



**REQUEST FOR PROPOSALS #2012-02 (“RFP”)**

**DESIGN/BUILD CONTRACTOR SERVICES**

**for the**

**GEOHERMAL POWER PLANT INFRASTRUCTURE**

**at**

**OREGON INSTITUTE OF TECHNOLOGY**

**April 17, 2012**

**PROPOSALS DUE MAY 15, 2012 – 1:00PM, PT**

Procurement and Contract Services  
20175 NW Amberglen Ct, Ste 100  
Beaverton, OR 97006

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## I. INTRODUCTION

The Oregon State Board of Higher Education, on behalf of the Oregon Institute of Technology (“**OIT**”, “**University**” or the “**Owner**”) is seeking Proposals from a Design/Builder to complete designs and perform construction from firms interested in providing Design/Build services to OIT by submitting a proposal to this Request for Proposals (“**RFP**”) for the Geothermal Power Plant Infrastructure project described below (the “**Project**”).

The attached Exhibit C - Sample Design/Construction Agreement contains contract terms and conditions, as well as the OUS General Conditions applicable to the Work, and will form the basis of the final Design/Construction Agreement.

The BOLI Prevailing Wage Rates applicable to this Project will be identified at the time the initial set of construction specifications are made available and are incorporated into the Design/Builder’s sub-bidding efforts for the Project. Those rates will then apply throughout the Project. See OUS General Conditions, Sections C.1 and C.2, regarding wage rate compliance, payroll certification and BOLI fee requirements.

All Proposers must be registered with the Oregon Construction Contractors Board and have on file with the Construction Contractors Board the required Public Works Bond prior to submitting Proposals. Failure to be registered and have the bond in place will be sufficient cause to reject Proposals as non-responsive.

When selected, the Design/Build firm will be a part of a construction team composed of OIT, and potentially other Project consultants through the completion of the Project. The Design/Builder firm shall be skilled in design, construction, developing schedules, preparing construction estimates, performing value engineering, understanding construction methods and techniques, selecting subcontractors, coordinating construction processes, and be capable of providing assistance to the Owner in procuring long lead equipment. The Design/Builder must be able to communicate the design and construction-related aspects of the Project to all team members throughout the design and construction phases. In addition, the Design/Builder must be familiar with the local labor and sub-contracting market and be capable of working and contracting directly with sub-contractors to generate viable pricing.

The design/construction agreement that may result from this Request for Proposals will cover two phases of work. The first phase of the Project (“Phase I”) will include Schematic Design, Design Development, and Construction Document services to complete the design. Products of Phase I will include technical specifications, drawings and details that meet the needs of the program and are AutoCAD compatible for construction. Phase I will be initiated immediately upon execution of the design/construction agreement and issuance of the Notice to Proceed. Proceeding to the second phase of the Project (“Phase II”) is conditioned upon approval of Phase I.

Phase II of the Project will include completion of subcontractor bidding, construction services, and construction administration. Products of Phase II will include completion of construction in compliance with the Owner-approved design documents, and provision of record documents.

Compensation shall be based upon certain fees and reimbursable costs associated with the design and construction administration phase, as well as a lump sum price for the actual construction services, as set forth in the Sample Design/Construction Agreement attached. Related contracting provisions are contained in **Exhibits A through E**, as detailed in **Part X** of this RFP entitled "Enclosures".

In addition to the Sample Design/Construction Agreement, OIT will use the February 1, 2011 Oregon University System General Conditions for Public Improvement Contracts (the "**OUS General Conditions**") as the basis for the final agreement (attached to this RFP as **Exhibit B**). The OUS General Conditions shall apply to the work of all subcontractors and to the work of the Design/Builder to the extent that they do not conflict with the Design/Construction Agreement.

If the Owner chooses not to continue the Design/Construction Agreement beyond the completion of Design Phase Services, the Design/Builder's compensation shall be limited to the costs of the Design Phase Services, not exceeding the maximum not-to-exceed fee stated in the Agreement.

OIT will monitor the competitive processes used to award subcontracts by the Design/Builder in accordance with **Article 11** of the Sample Design/Construction Agreement. The following minimum requirements shall be used:

- a. The Design/Builder shall solicit sealed bids or quotes from subcontractors in a manner consistent with industry practice, and make award decisions based on cost or, if not cost, on another identified alternative competitive basis as approved in advance by OIT. When there are single fabricators of materials or special packaging requirements for subcontractor work other than low price, advance approval of the alternative selection criteria by OIT is required.
- b. The Design/Builder shall use its best efforts to obtain at least three bids or quotes for the particular work to be subcontracted. OIT may make exceptions to this practice in advance of the procurement.
- c. The solicitation of subcontractors shall be made pursuant to **Article 10** in the Sample Design/Construction Agreement.

### **IMPORTANT NOTICE**

It will be the responsibility of potential proposers to refer daily to the OUS Procurement Gateway website (<https://secure.ous.edu/bid>) to check for any available addenda, response to clarifying questions, cancellations or other information pertaining to this Request for Proposals ("RFP").

**Issuing Office:** The Facilities Services Office is the Issuing Office and is the sole point of contact for clarifications regarding technical specifications in this RFP. The Purchasing and Contract Services Office is the sole point of contact regarding the RFP process. All correspondence pertaining to these two matters should be appropriately addressed to the contact persons below:

**Content and Technical Specifications:**

David Ebsen, Dir. of Facilities Services  
Telephone (541) 885-1600

Mailing Address: 3201 Campus Drive  
Klamath Falls, OR 97601

Email: David.Ebsen@oit.edu

**RFP Process Questions:**

George Marlton, Dir. of Purchasing and Contract Services  
Telephone (541) 885-1225

Mailing Address: Purchasing and Contract Services  
20175 NW AmberGlen Ct., Ste. 100  
Beaverton, OR 97006

Email: George.Marlton@oit.edu

**II. SCHEDULE OF EVENTS**

The timing and sequence of events resulting from this RFP will be ultimately determined by OIT. This Schedule is illustrative of optimal timing goals, but may be changed.

RFP Issue Date.....	April 17, 2012
Deadline for Protest of Specifications .....	April 25, 2012 (5:00 pm, PT)
Notice of Interest Deadline .....	April 27, 2012 (5:00 pm, PT)
Mandatory Pre-Proposal .....	May 4, 2012 (1:00 pm, PT)
All Clarifying Questions Due .....	May 7, 2012 (5:00 pm, PT)
Closing Date (Proposals Due).....	May 15, 2012 (1:00 pm, PT)
Deadline for Protest of Award .....	7 calendar days after date on Notice of Award letter
Anticipated Contract Begin Date .....	June 6, 2012

### **III. PROJECT DESCRIPTION**

#### **Narrative:**

The Oregon Institute of Technology (OIT) is a leader in the field of Renewable Energy. OIT's energy strategy maximizes the abundant natural resources available to the campus. A geothermal reservoir beneath the Klamath Basin supplies hot water for over 600 geothermal wells. OIT currently utilizes three geothermal wells for space heating and power generation purposes. In 2009, OIT drilled an additional geothermal well to expand its electrical power generation capabilities. The successful proposer to this RFP will design and construct the final phase of our current geothermal power generation plan.

#### **Work to Date**

Work to date includes the drilling of geothermal supply well #7 in 2009. Well #7 produces 2,500 gpm at 194°F. The installation of a utility corridor between supply well #7 and the university's power generation facilities. The utility corridor consists of a 12" insulated fiberglass pipe, a 5" electrical conduit and a 1" data conduit. Also completed is the drilling of an injection well for the power plant's effluent. The utility corridor that connects the power plant to the injection well has been designed and will be constructed under a separate contract. Oregon Tech has also contracted with Johnson Controls for the design, development and delivery of a 1.75 MW power plant.

#### **Target Completion Dates**

OIT would like to complete the design and construction as soon as feasibly possible to meet the project goals of having the power plant delivered in September 2012, installation and operation by December 31, 2012.

#### **Scope of Work**

Exhibit A – Scope of Work outlines the services and deliverables of the firm selected through this RFP.

### **IV. BUDGET**

The total direct construction budget range for this Project is currently estimated at \$1,000,000.00. This includes the Design Fee and Cost of the Work (including specialty building permit(s) and associated site improvements, as well the Design/Builder's Contingency). This does not include other "soft" costs; i.e. Owner's labor costs, plan review fees, building permit, special testing services, furniture and portable equipment, and other indirect development costs.

### **V. MANDATORY PRE-PROPOSAL WALK-THROUGH**

A mandatory pre-proposal site visit/walk-through will be held on May 4, 2012, at 1:00 p.m. in College Union on the Klamath Falls Campus. A representative of each Proposer's firm is required to attend. The pre-proposal site visit will be the Proposers' main opportunity to discuss the Project with OIT. Please RSVP with Leticia Hill, (541) 885-1133 or [Leticia.Hill@oit.edu](mailto:Leticia.Hill@oit.edu).

IT IS MANDATORY THAT THE POTENTIAL PROPOSERS ATTEND THIS PRE-

PROPOSAL SITE VISIT. PROPOSALS WILL NOT BE ACCEPTED FROM PROPOSERS WHO DO NOT ATTEND.

## VI. PROPOSAL REQUIREMENTS

1. **Maximum Proposal Length.** Your proposal must be contained in a document not to exceed twenty-five (25) single sided pages including pictures, charts, graphs, tables and text the firm deems appropriate to be part of the review of the firm's proposal. No supplemental information to the 25 – page limit will be considered except as provided below. Covers, numerical dividers and blank pages will not be counted in the 25 – page limit.
  - a. **Exceptions to Page Length:**
    - i. Resumes of key individuals proposed to be involved in this Project
    - ii. Completed Proposal Form
2. **Proposal Content.** Your proposal should include the following information:
  - a. Cover Letter signed by an officer of your firm with the authority to commit the firm
  - b. Response to Questions in Section VII.
  - c. Completed Proposal Form
3. **Proposal Format.** Information should be presented in the same order as identified in the above Paragraph 2 - Proposal Content. The proposal should be submitted in a soft-bound (comb or spiral, spiral preferred – no three-ring binders) format with page size of 8 ½ x 11 inches with no fold-outs except one fold out project schedule and one site logistics plan (should not exceed 11 x 17 inches each). The basic text information of the proposal should be presented in standard business font size, and reasonable (we prefer 1”) margins.
4. **Number of Copies and Submission Address.** Submit ten (10) copies of your written proposal, along with an electronic version on CD, to be received by the closing date and time listed in the Schedule of Events to:

George Marlton  
Procurement and Contract Services – Snell Hall 216  
Oregon Institute of Technology  
3201 Campus Drive  
Klamath Falls, OR 97601

Telephone and facsimile transmitted submittals will not be accepted.  
Responses received after the closing date and time will not be considered.

## VII. PROPOSAL RESPONSE AND EVALUATION CRITERIA

The following questions constitute the evaluation criteria for the Selection Committee to score proposals. You must respond to each question in numerical order. For ease in scoring the proposals, please provide tabs keyed to each of the following criteria numbers.

1. **Firm Background.** Describe your firm's history. Identify your firm's principal office

location. Include information identifying the firm's annual volume, financial/bonding capacities. Also include information identifying the firm's strengths and special capabilities. List any services the company self performs. Include a company-wide organizational chart.

Describe your firm's recent (past 5 years) experience designing and constructing similar projects to this one (design, construction, construction management, etc.) – use specific examples. Describe your firm's experience regarding contract administration. Identify and describe your experience with “green” building design and LEED requirements. Include information about the size, construction type, building uses, construction budget and project timeline. (Weight: 15)

2. **Key Personnel.** Describe the proposed key personnel's specific experience on projects of similar size, complexity, and scope as the Project subject to this RFP. For all project management personnel, identify the length of their employment with your firm, their responsibilities on this Project, and their primary office location during project execution. Indicate their time commitment for this Project during the design and construction phases. Indicate whether the proposed team has worked together on previous projects.

Provide the names and current phone numbers of references for each of the key personnel you proposed for this Project in your RFP proposal. The references should represent at least one of each of the following: owners, subcontractors, and architects. These references should be from projects of a size, scope and/or complexity comparable to the Project subject to this RFP. Verify that the references identified had direct contact with your team member. Results obtained in reference checks may be used to score all evaluation criteria. (Weight: 15)

3. **Design/Builder Role.** Describe the proposed role(s) and responsibilities of your firm in the Project. Identify your firm's expectations of the role of the University. Describe how your firm will interact with the University (Weight: 10).
4. **Quality Control.** Describe your quality control and checking procedures to help prevent design oversights, coordination issues, and installation problems during construction. OIT currently tracks change orders by jurisdictional requirements, owner directed changes, unforeseen conditions, and design coordination issues. What percentage of design coordination issues do you typically see on your projects? (Weight 10)
5. **MWESB Management Plan (“Plan”).** The Oregon University System has implemented a policy that to increase participation by Historically Underrepresented Businesses. Historically Underrepresented Businesses are Oregon certified and self-identified minority, women and emerging small business as well as firms that are certified federally or by another state or entity with substantially the similar requirements of the State of Oregon.

Provide a Management Plan to increase the diversity of your workforce and subcontract opportunities with or purchase from Historically Underrepresented Businesses. The Management Plan may include your nondiscrimination practices, subcontracting strategy, workforce diversity plan, and outreach plan to increase participation by Historically



Underrepresented Businesses.

The selected Contractor will be required to perform Good Faith Effort outreach for divisions of work that will be subcontracted out. The required forms for solicitations and reporting are attached as Exhibit E. Compliance with the Good Faith Effort and submission of the required forms is a contractual requirement for final payment.

Provide examples of previous Management Plans and describe if the Plans met or exceeded the goals of the Plan. The Plan, except for any percentage goals to utilize Historically Underrepresented Businesses, shall become part of the Contract. (Weight 10)

6. **Project Management.** Describe your firm's process for managing this specific Project in order to ensure that the Project is completed safely, on schedule and within the contract amount and quality requirements. In addition, provide a description of your process for managing changes in construction, including efforts made to minimize change orders and claims (Weight: 5).
7. **Proposed Work Plan/Schedule.** Describe your firm's planned approach to the procurement and construction for this Project. Include a one page (30-40 activities) proposed Project schedule indicating procurement, mobilization, construction, and occupancy activities. Identify various bid packages or pre purchase packages that might be required in order to accomplish the proposed schedule (Weight:15).
8. **Design Price Proposal.** Proposers will be evaluated on the Phase I design price based on the lowest Price Proposal, and fewer points for higher Price Proposals. Price Proposals must be submitted using the Proposal Form attached to this RFP. Describe how you will meet the needs of the program requirements within the project budget for design and construction. Describe what programmatic requirements cannot be met within the budget and how these requirements can be met if funding is obtained either later within this project or as a future project. (Weight 20)
9. **References.** In addition, please provide the names, addresses and phone numbers of three client project owners to be used as references for this Project. Please verify that the individuals identified have had direct contact with the referenced project, and the phone number is current. OIT may check with these references and/or may check with other references associated with past work of your firm.

## VIII. PROPOSAL EVALUATION

### Final Rankings

This RFP is a two-step process to select a design-build Contractor for this Project. The selection committee will score each submittal on the basis of responses to the evaluation categories. Submittals will be rated based upon the weights assigned to each item as noted in the parentheses at the end of the categories.

Each criterion has been assigned a weight. Each member of the evaluation committee will rate each firm in each criterion. The evaluation committee members will then total the weighted score from all of the criteria to obtain the total score. The result of this total score will be used to rank all respondents. On the basis of this evaluation, the selection committee will make its best efforts to limit the field of finalists to at two (2), but not more than five (5), firms to be selected for final consideration through interviews of each finalist.

The RFP also requires reference information for your firm. OIT will use this information and any other independently obtained references that can provide background on your firm. This information will not be separately scored, but results obtained from these and/or other reference checks will be used in evaluating and scoring in the other criteria and in the final ranking.

In addition, the RFP response will be used in preparation for interviews of the finalists. Firms chosen to participate in the interviews may be asked to respond to additional questions designed to clarify and/or expand on their Proposals. We would prefer that you bring representatives/key personnel of your proposed major subcontractors to the interview. Interviews will include a presentation period for the Proposers to highlight their original Proposal as well as respond to additional questions or information requested in advance by the evaluation committee, and then a separate Q&A session. After all of the interviews/discussions are completed, the evaluation committee may modify their original scores based on all information received, presented, found and heard. The committee will then make an award recommendation to the Vice President for Finance and Administration.

### **Responsibility Evaluation**

OIT reserves the right to investigate and evaluate, at any time prior to award and execution of the contract, the submitting firm's financial responsibility to perform the anticipated contract. Submission of a signed proposal shall constitute approval for OIT to obtain any credit report information OIT deems necessary to conduct the evaluation. OIT shall notify the firms, in writing, of any other documentation required, which may include, but need not be limited to: recent profit-and-loss history; current balance statements; assets-to-liabilities ratio, including number and amount of secured versus unsecured creditor claims; availability of short and long-term financing; bonding capacity and credit information; etc. Failure to promptly provide this information shall result in rejection of the submission.

OIT may postpone the award or execution of a contract or selection of finalists in order to complete its investigation and evaluation. Failure of a firm to demonstrate financial responsibility shall render them non-responsible and shall constitute grounds for proposal rejection.

## **IX. GENERAL PROVISIONS**

OIT reserves the right to reject any and all Proposals received as a result of this RFP. Oregon Administrative Rules Chapter 580, Divisions 61 and 62 govern the procurement process for OIT.

1. **Modification or Withdrawal of Proposal.** Any Proposal may be modified or withdrawn at any time prior to the closing deadline, provided that a written request is received by OIT Director of Purchasing and Contract Services, prior to the Closing date. The withdrawal of a Proposal will not prejudice the right of a Proposer to submit a new Proposal.
2. **Notice of Interest.** The Notice of Interest (Exhibit F) may be submitted to the office of the OIT Director of Purchasing and Contract Services by 5:00 p.m., on the date indicated in the Schedule of Events, via email, fax or hardcopy. In the notice, the Proposer must provide the name of the primary contact person, plus that person's telephone number and email address for communication of information about the RFP, answers to questions submitted by Proposers, and other matters about the selection process. Proposers that complete and return the Notice will receive the same supplementary information. Submission of the Notice of Interest is not a mandatory requirement in order for Proposers to submit a Proposal.
3. **Requests for Clarification and Requests for Change.** Proposers may submit questions regarding the specifications of the RFP. Questions must be received in writing on or before the date indicated in the Schedule of Events, at the Purchasing and Contract Services address or email address as listed in the Introduction section of the RFP. Requests for changes must include the reason for the change and any proposed changes to the requirements.

The purpose of this requirement is to permit OIT to correct, prior to the opening of Proposals, RFP terms or technical requirements that may be unlawful, improvident or which unjustifiably restrict competition.

OIT will consider all requested changes and, if appropriate, amend the RFP. OIT will provide reasonable notice of its decision to all Proposers that submit a Notice of Interest and on the OUS Procurement Gateway.

No oral or written instructions or information concerning this RFP from OIT managers, employees or agents to prospective Proposers shall bind OIT unless included in an Addendum to the RFP.

4. **Protests of the RFP/Specifications.** Protests of the RFP/Specifications: Protests must be in accordance with OAR 580-061-0145. Protests of Specifications must be received in writing on or before 5:00 p.m. (Pacific Time), on the date indicated in the Schedule of Events, at the Purchasing and Contract Services address or email address as listed in the Contact Information section of the RFP. Protests may not be faxed. Protests of the RFP specifications must include the reason for the protest and any proposed changes to the requirements.
5. **Addenda.** If any part of this RFP is amended, addendum will be provided on the OUS Procurement Gateway website (<https://secure.ous.edu/bid>), with a copy to all parties who

submit the Notice of Interest.

6. **Post-Selection Review and Protest of Award.** OIT will name the apparent successful Proposer in a “Notice of Intent to Award” letter. Identification of the apparent successful Proposer is procedural only and creates no right in the named Proposer to award of the contract. Competing Proposers will be notified in writing of the selection of the apparent successful Proposer(s) and shall be given seven (7) calendar days from the date on the “Notice of Intent to Award” letter to review the file and evaluation report at the Purchasing and Contract Services office and file a written protest of award, pursuant to OAR 580-061-0145. Any award protest must be in writing and must be delivered by hand delivery, mail or email to the address for the Purchasing and Contract Services Office as listed in the Contact Information section of the RFP.

OIT will consider any protests received and:

- (A) reject all protests and proceed with final evaluation of, and any allowed contract language negotiation with, the apparent successful Proposer and, pending the satisfactory outcome of this final evaluation and negotiation, enter into a contract with the named Proposer; OR
- (B) sustain a meritorious protest(s) and reject the apparent successful Proposer as nonresponsive, if such Proposer is unable to demonstrate that its Proposal complied with all material requirements of the solicitation and Oregon public procurement law; thereafter, OIT may name a new apparent successful Proposer; OR
- (C) reject all Proposals and cancel the procurement.

The OIT Vice President for Finance and Administration or designee will timely respond to the protest after receipt. This decision shall be final.

7. **Acceptance of Contractual Requirements.** Acceptance of Contractual Requirements: Failure of the selected Proposer to execute a contract and deliver required insurance certificates within ten (10) calendar days after notification of an award may result in cancellation of the award. This time period may be extended at the option of OIT
8. **Public Records.** Proposals are deemed confidential until the “Notice of Intent to Award” letter is issued. This RFP and one copy of each original Proposal received in response to it, together with copies of all documents pertaining to the award of a contract, will be kept and made a part of a file or record which will be open to public inspection. If a Proposal contains any information that is considered a TRADE SECRET under ORS 192.501(2), SUCH INFORMATION MUST BE LISTED ON A SEPARATE SHEET CAPABLE OF SEPARATION FROM THE REMAINING PROPOSAL AND MUST BE CLEARLY MARKED WITH THE FOLLOWING LEGEND:

**“This information constitutes a trade secret under ORS 192.501(2), and shall not be disclosed except in accordance with the Oregon Public Records Law, ORS Chapter**

**192.”**

The Oregon Public Records Law exempts from disclosure only bona fide trade secrets, and the exemption from disclosure applies only “unless the public interest requires disclosure in the particular instance.” ORS 192.500(1). Therefore, non-disclosure of documents or any portion of a document submitted as part of a Proposal may depend upon official or judicial determinations made pursuant to the Public Records Law.

9. **Investigation of References.** OIT reserves the right to investigate all references in addition to supplied references and investigate past performance of any Proposer with respect to its successful performance of similar services, its compliance with specifications and contractual obligations, its completion or delivery of a project on schedule, its lawful payment of subcontractors and workers and any other factor relevant to this RFP. OIT may postpone the award or the execution of the contract after the announcement of the apparent successful Proposer in order to complete its investigation.
10. **RFP Proposal Preparation Costs and Other Costs.** Proposer costs of developing the Proposal, cost of attendance at an interview (if requested by OIT) or any other costs are entirely the responsibility of the Proposer, and will not be reimbursed in any manner by OIT.
11. **Clarification and Clarity.** OIT reserves the right to seek clarification of each Proposal, or to make an award without further discussion of Proposals received. Therefore, it is important that each Proposal be submitted initially in the most complete, clear and favorable manner possible.
12. **Right to Reject Proposals.** OIT reserves the right to reject any or all Proposals, if such rejection would be in the public interest, or if the Proposal does not comply with the requirements of the RFP, as determined by OIT.
13. **Cancellation.** OIT reserves the right to cancel or postpone this RFP at any time or to award no contract.
14. **Proposal Terms.** All Proposals, including any price quotations, will be valid and firm through a period of 120 calendar days following the Closing date. OIT may require an extension of this firm offer period. Proposers will be required to agree to the longer time frame in order to be further considered in the procurement process.
15. **Oral Presentations.** At OIT’s sole option, Proposers may be required to give an oral presentation of their Proposals to OIT, a process which would provide an opportunity for the Proposer to clarify or elaborate on the Proposal but will in no material way change Proposer’s original Proposal. If the evaluating committee requests presentations, the Issuing Office will schedule the time and location for said presentation. Any costs of participating in such presentations will be borne solely by Proposer and will not be reimbursed by OIT. Note: Oral presentations are at the discretion of the evaluating committee and may not be conducted; therefore, written Proposals should be complete.

16. **Usage.** It is the intention of OIT to utilize the services of the successful Proposer(s) to provide services as outlined in the attached Scope of Work.
17. **Sample Contract.** Submission of a Proposal in response to this RFP indicates Proposer's willingness to enter into a contract containing substantially the same terms listed in Exhibit C – Sample Design/Construction Agreement, attached hereto and made a part hereof. No action or response to the sample contract is required under this RFP. Any objections to the sample contract terms should be raised in accordance with Paragraphs 1 and 2 of the "General Provisions" of this RFP, pertaining to requests for clarification or change or protest of the RFP/specifications, and as otherwise provided for in this RFP.
18. **Review for Responsiveness.** Upon receipt of all Proposals, the Issuing Office or designee will determine the responsiveness of all Proposals before submitting them to the evaluation committee. If a Proposal is incomplete or non-responsive in significant part or in whole, it will be rejected and will not be submitted to the evaluation committee. OIT reserves the right to determine if an inadvertent error is solely clerical or is a minor informality which may be waived, and then to determine if an error is grounds for disqualifying a Proposal. The Proposer's contact person identified on the Proposal will be notified, identifying the reason(s) the Proposal is non-responsive. One copy of the Proposal will be archived and all others discarded.
19. **Rejections and Withdrawals.** OIT reserves the right to reject any or all Proposals or to withdraw any item from the award.
20. **RFP Incorporated into Contract.** This RFP will become part of the Contract between OIT and the selected contractor(s). The contractor(s) will be bound to perform according to the terms of this RFP, their Proposal(s), and the terms of Exhibit C.
21. **Communication Blackout Period.** Except as called for in this RFP, Proposers may not communicate with members of the Evaluation Committee about the RFP until the apparent successful Proposer is selected, and all protests, if any, have been resolved.
22. **Prohibition on Commissions.** OIT will contract directly with persons/entities capable of performing the requirements of this RFP. Contractors must be represented directly. Participation by brokers or commissioned agents will not be allowed during the proposal process.
23. **Ownership of Proposals.** All proposals in response to this RFP are the sole property of OIT, and subject to the provisions of Oregon Revised Statutes ORS 192.410-192.505 (Public Records Act).
24. **Clerical Errors in Awards.** OIT reserves the right to correct inaccurate awards resulting from its clerical errors.
25. **Rejection of Qualified Proposals.** Proposals may be rejected in whole or in part if they

attempt to limit or modify any of the terms, conditions or specifications of the RFP or the OIT Sample Contract.

26. **Collusion.** By responding, the Proposer states that the proposal is not made in connection with any competing Proposer submitting a separate response to the RFP, and is in all aspects fair and without collusion or fraud. Proposer also certifies that no officer, agent, or employee of OIT has a pecuniary interest in this Proposal.
27. **Evaluation Committee.** Proposals will be evaluated by a committee consisting of representatives from OIT and other technical advisors. OIT reserves the right to modify the Evaluation Committee make-up in its sole discretion. The committee's recommendations will be forwarded to the Vice President for Finance and Administration, or designee, for final approval.
28. **Commencement of Work.** The contractor shall commence no work until all insurance requirements have been met, the Protest of Awards deadline has been passed, any protest have been decided, a contract has been fully executed, and a Notice to Proceed has been issued by OIT.

## **X. ENCLOSURES**

Exhibit A – Scope of Work  
Exhibit B - OUS General Conditions  
Exhibit C – Sample Design/Construction Agreement  
Exhibit D – Proposal Form  
Exhibit E – Good Faith Effort  
Exhibit F – Notice of Interest

END OF RFP

**Geothermal Power Plant Infrastructure**  
**RFP #2012-02**  
**Exhibit A – Scope of Work**

**Narrative:**

Oregon Institute of Technology (OIT) is a leader in the field of Renewable Energy. The University's energy strategy maximizes the abundant natural resources available to the campus. A geothermal reservoir beneath the Klamath Basin supplies hot water for over 600 geothermal wells. OIT currently utilizes three geothermal wells for space heating and power generation purposes. In 2009 the University drilled an additional geothermal well to expand its electrical power generation capabilities. The successful proposer to this RFP will design and construct the final phase of our current geothermal power generation plan.

**Work to Date**

Work to date includes the drilling of geothermal supply well #7 in 2009. Well #7 produces 2,500 gpm at 194°F. The installation of a utility corridor between supply well #7 and the university's power generation facilities. The utility corridor consists of a 12" insulated fiberglass pipe, a 5" electrical conduit and a 1" data conduit. Also completed is the drilling of an injection well for the power plant's effluent. The utility corridor that connects the power plant to the injection well has been designed and will be constructed under a separate contract.

**Statement of Work:**

The design/build work described in this RFP is for the final design and construction work needed to complete the development, and begin operation of a 1.75 MW geothermal electrical power generation facility on the Klamath Falls campus of OIT. The Electrical Generators (1 MW and 0.75MW) are being designed and built by Johnson Controls Inc. (JCI) and will be installed in a building constructed as part of this project.

Johnson Controls Inc. will provide the power generators, cooling towers, and all associated piping between the units. The successful proposer to this RFP will develop the necessary infrastructure and assemble the power generator under the direction of JCI technicians and as described in the Delineation of Responsibilities section.

**Electrical Engineering and Construction**

- Electrical interconnection design at Large Power Plant
- Electrical Interconnection to grid
- Electrical Interconnection agreement with electrical utility provider. BacGen Technologies is conducting the interconnection application process on behalf of the University
- Electrical connection design at Geothermal Well head #7
- Coordination of Interconnection design with local utility



- Power Plant Building electrical distribution design in relation to the power generator
- Well #7 Pump House electrical distribution design
- Verification of VFD compatibility
- Direct Digital Controls (“DDC”) (Well head, Power Plants), and Injection Well (if needed)
- Metering plan (in conjunction with System West Engineers)
- Design and construction of the upgrade or replacement of OIT owned transformer that transforms the generator output with the 480 V side of the campus
- Other special provisions requested by PacifiCorp as a result of the System Impact study and/or the Facilities Study outcome, if any
- **Mechanical Engineering and Construction**
  - Pipe connections at injection well #3
  - Pipe connections to existing power generation facility
  - Pipe connections at Large Power generation facility
  - Pipe connections at Geothermal Well head #7
  - Domestic water piping for cooling towers and potable use
  - Fire suppression system for Power Plant structure (If needed)
  - Building ventilation system design (Designed in conjunction with Power Plant provider)
  - Containment facility for spare refrigerant. This facility will need to be constructed with capacity for both geothermal power generation facilities
  - Floor drains within Power plant facility
- **Structural Engineering and Construction**
  - Design and construct foundation and structure for Power Plant building. Building to be a pre-fabricated steel building designed for Klamath Falls seismic, wind, and snow loads
  - Design and construct foundation and slab for Cooling Towers
  - Design and construct foundation and structure for Well #7 pump house. The pump-house will be a wood framed structure with metal cladding to match exterior of power plant. The building will have a removable end for access to the well pump assembly.
  - Design and install pipe support system within Power Plant building
- **Civil Engineering and Construction**
  - Geotechnical Engineering for foundation design (Power Plant building and Cooling Towers)
  - Thrust blocks at pipe connections and elbows
  - Utility corridor between existing inlet and outlet pipelines and Power Plants
  - Domestic water distribution systems
- **Notes:**

- All design work to meet specifications from Power Plant provider
- All work to conform to latest versions of IBC and NEC

**Specifications:**

**Building Design Requirements and Characteristics**

- **Minimum building dimensions and clearances:**
  - Minimum inside clear dimensions for Power Plant Building will be 70 feet long x 40 feet wide.
- **Height requirements/restrictions:**
  - Minimum inside clearance to building structure is 30 feet.
- **Dimensions and Weight of Power Generator(s):**
  - Overall Unit Dimensions are 20 feet long x 28 feet wide x 21 feet high.
  - The overall operating weight of the Power Generator is 220,000 lbs.
- **Requirements for vibration dampers:**
  - Power Generator assembly will consist of five major sections (2-heat exchanger sections, 2-driveline sections, and 1-electrical control center section). The two heat exchanger sections will be directly anchored to the foundation with vibration isolation at each load point. The two drivelines will be skid mounted on a structural steel base. Each driveline base should be anchored to the foundation with vibration isolation at each load point. The electrical control center should be anchored directly to a concrete housekeeping pad without vibration isolation. JCI will provide vibration isolation requirements to the successful proposer.
- **Foundation Requirements for the Power Generator and Electrical/Mechanical Equipment:**
  - A structural foundation will be provided for the Power Generator based on operating weight of the major sections, applicable seismic loads, geotechnical report requirements, and other applicable structural loads. The overall operating weight of the Power Generator is 220,000 lbs. The foundation shall be reinforced and isolated from the building slab with vibration isolation material. Condenser water pump pads shall be a minimum of 8 inch thick, sized 4 inches larger than each pump, reinforced, and doweled into the building slab. Electrical equipment pads shall be a minimum of 4 inch thick, sized 4 inches larger than each piece of equipment, reinforced, and doweled into the building slab. Mechanical filtration equipment pads shall be a minimum of 4 inch thick, sized 4 inches larger than each piece of equipment, reinforced, and doweled into the building slab. Equipment foundation and pad concrete shall be 4000 psi design.
- **Roll-up door requirements and dimensions:**
  - Provide one (1) 12 ft. wide x 20 ft. high rollup door to allow equipment removal and heat exchanger tube removal.

- **Orientation of inlet and outlet piping:**
  - Geothermal hot water supply/return and condenser water supply/return piping connections will be on one side of Power Generator assembly. A layout drawing with piping connection locations will be furnished by JCI to the successful proposer.
- **Electrical one-line diagram:**
  - See attached one-line diagram E100 for reference. Electrical distribution equipment shall support a power plant up to 1.75 MW generation capacity with appropriate run factors with flexibility to utilize a smaller production capacity depending upon to-be-determined site conditions. Additional electrical characteristics specific to the generation equipment utilized will be provided by JCI. The attached one-line is not an indication of what equipment is being provided by JCI and equipment configuration/ratings are subject to change. Route of power plant electrical shall be underground/slab to the extent possible.
- **Signal Plan:**
  - Control system drawings will be furnished by JCI to the successful proposer.
- **Ventilation requirements:**
  - Provide 13,100 cfm emergency refrigerant removal exhaust system in accordance with ASHRAE 15 requirements based on 17,000 lbs. of refrigerant. In addition, a normal ventilation system should be provided to limit the room temperature rise to 15<sup>0</sup>F taking into account all equipment and piping heat rejection loads within the room. JCI will furnish equipment heat rejection loads (not equipment) to the successful proposer.
- **Maintenance access requirements:**
  - Provide 5 feet of service clearance around the entire Power Generator assembly. Provide 17 feet of service clearance at one end of the evaporator and condenser heat exchangers for tube removal. Provide 4 feet of clearance in front of electrical equipment or as required by the NEC. Provide 3 feet of clearance around mechanical equipment.
- **Refrigerant storage requirements:**
  - JCI will furnish 1700 lbs. of refrigerant in cylinder(s) that will be stored adjacent the Power Generator Building.
- **Additional infrastructure requirements :**
  - Provide seven (7) floor drains within the room, typically near each piece of mechanical equipment (Power generator - 2, condenser water pumps -1, non-chemical treatment system - 1, tower filtration system - 1, geothermal hot water strainer - 1, backflow preventer -1).
  - Air-compressor

## **Cooling Tower Foundation**

- **Weight of Cooling Tower(s):**
  - Cooling Tower will consist of four (4) tower cells at 46,500 lbs. operating weight each for a total operating weight of 186,000 lbs.
- **Dimensions of foundation:**
  - Cooling Tower foundation should be a minimum of 4 feet larger on all sides than the new 4-cell cooling tower. The overall dimension of the tower is 57.5 feet long x 24 feet wide. The slab dimension should be a minimum of 65.5 feet long x 32 feet wide. The Cooling tower should be located a minimum of six (6) feet above the Power Plant Building finished floor elevation. See cooling tower info below for height requirements. Tower should be supported above the slab with concrete piers or structural steel support frame. Cooling tower foundation and structural supports should be designed based on the cooling tower operating weight, applicable seismic loads, and per the requirements of the geotechnical report.
- **Minimum separation from Power Plant:**
  - Separation between cooling tower and Power Plant building should be a minimum of 18 feet.
- **Infrastructure Requirements:**
  - 100 gpm make-up water and drain piping; geothermal hot water piping for tower basin freeze protection; electrical feeders between tower fan VFD's (remote mounted inside of Power Plant Building), disconnects, and tower fans; control wiring and conduit between new Metasys main control panel inside of Power Plant Building and cooling tower control panel and any control devices.
- **Maintenance access requirements:**
  - Provide 4 feet of clearance around the cooling tower for service access. The cooling tower should be supported above the slab to provide 3 feet of service access to the bottom of the tower.
- **Anchoring design:**
  - Anchorage design will be in accordance with cooling tower manufacturer's recommendations and seismic code requirements. JCI will furnish cooling tower data sheets to the successful proposer.

## **Delineation of Responsibilities**

### **Johnson Controls Responsibilities**

- **Mechanical Equipment and Piping Systems:** Provide geothermal power plant mechanical equipment and piping systems as detailed on Drawings G100 and M100. All JCI furnished equipment and mechanical systems to be installed by OIT installing contractors
- **Geothermal Power Plant Module:** The new module will include evaporator, condenser, refrigerant pump, turbine generator, and control system skid mounted (20ft.L

x 28 ft. W x 18' H approximate dimensions). New unit to be mounted on reinforced concrete foundation (provided by OIT) with vibration isolation per code requirements and Johnson Controls recommendations.

- **Cooling Tower:** A new 7,900 gpm cooling tower designed for local codes. Tower to be provided with manufacturer provided access platforms, ladders and handrails. Tower shall have galvanized steel casing, structure, and access platform gratings. Hot Water and cold water basins to be stainless steel. Tower shall be mounted on reinforced concrete foundation provided by OIT. Foundation elevation to be 6 feet above the condenser water pump suction elevation to provide required NPSH. Cooling tower cells shall be provided with heated condenser water to maintain 35°F basin temperatures for freeze protection.
- **Condenser Water pumps:** Two new 4000 gpm condenser water pumps to be installed in equipment room. Pumps to be mounted on reinforced concrete foundations doweled into the equipment room slab floor (by OIT). Pumps to be connected to condenser water supply piping from cooling tower outlet. Each pump to be provided with suction butterfly valve, suction flex connector, discharge flex connector, discharge simplex basket strainer, discharge triple-duty valve. Provide pressure gauge assembly across suction and discharge piping.
- **Hot Water Piping:** New 12-inch geothermal hot water supply and hot water return piping will connect to OIT provided connection in equipment room. New field-insulated geothermal hot water supply and return piping will connect to the pre-insulated piping at the floor and will extend to the new geothermal power plant module. New interior geothermal hot water supply and return piping will be standard weight steel pipe fiberglass insulation/PVC jacketing (JCI furnished/OIT installed). Piping will connect to the module with inlet/outlet butterfly valves, pressure gauges, thermometers and pressure transmitters (connected to module control system).
- **Condenser Water Piping:** New 20-inch condenser water supply and return piping will be connected to the new module with inlet/outlet butterfly valves, pressure gauges, thermometers and temperature/pressure transmitters (connected to control system). New 20-inch condenser water supply piping will be routed from the condenser water pumps to the new Module inlet connection. New 20-inch condenser water return piping shall be routed from the Module outlet connection to the new cooling tower outside the building. New 12-inch supply and return piping will extend from the 20-inch headers to connect to tower cell inlets/outlets with butterfly valves. Tower cells inlets/outlets will also be provided with 12-inch isolation valves.
- **Exterior Piping:** New condenser water piping, make-up water piping and basin-heated condenser water piping outside the building to be insulated, heat traced and provided with aluminum jacketing. JCI will furnish pipe insulation, heat traced systems, and aluminum jacketing. The OIT contractor shall install insulation, heat tracing, and aluminum jacketing per JCI design requirements.

