

CITY OF NEWPORT
TASK ORDER NO. 6
TO PROFESSIONAL SERVICES AGREEMENT
(CONSULTANT OF RECORD)
FOR CIVIL ENGINEERING SERVICES

This TASK ORDER NO. 6 to the Professional Services Agreement dated July 24, 2017, hereinafter called Agreement, between the City of Newport, (CITY), and HHPR (ENGINEER).

A. SCOPE OF SERVICES

CITY agrees to utilize the services of ENGINEER and ENGINEER agrees to perform water tank design and distribution piping engineering services as required by the CITY for the Replacement of Main Tanks Project SET FORTH IN Attachment A.

B. CITY'S RESPONSIBILITIES

CITY to provide ENGINEER with the following information:

- CITY shall assign appropriate reviewers to the project and compile and provide a single consolidated, coordinated, legible, and internally consistent copy of written review comments to Consultant for all draft documents and work products, as appropriate.
- CITY shall provide timely review of submitted products (1-week turnaround), as appropriate.

C. COMPENSATION


1. CITY shall pay ENGINEER according to the fee schedule set forth in the fee schedule in Attachment B.
2. Services provided under this Task Order may be a single project whose fee does not exceed one hundred seventy three thousand eight hundred forty Dollars (\$173,840).

E. MISCELLANEOUS

All terms and conditions of the Agreement apply to this Task Order as though fully set forth therein. In the event of a conflict between this Task Order and the Agreement, the terms of this Task Order shall apply.

The parties do mutually agree to all mutual covenants and agreements contained within this Task Order No. 6.

CITY OF NEWPORT:


Signature: 

Name: Spencer R. Nobel

Title: City Manager

Date: 08-06-19

HHPR:

Signature: 

Name: Chris A. Beatty

Title: Associate Principal

Date: 8-8-19

City of Newport

**Project Understanding and Scope
Tanks and Pipeline Project – Phase 1, Replacement of Main Tanks**

PROJECT UNDERSTANDING

- A. Replacements of Main Tanks:** Phase 1 of the project will replace both existing Main Tanks with two new circular tanks. The main elements of the tank replacements are outlined below.
1. The two new tanks will be glass-fused, bolted-steel tanks anchored to concrete foundations at grade. The two tanks will have the same height, diameter and capacity.
 2. Tanks and coating will be manufactured, constructed, and disinfected according to AWWA standards, the OSSC, and other applicable codes. The project approach will be to require the tank manufacturer to provide the detailed structural designs of the tanks and tank foundations, including calculations stamped by an Oregon P.E.
 3. One new tank will be constructed southeast of the existing tank site, as close to the existing tank site as is practical. The second new tank will be constructed on the location of the existing southeast tank after that existing tank is demolished.
 4. Scope will include tank appurtenances, cathodic protection, yard piping, valves, valve vault(s), yard hydrant w/backflow device, & other elements needed for complete tank replacements.
 5. Yard piping layout will be based on a general concept of the transmission pipeline alignments established at project inception.
 6. Yard piping and site work will include a drain manhole and MH outlet for tank drains and overflows. Location of MH outlet to be determined.
 7. Other site improvements will include new perimeter fence and gates, access driveway branching off existing trail/roadway, slope stabilization, and related earthwork. Project will require excavations, backfilling and regrading.
- B. Instrumentation and Control:**
1. **Phase 1**
 - The replacement tanks will include new level transducers and transmitter. Phase 1 will require connection of onsite low-voltage signal cable from the level transmitter to the WTP.
 - We propose the project include a solar-powered seismic sensor and switch module along with an automated valve actuator to allow the tanks to be isolated in a major seismic event. The sensor, switch, and valve actuator will most likely all be installed in a valve vault.
 2. **Phase 2** will include a local SCADA module mounted outside the tanks and new communications fiber optic cable installed between the tank site and the WTP. The new fiber optic will likely be installed along the alignment of the new transmission pipeline (see Item C).
- C. Phase 2 – Transmission Pipeline Replacement:** Phase 2 will provide a new finished-water pipeline between the WTP and NE 7th Street, with intermediate connections to the Main Tanks. This phase is being deferred pending completion of the Transportation Systems Plan and the establishment of a route for the proposed Harney Street extension. The scope of Phase 2 engineering services, including an alignment study, will be described in a separate proposal.

