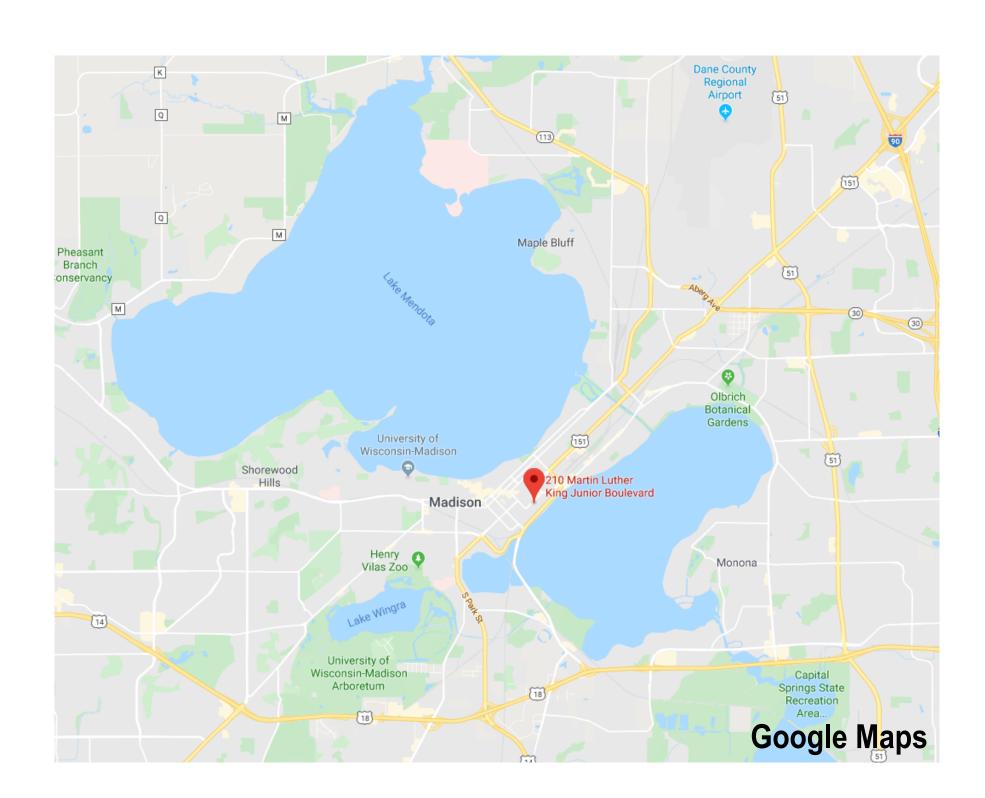
## NEW REMOTE DESCENT SYSTEM ANCHORAGE

# CITY-COUNTY BUILDING MADISON, WI

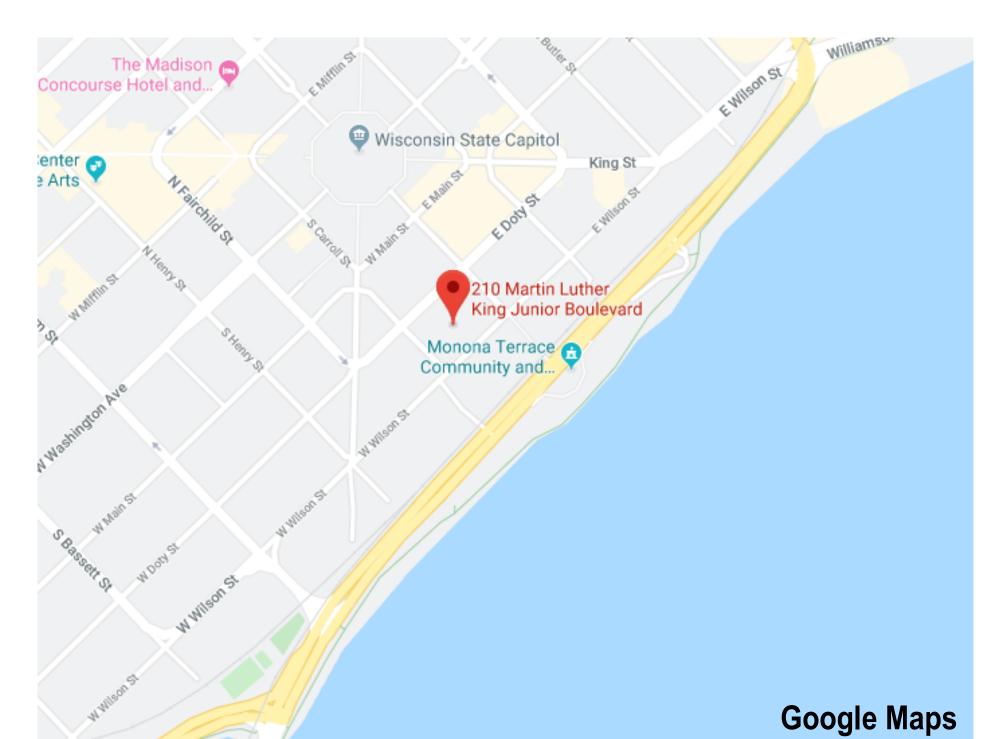
### CONSTRUCTION DOCUMENTS

**DECEMBER 30, 2019** 

**COUNTY OF DANE** 







SHEET LIST			
SHEET NO	SHEET NAME		
S-001	GENERAL NOTES		
S-002	ABBREVIATIONS		
S-161	SIXTH FLOOR PARTIAL PLAN - WEST		
S-181	MAIN ROOF PLAN - EAST		
S-182	MAIN ROOF PLAN - WEST		
S-191	PENTHOUSE ROOF PLAN - EAST		
S-192	PENTHOUSE ROOF PLAN - WEST		
S-301	STRUCTURAL DETAILS		
S-401	DEMOLITION AND WATERPROOFING DETAILS		

Thornton Tomasetti
Thornton Tomasetti, Inc.

Thornton Tomasetti, Inc 222 East Erie St, Suite Milwaukee, WI 53202 T 414.875.3370

WILLIAM D. BAST E-35493
HIGHLAND PARK.

2 CONSTRUCTION DOCUMENTS 12/30/19

NEW REMOTE DESCENT

NEW REMOTE DESCENT SYSTEM ANCHORAGE

CITY-COUNTY BUILDING 210 MARTIN LUTHER KING JR BLVD MADISON, WI 53703

COVER SHEET & DRAWING LIST

PROJECT NO: C19150.0

SHEET N

S-000

t Thornton Tomasetti, Inc. 2013

#### GR GENERAL REQUIREMENTS GR-1 AS USED IN THESE GENERAL NOTES: "DRAWINGS" MEANS THE LATEST PROJECT DESIGN DRAWINGS, UON. "SPECIFICATIONS" MEANS THE LATEST PROJECT SPECIFICATIONS, UON. "CONTRACT DOCUMENTS" IS DEFINED AS THE DESIGN DRAWINGS AND THE SPECIFICATIONS "SER" IS DEFINED ENGINEER OF RECORD FOR THE STRUCTURE IN ITS FINAL CONDITION (I.E. THORNTON TOMASETTI). "MEP" INCLUDES, BUT IS NOT LIMITED TO MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION. "CONTRACTOR" IS DEFINED TO INCLUDE ANY OF THE FOLLOWING: GENERAL CONTRACTOR AND THEIR SUBCONTRACTORS, CONSTRUCTION MANAGER AND THEIR SUBCONTRACTORS, STRUCTURAL STEEL FABRICATOR OR STRUCTURAL STEEL ERECTOR. "BASE BUILDING STRUCTURE" IS DEFINED AS THE STRUCTURAL FRAME DESIGNED BY THORNTON TOMASETTI. "STRUCTURE IN ITS FINAL CONDITION" MEANS ALL STRUCTURAL ELEMENTS SHOWN ON THE STRUCTURAL CONTRACT DOCUMENTS ARE INSTALLED AND COMPLETELY CONNECTED AND INSPECTED WITH NO OUTSTANDING NON-COMPLIANCE ISSUES. "DELEGATED DESIGN" MEANS A SCOPE OF WORK THAT MEETS PERFORMANCE CRITERIA ESTABLISHED IN THE CONTRACT DOCUMENTS AND IS TO BE COMPLETED BY THE CONTRACTOR'S LICENSED ENGINEER. GR-2 THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, INSTALLATION, AND REMOVAL OF TEMPORARY BRACING AND CONSTRUCTION SUPPORTS, FOR NEW AND EXISTING STRUCTURES, AS NECESSARY TO COMPLETE THE PROJECT. NO PORTION OF THE PROJECT WHILE UNDER CONSTRUCTION IS INTENDED TO BE STABLE IN THE ABSENCE OF THE CONTRACTOR'S TEMPORARY SUPPORTS AND BRACES. CONTRACTOR SHALL RETAIN A STRUCTURAL ENGINEER LICENSED IN THE STATE OF WISCONSIN TO DESIGN TEMPORARY BRACING AND CONSTRUCTION SUPPORTS. THE SPECIFICATIONS ARE AN INTEGRAL PART OF THE CONTRACT DOCUMENTS AND SHALL BE USED IN CONJUNCTION WITH THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND COORDINATE WITH THE CONTRACT DOCUMENTS, PROJECT SHOP DRAWINGS AND FIELD CONDITIONS. IN CASES OF CONFLICT BETWEEN DRAWINGS AND/OR SPECIFICATIONS OR EXISTING CONDITIONS, CONTRACTOR SHALL NOTIFY THORNTON TOMASETTI AND OBTAIN CLARIFICATION PRIOR TO BIDDING AND PROCEEDING WITH WORK. APPLY DETAILS, SECTIONS, AND NOTES ON THE DRAWINGS WHERE CONDITIONS ARE SIMILAR TO THOSE INDICATED BY DETAIL, DETAIL TITLE OR NOTE. ONLY USE DIMENSIONS INDICATED ON THE DRAWINGS. DO NOT SCALE DRAWINGS. ASSUME EQUAL SPACING BETWEEN ESTABLISHED DIMENSIONS, IF NOT INDICATED ON DRAWINGS. CENTERLINES OF COLUMNS AND FOUNDATIONS COINCIDE WITH GRID LINE GR-9 INTERSECTIONS, UON. CENTERLINES OF FRAMING MEMBERS COINCIDE WITH COLUMN CENTERLINES, UON. THE CONTRACTOR SHALL PROTECT EXISTING FACILITIES, STRUCTURES AND UTILITIES FROM DAMAGE. THE CONTRACTOR SHALL VERIFY THAT CONSTRUCTION LOADS DO NOT EXCEED THE CAPACITY OF THE STRUCTURE AT THE TIME THE LOAD IS APPLIED. CODES AND DESIGN CRITERIA PERFORM ALL CONSTRUCTION IN CONFORMANCE WITH THE BUILDING AND DESIGN CODES REFERENCED WITHIN THESE DOCUMENTS. THE PROJECT DOCUMENTS REFER TO THE FOLLOWING CODES AND STANDARDS. UON: WISCONSIN COMMERICAL BUILDING CODE, 2018 INTERNATIONAL EXISTING BUILDING CODE, 2015 OSHA STANDARDS - PART 1910 STRUCTURAL CONCRETE: "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" THE AMERICAN CONCRETE INSTITUTE (ACI 318-14) "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", (AISC 360-10) CONFORMING TO THE PROVISIONS OF LOAD RESISTANCE FACTOR DESIGN. BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC-LRFD) CD-2 LIVE LOADS: ROOFS 20 LBS./SQ. FT. SUPERIMPOSED DEAD LOADS: ROOFING 5 LBS./SQ. FT. LWC TOPPING (WHERE OCCURS) 30 LBS./SQ. FT. 10 LBS./SQ. FT. MEP BELOW **CEILING BELOW** 5 LBS./SQ. FT. CD-4 RISK CATEGORY CD-5 WIND LOAD DESIGN DATA: MAIN WIND FORCE RESISTING SYSTEM 120 MPH BASIC WIND SPEED. V **EXPOSURE** INTERNAL PRESSURE COEFFICIENT ± 0.18 COMPONENT AND CLADDING DESIGN PRESSURES ROOF EFFECTIVE WIND AREA = 10 SF ROOF= +/- 73 PSF ROOF EDGE = +/- 119 PSF ROOF CORNER= +/- 155 PSF SNOW LOADS NOT CONSIDERED TO ACT SIMULTANEOUSLY WITH TIE BACK ANCHOR STRUCTURAL COMPONENTS ARE NOT DESIGNED FOR VIBRATING EQUIPMENT MOUNT VIBRATING EQUIPMENT ON VIBRATION ISOLATORS.

