ADDENDUM NO. 1

The Architect/ Engineer issues this addendum, applicable to the above named project, to all known Contractors before receipt of proposal.

This addendum includes Item Number 1-1 thru 1-76. This addendum item shall be fully incorporated into the Bidding/Contract Documents and have the same force and effect as though originally included.

The Bidder shall acknowledge receipt of this Addendum No. 1 on the Bid Proposal Form in the place provided.

GENERAL

Item 1-1: Previous Packages

Previously submitted Auger Cast Pile Package dated October 17, 2013 is no longer relevant to these Construction Documents and shall be ignored. All work regarding auger cast piles is shown in these drawings and is to be performed as part of the shell package work.

Item 1-2: Third Party Testing and Inspections

All third-party testing and inspections required throughout the specifications shall be the responsibility of the Contractor.

SPECIFICATIONS

Item 1-3: Volume 1 Cover Sheet

The stamp for Stephen L. Clymer should be labeled as Architect and the stamp for James K. Luedke should be labeled as Structural Engineer.

Item 1-4: Volume 1 Table of Contents

Remove reference to Section 32 17 26 Cast-In-Place Detectable Warning Surfaces, it is not included in the project.

Item 1-5: Bid Proposal Form

Add attached Bid Proposal Form.

Item 1-6: Exhibit A – GENERAL CONDITIONS AND CONSTRUCTION MANAGEMENT WORKSHEET

Add attached Exhibit “A”.

Item 1-7: Section 01 21 00 - ALLOWANCES

- Refer to paragraph 3.3 A Unit Price No 1 – Auger Cast Piles:. Replace "Section 31 63 13" with Sections 31 63 16 and 13 63 17".
- Refer to paragraph 3.3 SCHEDULE OF ALLOWANCES. Replace Subparagraph 3.3 B with the following:

B. Allowance No. 2: Regulatory Impact and Permitting Fees Allowance: Include the sum of $554,600.00 for regulatory impact fees not associated with permitting required by Sections 00 70 00 and 00 73 00.

Item 1-8: Section 01 22 00 – UNIT PRICES

- Refer to paragraph 3.1 F Unit Price No. 6 – Roof Paver South Building. Replace Subparagraph 1 with the following:

1. Description: Provide additional materials and labor for installation of additional roof pavers on the South Building roof in excess of areas as indicated on the drawings and according to Section 07 53 23 "Ethylene-Propylen-Diene-Monomer (EPDM) Roofing." Cost shall include pedestals and accessories necessary for a complete installation and providing 90 mil. EPDM roofing at areas to receive addition pavers.

- Refer to paragraph 3.1 I . Change to Read "Unit Price **No. 9** – Exhaust Fan Array"

Item 1-9: Section 01 31 00 – PROJECT MANAGEMENT AND COORDINATION

Refer to paragraph 1.8 PROJECT WEBSITE. Add the following sub paragraph:

B. Project Website will be provided by the Owner.

Item 1-10: Section 04 21 13 – BRICK MASONRY

Refer to sub paragraph 2.2 B Face Brick. Replace subparagraph 2.2 B.1 a with the following:

a. Match Existing Brick for color blend and texture. Size shall be Modular 3-5/8 inches wide by 2-1/4 inches high by 7-5/8 inches long.

Item 1-11: Section 07 27 26 – FLUID-APPLIED MEMBRANE AIR BARRIERS

Refer to sub paragraph 2.3.A.1.a. Add BASF Wall Systems; Enershield-HP as an approved equal.

Item 1-12: Section 07 46 46 – FIBER CEMENT SIDING

- Refer to paragraph 2.2 FIBER CEMENT SIDING. Change to Read "2.2 FIBER CEMENT SIDING PANEL – NORTH BUILDING
- Refer to PART 2 – PRODUCTS. Add the following:

2.4 FIBER-CEMENT SIDING PANEL – SOUTH BUILDING

B. General: ASTM C 1186, Type A, Grade II, fiber-cement board, noncombustible when tested according to ASTM E 136; with a flame-spread index of 25 or less when tested according to ASTM E 84.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Nichiha USA; Illumination Series or comparable product by one of the following:

a. Or equal if and as specifically approved by Architect by Addendum during the bidding period.

C. Labeling: Provide fiber-cement siding that is tested and labeled according to ASTM C 1186 by a qualified testing agency acceptable to authorities having jurisdiction.

D. Nominal Thickness: Not less than 5/8 inch (nominal).

E. Horizontal Pattern: Boards 18" high in plain style.

1. Texture: Smooth.

F. Factory Finish: Nichiha Storm.

Item 1-13: Section 08 36 13 – SECTIONAL DOORS

Add attached Section 08 36 13 – SECTIONAL DOORS in its entirety.

Item 1-14: Section 08 41 13 – ALUMINUM FRAMED ENTRANCES AND STOREFRONTS

Refer to sub paragraph 2.4 A 1. Door Construction. Replace "2 to 2 ¼" overall thickness" with "1 ¾" overall thickness". Delete subparagraph a. in its entirety. Thermally broken construction is not required for Entrance Door Systems.

Item 1-15: Section 09 51 13 – ACOUSTICAL PANEL CEILINGS

- Refer to sub paragraph 2.1 A 1. APC -1. Replace subparagraph 1 with the following:

  1. APC – 1 CertainTeed Ceilings, Perfoma Symphony m , 24" x 24" x 3/4", reveal corner bevel lay-in for 15/16" grid. Color: White. NRC: 0.70. CAC: 35. Light Reflectance: 0.90

- Refer to sub paragraph 2.1 A 2. APC -2. Replace subparagraph 2 with the following:

  2. APC – 2 HunterDouglas Contract Ceilings, Techstyle E , 24" x 72" x 1 1/8", for 15/16" grid. Color: White. NRC: 0.85. CAC: 17. Light Reflectance: 0.81

- Refer to sub paragraph 2.1 A 3. APC -3. Delete subparagraph 3 in its entirety.
- Refer to sub paragraph 2.1 A 4. Delete the subparagraph in its entirety, no substitutions are allowed.
- Refer to sub paragraph 2.2 A Narrow-Face Capped Double-Web Steel Suspension System: Delete 2.2 A in its entirety.
- Refer to sub paragraph 2.2 C Suspended Cloud Componenets: Replace subparagraph 2.2 C with the following:

  C. Suspended Cloud Components: HunterDouglasContract, EdgeLine Trim Systems edge system for suspended ceiling system, where indicated on the drawings

  1. Channel Trim System: 6 inch profile, Color: White
  2. Blade Trim System: 6” exposed blade, Color: White

Item 1-16: Section 23 09 00 – INSTRUMENTATION AND CONTROL FOR HVAC

Refer to paragraph 2.7 DDC SENSOR AND POINT HARDWARE: Remove subparagraph F.1.b.

Item 1-17: Section 23 21 13 – HYDRONIC PIPING

Refer to paragraph 1.1 SECTION INCLUDES, subparagraph A.3: The terms “Effluent water”, “Effluent condenser water”, and “Campus condenser water” shall be interchangeable in the plans and specifications.

Item 1-18: Section 31 63 16 – AUGER CAST PILES – AREA “A”

Add attached Section 31 63 16 – AUGER CAST PILES – AREA “A” in its entirety.

DRAWINGS

GENERAL

Item 1-19: Sheet G0.0A – Cover Sheet – Vol. 1

Refer to the **BUILDING RESTORATION** drawings. All sheets have been renumbered and renamed. See Items 1-? & 1-? of this addendum for updated information.

Refer to the **LANDSCAPE ARCHITECTURAL** index of drawings. Add Sheet L3.01 – Site Planting Plan and L4.01 – Site Irrigation Plan to the index of drawings.

Refer to the **STRUCTURAL** Index of Drawings. Sheet S5.09 - Structural Details – Areas A,B,C,D. This sheet is being issued as new with this addendum.

CIVIL

Item 1-20: Sheet C1.01 – Utility Plan

This sheet is being reissued in its entirety with this Addendum.

Item 1-21: C1.02 – Storm Sewer Plan

This sheet is being reissued in its entirety with this Addendum.

LANDSCAPE

Item 1-22: Sheet L2.04 – Topsoil Placement Plan

This sheet is being reissued in its entirely with this addendum.

Item 1-23: Sheet L3.01 – Site Planting Plan (For Reference Only)
Sheet L4.01 – Site Irrigation Plan (For Reference Only)

These sheets are being issued as new with this addendum.

BUILDING RESTORATION

Item 1-24: Sheet AR3.01 – Overall First Floor Plan
Sheet AR3.02 – Soffit Vent Plan
Sheet AR3.05 – Wall Sections
Sheet AR3.06 – Wall Sections
Sheet AR3.07 – Wall Sections
Sheet AR3.08 – Wall Section Details
Sheet AR3.09 – Plan Detail

These sheets are being issued as new with this addendum.

Item 1-25: Sheet AR3.03 – IAB-Exterior Elevations
Sheet AR3.04 – IAB-Exterior Elevations

These sheets are being re-numbered and re-issued in its entirety with this addendum.

STRUCTURE

Item 1-26: Sheet S3.01 – Foundation Details – Areas B, C & D

Reference detail 2: add 8" deep (minimum) concrete cap on top of existing foundations below masonry wall arches. Top of caps shall be flush with finish floor. Provide dowels and reinforcement as shown in attached updated sheet. Similar changes shall also apply to detail 5/S3.01.

Item 1-27: Sheet S4.03 – Framing Details – Areas B, C & D

Add details 14 & 15, see attached updated sheet. Details shall apply to existing lintels that are designated to be replaced on sheets AR3.02 & AR3.03

Item 1-28: Sheet S5.01 – Structural Details – Area A

This sheet is being reissued in its entirely with this addendum.

Item 1-29: Sheet S5.03 – Structural Details – Area A

Refer to Detail 9. The length of the headed studs for the typical embed detail at steel beam is 6" for all the studs shown.

Item 1-30: Sheet S5.09 – Structural Details – Areas A,B,C,D

Refer to Detail 1. This detail shows the support of brick above the doors at north end at grids F.7 and F.8

ARCHITECTURE

Item 1-31: All Sheets

1. Refer to all notes described as "Treated Wood Blocking". Unless wood blocking is in direct contact with the ground, concrete, or exposed to the exterior, replace with "Non-Treated Dimensional Lumber".

Item 1-32: Sheet A1.01 – Lower Level Floor Plan & Reflected Ceiling Plan – Area A

See revised sheet for updated ceiling at corridor N0CR2 and updated note at underside of Curtainwall at Skywalk Soffit.

Item 1-33: Sheet A1.19 – Skywalk Floor Plan & Reflected Ceiling Plan – Area A

See revised sheet for updated Ceiling at skywalk and vestibule. See revised sheet for updated Curtainwall frame type reference tags and new detail reference tag.

Item 1-34: Sheet A1.21 Second Floor Plan – Area A

Remove detail reference tag 8/A7.01 at column grid E.8, 0.7. Curtainwall reference tag "CW-13" on South side of building at column grid E, 0.1 shall be replaced with "CW-18".

Item 1-35: **Sheet A1.22 – Second Floor Plan – Area B**
Sheet A1.23 – Second Floor Plan – Area C
Sheet A1.24 – Second Floor Plan – Area D

Provide addition 1'-0" wide strip of 90 mil EPDM membrane directly centered under bottom edge of 2nd floor shed roof.

Item 1-36: **Sheet A1.25 – Second Floor Reflected Ceiling Plan – Area A**

See revised sheet for updated Ceiling at corridor N2CR1 and Ceiling type at exterior soffit.

Item 1-37: **Sheet A1.31 – Third Floor Plan – Area A**

See revised sheet for updated Curtainwall frame type reference tags and dimensions at North Stair N3ST1.

Item 1-38: **Sheet A1.32 - Third Floor Reflected Ceiling Plan – Area A**

See revised sheet for updated Ceiling at corridor N3CR1.

Item 1-39: **Sheet A1.41 – Fourth Floor Plan – Area A**

See revised sheet for updated Curtainwall frame type reference tags and dimensions at North Stair N4ST1.

Item 1-40: **Sheet A1.42 – Fourth Floor Reflected Ceiling Plan – Area A**

See revised sheet for updated Ceiling at corridor N4CR1.

Item 1-41: **Sheet A1.51 - Mechanical Penthouse Floor Plan – Area A**

Provide a 2 hour fire rated lid at the penthouse floor at mechanical shaft at column grid F.7, 0.3 & H.2, 0.1.

Item 1-42: **Sheet A2.01- Exterior Building Elevations – Area A**

See revised sheet for updated Curtainwall frame type reference tags. A portion of the Second Floor Addition at IAB is now shown in the East Elevation.

Item 1-43: **Sheet A2.02 – Exterior Building Elevations – Area A**

- See revised sheet for updated Curtainwall frame type reference tags. A portion of the Second Floor Addition at IAB is now shown in the East Elevation.
- See revised sheet for updated Curtainwall frame type reference tags.

Item 1-44: **Sheet A2.11 - Skywalk Exterior Building Elevations – Area A**

See revised sheet for updated Curtainwall frame type reference tags and revised height of wall at Vestibule K1.5CR1.

Item 1-45: A3.11 - Skywalk Cross Sections

See revised sheet for revised height of wall at Vestibule K1.5CR1 and revised section #2.

Item 1-46: Sheet A4.11 - Skywalk Wall Sections

See revised sheet for updated Curtainwall detail #5 and revised ceiling details.

Item 1-47: Sheet A4.12 - Skywalk Wall Sections

See revised sheet for updated Curtainwall detail #3 and delete note “CEMENT FIBER BOARD” on roof side of parapet wall.

Item 1-48: Sheet A5.01 - Enlarged North Stair Floor Plans

See revised sheet for added stair tread note “PRECAST EPOXY TERRAZZO TREADS, SEE FINISH SCHED. FOR COLOR” and associated stair details #8&9.

Item 1-49: Sheet A5.01 – Enlarged North Stair Floor Plans

Added detail view of wood panel termination at glass guardrail (View #8)

Item 1-50: Sheet A5.03 - North Stair Sections

See revised sheet for added stair tread note “STL. STAIR W/ PRECAST EPOXY TERR. TREADS” and new detail reference tag.

Item 1-51: Sheet A6.02 - Exterior Frame Types – Area A

See revised sheet for updated Curtainwall frame types.

Item 1-52: Sheet A6.03 - Exterior Frame Types – Area A

See revised sheet for updated Curtainwall frame types and new alum. door head detail #3.

Item 1-53: Sheet A6.04 - Exterior Skywalk Exterior Frame Types – Area A

See revised sheet for updated Curtainwall frame types.

Item 1-54: Sheet A6.06 – Enlarged Restroom Plans – Area A

Reference Toilet Accessory Schedule. Accessory “SD” manufacturer and model number shall be replaced with: American Specialties, Inc. #0332; Accessory “TTD-1” manufacturer and model number shall be replaced with: American Specialties, Inc. #20030; Add Coat Hook (“CH”) at the back of all toilet partition doors- manufacturer and model number: Bobrick #B-212.

Item 1-55: Sheet A7.02 - Plan Details

Reference detail #4. Delete note “CONTINUE VAPOR BARRIER ABOVE AND BELOW SKYWALK” and replace with “CONTINUE FLUID APPLIED AIR BARRIER ABOVE AND BELOW SKYWALK”.

Item 1-56: Sheet A8.05 – Wall Section Details

Refer to Section Details 1 & 2. Reverse the slope of the two piece 24ga. cap flashing so moisture falls on the inside perimeter of the building.

FINISH

Item 1-57: Sheet F1.00 – Finish Materials List & Room Finish Schedule

Refer to the Finish Materials Legend and make the follow changes:
1. Omit APC-3 designation from the Acoustical Panel Ceiling list.
2. Revise APC-1 and APC-2 designations in the Acoustical Panel Ceiling list per the following;
   APC-1 = Certainteed, #122-IOF-1 Performa Symphony m, 24”x24”x3/4” WHT
   APC-2 = Hunter Douglas, Techstyle E, 24”x72”x1 1/8” WHT

Refer to the Room Finish Schedule and make the follow changes:
1. Add CPT-1 floor finish to Elevator N1EL2.
2. Change K1.5 Skywalk Ceiling from APC-3 to APC-2/PT-2.

Item 1-58: Sheets F1.02 thru F1.08 Finish Plans

1. Elevators N0EL1 thru N4EL1 and N1EL2 thru N5EL2 shall include CPT-1 as floor finish.
2. Change Skywalk K1.5 APC-3 ceiling designation to APC-1 and PT-2.

MECHANICAL

Item 1-59: Sheet PM1.03 – First Floor Mechanical Room Plan

Switch the supply and return Effluent Condenser water piping entering the building to the first floor mechanical room.

Item 1-60: Sheet PM3.01 – Mechanical Site Plan

Refer to the Mechanical Site Plan and make the following changes:

1. All sewer invert elevations for the North Building shall be 90’-0”.
2. Switch the supply and return for the Campus Condenser (effluent) water piping entering the building.
3. Rotate grease interceptor INT-1 90 degrees and adjust inlets and outlets accordingly.

PLUMBING

Item 1-61: Sheet P1.02 – Below Floor Plumbing Plan – Area B

Switch the supply and return Effluent Condenser water piping entering the building to the first floor mechanical room.

Item 1-62: Sheet P1.02 – Below Floor Plumbing Plan – Area C

Switch the supply and return Effluent Condenser water piping entering the building to the first floor mechanical room.

Item 1-63: Sheet P2.03 – Natural Gas and Specialty Gas Piping Schematics and Controls

Add liquid separator upstream of VP-1. Model shall be Busch ClearTrap CLS-200 or equivalent.

Item 1-64: Sheet P3.01 – Plumbing Details

Added plumbing details for site specific equipment. Refer to Grease Interceptor Detail #6 and Neutralization Tank Detail #7.

Item 1-65: Sheet P4.01 – Plumbing Schedules

Add liquid separator upstream of VP-1. Model shall be Busch ClearTrap CLS-200 or equivalent.

ELECTRICAL

Item 1-66: Sheet E0.01 – Electrical Site Utilities Plan

Site lighting and additional details have been modified. This sheet is being re-issued in its entirety as a part of this addendum. See re-issued sheet E0.01 for changes.

Item 1-67: Sheet E1.01 – Lower Level Lighting Plan

Adjust layout of Type 'T' fixtures under Skywalk, switch Type 'V' fixture to Type 'D' fixture in Corridor N0CR2 and adjust layout. See re-issued sheet E1.01 for changes.

Item 1-68: Sheet E1.13 – First Floor Lighting Plan – Area 'C'

Add (1) Type 'Q' fixture centered over overhead door on north wall between column lines ZJ and ZK and (1) Type 'Q' fixture centered over overhead door on west wall just north of column line Z6. Keyed notes 4 and 5 apply to both fixtures, circuit fixtures to '1HS1-13', and control via lighting control Lighting Control Scenario Designation 'K'. See the Light Fixture Schedule for additional information.

Item 1-69: Sheet E1.14 – First Floor Lighting Plan – Area 'D'

Add (1) Type 'Q' fixture centered over overhead door on west wall just north of column line Z8. Keyed notes 4 and 5 apply to fixture, circuit fixture to '1HS1-13', and control via lighting control Lighting Control Scenario Designation 'K'. See the Light Fixture Schedule for additional information.

Item 1-70: Sheet E1.21 – Second Floor Lighting Plan – Area 'A'

Reference Second Floor Lighting Plan – Area 'A': Switch Type 'V' fixture to Type 'D' fixture in Corridor N2CR1 and adjust layout.
Reference Skywalk Lighting Plan: Switch Type 'V' fixture to Type 'D' fixture in Corridor N1.5CR3 and adjust layout. Adjust Type 'M' fixture layout to match new ceiling layout in Skywalk. See re-issued sheet E1.21 for changes.

Item 1-71: Sheet E1.31 – Third Floor Lighting Plan – Area 'A'

Switch Type 'V' fixture to Type 'D' fixture in Corridor N3CR1 and adjust layout. See re-issued sheet E1.31 for changes.

Item 1-72: Sheet E1.41 – Fourth Floor Lighting Plan – Area 'A'

Switch Type 'V' fixture to Type 'D' fixture in Corridor N4CR1 and adjust layout. See re-issued sheet E1.41 for changes.

Item 1-73: Sheet E4.01 – Electrical Schedules

Change fixture type 'T' to Zumtobel, catalog no. BR4DICLED-16W-K40-MS45-CS-W, fixture remarks added to schedule. Fixture type 'Q' is to be wall mounted so that the bottom of fixture is at +9'-4" above finish grade, unless otherwise noted. See re-issued sheet E4.01 for changes.

Item 1-74: Sheet E4.02 – Electrical Schedules

Reference Panelboard Schedule '1HS1': Circuit #13 to serve LTG: EXTERIOR OVERHEAD DOORS, with a load of 90VA.

Item 1-75: Sheet E6.03 – Electrical Details

Reference Access Control Connection Diagram: In 'Area A, Skywalk' change door numbers K1.5CR1.3, K1.5CR1.2, and K1.5CR1.1 to 200.6, 200.5, and 200.4.

VOLUME 3 TENANT FINISH CONCEPT PLANS

Item 1-76: Sheet G0.00C – Title Sheet & Drawing Index
Sheet TF1.11 – First Floor Tenant Finish Concept Plan
Sheet TF1.21 – Second Floor Tenant Finish Concept Plan
Sheet TF1.31 – Third Floor Tenant Finish Concept Plan

These sheets are being issued as new with this addendum as part of their own package and labeled as (For Information Only).

END OF ADDENDUM NO. 1

BID PROPOSAL

CONTRACTOR:

DATE:

TO: **TOMATO CLUB LLC**
728 Q Street, Suite C
Lincoln, Nebraska 68508

BID SECTION #1 Core and Shell

BID SECTION #2 Tenant Improvement

RE: **NIC - Life Science Collaboration**
Nebraska Innovation Campus
Lincoln, Nebraska

The undersigned having carefully examined the drawings, the Instructions to Bidders, the Contract Form, Supplementary General Conditions, and Specifications pertaining to the above-referenced Project; having familiarized myself with the site and job conditions; and having visited the site and observed and accepted all existing conditions, hereby proposes and agrees to furnish all labor, materials, equipment, plant, transportation, services, sales taxes, inspection fees, permits, testing, and other costs necessary to complete the construction of the Work for the above Project in strict conformity with said Documents and any Work specified in Addenda for the lump-sum cost and terms as described below.

I acknowledge receipt of Addenda:_____

BID SECTION 1: FIXED LUMP SUM BASE BID (Core and Shell)

		NIC - Life Science Collaboration
Cost for all building construction and associated improvements for the NIC Life Science Collaboration project.		$
Contingency to be included as part of Lump Sum Base Bid noted above.	3%	$

BID SECTION 2: CM FEE PROPOSAL (Tenant Improvments)

Estimated Tenant Improvement Cost of 11,500,000		**TI - UNL FOOD SCIENCE & TECHNOLOGY**
Fixed GC Fee per Exhibit A for all tenant improvement construction and associated finishes for the UNL Food Science and Technology based on actual cost from accepted GMP:	2.5%	
Job Services Total Fixed Fee per Exhibit A for all tenant improvement construction and associated finishes for the UNL Food Science and Technology based on acutal cost from accepted GMP:	%	$
Construction Manager's Fee for all tenant improvement construction and associated finishes for the UNL Food Science and Technology :	%	$
TOTAL FIXED BASE BID **(Aggregate amount to equal the sum of each bid section 1 and 2)**	**$**	**-**

TIME OF COMPLETION

The time period required to complete the work expressed in the number of calendar days from the time of Notice to Proceed (effective date) is as indicated. The dates established below are based on the assumption that the Contract for the entire project is awarded within no more than 60-days of the receipt of bids. Any Notice to Proceed will include authorization to proceed on Bid Section 1.

BID SECTION 1: TIME COMPLETION

1	If this proposal is accepted, the undersigned agrees to complete building core and shell construction for the NIC LS Collaboration within the number of calendar days indicated from the date of receipt of Notice to Proceed and **shall not exceed March 1, 2015.**		Days
2	Contractor agrees to pay liquidated damages in the amount of $500.00 per day for each calendar day that work is not completed for portion of work described in the Core and Shell Scope.	$ 500.00	$ 500.00
3	Time required to complete Total Project Completion including site and utility work after given Notice to Proceed and **shall not exceed June 1, 2015.**		Days

BID SECTION 2: TIME COMPLETION

1	If this proposal is accepted, the undersigned agrees to complete building tenant improvement construction for the UNL Food Science and Technology within the number of calendar days indicated from the date of receipt of Notice to Proceed and **shall not exceed June 1, 2015.**		Days
2	Contractor agrees to pay liquidated damages in the amount of $2,500.00 per day for each calendar day that work is not substantially complete beyond the indicated time of completion of the each portion of the work.	$ 2,500.00	$ 2,500.00

ALTERNATES - BID SECTION #1

1 Bidder acknowledges that an alternate is an amount proposed by Contractor and stated on the Bid Form that will be added to or deducted from Base Bid Amount if Owner decides to accept a corresponding change in either Scope of Work or in products, materials, equipment, systems, or installation methods described in Contract Documents.

2 Bidder acknowledges its responsibility to coordinate related work and modify or adjust adjacent work as required so that alternate is complete and fully integrated. Any additional cost or savings associated with adjustments or modifications in adjoining work are included in the respective alternate. Alternate also includes any miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.

3 Owner shall generally notify Bidder of selected alternates in conjunction with the award of the contract. Notwithstanding, Bidder acknowledges that Owner has the right to defer a decision on any alternate until after an award at no additional cost to the Owner provided the final decision thereof is made in a timely manner as to not affect the normal sequencing of the Work.

	Description	LS Collaboration
1	**Interior Floor Finishes:** Base Bid - Epoxy Terrazzo as specified in Section 09 66 23. Deduct Alternate: Provide Porcelain Ceramic Tile as specified in Section 09 30 00 in lieu of Epoxy Terrazzo.	$
2	**Gypsum Drywall at Interior Face of Exterior Wall:** Base Bid - No gypsum drywall at interior wall face. Add Alternate: Provide gypsum drywall on interior face of exterior wall as specified in Section 09 29 00 "Gypsum Drywall"	$
3	**Grade Beams South Building:** Base Bid - Provide all grade beams for future masonry walls as indicated on Sheets S1.12, S1.13, and S1.14. Deduct Alternate: Delete grade beams where indicated on Sheets S1.12, S1.13, and S1.14.	$
4A	**Shell Space Lighting First Level:** Base Bid - Provide and install lighting as indicated on the Electrical Lighting Plans. Deduct Alternate: Delete fixtures, associated conduit and conductors for lighting in unfinished, shell spaces.	$
4B	**Shell Space Lighting Second Level:** Base Bid - Provide and install lighting as indicated on the Electrical Lighting Plans. Deduct Alternate: Delete fixtures, associated conduit and conductors for lighting in unfinished, shell spaces.	$
4C	**Shell Space Lighting Third Level:** Base Bid - Provide and install lighting as indicated on the Electrical Lighting Plans. Deduct Alternate: Delete fixtures, associated conduit and conductors for lighting in unfinished, shell spaces.	$
4D	**Shell Space Lighting Fourth Level:** Base Bid - Provide and install lighting as indicated on the Electrical Lighting Plans. Deduct Alternate: Delete fixtures, associated conduit and conductors for lighting in unfinished, shell spaces.	$
5A	**Unit Heaters First Level:** Base Bid - Provide and install unit heaters and associated piping as indicated on the Mechanical Plans. Deduct Alternate: Delete unit heaters, associated piping and installtion in unfinished, shell spaces.	$
5B	**Unit Heaters Second Level:** Base Bid - Provide and install unit heaters and associated piping as indicated on the Mechanical Plans. Deduct Alternate: Delete unit heaters, associated piping and installtion in unfinished, shell spaces.	$
5C	**Unit Heaters Third Level:** Base Bid - Provide and install unit heaters and associated piping as indicated on the Mechanical Plans. Deduct Alternate: Delete unit heaters, associated piping and installtion in unfinished, shell spaces.	$
5D	**Unit Heaters Fourth Level:** Base Bid - Provide and install unit heaters and associated piping as indicated on the Mechanical Plans. Deduct Alternate: Delete unit heaters, associated piping and installtion in unfinished, shell spaces.	$
6	**Fire Suppression System:** Base Bid - Design, provide and install risers and mains as indicated on the Fire Protection Plans and as specified in Division 21. Add Alternate: Provide complete system installation, based upon schematic plans of future tenant improvements as indicatd on the Fire Protection drawings.	$

ALLOWANCES - BID SECTION #1

1 Where allowances are called for, Bidder has included the amount in its Base Bid.

2 Bidder's costs for unloading, handling, labor, installation, overhead, profit, and other expenses contemplated for the original allowance shall be included in the Base Bid and not in the allowance.

3 Bidder acknowledges that the Contract Sum will be adjusted by the actual cost of the allowance without any application of or adjustment to overhead, profit, general conditions, or other expenses associated therewith for handling and labor.

4 Bidder acknowledges that the Contract Sum will be adjusted for unit-cost type allowances based solely on the difference between the actual unit purchase amount and the unit allowance multiplied by the final measure or count of work-in-place with reasonable adjustment, where applicable, for cutting losses, tolerances, mixing wastes, and similar margins. No mark-up shall be included with respect to allowance costs and change order prices.

Cost of each item to be included in Base Bid.		LS Collaboration
1	**Testing and Inspection Allowance:** For Field Quality Control Testing as specified in Section 07 27 26 "Fluid-applied Membrane Air Barriers	$20,000
2	**Regulatory Impact Fees Allowance:** For regulatory impact fees not associated with permitting required by Sections 00 70 00 and 00 73 00	$554,600
3	**Landscape Planting and Irrigation:** For landscape planting and irrigation system to be specified.	$150,000
4	**Terrazzo Logo:** Material and Installation associated with building logo to be incorporated into the main level terrazzo floor.	$10,000

BID PROPOSAL

UNIT PRICES - BID SECTION #1

1	Bidder acknowledges that unit pricing may be used as the basis for adjusting the Contract Sum on account of changes in the scope of the work. The unit amount shown multiplied by the in-place quantity shall be the method by which any adjustment will be calculated. Unit price adjustments may be either a deduction from or an addition to the Base Bid price without any additional mark-up for overhead and profit or General Conditions.
2	Bidder acknowledges that unit pricing will be in effect for the duration of the construction contract time, but will not be effective for work necessary to be performed after normal construction periods unless agreed to otherwise.

1	**Auger Cast Piles**: Add or deduct length of auger cast piles to reach required depth into Dakota Limestone according to Article 1.3 of Section 31 63 13 Auger Cast Piles and the "Geotechnical Engineering Report" in Section 03 31 32.	$	Per LF
2	**Imported Soils for Backfill**: Provide, place, and compact additional backfill materials required in addition to the fill as indicated in the drawings and according to Section 31 20 00 "Earth Moving."	$	Per CY
3	**Imported Soils for Backfill**: Provide, place, and compact additional backfill materials borrowed from site and as directed by the Owner required in addition to the fill as indicated in the drawings and according to Section 31 20 00 "Earth Moving."	$	Per CY
4	**Masonry Restoration - Tuckpointing**: Provide additional materials and labor for tuckpointing masonry on South Building required in addition to quantities as indicated on the drawings and according to Section 04 05 13 "Masonry Restoration Mortaring."	$	Per SF
5	**Masonry Restoration - Brick Replacement**: Provide additional materials and labor for replacing masonry on South Building required in addition to quantities as indicated on the drawings and according to Section 04 10 20 "Masonry Restoration and Cleaning."	$	Per SF
6	**Roof Pavers South Building:** Provide additional materials and labor for installation of additional roof pavers on the South Building roof in excess of areas as indicated on the drawings and according to Section 04 05 13 "Masonry Restoration Mortaring." Cost shall include pedestals and accessories necessary for a complete installation and providing 90 mil. EPDM roofing at areas to receive addition pavers.	$	Per SF
7	**Air Handling Units 1, 2, 3 & 4:** Provide materials and labor for mechanical air-handling units as indicated on the drawings and in accordance with Section 23 73 13 Air Handling Units.	$	Lump Sum per Unit
8	**Air Handling Units 5 & 6:** Provide materials and labor for mechanical air-handling units as indicated on the drawings and in accordance with Section 23 73 13 Air Handling Units.	$	Lump Sum per Unit
9	**Exhaust Fan Array:** Provide materials and labor for mechanical air-handling units as indicated on the drawings and in accordance with Section 23 34 13 High Plume Fans.	$	Lump Sum

PERFORMANCE BOND - BID SECTION #1

The undersigned agrees if awarded the Contract and, if so directed by Owner, to deliver to the Owner within 10 calendar days after signing the Contract, a satisfactory Performance and 100% Material and Labor Payment Bond on a form and with a bonding company acceptable to Owner. The cost of such Bond will be added to the Lump Sum Base Price.

1	The cost of the bonds described above will be equal to: (express as a % of the Contract Sum)	%
2	Adjustments to the above amount based on changes in scope (indicate % if different from the % above):	%

CHANGES IN THE WORK - BID SECTION #1

The undersigned agrees if work is added or deducted by written order of the Owner and such work is not called out as an alternate or a unit price, the cost of such changes shall be determined in accordance with the provisions of the Supplementary General Conditions and the percentage mark-up added shall be as follows:

1	For work not scheduled, performed by this contractor, mark-up on account of all General Conditions and contractor profit and overhead on net-direct cost of materials and labor will be as indicated. Material, labor, and equipment rates to be as described in A201 General Conditions of the Contract, as modified.		%
2	For work not scheduled, performed by any subcontractor, mark-up for contractor on account of all General Conditions, profit and overhead on subcontractor costs will be as indicated. Material, labor, equipment rates, and subcontractor mark-up to be as described in A201 General Conditions of the Contract, as modified.		%
3	For work deleted, general contractor's mark-up and/or credit on account of general supervision, overhead and other general conditions shall be as indicated. Insert zero if none or provide the % of additional credit to be added to the actual value of the work deleted.		%

BID PROPOSAL

BID PROPOSALS AND CONTRACT

1. The undersigned understands that the preparation and submission of this Proposal and other quotations herein contained does not obligate the Owner or Architect in any way; and that the Owner assumes no obligation to enter into a contract for the work.
2. If awarded a contract or contracts for the work, the undersigned agrees to execute the Contract Agreement on the form provided herein with the appropriate blank spaces filled in, in accordance with the above-stated compensation.
3. This Bid Proposal is a firm offer continuing for sixty (60) days after the date set for the opening of bids. If the undersigned is notified of the acceptance of this Proposal within the 60 day period, he agrees to execute the Construction Contract for the above-stated compensation.
4. A 5% Bid Bond is included herewith. If Owner notifies contractor of its intent to award the work and contractor fails to enter into the Contract Agreement in substantially the form provided, or fails to provide Performance and 100% Labor and Materials Payment Bonds (if requested by Owner), contractor shall forfeit the amount of its Bid Bond.

SEPARATE CONTRACTS

1. Bidder acknowledges that Owner has the right to let other contracts and to employ other contractors in connection with this project including the construction of tenant improvements. Bidder shall afford such other contractors reasonable opportunity for the storage of materials and equipment, and at such time that does not materially interfere with Bidder's work, to commence construction of their work. Bidder shall properly coordinate the work of separate contractors with Bidder's work and allow connection to its facilities.
2. Bidder recognizes that plans for tenant improvements or Owner-provided work will be issued as separate bid packages. It is the Owner's intent, but not obligation, to allow the successful Bidder to submit a bid proposal on all such work, recognizing that, in some instances, tenants may perform their own tenant work.

THE UNDERSIGNED CERTIFIES

1. That he has reviewed and understands the drawings, specifications, scope of the work, and sample contracts provided relating to this Project.
2. That he has the equipment, technical ability, personnel, and facilities to construct the Project in accordance with the drawings and specifications.
3. That he has inspected the site and familiarized himself with the requirements of Lincoln City and other municipal agencies having jurisdiction.
4. That he has qualified each of his subcontractors and materials suppliers and determined that such persons have the equipment, technical ability, personnel, and facilities to perform their work in accordance with the Contract Documents; and that each subcontractor has the financial capacity to fulfil all aspects of the work.

FIRM NAME: _____

SIGNED BY: _____

TITLE: _____

DATE: _____

ADDRESS: _____

TELEPHONE NO: _____

LICENSE NO: _____

BONDING AGENT: _____

PHONE NUMBER. _____

STATE OF INCORPORATION: _____

NEBRASKA NOVA

EXHIBIT A

GENERAL CONDITIONS & CONSTRUCTION MANAGEMENT FEE WORKSHEET

TENANT IMPROVEMENT PACKAGE - UNL Food Science and Technology

Estimated Cost: $11,500,000

GENERAL CONDITIONS

FIXED fee to include the following:

Staffing

Project Executive
Project Manager
Superintendent
Assistant Superintendent
Project Engineer
Safety Coordinator
Project Coordinator/Accountant
Other Staff not listed above

Site Requirements

Mobilization / Demobilization
Remobilization allowance
Office trailer and Setup
Office Supplies
Temp Office and Office Equipment
Field Drinking Water and Coolers
Mail & Overnight Expense
Project Photos
Project Sign
Temp Toilets
Temp Power
Temp Power Setup/Facilities
Temp Water and Setup
Temp Communications (telephone/internet)
Safety:
- Safety Inspections
- Safety/First Aid
- Fire Extinguisher
- Eyewash Station
- Rebar Guards
- Fall Protection
- Safety Sign
- General PPE
- Guardrails
- Safety Maintenance
- Hole Covers
- Railings
- Misc. Signage
- Safety Lunches
- Misc. Safety

Permits and Impections
Jobsite Signage
Temp Barricades/Fencing
Temp Walkways / Partitions
Traffic Control and Barricades
Plan Reproduction and Record Drawings
Record Drawings
Garbage Services/Dumpsters
Site Cleanup / Maintenance
Snow Removal to complete work
Dewatering
Weather Protection
Temp Heaters
Temp Heater Fuel and Supplies
Weather Protection Materials
Weather Protection labor
Progress Cleaning
Wash Windows
Final Cleanup

Miscellaneous

General Hoisting:
- Forklift w/ Operator
- Bobcat w/ Operator

Superintendent Vehicle
Fuel, Oil, Maintenance
Warranty
Finish Work Protection
Survey and Layout
Security
SWPP Facilities & Maintenance

2.5%	**TOTAL PERCENT: GENERAL CONDITIONS** (accounts for all items noted above)

JOB SERVICES BASED ON BUDGETED COST OF WORK OF $11.5M

$ **CMR Performance and Payment Bond**
% Percent of Cost

$ **General Liability**
% Percent of Cost

$ **Builder's Risk Insurance**
% Percent of Cost

%	**TOTAL PERCENT: JOB SERVICES**

CONSTRUCTION MANAGER'S FEE

%	**TOTAL PERCENT: CONSTRUCTION MANAGER FEE** (to also be applied to all change orders)

SECTION 08 36 13 - SECTIONAL DOORS

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 electrically operated sectional doors.

B. Related Requirements:

1. Section 05 50 00 "Metal Fabrications" for miscellaneous steel supports.

1.3 ACTION SUBMITTALS

A. Product Data: For each type and size of sectional door and accessory.

1. Include construction details, material descriptions, dimensions of individual components, profile door sections, and finishes.
2. Include rated capacities, operating characteristics, electrical characteristics, and furnished accessories.

B. Shop Drawings: For each installation and for special components not dimensioned or detailed in manufacturer's product data.

1. Include plans, elevations, sections, and mounting details.
2. Include details of equipment assemblies. Indicate dimensions, required clearances, method of field assembly, components, and location and size of each field connection.
3. Include points of attachment and their corresponding static and dynamic loads imposed on structure.
4. Include diagrams for power, signal, and control wiring.

C. Samples for Initial Selection: For units with factory-applied finishes.

1. Include Samples of accessories involving color selection.

D. Samples for Verification: For each type of exposed finish on the following components, in manufacturer's standard sizes:

1. Frame for paneled door sections; of each width of stile and rail required.
2. Panel for raised-panel door sections; not smaller than required to show raised-panel profile.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

B. Sample Warranties: For special warranties.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance Data: For sectional doors to include in maintenance manuals.

1.6 QUALITY ASSURANCE

A. Wood Sectional Door Manufacturer Qualifications: A qualified manufacturer that is certified for chain of custody by an FSC-accredited certification body.

B. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer for both installation and maintenance of units required for this Project.

C. Regulatory Requirements: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines and ICC A117.1.

1.7 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace components of sectional doors that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

    a. Structural failures including, but not limited to, excessive deflection.
    b. Failure of components or operators before reaching required number of operation cycles.
    c. Faulty operation of hardware.
    d. Deterioration of metals, metal finishes, and other materials beyond normal weathering and use; rust through.
    e. Delamination of exterior or interior facing materials.

2. Warranty Period: Five years from date of Substantial Completion.

B. Special Finish Warranty: Manufacturer agrees to repair or replace components that show evidence of deterioration of factory-applied finishes within specified warranty period.

1. Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS, GENERAL

A. Source Limitations: Obtain sectional doors from single source from single manufacturer.

1. Obtain operators and controls from sectional door manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. General Performance: Sectional doors shall comply with performance requirements specified without failure due to defective manufacture, fabrication, installation, or other defects in construction.

2.3 DOOR ASSEMBLY

1. Basis-of-Design Product: Subject to compliance with requirements, provide Overhead Door Corporation Model 593:

a. Or equal if and as specifically approved by Architect by Addendum during the bidding period.

B. Operation Cycles: Door components and operators capable of operating for not less than 20,000. One operation cycle is complete when a door is opened from the closed position to the fully open position and returned to the closed position.

C. Air Infiltration: Maximum rate of 0.08 cfm/sq. ft. at 15 and 25 mph when tested according to ASTM E 283.

D. Installed R-Value: 17.5 deg F x h x sq. ft./Btu.

E. Steel Sections: Zinc-coated (galvanized) steel sheet with G90 zinc coating.

1. Section Thickness: 1 3/8 inches.
2. Exterior-Face, Steel Sheet Thickness: .015-inch- nominal coated thickness.
   a. Surface: Manufacturer's standard, ribbed.

3. Insulation: Foamed in place.
4. Interior Facing Material: Zinc-coated (galvanized) steel sheet with a nominal coated thickness of manufacturer's recommended dimension to comply with performance requirements.

F. Track Configuration: Standard-lift track.

G. Weatherseals: Fitted to bottom and top of door. Provide combination bottom weatherseal and sensor edge.

H. Locking Devices: Equip door with locking device assembly.

1. Locking Device Assembly: Cremone type, both jamb sides, locking bars, operable from outside only, with cylinder.

I. Counterbalance Type: Torsion spring.

J. Electric Door Operator:

1. Usage Classification: Intermittent duty, up to 15 cycles per hour and up to 90 cycles per day.
2. Operator Type: Manufacturer's standard for door requirements.
3. Safety: Listed according to UL 325 by a qualified testing agency for commercial or industrial use; moving parts of operator enclosed or guarded if exposed and mounted at 8 feet or lower.
4. Motor Exposure: Exterior, dusty, wet, or humid.
5. Emergency Manual Operation: Chain type.
6. Obstruction-Detection Device: Automatic electric sensor edge on bottom section.

a. Sensor Edge Bulb Color: Black.

7. Control Station: Where indicated on Drawings.

K. Door Finish:

1. Baked-Enamel or Powder-Coat Finish: Custom Color to match Nichiha Smoke.
2. Finish of Interior Facing Material: Match finish of exterior section face.

2.4 MATERIALS, GENERAL

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

2.5 STEEL DOOR SECTIONS

A. Exterior Section Faces and Frames: Zinc-coated (galvanized), cold-rolled, commercial steel (CS) sheet, complying with ASTM A 653/A 653M, with indicated zinc coating and thickness.

1. Fabricate section faces from single sheets to provide sections not more than 24 inches high and of indicated thickness. Roll horizontal meeting edges to a continuous, interlocking, keyed, rabbeted, shiplap, or tongue-in-groove weather-resistant seal, with a reinforcing flange return.
2. For insulated doors, provide sections with continuous thermal-break construction, separating the exterior and interior faces of door.

B. Section Ends and Intermediate Stiles: Enclose open ends of sections with channel end stiles formed from galvanized-steel sheet not less than 0.064-inch- nominal coated thickness and welded to door section. Provide intermediate stiles formed from not less than 0.064-inch- thick galvanized-steel sheet, cut to door section profile, and welded in place. Space stiles not more than 48 inches apart.

C. Reinforce bottom section with a continuous channel or angle conforming to bottom-section profile and allowing installation of astragal.

D. Provide reinforcement for hardware attachment.

E. Foamed-in-Place Thermal Insulation: Insulate interior of steel sections with door manufacturer's standard CFC-free polyurethane insulation, foamed in place to completely fill interior of section and pressure bonded to face sheets to prevent delamination under wind load, and with maximum flame-spread and smoke-developed indexes of 75 and 450, respectively, according to ASTM E 84. Enclose insulation completely within steel sections and the interior facing material, with no exposed insulation.

F. Interior Facing Material: Zinc-coated (galvanized), cold-rolled, commercial steel (CS) sheet, complying with ASTM A 653/A 653M, with indicated thickness.

G. Fabricate sections so finished door assembly is rigid and aligned, with tight hairline joints and free of warp, twist, and deformation.

2.6 TRACKS, SUPPORTS, AND ACCESSORIES

A. Tracks: Manufacturer's standard, galvanized-steel track system of configuration indicated, sized for door size and weight, designed for lift type indicated and clearances indicated on Drawings, Provide complete system including brackets, bracing, and reinforcement to ensure rigid support of ball-bearing roller guides for required door type, size, weight, and loading.

1. Galvanized Steel: ASTM A 653/A 653M, minimum G60 zinc coating.
2. Slope tracks at an angle from vertical or design tracks to ensure tight closure at jambs when door unit is closed.
3. Track Reinforcement and Supports: Galvanized-steel members to support track without sag, sway, and vibration during opening and closing of doors. Slot vertical sections of track spaced 2 inches apart for door-drop safety device.

    a. For Vertical Track: Intermittent, jamb brackets attached to track and attached to wall.

b. For Horizontal Track: Continuous reinforcing angle from curve in track to end of track, attached to track and supported at points by laterally braced attachments to overhead structural members.

B. Weatherseals: Replaceable, adjustable, continuous, compressible weather-stripping gaskets of flexible vinyl, rubber, or neoprene fitted to bottom and top of sectional door unless otherwise indicated.

2.7 HARDWARE

A. General: Heavy-duty, corrosion-resistant hardware, with hot-dip galvanized, stainless-steel, or other corrosion-resistant fasteners, to suit door type.

B. Hinges: Heavy-duty, galvanized-steel hinges of not less than 0.079-inch- nominal coated thickness at each end stile and at each intermediate stile, according to manufacturer's written recommendations for door size. Attach hinges to door sections through stiles and rails with bolts and lock nuts or lock washers and nuts. Use rivets or self-tapping fasteners where access to nuts is impossible. Provide double-end hinges where required, for doors more than 16 feet wide unless otherwise recommended by door manufacturer.

C. Rollers: Heavy-duty rollers with steel ball-bearings in case-hardened steel races, mounted with varying projections to suit slope of track. Extend roller shaft through both hinges where double hinges are required. Provide 3-inch- diameter roller tires for 3-inch- wide track and 2-inch-diameter roller tires for 2-inch- wide track.

D. Push/Pull Handles: Equip each push-up operated or emergency-operated door with galvanized-steel lifting handles on each side of door, finished to match door.

2.8 LOCKING DEVICES

A. Slide Bolt: Fabricate with side-locking bolts to engage through slots in tracks for locking by padlock, located on single-jamb side, operable from inside only.

B. Locking Device Assembly: Fabricate with cylinder lock, spring-loaded deadbolt, operating handle, cam plate, and adjustable locking bars to engage through slots in tracks.

1. Lock Cylinders: Cylinders specified in Section 08 71 00 "Door Hardware".

C. Chain Lock Keeper: Suitable for padlock.

D. Safety Interlock Switch: Equip power-operated doors with safety interlock switch to disengage power supply when door is locked.

2.9 COUNTERBALANCE MECHANISM

A. Torsion Spring: Counterbalance mechanism consisting of adjustable-tension torsion springs fabricated from steel-spring wire complying with ASTM A 229/A 229M, mounted on torsion shaft made of steel tube or solid steel. Provide springs designed for number of operation cycles indicated.

B. Cable Drums and Shaft for Doors: Cast-aluminum or gray-iron casting cable drums mounted on torsion shaft and grooved to receive door-lifting cables as door is raised. Mount counterbalance

mechanism with manufacturer's standard ball-bearing brackets at each end of torsion shaft. Provide one additional midpoint bracket for shafts up to 16 feet long and two additional brackets at one-third points to support shafts more than 16 feet long unless closer spacing is recommended by door manufacturer.

C. Cables: Galvanized-steel, multistrand, lifting cables with cable safety factor of at least 5 to 1.

D. Cable Safety Device: Include a spring-loaded steel or spring-loaded bronze cam mounted to bottom door roller assembly on each side and designed to automatically stop door if either lifting cable breaks.

E. Bracket: Provide anchor support bracket as required to connect stationary end of spring to the wall and to level the shaft and prevent sag.

F. Bumper: Provide spring bumper at each horizontal track to cushion door at end of opening operation.

2.10 ELECTRIC DOOR OPERATORS

A. General: Electric door operator assembly of size and capacity recommended and provided by door manufacturer for door and "operation cycles" requirement specified, with electric motor and factory-prewired motor controls, starter, gear-reduction unit, solenoid-operated brake, clutch, control stations, control devices, integral gearing for locking door, and accessories required for proper operation.

B. Usage Classification: Electric operator and components capable of operating for not less than number of cycles per hour indicated for each door.

C. Door-Operator Type: Unit consisting of electric motor, gears, pulleys, belts, sprockets, chains, and controls needed to operate door and meet required usage classification.

1. Jackshaft, Side Mounted: Jackshaft operator mounted on the inside front wall on right or left side of door and connected to torsion shaft with an adjustable coupling or drive chain.

D. Motors: Reversible-type motor with controller (disconnect switch) for motor exposure indicated.

1. Electrical Characteristics:

a. Phase: 3 Phase.
b. Volts: 208 V.
c. Hertz: 60.

2. Motor Size: Minimum size as indicated. If not indicated, large enough to start, accelerate, and operate door in either direction from any position, at a speed not less than 8 in./sec. and not more than 12 in./sec., without exceeding nameplate ratings or service factor.
3. Operating Controls, Controllers (Disconnect Switches), Wiring Devices, and Wiring: Manufacturer's standard unless otherwise indicated.
4. Coordinate wiring requirements and electrical characteristics of motors and other electrical devices with building electrical system and each location where installed.
5. Use adjustable motor-mounting bases for belt-driven operators.

E. Limit Switches: Equip motorized door with adjustable switches interlocked with motor controls and set to automatically stop door at fully opened and fully closed positions.

F. Obstruction Detection Device: External entrapment protection consisting of indicated automatic safety sensor capable of protecting full width of door opening. Activation of device immediately stops and reverses downward door travel.

1. Photoelectric Sensor: Manufacturer's standard system designed to detect an obstruction in door opening without contact between door and obstruction.

a. Self-Monitoring Type: Designed to interface with door operator control circuit to detect damage to or disconnection of sensing device. When self-monitoring feature is activated, door closes only with sustained pressure on close button.

2. Electric Sensor Edge: Automatic safety sensor edge, located within astragal or weather stripping mounted to bottom section. Contact with sensor activates device. Connect to control circuit using manufacturer's standard take-up reel or self-coiling cable.

a. Self-Monitoring Type: Four-wire configured device designed to interface with door-operator control circuit to detect damage to or disconnection of sensor edge.

G. Control Station: Three-button control station in fixed location with momentary-contact push-button controls labeled "Open" and "Stop" and sustained- or constant-pressure, push-button control labeled "Close."

1. Interior-Mounted Units: Full-guarded, surface-mounted, heavy-duty type, with general-purpose NEMA ICS 6, Type 1 enclosure.
2. Exterior-Mounted Units: Full-guarded, standard-duty, surface-mounted, weatherproof type, NEMA ICS 6, Type 4 enclosure, key operated.

H. Emergency Manual Operation: Equip electrically powered door with capability for emergency manual operation. Design manual mechanism so required force for door operation does not exceed 25 lbf.

I. Emergency Operation Disconnect Device: Equip operator with hand-operated disconnect mechanism for automatically engaging manual operator and releasing brake for emergency manual operation while disconnecting motor without affecting timing of limit switch. Mount mechanism so it is accessible from floor level. Include interlock device to automatically prevent motor from operating when emergency operator is engaged.

J. Motor Removal: Design operator so motor may be removed without disturbing limit-switch adjustment and without affecting emergency manual operation.

K. Audible and Visual Signals: Audible alarm and visual indicator lights in compliance with regulatory requirements for accessibility.

2.11 GENERAL FINISH REQUIREMENTS

A. Comply with NAAMM/NOMMA's "Metal Finishes Manual for Architectural and Metal Products (AMP 500-06)" for recommendations for applying and designating finishes.

B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.12 STEEL AND GALVANIZED-STEEL FINISHES

A. Baked-Enamel or Powder-Coat Finish: Manufacturer's standard baked-on finish consisting of prime coat and thermosetting topcoat. Comply with coating manufacturer's written instructions for cleaning, pretreatment, application, and minimum dry film thickness.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for substrate construction and other conditions affecting performance of the Work.

B. Examine locations of electrical connections.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install sectional doors and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; according to manufacturer's written instructions and as specified.

B. Tracks:

1. Fasten vertical track assembly to opening jambs and framing, spaced not more than 24 inches apart.
2. Hang horizontal track assembly from structural overhead framing with angles or channel hangers attached to framing by welding or bolting, or both. Provide sway bracing, diagonal bracing, and reinforcement as required for rigid installation of track and door-operating equipment.

C. Accessibility: Install sectional doors, switches, and controls along accessible routes in compliance with regulatory requirements for accessibility.

