fully complies with Title VI of the Civil Rights Act of 1964, the ADA Title II, and related statutes and regulations in all programs and activities. For accommodations, complaints and information, call (503) 823-5185, City TTY (503) 823-6868, or use Oregon Relay Service: 711.

DMWESB Participation for this Task Order

Consultant agrees they will use the following subconsultants on this Task Order in the following percentages and/or dollar amounts listed:

| Subconsultant(s) to be used | Certification | | | | Percentage of Total TO | Total Dollars Committed per TO |
|-----------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|------------------------|--------------------------------|
| | DBE | MBE | WBE | ESB | | |
| Nevue Ngan | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 8.1% | \$ 23,585.00 |
| Global Transportation Engineering | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 12.3% | \$ 36,040.00 |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |

| Procurement Services to complete this section |
|--|
| Cumulative DMWESB Participation for the Entire Contract |
| Current DMWESB participation is <u>\$39,484</u> ; Subconsultant Total -100%; Contract Total - 19.7 % |
| Proposed DMWESB participation is <u>\$99,109</u> ; Subconsultant Total-100%; Contract Total - 20.1% |


7/5/17
 PBOT Director/Designee Signature Date

Larry Pelatt Digitally signed by Larry Pelatt
Date: 2017.07.06 12:14:47 -07'00'
 Chief Procurement Officer Signature Date

City of Portland – Outer Division Multi-Modal Safety Project

On-Call Task

CH2M Scope of Work

June 20, 2017

Purpose

CH2M (CONSULTANT) has been assigned the Outer Division Multi-Modal Safety project as task order to the 2016 civil design on-call contract. The project area is SE Division Street from 81st Avenue to the City limits east of 174th Avenue. The scope of the project includes buffered bike lanes between 81st and City limits, access management in the form of median islands, landscaping, enhanced pedestrian crossings and pedestrian scaled street lighting (if needed) at new crossings.

The purpose of this work is to provide public outreach support, conceptual design development, final design engineering and construction bid services for the Portland Bureau of Transportation (CITY).

Project Assumptions

- Work is expected to begin June 25, 2017 and will be completed by March 31, 2018
- The work will be completed, expenses included, within a budget of \$292,749.01
- The proposed concepts on this project will factor PBOT's Vision Zero and propose infill pedestrian crossings as necessary to achieve 530 foot maximum spacing between crossings.
- The proposed concepts on this project will factor TriMet's proposed Division Transit Project (DTP) improvements.
- The CITY will provide criteria for elimination of existing right turn lanes.
- The CONSULTANT will utilize survey information provided by TriMet. CITY will provide any supplemental survey requested by CONSULTANT. CONSULTANT will develop basemap using provided data.
- Designs for separated/buffered bike lanes will be prepared to attempt to avoid improvements outside of right-of-way. ADA improvements at intersections may require private property acquisition.
- Existing driveways will not be reconstructed or removed with this project, unless triggered by ADA
- Curb profiles for new medians will not be required. Curb profiles for new ADA ramps and crossings through medians will be required.

- Considerations for stormwater management (quality and quantity) will not be required on this project. There will be no full depth road reconstruction or increase in impervious area sufficient to trigger stormwater management.
- The CITY Project Manager and staff will be responsible for coordinating utility conflicts and relocations with the respective owners.
- Pavement marking within the corridor will be replaced in kind where impacted by the project.
- Permitting is not included.
- The design of RRFB's for four new pedestrian crossings are included. All other signal design or modifications are excluded – this includes excluding the design of new HAWKS and at existing signals, the introduction of bike-only/protected phases, and modifications to signal timing.
- CONSULTANT shall reference/utilize CITY standard drawings and details applicable.

Consultant Tasks and Deliverables

Task 1 – Project Management and Administration

Task 1 Activities:

- CONSULTANT will prepare project execution plan and quality management plan for the project team describing the issues and work tasks involved in the design of this project. The design team will use these instructions as a guide for project tasks, budgets, and schedule.
- CONSULTANT will coordinate and manage project development with the CITY Project Manager. Prepare monthly progress reports and billings for the project through design. Monitor scope, schedule and budget against milestones. Consultant will engage and consult team members and internal stakeholders as needed
- Bi-weekly meetings with CITY PM and CONSULTANT PM. CONSULTANT will provide email summaries of action items from each meeting.
- CONSULTANT will communicate with team members and sub-consultants, maintain files, prepare correspondence, prepare submittals, and provide guidance to the team is all part of coordinating and managing the design team. Formal activities include a kickoff meeting with up to four (4) team members.
- CONSULTANT will coordinate outcomes pertaining to access management, turn lane modifications and preservation of parking to the Metro and TriMet Division Transit Project teams at key milestones, deliverables and decision points, in order to inform the NEPA and Final Design work of that project in a succinct and timely fashion.

Task 1 Deliverables:

CONSULTANT will provide the following deliverables:

1. Project execution plan and quality management plan
2. Monthly invoice and progress report
3. Meeting attendance and agendas at three (3) inter-agency coordination meetings

Task 2 – Public Involvement Support

Task 2 Activities:

- CONSULTANT will support three (3) Community Meetings organized by the CITY by providing open house materials related to the design which may include display boards and roll map(s) of the design at each phase (concept, 60% and 95% plans). The first meeting will be held to evaluate concepts; the second meeting will be to share preliminary plans; and the third meeting will be to share construction plans, impacts and schedule. Up to three (3) members of the CONSULTANT team shall attend each meeting.
 - The CITY Project Manager will be responsible for scheduling the open house, finding a venue, and for mailers to notify surrounding residents/business owners.
 - CONSULTANT will prepare up to 6 display boards for each meeting in addition to roll plots, construction staging documents and project schedules developed in other tasks.
- CITY will maintain a project interested parties list. The CITY will track public comments in a comment log. The CITY will respond to comments.
- CITY will conduct up to five “office hour” sessions at community locations to review project plans and answer questions from business owners, residents and community members. “Office hour” sessions are drop-in times when community members can meet with CITY PM and CONSULTANT design staff to discuss project designs. CITY will schedule meetings. One (1) member of the CONSULTANT design team shall attend each session. CITY will document interactions and prepare summary following that will be shared with the CONSULTANT. CITY Project Manager shall attend “office hour” sessions. Each session will be up to two hours in length. Office hour sessions will rely on the most current design drawings, display boards and roll plots; the CONSULTANT will not prepare separate graphics or materials. CONSULTANT will not advertise sessions or recruit attendees.

Task 2 Assumptions:

1. CITY will prepare all translated materials
2. CITY will reserve and pay for all meeting rooms
3. CITY will establish and maintain a website

4. CITY will establish and maintain a project interested parties list and track public comment
5. CITY will be responsible for all media outreach
6. CITY will be responsible for all mailing, email and other project notifications

Task 2 Deliverables:

CONSULTANT will provide the following deliverables in the noted format:

1. Display board for three community meetings (PDF format)
2. Roll plots, roll plots, construction staging documents and project schedules developed in other tasks (as needed).

Task 3 – Concepts to Support Agency Approval/Coordination/Public Involvement

Task 3 Activities:

- CONSULTANT will develop up to three (3) iterations for access management in Jade (82nd to 92nd) and three (3) alternatives for the extents/configuration of access management in Midway (117th to 141st). Initial study will focus on identifying locations for a center barrier and the necessitated U-turn movements as well as identification of out-of-direction travel (all right turn movements) for oversize freight vehicles. CITY will provide traffic counts of sufficient veracity to allow CONSULTANT to develop accurate left/U-turn queue lengths at minor intersections. The CITY will provide the “design vehicle” for turning and U-turn testing and provide direction to the CONSULTANT on allowable out-of-direction travel routes (as noted in Task 3 Assumptions).
- In locations where medians are proposed, CONSULTANT shall develop treatment with wide medians with street trees (including a code review and cross-sectional study of the relationship between below-grade PWB conduits and root zones); and narrow medians with mountable curb (per ODOT’s recent design standards). Where medians are constructed, CONSULTANT, in coordination with CITY, will evaluate and determine feasibility of incorporating pedestrian crossings at a maximum spacing of 530’.
- Figures of prototypical, indicative cross sections will be developed in a graphic style that is dimensionally accurate but understandable to lay audiences.

Task 3 Assumptions:

1. Driveway consolidation will not be considered as part of Project.
2. NACTO will be used as guidance in developing transitions from protected to shared environment.
3. F-450 turning template (53’ outside radius) will be used for U-turn analysis.
4. Acceptable out of direction distance is 1/3 of a mile.

5. Physical bike lane buffers will be designed to perpetuate curb side uses including sanitation and delivery services. CITY will provide acceptable minimum lengths for physical bike lane buffers.

