PROJECT:	Nebraska State Patrol Crime Lab	**PROJECT NO.**	#L13459
FROM:	BVH Architects	**DATE:**	7/11/14
TO:	Bidders	**ADDENDUM NO.**	#2

This Addendum is issued by the Architect to all bidders of record prior to receipt of proposals. Bidders shall acknowledge receipt of this addendum by so indicating on the Proposal Form. Failure to do so may subject Bidder to disqualification.

All information and instructions given herein shall become a part of the Contract Documents.

GENERAL

1. Building Permit: The owner has applied for the building permit review and has paid the review fee equaling approximately 50% of the total building permit fees. The General Contractor shall carry the balance of the building permit fee in the general conditions of the bid in the amount of $4,565.00 without burden of overhead and profit. The selected General Contractor is required to assume full administrative responsibilities regarding the terms/requirements of the Building Permit upon award of contract. Impact fees will not apply.
2. Mechanical Systems Commissioning: The owner intends to commission the mechanical systems by an independent, third-party commissioning agent.

PROJECT MANUAL –SHELL PACKAGE

1. Section 004100 Bid Form
    a. General Contractor shall utilize the attached revised Bid Form for final bid tabulation.
2. Section 075100 Built-Up Bituminous Roofing
    a. Delete entire section found in the Project Manual and replace with revised section attached with this addendum.
3. Section 076100
    a. Delete this section in its entirety.
4. Section 079005 Joint Sealers
    a. Sikasil GP as manufactured by Sika, Inc. is approved as a substitution for sealant type E.
    b. Sikasil 290 as manufactured by Sika, Inc. is approved as a substitution for sealant type A.
    c. Add sealant type to sealant schedule as found in paragraph 2.03:
        1. Type F –Interior Precast Panel Joint Sealant: Sikaflex 15LM or equivalent.
5. Section 084313 Aluminum Framed Storefronts
    a. Delete paragraph 1.05, C 1-2 and replace with the following
        1. “90 mph, Exposure C, Building Category II [I=1.00] – refer to structural drawings for design pressures”
6. Section 084413 Glazed Aluminum Curtain Wall
    a. Delete paragraph 1.05, C 1-2 and replace with the following
        1. “90 mph, Exposure C, Building Category II [I=1.00] – refer to structural drawings for design pressures”
    b. Sun shade depth shall be 24” as specified
    c. Light shelf depth shall be 24”
7. Section 088000 Exterior Glazing
    a. Revise paragraph 2.01 G (Type Alt. 5) as follows:

1. Delete reference to applied security film as "Bullet Resistant". Applied security film shall be considered "Blast Resistant"
2. Applied security film shall be applied to type 1 and type 2 glazing on both the #1 and #4 surfaces and secured with a wet glaze anchoring system. Security film shall be a minimum of 8 mil thickness.
3. Delete reference to Underwriters Laboratory (UL) Security Level: Level 3 and replace with the following referenced standard: GSA Level 2.
4. Security film shall be Madico Safety Shield 700 or equivalent.

8. Section 87100 Door Hardware
   a. Delete door #007 from hardware set no. 3.
   b. Add door hardware set no. 3a to include all components found in hardware set no. 3 and add the following components.

1.	1	Threshold	513	689
2.	1	Sweep	200NA	689
3.	1	Gasket	5050B @ head	Blk
4.	1	Weather Stripping	130NA @ Jambs	689
5.	1	Drip Cap	16A	689

ARCHITECTURAL DRAWINGS–SHELL PACKAGE

1. Clerestory window frames are delineated on sheet A3.1-S. Refer to elevation drawings for clerestory window dimensions and segmentation. All segmentation is to be considered at equal spacing. Clerestory windows are called to be included as window type as required in Section 084313 Aluminum-Framed Storefronts. Clerestory window heights are shown on wall section A10/A5.1-S.
2. Sheet A7.1-S: Revise frame type associated with door 004 to be frame type A-3. See attached drawing.
3. "Hard-coat Stucco" Soffits as noted on drawings shall be referenced to Section 072400 Direct Applied Finish System.

STRUCTURAL DRAWINGS–SHELL PACKAGE

1. See Voss and Associates structural drawings S1- S3 attached with this addenda for revisions to structural.

PROJECT MANUAL –TENANT IMPROVEMENT PACKAGE

1. See DLR Group Addendum No. CC-2 attached with this addenda for revisions to the Project Manual as it relates to the Tenant Improvement scope of work.

MECHANICAL AND ELECTRICAL –SHELL AND TENANT IMPROVEMENT PACKAGE

1. See Olsson and Associates addendum pages 1-7 attached with this addenda for revisions to the Project Manual and drawings as it relates to Mechanical and Electrical scopes of work.

END OF ADDENDUM

SECTION 004100

BID FORM (Revised)

THE PROJECT AND THE PARTIES

1.01 TO:

Lincoln Airport Authority
2400 West Adams Street, Suite 200
P.O. Box 80407
Lincoln, NE 68501

1.02 FOR:

A. Construction of the Nebraska State Patrol Crime Lab.

1.03 BID DATE: _____ (BIDDER TO ENTER DATE).

1.04 SUBMITTED BY: (BIDDER TO ENTER NAME AND ADDRESS)

A. Bidder's Full Name _____

B. Address _____

C. City, State, Zip_____

1.05 OFFER

A. Having examined the Place of The Work and all matters referred to in the Instructions to Bidders and the Contract Documents prepared by [Bahr Vermeer Haecker Architects, Ltd.] for the above mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work, which is a combined amount for the "Shell Package Offer" and the "Tenant Improvement Package Offer" for the total Base Bid of:

B. _____
_____ dollars
($_____), in lawful money of the United States of America.

C. The Shell Package and Tenant Improvement Package offers are broken out as follows:
   1. Shell Package Offer:
      a. _____
      _____ dollars
      ($_____), in lawful money of the United States of America.
   2. Tenant Improvement Package Offer:
      a. _____
      _____ dollars
      ($_____), in lawful money of the United States of America.

D. We have included the required Bid Bond as indicated in the Instruction to Bidders.

1.06 ALTERNATES

A. The Base Bid may be increased in accordance with the Alternate proposals as follows. Alternates are described in Section 012300 - Alternates. All Alternates must be bid.

Alternate No. 1: Sally Port Shell.

Add: _____dollars

($_____).

Alternate No. 2: Sally Port Interior Fit-Out.

Add: _____dollars

($_____).

Alternate No. 3: Flag Pole and Flag Lighting

Add: _____dollars

($_____).

Alternate No. 4: Heat Recovery System.

Add: _____dollars

($_____).

Alternate No. 5: Bullet Resistant Glass Film.

Add: _____dollars

($_____).

1.07 ACCEPTANCE

A. This offer shall be open to acceptance and is irrevocable for forty-five days from the bid closing date.

B. If this bid is accepted by Owner within the 45 day time period of irrevocability, we will:
   1. Execute the Agreement within seven days of receipt of Notice of Award.
   2. Furnish the required bonds within seven days of receipt of Notice of Award.
   3. Commence work within seven days after written Notice to Proceed of this bid.

C. If this bid is accepted within the time stated, and we fail to commence the Work or we fail to provide the required Bond(s), the security deposit shall be forfeited as damages to Owner by reason of our failure, limited in amount to the lesser of the face value of the security deposit or the difference between this bid and the bid upon which a Contract is signed.

D. In the event our bid is not accepted within the 45 day time period of irrevocability, the required security deposit shall be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

1.08 CONTRACT TIME

A. If this Bid is accepted, we will:

B. Complete the Work by the 1st day of September, 2015.

1.09 ADDENDA

A. The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.
   1. Addendum # _____ Dated _____.
   2. Addendum # _____ Dated_____.
   3. Addendum # _____ Dated _____.

1.10 BID FORM SUPPLEMENTS

A. The following Supplements are attached to this Bid Form and are considered an integral part of this Bid Form:
   1. Subcontractors: Include the names of all Subcontractors and the portions of the Work they will perform.
   2. Schedule of Values identifies the Bid Sum segmented into portions as requested.

1.11 BID FORM SIGNATURE(S)

A. The Corporate Seal of

B. _____

C. (Bidder - print the full name of your firm)

D. was hereunto affixed in the presence of:

E. _____

F. (Authorized signing officer, Title)

G. (Seal)

1.12 IF THE BID IS A JOINT VENTURE OR PARTNERSHIP, ADD ADDITIONAL FORMS OF EXECUTION FOR EACH MEMBER OF THE JOINT VENTURE IN THE APPROPRIATE FORM OR FORMS AS ABOVE.

1.13 ITEMIZATION OF PROJECT TEAM EXPERIENCE.

A. This project requires a Construction Team with experience and proven success in constructing laboratory and/or similar project type. In addition to the lowest qualified bid, the Owner will evaluate and consider your following information:

The following (3) projects are representative of the General Contractor's experience:

1) Project _____Reference _____

2) Project _____Reference _____

3) Project _____Reference _____

The following (3) projects are representative of the General Contractor's Mechanical Subcontractor's experience:

(Name) _____

1) Project _____Reference _____

2) Project _____Reference _____

3) Project _____Reference _____

The following (3) projects are representative of the General Contractor's Electrical Subcontractor's experience:

(Name) _____

1) Project _____Reference _____

2) Project _____Reference _____

3) Project _____Reference _____

B. Subcontractor List

For consideration, a list of all her subcontractors will be required to be submitted to the Owner (same address as listed in paragraph 1.01) by 12:00pm (noon) the following day after the date of bidding.

END OF BID FORM

SECTION 075100

BUILT-UP BITUMINOUS ROOFING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Built-up roofing membrane, conventional application.

B. Insulation, flat and tapered.

C. Cover Board.

D. Base flashings.

E. Roofing cant strips, accessories, and walkways.

1.02 REFERENCE STANDARDS

A. ASTM C208 - Standard Specification for Cellulosic Fiber Insulating Board; 2012.

B. ASTM C1177/C1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing; 2008.

C. ASTM C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2013.

D. ASTM D41 - Standard Specification for Asphalt Primer Used in Roofing, Dampproofing, and Waterproofing; 2011.

E. ASTM D312 - Standard Specification for Asphalt Used in Roofing; 2000 (Reapproved 2006).

F. ASTM D1863/D1863M - Standard Specification for Mineral Aggregate Used on Built-Up Roofs; 2005 (Reapproved 2011)e1.

G. ASTM D2178 - Standard Specification for Asphalt Glass Felt Used in Roofing and Waterproofing; 2004.

H. ASTM D2822/D2822M - Standard Specification for Asphalt Roof Cement, Asbestos-Containing; 2005 (Reapproved 2011)e1.

I. ASTM D4586/D4586M - Standard Specification for Asphalt Roof Cement, Asbestos-Free; 2007 (Reapproved 2012)e1.

J. ASTM D4601/D4601M - Standard Specification for Asphalt-Coated Glass Fiber Base Sheet Used in Roofing; 2004 (Reapproved 2012)e1.

K. FM DS 1-28 - Wind Design; Factory Mutual Research Corporation; 2007.

L. NRCA ML104 - The NRCA Roofing and Waterproofing Manual; National Roofing Contractors Association; Fifth Edition, with interim updates.

