Phone (816) 969-1200 FAX (816) 969-1201

Report #1

CITY OF LEE'S SUMMIT
MISSOURI
CODES ADMINISTRATION

8-18-5

Bi-weekly Special Inspections Report

Project Address 20 W. NE Saint Luke's Blvd. **Project Name** St. Luke's East OR Addition #2

Permit No. PrCom20170703 PrCom20171689 **Special Inspection Agency or Agent** Structural Engineering Associates, Inc.

This is to certify that I or qualified individual(s) working under my direction inspected and/or tested the following items in accordance with Chapter 17 of the 2003 International Building Code. The work was found to be in substantial compliance with the City approved plans, specifications, and applicable provisions of the City of Lee's Summit building code.

Check appropriate items

- ☐ **INSPECTION OF WOOD FABRICATION PROCESS per 17044.2.1**
- ☐ **INSPECTION OF STEEL FABRICATION PROCESS per 1704.2.1**
- ☐ **INSPECTION OF STEEL per 1704.3-1704.3.3.3**
- ☒ **INSPECTION OF CONCRETE per 1704.4-1704.4.1**
- ☐ **INSPECTION OF MASONRY per 1704.5**
- ☐ **INSPECTION OF SOIL CONDITIONS per 1704.7-1704.7.3**
- ☐ **INSPECTION OF PILE FOUNDATIONS per 1704.8**
- ☐ **INSPECTION OF PIER FOUNDATIONS per 1704.9**
- ☐ **INSPECTION OF EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) per 1704.12**
- ☐ **SPRAYED FIRE-RESISTIVE MATERIALS per 1704.11**
- ☐ **SMOKE CONTROL SYSTEMS per 1704.14**

Professional Seal _____

Signature Nicolas Pino Date JUNE 16, 2017

CODES ADMINISTRATION, 220 SE GREEN ST, LEE'S SUMMIT, MO 64063

cc: Mark Brooks - St. Luke's; Mark Hunter - ACI; Mike Schmelig - JED; Daniel Polletta - JED; Dave Jardon - JED; Bill Lipp - JED; Brady Myers - JED; Garrett Estabrook - JED; AJ Devlin - JED; Pat Huss - Fordyce; Andy Nimz - GJS; Krishna Saha - SEA; Bryan Evans - SEA

STRUCTURAL ENGINEERING ASSOCIATES, INC.

Est. 1909

St. Luke's East - OR Addition #2
20 W. NE Saint Luke's Blvd.
Lee's Summit, MO 64086
Special Inspection Report #01
June 15, 2017

1) Summary of work performed from 05/16/17 through 05/31/17

   - Concrete: Grade beams between J/14-15, E'-J/14, E'-I/17, E'-H/15, G/13-16, E'-I/16, H/16-17, G/16-H/17, H/18.2-17, F'-I/18.2, and I/18.2-17.8; Compressive strength tests.
   - Drill & Epoxy Adhesive Bars: into existing footing at E'/14, E'/15, E'/16, E'/17, F'18.2, and I/18.2.

2) Changes from drawings/specifications/codes

   Item 5 pertains to this time period.

3) Discrepancies with approved plans

   No items pertain to this time period.

4) Resolved/corrected discrepancies

   Item 5 pertains to this time period.

ITEMS REQUIRING RESOLUTION

St. Luke's East - OR Addition #2
20 W. NE Saint Luke's Blvd.
Lee's Summit, MO
Special Inspection Report #01

Item Number	Date	Discrepancy location and description	Reference	Resolution Date
1	3/23/2017	Drawings modified by 'Addendum #1'. Sheets S0.0, S1.0, S1.1, S2.0, and S2.1 were modified or added to contract documents.	Addendum #1	3/23/2017
2	5/2/2017	Drawings modified by 'Addendum #2'. Sheets S0.0, S1.0, S1.1, S2.0, S2.1, S3.0, S4.0, S4.1, and S4.2 were modified or added to contract documents.	Addendum #2	5/2/2017
3	5/9/2017	Drawings modified by 'Addendum #3'. Sheets S1.0, S2.0, S2.1, S4.0, and S4.2 were modified or added to contract documents.	Addendum #3	5/9/2017
4	5/15/2017	Drawings modified by 'Addendum #4'. Sheets S1.1 and S2.1 were modified or added to contract documents.	Addendum #4	5/15/2017
5	5/25/2017	Drawings modified by 'Addendum #6'. Sheets S1.1 and S2.0 were modified or added to contract documents.	Addendum #6	5/25/2017

5/2/2017
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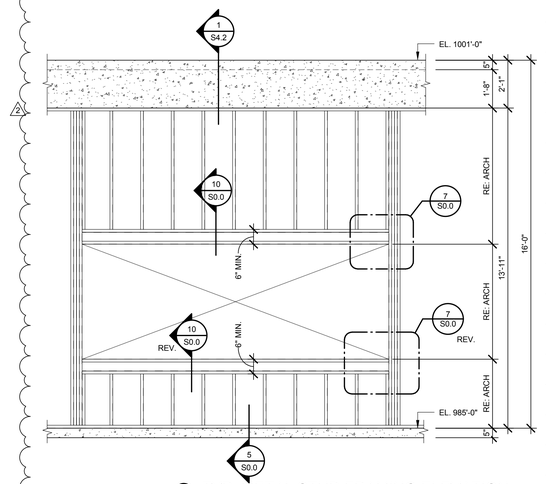
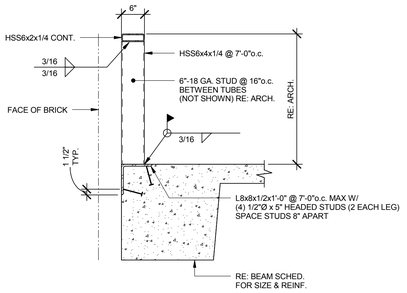
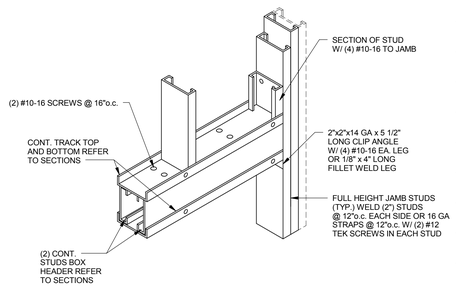


9 TYP. METAL STUD FRAMING ELEVATION
3/8" = 1'-0"

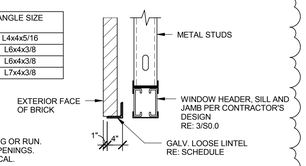


8 TYPICAL FRAMING AT PARAPET
3/4" = 1'-0"



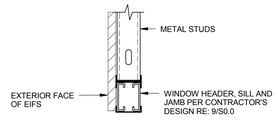
7 TYPICAL HEADER - JAMB DETAIL
3/4" = 1'-0"

CENTER OPENING FT.	ANGLE SIZE
≤ 4'-0"	L4x4x5/16
4'-0" ≤ 6'-0"	L6x4x3/8
6'-0" ≤ 7'-0"	L6x4x3/8
7'-0" ≤ 8'-8"	L7x4x3/8

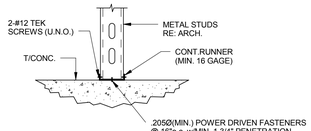


NOTES:
1. GALVANIZE BRICK LOOSE LINTEL.
2. EXTEND LINTEL MIN. 8" BEYOND OPENING OR RUN.
3. ANGLE CONTINUOUS OVER SEVERAL OPENINGS. PLACE LONG LEG OF THE ANGLE VERTICAL.

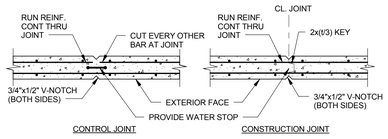
6 BRICK LINTEL SCHEDULE (LOOSE LINTEL)
3/4" = 1'-0"



10 SECTION AT WINDOW OPENING
3/4" = 1'-0"



5 TYP. METAL STUD BASE CONN.
3/4" = 1'-0"

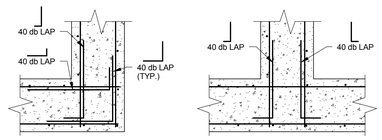


NOTE:

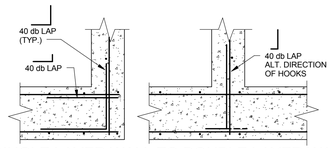
PROVIDE CONSTRUCTION JOINT @ 32'-0"o.c. (MAX.) AND CONTROL JOINT AT 16' o.c. (MA.)

4 TYPICAL WALL JOINTS
3/4" = 1'-0"

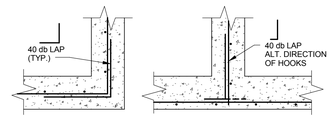
INTERSECTING WALL REINFORCING IS IN ADDITION TO ALL OTHER WALL REINFORCING. RE: PLAN AND WALL SECTIONS FOR ACTUAL LOCATION AND SIZE OF WALL REINFORCING. WALL REINFORCING SHOWN IS ILLUSTRATIVE ONLY.



DOUBLE LAYER WALL TO DOUBLE LAYER WALL

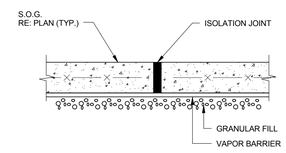


SINGLE LAYER WALL TO DOUBLE LAYER WALL

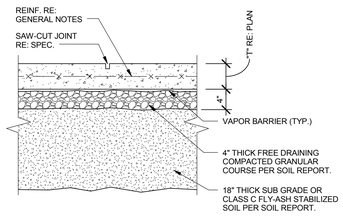


SINGLE LAYER WALL TO SINGLE LAYER WALL

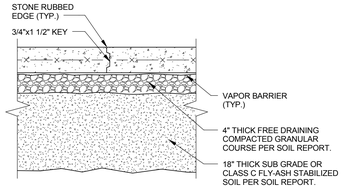
3 TYPICAL INTERSECTING WALL REINF.
1" = 1'-0"



2 TYPICAL ISOLATION JOINT
3/4" = 1'-0"



CONTROL JOINT (S.J.)



CONSTRUCTION JOINT (C.J.)

1 TYP. SLAB-ON-GRADE DETAILS
1" = 1'-0"

GENERAL NOTES

A. GENERAL

1. These notes shall be read in conjunction with the Specifications and the Drawings. In the event of a conflict, notify the Architect for clarification.
2. Before executing anything herein shown, examine actual job conditions. Report any discrepancy, dimensional or otherwise, between architectural and structural Drawings and any other error, omission, or difficulty affecting the work to the Architect and to the Structural Engineer for review.
3. The Owner or his Representative reserves the right to inspect any material, fabrication, or workmanship at any time in field or shop for conformance to the Specifications and Drawings.
4. All details and sections are intended to be typical and shall be construed to apply to any similar situation elsewhere, except where a different detail is shown.

B. DESIGN

1. Codes, specifications and standards (latest editions, U.N.O.)
   a. All design and construction shall conform to the International Building Code (2012) as amended and adopted by the City of Lee's Summit, Missouri.
   b. All construction shall comply with the provisions of the following codes, specifications and standards, except where noted to the contrary on drawings and specifications or where more stringent requirements are specified or shown:
   MCIB "Specifications for Concrete Work"
   ACI 117 "Standard Specifications for Tolerance for Concrete Construction and Materials"
   ACI 301 "Specifications for Structural Concrete for Buildings"
   ACI 318 "Building Code Requirements for Reinforced Concrete"
   ACI 530 "Building Code Requirements for Masonry Structures"
   ASCE 7-02 "Minimum Design Loads for Buildings and Other Structures"
   AISC "Load and Resistance Factor Design (LRFD) Specification for Structural Steel Buildings"
   AISI "Specifications for the Design of Cold-Formed Steel Structural Members"
   SJI "Specifications, Load Tables, and Weight Tables for Steel Joist and Joist Girders"
   SDI "Steel Deck Manual for Floor Decks and Roof Decks"
   AWS D1.1 "Structural Welding Code - Steel "
2. Design Loads:
   a. Roof - Snow (incl. rain on snow)
      - Flat Roof Snow Load, Pf 24 psf
      - Snow Importance Factor, Is 1.20
      - Thermal Factor, Ct 1.00
   b. Wind
      - Ultimate Design Wind Speed (3 second gust)V = 120 mph
      - Service wind speed (3 second gust) V = 90 mph
      - Importance factor (Service wind only), Iw = 1.15
      - Wind Exposure C
      - Internal Pressure Coefficient 0.18
   c. Seismic
      - Seismic Use Group IV
      - Seismic Design Category C
      - Seismic Importance Factor, Ie 1.50
      - Spectral Response Acceleration, Ss 0.12g
      - Spectral Response Acceleration, S1 0.06g
      - Spectral Response Coefficient, Sds 0.096g
      - Spectral Response Coefficient, Sd1 0.068g
      - Site Class C
      - Basic Seismic-Force-Resisting System: Intermediate Reinforced Concrete Moment Frames
      - Design Base Shear (South) V = 176k
      - Design Base Shear (North) V = 176k
      - Seismic Response Coefficient, Cs 0.029
      - Response Modification Factor, R 5.0
      - Analysis Procedure Equivalent Lateral Force
   d. Floor Live Load
      - Floor 100 psf
      - Entrances (exits), stairs 100 psf
      - Roof Live Load 50 psf
   e. Interior Partition 5 psf
   f. Load Combinations:
      Strength Design:
      - 1.4D
      - 1.2D + 1.6L
      - 1.2D + 1.6L + 0.5W
      - 1.2D + 1.6W + 0.5L
      - 1.2D + 1.0E + 0.5L
      - 0.9D + (1.0E OR 1.6W)
      Allowable Stress Design:
      - D
      - D + L
      - D + (W or 0.7E) + L
      - 0.6D + W
      - 0.6D + 0.7E
3. Foundations are designed for the following net allowable bearing capacities:
   a. Drilled piers on limestone. 50,000 psf
   b. Footings on Limestone. 20,000 psf
   c. Footing on Native Clay Soil or Engineered fill. 2,500 psf
4. Foundations and retaining walls have been designed for the following:
   a. Active pressure 45 pcf
   b. At rest 60 pcf

C. EARTHWORK

1. Refer to specification for access to geotechnical report.
2. Foundation design is based on a soils investigation by Terracon.
3. Refer to Drawings and Specifications for details of fill and compaction requirements.
4. Foundation wall backfill shall not be unbalanced by more than two (2) feet on either side at any time or placed before the interior floor slab is placed.
5. Clean footing excavations immediately before concrete is placed to remove all material softened or loosened.
6. Place footings against undisturbed earth (i.e. bottom & sides).

