



State of Utah

GARY R. HERBERT
Governor

GREGORY S. BELL
Lt. Governor

Department of Administrative Services

KIMBERLY K. HOOD
Executive Director

Division of Facilities Construction and Management

DAVID G. BUXTON
Director

ADDENDUM NO. 3

Date: May 19, 2010

To: Prime Contractors/RFP Respondents:
Big-D, Jacobsen, Layton, McCarthy/Westland, Okland, Walbridge

From: Dave McKay, Project Manager

Reference: Utah Valley University
Pope Science Building Addition - Request for Proposals for Construction Services
DFCM Project No. 09020790

Subject: **Addendum No. 3**

Pages

Addendum Cover Sheet	1 page
Revised Cost Proposal Form	3 pages
<u>Architect's Specification Section 012300 - Alternates</u>	<u>12 pages</u>
Total	16 pages

Note: This Addendum shall be included as part of the Contract Documents. Items in this Addendum apply to all drawings and specification sections whether referenced or not involving the portion of the work added, deleted, modified, or otherwise addressed in the Addendum. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to Disqualification.

While we contend that SB220 should only be potentially applicable to a contract issued after the effective date of said bill, this is to clarify that for purposes of this contract, regardless of the execution or effective dates of this contract, the status of Utah Law and remedies available to the State of Utah and DFCM, as it relates to any matter referred to or affected by said SB220, shall be the Utah law in effect at the time of the issuance of this Addendum.

3.1 SCHEDULE CHANGES: There are no Project Schedule changes.

3.2 GENERAL ITEMS:

3.2.1 See attached Revised Cost Proposal Form – seven additive alternates specified.

3.2.2 See attached Architect's Specification Section 012300 - clarifying additive alternates.



STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES
Division of Facilities Construction and Management

DFCM

**COST PROPOSAL FORM – REVISED
 PER ADDENDUM NO. 3 DATED MAY 19, 2010**

NAME OF PROPOSER _____ DATE _____

To the Division of Facilities Construction and Management
 4110 State Office Building
 Salt Lake City, Utah 84114

The undersigned, responsive to the "Notice to Contractors" and in accordance with the "Request for Proposals" for the **POPE SCIENCE BUILDING ADDITION – UTAH VALLEY UNIVERSITY OREM, UTAH – DFCM PROJECT NO. 09020790** and having examined the Contract Documents and the site of the proposed Work and being familiar with all of the conditions surrounding the construction of the proposed Project, including the availability of labor, hereby proposes to furnish all labor, materials and supplies as required for the Work in accordance with the Contract Documents as specified and within the time set forth and at the price stated below. This price is to cover all expenses incurred in performing the Work required under the Contract Documents of which this bid is a part:

I/We acknowledge receipt of the following Addenda: _____

BASE BID: For all work shown on the Drawings and described in the Specifications and Contract Documents, I/we agree to perform for the sum of:

_____ DOLLARS (\$ _____)
 (In case of discrepancy, written amount shall govern)

ADDITIVE ALTERNATE NO. 1: For all work described in Specification Section 012300-Alternates to provide the finish of the Auditorium space per Alternate 1, I/we agree to perform for the sum of:

_____ DOLLARS (\$ _____)
 (In case of discrepancy, written amount shall govern)

ADDITIVE ALTERNATE NO. 2: For all work described in Specification Section 012300-Alternates, PART 3.1.B to provide the finish of laboratories and associated spaces on Level 0 per Alternate 2, I/we agree to perform for the sum of:

_____ DOLLARS (\$ _____)
 (In case of discrepancy, written amount shall govern)

ADDITIVE ALTERNATE NO. 3: For all work described in Specification Section 012300-Alternates, PART 3.1.C to provide the finish of laboratories and associated spaces on Level 0 per Alternate 3, I/we agree to perform for the sum of:

_____ DOLLARS (\$ _____)
 (In case of discrepancy, written amount shall govern)

COST PROPOSAL FORM

PAGE NO. 2

ADDITIVE ALTERNATE NO. 4: For all work described in Specification Section 012300-Alternates, PART 3.1.D to provide the finish of laboratories and associated spaces on Level 0 per Alternate 4, I/we agree to perform for the sum of:

