

Exhibit A

CITY OF PORTLAND
AGREEMENT FOR PROFESSIONAL, TECHNICAL, OR EXPERT SERVICES

CONTRACT NUMBER 30005876

TITLE OF WORK PROJECT
N. Rivergate Overcrossing Project Design & Engineering Services

This Contract is between the City of Portland ("City," or "Bureau") and HDR Engineering, Inc., hereafter called Consultant. The City's Project Manager for this Contract is Dan Layden.

Effective Date and Duration

This Contract shall become effective on July 1, 2017. This Contract shall expire, unless otherwise terminated or extended, on December 31, 2018.

Consideration

- (a) City agrees to pay Consultant a sum not to exceed \$2,222,941 for accomplishment of the work.
- (b) Interim payments shall be made to Consultant according to the schedule identified in the STATEMENT OF THE WORK AND PAYMENT SCHEDULE.

CONSULTANT DATA AND CERTIFICATION

Name (print full legal name): HDR Engineering, Inc.

Address: 1001 SW 5th Avenue, Suite 1800 Portland, OR 97204

Employer Identification Number (EIN): 21065628

[INDEPENDENT CONSULTANTS: DO NOT PROVIDE SOCIAL SECURITY NUMBER (SSN) – LEAVE BLANK IF NO EIN]

City of Portland Business Tax Registration Number: 670538

Citizenship: Nonresident alien Yes No

Business Designation (check one): Individual Sole Proprietorship Partnership Corporation

Limited Liability Co (LLC) Estate/Trust Public Service Corp. Government/Nonprofit

Payment information will be reported to the IRS under the name and taxpayer I.D. number provided above. Information must be provided prior to Contract approval.

TERMS AND CONDITIONS

1. Standard of Care

Consultant shall perform all services under this Contract using that care, skill, and diligence that would ordinarily be used by similar professionals in this community in similar circumstances.

2. Effect of Expiration

Passage of the Contract expiration date shall not extinguish, prejudice, or limit either party's right to enforce this Contract with respect to any default or defect in performance that has not been corrected.

3. Order of Precedence

This Contract consists of these Terms and Conditions, the Statement of Work and Payment Schedule, and any exhibits that are attached. Any apparent or alleged conflict between these items will be resolved by using the following order of precedence:

a) these Terms and Conditions; b) Statement of Work and Payment Schedule; and c) any exhibits attached to the Contract.

4. Early Termination of Contract

- (a) The City may terminate this Contract for convenience at any time for any reason deemed appropriate in its sole discretion. Termination is effective immediately upon notice of termination given by the City.
- (b) Either party may terminate this Contract in the event of a material breach by the other party that is not cured. Before termination is permitted, the party seeking termination shall give the other party written notice of the breach, its intent to terminate, and fifteen (15) calendar days to cure the breach. If the breach is not cured within 15 calendar days, the party seeking termination may terminate immediately by giving written notice that the Contract is terminated.

5. Remedies and Payment on Early Termination

- (a) If the City terminates pursuant to 4(a) above, the City shall pay the Consultant for work performed in accordance with the Contract prior to the termination date. No other costs or loss of anticipated profits shall be paid.
- (b) If the City terminates pursuant to 4(b) above, the City is entitled all remedies available at law or equity. In addition, Consultant shall pay the City all damages, costs, and sums incurred by the City as a result of the breach.
- (c) If the Consultant justifiably terminates the Contract pursuant to subsection 4(b), the Consultant's only remedy is payment for work prior to the termination. No other costs or loss of anticipated profits shall be paid.
- (d) If the City's termination under Section 4(b) was wrongful, the termination shall be automatically converted to one for convenience and the Consultant shall be paid as if the Contract was terminated under Section 4(a).
- (e) In the event of early termination the Consultant's work product before the date of termination becomes property of the City.

6. Assignment

Consultant shall not subContract, assign, or transfer any of the work scheduled under this agreement, without the prior written consent of the City. Notwithstanding City approval of a subconsultant, the Consultant shall remain obligated for full performance hereunder, and the City shall incur no obligation other than its obligations to the Consultant hereunder. The Consultant agrees that if subconsultants are employed in the performance of this Agreement, the Consultant and its subconsultants are subject to the requirements and sanctions of ORS Chapter 656, Workers' Compensation.

7. Compliance with Applicable Law

Consultant shall comply with all applicable federal, state, and local laws and regulations. Consultant agrees it currently is in compliance with all tax laws. Consultant shall comply with Title VI of the Civil Rights Act of 1964 and its corresponding regulations. In connection with its activities under this Contract, the Consultant shall comply with all applicable Grant Terms and conditions. This includes all terms and conditions contained in this Contract and, for a Contract involving a grant, the Grant Terms and Conditions.

8. Indemnification for Property Damage and Personal Injury

Consultant shall indemnify, defend, and hold harmless the City, its officers, agents, and employees, from all claims, losses, damages, and costs (including reasonable attorney fees) for personal injury and property damage to the extent arising out of the intentional misconduct or negligent acts or omissions of the Consultant, its Subconsultants, suppliers, employees or agents in the performance of its services. Nothing in this paragraph requires the Consultant or its insurer to indemnify the City for claims of personal injury or property damage caused by the negligence of the City. This duty shall survive the expiration or termination of this Contract.

9. Insurance

Consultant shall obtain and maintain in full force at Consultant expense, throughout the duration of the Contract and any warranty or extension periods, the required insurance identified below. The City reserves the right to require additional insurance coverage as required by statutory or legal changes to the maximum liability that may be imposed on Oregon cities during the term of the Contract.

- (a) Workers' compensation insurance as required by ORS Chapter 656 and as it may be amended. Unless exempt under ORS Chapter 656, the Consultant and all subconsultants shall maintain coverage for all subject workers.

Required and attached // Proof of exemption (i.e., completion of Workers' Compensation Insurance Statement)

- (b) General commercial liability (CGL) insurance covering bodily injury, personal injury, property damage, including coverage for independent consultant's protection (required if any work will be subContracted), premises/operations, Contractual liability, products and completed operations, in per occurrence limit of not less than \$1,000,000, and aggregate limit of not less than \$2,000,000.

Required and attached // Waived by Bureau Director or designee // Reduce by Bureau Director or designee

- (c) Automobile liability insurance with coverage of not less than \$1,000,000 each accident, and an umbrella or excess liability coverage of \$2,000,000. The insurance shall include coverage for any auto or all owned, scheduled, hired and non-owned auto. This coverage may be combined with the commercial general liability insurance policy.

Required and attached // Waived by Bureau Director or designee // Reduce by Bureau Director or designee

- (d) Professional Liability and/or Errors & Omissions insurance to cover damages caused by negligent acts, errors or omissions related to the professional services, and performance of duties and responsibilities of the Consultant under this Contract in an amount with a combined single limit of not less than \$1,000,000 per occurrence and aggregate of \$3,000,000 for all claims per occurrence. In lieu of an occurrence based policy, Consultant may have claims-made policy in an amount not less than \$1,000,000 per claim and \$3,000,000 annual aggregate, if the Consultant obtains an extended reporting period or tail coverage for not less than three (3) years following the termination or expiration of the Contract.

Required and attached // Waived by Bureau Director or designee // Reduce by Bureau Director or designee

Continuous Coverage; Notice of Cancellation: The Consultant agrees to maintain continuous, uninterrupted coverage for the duration of the Contract. There shall be no termination, cancellation, material change, potential exhaustion of aggregate limits or non-renewal of coverage without thirty (30) calendar days written notice from Consultant to the City. If the insurance is canceled or terminated prior to completion of the Contract, Consultant shall immediately notify the City and provide a new policy with the same terms. Any failure to comply with this clause shall constitute a material breach of Contract and shall be grounds for immediate termination of this Contract.

Additional Insured: The liability insurance coverages, except Professional Liability, Errors and Omissions, or Workers' Compensation, shall be without prejudice to coverage otherwise existing, and shall name the City of Portland and its bureaus/divisions, officers, agents and employees as Additional Insureds, with respect to the Consultant's activities to be performed, or products or services to be provided. Coverage shall be primary and non-contributory with any other insurance and self-insurance. Notwithstanding the naming of additional insureds, the insurance shall protect each additional insured in the same manner as though a separate policy had been issued to each, but nothing herein shall operate to increase the insurer's liability as set forth elsewhere in the policy beyond the amount or amounts for which the insurer would have been liable if only one person or interest had been named as insured.

Certificate(s) of Insurance: Consultant shall provide proof of insurance through acceptable certificate(s) of insurance, including additional insured endorsement form(s) and all other relevant endorsements, to the City prior to the award of the Contract if required by the procurement documents (e.g., request for proposal), or at execution of Contract and prior to any commencement of work or delivery of goods or services under the Contract. The Certificate(s) will specify all of the parties who are endorsed on the policy as Additional Insureds (or Loss Payees). Insurance coverages required under this Contract shall be obtained from insurance companies acceptable to the City of Portland. The Consultant shall pay for all deductibles and premium. The City reserves the right to require, at any time, complete, certified copies of required insurance policies, including endorsements evidencing the coverage the required.

Subconsultant(s): Consultant shall provide evidence that any subconsultant, if any, performing work or providing goods or service under the Contract has the same types and amounts of coverages as required herein or that the subconsultant is included under Consultant's policy.

10. Ownership of Work Product

All work product produced by the Consultant under this Contract is the exclusive property of the City. "Work Product" includes, but is not limited to: research, reports, computer programs, manuals, drawings, recordings, photographs, artwork and any data or information in any form. The Consultant and the City intend that such Work Product shall be deemed "work made for hire" of which the City shall be deemed the author. If for any reason a Work Product is deemed not to be a "work made for hire," the Consultant hereby irrevocably assigns and transfers to the City all right, title and interest in such work product, whether arising from copyright, patent, trademark, trade secret, or any other state or federal intellectual property law or doctrines. Consultant shall obtain such interests and execute all documents necessary to fully vest such rights in the City. Consultant waives all rights relating to work product, including any rights arising under 17 USC 106A, or any other rights of authorship, identification or approval, restriction or limitation on use or subsequent modifications. If the Consultant is an architect, the Work Product is the property of the Consultant-Architect, and by execution of this Contract, the Consultant-Architect grants the City an exclusive and irrevocable license to use that Work Product.

Notwithstanding the above, all pre-existing trademarks, services marks, patents, copyrights, trade secrets, and other proprietary rights of Consultant are and will remain the exclusive property of Consultant.

11. EEO Certification

The Consultant must be certified prior to Contract execution, as Equal Employment Opportunity Affirmative Action Employers as prescribed by Chapter 5.33.076 of the Code of the City of Portland.

12. Equal Benefits

Consultant must certify prior to Contract execution, that they provide benefits to their employees with spouses as prescribed by Chapter 5.33.077 of the Code of the City of Portland.

13. Successors in Interest

The provisions of this Contract shall be binding upon and shall inure to the benefit of the parties hereto, and their respective successors and approved assigns.

14. Severability

The parties agree that if any term or provision of this Contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Contract did not contain the particular term or provision held to be invalid.

15. Waiver

The failure of the City to enforce any provision of this Contract shall not constitute a waiver by the City of that or any other provision.

16. Errors

The Consultant shall promptly perform such additional services as may be necessary to correct errors in the services required by this Contract without undue delays and without additional cost.

17. Governing Law/Venue

The provisions of this Contract shall be interpreted, construed and enforced in accordance with, and governed by, the laws of the State of Oregon without reference to its conflict of laws provisions that might otherwise require the application of the law of any other jurisdiction. Any action or suits involving any question arising under this Contract must be brought in the appropriate court in Multnomah County Oregon.

18. Amendments

All changes to this Contract, including changes to the scope of work and Contract amount, must be made by written amendment and approved by the Chief Procurement Officer to be valid. Any amendment that increases the original Contract amount by more than 25% must be approved by the City Council to be valid.

19. Business Tax Registration

The Consultant shall obtain a City of Portland business tax registration number as required by PCC 7.02 prior to beginning work under this Contract.

20. Prohibited Conduct

The Consultant shall not hire any City employee who evaluated the proposals or authorized the award of this Contract for two years after the date the Contract was authorized without the express written permission of the City and provided the hiring is permitted by state law.

21. Payment to Vendors and Subconsultants

The Consultant shall timely pay all subconsultants and suppliers providing services or goods for this Contract.

22. Access to Records

The Consultant shall maintain all records relating to this Contract for three (3) years after final payment. The City may examine, audit and copy the Consultant's books, documents, papers, and records relating to this Contract at any time during this period upon reasonable notice. Copies of these records shall be made available upon request. Payment for the reasonable cost of requested copies shall be made by the City.

23. Audits

- (a) The City may conduct financial and performance audits of the billings and services specified in this Contract at any time in the course of the Contract and during the three (3) year period established by paragraph 22. Audits will be conducted in accordance with generally accepted auditing standards as promulgated in Government Auditing Standards by the Comptroller General of the United States Government Accountability Office.
- (b) If an audit discloses that payments to the Consultant exceed the amount to which the Consultant was entitled, the Consultant shall repay the amount of the excess to the City.

24. Electronic Signatures

The City and Consultant may conduct this transaction, including any Contract amendments, by electronic means, including the use of electronic signatures.

25. Merger Clause

This Contract encompasses the entire agreement of the parties, and supersedes all previous understandings and agreements between the parties, whether verbal or written.

26. Dispute Resolution/Work Regardless of Disputes

The parties shall participate in mediation to resolve disputes before conducting litigation. The mediation shall occur at a reasonable time after the conclusion of the Contract with a mediator jointly selected by the parties. Notwithstanding any dispute under this Contract, the Consultant shall continue to perform its work pending resolution of a dispute, and the City shall make payments as required by the Contract for undisputed portions of the work. In the event of litigation no attorney fees are recoverable. No different dispute resolution paragraph(s) in this Contract or any attachment hereto shall supersede or take precedence over this provision.

27. Progress Reports:

If applicable, the Consultant shall provide monthly progress reports to the Project Manager as described in the Statement of the Work and Payment Schedule.

28. Consultant's Personnel:

If applicable, the Consultant shall assign the personnel listed in the Statement of the Work and Payment Schedule for the work required by the Contract and shall not change personnel without the prior written consent of the City, which shall not be unreasonably withheld.

29. Subconsultants

The Consultant shall use the subconsultants identified in its proposals. The Consultant shall not change subconsultant's assignments without the prior written consent of the Chief Procurement Officer. The City will enforce all social equity Contracting

and Disadvantaged, Minority, Women and Emerging Small Business (D/M/W/ESB) subContracting commitments submitted by the Consultant in its proposals. Failure to use the identified D/M/W/ESB subconsultants without prior written consent is a material breach of Contract.

For Contracts valued \$50,000 or more, the Consultant shall submit a Monthly Subconsultant Payment and Utilization Report (MUR), made part of this Contract by reference, reporting ALL subconsultants employed in the performance of this agreement. An electronic copy of the MUR may be obtained by contacting the PTE Contract Compliance Specialist.

30. Third Party Beneficiaries

There are no third party beneficiaries to this Contract. Enforcement of this Contract is reserved to the parties.

31. Conflict of Interest

Consultant hereby certifies that, if applicable, its Contract proposal is made in good faith without fraud, collusion or connection of any kind with any other proposer of the same request for proposals or other City procurement solicitation(s), that the Consultant as a proposer has competed solely on its own behalf without connection or obligation to, any undisclosed person or firm. Consultant certifies that it is not a City official/employee or a business with which a City official/employee is associated, and that to the best of its knowledge, Consultant, its employee(s), its officer(s) or its director(s) is not a City official/employee or a relative of any City official/employee who: i) has responsibility in making decisions or ability to influence decision-making on the Contract or project to which this Contract pertains; ii) has or will participate in evaluation or management of the Contract; or iii) has or will have financial benefits in the Contract. Consultant understands that should it elect to employ any former City official/employee during the term of the Contract then that the former City official/Consultant employee must comply with applicable government ethics and conflicts of interest provisions in ORS Chapter 244, including but not limited to ORS 244.040(5) and ORS 244.047, and the City's Charter, Codes and administrative rules, including lobbying prohibitions under Portland City Code Section 2.12.080.

