STRUCTURAL GENERAL NOTES

1. CODE

A. ALL CONSTRUCTION SHALL CONFORM WITH THE PROVISIONS OF THE 2009 IBC AND ASCE 7-05 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.

B. STEEL PROCUREMENT ACT: ALL STEEL PRODUCTS BEING PROVIED FOR PERMANENT INCLUSION IN THE PROJECT ARE TO BE MADE IN THE UNITED STATES IN ACCORDANCE WITH THE STEEL PROCUREMENT ACT, AND CERTIFICATES OF COMPLIANCE FROM EACH SUPPLIER FOR ALL STEEL PRODUCTS DELIVERED TO THE PROJECT SHALL BE SUBMITTED AS REQUIRED BY THE ACT.

2. DESIGN LOADING

A. THE DESIGN DEAD LOAD FOR THE FRAMING IS AS FOLLOWS:

1ST CONCRETE FLOOR

8" CONC. SLAB NORMAL WT. -- 100 PSF

1ST FLOOR MISC. LOAD		PLAZA - MISC. LOAD	
MECHANICAL	5 PSF	MECHANICAL	5 PSF
ELECTRICAL/LIGHTING	3 PSF	ELECTRICAL/LIGHTING	3 PSF
CEILING	2 PSF	CEILING	2 PSF
MISCELLANEOUS	2 PSF	MISCELLANEOUS	2 PSF
		INFILL MATERIAL	80 PSF
TOTAL	20 PSF	TOTAL	92 PSF

PLAZA - 2 WAY SLAB

12" CONC. SLAB NORMAL WT. - 150 PSF

STAIR 4 LANDING		STAIR 4 TREADS	
3" CONCRETE	37.5 PSF	2" CONCRETE FILLED TREADS	25 PSF
PORCELAIN TILE	23 PSF	PORCELAIN TILE	23 PSF
FRAMING	5 PSF	FRAMING	5 PSF
CEILING/LIGHTS	3 PSF	CEILING/LIGHTS	3 PSF
SPRINKLERS	2 PSF	SPRINKLERS	2 PSF
MISCELLANEOUS	2.5 PSF	MISCELLANEOUS	2 PSF
TOTAL	73 PSF	TOTAL	60 PSF

WALL SYSTEM

CURTAIN WALL	20 PSF
6" PRECAST WALL SYSTEM	75 PSF
8" PRECAST WALL SYSTEM	100 PSF
BRICK WALL SYSTEM	40 PSF

ELEVATED FLOOR		MAIL ROOM ROOF SLAB	
5" LW SLAB & 1 1/2" DECK	43 PSF	5" NW SLAB & 1 1/2" DECK	53 PSF
FRAMING	5 PSF	FRAMING	5 PSF
MECHANICAL	5 PSF	MECHANICAL	5 PSF
ELECTRICAL/LIGHTING	3 PSF	ELECTRICAL/LIGHTING	3 PSF
CEILING	2 PSF	CEILING	2 PSF
MISCELLANEOUS	2 PSF	MISCELLANEOUS	2 PSF
TOTAL	60 PSF	TOTAL	70 PSF

ROOF

DECK & INSULATION	5 PSF
FRAMING	5 PSF
MECHANICAL	5 PSF
ELECTRICAL/LIGHTING	3 PSF
CEILING	2 PSF
MISCELLANEOUS	5 PSF
TOTAL	25 PSF

DESIGN LIVE LOADS ARE AS FOLLOWS:

RESIDENTIAL	40 PSF
CORRIDORS 1ST FLOOR	100 PSF
CORRIDORS ABOVE 1ST FLOOR	80 PSF
GROUND FLOOR / COMMON AREAS	100 PSF
MAIL ROOM	100 PSF
LOADING DOCK	100 PSF
MECHANICAL	150 PSF
STAIRS	100 PSF
ROOF	Pf=30 PSF PLUS SNOW DRIFTING Pg=35 PSF
PLAZA	100 PSF
WIND (3 SECOND GUST)	90 MPH
WIND EXPOSURE CATEGORY	EXPOSURE B
WIND IMPORTANCE FACTOR	Iw = 1.15
OCCUPANCY CATEGORY	III
SNOW EXPOSURE FACTOR	Ce=0.9
SNOW IMPORTANCE FACTOR	Is=1.1
THREMAL FACTOR	Ct=1.0
BUILDING OCCUPANCY CATEGORY	III
SEISMIC USE GROUP	II
SEISMIC IMPORTANCE FACTOR	Ie=1.25
MAPPED SPECTRAL RESPONSE ACCELERATION	S_{DS}=0.148q S_{DI}=0.088q
SEISMIC DESIGN CATEGORY	B
SITE CLASS	D
BASIC SEISMIC FORCE RESISTING SYSTEM	COMBINATION OF CONCENTRIC BRACING & CONC. SHEAR WALLS
RESPONSE MODIFICATION COEFFICIENT	R=5
DESIGN BASE SHEAR	500 KIPS
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE PROCEDURE

THE CONTRACTOR IS CAUTIONED AS TO NOT STORE ANY CONSTRUCTION MATERIALS OR UNDERTAKE ANY CONSTRUCTION OPERATION WHICH WILL EXCEED THE DESIGN LIVE LOAD CAPACITIES NOTED.

B. THE STRUCTURE HAS BEEN DESIGNED FOR THE DEAD AND LIVE LOADS INDICATED ABOVE. ANY INCREASE OF LOADS DUE TO CHANGE IN USAGE OR CONSTRUCTION MATERIALS, ETC. SHALL HAVE THE WRITTEN APPROVAL OF THE ENGINEER.

C. THE STABILITY OF THE STRUCTURE IS DEPENDENT UPON THE DIAPHRAGM ACTION OF THE FLOOR AND ROOF. THE CONTRACTOR IS COMPLETELY RESPONSIBLE FOR THE METHODS OF CONSTRUCTION AND SHALL PROVIDE ALL GUYS, BRACING AND SHORING REQUIRED TO ACCOMMODATE ALL INTERIM LOADING CONDITIONS THROUGHOUT THE CONSTRUCTION PHASE.

D. WEIGHT OF EQUIPMENT SHOWN ON THE STRUCTURAL DRAWINGS HAVE BEEN CONSIDERED IN THE DESIGN OF THE FRAMING. ANY ADDITIONAL EQUIPMENT NOT SHOWN ON THE STRUCTURAL DRAWINGS AND EXCEEDING 500 POUNDS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

3. GENERAL

A. THE CONTRACTOR IS ADVISED THAT ALL PLANS, DIMENSIONS, AND DETAILS DEPICT FIELD CONDITION AS SHOWN. MINOR VARIATIONS ARE TO BE EXPECTED AND ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS SHALL BE APPROVED BY THE ARCHITECT IN WRITING PRIOR TO PROCEEDING.

B. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE LOCATION OF ANY UTILITIES IN THE IMMEDIATE VICINITY OF CONSTRUCTION SO AS TO PREVENT DAMAGE TO THEM. SHOULD ANY DAMAGE TO SUCH UTILITIES OCCUR THE CONTRACTOR SHALL BE REQUIRED TO REPAIR SUCH DAMAGE AT HIS OWN EXPENSE AND TO THE SATISFACTION OF THE OWNER.

C. SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS MUST BE SUBMITTED BY THE GENERAL CONTRACTOR AND REVIEWED BY THE ENGINEER. IF THE CONTRACTOR OR OWNER FAILS TO OBTAIN ENGINEER'S REVIEW OF THE SHOP DRAWINGS, THE ENGINEER WILL NOT BE RESPONSIBLE FOR THE STRUCTURAL CERTIFICATION AND DESIGN OF THE PROJECT. SHOP DRAWINGS ARE REVIEWED BY THE ENGINEER AS A CONVENIENCE TO THE GENERAL CONTRACTOR AND ARE NOT A CONTRACT DOCUMENT.

D. LOADS GREATER THAN THE DESIGN LIVE LOADS SHALL NOT BE PLACED ON THE STRUCTURE. CONTRACTOR SHALL SUPPORT ADJACENT STRUCTURES, UTILITIES AND EXCAVATIONS AS REQUIRED CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL TEMPORARY FORMWORK, SHEETING, SHORING AND UNDERPINNING SEALED BY A PROFESSIONAL ENGINEER AS A PART OF THE CONTRACTOR'S WORK.

E. THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE ALLOWABLE CONSTRUCTION LOADS AND TO PROVIDE DESIGN AND CONSTRUCTION OF FALSEWORK, FORMWORK, STAGINGS, BRACING, SHEETING, SHORING AND UNDERPINNING AS NECESSARY TO PREVENT ANY LATERAL OR VERTICAL MOVEMENTS TO, AND TO INSURE THE STRUCTURAL INTEGRITY OF EXISTING BUILDINGS, STREETS, AND ANY UTILITY LINES, BRACING, SHEETING, SHORING, ETC., REQUIRED TO INSURE THE STRUCTURAL INTEGRITY OF THE EXISTING BUILDINGS OR NEW CONSTRUCTION, SIDEWALKS, UTILITIES ETC., SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA ENGAGED BY THE CONTRACTOR. DETAILED SIGNED AND SEALED SHOP DRAWINGS SHALL BE PREPARED INDICATING ALL WORK TO BE PERFORMED. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS.

F. THE ARCHITECTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THESE STRUCTURAL DRAWINGS FOR DETAIL DIMENSIONS AND SECTION DETAILS AS REQUIRED.

G. AT THE TIME OF SHOP DRAWING SUBMISSION, THE GENERAL CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF ANY DEVIATIONS OR OMISSIONS FROM THE CONTRACT DOCUMENTS.

H. CONSULT ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR VERIFICATION OF LOCATION AND DIMENSION OF CHASES, INSERTS, OPENINGS, SLEEVES. WASHERS, DRIPS, REVEALS, DEPRESSIONS AND OTHER PROJECT REQUIREMENTS.

J. THE STRUCTURAL CONTRACT DOCUMENTS ARE NOT TO BE REPRODUCED FOR USE AS SHOP DRAWINGS.

K. CONTRACTOR IS REQUIRED TO PROVIDE SHEETING, SHORING AND BRACING AS NECESSARY TO MAINTAIN STABILITY OF EXCAVATION AND ADJACENT PROPERTY.

4. FOUNDATION

A. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 4'-0" BELOW FINISH GRADE FOR FROST PROTECTION, UNLESS NOTED OTHERWISE ON THE DRAWINGS. SEE SITE PLANS FOR EXISTING AND FINISHED GRADES.

B. TOP OF ALL INTERIOR FOOTINGS SHALL BE 8" BELOW FINISHED FLOOR , UNLESS NOTED OTHERWISE ON THE DRAWINGS.

C. ALL FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE NET SOIL BEARING PRESSURE OF 4,000 PSF. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE SERVICES OF A GEOTECHNICAL ENGINEER FOR FIELD VERIFICATION OF THE SOIL BEARING PRESSURES. SHOULD THE SOIL BEARING PRESSURE BE FOUND TO BE LESS THAN 4,000 PSF THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT.

D. ALL EXCAVATION, BACKFILLING, AND FILLING OPERATIONS BENEATH THE BUILDING SLAB AND FOUNDATIONS, AND ALL COMPACTION TESTS AND INSPECTION, SHALL BE DONE UNDER THE DIRECTION AND SUPERVISION OF A REGISTERED GEOTECHNICAL ENGINEER RETAINED BY THE CONTRACTOR. ALL SOIL, EQUIPMENT AND PROCEDURES SHALL BE APPROVED BY THE GEOTECH ENGINEER PRIOR TO ALL EARTHWORK OPERATIONS.

E. ALL FILL UNDER FOOTINGS AND SLABS SHALL BE COMPACTED TO A DRY DENSITY OF 100 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698. OVEREXCAVATION REQUIRED AT COLUMN FOOTINGS CAN BE BACKFILLED USING PENNDOT 2A STONE COMPACTED OR FLOWABLE FILL WITH A MIN. 28 DAY COMPRESSIVE STRENGTH OF 300 PSF.

TYPICAL FOUNDATION BEARING SHALL BE PREPARED PER FOLLOWING: GEOTECHNICAL RECOMMENDATIONS

BEARING MATERIAL	OVEREXCAVATION/REPLACEMENT REQUIREMENT	
	SPREAD/COLUMN FOOTING	CONTINUOUS WALL FOOTING
INTACT SHALE/SILTSTONE BEDROCK (1)	NONE	NONE
IN-SITU FILL OR NATURAL SOILS	1/3B	1B
COMPACTED STRUCTURAL FILL (2)	1/4B	1/2B

B = FOOTING WIDTH
1 FIELD VERIFIED BY GEOTECHNICAL ENGINEER-OF-RECORD
2 MAY BE REDUCED AFTER FIELD INSPECTION BY GEOTECHNICAL ENGINEER-OF-RECORD

F. PROVIDE 6" COMPACTED STONE BASE BELOW SLABS ON GRADE. STONE SHALL CONFORM TO PENNDOT 2A.

G. REFERENCE GEOTECHNICAL REPORT PREPARED BY:
CMT LABORATORIES, INC.
2701 CAROLEAN INDUSTRIAL DR.
STATE COLLEGE, PA 16801
DATED: AUGUST 3, 2015

5. CAST-IN-PLACE CONCRETE

A. ALL CONCRETE WORK SHALL CONFORM TO ALL PROVISIONS OF THE "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301), AND TO THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318).

B. ADDITIONALLY THE CONCRETE SHALL CONFORM TO ALL PROVISIONS OF THE LATEST EDITIONS OF THE FOLLOWING PUBLICATIONS:

1. ACI 305R RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING.
2. ACI 306R RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING.
3. ACI 347 RECOMMENDED PRACTICE FOR CONCRETE FORMWORK.

C. ALL CONCRETE, UNLESS NOTED OTHERWISE, SHALL BE STONE AGGREGATE CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.

1. 1ST FLOOR CONCRETE SLAB AND BEAMS - NORMAL WEIGHT CONCRETE WITH A MINIMUM DESIGN COMPRESSION STRENGTH OF 4000 PSI AT 28 DAYS.
2. ALL CONCRETE SLAB ON METAL DECK SHALL BE LIGHT WEIGHT STRUCTURAL CONCRETE HAVING A MINIMUM DESIGN COMPRESSION STRENGTH OF 4000 PSI AT 28 DAYS.

D. ALL CONCRETE FILL FOR METAL PAN STAIRS AND MASONRY WALLS SHALL BE PEA GRAVEL CONCRETE, HAVING A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. MAXIMUM SIZE OF AGGREGATE SHALL BE 1/2".

E. ALL CONCRETE MIX DESIGNS AND ADMIXTURES SHALL BE APPROVED BY THE ARCHITECT 30 DAYS PRIOR TO INITIATION OF FIRST POUR.

F. ALL REINFORCING BARS SHALL CONFORM TO ASTM A-615 GRADE 60. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185, GRADE 65. ALL WELDED WIRE FABRIC SHALL BE IN SHEETS AND SHALL BE SUPPORTED ON CHAIRS.

G. ALL CONCRETE SHALL BE SAMPLED AND TESTED AS REQUIRED BY SPECIFICATIONS.

H. MINIMUM BAR LAPS SHALL BE 48 BAR DIAMETERS WITH A MINIMUM LAP OF 24" UNLESS NOTED.

J. PROVIDE WATER STOPS IN ALL CONSTRUCTION AND CONTROL JOINTS IN CONCRETE BELOW GRADE AS PER THE ARCHITECTURAL DRAWINGS.

K. CONCRETE EXPOSED TO PUBLIC VIEW SHALL MEET THE REQUIREMENTS FOR ARCHITECTURAL CONCRETE OF ACI 301.

L. CONSTRUCTION JOINTS IN WALLS, BEAMS AND SLABS SHALL BE LOCATED MIDWAY BETWEEN SUPPORTS EXCEPT THAT WHERE AN INTERSECTING MEMBER OCCURS AT MID-SPAN, THE JOINT SHALL BE OFFSET TWICE THE WIDTH OF THE INTERSECTING MEMBER. BEFORE FRESH CONCRETE IS POURED AGAINST CONCRETE IN PLACE, THE CONTACT SURFACES OF CONCRETE IN PLACE SHALL BE THOROUGHLY CLEANED, ALL LAITANCE SHALL BE REMOVED. PREPARE JOINTS IN ACCORDANCE WITH WATERPROOF REQUIREMENTS.

M. CONTRACTOR SHALL COORDINATE WITH ALL RELATED TRADES FOR DETAILING, FABRICATION AND ERECTION PRIOR TO SUBMITTING SHOP DRAWINGS FOR APPROVAL.

N. NO OPENINGS SHALL BE MADE IN STRUCTURAL MEMBERS UNLESS SHOWN ON STRUCTURAL DRAWINGS OF APPROVED BY STRUCTURAL ENGINEER. NO CONDUITS MAY BE PLACED IN CONCRETE SLAB WHICH HAS AN OUTSIDE DIAMETER LARGER THAN 1/3 THE TOTAL SLAB THICKNESS.

P. ALL STRUCTURAL WORK SHALL BE COORDINATED WITH ARCHITECTURAL , MECHANICAL, ELECTRICAL, PLUMBING, ETC. REQUIREMENTS. G.C. TO PROVIDE APPROPRIATE NUMBER OF COPIES OF COORDINATED DRAWINGS SHOWING ALL SLEEVES, CONDUIT BOXES, DUCT OPENINGS, ETC. AS REQUIRED FOR ALL TRADES FOR STRUCTURAL ENGINNERS APPROVAL.

6. MASONRY

A. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF ACI 530/ASCE 5: BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.

B. ALL BLOCK SHALL CONFORM TO ASTM C-90 AND ASTM C-145 WITH A MINIMUM COMPRESSIVE STRENGTH OF 1,900 PSI (NET AREA) FOR F'M = 1,500 PSI

C. ALL WALLS SHALL BE LAID UP WITH TYPE S LIME MORTAR CONFORMING TO ASTM C270 WITH FULL MORTAR BEDDING.

D. ALL MASONRY WALLS SHALL BE REINFORCED WITH NO. 9 GAGE TRUSS-TYPE GALVANIZED WIRE JOINT REINFORCING SPACED VERTICALLY AT 16" ON CENTER UNLESS NOTED. PROVIDE CORNER AND TEE PIECES AT ALL INTERSECTIONS. LAP ALL REINFORCING 6" MINIMUM.

E. PROVIDE 8" MINIMUM DEPTH OF 100% SOLID MASONRY OR HOLLOW BLOCK FILLED SOLID WITH GROUT BELOW ALL BEAMS OR LINTELS.

F. PROVIDE SOLID BLOCK OR FILL WALL SOLID WITH GROUT DIRECTLY BELOW ALL CHANGES IN WALL THICKNESS OR CONSTRUCTION AS REQUIRED TO PROVIDE CONTINUOUS BEARING FOR ALL FACE SHELLS OF BLOCK.

G. LAP ALL VERTICAL REINFORCING 48 BAR DIAMETERS MINIMUM.

H. PROVIDE 8" DEEP SOLID BEARING BELOW ALL STUDS BEARING ON MASONRY WALLS. SOLID BEARING SHALL BE SOLID BLOCK OR BRICK OR HOLLOW BLOCK FILLED SOLID WITH GROUT.

J. PROVIDE A SOFT JOINT WHERE ANY NON-BEARING MASONRY PARTITIONS OR WALLS ARE LAID TO THE UNDERSIDE OF THE STRUCTURAL FLOOR OR ROOF FRAMING ABOVE.

K. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.

L. INSPECTION AND TESTING SHALL BE PERFORMED AS REQUIRED BY SPECIFICATIONS.

7A. STRUCTURAL AND MISCELLANEOUS STEEL

A. ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL CONFORM TO THE THIRTEENTH EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" AND ALL ITS SUPPLEMENTS, AND TO THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES." STRUCTURAL STEEL DESIGN BASED ON LRFD PROCEDURE.

B. THE STRUCTURAL STEEL ERECTER WILL BE RESPONSIBLE FOR PROVIDING ADEQUATE TEMPORARY BRACING DURING CONSTRUCTION TO PREVENT COLLAPSE DURING CONSTRUCTION.

C. ALL STRUCTURAL STEEL BEAMS AND COLUMNS SHALL CONFORM TO ASTM A-572 FY=50,000 PSI UNLESS NOTED OTHERWISE. ALL ANGLES, CHANNELS AND MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A-36, FY = 36,000 PSI.

D. STEEL TUBES SHALL CONFORM TO ASTM A500 GRADE B, FY = 46,000 PSI.

E. ALL STEEL PIPE SHALL CONFORM TO ASTM A-501, FY = 36,000 PSI OR ASTM A-53 TYPE "E" OR "S" GRADE B, FY = 35,000 PSI.

F. ALL WELDED CONNECTIONS SHALL BE DONE WITH E70XX ELECTRODES WITH 3/16" MINIMUM MATERIAL. ALL BOLTED CONNECTIONS SHALL USE 3/4" DIA. ASTM A325N HIGH STRENGTH BOLTS MINIMUM. ALL BEAM CONNECTIONS SHALL DEVELOP THE GREATER SHEAR VALUE OF ONE HALF OF ITS TOTAL UNIFORM LOAD CAPACITY IN ACCORDANCE WITH THE AISC SPECIFICATIONS FOR FRAMED BEAM CONNECTIONS, TABLE 3-6, OR THE END REACTION LISTED. IF SHOP WELDED, FURNISH IN ACCORDANCE WITH TABLE 10-3. MINIMUM THICKNESS OF CLIP ANGLES OF 5/16". NO CONNECTIONS SHALL BE MADE USING LESS THAN TWO BOLTS. ALL ANCHOR BOLTS SHALL BE ASTM A-307 U.N.O. ALL CONNECTIONS SHALL BE DEVELOPED BY THE CONTRACTOR UNLESS COMPLETELY DETAILED ON CONTRACT DRAWINGS.

THE STRUCTURAL STEEL FABRICATOR SHALL PROVIDE CERTIFICATION BY A PROFESSIONAL ENGINEER, REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA THAT THE CONNECTION DESIGN IS IN ACCORDANCE WITH ALL APPLICABLE CODES AND SPECIFICATIONS.

G. END CONNECTIONS OF COMPOSITE FLOOR BEAMS SHALL DEVELOP IN SHEAR THE END REACTIONS INDICATED ON THE DRAWINGS.

H. SHOP AND FIELD WELDS SHALL BE MADE BY APPROVED CERTIFIED WELDERS AND SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE FOR BUILDINGS AWS D1.1. WELDS SHALL DEVELOP THE FULL STRENGTH OF MATERIALS BEING WELDED, UNLESS OTHERWISE NOTED.

J. ALL EXPANSION BOLTS SHALL BE HILTI KWIK BOLT 3 EXPANSION ANCHORS, 3" MINIMUM EMBEDMENT LENGTH AS MANUFACTURED BY HILTI OR APPROVED EQUIVALENT. U.N.O. ALL EXPANSION BOLTS SHALL BE SET IN CONCRETE OR 100% SOLID FILLED MASONRY.

K. NO OPENINGS IN BEAMS SHALL BE PERMITTED WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.

L. THE USE OF A GAS TORCH IN THE FIELD FOR CUTTING HOLES OR FOR CORRECTING FABRICATION ERRORS WILL NOT BE PERMITTED ON STRUCTURAL FRAMING MEMBERS EXCEPT WITH THE WRITTEN APPROVAL OF THE ARCHITECT FOR EACH SPECIFIC CONDITION.

M. ALL STRUCTURAL STEEL THAT IS TO BE FIREPROOFED SHALL NOT BE PAINTED. STRUCTURAL STEEL NOT REQUIRED TO BE FIREPROOFED SHALL BE SHOP PAINTED WITH AN APPROVED CORROSION RESISTANT PRIMER. STEEL SHALL BE PAINTED IN STRICT ACCORDANCE WITH THE AISC SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS. PRIOR TO PAINTING, ALL STEEL SURFACES SHALL BE PREPARED IN ACCORDANCE WITH SSPC-SP3. ALL PAINTS SHALL BE APPROVED BY THE ARCHITECT PRIOR TO THEIR USE. STRUCTURAL STEEL EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED.

N. INSPECTION AND TESTING SHALL BE PERFORMED AS REQUIRED BY SPECIFICATIONS.

P. ALL COLUMNS SHALL HAVE 5/8" THICK CAP PLATES UNLESS NOTED.

7B. COMPOSITE CONSTRUCTION

A. SHEAR CONNECTORS SHALL BE 3/4" DIAMETER, 4" LONG STEEL HEADED STUDS, CONFORMING TO ASTM A108 GRADES 1015 THROUGH 1020 AND THE REQUIREMENTS OF SECTION 7 OF AWS D1.1, TYPE B, WELDED BY AUTOMATIC EQUIPMENT TO STRUCTURAL STEEL. MINIMUM SHEAR CAPACITY OF CONNECTOR SHALL BE 9.70 KIPS.

B. CONNECTIONS SHALL BE OF NUMBER SHOWN EQUALLY SPACED ALONG LENGTH OF BEAM, UNLESS OTHERWISE NOTED ON PLAN.

C. ALL BEAM CONNECTIONS SHALL BE DESIGNED FOR REACTION SHOWN ON COMPOSITE BEAMS.

D. WHERE COMPOSITE CONSTRUCTION OCCURS AND NO SHEAR CONNECTORS ARE SHOWN ON PLAN, PROVIDE CONNECTORS AT 24" O/C MAX.

8. METAL DECKING

A. ALL METAL DECKING SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE "SPECIFICATION OF THE STEEL DECK INSTITUTE." ALL METAL DECKING SHALL BE THREE SPAN CONTINUOUS.

B. ALL METAL ROOF DECK SHALL BE 1 1/2"-20 GAGE WIDE RIB TYPE "B" DECKING AS MANUFACTURED BY VULCRAFT, INC. OR AN APPROVED EQUIVALENT.

C. ALL METAL FLOOR DECKING SHALL BE 1 1/2"-GALVANIZED 20 GAGE COMPOSITE DECKING AS MANUFACTURED BY VULCRAFT, INC. OR AN APPROVED EQUIVALENT.

D. ALL WELDS AND BURN AREAS SHALL BE CLEANED AND PAINTED WITH AN APPROVED PRIMER.

E. METAL DECKING SHALL BE INSTALLED AS FOLLOWS:

FASTEN ALL DECK ROOF TO FRAMING WITH HILTI X-EDN19 IN 36/4 PATTERN WITH 3-#10 TEK SCREWS PER SPAN FOR SIDELAPS. FASTEN ALL DECK TO PERIMETER FRAMING WITH PUDDLE WELDS AT 6" O/C.

COMPOSITE FLOOR DECK TO BE ANCHORED TO FRAMING BY HEADED STUDS INDICATED ON PLAN. FOR ANY BEAMS WITHOUT STUDS PROVIDE HILTI X-EDN19 FASTENERS IN 36/4 PATTERN. ALL SIDELAPS TO HAVE MIN. (2)-#10 SCREWS PER SPAN.

F. PROVIDE STEEL HEADER FRAMES FOR SUPPORT OF METAL DECKING FOR ALL OPENINGS GREATER THAN 10" SQUARE.

G. PROVIDE 12" X 20 GAGE CONTINUOUS GALVANIZED STEEL BUTT STRIP WHERE DECK CHANGES DIRECTION.

H. PROVIDE 14 GAGE GALVANIZED STEEL SUMP PANS AT ALL ROOF DRAINS.

I. PROVIDE STEEL LEDGER ANGLES AT STEEL COLUMNS AS REQUIRED FOR SUPPORT OF METAL DECKING.

9. CURTAIN WALL SYSTEM

A. THE WEIGHT OF THE SPECIFIED CURTAIN WALL SYSTEM HAS BEEN ASSUMED TO BE 20 PSF FOR THE DESIGN OF THE STRUCTURAL SUPPORT OF THE CURTAIN WALL. THE CURTAIN WALL MANUFACTURER SHALL VERIFY THAT THE ACTUAL WEIGHT OF THE SYSTEM DOES NOT EXCEED THIS WEIGHT. IF THE WEIGHT OF THE SYSTEM EXCEEDS THE ABOVE REFERENCED WEIGHT, THE MANUFACTURER SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY FOR REVIEW.

10. PRECAST CONCRETE

A. PRECAST PANEL CONNECTIONS TO BE DESIGNED AND DETAILED BY PRECASTER AND COORDINATED WITH BUILDING STRUCTURAL SYSTEMS. ALL CONNECTION MATERIAL REQUIRED FOR SUPPORT AND TRANSFER OF VERTICAL AND LATERAL LOADS OF THE PRECAST PANELS TO THE BUILDING STRUCTURE, INCLUDING IMBEDDED PLATES SHALL BE PROVIDED AND INSTALLED BY THE PRECASTER.

