

**ADDENDUM NO. 3**

**ADDENDUM NO. 3**

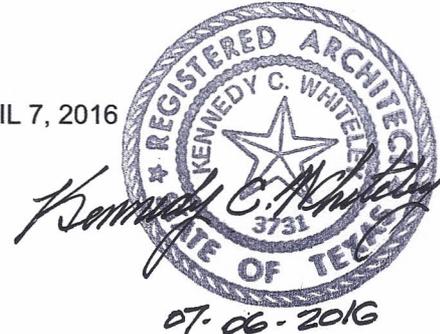
FOR: WEBB COUNTY YOUTH VILLAGE REHABILITATION CENTER  
FOR WEBB COUNTY  
111 CAMINO NUEVO ROAD, HWY 359  
LAREDO, TEXAS 78041

TO: DRAWINGS AND SPECIFICATIONS DATED APRIL 7, 2016

PREPARED BY: AUSLAND ARCHITECTS + METAFORM STUDIO

ADDENDUM DATE: July 6, 2016

ARCHITECTS PROJ. NO.: 1401



This addendum shall be considered part of the Contract Documents for the above-mentioned project as though it had been issued at the same time and shall be incorporated integrally therewith. Where provisions of the following supplementary data differ from those of the original Contract Documents, this Addendum shall govern and take precedence.

Addendum No. 3 consists of the following:

- Addendum No. 3
- Revised Proposal Form 1 thru 5
- Revised Webb County Conflict of Interest Form 1 thru 2
- Specifications
- 012200 - Allowances (1-3), 74116 Metal Soffit, Wall Panels, & Roof Panels (1-7); 087100 - Door Hardware (1-19), 093050 - Tile Setting Materials & Accessories (1-4), 011480 - Gymnasium & Play Field Equipment (1-4), 142100 - Electric Traction Elevator (1-7), 265150 - Lighting Control System (1-10)
- Attachments: 8/A1.3; 1R/A2.1 (1-3); 1R/A2.2 (1-2); A2.3 (1-3); 1R/A2.4, A2.4 (1-2), 1R/A2.5 (1-3); 1/A2.5 (1-2); 1R/A2.6; 5R/A2.6; 8R/A2.6; 3R/A2.7; 7R/A2.7; 8/A2.7; 9R/A2.7; 10R/A2.9; 4R/A4.8; 6R/4.8; 1R/A5.3 (1-2); 4/A5.8; C.06; C.07; C.08; C.12; S-2.1; AM1.1; AM1.2; AM3.1; AES1.1; AE1.1; AE1.2; AE2.1-A; AE2.1-B; AE2.2-A; AE/2.2-B; 1/AE3.1-A; 1/AE3.1-B;
- AE3.2-A; AE3.2-B; AE4.1; AE5.2; AE5.1; AP1.1-A
- End of Addendum No. 3

Bidders are hereby notified that they shall make any necessary adjustment in their estimates on account of this addendum. It will be construed that each bidder has submitted with full knowledge of all modifications and supplemental data specified herein.

---

**Note: Invitation For Competitive Sealed Proposals Revision**

**COMPETITIVE SEALED PROPOSALS WILL BE RECEIVED UNTIL 2:00 PM, CST, Thursday, July 14, 2016**

Mark Proposal: Proposal No. 2016-03: "Webb County Youth Village Rehabilitation Center," Laredo, Texas

**Hand delivered or mailed to:  
Webb County Clerk's Office  
County Clerk  
1110 Victoria St., Suite 201  
Laredo, Texas 78040**

### **ADDENDUM NO. 3**

Proposals must be delivered no later than Thursday, July 14, 2016 – 2:00 p.m. to the attention of the Webb County Clerk. Proposals will be opened and publicly read at 2:00 p.m.

A Proposal Security in the amount of five percent (5%) of the Proposer amount must accompany each proposal in the form of a payment bond, cashier's check, or bank money order made payable to the County of Webb. Performance and Payment Bonds each in the amount of (100) % of the contract amount will be required from the successful Proposer.

Proposals must be submitted with one (1) ORIGINAL and eight (8) COPIES in sealed envelopes to the Webb County Clerk's Office. Sealed envelopes must be marked (Sealed- Proposal) with proposal name on envelope.

Jose Angel Lopez III, Purchasing Agent

#### **CLARIFICATIONS:**

<b>Item</b>		<b>Clarification</b>
C3-1	Bid Proposal	Irrigation shall be designed by a license irrigation contractor. The contractor shall be responsible for all materials and equipment required by local codes, including back flow preventer, etc.
C3-2	AC.1	At Applicable Codes revise code to read, "International Energy Conservation Code (IECC 2009 Edition)", in lieu of IECC 2012 Edition.
C3-3	Miscellaneous Requirements	Contractor to review and provide price for all kitchen equipment as specified.
C3-4	C.08	Add note to read; "Alternate N0.06 Site Improvements; Parking lot shall be asphalt to match existing".

#### **SPECIFICATIONS:**

<b>Item</b>	<b>Reference Specifications</b>	<b>Description</b>
S3-1	Contract Documents Proposal Form	1. Delete the current section PROPOSAL FORM, in its entirety. 2. Insert PROPOSAL FORM (revised 7-6-16) issued herewith, pages 1 thru 5, see attached.
S3-2	Webb County Conflict of Interest Disclosure	1. Delete Conflict of Interest Disclosure, and replace with attached revised Conflict of Interest; see attached pages 1 thru 2
S3-3	Section 012200 Allowances	1. Delete the current Section 012200 - ALLOWANCES, in its entirety. 2. Insert Section 012200 - ALLOWANCES (revised 7-6-16), pages 1 thru 3, see attached.
S3-4	Section 054100 Cold-form Metal Framing Non-Load Bearing	Revise Part 1 - General, section 1.2 Action Submittals as follows: 1. Add Paragraph B: Contractor to submit shop drawings for review. Indicate component details, framed openings, and accessories or items required of related work. Provide design engineer's stamp on shop drawings. Design frame system under direct supervision of a structural Engineer.
S3-5	Section 074113 Metal Soffit, Wall Panels & Roof Panels	Add Specification Section 074113 Metal Soffit, Wall Panels, & Roof Panels, Sheets 1-7.

### **ADDENDUM NO. 3**

S3-6	Section 077200 Roof Accessories	Revise Part 2 - Products, section 1.1 Manufacturers as follows:  Add Paragraph A- Item 3: "Deadweight Anchor System: KEE Safety, Weightanka", non-penetrating anchor system. System shall be used for harness attachment at roof. Coordinate install location with Architect.
S3-7	Section 084113 Aluminum-framed Entrances and Storefronts	Revise Part 2 - Products, section 2.1- Products as follows:  1. Paragraph A – Add Item 4: General Note: "All exterior glass shall be 451T, front loaded glazing", (exceptions WA12- shall be curtain wall type.)
S3-8	Section 084413 Glazed Aluminum Curtain Walls	Revise Part 2 - Products, section 2.2- Manufacturers as follows:  1. Paragraph A – Delete title and revise to read, "Basis of Design Product: Subject to compliance with requirements, provided by Kawneer 1600 SSG or comparable product by one of the following".
S3-9	Section 087100 Door Hardware	Delete this specification section in its entirety and replace with revised section 087100 - Door Hardware; see attached sheets 1-19.
S3-10	Section 088000 Glazing	Revise Part 1 - General, section 1.2 Performance Requirements as follows:  2. Paragraph A – Add Item 5: General Note: "Glazing contractor to verify size of glazing meets size requirements to comply with all applicable codes."  Revise section 2.8 Monolithic - Glass as follows:  1. Paragraph A – Delete title "Glass Type 4" and replace with revise title to read "Type 3: Clear heat-strengthened float glass". 2. Paragraph B - Delete title "Glass Type 5" and replace with revise title to read "Type 4: Clear fully tempered float glass". 3. Paragraph C - Delete title "Glass Type 8" and replace with revise title to read "Type 5: Clear fully tempered float glass". 4. Add Paragraph D - Glass Type 6: Clear fully tempered float Glass; Item 1: Thickness 3/8", Item 2: Provide safety glazing labeling.  Revise section 2.9 Insulating - Glass Types as follows:  1. Paragraph A – Item 3: Delete and revise to read, "Outdoor Lite: Heat-strengthened float glass, standard tint glass." 2. Paragraph A – Item 5: Delete and revise to read, "Indoor Lite: Heat-strengthened float glass, Low-E No.3." 3. Paragraph B – Item 3: Delete and revise to read, "Outdoor Lite: Fully tempered float glass, standard tint glass." 4. Paragraph B – Item 5: Delete and revise to read, "Indoor Lite: Fully tempered float glass, Low-E No.3."
S3-11	Section 093050 Tile Setting Materials and Accessories	Add Specification Section 093050 Tile Setting Materials and Accessories, Sheets 1-4.
S3-12	Section 096813 Tile Carpeting	Revise Part 2 – Products section 2.1 Carpet Tile CPT-1 & CPT-2 as follows:  1. Paragraph A – Item 2: Delete and revise to read, "Boylu-SVELTE level (CPT-2) at floors and walls of Intake 130 &131, and floor at Office 118".

**ADDENDUM NO. 3**

		2. Contact Information for Carpet: Milliken Carpet: (Nan Alexander, 512-632-1604) Boylu Carpet: (Tasha Boyer, 210-788-9401)
S3-13	Section 011480 Gymnasium & Play Field Equipment	Add Specification Section 011480 Gymnasium and Play Field Equipment, Sheets 1-4
S3-14	Section 142400 Hydraulic Elevators	Delete this specification section in its entirety and replace with revised section 142100 – Electric Traction Elevators; see attached sheets 1-7.
S3-15	Section 104000 Architectural Signage	Delete section 2.2 Materials, Paragraph B title, “City of Laredo Seal,” and replace with the following:  B. Webb County Seal(s) 1. Furnish and install (1) aluminum seal 30” Diameter. Architect to determined installation location.  Revise section 2.2 Materials Paragraph C. Dimensional Letters as follows:  1. Item 1: Delete section and replace with the following: “Allow for thirty (30) 18” height letters as selected by the architect; Prismatic K-410, at heights noted, 1” thick, cast aluminum as manufactured by Southwell or equal.” 2. Item 2: Delete section and replace with the following: “ Interior Letters: Allow for fifty (50) 4” height letters as selected by the architect; Prismatic K-410, 3/4” thick, cast aluminum as manufactured by Southwell or equal.” 3. Item 3: Delete section in its entirety.
S3-16	Section 265150 Lighting Control System	Add Specification Section 265150 Lighting Control System, Sheets 1-10.

**DRAWINGS:**

Item	Reference Drawing(s)	Description
D3-1	A1.2	1. Add Note, “Provide a pair of 3’-0” Chain link gates at South gates of basketball court. 2. Remove berms at perimeter of basketball court, refer to Civil Drawings. 3. Revise callout tag to read, “1/A5.9”, in lieu of 1/A1.3 at bench.
D3-2	A1.3	1. Add Detail 8/A1.2; see attached
D3-3	A2.1	1. Revise column grid lines; see attached 1R/A2.1 2. Add keynote tag 18; see attached 1R/A2.1 3. Revise dimension at Dining 107; see attached 1R/A2.1 4. Revise window WA-3 to read WA-9; see attached 1R/A2.1 5. Revise door tag 119 to read 118A; see attached 1R/A2.1 6. Add millwork at Conference Rm. 122; see attached 1R/A2.1
D3-4	A2.2	1. Add enlarged detail tag at elevator 206; see attached 1R/A2.2. 2. Add window tag WA-30 at Corridor A205; see attached 1R/A2.2. 3. Add window tag WA-31 at Corridor A205; see attached 1R/A2.2.

**ADDENDUM NO. 3**

		<ol style="list-style-type: none"><li>4. Add elevation tag 12/A5.6 at TV Room 202; see attached 1R/A2.2.</li><li>5. Add elevation tag 10/A5.6 Typical at all Dorm Rooms; see attached 1R/A2.2.</li><li>6. Add note, "Standing Seam Metal at all Canopies".</li></ol>
D3-5	A2.3	<ol style="list-style-type: none"><li>1. Revise Door Schedule as noted in attached drawing.</li><li>2. Revise Interior Finish Schedule; as noted in attached drawing.</li><li>3. Revise Glazing Legend as noted in attached drawing.</li><li>4. Add note, "Contractor to verify size of Type A door, refer to Door Schedule".</li></ol>
D3-6	A2.4	<ol style="list-style-type: none"><li>1. Revise WA-3 window elevation; see attached WA-3</li><li>2. Add section tag 8/A2.6.1 at window WA-12 butt joint.</li><li>3. Revise Glazing Legend as noted in attached drawing.</li></ol>
D3-7	A2.5	<ol style="list-style-type: none"><li>1. Revise WA-18 window elevation; see attached WA-18</li><li>2. Revise WA-19 window elevation; see attached WA-19</li><li>3. Revise WA-20 window elevation; see attached WA-20</li><li>4. Add window type WA-30 &amp; WA-31; see attached 1R/A2.5</li><li>5. Revise Glazing Legend as noted in attached drawing</li></ol>
D3-8	A2.6	<ol style="list-style-type: none"><li>1. Revise Detail No.1; see attached detail 1R/A2.6</li><li>2. Revise Detail No.5; see attached detail 5R/A2.6</li><li>3. Revise Detail No.8; see attached detail 8R/A2.6</li></ol>
D3-9	A2.6.1	<ol style="list-style-type: none"><li>1. Revise Detail No.10 title to read; "10 Hollow Metal Door Head"</li><li>2. Revise Detail No. 11 title to read; "11 Hollow Metal Door Jamb"</li><li>3. Revise Detail No. 12 title to read; Hollow Metal Door Threshold"</li></ol>
D3-10	A2.7	<ol style="list-style-type: none"><li>1. Revise Detail No.3; see attached detail 3R/A2.7</li><li>2. Revise Detail No.7; see attached detail 7R/A2.7</li><li>3. Add Detail No.8; see attached detail 8/A2.7</li><li>4. Revise Detail No.9; see attached detail 9R/A2.7</li></ol>
D3-11	A2.7.1	<ol style="list-style-type: none"><li>1. Revise Detail No.1 title to read; "1 Aluminum Curtain Wall SSG Storefront Head"</li><li>2. Revise Detail 2 title to read; "2 Aluminum Curtain Wall SSG Jamb"</li><li>3. Revise Detail 3 title to read; "3 Aluminum Curtain Wall SSG Sill"</li></ol>
D3-12	A2.9	<ol style="list-style-type: none"><li>1. Revise Detail No.10; see attached detail 10R/A2.9</li><li>2. Add note, Membrane Waterproofing to Detail No.4</li><li>3. Delete note, "Wood blocking where necessary" at Detail No.7</li><li>4. Add note, "Provide Break Metal at exterior side of column at Detail No.8.</li><li>5. Revise grid line 3 to read "5" at Detail No. 12</li></ol>
D3-13	A2.10	<ol style="list-style-type: none"><li>1. Add note, "Backer rod and metal trim edge of window.</li></ol>
D3-14	A3.1	<ol style="list-style-type: none"><li>1. Add note, "Prefinished Metal Wall panels at entry between column grid 7 &amp; 8 at No. 1 West Elevation.</li><li>2. Revise window tag to read, WA-29 in lieu of WA-4 at No.1 West Elevation.</li></ol>
D3-15	A3.2	<ol style="list-style-type: none"><li>1. Add note: "Refer to MEP for louver locations".</li><li>2. Revise door tag to read, 215 in lieu of 212 at No. 2 North Elev.</li><li>3. Relocate light fixtures between metal panel downspouts at No. 2 North Elev.</li></ol>

### **ADDENDUM NO. 3**

D3-16	A4.1	<ol style="list-style-type: none"><li>1. Revise window tag to read, WA-22 in lieu of WA-26 at Intake 130 and 131 at No. 1 Bldg. Section.</li><li>2. Revise window tag to read, WA-29 in lieu of WA-12 at Social Area 201 at No.1 Bldg. Section.</li><li>3. Revise keyed note No. 21 at col. grid 13 to read, "No.27-Alucobond Panels" at No.1 &amp; No.2 Bldg. Sections.</li><li>4. Revise window tag to read, WA-25 in lieu of WA-22 at Office 134 at No.2 Bldg. Section.</li></ol>
D3-17	A4.2	<ol style="list-style-type: none"><li>1. Revise room name to read, "Social Area 201 in lieu of Multi-purpose Room.</li><li>2. Revise keyed note No. 21 at col. grid 13 to read, "No.27-Alucobond Panels" at No.2 Bldg. Section.</li></ol>
D3-18	A4.3	<ol style="list-style-type: none"><li>1. Revise note to read, "Suspended Pre-finish Metal Panels," in lieu of Alucobond panels at Detail No.1</li><li>2. Revise note to read,"Alucobond Panels on exterior grade plywood, and moisture barrier in lieu of Pre-finish metal panels at Detail No. 2</li><li>3. Revise note to read,"Alucobond Panels on exterior grade plywood, and moisture barrier in lieu of Pre-finish metal panels at Detail No. 3</li></ol>
D3-19	A4.8	<ol style="list-style-type: none"><li>1. Revise Detail 4; see attached 4R/A4.8</li><li>2. Revise Detail 6; see attached 6R/A4.8</li><li>3. Revise Detail No.1, lower left to read, "Detail No. 2".</li></ol>
D3-20	A5.3	<ol style="list-style-type: none"><li>1. Revise dimension at Shower 209; see attached detail 1R/A5.3</li><li>2. Revise dimension at Men's Toilet 208; see attached Detail 1R/A5.3</li></ol>
D3-21	A5.8	<ol style="list-style-type: none"><li>1. Add Detail No.4; see attached Detail 4/A5.8</li><li>2. Add detail section tag 4/A5.8 to top of steps, floor to tread intersection</li><li>3. Add detail section tag 2/A5.8 at Detail No.1</li><li>4. Revise detail callout tag 5/A4.8 at to read 3/A4.8 at Detail No. 2</li></ol>
D3-22	A7.1	<ol style="list-style-type: none"><li>1. At note to read, "Provide 5/8" gypsum board under stairs.</li><li>2. Revise all light fixture tags to match E1.1 &amp; E1.2 (refer to MEP Sheets ES1.1, E1.1 &amp; E1.2.)</li></ol>

END OF ARCHITECTURAL ADDENDUM NO. 3

### **CIVIL ADDENDUM NO. 3**

PREPARED BY: HOWLAND ENGINEERING

---

#### **CLARIFICATIONS:**

<b>Item</b>		<b>Clarification</b>
C1-3	C.01	<ol style="list-style-type: none"><li>1. Revise note, Alternate No.1 to read," Walking Trails &amp; Surface" (Refer to Civil Sheets &amp; A1.1.)</li></ol>
C2-3	C.05	<ol style="list-style-type: none"><li>1. Add the following note: "Contractor shall verify all quantities of materials as shown in Civil sheet C.05 &amp; Architectural drawings".</li></ol>
C3-3	C.05	<ol style="list-style-type: none"><li>1. Contactor shall raise or lower existing fire hydrants to match proposed grading elevations, or as required by local Fire</li></ol>

### **ADDENDUM NO. 3**

		Dept., Contractor to also coordinate with relocation with the City of Laredo Utilities Dept.
--	--	--

#### **DRAWINGS:**

<b>Item</b>	<b>Reference Drawing(s)</b>	<b>Description</b>
D3-1	C.12	Add the following General Notes: <ol style="list-style-type: none"><li>1. Any water and sewer lines parallel or crossing each other must meet (TECQ) requirements pertaining to separation and clearance.</li><li>2. All water fittings shall be mechanical joints made in the U.S.A.</li><li>3. All underground bolts and nuts shall be A316 stainless steel.</li><li>4. All pipe joint restraint fittings shall be made in the U.S.A. and bolts, nuts and rods shall be A316 Stainless steel.</li><li>5. All water pipe up to 12" if diameter shall be PVC, DR-14, C-900. From 16" to 24" diameter water pipe shall be PVC, DR-18, c-905.</li><li>6. If an existing water line is replaced, all water services shall be replaced from the new line to the meter location. All water services to be transferred to the new water line once it has passed the pressure test and bacteriological test.</li><li>7. All tie-in connections to the existing mains shall be done with restraint pipe and fittings.</li><li>8. Refer to MEP plans for fire protection connection and transformer pad details.</li><li>9. Any conduit turn whether up to the pole or into the transformer will need to be a steel conduit turn and not a pvc.</li><li>10. Contractor to call AEP at 1-877-373-4858 top inspect lines before cover.</li><li>11. All existing regulatory street signs must be maintained with proper display at all times.</li></ol>
D3-2	C.06	<ol style="list-style-type: none"><li>1. Replace sheet in its entirety and replace with re-issue sheet C.06; attached this addendum.</li></ol>
D3-3	C.07	<ol style="list-style-type: none"><li>1. Replace sheet in its entirety and replace with re-issue sheet C.07; attached this addendum.</li></ol>
D3-4	C.08	<ol style="list-style-type: none"><li>1. Replace sheet in its entirety and replace with re-issue sheet C.08; attached this addendum.</li><li>2. Remove detail "Concrete Approach"</li></ol>
D3-5	C.12	<ol style="list-style-type: none"><li>1. Replace sheet in its entirety and replace with re-issue sheet C.12; attached this addendum.</li></ol>

END OF CIVIL ADDENDUM NO. 3

### **Structural Addendum No. 3**

PREPARED BY: SYNERGY ENGINEERING

-----

#### **CLARIFICATIONS**

<b>Item</b>	<b>Reference Specifications</b>	<b>Description</b>
C3-1	S-2	Refer to Civil drawings for all slope at Foundation Plans

### **ADDENDUM NO. 3**

#### **DRAWINGS:**

<b>Item</b>	<b>Reference Drawing(s)</b>	<b>Description</b>
D3-1	S-2.1	1. Add drawing Foundation Plan Basketball Court, refer to attached sheet S-2.1

END OF STRUCTURAL ADDENDUM NO. 3

### **MEP ADDENDUM NO. 3**

PREPARED BY: TRINITY MEP ENGINEERING

-----

#### **CLARIFICATIONS:**

<b>Item</b>	<b>Reference Specifications</b>	<b>Description</b>
C3-1	Na	None

#### **DRAWINGS:**

<b>Item</b>	<b>Reference Drawing(s)</b>	<b>Description</b>
D3-1	M1.1	<ol style="list-style-type: none"><li>1. Add keyed note No.21; refer to attached AM1.1</li><li>2. Revise keyed note No.8; refer to attached 1/AM1.1</li><li>3. Revise location of transfer air on Office 118; refer to attached 1/AM.1</li><li>4. Revise location of intake louvers; refer to attached 1/AM1.1</li><li>5. Revise supply air ductwork taps onto Office 128 &amp; 129; refer to attached 1/AM1.1</li></ol>
D3-2	M1.2	<ol style="list-style-type: none"><li>1. Add keyed notes No.19, 20 &amp; 21; refer to attached AM1.2</li><li>2. Revise mounting locations for supply air devices in Social Area 201; refer to attached 1/AM1.2</li><li>3. Revise location of intake &amp; exhaust louver heights; refer to attached 1/AM1.2</li></ol>
D3-3	M3.1	<ol style="list-style-type: none"><li>1. Revise Detail No. 1 to reflect metal AHU platform in lieu of wooden platform; refer to attached 1/AM3.1</li></ol>
D3-4	ES1.1	<ol style="list-style-type: none"><li>1. Revise site plan keyed notes. Items shall be included in Alternate No. 06; refer to attached ES1.1</li></ol>
D3-5	E1.1	<ol style="list-style-type: none"><li>1. Revise as shown in attached sheet AE1.1</li><li>2. Revise lighting types at Dining 107; refer to attached 1/AE1.1</li><li>3. Add notes at Office 111, 128, 129, &amp; 134; refer to attached 1/AE1.1.</li><li>4. Revise lighting type and notes at Office 118; refer to attached 1/AE1.1</li><li>5. Revise lighting type at IDF 121; refer to attached 1/AE1.1</li></ol>

**ADDENDUM NO. 3**

D3-6	E1.2	<ol style="list-style-type: none"><li>1. Revise as shown in attached sheet AE1.2</li><li>2. Add keyed note No.4; refer to attached AE1.2</li><li>3. Revise wall switch at TV Room 202; refer to attached 1/AE1.2</li><li>4. Add notes at Elevator 206; refer to attached 1/AE1.2</li><li>5. Revise lighting types at Corridor 215; refer to attached 1/AE1.2</li></ol>
D3-7	E2.1	<ol style="list-style-type: none"><li>1. Revise as shown in attached sheets AE2.1-A &amp; AE2.1-B</li><li>2. Revise notes at Dining 107; refer to attached 1/AE2.1-A</li><li>3. Add General Notes: Power, item H; refer to attached AE2,1-B</li><li>4. Add Keynotes: Power, items 19-23; refer to attached AE2.1-B</li><li>5. Revise outlet locations as shown in attached sheets AE2.1-A &amp; AE2.1-B</li></ol>
D3-8	E2.2	<ol style="list-style-type: none"><li>1. Revise a shown in attached sheet AE2.2-A &amp; AE2.2-B</li><li>2. Add General Notes: Power item H; refer to attached AE2,2-A</li><li>3. Add Keyed Notes; Power items 8-15; refer to attached AE2.2-A</li><li>4. Revise outlet locations at Dorm Rooms typical as shown in attached sheets AE2.2-A</li></ol>
D3-9	E3.1	<ol style="list-style-type: none"><li>1. Revise as shown in attached sheets AE3.1-A &amp; AE3.1-B</li><li>2. Add General Notes: Special Systems, items I &amp; J; refer to attached AE3.1-A</li><li>3. Add Surveillance Camera Legend; refer to attached AE3.1-B</li></ol>
D3-10	E3.2	<ol style="list-style-type: none"><li>1. Revise as shown in attached sheets AE3.2-A &amp; AE3.2-B</li><li>2. Relocate Tel/ Data outlets; refer to attached sheets AE3.2-A &amp; AE3.2-B</li><li>3. Add General Notes: Special Systems, items I &amp; J; refer to attached AE3.2-B</li><li>4. Add Surveillance Camera Legend; refer to attached sheets AE3.2-B</li></ol>
D3-11	E4.1	<ol style="list-style-type: none"><li>1. Revise as shown in attached sheets AE4.1</li><li>2. Revise Electrical legend, Luminaire Schedule; refer to attached AE4.1.</li><li>3. Add relay Lighting Control Panel Schedule and Occupancy Sensor Legend; refer to attached AE4.1.</li></ol>
D3-12	E5.1	<ol style="list-style-type: none"><li>1. Revise as shown in attached sheets AE5.1</li><li>2. Add Electrical Riser Diagram Keyed Notes, item 12; refer to attached sheet AE5.1</li></ol>
D3-13	E5.2	<ol style="list-style-type: none"><li>1. Revise Electrical Panel Schedules; refer to attached AE5.2</li></ol>
D3-14	P1.1	<ol style="list-style-type: none"><li>1. Revise Electrical Panel Schedules; refer to attached AP1.1-A</li></ol>

END OF MEP ADDENDUM NO. 3

## Form of Competitive Sealed Proposal Webb County Youth Village Rehabilitation Center

To: The COUNTY OF WEBB, TEXAS

From:

\_\_\_\_\_  
Contractor

Address: \_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_ E-mail: \_\_\_\_\_

**PROJECT: "Webb County Youth Village Rehabilitation Center"**

Attention: Honorable Tano E. Tijerina , Webb County Judge

Pursuant to Notice to Bidders, the undersigned bidder hereby proposes to furnish the labor, materials, and equipment in accordance with the Plans and Specifications, General Conditions of the Agreement, Special Provisions of the Agreement, and Addenda, if any. The proposer binds himself/ herself upon acceptance of his proposal to execute a contract and bonds on the accompanying form for performing and completing the said work within the time stated and as required by the detailed Specifications at the following price listed below.

The Contractor agrees to complete the entire project (including all alternates selected) within **450 calendar days** of the contractor's receipt of the Notice to Proceed including Base Proposal and all selected Alternates listed below.

Contractor to incorporate into **Base Proposal Section 012200 - Allowances**. The Allowances are considered "betterment funds" in addition to work/ items already described and documented in the construction documents and specifications. The base bid price includes all project work except for that work contained within the alternate proposal items.

In submitting this proposal, the undersigned agrees:

1. That the Owner has the right to reject this bid form.
2. To hold my bid open for a period of ninety (**90**) calendar days from date of receipt.
3. To accept the provisions of the instructions to proposers regarding disposition of proposal security.
4. To enter into and execute a contract, if awarded, on the basis of this bid form.
5. To accomplish the work in accordance with Contract Documents. The undersigned further agrees to execute and deliver the contract, performance and payment bonds in the form set forth in these documents within ten (10) days from date of notification of acceptance of the bid, and in case the undersigned fails, refuses or neglects to execute and deliver the contract within the time specified, the undersigned will be considered as having defaulted in the offer to do the work and furnish labor and materials as specified in said bid, and the cashier's

check (or bid bond) shall be forfeited to Webb County by reason of such failure and such default and said check and the funds represented thereby shall be the property of the Webb County absolutely upon the same conditions and contingencies as to time in default of executing the contract with performance bond and payment bond in the form provided with the Contract Documents in those cases where a bidder's bond has been indicated as acceptable and such bond having been filed. Webb County shall have the immediate right to call upon the principal and sureties to pay the principal sum of said bond.

The undersigned further agrees that the proposal guaranty may be retained by the Webb County.

The undersigned certified that this bid is made in strict conformity with all of the conditions, contingencies, requirements set forth stated in every part of the drawings. Advertisement for Bids, Instructions to Bidders, General Conditions, Special Conditions, and all other parts setting forth the specifications for the performance of the heretofore-described work and without collusion or connection with any other person, partnership, company, firm, association, or corporation offering bids on this work for the following sums or prices to-wit:

\_\_\_\_\_

Having examined the project documents and agreeing to conform to the project documents, we enclose herewith bid security in the amount of 5% of the Base Proposal Amount and submit the following:

**Base Bid Total Price (Including Allowances):** \_\_\_\_\_

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

Base Bid shall include all Allowances (Refer to Section 012200 for Allowances).

Acknowledgment of Addenda: (Please initial and date)

Addendum No. 1: \_\_\_\_\_

Addendum No. 2: \_\_\_\_\_

Addendum No. 3: \_\_\_\_\_

Addendum No. 4: \_\_\_\_\_

Addendum No. 5: \_\_\_\_\_

The undersigned acknowledges receipt of the following Addenda to the Construction Documents and the provisions and requirements of which the Addenda have been taken into consideration in the preparation of this Proposal.

Acknowledgment of other documents: (Please initial and date):

Wage Determination: \_\_\_\_\_

Labor Provisions: \_\_\_\_\_

Affirmative Action Program: \_\_\_\_\_

**ALTERNATES:**

**Alternate Proposal No. 01 - Walking Trail & Surface**

The addition of a walking trail as shown in Architectural and Civil Drawings. The contractor shall include all labor, materials, and equipment.

(Add) \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

**Alternate Proposal No. 02 - Proposed Road & Parking Spaces (Adjacent to New Bldg.)**

Delete proposed Road & Parking spaces as shown in Civil Engineering drawings. All grading and site preparation shall be included in Base Bid. The contractor shall include all labor, material and equipment in the base bid amount.

(Deduct) \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

**Alternate Proposal No. 03 - Warming Kitchen Equipment at Room 116**

Delete all kitchen equipment as indicated in Kitchen 116 & Storage 113. Refer to Kitchen Equipment drawings (sheets FS-1.00 thru FS-2.02). Price shall include all necessary equipment as specified for functional kitchen. Contractor shall include all labor, materials, and equipment.

(Deduct) \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

**Alternate Proposal No. 04 - JJAEP Cafeteria Finish-out**

Delete all interior finish-out of the following: Lobby 101, Restrooms 103 & 104, Kitchen 105, Storage 106, and Dining 107. Include all finishes (walls, floors and ceilings), plumbing fixtures, electrical and mechanical systems. All mechanical equipment shall remain in adjacent space. (Refer Sheet A1.1 & MEP drawings.) Contractor shall include all labor, materials and equipment for shell build out.

(Deduct) \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

**Alternate Proposal No. 05 - Kitchen Equipment at Room 105**

Delete all kitchen equipment as indicated for Kitchen Room 105. Refer to drawings (sheets FS-1.00 thru FS-2.02). Price shall include all necessary equipment for functional kitchen. Contractor shall include all labor, materials, and equipment.

(Deduct) \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

**Alternate Proposal No. 06 - Site Improvements**

The addition of new parking spaces (72) as indicated in the construction documents. Provide parking lot light poles, match existing. Refer to Civil Engineering drawings. Contractor shall include all labor, materials, and equipment.

(Add) \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

**Alternate Proposal No. 07 - Decorative Iron Fencing**

Provide Decorative iron fence as indicated in Construction Documents. Contractor shall include all labor, materials, and equipment.

(Add) \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

**Alternate Proposal No.08 - Concrete Benches**

Delete exterior concrete benches as indicated. All labor, materials, and equipment shall be included.

(Delete) \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

Bid Notes:

1. All amounts shall be shown in figures and words. In case of discrepancy, the amount shown in words shall govern.
2. Webb County Reserves the right to award the project with any combination of additive alternatives as stated.

**PROJECT: "Webb County Youth Village Rehabilitation Center"**

PROPOSAL AFFIDAVIT

STATE OF TEXAS §

COUNTY OF WEBB §

\_\_\_\_\_
being first duly sworn, deposes and says

that he is \_\_\_\_\_
(a Partner or Officer of the firm of, etc.)

the party making the foregoing proposal , that such proposal is genuine and not collusive or sham; that said Proposer has not colluded, conspired, connived or agreed, directly or indirectly, sought by agreement or collusion, or communication or conference, with any person, to fix the proposal or affiant of any other Proposer, or to fix any overhead, profit or cost element of said proposal price, or of that of any other Proposer, or to secure any advantage against Webb County or any person interested in the proposed Contract; and that all statements in said proposal are true.

\_\_\_\_\_
Signature of
Proposer, if the Proposer is an individual
Partner, if the Proposer is a Partnership
Officer, if the Proposer is a Corporation

Subscribed and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_
Notary Public

My Commission expires
\_\_\_\_\_

## Webb County

### Conflict of Interest Disclosure

Effective January 1, 2006, Chapter 176 of the Texas Local Government Code requires that any vendor or person considering doing business with a local government entity disclose in the Questionnaire Form CIQ, the vendor or person's affiliation or business relationship that might cause a conflict of interest with a local government entity. By law, this questionnaire must be filled with the records administrator of Webb County no later than the 7<sup>th</sup> business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code. A person commits an offense if the person violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor. The questionnaire may be viewed and printed by following the link before:

By submitting a response to this request, the vendor represents that it is in compliance with the requirements of Chapter 176 of the Texas Local Government Code.

The Webb County Officials who come within Chapter 176 of the Local Government Code relating to filing of Conflict of Interest Questionnaire (Form CIQ) include:

1. Webb County Judge Cayetano "Tano" Tijerina
2. Commissioner Frank Sciaraffa
3. Commissioner Rosaura "Wawi" Tijerina
4. Commissioner John Galo
5. Commissioner Jaime Canales
6. Judge Joe Lopez, 49<sup>th</sup> Judicial District
7. Judge Becky Palomo, 341<sup>st</sup> Judicial District
8. Judge Oscar J. Hale, JR., 406<sup>th</sup> Judicial District

Please send completed forms to the Webb County Clerk's Office located at 1110 Victoria, Suite 201, Laredo, Texas 78040.

# CONFLICT OF INTEREST QUESTIONNAIRE

## FORM CIQ

For vendor or other person doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 1491, 80th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code by a person who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the person meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code.

A person commits an offense if the person knowingly violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor.

### OFFICE USE ONLY

Date Received

**1** Name of person who has a business relationship with local governmental entity.

**2**  Check this box if you are filing an update to a previously filed questionnaire.

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.)

**3** Name of local government officer with whom filer has employment or business relationship.

\_\_\_\_\_  
Name of Officer

This section (item 3 including subparts A, B, C & D) must be completed for each officer with whom the filer has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the filer of the questionnaire?

Yes       No

B. Is the filer of the questionnaire receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?

Yes       No

C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership of 10 percent or more?

Yes       No

D. Describe each employment or business relationship with the local government officer named in this section.

**4**

\_\_\_\_\_  
Signature of person doing business with the governmental entity

\_\_\_\_\_  
Date

SECTION 012200ALLOWANCES

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
  - 1. Contingency allowances.
  - 2. Betterment allowances.
  - 3. Lump sum allowances.

## 1.2 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.
- B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.

## 1.3 ACTION SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.

## 1.4 INFORMATIONAL SUBMITTALS

- A. Submit invoices to show cost of products furnished under each allowance. Reconciliation of allowance amounts with actual costs will be by Change Order.
- B. Submit documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

## 1.5 COORDINATION

- A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

## 1.6 LUMP SUM AND BETTERMENT ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes, freight, and delivery to Project site.

- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials selected by Owner and/or Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.
- C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.
  - 1. If requested by Architect, retain and prepare unused material for storage by Owner. Deliver unused material to Owner's storage space as directed.

#### 1.7 CONTINGENCY ALLOWANCES

- A. Use the contingency allowance only as directed by the Owner and only by Change Orders that indicate amounts to be charged to the allowance.
- B. Contractor's related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.
- C. Change Orders authorizing use of funds from the contingency allowance will include Contractor's related costs and reasonable overhead and profit margins.
- D. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

#### 1.8 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
  - 1. Include installation costs in purchase amount only where indicated as part of the allowance.
  - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.
  - 3. Submit substantiation of a change in scope of work, if any, claimed in Change Orders related to unit-cost allowances.
  - 4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.
  - 1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.
  - 2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

## PART 2 - PRODUCTS (Not Used)

## PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

## 3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

## 3.3 SCHEDULE OF ALLOWANCES

- A. The following Allowances are included in the Contract Sum:

- 1. **Allowance No. 01 – Contingency Allowance**

- Include a Contingency Allowance of One Hundred Twenty Thousand Dollars (\$120,000.00) to be used at Owner's discretion. Contingency to include contractor's overhead and profit.

- 2. **Allowance No. 02 – Digital Wallcovering Betterment Allowance**

- Include a digital wallcovering betterment allowance of Ten Thousand Dollars (\$10,000.00) in addition to items included in the specification(s) to be used for the purchase of material and/or design of displays and graphical information. Contractor shall be responsible for the coordination of the work, All graphical information shall be approved by the Owner and Architect. Contractor is to include installation labor in the base bid, contractor's overhead and profit.

- 3. **Allowance No. 03 – Testing Allowance**

- Include a testing allowance of Ten Thousand Dollars (\$10,000.00) in addition to items included in the specification(s) to be used for the testing of materials. A qualified testing laboratory will be selected by the owner, and paid by the Contractor. The Contractor shall be responsible for the coordination of the work.

END OF SECTION 012100

SECTION 087100DOOR HARDWARE

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of contract, including general and supplementary conditions and Division 01 specification sections, apply to this section.

## 1.2 SUMMARY

- A. General – this section includes items known commercially as finish or door hardware that are required for swing, sliding, overhead and folding doors, except special types of unique hardware specified in the same sections as the doors and door frames on which they are installed. This section includes (but is not limited to) the following:

1. Hinges and pivots
2. Key control system
3. Lock cylinders and keys
4. Lock and latch sets
5. Bolts and coordinators
6. Exit devices
7. Push/pull units
8. Closers, door control devices, and electromagnetic hold open devices
9. Stops and overhead holders
10. Door trim units
11. Protection plates
12. Weatherstripping, fire, and smoke seals
13. Astragals and meeting seals on pairs of doors
14. Thresholds, gasketing, and door bottoms
15. Miscellaneous devices
16. Electrified hardware devices, controls, power supplies, transfers, and wiring diagrams

- B. Related sections – contain requirements that relate to this section (but are not limited to those listed):

1. Division 00 and 01 section(s) for sustainable material requirements, windstorm/hurricane code compliance, and blast resistance.
2. Division 06 section(s) for interior architectural woodwork cabinet hardware.
3. Division 08 and 10 section(s) for all opening hardware requirements including but not limited to coordination and matching efforts, template requirements, and keyed security.
  - a. All hardware for aluminum storefront swinging doors shall be supplied by this section's Supplier if not specifically specified in aluminum storefront section.
  - b. All cylinders for locks on overhead type doors, folding doors, wire-mesh sliding doors, accordion type doors, and gates to be provided under this section, unless specifically called out to be provided by others in respective sections.
  - c. All "hardware preps" must be covered in the door/frame supplier's bid. The pricing for finish hardware only covers the products within this document, not the doors/frames respective cutouts/mortise/surface prep required for these items.
4. Divisions 13 and 16 section(s) for access control, fire alarm integrated systems, electrical provisions, and radiation/radio frequency shielding requirements for hardware.

- C. References – as specified in this section are subject to the following standards in the most recent code revisions as approved by local building code and as applicable to plan:
1. ADA. The Americans with Disabilities Act – “Title III – Public Accommodations”.
  2. ANSI-A117.1. American National Standards Institute – “Accessible and Usable Buildings and Facilities”.
  3. ANSI/BHMA-156 Series. American National Standards Institute/Builders Hardware Manufacturing Association – “Builders Hardware Standards”.
  4. ANSI A250.13. American National Standards Institute – “Testing and Rating of Severe Windstorm Resistant Components for Swinging Door Assemblies.”
  5. ASTM E330/E1886/E1996. American Society for Testing and Materials – “Uniform Static Air Pressure Difference” / “Cyclic Pressure Differentials”/ “Impacted by Windborne Debris in Hurricanes”.
  6. IBC. International Building Code.
  7. NEC. National Electrical Code.
  8. NFPA-80. National Fire Protection Agency – “Standard for Fire Doors and Windows”.
  9. NFPA-101. National Fire Protection Agency – “Life Safety Code”.
  10. State and Local Codes including Authority Having Jurisdiction.
  11. UFAS. Uniform Federal Accessibility Standards.
  12. UL. Underwriter’s Laboratories Testing Services.
  13. UL-10C. Underwriter’s Laboratories – “Positive Pressure Tests of Door Assemblies”.
  14. WHI. Warnock Hersey International Testing Services.

### 1.3 HARDWARE SUPPLIER RESPONSIBILITIES

- A. Under the direction of Architect and Hardware Door Consultant to:
1. Key meetings - attend a minimum of two (2) key meetings per project at the location selected by Owner.
  2. Tagging and indexing - tag all keys with permanent tags, assemble key cabinet, and set up electronic cross index system.
  3. Pre-install meeting – provide a pre-installation training meeting for hardware Installer(s) and General Contractor at the job site one (1) week prior to installation of finish hardware.
  4. Instruct Owner – provide a minimum of four (4) hours of key control instructions per project for training Owner’s personnel in the proper adjustment and maintenance of door hardware and hardware finishes at project conclusion training.
  5. Install cores - permanent cores to be installed under the direct supervision and presence of Supplier and Owner's maintenance personnel.
  6. Certify install – at the completion of all work, with Installer(s), General Contractor, and manufacturer’s representative(s), inspect and supervise the adjustment of any piece of hardware not operating or installed correctly, certify in writing that all hardware has been installed per manufacturer’s requirements, and provide a written punch list directly to Architect of all outstanding items not completed.
  7. Follow-up inspection – approximately six (6) months after the date of substantial completion, meet with representatives of the General Contractor, Installer(s), Owner, and lock, exit, and closer manufacturers, at project site for the following:
    - a. Examine and re-adjust each item of door hardware as necessary to restore function of doors and hardware to comply with specified requirements.
    - b. Consult with and instruct Owner’s personnel in recommended additions to the maintenance procedures.

- c. Replace hardware items that have deteriorated or failed due to faulty design, materials, or installation of hardware units.
- d. Prepare a written report for Owner and Architect of current and predictable problems (of substantial nature) in the performance of the hardware.
8. Owner meeting – H&H Door Company shall meet with Owner and Architect to determine applicable access control requirements on project.
9. Pre-Bid Questions shall be directed to Rick Huegele at H&H Door Company if any questions regarding this specification or sets arise. Phone contact #361-578-3664

#### 1.4 SUBMITTALS

- A. Submittals – submit the following in accordance with conditions of contract and Division 01 specification sections within two (2) weeks of receipt of an executed purchase order and contract documents.
  1. Product data – manufacturer’s technical data for each item of door hardware, installation and mounting instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
    - a. Include templates for doors, frames, and other work specified to be factory prepared for the installation and preparation of door hardware. Contractor to check shop drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
  2. Schedule layout – coordinated with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
  3. Schedule content – based on hardware indicated, organize schedule into “hardware sets” indicating complete designations of each item required for every door or opening. Include the following information:
    - a. Type, style, function, size, and finish of each hardware item.
    - b. Model name and manufacturer of each item.
    - c. Fastenings and other pertinent information.
    - d. Location of each hardware set cross-referenced to indications on drawings both on floor plans and in door and frame schedule.
    - e. Explanation of all abbreviations, symbols, and codes contained in schedule.
    - f. Mounting locations for hardware.
    - g. Degree of opening required for all doors with closers.
    - h. Door and frame handing, sizes, and materials.
    - i. Keying information.
    - j. Supplier performance responsibilities.
  4. Samples – as requested by Architect for each type of exposed hardware unit in finish indicated and tagged with full description for coordination with schedule.
    - a. Samples will be returned to supplier. Units that are acceptable and remain undamaged though submittal, review, and field comparison process may, after final check of operation, be incorporated in the work, within limitations of keying coordination requirements.

5. Electronic security hardware – coordinate the installation of electronic security with Architect and provide installation and technical data to Architect and other related sub-contractor(s).
  - a. Provide complete wiring diagrams for each opening requiring electrified hardware, except openings where only magnetic hold-opens are specified. Provide a copy with each hardware schedule submitted after approval. Provide a copy with delivery of hardware to job site and another copy to Owner at time of job completion.
- B. Finals – supply the approved schedule and templates for all finish hardware within two (2) weeks of receipt of approved submittal for use by Architect, General Contractor, and affected supplier(s) for all other products. Include with schedule the product data, samples, shop drawings of other work affected by door hardware, and other information essential to the coordinated review of schedule.
- C. Keying submittal - submit separate keying schedule with detailed electronic and paper copies of key structure indicating clearly how Owner's final instructions on keying of locks have been fulfilled.

## 1.5 QUALITY ASSURANCE

- A. Single source responsibility – obtain each type of hardware for latch and lock sets, hinges, closers, exit devices, and flat goods from a single manufacturer.
- B. Supplier qualifications – a recognized architectural door hardware supplier, that has exact knowledge and experience with Owner's current material hardware requirements and supplier performance requirements, that has a record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this project, and that employs an experienced hardware consultant who is available to Owner, Architect, and Contractor as requested at reasonable times during the course of the work, for consultation at the jobsite.
- C. Fire-rated openings – provide door hardware scheduled or required for fire-rated openings that complies with UL, NFPA-80, and requirements of Authority Having Jurisdiction. Provide only items of door hardware that are listed and are identical to products tested by UL, Warnock Hersey, Factory Mutual or other testing and inspecting organization acceptable to Authority Having Jurisdiction for use on types and sizes of doors indicated in compliance with requirements of fire-rated door and door frame labels.
  1. All required finish hardware components of a fire-rated opening shall be incorporated into any door assembly located within a fire-rated partition.
  2. Doors and frames used in positive pressure opening assemblies shall meet IBC and UL-10C in areas where this specification includes gasketing for smoke rated openings.
- B. General compliance – Supplier to certify and submit documentation that all hardware supplied complies with all Federal ADA, State TAS, Local IBC Code, Fire Life Safety Code, and additional requirements of doors. Provide a complete list of discrepancies and possible solutions to any opening not meeting requirements.

## 1.6 PRODUCT HANDLING

- A. Packaging – door hardware is the responsibility of Supplier. As material is received by Supplier from various manufacturers, sort, tag, and repackage in containers clearly marked with appropriate hardware set number or correct item code to match set numbers or item code of approved hardware schedule. Include basic installation instructions with each item or package.
- B. Delivery – Supplier to deliver packaged door hardware items promptly to location as directed by General Contractor.

- C. Inventory – General Contractor to inventory door hardware jointly with representatives of Supplier and Installer(s) at job site at delivery until each is satisfied that count of the delivery is correct.
- D. Site control – General Contractor to provide secure lock-up for door hardware delivered but not yet installed. Control handling and installation of hardware items that are not immediately replaceable so that completion of the work will not be delayed by hardware losses both before and after installation. Replace any hardware lost or misplaced at own expense to meet construction schedule.

#### 1.7 MAINTENANCE

- A. Supplier to furnish a complete set of as-built hardware schedule, installation instructions, specialized tools, and maintenance instructions for all products supplied for Owner’s continued adjustment, maintenance, and removal and replacement of door hardware at the Owner key control training. Final payment will not be released until this item has been completed fully.

#### 1.8 WARRANTY

- A. All finish hardware shall be supplied with a minimum two (2) year warranty against defects in materials and workmanship commencing with substantial completion of the project except as follows:
  - 1. All closers to have a minimum ten (10) year written warranty.
  - 2. All exit devices to have a minimum five (5) year written warranty.
  - 3. All locksets to have a minimum five (5) year written warranty.

