

ADDENDUM #2

Project:

UO Chiles 3rd Floor Improvements Project (1210)

Date:

June 25, 2012

To:

Interested Bidders

Prepared by: Curt Wilson, PIVOT Architecture

This Addendum modifies the Project Manual, Specifications, and Drawings as follows:

This Addonatin meaning the Project Maridal, opening and Drawings as leneve.						
<u>2-1-0</u>	General Information					
2-1-1	The bid opening is scheduled for 2:00 pm on Tuesday, 06.26.2012 per the NOTICE OF RETAINER CONTRACT OPPORTUNITY in the Project Manual.					
2-1-2	Addendum 1 was issued on 06.21.2012.					
2-1-3	The Mandatory Pre-Bid Meeting was conducted on 06.14.2012. The attendance list was included in Addendum 1.					
<u>2-2-0</u>	Changes to the Project Manual					
2-2-1	B-5 - OUS Standard Public Improvement Contract Bid Form					
	 A Bid Bond is not required on this project. The attached revised Bid Form deletes the reference to a Bid Form under the heading "and the Undersigned agrees to be bound by the following documents." 					
2-2-2	Section 27 20 00 - Voice and Data Wiring					

2-3-0 Changes to the Drawings

1.

- 2-3-1 Sheet E121 - Power and Signal:
 - Add the following to Reference Note 5: "BREAKER SHALL BE SQUARE D I-LINE TYPE WITH MICROLOGIC TRIP UNIT AND POWER MONITORING MODULE, COMPATIBLE WITH CENTRAL PLANT POWER MONITORING SYSTEM. PROVIDE WIRING FROM BREAKER TO NEAREST DATA CLOSET FOR CONNECTION TO MONITORING SYSTEM."

Delete the original section and replace with the attached section.

- Substitution Approvals 2-4-0
- 2-4-1 No additional approvals since Addendum 1 was listed.

End of Addendum #2 - Referenced Attachments follow.

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OREGON UNIVERSITY SYSTEM

STANDARD PUBLIC IMPROVEMENT CONTRACT

BID FORM

OUS CAMPUS:		University of Oregon						
PROJECT:		Chiles Hall 3 rd Floor Busine	Chiles Hall 3 rd Floor Business Technology Center Improvements Project					
BID (CLOSING:	June 26, 2012 at 2:00 pm						
FRON	M:							
	Name of Co	ontractor						
TO:	Oregon State Board of Higher Education (campus or office name and address)							
1.		gned (check one of the following	ng and insert information requested):					
		ndividual doing business under	an assumed name registered under the laws of; or					
	b. A pa	rtnership registered under the l	aws of the State of; or					
	c. A co	orporation organized under the	laws of the State of; or					
		mited liability corporation orga e State of						
			labor and perform all work hereinafter indicated with the Contract Documents for the Basic Bid as					
	and the Und	ersigned agrees to be bound by	the following documents:					
		nent for Bids ntal Instructions to Bidders	• Instructions to Bidders					
	Public ImpOUS Gene	provement Agreement Form ral Conditions Wage Rates	Performance Bond and Payment BondSupplemental General ConditionsPayroll and Certified Statement Form					

 Plans and Specifications Drawings and Details 						
• ADDENDA numbered through, inclusive (fill in blanks)						
2. The Undersigned proposes to add to or deduct from the Base Bid indicated above the items of work relating to the following Alternate(s) as designated in the Specifications:						
ALTERNATE #1: Additive: Provide all furniture ADD or DEDUCT: \$ described on Sheet A151 - Furniture Plan and Specification Section 11 001 - Misc Furniture.						
3. No Unit Price requirements						
4. The work shall be completed within the time stipulated and specified in Division 1, Section 01 1000 - Summary, of the Specifications.						
5. 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.						
6. 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 or its surety on any Bond furnished with the Bid and will not be communicated to such person prior to the official opening of the Bid.						
7. The undersigned HAS, HAS NOT (<i>circle applicable status</i>) paid unemployment or income taxes in Oregon within the past 12 months and HAS, HAS NOT (<i>circle applicable status</i>) a business address in Oregon.						
8. 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.						
9. 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.

10. The successful Bidder hereby certifies that all subcontractors who will perform construction
work as described in ORS 701.005(2) were registered with the Construction Contractors Board
accordance with ORS 701.035 to 701.055 at the time the subcontractor(s) made a bid to wo
under the contract.

11.	Th	e succ	cessful l	Bidde	er hereby c	ertific	es that, in co	ompliance with the	ne Worker's	Compensat	tion
Law	of	the	State	of	Oregon,	its	Worker's	Compensation	Insurance	provider	is
	, Policy No, and that Contractor sha						hall				
submit Certificates of Insurance as required.											
12. Contractor's Project Manager for this project is:											
Office	Pho	one: _					_ Cell Phor	ne:			_•

13. The Undersigned certifies that it has not discriminated against minority, women, or emerging small businesses in obtaining any subcontracts for this project.

	NAME OF FIRM	
	ADDRESS	
	FEDERAL TAX ID	
	TELEPHONE NO	
	FAX NO	
	SIGNATURE 1)	
		Sole Individual
	or 2)	Partner
	or 3)	
(SEAL)		Authorized Officer of Corporation
		Attested: Secretary of Corporation

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

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 *****

SECTION 27 20 00

VOICE AND DATA WIRING

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Furnish and install all labor and materials required for the installation of a complete voice and data cable infrastructure.

1.02 QUALITY ASSURANCE

- A. Do all work in accordance with the guidelines published in EIA/TIA standard 568 and 569. Where conflicts exist, the plans and specifications shall take precedence.
- B. All workers involved in the installation and termination of cable shall have at least two years of experience. No less than 33% of the workers on the job shall have attended a vendor sponsored training program covering installation and termination of cable.

1.03 SUBMITTALS

A. Submit complete and descriptive shop drawings in accordance with Section 01 33 00. Include data for wall jacks, cable, and a layout for each IDF and MDF terminal board.

1.04 GUARANTEE

A. Guarantee all work against faulty and improper material and workmanship for a minimum period of one (1) year from the date of final written acceptance by Owner, except where guarantee or warranties for longer terms are specified herein.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Copper Cable: Belden, Berktek, AMP, Avaya.
- B. Termination Hardware: AMP, Avaya. Panduit mini-com CJ5E88TGxx.
- C. Outlets: AMP Panduit CFPnxx
- Requests for substitution of other products will be considered if submitted in accordance with Section 01 60 00.

2.02 HORIZONTAL DISTRIBUTION

- A. All UTP cable shall be 4-pair cable, of 23AWG solid copper conductors under a common sheath. Cable must meet the requirement for Category 6 Category 5e 350 Mhz standards and be rated for use in the environment in which it is used.
- B. UTP cables shall terminate on 110-type terminating Category 6 modular Panduit CPP48WBLY RJ-45 patch panels and shall be provided and installed in equipment racks. Rack mount wire management panels are to be installed between each pair of 48 jack port

- mount 110 type Horizontal wire management Panduit NM2 or equivalent. modular patch panels.
- C. All voice and data outlet plates shall be of a modular design capable of accepting interchangeable RJ-11, RJ-45, video F connectors, BNC, fiber ST or MT-RJ connectors or blank inserts into a single plate. Plates shall be nylon, 4 port single gang, color to match adjacent power receptacle plates.
- D. Each outlet shall have UTP cables terminated on CAT 6 RJ-45 jacks. See 2.01 B Quantity of jacks as indicated on the floor plans, but no less than two per plate.
- E. Wall phone outlets shall have one 4 pair UTP cable terminated in a single gang plate. at least two cables installed, single gang wall plates shall have the 2nd cable labeled and unterminated in the electrical box. It shall be labeled and terminated in the closet patch panel.
- F. All Data UTP station cable to terminate on 8-pin CAT 6 RJ-45 inserts. Wiring configuration (568A 568B) as directed by Owner. Inserts shall be designed to permit them to be disconnected from the plate without removing the cable, and reinstalled on another plate. In addition to wall mounted outlets, include outlets in modular furniture and floor boxes.

2.03 CONNECTOR CABLES

- A. U of O NTS will provide and install all patch cables.
- A. Provide one data connector cable for each data jack. 50% shall be 6 feet and 50% shall be 12 feet in length. Data grade, category 6 with RJ-45 male connector on each end.
- B. Provide one, 6 foot min. telephone connector cable for each telephone jack. Voice grade, category 6 with RJ-11/45 compatible male connector on each end.
- C. Provide one, 1-foot patch cable for each patch panel jack. Data grade, category 6 with RJ-45 male connector on each end.

PART 3 - EXECUTION

3.01 EXECUTION

- A. The Contractor shall furnish and install all cabling in accordance with these specifications, and as indicated on the cable schedules and drawings.
- B. Install each cable as an uninterrupted conductor section between the designated termination points, unless otherwise directed by the cable installation specifications. There shall be no splices or mechanical coupler installed between the cable points of origin and termination except as shown on drawings and/or specifications.
- C. Unless otherwise noted, all cable shall be rerouted though the building low voltage cable tray/conduit system where available.
- D. Contractor is responsible for insuring that cable jacket is suitable for the environment in which it is placed, i.e., CM, CMR, CMP rated.
- E. All cable shall be attached to building structure except as noted below, at intervals not to exceed 6 feet.
- F. At the same time cable is pulled into a cable pathway, also install a pull string of appropriate size to facilitate future cable pulls along those pathways.

- G. Install "J-hooks" or reusable "o-rings" for horizontal cable support. Coordinate location of support hardware to avoid conflicts with other trades.
- H. At no point will any station cable be tie wrapped or fastened to the cable tray. After cables have exited the cable tray they will be tie wrapped to the "J-hooks". The tie wraps will be clinched snug enough around the cable bundle to keep them uniform and in the hooks, but not so tight as to damage the construction of the cables themselves.
- I. Installation of workstation cables shall be coordinated with the modular furniture system contractor. Prior to the furniture system installation, the workstation cables will be pulled near the "stub-ups" or poke-thrus" and left coiled with enough slack to reach the eventual outlet location. After the modular furniture systems are installed and walls are finished, the contractor will pull cable to the outlet locations and complete the cable installation.
- J. Provide firestopping at all locations where cables penetrate fire rated surfaces. Materials and methods used shall be acceptable to the code authority having jurisdiction and shall maintain the fire integrity of the wall, floor, or ceiling.

3.02 CABLE IDENTIFICATION

- A. Cable tags containing a unique cable ID designator shall be placed on both ends of all cables, 6 inches from the connector and/or termination blocks. Also, label all backbone cables passing through telecommunications rooms. Each label shall be pre-printed with the appropriate cable number as indicated. Hand written cable labels are not acceptable.
- B. Individual station outlets shall be labeled with the designator of the cables terminated at that particular outlet. See campus construction standard 27 15 13 section 3.04.
- C. If at any time during the job the cable tag becomes illegible or removed for whatever reason, the Contractor shall immediately replace it with a duplicate pre-printed cable tag at the Contractor's expense.
- D. Labeling sequence to be determined by the Owner and to be followed by the Contractor.

3.03 TERMINATION HARDWARE

- A. Quantities of termination blocks, racks, splice enclosures, and patch panels, etc. shown on drawings are illustrative only and are meant to indicate the general configuration of the work. The Contractor is responsible for providing the correct quantities of termination hardware required to terminate, patch, cross connect, etc. the volume of cable described herein and shown on the drawings. Rack quantities shall be no less than what is shown on the drawings.
- B. At all times during the construction, the Contractor shall protect the equipment from damage and theft. Equipment shall not be installed until such time as other trades have completed their work in the area.

3.04 CABLE TERMINATIONS

A. Fiber optic cables: After dressing the fiber to its final destination, sheath shall be removed to a point that allows the fibers to be splayed and terminated in a neat and uniform fashion. At this point all fiber strands will be terminated in strict compliance with the manufacturer's instructions. Type and strand count of fiber. 12 strand OM2 Multi-Mode 62.5u terminated

with spliced or hand polished ST connectors. 12 strand OM1 9u Single Mode IITU-T G.652 compliant spliced with factory terminated ends. Corning enclosure CCH-02u and panels shall be utilized. ST connector CCH-CP-12-15T, SC conector module CH-RM-12-3c-PO3RH. Fiber and telephone backbone cables to rm 329B should be preserved if possible.

- B. Twisted pair metallic cables: After dressing cable to its final location the sheath shall be removed to a point that allows the conductors to be splayed and terminated in a neat and uniform fashion. Every effort must be made to maintain sheath integrity by removing only as much as is practical to accomplish termination. Cable pair twist shall be maintained up to the point of termination. Under no circumstances shall cable pairs be untwisted or otherwise altered beyond ½" per EIA/TIA-568.
- C. Cross-connect wire: Cable pair twist shall be maintained up to the point of termination. Under no circumstances shall cable pairs be untwisted or otherwise altered prior to termination.

3.05 GROUNDING

- A. All metallic cable tray, ladder rack, raceways, cable sheath/armor, enclosures, and equipment racks and other conductive surfaces shall be properly bonded to the grounding system. All paint and other coatings shall be removed at all contact surfaces to ensure proper ground.
- B. Furnish and install an insulated #6 copper ground wire from all telecommunication rooms to the main building electrical ground point in the main electrical room. Drawing notes indicating a larger size shall take precedence.
- C. Ground all cable shields, ducts, connector panels and grounding blocks.
- D. All grounding shall be in compliance with the NEC code Article 800, Article 250, as well as EIA/TIA standard 607.

3.06 CABLE TESTING

- A. Copper:
 - Visually inspect all cables, cable reels, and shipping cartoons to detect cable damage incurred during shipping and transport. Return visibly damaged items to the manufacturer.
 - Conduct cable testing as described below upon completion of installation. Test fully completed systems only. Piecemeal testing is not acceptable, except by prior written approval from the Architect.
 - 3. After terminating both ends, but before any cross connects are installed, test all UTP voice and data stations cables for attenuation and for near-end cross talk (NEXT) to 100 350 Mhz. Test all UTP backbone, distribution and patch cable for cable pair/conductor continuity, ground fault, proper cross-connect, shorts, loose connectors, and crossed pairs.
 - 4. Remove all defective cables from pathways system. Do not abandon cables in place.

3.07 ACCEPTANCE

A. Upon receipt of the Contractor's documentation of cable testing, the Architect will review the installation and may request a retest using contractor equipment and labor, of up to 5% of the cable/wires installed.

END OF SECTION