B. SUPPORT GRAVITY LOADS AT COLUMNS OR FOUNDATIONS WHENEVER POSSIBLE.

ABBREVIATIONS

A.B.	ANCHOR BOLT	IBC	INTERNATIONAL BUILDING CODE
ACI	AMERICAN CONCRETE INSTITUTE	I.F.	INSIDE FACE
ADDTL.	ADDITIONAL	IN	INCH
ADJMT.	ADJUSTMENT	INFO.	INFORMATION
ANCH.	ANCHOR BOLT	INS.	INSULATION
ARCH	ARCHITECTURAL	JT.	JOINT
ASCE	AMERICAN STANDARDS OF CIVIL ENGINEERING	K.	KIPS (1000 LBS.)
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	KSF	KIPS PER SQUARE FOOT
AWS	AMERICAN WELD SOCIETY	KSI	KIPS PER SQUARE INCH
BET.	BETWEEN	LB/LBS	POUND/POUNDS
BLDG.	BUILDING	LOC.	LOCATE, LOCATED
BLKG.	BLOCKING	L.L.	LIVE LOAD
BM.	BEAM	LLH	LONG LEG HORIZONTAL
B.O.	BOTTOM OF	LLV	LONG LEG VERTICAL
BOT.	BOTTOM	LT.	LIGHT
BPL.	BASEPLATE	L.P.	LOW POINT
BRCG.	BRACING	LW	LIGHT WEIGHT
BRG.	BEARING	MAS.	MASONRY
BRK.	BRICK	MAX.	MAXIMUM
BRKT.	BRACKET	MECH	MECHANICAL
B.S.	BOTH SIDE (USED W/ REINF)	MTL.	METAL
B.S.	BRICK SHELF	MFR.	MANUFACTURER
B.W.	BOTH WAYS	MIN.	MINIMUM
CANT.	CANTILEVER	MPH	MILES PER HOUR
C.B.	CONCRETE BEAM	N.	NORTH
C.J.	CONTROL JOINT	NO.	NUMBER
CL.	CENTERLINE	N.S.	NEAR SIDE
CLR.	CLEAR	N-S	NORTH-SOUTH
CMU	CONCRETE MASONRY UNIT	NW	NORMAL WEIGHT
COL.	COLUMN	O.C., O/C	ON CENTER
CONC.	CONCRETE	O.F.	OUTSIDE FACE
CONN.	CONNECTION	OPNG.	OPENING
CONST.	CONSTRUCTION	ORIENT.	ORIENTATION
CONT.	CONTINUOUS	PCF	POUNDS PER CUBIC FOOT
CONTR.	CONTRACTOR	PENET.	PENETRATION
COORD.	COORDINATE	PL.	PLATE
DBL.	DOUBLE	PLUMB.	PLUMBING
DET.	DETAIL	PSF	POUNDS PER SQUARE FOOT
DEV.	DEVELOP,DEVELOPMENT	PSI	POUNDS PER SQUARE INCH
DIA.	DIAMETER	REINF.	REINFORCING
DIAG.	DIAGONAL	REQD.	REQUIRED
DIM.	DIMENSION	RET.	RETAINING
DIST.	DISTANCE	REV.	REVISION
D.L.	DEAD LOAD	RF.	ROOF
DN.	DOWN	R.O,	ROUGH OPENING
DWG.	DRAWING	RW	RETAINING WALL
DWL.	DOWEL	SCHED.	SCHEDULE
EA.	EACH	SECT.	SECTION
E.F.	EACH FACE	SIM	SIMILAR
EL.	ELEVATION	SL.	SLOTTED
ELEC.	ELECTRICAL	SPA.	SPACING
ELEV.	ELEVATOR	SPEC.	SPECIFICATIONS
EMBED.	EMBED, EMBEDMENT	SQ.	SQUARE
EQ.	EQUAL	STAGG.	STAGGERED
ETC.	ETCETERA	STD.	STANDARD
E.W.	EACH WAY	STIFF.	STIFFENER
E-W	EAST-WEST	STL.	STEEL
EXIST.(E)	EXISTING	SUPP.	SUPPORT
EXP.	EXPANSION	T.&B.	TOP AND BOTTOM
EXP. JT.	EXPANSION JOINT	TEMP.	TEMPORARY
FDN.	FOUNDATION	THK.	THICK, THICKNESS
FIN.	FINISH	T.O.	TOP OF
FLG.	FLANGE	T.O.C.	TOP OF CONCRETE
FLR.	FLOOR	TOL.	TOLERANCE
FRMG.	FRAMING	T.O.P.	TOP OF PIER
F.S.	FAR SIDE	T.O.S.	TOP OF STEEL
FT	FOOT	T.O.W.	TOP OF WALL
FTG.	FOOTING	TYP.	TYPICAL
FY, Fy	YIELD STRENGTH	U.N.O.	UNLESS NOTED OTHERWISE
GA.	GAGE	V.	VERTICAL (USED W/ REINF.)
GALV.	GALVANIZED	VERT.	VERTICAL
G.C.	GENERAL CONTRACTOR	V.I.F.	VERIFY IN FIELD
H.	HORIZONTAL (USED W/ REINF.)	W.J.	WORK POINT
HK.	HOOK	W.S.	WATER STOP
HORIZ.	HORIZONTAL	WT.	WEIGHT
H.P.	HIGH POINT	WWF	WELDED WIRE FABRIC
HT.	HEIGHT	W/	WITH

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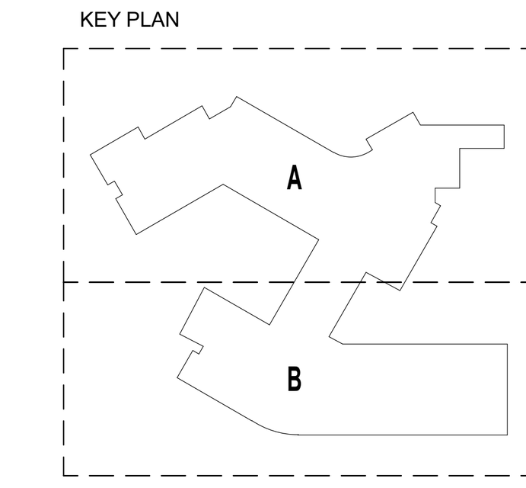
KEY PLAN



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SHEET TITLE
STRUCTURAL GENERAL NOTES

SHEET NO.
S0.01

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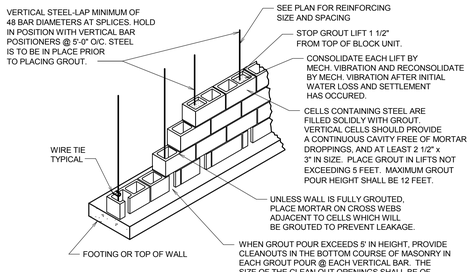
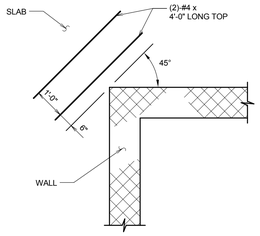


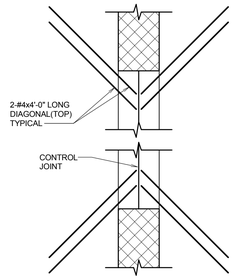
TYPICAL REINFORCED MASONRY CONSTRUCTION

1 DETAIL S0.02 NONE



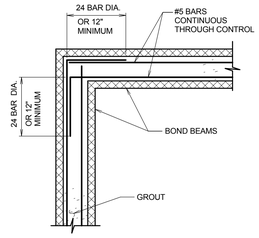
TYPICAL ADDITIONAL SLAB REINFORCING AT REENTRANT CORNER

2 DETAIL S0.02 NONE



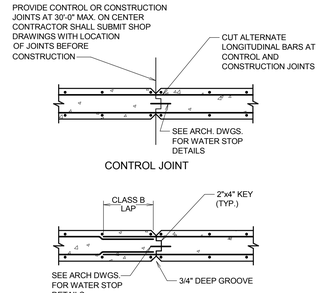
TYPICAL PLAN AT DOORWAY

3 DETAIL S0.02 NONE



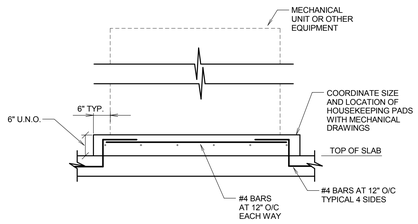
TYPICAL BOND BEAM CORNER

4 DETAIL S0.02 NONE



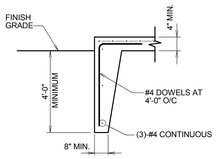
TYPICAL FORMED CONCRETE JOINTS

5 DETAIL S0.02 NONE



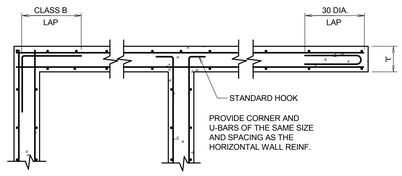
TYPICAL HOUSEKEEPING PADS

6 DETAIL S0.02 NONE



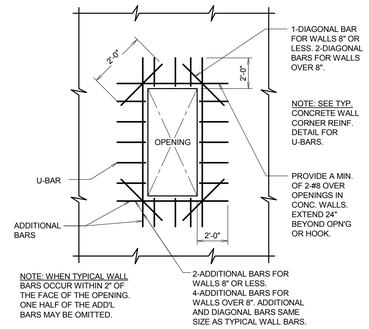
TYPICAL TURNED DOWN SLAB

7 DETAIL S0.02 NONE



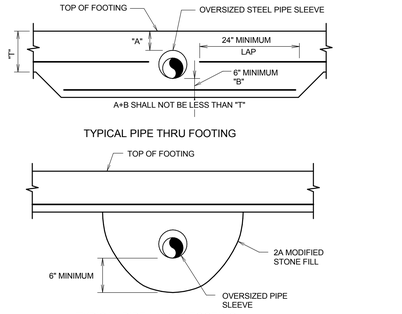
TYPICAL CONCRETE WALL CORNER REINFORCING

8 DETAIL S0.02 NONE



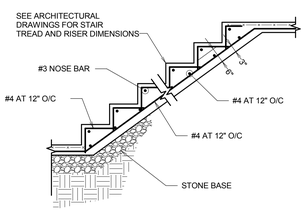
ADDITIONAL BARS AROUND OPENINGS IN CONCRETE WALL

9 DETAIL S0.02 NONE



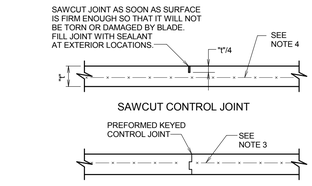
TYPICAL PIPE UNDER FOOTING

10 DETAIL S0.02 NONE



TYPICAL STAIR REINFORCING FOR STAIRS ON GRADE

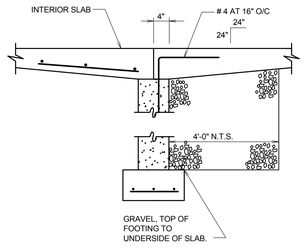
12 DETAIL S0.02 NONE



NOTES:
1. PROVIDE KEYED OR SAWCUT CONTROL JOINTS IN SLABS ON GRADE WHERE NOTED THUS (C.J.) ON THE PLAN.
2. KEYED CONTROL JOINTS MUST BE USED BETWEEN ADJACENT POURS.
3. AT KEYED CONSTRUCTION JOINTS, STOP W.W.F. EACH SIDE OF JOINT.
4. AT SAWCUT CONTROL JOINTS, CUT ALTERNATE WIRES CROSSING THE JOINT.

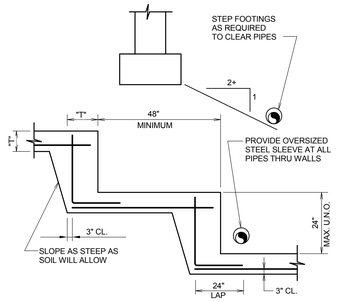
TYPICAL SLAB ON GRADE CONTROL JOINT

13 DETAIL S0.02 NONE



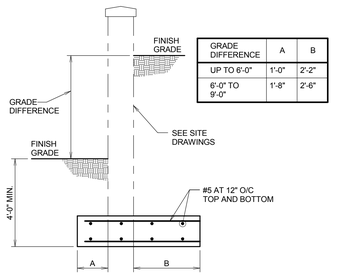
TYPICAL EXTERIOR ENTRANCE

14 DETAIL S0.02 NONE



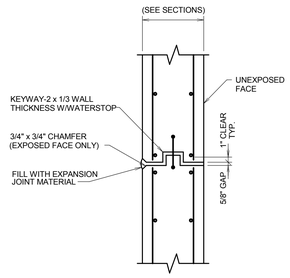
TYPICAL STEPPED FOOTING

15 DETAIL S0.02 NONE



GRADE DIFFERENCE	A	B
UP TO 6'-0"	1'-0"	2'-2"
6'-0" TO 9'-0"	1'-8"	2'-6"

16 DETAIL S0.02 NONE



NOTE LOCATE CONTROL JOINTS AS SHOWN ON PLAN

TYPICAL CONCRETE WALL EXPANSION JOINT

17 DETAIL S0.02 NONE

MASONRY WALL LINTEL SCHEDULE

MARK	SIZE	SPAN	REMARKS
P	8" DEEP PRECAST CONCRETE LINTEL REINFORCE BASED ON SPAN	UP TO 8'-0" CLEAR	AT ALL 6" THICK WALLS PROVIDE 1#5 TOP AND BOTTOM
L1	(1)L4" X 3 1/2" X 5/16"	UP TO 4'-0" CLEAR	1-L FOR EA. 4" THICKNESS OF MASONRY
L2	(1)L5" X 3 1/2" X 5/16"	4'-0" TO 6'-0" CLEAR	1-L FOR EA. 4" THICKNESS OF MASONRY
L3	(1)L6" X 3 1/2" X 5/16"	6'-0" TO 8'-0" CLEAR	1-L FOR EA. 4" THICKNESS OF MASONRY
L4	W8x28 + 3/8" PLATE	UP TO 10'-0" CLEAR	2-12

NOTES:
1. ALL LINTELS SHALL HAVE 6" MINIMUM BEARING AT EACH END, UNLESS NOTED.
2. PROVIDE LINTELS OVER ALL OPENINGS PER ABOVE, INCLUDING DOORS, WINDOWS, DUCTS, LOUVERS, RECESSES, AND OTHER OPENINGS, UNLESS SHOWN OR NOTED OTHERWISE ON STRUCTURAL OR ARCHITECTURAL DRAWINGS.
3. FOR DIMENSIONS AND LOCATION OF OPENINGS, SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS.
4. ALL EXTERIOR LINTELS SHALL BE EPOXY PAINTED.

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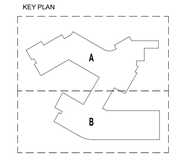
KEY PLAN



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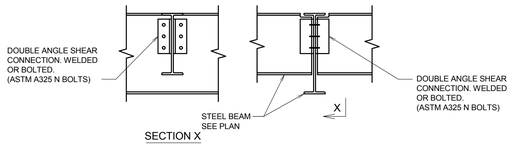
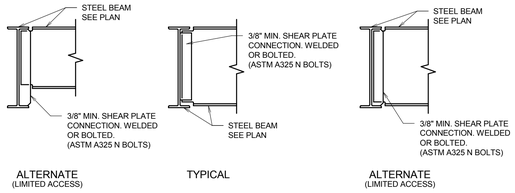
SHEET TITLE
TYPICAL DETAILS

SHEET NO.
S0.02



SECTION X

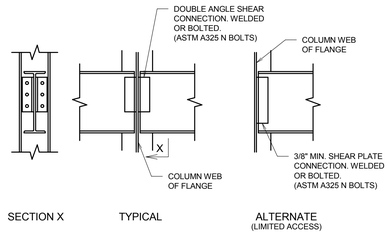
TYPICAL



ALTERNATE (LIMITED ACCESS) | TYPICAL | ALTERNATE (LIMITED ACCESS)

BEAM TO BEAM SHEAR CONNECTIONS

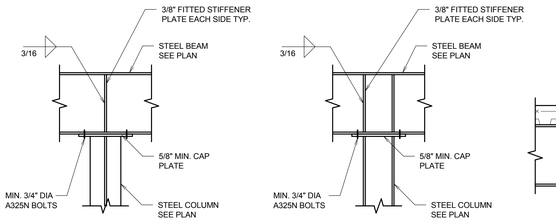
1 DETAIL
S0.03 NONE



SECTION X | TYPICAL | ALTERNATE (LIMITED ACCESS)

BEAM TO COLUMN SHEAR CONNECTIONS

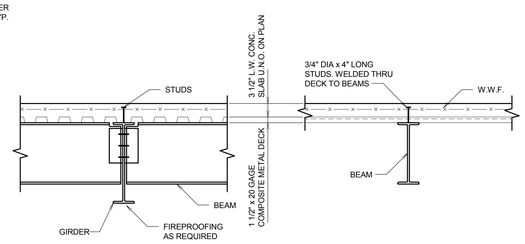
2 DETAIL
S0.03 NONE



WEBS PERPENDICULAR (PIPE & TUBE SIMILAR) | WEBS PARALLEL

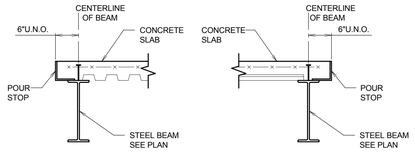
BEAM TO CANTILEVER ACROSS STEEL COLUMN

3 DETAIL
S0.03 NONE



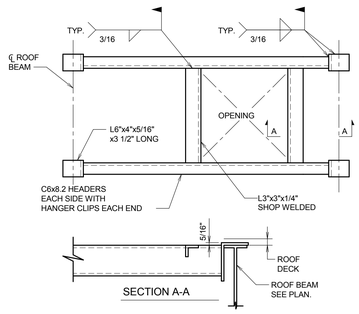
TYPICAL COMPOSITE FLOOR CONSRUCTION

4 DETAIL
S0.03 NONE



TYPICAL EDGE OF SLAB CONDITION

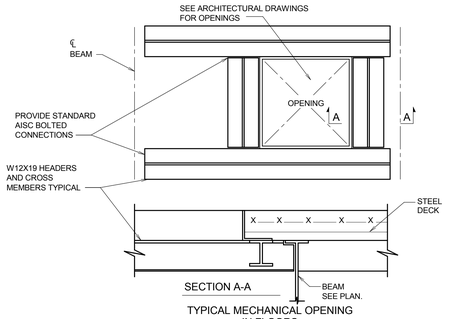
5 DETAIL
S0.03 NONE



SECTION A-A

TYPICAL MECHANICAL OPENING

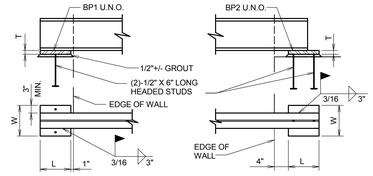
6 DETAIL
S0.03 NONE



SECTION A-A

TYPICAL MECHANICAL OPENING IN FLOORS

7 DETAIL
S0.03 NONE



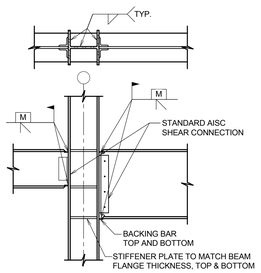
BEAM PERPENDICULAR TO WALL | BEAM PARALLEL TO WALL

PROVIDE 16" MINIMUM DEEP SOLID BEARING BELOW ALL BEARING PLATES ON MASONRY. SOLID BEARING SHALL BE TWICE THE LARGEST PLATE DIMENSION IN LENGTH. THE SOLID BEARING SHALL BE HOLLOW BLOCK FILLED SOLID WITH GROUT OR SOLID BRICK WHERE NOT EXPOSED IN THE FINISHED BUILDING.

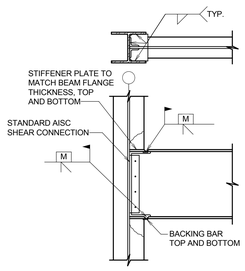
SCHEDULE	
MARK	SIZE T x W x L
BP1	1/2"x8"x6"

TYPICAL BEAM BEARING PLATE

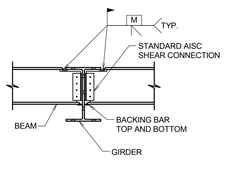
8 DETAIL
S0.03 NONE



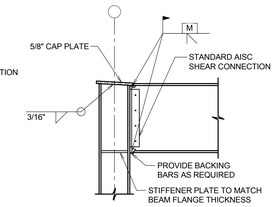
TO COLUMN FLANGE



TO COLUMN WEB



TO GIRDER

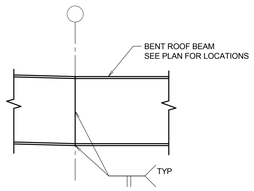


TO TOP OF COLUMN

TYPICAL MOMENT CONNECTION DETAILS

NOTE: ALL WELDS SHALL BE PREQUALIFIED FULL PENETRATION WELDS.

9 DETAIL
S0.03 NONE



TYPICAL BENT BEAM DETAIL

NOTE: ALL WELDS SHALL BE PREQUALIFIED FULL PENETRATION WELDS.

10 DETAIL
S0.03 NONE

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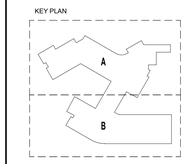

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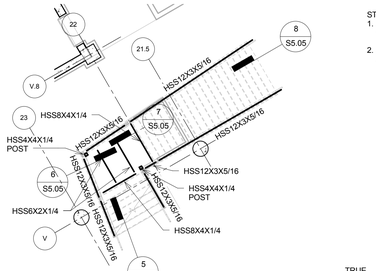


STAIR 4 FRAMING PLAN

1/8" = 1'-0"

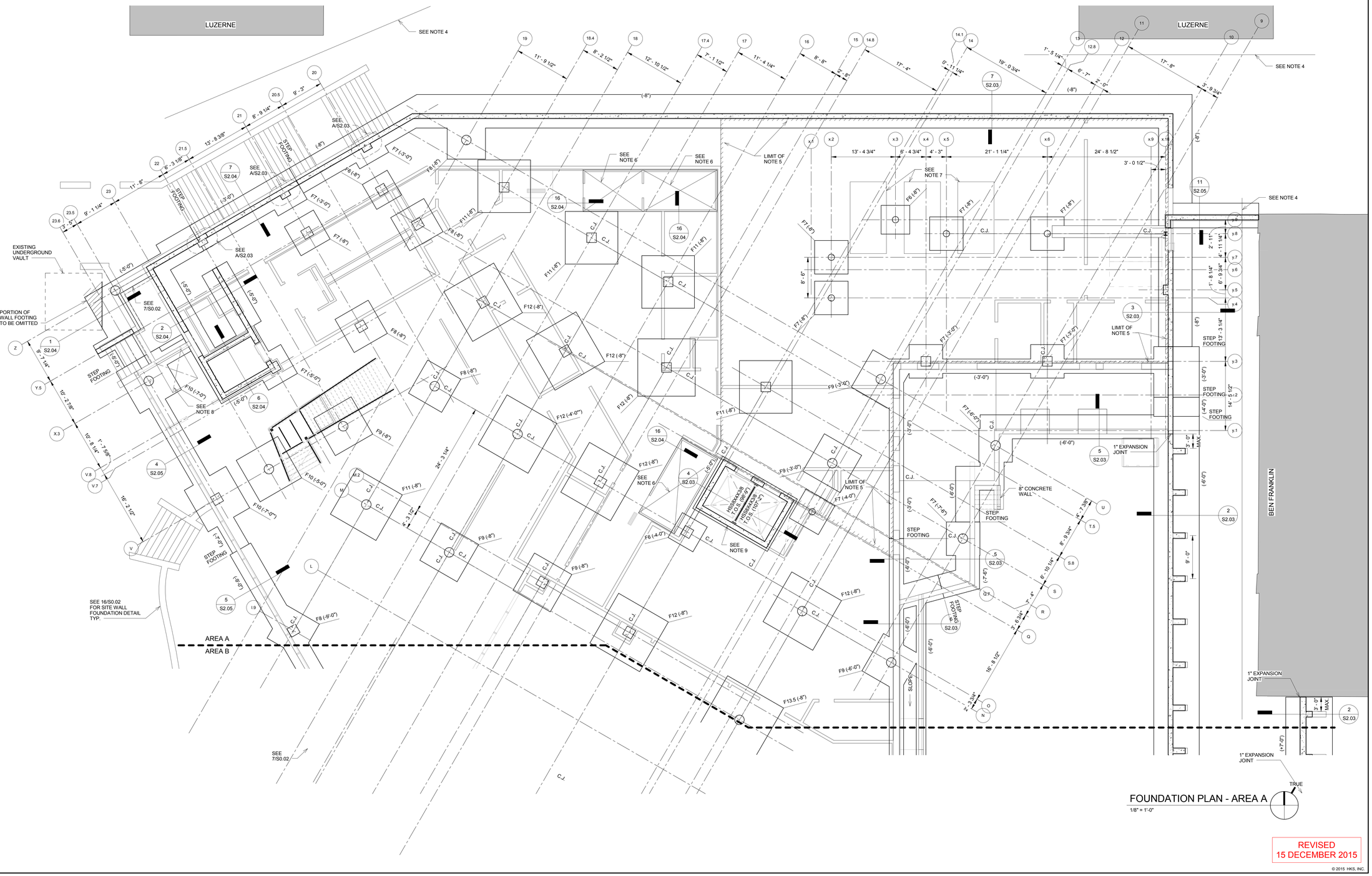
TRUE

STAIR 4 FRAMING NOTES:
1. ALL EXPOSED HSS JOINTS TO BE FULLY WELDED AND GROUND SMOOTH.
2. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND ELEVATIONS.

INCICATES ROUND CONCRETE COLUMN. SEE SCHEDULE ON SHEET S2.02.

INCICATES SQUARE CONCRETE COLUMNS. SEE SCHEDULE ON SHEET S2.02.

FOUNDATION PLAN NOTES:
1. FINISH FLOOR ELEVATION = 100'-0".
2. TOP OF FOOTINGS INDCATED ON PLAN THUS (+/-X'-X") INDICATES DIMENSION ABOVE OR BELOW FINISH FLOOR. SEE S2.02 FOR FOOTING SCHEDULE.
3. CONCRETE SLAB ON GRADE SHALL BE 4" THICK U.N.O. REINFORCED WITH 6x6-W2.0xW2.0 WELDED WIRE FABRIC (W.W.F.). PLACE SLAB OVER 10 MIL VAPOR BARRIER BELOW SLAB SUBBASE UNLESS NOTED OTHERWISE. LAP ALL W.W.F. 12" MIN. SEE GEOTECH REPORT FOR SUBSURFACE PREP REQUIREMENTS.
4. PROVIDE SHEATING/SHORING AS NEEDED TO MAINTAIN EXISTING CONSTRUCTION.
5. PROVIDE 6" THICK CONCRETE SLAB REINFORCED WITH 6x6-W2.9xW2.9 W.W.F. IN AREA NOTED. SEE NOTE 3 FOR SUBBASE REQUIRMENTS.
6. PROVIDE 4" DEPRESSION IN SLAB AT LOCATIONS NOTED. COORDINATE DIMENSIONS WITH FINAL FOOD SERVICE CONSUTANT DRAWINGS.
7. COORDINATE EQUIPMENT PAD SIZE AND LOCATION WITH ARCH. AND MECH. DRAWINGS. SEE DETAIL 6/S0.02.
8. COORDINATE SLAB DEPRESSION REQUIREMENTS WITH FLOOR MAT REQUIREMENTS.



FOUNDATION PLAN - AREA A

1/8" = 1'-0"

TRUE

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15 DECEMBER 2015

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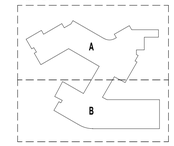
STRUCTURAL ENGINEER
WBCM
100 STERLING PARKWAY, SUITE 108
MECHANICSBURG, PA 17050

BLOOMSBURG UNIVERSITY
RESIDENCE HALL
& BOOKSTORE

KEY PLAN



REVISION
NO. DESCRIPTION DATE

HKS PROJECT NUMBER
19087.000

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03 DECEMBER 2015

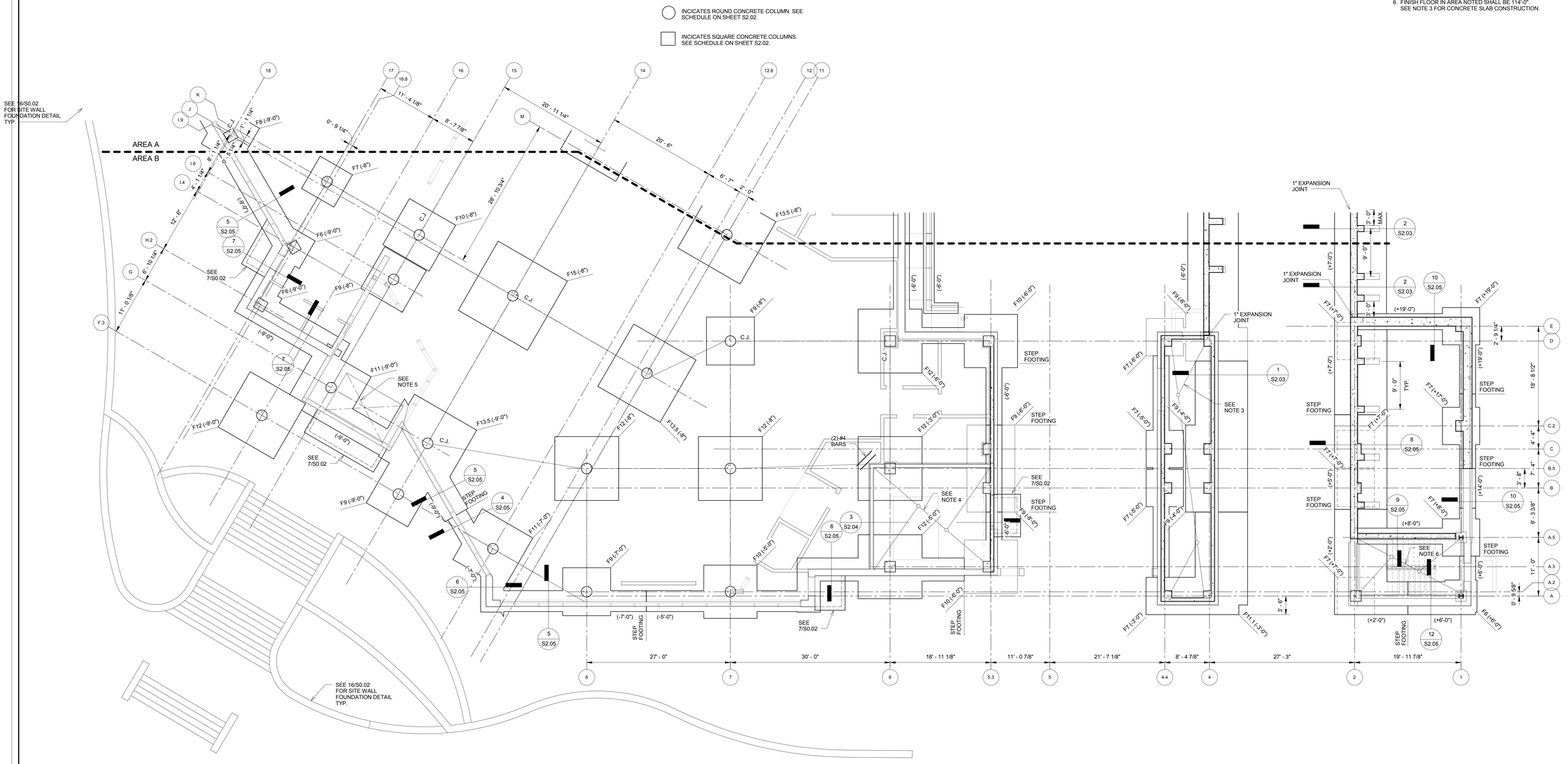
ISSUE
CONSTRUCTION DOCUMENTS

SHEET TITLE
FOUNDATION PLAN - AREA A

SHEET NO.
S1.01

PLOT DATE:
12/14/2015 4:08:14 PM TEMPLATE VERSION:

FOUNDATION PLAN NOTES:
1. FINISH FLOOR ELEVATION = 100'-0".
2. TOP OF FOOTINGS INDCATED ON PLAN THUS (+/-X'-X") INDICATES DIMENSION ABOVE OR BELOW FINISH FLOOR. SEE S2.02 FOR FOOTING SCHEDULE.
3. CONCRETE SLAB ON GRADE SHALL BE 4" THICK U.N.O. REINFORCED WITH 6x6-W2.0xW2.0 WELDED WIRE FABRIC (W.W.F.). PLACE SLAB OVER 10 MIL VAPOR BARRIER BELOW SLAB SUBBASE UNLESS NOTED OTHERWISE. LAP ALL W.W.F. 12" MIN. SEE GEOTECH REPORT FOR SUBSURFACE PREP REQUIREMENTS.
4. PROVIDE 6" THICK CONCRETE SLAB REINFORCED WITH 6x6-W2.9xW2.9 W.W.F. IN AREA NOTED. SEE NOTE 3 FOR SUBBASE REQUIREMENTS. FINISH FLOOR ELEVATION = 98'-6" IN AREA NOTED.
5. COORDINATE SLAB DEPRESSION REQUIREMENTS WITH FLOOR MAT REQUIREMENTS.
6. FINISH FLOOR IN AREA NOTED SHALL BE 114'-0". SEE NOTE 3 FOR CONCRETE SLAB CONSTRUCTION.