DE-3 DE-4 DE-5 DE-6 DE-7 DE-8	THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE MEANS AND METHODS OF DEMOLITION AND THE INTEGRITY AND STABILITY OF THE EXISTING STRUCTURE DURING DEMOLITION UNTIL THE WORK IS COMPLETED. THE CONTRACTOR SHALL PROVIDE SHORING IN REQUIRED LOCATIONS WHERE EXISTING CONSTRUCTION TO REMAIN WILL BE AFFECTED BY DEMOLITION. CONTRACTOR SHALL RETAIN A STRUCTURAL ENGINEER LICENSED IN THE STATE OF WISCONSIN TO DESIGN SHORING.  THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS TO ANY STRUCTURAL ELEMENTS WHICH ARE TO REMAIN AND THAT HAVE BEEN DAMAGED DURING THE DEMOLITION PROCESS TO THE COMPLETE SATISFACTION OF THE OWNER. THE REPAIRS SHALL BE AT NO EXPENSE TO THE OWNER. ALL REPAIR WORK SHALL BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE WISCONSIN AND SUBMITTED TO THORNTON TOMASETTI FOR REVIEW AND APPROVAL PRIOR TO COMMENCING REPAIR WORK.  ALL EXISTING FRAMING IS INDICATED FOR REFERENCE ONLY AND IS TO BE FIELD VERIFIED BY THE CONTRACTOR. VERIFY THE EXACT EXTENT OF DEMOLITION AT THE SITE. DETERMINE THE NATURE AND EXTENT OF DEMOLITION THAT WILL BE NECESSARY BY COMPARING THE CONTRACT DOCUMENTS WITH THE EXISTING CONSTRUCTION. IMMEDIATELY NOTIFY THE DESIGN PROFESSIONALS OF ANY INCONSISTENCIES.  THE CONTRACTOR SHALL USE QUALIFIED, EXPERIENCED PERSONNEL FOR DEMOLITION AND REMOVAL OPERATIONS IN A CAREFUL AND ORDERLY MANNER TO PREVENT HAZARDS TO PERSONS, DAMAGE TO PROPERTY, AND THE SPREADING OF DUST AND DEBRIS.  DO NOT PERMIT PORTIONS OF THE STRUCTURE TO FALL NOR DEBRIS TO DROP EXCEPT BY METHODS WHICH WILL ENSURE INTEGRITY OF THE STRUCTURE.  PRIOR TO THE START OF WORK, VERIFY THAT THE SCOPE OF DEMOLITION INDICATED ON THE CONTRACT DOCUMENTS SHALL NOT DAMAGE, CUT OR DISRUPT SERVICE OF ANY MECHANICAL SYSTEM, ELECTRICAL SYSTEM OR UTILITY EMBEDDED IN THE EXISTING STRUCTURE.  DO NOT REMOVE MORE OF THE EXISTING STRUCTURE THAN INDICATED ON CONTRACT DOCUMENTS. DO NOT DAMAGE, MAR, CUT OR DEFACE THE REMAINING STRUCTURE OR MATERIALS TO BE REUSED.			
DE-2 DE-3 DE-4 DE-5 DE-6 DE-7 DE-8 DE-9	WHICH ARE TO REMAIN AND THAT HAVE BEEN DAMAGED DURING THE DEMOLITION PROCESS TO THE COMPLETE SATISFACTION OF THE OWNER. THE REPAIRS SHALL BE AT NO EXPENSE TO THE OWNER. ALL REPAIR WORK SHALL BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE WISCONSIN AND SUBMITTED TO THORNTON TOMASETTI FOR REVIEW AND APPROVAL PRIOR TO COMMENCING REPAIR WORK.  ALL EXISTING FRAMING IS INDICATED FOR REFERENCE ONLY AND IS TO BE FIELD VERIFIED BY THE CONTRACTOR. VERIFY THE EXACT EXTENT OF DEMOLITION AT THE SITE. DETERMINE THE NATURE AND EXTENT OF DEMOLITION THAT WILL BE NECESSARY BY COMPARING THE CONTRACT DOCUMENTS WITH THE EXISTING CONSTRUCTION. IMMEDIATELY NOTIFY THE DESIGN PROFESSIONALS OF ANY INCONSISTENCIES.  THE CONTRACTOR SHALL USE QUALIFIED, EXPERIENCED PERSONNEL FOR DEMOLITION AND REMOVAL OPERATIONS IN A CAREFUL AND ORDERLY MANNER TO PREVENT HAZARDS TO PERSONS, DAMAGE TO PROPERTY, AND THE SPREADING OF DUST AND DEBRIS.  DO NOT PERMIT PORTIONS OF THE STRUCTURE TO FALL NOR DEBRIS TO DROP EXCEPT BY METHODS WHICH WILL ENSURE INTEGRITY OF THE STRUCTURE.  PRIOR TO THE START OF WORK, VERIFY THAT THE SCOPE OF DEMOLITION INDICATED ON THE CONTRACT DOCUMENTS SHALL NOT DAMAGE, CUT OR DISRUPT SERVICE OF ANY MECHANICAL SYSTEM, ELECTRICAL SYSTEM OR UTILITY EMBEDDED IN THE EXISTING STRUCTURE.  DO NOT REMOVE MORE OF THE EXISTING STRUCTURE THAN INDICATED ON CONTRACT DOCUMENTS. DO NOT DAMAGE, MAR, CUT OR DEFACE THE REMAINING STRUCTURE OR MATERIALS TO BE REUSED.			
DE-4 DE-5 DE-6 DE-7 DE-8	VERIFIED BY THE CONTRACTOR. VERIFY THE EXACT EXTENT OF DEMOLITION AT THE SITE. DETERMINE THE NATURE AND EXTENT OF DEMOLITION THAT WILL BE NECESSARY BY COMPARING THE CONTRACT DOCUMENTS WITH THE EXISTING CONSTRUCTION. IMMEDIATELY NOTIFY THE DESIGN PROFESSIONALS OF ANY INCONSISTENCIES.  THE CONTRACTOR SHALL USE QUALIFIED, EXPERIENCED PERSONNEL FOR DEMOLITION AND REMOVAL OPERATIONS. PERFORM DEMOLITION AND REMOVAL OPERATIONS IN A CAREFUL AND ORDERLY MANNER TO PREVENT HAZARDS TO PERSONS, DAMAGE TO PROPERTY, AND THE SPREADING OF DUST AND DEBRIS.  DO NOT PERMIT PORTIONS OF THE STRUCTURE TO FALL NOR DEBRIS TO DROP EXCEPT BY METHODS WHICH WILL ENSURE INTEGRITY OF THE STRUCTURE.  PRIOR TO THE START OF WORK, VERIFY THAT THE SCOPE OF DEMOLITION INDICATED ON THE CONTRACT DOCUMENTS SHALL NOT DAMAGE, CUT OR DISRUPT SERVICE OF ANY MECHANICAL SYSTEM, ELECTRICAL SYSTEM OR UTILITY EMBEDDED IN THE EXISTING STRUCTURE.  DO NOT REMOVE MORE OF THE EXISTING STRUCTURE THAN INDICATED ON CONTRACT DOCUMENTS. DO NOT DAMAGE, MAR, CUT OR DEFACE THE REMAINING STRUCTURE OR MATERIALS TO BE REUSED.			
DE-5 DE-6 DE-7 DE-8	DEMOLITION AND REMOVAL OPERATIONS. PERFORM DEMOLITION AND REMOVAL OPERATIONS IN A CAREFUL AND ORDERLY MANNER TO PREVENT HAZARDS TO PERSONS, DAMAGE TO PROPERTY, AND THE SPREADING OF DUST AND DEBRIS.  DO NOT PERMIT PORTIONS OF THE STRUCTURE TO FALL NOR DEBRIS TO DROP EXCEPT BY METHODS WHICH WILL ENSURE INTEGRITY OF THE STRUCTURE.  PRIOR TO THE START OF WORK, VERIFY THAT THE SCOPE OF DEMOLITION INDICATED ON THE CONTRACT DOCUMENTS SHALL NOT DAMAGE, CUT OR DISRUPT SERVICE OF ANY MECHANICAL SYSTEM, ELECTRICAL SYSTEM OR UTILITY EMBEDDED IN THE EXISTING STRUCTURE.  DO NOT REMOVE MORE OF THE EXISTING STRUCTURE THAN INDICATED ON CONTRACT DOCUMENTS. DO NOT DAMAGE, MAR, CUT OR DEFACE THE REMAINING STRUCTURE OR MATERIALS TO BE REUSED.			
DE-6 DE-7 DE-8	PRIOR TO THE START OF WORK, VERIFY THAT THE SCOPE OF DEMOLITION INDICATED ON THE CONTRACT DOCUMENTS SHALL NOT DAMAGE, CUT OR DISRUPT SERVICE OF ANY MECHANICAL SYSTEM, ELECTRICAL SYSTEM OR UTILITY EMBEDDED IN THE EXISTING STRUCTURE.  DO NOT REMOVE MORE OF THE EXISTING STRUCTURE THAN INDICATED ON CONTRACT DOCUMENTS. DO NOT DAMAGE, MAR, CUT OR DEFACE THE REMAINING STRUCTURE OR MATERIALS TO BE REUSED.			
DE-7 DE-8	ON THE CONTRACT DOCUMENTS SHALL NOT DAMAGE, CUT OR DISRUPT SERVICE OF ANY MECHANICAL SYSTEM, ELECTRICAL SYSTEM OR UTILITY EMBEDDED IN THE EXISTING STRUCTURE.  DO NOT REMOVE MORE OF THE EXISTING STRUCTURE THAN INDICATED ON CONTRACT DOCUMENTS. DO NOT DAMAGE, MAR, CUT OR DEFACE THE REMAINING STRUCTURE OR MATERIALS TO BE REUSED.			
DE-8	CONTRACT DOCUMENTS. DO NOT DAMAGE, MAR, CUT OR DEFACE THE REMAINING STRUCTURE OR MATERIALS TO BE REUSED.			
	THE CONTRACTOR SHALL INCLUDE IN HIS BID THE COST OF REMOVING DEMOLISHED			
DE-9	MATERIALS FROM THE SITE IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES, AND REGULATIONS.			
	WHERE NEW OPENINGS IN EXISTING CONCRETE SLABS OR WALLS ARE TO BE CREATED, THE DEMOLITION CONTRACTOR SHALL CORE HOLES AT THE OUTSIDE CORNERS OF THE NEW OPENING PRIOR TO DEMOLITION. SAW-CUT AND DEMOLISH SLAB OR WALL ONLY AFTER THE INSTALLATION OF ALL REQUIRED NEW STRUCTURAL FRAMING AND/OR REINFORCEMENT IN PLAN OR SECTION, UON. SAW CUTTING SHALL BE STRAIGHT AND SHALL NOT EXTEND INTO EXISTING SLAB OR WALL TO REMAIN NOR BEYOND THE HOLES CORED AT THE CORNERS OF THE NEW OPENING.			
DI	DELEGATED DESIGN ITEMS			
OI-1	THE CONTRACTOR SHALL EMPLOY OR RETAIN A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF WISCONSIN TO DESIGN AND DETAIL DELEGATED DESIGN ITEMS TO MEET THE PERFORMANCE AND DESIGN CRITERIA ESTABLISHEDIN THE CONTRACT DOCUMENTS INCLUDING BUT NOT LIMITED TO:			
	TIE BACK ANCHORS ASSEMBLIES			
<u>SU</u>	SUBMITTALS			
SU-1	TWENTY WORKING DAYS PRIOR TO SUBMITTING SHOP DRAWINGS, THE CONTRACTOR SHALL SUBMIT FOR SER'S REVIEW A SCHEDULE WHICH DETAILS THE ESTIMATED QUANTITY OF SHOP DRAWINGS AND THE DATE THE SHOP DRAWINGS WILL BE RECEIVED BY THE SER. THE SER SHALL HAVE THE OPPORTUNITY TO REVIEW THE PROPOSED SCHEDULE AND SUBMIT COMMENTS TO THE CONTRACTOR. THE FINAL SHOP DRAWING SCHEDULE SHALL BE DEVELOPED AND SUBMITTED TO THE SER. IN ACCORDANCE WITH THE SHOP DRAWING SCHEDULE, THE SER WILL RETURN THE SHOP DRAWING ITEMS WITHIN TEN WORKING DAYS AFTER HAVING RECEIVED THE ELECTRONIC SHOP DRAWING.			
SU-2	THE CONTRACTOR IS TO REVIEW EACH SUBMITTAL PRIOR TO FORWARDING TO DESIGN PROFESSIONALS. THE CONTRACTOR IS TO STAMP EACH SUBMITTAL VERIFYING THAT THE FOLLOWING IS ADDRESSED:			
	<ol> <li>THE SHOP DRAWING IS REQUESTED.</li> <li>THE SHOP DRAWING IS BASED ON THE LATEST DESIGN.</li> <li>THE DESIGN PROFESSIONALS' COMMENTS FROM ANY PREVIOUS SUBMITTALS</li> </ol>			
	ARE ADDRESSED.  4. THE WORK IS COORDINATED AMONG ALL CONSTRUCTION TRADES.  5. REVISIONS FROM PREVIOUS SUBMITTALS ARE CLEARLY MARKED BY CIRCLING			
	OR CLOUDS. 6. SUBMITTAL IS COMPLETE. 7. SUBMITTAL DOES NOT INCLUDE SUBSTITUTION REQUEST			
	8. SUBMITTAL SHALL INCLUDE A STAMP INDICATING PROJECT NAME AND LOCATION, SUBMITTAL NUMBER, SPECIFICATION SECTION NUMBER.			
	THE SER SHALL RETURN, WITHOUT COMMENT, SUBMITTALS WHICH THE CONTRACTOR HAS NOT STAMPED OR WHICH DO NOT MEET THE ABOVE REQUIREMENTS. THE SER'S REVIEW OF SUBMITTALS SHALL BE FOR GENERAL CONFORMANCE WITH THE DESIGN INTENT. NO WORK SHALL BE STARTED WITHOUT SUCH REVIEW.			
SU-3	FOR COMPONENTS THAT REQUIRE ENGINEERING BY THE CONTRACTOR, PROVIDE A NOTE ON EACH SHOP DRAWING, WRITTEN AND SIGNED BY THE SUPPLIER'S ENGINEER, INDICATING THAT THE SHOP DRAWING IS IN CONFORMANCE WITH THE CALCULATIONS OF THE CONTRACTOR'S ENGINEER.			
SU-4	THE FOLLOWING ITEMS REQUIRE SUBMITTALS FOR STRUCTURAL REVIEW AS OUTLINED IN THE SPECIFICATIONS:			
	039300 P CONCRETE RESTORATION 051200 S STRUCTURAL STEEL			
	053000 S STEEL ROOF DECK 075323 P EPDM ROOFING 078100 P FIREPROOFING			
	112400 S CALC FALL PROTECTION EQUIPMENT 112400 S CALC TIE BACK ANCHOR LOAD TEST PLAN			
	S = SHOP DRAWINGS REQUIRED			
	P = PRODUCT DATA REQUIRED  CALC = SUPPORTING CALCULATIONS REQUIRED, SEALED AND SIGNED BY A			
	CALC = SUPPORTING CALCULATIONS REQUIRED, SEALED AND SIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF WISCONSIN.			