D. DRILLED PIERS

1. Install drilled piers by penetrating into limestone until the entire area of the drilled pier is founded on a level plane of limestone capable of providing indicated bearing capacity.
2. Verify bearing material capacity at each drilled pier. Clean drilled pier holes of loose material and obtain approval by the Architect or his Representative prior to placing concrete.
3. Accurately locate drilled-pier dowels with templates. Protect dowels from construction activity until the structure above is in place. Do not insert dowels into partially hardened concrete or bend in place dowels.

E. CONCRETE

1. Concrete used in the Work shall have the following minimum 28-day ultimate compressive strengths:
   a. Drilled piers, footings, grade beams, interior slabs 4,000 psi
   b. Columns: 4,000 psi
   c. Foundation walls: 4,500 psi
2. Portland Cement: ASTM C 150, Type 1.
3. Air entrain all exterior concrete (admixture: ASTM C 260).
4. Reinforcing bars: ASTM A 615 Specifications, Grade 60, deformed. Bend bars cold.
5. Welded wire fabric (WWF): ASTM A 185.
6. Maintain minimum concrete coverage for reinforcing as indicated, unless noted otherwise.
   a. 3 in. clear where concrete is deposited directly against earth.
   b. 2 in. clear where concrete is exposed to earth or weather but poured against forms for bars larger than #5.
   c. 1-1/2 in. clear where concrete is exposed to earth or weather, but poured against forms for bars #5 or smaller.
   d. 3/4 in. clear for slabs and walls formed above grade not exposed to weather.
   e. 1-1/2 in. clear for beam and columns formed above grade and not exposed to weather.
7. Lap all bars at splices in accordance with ACI 318, but not less than 48 bar diameters nor less than 24 inches unless noted otherwise. All horizontal wall bars shall be developed at corners either by bending not less than 24 inches around corners or with properly placed hooked and lapped corner bars.
8. Top and bottom bars in continuous grade beams shall run continuous through multiple spans, where possible. Otherwise, top bars shall splice within the middle 1/3 span and bottom bars shall splice (by lapping 3'-0) over supports.
9. Pour columns, walls, and pilasters to be monolithic.
10. All concrete walls shall be properly braced and held in line until supporting slabs or floors are in place.
11. All bar steel and WWF shall be properly supported and held accurately in place as recommended by the Concrete Reinforcing Steel Institute, except that maximum spacing of any bar support shall be 3 feet.
    a. Support top slab bars with continuous high chairs.
    b. Support beam bars on heavy beam bolsters.
    c. Support footing and grade beam bottom reinforcing on concrete bricks, concrete blocks, or mounds of poured concrete. Do not use any other support materials without the approval of the Engineer.
    d. Support WWF in slab on grade at the mid-depth of the slab. Hooking and pulling up mesh after concrete has started to take its initial set is prohibited.
12. Openings in slabs and walls: Provide 2 - #5 extra bars each side of opening extending 2 feet past the opening, unless noted otherwise. Do not provide or cut any openings or sleeves in slabs or walls other than those shown on the Structural Drawings, unless approved by the Structural Engineer.
13. Interior slabs on grade: 5 in. minimum thickness walkway reinforced with 6x6xW2.9xW2.9 WWF, and placed on 4 in. free-draining granular sub-base covered by vapor barrier.
14. Where slabs on grade make an abrupt change in direction, such as at doors and corners or ends of walls, provide 1-#4 by 4 feet across the reentrant corner.

F. STEEL

1. Structural steel: ASTM A 992 - wide flange; ASTM A 36 - channels, angles, plates, and bars; ASTM A 501 - pipes; and ASTM A 500, Grade B - tubes.
2. Beam connections shall be as shown on plans.
3. High Strength Bolts (steel-to-steel connections): ASTM A325N, load indicator bolts.
4. Anchor bolts: ASTM A 307
5. Welded connections: AWS Standards and Specifications using E70xx electrodes, unless noted otherwise.
6. Expansion Bolts: Stud type expansion anchors... (Hilti Kwik Bolt II, Simpson Strong-Tie Wedge-All). Tighten all expansion anchors to manufacturer's required torque.
7. Injection Adhesive: Hilti Dowelling Anchor (Hy-200); Simpson Strong-Tie Epoxy Tie Adhesive.
8. Non-shrink grout: CRD-621 Type A, premixed, non-metallic, non-corrosive, non-staining. Pack grout solidly between bearing surfaces to ensure that no voids remain.

G. Light Gauge Structural Steel Framing

1. The contractor is responsible for the design of all structural light gauge steel framing and connections between them and the other structural members. Submit design calculations and drawings, sealed by an engineer licensed in the state of the project location, for review by the architect/ structural engineer of record.

H. CONSTRUCTION

1. See architectural and mechanical requirements for imbedded items and sleeves not shown on the structural drawings and to verify size and location of all openings.
2. Coordinate the sizes and locations of all miscellaneous metal items required for mechanical and electrical.
3. Requirements for embedded items, sleeves, block outs, duct openings, etc., in the concrete frame shall be submitted (plans and details) to the structural engineer for approval at least two weeks prior to the proposed date of casting concrete. No such items, other than those shown, shall be provided in the structure without the approval of the structural engineer.
4. Provide adequate shoring or bracing during construction to resist forces such as wind and unbalanced loading due to construction.
5. Field verify the location and depth (or height) of all utilities prior to beginning construction in order to provide adequate clearances and to insure noninterruption of service.

I. SPECIAL INSPECTION

1. The following tests and inspection shall be performed by an independent inspection agency employed by the owner and approved by the structural engineer and the building official. Test and inspection reports shall be submitted to the owner, architect, structural engineer, and building official. Special inspection shall conform to Chapter 17 of the 2012 International Building Code.
2. Special inspection requirement:
   a. Soils - bearing capacity of foundations.
   b. Controlled fill - placement, compaction, moisture content.
3. Reinforced concrete - 2012 IBC Table 1704.4

		Continuous	Periodic
a.	Inspection of reinforcing steel.		X
b.	Inspection of bolts installed in concrete.	X	
c.	Verification of required mix design.		X
d.	Sampling concrete, compressive strength cylinders, slump, air content.	X	
e.	Inspection of concrete placement.	X	
f.	Inspection of curing techniques.		X

4. Structural steel - 2012 IBC Table 1704.3

a.	Material verification - structural steel, high-strength bolts, nuts, washers.		X
b.	Inspection of high-strength bolting - bearing connections.		X
c.	Inspection of steel frame.		X
d.	Inspection of welding:		
	1) Single pass fillet welds >5/16".	X	
	2) Single pass fillet welds <5/16".		X
	3) Floor and Roof deck.	X	
	4) Complete and partial penetration groove welds.	X	
e.	In-plant steel inspection. Note: In-plant inspection is not required if steel fabrication plant has AISC certification for steel and SJI certification for steel joists.		X

Matthew J. Heller - P.E.
License - Missouri # 2008015905

ACI BOLAND ARCHITECTS
1710 Wyandotte
Kansas City, MO 64108
T: 816.763.9600 F: 816.763.9757

ACI/Boland, Inc.
Kansas City | St. Louis
Licensee's Certificate of Authority Number:
Missouri: #000958

MEP CONSULTANT
W.L. Cassell & Associates Inc.
1600 Baltimore, Suite 300
Kansas City, MO 64108
Licensee's Certificate of Authority Number:
00127265
816.842.8437

STRUCTURAL CONSULTANT
Structural Engineering Associates, Inc.
1000 Walnut, Suite 1570
Kansas City, MO 64106
Licensee's Certificate of Authority Number:
000396
816.595.5625

CIVIL CONSULTANT
Shafer, Kline & Warren
11250 Corporate Avenue,
Lenexa, KS 66219
Licensee's Certificate of Authority Number:
F001139850
913.888.7800

Saint Luke's East Hospital
OR Addition #2 Shell & Finish Package
20 W. NE Saint Luke's Blvd.
Lee's Summit, MO 64086

Date	5/02/2017
Job Number	3-16198.00
Drawn By	CMS
Checked By	MJH

Revision

Number	Date	Description
1	3/23/17	Addendum #1
2	5/02/17	Addendum #2

S0.0

GENERAL NOTES AND TYPICAL DETAILS

5/9/2017
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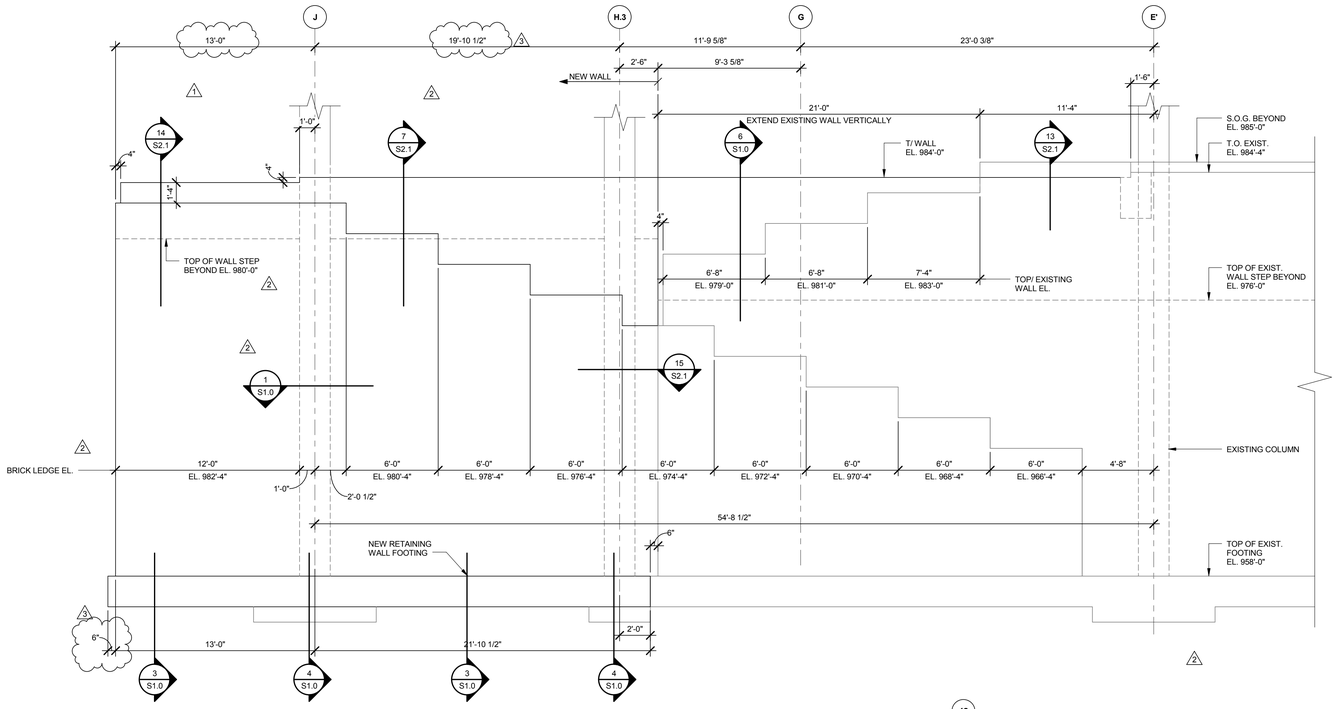
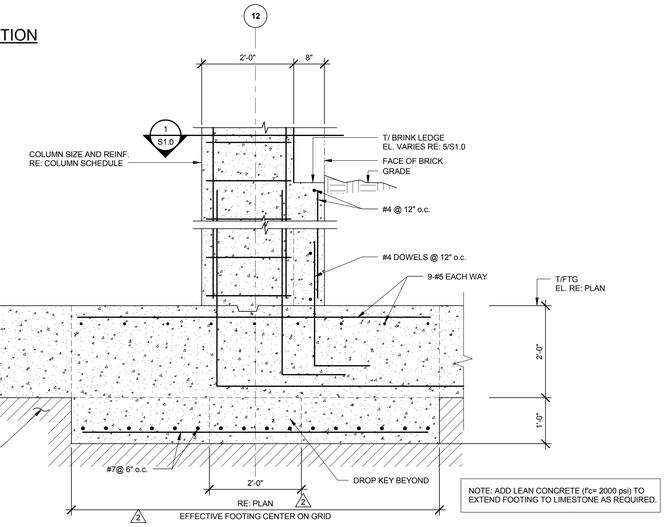
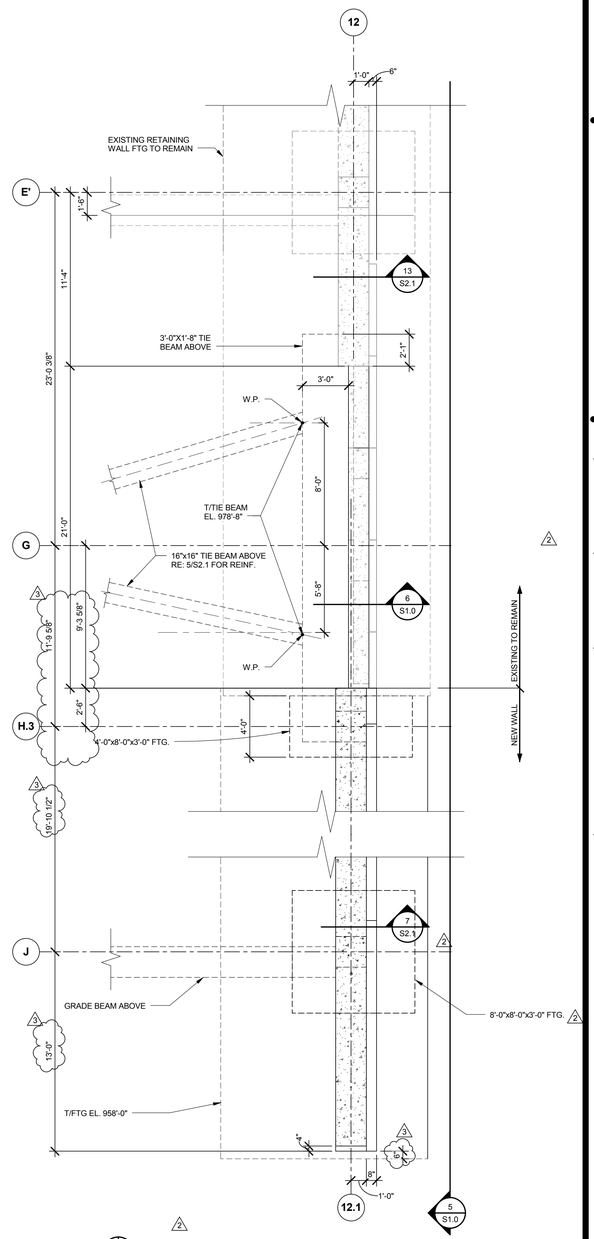


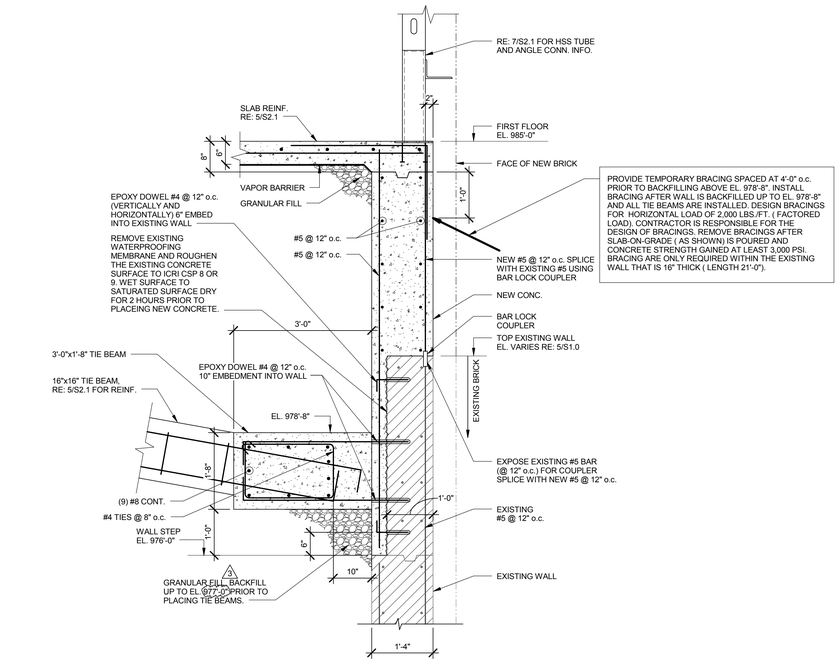
5 SOUTH WALL ELEVATION
1/4" = 1'-0"



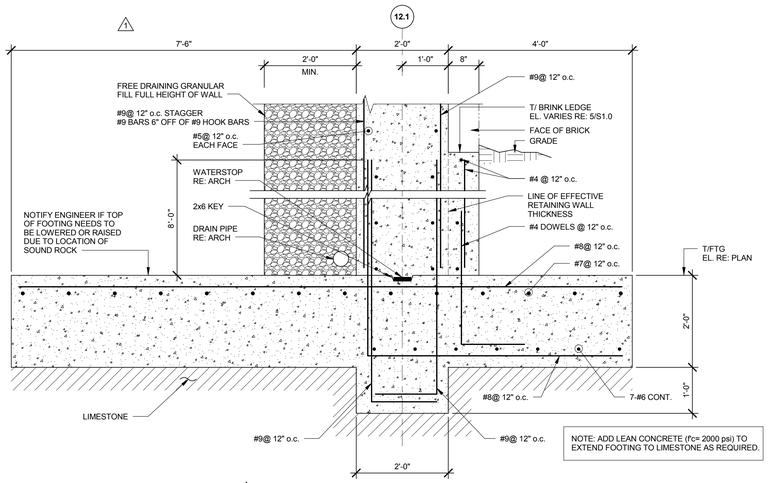
4 SECTION THRU RETAINING WALL AT COLUMN
3/4" = 1'-0"



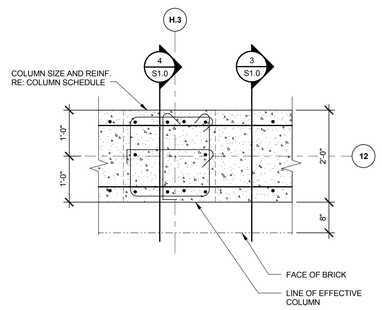
2 NEW RETAINING WALL PLAN
1/4" = 1'-0"



6 SECTION AT SOUTH WALL
3/4" = 1'-0"



3 SECTION THRU RETAINING WALL
3/4" = 1'-0"



1 SECTION AT WALL PILASTER PLAN DETAIL
3/4" = 1'-0"

Matthew J. Heller - P.E.
License - Missouri # 2008015905

ACI BOLAND ARCHITECTS
1710 Wyandotte
Kansas City, MO 64108
T: 816.763.9600 F: 816.763.9757

ACI/Boland, Inc.
Kansas City | St. Louis
Licensee's Certificate of Authority Number:
Missouri: #000958

MEP CONSULTANT
W.L. Cassell & Associates Inc.
1600 Baltimore, Suite 300
Kansas City, MO 64108
Licensee's Certificate of Authority Number:
00127265
816.842.8437

STRUCTURAL CONSULTANT
Structural Engineering Associates, Inc.
1000 Walnut, Suite 1570
Kansas City, MO 64106
Licensee's Certificate of Authority Number:
000396
816.595.5625

CIVIL CONSULTANT
Shafer, Kline & Warren
11250 Corporate Avenue,
Lenexa, KS 66219
Licensee's Certificate of Authority Number:
F001139850
913.888.7800

Saint Luke's East Hospital
OR Addition #2 Shell & Finish Package
20 W. NE Saint Luke's Blvd.
Lee's Summit, MO 64086

Date	5/02/2017
Job Number	3-16198.00
Drawn By	CMS
Checked By	MJH

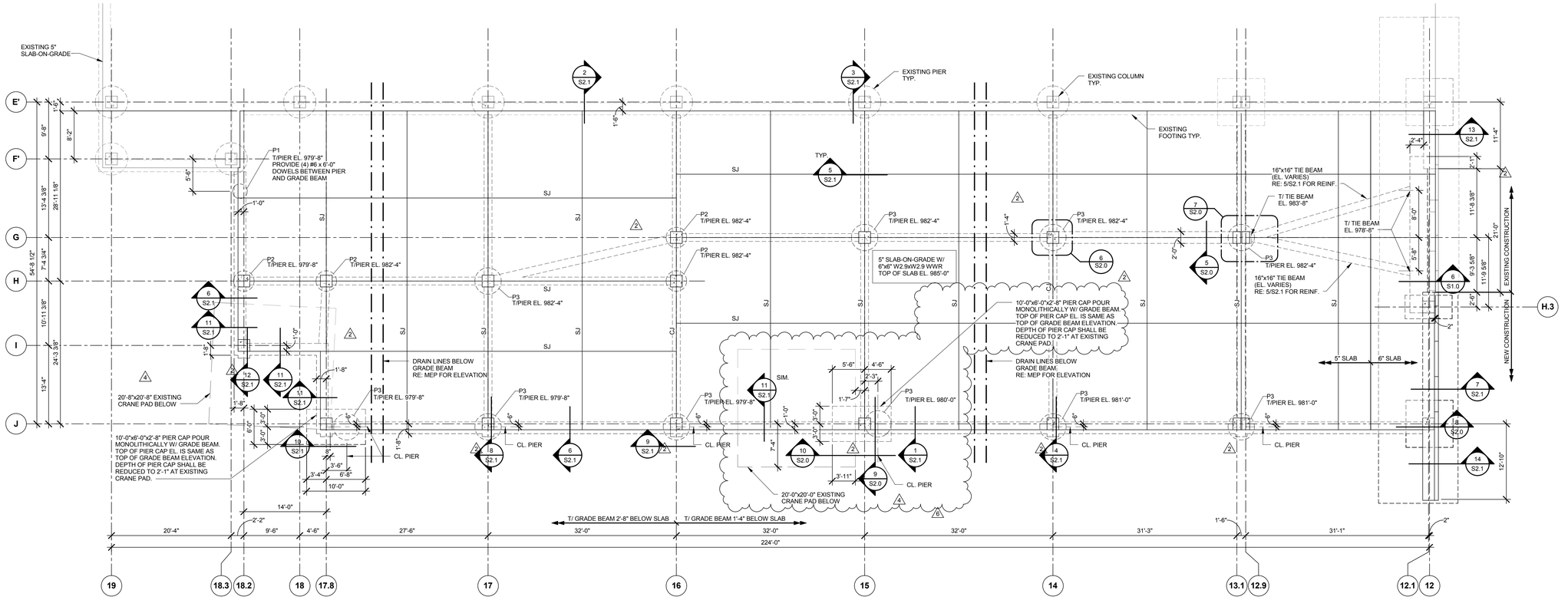
Revision

Number	Date	Description
1	3/23/17	Addendum #1
2	5/02/17	Addendum #2
3	5/09/17	Addendum #3

S1.0

RETAINING WALL PLAN

5/25/2017
2:35:15 PM



NOTES:
1. FINISH FLOOR ELEVATION 985'-0" UNLESS NOTED OTHERWISE.
2. RE: 1/S0.0 FOR TYPICAL CONSTRUCTION JOINT (C.J.) AND CONTROL JOINT (S.J.) IN SLAB-ON-GRADE.
3. P# INDICATES DRILLED PIER DESIGNATION. RE: 2/S2.0 FOR SCHEDULE AND DETAIL.
4. RE: 2/S0.1 FOR TYPICAL BRICK LINTEL SCHEDULE.
5. FIELD VERIFY LOCATIONS OF EXISTING CRANE PAD PRIOR TO DRILLING PIERS. CONTACT STRUCTURAL ENGINEER IF LOCATION DIFFERS FROM WHAT IS SHOWN.
6. AT THE COLUMNS, POUR TIE BEAMS/ GRADE BEAMS WIDER TO MATCH COLUMN SIZE.

1 FOUNDATION AND FIRST FLOOR PLAN
1/8" = 1'-0"

Matthew J. Heller - P.E.
License - Missouri # 2008015905

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1710 Wyandotte
Kansas City, MO 64108
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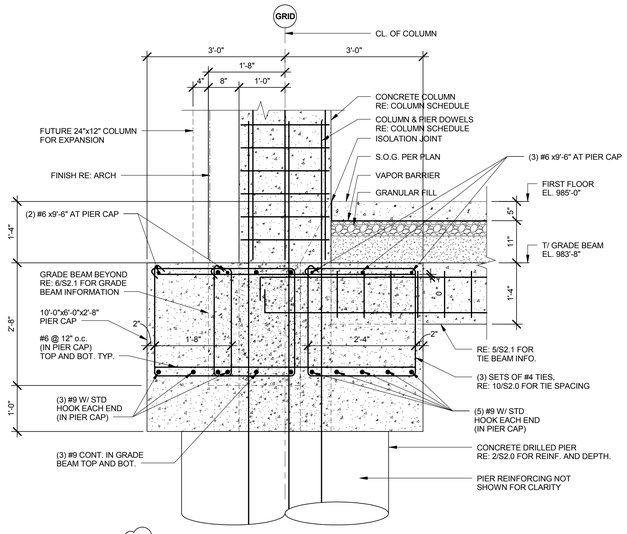
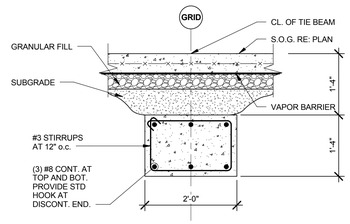
S1.1

FOUNDATION AND FIRST FLOOR PLAN

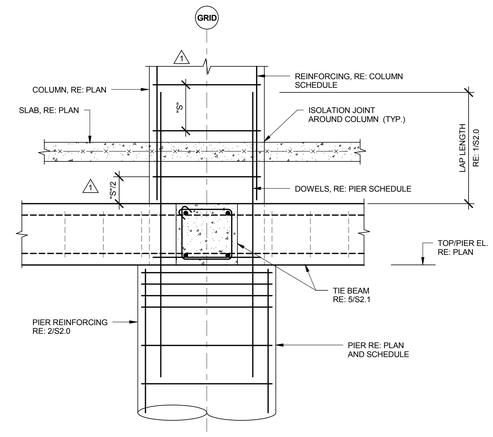
5/25/2017
2:35:16 PM



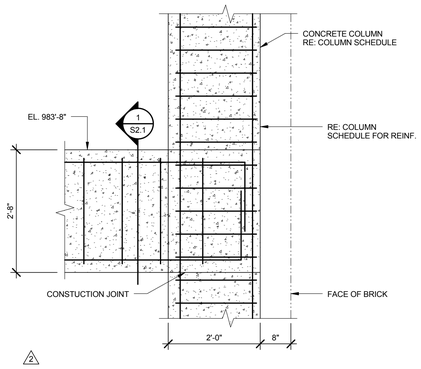
9 SECTION AT EXTERIOR COLUMN
3/4" = 1'-0"



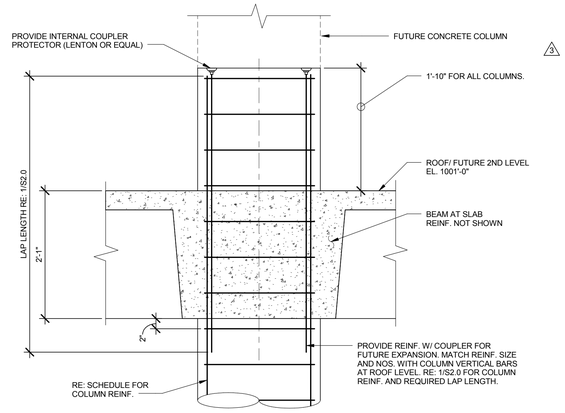
5 TIE BEAM REINFORCING
3/4" = 1'-0"



3 INTERIOR PIER/COLUMN CONNECTION
N.T.S.

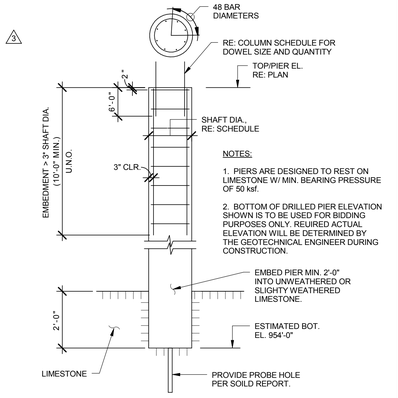


8 GRADE BEAM TO COLUMN CONN.
3/4" = 1'-0"

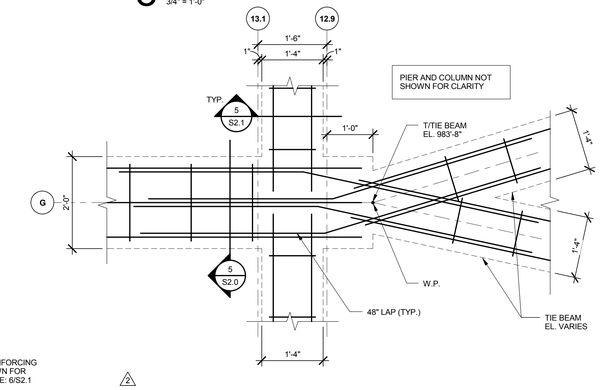


4 TYP. COLUMN DETAIL @ FLOOR (SAME SIZE)
1" = 1'-0"

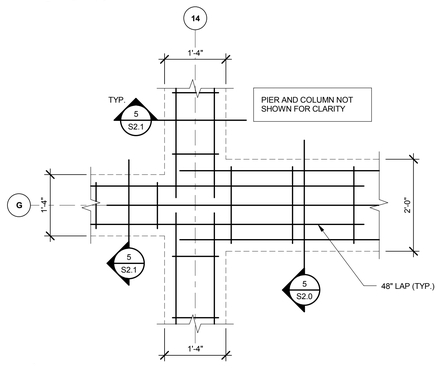
DRILLED PIER SCHEDULE					
PIER NO.	SHAFT DIA.	TOP EL.	SERVICE LOAN (K)	REINFORCEMENT	
				VERTICALS	TIES
P1	2'-6"	SEE PLAN	245	6-#8	#4 @ 14" o.c.
P2	3'-6"	SEE PLAN	480	8-#9	#4 @ 18" o.c.
P3	4'-6"	SEE PLAN	795	10-#10	#4 @ 18" o.c.



2 TYPICAL DRILLED PIER REINFORCEMENT
N.T.S.



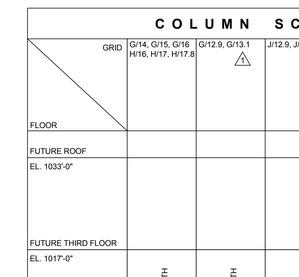
7 TIE BEAM REINFORCEMENT PLAN DETAIL
3/4" = 1'-0"



6 TIE BEAM REINFORCEMENT PLAN DETAIL
3/4" = 1'-0"

COLUMN SCHEDULE								
GRID / FLOOR	G/14, G/15, G/16 H/16, H/17, H/17.8	G/12.9, G/13.1 1	J/12.9, J/13.1 1	J/14, J/15, J/16 J/17, J/17.8,	J/12.1	H.3/12.1	I/18.2 H/18.2
FUTURE ROOF							
EL. 1033'-0" FUTURE THIRD FLOOR							
EL. 1017'-0" ROOF (FUTURE 2ND LEVEL)	(8)-#10 WITH COUPLER	(8)-#10 WITH COUPLER	(8)-#10 WITH COUPLER	(8)-#10 WITH COUPLER	(8)-#9 WITH COUPLER	(8)-#9 WITH COUPLER	(8)-#9 WITH COUPLER
EL. 1001'-0" FIRST LEVEL	24" x 24" 3-#4 TIES @ 10" o.c.	16" x 24" 2-#4 TIES @ 8" o.c. 1	16" x 24" 2-#4 TIES @ 8" o.c. 1	24" x 24" 3-#4 TIES @ 10" o.c.	24" x 24" 3-#4 TIES @ 8" o.c. 1	24" x 24" 3-#4 TIES @ 8" o.c. 1	24" x 24" 3-#4 TIES @ 8" o.c. 1
EL. 985'-0" TOP OF GRADE BEAM	8-#10 DOWELS	6-#10 DOWELS	6-#10 DOWELS	8-#10 DOWELS	8-#9 DOWELS	8-#9 DOWELS	8-#9 DOWELS
EL. (RE: PLAN) TOP OF PIER							
EL. (RE: PLAN)							
PLAN DETAILS	A	B	B	A	A	A	A

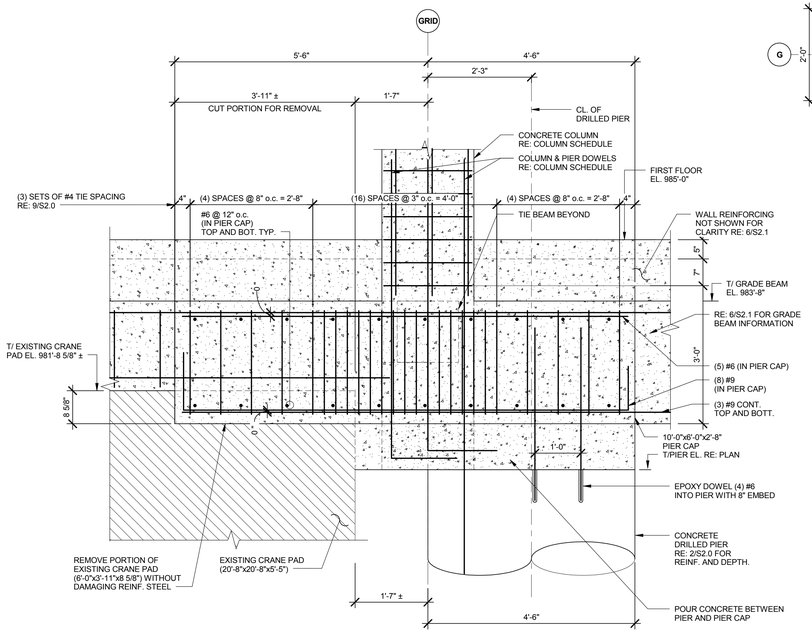
1 COLUMN SCHEDULE
3/4" = 1'-0"



* LAP LENGTHS FOR COLUMN BAR SPLICES	
BAR SIZE	LAP LENGTHS (INCHES)
#7	42
#8	48
#9	54
#10	60
#11	66

* WHERE BARS OF DIFFERENT SIZE ARE LAP SPLICED USE THE LAP LENGTH OF THE SMALLER BAR.

* 1.) RE: PLAN FOR TOP OF FOOTING ELEVATION.
2.) COORDINATE W/ ELETRICAL CONTRACTOR FOR LIGHTING PROTECTION CONDUCTOR TO BE PLACED IN COLUMNS RE: ELECTRIC DRAWINGS FOR LOCATION



10 SECTION AT CRANE PAD AND PIER
3/4" = 1'-0"

Matthew J. Heller - P.E.
License - Missouri # 2008015905

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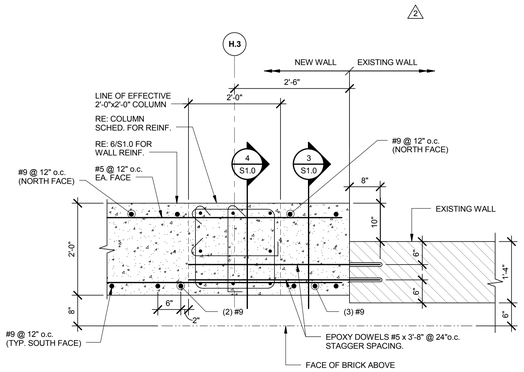
6	5/25/17	Addendum #6

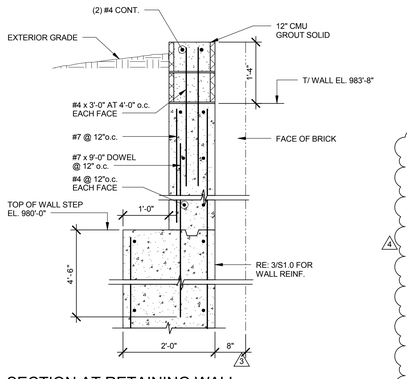
S2.0

FOUNDATION SCHEDULE

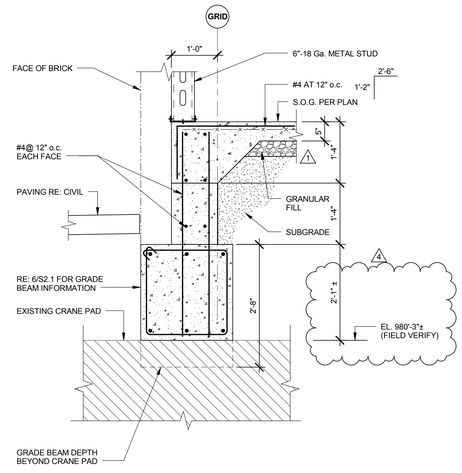
5/15/2017
11:27:52 AM



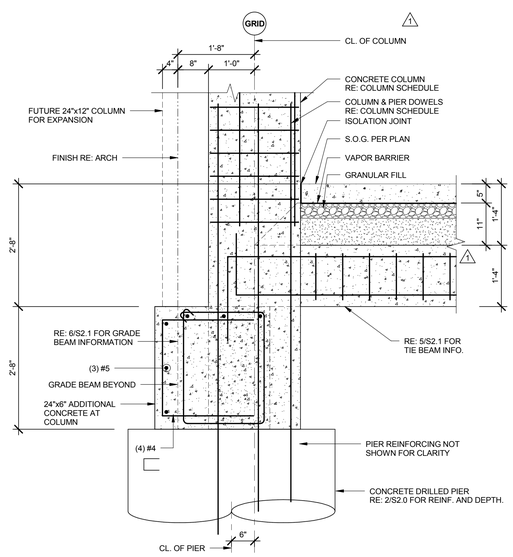
15 WALL TO EXISTING WALL CONN.
3/4" = 1'-0"



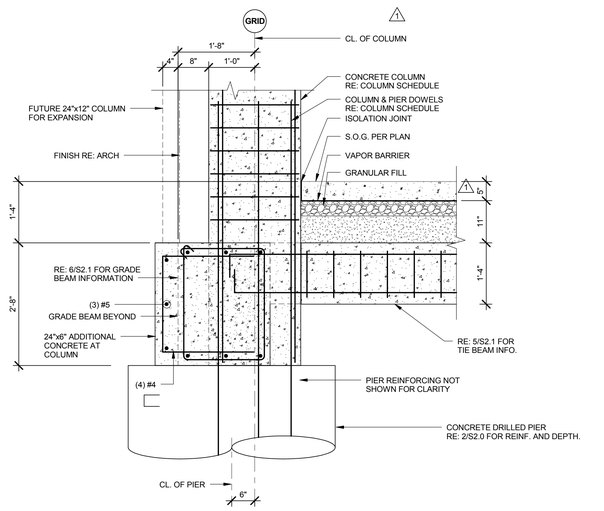
14 SECTION AT RETAINING WALL
3/4" = 1'-0"



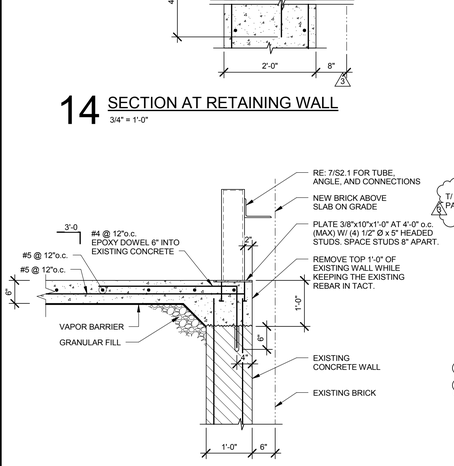
11 LOWER EXTERIOR GRADE BEAM SECTION
3/4" = 1'-0"



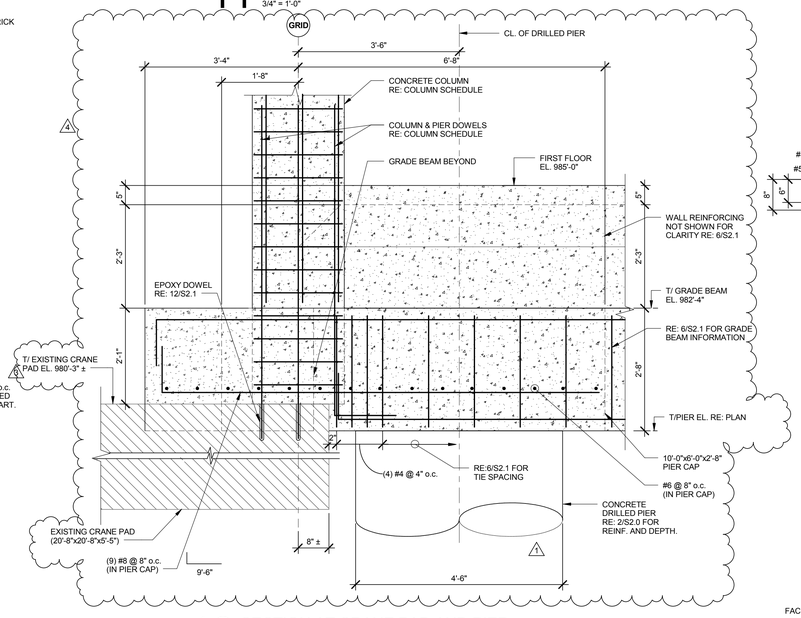
8 SECTION AT EXTERIOR COLUMN
3/4" = 1'-0"



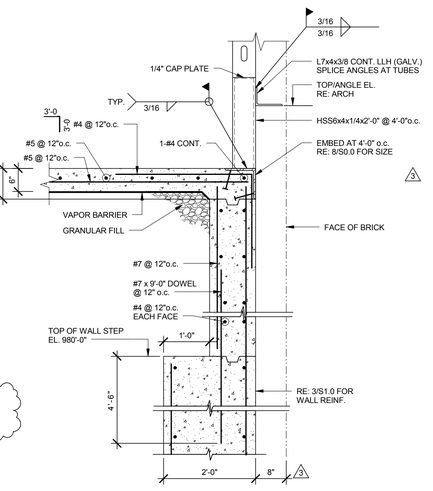
4 SECTION AT EXTERIOR COLUMN
3/4" = 1'-0"