FOUNDATION PLAN - AREA B
1/8" = 1'-0"

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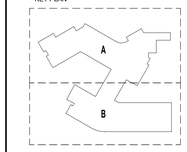
WBCM
100 STERLING PARKWAY, SUITE 108
MECHANICSBURG, PA 17050

BLOOMSBURG UNIVERSITY RESIDENCE HALL & BOOKSTORE

KEY PLAN



REVISION
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HKS PROJECT NUMBER
19087.000

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03 DECEMBER 2015

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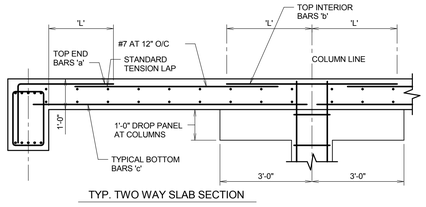
CONSTRUCTION DOCUMENTS

SHEET TITLE
FOUNDATION PLAN - AREA B

SHEET NO.
S1.02

PLOT DATE:
12/14/2015 4:08:18 PM TEMPLATE VERSION:



TYP. TWO WAY SLAB SECTION

TWO WAY SLAB REINFORCING SCHEDULE

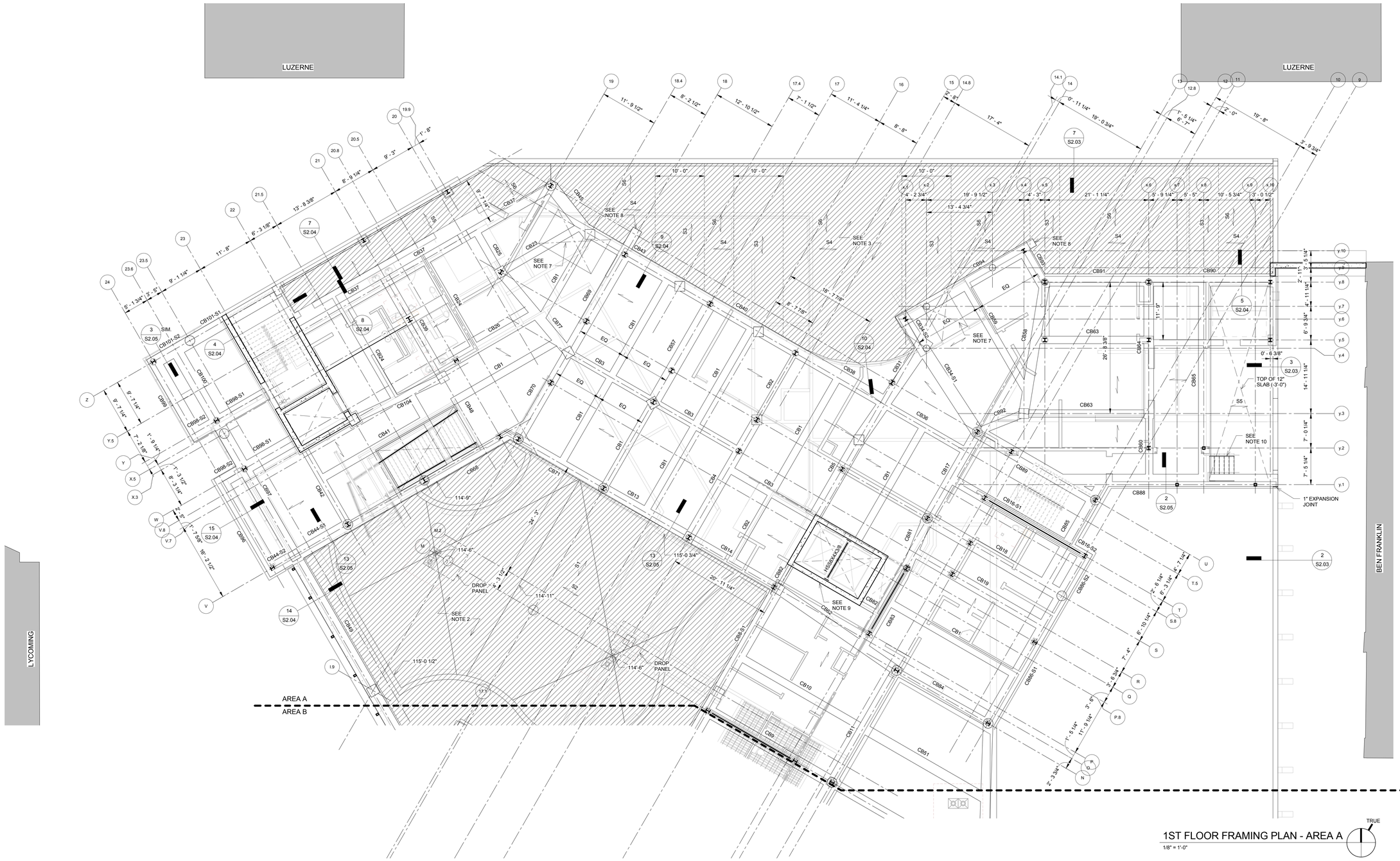
MARK	'a'	'b'	'c'	'L'	NOTES
S1	#9 AT 12"	#10 AT 12"	#8 AT 12"	10'-3"	
S2	#8 AT 12"	#7 AT 12"	#8 AT 12"	8'-0"	
S3	#9 AT 12"	#9 AT 12"	#8 AT 12"	10'-0"	
S4	#8 AT 12"	#8 AT 12"	#7 AT 12"	6'-0"	
S5	#7 AT 12"	#7 AT 12"	#5 AT 12"	N/A	#5 AT 12" TRANSVERSE TOP & BOTT.
S6	#7 AT 12"	#8 AT 12"	#7 AT 12"		

LEGEND:

SLAB SPAN. SEE 6/S2.01 FOR 1-WAY SLAB.

PLAN NOTES:

1. FINISH FLOOR ELEVATION = 116'-0". FLOOR CONSTRUCTION SHALL BE 8" SLAB REINFORCED PER SECTIONS.
2. FINISH SLAB ELEVATION VARIES IN AREA NOTED. CONSTRUCTION SHALL BE 12" SLAB MIN. BOTTOM OF SLAB ELEVATION = 113'-8". REINFORCE 2 WAY PER SCHEDULE. COORDINATE TOP OF CONCRETE ELEVATION AND SLOPE WITH ARCHITECTURAL AND CIVIL DWGS.
3. FINISH SLAB ELEVATION = 113'-0" IN AREA NOTED. CONSTRUCTION SHALL BE 12" SLAB REINFORCED 2 WAY PER SCHEDULE.
4. FINISH FLOOR ELEVATION = 116'-0". FLOOR CONSTRUCTION SHALL BE 5" SLAB ON 1 1/2" - 20 GAGE COMPOSITE DECKING REINFORCED WITH 6x6-W2.9xW2.9 W.W.F.
5. G.C. TO COORDINATE ANY REQUIRED OPENINGS IN SLAB FOR MECHANICAL / ELECTRICAL SYSTEMS WITH THE MECHANICAL / ELECTRICAL SHOP DRAWINGS FOR SIZE AND LOCTION OF OPENINGS.
6. SEE 5/S2.02 FOR 1 WAY TYPICAL SLAB REINFORCING.
7. COORDINATE SLAB DEPRESSION REQUIREMENTS WITH FLOOR MAT REQUIREMENTS. MAX RECESS 1 1/2".
8. CONCRETE PIER. TOP OF PIER AT 116'-0". REINFORCE WITH #6 AT 12" VERTICAL PERIMETER AND #4 AT 12" O/C HORIZONTAL TIES INTO PERIMETER BEAM.
9. DEVELOP ALL SLAB AND BEAM BARS INTO ELEVATOR WALL TYP.
10. PROVIDE C12x20.7 MIN. GALVANIZED STRINGERS WITH 1 1/4" GALVANIZED BAR GRATING TREADS WITH SKID PROOF NOSINGS.



1ST FLOOR FRAMING PLAN - AREA A

1/8" = 1'-0"

REVISED
15 DECEMBER 2015

PLOT DATE:
12/14/2015 4:08:23 PM
TEMPLATE VERSION:

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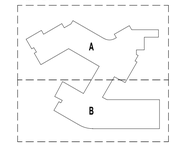
KEY PLAN



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NO.	DESCRIPTION	DATE

HKS PROJECT NUMBER
19087.000

DATE
03 DECEMBER 2015

ISSUE
CONSTRUCTION DOCUMENTS

SHEET TITLE
1ST FLOOR FRAMING PLAN - AREA A

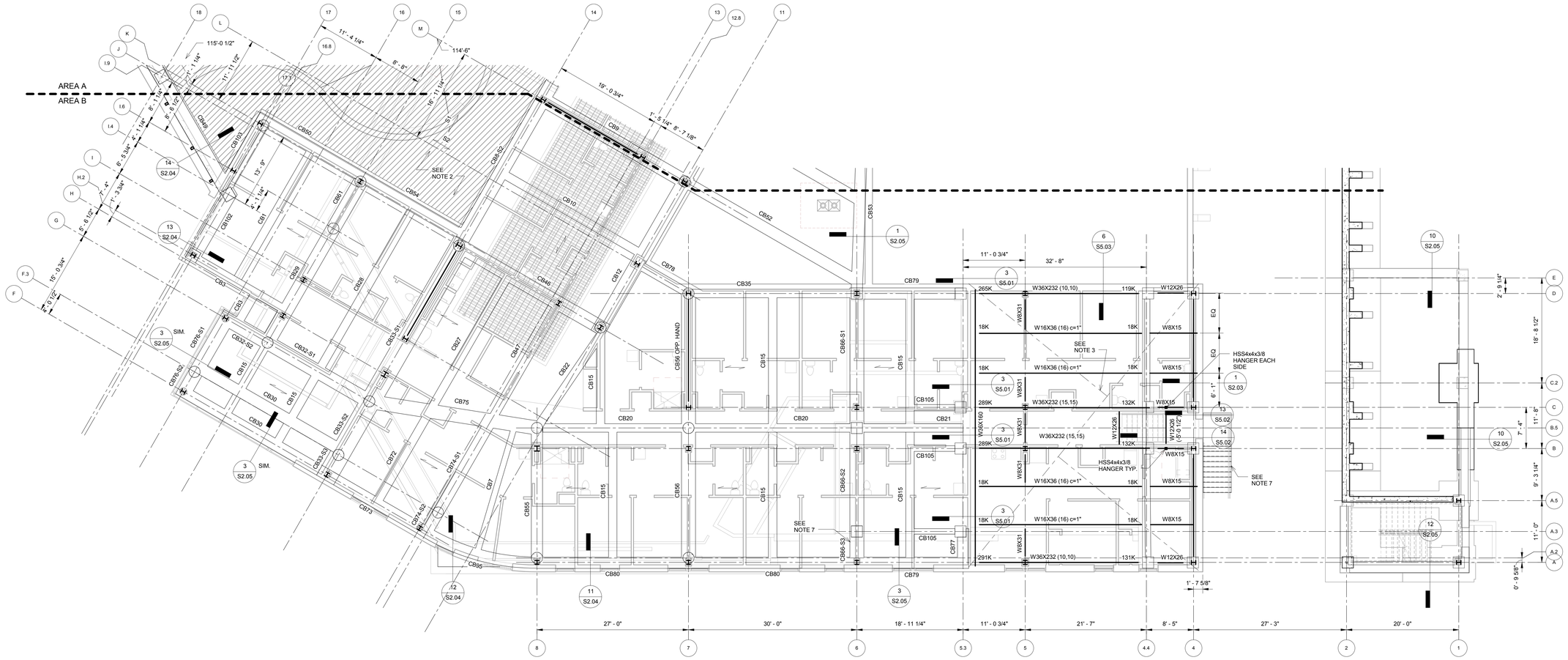
SHEET NO.
S1.03

LEGEND:

ONE WAY SLAB SPAN.
SEE 7/S2.01

PLAN NOTES:

1. FINISH FLOOR ELEVATION = 116'-0". FLOOR CONSTRUCTION SHALL BE 8" NORMAL WEIGHT CONCRETESLAB REINFORCED PER SECTIONS.
2. FINISH SLAB ELEVATION = 115'-0" IN AREA NOTED. CONSTRUCTION SHALL BE 12" SLAB REINFORCED 2 WAY PER SCHEDULE ON S1.03.
3. FINISH FLOOR ELEVATION = 116'-0". FLOOR CONSTRUCTION SHALL BE 5" LIGHT WEIGHT CONCRETE SLAB ON 1 1/2" - 20 GAGE COMPOSITE DECKING REINFORCED WITH 6x6-W2.0xW2.0 W.W.F.
4. G.C. TO COORDINATE ANY REQUIRED OPENINGS IN SLAB FOR MECHANICAL / ELECTRICAL SYSTEMS WITH THE MECHANICAL / ELECTRICAL SHOP DRAWINGS FOR SIZE AND LOCTION OF OPENINGS.
5. SEE 5/S2.02 FOR 1 WAY TYPICAL SLAB REINFORCING.
6. AT STAIRS, PROVIDE 8" CONCRETE WALL WITH #5 AT 12" O/C EACH WAY WITH 24" WIDE FOOTING REINFORCED WITH (3)-#5 CONTINUOUS AND #5 AT 12" O/C TRANSVERSE. BOTTOM OF FOOTING MIN. 4'-0" BELOW FINISH GRADE.
7. TAPER BEAM DEPTH FROM COLUMN TO MATCH EXTERIOR BEAM DEPTH. TYPICAL AT PERIMETER.



1ST FLOOR FRAMING PLAN - AREA B

1/8" = 1'-0"

TRUE

REVISED
15 DECEMBER 2015

PLOT DATE:
12/14/2015 4:08:28 PM
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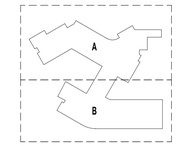
KEY PLAN



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NO. DESCRIPTION DATE

HKS PROJECT NUMBER
19087.000

DATE
03 DECEMBER 2015

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CONSTRUCTION DOCUMENTS

SHEET TITLE
1ST FLOOR FRAMING PLAN - AREA B

SHEET NO.
S1.04

CHILLER DUNNAGE FRAMING PLAN NOTES:
1. TOP OF STEEL ELEVTION = 133'-0". TOP OF STEEL IS DEFINED AS BOTTOM OF FIBERGLASS GRATING.
2. ——— INDICATES SPAN OF 1 1/2" DEEP GATORDECK FIBERGLASS GRATING BY SEASAFE. MODEL DG-16015.
3. STRUCTURAL STEEL FABRICATOR AND INSALLER SHALL BE RESPONSIBLE FOR THE COORDINATION WITH APPROVED EQUIPMENT MANUFACTURERS FRAMED OPENINGS AND DUNNAGE BEAM LOCATIONS TYP. EXACT LOCATION OF BEAMS AND POSTS SHALL BE COORDINATED DURING SHOP DRAWING PHASE WITH ALL TRADES.

CHILLER DUNNAGE FRAMING PLAN
1/8" = 1'-0"

LEGEND:
BEAM 14K W18X40 (14) c=1 1/2" 14K
4" LONG 3/4" DIA STUDS
REQUIRED CAMBER
END REACTION

FRAMING PLAN NOTES:
1. FINISH FLOOR ELEVATION = 129'-3". FLOOR CONSTRICTION SHALL BE 5" LIGHT WEIGHT SLAB ON 1 1/2" - 20 GAGE COMPOSITE DECKING REINFORCED WITH 6x6-W2.0xW2.0 W.W.F. (IN AREA NOTED AS "ROOF" CONSTRUCTION SHALL BE 5" NORMAL WEIGHT CONCRETE - REINFORCED AS FLOOR). TOP OF STEEL SHALL BE 128'-10" UNLESS NOTED OTHERWISE. TOP OF STEEL IS DEFINED AS BOTTOM OF METAL DECK. MEMBERS DENOTED THUS (-X'-X") ARE DEPRESSED SAID DISTANCE BELOW TOP OF STEEL ELEVATION.
2. G.C. TO COORDINATE ANY REQUIRED OPENINGS IN SLAB FOR MECHANICAL / ELECTRICAL SYSTEMS WITH THE MECHANICAL / ELECTRICAL SHOP DRAWINGS FOR SIZE AND LOCTION OF OPENINGS. SEE DETAIL 3/S0.02.
3. ▷——— INDICATES FULL PEN MOMENT CONNECTION. SEE DETAIL 9/S0.03.
4. SEE 6/S2.02 FOR EMBEDDED PLATE DETAIL.
5. SEE SHEET S4.01 FOR X-BRACE ELEVATION.
6. REINFORCED CONCREET SHEAR WALLS. SEE SECTION 4/S5.02 AND 2/S5.02 FOR REINFORCING.
7. ——— REPRESENTS DECK SPAN. SEE NOTE 1.

AREA A
AREA B

2ND FLOOR FRAMING PLAN - AREA A
1/8" = 1'-0"

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KEY PLAN

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NO. DESCRIPTION DATE

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DATE
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CONSTRUCTION DOCUMENTS
SHEET TITLE
2ND FLOOR FRAMING PLAN - AREA A
SHEET NO.
S1.05

PLOT DATE:
12/14/2015 4:32:40 PM TEMPLATE VERSION

LEGEND:

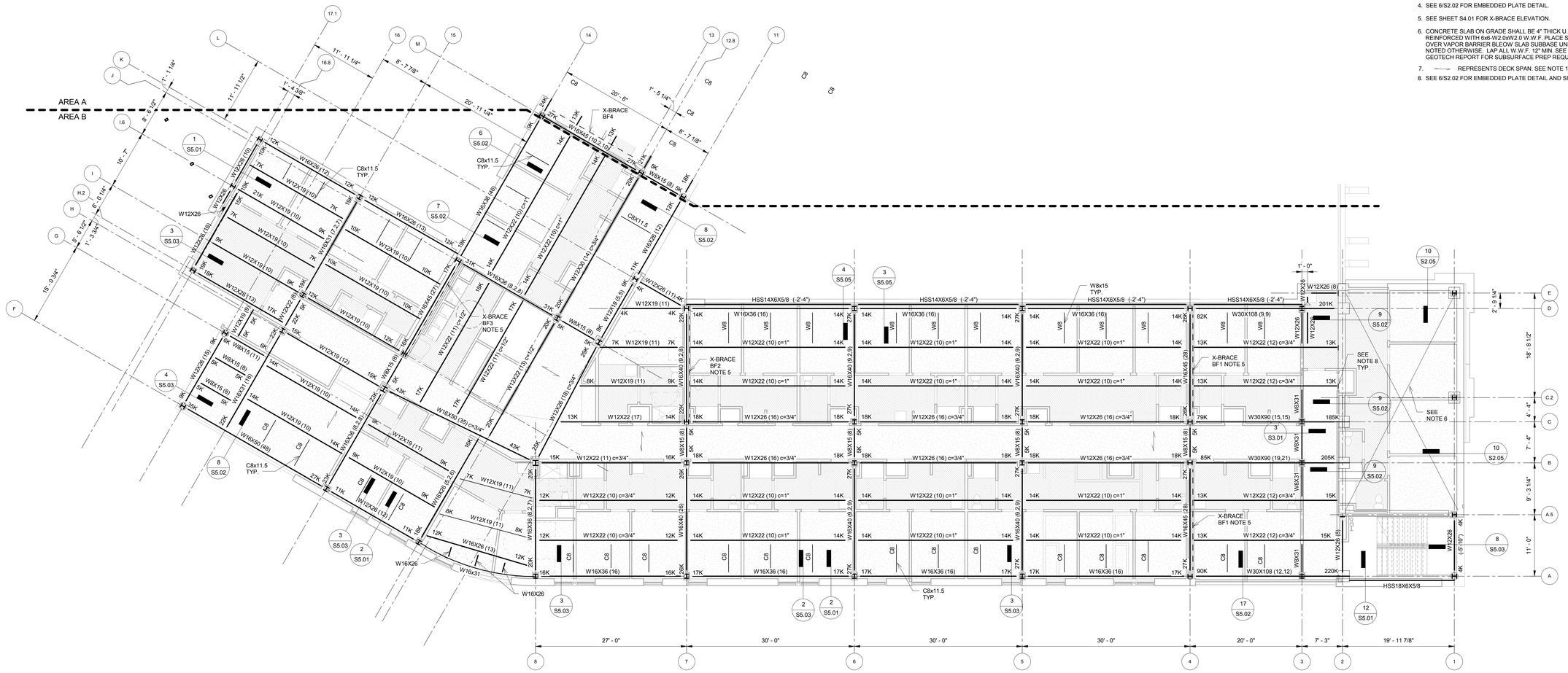
BEAM — 4" LONG 3/4" DIA STUDS

14K W18X40 (14) c=1 1/2" 14K

REQUIRED CAMBER — END REACTION

PLAN NOTES:

1. FINISH FLOOR ELEVATION = 129'-3". FLOOR CONSTRUCTION SHALL BE 5" SLAB ON 1 1/2" - 20 GAGE COMPOSITE DECKING REINFORCED WITH 6x6-W2.9xW2.9 W.W.F. TOP OF STEEL ELEVATION SHALL BE 128'-10" UNLESS NOTED OTHERWISE. TOP OF STEEL IS DEFINED AS BOTTOM OF METAL DECK. MEMBERS DENOTED THUS (-X"-X") ARE DEPRESSED SAID DISTANCE BELOW TOP OF STEEL ELEVATION.
2. G.C. TO COORDINATE ANY REQUIRED OPENINGS IN SLAB FOR MECHANICAL / ELECTRICAL SYSTEMS WITH THE MECHANICAL / ELECTRICAL SHOP DRAWINGS FOR SIZE AND LOCTION OF OPENINGS. SEE DETAIL 3/S0.02.
3. ——○ INDICATES FULL PEN MOMENT CONNECTION. SEE DETAIL 9/S0.03.
4. SEE 6/S2.02 FOR EMBEDDED PLATE DETAIL.
5. SEE SHEET S4.01 FOR X-BRACE ELEVATION.
6. CONCRETE SLAB ON GRADE SHALL BE 4" THICK U.N.O. REINFORCED WITH 6x6-W2.0xW2.0 W.W.F. PLACE SLAB OVER VAPOR BARRIER BLOW SLAB SUBBASE UNLESS NOTED OTHERWISE. LAP ALL W.W.F. 12" MIN. SEE GEOTECH REPORT FOR SUBSURFACE PREP REQUIREMENTS.
7. ——— REPRESENTS DECK SPAN. SEE NOTE 1.
8. SEE 6/S2.02 FOR EMBEDDED PLATE DETAIL AND SIZES.



2ND FLOOR FRAMING PLAN - AREA B

1/8" = 1'-0"

TRUE

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15 DECEMBER 2015

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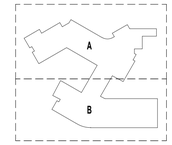
BLOOMSBURG UNIVERSITY RESIDENCE HALL & BOOKSTORE

KEY PLAN



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NO.	DESCRIPTION	DATE

HKS PROJECT NUMBER
19087.000

DATE
03 DECEMBER 2015

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CONSTRUCTION DOCUMENTS

SHEET TITLE
2ND FLOOR FRAMING PLAN - AREA B

SHEET NO.
S1.06

PLOT DATE: 12/14/2015 4:09:43 PM TEMPLATE VERSION:

LEGEND:

BEAM — 14K — W18X40 (14) c=1 1/2" — 14K

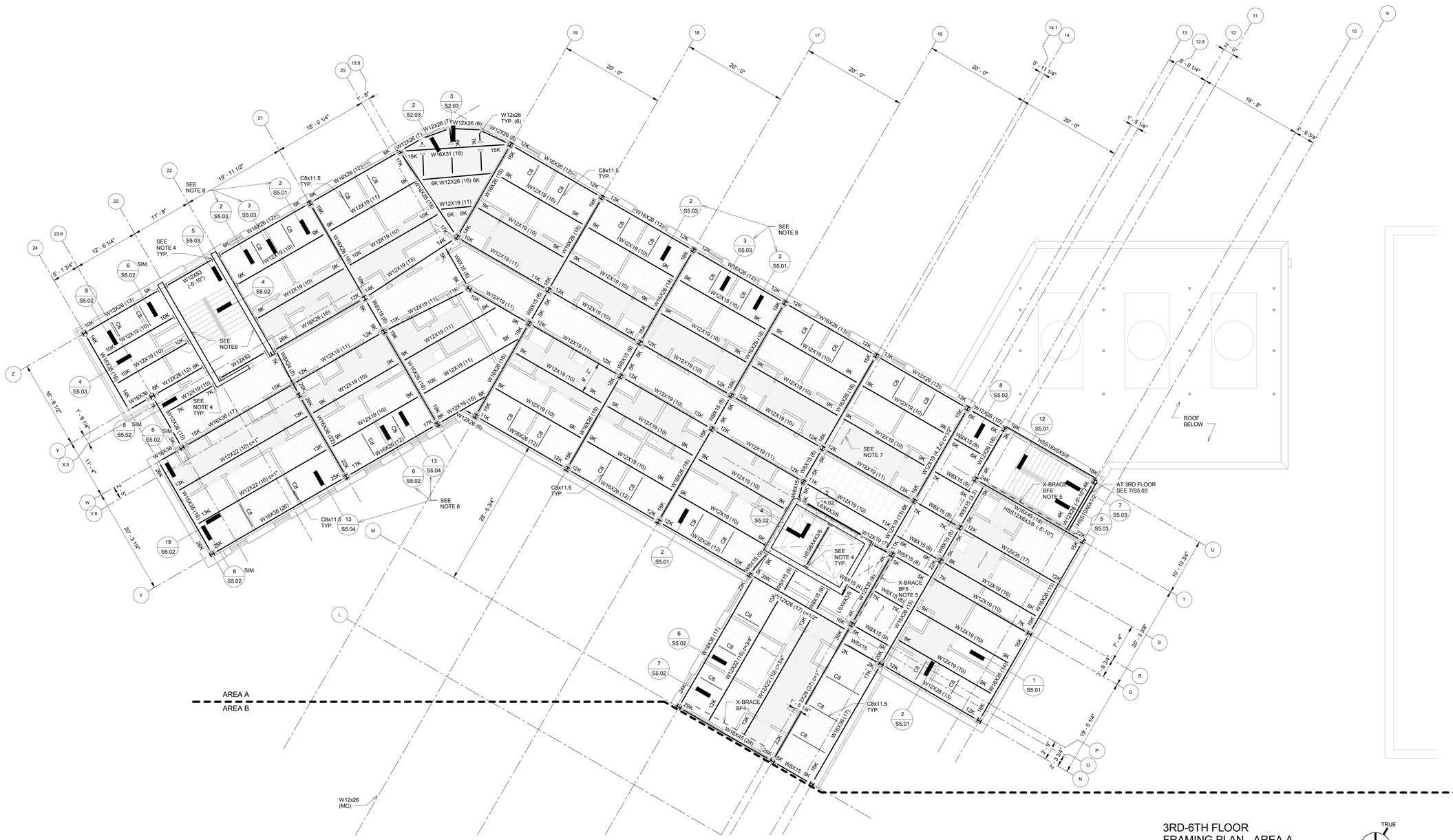
4" LONG 3/4" DIA STUDS

REQUIRED CAMBER

END REACTION

PLAN NOTES:

1. FINISH 3RD FLOOR ELEVATION = 140'-5".
   FINISH 4TH FLOOR ELEVATION = 151'-7".
   FINISH 5TH FLOOR ELEVATION = 162'-9".
   FINISH 6TH FLOOR ELEVATION = 173'-11".
   FLOOR CONSTRCTION SHALL BE 6" LIGHT WEIGHT CONCRETE SLAB ON 1 1/2" - 20 GAGE COMPOSITE DECKING REINFORCED WITH 6x6-W2.0xW2.0 W.W.F.
2. G.C. TO COORDINATE ANY REQUIRED OPENINGS IN SLAB FOR MECHANICAL / ELECTRICAL SYSTEMS WITH THE MECHANICAL / ELECTRICAL SHOP DRAWINGS FOR SIZE AND LOCTION OF OPENINGS. SEE DETAIL 3/S0.02.
3. ▷—— INDICATES FULL PEN MOMENT CONNECTION. SEE DETAIL 9/S0.03.
4. SEE 6/S2.02 FOR EMBEDDED PLATE DETAIL.
5. SEE SHEET S4.01 FOR X-BRACE ELEVATION.
6. REINFORCED CONCREET SHEAR WALLS. DEE SECTION 4/S5.02 AND 2/S5.02 FOR REINFORCING.
7. —— REPRESENTS DECK SPAN. SEE NOTE 1.
8. G.C. TO COORDINATE LOCATION OF SECTIONS WITH ARCH. ELEVATION FOR EACH FLOOR LEVEL, 3RD THRU 6TH BASED ON WINDOW LOCATION.