- **Water Filtration:** Provide geothermal hot water filtration and condenser water filtration and treatment as required for new geothermal power plant module.
- **Backflow Preventer:** Provide reduced pressure backflow preventer and connect to OIT water connection.
- **Ventilation:** ASHRAE 15 Ventilation package, including refrigerant monitor, SCBA, and 9000 cfm ventilation system for temperature control and emergency refrigerant removal.
- **Heat Exchanger:** The cooling tower basin heating system will be served from geothermal hot water piping serving the building heating hot water and domestic hot water systems. It is assumed that the building hot water and domestic hot water systems will be served from the Heat Exchanger Building to heat condenser water for tower basin heating.
- **Water Metering:** Provide metering of condenser water, geothermal water to module, and make-up water to tower system.
- **Water Treatment:** Provide non-chemical based water treatment system for cooling tower condenser water system.
- **Test and balance:** Provide test and balance of geothermal and condenser water systems, as well as geothermal power plant equipment room HVAC systems.
- **Electrical Feeders:** Furnish electrical equipment and electrical systems as detailed on drawings G100 (reference for equipment layout only) and E100. JCI will also provide Arc-Flash calculations. All JCI furnished equipment and electrical systems to be installed by OIT installing contractors.
- **Electrical Metering:** Provide electrical metering of generator output and input to power plant module ancillary equipment, including cooling tower, condenser water pumps, oil pumps and refrigerant pumps. Metering will be connected to the campus communication network for remote viewing and logging.
- **Energy Management System:** Geothermal Power plant energy management system (EMS) to control cooling tower, condenser water pumps, VFDs, temperature sensors, and control valves based on Module requirements. New geothermal power plant building EMS control shall be connected to the campus communication network in the Heat Exchanger building to allow for remote monitoring and control by OIT. The new EMS system design shall be customized to OIT monitoring and control requirements. Johnson Controls will provide continued support with local service personnel.
- **Utility Coordination:** JCI will work with OIT and PacifiCorp as part of the interconnection agreement. JCI will provide all necessary engineering, calculations and equipment data related to the power generation Module for interconnection to the campus and utility electrical distribution system.
- **Commissioning:** All new mechanical and electrical equipment shall be commissioned and a commissioning report submitted to OIT.

## OIT Responsibilities

- **Hot Water Supply Piping:** OIT will provide 12-inch underground geothermal hot water piping from production well #7 to within 100 feet of the new geothermal power plant building. This contract will extend the 12-inch underground geothermal piping to the new power plant building for connection with power plant Module.
- **Electrical Conductors:** OIT is responsible for the interconnection relay (Sweitzer Engineering Laboratories – SEL relay recommended) and enclosure, as well as application and submission of the interconnection agreement with PacifiCorp. OIT will provide the geothermal power plant main distribution panel and 480-volt electrical service from the new geothermal power plant main distribution panel to the existing 1000 KVA transformer. Conductors to be sized and installed per latest NEC and local code requirements.
- **New Building Construction:** OIT will construct a power plant building to accommodate a geothermal power plant equipment room. Building foundation and structure to be designed for new piping and equipment support loads, as well as applicable building codes. New building to be provided with plumbing, lighting, electrical, and alarm system as required by code.
- **Site Preparation:** Site clearing, grading and backfill to provide suitable site for new power plant building and cooling tower foundations. Provide grading and storm drainage as required by local code or planning authority.
- **Landscaping and Parking:** Landscaping provide by OIT Grounds department. Parking area surface to be gravel and designed as required by local building and planning authority.
- **Fire Access:** Fire Access road to meet requirements of KCFD #1.
- **Utilities:** All required site utilities, such as storm drains and domestic water shall be included in the building.
- **Foundation, Building:** OIT to provide new reinforced concrete foundation for new geothermal power plant module per code requirements and JCI recommendations. OIT will provide reinforced concrete pads for new electrical equipment, new condenser water pumps, and new filtration equipment. JCI will provide equipment design requirements.
- **Foundation, Cooling Towers:** OIT will provide reinforced cooling tower foundation and structural steel support rails. Foundation elevation to be 6 feet above the condenser water pump suction elevation to provide pump required NPSH.
- **Metering:** OIT to provide electrical metering of OIT production well #7.
- **Interconnection Relay:** OIT is responsible for the utility interconnection relay and enclosure, as well as application and submission of the interconnection agreement with PacifiCorp.
- **Equipment Piping/Electrical System Installation:** OIT will provide the installation of all JCI furnished equipment, piping systems, and electrical systems associated with the

geothermal power plant (refer to drawings G100, M100 and E100). OIT installing contractors shall submit a complete set of installation drawings based on JCI scope of work requirements. Upon approval of installation drawings, OIT installing contractors will coordinate all material requirements with JCI Project Manager. JCI will provide supervision of all OIT contractors.

Appendix:

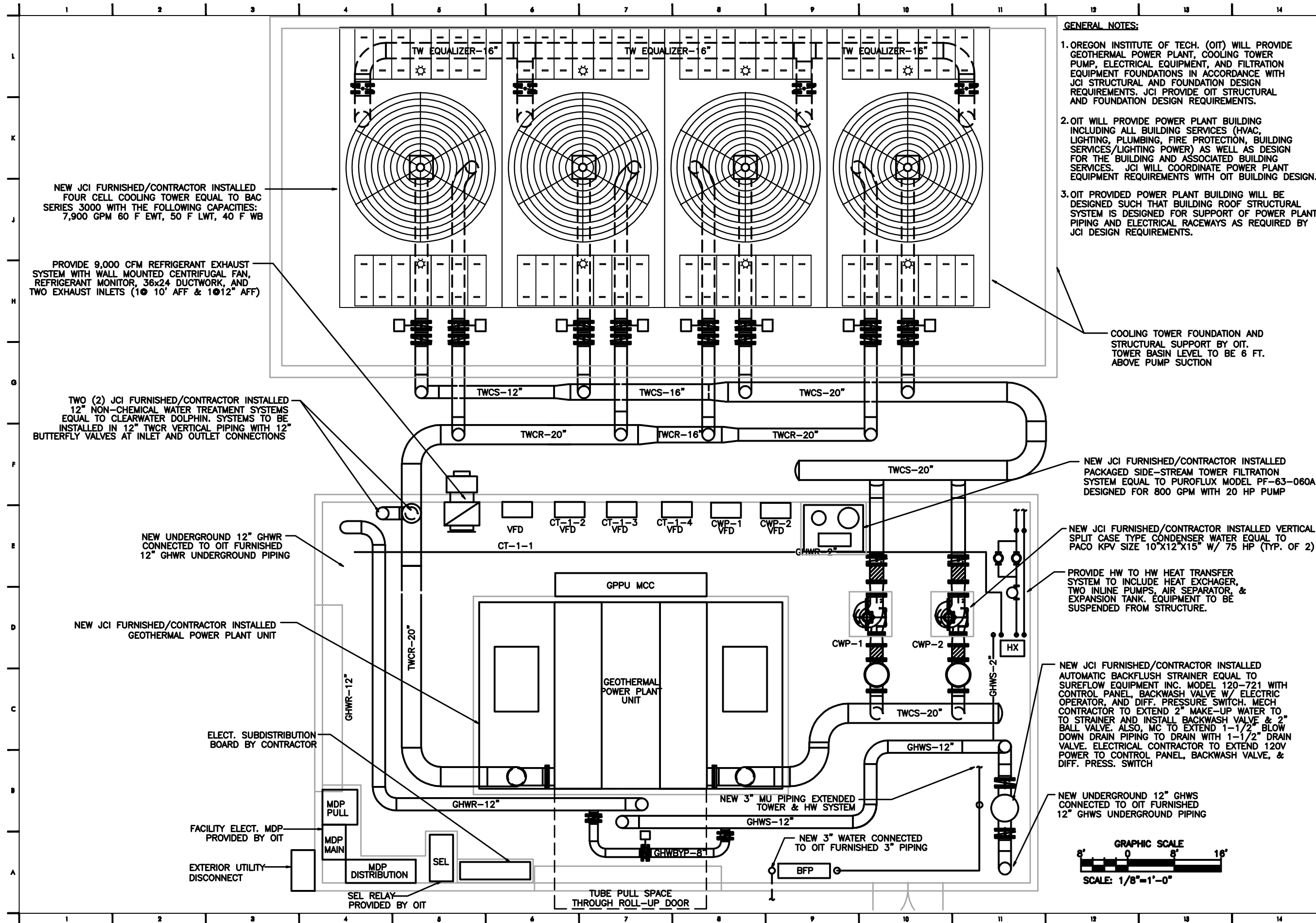
Drawing G100

Drawing M100

Drawing E100

JCI equipment specifications



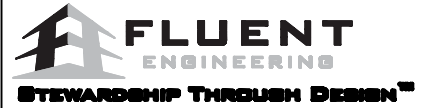


**GENERAL NOTES:**

1. OREGON INSTITUTE OF TECH. (OIT) WILL PROVIDE GEOTHERMAL POWER PLANT, COOLING TOWER PUMP, ELECTRICAL EQUIPMENT, AND FILTRATION EQUIPMENT FOUNDATIONS IN ACCORDANCE WITH JCI STRUCTURAL AND FOUNDATION DESIGN REQUIREMENTS. JCI PROVIDE OIT STRUCTURAL AND FOUNDATION DESIGN REQUIREMENTS.
2. OIT WILL PROVIDE POWER PLANT BUILDING INCLUDING ALL BUILDING SERVICES (HVAC, LIGHTING, PLUMBING, FIRE PROTECTION, BUILDING SERVICES/LIGHTING POWER) AS WELL AS DESIGN FOR THE BUILDING AND ASSOCIATED BUILDING SERVICES. JCI WILL COORDINATE POWER PLANT EQUIPMENT REQUIREMENTS WITH OIT BUILDING DESIGN.
3. OIT PROVIDED POWER PLANT BUILDING WILL BE DESIGNED SUCH THAT BUILDING ROOF STRUCTURAL SYSTEM IS DESIGNED FOR SUPPORT OF POWER PLANT PIPING AND ELECTRICAL RACEWAYS AS REQUIRED BY JCI DESIGN REQUIREMENTS.



Engineering by:  
 Brian Brown Engineering LLC  
 PO Box 563  
 Fort Klamath, Oregon 97626  
 541-783-3347



1775 32ND PLACE NE - SUITE E  
 SALEM, OREGON 97301  
 503-447-8030  
 FLUENTENGINEERING.COM

Geothermal Power Plant  
 Oregon Institute of Tech.  
 Klamath Falls, OR

Johnson Controls, Inc.

GEOHERMAL POWER PLANT  
 EQUIPMENT LAYOUT PLAN

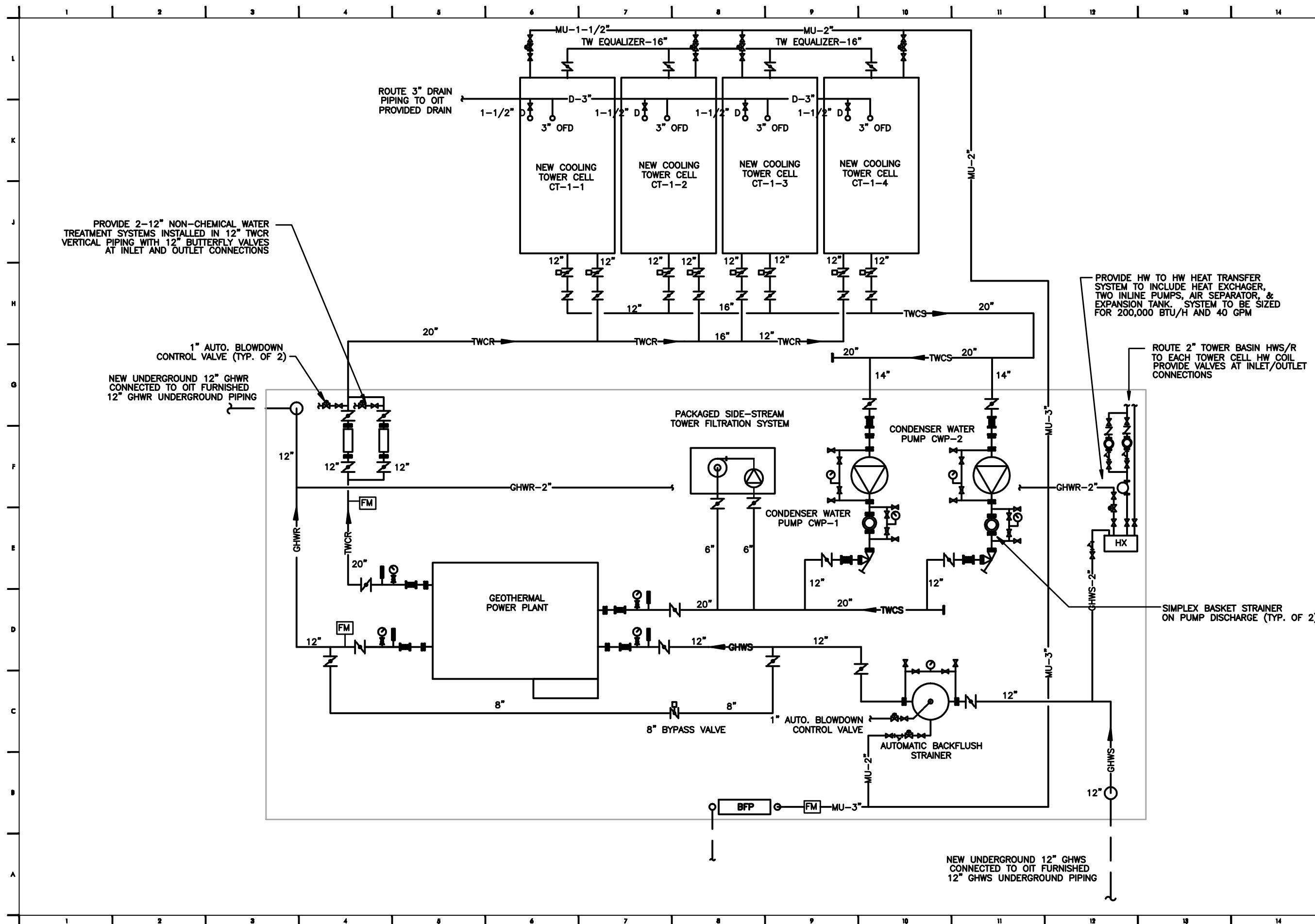
JOB NO: XXXX  
 DATE: 04.15.11  
 DRAWN: XXX  
 CHECKED: XXX  
 CAD FILE: OIT MECH-1

G100

Engineering by:  
 Brian Brown Engineering LLC  
 PO Box 563  
 Fort Klamath, Oregon 97626  
 541-783-3347



1775 32ND PLACE NE - SUITE E  
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 503-447-5030  
 FLUENTENGINEERING.COM



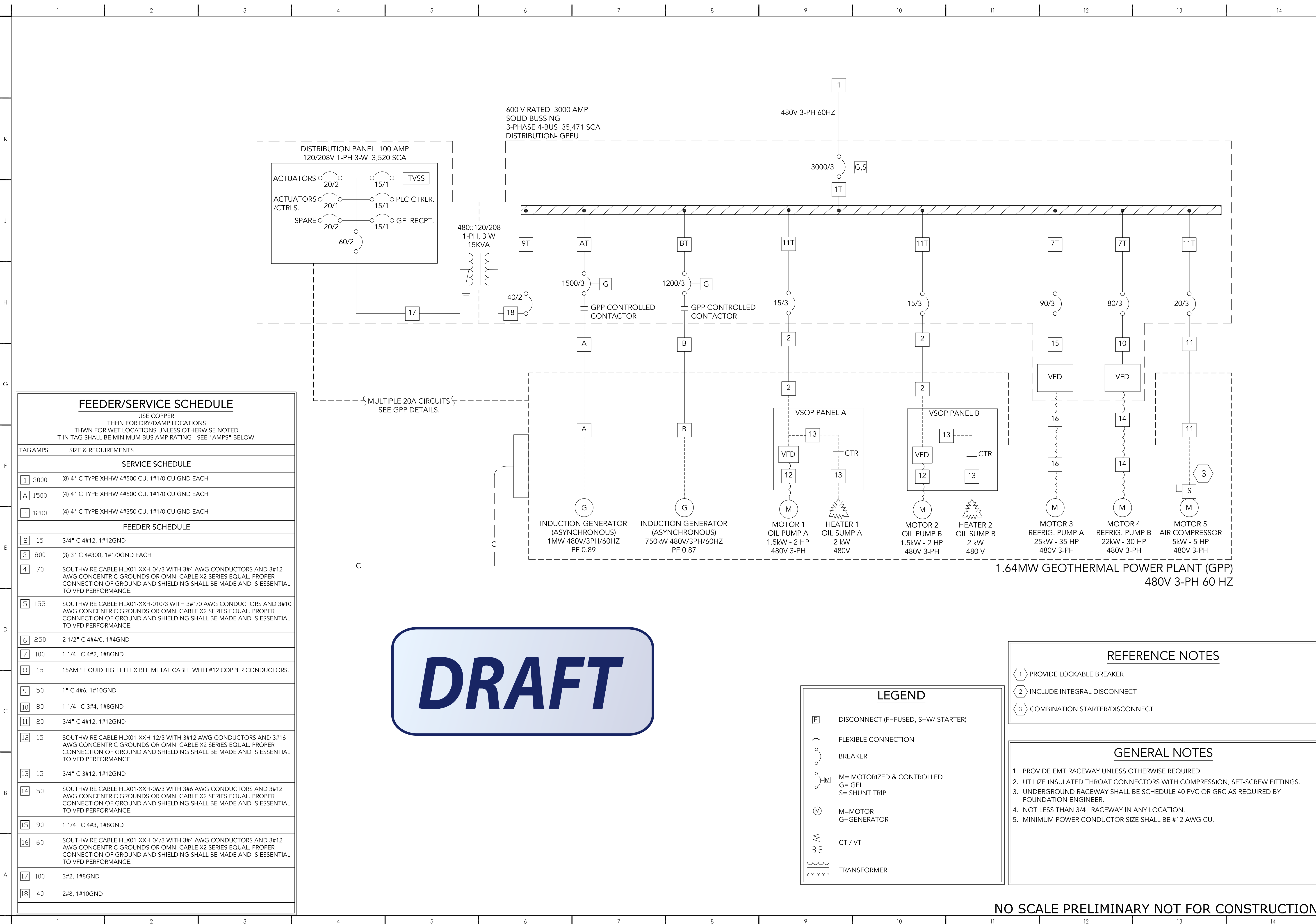
Geothermal Power Plant  
 Oregon Institute of Tech.  
 Klamath Falls, OR

Johnson Controls, Inc.

GEOTHERMAL POWER PLANT  
 PIPING SCHEMATIC

JOB NO: XXXX  
 DATE: 04.15.11  
 DRAWN: XXX  
 CHECKED: XXX  
 CAD FILE: M1

M100



FEEDER/SERVICE SCHEDULE	
USE COPPER	
THHN FOR DRY/DAMP LOCATIONS	
T IN TAG SHALL BE MINIMUM BUS AMP RATING- SEE *AMPS* BELOW.	
TAG/AMPS	SIZE & REQUIREMENTS
<b>SERVICE SCHEDULE</b>	
1	3000 (8) 4" C TYPE XHHW 4#500 CU, 1#1/0 CU GND EACH
A	1500 (4) 4" C TYPE XHHW 4#500 CU, 1#1/0 CU GND EACH
B	1200 (4) 4" C TYPE XHHW 4#350 CU, 1#1/0 CU GND EACH
<b>FEEDER SCHEDULE</b>	
2	15 3/4" C 4#12, 1#12GND
3	800 (3) 3" C 4#300, 1#1/0GND EACH
4	70 SOUTHWIRE CABLE HLX01-XXH-04/3 WITH 3#4 AWG CONDUCTORS AND 3#12 AWG CONCENTRIC GROUNDS OR OMNI CABLE X2 SERIES EQUAL. PROPER CONNECTION OF GROUND AND SHIELDING SHALL BE MADE AND IS ESSENTIAL TO VFD PERFORMANCE.
5	155 SOUTHWIRE CABLE HLX01-XXH-010/3 WITH 3#1/0 AWG CONDUCTORS AND 3#10 AWG CONCENTRIC GROUNDS OR OMNI CABLE X2 SERIES EQUAL. PROPER CONNECTION OF GROUND AND SHIELDING SHALL BE MADE AND IS ESSENTIAL TO VFD PERFORMANCE.
6	250 2 1/2" C 4#4/0, 1#4GND
7	100 1 1/4" C 4#2, 1#8GND
8	15 15AMP LIQUID TIGHT FLEXIBLE METAL CABLE WITH #12 COPPER CONDUCTORS.
9	50 1" C 4#6, 1#10GND
10	80 1 1/4" C 3#4, 1#8GND
11	20 3/4" C 4#12, 1#12GND
12	15 SOUTHWIRE CABLE HLX01-XXH-12/3 WITH 3#12 AWG CONDUCTORS AND 3#16 AWG CONCENTRIC GROUNDS OR OMNI CABLE X2 SERIES EQUAL. PROPER CONNECTION OF GROUND AND SHIELDING SHALL BE MADE AND IS ESSENTIAL TO VFD PERFORMANCE.
13	15 3/4" C 3#12, 1#12GND
14	50 SOUTHWIRE CABLE HLX01-XXH-06/3 WITH 3#6 AWG CONDUCTORS AND 3#12 AWG CONCENTRIC GROUNDS OR OMNI CABLE X2 SERIES EQUAL. PROPER CONNECTION OF GROUND AND SHIELDING SHALL BE MADE AND IS ESSENTIAL TO VFD PERFORMANCE.
15	90 1 1/4" C 4#3, 1#8GND
16	60 SOUTHWIRE CABLE HLX01-XXH-04/3 WITH 3#4 AWG CONDUCTORS AND 3#12 AWG CONCENTRIC GROUNDS OR OMNI CABLE X2 SERIES EQUAL. PROPER CONNECTION OF GROUND AND SHIELDING SHALL BE MADE AND IS ESSENTIAL TO VFD PERFORMANCE.
17	100 3#2, 1#8GND
18	40 2#8, 1#10GND

DRAFT

LEGEND	
	DISCONNECT (F=FUSED, S=W/ STARTER)
	FLEXIBLE CONNECTION
	BREAKER
	M= MOTORIZED & CONTROLLED
	G= GFI
	S= SHUNT TRIP
	M=MOTOR
	G=GENERATOR
	CT / VT
	TRANSFORMER

REFERENCE NOTES	
	PROVIDE LOCKABLE BREAKER
	INCLUDE INTEGRAL DISCONNECT
	COMBINATION STARTER/DISCONNECT

GENERAL NOTES	
1.	PROVIDE EMT RACEWAY UNLESS OTHERWISE REQUIRED.
2.	UTILIZE INSULATED THROAT CONNECTORS WITH COMPRESSION, SET-SCREW FITTINGS.
3.	UNDERGROUND RACEWAY SHALL BE SCHEDULE 40 PVC OR GRC AS REQUIRED BY FOUNDATION ENGINEER.
4.	NOT LESS THAN 3/4" RACEWAY IN ANY LOCATION.
5.	MINIMUM POWER CONDUCTOR SIZE SHALL BE #12 AWG CU.

1.64MW GEOTHERMAL POWER PLANT (GPP)  
480V 3-PH 60 HZ

NO SCALE PRELIMINARY NOT FOR CONSTRUCTION

Geothermal Power Plant  
Oregon Institute of Tech.  
Klamath Falls, OR.

No.	Revision:	Date
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Geothermal Power Plant  
Equipment Layout Plan

Job:	11156
Date:	12.12.11
Drawn:	BS
Checked:	MJC
CAD File:	E_ONE_MACHINE

E100- COMBINED  
ONE-LINE

**PRELIMINARY SYSTEM DESCRIPTION**  
**OIT ORC GEOTHERMAL POWER PLANT**  
*(Not for Construction)*



**MACHINE PHYSICAL DATA**

Generator (qty) x Output	(1) x 750kW, (1) x 1MW
Generator Type	Induction, D-Flange, 480V, 3600 RPM
Generator Spec #	C-Gen
Working fluid	R245fa
Working Fluid Temp	175 °F max
Boiler Pressure	115 psia max
Turbine Material	A356 Cast Aluminum
Gearbox	JCI, model HL
Boiler construction	Shell and welded steel tube
Boiler Inlet Flange	12"
Total Brine Loss	30 ft
Condenser Construction	Shell and copper tube
Condenser Inlet Flange	20"
Total Condenser Water Loss	15 ft

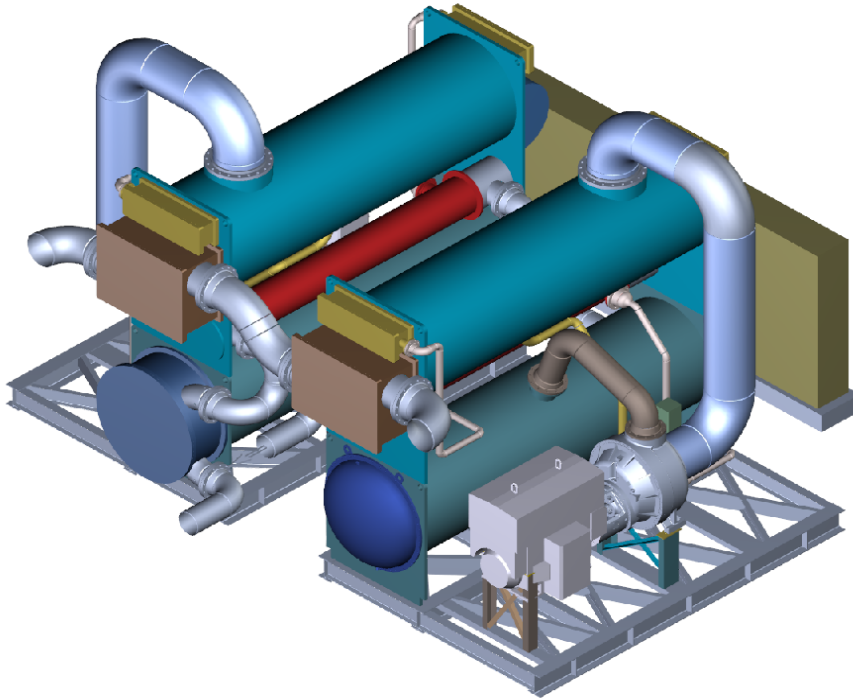
**MACHINE DIMENSIONS & WEIGHTS**

	Shipping Section	Shipping Sections (lbs)	Dimensions (ft)
Boiler A	1	43,000	21 L x 5 W x 7 H
Boiler B	2	43,000	21 L x 5 W x 7 H
Condenser A	3	36,000	21 L x 6 W x 6 H
Condenser B	4	36,000	21 L x 6 W x 6 H
Power Train Skid A	5	27,000	16 L x 6 W
Power Train Skid B	6	27,000	16 L x 6 W
Refrigerant	7	17,000	
Unit Piping	8	3,000	
Switch Gear	9	4,000	
Miscellaneous	10	5,000	
Overall Unit		241,000	21 L x 31 W x 20 H

**PRELIMINARY SYSTEM DESCRIPTION**  
**OIT ORC GEOTHERMAL POWER PLANT**  
*(Not for Construction)*



**MACHINE DIMENSIONS INSTALLED**  
21 ft Long x 31 ft Wide, 20 ft High



Rev. Lev.	Date	Revision Description	By
-	01/05/12	Initial Release	E. Minor

## 5.0 DOLPHIN SERIES 3000 MAJOR COMPONENT DESCRIPTIONS

As depicted on page 1 of this manual in Figure 1, the Dolphin System consists of two main units: the Transformer Panel, and the Coil-Pipe Assembly.

### 5.1 The Transformer Panel

Depicted in Figure 2, the Transformer Panel contains the transformer, fuses, status LEDs, Digital Dolphin printed circuit board, umbilical cable connector, AC power connection at terminal block, ventilation ports, and a ventilation fan. The Transformer Panel is a stainless steel NEMA 3R rated enclosure that provides protection against rain and sleet in an outdoor installation. Table 1 lists the physical specifications for the Transformer Panel.

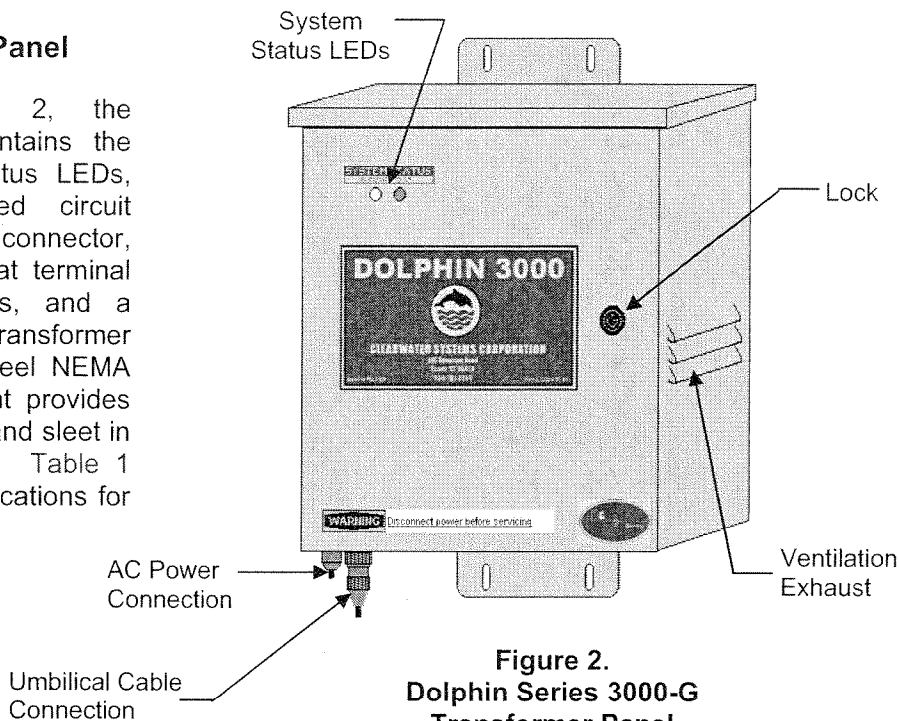


Figure 2.  
Dolphin Series 3000-G  
Transformer Panel

Table 1. Transformer Panel Specifications

Model	Pipe Size	Voltage	VA	Fuse Size	Enclosure Dimensions	Umbilical Cable	Net Weight	
							Coil	Panel
3010-SST	1"	115-230V/50-60Hz	150	MDL-2	10" X 10" X 8"	10 ft	13 lb	32 lb
3010-PVC	1"	115-230V/50-60Hz	150	MDL-2	10" X 10" X 8"	10 ft	11 lb	32 lb
3020-SST	2"	115-230V/50-60Hz	220	MDL-3	10" X 10" X 8"	10 ft	28 lb	32 lb
3020-PVC	2"	115-230V/50-60Hz	220	MDL-3	10" X 10" X 8"	10 ft	24 lb	32 lb
3030-SST	3"	115-230V/50-60Hz	325	MDL-5	10" X 10" X 8"	10 ft	50 lb	32 lb
3030-PVC	3"	115-230V/50-60Hz	325	MDL-5	10" X 10" X 8"	10 ft	35 lb	32 lb
3040-PVC	4"	115-230V/50-60Hz	390	MDL-7	10" X 10" X 8"	10 ft	43 lb	32 lb
3060-PVC	6"	115-230V/50-60Hz	480	MDL-7	10" X 10" X 8"	10 ft	110 lb	32 lb
3080-PVC	8"	230-460V/50-60Hz	2400	MDA-15	16" X 16" X 10"	16 ft	140 lb	84 lb
3100-PVC	10"	230-460V/50-60Hz	2100	MDA-15	16" X 16" X 10"	16 ft	175 lb	84 lb
3120-PVC	12"	230-460V/50-60Hz	1800	MDA-12	16" X 16" X 10"	16 ft	206 lb	84 lb
3160-PVC	16"	230-460V/50-60Hz	2400	MDA-15	16" X 16" X 10"	16 ft	250 lb	84 lb

- All Transformer Panels are configured for AC power hardwiring in the field.
- Dimensions and specifications are for reference only and are subject to change without notice.
- All 230 Volt units may be operated at 208 Volts without damaging the unit.
- **Special order** Umbilical Cables up to 25 feet in length can be provided.



APPLIED SYSTEMS NORTHWEST  
 500 W 8<sup>TH</sup> STREET, SUITE 110  
 VANCOUVER, WA 98660  
 PH: 360.883.3962  
 FAX: 360-885-3188

To: **Scott Tyra** From: **Tom Berger - Technical Sales**  
**Johnson Controls, Inc.**  
 Re: **Dolphin/Separator Quotation** Date: **2/2/2011** Quote#: **3534**

*We offer to furnish the equipment and services specified herein at the prices stated and in accordance with ASO's standard terms and conditions. If terms and conditions are stated below, these terms will take precedence. If you do not have a copy of, or are not aware of, these standard conditions please contact this office.*

Scott,

Please see quote below for accessories to support the cooling towers on the project.

**I NON-CHEMICAL WATER TREATMENT SYSTEM** Tag# N/A

Two ( 2 ) Clearwater brand "Dolphin" units with accessories with the following components, features and options:

- Two (2) 12" Dolphin Series 3000 – Water Treatment Pipe Spools
- Two (2) Control Panels NEMA 3R for 115/230V -1-60 Power. 16 ft umbilical cord between panel and Dolphin Coil Pipe assembly.
- **Unlimited lifetime product; no known limit to length of product usage**
- Two (2) pair of 150# PVC Van Stone flanges for coil pipe assemblies, ship loose
- One (1) Conductivity controller MicroVision 4-20, with flow switch. 120V.
- One (1) Blow-down valve. Belimo 2" motorized ball valve Model B250.120V. Power cord with plug connects to the power output on the conductivity controller.
- Two (2) Rain hood assemblies for outdoor application
- Water analysis, Start up service and water quality monitoring for a period of one year
- Owner Training
- Freight to the jobsite curb is included.

**Total Price for Item I above.....\$69,100.00**

Prices are FOB factory, freight allowed, taxes excluded  
 Lead times are currently about 6 - 7 weeks, plus transit time

**II SOLIDS FROM LIQUID SEPARATOR** Tag# N/A

One ( 1 ) Puroflux separator system for side stream application with the following components, features and options:

- Puroflux model - PF-64-060A
- For 800 GPM activity rate
- Separator assembly from carbon steel
- Centrifugal pump, 20 HP motor
- Cast iron pre-strainer w/stainless steel basket (Deduct \$1078.00 to delete strainer)
- NEMA 4X polycarbonate control panel w/door mounted disconnect
- Motor starter for pump
- Purge timer
- Short circuit/overload protection

- Step-down transformer
- HOA selector switches
- Factory mounted on steel skid

➤ **Total Price for Item II above.....\$14,700.00**

Prices are FOB factory, freight allowed, taxes excluded  
Lead times are currently about 4 - 5 weeks, plus transit time

Thank you for considering our products and services on this project. Please call if you have any questions regarding this proposal.

Sincerely,

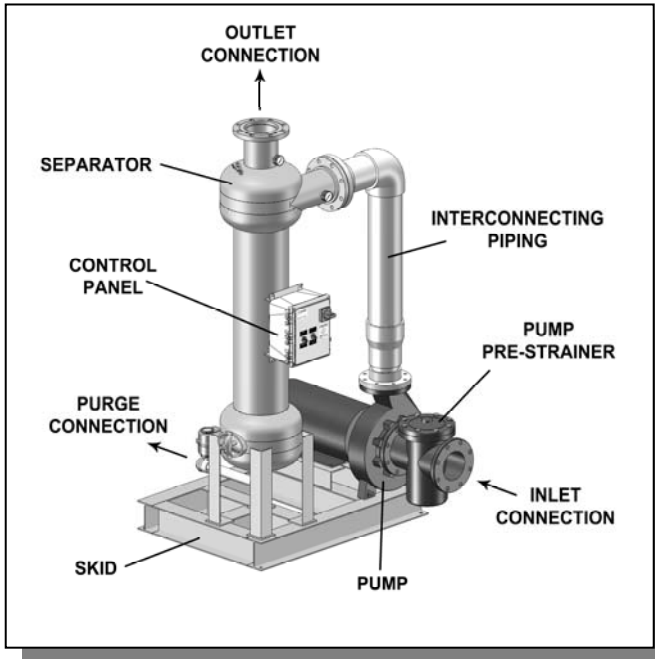


Tom Berger  
Technical Sales





## PF64-060(A) SPECIFICATION SHEET PUMP PACKAGE SYSTEM



SPECIFICATIONS	PF64-060(A)
Flow Rate	900 gpm
System Inlet Connection	6" flng
System Outlet Connection	6" flng
Purge Connection	1 1/2" fpt
Separator Model	PF61-060
Separator Purge	Automatic
Pump Motor	20 hp
Volume	40 gal
Est. Weight, Dry	1400 lbs
Est. Weight, Operating	1732 lbs

- Removes particulate as low as 45 microns
- 150 psi working pressure

- Fully assembled skid package
- One year limited warranty

### SYSTEM COMPONENTS

#### Separator :

- PF61-060 - 6" flanged separator
- Fusion bonded polyester coated vessel
- 1/4" Manual air bleed valve
- 0 to 160 psi gauges on influent / effluent

#### Electrical Controls :

- NEMA 4X fiberglass enclosure
- Motor overload/short circuit protection
- Hand-Off-Auto switches

#### Pump :

- Close coupled, end suction centrifugal pump
- 1750 rpm, TEFC motor

#### Automatic Purge :

- Electrically actuated industrial grade ball valve
- Adjustable purge timer

#### Skid :

- Fusion bonded polyester coated carbon steel

#### Interconnecting Pipe :

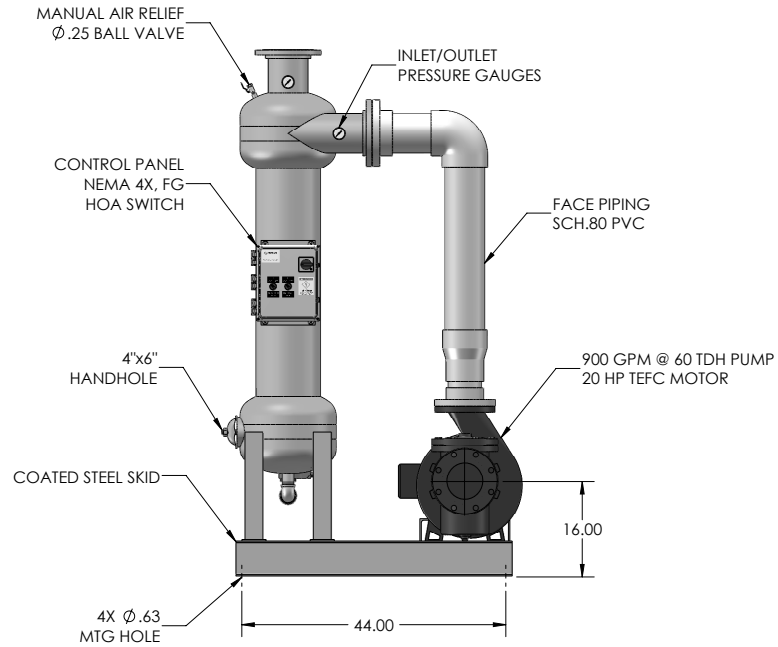
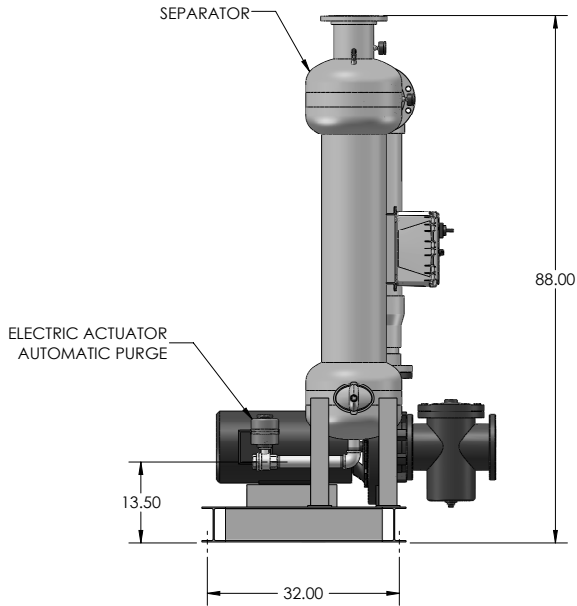
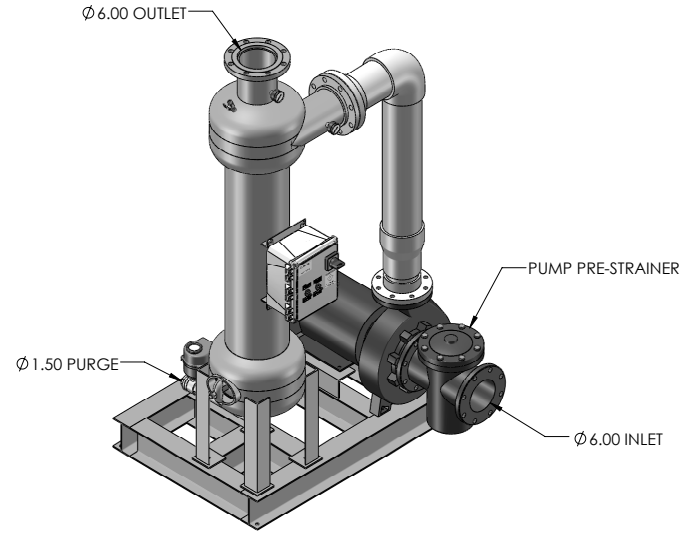
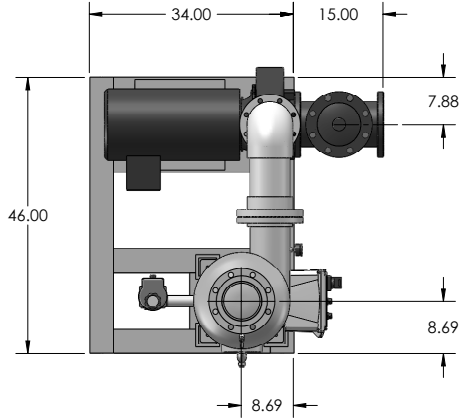
- Sch.80 PVC piping

**Options:** Manual Purge, Removable Dome, 22 1/2" profile

NOTES: UNLESS OTHERWISE SPECIFIED

1. DIMENSIONS ARE IN INCHES
2. DIMENSIONS MAY VARY SLIGHTLY - DO NOT USE FOR CONSTRUCTION
3. SEPARATOR SYSTEM IS RATED FOR 150 PSI WORKING PRESSURE

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
J	CHANGED FLOW RATE	08-18-09	D.L.