KEY CONSIDERATIONS FOR PHASE 1 TANK REPLACEMENTS

- A. **Tank Volume.** The volume of each replacement tank will be established prior to preliminary design of Phase 1 as a separate analysis under the miscellaneous services task order.
- B. **Staged Tank Installations.** The design will require staged tank construction to keep two tanks in service throughout construction, except during brief shutdowns for connecting to existing pipe.
1. A new tank located adjacent to an existing tank site will be constructed first while both existing tanks remain in service.
 2. After one new tank is placed into service, one existing tank will be demolished and the second new tank will be constructed.
 3. Once the second replacement tank is in service, the second old tank will be demolished. This last tank demolition will provide space for a future third tank.
- C. **Tank Water Turnover.** The new tanks will be designed with separate inlet and outlet piping for flow-through operation. The inlet pipes will be configured to promote water distribution in each tank.
- D. **Tank Configuration and Water Level.**
1. The overflow elevation and maximum operating elevation in the new tanks will match the existing tanks, unless a minor downward adjustment can be accommodated in the Main Zone.
 2. Tanks Profile and Seismic Constraints.
 - To meet current seismic design requirements, freeboard space needs to be available at the top of the tanks for a sloshing zone. Due to changes in seismic design over the years, the top elevation of the new tank walls will likely need to be higher than the tops of the existing walls.
 - The roof will further raise the profile of the tanks whether a dome roof or a beam/truss supported roof is used. Current AWWA standards require internal roof supports to be above the sloshing zone in the tanks.
 - This proposal has been prepared with the assumption that a higher tank profile will be acceptable at the proposed tank site.
 3. The bottom elevation and diameter of the new tanks may differ from existing conditions depending on site constraints. The bottom elevation of the new tanks may be lower than the existing tank floors, which could allow the diameter to be reduced relative to the existing.
 4. The level controls programmed into the existing SCADA system will continue to be used, unless otherwise determined by the City. The Main Tanks should generally remain close to full during normal operation to maintain the Main Zone HGL.
 5. Yard piping will allow each tank to be isolated for separate draining, cleaning and inspections. Piping will also include a bypass and allow for flow in each direction in the transmission pipeline.
- E. **Piping for Project Phasing.** Yard piping will need to be connected to the existing transmission main during Phase 1 construction and then be connected to the future replacement pipeline in Phase 2.
- F. **Slope Stabilization.** The design will configure the site grading and provide any other features needed to promote stable site conditions, including stable slopes.

PHASE 1 SCOPE OF WORK***Task 1 – Project Management and Administration***

Harper Houf Peterson Righellis Inc. (HHPR) will provide professional consulting services to manage and administer the project. We will assign a project manager to manage, coordinate, and direct the project team, including our subconsultants, for the duration of the work. Key tasks shall be as follows:

- 1.1 Coordinate with City Project Manager and the project team to keep the project on schedule.
- 1.2 Track progress on work completed and coordinate with City Project Manager to revise the project schedule when necessary to reflect changes in the project.
- 1.3 Maintain records of coordination activities and decisions made. Provide copies of records to City Project Manager as requested during the project.
- 1.4 Prepare monthly invoices and summaries of budget status to show the costs to date and percent complete of major tasks.

Task 2 – Document Review and Initial Field Work

HHPR shall provide labor, equipment and materials to complete the following tasks.

- 2.1 Review available drawings and geotechnical data.
- 2.2 Perform a Phase 1 site reconnaissance, collect and review field data, and develop a photo log.
- 2.3 Our subconsultant shall perform a geotechnical investigation of the Phase 1 site and prepare a report. The geotechnical scope will include an initial site reconnaissance and the collection of 5 soil borings. A report will be produced according to AWWA standards to provide information needed for tank and foundation designs, including site-specific seismic design criteria.
- 2.4 Perform a topographic survey of the Phase 1 project area. This survey will be used to prepare the topographic base drawing for the project. Key survey tasks shall include the following:
 - Obtain and review available County records of existing property boundaries in order to calculate the location of the property line along the east side of the project area.
 - Establish survey control network within the Phase 1 area to be used for the survey. Horizontal datum to be local datum plane ground coordinates based on the Oregon Coordinate Reference System – Coast Zone. Vertical datum to be NAVD88 per network GPS ties.
 - Tie available property corners along the east side of the project area to facilitate property line calculation. Calculate property line based upon found survey monuments and coordinates shown on CS12367 and CS20411. The calculated property line will be shown for reference and is subject to change. No deeds/easements will be researched or identified as a part of this survey.
 - Topographic survey information will include utilities disclosed by City-provided locates, existing visible above ground improvements, grades needed to provide 1-foot contours on the base map, and trees 8 inches and larger in diameter at breast height (DBH).
 - Tie provided survey control at the Big Creek Dam Project or WTP relative to the established survey control network for this project.