	SS	STRUCTURAL STEEL			
DS OF	SS-1	STEEL MATERIALS SHALL CONFORM UNLESS OTHERWISE NOTED ON THE			
CTURE R SHALL JCTION TO		ROLLED SHAPES AND CHANNELS:	ASTM A572 OR A992, MII		
IN A SIGN		ANGLES: HOLLOW STRUCTURAL SECTIONS:	50 KSI ASTM A36		
ELEMENTS EMOLITION		SEAMLESS PIPE:	RECTANGULAR HSS ASTM A53 GRADE B, TYPE		
IRS SHALL BE D BY A IITTED TO		PLATES	STRENGTH 35 KSI. ASTM A572 OR A529, MII 50 KSI		
ICING REPAIR	SS-2	CONNECTION MATERIAL SHALL CONF			
BE FIELD TION AT THE BE STING FANY		ANGLES: WTs: PLATES:	ASTM A36 ASTM A992 ASTM A36, MIN YIELD ST ASTM A572 OR A529, MII		
OR REMOVAL DS TO DEBRIS.		BOLTS: NUTS: WASHERS: HEADED STUDS:	STRENGTH 50 KSI ASTM A325 OR A490 ASTM A563 ASTM F436 ASTM A 108, GRADE 101 HEADED STUD TYPE, CO		
DROP IRE.		WELD ELECTRODES:	CARBON STEEL, AWS D DIAMETER UNO E70XX		
ON INDICATED SERVICE OF	SS-3	WHERE NO CAMBER IS INDICATED, F			
IN THE	SS-4	SPLICES SHALL BE ALLOWED ONLY A STRUCTURAL DRAWINGS UNLESS AF	AT LOCATIONS SPECIFICALL		
on Remaining	SS-5	FOR STEEL MEMBERS AND EMBEDMI			
DEMOLISHED S, CODES,	SS-6	PROVIDE HOLES IN ALL STEEL AS REQUIRED TO PREVENT ANY WATER. ALL PENETRATIONS THROUGH MAIN MEMBERS SHALL DIA. AND SHALL BE GROUND SMOOTH. THESE DRAINS MUST B OPEN.			
O BE OUTSIDE DEMOLISH STRUCTURAL	SS-7	SHOW ALL COPES, HOLES, OPENING STRUCTURAL STEEL MEMBERS FOR THE SHOP DRAWINGS FOR APPROVA	ERECTION OR THE WORK O		
TTING SHALL REMAIN NOR	SS-8	FIELD MODIFICATION OF STRUCTURAL STEEL IS PROHIBITED WI WRITTEN APPROVAL OF THE DESIGN PROFESSIONALS.			
ED LICENCED	<u>sc</u>	STRUCTURAL STEEL CONNECTIONS			
ER LICENSED GN ITEMS TO ONTRACT	SC-1	ALL STEEL DETAILS AND CONNECTION REQUIREMENTS OF "SPECIFICATION AND RESISTANCE FACTOR DESIGN.			
	SC-2	ALL CONNECTIONS INDICATED ON ST DESIGNED.	FRUCTURAL DRAWINGS HAV		
	SC-3	DETAILS INDICATED ON DRAWINGS E ERECTION AIDS AS REQUIRED AND R			
ETAILS THE RAWINGS	SC-4	ALTERNATE CONNECTIONS TO THOS AS A SUBSTITUTION REQUEST. SEE F			
TY TO INTRACTOR. ITTED TO	SC-5	FOR CONNECTION DETAILING, SET C MEMBER CENTERLINES, UON.	ONNECTION WORK POINT A		
ER WILL HAVING	SC-6	CONNECTION DESIGN FORCES INDIC	ATED ON THE DRAWINGS A		
ING TO ITAL	SC-7	USE NO MORE THAN TWO BOLT DIAM SHALL BE OF THE SAME GRADE, SKIF A MINIMUM OF 3/4-INCH DIAMETER G	P ONE SIZE BETWEEN DIAMI		
	SC-8	BEAM CONNECTION DESIGN NOTES:			
UBMITTALS		EXCEPT WHERE "SNUG TIGHT" INSTA DRAWINGS OR "SLIP CRITICAL" DETA SHALL BE INSTALLED AS FULL PRETE	ILING IS REQUIRED, ALL HIG		
Y CIRCLING		AT A MINIMUM ALL BOLTED MOMENT PRETENSIONED BOLTS IN STANDARD			
AND R.		BOLTED MOMENT CONNECTIONS AT CRITICAL BOLTS.	CANTILEVERS AND BACKSP		
λ.		DO NOT USE OVERSIZED OR SLOTTE SPECIFICALLY INDICATED ON THE DR			
NERAL D WITHOUT	SC-9	ALL WELDING SHALL CONFORM TO T WELDING CODE, ANSI/AWS D1.1, LAT LARGER OF THE SIZE REQUIRED BY ANSI/AWS D1.1, OR 3/16 INCH MINIMU	EST EDITION. ALL WELD SIZ CONNECTION FORCES, THE IM FILLET WELD UON. ANY N		
PROVIDE A R'S WITH THE		ON THE DESIGN DRAWINGS ARE CON INCREASED IN ACCORDANCE WITH A COMPONENTS.			
V AS	SC-10	USE RUNOFF TABS AT ALL BEVEL AN REMOVE RUNOFF TABS BY NEAT CU'WHERE REQUIRED BY DETAIL.			
	SC-11	WHERE REQUIRED BY DETAIL REMO' AFTER WELD IS COMPLETED.	VE WELD BACK UP BARS AN		
Y A					

STEEL DECK GENERAL REQUIREMENTS EL MATERIALS SHALL CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS THE DESIGN, MANUFACTURE AND ERECTION OF STEEL DECK AND ITS ANCHORAGE SHALL, AT A MINIMUM, BE IN ACCORDANCE WITH "DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS AND ROOF DECKS" OF THE STEEL DECK INSTITUTE (SDI), ASTM A572 OR A992, MIN YIELD STRENGTH CURRENT EDITION AND "SPECIFICATIONS FOR DESIGN OF LIGHT GAGE COLD FORMED STEEL STRUCTURAL MEMBERS" AS PUBLISHED BY THE AMERICAN IRON AND STEEL INSTITUTE (AISI), CURRENT EDITION. ASTM A500 GRADE C, MIN YIELD STRENGTH 46 KSI FOR ROUND AND 50 KSI FOR CONFIGURE ALL STEEL DECK USING THREE SPAN CONTINUOUS LAYOUTS WHEREVER ASTM A53 GRADE B, TYPE S, MIN YIELD CONFIGURE ALL STEEL DECK AS SHOWN ON THE DRAWINGS. ASTM A572 OR A529, MIN YIELD STRENGTH DESIGN STEEL DECK FOR UNSHORED CONDITIONS. NNECTION MATERIAL SHALL CONFORM TO THE FOLLOWING MINIMUM PROPERTIES: ASTM A36, MIN YIELD STRENGTH 36 KSI OR ASTM A572 OR A529, MINIMUM YIELD **ASTM A 108, GRADE 1010 THROUGH 1020** HEADED STUD TYPE, COLD-FINISHED CARBON STEEL, AWS D1.1, TYPE B. 3/4" ERE NO CAMBER IS INDICATED. FABRICATE BEAMS SO THAT ANY NATURAL LICES SHALL BE ALLOWED ONLY AT LOCATIONS SPECIFICALLY INDICATED ON THE RUCTURAL DRAWINGS UNLESS APPROVED OTHERWISE BY THE SER IN WRITING. R STEEL MEMBERS AND EMBEDMENTS EXPOSED TO WEATHER, PROVIDE HOT-PED GALVANIZED FINISH OR APPROVED ZINC RICH EXTERIOR COATING SYSTEM. DVIDE HOLES IN ALL STEEL AS REQUIRED TO PREVENT ANY ACCUMULATION OF TER. ALL PENETRATIONS THROUGH MAIN MEMBERS SHALL NOT EXCEED 1 1/8" . AND SHALL BE GROUND SMOOTH. THESE DRAINS MUST BE KEPT CLEAN AND OW ALL COPES. HOLES. OPENINGS AND MODIFICATIONS REQUIRED IN RUCTURAL STEEL MEMBERS FOR ERECTION OR THE WORK OF OTHER TRADES ON E SHOP DRAWINGS FOR APPROVAL BY THE DESIGN PROFESSIONALS. LD MODIFICATION OF STRUCTURAL STEEL IS PROHIBITED WITHOUT PRIOR SPECIFICATIONS. STEEL DETAILS AND CONNECTIONS SHALL BE IN ACCORDANCE WITH THE QUIREMENTS OF "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", AISC-LOAD CONNECTIONS INDICATED ON STRUCTURAL DRAWINGS HAVE BEEN COMPLETELY TAILS INDICATED ON DRAWINGS DO NOT SHOW ERECTION AIDS. PROVIDE ECTION AIDS AS REQUIRED AND REMOVE THEM AFTER WORK IS COMPLETE. REQUIREMENTS. ERNATE CONNECTIONS TO THOSE SHOWN ON DRAWINGS WILL BE CONSIDERED **FIREPROOFING** R CONNECTION DETAILING. SET CONNECTION WORK POINT AT INTERSECTION OF NNECTION DESIGN FORCES INDICATED ON THE DRAWINGS ARE FACTORED UON. E NO MORE THAN TWO BOLT DIAMETERS. ALL BOLTS OF THE SAME DIAMETER ALL BE OF THE SAME GRADE. SKIP ONE SIZE BETWEEN DIAMETERS. BOLTS TO BE CEPT WHERE "SNUG TIGHT" INSTALLATION IS SPECIFICALLY PERMITTED ON AWINGS OR "SLIP CRITICAL" DETAILING IS REQUIRED, ALL HIGH STRENGTH BOLTS A MINIMUM ALL BOLTED MOMENT AND AXIAL CONNECTION SHALL HAVE LTED MOMENT CONNECTIONS AT CANTILEVERS AND BACKSPANS SHALL USE SLIP NOT USE OVERSIZED OR SLOTTED HOLES FOR ANY CONNECTIONS UNLESS ECIFICALLY INDICATED ON THE DRAWINGS OR APPROVED IN WRITING BY THE SER. WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE STRUCTURAL LDING CODE, ANSI/AWS D1.1, LATEST EDITION. ALL WELD SIZES SHALL BE THE RGER OF THE SIZE REQUIRED BY CONNECTION FORCES, THE MINIMUM SIZE PER SI/AWS D1.1, OR 3/16 INCH MINIMUM FILLET WELD UON. ANY WELD SIZES SHOWN THE DESIGN DRAWINGS ARE CONSIDERED EFFECTIVE WELD SIZES AND SHALL BE REASED IN ACCORDANCE WITH AWS AS REQUIRED BY GAPS OR SKEWS BETWEEN ERUNOFF TABS AT ALL BEVEL AND COMPLETE JOINT PENETRATION WELDS. MOVE RUNOFF TABS BY NEAT CUTS AFTER WELD IS COMPLETED. GRIND SMOOTH ERE REQUIRED BY DETAIL REMOVE WELD BACK UP BARS AND GRIND SMOOTH PARAPET WALL WHERE OCCURS