32. Respectful Workplace Behavior

The City of Portland is committed to a respectful work environment, free of harassment, discrimination and retaliation and other inappropriate conduct. Every individual has a right to work in a professional atmosphere where all individuals are treated with respect and dignity. The City's HR Rule 2.02 covers all employees with the City of Portland as well as consultants, vendors or consultants who provide services to the City of Portland. By signing this Contract/Agreement, the Consultant indicates compliance with all terms and conditions contained in this Contract including HR 2.02.

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**STATEMENT OF THE WORK
AND PAYMENT SCHEDULE**

SCOPE OF WORK

See attached EXHIBIT A which is hereby referenced and is incorporated into this contract by said reference.

CONSULTANT PERSONNEL

The Consultant shall assign the following personnel to do the work in the capacities designated:

NAME	ROLE ON PROJECT
See attached EXHIBIT B	As stated

SUBCONSULTANTS

The Consultant shall assign the following subconsultants to perform work in the capacities designated:

NAME	ROLE ON PROJECT
See attached EXHIBIT B	As stated

The City will enforce all social equity Contracting and Disadvantaged, Minority, Women and Emerging Small Business (D/M/W/ESB) subContracting commitments submitted by the Consultant in its Proposal. For Contracts valued \$50,000 or more, the Consultant shall submit a Monthly Subconsultant Payment and Utilization Report (MUR), made part of this Contract by reference, reporting ALL subconsultants employed in the performance of this agreement. A copy of the Subconsultant Change Request Form can be found on Procurement Services' website under Consultant Resources.

COMPENSATION

The maximum that the Consultant can be paid on this Contract is \$2,183,435 (hereafter the "not to exceed" amount.). The "not to exceed" amount includes all payments to be made pursuant to this Contract, including reimbursable expenses, if any. Nothing in this Contract requires the City to pay for work that does not meet the Standard of Care or other requirements of the Contract. The actual amount to be paid Consultant may be less than that amount.

The Consultant is entitled to receive progress payments for its work pursuant to the Contract as provided in more detail below. The City will pay Consultant based on these invoices for acceptable work performed and approved until the "not to exceed" amount is reached. Thereafter, Consultant must complete work based on the Contract without additional compensation unless there is a change to the scope of work.

Any estimate of the hours necessary to perform the work is not binding on the City. The Consultant remains responsible if the estimate proves to be incorrect. Exceeding the number of estimated hours of work does not impose any liability on the City for additional payment.

If work is completed before the "not to exceed" amount is reached, the Consultant's compensation will be based on the Consultant's bills previously submitted for acceptable work performed and approved.

PAYMENT TERMS: Net 30 Days

Hourly Rates

The billing rates shall not exceed those set forth below:

See attached Exhibit B, which is incorporated into this Contract by reference.

Standard Reimbursable Costs

DIRECT NON LABOR COSTS

1. Travel: Approved mileage, airfare, meals, and lodging shall be billed in accordance with prior City Project Manager approval in writing only.
2. "Other Direct Costs (ODCs): Special equipment charges, outside rental of equipment, trade services (flagging, borings, etc.), outside lab tests, etc., must be billed at cost. No markup allowed. Charges for in-house equipment must be based on the actual cost (using a calculation method acceptable to Agency) rather than market rates and may include costs for maintenance, repair, calibration, etc. For example, an acceptable calculation method for current year rates is to calculate the total costs in previous year for each piece of equipment divided by the number of days each respective piece of equipment was charged to various jobs in that year. Equipment that is depreciated in O/H may not also be direct charged (an exception to this would be if a firm's accounting practices credit direct-charge revenues from the equipment back to O/H each year with appropriate adjustments)." All Other Direct Costs(ODC's) shall be preapproved in writing by the City Project Manager

Submit to Agency a Direct Non-Labor Costs Schedule to list any ODC items. Provide annual updates of the schedule to reflect depreciation and the current calculation of the actual cost basis. After the schedule is approved by Agency it will be maintained on file. Equipment rates lower than the daily rates approved on the schedule may be negotiated on WOCs/Contracts with extensive usage of the equipment.

The allowability of costs is dependent upon the standards in the Code of Federal Regulations (CFR) Title 48 - Federal Acquisition Regulations System (FARS), Part 31, "Contractor Cost Principles and Procedures".

Subconsultant Costs

Compensation for subconsultants shall be limited to the same restrictions imposed on the Consultant. The maximum markup on subconsultant services shall not exceed zero%.

Progress Payments

On or before the 15th of each month, the Consultant shall submit to: PBOTContracts@portlandoregon.gov an electronic copy(pdf only) invoice for work performed by the Consultant during the preceding month. The invoice shall be on the prime contractors business letterhead and contain the City's Contract Number/Purchase Order and any Task Order number, as applicable, the PBOT Project Managers name, and set out all items for payment including, but not limited to: invoice number, period services were performed for, the name of the individual, labor category, direct labor rate, hours worked during the period, and tasks performed. The Consultant shall also attach photocopies of claimed reimbursable expenses, as applicable. A summary shall be provided per invoice showing, Current amount billed, past invoices billed but unpaid, invoices paid to reflect total amount billed as of invoice date against contract total. The Consultant shall stamp and approve all subconsultant invoices and note on the subconsultant invoice what they are approving as "billable" under the contract, if subconsultants were used under this contract. The billing from the prime should clearly roll up labor and reimbursable costs for the prime and subconsultants - matching the subconsultant invoices. Prior to initial billing, the Consultant shall develop a billing format for approval by the City.

ACH Payments

It is the City's policy to pay its Consultant invoices via electronic funds transfers through the automated clearing house (ACH) network. To initiate payment of invoices, Consultant shall execute the City's standard ACH Vendor Payment Authorization Agreement.

Upon verification of the data provided, the Payment Authorization Agreement will authorize the City to deposit payment for services rendered directly into Consultant accounts with financial institutions. All payments shall be in United States currency.

WORKERS' COMPENSATION INSURANCE STATEMENT

IF YOUR FIRM HAS CURRENT WORKERS' COMPENSATION INSURANCE, CONSULTANT MUST SIGN HERE:

I, undersigned, am authorized to act on behalf of entity designated below, and I hereby certify that this entity has current Workers' Compensation Insurance.

Consultant Signature [Signature] Date: 6/24/2017 Entity: HDR Engineering, Inc.

IF YOUR FIRM DOES NOT HAVE CURRENT WORKERS' COMPENSATION INSURANCE, CONSULTANT MUST COMPLETE THE FOLLOWING INDEPENDENT CONSULTANT CERTIFICATION STATEMENT:

As an independent Consultant, I certify that I meet the following standards:

- 1. The individual or business entity providing labor or services is registered under ORS Chapter 701, if the individual or business entity provides labor or services for which such registration is required;
2. Federal and state income tax returns in the name of the business or a business Schedule C or form Schedule F as part of the personal income tax return were filed for the previous year if the individual or business entity performed labor or services as an independent Consultant in the previous year; and
3. The individual or business entity represents to the public that the labor or services are to be provided by an independently established business. Except when an individual or business entity files a Schedule F as part of the personal income tax returns and the individual or business entity performs farm labor or services that are reportable on Schedule C, an individual or business entity is considered to be engaged in an independently established business when four or more of the following circumstances exist. Consultant: check four or more of the following:
A. The labor or services are primarily carried out at a location that is separate from the residence of an individual who performs the labor or services, or are primarily carried out in a specific portion of the residence, which portion is set aside as the location of the business;
B. Commercial advertising or business cards as is customary in operating similar businesses are purchased for the business, or the individual or business entity has a trade association membership;
C. Telephone listing and service are used for the business that is separate from the personal residence listing and service used by an individual who performs the labor or services;
D. Labor or services are performed only pursuant to written Contracts;
E. Labor or services are performed for two or more different persons within a period of one year; or
F. The individual or business entity assumes financial responsibility for defective workmanship or for service not provided as evidenced by the ownership of performance bonds, warranties, errors and omission insurance or liability insurance relating to the labor or services to be provided.

Consultant Signature

Date

FOR CITY USE ONLY

PROJECT MANAGER-COMplete ONLY IF CONSULTANT DOES NOT HAVE WORKER'S COMPENSATION INSURANCE

ORS 670.600 Independent Consultant standards. As used in various provisions of ORS Chapters 316, 656, 657, and 701, an individual or business entity that performs labor or services for remuneration shall be considered to perform the labor or services as an "independent consultant" if the standards of this section are met. The Contracted work meets the following standards:

- 1. The individual or business entity providing the labor or services is free from direction and control over the means and manner of providing the labor or services, subject only to the right of the person for whom the labor or services are provided to specify the desired results;
2. The individual or business entity providing labor or services is responsible for obtaining all assumed business registrations or professional occupation licenses required by state law or local government ordinances for the individual or business entity to conduct the business;
3. The individual or business entity providing labor or services furnishes the tools or equipment necessary for performance of the Contracted labor or services;
4. The individual or business entity providing labor or services has the authority to hire and fire employees to perform the labor or services;
5. Payment for the labor or services is made upon completion of the performance of specific portions of the project or is made on the basis of an annual or periodic retainer.

City Project Manager Signature

Date

CONTRACT NUMBER: 30005876

CONTRACT TITLE: N. Rivergate Overcrossing Project Design & Engineering Services

CITY OF PORTLAND SIGNATURES

By: Don Inty
Elected Official

Date: 6/30/17

APPROVED AS TO FORM

Approved as to Form:
By: [Signature]
Office of City Attorney

Date: 6/28/17

CITY ATTORNEY


CONSULTANT SIGNATURE:

This Contract 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 Agreement.

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

I, the undersigned, agree to perform work outlined in this Contract in accordance to the STANDARD CONTRACT PROVISIONS, the terms and conditions, made part of this Contract by reference, and the STATEMENT OF THE WORK made part of this Contract by reference; hereby certify under penalty of perjury that I/my business am not/is not in violation of any Oregon tax laws; hereby certify that my business is certified as an Equal Employment Opportunity Affirmative Action Employer and is in compliance with the Equal Benefits Program as prescribed by Chapters 5.33.076 and 5.33.077 of Code of the City of Portland; and hereby certify I am an independent consultant as defined in ORS 670.600.

HDR Engineering, Inc.

BY:  Date: 6/26/2017

Name: MICHAEL H. BERTRAM

Title: VICE PRESIDENT

EXHIBIT A

SCOPE OF WORK FOR N. RIVERGATE BLVD. OVERCROSSING FINAL DESIGN (PS&E)

May 10, 2017

PROJECT DESCRIPTION

The Portland Bureau of Transportation (PBOT, "City") has requested HDR Engineering, Inc. ("Consultant") to advance the "Final Type, Size, and Location (TS&L) Report" for the North Rivergate Boulevard Overcrossing dated December 22, 2015 through to Final Design Plans, Specifications, and Estimate (PS&E).

The proposed project is centered at the intersection of the UPRR tracks on North Rivergate Boulevard. Project work extends approximately 1,500 feet west, 1,500 feet east, 300 feet north, and 40 feet south. The proposed temporary detour route is approximately 5,250 feet long on N Time Oil Road, extending from its intersection with N Rivergate Blvd to its intersection with N Lombard St/N Burgard Rd.

Major elements of the project include:

- New elevated roadway approaches and bridge over existing and proposed UPRR tracks.
- Pedestrian, bike, and other safety improvements on the elevated roadway and bridge, compliant with ADA and UPRR standards.
- A frontage road to the north and east of the new elevated roadway, providing business access and connecting back to N Lombard St.
- Comply with federal, state, and local requirements for permitting and stormwater treatment.
- Relocate conflicting utilities affected by the project.
- Traffic detour around the project site using N Time Oil Road.
- Improve the right turning radius for SB Lombard traffic onto Rivergate.

TASK 1 - PROJECT MANAGEMENT & COORDINATION

Consultant shall manage, coordinate and provide Project Management oversight for the tasks included in this Statement of Work ("SOW"). Consultant shall also assist and coordinate with City on tasks assigned to and performed by others.

Assumptions:

- July 1, 2017 – Anticipated NTP
- July 1, 2018 – Final PS&E

TASK 1.1 – PROJECT MANAGEMENT AND QUALITY

Consultant shall schedule and coordinate work tasks within this SOW and maintain coordination with City. Consultant's Project Manager ("PM") shall be the primary point of contact for Consultant and shall communicate with City's Project Manager ("City PM") regarding the status of work being performed and to discuss issues or concerns that may impact the Project.

Consultant shall prepare a Project Management Guide including Consultant and City staff contacts, communications plan, list of deliverables and target delivery dates, cost control plan, health & safety plan, and project administration procedures. Consultant shall monitor the Project budget and expenditures. Consultant shall maintain a Project file to include engineering computations, assumptions, meeting agendas and notes, business drawings, correspondence and memoranda.

Consultant shall prepare and maintain a project schedule in Microsoft Project using the critical path method ("CPM"). The schedule shall include: major tasks, project development team meetings, deliverables, and milestones required to complete the work. Updates to the schedule shall be made during the course of the Project if milestone dates are modified.

Consultant shall develop a Quality Control Plan ("QCP") for the work as detailed in this SOW for delivery to City. A quality review shall be performed by Consultant for each deliverable.

- Consultant's assigned Quality Control ("QC") reviewers shall review each deliverable using the QCP for presentation to City. Consultant shall issue draft QCP to City for review and comment.
- Consultant shall log review comments received from City.
- Consultant shall log responses to comments and shall note how and if the comment was incorporated into the final deliverable.

Changes indicated by review comments shall be made to deliverables prior to being submitted to City.

Consultant shall prepare Monthly Progress Reports and invoices according in approved formats. Each report shall include a summary of previous month's activities, identify percentage completed and percentage spent of each Task/Deliverable, and reconcile the budget with the actual amount billed to date.

Consultant shall develop and maintain project files to include survey and engineering computations, assumptions, meeting agendas and summary notes, working drawings, quality control and review documentation, correspondence, and memorandums.

Consultant shall submit a Monthly Subcontractor Payment and Utilization Report by the 15th of each month.

Consultant shall provide administrative support for assigning and scheduling work, monitoring progress and managing change.

Deliverables:

- Draft Project Management Guide and Draft QCP due within fifteen (15) business days following Notice to Proceed (“NTP”) of this Contract.
- Final Project Management Guide and QCP within five (5) days after City comments.
- Completed version of Quality Control Checklist (“QCC”) and Comment Log (electronic copy) with future deliverables.
- Draft and Final Design Schedule (MS Project and PDF format) with updates as necessary throughout the project.
- Monthly Progress Reports and Invoices (PDF format).
- Monthly Subcontractor Payment and Utilization Report
- Project files containing required documents mentioned above and delivered within five (5) business days of request by City.

TASK 1.2 – PROJECT MEETINGS

Consultant shall schedule and conduct meetings identified below as well as prepare draft and final meeting agendas and attend meetings. Consultant shall prepare draft meeting notes for each meeting, which shall include draft action items and records decisions from the meetings.

Consultant shall prepare and maintain a Project Action Item/Risks/Decision Log to track action items and decisions discussed at Project meetings. Consultant shall provide the draft summary notes to City for review and distribution.

Task 1.2.1 Kick-Off Meeting

Consultant shall attend one (1) Project kick-off meetings within fifteen (15) business days of NTP. Project kick-off meeting will be held at City’s Portland Office. Up to six (6) Consultant staff shall attend the meeting, which is estimated to be two (2) hours in length.