Deliverables/Meetings:

- *Site visit prior to collecting soil borings/samples.*
- *Geotechnical Report.*
- *Survey Topographic Base Drawing.*

City Responsibilities:

- *Provide any record drawings and any other available record information.*
- *Provide access for geotechnical site reconnaissance and boring collection.*
- *Provide access to Main Tanks site and adjacent area for survey work.*
- *Notify adjoining property owner(s) of scheduled survey work.*
- *Locate City-owned utilities in Phase 1 project area.*
- *Provide existing survey control for the Big Creek Dam Project or WTP site.*

Task 3 – Preliminary Design

HHPR will perform the following tasks.

- 3.1 Prepare initial structural calculations for the tanks and foundation to identify a minimum tank freeboard for the sloshing zone and a probable foundation type.
- 3.2 Develop the preliminary site layout for the tanks and identify the tank bottom elevation.
- 3.3 Identify a proposed tank height and diameter based on project constraints (previously determined tank volume, required overflow elevation, and proposed bottom elevation).
- 3.4 Develop an initial yard piping layout that accommodates both the Phase 1 connections to the existing transmission pipeline and future Phase 2 connections to the replacement pipeline.
- 3.5 Develop initial grading plan and site profiles to evaluate earthwork requirements. Identify site drainage pattern, clearing and earthwork limits, and site access requirements.
- 3.6 Identify requirements for handling and discharging tank overflow and drain water.
- 3.7 Develop design basis for level sensors/transmitter, seismic sensor/controller, and automated shut-off valve. Preliminary design will establish power and communication requirements.
- 3.8 Develop and submit 30% drawings of tank site layout, probable grading limits, yard piping configuration, valve vaults, tank connections and other features.
- 3.9 Prepare and submit a preliminary design memorandum to present our recommendations and describe key design parameters. The memo will document structural design basis, identify materials of construction for project components, and present an initial Phase 1 schedule.
- 3.10 Develop a budget-level estimate of probable construction cost and a preliminary schedule.
- 3.11 Update the memo and 30% drawings in response to review comments.

Deliverables/Meetings:

- *Technical memorandum and 30% plans.*
- *Budget level estimates of probable construction costs.*

City Responsibilities:

- *Provide daily water production data for June through September from 2013 through 2018 to augment monthly production data previously provided.*
- *Review memo and 30% drawings and provide comments/approval.*

Task 4 – Prepare Plans, Specifications, and Estimate of Probable Cost (PS&E)

HHPR shall provide labor, equipment and materials to develop project design and prepare PS&E for a 90% progress review and construction contract bidding.

Design scope shall include the following main subtasks:

- 4.1 Establish detailed structural design criteria for tanks and foundations. Prepare specifications for structural materials. **NOTE:** *This scope is prepared based on the assumption that a pile-supported foundation will not be recommended by the geotechnical report.*
- 4.2 Develop tank detailed design criteria and prepare tank specification according to project requirements and industry standards.
 - Specify tight material and construction requirements while allowing competition among qualified glass-fused tank manufacturers. Include requirement for prebid submittals to prequalify tank manufacturers during bidding phase.
 - Specify detailed material, structural, and OSHA requirements for tank appurtenances, including access openings, ladders, fall protection, overflow, inlet and outlet connections, and any other components.
 - Specify cathodic protection appropriate to the application and the specified tank requirements.
 - Specify special inspections required to comply with current OSSC.
- 4.3 Design development of yard piping systems, valves, valve vaults, tank overflow/drain system, and overflow/drain outlet.
- 4.4 Develop civil site design for proper site drainage, slope stability, access and security.
- 4.5 Design level and seismic instrumentation and power requirements. Determine method for connecting new instrumentation to existing WTP SCADA.
- 4.6 Develop an initial construction schedule and establish limitations for sequencing, component shutdowns, and connections to existing mains at contract limits.