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL: ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ± INTERPRET GEOMETRIC TOLERANCING PER:	PROJ. NO.	PF-64-060(A) AP SEPARATOR PACKAGE	
	DRAWN	K. CARTER	900 GPM - W/SKID MOUNTED PUMP
	CHECKED		
	DESIGN APPROVED		
MATERIAL	QA APPROVED	SCALE	NONE
FINISH	RELEASE DATE	12-27-01	
APPLICATION	DO NOT SCALE DRAWING		

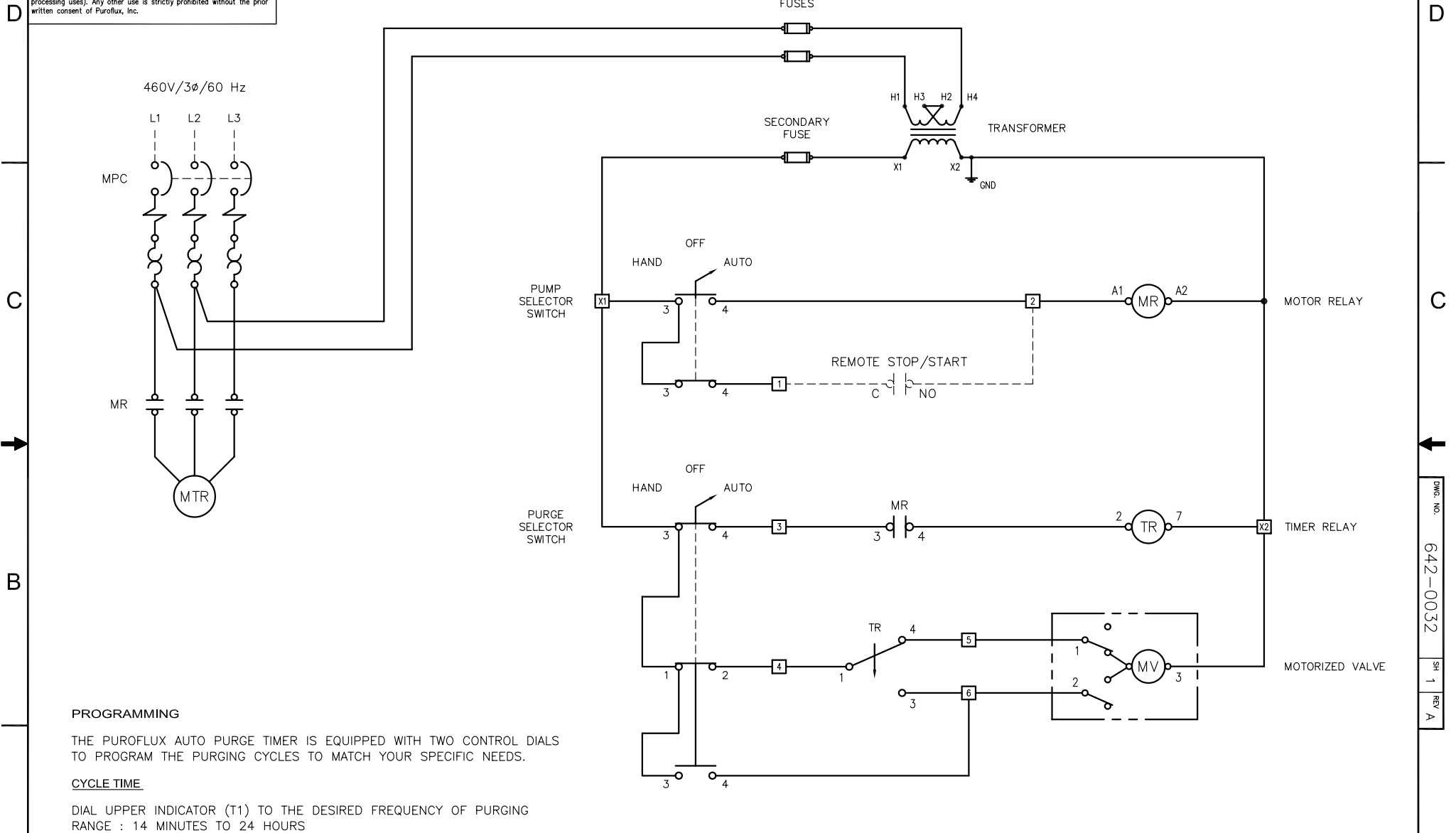
**PUROFLUX CORPORATION**  
 PHONE: (805) 579-0216  
 FAX: (805) 579-4005  
 WEBSITE: www.puroflux.com

SIZE	CAGE CODE	DWG NO.	REV
C		641-0020	J
SCALE		NONE	
SHEET		1 OF 2	

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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED - VALBIA ACTUATOR	02-20-08	K.C.



**PROGRAMMING**

THE PUROFLUX AUTO PURGE TIMER IS EQUIPPED WITH TWO CONTROL DIALS TO PROGRAM THE PURGING CYCLES TO MATCH YOUR SPECIFIC NEEDS.

CYCLE TIME

DIAL UPPER INDICATOR (T1) TO THE DESIRED FREQUENCY OF PURGING  
 RANGE : 14 MINUTES TO 24 HOURS  
 FACTORY SETTING : 25% (APPROX EVERY 6 HRS)

PURGING TIME

DIAL LOWER INDICATOR (T2) TO THE DESIRED DURATION OF PURGING  
 RANGE : 6 TO 60 SECONDS  
 FACTORY SETTING : 35% (APPROX 20 SEC)

MATERIAL	UNLESS OTHERWISE NOTED	PROJ. NO.	WIRING DIAGRAM : 460V/3φ/60 HZ	
	DIMENSIONS ARE IN INCHES	DRAWN K. CARTER	AUTO PURGE PANEL : REMOTE STOP/START	
	DO NOT SCALE THIS DRAWING	CHECKED		
	INTERPRET DRAWING PER APPLICABLE STANDARDS	DESIGN APPROVED	1357 KUEHNER DRIVE SIMI VALLEY CA 93063 PHONE: (805) 579-0216 FAX: (805) 579-6005	
DECIMALS	ANGLES SURFACE FINISH	MFG APPROVED	SIZE C	CAGE CODE
.XX ± ± ±	XXX ± ±	QA APPROVED	DWG NO. 642-0032	REV A
THREADS PER NBS HANDBOOK-H28	CONCENTRICITIES .010 TIR	RELEASE DATE 08-23-02	SCALE NONE	SHEET 1 OF 1
BREAK CORNERS .005-.015	INTERNAL RADIi .015-.030			
NEXT ASSEMBLY				
APPLICATION				

DWG. NO. 642-0032  
 SH 1  
 REV A



**BALTIMORE  
AIRCOIL COMPANY**

**QUOTE**

TO JOHNSON CONTROLS  
Attn: Lee Dowden

BAC Quote # Q110162077  
Project: OIT Geo Heat Plant  
Date: 4/18/2011  
ASNW Quote#: 3534

Quantity: 4 Model 31213C-PM Cooling Tower Unit

Certified Capacity: 1975.00 USGPM of water from 59.75°F to 49.75°F at 40.00°F entering air wet bulb.

Fan Motor(s): One (1) 40 HP fan motor(s): Totally Enclosed, Air Over (TEAO),  
1 Speed/1 Winding - Premium Efficiency (Inverter Duty), suitable for 460 volt, 3 phase,  
60 hertz electrical service. Drives are based on 0 inches ESP.

NOTE: Inverter Duty fan motors, furnished in accordance with NEMA Standard Mg.1 -- Part 31, are required for applications using variable frequency drives for fan motor control.

**Equipment Summary**

- Induced Draft, Crossflow Cooling Tower
- Quality Assurance - ISO 9001 Certified
- Unit Energy Efficiency per ASHRAE Standard 90.1-2004
- Steel Panels and Structural Members are Constructed of Galvanized Steel with Stainless Steel Hot and Welded Cold Water Basin
- Standard Fan Driven by BALTIDRIVE® Power Train
- Fiberglass Reinforced Polyester (FRP) Casing Panels
- FRP Air Inlet Louvers
- PVC Film Wet Deck Material & Drift Eliminators
- Structure Designed in accordance with the 2009 IBC
- Bottom Inlet EASY CONNECT® Piping Arrangement
- Bottom Outlet Pump Suction Connection
- Electric Water Level Control Package with High & Low Level Alarm
- Electronic Vibration Cutout Switch with Alarm Contact
- Extended Bearing Lubrication Lines
- Hot Water Basin Weir Dams

- Galvanized Steel Air Intake Screens
- Galvanized Steel Velocity Recovery Stack
- Aluminum Ladders Located on the End Front Right & End Back Left
- Safety Cage is Provided for each Ladder to the Fan Deck
- One Self-Closing Safety Gate
- 6' Ladder and Cage (if provided) Extension(s) for each Ladder
- Perimeter Handrails
- Access Door Platform with Aluminum Ladder Located on Both Ends of the Unit
- Internal Walkway
- Internal Ladder, Service Platform and Safety Gate with Galvanized Steel Supports

#	QTY	PRODUCT ID	DESCRIPTION	TOTAL \$
1	4	31213C-PM	Model 31213C-PM Cooling Tower Units	\$453,900.00
<b>TOTAL</b>				<b>\$453,900.00</b>

Prices are FOB factory, freight allowed, taxes excluded  
 Lead times are currently about 6 to 7 weeks lead time, plus transit



Tom Berger - Applied Systems NW

**Equipment Details - All Information is Per Unit**

**Unit Type:**

This unit will be a factory fabricated, induced draft, crossflow cooling tower with vertical discharge.

**Quality Assurance:**

Each unit will be manufactured under closely-controlled conditions using standardized parts to ensure each unit is built precisely to the same high-quality design and construction standards. The design, manufacture, and business processes of Baltimore Aircoil Company are ISO 9001:2000 certified.

**Unit Efficiency:**

The unit(s) will comply with the energy efficiency requirements established by ASHRAE Standard 90.1-2004.

#### **Materials of Construction:**

The hot water basins and areas of the cold water basin in contact with the water are constructed of Type 304 stainless steel which extends the life of the cold water basin. The cold water basin may be exposed to extended periods of stagnant water where variations in treatment chemicals and natural contaminants can attack the basin material. To protect from these contaminants, the areas of the cold water basin in contact with the water will be constructed of Type 304 stainless steel. All factory seams in the cold water basin will be welded to ensure watertight construction and welded seams shall be warranted against leaks for a period of five (5) years. The steel panels and structural elements above and below the cold water basin will be constructed of the standard G235 (Z700 metric) hot-dip galvanized steel.

#### **Fan & Drive System:**

The unit features the exclusive BALTIDRIVE® Power Train fan drive system with over a decade of proven performance in tens of thousands of installations world wide. Backed by an extensive five year drive warranty that even includes the motor, the BALTIDRIVE® Powertrain fan drive system utilizes special corrosion resistant materials of construction and state-of-the-art-technology to ensure long, trouble-free life, ease of maintenance and reliable year round performance for all fan drive components. The five-year warranty provided on all BAC evaporative cooling equipment is the most comprehensive fan motor and mechanical equipment warranty available in the industry. Included in the five-year warranty are the mechanical equipment support, fan(s), fan shaft(s), bearings, sheaves, and fan motor(s).

#### **Casing Panels:**

Casing panels are constructed of corrosion resistant, UV protected Fiberglass Reinforced Polyester (FRP).

#### **Inlet Louvers:**

The FRP air inlet louvers are spaced to reduce air resistance while preventing water splash-out.

#### **Wet Deck Material:**

The patented BAC Wet Deck and eliminators used in the unit have been engineered to provide a maximum air/water contact and low air pressure drop to ensure efficient heat transfer with minimum fan power requirements. The wet deck surface is impervious to rot, decay, fungus or biological attack and have a flame spread rating of 5 per ASTM Standard E-84-77a. The eliminators are designed to effectively strip entrained moisture from the leaving airstream.

#### **Equipment Structure:**

The structure of this product has been designed, tested and independently certified in accordance with the wind and seismic load requirements of the 2009 International Building Code (IBC) and ASCE/SEI 7-05. For more information and specific wind and seismic load capacity ratings, please see the Certificate of Wind and Seismic Load Capacity.

#### **Water Inlet(s):**

The unique EASY CONNECT® Piping Arrangement provides you with a single bottom inlet piping connection per cell to significantly reduce the field piping required, and eliminate all overhead piping. The symmetrical internal piping from the EASY CONNECT® Piping Arrangement to the hot water distribution systems assures each distribution system with balanced flow. Therefore, eliminating the need for flow control valves within the tower. The bottom inlet connection will be grooved to suit a mechanical coupling and beveled for welding, located within the plenum of the cooling tower. In short, the EASY CONNECT® Piping Arrangement will reduce your installation costs while enhancing the appearance of the final installation.

#### **Water Outlet(s):**

The unit will be provided a bottom bolt hole pattern with a large area lift out strainer which includes an anti-vortexing hood to prevent air entrainment. Please see the submittal package for the connection size.

#### **Basin Water Level Control:**

A factory-set electric water level control system can be substituted for the standard mechanical make-up valve to provide accurate water level control. No field adjustment is necessary despite variations in thermal loads on a tower or variations within the normal range of make-up water supply pressures (15 to 50 psig). This system consists of a conductance-actuated control/assembly, mounted in the cold water basin. A slow closing solenoid valve is shipped loose for field installation at the make-up water connection on the unit. All wiring must be provided by others. If the make-up supply pressure is high (>40 psig) and/or the solenoid valve is at the end of a lengthy pipe, a surge suppresser maybe required (by others).

#### **Vibration Cutout Switch:**

A solid state vibration cutout switch with adjustable time delay, mounted in a NEMA 4X enclosure, can be furnished on the fan support framework. The switch shuts off the fan motor when subjected to excessive mechanical equipment vibration. Field wiring (by others) is required.

#### **Extended Lubrication Lines:**

To simplify maintenance of the drive bearing, extended lubrication lines ending in standard grease fittings are provided. The grease fittings are located on the inside of the access door. The extended lubrication lines allow evaporative cooling equipment operators to lubricate the drive bearings from the outside of the unit.

#### **Hot Water Basin Weirs:**

The unit is supplied with a hot water basin dam in each hot water basin to accommodate water flow rates of 50% of the design flow. The weir dams provide an even water distribution over the fill at below design water flow rate conditions.

#### **Air Intake Option:**

Hot-dip galvanized steel wire mesh screens are available factory-installed over the air inlet louvers to prevent debris from entering the unit.

#### **Air Discharge Option:**

The velocity recovery stack consists of multiple panels which form a tapered 60" (1,524 mm) tall stack. It is constructed of G-235 (Z700 metric) hot-dip galvanized steel. Field assembly and installation is by others. Due to the height of the stack, a fan guard is not provided.

#### **External Ladder to Top of Unit:**

The Aluminum Ladders are Located on the End Front Right & End Back Left

#### **Safety Cage(s) for Ladder(s):**

Safety Cage shall be provided for each ladder to the fan deck.

#### **Safety Gate(s) for Ladder(s):**

One self-closing safety gate shall be provided for each ladder.

#### **Ladder Extension(s):**

6' Ladder and Cage (if provided) Extension(s) for each Ladder

#### **Safety Railings:**

Perimeter handrails are included to access the top of the unit and the water distribution system.

**Access Door Platform:**

A service platform, access ladder, and safety railing complying with OSHA standards and regulations provides means for safe and convenient access to the unit.

**Internal Access Option:**

A galvanized steel walkway in the plenum facilitates access to the fan drive components and basin strainer screens.

**Internal Service Platform:**

A service platform with aluminum ladder in the plenum facilitates access to the fan drive components.



**Baltimore Aircoil Company**

**Cooling Tower Selection Program**

Version: 7.2.1 NA  
Product data correct as of: February 24, 2011

Project Name: OIT Geo Heat Plant  
Selection Name: Tom Berger - Applied Systems NW  
Project State/Province: Oregon  
Project Country: United States  
Date: April 10, 2011

**Selection Parameters**

**Model & Fan Motor**

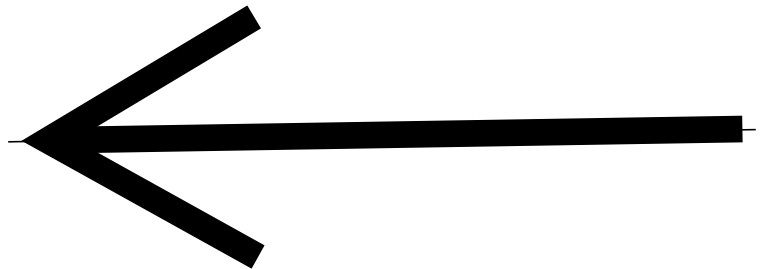
Product Line: Series 3000  
Model: 31213C-PM/V  
Number of Units: 4  
Fan Motor Alternative: Full Speed  
Total Standard Fan Power per Unit: 40.00 HP  
Tower Pumping Head: 9.00 psi

**Model Accessories**

Unit Intake Option: None  
Unit Internal Option: None  
Unit Discharge Option: None  
Fan Type: Standard

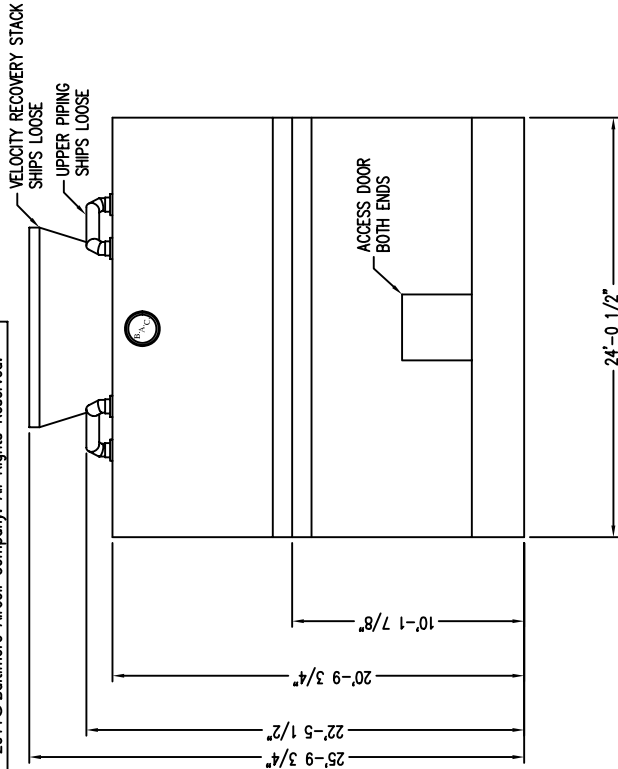
**Maximized Capability, per Unit**

Flow Rate: 7900.00 USGPM  
Hot Water Temperature: 59.73 °F  
Cold Water Temperature: 49.73 °F  
Wet Bulb Temperature: 40.00 °F  
Range: 10.00 °F



***Applicable Warning For Selections Indicated Above:***

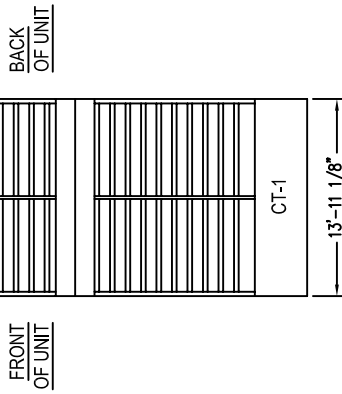
- |  |
|--|
| 1. One or more selection parameters outside of CTI Certification limits. |
|--|



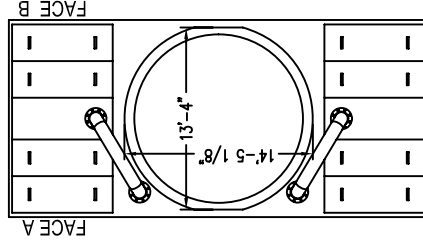
END ELEVATION (FACE A)

Notes

- 1) Drawings are not to scale. All dimensions are in feet and inches. Weights are in pounds and include options and accessories.
- 2) Unless otherwise indicated, connections 3" and smaller are MPT. Connections 4" and larger are grooved to suit a mechanical coupling and beveled for welding.
- 3) Field piping should be fabricated at time of installation. Pre-fabrication of pipe work is not recommended.
- 4) Do not support piping from unit connections. All necessary piping supports to be supplied by others.
- 5) For weight loadings and support requirements, refer to the suggested unit support drawing.
- 6) The area above the fan discharge must be unobstructed.
- 7) Due to height limitations on truck shipments, some items shown may ship loose for field installation.
- 8) Units with velocity recovery stacks are not shipped with fan guards.



SIDE ELEVATION



PLAN VIEW

Model Number	Shipping Weight	Operating Weight	Heaviest Section
31213C-PMVX	24300	48530	12440



**BALTIMORE AIRCOIL COMPANY**

**3000C Unit Print  
Two Piece Units**

DRAWING NUMBER:

**UP-Q11016207701-QTY 4**

ORDER NO: **Q11016207701-QTY 4**

DATE: **4/18/2011**

Project name / location	: -	Tag Number	: 002
Consulting engineer	: -	Service	: -
Customer	:	Model	: CV12-250
Customer ref. / PO	:	Quantity	: 2
Quote number	: 01-31-11 Johnson Control - OIT	Quoted By (Sales Office)	: Performance Pump Co. Inc.
Date last saved	: 03 Feb 2011 1:03 PM	Quoted By (Sales Engineer)	: Martin Gillies

**Construction**

Nozzle	Size (in.)	Nozzle Configuration	Pos'n
Inlet	12	250# ANSI flange	Side
Outlet	12	250# ANSI flange	Side

Valve Body	: ASTM A395
Seat Guide	: -
Disc	: Ductile Iron ASTM A395
Spring	: Stainless Steel, ASTM A240-304
Packing Gland	: Brass ASTM B125 C37700
Stem Packing	: -
Yoke	: Steel ASTM A283-C
Indicator	: -
Hand wheel	: Ductile iron A395
Construction Code/Part Number	: 97523143

**Weights (Approx.)**

Estimated Shipping gross weight	: 665.0 lb
---------------------------------	------------

**PACO Combination Valves**



**Description**

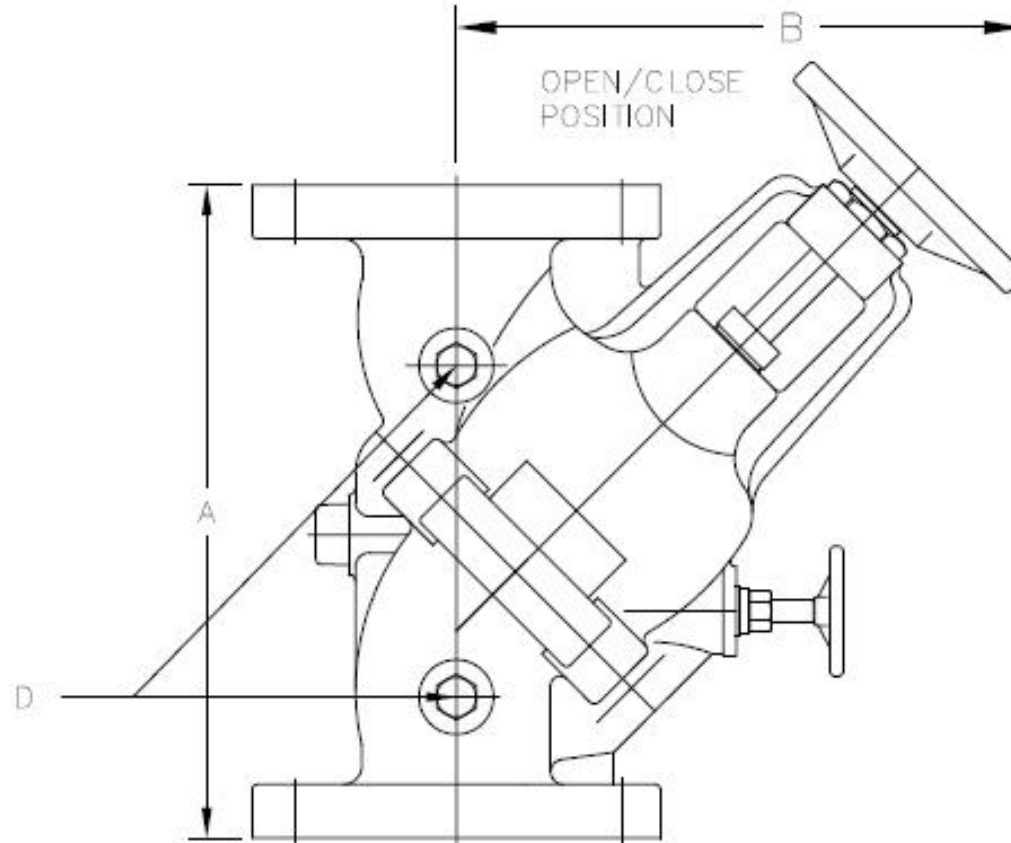
Grundfos Series CV, Combination valve combines three valves in one: shut-off valve, balancing valve, and flow throttling valve. The combination valve makes it possible to reduce the overall system pressure drop since fewer individual components are needed when installing a pump.

The combination valve provides the feature of changing the flange orientation to allow 90° pipe connection. Additional feature includes a built-in bypass valve allowing for drainage of water upstream of the check valve.

-

**General Arrangement**

Project name / location	: -	Tag Number	: 002
Consulting engineer	:	Service	:
Customer	:	Size	:
Customer ref. / PO	:	Quantity of pumps	: 2
Quote number	: 01-31-11 Johnson Control - OIT	Quoted By (Sales Office)	: Performance Pump Co. Inc.
Date last saved	: 03 Feb 2011 1:03 PM	Quoted By (Sales Engineer)	: Martin Gillies



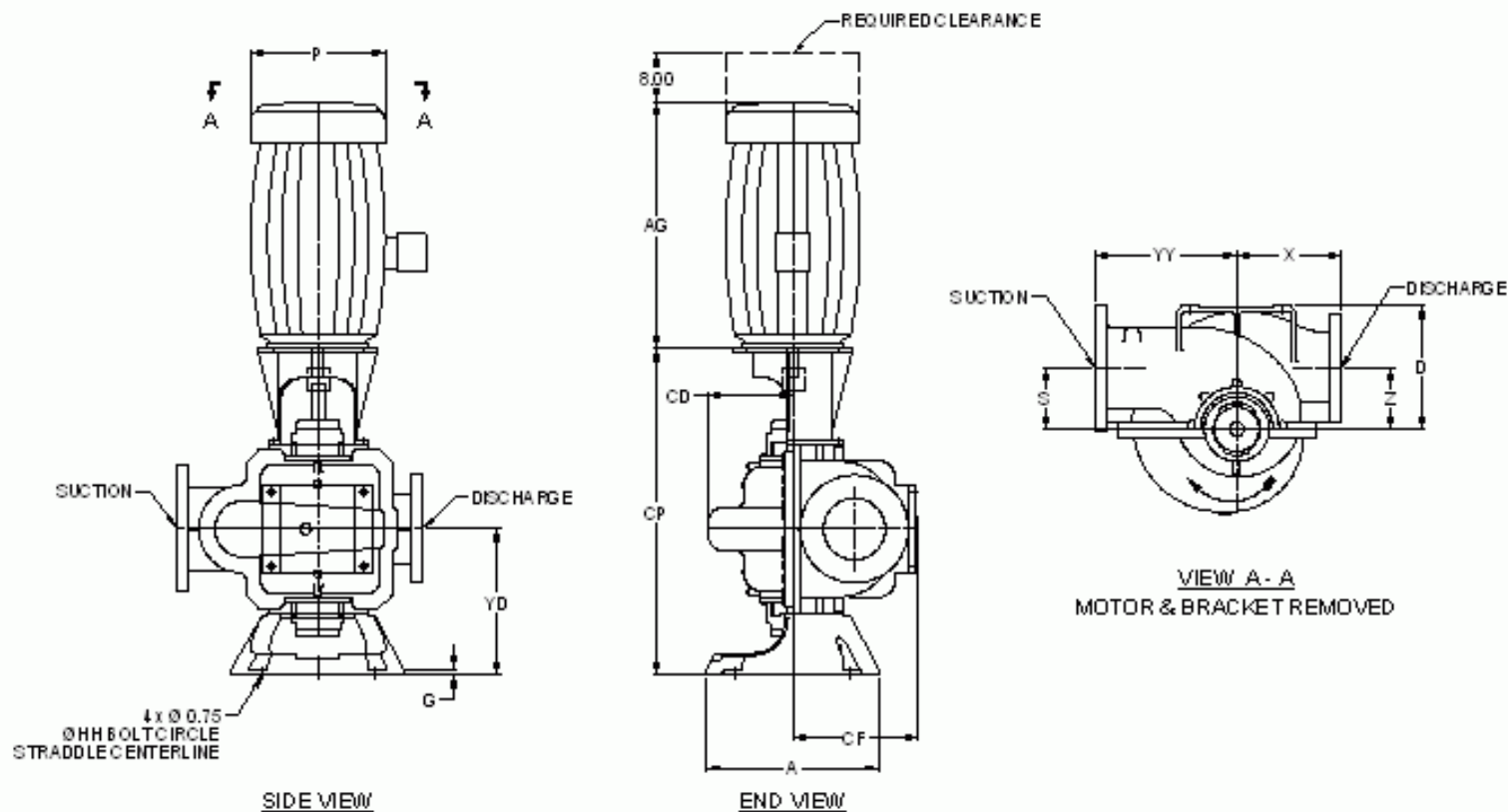
NOT FOR CONSTRUCTION, Unless certified and referenced on order

Units	Inlet Flg-250# ANSI	Outlet Flg-250# ANSI	A	B	D-Purge	Weight-Lbs
inches	12	12	28.94	23.35	0.5	665.0

Conditions of Service			Motor Data		
Flow: -	Fluid: -	HP: -	Encl: -	Phase: -	Efficiency: -
TDH: -	Temp.: -	RPM: -	Hz: -	Voltage: -	S.F.: -

## General Arrangement

Project name / location	: -	Tag Number	: 001
Consulting engineer	:	Service	:
Customer	:	Size	: 1015-3/4 KPV
Customer ref. / PO	:	Quantity of pumps	: 2
Quote number	: 01-31-11 Johnson Control - OIT	Quoted By (Sales Office)	: Performance Pump Co. Inc.
Date last saved	: 31 Jan 2011 6:10 PM	Quoted By (Sales Engineer)	: Martin Gillies



NOT FOR CONSTRUCTION, Unless certified and referenced on order

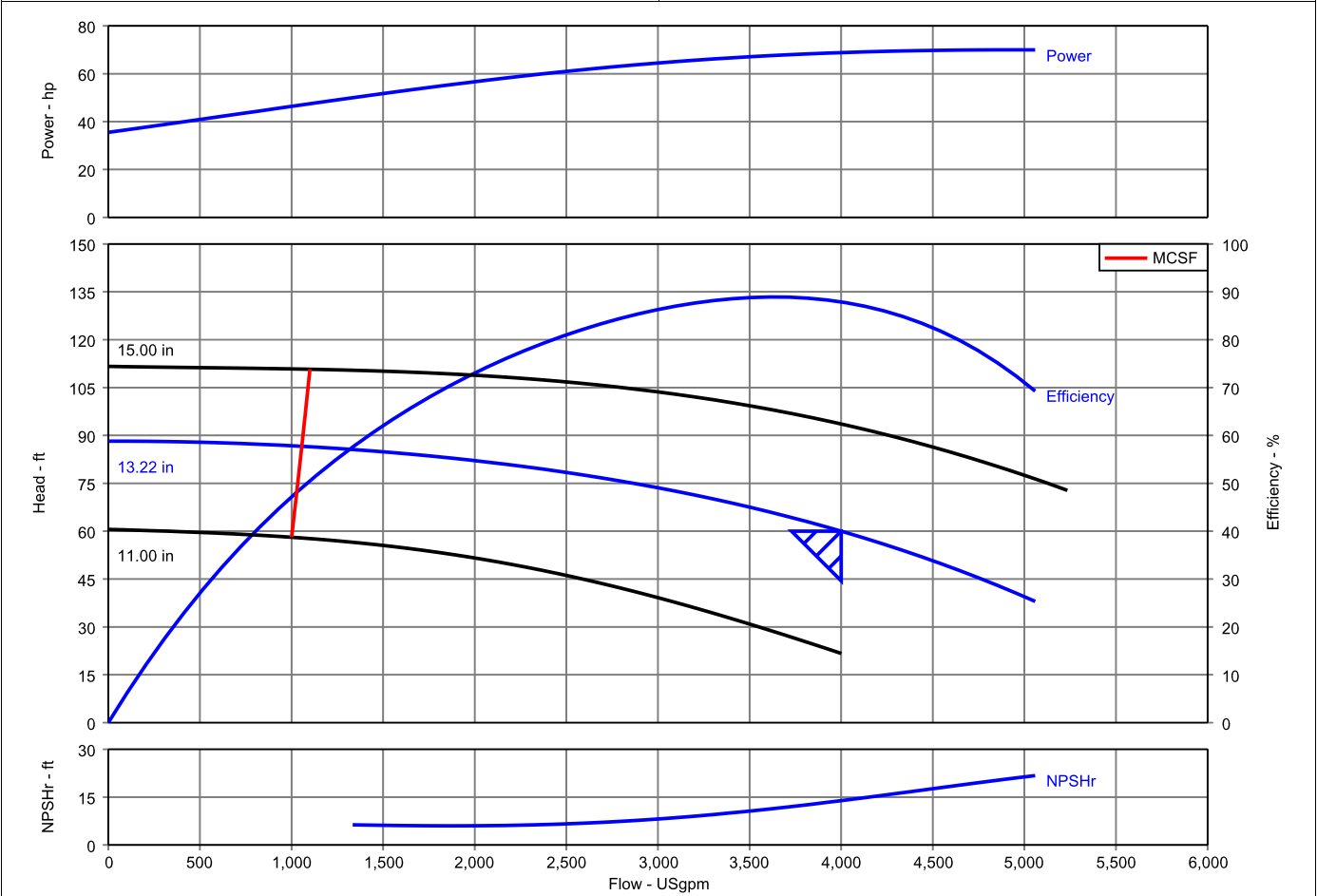
Units	Frame	Suct(in)	Disch(in)	A	AG	CD	CP	D	G	HH	P	S	X	YD	YY	Z	Weight ea
inches	405HP	12	10	28.00	38.00	14.75	53.00	20.00	0.88	26.00	22.00	10.00	17.00	23.75	23.00	10.00	3575.0

Conditions of Service			Motor Data			
Flow: 4,000.0 USgpm	Fluid: Water	HP (Not Mounted): 75	Encl: ODP	Phase: 3	Efficiency: Premium	
TDH: 60.00 ft	Temp.: 68.00 deg F	RPM: 1,187 rpm	Hz: 60	Voltage: 230/460	S.F.: 1.15	

## Pump Performance Datasheet

Project name / location :	Tag Number :	001
Consulting engineer :	Service :	
Customer :	Size :	1015-3/4 KPV
Customer ref. / PO :	Quantity :	2
Quote number :	Quoted By (Sales Office) :	Performance Pump Co. Inc.
Date last saved :	Quoted By (Sales Engineer) :	Martin Gillies

Operating Conditions		Liquid	
Flow, rated	: 4,000.0 USgpm	Liquid type	: Water
Differential head / pressure, rated (requested)	: 60.00 ft	Additional liquid description	:
Differential head / pressure, rated (actual)	: 59.94 ft	Solids diameter, max	: 0.00 in
Suction pressure, rated / max	: 0.00 / 0.00 psi.g	Temperature, max	: 68.00 deg F
NPSH available, rated	: Ample	Fluid density, rated / max	: 0.998 / 0.998 SG
Frequency	: 60 Hz	Viscosity, rated	: 1.00 cP
		Vapor pressure, rated	: 0.34 psi.a
Performance		Material	
Speed, rated	: 1,187 rpm	Material requested	: Auto
Impeller diameter, rated	: 13.22 in	Material selected	: Cast iron
Impeller diameter, maximum	: 15.00 in		
Impeller diameter, minimum	: 11.00 in	Pressure Data	
Efficiency	: 87.89 %	Maximum working pressure	: 38.17 psi.g
NPSH required / margin required	: 13.89 / 0.00 ft	Maximum allowable working pressure	: 250.0 psi.g
nq (imp. eye flow) / S (imp. eye flow)	: 35 / 137 Metric units	Maximum allowable suction pressure	: 250.0 psi.g
MCSF	: 1,055.9 USgpm	Hydrostatic test pressure	: 375.0 psi.g
Head, maximum, rated diameter	: 88.20 ft	Driver & Power Data	
Head rise to shutoff	: 47.00 %	Driver sizing specification	: Maximum power
Flow, best eff. point (BEP)	: 3,634.4 USgpm	Margin over specification	: 0.00 %
Flow ratio (rated / BEP)	: 110.06 %	Service factor	: 1.00
Diameter ratio (rated / max)	: 88.13 %	Power, hydraulic	: 60.50 hp
Head ratio (rated dia / max dia)	: 64.11 %	Power, rated	: 68.83 hp
Cq/Ch/Ce [ANSI/HI 9.6.7-2004]	: 1.00 / 1.00 / 1.00	Power, maximum, rated diameter	: 70.00 hp
Selection status	: Acceptable	Minimum recommended motor rating	: 75.00 hp / 55.93 kW



# Automatic Strainers

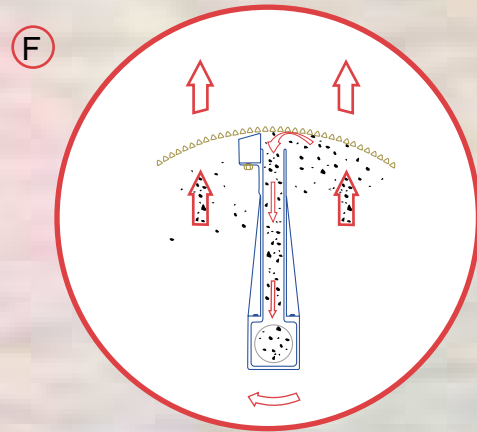
ASME Section VIII, Div 1,  
Current Edition:  
U and UM CODE STAMP  
Available

## The Eliminators

The Eliminator, motorized, automatic, self-cleaning strainer, provides continuous debris removal from fluid piping systems that demand full time uninterrupted flow.

The Eliminator is particularly effective in fluid applications where unattended service, high solids loading and/or uninterrupted flow requirements deem a basket strainer and its attendant maintenance problems impractical.

Any of the 700 Series Strainers, applied correctly, will prove efficient and cost effective compared to simplex/duplex strainers or other automatic straining systems.



Port/straining element interface during backwashing cycle.