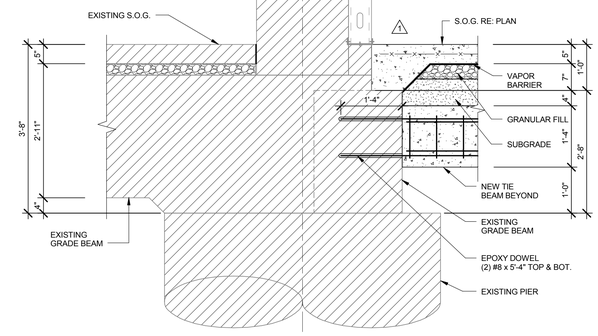
13 SECTION AT EXISTING WALL
3/4" = 1'-0"



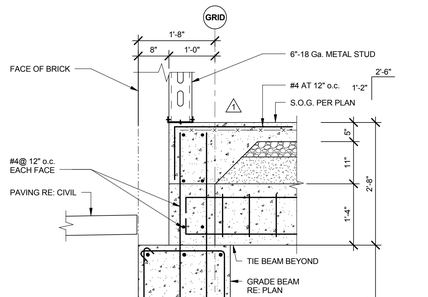
10 SECTION AT CRANE PAD AND PIER
3/4" = 1'-0"



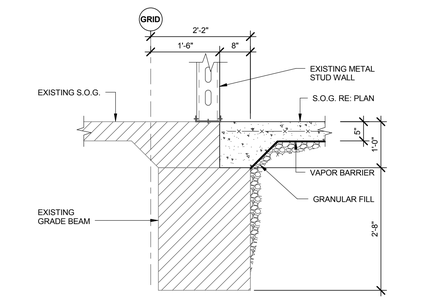
7 SECTION AT EXTERIOR WALL
3/4" = 1'-0"



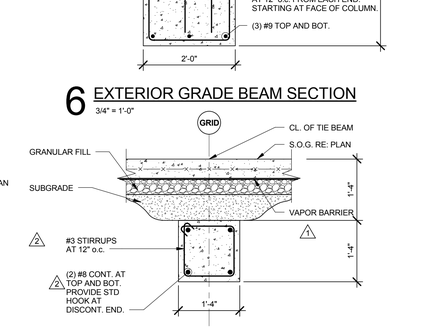
3 SECTION AT EXIST. EXTERIOR COLUMN
3/4" = 1'-0"



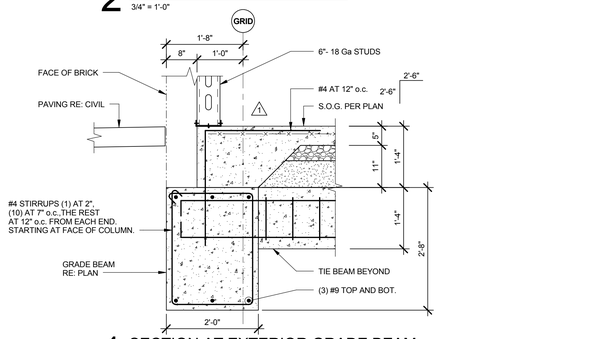
6 EXTERIOR GRADE BEAM SECTION
3/4" = 1'-0"



2 SECTION AT EXISTING WALL
3/4" = 1'-0"

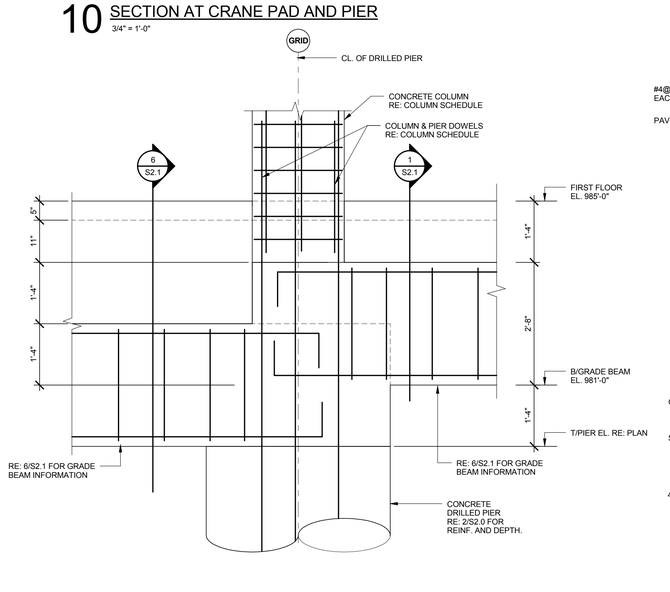


5 TYPICAL INTERIOR TIE BEAM
3/4" = 1'-0"



1 SECTION AT EXTERIOR GRADE BEAM
3/4" = 1'-0"

12 SECTION AT EXTERIOR COLUMN
3/4" = 1'-0"



9 SECTION AT GRADE BEAM STEP
3/4" = 1'-0"

Matthew J. Heller - P.E.
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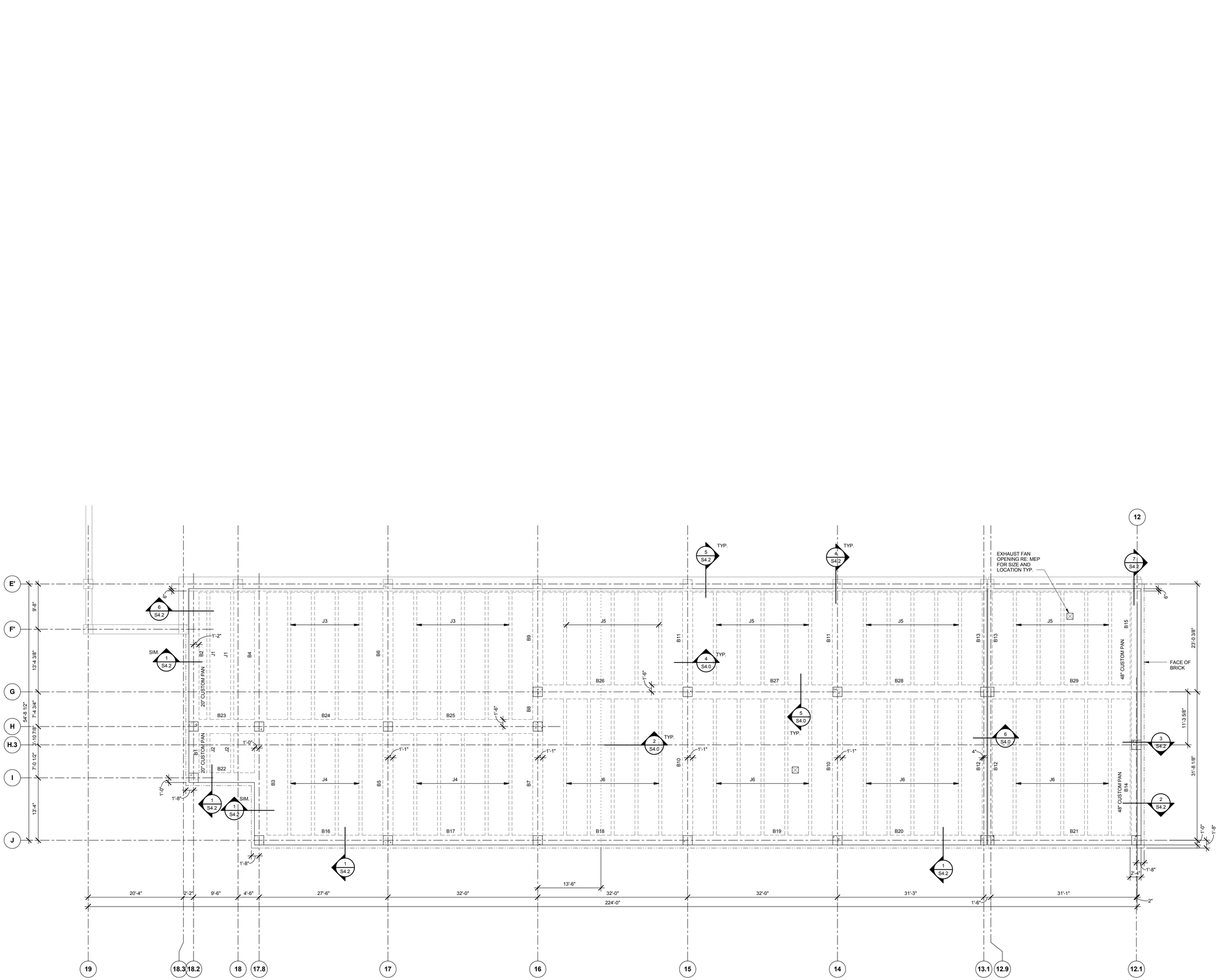
S2.1

FOUNDATION DETAILS

5/2/2017
3:52:11 PM



1 ROOF (FUTURE SECOND FLOOR) FRAMING PLAN
1/8" = 1'-0"

= ⊕

NOTES:
1. ALL PANS ARE 53" WIDE UNLESS NOTED OTHERWISE.
2. "J#" INDICATES JOIST MARK, RE: SCHEDULE FOR REINF.
3. "B#" INDICATES BEAM MARK, RE: SCHEDULE FOR REINF.
4. · · · · · · INDICATES CONSTRUCTION JOINT. CONTINUE BEAM AND SLAB REINFORCING THROUGH THE CONSTRUCTION JOINT.
5. TOP OF SLAB EL. 1001'-0".
6. COORDINATE SLAB PENETRATIONS/OPENINGS THROUGH SLAB WITH MEP/ARCH. DRAWINGS PRIOR TO PLACING CONCRETE.

STATE OF MISSOURI
MATTHEW J HELLER
NUMBER
PE-2008015905
PROFESSIONAL ENGINEER
5/4/17

Matthew J. Heller - P.E.
License - Missouri # 2008015905

ACI BOLAND ARCHITECTS

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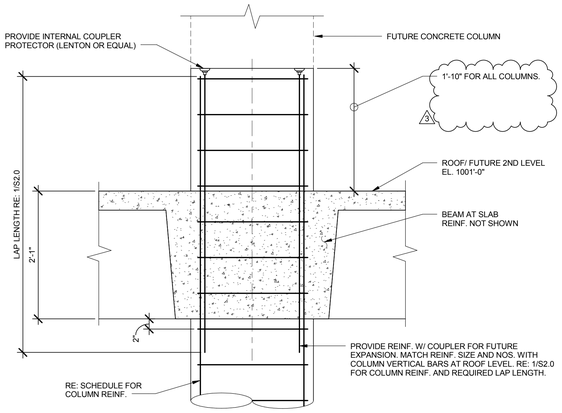
2	5/02/17	Addendum #2

S3.0

ROOF FRAMING PLAN

5/9/2017
4:05:14 PM

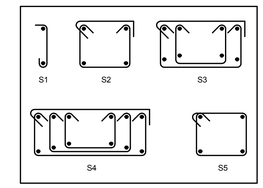


3 TYP. COLUMN DETAIL @ FLOOR (SAME SIZE)
1" = 1'-0"

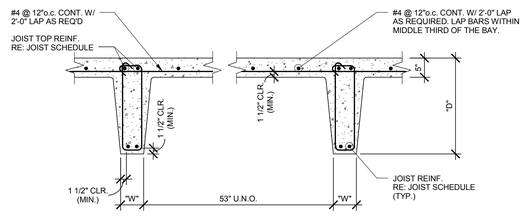
CONCRETE JOIST SCHEDULE

BEAM MARK	SIZE WIDTH	SIZE DEPTH	REINFORCING LONGITUDINAL REINFORCING		TYPE	STIRRUP CONFIGURATION SPACING EA. END	TYPE	COMMENTS
J1	8''	25''	2 - # 6 x 11'-0''	Top @ Grid E'	A	34 - #3 Total	S5	PROVIDE 1-#9 x 8'-0" TOP BAR EPOXY DOWELED 8" INTO EXISTING BEAM ALONG GRID E' (5" BELOW TOP OF BEAM)
			2 - # 6 x 16'-6"	Top @ Midspan	B	1 at 2''o.c.		
			2 - # 8 x 33'-6"	Bottom	C	16 at 10''o.c.		
J2	8''	25''	2 - # 9 x 25'-0''	Top @ Grid I	D	12 - #3 Total	S5	
			2 - # 6 x 15'-0''	Bottom	E	1 at 2''o.c.		
						5 at 10''o.c.		
J3	8''	25''	2 - # 6 x 11'-0''	Top @ Grid E'	A	34 - #3 Total	S5	PROVIDE 1-#9 x 8'-0" TOP BAR THREADED INTO EXISTING COUPLER ALONG GRID E'
			2 - # 6 x 16'-6"	Top @ Midspan	B	1 at 2''o.c.		
			2 - # 9 x 22'-0''	Top @ Grid H	B	16 at 10''o.c.		
			2 - # 8 x 33'-6"	Bottom	C			
J4	8''	25''	2 - # 6 x 13'-0''	Top @ Midspan	B	28 - #3 Total	S5	
			2 - # 6 x 10'-0''	Top @ Grid J	D	1 at 2''o.c.		
			2 - # 6 x 29'-0''	Bottom	E	13 at 10''o.c.		
J5	8''	25''	2 - # 6 x 16'-0''	Top @ Grid E'	A	26 - #3 Total	S5	PROVIDE 1-#9 x 8'-0" TOP BAR THREADED INTO EXISTING COUPLER ALONG GRID E'
			2 - # 9 x 22'-0''	Top @ Grid G	B	1 at 2''o.c.		
			2 - # 6 x 25'-0''	Bottom	C	12 at 10''o.c.		
J6	8''	25''	2 - # 6 x 19'-0''	Top @ Midspan	B	36 - #3 Total	S5	
			2 - # 6 x 12'-0''	Top @ Grid J	D	1 at 2''o.c.		
			2 - # 8 x 36'-0''	Bottom	E	17 at 10''o.c.		

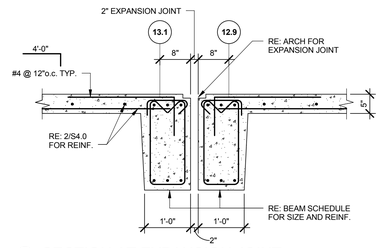
BAR TYPE	SKETCH
A	
B	
C	
D	
E	
F	
G	



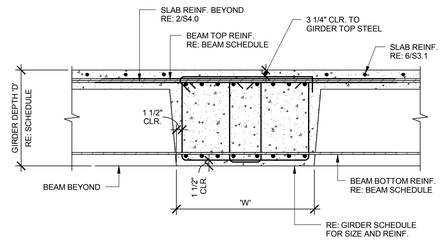
NOTES:
1. SEE TYPICAL DETAILS FOR PLACEMENT.
2. HOOK SHOWN ARE STANDARD HOOK LENGTHS PER ACI-318.



2 JOIST SCHEDULE & DETAIL
3/4" = 1'-0"



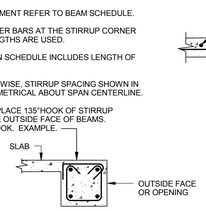
6 SECTION AT EXPANSION JOINT
3/4" = 1'-0"

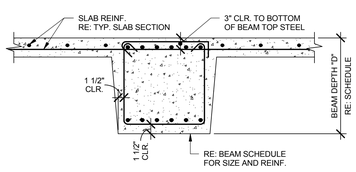


5 TYPICAL GIRDER SECTION @ DOUBLE STIRRUPS
3/4" = 1'-0"

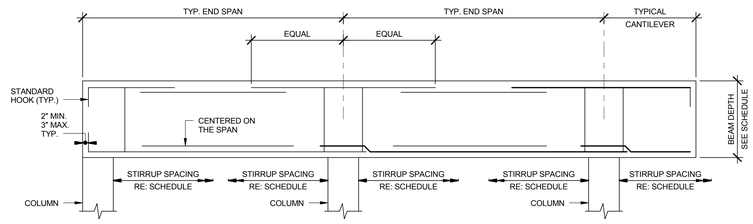
BEAM NOTES:

1. FOR BEAM REINFORCEMENT REFER TO BEAM SCHEDULE.
2. ALLWAYS PLACE LONGER BARS AT THE STIRRUP CORNER IF TWO DIFFERENT LENGTHS ARE USED.
3. BAR LENGTH SHOWN IN SCHEDULE INCLUDES LENGTH OF THE HOOK (IF ANY).
4. UNLESS NOTED OTHERWISE, STIRRUP SPACING SHOWN IN BEAM SCHEDULE IS SYMETRICAL ABOUT SPAN CENTERLINE.
5. IN SPANDREL BEAMS, PLACE 135°HOOK OF STIRRUP CLOSURE BARS ON THE OUTSIDE FACE OF BEAMS. DO NOT ALTERNATE HOOK. EXAMPLE.





4 TYPICAL BEAM SECTION
3/4" = 1'-0"



1 TYPICAL BEAM/GIRDER ELEVATION
3/4" = 1'-0"

STATE OF MISSOURI
MATTHEW J HELLER
NUMBER PE-2008015905
PROFESSIONAL ENGINEER
5/9/17

Matthew J. Heller - P.E.
License - Missouri # 2008015905

ACI BOLAND ARCHITECTS

1710 Wyandotte
Kansas City, MO 64108
T: 816.763.9600 F: 816.763.9757

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1600 Baltimore, Suite 300
Kansas City, MO 64108
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00127265
816.842.8437

STRUCTURAL CONSULTANT

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1000 Walnut, Suite 1570
Kansas City, MO 64106
Licensee's Certificate of Authority Number:
000396
816.595.5625

CIVIL CONSULTANT

Shafer, Kline & Warren
11250 Corporate Avenue,
Lenexa, KS 66219
Licensee's Certificate of Authority Number:
F001139850
913.888.7800

Saint Luke's East Hospital

OR Addition #2 Shell & Finish Package

20 W. NE Saint Luke's Blvd.
Lee's Summit, MO 64086

Date	5/02/2017
Job Number	3-16198.00
Drawn By	CMS
Checked By	MJH

Revision

Number	Date	Description
2	5/02/17	Addendum #2
3	5/09/17	Addendum #3

2 S4.0

ROOF SCHEDULE

5/2/2017
3:52:12 PM

CONCRETE BEAM SCHEDULE

BEAM MARK	SIZE WIDTH	SIZE DEPTH	REINFORCING LONGITUDINAL REINFORCING	REINFORCING TYPE	STIRRUP CONFIGURATION SPACING EA. END	STIRRUP CONFIGURATION TYPE	COMMENTS
B1	26''	25''	4 - # 9 x 24'-6'' Top @ Grid I	A	20 - #4 Total	S2	REFER TO 1/S4.2 FOR ADDITIONAL REINFORCNG
			4 - # 7 x 16'-0'' Bottom	C	1 at 2''o.c.		
					9 at 5''o.c.		
B2	26''	25''	4 - # 8 x 13'-0'' Top @ Grid E'	D	44 - #4 Total	S2	PROVIDE 2-#8 x 7'-0" TOP AND BOTTOM BARS EPOXY DOWELED 8" INTO EXISTING BEAM ALONG GRID E' LOCATE DOWELS 5" BELOW TOP OF BEAM
			4 - # 6 x 16'-0'' Top @ Midspan	B	1 at 2''o.c.		
			4 - # 7 x 33'-0'' Bottom	E	10 at 5''o.c.		
					11 at 10''o.c.		REFER TO 1/S4.2 FOR ADDITIONAL REINFORCNG
B3	32''	25''	4 - # 8 x 22'-6'' Top @ Grid J	A	38 - #4 Total	S2	REFER TO 1/S4.2 FOR ADDITIONAL REINFORCNG
			4 - # 9 x 22'-0'' Top @ Grid H	B	1 at 2''o.c.		
			4 - # 8 x 29'-0'' Bottom	C	11 at 5''o.c.		
					7 at 10''o.c.		
B4	32''	25''	4 - # 8 x 13'-0'' Top @ Grid E'	D	44 - #4 Total	S2	PROVIDE 2-#8 x 7'-0" TOP AND BOTTOM BARS EPOXY DOWELED 8" INTO EXISTING BEAM ALONG GRID E' LOCATE DOWELS 5" BELOW TOP OF BEAM
			4 - # 6 x 16'-0'' Top @ Midspan	B	1 at 2''o.c.		
			4 - # 8 x 33'-0'' Bottom	E	10 at 5''o.c.		
					11 at 10''o.c.		
B5	26''	25''	4 - # 8 x 22'-6'' Top @ Grid J	A	38 - #4 Total	S2	
			4 - # 9 x 22'-0'' Top @ Grid H	B	1 at 2''o.c.		
			4 - # 7 x 29'-0'' Bottom	C	11 at 5''o.c.		
					7 at 10''o.c.		
B6	26''	25''	4 - # 8 x 13'-0'' Top @ Grid E'	D	44 - #4 Total	S2	PROVIDE 2-#8 x 7'-0" TOP AND BOTTOM BARS THREADED INTO EXISTING COUPLERS ALONG GRID E'
			4 - # 6 x 16'-0'' Top @ Midspan	B	1 at 2''o.c.		
			4 - # 7 x 33'-0'' Bottom	E	10 at 5''o.c.		
					11 at 10''o.c.		
B7	26''	25''	4 - # 8 x 22'-6'' Top @ Grid J	A	38 - #4 Total	S2	
			4 - # 7 x 29'-0'' Bottom	C	1 at 2''o.c.		
					11 at 5''o.c.		
					7 at 10''o.c.		
B8	26''	25''	4 - # 9 x 29'-0'' Top	B	12 - #4 Total	S2	CENTER TOP BARS ON BEAM B8 SEE BEAM B9 FOR BOTTOM BARS
					1 at 2''o.c.		
					5 at 5''o.c.		
B9	26''	25''	4 - # 8 x 19'-6'' Top @ Grid E'	D	36 - #4 Total	S2	PROVIDE 2-#8 x 7'-0" TOP AND BOTTOM BARS THREADED INTO EXISTING COUPLERS ALONG GRID E'
			4 - # 7 x 33'-0'' Bottom	E	1 at 2''o.c.		
					11 at 5''o.c.		
					6 at 10''o.c.		
B10	26''	25''	4 - # 8 x 12'-6'' Top @ Grid J	A	46 - #4 Total	S2	
			4 - # 6 x 19'-0'' Top @ Midspan	B	1 at 2''o.c.		
			4 - # 9 x 22'-0'' Top @ Grid G	B	10 at 5''o.c.		
			4 - # 7 x 36'-0'' Bottom	C	12 at 10''o.c.		
B11	26''	25''	4 - # 8 x 19'-6'' Top @ Grid E'	D	36 - #4 Total	S2	PROVIDE 2-#8 x 7'-0" TOP AND BOTTOM BARS THREADED INTO EXISTING COUPLERS ALONG GRID E'
			4 - # 7 x 26'-0'' Bottom	E	1 at 2''o.c.		
					11 at 5''o.c.		
					6 at 10''o.c.		
B12	12''	25''	3 - # 8 x 12'-6'' Top @ Grid J	A	46 - #4 Total	S2	
			3 - # 6 x 19'-0'' Top @ Midspan	B	1 at 2''o.c.		
			3 - # 9 x 22'-0'' Top @ Grid G	B	10 at 5''o.c.		
			3 - # 7 x 36'-0'' Bottom	C	12 at 10''o.c.		
B13	12''	25''	3 - # 8 x 19'-6'' Top @ Grid E'	D	36 - #4 Total	S2	PROVIDE 2-#8 x 7'-0" TOP AND BOTTOM BARS THREADED INTO EXISTING COUPLERS ALONG GRID E'
			3 - # 7 x 26'-0'' Bottom	E	1 at 2''o.c.		
					11 at 5''o.c.		
					6 at 10''o.c.		
B14	24''	36''	4 - # 8 x 19'-0'' Top @ Grid J	A	34 - #4 Total	S2	REFER TO 2/S4.2 FOR ADDITIONAL REINFORCNG
			4 - # 11 x 24'-0'' Top @ Grid H.3	B	1 at 2''o.c.		
			2 - # 11 x 16'-0'' Top @ Grid H.3	B	11 at 5''o.c.		
			4 - # 9 x 26'-0'' Bottom	C	5 at 10''o.c.		
B15	24''	36''	4 - # 8 x 14'-0'' Top @ Grid E'	D	52 - #4 Total	S2	PROVIDE 3-#8 x 7'-0" TOP AND BOTTOM BARS THREADED INTO EXISTING COUPLERS ALONG GRID E'
			4 - # 8 x 18'-0'' Top @ Midspan	B	1 at 2''o.c.		
			4 - # 10 x 38'-0'' Bottom	E	13 at 5''o.c.		
			2 - # 10 x 29'-0'' Bottom @ Midspan	B	12 at 10''o.c.		REFER TO 2/S4.2 FOR ADDITIONAL REINFORCNG
B16	25''	25''	4 - # 8 x 15'-0'' Top @ Grid 17.8	A	42 - #4 Total	S3	REFER TO 1/S4.2 FOR ADDITIONAL REINFORCNG
			4 - # 7 x 12'-0'' Top @ Midspan	B	1 at 2''o.c.		
			4 - # 11 x 24'-0'' Top @ Grid 17	B	10 at 5''o.c.		
			4 - # 9 x 33'-0'' Bottom	C	10 at 10''o.c.		
B17	25''	25''	4 - # 11 x 24'-0'' Top @ Grid 16	B	48 - #4 Total	S3	REFER TO 1/S4.2 FOR ADDITIONAL REINFORCNG
			4 - # 7 x 16'-0'' Top @ Midspan	B	1 at 2''o.c.		
			4 - # 9 x 38'-0'' Bottom	B	11 at 5''o.c.		
					12 at 10''o.c.		
B18	25''	25''	4 - # 11 x 24'-0'' Top @ Grid 15	B	48 - #4 Total	S3	REFER TO 1/S4.2 FOR ADDITIONAL REINFORCNG
			4 - # 7 x 16'-0'' Top @ Midspan	B	1 at 2''o.c.		
			4 - # 9 x 38'-0'' Bottom	B	11 at 5''o.c.		
					12 at 10''o.c.		
B19	25''	25''	4 - # 11 x 24'-0'' Top @ Grid 14	B	48 - #4 Total	S3	REFER TO 1/S4.2 FOR ADDITIONAL REINFORCNG
			2 - # 11 x 16'-0'' Top @ Grid 14	B	1 at 2''o.c.		
			4 - # 7 x 16'-0'' Top @ Midspan	B	11 at 5''o.c.		
			4 - # 9 x 38'-0'' Bottom	B	12 at 10''o.c.		
B20	25''	25''	4 - # 8 x 15'-0'' Top @ Grid 13.1	D	46 - #4 Total	S3	REFER TO 1/S4.2 FOR ADDITIONAL REINFORCNG
			4 - # 7 x 16'-0'' Top @ Midspan	B	1 at 2''o.c.		
			4 - # 9 x 36'-0'' Bottom	E	10 at 5''o.c.		
			2 - # 9 x 26'-0'' Bottom @ Midspan	B	12 at 10''o.c.		
B21	25''	25''	4 - # 9 x 15'-0'' Top @ Grid 12.9	A	46 - #4 Total	S3	REFER TO 1/S4.2 FOR ADDITIONAL REINFORCNG
			4 - # 9 x 15'-0'' Top @ Grid 12.1	D	1 at 2''o.c.		
			4 - # 7 x 14'-0'' Top @ Midspan	B	10 at 5''o.c.		
			3 - # 10 x 33'-0'' Bottom	C	12 at 10''o.c.		
			3 - # 10 x 33'-0'' Bottom	E			
B22	25''	25''	4 - # 8 x 13'-0'' Top @ Grid 18.2	A	26 - #4 Total	S3	REFER TO 1/S4.2 FOR ADDITIONAL REINFORCNG
			4 - # 8 x 13'-0'' Top @ Grid 17.8	C	1 at 2''o.c.		
			2 - # 8 x 17'-0'' Bottom	D	11 at 5''o.c.		
			2 - # 8 x 17'-0'' Bottom	E	1 at 10''o.c.		
B23	36''	25''	4 - # 9 x 12'-0'' Top @ Grid 18.2	A	26 - #4 Total	S3	
			4 - # 11 x 24'-0'' Top @ Grid 17.8	B	1 at 2''o.c.		
			2 - # 11 x 16'-0'' Top @ Grid 17.8	B	11 at 5''o.c.		
			4 - # 10 x 19'-0'' Bottom	C	1 at 10''o.c.		
B24	36''	25''	4 - # 11 x 24'-0'' Top @ Grid 17	B	42 - #4 Total	S3	
			4 - # 11 x 16'-0'' Top @ Grid 17	B	1 at 2''o.c.		
			4 - # 8 x 12'-0'' Top @ Midspan	B	10 at 5''o.c.		
			4 - # 10 x 34'-0'' Bottom	B	10 at 10''o.c.		
			2 - # 10 x 21'-0'' Bottom @ Midspan	B			

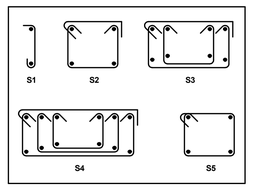
3 BEAM SCHEDULE
3/4" = 1'-0"

CONCRETE BEAM SCHEDULE

BEAM MARK	SIZE WIDTH	SIZE DEPTH	REINFORCING LONGITUDINAL REINFORCING	REINFORCING TYPE	STIRRUP CONFIGURATION SPACING EA. END	STIRRUP CONFIGURATION TYPE	COMMENTS
B25	36''	25''	4 - # 9 x 15'-0'' Top @ Grid 16	D	48 - #4 Total	S3	
			4 - # 9 x 11'-0'' Top @ Grid 16	D	1 at 2''o.c.		
			4 - # 8 x 16'-0'' Top @ Midspan	B	11 at 5''o.c.		
			4 - # 10 x 37'-0'' Bottom	E	12 at 10''o.c.		
			3 - # 10 x 26'-0'' Bottom @ Midspan	B			
B26	36''	25''	4 - # 9 x 15'-0'' Top @ Grid 16	A	48 - #4 Total	S3	
			4 - # 9 x 11'-0'' Top @ Grid 16	A	1 at 2''o.c.		
			4 - # 8 x 16'-0'' Top @ Midspan	B	11 at 5''o.c.		
			4 - # 11 x 24'-0'' Top @ Grid 15	B	12 at 10''o.c.		
			4 - # 11 x 16'-0'' Top @ Grid 15	B			
			4 - # 10 x 37'-0'' Bottom	C			
			3 - # 10 x 26'-0'' Bottom @ Midspan	B			
B27	36''	25''	4 - # 11 x 24'-0'' Top @ Grid 14	B	48 - #4 Total	S3	
			4 - # 11 x 16'-0'' Top @ Grid 14	B	1 at 2''o.c.		
			4 - # 8 x 16'-0'' Top @ Midspan	B	11 at 5''o.c.		
			4 - # 10 x 38'-0'' Bottom	B	12 at 10''o.c.		
			2 - # 10 x 26'-0'' Bottom @ Midspan	B			
B28	36''	25''	4 - # 9 x 15'-0'' Top @ Grid 13.1	D	46 - #4 Total	S3	
			2 - # 9 x 11'-0'' Top @ Grid 13.1	D	1 at 2''o.c.		
			4 - # 8 x 16'-0'' Top @ Midspan	B	10 at 5''o.c.		
			4 - # 10 x 37'-0'' Bottom	E	12 at 10''o.c.		
			3 - # 10 x 26'-0'' Bottom @ Midspan	B			
B29	36''	25''	6 - # 9 x 15'-0'' Top @ Grid 12.9	A	46 - #4 Total	S3	
			6 - # 9 x 15'-0'' Top @ Grid 12.1	D	1 at 2''o.c.		
			4 - # 8 x 14'-0'' Top @ Midspan	B	10 at 5''o.c.		
			4 - # 11 x 33'-0'' Bottom	C	12 at 10''o.c.		
			4 - # 11 x 33'-0'' Bottom	E			
			2 - # 11 x 30'-0'' Bottom @ Midspan	B			

BAR TYPE	SKETCH
A	
B	
C	
D	
E	
F	
G	

2 BEAM/SLAB BAR TYPE DIAGRAM
3/4" = 1'-0"



NOTES:
1. SEE TYPICAL DETAILS FOR PLACEMENT.
2. HOOK SHOWN ARE STANDARD HOOK LENGTHS PER ACI-318.

1 BEAM/GIRDER STIRRUP TYPE DIAGRAM
3/4" = 1'-0"

STATE OF MISSOURI
MATTHEW J HELLER
NUMBER
PE-2008015905
NATIONAL ENGINEER
5/4/17

Matthew J. Heller - P.E.
License - Missouri # 2008015905

ACI BOLAND ARCHITECTS

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Kansas City, MO 64108
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Saint Luke's East Hospital

OR Addition #2 Shell & Finish Package

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Date	5/02/2017
Job Number	3-16198.00
Drawn By	Author
Checked By	Checker

Revision

Number	Date	Description
2	5/02/17	Addendum #2

S4.1

ROOF SCHEDULE

5/9/2017
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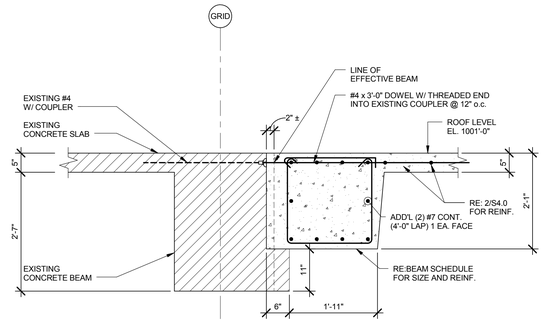
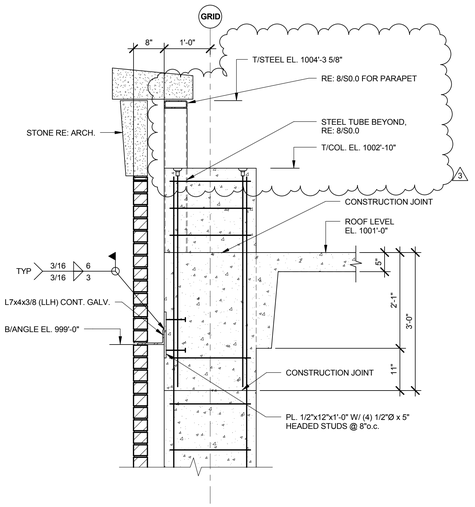
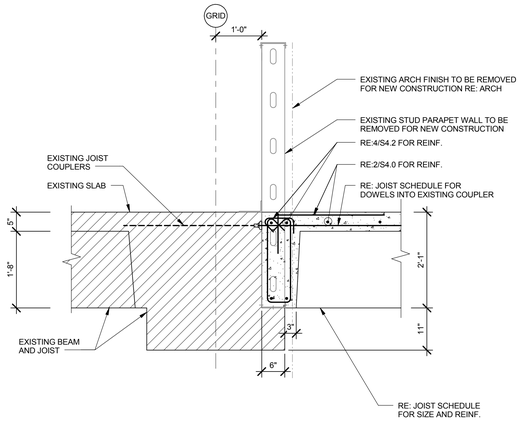


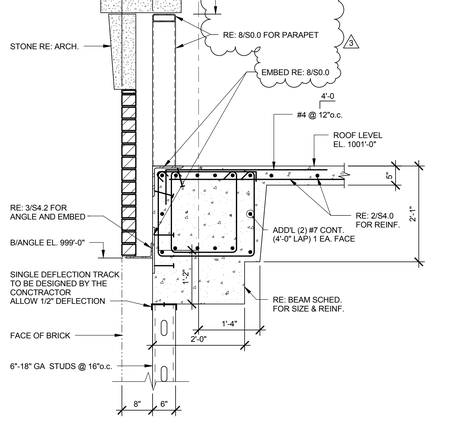
6 SECTION ALONG GRID 18.3
3/4" = 1'-0"



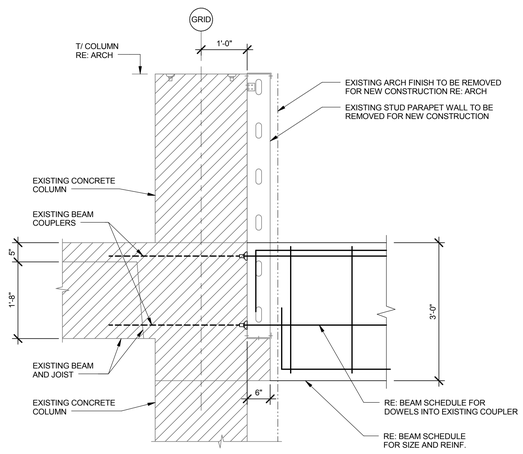
3 SECTION AT SOUTH WALL AT COLUMN
3/4" = 1'-0"



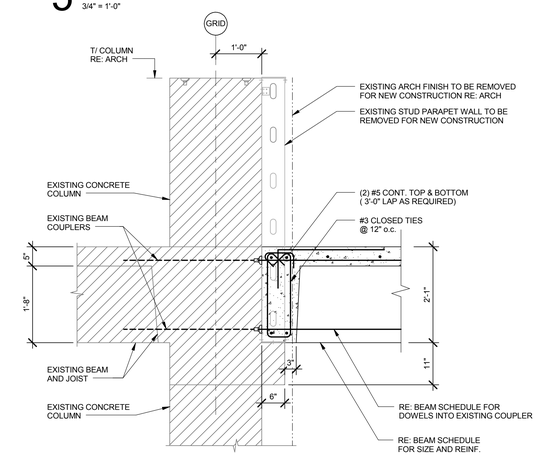
5 SECTION ALONG GRID E' AT EXT. BEAM
3/4" = 1'-0"



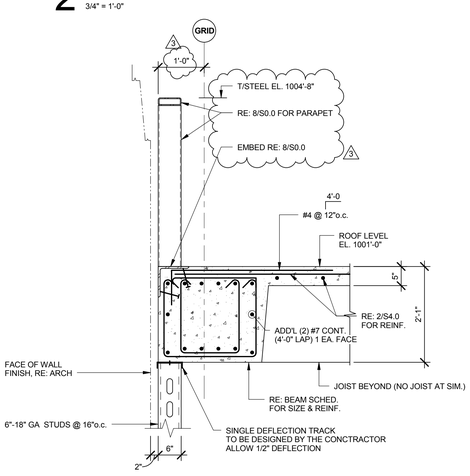
2 SECTION AT SOUTH WALL
3/4" = 1'-0"



7 SECTION ALONG GRID E' AT COLUMN
3/4" = 1'-0"



4 SECTION ALONG GRID E' AT COLUMN
3/4" = 1'-0"



1 SECTION AT EXTERIOR WALL
3/4" = 1'-0"

STATE OF MISSOURI
MATTHEW J HELLER
NUMBER
PE-2008015905
PROFESSIONAL ENGINEER
5/9/17

Matthew J. Heller - P.E.
License - Missouri # 2008015905

ACI BOLAND ARCHITECTS
1710 Wyandotte
Kansas City, MO 64108
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ACI/Boland, Inc.
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11250 Corporate Avenue,
Lenexa, KS 66219
Licensee's Certificate of Authority Number:
F001139850
913.888.7800

Saint Luke's East Hospital

OR Addition #2 Shell & Finish Package

20 W. NE Saint Luke's Blvd.
Lee's Summit, MO 64086

Date	5/02/2017
Job Number	3-16198.00
Drawn By	CMS
Checked By	MJH

Revision

Number	Date	Description
2	5/02/17	Addendum #2
3	5/09/17	Addendum #3

S4.2

ROOF DETAILS

STRUCTURAL
ENGINEERING
ASSOCIATES

1000 Walnut, Suite 1570
Kansas City, Missouri 64106
Phone: 816/421-1042 Fax: 816/421-1061

FIELD REPORT

PROJECT: St. Luke's East-OR Addition #2 **DATE:** 05/24/17 **JOB NO:** 2017068.00

LOCATION: 20 W. NE Saint Luke's Blvd. **CONTRACTOR:** J.E. Dunn

TO: Mark Brooks **OWNER:** Saint Luke's Health System

Saint Luke's Health System **WEATHER:** Sunny, 70's

901 E. 104th St. **PRESENT:** Construction Personnel

Kansas City, MO 64131

The following was noted:

1. Representative arrived on site to observe reinforcing steel placement, placement of concrete, and epoxy bars.
2. Observed placement of approximately 30 cubic yards of 4000-psi concrete for grade beams between Grids J/14-15, E'-J/14, and E'-I/17. Concrete was mechanically vibrated during placement.
3. Reinforcing bars were placed in substantial accordance with Addendum #4 dated 5/15/17 per details 1/S2.1, 4/S2.1, and 5/S2.1.
4. Epoxy bars were epoxied into existing footing at E'/14 and E'/17 in substantial accordance with Addendum #4 dated 5/15/17 per detail 3/S2.1

cc: Mark Hunter-ACI Boland; Mike Schmelig-JE Dunn; Daniel Polletta-JE Dunn; David Jardon-JE Dunn; Bill Lipp-JE Dunn; Brady Myers-JE Dunn; Garrett Estabrook-JE Dunn; Andy Nimz-G.J. Shaw; Pat Huss-Fordyce; Krishna Saha – SEA; Bryan Evans-SEA

Signature:

CONCRETE FIELD TEST DATA

STRUCTURAL ENGINEERING ASSOCIATES
1000 Walnut, Suite 1570
Kansas City, Missouri 64106
Phone: 816/421-1042
Fax: 816/421-1061

SUPPLIER: Fordyce | **PROJECT:** St. Luke's East-OR Addition #2 | **JOB NO:** 2017068.00

DATE: 5/24/2017 | **CLASS OF MIX:** 4000 psi | **MADE BY:** BRE

TICKET NO.	TRUCK NO.	AMT. NO.	BATCH TIME	TEST TIME	AIR TEMP.	CONC. TEMP	SLUMP IN.	AIR. %	CYLINDER SET	LOCATION/REMARKS
27931	111	10/10	8:11	8:45	53	75	3		OR1	Grade beams at J/14-15
27935	109	10/20	8:35							
27982	83	10/30	14:14	3:00	62	78	3.5		OR2	Grade beams at E'-J/14 and
										E'-I/17

STRUCTURAL
ENGINEERING
ASSOCIATES

1000 Walnut, Suite 1570
Kansas City, Missouri 64106
Phone: 816/421-1042 Fax: 816/421-1061

FIELD REPORT

PROJECT: St. Luke's East-OR Addition #2 **DATE:** 05/25/17 **JOB NO:** 2017068.00