Plan sheets will be developed using HHPR CADD standards. Specifications shall include bidding and contract documents and project-specific special provisions. HHPR shall provide an overall independent QA/QC of the PS&E developed by the project team prior to the 90% and 100% submittals. HHPR shall develop the cost estimate for the entire project included in the plan set.

Deliverables/Meetings:

- *HHPR shall prepare and submit 90% PS&E to the City for review. Deliverables shall include an electronic copy in PDF format and two (2) paper sets. Plan sheet sizes, either full-size (22"x34") or half-size (11"x17"), to be determined by the City.*
- *HHPR shall attend a design progress meeting to review 90% PS&E and prepare meeting notes.*
- *HHPR shall address the City's 90% review comments then prepare and submit 100% stamped and signed PS&E for bidding. Deliverable shall include an electronic copy of the plans and specifications in PDF format and two (2) paper sets. Paper copy of plans shall include both half-size (11"x17") and a full-size (22"x34") sets.*

City Responsibilities:

- *Provide review comments on 90% PS&E.*

Task 5 – Bidding, Contract Administration and Startup Services

HHPR proposes to perform the following tasks.

5.1 HHPR shall provide the following support services during the bid period:

- Review prebid submittals from tank manufacturers.
- Assist City staff in responding to all bidder inquiries by providing necessary materials for a bid addendum.
- Assist City staff, as needed, with tabulating bids and evaluating bids for accuracy and responsiveness.

Deliverables: PDF of all addenda, bidder inquiry log, and bid tabulation.

5.2 HHPR shall provide the following construction services:

- Cooperatively prepare for, attend and assist in the facilitation of a pre-construction conference to define contractor responsibilities, standards, special items of interest to the project, access, communications and scheduling.
- Submittal / Shop Drawing Review – Review shop drawings and submittals provided by the contractor. Maintain a submittal log to track submittal status and ensure timely response.
- Consult with and advise City staff regarding the acceptability of contractor proposed substitute and "or equal" items.
- Attend up to four (4) construction progress meetings with City staff and contractor. Provide agenda and record meeting highlights.
- Consult with and advise City staff on any conflicts with utilities and/or deviations from anticipated field conditions during construction of the project.
- Conduct project walk-thru, prepare final punch list and consult with City on completion of remaining work.

Deliverables: Preconstruction meeting notes, submittal log, progress meeting notes, and punchlist.

5.3 On-site Construction Representation. This scope is prepared with the assumption that the City will take primary responsibility for daily, on-site construction observation thus is not included in HHPR’s scope of work. HHPR will make construction observation periodically when it coincides with progress meeting dates.

Deliverables: Construction observation reports for any inspection by HHPR.

5.4 Record Drawings. HHPR shall track and compile data related to changes in work during the construction phase and prepare a post-construction, record drawing set.

Deliverables: Record drawing plan set in electronic PDF format and one 22"x34" paper set.