M. SPRI RP-4 - Wind Design Standard for Ballasted Single-Ply Roofing Systems; Single Ply Roofing Institute; 2008 (ANSI/SPRI RP 4).

N. UL (RMSD) - Roofing Materials and Systems Directory; Underwriters Laboratories Inc.; current edition.

1.03 ADMINISTRATIVE REQUIREMENTS

A. Coordinate with installation of associated counterflashings installed by other sections as the work of this section proceeds.

B. Preinstallation Meeting: Convene one week before starting work of this section.
   1. Review preparation and installation procedures and coordinating and scheduling required with related work.

1.04 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data indicating membrane and bitumen materials, base flashing materials, insulation, and surfacing.

C. Shop Drawings: Indicate joint or termination detail conditions, conditions of interface with other materials, and setting plan for tapered insulation.

D. Manufacturer's Installation Instructions: Indicate special procedures.

E. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

F. Manufacturer's Field Reports: Indicate procedures followed.

G. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.05 QUALITY ASSURANCE

A. Perform work in accordance with NRCA Roofing and Waterproofing Manual.

B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum 10 years of documented experience.

C. Applicator Qualifications: Company specializing in performing the work of this section with minimum 10 years experience.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver products in manufacturer's original containers, dry, undamaged, with seals and labels intact.

B. Store products in weather protected environment, clear of ground and moisture.

C. Protect foam insulation from direct exposure to sunlight.

1.07 FIELD CONDITIONS

A. Do not apply roofing membrane during unsuitable weather.

B. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.

C. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.

1.08 WARRANTY

A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.

B. Installer Guarantee: Correct defective Work within a two year period after Date of Substantial Completion.

C. Provide 15 year manufacturer's material and labor warranty to cover failure to prevent penetration of water.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Sheet and Bitumen Materials:
   1. CertainTeed Corporation: www.certainteed.com.
   2. GAF: www.gaf.com.
   3. Johns Manville Corporation: www.jm.com.
   4. Firestone Building Products; www.firestonbpco.com.
   5. Substitutions: See Section 016000 - Product Requirements.

B. Insulation:
   1. Same manufacturer as roofing products.
   2. Substitutions: See Section 016000 - Product Requirements.

2.02 ROOFING - CONVENTIONAL APPLICATION

A. Built-up Bituminous Roofing: Asphalt felt membrane, three ply plus base sheet with insulation and cover board.

B. Roofing Assembly Requirements:
   1. Roof Covering External Fire-resistance Classification: UL Class A.

2. Factory Mutual Classification: Class I and windstorm resistance of I-90, in accordance with FM DS 1-28.

C. Acceptable Insulation Types: 2 layers of 2.5" polyisocyanurate insulation. First layer to be mechanically fastened to deck with subsequent layers cold adhesive applied.

1. Fasten first layer according to requirements in FMG's "Approval Guide" for specified Windstorm Resistance Classification.

D. Acceptable Insulation Types - Tapered Application: Polyisocyanurate insulation in insulation adhesive.

E. Cover Board: ASTM C208; High Density Cellulosic Wood Fiber, 1/2" thick.

F. Surfacing: Aggregate.

2.03 SHEET MATERIALS

A. Base Sheet: ASTM D4601 Type II; asphalt-coated glass fiber; unperforated.

B. Roofing Felt: ASTM D2178; Asphalt-saturated glass fiber felt; Type VI.

C. Base Flashing Material: Modified bitumen, reinforced, granule surface.

D. Flashing Backer Sheet: ASTM D4601, Type II, asphalt coated glass fiber, unperforated.

2.04 BITUMINOUS MATERIALS

A. Bitumen: ASTM D312 Type III or Type IV, asphalt.

B. Primer: ASTM D41, asphalt type.

C. Roof Cement: ASTM D4586, Type I.

D. Emulsified Asphalt: ASTM D1227; with fiber reinforcement other than asbestos (Type II).

2.05 INSULATION

A. Cellulose Fiber Board Insulation: ASTM C208, Type II; Grade 2 with the following characteristics:
1. Board Size: 48 x 48 inch.
2. Board Thickness: 1/2 inch.
3. Board Edges: Square.
4. Thermal Conductivity (R-value): 1.4.
5. Manufacturer: Same as roofing products.
6. Substitutions: See Section 016000 - Product Requirements.

B. Polyisocyanurate Board Insulation: Rigid cellular foam, complying with ASTM C1289, Type II, Class 1, cellulose felt or glass fiber mat both faces; Grade 1, and with the following characteristics:
1. Compressive Strength: 20 psi
2. Board Size: 48 x 96 inch. (48 x 48 when being adhered)
3. Board Thickness: 2.5 inch.
4. Tapered Board: Slope as indicated; minimum thickness 1/2 inch; fabricate of fewest layers possible.
5. Thermal Resistance: R-value of 14.4 for 2.5"
6. Board Edges: Square.
7. Manufacturers:
   a. Same as roofing manufacturer.
8. Substitutions: See Section 016000 - Product Requirements.

2.06 SURFACING MATERIALS - CONVENTIONAL APPLICATION

A. Aggregate: ASTM D1863; sound, hard washed river gravel; 1/4 inch minimum to 1/2 inch maximum size.

B. Walkway Pads: Suitable for maintenance traffic, contrasting color or otherwise visually distinctive from roof membrane.
1. Composition: Asphaltic with mineral granule surface.
2. Size: 18 x 18 inch.

2.07 ACCESSORIES

A. Cant and Edge Strips: Bitumen-impregnated wood fiberboard, compatible with roofing materials; cants formed to 45 degree angle, tapered edge strips, and other configurations as detailed.

B. Insulation Fasteners: Appropriate for purpose intended and approved by roofing manufacturer for warranty requested and FM requirements.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that surfaces and site conditions are ready to receive work.

B. Verify deck is supported and secure.

C. Verify deck is clean and smooth, flat, free of depressions, waves, or projections, properly sloped and suitable for installation of roof system.

D. Verify deck surfaces are dry and free of snow or ice.

E. Verify that roof openings, curbs, and penetrations through roof are solidly set, and cant strips are in place.

3.02 INSULATION INSTALLATION

A. Attachment of Insulation:
   1. Mechanically fasten first layer of insulation to deck in accordance with roofing manufacturer's instructions and Factory Mutual requirements.
   2. Embed subsequent layers of insulation and cover board in cold fluid applied adhesive in accordance with roofing and insulation manufacturers' instructions and FM requirements.

B. Lay subsequent layers of insulation with joints staggered minimum 6 inch from joints of preceding layer.

C. Place tapered insulation to the required slope pattern in accordance with manufacturer's instructions.

D. On metal deck, place boards parallel to flutes with insulation board edges bearing on deck flutes.

E. Lay boards with edges in moderate contact without forcing. Cut insulation to fit neatly to perimeter blocking and around penetrations through roof.

F. At roof drains, use factory-tapered boards to slope down to roof drains over a distance of 18 inches.

G. Do not apply more insulation than can be covered with membrane in same day.

3.03 MEMBRANE APPLICATION

A. Equiviscous Temperature (EVT) at Point of Application: In accordance with NRCA recommendations.

B. Lay base sheet. Lap sides 2 inches; lap ends 6 inches.
   1. Lay in bitumen mopped at 20 lb/square.

C. Apply membrane plies, weather lap edges and ends, and mop with 20 lb/square of bitumen per ply.

D. Apply smooth, free from air pockets, wrinkles, fish-mouths, or tears.

E. At end of day's operation, install two plies membrane and bitumen glaze coat for cut-off. Glaze exposed felts. Remove cut-off before resuming roofing.

F. At intersections with vertical surfaces:
   1. Extend membrane and base sheet over cant strips and up a minimum of 4 inches onto vertical surfaces.
   2. Mop on base flashing of two additional plies of felt and one ply of base flashing material.
   3. Secure base flashing to nailing strips at 4 inches on center.

G. At gravel stops, extend membrane and base sheet under gravel stop and to the outside face of the wall.

H. Around roof penetrations, mop in and seal flanges and flashings with two additional plies of felt.

I. Coordinate installation of roof drains and related flashings.

3.04 AGGREGATE SURFACING

A. Apply uniform flood coat of bitumen at rate of 60 lb/square.

B. While flood coat is hot, embed aggregate at rate of 400 lb/square.

C. Evenly distribute aggregate and ensure bond with flood coat. Extend aggregate to bottom edge of cant strips.

3.05 FIELD QUALITY CONTROL

A. See Section 01 4000 - Quality Requirements, for general requirements for field quality control and inspection.

3.06 CLEANING

A. Remove bituminous markings from finished surfaces.

B. In areas where finished surfaces are soiled by bitumen or other source of soiling caused by work of this section, consult manufacturer of surfaces for cleaning advice and conform to their documented instructions.

C. Repair or replace defaced or damaged finishes caused by work of this section.

3.07 PROTECTION

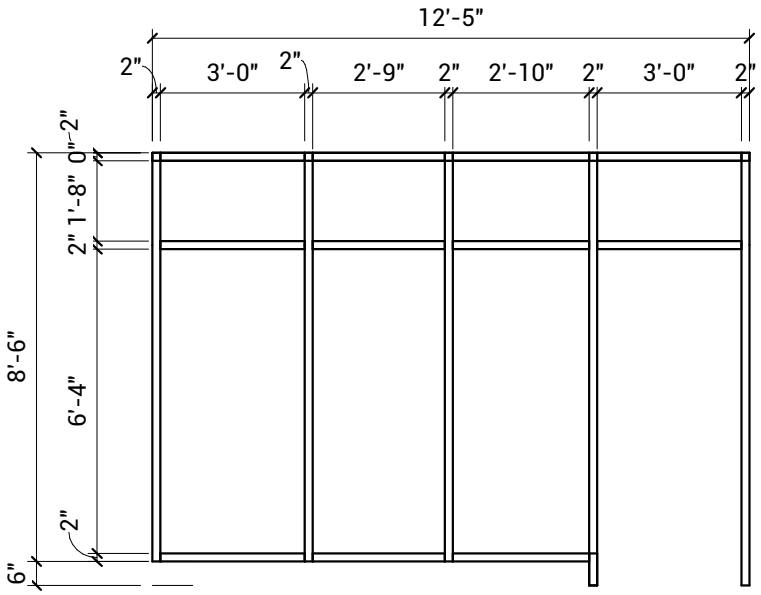
A. Protect installed roofing and flashings from construction operations.