Task 3 Deliverables:

CONSULTANT will provide the following deliverables in the noted format:

1. Roll Plot with locations of shared bike/right turn lanes identified existing and proposed for reconfiguration
2. Plan graphics of intersection treatments (up to 3 alternatives)
3. Roll Plot with extents of access management, U-turn locations and out of direction path of travel indicated (up to 3 alternatives in Jade and Midway)
4. Figures of prototypical, indicative cross sections in a graphic style that is dimensionally accurate but understandable to lay audiences.

Task 4 – Traffic Modeling/Lighting and Signal Design to Support Concept Development and Design**Task 4 Activities:**

- The CONSULTANT will determine feasibility of eliminating a westbound lane between 92nd and 87th based on traffic analysis provided by TriMet's DTP. CONSULTANT will provide a brief memorandum to document results. Up to four AM and PM peak hour traffic counts will be collected.
- Provide lighting analysis at 4 new pedestrian crossings. CONSULTANT will provide a brief memorandum to document results.
- Develop Traffic Signal Plans for a Rectangular Rapid Flashing Beacon located at four new enhanced pedestrian crossings. CONSULTANT will conduct one field visit.
- Deliverables will be provided concurrent with Task 6, Task 8 and Task 9 Deliverables.

Task 4 Assumptions:

1. City standards will be followed.
2. No travel demand forecasting is required under this task.
3. Traffic modeling will be in Synchro format.
4. CITY will provide current lighting analysis for SE Division Street.
5. CITY will provide lighting analysis guidelines.
6. The AGI32 software package will be used for lighting analysis.
7. CITY will provide luminaire photometric files to ensure the appropriate IES files are used in the analysis.

Task 4 Deliverables:

CONSULTANT will provide the following deliverables electronically in the noted format:

1. Draft and final traffic modeling memorandum (PDF)
2. Memo documenting feasibility of eliminating a westbound lane between 92nd and 87th
3. Lighting analysis graphical output along with a lighting analysis results table (PDF)
4. Develop 60%, 95% and 100% plans

Task 5 – Landscaping Design to Support Concept Development and Design**Task 5 Activities:**

- Develop up to three landscaping concepts for the median treatments in Task 3.
- Develop 60%, 95% and 100% plans

Task 5 Deliverables:

CONSULTANT will provide the following deliverables electronically in the noted format:

1. Roll plot of updated project design (Hard Copy)
2. Meeting summary (PDF)

Task 6 – Design – 60%**Task 6 Activities:**

- CONSULTANT will develop signing and striping design and layout including identified right turns for elimination and new bike box locations. The right turns proposed for elimination will be based on criteria provided by the CITY.
- CONSULTANT will develop access management strategies for Jade (82nd to 92nd) and Midway (117th to 141st) including median treatments, feasible U-turn locations, pedestrian crossing locations, interim physical bike lane buffer locations.
- Following the conceptual layout plan, CONSULTANT will conduct an over the shoulder review meeting with City staff to review the layout prior to advancing the 60% deliverable. CONSULTANT will prepare a meeting summary to document comments.
- CONSULTANT will develop the 60% design to include plans at intersection crossings with a standard typical section to inform the design through long stretches with similar treatments.
- CONSULTANT will develop 60% half size (11x17) construction plans to include:
 - Cover Sheet - 1

- Symbols and Abbreviations - 1
 - Sheet Layout Plan - 1
 - Typical Sections - 2
 - Street Plans (Access Control)- 16
 - Enhanced Pedestrian Crossing Details and Profiles for ADA Route - 4
 - Striping Plans – 16 (82nd, 92nd, 96th, 101st, 112th, 122nd, 130th, 136th, 145th, 148th, 157th, 162nd, 168th, 174th and two minor intersection treatments)
 - Street Signing Plans – 6
 - RRFB Plans - 6
- CONSULTANT will develop the design Engineer’s Estimate using the CITY Estimate Template based on the 60% design. Unit pricing will be based on available historical bid prices. A contingency of 20% will be used for the estimate at this submittal.
 - CONSULTANT will review and identify technical specifications and anticipated special provisions for the project. CONSULTANT will prepare an outline of specifications to include with the 60% submittal.
 - Following CITY review of the 60% submittal CONSULTANT will work the CITY Project Manager to schedule a comment review meeting. The meeting will be scheduled no sooner than two (2) days after receiving comments from the CITY. CONSULTANT will prepare initial responses to comments to be reviewed and discussed at the comment review meeting. CONSULTANT will prepare a summary of the meeting and provide a draft to the CITY Project Manager following the meeting.

Task 6 Deliverables:

CONSULTANT will provide the following deliverables in the noted format:

1. Meeting summary of over the shoulder conceptual layout review (PDF)
2. 60% Construction Plan Set (PDF).
3. 60% Engineer’s Estimate (XLS)
4. Technical Specification outline (PDF)
5. 60% Comment review and response form (PDF)
6. Meeting summary from the 50% comment review meeting (PDF)

Task 8 – Design – 95%

Task 8 Activities:

- Following the 60% comment review meeting CONSULTANT will advance the design to a 95% level.
- CONSULTANT will develop construction plans to include:
 - Cover Sheet - 1

- Symbols and Abbreviations - 1
- Sheet Layout Plan - 1
- Typical Sections – 2
- Construction Details - 4
- ADA Ramp Details/Profiles - 4
- Erosion Control Plans - 6
- Horizontal Alignment Plans - 16
- Street Plans - 16
- Striping Plans – 16
- Street Signing Plans – 6
- RRFB Plans - 6
- CONSULTANT will prepare special provisions.
- CONSULTANT will develop design engineers estimate based on the 95% design. A contingency of 10% will be used for the estimate at this submittal.
- Following CITY review of the 95% submittal CONSULTANT will work the CITY Project Manager to schedule a comment review meeting. The meeting will be scheduled no sooner than two (2) days after receiving comments from the CITY. CONSULTANT will prepare initial responses to comments to be reviewed and discussed at the comment review meeting. CONSULTANT will prepare a summary of the meeting and provide a draft to the CITY Project Manager following the meeting.

Task 8 Deliverables:

CONSULTANT will provide the following deliverables electronically in the noted format:

1. 95% Construction Plans (PDF)
2. 95% Engineer's Estimate (XLSX)
3. 95% Special Provisions (PDF)
4. 95% Comment review and response form (PDF)
5. Meeting summary from the 95% comment review meeting (PDF)

Task 8 Assumptions:

6. The CITY will prepare the Bid Book.

Task 9 – Final Design

Task 9 Activities:

- Following the 95% comment review meeting CONSULTANT will advance the design to a Final level and prepared stamped and sealed construction documents.
- CONSULTANT will develop the final construction plans to include:

- Cover Sheet - 1
 - Symbols and Abbreviations - 1
 - Sheet Layout Plan - 1
 - Typical Sections – 2
 - Construction Details - 4
 - ADA Ramp Details/Profiles - 4
 - Erosion Control Plans - 6
 - Horizontal Alignment Plans - 16
 - Street Plans - 16
 - Striping Plans – 18
 - Street Signing Plans – 6
 - RRFB plans - 6
- CONSULTANT will develop special provisions.
 - CONSULTANT will develop a final Engineers Estimate based on the 100% final design. A contingency of 5% will be used for the estimate at this final submittal.
 - CONSULTANT will deliver to the CITY Project Manager:
 - One set of full size (22x34) plans (vellum or mylar) stamped and signed.
 - One electronic copy, on CD, of final plans (PDF), special provisions (Word and PDF), and Engineer's Estimate (XLSX, bid form (XLSX)).

Task 9 Deliverables:

CONSULTANT will provide the following deliverables in the noted format:

1. Final stamped and signed 22x34 Vellum or Mylar plans (Hard copy)
2. CD with final files including plans, special provisions, Bid form, and Engineer's Estimate.

Task 9 Assumptions:

1. The CITY will prepare the Bid Book.

Task 10 – Mapping

Task 10 Activities:

- CONSULTANT will prepare base mapping and a digital terrain model (DTM) utilizing cloud point data provided by TriMet.
- Base map will consist of paint striping, curb flowlines, back of sidewalk, and driveway throats.

- DTM data will be extracted from flow line curb, to flowline curb, along with the additional pedestrian crossing areas.
- Provide additional detailed mapping at 4 pedestrian crossing locations for development of ADA compliant grading.

Task 10 Deliverables:

CONSULTANT will provide the following deliverables electronically in the noted format:

1. Base map of paint striping, curb flowlines, back of sidewalk, driveway throat locations, and pedestrian crossing areas in Bentley Microstation V8 format
2. Digital Terrain Model (DTM) of area between curb flowlines and curb returns at up to 6 intersections (to supplement DTM provided by DTP).