Deliverables:

- Meeting agenda to APM five (5) business days prior to date of meeting;
- Draft summary notes of meeting (including Project Action Item/Risks/Decision Log) to be delivered to APM within five (5) business days following the meeting (one electronic copy);

- Final summary notes within five (5) business days of receipt of City comments on draft summary notes (one electronic copy).

Task 1.2.2 PBOT Technical Review Meetings

Consultant shall coordinate up to 8 meetings held at City's office with PBOT and other City Bureaus. Four of the meeting will be to review submittals (DCR, 30% PS&E, 60% PS&E, 95% PS&E) with PBOT and other City Bureaus as needed. Consultant shall update the Project Action Item/Risks/Decision Log to track risks and decisions discussed throughout the Project and provide a copy at the PDT meetings attached to the Agenda. Up to four (4) Consultant staff shall attend each meeting, which are estimated to be two (2) hours in length.

Deliverables:

- Draft meeting Agendas and current Project Action Item/Risks/Decision Log to City PM five (5) business days prior to date of meetings;
- Final meeting Agendas to City PM within two (2) business day following receipt of City comments;
- Draft summary notes of meetings (including Project Action Item/Risks/Decision Log) to be delivered to City PM within five (5) business days following the meetings (one electronic copy);
- Final summary notes to City PM within five (5) business days of receipt of City comments on draft summary notes (one electronic copy).

Task 1.2.3 Project Sub Team Meetings

Consultant shall conduct up to 30 sub team meetings with its staff, sub-consultant staff and City to coordinate work, and meet Project goals and schedules. Consultant shall update the Project Action Item/Risks/Decision Log to track risks and decisions discussed throughout the Project and provide a copy at the PDT meetings attached to the Agenda. Consultant's staff at each Project sub team meeting shall include Consultant's Project Manager, Key Staff, or sub-consultants supporting the development of the Project. Attendance of additional staff is subject to City approval. Project coordination meetings will be held at Consultant's Portland Office which is estimated to be up to two (2) hours in length.

Deliverables:

- Draft meeting Agendas and current Project Action Item/Risks/Decision Log to City PM three (3) business days prior to dates of meetings;
- Final meeting Agendas to City PM within one (1) business day following receipt of APM comments;
- Draft summary notes of meetings (including Project Action Item/Risks/Decision Log) to be delivered to City PM within five (5) business days following the meetings - (one electronic copy);

- Final summary notes to City PM within five (5) business days of receipt of City comments on draft summary notes (one electronic copy).

Task 1.2.4 Project Site Meetings

Consultant shall conduct up to six (6) site visits to identify existing conditions and confirm constructability analysis. Consultant shall include date and provide documentation and outcomes of the meeting.

Deliverables:

- Draft summary notes of meetings (including Project Action Item/Risks/Decision Log) to be delivered to City within five (5) business days following the meetings (one electronic copy);
- Final summary notes to be delivered to City within five (5) business days of receipt of City comments on draft summary notes (one electronic copy).

Task 1.2.5 Bureau Coordination Meetings

Consultant shall attend up to eight (8) Bureau coordination meetings (approximately 4 meetings with BES and 4 meetings with PWB) to discuss and address the Bureaus' design needs. Each meeting is estimated to last up to 2 hours not including travel time. Up to four (4) Consultant staff shall attend each meeting.

Deliverables:

- Meeting agendas and summary notes
- Draft summary notes of meetings (including Project Action Item/Risks/Decision Log) to be delivered to City within five (5) business days following the meetings (one electronic copy);
- Final summary notes to be delivered to City within five (5) business days of receipt of City comments on draft summary notes (one electronic copy).

TASK 2 – SURVEY AND RIGHT-OF-WAY SERVICES

The purpose of this task is to provide engineering services for the development of Project survey and mapping data and right-of-way needs.

Assumptions:

- City is performing all survey and right-of-way services with Consultant support as described in this task.
- City will perform the survey work for this project to collect missing, uncertain, and updated information on topography, features, structures, utilities, railroad tracks, and property and easement data. Included in the survey will be ties to a relative Donation Land Claim (DLC) corner, section corner, quarter corner, sixteenth corner, or a lot corner of a recorded subdivision.

- City will provide basemap file(s) in InRoads/Microstation format.
- City will provide the necessary title reports and supporting documents for the affected properties.
- City will provide the file numbers for previous City acquisitions relative to the properties, as well as information regarding existing highway access rights for the properties.

TASK 2.1 – RIGHT OF WAY ENGINEERING (MAPPING & DESCRIPTIONS)

The purpose of this subtask is to coordinate the right of way engineering products used in the acquisition of property. Consultant shall provide information on project R/W needs to City.

Deliverables:

- A list and one (1) graphic of known R/W survey needs to City.
- Comments on City survey results regarding the R/W.

TASK 2.2 – NEW RIGHT OF WAY DESIGN/LAYOUT FOR PROJECT

Consultant shall:

- Design/layout the new R/W and easements required for the project using the data in the "Design" model created for the Project.
- Include the design and existing alignments that the Project R/W purchases. It will also show existing features that will require consideration or compensation because of City's acquisition.
- Identify easements as either permanent or a temporary type of easement.

Deliverables:

- R/W base map in DGN and .pdf file formats for use in PS&E deliverables.

TASK 2.3 – RIGHT OF WAY LEGAL DESCRIPTIONS

Consultant shall use the active R/W acquisition map to develop the legal Descriptions and accompanying Exhibit Maps for up to six (6) parcel(s) and shall:

- Prepare strip type descriptions based upon centerline stationing.
- Prepare Exhibit Maps to accompany each Description and be recorded therewith.
- State the section, township, and range of the property in the description.
- Cite the County recording information for the vesting documents in the new description.
- State the exact location of the centerline used in the property description, relative to a Donation Land Claim (DLC) corner, section corner, quarter corner, sixteenth corner, or a lot corner of a recorded subdivision.

- State the basis of bearings and the area of each parcel in each legal description for temporary construction easements.
- Include a specified duration of time the easement will be needed.
- In each property description, include an addendum page noting the existing highway access rights for the property, the access rights to be acquired with the conveyance, the area of taking that is encumbered by an existing easement, the area of a parcel that is included in another parcel, the uniform width of a taking, the uniform width of the existing R/W, an Engineer's Station for each parcel, the County tax lot number(s) of the property, the remainder area, the area of a remainder that is encumbered by an existing easement, and the file numbers of previous City acquisitions. The addendum will also include the location of the property by section, township, and range.
- If more than one (1) parcel is to be acquired from a particular property owner(s), then each parcel will be numbered within the R/W file.
- Be responsible to obtain from the project access sub-team (City or Consultant) the access right to be acquired with each conveyance for the project.
- Coordinate with City's Right of Way (R/W) Section.
- Submit an electronic and hard copy of the vesting documents for each property owner with each property description, which will be kept on file and then submitted with the final project descriptions to City's R/W Headquarters Section.
- Provide a copy of the vesting deed documents for each property owner with each property description, unless previously submitted. City PM will notify Consultant if the property description(s) and R/W acquisition map(s) are approved.
- Use the following procedure when a R/W file needs revising:
 - Prepare a Right-of-Way Services Request with supporting figures.
<ftp://ftp02.portlandoregon.gov/PBOT/CDS/DESIGN%20DOCUMENTS/RW-Services-Required-PBOT.doc>
 - City will then need to review and approve the request.
 - Submit a revised electronic file for each property description along with a revised R/W acquisition map and exhibit/sketch map(s) to City PM for review and approval. After reviewing the description file(s) and map City will send Consultant an email notice of revised description(s) and map(s) being accepted or rejected.
 - City will submit the final revised files to R/W headquarters.

Deliverables:

- Vesting Documents for each property owner(s) submitted in single and independent electronic files in MS Word (.doc) format.
- Six (6) Legal Descriptions with accompanying Exhibit Maps for each individual property description.

TASK 2.4 – RIGHT OF WAY SKETCH MAPS

Consultant shall prepare R/W sketch maps(s) to support six (6) property acquisitions.

Deliverables:

- R/W sketch map for each parcel, with topographic model referenced into it.

TASK 3 – UTILITY COORDINATION

The purpose of this task is to provide engineering services relating to coordination with and relocation of affected utilities within the Project limits.

TASK 3.1 – UTILITY COORDINATION

Assumptions:

- City will provide existing agreements with the utility companies, describing easements and access rights.
- City will furnish utility system mapping provided by utility owners for Consultant's use in utility coordination.

City represents the survey base mapping of utilities to be complete and correct. Consultant agrees to notify City of any utility-owner identified mapping errors or omissions brought to Consultant's attention. City accepts liability for utility-related survey omissions or mapping inaccuracies.

- PBOT's Utility Notification System will be used via PBOT Engineering's contact, Ryan Webb. The Consultant shall provide supporting documentation but will not prepare the notification letters.

Task 3.1.1 – Utility Coordination

This task includes contact, coordination, and official notification with up to six (6) utility facilities within the Project limits. If a utility is nonresponsive or uncooperative, Consultant shall notify the City, and City will communicate with the utility to affect a solution.

Consultant shall:

- Utilizing utility mapping provided by City of Portland surveyors coordinate with utility owners in order to determine conflicts with the Project work and potential resolutions, including utility relocation.

- Maintain a detailed Utility Communication Log of each contact made stating utility name, contact name, items discussed, resulting action items, and scheduling needs.
- Support the design submittals with a Utility Conflict Matrix documenting potential conflicts, updating at each submittal for potential conflicts and resolutions to the conflicts.
- Attend project sub team meetings when requested and coordinate with the design team on the outcome of the meeting and impacts to utility coordination.

Deliverables:

- Utility Communication Log (MS Excel format).
- Utility conflict list at 30%, 60%, 95%, and Final (PDF format)

Contingency Task 3.1.2 – Utility Conflict Report

If requested, Consultant shall prepare a Draft and Final Utility Conflict Report for utilities located within the Project limits. The Utility Conflict Report shall include the following:

- Description of utilities located within the Project limits
- Utility facility's structure dimension
- Size carrying capacity
- Probable buried depth of cover or aerial lowest height of wire
- General description of utility facility structure material
- Reliance upon other utilities in the vicinity (joint use facility)
- Description of the means used to verify facility location and limits of conflict (test hole data a.k.a. "pothole" verification)
- Proposed project construction requirements
- Potential utility conflicts
- Probable conflict resolution (relocation or adjustment concept)

Deliverables:

- Draft and Final Utility Conflict Report

TASK 3.2– UTILITY RELOCATION FACILITATION

Task 3.2.1 – Utility Relocation Facilitation

Assumptions:

- This task does not include the storm system and water utilities.

- Up to 1 utility is eligible for reimbursement.

This task includes coordination to assist utility relocation efforts and coordinating relocation design impacts into the PS&E.

Consultant shall:

- Coordinate the development of each affected utility's relocation plan, to be completed before the 3rd Utility Notice.
- Upon request by utility contact(s), organize, conduct, prepare for, and attend utility coordination meetings with utilities within the Project limits up to six (6) meetings.
- Examine received utility relocation plans for completeness and accuracy. If relocation plans do not resolve utility conflict, provide comments to Utility for correction and re-submittal;
- Negotiate with each utility to produce a utility construction work schedule that conforms to the project construction schedule.
- Coordinate relocation into the project documents including plans, schedule, and special provisions.
- Provide Utility Reimbursement Review and Package for utility relocations following City's reimbursement process, which includes review of relocation documentation and supporting information for completeness, accuracy, relevance, and reasonableness. A written justification for rejection of incomplete, inaccurate, non-relevant, or unreasonable information shall be prepared and delivered by Consultant to the utility. For each utility that is eligible for reimbursement (see Assumptions), Consultant shall provide a Reimbursement Package, which will include at a minimum:
 - Land deeds, easements, recorded surveys, X-permits, affidavits of prescription or estoppel rights, and service agreements
 - Property Rights Disposition declaration form
 - Reimbursement Information Form
 - Accepted Utility Relocation detail estimates
 - Utility's consultant agreements
 - Utility's construction PS&E contract bid documents
 - Evidence of the utility's construction bid advertisement and tabulation of responsive bids
 - Written request to include utility work into the Construction contract, and
 - Approved Utility relocation plan that clearly shows and defines reimbursable and non-reimbursable work Reimbursement Certification form

- Check for mathematical accuracy and verify correctness of up to 12 utility bills for reimbursable work. Consultant shall reject utility invoices that are lacking sufficient supporting documentation and provide written correspondence (email acceptable) to the utility, which outlines the insufficient or incorrect billing data. Consultant shall request an amended invoice to reflect the correction of billing errors.

Deliverables:

- Meeting agendas and meeting summary notes (MS Word and PDF format).
- Final utility relocation plan(s) (PDF format).
- Relocation information to support PS&E development and delivery.
- Documentation of exceptions.
- Utility Reimbursement Package or written justification documentation.
- Accepted Utility Billing Package and Payment Recommendation inter-office memo

Contingency Task 3.2.2 – Attaching to Structures

Assumptions:

- There will be up to 2 utilities attached to the bridge and going through the approaches, not including street lighting.
- This task includes initial client coordination on placement of utilities.

Consultant shall:

- Provide guidance (e-mail acceptable) to the utilities regarding bridge accommodation policies and request protocol for bridge accommodation (ref. ODOT Bridge Design/Drafting Manual sec. 3.14.10.3 and 4, https://www.oregon.gov/ODOT/HWY/BRIDGE/Pages/standards_manuals.aspx). Obtain acceptance or rejection of the utilities request for bridge accommodation from City.
- Design structures to accommodate utilities such as providing blockouts and review of proposed support systems.
- Develop PS&E to include this work.

Contingency Task 3.2.3 – Public Interest Finding

If an exception is required, prepare, for City Project Manager's signature, a Public Interest Finding (use template at <https://www.portlandoregon.gov/transportation/article/207301#UNF>) including facts regarding the cause for the exception, an action plan, and timetable in securing a utility agreement.

Deliverables:

- Public Interest Finding

TASK 3.3 – UTILITY CERTIFICATION

Consultant shall complete and sign the Utility Certification verifying that all utility work has been completed or that all necessary arrangements have been made for it to be undertaken and completed as required for proper coordination with the physical construction schedule.

Deliverables:

- 1 PDF copy of the Utility Certification sent to State Utility Liaison for co-signature due 10 business days prior to Final PS&E.

TASK 3.4 – RAILROAD COORDINATION

This task includes coordination with the railroad to obtain project review and approvals while meeting schedule requirements. Refer to the UPRR/BNSF Guidelines for Railroad Grade Separation Projects, available at:

https://www.up.com/cs/groups/public/documents/document/pdf_rr_grade_sep_projects.pdf.

Assumptions:

- City will have secured the participation of UPRR through funding their Agreement for Preliminary Engineering Services prior to NTP. UPRR will provide timely approval of the Railroad agreement. Otherwise, additional contract time, scope of work, and fees not covered in this scope of work may be required.
- Shoofly and track design will not be required.
- PBOT's template will be used for the railroad special provisions.
- City of Portland will cover UPRR costs for engineering and attending meetings directly, as well as permit fees.

Consultant shall:

- Review Railroad Agreements. Consultant shall review the railroad agreements between City of Portland and the UPRR Railway for this Project. This task includes facilitating three meetings between the City of Portland and UPRR Railway in addition to the meeting noted below at the concept stage. Consultant shall review the draft agreements prepared by UPRR, submit the draft agreements to the City of Portland, and make revisions based on input from the City of Portland. The agreements will include Preliminary Engineering Agreement if not already signed by NTP, Right-of-Entry, and Construction and Maintenance.
- Develop the ODOT Rail Crossing Order. Consultant shall coordinate with UPRR, City of Portland, and ODOT Rail Section to produce an exhibit based on the proposed design. Once the proposed design exhibit is approved, Consultant shall apply for a Rail Crossing Order to modify the existing at-grade railroad crossing. This scope of services does not include preparation for, testifying at, or supporting a crossing hearing or other legal matter

related to the crossing, should the Rail Crossing Order be disputed by other individuals or organizations.