### PART 2 – PRODUCTS:

#### 2.1 MANUFACTURERS

- A. Subject to compliance with requirements, provide products by one of the following:
  - 1. Butt hinges and pivots:
    - a. McKinney, div. Assa Abloy
  - 2. Cylinders and with interchangeable cores:
    - a. Sargent, div. Assa Abloy
  - 3. Key cabinet:
    - a. Key Control Systems, Inc.
    - b. Telkee, Inc.
    - c. MMF Co.
  - 4. Locks and latches:
    - a. Sargent, div. Assa Abloy
  - 5. Exit and panic devices:
    - a. Sargent, div. Assa Abloy
  - 6. Overhead and smoke-activated closers:
    - a. Sargent, div. Assa Abloy
  - 7. Push/Pull trim, protection plates, bolts, and other auxiliary hardware:
    - a. Rockwood, div. Assa Abloy

8. Weatherstripping, seals, astragals and thresholds:
  - a. Pemko, div. Assa Abloy
9. Miscellaneous items:

## 2.2 MATERIALS AND FABRICATION

- A. Base metals – produce hardware units of basic metal and forming method indicated, using manufacturer’s standard metal alloy, composition, temper, and hardness, but in no case of lesser (commercially recognized) quality than specified for applicable hardware units as determined by respective ANSI/BHMA A156 series standards for each type of hardware item and by ANSI/BHMA A156.18 for finish designations indicated. Do not furnish “optional” materials or forming methods other than those indicated, except as otherwise specified.
- B. General fasteners – provide hardware manufactured to conform to published templates, generally prepared for machine screw installation. Do not provide hardware that has been prepared for self-tapping sheet metal screws, except as specifically indicated.
  1. Furnish screws for installation with each item. Provide Phillips flat-head screws except as otherwise indicated. Finish exposed (exposed under any condition) screws to match hardware finish, or if exposed in surfaces of other work, to match finish as closely as possible including “prepared for paint” surfaces to receive painted finish.
  2. Provide concealed fasteners for hardware units that are exposed when door is closed except to the extent that no standard units of type specified are available with concealed fasteners. Do not use through-bolts for installation where bolt head or nut on opposite face is exposed in other work unless their use is the only means to fasten the hardware securely. Where through-bolts are used as a means of reinforcing the work, provide sleeves for each through-bolt or use sex screw fasteners.

## 2.3 HINGES, BUTTS, AND PIVOTS

- A. Locations – except for hinges and pivots to be installed entirely (both leaves) into wood doors and frames, provide only template-produced units. For fire-rated doors provide steel or stainless steel bearing type. Tips shall be flat button and matching plug, finished to match leaves, except where hospital tips (H, McKinney) are indicated. Provide ball bearing (TB series, McKinney) on all of the following door types: high frequency, exterior non-means of egress, doors with closers, restrooms, fire-rated, and sound sealed doors.
  1. B1 – Part #TA2314 x NRP, McKinney. Non-removable pins and non-ferrous material or stainless steel. Provide at reverse-hand exterior doors that are not means of egress.
  2. B2 – Part #MCK12HD x door height, McKinney. Continuous hinge, non-ferrous material. Provide at reverse-hand exterior doors that are a means of egress.
  3. B3 – Part #T2714 x NRP, McKinney. Non-removable pins. Provide at reverse hand interior corridor doors with lockable devices.
  4. B4 – Part #T2714, McKinney. Non-rising pins. Provide at all other interior doors.
  5. SH1 – Part #1502, McKinney. Spring pins. Provide (2) at wood or hollow metal toilet stall doors.
- B. Sizes – except as otherwise indicated, provide hinges as follows: 5 knuckle heavy duty full mortise template type 4.5” x 4.5” standard weight for all 1-3/4” doors up to and including 3’4” wide. For all doors over 3’4” wide, provide 4.5” x 4.5” heavy weight hinges (Number "4" between T and A in hinge model signifies heavy weight series, McKinney). For all doors over 1-3/4” through 2” thick provide 5” x 5” hinges.

- C. Number of hinges – provide number of hinges indicated, but not less than one (1) continuous or three (3) mortise butt hinges per door leaf for doors 90” (86” at fire-rated doors) or less in height and one (1) additional hinge for each 30” of additional height.
- D. Screws – provide Phillips flat head screws complying with the following requirements with screw head finish to match surface of hinges or pivots:
  - 1. Metal doors and frames – install machine screws into drilled and tapped holes or self-drilling screws on continuous hinges.
  - 2. Non fire-rated wood doors and frames – install wood screws.
  - 3. Fire-rated wood doors – install #12 x 1-1/4”, threaded-to-the-head steel wood screws.

#### 2.4 LOCK CYLINDERS AND KEYING

- A. Keying system – equip locks with cylinders for interchangeable core pin tumbler inserts. Provide temporary construction cores for all keyable devices for the construction period; Supplier to remove and replace with permanent cores when directed. Provide final cores and keys for installation by Supplier.
- B. Key ways – provide all lockable devices with Sargent keyway to be compatible with Owner’s new keying structure requested that comply with performance requirements for Grade 1 as listed in ANSI/BHMA A156.5, have been tested for pick and drill resistance requirements of UL 437, and which are UL listed for fire resistance.
- C. Key structure – comply with Owner’s instructions for master keying, and, except as otherwise indicated, provide individual change keys for each lock that is not designated to be keyed alike with a group of related locks. All interchangeable cores shall be stamped with the appropriate keying symbol for that core. Reference section HARDWARE SUPPLIER RESPONSIBILITIES for key meeting requirements.
  - 1. Permanently inscribe each key with cylinder manufacturer’s key symbol and notation “DO NOT DUPLICATE”.
  - 2. Provide concealed key control on all cores.
- D. Key material – provide keys of nickel silver only.
- E. Key quantity – provide three (3) change keys for each lock, five (5) master keys for each master system, and five (5) grandmaster keys for each grandmaster system, or in quantities as directed by Owner at the key meeting for multi-use rooms.
  - 1. Provide one (1) extra key blank for each lockable device.
  - 2. Provide ten (10) extra zero bitted cores.
  - 3. Provide key quantities equal to 125% of all classrooms for staff common use rooms.
  - 4. Provide two (2) additional copies of all master keys directly to Owner or district.
- F. Cylinder housing and cores – provide for all keyable exit device trim and applicable keyed options, keyed removable mullions, aluminum storefronts, overhead, accordion, wire partitions, package doors, and folding doors as required by each specific door or hardware type.
  - 1. CY1 – Part #1163-41/42/43/44/46 series x cam required, Sargent. Mortise Cylinder.
  - 2. CY2 – Part #1163-34, Sargent. Rim Cylinder.
- G. Key cabinet – provide key cabinet(s) including envelopes, labels, tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet, all as recommended by system manufacturer, with capacity for 150% of the total number of keyable devices required for the project. Provide hinged-panel type cabinet(s) for wall mounting. Reference section HARDWARE SUPPLIER RESPONSIBILITIES for tagging and indexing requirements.

1. KC1 – Part #201-8390-03, MMF. Key Cabinet.
  - H. Electronic index – provide complete electronic cross index system. Index to include architectural door mark number, key symbol, bitting, tag number, Owner’s door designation name or number, and number of keys provided.
- 2.5 LOCKS, LATCHES, BOLTS, ASTRAGALS, AND EXIT DEVICES
- A. Locks and latches – All locks shall have passed over 3 million cycle test and Supplier shall provide test data for verification at submittal. Provide locks and latches with function as required per room. Provide on all doors without push/pulls, exit devices, hospital latches, and flush bolts. Latch guard shall be provided on all reverse handed exterior doors with locksets. Latch guard shall be provided in models as required for door material type, lock strike dimensions, and thru-bolted.
    1. Lock functions – lever design shall be L lever design. Default to a single keyed function (office, classroom, or storeroom) if required function for any opening is in question. Where rabbit door stiles are indicated, provide special rabbit front on locks and latch units and bolts.
      - a. L1 – Part #28-1163-10G05, Sargent. Entrance lock.
      - b. L2 – Part #28-1163-10G38, Sargent. Classroom security lock. Provide at all classrooms (operated by cylinder both sides).
      - c. L3 – Part #28-1163-10G04, Sargent. Storeroom lock. Provide at all staff restrooms, mechanical rooms, electrical rooms, and storerooms.
      - d. L4 – Part #28-10U65, Sargent. Privacy latch. Provide at all single user, non-staff restrooms and wood or hollow metal toilet stall doors.
      - e. L5 – Part #28-10U15, Sargent. Passage latch. Provide at all Time Out rooms unless prior approval from Owner and Authority Having Jurisdiction.
      - f. DL1 – Part #1163-487, Sargent. Classroom deadbolt lock. Provide on all doors with push/pulls, hospital latches, and exterior mechanical, electrical, and custodial rooms.
      - g. DL2 – Part #1163-485, Sargent. Deadbolt with thumb-turn. Provide at all staff restrooms and non-gang restrooms. Staff restroom shall be keyed differently than the lever lock.
      - h. DL3 – Part #1163-484, Sargent. Serving line doors.
      - i. DL4 – Part #MS1850S x applicable strike required for frame type, Adams Rite. Storefront lock. Provide on all aluminum storefront doors requiring lock by finish hardware section
      - j. PL1 – Part #1163-858-2, Sargent. Padlock. Provide padlocks keyed to the building keying system for all perimeter chain link gates, mechanical yard gates, transformer enclosure gates, roof access hatches, floor access hatches and sprinkler control valves.
    2. Strikes – provide manufacturer’s standard wrought box strike for each latch or lock bolt, with curved lip extended to protect frame, finished to match hardware set, unless otherwise indicated.
      - a. Provide extra long strike lips for locks used on frames with applied wood or aluminum casing trim.
      - b. Provide roller type strikes where recommended by manufacturer of the latch and lock units.
      - c. Provide standard strike plates for interior doors of residential units where wood door frames are used.
    3. Lock throw – provide ½” minimum latch throw for other bored and pre-assembled locks and ¾” minimum latch throw for mortise locks. Provide 5/8” minimum latch throw on pairs of doors. Provide 1” minimum throw for all dead bolts. Comply with UL requirements for throw of bolts and latch bolts on fire-rated openings.

4. Lock backset – provide standard commercial backset. Adjust backset as required for coordination with surface applied hardware which would prohibit standard backset application.
- B. Flush bolts, overlapping astragals, and coordinators – provide minimum of ½” diameter rods of brass, bronze, or stainless steel with minimum 12” long rod for inactive leaf of pairs up to 7’0” in height. Provide longer rods as necessary for doors exceeding 7’0” in height. Provide recess type top strikes for bolts locking into head frames, unless otherwise indicated.
1. FB1 – Part #555 x height required, Rockwood. Manual flush bolt. Provide on non-rated inactive leafs of pairs without exit devices, sized to accommodate the door height.
  2. FB2 – Part #2845, Rockwood. Constant-latching flush bolt. Provide with automatic bottom bolt at all fire-rated pairs without exit devices.
  3. DP1 – Part #570, Rockwood. Dust-proof strike. Provide for foot bolts, except where special threshold construction provides non-recessed strike for bolt.
  4. AST1 – Part #357SP x door height, Pemko. Overlapping astragal. Provide at all inactive leafs of pairs without exit devices or push/pulls.
  5. COR1 – Part #2672 x lengths required, Rockwood. Bar coordinator. Provide with carry bars on all self-closing rated pairs with overlapping astragals sized to fit entire width of opening.
  6. COR2 – Part #1100, Rockwood. Carry bar. Provide with bar coordinator.
- C. Exit devices – provide lockable lever trim panic devices on all means of egress doors, door exiting from rooms of assembly, electrical closets that contain more than 1200 amps as required by NEC, and ALL reverse handed doors from locker rooms. Provide with device style, lever design to match lock levers, fire-rating, windstorm-rating, and sized per door height and width requirements. Provide double egress doors with panic devices with non-lockable trim. Provide all required components to insure all labeling and code requirements are satisfied. Provide shims where devices are required to span across glass lites which would interfere with level installation. All devices shall be through-bolted with sex bolts to the door and contain a sound deadening feature. Provide non-rated openings with keyed cylinder dogging to keep latch bolt retracted when engaged. Rim exit devices are to be used at all doors except double egress where surface vertical rod devices shall be used, or fire-rated pairs requiring a combination of mortise and vertical rod type as required by labeling authority. Pairs of doors at locations with mullion to have mullions equipped with “keyed cylinder” option and be furnished with mullion storage kits and applicable mullion stabilizers.
1. E1 – Part #12-43-1163-8810 x 862, Sargent. Rated rim exit.
  2. E2 – Part #16-43-1163-8810 x 862, Sargent. Non-rated rim exit.
  3. E3 – Part #12-43-1163-8710 x 862, Sargent. Rated surface vertical rod exit.
  4. E4 – Part #12-43-1163-8910 x 862, Sargent. Rated mortise exit.
  5. E5 – Part #16-43-1163-8510 x 862, Sargent. Provide at storefront doors requiring exit devices by hardware supplier.
  6. RM1 – Part #1163-L980 (#12-1163-L980 at fire-rated openings)x height required, Sargent. Removable mullion. Provide at pairs of doors requiring mullion for panic devices specified.
  7. MS1 – Part #98-2525 & 98-2526 Retainer packs, Sargent
  8. MS2 – Part #98-2578 Mullion storage kit, Sargent
- 2.6 PUSH/PULLS AND HOSPITAL LATCHES WITH ADDITIONAL DEADBOLTS
- A. Provide push/pulls on all non-rated entry foyer, atrium, multi-use restrooms, kitchen to serving, cafeteria/dining to serving, straight handed locker room doors. Provide hospital latches on rated doors in

lieu of push/pulls unless doors are a means of egress. Provide all doors with push/pulls or hospital latches with a classroom deadbolt. Provide manufacturer's standard exposed fasteners for installation.

1. P1/P2 – Part #70C / 107 x 70C, Rockwood. Push/Pull set.
2. P3 – Part #BF15747 x 3" less door width, Rockwood. Push bar/offset pull set. Provide on storefront doors without panic devices.
3. HL1 – Part #24-115, Sargent. Hospital latch.

## 2.7 CLOSERS AND DOOR CONTROL DEVICES

- A. Manual closers – provide with full covers on all door openings in fire/smoke rated partitions, means of egress, elevator machine rooms, electrical rooms, interior storage rooms over one-hundred square feet, rooms with sound seals, all rooms with a toilet, and exterior conditions except for mechanical and storage rooms. Provide closers at all corridor doors, except non-rated classrooms.
1. Special considerations – closers shall be added to all out-swinging doors in exit access or secondary communicating corridors (corridors other than exit access). Doors swinging from secondary communicating corridors shall require closers if:
    - a. Doors and/or partitions are indicated as fire-rated.
    - b. Room function defined elsewhere in this specification requires a closer.
    - c. The corridor provides egress travel to an exit access for an occupant load greater than fifty (50) persons.
  2. Sizes of units – except as otherwise specifically indicated furnish “multi-sized” closers with “barrier-free delayed closing” option to meet ADA and TAS requirements. Where manual closers are indicated for all doors required to be accessible to the physically handicapped, provide adjustable units complying with ANSI A117.1 provisions for door opening force and delayed action closing where indicated. Provide mounting brackets suitable for the style and swing of the door. Installer shall mount all closers on room side unless instructed otherwise by Architect. On doors with coordinators provide mounting brackets to span the coordinator. On aluminum storefront doors provide a drop mounting plate to accommodate the narrow top rail, if required.
    - a. C1 – Part #351 (P9 bracket where required), Sargent. Heavy Duty closer – used at all exterior locations except for exterior storerooms, mechanical, and electrical rooms.
    - b. C2 – Part #1431 (P9 bracket where required), Sargent. Low Duty closer – used at all remaining closer locations not using C1 closers.
    - c. MB1 – Part #2601AB/C, Rockwood. Coordinator mounting bracket.
    - d. MB2 – Part #351-D, Sargent. Storefront mounting drop plate for exterior closers.
    - e. MB3 – Part #1431D, Sargent. Storefront mounting drop plate for interior closers.
- B. Electro-magnetic holders – provide units designed to hold door in open position under normal usage and to release and close door automatically under fire conditions. Incorporate an integral electromagnetic holder mechanism designed for use with UL 288 listed fire detectors, provided with normally closed switching contacts.
1. EM1 – Part #997, Rixson. Magnetic holder. Provide at ALL stairwells and the following fire-rated locations: cross corridor pairs, cafeteria-dining to serving-tray line area, interior cafeteria, gym entrances, and vending.
  2. SC1 – Part #(P)7705PTDO, Norton. Smoke detector and closer device. Provide at doors noted to receive an electromagnetic holder that do not have a wall suitable for electromagnetic holder.

## 2.8 DOOR TRIM AND PROTECTION UNITS

- A. Edge trim – stainless steel to fit door thickness and 36” in height at kitchen to serving and custodial closets.
  - 1. ET1 – Part #310B x 36”, Rockwood. Edge Trim.
- B. Protection plates – fabricate face protection plates not more than 1-1/2” less than door width on push side of door by height indicated on single doors and 1” on each leaf for pairs. Provide protection plates for all doors with closers a minimum of 10” height, except provide 36” height at non-rated custodial closets and kitchen to serving. All metal protection plates to be of stainless steel, 0.050” thick. (U.S. 18 gage). Provide manufacturer’s standard exposed fasteners for door trim units consisting of either matching screws or self-tapping screws.
  - 1. KP1 – Part #K1050 10" x width required, Rockwood. Kick plate.
  - 2. AP1 – Part #K1050 36" x width required, Rockwood. Armor plate.

## 2.9 WEATHERSTRIPPING AND SEALS

- A. Provide continuous weatherstripping on all exterior, mechanical room, and electrical room doors. Provide light or sound seals on light or sound sensitive doors. Provide non-corrosive fasteners for exterior applications. Size weatherstripping and seals to opening size. Provide only those units where resilient or flexible seal strip is easily replaceable and readily available from stocks maintained by manufacturer.
  - 1. Weatherstripping at exterior jambs, mullions, and heads – provide bumper-type resilient insert and metal retainer strips, surface applied unless shown as mortise or semi-mortised, and of the following metal finish and resilient bumper material. Extruded aluminum with natural anodized finish, manufacturer’s standard color selections, or finish to match. Minimum 0.062” thickness of main walls and flanges.
    - a. WS1 – Part #303AV x door size, Pemko. Screw applied weatherstrip.
  - 2. Smoke seals – provide at interior openings as required by IBC on 3 sides to accommodate door sizes for all fire-rated doors and elevator machine rooms. Intumescent fire seals on 3 sides to accommodate door sizes for all fire-rated wood doors over 20 minute fire-ratings to meet IBC requirements if wood door specification does not require seals to be built into the edges of doors.
    - a. FS1 – Part #PK33BL x door size, Pemko. Smoke seal.
    - b. FS2 – Part #HSS2000 x door size, Pemko. Intumescent fire seal.
  - 3. Silencers – all doors not utilizing seals should be provided with mutes in design as required by frame manufacturer.
    - a. Z1 – Part #608, Rockwood. Door silencer.
  - 4. Sound seals – provide at sound sensitive doors.
    - a. SS – Part #379 x door size, Pemko. Sound seal.
    - b. ADB – Part #4301 x door size, Pemko. Automatic Door Bottom Seal.
  - 5. Light seals – provide at light sensitive doors.
    - a. LS1 – Part #379 x door size, Pemko. Light seal.
    - b. ADB – Part #4301 x door size, Pemko. Automatic Door Bottom Seal.

## 2.10 THRESHOLDS AND DOOR BOTTOM SWEEPS

- A. Except as otherwise indicated, provide standard metal threshold unit of type, size, and profile required at all exterior, mechanical, electrical, and interior doors separating non-conditioned and conditioned spaces. Provide units that meet ADA and TAS requirements. Undercut on doors to be adjusted to function as intended with applicable thresholds. Provide rain drips for all frames exposed directly to rain (no overhang on building).
1. Thresholds and door bottom sweeps – provide threshold consisting of metal, design, and finish sized to entire opening width. Extruded aluminum with color anodized finish as selected from manufacturer’s standard color, range, natural, or finished to match. Provide units not less than 4” wide, formed to accommodate change in floor elevation where indicated, fabricated to accommodate door hardware and to fit entire door width. Provide units with saddle threshold and exterior surface mounted door bottom drip-sweep combination unit.
    - a. TH1 – Part #170A x door width, Pemko. Saddle threshold.
    - b. DB1 – Part #345AV x door width, Pemko. Door bottom sweep.
  2. Drip cap – provide with width four (4)” wider than the size of the door at locations indicated.
    - a. DC1 – Part #346C x door width +4”, Pemko. Rain drip.

#### 2.11 DOOR STOPS, VIEWERS AND COAT HOOKS

- A. Door stops – provide wall stops at all doors that can open without hitting an obstruction and where a wall exists within the width of the door at 180° of open. Where obstruction exists, provide overhead surface mounted stops and with hold-open feature for all exterior non-means of egress doors. At exterior means of egress doors provide a heavy-duty floor stop projecting into the floor epoxy installed. This requirement is in addition to all closer requirements.
1. S1 – Part #409, Rockwood. Wall stop.
  2. S2 – Part #1540S series, Sargent. Overhead stop.
  3. S3 – Part #1540H series, Sargent. Overhead stop with hold open.
  4. S4 – Part #463, Rockwood. Heavy duty floor stop.
- B. Viewers – provide door viewers at all kitchen vendor back door entrances and where indicated by plans. Mount door viewer(s) to allow a minimum 180° viewing angle.
1. DV1 – Part#622, Rockwood. Door Viewer.
- C. Coat Hooks – provide coat hooks at all stall doors if not provided by toilet accessory or toilet partition suppliers.
1. CX1 – Part#806, Rockwood. Coat Hook.

#### 2.12 HARDWARE FINISHES

- A. Acceptable finishes – plated Satin Chrome, painted, and powder coated. Powder coated in similar finish is acceptable on closers. Anodized equal is acceptable where plating is not available or the commercially recognized standard. If finish selected above cannot be directly matched by product, a similar finish or paintable finish shall be provided.
1. General – provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with the manufacturer’s standards, but in no case less than specified by referenced standards for the applicable units of hardware.

2. Standard – The designations used in schedules and elsewhere to indicate hardware finishes are those listed in ANSI/BHMA A156.18, “Materials and Finishes”, including coordination with the traditional U.S. finishes shown by certain manufacturers for their products.
    - a. Provide finishes that match those established by BHMA or, if none established, match Architect’s sample.
  3. Lacquers – provide protective lacquer coating on all exposed hardware finishes of brass, bronze, and aluminum, except as otherwise indicated. The suffix “-NL” is used with standard finish designations to indicate “no lacquer”.
- B. Matching and coordination – match items to the manufacturer’s standard color and texture finish for the latch and locksets (or push/pull units if no latch/locksets).
1. Hardware components for storefront/specialty doors shall be coordinated with Architect/Owner and are to be compatible to the door finish as indicated in respective section(s), regardless of finish designations indicated herein.

## 2.13 MISCELLANEOUS ITEMS

- A. Knox Box – provide a 3200-Series with swinging door, tamper resistant electric switches and mortise kit “RMK” as manufactured by The Knox Company. Verify exact type required with the district fire marshal.

## PART 3 – EXECUTION:

### 3.1 INSTALLATION

- A. Pre-Install meeting – please reference section HARDWARE SUPPLIER RESPONSIBILITIES for pre-installation meeting requirements.
- B. Standards – mount hardware units at heights indicated in the following applicable publications, except as specifically indicated by Architect or required to comply with governing regulations:
  1. Door Hardware Institute – “Recommended Locations for Builders Hardware for Standard Steel Doors and Frames” and “Recommended Locations for Builders Hardware for Custom Steel Doors and Frames”.
  2. Texas Accessibility Standards & Americans with Disabilities Act mounting heights. When these two standards conflict, notify Architect and/or AHJ before installation of product.
- C. Coordination – install each hardware item in compliance with the manufacturer’s instructions and recommendations and hardware submittal requirements.
  1. General – set units level, plumb, and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation
  2. Painting/Finishes – where cutting and fitting is required to install hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation or application of surface protection with finishing work specified in Division 09 “Paintings and Coatings”. Do not install surface mounted items until finishes have been completed on the substrates involved. Remove all protective film prior to installation of mounting screws. Protect all finishes as required during construction to maintain original finish
  3. Fasteners – drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.
  4. Thresholds – set thresholds for exterior doors in full bed of butyl-rubber or polyisobutylene mastic sealant complying with requirements in Division 07 “Joint Sealers”.

- 5. Weatherstripping – comply with manufacturer’s instructions and recommendations to the extent installation requirements are not otherwise indicated for weatherstripping and seals.
- D. Electronic hardware – upon completion of any electronic security hardware installation, Contractor to verify that all components are working properly and state in the required guarantee that this inspection has been performed.
- E. Permanent core install and certify install - reference section HARDWARE SUPPLIER RESPONSIBILITIES for permanent core installation and certification of installation requirements.

3.2 ADJUSTING, CLEANING, AND DEMONSTRATING

- A. Adjusting – adjust and check each operating item of hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate freely and smoothly or as intended for the application made.
  - 1. Where door hardware is installed more than one (1) month prior to acceptance or occupancy of a space or area, Installer(s) shall return to the installation during the week prior to acceptance or occupancy and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.
- B. Cleaning – clean adjacent surfaces soiled by hardware installation. Clean all hardware finishes and return to new condition or replace prior to Owner’s occupancy.
- C. Instruct Owner and Follow-up – please reference section HARDWARE SUPPLIER RESPONSIBILITIES for demonstration/follow-up requirements.

PART 4 – JOB SPECIFIC DETAILS:

4.1 MEANS OF EGRESS DOORS

- A. All door openings that have an “EXIT” sign as indicated on the electrical drawings.

**HARDWARE SETS**

**Hardware Set 1**

2	KEY MEETING	SEE SPEC 1.3.A.1	-	SUPPLIER
1	TAGGING & INDEX	SEE SPEC 1.3.A.2	-	SUPPLIER
1	PRE-INSTALL MEETING	SEE SPEC 1.3.A.3	-	SUPPLIER
1	INSTRUCT OWNER	SEE SPEC 1.3.A.4	-	SUPPLIER
1	INSTALL CORES	SEE SPEC 1.3.A.5	-	SUPPLIER
1	CERTIFY INSTALL	SEE SPEC 1.3.A.6	-	SUPPLIER
1	FOLLOW-UP INSPECTION	SEE SPEC 1.3.A.7	-	SUPPLIER
1	OWNER MEETING	SEE SPEC 1.3.A.8	-	H&H DOOR

**Hardware Set 2**

Mark #101		6070		
2	CONTINUOUS HINGE	MCK-12HD x 84-1"	CLR	MCKINNEY
2	NARROW STILE RIM EXIT	43-8510 x 862 F x TB	32D	SARGENT
1	MULLION	980S x 84"	-	SARGENT
2	HEAVY DUTY CLOSER	351UO x TB	AL	SARGENT
2	DROP PLATE	351-D	AL	SARGENT
1	SADDLE THRESHOLD	170A x 72	AL	PEMKO

2 HEAVY DUTY FLOOR STOP 463 BLK ROCKWOOD  
 Note: All remaining seals to be provided by Storefront Supplier

**Hardware Set 3**

Mark #102	3070		
3 PLAIN BEARING HINGE	T2714 4 1/2 x 4 1/2 x NRP	26D	MCKINNEY
1 ENTRANCE LOCK	60-28-10G05	26D	SARGENT
1 WALL STOP	409	32D	ROCKWOOD
1 ARMOR PLATE	K1050 36" x 34	32D	ROCKWOOD
1 EDGE TRIM	310B x 36"	32D	ROCKWOOD
3 SILENCERS	608	GREY	ROCKWOOD

**Hardware Set 4**

Mark #103 - NOT USED  
 Mark #104 - NOT USED  
 Mark #119 - NOT USED  
 Mark #120 - NOT USED  
 Mark #132 - NOT USED  
 Mark #133 - NOT USED  
 Note: NO HARDWARE / NOT USED - - NOT USED

**Hardware Set 5**

Mark #105	3070		
3 PLAIN BEARING HINGE	T2714 4 1/2 x 4 1/2 x NRP	26D	MCKINNEY
1 ENTRANCE LOCK	60-28-10G05	26D	SARGENT
1 WALL STOP	409	32D	ROCKWOOD
3 SILENCERS	608	GREY	ROCKWOOD

**Hardware Set 6**

Mark #106	3070		
3 PLAIN BEARING HINGE	T2714 4 1/2 x 4 1/2	26D	MCKINNEY
1 ENTRANCE LOCK	60-28-10G05	26D	SARGENT
1 WALL STOP	409	32D	ROCKWOOD
3 SILENCERS	608	GREY	ROCKWOOD

**Hardware Set 7**

Mark #106A	3070		
Mark #118	3070		
Mark #118A	3070		
Mark #209	3070		
Mark #210	3070		
Mark #213	3070		
Mark #214	3070		
Mark #216	3070		
Mark #217	3070		
Mark #218	3070		
Mark #219	3070		
Mark #220	3070		
Mark #221	3070		
3 BALL BEARING HINGE	TA2714 4 1/2 x 4 1/2 x NRP	26D	MCKINNEY

1	ENTRANCE LOCK	60-28-10G05	26D	SARGENT
1	LOW DUTY CLOSER	1131 UO x TB	AL	SARGENT
1	WALL STOP	409	32D	ROCKWOOD
1	KICKPLATE	K1050 10" x 34	32D	ROCKWOOD
3	SILENCERS	608	GREY	ROCKWOOD

**Hardware Set 8**

Mark #107		3070		
Mark #117		3070		
1	CONTINUOUS HINGE	MCK-12HD x 84-1"	CLR	MCKINNEY
1	NARROW STILE RIM EXIT	43-8510 x 862 F x TB	32D	SARGENT
1	HEAVY DUTY CLOSER	351UO x TB	AL	SARGENT
1	DROP PLATE	351-D	AL	SARGENT
1	SADDLE THRESHOLD	170A x 36	AL	PEMKO
1	HEAVY DUTY FLOOR STOP	463	Black	ROCKWOOD

Note: All Remaining seals to be provided by Storefront Supplier

**Hardware Set 9**

Mark #108		3070		
1	CONTINUOUS HINGE	MCK-12HD x 84-1"	CLR	MCKINNEY
1	NARROW STILE RIM EXIT	43-8510 x 862 F x TB	32D	SARGENT
1	HEAVY DUTY CLOSER	351UO x TB	AL	SARGENT
1	DROP PLATE	351-D	AL	SARGENT
1	SADDLE THRESHOLD	170A x 36	AL	PEMKO
1	HEAVY DUTY FLOOR STOP	463	Black	ROCKWOOD

Note: All Remaining seals to be provided by Storefront Supplier

**Hardware Set 10**

Mark #109		3070		
Mark #110		3070		
Mark #125		3070		
Mark #126		3070		
Mark #135		3070		
3	BALL BEARING HINGE	TA2714 4 1/2 x 4 1/2	26D	MCKINNEY
1	PRIVACY SET	28-10U65	26D	SARGENT
1	LOW DUTY CLOSER	1131 UO x TB	AL	SARGENT
1	WALL STOP	409	32D	ROCKWOOD
1	DEADBOLT	60-485	26D	SARGENT
1	KICKPLATE	K1050 10" x 34	32D	ROCKWOOD
3	SILENCERS	608	GREY	ROCKWOOD

**Hardware Set 11**

Mark #111		3070		
Mark #113		3070		
Mark #122		30710		
Mark #128		30710		
Mark #129		3070		
Mark #130		3070		
Mark #131		3070		
Mark #134		30710		
Mark #136		3070		

Mark #138	3070		
Mark #201	30710		
Mark #201A	30710		
Mark #204	30710		
3 BALL BEARING HINGE	TA2714 4 1/2 x 4 1/2	26D	MCKINNEY
1 ENTRANCE LOCK	60-28-10G05	26D	SARGENT
1 LOW DUTY CLOSER	1131 UO x TB	AL	SARGENT
1 WALL STOP	409	32D	ROCKWOOD
1 KICKPLATE	K1050 10" x 34	32D	ROCKWOOD
3 SILENCERS	608	GREY	ROCKWOOD

**Hardware Set 12**

Mark #112	6070		
6 BALL BEARING EXTERIOR HINGE	TA2314 4 1/2 x 4 1/2 x NRP	32D	MCKINNEY
1 ENTRANCE LOCK	41-60-28-10G05	26D	SARGENT
1 CLASSROOM DEADBOLT	60-487	26D	SARGENT
2 DOOR BOTTOM SWEEP	345AV x 36	AL	PEMKO
1 SADDLE THRESHOLD	170A x 72	AL	PEMKO
1 WEATHERSTRIP	303AV x 72x84	AL	PEMKO
2 HEAVY DUTY FLOOR STOP	463	Black	ROCKWOOD
1 MANUAL FLUSHBOLT	555	26D	ROCKWOOD
1 RAINDRIP CAP	346 x 76	AL	PEMKO
1 DUSTPROOF STRIKE	570	26D	ROCKWOOD
1 ASTRAGAL	357SP 84	USP	PEMKO

**Hardware Set 13**

Mark #114	3070		
1 CONTINUOUS HINGE	MCK-12HD x 84-1"	CLR	MCKINNEY
1 NARROW STILE RIM EXIT	43-8510 x 862 F x TB	32D	SARGENT
1 HEAVY DUTY CLOSER	351UO x TB	AL	SARGENT
1 DROP PLATE	351-D	AL	SARGENT
1 SADDLE THRESHOLD	170A x 36	AL	PEMKO
1 HEAVY DUTY FLOOR STOP	463	Black	ROCKWOOD

Note: All Remaining seals to be provided by Storefront Supplier

**Hardware Set 14**

Mark #115	12040		
1 STOREFRONT CYLINDER	60-43	26D	SARGENT

**Hardware Set 15**

Mark #116	3070		
3 BALL BEARING HINGE	TA2714 4 1/2 x 4 1/2 x NRP	26D	MCKINNEY
1 DEADBOLT	60-484	26D	SARGENT
1 PUSH PLATE	70C	32D	ROCKWOOD
1 PULL PLATE	107 x 70C	32D	ROCKWOOD
1 LOW DUTY CLOSER	1131 UO x TB	AL	SARGENT
1 WALL STOP	409	32D	ROCKWOOD
1 ARMOR PLATE	K1050 36" x 34	32D	ROCKWOOD
1 EDGE TRIM	310B x 36"	32D	ROCKWOOD
3 SILENCERS	608	GREY	ROCKWOOD

**Hardware Set 16**

Mark #121	3070		
Mark #203	3070		
Mark #222	3070		
3 BALL BEARING HINGE	TA2714 4 1/2 x 4 1/2 x NRP	26D	MCKINNEY
1 ENTRANCE LOCK	60-28-10G05	26D	SARGENT
1 LOW DUTY CLOSER	1131 UO x TB	AL	SARGENT
1 SADDLE THRESHOLD	170A x 36	AL	PEMKO
1 WEATHERSTRIP	303AV x 36x84	AL	PEMKO
1 WALL STOP	409	32D	ROCKWOOD
1 KICKPLATE	K1050 10" x 34	32D	ROCKWOOD
1 DOOR BOTTOM SWEEP	345AV x 36	AL	PEMKO

**Hardware Set 17**

Mark #127	3070		
1 CONTINUOUS HINGE	MCK-12HD x 84-1"	CLR	MCKINNEY
1 NARROW STILE RIM EXIT	43-8510 x 862 F x TB	32D	SARGENT
1 HEAVY DUTY CLOSER	351UO x TB	AL	SARGENT
1 DROP PLATE	351-D	AL	SARGENT
1 SADDLE THRESHOLD	170A x 36	AL	PEMKO
1 HEAVY DUTY FLOOR STOP	463	Black	ROCKWOOD

Note: All Remaining seals to be provided by Storefront Supplier

**Hardware Set 18**

Mark #137	3070		
3 BALL BEARING EXTERIOR HINGE	TA2314 4 1/2 x 4 1/2 x NRP	32D	MCKINNEY
1 ENTRANCE LOCK	60-28-10G05	26D	SARGENT
1 CLASSROOM DEADBOLT	60-487	26D	SARGENT
1 SADDLE THRESHOLD	170A x 36	AL	PEMKO
1 WEATHERSTRIP	303AV x 36x84	AL	PEMKO
1 HEAVY DUTY FLOOR STOP	463	Black	ROCKWOOD
1 RAINDRIP CAP	346 x 40	AL	PEMKO
1 DOOR BOTTOM SWEEP	345AV x 36	AL	PEMKO

**Hardware Set 19**

Mark #139	3070		
1 CONTINUOUS HINGE	MCK-12HD x 84-1"	CLR	MCKINNEY
2 RIM / MORTISE CYLINDER	60-34	26D	SARGENT
1 RIM EXIT	43-8810 x 862 F x TB	32D	SARGENT
1 HEAVY DUTY CLOSER	351UO x TB	AL	SARGENT
1 SADDLE THRESHOLD	170A x 36	AL	PEMKO
1 WEATHERSTRIP	303AV x 36x84	AL	PEMKO
1 HEAVY DUTY FLOOR STOP	463	Black	ROCKWOOD
1 DOOR BOTTOM SWEEP	345AV x 36	AL	PEMKO
1 KICKPLATE	K1050 10" x 34	32D	ROCKWOOD
1 RAINDRIP CAP	346 x 40	AL	PEMKO

**Hardware Set 20**

Mark #140	3070		
3 BALL BEARING HINGE	TA2714 4 1/2 x 4 1/2	26D	MCKINNEY
1 ENTRANCE LOCK	60-28-10G05	26D	SARGENT
1 LOW DUTY CLOSER	1131 UO x TB	AL	SARGENT
1 SADDLE THRESHOLD	170A x 36	AL	PEMKO
1 WEATHERSTRIP	303AV x 36x84	AL	PEMKO
1 WALL STOP	409	32D	ROCKWOOD
1 KICKPLATE	K1050 10" x 34	32D	ROCKWOOD
1 DOOR BOTTOM SWEEP	345AV x 36	AL	PEMKO

**Hardware Set 21**

Mark #211	3070		
3 BALL BEARING HINGE	TA2714 4 1/2 x 4 1/2	26D	MCKINNEY
1 CLASSROOM DEADBOLT	60-487	26D	SARGENT
1 PUSH PLATE	70C	32D	ROCKWOOD
1 PULL PLATE	107 x 70C	32D	ROCKWOOD
1 LOW DUTY CLOSER	1131 UO x TB	AL	SARGENT
1 WALL STOP	409	32D	ROCKWOOD
1 KICKPLATE	K1050 10" x 34	32D	ROCKWOOD
3 SILENCERS	608	GREY	ROCKWOOD

**Hardware Set 22**

Mark #215	3070		
3 BALL BEARING HINGE	TA2714 4 1/2 x 4 1/2 x NRP	26D	MCKINNEY
2 RIM / MORTISE CYLINDER	60-34	26D	SARGENT
1 RIM EXIT	43-8810 x 862 F x TB	26D	SARGENT
1 LOW DUTY CLOSER	1131 UO x TB	AL	SARGENT
1 WALL STOP	409	32D	ROCKWOOD
1 KICKPLATE	K1050 10" x 34	32D	ROCKWOOD
3 SILENCERS	608	GREY	ROCKWOOD

**Hardware Set 23**

Mark #137-RISER			
Mark #222 ROOF HATCH			
2 PADLOCK	60-858-2	606	SARGENT

END OF SECTION 087100

HARDWARE SPECIFICATION AND SCHEDULE BY: H&H DOOR CO. (361)578-3664

SECTION 093050TILE SETTING MATERIALS AND ACCESSORIES

## PART 1 GENERAL (FOR SHOWERS 212)

## 1.1 SECTION INCLUDES

- A. Edge-protection and transition profiles for floors.
- B. Waterproofing Membrane.
- C. Floor drain, with integrated bonding flange.
- D. Shower waterproofing: prefabricated substrates, waterproofing membrane, floor drain with integrated bonding flange, and sealant.
- E. Setting materials: adhesives, mortars, grouts, and sealants.

## 1.2 RELATED SECTIONS

- A. Section 03 30 00 - Cast-in-Place Concrete.
- B. Section 05 55 00 - Metal Stair Treads and Nosings.
- C. Section 06 10 00 - Rough Carpentry.
- D. Section 07 90 00 - Joint Protection.
- E. Section 09 29 00 - Gypsum Board.
- F. Section 09 30 00 - Tiling.
- G. Section 10 26 13 - Corner Guards.
- H. Section 22 30 00 - Plumbing Equipment.
- I. Section \_\_\_\_\_ - Radiant Heating Units: electric cables, electric mats, and hydronic piping.

## 1.3 REFERENCES

- A. CSA B79-08: Floor, Area, and Shower Drains, and Cleanouts for Residential Construction.
- B. IAPMO IGC 195: Interim Guide Criteria for Floor Drain with Integrated Bonding Flange.
- C. Tile Council of North America (TCNA) Handbook for Ceramic Tile Installation.
- D. Terrazzo, Tile and Marble Association of Canada (TTMAC) Specification Guide 09300 Tile Installation Manual.
- E. American National Standard Specifications for the installation of ceramic tile A108 / A118 / A136.1.

## 1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.

2. Storage and handling requirements and recommendations.
3. Installation methods.

- C. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) long, representing actual product, color, and finish.
- D. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

#### 1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum ten years experience.
- B. Installer Qualifications: Company specializing in performing the work of this section with minimum five years experience.
- C. Source Limitations for Setting Materials and Accessories: Obtain product of a uniform quality for each application condition from a single manufacturer.
- D. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
  1. Finish areas designated by Architect.
  2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
  3. Refinish mock-up area as required to produce acceptable work.
- E. Pre-installation Conference: Conduct conference at the Project site.
  1. Convene one week prior to commencing work of this section.
  2. Require attendance of installation material manufacturer, tile supplier, tile installer and installers of related work. Review installation procedures and coordination required with related work.
  3. Meeting agenda includes but is not limited to:
    - a. Surface preparation.
    - b. Tile and installation material compatibility.
    - c. Edge protection, transition and pre-fabricated movement joint profiles.
    - d. Waterproofing techniques.
    - e. Crack isolation techniques.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Protect materials from exposure to moisture. Do not deliver until after wet work is complete and dry.
- C. Store materials in a dry, warm, ventilated weathertight location.

#### 1.7 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

#### 1.8 COORDINATION

- A. Coordinate Work with other operations and installation of floor finish materials to avoid damage to installed materials.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Schluter Systems, L.P., 194 Pleasant Ridge Road, Plattsburgh, NY 12901-5841. ASD. Tel: (800) 472-4588. Fax (800) 477-9783. E-mail:[specassist@schluter.com](mailto:specassist@schluter.com). Web:[www.schluter.com](http://www.schluter.com).
- B. Acceptable Manufacturer: Schluter Systems (Canada) Inc., 21100 Chemin Ste-Marie, Ste-Anne-de-Bellevue, QC H9X 3Y8. Tel: (800) 667-8746. Fax (514) 336-2410. E-mail:[specassist@schluter.com](mailto:specassist@schluter.com). Web:[www.schluter.com](http://www.schluter.com).
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00.

### 2.2 EDGE-PROTECTION AND TRANSITION PROFILES FOR FLOORS (Showers Room 212)

- A. Schluter-DECO
  - 1. Description: profile with 1/4 inch (6 mm) wide visible surface and integrated trapezoid-perforated anchoring leg.
  - 2. Material and Finish:
    - a. E - Stainless Steel Type 304 = V2A.
      - 1) Height as required to coordinate with tile selection and setting system selected.
- B. Schluter-RENO-RAMP-K
  - 1. Description: anodized aluminum profile with textured, sloped exposed surface, tapered leading edge and integrated grout joint spacer.
  - 2. Material and Finish:
    - a. AE - Satin Anodized Aluminum.
  - 3. Height: 1/2 inch (12.5 mm).
  - 4. Ramp Length: 2-1/2 inch (64 mm)

### 2.3 WATERPROOFING MEMBRANE

- A. Schluter-KERDI
  - 1. Description: 0.008 inch (0.2 mm) thick, orange polyethylene membrane, with polypropylene fleece laminated on both sides, which is listed by cUPC to meet or exceed requirements of the "American national standard specifications for load bearing, bonded, waterproof membranes for thin-set ceramic tile and dimension stone installation A118.10 and is listed by cUPC, and is evaluated by ICC-ES (see Report No. ESR-2467).
  - 2. Corners and seals:
    - a. Provide matching preformed inside corners.
    - b. Provide matching preformed outside corners.
    - c. Provide matching preformed pipe seals.
    - d. Provide matching preformed mixing valve seals.

### 2.4 FLOOR DRAIN WITH INTEGRATED BONDING FLANGE

- A. Schluter-KERDI-DRAIN, Plastic:
  - 1. Description: floor drain 11-25/32 inch (300 mm) diameter, trapezoid-perforated, integrated bonding flange with polypropylene fleece thermally laminated to the surface and hubbed connection to 2 inch (50 mm) drain pipe. Grate assembly includes 4 inch by 4 inch (102 mm by 102 mm) square grate, height adjustment collar, and lateral adjustment ring with trapezoid perforations.
  - 2. Drain listed by UPC to meet requirements of "International Association of Plumbing and Mechanical Officials Interim Guide Criteria for Floor Drain with Integrated Bonding Flange" (IGC 195), listed by CSA to meet requirements of the Canadian Standards Association

standard, "Floor, Area, and Shower Drains, and Cleanouts for Residential Construction" (CSA B79), and referenced in method B422 of the Tile Council of North America Handbook for Ceramic Tile Installation.

3. Drain Housing Material:
  - a. PVC.
4. Grate Material and Finish:
  - a. E - Stainless Steel Type 304 = V2A.
5. Nominal Grate Size:
  - a. 6 inch (150 mm) by 6 inch (150 mm) square.
6. Drain Outlet:
  - a. 3 inch (75 mm) outlet.

## 2.5 FINISHING AND TRANSITION PROFILES FOR SHOWERS

### A. Schluter-SHOWERPROFILE-S

1. Description: two-part profile with an exposed brushed stainless steel tapered edge and recycled PVC support section with integrated trapezoid-perforated anchoring leg for lateral transitions between sloped shower floors and walls.
2. Profile Height:
  - a. Height as required to coordinate with tile selection and tile setting system selected.
3. Profile Length:
  - a. Length as required.

## 2.6 SETTING MATERIALS

- A. Installation methods as specified in Section 09 30 00 - Tiling.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

### 3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

### 3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

### 3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

SECTION 011480GYMNASIUM AND PLAY FIELD EQUIPMENT

## PART 1 GENERAL

## 1.1 SECTION INCLUDES

## A. Gymnasium and Play Field Equipment:

1. Outdoor basketball backstops.
2. Outdoor basketball backboards.
3. Outdoor basketball goals.

## 1.2 SUBMITTALS

## A. Comply with Section 013300 – Submittal Procedures.

## B. Product Data: Submit manufacturer's product data, including materials, components, and fabrication, finish, and installation instructions.

## C. Shop Drawings:

1. Submit manufacturer's shop drawings, including plans, elevations, sections, and details indicating locations, quantities, dimensions, tolerances, materials, fabrication, connections, hardware, fasteners, finish, electrical wiring diagrams, options, and accessories.

## D. Samples: Submit manufacturer's color samples.

## E. Not Used.

## F. Test Reports: Submit manufacturer's certified test reports from testing performed by accredited independent testing laboratory, indicating compliance of materials with requirements as specified.

## G. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.

## H. Manufacturer's Project References: Submit manufacturer's list of recently completed projects, including project name and location, name of architect, and type and quantity of gymnasium and play field equipment installed.

## I. Operation and Maintenance Manual: Submit manufacturer's operation and maintenance manual; including operation, maintenance, adjustment, and cleaning instructions; trouble shooting guide; parts list; and electrical wiring diagrams.

## J. Warranty: Submit manufacturer's standard, lifetime, and additional warranties.

## 1.3 QUALITY ASSURANCE

## A. Single Source Responsibility: Provide gymnasium and play field equipment from single manufacturer.

- B. Manufacturer's Qualifications: Minimum of 5 consecutive years experience manufacturing gymnasium and play field equipment similar to that specified.
- C. Installer's Qualifications: Trained and approved by manufacturer.
- D. Regulatory Requirements: Gymnasium and play field equipment shall conform to latest rules and regulations.
  - 1. International Basketball Federation / Federation International de Basketball (FIBA).

#### 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage: Store materials in clean, dry area indoors in accordance with manufacturer's
- C. Handling: Protect materials and finish from damage during handling and installation.

#### 1.5 WARRANTY

- A. Provide 1-year warranty against defects in materials and workmanship, unless otherwise specified.

### PART 2 PRODUCTS

#### 2.1 MANUFACTURER

- A. Porter Athletic, Inc., 601 Mercury Drive, PO Box 1790, Champaign, Illinois 61824-1790. Toll Free (888) 277-7778. Phone (217) 367-8438. Fax (217) 239-2255. Web Site, [www.porterathletic.com](http://www.porterathletic.com). E-Mail [porter@porterathletic.com](mailto:porter@porterathletic.com).
- B. Substitutions: Not permitted:

#### 2.2 OUTDOOR BASKETBALL BACKSTOPS

- A. Outdoor Basketball Backstops: Model No. 175 outdoor backstop.
  - 1. Backstop: 4-1/2-inch O.D. gooseneck upright and 4-foot extension. Complete with support post system, backboard, and goal with net.
  - 2. Face of Backboard: 5'-0" (1.53 m) extended from center line of formed upright support.
  - 3. Upright Support: 4-1/2-inch (11.4-cm) O.D. heavy-walled galvanized pipe formed to approximate 18-inch (45.7-cm) radius.
  - 4. Vertical Section: Extend 3'-0" (91.4 cm) into concrete footing and secured with anchor lugs.
  - 5. Horizontal Section: Fabricated with slotted mounting plate to level backboard and goal.
  - 6. Bolts from Front-Mounted Goal: Mount directly through backboard and into Center-Strut mounting plate to eliminate strain on bank, should player hang on front-mounted goal.

## 2.3 OUTDOOR BASKETBALL BACKBOARDS

- A. Outdoor Basketball Backboards: Model No. 234-3 fan-shaped, cast-aluminum backboard.
  - 1. Provide each outdoor backstop with backboard.
  - 2. Backboard: Official size, 54 inches by 39 inches, and shape. Orange perimeter and target-area markings.
  - 3. Material: Cast-in-permanent-mold process from high-tensile, No. 319 aluminum. Cast with structural reinforcing ribs on backside with heavy, 1-1/2-inch deep perimeter flange to provide maximum rigidity.
  - 4. Backside of Backboard: 8 tapped holes, 3/8-16, to fit normal mounting attachments without exposed bolt heads on front face of unit.
  - 5. Backboard Drilling: For front-mount goal, 5-inch by 5-inch hole pattern. Compatible with direct-mount support structures.
  - 6. Goal Mounting Holes: 4, molded with integral, hex-shaped cavity located on front side of backboard to independently mount backboard to rear-support structure Center-Strut to provide option of removing goal for seasonal use or to prevent vandalism or unauthorized use.
  - 7. Finish: White powder coated.