B. Where traffic must continue over finished roof membrane, protect surfaces using durable materials.

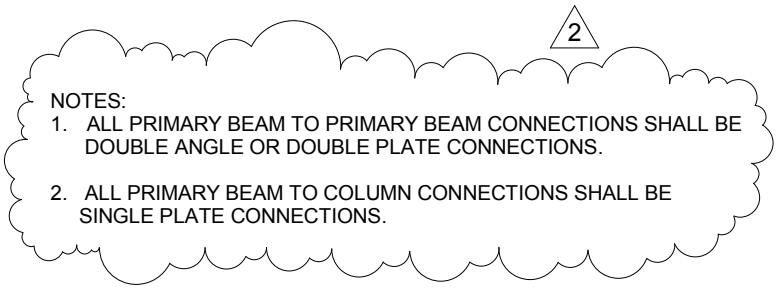
END OF SECTION

Nebraska State Patrol Crime Lab
Addendum #2

DATE: 07/11/14

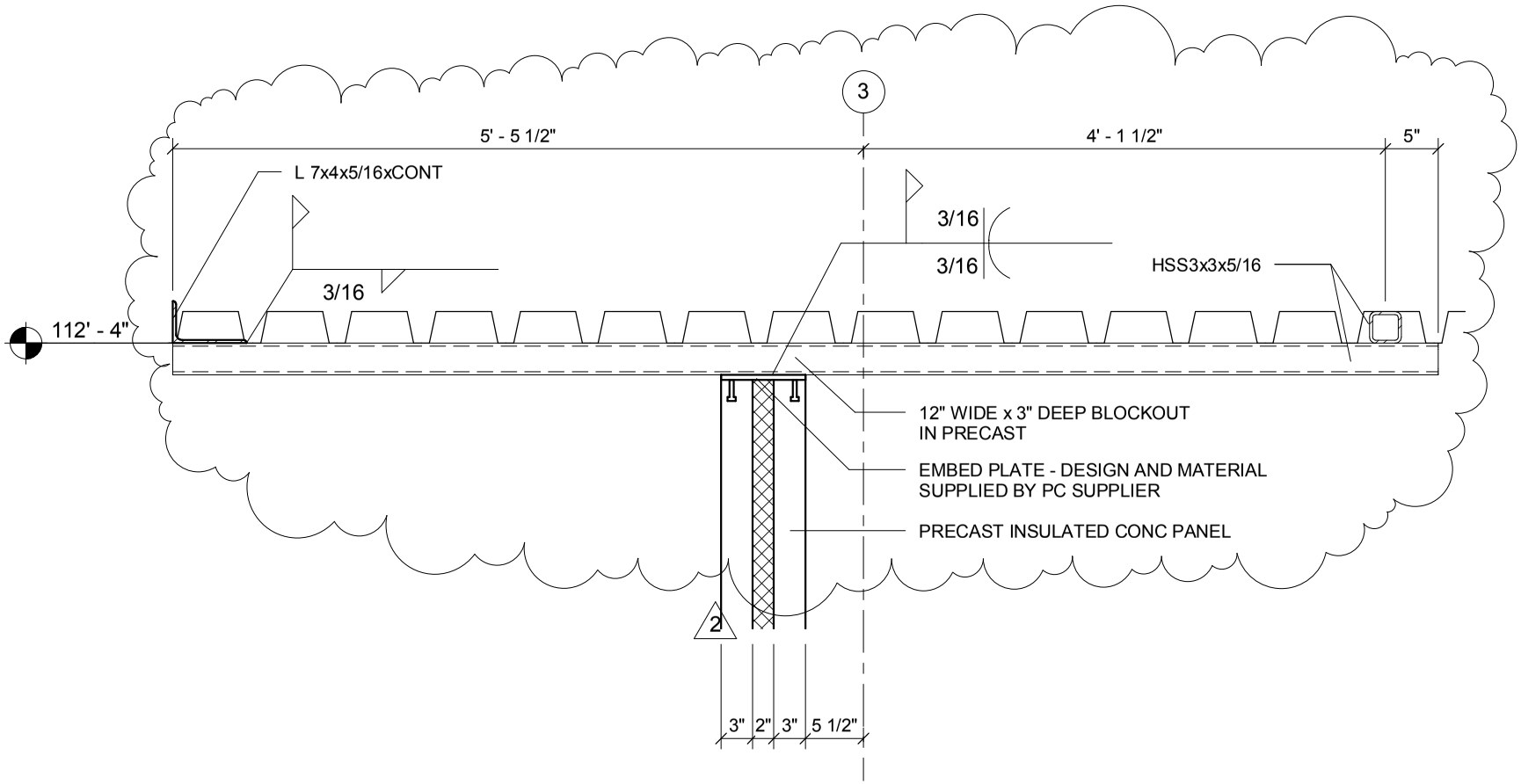


A-3
Frame associated with
door #004



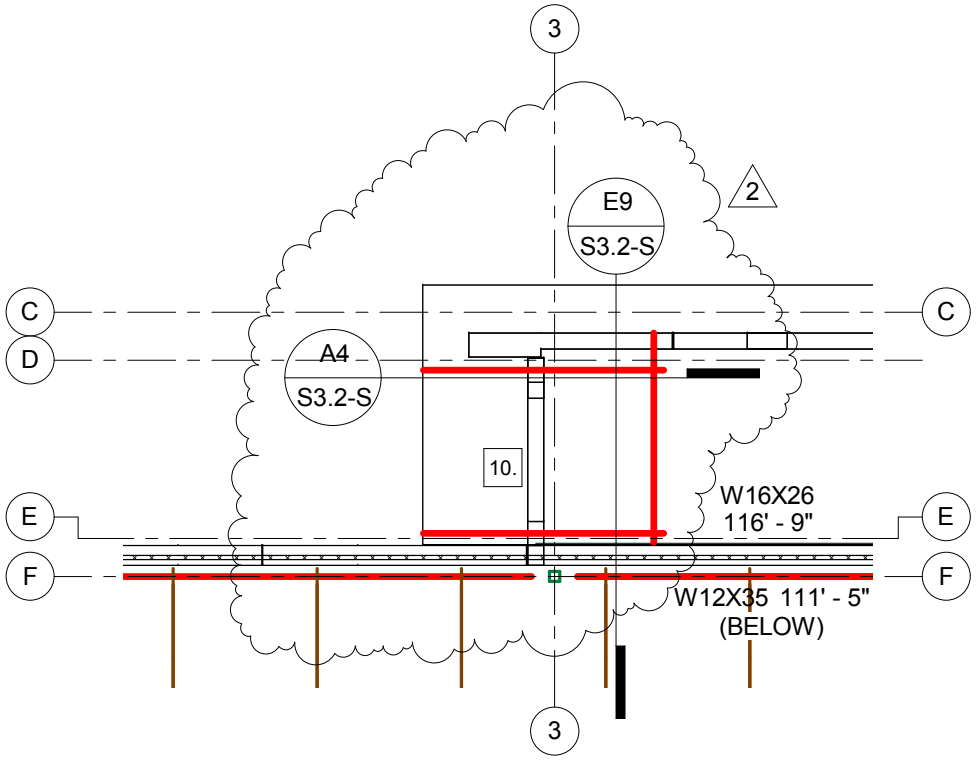
REF. SHEET S1.1-S (STANDARD STEEL CONNECTION SCHEDULE)

Date	07/11/14	VOSS & ASSOCIATES Inc. STRUCTURAL ENGINEERS	
Project Name	Nebraska State Patrol Crime Lab	SHEET	Add. No. 2 S1



REF. SHEET S3.2-S

Date	07/11/14	VOSS & ASSOCIATES Inc. STRUCTURAL ENGINEERS	
Project Name	Nebraska State Patrol Crime Lab	SHEET	Add. No. 2 S3



REF. SHEET S2.2-S

Date	07/11/14	VOSS & ASSOCIATES Inc. STRUCTURAL ENGINEERS	
Project Name	Nebraska State Patrol Crime Lab	SHEET	Add. No. 2 S2

ADDENDUM NO. CC-2

DLR Group
Architecture Engineering Planning Interiors

6457 Frances Street, Suite 200
Omaha, NE 68106
tel 402/393-4100
fax 402/393-8747
omaha@dlrgroup.com
www.dlrgroup.com

NEBRASKA STATE CRIME LAB
LINCOLN, NEBRASKA
DLR GROUP PROJECT NO. 10-13212-00

COMBINED CONTRACT

July 11, 2014

NOTICE TO BIDDERS: Amend the Project Manual and Drawings to the above referenced project as follows:

NOTICE TO BIDDERS II: Pre-Bid Questions and Answers have been placed at the end of this Addendum.

PROJECT MANUAL

ITEM NO. 1 SECTION 033000 CAST-IN-PLACE CONCRETE

A. Subparagraph 2.05.A.2. Add the following:

"e. Barrier Bac."

ITEM NO. 2 SECTION 095113 ACOUSTICAL PANEL CEILINGS

A. Paragraph 2.4.A. Add the following:

"4. Norton Industries."

ITEM NO. 3 SECTION 098436 SOUND-ABSORBING CEILING UNITS

A. Subparagraph 2.1.A. Add the following:

"4. Sound Concepts; Ceiling Book Baffles

ITEM NO. 4 SECTION 102800 TOILET BATH AND LAUNDRY ACCESSORES

A. Subparagraph 2.2.C.1. Delete "SJS 1050" and substitute "# ESD250".

B. Subparagraph 2.2.C.3. Delete "Vertically oriented, surface mounted" and substitute "Counter Top".

C. Subparagraph 2.2.C.4. Delete "(1000 mL)" and substitute "800 mL".

D. Subparagraph 2.2.C.5. Delete "Stainless Steel" and substitute "Chrome Plated".

ITEM NO. 5 SECTION 105626 MOBILE STORAGE SHELVING

A. Add Detail Sheets to the end of this Section as shown on Attachment No. 1.

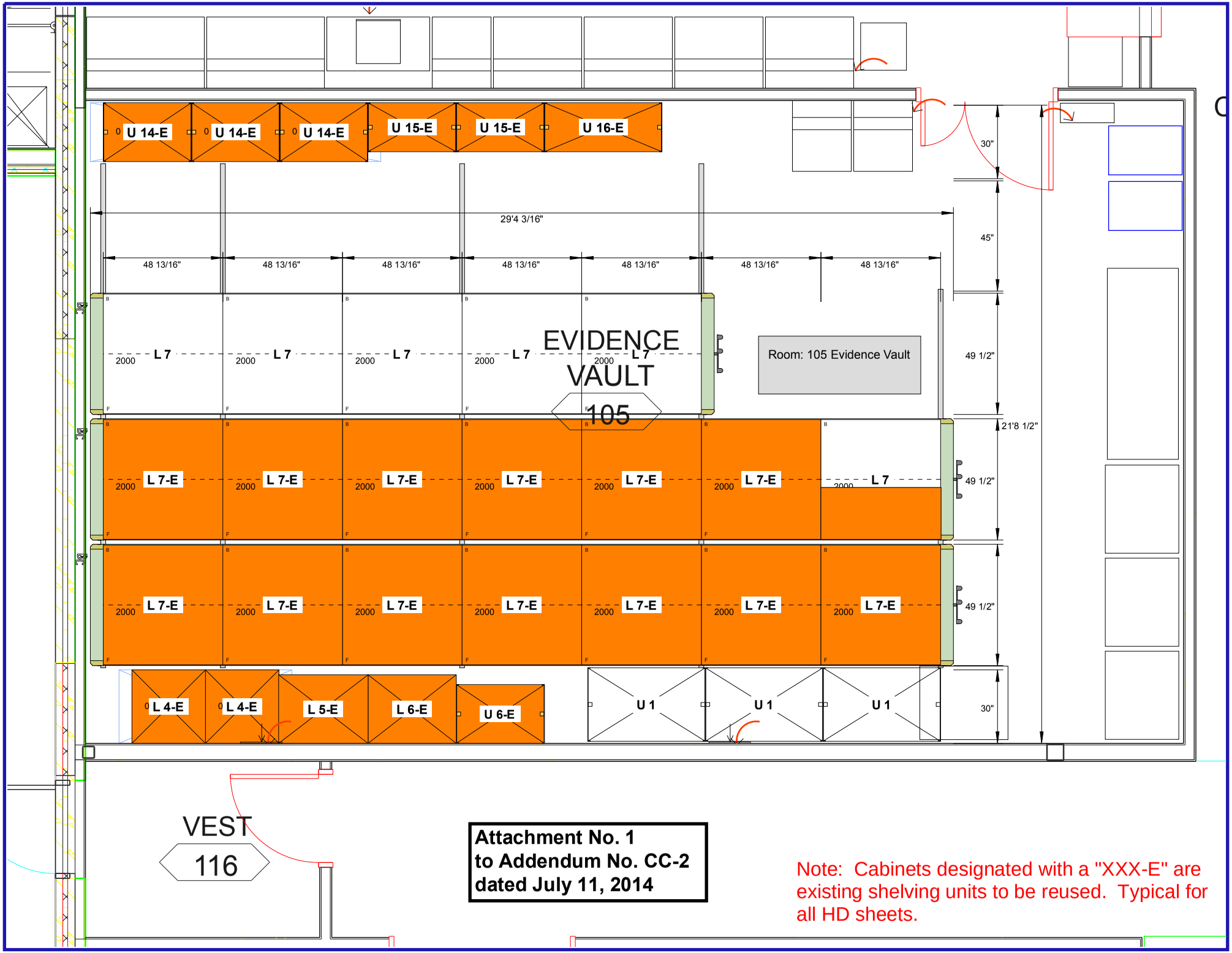
ITEM NO. 6 SECTION 114900 FIRING RANGE EQUIPMENT

