

ADDENDUM NO. 2

PROJECT NAME: East Campus Recreation Center Renovation & Addition
UNL PROJECT NUMBER: A016P039
BID INVITATION NUMBER: 2237-13-7200

CONSULTANT: Sinclair Hille & Associates, Inc.
ADDRESS: 700 Q Street
Lincoln, NE 68508

SUB-CONSULTANTS: 360 Architecture – Sports Architecture Consultant
Engineering Technologies, Inc. – Mechanical / Electrical Engineers
Nielsen-Baumert Engineering – Structural Engineers
Olsson Associates – Civil Engineering
Vireo – Landscape Architecture
Foodlines – Kitchen Consultant
FP& C – Code Consultant

DATE OF ISSUANCE: Thursday, September 26, 2013
DATE OF BID OPENING: Thursday, October 3, 2013, 3:30 PM CT

The bid documents, plans dated 8/21/13 and project manual dated 8/25/13, for the above referenced project are amended by this addendum.

NOTICE: This Addendum is issued to all interested prospective bidders as an amendment to the project manual or other parts of the bidding (contract) documents for the above named project. Reference to this Addendum must be included in the Bid proposal. The information contained herein shall be fully incorporated into the contract documents as though originally included therein.

PRE-BID MEETING INFORMATION

- ADD 2-1.** Sign-in sheets from Pre-Bid has been included for information purposes. Attendance was not mandatory.
- ADD 2-2.** As indicated at the Pre-Bid meeting, the existing building drawings have been added to the documents for use in bidding.

GENERAL CLARIFICATIONS

- ADD 2-3.** Section 072100 "Building Insulation"; For rigid perimeter insulation we will permit the use of either an extruded or molded polystyrene board insulation.
- ADD 2-4.** Section 075323 "Ethylene-Propylene-Diene-Monomer (EPDM) Roofing"; For tapered roof insulation, we will permit the use of either a polyisocyanurate or an EPS Type II insulation product. Note that EPS is NOT permitted for use as a roof insulation other than to achieve tapered surfaces to drain. If a mix of polyiso and EPS is utilized, manufacturer shall still provide a fully warranted system.

GENERAL QUESTIONS AND CLARIFICATIONS

ADD 2-5. Helical Piles.

Question: *We do not have a spec section for the helical piles. Are the notes on Sheet S001 sufficient to bid this work?*

Response: All requirements associated with the helical piers are shown on Sheet S001 under "Helical Piles" and should be sufficient for bidding purposes.

ADD 2-6. Existing Gymnasium Load Capacity.

Question: *What is the load capacity of the existing gymnasium floor? Will we be able to use lifts on the floor and if so, what are our limitations?*

Response: Contractor should be aware that they are responsible for all structural analysis of the structure related to means and methods per structural general note MM1 on Sheet S001. The limited preliminary calculations that have been done showed that the live load capacity, based on modern codes, is in the 60-65 psf range based on shear stress.

It should be noted that the topping is very thin (at 2") and the original drawings say nothing about reinforcing in the topping. Use of lifts on the floor is very questionable.

ADD 2-7. Contractor Parking.

Question: *Regarding the fenced parking area at 33rd and Doane, can we rent the entire lot? If so, what would be the cost?*

Response: The lot is reserved for the project at NO COST to the Contractors. The lot is available from the Notice to proceed until 45 days following substantial completion. The Contractor is responsible to maintain the lot in good order, free from trash and weeds. Hazardous materials may NOT be stored on this site.

ADD 2-8. Abatement Report.

Question: *Can we get a copy of the abatement report?*

Response: Yes, the APX Pre-renovation Environmental Survey Report dated 2-11-2013 and the APEX PCM Asbestos Clearance letter dated 8-23-2013 are included in this addendum for reference only.

ADD 2-9. Section 075323 "Ethylene-Propylene-Diene-Monomer (EPDM) Roofing".

Question: *Is it your intent for the cover board to be mechanically fastened or adhered?*

Response: Our intent is for the cover board to be adhered to the top layer of insulation.

ADD 2-10. Section 098413 "Sound Barriers".

Statement: *It is unclear where and to what extent the "Mull-it-over" product is required.*

Response: Product is located at locations where interior stud wall terminates at exterior window mullions. Locations are keynoted in plans and details with note 098413.A.

ADD 2-11. Transformer.

Question: Who provides secondary terminations in the pad mounted transformer?

Response: Electrical Contractor

ADD 2-12. Transformer.

Question: Who provides secondary lugs in transformer?

Response: Electrical Contractor

ADD 2-13. Riser Diagram.

Question: Sheet E600, Riser Diagram – Please clarify sheet Note 20.

Response: Conduit referenced shall extend from pad mounted transformer in lieu of generator. EMCS computer will be located in Telecom 129A.

ADD 2-14. Disconnect for dryer D-1.

Question: Sheet E201, Laundry 104A shows a fused disconnect for dryer D-1, Equipment Connection Schedule does not list a disconnect. Please clarify.

Response: Provide a 30 Amp fused disconnect. Contractor shall verify voltage and amperage of dryer with Owner prior to rough-in.

ADD 2-15. Light fixture type 27.

Question: Sheet E101, Unisex 105 & 113 – Type 27 light fixture is listed not used. Please clarify.

Response: Type 27 fixtures shall be changed to Type 29.

ADD 2-16. Lamps at exhaust hood.

Question: Sheet E101, Note 4 states that the contractor shall provide and install lamps in the exhaust hood. Please clarify lamp type.

Response: Screw in base LED lamps rated for use in an enclosed fixture. Coordinate wattage with hood installer.

ADD 2-17. Occupancy sensor.

Question: Sheet E101, Massage Office 115 – Occupancy sensor is not labeled. Please clarify.

Response: Provide Type 1 occupancy sensor.

ADD 2-18. Lighting controls.

Question: Sheet E103, Cardio Loft 303 – Occupancy sensor is noted to connect to room controller, but room controller is not shown. Please clarify.

Response: Connect occupancy sensors through Lighting Control Panel LCP2A, to control lighting circuits and ceiling fans in room.

MODIFICATIONS TO THE DRAWINGS

ADD 2-19. Refer to the Master keynote Legend on the Cover Sheet; Add the following Keynotes:

096466.H IN-FLOOR VOLLEYBALL SLEEVE
096466.H2 IN-FLOOR BADMINTON SLEEVE
102800.K2 WARM-AIR DRYER – HAND AND FACE

ADD 2-20. Refer to the Master keynote Legend on the Cover Sheet; Modify the following Keynotes:

072100.B 2" EXTRUDED POLYSTYRENE OR MOLDED-POLYSTYRENE PERIMETER INSULATION – R10 MIN.
072100.B2 1" EXTRUDED POLYSTYRENE OR MOLDED-POLYSTYRENE PERIMETER INSULATION – R-5 MIN.
116623.C NOT USED
116623.D NOT USED

ADD 2-21. Refer to the Index of Drawings on the Cover Sheet; Add the following sheets:

G101 Existing Building Drawings
G102 Existing Building Drawings
G103 Existing Building Drawings
G104 Existing Building Drawings
G105 Existing Building Drawings
G106 Existing Building Drawings
G107 Existing Building Drawings
G108 Existing Building Drawings
G109 Existing Building Drawings

ADD 2-22. Add Sheets G101 – G109. Existing Building Drawings have been added to the set of documents at the request of bidders for informational purposes only. Neither the Owner and or Design Professionals associated with this project can substantiate the accuracy of the information depicted in these newly added sheets. Contractor shall be responsible for field verify all existing conditions.

- ADD 2-23.** Refer to A1/ME100; Add one (1) type #36 light fixture at north exterior of building, mount fixture at 9'-0", above gas meter. Reference revisions to light fixture schedule for light fixture specification.
- ADD 2-24.** Refer to A1/ME100; Two (2) type A light fixtures at north elevation shall be located as shown on attachment E1, centered between windows.
- ADD 2-25.** Refer to A1/ME100; Two (2) type A light fixtures at south end of plan (towards east) shall be changed to type A2 fixtures.
- ADD 2-26.** Refer to A1/ME100; Three (3) type A light fixtures at east end of plan shall be changed to type A2 fixtures.
- ADD 2-27.** Refer to A1/A003; Place "Note 19" below "Note 14" at the center of the Mezzanine plan and add the following note to the Sheet A003 Demolition Notes Legend:
- NOTE 19 ALL REMAINING WOOD FRAMING NOT REMOVED DURING ASBESTOS OPERATIONS AT THE UNDERSIDE OF THE EXISTING STEEL ROOF TRUSSES SHALL BE REMOVED.
- ADD 2-28.** Refer to A1/A101; Grid 3.1 should move to the east 5 inches. Dimension between Grids 3 and 3.1 should be 3'-11".
- ADD 2-29.** Refer to A1/A101, Laundry 104A; Add graphic representing cast-in-place drain basin along the west wall along with section callout A4/A602 and vertical dimensions associated with basin. **Refer to Attachment A1.**
- ADD 2-30.** Refer to A1/A102; Grid 3.1 should move to the east 5 inches. Dimension between Grids 3 and 3.1 should be 3'-11"
- ADD 2-31.** Refer to A1/A103; Grid 3.1 should move to the east 5 inches. Dimension between Grids 3 and 3.1 should be 3'-11"
- ADD 2-32.** Refer to Sheet A151, Sheet Specific Notes: Add the following note:
- NOTE 11 COORDINATE MOUNTING HEIGHT OF MONITOR AND ELECTRICAL RECEPTACLES WITH OWNER PRIOR TO INSTALLATION
- ADD 2-33.** Refer to D11/A151; As requested by Owner, the door into Sauna 132C has been relocated as shown on **Attachment A2.**
- ADD 2-34.** Refer to D11/A151; Contractor shall provide blocking and labor for installation of Owner provided TV monitor in Men's Locker 132B on the west wall of Sauna 132C as shown on **Attachment A2.** Keynotes 10100.B and 061053.A along with Sheet Note "NOTE 11" have been added along with graphic indication of monitor. Center monitor on wall area between face of lockers and outside corner of Sauna.
- ADD 2-35.** Refer to D11/A151; Mirror 102800.E4 has been relocated to the west wall of Men's Restroom 132A and centered on opening as indicated on **Attachment A2.**
- ADD 2-36.** Refer to D11/A151; Warm air dryer 102800.K has been shifted east to center on wall at Men's Restroom 132A as shown on **Attachment A2.**

- ADD 2-37.** Refer to D11/A151; Add warm air dryer 102800.K2 in Men's Shower 132D and modify wall configuration as shown on **Attachment A2**.
- ADD 2-38.** Refer to D11/A151; Mirror 102800.E4 has been moved from the north wall of Women Locker 133A to the west wall of the entry to Women's Locker 133E as shown on **Attachment A3**.
- ADD 2-39.** Refer to D11/A151; Contractor shall provide blocking and labor for installation of Owner provided TV monitor at the north wall of Women's Locker 133A as shown on **Attachment A3**. Keynotes 061053.A and 10100.B along with Sheet Note, "NOTE 11" have been added along with graphic indication of monitor.
- ADD 2-40.** Refer to D11/A151; Add warm air dryer 102800.K2 in Women's Locker 133A where shown on **Attachment A3**.
- ADD 2-41.** Refer to A11/A151; Replace combination paper towel dispenser receptacle (102800.M) with warm air dryer (102800K) in Privacy Restroom 125A. Refer to **Attachment A4**. Note that dimensional location of wall hung lavatory has also increased from 1'-2" to 1'-4".
- ADD 2-42.** Refer to A11/A151, north wall of Privacy Restroom 125A; Add spot elevation callout, dimension and K7/A602 callout to provide clarification to the low wall element shown along the north wall as shown on **Attachment A4**.
- ADD 2-43.** Refer to A1/A502; Add identification CW-6 as well as keynotes 084113.A and 088000.A below the frame elevation that falls between Types CW-5 and CW-7.
- ADD 2-44.** Refer to Sheet A602; Add Detail A4/A602 to the sheet as shown on **Attachment A5**. In addition to inclusion of the new detail, also add keynote 071800.A to the sheet's keynote legend.
- ADD 2-45.** Refer to A1/A701, Room 100B (east/west corridor); Modify the location of the control joints in the GWB ceiling assembly. The east joint shall be moved east to align with the outside corner of Room 133B and the center control joint shall shift east as required to maintain an equal spacing in the corridor as shown on **Attachment A6**.
- ADD 2-46.** Refer to A1/A701, Room 100B (north/south corridor); Eliminate the control joint (092900.B2) shown in the GWB ceiling of 100B just outside of room 123. Refer to **Attachment A7**.
- ADD 2-47.** Refer to A1/A701; Room 121; Add acoustical ceiling assembly to the room along with Sheet Specific Notes, Note 4, Note 5 and Note 6. Note that sound insulation has also been added above the ceiling assembly as indicated in Note 6. The light fixtures that were originally indicated shall remain the same with the Type 9 and 9E fixtures mounted at 9'-0" AFF. Refer to **Attachment A7**.
- ADD 2-48.** Refer to A1/A701, Room 123; Ceiling assembly should continue into the niche located in the southwest corner of the room. Refer to **Attachment A7**.
- ADD 2-49.** Refer to A4/A805; Note above and to the right of the center of court that states "Typical volleyball court line, painted" should be removed. No volleyball court lines occur in Multi-Athletic Court 210.

- ADD 2-50.** Refer to A12/A805; Replace keynote 116623.C with keynote 096466.H at all locations.
- ADD 2-51.** Refer to A12/A805; Replace keynote 116623.D with keynote 096466.H2 at all locations.
- ADD 2-52.** Refer to Sheet S102, Second Level Framing Plan; At the southwest corner of gymnasium, revise framing, add dimensions and add detail reference as shown on **Attachment S102-A**.
- ADD 2-53.** Refer to Sheet S102, Second Level Framing Plan; At the expansion joint between gymnasium and south addition, revise framing, add plan note reference and add detail references as shown on **Attachment S102-B**.
- ADD 2-54.** Refer to Sheet S102, Second Level Framing Plan; At the interface between east addition and south addition, revise framing, add plan note reference and add detail references as shown on **Attachment S102-C**.
- ADD 2-55.** Refer to Sheet S102, Second Level Framing Plan; At stair opening floor infill near northeast corner of existing building, add beam for support of folding partition as indicated on **Attachment S102-D**.
- ADD 2-56.** Refer to Sheet S102, Second Level Framing Plan; See reference to Detail 1B/S301 near grid 'N6', with accompanying note that says "X=5 7/8"". Revise X to 5 1/2".
- ADD 2-57.** Refer to Sheet S102, Second Level Framing Plan; Add plan note No. 32 as follows:
32. PROVIDE W12x40 STUB BEAM ON NORTH SIDE OF COLUMN 'K-20', END OF BEAM = 1'-6" NORTH OF GRID 'K', TOP OF BEAM EL. = 112'-3 1/4". CONNECT TO COLUMN SIMILAR TO DETAIL 5/S310.
- ADD 2-58.** Refer to Sheet S103, Mezzanine Level Framing Plan; At the expansion joint between grids '4' and '4.1', north of grid 'M', add section detail reference 10/S310 (looking north).
- ADD 2-59.** Refer to Sheet S103, Mezzanine Level Framing Plan; At column 'L-4.1', reference plan detail 11/S310.
- ADD 2-60.** Refer to Sheet S103, Mezzanine Level Framing Plan; At column 'K-9', revise plan note number referenced from 32 to 40.
- ADD 2-61.** Refer to Sheet S103, Mezzanine Level Framing Plan; Add plan note No. 40 as follows:
40. BEAM TO COLUMN CONNECTION PER DETAIL 4A/S301 (STIFFENED).
- ADD 2-62.** Refer to Sheet S104, Roof Framing Plan; At the gymnasium there are six roof joists that are anticipated to support the basketball backstops. Add note "D=1.0K AT TRUSS CENTERLINE" pointing to the middle of the joists. The affected joists (to be verified by contractor) are the joist on grid 'K', the first two joists south of grid 'K', the joist on grid 'F', and the first two joists north of grid 'F'. (As a matter of clarification, some of those joists are anticipated to have loads applied at more than one point but that has been conservatively simplified for joist design purposes. Detail 8/S301 showing joist web stiffener angles will be applicable at all load application points).

- ADD 2-63.** Refer to Sheet S104, Roof Framing Plan; Reference the framing members shown on three sides of mechanical unit "EF-3" between grids 'F' and 'G', east of grid '4'. Add note "ANGLE 4x4x1/4 (3 SIDES)".
- ADD 2-64.** Refer to Sheet S202, Foundation Details; Add detail 5/S202 as shown on **Attachment S202-A.**
- ADD 2-65.** Refer to Sheet S302, Framing Details; Add Lintel Schedule 6/S302 as shown on **Attachment S302-A.**
- ADD 2-66.** Refer to Sheet S306, Framing Details; Reference Detail 8/S306. Add note at right end of upper slab "SEE DETAIL D13/A405 FOR ADDITIONAL PLATE IN TOP OF SLAB".
- ADD 2-67.** Refer to Sheet S307, Framing Details; Reference Detail 2/S307. In the lower right hand corner of the detail, the note pointing to the diagonal brace angle shall reference Detail 1C/S301 in lieu of 10/S302. Also add a diagonal brace angle on the left side of the beam with a note "ANGLE 2 1/2x2 1/2 @ 4'-0" O.C. PER DETAIL 1C/S301 WELDED TO BOTTOM OF BEAM ON GRID 22 AND TOP OF ADJACENT BEAM".
- ADD 2-68.** Refer to Sheet S307, Framing Details; Reference Detail 5/S307. Add Note 1 "SEE DETAIL 13/S310 FOR 6"x2" TUBES IN STUD SPACE AT GUARDRAIL POSTS". Also revise the dimension between beam centerline and inside face of metal studs from 5 1/2" to 6" so that the steel tubes can be welded directly to the angles.
- ADD 2-69.** Refer to Sheet S307, Framing Details; Reference Detail 11/S307. Add Note 3 "BALCONY CONCRETE SHALL BE 4000 PSI NORMAL WEIGHT LIMESTONE CONCRETE".
- ADD 2-70.** Refer to Sheet S310, Framing Details; Add Details 9/S310 through 15/S310 as shown on **Attachments S310-A, S310-B, S310-C, S310-D, S310-E, S310-F and S310-G.**
- ADD 2-71.** Refer to Sheet S401, Braced Frame Elevations & Details; Reference Detail 2/S401. Add Note 1 "SEE DETAIL 5/S202 FOR REINFORCING AROUND WALL OPENING".
- ADD 2-72.** Refer to Sheet S502, Framing Details – Existing Building; Reference Details 3/S502, 4/S502 and 7/S502. Add note to all three details "HILTI ANCHORS SHALL UTILIZE HILTI 'HAS-SUPER' RODS".
- ADD 2-73.** Refer to Sheet S502, Framing Details – Existing Building; Add Detail 19/S502 as shown on **Attachment S502-A.**
- ADD 2-74.** Refer to Sheet S503, Framing Details – Existing Building; Add Detail 5/S503 as shown on **Attachment S503-A.**
- ADD 2-75.** Refer to E101; Add one (1) type #30 light fixture at center of north exterior wall behind Stair 116. Mount fixture at 9'-0". Fixture shall be circuited to EH1A-5, LCP1A-5.
- ADD 2-76.** Refer to E101; Elevator Equipment 124 – Delete type #25 light fixture in this room. Provide two (2) type #5 light fixtures, chain hung to 7'-6". Connect both light fixtures to circuit EH2A-6.

- ADD 2-77.** Refer to E101; Elevator 122 – Type #34 fixtures shall be 4’ fluorescent fixtures. Reference revisions to light fixture schedule for light fixture specification.
- ADD 2-78.** Refer to E101; Weights/Cardio 120A – Ceiling fans shall be connected to panel “L1B1”. Provide additional room controller for 120V load.
- ADD 2-79.** Refer to E102; Large Group Studio 124 – Provide additional room controller for 120V ceiling fans.
- ADD 2-80.** Refer to E102; Elevator 222 - Light fixture type #15 shall be changed to type #34.
- ADD 2-81.** Refer to E103; Elevator 322 – Light fixture type #15 shall be changed to type #34.
- ADD 2-82.** Refer to E201, Men’s Locker 132B; Provide clock receptacle for video monitor on east wall. Coordinate exact height with Owner and backing/mounting bracket. See **Attachment A2** for location of video monitor. Provide dedicated circuit to new 20A/1P breaker in panel “L1C1”.
- ADD 2-83.** Refer to E201, Women’s Locker 133A; Provide clock receptacle for video monitor on north wall. Coordinate exact height with Owner and backing/mounting bracket. See **Attachment A3** for location of video monitor. Provide dedicated circuit to new 20A/1P breaker in panel “L1C1”.
- ADD 2-84.** Refer to E201, Men’s Restroom 132A; Hand dryer has been relocated to center of wall. Electrical connection shall be moved as well. See **Attachment A2** for location.
- ADD 2-85.** Refer to E201, Men’s Shower 132D; Add connection for hair dryer. Provide dedicated circuit to new 20A/1P breaker in panel “L1C1”. See **Attachment A2** for location.
- ADD 2-86.** Refer to E201, Women’s Locker 133A; Add connection for hair dryer. Provide dedicated circuit to new 20A/1P breaker in panel “L1C1”. See **Attachment A3** for location.
- ADD 2-87.** Refer to E201, Privacy Restroom 125A; Add connection for hair dryer. Provide dedicated circuit to new 20A/1P breaker in panel “L1A2”. See **Attachment A4** for location.
- ADD 2-88.** Refer to E202; Provide flush mounted j-box for scoreboard, two (2) locations at MAC Court 210 and two (2) locations at Gym 250, verify exact locations with the Architect. Provide ¾” conduit to panel “L2B2”, coordinate with scoreboard installer.
- ADD 2-89.** Refer to E301, Men’s Locker 132B; Provide data outlet for video monitor on east wall. Coordinate exact height with Owner and backing/mounting bracket. See **Attachment A2** for location of video monitor.
- ADD 2-90.** Refer to E301, Women’s Locker 133A; Provide data outlet for video monitor on north wall. Coordinate exact height with Owner and backing/mounting bracket. See **Attachment A3** for location of video monitor.
- ADD 2-91.** Refer to A10/E402; Lighting Control Riser Diagram – Restroom 133 (RC-1F) is not shown on riser diagram, but shall be similar to Restroom 132.

- ADD 2-92.** Refer to E500; Light Fixture Schedule: Add type A2 fixture, which is similar to type A, except with type V distribution.
- ADD 2-93.** Refer to E500; Equipment Connection Schedule (Elevator): Change feeder to 3-#1AWG and in 1-1/2" conduit. Change disconnect to 200 Amp Fused.
- ADD 2-94.** Refer to E500 Interior Light Fixture Schedule; Revise type #24 to include 16' safety chain accessory #HBL-TRI16.
- ADD 2-95.** Refer to E500 Interior Light Fixture Schedule; Revise type #34 to be Lithonia #DMW-2-32-MVOLT-GEB10IS.
- ADD 2-96.** Refer to E500 Interior Light Fixture Schedule; Add type #36, Dual-Lite #PG-Finish Color to be selected by Architect-HTR.
- ADD 2-97.** Refer to E501; Panel Schedules – Panel OH1A: Provide lockout device for T-OL1A, circuit breakers, per NEC requirements.
- ADD 2-98.** Refer to E501; Switchboard MSH: Breakers for circuits ATS-2 shall be adjustable trip type. Change Elevator Breaker to 125 Amp, 3-pole.

MODIFICATIONS TO THE SPECIFICATIONS

- ADD 2-99.** Table of Contents: Add the following section to Division 8 – Openings;

SHA	08 52 00	WOOD WINDOWS	6
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- ADD 2-100.** Section 072100, Article 2.1; Add paragraph B as follows:

- B. Molded-Polystyrene Board Insulation: ASTM C578, of type and minimum compressive strength indicated below, with maximum flame-spread and smoke-developed indexes of 75 and 450, respectively, per ASTM E84.

- 1. Basis-of-Design: ACH Foam Technologies Foam-Control Plus 250.
 - a. Minimum R-5 and R-10 as indicated.
 - b. Compressive Strength 25 psi.

- ADD 2-101.** Section 075323, Article 2.2; Add paragraph F as follows:

- F. Edge securement for low-slope roofs, in coordination with low-slope roof sheet metal fabrications as specified in Section 076200, shall be designed and installed to meet ANSI/SPRI ES-1 as required by local building codes.

- ADD 2-102.** Section 075323; Add Article 2.9 as follows:

2.9 VAPOR RETARDER

- A. Glass-Fiber Felts: ASTM D 4601, Type II, asphalt impregnated, glass fiber reinforced.

ADD 2-103. Section 075323, Articles 3.4, 3.5, 3.6, 3.7, 3.8, 3.9 and 3.10; Re-number articles as 3.5, 3.6, 3.7, 3.8, 3.9, 3.10 and 3.11 respectively.

ADD 2-104. Section 075323; Add new Article 3.4 as follows:

3.4 VAPOR-RETARDER INSTALLATION

- A. Install over all Deck Type 1 “roof” conditions shown on structural framing plans shown on Sheets S102 and S103.
- B. Glass-Fiber Felts: Install with manufacturer approved fasteners and insulation plates as recommended by manufacturer to achieve full manufacturer’s warranted roofing system.

ADD 2-105. Section 085200 “Wood Windows” was inadvertently left out of the set of bidding documents. This section has been added as part of this Addendum.

ADD 2-106. Section 233423-2.1-B – remove “Loren Cook Company” from approved manufacturers list.

ADD 2-107. Section 263213 – General Clarification of required information for Engine Generator:

- a. Purchase an EPA certified engine – An EPA Exhaust Emission Compliance Statement is usually included in shop drawings.
- b. LLCHD Air Quality Permit is required.
- c. Owner/Operator Maintenance Manual is required.

ADD 2-108. Section 283100, “Fire Detection and Alarm”; Provide white ceiling mounted fire alarm devices. Provide white wall mounted fire alarm devices where allowed by code.

ARCHITECTURAL PRIOR APPROVALS / SUBSTITUTIONS

ADD 2-109. The following manufacturers have received prior approval for bidding purposes subject to shop drawing review:

<u>Specification Section</u>	<u>Manufacturer / Product</u>
a. 075323 – Tapered Insulation	ACH / Foam Control Tapered EPS Type II
b. 092401 – Polymer Based Direct Applied...	BASF – Senergy
c. 095113 – APC-1	Certainteed Symphony M 1222BF IOF-1
d. 095113 – APC-2	Certainteed Sand Micro SHM-150 Class A Only
e. 095113 – Grid Suspension Systems	Chicago Metallic 4000 Tempra at APC-1 and 4050 Fire Front Tempra at APC-2

ADD 2-110. The following Architectural substitutions have **NOT** been approved for use on this Project:

<u>Specification Section</u>	<u>Manufacturer / Product</u>
a. 096543.13 – Linoleum Sports Flooring	Dyna Select HD – Advanced Synthetic Sport Flooring
Reason: Product is unknown, unproven and poured floor systems are not desired by operator.	
b. 096566 – Resilient Athletic Flooring	Dynatuff-SP (6 & 10mm)
Reason: Product is unknown, unproven and poured floor systems are not desired by operator.	
c. 096566 – Resilient Athletic Flooring	Dynaforce 9.5mm – Track
Reason: Product is unknown, unproven and poured floor systems are not desired by operator.	
d. 096566 – Resilient Athletic Flooring	Dynaforce 8mm (6-12mm) Seamless Hybrid Engineering Flooring System
Reason: Product is unknown, unproven and poured floor systems are not desired by operator.	

MECHANICAL PRIOR APPROVALS / SUBSTITUTIONS

ADD 2-111. The following manufacturers have received prior approval for bidding purposes subject to shop drawing review:

<u>Equipment</u>	<u>Manufacturer</u>
a. 232114 – Expansion Tanks	Armstrong Patterson
b. 232114 – Condensate Return Units	Sterling
c. 232114 – Balancing Valves	Pro Hydronic Specialties
d. 233100 – Spiral Ductwork	Eastern Sheet Metal, Spiral Pipe of Texas
e. 233100 – Spiral Pipe	La Pine Metal Products
f. 233300 – Safety Dampers	NCA Manufacturing, Inc., United Enertech, Air Balance Inc.
g. 233300 – Volume Dampers	NCA Manufacturing, Inc., United Enertech
h. 233423 – Centrifugal roof/wall exhausters	ACME

i. 233423 – Ceiling/cabinet exhausters	ACME
j. 233423 – Mixed flow fan	ACME
k. 233423 – Exhaust Fans	Twin City Fan
l. 233423 – Roof Hoods	Twin City Fan
m. 233600 – Air Terminal Units	Price Industries
n. 233700 – Air Outlets and Inlets	Price Industries
o. 233700 – Louvers	Ruskin
p. 233813 – Commercial Kitchen Hoods	Kees Captiveaire
q. 233600 – Reheat Coils	Greenheck
r. 233600 – Air Terminal Units	MetallAire, Nailor
s. 235700 – Shell & Tube heat Exchanger	Thrush
t. 237313 – Modular Central-Station Air-H...	Temtrol, Daikin-McQuay Innovent
u. Duct Sound Silencer	Commercial Acoustics Sound Attenuators Ruskin

ADD 2-112. The following Mechanical substitutions have **NOT** been approved for use on this Project:

<u>Equipment / Fixture</u>	<u>Manufacturer</u>
a. 232114 – Air Separators	Armstrong
b. 232114 – Air / Dirt Separators	Thrush
c. 232114 – Balance Valves	Flow Design, Inc.
d. 232214 – Pressure Reducing Valves	Spence
e. 232214 – Condensate Pumps	Russell Pump
f. 232214 – Steam Traps	Spence
g. 232214 – Steam PRV	Spence
h. 232500 - Glycol Feed System	General Treatment Products
i. 232500 – Bypass Chemical Feeder	General Treatment Products
j. 233423 – Return Fans	Loren Cook
k. 233423 – Roof Hoods	Loren Cook
l. 233700 – Louvers	Air Balance Inc.
m. 233813 – Commercial Kitchen Hoods	Larkin Industries
n. 238101 – Fin Tube Radiation	Vulcan

ELECTRICAL PRIOR APPROVALS / SUBSTITUTIONS

ADD 2-113. The following manufacturers have received prior approval for bidding purposes subject to shop drawing review:

<u>Equipment</u>	<u>Manufacturer</u>
a. 265100 – Fixture Type 1, 1E, 1a,b, 1Ha,b, 28	Corelite
b. 265100 – Fixture Type 22	Portfolio
c. 265100 – Fixture Type 30	McGraw-Edison
d. 265100 – Fixture Type 33	Erco

ADD 2-114. The following Electrical substitutions have **NOT** been approved for use on this Project:

<u>Equipment / Fixture</u>	<u>Manufacturer</u>
a. 265100 - Fixture Type 17, 17a,b, 35	PMC Lighting
b. 265100 - Fixture Type 24	Illumitex
c. 265100 – Fixture Type 31	FC Lighting

ATTACHMENTS

ADD 2-115. The following attachments are included as part of this addendum:

- Pre-Bid Sign-in Sheets.
- Existing Building Drawings – attached.
- APEX Pre-Renovation Environmental Survey report dated 2-3-2011 is attached.
- The APEX PCM asbestos clearance letter date 8/23/2013 is attached.
- Attachment A1 – Revision to A1/A101.
- Attachments A2, A3 & A4 – Revisions to D11/A151.
- Attachment A5 – New Detail A4 for Sheet A602.
- Attachments A6 & A7 – Revisions to A1/A701.
- Attachments S102-A, B, C & D – Revisions to Sheet S102.
- Attachment S202-A – Revision to Sheet S202.
- Attachment S302-A – Revision to Sheet S302.
- Attachments S310-A, B, C, D, E, F & G – Revisions to Sheet S310.
- Attachment S502-A – Revision to Sheet S502.
- Attachment S503-A – Revision to Sheet S503.
- Attachment E1 – Lighting at north elevation.
- Specification Section 085200 “Wood Windows”.