## 2.4 OUTDOOR BASKETBALL GOALS

- A. Outdoor Basketball Goals: Model No. 251 heavy-duty goal.
  - 1. Provide each outdoor backstop with goal.
  - 2. Goal: Double-rim, continuous-net support. Heavy-duty, side and center support gusset plates.
  - 3. Double Rim: Formed to official, 18-inch inside diameter with 5/8-inch diameter, solid, cold-rolled steel bars. Supported by continuous, 3/16-inch by 1-inch steel net tie strip.
  - 4. Net Support Strip: Precision die-cut with 12 net attachment openings.
  - 5. Rim Support: Heavy-mounting back plate with formed side plates tangentially connecting into net support strip for maximum strength.
  - 6. Center Reinforcing Steel Gusset: Additional rim support.
  - 7. Net: Heavy-duty chain net.
  - 8. Hardware: Grade 5 carriage bolts and mounting hardware.
  - 9. Finish: Orange powder coated.
  - 10. Warranty: Unconditional lifetime warranty.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Examine areas and supporting structure to receive gymnasium and play field equipment. Notify Architect in writing of conditions that would adversely affect installation or subsequent use. Do not proceed with installation until unsatisfactory conditions are corrected.

### 3.2 INSTALLATION

- A. Install gymnasium and play field equipment in accordance with manufacturer's instructions at locations indicated on the Drawings.

- B. Install equipment plumb, level, straight, square, accurately aligned, correctly located, to proper elevation, and secure.
- C. Install equipment using manufacturer's supplied hardware and fasteners.
- D. Repair minor damages to finish in accordance with manufacturer's instructions and as approved by Architect.
- E. Remove and replace damaged components that cannot be successfully repaired, as determined by Architect.

### 3.3 ADJUSTING

- A. Adjust basketball backstops, backboards, and goals for plumb and level.
- B. Adjust operating equipment to function properly and for smooth operation without binding.

### 3.4 CLEANING

- A. Clean gymnasium and play field equipment promptly after installation in accordance with manufacturer's instructions.
- B. Remove labels and temporary protective coverings.
- C. Do not use harsh cleaning materials or methods that would damage finish.

### 3.5 DEMONSTRATION

- A. Demonstrate operation and maintenance of gymnasium and play field equipment to Owner's personnel.

### 3.6 PROTECTION

- A. Protect installed gymnasium and play field equipment to ensure equipment will be without damage or deterioration at time of substantial completion.

END OF SECTION

SECTION 142100ELECTRIC TRACTION ELEVATOR

## PART 1 GENERAL

## 1.1 Summary

- A. Section Includes: one (1) electric traction passenger elevator(s).

## 1.2 RELATED SECTIONS

- A. Section 015000 - Temporary Facilities and Controls: Protection of floor openings and personnel barriers; temporary power and lighting;
- B. Section 033000 - Cast-in-Place Concrete: Elevator pit.
- C. Section 036000 - Grouting: Grouting hoistway door frames and sills.
- D. Section 042000 - Unit Masonry: Hoistway walls; setting sleeves, inserts, and anchoring devices.
- E. Section 051200 - Structural Steel Framing: Support steel for rails, divider beams, and hoist-beams.
- F. Section 055000 - Metal Fabrication: Pit ladder, sump cover, support for entrances in drywall hoistways.
- G. Section 061053 - Miscellaneous Rough Carpentry: Construct and install temporary work platform at top landing.
- H. Section 071600 - Cementitious Waterproofing: Waterproof elevator pit.
- I. Section 092900 - Gypsum Board: Hoistway walls.
- J. Section 099000 - Paints and Coatings: Field painting of elevator entrances, as required.
- K. Section 283100 Fire detection and Alarm: Heat, smoke, and products of combustion sensing devices, fire alarm signal lines to elevator contacts in machine space.
- L. Section 230000 - HVAC Equipment: Heating, cooling, and ventilation of control/machine space.
- M. Section 260500 - Wiring Methods: Lighting, outlets, light switches, and conduit.
- N. Section 262400 - Switchboards, Panelboards, and Control Centers: Means of disconnect.
- O. Section 265000 - Lighting: Light fixtures in pit and top of shaft.
- P. Section 221429 - Sump Pump: Sump pump in elevator pit.
- Q. Section 271500 - Communications Horizontal Cabling: Telephone service for elevator and for Internet connection to elevator controllers for remote monitoring.
- R. Section 273000 - Telephone and Intercommunication Equipment: Telephone outlets and elevator telephones.
- S. Section 310000 - Earthwork: Excavation of elevator pit.

## 1.3 REFERENCES

- A. ANSI/ASME A17.1/CAN/CSA B44 - Safety Code for Elevators and Escalators.
- B. ADAAG – Americans with Disabilities Act Accessibility Guidelines.
- C. ANSI/NFPA 70 – National Electrical Code
- D. ANSI/NFPA 80 – Fire Doors and Windows

- E. ANSI/UL 10B -Fire Tests of Door Assemblies
- F. Model & Local Building Codes H. ISO 9001: 2000 - Quality Management Systems - Requirements.

#### 1.4 DESIGN REQUIREMENTS

- A. Arrange elevator components in control closet or machinery space so equipment can be removed for repairs or replaced with minimal disturbance to other equipment and components.
- B. Where permitted by code, provide all elevator equipment including controls, drives, transformers, and rescue feature within elevator hoistway.
- C. Obtain variance from TDLR for conditions not in accordance with AMSE A17.1, **before** proceeding.

#### 1.5 SUBMITTALS

- A. Comply with Section 013300 - Submittal Procedures.
- B. Product Data: Submit manufacturer/installer's product data, including:
  - 1. Descriptive brochures or detail drawings of car and hall fixtures, cab ceilings, and product features.
  - 2. Power Information: Horsepower, starting current, running current, machine and control heat release, and electrical requirements.
- C. Shop Drawings: Submit manufacturer/installer's shop drawings, including plans, elevations, sections, and details, indicating location of equipment, loads, dimensions, tolerances, materials, components, fabrication, fasteners, hardware, finish, options, accessories, and other information to render totally functional elevators.
- D. Samples: Submit brochures of manufacturers standard colors and finishes.
- E. Operation and Maintenance Manual: Provide two (2) manufacturer/installer's standard O & M manuals; include general maintenance and cleaning instructions; renewal parts catalogs; electrical wiring diagrams.

#### 1.6 QUALITY ASSURANCE

- A. Manufacturer/Installer's Qualifications: Specialize in manufacturing and installing elevator equipment, with a minimum of 10 years successful experience.
- B. Regulatory Requirements:
  - 1. Elevator design, clearances, construction, workmanship, materials, and installation, unless specified otherwise, shall be in accordance with ANSI/ASME A17.1, Americans with Disabilities Act, and other codes having legal jurisdiction.
  - 2. ANSI/ASME A17.1 shall govern, except where codes having legal jurisdiction include more rigid requirements or conflict with ANSI/ASME A17.1.
  - 3. Elevator shall follow design and manufacturing procedures certified in accordance with ISO 9001:2000 to meet product and service requirements for quality assurance for new products.
  - 4. Where product is in variance to the published ANSI/ASME A17.1 model code, provide a 3<sup>rd</sup> party AECO certification demonstrating equivalent function, safety, and performance.
- C. Pre-installation Meeting:
  - 1. Convene pre-installation meeting before start of installation of elevators.
  - 2. Require attendance of parties directly affecting work of this section, including contractor, architect, and elevator manufacturer/installer and other subcontractors.
  - 3. Review installation, field quality control, adjusting, cleaning, protection, and coordination with other work.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer/installer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer/installer. Provide rollable truck access (paved or planked) for unloading the material.
- B. Storage: Material shall be placed in a safe, dry area (10'x15'/elevator±), in close proximity to the work

location, as directed by the job superintendent.

- C. Handling: Protect materials during handling and installation to prevent damage.

#### 1.8 PROJECT CONDITIONS

A. Temporary Power:

1. Arrange for confirmed three phase power and 220 VAC, single-phase, 60 Hz, GFCI-protected electricity to be available for installation of elevator components.
2. Comply with Section 015100 - Temporary Utilities.

B. Installation:

1. In order to begin installation General Contractor will have ready, *prior* to delivery:
  - a. Confirmed three phase power
  - b. "Ready" hoistway: Clean, topped out/dried-in with temporary work platform
  - c. OSHA-compliant barricades,.

C. Temporary Use:

1. Contractor will negotiate terms for temporary use of elevator, if required.
2. Use shall be in accordance with manufacturer's 'Temporary Acceptance' form.

#### 1.9 SCHEDULING

- A. Contractor shall co-ordinate related elevator work of other trades for proper time and sequence to avoid construction delays.
- B. Material delivery shall coincide with availability of a "Ready" shaft.

#### 1.10 WARRANTY

- A. Manufacturer/installer shall guarantee materials and workmanship of equipment installed under these specifications and make good, defects not due to ordinary wear or to improper use, which may develop within 12 months after completion of installation or acceptance thereof by beneficial use, whichever is earlier.

#### 1.11 MAINTENANCE SERVICE

- A. Elevator maintenance service shall be performed by elevator manufacturer/installer.
- B. Elevators shall receive regular maintenance on each unit for period of 12 months after acceptance thereof by beneficial use.
- C. Trained employees shall make periodic examinations and perform work including necessary adjusting, greasing, oiling, and replacing parts to keep elevators in operation, (excludes parts requiring replacement as a result of accidents, vandalism, misuse, or negligence by parties other than manufacturer/installer and acts of God).
- D. Manufacturer/installer shall perform all work, except emergency minor adjustment call-back service, during regular working hours. Manufacturer/installer shall provide emergency minor adjustment call-back service, during the regular working hours of the trade.
- E. Should Owner request that examinations, cleaning, lubrication, adjustments, repairs, replacements, or emergency minor adjustment call-back service, unless specified herein, be performed on other than manufacturer/installer's regular working hours of regular working days, manufacturer/installer shall absorb straight-time labor charges and Owner will compensate manufacturer/installer for overtime premium, travel time, and expense at normal billing rates.
- F. Elevator Control System:
1. Include built-in remote diagnostic module to relay constant status of elevators and control system to a 24-hour, 7-days-a-week, central-monitoring facility.
  2. Remote Monitoring Device: Transmit information on current status of elevators, including malfunctions, system errors, and shutdown.

PART 2 PRODUCTS

2.1 MANUFACTURER/INSTALLER

- A. Schindler Elevator Corporation, or others as approved in writing prior to bid.
- B. Elevator shall be installed by the manufacturer.

2.2 ELEVATOR SYSTEM AND COMPONENTS

- A. Basis of design: Schindler 3300
- B. Elevator Summary:
 

1. Application:	Machine-room-less
2. Machine location:	Top of shaft
3. Control location:	Top of shaft. (Inspection/test station located in top floor entrance frame)
4. Type:	Passenger
5. Capacity:	3500lbs
6. Speed:	150 fpm
7. Travel:	15'-4"
8. Landings:	Two; two front, 0 rear
9. Operation:	Microprocessor - simplex
10. Clear Inside:	6'-9" x 5'-5"
11. Entrance:	2-speed side opening, 3'-6" wide x 7'-0" high
12. Power Supply:	480 volts, 3 phase, 60 Hz
- C. Performance
  - 1. Car speed: -10% to +5% of contract speed under any loading condition or direction.
  - 2. Car capacity: Safely lower, stop and hold up to 125% of rated load per code.
- D. Ride Quality:
  - 1. Vertical vibration (maximum): 25 mg
  - 2. Horizontal vibration (maximum): 15 mg
  - 3. Vertical jerk (maximum): 2 ft/sec<sup>3</sup>
  - 4. Acceleration (maximum): 1.6 ft/sec<sup>2</sup>
  - 5. In-car noise: 53-60 dB(A)
  - 6. Landing accuracy: 1/4"
- E. Elevator Operation
  - 1. Simplex Collective Operation: Using a microprocessor based controller, operation shall be automatic by means of the car and hall buttons. When all calls have been answered, the car shall park at the last landing served.
- F. Operating Features
 

1. Static AC drive	6. Firefighter's operation
2. Phase monitor relay	7. Battery Rescue
3. Cab overload indicator	8. Independent service
4. Load-weighing	9. Cab protection pads
5. Remote monitoring	10. Keyed hall stations

2.3 EQUIPMENT: CONTROL COMPONENTS AND CONTROL SPACE

- A. Controller: Provide microprocessor based control system to perform all of the functions of safe elevator operation, as well as perform car and group operational control.
  - 1. All high voltage contact points inside the inspection and test panel shall be protected from accidental contact in a situation where the access panels are open.

2. The controller shall be distributed throughout the elevator system located in the overhead, cab and inspection and test panel. The inverter will be mounted in the overhead adjacent to the hoist machine and an inspection and test panel will be located in the door jamb at the top floor or one floor below the top floor. No elevator equipment mechanical rooms or closets are required.
  3. Provide multi-bus control architecture to reduce cabling, material and waste.
- B. Drive: Provide a VVVF AC Closed loop drive system. Provide stable start without high peak current, quickly reaching a low energy consumption level.
- C. Inspection and Test Panel: Integrated control equipment, main inspection and test panel in door frame at top level served or at one floor below the top level served.

#### 2.4 EQUIPMENT: HOISTWAY COMPONENTS

- A. Machine:
1. Gearless asynchronous AC motor with integral drive sheave, service/emergency brakes.
  2. Machine to enable direct power transfer, thereby avoiding loss of power.
  3. Machine to be compact, lightweight and durable.
  4. Mount to structural support channels on top of guide rail system as applicable in hoistway overhead.
- B. Governor:
1. Tension type over-speed governor with remote manual reset.
  2. Mount to structural support channels as applicable in hoistway overhead.
- C. Buffers: Compression spring type buffers to meet code.
- D. Hoistway operating devices:
1. Emergency Stop switch in the pit.
  2. Terminal stopping switches.
  3. Emergency stop switch on the machine.
- E. Positioning system: System consisting of proximity sensors and door zone vanes.
- F. Guide rails: Provide Tee-section steel rails with brackets and fasteners.
- G. Suspension system: Non-circular elastomeric coated suspension media with high tensile grade steel cords.
- H. Governor rope: 6 mm dia. steel wire rope.

#### 2.5 EQUIPMENT: HOISTWAY ENTRANCES

- A. Hoistway Doors and frames:
1. UL rated with required fire rating.
  2. Doors: Rigid flush panel construction with vertical channel reinforcements.
  3. Frames: Securely fasten at corners to form unit frame. Frames shall be bolted.
- B. Finish:
1. Frame & door: Manufacturer's standard with powder coat enamel finish.
- C. Sills: Extruded aluminum.
- D. Entrance tactile/braille: Provide entrance jamb markings on both jambs at all floors.

#### 2.6 EQUIPMENT: CAR COMPONENTS

- A. Car Frame and Safety: Provide car frame with adequate bracing to support the platform and car enclosure. The safety shall be integral to the car frame and shall be flexible guide clamp type.
- B. Platform: Provide platform of steel construction with plywood subfloor.
- C. Car Guides: Provide sliding guide shoes mounted to top and bottom of both car and counterweight frame. Arrange each guide shoe assembly to maintain constant contact on the rail surfaces. Provide retainers in areas with Seismic design requirements.
- D. Provide central guiding system to reduce mechanical friction and energy consumption.
- E. Car Enclosure - Class B fire rating:
1. Walls: Steel shell, No.4 stainless steel finish.
  2. Base and vertical trim: Satin aluminum.
  3. Threshold: Extruded aluminum
  4. Car doors, front, transom, and columns: Satin stainless steel.

5. Ceiling: 7'-9" AFF, Satin stainless steel.
6. Illumination: Compact florescent; semi-oval Lexan lens centered on each side of ceiling.
7. Handrail: Segmented design, 1 3/8" diameter, satin aluminum; 3 walls.
8. Ventilation: Single-speed fan on canopy; ventilation slots in transom & columns.
9. Emergency Alarm: Provide siren mounted on top of the car that is activated when the alarm button in the car operating panel is engaged.
10. Emergency Exit Switch: Provide an electrical contact to open the safety circuit when the emergency car top exit is opened and sopt/prevent elevator from operating.
11. Car Top Guard: Provide handrails on car top.
12. Flooring: By others; 3/8" thickness, 175lbs, max.
13. Wall protection; One set of heavy quilted wall pads with mounting hooks.

#### 1.7 DOOR OPERATOR AND REOPENING DEVICES

- A. Door Operator: Provide a closed loop VVVF high performance door operator with frequency controlled drive for fast and reliable operation to open and close the car and hoistway doors simultaneously.
  1. In case of interruption or failure of electric power, the doors can be readily opened by hand from within the car, in accordance with applicable code. Provide emergency devices and keys for opening doors from the landing as required by local code.
  2. Doors shall open automatically when the car has arrived at or is leveling at the respective landings. Doors shall close after a predetermined time interval or immediately upon pressing of a car button. Provide door open button in the car operating panel. Momentary pressing of this button shall reopen the doors and reset the time interval.
  3. Provide door hangers and tracks for each car and hoistway door. Contour tracks to match the hanger sheaves. Design hangers for power operation with provisions for vertical and lateral adjustment. Hanger sheaves shall have polyurethane tires and pre-lubricated sealed for life bearings.
- B. Electronic Door Sensing Device: Equip car doors with concealed transmitter and receiver infrared beam devices to detect presence of object in process of passing through hoistway entrance and car doorway (light curtain device). Prevent doors from closing, or if they have already started closing, cause doors to reopen and remain open while object is within detection zone.
  1. Use a multi-beam scanning device, with no moving parts to detect obstructions in door opening. Beams shall detect objects from sill to 6 feet.

#### 1.8 EQUIPMENT: SIGNAL DEVICES AND FIXTURES

- A. Car Operating Panel: Provide a car operating panel with all push buttons and key switches for elevator operation. Comply with handicap requirements. Faceplate to be No.4 stainless steel
  1. Car operating panel shall be surface-mounted on front return.
  2. Buttons: Metallic finish, mechanical type with long-lasting LED call registered indicators.
  3. Emergency buttons: Alarm button, door open and door close.
  4. Emergency light per ASME A17.1.
  5. Digital car position indicator.
  6. Firefighter's features.
  7. Keyed inspection switch.
  8. Independent service key switch.
- B. 2-way Communications: Activation of 'help' button shall initiate a two-way communication between car and an outside location where personnel are available to take the appropriate action, 24/7. Visual indicators shall be provided for call initiation and call acknowledgement.
- C. Hall Fixtures; mount fixtures in entrance frames:
  1. Hall stations: Metallic tactile push buttons, up button and down button at intermediate floors, single button at terminal floors. Illuminate using long-lasting LEDs. Faceplate to be No.4 st.stl.
  2. Hoistway access: Provide key-switch at top floor in entrance jamb in No.4 stainless steel faceplate with tamper resistant screws in same finish.
  3. Firefighter's Service: Key switch in a No.4 stainless steel faceplate.
  4. Provide LED illuminated in-car lantern with up/down arrows.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine hoistways, openings, pits, and overheads before starting installation.
- B. Verify hoistway, pit, overhead, and openings are of correct size, within tolerances, and are ready for work of this section.
- C. Verify walls are plumb where openings occur and ready for entrance sill installation. Traditional sill angle or concrete sill support shall not be required.
- D. Verify hoistway is clear and plumb, with variations not to exceed -0 to +1 inch at any point. Verify projections greater than 4" must be beveled not less than 75 degrees from horizontal. No negative tolerance is permitted for minimum hoistway dimensions.
- E. Verify minimum 2-hour fire-resistance rating of hatch walls.
- F. Notify Architect in writing of dimensional discrepancies or other conditions detrimental to proper installation or performance of elevators.
- G. Do not proceed with elevator installation until unsatisfactory conditions have been corrected in a manner acceptable to manufacturer/installer.

### 3.2 INSTALLATION

- A. Install elevators in accordance with manufacturer's instructions and ANSI/ASME A17.1.
- B. Set entrances in vertical alignment with car and plumb hoistway lines.

### 3.3 FIELD QUALITY CONTROL

- A. Perform tests of elevator as required by ANSI/ASME A17.1 and governing codes.

### 3.4 ADJUSTING

- A. Adjust elevators for proper operation in accordance with manufacturer/installer's instructions.
- B. Adjust elevators for smooth acceleration and deceleration of car so not to cause passenger discomfort.
- C. Adjust doors to prevent opening of doors at landing on corridor side, unless car is at rest at that landing, or is in leveling zone and stopping at that landing.
- D. Adjust automatic floor leveling feature at each floor to within 1/4 inch of landing.
- E. Repair minor damages to finish in accordance with manufacturer/installer's instructions and as approved by Architect.
- F. Remove and replace damaged components that cannot be successfully repaired as determined by Architect.
- G. Controls shall be designed whereby any competent elevator 'mechanic' will be able to maintain, test and diagnose the elevator without requiring a special tool/device or special OEM instructions.

### 3.5 CLEANING

- A. Clean elevators promptly after installation in accordance with manufacturer/installer's instructions.
- B. Do not use harsh cleaning materials or methods that could damage finish.

### 3.6 PROTECTION

- A. Protect installed elevators from damage during construction in accordance with the negotiated temporary use agreement between Owner and manufacturer's installer.

END OF SECTION 042100

PART 1 –GENERAL

1.1 SUMMARY

- A. The work covered in this section is subject to all of the requirements in the General Conditions of the Specifications. Contractor shall coordinate all of the work in this section with all of the trades covered in other sections of the specification to provide a complete and operable system. All Labor, materials, appliances, tools, equipment, facilities, transportation and services necessary for and incidental to performing all operations in connection with furnishing, delivery and installation of the work of this Section.
- B. **Contractor shall include all cost for a manufacturer certified technician to provide a complete training session to owner representatives. Training shall include but not limited to the following: programming existing and how to add new circuits, trouble shooting, overview of panel and any request from owner. Training may take days; contractor/manufacturer shall include all cost in bid. Contractor shall notify owner/Architect/Engineer on the day for the training.**

1.2 DESCRIPTION OF WORK

- A. Furnish and install a complete system for the control of lighting and other equipment as indicated on the plans, detailed in the manufacturer submittal and as further defined herein. Contractor is solely responsible to verify quantity, installation locations and wiring requirements for this project. Specific manufacturer's catalog numbers, when listed in this section are for reference only. It is the responsibility of the contractor to verify with lighting control manufacturer all catalog information and specific product acceptability.
- B. The system shall include but not be limited by the following list: Pre-wired, microprocessor controlled relay or dimming panels with latching relays controlled via a complete list of communication based accessories including digital switches, digital photocells, digital SmartBreaker panelboards, Digital Time Clock (DTC) and interface cards to dimming systems, building automation systems, thermostats, and other devices. The type of lighting control equipment and wiring specified in this section is covered by the description: Microprocessor Controlled Digital Lighting Control system with RS 485 Bus communications. Requirements are indicated elsewhere in these specifications for work including, but not limited to, raceways and electrical boxes and fittings required for installation of control equipment and wiring. They are not the work of this section.
- C. SmartBreaker panel boards shall operate as if each breaker were a relay in the lighting control system. All references in this spec to the operation of relays shall apply equally to the solenoid operated thermal magnetic breakers within SmartBreaker panel boards.

1.3 SUBMITTALS

- A. Section 16010 – Shop Drawing Requirements.
- B. Shop Drawings: Submit dimensioned drawings of lighting control system and accessories including, but not necessarily limited to, relay panels, switches, DTC, photocells and other

interfaces. Shop drawings shall indicate exact location of each device or a RFI to confirm location. Plans are diagrammatical. EC to verify all lighting control material requirements from approved shop drawings. "Cut Sheet" submittal not acceptable.

- C. Product Data: Submit for approval manufacturer's data on the specific lighting control system and components. Submittal shall be electronic format with hard copy available. To prevent departures from approved system operation, electronic files submitted shall be able to be directly downloaded to the specified system at manufacturer facility. Submit a complete bill of materials with part numbers, description and voltage specifications.
- D. Manufacturer shall provide free software that can be used to specify the system, detail all programming and generate a single line in a format that can be dropped into industry standard CAD packages.
- E. One Line Diagram: Submit a one-line diagram of the system configuration indicating the type, size and number of conductors between each component if it differs from that illustrated in the riser diagram in these specifications. Submittals that show typical riser diagrams are not acceptable.

#### 1.4 QUALITY ASSURANCE

- A. Products shall be manufactured by Lighting Control & Design, Los Angeles, CA, 800.345.4448 or approved equal. Such firms shall be regularly engaged in manufacturing of lighting control equipment and ancillary equipment, of types and capacities required, whose products have been in satisfactory use in similar service for not less than 5 years. Any product other than those listed in this specification must be pre-approved a minimum of two weeks before bid time. No exceptions.
- B. Control wiring shall be in accordance with the NEC requirements for Class 2 remote control systems, Article 725 and manufacturer specification.
- C. A licensed electrician shall functionally test each system component after installation, verify proper operation and confirm that all relay and dimming panels and switch wiring conform to the wiring documentation. The Electrical Contractor (EC) is required to phone LC&D a minimum of 7 days before turnover for system checkout. At time of LC&D contact, all components including phone line to modem must be installed, powered and operational.
- D. Comply with NEC and all local and state codes as applicable to electrical wiring work.
- E. Lighting control panels shall be UL 916 Listed. LCPs controlling emergency circuits shall be ETL listed to UL 924. Relay panels shall also be listed to comply with CSA C22.2#205 Emergency source circuits controlled in normal operation by a relay panel shall fully comply with NEC 700-9(b). Electrical contractor is responsible for verifying compliance.
- F. The lighting control system shall be listed, approved and comply as required with all national, state and local energy codes to include but not limited to California Title 24 and ASHRAE 90.1-2004.

#### 1.5 MAINTENANCE MATERIALS

- A. Division 1 - Execution Requirements: Spare parts and maintenance products.
- B. Provide 10% spare relays per LCP, up to the maximum capacity of the LCP.
- C. Provide CD version of manufacturers operating software to include graphical interface software.
- D. Provide 2 extra sets of as-built and operating manuals.

## 1.6 SUBSTITUTIONS

- A. Substitutions are permitted as voluntary alternates. Base bid must reflect the specified equipment.
- B. A product must go through the following process before being approved as a substitution:
  - 1. A list of substitutions shall be provided to the owner as an attachment to the bid form. Submit along with bill of material, CD of proposed operating system, and a one line diagram of the system configuration proposed indicating the type, size and number of conductors between each component if it differs from that illustrated in the riser diagram or in these specifications.
  - 2. The list will be reviewed by the owner and the engineer to determine whether the equipment meet the project needs. A \$500 retainer will be submitted with the list of voluntary alternates to cover this meeting. If the owner and engineer agree that this meeting is not required, then the \$500 will be returned to the contractor.
  - 3. The retainer is for evaluation of the alternate. The retainer is to be used to cover the time spent in this evaluation. The fee will be collected based on time spent in evaluation, not on whether the alternate is accepted. All unused portions will be returned to the contractor with an invoice marked "paid" by the engineer, architect, and/or owner.

## 1.7 SYSTEM DESCRIPTION

- A. The lighting control system is a networked system that communicates via RS485. The system must be able to communicate with fully digital centralized relay panels, small distributed relay panels (Available with 0-10VDC dimming outputs), (also called Micro Panels), Fully distributed fixture level control by bus connected relays or dimmers, (also called X-Point) smart breaker panels, digital switches, photocells, various interfaces and operational software. The intent of the specification is to integrate all lighting control into one system. Distributed lighting control shall be provided using networked micro relay panels or bus connected fixture level control (X Point.) Lighting control system shall include all hardware and software. Software shall be resident within the lighting control system. System shall provide local access to all programming functions at the master LCP and remote access to all programming functions via dial up modem and through any standard computer workstation. Lighting control system shall have the capability to be remotely controlled via the internet or building wide Ethernet LAN. Desktop computers are not part of this section and will be provided by others. Include all software for remote access and graphics.
- B. System software shall provide real time status of each relay, each zone and each group.
- C. Lighting control system shall be able to be monitored by and take commands from a remote PC. At any time, should the remote PC go off-line all system programming uploaded to the lighting control system shall continue to operate as intended. Systems requiring an on line PC or server for normal operation are not acceptable
- D. All devices shall be pre-addressed at the factory. If required by the client the system may be specified without pre-addressing and simple software is to be provided to simplify addressing in place. This particularly applies to fixture level control where controls may be factory mounted on the fixture in advance to speed installation.
- E. All programs, schedules, time of day, etc, shall be held in non-volatile memory for an indefinite time exceeding 10 years in the event of power failure. At restoration of power, lighting control system shall implement programs required by current time and date. Time of day shall be battery backed for at least 10 years.

- F. System shall be capable of warning of an impending off sweep by flashing lights Off/On once or twice (programmable) by relay or by zone prior to the lights being turned off. The warning interval times between the flash and the final lights off signal shall be definable for each zone. Additionally an audible signal shall be able to be programmed that gives a mild note on the first flash and a more insistent signal on the second one. Occupant shall be able to override any scheduled Off sweep using local wall switches within the occupied space. Occupant override time shall be locally and remotely programmable and not exceed 2-hours.
- G. The system shall be capable of implementing On commands, Off commands, Raise (dimming) commands, Lower (dimming) commands for any relay, group or zone by means of digital wall switches, contact closure switches, time clock schedules including offsets from dusk and dawn by up to 10 hours, photocell, pc software or other devices connected to programmable inputs in a lighting control panel.
- H. The lighting control system shall provide the ability to control each relay and each relay group per this specifications requirement. All programming and scheduling shall be able to be done locally at the master LCP and remotely via dial up modem and via the Internet. Remote connection to the lighting control system shall provide real time control and real time feedback.
- I. Micro relay panels shall be capable of taking inputs from contact closure switches and outputting up to 8 independent 0-10VDC dimming signals. All micro relay panels and all devices connected to micro relay panels (switches, photocells and occupancy sensors, etc) shall be wired per lighting control manufacturers instructions.
- J. X Point relay or dimming modules shall be fed from an X Point router that sits on the GR 2400 Bus in the manner of a relay panel. Individual modules are fed from this panel on a separate bus. Each router may feed two strings of up to 64 modules on a 2000ft string. Each Module may be a single relay, a dual relay or a dimming (0-10Volt) module. Relays in the modules are to be capable of being separately controlled in the same manner as an individual relay or dimmer in a relay or dimmer panel. Additionally multiple relays may be collected together to act together as a single multi-pole load or dimmer for ease of programming. Graphical software shall be available that does these assignments and reassignments in a straightforward and logical manner. Relays shall have the same specifications as laid out in 2.1.C. Modules with reduced current ratings may be supplied with Quick Connect connectors for more rapid installation.

## PART 2 -PRODUCTS

### 2.1 MATERIAL AND COMPONENTS

- A. Relay Panels:
  - 1. All LCP's shall be in NEMA 1 rated enclosure with screw cover or hinged door. Other NEMA rated types optional.
  - 2. A barrier shall separate the high voltage and low voltage compartments of the panel and separate 120VAC and 277VAC.
  - 3. LCP input power shall be capable of accepting 120VAC or 277VAC without rewiring or 120VAC or 347VAC for Canadian applications.
  - 4. Control electronics in the low voltage section shall be capable of driving 2 to 48, latching relays per section 2.1.C, control any individual or group of relays, provide individual relay overrides, provide a master override for each panel, store all programming in non-volatile memory, after power is restored return system to the correct state for time of day,

provide programmable dual blink warn timers for each relay or zone of relays, and be able to control Normally Open Latching (NOL) or Normally Closed Latching (NCL) relays.

5. Lighting control system shall be digital and consist of a Master LCP, Remote LCPs, Micro LCPs with up to 8 individual relays, X Point Router and associated relays or dimmers emulating standard or Micro LCPs, digital switches, digital interface cards and if required, SmartBreaker panelboards. All system components shall connect and be controlled via Category 5, 4 twisted pair cable with RJ45 connectors, providing real time two-way communication with each system component. All Micro LCP's shall provide multiple inputs for photocells and occupancy sensors. Analog systems are not acceptable.

**B. Micro Relay Panels**

1. Micro relay panels shall have from 2 to 8 latching relays per section 2.1.C and shall control all lighting in the designated area indicated on the plans and be part of the lighting control network. Each micro relay panel shall provide minimum 300ma at 12/24VDC for powering occupancy sensors. Micro relay panels that require a separate occupancy sensor power pack are not acceptable.
2. Micro relay panel shall provide a minimum of 4-programmable photocell inputs, a minimum of 8-programmable occupancy sensor contact closure inputs. This requirement is to insure integration of entire lighting system into one networked, lighting control system.
3. Micro relay panels shall be capable of outputting minimum 4 and up to 8 independent 0-10VDC dimming signals, one independent dimming signal for each of 8 relays. In order to maximize daylight harvesting and minimize disruption to occupants, each dimming output shall provide adjustment for baseline, start point, mid point, end point, trim, fade up rate, fade down rate, time delay and enable/disable masking. All photocell settings must be remotely accessible. Systems providing On, Off with Time Delay only, and system that do not provide remote access are not acceptable.
4. MicroPanels shall have built in capability to take commands from a fully compatible wireless switch. Wireless switch shall contain no battery; have 32-bit unique ID and a minimum 90-foot range line of sight.

**C. Standard Output relays**

1. UL Listed 30A @277VAC Ballast and HID, 20A Tungsten at 120VAC and 347VAC Ballast and HID at 20A Latching Relay with 18,000A SCCR @277VAC.
2. Relays shall be individually replaceable. Relay terminal blocks shall be capable of accepting two (2) #8AWG wires on both the line and the load side. Systems that do not allow for individual relay replacement or additions are not acceptable. Relays to be rated for 250,000 operations minimum at a full 30A lighting load. Standard relay shall default to closed at normal power loss, Normally Closed Latching (NCL).
3. Optional relay types available shall include: Normally Open Latching (NOL) relay rated for 250,000 operations, a 600VAC 2-pole NO or NC, and a Single Pole, Double Throw (SPDT) relay.

**D. Low Voltage Switches**

1. All switches shall be digital and communicate via RS 485. Contact closure style switches, except as specified for connection to the micro relay panel programmable contact closure inputs, shall not be acceptable. The programming for a digital switch shall reside in the switch itself, via double EPROM memory. Any digital switch button function shall be able to be changed locally (at the DTC or a PC) or remotely, via modem, Internet or Ethernet.

2. Digital low voltage switch shall be a device that sits on the lighting control system bus. Digital switch shall connect to the system bus using the same cable and connection method required for relay panels. Each button shall be capable of being programmed for On only, Off only, Mix (Some on some off), On/Off (toggle), Raise (Dim up) and Lower (Dim down). Further each button shall be able to be enabled or disabled over the bus. An audible alarm shall be available on all switches that can be programmed to beep on button push or with warning light blinks.
  3. Keyed switches shall be similarly programmable and connect to the lighting control system bus.
  4. Digital switches for high abuse areas (common areas, gymnasiums, etc.) shall be vandal resistant, contain no moving parts, and be touch sensitive and available with up to two buttons in a single gang. Multi gang versions shall also be available. Touch pads shall be Stainless Steel and capable of handling both high abuse and wash down locations. High abuse switches shall connect to the lighting control system digital bus. Each high abuse touch button shall be able to be programmed in the same way as other digital switch buttons. Switches must be capable of handling electrostatic discharges of at least 30,000 volts (1cmspark) without any interruption or failure in operation.
- E. Wireless Switches-System shall have the capability to accept in inputs from 32-bit unique ID wireless switches. Wireless switches shall have no battery and be capable of On, Off, Raise and Lower commands. Wireless switches shall have a minimum 90 foot line of sight range
- F. DTC - Digital Electronic Time Clock
1. A Digital Time Clock (DTC) shall control and program the entire lighting control system and supply all time functions and accept modem (RS232) inputs.
  2. DTC shall be capable of up to 32 schedules. Each schedule shall consist of one set of On and Off times per day for each day of the week and for each of two holiday lists. The schedules shall apply to any individual relay or group of relays.
  3. The DTC shall be capable of controlling digital devices at up to 127 addresses on a single bus and capable of interfacing digitally with other buses using manufacturer supplied interface cards.
  4. The DTC shall accept control locally using built in button prompts and use of an 8 line 21-space display or from a computer or modem via an on-board RS 232 port. All commands shall be in plain English. The DTC shall be run from non-volatile memory so that all system programming is retained indefinitely and time of day is battery backed for up to 10 years.
  5. Unity™ lighting control software shall provide via local or remote PC a visual representation of each device on the bus, show real time status and the ability to change the status of any individual device, relay or zone. System shall be capable of running optional Unity GX lighting control software. Unity GX shall provide for importing vector based graphics and a simple interface that allows users or a factory programmer to overlay color “controls” that are associated with relays or collections of relays. Clicking on the overlays changes the color and the status of the relays for visual display of large systems.
  6. System shall come with a pre-Installed modem that allows for remote programming from any location using a PC and free remote control software.
  7. DTC shall provide system wide timed overrides. Any relay, group or zone that is overridden ON, before or after hours, shall automatically be swept OFF by the DTC a maximum of 2 hours later.
- G. PHOTOCELL: Photocells to be mounted in location indicated on the plans. Photocells used for exterior lights shall provide multiple trip points from 1 roof mounted unit. All trip points shall be

able to be changed remotely via Internet or dial up modem. Photocells requiring manual trip point adjustment are not acceptable. Photocell used for interior lighting control shall have multiple settings such as start-point, mid-point, off-point, fade-up, fade-down, etc. All settings shall be remotely accessible and adjustable. Systems providing local adjustment only are not acceptable. Photocells to be certified to comply with the current energy code covering this project at time of submittal of plans for building permit.

- H. Interfaces: For future expansion capability, systems are to have available all of the following interfaces. Verify and install only those interfaces indicated on the plans.
1. A dry contact input interface card that provides 14 programmable dry contact closure inputs. Use shielded cable to connect input devices to interface card on runs over 200ft.
  2. Uplink Interface card that allows a single bus to be part of a greater system connected together by a Back Bone Bus. The back Bone bus requires a server for the Modem and Ethernet connections to such a large system.
  3. An interface card (T-LINK) that allows the DTC to control up to 32 digital XCI brand thermostats. Programming of thermostats is to be capable of being done locally (at the DTC) or remotely, via modem, Internet or Ethernet.
  4. When Unity GX software is specified full graphic pages shall be designed to the owner's specifications. Owner is to provide to manufacturer all necessary files and criteria. Provide \_\_\_\_ GX pages.
  5. Direct digital interface to SmartBreaker panelboards. Relay panel and SmartBreaker panelboard circuits shall appear on the system software as similar, yet distinct, items and maintain all functions and features of the system software.
  6. Direct digital interface to DMX 512 based systems. DMX interface shall provide 14 global commands, each of which can be modified locally or remotely using lighting controls manufacturer supplied software. DMX interface shall be integral to the system bus and shall connect and be controlled via a single Category 5, 4 twisted pair cable, providing real time response from the lighting control system to DMX commands.
  8. Direct digital interface to building automation systems using DDC protocols such as BACnet, Metasys (N2) and ModBus that accept on/off commands, time schedules and report status of all relays in all panels in real time. Interface cards shall "self populate" each individual relay and each group to the BAS. All BAS system programming required shall be the responsibility of the BAS system provider.

### PART 3 -EXECUTION

#### 3.1 EQUIPMENT INSTALLATION

- A. Mount relay control cabinets adjacent to respective lighting panel board. Cabinet shall be surface or flush mount, per plans. Wiring between relay control cabinets and panelboards shall be in accordance with local codes and acceptable industry standards. Under no circumstances will any extra payment be authorized for the EC or GC due to the EC's lack of knowledge or understanding of any and all prevailing codes or specified manufacturer's installation requirements. Neatly lace and rack wiring in cabinets. During construction process, protect all interior components of each relay panel and each digital switch from dust and debris. Any damage done to electronic components due to failure to protect them shall be the sole responsibility of the installing contractor.

- B. Switches: Provide outlet boxes, single or multi-gang, as shown on the plans for the low voltage digital switches. Mount switches as per plans. Supply faceplates per plans and specifications. EC is specifically responsible to supply and install the required low voltage cable, Category 5, 4 twisted pair, with RJ45 connectors (commonly referred to as Cat 5 patch cable) between all switches and panels. Field-test all Cat 5 patch cable with a recognized cable tester. All low voltage wire to be run in conduit, per local codes.
- C. Manufacturer to provide on all systems of more than 2 panels a crimping kit with sufficient approved EZ Brand RJ 45 connectors to populate the whole system. A simple manual that shows all the pitfalls of crimping RJ 45s and how to do it right must be both provided and read by the installing contractor.
- D. Wiring
  1. Do not mix low voltage and high voltage conductors in the same conduit. No exceptions.
  2. Ensure low voltage conduits or control wires do not run parallel to current carrying conduits.
  3. Place manufacturer supplied "terminators" at each end of the system bus per manufacturer's instructions.
  4. Plug in Category 5 patch cable with RJ45 end connector that has been field-tested with a recognized cable tester, at the indicated RJ45 connector provided at each lighting control device, per manufacturer's instructions.
  5. Use Category 5 patch cable for all system low voltage connections. Additional conductors may be required to compensate for voltage drop with specific system designs. Contact LC&D or refer to the GR2400 manual for further information. Use shielded cable for dry contact inputs on runs over 200ft.
  6. Do not exceed 4000ft-wire length for the system bus.
  7. All items on the bus shall be connected in sequence (daisy chained). Star and spur topologies are not acceptable.
  8. The specified lighting control system shall be installed by the electrical contractor who shall make all necessary wiring connections to external devices and equipment, to include photocell. EC to wire per manufacturer instructions.

### 3.2 INSTALLATION AND SET-UP

- A. Verify that conduit for line voltage wires enters panel in line voltage areas and conduit for low-voltage control wires enters panel in low-voltage areas. Refer to manufacturer's plans and approved shop drawings for location of line and low-voltage areas. This is especially applicable in jobs where back boxes are sipped in advance. It is the responsibility of the contractor to verify with lighting control manufacturer all catalog information and specific product acceptability.
- B. For approved contact closure switches, use #18 AWG stranded conductors. For all other digital switches, provide wiring required by system manufacturer.
- C. For classroom digital switches provide wiring required by system manufacturer
- D. Contractor to test all low voltage cable for integrity and proper operation prior to turn over. Verify with system manufacturer all wiring and testing requirements.

- E. Before Substantial Completion, arrange and provide a one-day Owner instruction period to designated Owner personnel. Set-up, commissioning of the lighting control system and Owner instruction includes:
  - 1. Confirmation of entire system operation and communication to each device.
  - 2. Confirmation of operation of individual relays, switches, occupancy sensors and daylight sensors
  - 3. Confirmation of system Programming, photocell settings, override settings, etc.
  - 4. Provide training to cover installation, maintenance, troubleshooting, programming, and repair and operation of the lighting control system.
- F. Panels shall be located so that they are readily accessible and not exposed to physical damage.
- G. Panel locations shall be furnished with sufficient working space around panels to comply with the National Electric Electrical Code.
- H. Panels shall be securely fastened to the mounting surface by at least 4 points.
- I. Unused openings in the cabinet shall be effectively closed.
- J. Cabinets shall be grounded as specified in the National Electrical Code.
- K. Lugs shall be suitable and listed for installation with the conductor being connected.
- L. Conductor lengths shall be maintained to a minimum within the wiring gutter space. Conductors shall be long enough to reach the terminal location in a manner that avoids strain on the connecting lugs.
- M. Maintain the required bending radius of conductors inside cabinets.
- N. Clean cabinets of foreign material such as cement, plaster and paint.
- O. Distribute and arrange conductors neatly in the wiring gutters.
- P. Follow the manufacturer's torque values to tighten lugs.
- Q. Before energizing the panelboard, the following steps shall be taken:
  - 1. Retighten relay connections to the manufacturer's torque specifications. Verify that required connections have been furnished.
  - 2. Remove shipping blocks from component devices and the panel interior.
  - 3. Remove debris from panelboard interior.
- R. Follow manufacturers' instructions for installation and all low voltage wiring.
- S. Service and Operation Manuals:
  - 1. Submit operation and service manuals. Complete manuals shall be bound in flexible binders and data shall be typewritten or drafted.
  - 2. Manuals shall include instructions necessary for proper operation and servicing of system and shall include complete wiring circuit diagrams of system, wiring destination schedules for circuits and replacement part numbers. Manuals shall include as-built cable Project site plot plans and floor plans indicating cables, both underground and in each building with conduit, and as-built coding used on cables. Programming forms of systems shall be submitted with complete information.

- T. Comply with energy code lighting control system "Acceptance Requirements". Acceptance tests are used to verify that lighting controls were installed and calibrated correctly. These tests may require that a responsible party certify that controls are installed and calibrated properly. This is the installing contractor's responsibility. Verify requirements with building authority.

### 3.3 DOCUMENTATION

- A. Each relay shall have an identification label indicating the originating branch circuit number and panelboard name as indicated on the drawings. Each line side branch circuit conductor shall have an identification tag indicating the branch circuit number.
- B. Provide a point-to-point wiring diagram for the entire lighting control system. Diagram must indicate exact mounting location of each system device. This accurate "as built" shall indicate the loads controlled by each relay and the identification number for that relay, placement of switches and location of photocell. Original to be given to owner, copies placed inside the door of each LCP.

### 3.4 SERVICE AND SUPPORT

- A. Start Up: EC shall contact LC&D at least 7 days before turnover of project. LC&D will remotely dial into the lighting control system, run diagnostics and confirm system programming. EC shall be available at the time of dial in to perform any corrections required by LC&D. EC is responsible for coordinating with GC and the owner the installation of a dedicated telephone line or a shared phone line with an automatic Fax/Modem switch. Phone jack to be mounted within 12" of Master LCP. Label jack with phone number. EC to connect phone line from jack to Master LCP.
- B. Telephone factory support shall be available at no additional cost to the EC or Owner both during and after the warranty period. Factory to pre-program the lighting control system per plans and approved submittal, to the extent data is available. The specified manufacturer, at no added cost, shall provide additional remote programming via modem as required by the EC or Owner for as long as a phone line is available for the life of the system. Upon request manufacturer to provide remote dial up software at no added cost to system owner. No exceptions.
- C. Provide a factory technician for on-site training of the owners' representatives and maintenance personnel. Coordinate timing with General Contractor. Provide \_\_\_ days of factory on-site training.

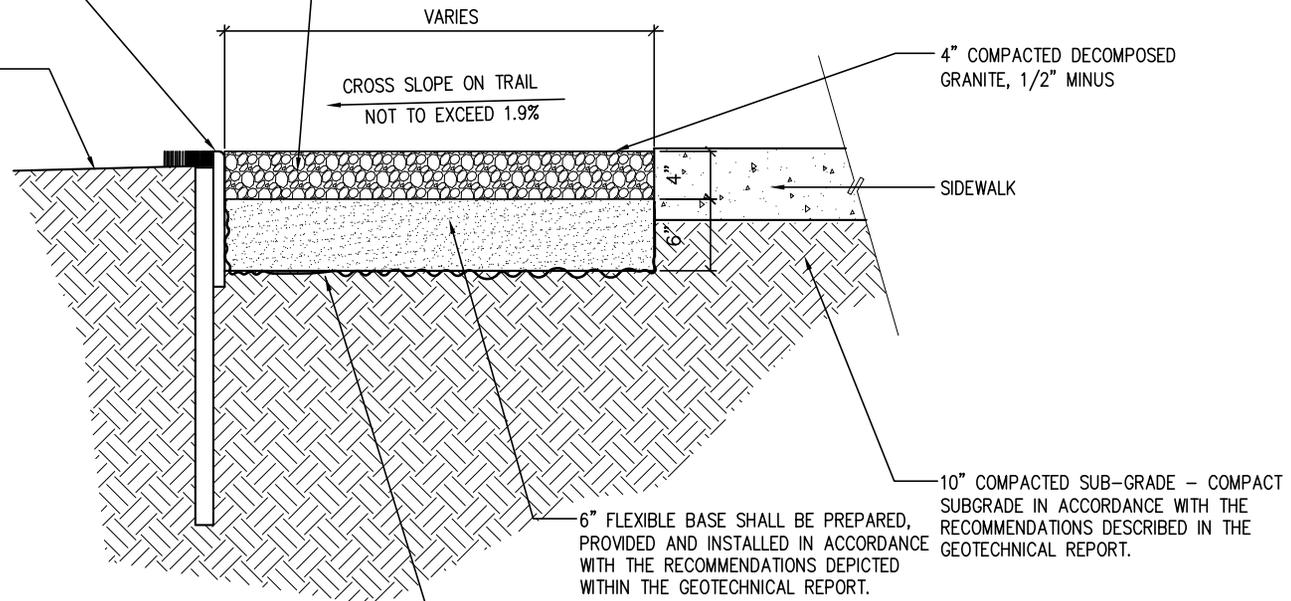
### 3.5 CLEANING

- A. Division 1 - Execution Requirements: Final cleaning.
- B. Clean photocell lens as recommended by manufacturer.
- C. Clean all switch faceplates.

END OF SECTION

3/8" THICK X 4" HEIGHT STEEL EDGING. COLOR TO BE FOREST GREEN. CONTRACTOR TO INSTALL EDGING ACCORDING TO THE MANUFACTURERS INSTRUCTIONS, USING THE STEEL AND ANCHORS MANUFACTURED AS COMPATABLE, AND INSTALLED WITH THE ANCHORS TO THE OUTSIDE OF THE TRAIL EDGE, AT THE INTERVAL RECOMMENDED BY THE MANUFACTURER. STEEL EDGING TO BE IN ALIGNMENT WITH TOP OF TRAIL ELEVATIONS, AND TOP OF STEEL EDGE TO BE 1/4" ABOVE ADJACENT GRADE TO ENSURE PROPPER DRAINAGE.