3RD-6TH FLOOR
FRAMING PLAN - AREA A

1/8" = 1'-0"

TRUE

REVISED
15 DECEMBER 2015

PLOT DATE:
12/14/2015 4:08:00 PM
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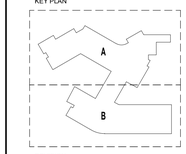
KEY PLAN



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HKS PROJECT NUMBER
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03 DECEMBER 2015

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CONSTRUCTION DOCUMENTS

SHEET TITLE
3RD-6TH FLOOR FRAMING PLAN - AREA A

SHEET NO.
S1.07

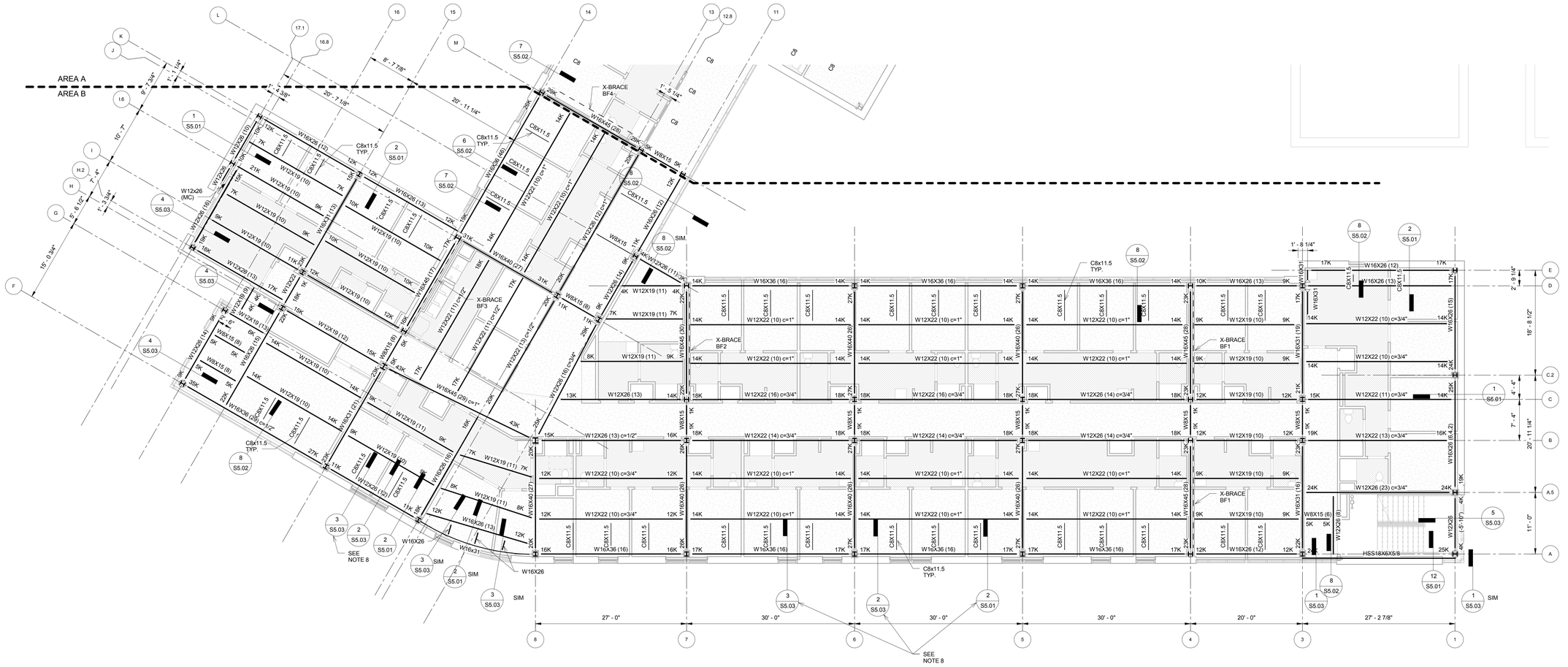
LEGEND:

BEAM — 14K W18X40 (14) c=1 1/2" 14K — 4" LONG 3/4" DIA STUDS

REQUIRED CAMBER — END REACTION

PLAN NOTES:

1. FINISH 3RD FLOOR ELEVATION = 140'-5".
   FINISH 4TH FLOOR ELEVATION = 151'-7".
   FINISH 5TH FLOOR ELEVATION = 162'-9".
   FINISH 6TH FLOOR ELEVATION = 173'-11".
   FLOOR CONSTRCTION SHALL BE 5" LIGHT WEIGHT CONCRETE SLAB ON 1 1/2" - 20 GAGE COMPOSITE DECKING REINFORCED WITH 6x6-W2.0xW2.0 W.W.F.
2. G.C. TO COORDINATE ANY REQUIRED OPENINGS IN SLAB FOR MECHANICAL / ELECTRICAL SYSTEMS WITH THE MECHANICAL / ELECTRICAL SHOP DRAWINGS FOR SIZE AND LOCTION OF OPENINGS. SEE DETAIL 3/S0.02.
3. ▷—— INDICATES FULL PEN MOMENT CONNECTION. SEE DETAIL 9/S0.03.
4. SEE 6/S2.02 FOR EMBEDDED PLATE DETAIL.
5. SEE SHEET S4.01 FOR X-BRACE ELEVATION.
6. REINFORCED CONCREET SHEAR WALLS. DEE SECTION 4/S5.02 AND 2/S5.02 FOR REINFORCING.
7. ⟵ REPRESENTS DECK SPAN. SEE NOTE 1.
8. G.C. TO COORDINATE LOCATION OF SECTIONS WITH ARCH. ELEVATION FOR EACH FLOOR LEVEL. 3RD THRU 6TH BASED ON WINDOW LOCATION.



3RD-6TH FLOOR
FRAMING PLAN - AREA B

1/8" = 1'-0"

TRUE

REVISED
15 DECEMBER 2015

PLOT DATE: 12/14/2015 4:08:58 PM TEMPLATE VERSION:

HKS

ARCHITECT
HKS, INC.
191 PEACHTREE STREET NE
SUITE 5000
ATLANTA, GA 30303

ASSOCIATE ARCHITECT
MURRAY AND ASSOCIATES ARCHITECTS
1600 NORTH SECOND STREET
HARRISBURG, PA 17102-2499

MEP ENGINEER
AHA CONSULTING ENGINEERS
1801 OLD ALABAMA RD, SUITE 125
ROSWELL, GA 30076

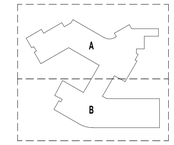
SITE/CIVIL ENGINEER
DERCK & EDSON ASSOCIATES
33 SOUTH BROAD STREET
LITITZ, PA 17543

GEOTECHNICAL ENGINEER
CMT LABORATORIES, INC.
2701 CAROLEAN INDUSTRIAL DRIVE
STATE COLLEGE, PA 16801

STRUCTURAL ENGINEER
WBCM
100 STERLING PARKWAY, SUITE 108
MECHANICSBURG, PA 17050

BLOOMSBURG UNIVERSITY RESIDENCE HALL & BOOKSTORE

KEY PLAN



REVISION
NO. DESCRIPTION DATE

HKS PROJECT NUMBER
19087.000

DATE
03 DECEMBER 2015

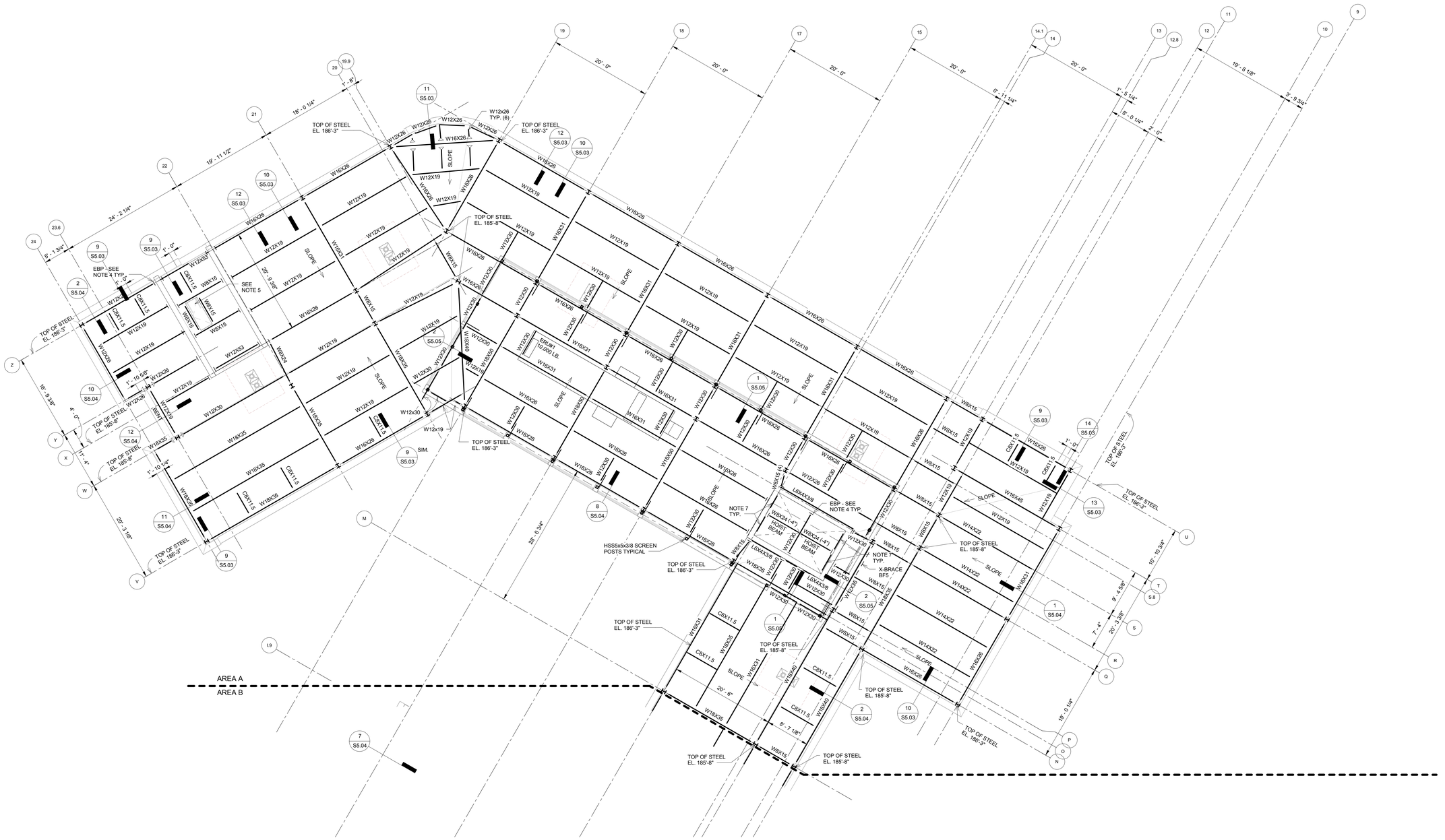
ISSUE
CONSTRUCTION DOCUMENTS

SHEET TITLE
3RD-6TH FLOOR FRAMING PLAN - AREA B

SHEET NO.
S1.08

PLAN NOTES:

1. TOP OF STEEL ELEVATION IS AS NOTED ON PLAN. TOP OF STEEL IS DEFINED AS BOTTOM OF METAL DECK. PROVIDE 1 1/2" - 20 GAGE TYPE B ROOF DECK OVER ENTIRE ROOF AREA UNLESS NOTED OTHERWISE.
2. G.C. TO COORDINATE ANY REQUIRED OPENINGS FOR MECHANICAL/ELECTRICAL SYSTEMS WITH MECHANICAL AND ELECTRICAL SHOP DRAWINGS. SEE DETIAL 6/S0.03 FOR FRAMING REQUIREMENTS.
3. PROVIDE 1/4" PLATE AT SLOPED BEAMS TO SUPPORT DECK AT ELEVATION TRANSITIONS AS REQUIRED.
4. EBP = EMBEDDED PLATE. SEE 4/S5.02 FOR DETAILS.
5. G.C. TO COORDINATE LOCATION OF ROOF HATCH WITH ARCHITECTURAL DRAWINGS.
6. ELEVATOR ROOF SHALL BE ELEVATION SHALL BE 190'-0". CONSTRUCTION SHALL BE 6" SLAB ON 1 1/2" - 20 GAGE COMPOSITE DECKING REIFORCED WITH 6x6-W2.9xW2.9 W.W.F. TOP OF STEEL SHALL BE 189'-6". TOP OF STEEL IS DEFINED AS BOTTOM OF METAL DECK. MEMBERS NOTED THUS (-X"-X") ARE DEPRESSED SAID DISTANCE BELOW SPECIFIED TOP OF STEEL.
7. PROVIDE L4x4x3/8 AT ELEVATION 189'-6" ATTACH TO WALL WITH 3/4" DIA EXPANSION BOLTS AT 32" O/C. MIN. (2) BOLTS PER ANGLE.
8. G.C. TO COORDINATE LOCATION OF SECTIONS WITH ARCH. ELEVATION FOR EACH FLOOR LEVEL. 3RD THRU 6TH BASED ON WINDOW LOCATION.



ROOF FRAMING PLAN - AREA A

1/8" = 1'-0"

TRUE

REVISED
15 DECEMBER 2015

HKS

ARCHITECT
HKS, INC.
191 PEACHTREE STREET NE
SUITE 5000
ATLANTA, GA 30303

ASSOCIATE ARCHITECT
MURRAY AND ASSOCIATES ARCHITECTS
1600 NORTH SECOND STREET
HARRISBURG, PA 17102-2499

MEP ENGINEER
AHA CONSULTING ENGINEERS
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ROSWELL, GA 30076

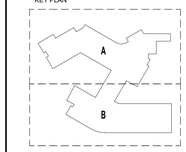
SITE/CIVIL ENGINEER
DERCK & EDSON ASSOCIATES
33 SOUTH BROAD STREET
LITITZ, PA 17543

GEOTECHNICAL ENGINEER
CMT LABORATORIES, INC.
2701 CAROLEAN INDUSTRIAL DRIVE
STATE COLLEGE, PA 16801

STRUCTURAL ENGINEER
WBCM
100 STERLING PARKWAY, SUITE 108
MECHANICSBURG, PA 17050

BLOOMSBURG UNIVERSITY RESIDENCE HALL & BOOKSTORE

KEY PLAN



REVISION

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HKS PROJECT NUMBER
19087.000

DATE
03 DECEMBER 2015

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CONSTRUCTION DOCUMENTS

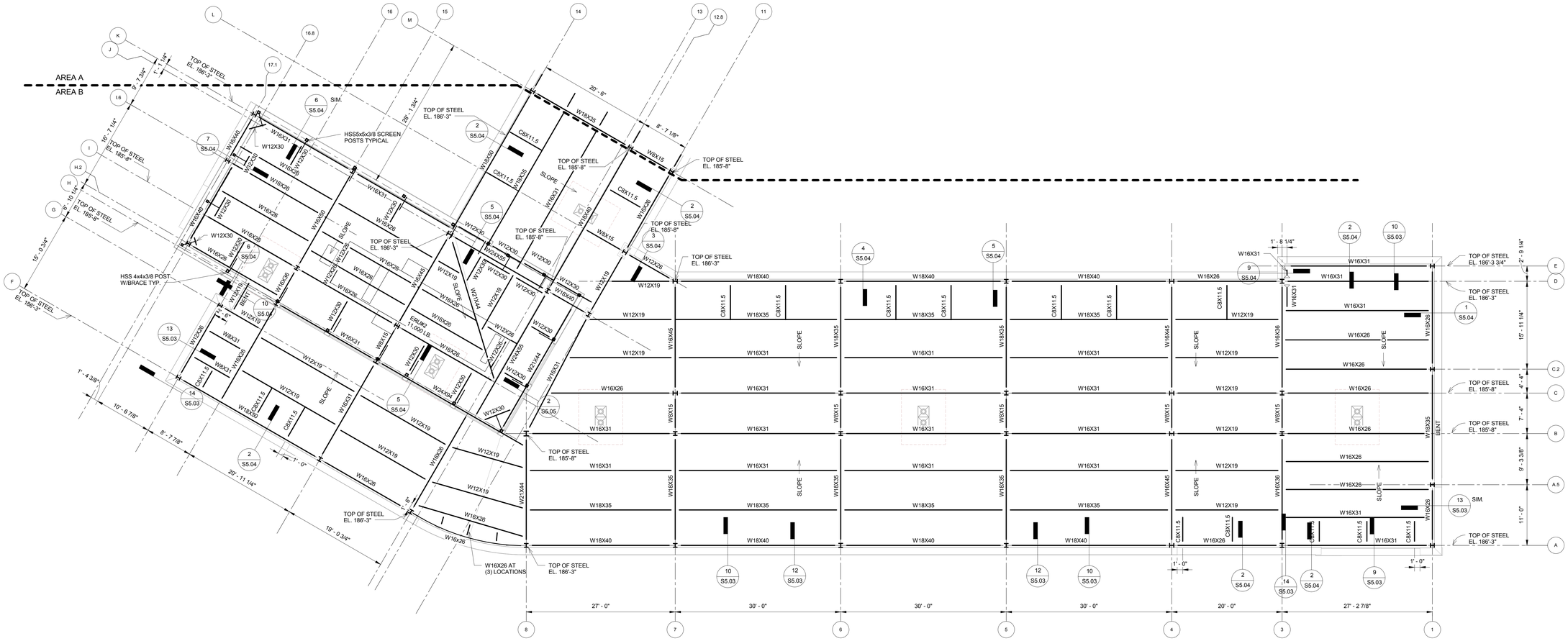
SHEET TITLE
ROOF FRAMING PLAN - AREA A

SHEET NO.
S1.09

PLOT DATE:
12/14/2015 4:09:02 PM
TEMPLATE VERSION:

PLAN NOTES:

1. TOP OF STEEL ELEVATION IS AS NOTED ON PLAN. TOP OF STEEL IS DEFINED AS BOTTOM OF METAL DECK. PROVIDE 1 1/2" - 20 GAGE TYPE B ROOF DECK OVER ENTIRE ROOF AREA.
2. G.C. TO COORDINATE ANY REQUIRED OPENINGS FOR MECHANICAL/ELECTRICAL SYSTEMS WITH MECHANICAL AND ELECTRICAL SHOP DRAWINGS. SEE DETIAL 6/S0.03 FOR FRAMING REQUIREMENTS.
3. PROVIDE 1/4" PLATE AT SLOPED BEAMS TO SUPPORT DECK AT ELEVATION TRANSITIONS AS REQUIRED.
4. ▷—— INDICATES FULL PEN MOMENT CONNECTION. SEE DETAIL 9/S0.03.



ROOF FRAMING PLAN - AREA B

1/8" = 1'-0"

TRUE

REVISED
15 DECEMBER 2015

ARCHITECT
HKS, INC.
191 PEACHTREE STREET NE
SUITE 5000
ATLANTA, GA 30303

ASSOCIATE ARCHITECT
MURRAY AND ASSOCIATES ARCHITECTS
1600 NORTH SECOND STREET
HARRISBURG, PA 17102-2499

MEP ENGINEER
AHA CONSULTING ENGINEERS
1801 OLD ALABAMA RD, SUITE 125
ROSWELL, GA 30076

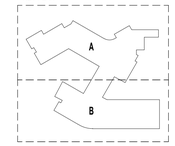
SITE/CIVIL ENGINEER
DERCK & EDSON ASSOCIATES
33 SOUTH BROAD STREET
LITITZ, PA 17543

GEOTECHNICAL ENGINEER
CMT LABORATORIES, INC.
2701 CAROLEAN INDUSTRIAL DRIVE
STATE COLLEGE, PA 16801

STRUCTURAL ENGINEER
WBCM
100 STERLING PARKWAY, SUITE 108
MECHANICSBURG, PA 17050

BLOOMSBURG UNIVERSITY
RESIDENCE HALL
& BOOKSTORE

KEY PLAN



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NO. DESCRIPTION DATE

HKS PROJECT NUMBER
19087.000

DATE
03 DECEMBER 2015

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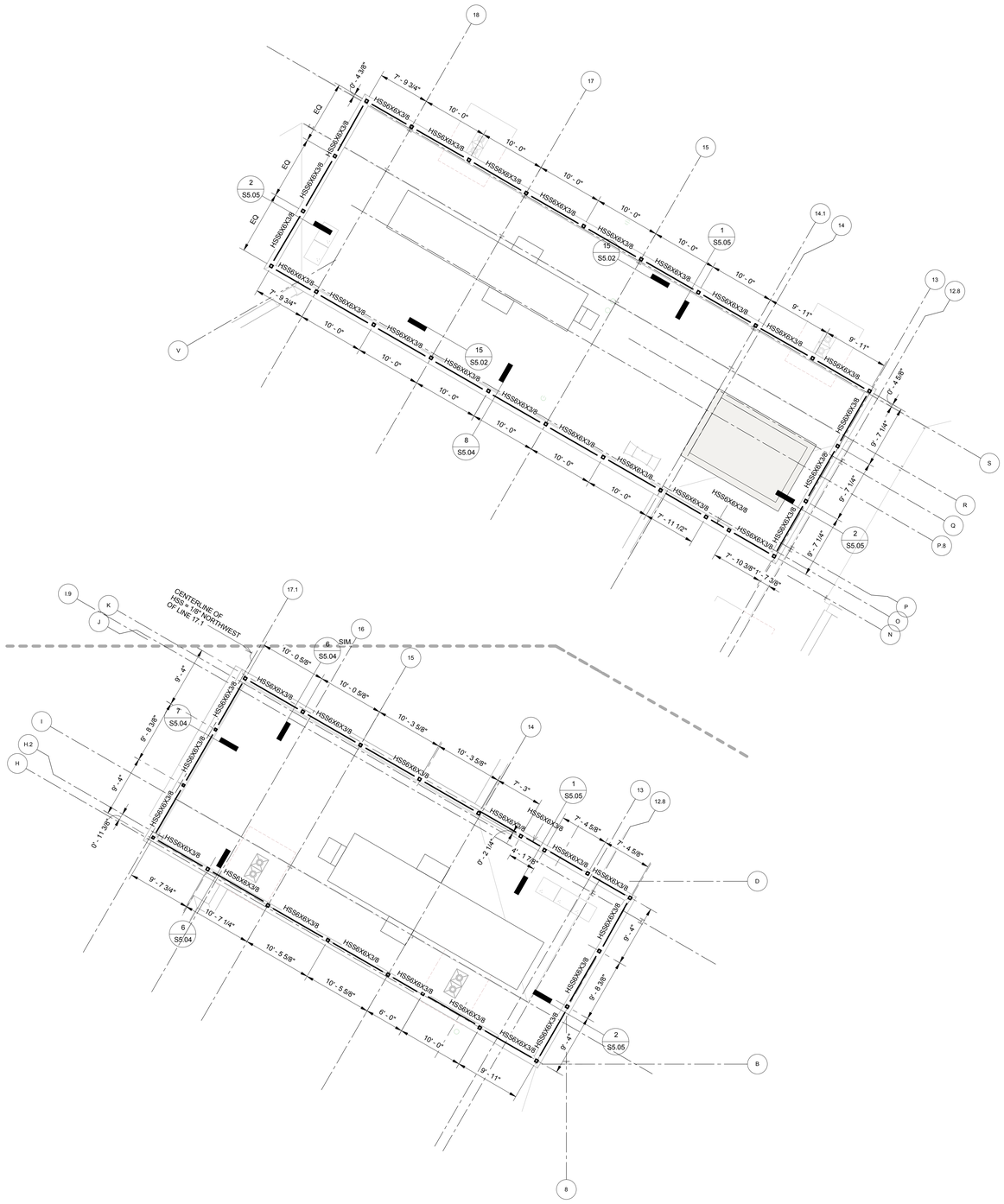
CONSTRUCTION DOCUMENTS

SHEET TITLE
ROOF FRAMING PLAN - AREA B

SHEET NO.
S1.10

PLOT DATE: 12/14/2015 4:09:08 PM TEMPLATE VERSION:

PLAN NOTES:
1. TOP OF STEEL ELEVATION IS 197'-4". TOP OF STEEL IS TOP OF HSS6x6 MEMBERS. COORDINATE TOP OF STEEL WITH ARCHITECTURAL SECTIONS.



SCREEN WALL FRAMING PLANS
1/8" = 1'-0"

TRUE

REVISED
15 DECEMBER 2015

PLOT DATE:
12/14/2015 4:09:19 PM
TEMPLATE VERSION:

HKS

ARCHITECT
HKS, INC.
191 PEACHTREE STREET NE
SUITE 5000
ATLANTA, GA 30303

ASSOCIATE ARCHITECT
MURRAY AND ASSOCIATES ARCHITECTS
1600 NORTH SECOND STREET
HARRISBURG, PA 17102-2499

MEP ENGINEER
AHA CONSULTING ENGINEERS
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ROSWELL, GA 30076

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DERCK & EDSON ASSOCIATES
33 SOUTH BROAD STREET
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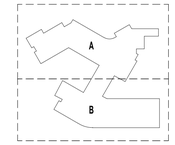
GEOTECHNICAL ENGINEER
CMT LABORATORIES, INC.
2701 CAROLEAN INDUSTRIAL DRIVE
STATE COLLEGE, PA 16801