COMPENSATION

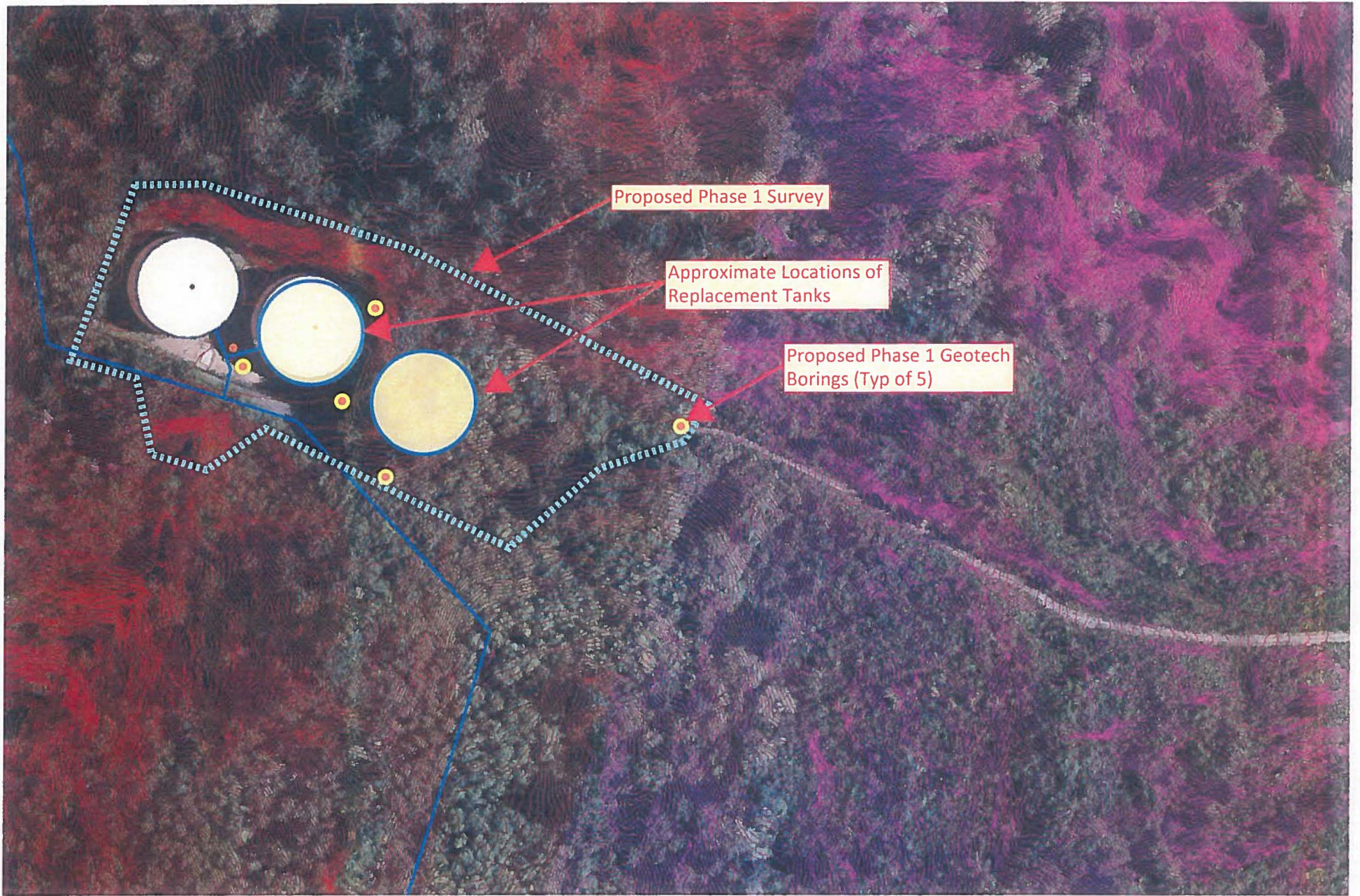
Summarized below is our estimate of the fees required to provide the scope of professional services we describe herein. A breakdown of the estimated staff hours and fees is attached.

<u>Project Task</u>	<u>Estimated Fee</u>
Task 1 Project Management	\$ 3,625
Task 2 Document Review & Initial Field Work	\$ 49,725
Task 3 Preliminary Design Phase	\$ 21,040
Task 4 Develop Design and Prepare PSE	\$ 47,990
Task 5.1 Bidding Services	\$ 7,275
Task 5.2 Construction Engineering Support	\$ 40,240
Task 5.3 Construction Site Representative	Not Included
Task 5. Post-construction Services	\$ 3,945
Total	\$ 173,840

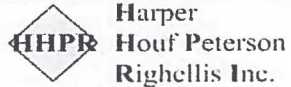
HHPR will complete the above tasks on a time and material basis to an agreed maximum fee limit based on the stated scope. We will not exceed the fee limit without the City’s prior approval.

ANTICIPATED SCHEDULE FOR PROJECT MILESTONES THROUGH DESIGN

Complete Initial Field Work (through survey)	-	6 weeks
Geotech Report & Prelim Design Deliverable	-	6 weeks
Review Comments from City	-	4 weeks
90% Design Deliverable	-	6 weeks
Design Review Comments from City	-	3 weeks
<u>100% Design Level</u>	-	<u>3 weeks</u>
Cumulative (N-T-P to Design Completion)	-	28 weeks



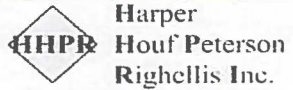
MAIN TANKS SITE



**CITY OF NEWPORT - REPLACEMENT OF MAIN TANKS (PHASE 1 IMPROVEMENTS)
FEE ESTIMATE FOR CONSULTING SERVICES (July 17, 2019)**