Task 11 – Bid Assistance

Task 11 Activities:

- CONSULTANT will assist the CITY in answering questions and reviewing substitution requests during the bidding period. The CONSULTANT will forward all contractor calls directly to the CITY Procurement Services Manager. Direct communication between contractors and the CONSULTANT is prohibited.
- The CONSULTANT will attend the pre-bid meeting at the CITY. One (1) CONSULTANT staff will attend.
- The CONSULTANT will prepare up to two (2) addenda during the bidding period. The need and scope of any addenda will be determined in cooperation between the CONSULTANT and the CITY Project Manager. Addenda will be issued by the CITY.
- The CONSULTANT will update the drawings to as-bid status by incorporating addenda changes to the drawings. Upon completion of the as-bid drawings changes, the CONSULTANT will deliver to the CITY Project Manager:
 - One set of full size (22x34) plans (vellum or mylar), including the corrected sheets, stamped and signed.
 - One electronic copy, on CD, of final as-bid drawings, special provisions, bid form, engineers estimate, and Microstation CAD drawings, Inroads Alignment files and Inroads DTM files

Task 11 Deliverables:

CONSULTANT will provide the following deliverables electronically in the noted format:

1. Up to two (2) addenda which may include plan and/or specification revisions and engineer's estimate updates (PDF).

2. Final as-bid stamped and signed full size (22x34) plans (vellum or mylar)
 - o CD with final as-bid files including plans, special provisions, bid form, engineers estimate, and Microstation CAD drawings, Inroads Alignment files and Inroads DTM files

Task 12 – Services During Construction

Task 12 Activities:

- A budget of 80 hours is set to provide on-call support service during construction for CITY staff. Support may include reviewing items from the contractor including RFIs, change requests, developing changed design plans and preparing as-built plans. CONSULTANT will work as directed up to the provided budget.
- CONSULTANT will prepare as-built drawings.
- CONSULTANT will notify the CITY PROJECT MANAGER when ninety (90) percent of the budget has been used to discuss whether an amendment for additional hours is necessary.
- Deliverables will be electronic format (PDF, Word, CAD) as requested, whether response to a RFI, revised design sheets or as-built drawings.

Task 12 Deliverables:

CONSULTANT will provide the deliverables as requested up to the noted budget for this subtask, including:

1. As requested responses to RFIs (PDF)
2. As requested responses to change requests (PDF)
3. As requested revised design plans (PDF)
4. As-built drawings (PDF)

| Task Order 2: Outer Division Multi Modal Safety Project | | CH2M HILL | | | | | | | | | | | | Total Labor Hours | Total Labor Dollars | Repro / Plots | Travel | Total Labor & Expenses |
|--|--------------------------|------------------|-----------------------------|-----------------------------|-----------------------------------|-----------------------------|----------------------------|----------------------------|---------------------|--------------------------|--------------|--------------------|----|-------------------|---------------------|---------------|--------|------------------------|
| Billing Rate | Senior Manager K Hull | PIC J McGrath | Senior Engineer Sh Daleo | Staff Engineer C Clausen | Technician/Drafter M Weinscott | Project Engineer J Bland | Staff Planner E Montejo | Survey Manager Hurifman | Surveyor Bittick | Sr. Technician Hobson | Office Staff | Proj Assist / Acct | | | | | | |
| Task 1: Project Management & Administration | | | | | | | | | | | | | | | | | | |
| 1.1 - QMP | 2 | | 4 | | | | | | | | | | | 6 | \$1,281.60 | | | \$1,281.60 |
| 1.2 - Monthly Invoice and Progress Report (12 mo) | 12 | | | | | | | | | | | 36 | 60 | 108 | \$14,071.45 | | | \$14,071.45 |
| 1.3 - Kickoff Meeting | 4 | 4 | 4 | | | | | | | | | | | 12 | \$2,897.38 | | | \$2,897.38 |
| 1.3 - Inter-Agency Meetings (3) | 6 | | 12 | 6 | | | | | | | | | | 24 | \$4,526.87 | | | \$4,526.87 |
| 1.4 - PM coordination meetings | 40 | 12 | 32 | | | | | | | | | | | 84 | \$19,715.38 | | | \$19,715.38 |
| Task 2: Public Involvement Support | | | | | | | | | | | | | | | | | | |
| 2.1 - Community Meetings | 24 | | | | | | 12 | | | 8 | | | | 44 | \$8,116.42 | | | \$8,116.42 |
| 2.2 - Office Hour Sessions | 3 | | 16 | | | | | | | | | | | 19 | \$3,844.40 | | | \$3,844.40 |
| 2.3 - Prepare illustrations for Meetings | | | | | | | | | | | | | | - | \$0.00 | | | \$0.00 |
| Task 3: Conceptual Design | | | | | | | | | | | | | | | | | | |
| 3.1 - Alternatives Development | 2 | 8 | 60 | 60 | 24 | | | | | 16 | | | | 170 | \$25,257.37 | \$100 | | \$25,357.37 |
| | | | | | | | | | | | | | | - | \$0.00 | | | \$0.00 |
| Task 4: Traffic Modeling, Lighting and RRFB Design | | | | | | | | | | | | | | | | | | |
| 4.1 - Traffic Modeling (Eliminating WB Lane 87th-92nd) | | | 4 | | | | | | | | | | | 4 | \$768.80 | \$100 | | \$868.80 |
| 4.2 - Lighting Analysis (4 Crossings) | | | | | | | | | | | | | | - | \$0.00 | | | \$0.00 |
| 4.3 - RRFB Design (4 Crossings) | | | 4 | | | | | | | | | | | 4 | \$768.80 | | | \$768.80 |
| | | | | | | | | | | | | | | - | \$0.00 | | | \$0.00 |
| Task 5: Landscape Design | | | | | | | | | | | | | | | | | | |
| 5.1 - Landscape Design | | | 4 | | | | | | | | | | | 4 | \$768.80 | \$100 | | \$868.80 |
| Task 6: Design - 60% | | | | | | | | | | | | | | | | | | |
| 6.1 - Over the Shoulder Meeting | | | 4 | 4 | | | | | | | | | | 8 | \$1,223.51 | | | \$1,223.51 |
| 6.2 - 60% Design Plans | | | 50 | 130 | 130 | 24 | | | | | | | | 334 | \$42,180.83 | \$300 | | \$42,480.83 |
| 6.3 - 60% Specs & Estimate | | | 6 | 14 | | 2 | | | | | | | | 22 | \$3,121.51 | | | \$3,121.51 |
| 6.4 - 60% Comment Review Meeting | | | 4 | 8 | | | | | | | | | | 12 | \$1,678.22 | | | \$1,678.22 |
| Task 8: Design - 95% | | | | | | | | | | | | | | | | | | |
| 8.1 - 95% Design Plans | | | 58 | 136 | 156 | 24 | | | | | | | | 374 | \$47,054.65 | \$300 | | \$47,354.65 |
| 8.2 - 95% Special Provisions | | | 4 | 8 | | 2 | | | | | | | 4 | 18 | \$2,509.77 | | | \$2,509.77 |
| 8.3 - 95% Engineers Estimate | | | 6 | 16 | | 4 | | | | | | | | 26 | \$3,725.70 | | | \$3,725.70 |
| 8.4 - 95% Comment Review Meeting | | | 4 | 8 | | | | | | | | | | 12 | \$1,678.22 | | | \$1,678.22 |
| Task 9: Final Design | | | | | | | | | | | | | | | | | | |
| 9.1 - Final Plans | | | 16 | 38 | 40 | 2 | | | | | | | | 96 | \$11,855.08 | \$1,500 | | \$13,355.08 |
| 9.2 - Special Provisions | | | 4 | 8 | | 1 | | | | | | | 8 | 21 | \$2,776.07 | | | \$2,776.07 |
| 9.3 - Final Engineers Estimate | | | 4 | 6 | | 1 | | | | | | | | 11 | \$1,639.26 | | | \$1,639.26 |
| Task 10: Mapping | | | | | | | | | | | | | | | | | | |
| 10.1 Base Mapping and Digital Terrain Model | | | | | | | | 10 | 84 | | | | | 94 | \$9,226.64 | | | \$9,226.64 |
| 10.2 Additional Base Mapping (4 Crossings) | | | | | | | 2 | 8 | | | | | | 10 | \$1,037.57 | | | \$1,037.57 |
| Task 11: Bid Assistance | | | | | | | | | | | | | | | | | | |
| 11.1 - Bid Addenda | | | 12 | 24 | | | | | | | | | | 36 | \$5,034.65 | \$1,500 | | \$6,534.65 |
| 11.2 - As-Bid Documents | | | 4 | 8 | 16 | | | | | | | | | 28 | \$3,311.54 | | | \$3,311.54 |
| Task 12: Services During Construction | | | | | | | | | | | | | | | | | | |
| 12.1 On-Call support | | | 20 | 24 | 20 | | | | | | | | | 64 | \$8,613.91 | | | \$8,613.91 |
| SUBTOTAL DESIGN | | | | | | | | | | | | | | | | | | |
| | 93 | 24 | 336 | 498 | 386 | 60 | 12 | 12 | 92 | 24 | 36 | 72 | | 1,645 | | | | |
| | \$23,845 | \$6,618 | \$64,579 | \$56,611 | \$39,404 | \$11,305 | \$1,095 | \$1,819 | \$8,445 | \$2,604 | \$4,174 | \$8,185 | | | \$228,684.45 | \$3,900 | | \$232,584.45 |
| PROJECT TOTAL HOURS | | | | | | | | | | | | | | | | | | |
| | 93 | 24 | 336 | 498 | 386 | 60 | 12 | 12 | 92 | 24 | 36 | 72 | | 1,645 | | | | |
| PROJECT TOTAL AMOUNT | | | | | | | | | | | | | | | | | | |
| | \$23,845 | \$6,618 | \$64,579 | \$56,611 | \$39,404 | \$11,305 | \$1,095 | \$1,819 | \$8,445 | \$2,604 | \$4,174 | \$8,185 | | | \$228,684.45 | \$3,900.00 | | \$232,584.45 |
| CH2M Individuals assigned to this project will be billed using their actual hourly wage times a 3.10 multiplier. | | | | | | | | | | | | | | | | | | |