STEEL ROOF DECK STEEL ROOF DECK SHALL CONFORM TO THE FOLLOWING STANDARDS AND MATERIAL STEEL FOR DECK ASTM A653, MINIMUM YIELD STRENGTH OF 33 KSI HOT-DIP GALVANIZING ASTM A653 G60 ROOF DECK SHALL BE HOT-DIP GALVANIZED. UON ROOF DECK ANCHORAGE TO SUPPORTING MEMBERS SHALL MEET THE FOLLOWING MINIMUM FASTENING REQUIREMENTS: A. AT ENDS OF UNITS AND AT ALL INTERMEDIATE SUPPORTS: BY PUDDLE WELDS NOT LESS THAN 5/8 INCH DIAMETER SPACED NOT MORE THAN 12 INCHES ON B. SIDE LAPS OF ADJACENT UNITS: SHALL BE FASTENED BY #10 TEK SCREWS SPACED AT 6" OC. DECKING CONTRACTOR SHALL COORDINATE DECK OPENING SIZES AND LOCATIONS FROM ARCHITECTURAL AND MEP CONTRACT DOCUMENTS, PROVIDE HEADER MEMBERS OR REINFORCEMENT AS REQUIRED BY TYPICAL DETAILS EVEN IF NOT SHOWN ON THE PLANS, AND SUBMIT PROPOSED OPENINGS THROUGH SLAB/DECK FOR REVIEW BY THE DESIGN PROFESSIONALS. POST-INSTALLED ANCHORS PA-1 FIELD DRILLED EXPANSION ANCHOR SYSTEMS USED FOR DESIGN: HILTI KWIK BOLT TZ PROOF TESTING OF EXPANSION ANCHORS SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. UNLESS NOTED OTHERWISE, EXPANSION ANCHOR PROOF TORQUE LOADS SHALL BE PER THE EXPANSION ANCHOR PROOF ALTERNATIVE SYSTEM EQUIVALENT TO OR EXCEEDING THE PROPERTIES OF THE SYSTEMS ABOVE WILL BE CONSIDERED AS A SUBSTITUTION REQUEST. SEE PROJECT INSTALL ANCHORS TO MEET THE REQUIREMENTS INDICATED IN THE CONTRACT DOCUMENTS AND THE CURRENT MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS (MPII). LOCATE, BY NON-DESTRUCTIVE MEANS, AND AVOID ALL EXISTING REINFORCEMENT PRIOR TO INSTALLATION OF ANCHORS. IF EXISTING REINFORCING LAYOUT PROHIBITS THE INSTALLATION OF ANCHORS AS INDICATED ON THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN PROFESSIONALS. SEE PROJECT SPECIFICATIONS FOR POST-INSTALLED ANCHOR INSPECTION WHERE EXISTING FIREPROOFING IS REMOVED TO INSTALL NEW FRAMING OR DECK. RE-APPLY FIREPROOFING TO EXPOSED PORTIONS OF EXISTING FRAMING AS WELL AS TO NEW FRAMING AND TO THE UNDERSIDE OF NEW DECK. THICKNESS FIREPROOFING AS REQUIRED TO ACHIEVE 2-HOUR RATING. TIE BACK ANCHORS EACH TIE BACK ANCHOR HAS BEEN DESIGNED FOR A SINGLE FALL ARREST LOAD OF 5,000 LB CAPABLE OF ACTING IN ANY DIRECTION. IN AN ANCHOR GROUP, ONE TIE BACK ANCHOR IS TO BE USED FOR THE ROPE DESCENT SYSTEM AND ONE IS TO BE USED FOR THE FALL ARREST SYSTEM. THE BASE BUILDING STRUCTURE HAS BEEN EVALUATED FOR ONE FALL ARREST LOAD PER ANCHOR GROUP. THE BASE BUILDING STRUCTURE HAS NOT BEEN EVALUATED FOR A FALL ARREST LOAD OCCURING SIMULTANEOUSLY AT BOTH ANCHORS IN A GROUP. SEE FIGURE 1 BELOW. ALL NEW TIE BACK ANCHOR ASSEMBLIES SHALL BE TESTED IN THEIR FINAL AS-BUILT CONDITION PRIOR TO BEING PLACED INTO SERVICE IN ACCORDANCE WITH OSHA 1910.66(g)(1) FOR A FALL ARREST PROOF LOAD OF 5,000 LBS. REFER TO SPECIFICATION FOR ADDITIONAL TESTING PROCEDURE REQUIREMENTS TIE BACK ANCHOR FOR ROPE DESCENT SYSTEM TIE BACK ANCHOR FOR FALL ARREST SYSTEM ANCHOR GROUP (PAIR OF ADJACENT TIE BACK ANCHORS) FIGURE 1

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D. BAST

**NEW REMOTE DESCENT** SYSTEM ANCHORAGE

**CITY-COUNTY BUILDING** 210 MARTIN LUTHER KING JR BLVD MADISON, WI 53703

**GENERAL NOTES** 

PROJECT NO: C19150.00 SCALE: 3/4" = 1'-0"

DATE: 11/05/2019

**S-001** 

ABBREVIATION DESCRIPTION **ABBREVIATION** DESCRIPTION ADDL **ADDITIONAL** LLH LONG LEG HORIZONTAL **ADJACENT** ADJ LLV LONG LEG VERTICAL LONG ALTERNATE LONGITUDINAL APPRX LP **APPROXIMATE** LOW POINT ARCH ARCHITECT OR ARCHITECTURAL LW LIGHTWEIGHT **BOTTOM OF** LWC LIGHTWEIGHT CONCRETE BACK TO BACK MOMENT BAL **BALANCE** MATL MATERIAL BLDG BUILDING MAX MAXIMUM MC BLK **BLOCK** MOMENT CONNECTION(S) MECH BLKG **BLOCKING** MECHANICAL BM MEP MECHANICAL, ELECTRICAL, BEAM PLUMBING, FIRE PROTECTION BOT **BOTTOM** MEZZ MEZZANINE BRDG **BRIDGING** MFR MANUFACTURER BRG **BEARING** MID MIDDLE **BETWEEN BTWN** MIN MINIMUM COMPRESSION MISC **MISCELLANEOUS** C/C CENTER TO CENTER NIC NOT IN CONTRACT CIP CAST-IN-PLACE NO NUMBER CL CENTER LINE NOM NOMINAL CLEAR OR CLEARANCE NS **NEAR SIDE** CMU CONCRETE MASONRY UNIT NTS NOT TO SCALE COLUMN COL NW NORMAL WEIGHT COMP COMPRESSION NWC NORMALWEIGHT CONCRETE CONC CONCRETE OC ON CENTER CONN CONNECTION(S) OD OUTSIDE DIAMETER CONST CONSTRUCTION OF **OUTSIDE FACE** CONT CONTINUOUS OH OPPOSITE HAND REINFORCING BAR DIAMETER OPNG(S) OPENING(S) DBL DOUBLE OPP OPPOSITE DCW DEMAND CRITICAL WELD OSL OUTSTANDING LEG DEGREE(S) DEG PIECE DET DETAIL PCY POUNDS PER CUBIC YARD DIAMETER DIA PERP PERPENDICULAR DIAG DIAGONAL PG PLATE GIRDER DIM(S) DIMENSION(S) PLATE DL DEAD LOAD PRC PRECAST DWG(S) DRAWING(S) PRLL PARALLEL DOWEL(S) DWL PSF POUNDS PER SQUARE FOOT **EACH** PSI POUNDS PER SQUARE INCH **ECCENTRICITY** PT POINT OR POST-TENSION(ED) OR EACH FACE (ING) **ELEVATION** RAD **RADIUS ELEC** ELECTRICAL REF REFERENCE **ENGR ENGINEER** REINF REINFORCE(D) (ING) OR (MENT) EOD EDGE OF DECK REQD REQUIRED EDGE OF SLAB EOS S&T SHRINKAGE AND TEMPERATURE EQ **EQUAL** SCHED SCHEDULE(D) **EQUIP EQUIPMENT** SUPERIMPOSED DEAD LOAD SDL EW **EACH WAY** SECT SECTION EXP **EXPANSION** STRUCTURAL ENGINEER OF RECORD SER **EXISTING EXST** SQUARE FOOT (FEET) **EXTERIOR** EXT SHT SHEET FACE TO FACE SIMILAR SIM FIN FINISH(ED) SEISMIC LOAD RESISTING SYSTEM SLRS **FLOOR** FLR SOG SLAB ON GRADE **FOUNDATION** FND **SPACE** SP FIREPROOF(ING) SPEC(S) SPECIFICATION(S) FAR SIDE STANDARD STD FOOTING STL STEEL GAGE, GAUGE GA STR STRUCTURE GALV GALVANIZED STRCTL STRUCTURAL **GRADE BEAM** GB SYM SYMMETRICAL GENERAL **TENSION** GRADE T&B TOP AND BOTTOM HOOK TOP OF HORIZ HORIZONTAL TEMP TEMPERATURE OR TEMPORARY **HIGH POINT** TEN **TENSION** HEIGHT THICK OR THICKNESS THK **INSIDE DIAMETER** TYP **TYPICAL** INSIDE FACE UNLESS OTHERWISE NOTED UON INFORMATION SHEAR INTERIOR VERT **VERTICAL** INTRM INTERMEDIATE VIF VERIFY IN FIELD JST(S) JOIST(S) JOINT WITHOUT KIPS (1,000 POUNDS) WOOD WD KIP PER LINEAR FOOT WP **WORK POINT** KIP PER SQUARE FOOT WATERPROOFING LIVE LOAD WS WATERSTOP WELDED WIRE REINFORCEMENT

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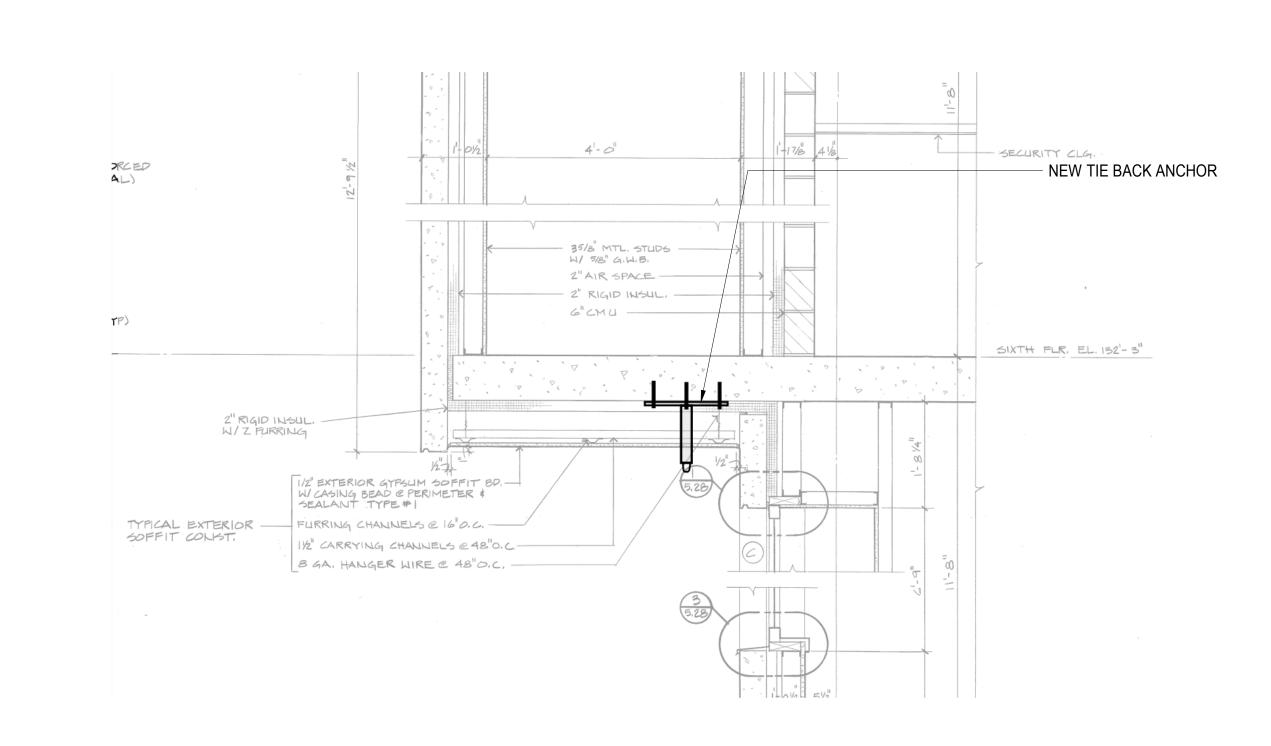
NEW REMOTE DESCENT SYSTEM ANCHORAGE

CITY-COUNTY BUILDING 210 MARTIN LUTHER KING JR BLVD MADISON, WI 53703

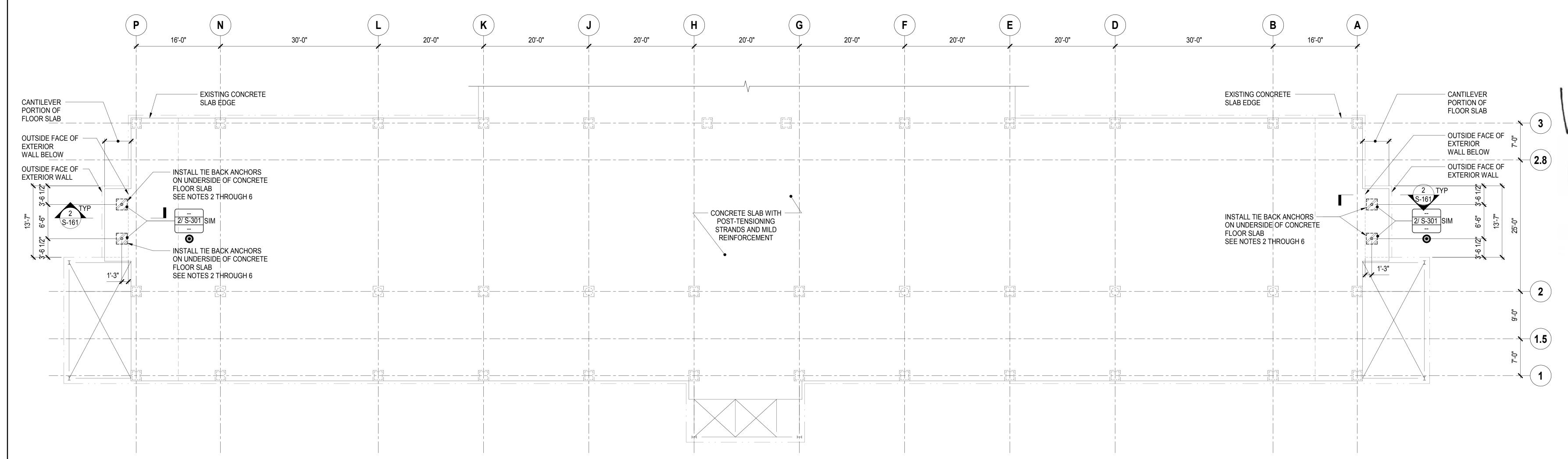
**ABBREVIATIONS** 

PROJECT NO: C19150.00 SCALE:

**S-002** DATE: 11/05/2019



2 SECTION AT SIXTH FLOOR OVERHANG
NOT TO SCALE



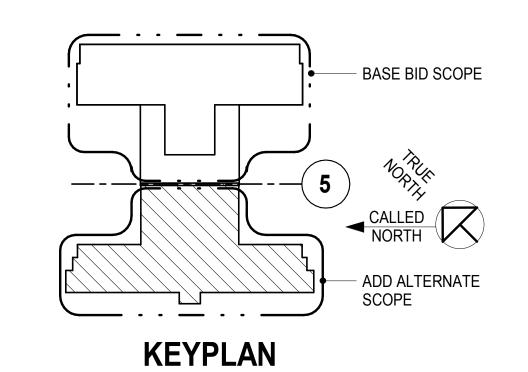
#### SIXTH FLOOR PARTIAL PLAN - WEST (ADD ALTERNATE)

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

#### PLAN NOTES:

- 1. TOP OF SLAB ELEVATION = 132'-3" (VERIFY IN FIELD). TOP OF STEEL ELEVATION VARIES.
- 2. REMOVE EXISTING SOFFIT SHEATHING AND RIGID INSULATION AS REQUIRED TO INSTALL NEW TIE BACK ANCHORS.
- 3. INSTALL NEW 2" XPS INSULATION TO CONCEAL ANCHOR BASE PLATE. REPLACE REMOVED SOFFIT SHEATING WITH USG SECUROCK BRAND GLASS-MAT SHEATHING (OR SIMILAR). THICKNESS TO MATCH EXISTING. INSTALL ADDITIONAL FURRING CHANNELS, CARRYING CHANNELS AND HANGERS AS REQUIRED TO ACCOMMODATE NEW TIE BACK ANCHORS. OPENING IN SOFFT SHEATHING FOR ANCHORS TO BE 1" LARGER THAN THE DIAMETER OF THE ANCHOR POST. INSTALL URETHANE SEALANT OVER BACKER ROD IN GAP. SEALANT COLOR TO MATCH EXISTING.
- 4. FASTEN SOFFIT SHEATHING TO FURRING CHANNELS WITH 1 1/4" #6 BUGLEHEAD CORROSION-RESISTANT SCREWS AT 8" OC MAX.
- 5. PROVIDE 1/2" GAP BETWEEN SOFFIT SHEATHING AND PRECAST WALL PANELS. INSTALL URETHANE SEALANT OVER BACKER ROD IN GAPS. SEALANT COLOR TO MATCH EXISTING.
- 6. SOFFIT SHEATHING FINISH:
- APPLY FILL COAT OF USG SHEETROCK BRAND DURABOND SETTING-TYPE JOINT COMPOUND (OR SIMILAR) AND EMBED USG SHEETROCK BRAND JOINT TAPE (OR SIMILAR) OVER ALL JOINTS. ONCE FILL COAT IS DRY, APPLY FINISH COAT OF JOINT COMPOUND OVER JOINTS.
- APPLY A SMOOTH, UNIFORM THIN COAT OF USG SHEETROCK BRAND DURABOND SETTING-TYPE JOINT COMPOUND (OR SIMILAR) OVER THE ENTIRE SURFACE OF THE SHEATHING. AFTER COMPOUND HAS DRIED, APPLY LATEX FLAT EXTERIOR PRIMER AND FINISH WITH TWO COATS OF LATEX EXTERIOR PAINT. COLOR TO MATCH EXISTING.
- 7. LOCATE EXISTING CONCRETE SLAB POST-TENSIONING STRANDS AND MILD REINFORCEMENT VIA NON-DESTRUCTIVE TESTING PRIOR TO DRILLING HOLES PER GENERAL STRUCTURAL NOTE PA-5.

TIE BACK ANCHOR SYMBOL LEGEND DEMOLITION DETAIL TIE BACK ANCHOR NUMBER TIE BACK DETAIL - BASE PL (WHERE OCCURS) NUMBER WATERPROOFING -DETAIL NUMBER **GRAY CIRCLE** - HORIZ DIRECTION(S) INDICATES VERT OF PROOF TEST LOAD PROOF TEST LOAD FOR ANCHOR GROUP FOR ANCHOR GROUP (WHERE OCCURS)



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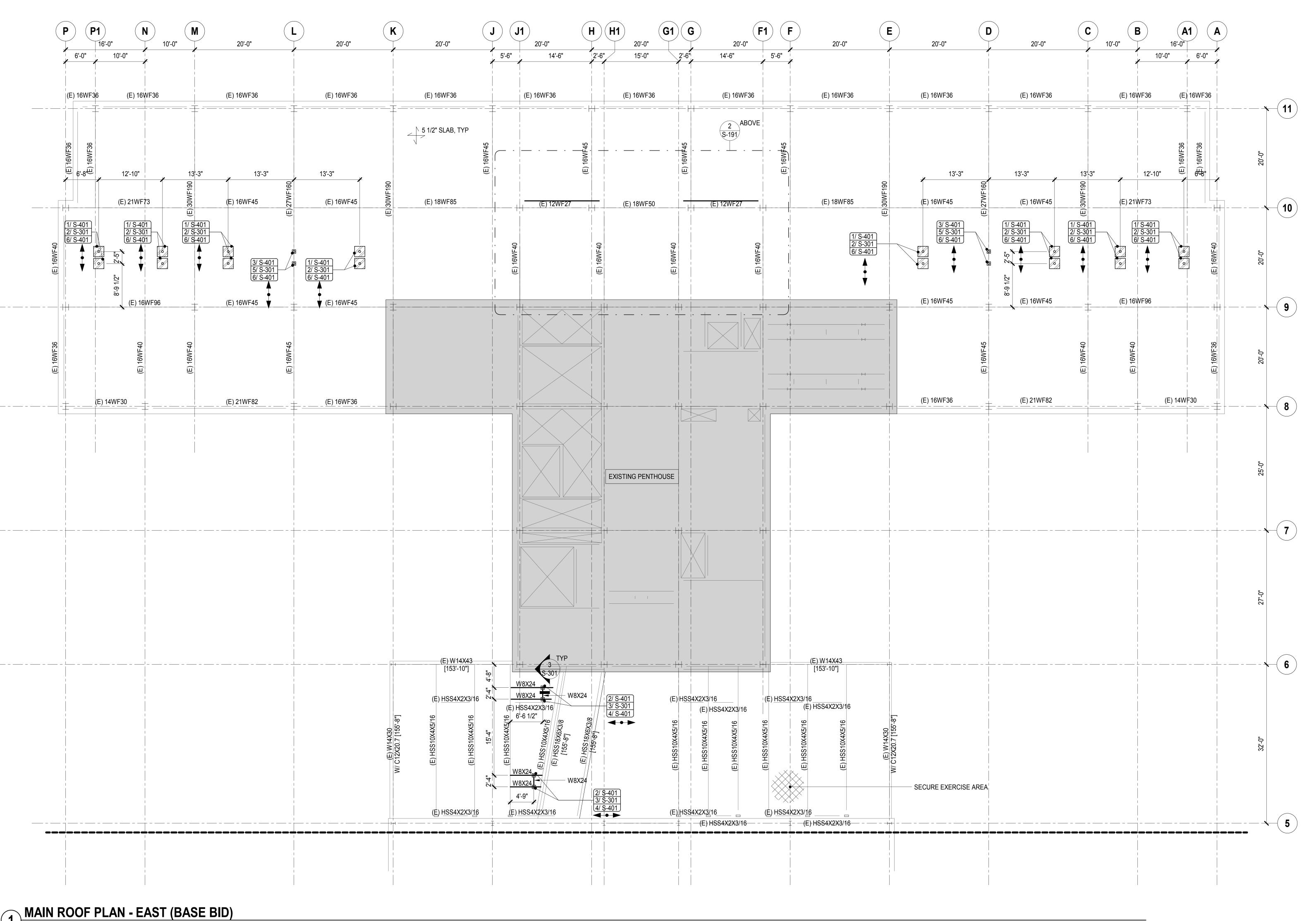
SIXTH FLOOR
PARTIAL PLAN WEST

CITY-COUNTY BUILDING 210 MARTIN LUTHER KING JR BLVD

MADISON, WI 53703

PROJECT NO:
C19150.00
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Author
CHECKED BY:
Checker
DATE:
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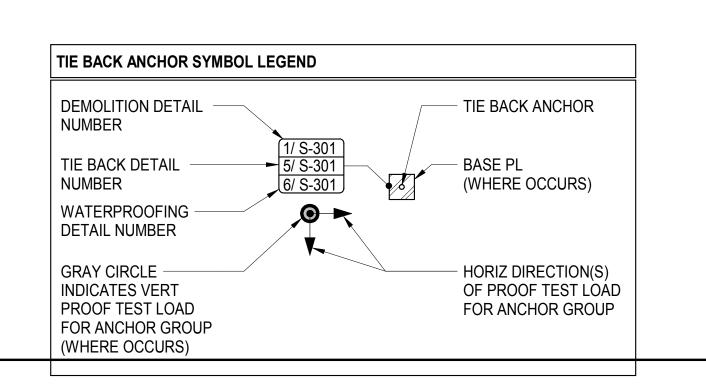
S-161

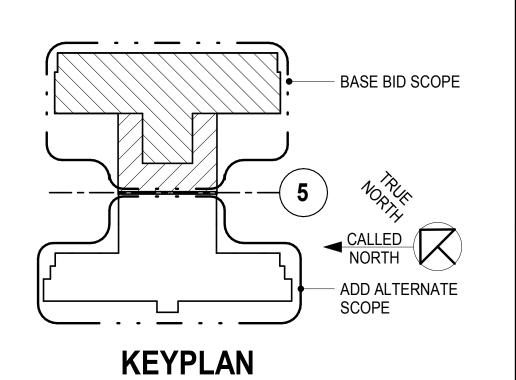


MAIN ROOF PLAN - EAST (BASE BID) SCALE: 1/8" = 1'-0"

PLAN NOTES:

- 1. TOP OF STRUCTURAL SLAB EL = +155'-4", UON. TOP OF STRUCTURAL STEEL EL = +155'-2", UON.
- 2. LOCATE EXISTING CONCRETE SLAB REINFORCEMENT VIA NON-DESTRUCTIVE TESTING PRIOR TO DRILLING HOLES PER GENERAL STRUCTURAL NOTE PA-5.





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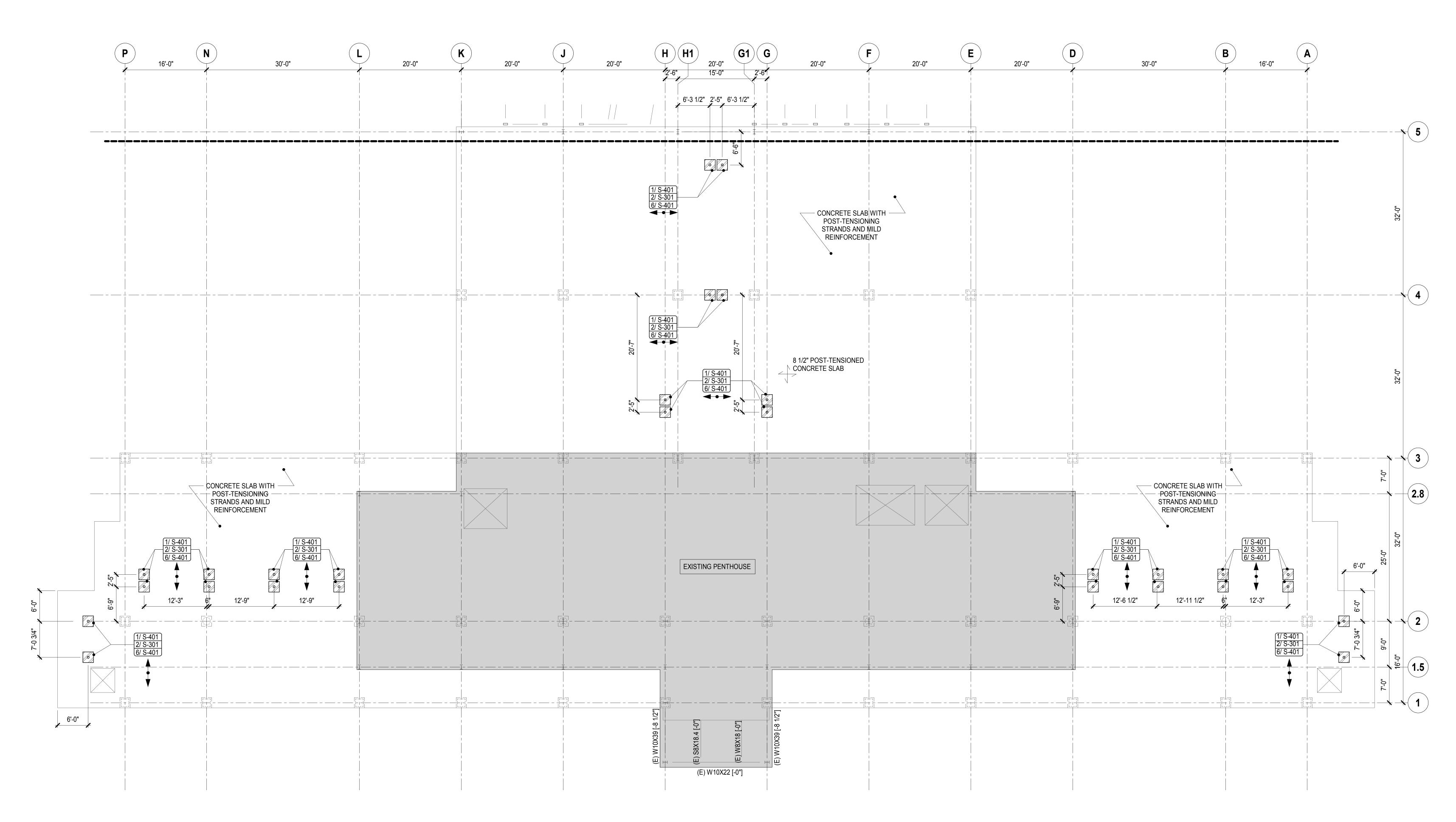
MAIN ROOF PLAN -**EAST** 