_____ DOLLARS (\$_____)

(In case of discrepancy, written amount shall govern)

ADDITIVE ALTERNATE NO. 5 For all work described in Specification Section 012300-Alternates, PART 3.1.E to provide the finish of the 2nd Level Biology and Dean’s Suite Area per Alternate 5, I/we agree to perform for the sum of:

_____ DOLLARS (\$_____)

(In case of discrepancy, written amount shall govern)

ADDITIVE ALTERNATE NO. 6: For all work described in Specification Section 012300-Alternates, PART 3.1.F to provide the addition of the Aircurity System per Alternate 6, I/we agree to perform for the sum of:

_____ DOLLARS (\$_____)

(In case of discrepancy, written amount shall govern)

ADDITIVE ALTERNATE NO. 7: For all work described in Specification Section 012300-Alternates, PART 3.1.G to provide an allowance for construction of a stand-alone Greenhouse per Alternate 7, I/We agree to provide an allowance in the amount of:

Two-hundred-fifty-thousand _____ DOLLARS (\$250,000)

I/We guarantee that the Work will be Substantially Complete by _____ **(specific date to be provided by contractor)**, should I/we be the successful proposer, and agree to pay liquidated damages in the amount of **\$2500.00** per day for each day after expiration of the Contract Time as stated in Article 3 of the Contractor’s Agreement.

This bid shall be good for 45 days after bid opening.

Enclosed is a 5% bid bond, as required, in the sum of _____

The undersigned Contractor's License Number for Utah is _____

COST PROPOSAL FORM

PAGE NO. 3

Upon receipt of notice of award of this bid, the undersigned agrees to execute the contract within ten (10) days, unless a shorter time is specified in the Contract Documents, and deliver acceptable Performance and Payment bonds in the prescribed form in the amount of 100% of the Contract Sum for faithful performance of the contract. The Bid Bond attached, in the amount not less than five percent (5%) of the above bid sum, shall become the property of the Division of Facilities Construction and Management as liquidated damages for delay and additional expense caused thereby in the event that the contract is not executed and/or acceptable 100% Performance and Payment bonds are not delivered within the time set forth.

Type of Organization:

(Corporation, Partnership, Individual, etc.)

Any request and information related to Utah Preference Laws:

Respectfully submitted,

Name of Proposer

ADDRESS:

Authorized Signature

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for alternates.

1.3 DEFINITIONS

- A. General: The intention of the Alternates is to indicate work which will be added to the Base Bid if accepted by the Owner. The drawings and specifications indicate all the Work to be completed if all the Alternates are accepted. The description of the Base Bid requirements in each of the Alternates describes the Work included in the Base Bid as well as the Work not included in the Base Bid but which will be included if the Alternate is accepted.
- B. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost for each alternate is the net addition from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or

deferred for later consideration. Include a complete description of negotiated revisions to alternates.

- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ADDITIVE ALTERNATES

A. Additive Alternate No. 1: Finish the Auditorium Space.

1. Base Bid: Do not provide the construction of the Auditorium within the area indicated in the Construction Documents and described herein. Omit construction of the Auditorium including rooms 134, 134C. Construct all walls dividing room 134 from neighboring spaces. Do not construct walls dividing room 134 from 134C. Omit all “saw-tooth” stud framing on the north and east walls of room 134. In place of the “saw-tooth” framing, under the Base Bid, construct a wall similar to the north and east walls of 134C, furring around the columns and braced frame.

Finish any wall surfaces facing non-alternate spaces. All doors, door hardware, backing and other elements related to these walls are part of the base bid and shall be installed regardless of the alternate status.

All finishes including acoustical, floor, wall and ceiling treatments, as well as auditorium seating and millwork are not part of the Base Bid. The thermal performance of exterior walls constructed under the Base Bid shall not be compromised by this alternate. Gypsum board on the inside face of exterior walls shall be prepared for painting, but not painted. Audio visual equipment and equipment in the ceiling clouds is also not part of the Base Bid. Conduits required to be in the floor slab are part of the Base Bid.

Fireproofing, fire dampers and other fire separation elements shall be constructed and installed as part of the Base Bid regardless of the status of Alternate No. 1 or No. 3.

Electrical Requirements:

- a. Electrical panelboards, associated feeders, outlets, devices and light fixtures in Electrical Room 134B are part of the Base Bid, except for the following:
 - 1) Dimmer panels “DMC” and “DMD” are not part of the Base Bid.

- b. Main copper and fiber backbone, together with backbone conduits in Data Room 134D are part of the Base Bid. Outlets and lighting fixtures in this room are part of the Base Bid.
- c. Security devices (card readers and cameras) are part of the Base Bid.
- d. Fire alarm audio/visual devices throughout this area are part of the Base Bid. The fire alarm panel, power supplies and batteries shall have capacity to serve this area based on the full build out design and are part of the Base Bid.
- e. As part of the Base Bid provide temporary lighting in each shelled areas or rooms. Allow one (S-3) 2-lamp fluorescent strip light fixture per 200 SF of shelled space, with switch(s) as required at each entrance. Circuit to nearest 277V lighting panelboard through relay panel at a load that does not exceed 3,200 watts per circuit.
- f. Provide power to temporary heating units as part of the Base Bid. Refer to mechanical for requirements.
- g. All other wiring devices and light fixtures with associated branch conduit and wiring is not a part of the Base Bid.

Mechanical Requirements:

- a. Medium pressure duct main is part of the Base Bid.
- b. The two following VAV boxes, associated reheat coils, reheat piping, and controls are part of the Base Bid: 1-4 and 1-7. Under the Base Bid stop ductwork installation at the reheat coils. Do not install any low-pressure supply ductwork downstream of the reheat coils. Install space temperature sensors on the side of the VAV box.
- c. The reheat piping loop in this area is part of the Base Bid. Install only the branch piping to those reheat coils being installed under the Base Bid.
- d. The return air/transfer air boots and associated fire dampers between the Auditorium and Campus corridor is part of the Base Bid.
- e. VAV box 1-3 serving the data room is part of the Base Bid.

- 2. Additive Alternate: Construct all Work as indicated in the Contract Documents and as described above as not being part of the Base Bid. Add. #3

B. Additive Alternate No. 2: Finish Portion of Laboratories and Associated Spaces on Level 0.

- 1. Base Bid: Do not provide (omit) the construction of laboratories and other spaces on level 0 as indicated in the Construction Documents. Alternates 2, 3 and 4 address different areas on level 0. The extent of each of these alternates is indicated on sheet AE-101 and associated LF, MH, MP, PL, LP, EP, EL, ET, EY, EJ, FA, TT, LE sheets.

Hallways 030A, Group Study 056 and 058, Electrical Room 061, Vestibules 030K and 030L, Restrooms 030E and 030H, Janitors Closet 030F, Electrical Closet 043, Data Rooms 042 and 069B, Fire Riser 059 and Storage 072 are part of the Base Bid and are not impacted by the alternates.

Walls dividing the Alternate space from hallways or other non-proposal spaces shall be constructed as indicated. Finish these walls on the hallway or non-Alternate side. All doors, door hardware, windows, backing or other elements related to these walls are included in the Base Bid and shall be installed. All glazing between shelled spaces and non-

shelled spaces shall receive a removable film that frosts the glass eliminating views into the area. This film is part of the Base Bid.

Walls within the Alternate area, including those intersecting hallway walls and those dividing lab spaces and support spaces, are part of the Alternate. All doors, door hardware, windows and other elements related to these walls are also a part of the Alternate.

All finishes and lab equipment items within the space defined are part of the Alternate. This includes, but is not limited to, floor, wall, window and ceiling treatments, millwork and casework, fume hoods, safety cabinets and audio visual equipment. Light fixtures, air diffusers / grills and all other equipment indicated in the ceiling is part of the Alternate. Any slab modifications required for the finishes shown in the documents must be constructed as part of the Base Bid. The utility trenches and trench covers shown in the Laboratory Plumbing sheets, Structural sheets and Architectural details shall be constructed as part of the Base Bid. Floor drains and any other components cast into the slab shall be constructed as part of the Base Bid. All conduits and raceways that are required to be in or under the slab are part of the Base Bid.

The thermal performance of exterior walls shall not be compromised by this Alternate. Gypsum board on the inside face of exterior walls shall be prepared for painting, but not painted. Column furr-outs are only required where thermal performance or construction methods require it. Window sills indicated in the drawings shall be constructed under the Base Bid.

Electrical Requirements:

- a. Electrical panelboards with associated feeders within these areas are part of the Base Bid.
- b. Security devices (card readers and cameras) are part of the Base Bid. Motion detectors are not required under the Base Bid but are required as part of this Additive Alternate.
- c. Provide one fire alarm audio/visual in each room under the Base Bid. All other fire alarm devices in this area are not part of the Base Bid but the fire alarm panel, power supplies and batteries shall have capacity to serve this area based on the full build.
- d. Provide temporary lighting in each shelled area or room under the Base Bid. Allow one (S-3) 2-lamp fluorescent strip light fixture per 200 SF of shelled space, with switch(s) as required at each entrance. Circuit to nearest 277V lighting panelboard through relay panel at a load that does not exceed 3,200 watts per circuit.
- e. Provide power to temporary heating units under the Base Bid. Refer to mechanical for requirements.
- f. All other wiring devices and light fixtures with associated branch conduit and wiring are not part of the Base Bid

Mechanical Requirements:

- a. Provide medium pressure supply air duct mains and reheat piping mains that cross any shell space. Do not provide medium pressure supply air branch ducts and branch reheat piping to lab supply air valves and reheat coils that are not installed as part of the shell space

- b. The lab supply air valves that are to be installed in the shell space as part of the base bid include: 0-1, 0-12, 0-17, and 0-29. Include the associated reheat coils, reheat piping, controls, medium pressure branch ductwork, and low pressure ductwork between the lab supply air valves and their reheat coils. Do not provide low pressure ductwork downstream of the reheat coils. Mount room temperature sensors on the side of the lab valve assembly. Program controls to maintain space temperature setpoint. Allow supply air valve minimum airflow rates to be zero cfm.
- c. Provide medium pressure lab exhaust ductwork mains that run north/south from the shaft to the north and south side of the building. Do not provide medium pressure lab exhaust duct mains that run east/west from these north/south mains.
- d. Provide all unit heaters and associated piping and controls shown inside the shell space as part of the base bid.
- e. Provide one transfer air sound boot each in the areas described by alternates 2A and 2C. Each transfer boot to be size F as shown on detail 4/Sheet MH501, and shall be installed to allow transfer air to flow from the shell space to the plenum above the hallway ceiling. These transfer boots are temporary, and must be removed when the shell spaces are fitted out into lab spaces.
- f. Lab waste and vent piping serving fixtures inside the shell space that is not being installed shall be capped just inside the shell space. Water, vacuum, and RO water piping serving fixtures in the shell space that are not being installed shall be valved and capped just inside the shell space. Waste and vent piping that crosses the shell space to serve fixtures that are installed as part of the base-bid, along with all below-grade waste and vent piping, shall be installed as part of the base bid. Below-grade waste and vent piping that serves fixtures in the shell space that is not being installed shall be capped 12" above the floor slab. Install all floor drains, trench drains, and any other fixtures that must be cast into the slab-on-grade floor slab.

2. Additive Alternates:

- a. Additive Alternate No. 2:
The Alternate includes the construction of Environment Room 045 including all pre-manufactured envelope components. The recessed floor slab in this area must be constructed as part of the Base Bid. Lab supply air valves 0-1, 0-12, and associated reheat coils and controls are part of the Base Bid. Construct all Work as indicated in the Contract Documents and as described in the Alternate as not being part of the Base Bid.

C. Additive Alternate No. 3: Finish Portion of Laboratories and Associated Spaces on Level 0.

- 1. Base Bid: Do not provide (omit) the construction of laboratories and other spaces on level 0 as indicated in the Construction Documents. Alternates 2, 3 and 4 address different areas on level 0. The extent of each of these alternates is indicated on sheet AE-101 and associated LF, MH, MP, PL, LP, EP, EL, ET, EY, EJ, FA, TT, LE sheets.

Hallways 030A, Group Study 056 and 058, Electrical Room 061, Vestibules 030K and 030L, Restrooms 030E and 030H, Janitors Closet 030F, Electrical Closet 043, Data

Rooms 042 and 069B, Fire Riser 059 and Storage 072 are part of the Base Bid and are not impacted by the alternates.

Walls dividing the Alternate space from hallways or other non-proposal spaces shall be constructed as indicated. Finish these walls on the hallway or non-Alternate side. All doors, door hardware, windows, backing or other elements related to these walls are included in the Base Bid and shall be installed. All glazing between shelled spaces and non-shelled spaces shall receive a removable film that frosts the glass eliminating views into the area. This film is part of the Base Bid.

Walls within the Alternate area, including those intersecting hallway walls and those dividing lab spaces and support spaces, are part of the Alternate. All doors, door hardware, windows and other elements related to these walls are also a part of the Alternate.

All finishes and lab equipment items within the space defined are part of the Alternate. This includes, but is not limited to, floor, wall, window and ceiling treatments, millwork and casework, fume hoods, safety cabinets and audio visual equipment. Light fixtures, air diffusers / grills and all other equipment indicated in the ceiling is part of the Alternate. Any slab modifications required for the finishes shown in the documents must be constructed as part of the Base Bid. The utility trenches and trench covers shown in the Laboratory Plumbing sheets, Structural sheets and Architectural details shall be constructed as part of the Base Bid. Floor drains and any other components cast into the slab shall be constructed as part of the Base Bid. All conduits and raceways that are required to be in or under the slab are part of the Base Bid.

The thermal performance of exterior walls shall not be compromised by this Alternate. Gypsum board on the inside face of exterior walls shall be prepared for painting, but not painted. Column furr-outs are only required were thermal performance or construction methods require it. Window sills indicated in the drawings shall be constructed under the Base Bid.

Electrical Requirements:

- a. Electrical panelboards with associated feeders within these areas are part of the Base Bid.
- b. Security devices (card readers and cameras) are part of the Base Bid. Motion detectors are not required under the Base Bid but are required as part of this Additive Alternate.
- c. Provide one fire alarm audio/visual in each room under the Base Bid. All other fire alarm devices in this area are not part of the Base Bid but the fire alarm panel, power supplies and batteries shall have capacity to serve this area based on the full build.
- d. Provide temporary lighting in each shelled area or room under the Base Bid. Allow one (S-3) 2-lamp fluorescent strip light fixture per 200 SF of shelled space, with switch(s) as required at each entrance. Circuit to nearest 277V lighting panelboard through relay panel at a load that does not exceed 3,200 watts per circuit.
- e. Provide power to temporary heating units under the Base Bid. Refer to mechanical for requirements.

- f. All other wiring devices and light fixtures with associated branch conduit and wiring are not part of the Base Bid

Mechanical Requirements:

- g. Provide medium pressure supply air duct mains and reheat piping mains that cross any shell space. Do not provide medium pressure supply air branch ducts and branch reheat piping to lab supply air valves and reheat coils that are not installed as part of the shell space
- h. The lab supply air valves that are to be installed in the shell space as part of the base bid include: 0-1, 0-12, 0-17, and 0-29. Include the associated reheat coils, reheat piping, controls, medium pressure branch ductwork, and low pressure ductwork between the lab supply air valves and their reheat coils. Do not provide low pressure ductwork downstream of the reheat coils. Mount room temperature sensors on the side of the lab valve assembly. Program controls to maintain space temperature setpoint. Allow supply air valve minimum airflow rates to be zero cfm.
- i. Provide medium pressure lab exhaust ductwork mains that run north/south from the shaft to the north and south side of the building. Do not provide medium pressure lab exhaust duct mains that run east/west from these north/south mains.
- j. Provide all unit heaters and associated piping and controls shown inside the shell space as part of the base bid.
- k. Provide one transfer air sound boot each in the areas described by alternates 2A and 2C. Each transfer boot to be size F as shown on detail 4/Sheet MH501, and shall be installed to allow transfer air to flow from the shell space to the plenum above the hallway ceiling. These transfer boots are temporary, and must be removed when the shell spaces are fitted out into lab spaces.
- l. Lab waste and vent piping serving fixtures inside the shell space that is not being installed shall be capped just inside the shell space. Water, vacuum, and RO water piping serving fixtures in the shell space that are not being installed shall be valved and capped just inside the shell space. Waste and vent piping that crosses the shell space to serve fixtures that are installed as part of the base-bid, along with all below-grade waste and vent piping, shall be installed as part of the base bid. Below-grade waste and vent piping that serves fixtures in the shell space that is not being installed shall be capped 12" above the floor slab. Install all floor drains, trench drains, and any other fixtures that must be cast into the slab-on-grade floor slab.

2. Additive Alternates:

- a. Additive Alternate No. 3:
Construct all Work as indicated in the Contract Documents and as described in the Alternate as not being part of the Base Bid.

D. Additive Alternate No. 4: Finish Portion of Laboratories and Associated Spaces on Level 0.

- 1. Base Bid: Do not provide (omit) the construction of laboratories and other spaces on level 0 as indicated in the Construction Documents. Alternates 2, 3 and 4 address different

areas on level 0. The extent of each of these alternates is indicated on sheet AE-101 and associated LF, MH, MP, PL, LP, EP, EL, ET, EY, EJ, FA, TT, LE sheets.

Hallways 030A, Group Study 056 and 058, Electrical Room 061, Vestibules 030K and 030L, Restrooms 030E and 030H, Janitors Closet 030F, Electrical Closet 043, Data Rooms 042 and 069B, Fire Riser 059 and Storage 072 are part of the Base Bid and are not impacted by the alternates.

Walls dividing the Alternate space from hallways or other non-proposal spaces shall be constructed as indicated. Finish these walls on the hallway or non-Alternate side. All doors, door hardware, windows, backing or other elements related to these walls are included in the Base Bid and shall be installed. All glazing between shelled spaces and non-shelled spaces shall receive a removable film that frosts the glass eliminating views into the area. This film is part of the Base Bid.

Walls within the Alternate area, including those intersecting hallway walls and those dividing lab spaces and support spaces, are part of the Alternate. All doors, door hardware, windows and other elements related to these walls are also a part of the Alternate.

All finishes and lab equipment items within the space defined are part of the Alternate. This includes, but is not limited to, floor, wall, window and ceiling treatments, millwork and casework, fume hoods, safety cabinets and audio visual equipment. Light fixtures, air diffusers / grills and all other equipment indicated in the ceiling is part of the Alternate. Any slab modifications required for the finishes shown in the documents must be constructed as part of the Base Bid. The utility trenches and trench covers shown in the Laboratory Plumbing sheets, Structural sheets and Architectural details shall be constructed as part of the Base Bid. Floor drains and any other components cast into the slab shall be constructed as part of the Base Bid. All conduits and raceways that are required to be in or under the slab are part of the Base Bid.

The thermal performance of exterior walls shall not be compromised by this Alternate. Gypsum board on the inside face of exterior walls shall be prepared for painting, but not painted. Column furr-outs are only required where thermal performance or construction methods require it. Window sills indicated in the drawings shall be constructed under the Base Bid.

Electrical Requirements:

- a. Electrical panelboards with associated feeders within these areas are part of the Base Bid.
- b. Security devices (card readers and cameras) are part of the Base Bid. Motion detectors are not required under the Base Bid but are required as part of this Additive Alternate.
- c. Provide one fire alarm audio/visual in each room under the Base Bid. All other fire alarm devices in this area are not part of the Base Bid but the fire alarm panel, power supplies and batteries shall have capacity to serve this area based on the full build.
- d. Provide temporary lighting in each shelled area or room under the Base Bid. Allow one (S-3) 2-lamp fluorescent strip light fixture per 200 SF of shelled space, with switch(s) as required at each entrance. Circuit to nearest 277V lighting

panelboard through relay panel at a load that does not exceed 3,200 watts per circuit.

- e. Provide power to temporary heating units under the Base Bid. Refer to mechanical for requirements.
- f. All other wiring devices and light fixtures with associated branch conduit and wiring are not part of the Base Bid

Mechanical Requirements:

- g. Provide medium pressure supply air duct mains and reheat piping mains that cross any shell space. Do not provide medium pressure supply air branch ducts and branch reheat piping to lab supply air valves and reheat coils that are not installed as part of the shell space
- h. The lab supply air valves that are to be installed in the shell space as part of the base bid include: 0-1, 0-12, 0-17, and 0-29. Include the associated reheat coils, reheat piping, controls, medium pressure branch ductwork, and low pressure ductwork between the lab supply air valves and their reheat coils. Do not provide low pressure ductwork downstream of the reheat coils. Mount room temperature sensors on the side of the lab valve assembly. Program controls to maintain space temperature setpoint. Allow supply air valve minimum airflow rates to be zero cfm.
- i. Provide medium pressure lab exhaust ductwork mains that run north/south from the shaft to the north and south side of the building. Do not provide medium pressure lab exhaust duct mains that run east/west from these north/south mains.
- j. Provide all unit heaters and associated piping and controls shown inside the shell space as part of the base bid.
- k. Provide one transfer air sound boot each in the areas described by alternates 2A and 2C. Each transfer boot to be size F as shown on detail 4/Sheet MH501, and shall be installed to allow transfer air to flow from the shell space to the plenum above the hallway ceiling. These transfer boots are temporary, and must be removed when the shell spaces are fitted out into lab spaces.
- l. Lab waste and vent piping serving fixtures inside the shell space that is not being installed shall be capped just inside the shell space. Water, vacuum, and RO water piping serving fixtures in the shell space that are not being installed shall be valved and capped just inside the shell space. Waste and vent piping that crosses the shell space to serve fixtures that are installed as part of the base-bid, along with all below-grade waste and vent piping, shall be installed as part of the base bid. Below-grade waste and vent piping that serves fixtures in the shell space that is not being installed shall be capped 12" above the floor slab. Install all floor drains, trench drains, and any other fixtures that must be cast into the slab-on-grade floor slab.

2. Additive Alternates:

- a. Additive Alternate No. 4:

Lab supply air valves 0-1, 0-12, and associated reheat coils and controls are part of the Base Bid. Construct all work as indicated in the Contract Documents and as described in this Alternate as not being part of the Base Bid.

Add. #3

E. Additive Alternate No. 5: Finish the 2nd Level Biology and Dean's Suite Area

ALTERNATES

012300 - 9

**NEW SCIENCE BUILDING - UTAH VALLEY UNIVERSITY
DFCM PROJECT NO. 09020790**

1. **Base Bid:** Do not construct the 2nd level Biology and Dean's Suite area as indicated in the Construction Documents. Construct the perimeter walls that contain these office areas as illustrated on sheet AE-111. Finish the walls on the side facing the public corridor. All doors, door hardware, windows, all-glass storefront systems, backing or other elements related to these walls are to be constructed as part of the Base Bid and shall be installed regardless of the status of this alternate. All glazing installed in the walls shall receive a removable film that frosts the glass eliminating views into the area as part of the Base Bid. All walls within the space, including those intersecting perimeter walls are part of the Alternate. Doors, door hardware, windows and other elements related to these walls are also part of the Alternate.

All finishes including floor, wall, window and ceiling treatments, millwork, casework and shower stall enclosures are not included in the Base Bid. Equipment installed in the ceiling is part of the Alternate. Any slab modifications required for the finishes shown in the documents must be constructed as part of the Base Bid.

Under the Base Bid, the thermal performance of exterior walls shall not be compromised. Gypsum board on the inside face of exterior walls shall be prepared for painting, but not painted. Column furr-outs are only required where thermal performance or construction methods require it. Window sills indicated in the drawings shall be installed as part of the base bid.

Electrical Requirements:

- a. Electrical room 243G and Data Room 244 are part of the Base Bid. Their bounding walls and all related doors, door hardware and backing must be constructed as part of the Base Bid. Electrical panelboards, associated feeders, outlets, devices and light fixtures are part of the Base Bid.
- b. Provide the VAV Box and associated controls serving Data Room 244 as part of the Base Bid
- c. Main copper and fiber backbone, together with backbone conduits remain in Data Room 244. Outlets and lighting fixtures in this room are part of the Base Bid.
- d. Security devices (card readers and cameras) are part of the Base Bid.
- e. Provide 8 each fire alarm audio/visual devices throughout this area in the Base Bid, The exact location is to be determined by Architect/Engineer. All other fire alarm devices in this area are not part of the Base Bid, but the fire alarm panel, power supplied and batteries shall have capacity to serve this area based on the full build out design under this Alternate.
- f. Provide temporary lighting in each shelled area or room under the Base Bid. Provide one (S-3) 2-lamp fluorescent strip light fixture per 200 SF of shelled space, with switch(es) as required at each entrance. Circuit to nearest 277V lighting panelboard through relay panel at a load that does not exceed 3,200 watts per circuit.
- g. Provide power to temporary heating units under the Base Bid Refer to mechanical for requirements.
- h. All other wiring devices and light fixtures with associated branch conduit and wiring are not part of the Base Bid but will be constructed under this Alternate.

Mechanical Requirements:

- a. Medium pressure duct main is part of the Base Bid. Install tight to the bottom of overhead structure.
 - b. The following four VAV boxes, associated reheat coils, reheat piping, and controls are part of the Base Bid: 2-4, 2-7, 2-10, and 2-13 Stop ductwork installation at the reheat coils under the Base Bid Do not install any low-pressure supply ductwork downstream of the reheat coils. Install space temperature sensors on the side of the VAV box.
 - c. The reheat piping loop in this area is part of the Base Bid. Install branch piping to those reheat coils being installed under the Base Bid.
 - d. The return air/transfer air boots and associated fire dampers between the Biology and Dean's Suite area are part of the Base Bid.
 - e. Exhaust fan EF-2 is part of the Base Bid. Install exhaust ductwork to all toilet rooms on Level 1, Do not install branch exhaust ductwork to the toilet rooms in the Base Bid on Level 2. Note that main exhaust ductwork from Level 1 up to EF-2 on the roof will cross the Alternate area.
 - f. The Base Bid does not include all plumbing fixtures, but floor drains and any other cast-in place components shall be constructed.
 - g. Domestic hot water piping serving this area comes from Level 1 below. Install the domestic hot water and recirc piping on Level 1, but do not install the 1-1/4" hot water rise to Level 2 under the Base Bid. Provide a piping bridge on Level 1 so the rise/drop to/from the toilet group on level 2 can be bypassed under the Base Bid Do not install the 1-1/2" domestic cold branch line from the toilet group on Level 1 up to the toilet group on Level 2 under the Base Bid. Cap the floor drains in the toilet rooms on Level 2 with gas-tight rubber plugs. The trap primers will be installed under this Alternate when flush-valve water closets are installed in the rooms.
 - h. Should this Alternate not be accepted while Alternate No. 1 (Shelling the Auditorium) is, the vertical shafts required for air delivery and exhaust from the Auditorium shall be constructed to the extent required to maintain indicated fire and/or smoke separation.
2. Additive Alternate: Construct all Work as indicated in the Contract Documents and as described in the Alternate as not being part of the Base Bid.

F. Additive Alternate No. 6: Add the Aircurity System.

- 1. Base Bid: Provide the complete HVAC system and controls without the Aircurity air monitoring system as indicated in the contract documents. Revert to minimum air change rates indicated for the systems operating without the Aircurity system. Lab supply air and exhaust air valve sizes do not change.
- 2. Additive Alternate: Add the Aircurity system to the laboratory ventilation control system as indicated in the construction documents.

G. Additive Alternative No. 7 : Add a Stand-Alone Greenhouse

- 1. Base Bid: Do not provide a greenhouse.

2. Additive Alternate: Provide a stand-alone greenhouse delivered under a design-build / turn-key arrangement. See Division 01 section “Allowances” for the lump-sum allowance for this work.

END OF SECTION 012300