Exhibit A

| Task Order 2: Outer Division Multi Modal Safety Project | Nevue Ngan | | | | | | | Global | | | | | | | Grand Total | | | |
|--|--------------|---------|----------|-------------------|---------------------|-----------------|--------|------------------------|---------------------------|-------------------------|-----------------------|--------------|-------------------|---------------------|-------------|----------------|----------|------------------------|
| | Billing Rate | Ngan | Goodyke | Total Labor Hours | Total Labor Dollars | Repro / Postage | Travel | Total Labor & Expenses | Principal/Project Manager | Senior Project Engineer | Engineering Associate | CAD Designer | Total Labor Hours | Total Labor Dollars | | Traffic Counts | Travel | Total Labor & Expenses |
| | | | | | | | | | | | | | | | | | | |
| Task 1: Project Management & Administration | | | | | | | | | | | | | | | | | | \$44,394.69 |
| 1.1 - QMP | | | | | \$0 | | | \$0 | | | | | | \$0 | | | | \$1,281.60 |
| 1.2 - Monthly Invoice and Progress Report (12 mo) | | 8 | | 8 | \$1,160 | | | \$1,160 | | | | | | \$0 | | | | \$15,231.45 |
| 1.3 - Kickoff Meeting | | 2 | 2 | 4 | \$482 | | | \$482 | 2 | | | 2 | \$260 | | | \$260 | | \$3,639.38 |
| 1.3 - Inter-Agency Meetings (3) | | | | | \$0 | | | \$0 | | | | | | \$0 | | | | \$4,526.87 |
| 1.4 - PM coordination meetings | | | | | \$0 | | | \$0 | | | | | | \$0 | | | | \$19,715.38 |
| Task 2: Public Involvement Support | | | | | | | | | | | | | | | | | | \$16,580.82 |
| 2.1 - Community Meetings | | | | | \$0 | \$200 | | \$200 | | | | | | \$0 | | | | \$8,316.42 |
| 2.2 - Office Hour Sessions | | | | | \$0 | | | \$0 | | | | | | \$0 | | | | \$3,844.40 |
| 2.3 - Prepare illustrations for Meetings | | 4 | 40 | 44 | \$4,420 | | | \$4,420 | | | | | | \$0 | | | | \$4,420.00 |
| Task 3: Conceptual Design | | | | | | | | | | | | | | | | | | \$25,357.37 |
| 3.1 - Alternatives Development | | | | | \$0 | | | \$0 | | | | | | \$0 | | | | \$25,357.37 |
| | | | | | \$0 | | | \$0 | | | | | | \$0 | | | | \$0.00 |
| Task 4: Traffic Modeling, Lighting and RRFB Design | | | | | | | | | | | | | | | | | | \$34,997.60 |
| 4.1 - Traffic Modeling (Eliminating WB Lane 87th-92nd) | | | | | \$0 | | | \$0 | 4 | 8 | 40 | | 52 | \$6,160 | \$560 | \$50 | \$6,770 | \$7,638.80 |
| 4.2 - Lighting Analysis (4 Crossings) | | | | | \$0 | | | \$0 | 2 | 4 | 24 | | 30 | \$3,540 | | \$50 | \$3,590 | \$3,590.00 |
| 4.3 - RRFB Design (4 Crossings) | | | | | \$0 | | | \$0 | 16 | 24 | 140 | 20 | 200 | \$23,000 | | | \$23,000 | \$23,768.80 |
| | | | | | \$0 | | | \$0 | | | | | | \$0 | | | | \$0.00 |
| Task 5: Landscape Design | | | | | | | | | | | | | | | | | | \$5,840.80 |
| 5.1 - Landscape Design | | 10 | 32 | 42 | \$4,522 | \$200 | \$50 | \$4,772 | | | | | | \$0 | | | | \$5,840.80 |
| Task 6: Design - 60% | | | | | | | | | | | | | | | | | | \$54,314.07 |
| 6.1 - Over the Shoulder Meeting | | | | | \$0 | | | \$0 | | | | | | \$0 | | | | \$1,223.51 |
| 6.2 - 60% Design Plans | | 5 | 36 | 41 | \$4,181 | | | \$4,181 | | | | | | \$0 | | | | \$48,661.83 |
| 6.3 - 60% Specs & Estimate | | 3 | 2 | 5 | \$627 | | | \$627 | | | | | | \$0 | | | | \$3,748.51 |
| 6.4 - 60% Comment Review Meeting | | 2 | 2 | 4 | \$482 | | | \$482 | 2 | 2 | | | 4 | \$520 | | | \$520 | \$3,748.51 |
| Task 8: Design - 95% | | | | | | | | | | | | | | | | | | \$9,397.34 |
| 8.1 - 95% Design Plans | | 4 | 18 | 22 | \$2,308 | | | \$2,308 | | | | | | \$0 | | | | \$2,308.00 |
| 8.2 - 95% Special Provisions | | 2 | | 2 | \$290 | | | \$290 | | | | | | \$0 | | | | \$2,799.77 |
| 8.3 - 95% Engineers Estimate | | 1 | 4 | 5 | \$529 | | | \$529 | | | | | | \$0 | | | | \$4,254.70 |
| 8.4 - 95% Comment Review Meeting | | 2 | 2 | 4 | \$482 | | | \$482 | 2 | 2 | | | 4 | \$520 | | | \$520 | \$2,680.22 |
| Task 9: Final Design | | | | | | | | | | | | | | | | | | \$19,694.44 |
| 9.1 - Final Plans | | 2 | 12 | 14 | \$1,442 | | | \$1,442 | | | | | | \$0 | | | | \$14,797.08 |
| 9.2 - Special Provisions | | 2 | | 2 | \$290 | | | \$290 | | | | | | \$0 | | | | \$3,066.07 |
| 9.3 - Final Engineers Estimate | | | 2 | 2 | \$192 | | | \$192 | | | | | | \$0 | | | | \$1,831.28 |
| Task 10: Mapping | | | | | | | | | | | | | | | | | | \$10,264.21 |
| 10.1 Base Mapping and Digital Terrain Model | | | | | \$0 | | | \$0 | | | | | | \$0 | | | | \$9,226.64 |
| 10.2 Additional Base Mapping (4 Crossings) | | | | | \$0 | | | \$0 | | | | | | \$0 | | | | \$1,037.57 |
| Task 11: Bid Assistance | | | | | | | | | | | | | | | | | | \$11,686.19 |
| 11.1 - Bid Addenda | | | 6 | 6 | \$576 | | | \$576 | | | | | | \$0 | | | | \$7,110.65 |
| 11.2 - As-Bid Documents | | | 4 | 4 | \$384 | | | \$384 | | 4 | | 4 | 8 | \$860 | | | \$860 | \$4,555.54 |
| Task 12: Services During Construction | | | | | | | | | | | | | | | | | | \$9,901.91 |
| 12.1 On-Call support | | | 8 | 8 | \$768 | | | \$768 | | 4 | | | 4 | \$520 | | | \$520 | \$9,901.91 |
| SUBTOTAL DESIGN | | 47 | 170 | 217 | \$23,135 | \$400 | \$50 | \$23,585 | 28 | 48 | 204 | 24 | 304 | \$35,380 | \$560 | \$100 | \$36,040 | \$292,209.45 |
| PROJECT TOTAL HOURS | | 47 | 170 | 217 | | | | | 28 | 48 | 204 | 24 | 304 | | | | | |
| PROJECT TOTAL AMOUNT | | \$6,815 | \$16,320 | | \$23,135 | \$400 | \$50 | \$23,585 | \$3,640 | \$6,240 | \$23,460 | \$2,040 | | \$35,380 | \$560 | \$100 | \$36,040 | \$292,209.45 |
| CH2M Individuals assigned to this project will be billed using t | | | | | | | | 8.1% | | | | | | | | | 12.3% | 20.4% |