1/2" MINUS DECOMPOSED GRANITE WITH STABILIZER / BINDER AS MANUFACTURED BY STABILIZER SOLUTIONS, AND AS SUPPLIED AND BLENDED BY COLLIER MATERIALS (OR APPROVED EQUAL); BLEND SIXTEEN LBS. OF STABILIZER PER ON TON OF DECOMPOSED GRANITE; SUBMIT FIVE POUND SAMPLE AND SIEVE ANALYSIS FOR GRADING OF DECOMPOSED GRANITE SAMPLE FOR LANDSCAPE ARCHITECT APPROVAL PRIOR TO ORDERING MATERIAL FOR CONSTRUCTION EFFORTS; PLACE 4" OF UN-COMPACTED MATERIAL. WATER HEAVILY FOR FULL-DEPTH MOISTURE PENETRATION OF THE STABILIZED SURFACE PROFILE; WATER ACTIVATES THE STABILIZER. TO ACHIEVE SATURATION OF STABILIZED SURFACE PROFILE, FORTY GALLONS OF WATER PER ONE TON MUST BE APPLIED. DURING WATER APPLICATION, RANDOMLY TEST FOR DEPTH USING A PROBING DEVICE, WHICH REACHES FULL DEPTH. UPON THOROUGH MOISTURE PENETRATION, COMPACT AGGREGATE SCREENINGS TO 95% RELATIVE COMPACTION DENSITY THROUGH THE USE OF A 1,000 LB. SINGLE DRUM ROLLER. DO NOT USE A VIBRATORY PLATE COMPACTOR OR VIBRATION FUNCTION ON ROLLER, AS VIBRATION SEPARATES LARGE AGGREGATE PARTICLES. DO NOT BEGIN COMPACTION FOR SIX HOURS AFTER PLACEMENT, AND UP TO FORTY EIGHT HOURS. IF SURFACE AGGREGATE DRIES SIGNIFICANTLY QUICKER THAN THE SUBSURFACE MATERIAL, LIGHTLY MIST THE SURFACE BEFORE COMPACTION.



NOTE: LONGITUDINAL SLOPES ALONG TRAIL LENGTH SHALL NOT EXCEED A MAXIMUM OF 5% SLOPE. CONTRACTOR NEEDS TO BE AWARE THAT THE ENTIRE PROJECT WILL BE REVIEWED BY TDLR FOR ADA ACCESSIBILITY CONFORMITY, BOTH IN THE DESIGN OF THE IMPROVEMENTS, AND IN THE FIELD FOLLOWING CONSTRUCTION COMPLETION. ANY VIOLATIONS OF THE MAXIMUM GRADE ASSOCIATED WITH THE CONSTRUCTED IMPROVEMENTS FOR THE PROJECT, WILL BE REJECTED, REMOVED, DISPOSED OF (IF NECESSARY), AND REPLACED BY THE CONTRACTOR, IN CONFORMANCE WITH THE REGULATIONS, AND AT THE EXPENSE OF THE CONTRACTOR. THESE COSTS, SHOULD THEY OCCUR, WILL NOT BE DIRECTED AS A FINANCIAL BURDEN TO EITHER MEMBERS OF THE DESIGN TEAM, COMPANIES WHICH EMPLOY DESIGN TEAM MEMBERS, OR THE OWNER.

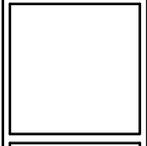
WEED CONTROL FABRIC SHALL BE MANUFACTURED FROM THERMALLY SPUN BONDED POLYPROPYLENE FABRIC AND SHALL CONFORM TO A GRAB TENSILE STRENGTH OF 59 KG MINIMUM, GRAB ELONGATION OF 60% MAXIMUM, UV RESISTANCE OF 70% @ 150 HOURS MINIMUM, AND IT'S MASS SHALL BE AT LEAST 102 GRAMS PER SQUARE METER. THE FABRIC SHALL BE STAPLED TO THE COMPACTED SUB-GRADE USING 50-MM WIDE, 200-MM IN LENGTH, AND 11 GAUGE WIRE. A SAMPLE OF THE MATERIAL BEING PROVIDED BY THE CONTRACTOR MEASURING A MINIMUM OF THREE SQUARE FEES, AND A COPY OF THE MANUFACTURERS PRODUCT SHEET, MANUFACTURERS INSTALLATION INSTRUCTIONS, ALONG WITH A CERTIFICATE OF COMPLIANCE FOR THE PRODUCT WILL BE MAILED AND RECEIVED BY THE ARCHITECT, WITH AT LEAST 5 DAYS NOTICE BEFORE INSTALLATION. THE ARCHITECT WILL BE RESPONSIBLE FOR COMMUNICATION OF THE RECEIPT OF THE SAMPLE AND PRODUCT INFORMATION IN A TIMELY FASHION.



# 8 - DECOMPOSED GRANITE DETAIL

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

AUSLAND ARCHITECTS - METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909



WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
1401

REVISIONS  
 ADD #3 07-05-16

FILENAME:

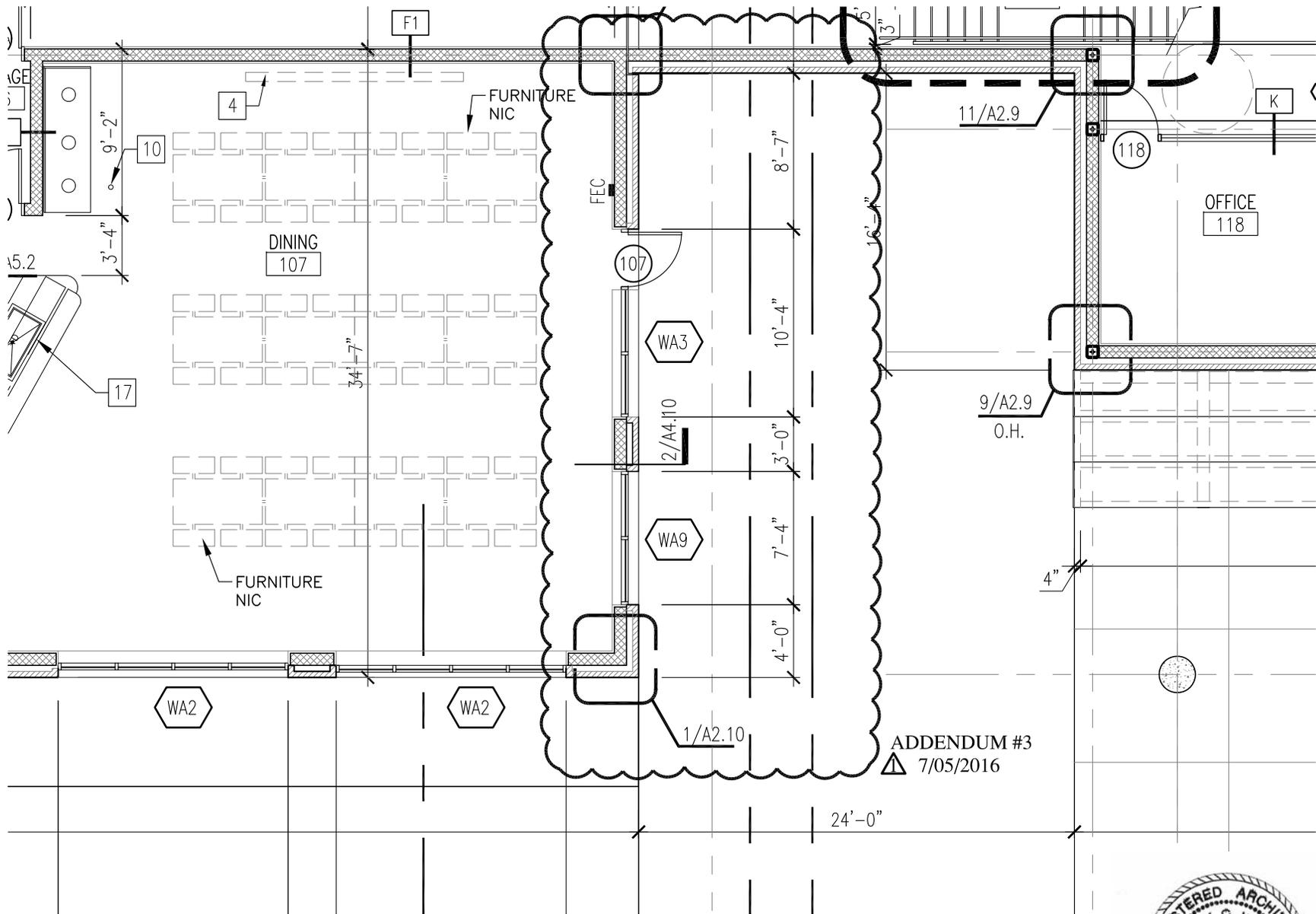
SHEET TITLE  
 PLANTING & IRRIGATION  
 DETAILS

DRAWN BY:

SHEET NO.

A1.3

DATE: JULY 05, 2016



# 1R - FIRST FLOOR PLAN

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



ADDENDUM #3  
 ▲ 7/05/2016



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERME DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

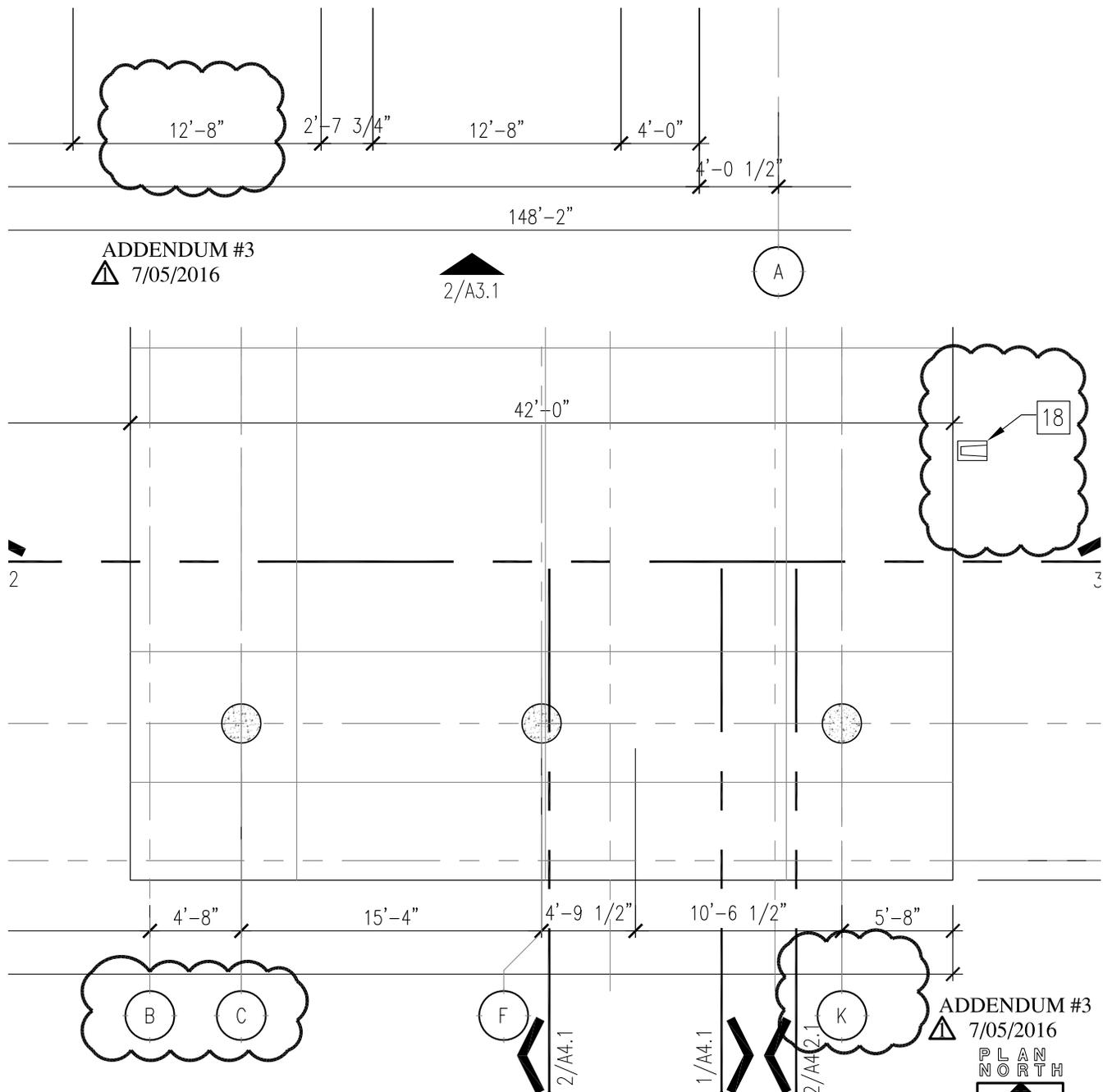
WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER	1401
REVISIONS	
▲ ADD #3 07-05-16	

FILENAME:  
 SHEET TITLE  
 FIRST FLOOR  
 PLAN  
 DRAWN BY:

SHEET NO.  
**A2.1**

DATE: JULY 05, 2016



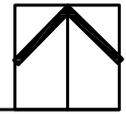
ADDENDUM #3  
 ▲ 7/05/2016

▲  
 2/A3.1

A

ADDENDUM #3  
 ▲ 7/05/2016

PLAN  
 NORTH



# 1R - FIRST FLOOR PLAN

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



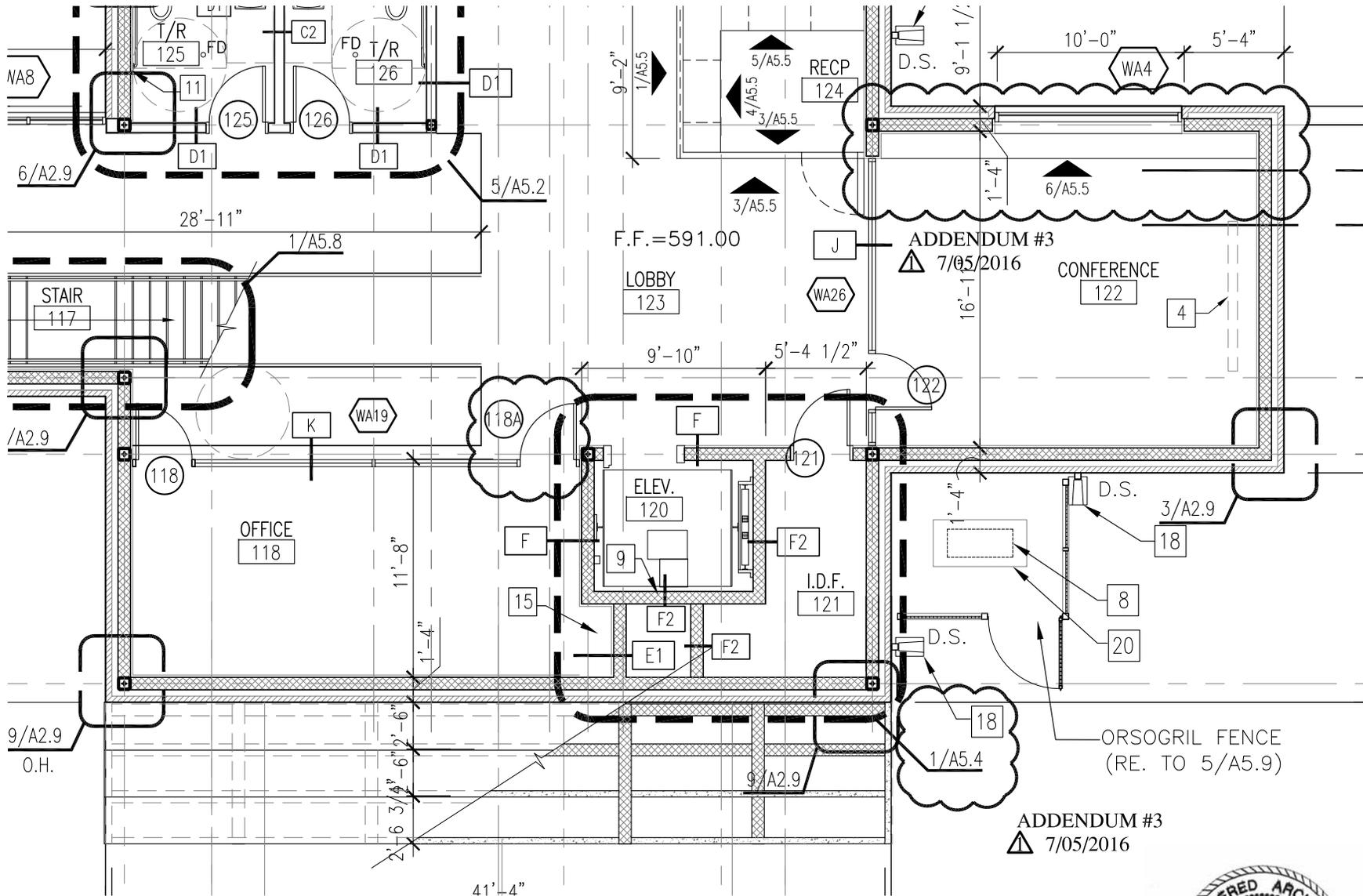
AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
 1401  
 REVISIONS  
 ▲ ADD #3 07-05-16

FILENAME:  
 SHEET TITLE  
 FIRST FLOOR  
 PLAN  
 DRAWN BY:

SHEET NO.  
**A2.1**  
 DATE: JULY 05, 2016



# 1R - FIRST FLOOR PLAN

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



AUSLAND ARCHITECTS - METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
1401

REVISIONS  
 ▲ ADD #3 07-05-16

FILENAME:

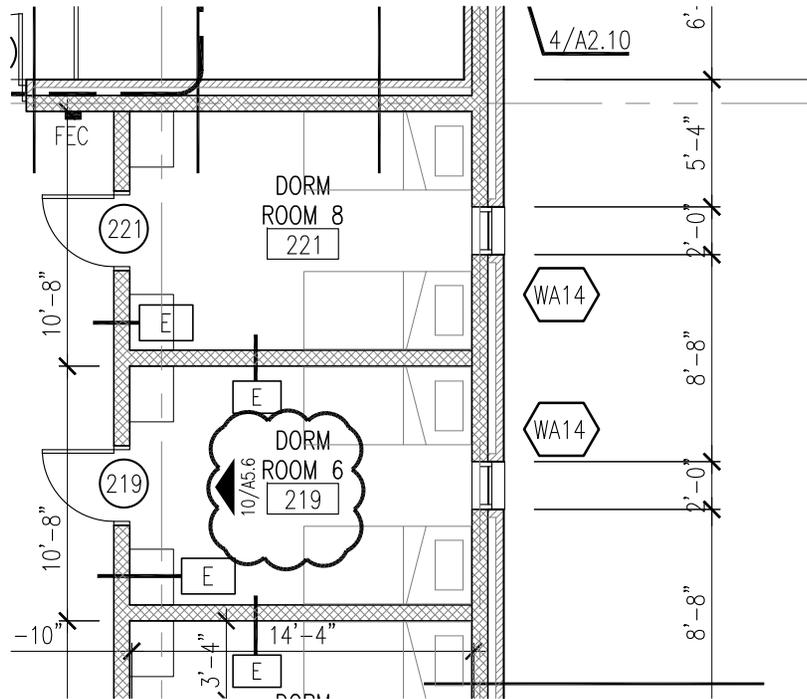
SHEET TITLE  
FIRST FLOOR  
PLAN

DRAWN BY:

SHEET NO.

A2.1

DATE: JULY 05, 2016



ADDENDUM #3  
 ▲ 7/05/2016

# 1R - SECOND FLOOR PLAN

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



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
 1401

REVISIONS  
 ▲ ADD #3 07-05-16

FILENAME:

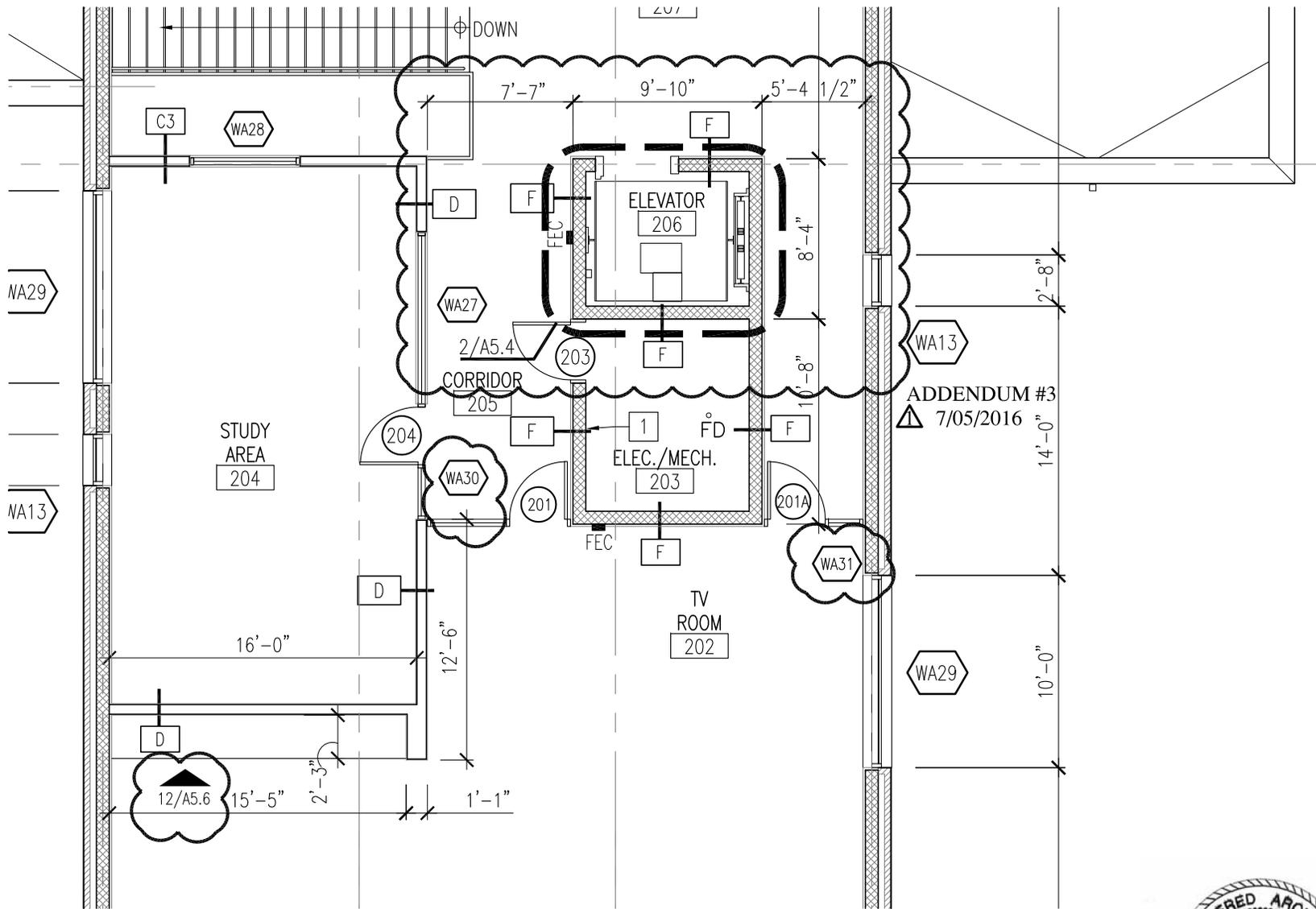
SHEET TITLE  
 SECOND FLOOR PLAN

DRAWN BY:

SHEET NO.

A2.2

DATE: JULY 05, 2016



# 1R - SECOND FLOOR PLAN

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



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER

111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
 1401

REVISIONS  
 ADD #3 07-05-16

FILENAME:

SHEET TITLE  
 SECOND FLOOR PLAN

DRAWN BY:

SHEET NO.

A2.2

DATE: JULY 05, 2016

# DOOR SCHEDULE FIRST FLOOR

			HARDWARE	REMARKS
No.	ROOM NAME	THRESH	SET	
115	WARMING KITCHEN	3/A2.6	HDW-2	
116	WARMING KITCHEN	12/A2.6.1	HDW-15	6
117	CORRIDOR		HDW-8	
118	OFFICE	12/A2.6.1	HDW-7	
118A	OFFICE	12/A2.6.1	HDW-7	
119	NOT USED	-	-	
120	ELEVATOR	-	-	

ADDENDUM #3  
 7/05/2016

# DOOR SCHEDULE SECOND FLOOR

ADDENDUM #3  
 7/05/2016

			HARDWARE	REMARKS
No.	ROOM NAME	THRESH	SET	
201	SOCIAL AREA	12/A2.6.1	HDW-11	
201A	SOCIAL AREA	12/A2.6.1	HDW-11	
203	ELECTRICAL/MECHANICAL	12/A2.6.1	HDW-16	
204	STUDY AREA	12/A2.6.1	HDW-11	7
209	STORAGE	12/A2.6.1	HDW-7	
210	NURSE STATION	12/A2.6.1	HDW-7	
211	TOILET ROOM/SHOWERS	12/A2.6.1	HDW-21	6
213	DORM ROOM 213	12/A2.6.1	HDW-7	8
214	DORM ROOM 214	12/A2.6.1	HDW-7	8
215	CORRIDOR (EXIT DOOR)	6/A2.6	HDW-22	
216	DORM ROOM 216	12/A2.6.1	HDW-7	8
217	DORM ROOM 217	12/A2.6.1	HDW-7	8
218	DORM ROOM 218	12/A2.6.1	HDW-7	8
219	DORM ROOM 219	12/A2.6.1	HDW-7	8
220	DORM ROOM 220	12/A2.6.1	HDW-7	8
221	DORM ROOM 221	12/A2.6.1	HDW-7	8
222	MECHANICAL	12/A2.6.1	HDW-16 & 23	



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERLINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
1401

REVISIONS  
 ADD #3 07-05-16

FILENAME:

SHEET TITLE  
 DOOR SCHED.  
 FINISH SCHED.  
 WINDOW SCH.

DRAWN BY:

SHEET NO.

A2.3

DATE: JULY 05, 2016

# INTERIOR FINISH SCHEDULE

## FIRST FLOOR

NO.	ROOM NAME	FLOOR	BASE	WALLS (PLAN NORTH)				CEILING	CLG. HT.	REMARKS
				NORTH	EAST	SOUTH	WEST			
116	WARMING KITCHEN	QT	QT	EPX	EPX	EPX	EPX	SAP.-2	10'-0"	
117	CORRIDOR	VCT-1	RB1	P	P	P	P	GYP.	15'-0"	6
118	OFFICE	CPT-2	RB1	P	P	P	P	SAP.-1	9'-0"	
119	NOT USED	NOT USED	-	-	-	-	-	-	-	
120	ELEVATOR	VCT-1	RB1	-	-	-	-	-	-	
121	I.D.F.	VCT-2	RB1	P	P	P	P	GYP.	9'-0"	
122	CONFERENCE ROOM	CPT-1	RB1	P	P	P	P	SAP.-1	10'-0"	
123	LOBBY	VCT-1	RB1	P	P	P	P	GYP.	12'-0"	
124	RECEPTION DESK	VCT-1	RB1	P	P	P	P	GYP.	13'-0"	
125	MEN'S TOILET ROOM	PT	PT	CT	CT	CT	CT	GYP.	9'-0"	
126	WOMEN'S TOILET ROOM	PT	PT	CT	CT	CT	CT	GYP.	9'-0"	
127	ENTRY LOBBY	VCT-1	RB1	P	P	P	P	GYP.	12'-0"	
128	OFFICE	CPT-1	RB1	P	P	P	P-MP	SAP.-1	9'-0"	3
129	OFFICE	CPT-1	RB1	P	P	P	P-MP	SAP.-1	9'-0"	3
130	INTAKE	CPT-2	RB1	P	-	P	-	GYP.	9'-0"	
131	INTAKE	CPT-2	RB1	P	-	P	-	GYP.	9'-0"	
132	ADMISSION INTAKE	VCT-1	RB1	P	P	P	P	EXP.	-	
133	CONFERENCE	VCT-1	RB1	P	P	P	P-MP	EXP.	-	3
134	OFFICE	CPT-1	RB1	P	P	P	P-MP	SAP.-1	9'-0"	3
135	TOILET ROOM	PT	PT	CT	CT	CT	CT	GYP.	9'-0"	4

ADDENDUM #3  
 ▲ 7/05/2016



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERLINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
1401

REVISIONS  
 ▲ ADD #3 07-05-16

FILENAME:

SHEET TITLE  
 DOOR SCHED.  
 FINISH SCHED.  
 WINDOW SCH.

DRAWN BY:

SHEET NO.

**A2.3**

DATE: JULY 05, 2016

## GLAZING LEGEND

- 1 DOUBLE PANE INSULATED GLASS
- 2 DOUBLE PANE INSULATED TEMPERED GLASS
- 3 1/4" CLEAR GLASS
- 4 1/4" TEMPERED GLASS
- 5 1/2" TEMPERED GLASS - POLISHED EDGE
- 6 3/8" TEMPERED GLASS

ADDENDUM #3  
 ▲ 7/05/2016



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
 1401

REVISIONS  
 ▲ ADD #3 07-05-16

FILENAME:

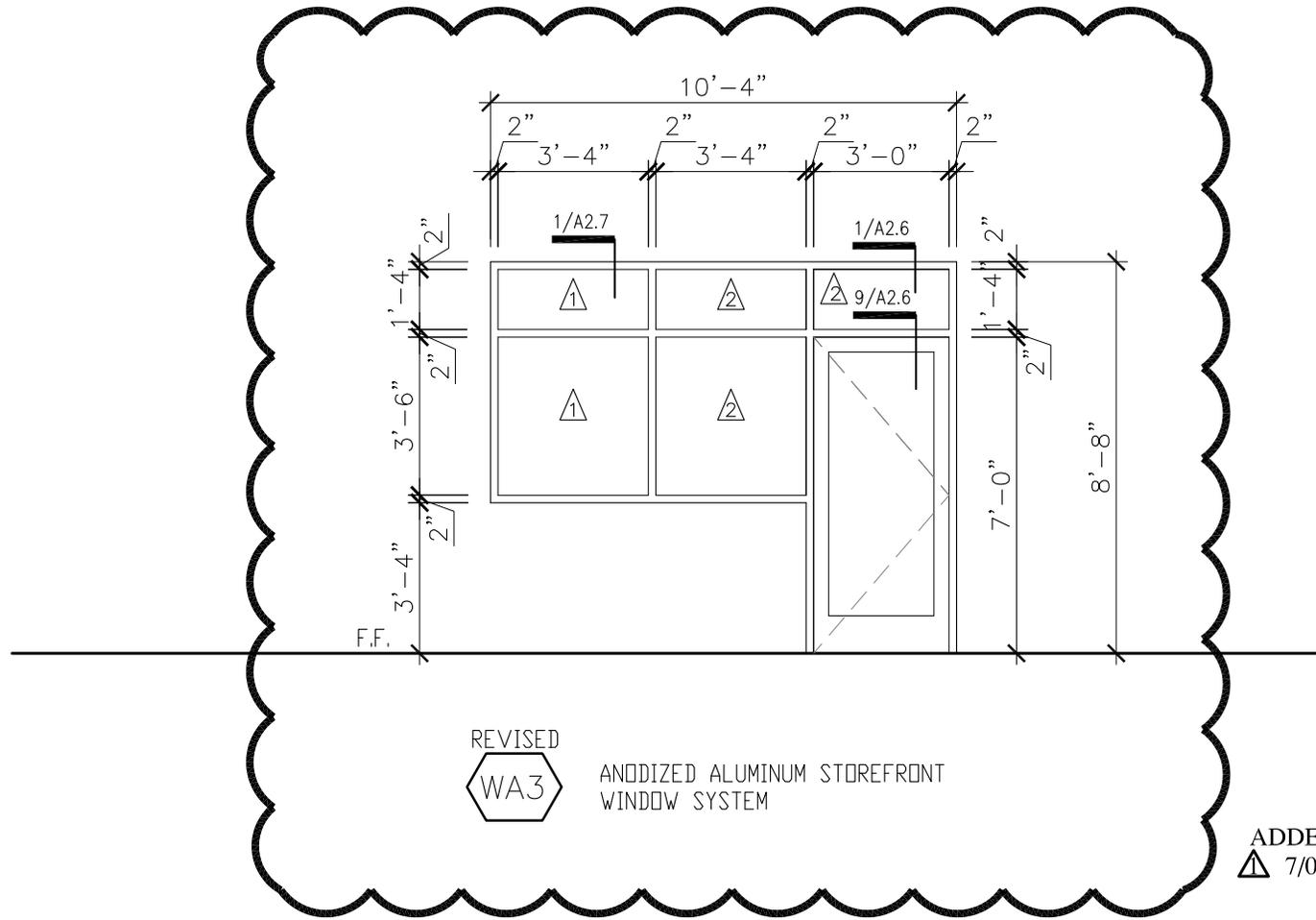
SHEET TITLE  
 DOOR SCHED.  
 FINISH SCHED.  
 WINDOW SCH.

DRAWN BY:

SHEET NO.

A2.3

DATE: JULY 05, 2016



REVISED  
 WA3 ANODIZED ALUMINUM STOREFRONT  
 WINDOW SYSTEM

ADDENDUM #3  
 △ 7/05/2016

# 1R - WINDOW ELEVATIONS

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



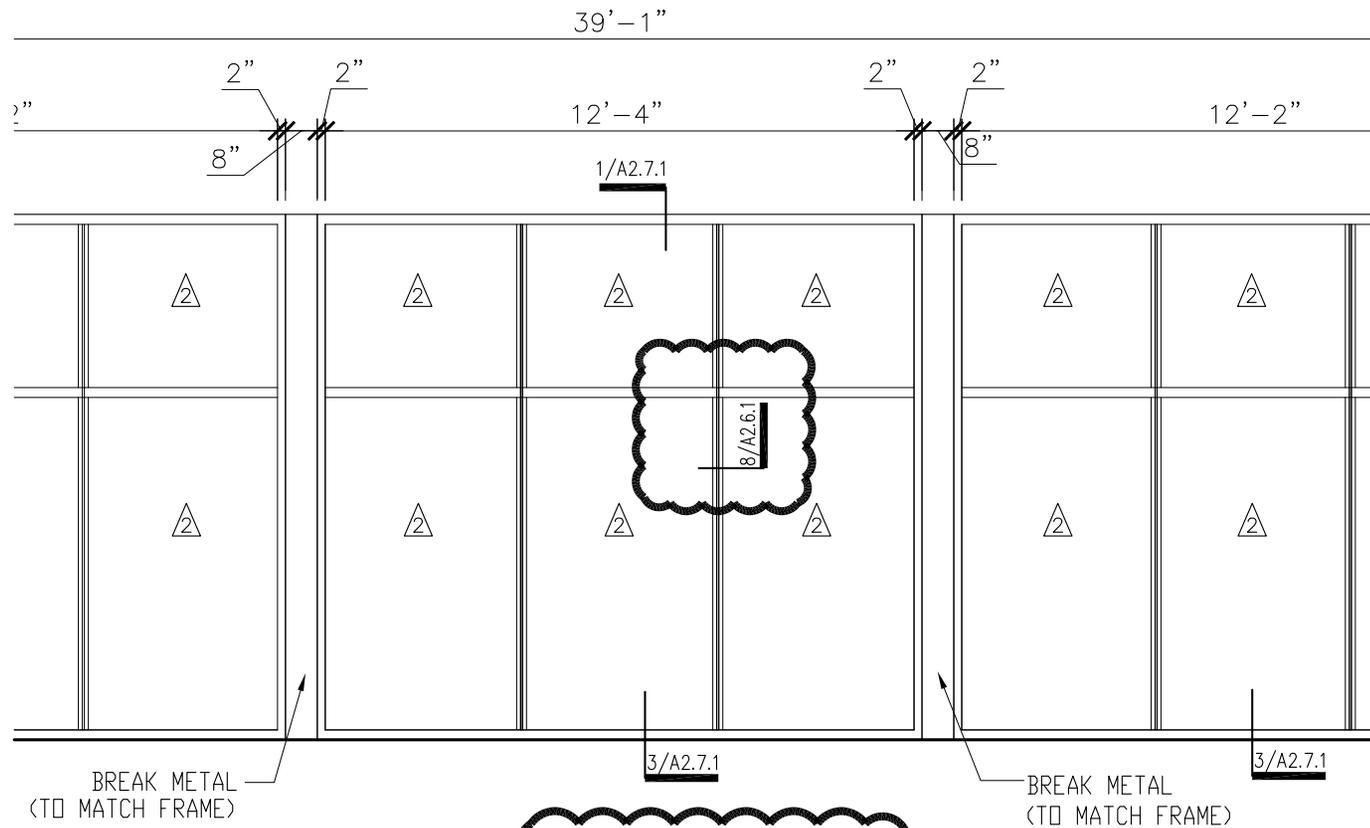
AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERLINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
 1401  
 REVISIONS  
 △ ADD #3 07-05-16

FILENAME:  
 SHEET TITLE  
 WINDOW ELEVATIONS  
 DRAWN BY:

SHEET NO.  
**A2.4**  
 DATE: JULY 05, 2016



WA12 ANODIZED ALUMINUM CURTAIN WALL SYSTEM

ADDENDUM #3  
 7/05/2016



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERLINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909



WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
 1401

REVISIONS  
 △ ADD #3 07-05-16

FILENAME:

SHEET TITLE  
 WINDOW ELEVATIONS

DRAWN BY:

SHEET NO.

A2.4

DATE: JULY 05, 2016

# GLAZING LEGEND

- 1 DOUBLE PANE INSULATED GLASS
- 2 DOUBLE PANE INSULATED TEMPERED GLASS
- 3 1/4" CLEAR GLASS
- 4 1/4" TEMPERED GLASS
- 5 1/2" TEMPERED GLASS – POLISHED EDGE
- 6 3/8" TEMPERED GLASS

ADDENDUM #3  
 ▲ 7/05/2016



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
 1401

REVISIONS  
 ▲ ADD #3 07-05-16

FILENAME:

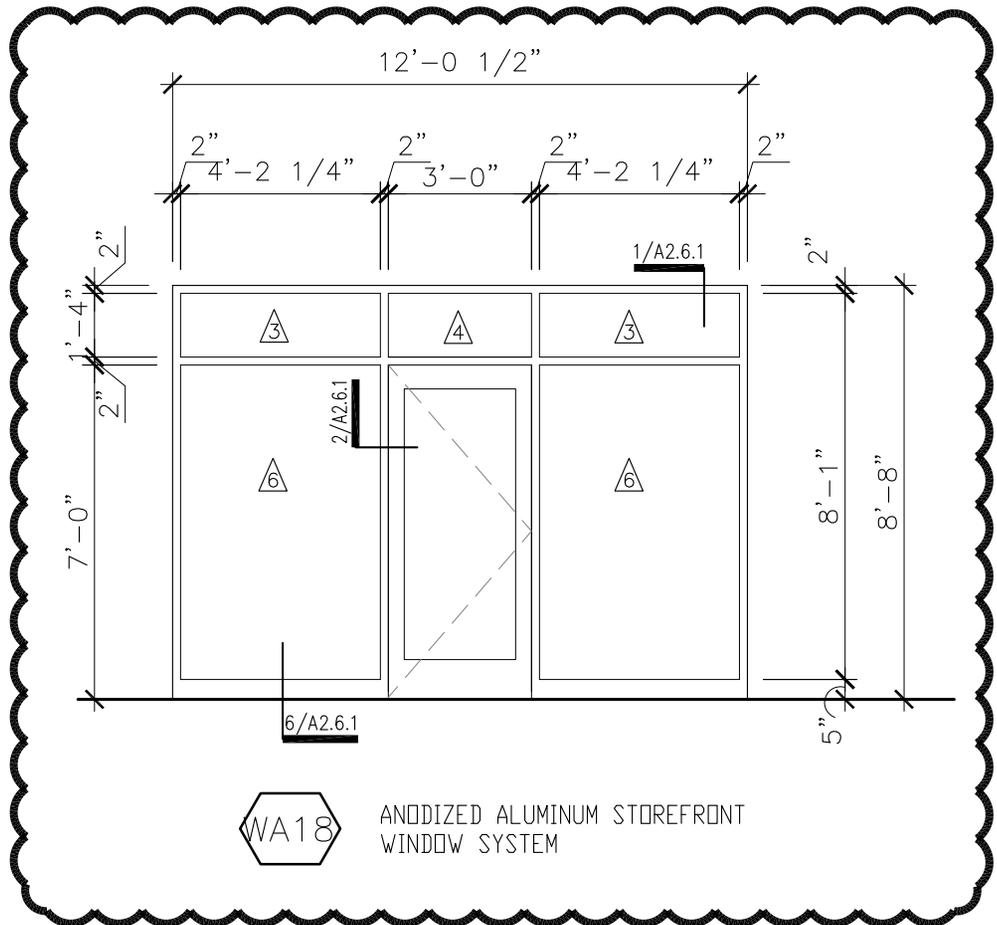
SHEET TITLE  
 WINDOW  
 ELEVATIONS

DRAWN BY:

SHEET NO.

A2.4

DATE: JULY 05, 2016



ANODIZED ALUMINUM STOREFRONT WINDOW SYSTEM

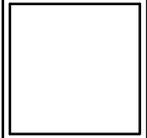
ADDENDUM #3  
 △ 7/05/2016

# 1R - WINDOW ELEVATIONS

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



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909



WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
 1401

REVISIONS  
 △ ADD #3 07-05-16

FILENAME:

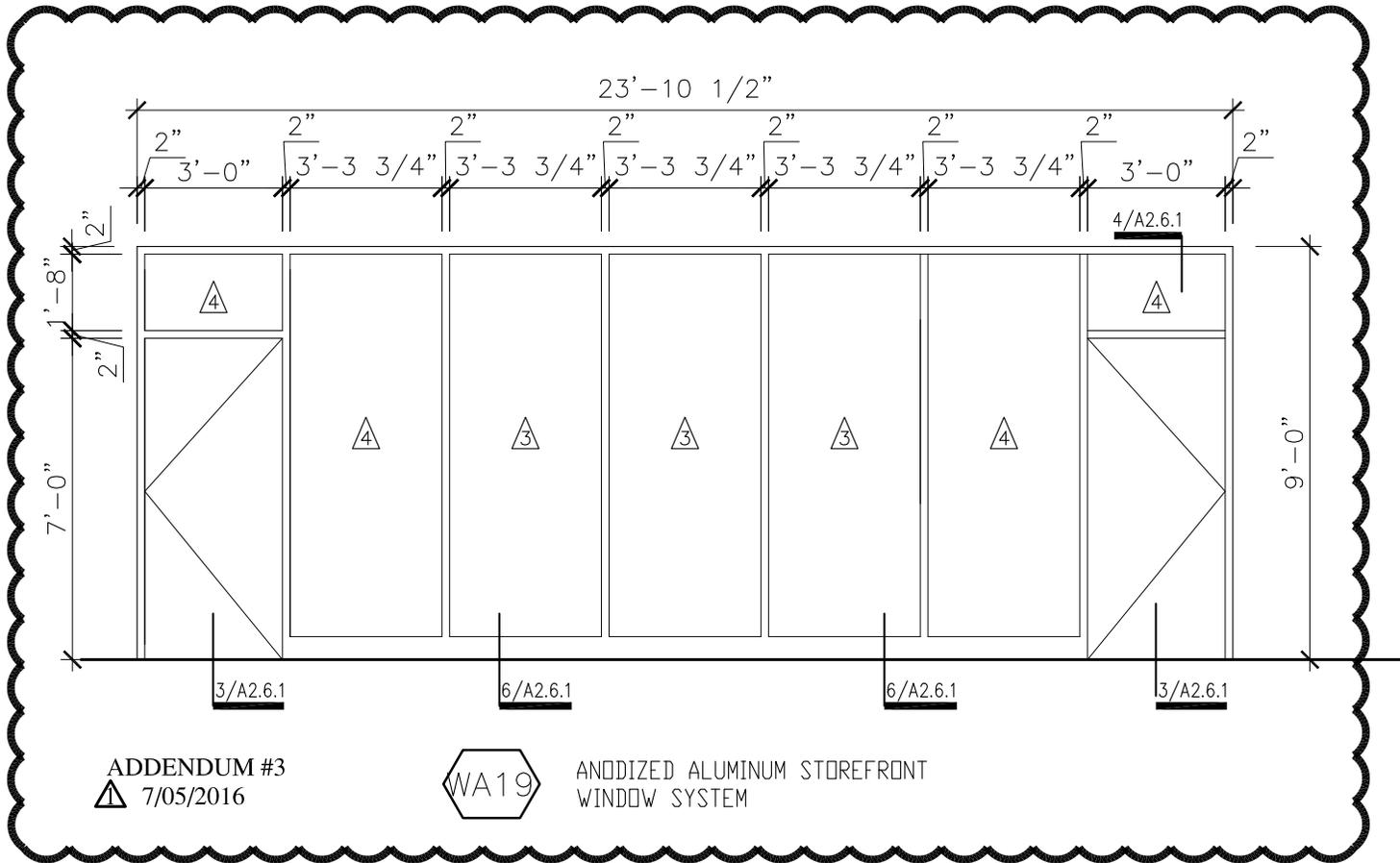
SHEET TITLE  
 WINDOW ELEVATIONS

DRAWN BY:

SHEET NO.

A2.5

DATE: JULY 05, 2016



# 1R - WINDOW ELEVATIONS

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



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERME DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
1401

REVISIONS  
 △ ADD #3 07-05-16

FILENAME:

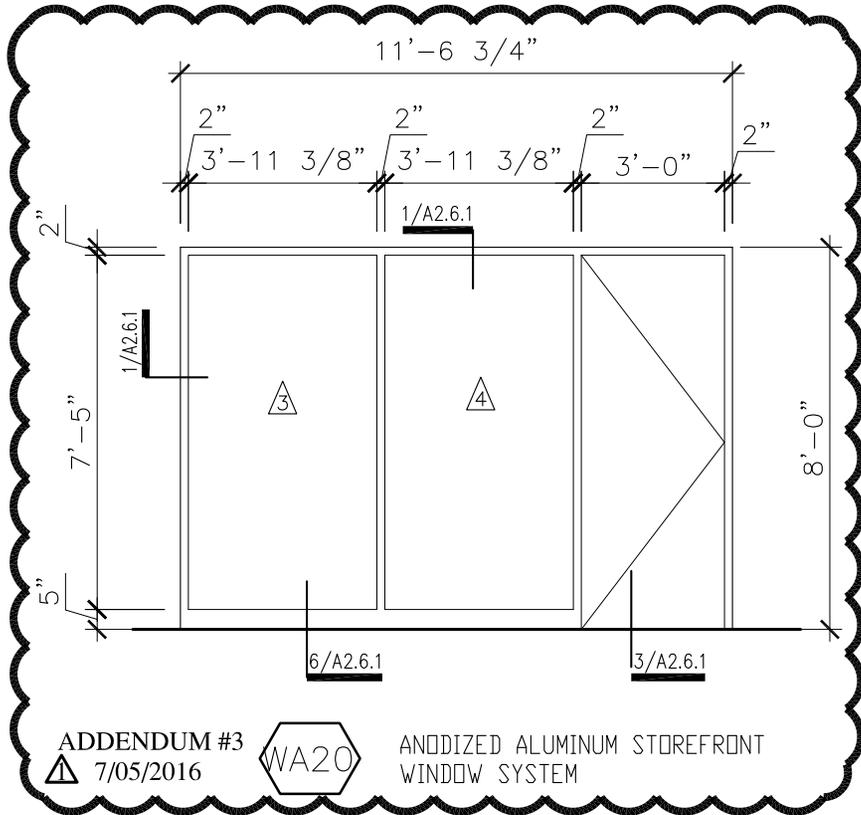
SHEET TITLE  
WINDOW  
ELEVATIONS

DRAWN BY:

SHEET NO.

**A2.5**

DATE: JULY 05, 2016



ADDENDUM #3  
 7/05/2016

**WA20**

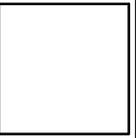
ANODIZED ALUMINUM STOREFRONT WINDOW SYSTEM

# 1R - WINDOW ELEVATIONS

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



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERLINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909



WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
1401

REVISIONS  
 △ ADD #3 07-05-16

FILENAME:

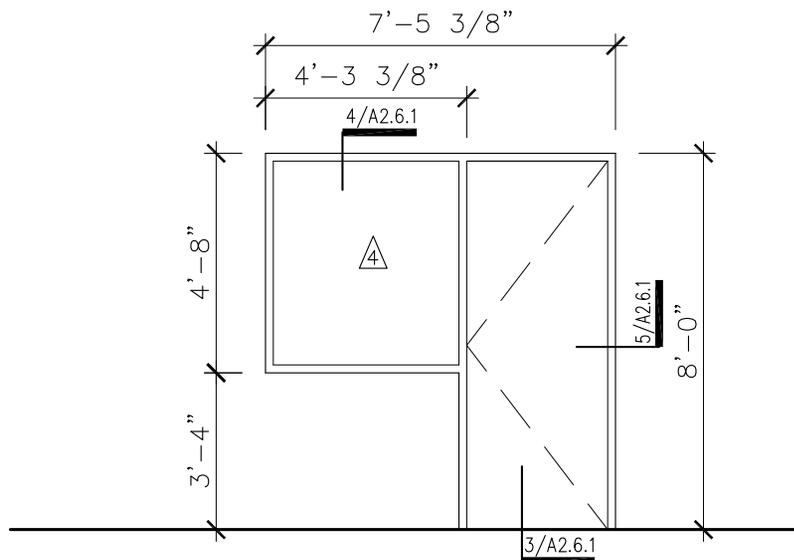
SHEET TITLE  
WINDOW ELEVATIONS

DRAWN BY:

SHEET NO.