D. Power-Operated Doors: Install according to UL 325.

3.3 STARTUP SERVICES

A. Engage a factory-authorized service representative to perform startup service.

1. Complete installation and startup checks according to manufacturer's written instructions.
2. Test and adjust controls and safety devices. Replace damaged and malfunctioning controls and equipment.

3.4 ADJUSTING

A. Adjust hardware and moving parts to function smoothly so that doors operate easily, free of warp, twist, or distortion.

B. Lubricate bearings and sliding parts as recommended by manufacturer.

C. Adjust doors and seals to provide weather-resistant fit around entire perimeter.

D. Touch-up Painting: Immediately after welding galvanized materials, clean welds and abraded galvanized surfaces and repair galvanizing to comply with ASTM A 780/A 780M.

3.5 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain sectional doors.

END OF SECTION 08 36 13

SECTION 316316 - AUGER CAST PILES "Area-A"

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

A. The extent of auger cast piles is shown on drawings, including locations, diameters of shafts, estimated bottom elevations, top elevations, and details of construction. Actual required lengths will be determined in the field by the Geotechnical Engineer/Soils Consultant.

1.2 QUALITY ASSURANCE

A. Auger Cast Pile Installer Qualifications: Not less than six years experience installing auger cast piles. Not less than six successfully completed contracts with similar soil conditions, shaft sizes, depths, and volumes of work contained in this project. Submit satisfactory proof of compliance to the Architect/Engineer.

B. Survey Work: The general contractor is completely responsible for all surveys, layouts, and measurements for auger cast pile work. Conduct layout work for each auger cast pile to lines and levels required before excavation, and record actual measurements of each auger cast pile's horizontal axial locations, shaft diameter, bottom and top elevations, deviations from specified tolerances, and other data as required.

1. Record and maintain information pertinent to each auger cast pile and cooperate with other testing and inspection personnel to provide data for required reports.

C. Concrete Testing: The Contractor shall retain the services of an approved testing laboratory to perform compressive strength tests on mortar as noted below:

1. Test the mortar in conformance with “Test Method for Compressive Strength of Hydraulic Cement Mortars” ASTM C109 each morning and afternoon. Record the piles represented by each test. See Section 03010 – “Concrete Work,” for further requirements for quality control testing.

D. Submittal: The Contractor shall submit the auger cast mix and test data from at least three (3) previous similar projects for review and approval by the Engineer of Record.

E. Materials and Installed Work: The Owner may require testing and retesting any time during progress of work. Allow free access to material stockpiles and facilities. Tests not specifically indicated shall be done at the Owner's expense. Retesting of rejected materials and installed work shall be done at the Contractor's expense.

F. Allowable Tolerances: Variation from vertical shall not be more than 1/4″ per foot of pile length with a maximum of 6 inches in the entire length.

G. Variation from drawing location of butt at cutoff shall not be more than 1-1/2″.

H. Field Quality Assurance: Inspection of piling placement is to be on a full-time basis by the Olsson Associates of Lincoln, Nebraska. The Soil Consultant must be present during all pile installation operations. The Contractor shall notify the Engineer at least seven (7) days prior to starting pile placement work. The Soil Consultant will keep a record for each pile placed. The

records shall indicate the pay length, location, type, calculated safe load, the results of any tests, and as well as any other information pertaining to the piles. Cooperate with the Soil Consultant to facilitate the keeping of these records. The Soil Consultant is the Owner's representative and the Contractor shall assume toward him all the obligation and responsibilities that he assumed toward the Owner and the Engineer. The Soil Consultant will be retained by the Owner. Grout testing will be paid by the Contractor. See Division 01 Section "Allowances" for the allowance on testing and soils engineering inspections.

1.3 PAY QUANTITIES FOR AUGER CAST PILES

A. Pile Lengths: Extend piles into soils as shown on drawings. See plans for locations of top and bottoms of piles.

B. Unit Prices: Bidders shall base proposals on the number of piles and pile lengths shown on the drawings. Payment under the contract shall be adjusted to reflect actual length of piles installed as determined by registered Geotechnical Engineer as specified above in the Article entitled QUALITY ASSURANCE. The Contract Sum will be adjusted for increases or decreases in the actual aggregate piling length compared to lengths shown on the drawings using unit prices stipulated by the Bidder on the Bid Proposal Form. Pay length of pile shall be from the tip to the cutoff elevation shown on the drawings. No payment will be made for withdrawn, broken, or rejected piling unless the Engineer determines that the piling was damaged by an obstruction. No payment will be made for cutting off piling or for any portion of pile remaining above cutoff elevation, except when specifically authorized.

1.4 SUBMITTALS

A. Reports:

1. Submit the following reports directly to Architect/Engineer, with copy to others as designated:

a. The General Contractor submit shop drawings, prepared by the pile contractor and associated trades, to the Engineer in accord with the General Conditions and General Requirements. Shop drawings shall show the following:

1) Calculations
2) Dimensions
3) Material Strengths
4) Reinforcement
5) Names of Three Past Successful Installations Under Similar Conditions
6) Grout Design

b. The General Contractor shall submit as-built drawings indicating the plans and actual locations of all piles to the Architect/Engineer upon completion of pile placement.

c. The Geotechnical Engineer/Soils Consultant shall submit a report to the Architect/Engineer upon completion of pile placement. This report shall contain the records required under “Field Quality Assurance,” and the stamp of a registered professional engineer licensed to practice in the State of Nebraska.

1.5 JOB CONDITIONS

A. Site Information: Data on indicated subsurface conditions are not intended as representations or warranties of continuity of such conditions. It is expressly understood that Owner will not be responsible for interpretations or conclusions drawn there from by the Contractor. Data are made available for convenience of the Contractor and are not guaranteed to represent conditions that may be encountered.

1. Additional test boring and other exploratory operations may be made by Contractor at no additional cost to Owner.

B. Existing Utilities: Locate existing underground utilities by careful hand excavation before starting pile excavation operations. If utilities are to remain in place, provide protection from damage during pile operations.

C. Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, consult Architect immediately for directions as to proceed. Cooperate with Owner, and public or private utility companies in keeping their respective service and facilities in operation. Repair damage utilities to the satisfaction of utility owner.

D. Do not interrupt existing utilities serving facilities occupied and used by Owner or others, except when permitted in writing by Architect and then only after acceptable temporary utility services have been provided.

PART 2 - PRODUCTS

A. Auger Cast Piles: Auger cast piles shall be a cast-in-place pile made by rotating a continuous helical flight hollow shaft auger into the subsoil and injecting grout under sufficient pressure as the auger is withdrawing to ensure a continuous column of grout to the minimum diameter of 18″. The piles shall develop an allowable capacity of at least 310 kips. A pile load test is required.

B. Portland Cement: Portland cement shall conform to ASTM C 150.

C. Fine Aggregate: Fine aggregate shall conform to ASTM C 33.

D. Admixtures: Admixtures may be used to impart additional strength, reduce mixing water, retard setting time, decrease bleeding and segregation, and eliminate setting shrinkage. Conform to the manufacturer's instructions. Any admixtures shall be indicated in submittal from general contractor.

E. Mortar: Proportion and mix mortar to provide a mortar capable of maintaining the solids in suspension without appreciable water gain, yet which may be pumped without difficulty and which will laterally penetrate and fill voids in the foundation material. Proportion materials to provide a compressive strength of 5,000 psi at 28 days. The compressive stress on the shaft concrete shall not exceed 22.5% of the 28-day compressive strength. Adjust mix as necessary to limit bleeding of completed pile such that water accumulation on top of pile is less than 2″ and no significant cement loss occurs.

F. Equipment: Equipment for pumping mortar shall provide continuous mixing and agitation in the preparation and handling of the mortar. Provide an accurate and recently calibrated grout pressure gauge in clear view of the equipment operator. Use a screen between mixer and pump, or between mixer and agitator. Accurately measure all materials by weight as they are fed into the mixer. Provide a stroke counter to continuously record the volume of grout pumped. Calibrate the pump on the site by pumping a known volume of grout exceeding 50 gallons or provide recent pump calibration data.

G. Auger flighting shall be continuous from the auger head to the top of the auger, with no gaps or other breaks. During the placement of the pile, pump the high-strength mortar through a hole located at the bottom at the auger head. The Contractor shall visit the site to verify the actual drilling clearances, which will be encountered due to existing construction.

PART 3 - EXECUTION

3.1 INSTALLATION OF PILES

A. Select and use installation methods suitable to the soil profile which will provide a continuous column of grout of the minimum diameter and strength indicated, free of voids and foreign material, without detrimental disturbance of the surrounding soil. Extend piles to elevation indicated or established by the Engineer. Piles less than 6′ center to center shall not be installed in the same working day.

B. Advance auger to the required depth with minimum rotation to prevent disturbance of surrounding soil. Do not rotate auger without either advancing the auger of pumping grout. Use consistent installation procedures throughout the project. Accomplish drilling with plug in lower end of auger. Do not inject water at anytime during drilling or grouting. Air may be injected during drilling with the approval of the Geotechnical Engineer.

C. Mix and pump grout only with adequate equipment in preparation and handling grout. Remove all soil, rust, or other foreign material from mixing drums, stirring mechanisms, and other equipment in contact with grout before materials are introduced. Mix grout not less than one minute. If grout is agitated continuously, grout may be held in mixer or agitator for a period not more than two hours at temperatures not exceeding 70° F. and for a period not exceeding 1-1/2 hour at higher temperatures. Recirculate grout through pump or agitator if there is a lapse in operation. Pump high- strength mortar with sufficient pressure as the auger is withdrawn to fill the hole preventing hole collapse, and to cause the lateral penetration of the mortar into soft or porous zones of the surrounding soil. Keep a head of mortar of at least 15′ above the injection point at all times during the raising of the auger. This method of placement shall be used at all times and not be dependent on whether the hole is sufficiently stable to retain its shape without support from the earth-filled auger. Pump mortar continuously, and, if there is a lapse in the operation, recirculate the mortar through the pump. Jerky removal of the auger will be sufficient basis for rejection of the pile.

D. Remove any mud which falls into the top of the hole before reinforcing steel is set. Place reinforcing steel as indicated on the drawings while mortar is still fluid.

E. Any pile that is not completed during the initial withdrawal of the auger will be rejected. The rejected pile must be lengthened to a depth determined by the Soil Consultant. The withdrawal may reduce the capacity of adjoining completed piles. The capacity reduction will be determined by the Soil Consultant. The Contractor is responsible for the cost of increasing the penetration of piles or additional piles required by the Soils Consultant if it is necessary to withdraw the auger without grouting.

F. If obstructions are encountered (including but not limited to boulders and timbers), which shall prevent placing the pile to the depth required or shall cause the pile to drift from the required location, the pile shall be completed and this short pile added to the unit lengths for payment. If required by the Engineer, an additional adjacent pile shall be placed and paid for at the Unit Price.

G. Place metal sleeves of the proper diameter around pile tops where the pile cutoff is near the surface or above the bottom of the excavation.

H. Remove fresh mortar to the cutoff elevation or allow the mortar to harden at least overnight and remove hardened mortar to the cutoff elevation.

I. Replace rejected piles by installing additional piles as directed by the Engineer. Piles may be rejected for location out of tolerance, broken or collapsed piles, inadequate strength, or failure to meet specifications. All rejected piles shall be corrected by the General Contractor at no expense to the Owner.

J. Depth of Bearing Strata: If indicated depth of shaft excavation is reached without developing required strata friction capacity, immediately suspend excavation operations and inform Architect. Architect will determine procedures to be followed in each instance.

1. Where changes in indicated depth or dimensions are required, or additional soil borings are required, proceed with such work when directed in writing by Architect.

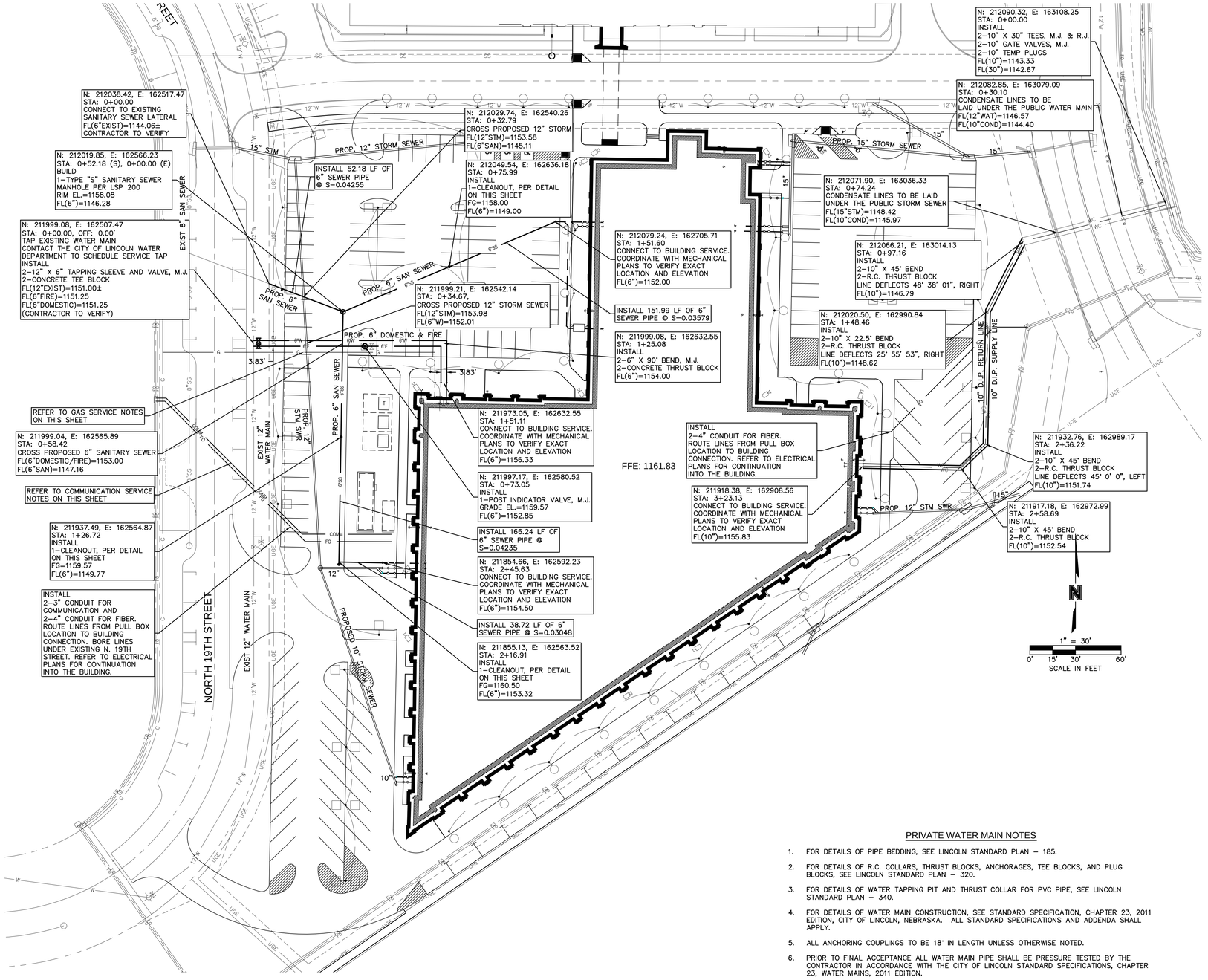
K. Overexcavation: No payment will be made for extra length, when auger cast piles shafts are excavated to a greater depth than required or authorized by Architect, due to overdrilling by Contractor. Complete intruded mortar piles and fill extra depth with grout, if other conditions are satisfactory. Overexcavated shafts will be measured and paid for to authorized depth.

L. Excavated Material: Remove excavated material and dispose of it off-site. Remove spoils in such a manner to minimize disturbance and thoroughly clean all affected areas when pile operation has been completed.

M. Cold Weather Placing: Protect mortar work from physical damage or reduced strength, which could be caused by frost, freezing actions, or low temperatures.

1. Do not use frozen materials or materials containing ice or snow. Do not place concrete against frozen subgrade or on subgrade containing frozen materials.
2. Do not use calcium chloride, salt and other mineral containing anti-freeze agents or chemical accelerators, unless otherwise accepted by Architect.
3. Do not use retarding admixtures without acceptance of Architect.

END OF SECTION 316316



UTILITY NOTES

ELECTRICAL SERVICE

1. ELECTRICAL TRANSFORMER PAD TO BE BUILT BY SITE CONTRACTOR. COORDINATE WITH LINCOLN ELECTRIC SYSTEM FOR EXACT SIZE, LOCATION, AND MATERIALS USED FOR PAD.
2. UNDERGROUND TELEPHONE AND ELECTRIC PRIMARY CONDUITS AND CONDUCTORS TO BE BUILT BY LINCOLN ELECTRIC SYSTEM. COORDINATE WITH LINCOLN ELECTRIC SYSTEM FOR EXACT LOCATION AND SCHEDULING OF CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR SECONDARY CONDUIT FROM TRANSFORMER TO WITHIN 5' OF BUILDING.
3. REFER TO ARCHITECTURAL BUILDING ELECTRICAL PLANS FOR CONTINUATION OF SERVICE IN BUILDING.
4. PARKING LOT LIGHTING TO BE SUBMITTED SEPARATELY.

TELEPHONE SERVICE

1. THE CONTRACTOR IS RESPONSIBLE TO FURNISH AND INSTALL CONDUIT FOR TENANT TELEPHONE SERVICE AS SHOWN.
2. WINDSTREAM WILL DIRECT BURY TELEPHONE LINES IN UTILITY EASEMENTS.
3. CONTRACTOR TO CONTACT WINDSTREAM TO VERIFY EXACT CONNECTION POINT OF SERVICE OFF THE PROPERTY.
4. REFER TO ARCHITECTURAL BUILDING MECHANICAL PLANS FOR CONTINUATION OF SERVICE IN BUILDING.

CABLE TELEVISION

1. CONDUIT FOR CABLE TELEVISION IS TO BE INSTALLED IN THE SAME TRENCH AS THE TELEPHONE.
2. CONTACT CABLE COMPANY FOR EXACT LOCATION OF CONNECTION POINTS.
3. REFER TO ARCHITECTURAL BUILDING MECHANICAL PLANS FOR CONTINUATION OF SERVICE IN BUILDING.

GAS MAIN

1. UNDERGROUND GAS SERVICE TO BE BUILT BY BLACK HILLS ENERGY. COORDINATE WITH BLACKS HILLS ENERGY FOR EXACT LOCATION AND SCHEDULING OF CONSTRUCTION.
2. REFER TO ARCHITECTURAL BUILDING MECHANICAL PLANS FOR CONTINUATION OF SERVICE IN BUILDING.

GENERAL NOTES

1. THE CONTRACTOR SHALL MAINTAIN STRICT LATERAL CLEARANCE AS SHOWN ON THE PLANS FOR ALL UTILITY LINES.
2. IN ANY OF THE MAIN OR SERVICE ROUTES ARE ADJUSTED IN THE FIELD BY THE CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TO THE ENGINEER A RECORD OF THE EXACT LOCATIONS, AT THE CONTRACTOR'S EXPENSE, A LICENSED SURVEYOR SHALL BE RETAINED TO LOCATE THE CONDUIT ROUTES. THE CONTRACTOR SHALL PROVIDE THE SURVEYED LOCATIONS TO THE ENGINEER IN ELECTRONIC FORMAT.
3. ALL TRENCHES SHALL BE BACKFILLED AND COMPACTED PER THE SPECIFICATIONS IN THE GEOTECHNICAL REPORT.
4. THE CONTRACTOR SHALL RESTORE ANY DISTURBED AREA TO ITS PREVIOUS CONDITION.
5. ALL CONDUITS SHALL BE TERMINATED 5 FEET FROM THE BUILDING.
6. THE CONTRACTOR SHALL VERIFY ALL VERTICAL AND HORIZONTAL CROSSINGS OF ALL PROPOSED AND EXISTING UTILITIES PRIOR TO INSTALLATION OF CONDUIT. CONTACT THE ENGINEER WITH ANY CONFLICTS.
7. ALL CONDUIT STUBS SHALL BE CAPPED AND MARKED ABOVE GROUND WITH REBAR AND A FLAG.

PRIVATE WATER MAIN NOTES

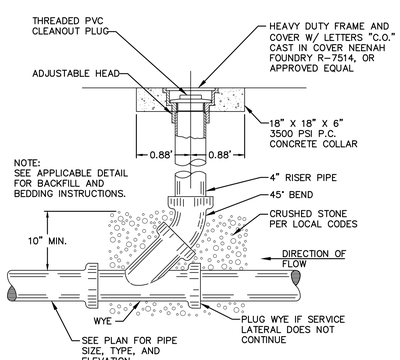
1. FOR DETAILS OF PIPE BEDDING, SEE LINCOLN STANDARD PLAN – 185.
2. FOR DETAILS OF R.C. COLLARS, THRUST BLOCKS, ANCHORAGES, TEE BLOCKS, AND PLUG BLOCKS, SEE LINCOLN STANDARD PLAN – 320.
3. FOR DETAILS OF WATER TAPPING PIT AND THRUST COLLAR FOR PVC PIPE, SEE LINCOLN STANDARD PLAN – 340.
4. FOR DETAILS OF WATER MAIN CONSTRUCTION, SEE STANDARD SPECIFICATION, CHAPTER 23, 2011 EDITION, CITY OF LINCOLN, NEBRASKA. ALL STANDARD SPECIFICATIONS AND ADDENDA SHALL APPLY.
5. ALL ANCHORING COUPLINGS TO BE 18" IN LENGTH UNLESS OTHERWISE NOTED.
6. PRIOR TO FINAL ACCEPTANCE ALL WATER MAIN PIPE SHALL BE PRESSURE TESTED BY THE CONTRACTOR IN ACCORDANCE WITH THE CITY OF LINCOLN STANDARD SPECIFICATIONS, CHAPTER 23, WATER MAINS, 2011 EDITION.
7. PRIOR TO FINAL ACCEPTANCE ALL WATER MAIN PIPE SHALL BE DISINFECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE CITY OF LINCOLN STANDARD SPECIFICATIONS, CHAPTER 23, WATER MAINS, 2011 EDITION.
8. FOR PVC WATER MAIN CONSTRUCTION, ALL FITTINGS SHALL BE DUCTILE IRON WRAPPED WITH POLYWRAP. POLYWRAP SHALL BE LINEAR LOW DENSITY POLYETHYLENE FILM MANUFACTURED OF VIRGIN POLYETHYLENE MATERIAL. MINIMUM THICKNESS SHALL BE 8 MIL. POLYWRAP SHALL BE IN ACCORDANCE WITH DRAFT OF AWWA C105 REVISION, DOUBLE WRAPPED (2 LAYERS) AND TAPED AS PER CITY OF LINCOLN STANDARD SPECIFICATION.
9. WHERE THE WATER MAIN IS TO BE CONSTRUCTED BELOW OR WITHIN 18 INCHES (0.5 M) OF ANY SEWER PIPE, THE CONTRACTOR SHALL LAY A FULL LENGTH OF WATER MAIN PIPE CENTERED ON THE SEWER OR SUCH LENGTH AS WILL PROVIDE THE MAXIMUM POSSIBLE SEPARATION OF THE JOINTS IN THE WATER MAIN FROM THE SEWER LINE. IF NOT ALREADY SO, THE CONTRACTOR SHALL CONSTRUCT SANITARY SEWER WITH ONE 20 FOOT (6 M) NOMINAL LENGTH OF PRESSURE PIPE MATERIAL CENTERED ON THE WATER MAIN AS PROVIDED IN SECTION 22.02(B), SUCH THAT THE MAXIMUM POSSIBLE SEPARATION BETWEEN THE WATER MAIN AND THE SEWER PIPE JOINTS WILL RESULT. THE BACKFILL MATERIAL SHALL BE SELECT, LOW PERMEABILITY SOIL.
10. AT ALL WATER MAIN CROSSINGS, SANITARY SEWERS SHALL BE LAID AT SUCH AN ELEVATION THAT THE TOP OF THE SANITARY SEWER IS AT LEAST 18 IN (357 MM) BELOW THE BOTTOM OF THE WATER MAIN.
11. ALL WATER MAIN CONSTRUCTION TO BE DONE UNDER A PLUMBERS PERMIT AND SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES.
12. ALL WATER METERS, PUMPS, AND BACKFLOW PREVENTERS ARE LOCATED INSIDE BUILDING. REFER TO ARCHITECTURAL PLANS FOR DESIGN AND LOCATIONS.
13. WATER SERVICE PIPE SHALL HAVE A 5.0' MINIMUM BURY DEPTH AS MEASURED FROM FINISHED GROUND TO TOP OF PIPE.
14. SITE SHALL BE TO FINISHED GRADE PRIOR TO INSTALLATION OF WATER SERVICE.
15. MATERIAL OF PIPE FROM TAP OF PUBLIC WATER MAIN TO METER IN BUILDING SHALL BE TYPE "K" SEAMLESS COPPER (3/4" TO 3"), DUCTILE IRON PIPE (3" AND LARGER), OR AWWA C900 PVC (4" AND LARGER) PER LOCAL CODES AND REGULATIONS.
16. REFER TO ARCHITECTURAL PLANS FOR WATER SERVICE TIE-INS WITH BUILDING.

PRIVATE SANITARY SEWER NOTES

1. FOR DETAILS OF C.I. MANHOLE RING, COVER, AND STEPS, SEE LINCOLN STANDARD PLAN – 162.
2. FOR DETAILS OF STANDARD SEWER MANHOLE TYPE "S" (LINE) AND TYPE "R" (OUTSIDE DROP), SEE LINCOLN STANDARD PLAN – 200.
3. FOR DETAILS OF PIPE BEDDING, SEE LINCOLN STANDARD PLAN – 185.
4. FOR DETAILS OF STANDARD SANITARY SEWER SERVICES, SEE LINCOLN STANDARD PLAN – 210.
5. FOR DETAILS OF PAVEMENT REPLACEMENT FOR UTILITY CONSTRUCTION, SEE LINCOLN STANDARD PLAN – 670.
6. FOR DETAILS OF SANITARY SEWER CONSTRUCTION, SEE STANDARD SPECIFICATION, CHAPTER 22, 2011 EDITION, CITY OF LINCOLN, NEBRASKA. ALL STANDARD SPECIFICATIONS AND ADDENDA SHALL APPLY.
7. USE 3' COUPLINGS AS REQUIRED BY STANDARD SPECIFICATIONS. MINIMUM PIPE LENGTH = 6.25'
8. SANITARY SEWERS SHALL BE SEPARATED BY AT LEAST 10 FT. (3.48 M) HORIZONTALLY FROM ANY EXISTING OR PROPOSED PARALLEL WATER MAINS, MEASURED EDGE TO EDGE.
9. AT ALL WATER MAIN CROSSINGS, SANITARY SEWERS SHALL BE LAID AT SUCH AN ELEVATION THAT THE TOP OF THE SANITARY SEWER IS AT LEAST 18 IN (457 MM) BELOW THE BOTTOM OF THE WATER MAIN. IN THOSE INSTANCES WHERE THE BOTTOM OF THE WATER MAIN IS LESS THAN 18 IN (457 MM), ABOVE THE TOP OF THE SANITARY SEWER OR THE SANITARY SEWER IS LOCATED ABOVE THE WATER MAIN, THE SANITARY SEWER SHALL BE CONSTRUCTED USING A 20 FT. (6.10 M) LENGTH OF PVC PRESSURE PIPE, MEETING THE REQUIREMENTS OF AWWA C900 FOR DR18, PRESSURE RATING 150 PSI (1034 KPA), CENTERED ON THE WATER MAIN.
10. ALL SANITARY SEWER WILL BE DONE UNDER A PLUMBERS PERMIT, AND SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES.
11. PRIOR TO FINAL ACCEPTANCE ALL SEWER MAIN SHALL BE AIR TESTED BY THE CONTRACTOR @ 5 LBS FOR 15 MINUTES, IN ACCORDANCE WITH THE LINCOLN PLUMBING CODE.
12. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL HAVE THE SEWER MAIN TV INSPECTED AND THE COST OF SUCH WORK SHALL BE SUBSIDIARY TO THE PRICE BID FOR SEWER WITH INSTALLATION.
13. PRIOR TO FINAL ACCEPTANCE, VACUUM TESTING SHALL BE PERFORMED ON ALL MANHOLES TO CONFORM TO THE REQUIREMENTS OF STANDARD TEST METHOD FOR CONCRETE MANHOLES BY THE 'NEGATIVE AIR PRESSURE (VACUUM) TEST' ASTM DESIGNATION C-1244.
14. CONTRACTOR SHALL VERIFY PROPOSED SANITARY SEWER MANHOLE RIM ELEVATIONS TO BE WITHIN ±0.25' TOLERANCE WITH EXISTING GROUND SURFACE. CONTRACTOR SHALL ADJUST MANHOLE RIM ELEVATIONS TO BE WITHIN TOLERANCE. ADJUSTMENTS SHALL BE A SUBSIDIARY TO THE PRICE BID FOR STANDARD SEWER MANHOLE, TYPE "S".
15. FOR BORED SECTION OF PIPE, CONTRACTOR SHALL TEST EVERY 25' SECTION OF 8" SEWER PIPE BASED ON THE FOLLOWING GUIDELINES: GRADE TOLERANCES SHOULD NOT EXCEED THE FOLLOWING:
    - A. THE MINIMUM SLOPE OF THE SEWER MAIN BETWEEN ANY TWO CHECK POINTS ALONG THE ALIGNMENT SHALL BE AT LEAST 0.005 FT/FT.
    - B. THE ENGINEER HAS THE RIGHT TO REJECT ANY INSTALLATION SECTION OF THE INSTALLATION THAT DOES NOT MEET THE MINIMUM REQUIREMENTS. CONTRACTOR SHALL, AT THEIR OWN EXPENSE, REINSTALL THE SEWER PIPE TO THE LINES AND GRADES REQUIRED.
18. REFER TO ARCHITECTURAL PLANS FOR SANITARY SEWER TIE-INS WITH BUILDING(S).
19. BUILD 1 ½" P.V.C. RISER PIPE WITH 1 ½" SOLVENT WELDED CAP, AT THE END OF SANITARY SEWER SERVICE.
20. CLEAN-OUTS TO BE BUILT AS PER CITY OF LINCOLN CODE.
21. ALL PIPE, SERVICE PIPE, AND FITTINGS SHALL BE SCHEDULE 40 PVC.

LEGEND

- W — PROPOSED WATER MAIN
- SS — PROPOSED SANITARY SEWER
- SD — PROPOSED STORM SEWER
- W — EXISTING WATER MAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- ROAD RIGHT-OF-WAY
- EASEMENT LINE
- BUILDING SETBACK LINE
- ROADWAY CENTERLINE
- SECTION LINE
- SANITARY SEWER MANHOLE
- FIRE HYDRANT
- WATER VALVE



SANITARY SEWER CLEAN-OUT
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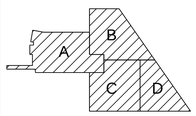


Key Plan

Life Sciences Collaboration

1910 N. Antelope Valley Parkway
Lincoln, Nebraska

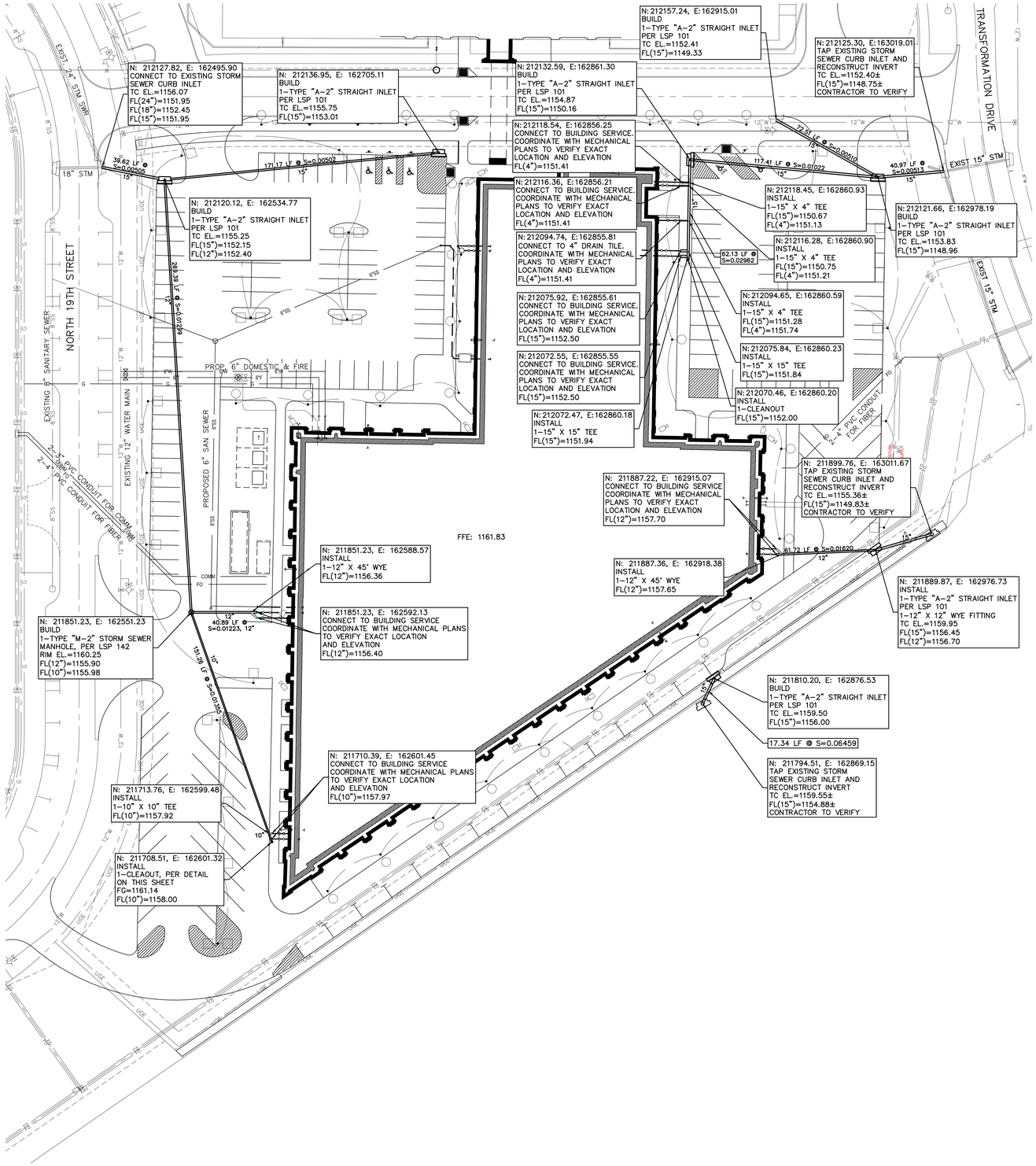
TCEP No.: 716-002-12
Davis Design.: 12-0077
BVH No.:L12018.unl

November 27, 2013

PROFESSIONAL ENGINEER
TIMOTHY S. GERGEN
E-10344
12/11/13
STATE OF NEBRASKA

UTILITY PLAN

C1.01



PRIVATE STORM SEWER NOTES

1. FOR DETAILS OF TYPE "A–2" STORM SEWER INLET, SEE LINCOLN STANDARD PLAN – 101.
2. BUILD 72" STORM SEWER INLET (COMPLETE) DOES NOT INCLUDE LENGTH OF CURB AS SHOWN ON LINCOLN STANDARD PLAN – 101.
3. FOR DETAILS OF TYPE "M–2" STORM SEWER MANHOLE, SEE LINCOLN STANDARD PLAN – 142.
4. FOR DETAILS OF R.C. COLLARS, R.C. ELBOWS, AND PLUGS, SEE LINCOLN STANDARD PLAN – 150.
5. FOR DETAILS OF C.I. MANHOLE RING, COVER, AND STEPS, SEE LINCOLN STANDARD PLAN – 162.
6. FOR DETAILS OF PIPE BEDDING, SEE LINCOLN STANDARD PLAN – 185.
7. FOR DETAILS OF STORM SEWER CONSTRUCTION, SEE STANDARD SPECIFICATION, CHAPTER 21, 2011 EDITION, CITY OF LINCOLN, NEBRASKA. ALL STANDARD SPECIFICATIONS AND ADDENDA SHALL APPLY.
8. FOR DETAILS OF PAVEMENT REPLACEMENT FOR UTILITY CONSTRUCTION, SEE LINCOLN STANDARD PLAN – 670.
9. ALL STATIONING AND DIMENSIONS ARE TO BE CENTERLINE OF VAULT UNLESS OTHERWISE NOTED.
10. THE PAVING CONTRACTOR SHALL BE RESPONSIBLE FOR THE INLET THROAT AND CURB AND GUTTER UP TO THE INLET TOP.
11. ALL STORM SEWER PIPE MATERIAL 12" AND SMALLER SHALL BE ADVANCED DRAINAGE SYSTEMS (ADS) PRODUCT OR APPROVED EQUAL.
12. ALL STORM SEWER PIPE MATERIAL TO CONFORM TO LOCAL CODES.

LEGEND

- W — PROPOSED WATER MAIN
- SS — PROPOSED SANITARY SEWER
- SD — PROPOSED STORM SEWER
- W — EXISTING WATER MAIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- ROAD RIGHT–OF–WAY
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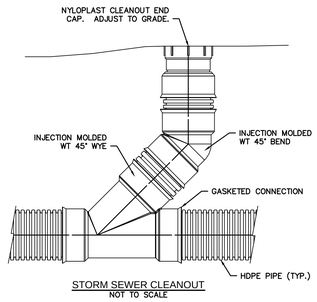

STORM SEWER CLEANOUT
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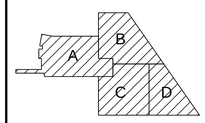
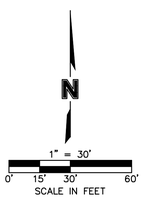


Key Plan



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TCEP No.: 716-002-12
Davis Design.: 12-0077
BVH No.:L12018.unl

November 27, 2013

PROFESSIONAL CIVIL ENGINEER
TIMOTHY S. GERGEN
E-10344
12/11/13
STATE OF NEBRASKA

STORM SEWER PLAN

C1.02

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LIFE SCIENCE BUILDING
ARCH ELEV: 94'-0"
ENG ELEV: 1155.83'

LIFE SCIENCE BUILDING
ARCH ELEV: 100'-0"
ENG ELEV: 1161.83'

INDUSTRIAL ARTS BUILDING (IAB)
ARCH ELEV: 100'-0"
ENG ELEV: 1161.83'

TRANSFORMATION DRIVE

NORTH 19TH STREET

TOPSOIL SCHEDULE:

TYPE 'A' ZONE- TURF
6" TOPSOIL DEPTH

TYPE 'B' ZONE- PLANTING BED
12" TOPSOIL DEPTH

TOPSOIL PLACEMENT PLAN

SCALE: 1"=20'-0"

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A B C D

Key Plan

Life Sciences Collaboration

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Lincoln, Nebraska

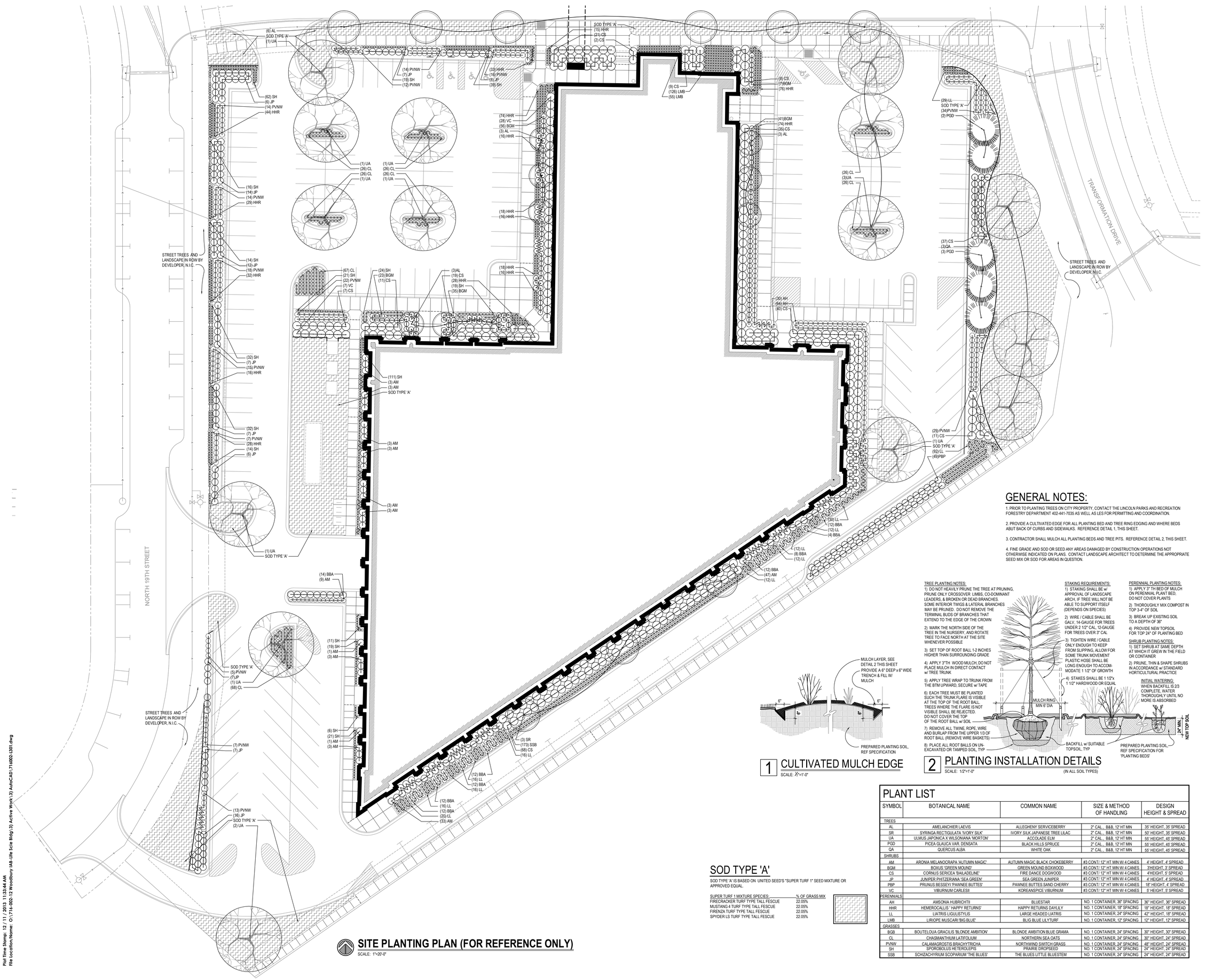
TCEP No.: 716-002-12
Davis Design.: 12-0077
BVH No.:L12018.unl

November 27, 2013

PROFESSIONAL LANDSCAPE ARCHITECT
ERIC J. CASPER
LA 252
STATE OF NEBRASKA
11/27/13

Topsoil Placement Plan

L2.04



SITE PLANTING PLAN (FOR REFERENCE ONLY)

SCALE: 1"=20'-0"

GENERAL NOTES:

1. PRIOR TO PLANTING TREES ON CITY PROPERTY, CONTACT THE LINCOLN PARKS AND RECREATION FORESTRY DEPARTMENT 402-441-7035 AS WELL AS LES FOR PERMITTING AND COORDINATION.

2. PROVIDE A CULTIVATED EDGE FOR ALL PLANTING BED AND TREE RING EDGING AND WHERE BEDS ABUT BACK OF CURBS AND SIDEWALKS. REFERENCE DETAIL 1, THIS SHEET.

3. CONTRACTOR SHALL MULCH ALL PLANTING BEDS AND TREE PITS. REFERENCE DETAIL 2, THIS SHEET.

4. FINE GRADE AND SOD OR SEED ANY AREAS DAMAGED BY CONSTRUCTION OPERATIONS NOT OTHERWISE INDICATED ON PLANS. CONTACT LANDSCAPE ARCHITECT TO DETERMINE THE APPROPRIATE SEED MIX OR SOD FOR AREAS IN QUESTION.

1 CULTIVATED MULCH EDGE

SCALE: 1½"=1'-0"

2 PLANTING INSTALLATION DETAILS

SCALE: 1/2"=1'-0" (IN ALL SOIL TYPES)

SOD TYPE 'A'

SOD TYPE 'A' IS BASED ON UNITED SEED'S "SUPER TURF 1" SEED MIXTURE OR APPROVED EQUAL

SUPER TURF 1 MIXTURE SPECIES:	% OF GRASS MIX
FIRECRACKER TURF TYPE TALL FESCUE	22.05%
MUSTANG 4 TURF TYPE TALL FESCUE	22.05%
FIRENZA TURF TYPE TALL FESCUE	22.05%
SPYDER LS TURF TYPE TALL FESCUE	22.05%

PLANT LIST

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE & METHOD OF HANDLING	DESIGN HEIGHT & SPREAD
TREES				
AL	AMELANCHIER LAEVIS	ALLEGHENY SERVICEBERRY	2" CAL., B&B, 12' HT MIN	35' HEIGHT, 35' SPREAD
SR	SYRINGA RECTIGULATA 'IVORY SILK'	IVORY SILK JAPANESE TREE LILAC	2" CAL., B&B, 12' HT MIN	50' HEIGHT, 35' SPREAD
UA	ULMUS JAPONICA X WILSONIANA 'MORTON'	ACCOLADE ELM	2" CAL., B&B, 12' HT MIN	55' HEIGHT, 45' SPREAD
PGD	PICEA GLAUCA VAR. DENSATA	BLACK HILLS SPRUCE	2" CAL., B&B, 12' HT MIN	55' HEIGHT, 45' SPREAD
QA	QUERCUS ALBA	WHITE OAK	2" CAL., B&B, 12' HT MIN	55' HEIGHT, 45' SPREAD
SHRUBS				
AM	ARONIA MELANOCRAPA 'AUTUMN MAGIC'	AUTUMN MAGIC BLACK CHOKEBERRY	#3 CONT/ 12" HT MIN W/ 4 CANES	4' HEIGHT, 4' SPREAD
BGM	BOXUS 'GREEN MOUND'	GREEN MOUND BOXWOOD	#3 CONT/ 12" HT MIN W/ 4 CANES	3'HEIGHT, 3' SPREAD
CS	CORNUS SERICEA 'BAILADELINE'	FIRE DANCE DOGWOOD	#3 CONT/ 12" HT MIN W/ 4 CANES	4'HEIGHT, 5' SPREAD
JP	JUNIPER PHITZERIANA 'SEA GREEN'	SEA GREEN JUNIPER	#3 CONT/ 12" HT MIN W/ 4 CANES	4' HEIGHT, 4' SPREAD
PBP	PRUNUS BESSEYI 'PAWNEE BUTTES'	PAWNEE BUTTES SAND CHERRY	#3 CONT/ 12" HT MIN W/ 4 CANES	18" HEIGHT, 4' SPREAD
VC	VIBURNUM CARLESII	KOREANSPICE VIBURNUM	#3 CONT/ 12" HT MIN W/ 4 CANES	5' HEIGHT, 5' SPREAD
PERENNIALS				
AH	AMSONIA HUBRICHTII	BLUESTAR	NO. 1 CONTAINER, 36" SPACING	36" HEIGHT, 36" SPREAD
HHR	HEMEROCALLIS ' HAPPY RETURNS'	HAPPY RETURNS DAYLILY	NO. 1 CONTAINER, 18" SPACING	18" HEIGHT, 18" SPREAD
LL	LIATRIS LIGULISTYLIS	LARGE HEADED LIATRIS	NO. 1 CONTAINER, 24" SPACING	42" HEIGHT, 18" SPREAD
LMB	LIRIOPE MUSCARI 'BIG BLUE'	BLIG BLUE LILYTURF	NO. 1 CONTAINER, 12" SPACING	12" HEIGHT, 12" SPREAD
GRASSES				
BGB	BOUTELOUA GRACILIS 'BLONDE AMBITION'	BLONDE AMBITION BLUE GRAMA	NO. 1 CONTAINER, 24" SPACING	30" HEIGHT, 30" SPREAD
CL	CHASMANTHIUM LATIFOLIUM	NORTHERN SEA OATS	NO. 1 CONTAINER, 24" SPACING	30" HEIGHT, 24" SPREAD
PVNW	CALAMAGROSTIS BRACHYTRICHA	NORTHWIND SWITCH GRASS	NO. 1 CONTAINER, 24" SPACING	48" HEIGHT, 24" SPREAD
SH	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSEED	NO. 1 CONTAINER, 24" SPACING	24" HEIGHT, 24" SPREAD
SSB	SCHIZACHYRIUM SCOPARIUM 'THE BLUES'	THE BLUES LITTLE BLUESTEM	NO. 1 CONTAINER, 24" SPACING	24" HEIGHT, 24" SPREAD

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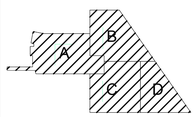
Kansas City, Missouri
Fairway, Kansas

SHEET HISTORY:

ISSUED 12/11/2013 AS PER ADDENDUM #1



Key Plan

Life Sciences Collaboration

1910 N. Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design.: 12-0077
BVH No.:L12018.unl

November 27, 2013

Site Planting Plan (For Reference Only)

L3.01

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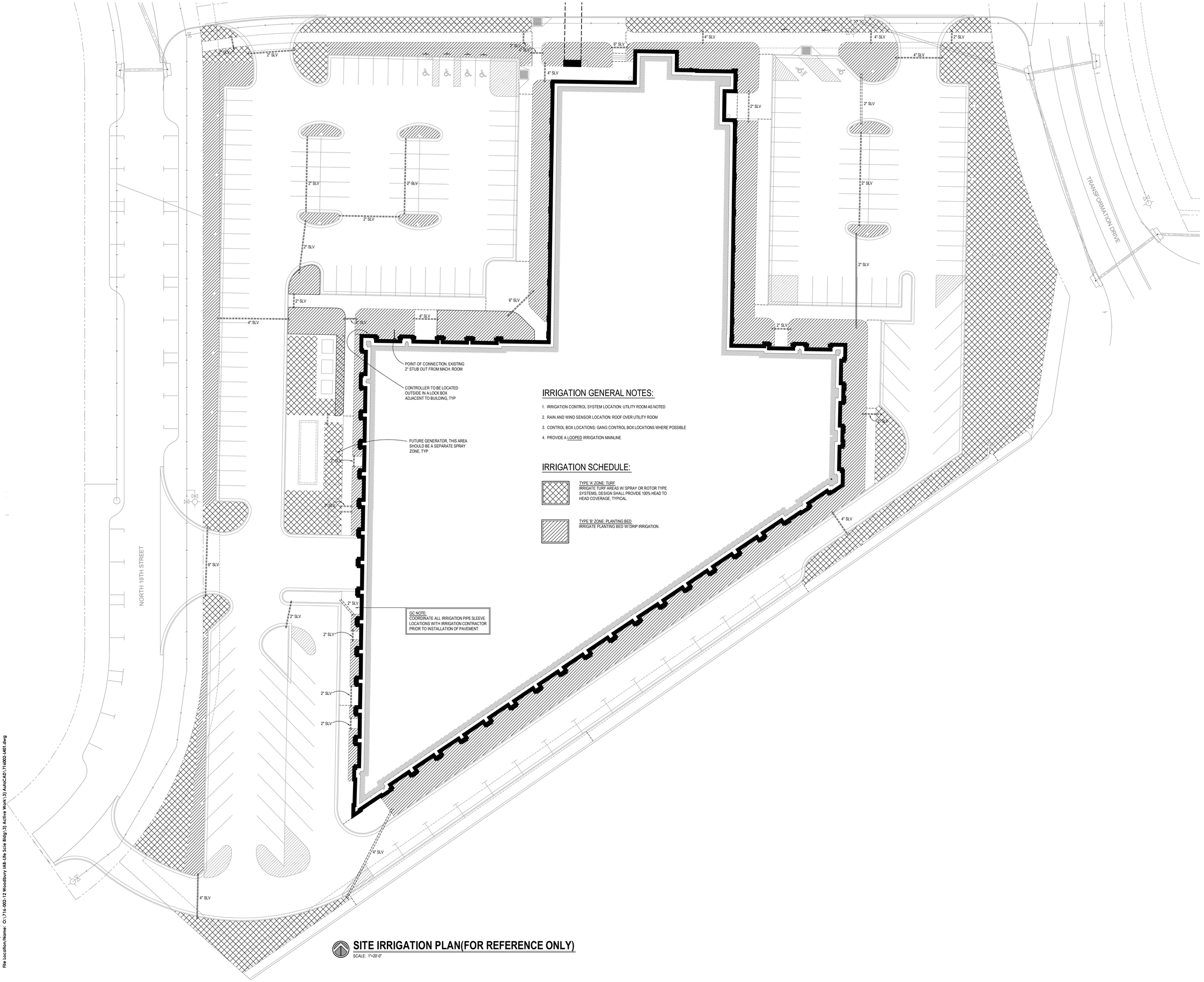

IRRIGATION GENERAL NOTES:

1. IRRIGATION CONTROL SYSTEM LOCATION: UTILITY ROOM AS NOTED
2. RAIN AND WIND SENSOR LOCATION: ROOF OVER UTILITY ROOM
3. CONTROL BOX LOCATIONS: GANG CONTROL BOX LOCATIONS WHERE POSSIBLE
4. PROVIDE A LOOPED IRRIGATION MAINLINE

IRRIGATION SCHEDULE:

TYPE 'A' ZONE: TURF
IRRIGATE TURF AREAS W/ SPRAY OR ROTOR TYPE SYSTEMS, DESIGN SHALL PROVIDE 100% HEAD TO HEAD COVERAGE, TYPICAL.

TYPE 'B' ZONE: PLANTING BED
IRRIGATE PLANTING BED W/ DRIP IRRIGATION.

SITE IRRIGATION PLAN(FOR REFERENCE ONLY)

SCALE: 1"=20'-0"

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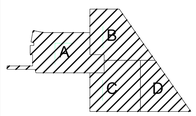

Key Plan

Life Sciences Collaboration

1910 N. Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design.: 12-0077
BVH No.:L12018.unl

November 27, 2013

Site Irrigation Plan
(For Reference Only)

L4.01

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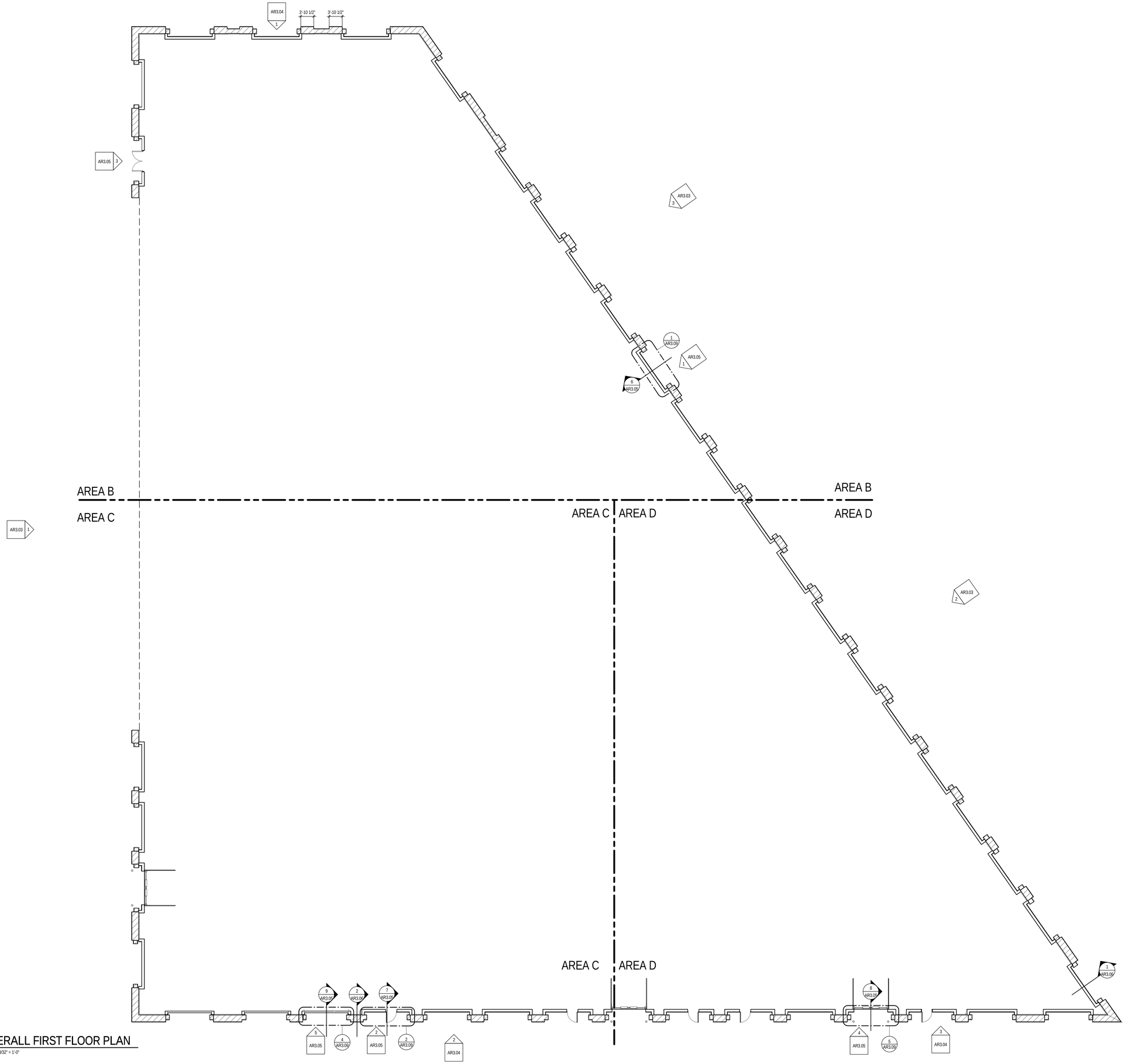

OVERALL FIRST FLOOR PLAN

SCALE: 3/32" = 1'-0"

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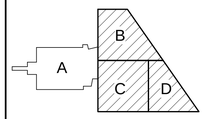
1	12/11/2013	AS PER ADDENDUM #01



Key Plan

Life Sciences Collaboration

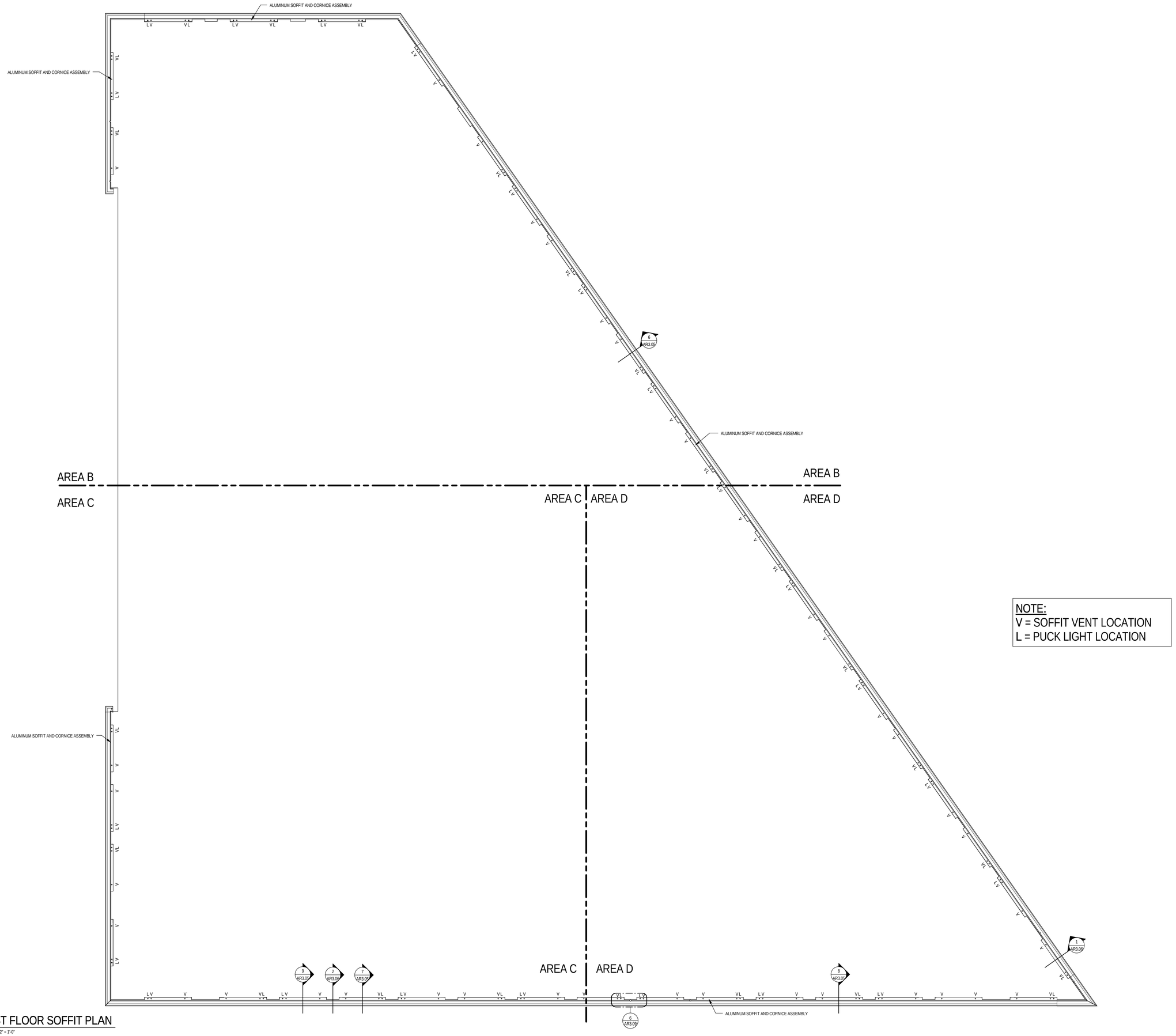
1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design: 12-0077
BVH No.: L12018.unl

NOVEMBER 27, 2013

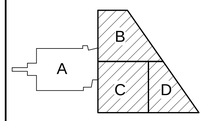
OVERALL FIRST FLOOR PLAN

AR3.01



NOTE:
V = SOFFIT VENT LOCATION
L = PUCK LIGHT LOCATION

FIRST FLOOR SOFFIT PLAN
SCALE: 3/32" = 1'-0"



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-	12/11/2013	AS PER ADDENDUM #01

Life Sciences Collaboration

1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
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BVH No.: L12018.unl

NOVEMBER 27, 2013

ARCHITECT
STEPHEN L. COMES
A-7116
11/27/2013
STATE OF NEBRASKA

SOFFIT VENT PLAN

AR3.02

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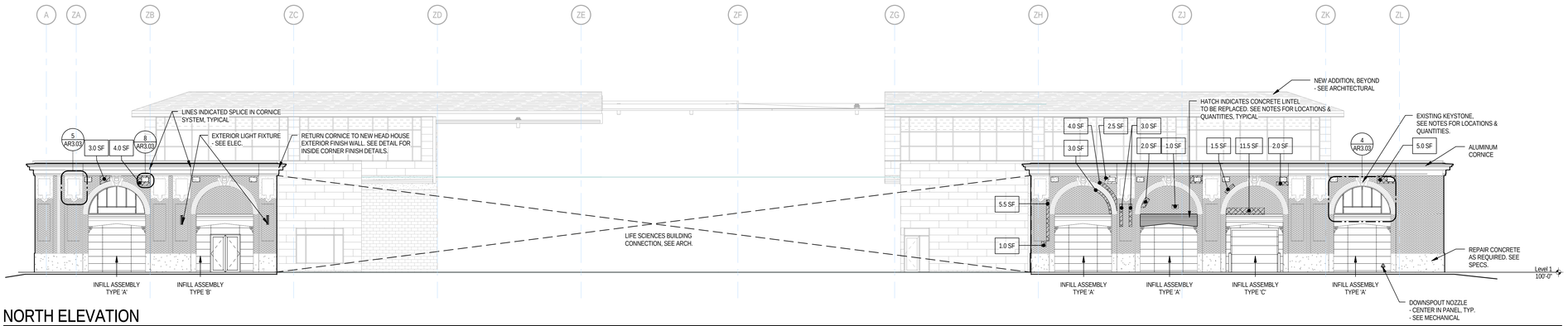
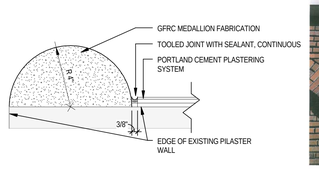


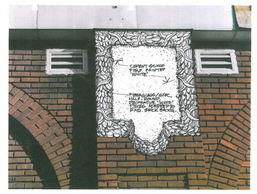
1 NORTH ELEVATION

SCALE: 3/32" = 1'-0"



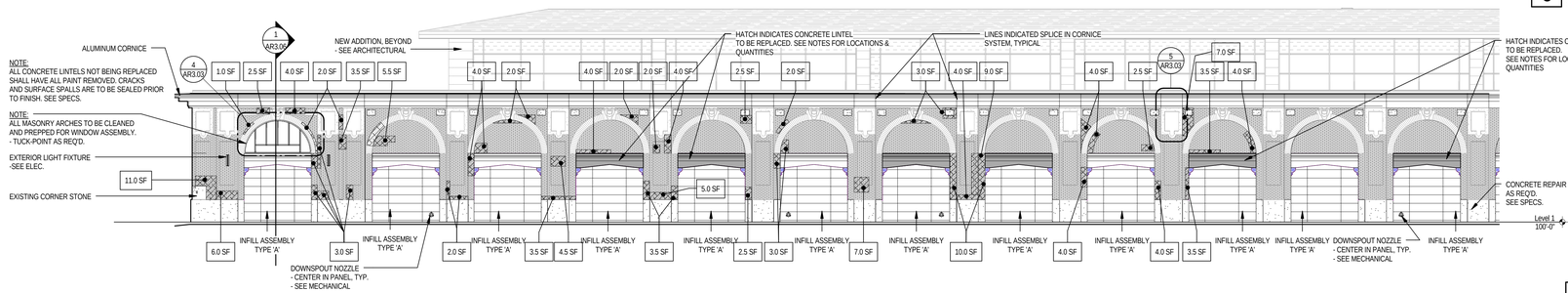
6 MEDALLION SECTION DETAIL

SCALE: 3" = 1'-0"



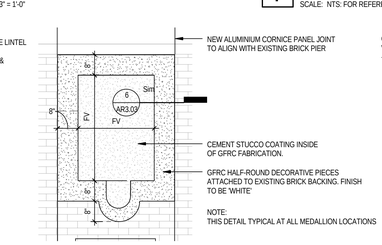
7 MEDALLION INSPIRATION

SCALE: NTS: FOR REFERENCE ONLY



2 SOUTH ELEVATION - PARTIAL 1 (WEST END)

SCALE: 3/32" = 1'-0"



5 MEDALLION DETAIL

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

8 EXTERIOR VENT INFILL DETAIL

SCALE: 3/4" = 1'-0"

NOTES:

A. SHADED LINTELS TO BE REPLACED WITH NEW. SEE STRUCTURAL DRAWINGS

B. MEDALLION LOATIONS - PATCH AND REPAIR SURFACE FOR ATTACHMENT. PRIME AND PAINT (WHITE). SEE DETAIL 5/AR3.03

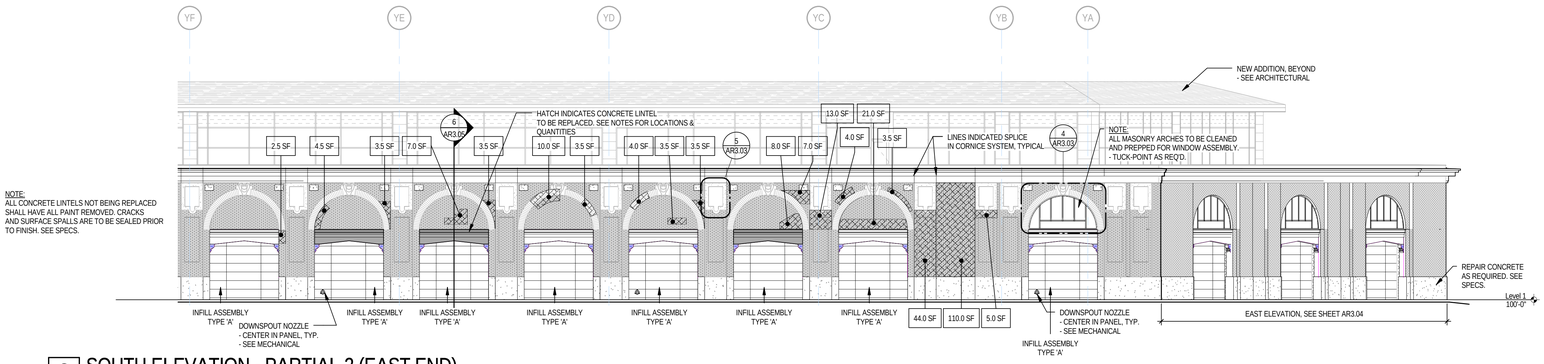
C. EXISTING BUILT-UP CONCRETE BASES: REMOVE ALL LOOSE / SPALLED CONCRETE TO SOLID BASE SURFACE. REMOVE ALL EXISTING PAINT. FILL VOIDS & SUBTRACTIONS WITH FINISH CONCRETE TO BRING SURFACE BACK TO ORIGINAL PROFILE. PRIME & APPLY CONCRETE COATING (WHITE). THIS REPAIR IS APPLICABLE TO ALL EXPOSED SURFACES INTERIOR & EXTERIOR.

D. ALL EXTERIOR ATTACHMENTS, CONDUIT, GROMMETS, TIE-OFFS & SIGNAGE EMBEDS TO BE REMOVED. EXISTING ANCHOR VOIDS TO BE FILLED WITH SEALANT AND PAINTED OUT TO MATCH BRICK.

E. REFER TO ARCHITECTURAL DRAWINGS FOR DOOR AND FRAME TYPES.

KEYSTONE & CORBELS TO BE REPLACED WITH GFRC FABRICATIONS. ALL LOCATIONS TO BE DETERMINED ON SITE WITH CONTRACTOR. APPROX. QUANTITES AS FOLLOWS:

1. NORTH ELEVATION: THREE (3) KEYSTONES & TWELVE (12) BRACKETS.
2. SOUTH ELEVATION: FIVE (5) KEYSTONES & TWENTY (20) BRACKETS.
3. EAST ELEVATION: ONE (1) KEYSTONE
4. WEST ELEVATION: FIVE (5) KEYSTONES & SIXTEEN (16) BRACKETS



3 SOUTH ELEVATION - PARTIAL 2 (EAST END)

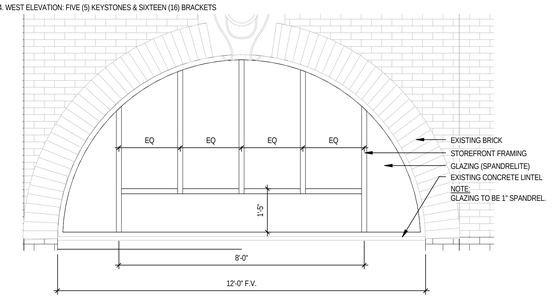
SCALE: 3/32" = 1'-0"

TUCK POINTING LEGEND

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

HATCH INDICATES AREA TO BE TUCK POINTED

9 SF — APPROX. SQUARE FOOTAGE F.V. AT LOCATION



4 WINDOW FRAME DETAIL (TYPICAL FOR ALL ARCHED WINDOWS)

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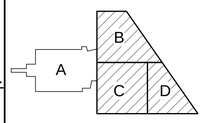

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SHEET HISTORY:

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NOVEMBER 27, 2013

ARCHITECT STEPHEN L. COMES A-7785 11/27/2013 STATE OF NEBRASKA

IAB - EXTERIOR ELEVATIONS

AR3.03

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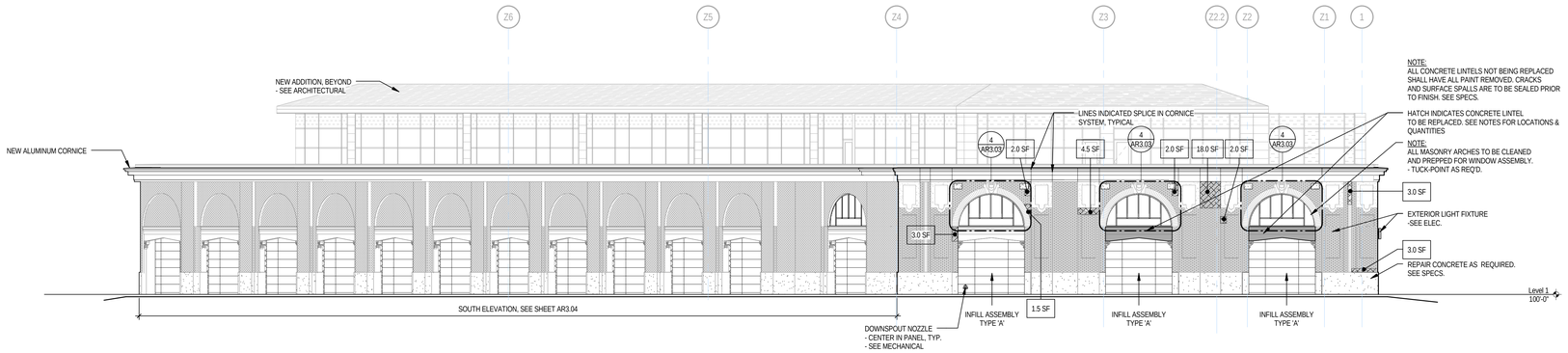

1 EAST ELEVATION

SCALE: 3/32" = 1'-0"

NOTES:

A. SHADED LINTELS TO BE REPLACED WITH NEW. SEE STRUCTURAL DRAWINGS

B. MEDALLION LOATIONS - PATCH AND REPAIR SURFACE FOR ATTACHMENT. PRIME AND PAINT (WHITE).
SEE DETAIL 5/AR3.03

C. EXISTING BUILT-UP CONCRETE BASES:
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THIS REPAIR IS APPLICABLE TO ALL EXPOSED SURFACES INTERIOR & EXTERIOR.

D. ALL EXTERIOR ATTACHMENTS, CONDUIT, GROMMETS, TIE-OFFS & SIGNAGE EMBEDS TO BE REMOVED.
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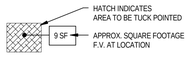
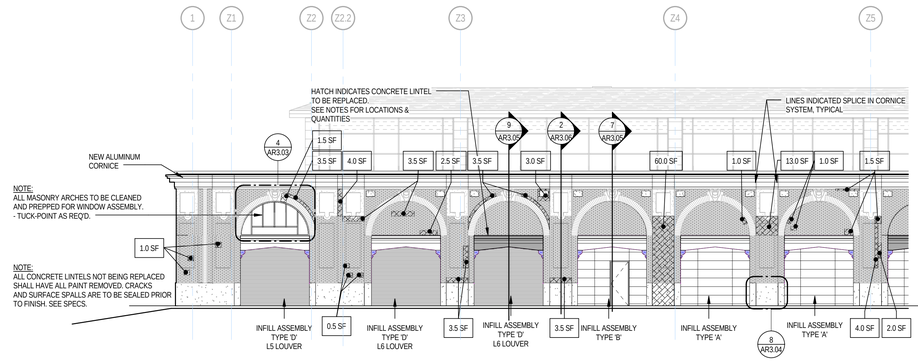
3. EAST ELEVATION: ONE (1) KEYSTONE

4. WEST ELEVATION: FIVE (5) KEYSTONES & SIXTEEN (16) BRACKETS



TUCK POINTING LEGEND

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



2 WEST ELEVATION - PARTIAL 1 (NORTH END)

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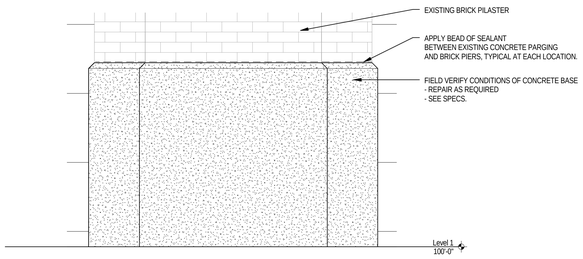
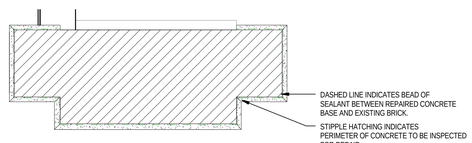


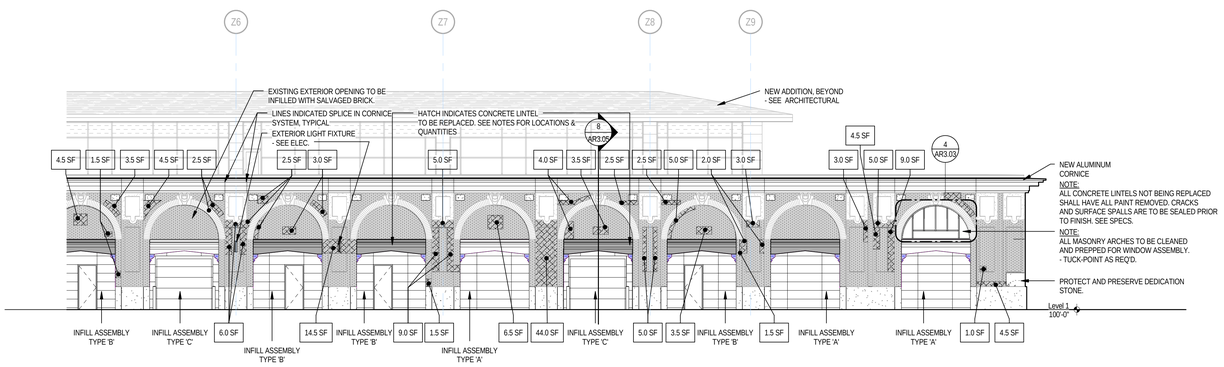
ELEVATION VIEW



PLAN VIEW

4 BASE DETAIL - PILASTER

SCALE: 3/4" = 1'-0"



3 WEST ELEVATION - PARTIAL 2 (SOUTH END)

SCALE: 3/32" = 1'-0"

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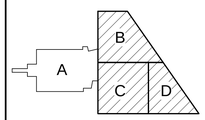

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NOVEMBER 27, 2013

ARCHITECT
STEPHEN L. CLOVER
A-1765
11/27/2013
STATE OF NEBRASKA

IAB - EXTERIOR ELEVATIONS

AR3.04

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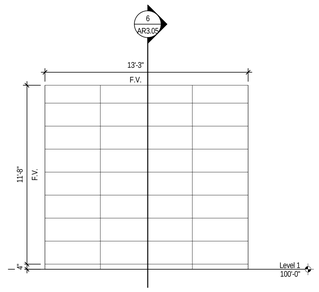
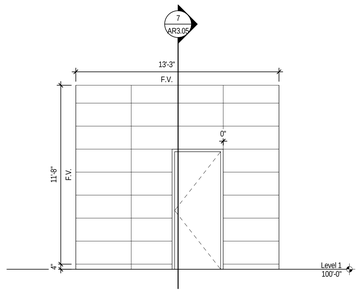
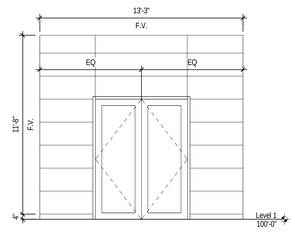


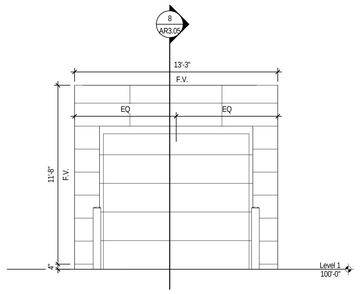
1 WALL TYPE 'A'
SCALE: 1/4" = 1'-0"



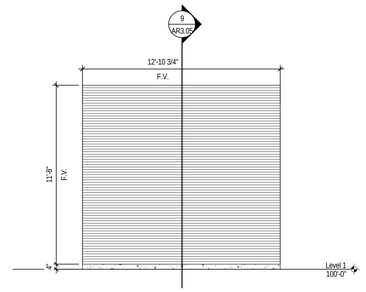
2 WALL TYPE 'B' - SINGLE
SCALE: 1/4" = 1'-0"



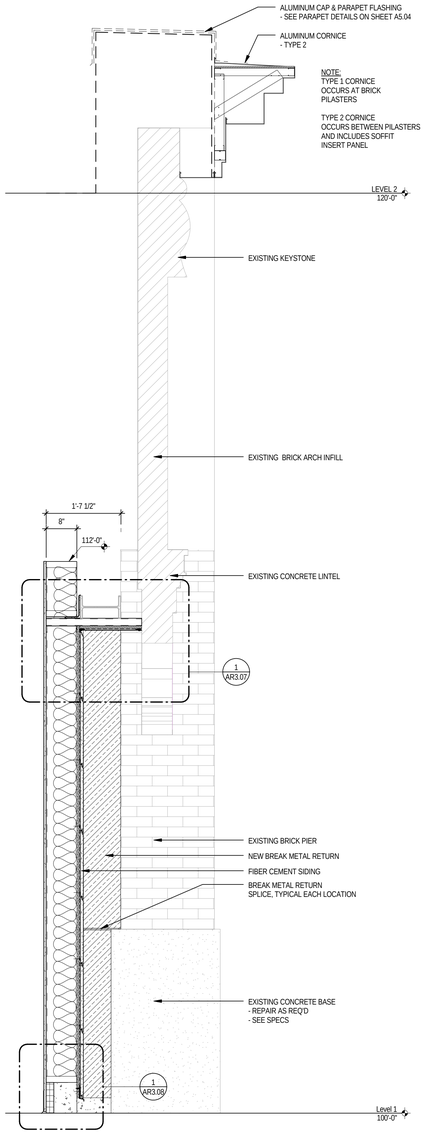
3 WALL TYPE 'B' - DOUBLE
SCALE: 1/4" = 1'-0"



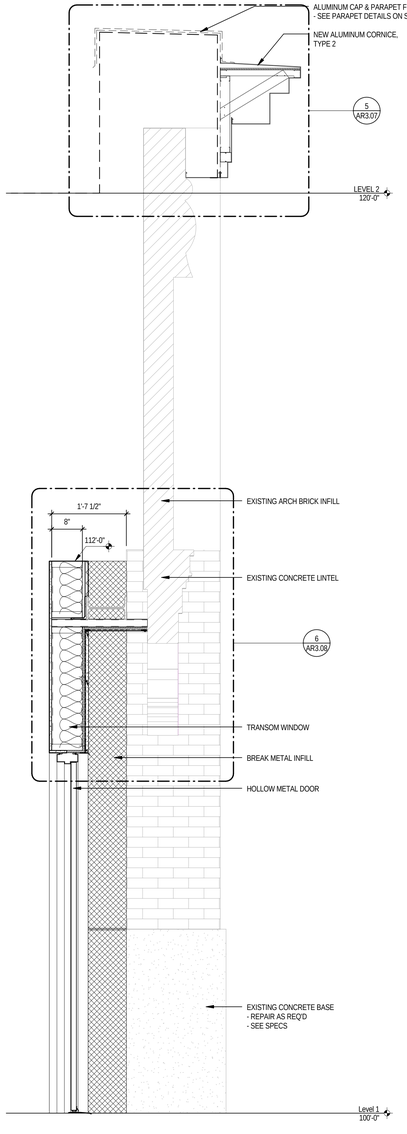
4 WALL TYPE 'C'
SCALE: 1/4" = 1'-0"



5 WALL TYPE 'D'
SCALE: 1/4" = 1'-0"



6 WALL SECTION - WALL TYPE 'A'
SCALE: 3/4" = 1'-0"



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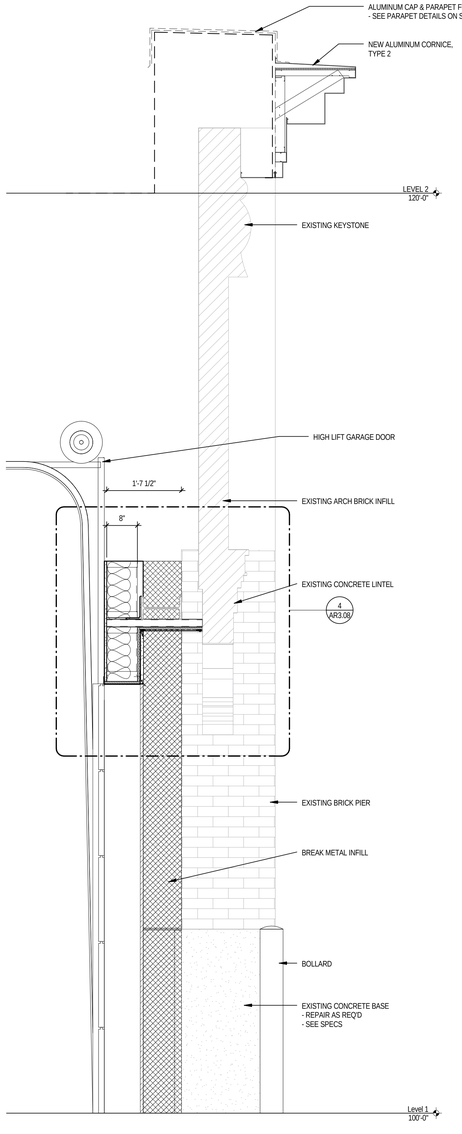
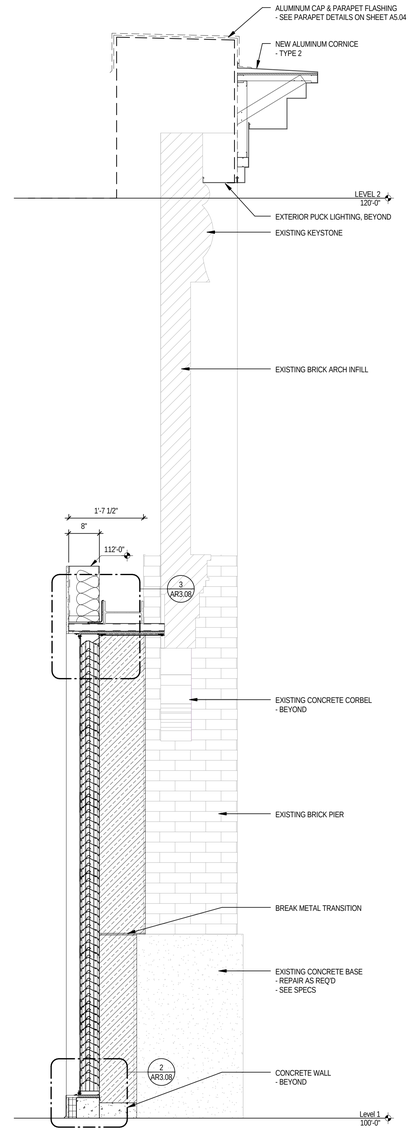


8 WALL SECTION - WALL TYPE 'C'
SCALE: 3/4" = 1'-0"



9 WALL SECTION - WALL TYPE 'D'
SCALE: 3/4" = 1'-0"

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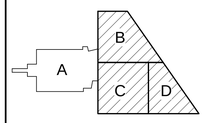
7 - #

SHEET HISTORY:

- 12/11/2013 AS PER ADDENDUM #01



Key Plan

Life Sciences Collaboration

1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design: 12-0077
BVH No.: L12018.unl

NOVEMBER 27, 2013

WALL SECTIONS

AR3.05

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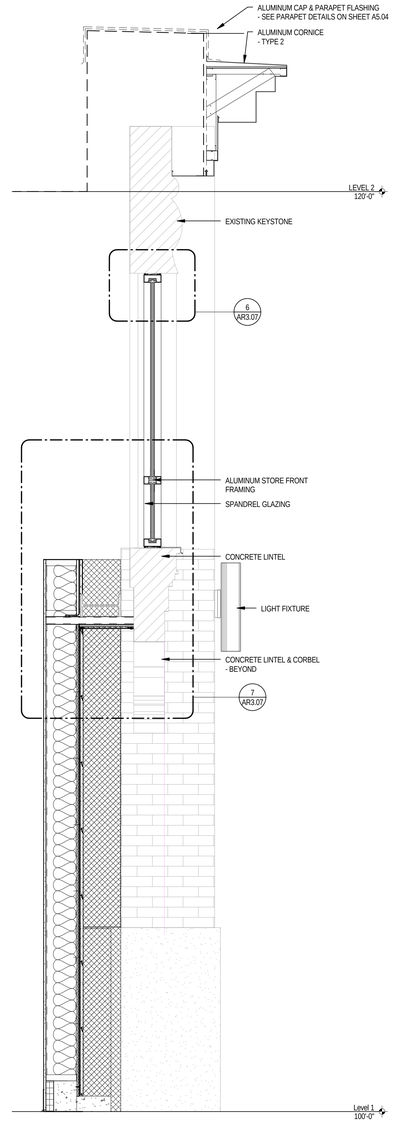

1 WALL SECTION

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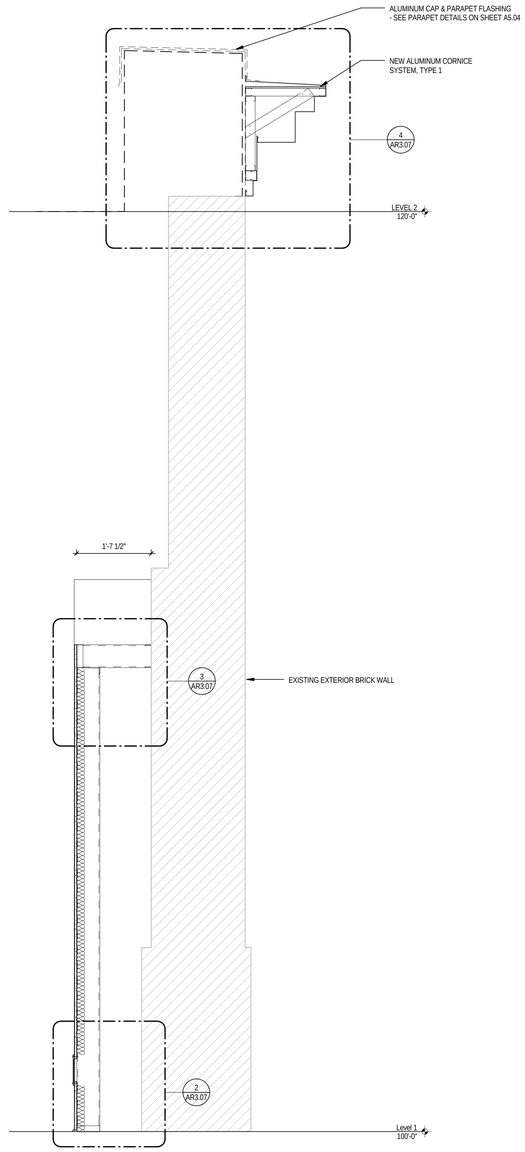

2 WALL SECTION

SCALE: 3/4" = 1'-0"

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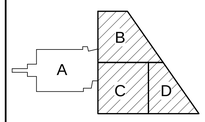
SHEET HISTORY:

-	12/11/2013	AS PER ADDENDUM #01



Key Plan

Life Sciences Collaboration

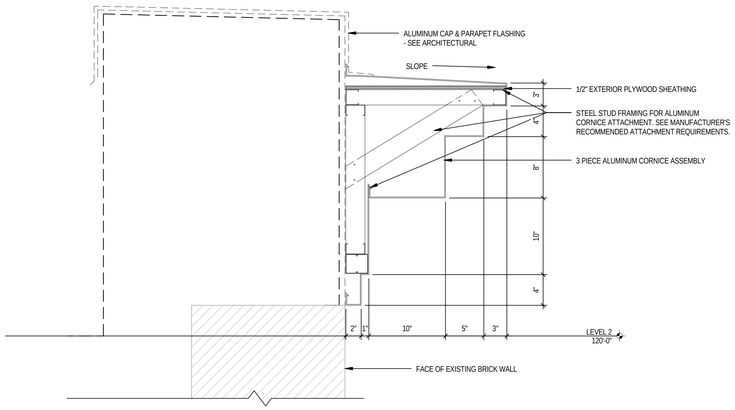
1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design: 12-0077
BVH No.: L12018.unl

NOVEMBER 27, 2013

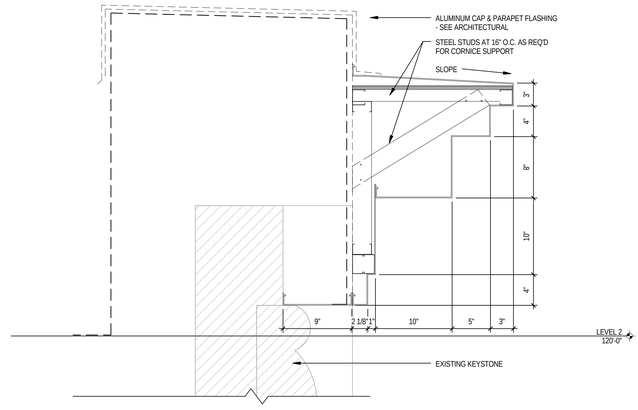
WALL SECTIONS

AR3.06



4 SECTION DETAIL

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



5 SECTION DETAIL

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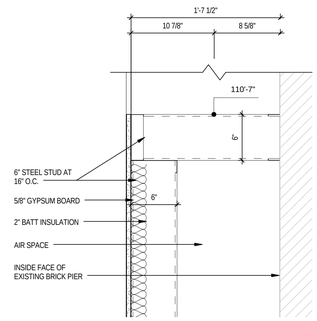

3 SECTION DETAIL

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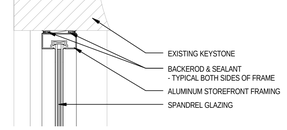

6 SECTION DETAIL

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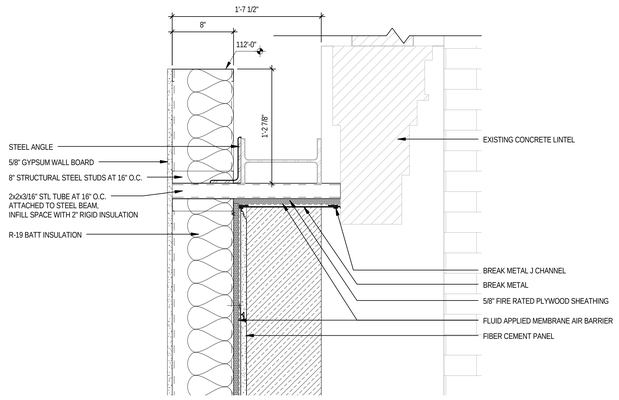

1 SECTION DETAIL

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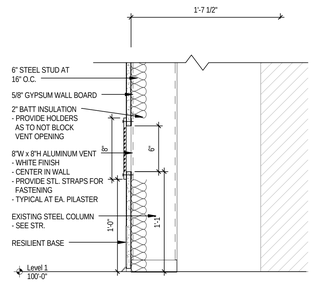

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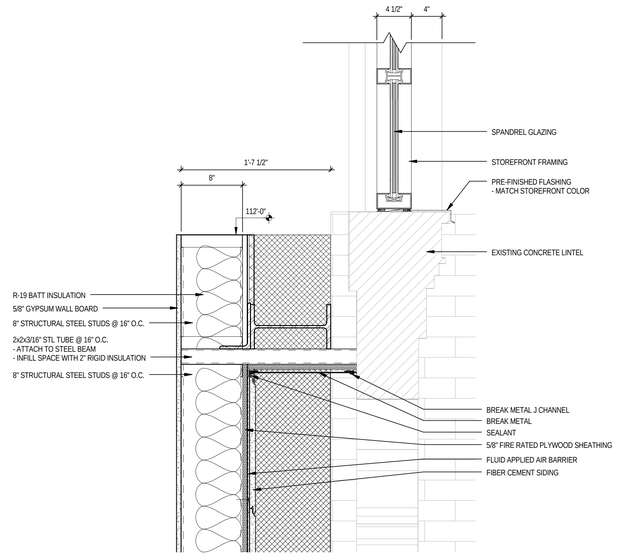

7 SECTION DETAIL

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

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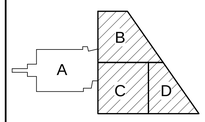
SHEET HISTORY:

7 - 8		
-	12/11/2013	AS PER ADDENDUM #01



Key Plan

Life Sciences Collaboration

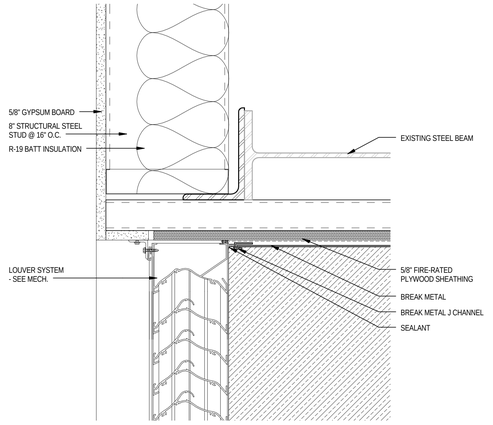
1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design: 12-0077
BVH No.: L12018.unl

NOVEMBER 27, 2013

WALL SECTION DETAILS

AR3.07



3 SECTION DETAIL

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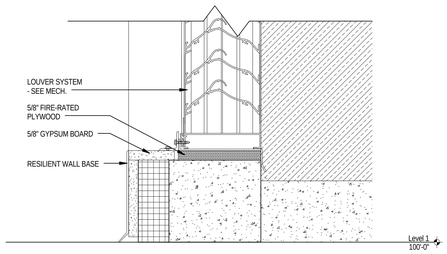

2 SECTION DETAIL

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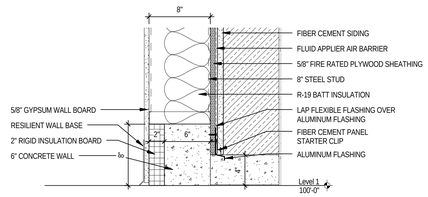

1 SECTION DETAIL

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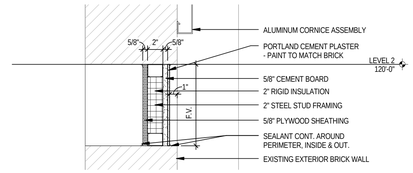
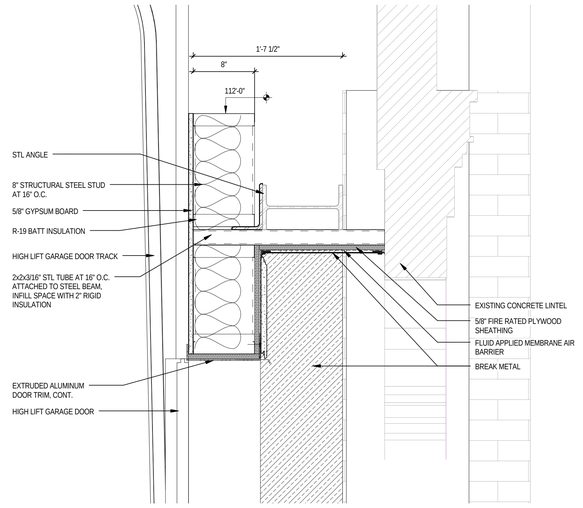


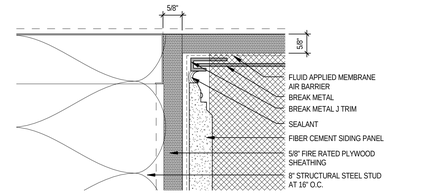
5 SECTION DETAIL

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



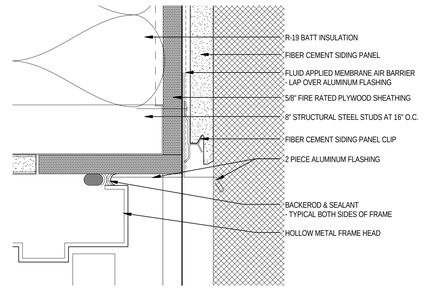
4 SECTION DETAIL

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



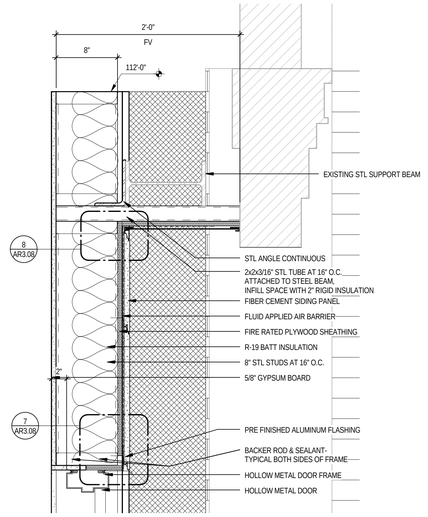
8 SECTION DETAIL

SCALE: 6" = 1'-0"



7 SECTION DETAIL

SCALE: 6" = 1'-0"



6 SECTION DETAIL

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

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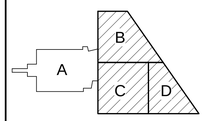
SHEET HISTORY:

-	12/11/2013	AS PER ADDENDUM #01



Key Plan

Life Sciences Collaboration

1910 N Antelope Valley Parkway
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TCEP No.: 716-002-12
Davis Design: 12-0077
BVH No.: L12018.unl

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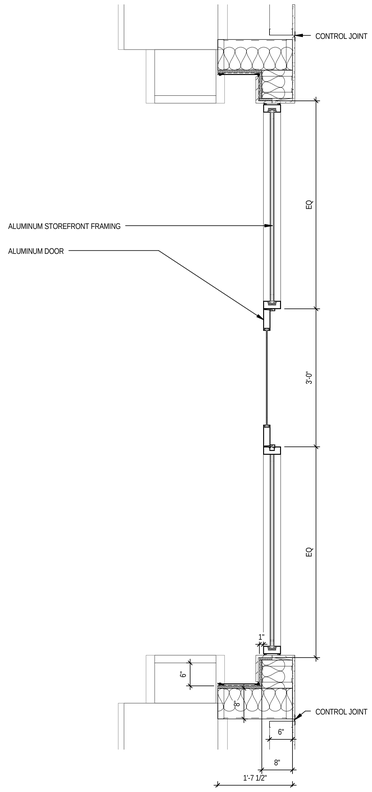
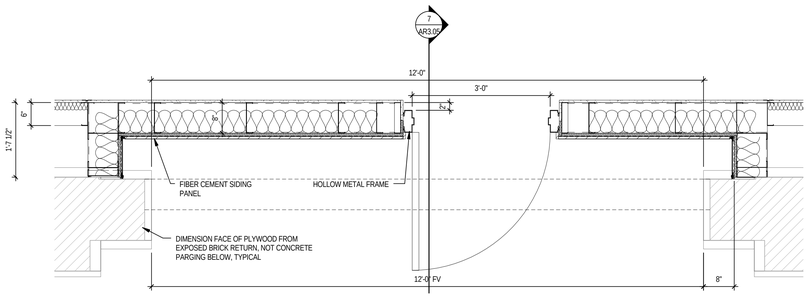
WALL SECTION DETAILS

AR3.08



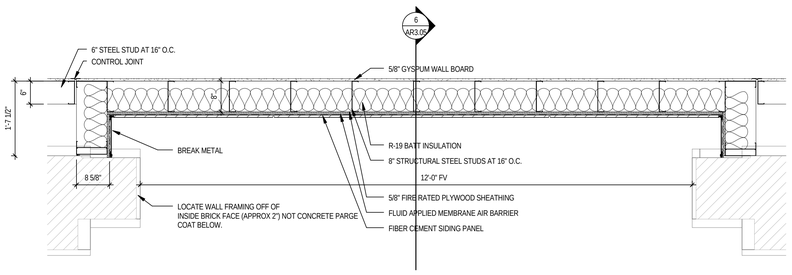
3 FUTURE INFILL ASSEMBLY OPTION (REFERENCE ONLY)

SCALE: 3/4" = 1'-0"



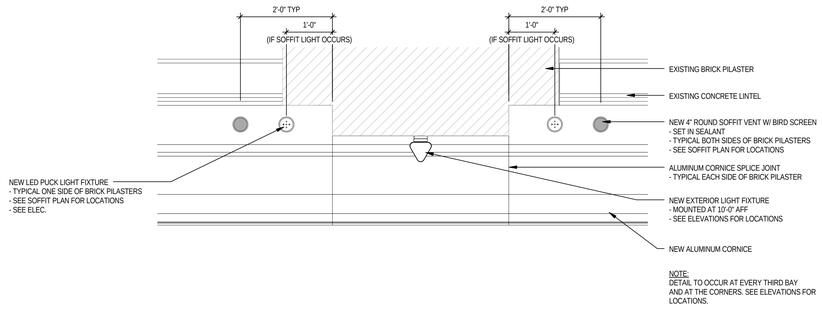
2 PLAN DETAIL - WALL TYPE 'B'

SCALE: 3/4" = 1'-0"



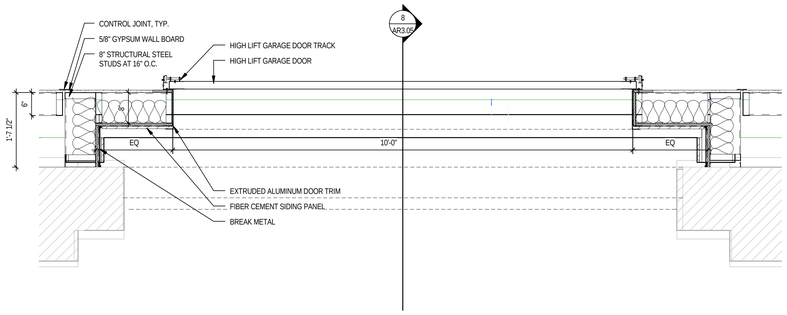
1 PLAN DETAIL - WALL TYPE 'A'

SCALE: 3/4" = 1'-0"



6 PLAN DETAIL - LIGHTING AND SOFFIT VENT

SCALE: 3/4" = 1'-0"



5 PLAN DETAIL - WALL TYPE 'C'

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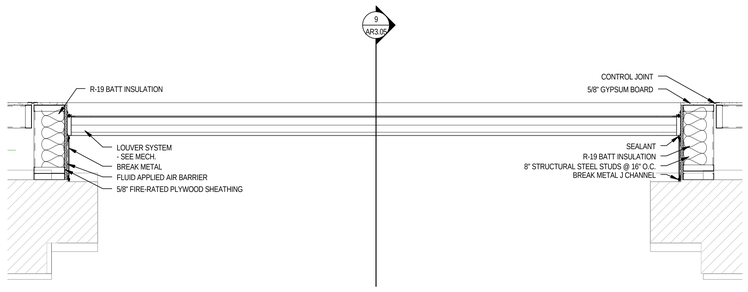

4 PLAN DETAIL - WALL TYPE 'D'

SCALE: 3/4" = 1'-0"

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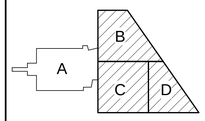
SHEET HISTORY:

-	12/11/2013	AS PER ADDENDUM #01



Key Plan

Life Sciences Collaboration

1910 N Antelope Valley Parkway
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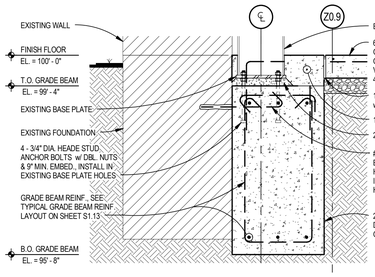
BVH No.: L12018.unl

NOVEMBER 27, 2013

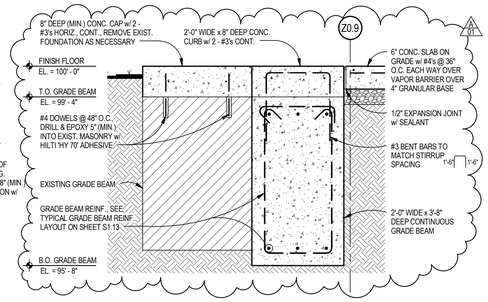
PLAN DETAILS

AR3.09



1 GRADE BEAM SECTION

SCALE: 3/4" = 1'-0"



2 GRADE BEAM SECTION

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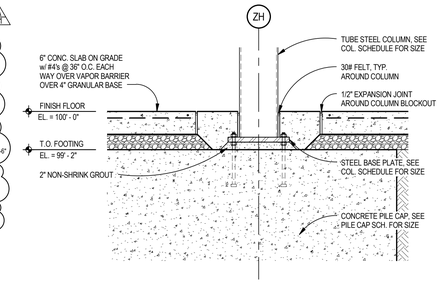
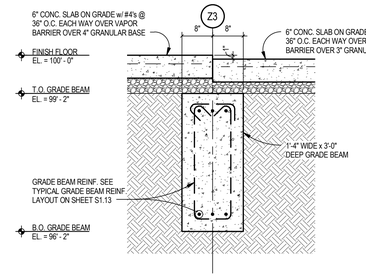


3 PAD FOOTING SECTION

SCALE: 3/4" = 1'-0"



4 GRADE BEAM SECTION

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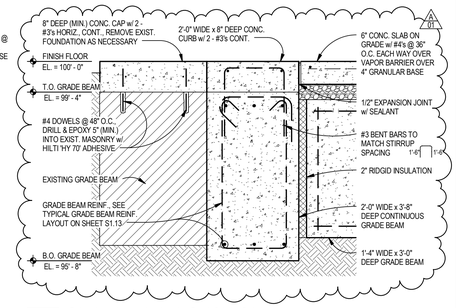

5 GRADE BEAM SECTION

SCALE: 3/4" = 1'-0"

6 STRUCTURAL STOOP SECTION

SCALE: 3/4" = 1'-0"

7 GRADE BEAM SECTION

SCALE: 3/4" = 1'-0"

8 GRADE BEAM PLAN DETAIL

SCALE: 3/4" = 1'-0"

9 STRUCTURAL STOOP SECTION

SCALE: 3/4" = 1'-0"

10 GRADE BEAM SECTION

SCALE: 3/4" = 1'-0"

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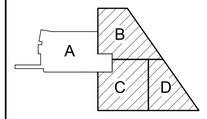
SHEET HISTORY:

ISSUED	11/27/2013	AS PER CONSTRUCTION DOCUMENTS
A - 01	12/11/2013	AS PER ADDENDUM #01



Key Plan

Progress Print

Life Science Collaboration

1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design No.: 12-0077
BVH No.: L12018.unl

November 27, 2013

Foundation Details - Areas B, C & D

S3.01

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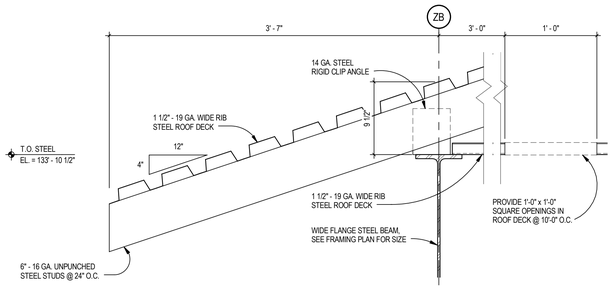

1 ROOF EDGE DETAIL
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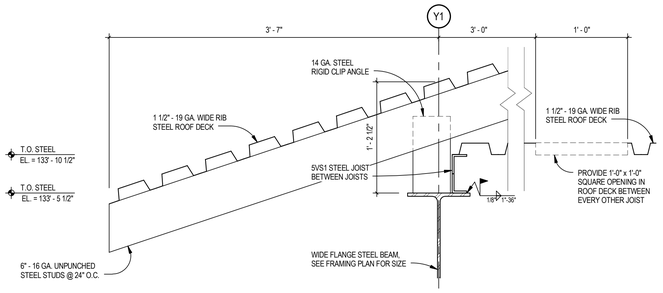

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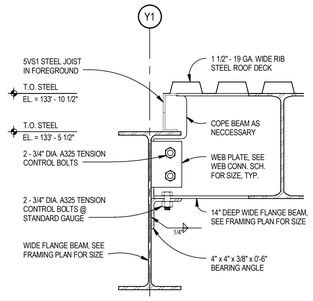

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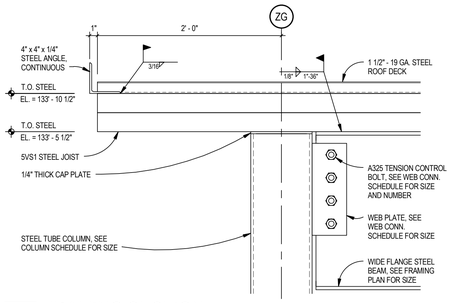

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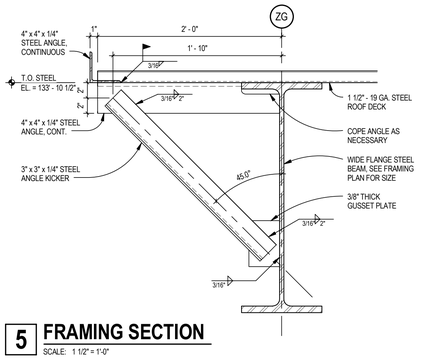

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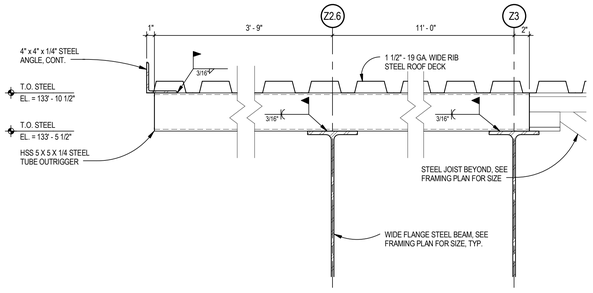

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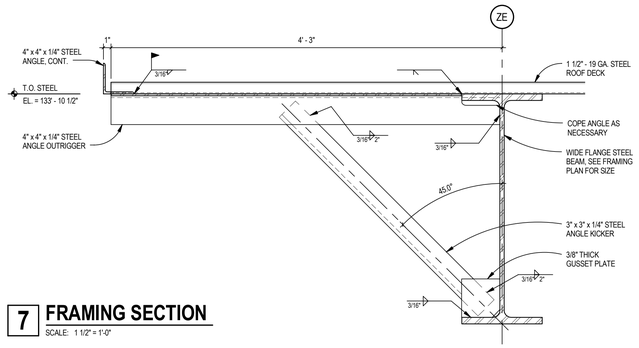

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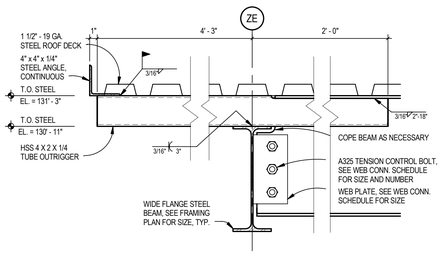

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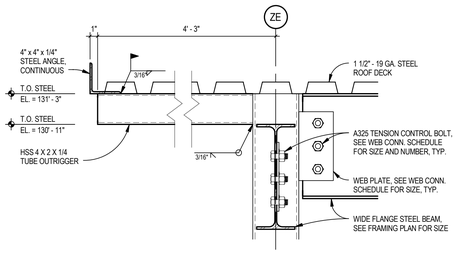

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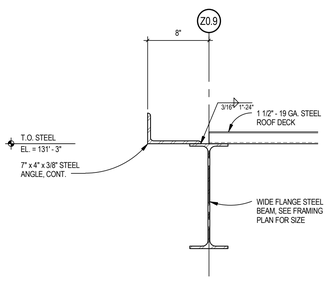
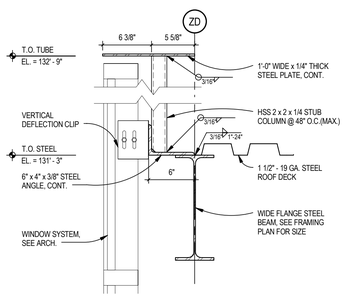
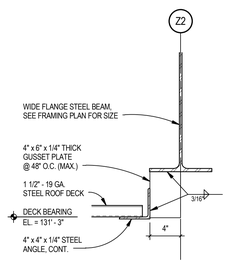


10 ROOF EDGE DETAIL
SCALE: 1 1/2" = 1'-0"

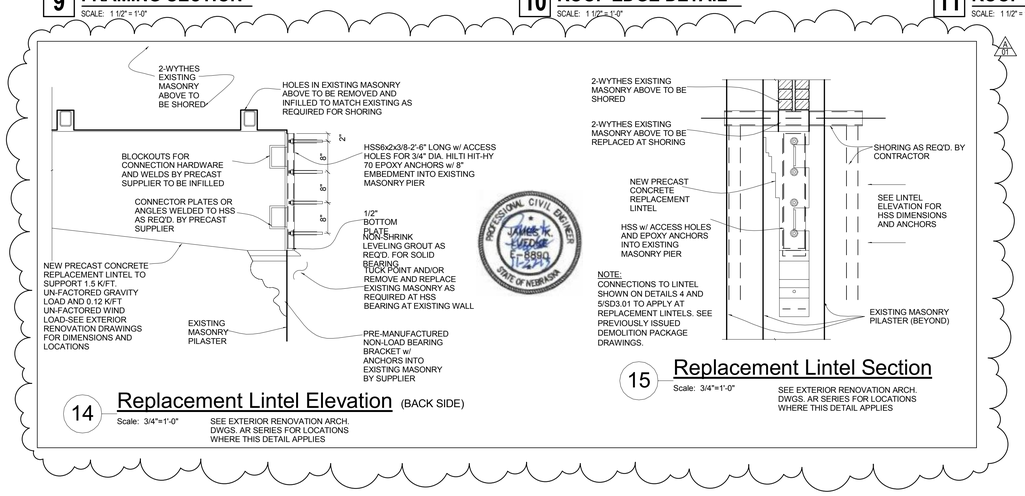


11 ROOF EDGE DETAIL
SCALE: 1 1/2" = 1'-0"



12 ROOF EDGE DETAIL
SCALE: 1 1/2" = 1'-0"

13 NOT USED
SCALE: 1 1/2" = 1'-0"



14 Replacement Lintel Elevation (BACK SIDE)
Scale: 3/4"=1'-0"

SEE EXTERIOR RENOVATION ARCH. DWGS. AR SERIES FOR LOCATIONS WHERE THIS DETAIL APPLIES

15 Replacement Lintel Section
Scale: 3/4"=1'-0"

SEE EXTERIOR RENOVATION ARCH. DWGS. AR SERIES FOR LOCATIONS WHERE THIS DETAIL APPLIES

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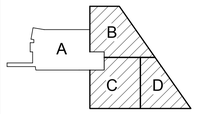
SHEET HISTORY:

ISSUED	11/27/2013	AS PER CONSTRUCTION DOCUMENTS
A - 01	12/11/2013	AS PER ADDENDUM #01



Key Plan

Progress Print

Life Science Collaboration

1910 N Antelope Valley Parkway
Lincoln, Nebraska

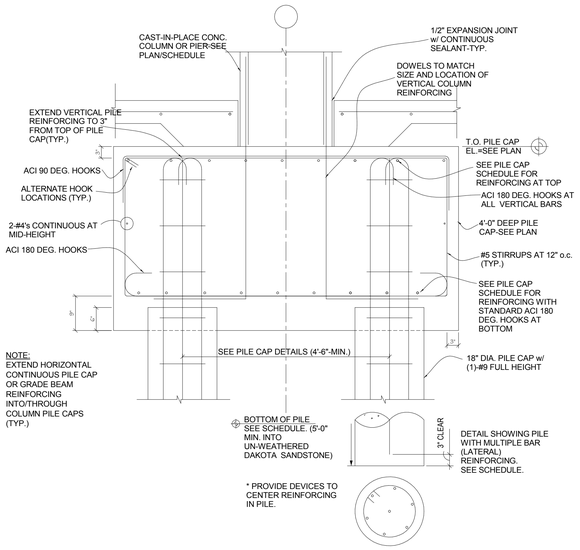
TCEP No.: 716-002-12
Davis Design No.: 12-0077
BVH No.: L12018.unl

November 27, 2013

PROFESSIONAL STRUCTURAL ENGINEER MICHAEL JOHN MCKIE E-14712 STATE OF NEBRASKA 11-27-13

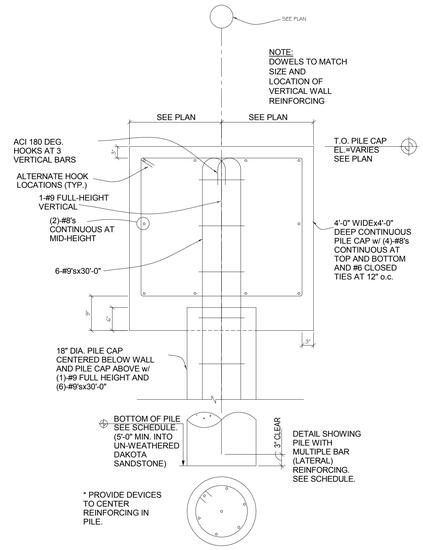
Framing Details - Areas B, C & D

S4.03



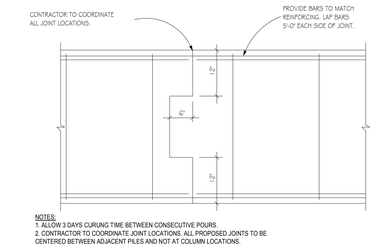
1 Pile Cap Detail @ Columns

Scale: 3/4"=1'-0"



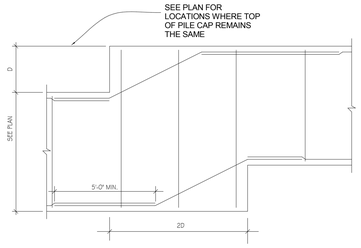
2 Continuous Pile Cap Detail

Scale: 3/4"=1'-0"



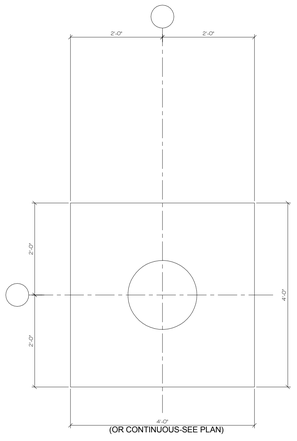
3 Cont. Pile Cap Construction Joint

Scale: NO SCALE PILE CAP SHOWN--SIMILAR AT GRADE BEAMS



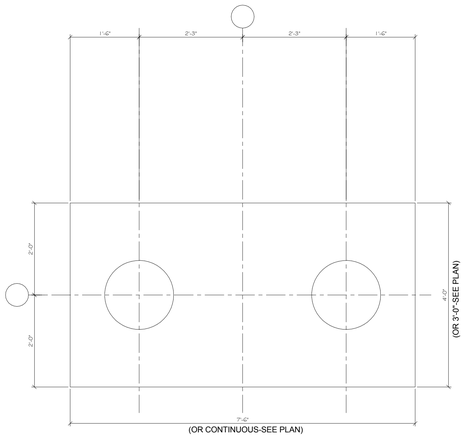
4 Pile Cap Step Detail

Scale: NO SCALE PILE CAP SHOWN--SIMILAR AT GRADE BEAMS



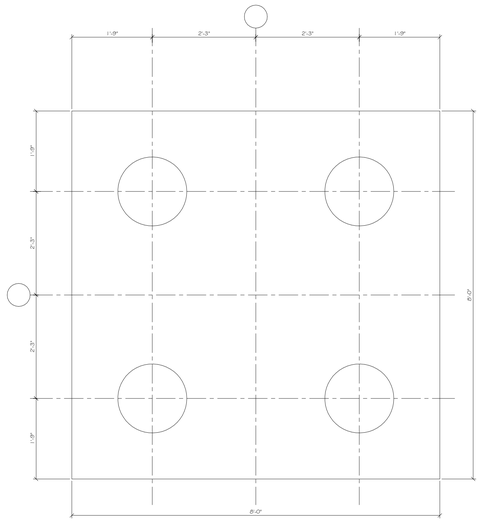
5 1-Pile - Pile Cap Detail

Scale: 3/4"=1'-0" SIMILAR AT CONTINOUS PILE CAPS



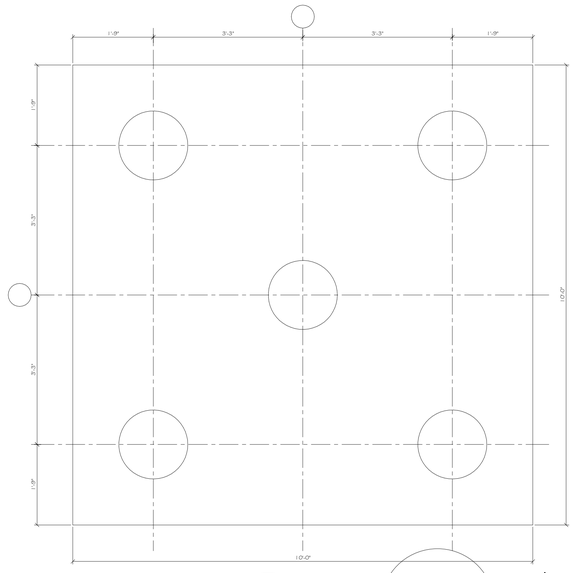
6 2-Pile - Pile Cap Detail

Scale: 3/4"=1'-0" SIMILAR AT CONTINOUS PILE CAPS



7 4-Pile - Pile Cap Detail

Scale: 3/4"=1'-0"



8 5-Pile - Pile Cap Detail

Scale: 3/4"=1'-0"

PILE CAP REINFORCING SCHEDULE

SIZE	REINFORCING		DOWELS	REMARKS
	LONG WAY	SHORT WAY		
8'-0"x8'-0"x4'-0" DEEP	14-#7H @ BOTTOM 14-#5H @ TOP	14-#7H @ BOTTOM 14-#5H @ TOP	TO MATCH VERT. WALL/COL. REINF.	EXTEND PILE REINF. INTO PILE CAP-TYP.
10'-0"x10'-0"x4'-0" DEEP	11-#9H @ BOTTOM 11-#6H @ TOP	11-#9H @ BOTTOM 11-#6H @ TOP	TO MATCH VERT. WALL/COL. REINF.	
7'-6"x4'-0"x4'-0" DEEP	6-#7H @ BOTTOM 6-#5H @ TOP	9-#7H @ BOTTOM 9-#5H @ TOP	TO MATCH VERT. WALL/COL. REINF.	
4'-0"x4'-0"x4'-0" DEEP	6-#7H @ BOTTOM 6-#5H @ TOP	6-#7H @ BOTTOM 6-#5H @ TOP	TO MATCH VERT. WALL/COL. REINF.	
4'-0"x4'-0" DEEPxCONTINUOUS	4-#8H @ BOTTOM 2-#8H @ MID. 4-#8H @ TOP	#6 CLOSED TIES AT 12" o.c.-TYP.	TO MATCH VERT. WALL/COL. REINF.	ALTERNATE TIE HOOK LOCATIONS
3'-0"x4'-0" DEEPxCONTINUOUS	4-#8H @ BOTTOM 4-#8H @ TOP	#6 CLOSED TIES AT 12" o.c.-TYP.	TO MATCH VERT. WALL/COL. REINF.	ALTERNATE TIE HOOK LOCATIONS
2'-6" DEEP @ ELEVATORS	#7H @ 6" o.c. @ BOT. #6H @ 12" o.c. @ TOP	#7H @ 6" o.c. @ BOT. #6H @ 12" o.c. @ TOP	TO MATCH VERT. WALL/COL. REINF.	PROVIDE 2-ADDITIONAL BARS AT EA. SIDE OF SUMP PIT

PAD FOOTING SCHEDULE

SIZE	REINFORCING*	REMARKS
3'-6"x3'-6"x1'-0" DEEP	4-#5's EACH WAY AT BOTTOM	AT ENTRANCE STAIR LANDING

*TOTAL AREA OF PAD FOOTING TENSILE REINFORCING PROVIDES 1/3 GREATER THAN THAT REQUIRED BY ANALYSIS PER ACI 10.5.3

ALLOWABLE SOIL CAPACITY BASED ON 2000 PSF PER GEOTECH REPORT

CMU WALL SCHEDULE

SIZE	REINFORCING	REMARKS
	VERTICAL	PROVIDE CONT. BOND BEAM w/ (2)-#4's CONTINUOUS AT ALL BEARING AND T.O. WALL LOCATIONS U.N.O. PROVIDE HORIZ. LADDER-TYPE REINF. AT 16" o.c.
4" OR 6"	NONE	PROVIDE MASONRY TIES TO C.I.P. AT 16" o.c. VERTICAL AND 24" o.c. HORIZ. AT/NEAR C.I.P. FOUNDATION WALL. SEE 7/S5.02.
6"	#4's @ 16" o.c.	AT PENTHOUSE PERIMETER

GRADE BEAM SCHEDULE

SIZE	REINFORCING *			REMARKS
	CONTINUOUS	LONGITUDINAL	TRANSVERSE	
10"x3'-4" DEEP	#4's AT 12" o.c. EACH WAY	--	--	AT FROST SLABS
12"x3'-1 1/2" DEEP	#5's AT 12" o.c. EACH WAY EA. FACE	--	--	AT FROST SLABS NEAR 4H BLDG.-VERIFY DEPTH w/ EXISTING

*TOTAL AREA OF GRADE BEAM TENSILE REINFORCING PROVIDES 1/3 GREATER THAN THAT REQUIRED BY ANALYSIS PER ACI 10.5.3

ALLOWABLE SOIL CAPACITY BASED ON 2000 PSF PER GEOTECH REPORT

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SHEET HISTORY:

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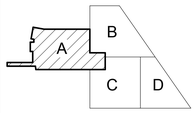


Key Plan

Life Science Collaboration

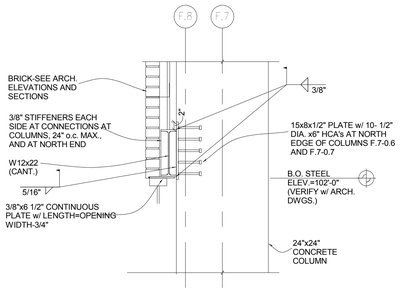
1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design No.: 12-0077
BVH No.: L12018.unl

November 27,2013

Structural Details - Area A

S5.01



1 Brick Support Detail

Scale: 3/4" = 1'-0" APPLIES AT BRICK ABOVE THE CURTAIN WALL/DOORS

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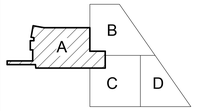

Key Plan

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November 27,2013

Structural Details- Areas A,B,C,D

S5.09

GENERAL PLAN NOTES

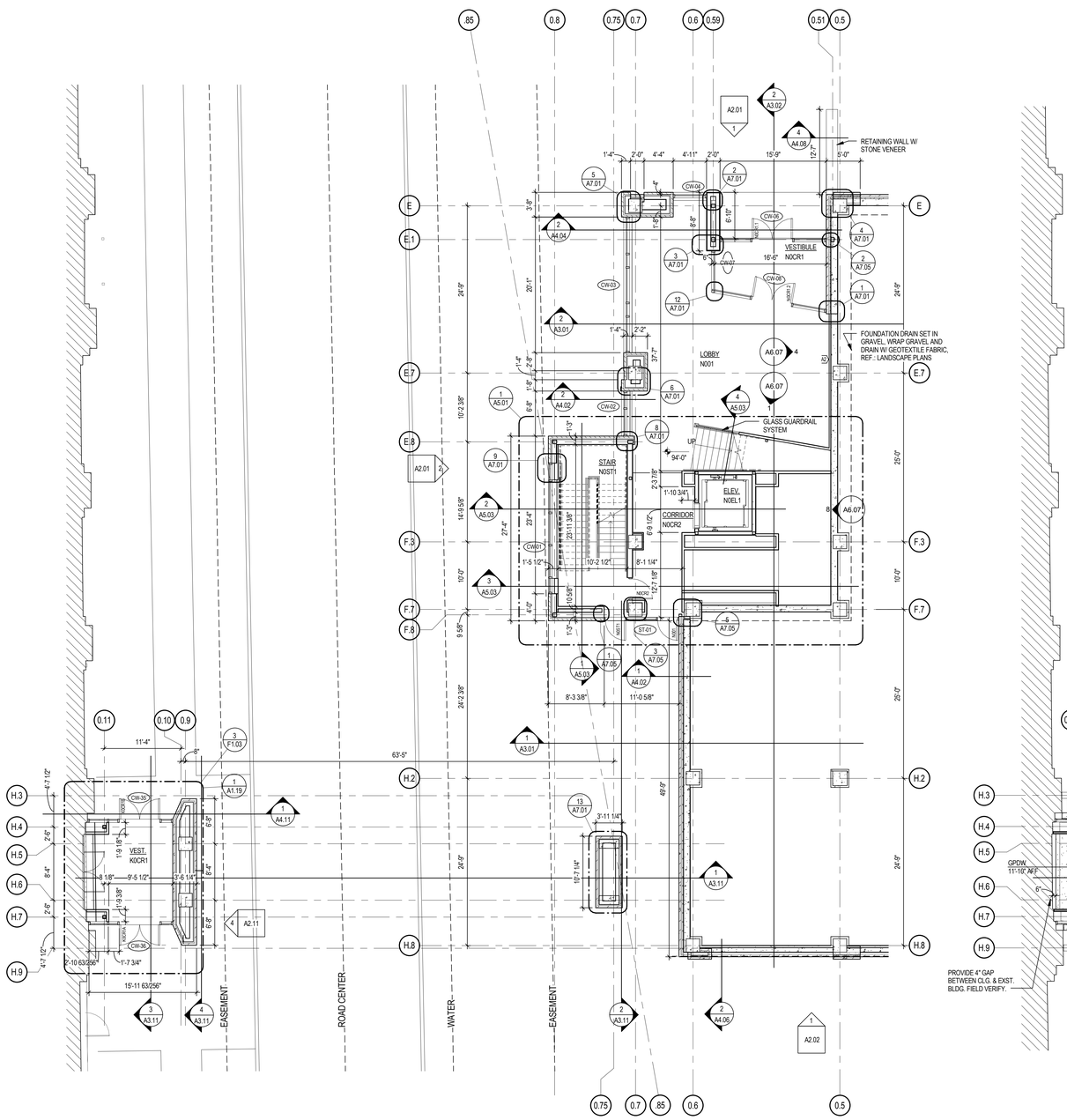
1. GENERAL PLAN NOTES APPLY TO ALL FLOOR PLAN SHEETS
2. LOWER FLOOR ELEVATION 94'-0" = CIVIL GRADE ELEVATION 1155.83
   FIRST FLOOR ELEVATION 100'-0" = CIVIL GRADE ELEVATION 1161.83
3. ALL SPANDREL GLAZING SHALL HAVE CURTAINWALL INSULATION INSET IN FRAME AND METAL STUD AND GPDW WALLS WITH THERMAL BATT INSUL. AT INTERIOR SIDE OF GLAZING. REF.: TYP. SPANDREL DETAIL
4. SEE SHEET A1.00 FOR WALL TYPE SCHEDULE
5. DIMENSIONS ARE TO FACE OF GYPSUM DRYWALL UNLESS OTHERWISE NOTED
6. REF.: A6.01 FOR INTERIOR HM FRAME TYPES.
   REF.: A6.02 & A6.03 FOR STOREFRONT & CURTAINWALL FRAME TYPES.
   REF.: A6.04 FOR SKYWALK CURTAINWALL FRAME TYPES

EXPANSION JOINT SCHEDULE

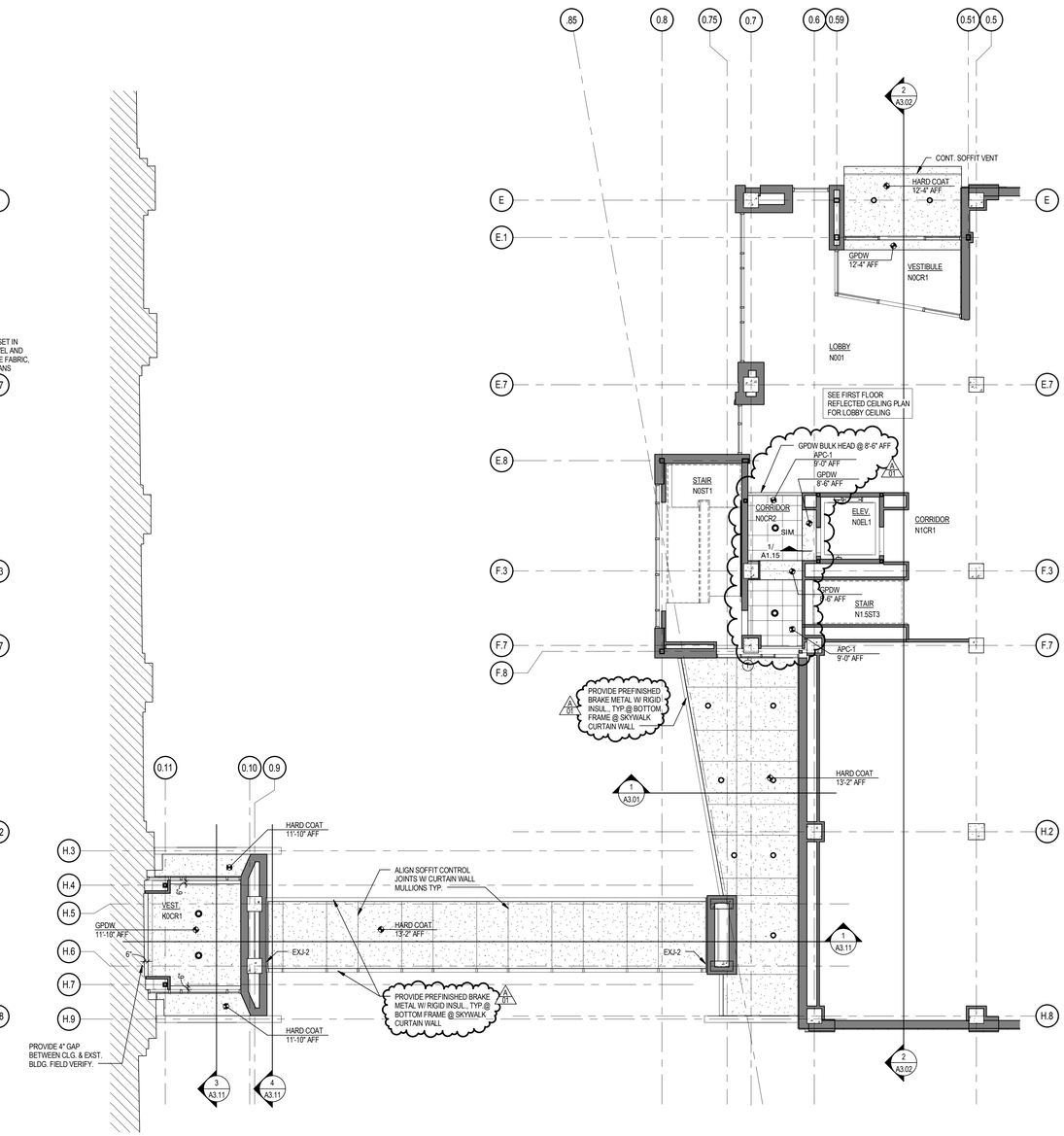
TAG	DESCRIPTION
EJ-1	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS LASB-NBR 2-1 @ FLOOR TO FLOOR RECESS MOUNT W/ FIRE BARRIER OR APPROVED EQUAL
EJ-2	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS FSW-200 @ WALL/CEILING TO WALL/CEILING CONNECTION OR APPROVED EQUAL
EJ-3	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS ERJL-200 @ ROOF TO WALL CONNECTION (EXTERIOR CONDITION) OR APPROVED EQUAL
EJ-4	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS ESS-200 @ WALL/CLG. TO WALL CONNECTION (EXTERIOR CONDITION) OR APPROVED EQUAL
EJ-5	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS ERJ-200 @ ROOF TO ROOF CONNECTION (EXTERIOR CONDITION) OR APPROVED EQUAL
EJ-6	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS FSE-200 @ WALL TO FLOOR RECESS MOUNT W/ FIRE BARRIER OR APPROVED EQUAL
EJ-7	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS FSWL-200 @ WALL TO WALL CONNECTION OR APPROVED EQUAL

REFLECTED CEILING LEGEND

	5/8" SUSPENDED GPDW CEILING SYSTEM	○	RECESSED DOWNLIGHT, REF: ELEC.
	ACOUSTICAL PANEL CEILING SYSTEM.	▯	EXIT SIGNAGE, REF: ELEC.
AP	2X2 ACCESS PANEL	▨	RETURN AIR/EXHAUST AIR GRILLE, REF: MECH.
	RECESSED & PENDANT MOUNTED LIGHT FIXTURES, REF: ELEC.	▩	SUPPLY AIR DIFFUSER, REF: MECH.



1 **LOWER LEVEL FLOOR PLAN - AREA A**
SCALE: 1/8" = 1'-0"



2 **LOWER LEVEL REFLECTED CEILING PLAN - AREA A**
SCALE: 1/8" = 1'-0"

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SHEET HISTORY:

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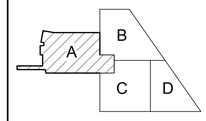
A - 01	12/11/2013	ADDENDUM #1



Key Plan

Life Science Collaboration

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Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design No.: 12-0077
BVH No.: L12018.unl

November 27, 2013

Lower Level Floor Plan & Reflected Ceiling Plan - Area A

A1.01

Plot Time Stamp: 12/11/2013 11:44:04 AM
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GENERAL PLAN NOTES

1. GENERAL PLAN NOTES APPLY TO ALL FLOOR PLAN SHEETS
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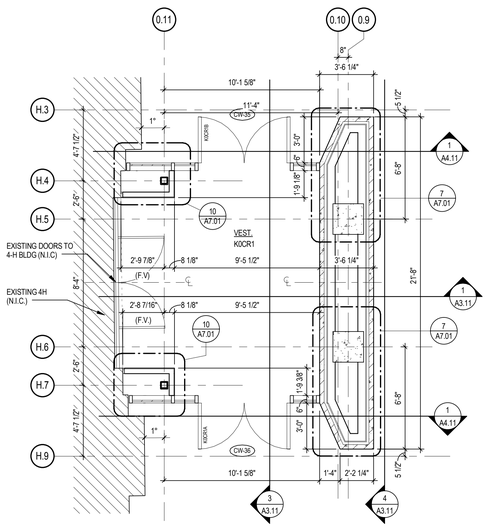
EJ-4	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS ESS-200 @ WALL/CLG. TO WALL CONNECTION (EXTERIOR CONDITION) OR APPROVED EQUAL
EJ-5	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS ERJ-200 @ ROOF TO ROOF CONNECTION (EXTERIOR CONDITION) OR APPROVED EQUAL
EJ-6	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS FSE-200 @ WALL TO FLOOR RECESS MOUNT W/ FIRE BARRIER OR APPROVED EQUAL
EJ-7	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS FSWL-200 @ WALL TO WALL CONNECTION OR APPROVED EQUAL

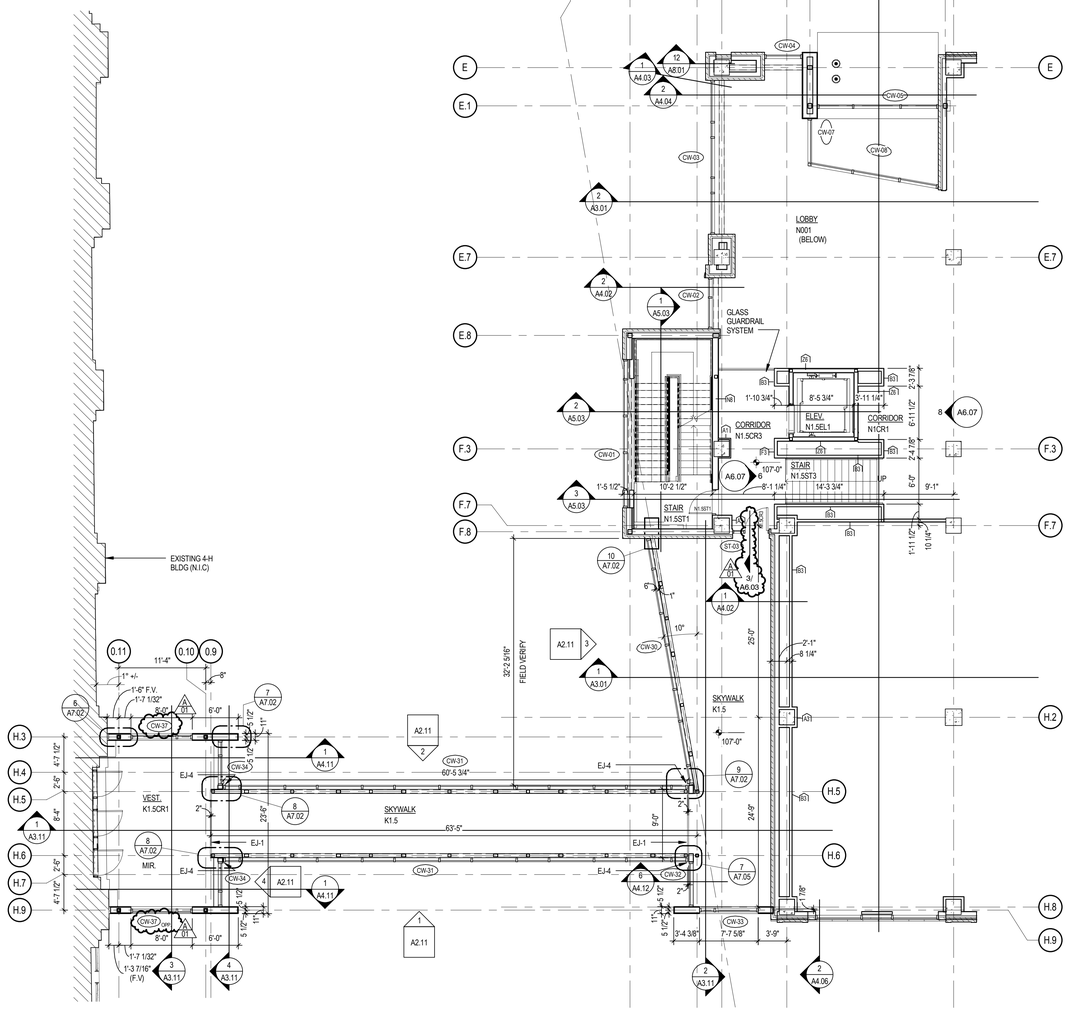
REFLECTED CEILING LEGEND

	5/8" SUSPENDED GPDW CEILING SYSTEM	○	RECESSED DOWNLIGHT, REF: ELEC.
	ACOUSTICAL PANEL CEILING SYSTEM.	▯	EXIT SIGNAGE, REF: ELEC.
AP	2X2 ACCESS PANEL	▨	RETURN AIR/EXHAUST AIR GRILLE, REF: MECH.
	RECESSED & PENDANT MOUNTED LIGHT FIXTURES, REF: ELEC.	⊠	SUPPLY AIR DIFFUSER, REF: MECH.



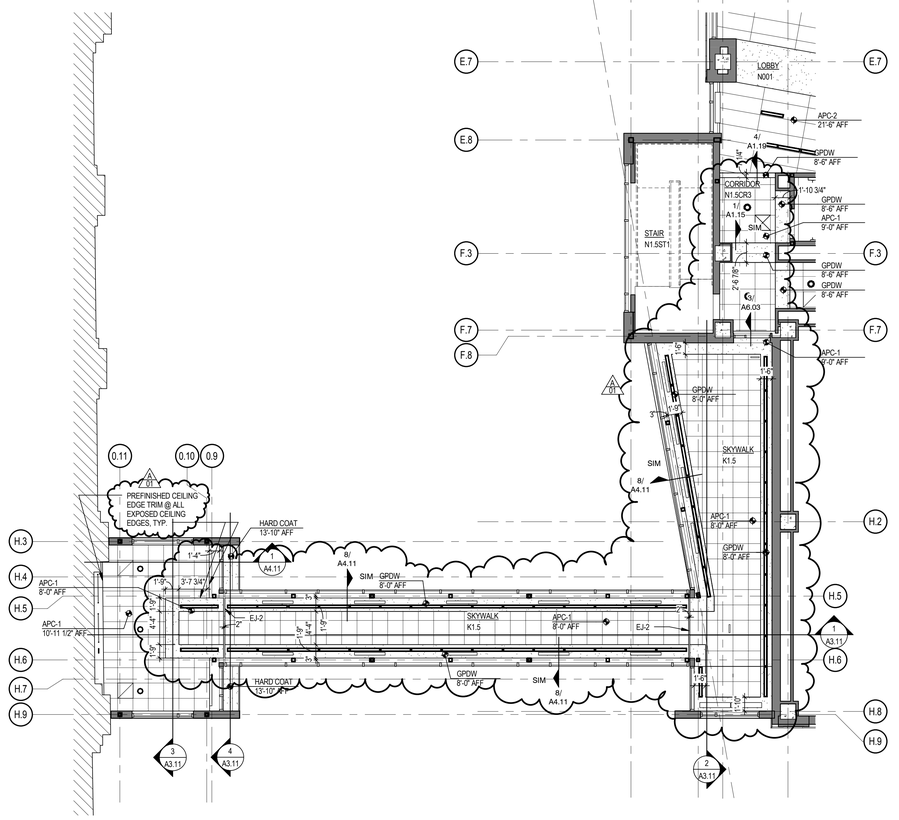
1 ENLARGED PLAN SKYWALK VESTIBULE 4H - LEVEL 1

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



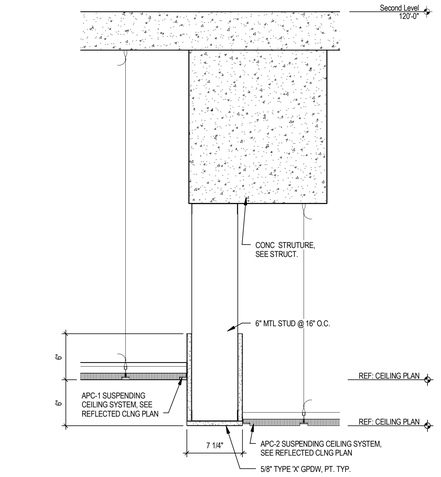
2 SKYWALK FLOOR PLAN

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



3 SKYWALK REFLECTED CEILING PLAN

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



4 SECTION DETAIL @ BULKHEAD

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

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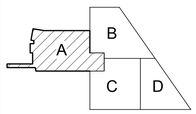

Key Plan

Life Science Collaboration

1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design No.: 12-0077
BVH No.: L12018.unl

November 27, 2013

ARCHITECT
GREGORY D. NEWPORT
A-2151
11-27-13
STATE OF NEBRASKA

Skywalk Floor Plan & Reflected Ceiling Plan - Area A

A1.19

Plot Time Stamp: 12/11/2013 11:44:19 AM
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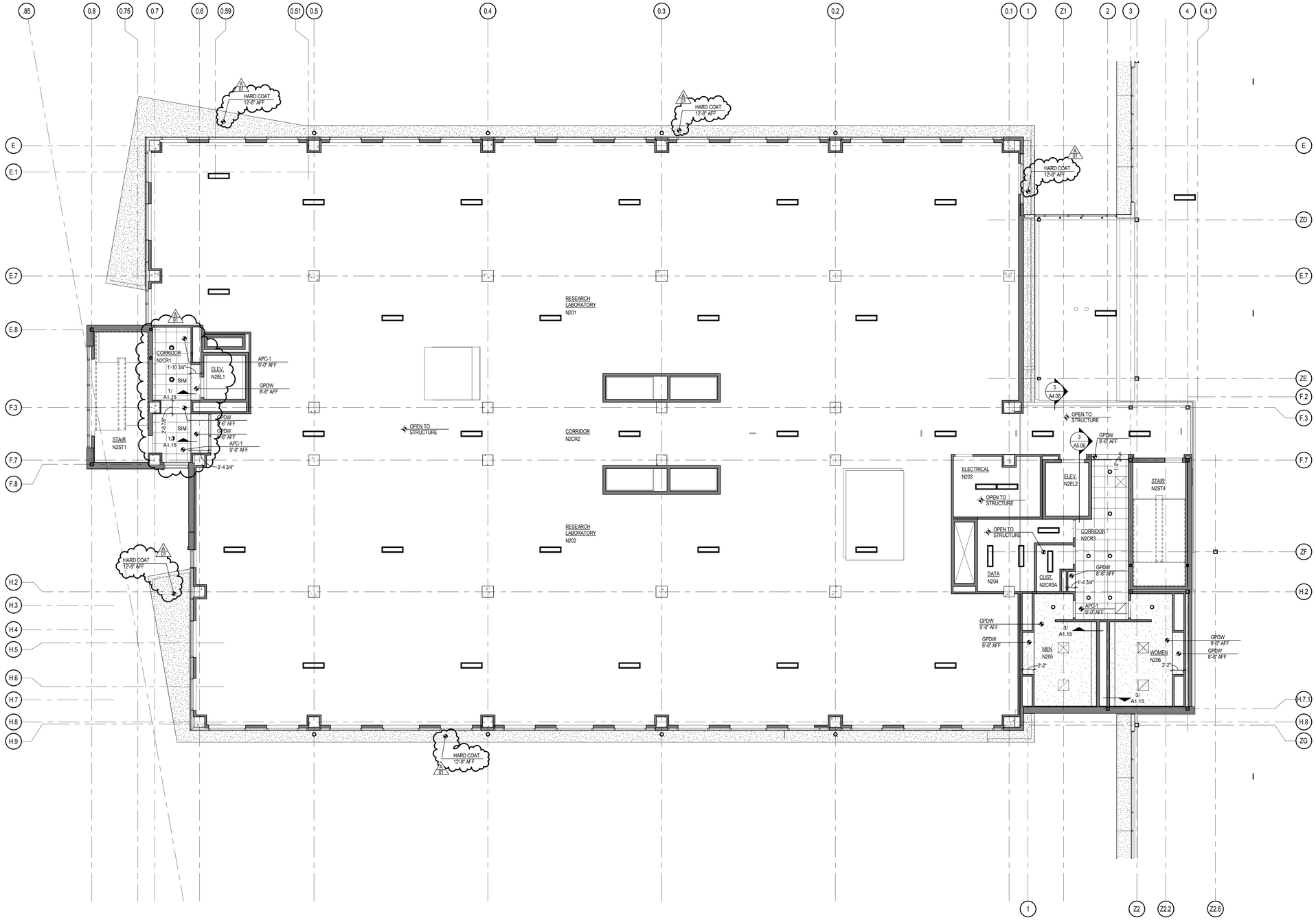

SECOND FLOOR REFLECTED CEILING PLAN - AREA A

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

REFLECTED CEILING LEGEND

	5/8" SUSPENDED GPDW CEILING SYSTEM	○	RECESSED DOWNLIGHT, REF: ELEC.
	ACOUSTICAL PANEL CEILING SYSTEM.	▯	EXIT SIGNAGE, REF: ELEC.
AP	2X2 ACCESS PANEL	▨	RETURN AIR/EXHAUST AIR GRILLE, REF: MECH.
	RECESSED & PENDANT MOUNTED LIGHT FIXTURES, REF: ELEC.	⊠	SUPPLY AIR DIFFUSER, REF: MECH.

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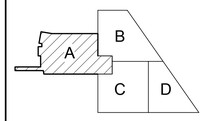

Key Plan

Life Science Collaboration

1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
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BVH No.: L12018.unl

November 27, 2013

Second Floor Reflected Ceiling Plan - Area A

A1.25

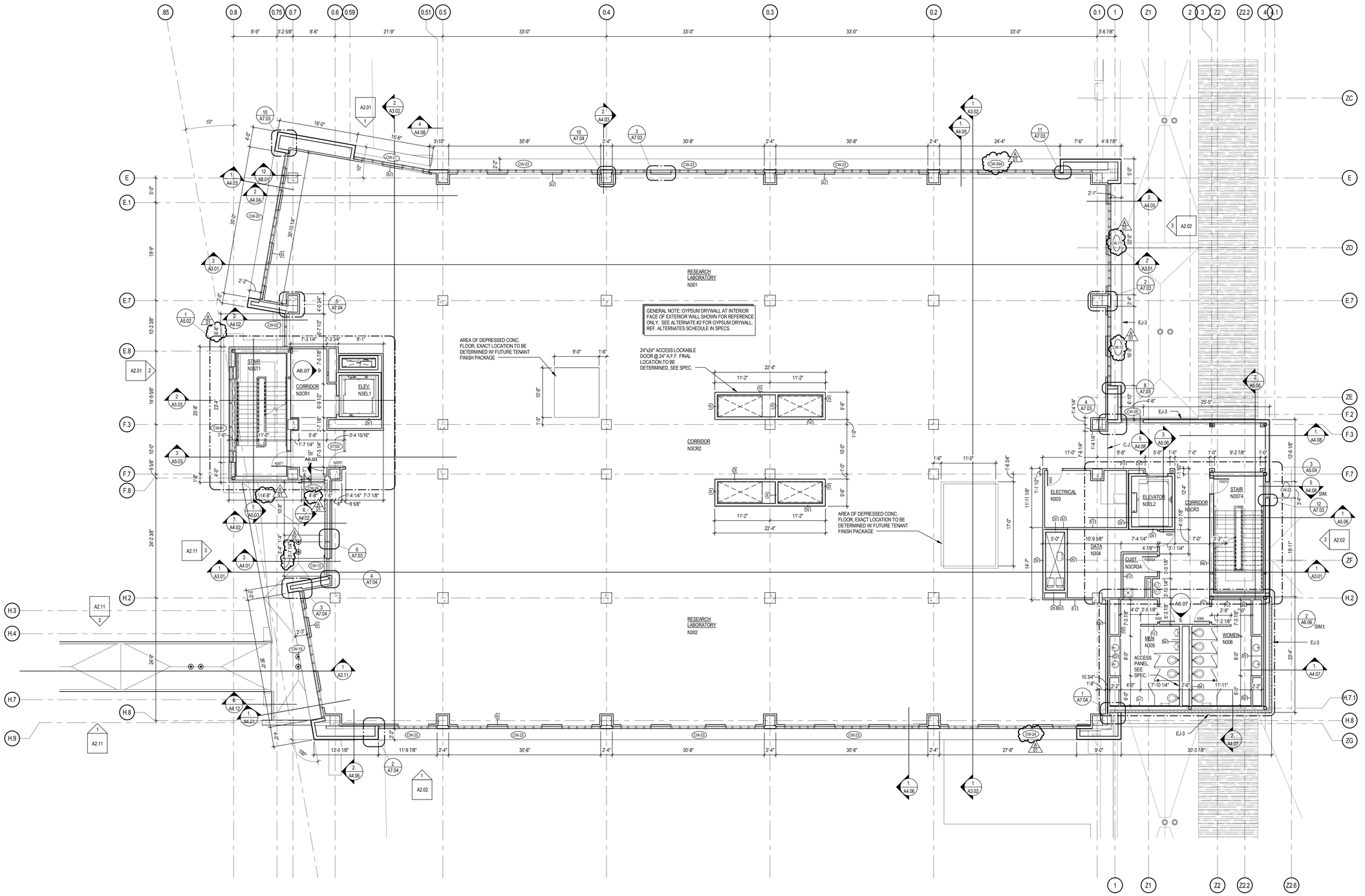
Plot Time Stamp: 12/11/2013 11:44:27 AM
File Location/Name: C:\(1) Revit Projects \2012\716002-LS-Arch_shaden.rvt

GENERAL PLAN NOTES

1. GENERAL PLAN NOTES APPLY TO ALL FLOOR PLAN SHEETS
2. LOWER FLOOR ELEVATION 94'-0" = CIVIL GRADE ELEVATION 1155.83
   FIRST FLOOR ELEVATION 100'-0" = CIVIL GRADE ELEVATION 1161.83
3. ALL SPANDREL GLAZING SHALL HAVE CURTAINWALL INSULATION INSET IN FRAME AND METAL STUD AND GPDW WALLS WITH THERMAL BATT INSUL. AT INTERIOR SIDE OF GLAZING. REF.: TYP. SPANDREL DETAIL
4. SEE SHEET A1.00 FOR WALL TYPE SCHEDULE
5. DIMENSIONS ARE TO FACE OF GYPSUM DRYWALL UNLESS OTHERWISE NOTED
6. REF.: A6.01 FOR INTERIOR HM FRAME TYPES.
   REF.: A6.02 & A6.03 FOR STOREFRONT & CURTAINWALL FRAME TYPES.
   REF.: A6.04 FOR SKYWALK CURTAINWALL FRAME TYPES

EXPANSION JOINT SCHEDULE

TAG	DESCRIPTION
EJ-1	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS LASB-NBR 2-1 @ FLOOR TO FLOOR RECESS MOUNT W/ FIRE BARRIER OR APPROVED EQUAL
EJ-2	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS FSW-200 @ WALL/CEILING TO WALL/CEILING CONNECTION OR APPROVED EQUAL
EJ-3	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS ERJL-200 @ ROOF TO WALL CONNECTION (EXTERIOR CONDITION) OR APPROVED EQUAL
EJ-4	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS ESS-200 @ WALL/C.L.G. TO WALL CONNECTION (EXTERIOR CONDITION) OR APPROVED EQUAL
EJ-5	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS ERJ-200 @ ROOF TO ROOF CONNECTION (EXTERIOR CONDITION) OR APPROVED EQUAL
EJ-6	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS FSE-200 @ WALL TO FLOOR RECESS MOUNT W/ FIRE BARRIER OR APPROVED EQUAL
EJ-7	2" EXPANSION JOINT COVER EQUAL TO MM SYSTEMS FSWL-200 @ WALL TO WALL CONNECTION OR APPROVED EQUAL



THIRD FLOOR PLAN - AREA A

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

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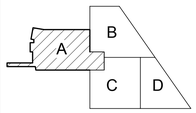

Key Plan

Life Science Collaboration

1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design No.: 12-0077
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November 27, 2013

Third Floor Plan - Area A

A1.31

Plot Time Stamp: 12/11/2013 11:44:40 AM
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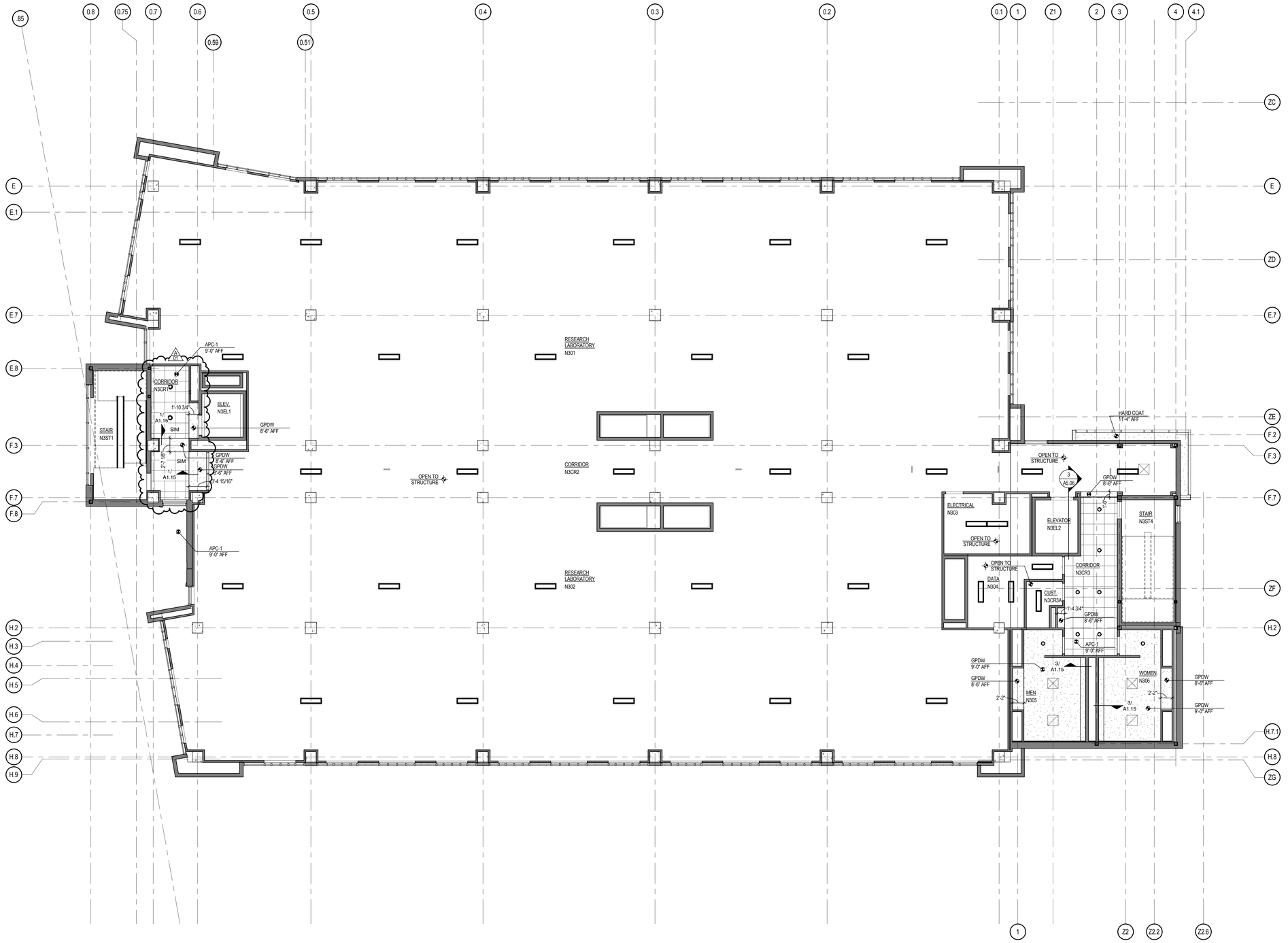

THIRD FLOOR REFLECTED CEILING PLAN - AREA A

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

REFLECTED CEILING LEGEND

	5/8" SUSPENDED GPDW CEILING SYSTEM	○	RECESSED DOWNLIGHT, REF: ELEC.
	ACOUSTICAL PANEL CEILING SYSTEM.	▯	EXIT SIGNAGE, REF: ELEC.
AP	2X2 ACCESS PANEL		RETURN AIR/EXHAUST AIR GRILLE, REF: MECH.
	RECESSED & PENDANT MOUNTED LIGHT FIXTURES, REF: ELEC.		SUPPLY AIR DIFFUSER, REF: MECH.

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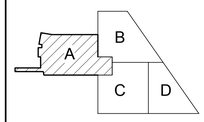

Key Plan

Life Science Collaboration

1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design No.: 12-0077
BVH No.: L12018.unl

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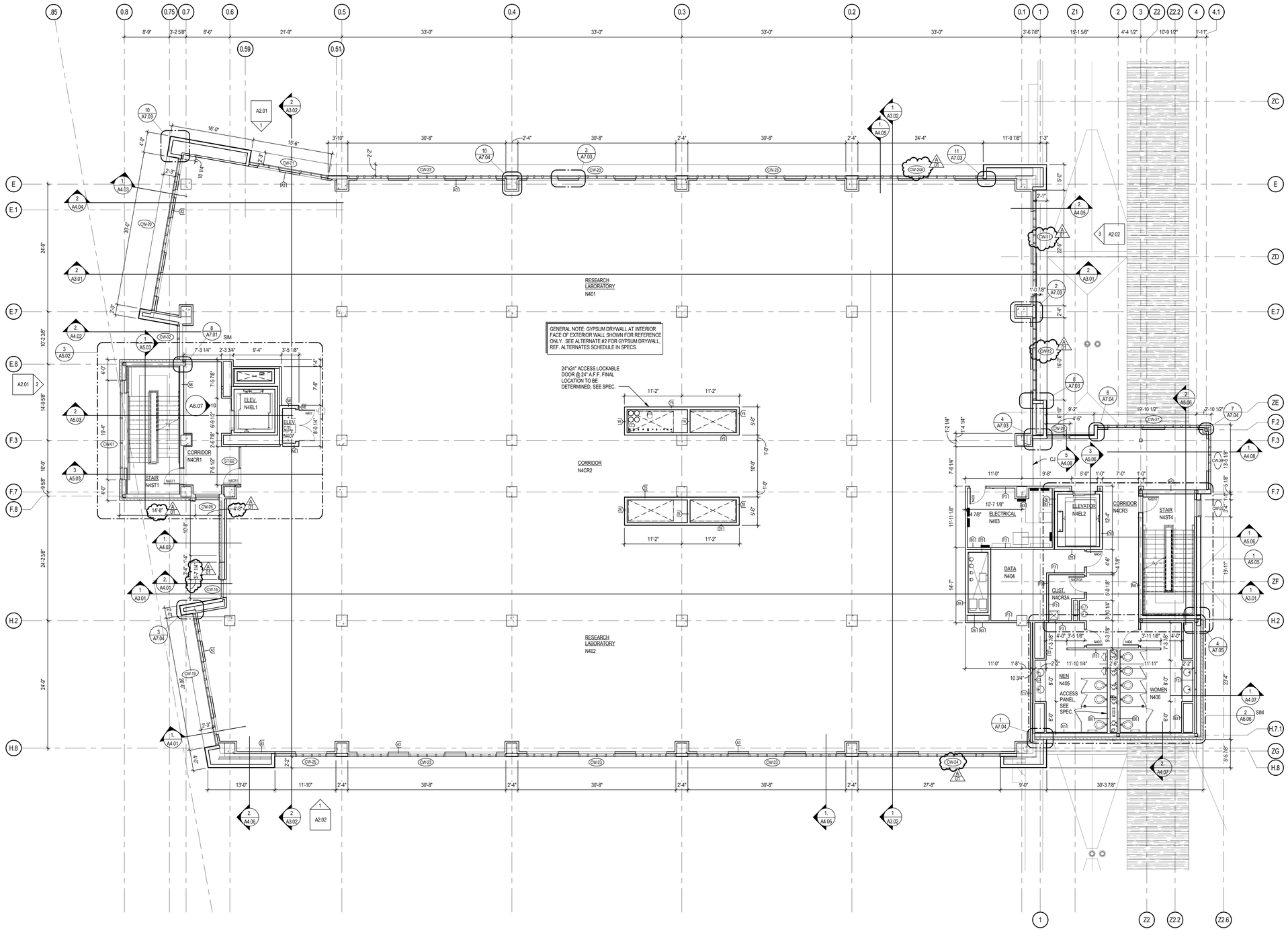
Third Floor Reflected Ceiling Plan - Area A

A1.32

Plot Time Stamp: 12/11/2013 11:44:46 AM
File Location/Name: C:\(1) Revit Projects\2012\716002-LS-Arch_ahaden.rvt

GENERAL PLAN NOTES

1. GENERAL PLAN NOTES APPLY TO ALL FLOOR PLAN SHEETS
2. LOWER FLOOR ELEVATION 94'-0" = CIVIL GRADE ELEVATION 1155.83
   FIRST FLOOR ELEVATION 100'-0" = CIVIL GRADE ELEVATION 1161.83
3. ALL SPANDREL GLAZING SHALL HAVE CURTAINWALL INSULATION INSET IN FRAME AND METAL STUD AND GPDW WALLS WITH THERMAL BATT INSUL. AT INTERIOR SIDE OF GLAZING. REF.: TYP. SPANDREL DETAIL
4. SEE SHEET A1.00 FOR WALL TYPE SCHEDULE
5. DIMENSIONS ARE TO FACE OF GYPSUM DRYWALL UNLESS OTHERWISE NOTED
6. REF.: A6.01 FOR INTERIOR HM FRAME TYPES.
   REF.: A6.02 & A6.03 FOR STOREFRONT & CURTAINWALL FRAME TYPES.
   REF.: A6.04 FOR SKYWALK CURTAINWALL FRAME TYPES



FOURTH FLOOR PLAN - AREA A

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

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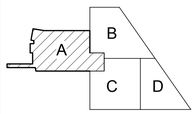

Key Plan

Life Science Collaboration

1910 N Antelope Valley Parkway
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November 27, 2013

Fourth Floor Plan - Area A

A1.41

Plot Time Stamp: 12/11/2013 11:44:58 AM
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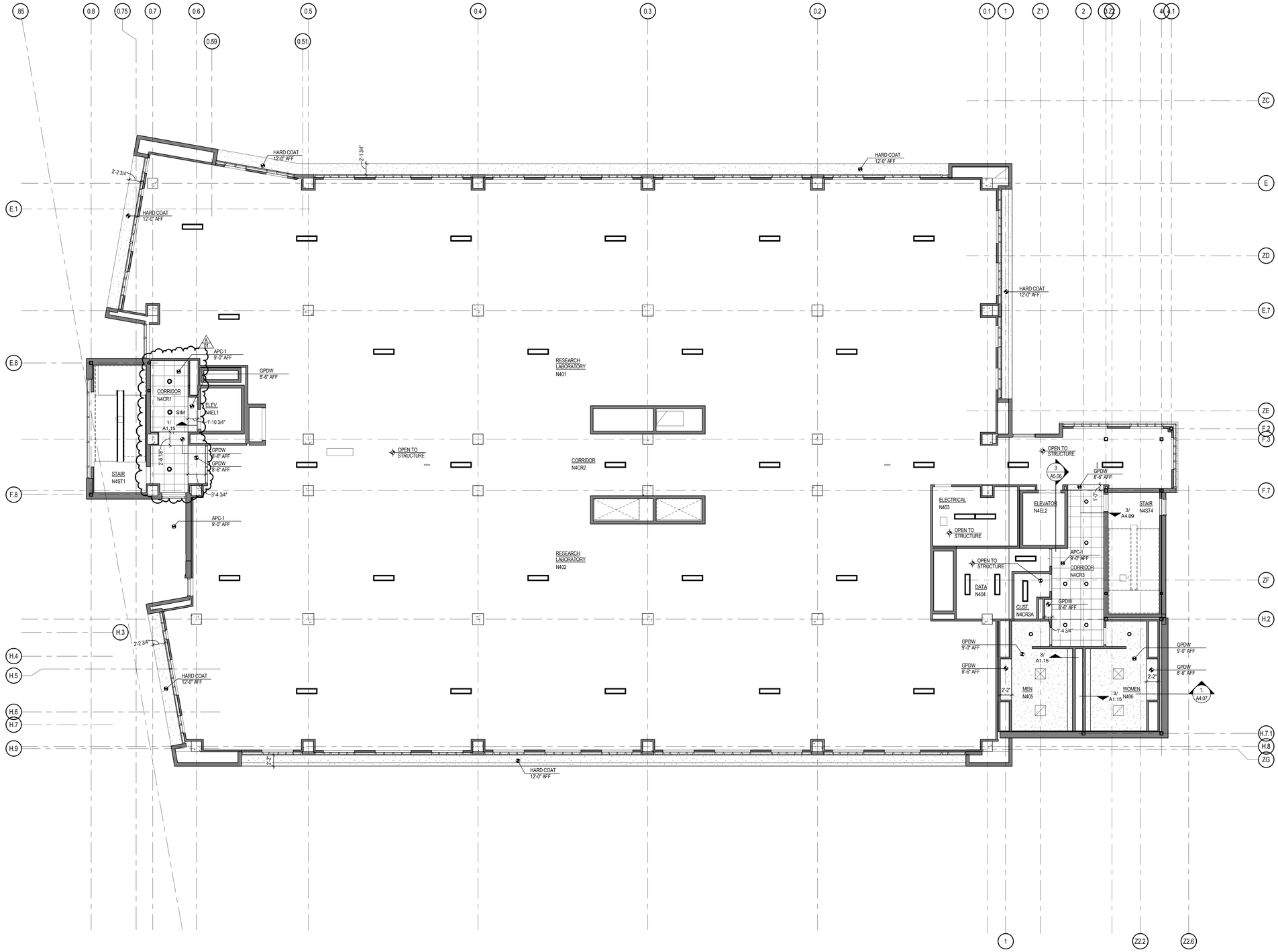

FOURTH FLOOR REFLECTED CEILING PLAN - AREA A

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

REFLECTED CEILING LEGEND

	5/8" SUSPENDED GPDW CEILING SYSTEM	○	RECESSED DOWNLIGHT, REF: ELEC.
	ACOUSTICAL PANEL CEILING SYSTEM.	▯	EXIT SIGNAGE, REF: ELEC.
AP	2X2 ACCESS PANEL	▨	RETURN AIR/EXHAUST AIR GRILLE, REF: MECH.
	RECESSED & PENDANT MOUNTED LIGHT FIXTURES, REF: ELEC.	⊠	SUPPLY AIR DIFFUSER, REF: MECH.

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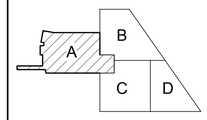

Key Plan

Life Science Collaboration

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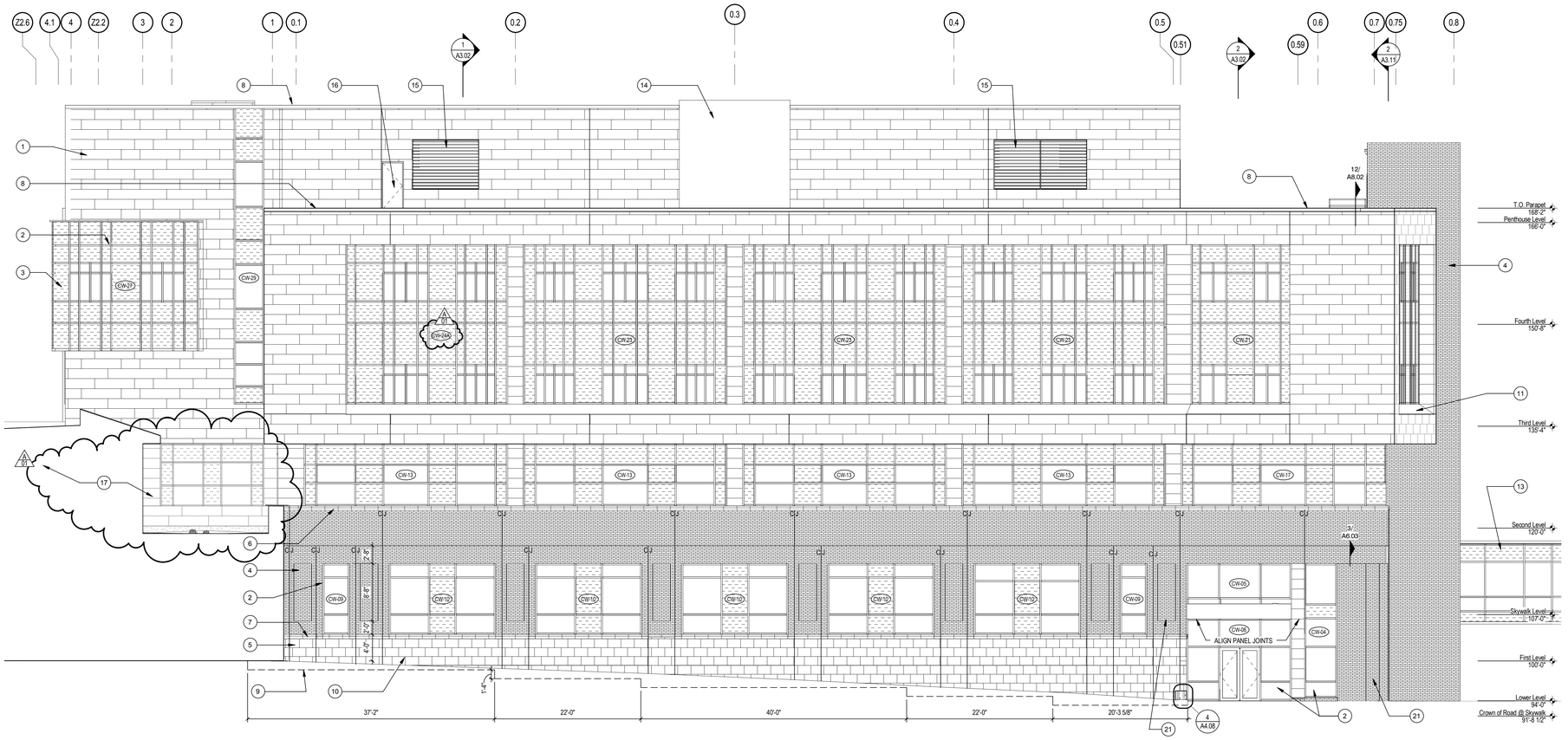
Fourth Floor Reflected Ceiling Plan - Area A

A1.42

Plot Time Stamp: 12/11/2013 11:46:05 AM
File Location/Name: C:\(1) Revit Projects\2012\716002-15-Arch_ohsden.rvt

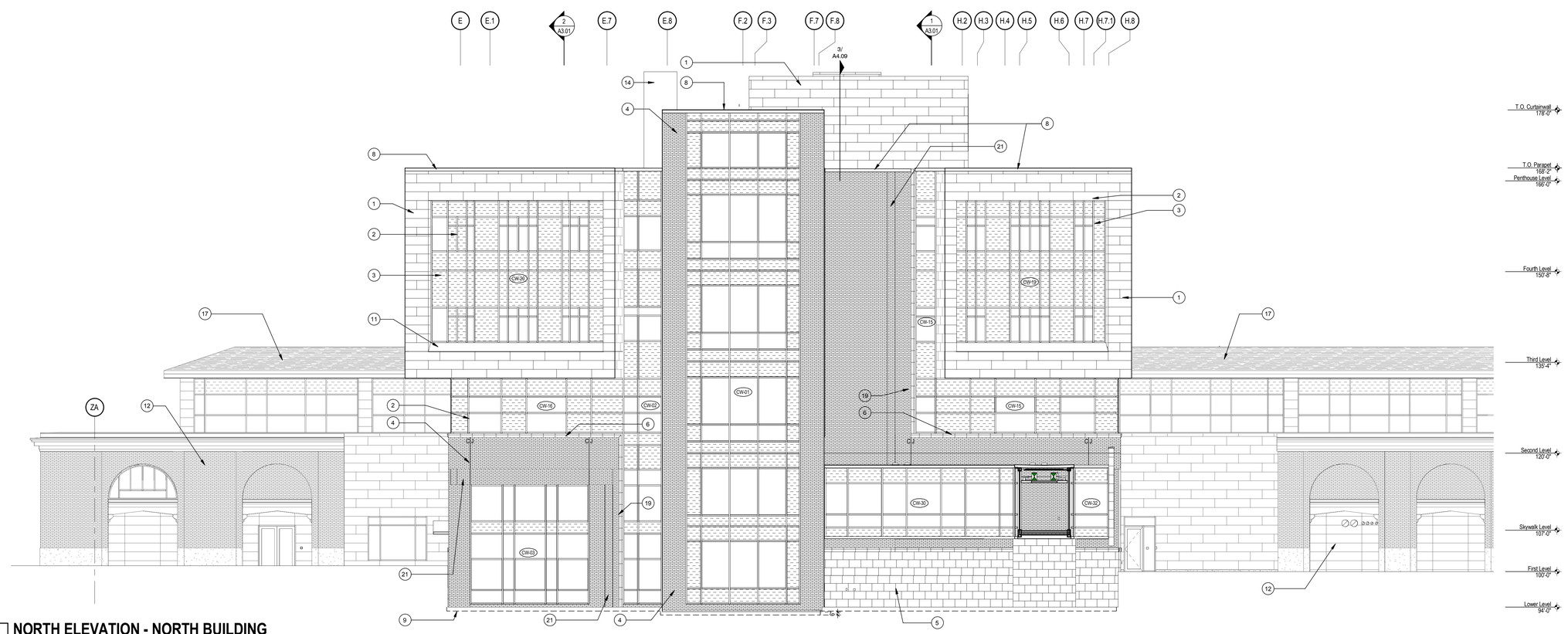
KEY NOTES - ELEVATION

1	CEMENT FIBER BOARD
2	CURTAIN WALL, TYP.
3	SPANDREL GLASS, TYP.
4	FACE BRICK
5	3 5/8" CAST STONE
6	CAST STONE SILL, TYPE "A"
7	CAST STONE SILL, TYPE "B"
8	PRE-FINISHED METAL COPING, TYP.
9	BRICK LEDGE, TYP.
10	SS DRIP, TYP.
11	PRE-FINISHED METAL FLASHING
12	EXISTING BUILDING, BEYOND
13	SKYWALK
14	MECH. EQUIP, REF: MECH.
15	MECHANICAL LOUVER, REF: MECH.
16	HM DOOR, REF: DOOR SCHED.
17	ADDITION TO EXISTING BUILDING, BEYOND
18	PREP. EXISTING WALL FOR INSTALLATION OF NEW EXPANSION JOINT
19	CAST STONE TRIM
20	CONDUCTOR HEAD & DOWNSPOUT
21	RECESSED BAND OF FACE BRICK
22	GUARDRAIL
23	PRE-FINISHED GRAVEL STOP
24	HARD COAT CEILING & SOFFIT SYSTEM



1 EAST ELEVATION - NORTH BUILDING

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



2 NORTH ELEVATION - NORTH BUILDING

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

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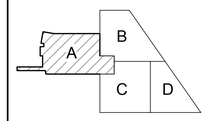

Key Plan

Life Science Collaboration

1910 N Antelope Valley Parkway
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TCEP No.: 716-002-12
Davis Design No.: 12-0077
BVH No.: L12018.unl

November 27, 2013

ARCHITECT Gregory D. Newport A-2151 11-27-13 STATE OF NEBRASKA

Exterior Building Elevations - Area A

A2.01

Plot Time Stamp: 12/11/2013 11:46:30 AM
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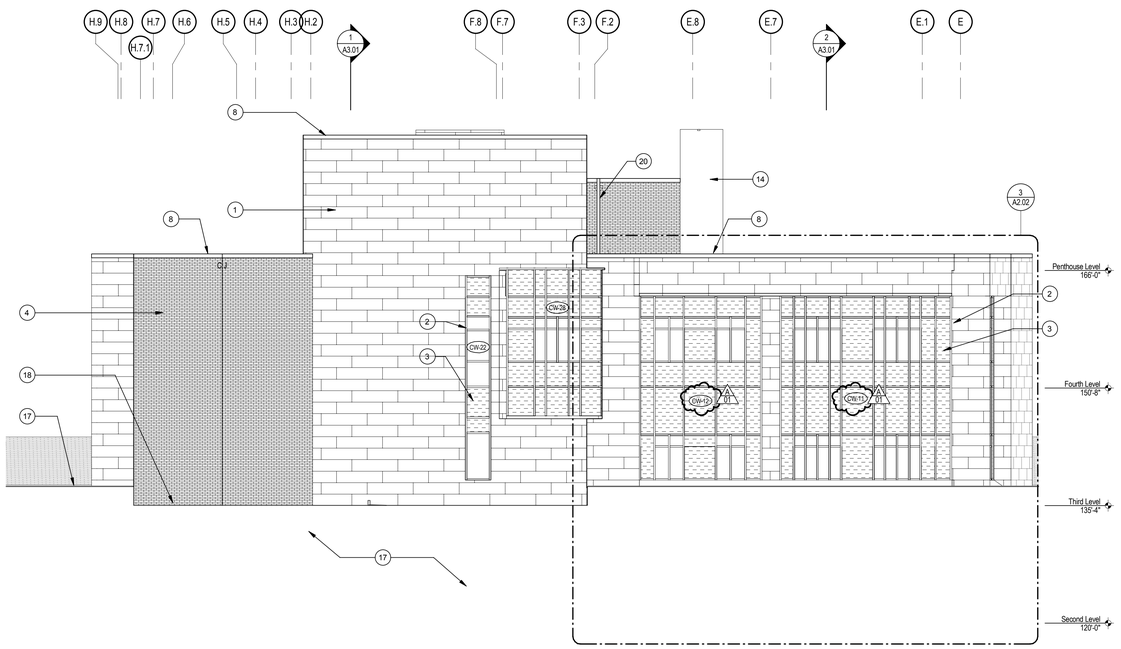
KEY NOTES - ELEVATION

1	CEMENT FIBER BOARD
2	CURTAIN WALL, TYP.
3	SPANDREL GLASS, TYP.
4	FACE BRICK
5	3 5/8" CAST STONE
6	CAST STONE SILL, TYPE "A"
7	CAST STONE SILL, TYPE "B"
8	PRE-FINISHED METAL COPING, TYP.
9	BRICK LEDGE, TYP.
10	SS DRIP, TYP.
11	PRE-FINISHED METAL FLASHING
12	EXISTING BUILDING, BEYOND
13	SKYWALK
14	MECH. EQUIP, REF: MECH.
15	MECHANICAL LOUVER, REF: MECH.
16	HM DOOR, REF: DOOR SCHED.
17	ADDITION TO EXISTING BUILDING, BEYOND
18	PREP. EXISTING WALL FOR INSTALLATION OF NEW EXPANSION JOINT
19	CAST STONE TRIM
20	CONDUCTOR HEAD & DOWNSPOUT
21	RECESSED BAND OF FACE BRICK
22	GUARDRAIL
23	PRE-FINISHED GRAVEL STOP
24	HARD COAT CEILING & SOFFIT SYSTEM

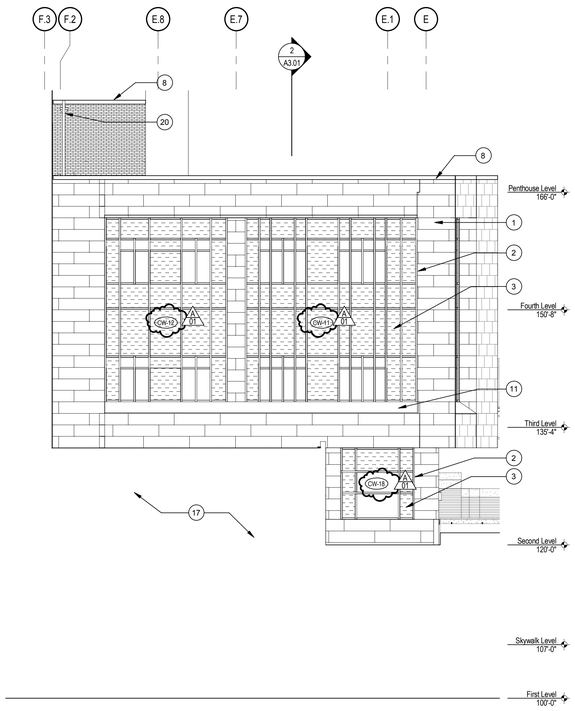
1 WEST ELEVATION - NORTH BUILDING

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



2 SOUTH ELEVATION - NORTH BUILDING

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



3 PARTIAL SOUTH ELEVATION - NORTH BUILDING

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

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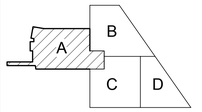

Key Plan

Life Science Collaboration

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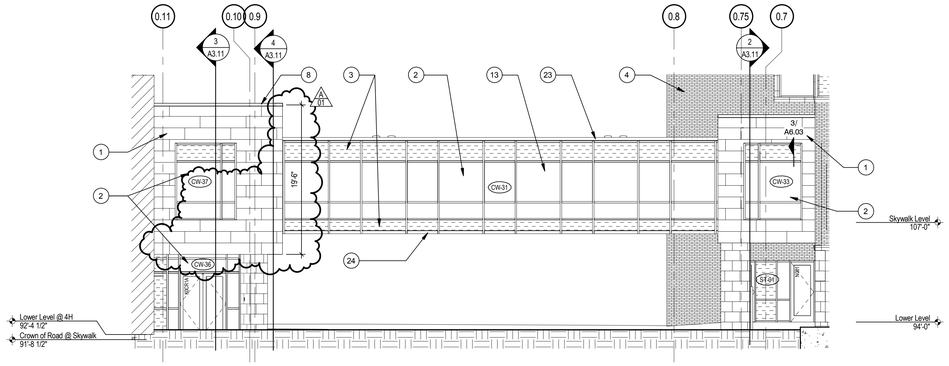
November 27, 2013

Exterior Building Elevations - Area A

A2.02

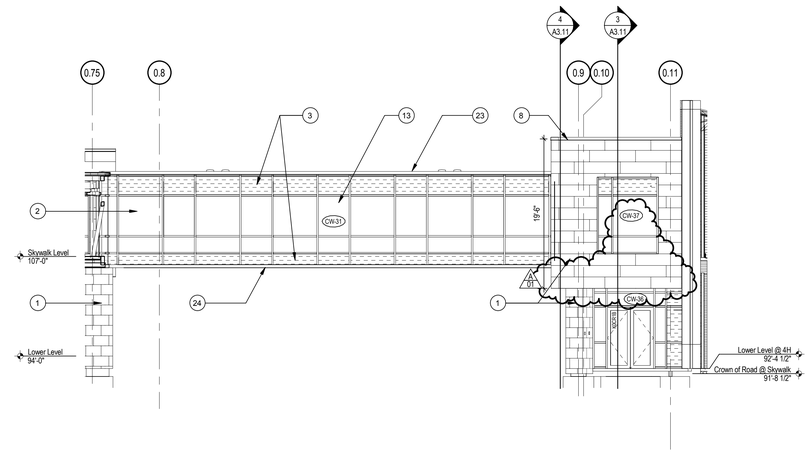
KEY NOTES - ELEVATION

1	CEMENT FIBER BOARD
2	CURTAIN WALL, TYP.
3	SPANDREL GLASS, TYP.
4	FACE BRICK
5	3 5/8" CAST STONE
6	CAST STONE SILL, TYPE "A"
7	CAST STONE SILL, TYPE "B"
8	PRE-FINISHED METAL COPING, TYP.
9	BRICK LEDGE, TYP.
10	SS DRIP, TYP.
11	PRE-FINISHED METAL FLASHING
12	EXISTING BUILDING, BEYOND
13	SKYWALK
14	MECH. EQUIP, REF: MECH.
15	MECHANICAL LOUVER, REF: MECH.
16	HM DOOR, REF: DOOR SCHED.
17	ADDITION TO EXISTING BUILDING, BEYOND
18	PREP. EXISTING WALL FOR INSTALLATION OF NEW EXPANSION JOINT
19	CAST STONE TRIM
20	CONDUCTOR HEAD & DOWNSPOUT
21	RECESSED BAND OF FACE BRICK
22	GUARDRAIL
23	PRE-FINISHED GRAVEL STOP
24	HARD COAT CEILING & SOFFIT SYSTEM



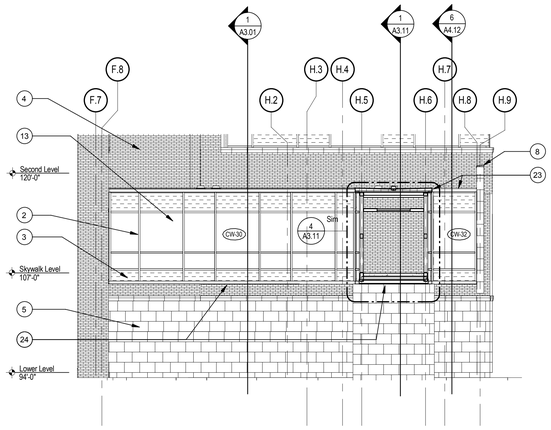
1 SKYWALK EXTERIOR ELEVATION - WEST

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



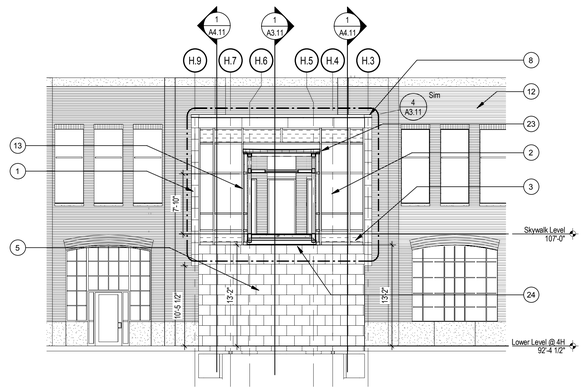
2 SKYWALK EXTERIOR ELEVATION - EAST

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



3 SKYWALK EXTERIOR ELEVATION - NORTH

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



4 SKYWALK EXTERIOR ELEVATION - SOUTH

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

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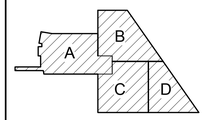

Key Plan

Life Science Collaboration

1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design No.: 12-0077
BVH No.: L12018.unl

November 27, 2013

Skywalk Exterior Building Elevations - Area A

A2.11

Plot Time Stamp: 12/11/2013 11:46:08 AM
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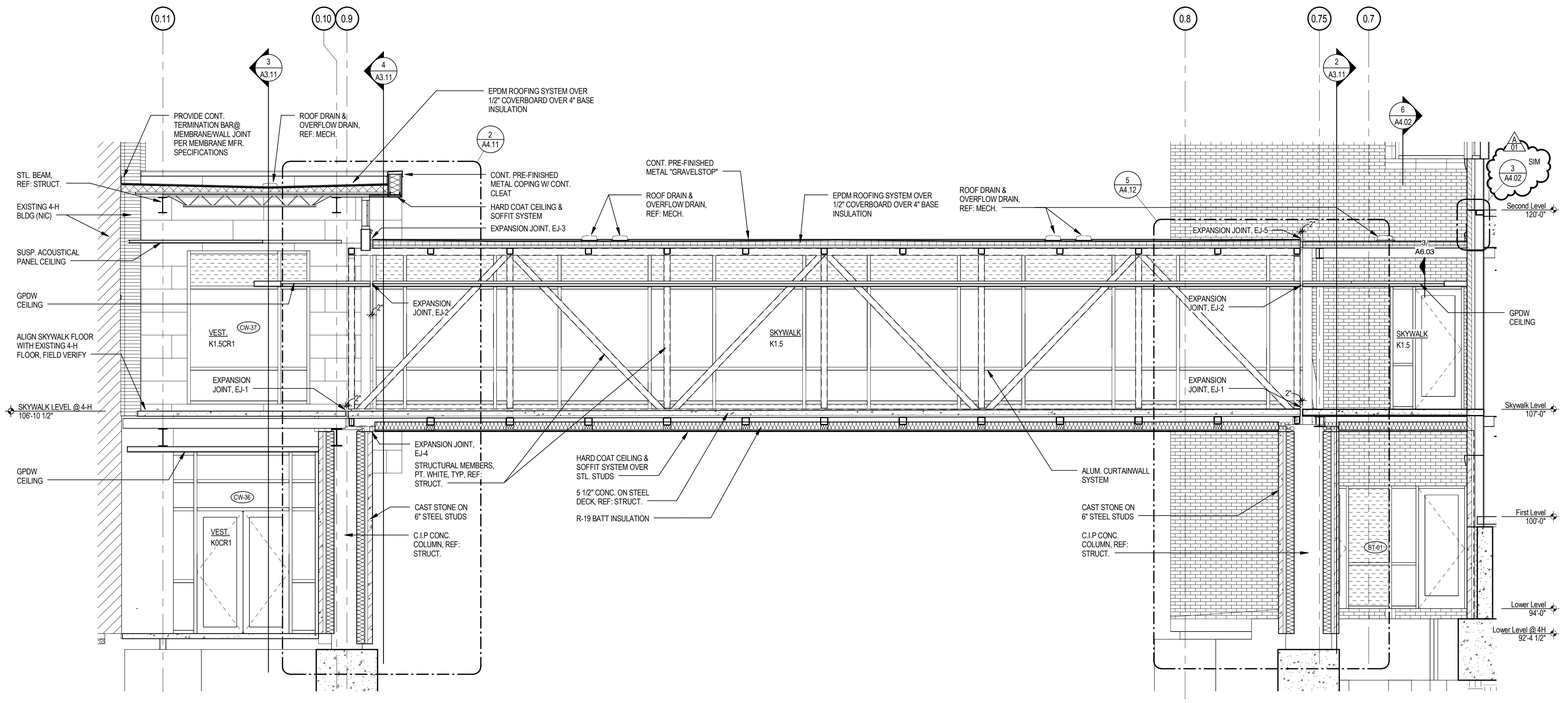
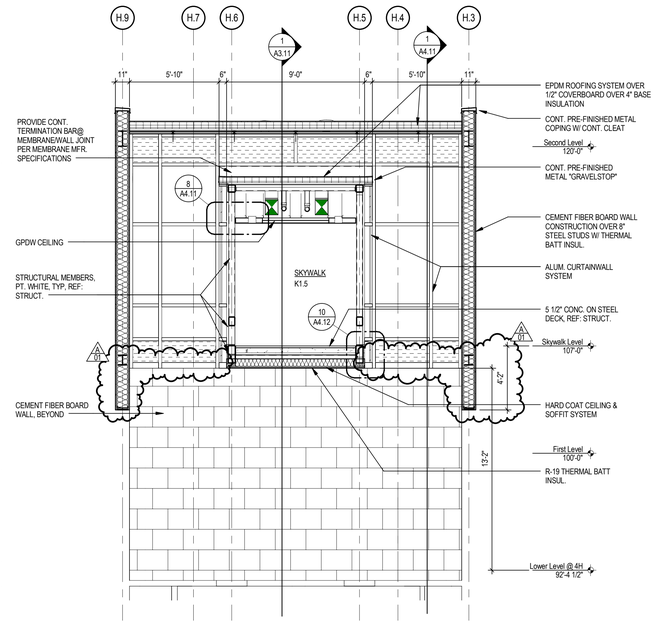


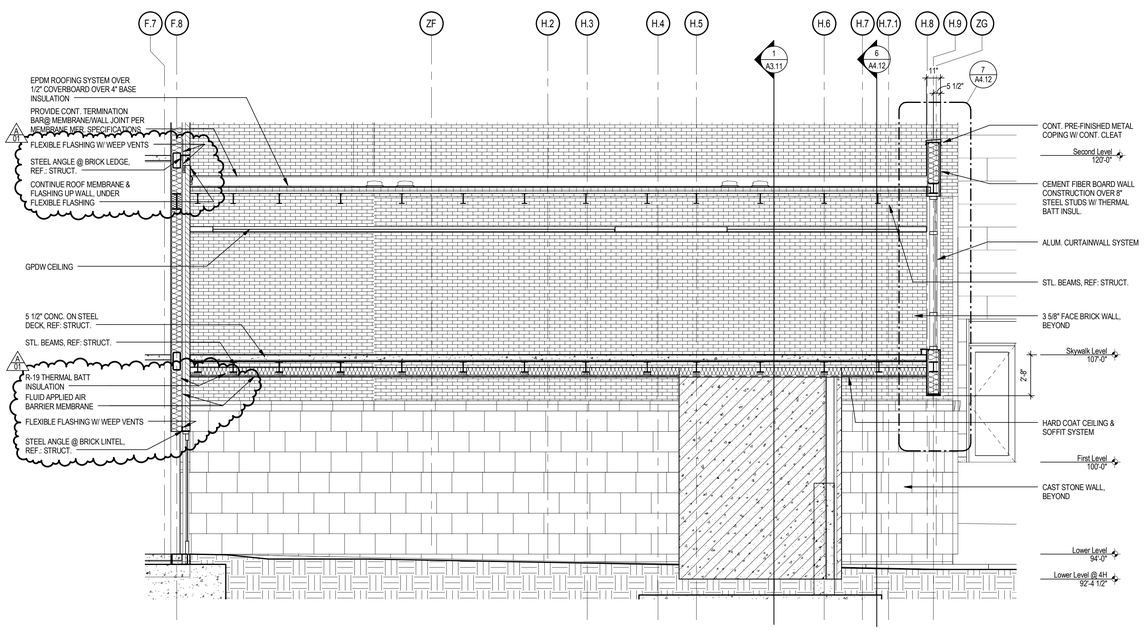
1 SKYWALK CROSS SECTION

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



4 CROSS SECTION @ SKYWALK VESTIBULE

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



2 TRANSVERSE BUILDING SECTION

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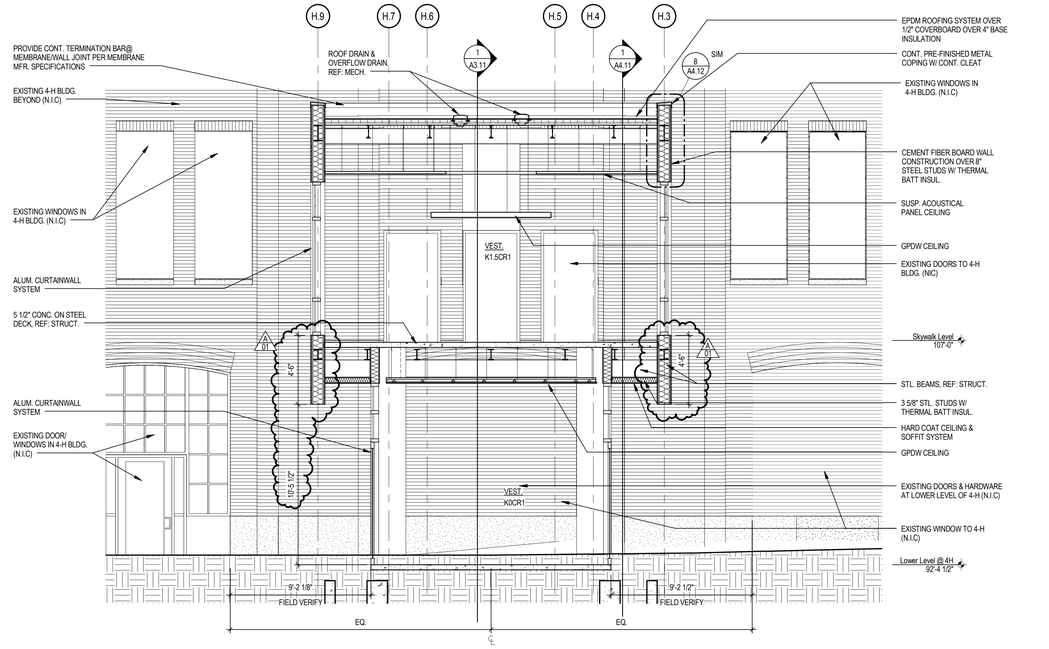

3 CROSS SECTION @ SKYWALK VESTIBULE

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

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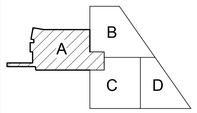

Key Plan

Life Science Collaboration

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Lincoln, Nebraska

TCEP No.: 716-002-12
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BVH No.: L12018.unl

November 27, 2013

Skywalk Cross Sections

A3.11

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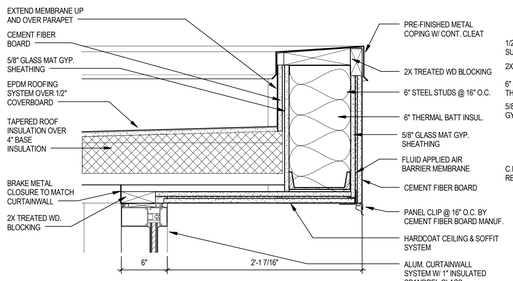
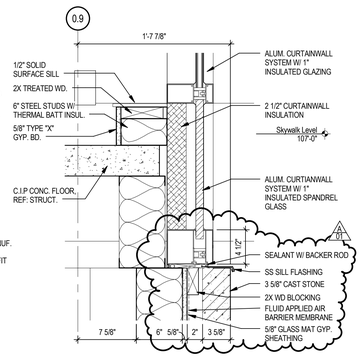
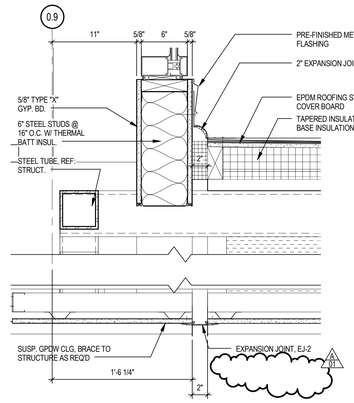
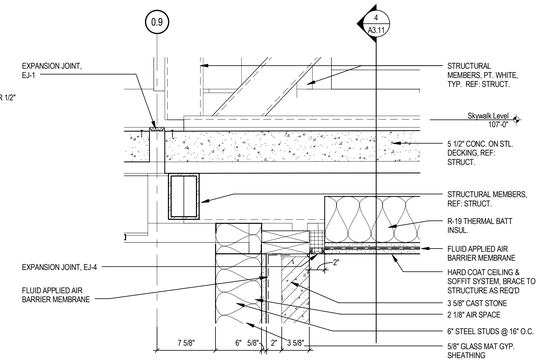
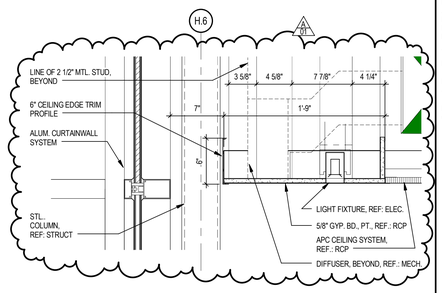










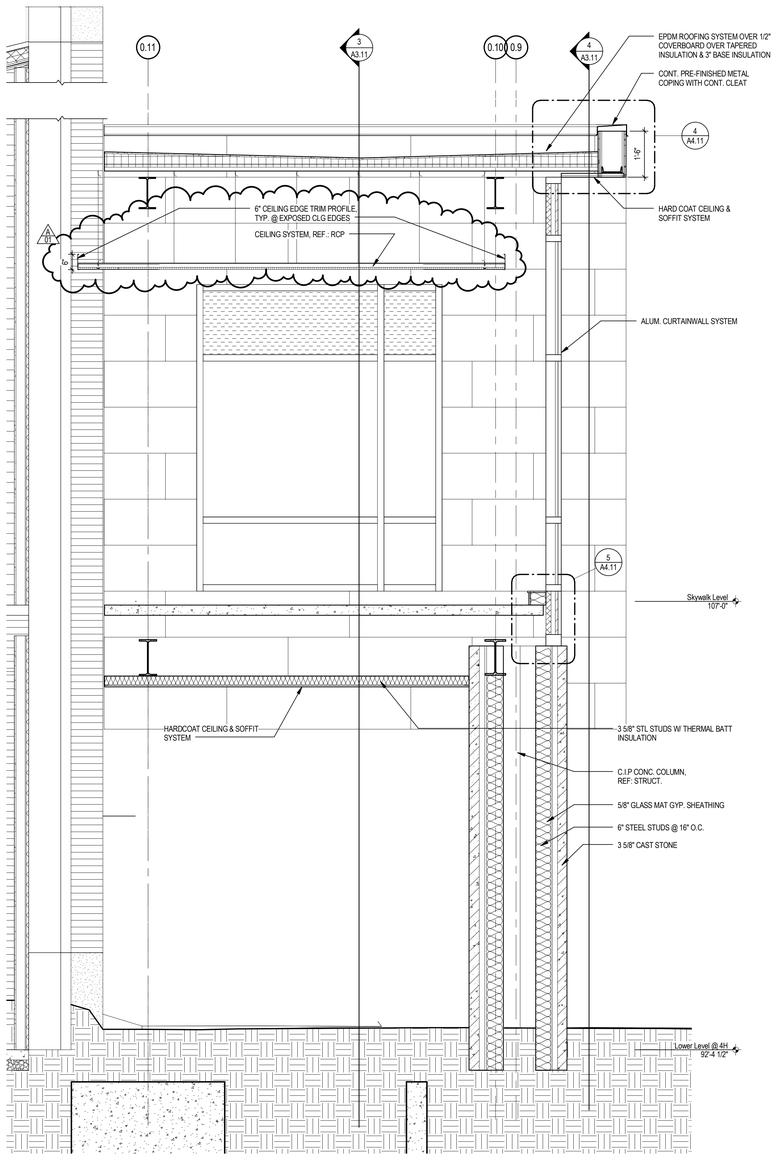
4 PARAPET DETAIL @ SKYWALK VESTIBULE
SCALE: 1 1/2" = 1'-0"

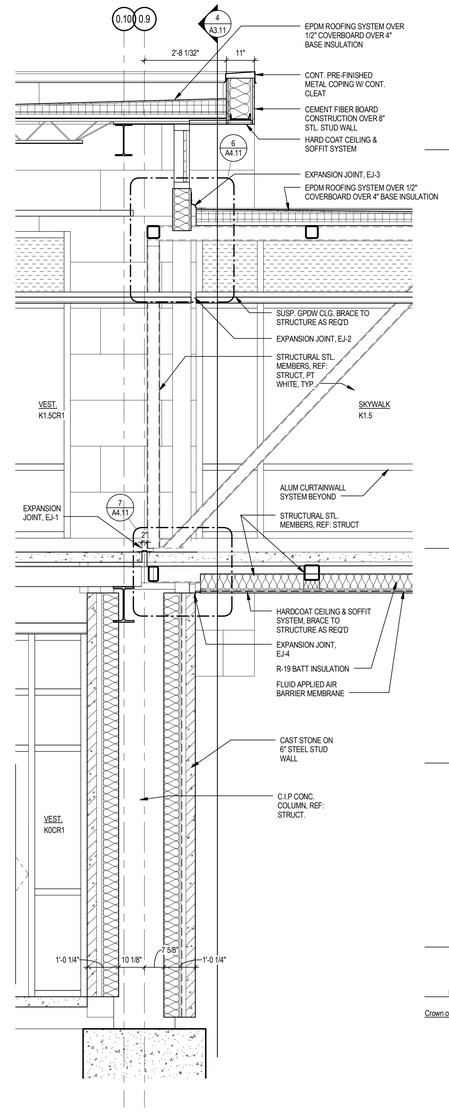
5 SKYWALK CURTAINWALL DETAIL
SCALE: 1 1/2" = 1'-0"

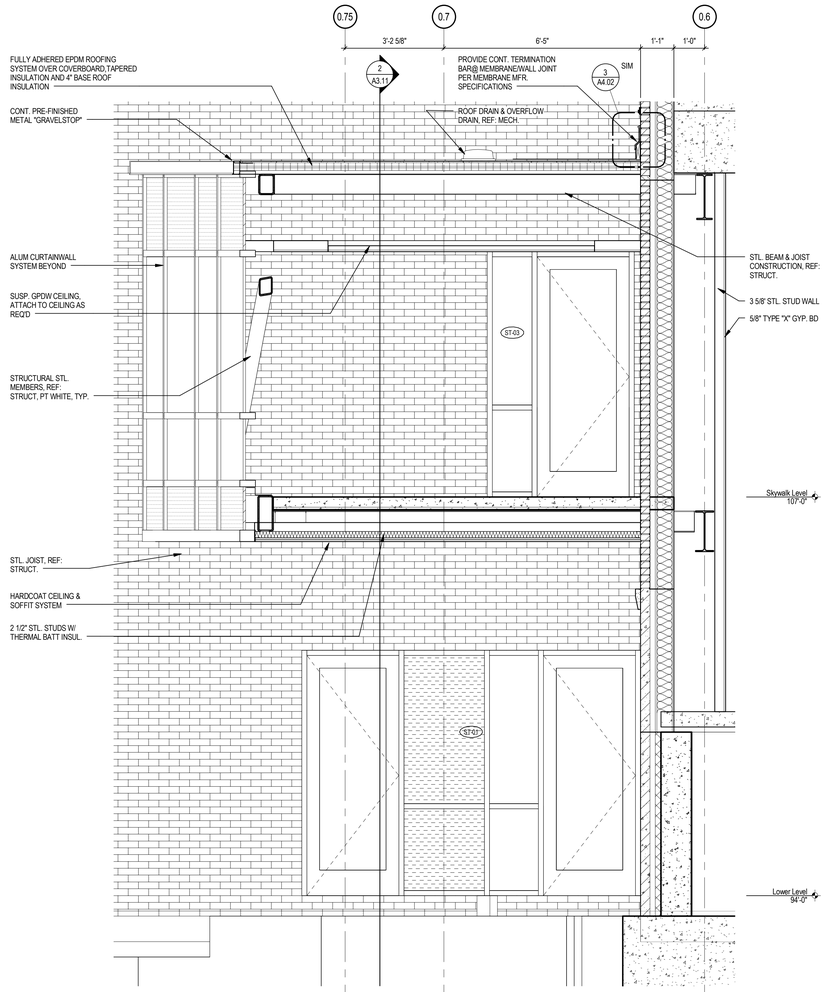
6 DETAIL @ SKYWALK-VESTIBULE CONNECTION
SCALE: 1 1/2" = 1'-0"

7 DETAIL @ SKYWALK-VESTIBULE CONNECTION
SCALE: 1 1/2" = 1'-0"

8 SKYWALK LIGHTING DETAIL
SCALE: 1 1/2" = 1'-0"







1 WALL SECTION @ SKYWALK VESTIBULE
SCALE: 1/2" = 1'-0"

2 WALL SECTION @ SKYWALK-VESTIBULE CONNECTION
SCALE: 1/2" = 1'-0"

3 SKYWALK SECTION
SCALE: 1/2" = 1'-0"

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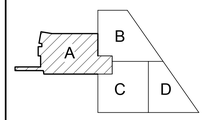

Key Plan

Life Science Collaboration

1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design No.: 12-0077
BVH No.: L12018.unl

November 27, 2013

Skywalk Wall Sections

A4.11

Plot Time Stamp: 12/11/2013 11:44:47 AM
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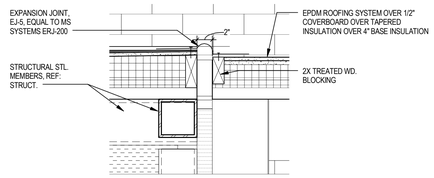
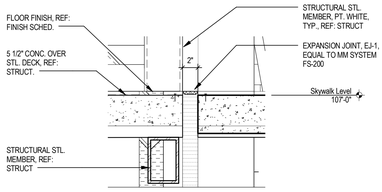


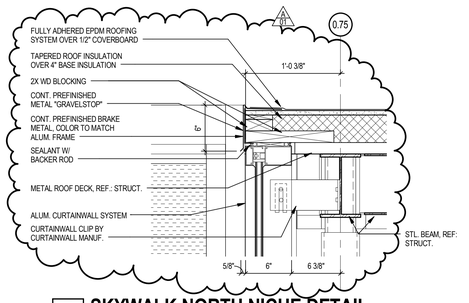
1 SKYWALK EXPANSION JOINT DETAIL

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



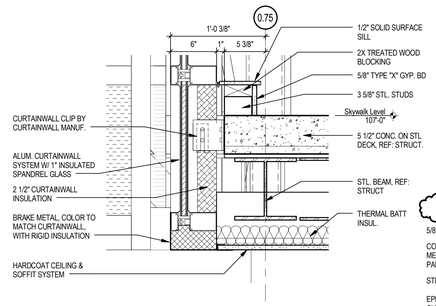
2 SKYWALK EXPANSION JOINT DETAIL

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



3 SKYWALK NORTH NICHE DETAIL

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



4 SKYWALK NORTH NICHE DETAIL

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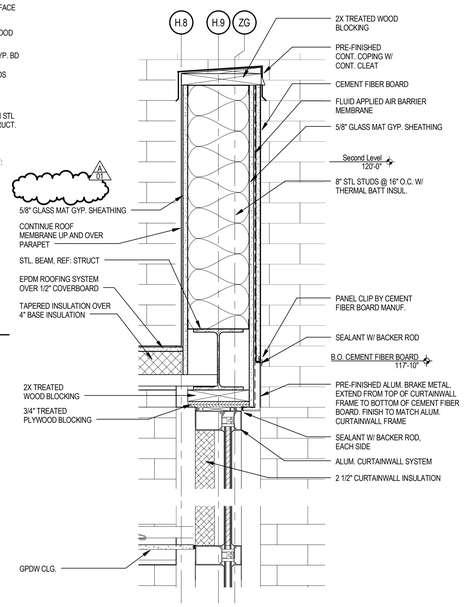
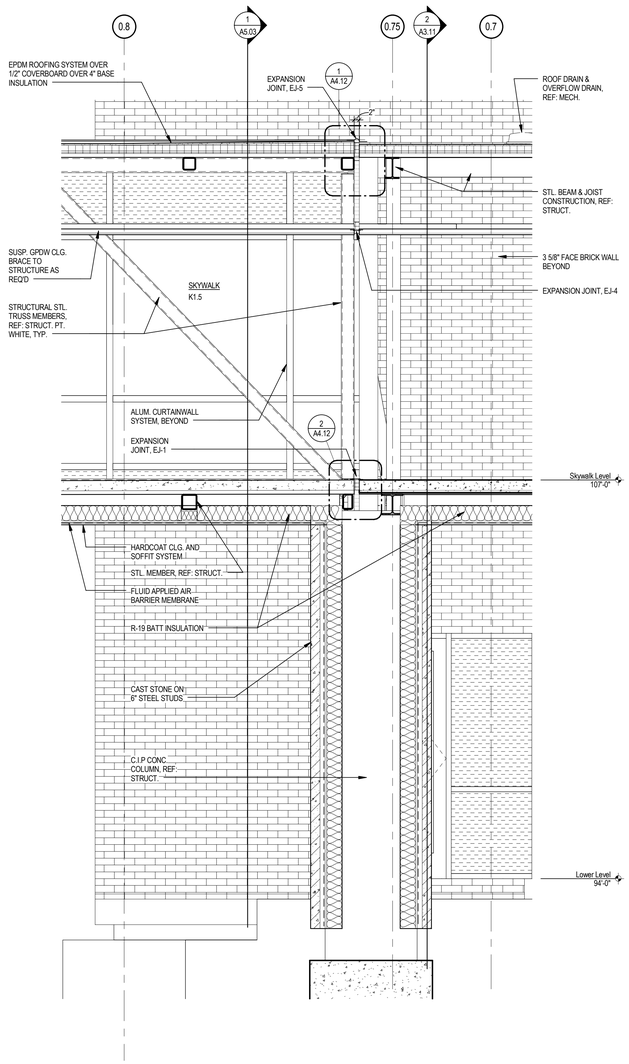


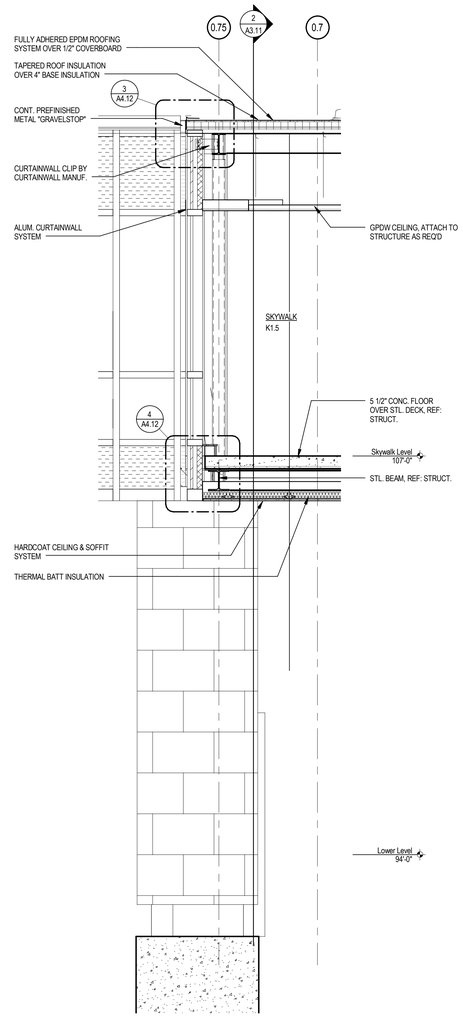
8 SKYWALK SOUTH NICHE DETAIL

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



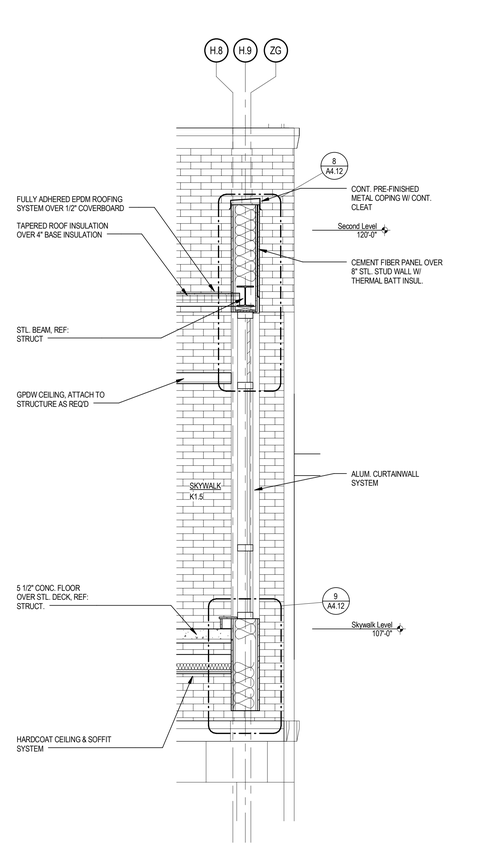
5 WALL SECTION

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



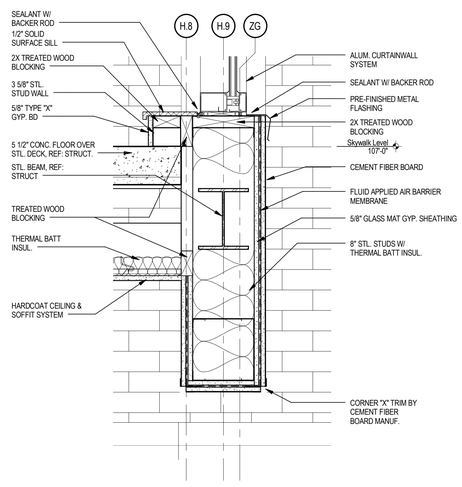
6 WALL SECTION

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



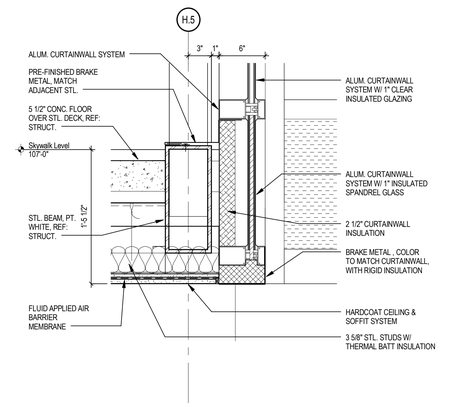
7 WALL SECTION

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



9 SKYWALK SOUTH NICHE DETAIL

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



10 SKYWALK SILL DETAIL

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

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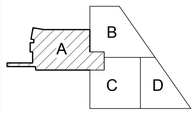

Key Plan

Life Science Collaboration

1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design No.: 12-0077
BVH No.: L12018.unl

November 27, 2013

Skywalk Wall Sections

A4.12

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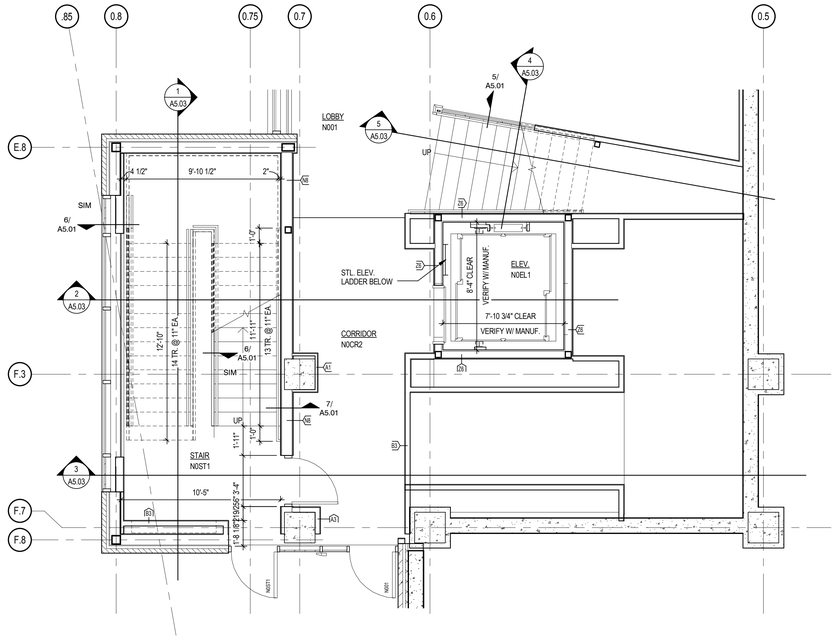
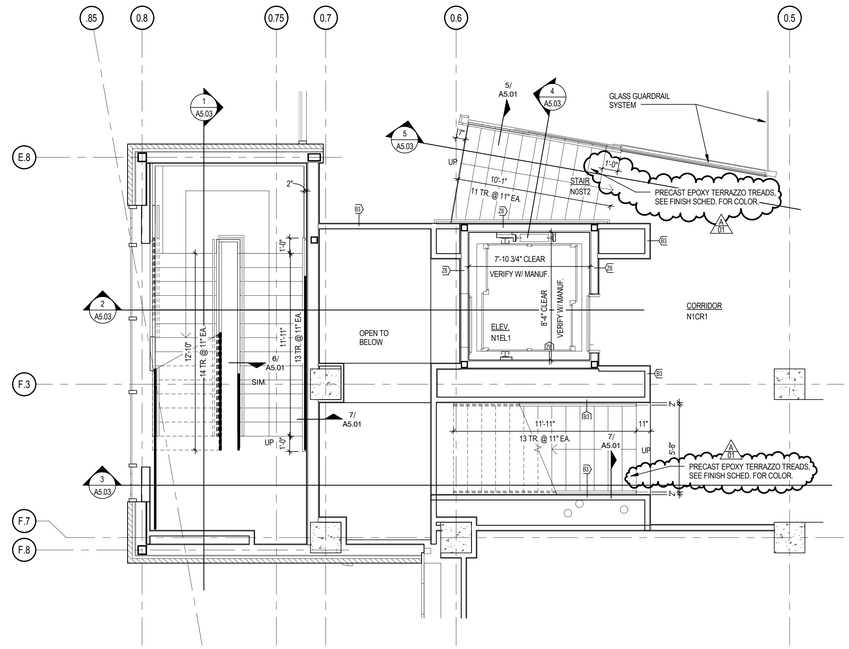


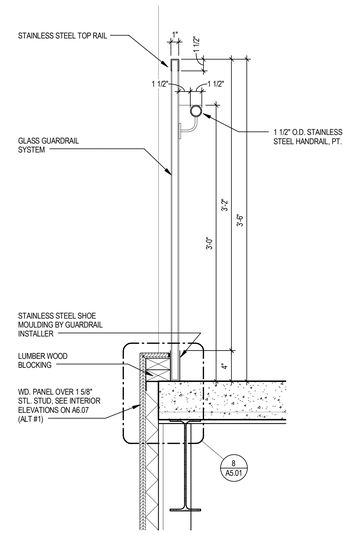
1 ENLARGED NORTH STAIR PLAN - LOWER LEVEL

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



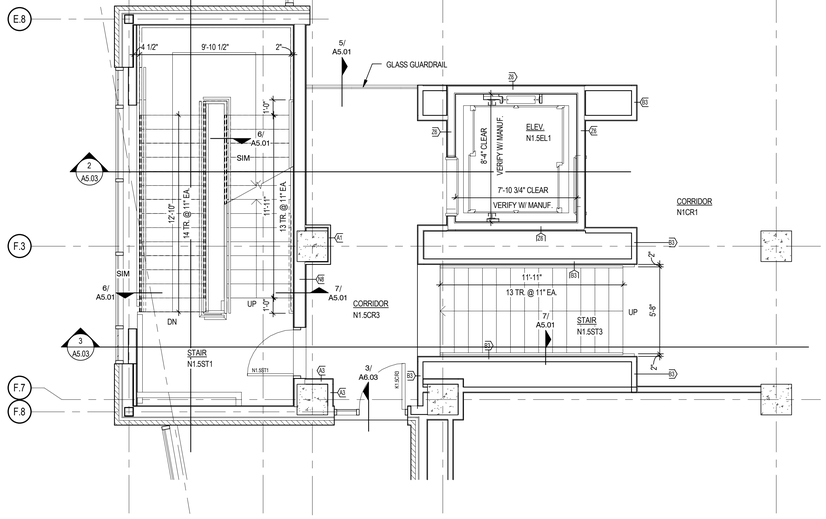
2 ENLARGED NORTH STAIR PLAN - FIRST LEVEL

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



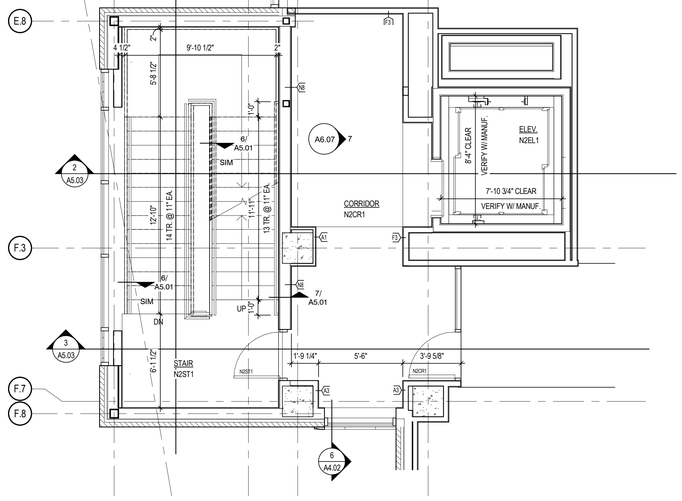
5 TYP. GLASS GUARDRAIL DETAIL

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



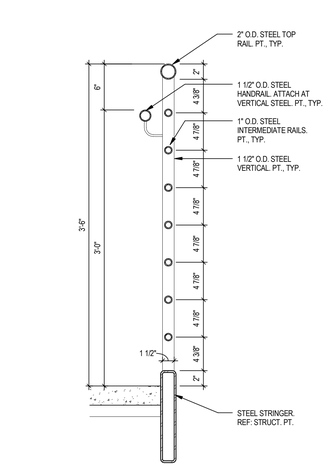
3 ENLARGED NORTH STAIR PLAN - SKYWALK LEVEL

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



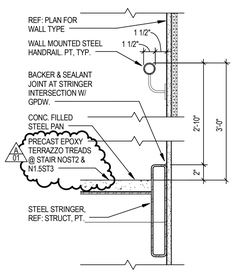
4 ENLARGED NORTH STAIR PLAN - SECOND LEVEL

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



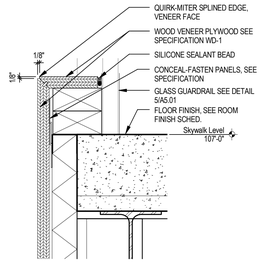
6 TYP. GUARDRAIL DETAIL

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



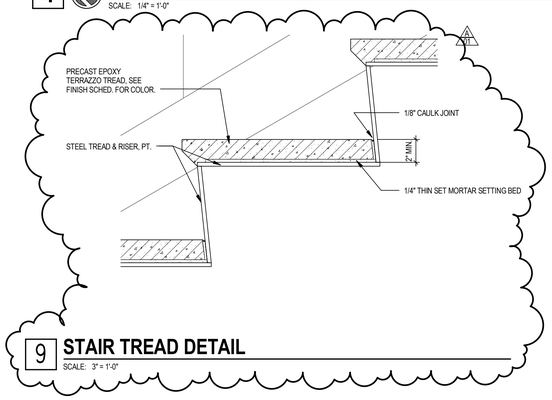
7 TYP. HANDRAIL DETAIL

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



8 WOOD PANEL TOP TERMINATION DETAIL

SCALE: 3" = 1'-0"



9 STAIR TREAD DETAIL

SCALE: 3" = 1'-0"

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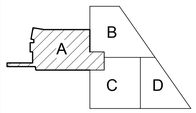

Key Plan

Life Science Collaboration

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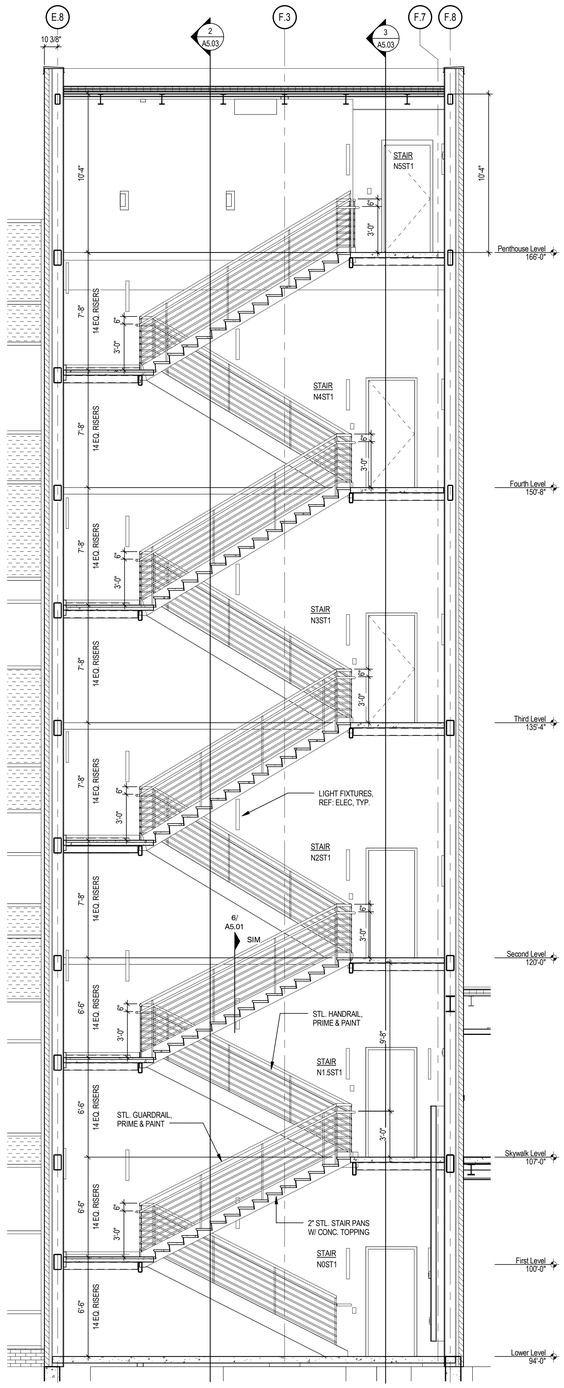
November 27, 2013

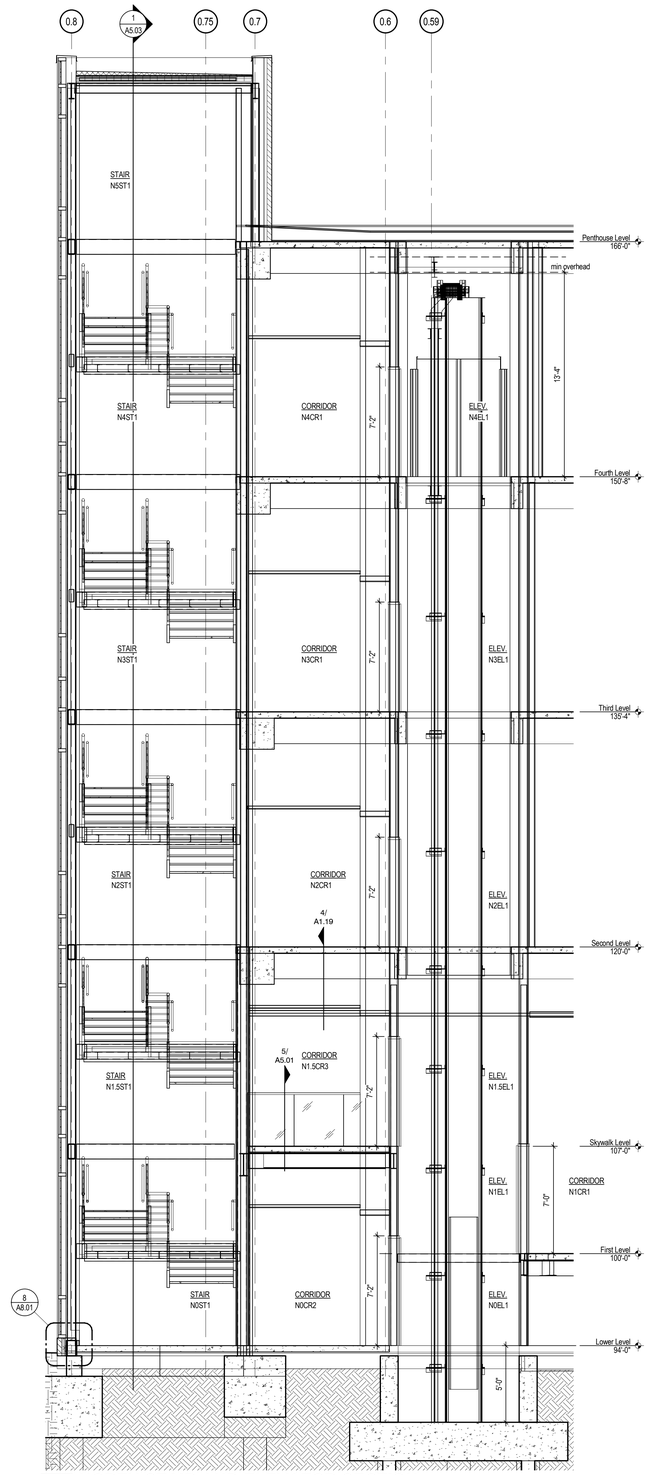
Enlarged North Stair Floor Plans

A5.01



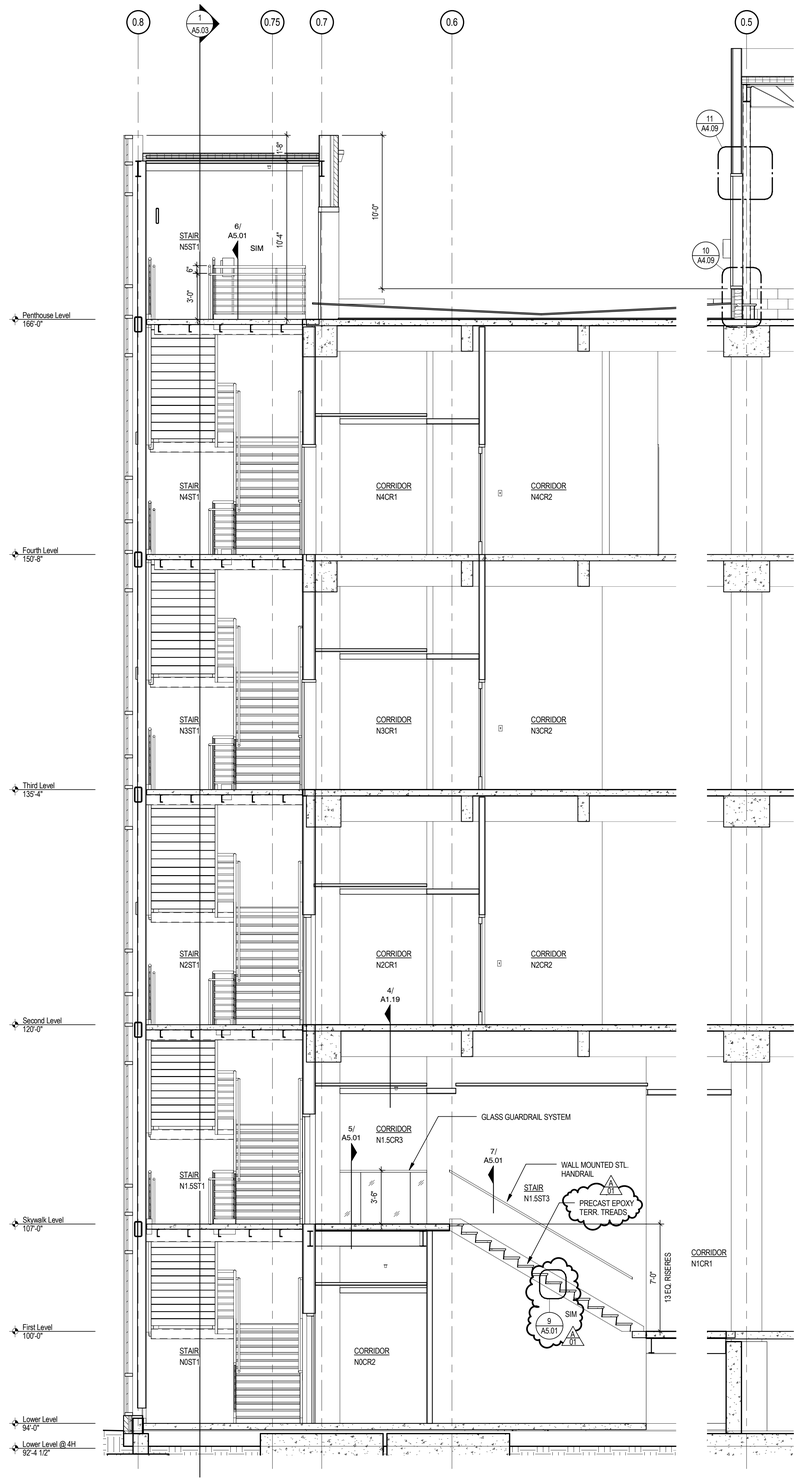
1 NORTH STAIR SECTION

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



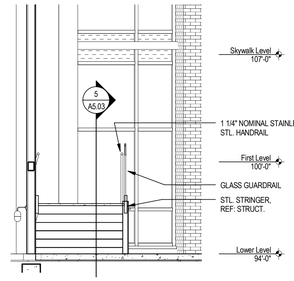
2 NORTH STAIR AND ELEVATOR SECTION

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



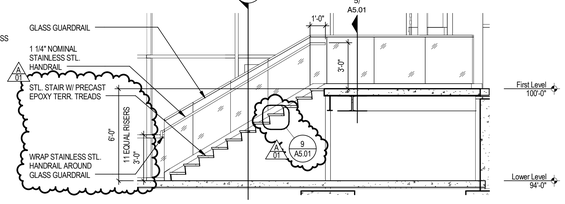
3 NORTH STAIR SECTION

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



4 LOBBY STAIR SECTION

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



5 LOBBY STAIR SECTION

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

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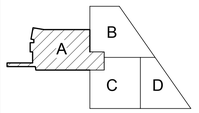
SHEET HISTORY:

ISSUED	11/27/2013	AS PER CONSTRUCTION DOCUMENTS
A - 01	12/11/2013	ADDENDUM #1



Key Plan

Life Science Collaboration

1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design No.: 12-0077
BVH No.: L12018.unl

November 27, 2013

North Stair Sections

A5.03

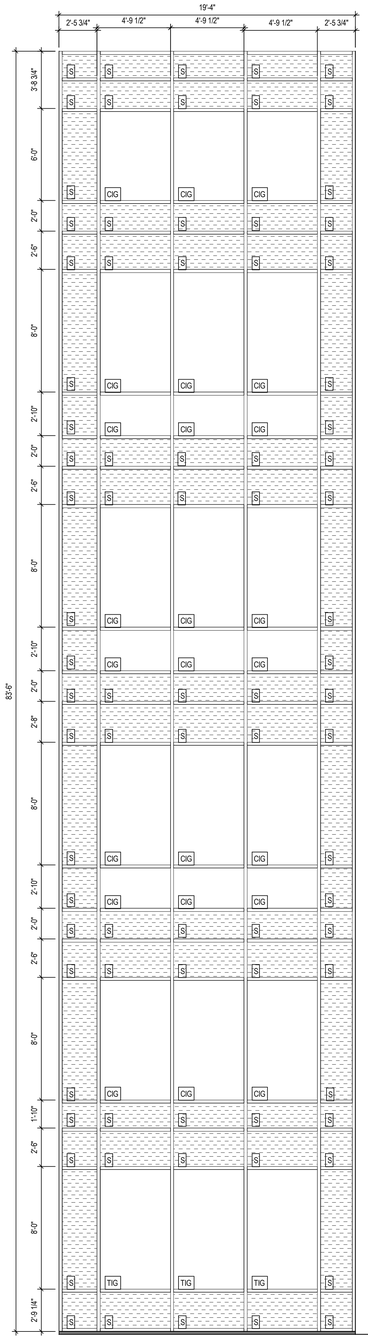
Plot Time Stamp: 12/11/2013 11:47:39 AM
File Location/Name: C:\(1) Revit Projects\2012\716002-15-Arch_ohaden.rvt

GLAZING TYPE LEGEND

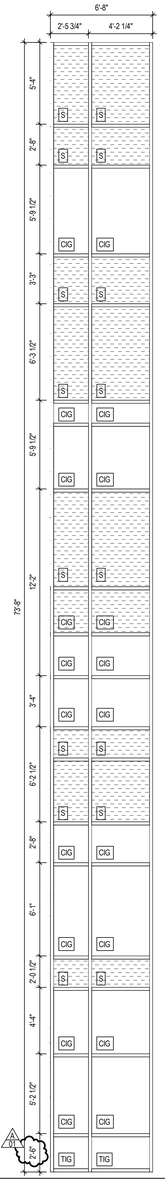
- S — SPANDREL GLAZING
- G — CLEAR GLASS
- T — SINGLE PANE TEMPERED GLAZING
- CIG — CLEAR INSULATED GLASS / LOW-E COATING
- TIG — TEMPERED INSULATED GLASS

NOTE: PROVIDE GLAZING TYPE AS INDICATED, REF.: SPECS.

GENERAL NOTE:
PROVIDE PREFINISHED BRAKE METAL , COLOR TO MATCH CURTAINWALL FRAME, @ INTERIOR SIDE OF EXPOSED SPANDREL CURTAINWALL PANEL @ CW-01, CW-02, CW-03, & CW-04.



CW-01



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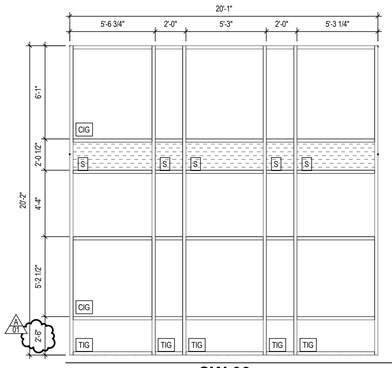
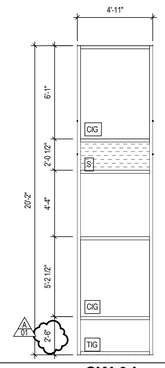
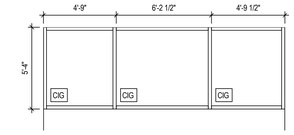


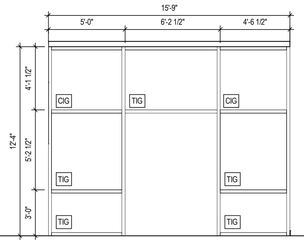
CW-03



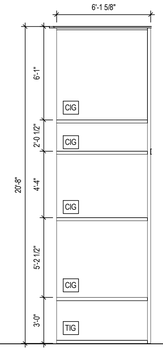
CW-04



CW-05



CW-06



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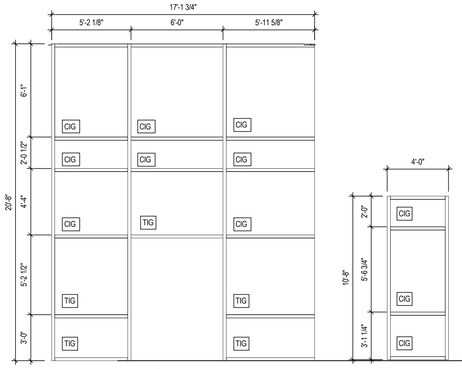
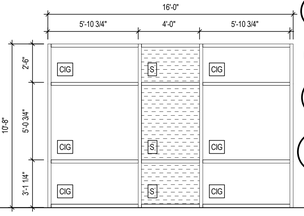
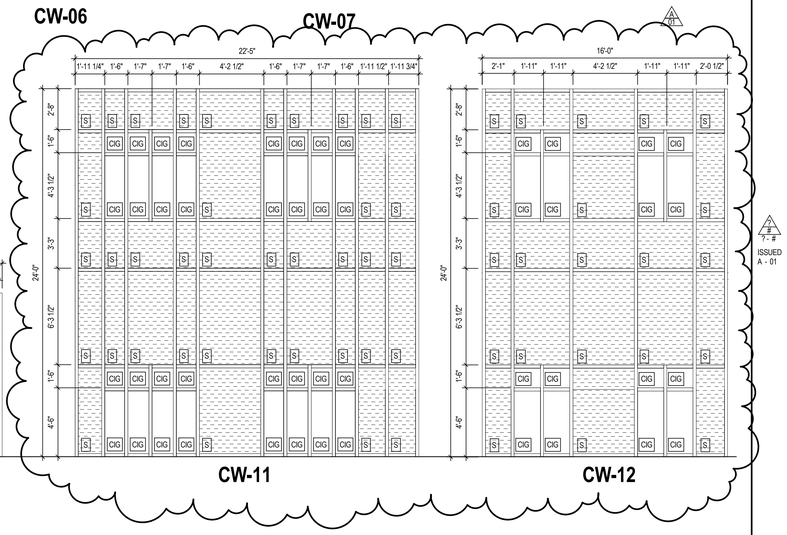


CW-08

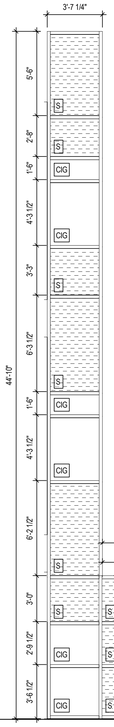
CW-09

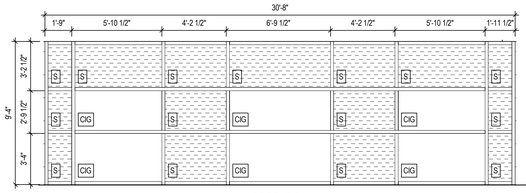


CW-10

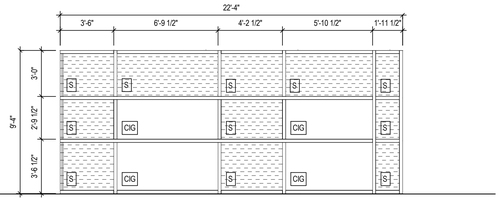


CW-11 CW-12





CW-13



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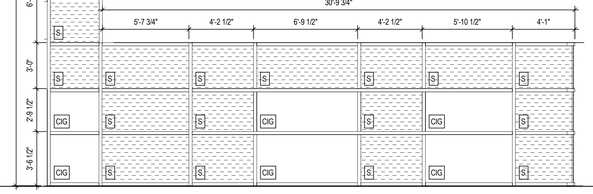
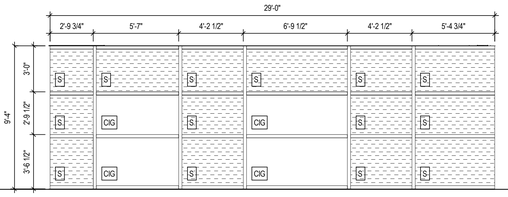


CW-15



CW-16

EXTERIOR CURTAINWALL FRAME TYPES

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

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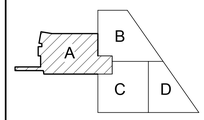

Key Plan

Life Science Collaboration

1910 N Antelope Valley Parkway
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TCEP No.: 716-002-12
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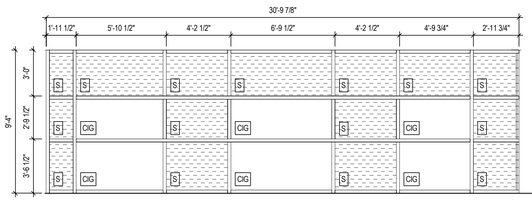
BVH No.: L12018.unl

November 27, 2013

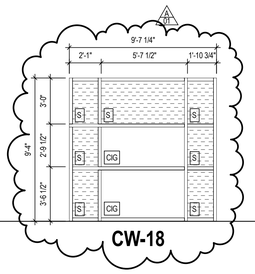
ARCHITECT
GREGORY D. NEWPORT
A-2151
11-27-13
STATE OF NEBRASKA

Exterior Frame Types - Area A

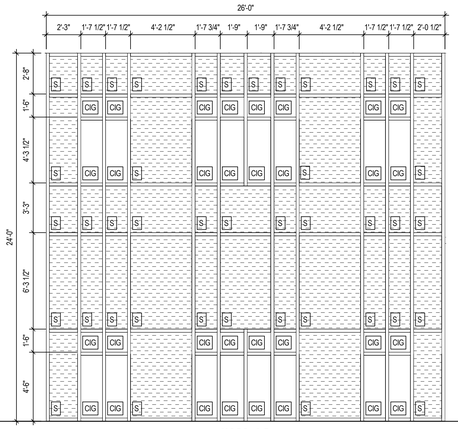
A6.02



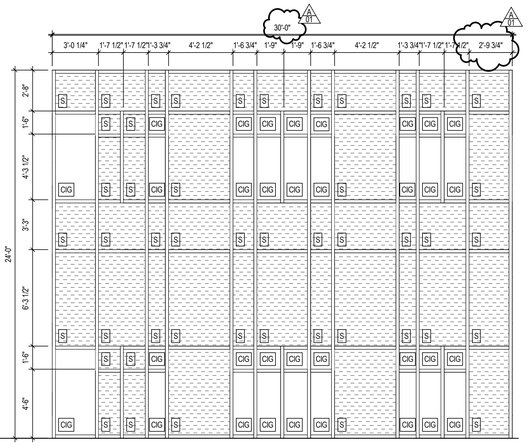
CW-17



CW-18



CW-19

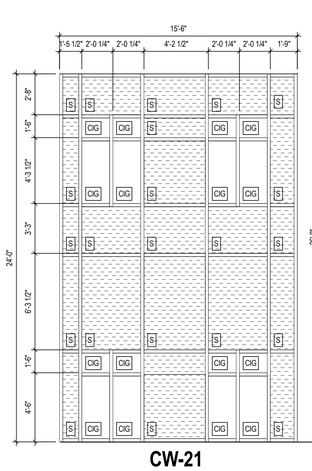


CW-20

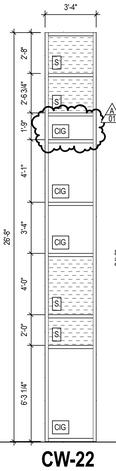
GLAZING TYPE LEGEND

S	SPANDREL GLAZING
G	CLEAR GLASS
T	SINGLE PANE TEMPERED GLAZING
CIG	CLEAR INSULATED GLASS / LOW-E COATING
TIG	TEMPERED INSULATED GLASS

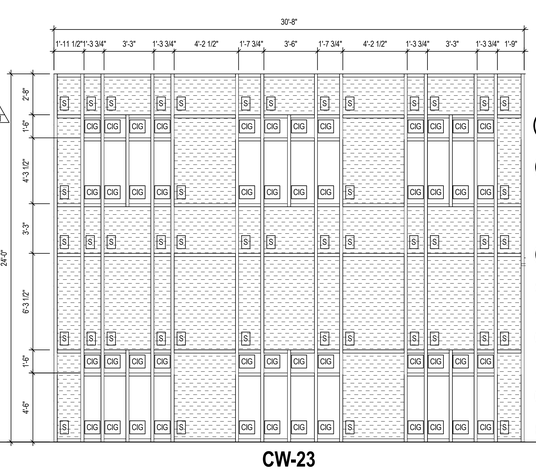
NOTE: PROVIDE GLAZING TYPE AS INDICATED, REF.: SPECS.



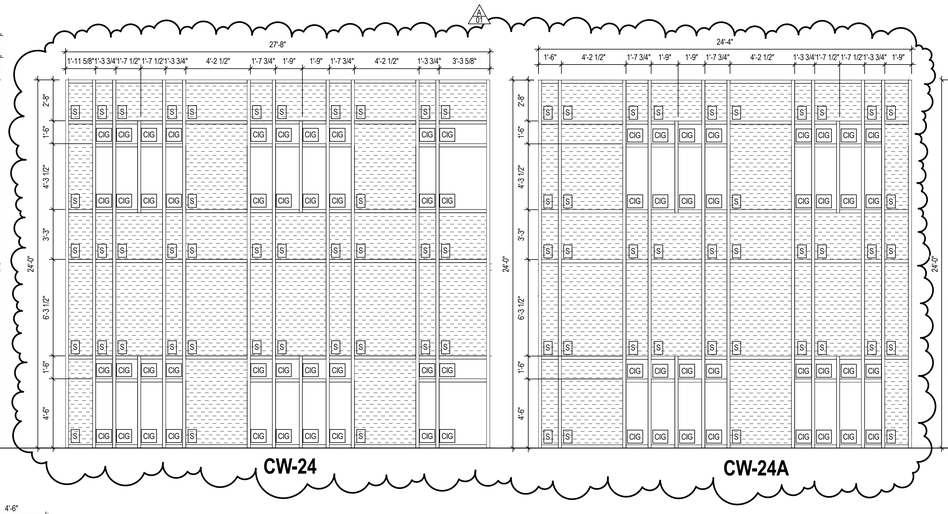
CW-21



CW-22

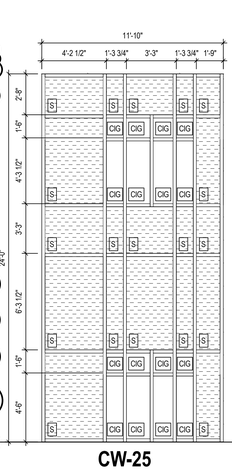


CW-23

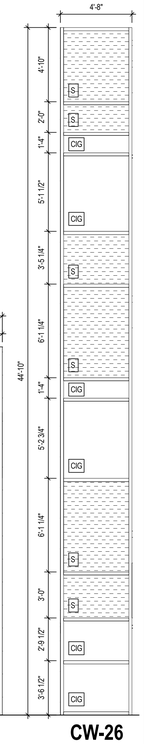


CW-24

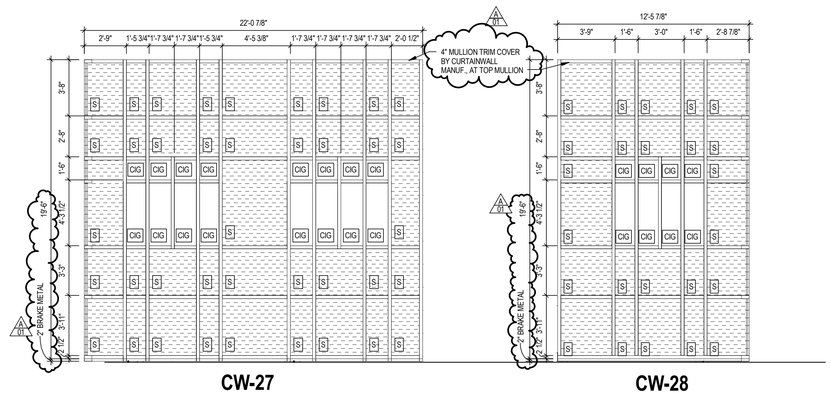
CW-24A



CW-25



CW-26

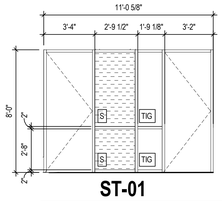


CW-27

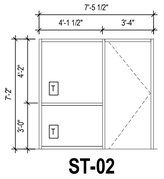
CW-28

EXTERIOR CURTAINWALL FRAME TYPES

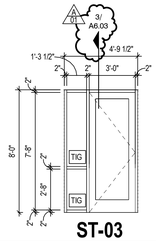
SCALE: 1/4" = 1'-0"



ST-01



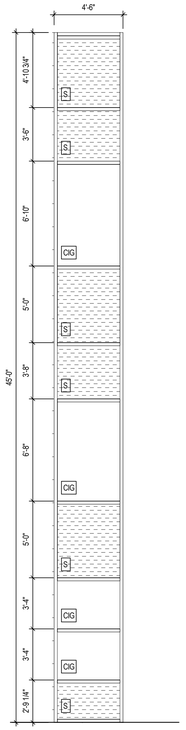
ST-02



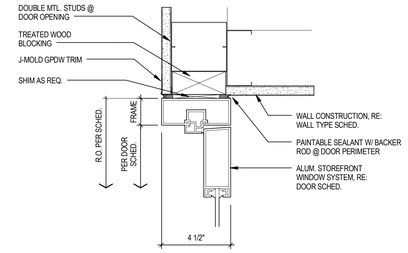
ST-03

STOREFRONT FRAME TYPES

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

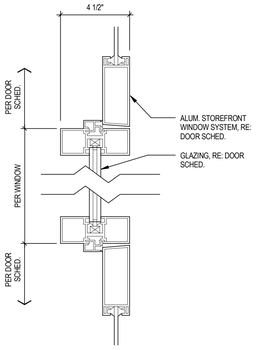


CW-29



1 ALUM. DOOR JAMB DETAIL

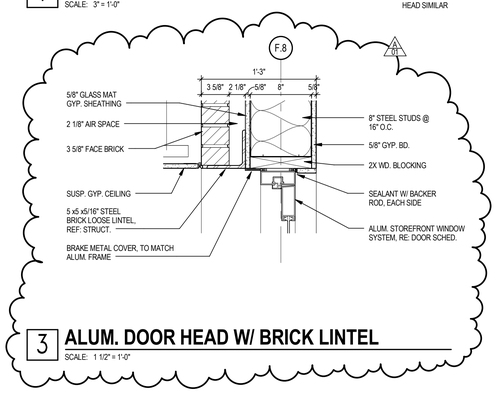
SCALE: 3" = 1'-0"



2 ALUM. WINDOW SIDELIGHT

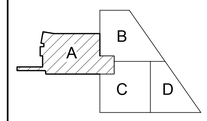
SCALE: 3" = 1'-0"

HEAD SIMILAR



3 ALUM. DOOR HEAD W/ BRICK LINTEL

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



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November 27, 2013

Exterior Frame Types - Area A

A6.03

Plot Time Stamp: 12/11/2013 11:48:30 AM
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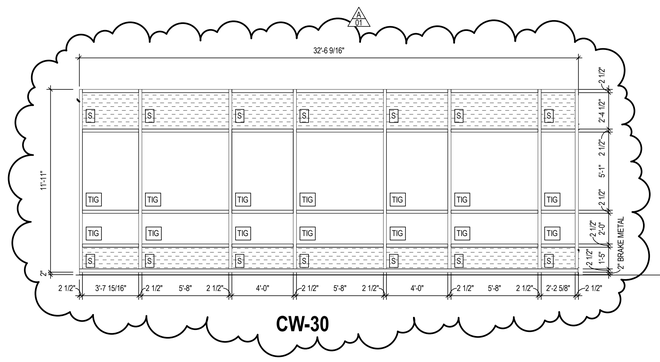
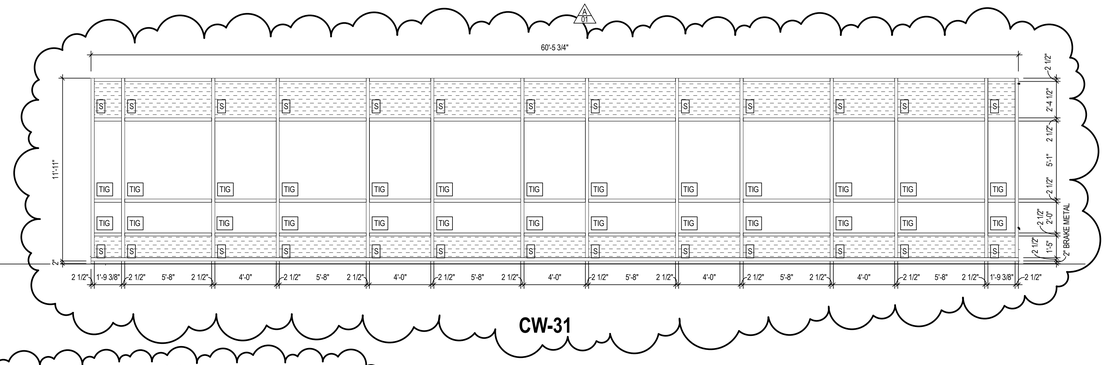


CW-30



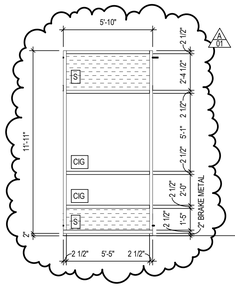
CW-31

GLAZING TYPE LEGEND

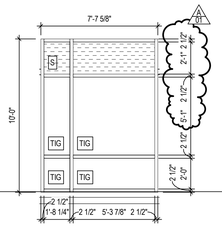
	S	SPANDREL GLAZING
	G	CLEAR GLASS
	T	SINGLE PANE TEMPERED GLAZING
	CIG	CLEAR INSULATED GLASS / LOW-E COATING
	TIG	TEMPERED INSULATED GLASS

NOTE: PROVIDE GLAZING TYPE AS INDICATED, REF.: SPECS.

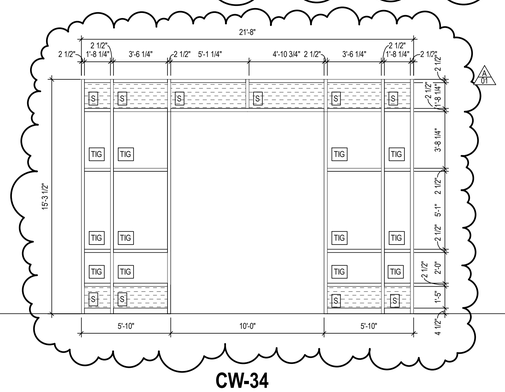
NOTE: TEMPERED INSULATED GLASS ON THE SKYWALK AT CW-30 & 31 SHALL BE FRITTED GLASS. SEE SPEC. FOR FRIT PATTERN



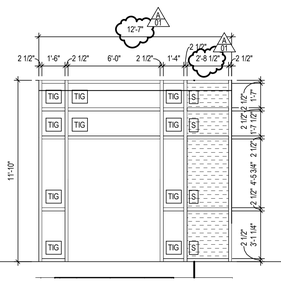
CW-32



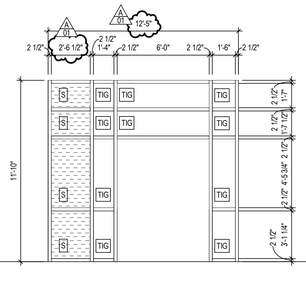
CW-33



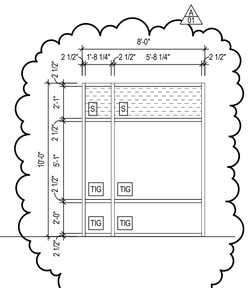
CW-34



CW-35



CW-36



CW-37

SKYWALK FRAME TYPES

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

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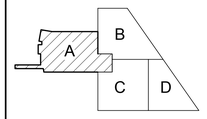

Key Plan

Life Science Collaboration

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November 27, 2013

Exterior Skywalk Frame Types - Area A

A6.04

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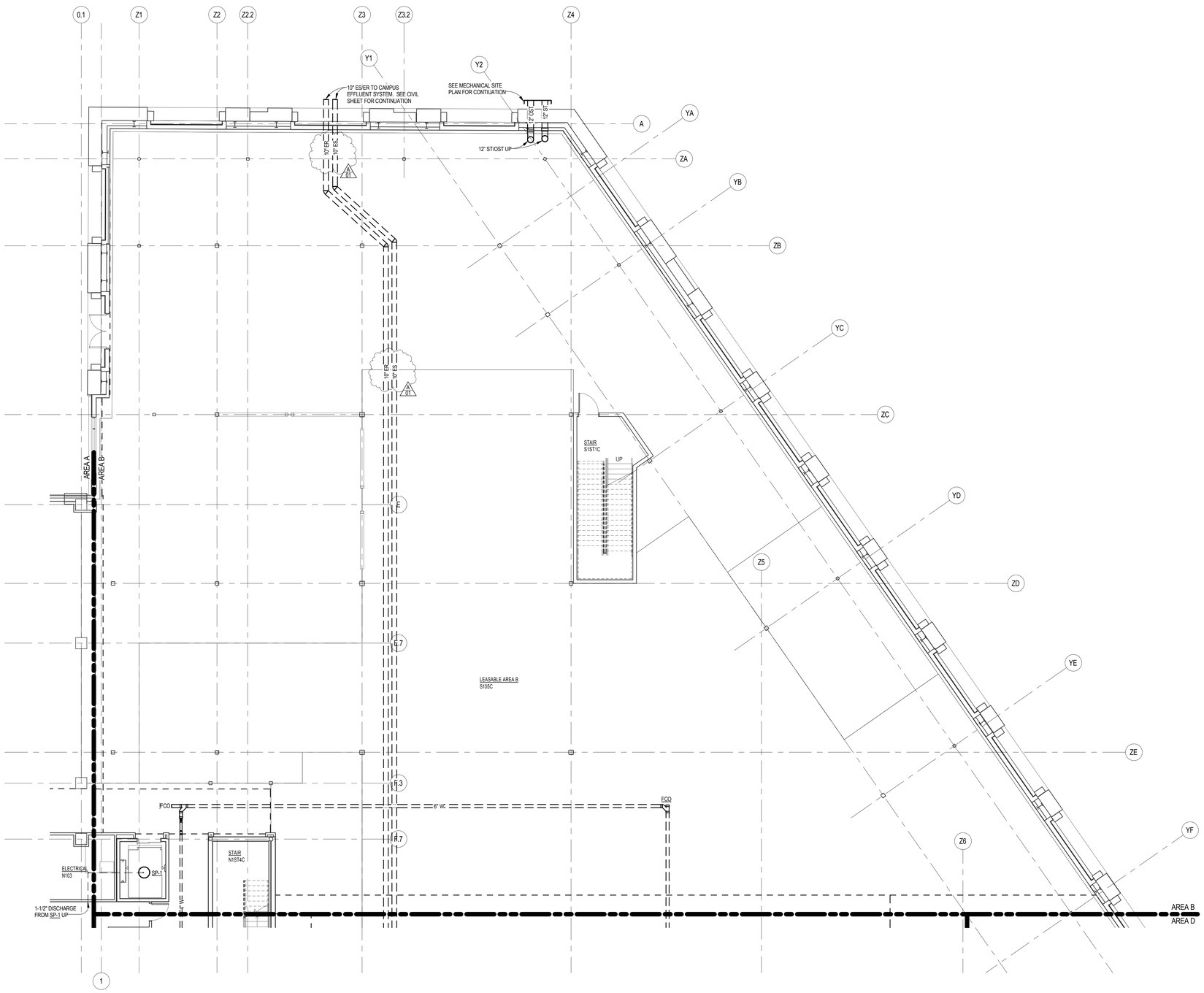

BELOW FLOOR PLUMBING PLAN - AREA B

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

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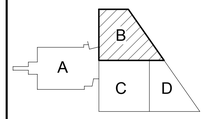

Key Plan

Life Science Collaboration

1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design No.: 12-0077
BVH No.: L12018.unl

November 27, 2013

Below Floor Plumbing Plan - Area B

P1.02

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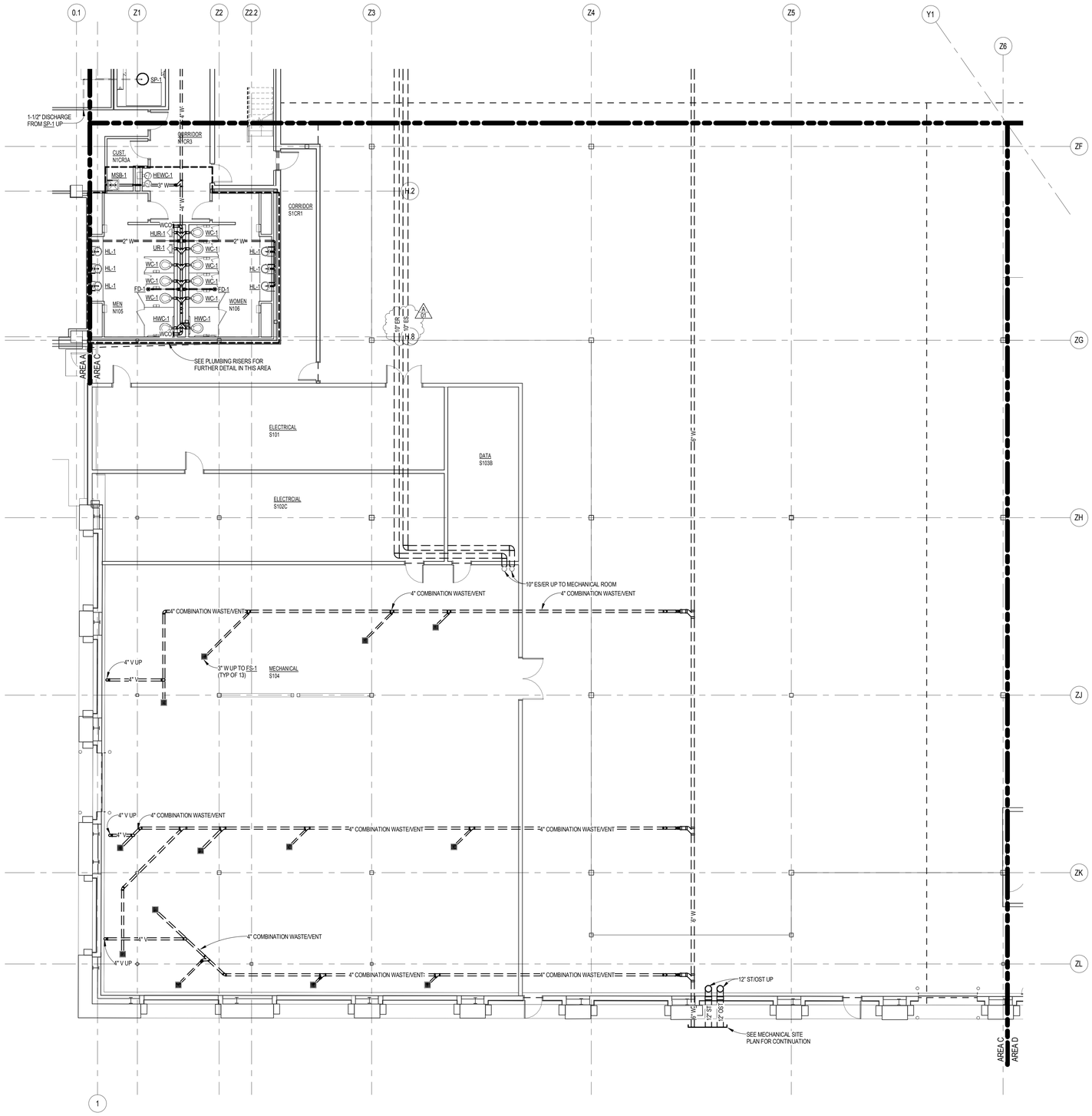

BELOW FLOOR PLUMBING PLAN - AREA C

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

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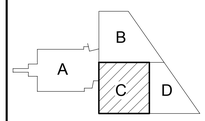

Key Plan

Life Science Collaboration

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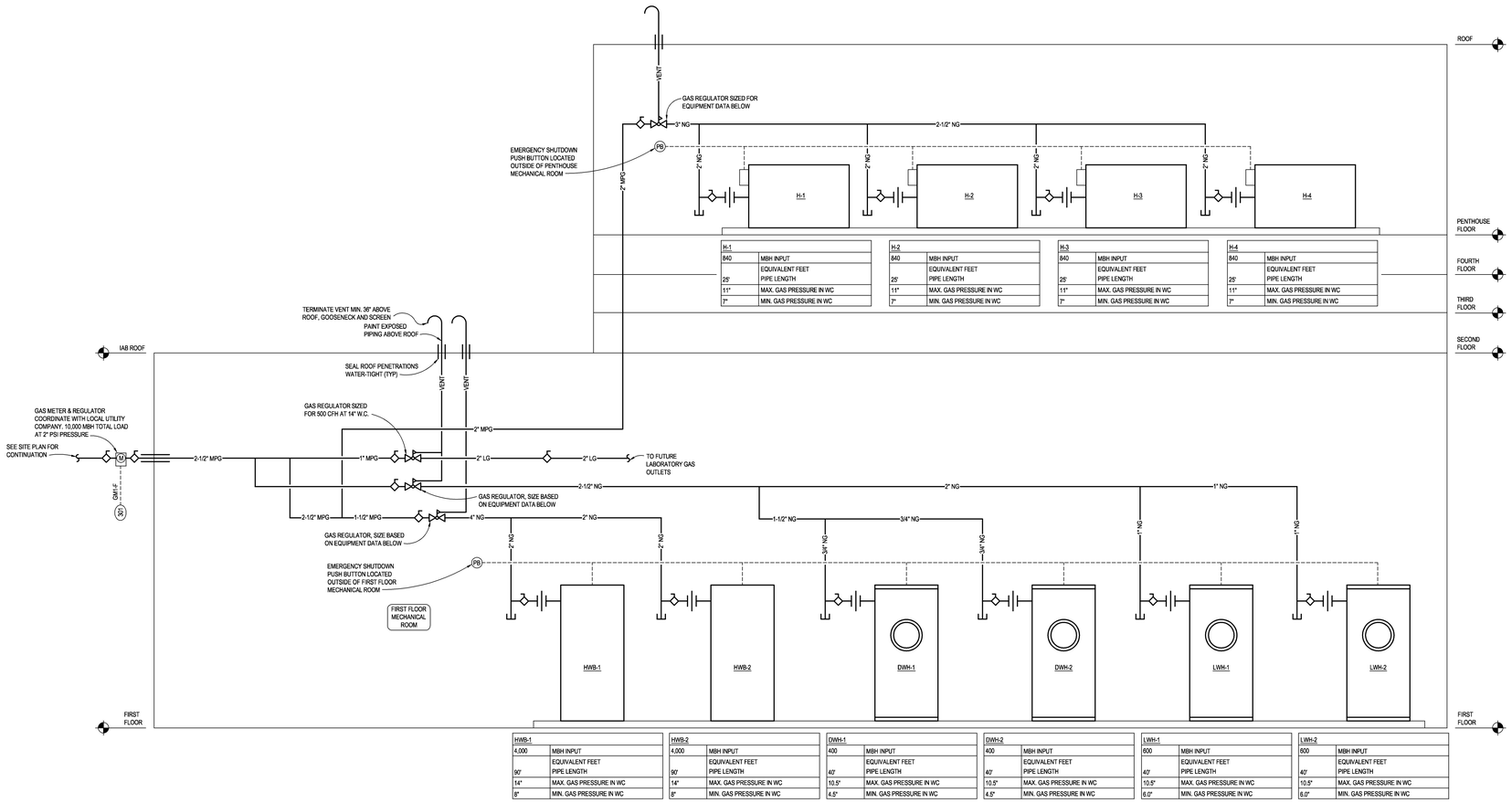
November 27, 2013

Below Floor Plumbing Plan - Area C

P1.03



H-1	
840	MBH INPUT
25'	EQUIVALENT FEET PIPE LENGTH
11"	MAX. GAS PRESSURE IN WC
7"	MIN. GAS PRESSURE IN WC

H-2	
840	MBH INPUT
25'	EQUIVALENT FEET PIPE LENGTH
11"	MAX. GAS PRESSURE IN WC
7"	MIN. GAS PRESSURE IN WC

H-3	
840	MBH INPUT
25'	EQUIVALENT FEET PIPE LENGTH
11"	MAX. GAS PRESSURE IN WC
7"	MIN. GAS PRESSURE IN WC

H-4	
840	MBH INPUT
25'	EQUIVALENT FEET PIPE LENGTH
11"	MAX. GAS PRESSURE IN WC
7"	MIN. GAS PRESSURE IN WC

HWB-1	
4,000	MBH INPUT
90'	EQUIVALENT FEET PIPE LENGTH
14"	MAX. GAS PRESSURE IN WC
8"	MIN. GAS PRESSURE IN WC

HWB-2	
4,000	MBH INPUT
90'	EQUIVALENT FEET PIPE LENGTH
14"	MAX. GAS PRESSURE IN WC
8"	MIN. GAS PRESSURE IN WC

DWH-1	
400	MBH INPUT
40'	EQUIVALENT FEET PIPE LENGTH
10.5"	MAX. GAS PRESSURE IN WC
4.5"	MIN. GAS PRESSURE IN WC

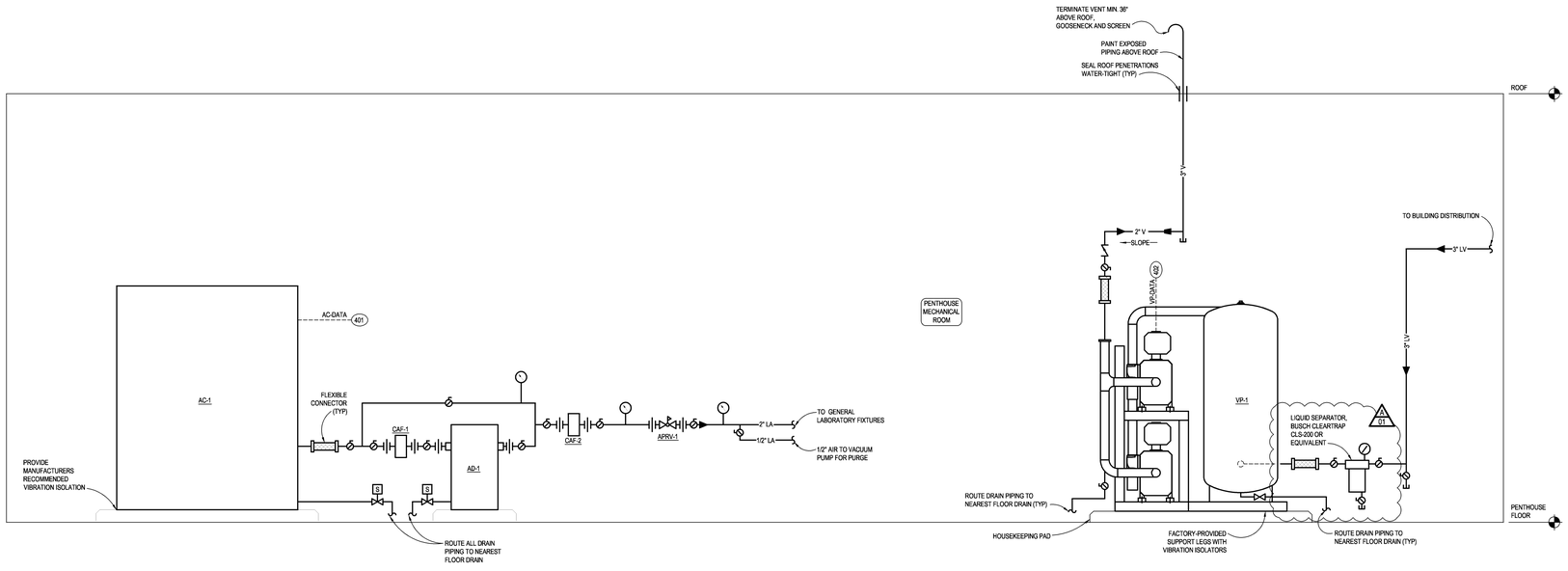
DWH-2	
400	MBH INPUT
40'	EQUIVALENT FEET PIPE LENGTH
10.5"	MAX. GAS PRESSURE IN WC
4.5"	MIN. GAS PRESSURE IN WC

LWH-1	
500	MBH INPUT
40'	EQUIVALENT FEET PIPE LENGTH
10.5"	MAX. GAS PRESSURE IN WC
6.0"	MIN. GAS PRESSURE IN WC

LWH-2	
500	MBH INPUT
40'	EQUIVALENT FEET PIPE LENGTH
10.5"	MAX. GAS PRESSURE IN WC
6.0"	MIN. GAS PRESSURE IN WC

3 NATURAL GAS PIPING SCHEMATIC AND CONTROLS

NO SCALE



4 LABORATORY COMPRESSED AIR AND VACUUM PIPING SCHEMATIC

NO SCALE

AIR COMPRESSOR / VACUUM SYSTEM DDC POINTS LIST

TAG #	TYPE	POINT NAME	DESCRIPTION	DEVICE
401	AI	AC-DATA	AIR COMPRESSOR DATA CONNECTION	AIR COMPRESSOR CONTROL PANEL
402	AI	VP-DATA	VACUUM PUMP DATA CONNECTION	VACUUM PUMP CONTROL PANEL

NATURAL GAS SYSTEM DDC POINTS LIST

PANEL LOCATION: FIRST FLOOR MECHANICAL ROOM

TAG#	TYPE	POINT NAME	DESCRIPTION	DEVICE
301	AI	GM1-F	GAS METER	GAS METER (PROVIDED BY CITY)

NATURAL GAS SEQUENCE OF OPERATIONS

3.1 GAS METER

3.1.1 THE CONTROLLER SHALL MONITOR THE GAS METER FOR GAS CONSUMPTION ON A CONTINUAL BASIS. THESE VALUES SHALL BE MADE AVAILABLE TO THE SYSTEM AT ALL TIMES.

3.1.2 ALARMS SHALL BE PROVIDED AS FOLLOWS:

3.1.2.1 METER FAILURE: SENSOR READING INDICATES A LOSS OF PULSE OUTPUT FROM THE GAS METER.

3.1.3 PEAK DEMAND HISTORY: THE CONTROLLER SHALL MONITOR AND RECORD THE PEAK (HIGH AND LOW) DEMAND READINGS FROM THE GAS METER. PEAK READINGS SHALL BE RECORDED ON A DAILY, MONTHLY-TO-DATE, AND YEAR-TO-DATE BASIS.

3.1.4 USAGE HISTORY: THE CONTROLLER SHALL MONITOR AND RECORD GAS METER READINGS SO AS TO PROVIDE A GAS CONSUMPTION HISTORY. USAGE READINGS SHALL BE RECORDED ON A DAILY, MONTHLY-TO-DATE, AND YEAR-TO-DATE BASIS.

3.1.5 PEAK DEMAND AND USAGE LOG: THE CONTROLLER SHALL LOG AT A MINIMUM THE PREVIOUS 12 MONTHS OF PEAK DEMAND AND USAGE DATA TO ALLOW FOR REVIEW OF MONTHLY DATA.

3.2 EMERGENCY SHUTDOWN

3.2.1 ALL NATURAL GAS EQUIPMENT SHALL BE HARDWIRED TO EMERGENCY PUSH BUTTON IN BOTH THE FIRST FLOOR MECHANICAL ROOM AND PENTHOUSE MECHANICAL ROOM.

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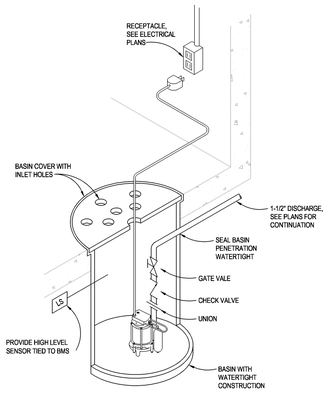
November 27, 2013

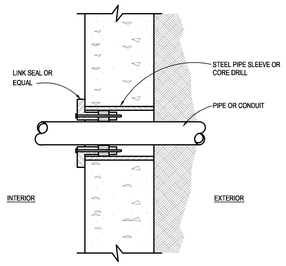
JAMES F. MAHONEY III — 6348 — REGISTERED PROFESSIONAL MECHANICAL ENGINEER — STATE OF NEBRASKA
11/27/13

Natural Gas and Specialty Gas Piping Schematics and Controls

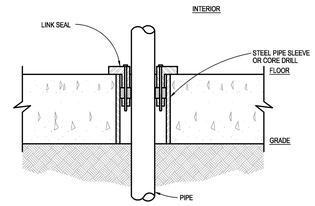
P2.03



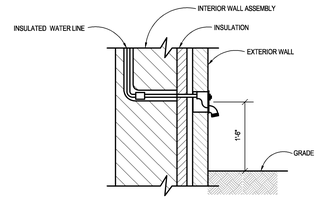
1 SUMP PUMP
NO SCALE



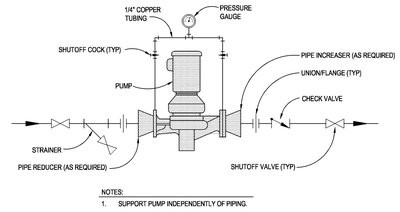
2 SLEEVE/SEAL THRU WALL BELOW GRADE
NO SCALE



3 SLEEVE/SEAL AT FLOOR
NO SCALE

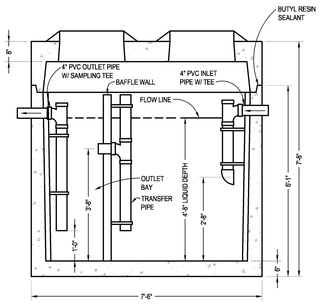


4 WALL HYDRANT
NO SCALE



NOTES:
1. SUPPORT PUMP INDEPENDENTLY OF PIPING.

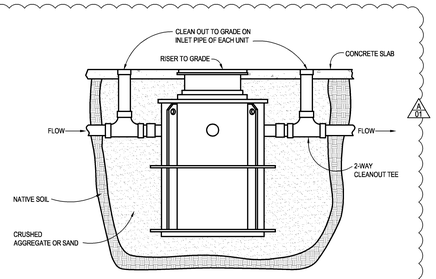
5 INLINE RECIRCULATING PUMP
NO SCALE



6 GREASE INTERCEPTOR
NO SCALE

NOTES:

1. UNIT SHALL BE DESIGNED IN ACCORDANCE WITH ASTM C 890 FOR AASHTO HS20-44 VEHICLE LOADING.
2. VENTILATE INTERCEPTOR TO OPEN ATMOSPHERE.
3. LEAK TEST PER IAPMO/ANSI Z1001-2007 SECTION 5.1.1.
4. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.



7 NEUTRALIZATION TANK
NO SCALE

NOTES:

1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
2. DO NOT PRESSURE TEST UNIT.

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BVH No.:L12018.unl

November 27, 2013

PROFESSIONAL MECHANICAL ENGINEER
JAMES F. MAHONEY III
E-14838
STATE OF NEBRASKA
11/27/13

Plumbing Details

P3.01

PLUMBING PUMP SCHEDULE

MARK:	FUNCTION:	OPERATING WATER TEMPERATURE:	FLUID TYPE:	PUMP TYPE:	WATER FLOW (GPM):	TOTAL HEAD (FT):	% EFF:	MOTOR DATA: RPM:	HP:	VOLTS:	PH:	HZ.	MANUFACTURER & MODEL NO. OR EQUIVALENT	SIZE S x D x IMP	SUCTION DIFFUSER	REMARKS
HWCP-1	DOMESTIC HOT WATER RECIRCULATION PUMP	100-140 DEG. F	A	1	20	20	---	3,300	1/6	120	1	60	BELL & GOSSETT NBF-36	1-1/4" x 1-1/4" x 3" IMP	N/A	1
LHWCP-1	LABORATORY HOT WATER RECIRCULATION PUMP	100-140 DEG. F	B	1	20	20	---	3,300	1/6	120	1	60	BELL & GOSSETT NBF-36	1-1/4" x 1-1/4" x 3" IMP	N/A	1

FLUID TYPE:
A. DOMESTIC HOT WATER
B. LABORATORY HOT WATER

PUMP TYPE:
1. INLINE CIRCULATOR

REMARKS
1. LEAD-FREE BRONZE CONSTRUCTION, UL-LISTED, POLYPROPYLENE IMPELLER, CERAMIC SHAFT, DOUBLE-SINTERED CARBON BEARINGS

LABORATORY GAS EQUIPMENT SCHEDULE

EQUIPMENT MARK:	EQUIPMENT FUNCTION:	OPERATING CONDITIONS:	PERFORMANCE REQUIREMENTS:	MANUFACTURER AND MODEL:	REMARKS:
AC-1	AIR COMPRESSOR	FOUR (4) PUMPS - 30 HP TOTAL LOAD 460V / 3 PH / 60 HZ 40 AMPS	85 SCFM DELIVERY AT 125 PSIG, 400 GALLON RECEIVER	ATLAS COPCO MODE SF 22 OR APPROVED EQUIVALENT	- MULTI-CORE UNIT WITH FOUR INDEPENDENT COMPRESSOR MODULES - AIR INTAKE FILTER/SILENCER WITH REPLACABLE PAPER ELEMENT - V-BELT DRIVE WITH BELT GUARDS - AFTER-COOLER - DRAIN VALVES AND PRESSURE SWITCH - DISCHARGE AIR SERVICE VALVE - SOUND ATTENUATING ENCLOSURE - VARIABLE FLOW TEECHNOLOGY - 104 DEG F AMBIENT OPERATING TEMPERATURE - SINGLE POINT ELECTRICAL CONNECTION (OTHER THAN DRAIN VALVE) - PROVIDE ELECTRICAL DRAIN VALVE (120V / 1 PH / 60 HZ) - PROVIDE MANUFACTURERS RECCOMMENDED VIBRATION ISOLATION - PROVIDE ABILITY TO CONNECT TO BUILDING MANAGEMENT SYSTEM.
AD-1	DESSICANT AIR DRYER	120V / 1 PH / 60 HZ 10 AMPS	106 SCFM AT -0 DEG F DEWPOINT	ATLAS COPCO MODEL CD 50 OR APPROVED EQUIVALENT	- TWIN TOWER HEATLESS DESICCANT DRYER - MAXIMUM DEWPOINT 33-39°F - INTEGRATED THREE WAY VALVES AND PURGE CONTROL SYSTEM - EXHAUST AIR SILENCER - SINGLE POINT ELECTRICAL CONNECTION - PRESSURE DEWPOINT SENSOR AT OUTLET - INCLUDE ALL PRE AND POST FILTERS
APRV-1	AIR PRESSURE REGULATOR	60 PSIG	0 - 125 PSIG DELIVERY RANGE	WATTS FLUIDAR MODEL R10-04CG OR EQUIVALENT	- DIAPHRAGM OPERATED DESIGN - 2" PIPE SIZE - PROVIDE 2" 0-160 PSIG PRESSURE GAUGE - 1/2" NPT PORT
CAF-1	GENERAL PURPOSE FILTER	N/A	0.1 PPM OIL CARRYOVER 3/4" NPT CONNECTION	ATLAS COPCO MODEL DD-32 OR APPROVED EQUIVALENT	- COALESCING FILTER FOR GENERAL PURPOSE PROTECTION - LIQUID WATER AND OIL AEROSOL REMOVAL TO 0.1 PPM AND PARTICLES DOWN TO 1 MICRON - AUDIBLE ALARM, AUTOMATIC DRAIN, SIGHT GLASS, DOUBLE O-RING SEALS, STAINLESS STEEL FILTER CORES - DIE CAST ALUMINUM HOUSING WITH ANODIZED TREATMENT OUTSIDE AND INSIDE
CAF-2	PARTICULATE FILTER	N/A	0.01 PPM OIL CARRYOVER 3/4" NPT CONNECTION	ATLAS COPCO MODEL PD-32 OR APPROVED EQUIVALENT	- HIGH EFFICIENCY COALESCING FILTER - LIQUID WATER AND OIL AEROSOL REMOVAL TO .01 PPM AND PARTICLES DOWN TO 0.01 MICRON - AUDIBLE ALARM, AUTOMATIC DRAIN, SIGHT GLASS, DOUBLE O-RING SEALS, STAINLESS STEEL FILTER CORES - DIE CAST ALUMINUM HOUSING WITH ANODIZED TREATMENT OUTSIDE AND INSIDE
VP-1	VACUUM PUMP	TWO (2) - 7.5 HP PUMPS, 460 V / 3 PH / 60 HZ, 3" INLET CONNECTION, TWO (2) - 2" EXHAUST CONNECTIONS	177 ACFM AT 23" Hg. 240 GALLON RECEIVER	RIETSCHLE THOMAS MODEL VRTD-300 OR EQUIVALENT	- HIGH EFFICIENCY AIR-COOLED CLAW TYPE ROTARY VACUUM PUMP WITH INTERNAL COMPRESSION - DUPLEX ARRANGEMENT - TANK-MOUNTED CONFIGURATION INCLUDING TWO VACUUM PUMPS, SINGLE-POINT INLET CONNECTION, HORIZONTAL RECEIVER, CONTROL CABINET, VALVES AND INTERCONNECTING PIPING, FLEXIBLE CONNECTORS, CHECK VALVES, VIBRATION DAMPENERS, OIL SIGHTGLASS, TEMPERATURE GAUGE, DRAIN VALVE - SINGLE POINT ELECTRICAL CONNECTION - ALTERNATOR FOR TIME-BASED SEQUENCING OF PUMPS, THERMAL MALFUNCTION PROTECTION DEVICE SHUTDOWN AND ALARM LIGHT, HOUR-METERS FOR EACH PUMP, H-O-A SWITCHES FOR EACH PUMP - PROVISE ABILITY TO CONNECT TO BUILDING MANAGEMENT SYSTEM - PROVIDE LIQUID SEPARATOR, BUSCH CLEARTRAP CLS 200 OR EQUIVALENT

WATER PURIFICATION EQUIPMENT SCHEDULE

MARK:	FUNCTION:	MANUFACTURER AND MODEL:
WPS-1	WATER PURIFICATION SYSTEM:	NOTE: THE FOLLOWING COMPONENTS AREA PART OF A SYSTEM DESIGNED TO PRODUCE ASTM TYPE II LABORATORY WATER WITH A RECIRCULATING FLOWRATE OF 50 GPM AND A STORAGE CAPACITY OF 500 GALLONS. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE OPERATIONAL SYSTEM. SUBMITTALS MUST INCLUDE PERFORMANCE AND CONSTRUCTION FOR EACH COMPONENT EQUIVALENT TO THAT OF THE COMPONENETS LISTED BELOW.
	CARBON TANK:	CULLIGAN MODEL HE SERIES 10 INCH, 1.5 CUBIC FEET OF CULLEX MEDIA AUTOMATIC ELECTRONIC TIMER CONTROL VALE WITH BUILT-IN BYPASS, RATED FOR 9.4 GPM AT 12 PSI PRESSURE DROP PROVIDE FITTINGS AND TUBING FOR HYDRAULIC CONNECTIONS.
	REVERSE OSMOSIS SYSTEM RO-1:	CULLIGAN MODEL G1-1F PLUS. PACKAGED RO SYSTEM COMPLETE WITH VERTICAL CENTRIFUGAL PUMP, LOW ENERGY BRACKISH WATER MEMBRANES, STEEL FRAME, END ENTRY PRESSURE VESSELS, SPIRAL WOUND THIN FILM COMPOSITE RO MEMBRANES, INTEGRAL PIPING, AND MICROPROCESSOR CONTROLLER IN NEMA4X ENCLOSURE. SYSTEM RATED FOR 1200 GPD, 0.83 GPM AT 112 PSI. 20-50 PSI INLET PRESSURE, 33-100 OPERATING TEMPERATURE, 120V /1 PH / 60 HZ. 1 HP PUMP MOTOR. OVERALL DIMENSIONS 37"W x 10"D x 46"H. 1/2" INLET, 1/2" OUTLET, 3/8" WASTE.
	FINAL FILTER FF-1:	20" BIG BLUE BBF1-20MB FILTER HOUSING WITH PCF1-20MB FILTER CARTRIDGE.
	STORAGE TANK: AND STAND	ACE ROTO MODEL CB0500-S2. 500-GALLON TANK WITH CONICAL BOTTOM, NEOPRENE GASKETED LID, VIRGIN HIGH-DENSITY POLYETHYLENE CONSTRUCTION, SUPPORT LEGS. 52"D x 81"H, 3/8" WALL THICKNESS. STAND 42"D x 42"W x 55"T
	TANK VENT FILTER:	US FILTER MODEL ZHA-10-01 POLYPROPYLENE HOUSING WITH FLAT GASKETS, 3/4" INLET AND OUTLET, 20" LENGTH. MOUNTED TO STORAGE TANK. PROVIDE US FILTER FCEA-F-10-S2 POLYSULFONE FILTER WITH 0.02 MICRON RATING FOR AIR. PROVIDE VACUUMPRESSURE RELIEF VALVE OPTION.
	PUMP PWP-1:	GRUNDFOS MODEL CRN (E) 10-6. STAINLESS STEEL CONSTRUCTION AND COMPONENTS, CAST IRON MOTOR STOOL AND COUPLINGS, RATED FOR 50 GPM AT 300 FT HEAD. 5 HP HIGH EFFICIENCY MOTOR, 480V / 3PH / 60 HZ. 1-1/4" FLANGE CONNECTION.
	PUMP MOTOR/TANK LEVEL/ UV CONTROLLER:	SPEC-TECH MODEL PC1500
	ULTRAVIOLET STERILIZER:	AQUAFIN CSL-I5R UV LIGHT STERILIZER UNIT WITH 254 NANO-METER UV ENERGY EMITTANCE, STAINLESS STEEL CONSTRUCTION, SIX UV LAMPS, 60 GPM FLOWRATE, 2" CONNECTION SIZE. PROVIDE WALL-MOUNTING BRACKET. 265 WATTS AT 120V / 1PHASE / 60 HZ.
	0.2 MICRON FILTER:	HARMSCO BC6-3 MULTI-TUBE FILTER HOUSING WITH 316 STAINLESS STEEL CONSTRUCTION, 2" CONNECTION SIZE, CAPABLE OF HOUSING FOUR FILTERS. PROVIDE SIX US FILTER FCWN-F-30-S2 POLYSULFONE FILTERS WITH 0.2 MICRON RATING. SYSTEM RATED FOR 1.0 PSIG LOSS THROUGH ENTIRE HOUSING (INCLUDING FILTERS).
	MONITOR PANEL CRM-1:	THORNTON M300 RESISTIVITY/CONDUCTIVITY METER IN NEMA 4X REAR ENCLOSURE, WITH 10' PATCH CORD. PROVIDE M300 CONDUCTIVITY CALIBRATION MODULE. PROVIDE THORTON M300 CONDUCTIVITY SENSORRESISTIVITY CELL, US FILTER MODEL ZCEL240202. USE SHORT PORBE ZCEL240201 IF NECESSARY.

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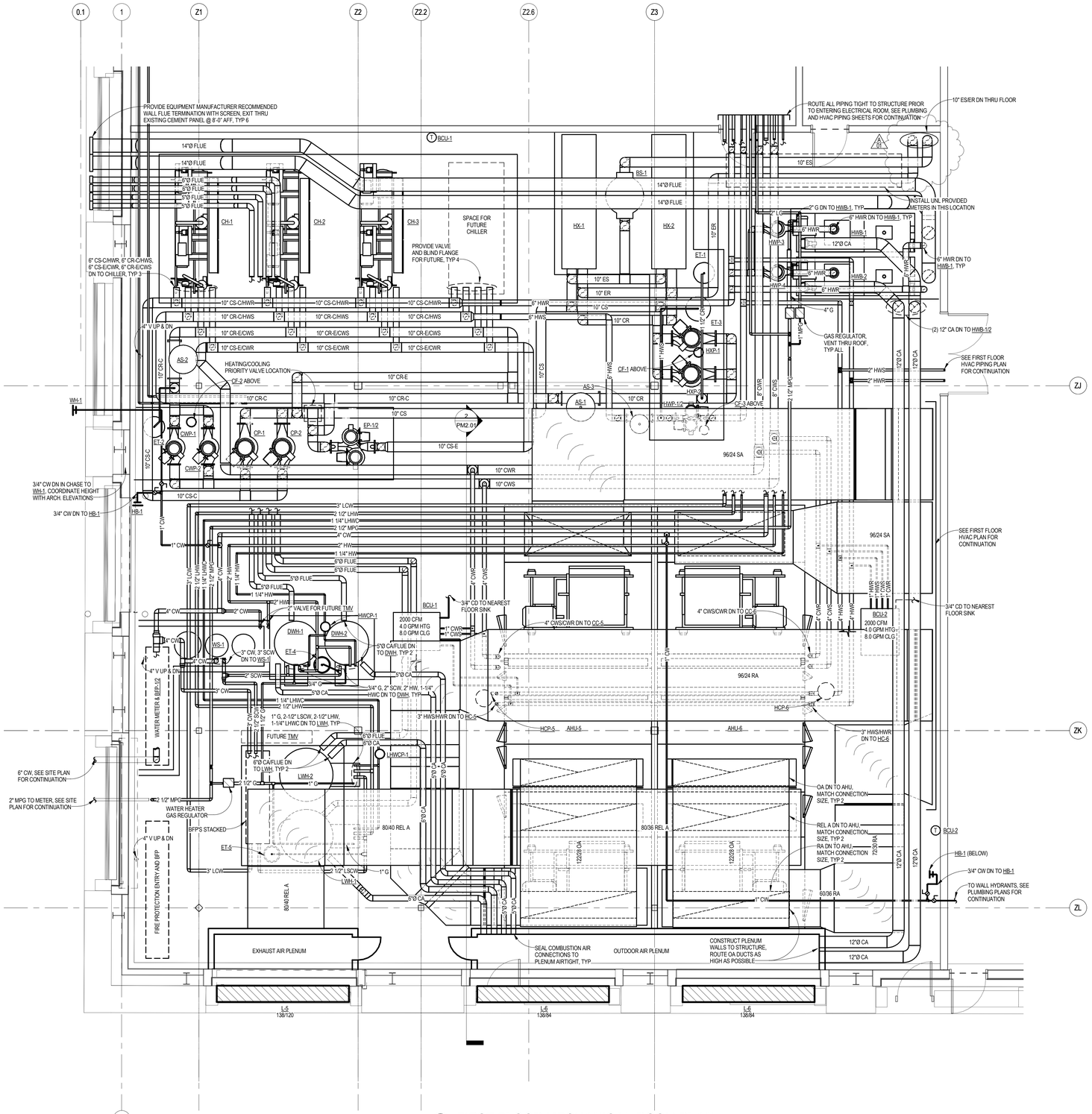
PROFESSIONAL MECHANICAL ENGINEER
JAMES F. MAHONEY - III
E-14838
STATE OF NEBRASKA
11/27/13

Plumbing Schedules

P4.01



FIRST FLOOR MECHANICAL ROOM PLAN

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

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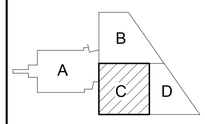

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November 27, 2013

First Floor Mechanical Room Plan

PM1.03

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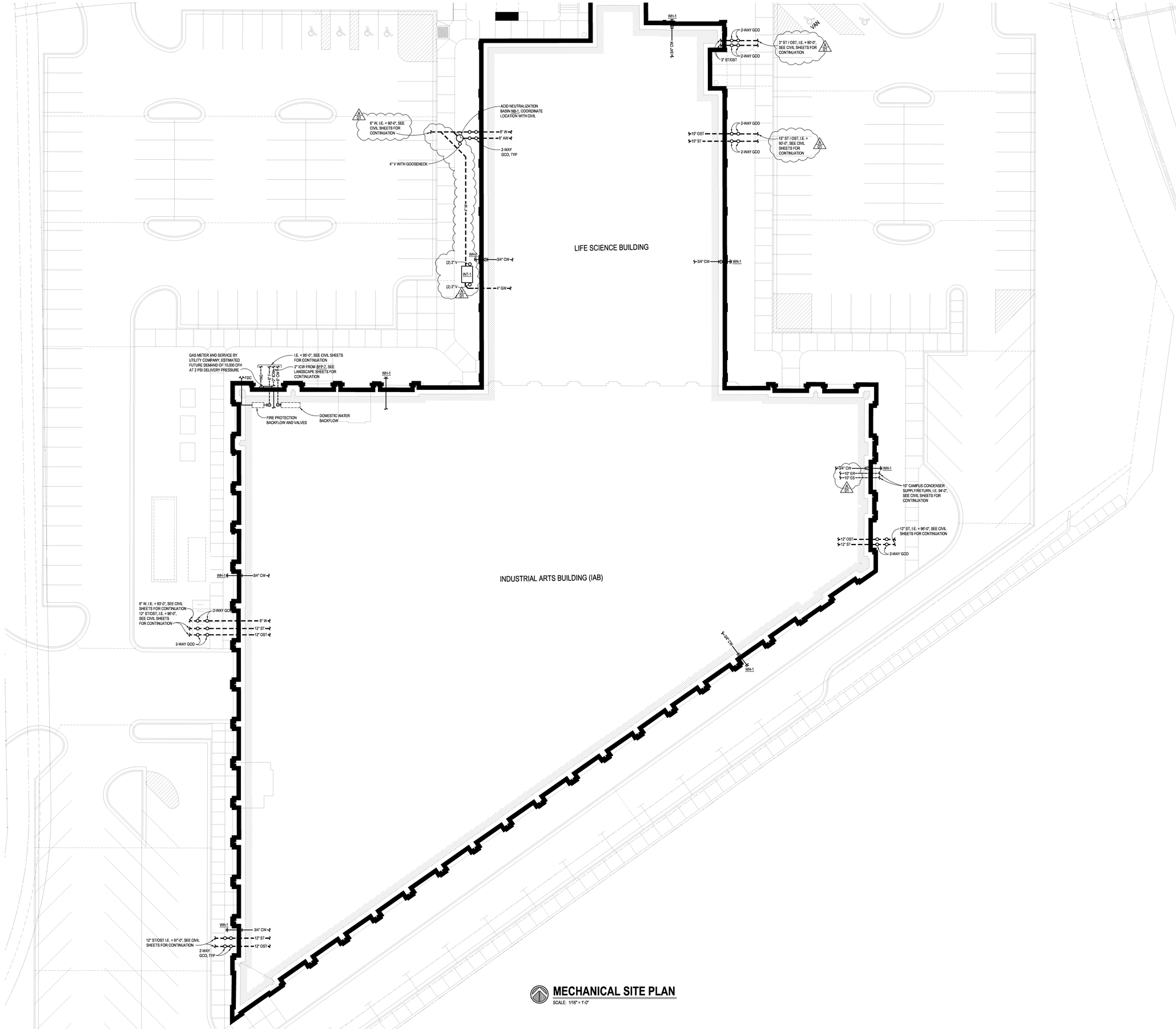

MECHANICAL SITE PLAN

SCALE: 1/16" = 1'-0"

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Life Science Collaboration

1910 N. Antelope Valley Parkway
Lincoln, Nebraska

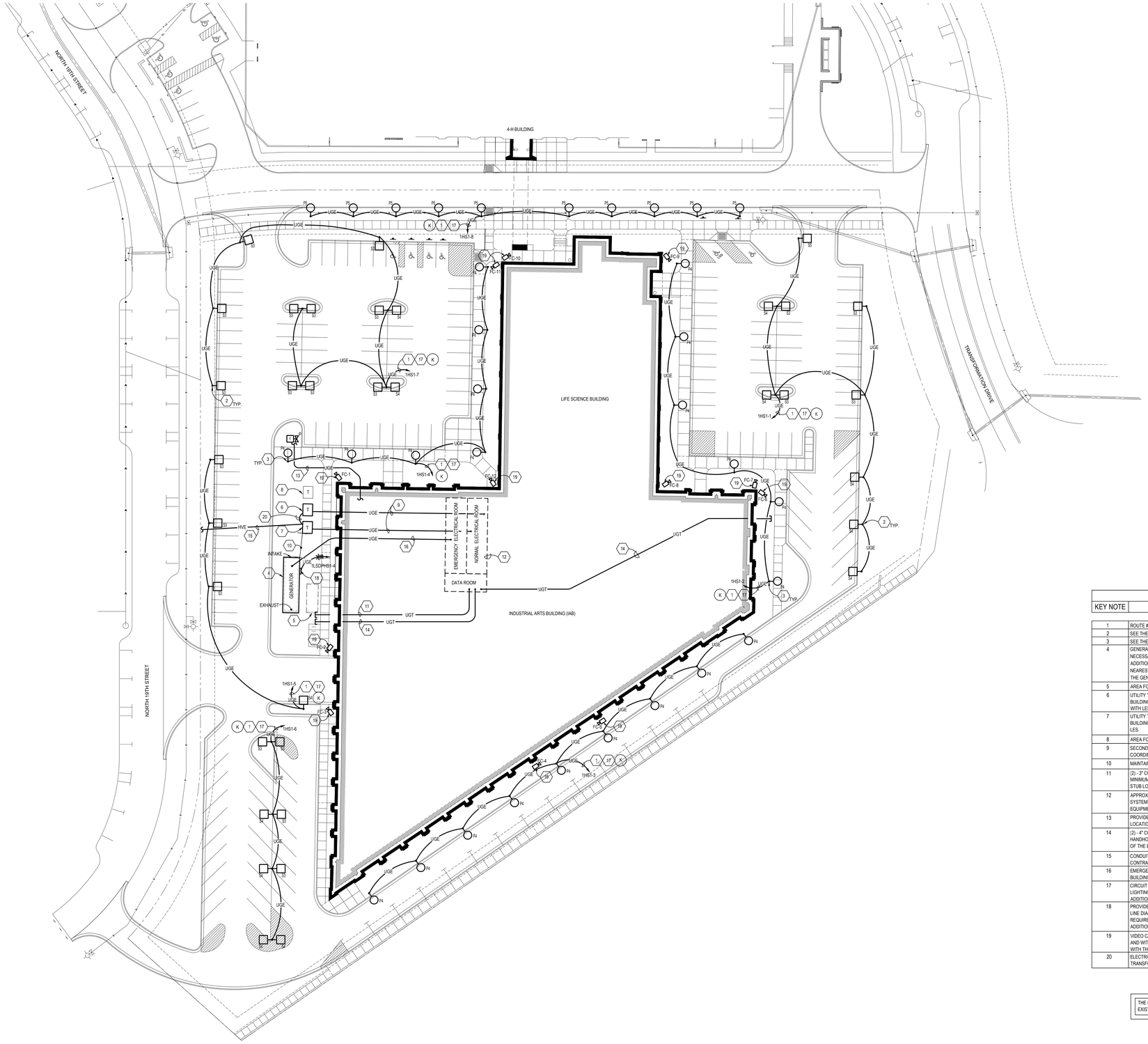
TCEP No.: 716-002-12
Davis Design.: 12-0077
BVH No.:L12018.unl

November 27, 2013

JAMES F. MAHONEY, III
E-8458
REGISTERED PROFESSIONAL MECHANICAL ENGINEER
STATE OF NEBRASKA
11/27/13

Mechanical Site Plan

PM3.01



ELECTRICAL SITE UTILITIES PLAN

SCALE: 1" = 30'-0"

ELECTRICAL SITE UTILITIES PLAN NOTES	
KEY NOTE	DESCRIPTION
1	ROUTE #6 CONDUCTORS IN 1" CONDUIT THROUGHOUT ENTIRE CIRCUIT.
2	SEE THE SITE FIXTURE POLE BASE DETAIL FOR ADDITIONAL INFORMATION.
3	SEE THE PEDESTRIAN FIXTURE POLE BASE DETAIL FOR ADDITIONAL INFORMATION.
4	GENERATOR. SEE THE ONE LINE DIAGRAM - EMERGENCY, SOUTH BUILDING FOR ADDITIONAL INFORMATION. PROVIDE ALL NECESSARY CONTROL CIRCUITS IN CONDUIT FROM THE GENERATOR TO ASSOCIATED AUTOMATIC TRANSFER SWITCHES. IN ADDITION, PROVIDE ALL NECESSARY CIRCUITS IN CONDUIT FOR AUXILIARY GENERATOR LOADS AND DEVICES FROM THE NEAREST LIFE SAFETY BRANCH PANELBOARD. FULLY COORDINATE ALL REQUIREMENTS AND INSTALLATION DETAILS WITH THE GENERATOR SUPPLIER/MANUFACTURER FOR A COMPLETE INSTALLATION.
5	AREA FOR POTENTIAL FUTURE GENERATOR.
6	UTILITY TRANSFORMER PROVIDED AND INSTALLED BY THE UTILITY. SEE THE ONE-LINE DIAGRAM - NORMAL - NORTH BUILDING; AND THE TRANSFORMER PAD DETAIL FOR ADDITIONAL INFORMATION. COORDINATE EXACT REQUIREMENTS WITH LES.
7	UTILITY TRANSFORMER PROVIDED AND INSTALLED BY THE UTILITY. SEE THE ONE-LINE DIAGRAM - NORMAL - SOUTH BUILDING; AND THE TRANSFORMER PAD DETAIL FOR ADDITIONAL INFORMATION. COORDINATE EXACT REQUIREMENTS WITH LES.
8	AREA FOR POTENTIAL FUTURE UTILITY TRANSFORMER.
9	SECONDARY SERVICE ENTRANCE CONDUCTORS. SEE THE ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION. COORDINATE ALL ROUTING AND DETAILS WITH LES.
10	MAINTAIN A MINIMUM OF 10'-0" BETWEEN THE GENERATOR SET AND THE PAD MOUNTED TRANSFORMERS.
11	(2) - 3" CONDUITS FOR TELEPHONE AND TELEVISION UTILITIES FROM MAIN BUILDING DATA ROOM. ROUTE CONDUITS A MINIMUM OF 42" BELOW GRADE AND STUB AND CAP UNDERGROUND 10'-0" OUTSIDE OF THE BUILDING. COORDINATE EXACT STUB LOCATION WITH THE TELEPHONE AND TELEVISION COMPANIES.
12	APPROXIMATE LOCATIONS OF THE MAIN ELECTRICAL AND DATA ROOMS. SEE THE ELECTRICAL POWER & AUXILIARY SYSTEMS PLANS AND THE ENLARGED ELECTRICAL ROOM PLANS FOR ADDITIONAL INFORMATION AND LOCATION OF EQUIPMENT.
13	PROVIDE MONITORING OF POST INDICATOR VALVE (PIV) AT THE FIRE ALARM CONTROL PANEL. COORDINATE THE EXACT LOCATION OF PIV WITH MECHANICAL CONTRACTOR.
14	(2) - 4" CONDUITS FOR UNL FIBER/COMMUNICATIONS CABLING FROM MAIN BUILDING DATA ROOM. PROVIDE NECESSARY HANDHOLES REQUIRED DUE TO LENGTH/DIRECTION OF CONDUIT ROUTING. STUB AND CAP UNDERGROUND 10'-0" OUTSIDE OF THE BUILDING. SEE THE CIVIL SHEETS FOR ADDITIONAL INFORMATION.
15	CONDUIT(S) FOR LES PRIMARY CABLING. CONDUIT PROVIDED BY LES, INSTALLED AS NECESSARY BY ELECTRICAL CONTRACTOR. COORDINATE INSTALLATION SCOPE, ROUTING AND TERMINATION DETAILS WITH LES.
16	EMERGENCY/STANDBY SERVICE ENTRANCE FEEDERS. SEE THE ELECTRICAL ONE LINE DIAGRAM - EMERGENCY - SOUTH BUILDING FOR ADDITIONAL INFORMATION.
17	CIRCUIT TO BE CONTROLLED BY THE NETWORKED LIGHTING CONTROL SYSTEM. SEE THE LIGHTING CONTROL PLANS, THE LIGHTING CONTROL SCHEMATIC DIAGRAM AND THE NETWORKED LIGHTING CONTROL SYSTEM SPECIFICATIONS FOR ADDITIONAL INFORMATION.
18	PROVIDE CONNECTION TO INTEGRAL GENERATOR TRANSFORMER AND 208Y/120V PANELBOARD. SEE THE ELECTRICAL ONE LINE DIAGRAM - EMERGENCY - SOUTH BUILDING FOR ADDITIONAL INFORMATION. COORDINATE ALL CONNECTION REQUIREMENTS WITH THE GENERATOR SUPPLIER/MANUFACTURER. SEE THE GENERATOR SPECIFICATIONS FOR ADDITIONAL INFORMATION.
19	VIDEO CAMERA SECURITY LOCATION. CAMERAS MOUNTED ON BUILDING SHALL BE INSTALLED WITHIN 12" OF THE ROOF TOP AND WITHIN 12" OF THE CORNER OF THE BUILDING (WHERE SHOWN AT THE CORNER). COORDINATE THE EXACT LOCATION WITH THE SECURITY CONTRACTOR. SEE THE VIDEO SECURITY CONNECTION DIAGRAM FOR ADDITIONAL INFORMATION.
20	ELECTRICAL CONTRACTOR TO INTER-CONNECT LES PROVIDED 4" PRIMARY CONDUITS BETWEEN PAD MOUNTED TRANSFORMERS. COORDINATE EXACT REQUIREMENTS AND ROUTING WITH LES.

THE CONTRACTOR SHALL IDENTIFY, SUPPORT AND PROTECT ALL EXISTING UTILITIES THROUGHOUT THE DURATION OF CONSTRUCTION.

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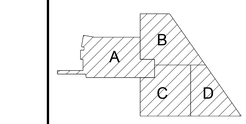

Key Plan

Life Science Collaboratio

1910 N. Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design.: 12-0077
BVH No.:L12018.unl

November 27, 2013

PROFESSIONAL ELECTRICAL ENGINEER
TED SCHIRMER
E-8623
11-27-13
STATE OF NEBRASKA

Electrical Site Utilities Plan

E0.01

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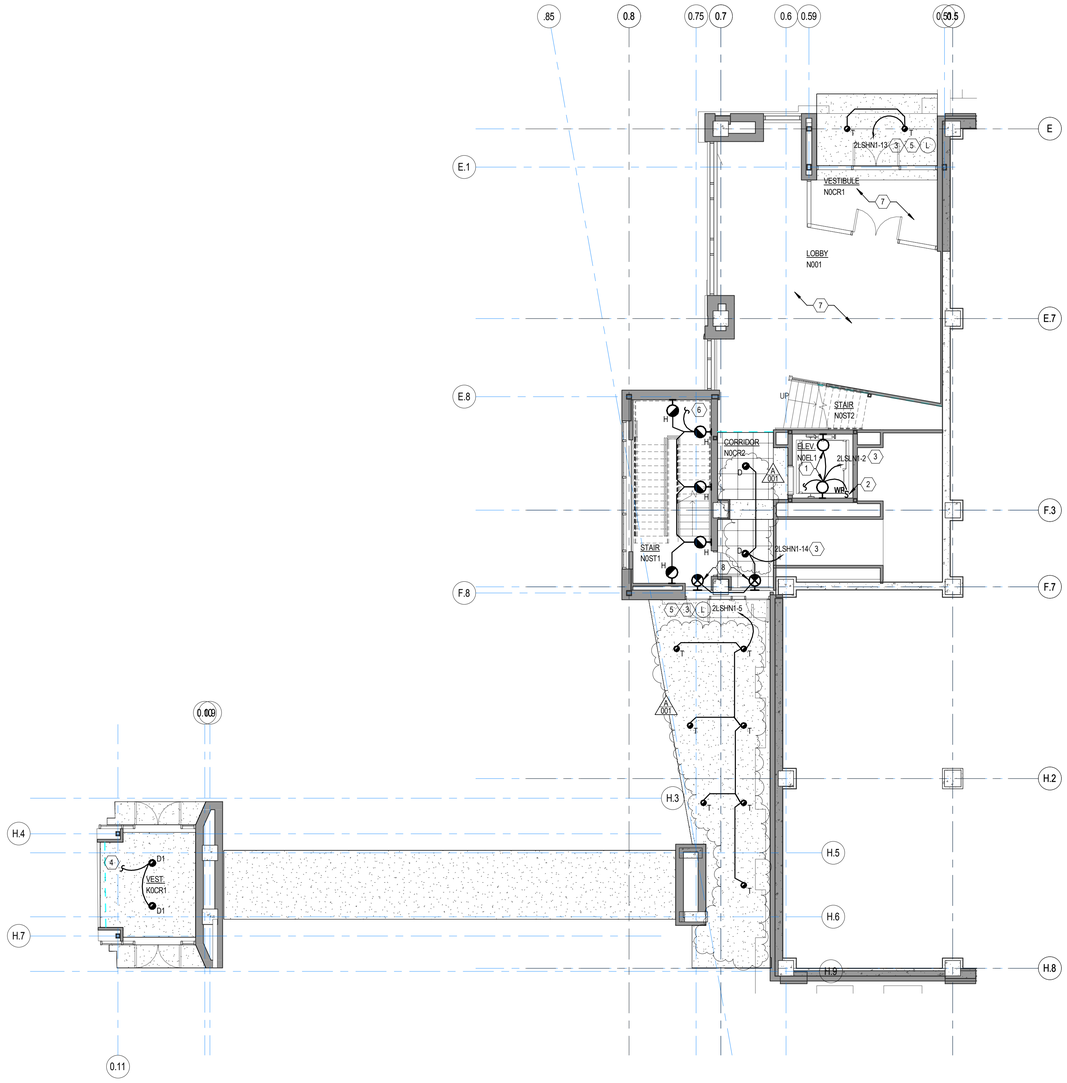

LOWER LEVEL LIGHTING PLAN NOTES

KEY NOTE	DESCRIPTION
1	ELEVATOR PIT LIGHT FIXTURE, EPCO (OR EQUIVALENT) TYPE G-4-L2-TSHO-Y (ENCLOSED AND GASKETED, SUITABLE FOR WET LOCATIONS). WALL MOUNT PIT LIGHT FIXTURE AT 12" ABOVE PIT FLOOR. COORDINATE EXACT FIXTURE LOCATION WITH ELEVATOR SUPPLIER/INSTALLER. GROUND FIXTURE AND FIXTURE GUARD IN ACCORDANCE WITH CODE REQUIREMENTS. DO NOT CONNECT THE LIGHT FIXTURE TO THE LOAD SIDE OF THE GFI RECEPTACLE. SEE SHEET E2.01 FOR CONTINUATION OF CIRCUIT.
2	MOUNT WEATHERPROOF PIT LIGHT SWITCH 18" ABOVE LOWER LEVEL FINISHED FLOOR ELEVATION, ADJACENT TO PIT LADDER. COORDINATE EXACT SWITCH LOCATION WITH ELEVATOR SUPPLIER/INSTALLER.
3	ROUTE #1D'S THROUGHOUT ENTIRE CIRCUIT.
4	CONNECT FIXTURES TO AN UNSWITCHED 'HOT' CONDUCTOR FROM THE NEAREST AVAILABLE 277V LIFE SAFETY LIGHTING CIRCUIT INSIDE THE 4-H BUILDING
5	CIRCUIT TO BE CONTROLLED BY THE NETWORKED LIGHTING CONTROL SYSTEM. SEE THE LIGHTING CONTROL PLANS, THE LIGHTING CONTORL SCHEMATIC DIAGRAM AND THE NETWORKED LIGHTING CONTROL SYSTEM SPECIFICATIONS FOR ADDITIONAL INFORMATION.
6	SEE SHEET E1.21 FOR CONTINUATION OF CIRCUIT.
7	SEE SHEET E1.11 FOR LIGHTING IN THIS AREA.
8	CONNECT FIXTURE TO 'UNSWITCHED HOT' OF CIRCUIT INDICATED.

LOWER LEVEL LIGHTING PLAN

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

0 4' 8' 16'

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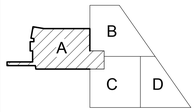

Key Plan

Life Science Collaboration

1910 N Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
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BVH No.: L12018.unl

November 27, 2013

Lower Level Lighting Plan

E1.01

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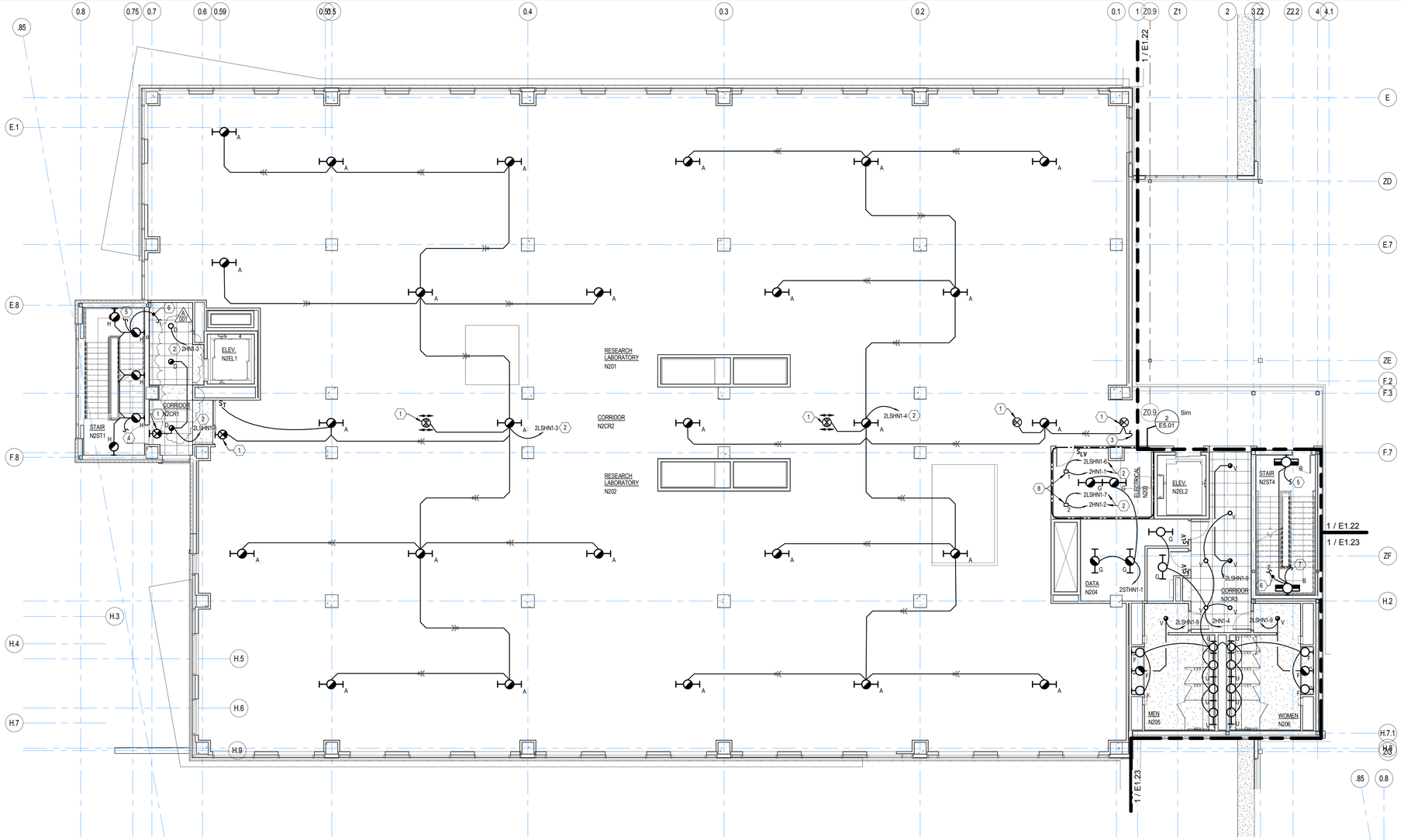


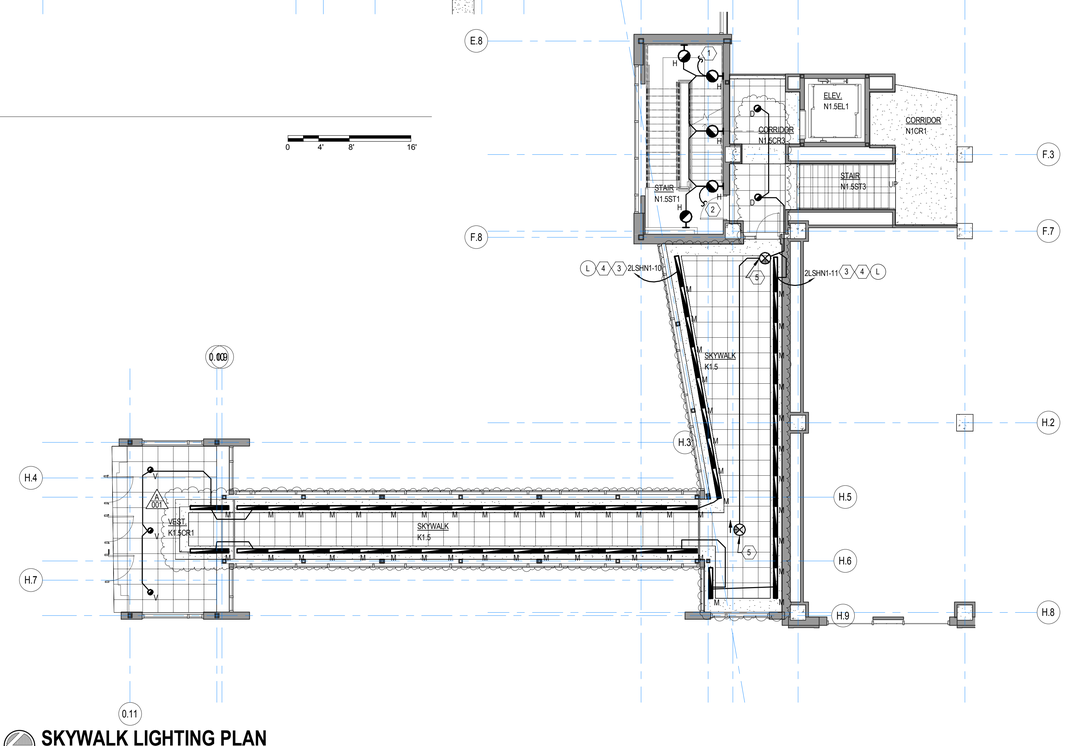
SECOND FLOOR LIGHTING PLAN - AREA 'A'

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

SHELL SPACE LIGHTING ON THIS LEVEL INCLUDING ASSOCIATED CIRCUITING AND CONDUIT TO BE BID AND COMPLETED AS A PART OF DEDUCT ALTERNATE #4 TO THE BASE BID CONDITION. SEE THE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

SECOND FLOOR LIGHTING PLAN NOTES - AREA 'A'	
KEY NOTE	DESCRIPTION
1	CONNECT FIXTURE TO 'UNSWITCHED HOT' OF CIRCUIT INDICATED.
2	ROUTE #10'S THROUGHOUT ENTIRE CIRCUIT.
3	SEE SHEET E1.22 FOR CONTINUATION
4	SEE THE SKYWALK LIGHTING PLAN FOR CONTINUATION OF CIRCUIT.
5	SEE SHEET E1.31 FOR CONTINUATION OF CIRCUIT.
6	CIRCUIT VIA EMERGENCY LIGHTING CONTROL UNIT INDICATED.
7	SEE SHEET E1.11 FOR CONTINUATION OF CIRCUIT.
8	PROVIDE AN EMERGENCY LIGHTING CONTROL UNIT, DUALITE #ATSD20 OR APPROVED EQUAL. ROUTE NORMAL AND LIFE SAFETY CIRCUIT INDICATED VIA THIS DEVICE AND THEN TO THE DESIGNATED LIGHTING FIXTURES. MOUNT UNIT TO BOTTOM OF STRUCTURE A MINIMUM OF 14'-0" AFF UNLESS NOTED OTHERWISE.

SKYWALK LIGHTING PLAN NOTES	
KEY NOTE	DESCRIPTION
1	SEE THE SECOND FLOOR LIGHTING PLAN - AREA 'A' FOR CONTINUATION OF CIRCUIT.
2	SEE SHEET E1.01 FOR CONTINUATION OF CIRCUIT.
3	CIRCUIT TO BE CONTROLLED BY THE NETWORKED LIGHTING CONTROL SYSTEM. SEE THE LIGHTING CONTROL PLANS, THE LIGHTING CONTROL SCHEMATIC DIAGRAM AND THE NETWORKED LIGHTING CONTROL SYSTEM SPECIFICATIONS FOR ADDITIONAL INFORMATION.
4	ROUTE #10'S THROUGHOUT ENTIRE CIRCUIT.
5	CONNECT FIXTURE TO 'UNSWITCHED HOT' OF CIRCUIT INDICATED.



SKYWALK LIGHTING PLAN

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

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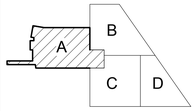

Key Plan

Life Science Collaboration

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Lincoln, Nebraska

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BVH No.: L12018.unl

November 27, 2013

PROFESSIONAL ELECTRICAL ENGINEER
JEFF J. SCHRMER
E-8623
11-27-13
STATE OF NEBRASKA

Second Floor Lighting Plan - Area 'A'

E1.21

SHELL SPACE LIGHTING ON THIS LEVEL INCLUDING ASSOCIATED CIRCUITING AND CONDUIT TO BE BID AND COMPLETED AS A PART OF DEDUCT ALTERNATE #4 TO THE BASE BID CONDITION. SEE THE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

THIRD FLOOR LIGHTING PLAN - AREA 'A' NOTES	
KEY NOTE	DESCRIPTION
1	CONNECT FIXTURE TO 'UNSWITCHED HOT' OF CIRCUIT INDICATED.
2	MOUNT FIXTURES IN EXTERIOR SOFFIT OVERHANGING SECOND FLOOR, ROUTE CONDUIT AND CONDUCTORS FROM THIRD FLOOR SPACE. SEE ARCHITECTURAL DETAIL FOR ADDITIONAL INFORMATION.
3	ROUTE #10'S THROUGHOUT ENTIRE CIRCUIT.
4	SEE SHEET E1.21 FOR CONTINUATION OF CIRCUIT.
5	SEE SHEET E1.41 FOR CONTINUATION OF CIRCUIT.
6	CIRCUIT TO BE CONTROLLED BY THE NETWORKED LIGHTING CONTROL SYSTEM. SEE THE LIGHTING CONTROL PLANS, THE LIGHTING CONTROL SCHEMATIC DIAGRAM AND THE NETWORKED LIGHTING CONTROL SYSTEM SPECIFICATIONS FOR ADDITIONAL INFORMATION.

THIRD FLOOR LIGHTING PLAN - AREA 'A'

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

0 4' 8' 16'

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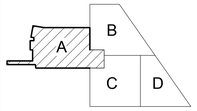

Key Plan

Life Science Collaboration

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November 27, 2013

Third Floor Lighting Plan - Area 'A'

E1.31

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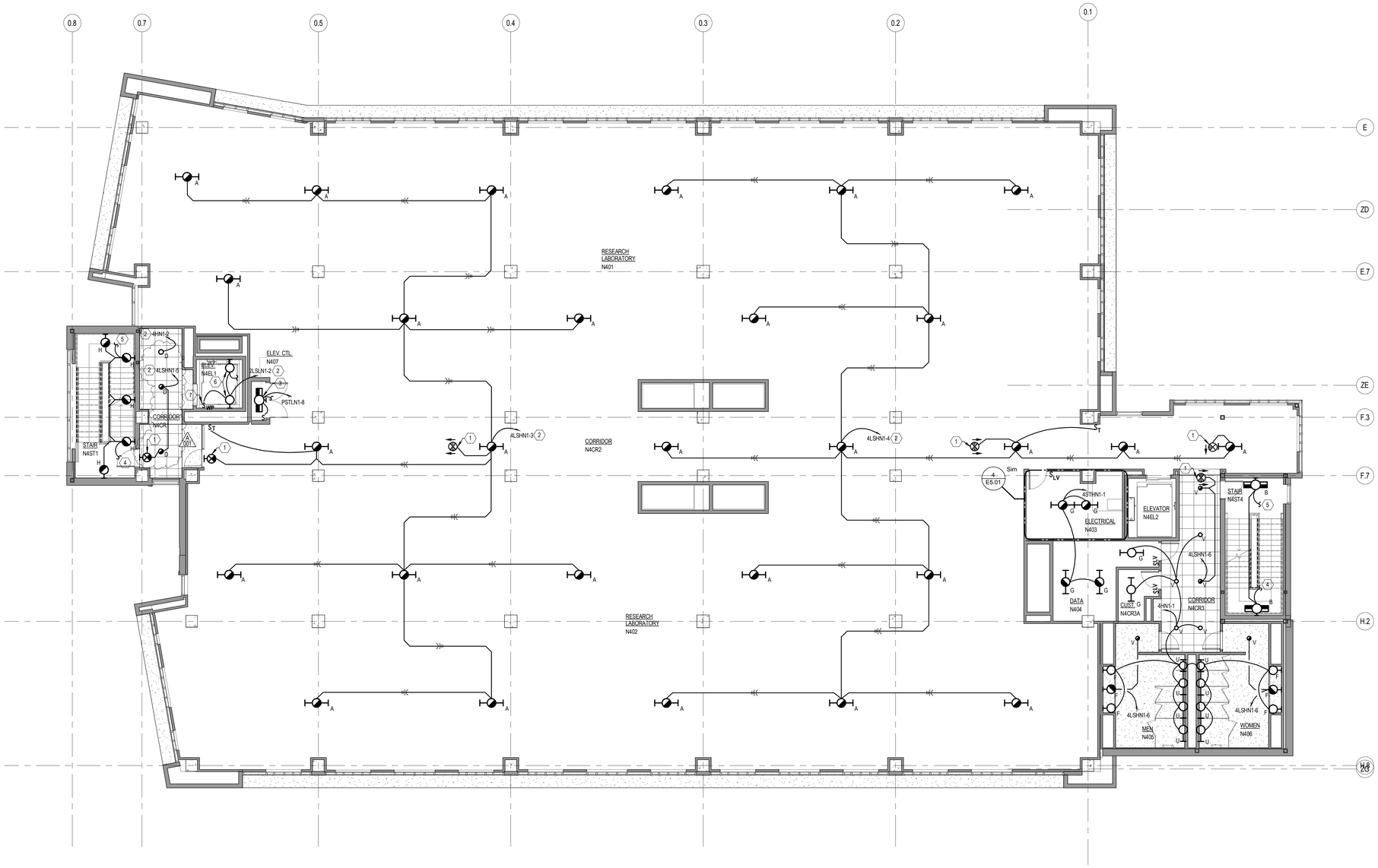

FOURTH FLOOR LIGHTING PLAN - AREA 'A'

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

0 4' 8' 16'

SHELL SPACE LIGHTING ON THIS LEVEL INCLUDING ASSOCIATED CIRCUITING AND CONDUIT TO BE BID AND COMPLETED AS A PART OF DEDUCT ALTERNATE #4 TO THE BASE BID CONDITION. SEE THE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

FOURTH FLOOR LIGHTING PLAN - AREA 'A' NOTES

KEY NOTE	DESCRIPTION
1	CONNECT FIXTURE TO 'UNSWITCHED HOT' OF CIRCUIT INDICATED.
2	ROUTE #10'S THROUGHOUT ENTIRE CIRCUIT.
3	ELEVATOR CONTROL ROOM LIGHT FIXTURE. METALUX (OR EQUIVALENT) TYPE SSF-2-32-120V WITH WIREGUARD. WALL MOUNT LIGHT FIXTURE ABOVE DOOR AT +8'-0" AFF. DO NOT CONNECT LIGHT FIXTURE TO THE LOAD SIDE OF THE GFI RECEPTACLE. SEE SHEET E2.41 FOR CIRCUIT CONTINUATION.
4	SEE SHEET E1.31 FOR CONTINUATION OF CIRCUIT.
5	SEE SHEET E1.51 FOR CONTINUATION OF CIRCUIT.
6	ELEVATOR PIT LIGHT FIXTURE, EPCO (OR EQUIVALENT) TYPE G-4-L2-T5HO-Y (ENCLOSED AND GASKETED, SUITABLE FOR WET LOCATIONS). WALL MOUNT PIT LIGHT FIXTURE AT 60" ABOVE FINISH FLOOR OF FOURTH FLOOR. COORDINATE EXACT FIXTURE LOCATION WITH ELEVATOR SUPPLIER/INSTALLER. GROUND FIXTURE AND FIXTURE GUARD IN ACCORDANCE WITH CODE REQUIREMENTS. DO NOT CONNECT THE LIGHT FIXTURE TO THE LOAD SIDE OF THE GFI RECEPTACLE. SEE SHEET E2.01 FOR CONTINUATION OF CIRCUIT.
7	MOUNT WEATHERPROOF PIT LIGHT SWITCH 48" ABOVE FOURTH FLOOR FINISHED FLOOR ELEVATION, ADJACENT TO ELEVATOR DOOR. COORDINATE EXACT SWITCH LOCATION WITH ELEVATOR SUPPLIER/INSTALLER.

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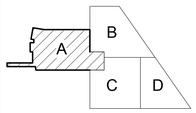

Key Plan

Life Science Collaboration

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November 27, 2013

REGISTERED PROFESSIONAL ELECTRICAL ENGINEER
TED SCHRMER
E-8623
11-27-13
STATE OF NEBRASKA

Fourth Floor Lighting Plan - Area 'A'

E1.41

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LIGHTING FIXTURE SCHEDULE

Fixture Type	Manufacturers	Catalog Numbers	Description	No. of Lamps	Lamp Type	Volt	VA	Mounting	Remarks
A	HE WILLIAMS COLUMBIA METALUX	80-4-232-UNV CSR-4-2-32-ST-X-U ICF-232-UNV	4'-0" LONG FLUORESCENT INDUSTRIAL FIXTURE	2	32W T8 3500K	UNV	70	PENDANT	UNLESS OTHERWISE NOTED, CHAIN HANG FIXTURES FROM STRUCTURE SO THAT BOTTOM OF FIXTURE IS 10'-0" AFF. PROVIDE FIXTURE WITH EMERGENCY BATTERY BALLAST. PROVIDE FIXTURE WITH BALLAST DISCONNECT PLUG. SEE SPECIFICATIONS FOR BALLAST INFORMATION.
B	OCL FOCAL POINT AXIS	D01-S1SA-48-MW-BAL-2LF54-277 (50% DIMMING) FAVDW-FL-11T5HO-277-_-WM-DC-TS-4 (50% DIMMING) BBW-S-4-T5HO-1-1-AP-UNV-T-X (50% DIMMING)	4'-0" LONG WALL MOUNTED	2	F54T5HO 3500K	UNV	120	WALL MOUNTED	MOUNT FIXTURE HORIZONTALLY TO WALL SO THAT BOTTOM OF FIXTURE IS 8'-6" ABOVE LANDING OR ADJACENT STAIR, UNLESS OTHERWISE NOTED. WHEN REQUIRED INTHE PLANS PROVIDE FIXTURES WITH DUAL LEVEL BALLASTS THAT EVENLY DIM LAMPS TO 50% UPON SIGNAL FROM LIGHTING CONTROL SYSTEM. SEE THE LIGHTING CONTROL PLANS FOR ADDITIONAL INFORMATION.
C	LITHONIA COLUMBIA METALUX	FGB164-4-32-N1-X20-MVOLT-SEE SPEC LHA-4-4-32-W-ST-EP-U HBI-4-32-M-UNV-ER8	HIGH BAY FLUORESCENT FIXTURE	4	32W T8 3500K	277	150	PENDANT	PENDANT MOUNT FIXTURES FROM STRUCTURE SO BOTTOM OF FIXTURE IS 28'-0" ABOVE FINISHED FIRST FLOOR. PROVIDE FIXTURE WITH EMERGENCY BATTERY BALLAST.
D	PORTFOLIO	LD6A-20-D010TE-X-ERMBA20-8-35-6LM1-H	6" LED DOWNLIGHT	PROV. W/ FIXTURE	LED	UNV	40	RECESSED	PROVIDE REQUIRED TRIM OPTIONS FOR COMPATIBLE INSTALLATION WITH CEILING TYPES SPECIFIED. PROVIDE BALLAST DISCONNECT PLUG WITH FIXTURE.
E	SURE-LITES	LPX-7	EXIT FIXTURE PROVIDED WITH NUMBER OF FACES AND ARROWS A.S.I. INDICATED ON PLANS	NA	LED	UNV	10	SURFACE	UNLESS OTHERWISE INDICATED WALL MOUNT AT 7'-6" AFF OR SO THAT BOTTOM OF EXIT SIGN IS 6" ABOVE TOP OF DOOR FRAMES. RECESS MOUNT WHERE CEILING LOCATION ALLOWS. PROVIDE SELF DIAGNOSTICS AND INTEGRAL BATTERY PACK. WHERE SHOWN SUSPENDED FROM STRUCTURE IN SHELL SPACE AREAS, MOUNT AT 9'-0" AFF WITH RIGID CONDUIT SUPPORT
EWP	SURE-LITES	UX7-R-WH	WEATHER PROOF EXIT FIXTURE PROVIDED WITH NUMBER OF FACES AND ARROWS AS INDICATED ON PLANS	NA	LED	UNV	10	SURFACE	UNLESS OTHERWISE INDICATED WALL MOUNT AT 7'-6" AFF OR SO THAT BOTTOM OF EXIT SIGN IS 6" ABOVE TOP OF DOOR FRAMES. PROVIDE SELF DIAGNOSTICS AND INTEGRAL BATTERY PACK.
F	AXIS	MBS-S-2-T5-1-AP-UNV-ERS-1	2' LINEAR WALL SCONCE	1	14W T5 3500K	UNV	20	WALL	MOUNT VERTICALLY ON WALL ADJACENT TO, OR CENTERED IN BETWEEN MIRORS, WITH CENTER OF FIXTURE AT 5'-0"AFF UNLESS OTHERWISE NOTED. MOUNT SO NARROW SIDE OF FIXTURE FACES OUTWARDS FROM TH EWALL. PROVIDE FIXTURES WITH BALLAST DISCONNECT PLUG. SEE SPECIFICATIONS FOR BALLAST INFORMATION.
G	HE WILLIAMS COLUMBIA METALUX	82-4-2-32-SPEC-UNV IC4-232-U-EP-U DMF-232-UNV-ER8	4'-0" LONG FLUORESCENT PENDANT MOUNTED PREMIUM INDUSTRIAL	2	32W T8 3500K	UNV	70	PENDANT	UNLESS OTHERWISE NOTED, CHAIN HANG FIXTURES FROM STRUCTURE SO THAT BOTTOM OF FIXTURE IS 10'-0" AFF. PROVIDE TYPE 'G1' FIXTURES WITH EMERGENCY BATTERY BALLASTS. SEE SPECIFICATIONS FOR BALLAST INFORMATION.
H	AXIS	ARWLED-B1-640-35-S-3-AP-UNV-D (50% DIMMING)	3' LINEAR WALL SCONCE	NA	LED 3500K	UNV/277	30	WALL	WALL MOUNT FIXTURE VERTICALLY SO CENTER OF FIXTURE IS 6'-0" ABOVE FINISH FLOOR OR STAIR. SEE THE ARCHITECTURAL ELEVATIONS FOR ADDITIONAL INFORMATION. WHEN REQUIRED INTHE PLANS PROVIDE FIXTURES WITH DRIVER THAT EVENLY DIMS LEDS TO 50% UPON SIGNAL FROM LIGHTING CONTROL SYSTEM. SEE THE LIGHTING CONTROL PLANS FOR ADDITIONAL INFORMATION.
K	MODA LIGHT	MOJO 4000K	LED SURFACE MOUNTED DOWNLIGHT	NA	LED 4000K	277	8	SURFACE	FIXTURE MOUNTED ON UNDERSIDE OF SOFFIT TO LIGHT EXISTING EXTERIOR HISTORICAL WALLS. COORDINATE EXACT PLACEMENT WITH THE ARCHITECT AND ENGINEER. ALL CONDUIT ROUTING TO THE FIXTURE SHALL BE CONCEALED. SEE THE ARCHITECTURAL DETAILS FOR ADDITIONAL INFORMATION.
L	FOCAL POINT	FCOL-HN-LL3-L35-1C-277-LD1-CV-(LENGTHS AS REQUIRED)	LED COVE FIXTURE	NA	LED 3500K	277	30	COVE	FIXTURES TO BE MOUNTED CONTINUOULSY END TO END TO PROVIDE EVENLY LIT COVE. PROVIDE ALL NECESSARY LENGTHS OF FIXTURES TO LIGHT THE ENTIRE COVE EVENLY. SEE THE ARCHITECTURAL COVE DETAILS FOR ADDITIONAL INSTALLATION INFORMATION. AIM TO EVENLY LIGHT ENTIRE COVE. COORDINATE AIMING WITH THE ENGINEER. SEE PLANS FOR FIXTURE LENGTHS
M	NEO-RAY	S22-D-R-2-L35-U-ED-S92	LED RECESSED LINEAR FIXTURE	NA	LED 3500K	UNV	40	RECESSED	COORDINATE TRIM KIT WITH THE CEILING INSTALLATION APPLICATION. SEE PLANS FOR RUN LENGTHS. PROVIDE FIXTURES IN CONTINUOUS LENGTHS WEN INDICATED END TO END. SEE ARCHITECTURAL SHEETS FOR ADDITIONAL INFORMATION.
N	BEGA	2384LED-K4-SLV	12" LONG X 3" HIGH LED RECESSED STEP FIXTURE	NA	LED 4000K	277	15	RECESSED IN WALL	RECESS FIXTURE IN WALL SO THAT BOTTOM OF FIXTURE IS AT 18" ABOVE ADJACENT FINISHED FLOOR/PATIO
P3	INVUE	MSA-B01-LED-E1-SL3-BK POLE: INVUE SRX BLACK	12'-0" POLE MOUNTED LED PEDESTRIAN FIXTURE	NA	LED 4000K	277	30	POLE	SEE THE PEDESTRIAN FIXTURE POLE BASE DETAIL AND THE ELECTRICAL SITE UTILITIES PLAN FOR A DDITIONAL INFORMATION.
P4	INVUE	MSA-B01-LED-E1-SL4-BK POLE: INVUE SRX BLACK	12'-0" POLE MOUNTED LED PEDESTRIAN FIXTURE	NA	LED 4000K	277	30	POLE	SEE THE PEDESTRIAN FIXTURE POLE BASE DETAIL AND THE ELECTRICAL SITE UTILITIES PLAN FOR A DDITIONAL INFORMATION.
P5	INVUE	MSA-B02-LED-E1-5WQ-BK POLE: INVUE SRX BLACK	12'-0" POLE MOUNTED LED PEDESTRIAN FIXTURE	NA	LED 4000K	277	55	POLE	SEE THE PEDESTRIAN FIXTURE POLE BASE DETAIL AND THE ELECTRICAL SITE UTILITIES PLAN FOR A DDITIONAL INFORMATION.
Q	INVUE	ENT-B01-LED-E1-BL4-BK	WALL-MOUNT LED SITE FIXTURE	NA	LED 4000K	277	30	WALL	WALL MOUNT FIXTURE TO EXTERIOR OF BUILDING SO THAT BOTTOM OF FIXTURE IS 9'-4" ABOVE FINISH GRADE UNLESS NOTED OTHERWISE IN THE PLANS. (A 001)
R	ERCO	81044.023	6" LED RECESSED DOWNLIGHT	NA	LED 4000K	UNV	15	RECESSED	RECESSED, LED, WET LOCATION FIXTURE WITH NARROW OPTIC DISTRIBUTION. ROTATE REFLECTOR TO EVENLY LIGHT BUILDING EXTERIOR BELOW. COORDINATE AIMING WITH THE ENGINEER.
S2	MCGRAW-EDISON	TLM-B03-LED-E1-SL2-BK POLE: STREETWORKS SSS BLACK	22'-0" POLE WITH LED SITE LIGHTING FIXTURE	NA	LED 4000K	277	130	POLE	FIXTURE AND POLE TO MATCH 4H. SEE THE SITE FIXTURE POLE BASE DETAIL AND THE ELECTRICAL SITE UTILITIES PLAN FOR ADDITIONAL INFORMATION. LUMINAIRE TO SHARE COMMON POLE AS INDICATED ON THE ELECTRICAL SITE UTILITIES PLAN
S3	MCGRAW-EDISON	TLM-B03-LED-E1-SL3-BK POLE: STREETWORKS SSS BLACK	22'-0" POLE WITH LED SITE LIGHTING FIXTURE	NA	LED 4000K	277	130	POLE	FIXTURE AND POLE TO MATCH 4H. SEE THE SITE FIXTURE POLE BASE DETAIL AND THE ELECTRICAL SITE UTILITIES PLAN FOR ADDITIONAL INFORMATION. LUMINAIRE TO SHARE COMMON POLE AS INDICATED ON THE ELECTRICAL SITE UTILITIES PLAN
S4	MCGRAW-EDISON	TLM-B03-LED-E1-SL4-BK POLE: STREETWORKS SSS BLACK	22'-0" POLE WITH LED SITE LIGHTING FIXTURE	NA	LED 4000K	277	130	POLE	FIXTURE AND POLE TO MATCH 4H. SEE THE SITE FIXTURE POLE BASE DETAIL AND THE ELECTRICAL SITE UTILITIES PLAN FOR ADDITIONAL INFORMATION. LUMINAIRE TO SHARE COMMON POLE AS INDICATED ON THE ELECTRICAL SITE UTILITIES PLAN
S5	MCGRAW-EDISON	TLM-B03-LED-E1-5WQ-BK POLE: STREETWORKS SSS BLACK	22'-0" POLE WITH LED SITE LIGHTING FIXTURE	NA	LED 4000K	277	130	POLE	FIXTURE AND POLE TO MATCH 4H. SEE THE SITE FIXTURE POLE BASE DETAIL AND THE ELECTRICAL SITE UTILITIES PLAN FOR ADDITIONAL INFORMATION. LUMINAIRE TO SHARE COMMON POLE AS INDICATED ON THE ELECTRICAL SITE UTILITIES PLAN
T	ZUMTOBEL	BRADLED-16W-K40-MS45-CS-W	4" LED RECESSED DOWNLIGHT	NA	LED 4000K	277	20	RECESSED	RECESSED, LED, WET LOCATION, IC RATED FIXTURE. PROVIDE REQUIRED TRIM OPTIONS FOR COMPATIBLE INSTALLATION WITH CEILING TYPES SPECIFIED. PROVIDE BALLAST DISCONNECT PLUG WITH FIXTURE. (A 001)
U	WILLIAMS LITHONIA COLUMBIA	T4-14 OR 21-1S2-OR-17-UNV SS-1-(32 OR 17)-MVOLT-X SS-(4 OR 2)-1-(32 OR 17)-X-U-X	4'-0" OR 2'-0" LONG STAGGERED STRIP COVE FIXTURE	1 - CROSS SECTION	32W T8 (4') OR 17W T8 (2') 3500K	277	50 OR 25	COVE	PROVIDE 4'-0" LONG OR 2'-0" LONG FIXTURES AS INDICATED ON THE LIGHTING PLANS. SEE THE ARCHITECTURAL COVE DETAILS FOR ADDITIONAL INSTALLATION INFORMATION. PROVIDE CONTINUOUS LENGTHS AS INDICATED TO EVENLY DISTRIBUTE LIGHT ALONG ENTIRE COVE LENGTH.
V	PORTFOLIO	LD4A-09-D010TE-ERMA09-8-35-4LM1-H	4" LED DOWNLIGHT	NA	LED	UNV	20	RECESSED	PROVIDE REQUIRED TRIM OPTIONS FOR COMPATIBLE INSTALLATION WITH CEILING TYPES SPECIFIED. PROVIDE BALLAST DISCONNECT PLUG WITH FIXTURE.
W	NEO-RAY FOCAL POINT	S23DR-2-L35-CONTINUOUS-UNV FSWAL-FL-LL2-L35-LD1-1C-277-X-WH-CONTINUOUS	LED RECESSED LINEAR FIXTURE	NA	LED 3500K	UNV	35	RECESSED	COORDINATE TRIM KIT WITH THE CEILING INSTALLATION APPLICATION. SEE PLANS FOR RUN LENGTHS. PROVIDE FIXTURES IN CONTINUOUS LENGTHS WEN INDICATED END TO END. SEE ARCHITECTURAL SHEETS FOR ADDITIONAL INFORMATION.

LIGHTING FIXTURE SCHEDULE GENERAL NOTES:

1. MANY OF THE LIGHTING FIXTURES LISTED IN THE FIXTURE SCHEDULE REQUIRE SPECIAL OPTIONS TO FUNCTION PROPERLY IN THE CONTROL SCENARIOS CALLED OUT ON THE LIGHTING CONTROL PLANS AND ASSOCIATED SCHEDULE. THE CONTRACTOR SHALL CAREFULLY REVIEW BOTH THE LIGHTING CONTROL PLANS AND THE LIGHTING FIXTURE SCHEDULE TO PROVIDE FIXTURES WITH ALL NECESSARY COMPONENTS TO ENSURE FULLY FUNCTIONAL LIGHTING CONTROL SCENARIOS AS CALLED OUT IN THE PLANS.
2. MULTIPLE CONTROL SCENARIOS ARE INDICATED ON THE LIGHTING AND LIGHTING CONTROL PLANS BY CIRCUITING AND/OR OTHER NOTATION. PROVIDE QUANTITY AND TYPE OF BALLASTS/DRIVERS OR OTHER COMPONENTS NECESSARY TO ACHIEVE THE CONTROL SCENARIOS INDICATED BY THE PLANS. FULLY COORDINATE BALLAST/DRIVER AND ALL LIGHTING FIXTURE COMPONENTS WITH THE LIGHTING CONTROL SYSTEM CONTRACTOR AND MANUFACTURER. THERE SHALL BE NO ADDITIONAL COMPENSATION FOR A LACK OF COORDINATION BETWEEN THE LIGHTING CONTROL SYSTEM CONTRACTOR, MANUFACTURER AND THE ELECTRICAL CONTRACTOR.

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A-001	12/11/2013	ADDENDUM #001

Life Science Collaboration

1910 N. Antelope Valley Parkway
Lincoln, Nebraska

TCEP No.: 716-002-12
Davis Design.: 12-0077
BVH No.:L12018.unl

November 27, 2013

PROFESSIONAL ELECTRICAL ENGINEER
TED L. SCHIMMER
E-8623
11-27-13
REGISTERED
STATE OF NEBRASKA

Electrical Schedules

E4.01

Nebraska Innovation Campus
Life Science Collaboration

Tenant Improvement Package - UNL Food Science and Technology (For Reference Only)

1910 N Antelope Valley Parkway
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November 27, 2013

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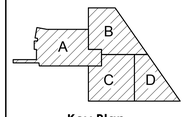

Key Plan

For Reference Only

Life Science Collaboration

1910 N Antelope Valley Parkway
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TCEP No.: 716-006-12

December 11, 2013

Title Sheet & Drawing Index

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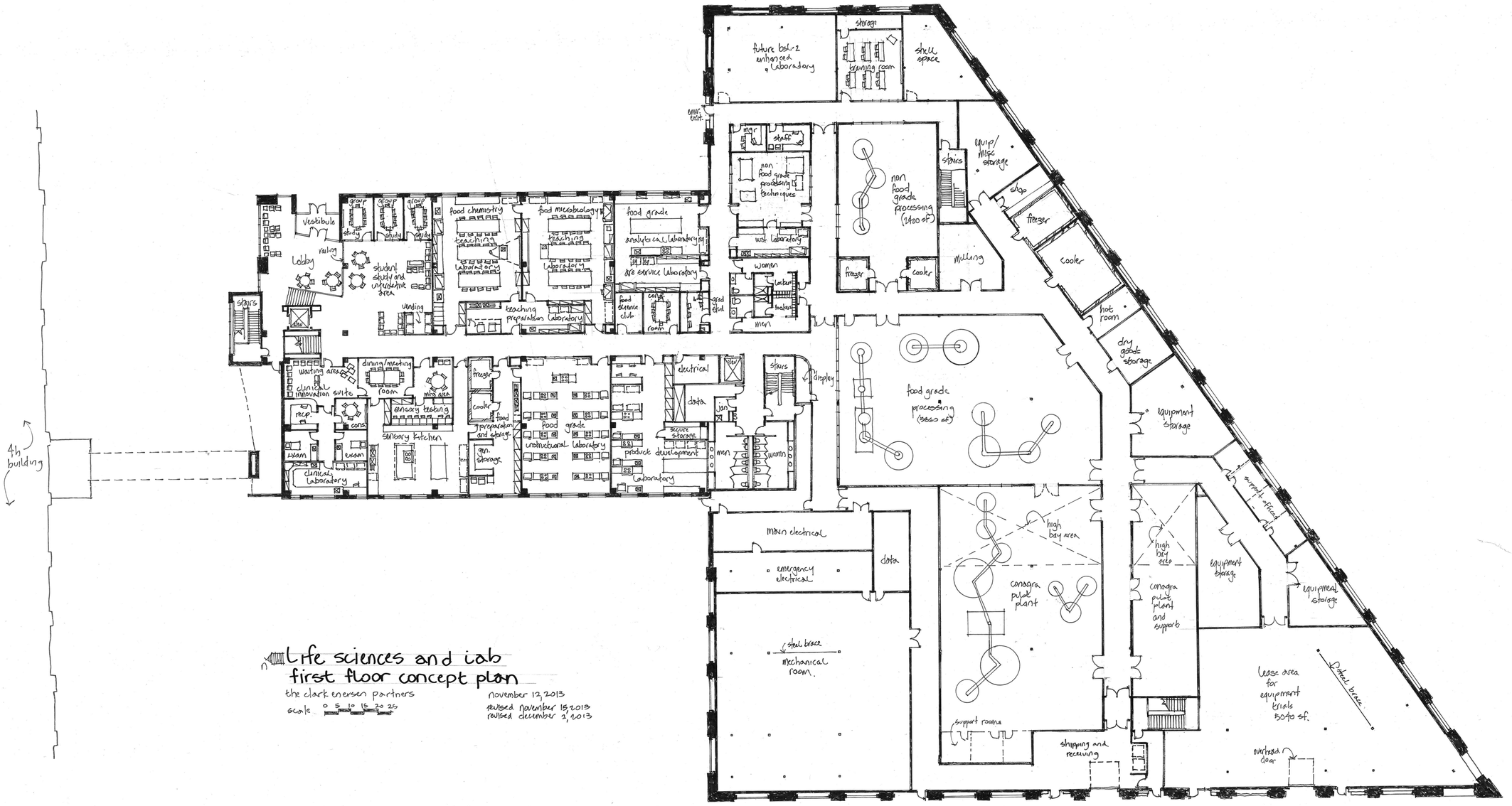

FIRST FLOOR CONCEPT PLAN (FOR REFERENCE ONLY)

SCALE: 1/16" = 1'-0"

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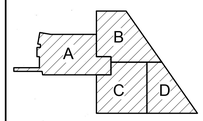

Key Plan

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First Floor - Tenant Finish Concept Plan

TF1.11

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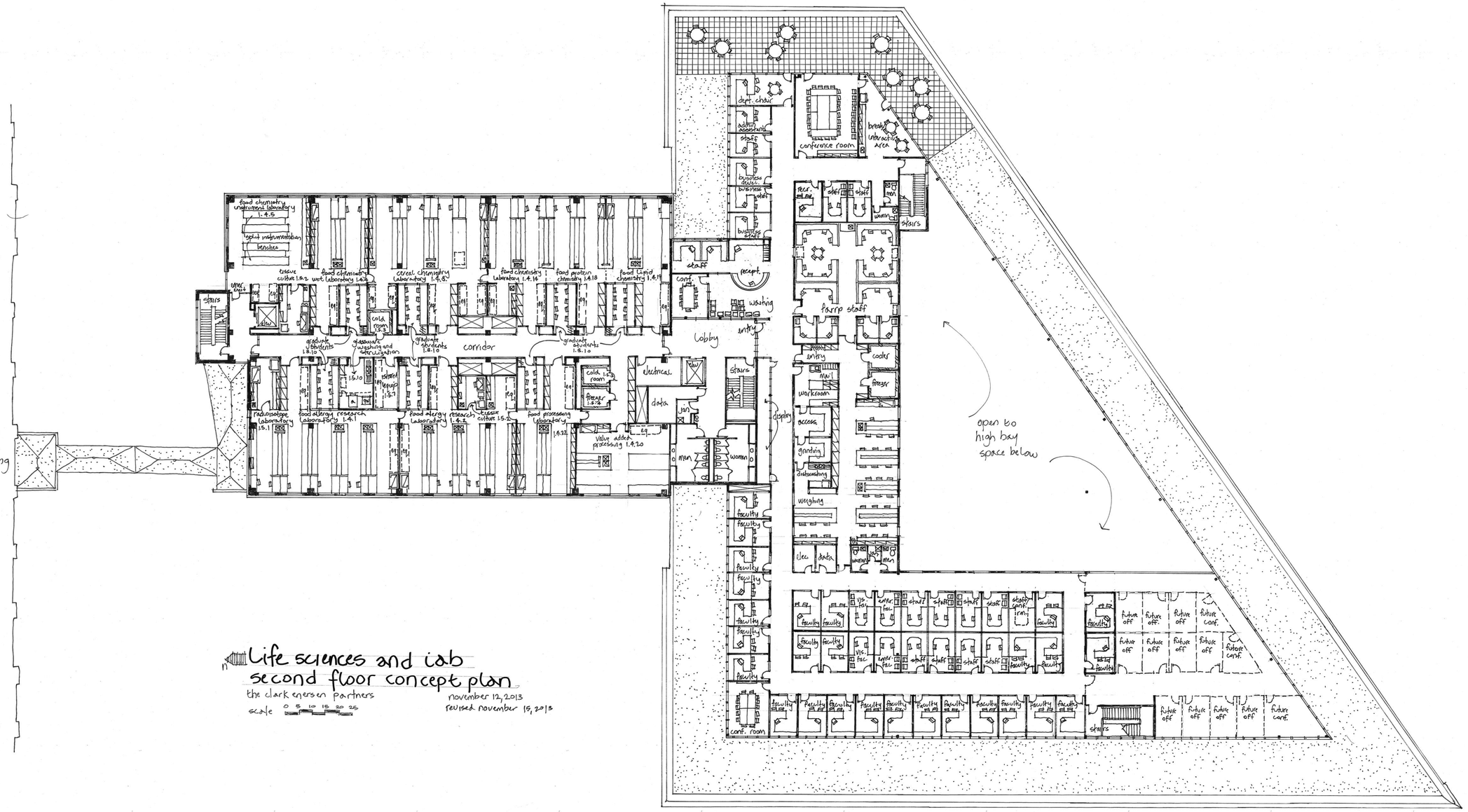

Life sciences and lab
second floor concept plan
the clark enersen partners
scale 0 5 10 15 20 25
november 12, 2013
revised november 15, 2013

SECOND FLOOR CONCEPT PLAN (FOR REFERENCE ONLY)
SCALE: 1/16" = 1'-0"

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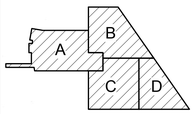

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Second Floor - Tenant Finish Concept Plan

TF1.21

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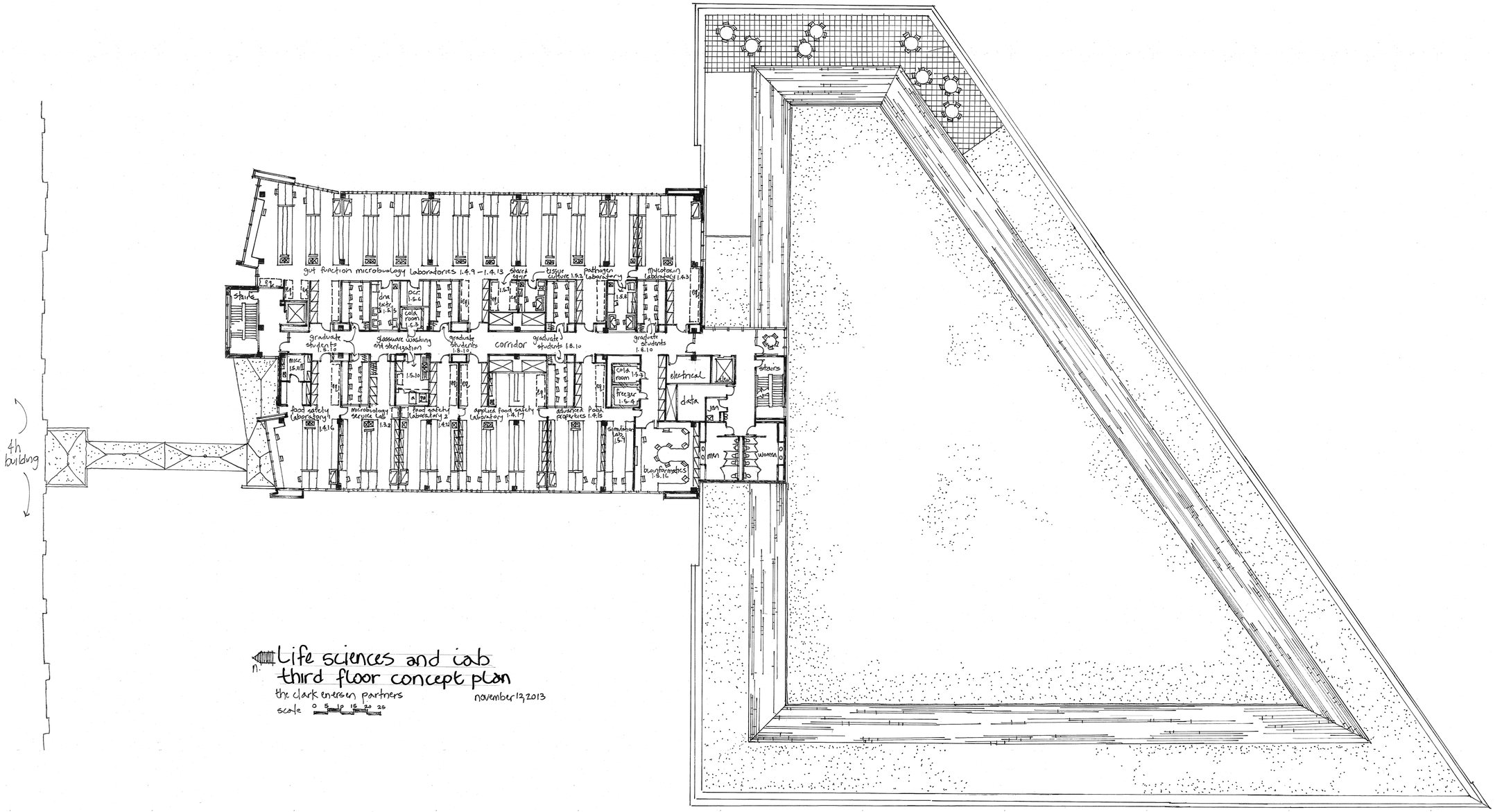

THIRD FLOOR CONCEPT PLAN (FOR REFERENCE ONLY)

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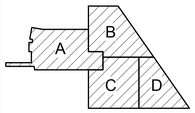

Key Plan

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Third Floor - Tenant Finish Concept Plan

TF1.31

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