EXHIBIT B

PBOT

PORTLAND BUREAU OF TRANSPORTATION

1120 SW Fifth Avenue, Suite 800 Portland, OR 97204 503.823.5185
Fax 503.823.7576 TTY 503.823.6868 www.portlandoregon.gov/transportation

Chloe Eudaly Commissioner Chris Warner Interim Director

Flexible Service Task Order

Price Agreement # 30005277

Project: Outer Division Multi Modal Safety Project - Amended Task Order #: Two (2) A

SAP Cost Object: T00629.D42 Consultant: CH2M Hill nka Jacobs

(PBOT) Project Manager: Liz Mahon Phone: 503-823-0396

(Consultant) Project Manager: Kristin Hull Phone: 503-235-5000

Group/Division: Policy, Planning & Projects / Capital Projects

Price Agreement Rates Verified: Total Price Agreement Value: \$ 908,649.02

Task Order Effective Date: As signed by all Original Task Order NTE Value: \$ 292,209.45

Task Order Expiration Date: As stated in the Price Agreement Revised Task Order NTE Value: \$ 672,016.99

Previous Task Order Funds Encumbered to Date: \$ 528,832.48

Total of all Task Order Funds Encumbered to Date: \$ 908,649.02

Scope of Work is attached hereto and incorporated herein as Exhibit A.
Fee Schedule is attached hereto and incorporated herein as Exhibit B.
The City of Portland pays on a net 30 day basis after receipt of invoice.
Please reference Price Agreement # / Purchase Order # / Task Order # on all invoices submitted for payment.

Approved by:

Acceptance of Terms by Consultant:

PBOT Project Manager Date

Name Date

Supervising Manager Date

2020 SW 4th Ave, Suite 300
Address

Financial Analyst Date

Portland, OR 97201
City, State, Zipcode

Contracts Date

TBD
E-Mail Address



The Portland Bureau of Transportation fully complies with Title VI of the Civil Rights Act of 1964, the ADA Title II, and related statutes and regulations in all programs and activities. For accommodations, complaints and information, call (503) 823-5185, City TTY (503) 823-6868, or use Oregon Relay Service: 711.

Exhibit A
Scope of Work
Outer Division Multi-Modal Safety Project Amendment

January 11, 2019

Purpose

CH2M (CONSULTANT) is currently preparing preliminary plans for the Outer Division Multi-Modal Safety project as task order to the 2016 civil design on-call contract. The plans were previously completed through the 60% stage however the scope of the project has expanded to include 10 signalized crossings and 10 unsignalized crossings. Limits of access control median has expanded to include SE 103rd to SE 110th. The purpose of this amendment is to provide additional scope of services and level of effort for changes associated with the development of construction documents for the Portland Bureau of Transportation (CITY). The duration of this amendment is September 1, 2018 thru December 27, 2019.

Final scope of Project that will be taken to 100% plans with the current amendment:

- Access Management Median Islands and Protected Bike lanes on SE Division Street as follows:
 - 80th – I-205 path – Protected bike lanes and access management median islands
 - 96th/98th – 103rd – Protected bike lanes, no access management
 - 103rd – 110th - Protected bike lanes and access management median islands
 - 110th-125th - Protected bike lanes, no access management
 - 125th – 142nd - Protected bike lanes and access management median islands
 - 142nd – 174th - Protected bike lanes, no access management
- Signalized pedestrian crossings on SE Division at the following locations:
 - SE 80th (full signal), SE 85th (half signal), SE 89th (half signal), SE 104th (half signal), SE 139th (full signal), SE 151st (half signal), SE 154th (half signal), SE 160th (half signal), SE 166th (half signal), and SE 170th (half signal)
- Interconnect plans will be provided. Wireless radios with integrated panel antennas will be installed to connect the signalized pedestrian crossings described above to the City of Portland communications system.
- Unsignalized pedestrian crossings on SE Division at the following locations:
 - SE 81st, SE 84th, SE 87th, SE 90th, SE 105th, SE 109th, SE 131st, SE 133rd, SE 137th, and SE 141st

- The SE 92nd signal will be modified to align with the revised lane locations. Loop detectors will be relocated accordingly and two wireless radios with integrated panel antennas will be installed to connect the intersection to the City of Portland communications system.
- The pedestrian signal located mid-block east of 84th Ave will be relocated to 85th Ave and redesigned as a half signal. 84th Ave will be designed as an unsignalized pedestrian crossing.
- Signalized crossings include illumination. The illumination memo will be revised to add the SE 85th and SE 139th signals.
- Profiles for new ADA ramps and crossings will be required.
- Curb profiles for new medians will not be required.
- Striping plans (double-stacked at 1"=80') will be provided for sections without access management (96th – 103rd, 110th – 125th, 142nd – 174th)
- Design provides for detailed design of 57 additional curb ramps
- The four Rectangular Rapid Flashing Beacons in the original scope will no longer be included in the project. Those locations have been revised to be design as half signals.
- BES will review the 60% plans and provide design for any drainage improvements needed. CH2M will incorporate BES designs into the 95% plans and estimate.
- Design to be updated with new survey data to be provided by PBOT (collected in 2018).

Task 1 – Project Management and Administration

Task 1 Activities:

- CONSULTANT will coordinate and manage project development with the CITY Project Manager. Prepare monthly progress reports and billings for the project through design. Monitor scope, schedule and budget against milestones. Consultant will engage and consult team members and internal stakeholders as needed
- Bi-weekly meetings with CITY PM and CONSULTANT Design Team. Assume 10 meetings at one hour each. CONSULTANT will provide agenda and email summaries of action items from each meeting.
- CONSULTANT will communicate with team members and sub-consultants, maintain files, prepare correspondence, prepare submittals, and provide guidance to the team is all part of coordinating and managing the design team.
- CONSULTANT will coordinate outcomes pertaining to access management, turn lane modifications and preservation of parking to the Metro and TriMet Division Transit Project teams at key milestones, deliverables and decision points, in order to inform the Final Design work of that project in a succinct and timely fashion.

Task 1 Deliverables:

CONSULTANT will provide the following deliverables:

1. Monthly invoice and progress report

2. Meeting attendance, agenda and meeting summaries at up to 10 coordination meetings

Task 6 – Design – 60%

The plan set will be expanded to include designs that were not included in the 60% submittal.

Task 6 Activities:

- CONSULTANT will provide 60% submittal of new sheets listed below
- CONSULTANT will develop and advance construction plans to include:
 - Cover Sheet - 1
 - Symbols and Abbreviations - 1
 - Sheet Layout Plan - 1
 - Typical Sections – 3
 - Survey Datum Sheet – 1
 - Construction Details - 4
 - ADA Ramp Details – 23 [up to 4 ramps per sheet] (10 new)
 - ADA Crossing Profiles – 19 (9 new)
 - Street Plans – 39 (11 new)
 - Street Signing and Striping Plans – 79 (43 new)
 - Signal and Interconnect Plans – 44 (9 New)
 - Landscaping Plans - 16
- CONSULTANT will prepare special provisions.
- CONSULTANT will develop design engineers estimate based on the 60% design. A contingency of 20% will be used for the estimate at this submittal.
- Following CITY review of the 60% submittal CONSULTANT will work the CITY Project Manager to schedule a comment review meeting. The meeting will be scheduled no sooner than two (2) days after receiving comments from the CITY. CONSULTANT will prepare initial responses to comments to be reviewed and discussed at the comment review meeting. CONSULTANT will prepare a summary of the meeting and provide a draft to the CITY Project Manager following the meeting.