END OF ADDENDUM NO. 2

Purpose: Pre-BID MTO

Project Name: EAST CAMPUS REC Project No. AD141039

Date: 9/20/13 Time: 10:00 AM Location: 1901 Y STREET

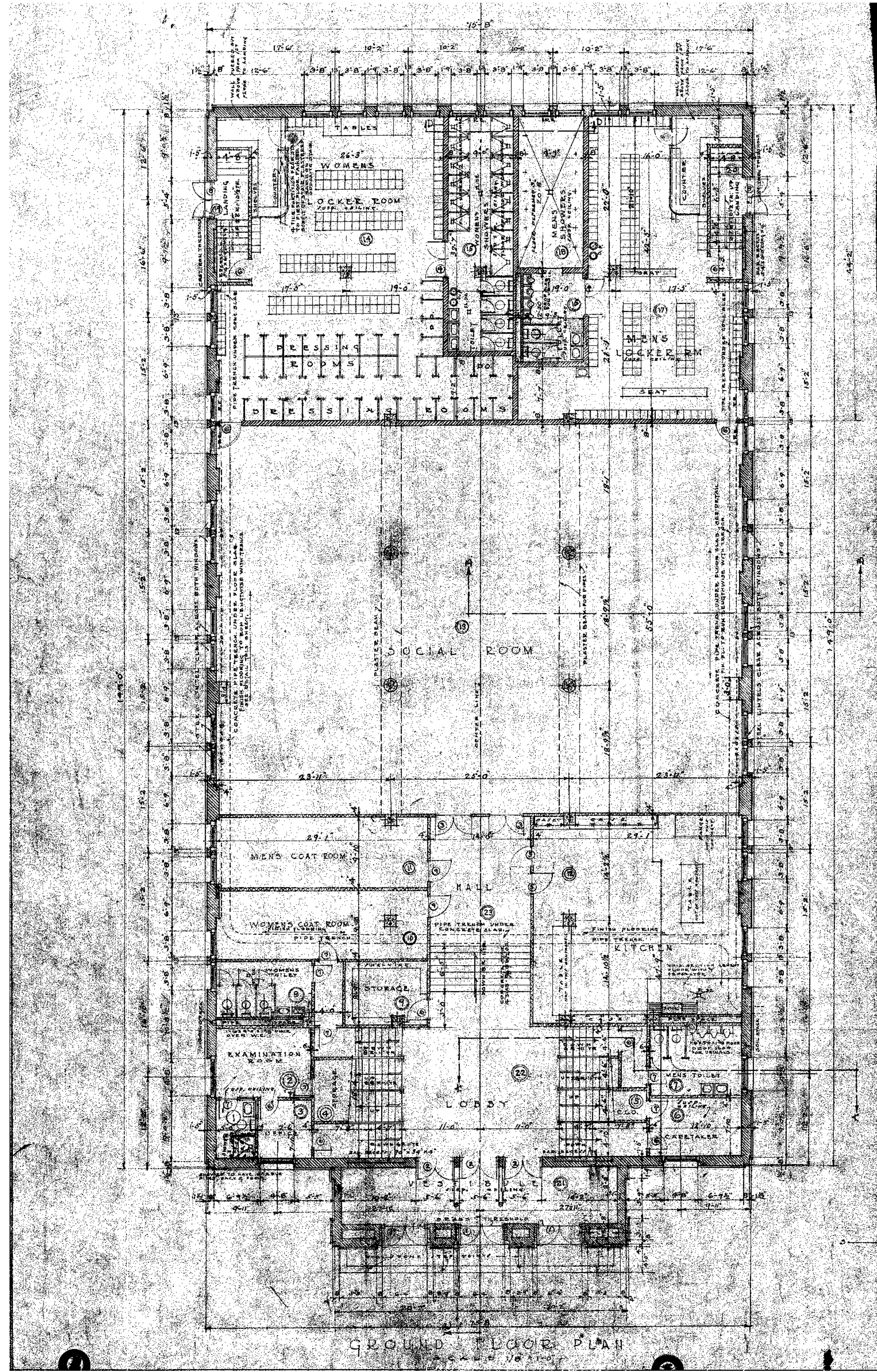
Name	Organization	Phone	Fax	E-Mail
<u>BRAD MUEHLING</u>	<u>UNL FPC</u>	<u>472-4812</u>		<u>BMUEHLING2@unl.edu</u>
<u>DAVID QUADE</u>	<u>SINCLAIR HILLS</u>	<u>476-7331</u>		<u>DQUADE@sinclairhills.com</u>
<u>DAN THOMPSON</u>	<u>ETI</u>	<u>476-1273</u>		<u>DThompson@eti-engineers.com</u>
<u>TOMY DURSKEY</u>	<u>ETI</u>	<u>476-7173</u>		<u>TJDURSKEY@ETI-ENGINEERS.COM</u>
<u>JEFF NICKLAS</u>	<u>HAMPTON</u>	<u>489-8858</u>		<u>JNICKLAS@HAMPTON1.COM</u>
<u>TIM GALLAGHAN</u>	<u>KIEWIT</u>	<u>290-492</u>		<u>tim.gallaghan@kiewit.com</u>
<u>Mike Callaway</u>	<u>Kiewit</u>	<u>977-4517</u>	<u>435-2080</u>	<u>mike.callaway@kiewit.com</u>
<u>BOB CAMPOS</u>	<u>KIEWIT</u>	<u>681-8039</u>		<u>BOB.CAMPOS@KIEWIT.COM</u>
<u>Jim Holland</u>	<u>BOYD JONES</u>	<u>553-1804</u>	<u>553-5894</u>	<u>j.holland@boydjones.biz</u>
<u>David Langenberg</u>	<u>Hawkins</u>	<u>402-221-7602</u>	<u>402-342-3221</u>	<u>DLangenberg@Hawkins.com</u>
<u>Jason Houdek</u>	<u>Mechanical Writers</u>	<u>(402) 474-7761</u>		<u>jhoudek@falconhunting.com</u>
<u>Gil Balboa</u>	<u>Midlands mech</u>	<u>402-525-6201</u>		<u>gbalboa@midmech.nc.com</u>
<u>Pat Duesman</u>	<u>Chicago Lumber</u>	<u>402-342-0840</u>		<u>patdedc-america.com</u>
<u>Jon Henne</u>	<u>Meco-Henne</u>	<u>402-339-8127</u>	<u>402-339-8147</u>	<u>mmanuel@meo-henne.com</u>
<u>Nick Cole</u>	<u>CECM</u>	<u>(402) 474-1341</u>		<u>nicole@commonwealthlectrical.com</u>
<u>LEROY BELL</u>	<u>CECM</u>	<u>(402) 473-2266</u>		<u>lbell@commonwealthlectrical.com</u>
<u>Tim Maschauer</u>	<u>CECM</u>	<u>402-473-2235</u>		<u>tmasschauer@commonwealthlectrical.com</u>
<u>AARON KENNING</u>	<u>NIFCO</u>	<u>402-477-0666</u>		<u>akenning@nifco-mechanical.com</u>
<u>JOHN ERICH</u>	<u>KIDWELL</u>	<u>402-475-9151</u>		<u>jeiriche@kidwell-us.com</u>

Purpose: Pre-Bid Meeting

Project Name: East Campus Rec Ctr. Renovation & Addition Project No. A016P039

Date: 9/20/13 Time: 10:00 AM Location: 1901 Y Street

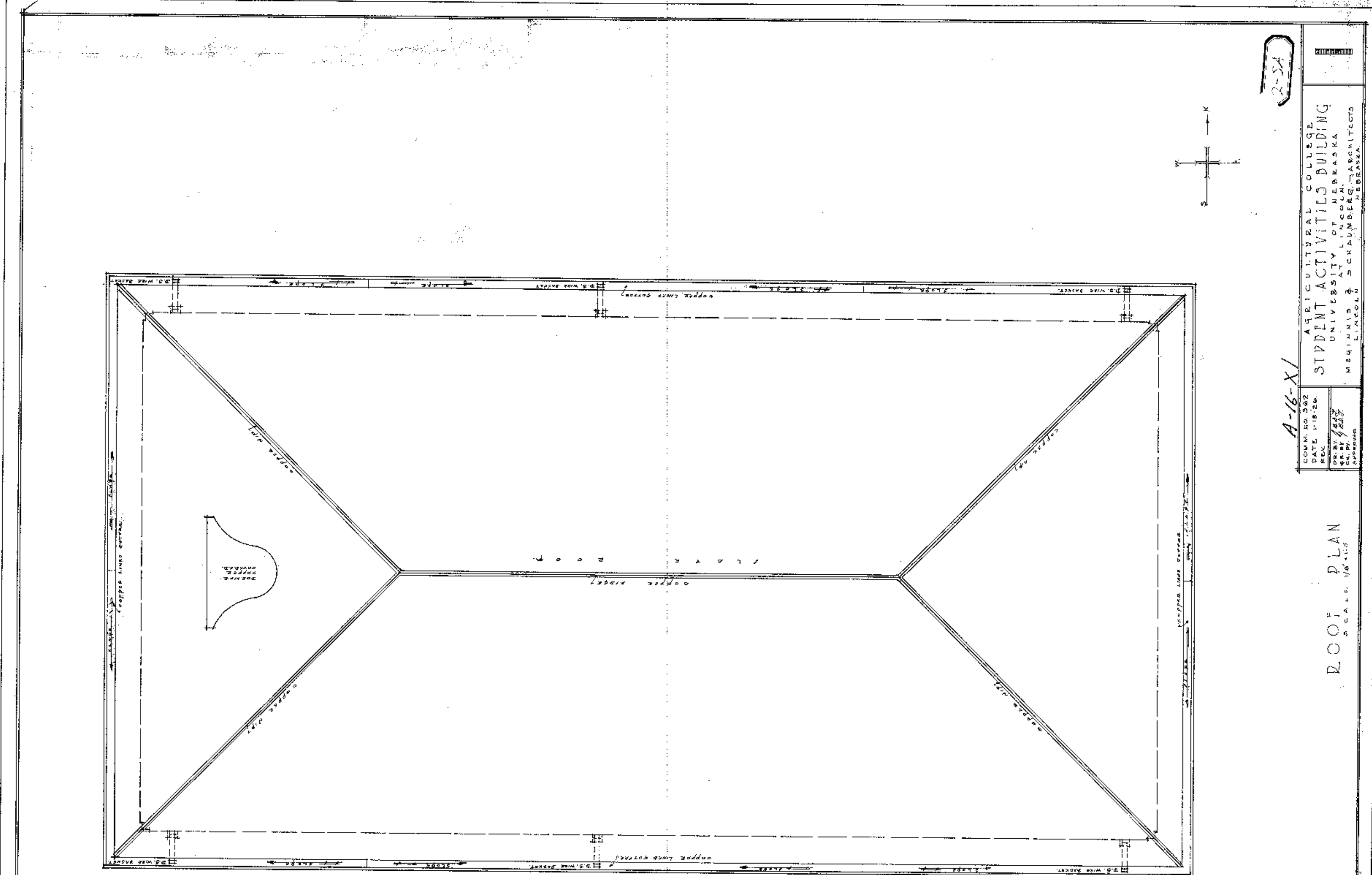
Name	Organization	Phone	Fax	E-Mail
<u>DAN GRAYNO</u>	<u>SHA</u>	<u>476-7331</u>	<u>701-460-2311</u>	<u>ESINCL@D.HILL.COM</u>
<u>Stan Campbell</u>	<u>UNL CRec</u>	<u>472-3467</u>	<u>2-8080</u>	<u>scampbell1@unl.edu</u>
<u>Amy Lanham</u>	<u>UNL CRec</u>	<u>472-9481</u>	<u>2-8080</u>	<u>alanham2@unl.edu</u>
<u>Dustin Kotik</u>	<u>UNL Procurement</u>	<u>2-5881</u>	<u>2-2246</u>	<u>dustin.kotik@unl.edu</u>
<u>Dave Kirsch</u>	<u>Empire Electric</u>	<u>416-5197</u>		<u>dave@empireelectric.com</u>
<u>Dustin Huernink</u>	<u>New Horizons</u>	<u>261-8130</u>	<u>-8136</u>	<u>dustin@newhorizons-llc.com</u>
<u>Rick Wintermute</u>	<u>Kingem Const</u>	<u>465-4400</u>	<u>-4529</u>	<u>rickw@kingembuilders.com</u>
<u>Shono Brown</u>	<u>FALCON</u>	<u>466-5676</u>		<u>shono@falconhvac.com</u>
<u>RODERICK HANSEN</u>	<u>H & S</u>	<u>471-1573</u>	<u>471-1574</u>	<u>rhan:en@hsphe.com</u>



THE ORIGINAL CONSTRUCTION DRAWINGS ASSOCIATED WITH THE EXISTING BUILDING ARE INCLUDED WITHIN THE FINAL CONTRACT DOCUMENTS FOR THIS PROJECT AS A COURTESY TO THE CONTRACTOR, AND ARE BEING PROVIDED BY THE UNIVERSITY OF NEBRASKA FOR INFORMATION PURPOSES ONLY. NEITHER THE OWNER AND/OR DESIGN PROFESSIONALS ASSOCIATED WITH THIS PROJECT CAN SUBSTANTIATE THE ACCURACY OF THE INFORMATION DEPICTED IN THE ORIGINAL DOCUMENTS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS.

A1 GROUND FLOOR PLAN

NOT TO SCALE EXISTING BUILDING PLANS



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A10 FOUNDATION PLAN & ROOF PLAN

NOT TO SCALE EXISTING BUILDING PLANS

NOTES:

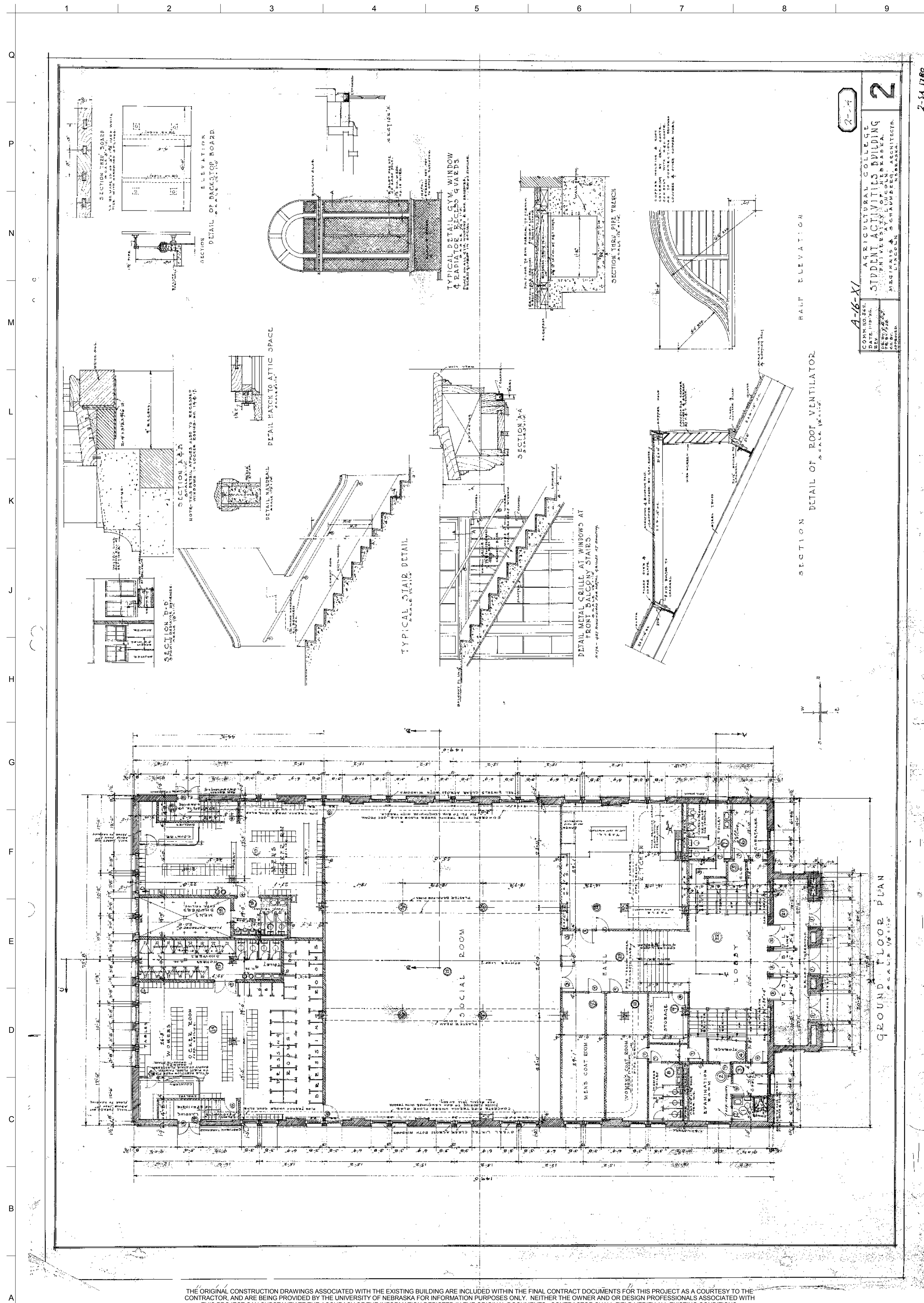
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2. ALL WALLS AND PARTITIONS ARE TO BE CONCRETE UNLESS OTHERWISE NOTED.
3. ALL FLOORS ARE TO BE CONCRETE UNLESS OTHERWISE NOTED.
4. ALL ROOFS ARE TO BE AS SHOWN UNLESS OTHERWISE NOTED.
5. ALL STRUCTURAL STEEL IS TO BE A36 UNLESS OTHERWISE NOTED.
6. ALL STRUCTURAL WOOD IS TO BE SYPHUM UNLESS OTHERWISE NOTED.
7. ALL STRUCTURAL GLASS IS TO BE 1/2" CLEAR UNLESS OTHERWISE NOTED.
8. ALL STRUCTURAL GLASS IS TO BE SET IN ALUMINUM CHANNELS UNLESS OTHERWISE NOTED.
9. ALL STRUCTURAL GLASS IS TO BE SET IN AN ANGLE IRON UNLESS OTHERWISE NOTED.
10. ALL STRUCTURAL GLASS IS TO BE SET IN AN ANGLE IRON UNLESS OTHERWISE NOTED.
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A-16-X1
STUDENT ACTIVITIES BUILDING
 UNIVERSITY OF NEBRASKA
 1111 N. STREET
 LINCOLN, NE 68508
 402.472.1377

SINCLAIR hills architects 700 O.S. LINCOLN, NE 68508 T: 402.472.1377 F: 402.472.1341 WWW.SINCLAIRHILLSARCHITECTS.COM	Existing Building Drawings		MECHANICAL/ELECTRICAL Engineering Technologies, Inc. 825 W. Street, Suite 200 Lincoln, NE 68508 402.472.8272	PROJECT CONSULTANTS CODE CONSULTANT FPAC Consultants, Inc. Kansas City, MO 64111 BR: 816.531.3377 CIVIL ENGINEER O'Brien Associates Lincoln, NE 68508 402.474.6311	STRUCTURAL ENGINEERS Nielsen-Baumer Engineering, Inc. 9802 Nicholas Street, Suite 105 Lincoln, NE 68516 402.486.4750 KITCHEN CONSULTANT For Collins 2001 Lincoln, NE 68508 402.475.1787	FOR INFORMATION PURPOSES ONLY CONTRACTOR FIELD VERIFY ALL CONDITIONS	REGIONAL PROJECT ARCHITECT: DRAWN BY: DATE: September 24, 2013
						SHA PROJECT NO. 11058	G101

East Campus Recreation Center
 UNL PROJECT A016P039

G101

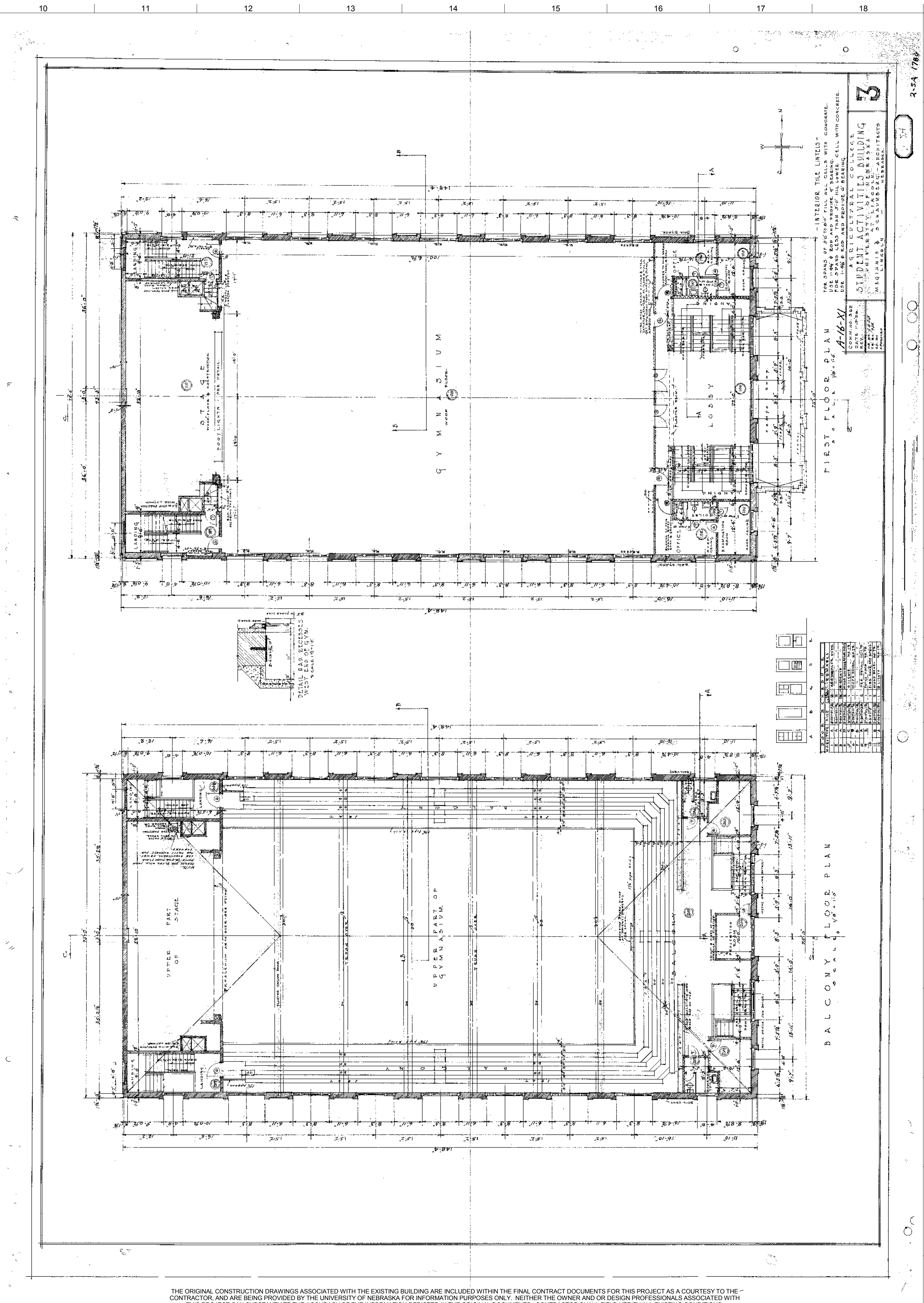


CONTRACTOR: **A-K-K**
AGRICULTURAL COLLEGE
STUDENT ACTIVITIES BUILDING
 UNIVERSITY OF NEBRASKA
 1000 S. 10TH STREET, LINCOLN, NE 68508
 DATE: 10/1/10

GROUND FLOOR PLAN
SCALE: 1/8" = 1'-0"

THE ORIGINAL CONSTRUCTION DRAWINGS ASSOCIATED WITH THE EXISTING BUILDING ARE INCLUDED WITHIN THE FINAL CONTRACT DOCUMENTS FOR THIS PROJECT AS A COURTESY TO THE CONTRACTOR, AND ARE BEING PROVIDED BY THE UNIVERSITY OF NEBRASKA FOR INFORMATION PURPOSES ONLY. NEITHER THE OWNER AND/OR DESIGN PROFESSIONALS ASSOCIATED WITH THIS PROJECT CAN SUBSTANTIATE THE ACCURACY OF THE INFORMATION DEPICTED IN THE ORIGINAL DOCUMENTS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS.

A1 GROUND FLOOR PLAN
NOT TO SCALE EXISTING BUILDING PLANS



CONTRACTOR: **A-K-K**
AGRICULTURAL COLLEGE
STUDENT ACTIVITIES BUILDING
 UNIVERSITY OF NEBRASKA
 1000 S. 10TH STREET, LINCOLN, NE 68508
 DATE: 10/1/10

BALCONY FLOOR PLAN
SCALE: 1/8" = 1'-0"

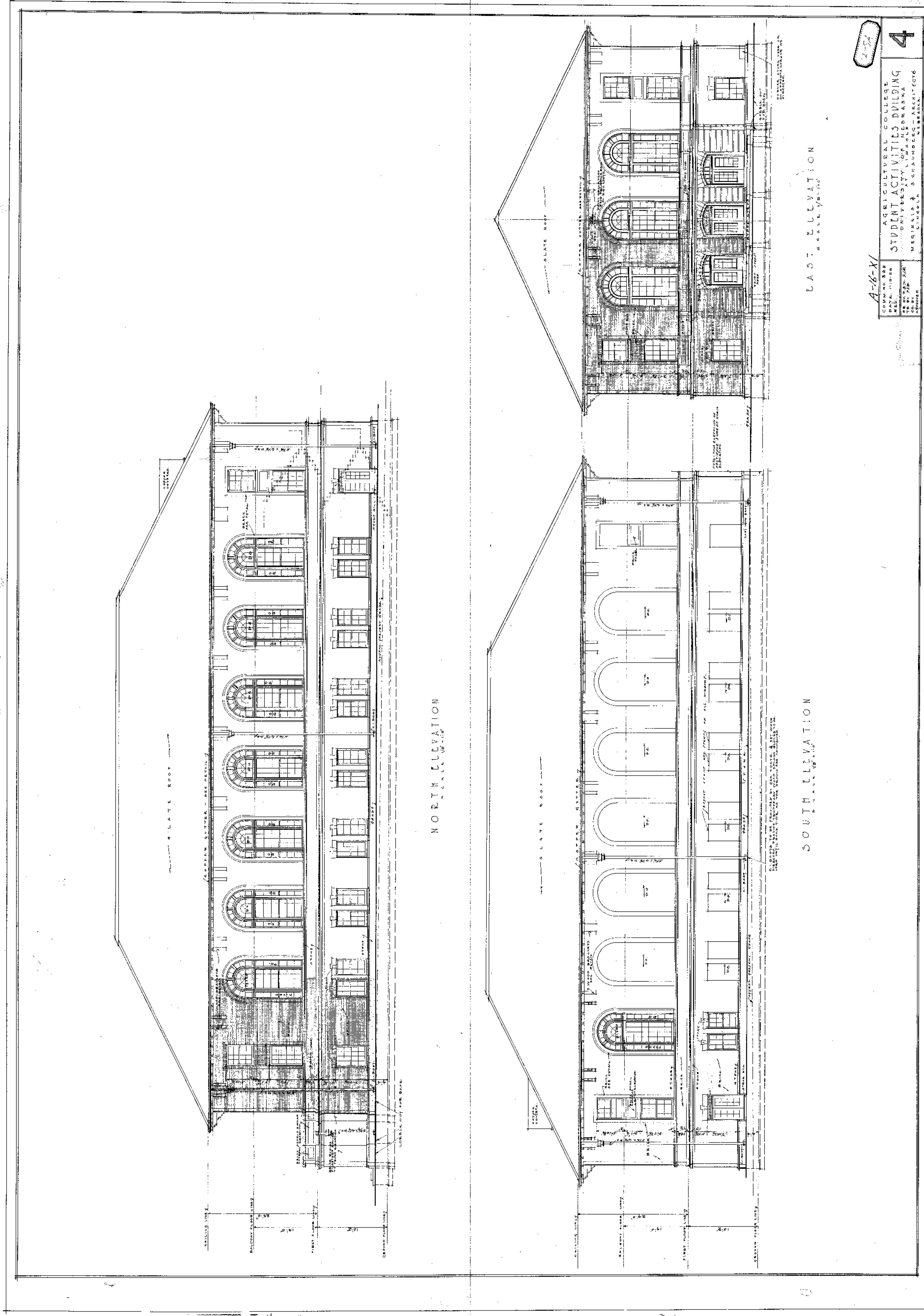
FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

THE ORIGINAL CONSTRUCTION DRAWINGS ASSOCIATED WITH THE EXISTING BUILDING ARE INCLUDED WITHIN THE FINAL CONTRACT DOCUMENTS FOR THIS PROJECT AS A COURTESY TO THE CONTRACTOR, AND ARE BEING PROVIDED BY THE UNIVERSITY OF NEBRASKA FOR INFORMATION PURPOSES ONLY. NEITHER THE OWNER AND/OR DESIGN PROFESSIONALS ASSOCIATED WITH THIS PROJECT CAN SUBSTANTIATE THE ACCURACY OF THE INFORMATION DEPICTED IN THE ORIGINAL DOCUMENTS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS.