- Prepare UPRR Design Phase A Package (Concept Railroad Submittal). Consultant shall prepare the Concept Plans and Site Pictures in accordance with Table 3-1 of the Guidelines for Railroad Grade Separation Projects. As part of this task, Consultant shall conduct a one-day meeting and site visit with UPRR and City of Portland representatives. The concept will be submitted to UPRR for review. This meeting will also include displays and a discussion about the proposed design exceptions that the Consultant team is proposing as part of the design package. This task includes Consultant communication with UPRR to encourage them to provide a meaningful and timely review and acceptance of the Design Phase A Package.
- Prepare UPRR Design Phase B Package (30% Railroad Submittal). The following items will be developed for the 30% submittal:
 - Bridge Plans (30% Railroad Submittal Package) – The 30% submittal will include responses to UPRR review comments on the concept submittal. The 30% Bridge Plans will show Plan View, Elevation View, and Typical Sections and the applicant's response to UPRR's comments on the Concept Railroad Submittal. Construction Phasing Plans and anticipated construction methods will also be included. Plans will depict top of rail profile for 1000 feet from the bridge each direction. The plans will include General Bridge Notes, a summary of bridge design criteria, and Crossing Exhibit for crossings that will be closed. This submittal package will also include related Specifications and railroad coordination requirements in draft form.
 - Hydraulics Summary (30% Railroad Submittal Package) – The 30% Railroad Submittal will include a Hydraulics Summary Report for culverts and drainage as it relates to the railroad and a statement that the project will not direct additional drainage along the tracks.
 - Railroad Profile Grade Diagrams (30% Railroad Submittal Package) – Railroad Profile Grade Track Diagrams will be prepared for submittal with the 30% Design Package.
- Prepare UPRR Design Phase C Package (100% Railroad Submittal). The 100% submittal will be prepared and submitted to UPRR for review and approval. The following items will be prepared for the 100% submittal;
 - Bridge Plans (100% Railroad Submittal Package) - The 100% submittal will include responses to UPRR review comments on the 30% submittal. The items for the 30% design will be revised to address the review comments. The railroad special provisions and railroad coordination requirements will be finalized. The 100% Bridge Plans will show finalized Plan View, Elevation View, and Typical Sections. Finalized Construction Phasing Plans and anticipated construction methods along with the other sheets from the 30% submittal will be included. The 100% submittal package will also include 100% Specifications.

- Railroad Profile Grade Diagrams (100% Railroad Submittal Package) – Consultant shall finalize the Railroad Profile Grade Track Diagrams as part of the 100% Design Package. The package will also include responses to UPRR review comments on the 30% submittal.
- Final Hydraulics Summary Report (100% Railroad Submittal Package) – The 100% Railroad Submittal will include a Final Hydraulics Summary Report for culverts and drainage as it relates to the railroad. It will also include responses to UPRR review comments on the 30% submittal.

Deliverables:

- Reviewed Railroad Agreement Drafts
- Reviewed Draft Rights-of-Entry for UPRR facilities
- ODOT Crossing Order exhibit and application
- UPRR Design Phase A Package
- UPRR Design Phase B Package
- UPRR Design Phase C Package

TASK 4 – PUBLIC INVOLVEMENT & INFORMATION

The purpose of this task is to provide graphic materials to support City’s public outreach and coordination efforts.

Assumptions:

- City will provide and facilitate all other aspects of public involvement meetings and notices.

TASK 4.1 – PROJECT EXHIBITS

Consultant shall attend up to two (2) meetings up to three (3) hours in length including travel time. Consultant shall coordinate with the City to provide project exhibits for each meetings, up to four (4) -11x17 exhibit figures (two exhibits are assumed for each meeting) for discussion purposes as requested by City;

Consultant shall provide up to 1 informational handout describing the proposed project, 1 large poster showing the proposed project with annotations.

Consultant shall develop a conceptual Sketchup model of the immediate project context, sufficient in size to include neighboring buildings, roadways, railroad tracks, and key landscape features. Key model elements shall approximate real-life materials, while background model elements may remain more diagrammatic. Consultant shall establish view points, view angles and frames for up to 4 distinct views. Consultant shall submit rough draft versions (wireframe model) of the views in jpg

format via e-mail to solicit City review. City shall return consolidated comments in five (5) days to Consultant. Upon confirmation of view angles and frames, Consultant shall refine model elements, including project structures, neighboring buildings and key landscape elements. Consultant shall submit the refined renderings for final City review. City shall return consolidated comments in five (5) days to Consultant. Upon receipt of final comments, consultant shall complete final model edits in Sketchup and finalize post-production of renderings in Photoshop for final submittal.

Deliverables:

- Draft and final large poster mounted on poster board.
- Four Draft and final renderings
- Four -11x17 exhibit figures and one project narrative (PDF format and MS Word).

TASK 5 – ENVIRONMENTAL SERVICES

This project will be constructed using federal funds and is subject to review under the requirements of the National Environmental Policy Act (NEPA).

Assumptions:

- Because the project does not add or modify signalized intersection(s), no detailed air quality analysis is required.
- Because there are no known sensitive noise receivers within 1,000 feet of the project area, no detailed noise impact analysis is required.
- The project design will be based on the 100 year flood hazard levels for the project site at the time of NTP.
- The project site is outside the 100 year flood hazard area and therefore does not require a no-rise certification.
- City will be responsible for obtaining the necessary property owner signatures for the various applications as well as signatures required to complete the Land Use Compatibility Statement(s) (LUCS).
- City will be responsible for payment of fees required by agencies for various reports, permits, reviews, and approvals.
- City will conduct one review of project deliverables and will provide one set of consolidated comments to HDR.
- A preliminary title report, environmental lien or activity and use limitation search will be completed by others and provided to HDR.

- City will provide right of entry to the Subject Properties and coordinate site access with the property owner.

TASK 5.1 – NATIONAL ENVIRONMENTAL POLICY ACT DOCUMENTATION

Consultant shall assemble environmental and related documentation into a preliminary Categorical Exclusion (CE) Closeout Document consistent with FHWA Oregon Division's guidance dated March 17, 2009. CE Closeout Document shall include Project information, FHWA nexus, a summary table presenting required compliance/status information, and relevant attachments. The intent of this effort is that the preliminary CE Closeout Document may be quickly updated and finalized for approval during future advance plans project phase.

Consultant shall attend one City meeting (up to two Consultant staff, and City staff to include City, Port, ODOT, and FHWA) to discuss and confirm documentation format and approach.

Assumptions:

- National Environmental Policy Act (NEPA) documentation will be a Documented Categorical Exclusion (DCE) through the FHWA. City will prepare and provide the approved Part 3 Prospectus.
- Attachments to preliminary Categorical Exclusion (CE) Closeout Document will be documents prepared under other tasks of this Project (i.e., no new documents will be created as part of Task 5 to be attachments of the CE Closeout Document).
- Mapping and map graphics for the CE Closeout Document will be adapted from maps prepared for other tasks (i.e., no original mapping or graphics will be created for the CE Closeout Document).

Deliverables:

- Preliminary CE Closeout Document.

TASK 5.2 – ESA NO EFFECTS MEMORANDUM

Consultant shall prepare a draft and final No Effects (NE) memorandum ("NE memo") for USFWS species. The NE memo shall be based on the current FHWA No Effect template. The No Effect memorandum shall include:

- A brief description of the proposed action, particularly components related to the determination of No Effect.
- List of evaluation methods, including field survey dates, background information reviewed, and summary of meetings or other communications relevant to ESA issues.
- Brief summary of habitat types and conditions in the Project area relevant to ESA species.
- List of the ESA species, including distinct population segments (DPS) or evolutionarily significant units (ESUs) and critical habitat present within the Project area.

- Evaluation of potential impacts of the Project to ESA species or critical habitat and Project design or implementation measures that avoid the impacts.
- Determination of effect(s).

Consultant shall coordinate with the project team during project development to design to avoid impacts to listed US Fish and Wildlife Service (USFWS) species and prepare construction special provisions that would be necessary to maintain the NE status determination for USFWS species using City's boiler plate special provisions.

Assumptions:

- City will provide information on prior field surveys, literature searches, and/or meeting summaries regarding threatened or endangered species.
- No bald or golden eagles roost or nest within 0.5 mile of the project and will not be affected.
- Endangered Species Act (ESA) Section 7 consultation will result in a No Effect Determination for USFWS listed species and informal consultation for National Marine Fisheries Service (NMFS) listed species.
- ODOT shall supply the most current version of the No Effect Template.

Deliverables:

- Draft and final NE memo (MS Word and PDF format).

TASK 5.3 – ESA FAHP DOCUMENTATION

Consultant shall coordinate and document compliance with the federal ESA for NMFS listed species using the existing FAHP form and complete programmatic ESA documentation with a qualified biologist;

Consultant shall facilitate early coordination meetings and prepare draft and final documentation through Project Notification, in accordance with the FAHP User's Guide, available on the FAHP website; (<http://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/Pages/fahp.aspx>).

Consultant shall:

- Review information from ORBIC SSP lists for the County relevant to the Project. Consultant shall contact City for an update if the ORBIC data is more than two-years old. If background information is not available, obtain and review ORBIC records (<http://orbic.pdx.edu/data-request.html>) for site-specific information on SSP potentially occurring in the County of the Project area;
- Contact Biologist: ODOT biologist, Oregon Department of Fish and Wildlife (ODFW), Oregon Department of Agriculture (ODA), NMFS, and USFWS for site-specific information regarding ESA species;

- Facilitate and attend up to one (1) on-site Project meetings with City and NMFS early during Project development to discuss impacts, applicable standards, possible modifications, enhancements, and mitigation. For the FAHP, this is part of the Early Coordination process described in Section 2.3 of the FAHP User's Guide. Prepare summary meeting notes (up to two (2) pages) for City that summarize main topics discussed (relevant to the FAHP), date(s), attendees, and recommendations from the Services;
- Prepare and submit a Project Initiation Memo (utilizing the latest template, available on the FAHP website) shortly after Project kick-off to alert the FAHP Project Stakeholders about the start of a new FAHP project. Coordinate with City to complete the FAHP Project Stakeholder list portion of the Project Initiation memo;
- Prepare and submit the relevant Project Notification Report and associated attachments, utilizing latest templates, available on the websites listed above;
- Perform quality control review, and for the FAHP only, check the latest Programmatic impact summary (available on FAHP website), obtain electronic signature from the Project Biologist, and, for local City projects, obtain electronic signature from a Project Manager who will take responsibility for construction of the Project in compliance with the FAHP; and
- Submit the complete Project Notification Report to City PM to coordinate final signatures.

Assumptions:

- No impacts to wetlands or waters of the US/State will occur.
- ESA Section 7 consultation for NMFS listed species will be documented using the Federal Highway Administration (FHWA) Federal Aid Highway Programmatic (FAHP) Form and preparation of a Biological Assessment will not be required.
- City will survey the wetland delineation into the project basemap.
- City shall be responsible for submittal of the completed FAHP to ODOT for submittal to the FHWA and NMFS.

Deliverables:

- FAHP Project Initiation Memo (MS Word and PDF format).
- Meeting summary notes for on-site FAHP coordination meeting (MS Word and PDF format).
- Draft and Final Project Notification Report (MS Word and PDF format).

TASK 5.4 – CULTURAL RESOURCES

Consultant shall prepare cultural resources information summary to support consultation under Section 106 of the National Historic Preservation Act (NHPA). Consultant shall:

- Provide an update to the 2015 technical report to integrate new data from SHPO records specific to the project area, as well as revised information on ground-disturbing activity anticipated for the project
- Provide the services of an experienced archaeologist to monitor up to 5 geotechnical probes that are known or likely to extend into native soils and would be located where there is a higher potential for archaeological resources (e.g., the crossing of Gatton's Slough).
- Provide a technical memorandum on the results of the monitoring.

Assumptions:

- No historic resources are present in the project area or will be affected by project activities.
- No known archaeological resources are present in the project area or will be affected by project activities. If evidence of archaeological resources is encountered in the geotechnical probes, continued excavation of that probe is prohibited under ORS 358.920 and 390.235. Additional steps to address archaeological resources would then be required under both state and federal law and are not included in this scope of work.
- Consultant shall monitor up to 5 geotechnical probes.

Deliverables:

- Draft and final Revised Cultural Resources Report (MS Word and PDF format).
- Draft and final Geotechnical Boring Cultural Resources Monitoring Memorandum (MS Word and PDF format).

TASK 5.5 – WETLAND DELINEATION

Consultant shall prepare a Wetland Delineation Report in accordance with current DSL standards described in OAR 141-090, including wetland delineation data sheets necessary to document existing site conditions;

- Prepare appropriate graphics to accompany the report and include: a site location map, National Wetlands Inventory (NWI) map, Local Wetland Inventory (LWI) map (if available), soil survey map, representative photographs, and wetland delineation boundary mapping (figures);
- Complete the appropriate DSL cover page for submitting the Wetland Delineation Report to DSL and USACE) for review and approval;
- Following City approval of Consultant's Wetland Delineation Report, submit the Wetland Delineation Report on behalf of City to DSL and USACE;
- Meet with DSL and USACE, providing consultative support during regulatory review, and address questions raised, which may require Consultant to modify or revise the Wetland Delineation Report to DSL and USACE satisfaction; and

- Determine boundaries of waters of this state as defined by OAR 635-412-0005 for the purposes of determining whether a fish passage plan is required.
- Provide a hand sketch of flagged wetland for City surveyor's use.

Deliverables:

- Hand sketched wetland boundary flag map
- Draft and Final Wetland Delineation Report (MS Word and PDF format).
- Revised Final Wetland Delineation Report (MS Word and PDF format).

TASK 5.6 – HAZARDOUS MATERIAL SERVICES

This task involves the preparation of a Phase I ESA for the Project (Subject Property), to be conducted on an approximately one quarter of a mile section of North Rivergate Boulevard, Portland, Multnomah County, Oregon.

Consultant shall:

- Perform the Phase 1 ESA in accordance with ASTM Practice 1527-13 and, as such, will conform to EPA's "All-Appropriate Inquiry" (AAI) Standard.
- Provide a description of the project area and current land use in the vicinity of the project area.
- Provide a general description of the topography, soils, geology, and groundwater flow direction in the vicinity of the project area.
- Review for content and accuracy, reasonably ascertainable and reviewable regulatory information published by federal, state, local, tribal, health, and environmental agencies pertaining to the project area and surrounding area. This information will be compiled by Environmental Data Resources, Inc.
- Request files from regulatory agencies for sites determined to have released hazardous constituents to the environment in the project corridor, and review to determine if these releases could impact the project area. Files will be reviewed based on the Environmental Professional's judgment regarding the applicability of the data.
- Review available historical data sources for the project area and vicinity, including aerial photographs, topographic maps, fire insurance maps, City directories, and other readily available development data.
- Conduct a field reconnaissance of the project area—including adjoining properties—with a focus on indications of hazardous substances, petroleum products, polychlorinated biphenyls (PCBs), wells, storage tanks, solid waste disposal pits and sumps, and utilities.

- Interview persons with knowledge of the development history of the project area and the area. Interviews will be conducted with the owner (at a minimum) of the project area and the PacifiCorp property contact.
- Prepare a written report of methods, findings, and conclusions.