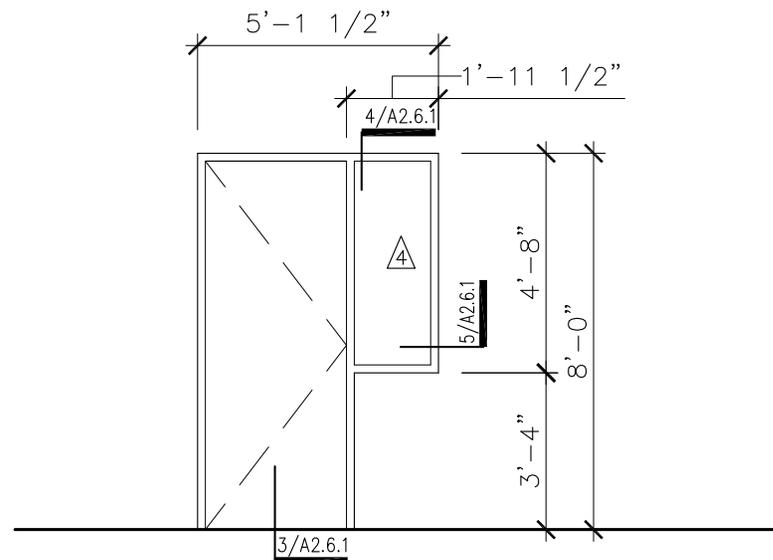
**A2.5**

DATE: JULY 05, 2016



WA30

ANODIZED ALUMINUM STOREFRONT WINDOW SYSTEM



WA31

ANODIZED ALUMINUM STOREFRONT WINDOW SYSTEM

ADDENDUM #3  
 ▲ 7/05/2016

# 1 - WINDOW ELEVATIONS

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



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERLINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER 1401
REVISIONS ▲ ADD #3 07-05-16
FILENAME:
SHEET TITLE WINDOW ELEVATIONS
DRAWN BY:
SHEET NO. <b>A2.5</b>
DATE: JULY 05, 2016

# GLAZING LEGEND

- 1 DOUBLE PANE INSULATED GLASS
- 2 DOUBLE PANE INSULATED TEMPERED GLASS
- 3 1/4" CLEAR GLASS
- 4 1/4" TEMPERED GLASS
- 5 1/2" TEMPERED GLASS - POLISHED EDGE
- 6 3/8" TEMPERED GLASS

ADDENDUM #3  
 △ 7/05/2016



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
 1401

REVISIONS  
 △ ADD #3 07-05-16

FILENAME:

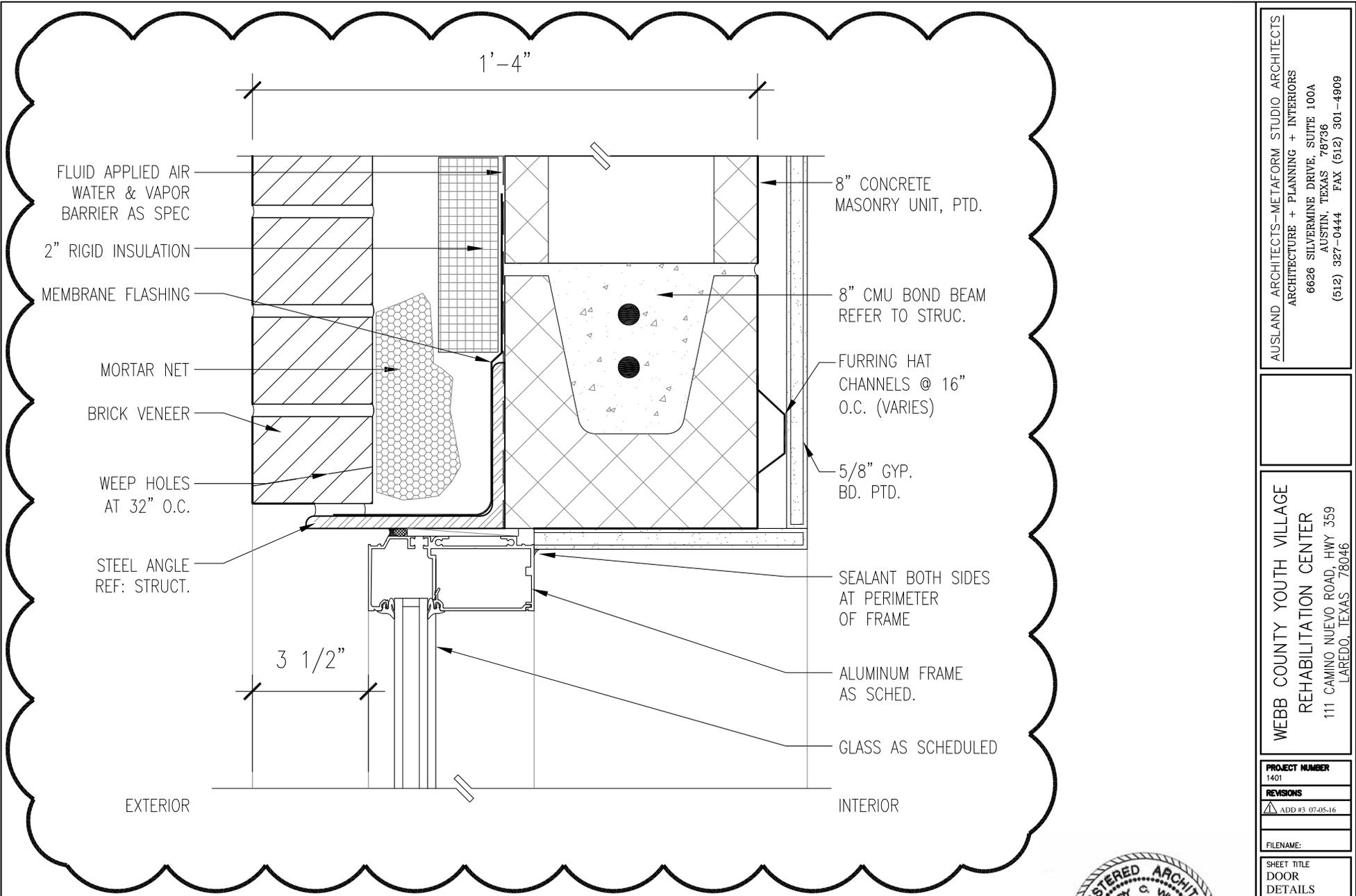
SHEET TITLE  
 WINDOW  
 ELEVATIONS

DRAWN BY:

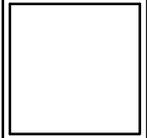
SHEET NO.

A2.5

DATE: JULY 05, 2016



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERLINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909



WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
 1401

REVISIONS  
 ▲ ADD #3 07-05-16

FILENAME:

SHEET TITLE  
 DOOR  
 DETAILS

DRAWN BY:

SHEET NO.

A2.6

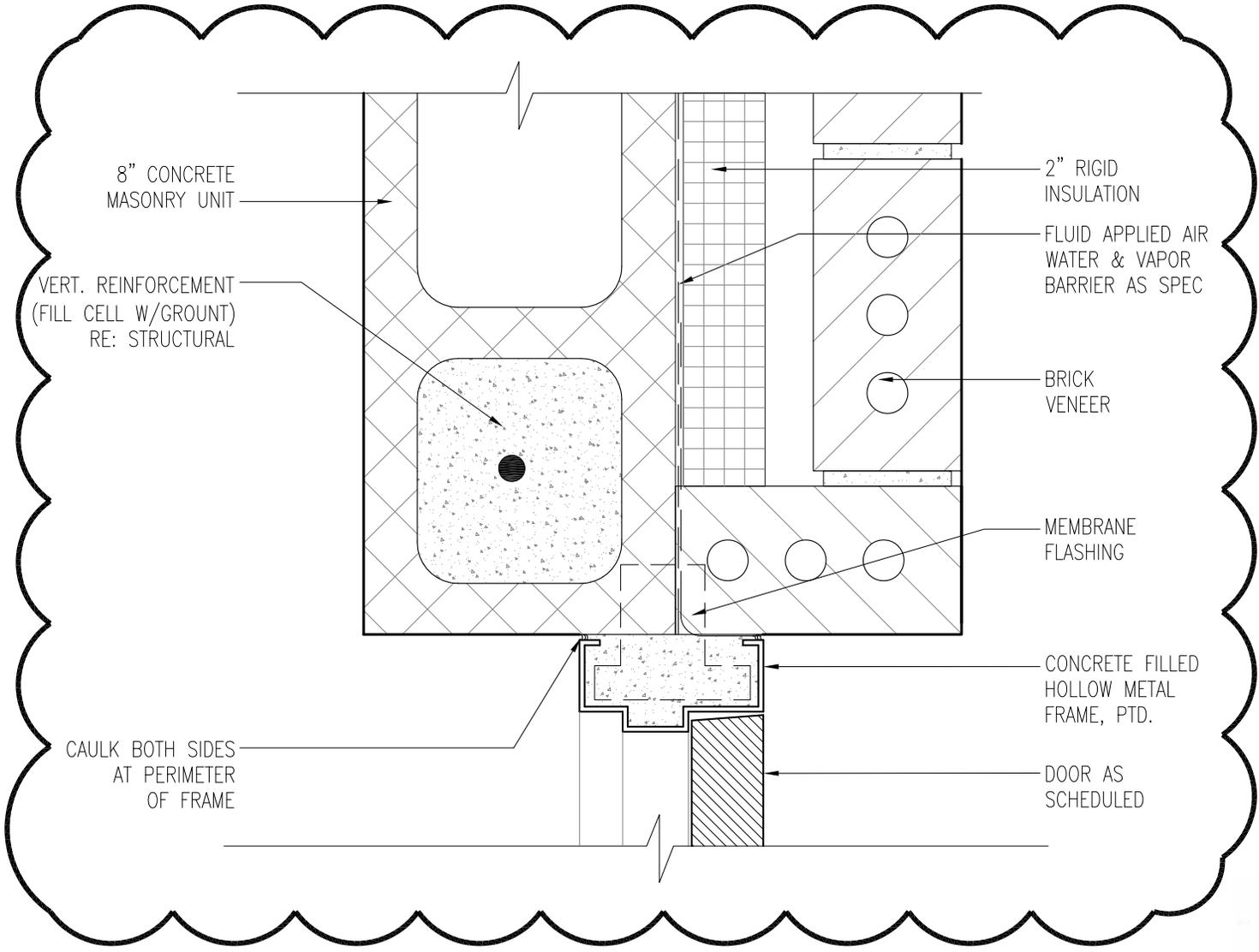
DATE: JULY 05, 2016

ADDENDUM #3  
 ▲ 7/05/2016

# 1R - EXT. ALUM. STOREFRONT HEAD / TRANSOM

SCALE: 3" = 1'-0"





8" CONCRETE  
MASONRY UNIT

VERT. REINFORCEMENT  
(FILL CELL W/GROUT)  
RE: STRUCTURAL

CAULK BOTH SIDES  
AT PERIMETER  
OF FRAME

2" RIGID  
INSULATION

FLUID APPLIED AIR  
WATER & VAPOR  
BARRIER AS SPEC

BRICK  
VENEER

MEMBRANE  
FLASHING

CONCRETE FILLED  
HOLLOW METAL  
FRAME, PTD.

DOOR AS  
SCHEDULED

# 5R - EXT. H.M. DOOR JAMB

SCALE: 3" = 1'-0"

ADDENDUM #3  
7/05/2016



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
ARCHITECTURE + PLANNING + INTERIORS  
6626 SILVERLINE DRIVE, SUITE 100A  
AUSTIN, TEXAS 78736  
(512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
REHABILITATION CENTER  
111 CAMINO NUEVO ROAD, HWY 359  
LAREDO, TEXAS 78046

PROJECT NUMBER  
1401

REVISIONS  
△ ADD #3 07-05-16

FILENAME:

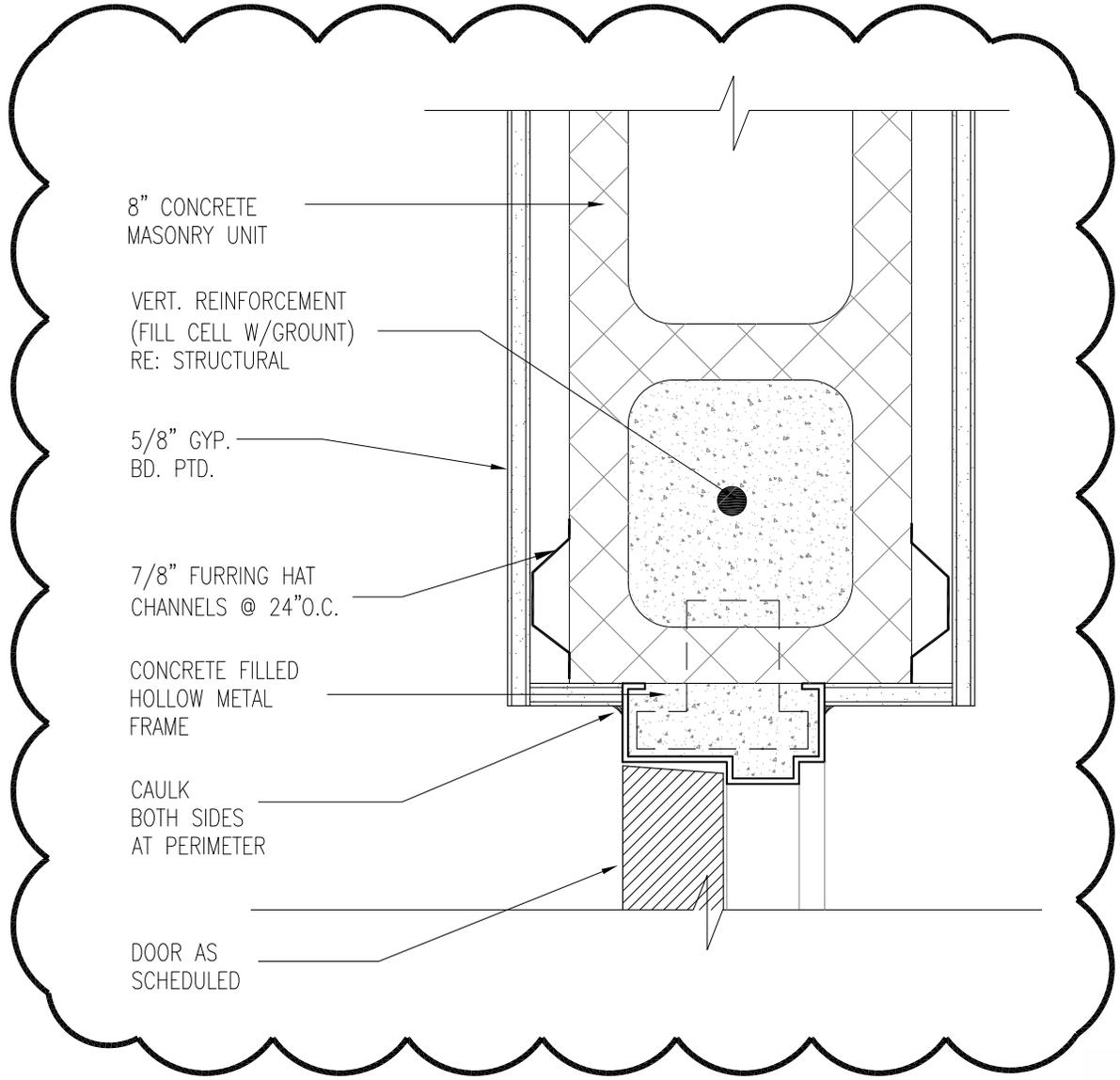
SHEET TITLE  
DOOR  
DETAILS

DRAWN BY:

SHEET NO.

A2.6

DATE: JULY 05, 2016



8" CONCRETE  
MASONRY UNIT

VERT. REINFORCEMENT  
(FILL CELL W/GROUT)  
RE: STRUCTURAL

5/8" GYP.  
BD. PTD.

7/8" FURRING HAT  
CHANNELS @ 24"O.C.

CONCRETE FILLED  
HOLLOW METAL  
FRAME

CAULK  
BOTH SIDES  
AT PERIMETER

DOOR AS  
SCHEDULED

# 8R - INT. H.M. DOOR JAMB

SCALE: 3" = 1'-0"

ADDENDUM #3  
7/05/2016



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
ARCHITECTURE + PLANNING + INTERIORS  
6626 SILVERLINE DRIVE, SUITE 100A  
AUSTIN, TEXAS 78736  
(512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
REHABILITATION CENTER  
111 CAMINO NUEVO ROAD, HWY 359  
LAREDO, TEXAS 78046

PROJECT NUMBER  
1401

REVISIONS

ADD #3 07-05-16

FILENAME:

SHEET TITLE  
DOOR  
DETAILS

DRAWN BY:

SHEET NO.

A2.6

DATE: JULY 05, 2016

ALUM. STOREFRONT  
KAWNEER TRIFAB  
VG 451T SERIES  
OR EQUAL

SEALANT

CORNER BEAD

FURRING HAT  
CHANNELS @ 16" O.C.  
(VARIES)

5/8" GYPSUM  
BOARD, PTD.

8" CONCRETE  
MASONRY UNIT

CMU BOND BEAM  
W/HORIZ. REINF,  
RE: STRUCTURAL

BACKER ROD  
& SEALANT

FLUID APPLIED AIR,  
WATER & VAPOR  
BARRIER AS SPEC.  
BRICK SILL

MEMBRANE  
FLASHING

WEEP HOLES  
AT 32" O.C.

METAL FLASHING

FLUID APPLIED AIR,  
WATER & VAPOR  
BARRIER AS SPEC

2" RIGID  
INSULATION

AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
ARCHITECTURE + PLANNING + INTERIORS  
6626 SILVERMINE DRIVE, SUITE 100A  
AUSTIN, TEXAS 78736  
(512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
REHABILITATION CENTER  
111 CAMINO NUEVO ROAD, HWY 359  
LAREDO, TEXAS 78046

PROJECT NUMBER  
1401

REVISIONS

△ ADD #3 07-05-16

FILENAME:

SHEET TITLE  
STOREFRONT  
DETAILS

DRAWN BY:

SHEET NO.

A2.7

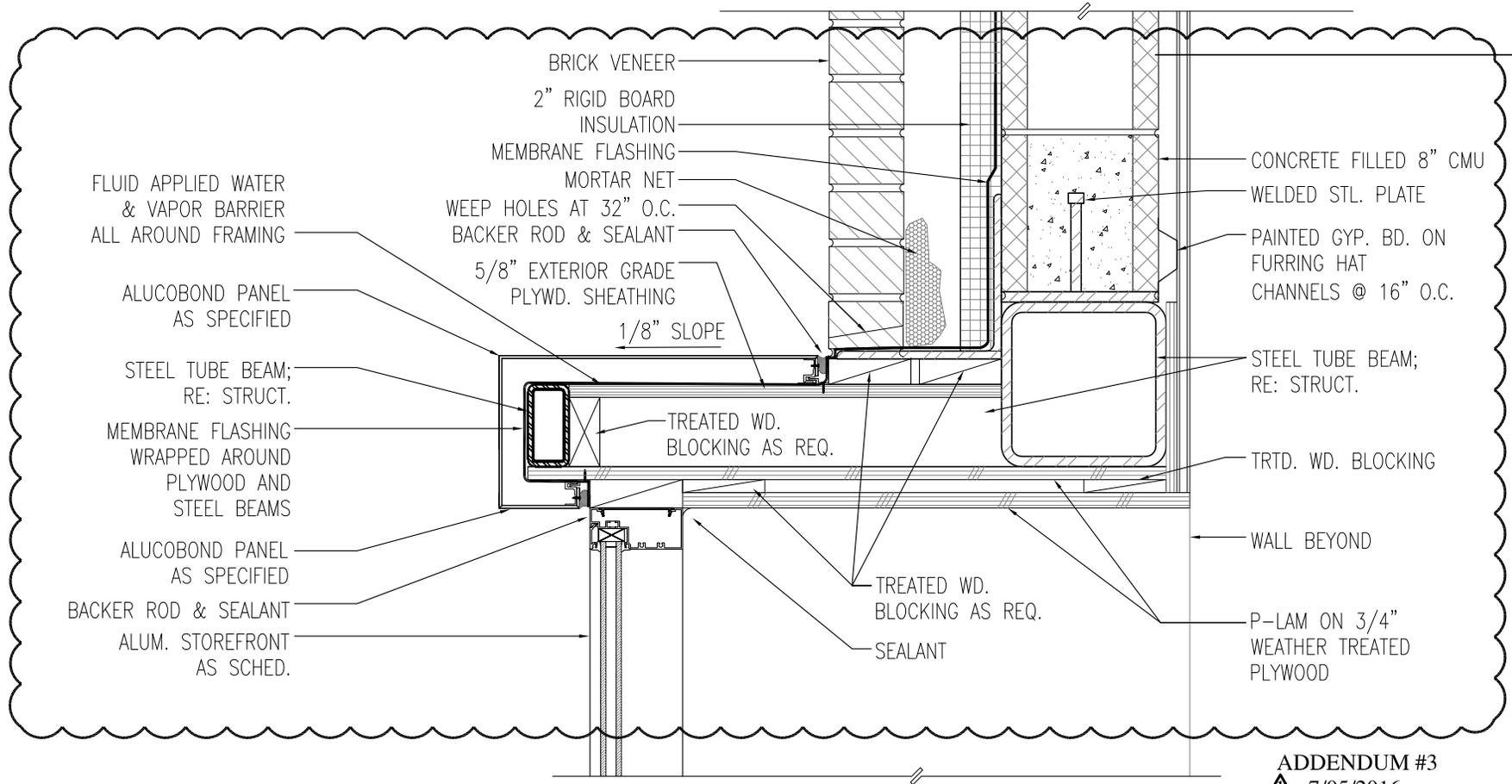
DATE: JULY 05, 2016

ADDENDUM #3  
△ 7/05/2016

# 3R - EXT. ALUM. STOREFRONT SILL

SCALE: 3" = 1'-0"





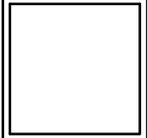
ADDENDUM #3  
 ▲ 7/05/2016

# 7R - EXT. ALUM. STOREFRONT HEAD

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



AUSLAND ARCHITECTS - METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909



WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
 1401

REVISIONS  
 ▲ ADD #3 07-05-16

FILENAME:

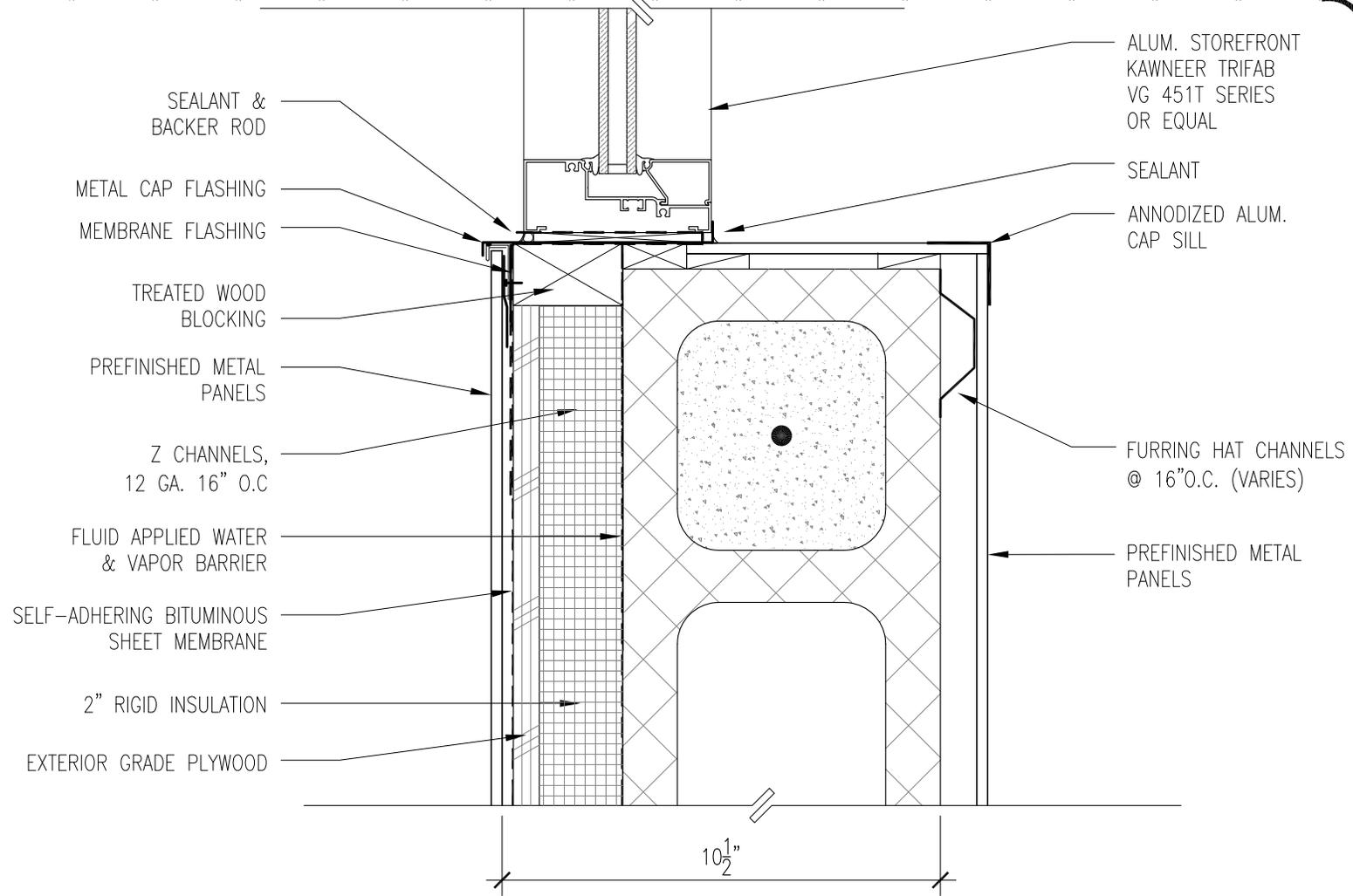
SHEET TITLE  
 STOREFRONT  
 DETAILS

DRAWN BY:

SHEET NO.

A2.7

DATE: JULY 05, 2016



# 8 - EXT. ALUM. STOREFRONT JAMB

SCALE: 3" = 1'-0"

ADDENDUM #3  
 Δ 7/05/2016



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
 1401

REVISIONS  
 Δ ADD #3 07-05-16

FILENAME:

SHEET TITLE  
 STOREFRONT  
 DETAILS

DRAWN BY:

SHEET NO.

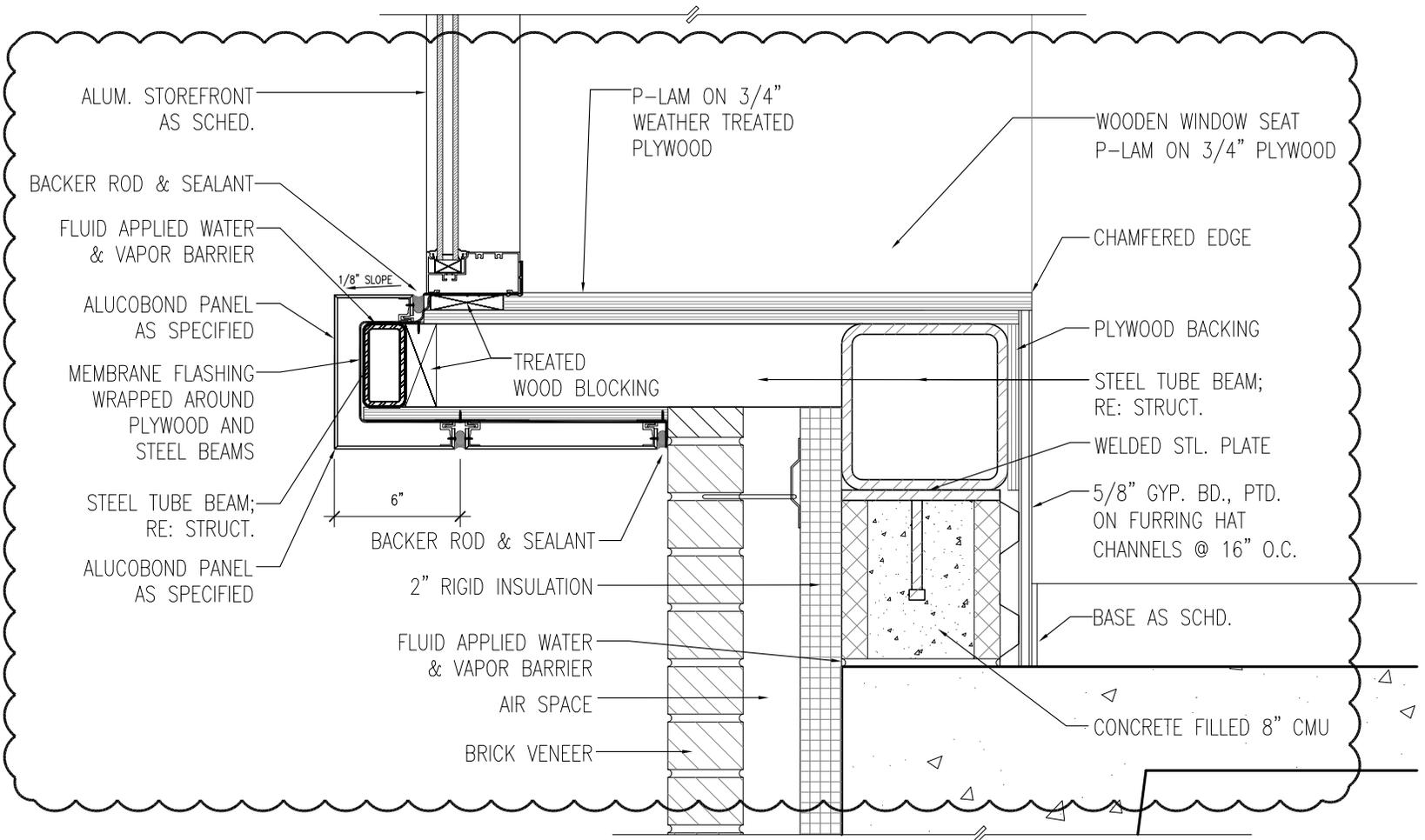
A2.7

DATE: JULY 05, 2016

AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER 1401
REVISIONS ▲ ADD #3 07-05-16
FILENAME:
SHEET TITLE STOREFRONT DETAILS
DRAWN BY:
SHEET NO. <b>A2.7</b>
DATE: JULY 05, 2016



ADDENDUM #3  
 ▲ 7/05/2016

# 9R - EXT. ALUM. STOREFRONT HEAD

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



WALL & FLOOR EJ COVER

7/8" FURRING CHANNELS  
@ 24" O.C.

8" CMU  
RE: STRUCT. DWGS.

5/8" GYP. BOARD, PTD.

HORIZONTAL REINF.  
@ 16" O.C.

FLUID APPLIED WATER  
& VAPOR BARRIER

VERT. REINFORCEMENT  
(FILL CELL W/GROUT)  
RE: STRUCTURAL

5/8" GYP. BOARD, PTD.

7/8" FURRING CHANNELS  
@ 24" O.C.

5/8" GYP. BOARD, PTD.

BRICK VENEER

LIQUID MEMBRANE AT EDGES OF  
EXPANSION JOINT FLASHING

CONTINUOUS ALUMINUM  
COVER PLATE

POLYETHYLENE  
VAPOR BARRIER

ADJUSTABLE WALL  
TIES AT 16' O.C.

2" RIGID INSULATION

FLUID APPLIED WATER  
& VAPOR BARRIER

ADDENDUM #3  
▲ 7/05/2016

8



# 10R - PLAN DETAIL

SCALE: 1" = 1'-0"

AUSLAND ARCHITECTS - METAFORM STUDIO ARCHITECTS  
ARCHITECTURE + PLANNING + INTERIORS  
6626 SILVERLINE DRIVE, SUITE 100A  
AUSTIN, TEXAS 78736  
(512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
REHABILITATION CENTER  
111 CAMINO NUEVO ROAD, HWY 359  
LAREDO, TEXAS 78046

PROJECT NUMBER  
1401

REVISIONS  
▲ ADD #3 07-05-16

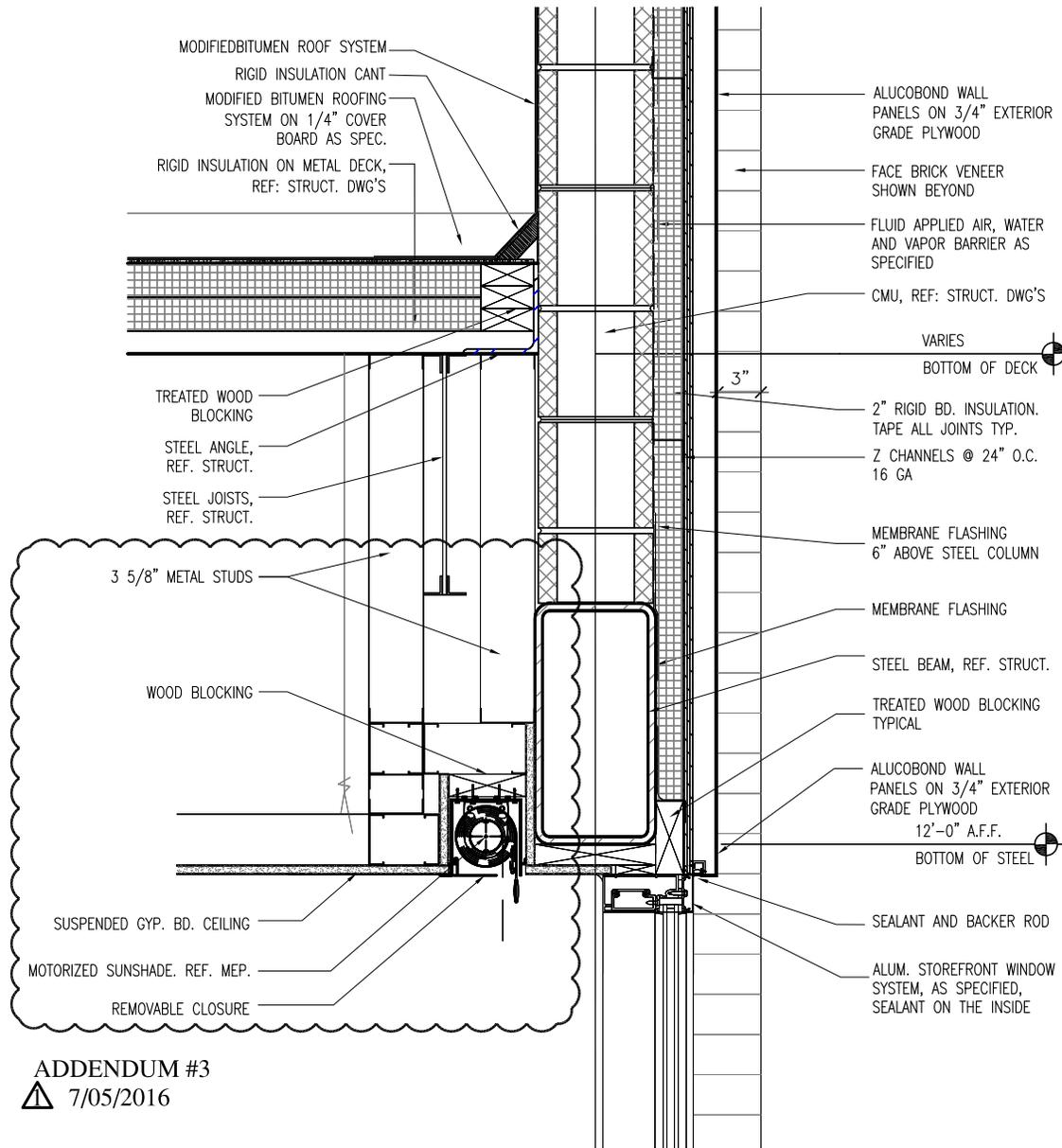
FILENAME:

SHEET TITLE  
PLAN  
DETAILS

DRAWN BY:

SHEET NO.  
A2.9

DATE: JULY 05, 2016



ADDENDUM #3  
 ▲ 7/05/2016

# 4R - SECTION DETAIL

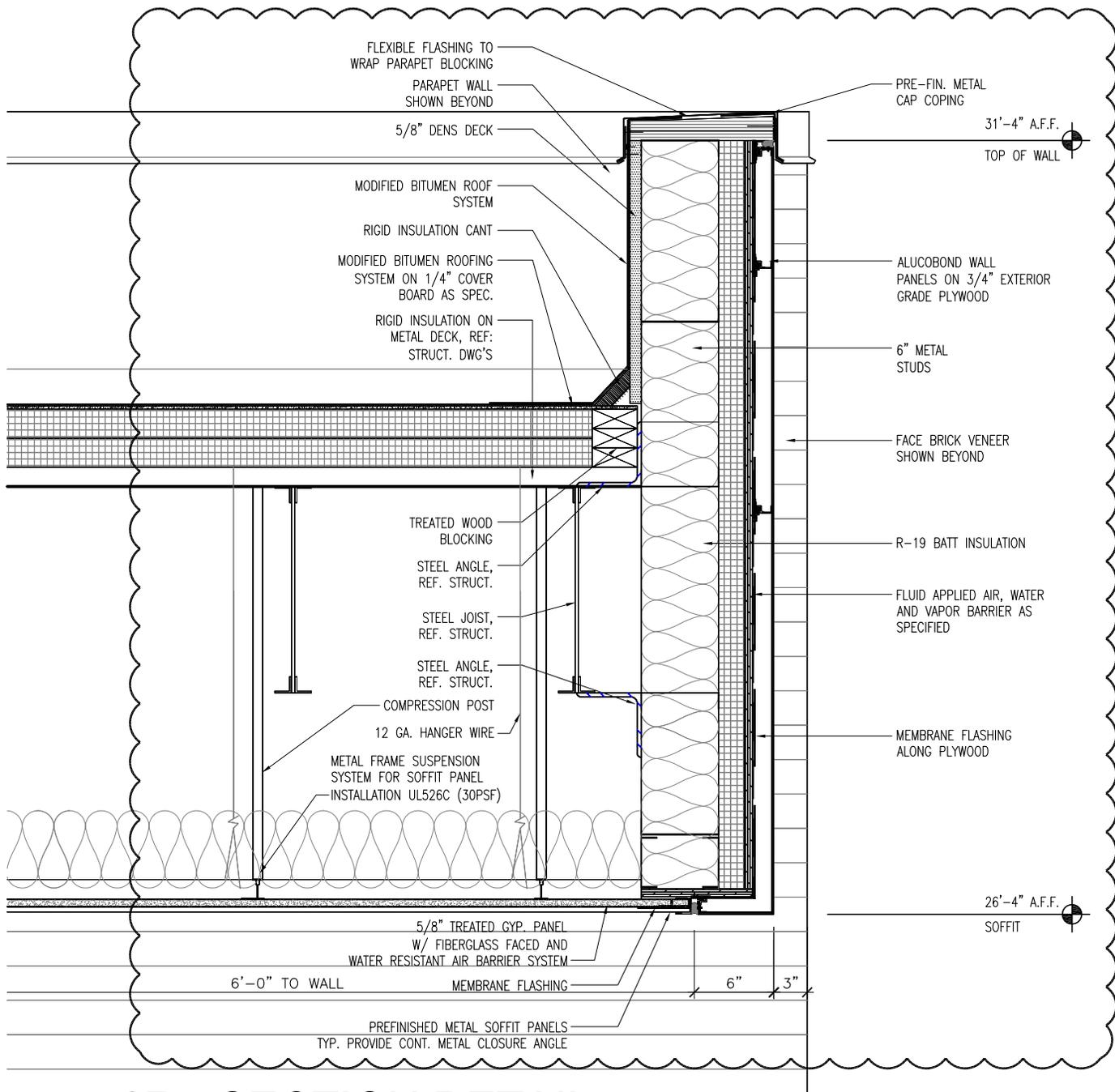
SCALE: 1" = 1'-0"



AUSLAND ARCHITECTS - METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER 1401
REVISIONS ▲ ADD #3 07-05-16
FILENAME:
SHEET TITLE SECTION DETAILS
DRAWN BY:
SHEET NO. <b>A4.8</b>
DATE: JULY 05, 2016



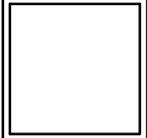
# 6R - SECTION DETAIL

SCALE: 1" = 1'-0"

ADDENDUM #3  
 7/05/2016



AUSLAND ARCHITECTS - METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909



WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
 1401

REVISIONS  
 ADD #3 07-05-16

FILENAME:

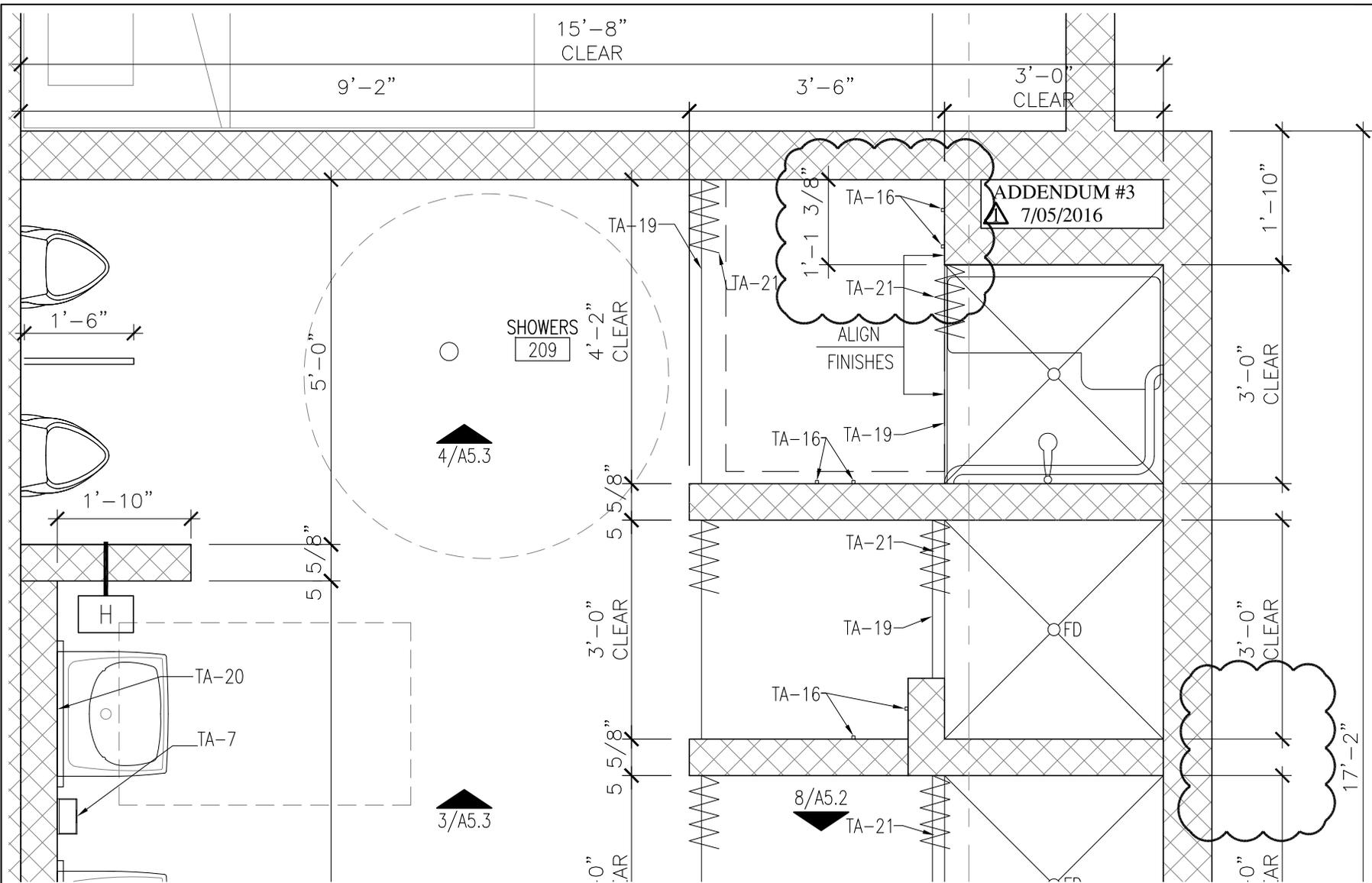
SHEET TITLE  
 SECTION  
 DETAILS

DRAWN BY:

SHEET NO.