STRUCTURAL ENGINEER
WBCM
100 STERLING PARKWAY, SUITE 108
MECHANICSBURG, PA 17050

BLOOMSBURG UNIVERSITY
RESIDENCE HALL
& BOOKSTORE

KEY PLAN



REVISION
NO. DESCRIPTION DATE

HKS PROJECT NUMBER
19087.000

DATE
03 DECEMBER 2015

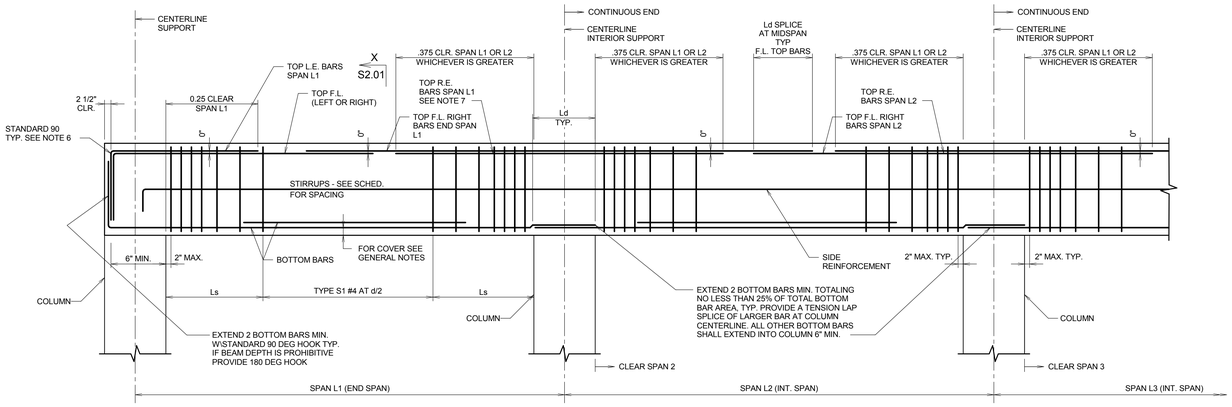
ISSUE
CONSTRUCTION DOCUMENTS

SHEET TITLE
SCREEN WALL FRAMING PLANS

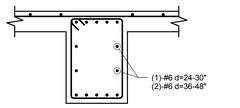
SHEET NO.
S1.11

CONCRETE BEAM SCHEDULE

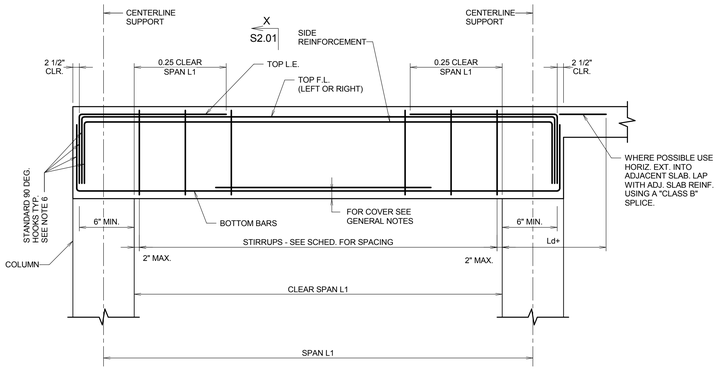
MARK	SIZE		REINFORCING					STIRRUPS								
			BOTTOM		TOP			LEFT				RIGHT				COMMENT
	WIDTH (IN)	DEPTH (IN)	FULL LENGTH	MIDDLE	LEFT END	FULL LENGTH	RIGHT END	TYPE	SIZE	SPACING (IN.)	LS (FT.)	TYPE	SIZE	SPACING (IN.)	LS (FT.)	ADDITIONAL PER A/S2.01
CB1	18	24	2-#9	-	3-#10	2-#6	3-#10	S1	#4	8"	8'	S1	#4	8"	8'	-
CB2	12	18	2-#7	-	-	2-#10	-	S1	#4	6"	8'	S1	#4	8"	8'	-
CB3	18	30	2-#6	2-#10	3-#10	2-#6	3-#10	S1	#4	12"	6'	S1	#4	8"	8'	-
CB4	30	42	2-#6	5-#10	12-#10	2-#6	6-#10	S2	#4	12"	8'	S3	#4	8"	6'	S3 #5 AT 6"
CB5	30	42	2-#6	5-#10	4-#10	2-#6	6-#10	S2	#4	8"	6'	S3	#4	6"	6'	S3 #5 AT 6"
CB6	30	42	3-#9	-	7-#10	2-#6	3-#10	S1	#4	10"	7'	S1	#4	10	7'	-
CB7	12	18	2-#7	-	2-#10	2-#6	2-#10	S1	#4	6"	9'	S1	#4	6	9'	-
CB8-S1	30	46	2-#6	3-#10	4-#10	2-#6	4-#10	S1	#4	16"	9'	S1	#4	16	9'	-
CB8-S2	30	46	4-#10	-	14-#10	2-#6	6-#10	S2	#4	16"	6'	S2	#4	6	5'	S3 #4 AT 6"
CB9	30	46	2-#6	5-#10 & 2-#9	10-#10	2-#6	5-#10	S2	#4	16"	6'	S2	#4	4	6'	S3 #4 AT 4"
CB10	18	24	2-#6	2-#10	4-#10	2-#6	4-#10	S1	#4	12"	9'	S1	#4	12	9'	-
CB11	24	36	2-#6	3-#10	4-#10	2-#6	4-#10	S1	#4	16"	-	S1	#4	16	-	-
CB12	30	42	2-#6	7-#10	10-#10	2-#6	8-#10	S2	#4	9"	11'	S2	#4	9	11'	-
CB13	24	36	4-#8	-	3-#10	2-#6	3-#10	S1	#4	12"	5'	S1	#4	12	5'	-
CB14	24	36	4-#8	-	3-#10	2-#6	3-#10	S1	#4	16"	-	S1	#4	16	-	-
CB15	18	24	2-#8	-	2-#10	2-#6	2-#10	S1	#4	9"	7'	S1	#4	9	7'	-
CB16-S1	24	36	3-#10	-	6-#10	2-#6	7-#10	S1	#4	6"	8'	S1	#4	12"	6'	S1 #4 AT 6"
CB16-S2	24	36	3-#6	-	-	7-#10	-	S2	#4	6"	4'	S1	-	-	-	-
CB17	24	36	2-#6	4-#10	5-#10	2-#6	4-#10	S1	#4	16"	6'	S2	#4	12"	6'	-
CB18	30	42	2-#6	5-#10	6-#10	2-#6	9-#10	S2	#4	12"	6'	S2	#4	4"	6'	S2 #4 AT 12"
CB19	24	36	2-#6	6-#10	10-#10	2-#6	5-#10	S2	#4	6"	5'	S2	#4	12"	6'	S2 #4 AT 9"
CB20	18	24	2-#6	4-#10	4-#10	2-#6	4-#10	S1	#4	10"	7'	S1	#4	10"	7'	-
CB21	18	24	2-#6	2-#9	2-#9	2-#6	2-#9	S1	#4	10"	7'	S1	#4	10"	7'	-
CB22	18	24	2-#6	-	-	2-#8	-	S1	#4	12"	-	S1	#4	12"	-	-
CB23	18	24	2-#6	-	-	2-#7	-	S1	#4	12"	-	S1	#4	12"	-	-
CB24	18	24	2-#9	-	-	2-#9	-	S1	#4	12"	-	S1	#4	12"	-	-
CB25	18	24	2-#6	-	-	2-#6	-	S1	#4	12"	-	S1	#4	12"	-	-
CB26	24	36	2-#6	3-#10	6-#10	2-#6	3-#10	S2	#4	4"	5'	S1	#4	12"	6'	S1 #4 AT 4"
CB27	18	24	2-#6	2-#9	3-#10	2-#6	3-#10	S1	#4	9"	9'	S1	#4	9"	9'	-
CB28	18	24	2-#6	2-#10	4-#10	2-#6	4-#10	S1	#4	9"	11'	S1	#4	9"	11'	-
CB29	30	42	2-#6	6-#10	13-#10	2-#6	8-#10	S3	#4	4"	5'	S3	#4	9"	11'	S3 #4 AT 4"
CB30	24	42	2-#6	2-#9	3-#9	2-#6	3-#9	S1	#4	18"	5'	S1	#4	18"	5'	-
CB31	30	48	2-#6	5-#10	6-#10	2-#6	5-#10	S3	#4	18"	4'	S3	#4	8"	9'	S2 #4 AT 8"
CB32-S1	30	42	3-#10	-	6-#10	2-#6	3-#10	S2	#4	12"	6'	S2	#4	12"	6'	-
CB32-S2	30	42	4-#6	-	-	6-#10	-	-	-	-	-	S2	#4	12"	-	-
CB33-S1	30	46	2-#6	6-#10	10-#10	2-#6	17-#10	S3	#5	4"	4'	S2	#4	18"	6'	S4 #5 AT 4"
CB33-S2	30	46	4-#10	-	-	10-#10	-	S2	#4	18"	-	S2	#4	18"	-	-
CB33-S3	30	46	8-#10	-	-	8-#10	-	-	-	-	-	S3	#4	6"	-	-
CB34-S1	30	48	2-#9	2-#6	2-#9	2-#6	2-#9	S1	#4	16"	6'	S1	#4	16"	6'	-
CB34-S2	30	48	2-#9	2-#6	2-#9	2-#6	2-#9	-	-	-	-	S1	#4	16"	-	-
CB35	18	30	2-#6	3-#10	4-#10	2-#6	4-#10	S1	#4	12"	-	S1	#4	12"	-	-
CB36	18	30	3-#8	-	3-#10	2-#6	3-#10	S1	#4	12"	-	S1	#4	12"	-	-
CB37	18	48	2-#6	2-#10	2-#10	2-#6	2-#10	S1	#4	18"	6'	S1	#4	18"	6'	-
CB38	30	48	2-#6	7-#10	12-#10	2-#6	8-#10	S3	#4	4"	9'	S3	#4	4"	9'	-
CB39	24	36	2-#6	5-#10	8-#10	2-#6	8-#10	S1	#4	12"	8'	S2	#4	6"	8'	S2 #4 AT 6"
CB40	30	48	2-#6	5-#10	13-#10	2-#6	11-#10	S3	#4	4"	7'	S3	#4	12"	4'	S3 #4 AT 4"
CB41	18	24	2-#8	-	3-#10	2-#6	3-#10	S1	#4	9"	6'	S1	#4	9"	6'	-
CB42	18	24	3-#9	-	-	3-#9	-	S1	#4	12"	-	S1	#4	12"	-	-
CB43	30	48	2-#6	6-#10	9-#10	2-#6	7-#10	S3	#4	4"	8'	S3	#4	6"	8'	S3 #4 AT 4"
CB44-S1	30	42	4-#6	-	10-#10	4-#10	-	S2	#4	12"	-	S2	#4	12"	-	-
CB44-S2	30	42	4-#6	-	-	10-#10	-	-	-	-	-	S2	#4	4"	7'	-
CB45	30	48	4-#6	-	2-#9	2-#9	2-#9	S2	#4	16"	4'	S2	#4	16"	4'	-
CB46	30	42	2-#6	7-#10	8-#10	2-#6	15-#10	S2	#4	12"	9'	S3	#4	4"	7'	S3 #4 AT 4"
CB47	18	24	2-#8	-	2-#10	2-#6	2-#10	S1	#4	9"	4'	S1	#4	9"	4'	-
CB48	18	24	2-#6	2-#10	3-#10	2-#6	2-#10	S1	#4	9"	4'	S1	#4	9"	4'	-
CB49	24	36	2-#6	3-#10	7-#10	2-#6	7-#10	S3	#4	4"	6'	S3	#4	4"	6'	-
CB50	24	36	2-#6	2-#10	4-#10	2-#6	4-#10	S1	#4	16"	5'	S1	#4	16"	5'	-
CB51	24	36	2-#6	2-#10	3-#10	2-#6	3-#10	S1	#4	16"	5'	S1	#4	16"	5'	-
CB52	24	36	2-#6	3-#10	5-#10	2-#6	5-#10	S1	#4	16"	7'	S1	#4	16"	7'	-
CB53	24	36	2-#6	2-#10	4-#10	2-#6	4-#10	S1	#4	16"	5'	S1	#4	16"	5'	-
CB54	24	36	2-#6	3-#10	4-#10	2-#6	4-#10	S1	#4	16"	7'	S1	#4	16"	7'	-
CB55	24	36	3-#10	-	4-#10	2-#6	12-#10	S2	#4	12"	6'	S3	#4	4"	3'	S3 #4 AT 4"
CB56	24	36	3#10	-	3-#10	2-#6	8-#10	S2	#4	12"	8'	S3	#4	4"	3'	S3 #4 AT 4"
CB57	30	42	2-#6	4-#10	5-#10	2-#6	4-#10	S1	#4	6"	7'	S1	#4	12"	8'	S1 #4 AT 6"
CB58	24	36	2-#6	6-#10	8-#10	2-#6	8-#10	S3	#4	9"	7'	S3	#4	9"	7'	-
CB59	18	24	2-#6	7-#9	3-#9	2-#6	3-#9	S1	#4	9"	5'	S1	#4	9"	5'	-
CB60	18	24	2-#10	-	-	2-#10	-	S1	#4	10"	-	S1	#4	10"	-	-
CB61	30	42	4-#6	-	-	4-#6	-	S1	#4	20"	-	S1	#4	20"	-	-
CB62	24	42	2-#6	5-#10	10-#10	2-#6	5-#10	S2	#4	16"	6'	S3	#4	6"	9'	-
CB63	18	30	2-#6	2-#9	4-#10	2-#6	3-#10	-	-	-	-	S1	#4	12"	5'	S2 #4 AT 4"
CB64	24	36	2-#6	5-#10	6-#10	2-#6	7-#10	S1	#4	12"	8'	S1	#4	6"	8'	S1 #4 AT 6"
CB65	30	48	2-#6	4-#10	7-#10	2-#6	7-#10	S1	#4	12"	12'	S1	#4	12"	12'	-
CB66-S1	30	46	4-#10	-	4-#10	2-#6	4-#10	S2	#4	12"	8'	S3	#4	6"	3'	S3 #4 AT 6"
CB66-S2	30	46	4-#9	-	4-#10	7-#10	4-#10	S3	#4	6"	3'	S2	#4	12"	5'	S3 #4 AT 6"
CB66-S3	30	46	4-#6	-	-	14-#10	-	S3	#4	4"	-	-	-	-	-	-
CB67	24	36	3-#8	-	-	2-#8	-	S1	#4	12"	6'	S1	#4	12"	6'	-
CB68	24	36	2-#6	4-#10	4-#10	2-#6	8-#10	S1	#4	16"	7'	S2	#4	6"	4'	S2 #4 AT 6"
CB69	30	42	2-#6	5-#10	8-#10	2-#6	6-#10	S3	#4	6"	3'	S2	#4	16"	8'	S3 #4 AT 6"
CB70	24	36	3-#9	-	7-#10	2-#6	6-#10	S3	#4	6"	5'	S3	#4	6"	5'	-
CB71	24	36	2-#6	3-#10	4-#9	2-#6	4-#9	S1	#4	12"	5'	S1	#4	12"	5'	-
CB72	18	24	2-#6	-	2-#8	2-#6	5-#10	S1	#4	10"	5'	S1	#4	10"	5'	-
CB73	24	42	3-#8	-	2-#10	2-#6	3-#10	S2	#4	12"	6'	S2	#4	6"	5'	-
CB74-S1	24	36	3-#6	-	2-#10	2-#6	2-#9	S3	#4	6"	4'	S2	#4	16"	4'	-
CB74-S2	24	36	3-#6	-	-	10-#10	-	-	-	-	-	S3	#4	6"	-	-
CB75	30	42	2-#6	4-#9	4-#10	2-#6	5-#10	S1	#4	16"	6'	S1	#4	16"	6'	-
CB76-S1	30	42	4-#6	-	8-#10	4-#6	-	S3	#4	6"	4'	S2	#4	16"	-	-
CB76-S2	30	42	4-#6	-	-	8-#10	-	-	-	-	-	S3	#4	6"	-	-
CB77	24	42	2-#9	-	-	-	4-#10	S1	#4	12"	4'	S1	#4	12"	4'	-
CB78	18	24	4-#6	-	2-#6	2-#6	2-#6	S1	#4	12"	-	S1	#4	12"	-	-
CB79	24	42	3-#7	-	-	3-#10	-	S1	#4	16"	6'	S1	#4	16"	6'	-
CB80	24	42	3-#9	-	2-#10	2-#6	2-#10	S1	#4	16"	6'	S1	#4	16"	6'	-
CB81	24	36	3-#9	-	3-#10	3-#10	3-#10	S1	#4	8"	5'	S1	#4	12"	8'	-
CB82	12	18	2-#6	-	2-#6	2-#6	2-#6	S1	#4	8"	-	S1	#4	8"	-	-
CB83	30	42	4-#10	-	5-#10	2-#6	5-#10	S2	#4	4"	2'	S2	#4	12"	6'	S2 #4 AT 4"
CB84	18	30	3-#7	-	2-#9	2-#6	2-#9	S1	#4	12"	7'	S1	#4	12"	7'	-
CB85	30	36	4-#10	-	4-#10	2-#6	6-#10	S2	#4	12"	6'	S2	#4	6"	8'	S2 #4 AT 6"
CB86-S1	30	42	6-#10	-	6-#10	2-#6	11-#10	S2	#4	16"	10'	S3	#4	8"	8'	S2 #4 AT 4"
CB86-S2	30	42	4-#6	-	11-#10	2-#10	-	S2	#4	12"	6'	S1	#4	16"	-	-
CB87	18	24	2-#6	2-#10	2-#10	2-#6	3-#10	S1	#4	10"	6'	S1	#4	10"	6'	-
CB88	30	48	2-#6	6-#10	13-#10	2-#6	10-#10	S2	#4	6"	8'	S2	#4	12"	8'	-
CB89	30	48	2-#6	4-#10	8-#10	2-#6	10-#10	S2	#4	4"	6'	S2	#4	4"	7'	S2 #4 AT 4"
CB90	30	48	2-#6	4-#10	5-#10	2-#6	5-#10	S2	#4	12"	5'	S2	#4	12"	5'	-
CB91	30	48	2-#7	-	2-#10	2-#6	2-#10	S1	#4	16"	6'	S1	#4	16"	6'	-
CB92	18	24	2-#6	-	2-#6	2-#6	2-#6	S1	#4	12"	-	S1	#4	12"	-	-
CB93	30	48	2-#6	-	2-#6	2-#6	2-#6	S1	#4	16"	4'	S1	#4	16"	4'	-
CB94	30	48	4-#9	-	3-#10	2-#6	3-#10	S1	#4	16"	6'	S1	#4	16"	6'	-
CB95	24	42	4-#9	-	2-#9	2-#6	2-#9	S2	#4	12"	8'	S2	#4	12"	8'	-
CB96	30	42	4-#6	-	-	4-#6	-	S2	#4	12"	8'	S2	#4	12"	8'	-
CB97	30	42	4-#6	5-#10	9-#10	2-#6	5-#10	S2	#4	6"	7'	S2	#4	16"	8'	S2 #4 AT 6"
CB98-S1	30	42	4-#6	-	-	4-#9	-	S1	#4	16"	-	S1	#4	16"	-	-
CB98-S2	30	42	4-#6	-	-	4-#9	-	S1	#4	16"	-	S1	#4	16"	-	-
CB99	30	46	4-#6	-	-	4-#6	-	S2	#4	12"	8'	S2	#4	12"	8'	-
CB100	30	42	4-#9	-	2-#10	2-#6	5-#10	S2	#4	16"	4'	S2	#4	4"	2'	S2 #4 AT 4"
CB101S1	30	42	4-#6	-	-	12-#10	-	S2	#4	12"	-	S2	#4	12"	-	-
CB101S2	30	42	4-#6	-	-	12-#10	-	-	-	-	-	S2	#4	4"	7'	S2 #4 AT 6"
CB102	30	42	4-#6	-	-	4-#6	-	S1	#4	18"	-	S1	#4	18"	-	-
CB103	30	42	4-#10	-	-	4-#9	-	S2	#4	9"	4'	S1	#4	12"	3'	S2 #4 AT 9"
CB104	18	24	2-#6	2-#9	2-#10	2-#6	2-#10	S1	#4	9"	6'	S1	#4	9"	6'	-
CB105	18	24	-	2-#6	-	2-#6	-	S1	#4	9"	5'	S1	#4	9"	5'	-
CB106	18	24	-	4-#6	-	4-#6	-	S1	#4	4"	2'	S1	#4	4"	2'	-



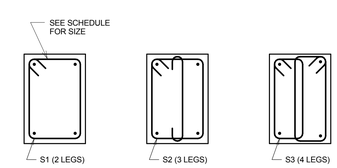
CONTINUOUS SPAN BEAM



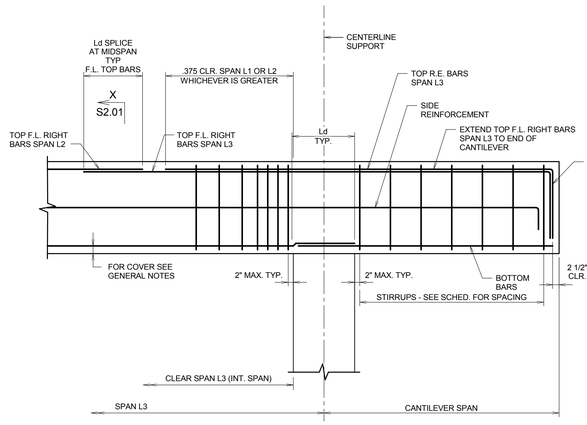
X/S2.01



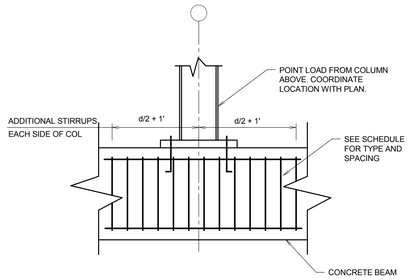
SINGLE SPAN BEAM



STIRRUP TYPES



CANTILEVER SPAN BEAM



A SECTION
S201 S201 NOT TO SCALE

NOTES:
1. F.L. = FULL LENGTH
   C.E. = CONTINUOUS END
   D.E. = DISCONTINUOUS END
   L.E. = LEFT END
   R.E. = RIGHT END
   E.E. = EACH END
   R = REMAINDER
   Ld = TENSION DEVELOPMENT LENGTH
2. ORIENTATION OF BEAM MARK ON PLAN DEFINES RIGHT END AND LEFT END OF BEAM (L.E.) ⟶ BXX ⟵ (R.E.)
3. WHERE CANTILEVER SPAN IS NOT SCHEDULED SEPARATELY EXTEND ALL SCHEDULED BARS, INCLUDING STIRRUPS FROM ADJACENT SPAN TO END OF CANTILEVER.
4. WHETHER OR NOT DISCONTINUOUS END OF THE BEAM OCCURS ON THE LEFT OR RIGHT, THE REBAR IS TO BE DETAILED PER THE DISCONTINUOUS END NOTED ABOVE.
5. WHETHER OR NOT THE CANTILEVER OCCURS ON THE LEFT OR RIGHT, THE REBAR IS TO BE DETAILED PER THE CANTILEVER END NOTED ABOVE.
6. WHERE BEAM DEPTH IS PROHIBITIVE, PROVIDE A STANDARD 180 HOOK IN LIEU OF 90 HOOK.
7. WHERE TOP RE BARS IN ONE SPAN AND TOP LE BARS OF THE NEXT ADJACENT SPAN CONFLICT, PROVIDE THE BARS WITH THE LARGER AREA OF STEEL.

CONCRETE BEAM DIAGRAM

1 DETAIL
S2.01 NONE

REVISED
15 DECEMBER 2015

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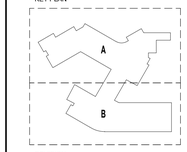
KEY PLAN



REVISION
NO. DESCRIPTION DATE

HKS PROJECT NUMBER
19087.000

DATE
03 DECEMBER 2015

ISSUE
CONSTRUCTION DOCUMENTS

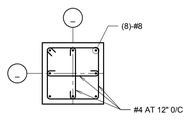
SHEET TITLE
CONCRETE BEAM SCHEDULE

SHEET NO.
S2.01

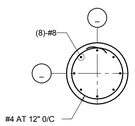
PLOT DATE: 12/14/2015 4:09:16 PM TEMPLATE VERSION:

CONCRETE COLUMN SCHEDULE

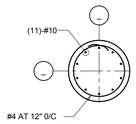
TOP OF SLAB 2ND FLOOR 129'-3"	24" x 24"	24" x 24"	24" DIA.	24" DIA.	16" DIA.
13'-3"					
TOP OF SLAB 1ST FLOOR 116'-0"					
16'-0"	(8)#8 VERTICAL #4 TIES AT 12"	(8)#8 VERTICAL #4 TIES AT 12"	(8)#8 VERTICAL #4 TIES AT 12"	(11)#10 VERTICAL #4 TIES AT 12"	(8)#8 VERTICAL #4 TIES AT 12"
TOP OF SLAB GROUND FLOOR 100'-0"					
COLUMN LOCATION	A-1, A-4.4, A.3-6, A.3-5.3, A.5-1, B-5.3, B-4.4, B.5-6, C-4.4, C-5.3, D-4.4, D-6, D-5.3, H.2-16.8, I.4-16.8, I.9-18, M.2,-14, M.2-15, O-14, O-15, Q.7-17, R-18, S-15, S-19, S.8-14.1, T.5-16, T.5-17.4, T.5-18.4, V-23.6, V.7-21, Y.5-21, Y.6-20, x.4-y.3, x.6-y.3, x.10-y.5, x.10-y.8,	A-2, A-4, B-2, B-4, C-2, C-4, C.2-1, D-2, D-4, E-1, E-2, V.8-22	A.2-7, A.2-8, B.5-8, B.5-7, D-7, F.3-12.8, F.3,-14, F.3-16, G-14, G-15, I.6-15, J-11, K-15, M-11, N-9, N-11, O-17, O-18, S-9, S-13, U-10, U-13, U-19, V-21.5, V-23, X.3-23.6, Z-23.5, x.2-y.7	J-14, M-17, M-18	Q-12.8, x.2-y.4, x.2-y.7, x.3-y.9, x.5-y.8, x.6-y.8
DETAIL	2/S2.01	2/S2.01	3/S2.01	4/S2.01	5/S2.01



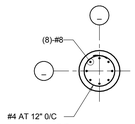
1 DETAIL S2.02 NOT TO SCALE



2 DETAIL S2.02 NOT TO SCALE



3 DETAIL S2.02 NOT TO SCALE



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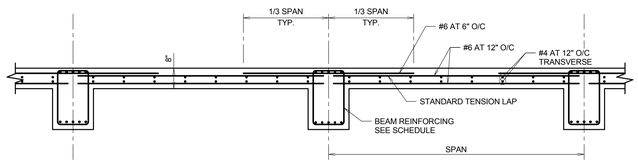
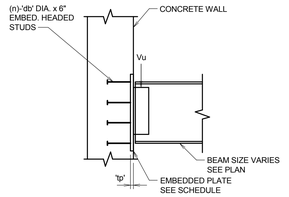


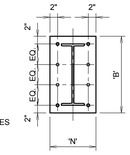
TYP. ONE WAY SLAB REINFORCING

5 DETAIL S2.02 NONE

FOOTING SCHEDULE		
MARK	SIZE	REINFORCING
F6.0	6'-0"x6'-0"x1'-6"	(5)-#8 EACH WAY BOTTOM
F7.0	7'-0"x7'-0"x1'-6"	(5)-#8 EACH WAY BOTTOM
F8.0	8'-0"x8'-0"x1'-6"	(6)-#8 EACH WAY BOTTOM
F9.0	9'-0"x9'-0"x1'-9"	(6)-#8 EACH WAY BOTTOM
F10.0	10'-0"x10'-0"x1'-9"	(9)-#8 EACH WAY BOTTOM
F11.0	11'-0"x11'-0"x2'-0"	(9)-#8 EACH WAY BOTTOM
F11.1	11'-0"x7'-0"x2'-0"	(11)-#8 SHORT WAY BOTTOM (8)-#8 LONG WAY BOTTOM
F12.0	12'-0"x12'-0"x2'-0"	(11)-#8 EACH WAY BOTTOM
F13.5	13'-6"x13'-6"x2'-3"	(15)-#8 EACH WAY BOTTOM
F15.0	15'-0"x15'-0"x2'-6"	(15)-#9 EACH WAY BOTTOM



X S2.02



SECTION X/S2.02

EMBEDDED PLATE SCHEDULE						
BEAM SIZE	Vu MAX.	'B'	'N'	'n'	'db'	'tp'
W8x15	6K	12"	8	4	1/2"	1/2"
W12x19	12K	16"	8	4	1/2"	1/2"
W12x22	15K	16"	8	4	1/2"	1/2"
W12x26	10K	16"	10	4	1/2"	1/2"
W12x53	15K	16"	13	4	1/2"	1/2"
W16x26	26K	19"	9	4	1/2"	1/2"
W16x31	95K	19"	9	12	1/2"	3/4"
W24x55	45K	27"	11	4	3/4"	3/4"
W24x55	86K	27"	11	6	3/4"	3/4"
HSS8x4x3/8	15K	12"	8	4	1/2"	1/2"
HSS18x6x5/8	24K	21"	12	6	3/4"	3/4"

6 DETAIL S2.02 NONE

REVISED
15 DECEMBER 2015

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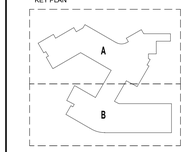
KEY PLAN



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CONSTRUCTION DOCUMENTS
SHEET TITLE
CONCRETE COLUMN & FOOTING SCHEDULES

S2.02

PLOT DATE:
12/14/2015 4:09:19 PM
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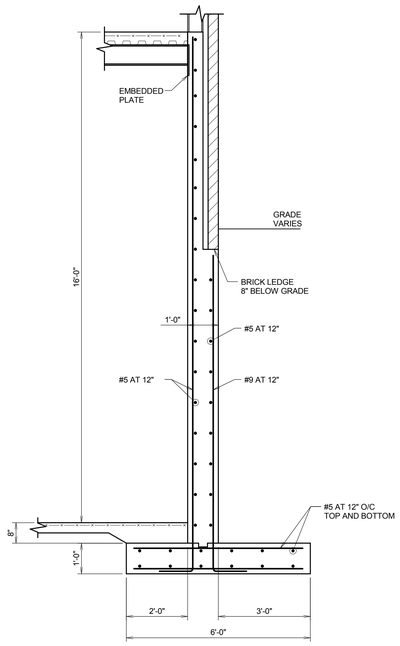
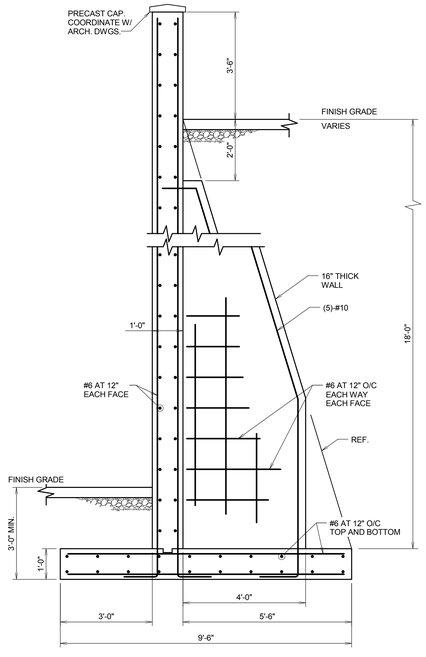
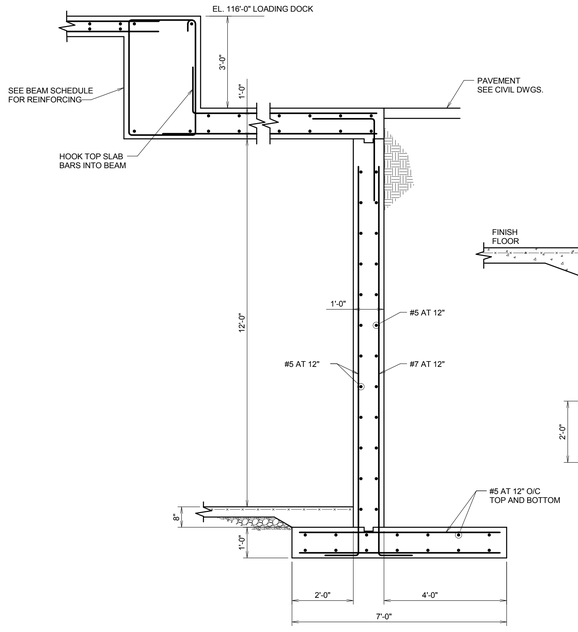


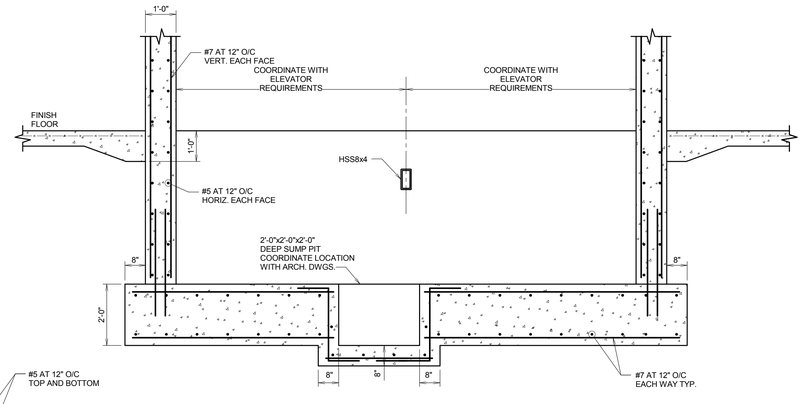
1 SECTION
S2.03 | S1.02 S1.04 1/2" = 1'-0"



2 SECTION
S2.03 | S1.01 S1.03 1/2" = 1'-0"



3 SECTION
S2.03 | S1.01 S1.03 1/2" = 1'-0"



4 SECTION
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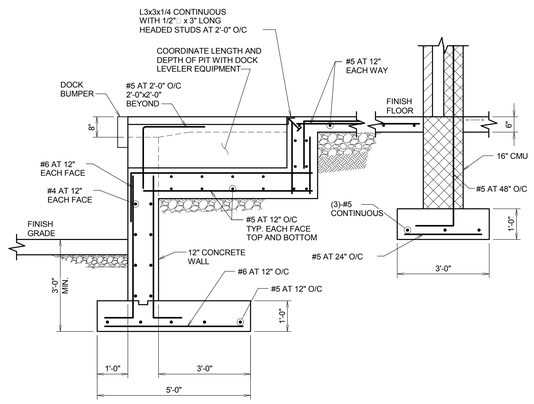

5 SECTION
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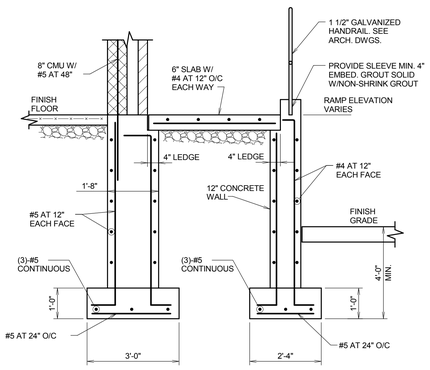

6 SECTION
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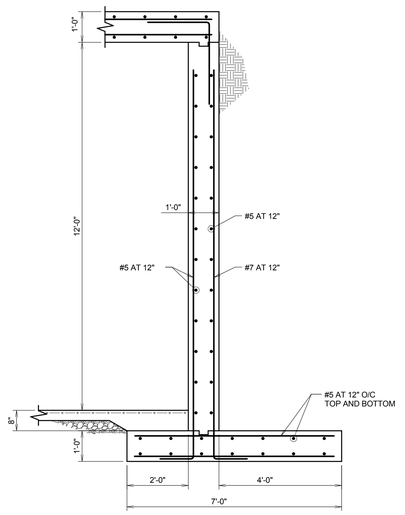

7 SECTION
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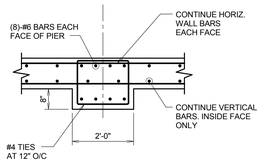

A DETAIL
S2.03 | S1.01 1/2" = 1'-0"

ARCHITECT
HKS, INC.
191 PEACHTREE STREET NE
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MURRAY AND ASSOCIATES ARCHITECTS
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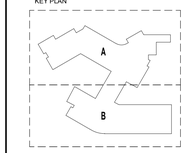
STATE COLLEGE, PA 16801

STRUCTURAL ENGINEER
WBCM
100 STERLING PARKWAY, SUITE 108
MECHANICSBURG, PA 17050

BLOOMSBURG UNIVERSITY RESIDENCE HALL & BOOKSTORE

KEY PLAN



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SHEET TITLE
CONCRETE SECTIONS

SHEET NO.
S2.03

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15 DECEMBER 2015

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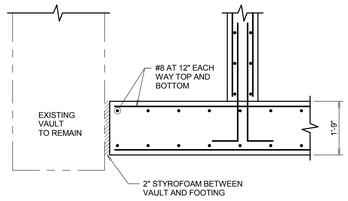
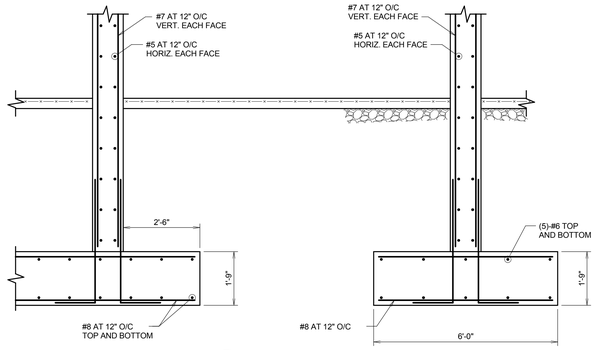
12/14/2015 4:09:22 PM TEMPLATE VERSION



1 SECTION
S2.04 S1.01 1/2" = 1'-0"



2 SECTION
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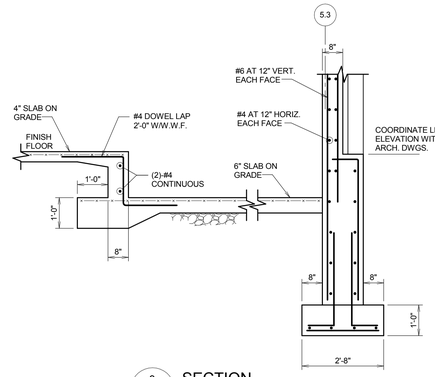

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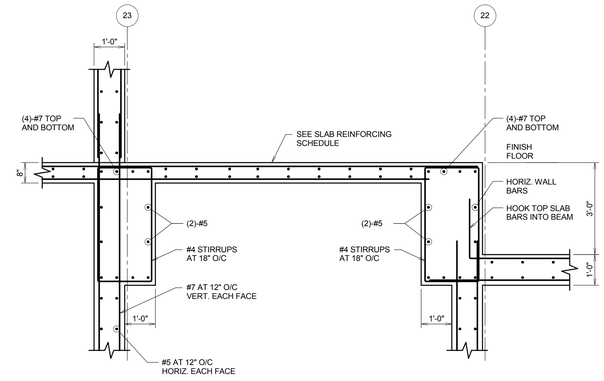