Task 6 Deliverables:

CONSULTANT will provide the following deliverables electronically in the noted format:

1. 60% Construction Plans (PDF): *Plans complete, biddable and buildable*
2. 60% Engineer's Estimate (XLSX)
3. 60% Special Provisions (PDF)
4. 60% Comment review and response form (PDF)
5. Meeting summary from the 60% comment review meeting (PDF)

Task 6 Assumptions:

6. The CITY will prepare the Bid Book.

Task 8 – Design – 95%

Task 8 Activities:

- Following the 60% comment review meeting CONSULTANT will advance the design to a 95% level.
- Consultant will incorporate BES drainage designs into the plans. It is assumed that 10 intersections will be impacted and two detail sheets will be added.
- CONSULTANT will develop and advance construction plans to include:
 - Cover Sheet - 1
 - Symbols and Abbreviations - 1
 - Sheet Layout Plan - 1
 - Typical Sections – 3
 - Survey Datum Sheet - 1
 - Construction Details - 6
 - ADA Ramp Details – 23
 - ADA Crossing Profiles – 19
 - Street Plans – 39
 - Street Signing and Striping Plans – 79
 - Signal and Interconnect Plans – 44
 - Landscaping Plans - 16
- CONSULTANT will prepare special provisions.
- CONSULTANT will develop design engineers estimate based on the 95% design. A contingency of 10% will be used for the estimate at this submittal.
- Following CITY review of the 95% submittal CONSULTANT will work the CITY Project Manager to schedule a comment review meeting. The meeting will be scheduled no sooner than two (2) days after receiving comments from the CITY. CONSULTANT will prepare initial responses to comments to be reviewed and discussed at the comment review meeting. CONSULTANT will prepare a summary of the meeting and provide a draft to the CITY Project Manager following the meeting.

Task 8 Deliverables:

CONSULTANT will provide the following deliverables electronically in the noted format:

7. 95% Construction Plans (PDF): *Plans complete, biddable and buildable*
8. 95% Engineer’s Estimate (XLSX)
9. 95% Special Provisions (PDF)
10. 95% Comment review and response form (PDF)

11. Meeting summary from the 95% comment review meeting (PDF)

Task 8 Assumptions:

12. The CITY will prepare the Bid Book.

Task 9 – Final Design

Task 9 Activities:

- Following the 95% comment review meeting CONSULTANT will advance the design to a Final level and prepared stamped and sealed construction documents. There will be no design changes following the 95% stage.
- CONSULTANT will develop the final construction plans to include:
 - Cover Sheet
 - Symbols and Abbreviations
 - Sheet Layout Plan
 - Typical Sections
 - Survey Datum Sheet
 - Construction Details
 - ADA Ramp Details
 - ADA Crossing Profiles
 - Street Plans
 - Street Signing and Striping Plans
 - Signal and Interconnect Plans
 - Landscaping Plans
- CONSULTANT will develop special provisions.
- CONSULTANT will develop a final Engineers Estimate based on the 100% final design. A contingency of 5% will be used for the estimate at this final submittal.
- CONSULTANT will deliver to the CITY Project Manager:
 - One set of full size (22x34) plans (vellum or mylar) stamped and signed.
 - One electronic copy, on CD, of final plans (PDF), special provisions (Word and PDF), and Engineer's Estimate (XLSX, bid form (XLSX)).

Task 9 Deliverables:

CONSULTANT will provide the following deliverables in the noted format when applicable:

- One (1) full-size, 22"x34" set of final design plans, stamped and signed, on vellum or mylar.
- One (1) half-size, 11"x17" set of final design plans in Adobe Acrobat (.PDF) format
- Electronic files in MicroStation (.dgn) Design File format. The MicroStation design files shall be kept on their original coordinate base. Level names that currently exist shall remain. New logical level names may be added as needed but must remain within the maximum 63 layers as

supported by the MicroStation level structure. All necessary MicroStation resource files (font libraries, line styles, etc.) shall be included with the returned set. File structure is to be organized so that the CADD operator can open the disk, go to a specific plan sheet and print the plan sheet in the final condition without having to reattach or move reference files. All files in MicroStation/InRoads format, file .dgn, .alg, .dtm and all CED cogo points.

- Digital Artwork for all new signs (custom) in Adobe Illustrator (.ai) format.
- CD with final files including plans, special provisions, Bid form, and Engineer's Estimate.
- 100% Comment review and response form (PDF), showing all responses have been addressed.

Task 9 Assumptions:

1. The CITY will prepare the Bid Book.

Task 10 – Mapping

Task 10 Activities:

- Consultant shall meet with a representative of PBOT's Survey Section prior to commencing final design to discuss electronic data files that will be needed for construction staking.
- Prepare electronic data files for construction staking with final PS&E. Design files to be provided will include design DTM, InRoads geometry, design file used to create DTM file, and others as specified in Task 4.1.4.
- Prior to full file transfer, Consultant shall provide staking data for one intersection so Survey Section can confirm that the appropriate information is included.

Task 10 Deliverables:

CONSULTANT will provide the following deliverables electronically in the noted format when applicable:

- Meeting attendance at one meeting with CITY and surveyors.
- Separate survey stationing and file for each curb alignment and tied to centerline stationing.
- Crown lines, gutter lines, top of curb lines, backs of sidewalk and berm lines.
- Valley gutters and surface elevation of catch basins.
- Driveways and wheelchair ramps.
- Property lines, easements, work limits.
- Utility features including water lines, sewer lines, underground power and phone lines, and sawcut lines.
- Structures such as retaining walls, bridges, buildings and build doorways etc.
- Any additional features (concrete pads, tree wells, light pole bases, and traffic signals) that need to be staked.
- Horizontal curves within alignments need to be tangent curves, where incoming and outgoing tangents are perpendicular to the curves radius.
- A .dgn file representing the above features separated on discrete levels is required.

- A comma delineated ASCII file or “points list”, of the features in the .dgn file is required in Point Number, Northing, Easting, Elevation, Description, (P,N,E,Z,D) format.
- A text file of profile information for crown lines, gutter lines, backs of sidewalk, and berm lines.
- Field Notes or Sketches showing location of each Survey Control Point.
- Surveying/Mapping work performed for the City of Portland must be referenced to the following:
 - Horizontal Coordinate System: Oregon State Plane Coordinate System, North Zone, NAD 83(91), International Feet
 - Vertical Datum: City of Portland Vertical Datum

Task 11 – Bid Assistance

Task 11 Activities:

- CONSULTANT will assist the CITY in answering questions and reviewing substitution requests during the bidding period. The CONSULTANT will forward all contractor calls directly to the CITY Procurement Services Manager. Direct communication between contractors and the CONSULTANT is prohibited.
- The CONSULTANT will attend the pre-bid meeting at the CITY. One (1) CONSULTANT staff will attend.
- The CONSULTANT will prepare up to two (2) addenda during the bidding period. The need and scope of any addenda will be determined in cooperation between the CONSULTANT and the CITY Project Manager. Addenda will be issued by the CITY.
- The CONSULTANT will update the drawings to as-bid status by incorporating addenda changes to the drawings. Upon completion of the as-bid drawings changes, the CONSULTANT will deliver to the CITY Project Manager:
 - One set of full size (22x34) plans (vellum or mylar), including the corrected sheets, stamped and signed.
 - One electronic copy, on CD, of final as-bid drawings, special provisions, bid form, engineers estimate, and Microstation CAD drawings, Inroads Alignment files and Inroads DTM files

Task 11 Deliverables:

CONSULTANT will provide the following deliverables electronically in the noted format:

1. Up to two (2) addenda which may include plan and/or specification revisions and engineer’s estimate updates (PDF).
2. Final as-bid stamped and signed full size (22x34) plans (vellum or mylar)
 - CD with final as-bid files including plans, special provisions, bid form, engineers estimate, and Microstation CAD drawings, Inroads Alignment files and Inroads DTM files

Task 12 – Services During Construction

Task 12 Activities:

- A budget of 80 hours is set to provide on-call support service during construction for CITY staff. Support may include reviewing items from the contractor including RFIs, change requests, developing changed design plans and preparing as-built plans. CONSULTANT will work as directed up to the provided budget.
- CONSULTANT will prepare as-built drawings.
- CONSULTANT will notify the CITY PROJECT MANAGER when ninety (90) percent of the budget has been used to discuss whether an amendment for additional hours is necessary.
- Deliverables will be electronic format (PDF, Word, CAD) as requested, whether response to a RFI, revised design sheets or as-built drawings.