PROJECT NO: **C19150.00** SHEET NUMBER scale: **As indicated** 

CHECKED BY:

DATE: 11/05/2019

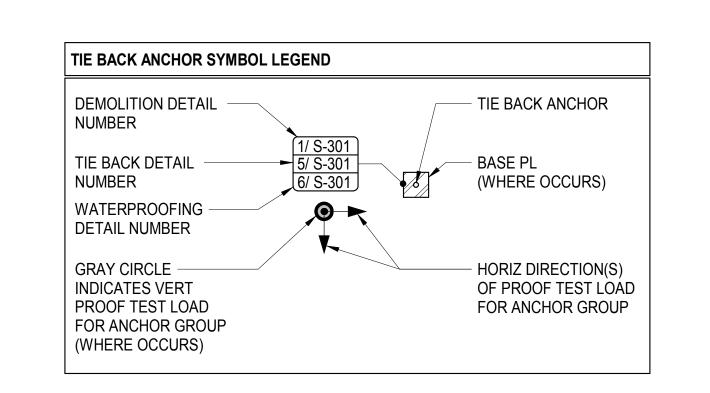
S-181

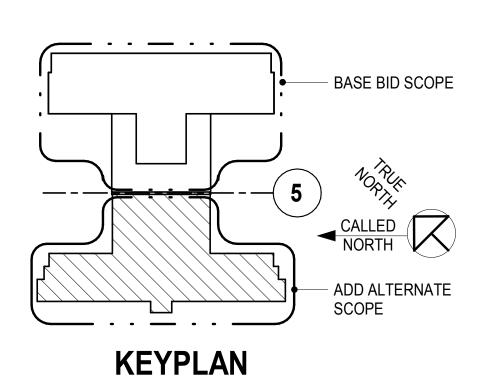


## MAIN ROOF PLAN - WEST (ADD ALTERNATE)

#### PLAN NOTES:

- 1. TOP OF STRUCTURAL SLAB AT EL = +156'-8", UON.
- LOCATE EXISTING CONCRETE SLAB POST-TENSIONING STRANDS AND MILD REINFORCEMENT VIA NON-DESTRUCTIVE TESTING PRIOR TO DRILLING HOLES PER GENERAL STRUCTURAL NOTE PA-5.





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MAIN ROOF PLAN -**WEST** 

CITY-COUNTY BUILDING 210 MARTIN LUTHER KING JR BLVD

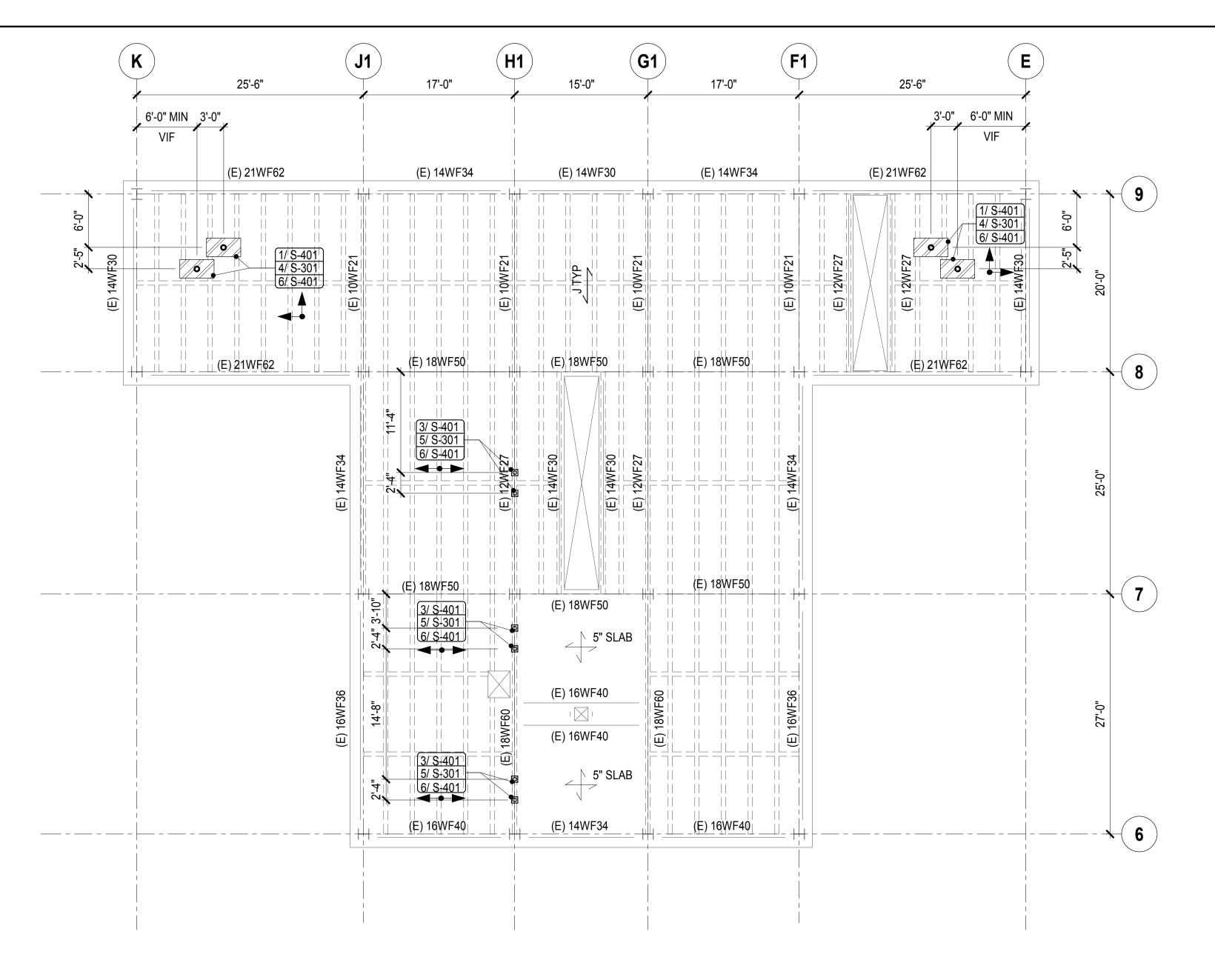
MADISON, WI 53703

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DATE: 11/05/2019

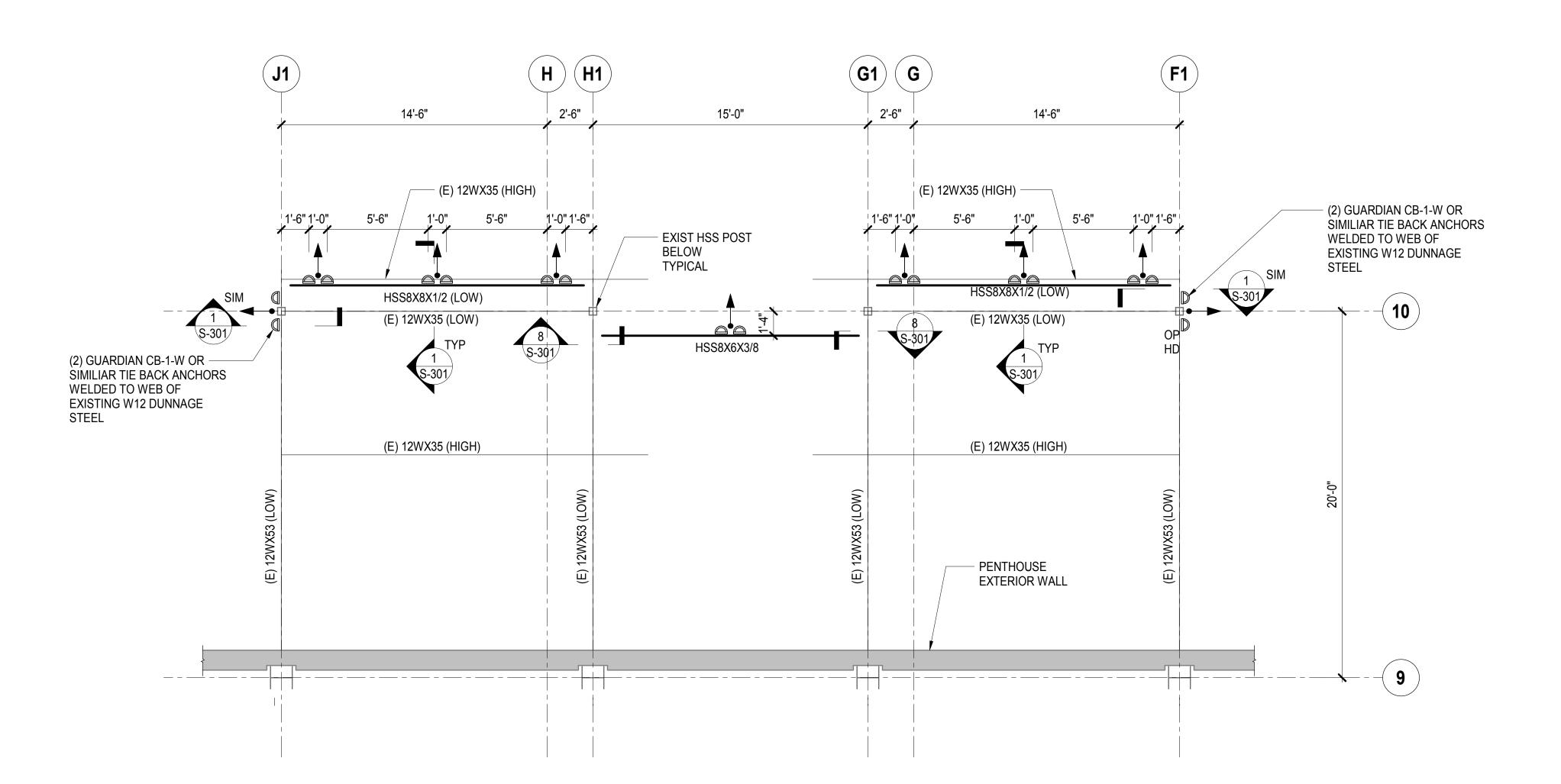
**S-182** 



#### PLAN NOTES:

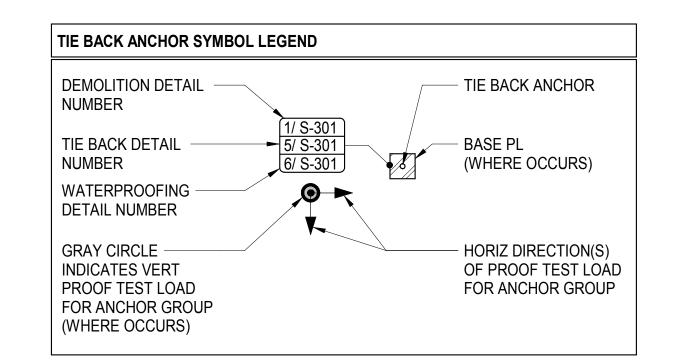
- 1. TOP OF STRUCTURAL SLAB EL = +172'-10", UON. TOP OF STRUCTURAL STEEL EL = +172'-8", UON.
- 2. LOCATE EXISTING CONCRETE SLAB POST-TENSIONING STRANDS AND MILD REINFORCEMENT VIA NON-DESTRUCTIVE TESTING PRIOR TO DRILLING HOLES PER GENERAL STRUCTURAL NOTE PA-5.
- PENTHOUSE ROOF PLAN EAST (BASE BID)

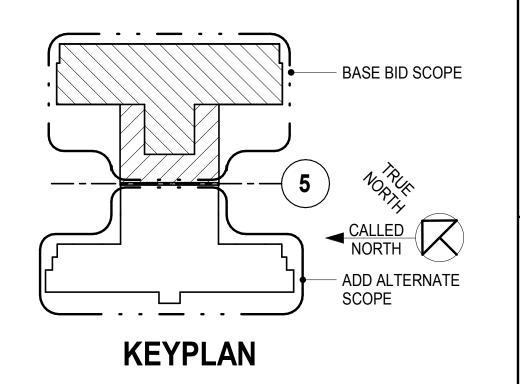
SCALE: 1/8" = 1'-0"



EAST COOLING TOWER DUNNAGE STEEL FRAMING PLAN (BASE BID)

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





WILLIAM D. BAST E-35493
HIGHLAND PARK.