4 SECTION
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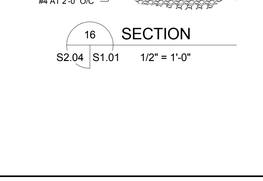

16 SECTION
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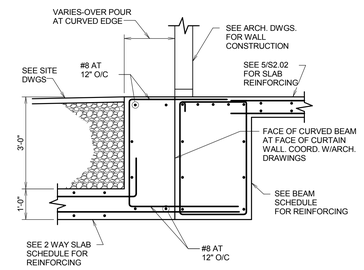
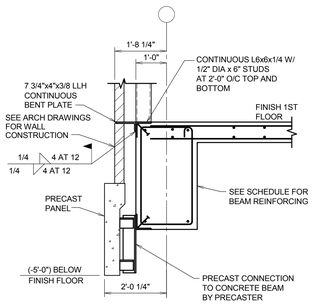
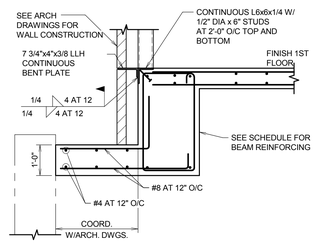


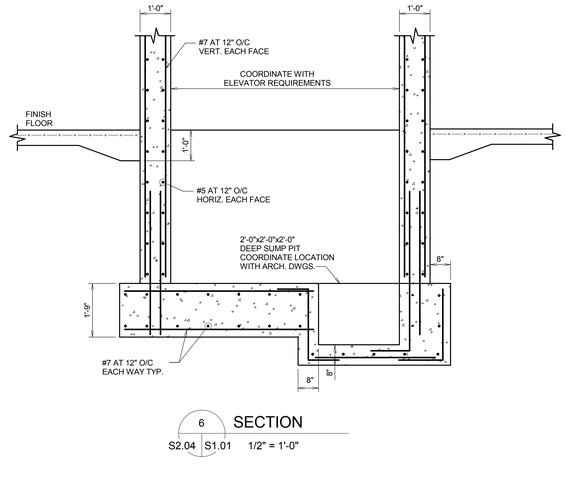
10 SECTION
S2.04 S1.03 1/2" = 1'-0"



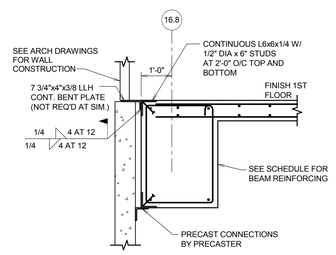
11 SECTION
S2.04 S1.04 1/2" = 1'-0"



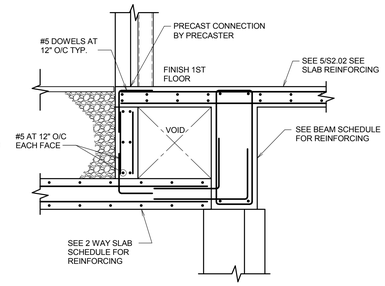
12 SECTION
S2.04 S1.04 1/2" = 1'-0"



7 SECTION
S2.04 S1.01 S1.03 1/2" = 1'-0"



13 SECTION
S2.04 S1.04 1/2" = 1'-0"



8 SECTION
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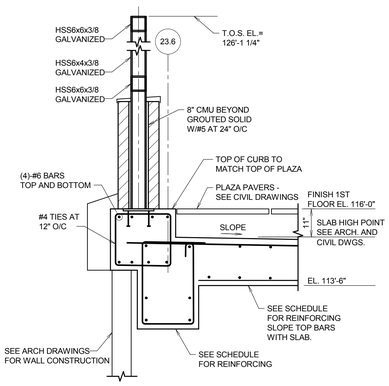
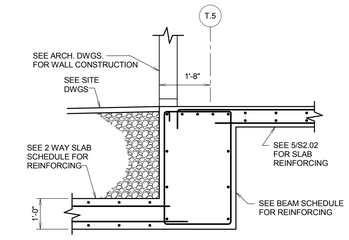
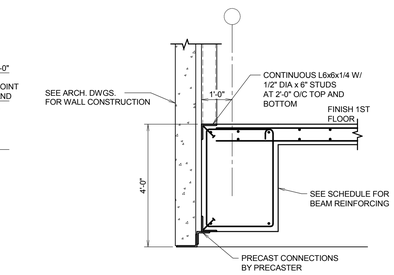


14 SECTION
S2.04 S1.03 S1.04 1/2" = 1'-0"



9 SECTION
S2.04 S1.03 1/2" = 1'-0"



15 SECTION
S2.04 S1.03 1/2" = 1'-0"

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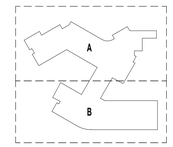
KEY PLAN



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12/14/2015 4:09:24 PM
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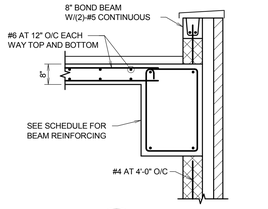
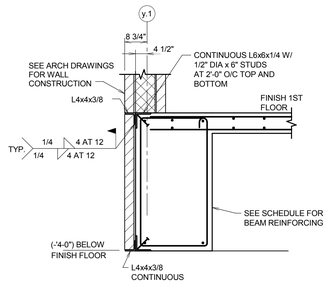


1 SECTION
S2.05 S1.04 1/2" = 1'-0"



2 SECTION
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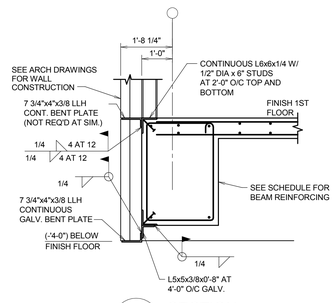

3 SECTION
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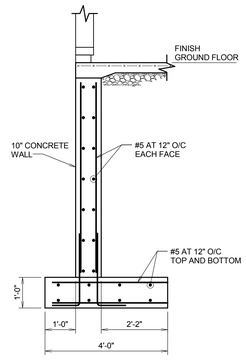
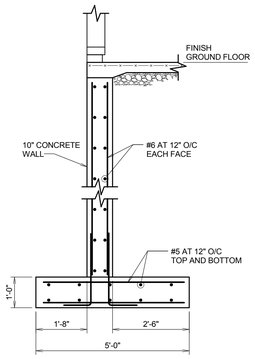
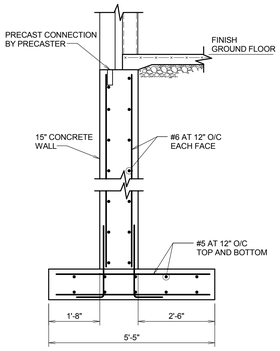


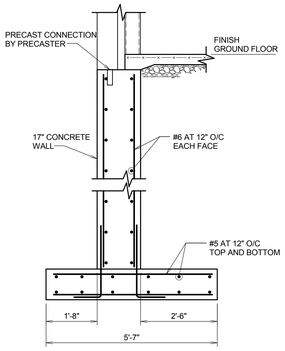
4 SECTION
S2.05 S1.01 S1.02 1/2" = 1'-0"



5 SECTION
S2.05 S1.01 1/2" = 1'-0"



6 SECTION
S2.05 S1.01 1/2" = 1'-0"



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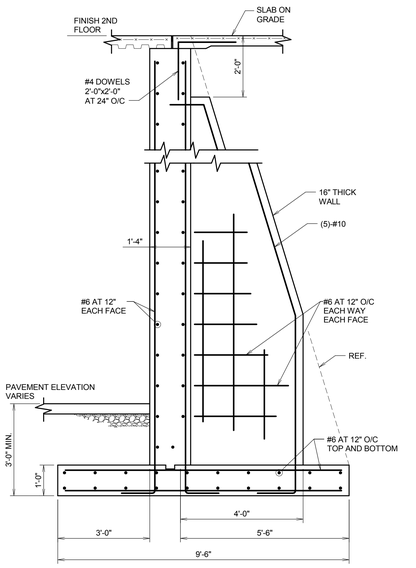

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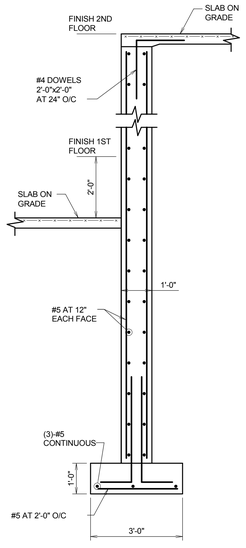

9 SECTION
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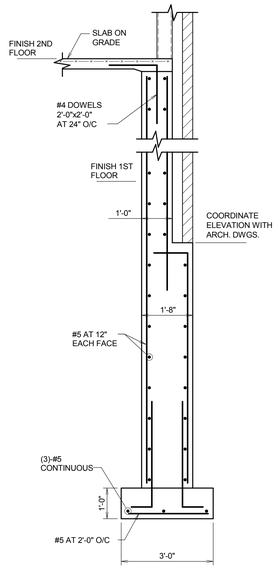

10 SECTION
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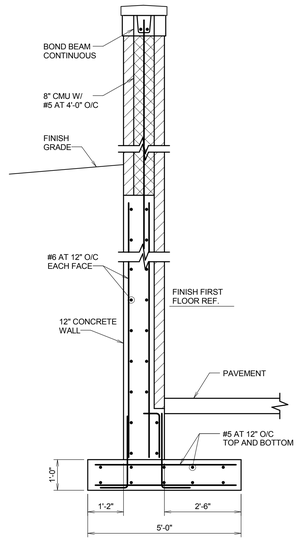
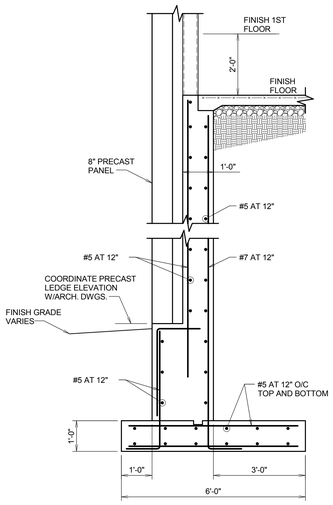


11 SECTION
S2.05 S1.01 1/2" = 1'-0"



12 SECTION
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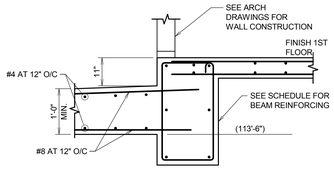

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S2.05 S1.03 1/2" = 1'-0"

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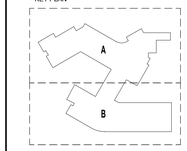

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12/14/2015 4:09:26 PM TEMPLATE VERSION

STEEL COLUMN SCHEDULE

Levels: TOP OF STEEL ROOF 185'-8" (LOW POINT SEE NOTE 2); TOP OF SLAB 6TH FLOOR 173'-11" (11'-9"); TOP OF SLAB 5TH FLOOR 162'-9" (11'-2"); SPLICE ELEVATION 4'-0" above 5th floor; TOP OF SLAB 4TH FLOOR 151'-7" (11'-2"); TOP OF SLAB 3RD FLOOR 140'-5" (11'-2"); TOP OF SLAB 2ND FLOOR 129'-3" (11'-2"); TOP OF SLAB 1ST FLOOR 116'-0" (13'-3")

COLUMN NUMBER	Upper tier (5th floor splice)	Lower tier (2nd floor)	1st floor	BASE PLATE TYPE	COLUMN LOAD* (KIPS)	COLUMN NUMBER (bottom row)
A 1	W8x31	W8x58		BP4	140	A 1
A 3	W8x31	W8x48		**	275	A 3
A 4	W8x67	W8x67		BP6	390	A 4
A 5	W8x31	W8x58		BP4	365	A 5
A 6	W8x31	W8x58		BP4	365	A 6
A 7	W8x31	W8x58		BP4	345	A 7
A 8	W8x31	W8x48		BP3	290	A 8
A.5 1	W8x31	W8x48		BP3	225	A.5 1
B 3	W8x31	W8x48		**	255	B 3
B 4	W8x67	W8x67		BP6	380	B 4
B 5	W8x31	W8x58		BP4	365	B 5
B 6	W8x31	W8x58		BP4	365	B 6
B 7	W8x31	W8x58		BP4	345	B 7
B 8	W10x49	W10x88		BP7	625	B 8
C 3	W8x31	W8x48		**	235	C 3
C 4	W8x67	W8x67		BP6	375	C 4
C 5	W8x31	W8x58		BP4	365	C 5
C 6	W8x31	W8x58		BP4	365	C 6
C 7	W8x67	W8x67		BP6	315	C 7
C.2 1	W8x31	W8x48		BP3	245	C.2 1
D 3	W8x31	W8x48		**	250	D 3
D 4	W8x67	W8x67		BP6	355	D 4
D 5	W8x31	W8x58		BP4	335	D 5
D 6	W8x31	W8x58		BP4	335	D 6
D 7	W8x67	W8x67		BP6	255	D 7
E 1	W8x31	W8x31		BP1	165	E 1
F 13	W8x31	W8x48		BP3	240	F 13
F 14	W8x31	W8x58		BP3	350	F 14
F 16	W8x31	W8x40		BP2	250	F 16
G 16	W8x31	W8x31		BP1	100	G 16
H 14	W10x49	W10x68		BP5	525	H 14
H 15	W8x31	W8x48		BP3	310	H 15
H.2 16.8	W8x31	W8x40		BP2	235	H.2 16.8
I 14	W8x31	W8x67		BP6	220	I 14
I 15	W8x31	W8x48		BP3	305	I 15
I 17.1	W8x67	W8x40		BP2	225	I.6 17.1
J 11	W8x31	W8x48		BP3	230	J 11
J 12.8	W8x31	W8x67		BP5	455	J 12.8
J 14	W10x68	W10x68		BP6	525	J 14
K 15	W8x31	W8x48		BP3	300	K 15
K 17.1	W8x31	W8x40		BP2	140	K 17.1
L 11	W8x31	W8x31		BP1	135	L 11
M 11	W8x31	W8x40		BP2	170	M 11
M 12.8	W8x67	W8x67		BP6	395	M 12.8
M 14	W8x67	W8x67		BP6	440	M 14
N 9	W8x31	W8x31		BP1	170	N 9
N 11	W8x31	W8x48		BP3	295	N 11
O 14.1	W8x31	W8x48		BP3	315	O 14.1
O 15	W8x31	W8x48		BP3	275	O 15
O 17	W8x31	W8x48		BP3	275	O 17
O 18	W8x31	W8x31		BP1	185	O 18
P 12.8	W8x67	W8x67		BP6	295	P 12.8
P.8 18			W8x48	BP3	175	P.8 18
Q 9	W8x31	W8x48		BP3	250	Q 9
Q 12.8	W8x67	W8x67		BP6	115	Q 12.8
R 11	W8x31	W8x40		BP2	205	R 11
R 14.1	W8x31	W8x40		BP2	125	R 14.1
R 15	W8x31	W8x48		BP3	290	R 15
R 17	W8x31	W8x48		BP3	285	R 17
R 18	W8x31	W8x40		**	230	R 18
R 20	W8x31	W8x31		**	135	R 20
S 11	W8x31	W8x31		BP1	120	S 11
S 13	W8x31	W8x40		BP2	225	S 13
S 14.1	W8x31	W8x40		BP2	290	S 14.1
S 15	W8x31	W8x48		BP3	200	S 15
S 17	W8x31	W8x48		BP3	200	S 17
S 18	W8x31	W8x58		BP4	335	S 18
S 19	W8x31	W8x58		BP4	395	S 19
T 9	W8x67	W8x67		BP6	215	T 9
T 12	W8x67	W8x67		BP6	160	T 12
T.5 15			W8x48	BP3	325	T.5 15
T.5 17			W8x48	BP3	315	T.5 17
T.5 18			W8x48	BP3	315	T.5 18
U 10	W8x31	W8x31		BP1	165	U 10
U 12	W8x31	W8x40		BP2	195	U 12
U 13	W8x31	W8x48		BP3	265	U 13
U 14.1	W8x31	W8x48		BP3	275	U 14.1
U 15	W8x31	W8x31		**	200	U 15
U 17	W8x31	W8x31		**	200	U 17
U 18	W8x31	W8x31		**	200	U 18
U 19	W8x31	W8x48		BP3	255	U 19
V 20.8			W8x58	BP4	200	V 20.8
V 21	W8x31	W8x40		**	215	V 21
V 21.5			W10x88	BP7	275	V 21.5
V 22	W8x31	W8x40		**	300	V 22
V 23			W8x58	BP4	145	V 23
V 24	W8x31	W8x48		BP3	280	V 24
V.8 20.8			W8x58	BP4	240	V.8 20.8
V.8 22	W8x31	W8x40		BP2	220	V.8 22
W 21	W8x31	W8x40		**	205	W 21
W 23.6	W8x31	W8x48		BP3	280	W 23.6
X 21	W8x31	W8x40		**	215	X 21
X.5 21			W10x88	BP7	265	X.5 21
Y 23.6	W8x31	W8x48		BP3	185	Y 23.6
Z 19.9	W8x31	W8x40		BP2	225	Z 19.9
Z 21	W8x31	W8x40		BP2	195	Z 21
Z 24	W8x31	W8x31		BP1	140	Z 24

NOTE: 1. *LOADS INDICATED ARE FACTORED TOTAL LOAD.
2. SEE ROOF PLAN FOR TOP OF STEEL ELEVATIONS.
3. ** SEE POST BASE CHART - THIS SHEET.

STEEL COLUMN SCHEDULE

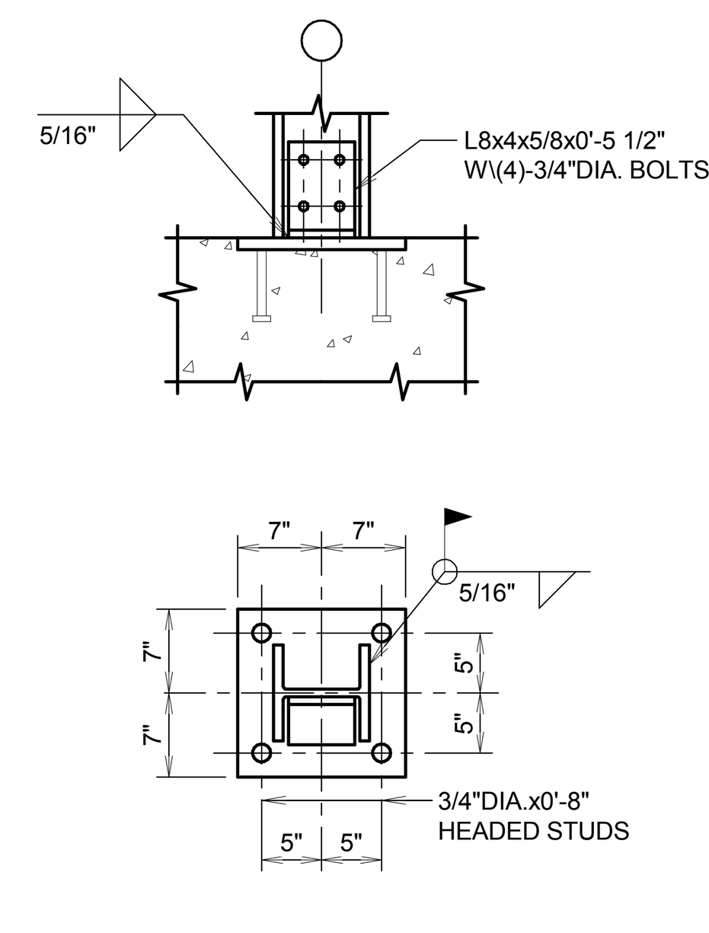
Levels: TOP OF STEEL ROOF 185'-8" (LOW POINT SEE NOTE 2); TOP OF SLAB 6TH FLOOR 173'-11" (11'-9"); TOP OF SLAB 5TH FLOOR 162'-9" (11'-2"); TOP OF SLAB 4TH FLOOR 151'-7" (11'-2"); TOP OF SLAB 3RD FLOOR 140'-5" (11'-2"); TOP OF SLAB 2ND FLOOR 129'-3" (11'-2"); TOP OF SLAB 1ST FLOOR 116'-0" (13'-3")

COLUMN NUMBER	1st floor	BASE PLATE TYPE	COLUMN LOAD* (KIPS)	COLUMN NUMBER (bottom row)
x.1 y.5	W8x31	BP1	95	x.1 y.5
x.3 y.7	W8x31	BP1	40	x.3 y.7
x.4 y.4	W8x31	BP1	128	x.4 y.4
x.4 y.6	W8x31	BP1	90	x.4 y.6
x.5 y.2	W8x31	BP1	105	x.5 y.2
x.5 y.4	W8x31	BP1	125	x.5 y.4
x.5 y.6	W8x31	BP1	70	x.5 y.6
x.6 y.1	HSS6x6x3/8	BP1	40	x.6 y.1
x.7 y.2	HSS6x6x3/8	BP1	20	x.7 y.2
x.8 y.1	HSS6x6x3/8	BP1	95	x.8 y.1
x.9 y.6	W8x31	BP1	45	x.9 y.6
x.9 y.4	W8x31	BP1	75	x.9 y.4

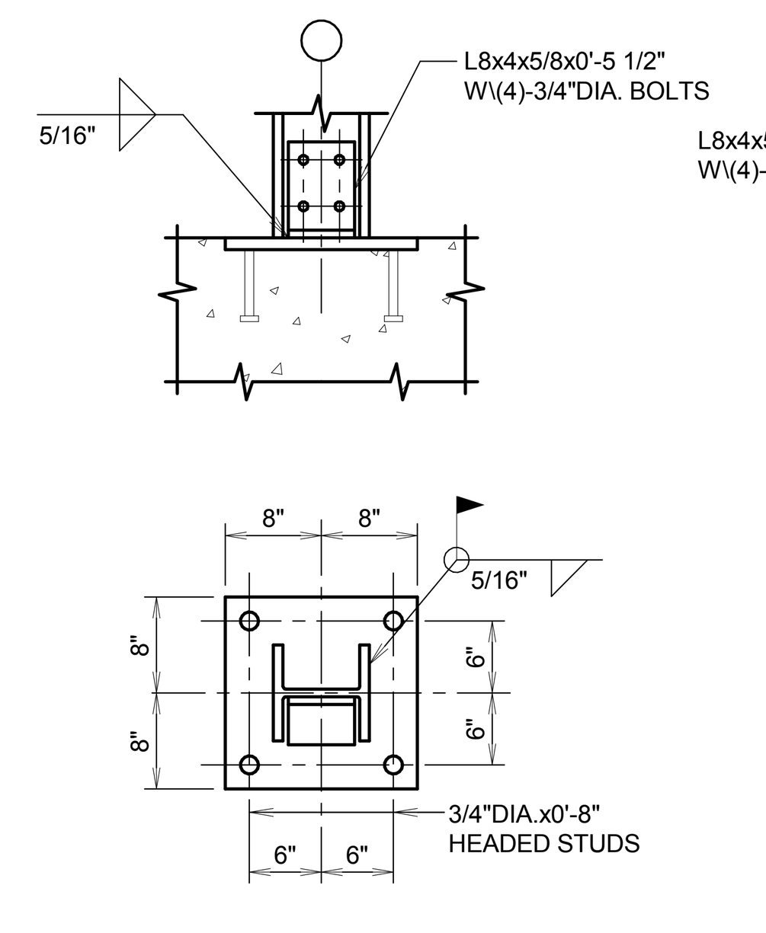
NOTE: 1. *LOADS INDICATED ARE FACTORED TOTAL LOAD.
2. SEE ROOF PLAN FOR TOP OF STEEL ELEVATIONS.

EMBEDDED BASE PLATE SCHEDULE

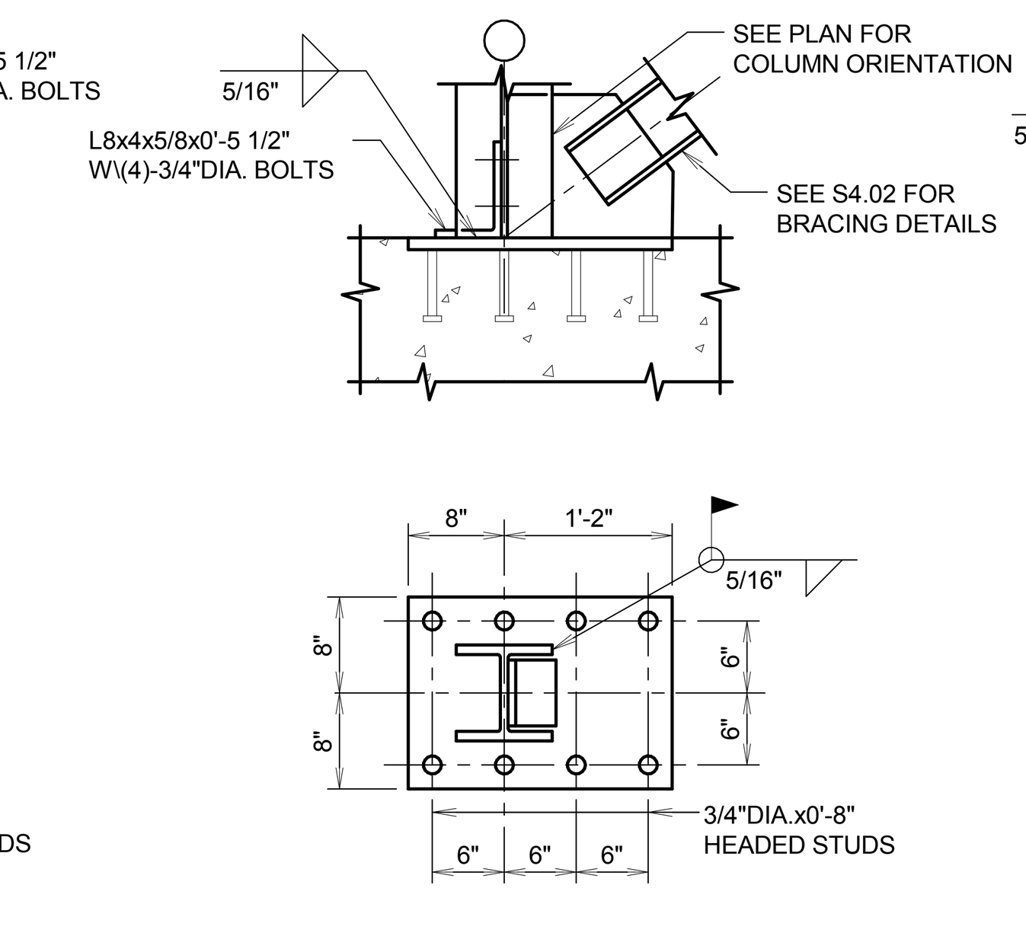
MARK	SIZE	STUDS
BP1	14"x1"x1'-2"	(4)-3/4"DIA.x8"
BP2	14"x1 1/4"x1'-2"	(4)-3/4"DIA.x8"
BP3	14"x1 1/2"x1'-2"	(4)-3/4"DIA.x8"
BP4	16"x1 3/4"x1'-4"	(4)-3/4"DIA.x8"
BP5	16"x2"x1'-4"	(4)-3/4"DIA.x8"
BP6	16"x2"x1'-10"	(12)-3/4"DIA.x8"
BP7	18"x2 1/4"x1'-6"	(4)-3/4"DIA.x8"



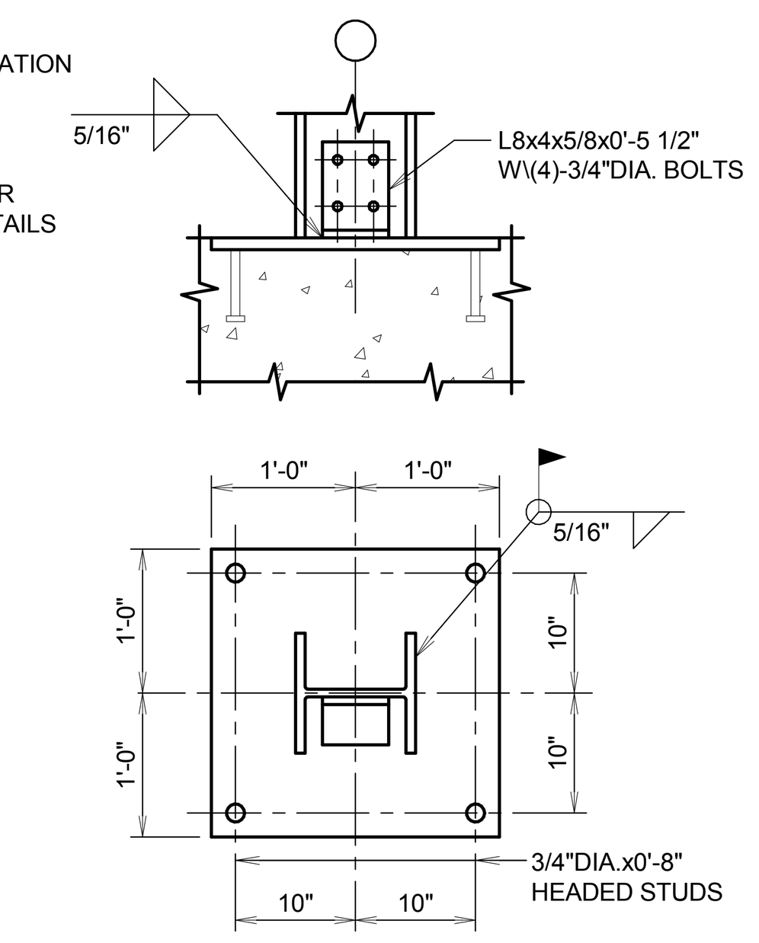
BP1, BP2 & BP3



BP4 & BP5



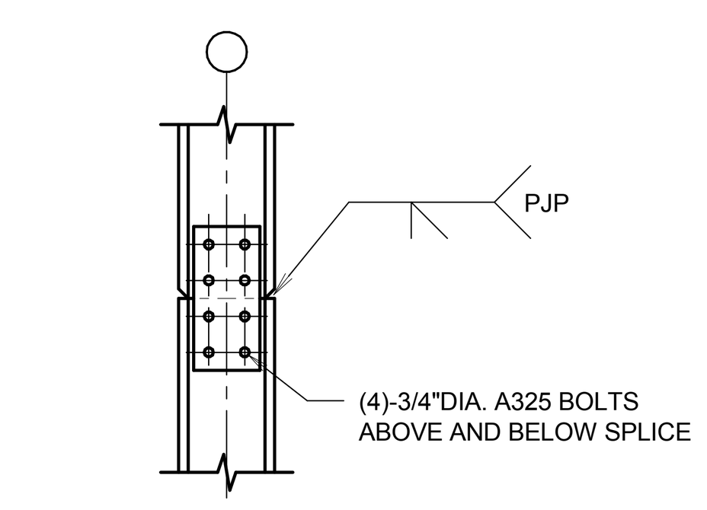
BP6



BP7

POST BASE CHART

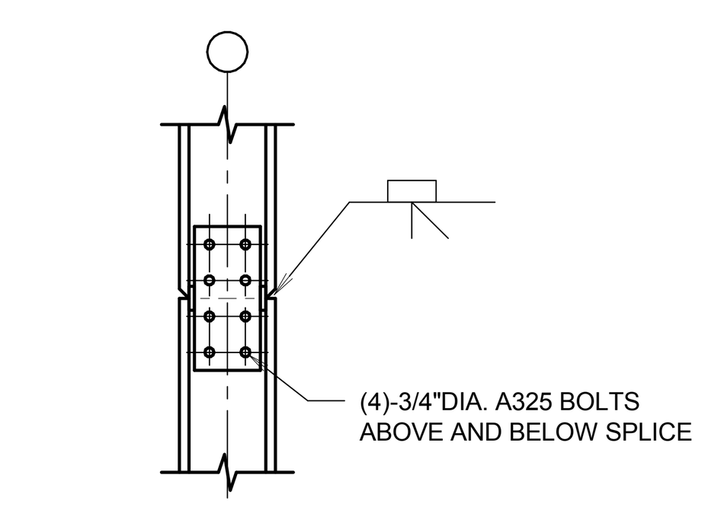
COLUMN NUMBER	BEAM SIZE	COLUMN SIZE	SEE 3/S3.01 'B'
A-3	W30x108	W8x48	10 1/2"
A-5	W36x232	W8x58	12"
B-3	W30x90	W8x48	10"
B-5	W36x232	W8x58	12"
C-3	W30x90	W8x48	10"
C-5	W36x232	W8x58	12"
D-3	W30x108	W8x48	10 1/2"
D-5	W36x232	W8x58	12"
R-15	W30x90	W8x40	10"
R-17	W30x90	W8x40	10"
R-18	W24x76	W8x40	9"
R-20	W21x44	W8x31	6 1/2"
U-15	W30x116	W8x31	10 1/2"
U-17	W30x116	W8x31	10 1/2"
U-18	W30x116	W8x31	10 1/2"
V-21	W24x55	W8x40	7"
V-22	W30x90	W8x40	10"
W-21	W24x76	W8x40	9"
W-22	W24x76	W8x40	9"
X-21	W24x76	W8x40	9"



TYPICAL COLUMN SPLICE

NOTES: 1. ALL COLUMNS ARE END BEARING.