A4.8

DATE: JULY 05, 2016



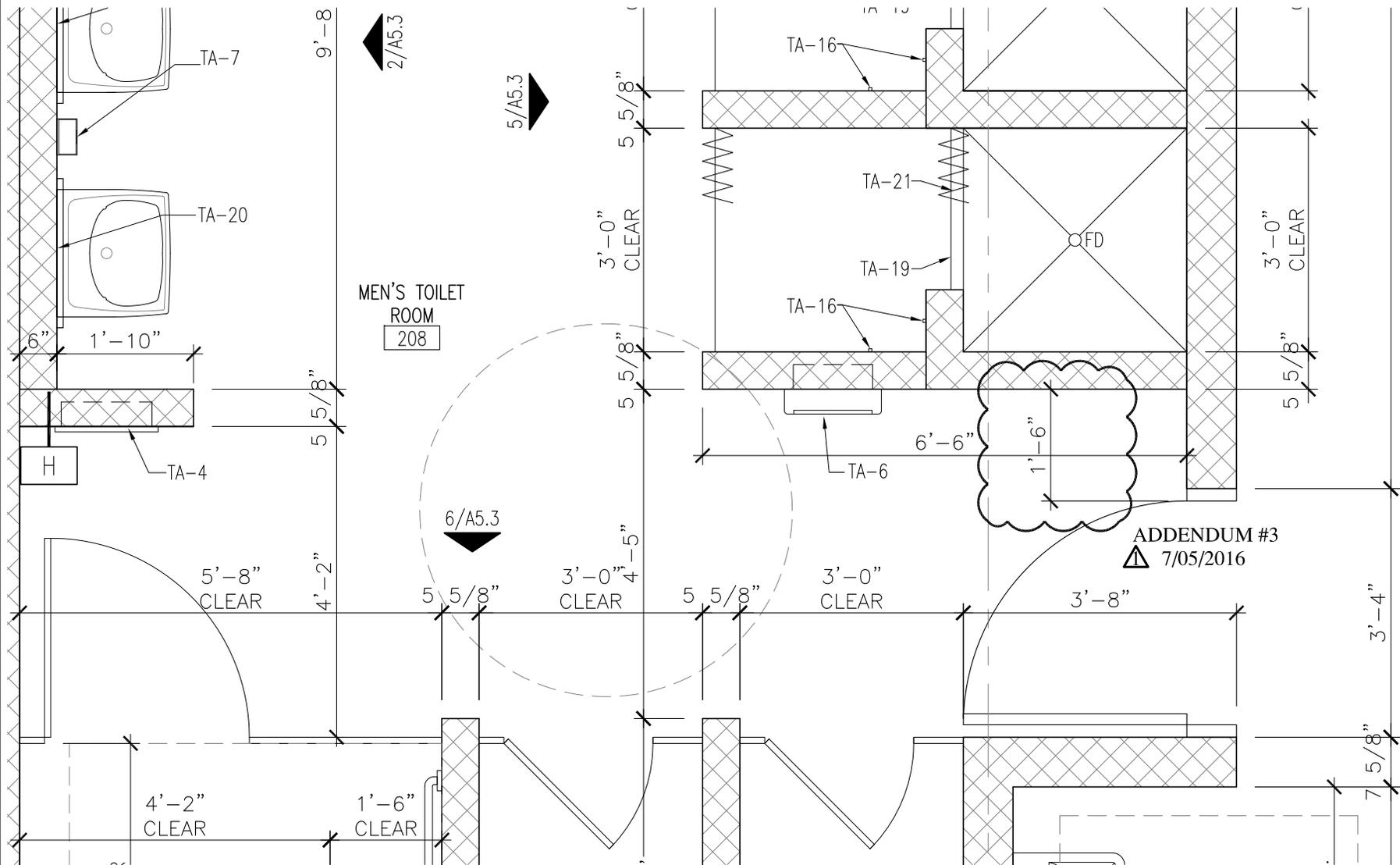
# 1R- SECOND FLOOR - TLT RMS & SHOWERS 208 & 209

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

ADDENDUM #3  
 7/05/2016



AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS ARCHITECTURE + PLANNING + INTERIORS 6626 SILVERMINE DRIVE, SUITE 100A AUSTIN, TEXAS 78736 (512) 327-0444 FAX (512) 301-4909	
WEBB COUNTY YOUTH VILLAGE REHABILITATION CENTER 111 CAMINO NUEVO ROAD, HWY 359 LAREDO, TEXAS 78046	
PROJECT NUMBER	1401
REVISIONS	ADD #3 07-05-16  FILENAME:
SHEET TITLE	ENLARGED FLOOR PLANS
DRAWN BY:	
SHEET NO.	A5.3
DATE:	JULY 05, 2016

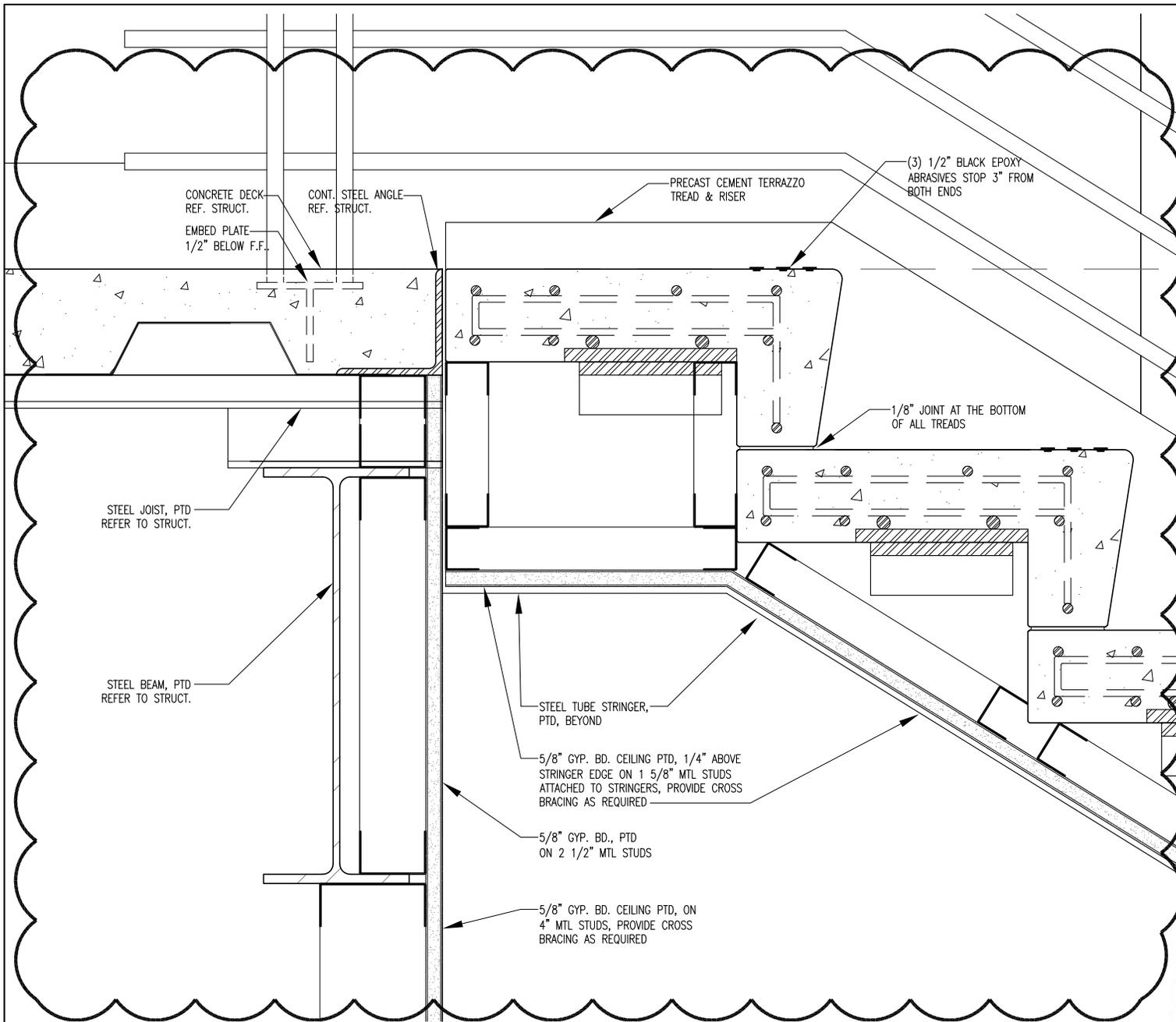


# 1R- SECOND FLOOR - TLT RMS & SHOWERS 208, 209

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



AUSLAND ARCHITECTS - METAFORM STUDIO ARCHITECTS ARCHITECTURE + PLANNING + INTERIORS 6626 SILVERME DRIVE, SUITE 100A AUSTIN, TEXAS 78736 (512) 327-0444 FAX (512) 301-4909	
WEBB COUNTY YOUTH VILLAGE REHABILITATION CENTER 111 CAMINO NUEVO ROAD, HWY 359 LAREDO, TEXAS 78046	
PROJECT NUMBER 1401	REVISIONS ADD #3 07-05-16
FILENAME:	SHEET TITLE ENLARGED FLOOR PLANS
DRAWN BY:	SHEET NO. <b>A5.3</b>
DATE: JULY 05, 2016	



# 4 - PARTIAL STAIR SECTION

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

ADDENDUM #3  
 Δ 7/05/2016



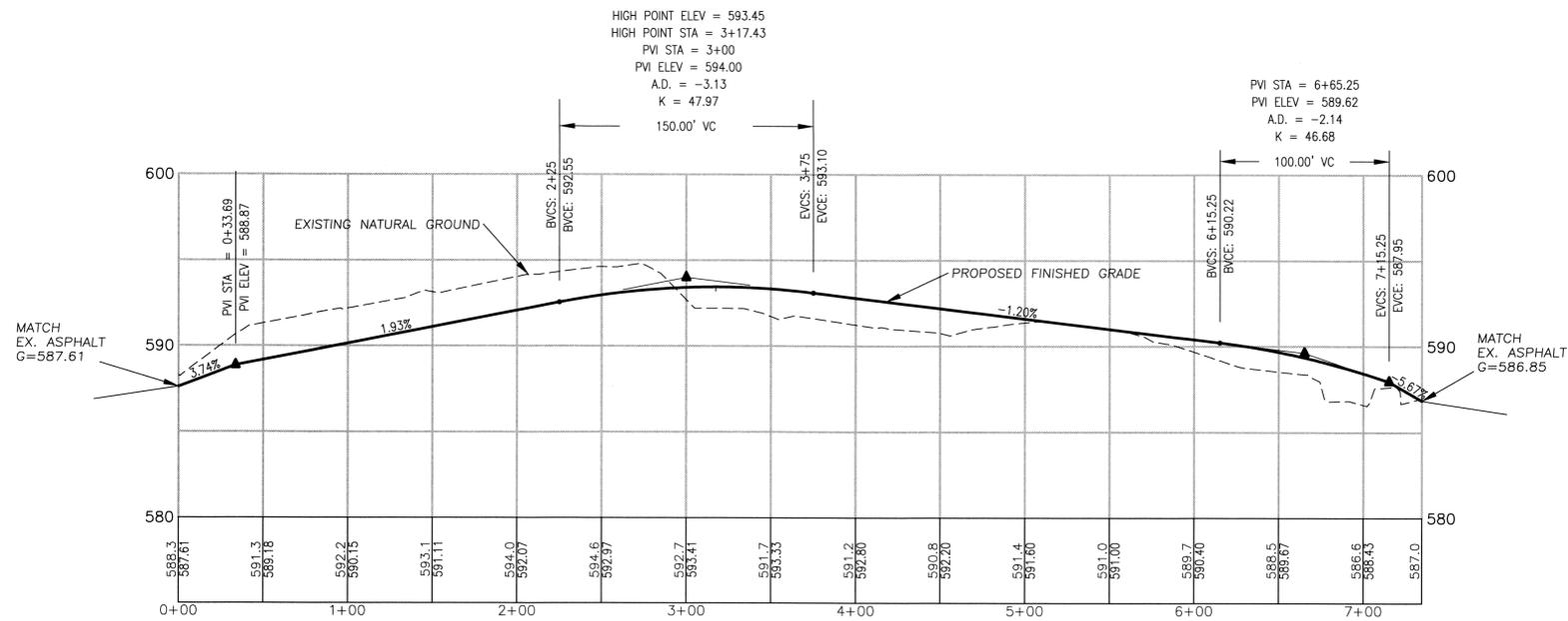
AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER 1401
REVISIONS Δ ADD #3 07-05-16
FILENAME:
SHEET TITLE STAIR DETAILS
DRAWN BY:
SHEET NO. <b>A5.8</b>
DATE: JULY 05, 2016

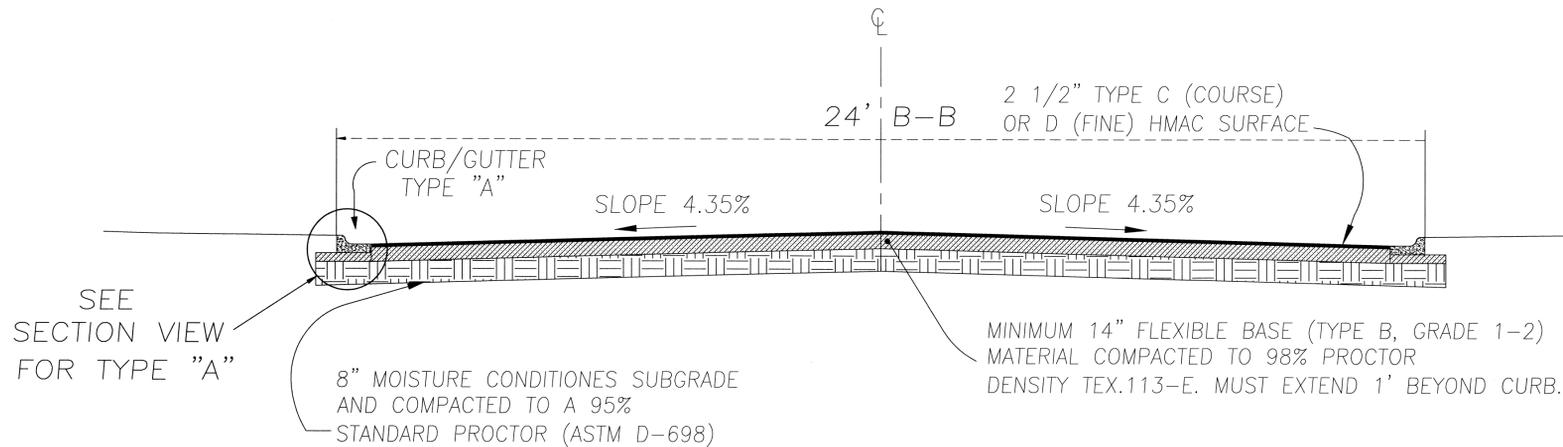






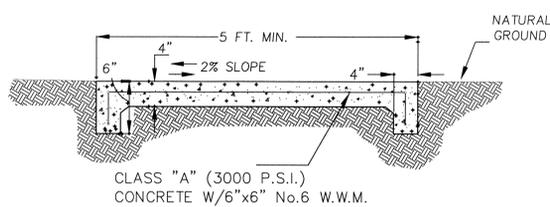
**LOOP-DRIVEWAY PROFILE**

SCALE: HOR: 1"=50'  
VER: 1"=5'



**TYPICAL LOOP-DRIVEWAY SECTION**

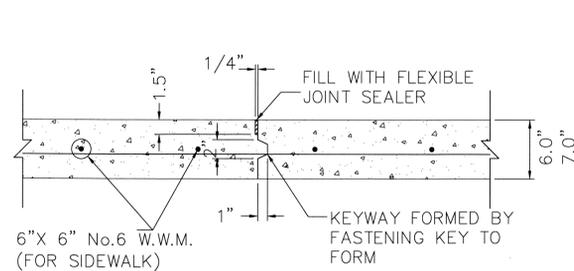
N.T.S.



**TYPICAL SIDEWALK**

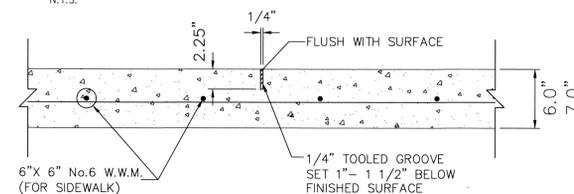
**NOTES ON SIDEWALK CONSTRUCTION:**

- CONCRETE SHALL BE CLASS "B" (2500 PSI)
- ONE-HALF (1/2) INCH THICK MINIMUM PREFORMED BITUMINOUS JOINT MATERIAL SET 3/4 INCHES BELOW FINISHED SURFACE SHALL BE INSTALLED AT EXPANSION JOINTS AS SHOWN IN PLAN ABOVE.
- DOWELS SHALL BE PLAIN BARS AND SHALL HAVE ONE HALF (1/2) THE BAR WRAPPED (ALT. LAYER 6"x6", 10 GAUGE WITH 2 LAYERS OF ROOFING FELT.
- 6"x6", 6 GAUGE WIRE MESH SHALL BE USED AS REINFORCEMENT (ACCEPTABLE.)
- THE FINISH SHALL BE SEMI SMOOTH WITH A STIFF BROOM OR BRUSH FINISH.
- CONTROL JOINTS SHALL BE SCORED AT SPACING EQUAL TO WIDTH OF SIDEWALK.
- EXPANSION JOINTS AT MAX. 40-FOOT SPACING WITH 2-1/2" X 36" SMOOTH DOWELS & 1/2" MIN. BITUMINOUS EXPANSION JOINT MATERIAL.
- FULL WIDTH FORMS WILL BE USED.



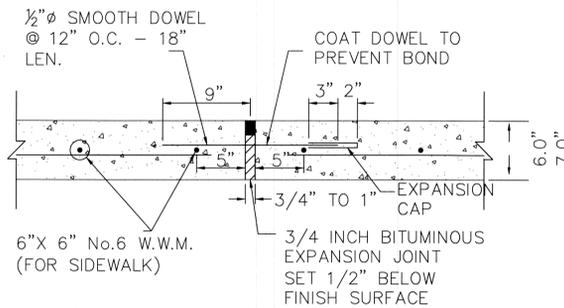
**CONTROL JOINT**

N.T.S.



**CONTRACTION/DUMMY JOINT**

N.T.S.



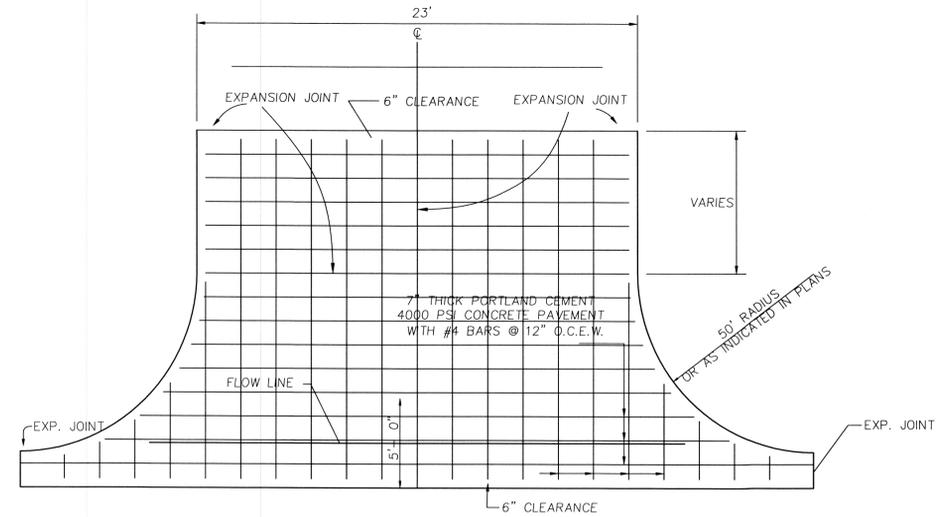
**EXPANSION JOINT**

N.T.S.

@ 70' - MAX.  
@ 65' - TYP.

**HOWLAND**  
ENGINEERING AND SURVEYING CO.

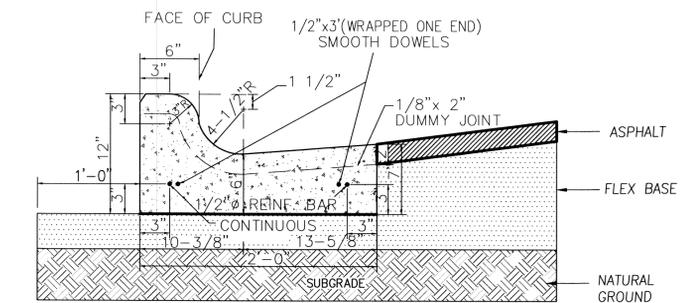
TBPE Firm Registration No. F-4097 | TBPLS Firm Registration No. 100464-00  
 7615 N. Bartlett Avenue | P.O. Box 451128 (78045) | Laredo, TX 78041  
 P. 956.722.4411 | F. 956.722.5414  
 www.howlandcompanies.com



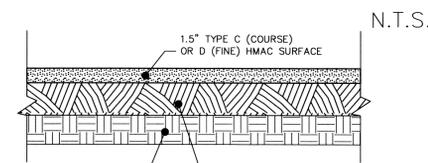
**CONCRETE APPROACH**

(TO BE CONSTRUCTED WITH CONTINUOUS POUR AFTER FLEXIBLE BASE IS IN PLACE)

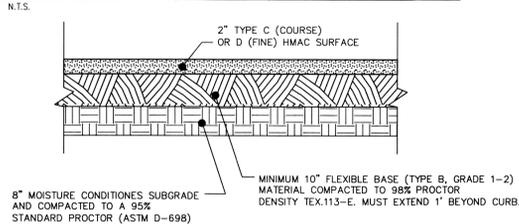
N.T.S.



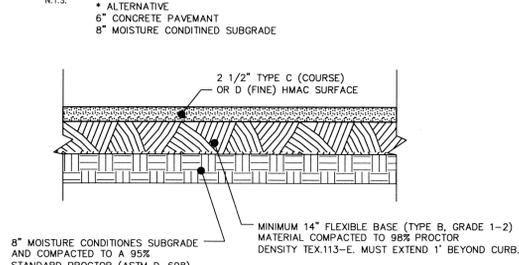
**SECTION VIEW TYPE "A" CURB & GUTTER / PAVEMENT**



**ALTERNATE #1. ASPHALT WALKING TRAIL**



**PARKING LOT TYP. ASPHALT PAVEMENT SECTION**



**LOOP DRIVEWAY TYP. ASPHALT PAVEMENT SECTION**

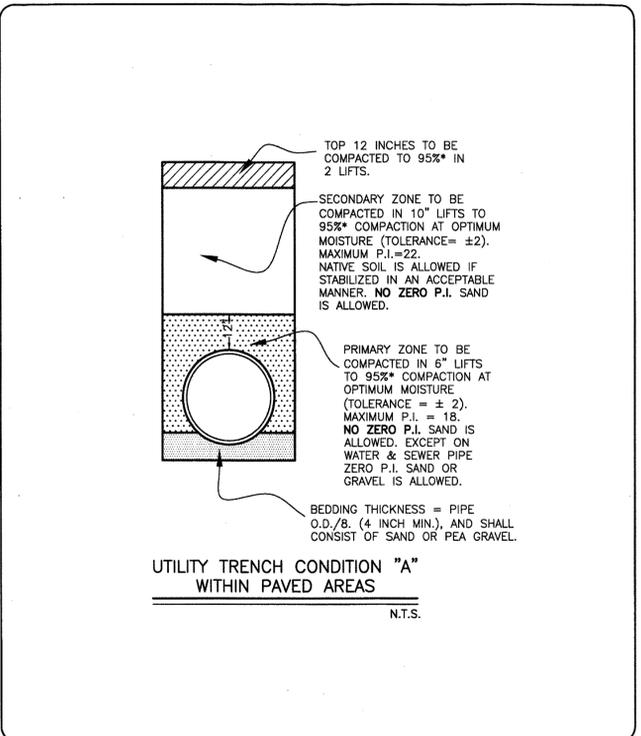
N.T.S. \* ALTERNATIVE 7" CONCRETE PAVEMENT 8" MOISTURE CONDITIONED SUBGRADE

AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

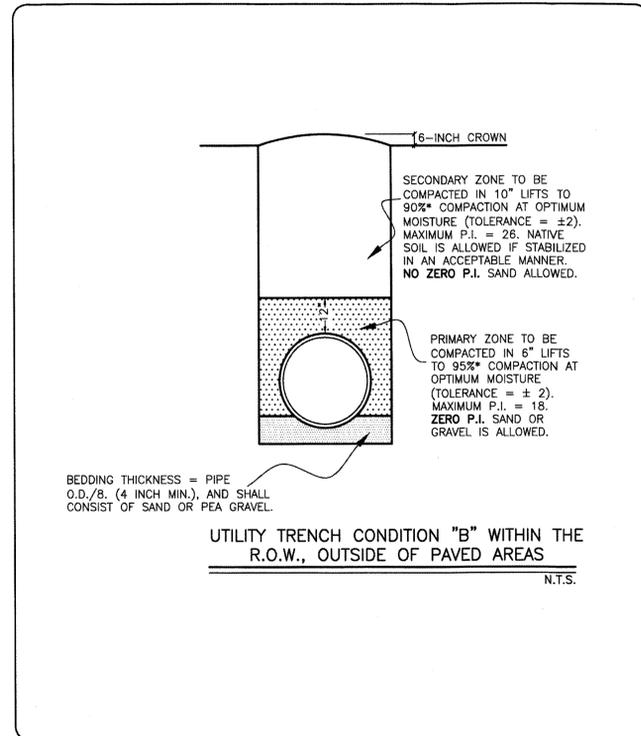


WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

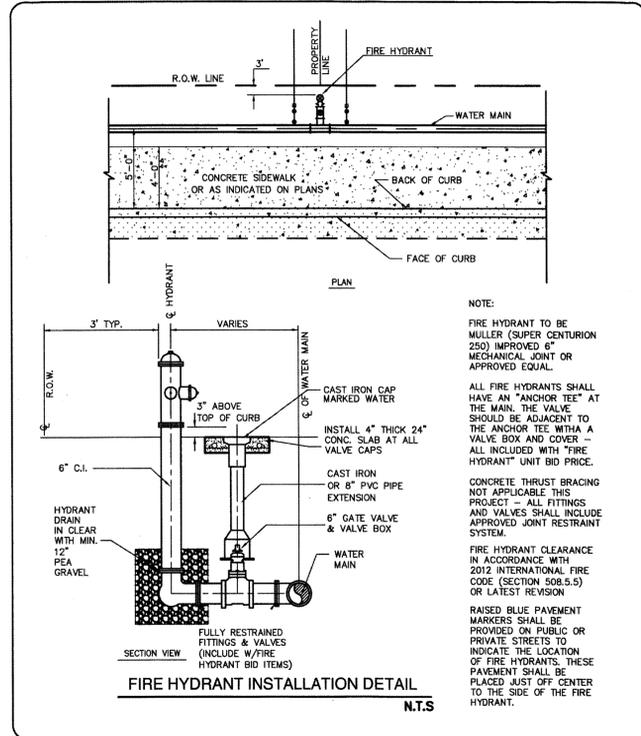
PROJECT NUMBER
REVISIONS
ADDENDUM 07-06-16
FILENAME:
SHEET TITLE LOOP-DRIVEWAY PROFILE AND PAVING DETAILS
DRAWN BY: J.C.N.
SHEET NO. <b>C.08</b>
DATE: April 07, 2016



SCALE: N.T.S.	APPROVED: MARCH 28, 2015	DETAIL DESCRIPTION: <b>UTILITY TRENCH BACKFILL DETAIL CONDITION "A"</b>	REVISION:	
DATE: 102-1	DESIGNED: JUNE 2014			



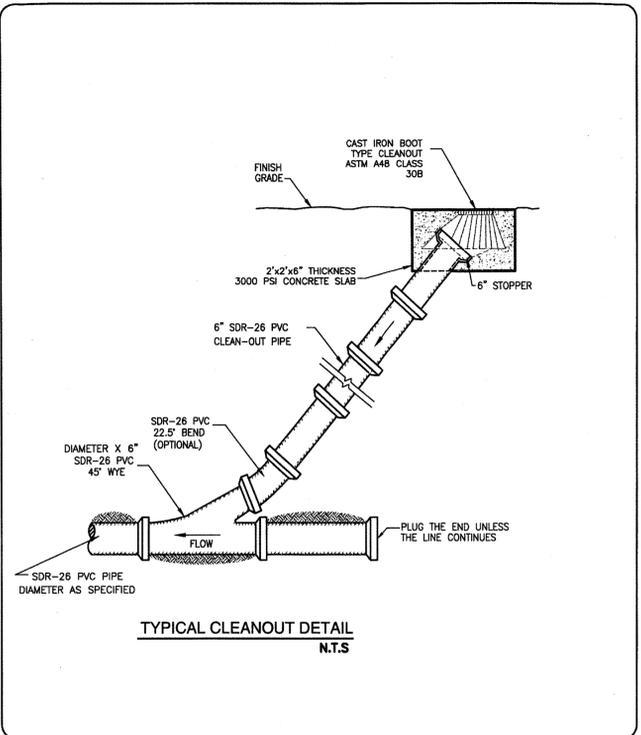
SCALE: N.T.S.	APPROVED: MARCH 28, 2015	DETAIL DESCRIPTION: <b>UTILITY TRENCH BACKFILL DETAIL CONDITION "B"</b>	REVISION:	
DATE: 102-2	DESIGNED: JUNE 2014			



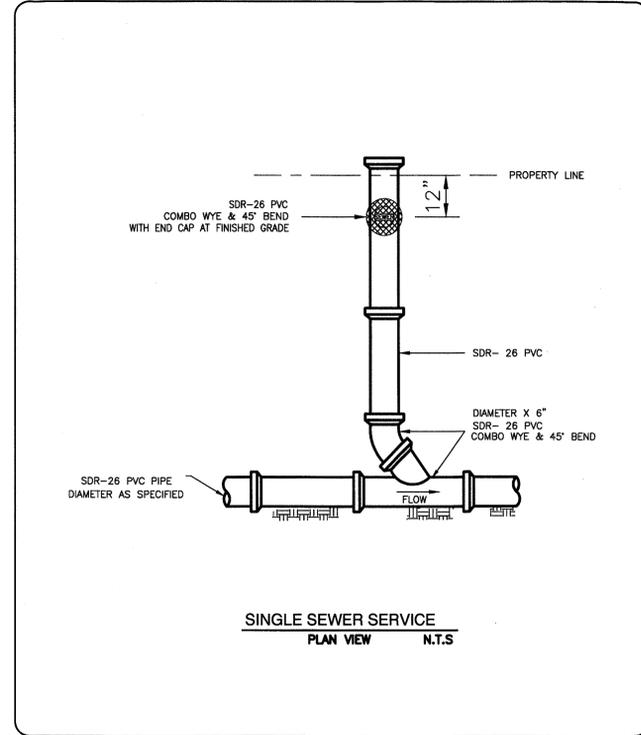
SCALE: N.T.S.	APPROVED: MARCH 28, 2015	DETAIL DESCRIPTION: <b>FIRE HYDRANT INSTALLATION DETAIL</b>	REVISION:	
DATE: 112-1	DESIGNED: JUNE 2014			

**NOTES**

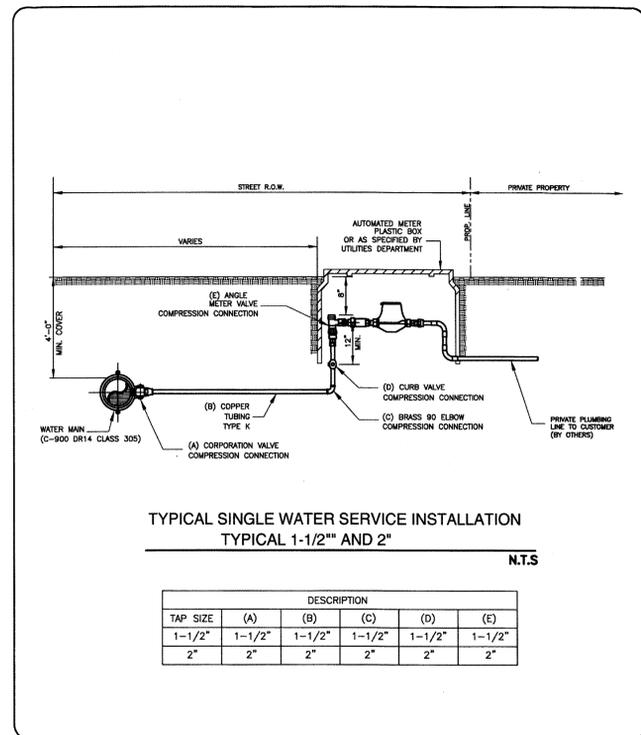
- ANY WATER AND SEWER LINES PARALLEL OR CROSSING EACH OTHER MUST MEET (TCEQ) REQUIREMENTS PERTAINING TO SEPARATION AND CLEARANCE.
  - ALL WATER FITTINGS SHALL BE MECHANICAL JOINTS MADE IN USA.
  - ALL UNDERGROUND BOLTS AND NUTS SHALL BE 316 STAINLESS STEEL.
  - ALL PIPE JOINT RESTRAINT FITTINGS SHALL BE MADE IN USA AND BOLTS, NUTS AND RODS SHALL BE 316 STAINLESS STEEL.
  - ALL WATER PIPE UP TO 12" OF DIAMETER SHALL BE PVC, DR-14, C-900. FROM 16" TO 24" DIAMETER WATER PIPE SHALL BE PVC, DR-18, C-905.
  - IF AN EXISTING WATERLINE IS REPLACED, ALL WATER SERVICES SHALL BE REPLACED FROM THE NEW LINE TO THE METER LOCATION. ALL WATER SERVICES TO BE TRANSFERRED TO THE NEW WATER LINE ONCE THIS HAS PASSED THE PRESSURE TEST AND BACTERIOLOGICAL TEST.
  - ALL TIE-IN CONNECTIONS TO THE EXISTING MAINS SHALL BE DONE WITH RESTRAINT PIPE AND FITTINGS.
  - VALVE BOX REQUIRED FOR ALL VALVES AND BLOWOFF VALVES.
  - FIRE HYDRANTS TO BE EQUAL TO MULLER A- 24015 IMPROVED 6"
  - ALL WET CONNECTIONS TO BE PREFORMED BY CONTRACTOR. COORDINATE WITH CITY OF LAREDO UTILITY DEPARTMENT PRIOR TO CONSTRUCTION.
- PIPE BACKFILL AND BEDDING**
- ALL PRIMARY BACKFILL SHALL POSSESS A MAXIMUM PLASTICITY INDEX OF 18 AND A MAXIMUM LIQUID LIMIT OF 35 ALL SECONDARY BACKFILL SHALL POSSESS A MAXIMUM PLASTICITY INDEX OF 18 AND A MAXIMUM LIQUID OF 40.
  - COMPACTION BY FLOODING/WATER JETTING SHALL NOT BE PERMITTED.



SCALE: N.T.S.	APPROVED: MARCH 28, 2015	DETAIL DESCRIPTION: <b>TYPICAL CLEANOUT DETAIL</b>	REVISION:	
DATE: 214-1	DESIGNED: JUNE 2014			



SCALE: N.T.S.	APPROVED: MARCH 28, 2015	DETAIL DESCRIPTION: <b>SINGLE SEWER SERVICE</b>	REVISION:	
DATE: 206-1	DESIGNED: JUNE 2014			

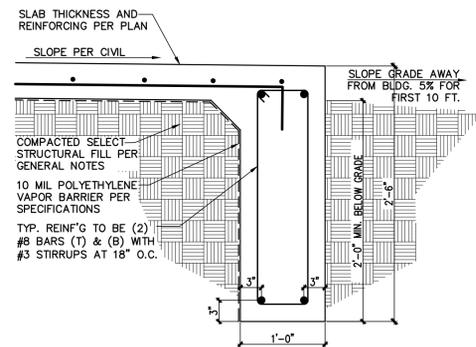


SCALE: N.T.S.	APPROVED: MARCH 28, 2015	DETAIL DESCRIPTION: <b>2" SINGLE WATER SERVICE</b>	REVISION:	
DATE: 104-3	DESIGNED: JUNE 2014			

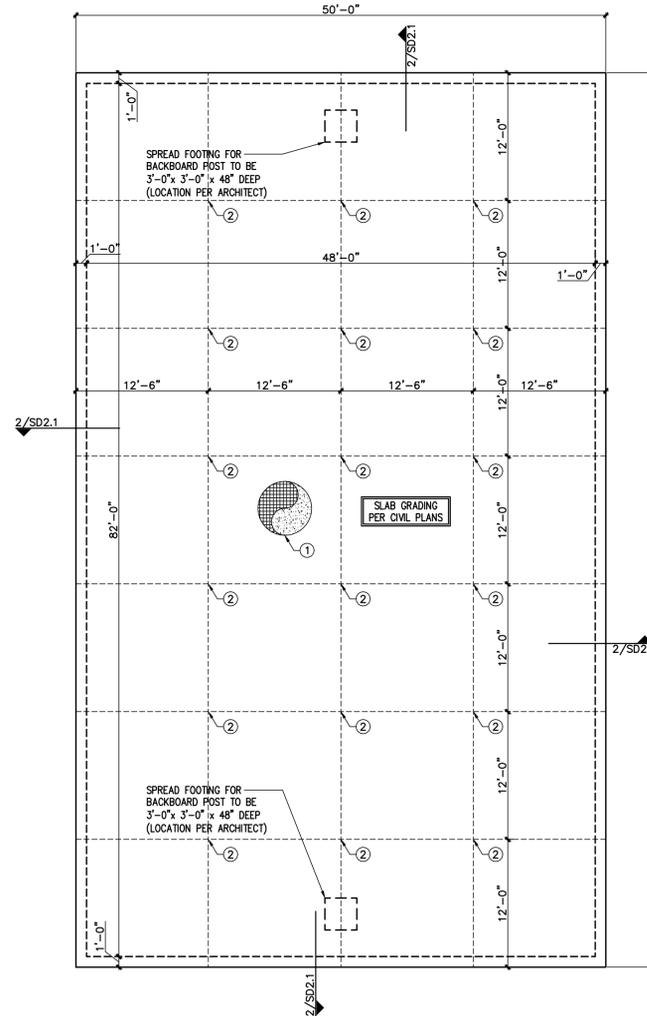
\* CONTRACTOR TO PROVIDE X, Y & Z COORDINATES FOR AS-BUILTS

**HOWLAND**  
 ENGINEERING AND SURVEYING CO.  
 TBPE Firm Registration No. F-4097 / TBPLS Firm Registration No. 100464-00  
 7615 N. Bartlett Avenue / P.O. Box 451128 (78045) Laredo, TX 78041  
 P. 956.722.4411 / F. 956.722.5414  
 www.howlandcompanies.com

These drawings and specifications are and shall remain the property of the Engineer. They may not be reused, reproduced or altered in any way without prior written approval from and with appropriate compensation to the Engineer.



**1** **2** PERIMETER GRADE BEAM  
SCALE: 1" = 1'-0"



**1** **1** FOUNDATION PLAN- RECREATIONAL BASKETBALL COURT  
SCALE: 1/8" = 1'-0"

**FOUNDATION NOTES**

1. SEE SHEET S-1.1 FOR GENERAL NOTES AND TYPICAL CONCRETE DETAILS.
2. SEE SHEET S-1.2 & S-1.3 FOR TYPICAL WALL DETAILS.
3. CONTRACTOR IS RESPONSIBLE FOR LOCATION OF ALL FLOOR DRAINS (F.D.) WHETHER OR NOT THEY ARE NOTED ON THE STRUCTURAL NOTES OR PLANS.
4. DIMENSIONS SHOWN ARE FOR GENERAL INFORMATION, COORDINATE WITH ARCHITECTURAL PLANS.
5. CONTRACTOR/SUBCONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS WITH ARCHITECTURAL PLANS BEFORE COMMENCING ANY WORK. THE CONTRACTOR/SUBCONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER BEFORE THE WORK HAS BEGUN.
6. WALL LEGEND:  
 INDICATES METAL STUD WALL PER ARCHITECT  
 INDICATES 8" CMU WALL  
 REFER TO CMU WALL SCHEDULE FOR REINFORCING.
7. ABBREVIATIONS:  
 CLC= CENTER LINE COLUMN  
 FOC= FACE OF COLUMN  
 FOW= FACE OF WALL  
 FFE= FINISH FLOOR ELEVATION  
 TOP= TOP OF PARAPET  
 JBE= JOIST BEARING ELEVATION  
 TOS= TOP OF STEEL
8. ALL ELEVATIONS REFERENCED HEREIN, ARE FROM THE BUILDING FINISH FLOOR ELEVATION OF 0'-0". REFER TO CIVIL PLANS FOR FINAL BUILDING ELEVATION.
9. REFER TO DETAIL 14/S-1.2 FOR CMU CONTROL JOINTS, UNLESS NOTED OTHERWISE. CONTROL JOINTS SHALL START AT 10 FT FROM EDGES OR CORNERS AND 20 FT O.C. IN BETWEEN.

**KEYED FOUNDATION NOTES**

- ① 5" THICK SLAB ON GRADE WITH #4 BARS @ 15" O.C. EACH WAY AT MID-DEPTH OF SLAB OVER 10 MIL VISQUEEN MOISTURE BARRIER OVER APPROVED COMPACTED FILL.
- ② SLAB CONTROL JOINTS, SEE DETAIL 6/S-1.1
- ③ CMU WALL EXPANSION JOINT SEE DETAIL 14/S1.2
- ④ RECESS SLAB PER ARCHITECT. SHADED AREAS INDICATE DEPRESSED SLAB, VERIFY AND COORDINATE WITH ARCHITECTURAL PLANS
- ⑤ 8x16 CMU PILASTER WITH (2) #5 BARS VERTICAL WITH #3 TIES @ 8" O.C.
- ⑥ PRE-FABRICATED METAL STAIRS, REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION, PROVIDE SIGNED AND SEALED SHOP DRAWINGS BY LICENSE ENGINEER.
- ⑦ PRE-FABRICATED METAL SCREEN, REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION, PROVIDE SIGNED AND SEALED SHOP DRAWINGS BY LICENSE ENGINEER.
- ⑧ 1" EXPANSION JOINT FULL DEPTH OF GRADE BEAM WITH 3/4" DIA SMOOTH DOWELS x 18" LONG @ 12" O.C. AT MID-DEPTH OF GRADE BEAM.

AUSLAND ARCHITECTS—METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

CONSTRUCTION DOCUMENTS

WEBB COUNTY  
 REHABILITATION CENTER  
 LAREDO, TEXAS

PROJECT NUMBER  
SSE-10-0-8

REVISIONS  
 ADDENDUM 3  
 JULY 2, 2011

FILENAME:

SHEET TITLE  
**FOUNDATION PLAN  
 BASKETBALL COURT**  
 DRAWN BY: LP/VDA

SHEET NO.

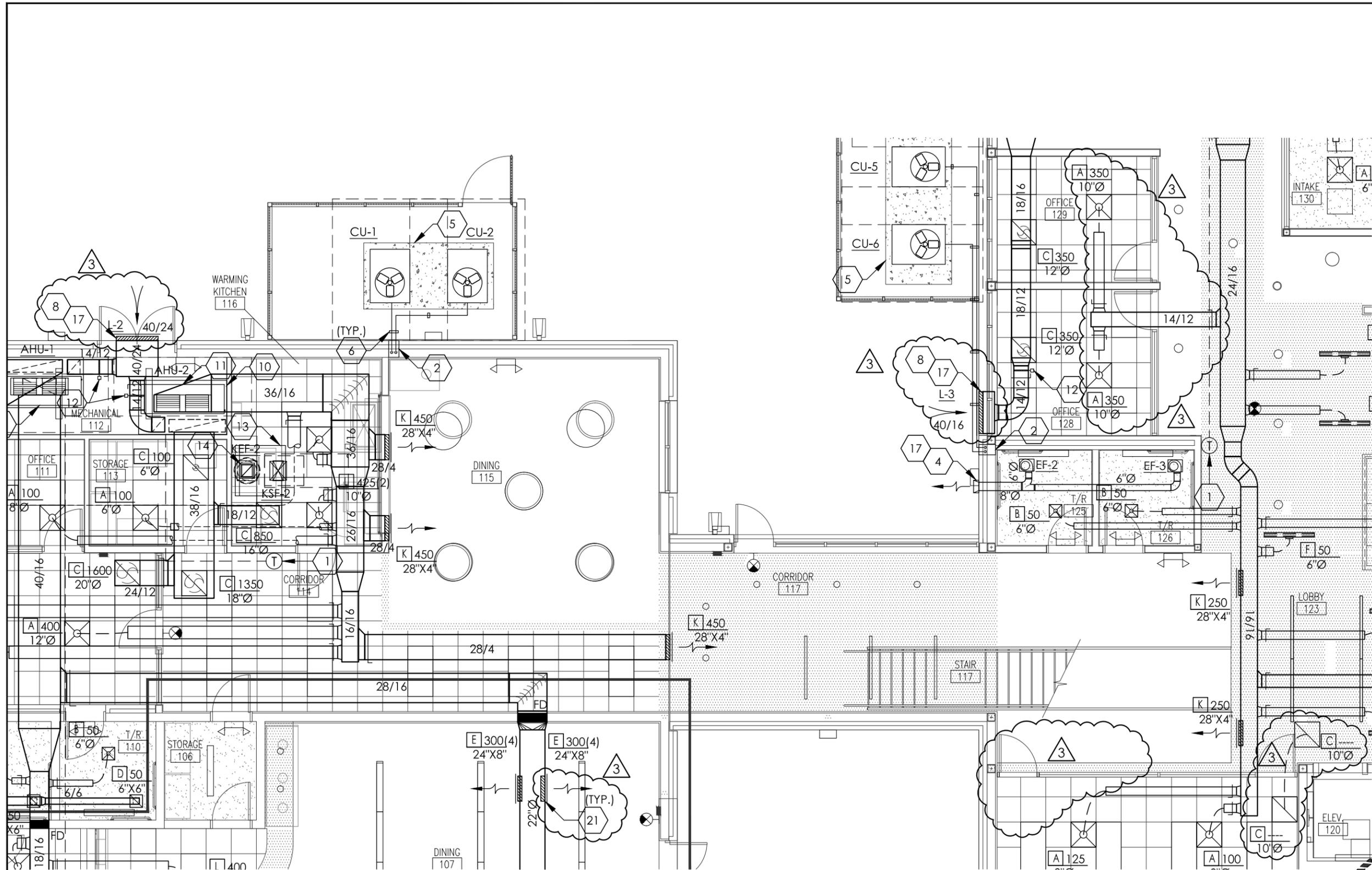
**S-21**

DATE: APRIL 7, 2011



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY  
 VICTOR M. DE ANDA JR., P.E. 92641  
 EXPIRES ON 09/30/2016

**SYNERGY**  
 STRUCTURAL ENGINEERING, INC.  
 6909 Springfield Ave. SUITE 105  
 Laredo, TX. 78041  
 (956) 753-5860 synergy@synergy-se.com  
 TBPE Reg. No.: F-7661



- 7 SUSPEND VIA 1/4" ALL THREAD ROD AND PROVIDE WITH SPRING VIBRATION ISOLATORS IN RUBBER SPRING CUPS.
- 8 LOUVER TO BE MOUNTED @ 11'-4" A.F.F. COURSE LOUVER OUT W/CMU BLOCK.
- 21 EXPOSED ROUND DUCT TO BE OF DOUBLE WALLED CONSTRUCTION W/ 1" THERMAL INSULATION. AIR DEVICES ON INDICATED EXPOSED ROUND DUCT SHALL BE MOUNTED @ 20° BELOW HORIZON (TYPICAL).

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

**TRINITY**  
 MEP ENGINEERING  
 3533 Moreland Dr. suite A Weslaco, Tx 78596  
 p:956.973.0500 | f:956-351-5750  
 www.trinitymep.com | Copyright 2012  
 Texas Registered Engineering Firm -F10362  
 Project number: 14.4.07



07/05/16

AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

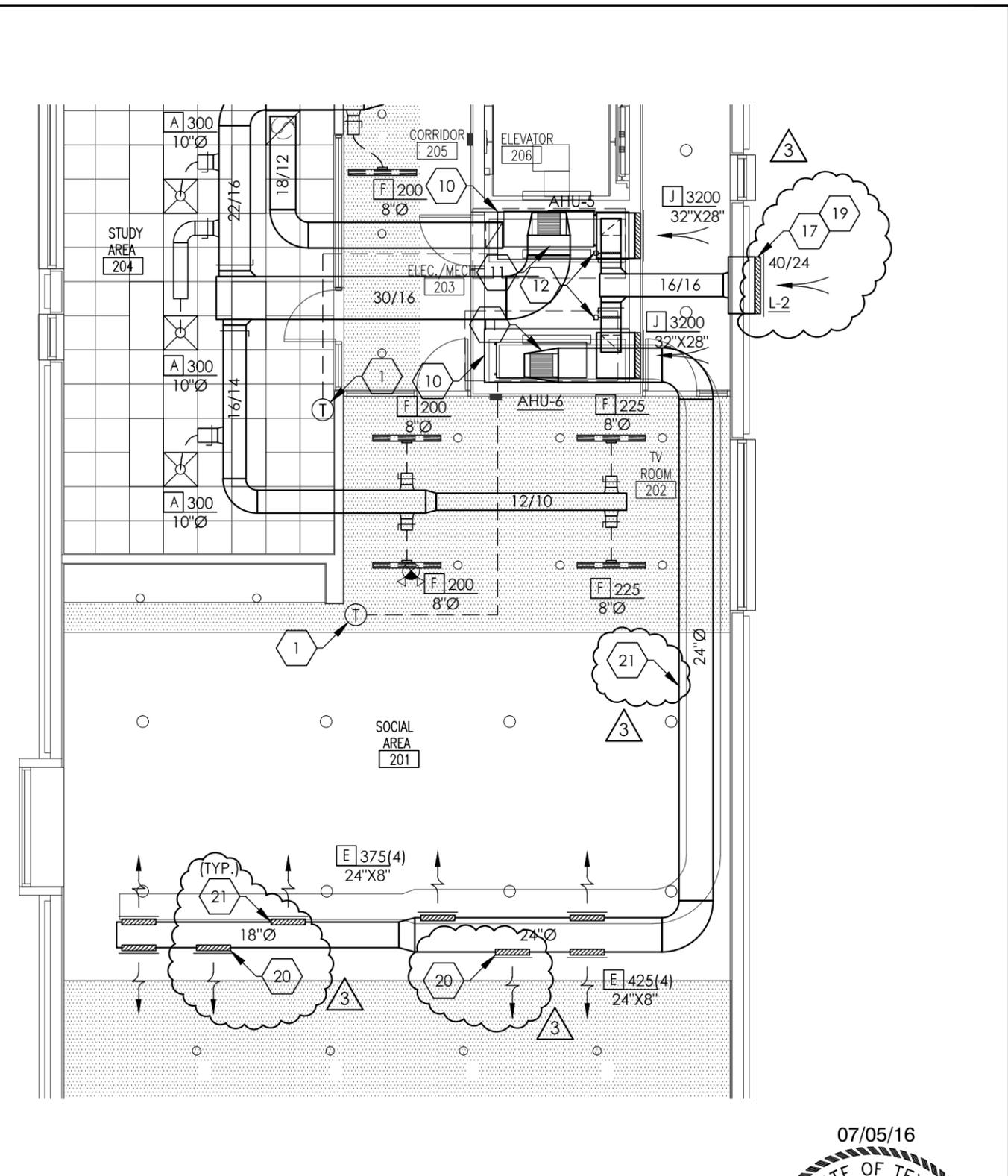
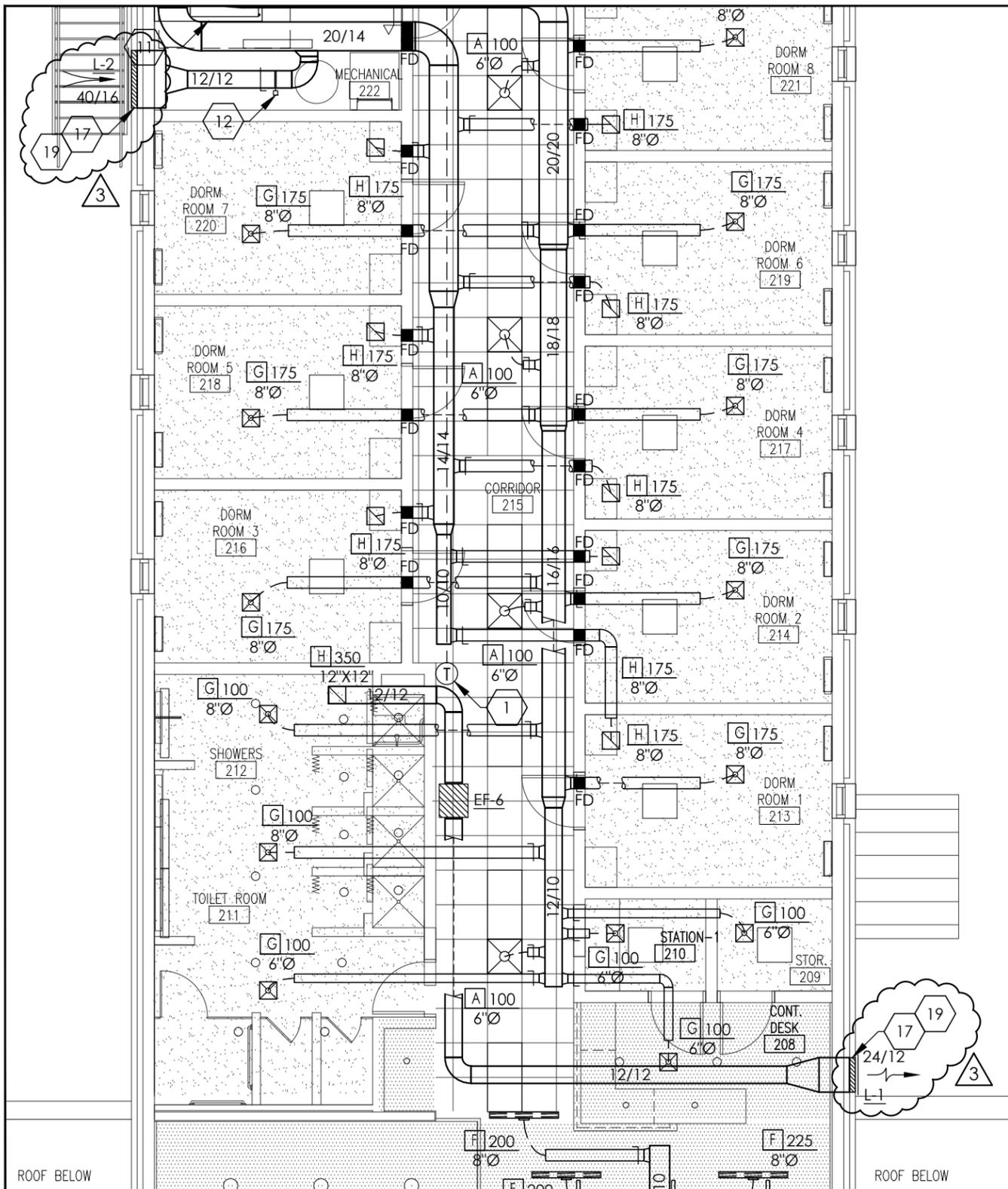
WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
 14.4.07  
 REVISIONS  
 ADDENDUM #3 7/05/16

FILENAME:  
 SHEET TITLE  
 MECHANICAL  
 FIRST FLOOR PLAN

DRAWN BY:  
 SHEET NO.

**AM1.1**  
 DATE: JUNE 29, 2016



- 19 LOUVER TO BE MOUNTED @ 25'-4" A.F.F. COURSE LOUVER OUT W/ BLOCK.
- 20 COORDINATE INDICATED SUPPLY AIR DEVICES SO AS NOT TO THROW AIR ONTO PROJECTOR SCREEN.
- 21 EXPOSED ROUND DUCT TO BE OF DOUBLE WALLED CONSTRUCTION W/ 1" THERMAL INSULATION. AIR DEVICES ON INDICATED EXPOSED ROUND DUCT SHALL BE MOUNTED @ 20° BELOW HORIZON (TYPICAL).