Task 12 Deliverables:

CONSULTANT will provide the deliverables as requested up to the noted budget for this subtask, including:

1. As requested responses to RFIs (PDF)
2. As requested responses to change requests (PDF)
3. As requested revised design plans (PDF)
4. As-built drawings (PDF)

DRAFT

Exhibit B Fee Schedule

| | A | B | C | D | E | F | G | H | I | J | K | M |
|----|--|-------------------|---------------------------|-------------------------|-------------------------------|----------------------------|--------------------------|---|--------------------------|----------------------------|---------------|-----------------------------------|
| 1 | Task Order 2, Amd 2: Outer Division Multi Modal Safety Project | CH2M HILL | | | | | | | | | | |
| 2 | | | | | | | | | | | | |
| 3 | Billing Rate | Senior Consultant | Senior Engineer Sharon | Office Engineer Cory | Technician/Drafter Manuela | Senior Engineer Dearing | Staff Engineer Belloc | Staff Eng/Planner/Scien /Arch/Staff Kestner | Total Labor Hours | Total Labor Dollars | Repro / Plots | Total Labor & Expenses |
| 4 | Task 1: Project Management & Administration | \$275.75 | \$223.51 | \$149.30 | \$103.45 | \$238.64 | \$118.36 | \$123.04 | | | | |
| 5 | 1.1 - Execute Amendment, Coordinator | 0 | 16 | 4 | | | | 24 | 44 | \$7,126.32 | | \$7,126.32 |
| 6 | 1.2 - Monthly Invoice and Progress Report (12 mo) | | 12 | | | | | | 12 | \$2,682.12 | | \$2,682.12 |
| 7 | 1.4 - Design coordination meetings (10) | | 10 | 20 | | | | | 30 | \$5,221.10 | | \$5,221.10 |
| 8 | Task 6: Design - 60% | | | | | | | | | | | |
| 9 | 6.1 - 60% Design Plans | | 108 | 248 | 308 | 40 | 304 | | 1,008 | \$138,555.12 | | \$138,555.12 |
| 10 | 6.2 - 60% Special Provisions | | 4 | 8 | | 2 | | 4 | 18 | \$3,057.88 | | \$3,057.88 |
| 11 | 6.3 - 60% Engineers Estimate | | 4 | 16 | | 4 | 8 | | 32 | \$5,184.28 | | \$5,184.28 |
| 12 | 6.4 - 60% Comment Review Meeting | | 4 | 8 | | | | | 12 | \$2,088.44 | | \$2,088.44 |
| 13 | Task 8: Design - 95% | | | | | | | | | | | |
| 14 | 8.1 - 95% Design Plans | | 34 | 96 | 124 | 8 | 56 | | 318 | \$43,297.22 | | \$43,297.22 |
| 15 | 8.2 - 95% Special Provisions | | 4 | 8 | | 1 | | 2 | 15 | \$2,573.16 | | \$2,573.16 |
| 16 | 8.3 - 95% Engineers Estimate | | 4 | 6 | | 1 | | | 11 | \$2,028.48 | | \$2,028.48 |
| 17 | 8.4 - 95% Comment Review Meeting | | 4 | 8 | | | | | 12 | \$2,088.44 | | \$2,088.44 |
| 18 | Task 9: Final Design | | | | | | | | | | | |
| 19 | 9.1 - Final Plans | | 16 | 60 | 94 | 4 | 16 | | 190 | \$25,106.78 | \$540 | \$25,646.78 |
| 20 | 9.2 - Special Provisions | | 2 | 4 | | 1 | | 2 | 9 | \$1,528.94 | | \$1,528.94 |
| 21 | 9.3 - Final Engineers Estimate | | 2 | 4 | | 1 | | | 7 | \$1,282.86 | | \$1,282.86 |
| 22 | Task 10: Mapping | | | | | | | | | | | |
| 23 | 10.2 Survey Coordination and Support | | | 12 | | | | | 12 | \$1,791.60 | | \$1,791.60 |
| 24 | Task 11: Bid Assistance | | | | | | | | | | | |
| 25 | 11.1 - Bid Addenda | | 4 | 8 | | | | | 12 | \$2,088.44 | | \$2,112.44 |
| 26 | 11.2 - As-Bid Documents | | 4 | 16 | 16 | | | | 36 | \$4,938.04 | | \$4,938.04 |
| 27 | Task 12: Services During Construction | | | | | | | | | | | |
| 28 | 12.1 On-Call Support | | 12 | 24 | | | | | 36 | \$6,265.32 | | \$6,265.32 |
| 29 | SUBTOTAL DESIGN | | | | | | | | | | | |
| 30 | | 0 | 244 | 550 | 542 | 62 | 384 | 32 | 1,814 | | | |
| 31 | | \$0 | \$54,536 | \$82,115 | \$56,070 | \$14,796 | \$45,450 | \$3,937 | | \$256,904.54 | \$540 | \$257,468.54 |
| 32 | | | | | | | | | | | | |
| 33 | | | | | | | | | | | | |
| 34 | PROJECT TOTAL HOURS | 0 | 244 | 550 | 542 | 62 | 384 | 32 | 1,814 | | | |
| 35 | PROJECT TOTAL AMOUNT | \$0 | \$54,536 | \$82,115 | \$56,070 | \$14,796 | \$45,450 | \$3,937 | | \$256,904.54 | \$540.00 | \$257,468.54 |
| 36 | | | | | | | | | | | | |
| 37 | CH2M Individuals assigned to this project will be billed using their actual hourly wage times a 3.10 multiplier. | | | | | | | | | | | |
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| | A | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | AA |
|----|---|-----------------------|-------|--------------------------|----------------------------|-----------------|--------|-----------------------------------|----------------------|---------------------|--------------------------|----------------------------|-----------------|--------|-----------------------------------|
| 1 | Task Order 2, Amd 2: Outer Division Multi Modal Safety Project | Nelson Nygaard | | | | | | | NNA Landscape | | | | | | |
| 2 | | | | Total Labor Hours | Total Labor Dollars | Repro / Postage | Travel | Total Labor & Expenses | | | Total Labor Hours | Total Labor Dollars | Repro / Postage | Travel | Total Labor & Expenses |
| 3 | Billing Rate | James McGrath | Other | | | | | | Sr. Landscape | Landscape Architect | | | | | |
| 3 | | \$275 | \$96 | | | | | | \$145 | \$104 | | | | | |
| 4 | Task 1: Project Management & Administration | | | | | | | | | | | | | | |
| 5 | 1.1 - Execute Amendment, Coordinator | 10 | | 10 | \$2,750 | | | \$2,750 | 8 | | 8 | \$1,160 | | | \$1,160 |
| 6 | 1.2 - Monthly Invoice and Progress Report (12 mo) | | | - | \$0 | | | \$0 | 2 | 2 | 4 | \$498 | | | \$498 |
| 7 | 1.4 - Design coordination meetings (10) | | | - | \$0 | | | \$0 | | 10 | 10 | \$1,040 | | | \$1,040 |
| 8 | Task 6: Design - 60% | | | | | | | | | | | | | | |
| 9 | 6.1 - 60% Design Plans | | | - | \$0 | | | \$0 | 4 | 12 | 16 | \$1,828 | | | \$1,828 |
| 10 | 6.2 - 60% Special Provisions | | | | \$0 | | | \$0 | | | - | \$0 | | | \$0 |
| 11 | 6.3 - 60% Engineers Estimate | | | | \$0 | | | \$0 | 2 | 2 | 4 | \$498 | | | \$498 |
| 12 | 6.4 - 60% Comment Review Meeting | | | - | \$0 | | | \$0 | | | - | \$0 | | | \$0 |
| 13 | Task 8: Design - 95% | | | | | | | | | | | | | | |
| 14 | 8.1 - 95% Design Plans | | | - | \$0 | | | \$0 | | | - | \$0 | | | \$0 |
| 15 | 8.2 - 95% Special Provisions | | | | \$0 | | | \$0 | | | - | \$0 | | | \$0 |
| 16 | 8.3 - 95% Engineers Estimate | | | | \$0 | | | \$0 | | | - | \$0 | | | \$0 |
| 17 | 8.4 - 95% Comment Review Meeting | | | - | \$0 | | | \$0 | | | - | \$0 | | | \$0 |
| 18 | Task 9: Final Design | | | | | | | | | | | | | | |
| 19 | 9.1 - Final Plans | | | - | \$0 | | | \$0 | | | - | \$0 | | | \$0 |
| 20 | 9.2 - Special Provisions | | | | \$0 | | | \$0 | | | - | \$0 | | | \$0 |
| 21 | 9.3 - Final Engineers Estimate | | | | \$0 | | | \$0 | | | - | \$0 | | | \$0 |
| 22 | Task 10: Mapping | | | | | | | | | | | | | | |
| 23 | 10.2 Survey Coordination and Support | | | | \$0 | | | \$0 | | | | \$0 | | | \$0 |
| 24 | Task 11: Bid Assistance | | | | | | | | | | | | | | |
| 25 | 11.1 - Bid Addenda | | | - | \$0 | | | \$0 | | | - | \$0 | | | \$0 |
| 26 | 11.2 - As-Bid Documents | | | - | \$0 | | | \$0 | | | - | \$0 | | | \$0 |
| 27 | Task 12: Services During Construction | | | | | | | | | | | | | | |
| 28 | 12.1 On-Call Support | | | - | \$0 | | | \$0 | | | - | \$0 | | | \$0 |
| 29 | SUBTOTAL DESIGN | | | | | | | | | | | | | | |
| 30 | | 10 | 0 | 10 | | | | | 16 | 26 | 42 | | | | |
| 31 | | \$2,750 | \$0 | | \$2,750 | \$0 | \$0 | \$2,750 | \$2,320 | \$2,704 | | \$5,024 | \$0 | \$0 | \$5,024 |
| 32 | | | | | | | | | | | | | | | |
| 33 | | | | | | | | | | | | | | | |
| 34 | PROJECT TOTAL HOURS | 10 | 0 | 10 | | | | | 16 | 26 | 42 | | | | |
| 35 | PROJECT TOTAL AMOUNT | \$2,750 | \$0 | | \$2,750 | \$0 | \$0 | \$2,750 | \$2,320 | \$2,704 | | \$5,024 | \$0 | \$0 | \$5,024 |
| 36 | | | | | | | | | | | | | | | |
| 37 | CH2M Individuals assigned to this project will be billed using | | | | | | | 24.4% | | | | | | | 1.3% |
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| | A | AB | AC | AD | AE | AF | AG | AH | AI | AJ | AK | AL |
|----|---|-------------------------------|---------------------------|-----------------------------|-------------------------|----------|--------------------------|----------------------------|----------------|--------|-----------------------------------|--------------------|
| 1 | Task Order 2, Amd 2: Outer Division Multi Modal Safety Project | Global | | | | | | | | | | |
| 2 | | Principal / Project Manager 4 | Senior Project Engineer 5 | Sr. Engineering Associate 4 | Engineering Associate I | Tech XIV | Total Labor Hours | Total Labor Dollars | Traffic Counts | Travel | Total Labor & Expenses | Grand Total |
| 3 | Billing Rate | \$140 | \$140 | \$120 | \$75 | \$95 | | | | | | |
| 4 | Task 1: Project Management & Administration | | | | | | | | | | | \$25,237.54 |
| 5 | 1.1 - Execute Amendment, Coordinator | 2 | | | | | 2 | \$280 | | | \$280 | \$11,316.32 |
| 6 | 1.2 - Monthly Invoice and Progress Report (12 mo) | 12 | | | | | 12 | \$1,680 | | | \$1,680 | \$4,860.12 |
| 7 | 1.4 - Design coordination meetings (10) | 20 | | | | | 20 | \$2,800 | | | \$2,800 | \$9,061.10 |
| 8 | Task 6: Design - 60% | | | | | | | | | | | \$221,116.72 |
| 9 | 6.1 - 60% Design Plans | 32 | 48 | 318 | 90 | 101 | 589 | \$65,705 | | | \$65,705 | \$206,088.12 |
| 10 | 6.2 - 60% Special Provisions | 4 | 6 | | | | 10 | \$1,400 | | | \$1,400 | \$4,457.88 |
| 11 | 6.3 - 60% Engineers Estimate | 4 | 8 | | | | 12 | \$1,680 | | | \$1,680 | \$7,362.28 |
| 12 | 6.4 - 60% Comment Review Meeting | 4 | 4 | | | | 8 | \$1,120 | | | \$1,120 | \$3,208.44 |
| 13 | Task 8: Design - 95% | | | | | | | | | | | \$69,197.30 |
| 14 | 8.1 - 95% Design Plans | 22 | 20 | 32 | 40 | 30 | 144 | \$15,570 | | | \$15,570 | \$58,867.22 |
| 15 | 8.2 - 95% Special Provisions | 4 | 4 | | | | 8 | \$1,120 | | | \$1,120 | \$3,693.16 |
| 16 | 8.3 - 95% Engineers Estimate | 4 | 6 | | | | 10 | \$1,400 | | | \$1,400 | \$3,428.48 |
| 17 | 8.4 - 95% Comment Review Meeting | 4 | 4 | | | | 8 | \$1,120 | | | \$1,120 | \$3,208.44 |
| 18 | Task 9: Final Design | | | | | | | | | | | \$41,548.58 |
| 19 | 9.1 - Final Plans | 20 | 18 | 20 | 20 | 26 | 104 | \$11,690 | | | \$11,690 | \$37,336.78 |
| 20 | 9.2 - Special Provisions | 1 | 4 | | | | 5 | \$700 | | | \$700 | \$2,228.94 |
| 21 | 9.3 - Final Engineers Estimate | 1 | 4 | | | | 5 | \$700 | | | \$700 | \$1,982.86 |
| 22 | Task 10: Mapping | | | | | | | | | | | \$1,791.60 |
| 23 | 10.2 Survey Coordination and Support | | | | | | - | \$0 | | | \$0 | \$1,791.60 |
| 24 | Task 11: Bid Assistance | | | | | | | | | | | \$10,350.48 |
| 25 | 11.1 - Bid Addenda | | | | | | - | \$0 | | | \$0 | \$2,112.44 |
| 26 | 11.2 - As-Bid Documents | | 10 | | | 20 | 30 | \$3,300 | | | \$3,300 | \$8,238.04 |
| 27 | Task 12: Services During Construction | | | | | | | | | | | \$10,565.32 |
| 28 | 12.1 On-Call Support | 12 | 16 | | | 4 | 32 | \$4,300 | | | \$4,300 | \$10,565.32 |
| 29 | SUBTOTAL DESIGN | | | | | | | | | | | |
| 30 | | 146 | 152 | 370 | 150 | 181 | 999 | | | | | |
| 31 | | \$20,440 | \$21,280 | \$44,400 | \$11,250 | \$17,195 | | \$114,565 | \$0 | \$0 | \$114,565 | \$158,690.82 |
| 32 | | | | | | | | | | | | |
| 33 | | | | | | | | | | | | |
| 34 | PROJECT TOTAL HOURS | 146 | 152 | 370 | 150 | 181 | 999 | | | | | |
| 35 | PROJECT TOTAL AMOUNT | \$20,440 | \$21,280 | \$44,400 | \$11,250 | \$17,195 | | \$114,565 | \$0 | \$0 | \$114,565 | \$379,807.54 |
| 36 | | | | | | | | | | | | |
| 37 | CH2M Individuals assigned to this project will be billed using | | | | | | | | | | 30.2% | 31.5% |
| 38 | | | | | | | | | | | | |
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EXHIBIT C
AMENDMENT NUMBER Two (2)
CONTRACT NUMBER 30005277
FOR
A & E Flex Service Price Agreement
Street Design