A. Paragraph 2.2.A. Add, "Action Target is an accepted manufacturer".

B. Paragraph 2.2.B. Add, “Action Target is an accepted manufacturer”.

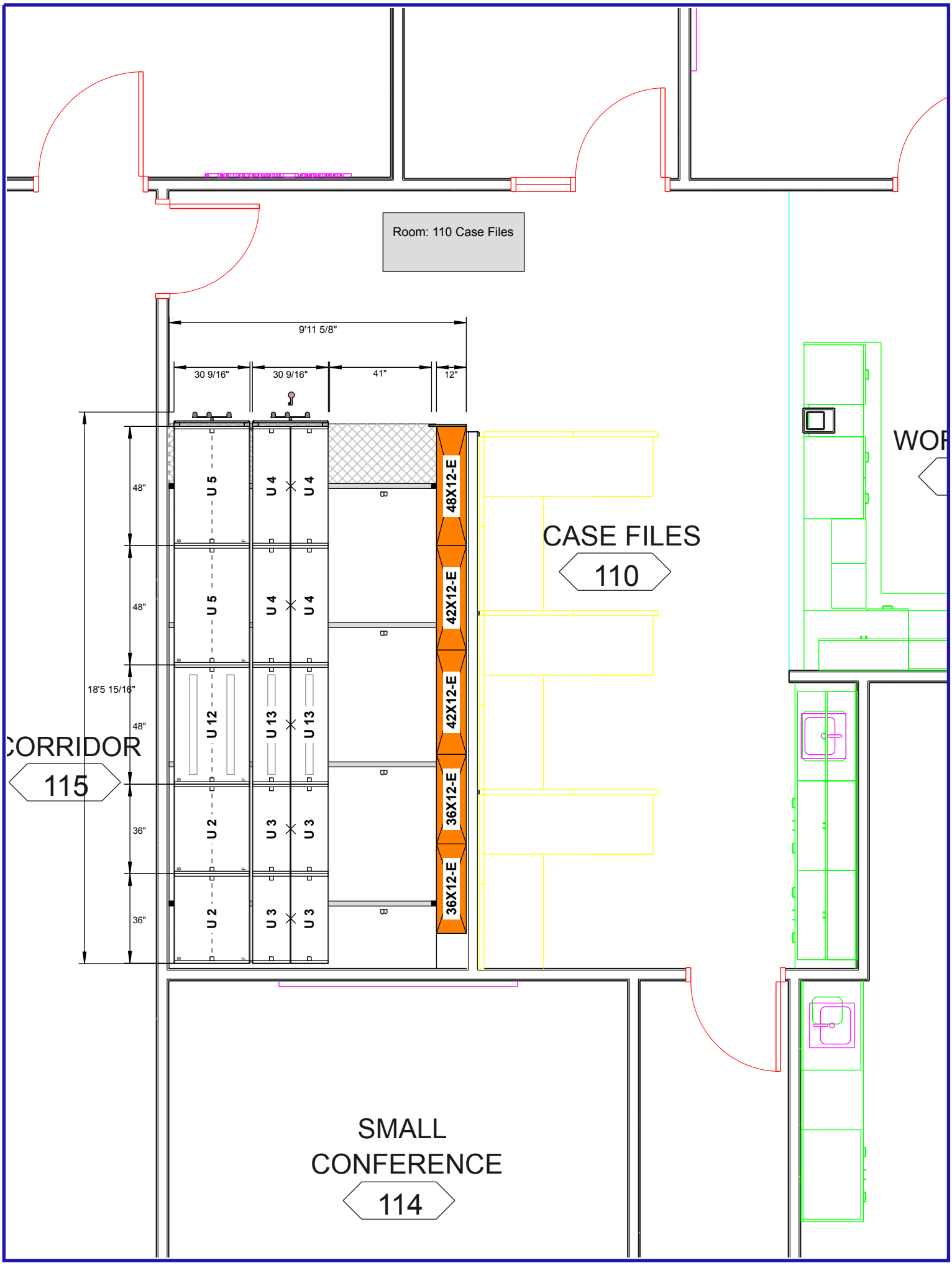
C. Paragraph 2.2.E. Add, “Action Target is an accepted manufacturer”.

END OF ADDENDUM



Attachment No. 1
to Addendum No. CC-2
dated July 11, 2014

Note: Cabinets designated with a "XXX-E" are existing shelving units to be reused. Typical for all HD sheets.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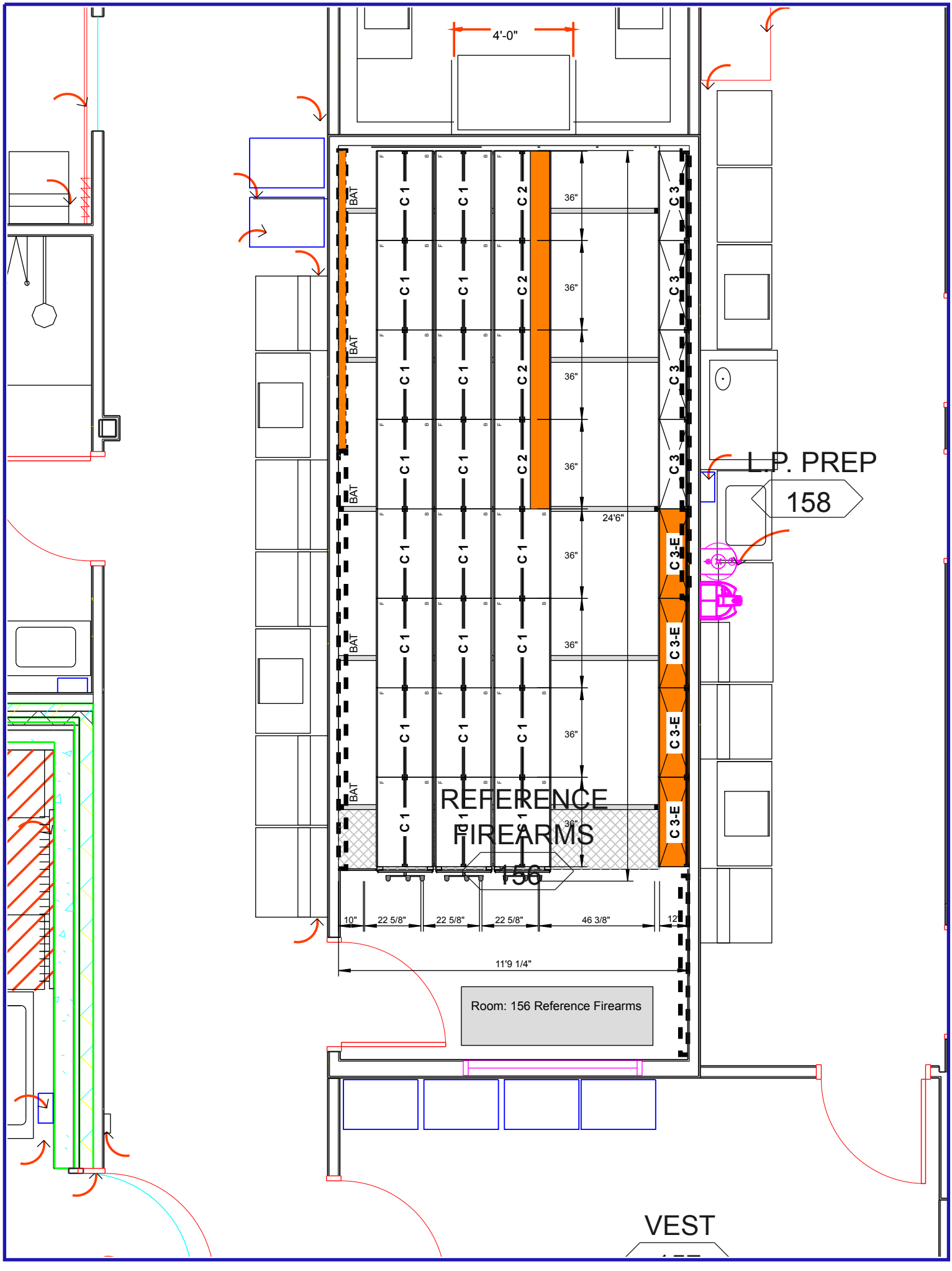
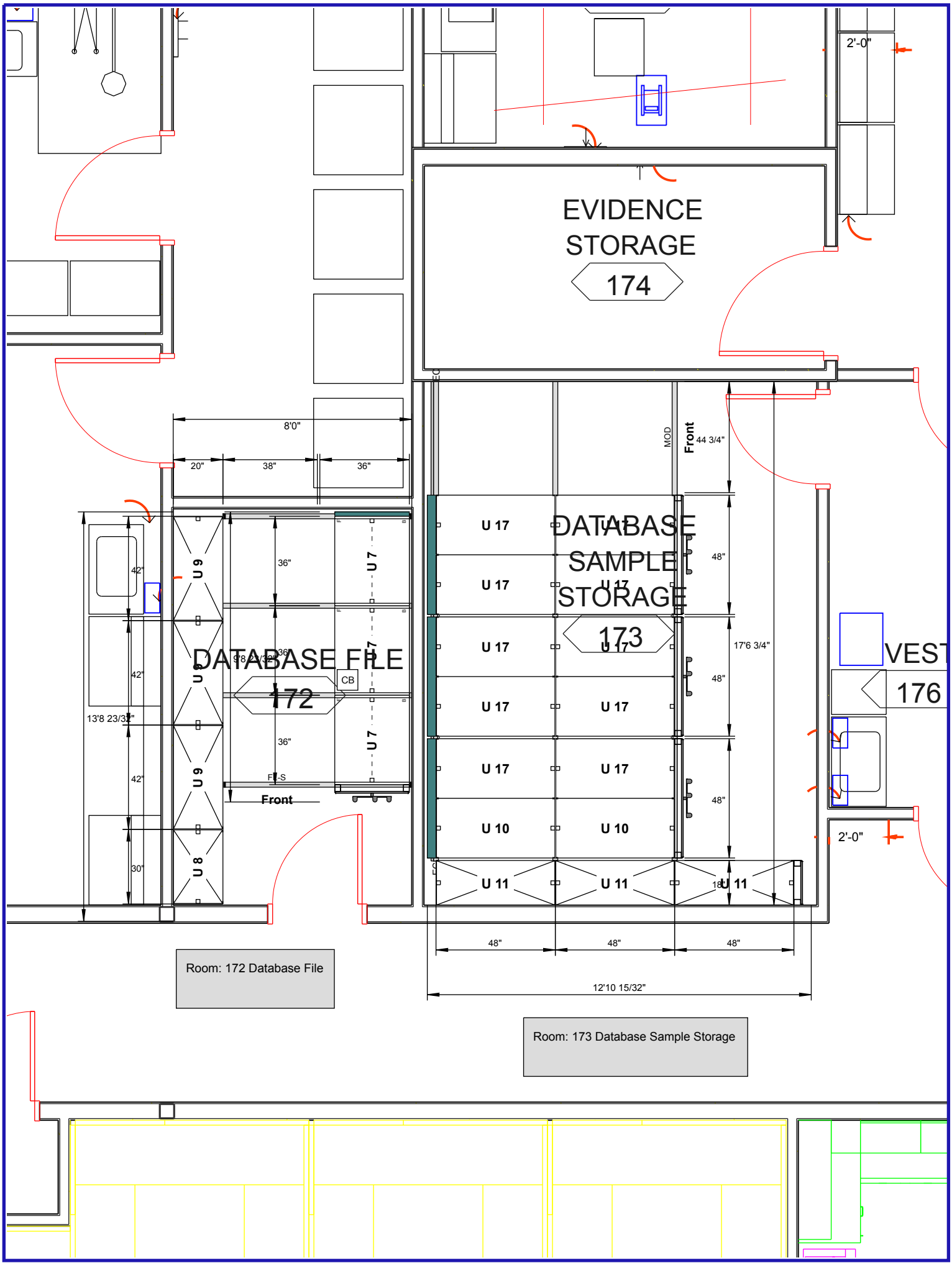
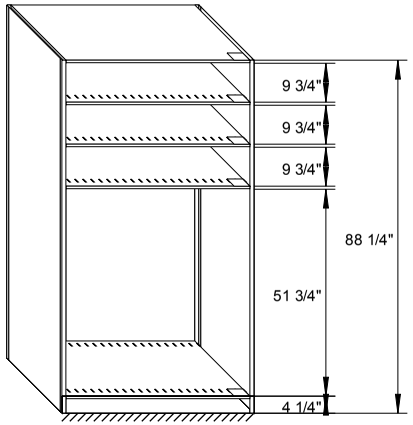
9'11 5/8"
30 9/16"
30 9/16"
41"
12"
48"
48"
18'5 15/16"
48"
36"
36"
U 5
U 4
U 4
U 5
U 4
U 4
U 12
U 13
U 13
U 2
U 3
U 3
U 2
U 3
U 3
48X12-E
42X12-E
42X12-E
36X12-E
36X12-E
CASE FILES
110
CORRIDOR
115
SMALL
CONFERENCE
114