Assumptions:

- If regulatory files related to hazardous materials review are identified at the regulatory Agency, they will be requested by mail. No onsite reviews will be completed. Up to \$200 has been assumed for City file review fees. If actual fees are greater than estimated, they will be billed at cost without markup.
- City will provide the name and contact information for the site owners for HDR to interview for the hazardous materials review. Interviews may be performed either onsite during the site reconnaissance, by phone or by email. HDR will make two attempts to contact each party.
- A Phase II Environmental Site Assessment (ESA) is not included.

Deliverables:

- Draft and Final Phase I ESA (MS Word and PDF format)

TASK 5.7 – CITY OF PORTLAND ENVIRONMENT REVIEW AND FLOODPLAIN DEVELOPMENT PERMIT

Consultant shall prepare and submit a City of Portland Environmental Review application package. The submittal package will include:

- Cover letter
- Land Use Review application form
- Project narrative including description of existing and proposed conditions, written findings for each applicable approval criterion (Zoning Code Section 33.430.250 and/or Plan District designation), including: evaluation of alternative locations, design modifications, or methods of development to avoid or reduce significant detrimental impacts to the identified resources and functional values of the site, resource site identified from City of Portland resource inventories, description of resources and functional values present on the property, development impacts, mitigation proposed for unavoidable impacts, monitoring plan for mitigation plantings, and findings for additional development standards or Approval criteria required by applicable Natural Resource Management Plans (NRMP) or Plan Districts .
- Existing and condition site plan (developed as part of a separate task)

- Proposed development site plan, construction management site plan, mitigation/remediation site plan (developed as part of a separate task)
- Environmental Resources Report
- Application fee

Following submittal, Consultant shall respond to City requests for additional information until the application is deemed complete and record the final decision with the County Recorder's Office.

Assumptions:

- The project is within the e-zone buffer and is expected to trigger City environmental review. A permit for impacts to the floodplain and environmental zone is required.

Deliverables:

- Draft and Final Land Use Review Application Package (MS Word and PDF format).

TASK 6 – GEOTECHNICAL & SEISMIC ENGINEERING SERVICES

The purpose of this task is to provide geotechnical and seismic engineering services necessary to provide recommendations to the structural and civil engineer and support the findings from the previous investigations performed for the earlier TS&L.

Assumptions:

- Deep soft, compressible soils are present at the site and a net zero embankment approach will continue to be advanced for final designs.
- Exploration approach and engineering effort assume driven piles are the preferred deep foundation alternative. Additional engineering effort and deeper explorations would be required if drilled shafts are selected as the preferred foundation alternative and are not covered in this scope.
- The combined number of previous and proposed deep explorations will be sufficient and reasonable for retaining wall design, to characterize subsurface conditions for design of each approach retaining walls with lightweight fill as backfill. This is due to the relative uniformity of the near-surface, relatively thick dredged sand fill in the project area. The exploration spacings will exceed the ODOT GDM maximum exploration spacing for retaining walls.
- PBOT survey will collect the exploration locations and provide data for inclusion in the project basemap.

- The seismic portions of the TS&L geotechnical report will need to be updated to meet the revised seismic design criteria outlined in the 2016 BDDM including the change to a deterministic earthquake for the lower hazard level design.
- Property access for the field investigations identified above is readily available.
- City will not waive permit fees for geotechnical and pavement drilling
- A single mobilization will be required for both the mud-rotary drill rig and CPT probe rig and drilling will be done during daylight hours with no limitation on length of work day.
- The deeper borings will be performed using mud-rotary drilling techniques. The pavement borings and infiltration borings will be performed using solid-stem auger drilling techniques.
- No known soil or groundwater contamination is present on or near the site. If encountered, the additional drilling time, testing, and disposal of obviously contaminated drilling spoils would be an additional cost.
- Drill cuttings will be drummed and removed from the site.
- Truck traffic and annual growth rate of traffic will be provided by the City.
- Pavement section design will be performed in accordance with the current ODOT Pavement Design Guide and 1993 AASHTO Guide for Design of Pavement Structures.

TASK 6.1 – PRELIMINARY GEOTECHNICAL DESIGN

Consultant shall provide preliminary design information and recommendations for bridge foundations, approach walls, lightweight fill for approaches, embankment stability, and stormwater needs based on available data from the December 2015 TS&L provided by City.

Deliverables:

- There are no physical deliverables associated with this subtask.

TASK 6.2 – FIELD EXPLORATION WORK PLAN

Consultant shall consider the findings from earlier TS&L explorations in developing the Exploration and Testing Work Plan (ETWP). Prepare an ETWP prior to beginning field work. No field work is to be performed before review and approval of the ETWP by City. The ETWP shall address the proposed drilling (borings and cores), pavement coring, cone penetration test (CPT) probes; site access; exploration and sampling procedures; limits for FWD testing; safety plan; and the traffic control plan. The traffic control plan will address minor road encroachments as well as lane and/or shoulder closures for activities associated with explorations and restoration of pavements, shoulders, and other areas disturbed due to subsurface exploration activities, including erosion control measures; and obtain the necessary permits and approvals including the City of Portland Drilling Permit.

Deliverables:

- Exploration and Testing Work Plan (MS Word and PDF format).

TASK 6.3 – GEOTECHNICAL AND PAVEMENT EXPLORATIONS AND LABORATORY TESTING

Consultant shall conduct field investigation work and perform field explorations in conformance with the approved ETWP. When feasible, Consultant shall coordinate traffic control and other subcontractors, such as drillers, to provide exploration services for both pavement and geotechnical explorations concurrently.

Consultant shall perform subsurface explorations to estimate and characterize the in situ soils for the purposes of addressing foundation support and other geotechnical or geological considerations for the following:

- New bridge foundations
- Retaining walls and lightweight fill at approaches and abutments
- Onsite infiltration of stormwater
- Pavement design;

Consultant shall complete one (1) boring and two cone penetration test (CPT) explorations to support bridge and proposed retaining wall design. The borings shall be completed to about 20 ft into the underlying gravel unit unless practical refusal is encountered at shallower depths. The CPT explorations shall be completed to the underlying gravel unit unless practical refusal is encountered at shallower depths.

Two (2) borings to a depth of 30 to 50 ft shall be completed to support the road extension at the west end to N. Lombard. Two (2) infiltration tests shall be completed at depths of less than 5 ft in the field just north of N. Rivergate at the east end of the project. Infiltration testing will be completed using the encased falling head procedure in accordance with the 2016 City of Portland Stormwater Management Manual. FWD testing and up to two (2) shallow pavement borings shall be completed from each end of project to the beginning of the embankment fill (four total borings) to support the pavement design. Provide an experienced engineer or geologist to observe the field operations for in situ data gathering. Scope assumes six (6) days of field exploration.

Laboratory soil testing will be performed on selected soil samples from the borings. Laboratory testing will primarily consist of general index and engineering property tests including, but not limited to the following:

- Moisture Content
- Unit Weight
- Atterberg Limits
- Grain Size

- Primary Consolidation and Secondary Compression Testing

Deliverables:

- Hand sketched map showing geotechnical investigation locations for survey.
- Deliverables included with Geotechnical and Pavement Reports.

TASK 6.4 – GEOTECHNICAL & PAVEMENT DESIGN AND REPORTS

Consultant shall complete a geotechnical study and provide design parameters and geotechnical construction recommendations for the Project. The engineering evaluation and analyses will be performed in accordance with the ODOT Geotechnical Design Manual (December 2016) and the most current AASHTO LRFD Bridge Design Specifications. Consultant shall provide recommendations for earthwork including site preparation, excavation, cut and fill slopes, structural fill material, fill placement, compaction, and wet weather construction and provide discussion of the existing deep, compressible alluvial soils, liquefaction evaluations, risks and recommended approaches to minimizing impact to surrounding facilities.

Consultant shall provide recommendations for the new bridge foundations including evaluation of pile and drilled shaft foundation options. Consultant shall provide design recommendations for the selected foundation option including: strength limit, extreme limit, and service limit state axial resistance of deep foundations; soil lateral resistance parameters for deep foundations; strength limit, extreme limit, and service limit state nominal bearing resistance and sliding coefficients for shallow foundations; resistance factors for the proposed foundation types; and evaluation of constructability of the bridge foundations. Consultant shall provide LPile or FB-Multipier (program to be confirmed before work begins) parameters for analysis. Consultant shall complete total stress site response for both the M9 deterministic and 1,000 year probabilistic seismic hazard levels. Recommended ground surface spectral accelerations will be provided to support structural design of the bridge and walls. Total stress site response analyses shall be completed with non-linear analyses using either D-MOD or DEEPSOIL. Liquefaction analyses will be provided at both hazard levels.

Consultant shall provide recommendations for abutment retaining walls and embankments including; lightweight fill discussion of risks and design approach; lateral earth pressures, nominal factored bearing resistances and estimated settlement for abutment and wing walls; and appropriate cut and fill slopes, global stability, and estimated settlement for embankments.

Consultant shall provide a discussion of geotechnical related construction considerations.

Consultant shall:

- Prepare a Geotechnical Design Report according to the December 2016 ODOT Geotechnical Design Manual criteria for submittal to City for review, which includes:
 - Summary of the geotechnical design and construction recommendations;

- Identify general specification criteria for the construction contract and provide recommendations for special provisions, if required;
- Summarize the results of the geotechnical analyses;
- Provide geotechnical design recommendations for the bridge foundations and retaining walls;
- Prepare up to a total of six (6) geotechnical data sheets to be incorporated into the Advance and Final plan sheets. Up to five (5) geotechnical data sheet(s) will be prepared for the bridge and wall structures and one will be prepared for the roadway explorations.
- Provide initial recommendations for establishing a preconstruction baseline surveys, vibration monitoring, and settlement monitoring.
- Prepare a Pavement Design Report according to the current ODOT Pavement Design Guide which includes:
 - Document pavement design criteria used, design parameters and pavement sections for an acceptable pavement design to be used in this application along Rivergate from Lombard to west of the Rivergate/Time Oil Intersection. It is assumed that up to two (2) pavement sections will be designed for the bridge approaches. The pavement designs will be designed for a 20 and 30 year design life at appropriate distances from the new bridge. Pavement cores will be obtained at the shallow pavement borings discussed in Task 6.3.

Deliverables:

- Draft and Final Geotechnical Report (MS Word and PDF format).
- Foundation Data sheet(s) and Geotechnical Data sheet (*.dgn and PDF format).
- Draft and Final Pavement Report (MS Word and PDF format).

CONTINGENCY TASK 6.5 – DETOUR ROAD PAVEMENT DESIGN (DETOUR ROAD REPAIR)

Consultant shall complete a pavement evaluation of N Time Oil Road between the western termination at N. Rivergate Blvd and the eastern termination at N. Lombard Street/N Burgard Rd. The pavement will be visually surveyed between the above project limits in accordance with ASTM D-6433, Standard Test Method for Roads and Parking Lots Pavement Condition Index Surveys. Falling weight deflectometer (FWD) testing will be done at approximately 100-ft. spacing in each direction and up to five (5) shallow pavement borings will be completed along the length of the alignment. Consultant shall evaluate the structural capacity of the existing pavement and provide an estimate of the remaining structural life of the roadway. Consultant shall provide recommendations to improve the structural capacity of the pavement for the anticipated additional detour truck traffic.

Deliverables:

- Draft and Final Pavement memo

TASK 6.6 – GEOTECHNICAL PEER REVIEW

Consultant shall provide senior technical peer review of the geotechnical evaluations, analyses, and design recommendations. Peer review will be provided throughout the project (as opposed to the later stages of project and issuance of the final Geotechnical Design Report) in order to provide timely over-the-shoulder review, project consultation, and assistance in the development of integrated work products. Close coordination of the peer review with on-going geotechnical analyses facilitates the efficient transfer of information, timely recommendations for various aspects of geotechnical analysis, and prompt, early-detection of potential oversight.

Consultant shall prepare for and participate in two (2) in person peer review meetings with the design team and City.

Deliverables:

- Two technical memoranda addressing; (i) seismic hazard analysis, and (ii) dynamic soil response, near-surface seismic ground motion characterization, and liquefaction hazards.
- Preparation of an internal Comment Log addressing geotechnical analyses of; seismic and liquefaction hazards, deep foundations and abutments, stability of slopes and retaining walls, static settlement due to consolidation and secondary settlement of foundation soils, construction-related ground deformations, and construction-related vibrations..
- One PowerPoint presentation to discuss design challenges and suggested mitigation approaches
- Response to internal peer review comment log at three check-in points.

TASK 6.7 – GEOTECHNICAL PLAN REVIEW, SPECIFICATION SUPPORT

Consultant shall support the 60%, 95%, and Final PS&E and develop final recommendations and edits for preconstruction baseline surveys, vibration monitoring, and settlement monitoring. Consultant shall comment on geotechnical aspects of the shoring and staging and plan.

Task assumes consultant shall attend two (2) additional team meetings with the design team and City.

CONTINGENCY TASK 6.8 – EFFECTIVE STRESS SITE RESPONSE ANALYSIS

The current scope of work assumes that non-linear total stress site response analyses (TSA) will be completed as part of the base scope of work. If the site amplification or the potential for liquefaction indicates large spectral amplification ratios near the predominant period of the structure, effective stress site response analyses (ESA) will be considered.

The ESA will be completed with a maximum of ten (10) ground motions using either DMOD or DEEPSOIL. The input design parameters will be based on published values and/or local experience for similar soils

Deliverables:

- Updated geotechnical design report incorporating ESA analyses and results.
- Additional supporting documentation will be included in geotechnical report for peer review

TASK 7-DESIGN

Assumptions:

- City will have secured the participation of UPRR through funding their Agreement for Preliminary Engineering Services to enable coordination for design decisions including center span length to establish the new roadway vertical profile.
- No hydraulic analysis is required. The project design will be based on the 100 year flood hazard levels for the project site at the time of NTP.
- The City will provide all necessary survey.
- N Rivergate Blvd will be closed for construction and a detour route using N Time Oil Rd to N Lombard St/N Burgard Rd will be available.
- The new alignment, structure, and associated project work will be contained within existing R/W to the south, with temporary construction easements and new acquisition for the frontage road at the N Lombard St intersection.
- Commercial business access shall be maintained for the properties to the east of the UPRR crossing,
- City will notify TriMet regarding disruption to the regular bus Route 11, and work to maintain current services.
- This project does not include ITS/VMS work.
- The anticipated sheet list is shown in the following table:

Description	Discipline	# sheets	Scale	Included in submittal		
				30%	60%	95/100%
Cover Sheet, Sheet Index & Std Dwgs list, Abbr and Symbols, Sheet Layout	Roadway	4	n/a	X	X	X
Typical Sections	Roadway	2	NTS	X	X	X
Details (street)	Roadway	8	Varies		X	X
Temporary Traffic Control Plan	Traffic	4	Varies	X	X	X

Temporary Traffic Control Details	Traffic	4	Varies		X	X
Erosion Control Plan and Details	Roadway	8	1"=50'			X
Alignment Sheets	Roadway /R/W	4	1"=50'	X	X	X
Elevation Detail Sheets	Roadway	3	1"=100'		X	X
Demolition/Site Preparation Plans	Roadway	4	1"=50'		X	X
Grading Plans	Roadway	4	1"=50'		X	X
Street Plan and Profile	Roadway	11	1"=20'	X	X	X
Stormwater Plans	Stormwater	11	1"=20'	X	X	X
Stormwater Details	Stormwater	2	n/a		X	X
Bridge Plan & Elevation	Structures	3	1"=20'	X	X	X
Bridge Details	Structures	38	Varies		X	X
Retaining Wall Plan & Elevation	Structures	8	Varies	X	X	X
Retaining Wall Details	Structures	9	Varies		X	X
Permanent Signing and Striping Sheets	Traffic	13	Varies		X	X
Illumination Plans	Traffic	6	Varies		X	X
Landscaping Key Plans	Landscaping	1	1"=100'	X	X	X
Landscaping Plans, Details, Plant List	Landscaping	9	1"=20' and n/a		X	X
Water Plans	Utilities	3	1"=20'	X	X	X
Water Details	Utilities	13	n/a and varies		X	X

TASK 7.1 – DESIGN CRITERIA REPORT

Consultant shall develop a Design Criteria Report (DCR) based on the Final Type, Size, & Location Report (TS&L) dated Dec. 22, 2015 provided by City, which resolves undecided design decisions from the TS&L. The DCR will be completed prior to commencement of the 30% design effort.