**1 - MECHANICAL SECOND FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

**TRINITY**  
MEP ENGINEERING  
3533 Moreland Dr. suite A Weslaco, Tx 78596  
p:956.973.0500 | f:956-351-5750  
www.trinitymep.com | Copyright 2012  
Texas Registered Engineering Firm -F10362  
Project number: 14.4.07



AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS  
ARCHITECTURE + PLANNING + INTERIORS  
6626 SILVERMINE DRIVE, SUITE 100A  
AUSTIN, TEXAS 78736  
(512) 327-0444 FAX (512) 301-4909

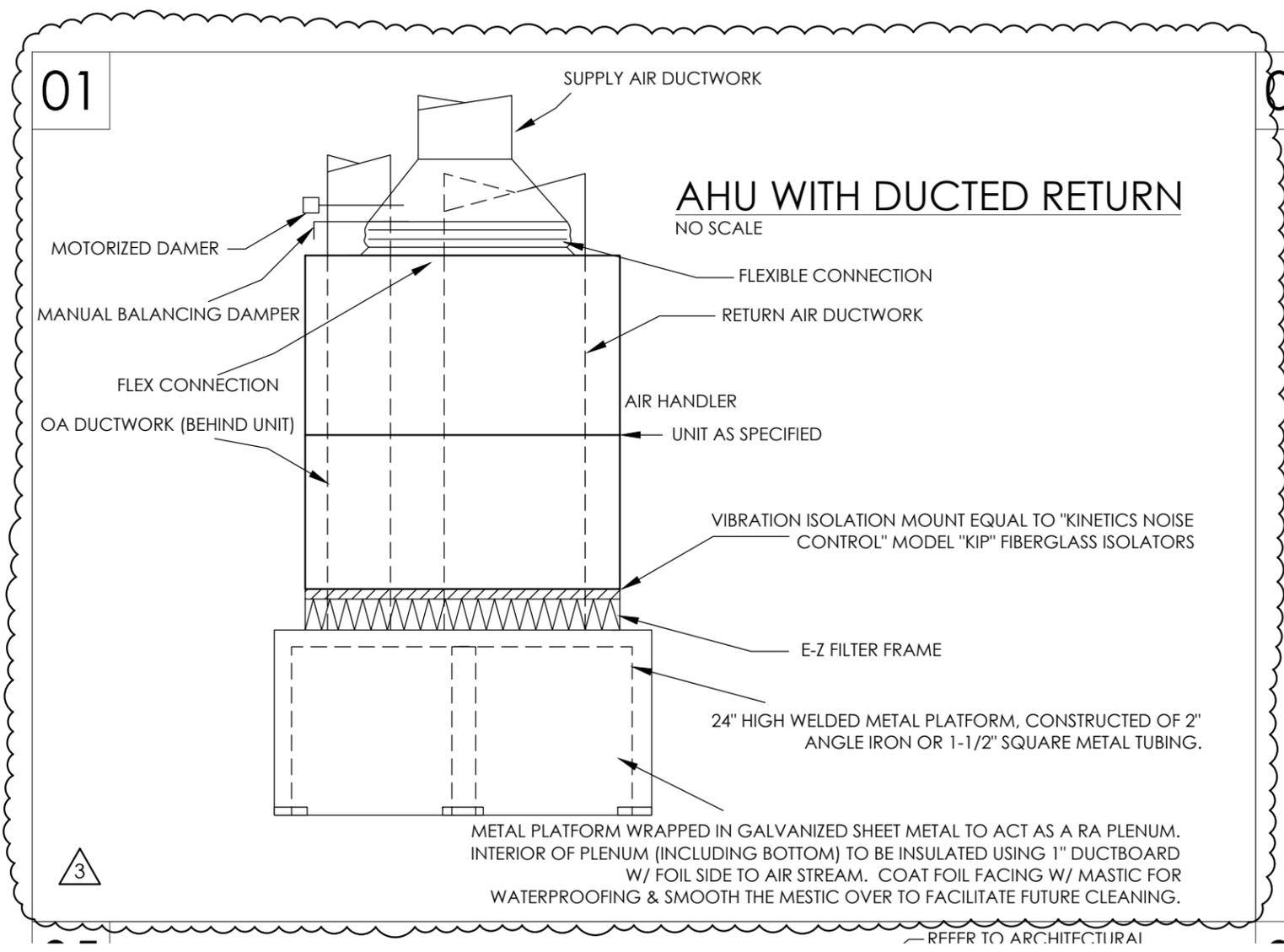
WEBB COUNTY YOUTH VILLAGE  
REHABILITATION CENTER  
111 CAMINO NUEVO ROAD HWY 359  
LAREDO, TEXAS 78046

PROJECT NUMBER  
14.4.07  
REVISIONS  
ADDENDUM #3 7/05/16

FILENAME:  
SHEET TITLE  
MECHANICAL  
SECOND FLOOR PLAN

DRAWN BY:  
SHEET NO.

**AM1.2**  
DATE: JUNE 29, 2016



01

**AHU WITH DUCTED RETURN**  
NO SCALE

SUPPLY AIR DUCTWORK

MOTORIZED DAMER

MANUAL BALANCING DAMPER

FLEX CONNECTION

OA DUCTWORK (BEHIND UNIT)

AIR HANDLER

UNIT AS SPECIFIED

RETURN AIR DUCTWORK

FLEXIBLE CONNECTION

VIBRATION ISOLATION MOUNT EQUAL TO "KINETICS NOISE CONTROL" MODEL "KIP" FIBERGLASS ISOLATORS

E-Z FILTER FRAME

24" HIGH WELDED METAL PLATFORM, CONSTRUCTED OF 2" ANGLE IRON OR 1-1/2" SQUARE METAL TUBING.

METAL PLATFORM WRAPPED IN GALVANIZED SHEET METAL TO ACT AS A RA PLENUM. INTERIOR OF PLENUM (INCLUDING BOTTOM) TO BE INSULATED USING 1" DUCTBOARD W/ FOIL SIDE TO AIR STREAM. COAT FOIL FACING W/ MASTIC FOR WATERPROOFING & SMOOTH THE MESTIC OVER TO FACILITATE FUTURE CLEANING.

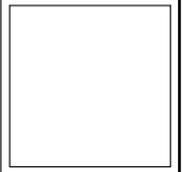
3

REFER TO ARCHITECTURAL

**TRINITY**  
MEP ENGINEERING  
3533 Moreland Dr. suite A Weslaco, Tx 78596  
p:956.973.0500 | f:956-351-5750  
www.trinitymep.com | Copyright 2012  
Texas Registered Engineering Firm -F10362  
Project number: 14.4.07



AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS  
ARCHITECTURE + PLANNING + INTERIORS  
6626 SILVERMINE DRIVE, SUITE 100A  
AUSTIN, TEXAS 78736  
(512) 327-0444 FAX (512) 301-4909



WEBB COUNTY YOUTH VILLAGE  
REHABILITATION CENTER  
111 CAMINO NUEVO ROAD HWY 359  
LAREDO, TEXAS 78046

PROJECT NUMBER  
14.4.07

REVISIONS

ADDENDUM #3 7/05/16

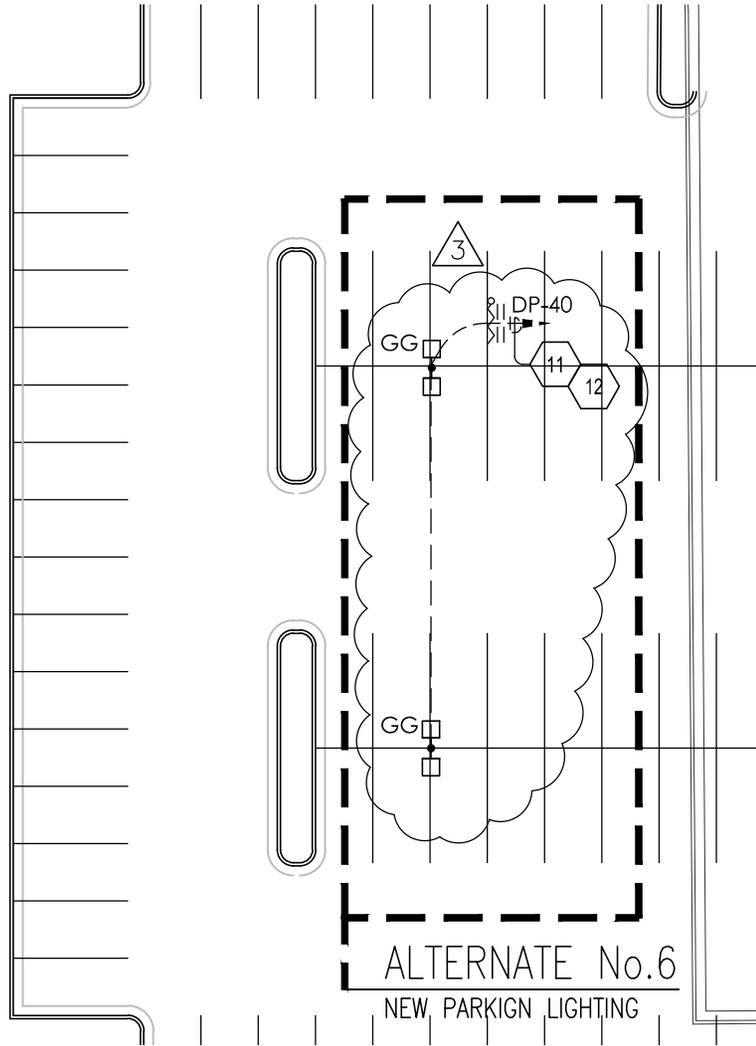
FILENAME:

SHEET TITLE  
MECHANICAL  
DETAILS

DRAWN BY:

SHEET NO.  
**AM3.1**

DATE: JUNE 29, 2016



1 - ELECTRICAL SITE PLAN  
SCALE: 1" = 30'-0"



**TRINITY**  
MEP ENGINEERING

3533 Moreland Dr. suite A Weslaco, Tx 78596  
p:956.973.0500 | f:956-351-5750  
www.trinitymep.com | Copyright 2012  
Texas Registered Engineering Firm -F10362  
Project number: 14.4.07



AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS  
ARCHITECTURE + PLANNING + INTERIORS  
6626 SILVERMINE DRIVE, SUITE 100A  
AUSTIN, TEXAS 78736  
(512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
REHABILITATION CENTER  
111 CAMINO NUEVO ROAD, HWY 359  
LAREDO, TEXAS 78046

PROJECT NUMBER  
14.4.07  
REVISIONS  
ADDENDUM #3 7/05/16

FILENAME:

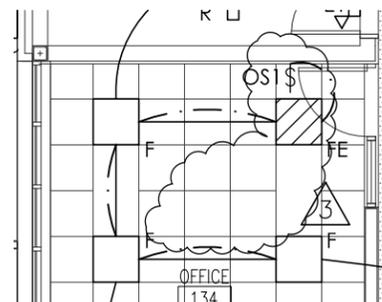
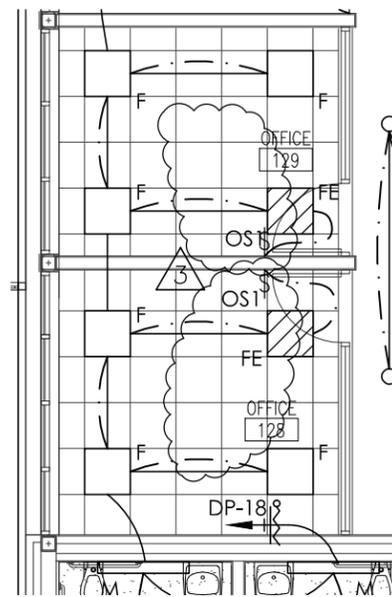
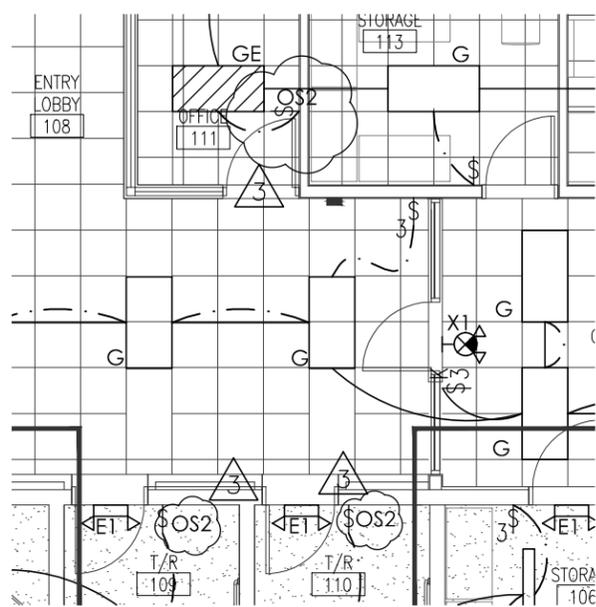
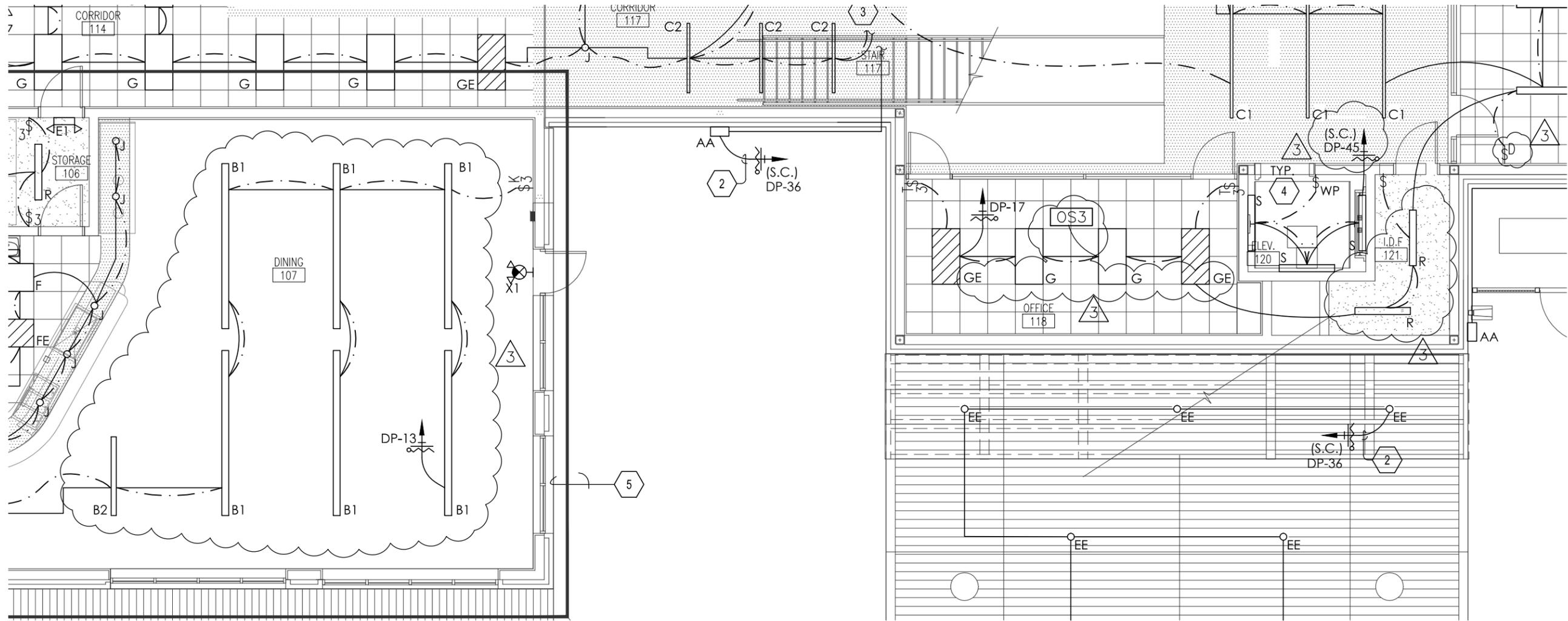
SHEET TITLE  
ELECTRICAL  
SITE PLAN

DRAWN BY:

SHEET NO.

**AES1.1**

DATE: JUNE 29, 2016



1 - ELECTRICAL LIGHTING FIRST FLOOR PLAN

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



**TRINITY**  
MEP ENGINEERING

3533 Moreland Dr. suite A Weslaco, Tx 78596  
p:956.973.0500 | f:956-351-5750  
www.trinitymep.com | Copyright 2012  
Texas Registered Engineering Firm -F10362  
Project number: 14.4.07



WEBB COUNTY YOUTH VILLAGE  
REHABILITATION CENTER  
111 CAMINO NUEVO ROAD, HWY 359  
LAREDO, TEXAS 78046

PROJECT NUMBER  
14.4.07  
REVISIONS  
▲ ADDENDUM #3 7/05/16

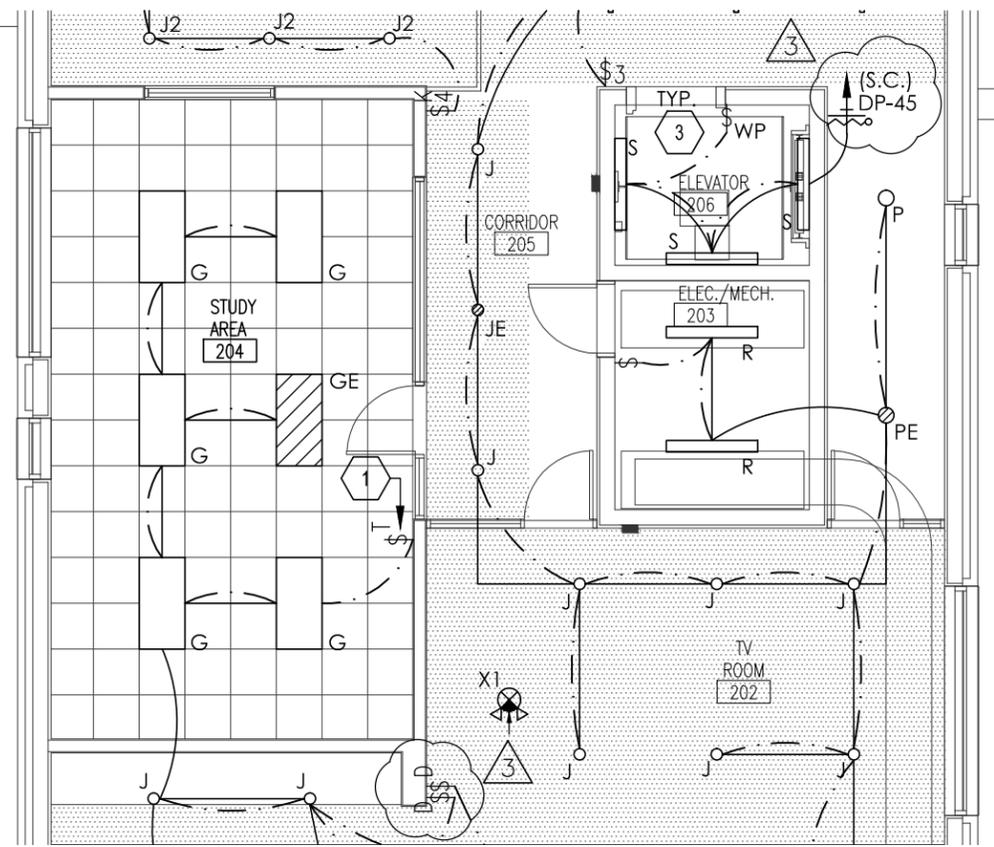
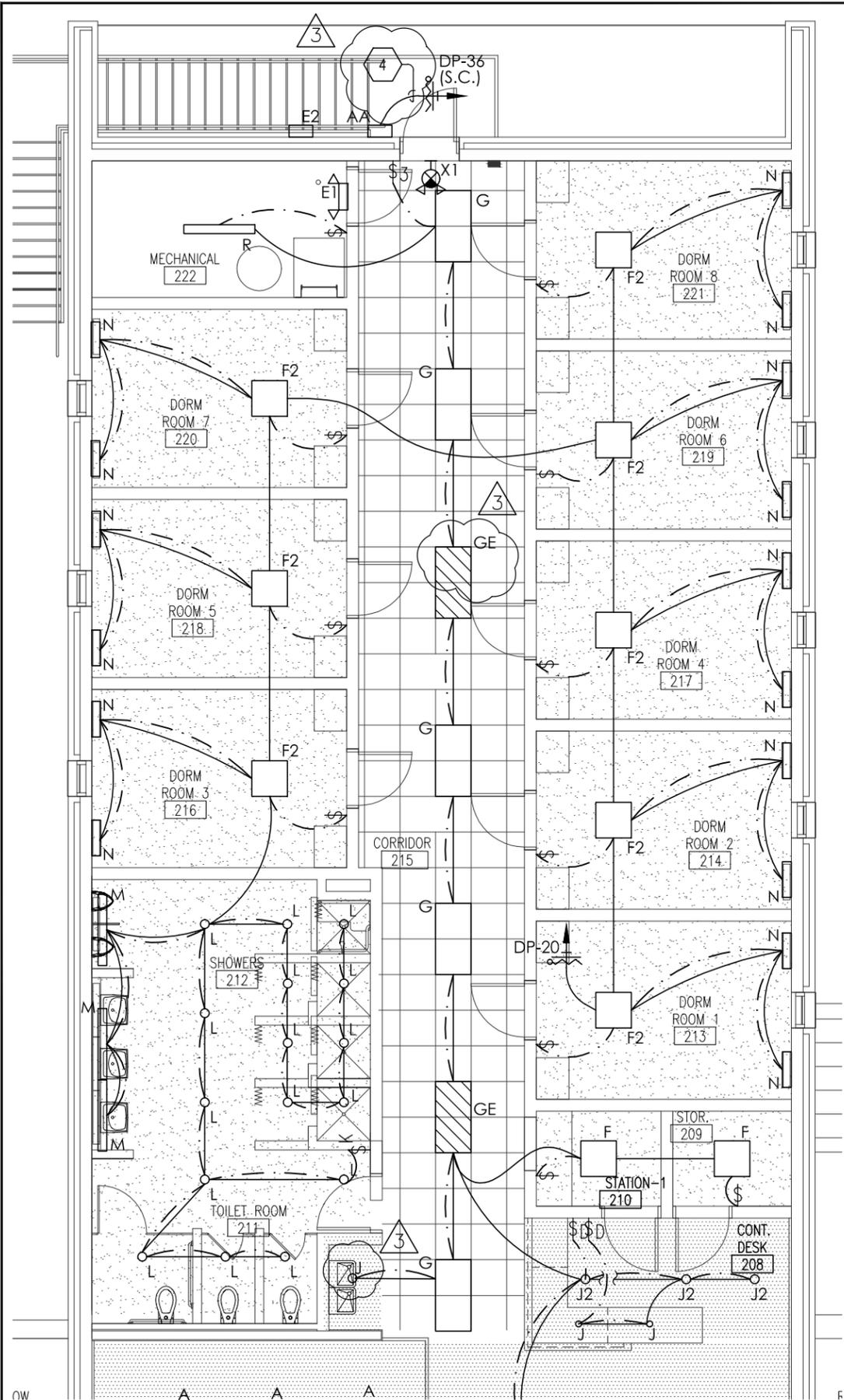
FILENAME:  
SHEET TITLE  
ELECTRICAL  
LIGHTING  
FIRST FLOOR PLAN

DRAWN BY:  
SHEET NO.

**AE1.1**

DATE: JUNE 29, 2016

AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS  
ARCHITECTURE + PLANNING + INTERIORS  
6626 SILVERMINE DRIVE, SUITE 100A  
AUSTIN, TEXAS 78736  
(512) 327-0444 FAX (512) 301-4909



**KEYED NOTES: LIGHTING**

- 1 PROVIDE DUAL LEVEL SWITCHING. "T" MEAN USING A TANDEM SWITCH.
- 2 CONTINUES DOWN TO FIRST FLOOR.
- 3 COORDINATE EXACT LOCATION OF LIGHT FIXTURE AND LIGHT FIXTURE DEVICE WITH ELEVATOR MANUFACTURE PRIOR TO COMMENCING ANY WORK.
- 4 SHALL BE CONTROLLED VIA LIGHTING CONTACTOR 'LC'.

**1 - ELECTRICAL LIGHTING SECOND FLOOR PLAN**

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



**TRINITY**  
MEP ENGINEERING

3533 Moreland Dr. suite A Weslaco, Tx 78596  
p:956.973.0500 | f:956-351-5750  
www.trinitymep.com | Copyright 2012  
Texas Registered Engineering Firm -F10362  
Project number: 14.4.07



**WEBB COUNTY YOUTH VILLAGE  
REHABILITATION CENTER**  
111 CAMINO NUEVO ROAD, HWY 359  
LAREDO, TEXAS 78046

**AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS**  
ARCHITECTURE + PLANNING + INTERIORS  
6626 SILVERMINE DRIVE, SUITE 100A  
AUSTIN, TEXAS 78736  
(512) 327-0444 FAX (512) 301-4909

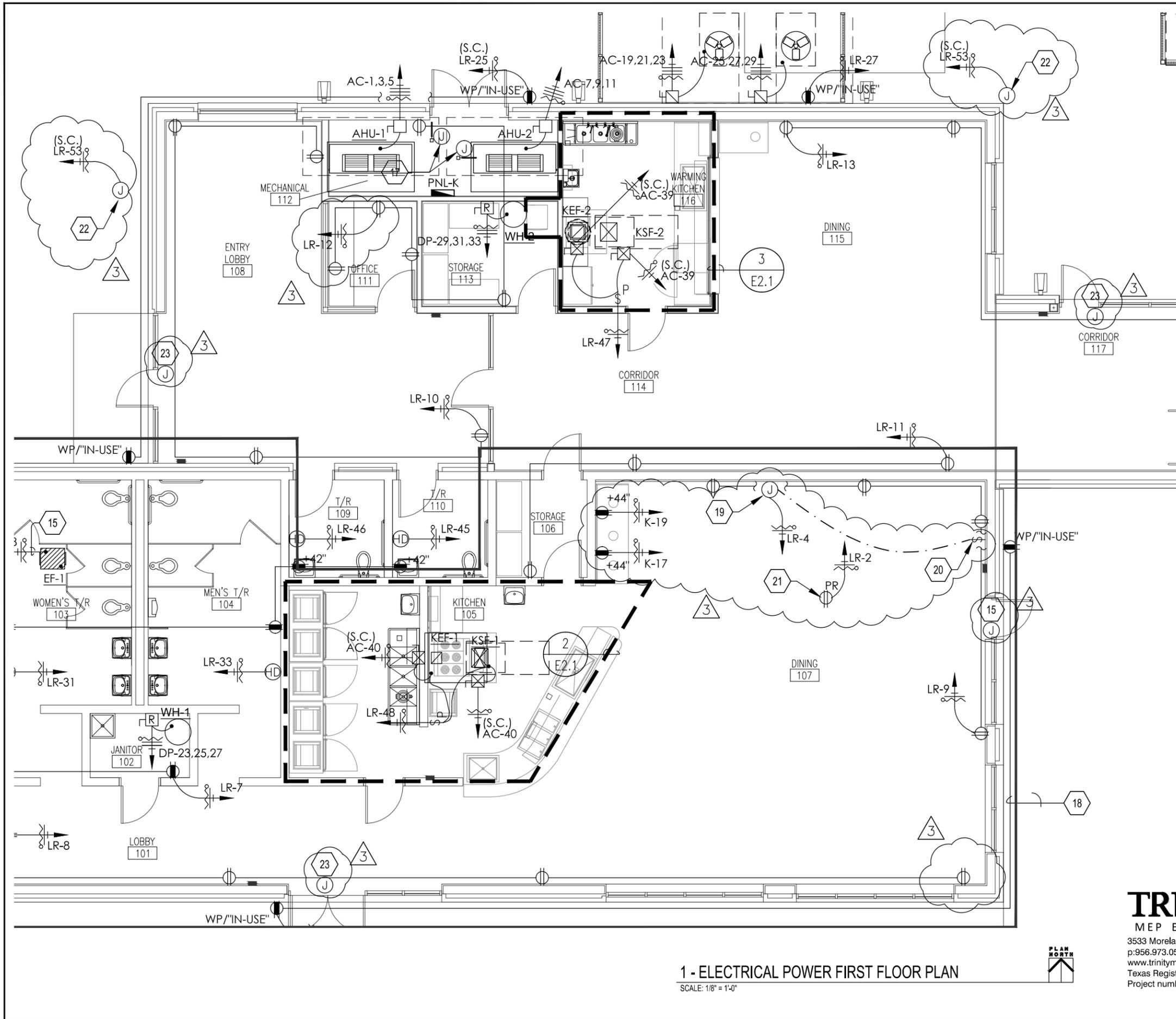
PROJECT NUMBER  
14.4.07  
REVISIONS  
ADDENDUM #3 7/05/16

FILENAME:  
SHEET TITLE  
ELECTRICAL  
LIGHTING  
SECOND FLOOR PLAN

DRAWN BY:  
SHEET NO.

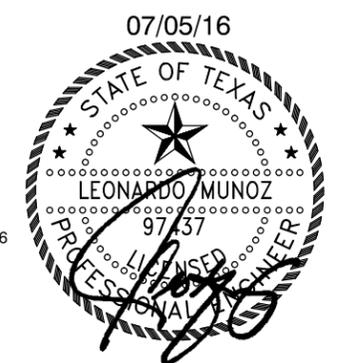
**AE1.2**

DATE: JUNE 29, 2016



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

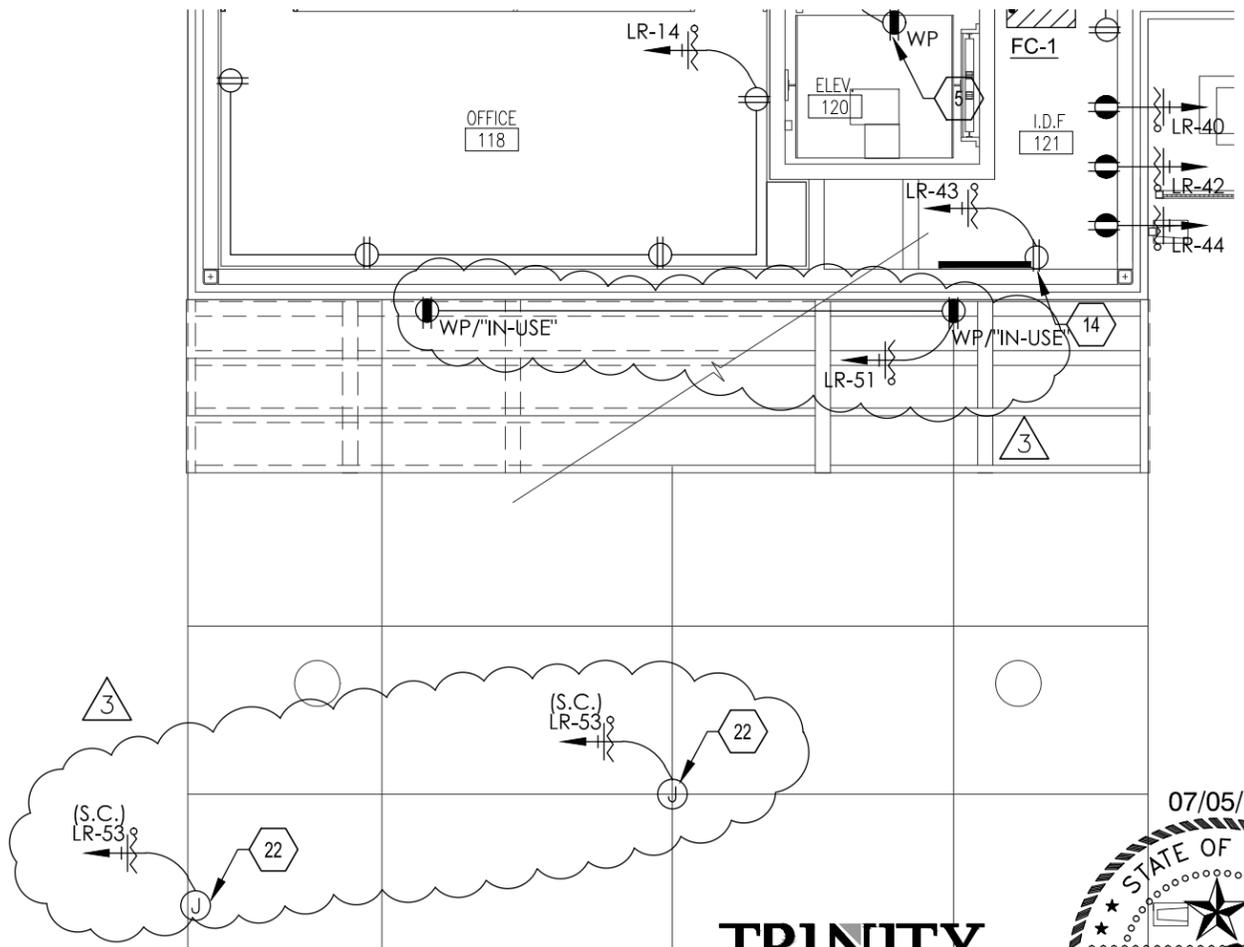
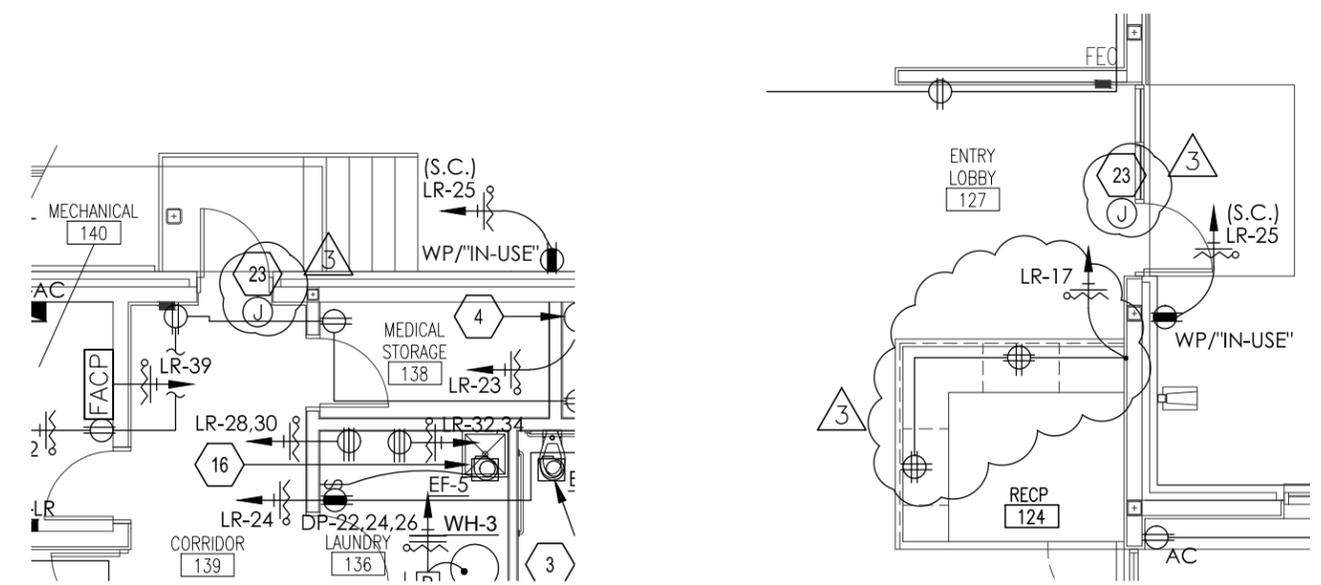
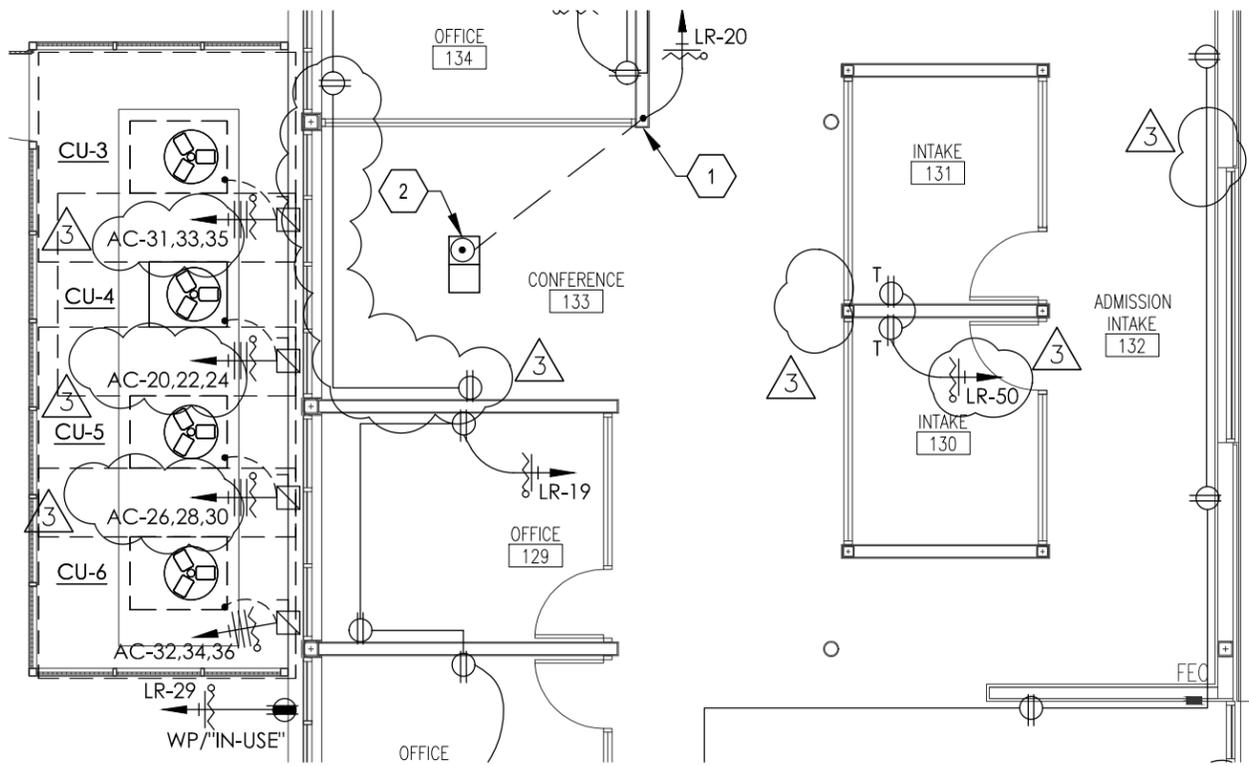
**TRINITY**  
MEP ENGINEERING  
3533 Moreland Dr. suite A Weslaco, Tx 78596  
p:956.973.0500 | f:956-351-5750  
www.trinitymep.com | Copyright 2012  
Texas Registered Engineering Firm -F10362  
Project number: 14.4.07



AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS  
ARCHITECTURE + PLANNING + INTERIORS  
6626 SILVERMINE DRIVE, SUITE 100A  
AUSTIN, TEXAS 78736  
(512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
REHABILITATION CENTER  
111 CAMINO NUEVO ROAD, HWY 359  
LAREDO, TEXAS 78046

PROJECT NUMBER 14.4.07
REVISIONS ▲ ADDENDUM #3 7/05/16
FILENAME:
SHEET TITLE ELECTRICAL POWER FIRST FLOOR PLAN
DRAWN BY:
SHEET NO. <b>AE2.1-A</b>
DATE: JUNE 29, 2016



**GENERAL NOTES: POWER**

EQUIPMENT REQUIREMENTS PRIOR TO BID.

H. CONTRACTOR SHALL LOCATE POWER OUTLETS AND DATA OUTLETS AT RECEPTIONIST DESK KNEE SPACE IN THE AREA # 111, 124, 208. COORDINATE EXACT LOCATION PRIOR TO ANY ROUGH-INS.

**KEYED NOTES: POWER**

PROPOSED ALTERNATE #4 CEILING LEVEL WITH PULLSTRINGS.

- 19 J-BOX FOR ELECTRIC PROJECTION SCREEN CIRCUIT. PROVIDE J-BOX AND CONDUIT FOR LOW VOLTAGE ON AND OFF SWITCH. COORDINATE EXACT LOCATION WITH OWNER/ARCHITECT AND EQUIPMENT SUPPLIER PRIOR TO COMMENCING ANY WORK.
- 20 PROVIDE J-BOX AND 3/4" C IN WALL FOR PROJECTOR CONTROL SWITCH.
- 21 CEILING MOUNTED RECEPTACLE FOR PROJECTOR. COORDINATE EXACT LOCATION WITH OWNER/ARCHITECT AND EQUIPMENT SUPPLIER PRIOR TO COMMENCING ANY WORK.
- 22 J-BOX FOR SURVEILLANCE CAMERA. COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS WITH OWNER AND EQUIPMENT SUPPLIER PRIOR TO COMMENCING ANY WORK.
- 23 J-BOX FOR DOOR CONTROLS. ROUTE 3/4" C TO PANEL 120/208V, PROVIDE 1-20AMP 1-POLE BREAKER FOR EACH DOOR. CIRCUIT WIRING SHALL BE 2#10, 1#10G, 3/4" C.

**1 - ELECTRICAL POWER FIRST FLOOR PLAN**

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



**TRINITY**  
MEP ENGINEERING

3533 Moreland Dr. suite A Weslaco, Tx 78596  
p:956.973.0500 | f:956-351-5750  
www.trinitymep.com | Copyright 2012  
Texas Registered Engineering Firm -F10362  
Project number: 14.4.07



AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS  
ARCHITECTURE + PLANNING + INTERIORS  
6626 SILVERMINE DRIVE, SUITE 100A  
AUSTIN, TEXAS 78736  
(512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
REHABILITATION CENTER  
111 CAMINO NUEVO ROAD, HWY 359  
LAREDO, TEXAS 78046

PROJECT NUMBER  
14.4.07

REVISIONS  
ADDENDUM #3 7/05/16

FILENAME:

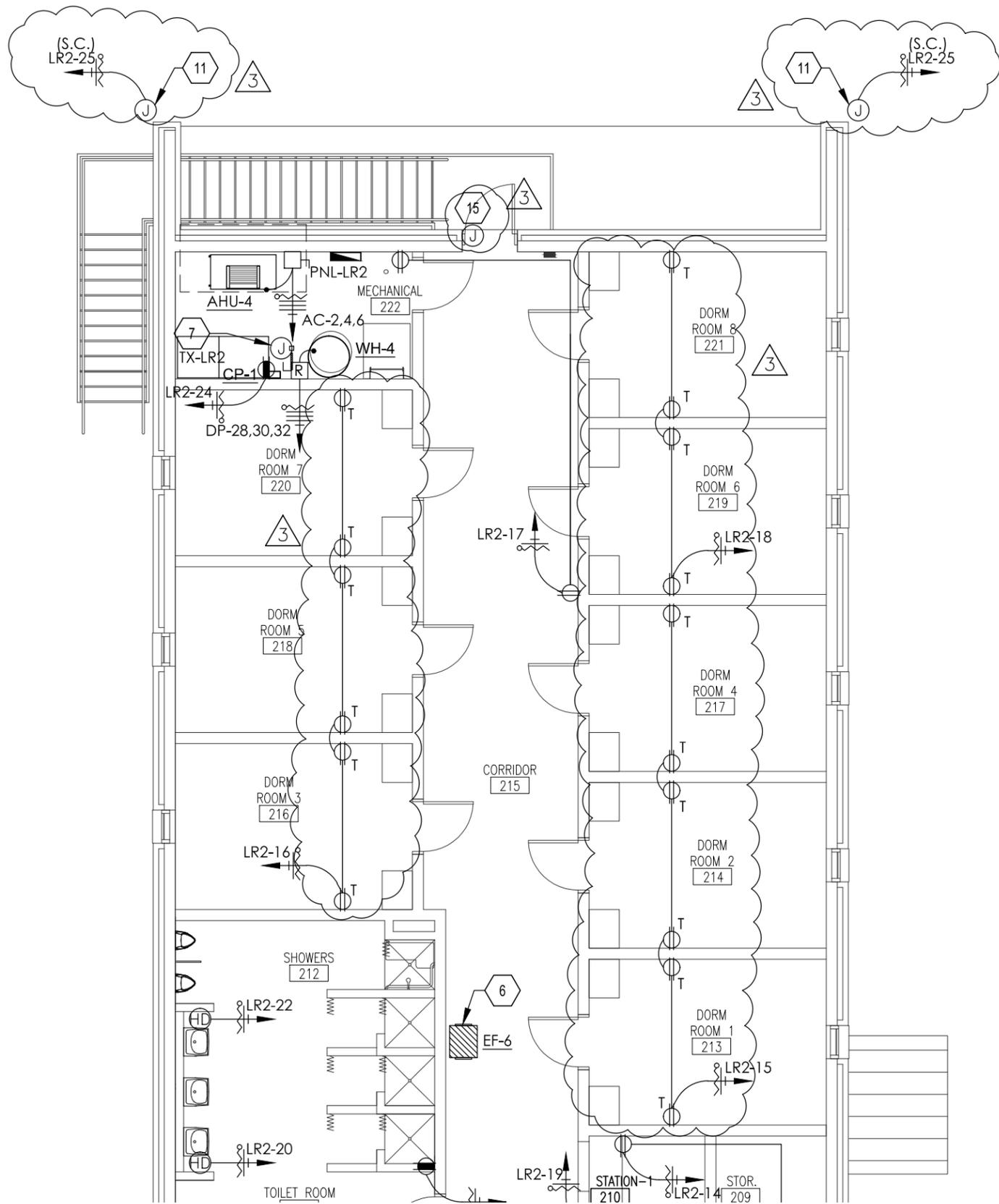
SHEET TITLE  
ELECTRICAL  
POWER  
FIRST FLOOR PLAN

DRAWN BY:

SHEET NO.

**AE2.1-B**

DATE: JUNE 29, 2016



## GENERAL NOTES: POWER

- H. CONTRACTOR SHALL LOCATE POWER OUTLETS AND DATA OUTLETS AT RECEPTIONIST DESK KNEE SPACE IN THE AREA#111,124,208. COORDINATE EXACT LOCATION PRIOR TO ANY ROUGH-INS.

## KEYED NOTES: POWER

- CONNECTIONS WITH MECHANICAL CONTRACTOR, AND LOCAL CODE.
- 8 J-BOX FOR ELECTRIC PROJECTION SCREEN CIRCUIT. PROVIDE J-BOX AND CONDUIT FOR LOW VOLTAGE ON AND OFF SWITCH. COORDINATE EXACT LOCATION WITH OWNER/ARCHITECT AND EQUIPMENT SUPPLIER PRIOR TO COMMENCING ANY WORK.
  - 9 PROVIDE J-BOX AND 3/4" C IN WALL FOR PROJECTOR CONTROL SWITCH.
  - 10 CEILING MOUNTED RECEPTACLE FOR PROJECTOR. COORDINATE EXACT LOCATION WITH OWNER/ARCHITECT AND EQUIPMENT SUPPLIER PRIOR TO COMMENCING ANY WORK.
  - 11 J-BOX FOR SURVEILLANCE CAMERA. COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS WITH OWNER AND EQUIPMENT SUPPLIER PRIOR TO COMMENCING ANY WORK.
  - 12 ELECTRIC SHADE CONTROL PANEL (MFR. LUTRON II SVQ-10-PNL). VERIFY EXACT LOCATION PRIOR TO COMMENCING ANY ROUGH-INS.
  - 13 J-BOX FOR ELECTRONIC ROLLER SHADES, VERIFY EXACT LOCATION. J-BOX SHALL INCLUDE 4#16 IN 1/2" C BACK TO SHADE CONTROL PANEL LOCATION AS INDICATED BY KEYED NOTE #12.
  - 14 J-BOX FOR ROLLER SHADE CONTROL KEY PAD. J-BOX SHALL INCLUDE 4#19 IN 1/2" C BACK TO SHADE CONTROL PANEL LOCATION AS INDICATED BY KEYED NOTE #12.
  - 15 J-BOX FOR DOOR CONTROLS. ROUTE 3/4" C TO PANEL 120/208V, PROVIDE 1-20AMP 1-POLE BREAKER FOR EACH DOOR. CIRCUIT WIRING SHALL BE 2#10, 1#10G, 3/4" C.