4'-0"
BAT
C 1
C 2
C 3
C 3-E
36"
24'6"
L.P. PREP
158
REFERENCE
FIREARMS
156
10"
22 5/8"
22 5/8"
22 5/8"
46 3/8"
12
11'9 1/4"
Room: 156 Reference Firearms
VEST


EVIDENCE
STORAGE
174
DATABASE
SAMPLE
STORAGE
173
DATABASE FILE
172
VEST
176
Front
MOD
CB
FE-S
2'-0"
8'0"
20"
38"
36"
42"
30"
48"
44 3/4"
17'6 3/4"
13'8 23/32"
12'10 15/32"
U 17
U 10
U 11
U 9
U 8
U 7
Room: 172 Database File
Room: 173 Database Sample Storage

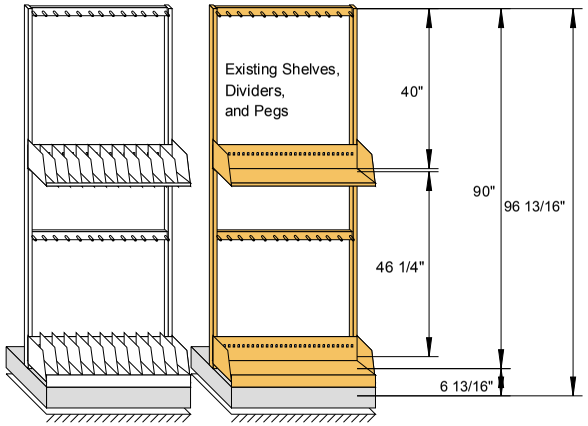
H88 1/4"
88 1/4"x48" d30"



U 1

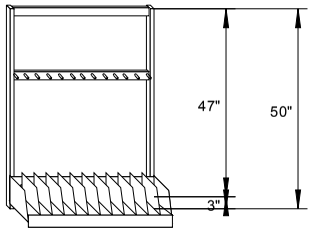
H96 13/16"
90"x36" d22"

H96 13/16"
90"x36" d22"

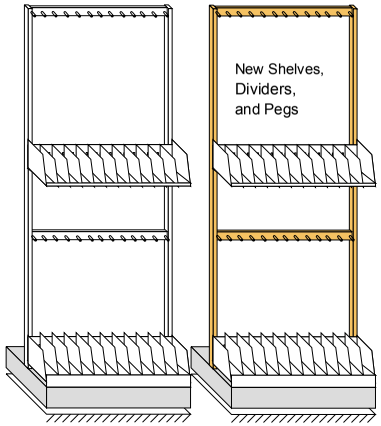


C 1-F C 2-F

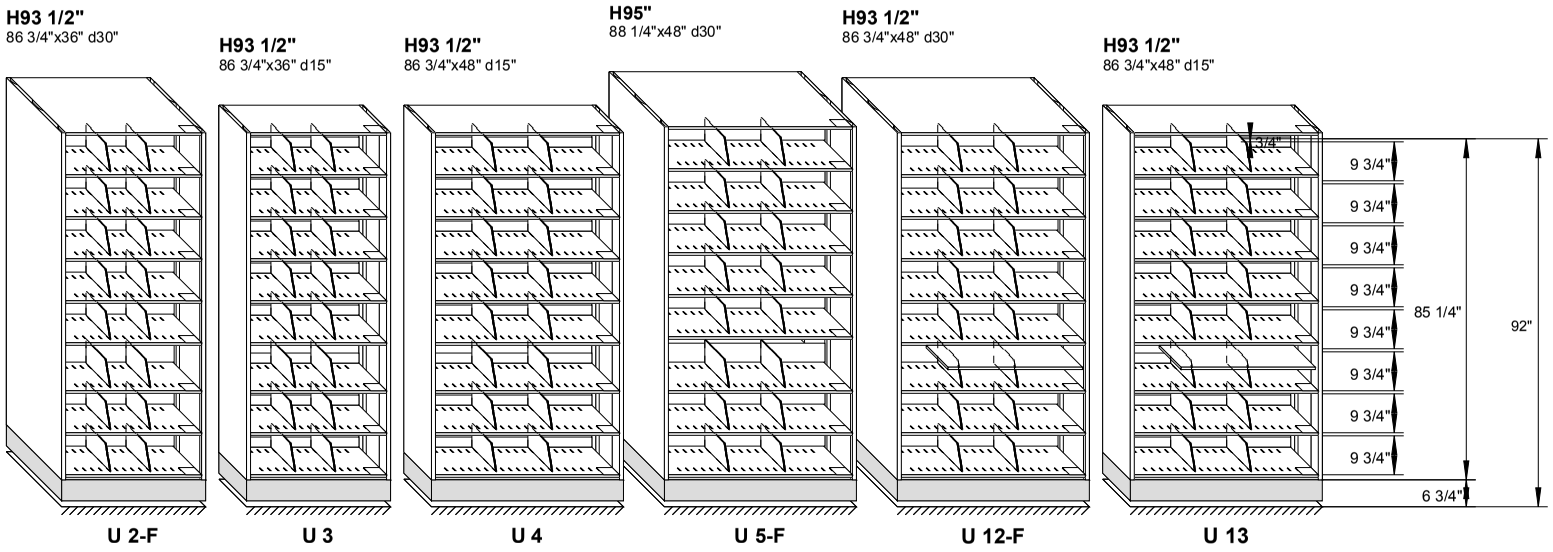
H50"
50"x36" d12"

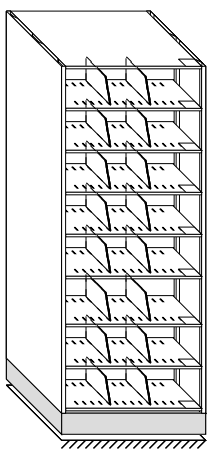


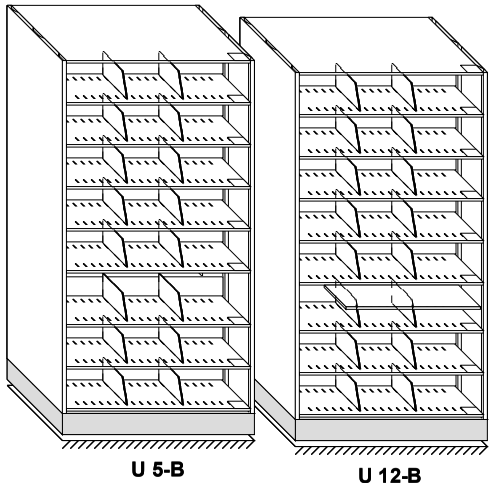
C 3



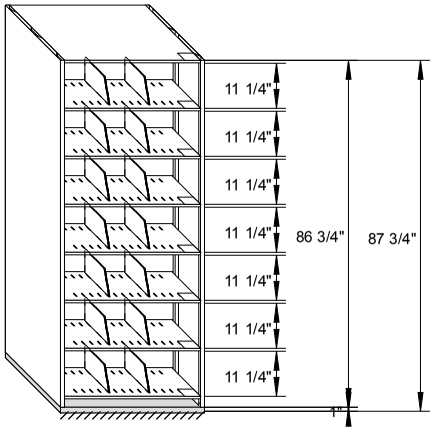
C 1-B C 2-B


H93 1/2"
86 3/4"x36" d30"
H93 1/2"
86 3/4"x36" d15"
H93 1/2"
86 3/4"x48" d15"
H95"
88 1/4"x48" d30"
H93 1/2"
86 3/4"x48" d30"
H93 1/2"
86 3/4"x48" d15"
3/4"
9 3/4"
9 3/4"
9 3/4"
9 3/4"
9 3/4"
9 3/4"
9 3/4"
9 3/4"
85 1/4"
92"
6 3/4"
U 2-F
U 3
U 4
U 5-F
U 12-F
U 13


U 2-B


U 5-B
U 12-B

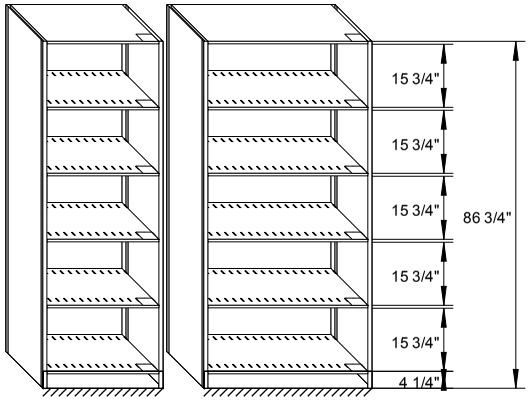
H87 3/4"
86 3/4"x36" d30"



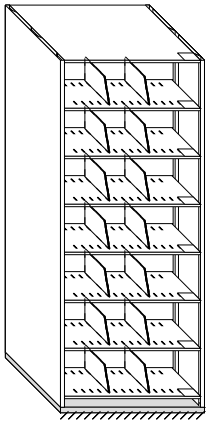
U 7-F

H86 3/4"
86 3/4"x30" d20"

H86 3/4"
86 3/4"x42" d20"

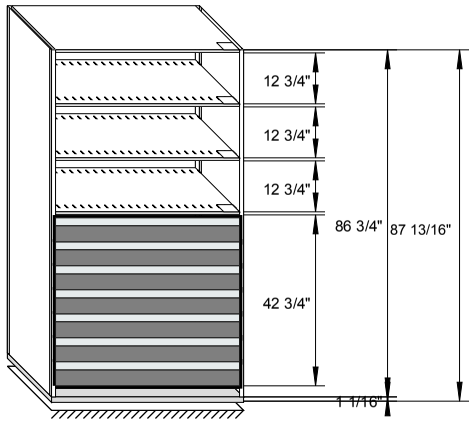


U 8 **U 9**



U 7-B

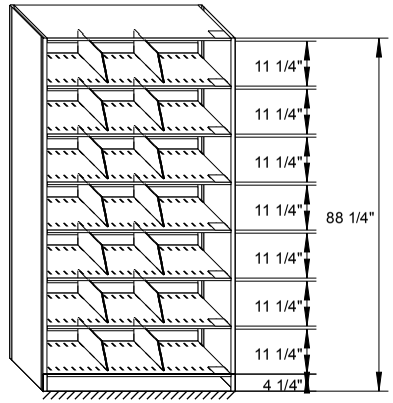
H90 1/8"
86 3/4"x48" d24"



U 10

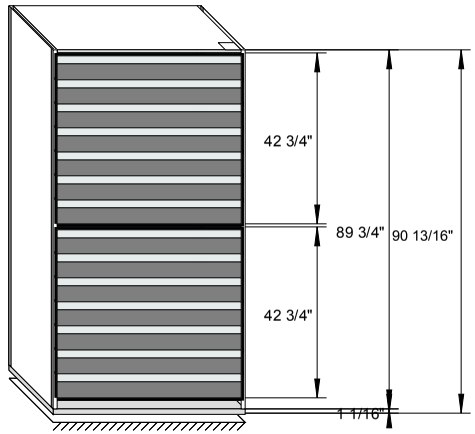
(7) 6" Drawers

H88 1/4"
88 1/4"x48" d18"



U 11

H93 1/8"
89 3/4"x48" d24"



U 17

(14) 6" Drawers

HICKS-ASHBY COMPANY

10618 SUMMIT • LENEXA, KS 66215
913-469-5411 FAX 913-469-1367
E-mail: dhowell@hicks-ashby.com

ESTIMATOR'S QUESTIONS AND ANSWERS

(Please answer the following unanswered questions and fax the completed form back to Hicks-Ashby as quickly as possible)

PROJECT NAME: **Nebraska State Crime Lab**	DATE: **7-3-14**
PROJECT LOCATION: **Lincoln, NE**	
PROJECT MANAGER:	HICKS-ASHBY ESTIMATOR: David Howell

Question:	Ref. Sheet LC1.2-TI	Date:
Rm 177 / 178 at the peninsula there is a cross section marked 5/LC5.2-TI. It shows a service chase, MaxWall, and wall cabinets. Since you can't hang wall cabinets on a service chase, does the MaxWall extend up to the 85" and the service chase above the MaxWall and extend to the ceiling?		
Answer:/Per		Date:

Question:	Ref. Drwg/Spc. No.	Date:
The locations on the MWL Lab plans identified with Key Note 22 as Umbilical Chase span from floor to ceiling using Maxwall studs the entire length with closure panels between studs fully concealing any utilities. Cabinets are able to be supported by the Maxwall system or Alpha system using slotted studs. The service chase will extend to the ceiling. Refer to attached picture for reference. Note: There is not a back splash intended for the horizontal panels on the reagent self. MWL 7-8-14		

Question:	Ref. Drwg/Spc. No.	Date:
Answer:/Per		Date:

Olsson Associates
1111 Lincoln Mall
Lincoln, NE. 68508
July 11, 2014

ADDENDUM NO. 2
Nebraska State Patrol Crime Lab
Lincoln, Nebraska - 2014
OA Project No. 014/A14-0651

This Addendum is issued by Olsson Associates to all Plan Holders of record. This Addendum shall be made part of the Contract Documents. Please acknowledge receipt of this Addendum in the space provided on the Bid Proposal Form. Failure to do so may subject Bidder to disqualification.

The following items are for the Shell Package.

ELECTRICAL TECHNICAL SPECIFICATIONS:

1. The following manufacturers are approved for the products listed.

   265619, E0.2-S Exterior Lighting Invue – Types EF1, EF3; Lumiere – EF2

Drawings:

1. Sheet E0.1-S, Electrical Site Plan

   a. Flag Pole Light Fixtures type “EF2” and associated conduit and wiring shall be provided under Alternate #3.
   b. Electrical contractor to install wiring for loop detector, refer to sheet C11.0
   c. Card reader for sliding gate will be provided by gate supplier, installed by electrical contractor.

2. Sheet E0.2-S, Site Lighting Photometric Plan

   a. Exterior Lighting Fixture Schedule: Light Fixtures Type “EF1” and “EF3” shall be provided with surface mount tenon Cat. # AFTM.

3. Sheet E1.1-S, First Floor Electrical Plan - Shell

   a. Circuit “HLS-2” shall read “HLS1-2”.

4. Sheet E5.1-TI, Electrical One-Line Diagram

   a. Replace Sheet note 7 with the following “PROVIDE HOFFMAN FREE STANDING HINGED, LOCKABLE CT CABINET CAT # A60R5218FSLP” AND METERING PER LES REQUIREMENTS.”

The following items are for the Tenant Improvement Package

MECHANICAL TECHNICAL SPECIFICATIONS:

1. The following manufacturers are approved for the products listed.

223400	Domestic Water Heaters	Bock
223400	Expansion Tanks	American Wheatley
230900	Laboratory Airflow Control System	Triatek

232116	Flow Control Valves	Hydronic Components Inc.
232116	Air/Dirt Separators	Armstrong
232116	Expansion Tanks	American Wheatley
233113	Round/Spiral Duct and Fittings	Eastern Sheet Metal, WSM Ind., La Pine Metal Prod.
233300	Control Dampers	Air Balance, Inc.
233300	Duct Silencers	Commercial Acoustics, Price
233300	Remote Damper Operators	United Enertech
233300	Security Bars	Titus, Nailor
233423	Centrifugal Roof & Inline Fans	Twin City Fan Co, Captiveaire
233423	Laboratory Dilution Fans	Twin City Fan Co., Greenheck, Loren Cook
237313	Air Handling Units	York, Energy Labs Inc.
238239	Unit Heaters	Raywall
M7.2-TI	Buffer Tanks	Wendland Tank Corp.
M7.2-TI	Glycol Feed System	John Woods
M7.2-TI	Louvers (L-1)	Ruskin
M7.3-TI	Energy Recovery Coils	Greenheck

2. Refer to Section 230900 – Instrumentation and Control for HVAC.

   a. Part 2.2 Laboratory Airflow Control System, Paragraph 'A':

      Remove manufacturers 'Tek-Air' and 'TSI Controls' from the approved manufacturers list.

3. Refer to Section 233300 – Air Duct Accessories.

   a. Part 2.10 Turning Vanes:

      Replace Paragraph 'D' with the following:

      "D. Vane Construction: Single wall allowed for ducts up to 30 inches wide located between air terminal units and air devices. Double wall for all other locations. Double wall may be used in place of single at the contractor's option."

Mechanical Drawings:

1. Clarification for all drawings.

   a. All energy recovery components, including energy recovery coil modules/plenums, shall be priced under Add Alternate #4. Under the base-bid, AHU-1 & 2 and EF-1,2,3 shall not have an empty module/plenum for future energy recovery coils. Fan selections shall remain the same with or without energy recover coils.

2. Sheet M3.2-TI, Domestic Water and Gas Plan – Tenant Improvement.

   a. Change the 'WH-1' hydrant in in the east high exterior wall of Corridor 118 (located above Tele/Server 130, for use on the roof) to 'WH-2'.

   b. Add a ball valve on the 3/4" branch piping to the wall hydrant described above.

3. Sheet M5.1-TI, Enlarged Mechanical Plans – Tenant Improvement.

   a. Delete second sentence of Sheet Note 7; the note shall be reduced to the following:

      "7. MAINTAIN 60" CLEAR WALKWAY BETWEEN AHUS, INCLUDING PIPING AND ACCESSORIES."

4. Sheet M7.3-TI, Mechanical Schedules – Tenant Improvement.

   a. Change Note 9 in the Air Handling Units schedule to the following:

      "9. SUBSTITUTED AHU'S SHALL NOT BE WIDER THAN THE LISTED WIDTH, DUE TO MECHANIAL ROOM SIZE AND AISLE CLEARANCE REQUIRED."

   b. Add the following to Remark 16 in the Lab Exhaust Fans schedule:

      "THE COIL SHALL HAVE A PHENOLIC COATING FOR CORROSION PROTECTION. PROVIDE A CORROSION RESISTANT WALKING GRATE OVER THE BOTTOM DUCT OPENING INSIDE THE PLENUM."

   c. Add the following as Remark 18 in the Lab Exhaust Fans schedule:

      "18. THE INTERIOR SURFACES OF THE FANS AND EITHER PLENUM TYPE SHALL HAVE A HERESITE COATING FOR CORROSION PROTECTION OR SHALL BE STAINLESS STEEL. THE EXTERIOR OF THE FAN SYSTEM SHALL BE COATED FOR CORROSION (PASSING THE 1000 HOUR SALT SPRAY TEST PER ASTM-B117) AND FOR UV PROTECTION."

ELECTRICAL TECHNICAL SPECIFICATIONS:

1. The following manufacturers are approved for the products listed.

260923	Lighting Control Devices	Cooper Greengate
260923.16	Network Based Lighting Controls	Cooper Greengate
260923.23	Relay Based Lighting Controls	Cooper Greengate
265100, E6.3-TI	Interior Lighting:	

Cooper – Types A1, A2, A3, B1, B2, B3, C1, C2, C3, C4, D1, D2, H1, J1, J2, L1, L2, L3, L4, L5, L6, M1, M2, M3, M4, Q1 with 90 CRI, R1, R2, S1, U1;
Eclipse – Types R1, R2; Lithonia – Type S1; Illumina – Types G1, G2, G3, G4; Phoenix – Type K1
Prudential – Type N1; Axis – Types P1, P2; AFC – Types T1, T2; Exitronics – Types X1, X2, X3

Electrical Drawings:

1. Sheet E1.1-TI, Lighting Plan – Tenant Improvement

   a. Primary Gear 132, Lighting Control Panel "LCP" shall be fed from circuit "H1-16".
   b. Trace 141, change (3) light fixtures type "J1" in the northeast corner to type "J2" and provide a single pole switch to control these lights.
   c. Toxicology 144, add (2) light fixtures type "J2" and single pole switch for upper cabinets along column line "R". Tie into lighting circuit serving this room.
   d. Forensic DNA Lab 184, add (3) light fixture type "J1" for upper cabinets "WC30-1". Tie into lighting circuit serving this room.

2. Sheet E2.1-TI, Power Plan – Tenant Improvement

   a. Shipping/Receiving 120, UH-3 shall be fed from circuit "H3-7,9,11" in lieu of "H3-1,3,5".
   b. Supervisor 165, receptacle being fed from circuit "LE1-18" should be fed from circuit "LE1-22".
   c. Sheet note 27, circuits should be "LE1-6" and "LE1-8" in lieu of "LE1-26" and "LE1-28".

3. Sheet E2.2-TI, Enlarged Power Plans – Area A, Area D – Tenant Improvement

   a. Enlarged Power Plan – Area D, Mech 149, VFD fed from circuit "H2-2,4,6" shall be serving "EF-3" in lieu of "EF2".

4. Sheet E2.3-TI, Enlarged Lab Power Plan – Area B – Tenant Improvement

    a. L.P. Prep 158, receptacle on east wall shall be fed from circuit "LL2-1".
    b. L.P. Prep 158, Fridge R5 shall be fed from circuit "LE1-11" in lieu of circuit "LE2-14".
    c. L.P. #1 161, COM receptacle on east wall should be fed from circuit "LL2-2" in lieu of circuit "LL2-22".
    d. Sample Prep 178, COM receptacle on west wall should be fed from circuit "LL4-17" in lieu of circuit "L4-5".

5. Sheet E2.4-TI, Enlarged Power Plan – Area C – Tenant Improvement

    a. Trace 141, receptacles being fed from circuit "LE3-3" should be fed from circuit "LL5-3". Refer to attachment E2.4-TI-2 to Addendum No. 2, dated July 11, 2014.
    b. Exam 14, receptacle on west wall shall be fed from circuit LL5-25.
    c. Controlled Substances 143, revise receptacle circuits as shown in attachment E2.4-TI-2 to Addendum No. 2, dated July 11, 2014.
    d. Toxicology 144, receptacle serving equipment "TX4" shall be fed from circuit "LE3-48" in lieu of "LE1-48".
    e. Instrument Lab 145, revise receptacle circuits as shown in attachment E2.4-TI-1 to Addendum No. 2, dated July 11, 2014.

6. Sheet E5.1-TI, Electrical One-Line Diagram – Tenant Improvement

    a. One Line Diagram, ISC ratings have changed as follows, CT = 28,576; "HMD" = 25,117; "H1" =19,831; "H2" = 19,087; "H3" = 14,780; "LL3" = 3,403; "LL4" = 3,329; "LL5" = 4,504; "LL6" = 4,376; "LDP" = 7,633; "L2" = 7,279; "L3" = 6,962; "L4" = 5,178; "LL1" = 5,232; "LL2" = 5,069; ATS "LS" = 12,667; "HLS1" = 11,569; "LLS1" = 1,786; ATS "EQ" = 19,831; "HE1" = 18,668; "LE1" = 5,538; "LE2" = 2,472; ""LE3" = 3,248.

7. Sheet E6.1-TI, Electrical Schedules – Tenant Improvement.

    a. Panel "HMD", change MIN CB IC to 35,000.
    b. Panel "HLS1", change MIN CB IC to 14,000.
    c. Panel "H3", change MIN CB IC to 22,000.
    d. Panel "LE1", circuit 22 shall serve "RECEPT. RM 165", load of 500V/A.
    e. Panel "LE2", change circuit 14 to serve "RECEPT. R/F RM. 178".
    f. Panel "LE3", circuits 12 and 14 shall be 20A/1P serving "RECEPT. 145", load of 1000V/A.
    g. Panel "LE3", circuits 33, 35 shall be a 20A/2P breaker serving RECEPT. 145", load of 2400V/A.

8. Sheet E6.2-TI, Electrical Schedules – Tenant Improvement.

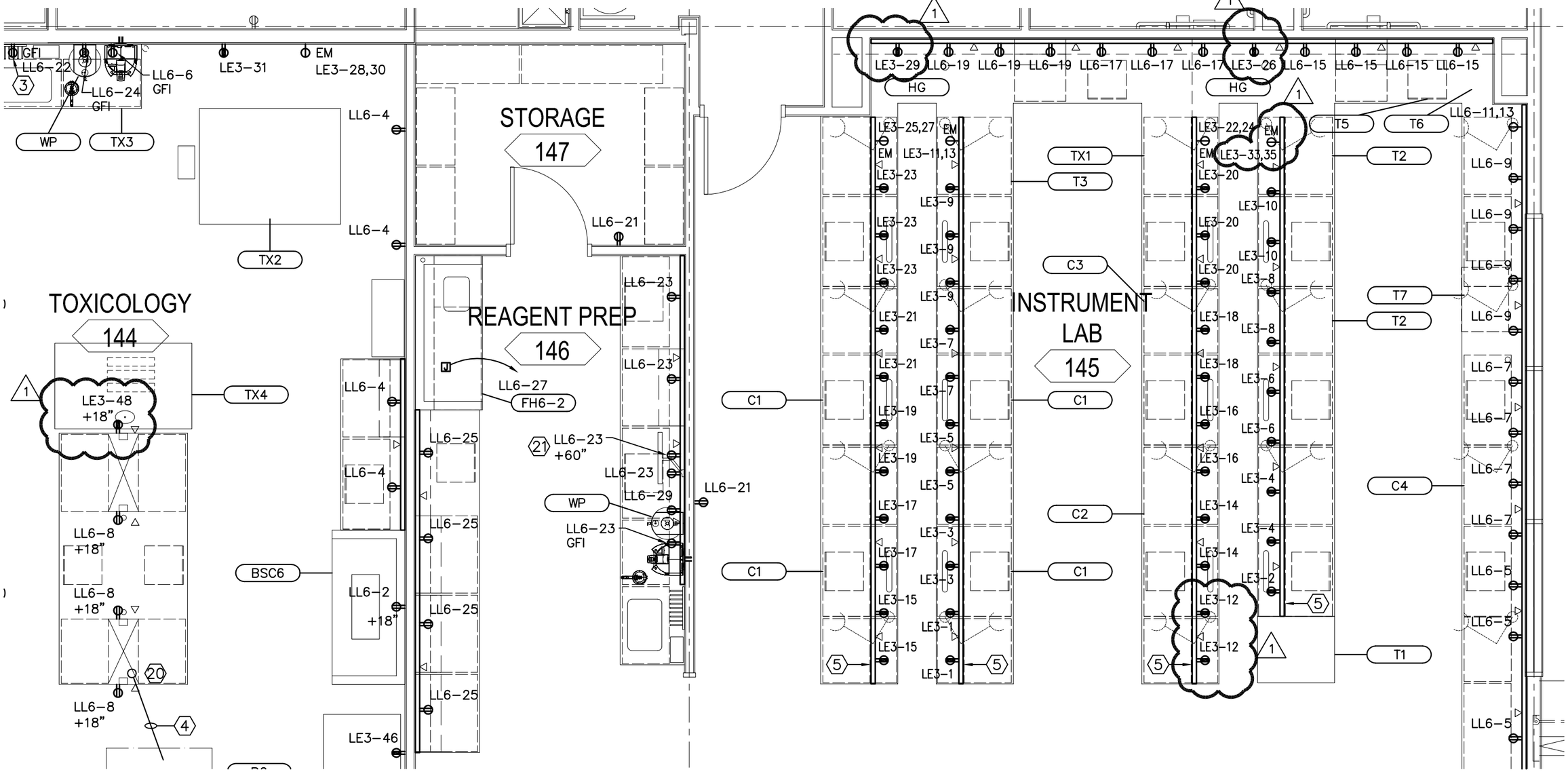
    a. Panel "LL3", circuits 19 and 21 are serving RM 170 in lieu of RM 175.

9. Sheet E6.3-TI, Electrical Schedules – Tenant Improvement.

    a. Add Lab Equipment Schedule, see attachment E6.3-TI-1 to Addendum No. 2, dated July 11, 2014.
    b. Lighting Fixture Schedule: Light fixture type "B3" shall be the same as type "B1" except with 3 lamps, Lithonia Cat # 2VT8-332-ADP-MVOLT-APNP.
    c. Lighting Fixture Schedule: Light fixtures type "G1" and "G2" shall be provided with amalgam lamps with a minimum CRI of 85.