To support City's efforts in finalizing the proposed detour route, Consultant shall develop a Temporary Traffic Control plan to include a draft detour exhibit and typical section for N Time Oil Road and submit to City for review.

Consultant shall develop a draft and final DCR, which describes the design criteria that are to be applied to the project, and submit to City for review. The DCR shall include at a minimum:

- Traffic volumes
- Design vehicles
- Typical sections
- Design speed
- ADA Criteria
- Overall construction phasing
- Proposed Temporary Traffic Control plan
- Stormwater Management criteria
- Pavement criteria
- List of required permits
- Potential design exceptions, if applicable
- Bridge type and length
- Foundation type
- Seismic design parameters
- Railroad coordination and submittal requirements
- Lightweight fill material
- Design codes and guidelines including:
 - AASHTO LRFD Bridge Design Specifications
 - AASHTO Guide Specifications for LRFD Seismic Bridge Design
 - ODOT Local Agency Guidelines (LAG) Manual
 - ODOT Bridge Design and Drafting Manual (BDDM).

City review period will be 3 weeks and consolidated comments will be sent to Consultant.

Deliverables:

- Draft and Final DCR (MS Word and PDF format).
- DCR review comments and responses.

TASK 7.2 – PRELIMINARY DESIGN – 30% PS&E

Consultant shall perform engineering calculations to progress the design and prepare Preliminary Plan drawings and Engineer's Estimate to be incorporated in the Preliminary PS&E. Consultant shall incorporate City comments from the DCR subtask.

- Develop design and prepare drawings to be in the construction bid package to a 30% design level. Consultant shall reference applicable ODOT and City standard drawings and details.
- Develop quantity take-offs and prepare Engineer's Estimate for the 30% deliverable. Estimate will include narrative explain assumptions and contingencies. The Engineer's Estimate will be based on historical unit cost information obtained by the Consultant and use a 30% contingency.
- Prepare a utility conflict matrix that documents potential conflicts (per Task 3.1.1).
- Prepare the PBOT Design Items-30-60-95 checklist for the 30% deliverable.
- Conduct Consultant project team QC review of 30% PS&E prior to submittal to City.
- Prepare a 30% Design Report to summarize new decisions and changes to the December 22, 2015 TS&L Report, including addressing disciplines with no 30% drawings.
- UPRR Concept Submittal (per Task 3.3)

Task 7.2.1 Roadway

- Design alignments and section with the necessary grades, clearances, and dimensions.

Task 7.2.1 Stormwater

- Develop the Preliminary Stormwater Management Plan (SWMP) including preliminary design calculations for the water quality facilities and an outline for the overall stormwater concept for the Project including drainage patterns and outfalls. The Preliminary Stormwater Management Plan will be developed to meet the requirements of the City of Portland Stormwater Management Manual;
- Prepare Preliminary Drainage Plans including the conceptual layout of the proposed water quality facilities and drainage structures and a plan for the piping and inlets, to be included in the 30% set;
- Prepare a Preliminary Drainage Cost Estimate including a summary of quantities, units of measurement and unit prices used to arrive at the cost estimate, to be included in the 30% Engineer's Estimate;
- Use the most current published ODOT average unit prices, adjusted for local variations in the average unit bid prices, to prepare the construction cost estimate;
- Develop linear stormwater facilities designed to fit within the available and proposed ROW; and

- Include a map of drainage subbasins for the contributing impervious area (CIA) in the Preliminary SWMP. The purpose of this map is to show how each portion of the CIA will be treated; therefore the number of subbasins will be one (1) for each stormwater BMP, and flow lines will be included to show how runoff from each pavement section flows to stormwater BMP(s). Provide this map for permitting.

Task 7.2.3 Walls and Lightweight Fill

- Develop preliminary plans for the 30% deliverable including layout and extent of walls, wall types, lightweight fill, and details. Wall type will not change after 60% PS&E. Wall layout and location will not change after 95% PS&E.
- Prepare a cost estimate based on unit prices and past project information to be included in the 30% Engineer's Estimate.

Task 7.2.4 Bridge

- Coordinate with the project team to establish bridge length, profile, approach interface, and other design elements to advance the project.
- Perform calculations to support layout and component design of a multi-span, multi-girder bridge supported by deep foundations. Bridge design shall be performed in accordance with the most current edition of the ODOT Bridge Design and Drafting Manual.
- Determine preliminary quantities and use current ODOT Bridge Cost Data and engineering judgment for the cost estimate to be included in the Engineer's Estimate.

Task 7.2.5 Traffic (Street Lighting, Signing, Striping, TP&DT)

- Provide lighting design criteria including pole type, fixture, and target light levels for review and approval by City staff.
- No signing or striping will be provided at the 30% design level.
- Propose traffic control solutions to support the selected Project improvements. Consider impacts to adjacent properties.
- Show proposed temporary detour routes and temporary construction staging concept.
- Base design estimate for TP&DT on a percentage of the overall construction cost.

Task 7.2.6 Landscape Plans

- Stormwater treatment facilities: Conceptual grading/cross sections, and planting approach
- Landscape Restoration areas: Develop planting and maintenance strategies;
- Roadside Beautification: develop criteria for maintenance and sightlines and develop planting and maintenance strategies

Task 7.2.7 Water

- Meet with the Portland Water Bureau (PWB) and obtain the design requirements for the waterline (effort included in Task 1).
- The Portland Water Bureau (PWB) CAD seed files, CAD waterline standard details, and example project plans will be available for use and reference.
- Assume the waterline relocation design is a fully-restrained system with mechanically restrained joints.
- Assume the waterline relocation design does not require engineering calculations.
- Develop waterline design and prepare drawings and estimate to be incorporated into the Preliminary PS&E. Develop up to three (3) plan drawings to be in the construction bid package to a 30% design level. Plans will reference applicable City standard drawings and details.

Deliverables:

- Preliminary Design (30%) Plans.
- Preliminary (30%) Engineer's Estimate.
- Utility conflict matrix (per Task 3.1.1)
- PBOT Design Items-30-60-95 checklist.
- QC documentation (upon request)
- 30% Design Report
- Preliminary Stormwater Management Plan (MS Word and PDF format).
- UPRR Concept Submittal, subsequent to incorporation of City comments on 30% submittal (per Task 3.3)

TASK 7.3 – FINAL DESIGN – 60%, 95% & FINAL PS&E

Consultant shall perform engineering calculations to progress the design and prepare Final Plan drawings, Special Provisions, and Engineer's estimate to be incorporated in the Final PS&E. Incorporate City comments from Preliminary Design phase and from each previous phase of the Final submittal. The 60% PS&E represents geometry and element type selections with no specific details such as reinforcement, sufficient to identify preliminary construction conflicts and potential solutions. The 95% PS&E represents nearly complete design and construction document preparation, to support the City's constructability review and ODOT review. The 100% PS&E will be the final printing of the submittal.

- Advance design and plans to be in the construction bid package to a Final Design level. Consultant shall reference applicable ODOT and City standard drawings and details. Submit Electronic CADD files to City for review, including Digital Terrain Model in MicroStation (.DGN) and InRoads (.DTM) format; Horizontal and vertical alignment (.ALG) files for bottom face of curbs if standard 6 inch exposure (top face of curbs if variable curb exposure); and text file containing the coordinates (N, E, Elve.) of proposed features/elements (curbs, sidewalks, ramps, etc.). 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. The necessary MicroStation resource files (font, libraries, line styles etc.) shall be included with the returned set.
- At 60%, determine applicable specification sections, including identifying special or non-standard provisions to be created, and prepare and submit the PBOT Bid Booklet and Special Provision Document Assembly checklist. Prepare and submit Draft Technical Specification sections at 95% and Final Technical Specification sections at Final PS&E. This project will utilize the 2010 City of Portland Standard Construction Specifications.
- Advance quantity take-offs and Engineer's Estimate for the Final Design deliverable. Estimate will include narrative explain assumptions and contingencies. The Engineer's Estimate will be based on historical cost information obtained by the Consultant and use a reduced contingency as compared to the Preliminary Estimate.
- Include utility conflict lists at each submittal.
- Concept Construction Schedule, Draft at 95% and Final at Final PS&E.
- Prepare ADA ramp reports using the ODOT forms, and submit at Final PS&E.
- Prepare the PBOT Design Items-30-60-95 checklist and submit with Final PS&E package.
- Prepare City Engineer Project Checklist Report and submit with Final PS&E package.
- Stamp and sign plan sheets and specifications with the appropriate Professional Engineer or Landscape Architect, active in the State of Oregon.
- Prepare and track comments through each design review, and monitor resolutions through design stages. The log will include the name of the person making the comment, sheet number, action taken and reason. Consultant shall work with City to identify appropriate City and ODOT staff to resolve or help in decision making.
- Conduct Consultant project team QC reviews prior to submittal to City.

Task 7.3.1 Roadway

- For the 60%, 95%, and Final PS&E submittal, cross-sections at every 25' to be plotted and provided to the City.

- For the Final PS&E submittal, provide Mass Haul Diagram in electronic and hard copy format.

Task 7.3.2 Stormwater

- Prepare the Stormwater Management Plan from the Preliminary Stormwater Management Plan with updated design information.

Task 7.3.3 Walls and Lightweight Fill

- Perform engineering calculations to progress the wall and lightweight fill design.
- Design check in quality assurance and calculation book
- Provide horizontal and vertical alignment files for bottom (exposed) face of proposed walls.

Task 7.3.4 Bridge

- Perform engineering calculations to progress the bridge design.
- Incorporate City review comments from each previous submittal.
- Perform a Class 1 detailed check of the Final Bridge Design according to the project QCP.

Task 7.3.5 Traffic (Street Lighting, Signing, Striping, TP&DT)

- Design and analyze illumination within the project area using AGi software and City standards. Document results in Draft and Final Lighting Analysis Memorandum.
- Develop lighting plans for the Project based on City standards.
- Develop signing and striping plans for the Project.
- Develop TCPs and detour plans for the Project. Identify areas under traffic. Base potential closures on coordination with City and Consultant design team.
- Provide coordinates (N, E, Elev.) for traffic and light poles bases.

Task 7.3.6 Landscape Plans

- Stormwater treatment facilities: Coordinate grading, develop detail sections and planting .
- Landscape Restoration areas: Develop planting plans and seed mixes.
- Roadside Beautification: planting.

Task 7.3.7 Water

- Continue design and coordination to progress the design.

Task 7.3.8 – specifications

- Consultant shall coordinate and compile the specification and specifications booklet.

Deliverables:

- 60% PS&E Deliverables:
 - 60% Plans
 - PBOT Bid Booklet and Special Provision Document Assembly checklist (per Task 7.6)
 - 60% Engineer's Estimate
 - Updated utility conflict matrix (per Task 3.1.1)
 - PBOT Design Items-30-60-95 checklist
 - Comment Log with responses to 30% comments and resolutions
 - QC documentation (upon request)
 - UPRR 30% Submittal, subsequent to incorporation of City comments on 60% submittal (per Task 3.3)
 - PBOT Bid Booklet and Special Provision Document Assembly checklist with 60% PS&E deliverable

- 95% PS&E Deliverables:
 - 95% Plans
 - 95% Engineer's Estimate
 - Final Stormwater Management Plan
 - Updated utility conflict matrix (per Task 3.1.1)
 - Draft Concept Construction Schedule (MS Project and PDF format)
 - Draft ADA Ramp Reports
 - PBOT Design Items-30-60-95 checklist
 - Comment Log with responses to 60% comments and resolutions
 - QC documentation (upon request)
 - UPRR Final Submittal, subsequent to incorporation of City comments on 95% submittal (per Task 3.3)

- Draft Lighting Analysis Memorandum
- ODOT Region 1 PS&E Checklist and associated documentation compiled in notebooks
- Draft Technical Specifications with 95% PS&E deliverable

- Final PS&E Deliverables:
 - Final Plans
 - Final Engineer's Estimate
 - Digital Terrain Model (DTM) in InRoads format depicting catchlines, earthwork quantities and grading templates (final grade, excavation planes, and original ground lines).
 - Updated utility conflict matrix (per Task 3.1.1)
 - Final Concept Construction Schedule (MS Project and PDF format)
 - Final ADA Ramp Reports
 - PBOT Design Items-30-60-95 checklist
 - City Engineer Project Checklist Report
 - Comment Log with responses to 95% comments and resolutions
 - QC documentation (upon request)
 - Bridge Calculation Book with Class 1 design check
 - Wall Calculation Book with design check
 - Final Lighting Analysis Memorandum
 - PBOT CIP Asset Management Form
 - Final Technical Specifications with Final PS&E deliverable

TASK 7.4 – CONSTRUCTABILITY REVIEW

Consultant shall perform internal constructability reviews at to the 60% and 95% submittals. The constructability review will evaluate:

- Potential construction means and methods;
- Potential contractor staging areas;

- Potential conflicts with construction methods and rail operations;
- Anticipated rail outages to facility construction.
- Coordination between plans, specifications and bid items; and
- Site restrictions and time limits associated with rail operations are included in the project documents.

Deliverables:

- Constructability technical memo at 60%
- Constructability technical memo at 100%

TASK 7.5 – DESIGN EXCEPTIONS

Consultant shall prepare up to 3 design exceptions using the PBOT Design Exception Form available online.

- Submit Drafts to City for review.
- Address draft comments and submit the Final forms to City within ten (10) business days after receiving comments.

Assumptions:

- City will coordinate approvals of the design exceptions.
- City will provide compiled comments on the Draft Design Exceptions within ten (10) business days of submittal to City PM.

Deliverables:

- Draft and Final Design Exception Forms (Word and PDF)

TASK 8 – BID AND AWARD ASSISTANCE

This task includes the preparation of addenda, as requested, and responding to questions during the bidding phase. Consultant shall respond to questions from City and potential bidders about the plans and specifications during the bidding process.

TASK 8.1 – QUESTIONS DURING BIDDING

Consultant's Project Manager, or Consultant's designee(s) approved by City, shall serve as the point of contact for potential bidders with questions regarding the bid documents and bid process. Consultant shall:

- Respond to questions from potential bidders ;

- Questions and responses will be recorded in writing within five (5) day(s), and deliver the resulting written document to City PM;
- Prepare a written log to document conversations and questions asked by potential bidders and the answers provided; and
- Maintain the written log in the project file and provide upon request by City Project Manager

Deliverables:

- Written log of conversations, questions and answers, provided City Project Manager upon request.

TASK 8.2 – ADDENDA TO THE BID DOCUMENTS

Consultant shall prepare up to two (2) bid addenda to provide interpretation of or modifications to construction documents.

Consultant shall:

- Prepare and deliver the addenda text in a Microsoft Word file;
- Prepare and deliver stamped drawings in PDF and 11" x 17" paper;
- Coordinate reviews of addenda by City prior to submittal; and City will issue and distribute the addenda to bidders.
- Prepare conformed construction contract documents

Deliverables:

- Bid document addenda; stamped PDF and full size paper drawings; and necessary special provision revisions.

TASK 9 – LOAD RATING

This task includes the load rating calculations for the bridge according to the ODOT Load and Resistance Factor Ratings (LRFR) Procedures.