### 1 - ELECTRICAL POWER SECOND FLOOR PLAN

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



## TRINITY

MEP ENGINEERING

3533 Moreland Dr. suite A Weslaco, Tx 78596  
 p:956.973.0500 | f:956-351-5750  
 www.trinitymep.com | Copyright 2012  
 Texas Registered Engineering Firm -F10362  
 Project number: 14.4.07



WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
14.4.07

REVISIONS

ADDENDUM #3 7/05/16

FILENAME:

SHEET TITLE  
ELECTRICAL  
POWER  
SECOND FLOOR PLAN

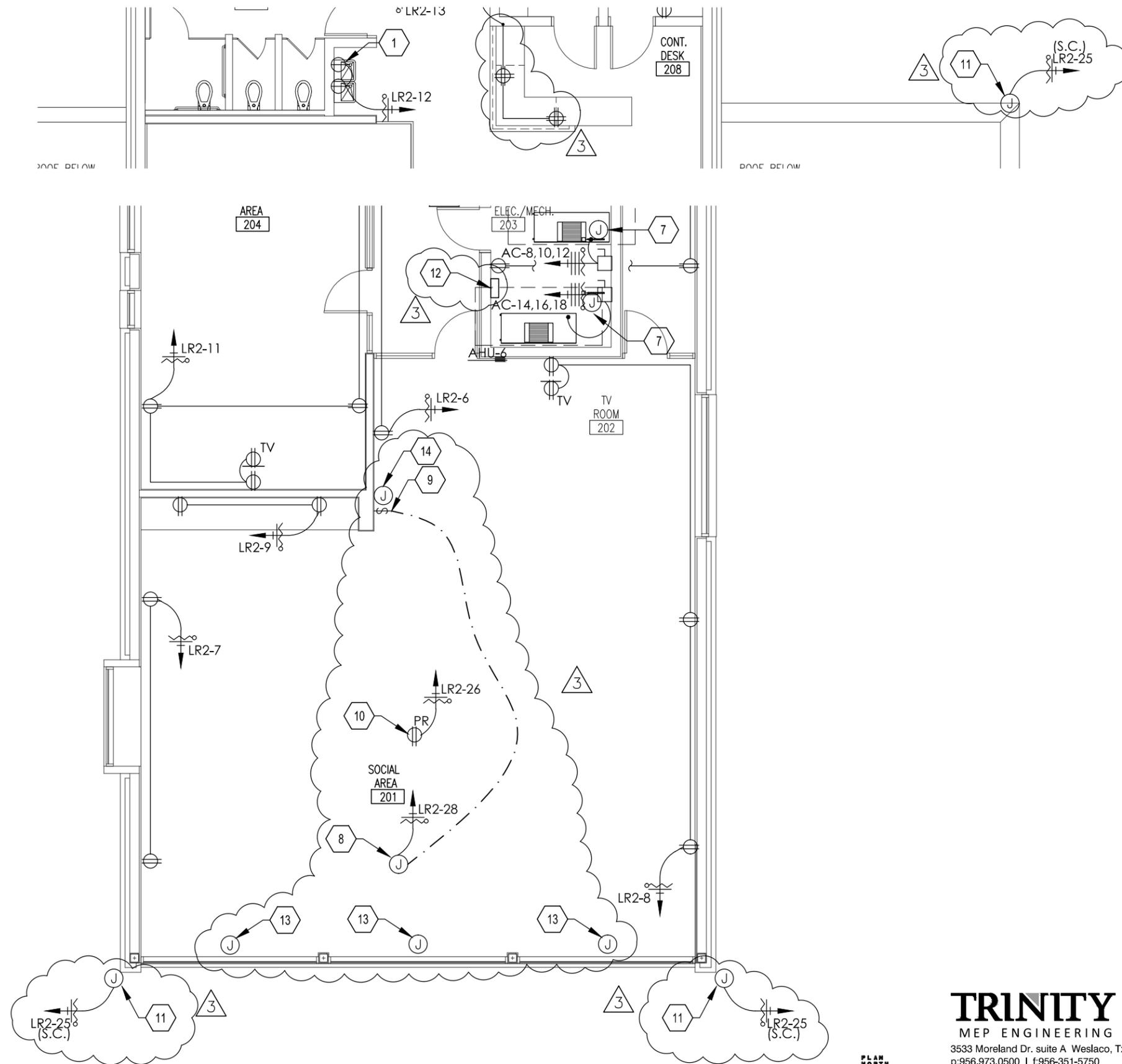
DRAWN BY:

SHEET NO.

AE2.2-A

DATE: JUNE 29, 2016

AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

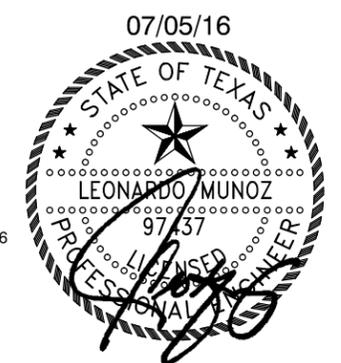


1 - ELECTRICAL POWER SECOND FLOOR PLAN

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



**TRINITY**  
 MEP ENGINEERING  
 3533 Moreland Dr. suite A Weslaco, Tx 78596  
 p:956.973.0500 | f:956-351-5750  
 www.trinitymep.com | Copyright 2012  
 Texas Registered Engineering Firm -F10362  
 Project number: 14.4.07



AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

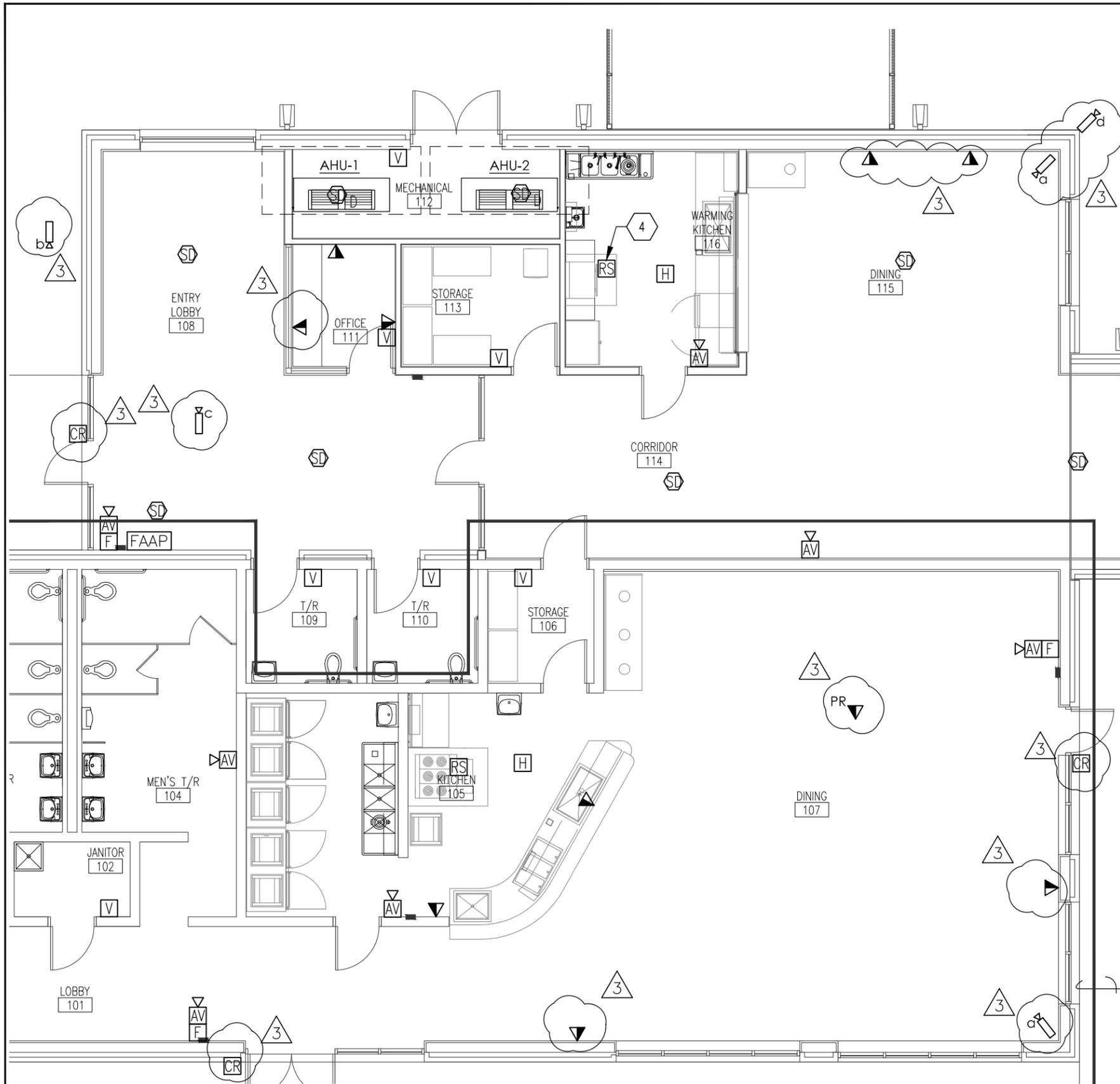
PROJECT NUMBER  
 14.4.07  
 REVISIONS  
 ADDENDUM #3 7/05/16

FILENAME:  
 SHEET TITLE  
 ELECTRICAL  
 POWER  
 SECOND FLOOR PLAN

DRAWN BY:  
 SHEET NO.

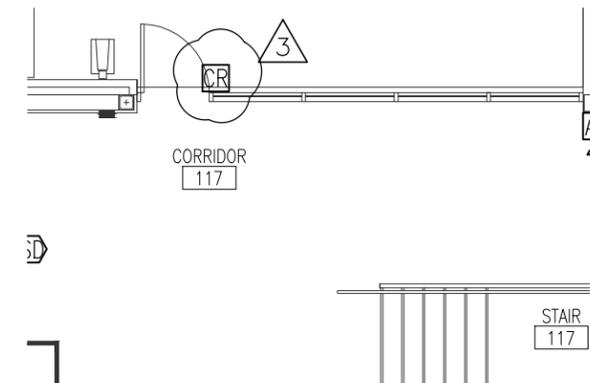
**AE2.2-B**

DATE: JUNE 29, 2016



### GENERAL NOTES: SPECIAL SYSTEMS

- LEVEL. IF CABLE TRAY IS PRESENT, STUBBED CONDUITS TO CABLE TRAY.
- I. CONTRACTOR SHALL LOCATE POWER OUTLETS AND DATA OUTLETS AT RECEPTIONIST DESK KNEE SPACE IN THE AREA# 111,124,208. COORDINATE EXACT LOCATION PRIOR TO ANY ROUGH-INS.
  - J. FIRE ALARM CONTRACTOR SHALL COORDINATE THE NEED FOR A VOICE EVAC FIRE ALARM SYSTEM WITH LOCAL JURISDICTION PRIOR TO BID DATE. IF DETERMINED TO BE REQUIRED, CONTRACTOR SHALL PROVIDE AND INSTALL ALL DEVICES AND EQUIPMENT REQUIRED TO PROVIDE A FULLY OPERABLE CODE COMPLIANT FIRE ALARM SYSTEM.



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



**TRINITY**  
MEP ENGINEERING  
3533 Moreland Dr. suite A Weslaco, Tx 78596  
p:956.973.0500 | f:956-351-5750  
www.trinitymep.com | Copyright 2012  
Texas Registered Engineering Firm -F10362  
Project number: 14.4.07



AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS  
ARCHITECTURE + PLANNING + INTERIORS  
6626 SILVERMINE DRIVE, SUITE 100A  
AUSTIN, TEXAS 78736  
(512) 327-0444 FAX (512) 301-4909

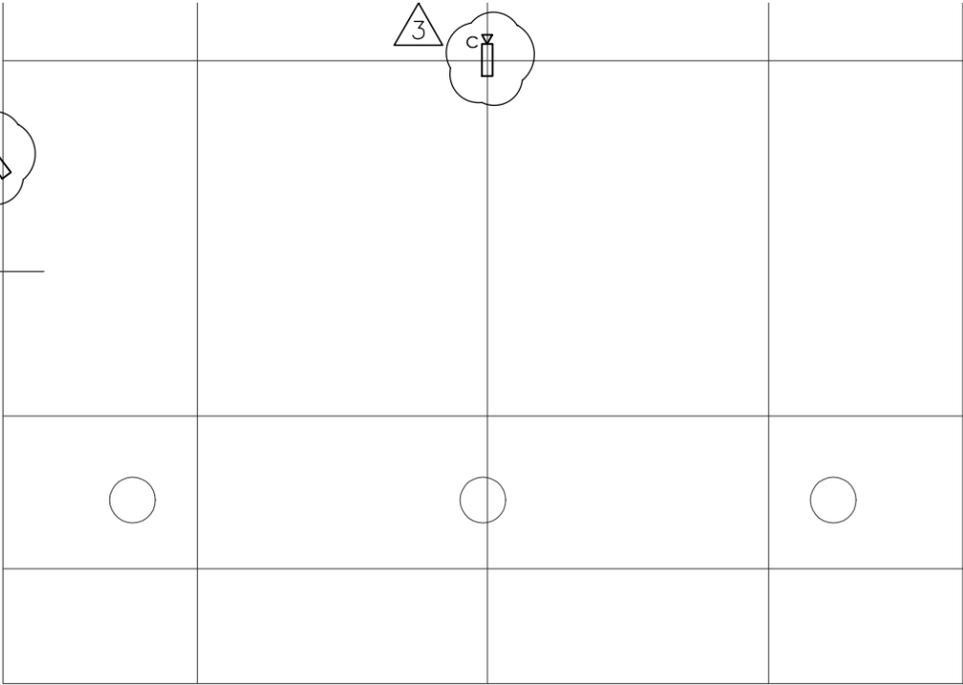
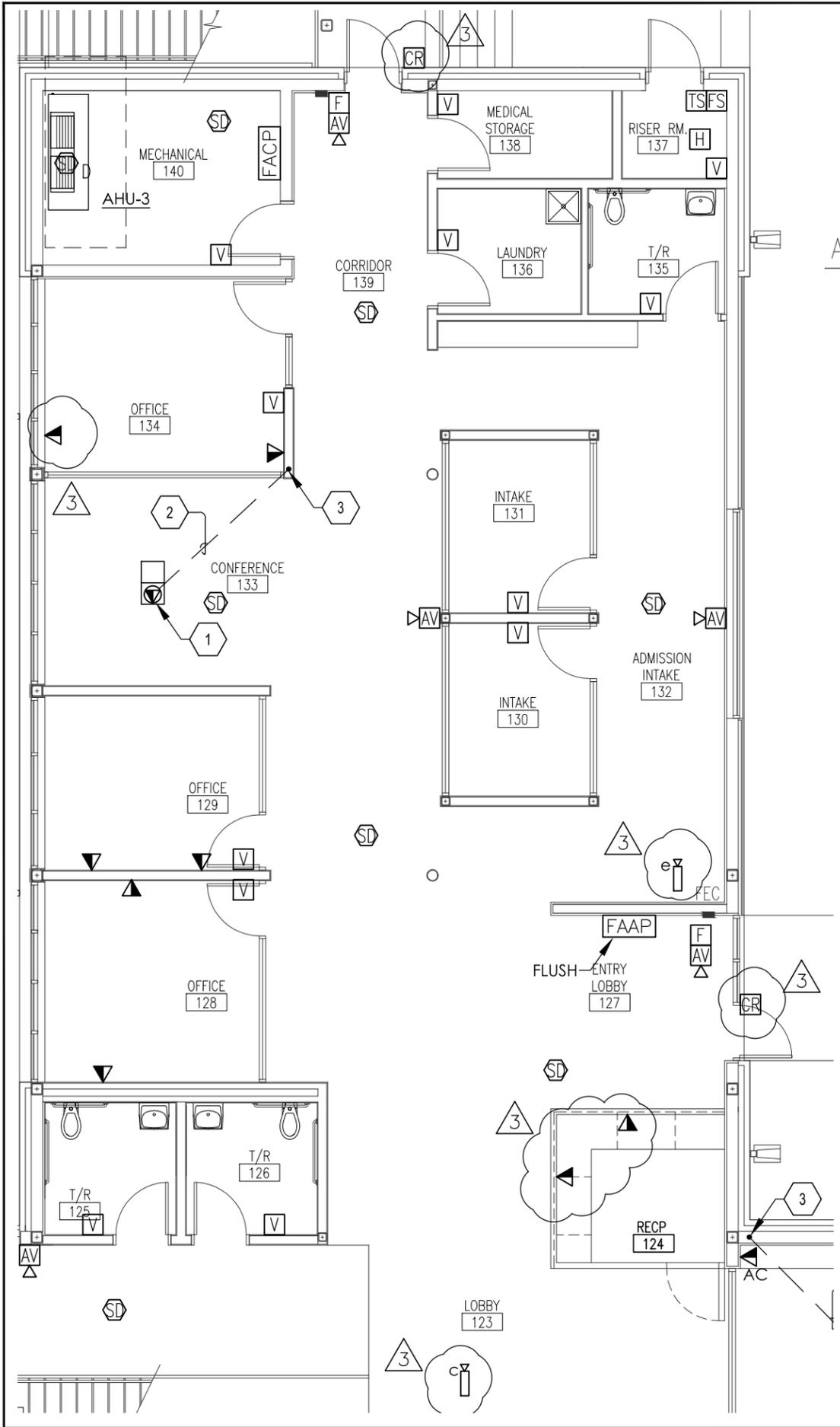
WEBB COUNTY YOUTH VILLAGE  
REHABILITATION CENTER  
111 CAMINO NUEVO ROAD, HWY 359  
LAREDO, TEXAS 78046

PROJECT NUMBER  
14.4.07  
REVISIONS  
ADDENDUM #3 7/05/16

FILENAME:  
SHEET TITLE  
ELECTRICAL  
SPECIAL SYSTEMS  
FIRST FLOOR PLAN

DRAWN BY:  
SHEET NO.

AE3.1-A  
DATE: JUNE 29, 2016



### SURVEILLANCE CAMERA LEGEND

SYMBOL	DESCRIPTION	COMMENTS
	WIDE ANGLE CAMERA	PROVIDE J-BOX(N3R) W/3/4"CONDUIT STUB OUT TO NEAREST IDF/MDF ROOM-121. COORDINATE WITH OWNER PRIOR TO TERMINATION ON OWNER EQUIPMENT.
	PTZ CAMERA	PROVIDE J-BOX(N3R) W/3/4"CONDUIT STUB OUT TO NEAREST IDF/MDF ROOM-121. COORDINATE WITH OWNER PRIOR TO TERMINATION ON OWNER EQUIPMENT.
	360 DOME	PROVIDE J-BOX(N3R) W/3/4"CONDUIT STUB OUT TO NEAREST IDF/MDF ROOM-121. COORDINATE WITH OWNER PRIOR TO TERMINATION ON OWNER EQUIPMENT.
	PTZ 270	PROVIDE J-BOX(N3R) W/3/4"CONDUIT STUB OUT TO NEAREST IDF/MDF ROOM-121. COORDINATE WITH OWNER PRIOR TO TERMINATION ON OWNER EQUIPMENT.
	WIDE ANGLE FIXED	PROVIDE J-BOX(N3R) W/3/4"CONDUIT STUB OUT TO NEAREST IDF/MDF ROOM-121. COORDINATE WITH OWNER PRIOR TO TERMINATION ON OWNER EQUIPMENT.

### 1 - ELECTRICAL SPECIAL SYSTEMS FIRST FLOOR PLAN

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



## TRINITY

MEP ENGINEERING  
 3533 Moreland Dr. suite A Weslaco, Tx 78596  
 p:956.973.0500 | f:956-351-5750  
 www.trinitymep.com | Copyright 2012  
 Texas Registered Engineering Firm -F10362  
 Project number: 14.4.07



AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
14.4.07

REVISIONS  
 ADDENDUM #3 7/05/16

FILENAME:

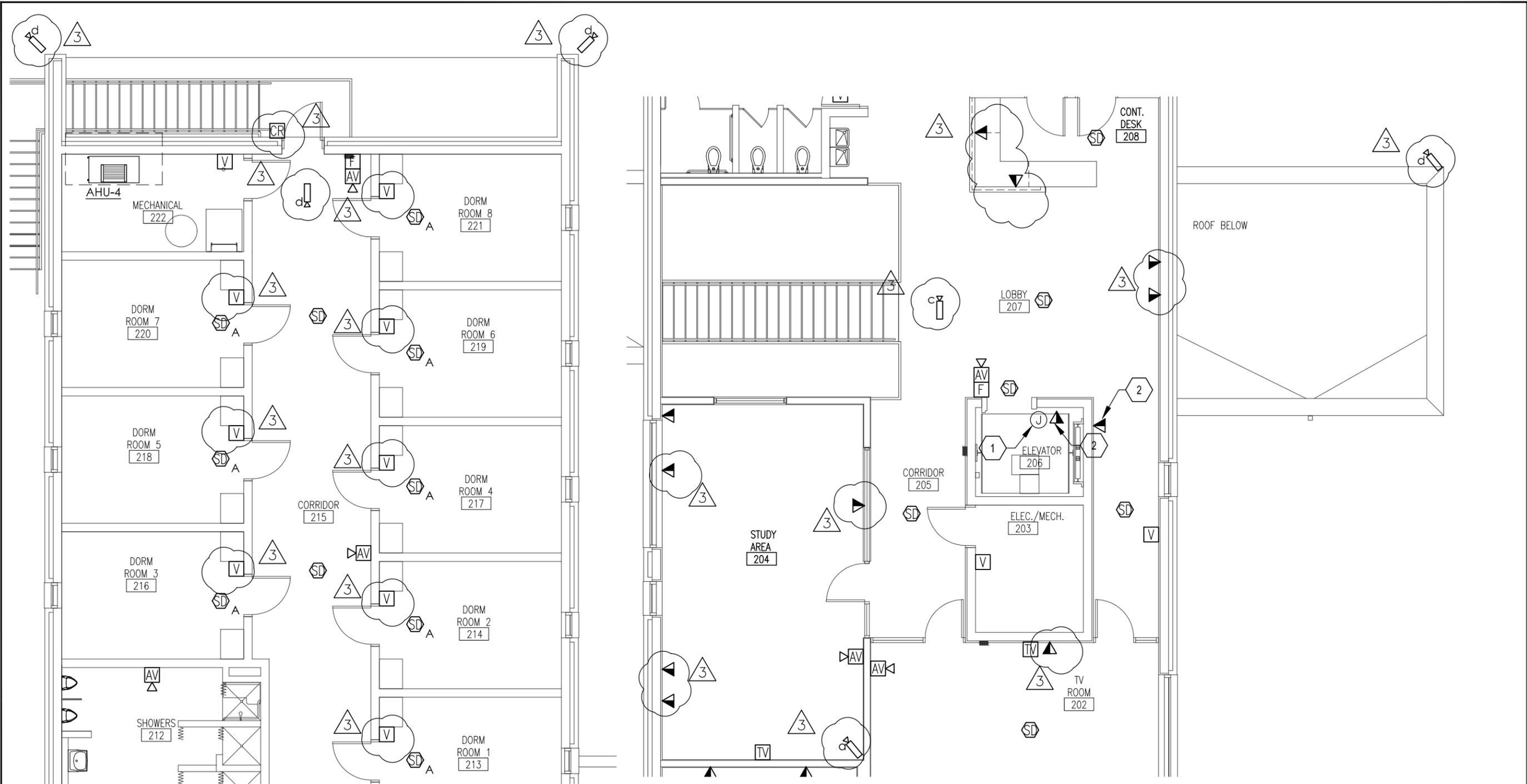
SHEET TITLE  
ELECTRICAL  
SPECIAL SYSTEMS  
FIRST FLOOR PLAN

DRAWN BY:

SHEET NO.

# AE3.1-B

DATE: JUNE 29, 2016



1 - ELECTRICAL SPECIAL SYSTEMS SECOND FLOOR PLAN

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



**TRINITY**  
MEP ENGINEERING

3533 Moreland Dr. suite A Weslaco, Tx 78596  
p:956.973.0500 | f:956-351-5750  
www.trinitymep.com | Copyright 2012  
Texas Registered Engineering Firm -F10362  
Project number: 14.4.07



WEBB COUNTY YOUTH VILLAGE  
REHABILITATION CENTER  
111 CAMINO NUEVO ROAD, HWY 359  
LAREDO, TEXAS 78046

AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS  
ARCHITECTURE + PLANNING + INTERIORS  
6626 SILVERMINE DRIVE, SUITE 100A  
AUSTIN, TEXAS 78736  
(512) 327-0444 FAX (512) 301-4909

PROJECT NUMBER  
14.4.07

REVISIONS

▲ ADDENDUM #3 7/05/16

FILENAME:

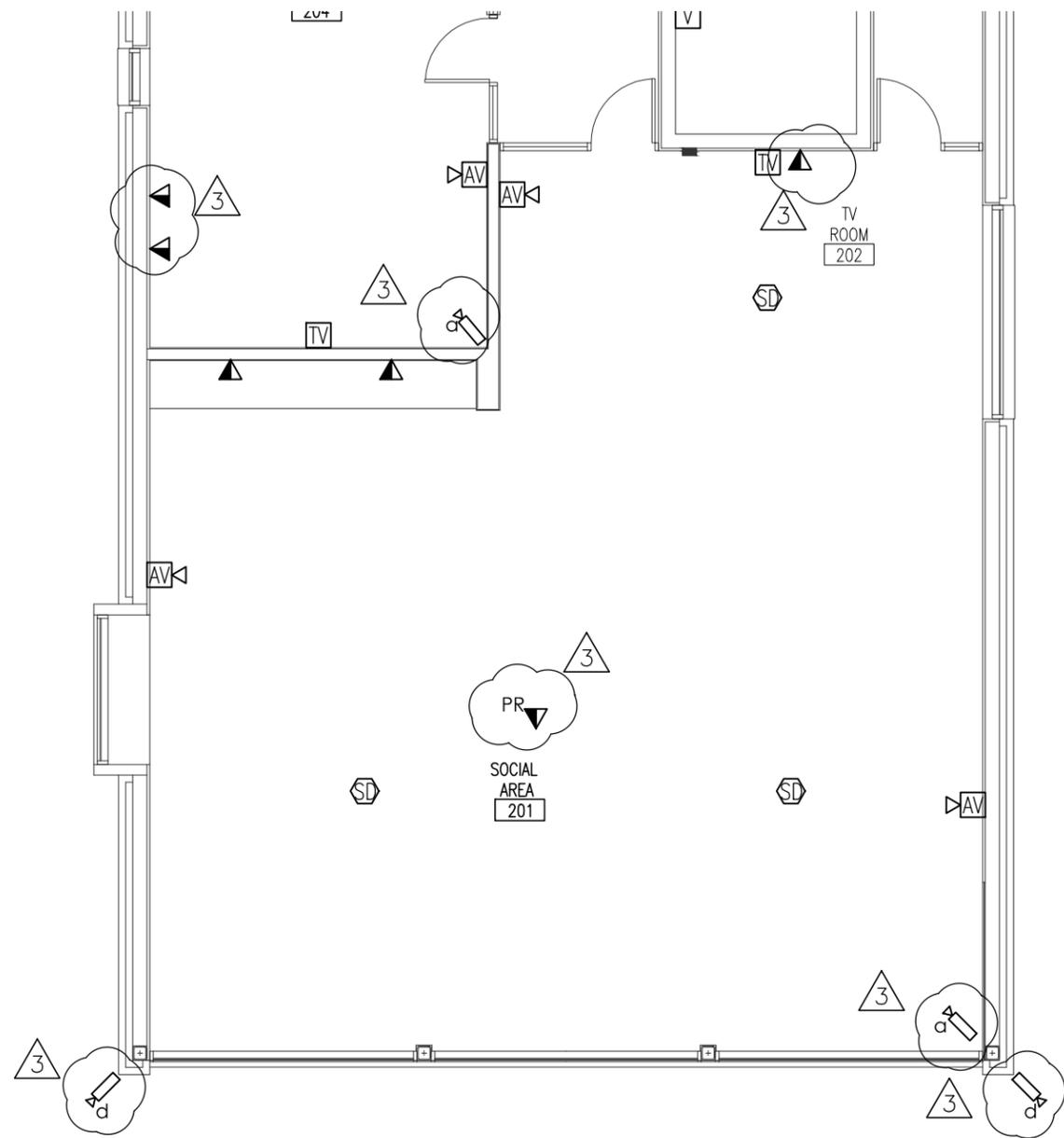
SHEET TITLE  
ELECTRICAL  
SPECIAL SYSTEMS  
SECOND FLOOR PLAN

DRAWN BY:

SHEET NO.

**AE3.2-A**

DATE: JUNE 29, 2016



### GENERAL NOTES: SPECIAL SYSTEMS

- H. ALL SPECIAL SYSTEM CONDUITS SHALL BE STUBBED UP ABOVE THE CEILING LEVEL. IF CABLE TRAYS ARE PRESENT, STUBBED CONDUITS TO CABLE TRAY.
- I. CONTRACTOR SHALL LOCATE POWER OUTLETS AND DATA OUTLETS AT RECEPTIONIST DESK KNEE SPACE IN THE AREA# 111,124,208. COORDINATE EXACT LOCATION PRIOR TO ANY ROUGH-INS.
- J. FIRE ALARM CONTRACTOR SHALL COORDINATE THE NEED FOR A VOICE EVAC FIRE ALARM SYSTEM WITH LOCAL JURISDICTION PRIOR TO BID DATE. IF DETERMINED TO BE REQUIRED, CONTRACTOR SHALL PROVIDE AND INSTALL ALL DEVICES AND EQUIPMENT REQUIRED TO PROVIDE A FULLY OPERABLE CODE COMPLIANT FIRE ALARM SYSTEM.

### SURVEILLANCE CAMERA LEGEND

SYMBOL	DESCRIPTION	COMMENTS
	WIDE ANGLE CAMERA	PROVIDE J-BOX(N3R) W/3/4"CONDUIT STUB OUT TO NEAREST IDF/MDF ROOM-121. COORDINATE WITH OWNER PRIOR TO TERMINATION ON OWNER EQUIPMENT.
	PTZ CAMERA	PROVIDE J-BOX(N3R) W/3/4"CONDUIT STUB OUT TO NEAREST IDF/MDF ROOM-121. COORDINATE WITH OWNER PRIOR TO TERMINATION ON OWNER EQUIPMENT.
	360 DOME	PROVIDE J-BOX(N3R) W/3/4"CONDUIT STUB OUT TO NEAREST IDF/MDF ROOM-121. COORDINATE WITH OWNER PRIOR TO TERMINATION ON OWNER EQUIPMENT.
	PTZ 270	PROVIDE J-BOX(N3R) W/3/4"CONDUIT STUB OUT TO NEAREST IDF/MDF ROOM-121. COORDINATE WITH OWNER PRIOR TO TERMINATION ON OWNER EQUIPMENT.
	WIDE ANGLE FIXED	PROVIDE J-BOX(N3R) W/3/4"CONDUIT STUB OUT TO NEAREST IDF/MDF ROOM-121. COORDINATE WITH OWNER PRIOR TO TERMINATION ON OWNER EQUIPMENT.

### 1 - ELECTRICAL SPECIAL SYSTEMS SECOND FLOOR PLAN

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



### TRINITY

MEP ENGINEERING  
 3533 Moreland Dr. suite A Weslaco, Tx 78596  
 p:956.973.0500 | f:956-351-5750  
 www.trinitymep.com | Copyright 2012  
 Texas Registered Engineering Firm -F10362  
 Project number: 14.4.07



AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
14.4.07

REVISIONS  
 ADDENDUM #3 7/05/16

FILENAME:

SHEET TITLE  
ELECTRICAL  
SPECIAL SYSTEMS  
SECOND FLOOR PLAN

DRAWN BY:

SHEET NO.

AE3.2-B

DATE: JUNE 29, 2016



PANEL:LR	AMP	LUGS	NEMA	V(LL)		(P)	(W)		V(LN)	MNT	KAIC	FDR	
LOCATION:	225	MB	1	208		3	4		120	SUR.	10	1-RUN 4#4/0, 1#4G, 3"C	
LOAD	CKT	LOAD	BKR	POLE	FEEDER/BRANCH CIRCUIT			FEEDER/BRANCH CIRCUIT	POLE	BKR	LOAD	CKT	LOAD
SERVED	#	KVA	SIZE		SIZE	A	B	SIZE		KVA	#	SERVED	
FCCU-1	1	1.6	20	2	3#12, 1#12G, 1/2"C	*	*	2#12, 1#12G, 1/2"C	1	20	0.5	2	PROJECTOR
"	3	1.6			-			2#12, 1#12G, 1/2"C	1	20	0.5	4	PROJECTOR SCREEN
IWH-1	5	2.4	25	1	2#10, 1#10G, 3/4"C		*	2#10, 1#10G, 3/4"C	1	20	0.4	6	2 RCPTS
5 RCPTS	7	1	20	1	2#8, 1#10G, 3/4"C	*		2#8, 1#10G, 3/4"C	1	20	0.8	8	4 RCPTS
4 RCPTS	9	0.8	20	1	2#8, 1#10G, 3/4"C		*	2#10, 1#10G, 3/4"C	1	20	0.8	10	4 RCPTS
3 RCPTS	11	0.6	20	1	2#10, 1#10G, 3/4"C		*	2#10, 1#10G, 3/4"C	1	20	1	12	5 RCPTS
3 RCPTS	13	0.6	20	1	2#10, 1#10G, 3/4"C	*		2#10, 1#10G, 3/4"C	1	20	0.8	14	4 RCPTS
4 RCPTS	15	0.6	20	1	2#10, 1#10G, 3/4"C		*	2#12, 1#12G, 1/2"C	1	20	0.2	16	1 RCPT
1 QRCPT	17	0.4	20	1	2#12, 1#12G, 1/2"C		*	2#12, 1#12G, 1/2"C	1	20	1	18	5 RCPTS
5 RCPTS	19	1	20	1	2#12, 1#12G, 1/2"C	*		2#12, 1#12G, 1/2"C	1	20	0.2	20	1 RCPT
3 RCPTS	21	0.6	20	1	2#12, 1#12G, 1/2"C		*	2#12, 1#12G, 1/2"C	1	20	0.8	22	4 RCPTS
J-BOX	23	0.6	20	1	2#12, 1#12G, 1/2"C		*	2#12, 1#12G, 1/2"C	1	20	0.4	24	2 RCPTS
EXTERIOR 6 RCPTS	25	1.2	20	1	2#12, 1#12G, 1/2"C	*		2#12, 1#12G, 1/2"C	1	20	0.4	26	2 RCPTS
EXTERIOR RCPT	27	1.5	20	1	2#8, 1#10G, 3/4"C		*	3#6, 1#10G, 1"C	2	50	4	28	WASHER/DRYER
EXTERIOR RCPT	29	1.5	20	1	2#12, 1#12G, 1/2"C		*	-			4	30	"
HAND DRYER	31	2.3	25	1	2#10, 1#10G, 3/4"C	*		3#6, 1#10G, 1"C	2	50	4	32	WASHER/DRYER
HAND DRYER	33	2.3	25	1	2#10, 1#10G, 3/4"C		*	-			4	34	"
HAND DRYER	35	2.3	25	1	2#8, 1#10G, 3/4"C		*	2#12, 1#12G, 1/2"C	1	20	0.6	36	J-BOX
HAND DRYER	37	2.3	25	1	2#8, 1#10G, 3/4"C	*		2#10, 1#10G, 3/4"C	1	25	2.5	38	HAND DRYER
FACP	39	0.4	20	1	2#12, 1#12G, 1/2"C		*	2#10, 1#10G, 3/4"C	1	20	1	40	1 RCPT
ELEV. CAB	41	1.5	20	1	2#12, 1#12G, 1/2"C		*	2#10, 1#10G, 3/4"C	1	20	1	42	1 RCPT
TELE. BOARD	43	0.4	20	1	2#12, 1#12G, 1/2"C	*		2#10, 1#10G, 3/4"C	1	20	1	44	1 RCPT
HAND DRYER	45	2.3	25	1	2#8, 1#10G, 3/4"C	*		2#8, 1#10G, 3/4"C	1	25	2.3	46	HAND DRYER
PILOT SWITCH	47	0.4	20	1	2#10, 1#10G, 3/4"C		*	2#10, 1#10G, 3/4"C	1	20	0.4	48	PILOT SWITCH
DAMPER	49	0.6	20	1	2#10, 1#10G, 3/4"C	*		2#12, 1#12G, 1/2"C	1	20	0.4	50	2 RCPT
2 RCPTS	51	0.4	20	1	2#10, 1#10G, 3/4"C	*		-				52	SPACE
SURVEILLANCE CAMS	53	1	20	1	2#10, 1#10G, 3/4"C		*	-				54	SPACE
SPARE	55		20	1	-	*		-				56	SPACE
SPARE	57		20	1	-	*		-				58	SPACE
SPARE	59		20	1	-	*		-				60	SPACE
SPARE	61		20	1	-	*		-				62	SPACE
SPARE	63		20	1	-	*		-				64	SPACE
LOADS	-	(KVA)				20	23	19			(KVA)	-	DESCRIPTIVE LOADS
CONNECTED LOAD	-	60				KVA/PHASE					0	-	LIGHTING
RESERVE - %	25	15									41	-	RECEPTACLES
TOTAL LOAD	-	<b>75</b>									3	-	COOLING
											0	-	HEATING
											0	-	MOTOR
											0	-	KITCHEN
											16	-	OTHER
TOTAL AMPS	-	<b>208</b>											

PANEL:LR2	AMP	LUGS	NEMA	V(LL)		(P)	(W)		V(LN)	MNT	KAIC	FDR	
LOCATION:	100	MB	1	208		3	4		120	SUR.	10	1-RUN 4#2, 1#8G, 2"C	
LOAD	CKT	LOAD	BKR	POLE	FEEDER/BRANCH CIRCUIT			FEEDER/BRANCH CIRCUIT	POLE	BKR	LOAD	CKT	LOAD
SERVED	#	KVA	SIZE		SIZE	A	B	SIZE		KVA	#	SERVED	
SPARE	1		20	1	-	*		-	1	20		2	SPARE
SPARE	3		20	1	-	*		-	1	20		4	SPARE
SPARE	5		20	1	-	*		-	1	20	0.2	6	2 RCPTS
2 RCPTS	7	0.4	20	1	2#10, 1#10G, 3/4"C	*		2#8, 1#10G, 3/4"C	1	20	0.8	8	4 RCPTS
2 RCPTS	9	0.4	20	1	2#10, 1#10G, 3/4"C	*		2#10, 1#10G, 3/4"C	1	20	0.6	10	3 RCPTS
6 RCPTS	11	1.2	20	1	2#8, 1#10G, 3/4"C		*	2#12, 1#12G, 1/2"C	1	20	1.5	12	E.D.F.
1 RCPT	13	0.2	20	1	2#12, 1#12G, 1/2"C	*		2#12, 1#12G, 1/2"C	1	20	0.4	14	2 RCPTS
6 RCPTS	15	1.2	20	1	2#12, 1#12G, 1/2"C	*		2#12, 1#12G, 1/2"C	1	20	1.2	16	6 RCPTS
2 RCPTS	17	0.4	20	1	2#12, 1#12G, 1/2"C	*		2#12, 1#12G, 1/2"C	1	20	0.8	18	4 RCPTS
1 QRCPT	19	0.4	20	1	2#12, 1#12G, 1/2"C	*		2#8, 1#10G, 3/4"C	1	25	2.3	20	HAND DRYER
ELEVATOR CAB	21	1.5	20	1	2#12, 1#12G, 1/2"C	*		2#8, 1#10G, 3/4"C	1	25	2.3	22	HAND DRYER
DAMPER	23	0.4	20	1	2#10, 1#10G, 3/4"C	*		2#12, 1#12G, 1/2"C	1	20	0.5	24	CP-1
SURVEILLANCE CAMS	25	1	20	1	2#10, 1#10G, 3/4"C	*		2#12, 1#12G, 1/2"C	1	20	0.5	26	PROJECTOR
SPACE	27				-	*		2#12, 1#12G, 1/2"C	1	20	0.5	28	PROJECTOR SCREEN
SPACE	29				-	*		-				30	SPACE
SPACE	31				-	*		-				32	SPACE
SPACE	33		20	1	-	*		-				34	SPACE
SPACE	35		20	1	-	*		-				36	SPACE
SPACE	37		20	1	-	*		-				38	SPACE
SPACE	39		20	1	-	*		-				40	SPACE
SPACE	41		20	1	-	*		-				42	SPACE
LOADS	-	(KVA)				4	7	5			(KVA)	-	DESCRIPTIVE LOADS
CONNECTED LOAD	-	16				KVA/PHASE					0	-	LIGHTING
RESERVE	25	4									16	-	RECEPTACLES
TOTAL LOAD	-	<b>20</b>									0	-	COOLING
											0	-	HEATING
											0	-	OTHER
TOTAL AMPS	-	<b>55</b>											

NOTES:  
1)  
2)  
3)

AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS  
ARCHITECTURE + PLANNING + INTERIORS  
6626 SILVERMINE DRIVE, SUITE 100A  
AUSTIN, TEXAS 78736  
(512) 327-0444 FAX (512) 301-4909

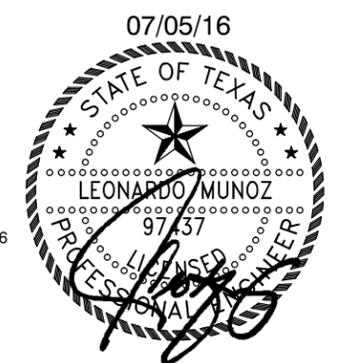
WEBB COUNTY YOUTH VILLAGE  
REHABILITATION CENTER  
111 CAMINO NUEVO ROAD, HWY 359  
LAREDO, TEXAS 78046

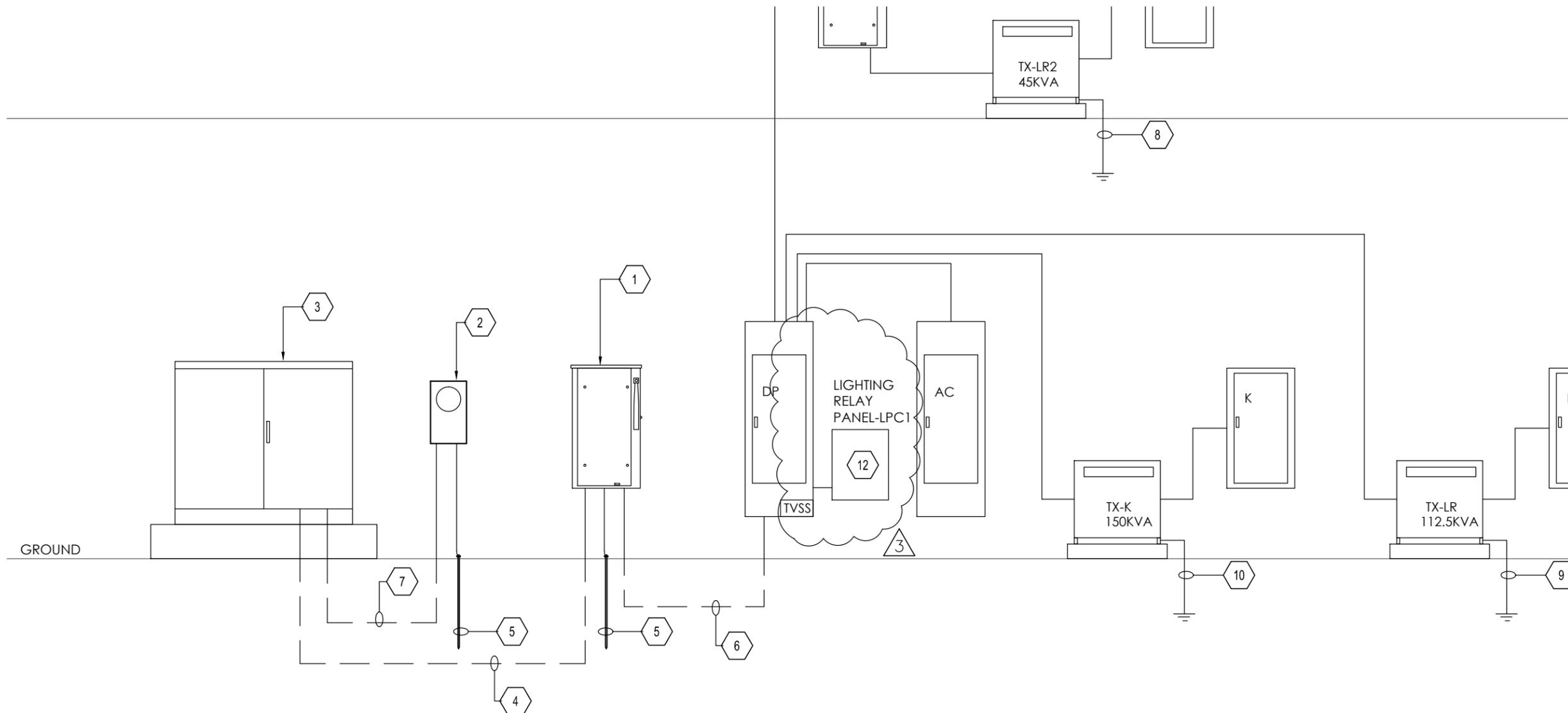
PROJECT NUMBER  
14.4.07  
REVISIONS  
ADDENDUM #3 7/05/16

FILENAME:  
SHEET TITLE  
ELECTRICAL  
PANELS  
DRAWN BY:

SHEET NO.  
**AE5.2**  
DATE: JUNE 29, 2016

**TRINITY**  
MEP ENGINEERING  
3533 Moreland Dr. suite A Weslaco, Tx 78596  
p:956.973.0500 | f:956-351-5750  
www.trinitymep.com | Copyright 2012  
Texas Registered Engineering Firm -F10362  
Project number: 14.4.07





**1** ELECTRICAL SCHEMATIC DIAGRAM  
SCALE: NTS

- 11 PROVIDE 100AMPS, 480V, 3Ø, 4W, S/N, N3R, HEAVY DUTY, NON- FUSED DISCONNECT.
- 12 LIGHTING CONTROL RELAY PANEL. REFER TO SPECIFICATIONS - 265150.

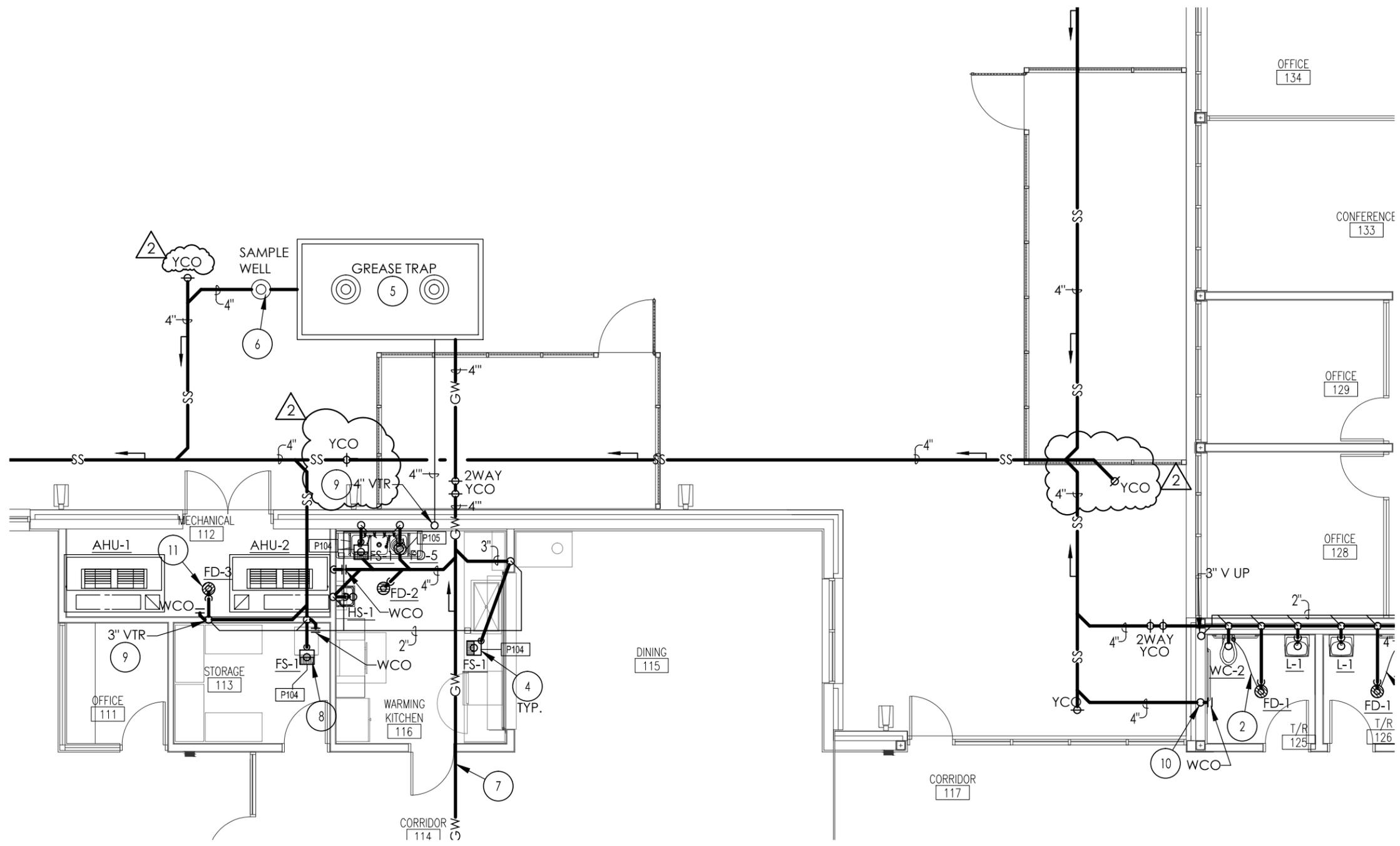
**TRINITY**  
MEP ENGINEERING  
3533 Moreland Dr. suite A Weslaco, Tx 78596  
p:956.973.0500 | f:956-351-5750  
www.trinitymep.com | Copyright 2012  
Texas Registered Engineering Firm -F10362  
Project number: 14.4.07



AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS  
ARCHITECTURE + PLANNING + INTERIORS  
6626 SILVERMINE DRIVE, SUITE 100A  
AUSTIN, TEXAS 78736  
(512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
REHABILITATION CENTER  
111 CAMINO NUEVO ROAD, HWY 359  
LAREDO, TEXAS 78046

PROJECT NUMBER 14.4.07
REVISIONS ▲ ADDENDUM #3 7/05/16
FILENAME:
SHEET TITLE ELECTRICAL RISER/SCHEDULES
DRAWN BY:
SHEET NO. <b>AE5.1</b>
DATE: JUNE 29, 2016



SEWER & VENT  
**1 - PLUMBING FIRST FLOOR PLAN**  
 SCALE: 1/8" = 1'-0"



**TRINITY**  
 MEP ENGINEERING  
 3533 Moreland Dr. suite A Weslaco, Tx 78596  
 p:956.973.0500 | f:956-351-5750  
 www.trinitymep.com | Copyright 2012  
 Texas Registered Engineering Firm -F10362  
 Project number: 14.4.07



AUSLAND ARCHITECTS-METAFORM STUDIO ARCHITECTS  
 ARCHITECTURE + PLANNING + INTERIORS  
 6626 SILVERMINE DRIVE, SUITE 100A  
 AUSTIN, TEXAS 78736  
 (512) 327-0444 FAX (512) 301-4909

WEBB COUNTY YOUTH VILLAGE  
 REHABILITATION CENTER  
 111 CAMINO NUEVO ROAD, HWY 359  
 LAREDO, TEXAS 78046

PROJECT NUMBER  
 14.4.07  
 REVISIONS  
 ADDENDUM #3 7/05/16

FILENAME:

SHEET TITLE  
 PLUMBING  
 FIRST FLOOR PLAN

DRAWN BY:

SHEET NO.

**AP1.1-A**

DATE: JUNE 29, 2016