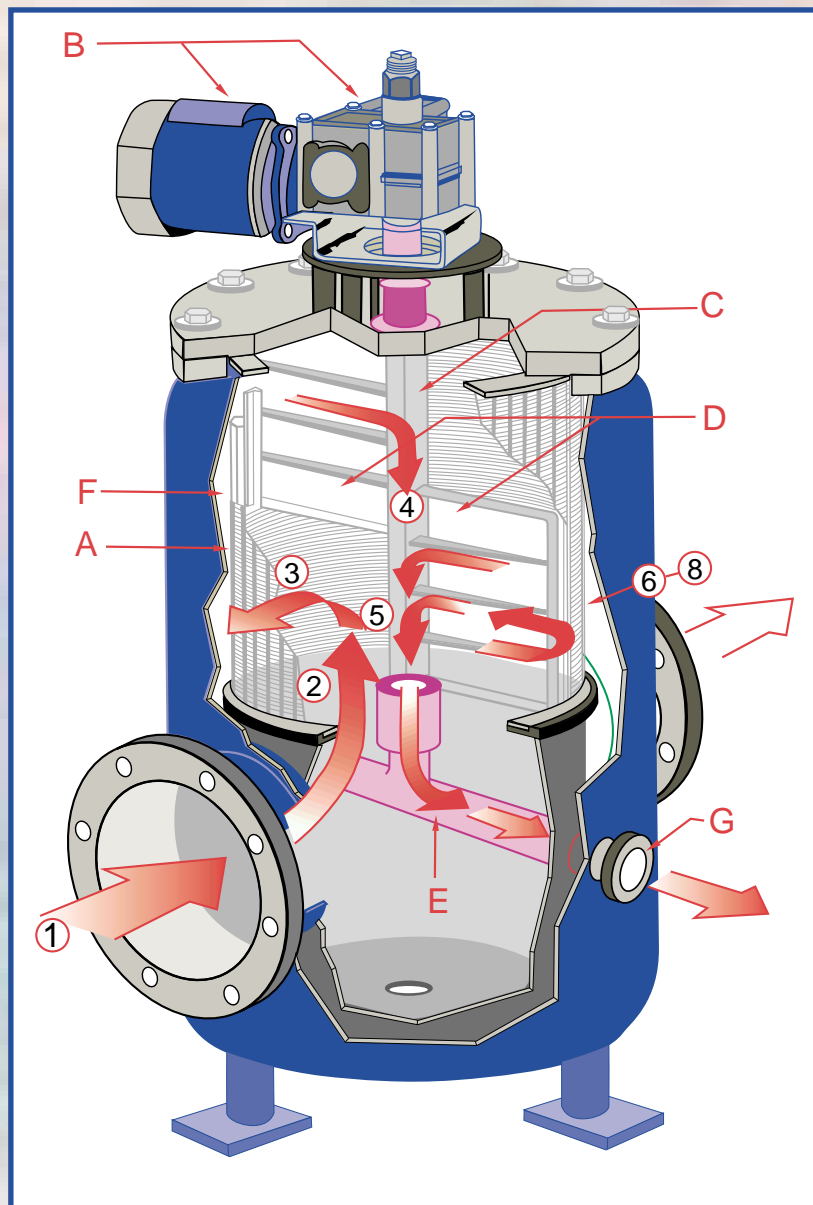


Figure 1 - Cut-away of Eliminator showing fluid flow during operation

## Sequence of operation

1. Debris laden fluid enters through inlet to inner chamber. (Fig. 1)
2. Dirty fluid flows upward and outward through the strainer element (A).
3. Debris is retained on the flat face of the strainer element, while strained fluid continues to outer chamber and exits through strainer outlet. (See inset)
4. During backwash or cleaning cycle, the motor/gear reducer (B) is engaged and drives the hollow drive shaft (C) and hollow port (D) around the inner circumference of the strainer element.
5. The backwash assembly (E) is opened to atmospheric pressure by opening the backwash control valve (not shown).
6. Flow reversal occurs at the port/straining element (F) interface because of the pressure differential described in 5.
7. Debris is effectively vacuumed from the full length of the straining element by a vigorous reverse fluid flow and into the hollow port; down the hollow drive shaft and out the backwash outlet (G).
8. The hollow port continues to sweep the full length of the strainer element until the cleaning cycle has ended.
9. The strainer will provide continuous uninterrupted fluid flow during the cleaning operation.
10. The cleaning cycle can be set for continuous or intermittent backwash.

# Automatic Self-Cleaning Strainers



Figure 2 - Wedge Wire Straining Element Cross-Section

## Application

The Eliminator's patented unique strainer element design permits installation in virtually any piping system operating at a positive pressure.

The Eliminators can operate through a wide range of operating pressures (5 psig minimum) and solids loading with effective debris removal and backwashing across the entire pressure range. Additionally, only one drain/backwash connection is required for installation, effectively eliminating the expense of a separate backwash pressure connection.

Strainers are used to protect equipment such as valves, pumps, meters, heat exchangers or spray nozzles, as well as in-feed water and process water applications or virtually any similar application.

The Eliminator 700 Series Automatic Self-Cleaning Strainers are fabricated in pipe sizes ranging from 1" to 48" to suit most application requirements.

## Proven Features Include:

- Patented rugged screen and mechanical assist backwash mechanism extends useful service life.
- Unique clog-resistant straining element reduces maintenance downtime.
- All internal replacement parts supplied in corrosion resistant material.
- Efficient new design reduces maintenance requirements; requires fewer parts.
- Low rpm backwash mechanism provides more efficient cleaning, less wear of internals.

## Straining Element

The Eliminators feature a revolutionary reverse rolled wedge-wire straining element (Fig. 2) that is extremely rugged and more clog-resistant than conventional strainer elements that use perforated plate or wire mesh screens.

This proven state-of-the-art straining media is fabricated by wrapping vertical rods with wedge shaped profile wire. Each intersection of rod and wire is welded to produce an extremely rugged one-piece element. This forms a continuous slot that allows only two point contact with debris particles to reduce clogging.

The wedge shaped profile wire reduces the possibility of retaining debris smaller than the screen opening which historically has been the cause of premature clogging or failure of competitive screen designs.

## Advantages of Wedge Wire Straining Element

- Maximum effective flow area and maximum operating efficiency are maintained throughout service life.
- Maintenance costs are reduced drastically due to reduced clogging and stappling of fibrous material.
- Long-lived straining element provides reduced operating costs over entire service life.
- Rigid element prevents flexing which can cause premature element failure.
- Efficient, effective debris collection at media/screen interface.



# Strainer Element Selection



Figure 3 - Wedge-Wire Straining Elements

## Straining Element Selection

The 700 Series Straining Element (Fig. 3) is an extremely rugged, single-piece unit available in a variety of standard and custom openings and materials.

Screen opening should be selected based on the amount of protection necessary, and not on the smallest opening available. By specifying a smaller opening than needed, more debris will be retained

and subsequently result in longer cleaning durations and increased backwash fluid loss. Also, smaller than necessary screen openings will reduce open screen area and increase pressure loss.

The screen opening should be approximately one-third (1/3) to one half (1/2) the largest size particle that can safely pass downstream. Example: A strainer protecting spray nozzles with a 1/16" orifice would be supplied with a 1/32" screen opening.

## Straining Element Selection Guide

Slot Opening (inches)	Fraction Equivalent inches (mm.)	Mesh Equivalent	Micron Equivalent	% Open Area	Slot Opening (inches)	Fraction Equivalent inches (mm.)	Mesh Equivalent	Micron Equivalent	% Open Area
<b>Standard</b>					<b>Custom</b>				
0.015	1/64 (0.4)	40	385	24	0.003	- (0.08)	200	75	9
0.031*	1/32 (0.8)	20	795	40	0.006	- (0.15)	100	149	16.5
0.062*	1/16 (1.6)	10	1590	51	0.010	- (0.25)	50	250	17.5
0.125*	1/8 (3.2)	6	3205	67	0.020	- (0.5)	35	500	30
0.187	3/16 (4.8)	4	4795	72	0.040	- (1.0)	18	1000	46
					0.156	5/32 (4.0)	5	4000	69
					0.250	1/4 (6.4)	3	6410	78

\* Available from stock

Standard screen material is 304 Stainless Steel.

316 Stainless Steel, 316L Stainless Steel, Monel and other materials are available upon request.

# The Hyper-Jet<sup>®</sup> Advantage

## The Hyper-Jet™

The Hyper-Jet™ is the line of motorized, automatic self-cleaning strainers. It is very effective in system applications where operating pressure is low (under 5 psig) or where the debris is difficult to remove. The 721 Series strainer provides unattended service with the addition of external backwash to enhance the self-cleaning attribute over other automatic strainers.

### Application:

The Hyper-Jet™'s unique patented backwash system permits installation in a broader range of applications. This range includes from relatively low pressure to very high pressure and from coarse, easily removed debris to fine, sticky debris.

In a low pressure mode (such as on the suction side of a pumping system), the Hyper-Jet™ system is mounted on the leading edge of the strainer backwash arm. External fluid is directed at an incident angle over the inside surface of the straining element through the high pressure nozzle assembly. The high velocity of this spray assists the cleaning of the straining element. **External source backwash pressure must be a minimum of 30 psi over operating pressure.**

Hyper-Jet™ strainers are used to protect equipment such as pumps, motors, heat exchangers or spray nozzles, as well as process applications such as cooling towers or virtually any similar application.

The Series 721 Hyper-Jet™ Self-Cleaning Strainers are fabricated in pipe sizes ranging from 1" to 36" to suit most applications' requirements.

The Hyper-Jet™ System can also easily and economically be field installed in any Fluid Engineering Self-Cleaning Strainer (6" size and larger) in service as a retrofit installation.

## The Unique Hyper-Jet™ Advantage

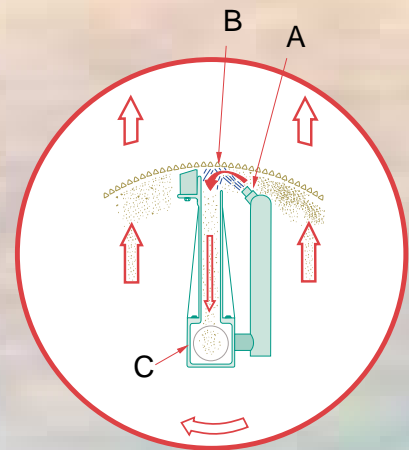
The external source of backwash fluid is introduced by opening the control valve (not shown) connecting the spray nozzles (A) at the leading edge (B) of the backwash assembly.

A "Jet" spray action occurs at the straining element inside surface (see insert) in addition to the flow reversal at the port/straining element interface.

Debris is effectively removed from the full-length of the straining element by a vigorous "Hyper-Jet" fluid flow into the hollow port; down the hollow drive shaft and out the backwash outlet.



Figure 2 - The innovative internals of the Hyper-Jet™ showing ease of maintenance.

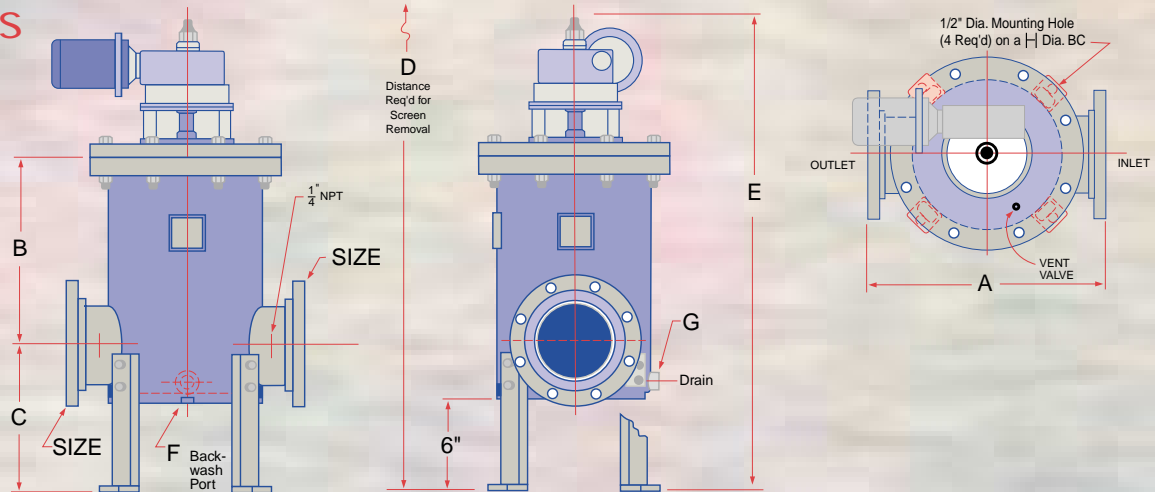


Cross-Sectional View of Port/Straining Element During Backwash Cycle

Series 721 Self-Cleaning Strainer Typical Backwash Flow Requirement										
Strainer Size	1", 1-1/2" 2" or 3"	4"	6"	8"	10/12"	14/16"	18/20"	24"	30"	36"
Backwash Line Size	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"	3"	3"	4"	4"	6"
Backwash Flow in GPM (Gal. Per Minute)	8-12	15-20	30-40	60-75	110-150	170-210	250-310	400-490	550-700	750-900
External Backwash Source GPM	3-5	3-5	5-10	10-15	15-25	25-35	35-45	55-65	80-90	115-130
External Line Size	3/4"	3/4"	3/4"	1"	1"	1"	1-1/4"	1-1/2"	1-1/2"	2"

# Specifications - Dimensions / Weight

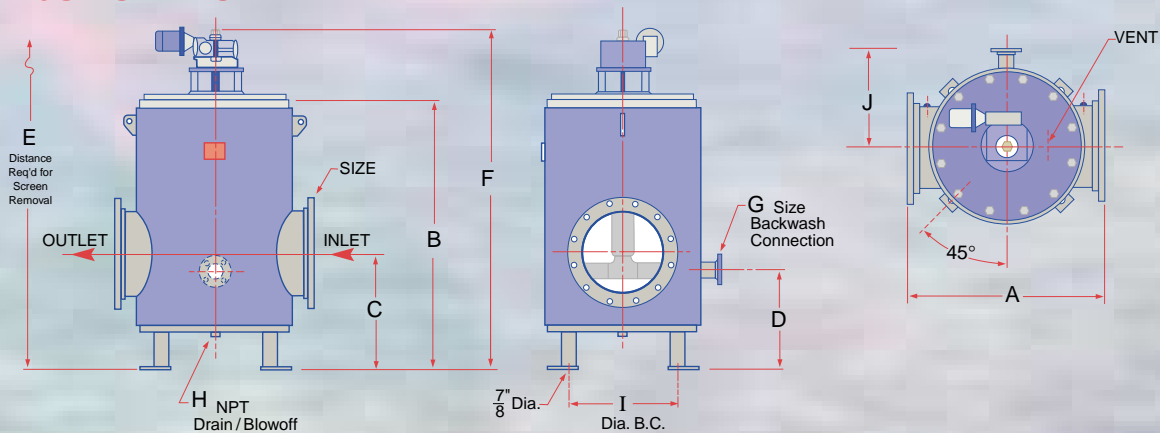
## 793 Series 1" -10"



Model No.	Size (In.)	A (In.)	B (In.)	C (In.)	D (In.)	E (In.)	F (In.)	G (In.)	H (In.)	Approx. Dry	Wts. Wet	Lbs. Cov.	Motor H.P.
010-793	1-150	16-1/2	14-1/4	10	53	30-1/2	1 NPT	1 NPT	11-1/4	320	466	142	1/4
015-793	1 1/2-150	16-1/2	14-1/4	10	53	30-1/2	1 NPT	1 NPT	11-1/4	323	469	142	1/4
020-793	2-150	16-1/2	14-1/4	10	53	30-1/2	1 NPT	1 NPT	11-1/4	327	473	142	1/4
025-793	2 1/2-150	16-1/2	14-1/4	10	53	30-1/2	1 NPT	1 NPT	11-1/4	336	482	142	1/4
030-793	3-150	16-1/2	14-1/4	10	53	30-1/2	1 NPT	1 NPT	11-1/4	338	484	142	1/4
040-793	4-150	16-1/2	14-1/4	10	53	30-1/2	1 NPT	1 NPT	11-1/4	348	494	142	1/4
060-793	6-150	20	15-5/8	11	58-5/8	32	1-1/2 NPT	1 NPT	15-1/2	511	700	176	1/4
080-793	8-150	28	18	16	74	41	1-1/2 NPT	1 NPT	20-3/4	797	1030	200	1/4
100-793	10-150	28	18	16	74	41	1-1/2 NPT	1 NPT	20-3/4	830	1060	200	1/4

THREADED (NPT) INLET/OUTLET CONNECTIONS AVAILABLE

## 723 Series 10" -20"

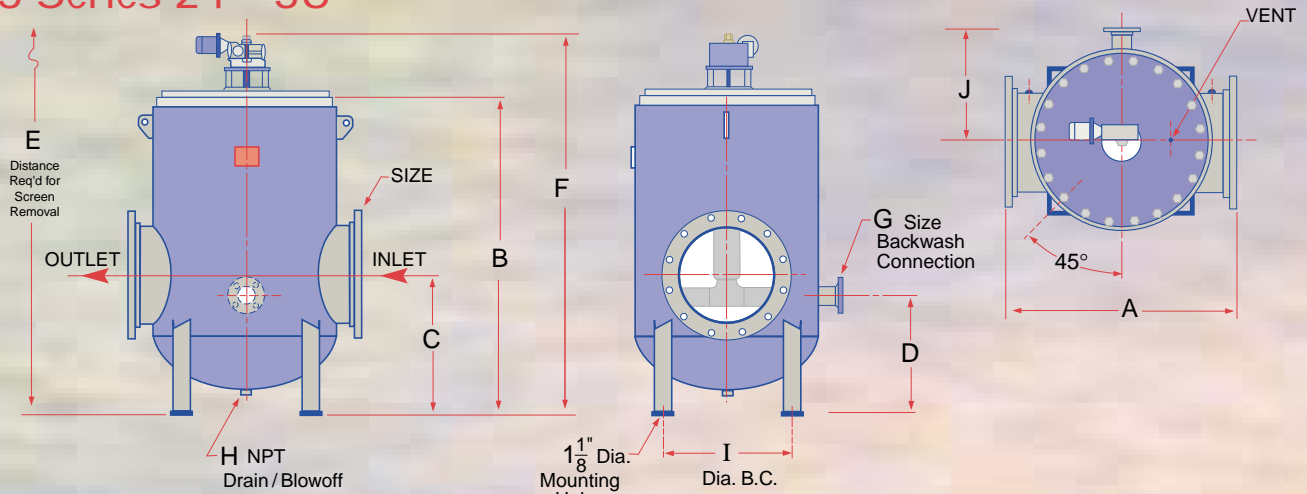


Model No.	Size (In.)	A (In.)	B (In.)	C (In.)	D (In.)	E (In.)	F (In.)	G (In.)	H (In.)	I (In.)	J (In.)	Approx. Dry	Wts. Wet	Lbs. Cov.	Motor H.P.
100-723	10-150	36	43	17 1/2	14 1/2	75	58 1/2	2 NPT	1 1/2 NPT	26	14 3/4	1450	2100	290	1/4
120-723	12-150	36	43	17 1/2	14 1/2	75	58 1/2	2 NPT	1 1/2 NPT	26	14 3/4	1520	2175	290	1/4
140-723	14-150	44	51 1/2	19 1/2	15 1/2	94	69	3-150	1 1/2 NPT	32	21 3/4	2375	3650	460	1/4
160-723	16-150	44	51 1/2	19 1/2	15 1/2	94	69	3-150	1 1/2 NPT	32	21 3/4	2450	3725	460	1/4
180-723	18-150	48	66	24	21	113	87	3-150	2 NPT	38	25 1/4	3290	5535	580	1/4
200-723	20-150	48	66	24	21	113	87	3-150	2 NPT	38	25 1/4	3375	5625	580	1/4

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE. APPLY FOR CERTIFIED DRAWINGS

# Specifications - Dimensions / Weight

## 723 Series 24" - 36"

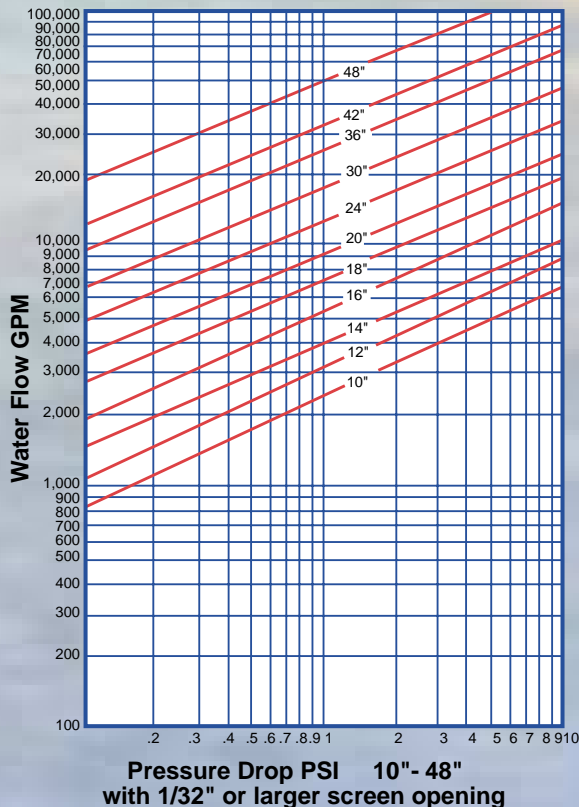


Model No.	Size (In.)	A (In.)	B (In.)	C (In.)	D (In.)	E (In.)	F (In.)	G (In.)	H (In.)	I (In.)	J (In.)	Approx. Dry	Wts. Wet	Lbs. Cov.	Motor H.P.
240-723	24-150	56	77	33	28	122	98	4-150	2 NPT	44	28	4,375	8,350	610	1/3
300-723	30-150	66	94	39	34	150	115	4-150	2 NPT	54	33	6,525	13,625	1,125	1/3
360-723	36-150	86	158-5/8	47-5/8	40-5/8	210	130	6-150	2 NPT	72	43	12,050	26,975	1,490	1/2

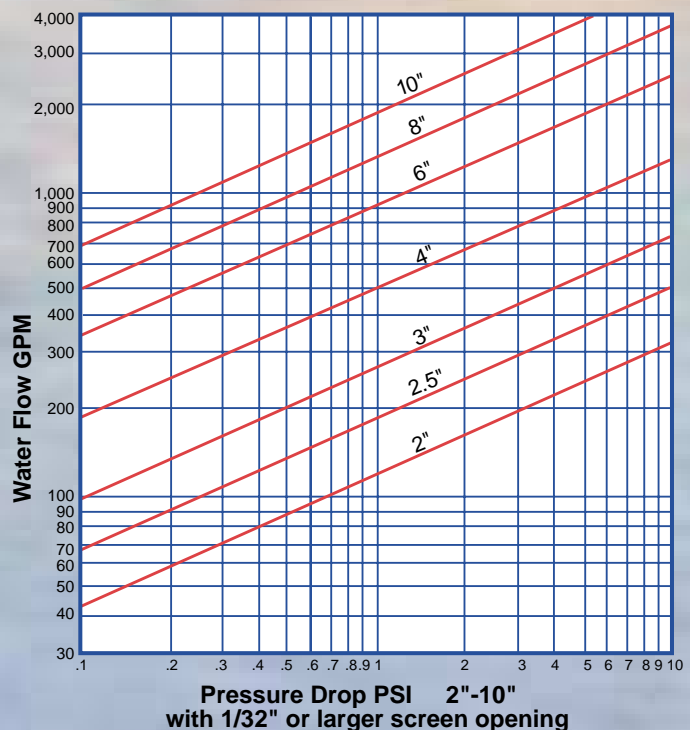
LARGER SIZES AVAILABLE UPON REQUEST  
DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE. APPLY FOR CERTIFIED DRAWINGS

## Specifications - Pressure Drop Charts

### 721-723 Series



### 793 Series



# Specifications and Options

## Typical Strainer Specifications

The strainer shall be Series 723/793 Self-Cleaning, motorized type. (Fig. 4)

The body and cover shall be fabricated (carbon steel), designed, manufactured and tested generally to ASME Section VIII Standards, using qualified ASME Section IX welders.

Housing to be suitable for a design pressure of (150) psig. Inlet and outlet connections shall be flanged and conform to ANSI B16.5 standards. The strainer shall have a single backwash connection and large drain connections located in vessel bottom. Unit to be complete with factory supplied steel support legs for bolting to concrete or steel base.

Strainer shall be \_\_\_\_\_ size capable of handling \_\_\_\_\_ gpm of fluid at a \_\_\_\_\_ psig pressure loss with clean straining elements.

The straining element will be manufactured from corrosion resistant (304 Stainless Steel) reverse rolled slotted wedge wire screen designed with \_\_\_\_\_ inch openings. The wide or flat cross section of the wedge wire shall face the direction of flow providing for a continuous smooth flat surface to trap debris. The straining media shall be free of pockets, tubes, collector bars, etc. that accumulate and trap debris permanently.

All internal parts will be of corrosion resistant (304 Stainless Steel). The strainer shall be provided with drive shaft and hollow port assembly fitted with all necessary bearings and seals.

The drive arm and hollow port assembly will be free running at a maximum speed of two (2) rpm and not contact with screen surface. Port assembly shall be factory and field adjustable for positive effective cleaning and shear capability. Note: Sizes 1" thru 20" have (1) backwash hollow port. Sizes 24" and up will have (2) backwash hollow ports.

Drive shaft will be supported at the top with roller bearings located in a double reduction gear reducer and at the bottom with a water lubricated guide bearing.

The gear reducer shall be driven by a \_\_\_\_\_ hp, \_\_\_\_\_ v, \_\_\_\_\_ Ph, 50/60 Hz, TEFC motor.

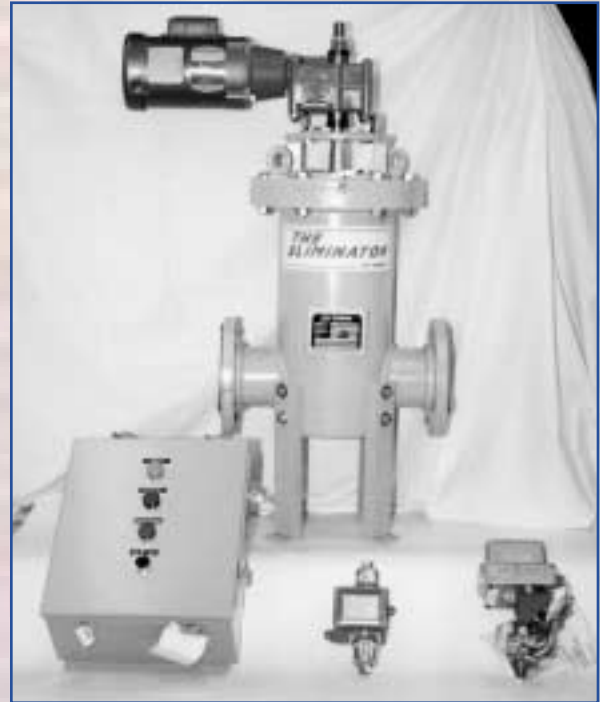


Fig. 4

## Strainer Options Available

- Cover Lift Assemblies -** Recommended for remote locations.
- ASME -** ASME Section VIII and Code stamped.
- Materials of Construction -** Consult factory for stainless steel, copper, nickel, monel, or other requirements.
- Control Package -** Control Panel with Nema 4 Enclosure, Backwash Valve with Electric Operator, Single Element Differential Pressure Switch.
- Design -** High Pressure applications - Consult factory.
- Hyper-Jet -** Low Pressure and Special Application.
- Skid Packages -** All equipment desired, including strainers, valves, controls, wiring, piping and skids may be combined as a complete, custom package. Size of the project has no limitation.
- Water Saver Package -** The Water Saver Package (Fig. 5) can be used on most applications where the strained liquid is scarce or valuable. The strainer backwash fluid is directed to a centrifugal separator where only a fraction of the strainer backwash is discharged to waste. The separator backwash can be manually operated and/or automated with a pre-set timer controlled valve.

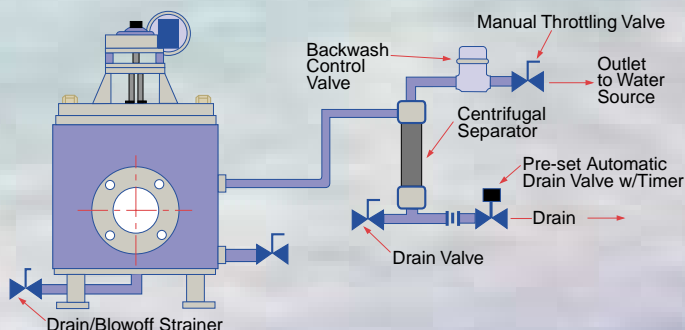
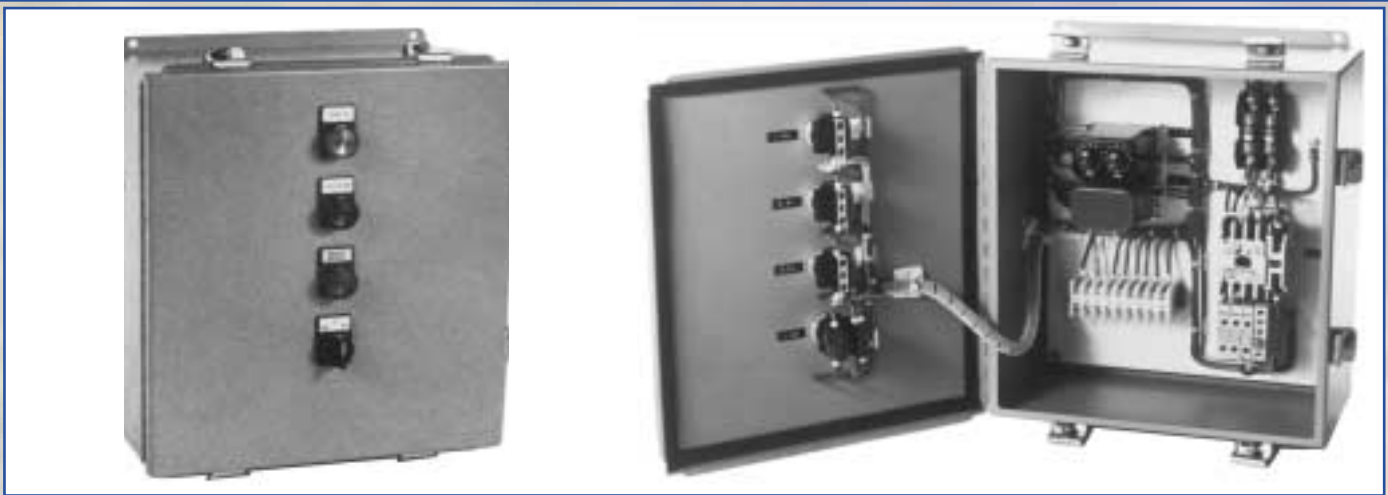


Fig. 5 - Series 723 - Water Saver Package

# Sequence Controller



## Design and Construction

The Sequence Controller is designed with the Customers' specific requirements in mind. The Sequence Controller provides an automatic, effective backwashing cycle with a minimum loss of water.

The Sequence Controllers are constructed with state-of-the-art industrial type components which permits replacing individual components without having to replace an entire circuit board. The industrial type components are more durable and reliable and adjustments can be made with ease.

## Standard Features

- Enclosure - Nema 4
- Adjustable Cycle Timer
- Off-delay Timer
- Motor Starters with Auxiliary contact and overload relay
- Selector Switch
- Indicating Lights
- Fuses
- Terminal Block

## Modes of Operation

There are basically two modes of operation - intermittent and continuous. By turning the selector switch, the mode of operation can be selected.

## Automatic Intermittent Position

With the selector in the "Auto" position, the drive motor will start and the backwash valve opens as determined by the adjustable cycle timer or by the differential pressure switch.

The differential pressure switch is normally factory set at 1 - 1-1/2 psig over the anticipated clean pressure drop. Should a high differential pressure occur during the timed off period, the differential pressure switch will override the cycle timer and start or continue the backwash until the differential pressure is satisfied. After the differential pressure has been satisfied, the strainer will continue to backwash for an additional 60 seconds (time delay relay).

The Automatic Self-Cleaning Strainer would start a backwash cycle based on the timed sequence selected on the adjustable cycle timer. The timed sequence should be determined by each

installation and the conditions experienced. The adjustable cycle timer can be programmed from 15 minutes to a 10-hour cycle (off) and for 1 to 10 minutes duration (on). Adjustments can be made as conditions warrant them.

## Continuous Operation

The selector switch is adjusted to "Manual" thus permitting the continuous mode. In the continuous mode, the Automatic Self-Cleaning Strainer will be backwashing continuously with the backwash valve open and the drive motor running. This mode of operation may be necessary if the installation experiences high solid loadings.

In either Mode of Operation, the backwash assembly is specifically designed to rotate at 2 RPM to allow for effective backwashing in less time, thus decreasing the amount of backwash water lost.

## Standard Control Package

The Sequence Controller Control Package consists of:

- Control Panel with Nema 4 Enclosure
- Backwash Valve with Electric Operator
- Single Element Differential Pressure Switch

## Options

- 230V, 380V, 460V, 575V
- 50 or 60 hertz
- Dual Element Differential Pressure Switch
- Nema 4X (Fiberglass or Stainless Steel), Nema 7 or 9 (Explosion Proof), Nema 12, Nema 3 Enclosures
- Circuit Breakers, Disconnect Switch, Transformer
- Reset Buttons
- Alarms
- PLC Interface and/or Pump Interlock
- Extra Contact and Relays
- Backwash valve can be supplied with Pneumatic Operator
- Backwash Valve available in numerous materials
- Differential Pressure Switches available with Mercury, Snap Action, Diaphragm or piston contacts.

## Codes/Standards

The Sequence Controller can be manufactured to UL Listings, CSA Approval, JIC, NEMA Standards.

# Sure Flow Equipment Inc. – Limited Warranty

All products are warranted to be free of defects in material and workmanship for a period of one year from the date of shipment, subject to below. **All custom products are not subject to return, credit or refund.**

If the purchaser believes a product to be defective, the purchaser shall:

(a) Notify the manufacturer **within ten(10) days after receipt of merchandise**, state the alleged defect and request permission to return the product. Merchandise will not be accepted for return without a "Return Code" clearly marked on the outside of the package. Contact the office to obtain a return code. **Merchandise will not be accepted for return or credit later than six (6) months after invoicing.**

(b) If permission is given, return the product with the transportation prepaid. Collect shipments will not be accepted. Goods must be returned **prepaid.**

If a shipment is received in a damaged or deficient condition, a claim must be filed with the delivering carrier and noted on the freight bill before you accept the merchandise. All other claims must be made in writing and received by Sure Flow Equipment Inc. within ten (10) days after receipt of merchandise.

If the product is accepted for return and found to be defective, the manufacturer will, at its discretion, either repair or replace the product, F.O.B. factory, within 60 days of receipt, or issue credit for the purchase price.

Sure Flow Equipment Inc. shall not be liable for failure to deliver or delays in delivering occasioned by acts of God, war, labor difficulties, inability to obtain materials or any other causes whatsoever beyond our control.

Other than to repair, replace or credit as described above, purchaser agrees that manufacturer shall not be liable for any loss, costs, expenses, or damages of any kind arising out of the product, its use, installation or replacements, labeling, instructions, information or technical data of any kind, description of product use, sample or model, warnings or lack of any of the foregoing.

NO OTHER WARRANTIES, WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY, ARE MADE OR AUTHORIZED. NO AFFIRMATION OF ACT, PROMISE, DESCRIPTION OF PRODUCT OR USE OR SAMPLE OR MODEL SHALL CREATE ANY WARRANTY FROM MANUFACTURER, UNLESS SIGNED BY THE PRESIDENT OF MANUFACTURER.

**CANCELLATIONS:** Cancelled orders will be subject to a charge of at least 35%.  
Cancelled custom orders will be subject to a charge of 100% of quoted price.

**MINIMUM BILLING: \$50.00 NET**

**SPECIAL DOCUMENTATION:** A charge will apply for non-standard, special documentation requests such as Material Test Reports (MTR's) and Certificates of Conformance (COC's).

## Catalogs Available from Sure Flow Equipment





Company: Johnson Controls, Inc

Contact: Lee Dowden

Email:

From: Patrick Clarke

Reference: PC020211-3R0

Date: Feb 2, 2011 Number of Pages: 1

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**(1) 12" - 753 Series ELIMINATOR Automatic Self Cleaning Strainer**

PRICE PER EACH UNIT: \$24,325.00 USD EACH

**CONSTRUCTION DETAILS**

Body Material:	Cast Iron
Inlet/Outlet Connections:	(2) 12" - 150# Raised Face Connections
Backwash Connection:	(1) 2" N.P.T. Connection
Drain Connection:	(1) 1" N.P.T. Connection
Vent Connection:	(1) 1/4" N.P.T. Connection
Backwash Arm Assembly:	316SS/316LSS with Polyurethane Port Shoe with Brush
Drive Motor:	1/4HP/120V/1PH/60Hz
Design Pressure :	150 psig @ 150oF
Operating Flow:	2000 GPM
Straining Element:	Slotted Reverse Rolled Wedge Wire Screen
Material:	316L Stainless Steel
Screen Opening:	0.032"
Quantity Included:	1
Backwash Valve:	2" Triac Ball Valve with Electric Actuator. 316SS (120V)
Diff. Pressure Switch:	Single Element
Control Panel:	Std 120V, NEMA 4 Steel with adjustable timers drive motor starter, relays, selector switch, high DP dry contact and operating lights
Accessories:	None
Code:	Designed, manufactured and tested in accordance with ASME Section VIII, Division 1, but not "U" stamped
Dry Weight (approximate):	1625 lbs

Strainer design capacity when in use on a fresh water system will exhibit an approximate pressure drop of 0.31 psig (clean) for normal flows of 2000 USGPM.

**Approval Drawings:** Approximately: 1 to 2 weeks, after receipt of purchase order. (If Required)

**Manufacturing Lead Time:** Approximately: 14 to 16 weeks after receipt of Approved Drawings, subject shop load

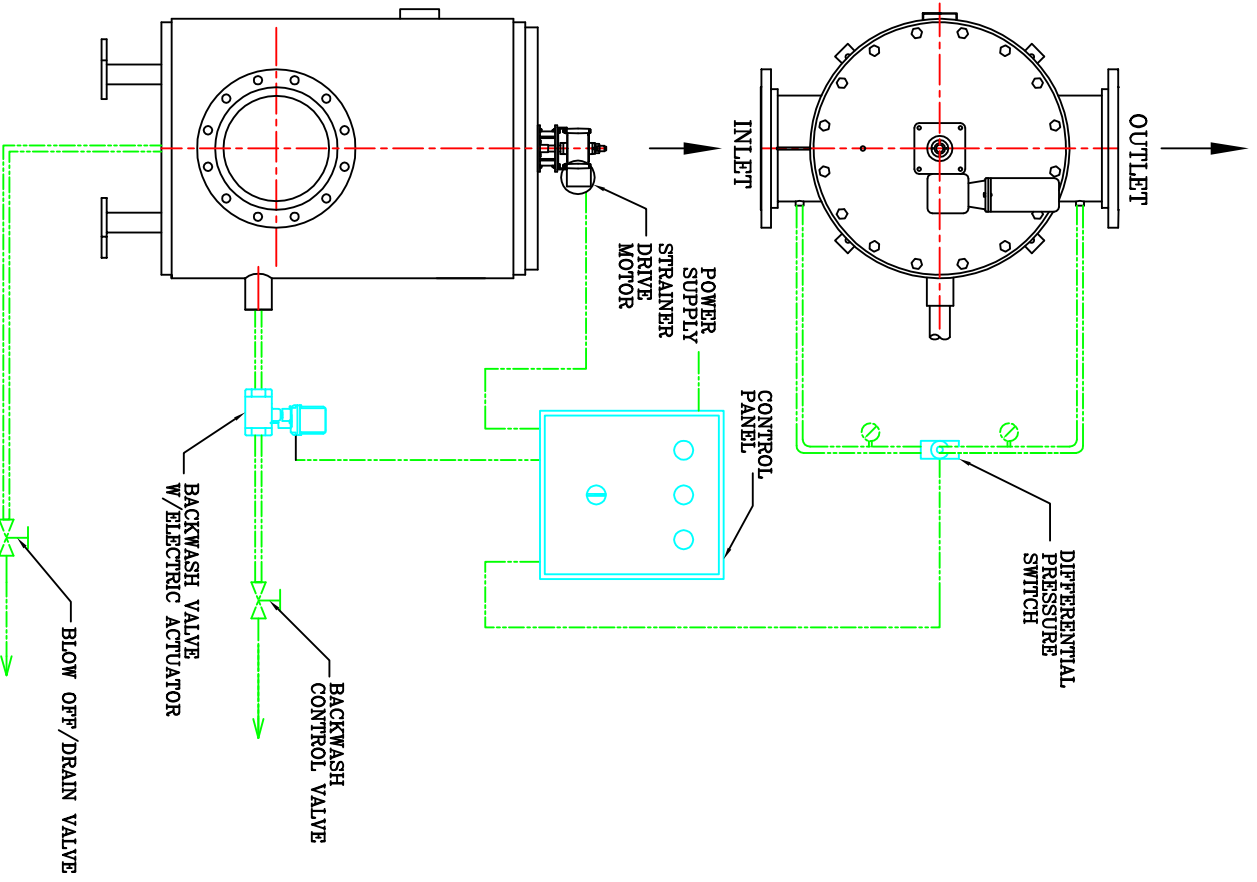
**Validity:** This quotation is valid for 30 days from the date of issue. Prices are firm for the quoted delivery period.

**Payment Terms:** 100% Net 30 Days, Subject to Credit Evaluation.

**Shipment Terms:** Unless otherwise stated in this quotation, Sure Flow Equipment, Inc.'s Standard Terms & Conditions of Sale.