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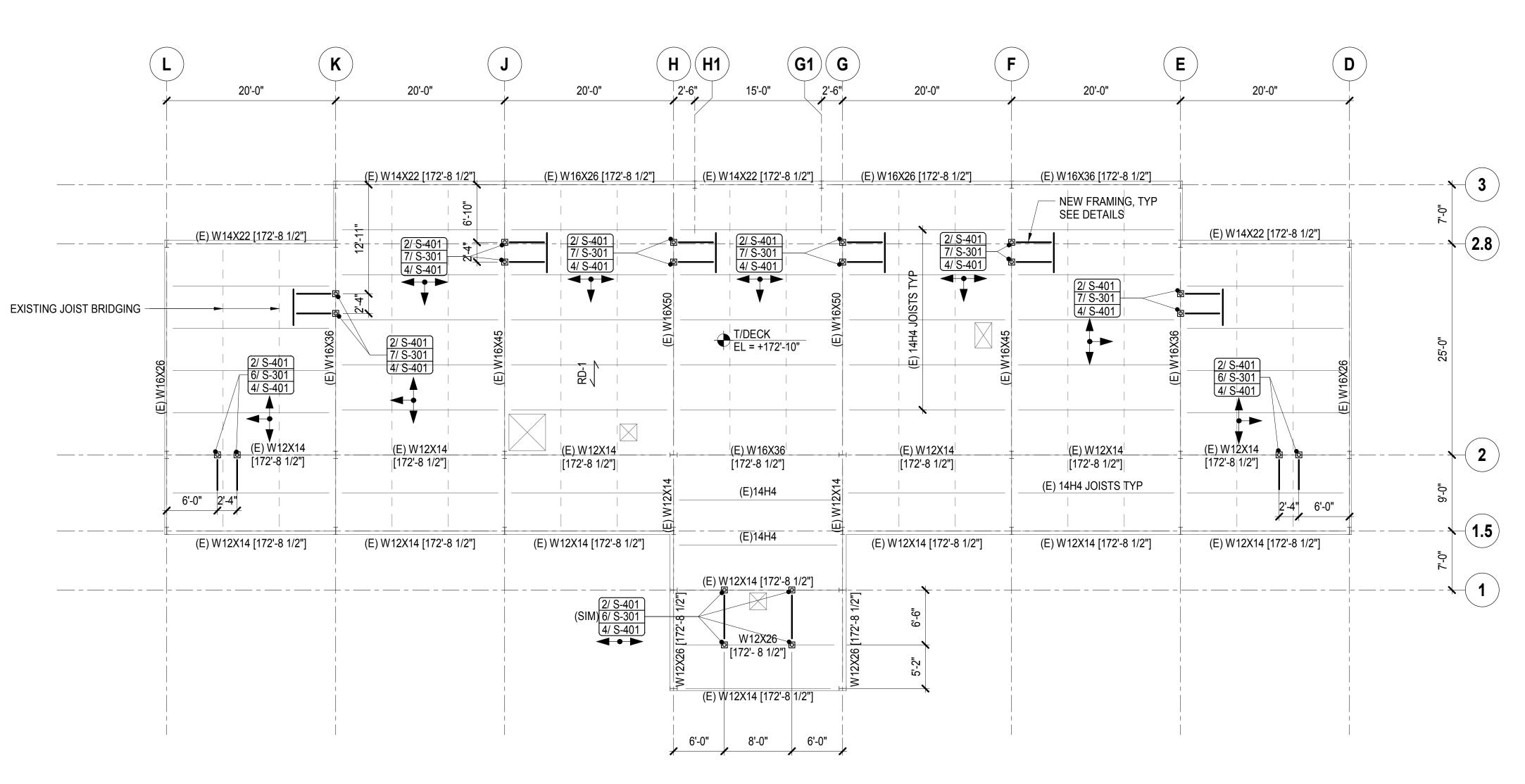
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SYSTEM ANCHORAGE

CITY-COUNTY BUILDING 210 MARTIN LUTHER KING JR BLVD MADISON, WI 53703

PENTHOUSE ROOF
PLAN - EAST

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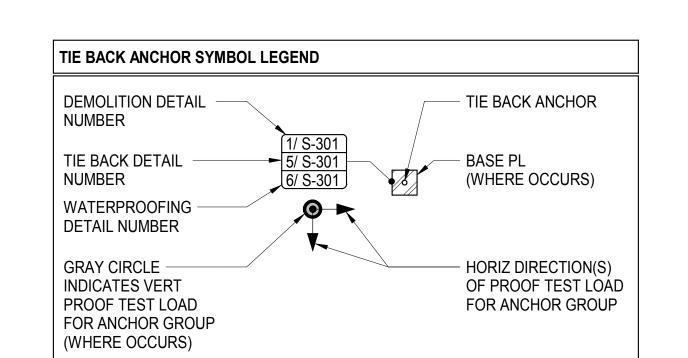
DATE: 11/05/2019 S-191

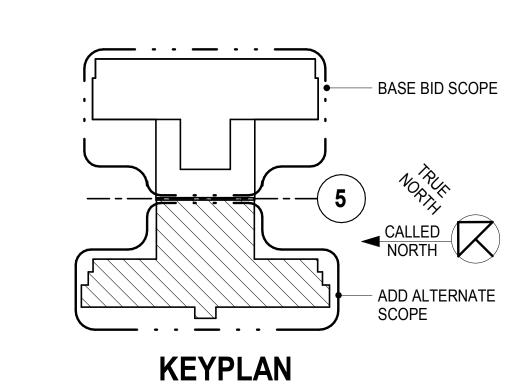


## PENTHOUSE ROOF PLAN - WEST (ADD ALTERNATE) SCALE: 1/8" = 1'-0"

PLAN NOTES:

- 1. TOP OF STEEL JOIST AT EL = +172'-8 1/2", UON. TOP OF STRUCTURAL STEEL AT EL = +172'-6", UON.
- 2. RD-1 INDICATES EXISTING 1 1/2" 20 GA INTERMEDIATE RIB METAL ROOF DECK. VERIFY IN FIELD.





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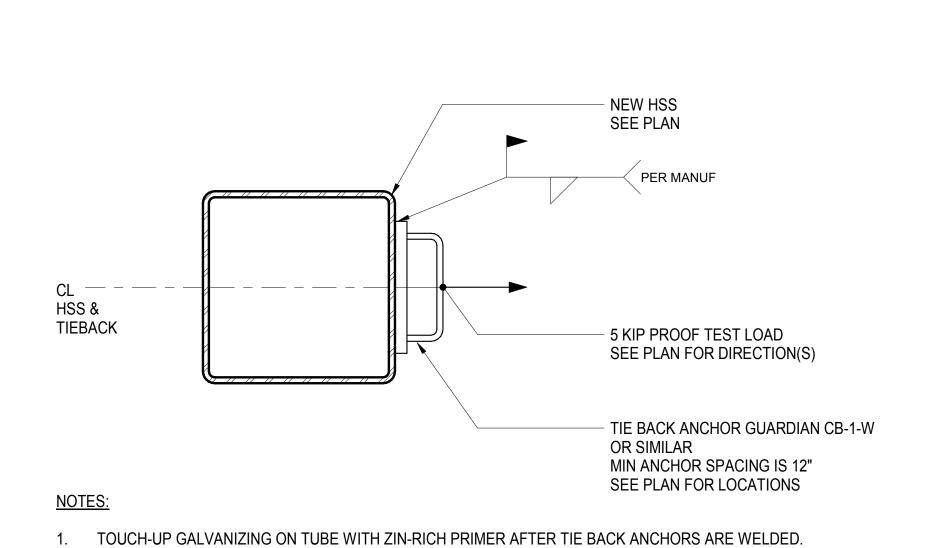
SYSTEM ANCHORAGE

CITY-COUNTY BUILDING 210 MARTIN LUTHER KING JR BLVD MADISON, WI 53703

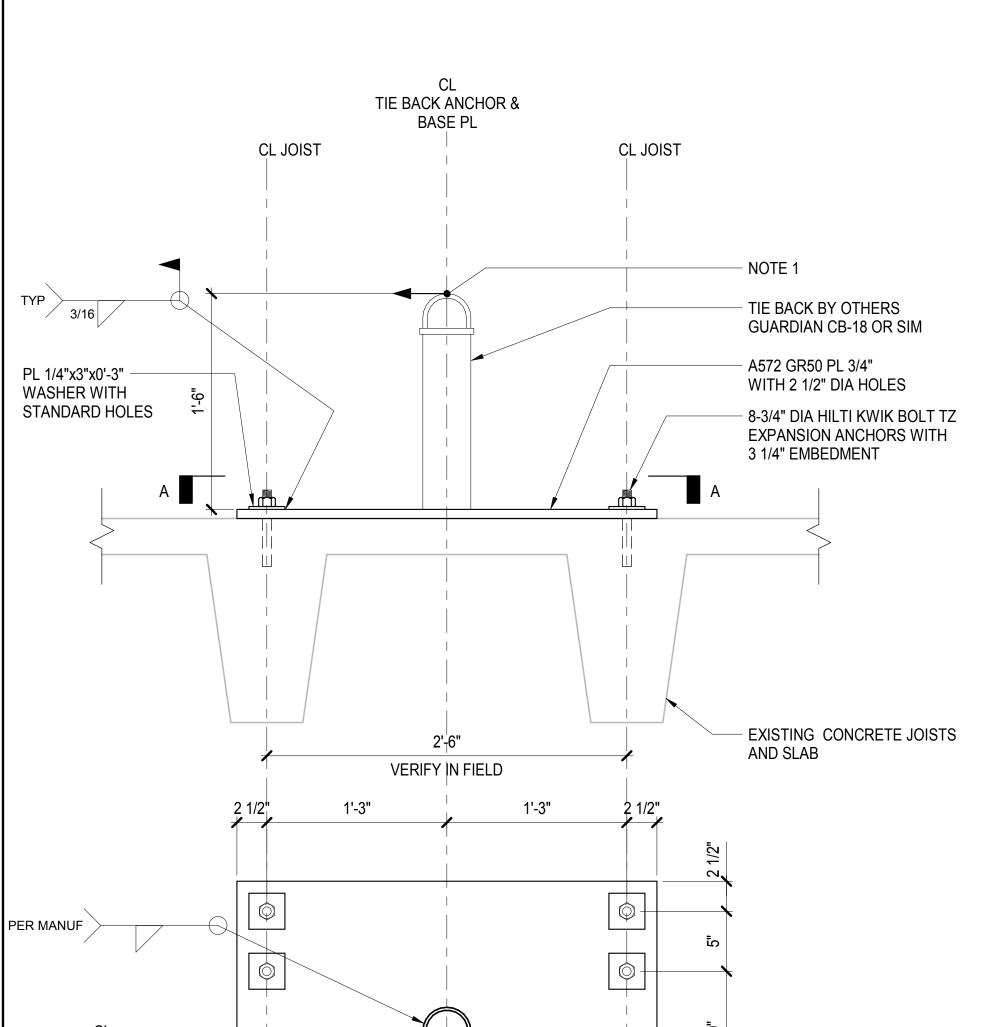
PENTHOUSE ROOF **PLAN - WEST** 

PROJECT NO: **C19150.00** SHEET NUMBER scale: **As indicated** 

CHECKED BY: DATE: 11/05/2019



TIE BACK ANCHOR DETAIL - TYPE 1 SCALE: 3" = 1'-0"



**ANCHOR &** 

**BASE PLATE** 

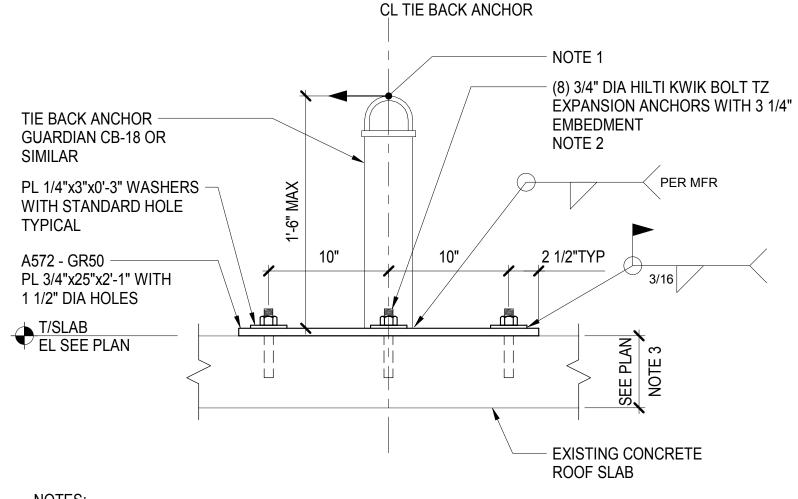
- TIE BACK ANCHOR BASIS OF DESIGN LOAD IS 5 KIPS APPLIED IN ANY DIRECTION. REFER TO PLAN FOR PROOF TEST LOAD DIRECTION(S).
- PRIOR TO DRILLING HOLES, LOCATE EXISTING SLAB REINF VIA NON-DESTRUCTIVE MEANS SO AS TO NOT DAMAGE OR CUT EXISTING REINF PER GENERAL NOTE PA-7.

**SECTION A-A** 

- CONTRACTOR TO FIELD VERIFY EXISTING CONCRETE JOIST LAYOUT. PLAN LOCATION OF ANCHOR
- ASSEMBLY TO BE SET ACCORDING TO VERIFIED EXISTING JOIST CENTERLINES.

TIE BACK ANCHOR DETAIL - TYPE 4

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

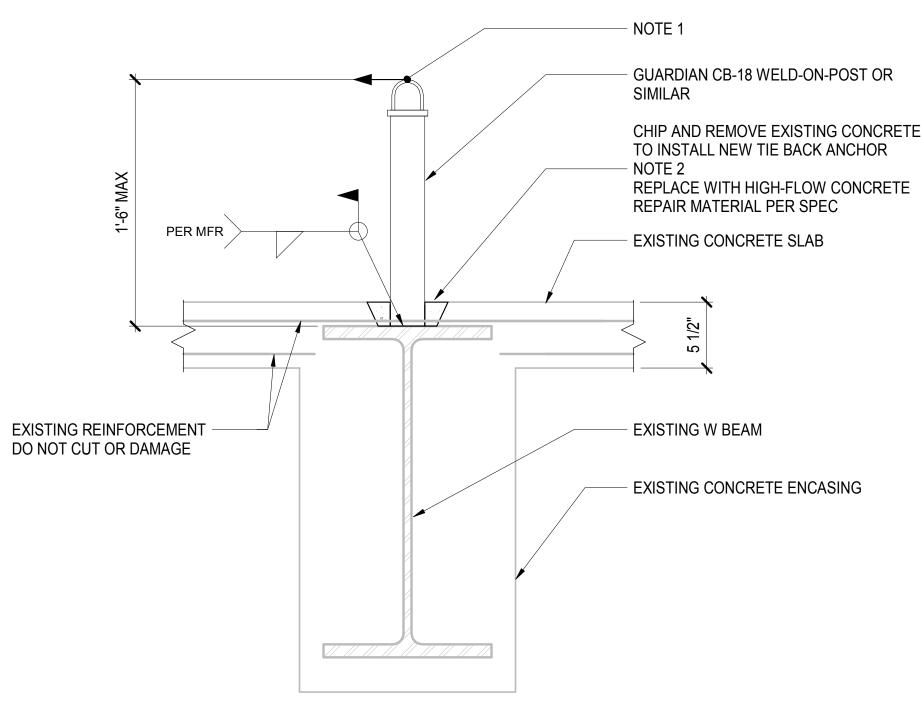


NOTES:

- 1. TIE BACK ANCHOR BASIS OF DESIGN LOAD IS 5 KIPS APPLIED IN ANY DIRECTION. REFER TO PLAN FOR
- PROOF TEST LOAD DIRECTION(S). PRIOR TO DRILLING HOLES, LOCATE EXISTING SLAB REINF VIA NON-DESTRUCTIVE MEANS SO AS TO NOT
- DAMAGE OR CUT EXISTING REINF PER GENERAL NOTE PA-7. CONTRACTOR TO CONFIRM SLAB THICKNESS IN FIELD PRIOR TO FABRICATION & CONSTRUCTION. NOTIFY SER IF SLAB THICKNESS IS LESS THAN SHOWN IN PLAN.

TIE BACK ANCHOR DETAIL - TYPE 2

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

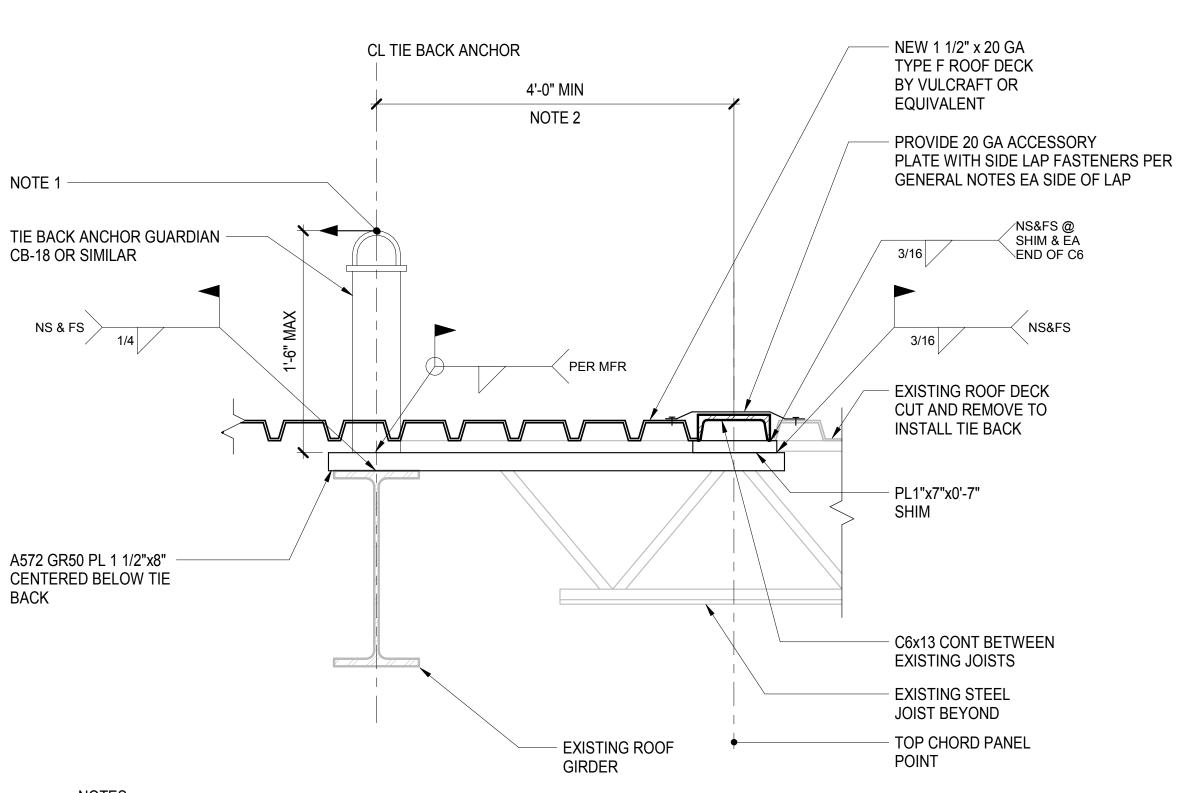


<u>NOTES</u>

- 1. TIE BACK ANCHOR BASIS OF DESIGN LOAD IS 5 KIPS APPLIED IN ANY DIRECTION. REFER TO PLAN
- FOR PROOF TEST LOAD DIRECTION(S). 2. DO NOT CUT OR DAMAGE EXISTING REINFORCEMENT WHEN REMOVING CONCRETE. ADJUST LOCATION OF TIE BACK ANCHOR AS REQUIRED SO AS TO FIT BETWEEN SLAB TOP REINFORCING

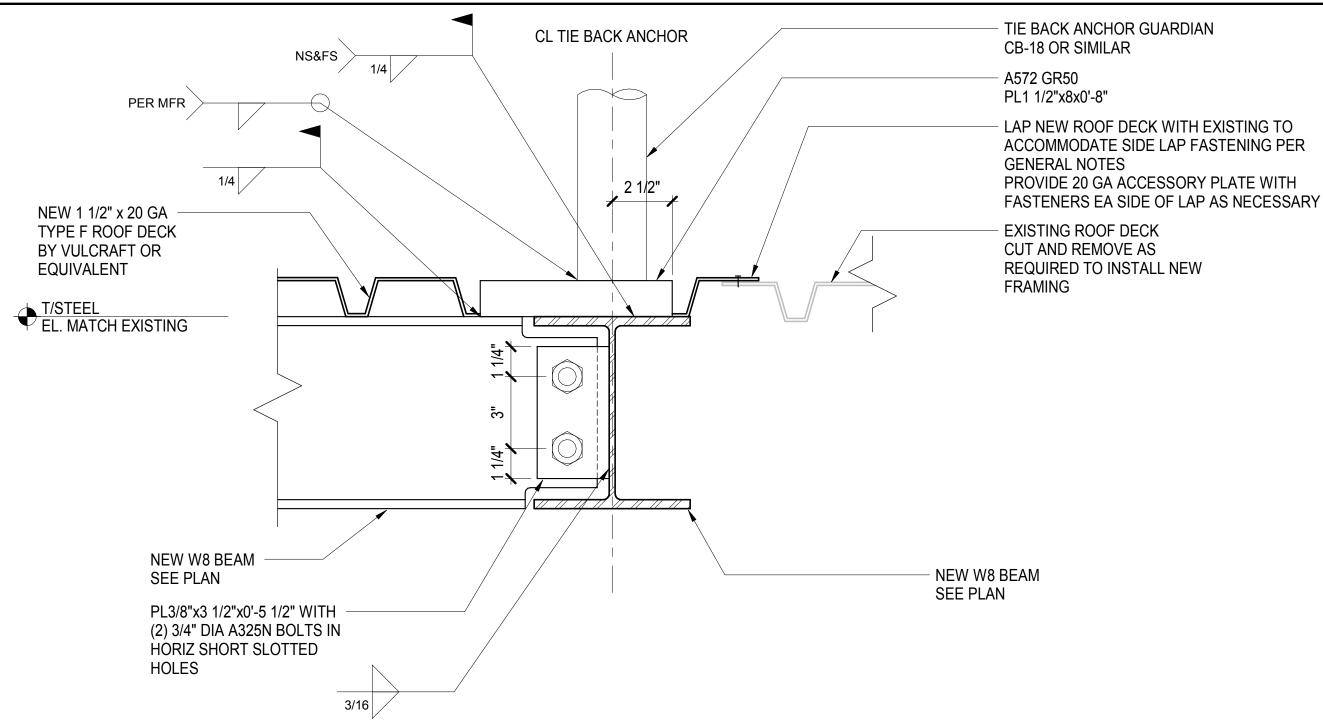
TIE BACK ANCHOR DETAIL - TYPE 5

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

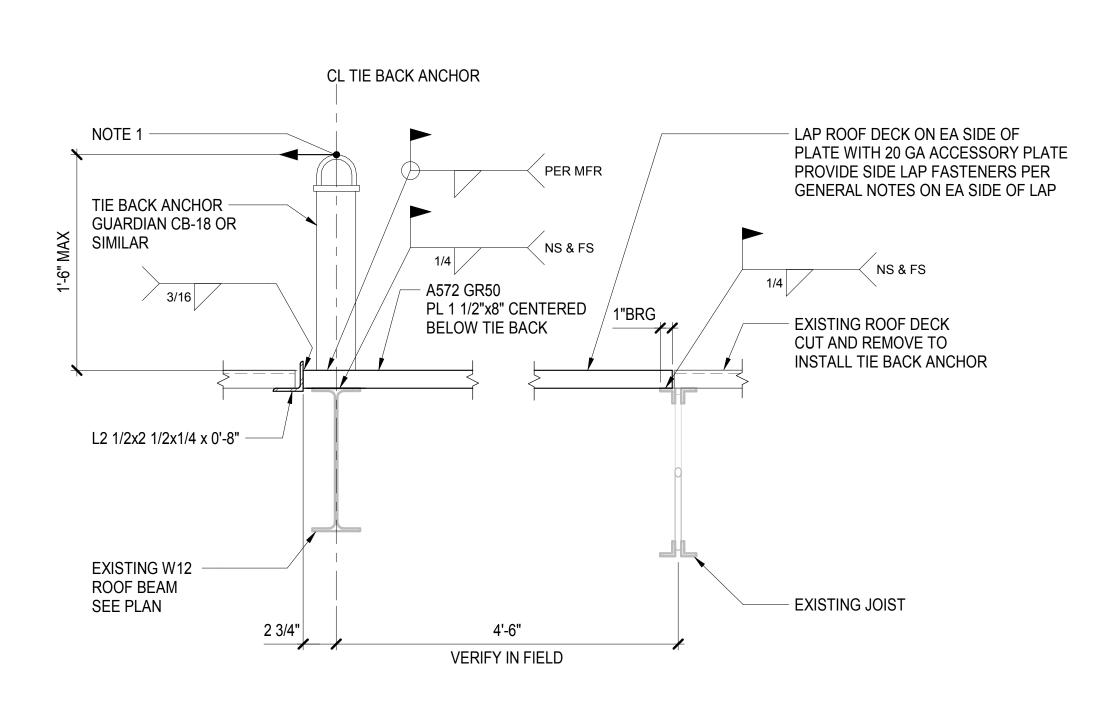


<u>NOTES</u>

- TIE BACK ANCHOR BASIS OF DESIGN LOAD IS 5 KIPS APPLIED IN ANY DIRECTION. REFER TO PLAN FOR PROOF TEST LOAD DIRECTION(S). 2. ALIGN C6 CHANNEL WITH FIRST JOIST TOP CHORD PANEL POINT 4 FEET OR MORE FROM TIE BACK. WELD TO TOP FLANGE OF EXISTING JOIST WITH 3/16" FILLET WELDS AT EACH TOE.
- TIE BACK ANCHOR DETAIL TYPE 7



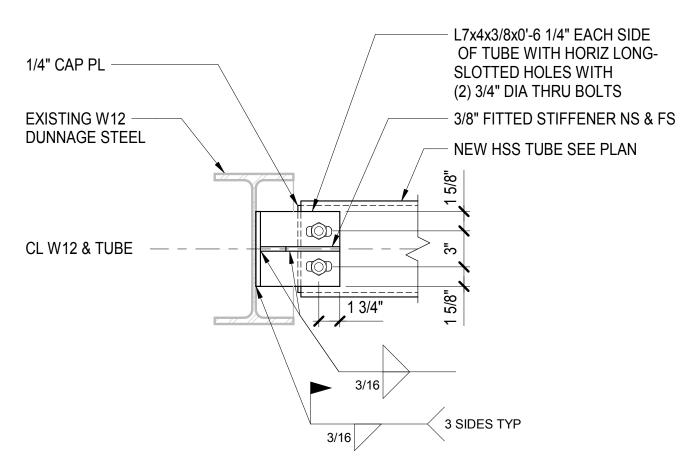
TIE BACK ANCHOR DETAIL - TYPE 3



NOTES:

1. TIE BACK ANCHOR BASIS OF DESIGN LOAD IS 5 KIPS APPLIED IN ANY DIRECTION. REFER TO PLAN FOR PROOF TEST LOAD DIRECTION(S).

TIE BACK ANCHOR DETAIL - TYPE 6



<u>NOTES</u>

- 1. PROVIDE WEEP HOLES IN BOTTOM OF TUBE AT ENDS AND AT MIDSPAN.
- TOUCH UP GALVANIZING ON NEW AND EXISTING STEEL WITH ZINC-RICH PRIMER AFTER WELDING HAS BEEN COMPLETED.

8 TUBE CONNECTION DETAIL
SCALE: 1 1/2" = 1'-0"

D. BAST E-35493 HIGHLAND PARK.

**Thornton Tomasetti** 

Thornton Tomasetti, Inc.

Milwaukee, WI 53202

**T** 414.875.3370

222 East Erie St, Suite 360

1 80% CDs 11/05/19 2 CONSTRUCTION DOCUMENTS 12/30/19

**NEW REMOTE DESCENT SYSTEM ANCHORAGE** 

CITY-COUNTY BUILDING 210 MARTIN LUTHER KING JR BLVD MADISON, WI 53703

STRUCTURAL **DETAILS** 

SHEET NUMBER PROJECT NO: **C19150.00** SCALE: **As indicated** DRAWN BY:

CHECKED BY:

DATE: 11/05/2019

**S-301** 