A10 BALCONY FLOOR PLAN & FIRST FLOOR PLAN
NOT TO SCALE EXISTING BUILDING PLANS

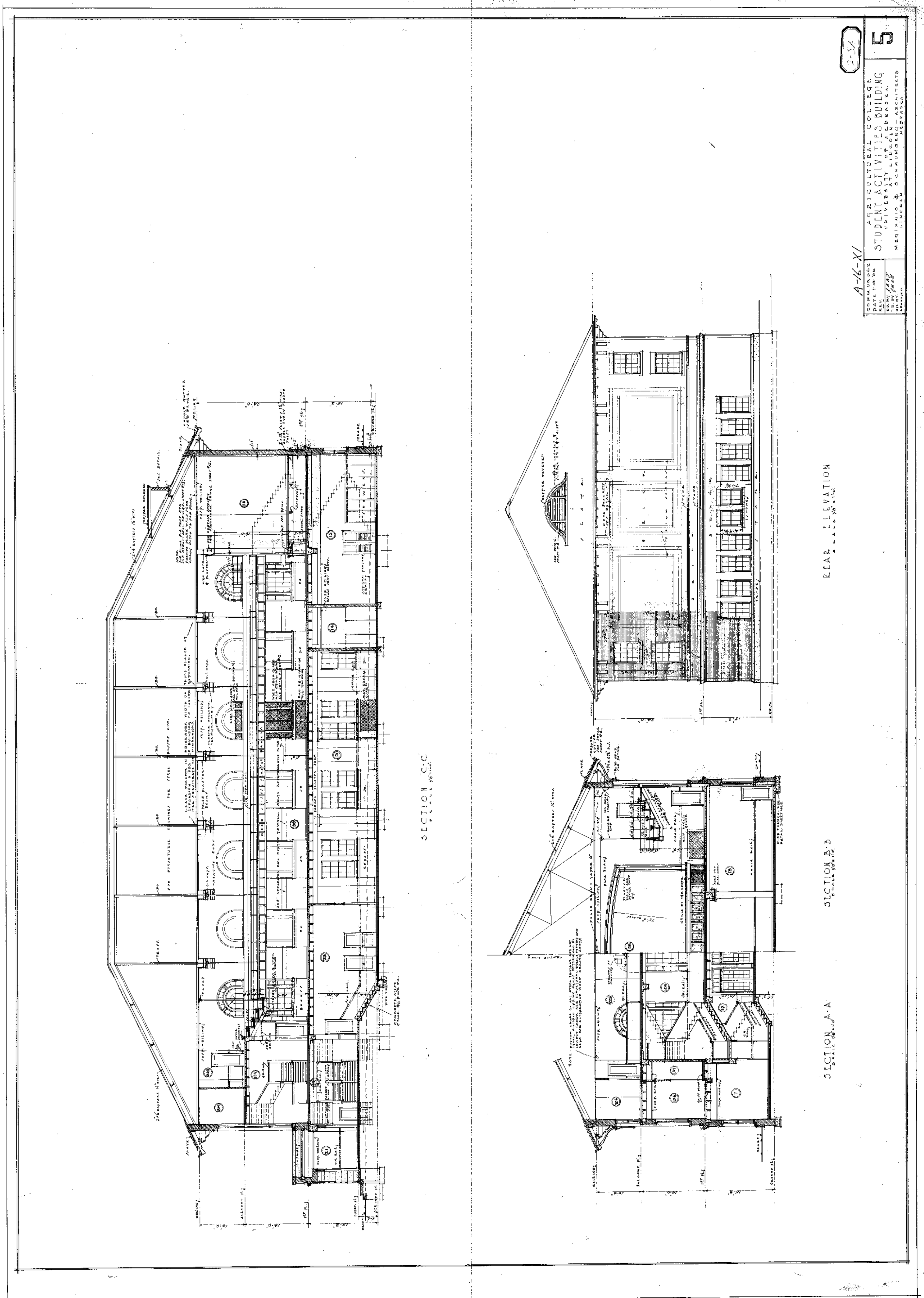
SINCLAIR hills architects 700 O.S. LINCOLN, NE 68508 T: 402.475.2311 F: 402.475.8841 Existing Building Drawings	360 HERESHEY ARCHITECTURE 300 W. 26th STREET LINCOLN, NE 68508 402.475.3300	PROJECT CONSULTANTS MECHANICAL/ELECTRICAL Engineering Technologies, Inc. 825 W. Street, Suite 200 Lincoln, NE 68508 402.475.9275 LANDSCAPE ARCHITECT Vito Schmit 111 N. V Street Omaha, NE 68102 402.553.5485	FOR INFORMATION PURPOSES ONLY CONTRACTOR: FIELD VERIFY ALL CONDITIONS FIELD VERIFY ALL CONDITIONS	REGIONAL: ARCHITECT: PROJECT ARCHITECT: DRAWN BY: DATE: September 24, 2013
	UNL PROJECT A016P039 East Campus Recreation Center	STRUCTURAL ENGINEERS Nielsen-Baumer Engineering, Inc. 9802 Nicholas Street, Suite 105 Lincoln, NE 68516 402.486.4750 KITCHEN CONSULTANT Forthling 2001 N. Street Lincoln, NE 68508 402.475.1787	CODE CONSULTANT FPAC Consultants, Inc. 2001 N. Street Lincoln, NE 68508 402.474.8311	CONTRACTOR FIELD VERIFY ALL CONDITIONS

G102
NOT TO SCALE EXISTING BUILDING PLANS



THE ORIGINAL CONSTRUCTION DRAWINGS ASSOCIATED WITH THE EXISTING BUILDING ARE INCLUDED WITHIN THE FINAL CONTRACT DOCUMENTS FOR THIS PROJECT AS A COURTESY TO THE CONTRACTOR, AND ARE BEING PROVIDED BY THE UNIVERSITY OF NEBRASKA FOR INFORMATION PURPOSES ONLY. NEITHER THE OWNER AND/OR DESIGN PROFESSIONALS ASSOCIATED WITH THIS PROJECT CAN SUBSTANTIATE THE ACCURACY OF THE INFORMATION DEPICTED IN THE ORIGINAL DOCUMENTS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS.

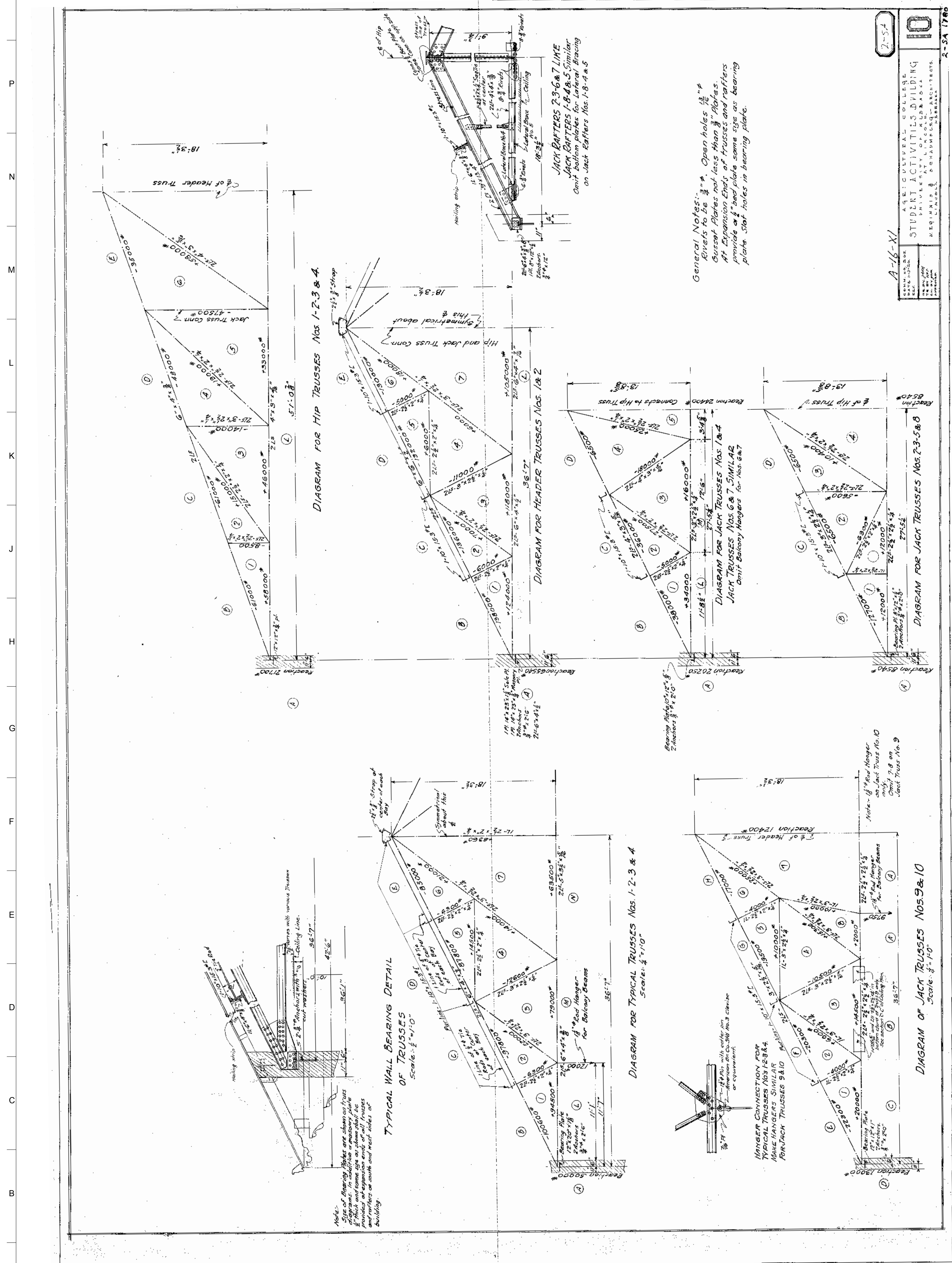
A1 ELEVATIONS
NOT TO SCALE EXISTING BUILDING PLANS



THE ORIGINAL CONSTRUCTION DRAWINGS ASSOCIATED WITH THE EXISTING BUILDING ARE INCLUDED WITHIN THE FINAL CONTRACT DOCUMENTS FOR THIS PROJECT AS A COURTESY TO THE CONTRACTOR, AND ARE BEING PROVIDED BY THE UNIVERSITY OF NEBRASKA FOR INFORMATION PURPOSES ONLY. NEITHER THE OWNER AND/OR DESIGN PROFESSIONALS ASSOCIATED WITH THIS PROJECT CAN SUBSTANTIATE THE ACCURACY OF THE INFORMATION DEPICTED IN THE ORIGINAL DOCUMENTS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS.

A10 BUILDING SECTIONS
NOT TO SCALE EXISTING BUILDING PLANS

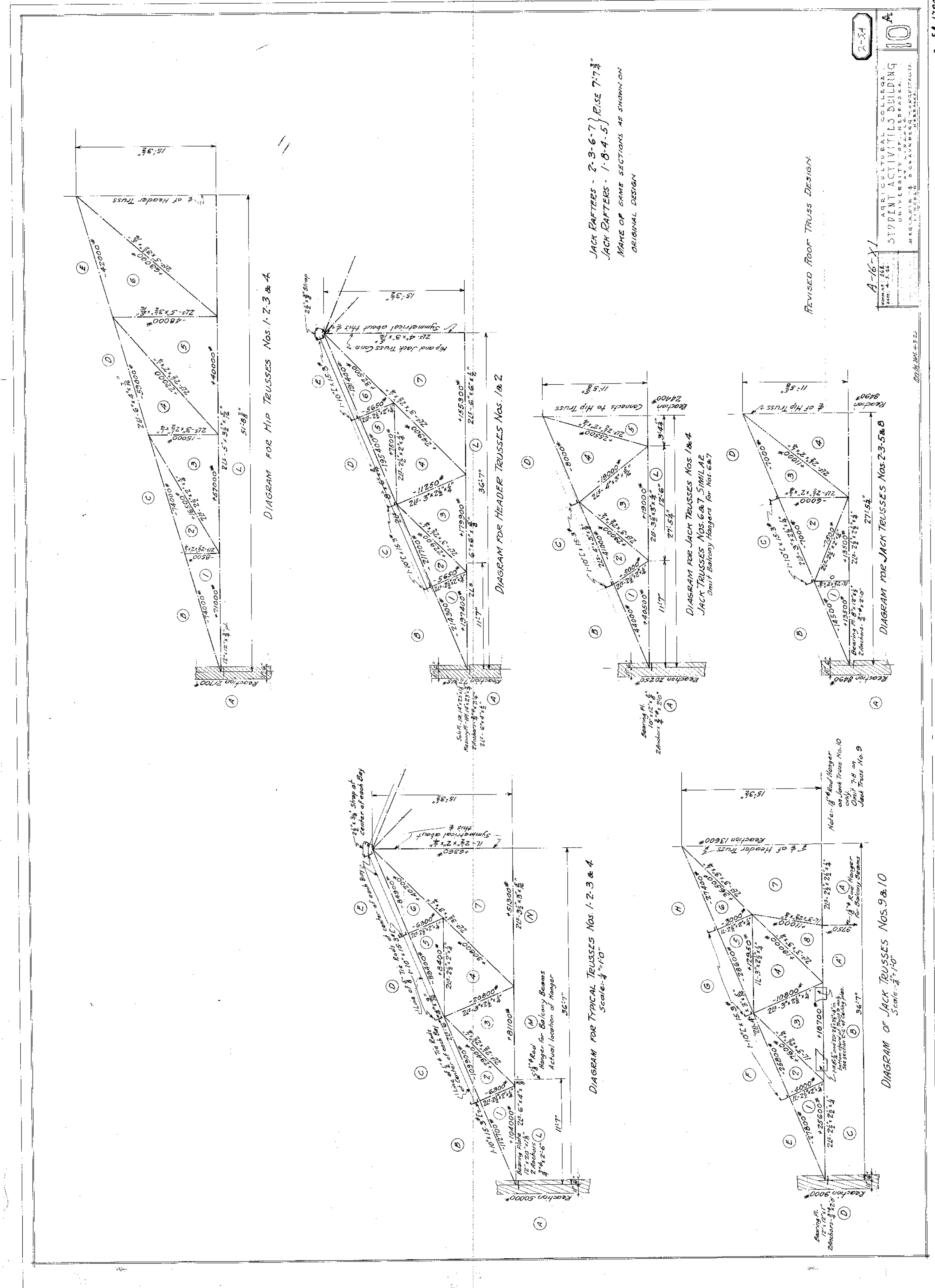
SINCLAIR HILLS ARCHITECTS 700 O.S. LINCOLN, NE 68508 T: 402.475.7331 F: 402.475.8341 Existing Building Drawings	 360 ARCHITECTURE 300 W. 24th Street Lincoln, NE 68508 402.475.3300	UNL PROJECT A016P039 East Campus Recreation Center	MECHANICAL/ELECTRICAL Engineering Technologies, Inc. 825 W. Street, Suite 200 Lincoln, NE 68508 402.475.8275	PROJECT CONSULTANTS CODE CONSULTANT FPK Consulting, Inc. Kansas City, MO 64111 BR: 816.351.3377 CIVIL ENGINEER O'Brien Associates Lincoln, NE 68508 402.474.8311	STRUCTURAL ENGINEERS Nielsen-Baumer Engineering, Inc. 9802 Nicholas Street, Suite 105 Lincoln, NE 68516 402.486.4750 KITCHEN CONSULTANT Forthling 2001 Lincoln, NE 68508 402.475.1787	REGIONAL: ARCHITECT: PROJECT ARCHITECT: DRAWN BY: CHECKED BY: DATE: September 24, 2013
			FOR INFORMATION PURPOSES ONLY CONTRACTOR FIELD VERIFY ALL CONDITIONS	AGRICULTURAL COLLEGE STUDENT ACTIVITIES BUILDING 402.475.7331 402.475.8341	11058	G103



THE ORIGINAL CONSTRUCTION DRAWINGS ASSOCIATED WITH THE EXISTING BUILDING ARE INCLUDED WITHIN THE FINAL CONTRACT DOCUMENTS FOR THIS PROJECT AS A COURTESY TO THE CONTRACTOR, AND ARE BEING PROVIDED BY THE UNIVERSITY OF NEBRASKA FOR INFORMATION PURPOSES ONLY. NEITHER THE OWNER AND/OR DESIGN PROFESSIONALS ASSOCIATED WITH THIS PROJECT CAN SUBSTANTIATE THE ACCURACY OF THE INFORMATION DEPICTED IN THE ORIGINAL DOCUMENTS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS.

A1 TRUSS DRAWINGS

NOT TO SCALE EXISTING BUILDING PLANS



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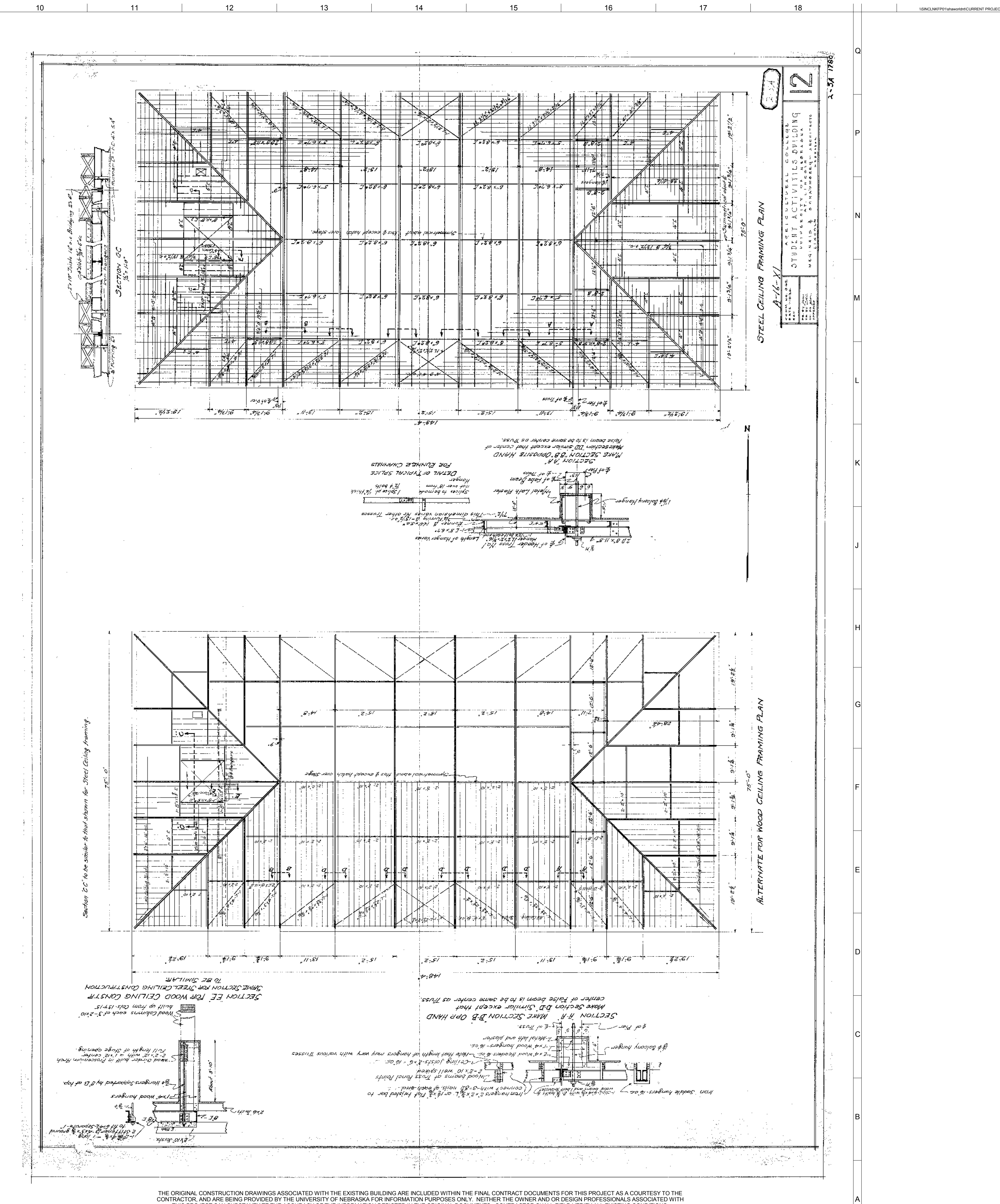
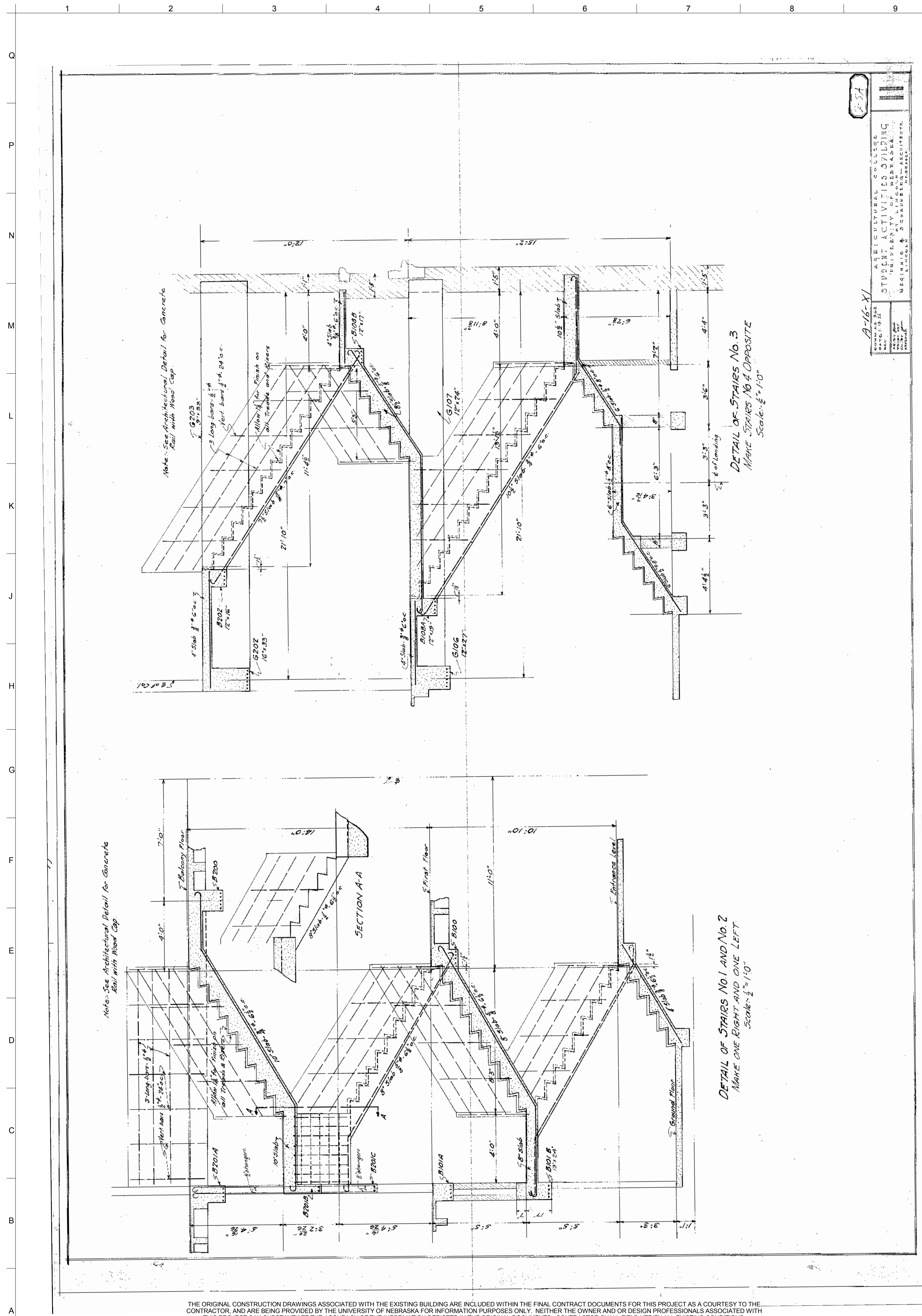
A10 TRUSS DRAWINGS

NOT TO SCALE EXISTING BUILDING PLANS

G106

NOT TO SCALE EXISTING BUILDING PLANS

SINCLAIR hills architects 700 O.S. Lincoln, NE 68508 T: 402.475.2311 F: 402.475.8841 816.475.3300	360 ARCHITECTURE 3001 W. 24th Street Lincoln, NE 68502 402.475.3300	PROJECT CONSULTANTS MECHANICAL/ELECTRICAL Engineering Technologies, Inc. 825 W. Street, Suite 200 Lincoln, NE 68502 402.475.9275 LANDSCAPE ARCHITECT Vito S. Smith 111 N. S Street Omaha, NE 68102 402.553.5485	PROJECT CONSULTANTS CIVIL ENGINEER O'Brien Associates, Inc. 2000 S. 10th Street Lincoln, NE 68508 402.474.6311 CODE CONSULTANT FRAC Consultants, Inc. Kansas City, MO 64111 816.551.3377	FOR INFORMATION PURPOSES ONLY CONTRACTOR FIELD VERIFY ALL CONDITIONS	REGIONAL: ARCHITECT: PROJECT ARCHITECT: DRAWN BY: DATE: September 24, 2013
					EAST CAMPUS RECREATION CENTER/FUNCTION BUILDING UNIVERSITY OF NEBRASKA 1000 S. 10th Street Lincoln, NE 68508 402.475.1787



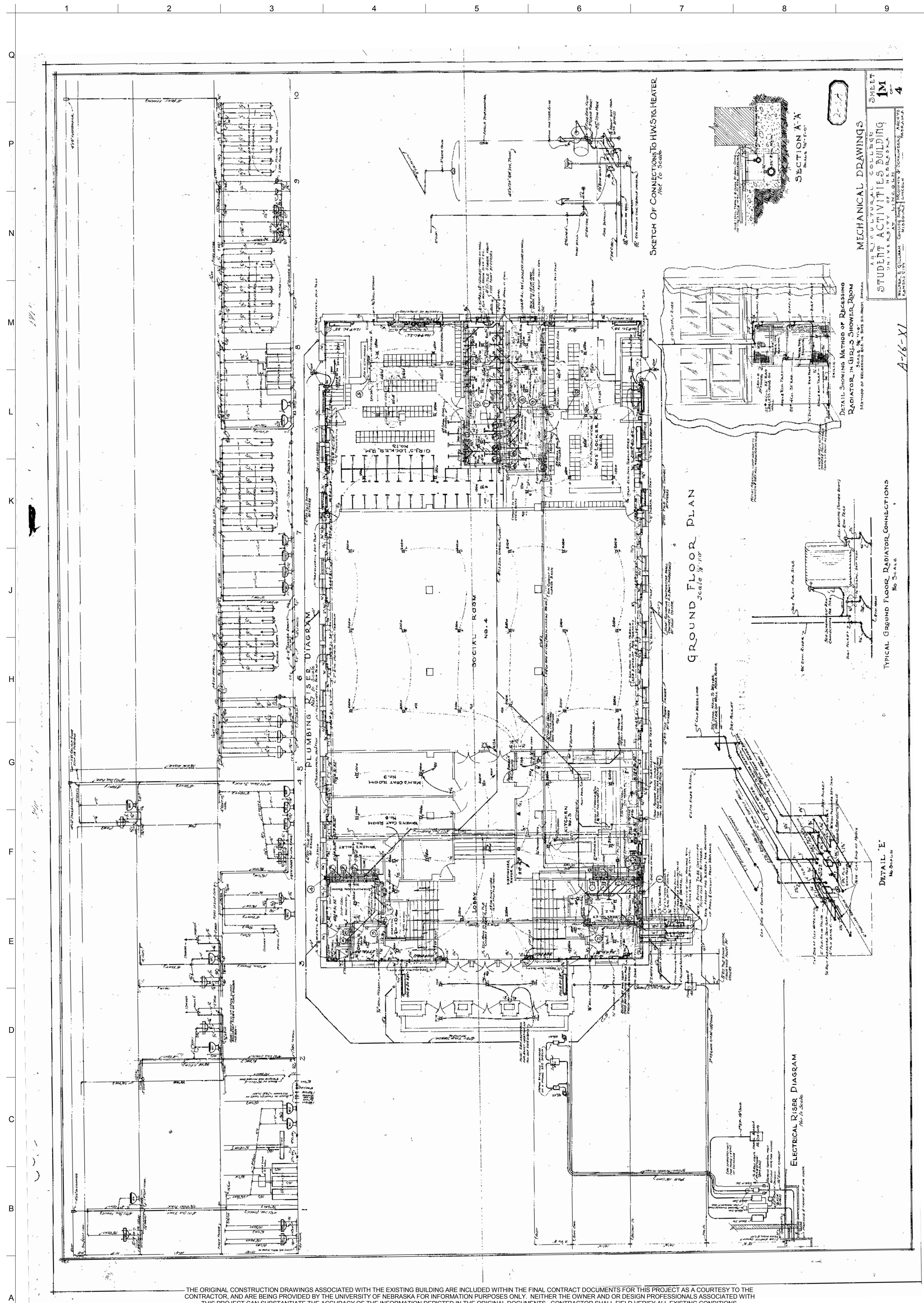
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A1 STAIR SECTIONS

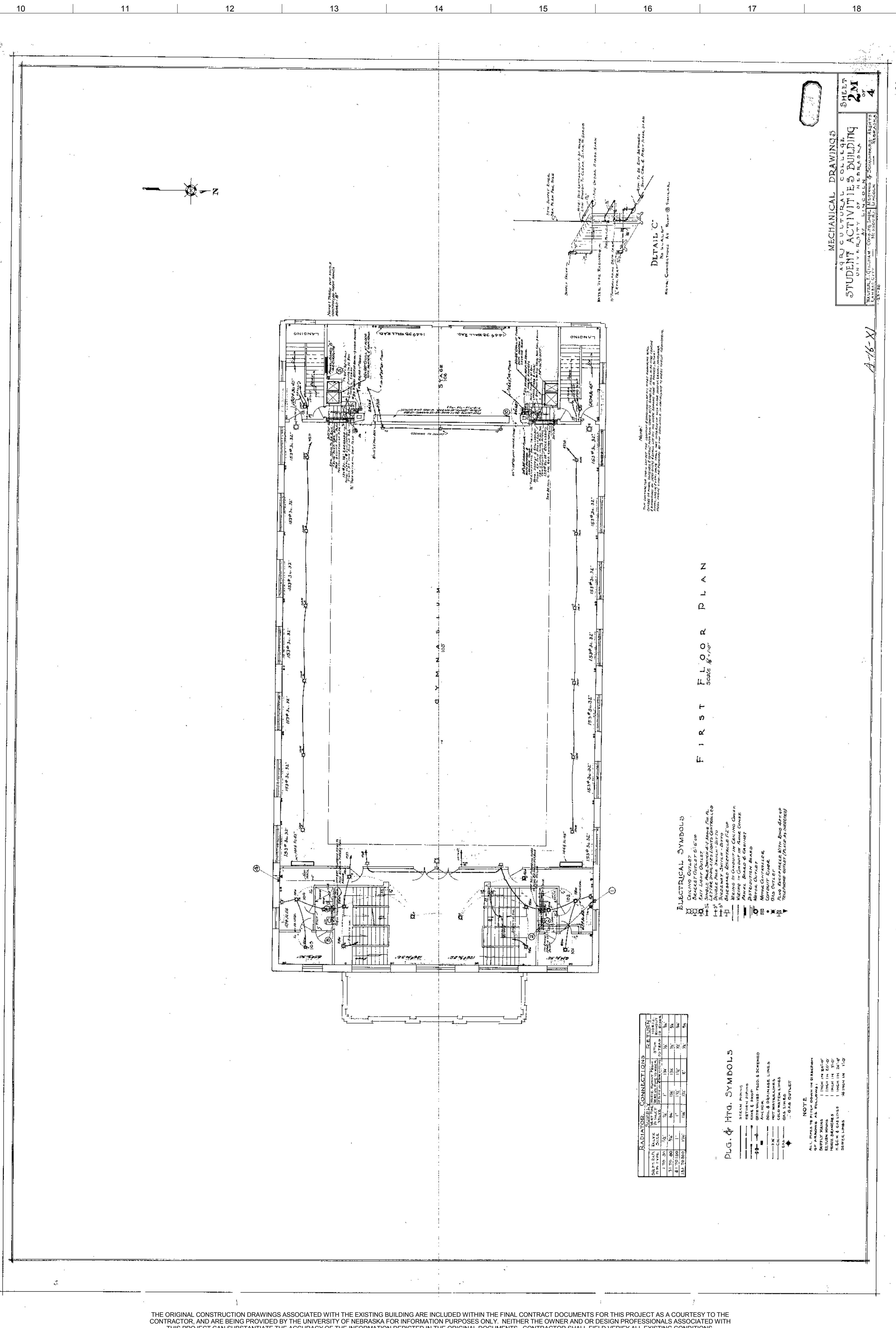
A10 CEILING FRAMING

SINCLAIR hills architects 700 O.S. LINCOLN, NE 68508 T: 402-475-1231 F: 402-475-1241 360 UNIVERSITY ARCHITECTURE 3001 W. 24th STREET LINCOLN, NE 68502 402-475-3200	PROJECT CONSULTANTS MECHANICAL/ELECTRICAL Engineering Technologies, Inc. 825 W. Street, Suite 200 Lincoln, NE 68502 402-475-8272 LANDSCAPE ARCHITECT Vito S. Smith 111 N. S Street Omaha, NE 68102 402-553-5485	PROJECT CONSULTANTS CIVIL ENGINEER O'Brien Associates 2001 F Lincoln, NE 68508 402-474-6311 CODE CONSULTANT FRAC Consultants, Inc. 2001 F Kansas City, MO 64111 816-551-3377	FOR INFORMATION PURPOSES ONLY CONTRACTOR FIELD VERIFY ALL CONDITIONS	REGIONAL: ARCHITECT PROJECT ARCHITECT: DRAWN BY: CHECKED BY: DATE: September 24, 2013
	East Campus Recreation Center UNL PROJECT A016P039			



A1 GROUND FLOOR MECHANICAL

NOT TO SCALE EXISTING BUILDING PLANS



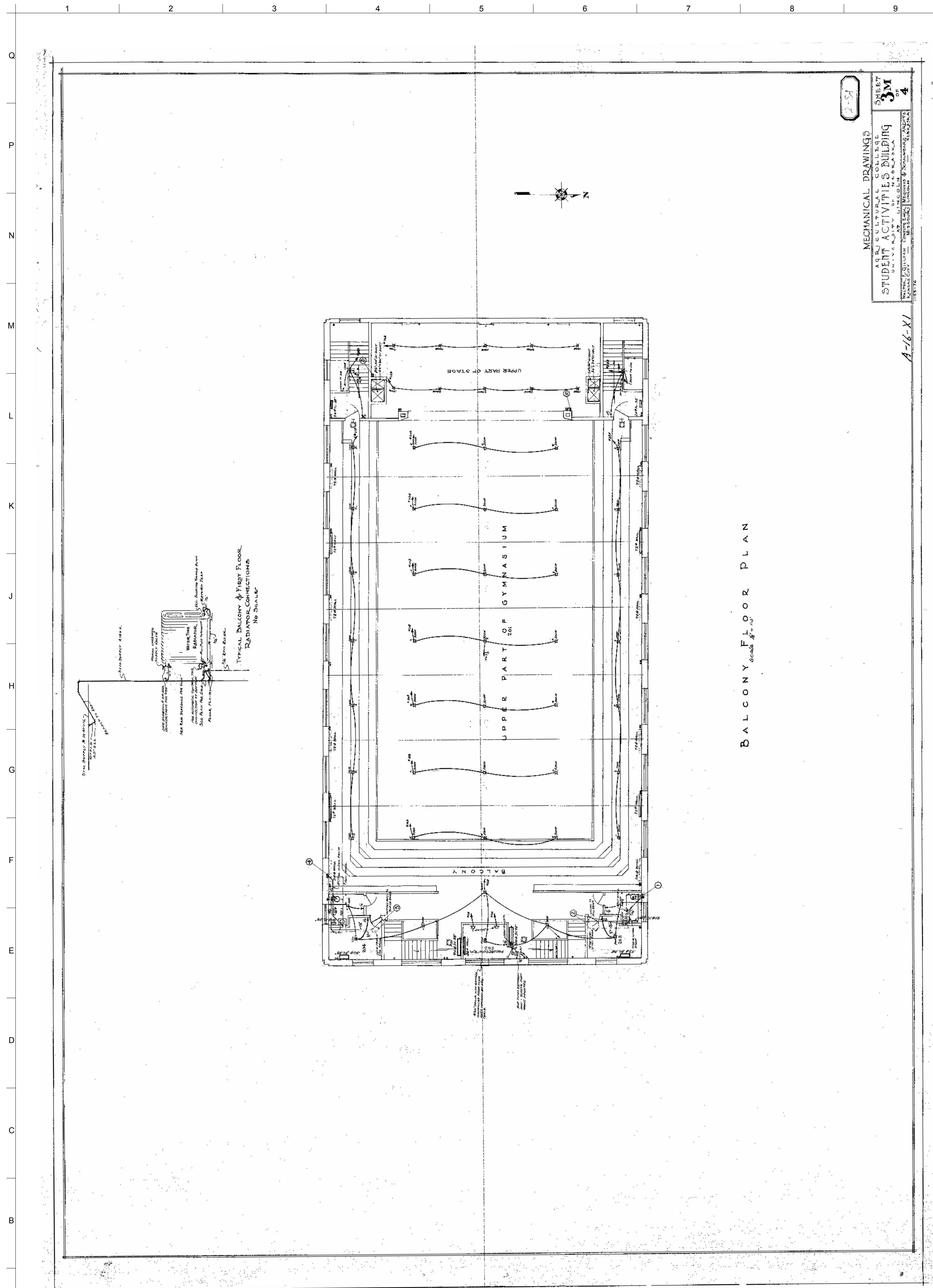
A10 FIRST FLOOR MECHANICAL

NOT TO SCALE EXISTING BUILDING PLANS

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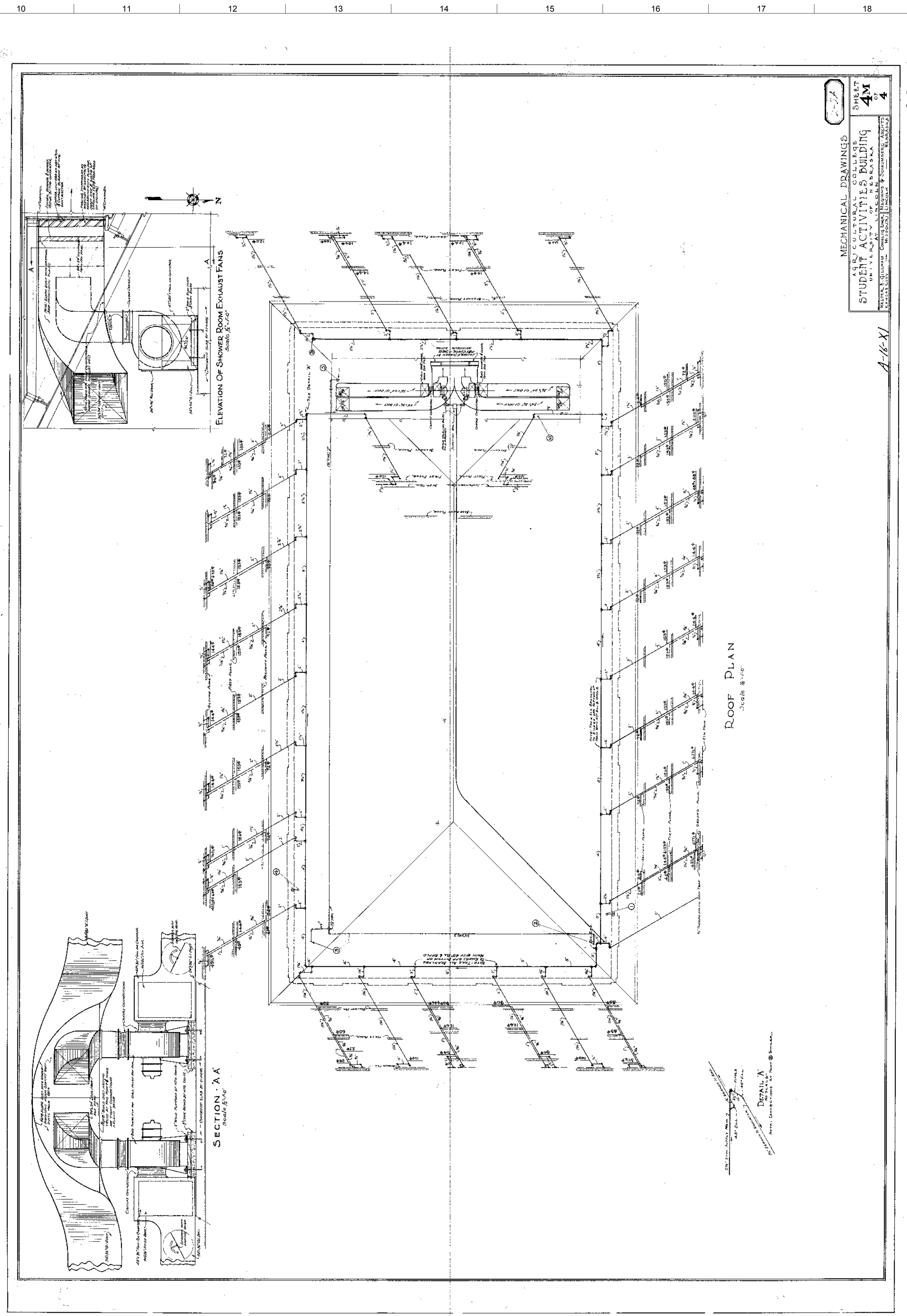
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SINCLAIR hills architects 700 O.S.L. LINCOLN, NE 68508 T: 402.475.7331 F: 402.475.8841 Existing Building Drawings	360 HERESHEBY ARCHITECTURE 3001 W. 29th STREET LINCOLN, NE 68502 402.475.3300	PROJECT CONSULTANTS MECHANICAL/ELECTRICAL Engineering Technologies, Inc. 825 W. Street, Suite 200 Lincoln, NE 68502 402.476.8276 LANDSCAPE ARCHITECT Vico Studio 111 N. S Street Omaha, NE 68102 402.553.5486	FOR INFORMATION PURPOSES ONLY CONTRACTOR FIELD VERIFY ALL CONDITIONS	REGIONAL: ARCHITECT: PROJECT ARCHITECT: DRAWN BY: DATE: September 24, 2013
	SHA PROJECT NO: 11058	G108	PROJECT CONSULTANTS CIVIL ENGINEER Olson Associates Lincoln, NE 68508 402.474.6311 CODE CONSULTANT FPKC Consultants, Inc. Kansas City, MO 64111 BR:501.3377	STRUCTURAL ENGINEERS Nielsen-Baumer Engineering, Inc. 9802 Nicholas Street, Suite 105 Lincoln, NE 68514 402.486.4750 KITCHEN CONSULTANT Forthling 2001 Lincoln, NE 68508 402.475.1787



THE ORIGINAL CONSTRUCTION DRAWINGS ASSOCIATED WITH THE EXISTING BUILDING ARE INCLUDED WITHIN THE FINAL CONTRACT DOCUMENTS FOR THIS PROJECT AS A COURTESY TO THE CONTRACTOR, AND ARE BEING PROVIDED BY THE UNIVERSITY OF NEBRASKA FOR INFORMATION PURPOSES ONLY. NEITHER THE OWNER AND/OR DESIGN PROFESSIONALS ASSOCIATED WITH THIS PROJECT CAN SUBSTANTIATE THE ACCURACY OF THE INFORMATION DEPICTED IN THE ORIGINAL DOCUMENTS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS.

A1 BALCONY MECHANICAL
NOT TO SCALE EXISTING BUILDING PLANS



THE ORIGINAL CONSTRUCTION DRAWINGS ASSOCIATED WITH THE EXISTING BUILDING ARE INCLUDED WITHIN THE FINAL CONTRACT DOCUMENTS FOR THIS PROJECT AS A COURTESY TO THE CONTRACTOR, AND ARE BEING PROVIDED BY THE UNIVERSITY OF NEBRASKA FOR INFORMATION PURPOSES ONLY. NEITHER THE OWNER AND/OR DESIGN PROFESSIONALS ASSOCIATED WITH THIS PROJECT CAN SUBSTANTIATE THE ACCURACY OF THE INFORMATION DEPICTED IN THE ORIGINAL DOCUMENTS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS.

A10 ROOF PLAN MECHANICAL
NOT TO SCALE EXISTING BUILDING PLANS

SINCLAIR hills architects 700 O.S. LINCOLN, NE 68508 T: 402.475.2331 F: 402.475.8341 Existing Building Drawings	360 HERESHEY ARCHITECTURE 300 W. 24th STREET LINCOLN, NE 68508 402.475.3300	PROJECT CONSULTANTS MECHANICAL/ELECTRICAL Engineering Technologies, Inc. 825 W. Street, Suite 200 Lincoln, NE 68508 402.475.8273 LANDSCAPE ARCHITECT Vico, Schmitz Omaha, NE 68102 402.553.5485	PROJECT CONSULTANTS CIVIL ENGINEER O'Brien Associates Lincoln, NE 68508 402.474.8311 CODE CONSULTANT FPKC Consultants, Inc. Kansas City, MO 64111 BR:501.3377	FOR INFORMATION PURPOSES ONLY CONTRACTOR FIELD VERIFY ALL CONDITIONS	REGIONAL: ARCHITECT: PROJECT ARCHITECT: DRAWN BY: DATE: September 24, 2013
					STRUCTURAL ENGINEER: Nielsen-Baumer Engineering, Inc. 9802 Nicholas Street, Suite 105 Lincoln, NE 68514 402.486.4750 KITCHEN CONSULTANT Forthling Lincoln, NE 68508 402.475.1787

G109
SHEET PROJECT NO. 11058

PRE-RENOVATION ENVIRONMENTAL SURVEY REPORT



PERFORMED AT:

EAST CAMPUS ACTIVITIES BUILDING
UNIVERSITY OF NEBRASKA-LINCOLN

PREPARED FOR:

KEVIN HERR
PROJECT MANAGER/DESIGNER
FM&P, FACILITIES PLANNING AND CONSTRUCTION
1901 "Y" STREET
LINCOLN, NE 68588-0605

PREPARED BY:

APEX ENVIRONMENTAL CONSULTANTS, INC.
14955 W. 101ST TERRACE
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WWW.4APEX.COM

APEX PROJECT NO. 110018E
FEBRUARY 3, 2011

PRE-RENOVATION ENVIRONMENTAL SURVEY REPORT



PERFORMED AT:

**EAST CAMPUS ACTIVITIES BUILDING
UNIVERSITY OF NEBRASKA-LINCOLN**

PREPARED FOR:

**KEVIN HERR
PROJECT MANAGER/DESIGNER
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CLIENT:

Kevin Herr
Project Manager/Designer
FM&P, Facilities Planning and Construction
1901 "Y" Street
Lincoln, NE 68588-0605

Tel.: 402-472-9138
Fax: 402-472-5908

PROJECT:

Pre-Renovation Environmental Survey Report
East Campus Activities Building
University of Nebraska-Lincoln

APEX Project No. 110018E
UNL Project No. A016P039

ENVIRONMENTAL CONSULTANT:

APEX ENVIRONMENTAL CONSULTANTS, INC.



Inspector:

Lance Tomlin
Project Manager

Address: 14955 West 101st Terrace
Lenexa, Kansas 66215
Tel: (913) 338-APEX Fax: (913) 338-2741
e-mail: LTomlin@4apex.com

1.0 EXECUTIVE SUMMARY

On January 13-14, 2011, APEX Environmental Consultants (APEX), Inc. completed surveys for asbestos-containing materials (ACM), lead-based paint (LBP), mercury, and other environmental hazards in support of planned renovation/demotion in the East Campus Activities at the University of Nebraska-Lincoln. The inspection included the entire building. Room/door numbering used throughout this report is as used by the University for existing conditions.

Lance Tomlin of APEX performed the surveys. Mr. Tomlin's Nebraska Department of Health and Human Services (NDHHS) Lead Risk Assessor Certification Number is 213. Mr. Tomlin's NDHHS Asbestos Inspector Certification Number is 962. Copies of these certifications are included in Appendix V.

The intent of the ACM survey was to positively identify and quantify ACM in the building. The purpose of the LBP survey was to conduct an investigation of painted components inside and outside of the building in an effort to identify which painted surfaces contain lead. Such information includes locations and quantities of known ACM and LBP. In addition, a general investigation of the building was conducted to identify other above-ground environmental hazards including polychlorinated biphenyls (PCBs), mercury-containing components, evidence of underground storage tanks, biological hazards, and other readily accessible contaminants. This report has been compiled for the University of Nebraska-Lincoln based on the authorization of Kevin Herr, Project Manager/Designer.

2.0 SURVEY METHODOLOGY

Asbestos-Containing Materials

The asbestos survey of the building was performed in accordance with the Environmental Protection Agency's (EPA) National Emission Standard for Hazardous Air Pollutants (NESHAP), (ref: 40 CFR, Part 61), utilizing the AHERA assessment, sampling, and analytical protocols (ref: 40 CFR 763).

Suspect materials were grouped together into homogeneous sampling areas. A homogeneous sampling area contains material that is uniform in texture and color and appears to be identical in every other respect. Building materials that were installed at different times or that do not appear to be similar in any other way are considered separate homogeneous materials/areas. Bulk samples were collected of suspect ACM in order to determine the presence of asbestos. The bulk samples were sent to Schneider Laboratories, an independent NVLAP-accredited laboratory, for analysis. The samples were analyzed using polarized light microscopy (PLM) coupled with dispersion staining techniques in accordance with Appendix A to Subpart F of 40 CFR Part 763 (1982). For your information, the EPA considers a material to be asbestos-containing if it contains greater than one percent (1%) asbestos fibers. OSHA regulations cover materials containing asbestos in any concentration. Please refer to the bulk sample analytical data found in Appendix II of this report.

The EPA considers the following materials to be non-suspect ACM, and consequently, they were not sampled:

- Glass
- Metal
- Concrete
- Brick
- Fiberglass
- Rubber
- Foam

The data contained in this report has been compiled based upon visible and accessible materials. Without complete access to all walls/pipe chases and ceiling cavities, 100% accuracy in the following data is not possible.

Lead-Based Paint

Interior and exterior areas of the building were surveyed to determine the presence of lead in paint. The testing was accomplished by collection of a small number of paint samples. The samples were sent to an accredited laboratory for analysis by flame (direct aspiration) atomic absorption spectrophotometry.

PCBs, Mercury, and other Environmental Hazards

The EPA requires that all fluorescent light ballasts be considered PCB-containing unless labeled non-PCB. Mercury-containing fluorescent light bulbs are also considered potential hazards due to the presence of mercury vapor found inside of the bulbs. Other environmental hazards observed that should be addressed prior to renovation include emergency lights with lead-acid batteries, thermostats with mercury filled glass bulbs, and building materials with visible fungal growth. The project site was also visually evaluated for the presence of apparent biological hazards, in accordance with standard industry procedures. Such hazards include bird/bat excrement, rodents, raw sewage, etc.

3.0 RESULTS OF SURVEYS

Asbestos Containing Materials

A total of 41 bulk samples were collected from suspect ACM during the survey. Samples were numbered consecutively for the building. Sample 41 was inadvertently omitted from the chain of custody form.

Analytical data indicates that the following suspect materials tested *positive* for asbestos:

Pipe Insulation;

- Mudded Pipe Fittings;
- Acoustical Plaster; and,
- Four types of Floor Tile and Mastic.

The following suspect materials tested *negative* for asbestos:

- Gypsum Board with Joint Compound;
- Hard Wall and Ceiling Plaster;
- Two types of Suspended Ceiling Tile;
- Acoustical Tile and Glue (contains trace asbestos, likely in debris);
- Floor Tile Mastic (Under Floor Tile which contains trace asbestos);
- Five types of Cove Base and glue;
- Tar Coating on Interior Brick Wall
- Duct Isolation Cloth
- Window Glazing Compound;
- Roof Shingles; and,
- Linoleum.

The following material was *assumed* to contain asbestos:

- Wood Fire Doors.

Please refer to the ACM inventory spreadsheet, located in Appendix I, which lists the specific locations and quantities for ACM in the facility. A cost estimate for the removal of the ACM is included in Appendix IV.

Lead-Based Paint

A total of six lead paint samples were collected during the inspection. Of these six samples, one indicated a level of lead equal to or greater than 1.0 mg/cm², the action level established by HUD and EPA.

Lead-based paint was determined to be present on the windows on the exterior of the building. Unless specifically tested and found to not be LBP, all painted surfaces in the buildings should be treated as LBP.

Abatement Cost Estimates are included in Appendix IV.

PCBs, Mercury, and Other Environmental Hazards

Several of the fluorescent light fixtures were assessed in order to determine if PCB-containing ballasts and mercury-containing light bulbs were present. All ballasts that were assessed were labeled as non-PCB. Not all ballasts were assessed. The EPA requires that all fluorescent light ballasts be considered PCB-containing unless labeled non-PCB. Mercury-containing fluorescent light bulbs are also considered potential hazards due to the presence of mercury vapor inside of the bulbs.

There are emergency and exit lights with lead-acid batteries present throughout the building. Smoke detectors with radioactive elements may be present in the building.

4.0 RECOMMENDATIONS

Due to multiple federal and State of Nebraska regulations governing the disturbance, employee exposure, and disposal of ACM and LBP, APEX recommends that all ACM and LBP be properly addressed prior to the start of demolition or renovation activities. An NDHSS-licensed asbestos abatement contractor should remove all of the ACM that is designated for removal as part of the project.

Current federal and state regulations do not require abatement of lead-based paint prior to renovation or demolition of a structure. With the exception of child-occupied facilities, the State of Nebraska does not currently have regulations regarding the disturbance and handling of LBP; however, federal (OSHA) regulations require that all painted surfaces be considered lead containing unless proven otherwise. When performing demolition or renovation work, employers must provide protection for their employees that is at least as stringent as the requirements specified in OSHA's Lead in Construction Standard 29 CFR 1926.62.

Following removal of lead-based paint and/or lead-based paint coated components of the building, APEX recommends that the waste generated as a result of the removal be properly categorized prior to disposal through toxicity characterization leaching procedure (TCLP) sampling, performed in accordance with SW 846 protocol identified in EPA's RCRA regulations.

The following additional potential environmental hazards were identified in the building: potentially PCB-containing light ballasts, mercury containing fluorescent light tubes, emergency and lights with lead-acid batteries, and smoke detectors may be present that may contain radioactive elements. The light ballasts, fluorescent tubes, lead-acid batteries, and smoke detectors should be removed and properly disposed of, preferably by

recycling, in accordance with federal regulations. Contractors removing the above components/materials should be experienced, properly trained, licensed (when applicable), and insured for the hazards in which they may encounter. All personnel must wear appropriate personal protection equipment in accordance with federal regulations.

APPENDIX I
ASBESTOS MATERIALS INVENTORY

Asbestos Materials Inventory						East Campus Activities Building	
APEX Project No. 110018E						University of Nebraska-Lincoln	
<i>Flr.</i>	<i>Room/Area</i>	<i>Material</i>	<i>Size</i>	<i>Qty.</i>	<i>Units</i>	<i>Sample #</i>	<i>Comments</i>
First	Room 106 (Mech Room)	Pipe Insulation	4"- 6"	24	LF	1	
First	Room 106 (Mech Room)	Mudded Pipe Fitting	4"- 6"	3	EA	2, 3, 4	
First	Room 107A (Men's RR)	Pipe Insulation	4"- 6"	20	LF	1	Including above ceiling.
First	Room 112 (Storage Room)	Pipe Insulation	4"- 6"	50	LF	1	
First	Room 112 (Storage Room)	Mudded Pipe Fitting	4"- 6"	6	EA	2, 3, 4	
First	Room 112 (Storage Room)	Floor Tile and Mastic	12"	115	SF	26	Off-white w/ Tan and White Streaks
First	SE Stairwell	Pipe Insulation	4"- 6"	30	LF	1	
First	Room 34B (Training Room)	Pipe Insulation	4"- 6"	30	LF	1	
First	Room 34B (Training Room)	Mudded Pipe Fitting	4"- 6"	4	EA	2, 3, 4	
First	Room 34B, S. End of Room	Floor Tile and Mastic	12"	120	SF	27	White w/ Gray Specks.
First	Room 29 (Telephone)	Floor Tile and Mastic	12"	70	SF	27	White w/ Gray Specks.
First	Room 28.5 (Aerobics Storage)	Pipe Insulation	4"- 6"	30	LF	1	
First	Room 28.5 (Aerobics Storage)	Mudded Pipe Fitting	4"- 6"	4	EA	2, 3, 4	
First	Room 28.5 (Aerobics Storage)	Floor Tile and Mastic	12"	75	SF	27	White w/ Gray Specks. Under carpet.
First	Room 31 (Aerobics)	Pipe Insulation	4"- 6"	90	LF	1	

Asbestos Materials Inventory						East Campus Activities Building	
APEX Project No. 110018E						University of Nebraska-Lincoln	
<i>Flr.</i>	<i>Room/Area</i>	<i>Material</i>	<i>Size</i>	<i>Qty.</i>	<i>Units</i>	<i>Sample #</i>	<i>Comments</i>
First	Room 31 (Aerobics)	Mudded Pipe Fitting	4"- 6"	15	EA	2, 3, 4	
First	Room 14 (Men's Locker)	Pipe Insulation	4"- 6"	46	LF	1	
First	NW Stairwell	Pipe Insulation	4"- 6"	27	LF	1	
First	NW Stairwell	Mudded Pipe Fitting	4"- 6"	2	EA	2, 3, 4	
First	Room 12 (Weight Room)	Pipe Insulation	4"- 6"	110	LF	1	
First	Room 12 (Weight Room)	Mudded Pipe Fitting	4"- 6"	15	EA	2, 3, 4	
First	Room 20 (Small Weight Room)	Pipe Insulation	4"- 6"	60	LF	1	
First	Room 20 (Small Weight Room)	Mudded Pipe Fitting	4"- 6"	4	EA	2, 3, 4	
First	Room 33 (Office)	Pipe Insulation	4"- 6"	30	LF	1	Above ceiling.
First	Room 13A (SARE Room)	Pipe Insulation	4"- 6"	180	LF	1	Above ceiling.
First	Room 13A (SARE Room)	Mudded Pipe Fitting	4"- 6"	25	EA	2, 3, 4	Above ceiling.
First	SW Stairwell	Pipe Insulation	4"- 6"	50	LF	1	
First	SW Stairwell	Mudded Pipe Fitting	4"- 6"	4	EA	2, 3, 4	
First	Room 28 (Entry to Women's)	Pipe Insulation	4"- 6"	30	LF	1	
First	Room 28 (Entry to Women's)	Mudded Pipe Fitting	4"- 6"	4	EA	2, 3, 4	

Asbestos Materials Inventory						East Campus Activities Building	
APEX Project No. 110018E						University of Nebraska-Lincoln	
<i>Flr.</i>	<i>Room/Area</i>	<i>Material</i>	<i>Size</i>	<i>Qty.</i>	<i>Units</i>	<i>Sample #</i>	<i>Comments</i>
First	Room 21 (Women's Locker)	Pipe Insulation	4"- 6"	65	LF	1	
First	Room 21 (Women's Locker)	Mudded Pipe Fitting	4"- 6"	6	EA	2, 3, 4	
First	Room 23 (Women's Shower)	Pipe Insulation	4"- 6"	6	LF	1	
Second	Lobby	Pipe Insulation	4"- 6"	30	LF	1	
Second	Lobby	Mudded Pipe Fitting	4"- 6"	2	EA	2, 3, 4	
Second	Lobby	Floor Tile and Mastic	12"	550	SF	29	Tan. Under carpet.
Second	Room 204B (NE Room)	Pipe Insulation	4"- 6"	24	LF	1	
Second	Room 204B (NE Room)	Pipe Insulation	10"- 12"	12	LF	1	
Second	Room 205 (South Office)	Pipe Insulation	4"- 6"	24	LF	1	
Second	Room 205 (South Office)	Mudded Pipe Fitting	4"- 6"	2	EA	2, 3, 4	
Second	Room 205 (South Office)	Floor Tile and Mastic	12"	150	SF	30	Mastic contains asbestos. Floor Tile contains trace asbestos. Under carpet.
Second	Room 205B (SE Room)	Pipe Insulation	4"- 6"	24	LF	1	
Second	Room 205B (SE Room)	Mudded Pipe Fitting	4"- 6"	2	EA	2, 3, 4	
Second	Room 205 (South Office)	Floor Tile and Mastic	12"	70	SF	30	Mastic contains asbestos. Floor Tile contains trace asbestos.
Second	NW Stairwell	Pipe Insulation	4"- 6"	40	LF	1	

Asbestos Materials Inventory						East Campus Activities Building	
APEX Project No. 110018E						University of Nebraska-Lincoln	
<i>Flr.</i>	<i>Room/Area</i>	<i>Material</i>	<i>Size</i>	<i>Qty.</i>	<i>Units</i>	<i>Sample #</i>	<i>Comments</i>
Second	NW Stairwell	Mudded Pipe Fitting	4"- 6"	2	EA	2, 3, 4	
Second	SW Stairwell	Pipe Insulation	4"- 6"	50	LF	1	
Second	SW Stairwell	Mudded Pipe Fitting	4"- 6"	4	EA	2, 3, 4	
Second	Stage	Pipe Insulation	4"- 6"	150	LF	1	
Second	Stage	Mudded Pipe Fitting	4"- 6"	6	EA	2, 3, 4	
Second	Stage	Acoustical Plaster		1,150	SF	5-11	On ceiling.
Second	Gym	Acoustical Plaster		16,000	SF	5-11	On ceiling.
Second	Gym	Acoustical Plaster		900	SF	5-11	On west wall. Includes balcony level.
Third	SW Stairwell	Pipe Insulation	4"- 6"	12	LF	1	
Third	SW Stairwell	Mudded Pipe Fitting	4"- 6"	1	EA	2, 3, 4	
Third	Gym Balcony	Pipe Insulation	4"- 6"	140	LF	1	
Third	Gym Balcony	Mudded Pipe Fitting	4"- 6"	14	EA	2, 3, 4	
Third	Gym Balcony	Acoustical Plaster		1,800	SF	5-11	On upper walls.
Third	NW Stairwell	Pipe Insulation	4"- 6"	12	LF	1	
Third	NW Stairwell	Mudded Pipe Fitting	4"- 6"	1	EA	2, 3, 4	

Asbestos Materials Inventory						East Campus Activities Building	
APEX Project No. 110018E						University of Nebraska-Lincoln	
<i>Flr.</i>	<i>Room/Area</i>	<i>Material</i>	<i>Size</i>	<i>Qty.</i>	<i>Units</i>	<i>Sample #</i>	<i>Comments</i>
Third	NE Stairwell	Pipe Insulation	4"- 6"	20	LF	1	
Third	NE Stairwell	Acoustical Plaster		150	SF	5-11	On ceiling.
Third	Lobby	Pipe Insulation	4"- 6"	20	LF	1	
Third	Lobby	Mudded Pipe Fitting	4"- 6"	1	EA	2, 3, 4	
Third	Lobby	Acoustical Plaster		200	SF	5-11	On ceiling.
Third	SE Stairwell	Pipe Insulation	4"- 6"	20	LF	1	
Third	SE Stairwell	Acoustical Plaster		150	SF	5-11	On ceiling.
Third	Room 304/305 (SE Office)	Pipe Insulation	4"- 6"	10	LF	1	
Third	Room 304/305 (SE Office)	Mudded Pipe Fitting	4"- 6"	1	EA	2, 3, 4	
Third	Room 304/305 (SE Office)	Floor Tile and Mastic	12"	140	LF	31	Tan w/ Brown & White Streaks.
Third	Room 302/303 (NE Office)	Pipe Insulation	4"- 6"	10	LF	1	
Third	Room 302/303 (NE Office)	Mudded Pipe Fitting	4"- 6"	1	EA	2, 3, 4	
Third	Room 302/303 (NE Office)	Pipe Insulation	10"- 12"	10	LF	1	
Third	Room 302/303 (NE Office)	Floor Tile and Mastic	12"	140	LF	31	Tan w/ Brown & White Streaks.
Attic	Attic	Pipe Insulation	4"- 6"	300	LF	1	

Asbestos Materials Inventory						East Campus Activities Building	
APEX Project No. 110018E						University of Nebraska-Lincoln	
<i>Flr.</i>	<i>Room/Area</i>	<i>Material</i>	<i>Size</i>	<i>Qty.</i>	<i>Units</i>	<i>Sample #</i>	<i>Comments</i>
Attic	Attic	Mudded Pipe Fitting	4"- 6"	40	EA	2, 3, 4	
Attic	Attic	Pipe Insulation	6"-10"	350	LF	1	
Attic	Attic	Mudded Pipe Fitting	6"-10"	80	EA	2, 3, 4	
Attic	Attic	Pipe Insulation	10"- 12"	50	LF	1	
Attic	Attic	Mudded Pipe Fitting	10"- 12"	6	EA	2, 3, 4	
All	Throughout	Wood Fire Doors		26	EA	Assumed	

APPENDIX II
ASBESTOS BULK SAMPLE RESULTS



APEX ENVIRONMENTAL CONSULTANTS, INC.



000744036

14955 W. 101st Terrace • Lenexa, Kansas 66215 • Tel: (913) 338-2739 • Fax: (913) 338-2741

ASBESTOS BULK SAMPLE CUSTODY FORM

CLIENT: Kevin Herr, Project Manager
Architectural and Engineering Services
Facilities Management & Planning
University of Nebraska-Lincoln

JOB LOCATION: East Campus Activities Building
University of Nebraska-Lincoln

PROJECT No: 110018E

CONTACT/PHONE: Lance Tomlin (913) 338-2739

DATE	SAMPLE	LOCATION	MATERIAL	COMMENTS
1-14-11	1	First, Room 112	Pipe Insulation	
1-14-11	2	First, Room 112	Mudded Pipe Fitting	
1-14-11	3	Second, Room 204B	Mudded Pipe Fitting	
1-14-11	4	Third, Gym Balcony, S. Side, Center	Mudded Pipe Fitting	
1-14-11	5	Second, Gym, SW Corner, Wall	Acoustical Plaster	
1-14-11	6	Second, Stage, N. End, Ceiling	Acoustical Plaster	
1-14-11	7	Third, Lobby, Center, Ceiling	Acoustical Plaster	
1-14-11	8	Third, Gym Balcony, SE Corner, Wall	Acoustical Plaster	
1-14-11	9	Third, Gym Balcony, SE Corner, Ceiling	Acoustical Plaster	
1-14-11	10	Third, Gym Balcony, NW Corner, Wall	Acoustical Plaster	

ADDITIONAL REMARKS:

- Please put project number on report.
- Requested Analysis - PLM-DS
- Fax results to (913) 338-2741

TURNAROUND TIME: Standard Turnaround

SAMPLED BY:

Lance Tomlin

PRINTED NAME

Lance Tomlin

SIGNATURE

Relinquished By: *Lance Tomlin* CUSTODY

Date: 1/18/11

Received By: *Charlene Reynolds*

Date: 1/19/11 938A

PLEASE RETURN ORIGINAL TO APEX ENVIRONMENTAL CONSULTANTS, INC.

91064



APEX ENVIRONMENTAL CONSULTANTS



000744036

14955 W. 101st Terrace • Lenexa, Kansas 66215 • Tel: (913) 338-2739 • Fax: (913) 338-2741

ASBESTOS BULK SAMPLE CUSTODY FORM

CLIENT: Kevin Herr, Project Manager
Architectural and Engineering Services
Facilities Management & Planning
University of Nebraska-Lincoln

JOB LOCATION: East Campus Activities Building
University of Nebraska-Lincoln

PROJECT No: 110018E

CONTACT/PHONE: Lance Tomlin (913) 338-2739

DATE	SAMPLE	LOCATION	MATERIAL	COMMENTS
1-14-11	11	Third, Gym Balcony, NW Corner, Ceiling	Acoustical Plaster	
1-14-11	12	First, Room 112, Above Drop Ceiling	Gypsum Board with Joint Compound	Analyze as composite
1-14-11	13	First, Room 13A (SARE Room)	Gypsum Board with Joint Compound	Analyze as composite
1-14-11	14	First, Room 28.5 (Aerobics Storage)	Gypsum Board with Joint Compound	Analyze as composite
1-14-11	15	First Room 106, Wall	Hard Plaster	
1-14-11	16	First Room 113B, Wall	Hard Plaster	
1-14-11	17	Second, Room 205B, Wall	Hard Plaster	
1-14-11	18	Second, Room 204, Wall	Hard Plaster	
1-14-11	19	Second, Gym, S. Side, E. End, Wall	Hard Plaster	
1-14-11	20	Third, Lobby, Wall	Hard Plaster	

ADDITIONAL REMARKS:

- Please put project number on report.
- Requested Analysis – PLM-DS
- Fax results to (913) 338-2741

SAMPLED BY:

Lance Tomlin

PRINTED NAME

L Tomlin

SIGNATURE

TURNAROUND TIME: Standard Turnaround

Relinquished By: *R Tomlin* CUSTODY

Date: 1/18/11

Received By: *Nauser Rom*

Date: 1/19/11

PLEASE RETURN ORIGINAL TO APEX ENVIRONMENTAL CONSULTANTS, INC.

P2084



APEX ENVIRONMENTAL CONSULTANTS



000744036

14955 W. 101st Terrace • Lenexa, Kansas 66215 • Tel: (913) 338-2739 • Fax: (913) 338-2741

ASBESTOS BULK SAMPLE CUSTODY FORM

CLIENT: Kevin Herr, Project Manager
Architctural and Engineering Services
Facilities Management & Planning
University of Nebraska-Lincoln

JOB LOCATION: East Campus Activities Building
University of Nebraska-Lincoln

PROJECT No: 110018E

CONTACT/PHONE: Lance Tomlin (913) 338-2739

DATE	SAMPLE	LOCATION	MATERIAL	COMMENTS
1-14-11	21	Third, Gym Balcony, N. Side, W. End, Lower Wall	Hard Plaster	
1-14-11	22	First, Room 112	Suspended Ceiling Tile	2'x2' w/ fissures
1-14-11	23	First, Room 28.5 (Acrobic Storage)	Suspended Ceiling Tile	2'x2' w/ small fissures
1-14-11	24	First, Room 28.5 (Acrobic Storage)	Acoustic Tile and Glue	1' w/ rows of holes
1-14-11	25	First, SE Stairs	Floor Tile and Mastic	12" Tan and Brown
1-14-11	26	First, Room 112	Floor Tile and Mastic	12" Off-white w/ Tan and White Streaks
1-14-11	27	First, Room 34B, S. End	Floor Tile and Mastic	12" White w/ Gray Specks
1-14-11	28	First, Room 34B, N. End	Floor Tile and Mastic	12" White and Gray
1-14-11	29	Second, Lobby, NW Corner	Floor Tile and Mastic	12" Tan
1-14-11	30	Second, Room 205B	Floor Tile and Mastic	12" Tan w/ Brown and White Specks

ADDITIONAL REMARKS:

- Please put project number on report.
- Requested Analysis - PLM-DS
- Fax results to (913) 338-2741

SAMPLED BY:

Lance Tomlin

PRINTED NAME

Lance Tomlin

SIGNATURE

TURNAROUND TIME: Standard Turnaround

Relinquished By: *Lance Tomlin* CUSTODY

Date: 1/18/11

Received By: *Lance Tomlin*

Date: _____

PLEASE RETURN ORIGINAL TO APEX ENVIRONMENTAL CONSULTANTS, INC.

P 3084



APEX ENVIRONMENTAL CONSULTANTS



000744036

14955 W. 101st Terrace • Lenexa, Kansas 66215 • Tel: (913) 338-2739 • Fax: (913) 338-2741

ASBESTOS BULK SAMPLE CUSTODY FORM

CLIENT: Kevin Herr, Project Manager
Architectural and Engineering Services
Facilities Management & Planning
University of Nebraska-Lincoln

JOB LOCATION: East Campus Activities Building
University of Nebraska-Lincoln

PROJECT No: 110018E

CONTACT/PHONE: Lance Tomlin (913) 338-2739

DATE	SAMPLE	LOCATION	MATERIAL	COMMENTS
1-14-11	31	Third, Gym Balcony, N. Side, W. End, Lower Wall	Floor Tile and Mastic	12" Tan w/ Brown and White Streaks
1-14-11	32	First, Room 34B, N. End	Cove Base & Glue	4" Brown
1-14-11	33	First, Room 12 (Weight Room)	Cove Base & Glue	4" Gray
1-14-11	34	First, Room 13A (SARE Room)	Cove Base & Glue	4" Reddish Brown
1-14-11	35	Second, Lobby, NE Corner	Cove Base & Glue	6" Gray
1-14-11	36	Third, Lobby	Cove Base & Glue	6" Brown
1-14-11	37	First, Room 106	Tar Coating	On brick wall
1-14-11	38	Attic, West End	Duct Isolation Cloth	
1-14-11	39	Exterior, Outside Room 106	Window Glazing Compound	
1-14-11	40	Roof, West End	Roof Shingle	

ADDITIONAL REMARKS:

- Please put project number on report.
- Requested Analysis – PLM-DS
- Fax results to (913) 338-2741

TURNAROUND TIME: Standard Turnaround

SAMPLED BY:

Lance Tomlin

PRINTED NAME

Lance Tomlin

SIGNATURE

Relinquished By: *Lance Tomlin* CUSTODY

Date: 4/18/11

Received By: *Wynne Sawyer*

Date: 4/19/11

PLEASE RETURN ORIGINAL TO APEX ENVIRONMENTAL CONSULTANTS, INC.

P4 of 4



EMLab P&K

Report for:

Mr. Lance Tomlin
Apex Environmental Consultants, Inc. - Kansas
14955 W. 101 Terrace
Lenexa, KS 66215

Regarding: Project: 110018E; East Campus Activities Building, University of Nebraska-Lincoln
EML ID: 744036

Approved by:

Dates of Analysis:
Asbestos-EPA Method 600/R-93/116: 01-20-2011 to 01-24-2011

Lab Director
Eric Ciotti

Service SOPs: Asbestos-EPA Method 600/R-93/116 (EPA-600/M4-82-020 (SOP 01264))

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Document Number: 200091 - Revision Number: 5

Client: Apex Environmental Consultants, Inc. -
 Kansas
 C/O: Mr. Lance Tomlin
 Re: 110018E; East Campus Activities Building,
 University of Nebraska-Lincoln

Date of Sampling: 01-14-2011
 Date of Receipt: 01-19-2011
 Date of Report: 01-24-2011

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Total Samples Submitted: 41

Total Samples Analysed: 41

Total Samples with Layer Asbestos Content > 1%: 16

Location: 1, First, Room 112

Lab ID-Version‡: 3292612-1

Sample Layers	Asbestos Content
Multicolored Pipe Insulation	50% Chrysotile
Composite Non-Asbestos Fibrous Content:	10% Cotton
Sample Composite Homogeneity:	Moderate

Location: 2, First, Room 112

Lab ID-Version‡: 3292613-1

Sample Layers	Asbestos Content
Multicolored Pipe Insulation	25% Chrysotile
Composite Non-Asbestos Fibrous Content:	35% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 3, Second, Room 204B

Lab ID-Version‡: 3292614-1

Sample Layers	Asbestos Content
Multicolored Pipe Insulation	50% Chrysotile
Composite Non-Asbestos Fibrous Content:	10% Cotton
Sample Composite Homogeneity:	Moderate

Location: 4, Third, Gym Balcony, S Side, Center

Lab ID-Version‡: 3292615-1

Sample Layers	Asbestos Content
Multicolored Pipe Insulation	25% Chrysotile
Composite Non-Asbestos Fibrous Content:	20% Cotton
Sample Composite Homogeneity:	Moderate

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All samples were received in acceptable condition unless otherwise noted. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

EMLab P&K1936 Olney Avenue, Cherry Hill, NJ 08003
(866) 871-1984 Fax (856) 489-4085 www.emlab.comClient: Apex Environmental Consultants, Inc. -
Kansas
C/O: Mr. Lance Tomlin
Re: 110018E; East Campus Activities Building,
University of Nebraska-LincolnDate of Sampling: 01-14-2011
Date of Receipt: 01-19-2011
Date of Report: 01-24-2011**ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116****Location: 5, Second, Gym, SW Corner, Wall**

Lab ID-Version‡: 3292616-1

Sample Layers	Asbestos Content
Multicolored Plaster with Paint	25% Chrysotile
Sample Composite Homogeneity:	Poor

Location: 6, Second, Stage, N End, Ceiling

Lab ID-Version‡: 3292617-1

Sample Layers	Asbestos Content
Multicolored Plaster with Paint	25% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: 7, Third, Lobby, Center, Ceiling

Lab ID-Version‡: 3292618-1

Sample Layers	Asbestos Content
Multicolored Plaster with Paint	15% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: 8, Third, Gym Balcony, SE Corner, Wall

Lab ID-Version‡: 3292619-1

Sample Layers	Asbestos Content
Multicolored Plaster with Paint	30% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: 9, Third, Gym Balcony, SE Corner, Ceiling

Lab ID-Version‡: 3292620-1

Sample Layers	Asbestos Content
Multicolored Plaster with Paint	35% Chrysotile
Composite Non-Asbestos Fibrous Content:	2% Cellulose
Sample Composite Homogeneity:	Moderate

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EMLab P&K1936 Olney Avenue, Cherry Hill, NJ 08003
(866) 871-1984 Fax (856) 489-4085 www.emlab.comClient: Apex Environmental Consultants, Inc. -
Kansas
C/O: Mr. Lance Tomlin
Re: 110018E; East Campus Activities Building,
University of Nebraska-LincolnDate of Sampling: 01-14-2011
Date of Receipt: 01-19-2011
Date of Report: 01-24-2011**ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116****Location: 10, Third, Gym Balcony, NW Corner, Wall**

Lab ID-Version‡: 3292621-1

Sample Layers	Asbestos Content
Multicolored Plaster with Paint	25% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: 11, Third, Gym Balcony, NW Corner, Ceiling

Lab ID-Version‡: 3292622-1

Sample Layers	Asbestos Content
Multicolored Plaster with Paint	30% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: 12, First, Room 112, Above Drop Ceiling

Lab ID-Version‡: 3292623-1

Sample Layers	Asbestos Content
Multicolored Drywall	ND
White Joint Compound	ND
Cream Tape /White Compound	ND
Composite Non-Asbestos Fibrous Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 13, First, Room 13A (SARE Room)

Lab ID-Version‡: 3292624-1

Sample Layers	Asbestos Content
Multicolored Drywall	ND
White Compound /White Paint	ND
White Joint Compound	ND
Cream Tape	ND
Composite Non-Asbestos Fibrous Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

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Client: Apex Environmental Consultants, Inc. -
 Kansas
 C/O: Mr. Lance Tomlin
 Re: 110018E; East Campus Activities Building,
 University of Nebraska-Lincoln

Date of Sampling: 01-14-2011
 Date of Receipt: 01-19-2011
 Date of Report: 01-24-2011

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 14, First, Room 28.5 (Aerobics Storage)

Lab ID-Version‡: 3292625-1

Sample Layers	Asbestos Content
Multicolored Drywall	ND
White Joint Compound	ND
Composite Non-Asbestos Fibrous Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 15, First Room 106, Wall

Lab ID-Version‡: 3292626-1

Sample Layers	Asbestos Content
White Plaster /Blue Paint	ND
Beige Base Coat	ND
Sample Composite Homogeneity:	Moderate

Location: 16, First Room 113B, Wall

Lab ID-Version‡: 3292627-1

Sample Layers	Asbestos Content
Beige Base Coat	ND
Multicolored Plaster	ND
Sample Composite Homogeneity:	Moderate

Location: 17, Second, Room 205B, Wall

Lab ID-Version‡: 3292628-1

Sample Layers	Asbestos Content
Multicolored Paint	ND
White Plaster /Beige Base Coat	ND
Composite Non-Asbestos Fibrous Content:	< 1% Talc
Sample Composite Homogeneity:	Moderate

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EMLab P&K1936 Olney Avenue, Cherry Hill, NJ 08003
(866) 871-1984 Fax (856) 489-4085 www.emlab.comClient: Apex Environmental Consultants, Inc. -
Kansas
C/O: Mr. Lance Tomlin
Re: 110018E; East Campus Activities Building,
University of Nebraska-LincolnDate of Sampling: 01-14-2011
Date of Receipt: 01-19-2011
Date of Report: 01-24-2011**ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116****Location: 18, Second, Room 204, Wall**

Lab ID-Version‡: 3292629-1

Sample Layers	Asbestos Content
Multicolored Paint	ND
White Plaster	ND
Composite Non-Asbestos Fibrous Content:	< 1% Cellulose < 1% Talc
Sample Composite Homogeneity:	Moderate

Location: 19, Second, Gym, S Side, E End, Wall

Lab ID-Version‡: 3292630-1

Sample Layers	Asbestos Content
Beige Paint /White Plaster	ND
Beige Base Coat	ND
Sample Composite Homogeneity:	Moderate

Location: 20, Third, Lobby, Wall

Lab ID-Version‡: 3292631-1

Sample Layers	Asbestos Content
Multicolored Plaster /Beige Paint	ND
Sample Composite Homogeneity:	Moderate

Location: 21, Third, Gym Balcony, N Side, W End, Lower Wall

Lab ID-Version‡: 3292632-1

Sample Layers	Asbestos Content
White Plaster /Beige Paint	ND
Sample Composite Homogeneity:	Moderate

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Client: Apex Environmental Consultants, Inc. -
 Kansas
 C/O: Mr. Lance Tomlin
 Re: 110018E; East Campus Activities Building,
 University of Nebraska-Lincoln

Date of Sampling: 01-14-2011
 Date of Receipt: 01-19-2011
 Date of Report: 01-24-2011

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 22, First, Room 112

Lab ID-Version‡: 3292633-1

Sample Layers	Asbestos Content
Beige Ceiling Tile with White Surface	ND
Composite Non-Asbestos Fibrous Content:	35% Cellulose 35% Mineral wool
Sample Composite Homogeneity:	Moderate

Location: 23, First, Room 28.5 (Aerobics Storage)

Lab ID-Version‡: 3292634-1

Sample Layers	Asbestos Content
Beige Ceiling Tile	ND
Composite Non-Asbestos Fibrous Content:	45% Mineral wool 20% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 24, First, Room 28.5 (Aerobics Storage)

Lab ID-Version‡: 3292635-1

Sample Layers	Asbestos Content
Brown Glue	ND
Brown Ceiling Tile with White Surface /Debris	< 1% Chrysotile
Composite Non-Asbestos Fibrous Content:	75% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 25, First, SE Stairs

Lab ID-Version‡: 3292636-1

Sample Layers	Asbestos Content
Yellow Mastic	ND
Tan Floor Tile	ND
Multicolored Non-Fibrous Material	ND
Sample Composite Homogeneity:	Moderate

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EMLab P&K1936 Olney Avenue, Cherry Hill, NJ 08003
(866) 871-1984 Fax (856) 489-4085 www.emlab.comClient: Apex Environmental Consultants, Inc. -
Kansas
C/O: Mr. Lance Tomlin
Re: 110018E; East Campus Activities Building,
University of Nebraska-LincolnDate of Sampling: 01-14-2011
Date of Receipt: 01-19-2011
Date of Report: 01-24-2011**ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116****Location: 26, First, Room 112**

Lab ID-Version‡: 3292637-1

Sample Layers	Asbestos Content
Tan Floor Tile	2% Chrysotile
Black Mastic /Debris	5% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: 27, First, Room 34B, S End

Lab ID-Version‡: 3292638-1

Sample Layers	Asbestos Content
Black Mastic	12% Chrysotile
Beige Floor Tile	2% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: 28, First, Room 34B, N End

Lab ID-Version‡: 3292639-1

Sample Layers	Asbestos Content
Yellow Mastic	ND
Gray Floor Tile	ND
White Non-Fibrous Material /Debris	ND
Composite Non-Asbestos Fibrous Content:	2% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 29, Second, Lobby, NW Corner

Lab ID-Version‡: 3292640-1

Sample Layers	Asbestos Content
Tan Floor Tile	8% Chrysotile
Yellow Mastic	ND
Black Mastic	3% Chrysotile
Sample Composite Homogeneity:	Moderate

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Client: Apex Environmental Consultants, Inc. -
Kansas
C/O: Mr. Lance Tomlin
Re: 110018E; East Campus Activities Building,
University of Nebraska-Lincoln

Date of Sampling: 01-14-2011
Date of Receipt: 01-19-2011
Date of Report: 01-24-2011

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**Location: 30, Second, Room 205B**

Lab ID-Version‡: 3292641-1

Sample Layers	Asbestos Content
Black Mastic	3% Chrysotile
Multicolored Non-Fibrous Material	ND
Tan Floor Tile	< 1% Chrysotile
Composite Non-Asbestos Fibrous Content:	2% Talc < 1% Cellulose < 1% Hair/Wool
Sample Composite Homogeneity:	Moderate

Location: 31, Third, Gym Balcony, N Side, W End, Lower Wall

Lab ID-Version‡: 3292642-1

Sample Layers	Asbestos Content
Tan Floor Tile	2% Chrysotile
Black Mastic	8% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: 32, First, Room 34B, N End

Lab ID-Version‡: 3292643-1

Sample Layers	Asbestos Content
Brown Baseboard	ND
Brown Glue /Beige Non-Fibrous Material	ND
Sample Composite Homogeneity:	Moderate

Location: 33, First, Room 12 (Weight Room)

Lab ID-Version‡: 3292644-1

Sample Layers	Asbestos Content
Gray Baseboard /Debris	ND
Multicolored Glue /Multicolored Non-Fibrous Material	ND
Composite Non-Asbestos Fibrous Content:	< 1% Cellulose
Sample Composite Homogeneity:	Moderate

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Client: Apex Environmental Consultants, Inc. -
 Kansas
 C/O: Mr. Lance Tomlin
 Re: 110018E; East Campus Activities Building,
 University of Nebraska-Lincoln

Date of Sampling: 01-14-2011
 Date of Receipt: 01-19-2011
 Date of Report: 01-24-2011

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 34, First, Room 13A (SARE Room)

Lab ID-Version‡: 3292645-1

Sample Layers	Asbestos Content
Red Baseboard	ND
Yellow Glue /Tan Fibrous Material	ND
Composite Non-Asbestos Fibrous Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 35, Second, Lobby, NE Corner

Lab ID-Version‡: 3292646-1

Sample Layers	Asbestos Content
Gray Baseboard	ND
Yellow Glue /White Non-Fibrous Material	ND
Sample Composite Homogeneity:	Moderate

Location: 36, Third, Lobby

Lab ID-Version‡: 3292647-1

Sample Layers	Asbestos Content
Brown Baseboard	ND
Brown Glue /Beige Non-Fibrous Material	ND
Sample Composite Homogeneity:	Moderate

Location: 37, First, Room 106

Lab ID-Version‡: 3292648-1

Sample Layers	Asbestos Content
Black Tar Coating/Multicolored Non-Fibrous Material	ND
Sample Composite Homogeneity:	Moderate

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Client: Apex Environmental Consultants, Inc. -
Kansas
C/O: Mr. Lance Tomlin
Re: 110018E; East Campus Activities Building,
University of Nebraska-Lincoln

Date of Sampling: 01-14-2011
Date of Receipt: 01-19-2011
Date of Report: 01-24-2011

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 38, Attic, West End

Lab ID-Version‡: 3292649-1

Sample Layers	Asbestos Content
Beige Duct Insulation	ND
Composite Non-Asbestos Fibrous Content:	90% Cotton < 1% Cellulose < 1% Mineral wool
Sample Composite Homogeneity:	Moderate

Location: 39, Exterior, Outside Room 106

Lab ID-Version‡: 3292650-1

Sample Layers	Asbestos Content
Beige Window Glazing	< 1% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: 40, Roof, West End

Lab ID-Version‡: 3292651-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Multicolored Pebbles	ND
Black Roofing Mastic	ND
Composite Non-Asbestos Fibrous Content:	20% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 41, First, NW Stairwell

Lab ID-Version‡: 3296082-1

Sample Layers	Asbestos Content
Brown Linoleum with Fibrous Backing	ND
Beige Non-Fibrous Material	ND
Multicolored Debris	ND
Composite Non-Asbestos Fibrous Content:	20% Cellulose < 1% Hair/Wool < 1% Synthetic Fibers
Sample Composite Homogeneity:	Poor

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APPENDIX III
LEAD-BASED PAINT SURVEY DATA

SCHNEIDER LABORATORIES

INCORPORATED

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • (FAX) 804-359-1475

Excellence in Service and Technology

AIHA/ELLAP 100527, NVLAP 101150-0, NYELAP/NELAC 11413, CAELAP 2078, NC 593, SC 93003

LABORATORY ANALYSIS REPORT

Lead Analysis based on EPA 7000B Method

Using SLI P26 A14

ACCOUNT #: 1899-11-2080
CLIENT: Apex Environmental Consultants, Inc.
ADDRESS: 14955 W 101st Terrace
Lenexa, KS 66215-1161

DATE COLLECTED: 1/14/2011
DATE RECEIVED: 1/18/2011
DATE ANALYZED: 1/19/2011
DATE REPORTED: 1/20/2011

PROJECT NAME:

JOB LOCATION: E Cmpus Activity Bld

PROJECT NO.: 110018E

PO NO.:

Sample Type: PAINT-CM

SLI Sample No.	Client Sample No.	Collection Date	Sample Description	Sample Area		Total Lead (mg)	Lead Concentration (mg/cm ²)
				Initial (cm ²)	Adj (cm ²)		
30878246	1	1/14/2011	2nd, Room 205B Wall	8.87	8.87	0.272	0.031
<i>Sample weight below SLI SOP guidelines.</i>							
30878247	2	1/14/2011	2nd, 204 Ceiling	9.68	9.68	0.635	0.066
30878248	3	1/14/2011	Ext, Outside Rm 204 Win J	9.68	9.68	43.278	4.472
30878249	4	1/14/2011	3rd, Lobby Wall	6.45	6.45	2.409	0.373
30878250	5	1/14/2011	3rd, Gym Balcony NE Crnr	9.68	9.68	0.431	0.045
30878251	6	1/14/2011	3rd, Gym Balcony NE Crnr	9.68	9.68	0.042	0.004

Sample weight below SLI SOP guidelines.

Analysis Run ID: 47367

Analyst: MOHAMMED ELTILIB

Total Number of Pages in Report: 1

Results relate only to samples as received by the laboratory.


Reviewed By **Dara L. Fox, Analyst**

Visit www.slabin.com for current certifications.

*Minimum Reporting Limit: 0.010 mg. When entire sample weight exceeds protocol, sample is divided for analysis and sample area is adjusted accordingly. Lead Based Paint contains 1.0 mg lead per cm² per Federal statute. The OSHA Lead in Construction Standard, 29 CFR 1926.62, is invoked if any lead is present in the sample. Lead-free paint is defined as <0.06% by weight (CPSC). *Data precision justifies 2 significant figures. All internal QC parameters were met. Unusual sample conditions, if any, are described.*

1877-11-2080



APEX ENVIRONMENTAL CONSULTANTS, INC.

14955 W. 101st Terrace • Lenexa, Kansas 66215 • Tel: (913) 338-2739 • Fax: (913) 338-2741

LEAD DUST WIPE/SOIL CUSTODY FORM

CLIENT: Kevin Herr, Project Manager
Architectural and Engineering Services
Facilities Management & Planning
University of Nebraska-Lincoln

JOB LOCATION East Campus Activities Building
University of Nebraska-Lincoln

PROJECT No: 110018E

CONTACT/PHONE: Lance Tomlin (913) 338-2739

(Lab ID No. 1899)

DATE	SAMPLE #	LOCATION	COMPONENT	SIZE	COMMENT
1-14-11	1	Second, Room 205B	Wall	1.375 sq. in.	
1-14-11	2	Second, 204	Ceiling	1.5 sq. in.	
1-14-11	3	Exterior, Outside Room 204	Window Jamb	1.5 sq. in.	
1-14-11	4	Third, Lobby	Wall	1 sq. in.	
1-14-11	5	Third, Gym Balcony, NE Corner	Wall	1.5 sq. in.	
1-14-11	6	Third, Gym Balcony, NE Corner	Chair Rail	1.5 sq. in.	


RECEIVED
 JAN 18 2011
 BY: FAOJ CHRAIZI
 USM

ADDITIONAL REMARKS:

- Please put project number on report.
 - Please fax results to (913) 338-2741
 - Report in % by wt. and mg/in²
 - Wipes meet ASTM E 1792
- TURNAROUND TIME:** 3 Day Turnaround

SAMPLED BY:

Lance Tomlin

 PRINTED NAME


 SIGNATURE

CUSTODY

Relinquished By: 

Date: 1/17/11

Received By: _____

Date: _____

PLEASE RETURN ORIGINAL TO APEX ENVIRONMENTAL CONSULTANTS, INC.

WorkOrderKey



V : \ 790 \ 790368

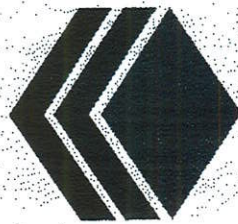
APPENDIX IV
ABATEMENT COST ESTIMATES

**Abatement Cost Estimate
APEX Project No. 110018E**

**East Campus Activities Building
University of Nebraska-Lincoln**

<i>Material</i>	<i>Size</i>	<i>Qty.</i>	<i>Units</i>	<i>Unit Price</i>	<i>Extension</i>
Acoustical Plaster		20,350	SF	\$ 20.00	\$ 407,000.00
Floor Tile and Mastic	12"	1,210	LF	\$ 5.00	\$ 6,050.00
Pipe Insulation (including 169 fittings)	4" - 6"	1,764	LF	\$ 30.00	\$ 52,920.00
Pipe Insulation (including 80 fittings)	6" - 10"	350	LF	\$ 35.00	\$ 12,250.00
Pipe Insulation (including 6 fittings)	10" - 12"	72	LF	\$ 45.00	\$ 3,240.00
Lead-Based Paint Abatement for repaint prep., cleanup for renovation only		1	EA	\$25,000.00	\$25,000.00
Misc. Hazardous Materials, including Fluorescent Lamps, Ballasts, etc.		1	EA	\$ 5,000.00	\$ 5,000.00
TOTAL *					\$ 511,460.00
* Price includes profit (10%), insurance and bonding (8%), and Miscellaneous and overhead (15%).					
Based on a single mobilization.					

APPENDIX V
INSPECTOR'S CERTIFICATIONS



M·E·T·A

Mayhew Environmental Training Associates

I N C O R P O R A T E D

Certificate # 7ME01061101ANIR006

This is to certify that

Lance Tomlin

*has on 01/06/2011, in Lawrence, KS
completed the requisite training for asbestos accreditation under TSCA Title II
and the State of Nebraska Asbestos Regulations and Statutes*

EPA/AHERA Nebraska Asbestos Building Inspector Refresher Course

*as approved by the State of Nebraska and the U.S.E.P.A. under 40 C.F.R. 763 (AHERA)
on 01/06/2011 - 01/06/2011 and passed the associated examination on 01/06/2011
with a score of 70% or better*

CM =



*Instructor
Thomas Mayhew*

*President
Thomas Bradford Mayhew*

Soc.Sec#:509-70-5228
Accreditation Expires: 1/6/12

M E T A - P.O. Box 786 - Lawrence KS 66044 - 800-444-6382

State of Nebraska

Department of Health and Human Services
Division of Public Health

License Type: Asbestos Inspector

License No. 962 Status: Active

Lance Tomlin

Apex Environmental Consultants

14955 W 101 St

Lenexa KS 66215

Expires: 01/31/2011


Administrator / Licensure Unit

Signature



BAKER ENVIRONMENTAL CONSULTING, INC.

Nationwide Training and Consulting for the Detection and Control of Environmental Hazards

Lance Tomlin

has successfully completed a professionally accredited training course and passed an end of course exam with a score of at least 70%

LEAD HAZARD RISK ASSESSOR REFRESHER

Certificate #: LHRAR120309-02

Attendee's Listed Address: 14955 West 101st Terrace; Lenexa, KS 66215

Course Dates: December 3, 2009

Exam Date: December 3, 2009

Unique Identifying Number: 120350970522809

Training Course Manager

www.bakerenvironmental.com

ThePBMan@hotmail.com



7941 Westgate Street * Lenexa, Kansas 66215-2636 * (913) 541-0220 * (913) 541-0457 (FAX)

State of Nebraska

Department of Health and Human Services
Division of Public Health

This is to certify that **Lance Tomlin**
Having submitted satisfactory evidence of compliance with the laws of the State of Nebraska is hereby
granted

Certificate No. 213 to practice as a

Lead Abatement Risk Assessor

Given under the name and Seal of the Department of Health and Human Services Division of Public
Health of the State of Nebraska, at Lincoln, on **05/29/2008**.



Dave Heineman, Governor




Joann Schaefer, MD, Chief Medical Officer, Director
Division of Public Health, Department of Health and Human Services

Certificate of Achievement

This is to certify that

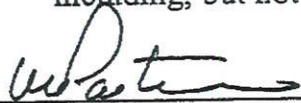
Lance Tomlin

of **APEX Environmental Consulting, Inc.**

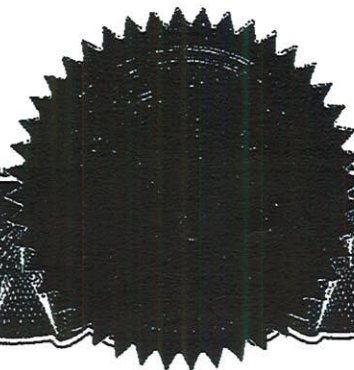
on the 31st day of March 2000 successfully completed the factory training for

RMD's LPA-1 Lead Paint Inspection System

including, but not limited to, the topics of Radiation Safety and the Proper Use of the Instrument.



Jacob Paster, Vice President, RMD
44 Hunt St., Watertown, Massachusetts





APEX ENVIRONMENTAL CONSULTANTS, INC.

14955 W. 101st Terrace • Lenexa, Kansas 66215 • Tel: (913) 338-2739 • Fax: (913) 338-2741

August 23, 2013

Brad Muehling, AIA, PMP
Lead Project Manager
FM&P, Facilities Planning and Construction
1901 "Y" Street
Lincoln, NE 68588-0605

Tel.: 402-472-4812

**RE: PCM Asbestos Clearance
Gym, Stage and Third Floor Areas
East Campus Rec Center
University of Nebraska-Lincoln**

APEX Project No. 120465A

Dear Mr. Muehling:

At your request and authorization, APEX Environmental Consultants, Inc. (APEX) conducted asbestos clearance sampling at the above location on August 20, 2013. This sampling was performed following abatement of asbestos-containing acoustic ceiling plaster, pipe insulation, and floor tile and mastic. These materials were abated using full containment (gross) removal procedures by Great Plains Asbestos Control. Lance Tomlin performed the post-abatement inspection, clearance sampling, and sample analysis.

Post-abatement clearance sampling was performed to determine airborne concentrations of asbestos following the abatement project. All samples were collected on 25-mm diameter carbon impregnated cassettes with an open-faced 50-mm extension cowl and were analyzed utilizing phase contrast microscopy (PCM). Filter membranes used as sampling media were mixed cellulose ester and were specifically designated as suitable for asbestos. Air sampling pumps were calibrated before and after use with a representative filter cassette according to Occupational Safety and Health Administration (OSHA) and National Institute of Occupational Safety and Health (NIOSH) methods. All air samples were analyzed using the NIOSH 7400 method.

The abatement area passed a post-abatement visual inspection and work area sample results indicated that airborne fiber concentrations following abatement were below the clearance level of 0.010 f/cc.

Attached is a copy of the post-abatement air sampling analytical results. Please refer to the attached for specific details regarding air sampling locations and methodology.

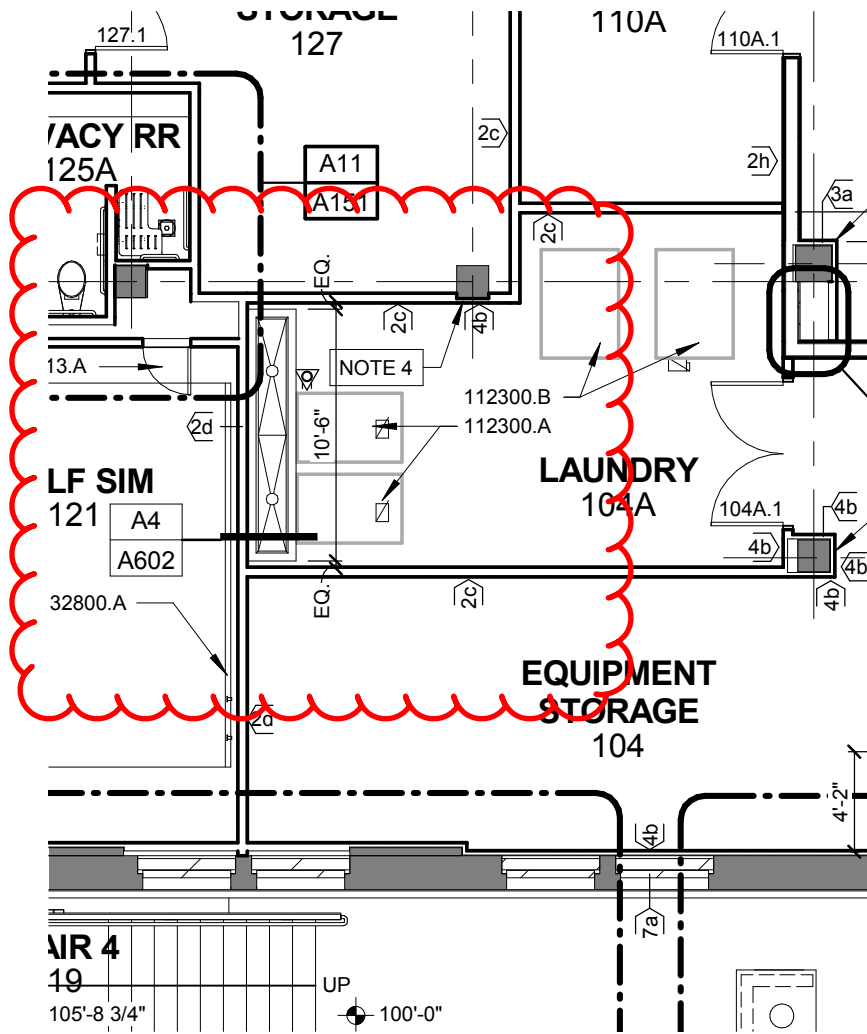
APEX sincerely appreciates the opportunity to be of service to you and The University of Nebraska. Following your review of this report, please do not hesitate to contact me if you have any questions.

Respectfully submitted,
APEX Environmental Consultants, Inc.

A handwritten signature in cursive script that reads "Lance Tomlin".

Lance Tomlin
Project Manager

Attachment



First Level Floor Plan

SINCLAIR **hille** architects

Revision to Detail: **A1/A101**

UNL East Campus Recreation Center

Attachment: A1

Scale: 1/8" = 1'-0"

Project Number:

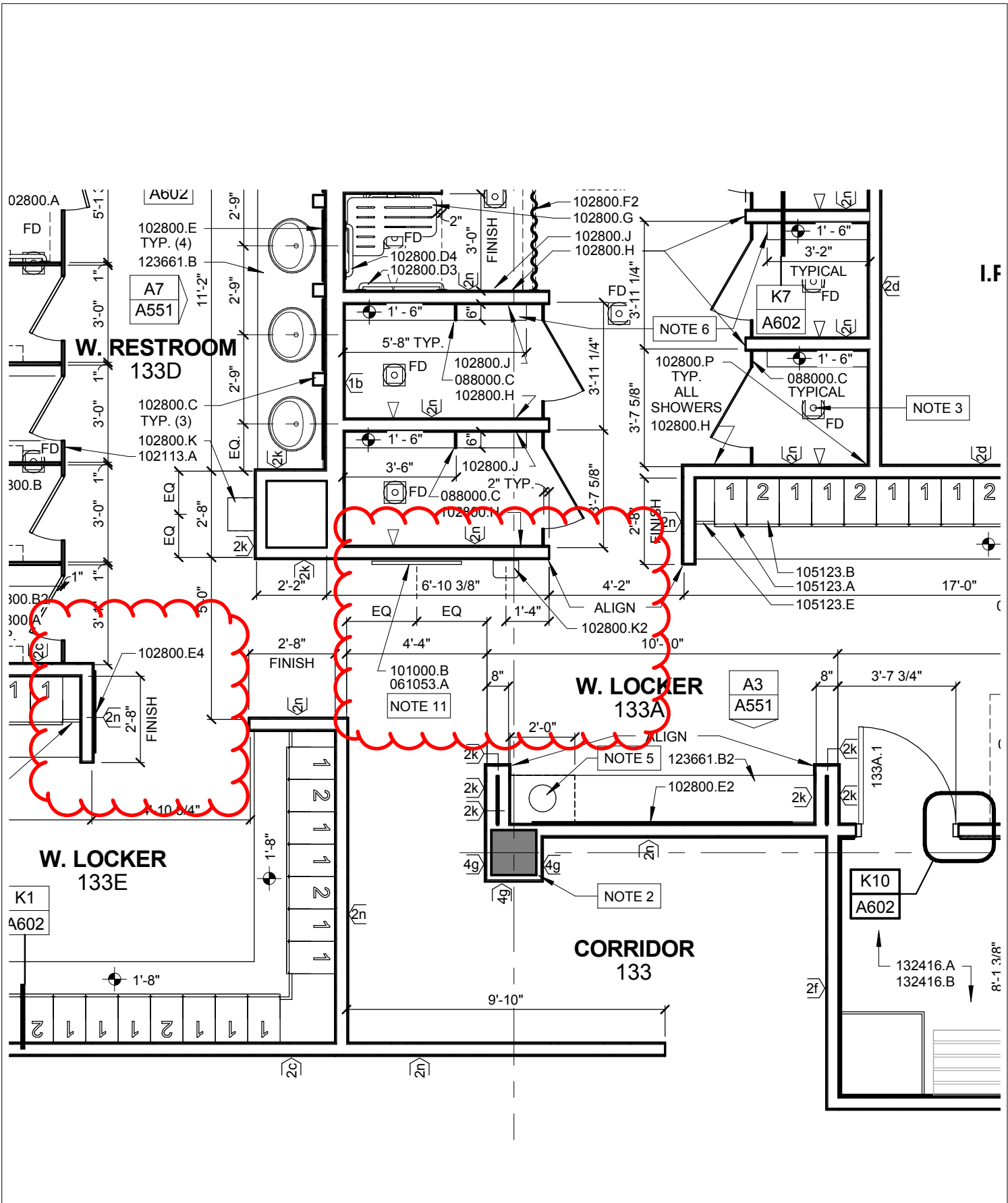
A016P039

Date:

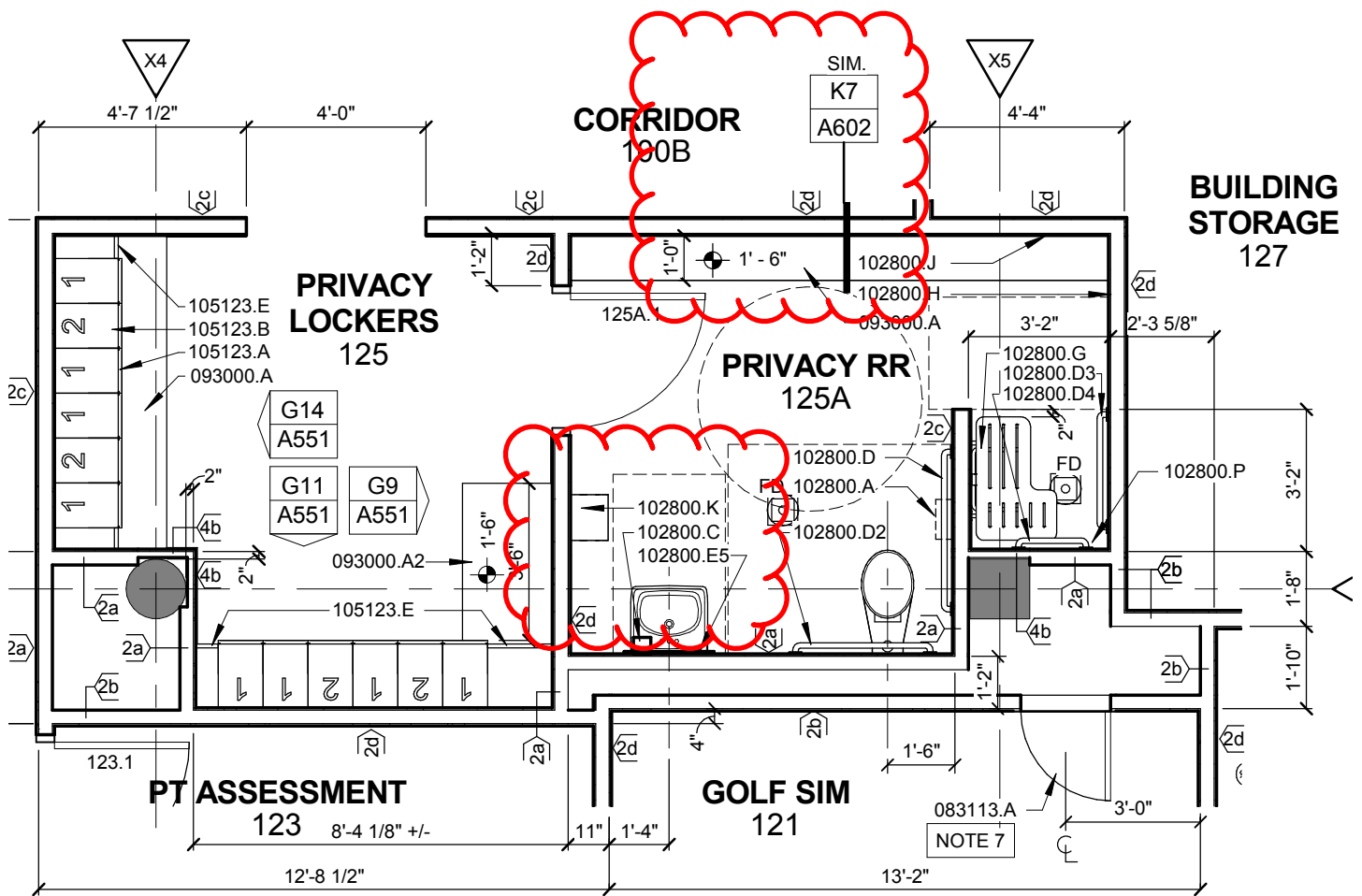
September 24, 2013

Attachment to:

Addendum 02



<h1>Enlarged Floor Plan</h1>		SINCLAIR hille architects	
Revision to Detail: D11/A151		UNL East Campus Recreation Center Attachment: A3	
Scale: 1/4" = 1'-0"	Project Number: A016P039	Date: September 24, 2013	Attachment to: Addendum 02



Enlarged Floor Plan

SINCLAIR **hille** architects

Revision to Detail: **A11/A151**

UNL East Campus Recreation Center

Attachment: **A4**

Scale: 1/4" = 1'-0"

Project Number:

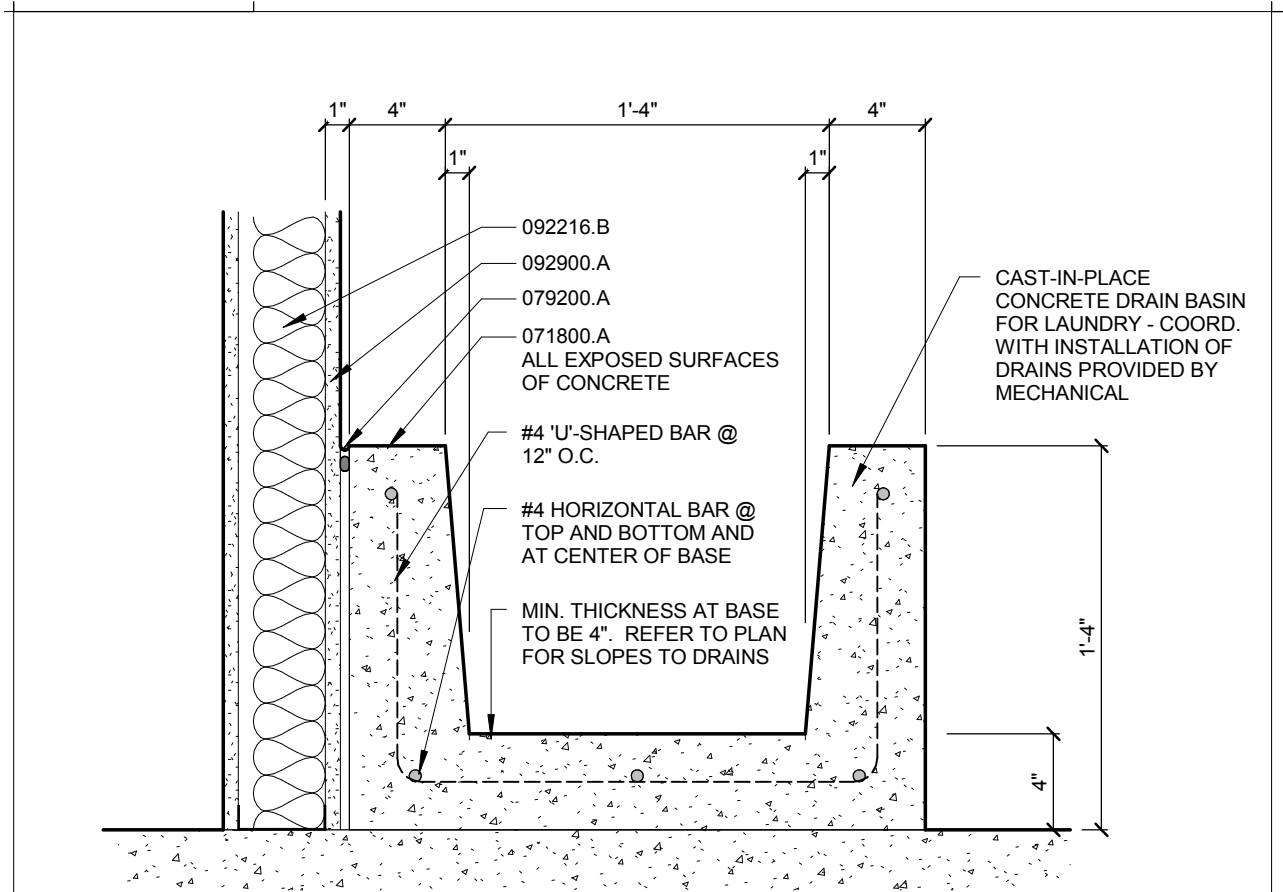
A016P039

Date:

September 24, 2013

Attachment to:

Addendum 02



A4	SECTION DETAIL
SCALE: 1 1/2" = 1'-0"	RAISED DRAIN AT LAUNDRY 104A

KEYNOTE LEGEND

071800.A TRAFFIC COATING

Interior Plan and Section Details

SINCLAIR **hille** architects

Revision to Detail: **NEW DETAIL A4/A602**

UNL East Campus Recreation Center

Attachment: A5

Scale: 1 1/2" = 1'-0"

Project Number:

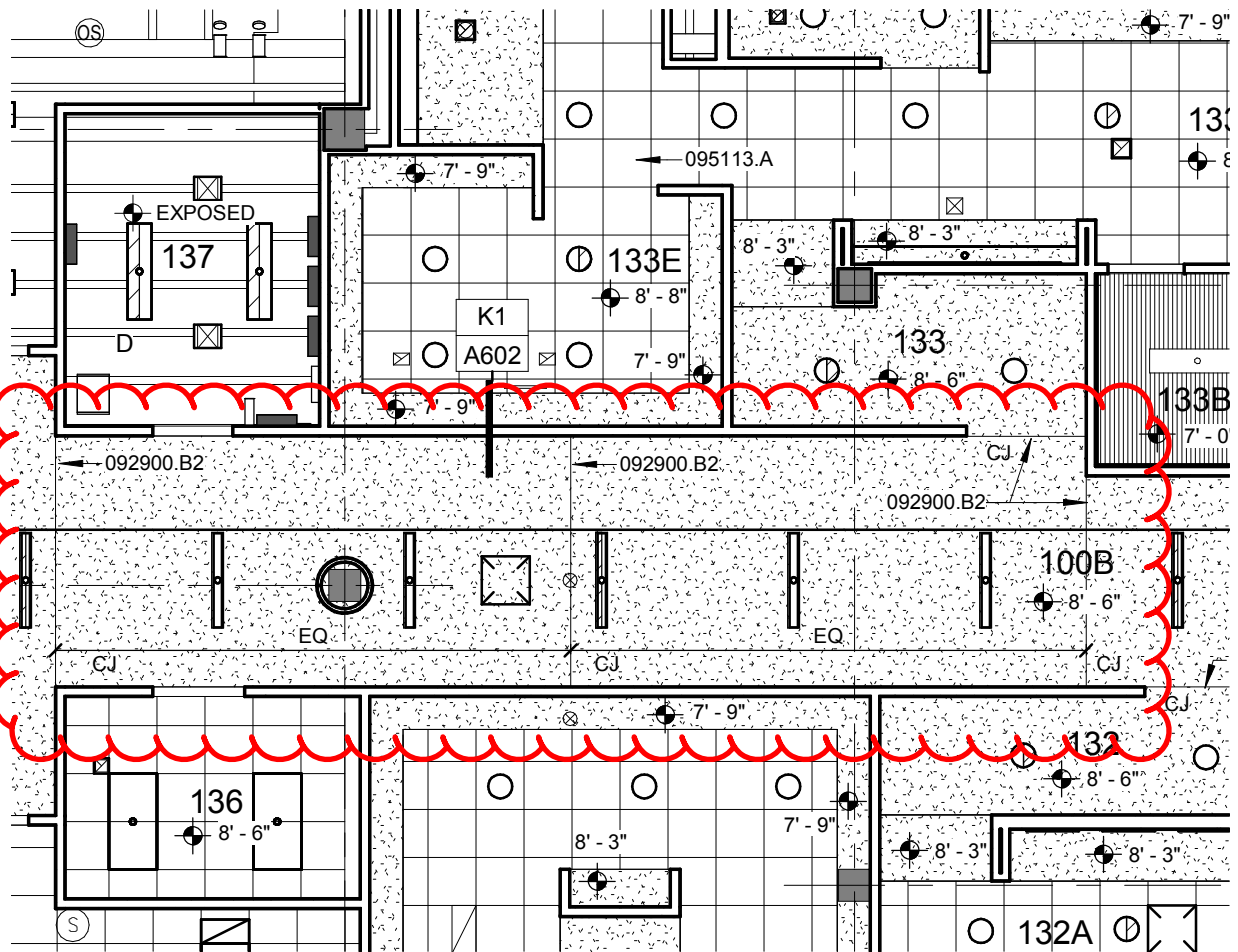
A016P039

Date:

September 24, 2013

Attachment to:

Addendum 02



First Level Reflected Ceiling Plan

SINCLAIR **hille** architects

Revision to Detail: **A1/A701**

UNL East Campus Recreation Center

Attachment: A6

Scale: 1/8" = 1'-0"

Project Number:

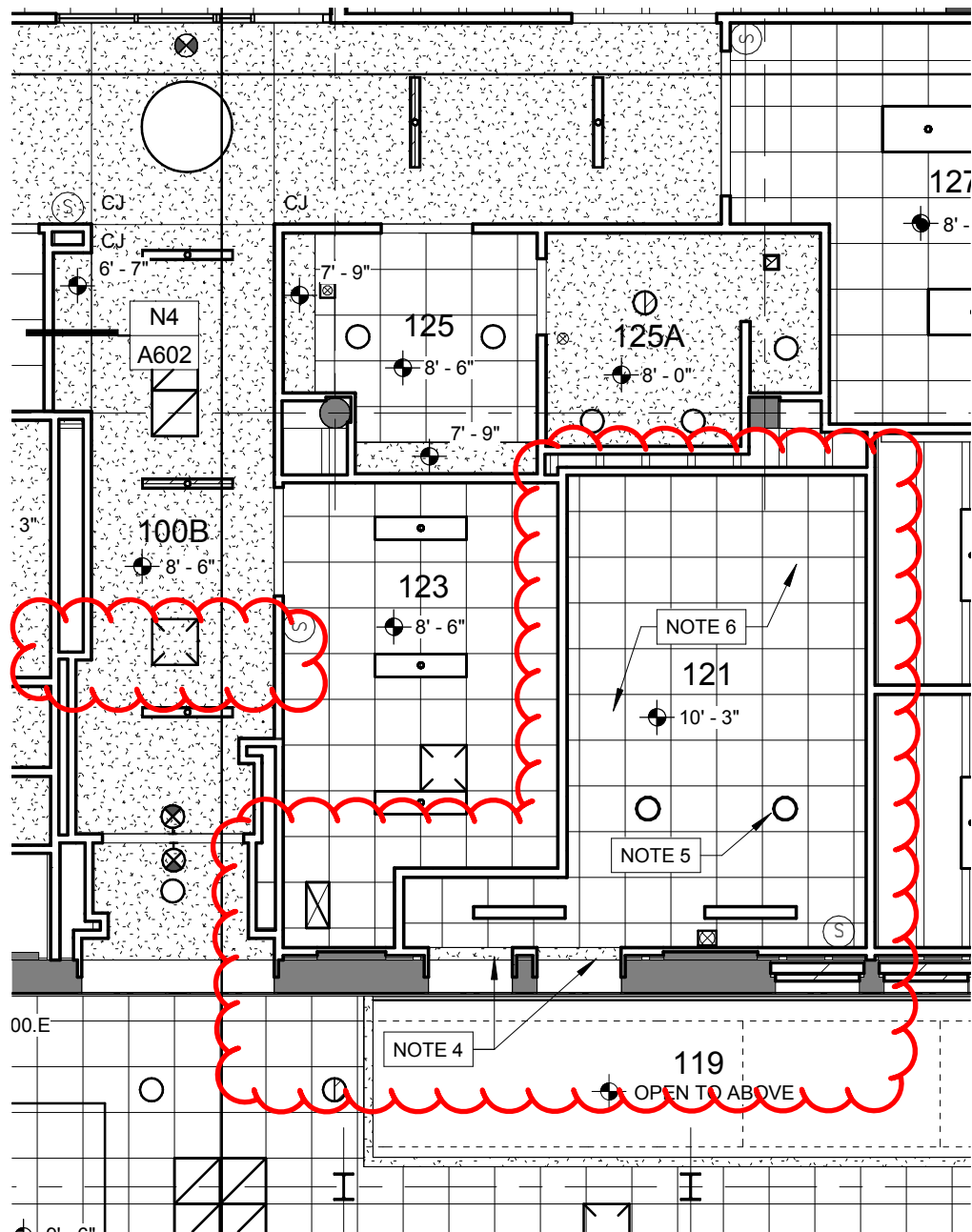
A016P039

Date:

September 24, 2013

Attachment to:

Addendum 02



- NOTE 4** PROVIDE GWB HEADER AT ELEVATION TO MATCH FINISHED ELEVATION OF EXISTING MASONRY OPENING THAT REMAINS AFTER REMOVAL OF WINDOW. EXTEND GWB AS FAR INTO EXISTING WALL OPENING AS NECESSARY TO PROVIDE A CLEAN AND FINISHED TRANSITION. PROVIDE ROD AND SEALANT AT TRANSITION BETWEEN GWB AND EXISTING MASONRY.
- NOTE 5** CONTRACTOR TO COORDINATE INSTALLATION OF LIGHT FIXTURES WITH SUPPLIER OF GOLF SIMULATOR.
- NOTE 6** CEILING ASSEMBLY TO BE AT ELEVATION AS NECESSARY TO CLEAR OWNER PROVIDED GOLF SIMULATOR. ASSUMED ELEVATION IS 10'-3" AFF. CONTRACTOR TO COORDINATE ALL MEP ITEMS ABOVE CEILING ASSEMBLY WITH EQUIPMENT SUPPLIED BY OWNER TO ENSURE CLEARANCES ARE MET. PROVIDE SOUND INSULATION ON TOP OF CEILING PADS ACROSS ENTIRE ROOM.

First Level Reflected Ceiling Plan

SINCLAIR **hille** architects

Revision to Detail: **A1/A701**

UNL East Campus Recreation Center

Attachment: A7

Scale: 1/8" = 1'-0"

Project Number:

A016P039

Date:

September 24, 2013

Attachment to:

Addendum 02

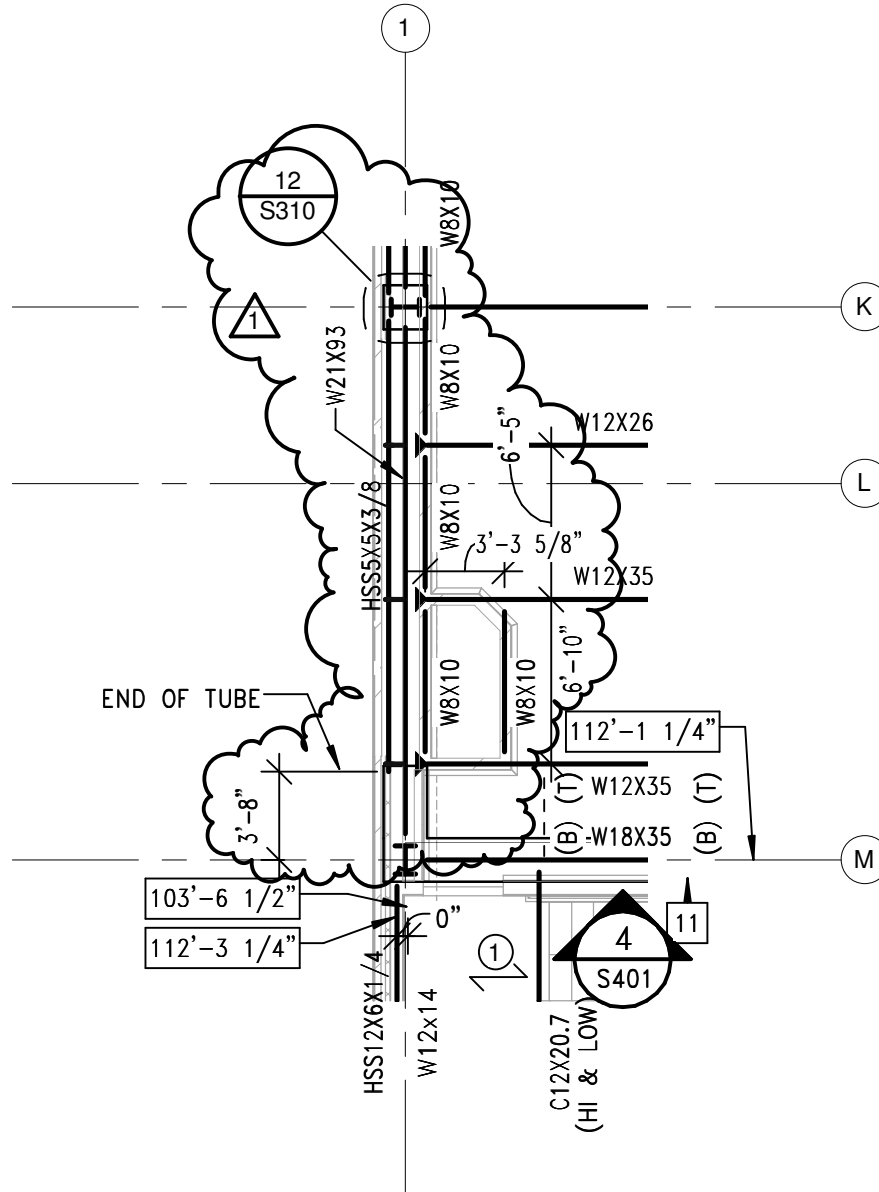
NIELSEN-BAUMERT ENGINEERING, INC.

9802 Nicholas Street, Suite 105 Omaha, NE 68114
Phone: (402) 496-4750
Fax: (402) 496-1147

Project: East Campus
Recreation Center
Subject: Addendum 2

Date: 9/20/2013

Attachment No.: S102-A



1
S102

PARTIAL SECOND LEVEL FRAMING PLAN

1/8" = 1'-0"

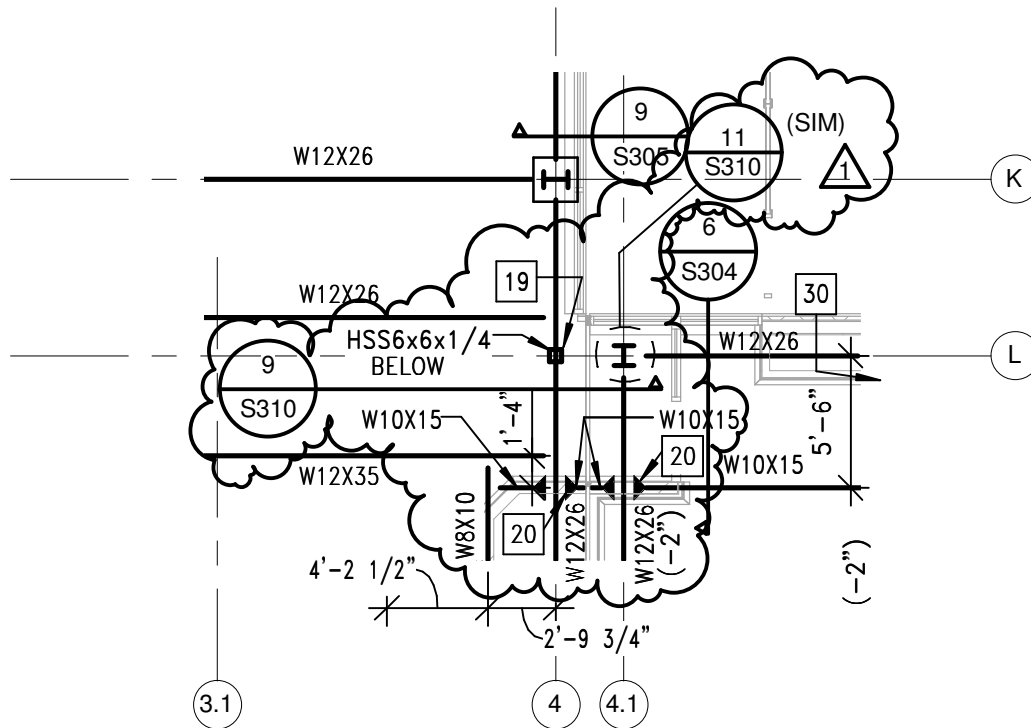
NIELSEN-BAUMERT ENGINEERING, INC.

9802 Nicholas Street, Suite 105 Omaha, NE 68114
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Project: East Campus
Recreation Center
Subject: Addendum 2

Date: 9/20/2013

Attachment No.: S102-B



1
S102

PARTIAL SECOND LEVEL FRAMING PLAN

1/8" = 1'-0"

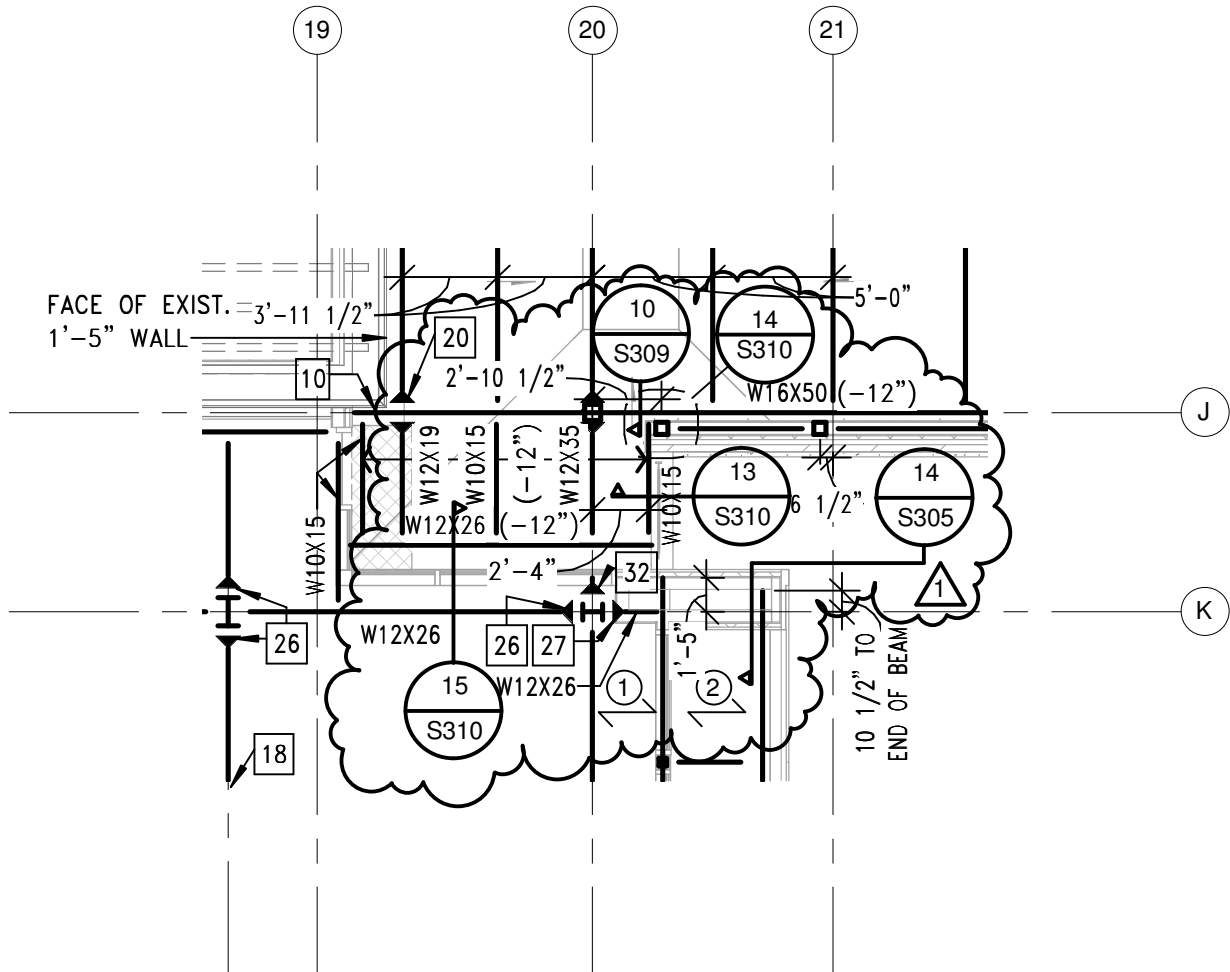
NIELSEN-BAUMERT ENGINEERING, INC.

9802 Nicholas Street, Suite 105 Omaha, NE 68114
Phone: (402) 496-4750
Fax: (402) 496-1147

Project: East Campus
Recreation Center
Subject: Addendum 2

Date: 9/20/2013

Attachment No.: S102-C



1
S102

PARTIAL SECOND LEVEL FRAMING PLAN

1/8" = 1'-0"

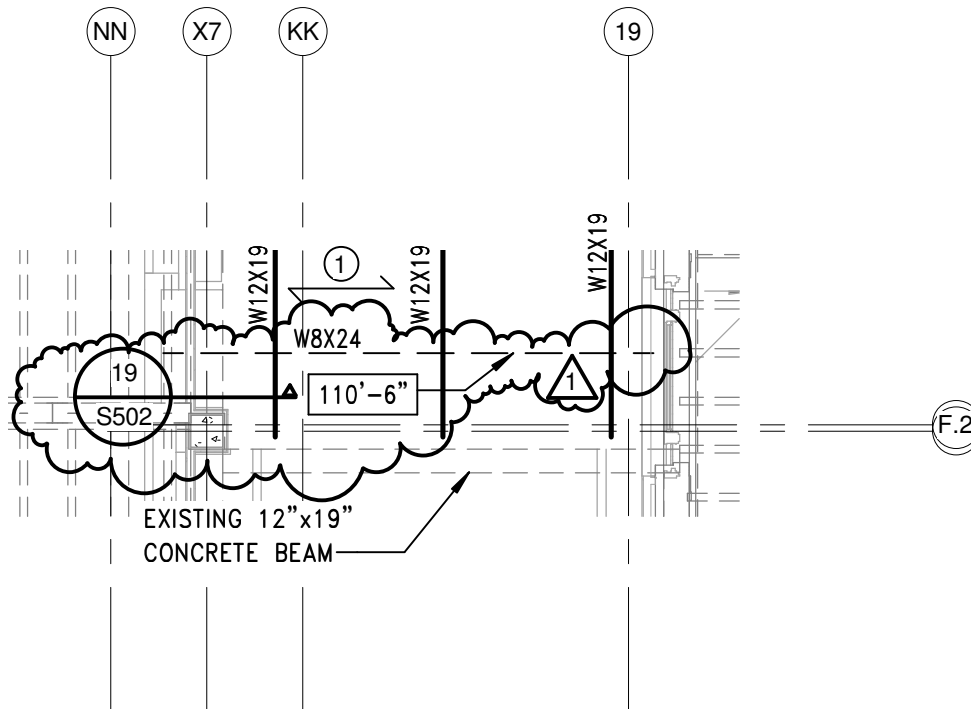
NIELSEN-BAUMERT ENGINEERING, INC.

9802 Nicholas Street, Suite 105 Omaha, NE 68114
Phone: (402) 496-4750
Fax: (402) 496-1147

Project: East Campus
Recreation Center
Subject: Addendum 2

Date: 9/20/2013

Attachment No.: S102-D



1
S102

PARTIAL SECOND LEVEL FRAMING PLAN

1/8" = 1'-0"

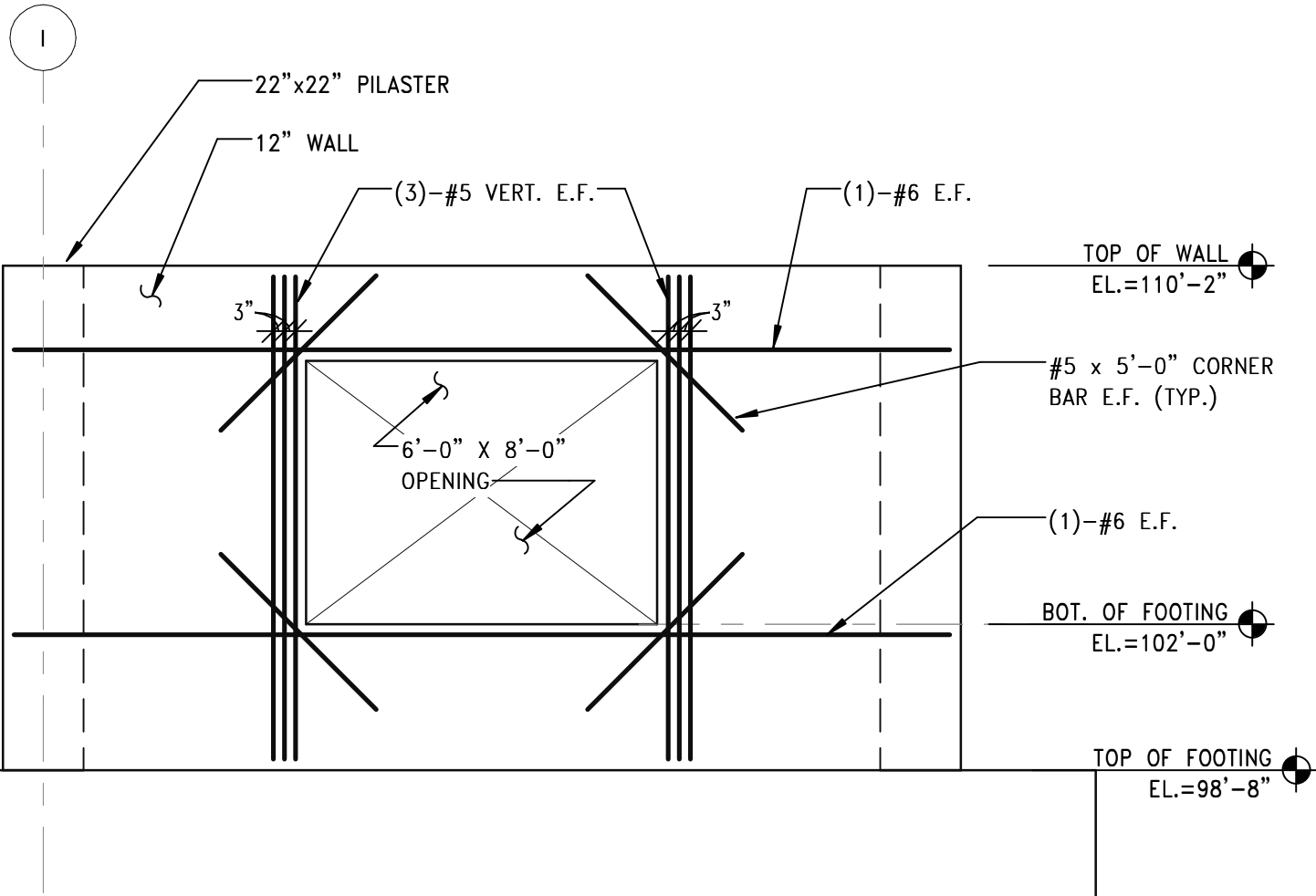
NIELSEN-BAUMERT ENGINEERING, INC.

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Project: East Campus
Recreation Center
Subject: Addendum 2

Date: 9/20/2013

Attachment No.: S202-A



NOTES:

1. THIS ELEVATION SHOWS ONLY THAT REINFORCING IMMEDIATELY ADJACENT TO OPENING. TYPICAL WALL REINFORCING SHALL BE PER DETAIL 11 / S201 WHERE TYPICAL BARS ENCOUNTER OPENING SHOWN, STOP 2" SHORT OF OPENING.
2. PROVIDE FOOTING DOWELS FOR ALL VERTICAL BARS (NOT SHOWN ABOVE).
3. E.F.= EACH FACE

5
S202

WALL OPENING REINFORCING DETAIL

1/4" = 1'-0"

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Project: East Campus
Recreation Center
Subject: Addendum 2

Date: 9/20/2013

Attachment No.: **S302-A**

LOCATION	LINTEL
DOORS 141.2, 150A.1, 153.1, 216.1 @ BRICK VENEER	GALV. ANGLE 4x3 1/2x5/16 (LLV) w/ 8" END BEARING
DOORS 241.1, 249.1, 250A.1 @ 6" CMU WALLS	6"x8" CMU w/ (1)-#5 BOTTOM BAR, 8" END BEARING

6

S302

MISCELLANEOUS MASONRY LINTEL SCHEDULE

NO SCALE

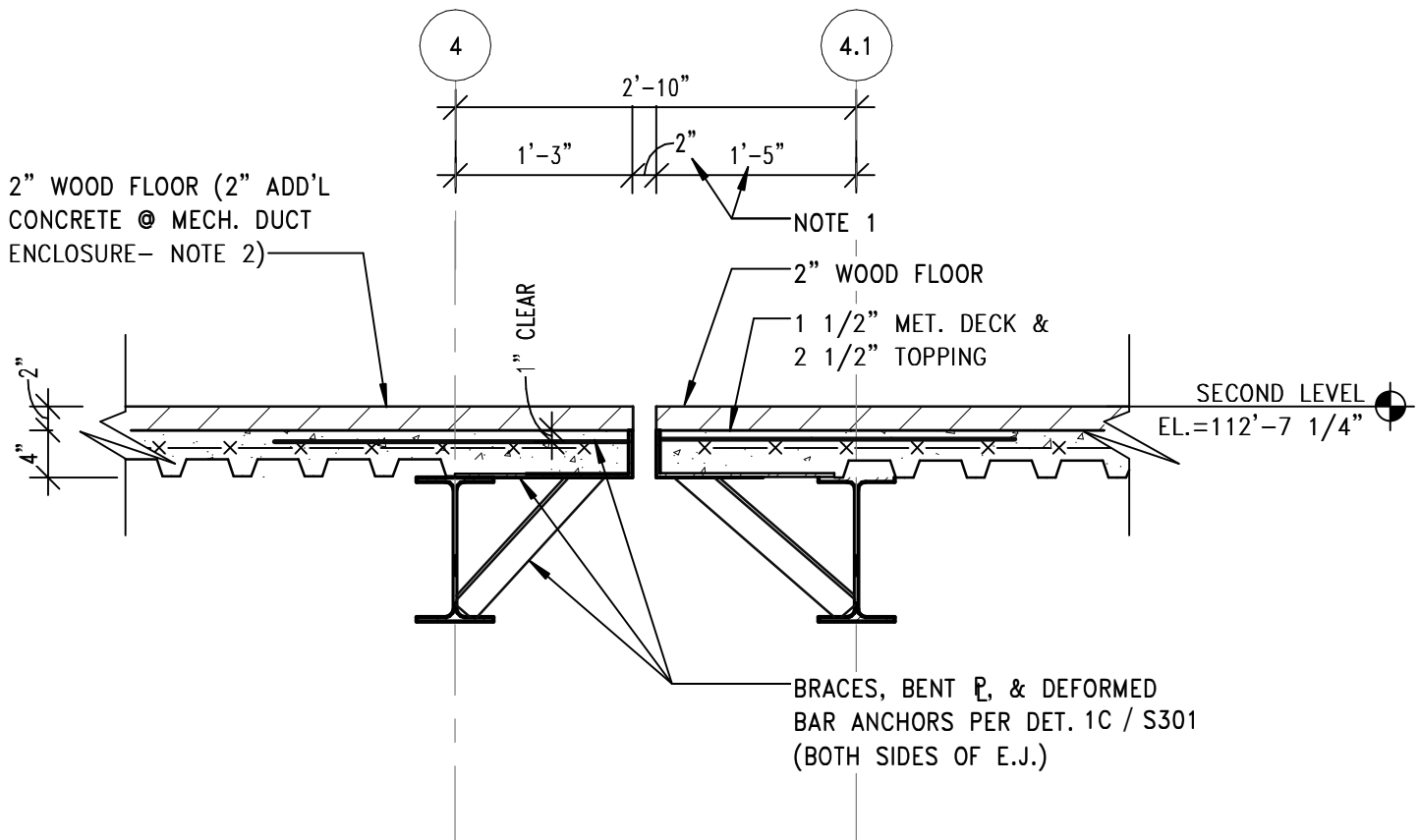
NIELSEN-BAUMERT ENGINEERING, INC.

9802 Nicholas Street, Suite 105 Omaha, NE 68114
 Phone: (402) 496-4750
 Fax: (402) 496-1147

Project: East Campus
 Recreation Center
 Subject: Addendum 2

Date: 9/20/2013

Attachment No.: S310-A



NOTES:

1. THE DIMENSIONS NOTED ARE 3" & 1'-4" ALONG DEPRESSED ROOF OVER MECH. ROOM '150A' AS SHOWN IN DET. A11/A303. TRANSITION OCCURS 1'-8" SOUTH OF GRID 'M'.
2. WHERE 2" ADD'L CONCRETE IS USED IN LIEU OF 2" WOOD FLOOR COORDINATE LENGTH OF VERT. LEG OF BENT PLATES w/ EXP. JT. DEVICE REQUIREMENTS. DEFORMED BAR ANCHORS SHALL REMAIN @ LOCATION SHOWN ABOVE.

9
 S310

SECTION @ SECOND LEVEL E.J.

3/4" = 1'-0"

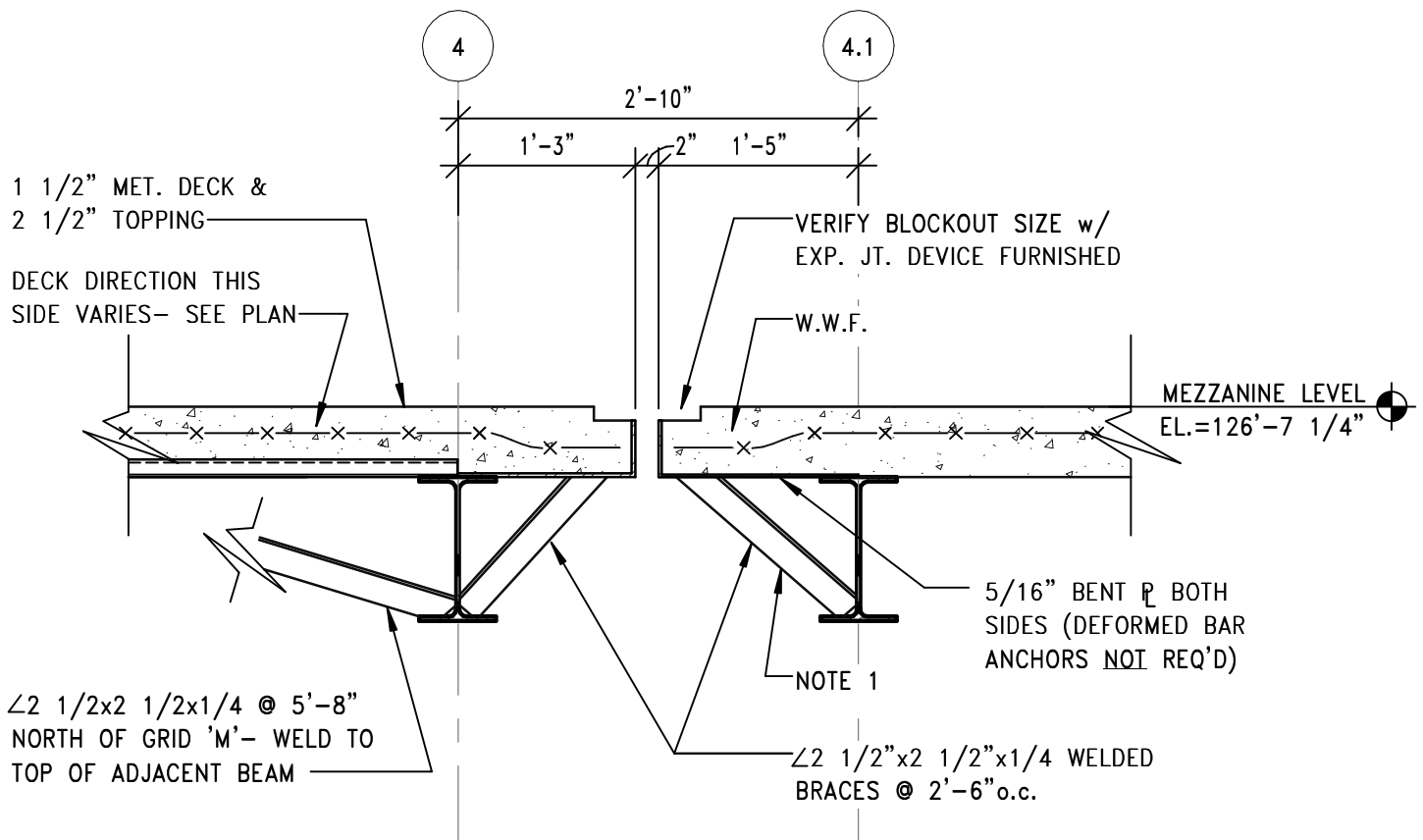
NIELSEN-BAUMERT ENGINEERING, INC.

9802 Nicholas Street, Suite 105 Omaha, NE 68114
 Phone: (402) 496-4750
 Fax: (402) 496-1147

Project: East Campus
 Recreation Center
 Subject: Addendum 2

Date: 9/20/2013

Attachment No: S310-B



10
 S310

MEZZANINE LEVEL E.J.

3/4" = 1'-0"

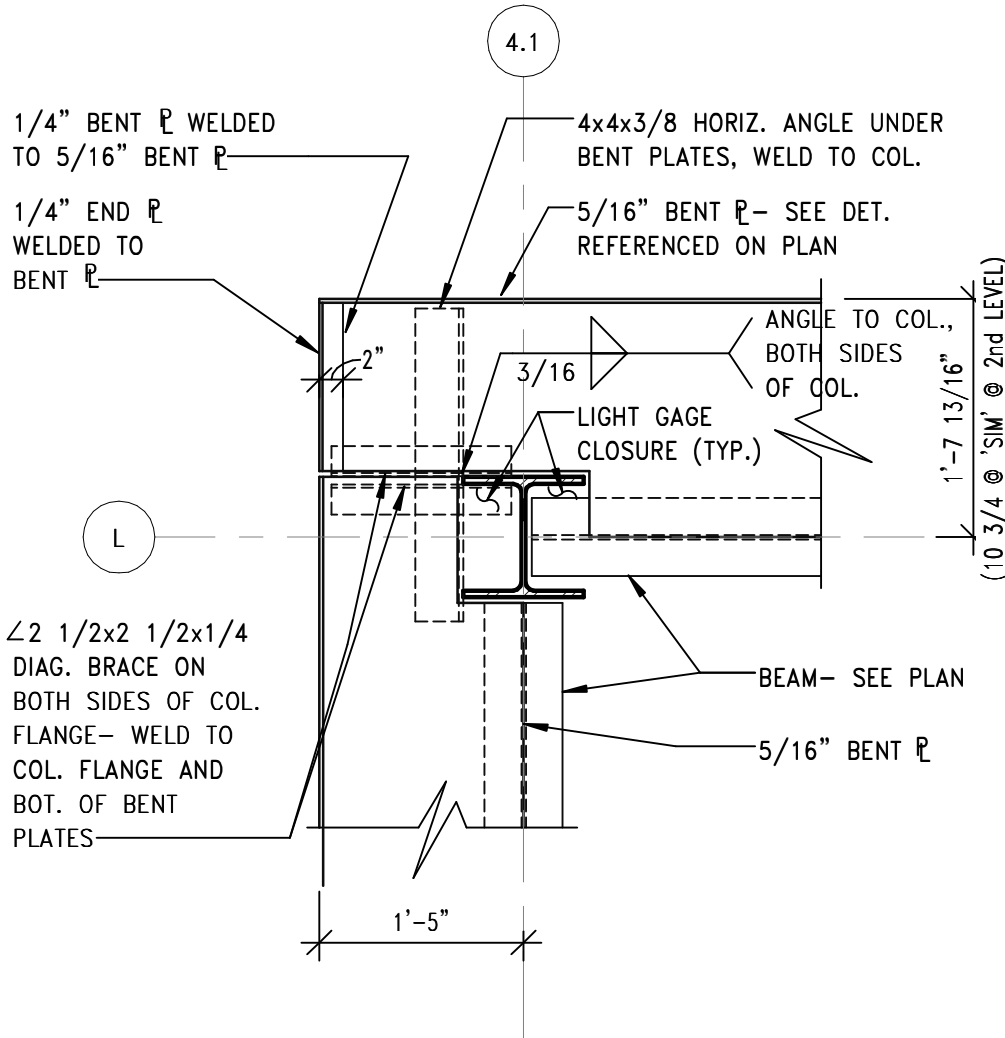
NIELSEN-BAUMERT ENGINEERING, INC.

9802 Nicholas Street, Suite 105 Omaha, NE 68114
 Phone: (402) 496-4750
 Fax: (402) 496-1147

Project: East Campus
 Recreation Center
 Subject: Addendum 2

Date: 9/20/2013

Attachment No.: S310-C



11 PLAN @ COL. 'L-4.1', MEZZANINE LEVEL
 S310 3/4" = 1'-0"

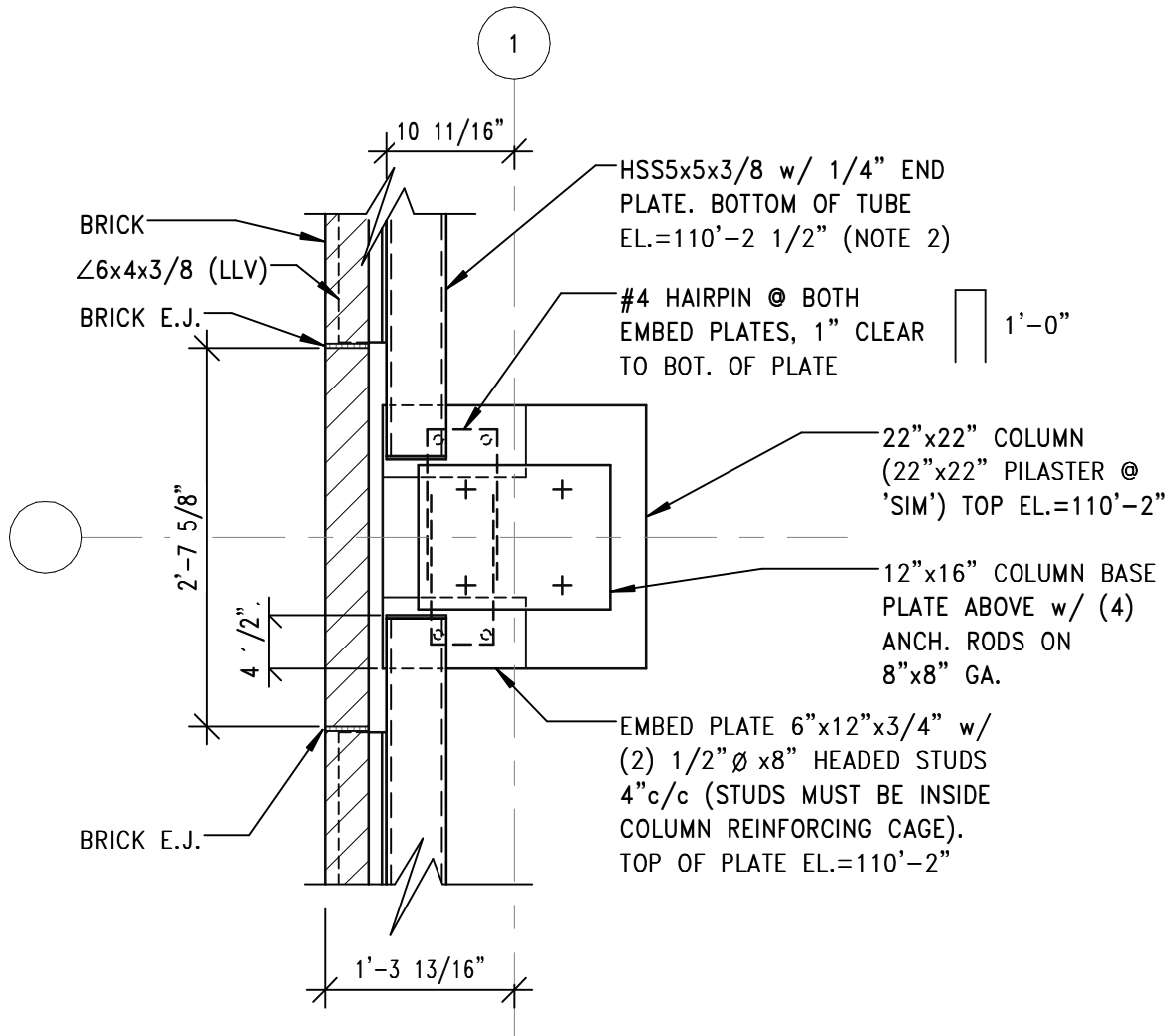
NIELSEN-BAUMERT ENGINEERING, INC.

9802 Nicholas Street, Suite 105 Omaha, NE 68114
 Phone: (402) 496-4750
 Fax: (402) 496-1147

Project: East Campus
 Recreation Center
 Subject: Addendum 2

Date: 9/20/2013

Attachment No.: S310-D



NOTES:

1. EMBED PLATE OCCURS @ BOTH SIDES OF COLS. 'F-1' & 'K-1', SOUTH SIDE OF PILASTER @ GRID 'I-1', AND NORTH SIDE OF PILASTER @ GRID 'G-1'.
2. PROVIDE 5"x5" SHIM PLATES BETWEEN 5x5 TUBE AND EMBED PLATES. WELD EAST & WEST SIDES OF SHIMS CONTINUOUSLY TO EMBED PLATE, TO EACH OTHER, AND TO 5x5 TUBE.

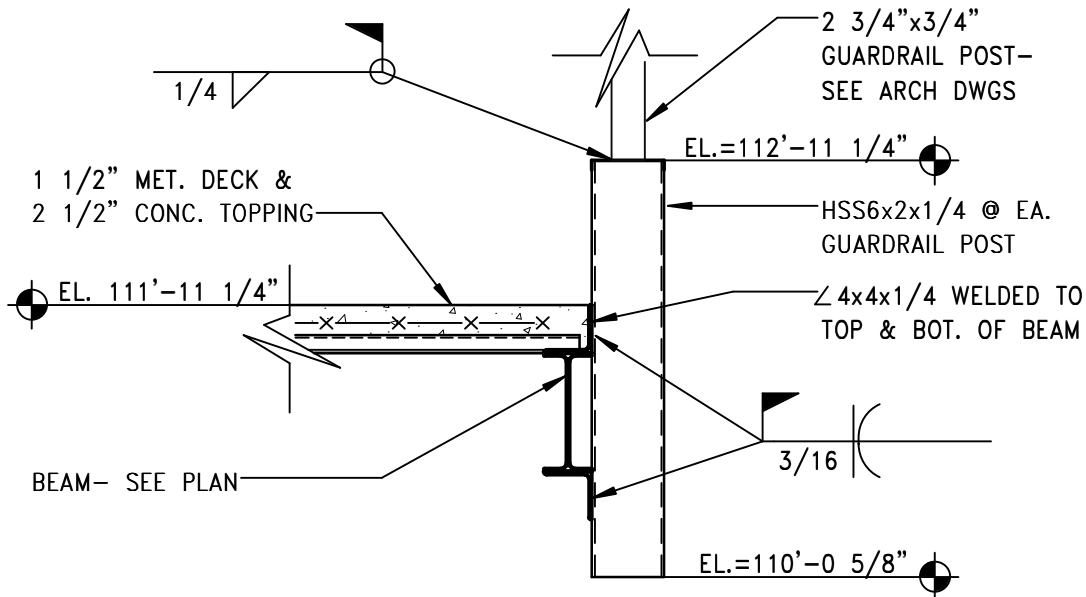
NIELSEN-BAUMERT ENGINEERING, INC.

9802 Nicholas Street, Suite 105 Omaha, NE 68114
Phone: (402) 496-4750
Fax: (402) 496-1147

Project: East Campus
Recreation Center
Subject: Addendum 2

Date: 9/20/2013

Attachment No.: S310-E



NOTES:

1. TYPICAL FASCIA FRAMING (PER DET. A11/A301)= 600S162-43 MET. STUDS @ 16"o.c., ATTACHED TO TOP & BOT. ANGLES PER DET. 2C / S302 .

13
S310

SECTION @ GUARDRAIL POSTS

3/4" = 1'-0"

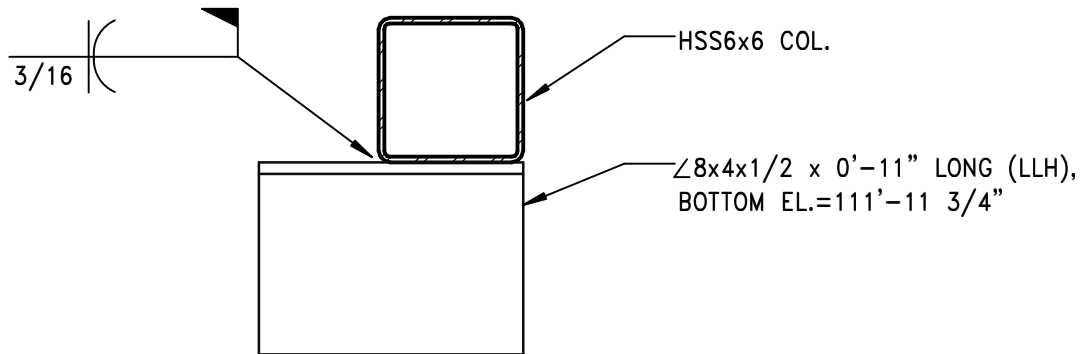
NIELSEN-BAUMERT ENGINEERING, INC.

9802 Nicholas Street, Suite 105 Omaha, NE 68114
Phone: (402) 496-4750
Fax: (402) 496-1147

Project: East Campus
Recreation Center
Subject: Addendum 2

Date: 9/20/2013

Attachment No.: S310-F



14 PLAN @ BRICK LEDGE ANGLE
S310 1 1/2" = 1'-0"

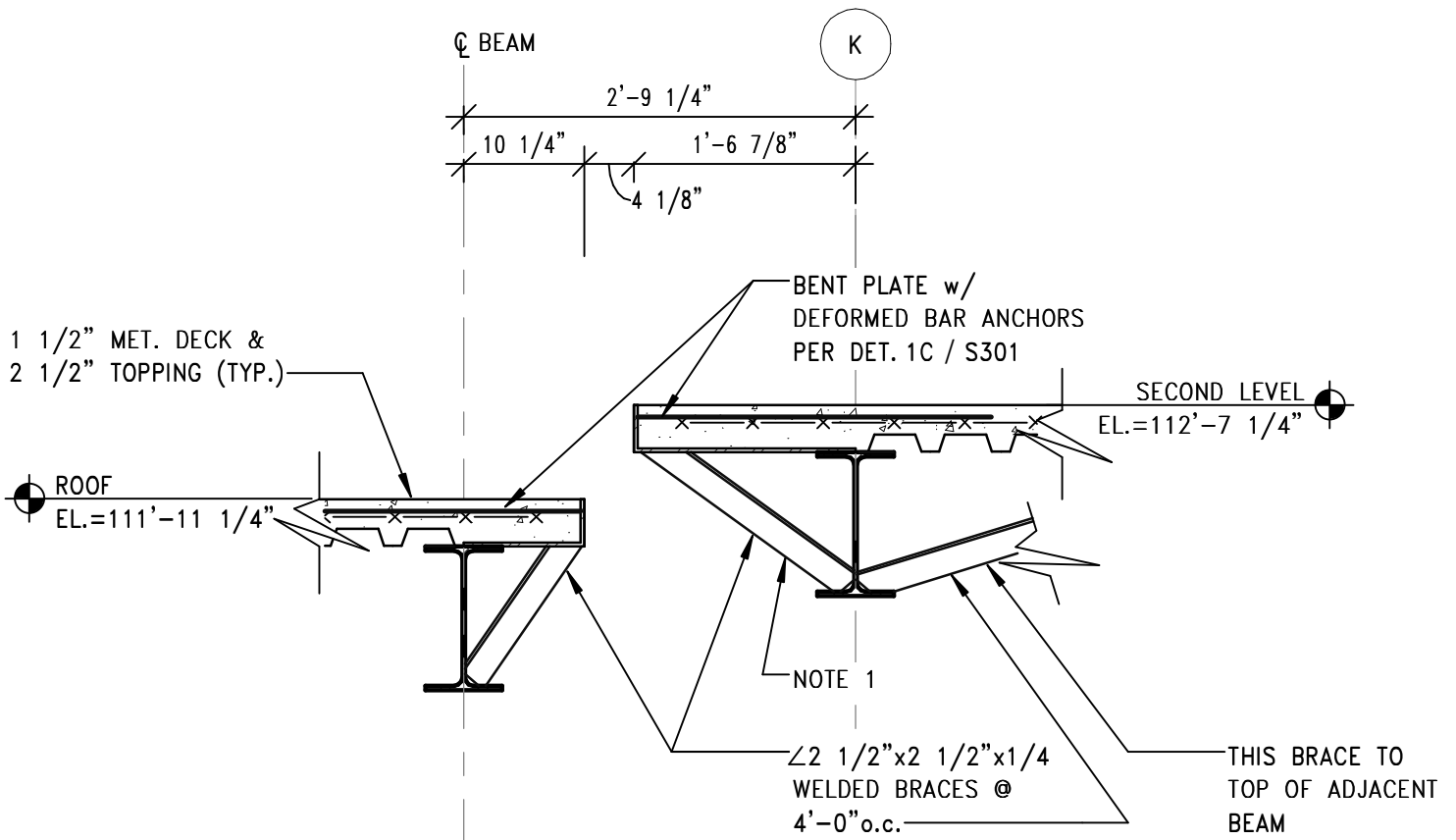
NIELSEN-BAUMERT ENGINEERING, INC.

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Phone: (402) 496-4750
Fax: (402) 496-1147

Project: East Campus
Recreation Center
Subject: Addendum 2

Date: 9/20/2013

Attachment No.: S310-G



15 SECTION @ EXPANSION JOINT
S310 3/4" = 1'-0"

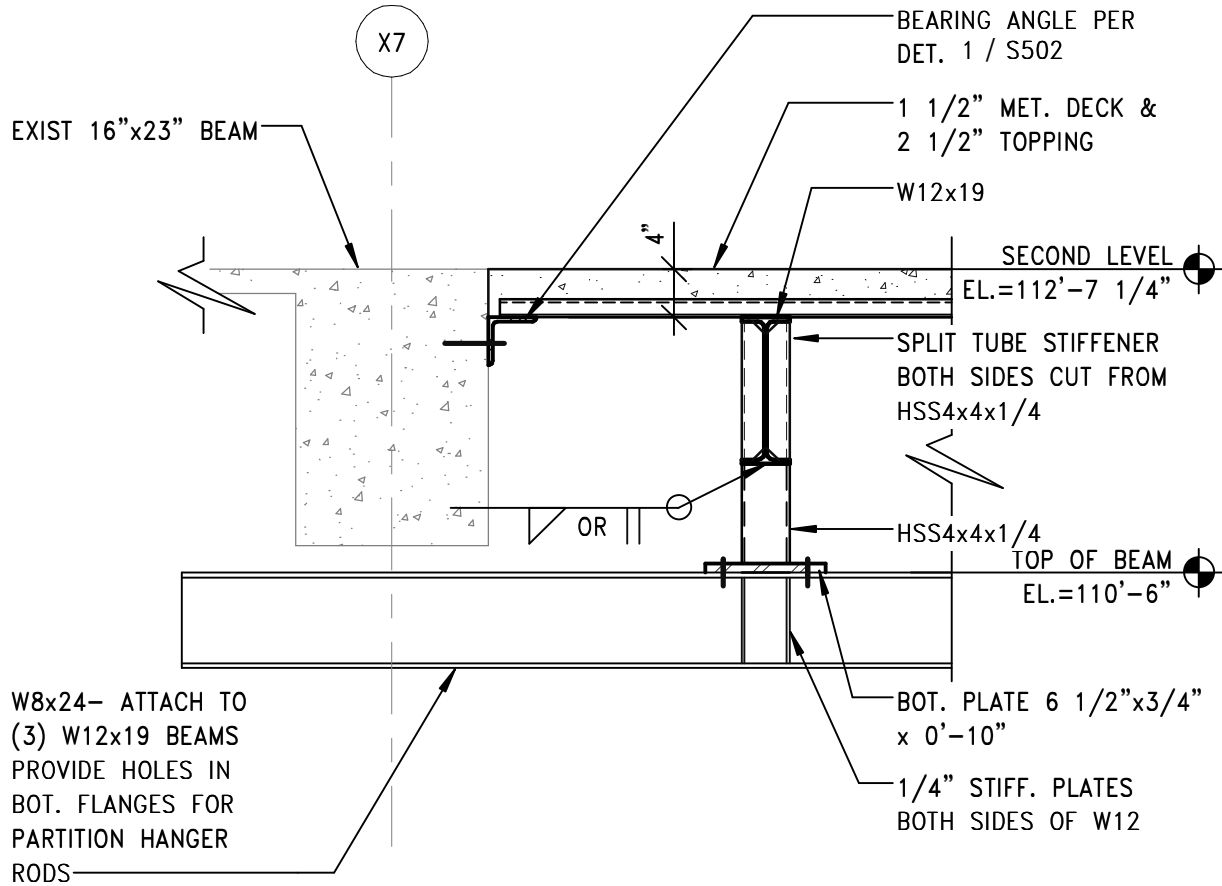
NIELSEN-BAUMERT ENGINEERING, INC.

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Phone: (402) 496-4750
Fax: (402) 496-1147

Project: East Campus
Recreation Center
Subject: Addendum 2

Date: 9/20/2013

Attachment No.: S502-A



19
S502

FOLDING PARTITION SUPPORT BEAM DETAIL

3/4" = 1'-0"

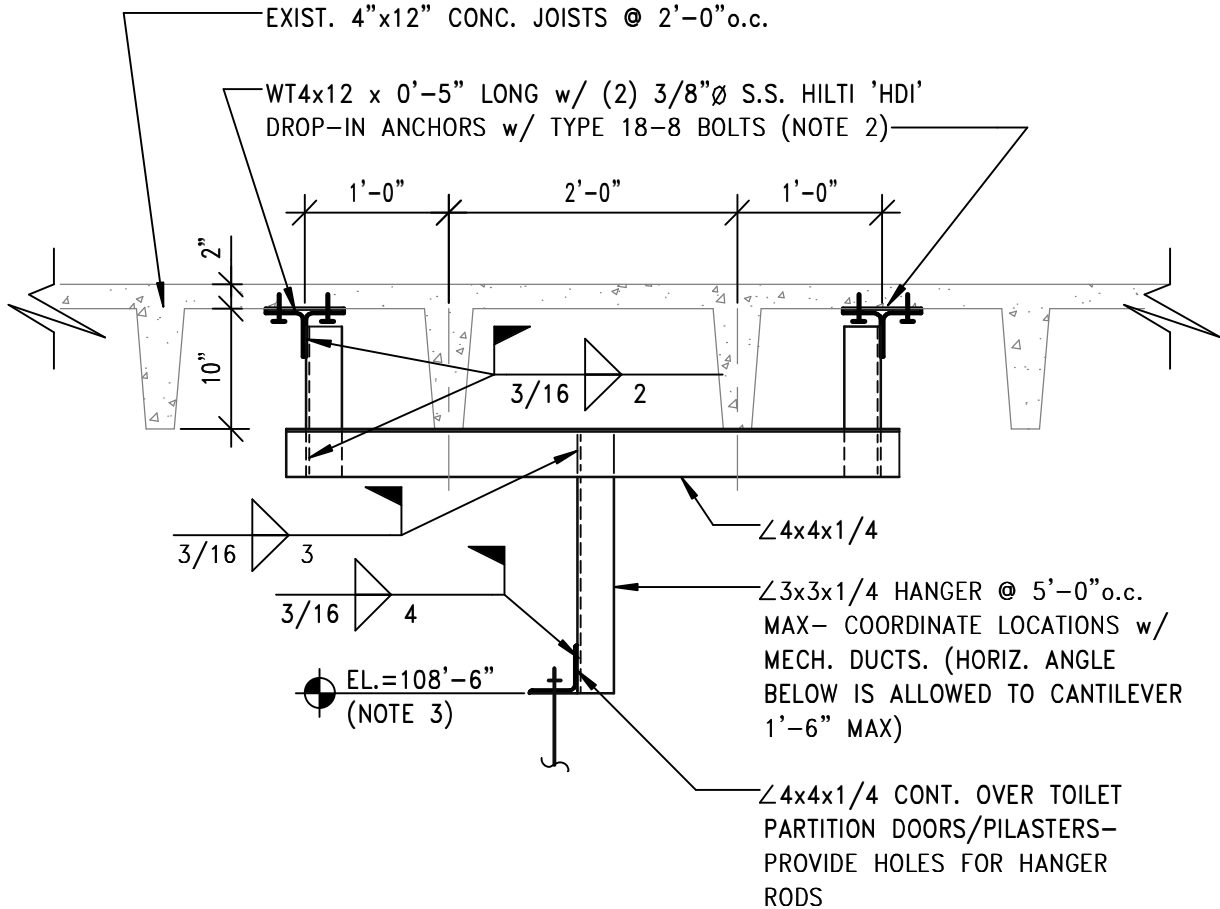
NIELSEN-BAUMERT ENGINEERING, INC.

9802 Nicholas Street, Suite 105 Omaha, NE 68114
 Phone: (402) 496-4750
 Fax: (402) 496-1147

Project: East Campus
 Recreation Center
 Subject: Addendum 2

Date: 9/20/2013

Attachment No.: S503-A



NOTES:

1. GALVANIZE ALL ANGLES, TOUCH UP WELDS w/ Z.R.C. COLD GALV. PAINT.
2. WT's MUST BE 4'-0" APART FOR PROPER LOAD DISTRIBUTION TO EXIST. JOISTS.
3. COORDINATE BOTTOM OF ANGLE ELEVATION w/ CEILING CONSTRUCTION AND TOILET PARTITION REQUIREMENTS.
4. DETAIL APPLIES @ ROOMS '133D' AND '132A' IN EXISTING BUILDING.

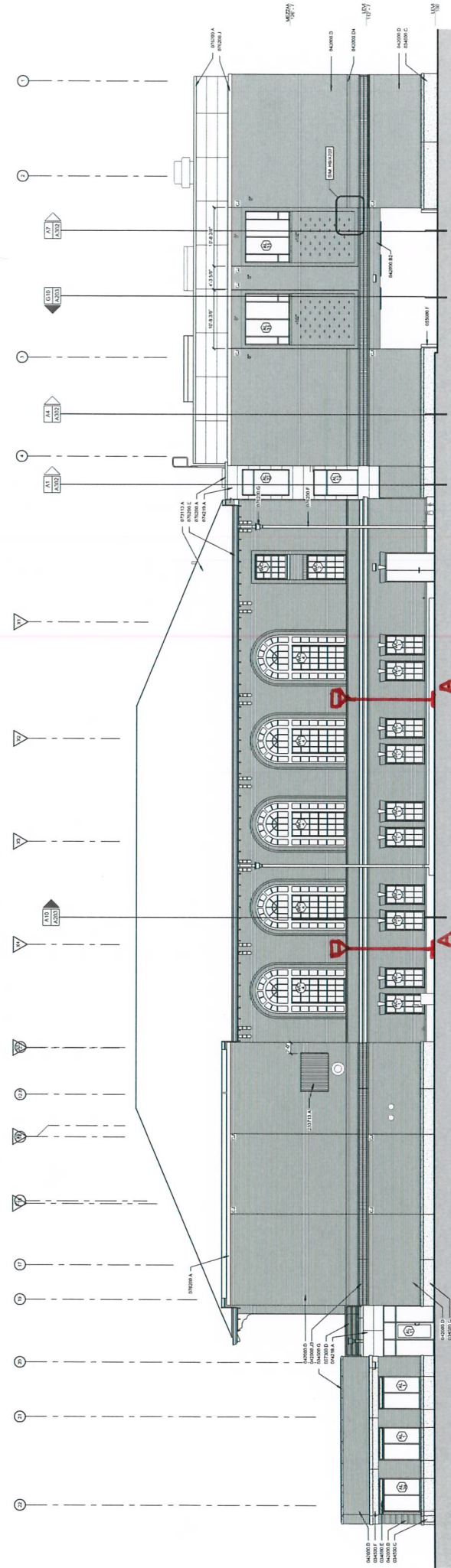
5

FRAMING @ CEILING HUNG TOILET PARTITIONS

S503

3/4" = 1'-0"

UNL East Campus Recreation Center



North Elevation- Not to Scale

Type A post top light fixtures shown at north elevation on sheet ME100 shall be centered between windows, as shown above.

SECTION 085200 - WOOD WINDOWS

360 Architects' Project No. 116900.00
Sinclair Hille Architects' Project No. 11058

SECTION 085200 - WOOD WINDOWS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes aluminum-clad wood windows.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - 2. Review, discuss, and coordinate the interrelationship of wood windows with other exterior wall components. Include provisions for anchoring, flashing, weeping, sealing perimeters, and protecting finishes.
 - 3. Review and discuss the sequence of work required to construct a watertight and weathertight exterior building envelope.
 - 4. Inspect and discuss the condition of substrate and other preparatory work performed by other trades.

1.4 ACTION SUBMITTALS

- A. Shop Drawings: Include plans, elevations, sections, hardware, accessories, insect screens, operational clearances, and details of installation, including anchor, flashing, and sealant installation.
- B. Samples: For each exposed product and for each color specified, 2 by 4 inches (50 by 100 mm) in size.
- C. Samples for Initial Selection: For units with factory-applied color finishes.
 - 1. Include similar Samples of hardware and accessories involving color selection.
- D. Product Schedule: For wood windows. Use same designations indicated on Drawings.

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1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer and Installer.
- B. Product Test Reports: For each type of wood window, for tests performed by a qualified testing agency.
- C. Field quality-control reports.
- D. Sample Warranties: For manufacturer's warranties.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A manufacturer capable of fabricating wood windows that meet or exceed performance requirements indicated and of documenting this performance by test reports, and calculations.
- B. Installer Qualifications: An installer acceptable to wood window manufacturer for installation of units required for this Project.

1.7 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace wood windows that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Failure to meet performance requirements.
 - b. Structural failures including excessive deflection, water leakage, and air infiltration.
 - c. Faulty operation of movable sash and hardware.
 - d. Deterioration of materials and finishes beyond normal weathering.
 - e. Failure of insulating glass.
 - 2. Warranty Period:
 - a. Window: 10 years from date of Substantial Completion.
 - b. Glazing Units: 10 years from date of Substantial Completion.
 - c. Aluminum-Cladding Finish: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Product: Requests for manufacturer substitutions prior to bidding will be reviewed and responded to in conformance with Division 1 requirements. Subject to

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compliance with requirements, provide Marvin Ultimate Wood Clad or comparable product pre-approved during bidding or by a manufacturer listed below:

1. Aluminum-Clad Wood Windows:
 - a. EAGLE Window & Door, Inc.: an Andersen Window & Door company.
 - b. JELD-WEN, Inc.
 - c. Peachtree Doors and Windows.
 - d. Pella Corporation .
 - e. Weather Shield Mfg., Inc.

- B. Source Limitations: Obtain wood windows from single source from single manufacturer.

2.2 WINDOW PERFORMANCE REQUIREMENTS

- A. Product Standard: Comply with AAMA/WDMA/CSA 101/I.S.2/A440 for definitions and minimum standards of performance, materials, components, accessories, and fabrication unless more stringent requirements are indicated.
 1. Window Certification: WDMA certified with label attached to each window.

- B. Performance Class and Grade: AAMA/WDMA/CSA 101/I.S.2/A440 as follows:
 1. Minimum Performance Class: CW.
 2. Minimum Performance Grade: 40.

- C. Thermal Transmittance: NFRC 100 maximum whole-window U-factor of 0.35 Btu/sq. ft. x h x deg F (2.0 W/sq. m x K).

- D. Solar Heat-Gain Coefficient (SHGC): NFRC 200 maximum whole-window SHGC of 0.40.

2.3 WOOD WINDOWS

- A. Operating Types: Provide the following operating types in locations indicated on Drawings:
 1. Fixed.

- B. Frames and Sashes: Fine-grained wood lumber complying with AAMA/WDMA/CSA 101/I.S.2/A440; kiln dried to a moisture content of not more than 12 percent at time of fabrication; free of visible finger joints, blue stain, knots, pitch pockets, and surface checks larger than 1/32 inch (0.8 mm) deep by 2 inches (51 mm) wide; water-repellent preservative treated.
 1. Exterior Finish: Aluminum-clad wood.
 - a. Aluminum Finish: Manufacturer's standard fluoropolymer two-coat system with fluoropolymer color topcoat containing not less than 70 percent polyvinylidene fluoride resin by weight and complying with AAMA 2605.

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- b. Exposed Unfinished Wood Surfaces: Manufacturer's standard paint-grade species.
 - c. Color: To match aluminum finishes at storefront and curtain wall assemblies – PPG UC106688F Duranar Sunstorm Moon dust.
 2. Interior Finish: Manufacturer's standard factory-prime coat.
- C. Glass: Clear annealed glass, ASTM C 1036, Type 1, Class 1, q3.
 1. Kind: Fully tempered (where required by code).
- D. Insulating-Glass Units: ASTM E 2190, certified through IGCC as complying with requirements of IGCC.
 1. Glass: ASTM C 1036, Type 1, Class 1, q3.
 - a. Tint: Clear.
 - b. Kind: Fully tempered (where required by code).
 2. Lites: Two.
 3. Filling: Fill space between glass lites with air.
 4. Low-E Coating: Sputtered on second surface.
- E. Glazing System: Manufacturer's standard factory-glazing system that produces weathertight seal.
- F. Fasteners: Noncorrosive and compatible with window members, trim, hardware, anchors, and other components.
 1. Exposed Fasteners: Do not use exposed fasteners to the greatest extent possible. For application of hardware, use fasteners that match finish hardware being fastened.

2.4 ACCESSORIES

- A. Dividers (False Muntins): Provide divider grilles in designs indicated for each sash lite.
 1. Material: Manufacturer's standard.
 2. Pattern: As indicated on Drawings.
 3. Profile: 1-1/8 inch wide with internal spacer bars
 - a. Exterior muntin: 0.055 inch thick extruded aluminum.
 - b. Interior muntin: Wood matching frame.
 4. Color: To match frames.

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2.5 FABRICATION

- A. Fabricate wood windows in sizes indicated. Include a complete system for installing and anchoring windows.
- B. Glaze wood windows in the factory.
- C. Mullions: Provide mullions and cover plates, matching window units, complete with anchors for support to structure and installation of window units. Allow for erection tolerances and provide for movement of window units due to thermal expansion and building deflections. Provide mullions and cover plates capable of withstanding design wind loads of window units.
- D. Complete fabrication, assembly, finishing, hardware application, and other work in the factory to greatest extent possible. Disassemble components only as necessary for shipment and installation. Allow for scribing, trimming, and fitting at Project site.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine openings, substrates, structural support, anchorage, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Verify rough opening dimensions, levelness of sill plate, and operational clearances.
- C. Examine wall flashings, vapor retarders, water and weather barriers, and other built-in components to ensure weathertight window installation.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with manufacturer's written instructions for installing windows, hardware, accessories, and other components. For installation procedures and requirements not addressed in manufacturer's written instructions, comply with installation requirements in ASTM E 2112.
- B. Install windows level, plumb, square, true to line, without distortion, anchored securely in place to structural support, and in proper relation to wall flashing and other adjacent construction to produce weathertight construction.

3.3 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.

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1. Testing and inspecting agency will interpret tests and state in each report whether tested work complies with or deviates from requirements.
 - B. Testing Services: Testing and inspecting of installed windows shall take place as follows:
 1. Testing Methodology: Testing of windows for air infiltration and water resistance shall be performed according to AAMA 502.
 2. Air-Infiltration Testing:
 - a. Test Pressure: That required to determine compliance with AAMA/WDMA/CSA 101/I.S.2/A440 performance class indicated.
 - b. Allowable Air-Leakage Rate: 1.5 times the applicable AAMA/WDMA/CSA 101/I.S.2/A440 rate for product type and performance class rounded down to one decimal place.
 3. Water-Resistance Testing:
 - a. Test Pressure: Two-thirds times test pressure required to determine compliance with AAMA/WDMA/CSA 101/I.S.2/A440 performance grade indicated.
 - b. Allowable Water Infiltration: No water penetration.
 4. Testing Extent: One WC4 window. Windows shall be tested after perimeter sealants have cured.
 5. Test Reports: Prepared according to AAMA 502.
 - C. Remove and replace noncomplying windows and retest as specified above.
 - D. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
 - E. Prepare test and inspection reports.
- 3.4 ADJUSTING, CLEANING, AND PROTECTION
- A. Clean exposed surfaces immediately after installing windows. Remove excess sealants, glazing materials, dirt, and other substances.
 1. Keep protective films and coverings in place until final cleaning.
 - B. Remove and replace sashes if glass has been broken, chipped, cracked, abraded, or damaged during construction period.
 - C. Protect window surfaces from contact with contaminating substances resulting from construction operations. If contaminating substances do contact window surfaces, remove contaminants immediately according to manufacturer's written instructions.

END OF SECTION 085200