ENGINEERS • PLANNERS
AND ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97207
PHONE: 503 551 1131 www.hhp.com FAX: 503 551 1171

Task Description	Breakdown of Estimated Staff Hours							Subtotals	
	Project Mgr/ Engineer	Civil Engineer	Civil Designer	Structural Engineer	Structural Designer	CAD Tech	Clerical	Hours	Charge
1. - Project Management									
Project setup, budget tracking & invoicing	6	0	0	0	0	0	2	8	\$1,270
Interdiscipline coordination	0	4	0	2	0	0	0	6	\$920
Coordination w/City	4	4	0	0	0	0	1	9	\$1,435
Subtotal - Task 1 Hours	10	8	0	2	0	0	3	23	
Subtotal - Task 1 Amounts	\$1,800	\$1,240	\$0	\$300	\$0	\$0	\$285		\$3,625
2a. - Document Reviews & Field Work									
Geotechnical Investigation									\$29,800
Topo survey & base mapping									\$17,700
Subtotal - Task 2 Hours	0	0	0	0	0	0	0	0	\$47,500
Subtotal - Task 2 Amounts	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
2b. - Document Reviews & Field Work									
Review & comment on geotech report	1	0	0	3	0	0	0	4	\$630
Site reconnaissance & Notes (1 visit)	1	8	0	0	0	0	0	9	\$1,420
Subtotal - Task 2 Hours	2	8	0	3	0	0	0	13	
Task 2b Expenses (1 site visit/mtg)									\$175
Subtotal - Task 2 Amounts	\$360	\$1,240	\$0	\$450	\$0	\$0	\$0		\$49,725
3. - Preliminary Design									
Develop prelim site layout & rough grading plan to evaluate earthwork requirements	2	8	16	0	0	0	0	26	\$3,680
Establish tank design dimensions & req'd appurtenances/connections	1	4	0	0	0	0	0	5	\$800
Identify required site piping, valves, vaults & drainage structures.	2	6	12	0	0	0	0	20	\$2,850
Prepare initial structural calcs. Identify tank & foundation design basis	1	0	0	4	8	0	0	13	\$1,820
Identify instrumentation & control requirements	1	6	0	0	0	0	0	7	\$1,110
Predesign memo, 30% plans & cost estimate	1	16	24	2	0	24	2	69	\$8,910
QA/QC design memo	6	1	0	0	0	0	0	7	\$1,235
Revise/resubmit memo to address comments	0	1	2	0	0	2	0	5	\$635
Subtotal - Task 3 Hours	14	42	54	6	8	26	2	152	
Subtotal - Task 3 Amounts	\$2,520	\$6,510	\$7,020	\$900	\$1,040	\$2,860	\$190		\$21,040



ENGINEERS • PLANNERS
AND ARCHITECTS • SURVEYORS
705 SE Spokane Street, Suite 200, Portland, OR 97202
PHONE: 503.441.1131 WWW.HHPRI.COM FAX: 503.221.1111

**CITY OF NEWPORT - REPLACEMENT OF MAIN TANKS (PHASE 1 IMPROVEMENTS)
FEE ESTIMATE FOR CONSULTING SERVICES (July 17, 2019)**

Task Description	Breakdown of Estimated Staff Hours							Subtotals	
	Project Mgr/ Engineer	Civil Engineer	Civil Designer	Structural Engineer	Structural Designer	CAD Tech	Clerical	Hours	Charge
4. - Detailed Plans, Specs & Estimate									
Establish structural design criteria & prepare structural specifications	1	0	0	4	16	0	1	22	\$2,955
Tank & appurtenances - specifications & configurations	2	16	0	0	0	0	1	19	\$2,935
Designs & specifications for yard piping, valves, vaults & accessories	2	12	28	0	0	0	2	44	\$6,050
Site design & specs - grading, drainage, slope stability, access, security, & related work	2	12	42	8	0	0	2	66	\$9,070
Design & specs for instrumentation & control (level & seismic sensors)	2	8	0	0	0	0	0	10	\$1,600
Electrical design of power/communications (subconsultant)									\$2,000
Prepare 90% detailed plans (2 visits)	2	12	24	2	4	48	0	92	\$11,440
Prepare/edit contract docs (Front End)	0	6	0	0	0	0	2	8	\$1,120
Develop prelim construction schedule, sequencing & probable cost estimate	2	6	12	1	4	0	0	25	\$3,520
QA/QC 90% PS&E	16	1	0	0	0	0	0	17	\$3,035
Submit 90% PS&E to City & DWS	0	1	0	0	0	4	4	9	\$975
Address comments & submit 100% PS&E	1	4	4	1	0	8	2	20	\$2,540
Subtotal - Task 4 Hours	30	78	110	16	24	60	14	332	
Task 4 Expenses (3 site visits/mtgs)									\$750
Subtotal - Task 4 Amounts	\$5,400	\$12,090	\$14,300	\$2,400	\$3,120	\$6,600	\$1,330		\$47,990
Estimated Hours	56	136	164	27	32	86	19	520	
Total Design-Phase Services									\$122,380
Hourly Rates	\$180	\$155	\$130	\$150	\$130	\$110	\$95		
	\$10,080	\$21,080	\$21,320	\$4,050	\$4,160	(\$440)	\$1,805		

**



Harper
Houf Peterson
Righellis Inc.

ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
700 5th Street, Suite 200, Portland, OR 97202
PHONE: 503.741.1111 www.hpr.com FAX: 503.741.1111

**CITY OF NEWPORT - NE 54TH ST PS, PRV & WATER MAIN IMPROVEMENTS
FEE ESTIMATE FOR CONSULTING SERVICES (Revised June 24, 2019)**

Task Description	Breakdown of Estimated Staff Hours							Subtotals	
	Project Mgr/ Engineer	Civil Engineer	Civil Designer	Structural Engineer	Structural Designer	CAD Tech	Clerical	Hours	Charge
5.1 - Bid Support									
Review Tank Mfr's Prebid Submittals	4	8	0	1	4	0	0	17	\$2,630
Log & respond to bidder questions	1	4	4	2	0	0	1	12	\$1,715
Text/specs/plans for 1 addendum	1	4	8	1	0	4	1	19	\$2,525
Bid tabulation review	0	2	0	0	0	0	1	3	\$405
Subtotal - Task 5 Hours	6	18	12	4	4	4	3	51	
Subtotal - Task 5 Amounts	\$1,080	\$2,790	\$1,560	\$600	\$520	\$440	\$285		\$7,275
5.2 - Construction Engineering Support									
Preconstruction conference & notes	1	12	12	0	0	0	1	26	\$3,695
Review tech submittals & shop dwgs	4	8	32	4	16	0	0	64	\$8,800
Rvw mfr's O&M information	1	4	8	0	0	0	0	13	\$1,840
Review 12 RFIs & issue responses	4	12	24	2	0	0	2	44	\$6,190
Site visits & progress mtgs (5)	4	48	24	12	4	0	2	94	\$13,790
Walkthroughs (2) & deficiencies list	2	24	0	0	0	0	1	27	\$4,175
Subtotal - Task 6a Hours	16	108	100	18	20	0	6	268	
Task 6a Expenses (8 visits)									\$1,750
Subtotal - Task 6a Amounts	\$2,880	\$16,740	\$13,000	\$2,700	\$2,600	\$0	\$570		\$40,240
5.3 - Construction Observation/Monitoring									
Onsite Representation	(HHPR onsite representative not included in scope - provided by City or others)							0	\$0
Subtotal - Task 6b Hours & Fee								0	\$0
Subtotal - Task 6b Amounts	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
5.4 - Post-construction Services									
Prepare record drawings	1	4	8	1	2	0	0	16	\$2,250
Warranty period review	2	8	0	0	0	0	1	11	\$1,695
Subtotal - Task 6c Hours	3	12	8	1	2	0	1	27	
Subtotal - Task 6c Amounts	\$540	\$1,860	\$1,040	\$150	\$260	\$0	\$95		\$3,945
Estimated Hrs. & Labor/Sub Fees	25	138	120	23	26	4	10	346	
Bidding & Construction-Phase Services									\$51,460
Total Fee Estimate - All Phases									\$173,840
Hourly Rates	\$180	\$155	\$130	\$150	\$130	\$110	\$95		
	\$4,500	\$21,390	\$15,600	\$3,450	\$3,380	\$440	\$950		

** Includes record electrical drawings.