Attachments: E2.4-TI-1, E2.4-TI-2, E6.3-TI-1

END OF ADDENDUM NO. 2



NORTH

ENLARGED POWER PLAN - AREA C - TENANT IMPROVEMENT

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

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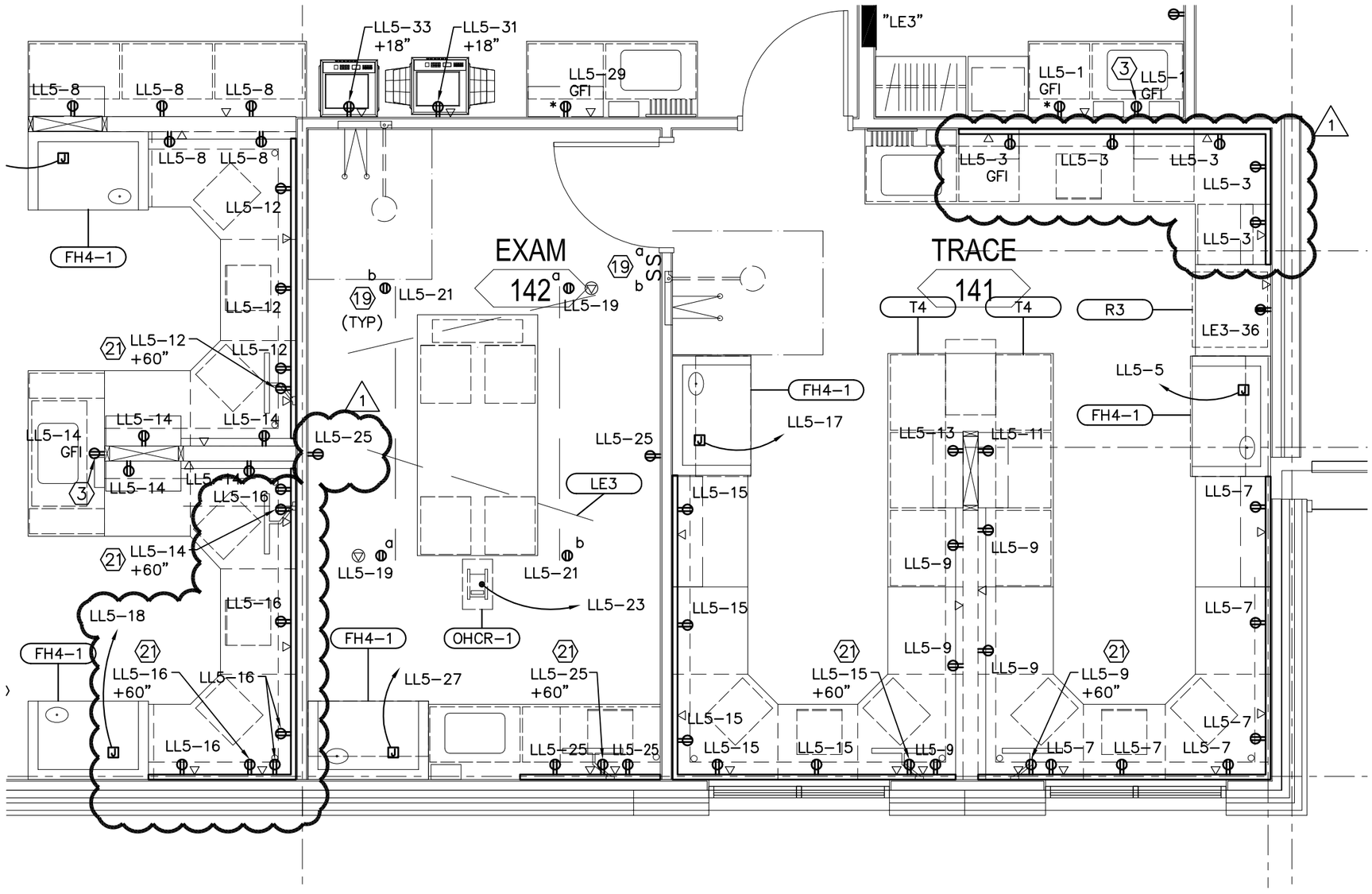
Project #: 014-0651

(Sheet Number) **E2.4-TI**
(Project Number) 014-0651
(Drawing Number)
(Date) 06.24.2014

ENLARGED POWER PLAN - AREA C - TENANT IMPROVEMENT
NEBRASKA STATE PATROL
CRIME LAB

1 Attachment No. E2.4-TI-1 to Addendum No. 2 Dated: July 11, 2014



ENLARGED POWER PLAN - AREA C - TENANT IMPROVEMENT

NORTH

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

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DATE: Jul 11, 2014 8:41am XREFS: xref - titleblock xref - First Level Interior xref - First Level Shell xref - lab equip EPN1A MHN1A ESN1A Power Notes

OLSSON ASSOCIATES
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(Sheet Number) **E2.4-TI**
(Project Number) 014-0651
(Drawing Number)
(Date) 06.24.2014

ENLARGED POWER PLAN - AREA C - TENANT IMPROVEMENT
NEBRASKA STATE PATROL
CRIME LAB

1 Attachment No. E2.4-TI-2 to Addendum No. 2 Dated: July 11, 2014

LAB EQUIPMENT SCHEDULE

ITEM #	DESCRIPTION	VOLT	PH	FLA	VA	BREAKER	CONDUCTORS	COND	CONNECTION	HEIGHT A.F.F.	REMARKS
	GENERAL LAB EQUIPMENT & LAB FIXTURES										
LE3	OVERHEAD PHOTO/LIGHT RAIL SYSTEM	120	1	14.585	1750	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	CEILING	NOTE 2
FHx-y	FUME HOOD	120	1	14	1680	20A/1P	2 #12; 1 #12 G.	3/4"	JB HARDWIRE	ON UNIT	NOTE 3
FHx-ADA	FUME HOOD (ADA)	120	1	14	1680	20A/1P	2 #12; 1 #12 G.	3/4"	JB HARDWIRE	ON UNIT	NOTE 3
BSCx-y	BIOLOGICAL SAFETY CABINET - CLASS II, TYPE A2	115	1	11	1265	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+18"	
R1	LABORATORY REFRIGERATOR	120	1	5	600	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 4, 5
R2	LABORATORY REFRIGERATOR/FREEZER	120	1	7.2	864	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 4, 5
R2	LABORATORY REFRIGERATOR/FREEZER - UC	120	2	7.2	864	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 4, 5
F1	LABORATORY FREEZER	120	1	1.8	216	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 4, 5
LS-1	LABORATORY FAUCET INFRARED SENSOR	120	1			20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	UNDER SINK	
OHCR-1	OVERHEAD POWER REEL (RECESSED)	110	1	9	990	20A/1P	2 #12; 1 #12 G.	3/4"	JB HARDWIRE	RECESSED CEILING	
HG	HYDROGEN GENERATOR	120	1	2	240	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 6
WP	WATER POLISHER	120	1			20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 6
	TRACE EVIDENCE										
T1	XRF	110	1	18	1980	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 4, 6
T2	GC	120	1	12	1440	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 4, 6
T3	GC WITH AUTOSAMPLTER	120	1	15	1800	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 4, 6
T4	ARSON OVEN	120	1	13.3	1596	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 6
T5	DRYING OVEN	120	1	4.2	504	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 6
T6	DRYING OVEN	120	1	7	840	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 6
T7	PELLET PRESS	120	1	6.8	816	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 6, 7
	TOXICOLOGY										
TX1	GC/MS WITH AUTOSAMPLER	120	1	15	1800	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 4, 6
TX2	ARCHITECT	220	2	13.6	2992	20A/2P	2 #12; 1 #12 G.	3/4"	NEMA 6-20	+48"	NOTE 1, 4
TX3	WATER PURIFICATION SYSTEM	120	1	15	1800	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 4
TX4	SOLID PHASE EXTRACTION	110	1	1.6	176	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+18"	NOTE 4
	CONTROLLED SUBSTANACES										
C1	GC WITH AUTOSAMPLER	120	1	18.8	2256	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	IN BASE CABINET	NOTE 4, 6
C2	GC/MS WITH AUTOSAMPLER	120	1	8	960	20A/2P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	IN BASE CABINET	NOTE 4, 6
C3	GC/MS WITH AUTOSAMPLER	120	1	8	960	20A/2P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	IN BASE CABINET	NOTE 4, 6
C4	FITR W/MICROSCOPE	120		15	1800	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 6
C5	DRUG KEEPER	120		10	1200	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 4
	FIREARMS/TOOLS										
FA1	COMPARISON MICROSCOPE	120	1	15	1800	20A/1P	2 #12; 1 #12 G.	3/4"	2 - NEMA 5-20P QUAD	+18"	
FA2a	IBIS DATA CONCENTRATOR STION	110	1	17	1870	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	
FA2b	IBIS DATA CONCENTRATOR STION	110	1	17	1870	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	
FA7	TARGET TROLLEY	115	1	verify	verify	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	ABOVE BAFFLES	
FA8	PROJECTILE RECOVERY TANK	125	1	23	2875	30A/1P GFCI	2 #10; 1 #10 G.	3/4"	NEMA 5-30R HUBBELL 9308	+24"	
FA9	DRILL PRESS	120	1	3.2	384	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 6
FA10	GRINDER	120	1	4	480	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 6
	LATENT PRINTS										
L1	SUPER GLUE CABINET	110	1	10	1100	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	
L2	DFO CHAMBER	110	1	12	1320	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 6
	FORENSIC BIOLOGY										
B1	THERMAL CYCLER	120	1	4.2	504	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 4, 6
B2	GENETIC ANALYZER	220	1	11.2	2464	20A/2P	2 #12; 1 #12 G.	3/4"	NEMA 6-30P	IN BASE CABINET	NOTE 4
B3	GENETIC ANALYZER	110	1	15	1650	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	IN BASE CABINET	NOTE 4
B4	REAL TIME PCR 7500	120	1	8	960	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 4, 6
B5	EXTRACTION ROBOT	120	1	10	1200	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 4, 6
B6	EXTRACTION ROBOT	120	1	10	1200	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	IN BASE CABINET	NOTE 4
B7	EXTRACTION ROBOT	120	1	6.3	756	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 4, 6
B8	EXTRACTION ROBOT	120	1	5	600	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 4, 6
B9	PCR ENCLOSURE	115	1	10	1150	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 6
B10	UV CROSS-LINKER	120	1	3	360	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 6
B11	AUTOCLAVE	120	1	11.7	1404	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 6
B12	OVEN	115	1	3.5	403	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 6
B13	UV BOX	110	1	5	550	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 6
B14	PUNCH	110	1	10	1100	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-20P	+48"	NOTE 6
B15	PLATE CENTRIFUGE	110	1	10	1100	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-15P	+48"	NOTE 6
B16	PLATE CENTRIFUGE - REFRIGERATED	120	1	12	1440	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-15P	+48"	NOTE 6
B17	PLATE CENTRIFUGE	110	1	5	550	20A/1P	2 #12; 1 #12 G.	3/4"	NEMA 5-15P	+48"	NOTE 6

GENERAL NOTE: VERIFY ALL EQUIPMENT VOLTAGE, LOAD, CONNECTION, & MOUNTING REQUIREMENTS W/SUPPLIER & OWNER PRIOR TO ROUGH-IN.

NOTES:
1. VERIFY RECEPTACLE REQUIRED WITH PLUG BEING PROVIDED.
2. CEILING MOUNTE DUPLEX RECEPTACLES AT BOTH ENDS OF TRACK SYSTEM.
3. UNIT COMES PREWIRED. CONNECT TO J-BOX PROVIDED WITH THE UNIT.
4. CIRCUITED TO EM PANEL. RED DEVICE.
5. UNIT PROVIDED WITH A DRY CONTACT FOR TYING INTO THE BMS.
6. RECEPTACLE MOUNTED IN TWO-COMPARTMENT RACEWAY.
7. PROVIDE ON/OFF SWITCH TO RECEPTACLE IN RACEWAY LOCATED IN BASE CABINET.

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DWG: F:\Projects\014-0651_MPEL\1-NSP Crime Lab ACAD\Constructs\Electrical Schedules & Details\ESN1A.dwg USER: dquackenbush
DATE: Jul 11, 2014 9:15am XREFS: xref - titleblock ELN1A EPN1A EPNLA

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(Sheet Number) **E6.3-TI**
(Project Number) 014-0651
(Drawing Number)
(Date) 06.24.2014

ELECTRICAL SCHEDULES
NEBRASKA STATE PATROL
CRIME LAB

1 Attachment No. E6.3-TI-1 to Addendum No. 2 Dated: July 11, 2014