FOB: Buffalo, NY (Shipping & Handling will be prepaid & added to Invoice or 3<sup>rd</sup> party billed to customer's freight account)





- ITEMS SUPPLIED WITH AUTOMATIC BACKWASH STRAINER
- ONE (1) CONTROL PANEL, NEMA 4 ENCLOSURE
  - ONE (1) BACKWASH VALVE WITH ELECTRIC OPERATOR
  - ONE (1) DIFFERENTIAL PRESSURE SWITCH

CUSTOMER:  
 PROJECT:  
 P.O. #:  
 SURE FLOW FILE NO:

NOTE:  
 PHANTOM LINES INDICATE PIPING AND WIRING BY OTHERS  
 ( - - - - - )

Ref.	Revision	Date:
<b>SURE FLOW EQUIPMENT INC.</b>		
Date: MAY10/02	Apprv'd. by G. B.	Scale NTS
Title: TYPICAL EXTERNAL PIPING AND WIRING		
Drawn by: GRACE P.		Drawing no.

**OREGON UNIVERSITY SYSTEM**  
**GENERAL CONDITIONS**  
**FOR PUBLIC IMPROVEMENT CONTRACTS**

**February 1, 2011**

INSTRUCTIONS: The attached **Oregon University System General Conditions for Public Improvement Contracts ("OUS General Conditions")** apply to all designated public improvement contracts. Changes to the OUS General Conditions (including any additions, deletions or substitutions) should only be made by attaching Supplemental General Conditions. The text of these OUS General Conditions should not otherwise be altered. These OUS General Conditions have been reviewed as to form by the Oregon Department of Justice. The legal sufficiency and approval requirements of ORS 291.047 remain applicable to individual OUS procurements, unless an exemption has been granted pursuant to that statute and Department of Justice administrative rules at OAR Chapter 137, Division 45.

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**OREGON UNIVERSITY SYSTEM  
GENERAL CONDITIONS FOR PUBLIC IMPROVEMENT CONTRACTS  
("OUS General Conditions")**

**SECTION A  
GENERAL PROVISIONS**

**A.1 DEFINITION OF TERMS**

In the Contract Documents the following terms shall be as defined below:

**ARCHITECT/ENGINEER**, means the Person appointed by the Owner to make drawings and specifications and, to provide contract administration of the Work contemplated by the Contract to the extent provided herein or by supplemental instruction of Owner (under which Owner may delegate responsibilities of the Owner's Authorized Representative to the Architect/Engineer), in accordance with ORS Chapter 671 (Architects) or ORS Chapter 672 (Engineers) and administrative rules adopted thereunder.

**CHANGE ORDER**, means a written order issued by the Owner's Authorized Representative to the Contractor requiring a change in the Work within the general scope of the Contract Documents, issued under the changes provisions of Section D, including Owner's written change directives as well as changes reflected in a writing executed by the parties to this Contract and, if applicable, establishing a Contract Price or Contract Time adjustment for the changed Work.

**CLAIM**, means a demand by Contractor pursuant to Section D.3 for review of the denial of Contractor's initial request for an adjustment of Contract terms, payment of money, extension of Contract Time or other relief, submitted in accordance with the requirements and within the time limits established for review of Claims in these OUS General Conditions.

**CONSTRUCTION CHANGE DIRECTIVE**, means a written order by the Owner's Authorized Representative to the Contractor requiring a change in the Work within the general scope of the Contract Documents, issued under the changes provisions of Section D.

**CONTRACT**, means the written agreement between the Owner and the Contractor comprised of the Contract Documents which describe the Work to be done and the obligations between the parties.

**CONTRACT DOCUMENTS**, means the Solicitation Document and addenda thereto, Instructions to Offerors, Supplemental Instructions to Offerors, the OUS Public Improvement Agreement Form, OUS General Conditions, Supplemental General Conditions, if any, the accepted Offer, Plans, Specifications, amendments, Change Orders and Construction Change Directives .

**CONTRACT PERIOD**, as set forth in the Contract Documents, means the total period of time beginning with the issuance of the Notice to Proceed and concluding upon Final Completion.

**CONTRACT PRICE**, means the total of the awarded Offer amount, as increased or decreased by the price of approved alternates and Change Orders.

**CONTRACT TIME**, means any incremental period of time allowed under the Contract to complete any portion of the Work as reflected in the project schedule.

**CONTRACTOR**, means the Person awarded the Contract for the Work contemplated.

**DAYS**, are calendar days, including weekdays, weekends and holidays, unless otherwise specified.

**DIRECT COSTS**, means, unless otherwise provided in the Contract Documents, the cost of materials, including sales tax, cost of delivery; cost of labor, including social security, old age and unemployment insurance, and fringe benefits required by agreement or custom; worker's compensation insurance; project specific insurance (including, without limitation, Builder's Risk Insurance and Builder's Risk Installation Floater); bond premiums, rental cost of equipment, and machinery required for execution of the work; and the additional costs of field personnel directly attributable to the Work.

**FINAL COMPLETION**, means the final completion of all requirements under the Contract, including Contract Closeout as described in Section K but excluding Warranty Work as described in Section I.2, and the final payment and release of all retainage, if any, released.

**FORCE MAJEURE**, means an act, event or occurrence caused by fire, riot, war, acts of God, nature, sovereign, or public enemy, strikes, freight embargoes or any other act, event or occurrence that is beyond the control of the party to this Contract who is asserting Force Majeure.

**MWESB REPORT**, means an accurate report by the Contractor to the Owner identifying all Minority, Women and Emerging Small Business (MWESB) enterprises, as those terms are defined in ORS 200.005, receiving contracts throughout the course of the Work. An initial MWESB report is required (see Section E.2.9) and MWESB Reports are required annually (see Section E.2.9) and as a condition of final payment (see Section K.1). The initial report shall include the total number of contracts and subcontracts awarded to MWESB enterprises and the dollar value of their respective contracts and subcontracts. The annual reports shall include the total number of contracts and subcontracts awarded to MWESB enterprises, the dollar value of each, and the expenditure toward each contract and subcontract during the previous twelve (12) months. The final report shall include the total number of contracts and subcontracts awarded to MWESB enterprises and the dollar value of their respective contracts and subcontracts including all Change Orders incorporated during the course of the project. The reports shall only include enterprises certified with the State of Oregon as MWESB enterprises and shall include individual identification of each enterprise as a Minority business enterprise, a Women business enterprise, and/or an Emerging Small Business Enterprise, as applicable.

**NOTICE TO PROCEED**, means the official written notice from the Owner stating that the Contractor is to proceed with the Work defined in the Contract Documents. Notwithstanding the Notice to Proceed, Contractor shall not be authorized to proceed with the Work until all initial Contract requirements, including the Contract, performance bond and payment bond, and certificates of insurance, have been fully executed and submitted to Owner in a suitable form.

**OFFER**, means a bid in connection with Instructions to Bidders and a proposal in connection with a Request for Proposals.

**OFFEROR**, means a bidder in connection with Instructions to Bidders and a proposer in connection with a Request for Proposals.

**OVERHEAD**, means those items which may be included in the Contractor's markup (general and administrative expense and profit) and that shall not be charged as Direct Cost of the Work, including without limitation such Overhead expenses as wages or salary of personnel above the level of foreman (i.e., superintendents and project managers), expenses of Contractor's offices at the job site (e.g. job trailer) including expenses of personnel staffing the job site

office, and Commercial General Liability Insurance and Automobile Liability Insurance.

**OWNER**, means the State of Oregon acting by and through the Oregon State Board of Higher Education, in its own right or on behalf of one of its institutions as identified in the Solicitation Document, also known as the Oregon University System (OUS).

**OWNER'S AUTHORIZED REPRESENTATIVE**, means those individuals identified in writing by the Owner to act on behalf of the Owner for this project. Owner may elect, by written notice to Contractor, to delegate certain duties of the Owner's Authorized Representative to more than one party, including without limitation, to an Architect/Engineer. However, nothing in these OUS General Conditions is intended to abrogate the separate design professional responsibilities of Architects under ORS Chapter 671 or of Engineers under ORS Chapter 672.

**PERSON**, means an entity doing business as a sole proprietorship, a partnership, a joint venture, a corporation, a limited liability company or partnership, or any other entity possessing the legal capacity to contract.

**PLANS**, means the drawings which show the location, type, dimensions, and details of the Work to be done under the Contract.

**PUNCHLIST**, means the list of Work yet to be completed or deficiencies which need to be corrected in order to achieve Final Completion of the Contract.

**RECORD DOCUMENT**, means the as-built Plans, Specifications, testing and inspection records, product data, samples, manufacturer and distributor/supplier warranties evidencing transfer to Owner, operational and maintenance manuals, shop drawings, Change Orders, Construction Change Directives, MWESB Reports, correspondence, certificate(s) of occupancy, and other documents listed in Subsection B.9.1 of these OUS General Conditions, recording all Services performed.

**SOLICITATION DOCUMENT**, means Instructions to Bidders or Offerors or a Request for Proposal or a Request for Quotes.

**SPECIFICATION**, means any description of the physical or functional characteristics of the Work, or of the nature of a supply, service or construction item. Specifications may include a description of any requirement for inspecting, testing or preparing a supply, service or construction item for delivery and the quantities or qualities of materials to be furnished under the Contract. Specifications generally will state the results or products to be obtained and may, on occasion, describe the method and manner of doing the work to be performed. Specifications may be incorporated by reference and/or may be attached to the Contract.

**SUBCONTRACTOR**, means a Person having a direct contract with the Contractor, or another Subcontractor, to perform one or more items of the Work.

**SUBSTANTIAL COMPLETION**, means the date when the Owner accepts in writing the construction, alteration or repair of the improvement to real property or any designated portion thereof as having reached that state of completion when it may be used or occupied for its intended purpose. Substantial Completion of facilities with operating systems occurs only after thirty (30) continuous Days of successful, trouble-free operation of the operating systems as provided in Section K.4.2.

**SUBSTITUTIONS**, means items that in function, performance, reliability, quality, and general configuration are the same or better than the product(s) specified. Approval of any substitute item shall be solely determined by the Owner's Authorized Representative. The decision of the Owner's Authorized Representative is final.

**SUPPLEMENTAL GENERAL CONDITIONS**, means those conditions that remove from, add to, or modify these OUS General Conditions. Supplemental General Conditions may be included in the Solicitation Document or may be a separate attachment to the Contract.

**WORK**, means the furnishing of all materials, equipment, labor, transportation, services and incidentals necessary to successfully complete any individual item or the entire Contract and the carrying out of duties and obligations imposed by the Contract Documents.

## A.2 SCOPE OF WORK

The Work contemplated under this Contract includes all labor, materials, transportation, equipment and services for, and incidental to, the completion of all construction work in connection with the project described in the Contract Documents. The Contractor shall perform all Work necessary so that the project can be legally occupied and fully used for the intended use as set forth in the Contract Documents.

## A.3 INTERPRETATION OF CONTRACT DOCUMENTS

A.3.1 Unless otherwise specifically defined in the Contract Documents, words which have well-known technical meanings or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. Contract Documents are intended to be complementary. Whatever is called for in one, is interpreted to be called for in all. However, in the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following descending order of precedence:

- (a) Contract amendments, Change Orders and Construction Change Directives, with those of later date having precedence over those of an earlier date;
- (b) The Supplemental General Conditions;
- (c) The OUS Public Improvement Agreement Form;
- (d) The OUS General Conditions;
- (e) Division One (General Requirements) of the Specifications;
- (f) Detailed Schedules of finishes, equipment and other items included in the Specifications;
- (g) Plans and Specifications (other than Division One and the Detailed Schedules to the Specifications);
- (h) Large-scale drawings on Plans;
- (i) Small-scale drawings on Plans;
- (j) Dimension numbers written on Plans which shall prevail and take precedence over dimensions scaled from Plans;
- (k) The Solicitation Document, including Instructions to Offerors and Supplemental Instructions to Offerors, and any addenda thereto;
- (l) The accepted Offer.

A.3.2 In the case of an inconsistency between Plans and Specifications or within either document not clarified by addendum, the better quality or greater quantity of Work shall be provided in accordance with the Owner or Owner's Authorized Representative's interpretation in writing.

A.3.3 If the Contractor finds discrepancies in, or omissions from the Contract Documents, or if the Contractor is in doubt as to their meaning, the Contractor shall at once notify the Owner or Owner's Authorized Representative. Matters concerning and interpretation of requirements of, the Contract Documents will

be decided by the Owner's Authorized Representative, who may delegate that duty in some instances to the Architect/Engineer. Responses to Contractor's requests for interpretation of Contract Documents will be made in writing by Owner's Authorized Representative (or the Architect/Engineer) within any time limits agreed upon or otherwise with reasonable promptness. Interpretations and decisions of the Owner's Authorized Representative (or Architect/Engineer) will be consistent with the intent of and reasonably inferable from the Contract Documents. Contractor shall not proceed without direction in writing from the Owner's Authorized Representative (or Architect/Engineer).

- A.3.4 References to standard specifications, manuals, codes of any technical society, organization or association, to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code, laws or regulations in effect in the jurisdiction where the project is occurring on the first published date of the Solicitation Document, except as may be otherwise specifically stated.

**A.4 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE**

- A.4.1 It is understood that the Contractor, before submitting an Offer, has made a careful examination of the Contract Documents; has become fully informed as to the quality and quantity of materials and the character of the Work required; and has made a careful examination of the location and conditions of the Work and the sources of supply for materials. The Owner will in no case be responsible for any loss or for any unanticipated costs that may be suffered by the Contractor as a result of the Contractor's failure to acquire full information in advance in regard to all conditions pertaining to the Work. No oral agreement or conversation with any officer, agent, or personnel of the Owner, or with the Architect/Engineer either before or after the execution of this Contract, shall affect or modify any of the terms or obligations herein contained.
- A.4.2 Should the Plans or Specifications fail to particularly describe the materials, kind of goods, or details of construction of any aspect of the Work, Contractor shall have the duty to make inquiry of the Owner and Architect/Engineer as to what is required prior to performance of the Work. Absent Specifications to the contrary, the materials or processes that would normally be used to produce first quality finished Work shall be considered a part of the Contract requirements.
- A.4.3 Any design errors or omissions noted by the Contractor shall be reported promptly to the Owner's Authorized Representative, including without limitation, any nonconformity with applicable laws, statutes, ordinances, building codes, rules and regulations.
- A.4.4 If the Contractor believes that additional cost or Contract Time is involved because of clarifications or instructions issued by the Owner's Authorized Representative (or Architect/Engineer) in response to the Contractor's notices or requests for information, the Contractor must submit a written request to the Owner's Authorized Representative, setting forth the nature and specific extent of the request, including all time and cost impacts against the Contract as soon as possible, but no later than thirty (30) Days after receipt by Contractor of the clarifications or instructions issued. If the Owner's Authorized Representative denies Contractor's request for additional compensation, additional Contract Time, or other relief that Contractor believes results from the clarifications or instructions, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process. If the Contractor fails to perform the obligations of Sections A.4.1 to A.4.3, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations.

**A.5 INDEPENDENT CONTRACTOR STATUS**

The service or services to be performed under this Contract are those of an independent contractor as defined in ORS 670.600. Contractor represents and warrants that it is not an officer, employee or agent of the Owner as those terms are used in ORS 30.265.

**A.6 RETIREMENT SYSTEM STATUS AND TAXES**

Contractor represents and warrants that it is not a contributing member of the Public Employees' Retirement System and will be responsible for any federal or state taxes applicable to payment received under this Contract. Contractor will not be eligible for any benefits from these Contract payments of federal Social Security, employment insurance, workers' compensation or the Public Employees' Retirement System, except as a self-employed individual. Unless the Contractor is subject to backup withholding, Owner will not withhold from such payments any amount(s) to cover Contractor's federal or state tax obligations.

**A.7 GOVERNMENT EMPLOYMENT STATUS**

- A.7.1 If this payment is to be charged against federal funds, Contractor represents and warrants that it is not currently employed by the Federal Government. This does not preclude the Contractor from holding another contract with the Federal Government.
- A.7.2 Contractor represents and warrants that Contractor is not an employee of the State of Oregon for purposes of performing Work under this Contract

**SECTION B  
ADMINISTRATION OF THE CONTRACT**

**B.1 OWNER'S ADMINISTRATION OF THE CONTRACT**

- B.1.1 The Owner's Authorized Representative will provide administration of the Contract as described in the Contract Documents (1) during construction (2) until final payment is due and (3) during the one-year period for correction of Work. The Owner's Authorized Representative will act on behalf of the Owner to the extent provided in the Contract Documents, unless modified in writing in accordance with other provisions of the Contract. In performing these tasks, the Owner's Authorized Representative may rely on the Architect/Engineer or other consultants to perform some or all of these tasks.
- B.1.2 The Owner's Authorized Representative will visit the site at intervals appropriate to the stage of the Contractor's operations (1) to become generally familiar with and to keep the Owner informed about the progress and quality of the portion of the Work completed, (2) to endeavor to guard the Owner against defects and deficiencies in the Work, and (3) to determine in general if Work is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. The Owner's Authorized Representative will not make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Owner's Authorized Representative will neither have control over or charge of, nor be responsible for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work.
- B.1.3 Except as otherwise provided in the Contract Documents or when direct communications have been specifically authorized, the Owner and Contractor shall endeavor to communicate with each other through the Owner's Authorized Representative or designee about matters arising out of or relating to the Contract. Communications by and with the Architect/Engineer's consultants shall be through the Architect/Engineer. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by

and with separate contractors shall be through the Owner's Authorized Representative.

- B.1.4 Based upon the Architect/Engineer's evaluations of the Contractor's Application for Payment, or unless otherwise stipulated by the Owner's Authorized Representative, the Architect/Engineer will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

**B.2 CONTRACTOR'S MEANS AND METHODS;  
MITIGATION OF IMPACTS**

- B.2.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures.
- B.2.2 The Contractor is responsible to protect and maintain the Work during the course of construction and to mitigate any adverse impacts to the project, including those caused by authorized changes, which may affect cost, schedule, or quality.
- B.2.3 The Contractor is responsible for the actions of all its personnel, laborers, suppliers, and Subcontractors on the project. The Contractor shall enforce strict discipline and good order among Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of persons who are unfit or unskilled for the tasks assigned to them.

**B.3 MATERIALS AND WORKMANSHIP**

- B.3.1 The intent of the Contract Documents is to provide for the construction and completion in every detail of the Work described. All Work shall be performed in a professional manner and unless the means or methods of performing a task are specified elsewhere in the Contract Documents, Contractor shall employ methods that are generally accepted and used by the industry, in accordance with industry standards.
- B.3.2 The Contractor is responsible to perform the Work as required by the Contract Documents. Defective Work shall be corrected at the Contractor's expense.
- B.3.3 Work done and materials furnished shall be subject to inspection and/or observation and testing by the Owner's Authorized Representative to determine if they conform to the Contract Documents. Inspection of the Work by the Owner's Authorized Representative does not relieve the Contractor of responsibility for the Work in accordance with the Contract Documents.
- B.3.4 Contractor shall furnish adequate facilities, as required, for the Owner's Authorized Representative to have safe access to the Work including without limitation walkways, railings, ladders, tunnels, and platforms. Producers, suppliers, and fabricators shall also provide proper facilities and access to their facilities.
- B.3.5 The Contractor shall furnish Samples of materials for testing by the Owner's Authorized Representative and include the cost of the Samples in the Contract Price.

**B.4 PERMITS**

Contractor shall obtain and pay for all necessary permits and licenses, except for those specifically excluded in the Supplemental

General Conditions, for the construction of the Work, for temporary obstructions, enclosures, opening of streets for pipes, walls, utilities, environmental Work, etc., as required for the project. Contractor shall be responsible for all violations of the law, in connection with the construction or caused by obstructing streets, sidewalks or otherwise. Contractor shall give all requisite notices to public authorities. The Contractor shall pay all royalties and license fees. The Contractor shall defend all suits or claims for infringement of any patent or other proprietary rights and save harmless and blameless from loss, on account thereof, the State of Oregon, and its departments, divisions, members and employees.

**B.5 COMPLIANCE WITH GOVERNMENT  
REGULATIONS**

- B.5.1 Contractor shall comply with all federal, state and local laws, codes, regulations and ordinances applicable to the Work and the Contract. Failure to comply with such requirements shall constitute a breach of Contract and shall be grounds for Contract termination. Without limiting the generality of the foregoing, Contractor expressly agrees to comply with the following, as applicable:
- (i) Title VI and VII of Civil Rights Act of 1964, as amended; (ii) Section 503 and 504 of the Rehabilitation Act of 1973, as amended; (iii) the Health Insurance Portability and Accountability Act of 1996; (iv) the Americans with Disabilities Act of 1990, as amended; (v) ORS Chapter 659A; as amended; (vi) all regulations and administrative rules established pursuant to the foregoing laws; and (vii) all other applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations.
- B.5.2 Contractor shall comply with all applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations, and
- (a) Contractor shall not discriminate against Disadvantaged, Minority, Women or Emerging Small Business enterprises, as those terms are defined in ORS 200.005, or a business enterprise that is owned or controlled by or that employs a disabled veteran, as that term is defined in ORS 408.225, in the awarding of subcontracts.
  - (b) Contractor shall maintain, in current and valid form, all licenses and certificates required by law, regulation, or this Contract when performing the Work.
- B.5.3 Unless contrary to federal law, Contractor shall certify that it shall not accept a bid from Subcontractors to perform Work as described in ORS 701.005 under this Contract unless such Subcontractors are registered with the Construction Contractors Board in accordance with ORS 701.035 to 701.055 at the time they submit their bids to the Contractor.
- B.5.4 Unless contrary to federal law, Contractor shall certify that each landscape contractor, as defined in ORS 671.520(2), performing Work under this Contract holds a valid landscape contractor's license issued pursuant to ORS 671.560.
- B.5.5 The following notice is applicable to Contractors who perform excavation Work. ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center at (503)232-1987.
- B.5.6 Failure to comply with any or all of the requirements of B.5.1 through B.5.5 shall be a breach of Contract and constitute grounds for Contract termination. Damages or costs resulting from such noncompliance shall be the responsibility of Contractor.

**B.6 SUPERINTENDENCE**

Contractor shall keep on the site, during the progress of the Work, a competent superintendent and any necessary assistants who shall be satisfactory to the Owner and who shall represent the Contractor on the site. Directions given to the superintendent by the Owner's Authorized Representative shall be confirmed in writing to the Contractor.

#### **B.7 INSPECTION**

- B.7.1 Owner's Authorized Representative shall have access to the Work at all times.
- B.7.2 Inspection of the Work will be made by the Owner's Authorized Representative at its discretion. The Owner's Authorized Representative will have authority to reject Work that does not conform to the Contract Documents. Any Work found to be not in conformance with the Contract Documents, in the discretion of the Owner's Authorized Representative, shall be removed and replaced at the Contractor's expense.
- B.7.3 Contractor shall make or obtain at the appropriate time all tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work. The Contractor shall give the Owner's Authorized Representative timely notice of when and where tests and inspections are to be made so that the Owner's Authorized Representative may be present for such procedures. Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Owner's Authorized Representative.
- B.7.4 As required by the Contract Documents, Work done or material used without inspection or testing by the Owner's Authorized Representative may be ordered removed at the Contractor's expense.
- B.7.5 If directed to do so any time before the Work is accepted, the Contractor shall uncover portions of the completed Work for inspection. After inspection, the Contractor shall restore such portions of Work to the standard required by the Contract. If the Work uncovered is unacceptable or was done without sufficient notice to the Owner's Authorized Representative, the uncovering and restoration shall be done at the Contractor's expense. If the Work uncovered is acceptable and was done with sufficient notice to the Owner's Authorized Representative, the uncovering and restoration will be paid for as a Change Order.
- B.7.6 If any testing or inspection reveals failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Owner's Authorized Representative's and Architect/Engineer's services and expenses, shall be at the Contractor's expense.
- B.7.7 When the United States government participates in the cost of the Work, or the Owner has an agreement with other public or private organizations, or if any portion of the Work is being performed for a third party or in close proximity to third party facilities, representatives of these organizations have the right to inspect the Work affecting their interests or property. Their right to inspect shall not make them a party to the Contract and shall not interfere with the rights of the parties of the Contract. Instructions or orders of such parties shall be transmitted to the Contractor, through the Owner's Authorized Representative.

#### **B.8 SEVERABILITY**

If any provision of this Contract is declared by a court 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 provision held to be invalid.

#### **B.9 ACCESS TO RECORDS**

- B.9.1 Contractor shall keep, at all times on the Work site, one record copy of the complete Contract Documents, including the Plans, Specifications, Change Orders, Construction Change Directives and addenda, in good order and marked currently to record field changes and selections made during construction, and one record copy of Shop Drawings, Product Data, Samples and similar submittals, and shall at all times give the Owner's Authorized Representative access thereto.
- B.9.2 Contractor shall retain and the Owner and its duly authorized representatives shall have access, for a period not less than ten (10) years, to all Record Documents, financial and accounting records, and other books, documents, papers and records of Contractor which are pertinent to the Contract, including records pertaining to Overhead and indirect costs, for the purpose of making audit, examination, excerpts and transcripts. If for any reason, any part of the Contract is involved in litigation, Contractor shall retain all such records until all litigation is resolved. The Owner and/or its agents shall continue to be provided full access to the records during litigation.

#### **B.10 WAIVER**

Failure of the Owner to enforce any provision of this Contract shall not constitute a waiver or relinquishment by the Owner of the right to such performance in the future nor of the right to enforce any other provision of this Contract.

#### **B.11 SUBCONTRACTS AND ASSIGNMENT**

- B.11.1 Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound by the terms and conditions of these OUS General Conditions, and to assume toward the Contractor all of the obligations and responsibilities which the Contractor assumes toward the Owner thereunder, unless (1) the same are clearly inapplicable to the subcontract at issue because of legal requirements or industry practices, or (2) specific exceptions are requested by Contractor and approved in writing by Owner. Where appropriate, Contractor shall require each Subcontractor to enter into similar agreements with sub-subcontractors at any level.
- B.11.2 At Owner's request, Contractor shall submit to Owner prior to their execution either Contractor's form of subcontract, or the subcontract to be executed with any particular Subcontractor. If Owner disapproves such form, Contractor shall not execute the form until the matters disapproved are resolved to Owner's satisfaction. Owner's review, comment upon or approval of any such form shall not relieve Contractor of its obligations under this Agreement or be deemed a waiver of such obligations of Contractor.
- B.11.3 Contractor shall not assign, sell, or transfer its rights, or delegate its responsibilities under this Contract, in whole or in part, without the prior written approval of the Owner. No such written approval shall relieve Contractor of any obligations of this Contract, and any transferee shall be considered the agent of the Contractor and bound to perform in accordance with the Contract Documents. Contractor shall remain liable as between the original parties to the Contract as if no assignment had occurred.



#### **B.12 SUCCESSORS IN INTEREST**

The provisions of this Contract shall be binding upon and shall accrue to the benefit of the parties to the Contract and their respective permitted successors and assigns.

#### **B.13 OWNER'S RIGHT TO DO WORK**

Owner reserves the right to perform other or additional work at or near the project site with other forces than those of the Contractor. If such work takes place within or next to the project site, Contractor will coordinate work with the other contractors or forces, cooperate with all other contractors or forces, carry out the Work in a way that will minimize interference and delay for all forces involved, place and dispose of materials being used so as not to interfere with the operations of another, and join the Work with the work of the others in an acceptable manner and perform it in proper sequence to that of the others. The Owner's Authorized Representative will resolve any disagreements that may arise between or among Contractor and the other contractors over the method or order of doing all work (including the Work). In case of unavoidable interference, the Owner's Authorized Representative will establish work priority (including the Work) which generally will be in the sequence that the contracts were awarded.

#### **B.14 OTHER CONTRACTS**

In all cases and at any time, the Owner has the right to execute other contracts related to or unrelated to the Work of this Contract. The Contractor of this Contract will fully cooperate with any and all other contractors without additional cost to the Owner in the manner described in section B.13.

#### **B.15 GOVERNING LAW**

This Contract shall be governed by and construed in accordance with the laws of the State of Oregon without regard to principles of conflict of laws.

#### **B.16 LITIGATION**

Any Claim between Owner and Contractor that arises from or relates to this Contract and that is not resolved through the Claims Review Process in Section D.3 shall be brought and conducted solely and exclusively within the Circuit Court of Marion County for the State of Oregon; provided, however, if a Claim must be brought in a federal forum, then it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. In no event shall this section be construed as a waiver by the State of Oregon on any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the Constitution of the United States or otherwise, from any claim or from the jurisdiction of any court. CONTRACTOR BY EXECUTION OF THIS CONTRACT HEREBY CONSENTS TO THE IN PERSONAM JURISDICTION OF THE COURTS REFERENCED IN THIS SECTION B.16.

#### **B.17 ALLOWANCES**

B.17.1 The Contractor shall include in the Contract Price all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct.

B.17.2 Unless otherwise provided in the Contract Documents:

- (a) when finally reconciled, allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;

- (b) Contractor's costs for unloading and handling at the site, labor, installation costs, Overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Price but not in the allowances;

- (c) whenever costs are more than or less than allowances, the Contract Price shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (i) the difference between actual costs and the allowances under Section B.17.2(a) and (2) changes in Contractor's costs under Section B.17.2(b).

- (d) Unless Owner requests otherwise, Contractor shall provide to Owner a proposed fixed price for any allowance work prior to its performance.

#### **B.18 SUBMITTALS, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

B.18.1 The Contractor shall prepare and keep current, for the Architect's/Engineer's approval (or for the approval of Owner's Authorized Representative if approval authority has not been delegated to the Architect/Engineer), a schedule and list of submittals which is coordinated with the Contractor's construction schedule and allows the Architect/Engineer reasonable time to review submittals. Owner reserves the right to finally approve the schedule and list of submittals. Submittals include, without limitation, Shop Drawings, Product Data, and Samples which are described below:

- (a) Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor (including any sub-subcontractor), manufacturer, supplier or distributor to illustrate some portion of the Work.

- (b) Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

- (c) Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

B.18.2 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required by the Contract Documents the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents. Review of submittals by the Architect/Engineer is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, or for approval of safety precautions or, unless otherwise specifically stated by the Architect/Engineer, of any construction means, methods, techniques, sequences or procedures, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect/Engineer's review of the Contractor's submittals shall not relieve the Contractor of its obligations under the Contract Documents. The Architect/Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component. Informational submittals upon which the Architect/Engineer is not expected to take responsive action may be so identified in the Contract Documents. Submittals which are not required by the Contract Documents may be returned by the Architect/Engineer without action.

B.18.3 The Contractor shall review for compliance with the Contract Documents, approve and submit to the Architect/Engineer Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors. Submittals which are not marked as reviewed for compliance with the Contract Documents and approved by the Contractor may be returned by the Architect/Engineer without action.

B.18.4 By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

B.18.5 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved by the Architect/Engineer.

B.18.6 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect/Engineer's review or approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Architect/Engineer in writing of such deviation at the time of submittal and (i) the Architect/Engineer has given written approval to the specific deviation as a minor change in the Work, or (ii) a Change Order or Construction Change Directive has been executed by Owner authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect/Engineer's review or approval thereof.

B.18.7 In the event that Owner elects not to have the obligations and duties described under this Section B.18 performed by the Architect/Engineer, or in the event no Architect/Engineer is employed by Owner on the project, all obligations and duties assigned to the Architect/Engineer hereunder shall be performed by the Owner's Authorized Representative.

#### **B.19 SUBSTITUTIONS**

The Contractor may make Substitutions only with the consent of the Owner, after evaluation by the Owner's Authorized Representative and only in accordance with a Change Order or Construction Change Directive. Substitutions shall be subject to the requirements of the bid documents. By making requests for Substitutions, the Contractor: represents that the Contractor has personally investigated the proposed substitute product; represents that the Contractor will provide the same warranty for the Substitution that the Contractor would for the product originally specified unless approved otherwise; certifies that the cost data presented is complete and includes all related costs under this Contract including redesign costs, and waives all claims for additional costs related to the Substitution which subsequently become apparent; and will coordinate the installation of the accepted Substitution, making such changes as may be required for the Work to be completed in all respects.

#### **B.20 USE OF PLANS AND SPECIFICATIONS**

Plans, Specifications and related Contract Documents furnished to Contractor by Owner or Owner's Architect/Engineer shall be used solely for the performance of the Work under this Contract. Contractor and its Subcontractors and suppliers are authorized to use and reproduce applicable portions of such documents appropriate to the execution of the Work, but shall not claim any ownership or other

interest in them beyond the scope of this Contract, and no such interest shall attach. Unless otherwise indicated, all common law, statutory and other reserved rights, in addition to copyrights, are retained by Owner.

#### **B.21 FUNDS AVAILABLE AND AUTHORIZED**

Owner reasonably believes at the time of entering into this Contract that sufficient funds are available and authorized for expenditure to finance the cost of this Contract within the Owner's appropriation or limitation. Contractor understands and agrees that, to the extent that sufficient funds are not available and authorized for expenditure to finance the cost of this Contract, Owner's payment of amounts under this Contract attributable to Services performed after the last day of the current biennium is contingent on Owner receiving from the Oregon Legislative Assembly appropriations, limitations or other expenditure authority sufficient to allow Owner, in the exercise of its reasonable administrative discretion, to continue to make payments under this Contract.

#### **B.22 NO THIRD PARTY BENEFICIARIES**

Owner and Contractor are the only parties to this Contract and are the only parties entitled to enforce its terms. Nothing in this Contract gives, is intended to give, or shall be construed to give or provide any benefit or right, whether directly, indirectly, or otherwise, to third persons unless such third persons are individually identified by name herein and expressly described as intended beneficiaries of the terms of this Contract.

### **SECTION C WAGES AND LABOR**

#### **C.1 MINIMUM WAGE RATES ON PUBLIC WORKS**

Contractor shall comply fully with the provisions of ORS 279C.800 through 279C.870. Documents establishing those conditions, as determined by the Commissioner of the Bureau of Labor and Industries (BOLI), are included as attachments to or are incorporated by reference in the Contract Documents. Contractor shall pay workers at not less than the specified minimum hourly rate of wage, and shall include that requirement in all subcontracts.

#### **C.2 PAYROLL CERTIFICATION AND FEE REQUIREMENTS**

C.2.1 In accordance with ORS 279C.845, the Contractor and every Subcontractor shall submit written certified statements to the Owner's Authorized Representative, on the form prescribed by the Commissioner of the Bureau of Labor and Industries, certifying the hourly rate of wage paid each worker which the Contractor or the Subcontractor has employed on the project and further certifying that no worker employed on the project has been paid less than the prevailing rate of wage or less than the minimum hourly rate of wage specified in the Contract, which certificate and statement shall be verified by the oath of the Contractor or the Subcontractor that the Contractor or Subcontractor has read the certified statement, that the Contractor or Subcontractor knows the contents of the certified statement, and, that to the Contractor's or Subcontractor's best knowledge and belief, the certified statement is true. The certified statements shall set out accurately and completely the payroll records for the prior week, including the name and address of each worker, the worker's correct classification, rate of pay, daily and weekly number of hours worked, deductions made, and actual wages paid. Certified statements for each week during which the Contractor or Subcontractor has employed a worker on the project shall be submitted once a month, by the fifth business day of the following month. The Contractor and Subcontractors shall preserve the certified

statements for a period of ten (10) years from the date of completion of the Contract.

- C.2.2 Pursuant to ORS 279C.845(7), the Owner shall retain 25 percent of any amount earned by the Contractor on this public works project until the Contractor has filed the certified statements required by section C.2.1. The Owner shall pay to the Contractor the amount retained under this subsection within 14 days after the Contractor files the required certified statements, regardless of whether a Subcontractor has failed to file certified statements.
- C.2.3 Pursuant to ORS 279C.845(8), the Contractor shall retain 25 percent of any amount earned by a first-tier Subcontractor on this public works project until the first-tier Subcontractor has filed with the Owner the certified statements required by C.2.1. Before paying any amount retained under this subsection, the Contractor shall verify that the first-tier Subcontractor has filed the certified statement. Within 14 days after the first-tier Subcontractor files the required certified statement the Contractor shall pay the first-tier Subcontractor any amount retained under this subsection.
- C.2.4 In accordance with statutory requirements and administrative rules promulgated by the Commissioner of the Bureau of Labor and Industries, the fee required by ORS 279C.825(1) will be paid by Owner to the Commissioner.

### **C.3 PROMPT PAYMENT AND CONTRACT CONDITIONS**

- C.3.1 As a condition to Owner's performance hereunder, the Contractor shall:
- C.3.1.1 Make payment promptly, as due, to all persons supplying to Contractor labor or materials for the prosecution of the Work provided for in this Contract.
- C.3.1.2 Pay all contributions or amounts due the State Industrial Accident Fund from such Contractor or Subcontractor incurred in the performance of the Contract.
- C.3.1.3 Not permit any lien or claim to be filed or prosecuted against the Owner on account of any labor or material furnished. Contractor will not assign any claims that Contractor has against Owner, or assign any sums due by Owner, to Subcontractors, suppliers, or manufacturers, and will not make any agreement or act in any way to give Subcontractors a claim or standing to make a claim against the Owner.
- C.3.1.4 Pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.
- C.3.2 As a condition to Owner's performance hereunder, if Contractor fails, neglects or refuses to make prompt payment of any claim for labor or services furnished to the Contractor of a Subcontractor by any person in connection with the project as such claim becomes due, the proper officer(s) representing the Owner may pay the claim and charge the amount of the payment against funds due or to become due Contractor under this Contract. Payment of claims in this manner shall not relieve the Contractor or the Contractor's surety from obligation with respect to any unpaid claims.
- C.3.3 Contractor shall include in each subcontract for property or services entered into by the Contractor and a first-tier subcontractor, including a material supplier, for the purpose of performing a construction contract, a payment clause that obligates the Contractor to pay the first-tier Subcontractor for satisfactory performance under its subcontract within ten (10)

Days out of such amounts as are paid to the Contractor by the public contracting agency under such contract.

- C.3.4 All employers, including Contractor, that employ subject workers who work under this contract in the State of Oregon shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless such employers are exempt under ORS 656.126. Contractor shall ensure that each of its Subcontractors complies with these requirements.

### **C.4 PAYMENT FOR MEDICAL CARE**

As a condition to Owner's performance hereunder, Contractor shall promptly, as due, make payment to any person, partnership, association or corporation furnishing medical, surgical, and hospital care or other needed care and attention, incident to sickness or injury, to the employees of such Contractor, all sums of which the Contractor agrees to pay for such services and all moneys and sums which the Contractor has collected or deducted from the wages of personnel pursuant to any law, contract or agreement for the purpose of providing or paying for such services.

### **C.5 HOURS OF LABOR**

As a condition to Owner's performance hereunder, no person shall be employed to perform Work under this Contract for more than ten (10) hours in any one day or forty (40) hours in any one week, except in cases of necessity, emergency or where public policy absolutely requires it. In such instances, Contractor shall pay the employee at least time and a half pay:

- (a) For all overtime in excess of eight (8) hours a day or forty (40) hours in any one week when the work week is five consecutive Days, Monday through Friday; or
- (b) For all overtime in excess of ten (10) hours a day or forty (40) hours in any one week when the work week is four consecutive Days, Monday through Friday; and
- (c) For all Work performed on Saturday and on any legal holiday specified in ORS 279C.540.

This section C.5 will not apply to Contractor's Work under this Contract if Contractor is currently a party to a collective bargaining agreement with any labor organization.

This Section C.5 shall not excuse Contractor from completion of the Work within the time required under this Contract.

## **SECTION D CHANGES IN THE WORK**

### **D.1 CHANGES IN WORK**

- D.1.1 The terms of this Contract shall not be waived, altered, modified, supplemented or amended in any manner whatsoever, without prior written approval of the Owner's Authorized Representative, and then only in a manner consistent with the Change Order provisions of this Section D.1 and after any necessary approvals required by public contracting laws have been obtained. Otherwise, a formal contract amendment is required, which shall not be effective until its execution by the parties to this Contract and all approvals required by public contracting laws have been obtained.
- D.1.2 It is mutually agreed that changes in Plans, quantities, or details of construction are inherent in the nature of construction and may be necessary or desirable during the course of construction. Within the general scope of this Contract, the Owner's Authorized Representative may at any time, without notice to the sureties and without impairing the Contract, require changes consistent with this Section D.1. All Change Order Work shall

be executed under the conditions of the Contract Documents. Such changes may include, but are not limited to:

- (a) Modification of specifications and design.
- (b) Increases or decreases in quantities.
- (c) Increases or decreases to the amount of Work.
- (d) Addition or elimination of any Work item.
- (e) Change in the duration of the project.
- (f) Acceleration or delay in performance of Work.
- (g) Deductive changes.

Deductive changes are those that reduce the scope of the Work, and shall be made by mutual agreement whenever feasible. In cases of suspension or partial termination under Section J, Owner reserves the right to unilaterally impose a deductive change and to self perform such Work, for which the provisions of B.13 (Owner's Right to Do Work) shall then apply. Adjustments in compensation shall be made under the provisions of D.1.3, in which costs for deductive changes shall be based upon a Direct Costs adjustment together with the related percentage markup specified for profit, Overhead and other indirect costs, unless otherwise agreed to by Owner.