Assumptions:

- City will provide as-built drawings in a timely manner to support the load rating work, which is to be submitted for City review within 45 days of substantial construction completion.
- City will review and provide compiled comments within 2 weeks of receiving draft submittal.
- City will complete submission of the final load rating to ODOT within 60 days of substantial completion.

TASK 9.1 – LOAD RATING

Consultant shall perform load rating in accordance with ODOT LRFR Manual, November 2015. Load rating shall be performed using MIDAS Civil software.

Deliverables

- Draft load rating and all associated calculations and electronic files
- Final load rating and all associated calculations and electronic files

Level of Effort City of Portland Rivergate Blvd Grade Separation	EXHIBIT B	GRI											Willamette Cultural						New Albion Geotechnical				
		Geotechnical Lead	Principal Pavement Engineer	Senior Pavement Engineer	Senior Geotechnical Engineer	Staff Eng.	Technical Editor	Drafter	Labor	Expenses	Subconsultant Total	Project Manager	Researcher	Monitor	GIS Specialist	Report Assistant	Labor	Expenses	Subconsultant Total	Labor	Expenses	Subconsultant Total	
		Scott Schleicher	Mike Maloney	Linda Hammond	Brian Bayne															Steve Dickenson			
Staff Names (hide this row when printing)																							
Average Rates (hide this row when printing)																							
Job Codes																							
Task Description		\$ 215.00	\$ 215.00	\$ 180.00	\$ 180.00	\$ 115.00	\$ 120.00	\$ 100.00														\$ 275.00	
1 Project Management & Coordination																							
1.1 Project Management and Quality																							
1.2 Project Meetings																							
1.2.1 Kick-Off Meeting - 1-2hr, 8 staff	3								\$ 645	\$ 645													
1.2.2 PBOT Technical Review Meetings - 4-2hr, 3 staff	18				16				\$ 6,430	\$ 6,430										8	\$ 2,200	\$ 400	\$ 2,600
1.2.3 Project Sub Team Meetings - 30-2hr, staff varies	40			6	45				\$ 16,760	\$ 16,760										8	\$ 2,200	\$ 400	\$ 2,600
1.2.4 Project Site Meetings - 6 mtgs	8				8				\$ 3,000	\$ 3,000													
1.2.5 Bureau Coordination Meetings - 4/4-2hr w/ BES/PWB, 3 staff									\$ -	\$ -													
Sub-total	69	0	6	69	0	0	0	0	\$ 26,835	\$ 26,835	0	0	0	0	0	0	0	0	16	\$ 4,400	\$ 800	\$ 5,200	
2 Survey																							
2.1 Right of Way Engineering (Mapping & Descriptions)																							
2.2 New Right of Way Design Layout for Project																							
2.3 Right of Way Legal Descriptions																							
2.4 Right of Way Sketch Maps																							
Sub-total	0	0	0	0	0	0	0	0	\$ -	\$ -	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	
3 Utility Coordination																							
3.1 Utility Coordination																							
3.1.1 Utility Coordination																							
C3.1.2 Utility Conflict Report																							
3.2 Utility Relocation Facilitation																							
3.2.1 Utility Relocation Facilitation																							
C3.2.2 Attaching to Structures																							
C3.2.3 Public Interest Finding																							
3.3 Utility Certification																							
3.4 Railroad Coordination																							
Sub-total	0	0	0	0	0	0	0	0	\$ -	\$ -	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	
4 Public Involvement & Information																							
4.1 Project Exhibits																							
Sub-total	0	0	0	0	0	0	0	0	\$ -	\$ -	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	
5 Environmental Services																							
5.1 National Environmental Policy Act Documentation																							
5.2 ESA No Effects Memorandum																							
5.3 ESA FAHP Documentation																							
5.4 Cultural Resources											10	10	38	4	10	\$ 4,462	\$ 41	\$ 4,503					
5.5 Wetland Delineation																							
5.6 Hazardous Material Services																							
5.7 City of Portland Environment Review and Floodplain Development																							
Sub-total	0	0	0	0	0	0	0	0	\$ -	\$ -	10	10	38	4	10	\$ 4,462	\$ 41	\$ 4,503	0	\$ -	\$ -	\$ -	
6 Geotechnical & Seismic Engineering Services																							
6.1 Preliminary Geotechnical Design	15			24	20				\$ 9,385	\$ 9,385													
6.2 Field Exploration Work Plan	2			14	24	2			\$ 5,970	\$ 4,421	\$ 10,391												
DBE - D and H Flagging, TCP									\$ -	\$ 725	\$ 725												
6.3 Geotechnical and Pavement Explorations and Laboratory Testing	2			12	128				\$ 17,070	\$ 24,746	\$ 41,816												
DBE - Western States Soil Conservation, lab work									\$ -	\$ 13,240	\$ 13,240												
DBE - Oregon Geotechnical Explorations, CPTs									\$ -	\$ 4,815	\$ 4,815												
DBE - Dan Fischer Excavating (Fed#43-1987925, ESB #5270)									\$ -	\$ 1,500	\$ 1,500												
DBE - D and H Flagging, flaggers									\$ -	\$ 2,797	\$ 2,797												
6.4 Geotechnical & Pavement Design and Reports	12	4	30	52	153	10			\$ 38,355	\$ 38,355													
6.5 Detour Road Pavement Design (Detour Road Repair)		8	40	8	54	4			\$ 16,170	\$ 6,460	\$ 22,630												
DBE - Dan Fischer Excavating (Fed#43-1987925, ESB #5270)									\$ -	\$ 1,500	\$ 1,500												
DBE - D and H Flagging, flaggers and TC									\$ -	\$ 915	\$ 915												
6.6 Geotechnical Peer Review	8			16	18				\$ 6,350	\$ 6,350													
6.7 Geotechnical Plan Review, Specification Support	12			24	6				\$ 7,110	\$ 7,110									66	\$ 18,150	\$ 200	\$ 18,350	
6.8 Effective Stress Site Response Analysis	5			20	55				\$ 10,800	\$ 10,800									4	\$ 1,100	\$ -	\$ 1,100	
Sub-total	56	12	70	168	458	18	47	\$ 111,990	\$ 61,119	\$ 173,109	0	0	0	0	0	\$ -	\$ -	70	\$ 19,250	\$ 200	\$ 19,450		

7	Design																						
7.1	Design Criteria Report								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.2	Preliminary Design - 30% PS&E								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.2.1	Roadway								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.2.2	Stormwater								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.2.3	Walls and Lightweight Fill								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.2.4	Bridge								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.2.5	Traffic (Street Lighting, Signing, Striping, TP&DT)								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.2.6	Landscape Plans								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.2.7	Water								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.3	Final Design - 60%, 95%, and Final PS&E								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.3.1	Roadway								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.3.2	Stormwater								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.3.3	Walls and Lightweight Fill								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.3.4	Bridge								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.3.5	Traffic (Street Lighting, Signing, Striping, TP&DT)								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.3.6	Landscape Plans								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.3.7	Water								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.3.8	Specifications								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.4	Constructability Review								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
7.5	Design Exceptions								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
	Sub-total	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -		
8	Bid and Award Assistance																						
8.1	Questions During Bidding	2			6				\$ 1,390	\$ 1,390				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
8.2	Addenda to the Bid Documents	1			2				\$ 535	\$ 535				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
	Sub-total	3	0	0	8	0	0	0	\$ 1,925	\$ 1,925	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -			
9	Load Rating																						
9.1	Load Rating								\$ -	\$ -				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
	Sub-total	0	0	0	0	0	0	0	\$ -	\$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -			
	Hours	128	12	76	246	458	16	47			10	10	38	4	10								
	Fee	\$27,520	\$2,560	\$12,160	\$39,200	\$62,870	\$1,920	\$4,700	\$ 140,750	\$ 61,119	\$ 201,869	\$947	\$730	\$2,053	\$240	\$492	\$ 4,462	\$ 41	\$ 4,503	\$23,650	\$ 23,650	\$ 1,000	\$ 24,650
	Escalation																						
	Sub-consultant Budget w/ Mark-up									\$ 211,962						\$ 4,728					\$ 25,883		

Level of Effort City of Portland Rivergate Blvd Grade Separation	Casso Consulting		Emerio					Exetech Consulting					Nevue Ngan					Total Fee (includes sub- consultant mark-up and escalation)						
	Engineer II	Engineer I	Labor	Expenses	Subconsultant Total	Senior Professional Land Surveyor	Survey Technician	Project Assistant	Labor	Expenses	Subconsultant Total	Structural Lead	Structural Checker	Structural Designer	Technician	Labor	Expenses		Subconsultant Total	Principal	Landscape Architect	Labor	Expenses	Subconsultant Total
	Tina Adams	Cory Burlingame				Denny Denning						Karl Kiefer	Cheng Yang	Heidi Clayville	Paul Onstott									
Staff Names (hide this row when printing) Average Rates (hide this row when printing) Job Codes																								
Task Description	\$ 155.00	\$ 132.00				\$ 120.00	\$ 95.00	\$ 79.00				\$ 184.55	\$ 196.04	\$ 132.72	\$ 89.33				\$ 145.00	\$ 96.00				
1 Project Management & Coordination																								
1.1 Project Management and Quality			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,525	
1.2 Project Meetings			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
1.2.1 Kick-Off Meeting - 1-2hr, 6 staff	4	4	\$ 1,148	\$ 26	\$ 1,178	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	8	\$ 1,477	\$ 1,477	\$ -	\$ -	\$ -	\$ -	4	4	\$ 964	\$ 964	\$ 11,290	
1.2.2 PBOT Technical Review Meetings - 4-2hr, 3 staff			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	2	2	\$ 482	\$ 482	\$ 32,326	
1.2.3 Project Sub Team Meetings - 30-2hr, staff varies	40		\$ 5,280	\$ 150	\$ 5,430	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	40	\$ 5,309	\$ 5,309	\$ -	\$ -	\$ -	\$ -	8	8	\$ 1,928	\$ 1,928	\$ 84,652	
1.2.4 Project Site Meetings - 6 mtgs			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	8	\$ 2,538	\$ 2,538	\$ -	\$ -	\$ -	\$ -	3	3	\$ 723	\$ 723	\$ 16,154	
1.2.5 Bureau Coordination Meetings - 4/4-2hr w/ BES/PWB, 3 staff		12	\$ 1,584	\$ -	\$ 1,584	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	2	2	\$ 482	\$ 482	\$ 10,718	
Sub-total	4	56	\$ 8,012	\$ 176	\$ 8,190	0	0	0	\$ -	\$ -	\$ -	16	0	48	0	\$ 9,324	\$ -	\$ 9,324	19	19	\$ 4,579	\$ -	\$ 4,579	\$ 365,666
2 Survey																								
2.1 Right of Way Engineering (Mapping & Descriptions)			\$ -	\$ -	\$ -	12	\$ 1,440	\$ 1,440	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,512	
2.2 New Right of Way Design/Layout for Project			\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,272	
2.3 Right of Way Legal Descriptions			\$ -	\$ -	\$ -	46	36	2	\$ 9,338	\$ 9,338	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,805	
2.4 Right of Way Sketch Maps			\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,272	
Sub-total	0	0	\$ -	\$ -	\$ -	60	36	2	\$ 10,778	\$ 10,778	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0	\$ -	\$ -	\$ 19,862	
3 Utility Coordination																								
3.1 Utility Coordination		174	24	\$ 30,138	\$ 30,138	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 31,645	
3.1.2 Utility Conflict Report		31	16	\$ 6,917	\$ 6,917	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,358	
3.2 Utility Relocation Facilitation			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
3.2.1 Utility Relocation Facilitation	208	4	\$ 32,768	\$ 145	\$ 32,913	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 41,039	
3.2.2 Attaching to Structures	12		\$ 1,860	\$ -	\$ 1,860	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	44	16	20	40	\$ 17,326	\$ 17,326	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 26,498	
3.2.3 Public Interest Finding	8	2	\$ 1,504	\$ -	\$ 1,504	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,579	
3.3 Utility Certification	2		\$ 310	\$ -	\$ 310	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 329	
3.4 Railroad Coordination			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 73,609	
Sub-total	438	46	\$ 73,497	\$ 145	\$ 73,642	0	0	0	\$ -	\$ -	\$ -	44	16	20	40	\$ 17,326	\$ 17,326	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 162,058	
4 Public Involvement & Information																								
4.1 Project Exhibits			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	2	24	\$ 2,594	\$ 2,594	\$ 19,131
Sub-total	0	0	\$ -	\$ -	\$ -	0	0	0	\$ -	\$ -	\$ -	0	0	0	0	\$ -	\$ -	\$ -	\$ -	2	24	\$ 2,594	\$ 2,594	\$ 16,131
5 Environmental Services																								
5.1 National Environmental Policy Act Documentation			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,674	
5.2 ESA No Effects Memorandum			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,368	
5.3 ESA FAHP Documentation			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,281	
5.4 Cultural Resources			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,112	
5.5 Wetland Delineation			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,949	
5.6 Hazardous Material Services			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,854	
5.7 City of Portland Environment Review and Floodplain Development			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,712	
Sub-total	0	0	\$ -	\$ -	\$ -	0	0	0	\$ -	\$ -	\$ -	0	0	0	0	\$ -	\$ -	\$ -	\$ -	0	0	\$ -	\$ -	\$ 80,950
6 Geotechnical & Seismic Engineering Services																								
6.1 Preliminary Geotechnical Design			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,933	
6.2 Field Exploration Work Plan			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,910	
DBE - D and H Flagging, TCP			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 761	
6.3 Geotechnical and Pavement Explorations and Laboratory Testing			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 43,907	
DBE - Western States Soil Conservation, lab work			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,902	
DBE - Oregon Geotechnical Explorations, CPTs			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,056	
DBE - Dan Fischer Excavating (Fed#43-1967925, ESB #5270)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,575	
DBE - D and H Flagging, flaggers			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,837	
6.4 Geotechnical & Pavement Design and Reports			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 41,323	
C6.5 Detour Road Pavement Design (Detour Road Repair)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 23,762	
DBE - Dan Fischer Excavating (Fed#43-1967925, ESB #5270)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,675	
DBE - D and H Flagging, flaggers and TC			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 961	
6.6 Geotechnical Peer Review			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,688	
6.7 Geotechnical Plan Review, Specification Support			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 26,733	
C6.8 Effective Stress Site Response Analysis			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,285	
Sub-total	0	0	\$ -	\$ -	\$ -	0	0	0	\$ -	\$ -	\$ -	0	0	0	0	\$ -	\$ -	\$ -	\$ -	0	0	\$ -	\$ -	\$ 292,187

Level of Effort City of Portland Rivergate Blvd Grade Separation	Casso Consulting					Emerio					Exeltech Consulting					Nevue Ngan					Total Fee (includes sub- consultant mark-up and escalation)					
	Engineer II		Labor	Expenses	Subconsultant Total	Senior Professional Land Surveyor		Survey Technician	Project Assistant	Labor	Expenses	Subconsultant Total	Structural Lead		Structural Designer	Technician	Labor	Expenses	Subconsultant Total	Principal		Landscape Architect	Labor	Expenses	Subconsultant Total	
	Tina Adams	Cory Burlingame				Danny Denning							Kurt Kriner	Cheng Yang						Hedi Clayville						Paul Onsbart
Staff Names (hide this row when printing) Average Rates (hide this row when printing) Job Codes	\$ 155.00	\$ 132.00				\$ 120.00	\$ 95.00	\$ 79.00				\$ 184.59	\$ 186.04	\$ 132.72	\$ 89.33					\$ 145.00	\$ 96.00					
Task Description																										
1 Project Management & Coordination																										
1.1 Project Management and Quality			\$ -	\$ -	\$ -				\$ -	\$ -	\$ -						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,525	
1.2 Project Meetings																										
1.2.1 Kick-Off Meeting - 1-2hr, 6 staff	4	4	\$ 1,148	\$ 28	\$ 1,176								8				\$ 1,477	\$ -	\$ 1,477		4	4	\$ 964	\$ -	\$ 11,290	
1.2.2 PBOT Technical Review Meetings - 4-2hr, 3 staff																					2	2	\$ 482	\$ -	\$ 32,326	
1.2.3 Project Sub Team Meetings - 30-2hr, staff varies		40	\$ 5,280	\$ 150	\$ 5,430										40		\$ 5,309	\$ 5,309			8	8	\$ 1,928	\$ -	\$ 84,652	
1.2.4 Project Site Meetings - 6 mtgs													8		8		\$ 2,538	\$ -	\$ 2,538		3	3	\$ 723	\$ -	\$ 16,154	
1.2.5 Bureau Coordination Meetings - 4/4-2hr w/ BES/PWB, 3 staff		12	\$ 1,584	\$ -	\$ 1,584												\$ -	\$ -	\$ -		2	2	\$ 482	\$ -	\$ 10,718	
Sub-total	4	56	\$ 8,012	\$ 178	\$ 8,190	0	0	0	\$ -	\$ -	\$ -	16	0	48	0	\$ 9,324	\$ -	\$ 9,324	19	19	\$ 4,579	\$ -	\$ 4,579	\$ -	\$ 385,668	
2 Survey																										
2.1 Right of Way Engineering (Mapping & Descriptions)						12			\$ 1,440	\$ 1,440	\$ 1,440						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,512	
2.2 New Right of Way Design/Layout for Project																									\$ 4,272	
2.3 Right of Way Legal Descriptions						48	36		\$ 9,336	\$ 9,336	\$ 9,336						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,805	
2.4 Right of Way Sketch Maps																									\$ 4,272	
Sub-total	0	0	\$ -	\$ -	\$ -	60	36	2	#####	\$ -	\$ 10,778	0	0	0	0	\$ -	\$ -	\$ -	\$ -	0	0	\$ -	\$ -	\$ -	\$ 19,862	
3 Utility Coordination																										
3.1 Utility Coordination																										
3.1.1 Utility Coordination	174	24	\$ 30,138	\$ -	\$ 30,138				\$ -	\$ -	\$ -						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 31,645	
C3.1.2 Utility Conflict Report	31	16	\$ 6,917	\$ -	\$ 6,917				\$ -	\$ -	\$ -						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,358	
3.2 Utility Relocation Facilitation																										
3.2.1 Utility Relocation Facilitation	208	4	\$ 32,768	\$ 145	\$ 32,913				\$ -	\$ -	\$ -						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 41,039	
C3.2.2 Attaching to Structures	12		\$ 1,860	\$ -	\$ 1,860				\$ -	\$ -	\$ -	44	16	20	40	\$ 17,326	\$ 17,326	\$ 17,326	\$ 17,326	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 26,496	
C3.2.3 Public Interest Finding	8	2	\$ 1,504	\$ -	\$ 1,504				\$ -	\$ -	\$ -						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,579	
3.3 Utility Certification	2		\$ 310	\$ -	\$ 310				\$ -	\$ -	\$ -						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 320	
3.4 Railroad Coordination																									\$ 73,609	
Sub-total	435	46	\$ 73,497	\$ 145	\$ 73,642	0	0	0	\$ -	\$ -	\$ -	44	16	20	40	\$ 17,326	\$ 17,326	\$ 17,326	\$ 17,326	0	0	\$ -	\$ -	\$ -	\$ 182,055	
4 Public Involvement & Information																										
4.1 Project Exhibits																					2	24	\$ 2,594	\$ 2,594	\$ 16,131	
Sub-total	0	0	\$ -	\$ -	\$ -	0	0	0	\$ -	\$ -	\$ -	0	0	0	0	\$ -	\$ -	\$ -	\$ -	2	24	\$ 2,594	\$ 2,594	\$ 16,131		
5 Environmental Services																										
5.1 National Environmental Policy Act Documentation																									\$ 7,674	
5.2 ESA No Effects Memorandum																									\$ 4,368	
5.3 ESA FAHP Documentation																									\$ 5,281	
5.4 Cultural Resources																									\$ 6,112	
5.5 Wetland Delineation																									\$ 14,948	
5.6 Hazardous Material Services																									\$ 8,954	
5.7 City of Portland Environment Review and Floodplain Development																									\$ 12,712	
Sub-total	0	0	\$ -	\$ -	\$ -	0	0	0	\$ -	\$ -	\$ -	0	0	0	0	\$ -	\$ -	\$ -	\$ -	0	0	\$ -	\$ -	\$ -	\$ 60,950	
6 Geotechnical & Seismic Engineering Services																										
6.1 Preliminary Geotechnical Design																									\$ 9,833	
6.2 Field Exploration Work Plan																									\$ 10,910	
DBE - D and H Flagging, TCP																									\$ 761	
6.3 Geotechnical and Pavement Explorations and Laboratory Testing																									\$ 43,907	
DBE - Western States Soil Conservation, lab work																									\$ 13,902	
DBE - Oregon Geotechnical Explorations, CPTs																									\$ 5,056	
DBE - Dan Fischer Excavating (Fed#43-1987925, ESB #5270)																									\$ 1,575	
DBE - D and H Flagging, flaggers																									\$ 2,937	
6.4 Geotechnical & Pavement Design and Reports																									\$ 41,323	
Detour Road Pavement Design (Detour Road Repair)																									\$ 23,752	
DBE - Dan Fischer Excavating (Fed#43-1987925, ESB #5270)																									\$ 1,575	
DBE - D and H Flagging, flaggers and TC																									\$ 961	
6.6 Geotechnical Peer Review																									\$ 6,688	
6.7 Geotechnical Plan Review, Specification Support																									\$ 26,733	
C6.8 Effective Stress Site Response Analysis																									\$ 12,285	
Sub-total	0	0	\$ -	\$ -	\$ -	0	0	0	\$ -	\$ -	\$ -	0	0	0	0	\$ -	\$ -	\$ -	\$ -	0	0	\$ -	\$ -	\$ -	\$ 202,187	

FOR

N. Rivergate Overcrossing Project Design & Engineering Services

Pursuant to Ordinance Number TBD after Council action

This Contract was made and entered by and between HDR Engineering, 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. Additional work is necessary as described in the Scope of Work as follows: Please see Exhibits A & B which detail scope & budget changes.
2. Additional compensation is necessary and shall not exceed \$298,149.00 for new not to exceed contract total amount of \$3,073,474.00. The new contract amount was calculated as follows:

\$2,222,941.00 (Original Contract Amount)
+ \$0.00 (Amendment 1)
+\$81,624.00(Amendment 2)
+\$470,760.00(Amendment 3)
+\$0.00(Amendment 4)
+\$0.00(Amendment 5)
+ \$298,149.00(Amendment 6)
= \$3,073,474.00 (Total Not to Exceed Amount)

3. 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: HDR Engineering, Inc

Address: 1001 SW 5th Avenue, Suite 1800

Portland OR 97204

Signature: _____ Date: _____

Name: _____

Title: _____

DRAFT

Contract Number: 30005876

Amendment Number: Six (6)

Contract Title: N. Rivergate Overcrossing Project Design & Engineering Services

CITY OF PORTLAND SIGNATURES

By: _____ Date: _____
Chief Procurement Officer

Approved as to Form:

By: _____ Date: _____
Office of City Attorney

DRAFT

EXHIBIT B

SCOPE OF WORK FOR N. RIVERGATE BLVD. OVERCROSSING FINAL DESIGN (PS&E)

AMENDMENT 6

October 27, 2019

AMENDMENT DESCRIPTION

This amendment provides effort for two additional review cycles and revisions to remove the water betterment from the bid set, address questions with the betterment associated with a dredge pipe, and revised the plans to accommodate the City's desire not to accept a design exception as well as other elements.

TASK 1 - PROJECT MANAGEMENT & COORDINATION (REVISED - ADDITIONAL EFFORT)

TASK 1.1 – PROJECT MANAGEMENT AND QUALITY (REVISED – ADDITIONAL EFFORT)

Consultant shall manage, coordinate and provide Project Management oversight for an additional six months of project duration and for the additional tasks included in this Amendment.

TASK 1.2 – PROJECT MEETINGS (UNCHANGED)

Task 1.2.1 Kick-Off Meeting (Unchanged)

Task 1.2.2 PBOT Technical Review Meetings (Unchanged)

Task 1.2.3 Project Sub Team Meetings (Unchanged)

Task 1.2.4 Project Site Meetings (Unchanged)

Task 1.2.5 Bureau Coordination Meetings (Unchanged)

TASK 2 – SURVEY AND RIGHT-OF-WAY SERVICES (REVISED – ADDITIONAL & REDUCED EFFORT)

TASK 3 – UTILITY COORDINATION (REVISED – ADDITIONAL & REDUCED EFFORT)

TASK 3.1 – UTILITY COORDINATION (REVISED – ADDITIONAL EFFORT)

Task 3.1.1 – Utility Coordination (REVISED – ADDITIONAL EFFORT)

Consultant shall coordinate with the design team during plan revisions noted in Task 7.3. Consultant shall provide review and comments requested by the City on permits submitted by the utilities.

Contingency Task 3.1.2 – Utility Conflict Report (UNCHANGED)

TASK 3.2– UTILITY RELOCATION FACILITATION (UNCHANGED)

TASK 3.3 – UTILITY CERTIFICATION (UNCHANGED)

TASK 3.4 – RAILROAD COORDINATION (UNCHANGED)

TASK 4 – PUBLIC INVOLVEMENT & INFORMATION (UNCHANGED)

TASK 5 – ENVIRONMENTAL SERVICES (UNCHANGED)

TASK 6 – GEOTECHNICAL & SEISMIC ENGINEERING SERVICES (UNCHANGED)

TASK 7–DESIGN (REVISED – ADDITIONAL EFFORT)

TASK 7.1 – DESIGN CRITERIA REPORT (UNCHANGED)

TASK 7.2 – PRELIMINARY DESIGN – 30% PS&E (UNCHANGED)

TASK 7.3 – FINAL DESIGN – 60%, 95% & FINAL PS&E (REVISED – ADDITIONAL EFFORT)

Consultant shall:

- Modify the bridge deck thickness and recalculate loads for all the bridge members including the girders, beams, columns and foundation and shall re do the bridge seismic model.
- Modify plans to address changes needed to avoid the design exception for longitudinal slope without gutter.
- Add cathodic protection to the water line betterment design and remove the waterline betterment section from the PS&E package and prepare it to be added via change order during construction.
- Conduct potholing and provide survey to identify the elevation of the dredge pipe that runs under the railroad tracks and crosses N. Rivergate.
- Provide four additional plan and specification packages for review and address comments on each set.

- Provide a major addendum to:
 - Modify the intersection design of Lombard Street and N Rivergate Boulevard to provide a minimum offset of 2-feet between the design vehicles (WB67) wheel path and proposed curb.
 - Modify the proposed dual driveway west of the UPRR tracks to allow ingress/egress of the design vehicle (WB67) without off-tracking into opposing traffic.
 - Modify westerly terminus to address a new bicycle connection concept.

TASK 7.4 – CONSTRUCTABILITY REVIEW (UNCHANGED)

TASK 7.5 – DESIGN EXCEPTIONS (UNCHANGED)

TASK 8 – BID AND AWARD ASSISTANCE (UNCHANGED)

TASK 9 – LOAD RATING (UNCHANGED)

TASK 10 – Professional of Record Services (UNCHANGED)

Consultant shall provide Professional of Record (“POR”) services throughout the construction phase of the project up to the amount in the fee estimate. Construction duration is assumed to be approximately 18 months.

TASK 10.1 – PROJECT MANAGEMENT OF POR SERVICES (UNCHANGED)

TASK 10.2 – CONSTRUCTION PROJECT MEETINGS (UNCHANGED)

TASK 10.3 – SHOP DRAWING AND SUBMITTAL REVIEW

Task 10.3.1 Utility Permit Review and Coordination (NEW TASK)

Consultant shall provide utility coordination during the project’s construction phase including reviewing and commenting on up to eight additional utility permits submitted to the City of Portland. Consultant shall review up to two minor revisions to the plans to accommodate adjustments requested by the utilities.

TASK 10.4 – CONSULTATION DURING CONSTRUCTION (UNCHANGED)

TASK 10.5 – CONSTRUCTION, ENVIRONMENTAL COMPLIANCE AND WORK ZONE MONITORING AND INSPECTION (UNCHANGED)

TASK 10.6 – PROJECT CLOSEOUT (UNCHANGED)

EXHIBIT C

Level of Effort		HDR Engineering																								
		Project Manager	Storm / Hydro Support	Enviro Lead	Structures Lead	Structures Lead	Project Accountant	Structures Lead	Quality Manager/RR Coordination/Const Admin	Technician	Roadway / Traffic Lead	Specifications QC	Sr Structures QC	Roadway / Traffic Lead	Technician	Quality Manager/RR Coordination/Const Admin	Project Coordinator	Storm / Hydro Lead	Project Coordinator	Project Accountant	Traffic QC	Storm / Hydro Support	Storm / Hydro QC			
PBOT - N Rivergate Blvd Amendment 6		Siebenaler, April S	Asikhodapasand, Farzin	Bauman, Brian S	Bautista, Rebecca J	Bell, Bridget M	Chipman, Kerri L	Doornink, Justin D	Evers III, Buddy	Gonsior, Heather E	Hume, William D	LeBlanc, Brendan E	Libby, Mark A	Mariano, Carolyn A	Nguyen, Tam T	Reicheit, Kurt W	Segura, Katy	Sheean, Ryan B	Siemens, Sandra L	Skofstad, Julie Y	Snuffin, Colette T	Tholl, Morgan L	Christensen, Scott D			
Hide these rows when printing		Staff Names	Billable Rates	\$227.00	\$105.00	\$165.00	\$191.00	\$191.00	\$112.00	\$191.00	\$262.00	\$132.00	\$125.00	\$184.00	\$243.00	\$125.00	\$132.00	\$262.00	\$97.00	\$187.00	\$97.00	\$112.00	\$170.00	\$105.00	\$262.00	
Task Description																										
1 Project Management & Coordination																										
1.1	Project Management and Quality	140					24																			
1.2	Project Meetings	16																								
Sub-total		156	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 Survey																										
2.5	Dredge Pipe Potholing and Survey																									
Sub-total		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 Utility Coordination																										
3.1.1	Utility Coordination																									
Sub-total		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 Design																										
7.3.1	Roadway								40		200	32			320	8										
7.3.2	Stormwater																80								16	
7.3.4	Bridge	24	4	32	2		16		96			32														
7.3.5	Traffic (Street Lighting, Signing, Striping, TP&DT)													200											80	
7.3.6	Landscape Plans																									
7.3.7	Water																									40
7.3.8	Specifications																									
7.4	Constructability Review	2																								
Sub-total		2	24	4	32	2	0	16	40	96	200	32	32	200	320	8	0	80	0	0	0	80	16	40		
10 Professional of Record Services																										
10.3.1	Utility Permit Review and Coordination	4									12			24	24		8						4			
	QC Hours Only																									
Sub-total		4	0	0	0	0	0	0	0	0	12	0	0	24	24	0	8	0	0	0	0	4	0	0	0	0
Hours		162	24	4	32	2	24	16	40	96	212	32	32	224	344	8	168	80	1	0	84	16	40			
Fee		\$36,774	\$2,520	\$660	\$6,112	\$382	\$2,688	\$3,056	\$10,480	\$12,672	\$26,500	\$5,888	\$7,776	\$28,000	\$45,408	\$2,096	\$16,296	\$14,960	\$97	\$28	\$14,280	\$1,680	\$10,480			
Sub-consultant Budget w/ Mark-up																										
Total Non-Contingency																										