Pursuant to Ordinance Number TBD

This Contract was made and entered by and between CH2M Hill Engineers, Inc., hereinafter called Consultant, and the City of Portland, a municipal corporation of the State of Oregon, by and through its duly authorized representatives, hereinafter called City.

1. This Contract is hereby extended through December 31, 2019.
2. Additional work is necessary to complete Task Order 2.
3. Additional compensation is necessary and shall not exceed \$283,649.02 for new not to exceed contract total amount of \$908,649.02. The new contract amount was calculated as follows:

| | |
|----------------|------------------------------|
| \$500,000.00 | (Original Contract Amount) |
| + \$125,000.00 | (Amendment 1) |
| + \$283,649.02 | (Amendment 2) |
| = \$908,649.02 | (Total Not to Exceed Amount) |

4. All other terms and conditions shall remain unchanged and in full force and effect.

CONSULTANT SIGNATURE

This Contract amendment may be signed in two (2) or more counterparts, each of which shall be deemed an original, and which, when taken together, shall constitute one and the same Contract amendment.

The parties agree the City and Consultant may conduct this transaction by electronic means, including the use of electronic signatures.

Consultant Name: Ch2M Hill Engineers, Inc.

Address: 2020 SW 4th Avenue, Suite #300

Portland, OR 97201-4973

Signature: _____ Date: _____

Name: _____

Title: _____

Contract Number: 30005277

Amendment Number: Two (2)

Contract Title: A & E Flex Service Price Agreement Street Design

CITY OF PORTLAND SIGNATURES

By: _____ Date: _____
Commissioner

Approved:

By: _____ Date: _____
Office of City Auditor

Approved as to Form:

By: _____ Date: _____
Office of City Attorney

DRAFT