D.1.3 The Owner and Contractor agree that Change Order Work shall be administered and compensated according to the following:

- (a) Unit pricing may be utilized at the Owner's option when unit prices or solicitation alternates were provided that established the cost for additional Work, and a binding obligation exists under the Contract on the parties covering the terms and conditions of the additional Work.
- (b) If the Owner elects not to utilize unit pricing, or in the event that unit pricing is not available or appropriate, fixed pricing may be used for Change Order Work. In fixed pricing the basis of payments or total price shall be agreed upon in writing between the parties to the Contract, and shall be established before the Work is done whenever feasible. The mark-ups set forth in D.1.3(c) shall be utilized by the parties as a guide in establishing fixed pricing, and will not be exceeded by Owner without adequate justification. Cost and price data relating to Change Orders shall be supplied by Contractor to Owner upon request, but Owner shall be under no obligation to make such requests.
- (c) In the event that unit pricing and fixed pricing are not utilized, then Change Order Work shall be performed on a cost reimbursement basis for Direct Costs. Such Work shall be compensated on the basis of the actual, reasonable and allowable cost of labor, equipment, and material furnished on the Work performed. In addition, the following markups shall be added to the Contractor's or Subcontractor's Direct Costs as full compensation for profit, Overhead and other indirect costs for Work directly performed with the Contractor's or Subcontractor's own forces:

On Labor.....	15%
On Equipment.....	10%
On Materials.....	10%

When Change Order Work under D.1.3(c) is invoiced by an authorized Subcontractor at any level, each ascending tier Subcontractor or Contractor will be allowed a supplemental mark-up on each piece of subcontract Work covered by such Change Order as follows:

\$0.00 - \$5,000.00	10%, and then
Over \$5,000.00	5%

Payments made to the Contractor shall be complete compensation for Overhead, profit, and all costs that were

incurred by the Contractor or by other forces furnished by the Contractor, including Subcontractors, for Change Order Work. Owner may establish a maximum cost for Change Order Work under this Section D.1.3(c), which shall not be exceeded for reimbursement without additional written authorization from Owner. Contractor shall not be required to complete such Change Order Work without additional authorization.

D.1.4 Any necessary adjustment of Contract Time that may be required as a result of a Change Order must be agreed upon by the parties before the start of the Change Order Work unless Owner's Authorized Representative authorizes Contractor to start the Work before agreement on Contract Time adjustment. Contractor shall submit any request for additional compensation (and additional Contract Time if Contractor was authorized to start Work before an adjustment of Contract Time was approved) as soon as possible but no later than thirty (30) Days after receipt of the Change Order. If Contractor's request for additional compensation or adjustment of Contract Time is not made within the thirty (30) Day time limit, Contractor's requests pertaining to that Change Order are barred. The thirty (30) Day time limit for making requests shall not be extended for any reason, including without limitation Contractor's claimed inability to determine the amount of additional compensation or adjustment of Contract Time, unless an extension is granted in writing by Owner. If the Owner's Authorized Representative denies Contractor's request for additional compensation or adjustment of Contract Time, Contractor may proceed to file a Claim under Section D.3, Claims Review Process. No other reimbursement, compensation, or payment will be made, except as provided in Section D.1.5 for impact claims.

D.1.5 If any Change Order Work under Section D.1.3 causes an increase or decrease in the Contractor's cost of, or the Contract Time required for the performance of any other part of the Work under this Contract, the Contractor must submit a written request to the Owner's Authorized Representative, setting forth the nature and specific extent of the request, including all time and cost impacts against the Contract as soon as possible, but no later than thirty (30) Days after receipt of the Change Order by Contractor.

The thirty (30) Day time limit applies to claims of Subcontractors, suppliers, or manufacturers who may be affected by the Change Order and who request additional compensation or an extension of Contract Time to perform; Contractor has responsibility for contacting its Subcontractors, suppliers, or manufacturers within the thirty (30) Day time limit, and including their requests with Contractor's requests. If the request involves Work to be completed by Subcontractors, or materials to be furnished by suppliers or manufacturers, such requests shall be submitted to the Contractor in writing with full analysis and justification for the compensation and additional Contract Time requested. The Contractor will analyze and evaluate the merits of the requests submitted by Subcontractors, suppliers, and manufacturers to Contractor prior to including those requests and Contractor's analysis and evaluation of those requests with Contractor's requests for additional compensation or Contract Time that Contractor submits to the Owner's Authorized Representative. Failure of Subcontractors, suppliers, manufacturers or others to submit their requests to Contractor for inclusion with Contractor's requests submitted to Owner's Authorized Representative within the time period and by the means described in this section shall constitute a waiver of these Subcontractor claims. The Owner's Authorized Representative and the Owner will not consider direct requests or claims from Subcontractors, suppliers, manufacturers or others not a party to this Contract. The consideration of such requests and claims under this section does not give any person, not a party to the Contract the right to bring a claim against the State of Oregon, whether in this claims process, in litigation, or in any dispute resolution process.

If the Owner's Authorized Representative denies the Contractor's request for additional compensation or an extension of Contract Time, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process.

D.1.6 No request or Claim by the Contractor for additional costs or an adjustment of Contract Time shall be allowed if made after receipt of final payment application under this Contract. Final payment application must be made by Contractor within the time required under Section E.6.4.

D.1.7 It is understood that changes in the Work are inherent in construction of this type. The number of changes, the scope of those changes, and the effect they have on the progress of the original Work cannot be defined at this time. The Contractor is notified that numerous changes may be required and that there will be no compensation made to the Contractor directly related to the number of changes. Each change will be evaluated for extension of Contract Time and increase or decrease in compensation based on its own merit.

## **D.2 DELAYS**

D.2.1 Delays in construction include "Avoidable Delays", which are defined in Section D.2.1.1, and "Unavoidable Delays", which are defined in Section D.2.1.2. The effect of Avoidable Delays is described in Section D.2.2 and the effect of Unavoidable Delays is described in Section D.2.3.

D.2.1.1 Avoidable Delays include any delays other than Unavoidable Delays, and include delays that otherwise would be considered Unavoidable Delays but that:

- (a) Could have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its Subcontractors.
- (b) Affect only a portion of the Work and do not necessarily prevent or delay the prosecution of neither other parts of the Work nor the completion of the whole Work within the Contract Time.
- (c) Do not impact activities on the accepted critical path schedule.
- (d) Are associated with the reasonable interference of other contractors employed by the Owner that do not necessarily prevent the completion of the whole Work within the Contract Time.

D.2.1.2 Unavoidable Delays include delays other than Avoidable Delays that are:

- (a) Caused by any actions of the Owner, Owner's Authorized Representative, or any other employee or agent of the Owner, or by separate contractor employed by the Owner.
- (b) Caused by any site conditions which differ materially from what was represented in the Contract Documents or from conditions that would normally be expected to exist and be inherent to the construction activities defined in the Contract Documents. The Contractor shall notify the Owner's Authorized Representative immediately of differing site conditions before the area has been disturbed. The Owner's Authorized Representative will investigate the area and make a determination as to whether or not the conditions differ materially from either the conditions stated in the Contract Documents or those which could reasonably be expected in execution of this particular Contract. If Contractor and the Owner's Authorized Representative agree that a differing site condition exists, any additional compensation or additional Contract Time will be determined based on the process set forth in Section

D.1.5 for Change Order Work. If the Owner's Authorized Representative disagrees that a differing site condition exists and denies Contractor's request for additional compensation or Contract Time, Contractor may proceed to file a Claim under Section D.3, Claims Review Process.

- (c) Caused by Force Majeure acts, events or occurrences that could not have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its Subcontractors.
- (d) Caused by adverse weather conditions. Any adverse weather conditions must be substantiated by documentary evidence that weather conditions were abnormal for the specific time period claimed, could not have been anticipated by the Contractor, and adversely impacted the project in a manner that could not be avoided by rescheduling the Work or by implementing measures to protect against the weather so that the Work could proceed. A rain, windstorm, high water, or other natural phenomenon for the specific locality of the Work, which might reasonably have been anticipated from the previous 10-year historical records of the general locality of the Work, shall not be construed as abnormal. The parties agree that rainfall greater than the following levels cannot be reasonably anticipated:

- (i) Daily rainfall equal to, or greater than, 0.50 inch during a month when the monthly rainfall exceeds the normal monthly average by twenty-five percent (25 %) or more.
- (ii) daily rainfall equal to, or greater than, 0.75 inch at any time.

The Office of the Environmental Data Service of the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce nearest the project site shall be considered the official agency of record for weather information.

D.2.2 Contractor shall not be entitled to additional compensation or additional Contract Time for Avoidable Delays.

D.2.3 In the event of Unavoidable Delays, based on principles of equitable adjustment, Contractor may be entitled to the following:

- (a) Contractor may be entitled to additional compensation or additional Contract Time, or both, for Unavoidable Delays described in Section D.2.1.2 (a) and (b).
- (b) Contractor may be entitled to additional Contract Time for Unavoidable Delays described in Section D.2.1.2(c) and (d).

In the event of any requests for additional compensation or additional Contract Time, or both, as applicable, arising under this Section D.2.3 for Unavoidable Delays, other than requests for additional compensation or additional Contract Time for differing site conditions for which a review process is established under Section D.2.1.2 (b), Contractor shall submit a written notification of the delay to the Owner's Authorized Representative within two (2) Days of the occurrence of the cause of the delay. This written notification shall state the cause of the potential delay, the project components impacted by the delay, and the anticipated additional Contract Time extension or the additional compensation, or both, as applicable, resulting from the delay. Within seven (7) Days after the cause of the delay has been mitigated, or in no case more than thirty (30) Days after the initial written notification, the Contractor shall submit to the Owner's Authorized Representative, a complete and detailed request for additional compensation or additional Contract Time, or both, as applicable, resulting from the delay.

If the Owner's Authorized Representative denies Contractor's request for additional compensation or adjustment of Contract Time, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process.

If Contractor does not timely submit the notices required under this Section D.2, then unless otherwise prohibited by law, Contractor's Claim shall be barred.

### **D.3 CLAIMS REVIEW PROCESS**

D.3.1 All Contractor Claims shall be referred to the Owner's Authorized Representative for review. Contractor's Claims, including Claims for additional compensation or additional Contract Time, shall be submitted in writing by Contractor to the Owner's Authorized Representative within five (5) Days after a denial of Contractor's initial request for an adjustment of Contract terms, payment of money, extension of Contract Time or other relief, provided that such initial request has been submitted in accordance with the requirements and within the time limits established in these OUS General Conditions. Within thirty (30) Days after the initial Claim, Contractor shall submit to the Owner's Authorized Representative a complete and detailed description of the Claim (the "Detailed Notice") that includes all information required by Section D.3.2. Unless the Claim is made in accordance with these time requirements, it shall be waived.

D.3.2 The Detailed Notice of the Claim shall be submitted in writing by Contractor and shall include a detailed, factual statement of the basis of the Claim, pertinent dates, Contract provisions which support or allow the Claim, reference to or copies of any documents which support the Claim, the dollar value of the Claim, and the Contract Time extension requested for the Claim. If the Claim involves Work to be completed by Subcontractors, the Contractor will analyze and evaluate the merits of the Subcontractor claim prior to forwarding it and that analysis and evaluation to the Owner's Authorized Representative. The Owner's Authorized Representative and the Owner will not consider direct claims from Subcontractors, suppliers, manufacturers, or others not a party to this Contract. Contractor agrees that it will make no agreement, covenant, or assignment, nor will it commit any other act that will permit or assist any Subcontractor, supplier, manufacturer, or other to directly or indirectly make a claim against Owner.

D.3.3 The Owner's Authorized Representative will review all Claims and take one or more of the following preliminary actions within ten (10) Days of receipt of the Detailed Notice of a Claim: (1) request additional supporting information from the Contractor; (2) inform the Contractor and Owner in writing of the time required for adequate review and response; (3) reject the Claim in whole or in part and identify the reasons for rejection; (4) based on principles of equitable adjustment, recommend approval of all or part of the Claim; or (5) propose an alternate resolution.

D.3.4 The Owner's Authorized Representative's decision shall be final and binding on the Contractor unless appealed by written notice to the Owner within fifteen (15) Days of receipt of the decision. The Contractor must present written documentation supporting the Claim within fifteen (15) Days of the notice of appeal. After receiving the appeal documentation, the Owner shall review the materials and render a decision within thirty (30) Days after receiving the appeal documents.

D.3.5 The decision of the Owner shall be final and binding unless the Contractor delivers to the Owner its request for mediation, which shall be a non-binding process, within fifteen (15) Days of the date of the Owner's decision. The mediation process will be considered to have commenced as of the date the Contractor delivers the request. Both parties acknowledge and agree that participation in mediation is a prerequisite to commencement of

litigation of any disputes relating to the Contract. Both parties further agree to exercise their best efforts in good faith to resolve all disputes within sixty (60) Days of the commencement of the mediation through the mediation process set forth herein.

In the event that a lawsuit must be filed within this sixty (60) Day period in order to preserve a cause of action, the parties agree that notwithstanding the filing, they shall proceed diligently with the mediation to its conclusion prior to actively prosecuting the lawsuit, and shall seek from the Court in which the lawsuit is pending such stays or extensions, including the filing of an answer, as may be necessary to facilitate the mediation process. Further, in the event settlements are reached on any issues through mediation, the parties agree to promptly submit the appropriate motions and orders documenting the settlement to the Court for its signature and filing.

D.3.6 Should the parties arrive at an impasse regarding any Claims or disputed Claims, it is agreed that the parties shall participate in mediation as specified in Section D.3.5. The mediation process will be considered to have been commenced as of the date one party delivers to the other its request in writing to mediate. The mediator shall be an individual mutually acceptable to both parties, but in the absence of agreement each party shall select a temporary mediator and the temporary mediators shall jointly select the permanent mediator. Each party shall pay its own costs for the time and effort involved in mediation. The cost of the mediator shall be split equally between the two parties. Both parties agree to exercise their best effort in good faith to resolve all disputes in mediation. Participation in mediation is a mandatory requirement of both the Owner and the Contractor. The schedule, time and place for mediation will be mutually acceptable, or, failing mutual agreement, shall be as established by the mediator. The parties agree to comply with Owner's administrative rules governing the confidentiality of mediation, if any, and shall execute all necessary documents to give effect to such confidentiality rules. In any event, the parties shall not subpoena the mediator or otherwise require the mediator to produce records, notes or work product, or to testify in any future proceedings as to information disclosed or representations made in the course of mediation, except to the extent disclosure is required by law.

D.3.7 Owner may at any time and at its discretion issue a Construction Change Directive adding to, modifying or reducing the scope of Work. Contractor and Owner shall negotiate the need for any adjustment to compensation or additional Contract Time related to the change, subject to the procedures for submitting requests or Claims for additional compensation or additional Contract Time established in this Section D. Unless otherwise directed by Owner's Authorized Representative, Contractor shall proceed with the Work while any request or Claim for additional compensation or additional Contract Time resulting from Work under a Change Order or Construction Change Directive is pending. Regardless of the review period or the final decision of the Owner's Authorized Representative, the Contractor shall continue to diligently pursue the Work as identified in the Contract Documents. In no case is the Contractor justified or allowed to cease Work without a written stop work order from the Owner or Owner's Authorized Representative.

## **SECTION E PAYMENTS**

### **E.1 SCHEDULE OF VALUES**

The Contractor shall submit, at least ten (10) Days prior to submission of its first application for progress payment, a schedule of values ("Schedule of Values") for the contracted Work. This schedule will provide a breakdown of values for the contracted Work and will be the basis for progress payments. The breakdown will demonstrate reasonable, identifiable, and measurable components of the Work.

Unless objected to by the Owner's Authorized Representative, this schedule shall be used as the basis for reviewing Contractor's applications for payment. If objected to by Owner's Authorized Representative, Contractor shall revise the schedule of values and resubmit the same for approval of Owner's Authorized Representative.

## **E.2 APPLICATIONS FOR PAYMENT**

E.2.1 Owner shall make progress payments on the Contract monthly as Work progresses. Payments shall be based upon estimates of Work completed and the Schedule of Values. All payments shall be approved by the Owner's Authorized Representative. A progress payment shall not be considered acceptance or approval of any Work or waiver of any defects therein. Owner shall pay to Contractor interest for over due claims at the rate of two-thirds of one percent per month on the progress payment, not including retainage, due the Contractor. Over due claims will be those that have not been paid within forty five (45) days from the latest of:

- (a) The date of the receipt of the accurate invoice;
- (b) The date of the initial billing statement if no invoice is received;
- (c) The date all goods have been received; or
- (d) The date the claim is made certain by agreement of the parties or by operation of law.

Notwithstanding the foregoing, in instances when an application for payment is filled out incorrectly, or when there is any defect or impropriety in any submitted application or when there is a good faith dispute, Owner shall so notify the Contractor within fifteen (15) Days stating the reason or reasons the application for payment is defective or improper or the reasons for the dispute. A defective or improper application for payment, if corrected by the Contractor within seven (7) Days of being notified by the Owner, shall not cause a payment to be made later than specified in this section unless interest is also paid. Payment of interest will be postponed when payment on the principal is delayed because of disagreement between the Owner and the Contractor.

Owner reserves the right, instead of requiring the Contractor to correct or resubmit a defective or improper application for payment, to reject the defective or improper portion of the application for payment and pay the remainder of the application for payment that is correct and proper.

Owner, upon written notice to the Contractor, may elect to make payments to the Contractor only by means of Electronic Funds Transfers (EFT) through Automated Clearing House (ACH) payments. If Owner makes this election, the Contractor will be required to arrange for receipt of the EFT/ACH payments.

E.2.2 Contractor shall submit to the Owner's Authorized Representative an application for each payment and, if required, receipts or other vouchers showing payments for materials and labor including payments to Subcontractors. Contractor shall include in its application for payment a schedule of the percentages of the various parts of the Work completed, based on the Schedule of Values which shall aggregate to the payment application total, and shall include, on the face of each copy thereof, a certificate in substantially the following form:

"I, the undersigned, hereby certify that the above bill is true and correct, and the payment therefore, has not been received.

Signed: \_\_\_\_\_

E.2.3 Generally, applications for payment will be accepted only for materials that have been installed. Under special conditions,

applications for payment for stored materials will be accepted at Owner's sole discretion. Such a payment, if made, will be subject to the following conditions:

- (a) The request for stored material shall be submitted at least thirty (30) Days in advance of the application for payment on which it appears. Applications for payment shall be entertained for major equipment, components or expenditures only.
- (b) The Contractor shall submit applications for payment showing the quantity and cost of the material stored.
- (c) The material shall be stored in a bonded warehouse and Owner's Authorized Representative shall be granted the right to access the material for the purpose of removal or inspection at any time during the Contract Period.
- (d) The Contractor shall name the Owner as co-insured on the insurance policy covering the full value of the property while in the care and custody of the Contractor until it is installed. A certificate noting this coverage shall be issued to the Owner.
- (e) Payments shall be made for materials only. The submitted amount of the application for payment shall be reduced by the cost of transportation and for the cost of an inspector to check the delivery at out of town storage sites. The cost of said inspection shall be borne solely by the Contractor.
- (f) Within sixty (60) Days of the application for payment, the Contractor shall submit evidence of payment covering the material stored.
- (g) Payment for stored materials shall in no way indicate acceptance of the materials or waive any rights under this Contract for the rejection of the Work or materials not in conformance with the Contract Documents.
- (h) All required documentation must be submitted with the respective application for payment.

E.2.4 The Owner reserves the right to withhold all or part of a payment, or may nullify in whole or part any payment previously made, to such extent as may be necessary in the Owner's opinion to protect the Owner from loss because of:

- (a) Work that is defective and not remedied, or that has been demonstrated or identified as failing to conform with the Contract Documents,
- (b) third party claims filed or evidence reasonably indicating that such claims will likely be filed unless security acceptable to the Owner is provided by the Contractor;
- (c) failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment (in which case Owner may issue checks made payable jointly to Contractor and such unpaid persons under this provision, or directly to Subcontractors and suppliers at any level under Section C.3.2.1);
- (d) reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Price;
- (e) damage to the Owner or another contractor;
- (f) reasonable evidence that the Work will not be completed within the Contract Time required by the Contract, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
- (g) failure to carry out the Work in accordance with the Contract Documents; or

- (h) assessment of liquidated damages, when withholding is made for offset purposes.

E.2.5 Subject to the provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

- (a) Take that portion of the Contract Price properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the total Contract Price allocated to that portion of the Work in the Schedule of Values, less retainage as provided in Section E.5. Pending final determination of cost to the Owner of changes in the Work, no amounts for changes in the Work can be included in applications for payment until the Contract Price has been adjusted by Change Order;
- (b) Add that portion of the Contract Price properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner pursuant to Section E.2.3, suitably stored off the site at a location agreed upon in writing), less retainage as provided in Section E.5;
- (c) Subtract the aggregate of previous payments made by the Owner; and
- (d) Subtract any amounts for which the Owner's Authorized Representative has withheld or nullified payment as provided in the Contract Documents.

E.2.6 Contractor's applications for payment may not include requests for payment for portions of the Work for which the Contractor does not intend to pay to a Subcontractor or material supplier.

E.2.7 The Contractor warrants to Owner that title to all Work covered by an application for payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an application for payment all Work for which payments are received from the Owner shall be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

E.2.8 If Contractor disputes any determination by Owner's Authorized Representative with regard to any application for payment, Contractor nevertheless shall continue to prosecute expeditiously the Work. No payment made hereunder shall be or be construed to be final acceptance or approval of that portion of the Work to which such partial payment relates or shall relieve Contractor of any of its obligations hereunder.

E.2.9 Contractor shall submit its initial MWESB Report within ten (10) Days of Contractor's execution of the Contract, or if there will be a Guaranteed Maximum Price (GMP) Amendment, then within ten (10) Days of Contractor's execution of the GMP Amendment. Contractor shall submit annual MWESB Reports on June 30 of each year the Contract is active. Contracts (or GMP Amendments) first executed by Contractor within ninety (90) Days before June 30 of the year of execution by Contractor may at the discretion of Owner be exempt from submitting the annual MWESB Report otherwise due on that June 30. The final MWESB Report shall be filed with the application for final payment. Timely receipt of MWESB Reports by Owner's Authorized Representative shall be a condition of any progress payments or final payment otherwise due.

### **E.3 PAYROLL CERTIFICATION REQUIREMENT**

Payroll certification is required before payments are made on the Contract. Refer to Section C.2 for this information.

### **E.4 DUAL PAYMENT SOURCES**

Contractor shall not be compensated for Work performed under this Contract from any state agency other than the agency that is a party to this Contract.

### **E.5 RETAINAGE**

E.5.1 Retainage shall be withheld and released in accordance with OAR 580-063-0045.

E.5.1.1 Owner may reserve as retainage from any progress payment an amount not to exceed five percent of the payment. As Work progresses, Owner may reduce the amount of retainage on or may eliminate retainage on any remaining monthly Contract payments after 50 percent of the Work under the Contract is completed if, in the Owner's opinion, such Work is progressing satisfactorily. Elimination or reduction of retainage shall be allowed only upon written application by the Contractor, which application shall include written approval of Contractor's surety; except that when the Work is 97-1/2 percent completed the Owner may, at its discretion and without application by the Contractor, reduce the retained amount to 100 percent of the value of the Work remaining to be done. Upon receipt of written application by the Contractor, Owner shall respond in writing within a reasonable time.

E.5.1.2 Contractor may request in writing:

- (a) to be paid amounts which would otherwise have been retained from progress payments where Contractor has deposited acceptable bonds and securities of equal value with Owner or in a custodial account or other mutually-agreed account satisfactory to Owner, with an approved bank or trust company to be held in lieu of the cash retainage for the benefit of Owner;
- (b) for construction projects over \$1,000,000, that retainage be deposited in an interest bearing account, established through the State Treasurer for state agencies, in a bank, savings bank, trust company or savings association for the benefit of Owner, with earnings from such account accruing to the Contractor; or
- (c) that the Owner allow Contractor to deposit a surety bond for the benefit of Owner, in a form acceptable to Owner, in lieu of all or a portion of funds retained, or to be retained. Such bond and any proceeds therefrom shall be made subject to all claims in the manner and priority as set forth for retainage.

When the Owner has accepted the Contractor's election of option (a) or (b), Owner may recover from Contractor any additional costs incurred through such election by reducing Contractor's final payment. Where the Owner has agreed to Contractor's request for option (c), Contractor shall accept like bonds from Subcontractors and suppliers on the project from which Contractor has required retainages.

E. 5.1.3 The retainage held by Owner shall be included in and paid to the Contractor as part of the final payment of the Contract Price. The Owner shall pay to Contractor interest at the rate of two-thirds of one percent per month on the final payment due Contractor, interest to commence forty five (45) Days after the Work under the Contract has been completed and accepted and to run until the date when final payment is tendered to Contractor. The Contractor shall notify Owner in writing when the Contractor considers the Work complete and Owner shall, within fifteen (15) Days after receiving the written notice, either accept the Work or notify the Contractor of Work yet to be performed on the Contract. If Owner does not within the time allowed notify the Contractor of Work yet to be performed to



fulfill contractual obligations, the interest provided by this subsection shall commence to run forty five (45) Days after the end of the 15-Day period.

- E.5.1.4 Owner will reduce the amount of the retainage if the Contractor notifies the controller of the Owner that the Contractor has deposited in an escrow account with a bank or trust company, in a manner authorized by the Owner's Authorized Representative, bonds and securities of equal value of a kind approved by the Owner's Authorized Representative.
- E.5.1.5 Contractor agrees that if Contractor elects to reserve a retainage from any progress payment due to any Subcontractor or supplier, such retainage shall not exceed five percent of the payment, and such retainage withheld from Subcontractors and suppliers shall be subject to the same terms and conditions stated in Subsection E.5 as apply to Owner's retainage from any progress payment due to Contractor.
- E.5.2 As provided in subsections C.2.2 and C.2.3, additional retainage in the amount of 25% of amounts earned shall be withheld and released in accordance with ORS 279C.845(7) when the Contractor fails to file certified statements as required by section C.2.1.

## **E.6 FINAL PAYMENT**

- E.6.1 Upon completion of all the Work under this Contract, the Contractor shall notify the Owner's Authorized Representative, in writing, that Contractor has completed Contractor's part of the Contract and shall request final payment. Upon receipt of such notice the Owner's Authorized Representative will inspect the Work, and if acceptable, submit to the Owner a recommendation as to acceptance of the completed Work and the final estimate of the amount due the Contractor. If the Work is not acceptable, Owner will notify Contractor within fifteen (15) Days of Contractor's request for final payment. Upon approval of this final estimate by the Owner and compliance by the Contractor with provisions in Section K, AFFIDAVIT/RELEASE OF LIENS AND CLAIMS, and other provisions as may be applicable, the Owner shall pay to the Contractor all monies due under the provisions of these Contract Documents.
- E.6.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Owner's Authorized Representative (1) a notarized affidavit/release of liens and claims in a form satisfactory to Owner that states that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least thirty (30) Days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment and (5), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.
- E.6.3 Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that

payee except those previously made in writing and identified by that payee as unsettled at the time of final application for payment.

- E.6.4 Contractor agrees to submit its final payment application within ninety (90) Days after Substantial Completion, unless written extension is granted by Owner. Contractor shall not delay final payment application for any reason, including without limitation nonpayment of Subcontractors, suppliers, manufacturers or others not a party to this Contract, or lack of resolution of a dispute with Owner or any other person of matters arising out of or relating to the Contract. If Contractor fails to submit its final payment application within ninety (90) Days after Substantial Completion, and Contractor has not obtained written extension by Owner, all requests or Claims for additional costs or an extension of Contract Time shall be waived.

## **SECTION F JOB SITE CONDITIONS**

### **F.1 USE OF PREMISES**

Contractor shall confine equipment, storage of materials and operation of Work to the limits indicated by Contract Documents, law, ordinances, permits or directions of the Owner's Authorized Representative. Contractor shall follow the Owner's Authorized Representative's instructions regarding use of premises, if any.

### **F.2 PROTECTION OF WORKERS, PROPERTY AND THE PUBLIC**

- F.2.1 Contractor shall maintain continuous and adequate protection of all of the Work from damage and shall protect the Owner's Authorized Representative, workers and property from injury or loss arising in connection with this Contract. Contractor shall remedy acceptably to the Owner any damage, injury, or loss, except such as may be directly due to errors in the Contract Documents or caused by authorized representatives or personnel of the Owner. Contractor shall adequately protect adjacent property as provided by law and the Contract Documents.
- F.2.2 Contractor shall take all necessary precautions for the safety of all personnel on the job site and shall comply with the Contract Documents and all applicable provisions of federal, state and municipal safety laws and building codes to prevent accidents or injury to persons on, about or adjacent to the premises where the Work is being performed. Contractor shall erect and properly maintain at all times, as required by the conditions and progress of the Work, all necessary safeguards for protection of workers and the public against any hazards created by construction. Contractor shall designate a responsible employee or associate on the Work site, whose duty shall be the prevention of accidents. The name and position of the person designated shall be reported to the Owner's Authorized Representative. The Owner's Authorized Representative has no responsibility for Work site safety. Work site safety is the responsibility of the Contractor.
- F.2.3 Contractor shall not enter upon private property without first obtaining permission from the property owner or its duly authorized representative. Contractor shall be responsible for the preservation of all public and private property along and adjacent to the Work contemplated under the Contract and shall use every precaution necessary to prevent damage thereto. In the event the Contractor damages any property, the Contractor shall at once notify the property owner and make, or arrange to make, full restitution. Contractor shall, immediately and in writing, report to the Owner's Authorized Representative, all pertinent facts relating to such property damage and the ultimate disposition of the claim for damage.
- F.2.4 Contractor is responsible for protection of adjacent work areas including impacts brought about by activities, equipment, labor, utilities, and materials on the site.

F.2.5 Contractor shall at all times direct its activities in such a manner as to minimize adverse effects on the environment. Handling of all materials will be conducted so no release will occur that may pollute or become hazardous.

F.2.6 In an emergency affecting the safety of life or of the Work or of adjoining property, the Contractor, without special instruction or authorization from the Owner's Authorized Representative, shall act reasonably to prevent threatened loss or injury, and shall so act, without appeal, if instructed by the Owner's Authorized Representative. Any compensation claimed by the Contractor on account of emergency work shall be determined in accordance with section D.

### **F.3 CUTTING AND PATCHING**

F.3.1 Contractor shall be responsible for coordinating all cutting, fitting, or patching of the Work to make its several parts come together properly and fit to receive or be received by work of other contractors or Subcontractors shown upon, or reasonably implied by, the Contract Documents.

F.3.2 Contractor shall be responsible for restoring all cut, fitted, or patched surfaces to an original condition; provided, however, that if a different condition is specified in the Contract Documents, then Contractor shall be responsible for restoring such surfaces to the condition specified in the Contract Documents.

### **F.4 CLEANING UP**

From time to time as may be ordered by the Owner and, in any event, immediately after completion of the Work, the Contractor shall, at its own expense, clean up and remove all refuse and unused materials of any kind resulting from the Work. If Contractor fails to do so within twenty-four hours after notification by the Owner the work may be done by others and the cost charged to the Contractor and deducted from payment due the Contractor.

### **F.5 ENVIRONMENTAL CONTAMINATION**

F.5.1. Contractor will be held responsible for and shall indemnify, defend (with counsel of Owner's choice), and hold harmless Owner from and against any costs, expenses, damages, claims, and causes of action, (including attorney fees), or any of them, resulting from all spills, releases, discharges, leaks and disposal of environmental pollution, including storage, transportation, and handling during the performance of the Contract which occur as a result of, or are contributed by, the negligence or actions of Contractor or its personnel, agents, or Subcontractors or any failure to perform in accordance with the Contract Documents (except to the extent otherwise void under ORS 30.140). Nothing in this section F.5.1 shall limit Contractor's responsibility for obtaining insurance coverages required under Section G.3 of this Contract, and Contractor shall take no action that would void or impair such coverages.

F.5.1.1 Contractor agrees to promptly dispose of such spills, releases, discharge or leaks to the satisfaction of Owner and proper regulatory agencies in a manner that complies with applicable federal, state, and local laws and regulations. Cleanup shall be at no cost to the Owner and be performed by properly qualified personnel.

F.5.1.2 Contractor shall obtain the Owner's written consent prior to bringing onto the Work site any (i) environmental pollutants or (ii) hazardous substances or materials, as the same or reasonably similar terms are used in any applicable federal, state, or local statutes, rules or ordinances. Notwithstanding

such written consent from the Owner, the Contractor, at all times, shall:

- (a) properly handle, use and dispose of all environmental pollutants and hazardous substances or materials brought onto the Work site, in accordance with all applicable federal, state, or local statutes, rules, or ordinances;
- (b) be responsible for any and all spills, releases, discharges, or leaks of (or from) environmental pollutants or hazardous substances or materials which Contractor has brought onto the Work site; and
- (c) promptly clean up, without cost to the Owner, such spills, releases, discharges, or leaks to the Owner's satisfaction and in compliance with all applicable federal, state, or local statutes, rules or ordinances.

F.5.2 Contractor shall report all reportable quantity releases to applicable federal, state, and local regulatory and emergency response agencies. Reportable quantities are found in 40 CFR Part 302, Table 302.4 for hazardous substances and in OAR 340-142-0050 for all products addressed therein. Upon discovery, regardless of quantity, Contractor must telephonically report all releases to the Owner. A written follow-up report shall be submitted to Owner within 48 hours of the telephonic report. Such written report shall contain, as a minimum:

- (a) Description of items released (identity, quantity, manifest no., and all other documentation required by law.)
- (b) Whether amount of items released is EPA/DEQ reportable, and, if so, when it was reported.
- (c) Exact time and location of release, including a description of the area involved.
- (d) Containment procedures initiated.
- (e) Summary of communications about the release Contractor has had with members of the press or State officials other than Owner.
- (f) Description of cleanup procedures employed or to be employed at the site, including disposal location of spill residue.
- (g) Personnel injuries, if any, resulting from, or aggravated by, the release.

### **F.6 ENVIRONMENTAL CLEAN-UP**

F.6.1 Unless disposition of environmental pollution is specifically a part of this Contract, or was caused by the Contractor (reference F.5 Environmental Contamination), Contractor shall immediately notify Owner of any hazardous substance(s) which Contractor discovers or encounters during performance of the Work required by this Contract. "Hazardous substance(s)" means any hazardous, toxic and radioactive materials and those substances defined as "hazardous substances," "hazardous materials," "hazardous wastes," "toxic substances," or other similar designations in any federal, state, or local law, regulation, or ordinance, including without limitation asbestos, polychlorinated biphenyl (PCB), or petroleum, and any substances, materials or wastes regulated in 40 CFR, Part 261 and defined as hazardous in 40 CFR S 261.3. In addition to notifying Owner of any hazardous substance(s) discovered or encountered, Contractor shall immediately cease working in any particular area of the project where a hazardous substance(s) has been discovered or encountered if continued work in such area would present a risk or danger to the health or well being of Contractor's or any Subcontractor's work force.

F.6.2 Upon being notified by Contractor of the presence of hazardous substance(s) on the project site, Owner shall arrange for the proper disposition of such hazardous substance(s).

#### **F.7 FORCE MAJEURE**

A party to this Contract shall not be held responsible for delay or default due to Force Majeure acts, events or occurrences unless they could have been avoided by the exercise of reasonable care, prudence, foresight, and diligence by that party. The Owner may terminate this Contract upon written notice after determining that delay or default caused by Force Majeure acts, events or occurrences will reasonably prevent successful performance of the Contract.

### **SECTION G INDEMNITY, BONDING, AND INSURANCE**

#### **G.1 RESPONSIBILITY FOR DAMAGES / INDEMNITY**

G.1.1 Contractor shall be responsible for all damage to property, injury to persons, and loss, expense, inconvenience, and delay that may be caused by, or result from, the carrying out of the Work to be done under this Contract, or from any act, omission or neglect of the Contractor, its Subcontractors, personnel, or agents.

G.1.2 To the fullest extent permitted by law, Contractor shall indemnify, defend (with counsel approved by Owner) and hold harmless the Owner, Owner's Authorized Representative, Architect/Engineer, Architect/Engineer's consultants, and their respective officers, directors, agents, employees, partners, members, stockholders and affiliated companies (collectively "Indemnitees") from and against all liabilities, damages, losses, claims, expenses (including reasonable attorney fees), demands and actions of any nature whatsoever which arise out of, result from or are related to, (a) any damage, injury, loss, expense, inconvenience or delay described in this Section G.1.2, (b) any accident or occurrence which happens or is alleged to have happened in or about the project site or any place where the Work is being performed, or in the vicinity of either, at any time prior to the time the Work is fully completed in all respects, (c) any failure of the Contractor to observe or perform any duty or obligation under the Contract Documents which is to be observed or performed by the Contractor, or any breach of any agreement, representation or warranty of the Contractor contained in the Contract Documents or in any subcontract, (d) the negligent acts or omissions of the Contractor, a Subcontractor or anyone directly or indirectly employed by them or any one of them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder (except to the extent otherwise void under ORS 30.140), and (e) any lien filed upon the project or bond claim in connection with the Work. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Section G.1.2.

G.1.3 In claims against any person or entity indemnified under this Section G.1.2 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Section G.1.2 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

#### **G.2 PERFORMANCE AND PAYMENT SECURITY; PUBLIC WORKS BOND**

G.2.1 When the Contract Price is \$100,000 or more (or \$50,000 or more in the case of Contracts for highways, bridges and other transportation projects), the Contractor shall furnish and

maintain in effect at all times during the Contract Period a performance bond in a sum equal to the Contract Price and a separate payment bond also in a sum equal to the Contract Price. The bonds may be required if the Contract Price is less than the above thresholds if required by the Contract Documents.

G.2.2 Bond forms furnished by the Owner and notarized by awarded Contractor's surety company authorized to do business in Oregon are the only acceptable forms of performance and payment security, unless otherwise specified in the Contract Documents.

G.2.3 Before execution of the Contract the Contractor shall file with the Construction Contractors Board, and maintain in full force and effect, the separate public works bond required by Oregon Laws 2005, Chapter 360, and OAR 839-025-0015, unless otherwise exempt under those provisions. The Contractor shall also include in every subcontract a provision requiring the Subcontractor to have a public works bond filed with the Construction Contractors Board before starting Work, unless otherwise exempt, and shall verify that the Subcontractor has filed a public works bond before permitting the Subcontractor to start Work.

#### **G.3 INSURANCE**

G.3.1 Primary Coverage: Insurance carried by Contractor under this Contract shall be the primary coverage, and the Owner's insurance is excess and solely for damages or losses for which the Owner is responsible. The coverages indicated are minimums unless otherwise specified in the Contract Documents.

G.3.2 Workers' Compensation: All employers, including Contractor, that employ subject workers who work under this contract in the State of Oregon shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless such employers are exempt under ORS 656.126. This shall include Employer's Liability Insurance with coverage limits of not less than \$100,000 for each accident. Contractors who perform the Work without the assistance or labor of any employee need not obtain such coverage if the Contractor certifies so in writing. Contractor shall ensure that each of its Subcontractors complies with these requirements. The Contractor shall require proof of such Workers' Compensation by receiving and keeping on file a certificate of insurance from each Subcontractor or anyone else directly employed by either the Contractor or its Subcontractors.

G.3.3 Builder's Risk Insurance:

G.3.3.1 Builder's Risk: During the term of this Contract, for new construction the Contractor shall obtain and keep in effect Builder's Risk insurance on an all risk form, including earthquake and flood, for an amount equal to the full amount of the Contract. Any deductible shall not exceed \$50,000 for each loss, except the earthquake and flood deductible shall not exceed 2 percent of each loss or \$50,000, whichever is more. The policy will include as loss payees the Owner, the Contractor and its Subcontractors as their interests may appear.

G.3.3.2 Builder's Risk Installation Floater: For other than new construction the Contractor shall obtain and keep in effect during the term of this Contract, a Builder's Risk Installation Floater for coverage of the Contractor's labor, materials and equipment to be used for completion of the Work performed under this Contract. The minimum amount of coverage to be carried shall be equal to the full amount of the Contract. This insurance shall include as loss payees the State of Oregon, the Owner, the Contractor and its Subcontractors as their interests may appear.

G.3.3.3 Such insurance shall be maintained until Owner has occupied the facility.

G.3.3.4 A loss insured under the Builder's Risk insurance shall be adjusted by the Owner and made payable to the Owner for the insureds, as their interests may appear. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner. The Owner shall have power to adjust and settle a loss with insurers.