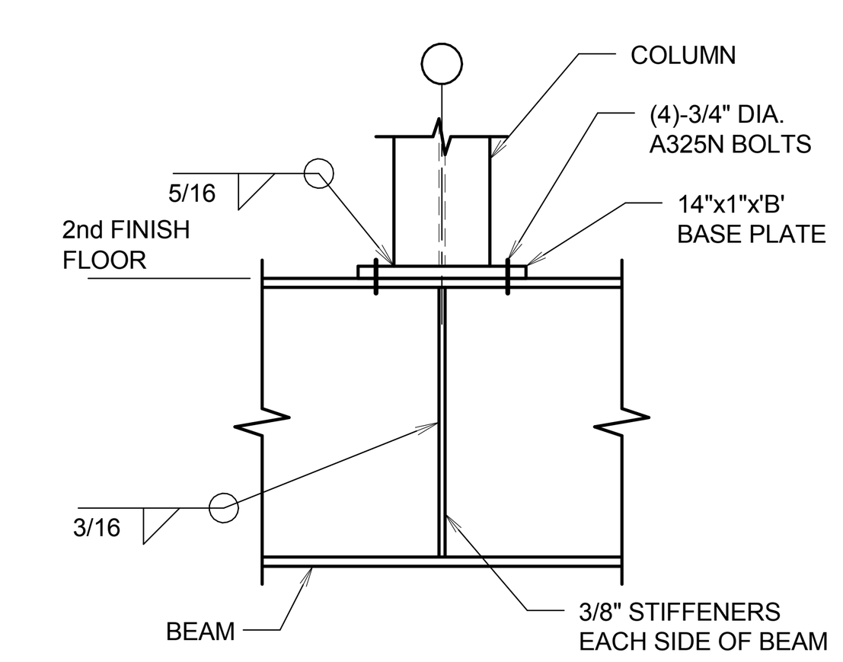
1 DETAIL
S3.01 NOT TO SCALE



COLUMN SPLICE AT
BRACED FRAMES

NOTES: 1. ALL COLUMNS ARE END BEARING.
2. COORDINATE WITH SHEET S4.01.

2 DETAIL
S3.01 NOT TO SCALE



3 DETAIL
S3.01 NOT TO SCALE

PLOT DATE: 12/14/2015 4:09:30 PM TEMPLATE VERSION:

HKS

ARCHITECT
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MURRAY AND ASSOCIATES ARCHITECTS
1600 NORTH SECOND STREET
HARRISBURG, PA 17102-2499

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AHA CONSULTING ENGINEERS
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SITE/CIVIL ENGINEER
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33 SOUTH BROAD STREET
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CMT LABORATORIES, INC.
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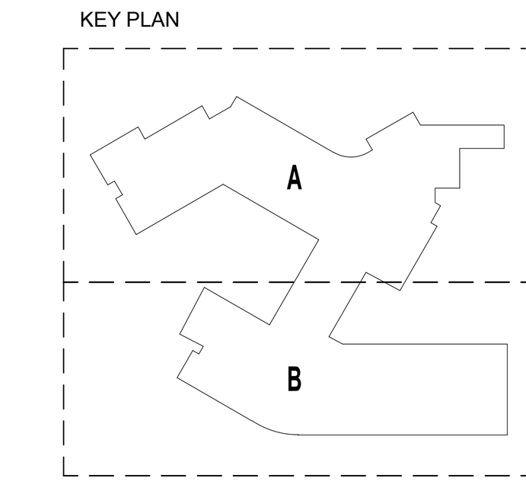
STRUCTURAL ENGINEER
WBCM
100 STERLING PARKWAY, SUITE 108
MECHANICSBURG, PA 17050

BLOOMSBURG UNIVERSITY RESIDENCE HALL & BOOKSTORE

KEY PLAN

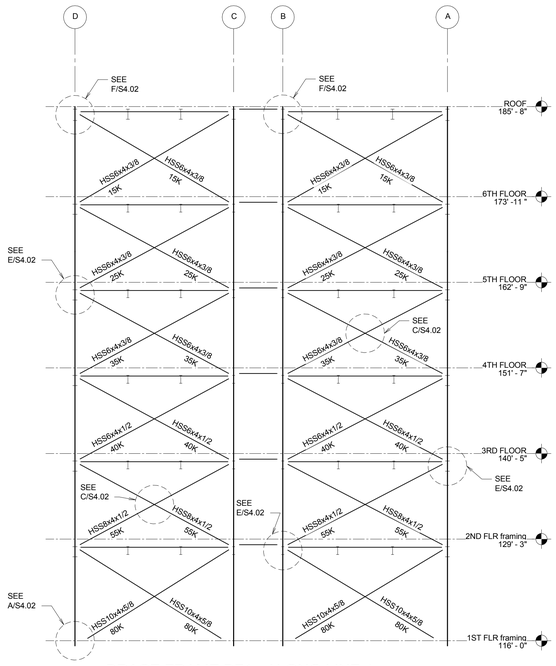


REVISION
NO. DESCRIPTION DATE

HKS PROJECT NUMBER
19087.000
DATE
03 DECEMBER 2015
ISSUE
CONSTRUCTION DOCUMENTS
SHEET TITLE
STEEL COLUMN SCHEDULE

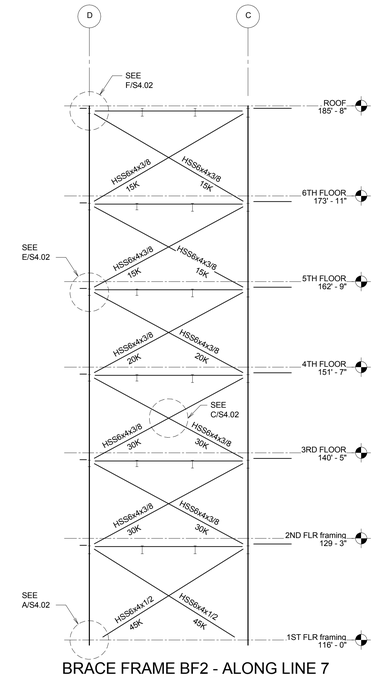
REVISED
15 DECEMBER 2015

SHEET NO.
S3.01



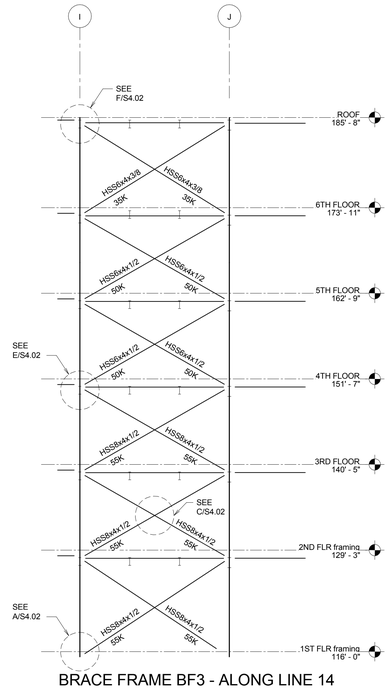
BRACE FRAME BF1 - ALONG LINE 4

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



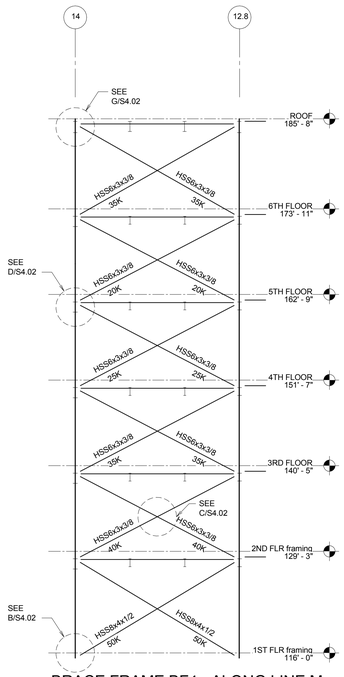
BRACE FRAME BF2 - ALONG LINE 7

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



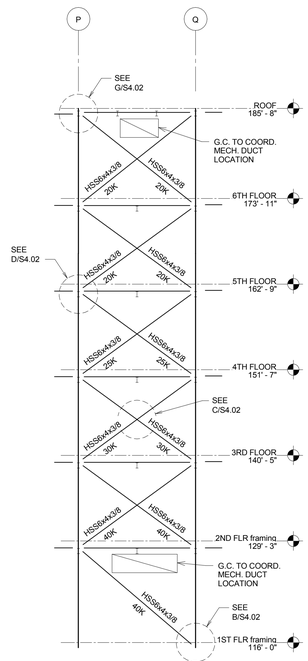
BRACE FRAME BF3 - ALONG LINE 14

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



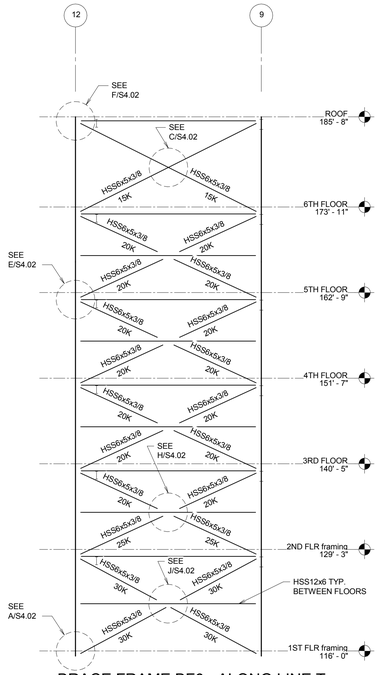
BRACE FRAME BF4 - ALONG LINE M

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



BRACE FRAME BF5 - ALONG LINE 12.8

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



BRACE FRAME BF6 - ALONG LINE T

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

ARCHITECT
HKS, INC.
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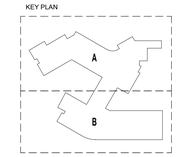
KEY PLAN



REVISION

NO.	DESCRIPTION	DATE

HKS PROJECT NUMBER
19087.000

DATE
03 DECEMBER 2015

ISSUE
CONSTRUCTION DOCUMENTS

SHEET TITLE
BRACED FRAMES

SHEET NO.
S4.01

REVISED
15 DECEMBER 2015

PLOT DATE:
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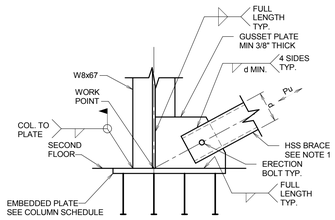
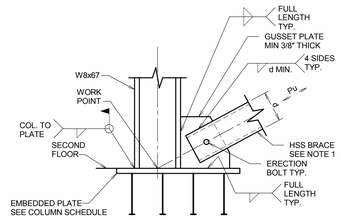


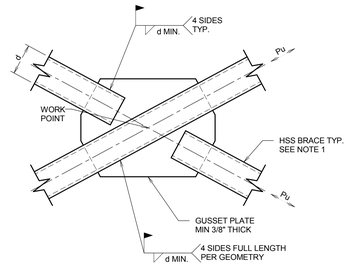
NOTES:
1. SEE BRACED FRAME ELEVATIONS AND FRAMING PLANS FOR MEMBER SIZES, DIMENSIONS AND ORIENTATIONS TYP.

A S4.02 S4.01 TYP. HSS BRACING CONNECTION AT BASE TO COLUMN WEB
NOT TO SCALE



NOTES:
1. SEE BRACED FRAME ELEVATIONS AND FRAMING PLANS FOR MEMBER SIZES, DIMENSIONS AND ORIENTATIONS TYP.

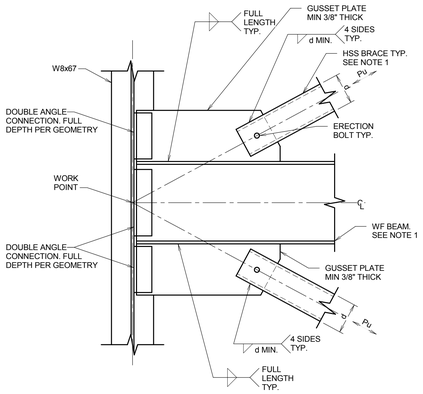
B S4.02 S4.01 TYP. HSS BRACING CONNECTION AT BASE TO COLUMN FLANGE
NOT TO SCALE



NOTES:
1. SEE BRACED FRAME ELEVATIONS AND FRAMING PLANS FOR MEMBER SIZES, DIMENSIONS AND ORIENTATIONS TYP.

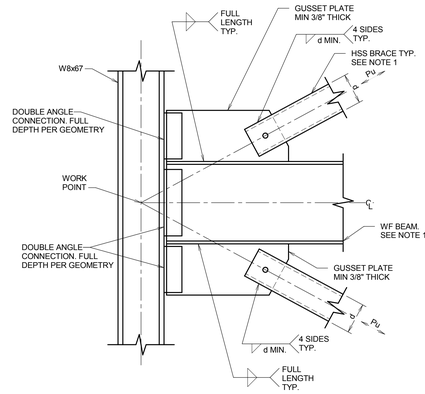
C S4.02 S4.01 TYP. HSS BRACE CONNECTION AT INTERSECTION OF BRACES
NOT TO SCALE

LATERAL BRACING NOTES:
1. ALL LATERAL BRACING CONNECTIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED. THIS SHALL INCLUDE ALL GUSSET PLATES, FILLER PLATES, ANGLES, STIFFENERS, BOLTS, WELDS OR OTHER MATERIAL REQUIRED FOR THE CONNECTION. SIGNED AND SEALED CALCULATIONS FOR THE CONNECTION DESIGN SHALL BE SUBMITTED FOR REVIEW WITH THE SHOP DRAWINGS.
2. ALL LATERAL BRACING CONNECTIONS SHALL BE DESIGNED IN ACCORDANCE WITH THE UNIFORM FORCE METHOD GIVEN IN THE AISC "MANUAL OF STEEL CONSTRUCTION".
3. FORCES SHOWN ARE FACTORED AND ARE INTENDED FOR USE WITH THE LOAD RESISTANCE FACTORED DESIGN (LRFD) PROVISIONS OF THE CODE. ALL APPLICABLE LOAD COMBINATIONS, FACTORS AND STRESS INCREASES HAVE BEEN ACCOUNTED FOR IN THE DETERMINATION OF THESE LOADS. NO ADDITIONAL LOAD REDUCTIONS OR STRESS INCREASES ARE PERMITTED.
4. FORCES SPECIFIED IN ELEVATION ARE TENSION AND COMPRESSION FORCES.
5. BEAM SHEAR CONNECTIONS SHALL BE DESIGNED FOR THE SHEAR AS DEFINED IN THE STRUCTURAL STEEL GENERAL NOTES IN ADDITION TO ANY BRACING FORCES.
6. WORK POINTS ARE DEFINED AS THE INTERSECTION OF THE CENTROIDS OF THE CONNECTED MEMBERS. THE WORK POINT AT THE BASE SHALL BE FINISH FLOOR.
7. WHERE OVERSIZED HOLES ARE PROVIDED IN BASE PLATES OF COLUMNS INSTALLED IN VERTICAL BUILDING BRACE FRAMES, FIELD WELD PLATE WASHERS WITH STANDARD HOLES TO TOP OF BASE PLATES AT EACH ANCHOR AFTER ERECTION OF THE COLUMN.
8. SEE TYPICAL BRACED FRAME DETAILS ON THIS SHEET. DETAILS PROVIDE SUGGESTED DETAILS ONLY.
9. STEEL FABRICATOR MAY SUBMIT ALTERNATE CONNECTION DETAILS FOR REVIEW BY THE ENGINEER FOR SUBSTITUTION OF DETAILS INDICATED ON THE DRAWINGS. SUBMIT ALTERNATE DETAILS WITH SIGNED AND SEALED CALCULATIONS FOR REVIEW PRIOR TO SUBMISSION OF STEEL SHOP DRAWINGS.



NOTES:
1. SEE BRACED FRAME ELEVATIONS AND FRAMING PLANS FOR MEMBER SIZES, DIMENSIONS AND ORIENTATIONS TYP.

D S4.02 S4.01 TYP. HSS BRACING CONNECTION AT BEAM TO COLUMN WEB
NOT TO SCALE



NOTES:
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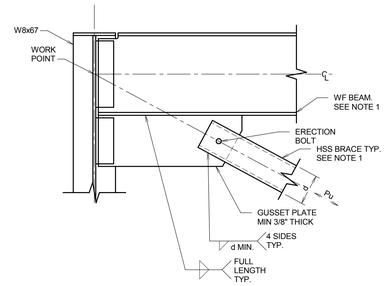
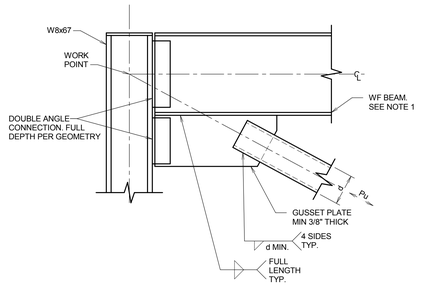
E S4.02 S4.01 TYP. HSS BRACING CONNECTION AT BEAM TO COLUMN FLANGE
NOT TO SCALE



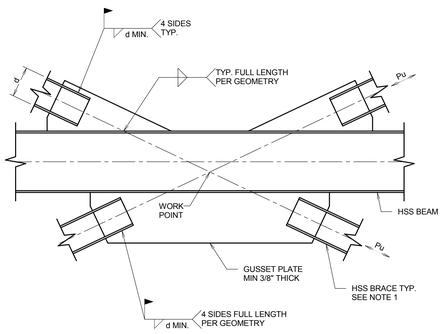
NOTES:
1. SEE BRACED FRAME ELEVATIONS AND FRAMING PLANS FOR MEMBER SIZES, DIMENSIONS AND ORIENTATIONS TYP.

F S4.02 S4.01 TYP. HSS BRACING CONNECTION AT ROOF BEAM TO COLUMN WEB
NOT TO SCALE



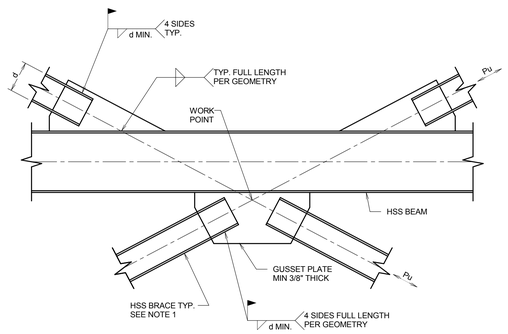
NOTES:
1. SEE BRACED FRAME ELEVATIONS AND FRAMING PLANS FOR MEMBER SIZES, DIMENSIONS AND ORIENTATIONS TYP.

G S4.02 S4.01 TYP. HSS BRACING CONNECTION AT ROOF BEAM TO COLUMN FLANGE
NOT TO SCALE



NOTES:
1. SEE BRACED FRAME ELEVATIONS AND FRAMING PLANS FOR MEMBER SIZES, DIMENSIONS AND ORIENTATIONS TYP.

H S4.02 S4.01 HSS BRACE CONNECTION AT INTERSECTION OF BRACES
NOT TO SCALE



NOTES:
1. SEE BRACED FRAME ELEVATIONS AND FRAMING PLANS FOR MEMBER SIZES, DIMENSIONS AND ORIENTATIONS TYP.

J S4.02 S4.01 HSS BRACE CONNECTION AT INTERSECTION OF BRACES
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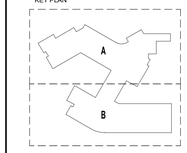
KEY PLAN



REVISION
NO. DESCRIPTION DATE

HKS PROJECT NUMBER
19087.000
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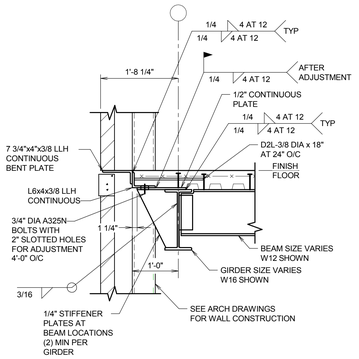
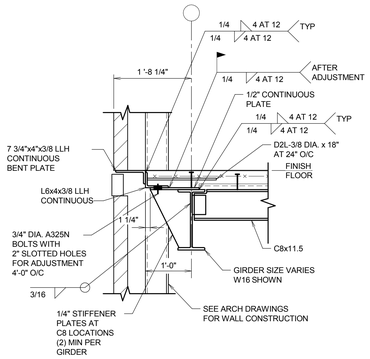
SHEET TITLE
BRACED FRAME DETAILS

SHEET NO.
S4.02

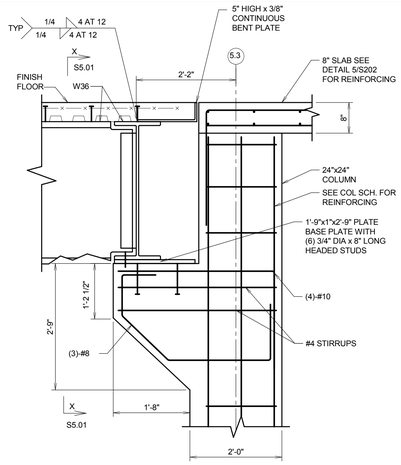
PLOT DATE: 12/14/2015 4:09:36 PM TEMPLATE VERSION



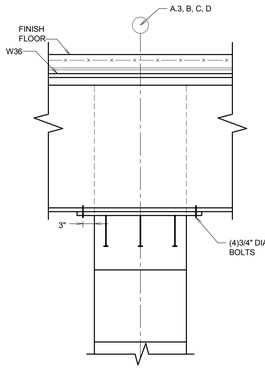
1 SECTION
S5.01 | S1.05 S1.07 S1.08 | 3/4" = 1'-0"



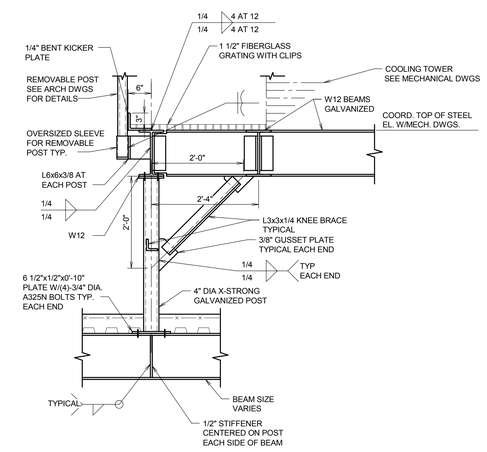
2 SECTION
S5.01 | S1.05 S1.06 S1.07 S1.08 | 3/4" = 1'-0"



3 SECTION
S5.01 | S1.04 | 3/4" = 1'-0"



X SECTION
S5.01 | S5.01 | 3/4" = 1'-0"



4 SECTION
S5.01 | S1.05 | 3/4" = 1'-0"

5 SECTION
S5.01 | S1.05 | 3/4" = 1'-0"

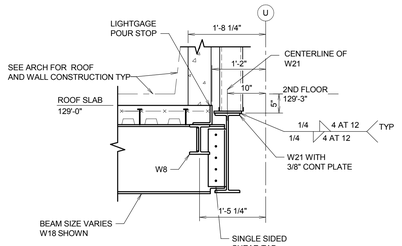
6 SECTION
S5.01 | S1.05 | 3/4" = 1'-0"

7 SECTION
S5.01 | S1.05 | 3/4" = 1'-0"

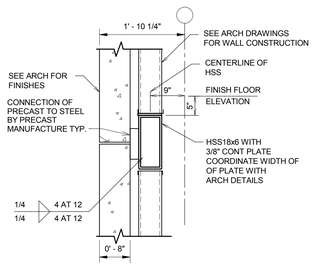
8 SECTION
S5.01 | S1.05 | 3/4" = 1'-0"

9 SECTION
S5.01 | S1.05 | 3/4" = 1'-0"

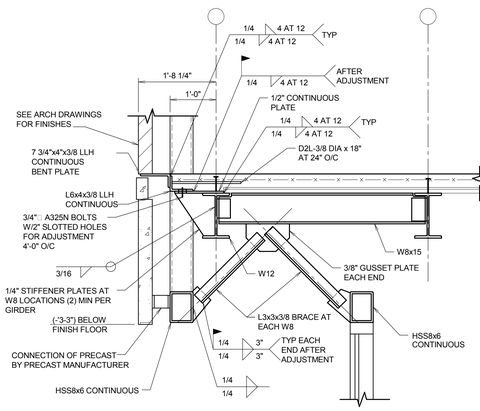
10 SECTION
S5.01 | S1.05 | 3/4" = 1'-0"



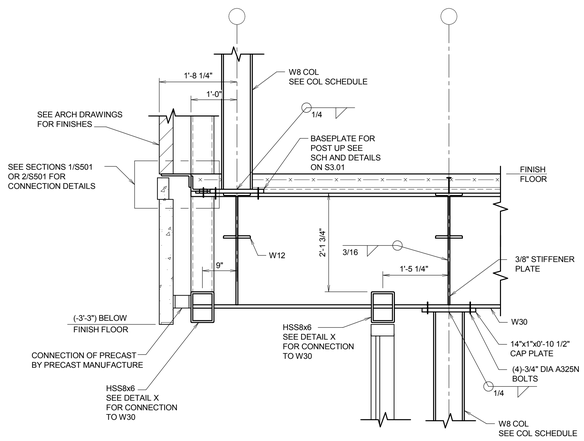
11 SECTION
S5.01 | S1.05 | 3/4" = 1'-0"



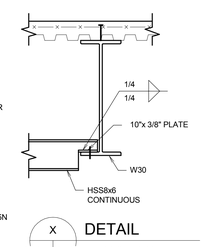
12 SECTION
S501 | S106 S107 S108 | 3/4" = 1'-0"



13 SECTION
S501 | S105 | 3/4" = 1'-0"



14 SECTION
S501 | S105 | 3/4" = 1'-0"



X DETAIL
S501 | S501 | 3/4" = 1'-0"

REVISED
15 DECEMBER 2015

PLOT DATE: 12/14/2015 4:12:18 PM TEMPLATE VERSION:

HKS

ARCHITECT
HKS, INC.
191 PEACHTREE STREET NE
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ASSOCIATE ARCHITECT
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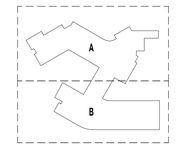
STRUCTURAL ENGINEER
WBCM
100 STERLING PARKWAY, SUITE 108
MECHANICSBURG, PA 17050

BLOOMSBURG UNIVERSITY RESIDENCE HALL & BOOKSTORE

KEY PLAN



REVISION
NO. DESCRIPTION DATE

HKS PROJECT NUMBER
19087.000

DATE
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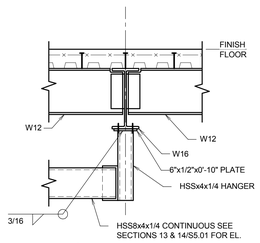
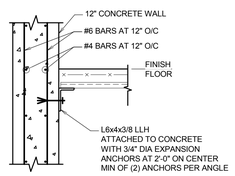
ISSUE
CONSTRUCTION DOCUMENTS

SHEET TITLE
SECTIONS AND DETAILS

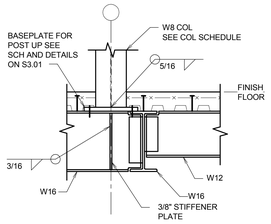
SHEET NO.
S5.01



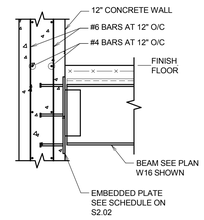
1 SECTION
S5.02 S1.05 3/4" = 1'-0"



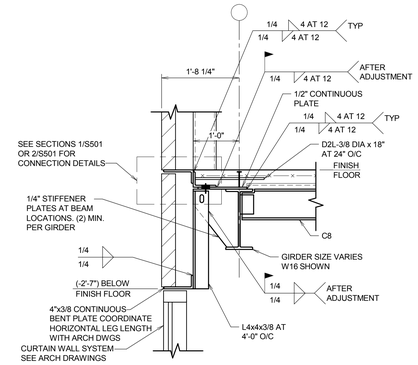
2 SECTION
S5.02 S1.05 S1.07 3/4" = 1'-0"



3 SECTION
S5.02 S1.05 3/4" = 1'-0"



4 SECTIONS
S5.02 S1.05 S1.07 3/4" = 1'-0"



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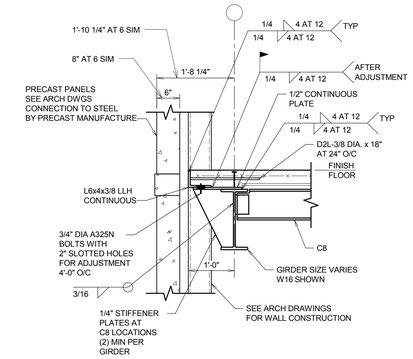
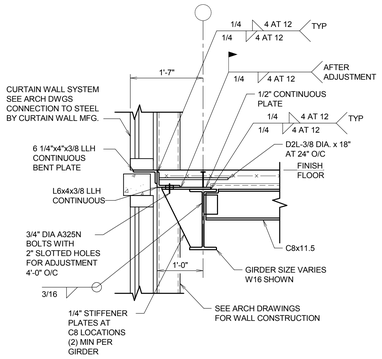
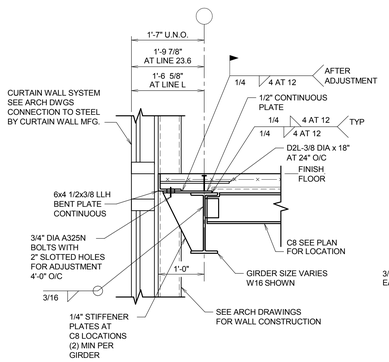
S5.02 S1.05 3/4" = 1'-0"