LOCATION: 20 W. NE Saint Luke's Blvd. **CONTRACTOR:** J.E. Dunn

TO: Mark Brooks **OWNER:** Saint Luke's Health System

Saint Luke's Health System **WEATHER:** Sunny, 70's

901 E. 104th St. **PRESENT:** Construction Personnel

Kansas City, MO 64131

The following was noted:

1. Representative arrived on site to observe reinforcing steel placement, placement of concrete, and epoxy bars.
2. Observed placement of approximately 13 cubic yards of 4000-psi concrete for grade beams between Grids E'-H/15 and G/13-16. Concrete was mechanically vibrated during placement.
3. Reinforcing bars were placed in substantial accordance with Addendum #4 dated 5/15/17 per details 5/S2.0, 1/S2.1, 4/S2.1, and 5/S2.1.
4. Epoxy bars were epoxied into existing footing at E'/15 in substantial accordance with Addendum #4 dated 5/15/17 per detail 3/S2.1

cc: Mark Hunter-ACI Boland; Mike Schmelig-JE Dunn; Daniel Polletta-JE Dunn; David Jardon-JE Dunn; Bill Lipp-JE Dunn; Brady Myers-JE Dunn; Garrett Estabrook-JE Dunn; Andy Nimz-G.J. Shaw; Pat Huss-Fordyce; Krishna Saha – SEA; Bryan Evans-SEA

Signature: BJE

CONCRETE FIELD TEST DATA

STRUCTURAL ENGINEERING ASSOCIATES
1000 Walnut, Suite 1570
Kansas City, Missouri 64106
Phone: 816/421-1042
Fax: 816/421-1061

SUPPLIER: Fordyce | **PROJECT:** St. Luke's East-OR Addition #2 | **JOB NO:** 2017068.00

DATE: 5/25/2017 | **CLASS OF MIX:** 4000 psi | **MADE BY:** BRE

TICKET NO.	TRUCK NO.	AMT. NO.	BATCH TIME	TEST TIME	AIR TEMP.	CONC. TEMP	SLUMP IN.	AIR. %	CYLINDER SET	LOCATION/REMARKS
28028	126	3/3	10:25							
28066	109	10/13	13:44	2:25	73	76	3.5		OR3	Grade beams between grids
										E'-H/15 and G/13-16

STRUCTURAL
ENGINEERING
ASSOCIATES

1000 Walnut, Suite 1570
Kansas City, Missouri 64106
Phone: 816/421-1042 Fax: 816/421-1061

FIELD REPORT

PROJECT: St. Luke's East-OR Addition #2 **DATE:** 05/26/17 **JOB NO:** 2017068.00

LOCATION: 20 W. NE Saint Luke's Blvd. **CONTRACTOR:** J.E. Dunn

TO: Mark Brooks **OWNER:** Saint Luke's Health System

Saint Luke's Health System **WEATHER:** Sunny, 70's

901 E. 104th St. **PRESENT:** Construction Personnel

Kansas City, MO 64131

The following was noted:

1. Representative arrived on site to observe reinforcing steel placement, placement of concrete, and epoxy bars.
2. Observed placement of approximately 11 cubic yards of 4000-psi concrete for grade beams between Grids E'-I/16, H/16-17, and G/16-H/17. Concrete was mechanically vibrated during placement.
3. Reinforcing bars were placed in substantial accordance with Addendum #4 dated 5/15/17 per details 1/S2.1, 4/S2.1, and 5/S2.1.
4. Epoxy bars were epoxied into existing footing at E'/16 in substantial accordance with Addendum #4 dated 5/15/17 per detail 3/S2.1

cc: Mark Hunter-ACI Boland; Mike Schmelig-JE Dunn; Daniel Polletta-JE Dunn; David Jardon-JE Dunn; Bill Lipp-JE Dunn; Brady Myers-JE Dunn; Garrett Estabrook-JE Dunn; Andy Nimz-G.J. Shaw; Pat Huss-Fordyce; Krishna Saha – SEA; Bryan Evans-SEA

Signature:

CONCRETE FIELD TEST DATA

STRUCTURAL ENGINEERING ASSOCIATES
1000 Walnut, Suite 1570
Kansas City, Missouri 64106
Phone: 816/421-1042
Fax: 816/421-1061

SUPPLIER: Fordyce | **PROJECT:** St. Luke's East-OR Addition #2 | **JOB NO:** 2017068.00

DATE: 5/26/2017 | **CLASS OF MIX:** 4000 psi | **MADE BY:** BRE

TICKET NO.	TRUCK NO.	AMT. NO.	BATCH TIME	TEST TIME	AIR TEMP.	CONC. TEMP	SLUMP IN.	AIR. %	CYLINDER SET	LOCATION/REMARKS
28148	104	5.5/5.5	12:08	1:10	78	84	3		OR4	Grade beams between Grids
28150	134	5.5/11	12:19							E'-I/16, H/16-17, and G/16-H/
										17

STRUCTURAL
ENGINEERING
ASSOCIATES

1000 Walnut, Suite 1570
Kansas City, Missouri 64106
Phone: 816/421-1042 Fax: 816/421-1061

FIELD REPORT

PROJECT: St. Luke's East-OR Addition #2 **DATE:** 05/30/17 **JOB NO:** 2017068.00

LOCATION: 20 W. NE Saint Luke's Blvd. **CONTRACTOR:** J.E. Dunn

TO: Mark Brooks **OWNER:** Saint Luke's Health System

Saint Luke's Health System **WEATHER:** Sunny, 70's

901 E. 104th St. **PRESENT:** Construction Personnel

Kansas City, MO 64131

The following was noted:

1. Representative arrived on site to observe epoxy bars.
2. Epoxy bars were epoxied into existing footing at F'/18.2 and I/18.2 in substantial accordance with Addendum #4 dated 5/15/17 per detail 12/S2.1 and approved Foundation Reinforcing Shop Drawings dated 5/12/17.

cc: Mark Hunter-ACI Boland; Mike Schmelig-JE Dunn; Daniel Polletta-JE Dunn; David Jardon-JE Dunn; Bill Lipp-JE Dunn; Brady Myers-JE Dunn; Garrett Estabrook-JE Dunn; Andy Nimz-G.J. Shaw; Pat Huss-Fordyce; Krishna Saha – SEA; Bryan Evans-SEA

Signature: BJ EJ

STRUCTURAL
ENGINEERING
ASSOCIATES

1000 Walnut, Suite 1570
Kansas City, Missouri 64106
Phone: 816/421-1042 Fax: 816/421-1061

FIELD REPORT

PROJECT: St. Luke's East-OR Addition #2 **DATE:** 05/31/17 **JOB NO:** 2017068.00

LOCATION: 20 W. NE Saint Luke's Blvd. **CONTRACTOR:** J.E. Dunn

TO: Mark Brooks **OWNER:** Saint Luke's Health System

Saint Luke's Health System **WEATHER:** Sunny, 70's

901 E. 104th St. **PRESENT:** Construction Personnel

Kansas City, MO 64131

The following was noted:

1. Representative arrived on site to observe reinforcing steel placement and placement of concrete.
2. Observed placement of approximately 27 cubic yards of 4000-psi concrete for grade beams between Grids H/18.2-17, F'-I/18.2, and I/18.2-17.8. Concrete was mechanically vibrated during placement.
3. Reinforcing bars were placed in substantial accordance with Addendum #4 dated 5/15/17 per details 1/S2.1, 4/S2.1, 5/S2.1, 6/S2.1, 11/S2.1, and 12/S2.1.
4. Concrete compressive strength testing was completed for sets OR1 and OR2. See attached Report of Concrete Compressive Strength sheet for testing results.

cc: Mark Hunter-ACI Boland; Mike Schmelig-JE Dunn; Daniel Polletta-JE Dunn; David Jardon-JE Dunn; Bill Lipp-JE Dunn; Brady Myers-JE Dunn; Garrett Estabrook-JE Dunn; Andy Nimz-G.J. Shaw; Pat Huss-Fordyce; Krishna Saha – SEA; Bryan Evans-SEA

Signature: BJE

CONCRETE FIELD TEST DATA

STRUCTURAL ENGINEERING ASSOCIATES
1000 Walnut, Suite 1570
Kansas City, Missouri 64106
Phone: 816/421-1042
Fax: 816/421-1061

SUPPLIER: Fordyce | **PROJECT:** St. Luke's East-OR Addition #2 | **JOB NO:** 2017068.00

DATE: 5/31/2017 | **CLASS OF MIX:** 4000 psi | **MADE BY:** BRE

TICKET NO.	TRUCK NO.	AMT. NO.	BATCH TIME	TEST TIME	AIR TEMP.	CONC. TEMP	SLUMP IN.	AIR. %	CYLINDER SET	LOCATION/REMARKS
28255	127	9/9	9:27	10:10	73	82	3		OR5	Grade beams between Grids
28258	130	9/18	9:39							H/18.2-17, F'-I/18.2 and
28262	83	9/27	9:52							I/18.2-17.8

KANSAS CITY TESTING & ENGINEERING, LLC

Kansas City Testing & Engineering, LLC
1308 Adams Street
Kansas City, KS 66103
Phone 913.321.8100
Fax 913.321.8181

REPORT OF CONCRETE COMPRESSIVE STRENGTH

CLIENT: STRUCTURAL ENGINEERING ASSOCIATES
ATTN: NICK PINO
1000 WALNUT, SUITE 1570
KANSAS CITY MO 64106

PROJECT: OPERATING ROOM #1
ST. LUKES

PROJECT NO.: C-12-059
REPORT NO.: K17732
DATE OF SERVICE: 05/24/2017
AUTHORIZATION: NICK PINO
REPORT DATE: 05/27/2017

SERVICES: Test compressive strength specimens prepared by others and delivered to our laboratory.

PROJECT DATA

CONTRACTOR:
CONCRETE SUPPLIER:
PLANT:
CLASS OF CONCRETE:
SPECIFICATION REQUIREMENTS
STRENGTH: 4000psi @ 28 DAYS
SLUMP: AIR:
METHOD OF TEST
CURING:
BEARING CONTACT: ASTM C1231
TESTING: ASTM C39

MIX DESIGN NUMBER: N/A
DATE OF PLACEMENT: 05/24/2017
TIME SAMPLED: BY: CLIENT
BATCH TIME:
TEMPERATURE (DegF) - AIR: CONCRETE:
WEATHER:
MEASURED SLUMP (in.):
AIR CONTENT (%): UNIT WT (pcf)
TRUCK NO: TICKET NO:
WATER ADDED @ SITE (gal)
LOCATION OF PLACEMENT
ST. LUKES
OPERATING ROOM 1

REPORT OF TESTS

CONCRETE COMPRESSIVE STRENGTH - 4 x 8 CYLINDERS

CYLINDER MARKED SET	MARK	DATE TESTED	AGE (days)	DIAMETER (in.)	AREA (sq.in.)	MAXIMUM LOAD (lbs. force)	COMPRESSIVE STRENGTH (psi)	FRACTURE TYPE	REMARKS
K1773	A	05/31/2017	7	4.000	12.57	69460	5530	TYPE 5	
K1773	B	06/21/2017	28						
K1773	C	06/21/2017	28						
K1773	D	06/21/2017	28						
K1773	E	Hold							

Technician:
Report Distribution:
(1) BEVANS@SEASSOCIATES.COM
(1) KMATCHELL@SEASSOCIATES.COM
(1) NPINO@SEASSOCIATES.COM

Type 1 | Cone
Type 2 | Cone Split
Type 3 | Columnar
Type 4 | Shear
Type 5 | Side Fracture
Type 6 | Top Fracture

KANSAS CITY TESTING &

DOUG ARTH, R.G.
REGISTERED GEOLOGIST

KANSAS CITY TESTING & ENGINEERING, LLC

Kansas City Testing & Engineering, LLC
1308 Adams Street
Kansas City, KS 66103
Phone 913.321.8100
Fax 913.321.8181

REPORT OF CONCRETE COMPRESSIVE STRENGTH

CLIENT: STRUCTURAL ENGINEERING ASSOCIATES
ATTN: NICK PINO
1000 WALNUT, SUITE 1570
KANSAS CITY MO 64106

PROJECT: OPERATING ROOM #2
ST. LUKES

PROJECT NO.: C-12-059
REPORT NO.: K17733
DATE OF SERVICE: 05/24/2017
AUTHORIZATION: NICK PINO
REPORT DATE: 05/27/2017

SERVICES: Test compressive strength specimens prepared by others and delivered to our laboratory.

PROJECT DATA

CONTRACTOR:
CONCRETE SUPPLIER:
PLANT:
CLASS OF CONCRETE:
SPECIFICATION REQUIREMENTS
STRENGTH: 4000psi @ 28 DAYS
SLUMP: AIR:
METHOD OF TEST
CURING:
BEARING CONTACT: ASTM C1231
TESTING: ASTM C39

MIX DESIGN NUMBER: N/A
DATE OF PLACEMENT: 05/24/2017
TIME SAMPLED: BY: CLIENT
BATCH TIME:
TEMPERATURE (DegF) - AIR: CONCRETE:
WEATHER:
MEASURED SLUMP (in.):
AIR CONTENT (%): UNIT WT (pcf)
TRUCK NO: TICKET NO:
WATER ADDED @ SITE (gal)
LOCATION OF PLACEMENT
ST. LUKES OPERATING ROOM 2

REPORT OF TESTS

CONCRETE COMPRESSIVE STRENGTH - 4 x 8 CYLINDERS

CYLINDER MARKED SET	MARK	DATE TESTED	AGE (days)	DIAMETER (in.)	AREA (sq.in.)	MAXIMUM LOAD (lbs. force)	COMPRESSIVE STRENGTH (psi)	FRACTURE TYPE	REMARKS
K1773	A	05/31/2017	7	4.000	12.57	70380	5600	TYPE 5	
K1773	B	06/21/2017	28						
K1773	C	06/21/2017	28						
K1773	D	06/21/2017	28						
K1773	E	Hold							

Technician:
Report Distribution:
(1) BEVANS@SEASSOCIATES.COM
(1) KMATCHELL@SEASSOCIATES.COM
(1) NPINO@SFASSOCIATES.COM

Type 1 | Cone
Type 2 | Cone Split
Type 3 | Columnar
Type 4 | Shear
Type 5 | Side Fracture
Type 6 | Top Fracture

KANSAS CITY TESTING &

DOUG ARTH, R.G.
REGISTERED GEOLOGIST