G.3.4 Liability Insurance:

G.3.4.1 Commercial General Liability: Contractor shall obtain, at Contractor's expense, and keep in effect during the term of this Contract, Commercial General Liability Insurance covering bodily injury and property damage in a form and with coverages that are satisfactory to the State. This insurance shall include personal injury liability, products and completed operations, and contractual liability coverage for the indemnity provided under this Contract (to the extent contractual liability coverage for the indemnity is available in the marketplace), and shall be issued on an occurrence basis. Contractor shall provide proof of insurance of not less than the following amounts:

Bodily Injury/Death:

Amounts not less than the amounts listed in the following schedule:

Per occurrence limit for any single claimant :

From commencement of the Contract term to  
 June 30, 2011: \$1,600,000  
 July 1, 2011 to June 30, 2012: \$1,700,000  
 July 1, 2012 to June 30, 2013: \$1,800,000  
 July 1, 2013 to June 30, 2014: \$1,900,000  
 July 1, 2014 to June 30, 2015: \$2,000,000  
 July 1, 2015 and thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 3 (Senate Bill 311).

Per occurrence limit for any number of claimants:

From commencement of the Contract term to  
 June 30, 2011: \$3,200,000  
 July 1, 2011 to June 30, 2012: \$3,400,000  
 July 1, 2012 to June 30, 2013: \$3,600,000  
 July 1, 2013 to June 30, 2014: \$3,800,000  
 July 1, 2014 to June 30, 2015: \$4,000,000  
 July 1, 2015 and thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 3 (Senate Bill 311).

Property Damage:

Amounts not less than the amounts listed in the following schedule:

Per occurrence limit for any single claimant:

From commencement of the Contract term to June 30, 2011: \$100,100.  
 Effective as of July 1 of each year the adjusted limitation will be as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 5 (Senate Bill 311).

Per occurrence limit for any number of claimants:

From commencement of the Contract term to June 30, 2011: \$500,600.  
 Effective as of July 1 of each year the adjusted limitation will be as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 5 (Senate Bill 311).

G.3.4.2 Automobile Liability: Contractor shall obtain, at Contractor's expense, and keep in effect during the term of this Contract, Automobile Liability Insurance covering owned, non-owned and/or hired vehicles, as applicable. The coverage may be written in combination with the Commercial General Liability Insurance. Contractor shall provide proof of insurance of not less than the following amounts:

Bodily Injury/Death:

Amounts not less than the amounts listed in the following schedule:

Per occurrence limit for any single claimant:

From commencement of the Contract term to  
 June 30, 2011: \$1,600,000.  
 July 1, 2011 to June 30, 2012: \$1,700,000.  
 July 1, 2012 to June 30, 2013: \$1,800,000.  
 July 1, 2013 to June 30, 2014: \$1,900,000.  
 July 1, 2014 to June 30, 2015: \$2,000,000.  
 July 1, 2015 and thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 3 (Senate Bill 311).

Per occurrence limit for any number of claimants:

From commencement of the Contract term to  
 June 30, 2011: \$3,200,000.  
 July 1, 2011 to June 30, 2012: \$3,400,000.  
 July 1, 2012 to June 30, 2013: \$3,600,000.  
 July 1, 2013 to June 30, 2014: \$3,800,000.  
 July 1, 2014 to June 30, 2015: \$4,000,000.  
 July 1, 2015 and thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 3 (Senate Bill 311).

Property Damage:

Amounts not less than the amounts listed in the following schedule:

Per occurrence limit for any single claimant:

From commencement of the Contract term to June 30, 2011: \$100,100.  
 Effective as of July 1 of each year the adjusted limitation will be as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 5 (Senate Bill 311).

Per occurrence limit for any number of claimants:

From commencement of the Contract term to June 30, 2011: \$500,600.  
 Effective as of July 1 of each year the adjusted limitation will be as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 5 (Senate Bill 311).

G.3.4.3 "Tail" Coverage: If any of the required liability insurance is arranged on a "claims made" basis, "tail" coverage will be required at the completion of this Contract for a duration of 24 months or the maximum time period available in the marketplace if less than 24 months. Contractor will be responsible for furnishing certification of "tail" coverage as described or continuous "claims made" liability coverage for 24 months following Final Completion. Continuous "claims made" coverage will be acceptable in lieu of "tail" coverage, provided its retroactive date is on or before the effective date of this Contract. This will be a condition of the final acceptance of Work or services and related warranty (if any).

G.3.5 Additional Insured: The liability insurance coverage, except Professional Liability if included, required for performance of

this Contract shall include the State of Oregon, its departments, divisions, officers, and employees, as Additional Insureds but only with respect to the Contractor's activities to be performed under this Contract.

If Contractor cannot obtain an insurer to name the State of Oregon, its departments, divisions, officers and employees as Additional Insureds, Contractor shall obtain at Contractor's expense, and keep in effect during the term of this Contract, Owners and Contractors Protective Liability Insurance, naming the State of Oregon, its departments, divisions, officers and employees as Named Insureds with not less than a \$1,500,000.00 limit per occurrence. This policy must be kept in effect for 12 months following Final Completion. As evidence of coverage, Contractor shall furnish the actual policy to Owner prior to execution of the Contract.

- G.3.6 Notice of Cancellation or Change: There shall be no cancellation, material change, potential exhaustion of aggregate limits or intent not to renew insurance coverages without thirty (30) Days' written notice from the Contractor or its insurer(s) to the Owner. Any failure to comply with the reporting provisions of this insurance, except for the potential exhaustion of aggregate limits, shall not affect the coverages provided to the State of Oregon, its Owner and their divisions, officers, and employees.
- G.3.7 Certificate(s) of Insurance: As evidence of the insurance coverage required by this Contract, the Contractor shall furnish certificate(s) of insurance to the Owner prior to execution of the Contract. The certificate(s) will specify all of the parties who are Additional Insureds or Loss Payees. Insurance coverage required under this Contract shall be obtained from insurance companies or entities acceptable to the Owner that are allowed to provide such insurance under Oregon law. Eligible insurers include admitted insurers that have been issued a certificate of authority from the Oregon Department of Consumer and Business Services authorizing them to do an insurance business in the state of Oregon, and certain non-admitted surplus lines insurers that satisfy the requirements of applicable Oregon law and are approved by the Owner. The certificates will also specify that there shall be no cancellation, material change, potential exhaustion of aggregate limits or intent not to renew insurance coverages without thirty (30) Days' written notice from the insurer(s) to the Owner. To the extent Certificates of Insurance contain words to the effect that Contractor shall "endeavor to send notice of cancellation" or similar language, Contractor shall require its insurer to send such notice by making sure that the words "endeavor to" or similar words are removed from the Certificate. The Contractor shall be financially responsible for all deductibles, self-insured retentions and/or self-insurance included hereunder. Any deductible, self-insured retention and/or self-insurance in excess of \$50,000 shall be approved by the Owner in writing prior to execution of the Contract and is subject to Owner's approval.
- G.3.8 Retainer Contract Program: For the OUS Retainer Contract Program the term "Contract" as used in this Section G in the phrases "keep in effect during the term of this Contract" and "prior to execution of the Contract" shall mean each Retainer Contract Supplement issued under the Retainer Contract.

## **SECTION H SCHEDULE OF WORK**

### **H.1 CONTRACT PERIOD**

- H.1.1 Time is of the essence on this Contract. The Contractor shall at all times carry on the Work diligently, without delay and punctually fulfill all requirements herein. Contractor shall

commence Work on the site within fifteen (15) Days of Notice to Proceed, unless directed otherwise.

- H.1.2 Unless specifically extended by Change Order, all Work shall be complete by the date contained in the Contract Documents. The Owner shall have the right to accelerate the completion date of the Work, which may require the use of overtime. Such accelerated Work schedule shall be an acceleration in performance of Work under Section D.1.2 (f) and shall be subject to the Change Order process of Section D.1.
- H.1.3 The Owner shall not waive any rights under the Contract by permitting the Contractor to continue or complete in whole or in part the Work after the date described in Section H.1.2 above.

### **H.2 SCHEDULE**

- H.2.1 Contractor shall provide, by or before the pre-construction conference, a detailed schedule for review and acceptance by the Owner. The submitted schedule must illustrate Work by significant project components, significant labor trades, and long lead items broken down by building and/or floor where applicable. Each schedule item shall account for no greater than 5 % of the monetary value of the project or 5 % of the available Contract Time. Schedules with activities of less than one Day or valued at less than 1% of the Contract will be considered too detailed and will not be accepted. Schedules lacking adequate detail, or unreasonably detailed, will be rejected. Included within the schedule are the following: Notice to Proceed, Substantial Completion, and Final Completion. Schedules will be updated monthly and submitted with the monthly payment application. Acceptance of the Schedule by the Owner does not constitute agreement by the Owner as to the Contractor's sequencing, means, methods, or durations. Any positive difference between the Contractor's scheduled completion and the Contract completion date is float owned by the Owner. Owner reserves the right to negotiate the float if it is deemed to be in Owner's best interest to do so. In no case shall the Contractor make a claim for delays if the Work is completed within the Contract Time but after Contractor's scheduled completion.

### **H.3 PARTIAL OCCUPANCY OR USE**

- H.3.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage, provided such occupancy or use is consented to by public authorities having jurisdiction over the Work. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have reasonably accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, insurance or self-insurance, maintenance, heat, utilities, and damage to the Work, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents with respect to such portion of the Work. Approval by the Contractor to partial occupancy or use shall not be unreasonably withheld. Immediately prior to such partial occupancy or use, the Owner and Contractor shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work. Partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

## **SECTION I CORRECTION OF WORK**

### **I.1 CORRECTION OF WORK BEFORE FINAL PAYMENT**

The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents,

that the Work will be free from defects, and that the Work will conform to the requirements of the Contract Documents. Work failing to conform to these requirements shall be deemed defective. Contractor shall promptly remove from the premises and replace all defective materials and equipment as determined by the Owner's Authorized Representative, whether incorporated in the Work or not. Removal and replacement shall be without loss or expense to the Owner, and Contractor shall bear the cost of repairing all Work destroyed or damaged by such removal or replacement. Contractor shall be allowed a period of no longer than thirty (30) Days after Substantial Completion for completion of defective (punch list) work. At the end of the thirty-day period, or earlier if requested by the Contractor, Owner shall arrange for inspection of the Work by the Architect/Engineer. Should the work not be complete, and all corrections made, the costs for all subsequent reinspections shall be borne by the Contractor. If Contractor fails to complete the punch list work within the thirty (30) Day period, Owner may perform such work and Contractor shall reimburse Owner all costs of the same within ten (10) Days after demand without affecting Contractor's obligations.

## **I.2 WARRANTY WORK**

I.2.1 Neither the final certificate of payment nor any provision of the Contract Documents shall relieve the Contractor from responsibility for defective Work and, unless a longer period is specified, Contractor shall correct all defects that appear in the Work within a period of one year from the date of issuance of the written notice of Substantial Completion by the Owner except for latent defects which will be remedied by the Contractor at any time they become apparent. The Owner shall give Contractor notice of defects with reasonable promptness. Contractor shall perform such warranty work within a reasonable time after Owner's demand. If Contractor fails to complete the warranty work within such period as Owner determines reasonable, or at any time in the event of warranty work consisting of emergency repairs, Owner may perform such work and Contractor shall reimburse Owner all costs of the same within ten (10) Days after demand, without affecting Contractor's obligations. The Contractor shall perform the warranty Work by correcting defects within twenty-four (24) hours of notification by Owner, unless otherwise specified in the Contract Documents. Should the Contractor fail to respond within the specified response time, the Owner may, at its option, complete the necessary repairs using another contractor or its own forces. If Owner completes the repairs using Owner's own forces, Contractor shall pay Owner at the rate of one and one-half (1½) times the standard hourly rate of Owner's forces, plus related overhead and any direct non-salary costs. If Owner completes the repairs using another contractor, Contractor shall pay Owner the amount of Owner's direct costs billed by the other contractor for the work, plus the direct salary costs and related overhead and direct non-salary expenses of Owner's forces who are required to monitor that contractor's work. Work performed by Owner using Owner's own forces or those of another contractor shall not affect the Contractor's contractual duties under these provisions, including warranty provisions.

I.2.2 This provision does not negate guarantees or warranties for periods longer than one year including without limitation such guarantees or warranties required by other sections of the Contract Documents for specific installations, materials, processes, equipment or fixtures.

I.2.3 In addition to Contractor's warranty, manufacturer's warranties shall pass to the Owner and shall not take effect until affected Work has been accepted in writing by the Owner's Authorized Representative.

I.2.4 The one-year period for correction of Work shall be extended with respect to portions of Work performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work, and shall be extended by corrective Work performed by the Contractor

pursuant to this Section, as to the Work corrected. The Contractor shall remove from the site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

I.2.5 Nothing contained in this Section I.2 shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents. Establishment of the period for correction of Work as described in this Section I.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

I.2.6 If the Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Price will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

## **SECTION J**

### ***SUSPENSION AND/OR TERMINATION OF THE WORK***

#### **J.1 OWNER'S RIGHT TO SUSPEND THE WORK**

J.1.1 The Owner and/or the Owner's Authorized Representative has the authority to suspend portions or all of the Work due to the following causes:

- (a) Failure of the Contractor to correct unsafe conditions;
- (b) Failure of the Contractor to carry out any provision of the Contract;
- (c) Failure of the Contractor to carry out orders;
- (d) Conditions, in the opinion of the Owner's Authorized Representative, which are unsuitable for performing the Work;
- (e) Time required to investigate differing site conditions;
- (f) Any reason considered to be in the public interest.

J.1.2 The Owner shall notify Contractor and the Contractor's Surety in writing of the effective date and time of the suspension, and Owner shall notify Contractor and Contractor's surety in writing to resume Work.

#### **J.2 CONTRACTOR'S RESPONSIBILITIES**

J.2.1 During the period of the suspension, Contractor is responsible to continue maintenance at the project just as if the Work were in progress. This includes, but is not limited to, protection of completed Work, maintenance of access, protection of stored materials, temporary facilities, and clean-up.

J.2.2 When the Work is recommenced after the suspension, the Contractor shall replace or renew any Work damaged during the suspension, remove any materials or facilities used as part of temporary maintenance, and complete the project in every respect as though its prosecution had been continuous and without suspension.

#### **J.3 COMPENSATION FOR SUSPENSION**

J.3.1 Depending on the reason for suspension of the Work, the Contractor or the Owner may be due compensation by the other party. If the suspension was required due to acts or omissions of Contractor, the Owner may assess the Contractor actual costs of the suspension in terms of administration, remedial work by the Owner's forces or another contractor to correct the problem associated with the suspension, rent of temporary facilities, and other actual costs related to the suspension. If the suspension was caused by acts or omissions of the Owner, the Contractor shall be due compensation which shall be defined using Section D, Changes in Work. If the suspension was required through no fault of the Contractor or the Owner, neither party owes the other for the impact.

#### **J.4 OWNER'S RIGHT TO TERMINATE CONTRACT**

J.4.1 The Owner may, without prejudice to any other right or remedy, and after giving Contractor seven (7) Days' written notice and an opportunity to cure, terminate the Contract in whole or in part under the following conditions:

- (a) If Contractor should voluntarily or involuntarily, seek protection under the United States Bankruptcy Code and Contractor as debtor-in-possession or the Trustee for the estate fails to assume the Contract within a reasonable time;
- (b) If Contractor should make a general assignment for the benefit of Contractor's creditors;
- (c) If a receiver should be appointed on account of Contractor's insolvency;
- (d) If Contractor should repeatedly refuse or fail to supply an adequate number of skilled workers or proper materials to carry on the Work as required by the Contract Documents, or otherwise fail to perform the Work in a timely manner;
- (e) If Contractor should repeatedly fail to make prompt payment to Subcontractors or for material or labor, or should disregard laws, ordinances or the instructions of the Owner or its Authorized Representative; or
- (f) If Contractor is otherwise in material breach of any part of the Contract.

J.4.2 At any time that any of the above occurs, Owner may exercise all rights and remedies available to Owner at law or in equity, and, in addition, Owner may take possession of the premises and of all materials and appliances and finish the Work by whatever method it may deem expedient. In such case, the Contractor shall not be entitled to receive further payment until the Work is completed. If the Owner's cost of finishing the Work exceeds the unpaid balance of the Contract Price, Contractor shall pay the difference to the Owner.

#### **J.5 TERMINATION FOR CONVENIENCE**

- J.5.1 Owner may terminate the Contract in whole or in part whenever Owner determines that termination of the Contract is in the best interest of the public.
- J.5.2 The Owner will provide the Contractor with seven (7) Days prior written notice of a termination for public convenience. After such notice, the Contractor shall provide the Owner with immediate and peaceful possession of the premises and materials located on and off the premises for which the Contractor received progress payment under Section E. Compensation for Work terminated by the Owner under this provision will be according to Section E. In no circumstance shall Contractor be entitled to lost profits for Work not performed due to termination.

#### **J.6 ACTION UPON TERMINATION**

- J.6.1 Upon receiving a notice of termination, and except as directed otherwise by the Owner, Contractor shall immediately cease placing further subcontracts or orders for materials, services, or facilities. In addition, Contractor shall terminate all subcontracts or orders to the extent they relate to the Work terminated and, with the prior written approval of the Owner, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts and orders.
- J.6.2 As directed by the Owner, Contractor shall, upon termination, transfer title and deliver to the Owner all Record Documents, information, and other property that, if the Contract had been completed, would have been required to be furnished to the Owner.

### **SECTION K CONTRACT CLOSE OUT**

#### **K.1 RECORD DOCUMENTS**

As a condition of final payment (refer also to section E.6), Contractor shall comply with the following: Contractor shall provide Record Documents for the entire project to Owner's Authorized Representative. Record Documents shall depict the project as constructed and shall reflect each and every change, modification, and deletion made during the construction. Record Documents are part of the Work and shall be provided prior to the Owner's issuance of final payment. Record Documents include all modifications to the Contract Documents unless otherwise directed, and accurate MWESB Reports.

#### **K.2 OPERATION AND MAINTENANCE MANUALS**

As part of the Work, Contractor shall submit two completed operation and maintenance manuals ("O & M Manuals") for review by the Owner's Authorized Representative prior to submission of any pay request for more than 75% of the Work. No payments beyond 75% will be made by the Owner until the O & M Manuals have been received. The O & M Manuals shall contain a complete set of all submittals, all product data as required by the specifications, training information, phone list of consultants, manufacturers, installer and suppliers, manufacturer's printed data, record and shop drawings, schematic diagrams of systems, appropriate equipment indices, warranties and bonds. The Owner's Authorized Representative shall review and return one O & M Manual for any modifications or additions required. Prior to submission of its final pay request, Contractor shall deliver three (3) complete and approved sets of O & M Manuals to the Owner's Authorized Representative.

#### **K.3 AFFIDAVIT/RELEASE OF LIENS AND CLAIMS**

As a condition of final payment, the Contractor shall submit to the Owner's Authorized Representative a notarized affidavit/release of liens and claims form in a form satisfactory to Owner, which states that all Subcontractors and suppliers have been paid in full, all disputes with property owners have been resolved, all obligations on the project have been satisfied, all monetary claims and indebtedness have been paid, and that, to the best of the Contractor's knowledge, there are no claims of any kind outstanding against the project. The Contractor shall indemnify, defend (with counsel of Owner's choice) and hold harmless the Owner from all claims for labor and materials finished under this Contract. The Contractor shall furnish complete and valid releases or waivers, satisfactory to the Owner, of all liens arising out of or filed in connection with the Work.

#### **K.4 COMPLETION NOTICES**

- K.4.1 Contractor shall provide Owner notice of both Substantial and Final Completion. The certificate of Substantial Completion shall state the date of Substantial Completion, the responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance,

and the time within which the Contractor shall finish all items on the punchlist accompanying the Certificate. Both completion notices must be signed by the Contractor and the Owner to be valid. The Owner shall provide the final signature on the notices. The notices shall take effect on the date they are signed by the Owner.

All warranty and indemnification provisions of this Contract, and all of Contractor's other obligations under this Contract that are not fully performed by the time of Final Completion or termination, shall survive Final Completion or any termination of the Contract.

K.4.2 Substantial Completion of a facility with operating systems (e.g., mechanical, electrical, HVAC) shall be that degree of completion that has provided a minimum of thirty (30) continuous Days of successful, trouble-free operation, which period shall begin after all performance and acceptance testing has been successfully demonstrated to the Owner's Authorized Representative. All equipment contained in the Work, plus all other components necessary to enable the Owner to operate the facility in the manner that was intended, shall be complete on the Substantial Completion date. The Contractor may request that a punch list be prepared by the Owner's Authorized Representative with submission of the request for the Substantial Completion notice.

#### **K.5 TRAINING**

As part of the Work, and prior to submission of the request for final payment, the Contractor shall schedule with the Owner's Authorized Representative training sessions for all equipment and systems as required in the individual specifications sections. Contractor shall schedule training sessions at least two weeks in advance of the date of training to allow Owner personnel adequate notice. The O & M Manual shall be used as a basis for training. Training shall be a formal session held after the equipment and/or system is completely installed and operational in its normal operating environment.

#### **K.6 EXTRA MATERIALS**

As part of the Work, Contractor shall provide spare parts, extra maintenance materials, and other materials or products in the quantities specified in the specifications prior to final payment. Delivery point for extra materials shall be designated by the Owner's Authorized Representative.

#### **K.7 ENVIRONMENTAL CLEAN-UP**

As part of the Final Completion notice, or as a separate written notice submitted with or before the notice of Final Completion, the Contractor shall notify the Owner that all environmental pollution clean-up performed as a part of this Contract has been disposed of in accordance with all applicable rules, regulations, laws, and statutes of all agencies having jurisdiction over such environmental pollution. The notice shall reaffirm the indemnification given under Section F.5.1 above.

#### **K.8 CERTIFICATE OF OCCUPANCY**

The Contractor shall not be granted Final Completion or receive final payment if the Owner has not received an unconditioned certificate of occupancy from the appropriate state and/or local building officials, unless failure to obtain an unconditional certificate of occupancy is due to the fault or neglect of Owner.

#### **K.9 OTHER CONTRACTOR RESPONSIBILITIES**

The Contractor shall be responsible for returning to the Owner all items issued during construction such as keys, security passes, site admittance badges, and all other pertinent items. The Contractor shall be responsible for notifying the appropriate utility companies to transfer utility charges from the Contractor to the Owner. The utility transfer date shall not be before Substantial Completion and may not be until Final Completion, if the Owner does not take beneficial use of the facility and the Contractor's forces continue with the Work.

#### **K.10 SURVIVAL**



**GEOHERMAL POWER PLANT INFRASTRUCTURE  
DESIGN AND CONSTRUCTION AGREEMENT**

OWNER: State of Oregon acting by and through  
the Oregon State Board of Higher Education  
on behalf of the Oregon Institute of Technology (the "Owner")

DESIGN/BUILDER: \_\_\_\_\_ (the "CONTRACTOR")  
\_\_\_\_\_  
\_\_\_\_\_

PROJECT: Geothermal Power Plant Infrastructure Design/Build (the "Project")

(The Owner and the Design/Builder are collectively referred to hereafter as the "Parties")

**RECITALS**

- A. WHEREAS, Owner is acquiring a 1.75MW geothermal power plant; and
- B. WHEREAS, Owner issued an **Request for Proposals #2012-02** (the "RFP") on \_\_\_\_\_, in order to obtain the services of a **Design/Builder** (the "CONTRACTOR") to competently assume responsibility for completion of the design, construction and install of the infrastructure and geothermal power plant for operation (the "Project") in two phases as follows: Phase I--design services to complete the design for infrastructure. Products of Phase I will include complete drawings and details that are AutoCAD compatible; Phase II—Supply of materials, construction, installation, turn-over and as-built documentation; and
- C. WHEREAS, CONTRACTOR submitted a bid in response to Owner's RFP and Owner selected CONTRACTOR as the most qualified responsive and responsible contractor to complete the Project; and
- D. WHEREAS, Owner and CONTRACTOR now wish to memorialize their respective rights and responsibilities regarding CONTRACTOR's completion of the Project; and
- E. WHEREAS, Owner is authorized under the laws of the State of Oregon to enter into the Contract for the purposes set forth herein.

NOW, THEREFORE, in consideration of the mutual promises contained in this document, and intending to be legally bound hereby, Owner and CONTRACTOR agree as follows (The above recitals are made part of the Contract.):

## AGREEMENT

### 1. DEFINITIONS

Key terms used within the Contract are defined at **Section A.1** of the Oregon University System General Conditions for Public Improvement Contracts, dated February 1, 2011 (the “**OUS General Conditions**”), except as modified or supplemented as follows:

- 1.1 “Agreement” means this document entitled, “Design and Construction Agreement,” excluding exhibits and material incorporated herein by reference, and is interchangeable with the term “OUS Public Improvement Agreement form” used in Section A.1 of the OUS General Conditions.
- 1.2 “Contract Documents” means the documents identified in **Section 2.1** of this Agreement.
- 1.3 “Construction Documents” means Owner-approved Plans, drawings, specifications and other documents necessary to allow complete and accurate construction of the Project.
- 1.4 “Construction Work” or “Work” means the providing of all work, services, construction management services, materials, equipment, transportation, tools, labor and incidentals necessary to complete the construction work described in and reasonably inferred from the Contract Documents, including but not limited to the services and work set forth in **Section 3.5** of this Agreement.
- 1.5 “Contract Price” means that amount set forth in the CONTRACTOR’s bid pertaining to the total fixed cost of the Project for both Design Services and Construction Work.
- 1.6 “Design/Builder” means the CONTRACTOR in its capacity of being responsible for providing all services necessary to achieve the purposes and intent of the RFP including without limitation, Project coordination and supervision, architectural and engineering design, procurement of goods, materials and services necessary to complete the Project, construction work/services, and commissioning services.
- 1.7 “Design Development Documents” means 1) any manufacturer's complete literature/documentation and technical data; 2) the complete architectural, structural, mechanical, plumbing and electrical drawings and specifications for the Project; 3) all architect's and professional engineer's drawings and calculations; and 4) all samples, more particularly set forth in the Specifications, that are initially provided by the Design/Builder after award of the Contract and that have NOT yet been finalized after review and approval by the Owner;
- 1.8 “Design Professional” means: 1) an architect who is registered and holds a valid certificate in the practice of architecture in the State of Oregon; 2) an engineer who is registered and holds a valid certificate in the practice of engineering in the State of Oregon; 3) a surveyor who is registered and holds a valid certificate in the practice of land surveying in the State of Oregon; and 4) such other professional person or entity

otherwise registered and holding a valid certificate to provide professional design services in the State of Oregon.

- 1.9 “Design Services” means all the design services, construction administration services and related services to be performed by the CONTRACTOR under the Contract, including but not limited to **Sections 3.3 and 3.4** of this Agreement.
- 1.10 “Direct Construction Costs” means the costs to the Owner of all divisions of construction, including portable equipment designed or specified in the construction specifications.
- 1.11 “Facility” means the new geothermal power plant site on the Owner’s property located in Klamath Falls.
- 1.12 “Notice to Proceed” means the official written notice from Owner that indicates that all of the threshold contractual requirements have been met, including full negotiation of Contract terms, execution and delivery of all Contract Documents, Owner’s receipt of acceptable and fully executed performance and payment bonds and certificates of insurance, and that the Contractor is authorized to proceed with the work.
- 1.13 “Owner” means the State of Oregon acting by and through the Oregon State Board of Higher Education on behalf of the Oregon Institute of Technology and those individuals designated in writing by Owner to act on its behalf as Authorized Representatives.
- 1.14 “PHASE I” means the Design Services to be performed by the Design/Builder, pursuant to **Section 3.3** of this Agreement, including all design services required for the Base Construction Work, as those terms are defined below.
- 1.15 “PHASE II” means the construction administration services and Construction Work to be performed by the Design/Builder, if such Construction Work is in fact authorized, pursuant to **Sections 3.4 and 3.5** of this Agreement.
- 1.16 “Request for Proposals” or “RFP” means a Solicitation Document for the solicitation of competitive, written, signed, and sealed Bids in which Specifications, price, and delivery (or project completion) are the predominant award criteria.
- 1.17 “Statement of Work” means the Design Services and Construction Work set forth in detail in the Owner’s outline project manual and site drawings.
- 1.18 “Substantial Completion Date” means the date on which CONTRACTOR warrants by written notice to Owner’s Authorized Representative that CONTRACTOR has substantially completed the Statement of Work as follows: Phase II, the supply and installation of the environmentally controlled storage rooms.
- 1.19 “Work Product” means the work product required to be delivered by CONTRACTOR under the Contract, as more particularly defined in **Section 3.3** of

this Agreement.

- 1.20 “Project Management Services” means the project management services that the CONTRACTOR will perform throughout the period of performance of the Contract, as more particularly described in Section 3.2 of this Agreement.

## 2. CONTRACT DOCUMENTS; OWNERSHIP OF WORK PRODUCT

The contract documents listed at **Section 2.1** of this Contract (the “Contract Documents”) are intended to reflect the Parties’ understanding of their respective rights and responsibilities concerning completion of the Work within the Contract Time and for the Contract Price.

**2.1 Interpretation.** Notwithstanding the order of precedence provision set forth in Section A.3.1 of the OUS General Conditions, in the event of any inconsistency, conflict, or ambiguity between or among the Contract Documents, the Contract Documents shall take precedence in the following order:

- 2.1.1** All written modifications, amendments and change orders to this Contract that have been executed by Owner following any required State of Oregon governmental approvals;
- 2.1.2** This Agreement, including exhibits minus material incorporated by reference;
- 2.1.3** The OUS General Conditions;
- 2.1.4** All design and construction drawings, Plans, Specifications and documents prepared and approved for the Project;
- 2.1.5** The **Request for Proposals** and all attachments thereto generated as part of Phase I services/work.
- 2.1.6** The Contractor’s Proposal submitted in response to the **Request for Proposals**.
- 2.1.7** Remaining **Exhibits and** documents incorporated into the Contract by reference.

The OUS General Conditions, to the extent not inconsistent with the Contract, shall also apply to the work of all subcontractors performing work on the Project.

**2.2 Ownership of Work Product.** All drawings, Plans, Specifications, prototypes, reports, and other work product required to be delivered by CONTRACTOR under the Contract (“**Work Product**”) shall be the exclusive property of Owner. Owner and CONTRACTOR intend that such Work Product be deemed “work made for hire.” If for any reason the Work Product is not deemed “work made for hire,” CONTRACTOR hereby irrevocably assigns to Owner all of its right, title and interest in and to any and all of the Work Product, whether arising from copyright, or any state or federal intellectual property law or doctrine. CONTRACTOR shall execute such further documents and instruments as Owner may reasonably request in order to fully vest such rights in Owner. CONTRACTOR forever waives any and all rights relating to the Work Product, including without limitation, any and all rights arising under 17 USC §106A or any other rights of identification of authorship or rights of approval, restriction or limitation on use or subsequent modifications.

**2.2.1** CONTRACTOR, notwithstanding other conditions in this **Section 2.1**, shall have the right to utilize such Work Product on its brochures or other literature that it may utilize for marketing and sales, and in addition, CONTRACTOR may use standard line drawings, specifications and calculations on other unrelated projects.

### **3 CONTRACTOR'S SERVICES**

#### **3.1 General.**

**3.1.1** CONTRACTOR agrees that the Design Development Documents approved by CONTRACTOR and Owner shall serve as the basis for the Statement of Work for Phase II.

**3.1.2** As the Design/Builder for this Project, CONTRACTOR shall perform all Project Management Services, Design Services, and Construction Work necessary to complete the Project.

**3.1.3** CONTRACTOR shall obtain at its own expense, and shall maintain in effect for the duration of the Contract, the insurance coverage required in **Section G** of the OUS General Conditions, as modified by **Section 9** of this Agreement.

**3.1.4** CONTRACTOR shall perform all services in good faith and shall perform all Design Services and Construction Work as expeditiously as is consistent with the highest professional skill, care and the orderly progress of that work.

**3.1.5** Within one week after execution of this Agreement, CONTRACTOR shall submit for Owner's approval a schedule for the performance of CONTRACTOR's Design Services and Construction Work, which shall include allowances for periods of time required for Owner's review and for approval of submissions by authorities having jurisdiction over the Project. Time limits established by this schedule and approved by Owner shall not, except for reasonable cause, be exceeded by CONTRACTOR or Owner.

**3.1.6** Owner reserves the right to review and approve Phase I Design Services before authorizing Contractor to perform Phase II Construction Work.

#### **3.2 Project Management.**

**3.2.1** CONTRACTOR shall appoint a CONTRACTOR staff person as CONTRACTOR's Project Manager (the "CPM", who is identified in **Section 4** of this Agreement) who will be reasonably available to Owner and who shall have the expertise and experience required to supervise the Work for the duration of the Project. CPM shall communicate regularly with Owner and shall have the authority to act on behalf of CONTRACTOR. CPM shall consult with the Owner's Project Manager (the "OPM") on issues affecting design, construction, Contract performance, Project budget and Project schedule. The CPM may be replaced during the Project only with Owner's prior consent, consistent with the provisions of **Section 4.5** of this Agreement.

**3.2.2** The CPM shall provide Owner with a status report every week, in which it shall detail the progress of the Work including the following: 1) whether the Work is proceeding according to schedule; 2) any discrepancies, conflicts, or

ambiguities in the Construction Documents that require resolution; 3) any safety issues related to the Work; 4) any other matter that requires resolution to ensure timely and cost-effective completion of the Work. At least four working days prior to the scheduled meeting, CONTRACTOR shall submit to Owner a list of identified matters that will require resolution; any matters that require Owner approvals, and any proposed deviations from the Project schedule.

- 3.2.3** The CPM shall be the principal contact between the OPM and all other CONTRACTOR representatives, and will be responsible for all communications, including, but not limited to, conveying concerns, decisions and formal actions.
- 3.2.4** The CPM shall be responsible for maintaining thorough and complete project records and regular briefings to the OPM. The CPM will coordinate the flow of information, communications and formal documents so that Owner has the material required for its timely action on policy, design and budget matters. The CPM will be responsible for transmission of documentation required for Owner approval or actions.
- 3.2.5** Owner's review of, and response to, any of the matters presented above shall not relieve CONTRACTOR of its obligation to complete the Design Services and Construction Work within the Contract Times set forth in Section 15 of this Agreement, and shall not be construed as relieving CONTRACTOR of its complete and exclusive control over the means, methods, sequences and techniques for executing the work.

### **3.3 Design.**

Based on approved Design Development Documents generated by the CONTRACTOR's Design Professional and approved by Owner during Phase I, and any further adjustments in the scope or quality of the Project or in the construction budget authorized by Owner, CONTRACTOR shall prepare, for approval by Owner, Construction Documents, consisting of drawings, Plans, Specifications and other documents setting forth in detail the requirements for construction of the entire Project.

- 3.3.1** The Construction Documents must meet the following requirements:
  - 3.3.1.1** CONTRACTOR shall provide Specifications that comply with the Construction Specifications Institute's 3-part and 16-division format, shall provide drawings and Plans based on the approved preliminary Design Development Documents and shall set forth in detail the architectural, structural, mechanical and electrical construction requirements for the Project.
  - 3.3.1.2** CONTRACTOR shall provide Owner with catalog cuts of all specified items, if different than Design Development Documents.
  - 3.3.1.3** CONTRACTOR shall provide Owner with in-progress Construction Documents as needed. At the completion of construction the

CONTRACTOR shall supply record drawings, and a copy of the final Construction Documents on a re-recordable compact disk.

**3.3.1.4** CONTRACTOR shall prepare 95% Construction Documents for review and approval by the Owner, and shall continue with preparation of the final Construction Documents, including final Specifications for all authorized Work on the Project, and shall incorporate into those final Construction Documents the comments and any modifications or changes desired by the Owner, and any modifications required for compliance with applicable codes, regulations or standards. The resulting final Construction Documents shall be a complete, fully coordinated, integrated package, suitable for use in the construction of the Project, without significant addenda or further clarifications required. All submittals shall be made in accordance with the schedule made pursuant to **Section 3.4** of this Agreement.

**3.3.1.5** CONTRACTOR shall file all documents required for the approval of governmental authorities having jurisdiction over the Project and shall obtain all necessary permits. In the event that Owner files any permits, CONTRACTOR shall assist Owner as Owner deems necessary.

**3.3.2** All specified items shall be standard, cataloged, manufactured items or "off the shelf" items. No custom items are to be designed or specified without prior written authorization of the Owner. No proprietary or "sole source" items shall be specified. Brand name products may be specified so long as "or approved equal" is included with their specification.

**3.3.3** Recycled products shall be used where they are economically feasible. The CONTRACTOR shall give preference to materials and supplies manufactured from recycled materials under the following conditions:

- a) The recycled product is available;
- b) The recycled product meets applicable standards;
- c) The recycled product can be substituted for a comparable non-recycled product; and
- d) Recycled product costs do not exceed the costs of non-recycled products by more than five percent.

#### **3.4 Construction Administration Services**

**3.4.1** GENERAL OFFICE CONSTRUCTION ADMINISTRATION. CONTRACTOR shall process submittals, including without limitation, the receipt, review and disposition of shop drawings, product data, and samples. CONTRACTOR shall transmit any such submittals to Owner, as required and shall maintain a master file of submittal communications. CONTRACTOR shall keep a submittal log on a spreadsheet program and send a copy to the Owner on a weekly basis.

- 3.4.2 INSPECTION COORDINATION.** CONTRACTOR shall provide all necessary services relating to independent inspection and testing required by applicable regulatory agencies, or relating to other inspection, testing and commissioning of the systems and equipment installed on the Project site as part of the Work, including but not limited to the following: administration and coordination of field testing as required by the Contract Documents; establishing the scope, standards, procedures and frequency of testing and inspections required to complete the Work; arranging for testing and inspections; notifying inspection and testing agencies of status of any portion of the Work requiring testing and inspection; evaluating compliance by testing and inspection agencies with required scope, standards, procedures and frequency; review of reports on inspections and tests; notifying the Owner of any observed deficiencies in the Work; and, providing copies of all reports on inspections and tests, as well as copies of all correspondence from the testing and inspection agencies, to the Owner.
- 3.4.3 SUPPLEMENTAL DOCUMENTS.** CONTRACTOR shall prepare, reproduce and distribute supplemental drawings, Plans and Specifications and shall issue interpretations in response to requests for clarification by Owner's Project Manager, or sub-contractors or as required by construction exigencies. CONTRACTOR shall be responsible for notifying the appropriate parties of Owner's instructions and of changed requirements and schedule revisions.
- 3.4.4 CHANGE REQUESTS/CHANGE ORDERS,** requested or approved by the Owner: CONTRACTOR shall prepare, reproduce and distribute drawings, Plans and Specifications to describe Work to be added, deleted or modified; review proposals from sub-contractor(s) for reasonableness of quantities and costs of labor and materials; review and recommend changes in time for substantial completion; coordinate communications, approvals and notifications. CONTRACTOR shall keep a log of all change requests on a spreadsheet program and copy the Owner bi-weekly.
- 3.4.5 PAYMENT REVIEW.** CONTRACTOR shall evaluate and certify applications for payment and shall maintain detailed records supporting approved applications for payment.
- 3.4.6 PROJECT CLOSEOUT.** CONTRACTOR shall verify that Work is sufficiently complete, in accordance with the Contract Documents, to permit occupancy or utilization for the use for which it is intended. CONTRACTOR shall coordinate a detailed inspection with the OPM to ensure that the Work conforms to the Contract Documents; to verify the list submitted by the sub-contractor(s) of items to be completed or corrected; to determine the amounts to be withheld until Final Completion; to issue Certificates of Substantial Completion; to perform inspection(s) upon notice by the sub-contractor(s) that the Work is ready for final inspection and acceptance; to notify Owner and sub-contractor(s) of deficiencies found in follow-up inspection(s), if any; to perform final inspection with the Owner's representative to verify Final



Completion of the Work; receipt and transmittal of warranties, affidavits, receipts, releases and waivers of lien or bonds indemnifying the Owner against liens; and issuance of Final Certificate(s) for Payment.

**3.4.7** RECORD DRAWINGS services consisting of: Preparation of record drawings on reproducible mylar, and on a re-recordable compact disk, based on information furnished by the sub-contractor(s) including significant changes in the Work made during construction including modifying the floor plan layouts including partitions, furniture and equipment; transmittal of record drawings and general data, appropriately identified, to the Owner and others as directed.

**3.4.8** WARRANTY REVIEW: Prior to the expiration of the warranties of any sub-contractor(s) and manufacturer(s), the CONTRACTOR shall perform a warranty review, documenting defects or deficiencies in installation, materials, systems and equipment and preparing instructions to the sub-contractor(s) and manufacturer(s) for correction of noted defects. The CONTRACTOR shall then follow through to ensure that each defect or deficiency is appropriately addressed and verify that an appropriate remedy has been accomplished. The CONTRACTOR shall copy the Owner on the correspondence related to these warranty issues.

### 3.5 Construction Services/Construction Management Services.

**3.5.1** CONTRACTOR shall have complete control over and charge of and shall be responsible for construction means, methods, techniques, sequences or procedures, and for safety precautions and programs in connection with the Work on the Project, so that, upon completion of the Work the Project shall be structurally sound and shall be a complete, fully-functioning facility suitable for the purposes for which it is intended. These roles are solely CONTRACTOR's responsibility under the Contract. CONTRACTOR shall be fully responsible for maintaining construction schedules and for any failure to carry out the Work in accordance with the Contract Documents. CONTRACTOR shall be deemed to have complete control over or charge of acts or omissions of all CONTRACTOR employees, agents, Design Professionals, and construction managers, as well as subcontractors, or their agents or employees, or of any other persons performing portions of the Work.

**3.5.2** CONTRACTOR's responsibility to provide the Design Services and Construction Work under the Contract commences with the execution of this Agreement and terminates upon CONTRACTOR's satisfaction of all obligations set forth in the Contract including those enumerated at Section K of the OUS General Conditions.

**3.5.3** CONTRACTOR shall provide, supervise and administer all Construction Work of the Contract as set forth in this Agreement and in the OUS General Conditions, current as of the date of the Contract, unless otherwise provided in the Contract.

- 3.5.4 CONTRACTOR's duties, responsibilities and limitations of authority shall not be modified or extended without the express written agreement of the Parties and any required State of Oregon governmental approvals.
- 3.5.5 Except as may otherwise be provided in the Contract Documents or when direct communications have otherwise been specifically authorized, Owner shall conduct all communications concerning the Design Services and Construction Work through CONTRACTOR's CPM.
- 3.5.6 Subject to the right to suspend and terminate as provided in Section J of the OUS General Conditions, in no event shall the existence of any claim, dispute or question constitute a justification for either party to suspend or terminate the progress of the Work, and both parties, in such event, shall continue to prosecute the Work and perform under the Contract diligently, and shall resolve the claim, dispute or question either by agreement or mediation or other lawful means.

3.6 Additional Services. All other services requested by Owner and mutually agreed to in writing by Owner and CONTRACTOR, including, among others, changes in the Design Services or Construction Work described in this Agreement, shall constitute Additional Services and shall be paid by Owner as provided in the written agreement applicable thereto.

#### 4 RELATIONSHIP BETWEEN AND ROLES OF THE PARTIES

##### 4.1 Owner Responsibilities.

- 4.1.1 Owner shall designate a representative authorized to act on Owner's behalf with respect to the Project. Owner or such authorized representative shall examine documents submitted by CONTRACTOR and shall promptly render decisions pertaining thereto to avoid delay in the orderly progress of the Work. Owner shall render approval of formal submittals on the Schedule of Performance within ten (10) calendar days after receipt of submittals from CONTRACTOR.
- 4.1.2 If Owner observes or otherwise becomes aware of a fault or defect in the Work or nonconformity with the Design or Construction Documents, Owner shall give prompt written notice thereof to CONTRACTOR.
- 4.1.3 Owner shall furnish required information and services and shall promptly render decisions pertaining thereto to avoid delay in the orderly progress of the design and construction.
- 4.1.4 No approval or acceptance of Construction Documents or changes herein given by or on behalf of Owner shall establish any warranty or representation on the part of Owner that such Construction Documents or changes are technically sound, complete or correct.
- 4.1.5 Owner shall communicate with the Design Professionals only through CONTRACTOR's Representative except in matters of public safety.

4.2 **Independent Contractor.** The service or services to be performed under this Contract are those of an independent contractor as defined in ORS 670.600. Contractor represents and warrants that it is not an officer, employee or agent of the Owner as those terms are used in ORS 30.265.

4.3 **CONTRACTOR's Key Personnel.** The CONTRACTOR's project staff shall consist of the following personnel. The CONTRACTOR's personnel identified herein shall be considered unique, key personnel, and shall not be replaced during the Project without the written permission of Owner, which shall not be unreasonably withheld.

4.3.1 \_\_\_\_\_ shall be the CONTRACTOR's Principal-in-Charge.

4.3.2 \_\_\_\_\_ shall be the CPM and shall participate in all meetings throughout the Project term.

4.3.3 \_\_\_\_\_ shall be the CONTRACTOR's Design Professional that will provide all design services provided for in the Contract.

4.3.4 \_\_\_\_\_ shall be the CONTRACTOR's on-site job superintendent for the Construction Work throughout the Project.

4.4 **Design Builder's Consultants/Subcontractors.** The CONTRACTOR shall be assisted by the consultants and/or subcontractors set forth in **Exhibit 2** hereto. The Parties acknowledge and agree that the Consultants have been reviewed and approved by the Owner, prior to the execution of this Agreement.

4.5 **Replacement of CONTRACTOR's Project Team.** If the CONTRACTOR intends to substitute Key Personnel, Consultants, or Subcontractors, a request must be given to Owner at least 10 days prior to the intended time of substitution. When Owner has approved replacements, the CONTRACTOR shall provide a transition period of at least 10 working days during which the original and replacement personnel shall be working on the Project concurrently, if feasible. Once a replacement for any Key Personnel, Consultants or Sub-contractors is authorized, further replacement shall not occur without the written permission of Owner.

## 5 COMPENSATION OF CONTRACTOR

Owner shall pay CONTRACTOR the fixed Contract Price stated in Section 6 of this Agreement for all Design Services and Construction Work according to the provisions of **Section E** "Payments" of the OUS General Conditions on the dates listed below:

5.1 Design Services. Once each month following execution of this Agreement, the CONTRACTOR shall submit its application for payment to Owner for Design Services performed during the prior month. Subject to the terms and conditions of Section E of the General Conditions, Owner will make payment within 45 Days of receipt of an application for payment.

5.2 Construction Work. Once each month following commencement of Construction Work, the CONTRACTOR shall submit its application for payment to Owner in compliance with the terms and conditions of Section E of the General Conditions. Owner will make payment to the CONTRACTOR, subject to the terms and conditions of Section E of the General Conditions, within 45 Days of receipt of each application for payment. Owner

shall withhold retainage in the amount of 5% from all payments relating to Construction Work, in accordance with the provisions of Subsection E.5 of the General Conditions.

## 6 CONTRACT PRICE

The "Contract Price," namely the total fixed cost of the Project for both Design Services and Construction Work payable under the Contract, unless increased or decreased by the price of approved change orders, is \$ \_\_\_\_\_, as established by the CONTRACTOR in its Proposal, and includes the entire cost of all labor, materials, tools, equipment, Consultants' fees, transportation, components and systems, allowances, bonds and insurance premiums, filing and review fees, incidentals, contingencies, and CONTRACTOR'S overhead and profit, and is composed of the following component parts:

(a) Phase I Design Services \$ \_\_\_\_\_  
(Lump Sum Amount)

(b) Phase II Construction Work \$ \_\_\_\_\_  
(Lump Sum Amount)

Total Contract Price (fixed) \$ \_\_\_\_\_

**7 CHANGES IN THE WORK.** Adjustments to the Contract Price required by changes in the Design Services or Construction Work beyond the stated scope may be determined by any of the methods listed in **Section D** of the OUS General Conditions.

**8 RESERVED.**

**9 BONDS AND INSURANCE.** During the term of this Agreement, Design/Builder shall maintain in full force, at its own expense, from companies authorized to do business in Oregon, performance and payments as required by Section G.2 of the General Conditions in the form set forth in Exhibit 1. During the term of this Agreement, Design/Builder shall maintain in full force, at its own expense, from companies licensed to do business in Oregon, each insurance coverage required by **Section G.3** of the OUS General Conditions, except as modified below:

**9.1 Professional Liability/Errors & Omissions.** Design/Builder shall provide the Owner with proof of coverage for Professional Liability/Errors & Omissions insurance covering any damages caused by any negligent error, omission, or any act for the Project, its drawings and project manual, and all related work products of the Design/Builder. The policy may be either a practice based policy or a policy pertaining to the specific project. Professional Liability insurance to be provided shall have a combined single limit of not less than \$3,000,000.

**10 GENERAL SUBCONTRACTING REQUIREMENTS.**

**10.1** Other than Work performed pursuant to Articles 3.4 or 3.5 of this Contract, Contractor shall subcontract the Work to Subcontractors other than the Contractor and its Affiliates.

- 10.2** The Contractor shall comply with Oregon Administrative Rules (“OAR”) 580-061-0030(3) and the MWESB Management Plan in all respects for the solicitation of Minority, Women and Emerging Small Business Enterprises. Compliance shall include pass-through requirements for Subcontractor demonstrations of good faith efforts for all subcontract Offer packages, for which set goals shall not be utilized.
- 10.3** In addition to the MWESB Management Plan, Contractor shall comply with the Owner’s Good Faith Effort outreach and reporting requirements. Contractor shall require all first tier subcontractors to also comply with the Good Faith Effort. Completion and submission of the required forms is an obligation under this Agreement for final payment.

## **11 CONTRACTOR'S OBLIGATIONS UNDER SUBCONTRACTS.**

- 11.1** No use of a Subcontractor shall relieve the CONTRACTOR of any of its obligations or liabilities under the Contract. The CONTRACTOR shall be fully responsible and liable for the acts or omissions of all Subcontractors and suppliers including persons directly or indirectly employed by them. The CONTRACTOR shall have sole responsibility for managing and coordinating the operations of its Subcontractors and suppliers, including the settlement of disputes with or between the CONTRACTOR and any such Subcontractor.
- 11.2** The CONTRACTOR shall include in each subcontract and require each Subcontractor to include in any lower tier subcontract, any provisions necessary to make all of the provisions of the OUS General Conditions fully effective as applied to Subcontractors. Contractor shall indemnify Owner for any additional cost based on a subcontractor claim which results from the failure of Contractor to incorporate the provisions of this Contract in each subcontract. The CONTRACTOR shall provide all necessary Plans, Specifications, and instructions to its suppliers and Subcontractors to enable them to properly perform their work.

## **12 SUBCONTRACTOR SELECTION.**

- 12.1** The selection of all Subcontractors and suppliers shall be made by competitive Offers in a manner that will not encourage favoritism or substantially diminish competition. While not subject to the competitive procurement requirements of ORS Chapter 279C, the process shall comply with the open and competitive nature of public procurement, taking into account industry subcontracting practices.

## **13 MISCELLANEOUS LABOR.**

- 13.1** The CONTRACTOR may provide normal layout, clean up, and other "pick-up" work required to complete the Project with its own forces, without the necessity of subcontracting.
- 13.2** If the CONTRACTOR desires to perform any other Construction Work through third-party subcontractors or other entities, that Construction Work shall be bid according to the provisions of **Section 12** of this Agreement.

14 **ACCOUNTING; AUDIT ACCESS.** The CONTRACTOR shall keep full and detailed accounts and exercise such controls as may be necessary for proper financial management under the Contract; the accounting and control systems shall be satisfactory to Owner. Owner and Owner's representatives, including the Oregon Secretary of State accountants and auditors, shall be afforded reasonable and regular access to the CONTRACTOR's records, books, correspondence, instructions, drawings, Plans, Specifications, receipts, subcontracts, purchase orders, vouchers, memoranda and other data relating to this Agreement, and the CONTRACTOR shall preserve these for a period of three years after final payment, or for such longer period as may be required by law. Owner may, at its discretion, perform periodic audits of the Cost of the Work and any other reimbursable costs associated with the Project. Owner intends to conduct a final audit of reimbursable costs prior to the Contract closeout. The CONTRACTOR shall cooperate fully with Owner in the performance of such audits.

## 15 CONTRACT TIME

**15.1 Date of Commencement.** The Design Services work shall commence within five days of CONTRACTOR's receipt of Owner's Notice to Proceed ("Date of Commencement") unless the parties mutually agree otherwise in writing. This Date shall be entered at **the Introduction** of this Agreement.

**15.2 Substantial Completion.** Substantial Completion for the entire Construction Work shall be achieved no later than \_\_\_\_\_ ( ) calendar days after the Date of Commencement.

**15.3 Final Completion of the Construction Work.** Final Completion of the Construction Work, or identified portions of the Construction Work, shall be achieved as expeditiously as practicable. All of the dates set forth in this **Section 15** ("Contract Time") shall be subject to adjustment in accordance with the OUS General Conditions.

## 16 INDEMNITY

**16.1 Claims for Other Than Professional Liability.** Contractor shall indemnify, hold harmless and defend the Owner and its colleges and universities and any public agencies for which Services are performed under this Agreement as supplemented or amended, and their officers, agents, employees and members from and against all claims, suits, actions, losses, damages, liabilities, costs and expenses of whatsoever nature resulting from, arising out of, or relating to the activities of the Contractor or the Contractor's Consultants, partners, joint venturers, subcontractors, officers, agents or employees acting under or pursuant to this Agreement or any supplement or amendment hereto.

**16.2 Claims for Professional Liability.** Contractor shall save, defend, indemnify and hold harmless the Owner and its colleges and universities and any public agencies for which Services are to be performed under this Agreement as supplemented or amended, and their officers, agents, employees and members from and against all claims, suits or actions, losses, damages, liabilities, costs and expenses of whatsoever nature resulting from, arising out of or relating to the professional negligent acts, errors or omissions of Contractor or its Consultants, partners, joint venturers, subcontractors, officers, agents

or employees acting under or pursuant to this Agreement or any supplement or amendment hereto.

**16.3 Owner Defense Requirements.** Notwithstanding the foregoing defense obligations of the Contractor, neither the Contractor nor any attorney engaged by the Contractor shall defend any claim in the name of the Owner, the State of Oregon or any agency of the State of Oregon, nor purport to act as legal representative of the Owner, the State of Oregon or any of its agencies, without the prior written consent of the Oregon Attorney General. The Owner may, at anytime at its election assume its own defense and settlement in the event that it determines that the Contractor is prohibited from defending the Owner, that Contractor is not adequately defending the Owner's interests, or that an important governmental principle is at issue or that it is in the best interests of the Owner to do so. The Owner reserves all rights to pursue any claims it may have against the Contractor if the Owner elects to assume its own defense.

**16.4 Agency's Actions. Sub-sections A. and B.** above do not include indemnification by the Contractor of the Owner for the Owner's activities, whether related to this Agreement or otherwise.

**17 STANDARD OF CARE; DRAWINGS, PLANS & SPECIFICATIONS.** CONTRACTOR hereby represents and warrants that all drawings, Plans, Specifications, and other documents prepared pursuant to the Contract will be completed in a manner consistent with the highest professional standard of care, and will function for the purposes intended, and that the Project, if constructed in accordance with such drawings, Plans, Specifications, and other documents, shall be structurally sound and a complete and properly functioning and suitable for the purposes for which it is intended.

**18 CORRECTION OF DRAWINGS, PLANS & SPECIFICATIONS.** CONTRACTOR shall be responsible for correcting any inconsistencies, errors or omissions in the drawings, Plans, Specifications, and other documents. CONTRACTOR will correct, at no additional cost to Owner, any and all inconsistencies, errors and omissions in the drawings, Plans and Specifications.

**19 FUNDS AVAILABLE AND AUTHORIZED; PAYMENTS.** CONTRACTOR shall not be compensated for work performed under the Contract by any other agency or department of the State of Oregon. Owner reasonably believes that sufficient funds are anticipated to pay all amounts due hereunder and hereby covenants and agrees that it will use its best efforts to obtain and properly request and pursue funds from which payments hereunder may be made, including making provisions for such payments to the extent necessary in the budget submitted for the purpose of obtaining funds and using its best efforts to have such budget approved. It is Owner's intention to make all payments due hereunder if funds are legally available for this Project and in that regard Owner represents and warrants to Design/Builder that this Agreement is important to Owner's efficient and economic operation. If, despite the above, Owner is not allotted sufficient funds for the next succeeding fiscal period by appropriation, appropriation limitation, grant, or other funds source lawfully available to it for such purposes to continue the Project and make payments hereunder, Owner may terminate this Agreement, by notice to Design/Builder, without penalty, effective at the end of the current fiscal period for which funds have been allocated and if not so terminated Owner will remain fully obligated for all amounts

owing hereunder. Such termination shall not constitute an event of default under any other provision of the Agreement, but Owner shall be obligated to pay all charges incurred through the end of such fiscal period. Owner shall give Design/Builder notice of such non-availability of funds within thirty (30) days after it received notice of such non-availability.

**20 MISCELLANEOUS.**

**20.1 Governing Law; Jurisdiction; Venue.** The Contract shall be governed by and construed in accordance with the laws of the State of Oregon without regard to principles of conflicts of law. Any claim, action, suit or proceeding (collectively "Claim") between the Owner and the CONTRACTOR that arises from or relates to the Contract shall be brought and conducted solely and exclusively within the Circuit Court of Marion County for the State of Oregon; provided, however, if a Claim must be brought in a federal forum, the it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. In no event shall this Subsection be construed as a waiver by the State of Oregon of any form of defense or immunity, whether based on sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the United States Constitution or otherwise. CONTRACTOR, BY EXECUTION OF THE CONTRACT, HEREBY CONSENTS TO THE IN PERSONAM JURISDICTION OF SAID COURTS.

**20.2 Foreign Contractor.** If CONTRACTOR is not domiciled in or registered to do business in the State of Oregon, CONTRACTOR shall promptly provide to the Oregon Department of Revenue and the Secretary of State Corporation Division all information required by those agencies relative to the Contract. CONTRACTOR shall demonstrate its legal capacity to perform the work under the Contract in the State of Oregon prior to entering into the Contract.

**20.3 Notices.** Except as otherwise expressly provided in the Contract, any notices to be given hereunder shall be given in writing by personal delivery, facsimile, or mailing the same, postage prepaid, to CONTRACTOR or Owner at the addresses or numbers as either party may hereafter indicate pursuant to this Section. Any notice so addressed and mailed shall be deemed to be given five (5) calendar days after the date of mailing. Any notice delivered by facsimile shall be deemed to be given when receipt of the transmission is generated by the transmitting machine. To be effective against Owner, such facsimile transmission must be confirmed by telephone notice to Owner's Representative for the Project. Any notice by personal delivery shall be deemed to be given when actually delivered.

Representatives for CONTRACTOR and the Owner for purposes of notice, communications, and other specific purposes provided for under this Agreement are:

CONTRACTOR:

\_\_\_\_\_

Telephone:

Address:

OWNER - Project Issues:



David Ebsen

Telephone: 541-885-1600

Address: Facilities Services, 3201 Campus Drive, Klamath Falls, OR 97601

OWNER - Contract Issues:

George Marlton

Telephone 503-821-1277

Address: 20175 NW AmberGlen Ct., Ste 100, Beaverton, OR 97006

**20.4 Disclosure of Tax Identification Number.** CONTRACTOR must provide its federal tax ID number to Owner. This number is required pursuant to ORS 305.385. The Tax Identification Number provided pursuant to this authority will be used for the administration of state, federal and local tax laws.

**20.5 Compliance with Applicable Law.** CONTRACTOR agrees to comply with all federal, state, county, and local laws, ordinances, and regulations applicable to the Services to be provided under this Agreement. CONTRACTOR specifically agrees to comply with all applicable requirements of federal and state civil rights and rehabilitation statues, rules and regulations. CONTRACTOR also shall comply with the Americans with Disabilities Act of 1990 (Pub L No. 101-336), ORS 659A.142, and all regulations and administrative rules established pursuant to those laws. Failure or neglect on the part of CONTRACTOR to comply with any or all such laws, ordinances, rules, and regulations shall not relieve Architect of these obligations nor of the requirements of the Contract. CONTRACTOR further agrees to make payments promptly when due, to all persons supplying to such CONTRACTOR labor or materials for the performance of the Services to be provided under the Contract; pay all contributions or amounts due the Industrial Accident Fund from such contractor incurred in the performance of the Contract; not permit any lien or claim to be filed or prosecuted against the State on account of any labor or material furnished; and pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167. If CONTRACTOR fails or refuses to make any such payments required herein, the appropriate Institution official may pay such claim. Any payment of a claim in the manner authorized in this Section shall not relieve the CONTRACTOR from obligation with respect to any unpaid claims. CONTRACTOR and all subcontractors shall pay not less than the prevailing rate of wage for an hour's work as required by Section C of the General Conditions.

Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act and the Oregon Building Codes require all new construction to be totally accessible to people with physical limitations. Owner expects that all spaces in designs for new facilities and in remodel projects will be accessible to people with physical limitations.

**20.6 Tax Compliance Certification.** By signature on this Agreement, the undersigned hereby swears or affirms under penalty of perjury that the undersigned is authorized to act on behalf of the CONTRACTOR and has authority and knowledge regarding the payment of taxes, and that CONTRACTOR is, to the best of the undersigned's

knowledge, not in violation of any Oregon Tax Laws. For purposes of this certification, "Oregon Tax Laws" means those programs listed in ORS 320.005 to 320.150 and 403.200 to 403.250, ORS chapters 118, 314, 316, 317, 318, 321 and 323 and sections 10 to 20, chapter 533, Oregon Laws 1981, as amended by chapter 16, Oregon Laws 1982 (first special session); the elderly rental assistance program under ORS 310.630 to 310.706; and local taxes administered by the Department of Revenue under ORS 305.620.

**20.7 Severability.** The Parties agree that if any term or provision of the 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.

**20.8 Waiver.** The failure of the Owner to enforce any provision of the Contract shall not constitute a waiver by the Owner of that or any other provision of the Contract.

**20.9 Media Contacts; Confidentiality.** The CONTRACTOR shall provide no news release, press release, or any other statement to a member of the news media regarding this Project, without the Owner's prior written authorization. Furthermore, except in the case where the Owner specifically authorizes disclosure of the Owner's confidential information in writing, the CONTRACTOR shall maintain the confidentiality of the Owner's information pertaining to the Project, unless withholding such information would violate the law, create the risk of significant harm to the public or prevent the CONTRACTOR from establishing a claim or defense in an adjudicatory proceeding. The CONTRACTOR shall require of its subcontractors similar agreements to maintain the confidentiality of the Owner's information.

**20.10 Conflict of Interest.** Except with Owner's prior written consent, the CONTRACTOR shall not engage in any activity, or accept any employment, interest or contribution that would, or would reasonably appear, to compromise the CONTRACTOR's professional judgment with respect to this Project, including, without limitation, concurrent employment on any project in direct competition with the Project.

THE CONTRACT CONSTITUTES THE ENTIRE AGREEMENT BETWEEN THE PARTIES ON THE SUBJECT MATTER ADDRESSED HEREIN. THE TERMS OF THE CONTRACT CAN NOT BE WAIVED, ALTERED, MODIFIED, SUPPLEMENTED, OR AMENDED, IN ANY MANNER WHATSOEVER, EXCEPT BY WRITTEN INSTRUMENT SIGNED BY THE PARTIES AND CONTAINING ALL REQUIRED STATE OF OREGON APPROVALS. ANY SUCH WAIVER, ALTERATION, MODIFICATION, SUPPLEMENTATION, OR AMENDMENT, IF MADE, SHALL BE EFFECTIVE ONLY IN THE SPECIFIC INSTANCE AND FOR THE SPECIFIC PURPOSE GIVEN. THERE ARE NO UNDERSTANDINGS, AGREEMENTS, OR REPRESENTATIONS, ORAL OR WRITTEN, REGARDING THE CONTRACT EXCEPT AS CONTAINED, INCORPORATED OR REFERENCED HEREIN. THE CONTRACTOR, BY THE SIGNATURE BELOW OF ITS AUTHORIZED REPRESENTATIVE, HEREBY ACKNOWLEDGES THAT IT HAS READ THE CONTRACT, UNDERSTANDS IT, AND AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS. THIS AGREEMENT MAY BE EXECUTED IN SEVERAL COUNTERPARTS, EACH OF WHICH SHALL BE AN ORIGINAL, AND ALL OF WHICH SHALL CONSTITUTE BUT ONE AND THE SAME INSTRUMENT.

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IN WITNESS WHEREOF, and intending to be legally bound, the authorized representatives of the parties hereto subscribe their names.

Contractor

State of Oregon acting by and through the State Board of Higher Education on behalf of the Oregon Institute of Technology

By \_\_\_\_\_

By \_\_\_\_\_

Title \_\_\_\_\_

George Marlton  
Dir. Purchasing and Contract Services

Date \_\_\_\_\_

Date \_\_\_\_\_

EXHIBIT 1- PERFORMANCE AND PAYMENT BONDS

(Rest of page intentionally left blank)

**OREGON UNIVERSITY SYSTEM  
STANDARD PUBLIC IMPROVEMENT CONTRACT**

**PERFORMANCE BOND**

Bond No. \_\_\_\_\_  
Solicitation \_\_\_\_\_  
Project Name \_\_\_\_\_

_____ (Surety #1)	Bond Amount No. 1:	\$ _____
_____ (Surety #2)*	Bond Amount No. 2:*	\$ _____
<i>* If using multiple sureties</i>	Total Penal Sum of Bond:	\$ _____

We, \_\_\_\_\_ as Principal, and the above identified Surety(ies), authorized to transact surety business in Oregon, as Surety, hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns firmly by these presents to pay unto the State of Oregon, Oregon State Board of Higher Education (OSBHE), the sum of (Total Penal Sum of Bond) \_\_\_\_\_  
(Provided, that we the Sureties bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety), and

WHEREAS, the Principal has entered into a contract with the State of Oregon, the plans, specifications, terms and conditions of which are contained in the above-referenced Solicitation;

WHEREAS, the terms and conditions of the contract, together with applicable plans, standard specifications, special provisions, schedule of performance, and schedule of contract prices, are made a part of this Performance Bond by reference, whether or not attached to the contract (all hereafter called "Contract"); and

WHEREAS, the Principal has agreed to perform the Contract in accordance with the terms, conditions, requirements, plans and specifications, and all authorized modifications of the Contract which increase the amount of the work, the amount of the Contract, or constitute an authorized extension of the time for performance, notice of any such modifications hereby being waived by the Surety:

NOW, THEREFORE, THE CONDITION OF THIS BOND IS SUCH that if the Principal herein shall faithfully and truly observe and comply with the terms, conditions and provisions of the Contract, in all respects, and shall well and truly and fully do and perform all matters and things undertaken by Contractor to be performed under the Contract, upon the terms set forth therein, and within the time prescribed therein, or as extended as provided in the Contract, with or without notice to the Sureties, and shall indemnify and save harmless the State of Oregon, OSBHE, and \_\_\_\_\_ (name of institution and any other Owner agency), and members thereof, its officers, employees and agents, against any direct or indirect damages or claim of every kind and description that shall be suffered or claimed to be suffered in connection with or arising out of the performance of the Contract by the Principal or its subcontractors, and shall in all respects perform said contract according to law, then this obligation is to be void; otherwise, it shall remain in full force and effect.

Nonpayment of the bond premium will not invalidate this bond nor shall the State of Oregon, or the above-referenced agency(ies), be obligated for the payment of any premiums.

This bond is given and received under authority of ORS Chapters 279C and 351, the provisions of which hereby are incorporated into this bond and made a part hereof.

IN WITNESS WHEREOF, WE HAVE CAUSED THIS INSTRUMENT TO BE EXECUTED AND SEALED BY OUR DULY AUTHORIZED LEGAL REPRESENTATIVES.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

**PRINCIPAL:** \_\_\_\_\_

By \_\_\_\_\_

Signature

\_\_\_\_\_  
Official Capacity

**SURETY:** \_\_\_\_\_

*[Add signatures for each surety if using multiple bonds]*

**BY ATTORNEY-IN-FACT:**

*[Power-of-Attorney must accompany each surety bond]*

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Phone Fax

**OREGON UNIVERSITY SYSTEM  
STANDARD PUBLIC IMPROVEMENT CONTRACT**

**PAYMENT BOND**

Bond No. \_\_\_\_\_  
Solicitation \_\_\_\_\_  
Project Name \_\_\_\_\_

_____ (Surety #1)	Bond Amount No. 1:	\$ _____
_____ (Surety #2)*	Bond Amount No. 2:*	\$ _____
	Total Penal Sum of Bond:	\$ _____

\* *If using multiple sureties*

We, \_\_\_\_\_, as Principal, and the above identified Surety(ies), authorized to transact surety business in Oregon, as Surety, hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns firmly by these presents to pay unto the State of Oregon, Oregon State Board of Higher Education (OSBHE), the sum of (Total Penal Sum of Bond) \_\_\_\_\_ (Provided, that we the Sureties bind ourselves in such sum “jointly and severally” as well as “severally” only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety), and

WHEREAS, the Principal has entered into a contract with the State of Oregon, the plans, specifications, terms and conditions of which are contained in above-referenced Solicitation;

WHEREAS, the terms and conditions of the contract, together with applicable plans, standard specifications, special provisions, schedule of performance, and schedule of contract prices, are made a part of this Payment Bond by reference, whether or not attached to the contract (all hereafter called “Contract”); and

WHEREAS, the Principal has agreed to perform the Contract in accordance with the terms, conditions, requirements, plans and specifications, and schedule of contract prices which are set forth in the Contract and any attachments, and all authorized modifications of the Contract which increase the amount of the work, or the cost of the Contract, or constitute authorized extensions of time for performance of the Contract, notice of any such modifications hereby being waived by the Surety:

NOW, THEREFORE, THE CONDITION OF THIS BOND IS SUCH that if the Principal shall faithfully and truly observe and comply with the terms, conditions and provisions of the Contract, in all respects, and shall well and truly and fully do and perform all matters and things by it undertaken to be performed under said Contract and any duly authorized modifications that are made, upon the terms set forth therein, and within the time prescribed therein, or as extended therein as provided in the Contract, with or without notice to the Sureties, and shall indemnify and save harmless the State of Oregon, OSBHE and \_\_\_\_\_ (name of institution and any other Owner agency), and members thereof, its officers, employees and agents, against any claim for direct or indirect damages of every kind and description that shall be suffered or claimed to be suffered in connection with or arising out of the performance of the Contract by the Contractor or its subcontractors, and shall promptly pay all persons supplying labor, materials or both to the Principal or its subcontractors for prosecution of the work provided in the Contract; and shall promptly pay all contributions due the State Industrial Accident Fund and the State Unemployment Compensation Fund from the Principal or its subcontractors in connection with the performance of the Contract; and shall pay over to the Oregon Department of Revenue all sums required to be deducted and retained from the wages of employees of the Principal and its subcontractors pursuant to

ORS 316.167, and shall permit no lien nor claim to be filed or prosecuted against the State on account of any labor or materials furnished; and shall do all things required of the Principal by the laws of this State, then this obligation shall be void; otherwise, it shall remain in full force and effect.

Nonpayment of the bond premium will not invalidate this bond nor shall the State of Oregon, or the above-referenced agency(ies), be obligated for the payment of any premiums.

This bond is given and received under authority of ORS Chapters 279C and 351, the provisions of which hereby are incorporated into this bond and made a part hereof.

IN WITNESS WHEREOF, WE HAVE CAUSED THIS INSTRUMENT TO BE EXECUTED AND SEALED BY OUR DULY AUTHORIZED LEGAL REPRESENTATIVES:

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

**PRINCIPAL:** \_\_\_\_\_

By \_\_\_\_\_  
Signature

\_\_\_\_\_  
Official Capacity

Attest: \_\_\_\_\_  
Corporation Secretary

**SURETY:** \_\_\_\_\_  
*[Add signatures for each if using multiple bonds]*

**BY ATTORNEY-IN-FACT:**  
*[Power-of-Attorney must accompany each bond]*

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Phone Fax



EXHIBIT 2 – SUBCONTRACTORS

**OREGON UNIVERSITY SYSTEM**  
**PUBLIC IMPROVEMENT CONTRACT**  
**PROPOSAL FORM**

OUS CAMPUS: OREGON INSTITUTE OF TECHNOLOGY

PROJECT: GEOHERMAL POWER PLANT INFASRUCUTRE DESIGN/BUILD

BID CLOSING: \_\_\_\_\_

FROM: \_\_\_\_\_  
*Name of Contractor*

TO: Oregon Institute of Technology  
Procurement and Contract Services  
3201 Campus Drive  
Klamath Falls, OR 97601

1. The Undersigned (*check one of the following and insert information requested*):

- \_\_\_ a. An individual doing business under an assumed name registered under the laws of the State of \_\_\_\_\_; or
- \_\_\_ b. A partnership registered under the laws of the State of \_\_\_\_\_; or
- \_\_\_ c. A corporation organized under the laws of the State of \_\_\_\_\_; or
- \_\_\_ d. A limited liability corporation organized under the laws of the State of \_\_\_\_\_;

hereby proposes to furnish all material and labor and perform all work hereinafter indicated for the above project in strict accordance with the Contract Documents for the Basic Bid as follows:

BASIC BID (Phase I Design Services):

\_\_\_\_\_ Dollars (\$\_\_\_\_\_)

and the Undersigned agrees to be bound by the following documents:

- RFP #2012-02
- OUS General Conditions
- Sample Design/Construction Agreement (including Exhibits)
- Scope of Work
- Prevailing Wage Rates
- ADDENDA numbered \_\_\_ through \_\_\_, inclusive (*fill in blanks*)

2. The work shall be completed within the time stipulated in the RFP.

3. The Undersigned agrees, if awarded the Contract, to execute and deliver to the Oregon State Board of Higher Education, within twenty (20) calendar days after receiving the Contract forms, an Agreement Form, and a satisfactory Performance Bond and Payment Bond each in an amount equal to one hundred (100) percent of the Contract sum, using forms provided by the Owner. The surety requested to issue the Performance Bond and Payment Bond will be \_\_\_\_\_.  
(name of surety company - not insurance agency)

The Undersigned hereby authorizes said surety company to disclose any information to the Owner concerning the Undersigned's ability to supply a Performance Bond and Payment Bond each in the amount of the Contract.

4. The Undersigned certifies that: (1) This Bid has been arrived at independently and is being submitted without collusion with and without any agreement, understanding, or planned common course of action with any other vendor of materials, supplies, equipment or services described in the invitation to bid designed to limit independent bidding or competition; and (2) The contents of the Bid have not been communicated by the Undersigned or its employees or agents to any person not an employee or agent of the Undersigned with the Bid and will not be communicated to such person prior to the official opening of the Bid.
5. The undersigned **HAS, HAS NOT** (circle applicable status) paid unemployment or income taxes in Oregon within the past 12 months and **HAS, HAS NOT** (circle applicable status) a business address in Oregon.
6. The Undersigned agrees, if awarded a contract, to comply with the provisions of ORS 279C.800 through 279C.870 pertaining to the payment of the prevailing rates of wage.
7. Contractor's CCB registration number is \_\_\_\_\_. As a condition to submitting a bid, a Contractor must be registered with the Oregon Construction Contractors Board in accordance with ORS 701.035 to 701.055, and disclose the registration number. Failure to register and disclose the number will make the bid unresponsive and it will be rejected, unless contrary to federal law.
8. The successful Bidder hereby certifies that all subcontractors who will perform construction work as described in ORS 701.005 were registered with the Construction Contractors Board in accordance with ORS 701.035 to 701.055 at the time the subcontractor(s) made a bid to work under the contract.
9. The successful Bidder hereby certifies that, in compliance with the Worker's Compensation Law of the State of Oregon, its Worker's Compensation Insurance provider is:  
Name: \_\_\_\_\_,  
Policy No: \_\_\_\_\_, and that Contractor shall submit Certificates of Insurance as required.
10. Contractor's Project Manager for this project is: \_\_\_\_\_,  
Office Phone: \_\_\_\_\_  
Cell Phone: \_\_\_\_\_.

11. The Undersigned certifies that it has not discriminated against minority, women, or emerging small businesses in obtaining any subcontracts for this project.
12. By submission of your proposal, the signatory (a duly authorized representative of the submitting proposer) must certify that the proposer is not, to the best of their knowledge, in violation of any Oregon tax law. For purposes of this certification, "Oregon Tax Laws" means a state tax imposed by ORS 320.005 to 320.150 and 403.200 to 403.250, ORS chapters 118, 314, 316, 317, 318, 321 and 323; the elderly rental assistance program under ORS 310.630 to 310.706; and local taxes administered by the Department of Revenue under ORS 305.620.

By signature below, Contractor agrees to be bound by this Bid.

NAME OF FIRM \_\_\_\_\_

ADDRESS \_\_\_\_\_

FEDERAL TAX ID \_\_\_\_\_

TELEPHONE NO \_\_\_\_\_

FAX NO \_\_\_\_\_

SIGNATURE 1) \_\_\_\_\_

Sole Individual – Signature

\_\_\_\_\_  
Sole Individual – Printed Name

or 2)

\_\_\_\_\_  
Partner

or 3)

\_\_\_\_\_  
Authorized Officer of Corporation – Signature

\_\_\_\_\_  
Authorized Officer of Corporation Printed Name

*Payment information will be reported to the IRS under the name and taxpayer ID # provided above. Information not matching IRS records could subject Contractor to 31 percent backup withholding.*

**\*\*\*\*\* END OF BID \*\*\*\*\***

**Exhibit E**

**OREGON INSTITUTE OF TECHNOLOGY  
GOOD FAITH EFFORT  
SUBCONTRACTOR AND SELF-PERFORM WORK LIST  
(FORM 1)**

Prime Contractor Name:

Total Contract Amount:

Project Name:

<b>PRIME SELF-PERFORMING:</b> Identify below ALL GFE Divisions of Work (DOW) to be self-performed. Good Faith Efforts are otherwise required.	
<u>GFE DOW BIDDER WILL SELF-PERFORM (GFE not required)</u>	

**PRIME CONTRACTOR SHALL DISCLOSE AND LIST ALL SUBCONTRACTORS**, including those M/W/ESBs that you intend to use on the project. .

<u>LIST ALL SUBCONTRACTORS BELOW</u> Use <u>correct legal name</u> of Subcontractor	Division of Work (Painting, electrical, landscaping, etc.) List ALL DOW performed by Subcontractors	DOLLAR AMOUNT OF SUBCONTRACT	If Certified MBE/WBE/ESB Subcontractor  Check box <input checked="" type="checkbox"/>		
			MBE	WBE	ESB
Name Address City/St/Zip Phone#                      Fax# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone#                      Fax # OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone#                      Fax # OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone#                      Fax# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## GFE SUBCONTRACTOR AND SELF-PERFORM WORK LIST (FORM 1) cont'd

Prime Contractor Name:

Total Contract Amount:

Project Name:

<b>LIST ALL SUBCONTRACTORS BELOW</b> Use <u>correct legal name</u> of Subcontractor	<b>Division of Work</b> (Painting, electrical, landscaping, etc.) List <b>ALL</b> DOW performed by Subcontractors	<b>DOLLAR                      AMOUNT OF                      SUBCONTRACT</b>	If Certified MBE/WBE/ESB Subcontractor  Check box <input checked="" type="checkbox"/>		
			MBE	WBE	ESB
Name Address City/St/Zip Phone#                      Fax # OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone#                      Fax # OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone#                      Fax # OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone#                      Fax # OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone#                      Fax # OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone#                      Fax # OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone#                      Fax # OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OREGON INSTITUTE OF TECHNOLOGY  
 GOOD FAITH EFFORT  
 M/W/ESB CONTACT / BIDS RECEIVED LOG  
 (FORM 2)

Prime Contractor:

Project:

Prime Contractor must contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with MBE/WBE/ESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/W/ESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			

**OREGON INSTITUTE OF TECHNOLOGY  
GOOD FAITH EFFORT  
PROJECT COMPLETION REPORT  
(FORM 3)**

Prime Contractor Name:

Total Contract Amount:

Project Name:

Complete this form and submit with your request for final payment upon the project completion. Please list all subcontractors used for the project. Use additional sheets as necessary.

<b>LIST ALL SUBCONTRACTORS BELOW</b> Use <u>correct legal name</u> of Subcontractor	<b>Division of Work</b> (Painting, electrical, landscaping, etc.) List ALL DOW performed by Subcontractors	<b>FINAL DOLLAR                      AMOUNT OF                      SUBCONTRACT</b>	If Certified MBE/WBE/ESB Subcontractor  Check box <input checked="" type="checkbox"/>		
			MBE	WBE	ESB
Name Address City/St/Zip Phone#                      Fax # OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone#                      Fax # OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone#                      Fax # OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone#                      Fax # OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone#                      Fax # OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone#                      Fax # OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*BY SIGNING BELOW, I HEREBY CERTIFY THAT THE ABOVE LISTED FIRMS HAVE BEEN UTILIZED BY OUR COMPANY IN THE AMOUNTS REPRESENTED ABOVE AND THAT THE INFORMATION CONTAINED HEREIN IS COMPLETE AND ACCURATE.*

\_\_\_\_\_  
Authorized Signature of Contractor Representative

\_\_\_\_\_  
Date



**Exhibit F**  
**Geothermal Power Plant Infrastructure Design Build**  
**RFP #2012-02**

**Notice of Interest**

Name of Consultant/Firm: \_\_\_\_\_

Check One:

\_\_\_\_\_ Yes, this firm will submit a proposal in response to this RFP. Please forward any addenda to the RFP to my attention.

\_\_\_\_\_ No, this firm does not anticipate submitting a proposal in response to this request.

Comments:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_

Email address for contact: \_\_\_\_\_

Please return this form no later than April 27, 2012 to George Marlton, Dir. of Purchasing and Contract Services, Purchasing and Contract Services, 20175 NW AmberGlen Ct., Ste. 100 Beaverton, OR 97006; email: [George.Marlton@oit.edu](mailto:George.Marlton@oit.edu).