Exhibit A

AGREEMENT FOR PROFESSIONAL, TECHNICAL, OR EXPERT SERVICES
CONTRACT NO. _____
SHORT TITLE OF WORK PROJECT: BULL RUN DAM NO. 2 STILLING BASIN

180971

This contract is between the City of Portland, acting by and through its Elected Officials, hereafter called "City," and **Murray, Smith and Associates, Inc.**, hereafter called Contractor. The City's Project Manager for this contract **Ryan Nelson**.

Effective Date and Duration
This contract shall become effective on **May 23, 2007** (or on the date at which every party has signed this contract, whichever is later.) This contract shall expire, unless otherwise terminated or extended, on **December 31, 2009**.

Statement of Work
(a) The statement of work is contained in EXHIBIT A attached hereto and by this reference made a part hereof.
(b) The delivery schedule for the work is identified in EXHIBIT A.

Consideration
(a) City agrees to pay Contractor a sum not to exceed **$397,868** for accomplishment of the work.
(b) Interim payments shall be made to Contractor according to the schedule identified in EXHIBIT A.

Terms and conditions listed on pages 2 - 4.

CONTRACTOR DATA, CERTIFICATION, AND SIGNATURE

Name (please print): Murray, Smith & Associates, Inc.
Address: 121 SW Salmon, Suite 900, Portland, Oregon 97204
Social Security #: _____
Federal Tax ID #: 93-0768555 State Tax ID #: 304827-7 Business License # 211425 01
Citizenship: Nonresident alien ____ Yes _X_ No
Business Designation (check one): ____ Individual ____ Sole Proprietorship ____ Partnership _X_ 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. Information not matching IRS records could subject you to 20 percent backup withholding.

I, the undersigned, agree to perform work outlined in this contract in accordance to the terms and conditions (listed on pages 2-4 and made part of this contract by reference) and the statement of 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 Chapter 3.100 of Code of the City of Portland; and hereby certify I am an independent contractor as defined in ORS 670.600.

Approved by the Contractor: _____ 4/27/2007
Signature/Title Date
Philip H. Smith, President

CITY OF PORTLAND SIGNATURES

Approved by Mayor or Commissioner: _____
Elected Official or Delegate Date

Approved by City Auditor: _____
City Auditor Date

Approved as to Form
by City Attorney: APPROVED AS TO FORM 5/3/07
Office of City Attorney Date
CITY ATTORNEY

CITY OF PORTLAND
STANDARD CONTRACT PROVISIONS FOR
PROFESSIONAL, TECHNICAL & EXPERT SERVICES (MANDATORY PROVISIONS)

1. Access to Records

The Contractor shall maintain, and the City of Portland ("City") and its duly authorized representatives shall have access to the books, documents, papers, and records of the Contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts, and transcripts for a period of three years after final payment. Copies of applicable records shall be made available upon request. Payment for cost of copies is reimbursable by the City.

2. Audits

(a) The City, either directly or through a designated representative, may conduct financial and performance audits of the billings and services specified in this agreement at any time in the course of the agreement and during the three (3) year period established by section 1, **Access to Records**. 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 General Accounting Office.
(b) If an audit discloses that payments to the Contractor were in excess of the amount to which the Contractor was entitled, then the Contractor shall repay the amount of the excess to the City.
(c) If any audit shows performance of services is not efficient in accordance with Government Auditing Standards, or that the program is not effective in accordance with Government Auditing Standards, the City may pursue remedies provided under section 5, **Early Termination of Agreement** and section 7, **Remedies**.

3. Effective Date and Duration

The passage of the contract expiration date (as recorded on reverse side) 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 cured.

4. Order of Precedence

This contract consists of the terms and conditions of this contract, the Request for Proposals (RFP) issued by the City, if any, and the Contractor's proposal in response to the RFP. In the event of any apparent or alleged conflict between these various documents, the following order of precedence shall apply to resolve the conflict: a) this contract's terms and conditions, b) the City's RFP, and c) the Contractor's proposal in response to the RFP.

5. Early Termination of Agreement

(a) The City and the Contractor, by mutual written agreement, may terminate this Agreement at any time.
(b) The City, on thirty (30) days written notice to the Contractor, may terminate this Agreement for any reason deemed appropriate in its sole discretion.
(c) Either the City or the Contractor may terminate this Agreement in the event of a breach of the Agreement by the other. Prior to such termination, however, the party seeking the termination shall give to the other party written notice of the breach and of the party's intent to terminate. If the party has not entirely cured the breach within fifteen (15) days of the notice, then the party giving the notice may terminate the Agreement at any time thereafter by giving a written notice of termination.

6. Payment on Early Termination

(a) In the event of termination under subsection 5(a) or 5(b), **Early Termination of Agreement** hereof, the City shall pay the Contractor for work performed in accordance with the Agreement prior to the termination date.
(b) In the event of termination under subsection 5(c), **Early Termination of Agreement** hereof, by the Contractor due to a breach by the City, then the City shall pay the Contractor as provided in subsection (a) of this section.
(c) In the event of termination under subsection 5(c), **Early Termination of Agreement** hereof, by the City due to a breach by the Contractor, then the City shall pay the Contractor as provided in subsection (a) of this section, subject to set off of excess costs, as provided for in section 7(a), **Remedies**.
(d) In the event of early termination all of the Contractor's work product will become and remain property of the City.

7. Remedies

(a) In the event of termination under subsection 5(c), **Early Termination of Agreement,** hereof, by the City due to a breach by the Contractor, then the City may complete the work either itself, by agreement with another contractor or by a combination thereof. In the event the cost of completing the work exceeds the remaining unpaid balance of the total compensation provided under this contract, then the Contractor shall pay to the City the amount of the reasonable excess.
(b) The remedies provided to the City under section 5, **Early Termination of Agreement** and section 7, **Remedies** for a breach by the Contractor shall not be exclusive. The City also shall be entitled to any other equitable and legal remedies that are available.
(c) In the event of breach of this Agreement by the City, then the Contractor's remedy shall be limited to termination of the Agreement and receipt of payment as provided in section 5(c), **Early Termination of Agreement** and section 6(b), **Payment on Early Termination** hereof.

8. Subcontracts and Assignment

Contractor 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 subcontractor, the Contractor shall remain obligated for full performance hereunder, and the City shall incur no obligation other than its obligations to the Contractor hereunder. The Contractor agrees that if subcontractors are employed in the performance of this Agreement, the Contractor and its subcontractors are subject to the requirements and sanctions of ORS Chapter 656, Workers' Compensation.

9. Compliance with Applicable Law
In connection with its activities under this Agreement, Contractor shall comply with all applicable federal, state and local laws and regulations including the City's Equal Benefits Ordinance and its administrative rules, all of which are incorporated by this reference. Failure to comply with the Ordinance permits the City to impose sanctions or require remedial actions as stated in Section 13.1 of the administrative rules. Contractor shall complete Exhibit B, Independent Contractor/Workers' Compensation Insurance Questionnaire, which is attached hereto and by this reference made a part hereof.

9a. Indemnity - Claims for Other than Professional Liability
Contractor shall defend, save, and hold harmless the City of Portland, its officers, agents, and employees, from all claims, suits, or actions of whatsoever nature, including intentional acts, resulting from or arising out of the activities of Contractor or its subcontractors, agents or employees under this agreement.

9b. Indemnity - Claims for Professional Liability
Contractor shall defend, save, and hold harmless the City of Portland, its officers, agents, and employees, from all claims, suits, or actions arising out of the professional negligent acts, errors or omissions of Contractor or its subcontractors and sub-consultants, agents or employees in performance of professional services under this agreement.

9c. Indemnity - Standard of Care
If Contractor's services involve engineering or consulting, the standard of care applicable to Contractor's service will be the degree of skill and diligence normally employed by professional engineers or consultants performing the same or similar services at the time such services are performed. Contractor will re-perform any services not meeting this standard without additional compensation.

10. Insurance
Exhibit C is hereby referenced and made a part of this contract.

11. Ownership of Work Product
All work products produced by the Contractor under this contract is the exclusive property of the City. "Work product" shall include but not be limited to research, reports, computer programs, manuals, drawings, recordings, photographs, artwork and any data or information in any form; the Contractor 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 Contractor 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. Contractor shall obtain such interests and execute all documents necessary to fully vest such rights in the City. Contractor 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 Contractor is an architect, the work product is the property of the Contractor-Architect, and by execution of this contract, the Contractor-Architect grants the City an exclusive and irrevocable license to use that work product.

12. Nondiscrimination
Contractor agrees to comply with all applicable requirements of federal and state civil rights and rehabilitation statutes, rules, and regulations. Contractor also shall comply with the Americans With Disabilities Act of 1990 (Pub I. No. 101-336) including Title II of that Act, ORS 659.425, and all regulations and administrative rules established pursuant to those laws.

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 Contractor shall perform such additional work as may be necessary to correct errors in the work required under this contract without undue delays and without additional cost.

17. Governing Law
The provisions of this contract shall be construed in accordance with the provisions of the laws of the State of Oregon. 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 Purchasing Agent 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 License
The Contractor shall obtain a City of Portland business license as required by PCC 7.02 prior to beginning work under this Agreement. The Contractor shall provide a business license number in the space provided on page one of this Agreement. Additionally, the Contractor shall pay all fees or taxes due under the Business License Law and the Multnomah County Business Income Tax (MCC Chapter 12) during the full term of this contract. Failure to be in compliance may result in payments due under this contract to be withheld to satisfy amount due under the Business License Law and the Multnomah County Business Income Tax Law.

20. Prohibited Interest
(a) No City officer or employee during his or her tenure or for one year thereafter shall have any interest, direct or indirect, in this Agreement or the proceeds thereof.
(b) No City officer or employee who participated in the award of this Agreement shall be employed by the Contractor during the period of the Agreement.

21. Payment to Vendors and Subcontractors
The Contractor shall timely pay all suppliers, lessors and contractors providing it services, materials or equipment for carrying out its obligations under this Agreement. The Contractor shall not take or fail to take any action in a manner that causes the City or any materials that the Contractor provides hereunder to be subject to any claim or lien of any person without the City's prior written consent.

Merger Clause
THIS CONTRACT AND ATTACHED EXHIBITS CONSTITUTES THE ENTIRE AGREEMENT BETWEEN THE PARTIES. NO WAIVER, CONSENT, MODIFICATION, OR CHANGE OF TERMS OF THIS CONTRACT SHALL BIND EITHER PARTY UNLESS IN WRITING AND SIGNED BY BOTH PARTIES. SUCH WAIVER, CONSENT, MODIFICATION, OR CHANGE IF MADE, SHALL BE EFFECTIVE ONLY IN SPECIFIC INSTANCES AND FOR THE SPECIFIC PURPOSE GIVEN. THERE ARE NO UNDERSTANDINGS, AGREEMENTS, OR REPRESENTATIONS, ORAL OR WRITTEN, NOT SPECIFIED HEREIN REGARDING THIS CONTRACT. CONTRACTOR, BY THE SIGNATURE OF ITS AUTHORIZED REPRESENTATIVE, HEREBY ACKNOWLEDGES THAT HE OR SHE HAS READ THIS CONTRACT, UNDERSTANDS IT AND AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS.

OPTIONAL PROVISIONS (selected by City Project Manager)

22. Arbitration: /_x_ Not Applicable /___/ Applicable (consult with City Attorney's Office before finalizing as applicable)
(a) Any dispute arising out of or in connection with this Agreement, which is not settled by mutual agreement of the Contractor and the City within sixty (60) days of notification in writing by either party, shall be submitted to an arbitrator mutually agreed upon by the parties. In the event the parties cannot agree on the arbitrator, then the arbitrator shall be appointed by the Presiding Judge (Civil) of the Circuit Court of the State of Oregon for the County of Multnomah. The arbitrator shall be selected within thirty (30) days from the expiration of the sixty (60) day period following notification of the dispute. The arbitration, and any litigation arising out of or in connection with this Agreement, shall be conducted in Portland, Oregon, shall be governed by the laws of the State of Oregon, and shall be as speedy as reasonably possible. The applicable arbitration rules for the Multnomah County courts shall apply unless the parties agree in writing to other rules. The arbitrator shall render a decision within forty-five (45) days of the first meeting with the Contractor and the City. Insofar as the Contractor and the City legally may do so, they agree to be bound by the decision of the arbitrator.
(b) Notwithstanding any dispute under this Agreement, whether before or during arbitration, the Contractor shall continue to perform its work pending resolution of a dispute, and the City shall make payments as required by the Agreement for undisputed portions of work.

23. Progress Reports: /_x_/ Applicable /___/ Not Applicable
The Contractor shall provide monthly progress reports to the Project Manager. If applicable, Exhibit A should list what information the Contractor must include in monthly progress reports.

24. Contractor's Personnel: /_x_/ Applicable /___/ Not Applicable
The Contractor shall assign the following personnel to do the work in the capacities designated: If applicable, list selected personnel in Exhibit A. The Contractor shall not change personnel assignments without the prior written consent of the City.

25. Subcontractors: /_x_/ Applicable /___/ Not Applicable
The Contractor shall assign the following subcontractors to perform work in the capacities designated: If applicable, list selected subcontractors in Exhibit A. The Contractor shall not change subcontractor assignments without the prior written consent of the City.

AGREEMENT FOR PROFESSIONAL, TECHNICAL, OR EXPERT SERVICES
EXHIBIT A

Statement of the Work
and
Payment Schedule

SCOPE OF WORK

The Contractor (MSA) shall provide technical services, develop the necessary construction documentation, and provide construction support services necessary to accomplish the four (4) infrastructure components itemized below. MSA will also work closely with the assigned Portland Water Bureau (PWB) environmental permitting lead to create the necessary permitting documents for this project. The PWB will be responsible for all communications with the permitting agencies and submitting all environmental permit applications.

The project shall include a conceptual design phase, final design phase and construction phase. The first stage of this conceptual design phase will primarily focus on the requirements associated with rebuilding the rock weir. MSA shall participate in a workshop with the PWB to develop consensus on the decision to raise or not raise the rock weir. The decision to raise the weir is in part a function of the level of protection that the PWB desires with respect to plunge pool scour and the additional permitting requirements for this extra protection. The workshop will also be used to develop conceptual design direction for the four (4) components described below.

During the conceptual design phase, MSA shall present all design alternatives to develop a design consensus with the PWB for each of the four (4) components.

During the design portion MSA shall take the recommendations from their conceptual designs and create the contract documents necessary for construction as well as construction cost estimates. MSA will create the necessary permit packages for submittal by PWB. These shall be secured prior to construction bidding. MSA shall continue to assist as required during the bidding of the project.

During the construction phase MSA shall provide technical assistance as requested by PWB.

The objectives and design criteria for each of the four (4) components are outlined in detail below.

1.) <u>Weir Reinforcement and/or Raise</u>

The objectives for the modification to the existing grouted rock weir are to repair the scour hole located on the toe and minimize future erosion and/or failure of the weir itself. The armor and profile of the proposed weir must have sufficient strength to minimize future scouring damage and eliminate the possibility of failure for a single flood event of 500 years. A 500 year flood event is equivalent to a 32,850 cfs flow.

The decision to raise the rock weir has not been made. The final decision to raise the weir is in part a function of the level of protection that the PWB desires with respect to plunge pool scour and the additional permitting requirements for this extra protection. MSA should also analyze the potential impact of the Total Dissolved Gas (TDG) levels associated with raising the weir.

Shallow slope failure rehabilitation along the south shore adjacent to the rock weir shall also be incorporated in the scope of this component.

The PWB does not intend to provide fish passage at this structure.

2.) <u>36-inch Outlet Pipe through Weir</u>

The objective of the installation of a 36-inch outlet pipe through the reinforced rock fill weir is to allow cold water released at Headworks to reach the lower Bull Run River with minimum rise in temperature. The design intent is for water to flow through the stilling basin along a path similar to the original Bull Run River channel. MSA's design concept shall be validated through documentation and calculations. The estimated water detention times should meet those defined in the Dam 2 Plunge Pool Travel Time Estimates memorandum. The PWB will assist in modeling and analysis to confirm the viability of the project to minimize temperature changes through the stilling basin.

3.) Walker Creek Culvert Redevelopment

Walker Creek is a tributary to the Bull Run River and its confluence is just downstream of the rock weir. The creek currently has several existing culverts between the Bull Run River and the large natural water fall approximately 700 feet upstream. The most downstream culvert runs under conduits 2 and 4. All of the current culverts are operating successfully as a means of conveying stream flows from Walker Creek; however, all of the culverts create fish barriers. These culverts do not meet state or federal fish passage criteria.

In regards to the most downstream culvert the PWB prefers a solution that includes volitional fish passage, preferably an open-bottomed or closed-bottom stream crossing structure that would maintain average water depth and velocities suitable for fish passage. MSA should consider all reasonable options for a culvert that meets state and federal fish passage criteria.

One of the most technically critical aspects of the design of the most downstream culvert involves the presence of Conduits No. 2 and 4 along the south side of the access road. The conduits are located above the existing culvert. The fish passage option will need to consider the conduits' locations as permanent. The PWB has no intention of realigning the conduits. In order to maintain the conduit integrity, a robust shoring, excavation, and construction plan will be required to support the conduits during construction of the new fish passage.

All of the upstream culverts between the confluence with the Bull Run river and the natural waterfall 700 feet upstream are to be enhanced to allow fish passage. If existing culvert geometry does not accommodate fish passage criteria, than new "fish friendly" replacement culverts will be designed for construction.

4.) Blow-off Valve Installed on Conduit #3

Conduit No. 3 is exposed on a trestle as it crosses over an unnamed creek. This creek is approximately 500 feet downstream from the rock weir. There is a blow-off on the conduit at the crossing. As part of this project this blow-off will be increased in size to allow flows up to 40 cfs. Using the Larson's Intertie to isolate the section of Conduit No.3 below Headworks, it could then supply untreated water, via the stream to the Bull Run River below the stilling basin during periods of maintenance and/or construction.

MSA should consider thrust restraint, energy dissipation to prevent significant erosion, and pipe support in their design.

The blow-off will be operated manually. Flow control and metering will be via the existing mechanisms from either intake at the Diversion Pool below Dam #2. Chlorination for potable service will follow the PWB's Standard Operating Procedures for conduits that have been out of services or used for raw water delivery to Roslyn Lake.

Use of Conduit No. 3 as the bypass will eliminate the need for an upstream water diversion weir (e.g. coffer dam) possibly simplifying permitting issues and shortening the construction schedule by one year. The criteria to provide flows for fish during maintenance and construction will be met, as are the ability to control and monitor these flows. MSA should consider the environmental impacts to fish habitat for diverting water around the weir by means of Conduit No.3.

WORK REQUIREMENTS\DELIVERABLES

The specific tasks required of MSA during the conceptual design, design, bidding, and construction of the four (4) components is listed below. Preliminary designs and surveys have occurred; however, additional surveying may be required. Documents with these designs are available for review along with a collection of historical reports and documents. This preliminary design work will need to be reviewed by MSA and the PWB before being incorporated into the construction documents.

MSA shall perform the tasks listed below and shall be expected to work closely with designated City personnel to accomplish these goals:

PROJECT MANAGEMENT REQUIREMENTS

MSA shall be responsible for the project management throughout the design. Project management functions are listed below.

1. Develop Project Management Plan: MSA will develop a Project Management plan to identify individual work elements and assigned staff for each work element, and schedule requirements incorporating milestones.
2. Negotiate subcontracts with sub-consultant: MSA will negotiate subcontracts with sub-consultants and manage the efforts of all sub-consultant disciplines. If alternative sub-consultant firms or key personnel are proposed, they shall have equivalent experience to those being replaced and be submitted to the Water Bureau for written approval prior to commencing work on the project.
3. Supervise all members of Project Team including sub-consultants.
4. Develop comprehensive project schedule and budget: An initial project schedule is attached. MSA shall review the schedule and note any proposed changes in the monthly summary reports and when submitting the detailed schedule updates.
5. Develop Project Communication Plan: MSA will work with the Water Bureau to develop a Project Communication plan that will itemize the formats and frequencies of formal communications expected by the Water Bureau (letters, memorandums, phone updates) and will itemize the various deliverables for the project.
6. Prepare monthly project summary reports for distribution to PWB: MSA will prepare monthly progress reports that highlight progress, unresolved issues, actions by the Water Bureau or others needed, and budget expenditures.
7. Prepare quality assurance/quality control (QA/QC) Plan.
8. Attend additional meetings as required (Assume 5 meetings).
9. Prepare meeting minutes for all meetings that occur throughout the life of the project.

A Project Initiation Workshop shall be held that includes key members of MSA's team, the PWB staff and stakeholders. MSA team's project manager will work with the PWB's project manager to develop an agenda for the meeting. It is anticipated that workshop will have the following goals:

a. Establish lines of communication and authority
b. Identify key PWB stakeholders
c. Introduce key MSA Team members to PWB staff
d. Identify known issues and concerns
e. Discuss availability and sources of background information
f. Discuss project expectations and goals
g. Discuss specific PWB project requirements and standards
h. Prepare meeting minutes that include a summary of the workshop decisions.

PROJECT MANAGEMENT DELIVERABLES

All documents listed below shall be provided on a CD in Microsoft Word and PDF format, in addition to noted number of hard copies.

1. Monthly summary reports highlighting work progress during the previous month and listing unresolved outstanding issues, actions by the PWB or others needed and budget expenditures. Two copies of each monthly report should be submitted to the PWB Project Manager. Work progress needs to be broken down by task and should compare percentage complete with percentage of budget spent.
2. One Copy of contract with each sub-consultant.
3. Two copies of project management plan, project schedule and budget, the project communication plan, and the quality control/quality assurance plan.
4. Two copies of minutes for all meetings that occur throughout the project.
5. Two copies of schedule updates shall be provided that occur at the noted project milestones.
    a. Two weeks after the conceptual design phase's first workshop.
    b. Design conceptual draft memorandum submittal.
    c. 50% design review submittal
    d. 90% design review submittal
    e. 100% design review submittal (construction schedule)

CONCEPTUAL DESIGN WORK REQUIREMENTS

The first stage of the conceptual design phase will focus primarily on determining the requirements for upgrading the rock weir. The PWB's environmental permitting lead shall work with the MSA team to determine the permitting requirements needed for rebuilding and/or raising the rock weir. MSA shall facilitate a workshop with the PWB to develop consensus on the decision to raise or not raise the rock weir along with a compiling a list of design alternatives for the (4) components. The final decision to raise the weir is in part a function of the level of protection that the PWB desires with respect to plunge pool scour and the additional permitting requirements and environmental impacts for this extra protection.

The second stage of the conceptual design phase will be for MSA to prepare and present conceptual engineering drawings and construction cost estimates for all alternatives for all four components. MSA is to present these documents to the PWB at a 4-hour workshop and through the draft conceptual design report. This report will be sent to the PWB a minimum of two business days prior to the 4-hour workshop. Preliminary engineering designs have already been accomplished by URS Corporation, dated April 2005 on the three (3) of the four (4) components requiring design by MSA. There are no preliminary designs of the blow off valve by URS Corporation. This preliminary design work will need to be closely reviewed by MSA and pros and cons of each design shall be presented in the draft conceptual design report.

The following is a list of potential design alternatives that should be examined for each component. This list in not intended to be an exhaustive list, but rather a minimum set of alternatives that MSA is to present to the PWB.

a.) Weir Reinforcement and/or Raise

- Refer to preliminary design produced by URS Corporation in their Bull Run Dam No. 2 Stilling Basin Rehabilitation and Improvements Preliminary Engineering Report, dated April 2005.
- The weir crest designed in a way that would have the upstream pool only experiencing the raised water level effect under such 1 in 500 year hydrological/hydraulic circumstance. This would be accomplished with an "open-saw-tooth" style weir top design that would incorporate notches to allow lesser magnitude storm events to pass over/through the weir without raising the upstream pool.
- A conventional notched weir configuration.
- Utilization of concrete reinforced rip rap and/or large partially exposed boulders to create the visual effect of a sloped stone masonry surface.
- The MSA team will consider all of the permitting implications of potential design alternatives.

b.) 36-Inch Outlet Pipe through Weir

- Refer to preliminary design produced by URS Corporation in their Bull Run Dam No. 2 Stilling Basin Rehabilitation and Improvements Preliminary Engineering Report, dated April 2005.
- A straight through pipe configuration.
- At the downstream pipe end a drop that allows for downstream fish passage during low flow conditions, but prohibits, or discourages upstream fish migration.
- Screening the outlet pipe.

c.) Flow Routing & Temperature Management through the Stilling Basin

- Reconstruction of the upstream river channel to replicate historical flow patterns by the use of man made and/or natural materials.

- Annual minor reconstruction of the upstream river channel to direct the majority of the summer base blows directly through the stilling basin.

d.) Walker Creek Culvert Redevelopment

- Refer to preliminary design produced by URS Corporation in their Bull Run Dam No. 2 Stilling Basin Rehabilitation and Improvements Preliminary Engineering Report, dated April 2005.
- Half pipe with reinforced concrete footing.
- Full shaped culvert pipe partially filled with river rock in combination with downstream splash/jumping pools.
- Splash jumping pools with large boulders and shaping with shotcrete.
- Mini weirs inside culvert to retain natural gravels and create mini jumping pools through the culvert.
- Evaluation and potential replacement of two existing culverts upstream from the mouth of Walker Creek, to meet state and federal fish passage criteria.
- Once existing elevations, grades and geometric constraints have been confirmed with updated surveying, MSA with the assistance of their team fishery expert, Steve Johnson (SWCA) should establish all viable design concepts in addition to the ones mentioned

Some specific tasks during the conceptual design phase include the following:

1. Conduct site visits with the Constructability Review Contractor and PWB design and construction sections to obtain early input on construction alternatives. This early input will facilitate identification and selection of more realistic, cost-effective alternatives. This site visit should occur prior to 2nd conceptual design workshop.
2. Provide draft conceptual design report a minimum two days prior to 2nd conceptual design workshop. This report should contain typed descriptions of all alternatives for all components, as well as drawings, and cost estimates.
3. Provide a permitting summary memorandum that contains timelines and activities necessary to obtain the permits and easements. The summary will describe the pros and cons of all design alternatives related to the potential environmental effects and permitting needs.
4. Write design consensus report after obtaining PWB feedback regarding presentation of the 25% plans of major design concepts.

CONCEPTUAL DESIGN DELIVERABLES

All documents listed below shall be provided on a CD in Microsoft Word and PDF format, in addition to noted number of hard copies.

1. Ten (10) copies of draft conceptual design report. This report shall contain the following information for each alternative of each component:
    a. Provide constructability issues and construction cost estimates for each alternative.
    b. Provide risks and benefits for each alternative
    c. Provide drawings and narrative for all alternatives.
    d. List any outstanding issues.
2. Ten (10) copies of a permitting summary memorandum.
3. Ten (10) copies of the design consensus report.

FINAL DESIGN WORK REQUIREMENTS

From the conceptual design documents, MSA will prepare or acquire the documents necessary for construction, such as permits, bidding documents, plans, special specifications, calculations, and construction estimates. The construction documents shall be prepared in a manner suitable to meet the City of Portland Purchasing requirements. The final design process shall cover the steps noted below.

A. Design Review

50% review – MSA will submit 50% complete design submittals as well as the environmental permit applications and supporting information as defined in the final design deliverables section. The PWB requires a minimum of three (3) weeks to review, after which MSA will hold a review meeting with Water Bureau stakeholders. All major design decisions must be finalized at this time.

90% review – MSA will submit 90% complete design submittals as defined in the final design deliverables section. The PWB will require a minimum of three (3) weeks for its final review

100% review – MSA will submit an unsigned set of 100% complete contract documents as defined in the final design deliverables. The Bureau will review these prints to assure that 90% revisions have been incorporated. When the PWB has approved the contract documents, MSA will incorporate any revisions and provide a complete signed set of documents unbound.

B. Construction Contractor Constructability Review

At 50% design the construction documents are to be reviewed by an independent contractor with experience in construction of large diameter pipe and reinforced grouted rock construction. The contractor shall review the drawings for constructability issues and economics. A constructability technical memorandum with recommendation on project revisions and constructability issues shall be prepared and provided to the City.

FINAL DESIGN DELIVERABLES

All construction documents shall be provided on a CD in Microsoft Word and PDF format with the drawing files in Micro station or other format that conforms to the PWB CAD standard in addition to the noted number of hard copies. The documentation supplied by the PWB, such as Section 01000, shall be incorporated into MSA's signed construction documentation.

1. Ten (10) copies of 50% complete design submittals. This package shall include full-size (22" X 34") drawings, specification outlines, calculations, schedule updates, and an Engineer's narrative detailing progress, design assumptions, design criteria, unresolved issues, and a list of the next steps. Also include ten (10) copies of ½-size drawings (11" X 17" black line). Electronic copies of the drawings and specifications may be requested.

2. Ten (10) copies of 90% complete design submittals. This package shall include the revised and improved drawings, specifications, schedule updates, and calculations made from the 50% complete submittals. These submittals shall be ready for final signature with only minor revisions anticipated. Include the Engineer's narrative describing the progress, design assumptions, QA/QC processes, design calculations, and design criteria used to make the revisions as well as construction estimates, and a list of any unresolved issues. Drawings shall be full-size (22" X 34") with ten (10) copies of ½-size drawings (11" X 17" black line)

3. At the 50% complete design submittal, five (5) copies of permit application and supporting information with updated timelines and activities to obtain permits.

4. Ten (10) copies of unsigned 100% complete final contract documents. Drawings shall be full-size (22" X 34") with ten (10) copies of ½-size drawings (11" X 17" black line).

5. One (1) copy of 100% completed final contract documents. This package shall include one set of sealed, signed, final construction documents. Technical specifications shall be on bond paper. Final review copies of the drawings shall be provided (full scale) prior to printing on Mylar. Once these drawings have final approval a set of full and ½-size drawings on Mylar shall be delivered.

6. After each review, MSA shall submit a table of review comments and course of action taken on each item and whether reviewer agreed with resolution.

7. At 100% design MSA will supply electronic copy of all design files, including memos, calculations, plans and specs, estimates, etc. for the project.

PERMITTING AND EASEMENTS WORK REQUIREMENTS

A. Permits

The PWB will be responsible for all communications with the permitting agencies and submitting all environmental permit applications. These permits could include, but are not limited to, Oregon Department of State Lands (ODSL) removal-fill or general authorization, United States Corp of Engineers (USCOE) Section 404, Endangered Species Act (ESA) Consultation, Department of Environmental Quality (DEQ) 401 certification, Oregon Department of Fish and Wildlife (ODFW) fish passage rules and exemptions, Department of Environmental Quality (DEQ) NPDES 1200-C Permit, Turbidity Management Plan for DEQ, National Marine Fisheries Service (NMFS) Biological Opinion, 4d exception for fish salvage, and Clackamas County land use permits for site and soil stockpile areas. MSA will be responsible for advising the PWB about needed permits and preparing all applications and supporting documentation for PWB submittal prior to bidding for a construction contractor.

The environmental permitting tasks may decrease if multiple PWB projects are channeled through the permitting process as one project.

Assistance with Dam Safety approvals and FEMA map updating will be provided by MSA, if required; however, it is beyond the scope of this contract.

PWB does not anticipate needing an easement for this project because all activities would be on City land. However, MSA should verify that assumption as part of the permitting review.

Building permits, such as electrical and plumbing permits, will be the sole responsibility of MSA. This includes all communications and required submitting procedures.

At the 90% submittal, the City shall apply for any environmental permits that will be required for the project. MSA shall provide all information including calculations, site plans, landscape plans and other drawings as requested in this process.

At the 100% submittal, MSA shall apply for any Building Permits that may be required. MSA shall provide all information, including any calculations requested during the application process, and shall incorporate any changes required under the permit into plans and specifications prior to bidding or by addendum.

PERMITTING DELIVERABLES

All documents listed below shall be provided on a CD in Microsoft Word and PDF format, in addition to noted number of hard copies.

1. Five (5) copies of any required environmental pre-bid permit applications and supporting documentation.
2. Five (5) copies of approved county land use permits, if necessary.
3. Five (5) copies of approved building permits.

ASSISTANCE DURING CONSTRUCTION WORK REQUIREMENTS

MSA shall designate one senior level engineer who is committed to this project to assist the PWB during project construction. Day-to-day project inspection, contract administration, payments, and the majority of construction engineering will be handled by the PWB. MSA shall perform the following design services during construction:

1. Write Addenda that may be required during the construction bidding phase.
2. Attend pre-bid meeting.
3. Attend the pre-construction conference(s)
4. Consult with the PWB and act as its representative as provided in the general conditions of the contract documents.

3. Make periodic visits to the site when requested by the PWB to observe, as an experienced and qualified design professional, the progress and quality of the various aspects of the contractor's work. Based on information obtained during such visits, determine if such work is proceeding, in general, in accordance with the contract documents. Five (5) site visits are estimated.
4. Provide written site visit reports to keep the PWB informed on the progress of the work.
5. Assist PWB with necessary interpretations and clarifications of the contract documents such as Requests for Information, field orders, or change orders. The PWB will prepare field orders and change orders with assistance from MSA.
6. Act as the Engineer of Record and review shop drawings and other data submitted by the contractor through the City.
7. Conduct an inspection and assist the PWB in determining if the work is substantially complete. MSA shall be present at the final inspection to determine if the completed work is acceptable for final payment to the contractor. Give written notice to the PWB that the work is acceptable.
8. MSA shall be available as necessary for special consultation to resolve conflicts and provide interpretations.

WORK REQUIREMENTS OF THE CITY OF PORTLAND

The Portland Water Bureau has assigned a project manager who will oversee MSA's work and provide support as needed. The PWB has also assigned an environmental permitting task manager for this project.

Specific duties the City will perform and items it will provide during the life of the project are listed below:

CONCEPTUAL DESIGN

1. Written comments within fifteen (15) working days after workshops.

DESIGN

1. One copy of the City of Portland Standard Construction Specifications for reference during the development of the special specification.
2. One copy of the City of Portland Standard Bidding Instructions.
3. Electronic copy of Section 00800 - Supplementary Specifications and Section 01000 – General Requirements.
4. Two Microstation files containing standard construction drawings, legend (with symbols) and general notes in a DXF format. 3D seed file for Micro station to be used for survey base map.
5. City of Portland, Purchasing required paperwork: notice to bidders, notice to contractors, non-collusion affidavit, bid bond, proposal, bid forms, sample agreement with minority subcontractor, work force training and hiring program and MBE/WBE/ESB participation requirement information, prevailing wage rates. This shall be included and bound with the completed specifications.
6. Written comments within fifteen (15) working days of receipt of 50% design submittal.
7. Written comments within fifteen (15) working days of receipt of 90% design submittal.
8. Written comments within fifteen (15) working days of receipt of 100% design submittal.

PERMITTING AND EASEMENTS

The City's PWB will review permit applications and will provide written comments within fifteen (15) working days after receipt of each item. The PWB will be responsible for all communications with permitting agencies and submitting all environmental permit applications and paying permitting fees.

CONTRACTOR PERSONNEL

The following firms and key personnel have been identified as the team to complete the work. Changes or substitutions to the list below shall be with firms or people of similar experience and capabilities to those being replaced. All changes shall be submitted in writing to the Water Bureau for approval prior to the firm or personnel beginning work on the project.

Firm	Role/Responsibility
Murray, Smith & Associates, Inc.	Overall Program and Project Manager/General Civil Engineering
MWH Americas, Inc.	Weir Design and Technical Advice (Scour/Temperature/TDG)

Shannon & Wilson, Inc.	Geotechnical Engineering (Weir Element)
Pacific Geotechnical, LLC	Geotechnical Engineering (Walker Creek Culvert, Blow-off & Landslides)
Sigma Engineering, Inc.	Structural Engineering (Walker Creek Culvert)
NLV Services, Inc.	Surveying
Ellett Construction Co.	Constructability Review
Crocket Environmental	Permitting Services
SWCA Environmental Consultants	Biological Assessments/ Environmental Assessments/ Wetland Delineations/ Fishery Consultations

Firm	Key Personnel	Title
Murray, Smith &	David Leibbrandt, P.E.	Project Manager
Associates, Inc.	Phil Smith, P.E.	Principal-in-Charge
	Jim Helton, P.E.	Project Engineer
	Bill Hollings, P.E.	Assistant Project Engineer
	Tom Boland, P.E.	Design Engineer
	Bill Evonuk, P.E.	Design Engineer
	Sandrine Ganry	Staff Engineer
MWH Americas, Inc.	Dennis Dorratcague, P.E.	Design Engineer
	Mark Hijazi, P.E.	Structural Engineer
Shannon & Wilson, Inc.	Frank Fujitani, P.E.	Lead Geotechnical Expert
	Gary Peterson, C.E.G.	Engineering Geologist
Pacific Geotechnical, LLC	Timothy Blackwood, P.E.	Geotechnical Engineer
Sigma Engineering, Inc.	Mark Nelson, P.E.	Structural Engineer
NLV Services, Inc.	Neal Vescogni, P.E., P.L.S.	Surveyor
Ellett Construction Co.	Vance Ellett	Construction Contractor
Crocket Environmental	Becky Crockett	Permitting Specialist
SWCA	Steve Johnson	Biol./Enviro. Assessment
	Mirth Walker	Biol./Enviro. Assessment

The City will enforce all diversity in workforce and Minority, Women and Emerging Small Business (M/W/ESB) subcontracting commitments submitted by the Contractor in its Proposal.

COMPENSATION

A. The City shall pay the Contractor for work performed under this Agreement after the effective date as set out below. The payment shall be full compensation for work performed, for services rendered and delivered, and for all labor, materials, supplies, equipment and incidentals necessary to perform the work and services and approved for payment by the City.

B. The City shall pay the Contractor on a time and materials basis in accordance with the following conditions:

Direct labor will be invoiced as Salary Times Multiplier using a 3.1 multiplier. This multiplier includes overhead and profit. This multiplier includes fringe benefits, payroll bonuses, autos and other perks, telecommunications, facsimile services, overhead expenses including but not limited to local and long distance telephone, parking, delivery/courier, general business and professional liability insurance, advertising costs, postage, leasing of office equipment, information technology (including computer time and CAD services and other related highly specialized equipment), all other direct costs not identified as reimbursable, other indirect costs (support staff such as legal, accounting, officers, computer) and profits..

All Reimbursable Direct Costs, with the exception of Sub-consultant services, will be billed with no-mark-up. Reimbursable Direct Costs include travel and document reproduction costs requiring outsourcing (e.g. drawings and specifications). Sub-consultant services will be invoiced at cost plus 5% mark-up.

C. Compensation for this contract shall not exceed $397,868 in total unless specifically authorized through amendment to this Agreement. City shall pay Contractor for the actual amount of work performed for each task as identified in the attached spreadsheet labeled Task Compensation Limits for Bull Run Dam No. 2

Stilling Basin. MSA shall not exceed the individual task cost without prior written approval of the Portland Water Bureau (PWB) project manager.

D. Compensation for additional services or changes in scope of work in excess of the estimates contained in the attached spreadsheet must be approved in advance by the City and will be separately negotiated and authorized through amendment to this Agreement. Should an amendment exceed 25% of the total contract amount an Ordinance shall be required and must be approved by City Council in order to proceed.

PAYMENT SCHEDULING AND REPORTING

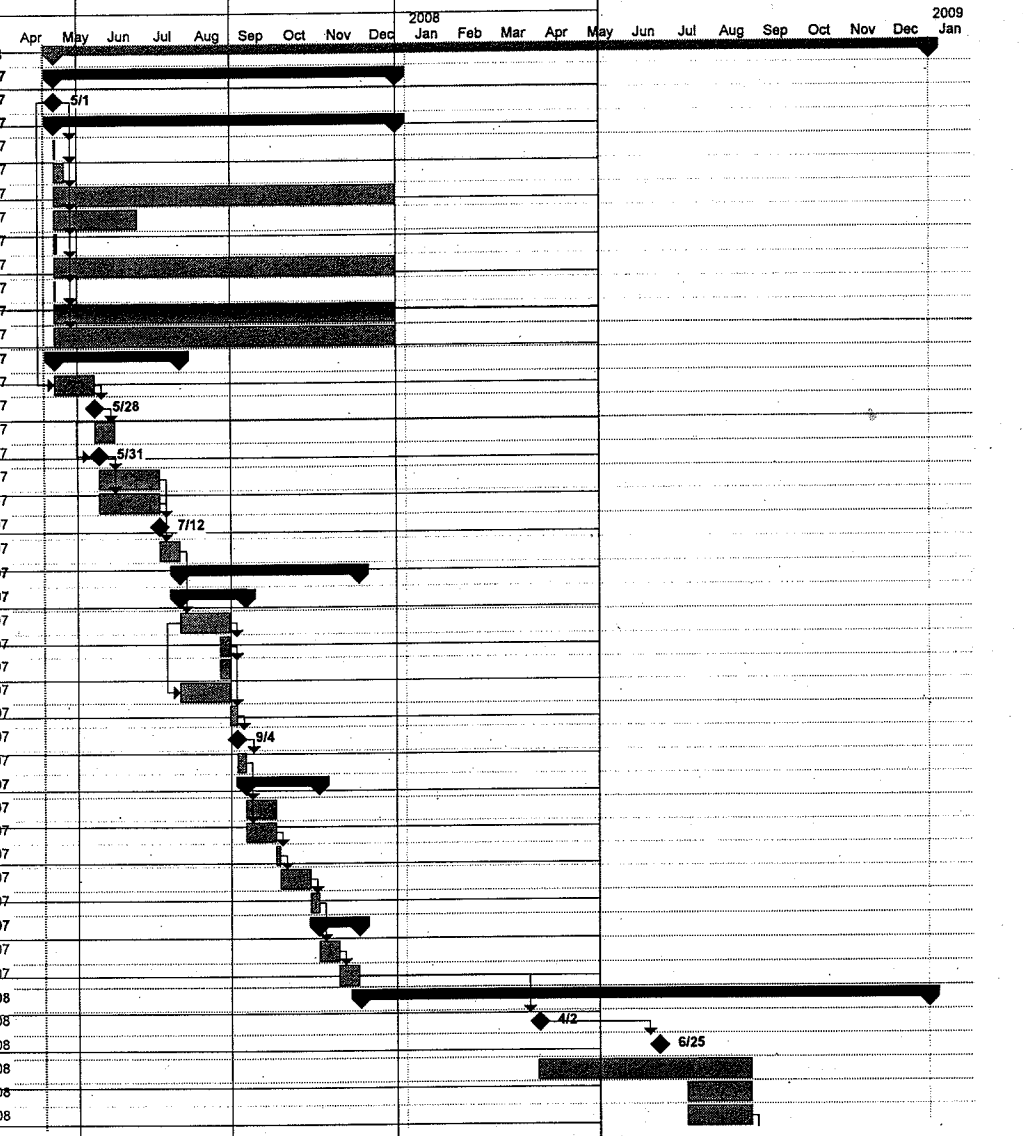
A. On or before the 15th day of each month, the Contractor shall submit to the City's Project Manager for approval, an invoice for work performed by the Contractor during the preceding month.

B. The invoice shall set out the number of labor hours per person worked, sub-consultant costs with mark-up, and other expenses directly attributable to the project. These costs shall be presented by task with a separate written description of the efforts completed under each task for the preceding month. A separate section on anticipated work to be completed in the upcoming month will be included with each monthly report.

C. Within 30 days after receipt of the invoice, provided the City's Project Manager has certified and approved payment, as invoiced by Contractor, the City shall pay the amount certified to the Contractor.

Bull Run Dam No. 2 Stilling Basin
April 27, 2007

ID	Task Name	Duration	Start	Finish
0	**Bull Run Dam No. 2 Stilling Basin**	**437 days**	**Tue 5/1/07**	**Wed 12/31/08**
1	**Phase AA. Projcect Kickoff and Project Management**	**170 days**	**Tue 5/1/07**	**Mon 12/24/07**
2	**Project Initiation Workshop**	**0 days**	**Tue 5/1/07**	**Tue 5/1/07**
11	**Basic Project Management**	**170 days**	**Tue 5/1/07**	**Mon 12/24/07**
12	a. Develop Project Management Plan	1 day	Tue 5/1/07	Tue 5/1/07
13	b. Negotiate subonctracts with sub-consultant	5 days	Tue 5/1/07	Mon 5/7/07
14	c. supervise all members of project team, including subconsultants	165 days	Tue 5/1/07	Mon 12/24/07
15	d. Develop comprehensive project schedule and and budget	42 days	Tue 5/1/07	Wed 6/27/07
16	e. Develop Project Communication Plan	2 days	Tue 5/1/07	Wed 5/2/07
17	f. Prepare monthly project summary reports for distribution to PWB	170 days	Tue 5/1/07	Mon 12/24/07
18	g. Prepare quality assurance/quality control (QA/QC) Plan	1 day	Tue 5/1/07	Tue 5/1/07
19	h. Prepare meeting minutes for all meetings/workshops	170 days	Tue 5/1/07	Mon 12/24/07
20	i. Attend additional meetings as required (assume 5 meetings)	170 days	Tue 5/1/07	Mon 12/24/07
21	**Phase A. Conceptual Design**	**63 days**	**Tue 5/1/07**	**Thu 7/26/07**
22	Permitting invistigation and deisgn alternative formulation	20 days	Tue 5/1/07	Mon 5/28/07
23	Workshop: to raise or not raise/possible alternative	0 days	Mon 5/28/07	Mon 5/28/07
24	Create Updated Project Schedule	10 days	Tue 5/29/07	Mon 6/11/07
25	Site visit with constructability review contractor	0 days	Thu 5/31/07	Thu 5/31/07
26	Create Draft Conceptural Design Report	30 days	Fri 6/1/07	Thu 7/12/07
27	Develop Permitting Summary Memorandum	30 days	Fri 6/1/07	Thu 7/12/07
28	Workshop: Present design alternatives/drawings/costs etc..	0 days	Thu 7/12/07	Thu 7/12/07
29	Write Design Concensus Report	10 days	Fri 7/13/07	Thu 7/26/07
30	**Phase B. Final Design**	**89 days**	**Fri 7/27/07**	**Wed 11/28/07**
31	**50% Design and Review**	**32 days**	**Fri 7/27/07**	**Mon 9/10/07**
32	develop 50% drawings, calculations, specifications, cost estimates, narrative	25 days	Fri 7/27/07	Thu 8/30/07
33	Construction contractor to reivew construction documents	5 days	Fri 8/24/07	Thu 8/30/07
34	Contractor to generate Constructability Technical Memorandum	5 days	Fri 8/24/07	Thu 8/30/07
35	Devlop permitting applications	25 days	Fri 7/27/07	Thu 8/30/07
36	Schedule updates	3 days	Fri 8/31/07	Tue 9/4/07
37	Review meeting	0 days	Tue 9/4/07	Tue 9/4/07
38	Create Table of Review Comments	4 days	Wed 9/5/07	Mon 9/10/07
39	**90% Design and Review**	**37 days**	**Tue 9/11/07**	**Wed 10/31/07**
40	Develop 90 % drawings, calculations, specifications, cost estimates, narrative	15 days	Tue 9/11/07	Mon 10/1/07
41	Complete permitting applications	15 days	Tue 9/11/07	Mon 10/1/07
42	Schedule updates	3 days	Tue 10/2/07	Thu 10/4/07
43	PWB review of 90% documents	15 days	Fri 10/5/07	Thu 10/25/07
44	Create Table of Review Comments	4 days	Fri 10/26/07	Wed 10/31/07
45	**100% Design and Review**	**20 days**	**Thu 11/1/07**	**Wed 11/28/07**
46	Develop 100% contract documents	10 days	Thu 11/1/07	Wed 11/14/07
47	Schedule updates (costruction)	10 days	Thu 11/15/07	Wed 11/28/07
48	**Phase C. Assistance During Construction**	**284 days**	**Fri 11/30/07**	**Wed 12/31/08**
49	Pre-bid meeting	0 days	Wed 4/2/08	Wed 4/2/08
50	Pre-construction conference	0 days	Wed 6/25/08	Wed 6/25/08
51	General Consultation	107 days	Wed 4/2/08	Thu 8/28/08
52	Periodic site visits (5 Total)	33 days	Tue 7/15/08	Thu 8/28/08
53	Site Visit Reports	33 days	Tue 7/15/08	Thu 8/28/08



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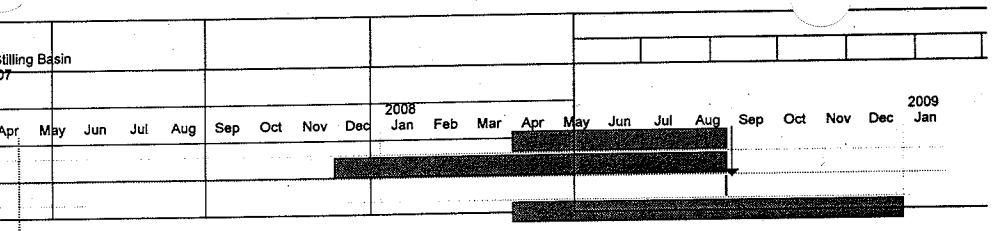
Bull Run Dam No. 2 Stilling Basin
April 27, 2007

ID	Task Name	Duration	Start	Finish
54	~~Interpretations/ Clarifications/Change Orders~~	~~108 days~~	~~Wed 4/2/08~~	~~Fri 8/29/08~~
55	Engineer of Record/ Shop Drawing Review	196 days	Fri 11/30/07	Fri 8/29/08
56	Substantial Completion and Final Inspections (Final Completion 12-31-08)	1 day	Fri 8/29/08	Fri 8/29/08
57	Special Consultations/ Conflict Resolution	196 days	Wed 4/2/08	Wed 12/31/08



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Task Compensation Limits for Bull Run Dam No. 2 Stilling Basin

Task	Totals			
	MSA Labor Hours	MSA Labor	Expenses (Including Subs)	Total
Phase A.1, Project Management				
Task A.1.1 Basic Project Management	138	$20,316	$300	$20,616
Task A.1.2 Project Initiation Workshop	33	$4,751	$800	$5,551
Task A.2 Conceptual Design				
Task A.2.1 Concept Development Workshops	36	$5,446	$5,550	$10,996
Task A.2.2 Concept Development and Analysis	127	$12,694	$12,500	$25,194
Task A.2.3 Constructability Site Visits	12	$2,146	$900	$3,046
Task A.2.4 Summary of Permits and Regulatory Approvals	9	$1,341	$1,500	$2,841
Task A.2.5 Design Consensus Report	30	$4,096	$0	$4,096
Phase B, Design (See Note 1)	0	$0	$8,400	$8,400
Task B.1 Construction Documents				
a. Final Design Calculations	62	$6,559	$18,275	$24,834
b. 50% Drawings/Specifications/Estimates/ Eng. Narrative (NOTE 2)	157	$16,170	$56,400	$72,570
c. 90% Drawings/Specifications/Estimates/Eng. Narrative	215	$21,354	$45,450	$66,804
d. 100% Drawings/Specifications/Estimates	75	$8,036	$21,825	$29,861
e. Constructability Technical Memorandum	6	$1,073	$3,000	$4,073
f. QA/QC Process Technical Memorandum	30	$4,650	$0	$4,650
g. Review Comment Documentation	70	$7,856	$0	$7,856
Task B.2 Design Review				
a. Conceptual Design	21	$2,768	$2,500	$5,268
b. Design Concept Confirmation (25%)	21	$2,768	$2,500	$5,268
c. 50% review	21	$2,768	$2,500	$5,268
d. 90% review	21	$2,768	$2,500	$5,268
e. 100% review	21	$2,768	$2,500	$5,268
Task B.3 Constructability Review	3	$537	$4,134	$4,671
Phase C, Permitting and Easements				
Task C.1 Permits				
a. ODSL Removal/Fill or General Authorization	33	$3,702	$6,300	$10,002
b. USCOE Section 404	33	$3,702	$6,300	$10,002
c. ODEQ Water Quality Certification	9	$984	$6,075	$7,059
d. ODFW Fish Passage Approval	9	$984	$6,075	$7,059
e. Clackamas County Land Use Permit	9	$984	$6,075	$7,059
Phase D, Assistance During Construction				
Task D.1 Pre-Construction Conference	18	$2,236	$0	$2,236
Task D.2 General Consultations	27	$3,041	$0	$3,041
Task D.3 Periodic Site Visits	48	$4,849	$300	$5,149
Task D.4 Site Visit Reports	54	$5,497	$0	$5,497
Task D.5 Interpretations/Clarifications/Change Order	24	$1,923	$0	$1,923
Task D.6 Engineer of Record/Shop Drawing Review	78	$7,735	$2,000	$9,735
Task D.7 Substantial Completion and Final Inspection	42	$4,695	$0	$4,695
Task D.8 Special Consultations/Conflict Resolution	15	$2,012	$0	$2,012
Total All Tasks		$173,209	$224,659	**$397,868**

Notes:

1. Line item includes $8,400 for additional optional survey to be performbed as required for areas with no existing survey data.
2. Line item includes costs for Geotechnical investigations to be performed by subconultants.

MONTHLY SUBCONSULTANT PAYMENT AND UTILIZATION REPORT

1. Solicitation No. _____ 2. Contract No. _____ 3. Prime Consultant _____

4. Contract Amount _____ 5. Report Dates: Beginning __/__/__ Ending Dates __/__/__ 6. Project Name _____

7. Progress Report No. _____

8 ALL SUBCONSULTANT NAMES APPEARING ON ORIGINAL FIRST-TIER SUBCONSULTANT DISCLOSURE FORM	9 ORIGINAL SUBCONSULTANT AMOUNT ($)	10 AMENDED SUBCONSULTANT AMOUNT ($)	11 PAYMENT AMOUNTS AND DATES MADE, FOR MONTH ($)	12 TOTAL PAYMENTS TO DATE ($)

SUBCONSULTANTS ADDED AFTER PROJECT AWARD (Must be EEO Certified with the City of Portland)*

13 SUBCONSULTANT NAME (LIST ANY SUBCONSULTANTS NOT LISTED ABOVE)	14 NATURE OF WORK	15 STATUS MBE, WBE OR ESB	16 SUBCONSULTANT AMOUNT	17 PAYMENT AMOUNTS AND DATES MADE, FOR MONTH ($)	18 TOTAL PAYMENTS TO DATE ($)

*CHANGES TO CONTRACT: Before replacing, substituting, or adding any subconsultant, please contact the **PTE Compliance Specialist**

Please note: Explanations and additional instructions for completing this report are on the reverse side.

IT IS HEREBY CERTIFIED THAT THE ABOVE LISTED FIRMS HAVE BEEN UTILIZED BY OUR FIRM IN THE AMOUNTS REPRESENTED ABOVE AND THAT THE INFORMATION CONTAINED HEREIN IS COMPLETE AND ACCURATE.

_____ _____

Authorized Signature of Consultant Representative Date

Subm th invoice by the 15th of the month to the City's Project Manager AND City of Portland, Bureau of Purchases, Contract Compliance Specialist, 1120 SW 5th Avenue, m 750, Portland, OR 97204

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INSTRUCTIONS FOR COMPLETING THE MONTHLY SUBCONSULTANT PAYMENT AND UTILIZATION REPORT

1. **SOLICITATION NUMBER:** Enter City of Portland solicitation number.
2. **CONTRACT NUMBER**: Indicates the contract number assigned by the City Auditor for this project.
3. **PRIME CONSULTANT**: Indicate the name of the prime consultant.
4. **PRIME CONTRACT AMOUNT**: Indicate the total dollar amount of the prime contract.
5. **REPORT DATES**: Indicate the beginning and ending dates corresponding to the progress payment period or use calendar month (i.e. 1/1/02 thru 1/31/02); reports should be sequential and not overlap.
6. **PROJECT NAME**: Indicate the project name as indicated on the contract documents.
7. **PROGRESS REPORT NUMBER**: Enter report No.1 for the first report submitted and sequential numbers for reports submitted thereafter.
8. **ALL SUBCONSULTANT NAMES**: List the names of all subconsultants listed on the original First-Tier Subconsultant Disclosure form as submitted at solicitation due date.
9. **ORIGINAL SUBCONTRACT AMOUNT**: Indicate the dollar amount for each subconsultant at time of award.
10. **AMENDED SUBCONSULTANT AMOUNT**: This amount should be the total dollar value (original subconsultant amount plus any additions or deletions) of the subcontract.
11. **PAYMENT AMOUNTS AND DATES MADE, FOR MONTH**: Please list any payment amounts for the month, and the dates the payments were made.
12. **TOTAL PAYMENTS, TO DATE**: This amount should be the total dollar amount paid-to-date to the subconsultant.

SUBCONSULTANTS ADDED AFTER PROJECT WAS AWARDED

13. **SUBCONSULTANT NAME:** Please list any subconsultants not appearing on original disclosure form.
14. **NATURE OF WORK:** Briefly describe subconsultants work (i.e. CAD drafting, environmental testing, etc.).
15. **STATUS**: Indicate the appropriate M/W/ESB status of each subconsultant listed (i.e. MBE, WBE, ESB). **Note:** Designations should be consistent with how firms were certified by the State at time of contract award. Leave blank for non-certified firms.
16. **SUBCONSULTANT AMOUNT:** Indicate the dollar amount of the subcontract.
17. **PAYMENT AMOUNTS AND DATES MADE, FOR MONTH**: Please list any payment amounts for the month, and the dates the payments were made.
18. **TOTAL PAYMENTS, TO DATE**: This amount should be the total dollar amount paid-to-date to the subconsultant

COMMENTS (Include why any payment amounts made to a subconsultant are less than that requested by the subconsultant).

_____

_____

_____

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EXHIBIT B
INDEPENDENT CONTRACTOR CERTIFICATION STATEMENT

SECTION A

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

Contractor Signature _____ Date 4/27/2007 Entity Murray, Smith & Associ

Philip H. Smith, President

If entity does not have Workers' Compensation Insurance, City Project Manager and Contractor complete the remainder of this form.

SECTION B

ORS 670.600 Independent contractor 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 contractor" 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

SECTION C

Independent contractor certifies he/she meets 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 contractor 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. Contractor check four or more of the following:

_____ A. The labor or services are primarily carried outat 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.

_____ _____

Contractor Signature Date

EXHIBIT C

INSURANCE **(The Project Manager must answer and initial 2, 3, and 4 below)**

During the term of this contract Contractor shall maintain in force at its own expense, each insurance noted below:

1. Workers' Compensation insurance in compliance with ORS 656.017, which requires subject employers to provide Oregon workers' compensation coverage for all their subject workers (contractors with one or more employees, unless exempt under ORS 656.027).

---

2. _X_ Required and attached or Waived by City Attorney :_____

   General Liability insurance with a combined single limit of not less than $1,000,000 per occurrence for Bodily Injury and Property Damage. It shall include contractual liability coverage for the indemnity provided under this contract, and shall provide that City of Portland, and its agents, officers, and employees are Additional Insured but only with respect to the Contractor's services to be provided under this Contract:

3. _X_ Required and attached or Waived by City Attorney : _____

   Automobile Liability insurance with a combined single limit of not less than $1,000,000 per occurrence for Bodily Injury and Property Damage, including coverage for owned, hired, or nonowned vehicles, as applicable:

4. _X_ Required and attached or Waived by City Attorney : _____

   Professional Liability insurance with a combined single limit of not less than $1,000,000 per claim, incident, or occurrence. This is to cover damages caused by error, omission or negligent acts related to the professional services to be provided under this contract. The insurance shall be maintained for three years after substantial completion of the project providing coverage is available and economically feasible. In the event that such coverage is not available or economically feasible, the Contractor shall notify the City immediately.

5. On all types of insurance. There shall be no cancellation, material change, reduction of limits, or intent not to renew the insurance coverage(s) without 30-days written notice from the Contractor or its insurer(s) to the City.

6. Certificates of insurance. As evidence of the insurance coverages required by this contract, the Contractor shall furnish acceptable insurance certificates to the City at the time contractor returns signed contracts. The certificate will specify all of the parties who are Additional Insured and will include the 30-day cancellation clause that provides that the insurance shall not terminate or be cancelled without 30 days written notice first being given to the City Auditor. Insuring companies or entities are subject to City acceptance. If requested, complete policy copies shall be provided to the City. The Contractor shall be financially responsible for all pertinent deductibles, self-insured retentions, and/or self-insurance.

180971

Client#: 19044 MURRASMI

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 04/26/07

PRODUCER
Kibble & Prentice, a USI Company
601 Union St., Suite 1000
Seattle, WA 98101-2925
206 695-3100

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED
Murray, Smith & Associates, Inc.
121 SW Salmon, Suite 900
Portland, OR 97204

INSURERS AFFORDING COVERAGE	NAIC #
INSURER A: U S Specialty Insurance Company	29599
INSURER B:	
INSURER C:	
INSURER D:	
INSURER E:	

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
		GENERAL LIABILITY				EACH OCCURRENCE	$
		COMMERCIAL GENERAL LIABILITY				DAMAGE TO RENTED PREMISES (Ea occurrence)	$
		CLAIMS MADE OCCUR				MED EXP (Any one person)	$
						PERSONAL & ADV INJURY	$
						GENERAL AGGREGATE	$
		GEN'L AGGREGATE LIMIT APPLIES PER: POLICY PRO-JECT LOC				PRODUCTS - COMP/OP AGG	$
		AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT (Ea accident)	$
		ANY AUTO					
		ALL OWNED AUTOS				BODILY INJURY (Per person)	$
		SCHEDULED AUTOS					
		HIRED AUTOS				BODILY INJURY (Per accident)	$
		NON-OWNED AUTOS					
						PROPERTY DAMAGE (Per accident)	$
		GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	$
		ANY AUTO				OTHER THAN AUTO ONLY: EA ACC	$
						AGG	$
		EXCESS/UMBRELLA LIABILITY				EACH OCCURRENCE	$
		OCCUR CLAIMS MADE				AGGREGATE	$
							$
		DEDUCTIBLE					$
		RETENTION $					$
		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY				WC STATU-TORY LIMITS OTH-ER	
		ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?				E.L. EACH ACCIDENT	$
		If yes, describe under SPECIAL PROVISIONS below				E.L. DISEASE - EA EMPLOYEE	$
						E.L. DISEASE - POLICY LIMIT	$
A		OTHER Professional Liability	US061146502	09/04/06	09/04/07	$1,000,000 per claim $1,000,000 annl aggr.	

APPROVED AS TO FORM
Linda Meng
CITY ATTORNEY

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS
RE: Project Name: Bull Run Dam No. 2 Stilling Basin Project

CERTIFICATE HOLDER

City of Portland
Attn: Ms. Anette Dabashinisky
Bureau of Water Works
1120 SW 5th Avenue
Portland, OR 97204

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 45 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE
Marguerite King

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IMPORTANT

If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

DISCLAIMER

The Certificate of Insurance on the reverse side of this form does not constitute a contract between the issuing insurer(s), authorized representative or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter the coverage afforded by the policies listed thereon.

ACORD CERTIFICATE OF LIABILITY INSURANCE

OP ID CH
MURRA-1

DATE (MM/DD/YYYY)
04/27/07

PRODUCER

ACEC/MARSH
701 Market St., Ste. 1100
St. Louis MO 63101
Phone: 800-338-1391 Fax: 888-621-3173

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED

Murray, Smith & Assoc., Inc.
121 S.W. Salmon, Ste. 900
Portland OR 97204

INSURERS AFFORDING COVERAGE		NAIC #
INSURER A:	Hartford Insurance Company	22357
INSURER B:		
INSURER C:		
INSURER D:		
INSURER E:		

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A		GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS MADE X OCCUR X CROSS-LIABILITY X XCU GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC	84SBWCG0421	11/01/06	11/01/07	EACH OCCURRENCE	$ 2,000,000
						DAMAGE TO RENTED PREMISES (Ea occurence)	$ 2,000,000
						MED EXP (Any one person)	$ 10,000
						PERSONAL & ADV INJURY	$ 2,000,000
						GENERAL AGGREGATE	$ 4,000,000
						PRODUCTS - COMP/OP AGG	$ 4,000,000
A		AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS	84UEGLN7493	11/01/06	11/01/07	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
						BODILY INJURY (Per person)	$
						BODILY INJURY (Per accident)	$
						PROPERTY DAMAGE (Per accident)	$
		GARAGE LIABILITY ANY AUTO				AUTO ONLY - EA ACCIDENT	$
						OTHER THAN AUTO ONLY: EA ACC	$
						AGG	$
A		EXCESS/UMBRELLA LIABILITY X OCCUR CLAIMS MADE DEDUCTIBLE X RETENTION $ 10,000	84SBWCG0421	11/01/06	11/01/07	EACH OCCURRENCE	$ 1,000,000
						AGGREGATE	$ 1,000,000
							$
							$
							$
A		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below	84WBGGL4649	11/01/06	11/01/07	X WC STATU-TORY LIMITS OTH-ER	
						E.L. EACH ACCIDENT	$ 500,000
						E.L. DISEASE - EA EMPLOYEE	$ 500,000
						E.L. DISEASE - POLICY LIMIT	$ 500,000
		OTHER					

APPROVED AS TO FORM
Linda Menzies
CITY ATTORNEY

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

PROJECT:BULL RUN DAM #2 STILLING BASIN PROJECT. CITY OF PORTLAND, AND ITS AGENTS, OFFICERS AND EMPLOYEES ARE INCLUDED AS ADDITIONAL INSURED ON ALL POLICIES EXCEPT W/C.

CERTIFICATE HOLDER

CITYOP1

CITY OF PORTLAND
ATTN: ANNETTE DABASHINSKY
1120 S.W. FIFTH
PORTLAND OR 97204

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE
Alfred A. Peterson

RECEIVED
APR 27 2007
MURRAY, SMITH & ASSOCIATES, INC.

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