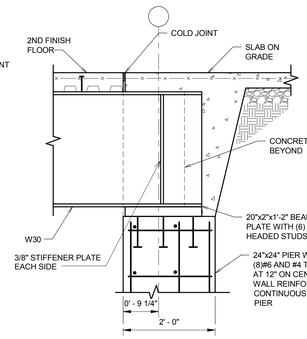
6 SECTION
S5.02 S1.05 S1.06 S1.07 S1.08 3/4" = 1'-0"



7 SECTION
S5.02 S1.05 S1.06 S1.07 S1.08 3/4" = 1'-0"



8 SECTION
S5.02 S1.05 S1.06 S1.07 S1.08 3/4" = 1'-0"



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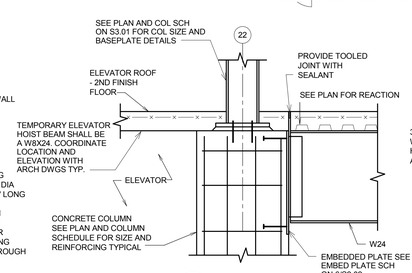

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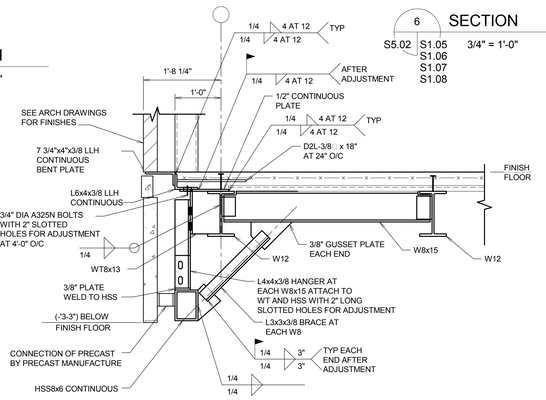
S5.02 S1.05 3/4" = 1'-0"



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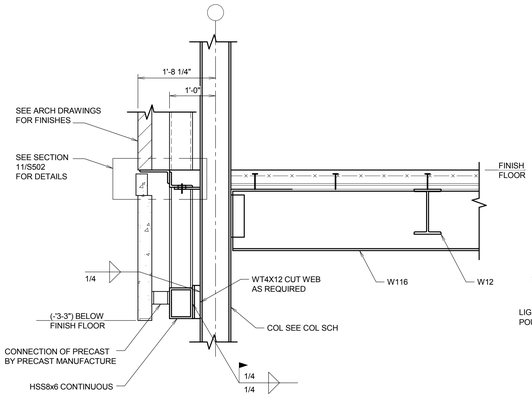

12 SECTION
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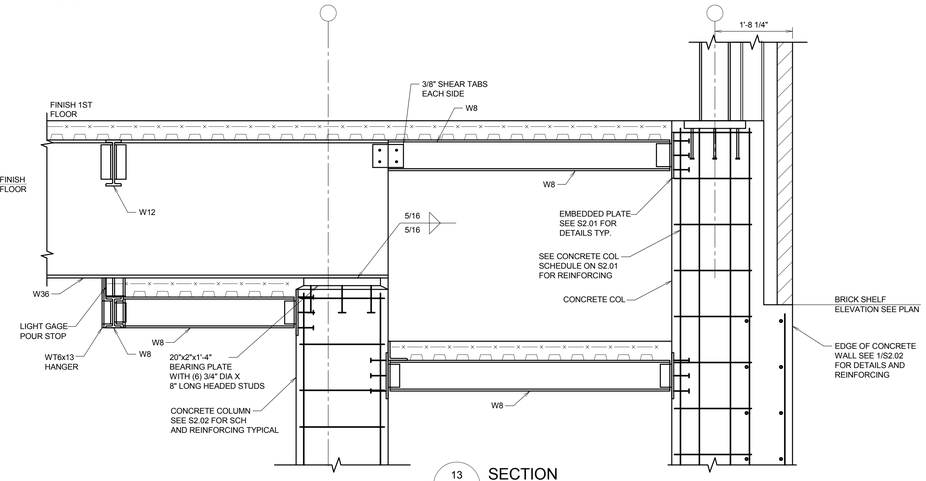

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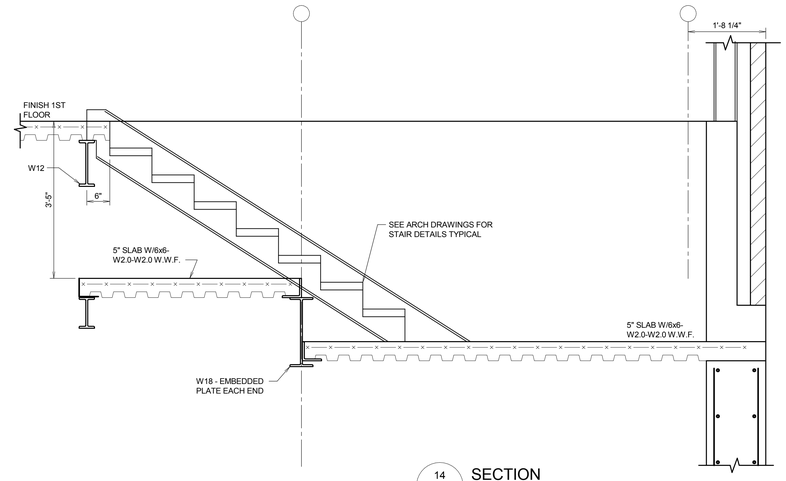
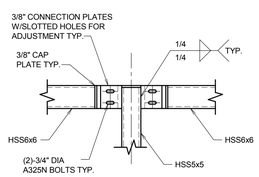


14 SECTION
S5.02 S1.04 3/4" = 1'-0"



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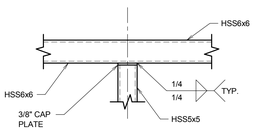
S5.02 S1.05 S1.11 3/4" = 1'-0"



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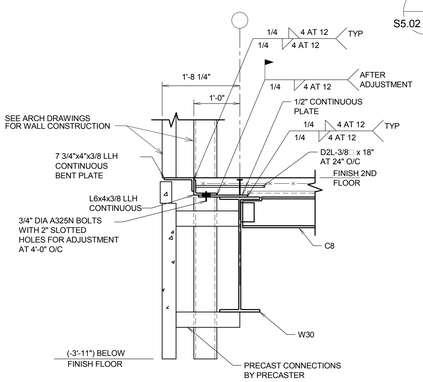
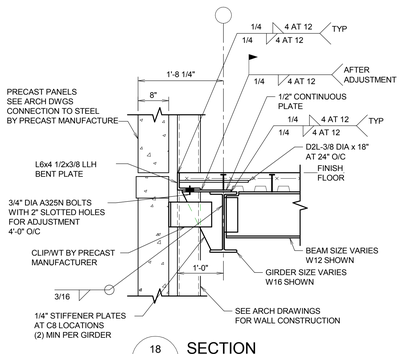


17 SECTION
S5.02 S1.06 3/4" = 1'-0"



18 SECTION
S5.02 S1.05 S1.06 S1.07 S1.08 3/4" = 1'-0"

PLOT DATE: 12/14/2015 4:09:48 PM TEMPLATE VERSION:

HKS

ARCHITECT
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CMT LABORATORIES, INC.
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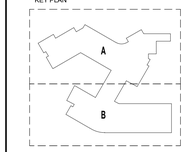
STRUCTURAL ENGINEER
WBCM
100 STERLING PARKWAY, SUITE 108
MECHANICSBURG, PA 17050

BLOOMSBURG UNIVERSITY RESIDENCE HALL & BOOKSTORE

KEY PLAN



REVISION
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HKS PROJECT NUMBER
19087.000

DATE
03 DECEMBER 2015

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SHEET TITLE
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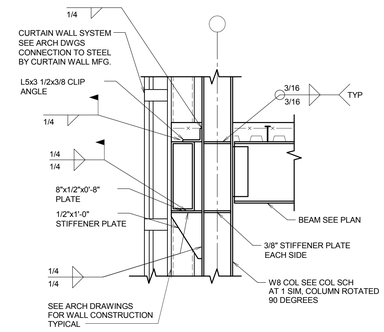
SHEET NO.
S5.02

REVISED
15 DECEMBER 2015



1 SECTION
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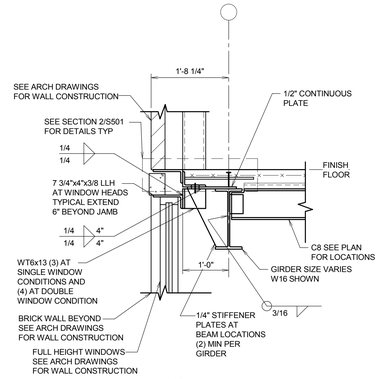

2 SECTION
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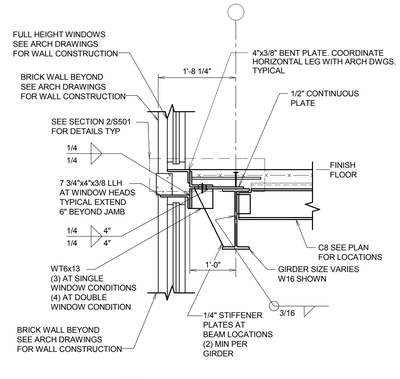
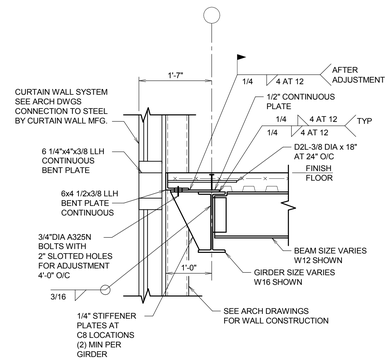
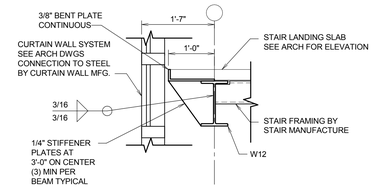


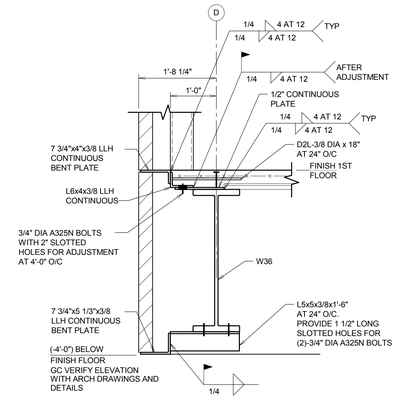
3 SECTION
S5.03 S1.07 S1.08 3/4" = 1'-0"



4 SECTION
S5.03 S1.05 S1.06 S1.07 S1.08 3/4" = 1'-0"



5 SECTION
S5.03 S1.05 S1.06 S1.07 S1.08 3/4" = 1'-0"



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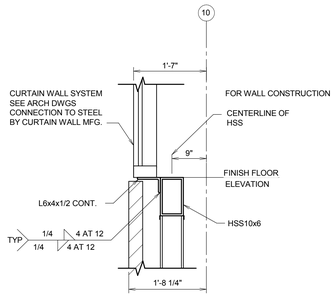

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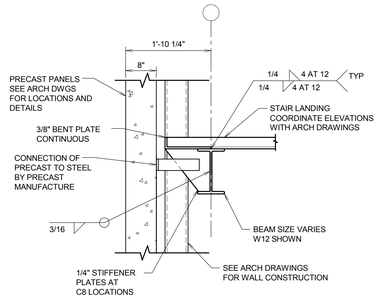

8 SECTION
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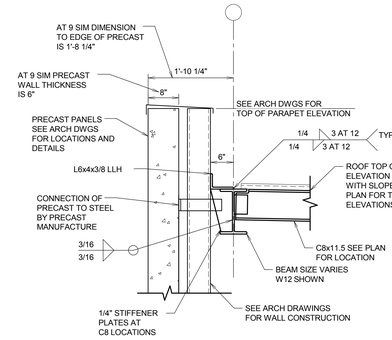

9 SECTION
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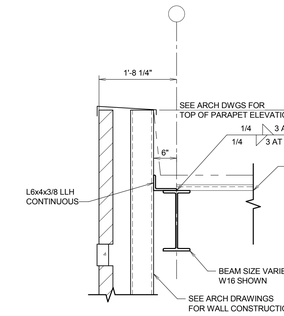

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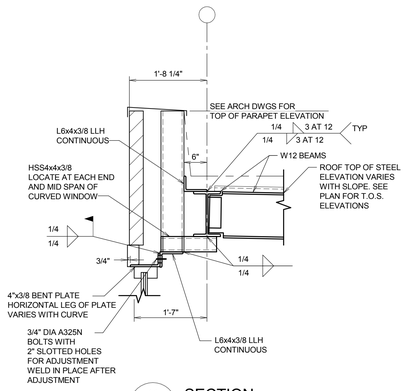

11 SECTION
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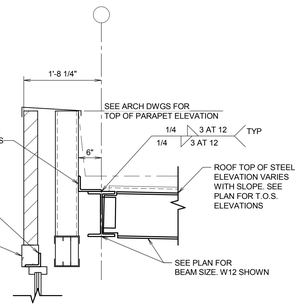
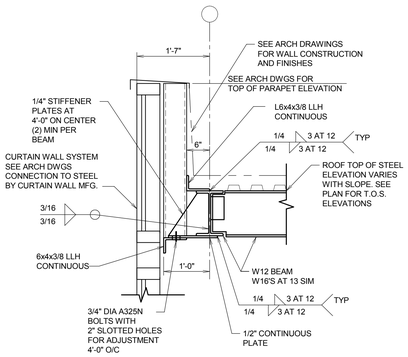


12 SECTION
S5.03 S1.09 3/4" = 1'-0"



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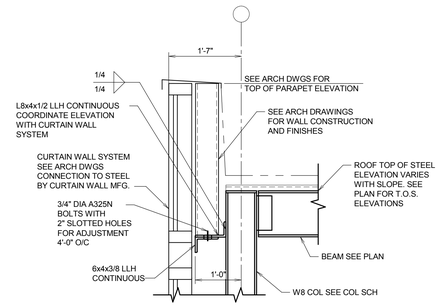
S5.03 S1.09 3/4" = 1'-0"



14 SECTION
S5.03 S1.09 3/4" = 1'-0"

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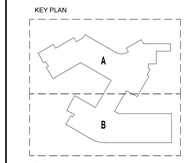
& BOOKSTORE

KEY PLAN



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SHEET NO.
S5.03

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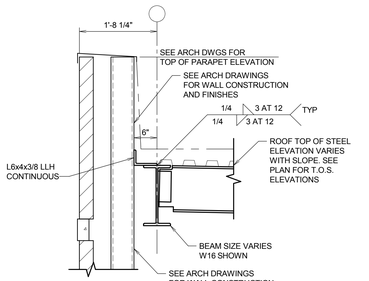
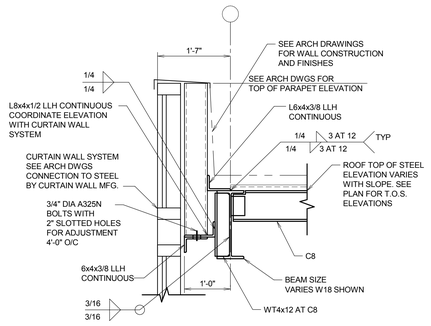
15 DECEMBER 2015

PLOT DATE: 12/14/2015 4:09:49 PM TEMPLATE VERSION:



1 SECTION
S5.04 S1.09 S1.10 3/4" = 1'-0"



2 SECTION
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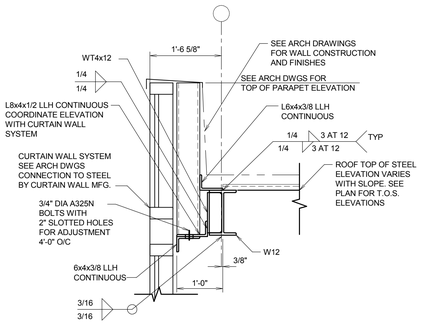
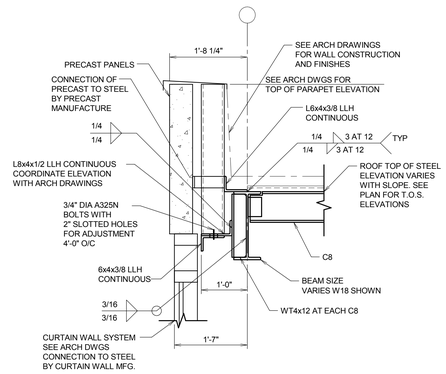
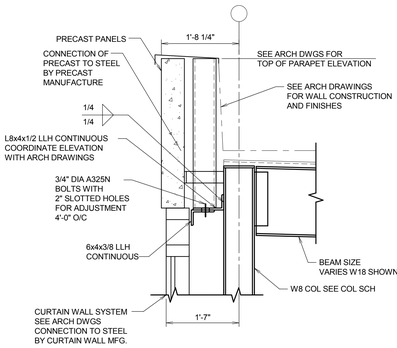


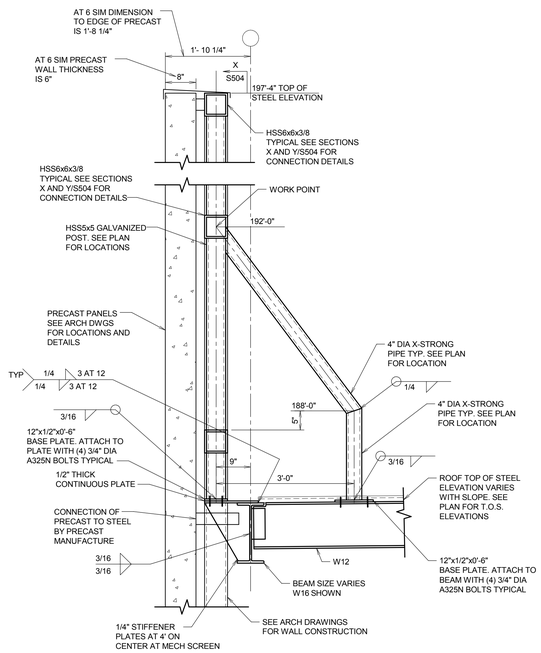
3 SECTION
S5.04 S1.10 3/4" = 1'-0"



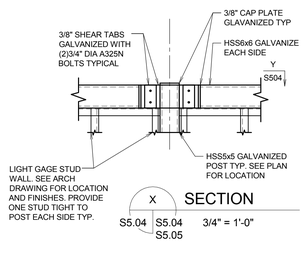
4 SECTION
S5.04 S1.09 S1.10 3/4" = 1'-0"



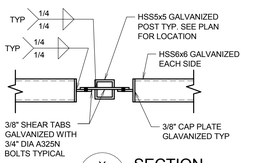
5 SECTION
S5.04 S1.10 3/4" = 1'-0"



6 SECTION
S5.04 S1.09 S1.10 3/4" = 1'-0"



X SECTION
S5.04 S5.04 S5.05 3/4" = 1'-0"



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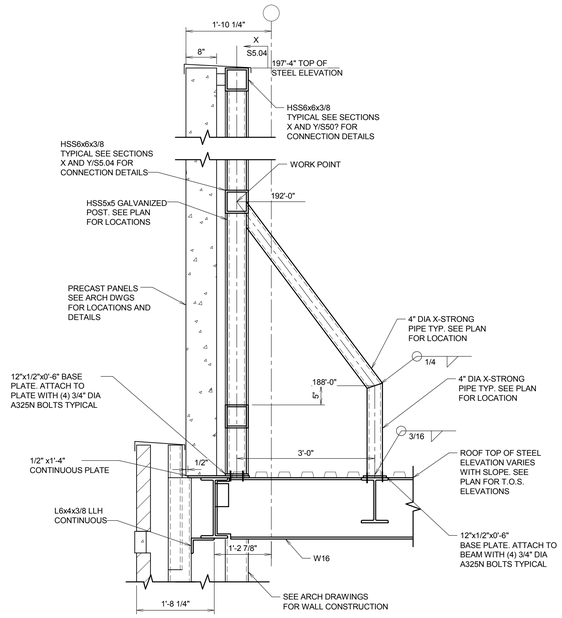
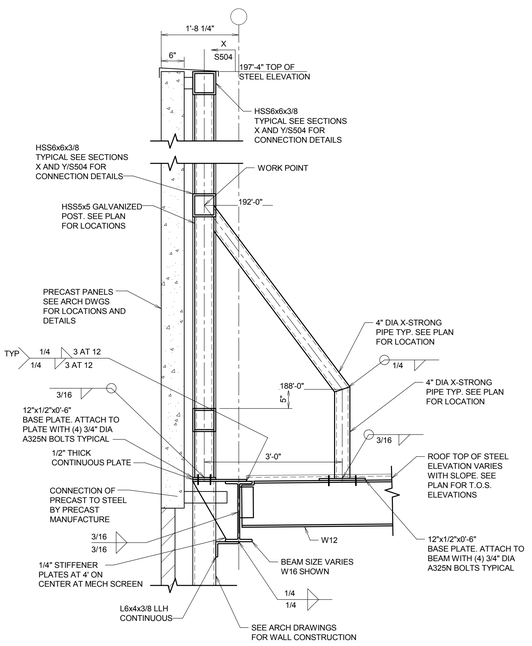
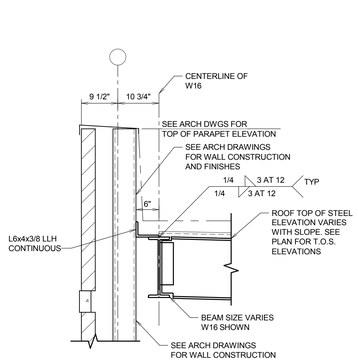
S5.04 S5.04 S5.05 3/4" = 1'-0"



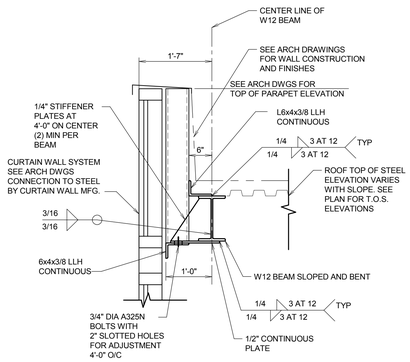
7 SECTION
S5.04 S1.10 3/4" = 1'-0"



8 SECTION
S5.04 S1.09 3/4" = 1'-0"



9 SECTION
S5.04 S1.10 3/4" = 1'-0"



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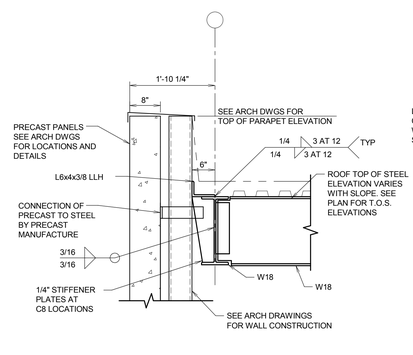
S5.04 S1.10 3/4" = 1'-0"



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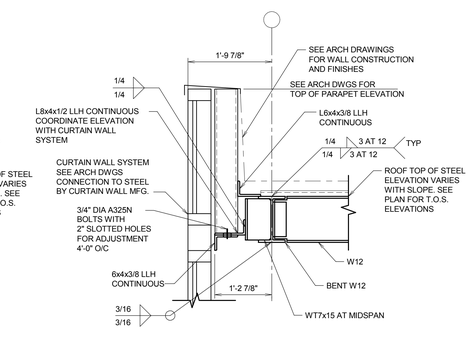
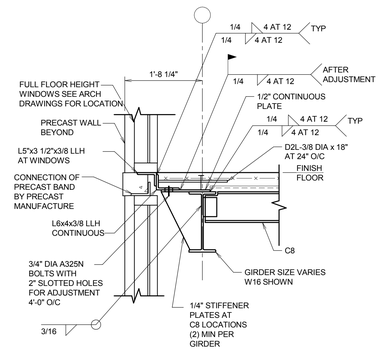
S5.04 S1.09 3/4" = 1'-0"



12 SECTION
S5.04 S1.09 3/4" = 1'-0"



13 SECTION
S5.04 S1.08 S1.06 3/4" = 1'-0"

HKS

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ROSWELL, GA 30076

SITE/CIVIL ENGINEER
DERCK & EDSON ASSOCIATES
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STATE COLLEGE, PA 16801

STRUCTURAL ENGINEER
WBCM
100 STERLING PARKWAY, SUITE 108
MECHANICSBURG, PA 17050

BLOOMSBURG UNIVERSITY RESIDENCE HALL & BOOKSTORE

KEY PLAN

REVISION
NO. DESCRIPTION DATE

HKS PROJECT NUMBER
19087.000

DATE
03 DECEMBER 2015

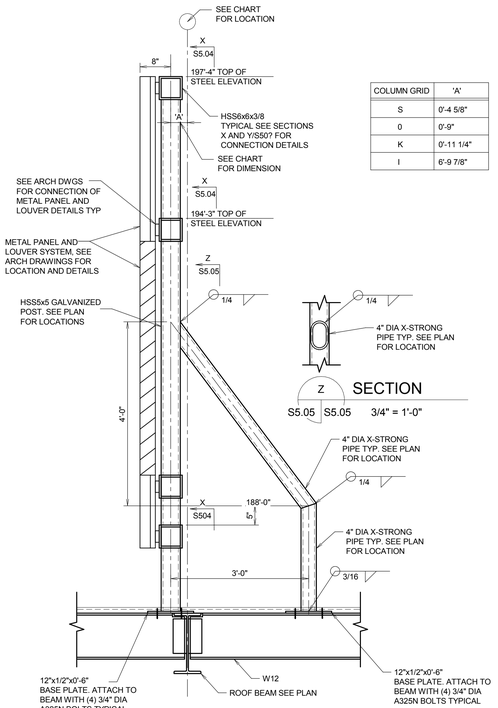
ISSUE
CONSTRUCTION DOCUMENTS

SHEET TITLE
SECTIONS AND DETAILS

SHEET NO.
S5.04

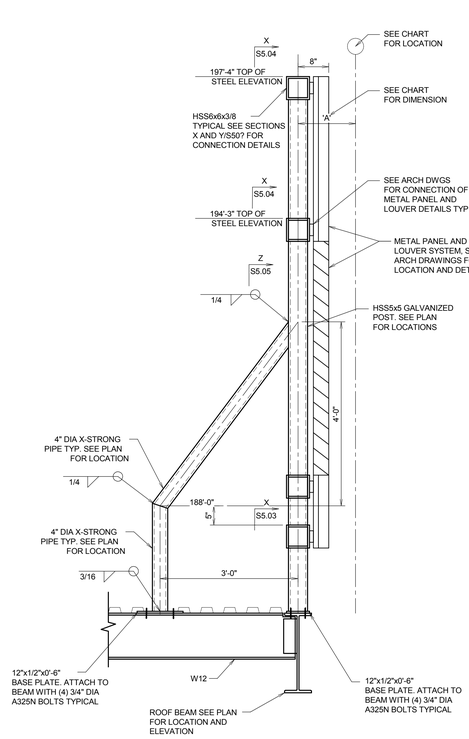
REVISED
15 DECEMBER 2015

PLOT DATE: 12/14/2015 4:08:53 PM TEMPLATE VERSION:



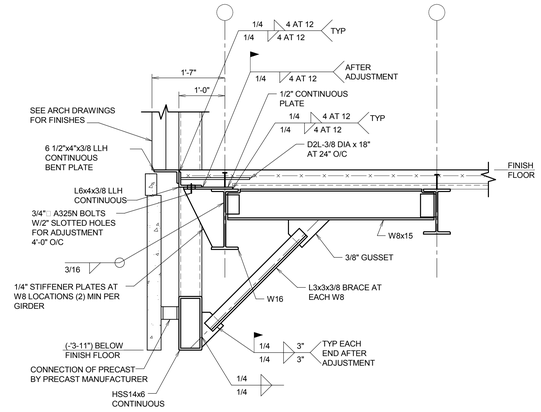
COLUMN GRID	'A'
S	0'-4 5/8"
0	0'-9"
K	0'-11 1/4"
I	6'-9 7/8"

1 SECTION
S5.05 | S1.09 S1.10 3/4" = 1'-0"

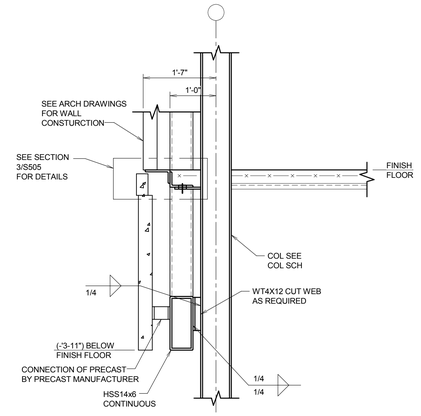


COLUMN GRID	'A'
12	1'-3"
12.8	1'-7 3/8"
19	12'-2 1/4"

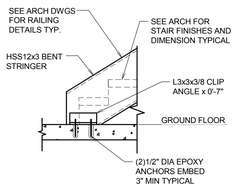
2 SECTION
S5.05 | S1.09 S1.10 3/4" = 1'-0"



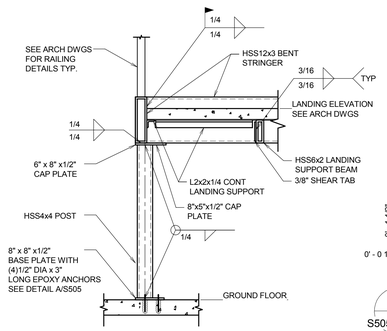
3 SECTION
S505 | S106 3/4" = 1'-0"



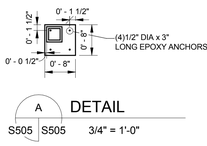
4 SECTION
S505 | S106 3/4" = 1'-0"



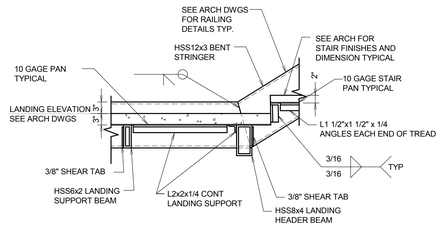
5 SECTION
S505 | S101 3/4" = 1'-0"



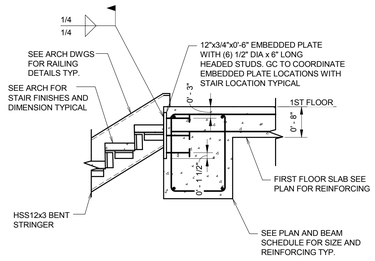
6 SECTION
S505 | S101 3/4" = 1'-0"



A DETAIL
S505 | S505 3/4" = 1'-0"



7 SECTION
S505 | S101 3/4" = 1'-0"



8 SECTION
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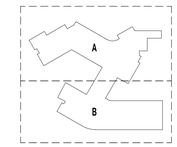

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SHEET NO.
S5.05

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12/14/2015 4:05:06 PM TEMPLATE VERSION: