ARCHITECTURAL

DESIGN WEST ARCHITECTS 255 SOUTH 300 WEST - 795 NORTH 400 WEST LOGAN, UT 84321 - SALT LAKE CITY, UT 84103 PHONE: 435.752.7031 - 801.539.8221

CONTACT

MECHANICAL

40 W CACHE VALLEY BLVD LOGAN, UT 84341

PHONE: 801.478.1087 jjenkins@vbfa.com JED JENKINS

STRUCTURAL

2766 S MAIN STREET SALT LAKE CITY, UT 84115 PHONE: 801.355.5656

dallin.pedersen@bhbengineers.com DALLIN PEDERSEN

CIVIL

CACHE LANDMARK 95 GOLF COURSE RD, SUITE 101 LOGAN, UT 84321 PHONE: 435.713.0099 lance@cachelandmark.com

LANCE ANDERSON

ELECTRICAL

SINE SOURCE ENGINEERING 95 GOLF COURSE RD, SUITE 102 LOGAN, UT 84321

shanes@sinesource.net

INTERIORS

DESIGN WEST ARCHITECTS
795 NORTH 400 WEST
SALT LAKE CITY, UT 84103 PHONE: 801.539.8221 jessicac@designwestarchitects.com JESSICA CHILDERS

LANDSCAPE

DESIGN WEST ARCHITECTS 255 SOUTH 300 WEST LOGAN, UT 84321 PHONE: 435.752.7031 kenia@designwestarchitects.com KENI ALTHOUSE

FIRE PROTECTION

NORTH LOGAN CITY - CIVIC CENTER

NORTH LOGAN, UT

West | architects

design 255 SOUTH 300 WEST 795 NORTH 400 WEST

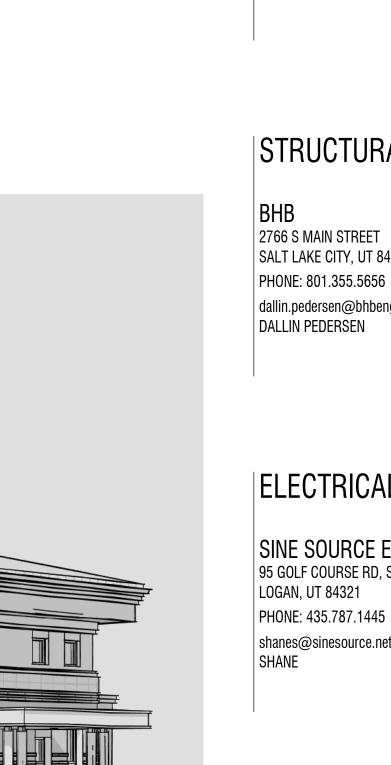
CENTER

CIVIC

NORTH LOGAN CITY - APPROXIMATELY 2515 N 600 E NORTH LOGAN, UT

COVER SHEET

G-001



GENERAL:		A-161	PLAN - ROOF
G-001	COVER SHEET	A-201	ELEVATIONS - EXTERIOR
G-002	PROJECT INFORMATION	A-202	ELEVATIONS - EXTERIOR
G-003	CODE REVIEW	A-301	SECTIONS - BUILDING
		A-302	SECTIONS - BUILDING
CIVIL:		A-303	SECTIONS - BUILDING
C-101	CIVIL DEMOLITION PLAN	A-341	SECTIONS - WALL
C-201	CIVIL SITE PLAN	A-342	SECTIONS - WALL
C-301	CIVIL UTILITY PLAN	A-343	SECTIONS - WALL
C-401	CIVIL GRADING PLAN	A-344	SECTIONS - WALL
C-501	CIVIL UTILITY DETAILS	A-411	ENLARGED PLAN - STAIR
C-502	CIVIL UTILITY DETAILS	A-412	ENLARGED PLAN - ELEVATOR
		A-461	ENLARGED ROOF PLAN
LANDSCAPE	<u> </u>	A-491	INTERIOR ELEVATIONS W/ ENLARGED PLANS
L-101	PLANTING PLAN	A-492	INTERIOR ELEVATIONS
L-501	LANDSCAPE DETAILS	A-493	INTERIOR ELEVATIONS
		A-512	STANDARD METAL STUD ELEVATIONS & DETAIL
STRUCTURA	IL:	A-513	STANDARD METAL STUD ELEVATIONS & DETAIL
S-001	GENERAL STRUCTURAL NOTES	A-531	BUILDING DETAILS
S-002	GENERAL STRUCTURAL NOTES	A-559	MILLWORK DETAILS
S-003	SPECIAL INSPECTION NOTES	A-561	ROOF DETAILS
S-004	SPECIAL INSPECTION NOTES	A-571	DOOR DETAILS
S-010	LEGEND OF MARKS AND ABBREVIATIONS	A-572	WINDOW FRAME TYPES
S-101	BASEMENT FOOTING AND FOUNDATION PLAN	A-573	WINDOW FRAME TYPE DETAILS
S-102	FIRTS FLOOR FLOOR FRAMING PLAN	A-581	CEILING DETAILS
S-121	ROOF FRAMING PLAN	A-582	CEILING DETAILS
S-122	HIGH ROOF FRAMING PLAN	A-591	INTERIOR FINISH DETAILS
S-401	STAIR DETAILS	A-611	ASSEMBLIES - INTERIOR WALLS
S-402	STAIR SECTIONS	A-612	ASSEMBLIES - EXTERIOR WALLS, FLOORS, ROC
S-501	DETAILS	A-671	DOOR SCHEDULE & TYPE NOTES
S-502	DETAILS	A-691	FINISH SCHEDULE
S-511	DETAILS	A-692	FINISH SCHEDULE
S-512	DETAILS	A-801	BID ALT 1 - BASEMENT PLAN
S-513	DETAILS	A-802	BID ALT 1 - REFLECTED CEILING PLAN
S-514	DETAILS		
S-522	DETAILS	MECHANIC	
S-523	DETAILS	M001	MECHANICAL SYMBOLS LEGEND AND GENERAL
S-601	SCHEDULES		NOTES
S-602	SCHEDULES	M002	MECHANICAL BASIS OF DESIGN
S-603	SCHEDULES	M003	BASEMENT HVAC ZONING PLAN
		M004	FIRTS FLOOR HVAC ZONING PLAN
	JRAL DEMO:	M100	BASEMENT MECHANICAL PLAN
AD-101.1	PLAN - DEMOLITION	M100A	BASEMENT MECHANICAL PLAN - BID ALTERNAT
AD-101.2	REFLECTED CEILING PLAN - DEMOLITION	M101	FIRST FLOOR MECHANICAL PLAN
		M102	ROOF MECHANICAL PLAN
ARCHITECTU		M301	MECHANICAL DETAILS
AS-101	ARCHITECTURAL SITE PLAN	M501	MECHANICAL DETAILS
AS-501	ARCHITECTURAL SITE DETAILS	M502	MECHANICAL DETAILS
A-100.0	PLAN - BASEMENT - SLAB	M503	MECHANICAL DETAILS
A-100.1	PLAN - BASEMENT - DIMENSION	M504	MECHANICAL SCHEDULES
	PLAN - BASEMENT - ANNOTATION	M601	MECHANICAL SCHEDULES
A-100.2	PLAN - BASEMENT - FINISH	M602	MECHANICAL SCHEDULES MECHANICAL SCHEMATICS
A-100.3			
A-100.3 A-100.4	PLAN - BASEMENT - REFLECTED CEILING	M701	INICOTANICAL SCHEINATIOS
A-100.3 A-100.4 A-101.0	PLAN - BASEMENT - REFLECTED CEILING PLAN - MAIN - SLAB		
A-100.3 A-100.4 A-101.0 A-101.1	PLAN - BASEMENT - REFLECTED CEILING PLAN - MAIN - SLAB PLAN - MAIN - DIMENSION PLAN	PLUMBING	:
A-100.3 A-100.4 A-101.0	PLAN - BASEMENT - REFLECTED CEILING PLAN - MAIN - SLAB		

	P102	ROOF PLUMBING PLAN
	P401	BASEMENT ENLARGED PLUMBING SUPPLY PLANS
	P402	BASEMENT ENLARGED PLUMBING DRAIN & VENT PLANS
	P403	FIRST FLOOR ENLARGED PLUMBING PLANS
	P404	MECHANICAL ROOM ENLARGED PLUMBING PLANS
	P601	PLUMBING SCHEDULES
	P602	PLUMBING SCHEDULES
	ELECTRICAL:	
	E-001.1	ABBREVIATIONS, G.P.N., LEGEND & SHEET INDEX
	E-001.2	PROJECT GENERAL NOTES
	ES-102.1	ELECTRICAL SITE PLAN - NEW
ANS	E-200.1	LIGHTING PLAN - LOWER LEVEL
	E-201.1	LIGHTING PLAN - MAIN LEVEL
	E-202.1	LIGHTING PLAN - CLERESTORY
DETAILS	E-300.1	POWER PLAN - LOWER LEVEL
DETAILS	E-301.1	POWER PLAN - MAIN LEVEL
	E-303.1	POWER PLAN - ROOF
	E-400.1	ELECTRONICS SYSTEMS PLAN - LOWER LEVEL
	E-401.1	ELECTRONICS SYSTEMS PLAN - MAIN LEVEL
	E-501.1	LIGHTING CONTROL RISER DIAGRAM & dETAILS
	E-501.2	ELECTRICAL DETAILS
	E-501.3	COMMUNICATIONS RISER DIAGRAM & DETAILS
	E-501.4	ELECTRONIC SYSTEMS ELEVATIONS & DETAILS
	E-601.1	ELECTRICAL ONE-LINE DIAGRAM
	E-602.1	LIGHTING SCHEDULE

ABBREVIATIONS

ACC	ABR.	DESCRIPTION	ABR.	DESCRIPTION	ABR.	<u>DESCRIPTION</u>
ACRYLONITRILE-BUTADIENE	ACC STA	ACCESSIBLE STATION	EIFS	EXTERIOR INSULATION	d	PENNY
ACRYLONITRILE-BUTADIENE	AC	ACOUSTIC, ACOUSTICAL		FINISH SYSTEM	P-LAM	PLASTIC LAMINATE PLATE
ADD			FIN	FINISH		PLYW00D
ADD		-STYRENE		FIRE EXTINGUISHER CABINET	PVC	POLYVINYL CHLORIDE
ADJUSTABLE FD FLOOR DRAIN PT PRESERVATIVE TREATED AFF ABOVE FINISH FLOOR FTG FOOTING PROJ PROJECTION ALT ALTERNATE FDN FOUNDATION QT QUARRY TILE ALLIM ALUMINUM GALV GALVANIZED RAD RADIUS AB ANCHOR BOLT GI GALVANIZED RAD RADIUS AB ANCHOR BOLT GI GALVANIZED RAD REF REFRIGERATOR L ANGLE GA GALVE REINF REINFORCE ASI ARCHITECT SUPPLEMENTAL GYP BD GYPSUM BOARD REV REVISION INSTRUCTION HDWD HARDWOOD RFI REQUEST FOR INFORMATION RESPECTED RESPE	AD					
AFF						
ALT ALTERNATE FON FOUNDATION OT QUARRY TILE ALUMINUM GALV GALVANIZED RAD RADIUS AB ANCHOR BOLT GI GALVANIZED RON REF REFRIGERATOR L ANGLE ANGLE ARCHITECT SUPPLEMENTAL INSTRUCTION ASPH ASPHALT BSMT BASEMENT HT HEIGHT RD ROOF DRAIN BSMT BASEMENT HM HOLLOW METAL RO ROUGH OPENING BB BASKETBALL HORIZ BB BASKETBALL HORIZ BB BASKETBALL HORIZ BB BASKETBALL HORIZ BB BLOCKING INT INTERIOR SHT SHEET BD BOARD JT JOINT SPEC BUILDING KO KNOCK DUWN SQ SUDARE BLUG BUILDING KO KNOCK OUT SS STAINLESS STEEL BLUR, BUILT UP ROOF LLV LONG LEG VERTICAL STD STANDARD CE CEILING MH MANHOLLOW MASONRY OPENING BLUR, BUILT UP ROOF LLV LONG LEG VERTICAL STD STANDARD CE CHANNEL MAX MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MASK MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MASK MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MASK MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MECH MAX MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MECH MAX MAXIMUM SYS SYSTEM CONC CONCRETE MASONRY UNIT CONN CONNECTED MASK MISSING DIAMETER CONT CONTRACTOR NIC NOT SINCE DIAMETER CONT CONTRACTOR NIC NOT SINCE DIAMETER CONT CONTRACTOR NIC NOT SINCE DIAMETER CONTRACTOR NIC NOT SINCE TO STORD STRUCTOR CONTRACTOR NIC NOT SINCE DIAMETER CONTRACTOR SINCE DIAMETER CONTRACTOR SINCE DIAMETER CONTRACTOR SINCE DIAMETER CONTRACTOR SINCE DIAMETER CONTRA						PROJECTION
ALUM ALUMINUM GALV GALVANIZED RAD RADIUS AB ANCHOR BOLT GI GALVANIZED RON REF REFRIGERATOR L ANGLE GA GAUGE REINF REINFORCE ASI ARCHITECT SUPPLEMENTAL INSTRUCTION HOWO HARDWOOD REV REVISION INSTRUCTION HOWO HARDWOOD REV RECUSION ASPH ASPHALT HT HEIGHT RD ROOF DRAIN BSMT BASEMENT HM HOLLOW METAL RO ROUGH OPENING BB BASKETBALL HORIZ HORIZONTAL RV ROUND BB BASKETBALL HORIZ HORIZONTAL RV ROUND BB BENCH MARK INSUL INSULATION SIM SIMILAR BLKG BLOCKING INT INTERIOR SHT SHEET BD BOARD JT JOINT SPEC SPECIFICATION BLOG BUILDING KO KNOCK DOWN SQ SOUARE BLOG BUILDING KO KNOCK DOWN SQ SOUARE BLOG BUILDING KO KNOCK DOWN SS STAINLESS STEEL BLUR. BUILT UP ROOF LLV LONG LEG VERTICAL STD STANDARD CLG CEILING MH MANHOLE STL STEEL CT CERAMIC TILE MB MARKE BOARD STRUCT CT CERAMIC TILE MB MARKER BOARD STRUCT CC CHANNEL MAX MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MECHANICAL TO LEVEL THE TELEPHONE CONC CONCRETE MASONRY UNIT MIN MINIMUM TELL TELEPHONE CONC CONCRETE MASONRY UNIT MIN MINIMUM TELL TELEPHONE CONT CONTRACTOR NIC MECH MECHANICAL TO LEVEL TELEPHONE CONT CONTRACTOR NIC MISCELLANEOUS TO LEVEL TILE TELEPHONE CONT CONTRACTOR NIC MISCELLANEOUS TO LEVEL THE TELEPHONE CONT CONTRACTOR NIC MISCELLANEOUS TO LEVEL THE STEEL BLEV LEVATION OPPOSITE VERTICAL CONTRACTOR NIC MISCELLANEOUS TO LIVE YPO THE STEEL CONT CONTRACTOR NIC MISCELLANEOUS THE THRESHOLD CONTRACTOR NIC MISCELLANEOUS THE THRESHOLD CONTRACTOR NIC ONTRACTOR NIC MISCELLANEOUS THE THRESHOLD CONTRACTOR NIC MISCELLANEOUS THE THRESHOLD CONTRACTOR NIC ONTRACTOR NIC MISCELLANEOUS THE THRESHOLD CONTRACTOR NIC ONTRACTOR NIC ONTRACTOR NIC OWNER FURNISHED / WWW WELDED WIFE FABRIC EWG ELECTRIC WATER COOLER COUNTRACTOR NIC OWNER FURNISHED / WWW WELDED WIFE FABRIC EWG ELECTRIC WATER COOLER COPY DOPOSITE VERT VERTICAL EDUN WITH WITH UNDUT						
AB ANCHOR BOLT GI GAUVANIZED IRON REF REINFEREDATOR ANGLE GA GAUGE REINF REINFORCE ASI ARCHITECT SUPPLEMENTAL GYP BD GYSUM BOARD REV REVISION NISTRUCTION HOWD HARDWOOD REI REQUEST FOR INFORMATION ASPH ASPHALT HT HEIGHT RD ROOF DRAIN BSMT BASEMENT HM HOLLOW METAL RO ROUGH OPENING BB BASKETBALL HORIZ HORIZONTAL RV ROUND BRG BEARING ID INSIDE DIAMETER SCHED SCHEDULE BM BENCH MARK INSUL INSULATION SIM SIMILAR BLKG BLOCKING INT INTERIOR SHT SHEET BD BOARD JT JOINT SPEC SPECIFICATION B.O. BOTTOM OF KD KNOCK DUTN SS STAINLESS STEEL BULT UP ROOF LLV LONG LEG VERTICAL STD STAINLESS STEEL B.U.R. BUILT UP ROOF LLV LONG LEG VERTICAL STD STAINLESS STEEL B.U.R. BUILT UP ROOF LLV LONG LEG VERTICAL STD STAINLESS STEEL C.G. CEILING MH MANHOLE STL STEEL C.G. CERAMIC TILE MB MARKER BOARD STRUCT STRUCTURAL C.G. CHANNEL MAX MAXIMUM SYS C. CAHANNEL MAX MAXIMUM SYS C. CHANNEL MAX MAXIMUM SYS C. CLHANNEL MAX MAXIMUM TEMP CONC CONCRETE MASONRY UNIT MIN MINIMUM TEMP CONC CONCRETE MASONRY UNIT MIN MINIMUM TEMP CONT CONTRACTOR NIC MISC MISCELLANEOUS TS THE STEEL CONT CONTRACTOR NIC MISC MISCELLANEOUS TS THE STEPL CONT CONTRACTOR NIC NOT NOT NOT NOT SCALE TO. D. DOWNSPOUT O.C. ON CENTER TA B TOP AND BOTTOM DIMENSION NTS NOT TO SCALE TO. UNLESS NOTED DTHERWISE EWC ELECTRIC WATER COOLER COUNTRACTOR NIC OWNER FURNISHED / WW WITH VELLOUS THERE ELEV ELECTRICAL OD OVERREAD WW WELDDED WIFE FABRIC EUCH ELECTRICAL ON OWNER FURNISHED / WW WITH WELDDED WIFE FABRIC EUCH ELECTRICAL ON OWNER FURNISHED / WW WITH WILL BEAD WOOD WITH HOUT WITH THE MISTALLED WW WITH WILL BEAD WOOD WOOD						
ASI						
ASI ARCHITECT SUPPLEMENTAL GYP BD GYPSUM BOARD REV REVISION INSTRUCTION HDWD HARDWOOD RIFI REQUEST FOR INFORMATION ASPHALT HT HEIGHT RD ROOF DRAIN BASEMENT HM HOLLOW METAL RO ROUGH OPENING BB BASKETBALL HORIZ HORIZONTAL R/ ROUND PENING BB BASKETBALL HORIZ HORIZONTAL R/ ROUND PENING BB BASKETBALL HORIZ HORIZONTAL R/ ROUND PENING BBM BEACH MARK INSUL INSULATION SIM SIMILAR SIMILAR BLKG BLCKING INT INTERIOR SHT SHEET SHEET BD BOARD JT JOINT SPEC SPECIFICATION SQ SOLARE BLLV LOW	i i					
INSTRUCTION HDWD HARDWOOD RFI REQUEST FOR INFORMATION ASPH ASPHALT HT HEIGHT RD ROOF DRAIN BMT BASEMENT HM HOLLOW METAL RO ROUGH OPENING BB BASKETBALL HORIZ HORIZONTAL R/ ROUND SCHEDULE SMM BENCH MARK INSUL INSULATION SIM SIMILAR BLKG BLOCKING INT INTERIOR SHT SHEET SPECK SPECIFICATION SIM SIMILAR BLKG BLOCKING INT INTERIOR SHT SHEET SPECK SPECIFICATION SIM SIMILAR BLKG BLOCKING INT INTERIOR SHT SHEET SPECK SPECIFICATION SIM SQUARE BLUDING KO KNOCK DUM SQ SQUARE BLUDING KO KNOCK DUM SQ SQUARE BLUDG BUILDING KO KNOCK DUM SS STAINLESS STEEL SBLUG BLUDING KO KNOCK OUT SS STAINLESS STEEL STE	ASI					
ASPH ASPHALT HT HEIGHT RD ROOF DRAIN BSMT BASEMENT HM HOLLOW METAL RO ROUGH OPENING BB BASKETBALL HORIZ BRG BEARING ID INSIDE DIAMETER SCHED SCHEDULE BM BENCH MARK INSUL INSULATION SIM SIMILAR BLKG BLOCKING INT INTERIOR SHT SHEET BD BOARD JT JOINT SPEC SPECIFICATION B.O. BOTTOM OF KD KNOCK DOWN SQ SQUARE BLUR. BUILT UP ROOF LLV LONG LEG VERTICAL STD STANDARD CLG CEILING MH MANHOLE STL STELL CLG CHANNEL MAX MAXIMUM SYS SVSTEM CC CAHANNEL MAX MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MECHANICAL TB TACKBOARD COL COLUMN MT MOUNT TEL TELEPHONE COL COLUMN MT MOUNT TEL TELEPHONE CONC CONCRETE MSONRY UNIT CONN CONNECTION MISC MISCELLANEOUS TS THRES THRESHOLD CONTROLOR CONTRACTOR NIC NOT SCALE TO. DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DO AND SOURCE PARKING CHANGE CHARLOS OPPONING CHARLOS OPPONING CONTRACTOR NIC NOT SCALE T.O. TOP OF OPPONING CONTROLOR CONTRACTOR NIC NOT SCALE T.O. TOP OF OPPONING CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTROLOR OF CONTRACTOR OF CONTRACTOR	7101					
BSMT BASEMENT HM HOLLOW METAL R/ ROUND ROUND BB BASKETBALL HORIZ HORIZONTAL R/ ROUND ROUND BBRG BEARING ID INSIDE DIAMETER SCHED SCHEDULE BM BENCH MARK INSUL INSULATION SIM SIMILAR BLKG BLOCKING INT INTERIOR SHT SHET BD BOARD JT JOINT SPEC SPECIFICATION B.O. BOTTOM OF KD KNOCK DOWN SO SQUARE BLUDING KO KNOCK OUT SS STAINLESS STEEL BLUDING KO KNOCK OUT SS STAINLESS STEEL B.U.R. BUILT UP ROOF LLV LONG LEG VERTICAL STD STANDARD CLG CEILING MH MANHOLE STL STEEL CT CERAMIC TILE MB MARKER BOARD STRUCT STRUCTURAL CB CHALKBOARD MO MASONRY OPENING SUSP SUSPENSION C CHANNEL MAX MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MECHANICAL TB TACKBOARD CONC CONCRETE MT MOUNT TELL TELEPHONE CONC CONCRETE MASONRY UNIT MIN MINIMUM TEMP TEMPORARY CONTRACTOR NIC ONTRACTOR NIC ONTRACTOR THRES THRESTEL CONTRACTOR NIC ONTRACTOR NIC ONTRACTOR TO THE STELL CONTRACTOR NIC ONTRACTOR NIC NOT IN CONTRACT TO ILL TO ILLET DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DEPONSION DS DOWNSPOUT O.C. ON CENTER T. & B TOP AND BOTTOM DWG DRAWING OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER ELEC ELECTRIC WATER COOLER ELEC ELECTRIC WATER COOLER ELEC ELECTRIC WATER COLER ELEC ELECTRIC WO WITHOUT EXPENDENCE WOOD W	ASPH					
BB BASKETBALL HORIZ HORIZONTAL R/ ROUND BRG BEARING ID INSIDE DIAMETER SCHED SCHEDULE BM BENCH MARK INSUL INSULATION SIM SIMILAR BLKG BLOCKING INT INTERIOR SHT SHEET BD BOARD JT JOINT SPEC SPECIFICATION BLO. BOTTOM OF KD KNOCK DOWN SQ SOUARE BLDG BUILDING KO KNOCK OUT SS STAINLESS STEEL B.U.R. BUILT UP ROOF LLV LONG LEG VERTICAL STD STANDARD CLG CEILING MH MANHOLE STL STEEL CENTER LINE MFR MANUFACTURER STOR STORAGE CT CERAMIC TILE MB MARKER BOARD STRUCT STRUCTURAL CB CHANNEL MAX MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MECHANICAL TB TACKBOARD CO CLEAN OUT MECH MECHANICAL TB TACKBOARD COL COLUMN MT MOUNT TEL TELEPHONE CONC CONCRETE MASONRY UNIT MIN MINIMUM TEMP TEMPORARY CONN CONNECTION MISC MISCELLANEOUS TS TUBE STEEL CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CMU DIMENSION NTS NOT TO SCALE T.O. TOP OF CD CREATICAL OD OVERHEAD CONC ELECTRICAL OD OUTSIDE DIAMETER TY TY CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET COMB DIMENSION NTS NOT TO SCALE T.O. TOP OF CD CELCTRICAL COUNCE CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CMU DIMENSION NTS NOT TO SCALE T.O. TOP OF CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET CMU DIMENSION NTS NOT TO SCALE T.O. TOP OF CONTR CETTICAL CELCTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE CWC ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE CWC ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE CWC ELECTRICAL OD OVERHEAD WC WATER CLOSET CEUP EQUIPMENT OF/OI OWNER FURNISHED / WM WATER METER CEUP EQUIPMENT OF/OI OWNER FURNISHED / WM WATER METER CEUP EQUIPMENT OF/OI OWNER FURNISHED / WM WIDE FLANGE CEUP EXPANSION PART BD PARTIBLE DW/ WITHOUT CEXP						
BRG BEARING ID INSIDE DIAMETER SCHED SCHEDULE BM BENCH MARK INSUL INSULATION SIM SIMILAR BLKG BLOCKING INT INTERIOR SHT SHEET BD BOARD JT JOINT SPEC SPECIFICATION B.O. BOTTOM OF KD KNOCK DOWN SQ SQUARE BLDG BUILDING KO KNOCK OUT SS STAINLESS STEEL B.U.R. BUILT UP ROOF LLV LONG LEG VERTICAL STD STANDARD CLG CEILING MIH MANHOLE STL STEEL CT CERAMIC TILE MB MARKER BOARD STRUCT STRUCTURAL CB CHANKEL MAX MAXIMUM SYS SYSTEM COL CHANNEL MAX MAXIMUM SYS SYSTEM COL COLUMN MT MOUNT TEL TELEPHONE CONC CONCRETE MASONRY UNIT MIN MINMUM TEMP TEMPORARY CONN CONCRETE MASONRY UNIT MIN MINMUM TEMP TEMPORARY CONT CONTROLORS (N) NEW THRES THRESHOLD CONTROLORS (N) NOT TO SCALE TO .O. TOP OF CONTROLORS (N) NOT TO SCALE TO .O. TOP OF CONTROLORS (N) NOT SOUTHER TO LOLET CHANGE (N) CONCRETE ON CONTRACT TO IN CONTRACT CELECT ELECTRICAL CONTROLORS (N) OPPOSITE VERT VERTICAL ELECT ELECTRICAL CONTRACTOR NIC CONTRACTOR INSTALLED CONTROLORS (N) WATER CLOSET CONTRACTOR INSTALLED CONTRACTOR IN						
BM BENCH MARK INSUL INSULATION SIM SIMILAR BLKG BLOCKING INT INTERIOR SHT SHEET BD BOARD JT JOINT SPEC SPECIFICATION B.O. BOTTOM OF KD KNOCK DOWN SQ SQUARE BLDG BUILDING KO KNOCK OUT SS STAINLESS STEEL B.U.R. BUILT UP ROOF LLV LONG LEG VERTICAL STD STANDARD CLG CEILING MH MANHOLE STL STEEL CT CERAMIC TILE MB MARKER BOARD STRUCT STRUCTURAL CB CHALKBOARD MO MASONRY OPENING SUSP SUSPENDED, SUSPENSION C CHANNEL MAX MAXIMUM SYS SYSTEM COC CLEAN OUT MECH MECHANICAL TB TACKBOARD COL COLUMN MT MOUNT TEL TELEPHONE CONC CONCRETE MTL METAL TV TELEPHONE CONC CONCRETE MSION MISC MISCELLANEOUS TS TUBE STEEL CONT CONTINUOUS (N) NEW THRES THRESHOLD CONTROL CONTROL OF MISC MISCELLANEOUS TS THRESHOLD CONTROL CONTROL OF MISC MISCELLANEOUS TS THRESHOLD CONTROL CONTROL OF MISC MISCELLANEOUS DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T & B TOP AND BOTTOM DWG DRAWING OPPING OPPING TYP TYPICAL EACH ELECT ELECTRICAL OD OPPING TYP TYPICAL EWC ELECTRIC WATER COOLER EWC ELECTRIC WATER COOLER EWC ELECTRIC WATER COOLER CONTROL OWNER FURNISHED / WW WIDE FLANGE EWC ELECTRIC WATER COOLER CONTROL OWNER FURNISHED / WW WIDE FLANGE EWC ELECTRIC WATER COOLER CONTROL OWNER FURNISHED / WW WIDE FLANGE EWC ELECTRIC WATER COOLER CONTROL OWNER FURNISHED / WW WIDE FLANGE EWC ELECTRIC WATER COOLER CONTROL OWNER FURNISHED / WW WIDE FLANGE EWC ELECTRIC WATER COOLER CONTROL OWNER FURNISHED / WW WIDE FLANGE EWIST EXISTING O.T.S. OPPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
BLKG BLOCKING INT INTERIOR SHT SHEET BD BOARD JT JOINT SPEC SPECIFICATION B.O. BOTTOM OF KD KNOCK DOWN SQ SQUARE BLDG BUILDING KO KNOCK OUT SS STAINLESS STEEL B.U.R. BUILT UP ROOF LLV LONG LEG VERTICAL STD STANDARD CLG CEILING MH MANHOLE STL STEEL CT CERAMIC TILE MB MARKER BOARD STRUCT STRUCTURAL CB CHALKBOARD MO MASONRY OPENING SUSP SUSPENDED, SUSPENSION C CHANNEL MAX MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MECHANICAL TB TACKBOARD CONC CONCRETE MASONRY UNIT MIN MINIMUM TELL TELEPHONE CONC CONCRETE MASONRY UNIT MIN MINIMUM TEMP TEMPORARY CONN CONNECTION MISC MISCELLANEOUS TS TUBE STEEL CONT CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T.S B TOP AND BOTTOM DWG DRAWING OPP OPPOSITE VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
BD BOARD JT JOINT SPEC SPECIFICATION B.O. BOTTOM OF KD KNOCK DOWN SQ SQUARE BLDG BUILDING KO KNOCK OUT SS STAINLESS STEEL B.U.R. BUILT UP ROOF LLV LONG LEG VERTICAL STD STANDARD CLG CEILING MH MANHOLE STL STEEL € CENTER LINE MFR MANUFACTURER STOR STORAGE CT CERAMIC TILE MB MARKER BOARD STRUCT STRUCTURAL CB CHALKBOARD MO MASONRY OPENING SUSP SUSPENDED, SUSPENSION C CHANNEL MAX MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MECHANICAL TB TACKBOARD COL COLUMN MT MOUNT TEL TELEPHONE CONC CONCRETE MTL METAL TV TELEVISION CMU CONCRETE MASONRY UNIT MIN MINIMUM TEMP TEMPORARY CONN CONNECTION MISC MISCELLANEOUS TS TUBE STEEL CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T & B TOP AND BOTTOM DWG DRAWING OPPNG OPENING TYP TYPICAL EACH OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTEI CWATER COOLER OH OVERHEAD WC WATER CLOSET ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELECT ELECTRICAL OF OWNER FURNISHED / WM WATER METER EQ EQUAL EQUIP EQUIPMENT OF/OI OWNER FURNISHED / WW WIDE FLANGE EXISTING (C.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
B.O. BOTTOM OF KD KNOCK DOWN SQ SQUARE BLDG BUILDING KO KNOCK OUT SS STAINLESS STEEL B.U.R. BUILT UP ROOF LLV LONG LEG VERTICAL STD STANDARD CLG CELLING MH MANHOLE STL STEEL Ç CENTER LINE MFR MANUFACTURER STOR STORAGE CT CERAMIC TILE MB MARKER BOARD STRUCT STRUCTURAL CB CHALKBOARD MO MASONRY OPENING SUSP SUSPENDED, S						
BLDG BUILDING KO KNOCK OUT SS STAINLESS STEEL B.U.R. BUILT UP ROOF LLV LONG LEG VERTICAL STD STANDARD CLG CEILING MH MANHOLE STL STEEL © CENTER LINE MFR MANUFACTURER STOR STORAGE CT CERAMIC TILE MB MARKER BOARD STRUCT STRUCTURAL CB CHALKBOARD MO MASONRY OPENING SUSP SUSPENDED, SUSPENSION C CHANNEL MAX MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MECHANICAL TB TACKBOARD COL COLUMN MT MOUNT TEL TELEPHONE CONC CONCRETE MTL METAL TV TELEVISION CMU CONCRETE MTL MINIMUM TEMP TEMPORARY CONN CONNECTION MISC MISCELLANEOUS TS TUBE STEEL CONT CONTINUOUS (N) NEW THRES THRESHOLD CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T & B TOP AND BOTTOM DWG DRAWING OPPIG OPPENING TYP TYPICAL EA EACH OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELECT ELECTRICAL OD OWNER FURNISHED / WM WATER METER EQ EQUAL EQUIP EQUIPMENT OF/OI OWNER FURNISHED / WM WATER METER EQ EQUAL EXPANSION PART BD PART BD PARTICLE BOARD WD WOOD						
B.U.R. BUILT UP ROOF LLV LONG LEG VERTICAL STD STANDARD CLG CEILING MH MANHOLE STL STEEL ℚ CENTER LINE MFR MANUFACTURER STOR STORAGE CT CERAMIC TILE MB MARKER BOARD STRUCT STRUCTURAL CB CHALKBOARD MO MASONRY OPENING SUSP SUSPENDED, SUSPENSION C CHANNEL MAX MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MECH MECHANICAL TB TACKBOARD COL COLUMN MT MOUNT TEL TELEPHONE CONC CONCRETE MTL METAL TV TELEVISION CMU CONCRETE MASONRY UNIT MIN MINIMUM TEMP TEMPORARY CONN CONNECTION MISC MISCELLANEOUS TS TUBE STEEL CONT CONTINUOUS (N) NEW THRES THRESHOLD CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T&B TOP AND BOTTOM DWG DRAWING OPNG OPENING TYP TYPICAL EACH OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER EQ EQUAL EQUIP EQUIPMENT OF/CI OWNER FURNISHED / WW WIDE FLANGE EXIST EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
CLG CEILING MH MANHOLE STL STEEL ← CENTER LINE MFR MANUFACTURER STOR STORAGE CT CERAMIC TILE MB MARKER BOARD STRUCT STRUCTURAL CB CHALKBOARD MO MASONRY OPENING SUSP SUSPENDED, SUSPENSION C CHANNEL MAX MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MECHANICAL TB TACKBOARD COL COLUMN MT MOUNT TEL TELEPHONE CONC CONCRETE MASONRY UNIT MIN MINIMUM TEMP TEMPORARY CONN CONCRETE MASONRY UNIT MISC MISCELLANEOUS TS TUBE STEEL CONT CONTINUOUS (N) NEW THRES THRESHOLD CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T & B TOP AND BOTTOM DWG DRAWING OPNG OPENING TYP TYPICAL EA EACH OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVER HEAD WC WATER CLOSET ELEV ELEVATION OF,OI OWNER FURNISHED / WM WATER METER EQ EQUAL EXIST EXISTING ONLS. STOR STORAGE EXPANSION PART BD PARTICLE BOARD WD WOOD						
©CENTER LINEMFRMANUFACTURERSTORSTORAGECTCERAMIC TILEMBMARKER BOARDSTRUCTSTRUCTURALCBCHALKBOARDMOMASONRY OPENINGSUSPSUSPENDED, SUSPENSIONCCHANNELMAXMAXIMUMSYSSYSTEMCOCLEAN OUTMECHMECHANICALTBTACKBOARDCOLCOLUMNMTMOUNTTELTELEPHONECONCCONCRETEMTLMETALTVTELEVISIONCMUCONCRETE MASONRY UNITMINMINIMUMTEMPTEMPORARYCONCONTRECTIONMISCMISCELLANEOUSTSTUBE STEELCONTCONTINUOUS(N)NEWTHRESTHRESHOLDCONTRCONTRACTORNICNOT IN CONTRACTTOILTOILETDIMDIMENSIONNTSNOT TO SCALET.O.TOP OFDSDOWNSPOUTO.C.ON CENTERT & BTOP AND BOTTOMDWGDRAWINGOPPNGOPENINGTYPTYPICALEAEACHOPPOPPOSITEVERTVERTICALELECTELECTRICALODOUTSIDE DIAMETERU.N.O.UNLESS NOTED OTHERWISEEWCELECTRIC WATER COOLEROHOVERHEADWCWATER CLOSETELEVELEVATIONOF/CIOWNER FURNISHED /WMWATER METEREQUIPEQUIPMENTOF/OIOWNER FURNISHED /WWIDE FLANGEEXISTINGO.T.S.OPEN TO STRUCTUREW/O						
CB CHALKBOARD MO MASONRY OPENING SUSP SUSPENDED, SUSPENSION C CHANNEL MAX MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MECHANICAL TB TACKBOARD COL COLUMN MT MOUNT TEL TELEPHONE CONC CONCRETE MTL METAL TV TELEVISION CMU CONCRETE MASONRY UNIT MIN MINIMUM TEMP TEMPORARY CONN CONNECTION MISC MISCELLANEOUS TS TUBE STEEL CONT CONTINUOUS (N) NEW THRES THRESHOLD CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T & B TOP AND BOTTOM DWG DRAWING OPPG OPENING TYP TYPICAL EACH OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER EQ EQUAL CONTRACTOR INSTALLED WWF WELDED WIRE FABRIC EXIST EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
CB CHALKBOARD MO MASONRY OPENING SUSP SUSPENDED, SUSPENSION C CHANNEL MAX MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MECHANICAL TB TACKBOARD COL COLUMN MT MOUNT TEL TELEPHONE CONC CONCRETE MTL METAL TV TELEVISION CMU CONCRETE MASONRY UNIT MIN MINIMUM TEMP TEMPORARY CONN CONNECTION MISC MISCELLANEOUS TS TUBE STEEL CONT CONTINUOUS (N) NEW THRES THRESHOLD CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T & B TOP AND BOTTOM DWG DRAWING OPPG OPENING TYP TYPICAL EACH OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER EQ EQUAL CONTRACTOR INSTALLED WWF WELDED WIRE FABRIC EXIST EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD	Ψ CT					
C CHANNEL MAX MAXIMUM SYS SYSTEM CO CLEAN OUT MECH MECHANICAL TB TACKBOARD COL COLUMN MT MOUNT TEL TELEPHONE CONC CONCRETE MTL METAL TV TELEVISION CMU CONCRETE MASONRY UNIT MIN MINIMUM TEMP TEMPORARY CONN CONNECTION MISC MISCELLANEOUS TS TUBE STEEL CONT CONTINUOUS (N) NEW THRES THRESHOLD CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T & B TOP AND BOTTOM DWG DRAWING OPPNG OPENING TYP TYPICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER EQ EQUAL CONTRACTOR IN OWNER INSTALLED WWF WELDED WIFT DATA OWNER INSTALLED EXST EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
CO CLEAN OUT MECH MECHANICAL TB TACKBOARD COL COLUMN MT MOUNT TEL TELEPHONE CONC CONCRETE MTL METAL TV TELEVISION CMU CONCRETE MASONRY UNIT MIN MINIMUM TEMP TEMPORARY CONN CONNECTION MISC MISCELLANEOUS TS TUBE STEEL CONT CONTINUOUS (N) NEW THRES THRESHOLD CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T & B TOP AND BOTTOM DWG DRAWING OPNG OPENING TYP TYPICAL EA EACH OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER EQUIP EQUIAL CONTRACTOR INSTALLED WWF WELDED WIRE FABRIC EXIST EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
COL COLUMN MT MOUNT TEL TELEPHONE CONC CONCRETE MTL METAL TV TELEVISION CMU CONCRETE MASONRY UNIT MIN MINIMUM TEMP TEMPORARY CONN CONNECTION MISC MISCELLANEOUS TS TUBE STEEL CONT CONTINUOUS (N) NEW THRES THRESHOLD CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T&B TOP AND BOTTOM DWG DRAWING OPNG OPENING TYP TYPICAL EA EACH OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER EQ EQUAL CONTRACTOR INSTALLED WWF WELDED WIRE FABRIC EQUIP EQUIPMENT OF/OI OWNER FURNISHED / WW WIDE FLANGE EXIST EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
CONC CONCRETE MTL METAL TV TELEVISION CMU CONCRETE MASONRY UNIT MIN MINIMUM TEMP TEMPORARY CONN CONNECTION MISC MISCELLANEOUS TS TUBE STEEL CONT CONTINUOUS (N) NEW THRES THRESHOLD CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T & B TOP AND BOTTOM DWG DRAWING OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER CONTRACTOR INSTALLED W/ WITH (E) EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT WOOD						
CMU CONCRETE MASONRY UNIT MIN MINIMUM TEMP TEMPORARY CONN CONNECTION MISC MISCELLANEOUS TS TUBE STEEL CONT CONTINUOUS (N) NEW THRES THRESHOLD CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T & B TOP AND BOTTOM DWG DRAWING OPNG OPENING TYP TYPICAL EA EACH OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER EQUIP EQUIPMENT OF/OI OWNER FURNISHED / WWF WELDED WIRE FABRIC EXIST EXISTING ONTE ONTSTALLED W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
CONN CONNECTION MISC MISCELLANEOUS TS TUBE STEEL CONT CONTINUOUS (N) NEW THRES THRESHOLD CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T & B TOP AND BOTTOM DWG DRAWING OPPG OPENING TYP TYPICAL EA EACH OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER EQ EQUAL CONTRACTOR INSTALLED WWF WELDED WIRE FABRIC EQUIP EQUIPMENT OF/OI OWNER FURNISHED / W WIDE FLANGE EXIST EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
CONT CONTINUOUS (N) NEW THRES THRESHOLD CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T & B TOP AND BOTTOM DWG DRAWING OPNG OPENING TYP TYPICAL EA EACH OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER EQ EQUAL CONTRACTOR INSTALLED WWF WELDED WIRE FABRIC EQUIP EQUIPMENT OF/OI OWNER FURNISHED / W WIDE FLANGE EXIST EXISTING ONLESS OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
CONTR CONTRACTOR NIC NOT IN CONTRACT TOIL TOILET DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T & B TOP AND BOTTOM DWG DRAWING OPNG OPENING TYP TYPICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER EQ EQUAL CONTRACTOR INSTALLED WWF WELDED WIRE FABRIC EQUIP EQUIPMENT OF/OI OWNER FURNISHED / W WIDE FLANGE EXIST EXISTING OWNER INSTALLED W/ WITH (E) EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
DIM DIMENSION NTS NOT TO SCALE T.O. TOP OF DS DOWNSPOUT O.C. ON CENTER T & B TOP AND BOTTOM DWG DRAWING OPNG OPENING TYP TYPICAL EA EACH OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER EQ EQUAL CONTRACTOR INSTALLED WWF WELDED WIRE FABRIC EQUIP EQUIPMENT OF/OI OWNER FURNISHED / W WIDE FLANGE EXIST EXISTING OWNER INSTALLED W/O WITH (E) EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
DS DOWNSPOUT O.C. ON CENTER T & B TOP AND BOTTOM DWG DRAWING OPNG OPENING TYP TYPICAL EA EACH OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER EQ EQUAL CONTRACTOR INSTALLED WWF WELDED WIRE FABRIC EQUIP EQUIPMENT OF/OI OWNER FURNISHED / W WIDE FLANGE EXIST EXISTING OWNER INSTALLED W/ WITH (E) EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
DWG DRAWING OPNG OPENING TYP TYPICAL EA EACH OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER EQ EQUAL CONTRACTOR INSTALLED WWF WELDED WIRE FABRIC EQUIP EQUIPMENT OF/OI OWNER FURNISHED / W WIDE FLANGE EXIST EXISTING OWNER INSTALLED W/ WITH (E) EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
EA EACH OPP OPPOSITE VERT VERTICAL ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER EQ EQUAL CONTRACTOR INSTALLED WWF WELDED WIRE FABRIC EQUIP EQUIPMENT OF/OI OWNER FURNISHED / W WIDE FLANGE EXIST EXISTING OWNER INSTALLED W/ WITH (E) EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
ELECT ELECTRICAL OD OUTSIDE DIAMETER U.N.O. UNLESS NOTED OTHERWISE EWC ELEV ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER CONTRACTOR INSTALLED WWF WELDED WIRE FABRIC EQUIP EQUIPMENT OF/OI OWNER FURNISHED / W WIDE FLANGE OWNER INSTALLED W/ WITH (E) EXISTING O.T.S. OPEN TO STRUCTURE W/O WOOD						
EWC ELECTRIC WATER COOLER OH OVERHEAD WC WATER CLOSET ELEV ELEVATION OF/CI OWNER FURNISHED / WM WATER METER EQ EQUAL CONTRACTOR INSTALLED WWF WELDED WIRE FABRIC EQUIP EQUIPMENT OF/OI OWNER FURNISHED / W WIDE FLANGE EXIST EXISTING OWNER INSTALLED W/ WITH (E) EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
ELEVELEVATIONOF/CIOWNER FURNISHED / CONTRACTOR INSTALLEDWMWATER METEREQEQUALCONTRACTOR INSTALLEDWWFWELDED WIRE FABRICEQUIPEQUIPMENTOF/OIOWNER FURNISHED / OWNER INSTALLEDWWIDE FLANGEEXISTEXISTINGOWNER INSTALLEDW/WITH(E)EXISTINGO.T.S.OPEN TO STRUCTUREW/OWITHOUTEXPEXPANSIONPART BDPARTICLE BOARDWDWOOD						
EQ EQUAL CONTRACTOR INSTALLED WWF WELDED WIRE FABRIC EQUIP EQUIPMENT OF/OI OWNER FURNISHED / W WIDE FLANGE EXIST EXISTING OWNER INSTALLED W/ WITH (E) EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD						
EQUIPEQUIPMENTOF/OIOWNER FURNISHED / OWNER INSTALLEDWWIDE FLANGEEXISTEXISTINGOWNER INSTALLEDW/WITH(E)EXISTINGO.T.S.OPEN TO STRUCTUREW/OWITHOUTEXPEXPANSIONPART BDPARTICLE BOARDWDWOOD			UF/UI	•		
EXIST EXISTING OWNER INSTALLED W/ WITH (E) EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD			05/01			
(E) EXISTING O.T.S. OPEN TO STRUCTURE W/O WITHOUT EXP EXPANSION PART BD PARTICLE BOARD WD WOOD			UF/UI	•		
ÈXP EXPANSION PART BD PARTICLE BOARD WD WOOD			0.7.0		•	
EXI EXTERIOR PARTIN PARTITION					WD	WUUD
	EXI	EXTERIUR	PAK I'N	PAKIIIIUN		

SYMBOLS LEGEND

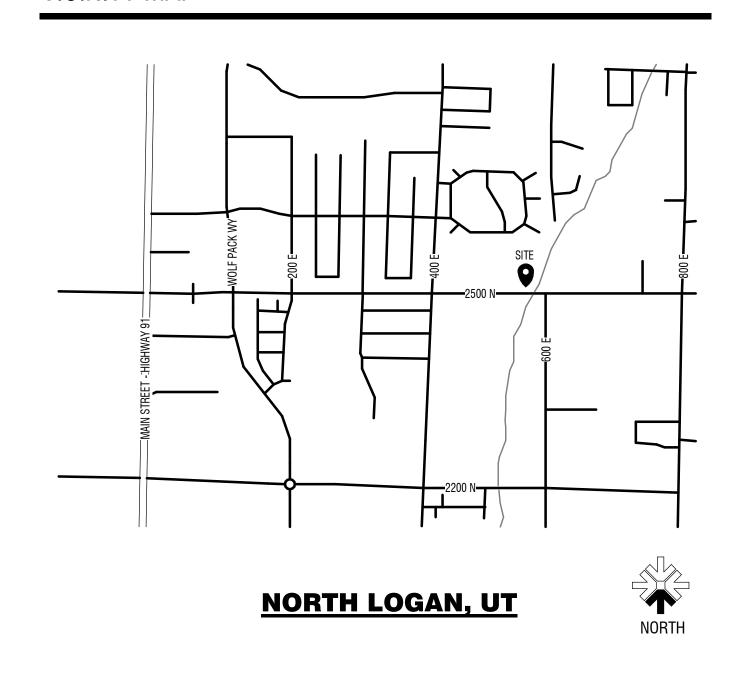
<u>DESCRIPTION</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>	<u>SYMBOL</u>
BUILDING SECTION —	1 A101	DRAWING TAG ————	A1 DETAIL 1/8" = 1'-0" Sub Description
WALL SECTION -	1 A101	WINDOW TYPES ————	STOREFRONT/ STEEL FRAME OTHER CURTAIN WALL
SECTION DETAIL	1 A101	WALL TYPES —	
SECTION DETAIL:	OPP	DOOR TAG —	DOOR NUMBER A101B A01HMA FRAME TYPE HARDWARE #
SECTION DETAIL:	SIM	KEYNOTES —	04.03 NOTE # DIVISION #
ELEVATION LEVEL	NAME ELEVATION	REVISIONS —	1
ELEVATIONS ————	INTERIOR EXTERIOR XX/A101 A101	GRID BUBBLE ————	0
ROOM TAG	ROOM NAME	EQUIPMENT TAG	
ROOM FINISH TAG	CEILING AC C BASE WALL P1 P1 WALL WALL P1 P1 WALL	FINISH TAG —	<u></u>

MATERIALS LEGEND

MATERIAL .	<u>SYMBOL</u>
EARTH	
ASPHALT PAVING	
COMPACTED GRANULAR FILL	
CONCRETE	A A A A A A A A A A A A A A A A A A A
CONCRETE MASONRY UNITS	
BRICK	
STEEL	
CONTINUOUS WOOD	
WOOD BLOCKING	
PLYW00D / OSB	
PARTICLE BOARD	
INSULATION	
RIGID INSULATION	
GYPSUM BOARD	
ACOUSTIC TILE	
GLU-LAMINATE BEAM	
PLASTER & METAL LATH	- 1/2 A V-3 S-1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
GLASS	
FINISH WOOD	
ALUMINUM	<u> </u>

WOOD STUD WALL

VICINITY MAP

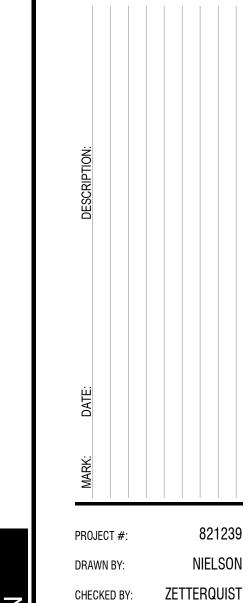


LEGAL

NOTE: THE CONSTRUCTION DOCUMENTS FOR THIS PROJECT ARE COMPOSED OF SETS OF DRAWINGS AND SPECIFICATIONS, AND THEREFORE SHALL BE USED AND MAINTAINED IN THEIR ENTIRETY. ANY CONTRACTOR, SUBCONTRACTOR, VENDOR OR PARTY PARTICIPATING IN OR BIDDING ON THIS PROJECT SHALL BE EXPECTED TO PERFORM DUE DILIGENCE TO ENSURE THEIR BID, WORK PERFORMED, AND MATERIALS PROVIDED CONFORMS TO THE INFORMATION PROVIDED WITHIN ANY AND ALL SHEETS OF DRAWINGS AND SPECIFICATIONS, INCLUDING, BUT NOT LIMITED TO, ANY SUBSEQUENT ADDENDA OR CLARIFICATIONS THAT MAY BE ISSUED RELEVANT TO THEIR SCOPE OF WORK. PROJECT SCOPE MAY BE DEFINED WITHIN SPECIFICATIONS

ADDITIONALLY, DRAWINGS MAY NOT BE RE-SCALED WHEN PRINTED, WRITTEN DIMENSIONS SHALL HAVE PRECEDENCE, AND LARGER SCALE DRAWINGS SHALL HAVE PRECEDENCE OVER SMALLER SCALE DRAWINGS.

ANY DEVIATION FROM OR CONFLICT WITHIN THE DRAWINGS AND/OR SPECIFICATIONS, MUST BE SUBMITTED VIA REQUEST FOR INFORMATION (RFI) AND RESPONDED TO BY THE ARCHITECT PRIOR TO BID OR BEFORE CONTINUING THAT PORTION OF WORK.



NORTH LOGA 2NORTH LOGA APPROXIMATELY 2NORTH LOGAN, UT

architects

West

CENTER

CIVIC

design V

LOGAN UT 84321 LAKE CITY UT 84103

PROJECT INFORMATION



BATT INSULATION - EXTEND TO CEILING - SEE WALL TYPES ON A-531 SOUND WALL - EXTEND TO CEILING - SEE

1 HOUR FIRE SEPERATION - OCCUPANCY A3 TO B

architects

St

esign

ENTER

 $\overline{\mathbb{S}}$

CIVIC

ORTH LOG/

LOGAN UT 84321 KE CITY UT 84103

WALL TYPES ON A-531

EGRESS PATH

EXIT EXIT LOCATION

FIRE EXTINGUISHER CABINET A-3 OCCUPANCY

B OCCUPANCY

CODE REVIEW

<u>JURISDICTION</u> NORTH LOGAN CITY

2018 INTERNATIONAL BUILDING CODE 2018 INTERNATIONAL MECHANICAL CODE 2018 INTERNATIONAL PLUMBING CODE 2020 NATIONAL ELECTRICAL CODE

BUILDING OCCUPANCY CLASSIFICATION OCCUPANCY: B

TYPE OF CONSTRUCTION
TYPE VB

REQUIRED SEPARATION OF OCCUPANCIES (508.4)

1 HOUR BETWEEN TYPE B AND AREAS OF A OCCUPANCY

AUTOMATIC SPRINKLER SYSTEM YES

BUILDING HEIGHT (504.3) ALLOWABLE BUILDING HEIGHT PROPOSED BUILDING HEIGHT

NUMBER OF STORIES (504.4) ALLOWABLE NUMBER OF STORIES 3 PROPOSED NUMBER OF STORIES

BUILDING AREA - (B) OCCUPANCY, (1)-STORY(506.2.)
ALLOWABLE BUILDING AREA 36,000 SF PROPOSED BUILDING AREA 20,524 SF CANOPY BUILDING AREA 992 SF GROSS BUILDING AREA 21,516 SF

FIRE RESISTIVE REQUIREMENTS FOR OCCUPANCY B - TYPE VB (TABLE 601) PRIMARY STRUCTURAL FRAME 0 HR RATING BEARING WALLS **EXTERIOR** 0 HR RATING 0 HR RATING INTERIOR NON BEARING WALLS 0 HR RATING

0 HR RATING

0 HR RATING

0 HR RATING

TOTAL $= 309 \ OCC$

OCCUPANT LOAD CALCULATION (TABLE 1004.1.2)

FLOOR CONSTRUCTION

ROOF CONSTRUCTION

SHAFT WALLS

OCCUPANCY CALCULATED OLF LEVEL 01 COUNCIL ROOM(A-3) 2,197 SF / 40 NET = 54.4 OCC. OFFICE(B) 8,125 SF / 150 GROSS = 54.1 OCC SUBTOTAL = 108.5 OCCLEVEL 00(FUTURE, UNFINISHED) MULTIPURPOSE RM.(A-3) 2,197 SF 15 NET = 146.4 OCC. OFFICE(B) 8,125 SF /150 = 54.1 OCC SUBTOTAL = 200.5 OCC

EGRESS WIDTH (TABLE 1005.1)
OTHER EGRESS 0.2 PER OCCUPANT - STAIRWAYS 0.15 PER OCCUPANT - DOORS

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

REQUIRED OCCUPANCY WATER CLOSETS LEVEL 01 COUNCIL ROOM(A-3) 27.7M/27.7F 1/125M | 1/65F 0.22 M / 0.42 F 27.1M/27.1F 1/25M|1/25F OFFICE(B) 1.08 M / 1.08 F ACTUAL - 1.30 M / 1.50 F = 2M/2FLEVEL 00(UNFINISHED) 73.3M/73.3F 1/125M|1/65F 0.58 M / 1.12 F MULTIPURPOSE(A-3) 27.1M/27.1F 1/25M | 1/25F 1.08 M/ 1.08 F OFFICE(B) ACTUAL - 1.68M / 2.20 F = 2M/3FLAVATORIES LEVEL 01 27.7M/27.7F 1/125M | 1/65F 0.22 M / 0.42 F COUNCIL ROOM(A-3) OFFICE(B) 27.1M/27.1F 1/25M | 1/25F 1.08 M / 1.08 F ACTUAL - 1.30 M / 1.50 F = 2 M / 2 F

LEVEL 00(UNFINISHED) MULTIPURPOSE(A-3) 73.3M/73.3F 1/200M | 1/200F 0.58 M / 1.12 F OFFICE(B) 27.1M/27.1F ACTUAL - 1.68M / 2.20 F = 2M/3F(ROUGH-IN, TO BE INSTALLED IN FUTURE BUILDOUT)

ACTUAL 1

DRINKING FOUNTAINS LEVEL 01 A-3 27.7M/27.7F

1 PER 500 0.11 27.1M/27.1F 1 PER 100 0.54 ACTUAL 0.55 = 1 PROVIDEDLEVEL 00 27.7M/27.7F 1 PER 500 0.11 A-3

27.1M/27.1F 1 PER 100 0.54 ACTUAL 0.55 = 1 PROVIDED(ROUGH-IN, TO BE INSTALLED IN FUTURE BUILDOUT)

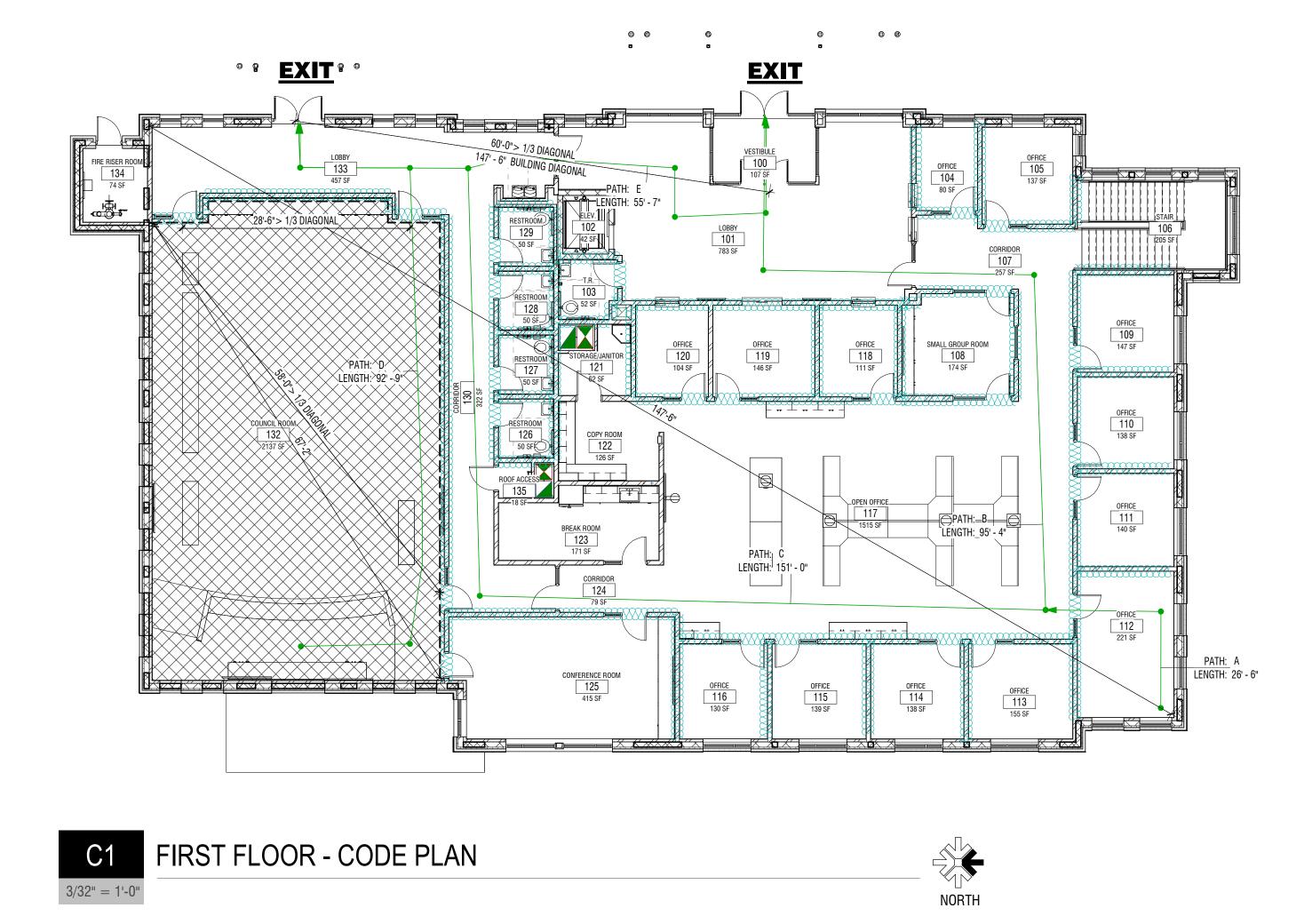
SERVICE SINKS REQUIRED

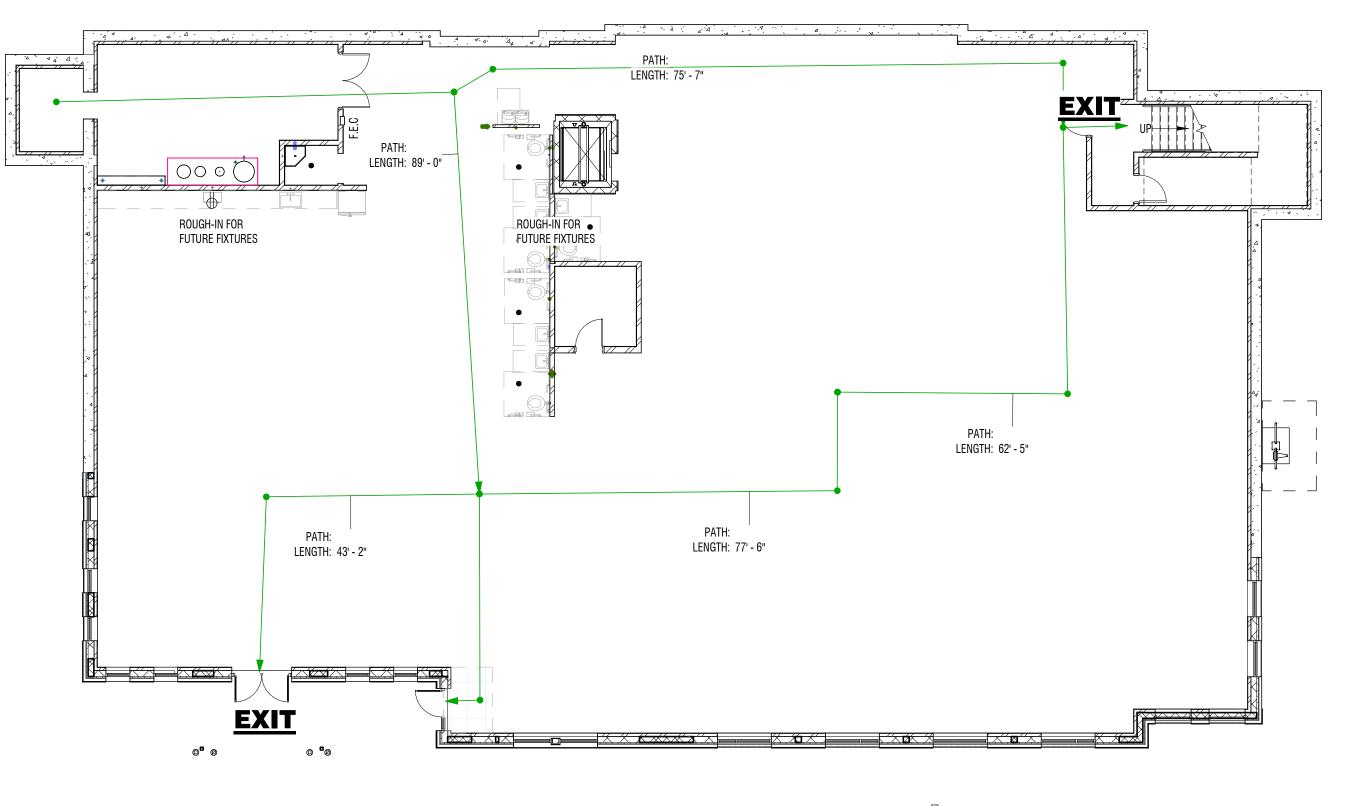
CODE REVIEW

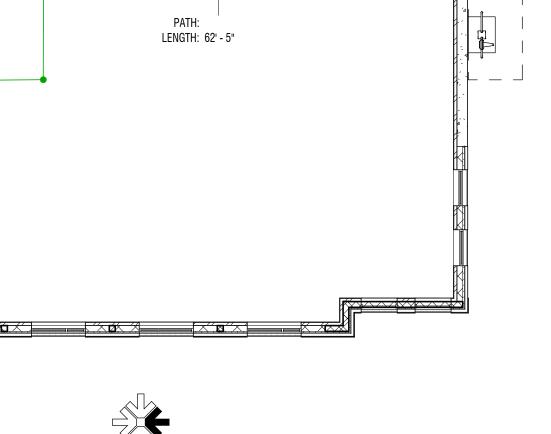
PROJECT #:

DRAWN BY:

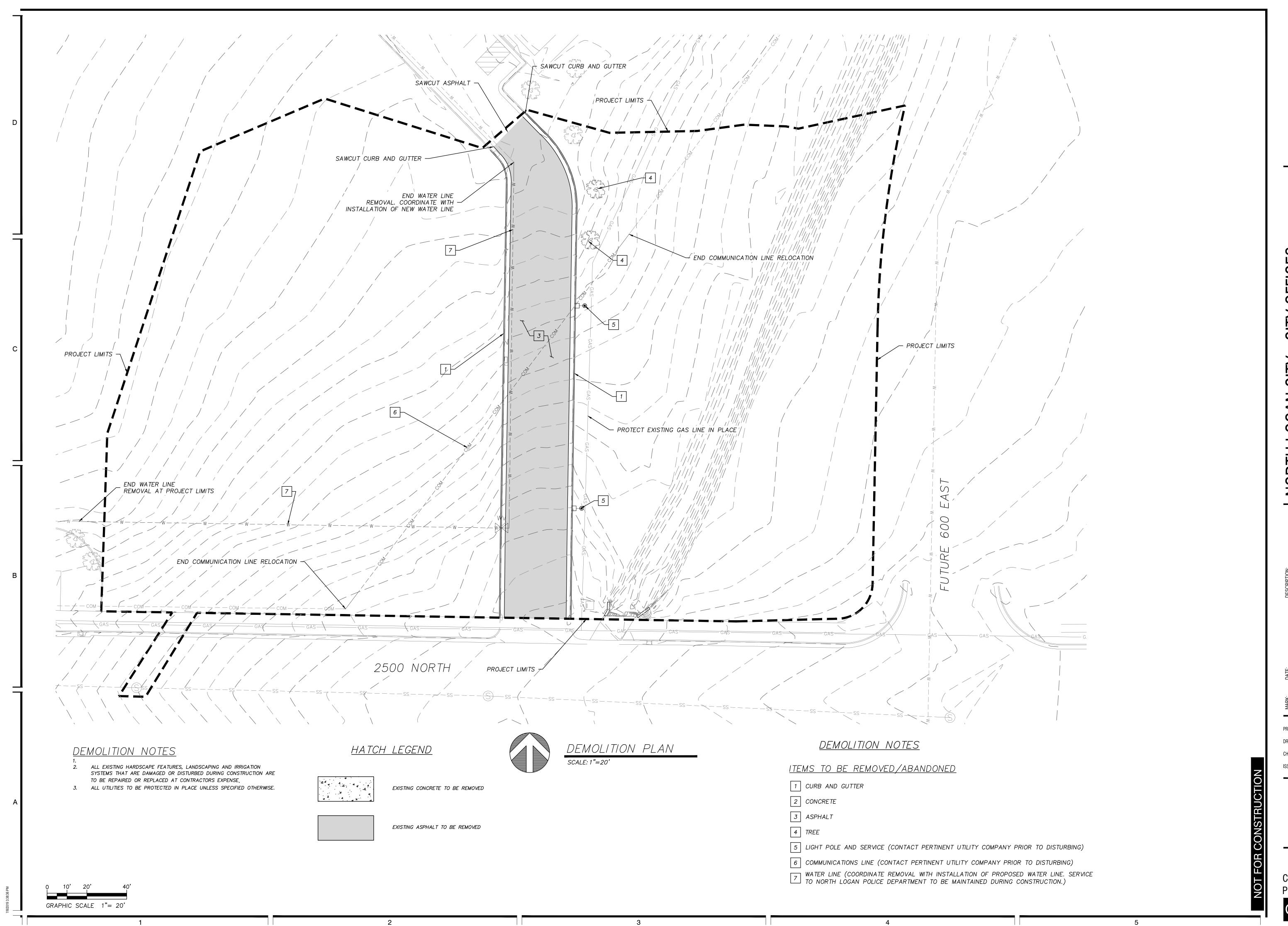
ZETTERQUIST







A1 BASEMENT - CODE PLAN



Vest | architects

00 WEST SALT LAKE (

design 255 SOUTH 300 WEST 795 NORTH 400 WEST

LOGAN CITY - CITY OFFICES

| NORTH LO

PROJECT #: 821

DRAWN BY: J.

HECKED BY: J. DAY

HECKED BY: L . ANDERSON

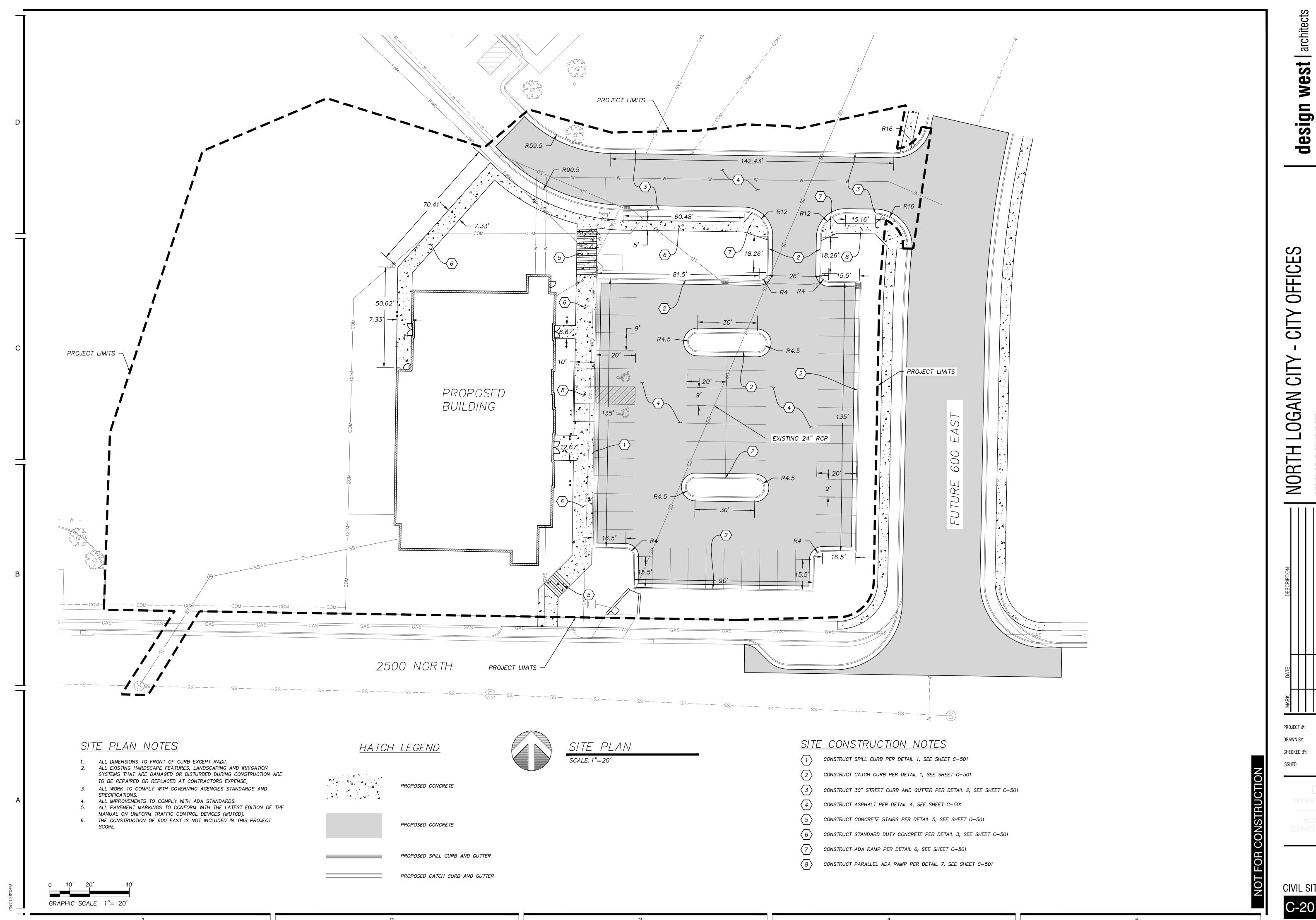
SUED: 03.31.2022

DD
REVIEW SUBMITTAL
NOT FOR
CONSTRUCTION

CIVIL DEMOLITION

C-101

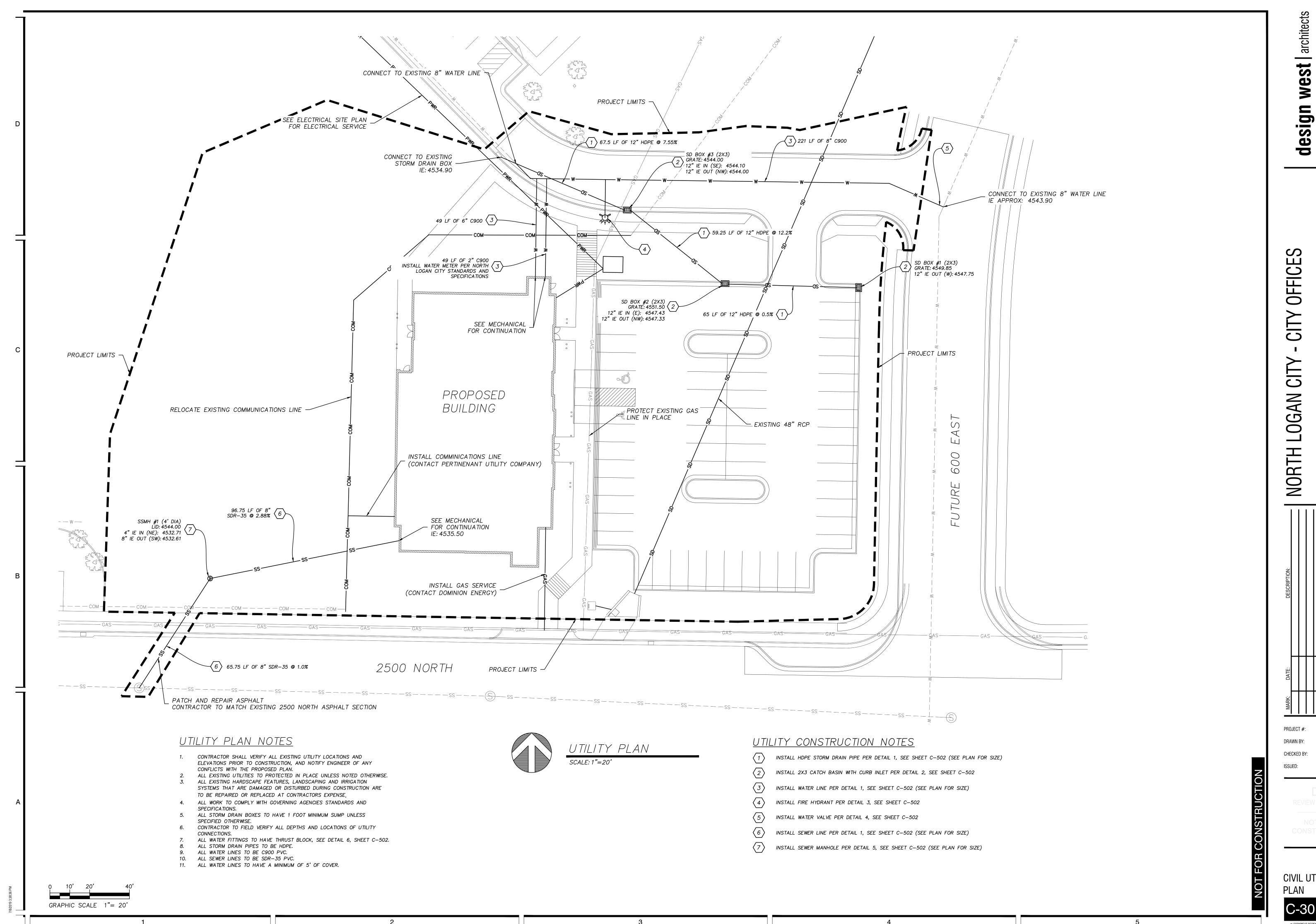
© COPYRIGHT DESIGN WEST ARCHITECTS 202



CHECKED BY: L . ANDERSON

CIVIL SITE PLAN

C-201



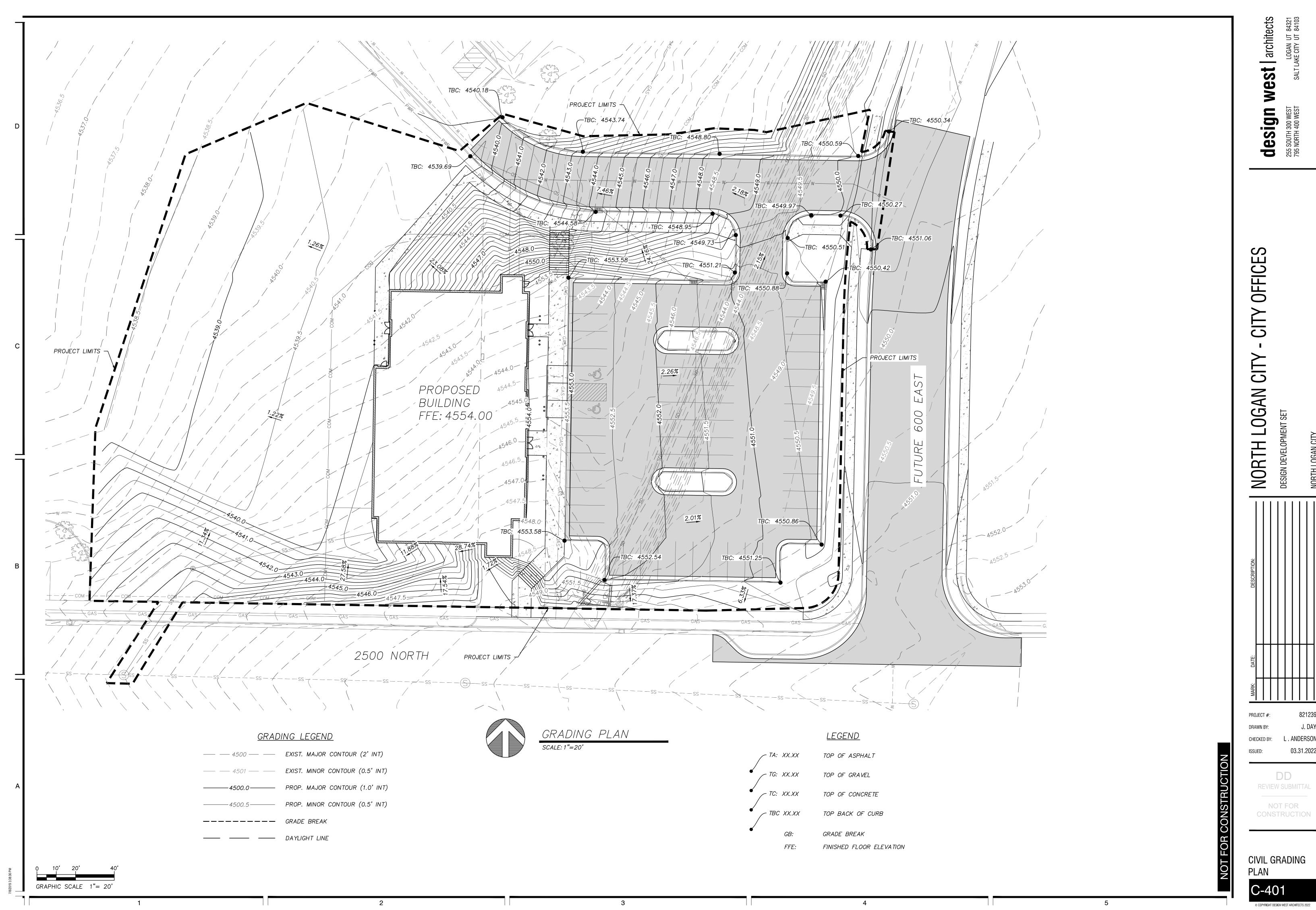
architects

St

L.ANDERSON 03.31.2022

CIVIL UTILITY

C-301



CIVIL GRADING

architects LOGAN UT AKE CITY UT St

design

OFFICE(CITY AN 06

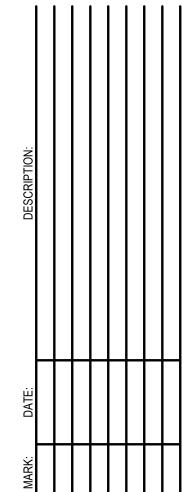
 Δ

Z

821239 PROJECT #: J. DAY DRAWN BY: L . ANDERSON 03.31.2022

CIVIL UTILITY **DETAILS**

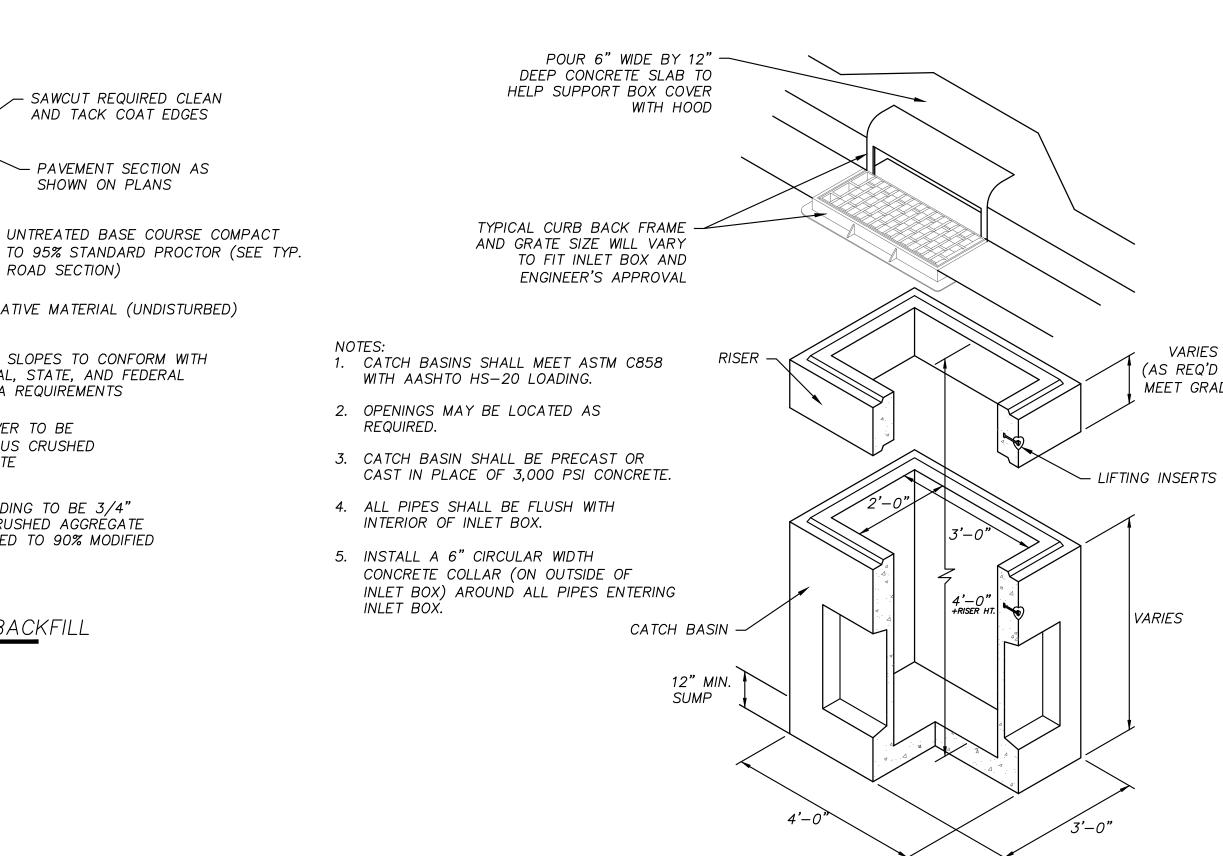
C-501



821239 PROJECT #: J. DAY DRAWN BY: L . ANDERSON CHECKED BY: 03.31.2022

CIVIL UTILITY

DETAILS C-502



STANDARD MANHOLE COVER & RING — D&L MODEL A-1180 OR APPROVED EQUAL (NEW ASPHALT WHERE REQ'D.) PRECAST 4" CONCRETE RING(S) SURFACE PLAN "B" - ASPHALT CONCRETE COLLAR REQ'D. -*GRAVEL* TOP OF COLLAR TO BE 1/4" BELOW TOP OF ASPHALT - PRECAST ECCENTRIC CONCRETE CONE PRECAST CONCRETE MANHOLE -INVERT CHANNELS CONSTRUCTED TO UNIFORM — - EPOXY COATED SECTION OF SPECIFIED DIAMETER. FLOW LINES WITH GRADUAL TRANSITION SECTIONS SEAL ALL JOINTS WITH APPROVED STEPS FOR MANHOLES JOINT SEALER PRECAST CONCRETE MANHOLE SECTION -VERTICAL SECTION "A" (5' AT JUNCTION OF MORE THAN 2 PIPES) HORIZONTAL SECTION "C" CHANNEL INTERSECTION FLOW LINE -(OTHER FLOW PATTERNS SIMILAR) PRECAST WITH BOOTS -

> SANITARY SEWER MANHOLE SCALE: NTS

(WATER) CONCRETE METAL LID COLLAR STAMPED "WATER" CONCRETE COMPACTED GRANULAR BORROW NOTE: 1. PLACE CONCRETE THAT IS AT LEAST 8" THICK AND HAVE MIN. DIMENSION AROUND VALVE BOX OF 12 INCHES. 2. THE CONCRETE COLLAR AROUND THE TOP OF THE VALVE BOX SHALL BE PARALLEL TO THE ROAD SURFACE.

WITHOUT PAVEMENT

SCALE: NTS

OWNER ACCEPTED NATIVE

95% STANDARD PROCTOR

PIPE LINE. ALSO PROVIDE 14

GAUGE TRACER WIRE ALONG

PLACE MARKING STRIP IN TRENCH @ 12" ABOVE WATER

BACKFILL OR 3" MINUS

GRANULAR BORROW

-COMPACTED TO

ALL WATER MAINS.

WITH PAVEMENT

— 6" МАХ.

PLASTIC PIPE EXCAVATION AND BACKFILL

- SAWCUT REQUIRED CLEAN

AND TACK COAT EDGES

- PAVEMENT SECTION AS SHOWN ON PLANS

─ NATIVE MATERIAL (UNDISTURBED)

SIDE SLOPES TO CONFORM WITH

LOCAL, STATE, AND FEDERAL

OSHA REQUIREMENTS

PIPE BEDDING TO BE 3/4"

MINUS CRUSHED AGGRÉGATE

COMPACTED TO 90% MODIFIED

PIPE COVER TO BE 3/4" MINUS CRUSHED

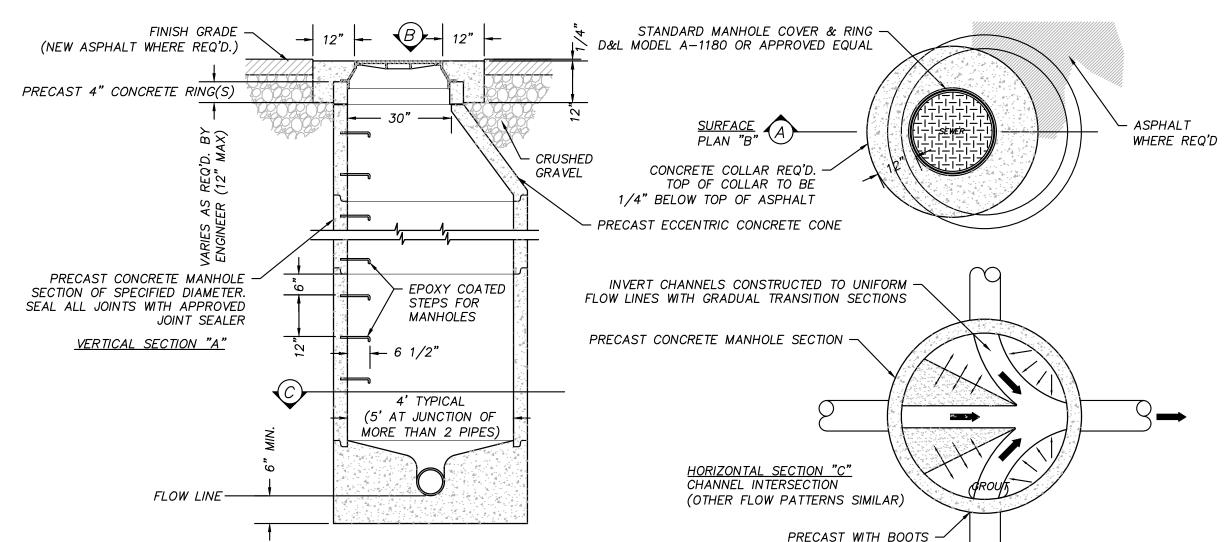
ÁGGREGATE

PROCTOR

ROAD SECTION)

UNTREATED BASE COURSE COMPACT

WATER VALVE SCALE: NTS



VARIES (AS REQ'D TO MEET GRADE)

2'X3' CATCH BASIN

THRUST BLOCKING

CLOW MEDALLON —

6" PVC OR

MECHANICAL JOINT OR

1. FIRE HYDRANTS SHALL BE SPACED AS INDICATED.

3. FIRE HYDRANT SHALL BE INSTALLED IN A VERTICAL

JOINT ADAPTER

2. FIRE HYDRANT SHALL HAVE A NOMINAL VALVE OPENING OF

POSITION WITH LARGE NOZZLE FACING THE STREET.

FLANGED-MECHANICAL

DI PIPE

- BREAKAWAY BOLTS

CONC. THRUST

PLUG

SAFETY FACTOR

1.50

22.5° ELBOW

0.6

1.2

2.2

3.4

5.0

6.8

8.8

11.2

13.8

19.8

BLOCK 1/4

CU. YD. MIN.

OR APPROVED EQUAL

AUXILIARY VALVE & -

CONC. THRUST BLOCK -

MECHANICAL JOINT

FLANGED TEE

FLANGED 6" GATE VALVE

MECHANICAL JOINT -

USE ONLY REDWOOD → OR CEDAR TIMBER FOR BLOCKING

AND PIPE.

BEARING AREA, TYP

TO PLACING CONCRETE

1. NO CONCRETE SHALL BE PLACED WITHIN 1

1/2" OF JOINT OR BOLTS. COVER ALL

2. THRUST BLOCKS SHALL BE REQUIRED AT

3. PLACE CONCRETE AGAINST UNDISTURBED GROUND IN TRENCH BOTTOM AND SIDES.

4. USE 6 MIL VISQUEEN BETWEEN CONCRETE

BEARING STRENGTH DIFFER THAN THOSE

LISTED BELOW, CONTACT ENGINEER FOR

DEAD END

OR TEE

1.4

3.2

5.7

8.8

12.7

17.3

22.6

28.6

35.3

50.9

THRUST BLOCK DESIGN INFO

THRUST BLOCK AREA REQUIRED (SQ FT)

90° ELBOW

2.0

4.5

8.0

12.5

18.0

24.5

32.0

40.5

50.0

71.9

SOIL BEARING STRENGTH (PSF)

2000

45° ELBOW

1.1

2.4

4.3

6.8

9.7

13.2

17.3

21.9

27.0

38.9

ALL 11.25° BENDS OR GREATER

5. IF STATIC PRESSURE AND/OR SOIL

REQUIRED THRUST BLOCK AREA

STATIC PRESSURE (PSi)

150

PIPE SIZE

4

8

10

12

14

16

18

20

24

METAL CONTACT W/ POLY-WRAP PRIOR

5 1/4" DIA.

4. D.I. PIPE TO BE WRAPPED.

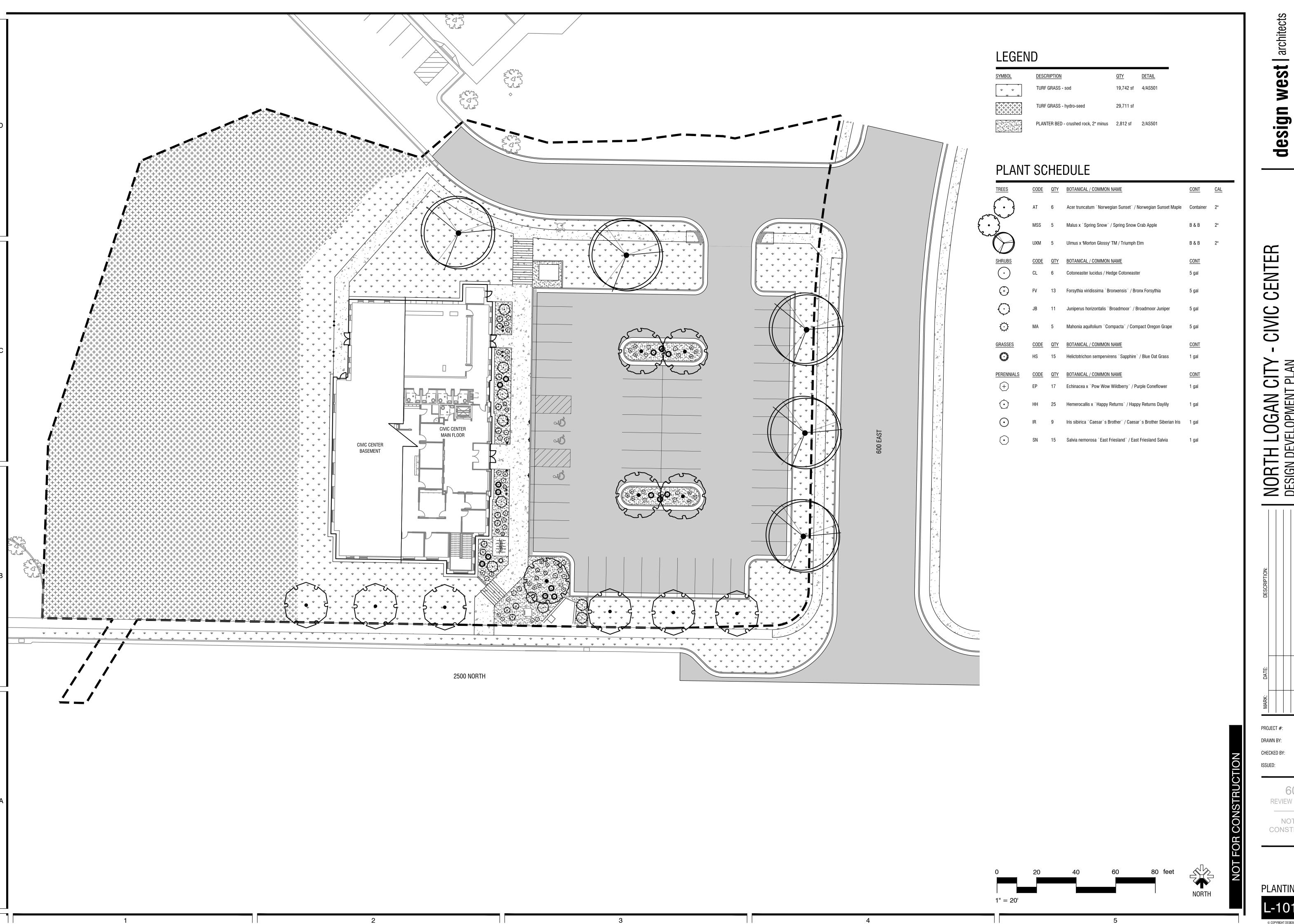
SCALE: NTS

FIRE HYDRANT

1/4 CU. YD. MIN.

VALVE BOX

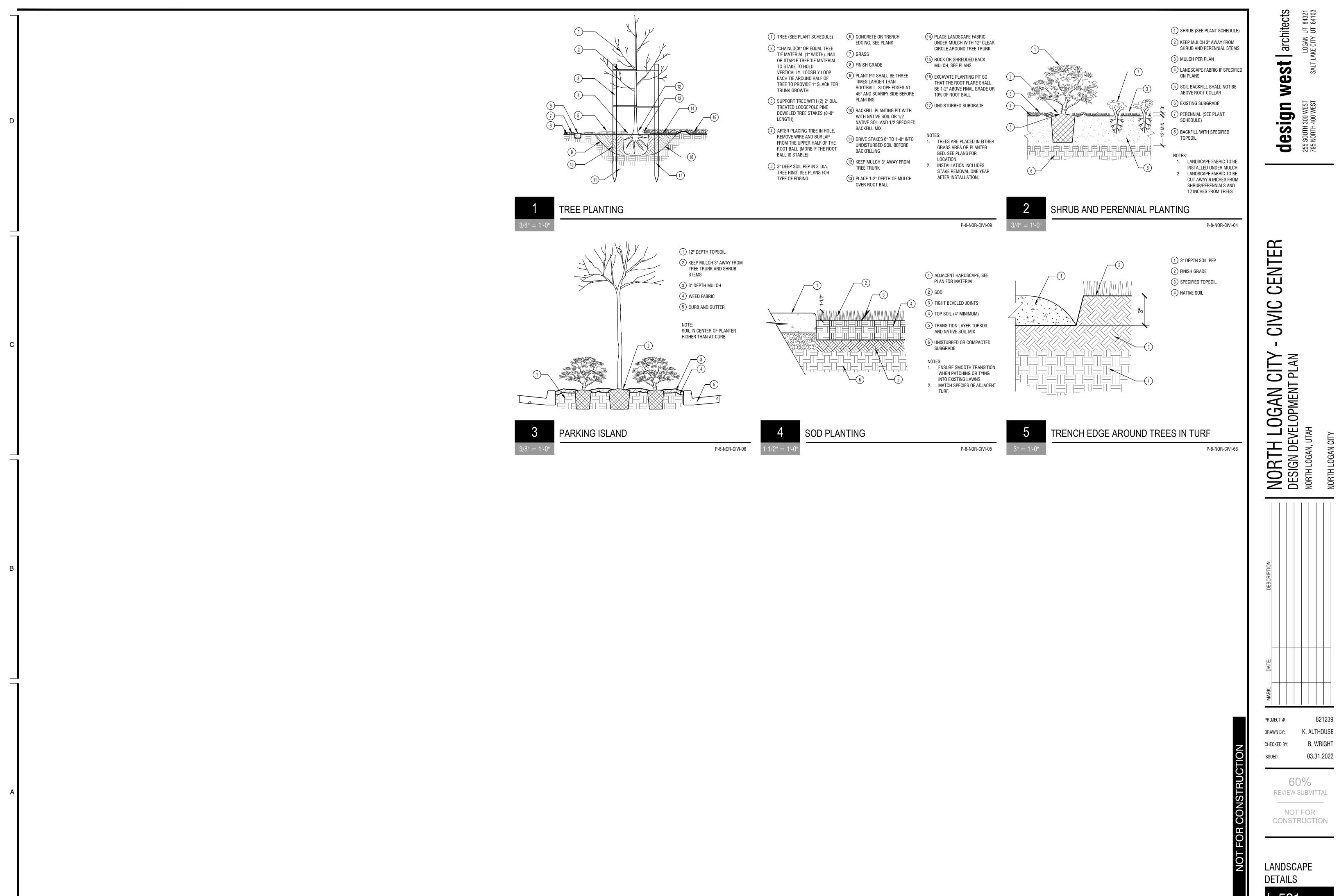
FLANGED JOINT -



IN LOGAN (

REVIEW SUBMITTAL

NOT FOR CONSTRUCTION



CENTE CIVIC TH LOGAN CITY

N DEVELOPMENT PLAN

SAN, UTAH

LOGAN UT 84321 AKE CITY UT 84103

K. ALTHOUSE

REVIEW SUBMITTAL

NOT FOR CONSTRUCTION

DETAILS

L-501

2. Typical details and sections shall apply where specific details are not shown.

- 3. The structural drawings are not all-inclusive and do not contain all dimensions, elevations, openings, mechanical shafts, and penetrations needed to build the structure. The contractor shall coordinate these items with the Architectural, Mechanical and Electrical drawings.
- 4. The contractor shall verify all site conditions and dimensions. If actual conditions differ from those shown in the contract drawings, the contractor shall immediately notify the architect/engineer before proceeding with the fabrication or construction of any affected elements.
- 5. Omissions or conflicts between the contract drawings and/or specifications shall be brought to the attention of the architect/engineer before proceeding with any work involved. In case of conflict, follow the most stringent requirement as directed by the architect/engineer at no additional cost to the owner.
- 6. The contractor shall submit a written request to the architect/engineer before proceeding with any changes, substitutions, or modifications. Any work done by the contractor before receiving written approval will be at the contractor's risk.
- 7. The contractor shall coordinate with all trades any items that are to be integrated into the structural system such as openings, penetrations, mechanical and electrical equipment, etc. Sizes and locations of mechanical and other equipment that differs from those shown on the contract drawings shall be reported to the architect/engineer.
- 8. The contractor shall provide adequate shoring and bracing as required for the chosen method of erection. Shoring and bracing shall remain in place until final connections for the permanent members are completed. The building shall not be considered stable until all connections are completed. Walls shall not be considered self-supporting and shall be braced until the floor/roof system is completed.
- 9. The contractor shall not cut or core any holes in masonry or concrete walls without prior review by the
- 10. Site observations by BHB Consulting Engineers' field representative shall not be construed as approval of construction procedures nor special inspection.
- 11. Detailing and shop drawing production for structural elements will require information (including dimensions) contained in the architectural, structural and/or other consultants' drawings. The structural drawings shall be used in conjunction with the architectural and other consultant's drawings. Some dimensions and elements such as elevations, depressions, slopes, mechanical housekeeping pads, etc. are not shown in the structural drawings. All dimensions shown on structural drawings shall be verified by contractor with architectural, mechanical, and electrical drawings.
- 12. Contractor shall review shop drawings for compliance with contract documents, and stamp shop drawings with review stamp prior to submission to architect for review. Review of shop drawings by BHB Consulting Engineers is for general compliance only and is not intended for approval. The shop drawing review shall not relieve the contractor from the responsibility of completing the project according to the contract documents. Fabrication shall not begin until shop drawings review process is complete. Shop drawings made from reproductions of the contract drawings will be rejected unless the contractor signs a release agreement prior to the shop drawings being reviewed.
- 13. Only an authorized representative of BHB Consulting Engineers may make changes to these contract drawings. BHB Consulting Engineers shall not be held responsible or liable for any claims arising directly or indirectly from changes made without written authorization by an authorized representative of BHB Consulting Engineers.
- 14. Bidding, pricing or construction done prior to receiving final building permits from the authorities having jurisdiction is at the contractor's own risk. Changes to the drawings may be required as part of the plan check process. BHB Consulting Engineers will not be held liable for, nor compensate for, changes to these drawings before final jurisdiction approval is obtained.

BASIS OF DESIGN

n. W

o. Base Shear

p. Analysis Procedure

1.	Governing Code a. Risk Category	International Building Code 2018 II
2.	Snow Loads a. Ground Snow Load b. Snow Importance Factor c. Snow Exposure Coefficient d. Thermal Exposure Coefficient e. Roof Snow Load	P_g = 44 psf I_s = 1.0 C_e = 1.0 C_t = 1.0 P_f = 0.7* C_e * C_t * I_s * P_g = 31 psf plus Snow Drift
3.	Rain Loads a. Rain Intensity	i = 1.5 in/hr
4.	Roof Live Load	20 psf
5.	Floor Live Loads a. Office b. Exit Facilities & Corridors	80 psf + 20 psf Partition 100 psf
6.	Seismic Loads a. Seismic Importance Factor, I _e b. Seismic Design Category c. Site Specific Ground Motion d. Soil Site Class e. Soil Site Coefficients f. 5% Damped Design Spectral Response Act	1.0 D Provided by the Geotechnical Engineer D $F_a = 1.20$ $F_v = 1.75$ celeration $S_{DS} = 2/3 * F_a * S_S = 0.744g$ $S_{D1} = 2/3 * F_v * S_1 = 0.460g$
	g. Seismic-Force-Resisting System h. Response Modification Coefficient i. System Over-strength Factor j. Deflection Amplification Factor k. Redundancy Factors l. Fundamental Building Period m. Seismic Response Coefficient	Special Masonry Shear Walls $R = 5.0$ $\Omega_0 = 2.5$ $C_d = 3.5$ $\rho_x = 1.0$; $\rho_y = 1.0$ $T = 0.536$ seconds $Cs = S_{DS} * I_e / R$ $Cs = S_{D1} * I_e / (R*T)$

Dead Loads of Structure

 $Vx = C_S * W = 0.148 * W$

 $V_y = C_S * W = 0.148 * W$

Equivalent Lateral Force (Static)

a. Basic Wind Velocity (3 Second Gust)	103 mph
b. Exposure Type	В
c. Internal Pressure Coefficient, GCpi	+/-0.18
d. Topographic Factor, Kzt	1.0
e. Ground Elevation Factor, Ke	1.0
f. Components and Cladding Wind Force	Table (psf. Strength Design)

	Effecti	ve Wind A	rea for Co	mponent (sq ft.)
Wall Zone	10 sq ft.	20 sq ft.	50 sq ft.	100 sq ft.	500 sq ft.
4	25.7	25.6	25.3	24.7	19.8
5	31.7	31.4	30.7	29.5	19.8

8. Serviceability Criteria

i. All

a. Beam Non-Composite Superimposed Load Deflection i. Interior L/360 (0.625" Max) ii. Perimeter b. Beam Post-Composite Superimposed Load Deflection

i. Interior L/360 (0.625" Max) ii. Perimeter c. Interstory Seismic/Wind Drift

FOUNDATION

1.	Soils Report
	a. Author:
	b. Dated:
	c. Project No:

CMT Engineering February 22, 2022

2. Soil Bearing Pressure Frost Protection

30" minimum to bottom of footing. Contractor shall field verify that the footing elevations and final grades indicated on the plans will provide the minimum frost protection. The contractor shall notify the architect/engineer if there are any locations where the minimum frost protection might not be achieved prior to placing concrete.

 Δ_{M} < 0.02h (Where h is the story height)

2000 psf, see Earthwork Section.

4. Lateral Soil Pressure Fluid Equivalent Density

a. Active 35 pcf (retaining walls) 24psf (additional seismic) 55 pcf (rigid foundation walls) b. At Rest c. Passive

EARTHWORK

1. All footings shall bear on a minimum of 18" of compacted structural fill extending down to suitable natural

CONCRETE

1. Materials, unless noted otherwise:

ASTM C 33 a. Normal weight aggregates

Combined aggregate gradation for slabs on grade and other designated concrete shall be 8% - 18% for large top size aggregates (1.1/2") or 8% - 22% for smaller top size aggregates (1" or 3/4") retained on each sieve below the top size and above the No. 100. The range for the No. 30 and No.50 sieves shall be 8% - 15% retained in each. To avoid gap gradation the following shall occur: 1. The percent retained on two adjacent sieves shall not fall below 5%.

2. The percent retained on three adjacent sieves shall not fall below 8%. 3. When the percent retained on two adjacent sieves is less than 8%, the total retained on either of these sieves and the adjacent outside sieve shall be at least 13%. See ACI 302 Section 5.4.3.3 for more information.

ii. Maximum Aggregate Size shall not be larger than: 1. 3.1/2" or 1/5 the narrowest dimension of the forms

2. 1/3 the depth of the slab

3. 3/4 the minimum clear spacing between bars ASTM 615 Grade 60 (Fy = 60 ksi) b. Reinforcing Steel

Use Grade 40 (Fy = 40 ksi) for field bent dowels with spacings indicated reduced by 1/3. c. Deformed Bar Anchors (DBA) ASTM A496

d. Headed Stud Anchors (HSA) ASTM A108 e. Anchor Rods See Structural Steel section

f. Admixtures: Air-entraining admixtures shall comply with ASTM C 260 (when used).

Calcium chloride shall not be added to the concrete mix. iii. Water-reducing admixture shall comply with ASTM C 494/C 494M, Type A (when used) iv. Retarding admixture shall comply with ASTM C 494/C 494M, Type B (when used).

v. Water-reducing and retarding admixture shall comply with ASTM C 494/C 494M, Type D (when vi. High-range, water-reducing admixture shall comply with ASTM C 494/C 494M, Type F (when used).

vii. High-range, water-reducing and retarding admixture shall comply with ASTM C 494/C 494M Type G viii. Admixture manufacturer shall have ISO 9001 Quality Certification. To ensure compatibility all admixtures shall be from the same manufacturer.

g. Type I/II cement complying with ASTM C-150 shall be used for all concrete. Cement source shall remain the same for the entire job.

h. The water/cementitious materials ratios shall meet the requirements of Table 19.3.2.1 of ACI 318-14. Cementitious Materials - Limit percentage, by weight, of cementitious materials other than portland

Fly Ash - ASTM C618, Class C or F – 35% maximum cementitious content. Slag Cement – ASTM C989, Grade 100 or 120 – 50% maximum cementitious content. Provide air entraining as recommended by Table 19.3.3.1 of ACI 318-14. Concrete that extends above

grade and is exposed to freezing and thawing while moist shall be air-entrained. Concrete in unconditioned spaces shall be considered site concrete. k. Concrete shall have, at the point of delivery, a slump of 4". Determine the slump by ASTM C143. Slump tolerance shall meet the requirements of ACI 117. When using high-range, water-reducing admixture or plasticizing admixture conforming to ASTM C494, it is permitted to increase the slump of concrete 8"

maximum with a verified slump of 2" to 4". before the admixture is added. No aluminum conduit or product containing aluminum or any other material injurious to concrete shall be embedded in concrete.

2. Compressive strengths of concrete at 28 days shall meet the follow performance requirements (see ACI-318-14; Chapter 19):

a. Footings & Interior Foundation Walls 3,000 psi F0, S0, W0, C0 Classification b. Exterior Foundation Walls 3,500 psi Strength Classification F1, S0, W0, C0 c. Interior Slabs on Grade Strenath 3,000 psi F0, S0, W0, C0 Classification d. Normal Weight Concrete over Steel Deck 3,500 psi Strenath F0, S0, W0, C0 Classification e. All Site Concrete with Reinforcement Strength 5,000 psi Classification F3, S0, W1, C2 f. All Site Concrete without Reinforcement 4,500 psi Strength

3. Reinforcement for concrete over metal floor decks

Classification

3.5" thick (6.5" overall) normal weight concrete slab shall be poured over the steel deck. Reinforce slab with a macro-synthetic fiber reinforcing (ASTM C 1116 Type III) with an equivalent diameter of 0.016" to 0.05", and a minimum aspect ratio (length to equivalent diameter) of 50. Provide 3 lbs minimum per cubic yard. Fiber manufacturer shall provide 2-hour fire resistance certification from UL.

i. At contractor's option, the welded wire fabric may be used in lieu of fiber reinforcing with the following requirements: 1. 6" x 6" – W2.1/W2.1 welded wire fabric minimum, unless noted otherwise. Welded Wire Fabric

F3, S0, W1, C2

4. Only one grade or type of concrete shall be poured on the site at any given time.

shall be placed 1" to 1.1/2" below the top of the slab.

5. The contractor shall be responsible for the design, detailing, care, placement and removal of all formwork

a. Supporting forms and shoring shall not be removed until structural members have acquired sufficient strength to safely support their own weight and any construction load to which they may be subjected. In no case, however, shall forms and shoring be removed in less than 24 hours after concrete placement.

6. Reinforcement shall have the following concrete cover: a. Cast-in-place Concrete

a. <u>Ca</u>	ast-in-place Concrete	Clear Cover
i.	Cast against and permanently exposed to earth	3"
ii.	Formed concrete exposed to earth or weather:	
	#6 thru #18 bars	2"
	#5 and smaller bars	1.1/2"
iii.	Concrete not exposed to weather or in contact with ground:	
	Slabs, Walls and their piers, Joists; #11 bars and smaller	3/4"
	Beams, Columns: Primary Reinf., Ties, Stirrups, Spirals	1.1/2"

a. Lap splice lengths shall be detailed to comply with the "Concrete Reinforcing Bar Lap Splice Schedule" on sheet S-601. Splices may be made with mechanical splices capable of 125% tension capacity of the bar being spliced. Mechanical splices shall be the positive connecting type coupler and shall meet all International Building Code requirements and shall have a current ICC-ES report or IAPMO Certification. Use "Lenton" Standard Couplers (ICC ER-3967), "Bar-Lock" (ICC ESR-2495) or equal with internal protector. If mechanical splices are used, splices or couplers on adjacent bars shall be staggered a minimum of 24" apart along the longitudinal axis of the reinforcing bars.

b. At joints, provide reinforcing dowels to match the member reinforcing, unless noted otherwise.

c. At all discontinuous control or construction slab on grade joints, provide 2 - #4 x 48".

d. Corner Bars: Provide corner bars at intersecting wall corners using the same bar size and spacing as the horizontal wall reinforcing. Corner bars shall lap the horizontal reinforcing with the required lap splice

e. All vertical reinforcing shall be doweled to footings, or to the structure below with the same size and spacing as the vertical reinforcing for the element above. Dowels extending into footings shall terminate with a 90-degree standard hook and shall extend to within 4" of the bottom of the footing. Footing dowels (#8 bars and smaller) with hooks need not extend more than 20" into footings. Horizontal wall reinforcing shall be continuous through construction and control joints.

for reinforcing around miscellaneous openings (8" to 36" wide). For openings g. See detail

wider than 36", contact the engineer. All recesses that interrupt reinforcing shall be reinforced the same as an opening.

8. Construction Joints. Control (Contraction) Joints:

a. Construction joints in all horizontal and vertical construction joints including between top of footing and foundation walls shall be intentionally roughened to a full amplitude of approximately 1/4". The laitance on the concrete (thin, flaky layer of hardened, weakened hydrated cement) shall be mechanically removed from the surface after the concrete has achieved final set. Construction joints in slabs on grade shall not exceed a distance of 125'-0" o.c. in any direction.

b. Control joints shall be installed in slabs on grade so the length to width ratio of the slab is no more than 1.25:1. Control joints shall be completed as soon as final set is achieved and it is okay to operate the cutter on the slab. Final set is typically achieved within the first 4 to 12 hours after the slab has been finished in an area (depending on weather conditions and concrete hydration rate; 4 hours in hot weather to 12 hours in cold weather). For early entry saw cutting, joints should be cut within the first 1 to 4 hours (depending on weather conditions and concrete hydration rate; 1 hour for hot weather and 4 hours for cold weather). Where saw cut joints cannot be cut along the entire projected length of the joint, a 90-degree hand grinder or other tool shall be used to complete the joint. Control joints may be installed by:

Saw cut a depth of 1/4 the thickness of the slab (1.1/4" ± for early entry saws) minimum.

Tooled joints a depth of 1/4 the thickness of the slab

iii. Saw cut depth shall be increased to 1/3 of the slab thickness (1.3/4" ± for early entry saws) where macro fibers are used.

c. For interior concrete slabs-on-grade that are to receive **no** floor covering, install construction or control joints in slabs on grade at a spacing not to exceed 24 times the slab thickness in any direction, unless noted otherwise. For interior concrete slabs-on-grade that are to receive floor coverings the contractor has the option to increase the control joint spacing to 36 times the slab thickness in any direction.

d. For architectural exposed concrete walls, including retaining walls, provide contraction joints at a uniform spacing of not more than 20 ft o/c by placing deep (1.5 times the maximum aggregate size), narrow rustication strips on both wall faces to induce cracking. Place contraction joints at any locations in which the wall changes thickness. At all contraction joints, reduce horizontal reinforcing crossing the joint by 1/2 of the horizontal reinforcement elsewhere in the wall. Coordinate location with the architectural drawings.

9. Construction

a. Use chairs or other support devices recommended by the CRSI to support and tie reinforcement bars and WWF prior to placing concrete. WWF shall be continuously supported at 36" o.c. maximum. Reinforcing steel for slabs on grade and slabs over metal deck shall be adequately supported. Support reinforcing steel of slabs on grade with precast concrete units. Lifting the reinforcing off the grade or deck during placement of concrete is not permitted.

architects

St

9

gn

S

(1)

7

丑

CEN

CIVIC

A

06

Image: control of the control of t

 Δ

 \vdash

b. Concrete to be mechanically consolidated during placement per ACI standards.

c. Contractor shall coordinate placement of all openings, curbs, dowels, sleeves, conduits, bolts, inserts

and other embedded items prior to concrete placement. d. All embeds, anchors and dowels shall be securely tied to formwork or to adjacent reinforcing prior to the placement of concrete.

e. No pipes, ducts, sleeves, etc shall be placed in structural concrete unless specifically detailed or approved by the structural engineer. Penetrations through walls when approved shall be built into the wall prior to concrete placement. Penetrations will not be allowed in footings or grade beams unless detailed. Piping shall be routed around footings and grade beams and unless detailed. Footings shall

f. Reinforcing Bars shall not be welded. Do not substitute reinforcing bars for DBAs or HSAs.

POST-INSTALLED ANCHORS

General Post-Installed Anchor Notes

a. Do not install adhesive anchors in concrete if less than 21 days old; do not install mechanical anchors, screw anchor or powder actuated anchors in concrete less than 7 days old. Contractor must obtain written approval from the engineer to install prior to these time periods. Do not apply full load to anchors

b. Anchors or adhesives specified in details shall be provided; alternative anchors or adhesives may be used if the contractor provides calculations demonstrating that the alternative can achieve the performance values of the specified product. These calculations, along with an ICC-ES ESR or IAPMO-UES ER approval for use in cracked concrete and compliant with the specified codes herein, must be

c. Follow all the manufacturer's recommendations and certification testing reports for anchor installation.

d. No anchor shall be installed within 1.5 anchor rod diameters of an abandoned hole that has been filled with non-shrink grout; increase distance to 3 anchor rod diameters when the abandoned hole has not

Strength Adhesives. Standard adhesives can be used in general applications when details reference the "Standard Adhesive Embedment Schedule" on sheet _____. High Strength adhesive groups will be specified for the particular application in the drawings and details. When a High Strength Adhesive is specified, the contractor has the option to use any of the adhesives in the High Strength group. When a Standard Adhesive is specified, the contractor has the option to use any of the adhesives in either group

i. Standard Adhesive Group for anchors in concrete includes the following adhesives:

1. SET-XP (ICC-ES ESR-2508) by Simpson Strong-Tie

3. AC100+ Gold (ICC-ES ESR-2582) by Dewalt 4. HIT-RE 100 (ICC-ES ESR-3829) by Hilti, Inc.

2. Pure 110+ (ICC-ES ESR-3298) by Dewalt

4. HIT-RE 500-V3 (ICC-ES ESR-3814) by Hilti Inc.

5. HIT-HY 200 (ICC-ES ESR-3187) by Hilti Inc. b. For anchors in grouted masonry, the adhesive shall be HIT-HY-200-A (ICC-ES ESR-3963) by Hilti Inc.,

Plastic mesh or stainless steel screen tubes shall be used.

e. Do not install adhesive anchor in wet or damp hole unless product is approved for such conditions without strength reduction. Do not install adhesive anchors if concrete temperature is below 50-degree F unless adhesive is approved for lower temperature without strength reduction. Refer to manufacturer's

prior to adhesive installation. All holes shall be drilled with ANSI standard bits designed for concrete. Diamond core drilled holes are not allowed unless indicated in specific details or approved by the

3. Mechanical Anchors

a. For concrete, the mechanical anchor shall be Kwik Bolt TZ2 (ICC-ES ESR-4266) by Hilti Inc., Strong-Bolt 2 (ICC-ES ESR-3037) by Simpson Strong-Tie Inc. or Power-Stud+ SD2 (ICC-ES ESR-2502) by Dewalt. Wedge-All (ICC-ES ESR-1396) by Simpson Strong-Tie or Strong-Bolt 2 (IAPMO-UES ER-240) by

4. Screw Anchors

a. For concrete and grouted masonry, the screw anchors shall be Titen HD (ICC-ES ESR-2713 for concrete only and ICC-ES ESR-1056 for grouted masonry) by Simpson Strong-Tie, or Screw-Bolt + (ICC-ER ESR-3889 for concrete only) by DeWalt, Screw-Bolt+ (ICC-ES ESR-4042 for grouted masonry) by Dewalt, or Kwik HUS-EZ (ICC-ES ESR-3027 for concrete only and ICC-ES ESR-3056 for grouted masonry) by Hilti

5. Powder Actuated Fasteners

a. For fasteners driven into steel (except at metal decks), concrete. or concrete over metal deck, the fastener shall be X-U P8 TH Universal Knurled Shank Fastener (ICC-ES ESR-2269) by Hilti Inc., PDPA (ICC-ES ESR-2138) by Simpson Strong-Tie Inc. or 8mm Head Spiral CSI Drive Pin (ICC-ES ESR-2024) by Dewalt.

MASONRY

a. Concrete Masonry Units (CMU) ASTM C90: Light weight (minimum net area unit strength of 2,000 ps $f'_{m} = 2,000 \text{ psi.}$

ASTM A496

e. Deformed Bar Anchors (DBA) f. Headed Stud Anchors (HSA)

hex nuts and ASTM F436 hardened washers

a. Typical reinforcement shall have a minimum coverage of one bar diameter over all the bars, but than 3/4". When masonry is exposed to soil, minimum coverage shall be 1.1/2". b. Joint reinforcement shall have not less than 5/8" mortar coverage from the exposed face.



GENERAL STRUCTURAL NOTES 801-355-5656 bhb@bhbengineers.com

CHECKED BY:

until concrete has reached 28-day compression strength.

submitted to the structural engineer prior to use.

See specific anchors below for more information.

been filled.

2. Adhesive Anchors

a. For anchors in concrete, the adhesives shall be divided into two groups: Standard Adhesives and High See below for the acceptable adhesives in each group.

2. Pure 50+ (ICC-ES ESR-3576) by Dewalt

ii. High Strength Adhesive Group for anchors in concrete includes the following adhesives:

1. SET-3G (ICC-ES ESR-4057) by Simpson Strong-Tie

3. AC200+ (ICC-ES ESR-4027) by Dewalt

HIT-HY-200-R (ICC-ES ESR-3963) by Hilti Inc., SET-XP (IAPMO UES ER-265) by Simpson Strong-Tie Inc. or AT-XP (IAPMO UES ER-281) by Simpson Strong-Tie Inc., AC100+ (ICC-ES ESR-3200) by

Dewalt or CIA GEL (ICC-ES ESR-1702) by USP. c. For anchors in ungrouted masonry, the adhesive shall be HIT-HY 270 (ICC-ES ESR-4143) by Hilti Inc., or SET (ICC-ES ESR-1772) by Simpson Strong-Tie Inc. or AC100+ (ICC-ES ESR-3200) by Dewalt.

 d. Adhesive shall be within the manufacturer's recommended lifetime and prior to expiration date. Do not use adhesive that has not been stored per manufacturer's recommendations or may have experienced freeze thaw cycles or extreme heat.

f. Follow all the manufacturer's recommendations and certification testing reports regarding hole cleaning

structural engineer prior to use.

b. For grouted masonry, the mechanical anchor shall be Kwik Bolt 3 (ICC-ES ESR-1385) by Hilti Inc., Simpson Strong-Tie or Power-Stud+ SD1 (ICC-ES ESR-2966) by Dewalt.

1. Materials, unless noted otherwise:

b. Mortar Cement ASTM C270: Use Type "S"

c. Masonry Grout ASTM C476: grout shall attain a minimum compressive strength of 2,500 psi at 28 da d. Reinforcing Steel ASTM 615 Grade 60 (Fy = 60 ksi)

ASTM A108 ASTM F1554, Grade 36 with ASTM A563 heavy g. Anchor Rods

2. Reinforcement shall have the following cover:

c. Corner Bars: Provide corner bars at intersecting wall corners using the same bar size and spacing as the horizontal wall reinforcing. Corner bars shall lap the horizontal reinforcing with the required lap splice length. See detail

d. Wall Openings: For unscheduled openings wider than 24", provide reinforcing on all sides per detail Also, for all scheduled openings, provide horizontal bar at bottom of opening per detail Vertical bars shall extend from floor level below to the floor, or roof level above. Horizontal bars for all openings shall extend a minimum of 48 bar diameters beyond the corners of the opening. Where a 48-bar diameter extension is not possible, extend bars as far beyond the opening as possible

and terminate the bar(s) with a 90-degree standard ACI hook. e. Horizontal wall reinforcing shall be continuous through joining concrete walls, masonry walls, columns, and pilasters. Provide a key between the wall and the column or pilaster. Horizontal wall reinforcing shall be placed inside the column vertical reinforcing.

f. Horizontal wall reinforcing shall terminate with a hook at edge of openings and at each side of control joints except at floor and roof levels, lintels, beams and at top of parapets. See details

g. All masonry column ties shall terminate with 135-degree hooks plus a 6-bar diameter extension (4"

4. Construction Requirements:

a. Masonry coursing shall be coordinated with the architectural drawings b. All units shall be laid with full mortar beds on the face shells. All head joints shall be filled solidly with mortar for a distance in from the face of the units not less than the thickness of the longitudinal face

shells. Cells which are to be grouted shall have full head joints. c. Masonry walls, beams and columns shall be constructed with running bond, unless noted otherwise. d. All cells containing reinforcement, embeds, anchor bolts, etc. shall be filled solid with grout. Grout shall be placed by mechanical vibration during placing and re-vibrated after excess moisture has been

absorbed but before workability is lost. Rodding of grout is not allowed. e. Where walls are not grouted solid, each grout pour shall terminate flush with the top of the uppermost unit except at cells with vertical reinforcing where the grout shall be 1.1/2" below top of unit to provide

f. Grout pours shall be limited to 5'-4" unless written approval is obtained from the engineer of record.

g. All walls below grade shall be grouted solid.

h. Vertical cells to be filled with grout shall have vertical alignment sufficient to maintain a clear, unobstructed vertical cell measuring not less than 2" by 3". All steel reinforcement shall be secured against displacement prior to grouting by wire positioners or other suitable devices at intervals not exceeding 200 bar diameters or 10 ft maximum, or at bar splice locations. Vertical reinforcing shall be located at the center of the wall unless noted otherwise

Reinforcing Bars shall not be welded. Do not substitute reinforcing bars for DBAs or HSAs. Control Joints: Spacing shall not exceed 30'-0". Control joints shall be not be placed any closer than 4'-0"

to edge of openings. Control joints shall not be placed in the middle of masonry piers. See architectural drawings for locations.

k. Grout all beam and joist pockets solid after installation of beams and joists. Embed channels and plates shall be placed so as to create a flush surface with the face of the wall.

m. Anchor bolts and headed stud anchors shall be set in a grouted cell. Anchor bolts and headed stud anchors shall have 1" grout surrounding the shank at its penetration. Grout shall be flush with the face or top of the masonry.

n. Pipes, conduits, and ducts shall not be placed in grouted cells without written approval from engineer. o. No aluminum conduit or product containing aluminum or any other material injurious to the masonry or grout shall be embedded in the masonry

p. Contractor shall coordinate placement of all openings, dowels, sleeves conduits, bolts, inserts and other embedded items prior to placing grout.

MASONRY VENEER

1. Masonry veneer shall be attached to steel stud walls with Dur-O-Wal DIA 213 seismic veneer anchors or Hohmann & Barnard DW-10 or DW-10HS seismic veneer anchors (or equal) spaced at 16" o.c. Veneer anchors shall be attached to studs with #10 corrosion resistant self-drilling screws. Attach the veneer to the anchors with Dur-O-Wal Seismic Steel Pintles or Hohmann & Barnard 3/16" Ø Byna-Tie with Seismiclips (or equal) spaced at a maximum of 16" o.c. in both directions. Anchor ties shall engage to a galvanized No. 9 gauge horizontal joint reinforcement wire in the veneer, which shall be continuous and shall be placed at 16" o.c. maximum at the center of the veneer. At walls with rigid insulation use Hohmann & Barnard X-SEAL

2. Masonry Veneer shall be attached to concrete walls with 22 gauge galvanized dovetail slots installed vertically in concrete at 16" o.c. Attach the veneer to dovetail slots with Dur-O-Wal 16 gage seismic dovetail anchor ties or Hohmann & Barnard 3/16"Ø Byna-Tie with Seismiclips (or equal) spaced at a maximum of 16" o.c. in both vertical and horizontal directions. Anchor ties shall engage to a galvanized No. 9 gauge horizontal joint reinforcement wire in the veneer, which shall be continuous and shall be placed at 16" o.c. maximum at the center of the veneer. Dovetail slots and anchor ties shall be galvanized. At walls with rigid insulation use Hohmann & Barnard 2-Seal Concrete Seal Tie veneer anchors.

3. Masonry veneer shall be attached to reinforced masonry walls with tri-rod ladder type reinforcement spaced at a maximum of 16" o.c. vertically consisting of 3-#9 gauge, galvanized, corrugated, wires. Veneer may also be attached with Dur-O-Wal D/A 3605 Seismic Ladur-Eye spaced a 16" o.c. maximum in both vertical and horizontal directions. . Anchor ties shall engage to a galvanized No. 9 gauge horizontal joint reinforcement wire in the veneer, which shall be continuous and shall be placed at 16" o.c. maximum at the center of the veneer. Anchors shall extend to the galvanized ladder type (2 - #9 wires) joint reinforcing in the masonry wall spaced at 16" o.c. maximum. At walls with rigid insulation use Hohmann & Barnard 2-Seal Concrete Seal Tie veneer anchors.

4. Other methods of attachment may be used after written acceptance by the architect and structural engineer.

5. Steel Lintels: Provide steel angle lintels at all openings through the masonry veneer. Provide 1" of bearing for each foot of width of opening with a minimum bearing of 6". See the "Veneer Lintel Schedule" on sheet for size. Steel lintel angles shall be galvanized at all exterior conditions where exposed to weather.

STRUCTURAL STEEL

Material:

a. Wide Flange Sections b. All Thread Rods, Other Shapes & Plates

c. Square or Rectangular HSS d. Deformed Bar Anchors (DBA) e. Headed Stud Anchors (HSA)

f. Non-Metallic Shrinkage Resistant Grout g. Anchor Rods Typical, uno

ASTM A992 (50 ksi) ASTM A36 (36 ksi)

ASTM A500 (50 ksi) Grade C or ASTM A1085 (50ksi) ASTM A496

ASTM A108 **ASTM C 1107**

> ASTM F1554, Grade 36, with ASTM A563 heavy hex nuts and ASTM F436 hardened washers Grade A

ASTM F3125 Grade A325 with ASTM A563 nuts and h. Bolted Connections: ASTM F436 hardened washers.

2. Fabrication and construction shall comply with the latest edition of the following Codes and Standards: a. American Institute of Steel Construction (AISC), "Specification for the Design, Fabrication and Erection of

Structural Steel for Buildings," with "Commentary". b. AISC "Code of Standard Practice" excluding the following: Section 3.2, Section 4.4, Section 4.4.1,

c. AISC "Specification for Structural Joints Using High-Strength Bolts"

d. American Welding Society (AWS), Structural Welding Code (specific items do not apply when they

conflict with the AISC requirements). e. AISC "Seismic Provision for Structural Steel Buildings"- ANSI/AISC 341 f. All exterior steel elements, including anchor rods and bolts shall be hot-dip galvanized in accordance

a. Field weld flags that have been put in these documents are for suggestion only. The contractor has the option to substitute shop welding for field welding or vice versa. The steel fabrication and steel erection

drawings must clearly distinguish between shop welds and field welds prior to any work being performed. b. Steel fabricators shall indicate the shop welds that are excluded from their bids. Steel erectors shall indicate the field welds that are excluded from their bids. It is the responsibility of the contractor to coordinate shop welding and field welding with the appropriate subcontractors.

c. All welding and cutting shall be performed by AWS certified welders. d. Use E-70 XX (58 ksi yield, 70 ksi tensile) unless noted otherwise. E60 XX may be used for welding steel

e. All intersecting steel shapes which are not bolted shall be connected by a fillet weld all around, unless noted otherwise. Where fillet weld sizes are not shown they shall be 1/16" less than the thinnest of the connected parts for thicknesses 1/4" and larger. Fillet welds on plates less than 1/4" shall be of the same size as the thinnest of the connected part.

f. Reinforcing Bars: Do not weld rebar. Do not substitute reinforcing bars for deformed bar anchors (DBAs), machine bolts, or headed stud anchors (HSAs).

g. Do not weld anchor bolts, including "tack" welds.

with ASTM A123 and A153 where applicable.

h. Headed Stud Anchors (HSAs) welding and deformed bar anchor welding shall conform to the manufacturer's specifications.

4. Bolted Connections:

a. Use bolts for steel-to-steel connections, as noted herein or as noted on the drawings. Bolts shall be used in connections for simple span framing and beam (or girder) to bearing plate connections. Tighten bolts

b. Use hardened washers beneath the turned element of all bolts or nuts. Use hardened beveled washers, to compensate for the lack of parallelism, where the outer face of the bolted parts has a slope greater than one in twenty with respect to the plane normal to the bolt axis. At oversized holes hardened

washers or plates shall conform with ASTM F-436 and shall completely cover the slot after installation. c. Where a steel-to-steel beam connection is not shown, provide a standard AISC framed connection for

one half the total uniform load capacity of the beam for the span and steel specified.

d. Bolts, nuts and washers shall not be reused.

5. Steel Lintels: Provide steel angle lintels at all openings through masonry veneer. Provide 1" of bearing for each foot of width of opening with a minimum bearing of 6". See the "Veneer Lintel Schedule" on sheet Sfor size. Steel lintel angles shall be galvanized at all exterior conditions where exposed to

6. Provide baseplate anchor rod connections to concrete elements that correlate with ACI 117. Circular or square washers are acceptable:

ANCHOR ROD	HOLE	WASHER	WASHER
DIAMETER	DIAMETER	SIZE	THICKNESS (MIN)
3/4"	1.5/16"	2"	1/4"
7/8"	1.9/16"	2.1/2"	5/16''
1"	1.7/8"	3"	3/8''
1.1/4"	2.1/8"	3.1/2"	1/2"
1.1/2"	2.3/8"	4"	1/2"
1.3/4"	2.7/8"	4.1/2"	5/8"
2"	3.1/4"	5"	3/4"
2.1/2"	3.3/4"	5.1/2"	7/8"

7. Provide full-depth web-stiffener plates at each side of all beams at all bearing points. Stiffener plates shall be the thickness called out below unless noted otherwise and shall be welded both sides with fillet welds all around:

FLANGE WIDTH	STIFFENER THICKNESS	WELD SIZE
Less than 8.1/4"	1/4"	3/16"
8.1/4" to 12.1/4"	3/8"	1/4"
12.1/4" to 16.1/2"	1/2"	5/16"
16.1/2" to 20.3/4"	5/8"	3/8"

COMPOSITE STEEL BEAMS

1. Headed Stud Anchors:

a. Headed stud anchors shall 3/4" diameter and shall extend 1.1/2" above the top of the steel deck after welding. Headed stud anchors shall be welded through the metal deck to the top flange of the steel section or welded directly to the steel section.

b. Anchors for composite steel beams are marked on the framing plans as "(x)". Locate anchors on composite steel beams (or segments of a beam) based on the following criteria:

i. The number inside the brackets indicates the quantity of headed studs for the beam or segment of beam. When only one set of brackets is indicated, the headed studs shall be spaced uniformly over the entire beam length. For multiple sets of brackets, the headed studs shall be spaced uniformly over the segment of a beam associated with that set of brackets. Beam segments are delineated by adjoining framing members.

For steel beams perpendicular to deck corrugations: Place anchors in bottom of deck flutes. Where the number of uniformly placed anchors requires more than 1 anchor per deck corrugation, the first row shall be a complete uniform row with the remainder of the anchors placed in a second row equally at each end of the beam/segment.

For steel beams parallel to deck corrugations: Place anchors uniformly along beam the entire beam length/segment. The minimum center-to-center spacing of anchors shall be 4.1/2". Where the number of uniformly placed anchors is spaced at less than 4.1/2" o.c., the first row shall be a complete uniform row at 4.1/2" o.c. with the remainder of the anchors placed in a second row equally at each end of the beam/segment.

Anchors shall be placed in a single row within 1/4" of the center of the steel beam web. Where two rows of anchors are required, provide 3" center-to-center spacing between rows of anchors transverse to the steel beam web.

v. The maximum center to center spacing shall not exceed 36".

Camber:

a. Specific composite beams shall be precambered at the mid span. c= x" on the plans denotes precamber dimension (upward) in inches.

b. Where a camber is not indicated at a steel beam, assume that c=0".

METAL DECKING

1. Steel deck shall comply with the latest requirements of the Steel Deck Institute.

2. All deck shall be 3-span continuous minimum. In areas where 3-span conditions are not possible, the contractor shall provide heavier gage deck as required to provide the equivalent loading of the deck under a three span condition.

3. Steel roof deck shall not be used to support loads from plumbing, HVAC ducts, light fixtures, architectural elements or equipment of any kind, unless specifically noted. Light weight suspended acoustical ceilings with a total weight of 50 lbs per attachment may be hung from roof deck. The hangers shall be staggered to distribute the loads over multiple deck flutes.

4. Conduits are permitted in composite deck slabs subject to local code requirements and fire rating considerations. Conduits other than electrical or communication conduits shall not be permitted. When conduits are installed in the slab, the diameter shall be the lesser of 1" or 1/3 times the depth of concrete cover over the metal deck.

a. No crossover of conduits shall occur

b. Conduit shall be spaced a minimum of 18" apart.

c. The minimum clearance between conduit and the metal deck shall be 1"

5. All deck supporting members shall be dry before welding.

6. Clinch seams before welding interlocking seams.

Steel Floor Deck

a. Steel floor deck shall be 3" deep X 20 gage minimum phosphatized/painted composite type "W" deck

with interlocking side seams with the following properties: <u>22 Gage</u> <u>20 Gage</u> <u>19 Gage</u> <u>18 Gage</u> <u>16 Gage</u> 0.410 0.528 0.652 0.768 0.966 0.736 0.907 1.067 1.213 1.516 Minimum I $(in^4/_{ff}) =$

Deck shall be galvanized (G60) when used below mechanical equipment rooms. b. Steel deck with 3.5" thick (6.5" overall) normal weight concrete slab shall have a minimum allowable diaphragm shear capacity of XXX lbs/ft for a X'-X" deck span.

c. Fasten deck to supporting framing members with powder-driven fasteners. Powder-driven fasteners shall be as indica

a	ated below based on the steel framing thicknesses:							
	Steel Framing Thickness Fastener		ICC-ESR or IAPMO report number					
	0.125" to 0.375"	Hilti X-HSN-24	ICC-ESR 2776					
	0.25" and up	Hilti X-ENP-19 L15	ICC-ESR 2776					
	0.113" to 0.155"	Pneutek SDK61075	ICC-ESR 2941					
	0.155" to 0.250"	Pneutek SDK63075	ICC-ESR 2941					
	0.188" to 0.312"	Pneutek K64062	ICC-ESR 2941					

d. Fasteners shall be placed at the following spacings (Closer spacings may be used to develop minimum shear requirements):

0.281" and up Pneutek K66062 ICC-ESR 2941

vi. 12" o.c. to supports perpendicular to deck corrugations (4 fasteners per 36" wide sheet). vii. 12" o.c. to all supports parallel to deck corrugations.

e. In lieu or mechanical fasteners, contractor may weld deck to supporting framing members with 3/4" diameter puddle welds at the same spacing for deck pins as indicated above.

f. Attach interlocking seams with one of the following. i. 3/16" Ø button punch at 18" o.c.

ii. 1.1/2" long top seam welds at 36" o.c. iii. Verco PunchLok II System at 36" o.c.,

iv. ASC DeltaGrip System at 36"o.c.

v. CSI Inter-Knek at 36" o.c. Closer spacing may be used to develop minimum shear requirements

g. Provide a 2" minimum bearing at supports

Steel Roof Deck

a. Steel roof deck shall be 1.1/2" deep X 20 gage minimum painted, type "B" wide rib deck with interlocking side seams with the following properties:

<u>22 Gage</u> <u>20 Gage</u> <u>18 Gage</u> <u>16 Gage</u> 0.188 0.237 0.331 0.410 Minimum S (in $^3/_{ft}$) = 0.192 0.231 0.306 0.381 Minimum I (in $^4/_{ft}$) =

b. Minimum allowable deck diaphragm shear values shall be XXX lbs/ft for a X'-X" deck span.

c. Maximum diaphragm flexibility factor shall be ______ for a _____deck span. d. Fasten deck to supporting framing members with powder-driven fasteners. Powder-driven fasteners shall

be as indicated below based on the steel framing thicknesses:					
	Steel Framing Thickness	Fastener	ICC-ESR or IAPMO report		
	0.405", 0.075"	LEIG W. LIONI O.4	number		
	0.125" to 0.375"	Hilti X-HSN-24	ICC-ESR 2776		
	0.25" and up	Hilti X-ENP-19 L15	ICC-ESR 2776		
	0.113" to 0.155"	Pneutek SDK61075	ICC-ESR 2941		
	0.155" to 0.250"	Pneutek SDK63075	ICC-ESR 2941		
	0.188" to 0.312"	Pneutek K64062	ICC-ESR 2941		
	0.281" and up	Pneutek K66062	ICC-ESR 2941		

e. Fasteners shall be placed at the following spacings (Closer spacings may be used to develop minimum

shear requirements): i. 6" o.c. to all supports perpendicular to deck corrugations (7 fasteners per 36" sheet).

ii. 6" o.c. to all supports parallel to deck corrugations. f. In lieu or mechanical fasteners, contractor may weld deck to supporting framing members with 3/4"

diameter puddle welds at the same spacing for deck pins as indicated above.

g. Attach interlocking seams with one of the following:

. 1.1/2" long top seam welds at_____ o.c. maximum Verco PunchLok II System at_____ o.c. maximum

ASC Delta Grip System at_____ o.c maximum

iv. CSI Inter-Knek System at ____ o.c maximum Closer spacing may be used to develop minimum shear requirements. A standard button punch can

not be used in place of Verco PunchLok, DeltaGrip or CSI Inter-Knek h. Provide a 2" minimum bearing and a 4" lap at the splice points.

COLD-FORMED STEEL AND SHEATHING

1. All cold-formed steel shall meet the requirements of "Specifications for the Design of Cold-Formed Steel Structural Members" by American Iron and Steel Institute (AISI).

2. All cold-formed steel connectors shall be provided by The Steel Network. If the contractor elects to substitute for another manufacturer, the contractor shall submit a revised connector list, prior to construction that includes the following information:

a. Specified connector indicated on these plans

b. Requested substitution connector c. Allowable capacity of the requested substitution connector

3. Light Gauge Steel Framing:

a. Galvanized steel shall meet the minimum requirements of ASTM A653 (Fy = 50 ksi) for 97 mil (12 gauge), 68 mil (14 gauge) and 54 mil (16 gauge). For 43 mil (18 gauge) and lighter galvanized steel shall meet and ASTM A653 (Fy = 33 ksi). Galvanized coatings must meet the ASTM A924.

b. Follow all manufacturers' recommendations for the use of these products.

c. Unless noted otherwise, all welded connections shall be done according to AWS standards.

d. All interior non-bearing steel-stud walls that extend above the ceiling but do not attach to the structure above shall be brace with diagonal metal-stud braces (45 degrees). The kl/r ratio of the brace shall not exceed 200 and shall not be spaced further apart than 10'-0" o.c. Connect diagonal braces to the top of the steel stud walls and to the top flange of the steel beams with two #10 tek screws minimum. Where a concrete deck occurs above, use two powder-driven fasteners per diagonal brace. Other approved methods may be used.

4. Steel Sheet Sheathing (Engineer note do not use if you don't have steel shearwalls) a. Steel sheets shall be of the following grade of structural quality steel: ASTM A1003, Grade 33, Type H

b. Steel sheets are permitted to be applied either parallel to or perpendicular to framing. c. Provide blocking at all panel edges.

d. Follow all manufacturer's recommendations for use of these products

5. Wood Sheathing (Engineer note do not use if you don't have wood shearwalls; do not use in non-

a. Wood sheathing shall meet the minimum performance criteria given in APA PRP-108, Performance Standards and Policies for Structural-Use Panels, Form E445, Voluntary Product Standard PS 1 & PS 2 and Performance Standard for Wood-Based Structural-Use Panels, Form S350, and Structural Plywood Form H860. Panels shall be unsanded plywood or oriented strand board (OSB) and shall be interior grade with exterior glue and have the minimum following thickness and span rating indicated in the "Sheathing Schedule at Roof and Floor" on sheet S-_____.

6. Prefabricated Systems: Submit complete shop drawings and calculations of all elements for review. Shop Drawings shall bear the stamp of a Professional Engineer registered in the same state as the project location.

> BHB STRUCTURAL Salt Lake City, Utah 84115 801-355-5656

GENERAL STRUCTURAL NOTES

bhb@bhbengineers.com

BHB PROJECT #:

architects

St

9

S

9

7

囯

CEN

CIMIC

0

AN

06

 Δ

STATEMENT OF SPECIAL INSPECTION AND QUALITY ASSURANCE

Special inspection and quality assurance (including structural testing), as required by section 1704 and 1705 of the 2018 IBC, shall be provided by an independent agency employed by the owner for the items in this section and other areas of the approved construction documents, unless waived by the building official. The names and credentials of the Special Inspectors to be used shall be submitted to the Building Official for approval.

Responsibilities of the Special Inspector

	Special Inspector shall review all work listed in the special inspection schedules herein
	for conformance with the approved construction plans, specifications and 2018 IBC.
	Testing and inspection reports shall be sent on a weekly basis to the architect,
	engineer, building official and contractor for review. All items not in compliance shall
	be brought to the immediate attention of the contractor for correction, and if
	uncorrected, to the architect, engineer and building official.
	Once corrections have been made by the contractor, the special inspector shall submit
	a final signed report to the building official stating that the work requiring special
	inspection was, to the best of the special inspector's knowledge, in conformance with
	the approved construction plans, specifications and 2018 IBC.
r	

Responsibilities of the Contractor

	···-
	the approved construction plans, specifications and 2018 IBC.
r	
	The contractor shall submit a written statement of responsibility to the owner and the building official prior to the commencement of work in accordance with 2018 IBC section 1704.4. This statement shall indicate that the contractor will coordinate and cooperate with the required inspections contained herein.
	The contractor shall notify the designated special inspector that work is ready for inspection at least 24 hours before said inspection is required.
	All work requiring special inspection shall remain open and accessible until it has bee observed by the special inspector and deemed acceptable through inspection report.
	Special inspection during fabrication is not required if the fabricator is registered and approved by the authority having jurisdiction to perform such work without special inspection. Upon completion of fabrication, the approved fabricator shall submit a certificate of compliance for submittal to the building official.
	The contractor shall be responsible for their own quality control including materials, fabrication, erection, etc.

SOILS CONSTRUCTION INSPECTIONS

	INSPECTION FF	REQUENCY		
ITEM FOR VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC	COMMENTS	
Site Preparation	-	x	Verify that the site has been prepared in accordance with the soils report prior to placement of prepared fill.	
Fill Material	х	-	Verify that the material being used, the maximum lift thickness and the in-place dry density of the compacted fill material comply with the soils report during placement and compaction of the fill material during placement and compaction.	
Continuous Footing Backfill: at least one test for each 40 linear feet or less of wall length, but no fewer than 2 tests.	-	х	At each compacted backfill layer.	
Spot Footing Backfill: Minimum of one compaction test for each lift for each spot footing.	-	х	At each compacted backfill layer.	

CONCRETE CONSTRUCTION INSPECTIONS

Concrete (2018 IBC Section 1705.3, Table 1705.3, and Section 1705.12) The following concrete elements	
require special inspection:	

ITEM FOR VERIFICATION & INCRECTION	INSPECTION FREQUENCY		CONANAENITO	
ITEM FOR VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC	COMMENTS	
Protection of concrete during cold and hot weather	•	X		
Verify materials used including use of the required mix design	ı	X	Verify mix design meets strength and exposur requirements listed on General Structural Notes	
Formwork	-	х	Verify shape, location and member dimensions	
Bolts installed in concrete	x	-	Inspection of anchors or embeds cast in concrete required when allowable loads have bee increased or where strength design is used. Prior to and during concrete placement.	
Embeds and Inserts installed in concrete	X	_	Prior to and during concrete placement.	
Concrete reinforcing steel placement –		x	Verify that reinforcing is of specified type, grace and size; that it is free of oil, dirt and rust; that it located and spaced properly; that hooks, bend ties, stirrups and supplemental reinforcement as placed correctly; that lap lengths, stagger are offsets are provided; and that all mechanic connections are installed per the manufacturer instructions and/or evaluation report.	
			Cylinders, slump, temperature and air-entrainme shall be done for every 150 cubic yards or each	

day's production if the day's production is less than 150 cubic yards nor less than once for each 5000 sq.

ft of surface area for slabs and walls.

STEEL BOLTED CONSTRUCTION INSPECTIONS

Where special inspections are listed under "Random Basis", special inspection of elements and items shall be performed on a random basis. Operations need not be delayed pending these inspections. Where special inspection items are listed under "Every Element", special inspection shall be performed for each element, joint, or member, as applicable based on

High Strength bolted connections (2018 IBC section 1705.2.1, section 1705.12.1 and section 1705.13.1 and AISC 360-16 Chapter N and AISC 341-16 Chapter J)

and AISC 360-16 Chapter N and AISC	INSPECTION INSPECTION IN INSPE	 	1
ITEM FOR VERIFICATION & INSPECTION	Every Random		COMMENTS
	Element	Basis	352
Inspection Tasks Prior to Bolting			
Manufacturer's certifications available for fastener materials	X	-	
Fasteners	-	X	Marked in accordance with ASTM requirements
Proper fasteners selected for the joint detail	-	х	Including grade, type, bolt length if threads are to be excluded from shear plane.
Proper bolting procedure selected for joint detail	-	х	
Connecting elements	-	x	Including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements
Pre-installation verification testing by installation personnel observed and documented for fastener assemblies and methods used	-	x	Not required if only snug-tight joints are specified per [Section N5.6(1) of AISC 360-16])
Proper storage	-	Х	Storage provided for bolts, nuts, washers and other fastener components
Inspection Tasks During Bolting			
Fastener assemblies, of suitable condition	-	х	Verify that fasteners placed in all holes and washers (if required) are positioned as required.
Joint	-	X	Verify that joint brought to the snug-tight condition (min) unless noted otherwise.
Fastener component	-	X	Verify that fastener component not turned by the wrench prevented from rotating
Pretensioned Fasteners	-	X	Verify that pretensioned fasteners are pretensioned in accordance with the RCSC <i>Specification</i> , progressing systematically from the most rigid point toward the free edges (Not required if only snug-tight joints are specified per [Section N5.6(1) of AISC 360-16]; Not required for pretensioned joints using turn-of-the-nut method with match-marking, direct-tension-indicators or twist-off type tension control bolt methods)
Inspection Tasks After Bolting			
Document acceptance or rejection of each bolted connection	X	-	

STEEL WELDED CONSTRUCTION INSPECTIONS

on a random basis. Operations need not b under "Every Element", special inspection the task listed below.	e delayed pen shall be perfo	ding these ins rmed for each	spection of elements and items shall be per spections. Where special inspection items a n element, joint, or member, as applicable b
		section 170	05.12.1 and section 1705.13.1 and AIS
16 Chapter N and AISC 341-16 Chap	inspecti	ON DI AN	
ITEM FOR VERIFICATION & INSPECTION	Every Element	Random Basis	COMMENTS
Inspection Tasks Prior to Welding			
Welding procedures specifications and manufacturer certifications for welding consumables shall be available	X	-	Welding procedures shall be submitted Engineer of Record for review.
Material identification (type/grade)	-	X	
Welder identification system	-	х	Verify there is a system in place to ider welder who has welded a joint or member
Fit-up of groove welds	-	x	Including joint geometry, joint prep dimensions, cleanliness, tacking and back and fit.
Configuration and finish of access holes	-	X	
Fit-up of fillet welds	-	x	Including alignment, gaps at root, dim cleanliness and tacking.
Check welding equipment	-	х	
Inspection Tasks During Welding			
Use of qualified welders	-	X	
Control and handling of welding consumables	-	х	Including packaging and exposure contro
Cracked tack welds	-	X	Verify no welding over cracked tack weld
Environmental conditions	-	х	Including wind speed within limi precipitation and temperature
WPS followed	-	x	Including settings on welding equipmen speed, selected welding materials, shiel type/flow rate, preheat applied, itemperature (min./max.) maintained, position (F, V, H, OH)
Welding techniques	-	x	Including interpass and final cleaning, ea within profile limitations, each pass meet requirements
Inspection Tasks After Welding			
Welds cleaned	-	X	
Size, length and location of welds	х	_	
Welds meet visual acceptance criteria	Х	-	Including crack prohibition, weld/bar fusion, crater cross section, weld profil size, undercut and porosity.
Arc strikes, k-area, weld access holes for flanges greater than 2", backing removed and weld tabs removed (if required), repair activities	Х	-	When welding of doubler plates, complates, or stiffeners has been performed area, visually inspect the web k-area for within 3" of the weld.

MISCELLANEOUS STEEL CONSTRUCTION INSPECTIONS

Ultrasonic testing (UT) for complete-

joint-penetration (CJP) groove welds,

partial penetration groove welds when

used in column splices, and welds

Document acceptance or rejection of

each welded joint or member

subject to fatigue

Structural Welding of Composite Construction (2018 IBC section 1705.2 and section 1705.12.1 and section 1705.13.1 and AISC 360-16 Chapter N and AISC 341-16 Chapter J)					
ITEM FOR VERIFICATION &	INSPECTION FREQUENCY		CONANAENTS		
INSPECTION	CONTINUOUS	PERIODIC	COMMENTS		
Placement and installation of steel headed stud anchors (HSA)	X -		Inspection of steel elements of composite construction prior to concrete placement fo each welded joint or member.		
Metal Deck Construction (2018 IB	C section 1705	5.2.2, AWS D	1.3, and section 6.1 of SDI QA/QC-2011)		
ITEM FOR VERIFICATION &	INSPECTION	FREQUENCY	COMMENTS		
INSPECTION	CONTINUOUS	PERIODIC	- COMMENTS		
Material verification of metal deck(s)	•	x	Confirm that identification markings are provided that conform to applicable ASTM standard specified on construction documents		
Placement and installation of metal deck	•	x	Confirm that the deck is installed per the approved construction documents, installation drawings, shop drawings and applicable reference standards.		
Steel deck welding/fastening (prior to concrete placement at floor)	-	x	Visual inspection is required to verify size and spacing of welds/fasteners for deck attachmen to the supporting structure. Also verify spacing and size of side-seam attachments. Confirm that welds/fasteners meet acceptance criteria of applicable referenced standards and manufacturer's instructions. Where applicable welder qualifications should be verified.		

and corner joints, in material 5/16" thick or

greater. For materials less than 5/16" thick,

ultrasonic testing is not required. The UT rate

must be increased to 100% if the rejection rate

exceeds 5% of the welds tested. See Sections

N5.5d and N5.5f for more information. (

MASONRY CONSTRUCTION INSPECTIONS

ONS	MASONRY CONSTRUCTION	N INSPECT	TIONS		
	Prior to Construction (2018 IBC se	ction 1705.4 a	nd TMS 602	Table 3)	
nspection of elements and items shall be performed aspections. Where special inspection items are listed the element, joint, or member, as applicable based on	ITEM FOR VERIFICATION			COMMENTS	
705.12.1 and section 1705.13.1 and AISC 360-	Verification of compliance of submittals	Verify that materials conform to the requirements of the approved submittals Mix design, test results, material certificates, and construction procedures should be submitted for review.			
	Verification of f'm	Verify that materials conform to the requirements of the approved construdocuments.			
COMMENTS	Verification of material certificates, mix designs, and test results	Mortar mix designs shall conform to ASTM C 270 while grout shall conform to ASTM C 476. Material certificates shall be provided for the reinforcement; anchors, ties, fasteners, and metal accessories; maso mortar and grout materials. Construction procedures for cold-weather			
Welding procedures shall be submitted to the Engineer of Record for review.	As management and having /3	weather constr			
Engineer of Record for Feview.	As masonry construction begins (2	INSPECTION		d TMS 602 Table 4)	
	ITEM FOR VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC	COMMENTS	
Verify there is a system in place to identify the welder who has welded a joint or member.	Proportions of site-prepared mortar, construction of mortar	-	X		
Including joint geometry, joint preparation, dimensions, cleanliness, tacking and backing type	Grade, type and size of reinforcement, connector, and anchors	-	х		
Including alignment, gaps at root, dimensions, cleanliness and tacking.	Sample wall panel construction			Use materials and procedures accepted for the Work to create a minimum sample panel size of 4 ft by 4 ft. The acceptable standard for the Work is established by the accepted panel and retained at the project site until Work has been accepted.	
	Prior to grouting and during cons	struction - Str	uctural Mas	onry shall have Level 2 special inspection	
	(2018 IBC section 1705.4 and TMS	602 Table 4)			
	ITEM FOR VERIFICATION & INSPECTION	INSPECTION	FREQUENCY	COMMENTS	
	TIEW FOR VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC	COMMENTS	
Including packaging and exposure control	Grout Space	-	Х	Verify grout space is clean prior to grouting	
Verify no welding over cracked tack welds. Including wind speed within limits and	Placement, grade, type and size of reinforcement, connectors and anchor bolts and anchorages	-	X		
precipitation and temperature	Proportions of site-prepared grout	-	Х		
Including settings on welding equipment, travel speed, selected welding materials, shielding gas type/flow rate, preheat applied, interpass	Materials and procedures with the approved submittals	-	Х		
temperature (min./max.) maintained, proper position (F, V, H, OH)	Placement of masonry units and mortar joint construction	-	X		
Including interpass and final cleaning, each pass	Size and location of structural members	-	X		
within profile limitations, each pass meets quality requirements	Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction	-	X		
	Protection of masonry during cold weather (below 40 deg F) and hot weather (above 90 deg F)		x		
Including crack prohibition, weld/base-metal fusion, crater cross section, weld profiles, weld size, undercut and porosity. When welding of doubler plates, continuity plates or stiffeners has been performed in the king.	Grout placement (including verification of Slump flow and Visual Stability Index (VSI) when self-consolidating grout is delivered to the project site.)	x	-		
plates, or stiffeners has been performed in the karea, visually inspect the web karea for cracks within 3" of the weld.	Observe preparation of grout specimens, mortar specimens and/or prisms	-	х	The contractor has the option of using the "Prism Test Method" per ACI 530.1/ASCE 6/TMS 602 in lieu of the "Unit Strength Method."	
Perform UT on 10% of welds subject to transversely applied tension loading in butt, T-					

COLD FORMED STEEL CONSTRUCTION INSPECTIONS

	ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
		CONTINUOUS	PERIODIC	COMMENTS
	Cold-formed steel framing (2018 II	3C Sections 17	05.11.2 and	1705.12.3)
	All diaphragms and shear walls with fastener spacing of 4 inches or less o/c.	•	X	Verify screw attachment, bolting, anchoring and other fastening of components within the seismic-force resisting system, including struts, braces and hold downs.

POST-INSTALLED ANCHOR INSPECTIONS

ITEM FOR VERIFICATION &	INSPECTION FREQUENCY		COMMENTS					
INSPECTION	CONTINUOUS	PERIODIC	COMMENTS					
Post-Installed Anchors and Reinforcing Bars (2018 IBC Section 1705.1.1)								
Adhesive Anchors and Reinforcing Bars	X	-	Special inspection shall be performed permanufacturer's requirements and approved ICC-ES reports noted in POST-INSTALLED ANCHOR section of the General Structural Notes prior to installation of epoxy and anchor rod. If the anchor is not installed in a horizontal, upwardly inclined or overhead orientation meant to resist sustained tension loads special inspection may be reduced to a periodic frequency.					
Mechanical Anchors and Screw Anchors	-	x	Special inspection shall be provided pe manufacturer's requirements and approved ICC-Es reports noted in POST-INSTALLED ANCHOR section o the General Structural Notes prior to installation o mechanical or screw anchor.					



bhb@bhbengineers.com

INSPECTION NOTES

architects

/est

design

CENTER

CIVIC

OGAN

Concrete placement and samples

CENTER

West | architects

design

CIVIC LOGAN CITY **ORTH**

INSPECTION NOTES

BLANK LEGENDS

NOTES

INDICATES PLYWOOD ROOF SHEATHING,

INDICATES MASONRY WALL (AND TYPE)

SCHEDULES ON SHEET(S) S-601 S-602

INDICATES MASONRY WALL TYPE, SEE

INDICATES METAL STUD WALL (AND TYPE)

SCHEDULES ON SHEET(S) S-601 S-603

INDICATES MASONRY WALL TYPE, SEE

INDICATES CONCRETE FOUNDATION WALL

SEE SCHEDULE ON SHEET

CW-x/MW-x > OVER CONCRETE WALL (AND TYPE), SÉE

CW-x/MSW-x OVER CONCRETE WALL (AND TYPE), SEE

TYPE, SEE SCHEDULE ON SHEET S-601

MW-x SCHEDULE ON SHEET S-602

INDICATES MASON.... SCHEDULE ON SHEET S-602

SECTION MARK

SHEET NUMBER

FOOTING DESIGNATION

TOP OF FOOTING ELEVATION

WEIGHT OF UNIT

WALLS STOP AT DECK

WALLS STOP AT DECK

DEPRESS FOUNDATION WALL AND POUR SLAB OVER. SEE DETAIL 7/S-501

____ INDICATES STRUCTURAL WALL ABOVE.

SCHEDULE ON SHEET S-601

ON SHEET S-601

KSF

LLH

LLV

LSH

LSV

MAS

MAX

MCJ

MC-x

MECH

MFR

MIN

MISC

ML-x

O.F.

OPNG

OPP

PAF

PCF

PSF

REINF

REQD

R.D.

RTU

SCW

SC-x

SCP-x

SHT

SIM

SMU SOG

SQ

SRE

STD

STL

STR

T&B TEMP

THDS

T.O.

STAG

INDICATES ROOF DRAIN, SEE DETAIL

INDICATES CONCRETE WALL. DASHED

INDICATES MASONRY WALL. DASHED

INDICATES CONTINUOUS FOOTING. SEE

INDICATES SPOT FOOTING. SEE SCHEDULE

INDICATES MASONRY LINTEL TYPE. SEE SCHEDULE ON SHEET S-602

INDICATES MASONRY PIER TYPE. SEE

KIP(S) = 1000 POUNDS

KIPS PER LINEAL FOOT

KIPS PER SQUARE FOOT

LONG LEG HORIZONTAL

LONG SIDE HORIZONTAL

MASONRY CONTROL JOINT

MASONRY COLUMN MARK

LONG LEG VERTICAL

LONG SIDE VERTICAL

LINEAL FOOT

MASONRY

MAXIMUM

MECHANICAL

MINIMUM

MANUFACTURER

MISCELLANEOUS

MASONRY LINTEL

MASONRY PIER

MASONRY WALL METAL STUD WALL

NOT IN CONTRACT

NOT TO SCALE

OUTSIDE FACE

POWDER-ACTUATED FASTENER

POUNDS PER CUBIC FOOT

POUNDS PER LINEAL FOOT

POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH

ON CENTER

OPENING

OPPOSITE

REINFORCING

ROOF DRAIN

ROOF TOP UNITS

STEEL BASE PLATE MARK

SEISMIC CRITICAL WELD

STEEL CAP PLATE MARK

SUSPENDED MECHANICAL UNITS

SEISMIC RESISTING ELEMENT

STEEL COLUMN MARK

SPECIAL INSPECTION

SLAB-ON-GRADE

SIMILAR

SQUARE

STAGGERED

STANDARD

STRUCTURAL

SELF TAPPING SCREWS

TOP AND BOTTOM

TEMPERATURE

THREADS

TOP OF

STEEL

REQUIRED

SCHEDULE ON SHEET S-602

RTU INDICATES ROOF MECHANICAL UNIT AND

sign **a**

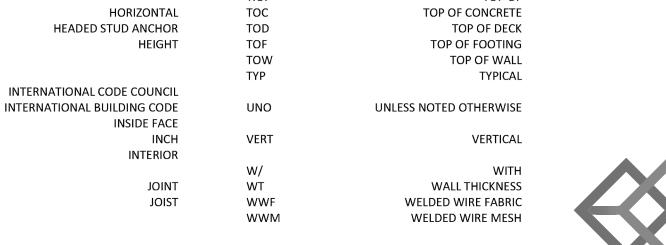
0

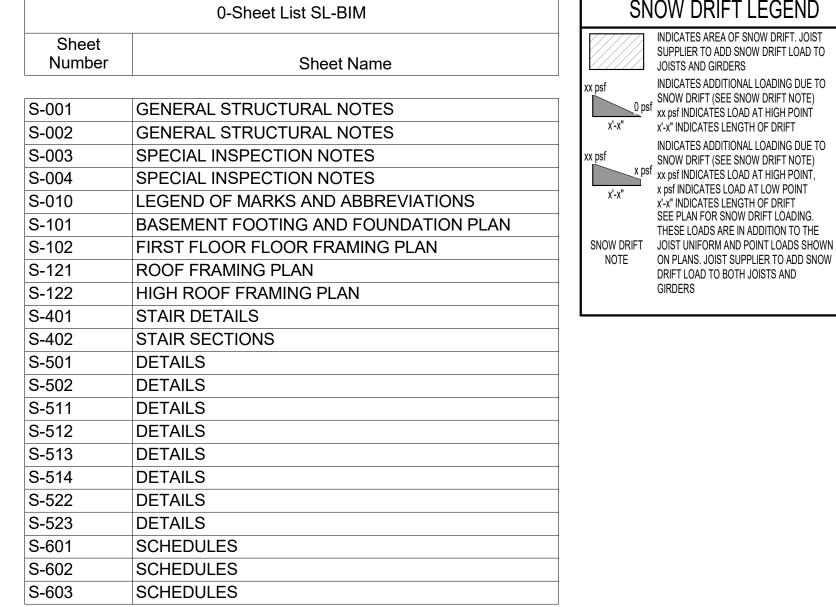
CENTER CIVIC CITY OGAN

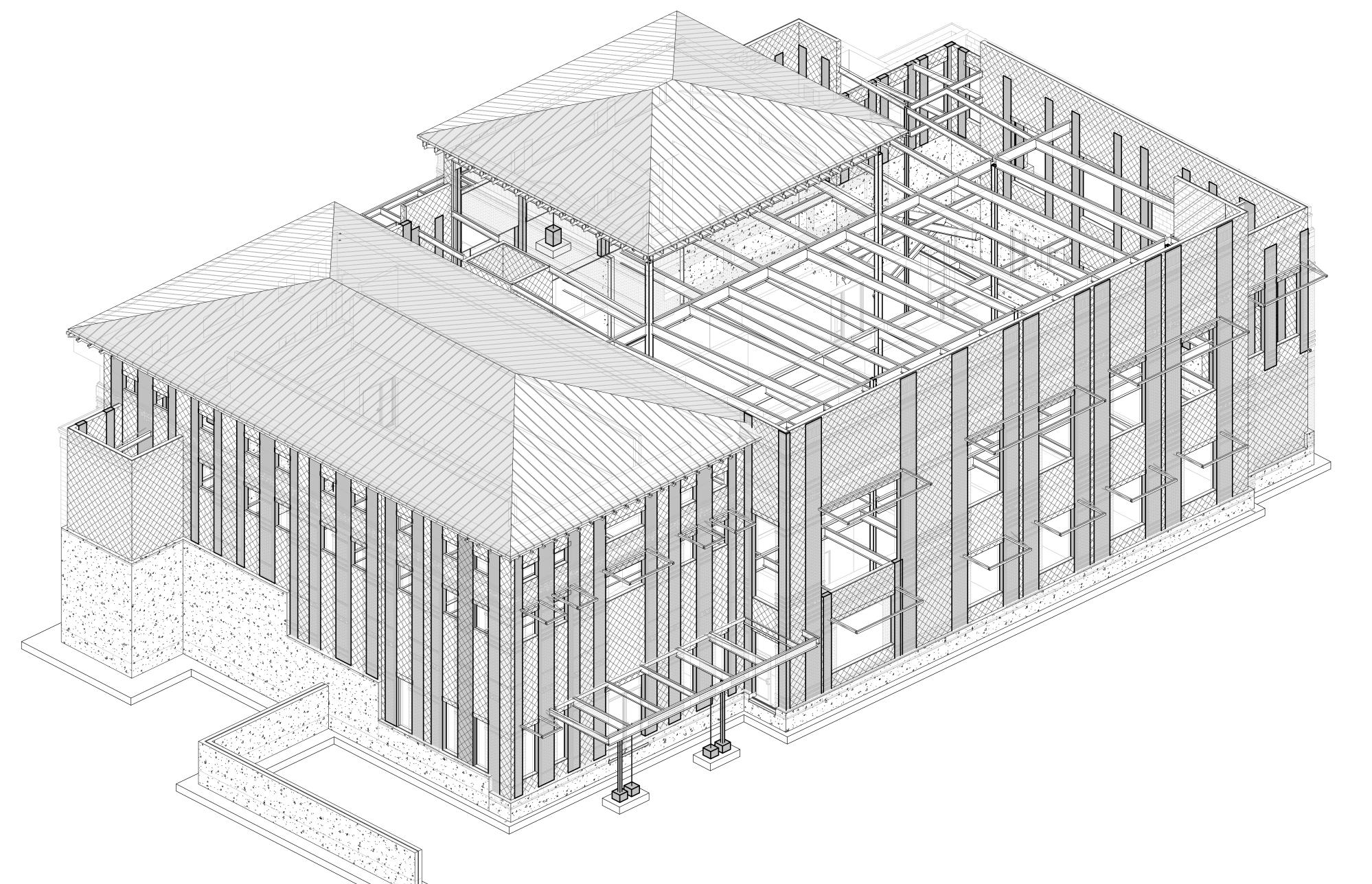
 Δ

BHB PROJECT #

LEGEND OF MARKS AND ABBREVIATIONS







FCx.x FSx.x MP-x **LEGEND OF MARKS AND ABBREVIATIONS** ANCHOR BOLT(S) ABV ABOVE ALT ALTERNATE APPROX APPROXIMATE ARCH ARCHITECT(URAL) BLDG BUILDING BLW BELOW BM BEAM BOT BOTTOM BRG BEARING BTWN BETWEEN CC. **CENTER-TO CENTER** C.J. CONST/CONTROL JOINT CJP COMPLETE JOINT PENETRATION GROOVE WELD (FULL PEN WELD) CMU CONCRETE MASONRY UNIT COL COLUMN CONCRETE CONST CONSTRUCTION CP-x CONCRETE PIER CTR CENTER CW-x CONCRETE WALL DECK BEARING DEFORMED BAR ANCHOR DECK BEARING ELEVATION DOUBLE DETAIL DIAMETER DIMENSION DOWN DRAWING DOWEL EACH **EACH FACE EXPANSION JOINT** E.J. ELEC ELECTRICAL ELEV ELEVATION E.O.D. EDGE OF DECK E.O.S. EDGE OF SLAB EQUIP EQUIPMENT EQ EQUAL E.W. **EACH WAY** EXST EXISTING EXP EXPANSION EXT **EXTERIOR** CONTINUOUS FOOTING MARK FC-x F.D. FLOOR DRAIN FDN FOUNDATION F.F. FINISHED FLOOR FR-x RECTANGULAR FOOTING SQUARE FOOTING MARK FS-x FOOT FTG FOOTING FTS-x THICKENED SLAB MARK GΑ GAUGE GALV GALVANIZED GSN GENERAL STRUCTURAL NOTES HORIZ HORIZONTAL

SNOW DRIFT LEGEND

JOISTS AND GIRDERS

INDICATES AREA OF SNOW DRIFT. JOIST

SUPPLIER TO ADD SNOW DRIFT LOAD TO

INDICATES ADDITIONAL LOADING DUE TO

INDICATES ADDITIONAL LOADING DUE TO

SNOW DRIFT (SEE SNOW DRIFT NOTE)

 $^{
m sf}$ XX psf INDICATES LOAD AT HIGH POINT,

x'-x" INDICATES LENGTH OF DRIFT

DRIFT LOAD TO BOTH JOISTS AND

NOTE ON PLANS. JOIST SUPPLIER TO ADD SNOW

GIRDERS

x psf INDICATES LOAD AT LOW POINT

SEE PLAN FOR SNOW DRIFT LOADING.

THESE LOADS ARE IN ADDITION TO THE

SNOW DRIFT (SEE SNOW DRIFT NOTE)

xx psf INDICATES LOAD AT HIGH POINT

x'-x" INDICATES LENGTH OF DRIFT

BHB STRUCTURAL Salt Lake City, Utah 84115

HSA

801-355-5656 bhb@bhbengineers.com

FOOTING AND FOUNDATION PLAN NOTES

- COORDINATE LOCATION OF DEPRESSED SLABS, SLOPED SLABS, AND FLOOR DRAINS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
 SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR EXTERIOR CONCRETE WORK AT DOORS, SIDEWALKS,

- ALL SPOT FOOTINGS SHALL BE CENTERED UNDER COLUMNS (UNO).
 SEE DETAILS 1/S-501 AND 2/S-501 FOR CONDITION WHERE BURIED PIPES RUN PARALLEL AND PERPENDICULAR TO FOOTINGS.
- SEE DETAIL 6/S-501 FOR TYPICAL CONTROL/CONSTRUCTION JOINTS IN CONCRETE SLAB ON GRADE.
 SEE DETAIL 7/S-501 FOR SLAB REINFORCING WHERE CONTROL JOINTS ARE DISCONTINUOUS.
- 9. SEE DETAIL 10/S-501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN MASONRY WALLS.
- 10. SEE DETAIL 12/S-501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN CONCRETE WALLS. 11. SEE DETAIL 5/S501 FOR CONDITION AT RECESSES IN MASONRY WALLS.
- 12. SEE DETAIL 9/S-501 FOR TYPICAL CONTROL JOINTS IN MASONRY WALLS.
- 13. SEE DETAIL 13/S-501 FOR TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALLS. 14. SEE DETAIL 5/S-502 FOR ANCHORAGE OF HOUSEKEEPING PADS.

15. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL STEEL COLUMNS.16. FIELD VERIFY ALL OF FOOTING ELEVATIONS WITH FINISHING GRADES. ALL EXTERIOR FOOTINGS TO HAVE

CIVIC CENTER ORTH LOGAN CITY

West | architects

design

BASEMENT FOOTING AND FOUNDATION PLAN

S-101

BHB STRUCTURAL 2766 South Main Street Salt Lake City, Utah 84115 801-355-5656 bhb@bhbengineers.com

. VERIFY ALL FLOOR OPENINGS FOR MECHANICAL SHAFTS, STAIRS, ETC. WITH ARCHITECTURAL AND

MECHANICAL DRAWINGS.

2. ALL JOIST SHALL HAVE 5" DEEP BEARING ENDS (UNO).

3. ALL JOIST GIRDERS SHALL HAVE 7.1/2" DEEP BEARING ENDS (UNO).

4. SEE DETAILS 1/S-51 FOR FRAMING AROUND ALL OPENINGS.

SEE DETAIL 1/S-512 FOR STEEL BRACE DETAIL CONNECTIONS AND LOCATIONS. 6. OPEN WEB STEEL JOIST AND JOIST GIRDERS SHALL BE DESIGNED BY THE MANUFACTURER TO SUPPORT THE MECHANICAL AND LATERAL LOADS SHOWN ON THE FLOOR FRAMING PLANS IN ADDITION TO THE

COORDINATE SIZE AND LOCATION OF ALL MECHANICAL OPENINGS WITH ARCHITECTURAL AND MECHANICAL

B. WHERE DIAGONAL BRIDGING CONFLICTS WITH MECHANICAL DUCTS, REMOVE DIAGONAL BRIDGING AND REPLACE WITH HORIZONTAL BRIDGING AFTER ROOF DECK IS IN PLACE.

SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL STEEL COLUMNS.

. COORDINATE LOCATION OF DEPRESSED SLABS, SLOPED SLABS, AND FLOOR DRAINS WITH

ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR EXTERIOR CONCRETE WORK AT DOORS, SIDEWALKS, ETC.
3. SEE ARCHITECTURAL DRAWINGS FOR CONTROL JOINT LOCATIONS.

. SEE "EARTHWORK" NOTES ON SHEET S-001 AND DETAIL 3/S-502 FOR MINIMUM FILL REQUIRED BENEATH

5. ALL SPOT FOOTINGS SHALL BE CENTERED UNDER COLUMNS (UNO).
6. SEE DETAILS 1/S-501 AND 2/S-501 FOR CONDITION WHERE BURIED PIPES RUN PARALLEL AND

PERPENDICULAR TO FOOTINGS.

. SEE DETAIL 7/S-501 FOR SLAB REINFORCING WHERE CONTROL JOINTS ARE DISCONTINUOUS. . SEE DETAIL 10/S-501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN MASONRY WALLS.

1. SEE DETAIL 5/S501 FOR CONDITION AT RECESSES IN MASONRY WALLS.

13. SEE DETAIL 13/S-501 FOR TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALLS. 14. SEE DETAIL 5/S-502 FOR ANCHORAGE OF HOUSEKEEPING PADS.

16. FIELD VERIFY ALL OF FOOTING ELEVATIONS WITH FINISHING GRADES. ALL EXTERIOR FOOTINGS TO HAVE MINIMUM FROST COVER PER THE GENERAL STRUCTURAL NOTES.

FOOTING AND FOUNDATION PLAN NOTES

SEE DETAIL 6/S-501 FOR TYPICAL CONTROL/CONSTRUCTION JOINTS IN CONCRETE SLAB ON GRADE.

10. SEE DETAIL 12/S-501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN CONCRETE WALLS.

12. SEE DETAIL 9/S-501 FOR TYPICAL CONTROL JOINTS IN MASONRY WALLS.

15. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL STEEL COLUMNS.

DRTH LOGAN CITY

West | architects

design

CENTER

CIVIC

FIRST FLOOR FLOOR FRAMING PLAN

BHB STRUCTURAL

Salt Lake City, Utah 84115 801-355-5656 bhb@bhbengineers.com

ROOF FRAMING PLAN NOTES

. VERIFY ALL ROOF OPENINGS FOR MECHANICAL SHAFTS, DRAINS, ETC. WITH ARCHITECTURAL AND

ALL JOISTS SHALL HAVE 5" DEEP BEARING ENDS (UNO).
 ALL JOIST GIRDERS SHALL HAVE 7.1/2" DEEP BEARING ENDS (UNO).
 ALL ROOF OPENINGS GREATER THAN, OR EQUAL TO, 12" x 12" SHALL BE FRAMED AS INDICATED IN DETAILS4/S-522 AND 5/S-522. FOR OPENINGS WHICH CUT LESS THAN TWO DECK FLUTES, SEE DETAIL

6. SEE DETAIL 7/S-522 WHEN MECHANICAL UNITS ARE HUNG BELOW BEAM. Y. VERIFY SIZE, WEIGHT, AND LOCATION OF ALL ROOF TOP MECHANICAL UNITS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. SEE DETAIL 8/S-522 FOR STEEL FRAMES AT ALL ROOF TOP EQUIPMENT.

COORDINATE OPENINGS WITH MECHANICAL, ELECTRICAL, AND GENERAL CONTRACTORS.

8. JOIST SUPPLIER SHALL DESIGN ALL ROOF JOIST BEARING ENDS AT WALLS TO TRANSFER {_____}}lbs (ALLOWABLE) AXIAL LOAD THROUGH JOIST BEARING ENDS.

9. SEE ARCHITECTURAL PLANS FOR DIMENSIONS TO ALL STEEL COLUMNS.

CIVIC CENTER ORTH LOGAN CITY

West | architects

design

BHB PROJECT #: DRAWN BY:

ROOF FRAMING PLAN

BHB STRUCTURAL 2766 South Main Street Salt Lake City, Utah 84115 801-355-5656

bhb@bhbengineers.com

ROOF FRAMING PLAN NOTES

I. VERIFY ALL ROOF OPENINGS FOR MECHANICAL SHAFTS, DRAINS, ETC. WITH ARCHITECTURAL AND

2. ALL JOISTS SHALL HAVE 5" DEEP BEARING ENDS (UNO).

3. ALL JOIST GIRDERS SHALL HAVE 7.1/2" DEEP BEARING ENDS (UNO).

4. ALL ROOF OPENINGS GREATER THAN, OR EQUAL TO, 12" x 12" SHALL BE FRAMED AS INDICATED IN DETAILS4/S-522 AND 5/S-522. FOR OPENINGS WHICH CUT LESS THAN TWO DECK FLUTES, SEE DETAIL

5. SEE DETAIL 1/S-512 FOR STEEL BRACE DETAIL CONNECTIONS AND LOCATIONS.

AND MECHANICAL DRAWINGS. SEE DETAIL 8/S-522 FOR STEEL FRAMES AT ALL ROOF TOP EQUIPMENT. COORDINATE OPENINGS WITH MECHANICAL, ELECTRICAL, AND GENERAL CONTRACTORS. B. JOIST SUPPLIER SHALL DESIGN ALL ROOF JOIST BEARING ENDS AT WALLS TO TRANSFER {_____}lbs

(ALLOWABLE) AXIAL LOAD THROUGH JOIST BEARING ENDS.
9. SEE ARCHITECTURAL PLANS FOR DIMENSIONS TO ALL STEEL COLUMNS.

CIVIC CENTER ORTH LOGAN CITY

architects

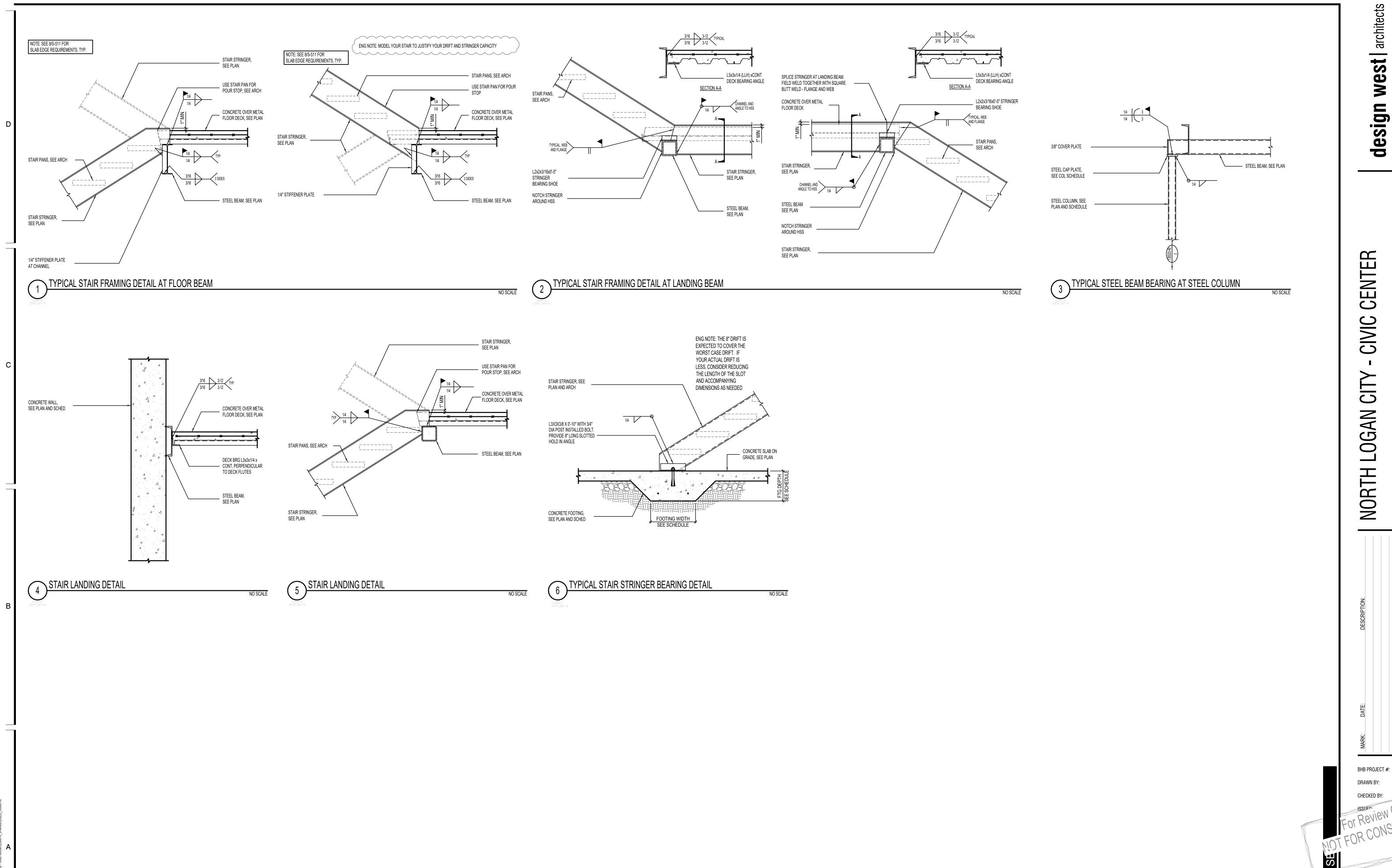
west

design

LOGAN UT 84321 AKE CITY UT 84103

HIGH ROOF FRAMING PLAN

BHB STRUCTURAL 2766 South Main Street Salt Lake City, Utah 84115 801-355-5656 bhb@bhbengineers.com



BHB PROJECT #: 220074

DRAWN BY: Author

CHECKED BY: Checker

ISSHIPP. ON 03/30/2022

FOR CONSTRUCTION

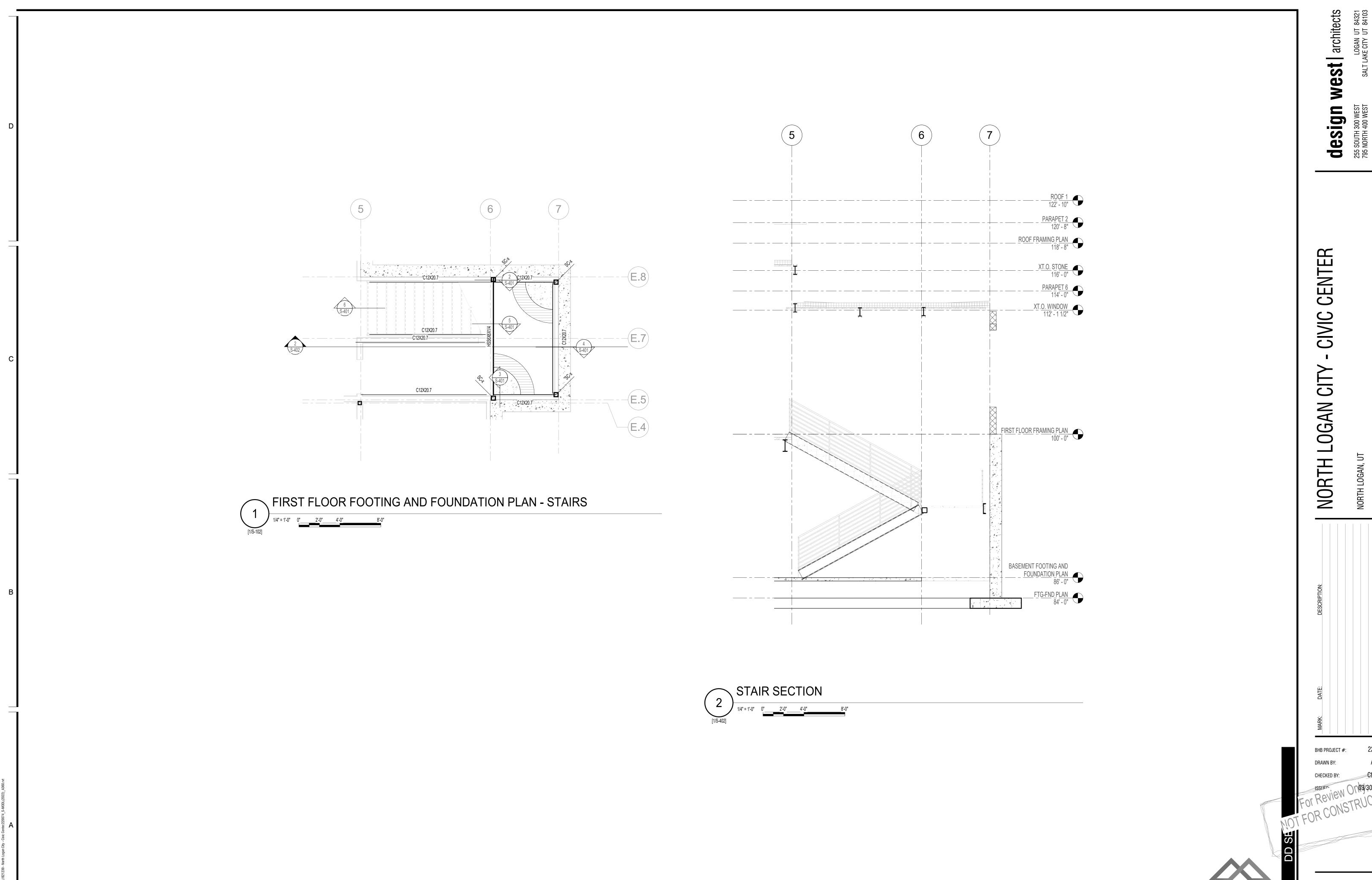
STAIR DETAILS

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656

bhb@bhbengineers.com

S-401

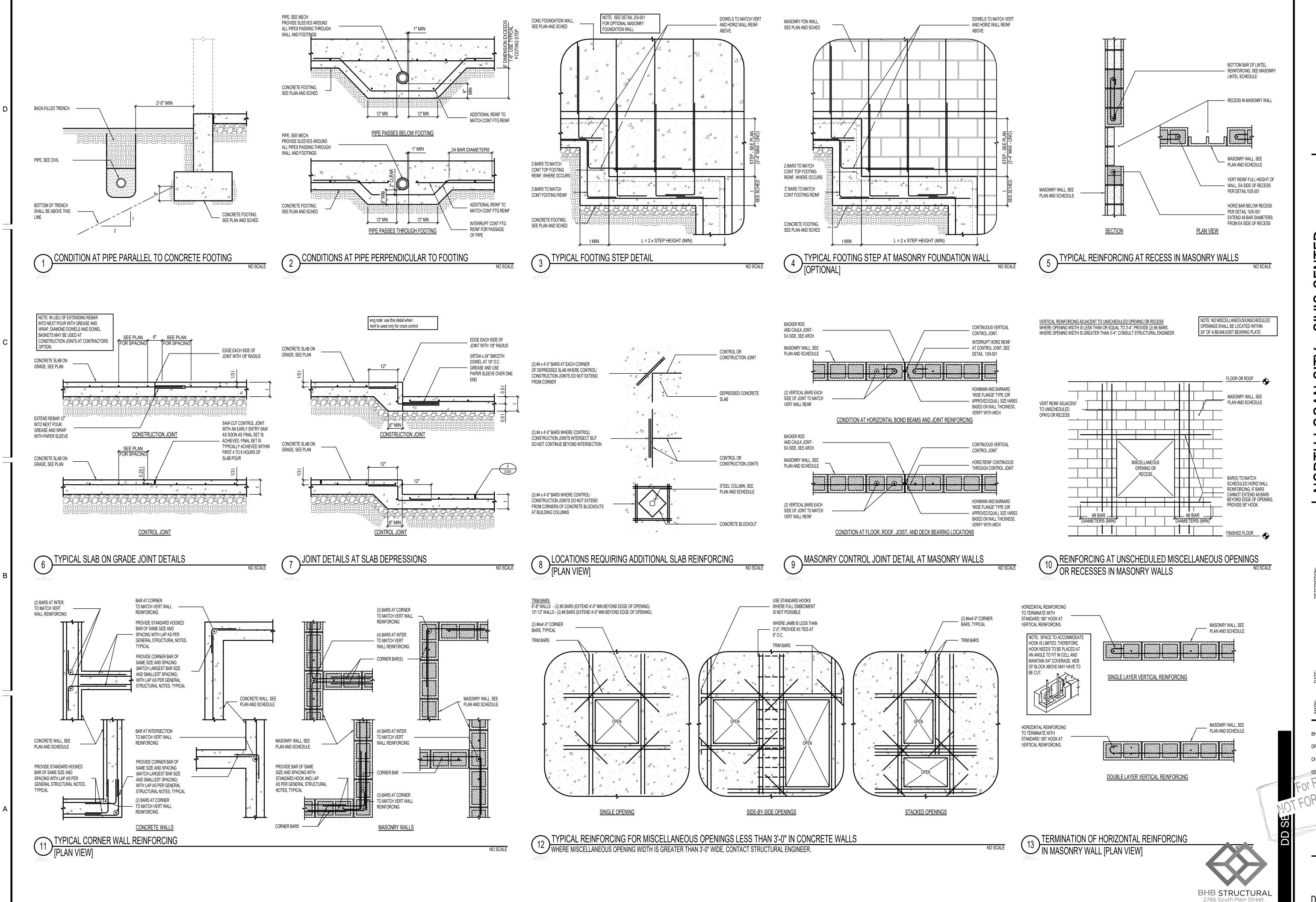
© COPYRIGHT DESIGN WEST ARCHITECTS



STAIR SECTIONS

BHB STRUCTURAL 2766 South Main Street Salt Lake City, Utah 84115 801-355-5656 bhb@bhbengineers.com

S-402



 Δ CENTER CIVIC CITY AN 06, Δ

architects

st

9

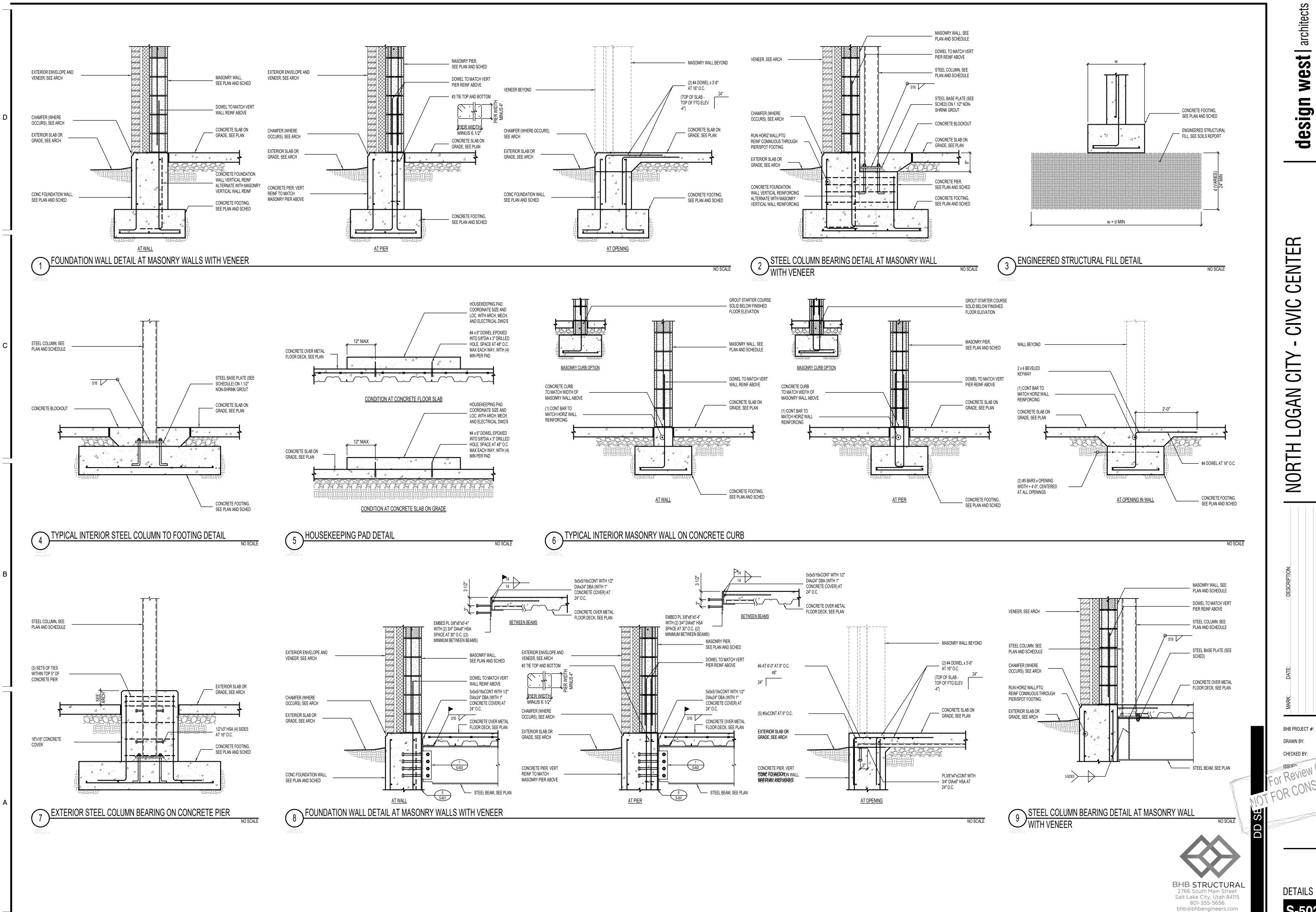
sign

a

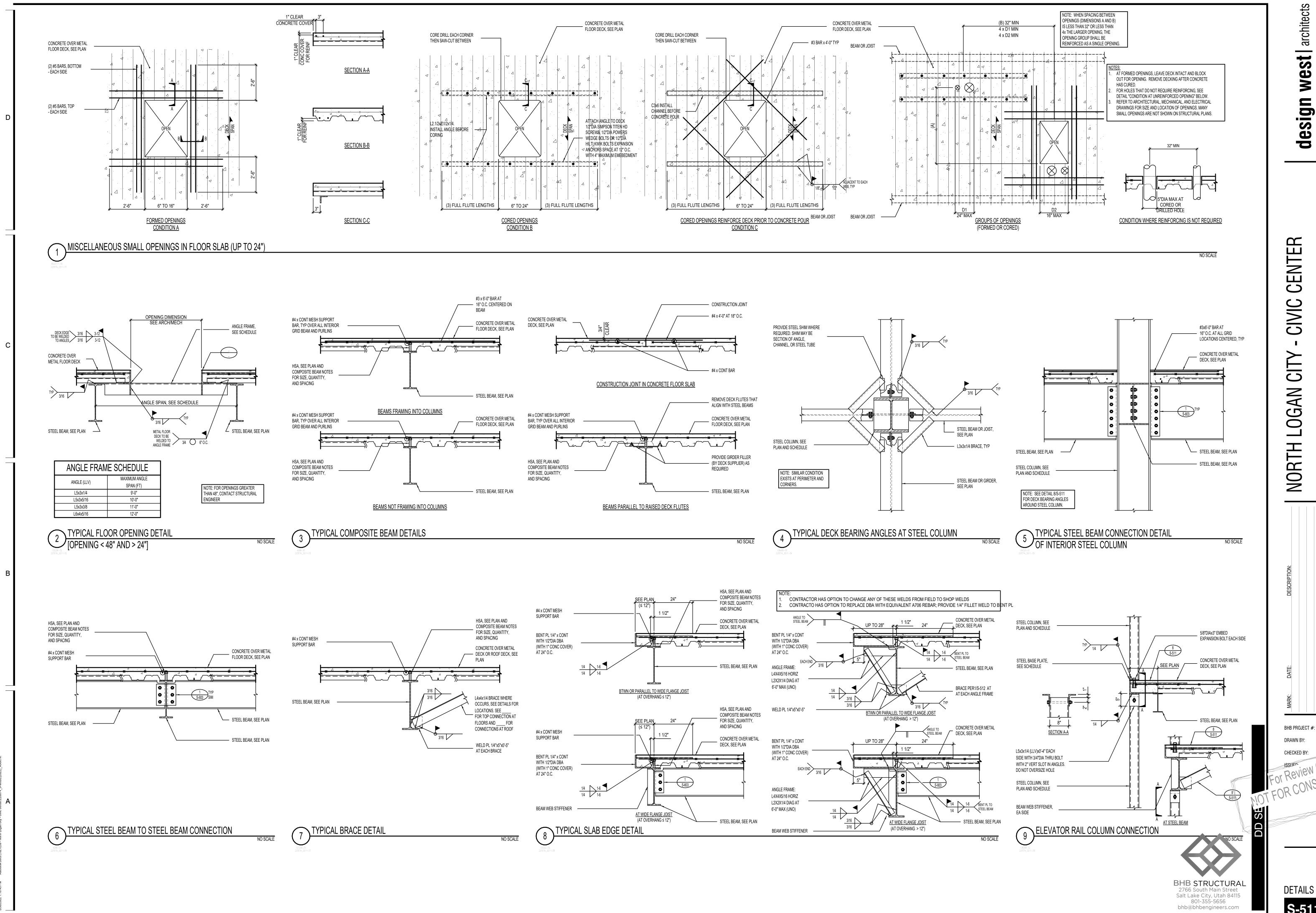
0

BHB PROJECT #: DRAWN BY

Salt Lake City, Utah 84115 801-355-5656 bhb@bhbengineers.com

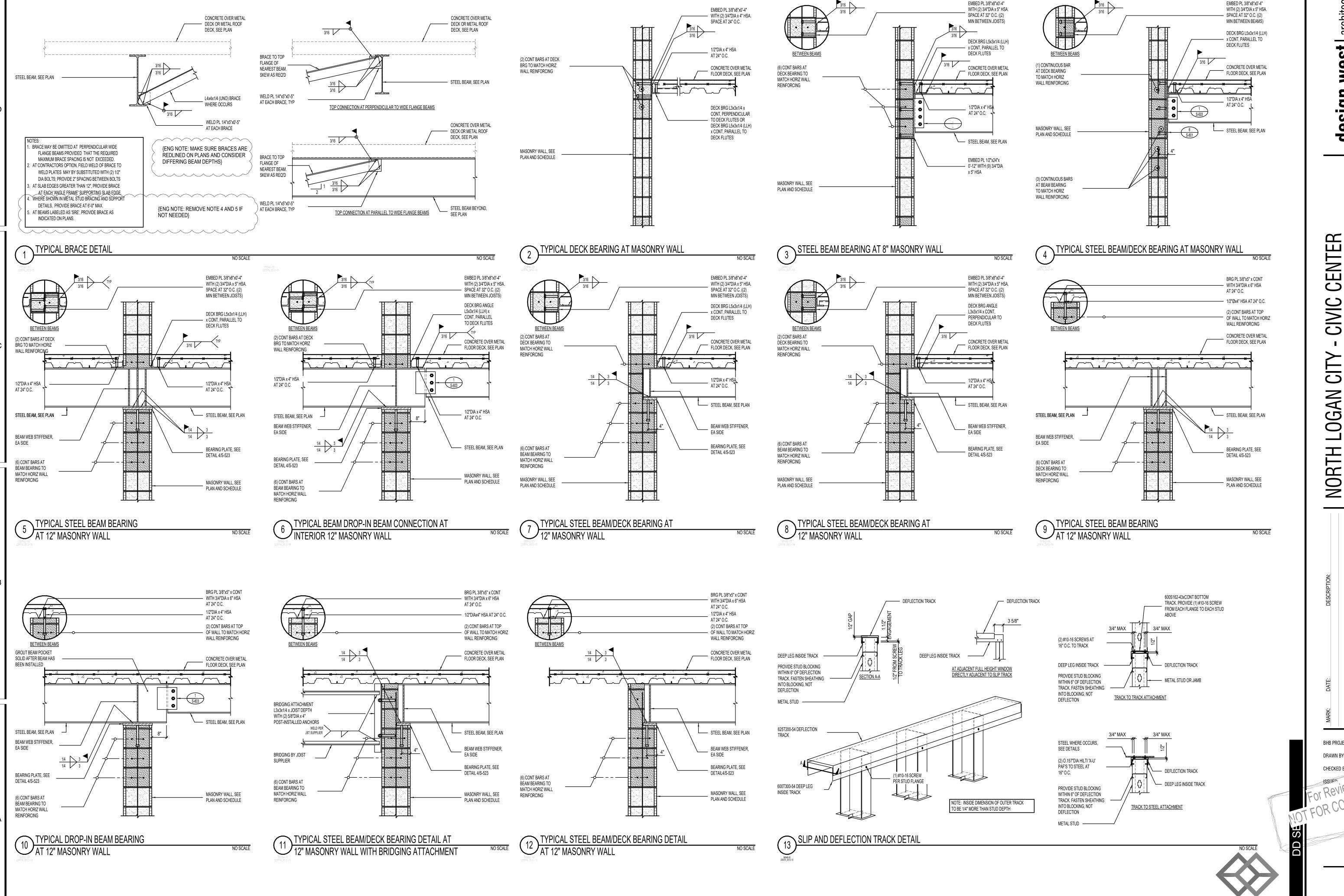


BHB PROJECT #:



CENTER CIVIC CITY LOGAN 王 Δ

BHB PROJECT #:



BHB STRUCTURAL 2766 South Main Street Salt Lake City, Utah 84115 801-355-5656 bhb@bhbengineers.com

architects

S

a

6

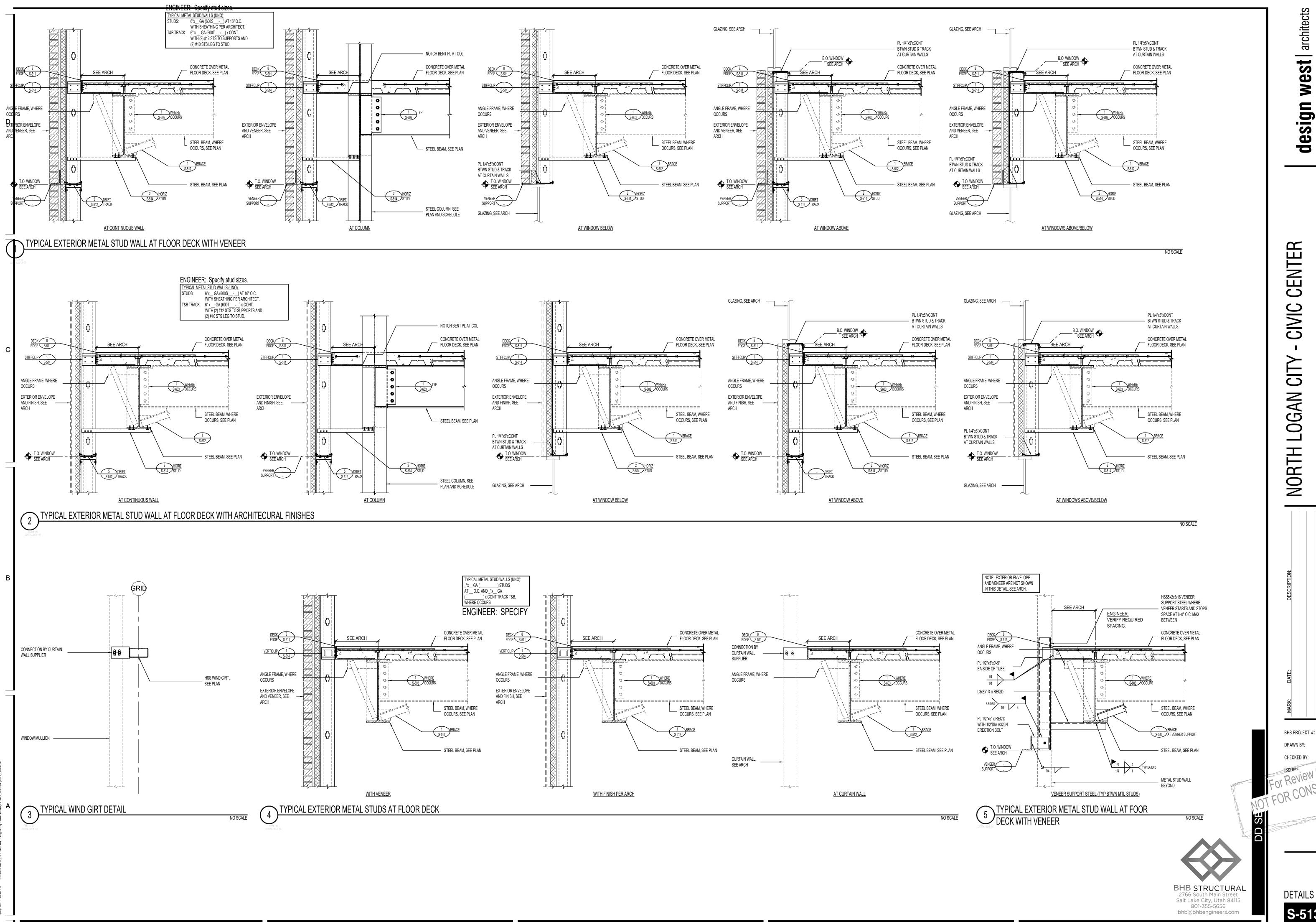
S

a

0

BHB PROJECT #: DRAWN BY

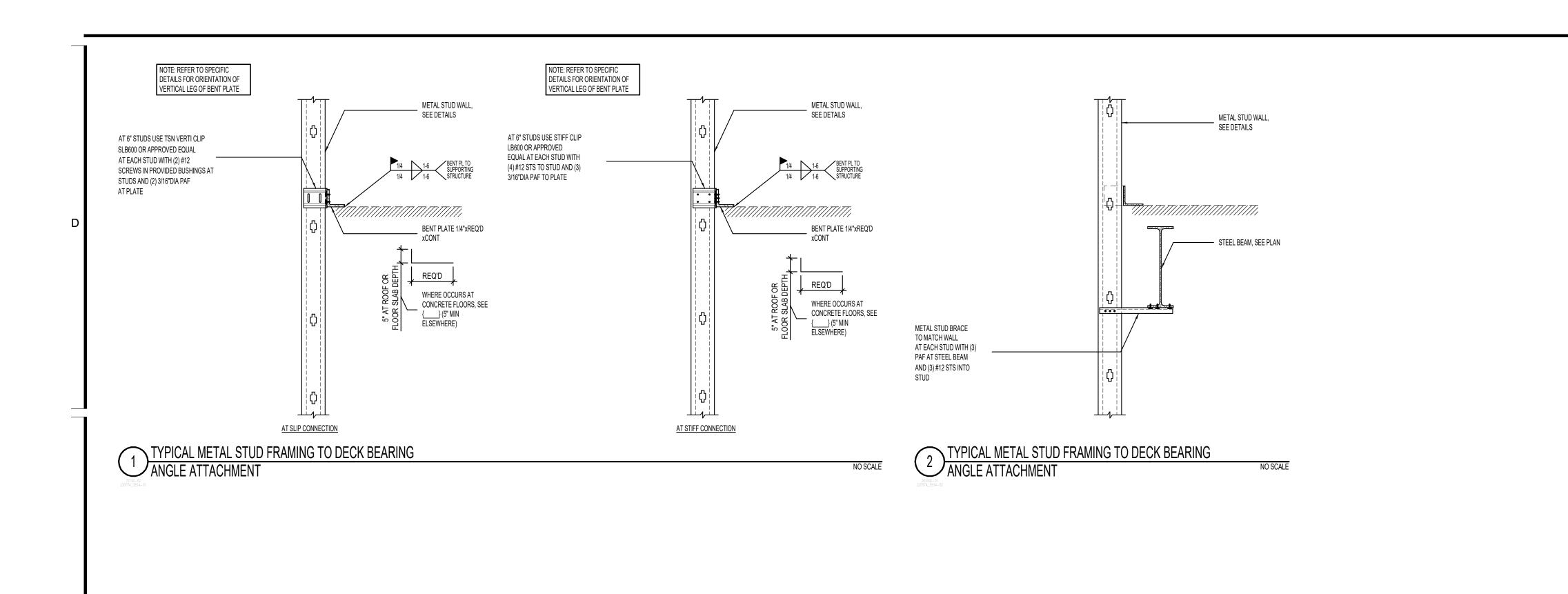
CHECKED BY:



 Δ

LOGAN UT 84321 KE CITY UT 84103

BHB PROJECT #:



BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

DETAIL

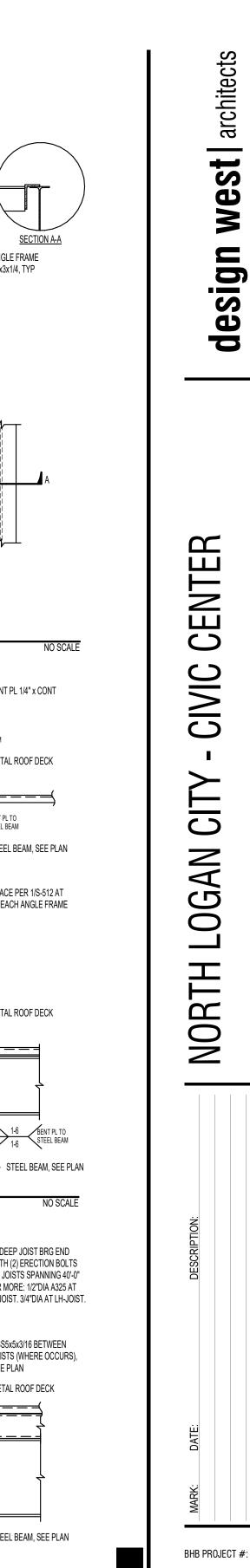
S-514
© COPYRIGHT DESIGN WEST ARCHITECTS

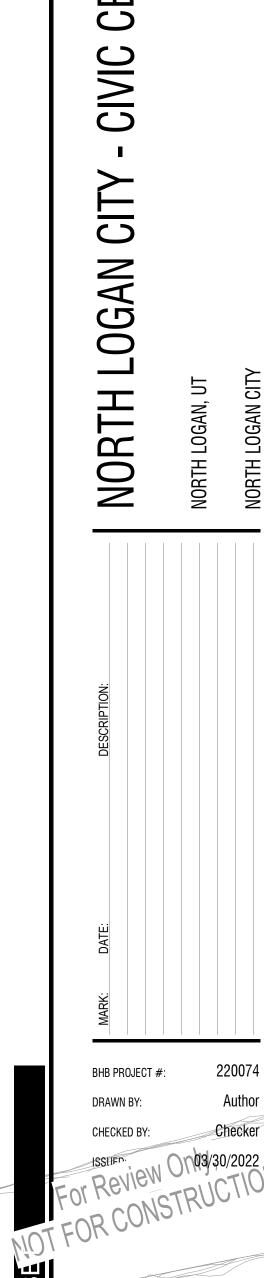
West | architects

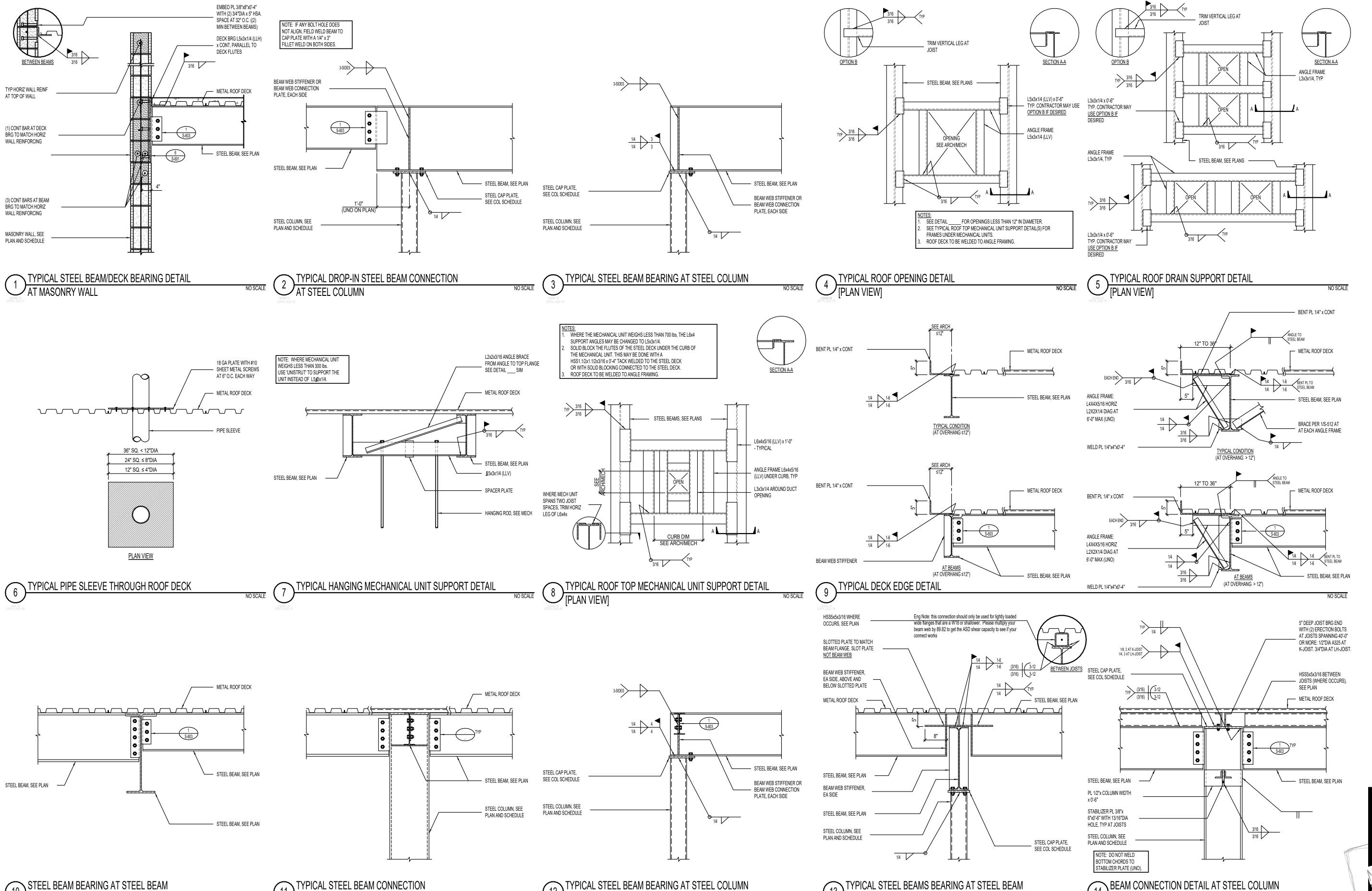
design

CIVIC CENTER

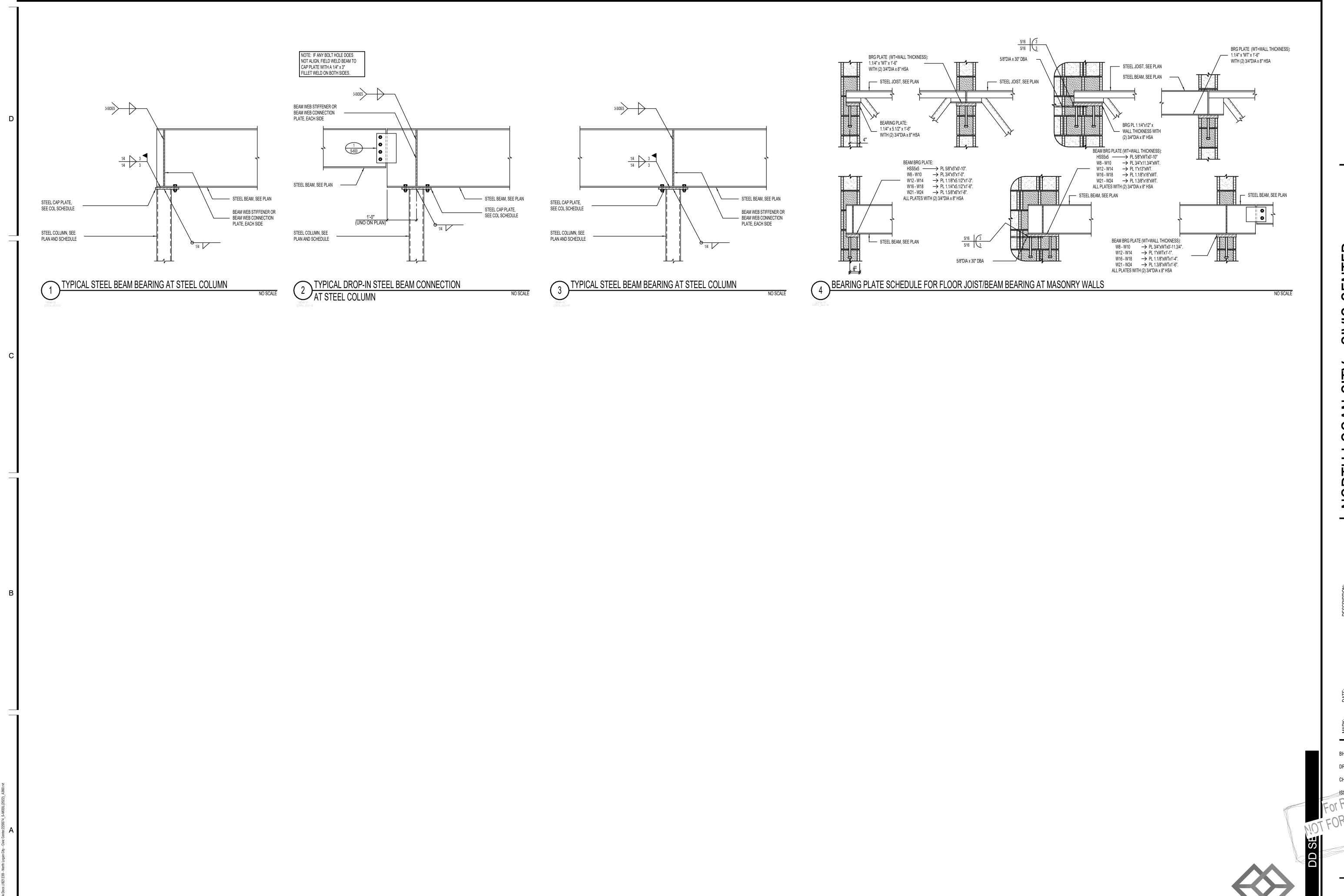
NORTH LOGAN CITY







BHB STRUCTURAL 2766 South Main Street Salt Lake City, Utah 84115 801-355-5656 bhb@bhbengineers.com



CIVIC CENTER NORTH LOGAN CITY

TH LOGAN, UT

LOGAN UT 84321 LAKE CITY UT 84103

West | architects

design 255 SOUTH 300 WEST 795 NORTH 400 WEST

BHB STRUCTURAL 2766 South Main Street Salt Lake City, Utah 84115 801-355-5656 bhb@bhbengineers.com

MADIZ	WIDTH	LENCTH	DEDTU	REINFORCING CROSSWISE		REINFORCING CROSSWISE REINFORCING LENGTHWISE			WISE	COMMENTO			
MARK	WIDTH	LENGTH	DEPTH	No.	SIZE	LENGTH	SPACING	No.	SIZE	LENGTH	SPACING	COMMENTS	
FTS2.0	2'-0"	CONT	12"	-	#4	1'-6"	48"	3	#4	CONT	EQ	THICKENED SLAB	
FC2.0	2'-0"	CONT	12"	-	#4	1'-6"	48"	3	#4	CONT	EQ		
FC2.5	2'-6"	CONT	12"	-	#5	2'-0"	14"	3	#5	CONT	EQ		
FC3.0	3'-0"	CONT	12"	-	#5	2'-6"	14"	3	#5	CONT	EQ		
FC4.0	4'-0"	CONT	12"	-	#5	3'-6"	14"	4	#5	CONT	EQ		
FC5.0	5'-0"	CONT	12"	-	#5	4'-6"	12"	5	#5	CONT	EQ		
FC6.0	6'-0"	CONT	16"	-	#6	5'-6"	16"	8	#6	CONT	EQ		
FC8.0	8'-0"	CONT	14"	-	#6	8'-6"	14"	8	#6	CONT	EQ		
FC9.0	9'-0"	CONT	16"	-	#6	8'-6"	16"	8	#6	CONT	EQ		
FS3.0	3'-0"	3'-0"	12"	3	#5	2'-6"	EQ	3	#5	2'-6"	EQ		
FS6.0	6'-0"	6'-0"	13"	6	#5	5'-6"	EQ	6	#5	5'-6"	EQ		
FS8.5	8'-6"	8'-6"	17"	8	#6	8'-0"	EQ	8	#6	8'-0"	EQ		
FS9.0	9'-0"	9'-0"	18"	9	#6	8'-6"	EQ	9	#6	8'-6"	EQ		
FS9.5	9'-6"	9'-6"	19"	10	#6	9'-0"	EQ	10	#6	9'-0"	EQ		
FS10.0	10'-0"	10'-0"	20"	11	#6	9'-6"	EQ	11	#6	9'-6"	EQ		

CONCRETE FOOTING NOTES:

1. PLACE ALL FOOTING REINFORCING IN THE BOTTOM OF THE FOOTING WITH 3" CLEAR CONCRETE COVER (UNO). TOP REINFORCING, WHERE OCCURS, SHALL BE PLACED IN THE TOP OF THE FOOTING WITH 2" MINIMUM CONCRETE COVER.

IF FOOTINGS ARE EARTH-FORMED, FOOTINGS SHALL BE 6" LONGER AND WIDER THAN SCHEDULED.

RUN CONTINUOUS FOOTING REINFORCEMENT THROUGH SPOT FOOTINGS.

SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

SOME SCHEDULED FOOTINGS MAY NOT BE USED, SEE FOOTING AND FOUNDATION PLAN FOR FOOTING MARKS.

CONCRETE FOOTING SCHEDULE

	fc = 3000psi & fc = 3500 psi															
DAD 017E		JLAR	T(REGULAR		TOP		REGULAR)P	REGULAR		TOP	
BAR SIZE	CLASS		CLASS		CLASS		CLASS		CLASS		CLASS		CLASS		CLASS	
	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В
#3	17"	22"	22"	28"	15"	19"	19"	24"	13"	17"	17"	22"	12"	16"	15"	20"
#4	22"	29"	29"	37"	19"	25"	25"	32"	17"	22"	22"	29"	16"	20"	20"	27"
#5	28"	36"	36"	47"	24"	31"	31"	40"	22"	28"	28"	36"	20"	26"	26"	33"
#6	33"	43"	43"	56"	29"	37"	37"	48"	26"	33"	33"	43"	24"	31"	31"	40"
#7	48"	63"	63"	81"	42"	54"	54"	70"	37"	49"	49"	63"	34"	44"	44"	58"
#8	55"	72"	72"	93"	48"	62"	62"	80"	43"	56"	55"	72"	39"	51"	51"	66"
#9	62"	81"	81"	105"	54"	70"	70"	91"	48"	63"	63"	81"	44"	57"	57"	74"
#10	70"	91"	91"	118"	61"	79"	79"	102"	54"	70"	70"	91"	50"	64"	64"	83"
#11	78"	101"	101"	131"	67"	87"	87"	113"	60"	78"	78"	101"	55"	71"	71"	93"

TABULATED VALUES ARE FOR CASE 1 REINFORCEMENT, WHERE THE REQUIREMENTS OF TABLE BELOW ARE MET. WHERE THESE CONDITIONS ARE NOT MET, MULTIPLY THE LAP LENGTHS (**f**d) BY 1.5.

REQUIREMENT FOR CASE 1 LAP LENGTHS						
BAR CLEAR CLEAR SPACING COVER		STIRRUPS OR TIES				
>=db	>=db	>=CODE FOR MINIMUM THROUGHOUT \$\mathcal{f} d	İ			
>=2db >=db		NO REQUIREMENT				

db = BAR DIAMETER

CONCRETE REINFORCING BAR LAP SPLICE NOTES:

1. THIS SCHEDULE SHALL BE USED FOR ALL BAR SPLICES IN CONCRETE WALLS, UNLESS NOTED OTHERWISE. 2. CLASS 'A' SPLICES MAY BE USED ONLY IN CASES WHERE 50% OR LESS OF THE BARS ARE SPLICED WITHIN THE LAP SPLICE LENGTH.

CLASS 'B' SPLICES SHALL BE USED FOR ALL SPLICES UNLESS THE REQUIREMENTS OF NOTE No. 2 ABOVE ARE MET.

TIES AND STIRRUPS SHALL NOT BE SPLICED.

DO NOT SPLICE VERTICAL BARS IN RETAINING WALLS UNLESS SPECIFICALLY SHOWN.

6. THE VALUES TABULATED IN SCHEDULE ARE FOR GRADE 60 REINFORCING BARS. FOR GRADE 75, MULTIPLY LAP LENGTHS BY 1.25 AND FOR THE VALUES TABULATED IN SCHEDULE ARE MINIMUM REQUIREMENTS. LONGER LENGTHS MAY BE USED FOR CONSTRUCTIBILITY.

TOP BARS ARE CLASSIFIED AS HORIZONTAL BARS WHERE 12", OR MORE, OF FRESH CONCRETE IS CAST BELOW THE REINFORCING BAR. 9. FOR EPOXY-COATED OR ZINC AND EPOXY DUAL-COATED BARS WITH CLEAR COVER < 3d b OR CLEAR SPACING <6db, MULTIPLY LAP LENGTHS BY 1.5. FOR ALL OTHER CASES MULTIPLY BY 1.2

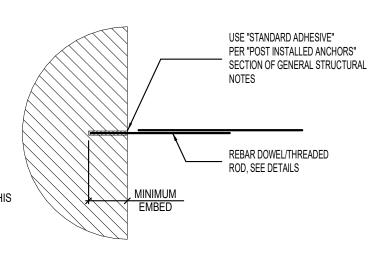
10. FOR LIGHT WEIGHT CONCRETE, MULTIPLY LAP LENGTHS BY 1.33 UNLESS THE AVERAGE SPLITTING TENSILE STRENGTH (F a) IS SPECIFIED. FOR LIGHT WEIGHT CONCRETE WHERE F at IS SPECIFIED, REFER TO ACI318-14 SECTION 19.2.4.3

11. SPLICES FOR BUNDLED BARS: a. FOR BUNDLED BARS OF THREE OR LESS, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.2.

b. FOR BUNDLED BARS OF FOUR OR MORE, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.33. c. INDIVIDUAL BAR SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP.

d. ENTIRE BUNDLES SHALL NOT BE LAP SPLICED. 12. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

CONCRETE REINFORCING BAR LAP SPLICE SCHEDULE



STANDARD ADHESIVE EMBEDMENT SCHEDULE MINIMUM EMBEDMENT INTO (THREADED ROD SIZE) CONCRETE OR GROUTED MASONRY #3 (3/8") #4 (1/2") #5 (5/8") 5.5/8" #6 (3/4")

STANDARD ADHESIVE EMBEDMENT NOTES:

1. SPECIFIC EMBEDMENTS, NOTES AND DETAILS IN DRAWINGS SHALL GOVERN OVER THIS

2. HOLE DIAMETER SHALL BE DOWEL/ROD DIAMETER PLUS 1/8". FOLLOW MANUFACTURER'S INSTRUCTIONS FOR HOLE PREPARATION.

PROVIDE A 3" MINIMUM EDGE DISTANCE TO CENTER OF HOLE. 4. CONTACT STRUCTURAL ENGINEER IF MINIMUM EMBEDMENTS INDICATED ABOVE ARE

NOT ACHIEVABLE.

5. SEE "POST INSTALLED ANCHORS" SECTION OF GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

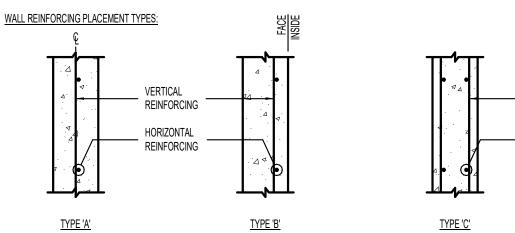
STANDARD ADHESIVE EMBEDMENT SCHEDULE

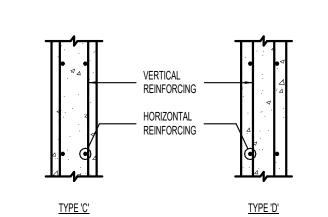
CONCRETE WALL SCHEDULE REINFORCING HORIZONTAL VERTICAL TOP AND BOTTOM #6 AT 8" O.C., E.F. #6 AT 8" O.C., E.F. (2) #6 #5 AT 12" O.C., E.F. #5 AT 12" O.C., E.F. (2) #5

WALLS NOT DESIGNATED IN PLAN							
THICKNESS	REINFO	RCING					
IHICKINESS	VERTICAL	HORIZONTAL					
6"	#4 AT 18" O.C.	#4 AT 16" O.C.					
8"	#4 AT 18" O.C.	#4 AT 12" O.C.					
10"	#4 AT 16" O.C.	#5 AT 15" O.C.					
12"	#4 AT 18" ∩ C. F.F.	#4 AT 16" O.C. F.F.					

ABBREVIATIONS: E.F. EACH FACE INSIDE FACE O.F. OUTSIDE FACE

CONCRETE FOUNDATION WALL NOTES: 1. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.





CONCRETE WALL SCHEDULE

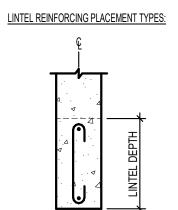
CONCRETE LINTEL SCHEDULE							
MARK	THICKNESS	DEPTH	REINFO HORIZONTAL	ORCING STIRRUPS	TYPE	COMMENTS	
CL-12A	14"	12"	(1) #4 BAR		A		

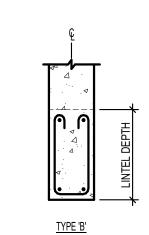
CONCRETE LINTEL NOTES:

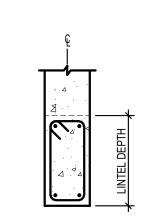
1. HORIZONTAL REINFORCING SHALL EXTEND 4'-0" BEYOND EDGE OF OPENING. IF HORIZONTAL REINFORCING CANNOT EXTEND 4'-0" BEYOND EDGE OF OPENING

PROVIDE 90° STD HOOK. 2. SPLICE TOP BARS AT MID-SPAN OF LINTEL ONLY AND BOTTOM BARS OVER SUPPORTS

3. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.







TYPE 'C'

CONCRETE LINTEL SCHEDULE

TYPICAL EMBED PLATE CONNECTION SCHEDULE FOR CONCRETE WALLS

CONNECTION SCHEDULE

(3) ROWS OF (2) 3/4"DIA

(6) ROWS OF (2) 3/4"DIA

x 5" HSA ((12) TOTAL) (7) ROWS OF (3) 3/4"DIA

x 5" HSA ((21) TOTAL)

x 5" HSA ((6) TOTAL)

EMBED PLATE

PL 1/2"x16"x1'-0"

PL 1/2"x28"x1'-0"

PL 1/2"x30"x1'-6"

W8, W10, W12

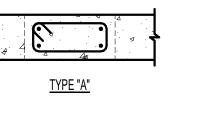
W18, W21

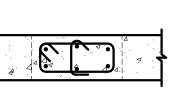
CONCRETE PIER SCHEDULE								
MARK	PIER SIZE	REINFORCING TYPE		TYPE	COMMENTS			
WARK	PIER SIZE	VERTICAL	TIES	ITPE	COMMENTS			
CP16A	16"	(2) #5 BARS	-	A				
CP24A	24"	(2) #5 BARS	-	A				
CP32A	32"	(2) #5 BARS	-	A				

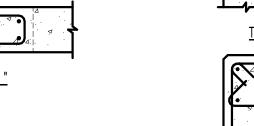
CONCRETE PIER NOTES:

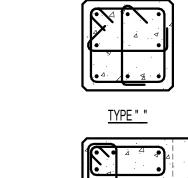
INSTALL (3) SETS OF TIES WITHIN TOP 5" OF ALL PIERS (UNO). RUN HORIZONTAL CONCRETE WALL REINFORCING CONTINUOUS THROUGH PIER WHEN PIER IS POURED

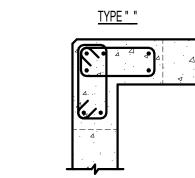
MONOLITHICALLY WITH CONCRETE WALL. 3. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

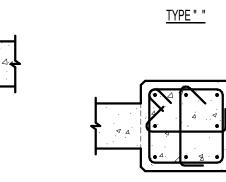












- FACE OF CONCRETE WALL

EMBED PLATE, SEE

STEEL BEAM, SEE

HEADED STUD ANCHORS PER SCHEDULE

WITH SHORT HORIZ SLOTS

SCHEDULE

CONCRETE PIER SCHEDULE

<u>TYPE " "</u>

BHB STRUCTURAL 2766 South Main Street

Salt Lake City, Utah 84115

bhb@bhbengineers.com

DRAWN BY

SCHEDULES

801-355-5656

	ML-32A	32"	(1) #7 x CONT TOP AND BOTTOM	#4 AT 8" O.C.
2.12"	ML-48A	48"	(1) #7 x CONT TOP AND BOTTOM	#4 AT 8" O.C.
• • • • • • • • • • • • • • • • • • • •				

MASONRY LINTEL NOTES:

		702 2000		
			<u> </u>	
HORIZONTAL WA	L _		2.1/2"	

DOUBLE VERTICAL LAYER WALL REINFORCING

VERTICAL WALL

REINFORCING

HORIZONTAL WALL

MASONRY WALL SECTION

MAXIMUM SPACING

16" O.C.

24" O.C.

32" O.C.

40" O.C.

48" O.C.

HEIGHT OR LENGTH

H OR I < 4'-0"

4'-0" < H OR L < 6'-0"

6'-0" < H OR L < <u>8'</u>-0" 8'-0" < H OR L < <u>10</u>'-0"

10'-0" < H OR L < <u>12</u>'-0"

H OR L > 12'-0"

1. ADDITIONAL VERTICAL AND HORIZONTAL REINFORCING SHALL MATCH BAR SIZE OF SCHEDULED WALL REINFORCING AT SPACING

2. WHERE 8" SPACING IS REQUIRED, #3 BAR MAY BE USED FOR HORIZONTAL REINFORCING. 3. WHERE SPACING OF SCHEDULED WALL REINFORCING IS LESS THAN TABLE ABOVE, SCHEDULED SPACING SHALL GOVERN.

INDICATED IN TABLE ABOVE.

	AT 12" MASONRY	
VERTICAL WALL REINFORCING		2.1/2"

DOUBLE VERTICAL LAYER WALL REINFORCING

AT 8" AND 10" MASONRY

TYPICAL MASONRY WALL

ADDITIONAL HORIZONTAL

REINFORCING WITH VERTICAL

REINFORCING PER TABLE

BELOW

REINFORCING PER SCHEDULE

SCHEDULE SHALL NOT APPLY. CONSULT THE STRUCTURAL ENGINEER FOR LINTELS NOT SPECIFIED ON THE PLANS WHICH HAVE A SPAN GREATER THAN 3'-4". MASONRY LINTEL ML-8A SHALL NOT BE LOCATED DIRECTLY BELOW FLOOR OR ROOF BEAMS OR GIRDERS UNLESS NOTED OTHERWISE ON THE PLANS. JOISTS SHALL NOT BEAR ON ANY LINTEL LESS THAN 16" DEEP. CONSULT THE

STRUCTURAL ENGINEER FOR LINTELS NOT SHOWN ON THE PLANS WHICH ARE LOCATED DIRECTLY BELOW FLOOR OR ROOF BEAMS OR GIRDERS. EXTEND ALL HORIZONTAL REINFORCING 48 BAR DIAMETERS MINIMUM BEYOND THE EDGE OF ALL OPENINGS. IF HORIZONTAL REINFORCING CANNOT EXTEND 48 BAR DIAMETERS BEYOND EDGE OF OPENING, PROVIDE 90° STANDARD

LINTEL WIDTH AND MATERIAL TYPE SHALL BE THE SAME AS THE WALL IN WHICH THE LINTEL IS CONSTRUCTED.

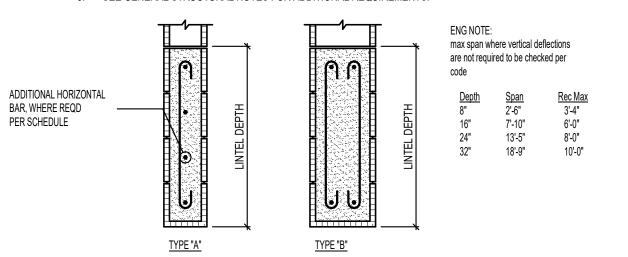
MASONRY LINTEL ML-8A, SHALL BE USED OVER OPENINGS IN MASONRY WALLS WHEN A SPECIFIC MASONRY LINTEL IS NOT OTHERWISE SPECIFIED. WHEN A LINTEL IS SPECIFIED ON THE PLANS, THE MAXIMUM SPAN AS NOTED IN THIS

GROUT MASONRY LINTELS MONOLITHICALLY WITH THE SUPPORT WALL OR PIER AT EACH END.

SPLICE TOP BARS AT MIDSPAN OF LINTEL ONLY AND BOTTOM BARS OVER SUPPORTS ONLY. HORIZONTAL WALL REINFORCING SHALL CONTINUE THROUGH MASONRY LINTELS. WHERE BOTH HORIZONTAL WALL REINFORCING AND LINTEL REINFORCING OCCUR IN THE SAME COURSE, USE THE LARGER REINFORCING.

8. DOWEL VERTICAL REINFORCING OF WALL ABOVE LINTEL INTO THE FULL DEPTH OF LINTEL OR 48 BAR DIAMETERS, WHICHEVER IS LESS.

9. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



MASONRY LINTEL SCHEDULE

SIZE VERTICAL REINFORCING VERTICAL REINFORCING SCHEMATIC COMMENTS MP-8B WT x 8" (2) #5 MP-16A (2) #5 WT x 16" MP-16B WT x 16" (4) #5 MP-16C USE #3 PIN TIES AT 8" O.C. 16" x 20" (4)#6 MP-24A WT x 24" (3) #5MP-24B WT x 24" (6) #5 MP-32A WT x 32" (4) #5 MP-32B WT x 32" MP-40A WT x 40" (5) #5 MP-40B WT x 40" (10) #5MP-48A MP-48B WT x 48"

MASONRY PIER SCHEDULE

MASONRY PIER NOTES:

SEE MASONRY WALL SCHEDULE FOR HORIZONTAL REINFORCING REQUIREMENTS FOR ALL PIERS. VERTICAL REINFORCING AND TIES SHALL EXTEND FULL HEIGHT OF WALL (UNO).

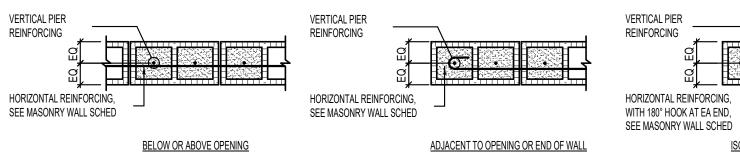
VERTICAL MASONRY PIER REINFORCING SHALL EXTEND INTO THE FOOTING AND TERMINATE WITH A STANDARD 90° HOOK. FOR CONCRETE FOUNDATION WALLS 4'-0" OR TALLER, VERTICAL PIER REINFORCING SHALL DOWEL 3'-0" MINIMUM INTO THE FOUNDATION WALL (UNO).

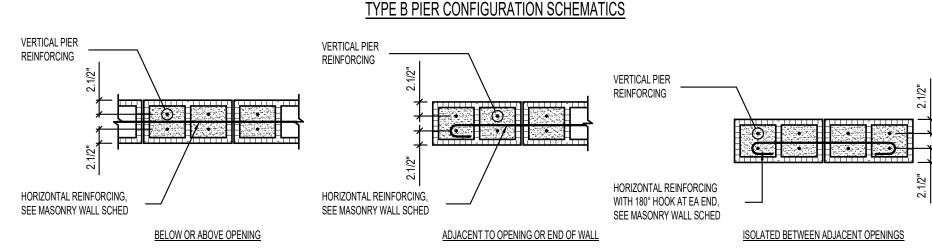
4. IN CONCRETE FOUNDATION WALLS, VERTICAL REINFORCING AT TYPE 'B' MASONRY PIERS SHALL BE TIED WITH #3 TIES AT TOP AND BOTTOM OF FOUNDATION WALL, SEE DETAILS.

5. HORIZONTAL REINFORCING OF ADJACENT WALLS SHALL RUN CONTINUOUS THROUGH MASONRY PIERS. 6. WHERE HORIZONTAL REINFORCING TERMINATES AT PIER, PROVIDE 180° HOOK, SEE SCHEMATICS BELOW.

7. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

TYPE A PIER CONFIGURATION SCHEMATICS





MASONRY PIER SCHEDULE

MASONRY WALL SCHEDULE

MASONRY REINFORCING LAP SPLICE SCHEDULE 12" MASONRY

MASONRY WALL SCHEDULE

TYPICAL REINFORCING (SEE NOTE 1)

#5 AT 48" O.C

#4 AT 24" O.C.

#5 AT 48" O.C.

(SOLID GROUTED)

#4 AT 24" O.C.

#4 AT 24" O.C.

#5 AT 24" O.C.

(2) #4 AT 24" O.C.

#5 AT 32" O.C.

#5 AT 32" O.C.

#5 AT 32" O.C.

SPACING OF MASONRY WALL REINFORCING SHALL NOT EXCEED TYPICAL SCHEDULED REINFORCING. SEE ELEVATION AND

VERTICAL REINFORCING SHALL EXTEND INTO FOOTINGS AND TERMINATE WITH STANDARD HOOK. FOR CONCRETE FOUNDATION WALLS 4'-0" OR TALLER, VERTICAL WALL REINFORCING SHALL DOWEL 3'-0" MINIMUM INTO THE FOUNDATION WALL (UNO).

HORIZONTAL WALL REINFORCING SHALL CONTINUE THROUGH MASONRY LINTELS. WHERE BOTH HORIZONTAL WALL REINFORCING

HORIZONTAL WALL REINFORCING SHALL BE PLACED BETWEEN DOUBLE LAYER OF VERTICAL MASONRY REINFORCING, WHERE

11. IN CONCRETE FOUNDATION WALL BELOW, ALTERNATE VERTICAL CONCRETE WALL REINFORCING WITH VERTICAL MASONRY

MARKS AND SYMBOLS LEGEND

OR LINTEL REINFORCING

----- INDICATES ADDITIONAL REINFORCING AS

REINFORCING TABLE

INDICATES SCHEDULED MASONRY WALL, PIER,

REQUIRED PER MASONRY WALL SECTION

INDICATES LENGTH OF WALL SECTION

INDICATES HEIGHT OF WALL SECTION

MASONRY WALL SECTION REINFORCING TABLE BELOW FOR LOCATIONS WHERE TIGHTER SPACING IS REQUIRED.

MASONRY WALLS NOT DESIGNATED IN PLAN

HORIZONTAL (NOT SOLID GROUTED)

#4 AT 48" O.C.

#5 AT 48" O.C.

#6 AT 48" O.C.

(2) #5 AT 48" O.C.

COORDINATE WALL FINISHES, MATERIALS, COURSING, ETC. WITH ARCHITECTURAL DRAWINGS.

AND LINTEL REINFORCING OCCUR IN THE SAME COURSE, USE THE LARGER REINFORCING.

10. SEE DETAIL 13/S-501 FOR WHERE HORIZONTAL REINFORCING TERMINATES AT EDGE OF OPENINGS.

DO NOT SOLID GROUT WALLS UNLESS REQUIRED BY SCHEDULE, NOTES, OR DETAILS.

SINGLE LAYER OF VERTICAL REINFORCING SHALL BE CENTERED IN WALL (UNO).

PROVIDE TWO VERTICAL BARS (MIN) AT ALL CORNERS AND END OF WALLS.

COMMENTS

SEE NOTE 11

SEE NOTE 11

2ND FLOOR-ROOF

THICKNESS MATERIAL GROUT

8" SEE ARCH NO

8" SEE ARCH YES

MW-8C 8" SEE ARCH NO

#5 AT 32" O.C

#5 AT 32" O.C.

#5 AT 24" O.C

REINFORCING.

DECK/FLOOR BEARING, SEE DETAILS

MASONRY LINTEL,

SEE PLAN AND SCHED

MASONRY VERTICAL PIER

REINFORCING, SEE PLAN

(1) CONT BAR AT BASE OF

ADDITIONAL VERTICAL REINFORCING PER TABLE

CONC FOUNDATION WALL,

WHERE OCCURS, SEE

PLAN AND SCHED

SEE PLAN AND SCHED

BELOW

WALL OPENINGS TO MATCH

HORIZONTAL WALL REINFORCING

AND SCHEDULE

SOLID GROUT ALL MASONRY COURSES BELOW GRADE.

12. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS. HORIZONTAL REINFORCING AT

1. WHERE INDICATED. USE MECHANICAL SPLICE COUPLER. SEE GSN FOR REQUIREMENTS. 2. WHERE VERTICAL BARS HAVE A SPECIFIED LAP SPLICE GREATER THAN THE HEIGHT OF THE GROUT POUR, USE MECHANICAL SPLICE COUPLER.

MASONRY REINFORCING LAP SPLICE SCHEDULE (f'm=2000psi)

2766 South Main Street

SCHEDULES

BHB PROJECT #:

DRAWN BY

architects

st

9

sign

a

 Δ

囯

CEN

CIVIC

LOGAN

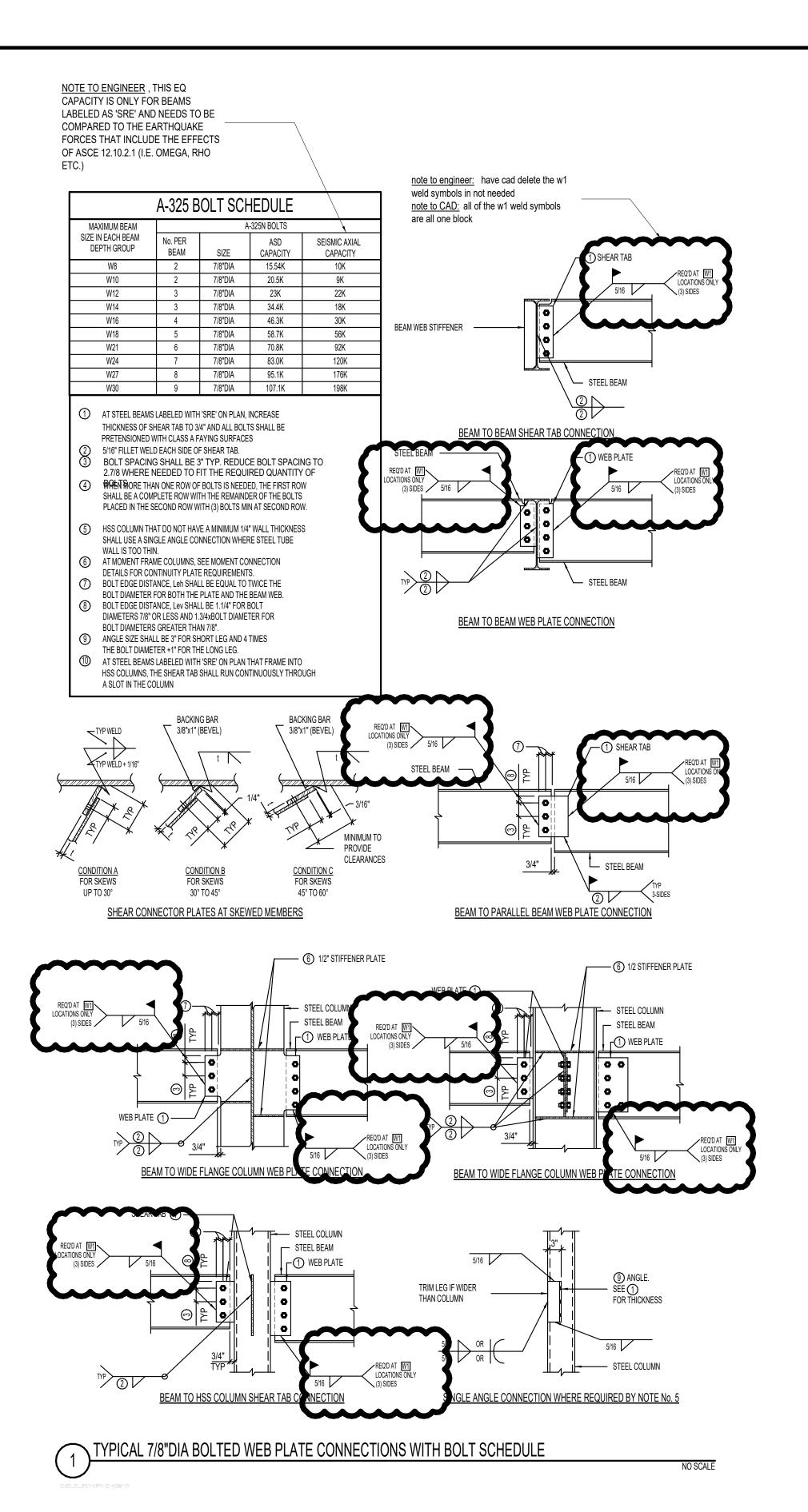
 Δ

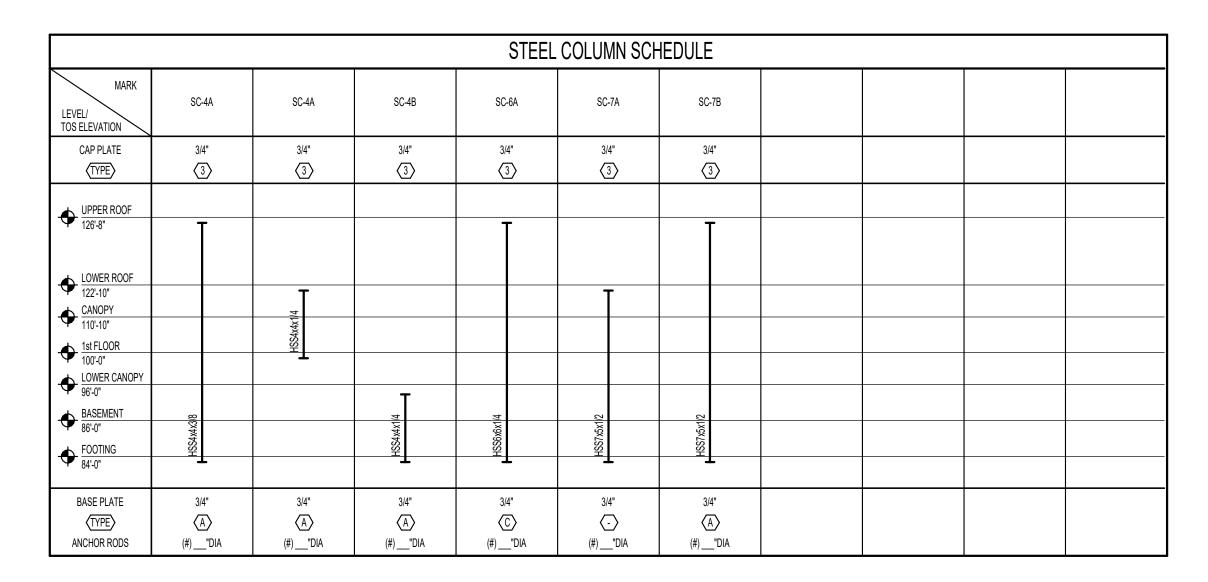
Salt Lake City, Utah 84115

ISOLATED BETWEEN ADJACENT OPENINGS

801-355-5656 bhb@bhbengineers.com

BHB STRUCTURAL





STEEL COLUMN NOTES:

1. PROJECT ANCHOR RODS 3" MINIMUM ABOVE TOP OF THE BASE PLATE. TYPICAL ANCHOR ROD EMBEDMENT INTO FOOTING SHALL BE 9" MINIMUM, WITH HOOKS (UNO). ALL ANCHOR RODS SHALL BE INSTALLED WITH HARDENED WASHERS BENEATH THE

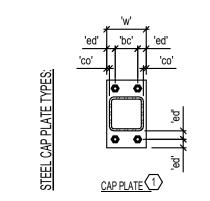
NUT. ANY HOLES LARGER THAN THE BOLT DIAMETER PLUS 5/16" SHALL HAVE 5/16" PLATE WASHERS INSTALLED BENEATH THE HARDENED WASHERS. 2. ANCHOR RODS SHALL NOT BE WELDED (INCLUDING TACK WELDS).

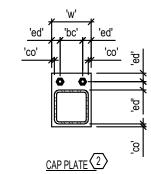
REFER TO DETAILS BELOW FOR ANCHOR ROD PATTERN.

4. ALL CAP PLATE BOLTS SHALL BE 3/4"DIA A325N BOLTS, TYPICAL UNLESS NOTED OTHERWISE.

5. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

BASE PLATE A





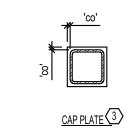


PLATE LEGEND co = 1/2" MINIMUM

sp = 3" MINIMUM

ed = 1.1/2" MINIMUM

bc = BEAM OR GIRDER GAGE

w = BEAM OR GIRDER GAGE + 3"

COLUMN WIDTH + 1" WHICHEVER IS GREATER

BEAM OR GIRDER WIDTH + 1"

STEEL COLUMN SCHEDULE

architects

st

We

design

CENTER

CIVIC

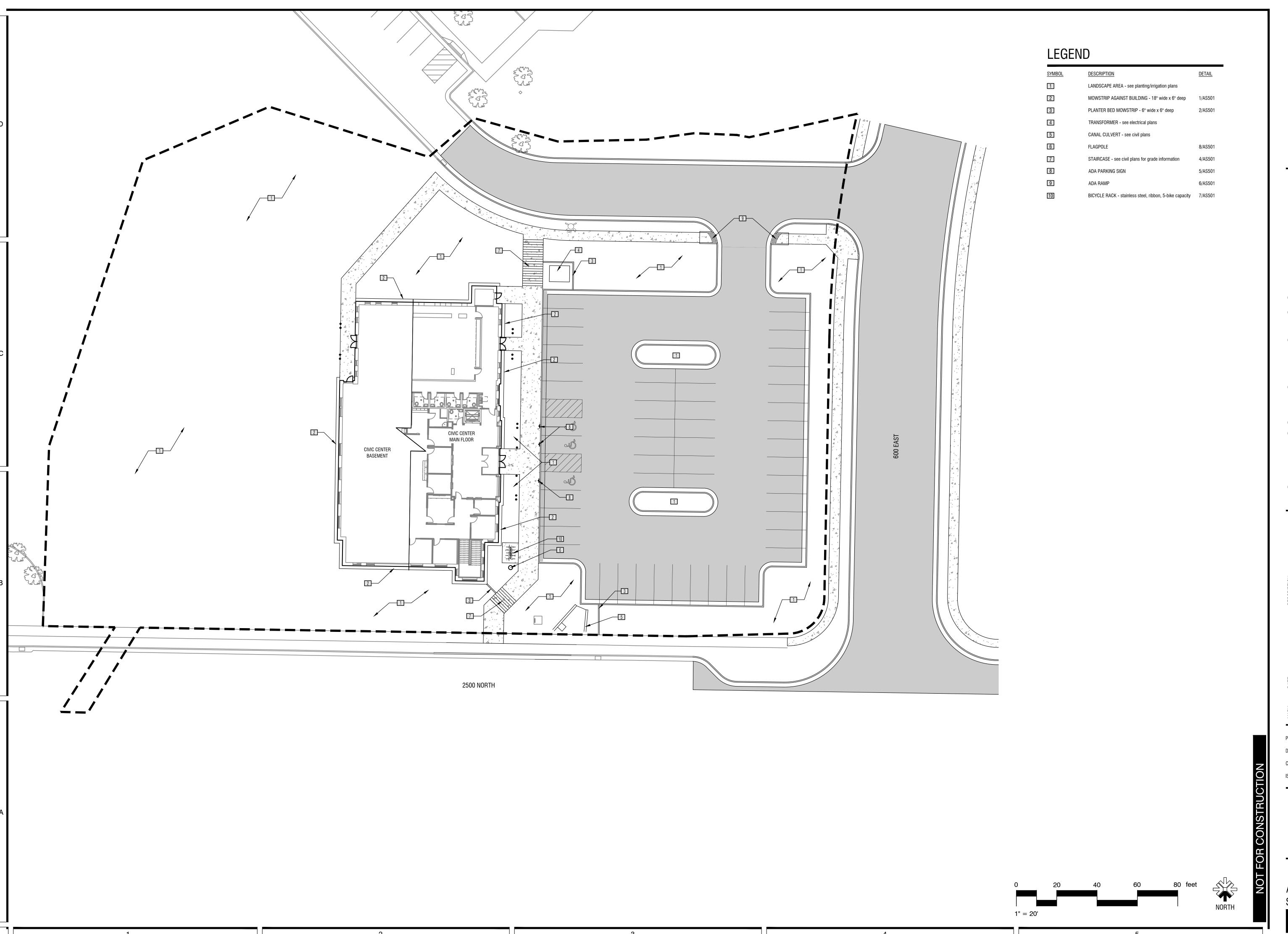
LOGAN CITY

OR.

BHB STRUCTURAL 2766 South Main Street

SCHEDULES

Salt Lake City, Utah 84115 801-355-5656 bhb@bhbengineers.com



| NORTH LOGAN CITY - CIVIC CENTER | DESIGN DEVELOPMENT PLAN | NORTH LOGAN, UTAH | NORTH LOGAN CITY

West | architects

design 255 SOUTH 300 WEST 795 NORTH 400 WEST

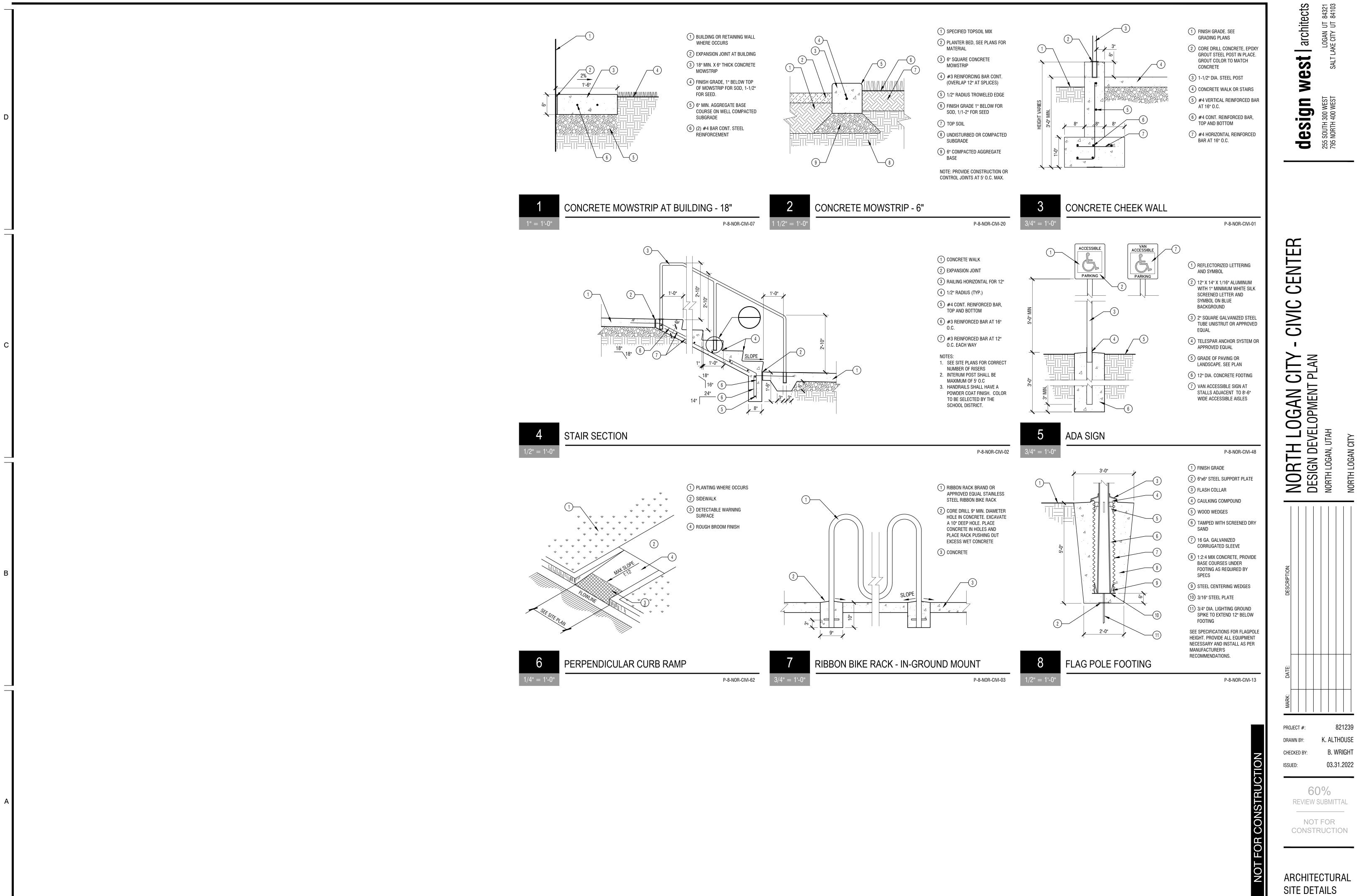
PROJECT #: 82123
DRAWN BY: K. ALTHOUS

AWN BY: K. ALTHOUSE
ECKED BY: B. WRIGHT
UED: 03.31.2022

60%
REVIEW SUBMITTAL

NOT FOR CONSTRUCTION

ARCHITECTURAL SITE PLAN AS-101



TH LOGAN (

LOGAN UT 84321 LAKE CITY UT 84103

K. ALTHOUSE

B. WRIGHT 03.31.2022

60% **REVIEW SUBMITTAL**

NOT FOR

ARCHITECTURAL

AS-501

GENERAL NOTES

• <u>LEGAL:</u> THE CONSTRUCTION DOCUMENTS FOR THIS PROJECT ARE COMPOSED OF SETS OF DRAWINGS AND SPECIFICATIONS, AND THEREFORE SHALL BE USED AND MAINTAINED IN THEIR ENTIRETY. ANY CONTRACTOR, SUBCONTRACTOR, VENDOR OR PARTY PARTICIPATING IN OR BIDDING ON THIS PROJECT SHALL BE EXPECTED TO PERFORM DUE DILIGENCE TO ENSURE THEIR BID, WORK PERFORMED, AND MATERIALS PROVIDED CONFORMS TO THE INFORMATION PROVIDED WITHIN ANY AND ALL SHEETS OF DRAWINGS AND SPECIFICATIONS, INCLUDING, BUT NOT LIMITED TO, ANY SUBSEQUENT ADDENDA OR CLARIFICATIONS THAT MAY BE ISSUED RELEVANT TO THEIR SCOPE OF WORK. PROJECT SCOPE MAY BE DEFINED WITHIN SPECIFICATIONS AND/OR DRAWINGS.

ADDITIONALLY, DRAWINGS MAY NOT BE RE-SCALED WHEN PRINTED, WRITTEN DIMENSIONS SHALL HAVE PRECEDENCE, AND LARGER SCALE DRAWINGS SHALL HAVE PRECEDENCE OVER SMALLER SCALE

ANY DEVIATION FROM OR CONFLICT WITHIN THE DRAWINGS AND/OR SPECIFICATIONS, MUST BE SUBMITTED TO AND APPROVED BY THE ARCHITECT BEFORE CONTINUING THAT PORTION OF WORK.

 KEYNOTES: THE FIRST TWO NUMBERS REPRESENT THE RELATED CSI MASTERFORMAT DIVISION. THE SECOND SET OF NUMBERS REPRESENT AN IDENTIFYING MARK VALUE. NOT ALL VALUES MAY BE USED OR OCCUR IN THE DOCUMENT SET.

ADDITIONALLY, KEYNOTES RETAIN THEIR ASSIGNED VALUE UNIVERSALLY THROUGHOUT THE SET. THE KEYNOTES LISTED BELOW, REPRESENT THE KEYNOTES FOUND AND UTILIZED ON THIS SHEET AND EACH LIST WILL DIFFER RESPECTIVE TO ITS' SHEET. THEREFORE, BASED ON ACTUAL KEYNOTES UTILIZED ON A GIVEN SHEET OF DRAWINGS, GAPS IN THE SEQUENCING WILL OCCUR.

 CONTRACTOR SHALL BE FAMILIARIZED WITH THE LAY-OUT OF STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. ANY QUESTIONS SHALL BE SUBMITTED VIA REQUEST FOR INFORMATION (RFI).

LEGEND

======= WALLS TO BE FRAMED FOUNDATION WALLS SLAB EDGES

KEYNOTES

(#) MARK DESCRIPTION

architects

st

esign

CENTER

CIVIC

ORTH LOG/

PLAN - BASEMENT -SLAB

A-100.0

A1 PLAN - SLAB

architects

st

esign

ENTER

 \mathbf{C}

CIVIC

PLAN - BASEMENT -**DIMENSION**

A-100.1

architects

est

esign

LOGAN UT 84321 LAKE CITY UT 84103

PLAN - BASEMENT -ANNOTATION

A-100.2

CENTER

CIVIC

SUBMITTED TO AND APPROVED BY THE ARCHITECT PRIOR TO BID OR BEFORE CONTINUING THAT PORTION

 ROOM FINISH TAGS FOR EACH ROOM REPRESENT TYPICAL FINISHES. SPECIFIC WALLS IN SELECTED AREAS MAY HAVE MULTIPLE FINISHES WHICH WILL BE INDICATED IN INTERIOR ELEVATIONS.

SEE INTERIOR ELEVATIONS FOR ADDITIONAL FINISH INFORMATION

SEE REFLECTED CEILING PLANS FOR ADDITIONAL FINISH INFORMATION

FOR FINISH LEGEND SEE A-691

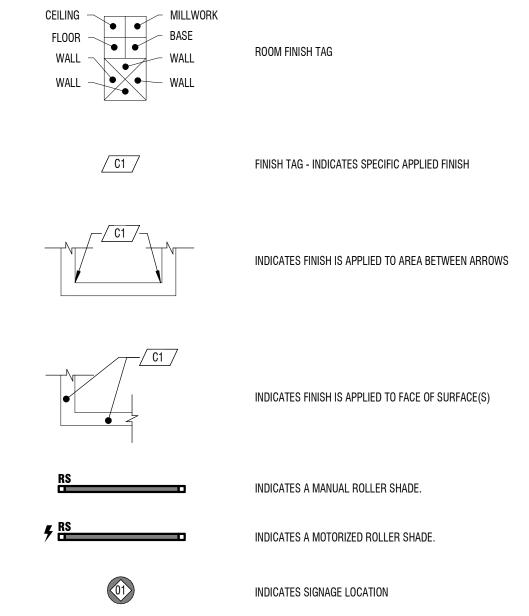
FLOOR MATERIAL TRANSITIONS WILL OCCUR BELOW DOORS. U.N.O. SEE TYPICAL TRANSITION DETAILS ON

POLISHED OR SEALED CONCRETE <u>DOES</u> EXTEND UNDER CASEWORK OR MILLWORK

• FLOOR COVERING <u>DOES NOT</u> EXTEND UNDER MILLWORK OR CASEWORK, U.N.O.

FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF CASEWORK AND FINISH ASSEMBLIES

LEGEND



INDICATES CORNER GUARD

PLAN - FINISH

UNFINISHED SPACE

MECHANICAL/ELECTRICAL

VI 11 11 11

A. A. A. A.

OUTLETS FOR FUTURE MICROWAVE 1 AT 36" AFF FOUR COUNTERTOP OPTION 1 AT 60" AFF FOR BUILT IN OPTION

PLAN - BASEMENT -

MEASUREMENTS SPECIFYING "EQ" = EQUAL LENGTH OR WIDTH TO FILL REMAINDER OF LENGTH REQUIRED

CEILINGS WITH NO DIRECT MEASUREMENTS, ASSUME CEILING TO BE EQUALLY DISTANCED ON ALL SIDES OF

• FIXTURES IN OPEN TO STRUCTURE AREAS ARE DIMENSIONED FROM WALL <u>OR</u> CENTERLINE OF ROOM

• LIGHT FIXTURES WITH NO DIMENSIONS ARE TO BE CENTERED ON ROOM UNLESS OTHERWISE NOTED

FIXTURES ON GRID SHALL BE IN LINE WITH GRID CENTER ON CENTER UNLESS OTHERWISE NOTED

ROLLER SHADES PER FINISH PLANS, COORDINATE MANUAL AND POWER LOCATIONS WITH THE ELECTRICAL

• FIRE SPRINKLER HEADS, MOTION DETECTORS, LIGHT SENSORS, ETC. ARE TO BE CENTERED IN THE PANEL.

FIXTURES WITHIN A.C.T. TO BE CENTERED IN GRID UNLESS OTHERWISE NOTED

WHERE LIGHTING OCCURS IN SLOPED CEILINGS, CENTER FIXTURES ON SLOPE

◆ 0.T.S. (E)— – — –

LEGEND

<u>MATERIALS</u>

2'-0" x 2'-0" SUSPENDED ACOUSTICAL LAY-IN CEILING SYSTEM

PAINTED GYPSUM BOARD CEILINGS TYPICAL, U.N.O.

LIGHTING FIXTURES: 2'x2' / 2'x4' TROFFERS LINEAR FIXTURES RECESSED FIXTURE COVE UPLIGHTING

<u>SENSORS/SIGNS/ELEC./DATA:</u> EXIT SIGN - SEE ELECTRICAL DRAWINGS OCCUPANCY SENSOR AIR GRILLES/ACCESS PANELS: EXHAUST SUPPLY / FRESH RETURN / RELIEF

ACCESS PANEL

A-100.4

A1 PLAN - REFLECTED CEILING 1/8" = 1'-0" BASEMENT

3 4

ENTER

 \mathbf{C}

CIVIC

ZETTERQUIST

PLAN - BASEMENT -REFLECTED CEILING

GENERAL NOTES

• <u>LEGAL:</u> THE CONSTRUCTION DOCUMENTS FOR THIS PROJECT ARE COMPOSED OF SETS OF DRAWINGS AND SPECIFICATIONS, AND THEREFORE SHALL BE USED AND MAINTAINED IN THEIR ENTIRETY. ANY CONTRACTOR, SUBCONTRACTOR, VENDOR OR PARTY PARTICIPATING IN OR BIDDING ON THIS PROJECT SHALL BE EXPECTED TO PERFORM DUE DILIGENCE TO ENSURE THEIR BID, WORK PERFORMED, AND MATERIALS PROVIDED CONFORMS TO THE INFORMATION PROVIDED WITHIN ANY AND ALL SHEETS OF DRAWINGS AND SPECIFICATIONS, INCLUDING, BUT NOT LIMITED TO, ANY SUBSEQUENT ADDENDA OR CLARIFICATIONS THAT MAY BE ISSUED RELEVANT TO THEIR SCOPE OF WORK. PROJECT SCOPE MAY BE DEFINED WITHIN SPECIFICATIONS AND/OR DRAWINGS.

ADDITIONALLY, DRAWINGS MAY NOT BE RE-SCALED WHEN PRINTED, WRITTEN DIMENSIONS SHALL HAVE PRECEDENCE, AND LARGER SCALE DRAWINGS SHALL HAVE PRECEDENCE OVER SMALLER SCALE

ANY DEVIATION FROM OR CONFLICT WITHIN THE DRAWINGS AND/OR SPECIFICATIONS, MUST BE SUBMITTED TO AND APPROVED BY THE ARCHITECT BEFORE CONTINUING THAT PORTION OF WORK.

 KEYNOTES: THE FIRST TWO NUMBERS REPRESENT THE RELATED CSI MASTERFORMAT DIVISION. THE SECOND SET OF NUMBERS REPRESENT AN IDENTIFYING MARK VALUE. NOT ALL VALUES MAY BE USED OR OCCUR IN THE DOCUMENT SET.

ADDITIONALLY, KEYNOTES RETAIN THEIR ASSIGNED VALUE UNIVERSALLY THROUGHOUT THE SET. THE KEYNOTES LISTED BELOW, REPRESENT THE KEYNOTES FOUND AND UTILIZED ON THIS SHEET AND EACH LIST WILL DIFFER RESPECTIVE TO ITS' SHEET. THEREFORE, BASED ON ACTUAL KEYNOTES UTILIZED ON A GIVEN SHEET OF DRAWINGS, GAPS IN THE SEQUENCING WILL OCCUR.

 CONTRACTOR SHALL BE FAMILIARIZED WITH THE LAY-OUT OF STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. ANY QUESTIONS SHALL BE SUBMITTED VIA REQUEST FOR INFORMATION (RFI).

LEGEND

======= WALLS TO BE FRAMED FOUNDATION WALLS SLAB EDGES

KEYNOTES

(#) MARK DESCRIPTION

A-101.0

A1 PLAN - SLAB

architects

st

design

CENTER CIVIC

ORTH LOG/

<u>KEYNOTES</u>:

THE FIRST TWO NUMBERS REPRESENT THE RELATED CSI MASTER FORMAT DIVISION.
THE SECOND SET OF NUMBERS REPRESENTS AN IDENTIFYING MARK VALUE. NOT ALL VALUES MAY BE USED

ADDITIONALLY, KEYNOTES RETAIN THEIR ASSIGNED VALUE UNIVERSALLY THROUGHOUT THE SET. THE KEYNOTES LISTED BELOW, REPRESENT THE KEYNOTES FOUND AND UTILIZED ON THIS SHEET AND EACH LIST WILL DIFFER RESPECTIVE TO ITS' SHEET. THEREFORE, BASED ON ACTUAL KEYNOTES UTILIZED ON A GIVEN

- DRAWINGS. ANY QUESTIONS SHALL BE SUBMITTED VIA REQUEST FOR INFORMATION (RFI).
- ALL INTERIOR DIMENSIONS ARE TO/FROM FACE OF STUD / MASONRY. ALL EXTERIOR DIMENSIONS ARE TO/FROM FACE OF GRID/FOUNDATION. DIMENSIONS MARKED 'CLEAR' OR 'CLR' ARE FROM FACE OF FINISH TO FACE OF FINISH AND SHALL BE MAINTAINED AND CANNOT BE FIELD ADJUSTED WITHOUT PRIOR APPROVAL

- COVERAGE OF GYP BD IN STUD WALLS TO MAINTAIN INTEGRITY OF FIRE WALL RATING PER C4/A-513
- ADA RESTROOMS MUST COMPLY WITH ADA WATER CLOSET MEASUREMENTS ON SHEET A-531

PLAN - MAIN -**DIMENSION PLAN**

A-101.1

• BLOCKING TO BE PROVIDED AT SHELVING, CASEWORK, RAILINGS, LIGHT FIXTURE, COUNTERTOP,

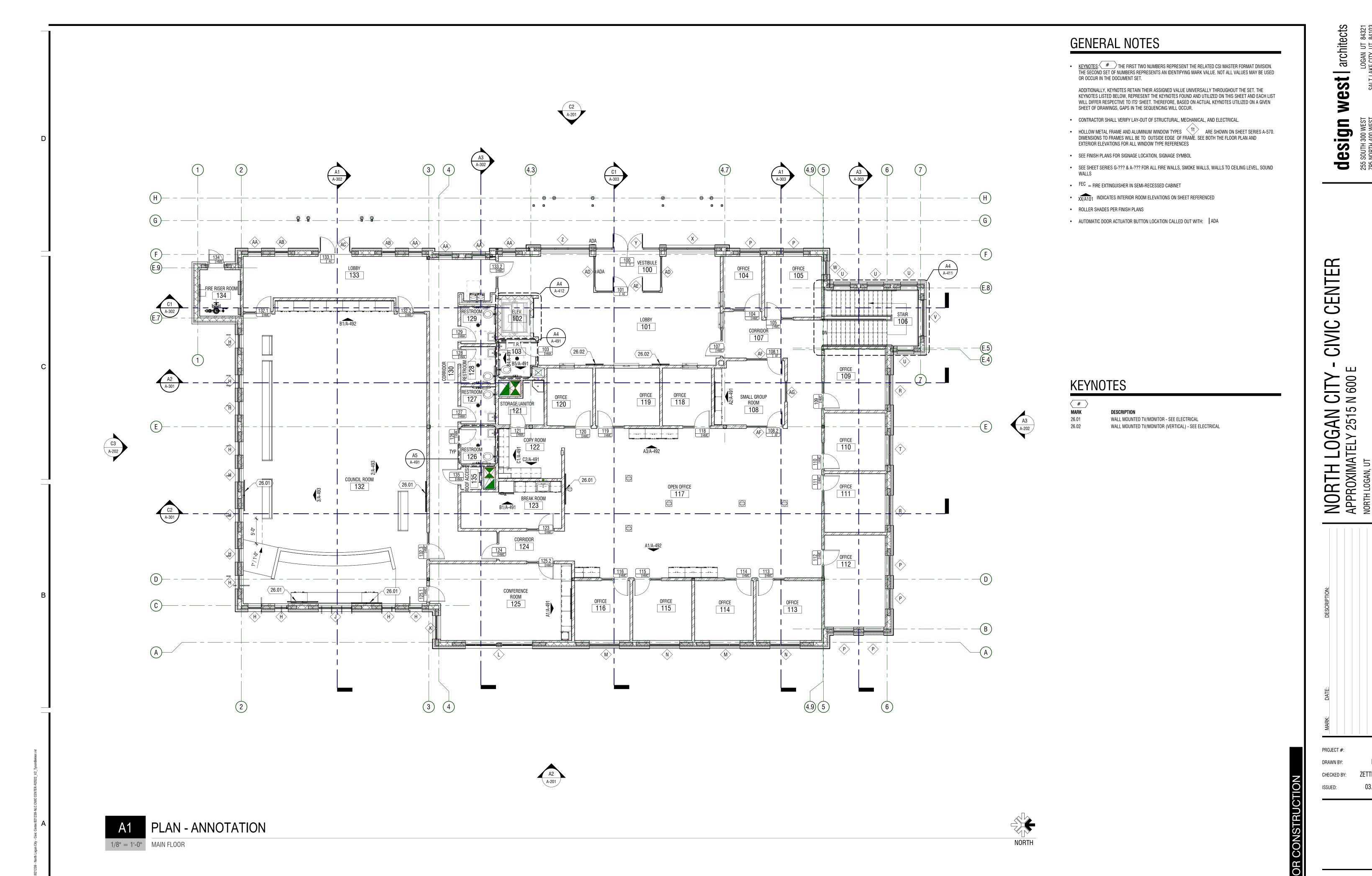
ENTE

 \mathbf{C}

architects

St

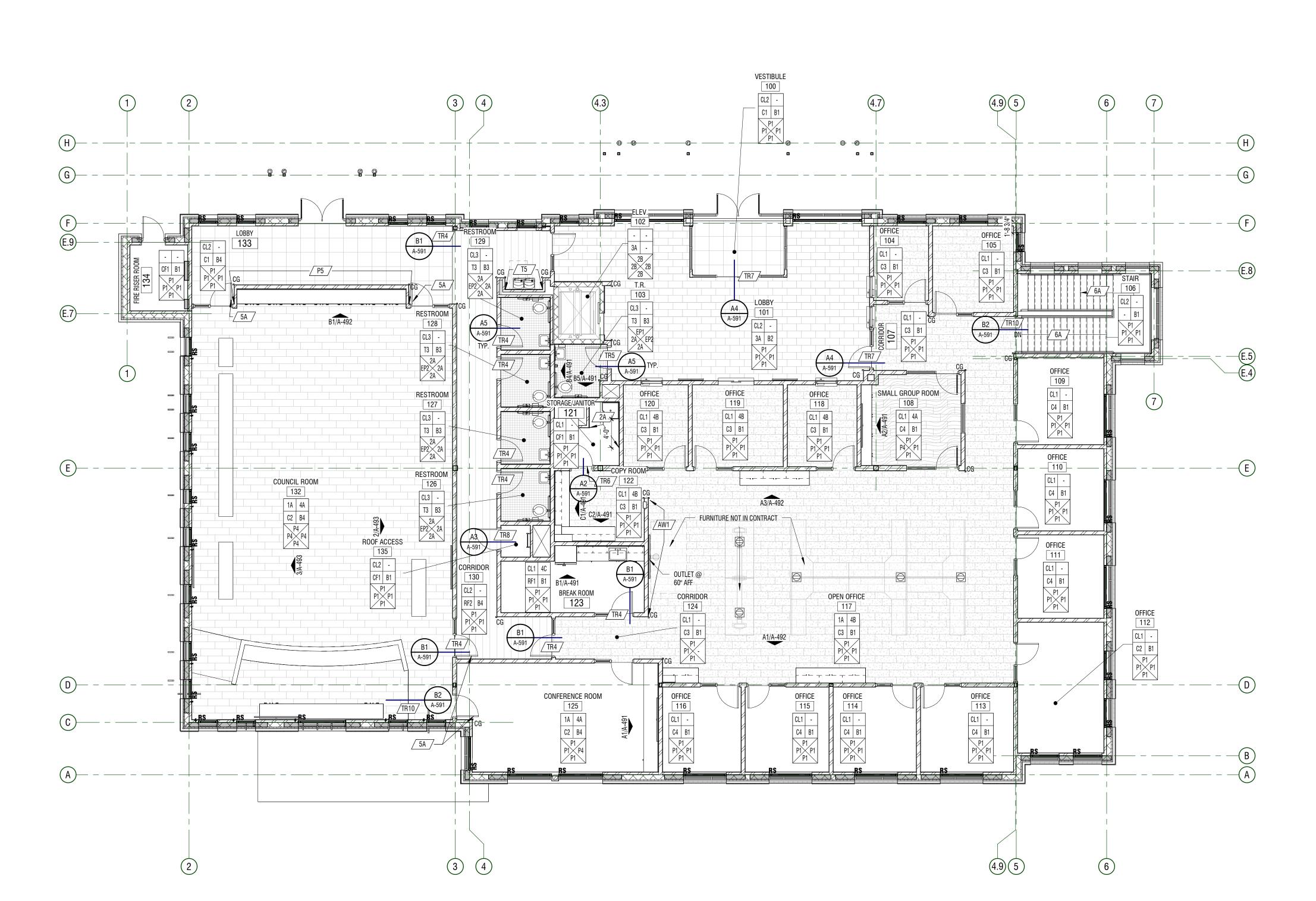
esign



PLAN - MAIN -ANNOTATION

A-101.2
© COPYRIGHT DESIGN WEST ARCHITECTS 2022

A-101.3



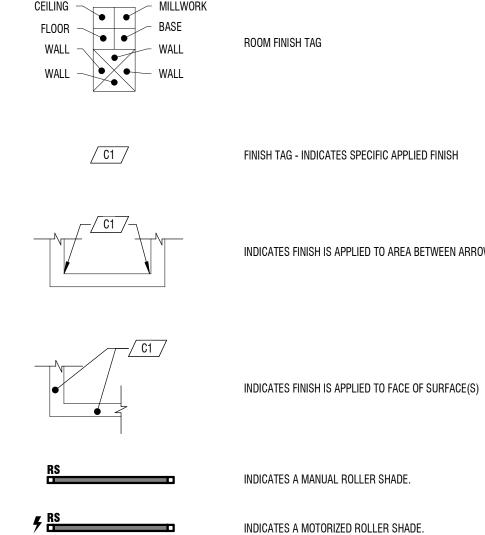
GENERAL NOTES

• <u>LEGAL NOTICE:</u> THE CONSTRUCTION DOCUMENTS FOR THIS PROJECT ARE COMPOSED OF SETS OF DRAWINGS AND SPECIFICATIONS, AND THEREFORE SHALL BE USED AND MAINTAINED IN THEIR ENTIRETY. ANY CONTRACTOR, SUBCONTRACTOR, VENDOR OR PARTY PARTICIPATING IN OR BIDDING ON THIS PROJECT SHALL BE EXPECTED TO PERFORM DUE DILIGENCE TO ENSURE THEIR BID, WORK PERFORMED, AND MATERIALS PROVIDED CONFORMS TO THE INFORMATION PROVIDED WITHIN ANY AND ALL SHEETS OF DRAWINGS AND SPECIFICATIONS, INCLUDING, BUT NOT LIMITED TO, ANY SUBSEQUENT ADDENDA OR CLARIFICATIONS THAT MAY BE ISSUED RELEVANT TO THEIR SCOPE OF WORK. PROJECT SCOPE MAY BE DEFINED WITHIN SPECIFICATIONS AND/OR DRAWINGS.

ADDITIONALLY, DRAWINGS MAY NOT BE RE-SCALED WHEN PRINTED, WRITTEN DIMENSIONS SHALL HAVE PRECEDENCE, AND LARGER SCALE DRAWINGS SHALL HAVE PRECEDENCE OVER SMALLER SCALE

ANY DEVIATION FROM OR CONFLICT WITHIN THE DRAWINGS AND/OR SPECIFICATIONS, MUST BE SUBMITTED TO AND APPROVED BY THE ARCHITECT PRIOR TO BID OR BEFORE CONTINUING THAT PORTION

- ROOM FINISH TAGS FOR EACH ROOM REPRESENT TYPICAL FINISHES. SPECIFIC WALLS IN SELECTED AREAS MAY HAVE MULTIPLE FINISHES WHICH WILL BE INDICATED IN INTERIOR ELEVATIONS.
- SEE INTERIOR ELEVATIONS FOR ADDITIONAL FINISH INFORMATION
- SEE REFLECTED CEILING PLANS FOR ADDITIONAL FINISH INFORMATION
- FOR FINISH LEGEND SEE A-691
- FLOOR MATERIAL TRANSITIONS WILL OCCUR BELOW DOORS. U.N.O. SEE TYPICAL TRANSITION DETAILS ON
- POLISHED OR SEALED CONCRETE <u>DOES</u> EXTEND UNDER CASEWORK OR MILLWORK
- FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF CASEWORK AND FINISH ASSEMBLIES



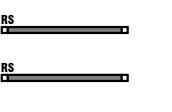
PLAN - FINISH

• FLOOR COVERING <u>DOES NOT</u> EXTEND UNDER MILLWORK OR CASEWORK, U.N.O.

LEGEND

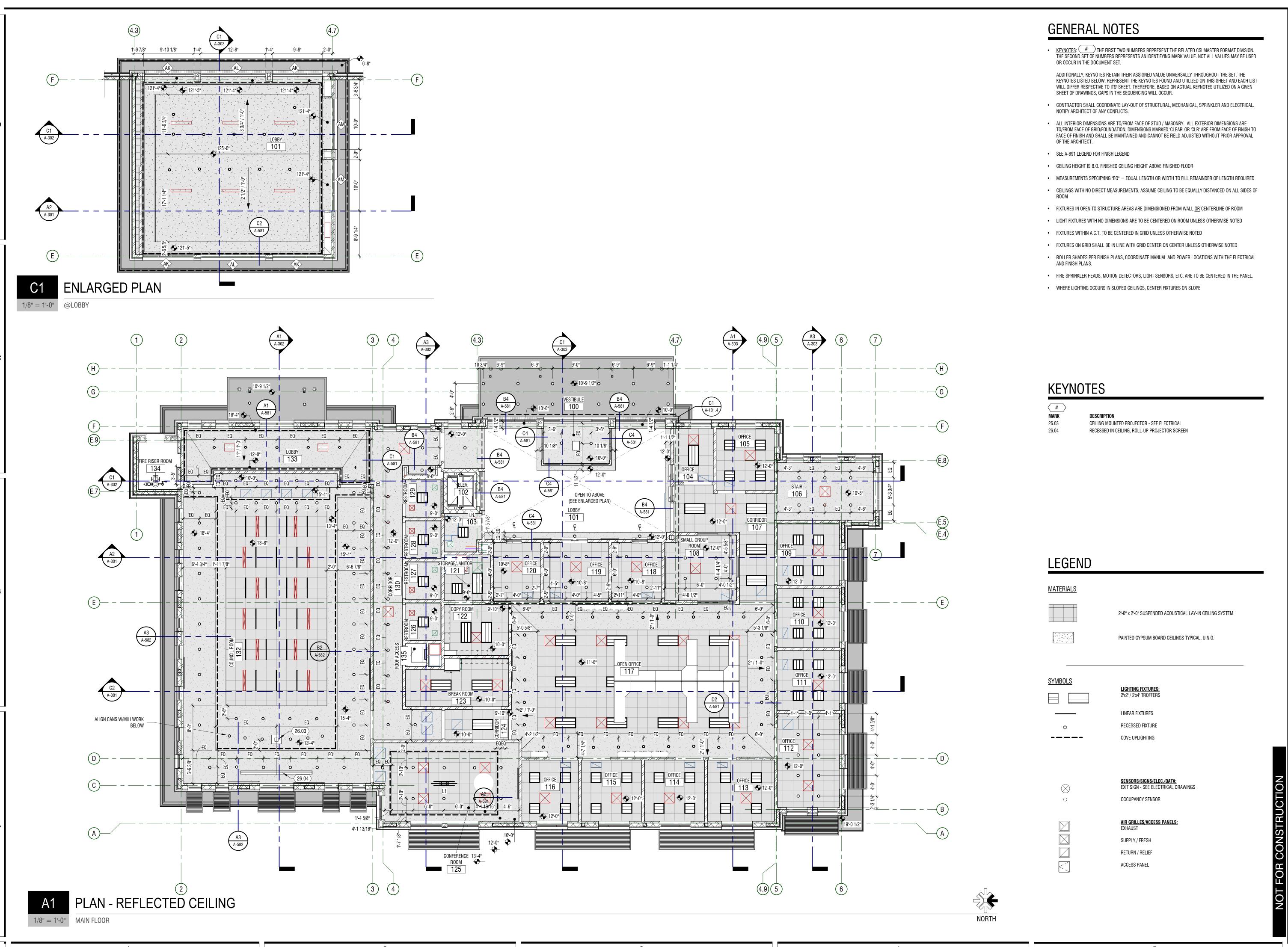
CEILING MILLWORK FLOOR BASE WALL WALL WALL	ROOM FINISH TAG
<u></u>	FINISH TAG - INDICATI
	INDICATES FINISH IS A

IS APPLIED TO AREA BETWEEN ARROWS





INDICATES CORNER GUARD



architects GAN UT

St

sign

ENTE \mathbf{C}

PLAN - MAIN -REFLECTED CEILING

A-101.4

architects

st

esign

ENTER

0

LOGAN UT 84321 LAKE CITY UT 84103



LOGAN UT 84321 LAKE CITY UT 84103 West | architects

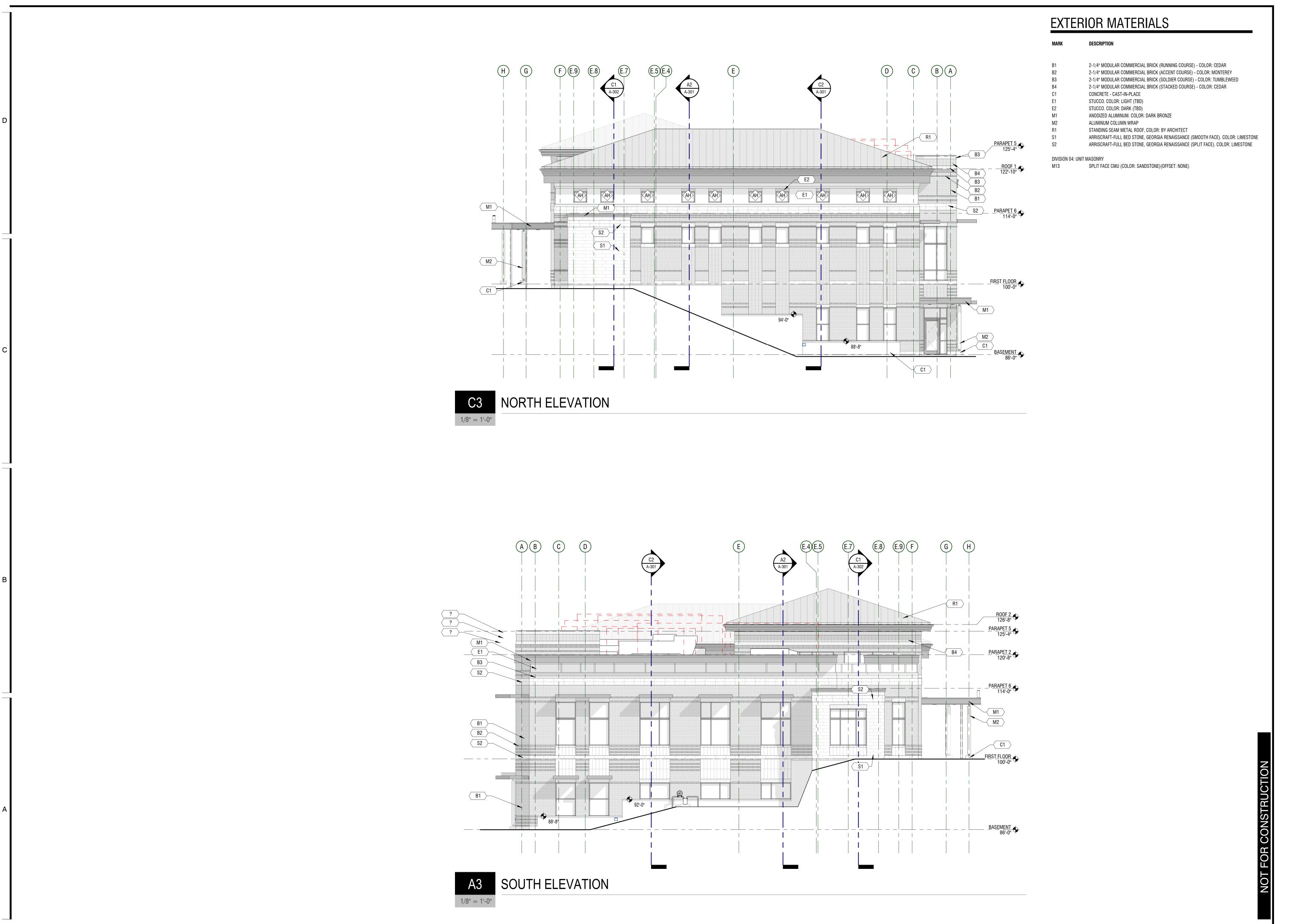
design 255 SOUTH 300 WEST 795 NORTH 400 WEST

CENTER CIVIC

NORTH LOGAN CITY - APPROXIMATELY 2515 N 600 E NORTH LOGAN, UT

ELEVATIONS -

EXTERIOR A-201



n west architects

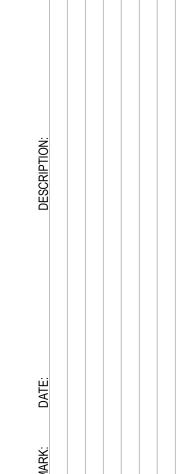
EST LOGAN UT 84321

EST SALT LAKE CITY UT 84103

design W 255 SOUTH 300 WEST 795 NORTH 400 WEST

CIVIC CENTER

NORTH LOGAN CITY - PPROXIMATELY 2515 N 600 E ORTH LOGAN, UT



821239

N BY: NIELSON

KED BY: ZETTERQUIST

D: 03.30.2022

ELEVATIONS -EXTERIOR

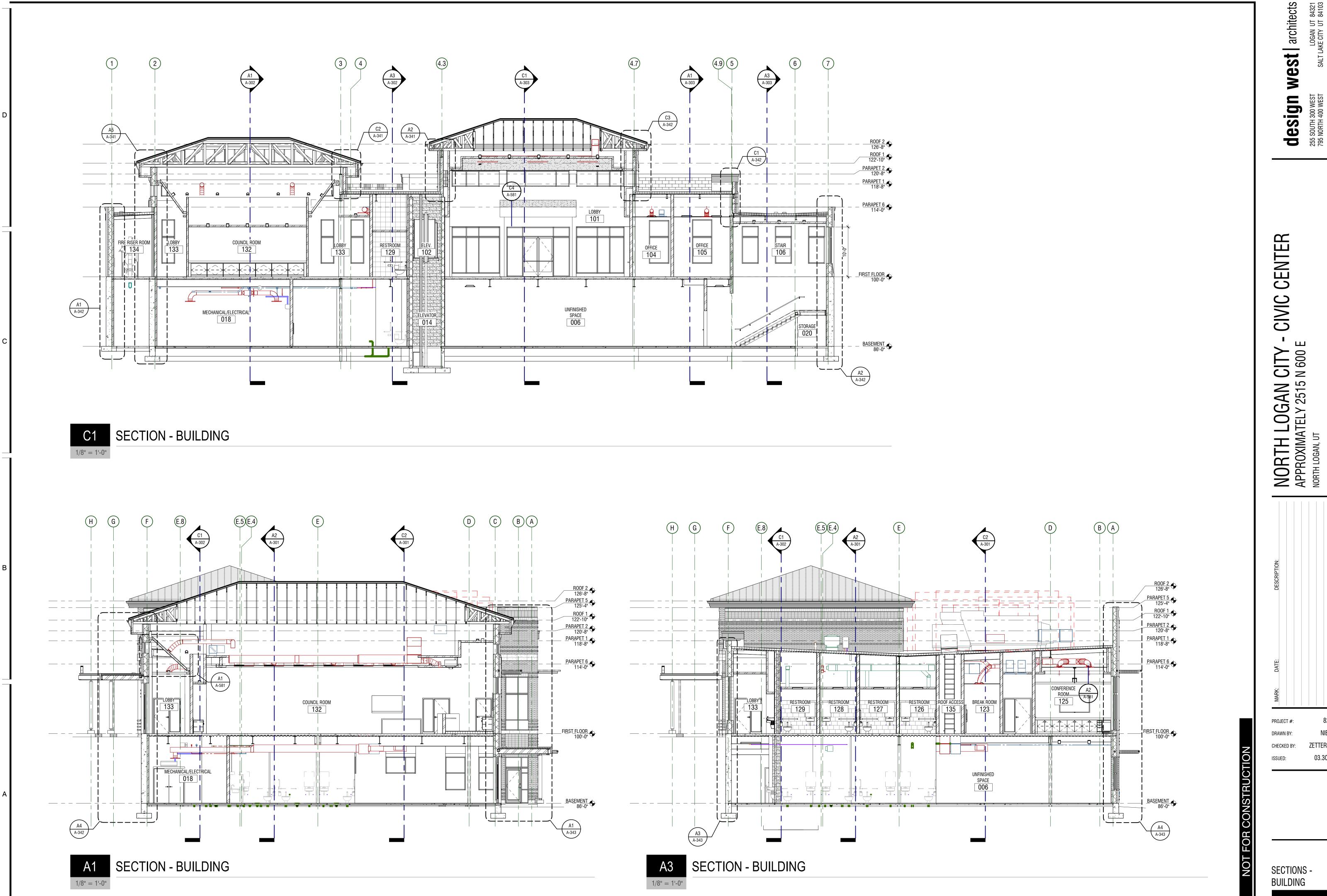
CENTER CIVIC

West | architects

design 255 SOUTH 300 WEST 795 NORTH 400 WEST

ZETTERQUIST 03.30.2022

BUILDING

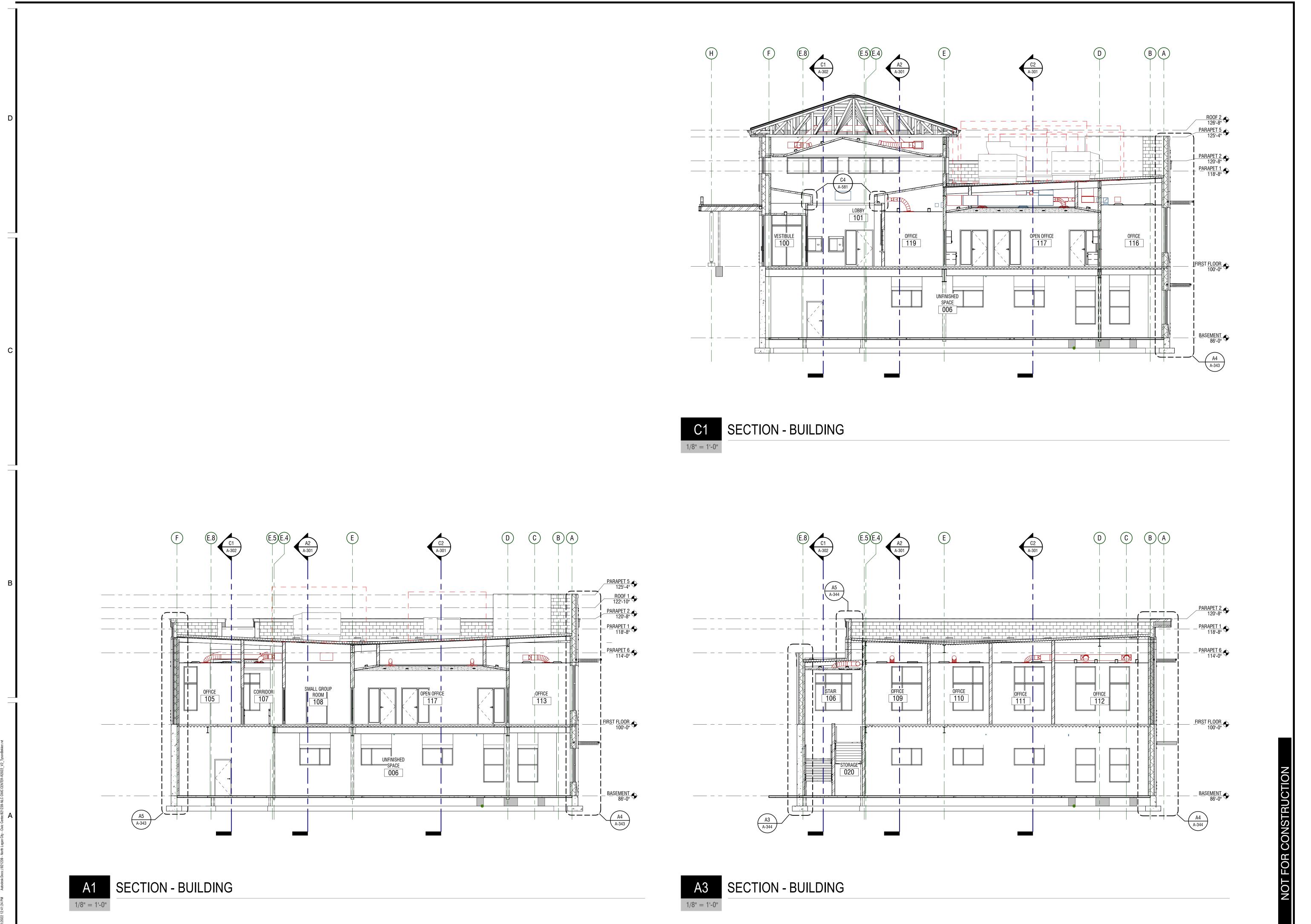


NORTH LOGAN CITY - APPROXIMATELY 2515 N 600 E NORTH LOGAN, UT

LOGAN UT 84321 LAKE CITY UT 84103

03.30.2022

SECTIONS -BUILDING



NORTH LOGAN CITY - CIVIC CENTER
APPROXIMATELY 2515 N 600 E

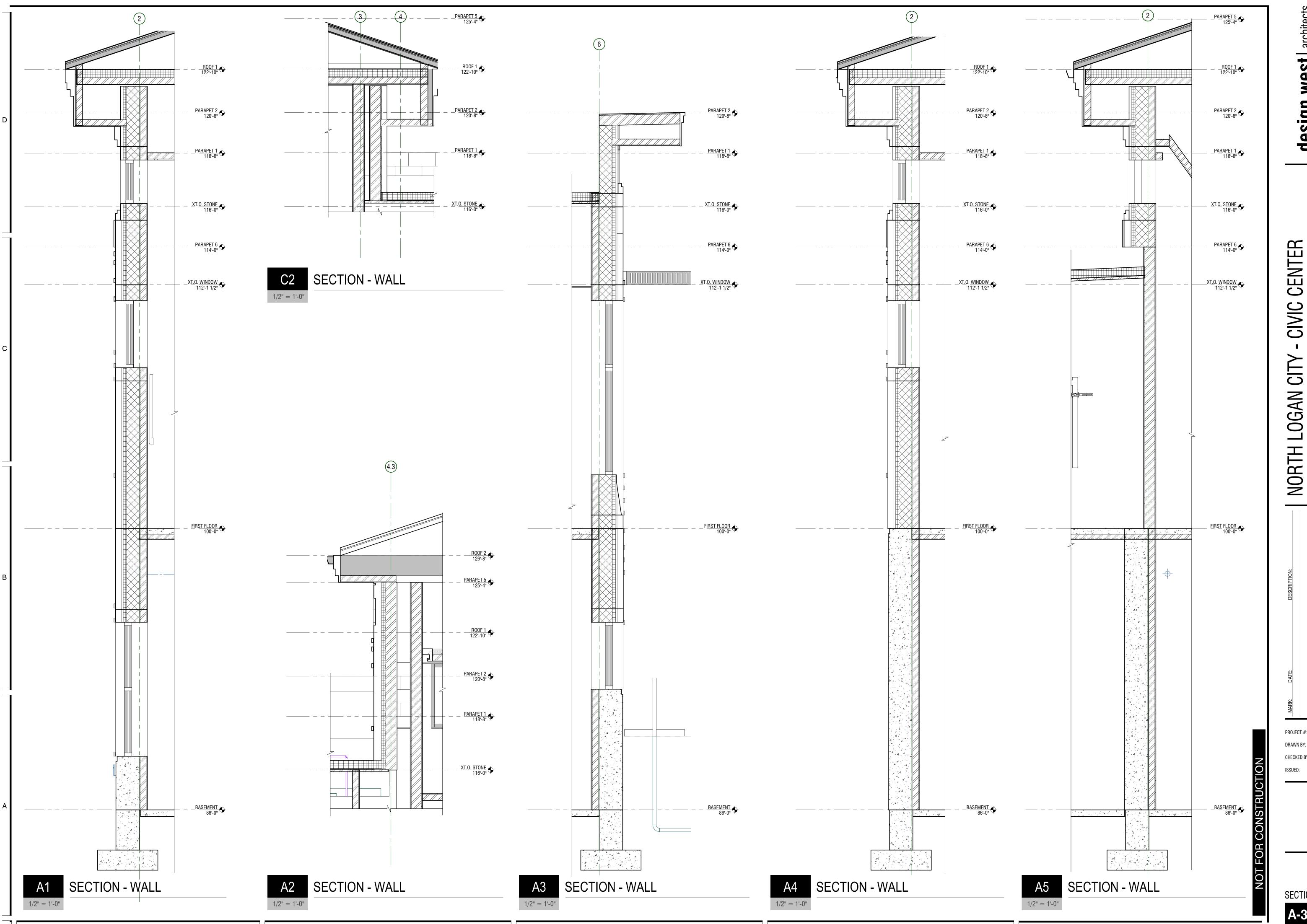
West | architects

design

PROJECT #: 82123
DRAWN BY: NIELSO
CHECKED BY: ZETTERQUIS
ISSUED: 03.30.202

SECTIONS -BUILDING

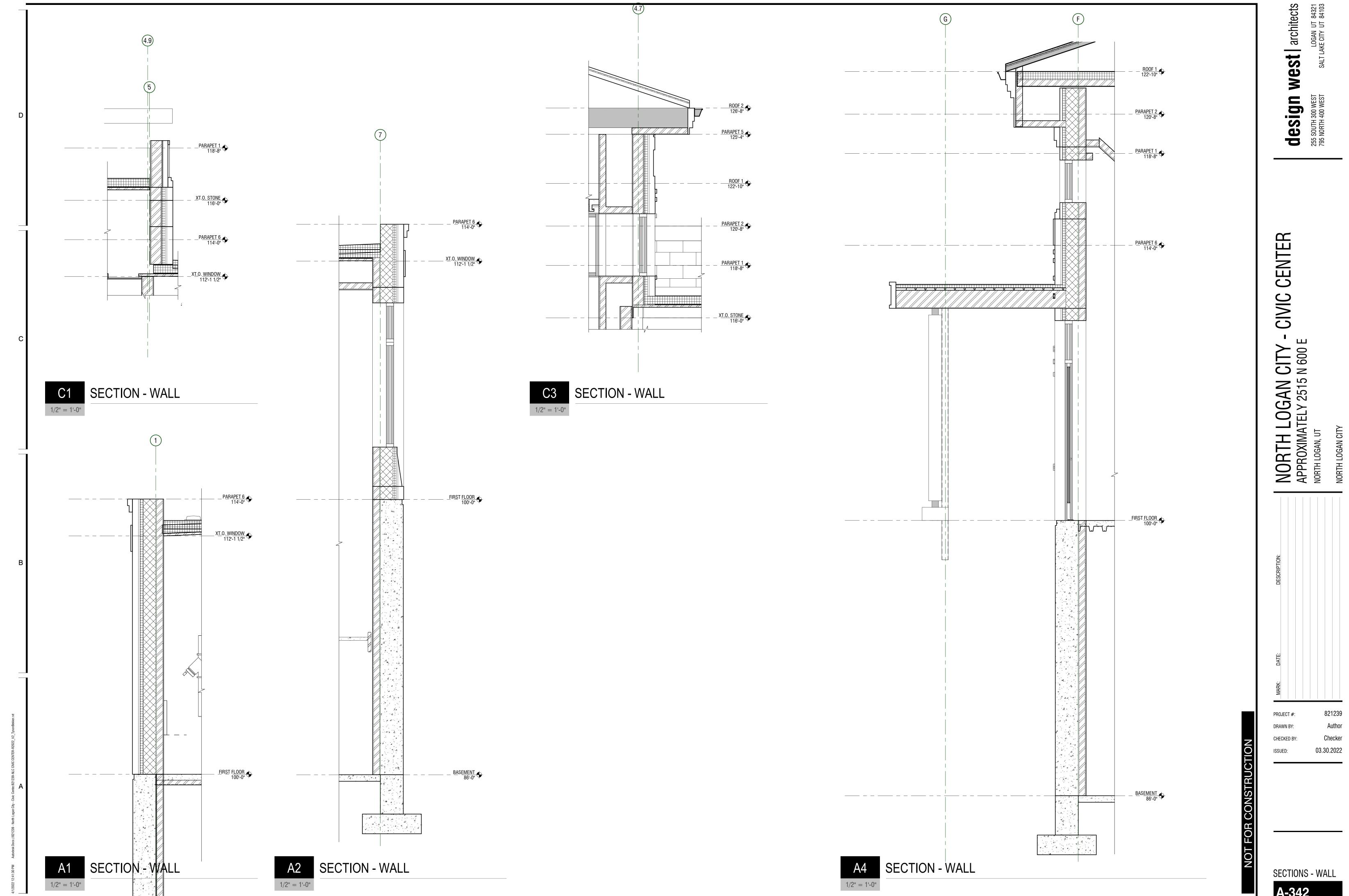
A-303
© COPYRIGHT DESIGN WEST ARCHITECTS 2022

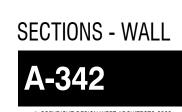


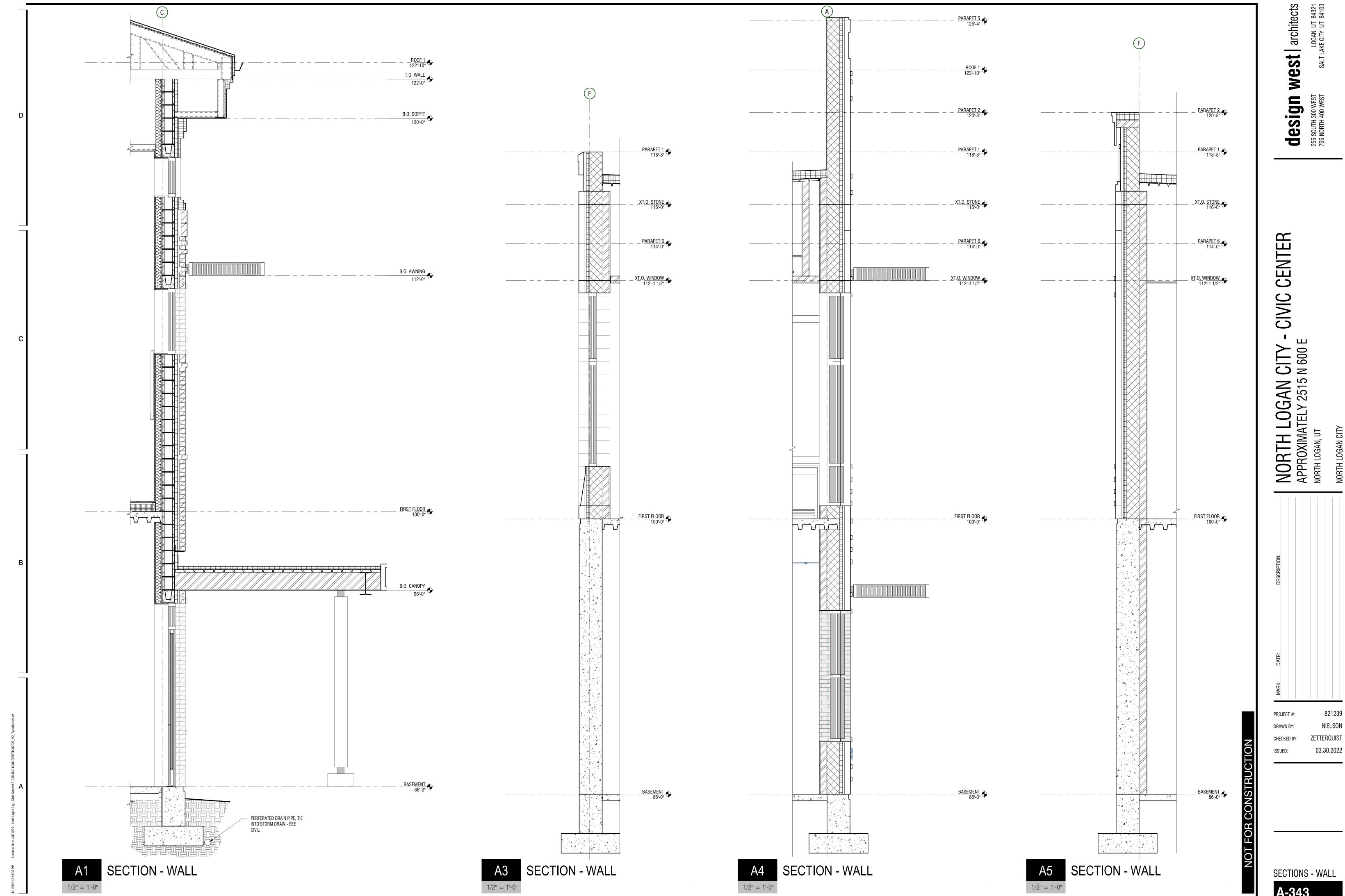
est | architects

design 255 SOUTH 300 WEST 795 NORTH 400 WEST

SECTIONS - WALL A-341

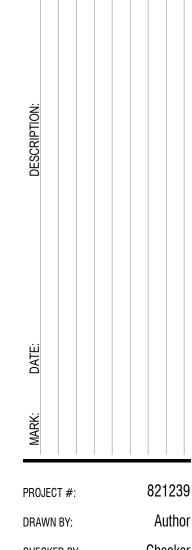






LOGAN UT 84321 FLAKE CITY UT 84103 design V 255 SOUTH 300 WEST 795 NORTH 400 WEST

NORTH LOGAN CITY - APPROXIMATELY 2515 N 600 E NORTH LOGAN, UT

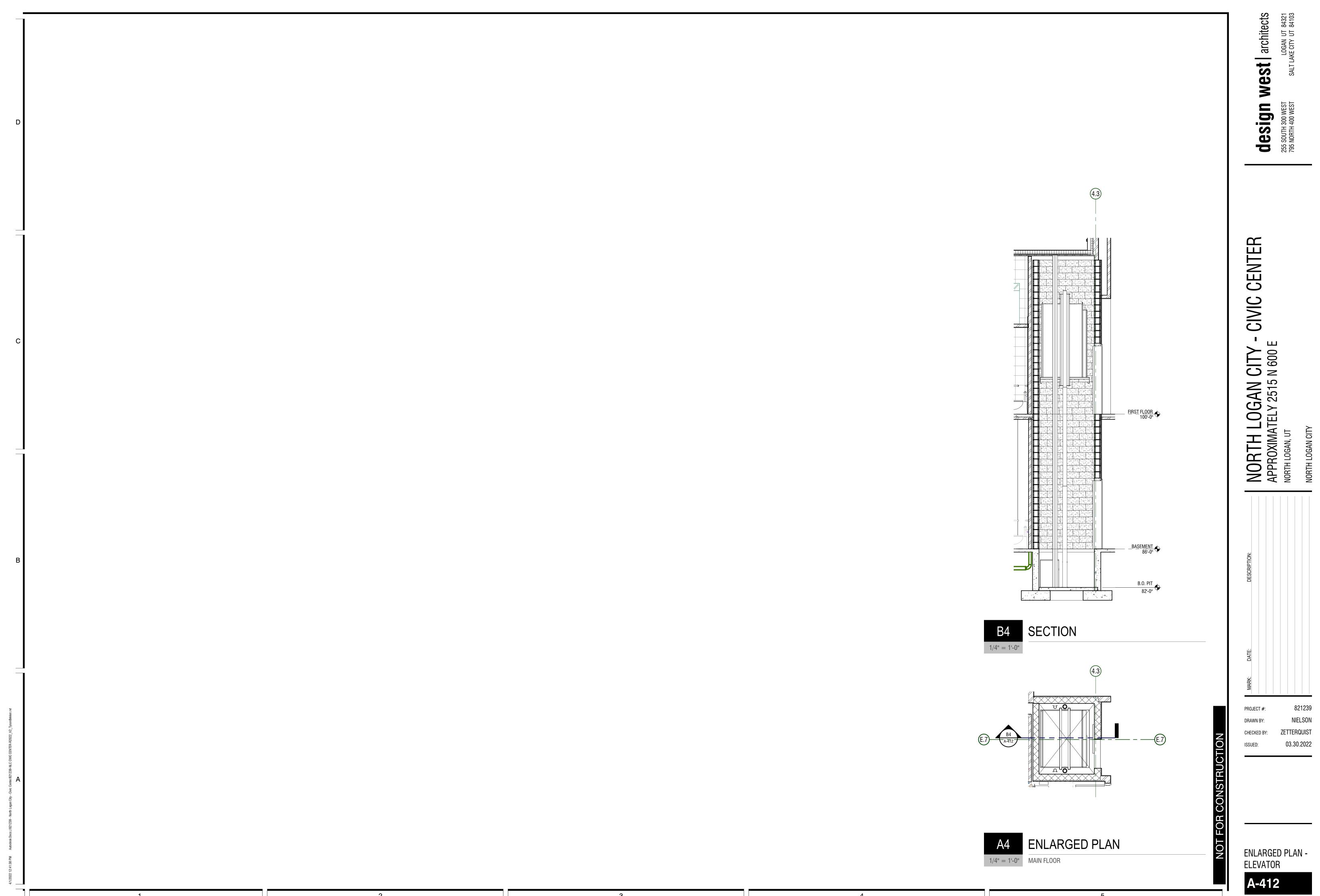




West | architects design

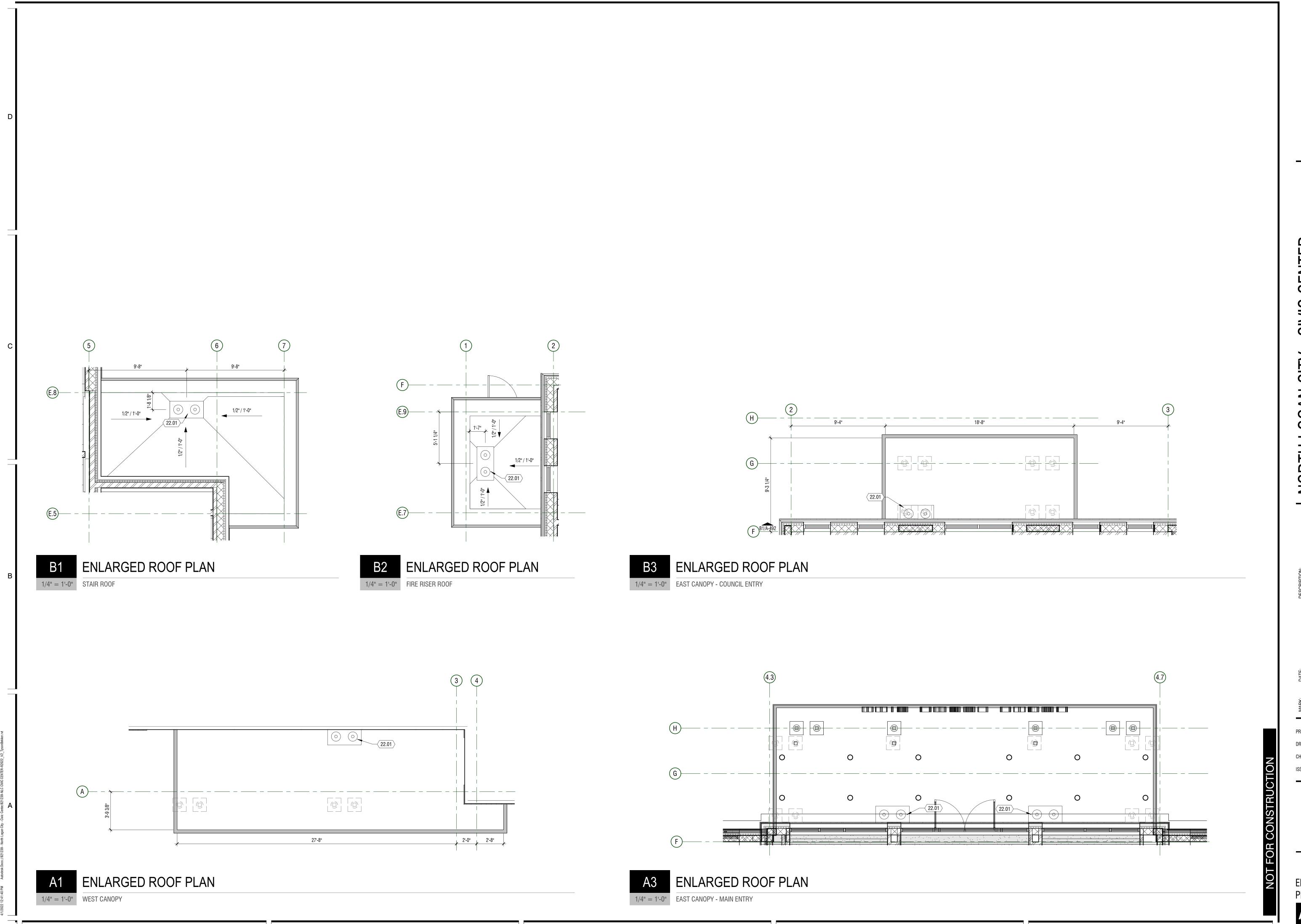
CENTER CIVIC NORTH LOGAN CITY - APPROXIMATELY 2515 N 600 E NORTH LOGAN, UT

ENLARGED PLAN -STAIR



ZETTERQUIST

ENLARGED PLAN -ELEVATOR

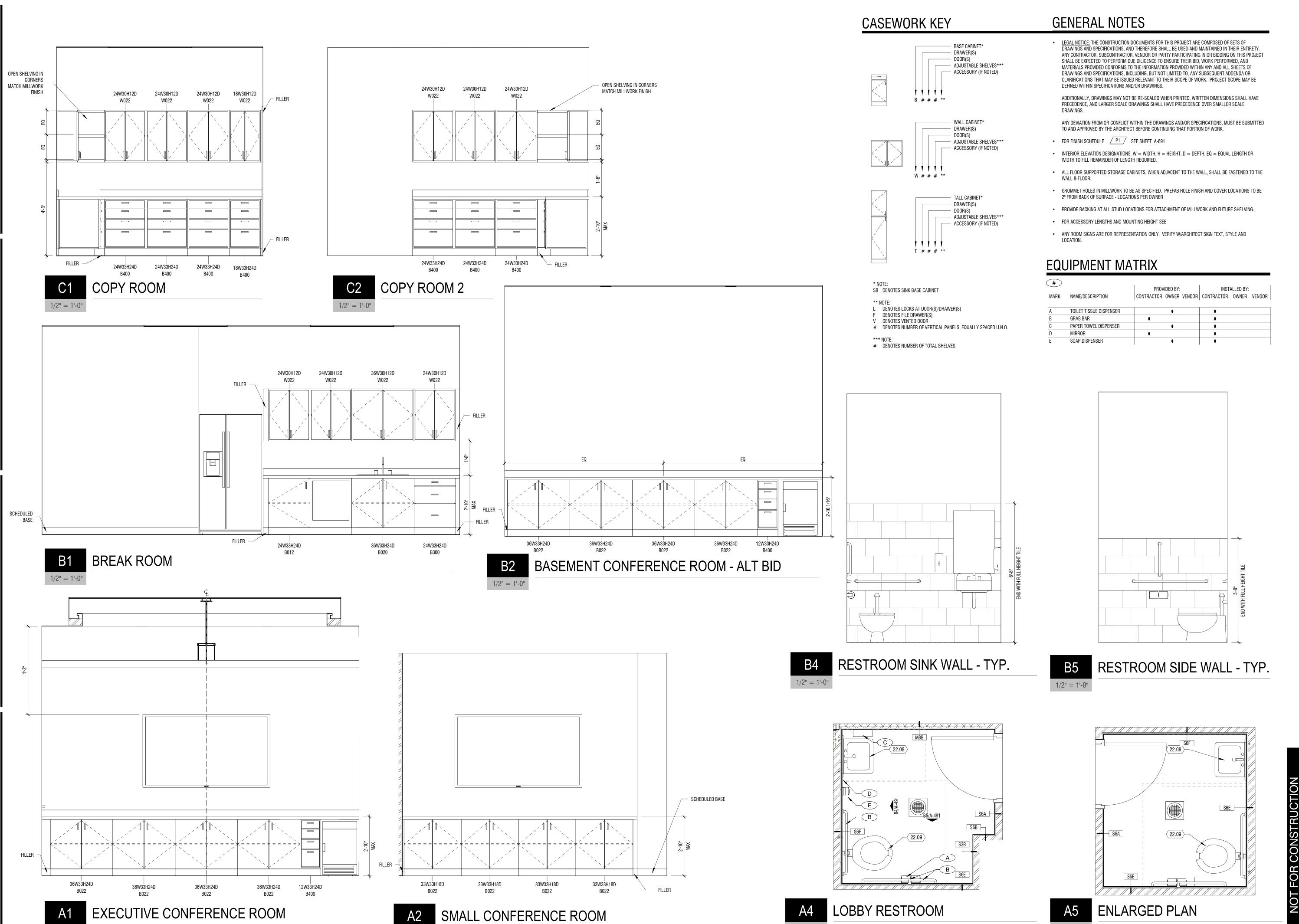


West | architects design

CENTER CIVIC NORTH LOGAN CITY APPROXIMATELY 2515 N 600 E
NORTH LOGAN, UT

ZETTERQUIST 03.30.2022

ENLARGED ROOF PLAN



Jesign West architects south 300 West salt lake city ut 84321 salt lake city ut 84103

Y - CIVIC CENTER

NORTH LOGAN CIT PPROXIMATELY 2515 N 600

MARK: DATE: DESCRIPTION:

ECT #: 8212
/N BY: CHILDE
KED BY: ZETTERQU
ED: 03.30.20

INTERIOR ELEVATIONS W/ ENLARGED PLANS

A-491
© COPYRIGHT DESIGN WEST ARCHITECTS 202

1/2" = 1'-0" TYPICAL RESTROOM

GSt architects

LOGAN UT 84321

SALT LAKE CITY UT 84103

esign west

255 SOUTH 300 WEST 795 NORTH 400 WEST

- CIVIC CENTER

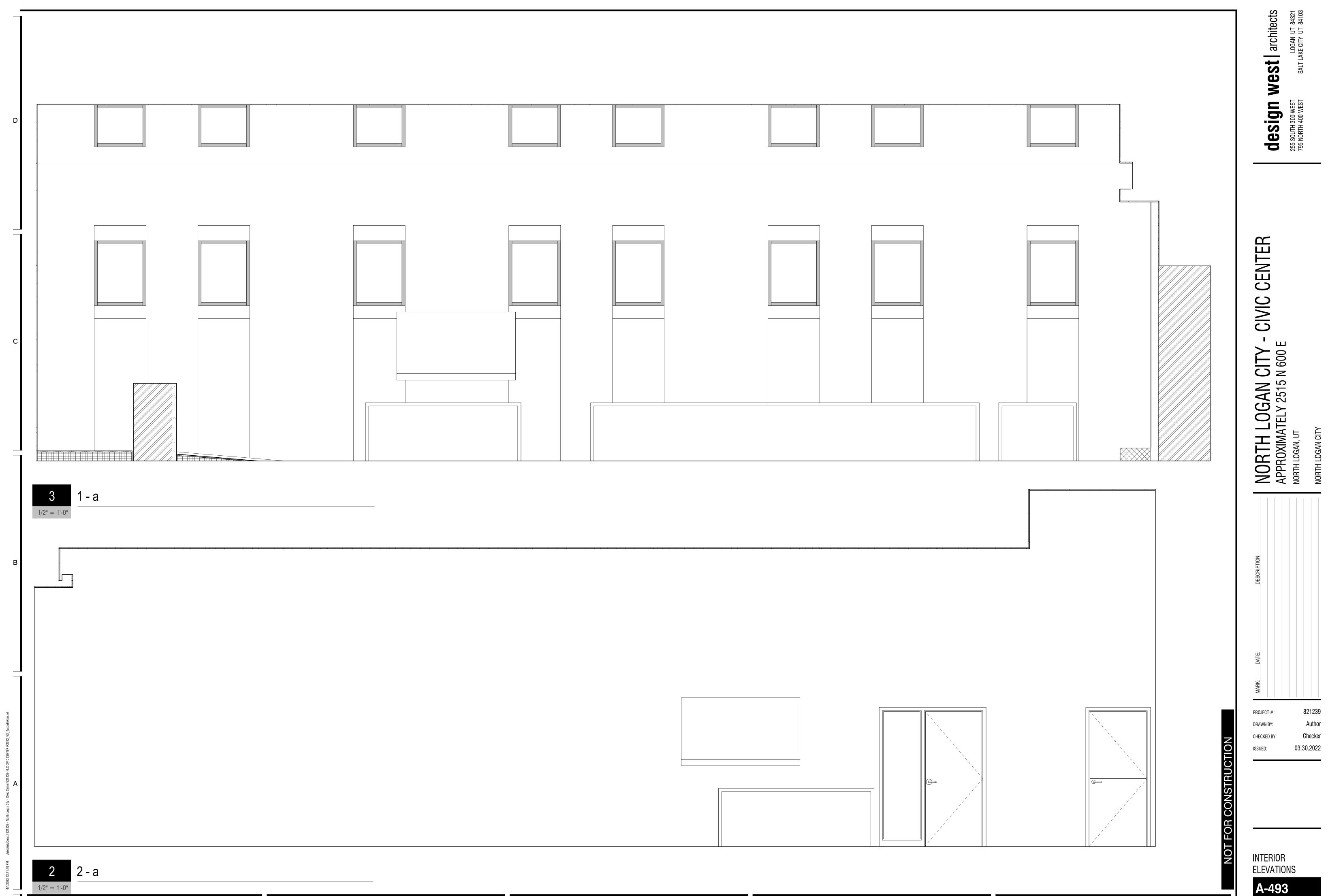
ORTH LOGAN CITY - (PROXIMATELY 2515 N 600 E

MARK: DATE: DESCRIPTION:

UJECT #: 82123 WN BY: CHILDEF CKED BY: ZETTERQUIS JED: 03.30.202

INTERIOR ELEVATIONS

A-492
© COPYRIGHT DESIGN WEST ARCHITECTS 20

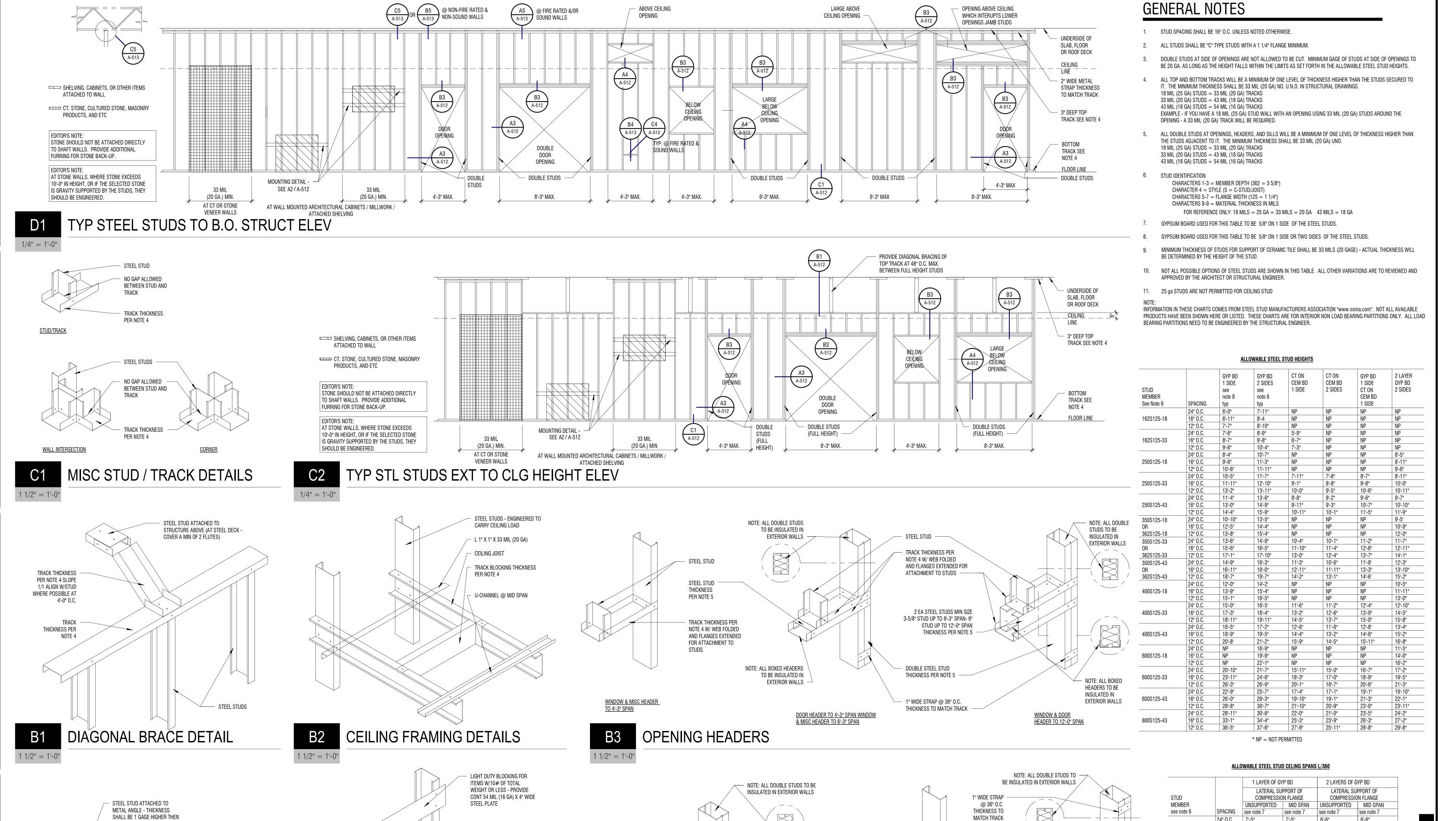


PROJECT #: 821239
DRAWN BY: NIELSON
CHECKED BY: ZETTERQUIST
ISSUED: 03.30.2022

STANDARD METAL
STUD ELEVATIONS &

A-512

© COPYRIGHT DESIGN WEST ARCHITECTS 2022



- STEEL STUD

TRACK THICKNESS PER

NOTE 4 W/ WEB FOLDED

FOR ATTACHMENT TO

DOUBLE STEEL

PER NOTE 5

STUD THICKNESS

AND FLANGES EXTENDED

162S137-33

250S162-33

250S162-43

362S162-33

362S162-43

400S162-33

400S162-43

600S162-33

2

 $1 \frac{1}{2} = 1'-0''$

2 X BLOCKING - NOTCHED AT ONE END TO CLEAR

STEEL STUD LIP (DO NOT

CUT THE LIP) - USE OF

THIS DETAIL AND FIRE

RATED WOOD TO BE

APPROVED BY ARCHITECT

STEEL STUD ATTACHED TO

STRUCTURE ABOVE

STEEL STUD ANGLE

DIAGONAL BRACE DETAIL

MEDIUM DUTY BLOCKING - FOR ITEMS WITH 25 LBS. OF WEIGHT OR LESS -

PROVIDE MIN 3-1/2" X 33 MIL (20 GA)

HOLELESS STUD W/ FLANGES CLIPPED TO

HEAVY DUTY BLOCKING

BRACKETS, GRAB BARS,

FOR TV SUPPORT

WALL MOUNTED

FIT OVER STUDS. STUD WIDTH AS REQ.

FOR BACKING WIDTH AS REQUIRED

3

1" WIDE STRAP

THICKNESS TO

MATCH TRACK

DOUBLE STEEL

STUD THICKNESS

TRACK THICKNESS

PER NOTE 4

1-1/2" X 1-1/2" X

1/2" LESS THAN

STUD WIDTH

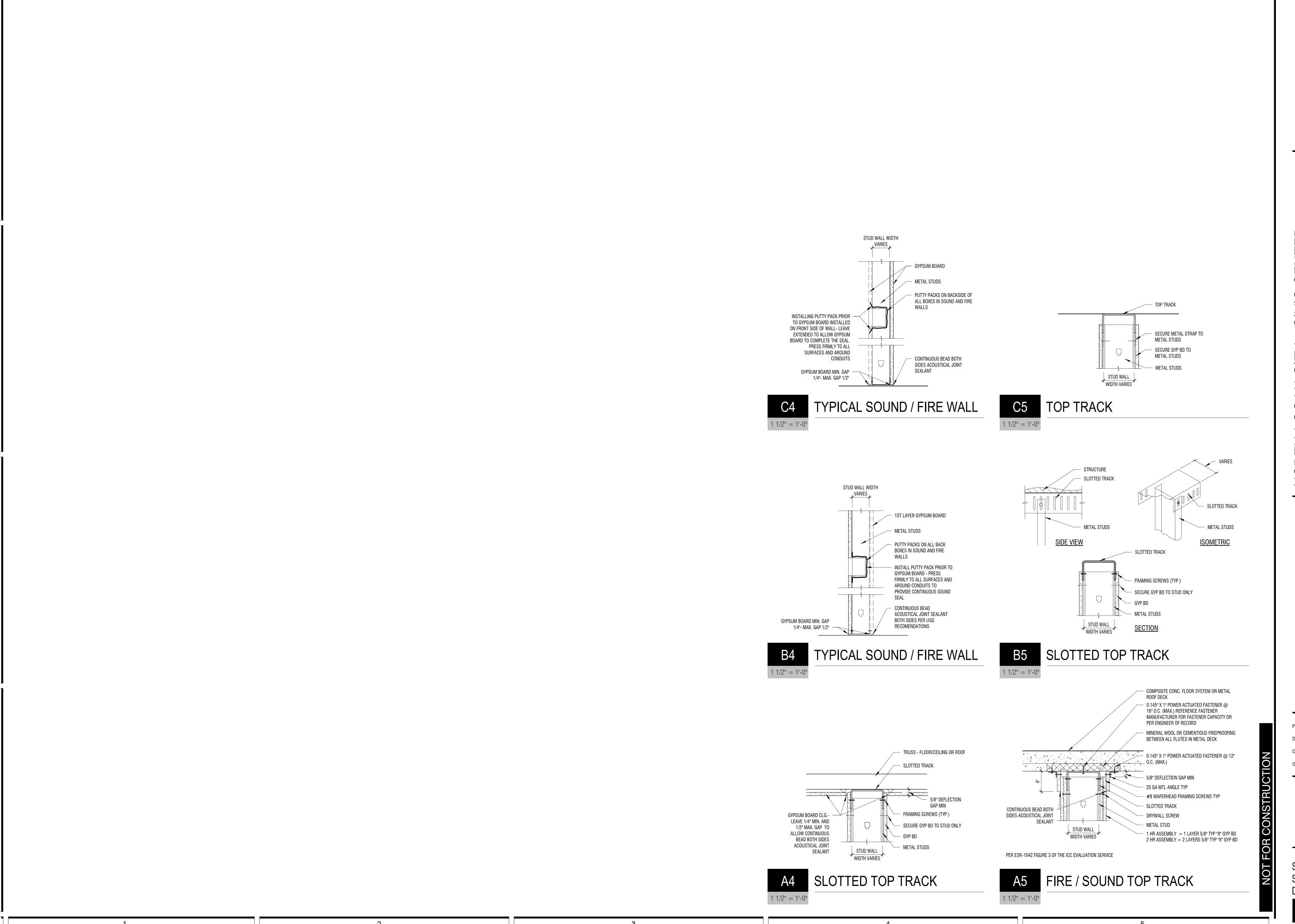
THICKNESS TO

MATCH TRACK

@ 36" O.C.

4

WINDOW & MISC OPNG TO 4'-3" SPAN



design west architects
255 SOUTH 300 WEST SALT LAKE CITY UT 84103

7 - CIVIC CENTER

NORTH LOGAN CITY - CINAPPROXIMATELY 2515 N 600 E NORTH LOGAN, UT

DATE: DESCRIPTION:

PROJECT #: 821239

DRAWN BY: NIELSON

CHECKED BY: ZETTERQUIST

ISSUED: 03.30.2022

STANDARD METAL STUD ELEVATIONS & DETAILS

A-513

© COPYRIGHT DESIGN WEST ARCHITECTS

LOGAN UT 84321 FLAKE CITY UT 84103

West | architects

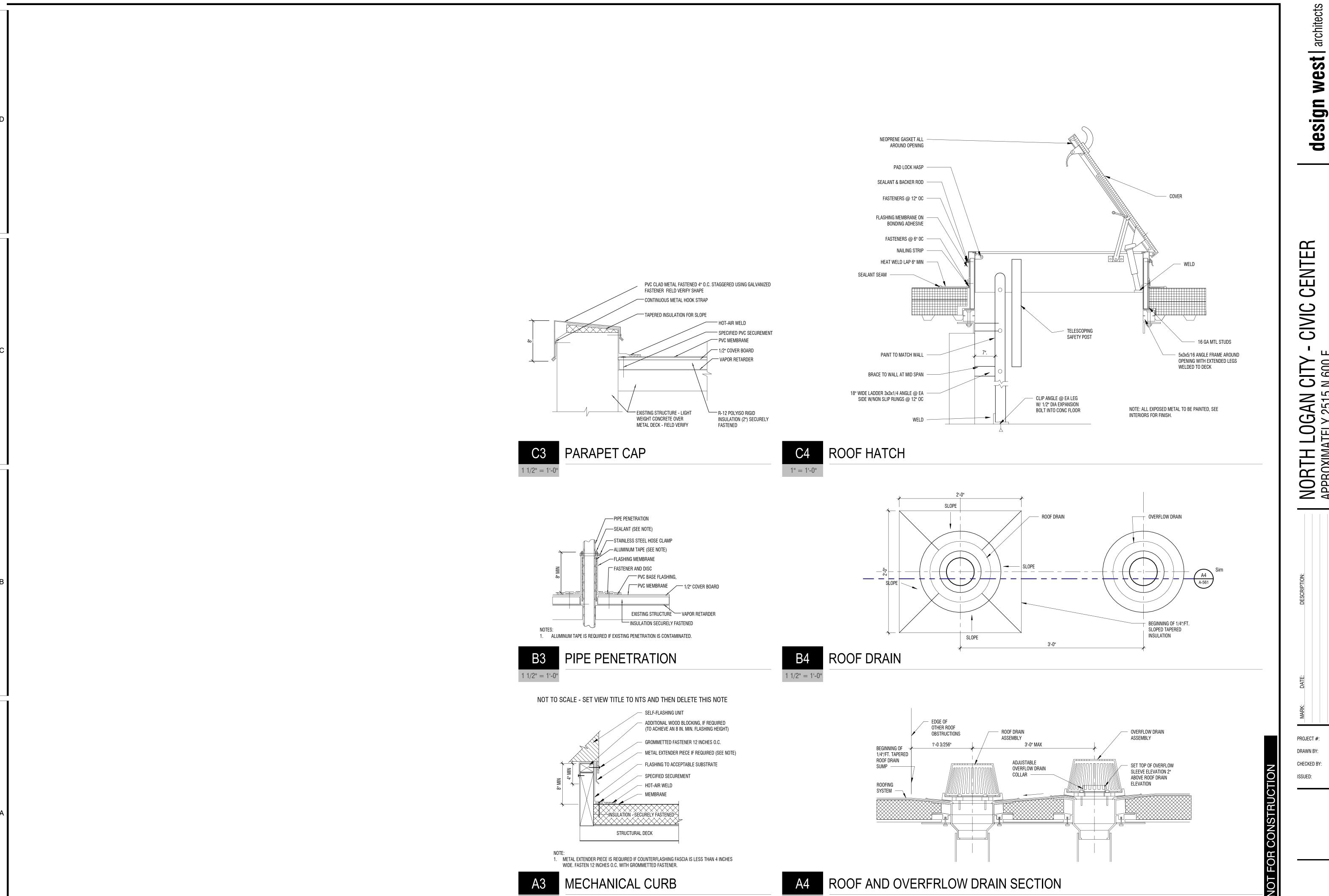
design 255 SOUTH 300 WEST 795 NORTH 400 WEST

ZETTERQUIST

BUILDING DETAILS A-531

NORTH LOGAN CAPPROXIMATELY 2515 N NORTH LOGAN, UT

MILLWORK DETAILS A-559



ROOF DETAILS

A-561

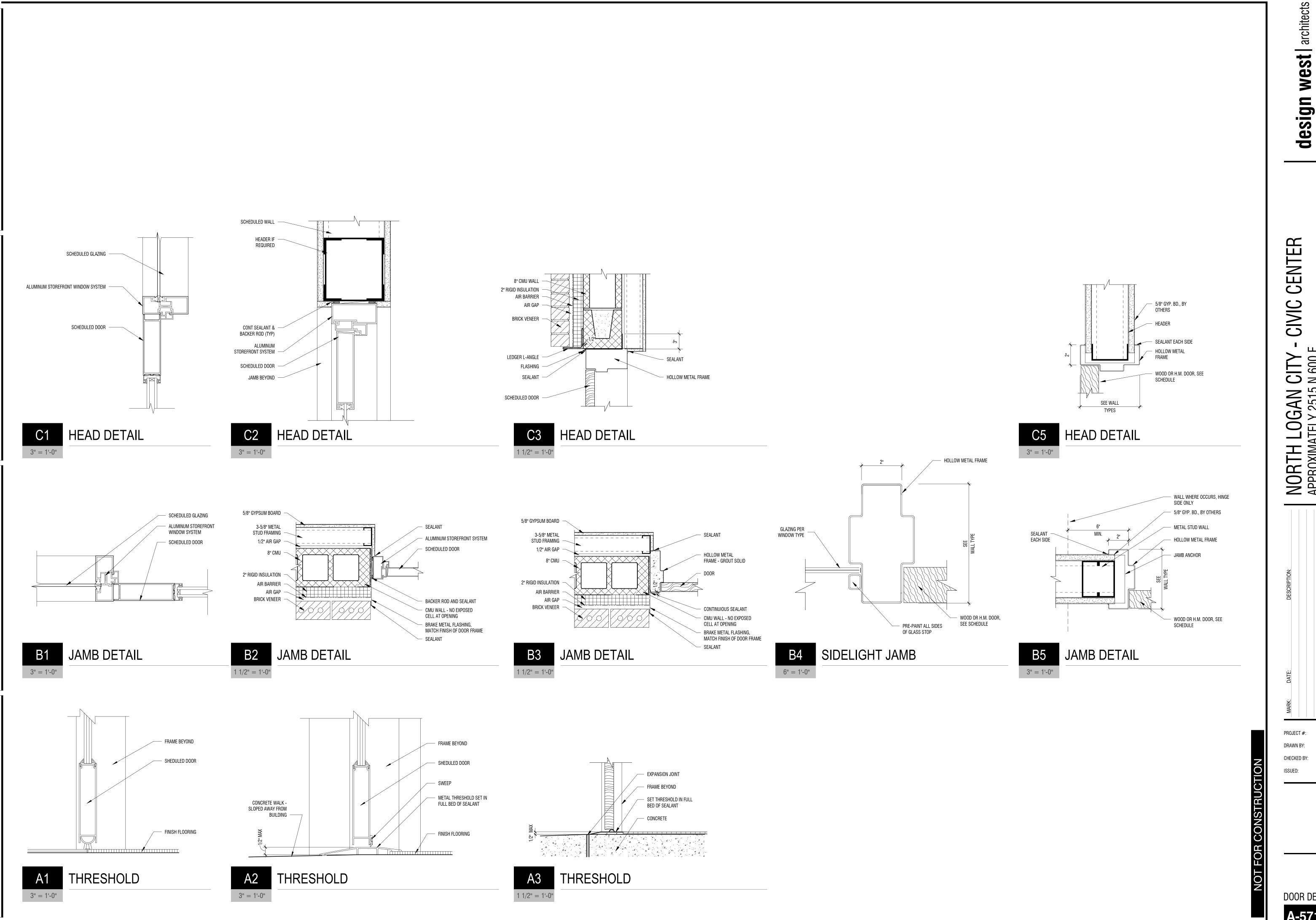
© COPYRIGHT DESIGN WEST ARCHITECTS 2022

821239

Author

Checker

03.30.2022



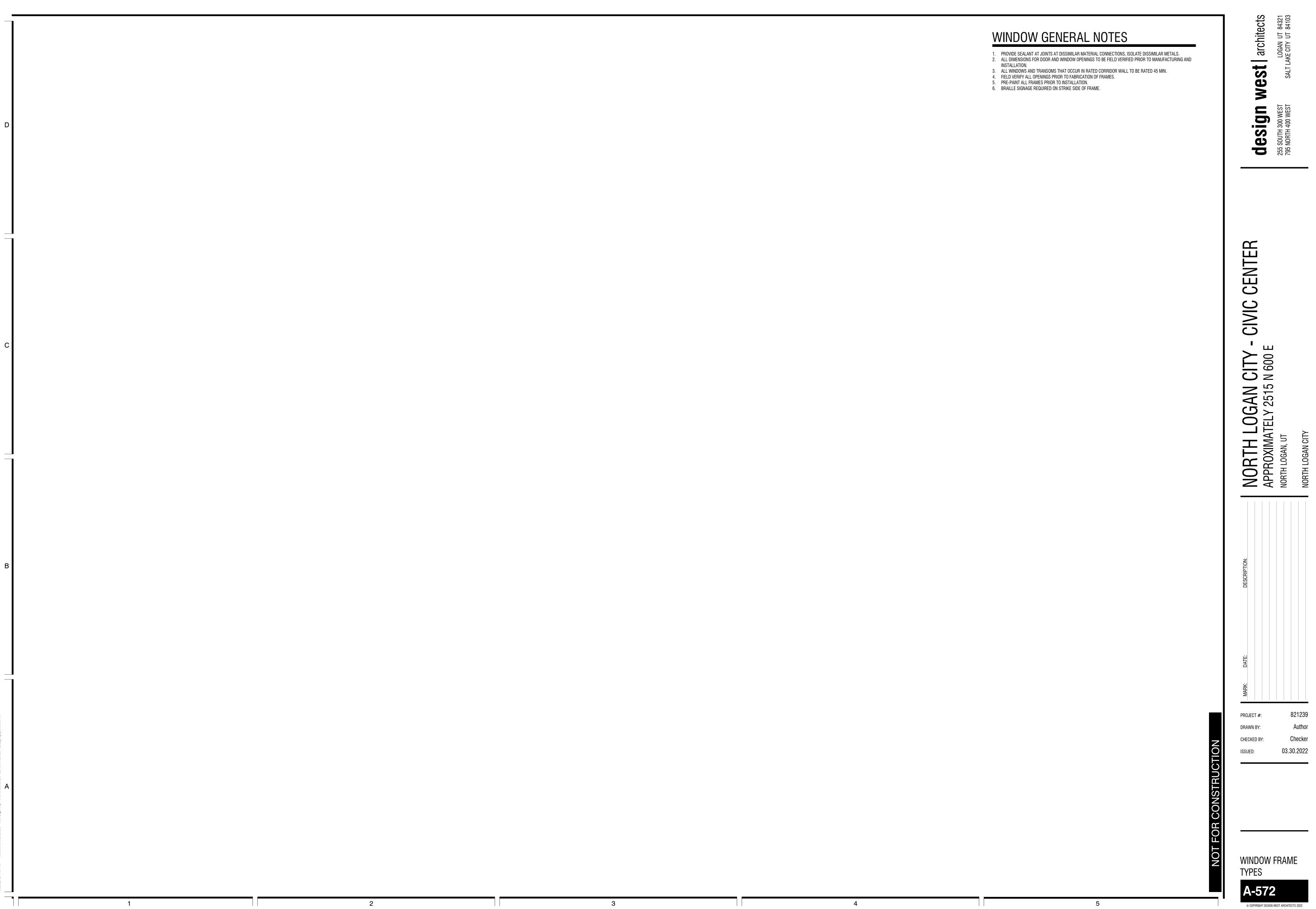
design CIVIC

NOR NOR

821239 NIELSON

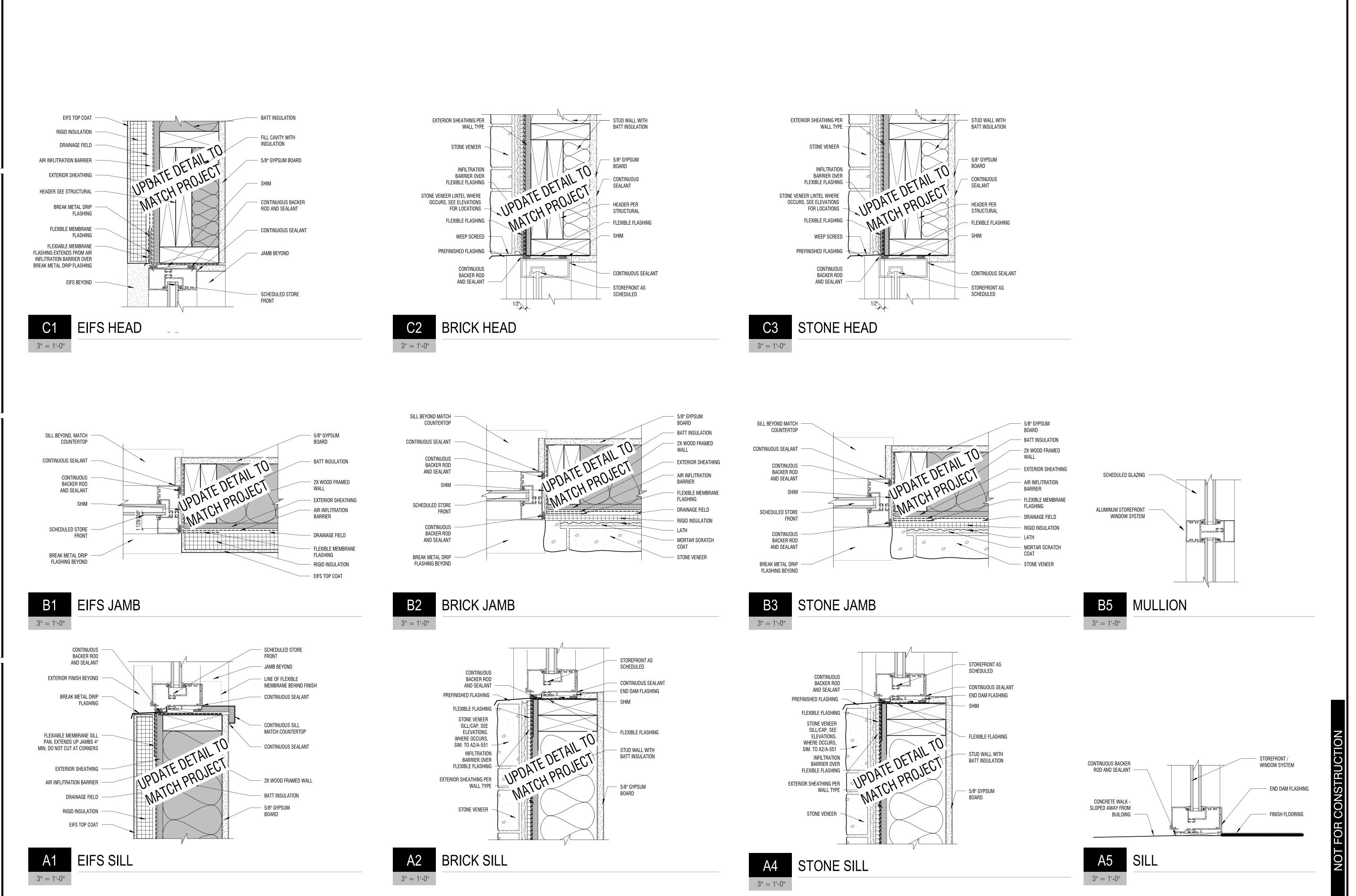
ZETTERQUIST 03.30.2022

DOOR DETAILS



LOGAN UT 84321 FLAKE CITY UT 84103

WINDOW FRAME



design west Logan ut 84321

255 SOUTH 300 V 795 NORTH 400 V

H LOGAN CITY - CIVIC CENTER IMATELY 2515 N 600 E

NORTH LOGA PORTH LOGA APPROXIMATELY 2 NORTH LOGAN, UT

MARK: DATE: DESCRIPTION:

PROJECT #: 821239

DRAWN BY: NIELSON

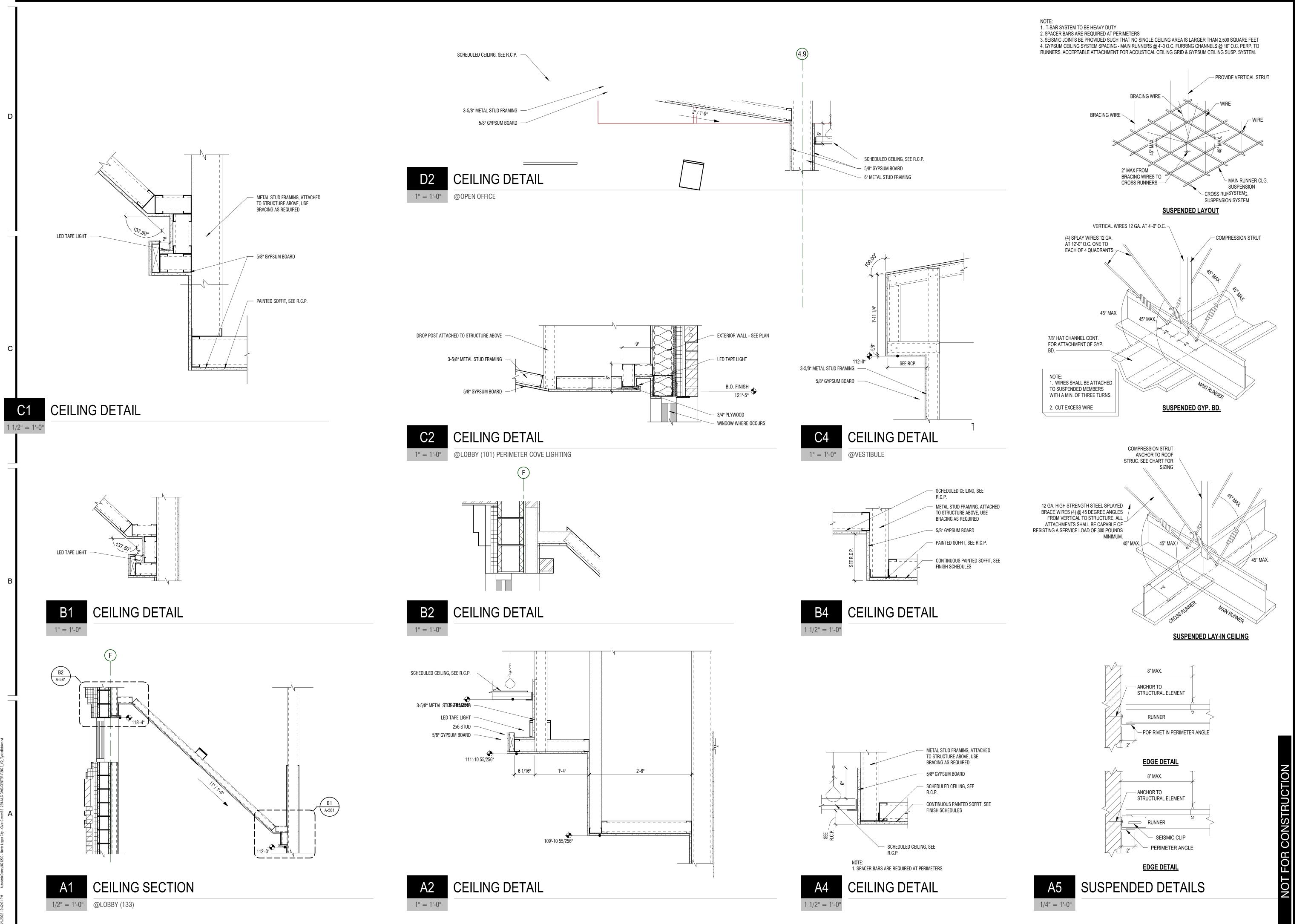
CHECKED BY: ZETTERQUIST

ISSUED: 03.30.2022

UED: 03.30.2022

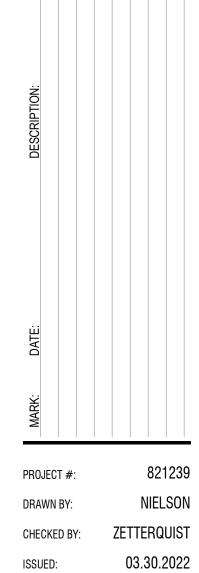
WINDOW FRAME TYPE DETAILS

A-573
© COPYRIGHT DESIGN WEST ARCHITECTS 20

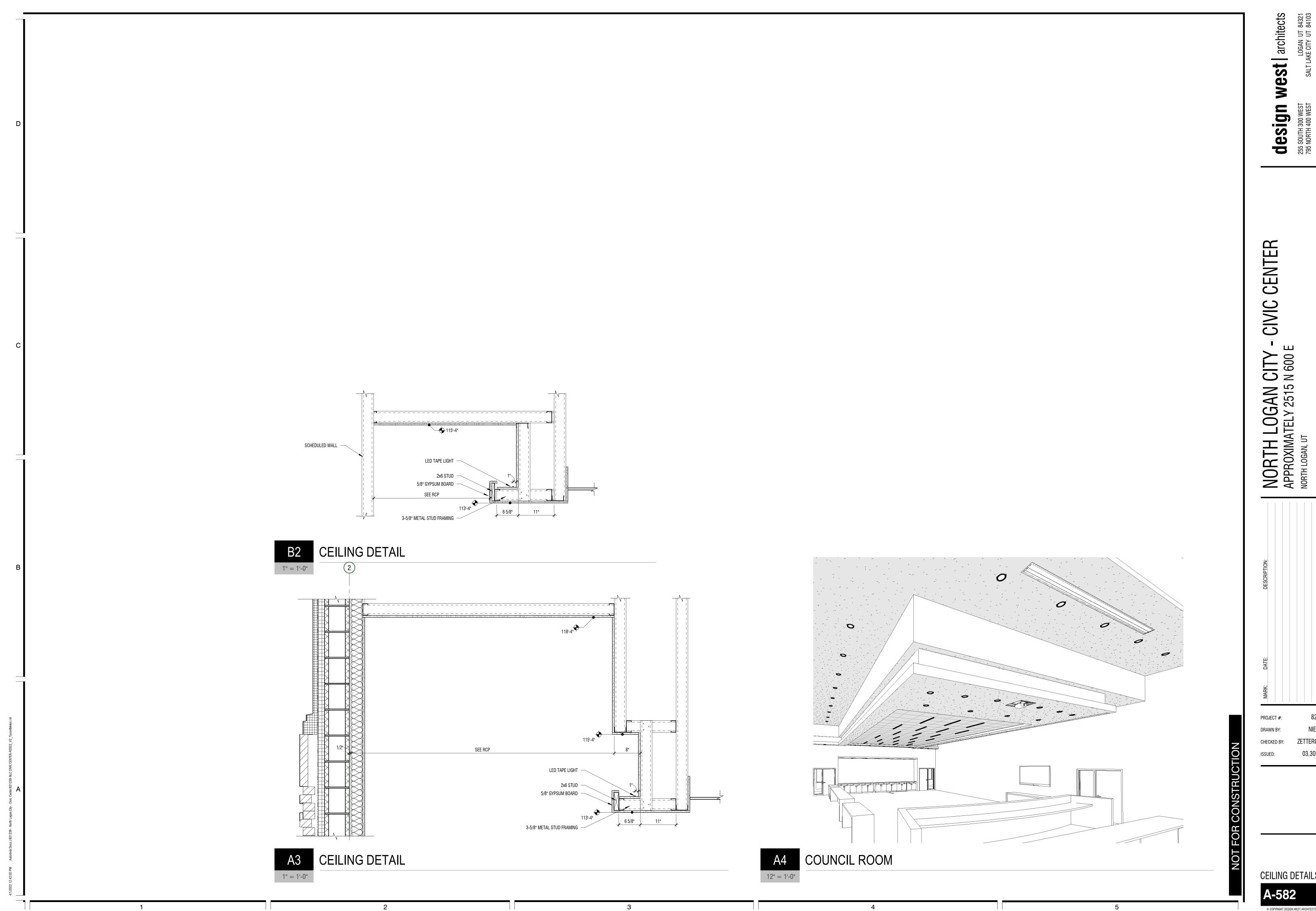


design west architects
255 SOUTH 300 WEST SALT LAKE CITY UT 84321
795 NORTH 400 WEST SALT LAKE CITY UT 84103

NORTH LOGAN CITY - CIVIC CENTER APPROXIMATELY 2515 N 600 E NORTH LOGAN, UT

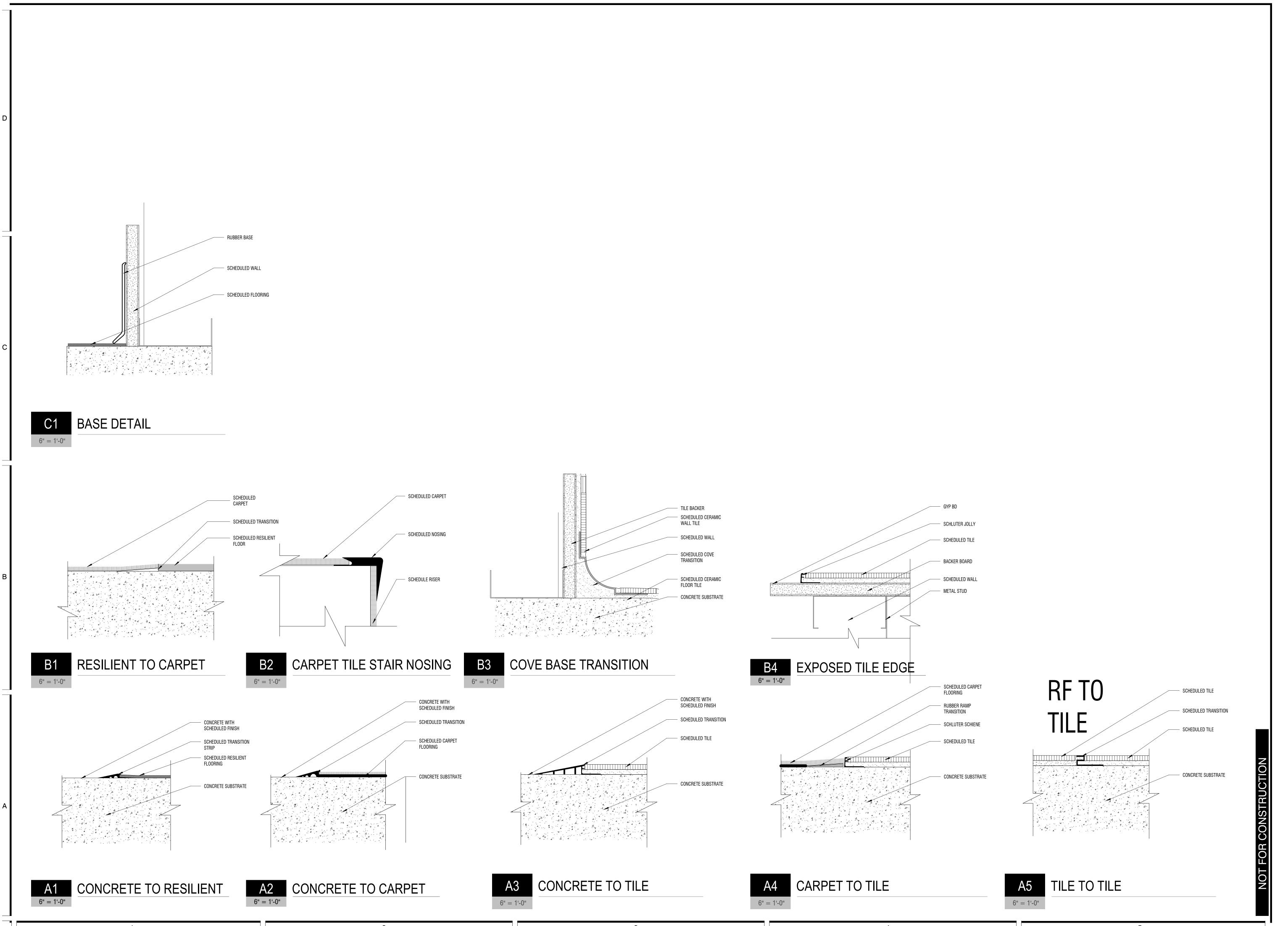


CEILING DETAILS



CENTER - CIVIC NORTH LOGAN CITY APPROXIMATELY 2515 N 600 E
NORTH LOGAN, UT

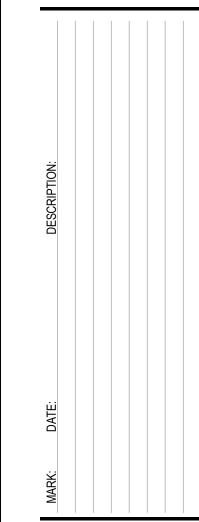
CEILING DETAILS



design west architects
255 SOUTH 300 WEST LOGAN UT 84321

CITY - CIVIC CENTER

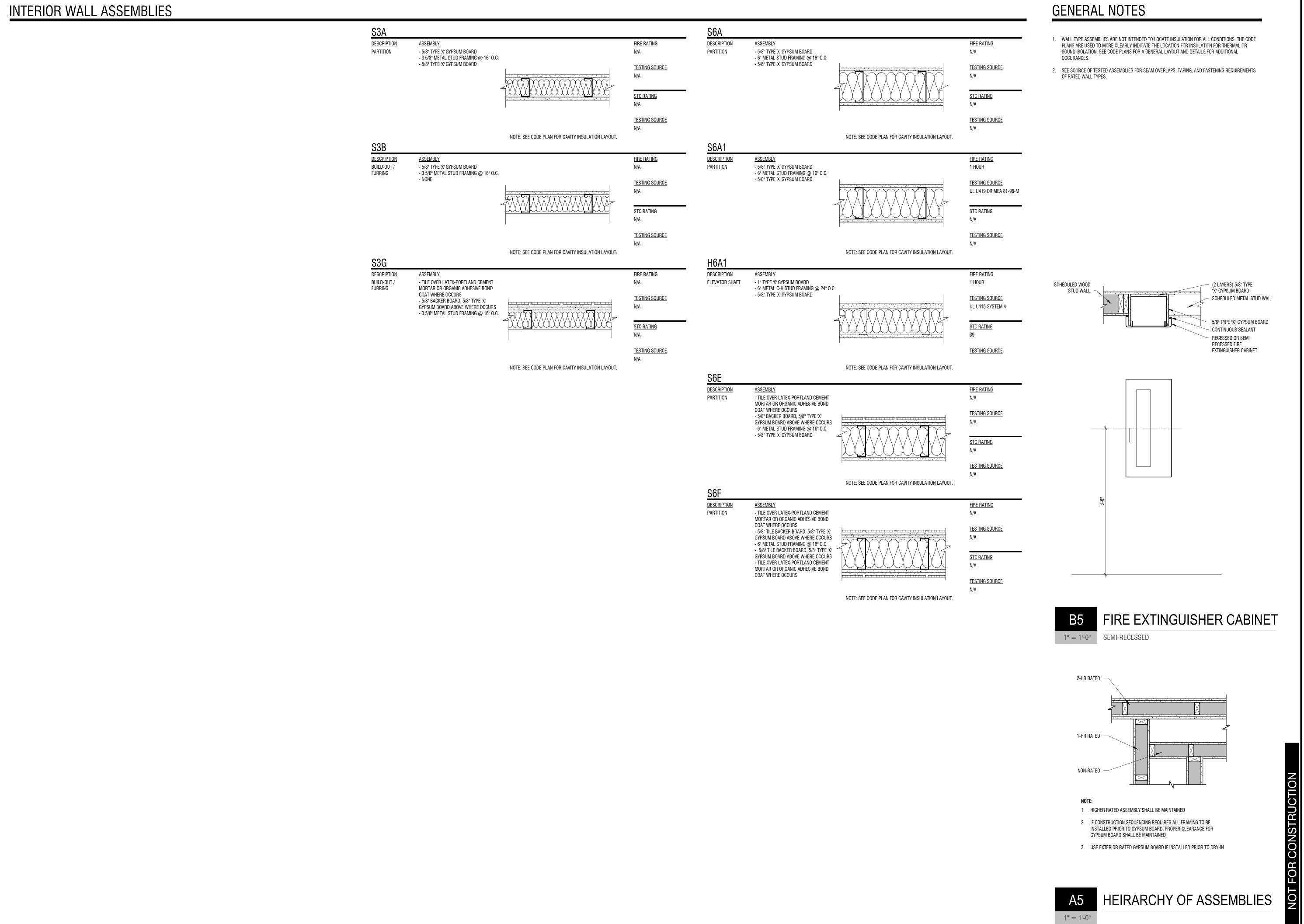
NORTH LOGAN CITY APPROXIMATELY 2515 N 600 E
NORTH LOGAN, UT



PROJECT #: 821239
DRAWN BY: JC
CHECKED BY: Checker
SSUED: 03.30.2022

INTERIOR FINISH DETAILS

A-591
© COPYRIGHT DESIGN WEST ARCHITECTS 2022



SALT LAKE CITY UT 84103

lesign west south 400 West s

255 SOUTH 300 \ 795 NORTH 400 \

- CIVIC CENTER

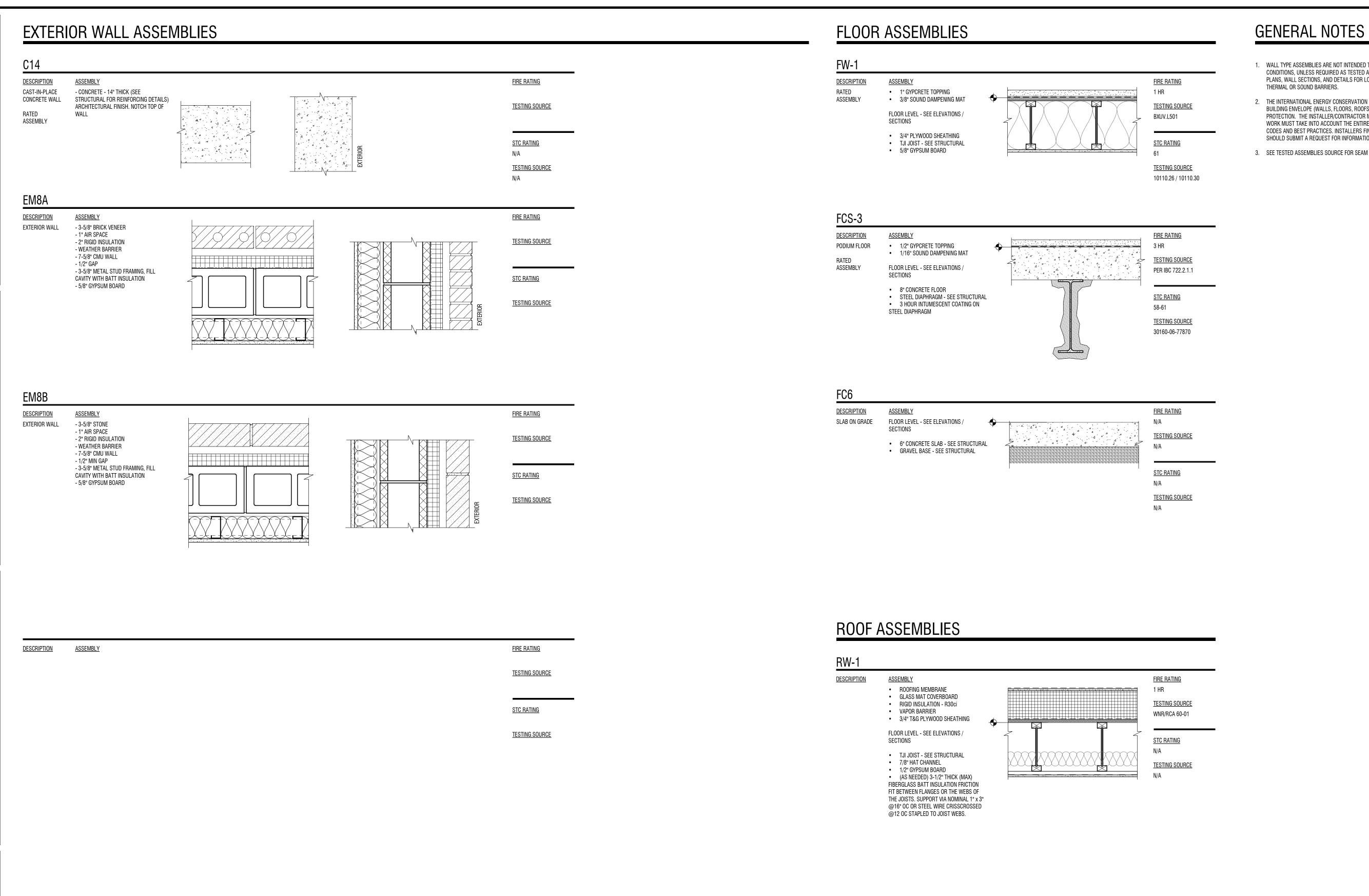
ORTH LOGAN CITY - PROXIMATELY 2515 N 600 E

MARK: DATE: DESCRIPTION:

DRAWN BY: NIELSON
CHECKED BY: ZETTERQUIST
ISSUED: 03.30.2022

ASSEMBLIES -INTERIOR WALLS

A-611



- 1. WALL TYPE ASSEMBLIES ARE NOT INTENDED TO LOCATE INSULATION FOR INTERIOR PARTITION CONDITIONS, UNLESS REQUIRED AS TESTED AND CERTIFIED FOR A RATED ASSEMBLY. SEE CODE PLANS, WALL SECTIONS, AND DETAILS FOR LOCATIONS INTENDED FOR INSULATION FOR EITHER THERMAL OR SOUND BARRIERS.
- 2. THE INTERNATIONAL ENERGY CONSERVATION CODE (IECC C403.1.3) REQUIRES ALL ELEMENTS OF THE BUILDING ENVELOPE (WALLS, FLOORS, ROOFS) EXPOSED TO THE EXTERIOR ENVIRONMENT TO RECEIVE PROTECTION. THE INSTALLER/CONTRACTOR MUST PROVIDE A COMPLIANT INSTALLATION. BIDS AND WORK MUST TAKE INTO ACCOUNT THE ENTIRE DOCUMENT SET AND COMPLY WITH ALL APPLICABLE CODES AND BEST PRACTICES. INSTALLERS FINDING ERRORS, OMISSIONS, OR AREAS LACKING CLARITY SHOULD SUBMIT A REQUEST FOR INFORMATION PRIOR TO SUBMITING BID OR PERFORMING WORK.
- 3. SEE TESTED ASSEMBLIES SOURCE FOR SEAM OVERLAPS, TAPING, AND FASTENING REQUIREMENTS.

architects

st

design

ENTER

 \Box

CIVIC

ORTH LOG/

LOGAN UT 84321 LAKE CITY UT 84103

NIELSON ZETTERQUIST

ASSEMBLIES -EXTERIOR WALLS,

FLOORS, ROOFS

A-612

architects LOGAN UT 8 KE CITY UT 8

St

esign 0

ENTE \mathbf{C} CIVIC **CITY** N 600

ORTH LOGA/
PPROXIMATELY 2
RTH LOGAN, UT

821239 PROJECT #: NIELSON DRAWN BY:

> DOOR SCHEDULE & TYPE NOTES

ZETTERQUIST

03.30.2022

A-671

SHEEN: EGGSHELL NOTES: ACCENT PAINT

GENERAL NOTES

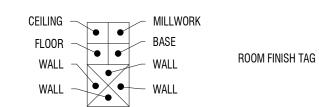
• LEGAL NOTICE: THE CONSTRUCTION DOCUMENTS FOR THIS PROJECT ARE COMPOSED OF SETS OF DRAWINGS AND SPECIFICATIONS, AND THEREFORE SHALL BE USED AND MAINTAINED IN THEIR ENTIRETY. ANY CONTRACTOR, SUBCONTRACTOR, VENDOR OR PARTY PARTICIPATING IN OR BIDDING ON THIS PROJECT SHALL BE EXPECTED TO PERFORM DUE DILIGENCE TO ENSURE THEIR BID, WORK PERFORMED, AND MATERIALS PROVIDED CONFORMS TO THE INFORMATION PROVIDED WITHIN ANY AND ALL SHEETS OF DRAWINGS AND SPECIFICATIONS, INCLUDING, BUT NOT LIMITED TO, ANY SUBSEQUENT ADDENDA OR CLARIFICATIONS THAT MAY BE ISSUED RELEVANT TO THEIR SCOPE OF WORK. PROJECT SCOPE MAY BE DEFINED WITHIN SPECIFICATIONS AND/OR DRAWINGS.

ADDITIONALLY, DRAWINGS MAY NOT BE RE-SCALED WHEN PRINTED, WRITTEN DIMENSIONS SHALL HAVE PRECEDENCE, AND LARGER SCALE DRAWINGS SHALL HAVE PRECEDENCE OVER SMALLER SCALE

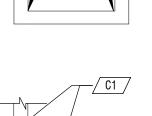
ANY DEVIATION FROM OR CONFLICT WITHIN THE DRAWINGS AND/OR SPECIFICATIONS, MUST BE SUBMITTED TO AND APPROVED BY THE ARCHITECT PRIOR TO BID OR BEFORE CONTINUING THAT PORTION

- ROOM FINISH TAGS FOR EACH ROOM REPRESENT TYPICAL FINISHES. SPECIFIC WALLS IN SELECTED AREAS MAY HAVE MULTIPLE FINISHES WHICH WILL BE INDICATED IN INTERIOR ELEVATIONS.
- SEE INTERIOR ELEVATIONS FOR ADDITIONAL FINISH INFORMATION
- SEE REFLECTED CEILING PLANS FOR ADDITIONAL FINISH INFORMATION
- FOR FINISH LEGEND SEE A-691
- FLOOR MATERIAL TRANSITIONS WILL OCCUR BELOW DOORS. U.N.O. SEE TYPICAL TRANSITION DETAILS ON
- POLISHED OR SEALED CONCRETE <u>DOES</u> EXTEND UNDER CASEWORK OR MILLWORK
- FLOOR COVERING <u>DOES NOT</u> EXTEND UNDER MILLWORK OR CASEWORK, U.N.O.
- FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF CASEWORK AND FINISH ASSEMBLIES

LEGEND



/ C1 / FINISH TAG - INDICATES SPECIFIC APPLIED FINISH



INDICATES FINISH IS APPLIED TO AREA BETWEEN ARROWS

INDICATES FINISH IS APPLIED TO FACE OF SURFACE(S)

INDICATES A MANUAL ROLLER SHADE.

INDICATES A MOTORIZED ROLLER SHADE.

INDICATES SIGNAGE LOCATION

INDICATES CORNER GUARD

FINISH SCHEDULE

PROJECT #:

DRAWN BY:

ISSUED:

architects

St

sign

O

0

田

Z

Ш

 \mathbf{C}

CIVIC

CITY N 600

AN 2515

5 > О. Н

ORTH LOPPROXIMATE

APPI NOR

LOGAN UT 84321 LAKE CITY UT 84103

A-691

821239

CHILDERS

ZETTERQUIST

FINISH COMBINATIONS

CEILING COMBINATIONS

MARK: 1A CL1 + CL2

WALL COMBINATIONS

MARK:

DESCRIPTION:

RESTROOM WALLS; T4; TR1 ON TOP AND ANY EXPOSED EDGES; TR-2 AT FLOOR; EP1 ABOVE TILE; PLUMBING WALLS: 6'8" AFF; OTHER WET

MARK:

DESCRIPTION:

RESTROOM WALLS; T4; TR1 ON TOP AND ANY ELEVATOR WALL FINISHES: STEEL SHELL W/VERTICAL PANELS; PLASTIC LAMINATE - WALNUT FIBERWOOD 8915; STAINLESS STEEL WALLS 5' AFF; END ON FULL HEIGHT TILE

REVEALS & BASE; 2" FLAT BAR HANDRAIL STAINLESS STEEL; STAINLESS STEEL CEILING - DOWNLIGHT W/LED;

FLOOR COMBINATIONS

MARK: DESCRIPTION: 3A T1 + T2 MIXXED AT 66% T1 AND 33% T2;

MILLWORK GROUPING

MARK: 4A
UPPER CABINETS: MF1 <u>4B</u> MF3 BACKSPLASH: 4" TO MATCH COUNTER 4" TO MATCH COUNTER 4" TO MATCH COUNTER COUNTERTOP: CT1 FRONT EDGE STYLE: AWS WATERFALL - MITERED AWS WATERFALL - MITERED AWS WATERFALL - MITERED BASE CABINETS: MF1 MF2 MF3 HARDWARE: MH1 FRAME CONSTRUCTION: FRAMELESS FRAMELESS FRAMELESS DOOR INTERFACE STYLE: FLUSH OVERLAY FLUSH OVERLAY FLUSH OVERLAY NOTES: | COUNCIL ROOM OPEN OFFICE BREAKROOM

DOOR FINISHES

MARK: 5A

DOOR FINISH: WHITE MAPLE; STAINED A WALNUT COLOR WHITE MAPLE; CLEAR FRAME FINISH: PAINTED P3 PAINTED P3 HARDWARE COLOR: MATTE BLACK MATTE BLACK NOTES: COUNCIL ROOM & EXECUTIVE CONFERENCE ALL DOORS UNLESS NOTED OTHERWISE

STAIR FINISHES

MARK:

RISER FINISH:
TREAD FINISH:
STRINGER FINISH:
STRINGER FINISH:
P2
GUARDRAIL FINISH:
HANDRAIL FINISH:
NOTES:
TR-3 FOR STAIR NOSINGS

ZETTERQUIST 03.30.2022

LOGAN UT 84321 LAKE CITY UT 84103

West | architects

design 255 SOUTH 300 WEST 795 NORTH 400 WEST

CENTER

CIVIC

NORTH LOGAN CAPPROXIMATELY 2515 N NORTH LOGAN, UT

FINISH SCHEDULE A-692

ELEVATOR CAB FINISHES

architects

St

sign

ENTE

 \mathbf{C}

BID ALT 1 -**BASEMENT PLAN**

A-801

1/8" = 1'-0" BASEMENT

A1 PLAN - DIMENSION (BID ALT 1)

GENERAL NOTES

BID ALT 1 -REFLECTED CEILING

architects

st

esign

ENTE

 \mathbf{C}

LOGAN UT 84321 -AKE CITY UT 84103

A-802

ZETTERQUIST

OR

2-WAY BLOW

1-WAY BLOW PATTERN

PATTERN

90° ELBOW

45° ELBOW

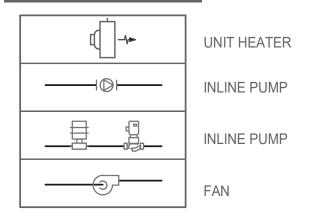
PITIMBING

	PLUMBING	<u>-</u>
	亞	THERMOSTATIC MIXING VALVE
		HOSE BIBB
		FLOOR SINK
		FLOOR DRAIN
	——— COTG	FLOOR CLEAN-OUT OR CLEAN-OUT TO GRADE
RGE	©	ROOF DRAIN
(GE	Î	DOWNSPOUT NOZZLE
	o VTR	VENT THRU ROOF
	P	WATER HAMMER ARRESTOR
		CLEAN-OUT
	(NAME)	FIXTURE FROM LEVEL ABOVE
		DEMOLITION.

DEMOLITION

EQUIPMENT

 $-\times \times \times$



8	HOSE VALVE
×	NRS GATE VALVE WITH SUPERVISION
삼	FLOW SWITCH
	FIRE RISER
©	SPRINKLER HEAD
——F——	FIRE SPRINKLER WATER

ANNOTATIONS

P-1	PLUMBING FIXTURES POINT OF CONNECTION
A M-101	SECTION TAG - TOP FIGURE IS SECTION NO. BOTTOM FIGURE IS SHEET NO.
A M101	DETAIL TAG - TOP FIGURE IS DETAIL NO. BOTTOM FIGURE IS SHEET NO.
EF 1	EQUIPMENT IDENTIFICATION
1	KEYED NOTE IDENTIFICATION

THERMOSTAT

LINETYPES

	DOMESTIC COLD WATER (DCW
	DOMESTIC HOT WATER (DHW)
	DOMESTIC HOT WATER RETUR (DHWR)
——E(NAME)——	EXISTING PIPING
→—(NAME)———	EXISTING PIPING TO BE REMOVED
G	NATURAL GAS
HWR	HEATING HOT WATER RETURN
HWS	HEATING HOT WATER SUPPLY
MUW	MAKE UP WATER
PC	PUMPED CONDENSATE
RD	ROOF DRAIN
RDO	ROOF DRAIN OVERFLOW
	REFRIGERANT LIQUID
RS	REFRIGERANT SUCTION
	SEWER (BELOW GRADE)
	SEWER (ABOVE GRADE)
SW	SOFT DOMESTIC WATER
	VENT (SEWER)

MECHANICAL PIPING GENERAL NOTES

PIPING DRAWINGS ARE SCHEMATIC IN NATURE. FIELD VERIFY ALL ROUTING AND COORDINATE WITH ALL OTHER TRADES.

- 2. NO PIPING TO RUN DIRECTLY OVER ELECTRICAL PANELS, MCC'S, VFD'S. ROUTE AROUND AS REQUIRED.
- 3. INSTALL MANUAL AIR VENTS AT ALL HYDRONIC SYSTEM HIGH POINTS.
- INSTALL ALL EQUIPMENT WITH SUFFICIENT CLEARANCE FOR MAINTENANCE PER MANUFACTURER'S RECOMMENDATION. PROVIDE A 24"X24" ACCESS DOOR BELOW EQUIPMENT BOX AND CONTROL VALVES WHERE INSTALL OVER HARD CEILING AREAS.
- COORDINATE EXACT LOCATION OF T-STATS WITH ARCHITECTURAL
- INSTALL A 24"x24" ACCESS PANEL BELOW ALL VALVES, CIRCUIT SETTERS, AND CONTROL VALVES OVER HARD CEILINGS.
- 7. MECHANICAL PIPING TO BE INSTALLED ABOVE DUCTWORK AND EQUIPMENT EXCEPT WHERE SHOWN.
- 8. FIELD VERIFY ALL EQUIPMENT LOCATIONS.
- DETAILS REFERENCE ALL SHEETS.

MECHANICAL GENERAL NOTES

- PROVIDE CD-1 TYPE DIFFUSER, AS SCHEDULED, FOR ALL CEILING SUPPLY DIFFUSERS UNLESS NOTED OTHERWISE. SEE DETAIL 6/M501
- PROVIDE RG-1 TYPE GRILLE, AS SCHEDULED, FOR ALL CEILING RETURN GRILLES SHOWN AS SUCH. PROVIDE SIZE 22x22, OR 22x10 WITH SOUND BOOT FOR UNDUCTED GRILLES. SEE DETAIL 7/M503.
- PROVIDE EG-1 TYPE GRILLE, AS SCHEDULED, FOR ALL CEILING EXHAUST GRILLES, SHOWN AS SUCH.
 - PROVIDE BALANCING DAMPERS AT EACH BRANCH TAKE OFF TO SERVE DIFFUSER OR GRILLE AS WELL AS WHERE INDICATED.
- COORDINATE EXACT LOCATION OF DUCTS WITH STRUCTURAL MEMBERS, LIGHTS, REFLECTED CEILING, CABLE TRAY, PLUMBING, MECHANICAL PIPING, ETC.
- BRANCH DUCTWORK SHALL BE SIZED TO MATCH THE NECK SIZE OF THE DIFFUSER, REGISTER OR GRILLE IT SERVES UNLESS NOTED OTHERWISE.
- INSTALL HARD ELBOWS AS SHOWN. HARD ELBOWS ARE REQUIRED FOR SOUND ATTENUATION.
- INSTALL EQUIPMENT WITH CLEARANCE PER MANUFACTURER'S RECOMMENDATIONS. MAINTAIN PROPER SPACE FOR COIL PULL, CONTROLS, AND MAINTENANCE ACCESS.
- INSTALL TURNING VANES IN ALL SQUARE AND RECTANGULAR LOW PRESSURE DUCTWORK.
- 10. DETAILS REFERENCE ALL SHEETS.
- ALL FIRE DAMPERS ARE 1-1/2 HR RATED, UNLESS NOTED OTHERWISE.
- 12. DO NOT ROUTE DUCTS OR PIPES ABOVE ELECTRICAL PANELS. DO NOT ROUTE DUCTS OR PIPES IN ELECTRICAL ROOMS. EXCEPT DUCTS AND PIPES SERVING THE ROOM.
- 13. IF CONTRACTOR ENCOUNTERS MATERIAL WHICH MAY CONTAIN ASBESTOS, IMMEDIATELY STOP WORK IN THIS AREA AND NOTIFY THE
- PROVIDE CEILING ACCESS PANELS AS REQUIRED WHERE MECHANICAL EQUIPMENT, VALVES, VAV BOXES, FIRE DAMPERS, ETC, ARE LOCATED ABOVE INACCESSIBLE CEILINGS.
- 15. ALL DUCT DIMENSIONS ARE INSIDE FREE AREA DIMENSIONS. ADJUST SHEET METAL DIMENSION FOR LINED DUCT.

- SLOPE PIPING AS FOLLOWS, UNLESS OTHERWISE NOTED. WASTE:
- 2. SLEEVE PIPING THRU WALLS/FOUNDATIONS WHERE REQUIRED.
- PLUMBING DRAWINGS ARE SCHEMATIC IN NATURE. FIELD VERIFY
- 4. ALL PIPING IN PLUMBING CHASES TO BE ARRANGED TO ALLOW
- 5. NO PIPING TO RUN OVER ELECTRICAL PANELS, VFD'S, OR MCC'S.
- 6. COORDINATE FAN ROOM FLOOR DRAIN LOCATIONS AND COOLING
- 7. NO FIRE PROTECTION LINE IS TO BE DESIGNED OR INSTALLED PRIOR MECHANICAL PIPING, AND PLUMBING TAKE PRECEDENCE OVER FIRE PROTECTION PIPING. FAILURE TO COMPLY WILL RESULT IN FIRE
- SLEEVE/CONFIGURE CMU WALLS FOR EMBEDDED PIPING AND PIPE
- 9. REFER TO ARCHITECTURAL DRAWINGS FOR FIXTURE MOUNTING HEIGHTS, DIMENSIONS, AND OTHER REQUIREMENTS.
- 10. CONTRACTOR TO VERIFY CONNECTION SIDE OF ADA FIXTURES AND
- 11. LOCATE ALL VENTS MINIMUM 25 FT AWAY FROM AIR INTAKES.
- 12. INSTALL DOMESTIC WATER LINES BELOW DUCTWORK.
- 13. INSTALL A 24"x24" ACCESS DOOR BELOW ALL ISOLATION VALVES AND CIRCUIT SETTERS WHERE MOUNTED ABOVE HARD CEILINGS.
- 15. DETAILS REFERENCE ALL SHEETS.
- 16. EXISTING PIPING SHOWN HAS BEEN TAKEN FROM INFORMATION PROVIDED BY OTHERS. FIELD VERIFY ALL SYSTEMS, SIZES, LOCATIONS, AND ELEVATIONS PRIOR TO STARTING ANY NEW WORK.

PLUMBING GENERAL NOTES

- BRANCHES 1/4" PER FOOT. WASTE MAINS: 1/8" PER FOOT.
- EXACT ROUTING AND COORDINATE WITH ALL OTHER TRADES.
- MAINTENANCE ACCESS.

- TO CLOSE COORDINATION WITH ALL OTHER DISCIPLINES. DUCTWORK, PROTECTION REMOVAL AND REINSTALLATION AT THE CONTRACTOR'S
- PENETRATIONS AS REQUIRED.
- ADJUST ACCORDINGLY.

- 14. MOUNT ALL CEILING TYPE ISOLATION VALVES, CONTROL VALVES, CIRCUIT SETTERS, ETC. NEAR CEILING FOR ACCESSIBILITY.

PROJECT #: DRAWN BY: ISSUED:

architects

St

<u>6</u>

S

മ

ш

 \bigcirc

9

MECHANICAL SYMBOLS LEGEND AND GENERAL

MECHANICAL SYSTEM NARRATIVE SD Submission

NORTH LOGAN CITY CIVIC CENTER

March 8, 2021

GENERAL

The mechanical system will be designed to provide a safe, economical, low maintenance type system. All mechanical systems will have a proven track record of high quality and environmental control. The basic mechanical systems will consist of the following:

- Packaged roof-mounted air-handling units (RTU). Each RTU will be equipped with the following features:
 - o Supply and relief air fan systems with variable speed control.
 - o DX cooling section with multi-stage modulation.
 - o Natural gas heating section with multi-stage modulation.
 - o Installed on a roof curb with vibration reduction.
 - o Single zone temperature control.
 - o Building automation system compatible.
- Full economizer capable.
 Roof-mounted exhaust fan system.
- Electric unit heaters.

and detection will be provided by others.

- · Gas-fired high efficiency domestic water heater.
- Sensor faucets in restrooms with low consumption plumbing fixtures.

The fire suppression system will be designed in compliance with IFC including Utah's amendments. The fire alarm

HVAC DESIGN CRITERIA

Comply with the 2018 edition of the International Codes:

International Building Code (IBC) - 2018
International Mechanical Code (IMC) - 2018
International Plumbing Code (IPC) - 2018
International Fuel Gas Code (IFGC) - 2018
International Energy Conservation Code (IECC) - 2018
International Fire Code (IFC) - 2018
National Electric Code (NEC) - 2018
All state amendments.

Comply with all applicable local, state, and federal codes and regulations.

HVAC system to comply with the following standards, most current edition:

ANSI/ASHRAE Standard 62-2018: Ventilation for Acceptable Indoor Air Quality
ANSI/ASHRAE Standard 55-2018: Thermal Environmental Conditions for Human Occupancy
ANSI/ASHRAE 90.1-2018: Energy Standard for Buildings
SMACNA Sheet Metal and Air Conditioning Contractor's National Association Standards

Heating and Cooling Load Calculations: Size the building heating and cooling systems based on undiversified calculated loads for space and process equipment. Include 10% safety factor for the heating load calculations and no safety factor for the cooling load calculations.

Infiltration: Design for 30 MPH wind when calculating infiltration loads and 10% positive building pressurization

Design for Environmental Awareness. The built environment has a profound impact on our natural environment, economy, health, and productivity. Incorporate environmentally friendly solutions in the building design.

DESIGN CONDITIONS

Outside Design Conditions: Use the following climate data from ASHRAE Fundamentals 2017 Climatic Design Information and best practices:

Elevation	4,692 FT
Summer Design Dry Bulb Temp. (ASHRAE 0.4%)	100°F
Summer Mean Coincident Web Bulb (ASHRAE 0.4%)	65°F
Winter Design Dry Bulb Temp.	-20°F

Indoor Design Conditions: ASHRAE Standard 55

Offices, Conference Rooms, & General Occupancy:

Design Temperature 72 +/- 4°F

Design Humidity N/A

Ventilation 5 CFM/Person + 0.06 CFM/ft²

Legislative Chambers:

Design Temperature 72 +/- 4°F

Design Humidity N/A

Ventilation 5 CFM/Person + 0.06 CFM/ft^2

Mechanical Rooms:

Design Temperature 70-75°F

Roof Drain Piping

- o Cast Iron.
- o PVC will not be permitted.

· Fire Protection

- o The building will be equipped with a wet fire sprinkling system.
- o A fire riser station will be provided in the fire riser room.
- o A wall-mounted electric unit heater will be provided in the fire riser room for freeze protection.
- The temperature in the fire riser room is to be monitored by the DDC system and alarm if approaching freezing temperatures.

I LOGAN CITY - CIVIC

ш

 C

NORTH LOGA

MARK: DATE: DESCRIPTION:

PROJECT #: 821

DRAWN BY:

CHECKED BY:

SSUED: 03.31.2

MECHANICAL BASIS
OF DESIGN

M002

3 5

Private Offices: NC = 25

Building: Positive to outside.

VENTILATION REQUIREMENTS

HVAC & PLUMBING EQUIPMENT

Air Handlers

Air Distribution

General Exhaust

Data/Comm/Electrical Rooms

Electric Ceiling Radiation Heating

Conference Rooms: NC = 25

Legislative Chambers: NC = 25

5. Circulation Spaces, Lobbies: NC = 25

2. Toilet Rooms: Negative to adjacent spaces & exhausted.

4. Break Rooms: Negative to adjacent spaces & exhausted.

Ventilation will comply with the 2018 IMC & ASHRAE Standard 62.

intake dampers.

load tracking capability.

modulation for building pressurization control.

leading to ceiling-mounted air diffusers.

mounted centrifugal exhausters.

There is no hazardous exhaust in the building.

o Each RTU will be installed on a roof curb with vibration reduction.

o Each RTU will be capable of connecting to the building management system.

sound boots connected to them to help mitigate noise transmission.

Janitor Rooms: Negative to adjacent spaces & exhausted.

Pressure Relationships: Design the heating, ventilating and air conditioning systems to meet the following:

o Eight new packaged rooftop air-handling units (RTU) will be utilized for heating, cooling, and ventilation. They shall each be manufactured with a single supply fan, single relief fan, DX

o The supply fan on each RTU will have a direct drive ECM motor with volume modulation for

o The heating & cooling sections of each RTU will have modulation for load matching capability.

o Supply air will be distributed to spaces through an insulation-lined, low-pressure duct system

o The return air system will be a plenum return system. Ceiling-mounted return grilles will have

o The toilet rooms, janitor closets, and break rooms will be exhausted out the roof with roof

o The main exhaust duct risers and main runs shall be constructed of galvanized sheet metal.

o Primary cooling for these rooms will be provided by the packaged rooftop units.

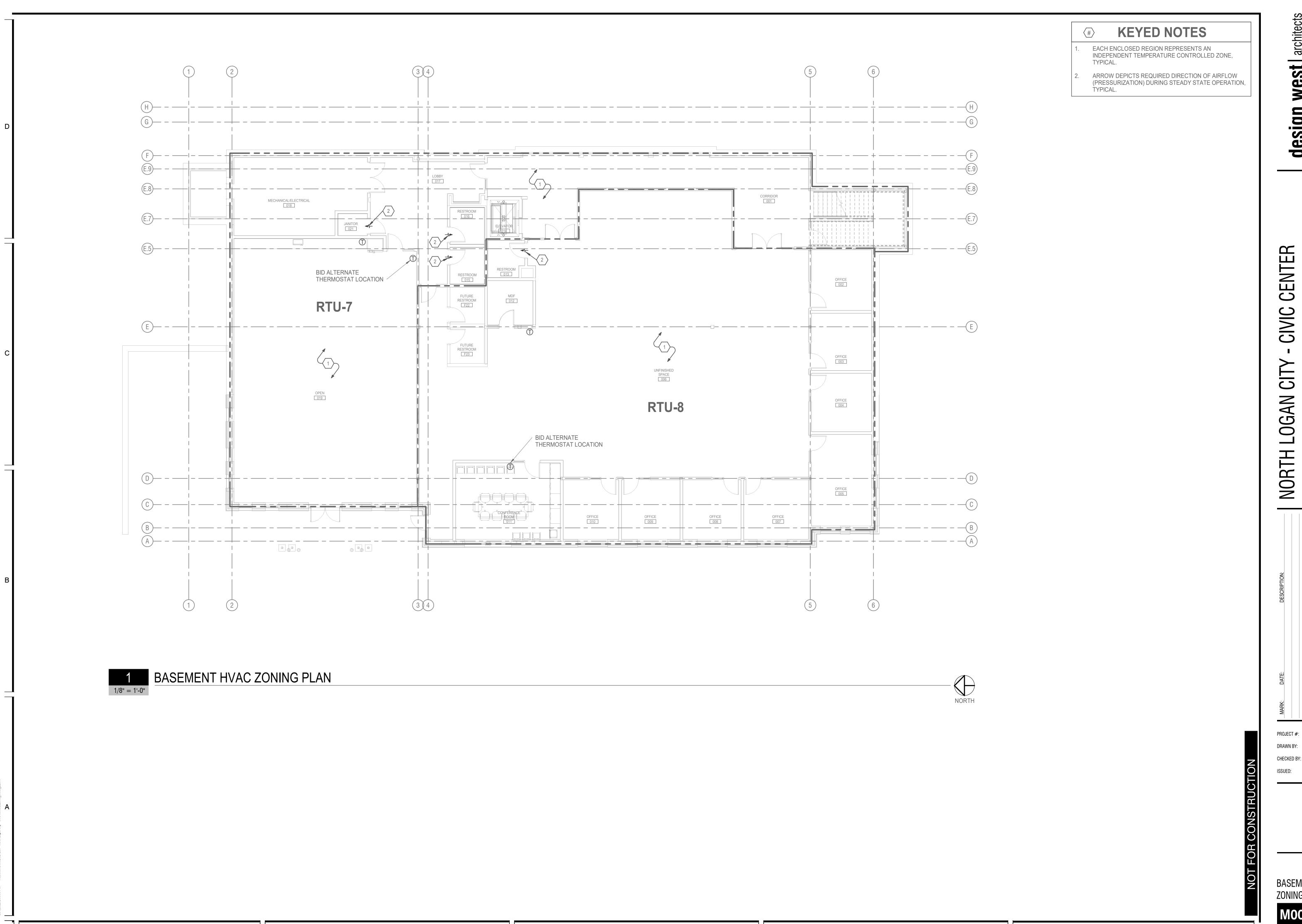
o Electric ceiling-mounted cabinet radiators will be utilized to provide heating in the entry

vestibule. Control for these panels will be internal factory-installed thermostats.

o Redundant backup cooling will be provided by Mini-Split DX cooling units.

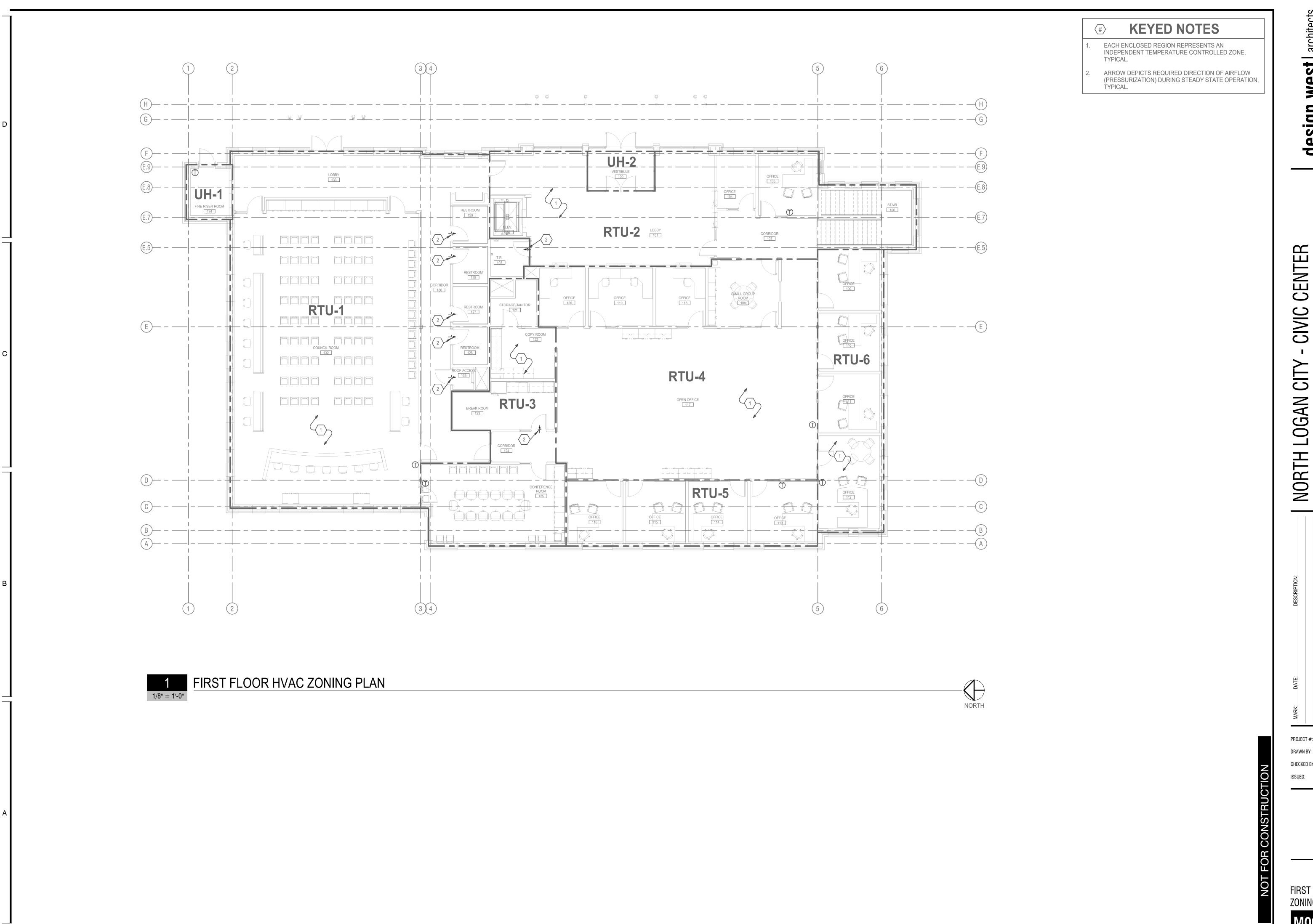
o Each RTU will have a powered relief air fan with a direct drive ECM motor with volume

cooling coil, natural gas-fired heating section, MERV-8 filters, and powered outside air/relief



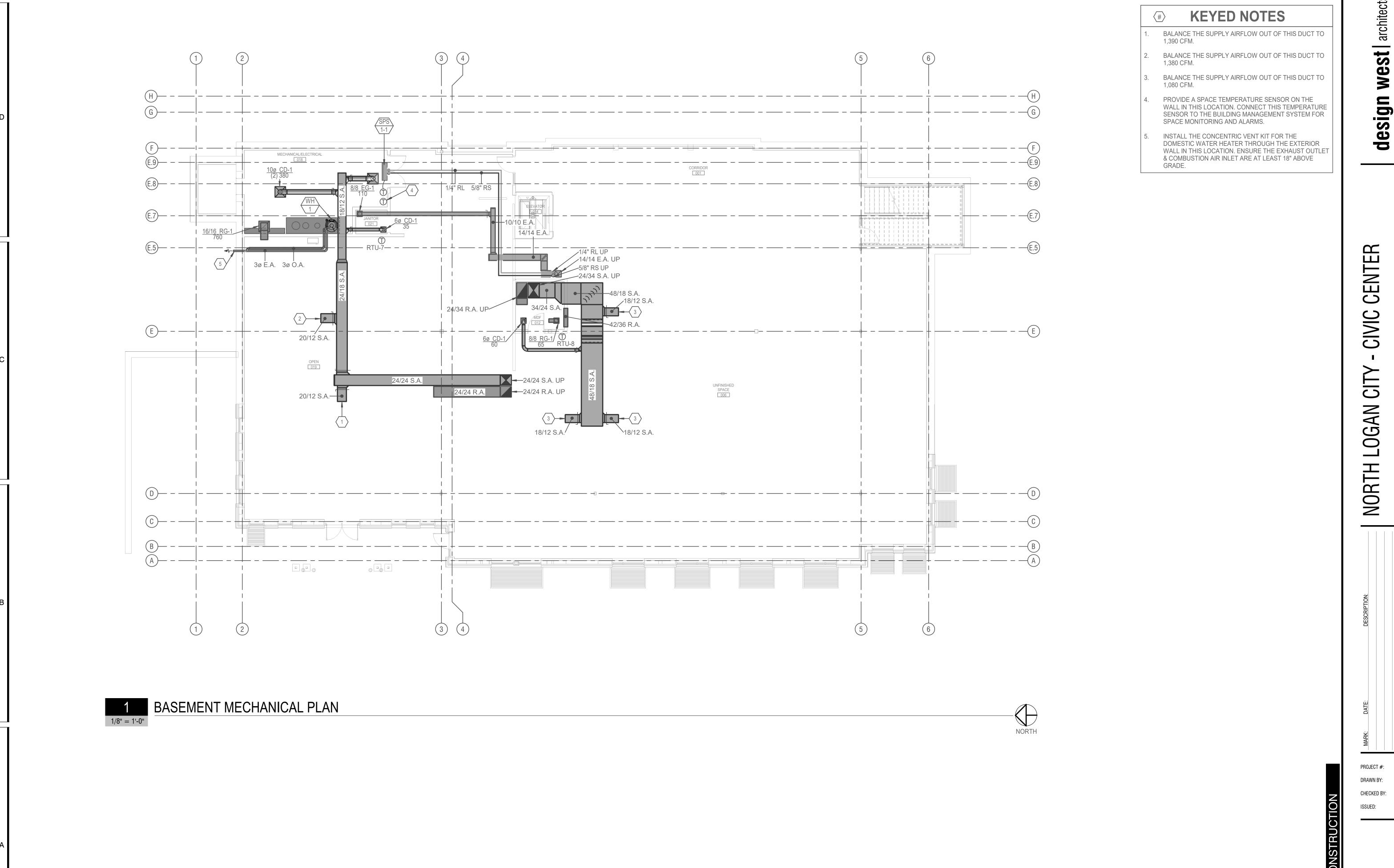
BASEMENT HVAC ZONING PLAN

M003



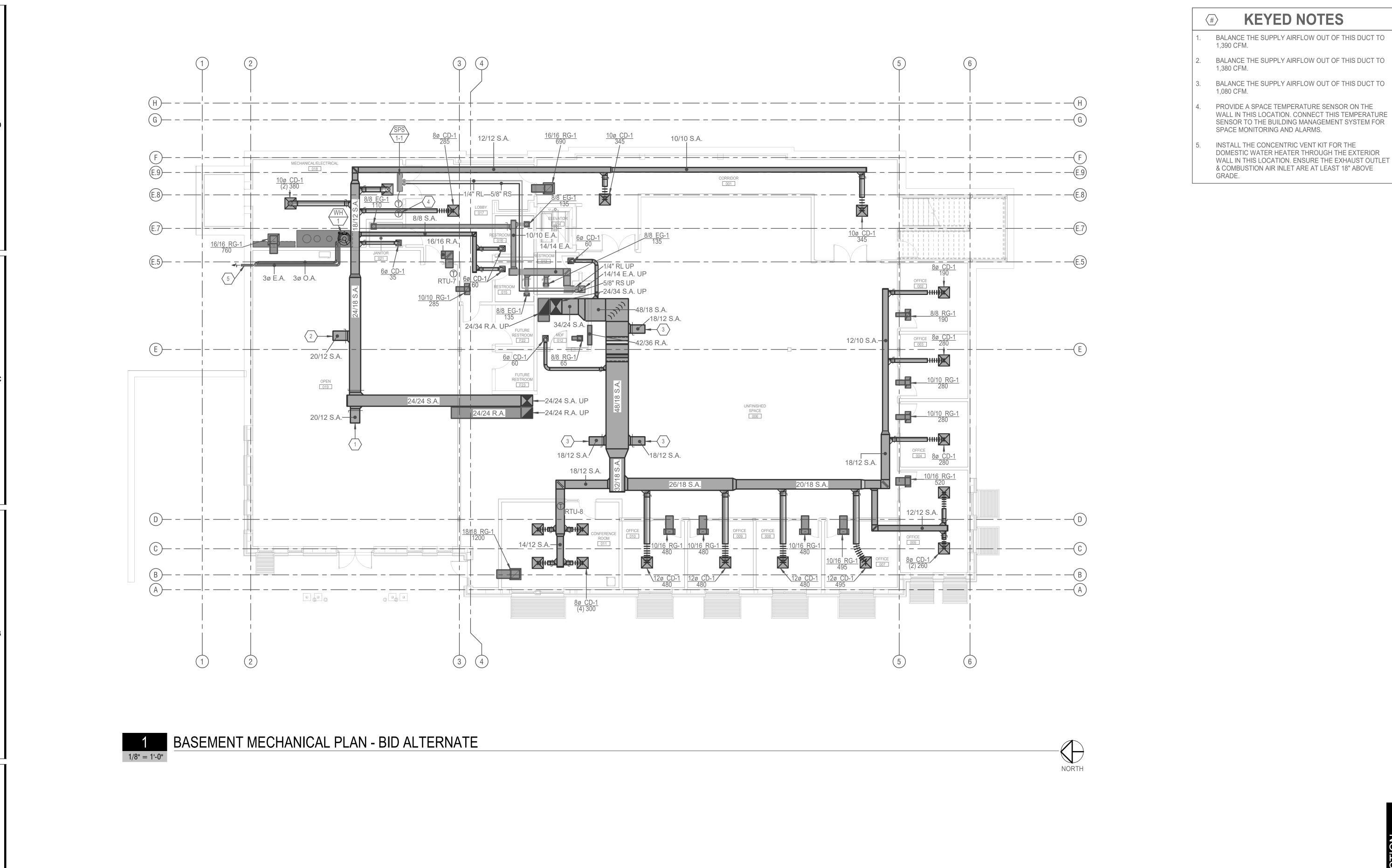
FIRST FLOOR HVAC **ZONING PLAN**

M004



CENTER

BASEMENT MECHANICAL PLAN M100

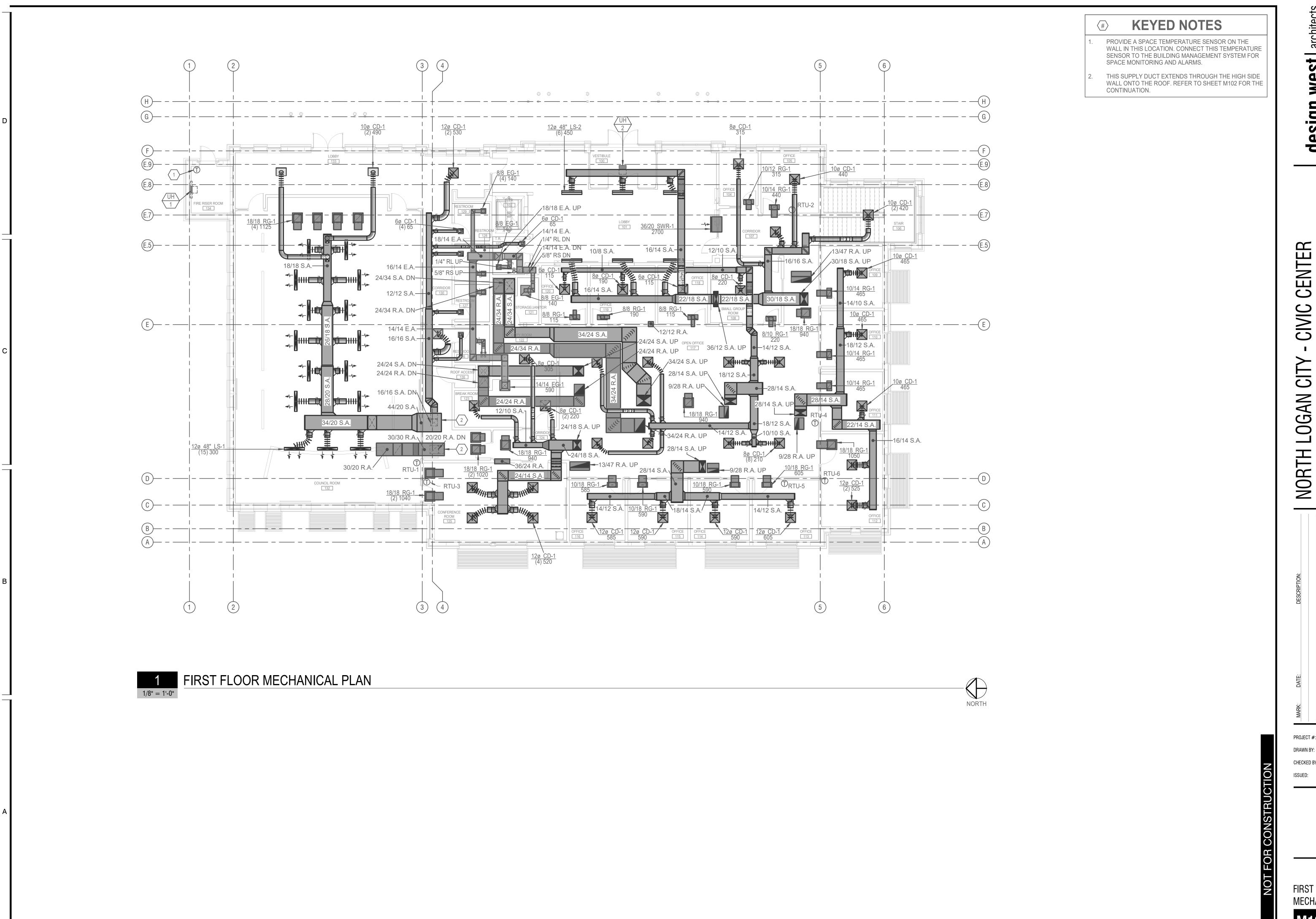


esign

CENTER

BASEMENT MECHANICAL PLAN -BID ALTERNATE

M100A



BSt architects

LOGAN UT 84321
SALTIAKE CITY UT 84103

SOUTH 300 WEST NORTH 400 WEST SA

ORTH LOGAN, UT

MARK: DATE: DESCRIPTION:

BEOJECT #: 8212

ROJECT #: 821239

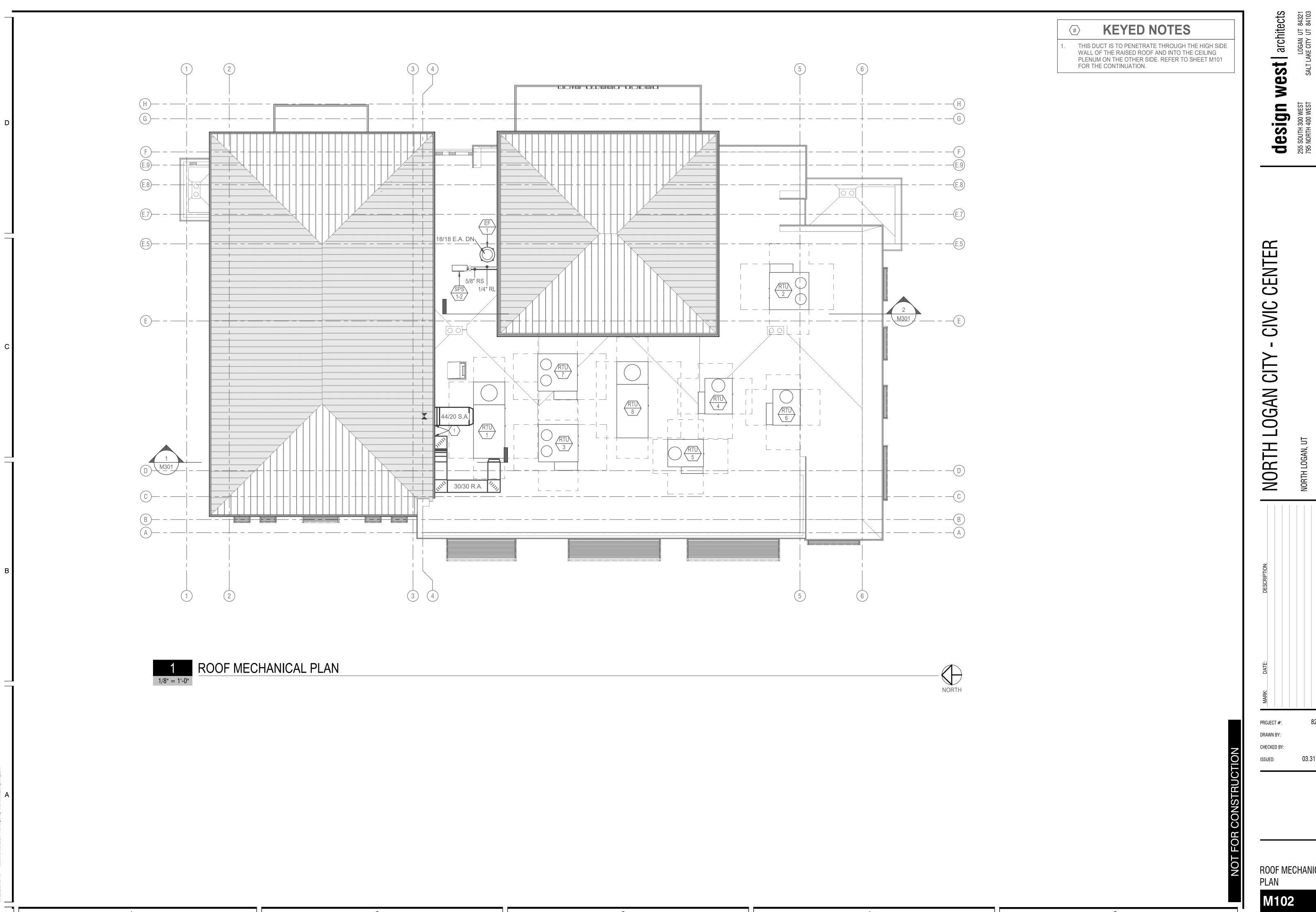
RAWN BY: KJM

HECKED BY: KJM

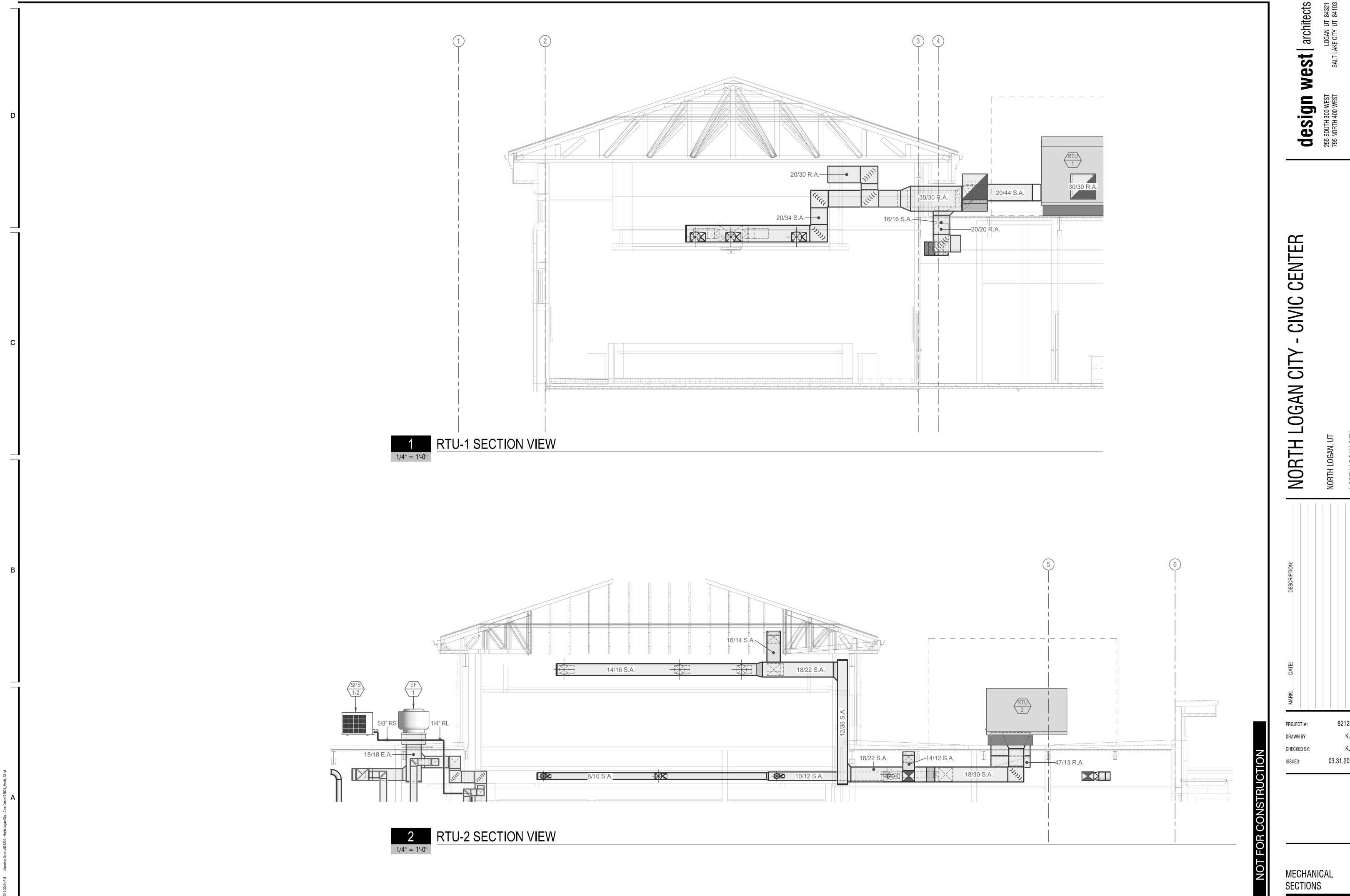
SSUED: 03.31.2022

FIRST FLOOR MECHANICAL PLAN

M101



ROOF MECHANICAL



M301

MECHANICAL DETAILS

M501

-MECHANICAL UNIT POWER DISCONNECT.— WELD OR BOLT ANGLE BRACKET TO UNISTRUT AND FASTENED THROUGH UNISTRUT RISER FOR POWER PAN EDGE INOT CURB NAILER WITH DISCONNECT. USE ANGLE BRACKETS-LAG BOLT AND SEALANT. TO SECURLY ATTACH TO CURB. SECURE UNIT WITH PER PROVIDE PIPE FLASHING (72 MIL.) AS SEISMIC REQUIREMENTS PER MANUFACTURER'S RECOMENDATIONS (12" MINIMUM FROM FINISHED ROOF) 2'-0" MINIMUM CURB FROM DECK. ENCAPSULATE ENTIRE ROOF CURB PIPE CLAMP MEMBRANE TO COPPER WITH ROOFING MEMBRANE PRIOR TO INSTALLING PAN COVER. 2" CONDUTI FOR LINE SETS TO 24-GUAGE KYNAR COATED OR GALVANIZED PAN OVER 3/4" PLYWOOD. PAN TO BE CONSTRUCTED EXTEND 8" ABOVE DECK AND 1" CONDUIT FOR POWER TO BE 24" MIN. — WITH NO SEAMS AND A 3" MINIMUM HIGH DRIP EDGE. FROM DECK. OF 1'-0" APART. (NOTE: NOTE: NO PENETRATIONS THROUGH TOP PAN. SPLIT LINE SET TO UNIT) ─2'-0" MINIMUM ABOVE DECK

ROOF MOUNTED SPLIT SYSTEM CONDENSING UNIT DETAIL

DUCT BRACING GENERAL NOTES

1 DETAILS SHOWN PROVIDE GENERAL GUIDELINES FOR A LATERAL BRACING SYSTEM. A TYPICAL VERTICAL SUPPORT SYSTEM MUST ALSO BE USED.

2 BRACE ALL RECTANGULAR DUCTS OF AREA 6 SQ. FT. AND LARGER. BRACE ALL ROUND DUCTS 28" IN DIAMETER AND

3 CABLE RESTRAINTS AND BRACING NOT TO EXCEED 30'-0" CENTERS AND SHALL BE PROVIDED AT EACH TURN, AT THE END OF EACH DUCT RUN, AND ON EACH SIDE OF FLEXIBLE CONNECTIONS. BRACE POINTS SHALL NOT EXCEED 15'-0" FROM FLEXIBLE CONNECTION.

4 WHEN COMBINING DUCT GROUPS ON COMMON BRACING SYSTEMS, USE WEIGHTS AND DIMENSIONS FROM BRACING

5 ALL HOLES IN ANGLES ARE TO BE 1/16 INCH OVERSIZED. PLACE STANDARD CUT WASHERS BETWEEN SHEET METAL ANGLES AND NUT.

6 DUCTS NOT BRACED SHALL BE INSTALLED WITH A 6" MIN. CLEARANCE TO VERTICAL CEILING HANGER WIRES.

7 REHEAT BOXES AND OTHER ITEMS WHICH ATTACH TO THE DUCT SYSTEM SHALL BE BRACED INDEPENDENTLY OF THE DUCTS.

8 ALL SHEET METAL FOR BRACING TO BE FY = 33 KSI MINIMUM. GAUGE FOR SHEET METAL BRACING SHALL BE AS FOLLOWS: 16 GA =(0.0598 INCH) 14 GA = (0.0747INCH)

12 GA= (0.1046 INCH) 9 MINIMUM DISTANCE FROM EDGE OF ANGLE TO BOLTS SHALL BE AS FOLLOWS:

_		•
	BOLT DIAMETER	DISTANCE FROM EDGE
	1/4" TO 1/2"	1"
	5/8"	1 1/8"
	3/4"	1 1/4"
	7/8"	1 1/2"

10 DO NOT FASTEN RESTRAINT SYSTEM TO TWO DISSIMILAR PARTS OF A BUILDING THAT MAY RESPOND IN A DIFFERENT MODE DURING AN EARTHQUAKE. FOR EXAMPLE, A WALL AND A ROOF. 11 ALTERNATE EVERY OTHER CABLE RESTRAINT IN OPPOSITE DIRECTION (SHOWN DOTTED).

	DUCT CABLE BRACING LIST									
DUCT SIZE (MAX.)	*WT/ LIN FT (MAX)	BOLT SIZE	HORIZONTAL ANGLE	VERTICAL ANGLE	CABLE DIA.**	CABLE DES.	ANCHOR CONN. TYPE			
12"	5#	3/8"	2 X 2 X 16 GA	2 X 2 X 12 GA	1/8"	7x19 _GALV	I			
18"	8#	3/8"	2 X 2 X 16 GA	2-1/2 X 2-1/2 X 12 GA	1/8"	7x19 _GALV	I			
24"	10#	3/8"	2 X 2 X 16 GA	2-1/2 X 2-1/2 X 12 GA	1/8"	7x19 _GALV	I			
30"	13#	3/8"	2 X 2 X 16 GA	2-1/2 X 2-1/2 X 12 GA	1/8"	7x19 _GALV	I			
42"	20#	3/8"	2-1/2 X 2-1/2 X 16 GA	4 X 4 X 12 GA	3/16"	7x19 _GALV	II			
54"	27#	3/8"	2-1/2 X 2-1/2 X 16 GA	4 X 4 X 12 GA	3/16"	7x19 _GALV	II			
60"	36#	3/8"	3 X 3 X 16 GA	4 X 4 X 12 GA	3/16"	7x19 _GALV	II			
84"	53#	3/8"	4 X 4 X 14 GA	4 X 4 X 1/4	1/4"	7x19 _GALV	III			
96"	80#	1/2"	4 X 4 X 12 GA	5 X 3 X 1/4	5/16"	7x19 _GALV	IV			

* MAXIMUM WEIGHT OF DUCTS OR COMBINATIONS OF DUCTS PER LINEAR FOOT. THE DUCTS MAXIMUM DIMENSION SHALL GOVERN WHAT BRACING IS REQUIRED. FOR ANCHOR CONNECTIONS SEE LIST. SEE DUCT BRACING DETAILS.

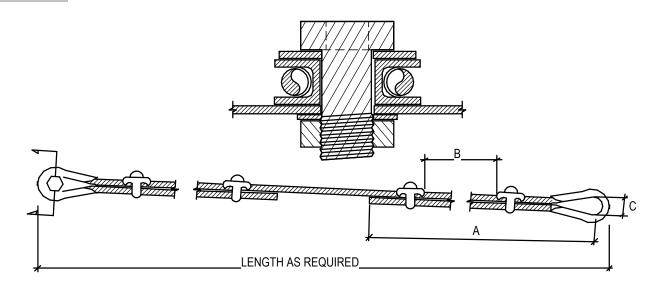
** TWO CABLES REQUIRED AT EACH RESTRAINT POINT, EACH CABLE TO BE INSTALLED 45° TO HORIZONTAL AND 45° TO LONGITUDINAL DIRECTION OF DUCT.

DUCT CABLE BRACING LIST

DUCT BRACING GENERAL NOTES

-SEE CONNECTION SCHEDULE AND DETAILS DUCT HANGER AS RECOMMENDED BY SMACNA 1 1/2" X 12 GA.--CABLE-SEE DETAIL, BRACING SHEET METAL -INSULATION HANGER STRAP 2 1/2" X 12 GA. SHEET AND CONNECTION SCHEDULES WHERE OCCURS FOR SIZE OF ANGLE, BOLT AND METAL RESTRAINT

CABLE BRACING FOR ROUND AND OVAL DUCTS



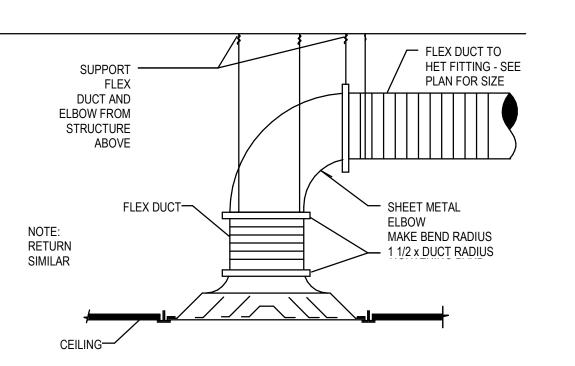
1. CABLES, THIMBLES, CLIPS, GROMMETS & FLAT WASHERS ARE TO BE FURNISHED BY RESTRAINT MANUFACTURER. ALL OTHER HARDWARE TO BE PROVIDED BY CONTRACTOR.

2. ENTIRE SYSTEM TO BE EQUAL TO AMBER BOOTH.

3. CABLE CLIPS MUST BE ORIENTED AS SHOWN WITH SHORT END OF CABLE ON THE CURVED PART OF THE CLIP.

	CABLE SCHEDULE								
CABLE DIA.	CABLE DESIGN	A	В	С	BOLT SIZE	ALLOWABLE LOAD (lbf)	BREAKING STRENGTH (lbf)		
1/8"	7X19 GALV.	5-1/4"	1-5/8"	5/8"	3/8"	660	2000		
3/16"	7X19 GALV.	5-3/4"	1-7/8"	5/8"	3/8"	1400	4200		
1/4"	7X19 GALV.	6-3/4"	2-3/8"	11/16"	3/8"	2330	7000		
5/16"	7X19 GALV.	7-3/8"	2-5/8"	13/16"	5/8"	3260	9800		
3/8"	7X19 GALV.	8-7/8"	3-1/4"	1"	5/8"	4800	14400		
7/16"	6X19 IWRC	17"	3-5/8"	1"	5/8"	5920	17800		
1/2"	6X19 IWRC	18"	3-7/8"	1-1/8"	3/4"	7660	23000		

CABLE RESTRAINT DETAIL



DIFFUSER CONNECTION DETAIL

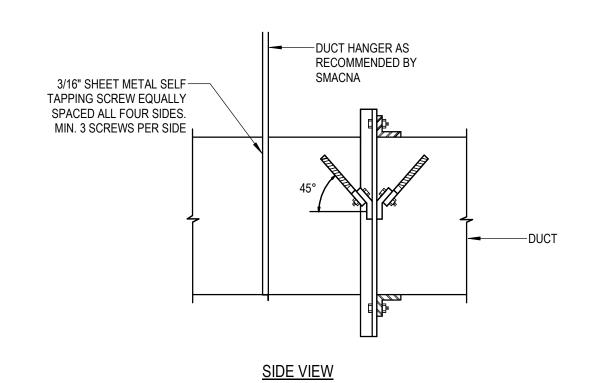
DRAIN LINE SHALL BE AT LEAST THE SAME SIZE AS THE NIPPLE ON THE DRAIN PAN PITCH DOWN TOWARD DRAIN-CLEAN OUT-UNIT TYPE OPEN DRAIN-2" (50 MM) DRAW THRU 1" (25 MM) **BLOW THRU** MINIMUM

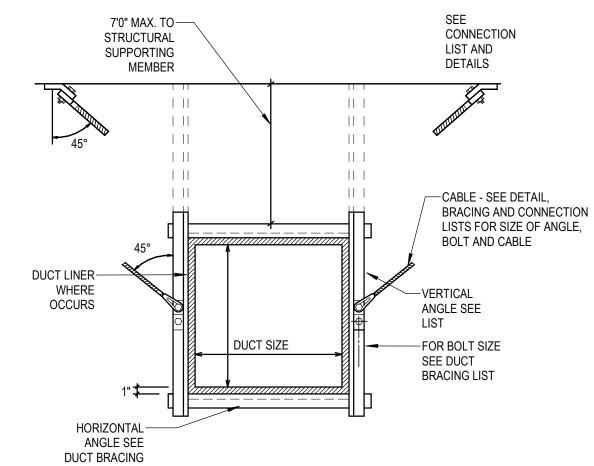
AIR HANDLING UNIT DRAIN TRAP

WHERE X = STATIC PRESSURE IN PAN

DAMPERS SHOULD NOT L=1/4 W (4" MIN.) BE INSTALLED CLOSER THAN TWO DUCT WIDTHS TO ELBOWS OR INTERSECTIONS -VOLUME DAMPER PROVIDE CONCEALED CEILING DAMPER REGULATOR REMOTE CEILING-OPERATOR WHERE DAMPER IS INACCESIBLE

BRANCH DUCT TAKE-OFF & DAMPER DETAIL





CABLE BRACING FOR RECTANGULAR DUCTS

- 2 BRACE ALL PIPES 1-1/2" I.D. AND LARGER.
- 3 CABLE RESTRAINTS AND BRACING NOT TO EXCEED 30'-0" CENTERS AND SHALL BE PROVIDED AT ALL CHANGES IN DIRECTION OF PIPE. ALL DROPS TO EQUIPMENT, AND ON EACH SIDE OF FLEXIBLE CONNECTIONS. BRACE POINTS SHALL NOT EXCEED 15'-0" FROM FLEXIBLE CONNECTION.
- 4 ALL HOLES IN ANGLES ARE TO BE 1/16 INCH OVERSIZED. PLACE STANDARD CUT WASHERS BETWEEN SHEET METAL ANGLES AND NUT.
- 5 EQUIPMENT WHICH ATTACHES TO THE PIPING SYSTEM SHALL BE BRACED INDEPENDENTLY OF THE PIPES.
- ALL SHEET METAL FOR BRACING TO BE FY=33 KSI MINIMUM. GAUGE FOR SHEET METAL BRACING SHALL BE AS FOLLOWS:

16 GA = (0.0598 INCH) 14 GA = (0.0747 INCH) 12 GA = (0.1046 INCH)

MINIMUM DISTANCE FROM EDGE OF ANGLE TO BOLTS SHALL BE AS FOLLOWS:

BOLT DIAMETER	DISTANCE FROM EDGE
1/4" TO 1/2"	1"
5/8"	1 1/8"
3/4"	1 1/4"
7/8"	1 1/2"

- 8 DO NOT FASTEN RESTRAINT SYSTEM TO TWO DISSIMILAR PARTS OF A BUILDING THAT MAY RESPOND IN A DIFFERENT MODE DURING AN EARTHQUAKE. FOR EXAMPLE, A WALL AND A ROOF.
- 9 PROVIDE LARGE ENOUGH PIPE SLEEVES THROUGH WALLS OR FLOORS TO ALLOW FOR ANTICIPATED DIFFERENTIAL MOVEMENTS.
- 10 DO NOT FASTEN ONE RIGID PIPING SYSTEM TO TWO DISSIMILAR PARTS OF A BUILDING THAT MAY RESPOND IN A DIFFERENT MODE DURING AN EARTHQUAKE. FOR EXAMPLE, A WALL AND A ROOF.
- BRACING DETAILS, SCHEDULE AND NOTES ARE TO BE USED WITH THE FOLLOWING TYPES OF PIPE: STEEL PIPE SCHEDULE 40 AND 80, COPPER PIPE TYPE K,L,M (ONLY SILVER SOLDERED BRAZED JOINTS TO BE USED WITH COPPER PIPE).
- 12 FOR GAS PIPING, THE BRACING DETAILS, SCHEDULES AND NOTES MAY BE USED EXCEPT THAT RESTRAINTS SHALL BE INSTALLED AT EVERY 20'-0" O.C. ALSO ALL PIPE 1 INCH AND LARGER SHALL BE BRACED.
- 13 WASTE, VENT AND ROOF DRAINAGE PIPING SYSTEMS ARE EXCLUDED FROM THE
- 14 ALTERNATE EVERY OTHER CABLE RESTRAINT IN OPPOSITE DIRECTION (SHOWN DOTTED).

PIPE BRACING GENERAL NOTES

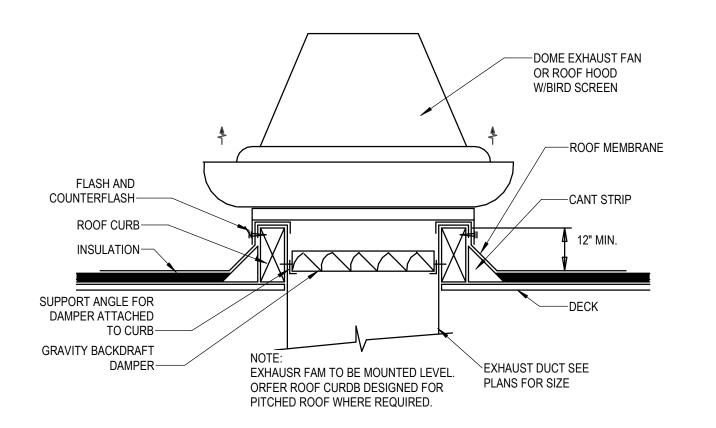
		Pl	PE SEISMIC	BRACING	SCHEDULE			
PIPE SIZE	HANGER ROD SIZE	MAX. ROD LENGTH	HANGER TYPE	BOLTS TO ANGLE	ANGLE CLIP	ANGLE BRACE	ANCHOR CONN. TYPE	ANCHOR BOLT OR INSERT
1-1/2"	1/2"	25"	CLEVIS	3/8"	3 x 3 x 1/4	2 x 2 x 16 GA	ı	3/8"
2"	1/2"	25"	CLEVIS	3/8"	3 x 3 x 1/4	2 x 2 x 16 GA	ı	3/8"
2-1/2"	5/8"	31"	CLEVIS	3/8"	3 x 3 x 1/4	2 x 2 x 16 GA	ı	3/8"
3"	5/8"	31"	CLEVIS	3/8"	3 x 3 x 1/4	2 1/2 x 2 1/2 x 16 GA	II	1/2"
3-1/2"	5/8"	31"	CLEVIS	3/8"	3 x 3 x 1/4	2 1/2 x 2 1/2 x GA	II	1/2"
4"	3/4"	37"	CLEVIS	3/8"	3 x 3 x 1/4	2 1/2 x 2 1/2 x 16 GA	II	1/2"
5"	3/4"	37"	CLEVIS	1/2"	5 x 3 x 1/2	2 1/2 x 2 1/2 x 16 GA	III	3/4"
6"	3/4"	37"	CLEVIS	5/8"	5 x 3x 1/2	2 1/2 x 2 1/2 x 16 GA	IV	3/4"
8"	7/8"	43"	CLEVIS	5/8"	(2) 5 x 3 x 1/2	3 x 3 x 12 GA	V	2 5/8"
10"	7/8"	43"	CLEVIS	3/4"	(2) 5 x 3 x 1/2	3 x 3 x 12 GA	VI	2 5/8"

FOR ANCHOR CONNECTIONS SEE LIST.

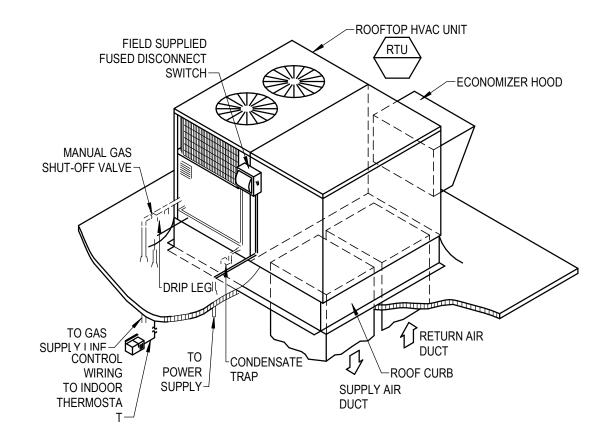
SEE PIPE BRACING DETAIL.

*1 5/8" x 1 5/8" x 12 GA CHANNEL MAY BE

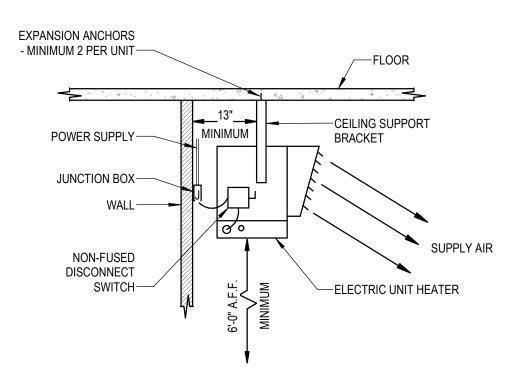
PIPE SEISMIC BRACING SCHEDULE



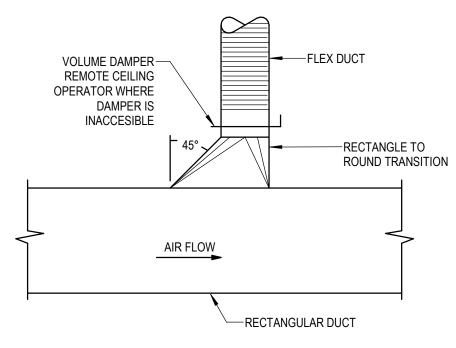
UP BLAST EXHAUST FAN DETAIL



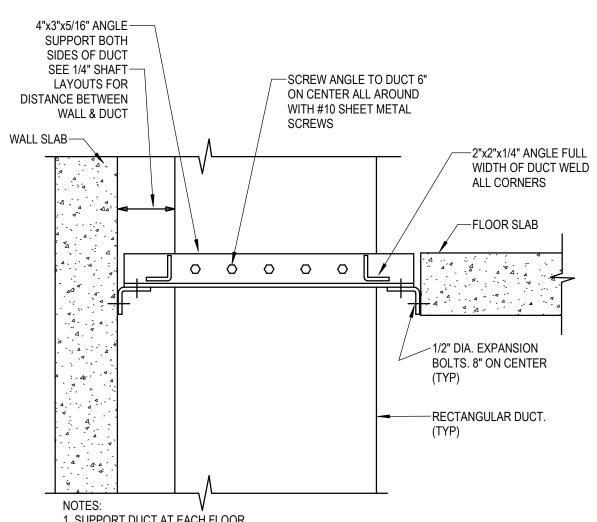
GAS FIRED ROOFTOP HVAC UNIT DETAIL



ELECTRIC UNIT HEATER MOUNTING DETAIL



FLEX DUCT WITH HIGH EFFICIENCY FITTING DETAIL

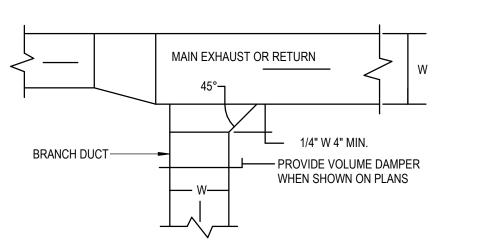


1. SUPPORT DUCT AT EACH FLOOR. 2. SUPPORT OF ROUND DUCT SIMILAR EXCEPT SCREW CLAMP TO DUCT SAME SIZE AS DUCT OUTSIDE DIAMETER AND BOLT CLAMP TO ANGLE SUPPORTS. 3. SUZE SUPPORT ANGLES AND DUCT CLAMPS AS REQUIRED TO SUPPORT WEIGHT 4. OMIT SCREWS AT FUME EXHAUST DUCTS AND BOLT ANGLES TO DUCT COMPANION ANGLE FLANGES.

DUCT RISER CHASE SUPPORT DETAIL

THYCURB EQUIPMENT RAIL CONDENSING-—ANCHOR UNIT TO EQUIPMENT RAIL AND EQUIPMENT RAIL TO ROOF STRUCTURE -INDOOR UNIT THERMOSTAT-

WALL MOUNTED DUCTLESS SPLIT SYSTEM DETAIL



EXHAUST AND/OR RETURN BRANCH DUCT DETAIL

architects

sign

ENTE

0

MECHANICAL DETAILS

ORTH

MECHANICAL DETAILS

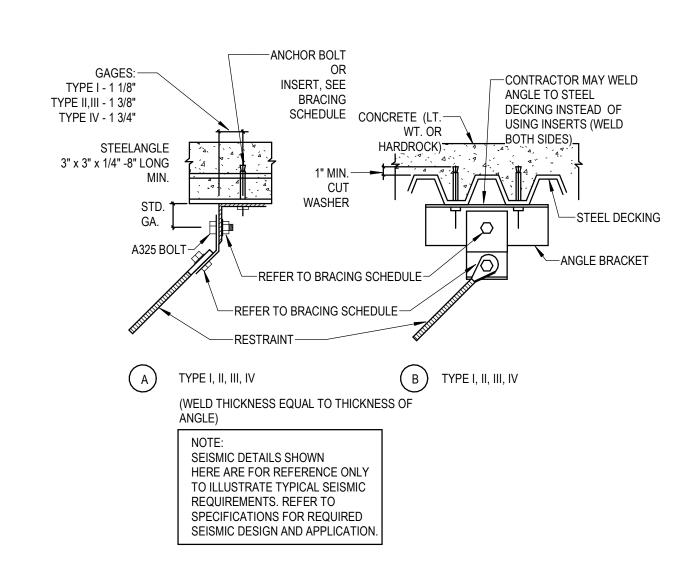
M503

-CONCRETE ROOF DECK 1 1/4" x 16—— GAUGE SHEET -DOUBLE FOLD STRAP AND SECURE METAL WITH 3/8" DIA. STRAP, EXPANSION BOLT, TYPICAL DUCT--#10 SHEET METAL SCREW 6" ON CENTER, TYP. BEND TAB UNDER-USE SPECIFIED SPACING AND NOT LESS ONE SUPPORT PER BRANCH.

RECTANGULAR DUCT DETAIL

-ANCHOR BOLT OR EXPANSION ANCHOR OF SIZE REQUIRED BY RESTRAINT MANUFACTURER -NEOPRENE WASHER AND SLEEVE EQUIPMENT BASE--STAINLESS STEEL BONDED PLATE -RESILIENT PAD DESIGNED FOR 1/4" MAX. STATIC DEFLECTION (TYPE DS) TACK WELD NUT-TO ANGLE, ISOLATION ASSEMBLE MUST BE DESIGNED TO PROVIDE LOCK WITHSTAND 0.5g LATERAL AND VERTICAL LOADS

RESILIENT PAD ISOLATOR RESTRAINT DETAIL DETAIL

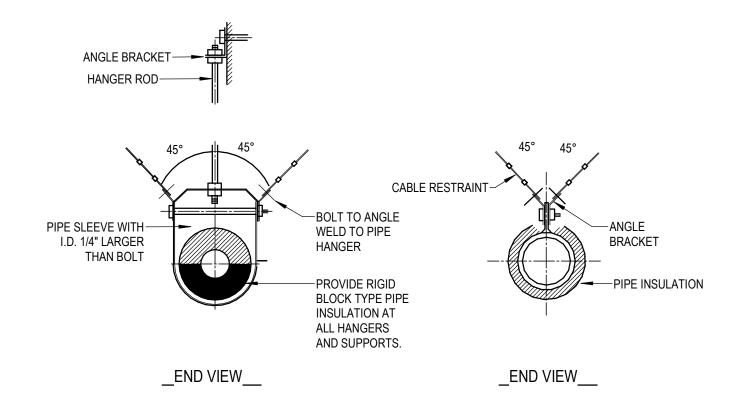


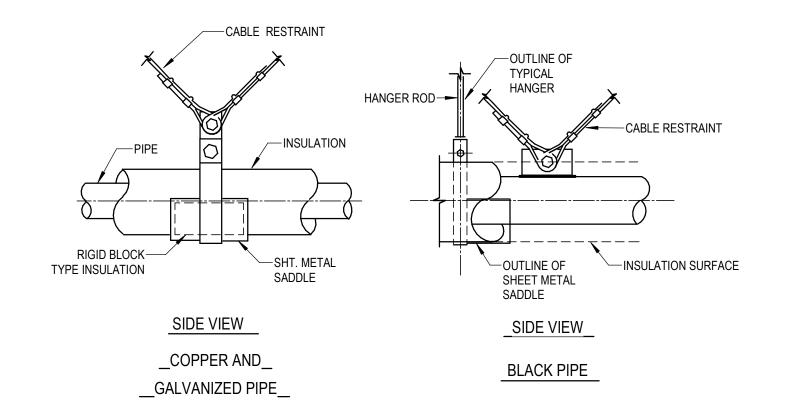
RESTRAINT CONNECTIONS TO STEEL

PROVIDE DOUBLESTICK ETERNABOND ADHESIVE FROM SUPPORT PAD TO **EXISTING ROOF** MEMBRANE

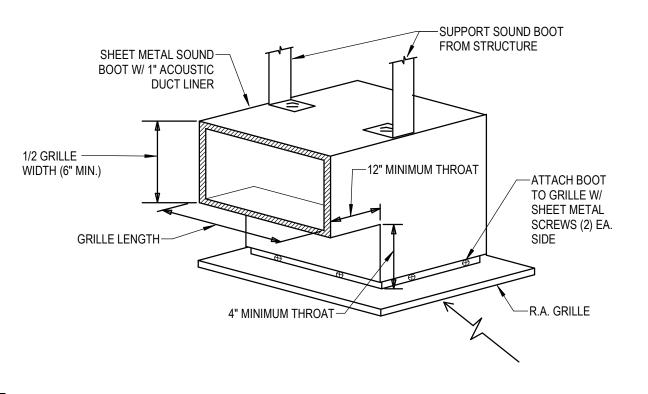
PIPE SUPPORT ON ROOF

MIRO INDUSTRIES 3-R-2 PIPE GUIDE OR EQUIVALENT





PIPING RESTRAINT DETAIL

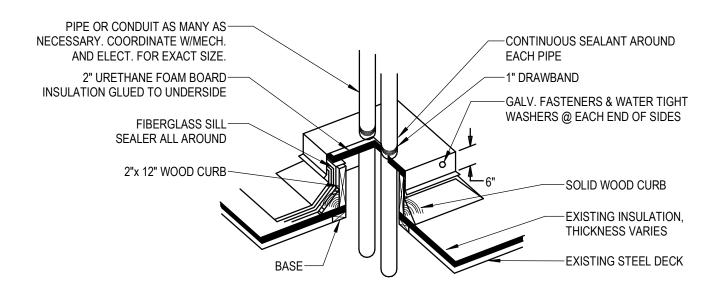


RA GRILLE WITH SOUND BOOT DETAIL

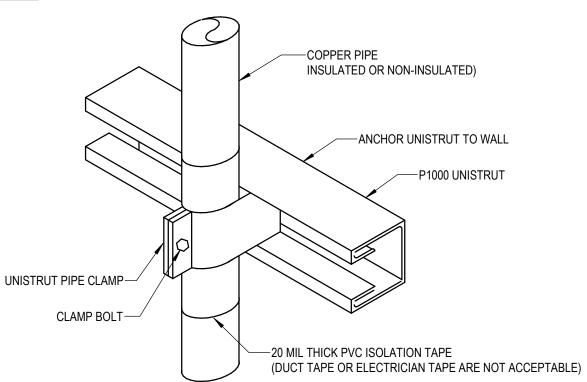
ANCHOR ANCHOR ROD HANGER TO ROD **ANGLE ANGLE** CONN. BOLT CLIP SIZE LENGTH BRACE SIZE TYPE **ANGLE** TYPE OR **INSERT** 1/2" 3/8" 1-1/2" CLEVIS 2 x 2 x 16 GA 3 x 3 x 1/4 3/8" 1/2" CLEVIS 3 x 3 x 1/4 2 x 2 x 16 GA 3/8" 2-1/2" CLEVIS 2 x 2 x 16 GA 3 x 3 x 1/4 1/2 x 2 1/2 x 16 GA 5/8" CLEVIS 3 x 3 x 1/4 2 1/2 x 2 1/2 x GA 3-1/2" CLEVIS 3 x 3 x 1/4 1/2" 2 1/2 x 2 1/2 x 16 GA 3/4" CLEVIS 1/2" 3 x 3 x 1/4 1/2 x 2 1/2 x 16 GA 3/4" CLEVIS 3/4" 5 x 3 x 1/2 2 1/2 x 2 1/2 x 16 GA 5 x 3x 1/2 3/4" CLEVIS 3/4" 2 5/8" 7/8" CLEVIS (2) 5 x 3 x 1/2 3 x 3 x 12 GA 7/8" CLEVIS (2) 5 x 3 x 1/2 3 x 3 x 12 GA 2 5/8" FOR ANCHOR CONNECTIONS SEE LIST. SEE PIPE BRACING DETAIL.

PIPE SEISMIC BRACING SCHEDULE

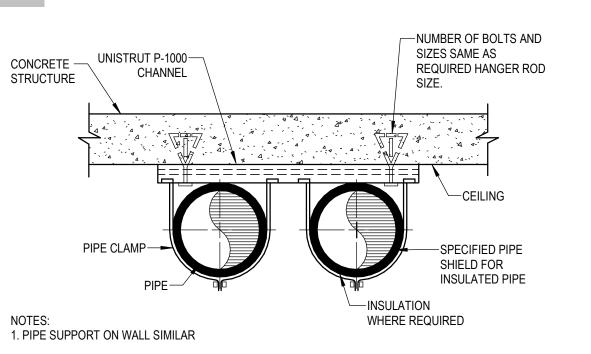
PIPE CABLE BRACING SCHEDULE



MULTI-PIPE ROOF PENETRATION DETAIL



PIPE SUPPORT DETAIL



PIPE SUPPORT ON CEILING

*1 5/8" x 1 5/8" x 12 GA CHANNEL MAY BE

HANGER

NTS

SCREW STRAP TO DUCT

6" O.C. ALL AROUND WITH #10 SHEET METAL

WATERTIGHT

SCREWS AND SOLDER

— FLASHING AND ROOFING. SEE ARCH. DWGS.

-2"x2"x1/8" ANGLE FRAME. FASTEN TO

6" O.C.

WHERE REQD.

-ROOF TOP UNIT

ALL DIRECTIONAL NEOPRENE BUSHING

CONTINUOUS

WOOD NAILER

SLOPE.

—ALUMINUM WEATHER SEAL

SPRING ISOLATION CURB WITH

INTEGRAL SEISMIC RESTRAINT

NEOPRENE ACOUSTICAL SEAT

-SUB FRAME TO COMPENSATE FOR INSULATION THICKNESS AND ROOF

DUCT WITH 3/16"∅

SELF-TAPPING SCREWS

ORTH

821239

03.31.2022

MECHANICAL

DETAILS M504

SLOPE TOP OF DUCT SHEET METAL DUCT SEAL 1/4" PER FOOT ALL JOINTS WATERTIGHT DOUBLE WALL EXPOSED DUCT 2" OWNENS CORNING WIDTH OF DUCT HEIGHT = "H" AEROFLEX RIGID INSULATION P-1000 GALVANIZED UP TO 24" (610 MM) 14" (356 MM) UNISTRUT CHANNEL 25" TO 36" (635 MM TO 914 MM) 18" (457 MM) 37" TO 48" (940 MM TO 1219 MM) 24" (610 MM) MIRO INDUSTRIES DS CUSTOM DUCT SUPPORT OR EQUIVALENT. WITH FULL DUCT SUPPORT. 49" TO 60" (1245 MM TO 1524 MM) 30" (762 MM) TOP OF ROOF -61" (1549 MM) AND WIDER 48" (1219 MM) H CLEARANCE FOR ROOF MAINTENANCE IS RECOMMENDED FOR EQUIPMENT AND DUCTS ROOF DECK

5 PIECE 90° ELBOW 4 PIECE 60° ELBOW 3 PIECE 45° ELBOW 2 PIECE 30° ELBOW

ROUND DUCT ELBOWS DETAIL

DUCT THROUGH ROOF DETAIL 2

DUCT THRU ROOF-

FLASHING-

18 GAUGE COUNTER-

CONCRETE CURB. SEE STURCTURAL DWGS.—

CANT AROUND-

1/2"Ø EXPANSION

CROSS BRACE-

FILL THE INSIDE OF THE ROOF CURB WITH BATT INSULATION AROUND THE DUCTWORK

TWO LAYERS OF 5/8" GYP BOARD

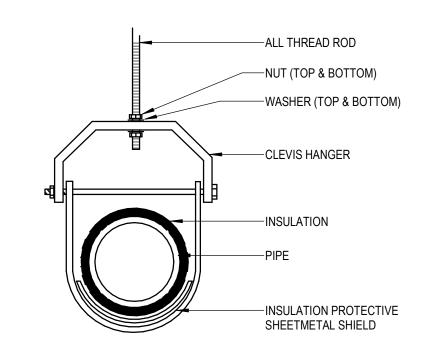
BOLT. (TYP)-

-METAL ROOF DECK -DOUBLE FOLD STRAP AND SECURE WITH 3/8" DIA. BOLT 3/8" DIA. BOLT AND NUT-—1-1/4" X 16 GA. ROUND DUCT-SHEET METAL STRAP

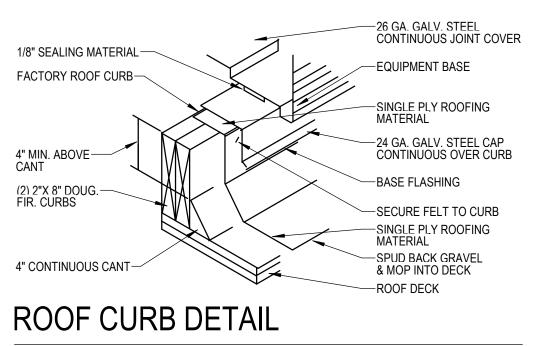
ROUND DUCT SUPPORT DETAIL

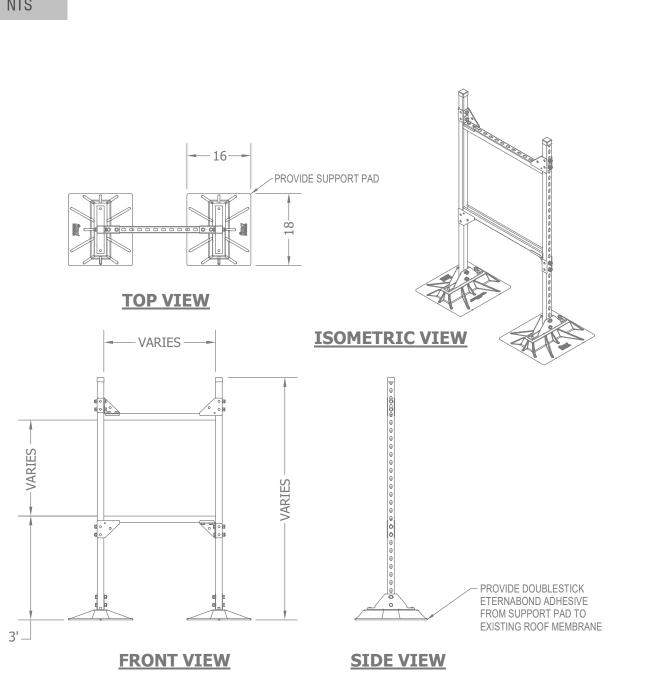
USE SPECIFIED SPACING AND NOT LESS THAN ONE

SUPPORT PER BRANCH.



TYPICAL CLEVIS HANGER DETAIL





ROOFTOP CURB DETAIL

MIRO INDUSTRIES 8-DS ENCLOSED DUCT SUPPORT OR EQUIVALENT

DUCT SUPPORT ON ROOF DETAIL

DUCT ABOVE ROOF DETAIL

06,

				EX	HAUS	T AIR I	FAN	SCH	IEDULE							
					AIR			FAN	ELECTRICAL					PHYSICAL		
					MAXIMUM	EXTERNAL	MAX							LENGTH/		
	MANUFACTURER				AIRFLOW	STATIC	AIR	FAN	MOTOR	MOTOR	MOTOR			WIDTH/		
	AND				RATE	PRESSURE	TEMP.	SPEED	SIZE	BHP	SPEED			HEIGHT	WEIGHT	
ID	MODEL NUMBER	LOCATION	QUAN.	TYPE	(CFM)	(IN. H2O)	(°F)	(RPM)	(HP)	(HP)	(RPM)	VOLT/PH/HZ	FLA	(IN)	(LBS)	NOTES
EF-1	GREENHECK CUE-180-VG	ROOF	1	UPBLAST CENTRIFUGAL	2,215	0.75	72	982	1	0.46	982	208/3/60	6.5	37/37/43	200	1, 2, 3, 4, 5, 6

- 1. PROVIDE 14" HIGH VIBRATION ISOLATION ROOF CURB, BIRD SCREEN, THERMAL OVERLOAD PROTECTION, AND MOTORIZED BACKDRAFT DAMPER.
- 2. PROVIDE FACTORY-INSTALLED ELECTRICAL DISCONNECT.
- 3. CAPACITIES ARE AT ALTITUDE.
- 4. EXHAUST FAN TO RUN CONTINUOUSLY.
- 5. WITH A WIRE HARNESS THAT CONNECTS THIS FAN TO THE BUILDING MANAGEMENT SYSTEM FOR EXTERNAL SPEED CONTROL, ON/OFF CONTROL, & BACKDRAFT DAMPER CONTROL.
- 6. ROOF CURB TO COMPENSATE FOR ANY SLOPE IN THE ROOF. EXHAUST FAN IS TO BE LEVEL WHEN IN OPERATION.

	GRILLES, REGISTERS AND DIFFUSERS							
ID	MANUFACTURER	MODEL	MAX NC	DESCRIPTION				
CD-1	TITUS	OMNI	25	SQUARE PLAQUE CEILING DIFFUSERS. REMOVABLE FACE & CORE FRAME SHALL BE FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED BY CEILING TYPE. LAY-IN FRAMES SHALL BE 24" x 24", 24" x 12" OR 12" x 12" AS REQUIRED TO FIT CEILING TILE SPACE AVAILABLE. PROVIDE ROUND NECK ADAPTER. COLOR SHALL BE WHITE.				
RG-1 / EG-1	TITUS	PAR	25	PERFORATED FACE RETURN AIR GRILLE, REMOVABLE FACE & CORE. FRAME SHALL BE FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED BY CEILING TYPE. LAY-IN FRAMES SHALL BE 24" x 24", 24" x 12" OR 12" x 12" AS REQUIRED TO FIT CEILING TILE SPACE AVAILABLE. PROVIDE ROUND NECK ADAPTER. COLOR SHALL BE WHITE.				
LS-1	TITUS	FL-20	25	LINEAR SLOT CEILING DIFFUSERS WITH TITUS FBPI PLENUM AND HIGH THROW PATTERN CONTROLLER. UNITS SHALL HAVE A SINGLE 2" SLOT AND BE INSTALLED USING BORDER TYPE 11 FOR LAY-IN CEILING MOUNTING OR BORDER TYPE 22 FOR SURFACE MOUNTING. UNITS SHALL HAVE AN INSULATED PLENUM AND 12" ROUND DUCT CONNECTION. UNITS ARE TO BE 4 FEET IN LENGTH. WITH #26 WHITE BORDER FACE & BLACK INTERIOR SURFACES.				
LS-2	TITUS	FL-20	25	LINEAR SLOT CEILING DIFFUSERS WITH TITUS FBPI PLENUM AND JET THROW OUTLET. UNITS SHALL HAVE A SINGLE 2" SLOT AND BE INSTALLED USING BORDER TYPE 11 FOR LAY-IN CEILING MOUNTING OR BORDER TYPE 22 FOR SURFACE MOUNTING. UNITS SHALL HAVE AN INSULATED PLENUM AND 12" ROUND DUCT CONNECTION. UNITS ARE TO BE 4 FEET IN LENGTH. WITH #26 WHITE BORDER FACE & BLACK INTERIOR SURFACES.				

								PA	CKAG	ED RO	OFTC)P UN	IT SCH	EDUL	E										
				AIR					HEATING S	ECTION				DX COOLIN	G SECTION	ELECTRICAL	-			PHYSICAL					
				CODE	MAXIMUM	SUPPLY	RELIEF	SUMMER/																	
				MINIMUM	DESIGN	EXTERNAL	EXTERNAL	WINTER		NATURAL	MAXIMUM	DESIGN	ENTERING/	TOTAL	ENTERING/					LENGTH/					
	MANUFACTURER			OUTSIDE	AIRFLOW	STATIC	STATIC	AMBIENT AIR		GAS	HEATING	HEATING	LEAVING	COOLING	LEAVING	SINGLE				WIDTH/	OPERATIONAL	-	REFRIGERANT	FILTER	
	AND		AREA	AIRFLOW	CAPACITY	PRESSURE	PRESSURE	TEMP.		PRESSURE	INPUT	OUTPUT	AIR TEMP.	LOAD	AIR TEMP.	POINT				HEIGHT	WEIGHT	REFRIGERANT	CHARGE	RATING	
ID	MODEL NUMBER	LOCATION	SERVED	(CFM)	(CFM)	(IN. H2O)	(IN. H2O)	(°F DB)	MEDIUM	(IN WG)	(BTUH)	(BTUH)	(°F)	(BTUH)	(°F)	VOLT/PH/HZ	FLA	MCA	MOCP	(IN)	(LBS)	TYPE	(LBS)	(MERV)	NO
RTU-1	DAIKIN DPS016A	ROOF	COUNCIL ROOM 132	1,415	7,450	1.5	0.5	100 / -20	NAT. GAS	5 - 14	450,000	316,800	54.5/100	178,358	80.2/55	208/3/60	99.5	111.2	150	185.9/76.5/82.5	3,875	R-410A	30.3	8	1 - 9
RTU-2	DAIKIN DPS012A	ROOF	LOBBY 101	705	5,650	1.5	0.5	100 / -20	NAT. GAS	5 - 14	300,000	211,200	60.5/100	138,021	78.1/55	208/3/60	60.2	64.6	80	112.7/96.5/56.8	2,517	R-410A	20	8	1 - 9
RTU-3	DAIKIN DPS007A	ROOF	CONFERENCE ROOM 125	895	3,165	1.5	0.5	100 / -20	NAT. GAS	5 - 14	200,000	140,800	45.3/100	85,900	82.8/55	208/3/60	39.7	42.7	50	112.7/96.5/56.8	2,332	R-410A	14.4	8	1 -
RTU-4	DAIKIN DPS005A	ROOF	OPEN OFFICE 117	255	2,525	1.5	0.5	100 / -20	NAT. GAS	5 - 14	120,000	84,480	62.7/100	55,666	78.2/55	208/3/60	35.2	38.2	50	84.5/87/40.8	1,502	R-410A	15.8	8	1 -
RTU-5	DAIKIN DPS005A	ROOF	LEVEL 1 WEST OFFICES	260	2,600	1.5	0.5	100 / -20	NAT. GAS	5 - 14	120,000	84,480	62.8/100	55,698	77.5/55	208/3/60	29.8	32.8	40	84.5/87/40.8	1,502	R-410A	15.8	8	1 -
RTU-6	DAIKIN DPS006A	ROOF	LEVEL 1 SOUTH OFFICES	270	2,675	1.5	0.5	100 / -20	NAT. GAS	5 - 14	120,000	84,480	62.7/100	65,396	79.7/55	208/3/60	32.9	36.6	50	84.5/87/40.8	1,502	R-410A	15.3	8	1 -
RTU-7	DAIKIN DPS010A	ROOF	OPEN OFFICE 019	930	5,210	1.5	0.5	100 / -20	NAT. GAS	5 - 14	300,000	211,200	55.6/100	116,514	79.7/55	208/3/60	50.5	54.9	70	112.7/96.5/56.8	2,517	R-410A	20	8	1 -
RTU-8	DAIKIN DPS016A	ROOF	CONFERENCE ROOM 011	1,170	7,860	1.5	0.5	100 / -20	NAT. GAS	5 - 14	450,000	316,800	61.5/100	176,711	77.9/55	208/3/60	99.5	111.2	150	185.9/76.5/82.5	3,875	R-410A	30.3	8	1 -

- 1. WITH DIGITAL SCROLLS & FULLY MODULATING DX COOLING CAPABILITY. CAPACITIES ARE TO BE AT SITE ELEVATION.
- 2. NATURAL GAS HEAT WITH MODULATING CONTROLS. HEATING SECTION IS TO HAVE AT LEAST 5:1 TURNDOWN. CAPACITIES ARE TO BE AT SITE ELEVATION.
- 3. PROVIDE FULL ECONOMIZER CAPABILITY AND ADDED STATIC PRESSURE CAPACITY BY INCLUDING POWERED EXHAUST AND BAROMETRIC RELIEF.
- 4. WITH INTEGRAL SUPPLY AND RELIEF FAN SPEED CONTROLLER, FACTORY MOUNTED ELECTRICAL DISCONNECT WITH HACR BREAKER.
- 5. WITH FOIL FACED INSULATION, HINGED PANELS, AND UNPOWERED CONVENIENCE OUTLET. CONNECT THE CONVENIENCE OUTLET TO A SEPARATE 115/120 VOLT POWER SOURCE.
- 6. PROVIDE UNIT WITH SMOKE DETECTOR IN THE SUPPLY & RETURN AIR PATH & A CONDENSATE OVERFLOW SWITCH.
- 7. PROVIDE A VIBRATION ISOLATION ROOF CURB FOR THE UNIT TO BE MOUNTED ON. CURB HEIGHT TO BE AT LEAST 14". CURB TO COMPENSATE FOR ANY SLOPE IN THE ROOF. UNIT IS TO HAVE NO SLOPE WHEN OPERATIONAL.
- 8. WITH FACTORY INSTALLED BACNET/MSTP CARD FOR CONNECTION TO THE EXISTING BUILDING MANAGEMENT SYSTEM.
- 9. WITH HIGH ALTITUDE CONVERSION KIT & ECONOMIZER HOOD.
- 10. CONFIGURE UNIT FOR BOTTOM/VERTICAL SUPPLY AND RETURN DUCT CONNECTIONS.
- 11. CONFIGURE UNIT FOR SIDE/HORIZONTAL SUPPLY AND RETURN DUCT CONNECTIONS.

					IINIT	HEAT	ER 6	CHEI	JIII E	! 							
					OITI		LIX 3		JULL	1							T
			AIR		CAPACITY				ELECTRIC	CAL			PHYSICAL				
						NATURAL							DEPTH/		OUTSIDE	FLUE	
	MANUFACTURER		AIRFLOW			GAS	HEATING	HEATING	MOTOR				WIDTH/		AIR INLET	VENT	
	AND		RATE			PRESSURE	INPUT	OUTPUT	SIZE		TOTAL	TOTAL	HEIGHT	WEIGHT	DUCT SIZE	SIZE	
ID	MODEL NUMBER	LOCATION	(CFM)	RPM	MEDIUM	(IN WC)	(BTUH)	(BTUH)	(HP)	VOLT/PH/HZ	FLA	MCA	(IN)	(LBS)	(IN)	(IN)	NOTES
UH-1	TRANE UHAA015ET-D0A	FIRE RISER 134	175	600	ELECTRIC			5,119		120/1/60	12.5	20	4/16/21	27			1, 2, 3
UH-2	MARKEL HF3385D-RPT	VESTIBULE 100	175	700	ELECTRIC	-,-		7,679		208/1/60	10.8		4/17/21	27			1, 4

- 1. HEATING CAPACITY IS AT SITE ELEVATION.
- 3. PROVIDE AN ADDITIONAL BMS-CONNECTED THERMOSTAT IN THE SAME SPACE SERVED BY THIS UNIT HEATER FOR TEMPERATURE ALARMS.

				SPLI	T SYS	STEM S	SCH	IED	ULE							
			AIR			ELECTRICAL	=			PHYSICAL						
										LENGTH/				GAS	LIQUID	
	MANUFACTURER		AIRFLOW	HEATING	COOLING					WIDTH/			REFRIG	PIPE	PIPE	
	AND		RATE	OUTPUT	OUTPUT					HEIGHT	WEIGHT	REFRIG.	CHARGE	SIZE	SIZE	
ID	MODEL NUMBER	LOCATION	(CFM)	(BTUH)	(BTUH)	VOLT/PH/HZ	FLA	MCA	МОСР	(IN)	(LBS)	TYPE	(LBS)	(IN)	(IN)	NOTES
SPS-1-1	DAIKIN FTK24AXVJU	MECH/ELEC 018	1,908		21,200	208/1/60	0.5	13.4	20	40/12/12	31			5/8	1/4	1,2,3,5,6,7,
SPS-1-2	DAIKIN RK24AXVJU	ROOF				208/1/60	14	13.4	20	36/14/28	106	R-410A	3.86	5/8	1/4	2,4,8

- 1. COOLING-ONLY SPLIT SYSTEM
- 3. UNIT TO BE PROVIDED WITH A CONDENSATE PUMP. RUN CONDENSATE PIPING FROM THIS UNIT TO THE NEAREST JANITOR'S SINK.
- 4. UNIT TO BE MOUNTED ON A 14" HIGH EQUIPMENT ROOF CURB.
- 5. WITH LOW AMBIENT KIT.
- 6. SET LINE VOLTAGE THERMOSTAT FOR 70 DEGREES (ADJUSTABLE). PROVIDE AN ADDITIONAL BMS-CONNECTED TEMPERATURE SENSOR IN THE SPACE FOR TEMPERATURE ALARMS.
- 7. RUN REFRIGERANT PIPING UP THROUGH THE ROOF TO CONNECT TO THE OUTDOOR UNIT. WEATHER SEAL ALL ROOF PENETRATIONS.

CENTER

design 255 SOUTH 300 WEST 795 NORTH 400 WEST

MECHANICAL SCHEDULES

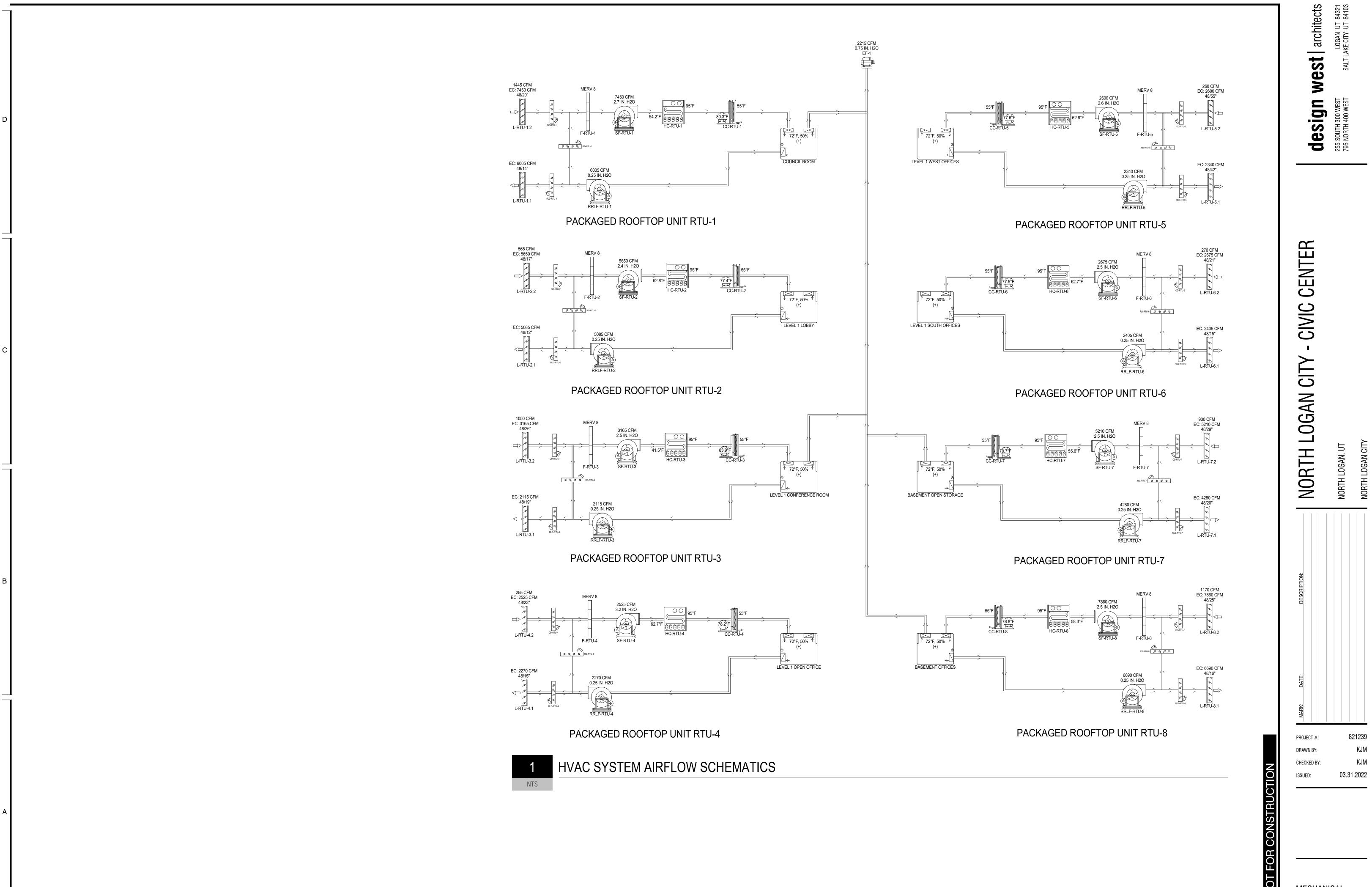
M602

2. WITH BUILT-IN TAMPERPROOF THERMOSTAT SET FOR 55 DEGREES (ADJUSTABLE) & SURFACE MOUNTING KIT.

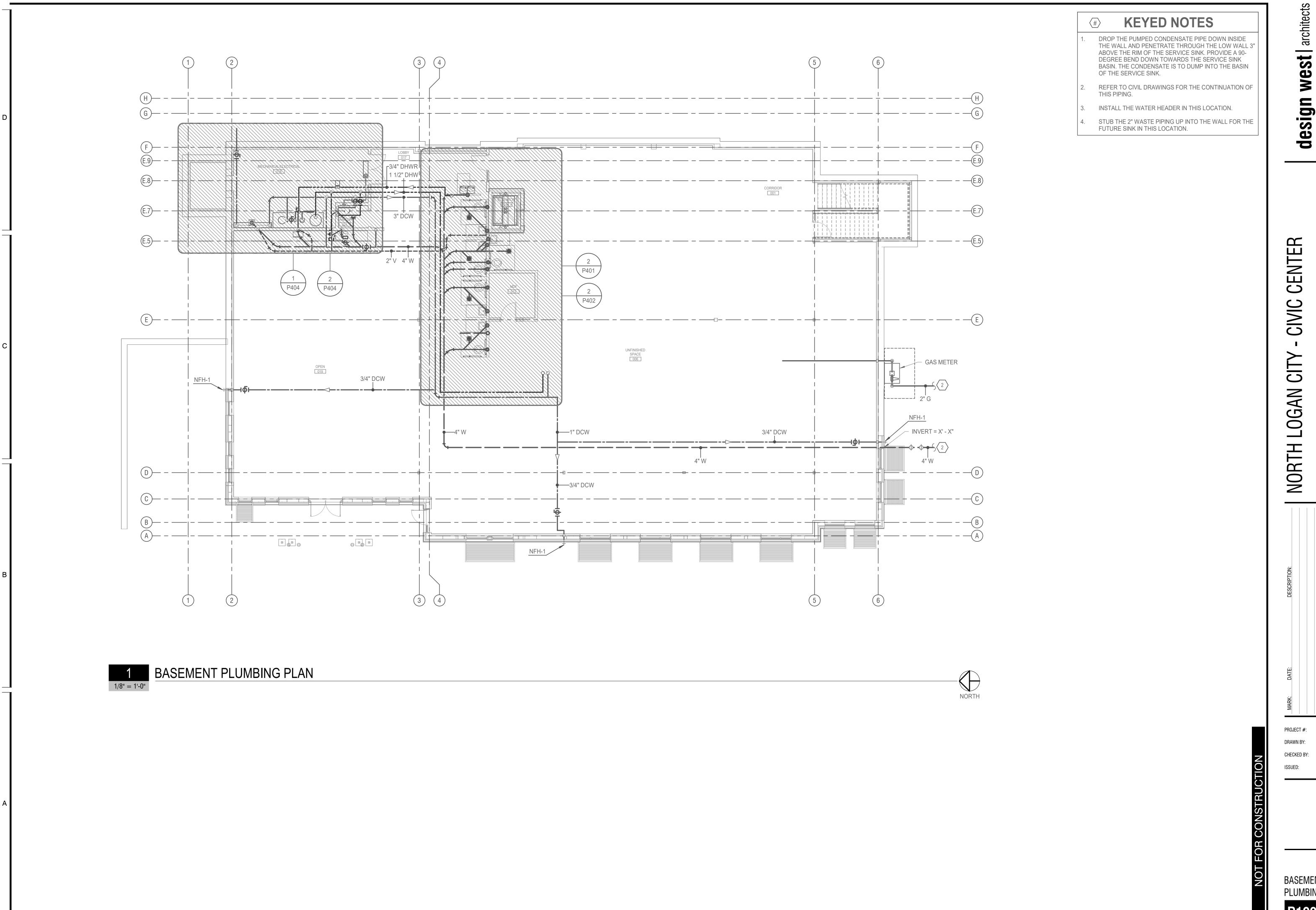
4. WITH BUILT-IN TAMPERPROOF THERMOSTAT SET FOR 55 DEGREES (ADJUSTABLE) & CEILING SURFACE MOUNTING KIT.

2. WEATHER PROOF ROOF PENETRATIONS

8. WITH COMMUNICATIONS INTERFACE CARD FOR REMOTE MONITORING. TIE THIS UNIT INTO THE BUIDLING MANAGEMENT SYSTEM.

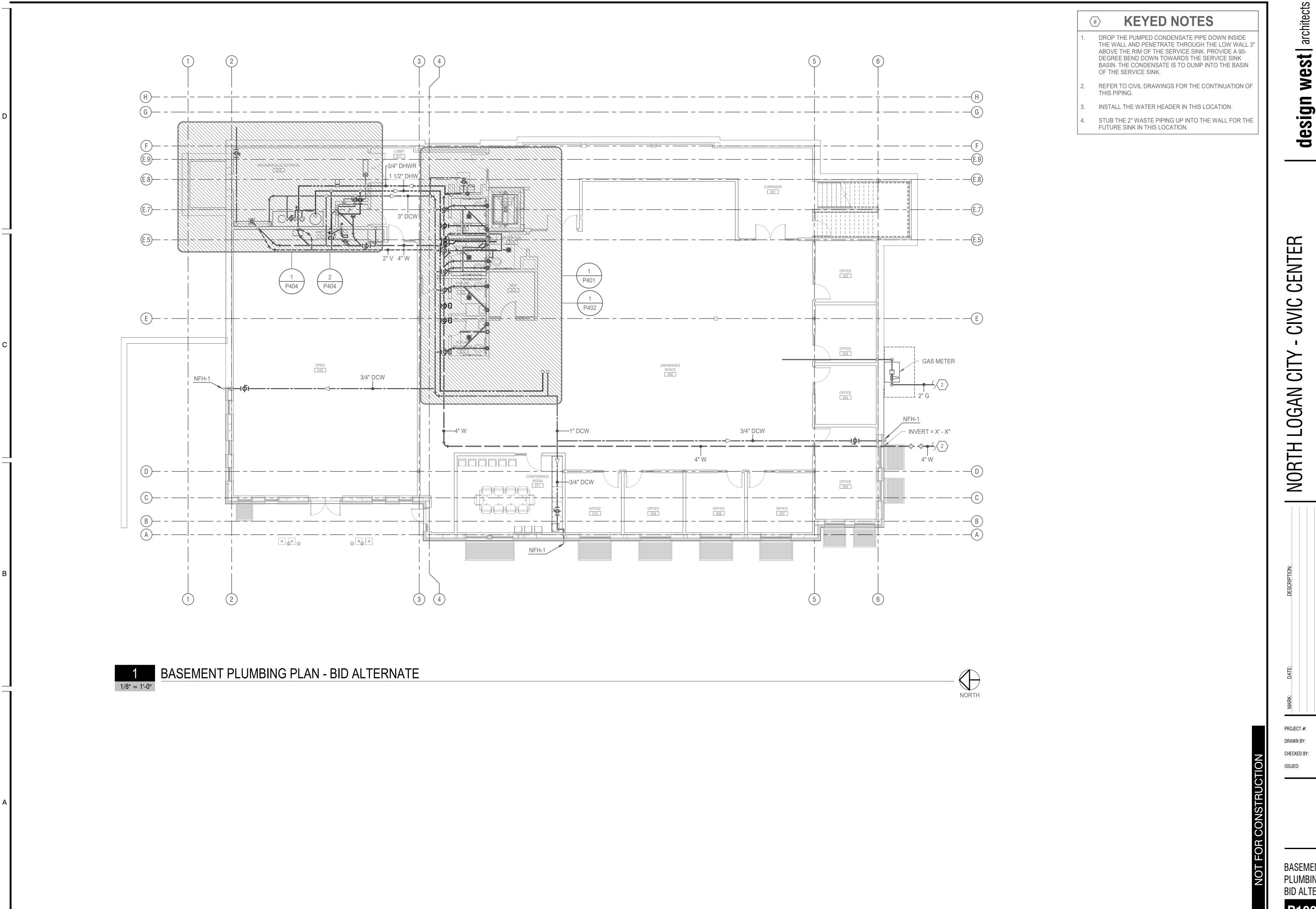


MECHANICAL SCHEMATICS M701



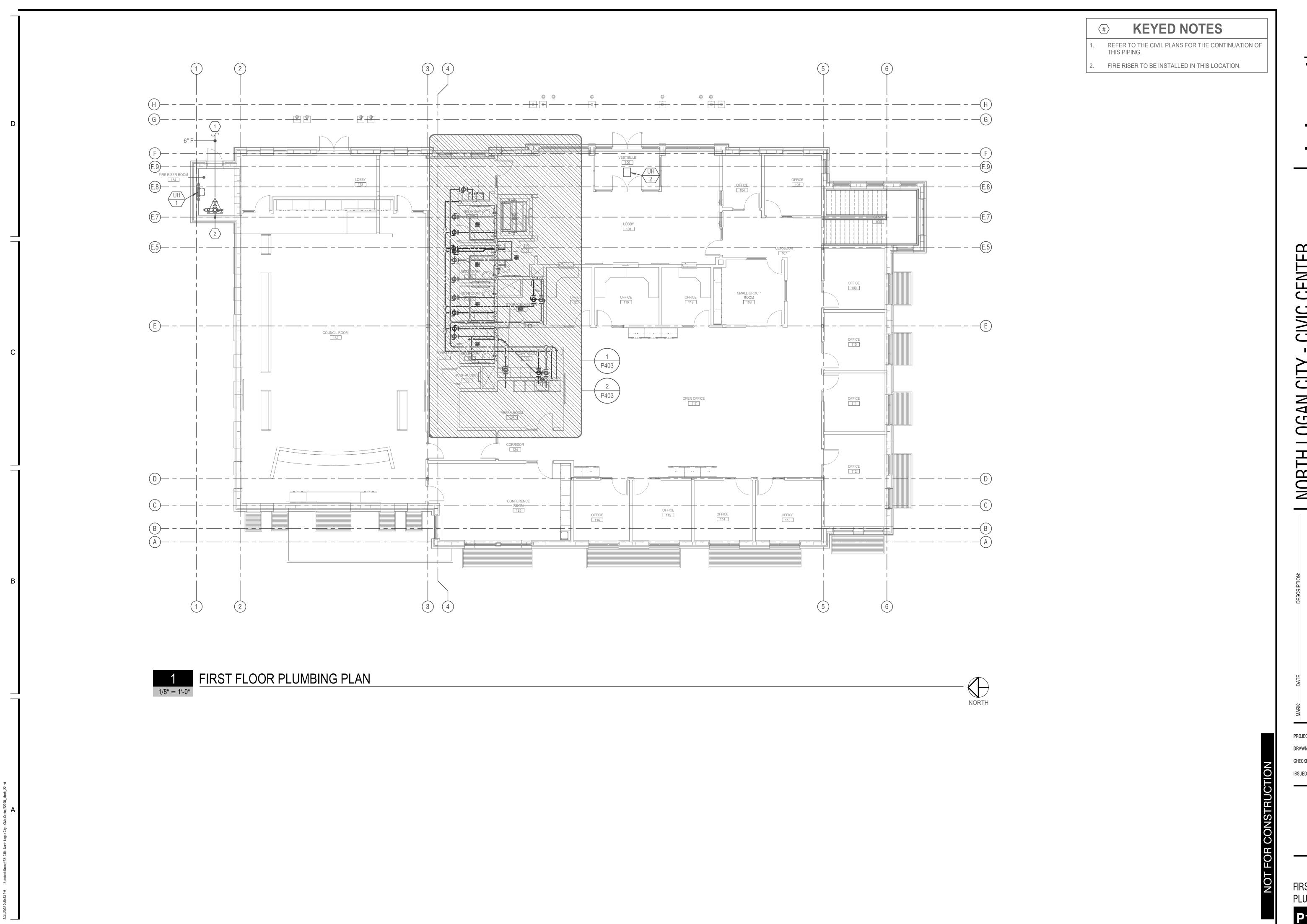
BASEMENT PLUMBING PLAN

P100



BASEMENT PLUMBING PLAN -BID ALTERNATE

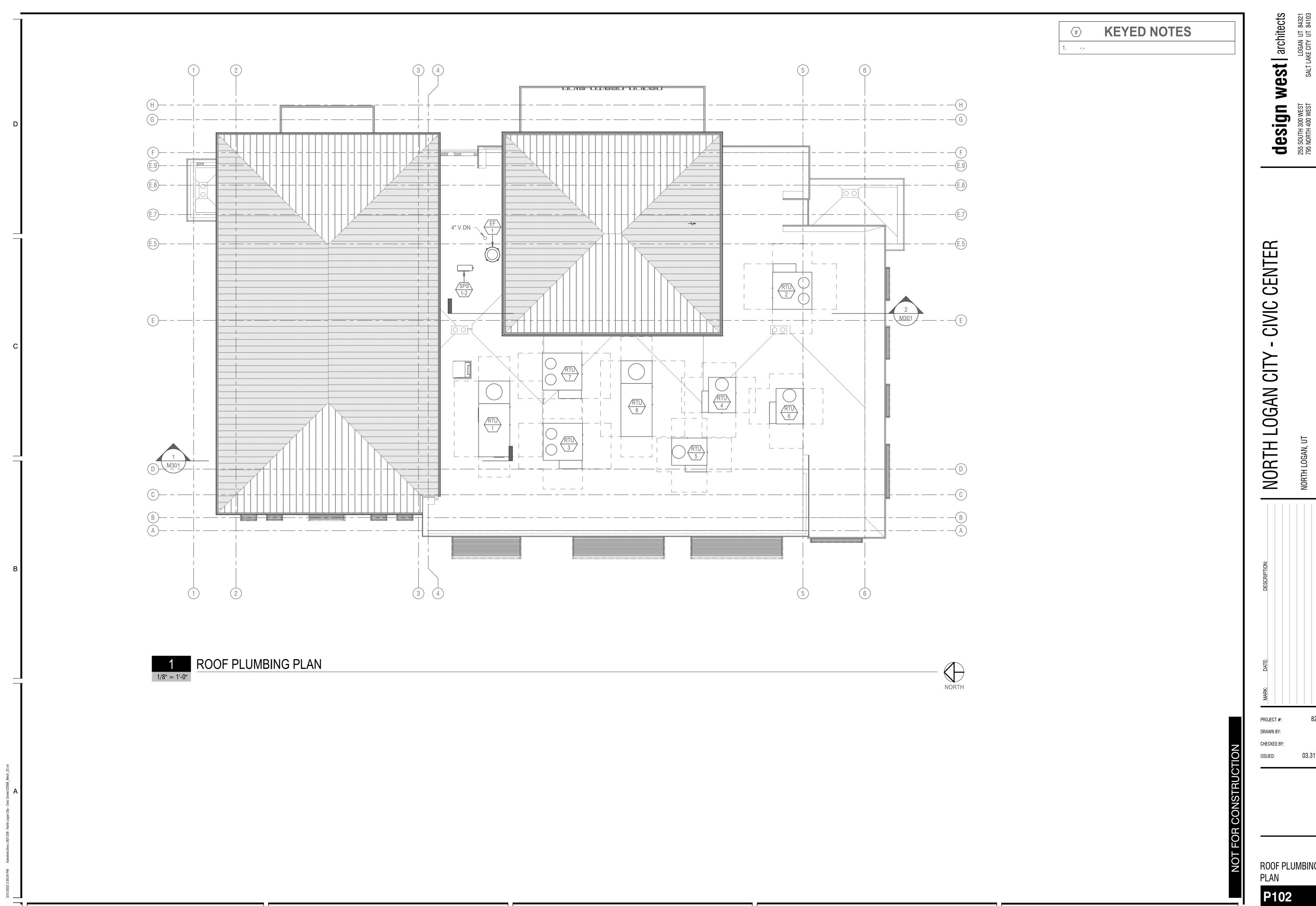
P100A



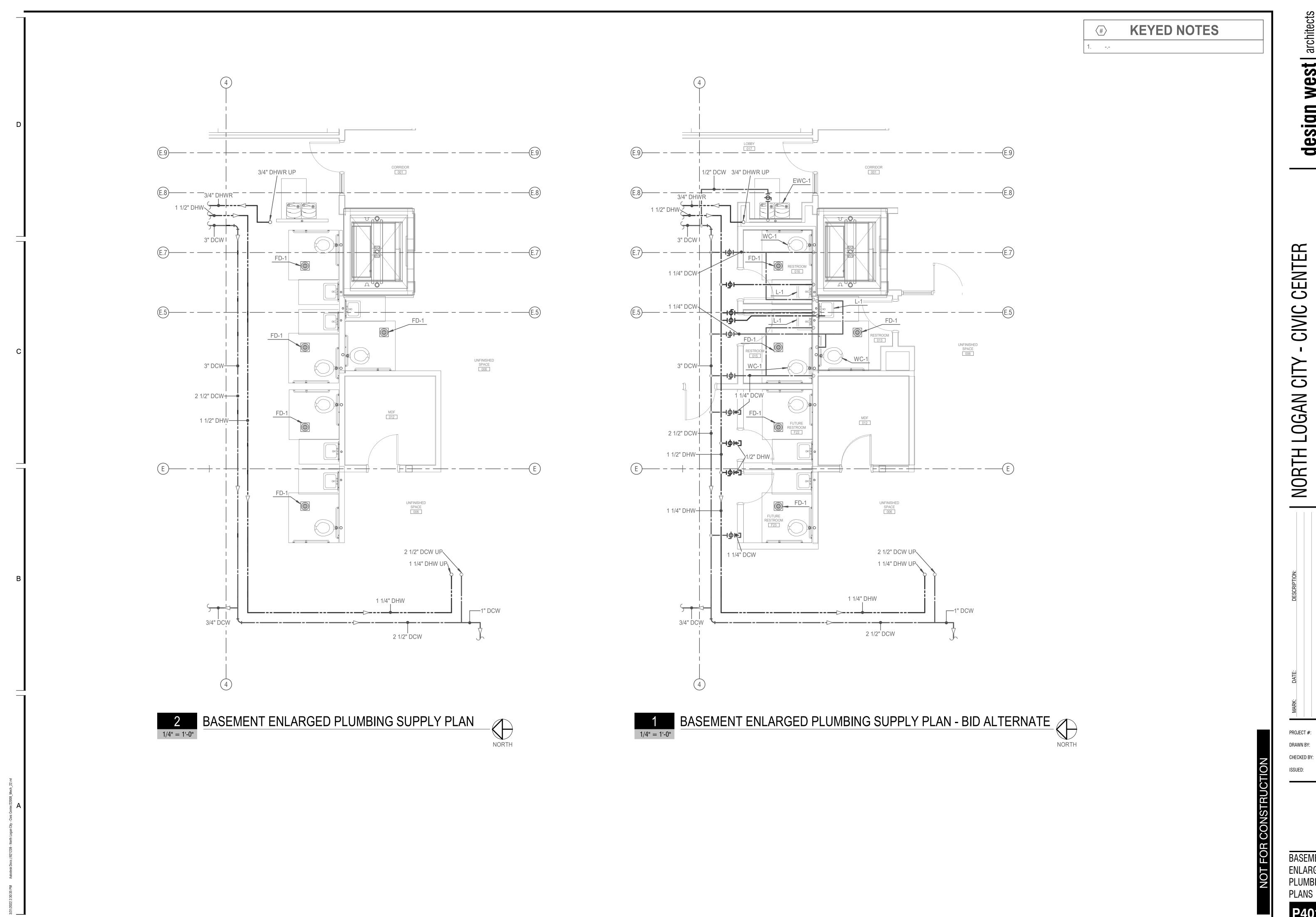
CENTER

FIRST FLOOR PLUMBING PLAN

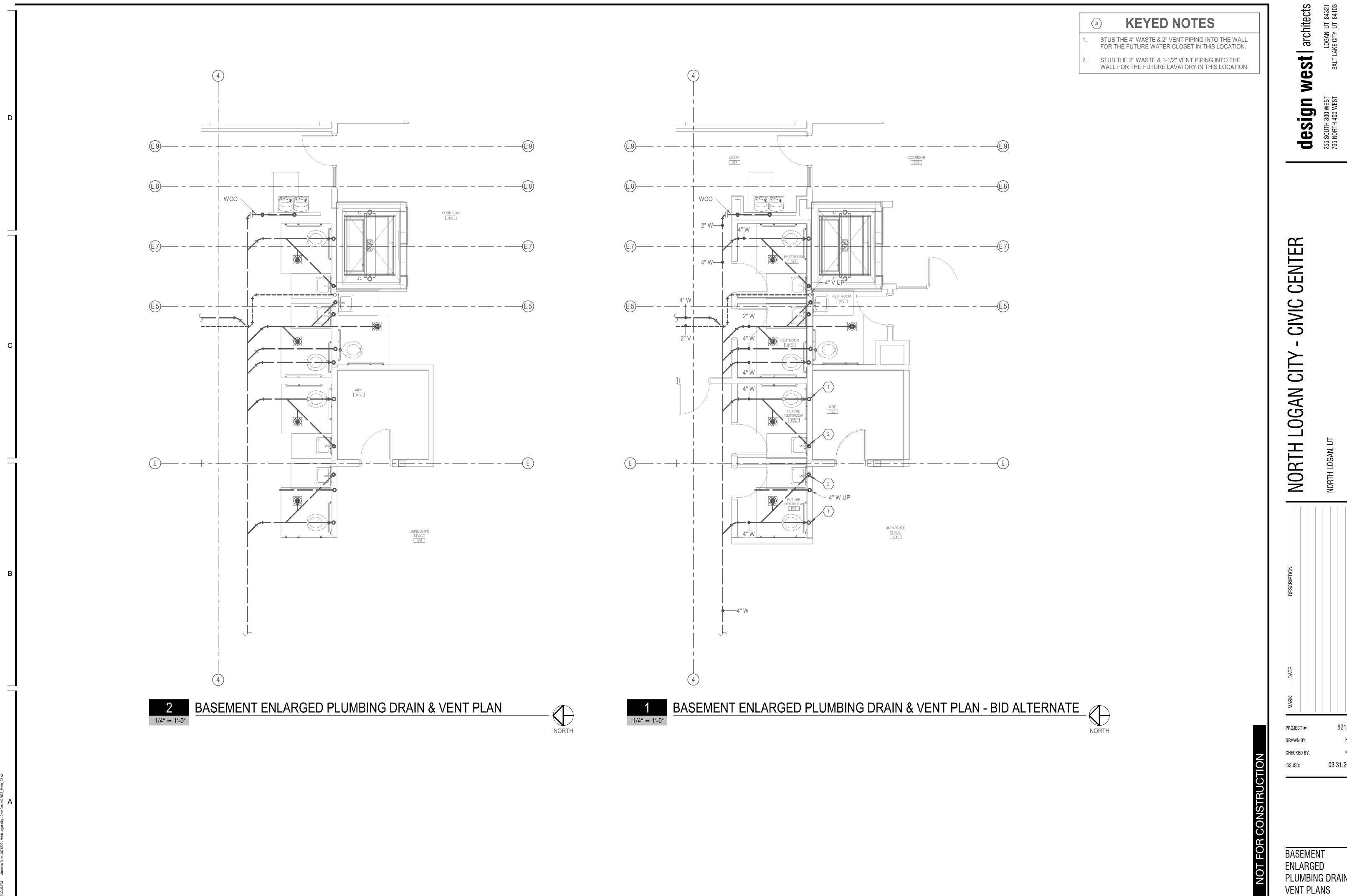
P101



ROOF PLUMBING

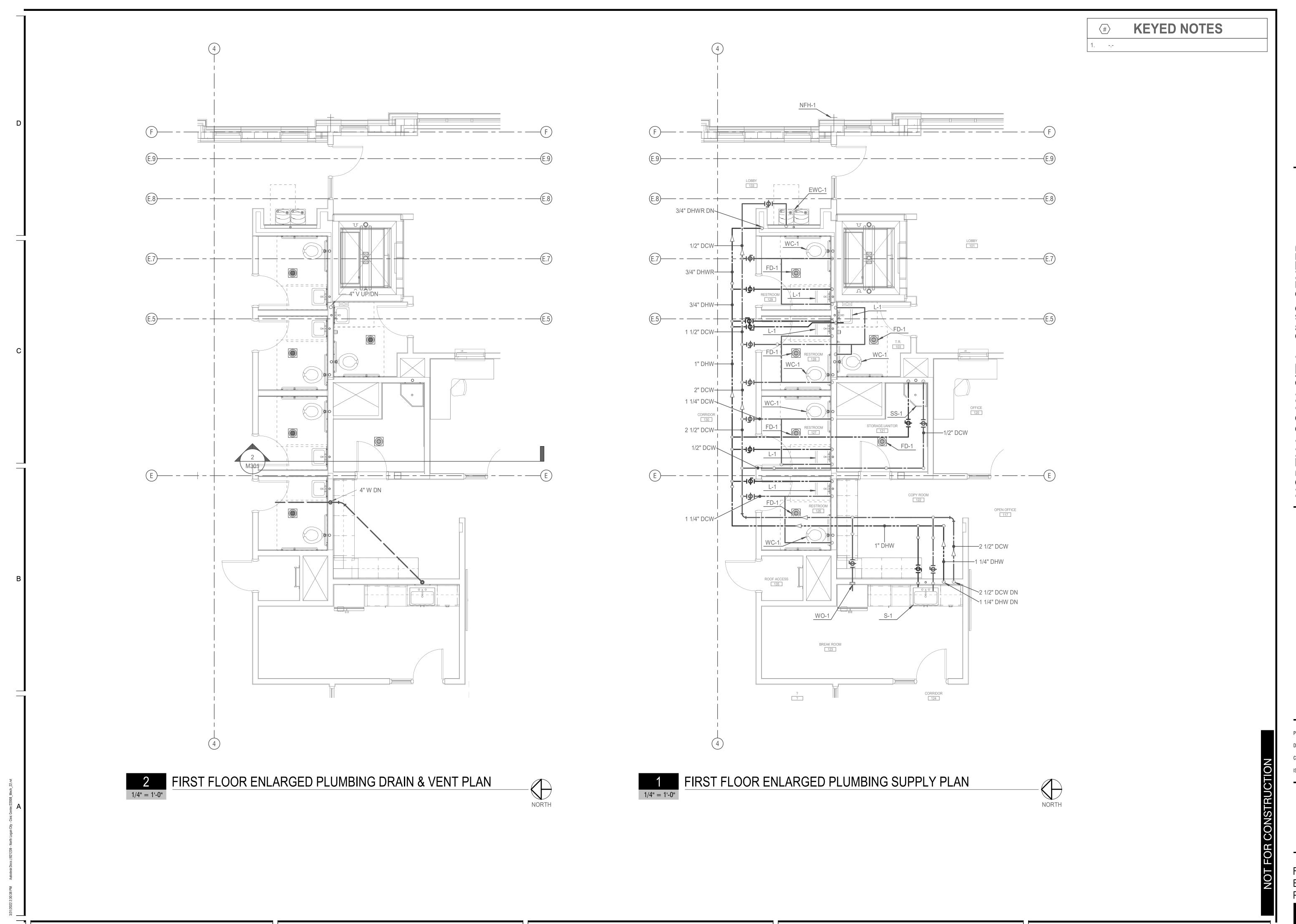


BASEMENT **ENLARGED** PLUMBING SUPPLY



PLUMBING DRAIN &

P402



design west architectory set to the set of t

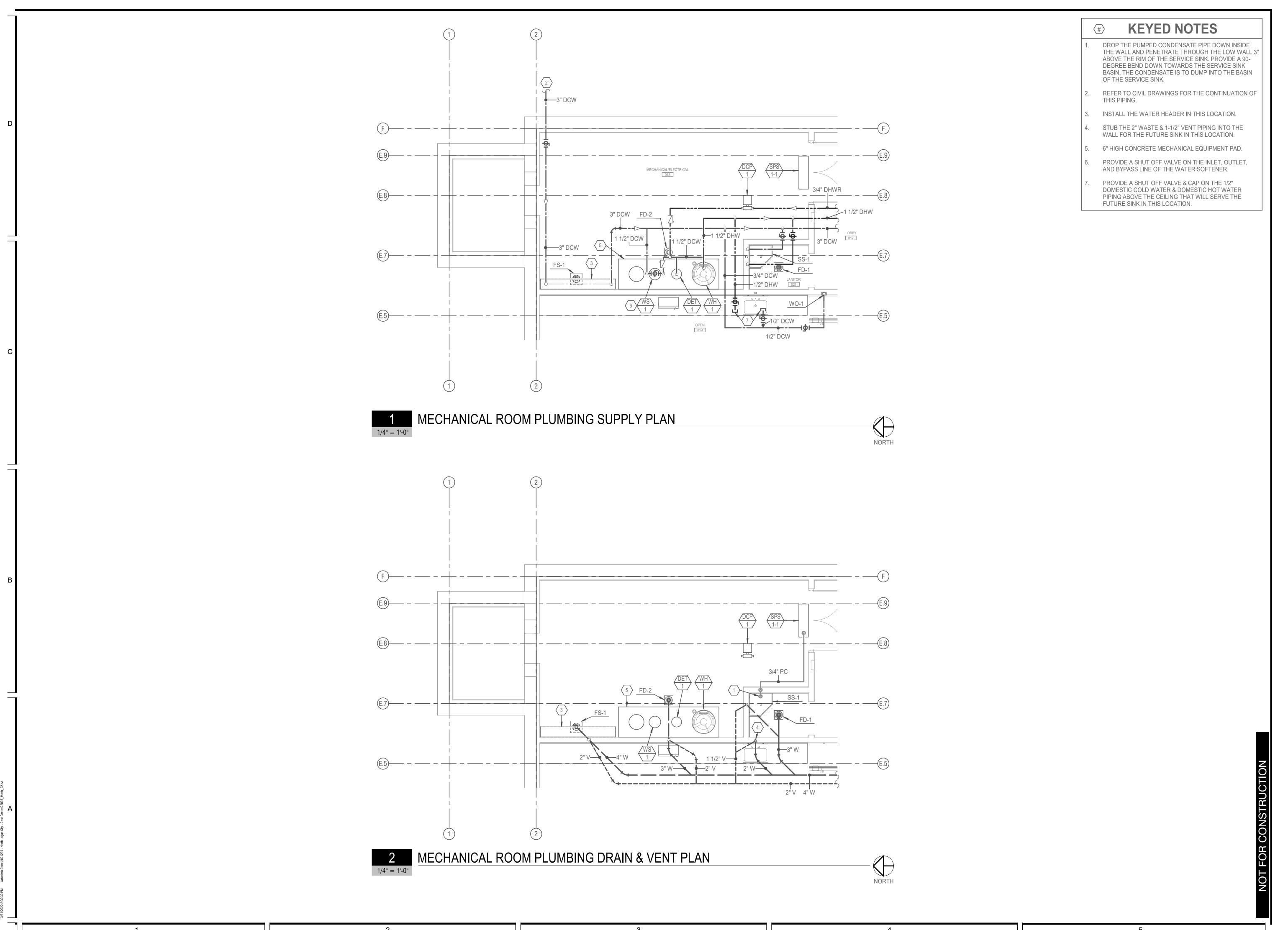
.0GAN CITY - CIVIC CENTER

NOR NOR

PROJECT #: 82123

FIRST FLOOR ENLARGED PLUMBING PLANS

P403



CENTER CITY OGAN. **ORTH**

architects

st

design 255 SOUTH 300 WEST 795 NORTH 400 WEST

MECHANICAL ROOM **ENLARGED** PLUMBING PLANS

P601
© COPYRIGHT DESIGN WEST ARCHITECTS 2021

		DOMEO	TIO EVDA	NOION	TANUZ O					
		DOMES	TIC EXPA	MSION	IANK S	CHEL	JULE			
				FLUID		PHYSICAL	_			
	MANUFACTURER				MIN. TANK/	TANK	RELIEF	DIA./	NPT	
	AND			WORKING	ACCEPTANCE	SIZE	VALVE	HEIGHT	FITTING	
ID	MODEL NUMBER	LOCATION	TYPE	FLUID	(GAL)	(GAL)	(PSIG)	(IN)	(IN)	NOTES
DET-1	AMTROL ST-20VC-DD	MECH. ROOM	DIAPHRAGM	WATER	3.2	8.6	100	12/22	3/4	1
										•

1. TANK LINER SUITABLE FOR POTABLE WATER

				DO	MEST	CDI	JMP SCH	IEDIIIE					
								ILDULL					
				FLUID			PUMP		ELECTRICA	AL			
	MANUFACTURER			FLOW		HEAD			MOTOR	MOTOR	MOTOR		
	AND			RATE	WORKING	LOSS	EFFICIENCY		SIZE	BHP	SPEED		
ID	MODEL NUMBER	LOCATION	TYPE	(GPM)	FLUID	(FT)	(%)	CONSTRUCTION	(HP)	(HP)	(RPM)	VOLT/PH/HZ	NOTES
DCP-1	BELL & GOSSETT PL-36	MECH RM.	IN-LINE	3	WATER	18	NA	ALL BRONZE	1/6	NA	3300	115/1/60	

	NATURAL GAS REQUIREMENTS										
				EQUIP							
EQUIP.				BTUH	TOTAL						
NO.	QTY.	LOCATION	EQUIPMENT	INPUT	CFH						
RTU-1	1	ROOF	HVAC RTU	450,000	511						
RTU-2	1	ROOF	HVAC RTU	300,000	341						
RTU-3	1	ROOF	HVAC RTU	200,000	227						
RTU-4	1	ROOF	HVAC RTU	120,000	136						
RTU-5	1	ROOF	HVAC RTU	120,000	136						
RTU-6	1	ROOF	HVAC RTU	120,000	136						
RTU-7	1	ROOF	HVAC RTU	300,000	341						
RTU-8	1	ROOF	HVAC RTU	450,000	511						
WH-1	1	MECH ROOM 1304	DOM. WATER HEATER	120,000	136						
TOTAL (BTU	H) = 2,180,000)									
BTU/CUBIC F	T. = 880										
TOTAL C	FH= 2477										

2 PSIG GAS METER WITH EARTHQUAKE VALVE ON CONCRETE PAD BY GAS SUPPLIER PAID FOR BY CONTRACTOR.

			GAS	FIRE	D WAT	ER HEATER S	CHEDI	JLE					
							RECOVERY				ELECTR	RICAL	
	MANUFACTURER			INPUT			RATE	TANK	FLUE	HEIGHT/			
	AND			LOAD	EFFICIENCY		@ 100 F	SIZE	SIZE	DIAMETER			
ID	MODEL NUMBER	LOCATION	SERVICE	(BTUH)	(%)	TYPE	DELTA T	(GAL)	(IN)	(IN)	(KW)	V/PH	NOTES
WH-1	A.O. SMITH BTH-120(A)	MECH. ROOM	120 DEG	120,000	95	SEALED COMBUSTION	138 GPH	60	3/3	56/28	NA	115/1	1, 2, 3

- 1. WITH A.O. SMITH MODEL 100111100 CONCENTRIC VENT KIT.
- 2. WITH A.O. SMITH MODEL 100289339 CONDENSATE NEUTRALIZATION KIT. INSTALL NEXT TO THE WATER HEATER PAD & DRAIN INTO NEAREST FLOOR DRAIN.
- 3. WATER HEATER TO BE INSTALLED ON 6" HIGH EQUIPMENT PAD.

				WATE	R SOFTE	NER S	CHED	JLE				
					NORMAL / MAX							1
					FLOW/UNIT	DRAIN		RESIN	BRINE			
	MANUFACTURER				@ 15/25 PSI	FLOW	RESIN	TANK	TANK		OPERATING	
	AND			TOTAL	LOSS	RATE	QUANTITY	HEIGHT/DIA	HEIGHT/DIA	ELECTRICAL	WEIGHT	
ID	MODEL NUMBER	LOCATION	TYPE	(GRAINS)	(GPM)	(GPM)	(FT^3)	(IN/IN)	(IN/IN)	(VOLT/PH)	(LBS)	NOTES
WS-1	CULLIGAN HE-060	MECH. ROOM	SIMPLEX	60,000	25.1/31.5	5.5	2	53/14	38/18	115/1	855	1, 2

- 1. PACKAGED EQUIPMENT INSTALLED ON A 6" HIGH EQUIPMENT PAD.
- PACKAGED EQUIPMENT INSTALLED
 DRAIN TO NEAREST FLOOR DRAIN.

(1)

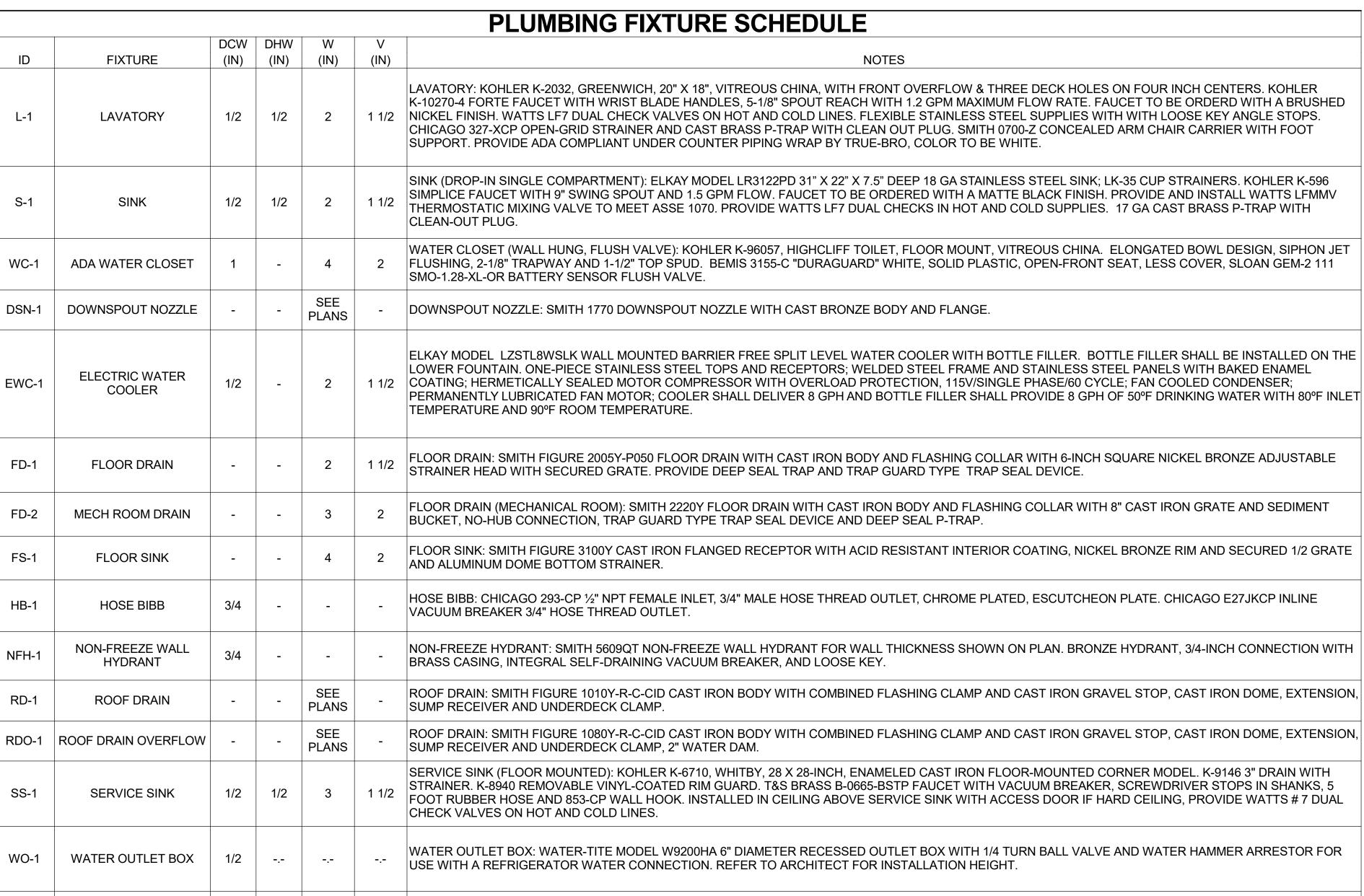
0

 C

 Δ

SCHEDULES P602

© COPYRIGHT DESIGN WEST ARCHITECTS 2021



(1) ALL UNDER GROUND WASTE AND VENT SHALL BE 2" OR GREATER PER DRAWINGS.

	SHEET INDEX
Sheet Number	Sheet Name
E-001.1	ABBREVIATIONS, G.P.N., LEGEND & SHEET INDEX
E-001.2	PROJECT GENERAL NOTES
ES-101.1	ELECTRICAL SITE PLAN - UTILITY MODIFICATIONS
ES-102.1	ELECTRICAL SITE PLAN - NEW
ES-103.1	PHOTOMETRIC SITE PLAN
ES-501.1	ELECTRICAL SITE DETAILS
E-200.1	LIGHTING PLAN - LOWER LEVEL
E-201.1	LIGHTING PLAN - MAIN LEVEL
E-202.1	LIGHTING PLAN - CLERESTORY
E-300.1	POWER PLAN - LOWER LEVEL
E-301.1	POWER PLAN - MAIN LEVEL
E-302.1	POWER PLAN - CLERSTORY
E-303.1	POWER PLAN - ROOF
E-400.1	ELECTRONICS SYSTEMS PLAN - LOWER LEVEL
E-401.1	ELECTRONICS SYSTEMS PLAN - MAIN LEVEL
E-402.1	ELECTRONICS SYSTEMS PLAN - CLERESTORY
E-501.1	LIGHTING CONTROL RISER DIAGRAM & DETAILS
E-501.2	ELECTRICAL DETAILS
E-501.3	COMMUNICATIONS RISER DIAGRAM & DETAILS
E-501.4	ELECTRONIC SYSTEMS ELEVATIONS & DETAILS
E-502.1	ELECTRICAL ELEVATIONS & DETAILS
E-502.2	ELECTRICAL ELEVATIONS & DETAILS
E-601.1	ELECTRICAL ONE-LINE DIAGRAM
E-602.1	LIGHTING SCHEDULE
E-602.2	ELECTRICAL SCHEDULES

	ELECTRICAL ABBREVIATIONS
A	AMPERE AMP FURE
AF AFF	AMP FUSE ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFI AIC	ARC-FAULT CIRCUIT-INTERRUPTER AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
ARCH	ARCHITECT(URAL)
AS AWG	AMP SWITCH AMERICAN WIRE GAUGE
BLDG	BUILDING
BKBD C	BACKBOARD CONDUIT
CAB	CABINET
CAT C/B	CATALOG/CATEGORY CIRCUIT BREAKER
CKT	CIRCUIT
CLG	CEILING
CO COMM	CONDUIT ONLY COMMUNICATION
CONN	CONNECTION
CU DEMO	COPPER DEMOLITION/DEMOLISH
DISC	DISCONNECT
DNC	DOWN DRAWING
DWG EA	DRAWING EACH
ELEC	ELECTRICAL
ELEV EMER, EM	ELEVATOR EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EOLR EQUIP	END OF LINE RESISTOR EQUIPMENT
EX, EXIST	EXISTING
FBO FCU	FURNISHED BY OTHERS FAN COIL UNIT
FF	FINISHED FLOOR
FIXT FLEX	FIXTURE FLEXIBLE METALLIC CONDUIT (STEEL)
FLUOR	FLUORESCENT
FT GFI	FEET OR FOOT GROUND FAULT INTERRUPTER
GND	GROUND
HP	HORSEPOWER
HVAC IG	HEATING, VENTILATING & AIR CONDITIONING ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
IN ISC	INCH(ES) SHORT CIRCUIT AMPERES, KA
JB, J-BOX	JUNCTION BOX
KCMIL KVA	THOUSAND CIRCULAR MILS KILOVOLT AMPERE
KW	KILOWATT
LTG MAX	LIGHTING MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MECH MFR	MECHANICAL MANUFACTURER
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MTD NEC	MOUNTED NATIONAL ELECTRICAL CODE
NECA	NATIONAL ELECTRICAL CONTRACTOR'S ASSOCIATION
NEMA NEUT	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION NEUTRAL
NFC	NATIONAL FIRE CODE
NC NIC	NORMALLY CLOSED NOT IN CONTRACT
NL	NIGHT LITE
NO NTS	NORMALLY OPEN NOT TO SCALE
OCP	OVERCURRENT PROTECTION
P	POLE
PH PNL	PHASE PANEL
PWR	POWER
QTY RECEP	QUANTITY RECEPTACLE
REQ'D	REQUIRED
RGSC RM	RIGID GALVANIZED STEEL CONDUIT ROOM
SCHED	SCHEDULE
SECT SP	SECTION SINGLE POLE
SN	SOLID NEUTRAL
SPEC SW	SPECIFICATION SWITCH
SWBD	SWITCH SWITCHBOARD
SWGR	SWITCH GEAR
SYS TEMP	SYSTEM TEMPORARY
TELE	TELEPHONE
TWP TWSP	TWISTED PAIR TWISTED SHEILDED PAIR
XFMR	TRANSFORMER
T-STAT	THERMOSTAT

PROJECT # ISSUED:

> ABBREVIATIONS, G.P.N., LEGEND & SHEET INDEX

> > © COPYRIGHT DESIGN WEST ARCHITECTS 2022

MOTOR PROTECTIVE THERMAL SWITCH

3

THERMOSTAT TYPICAL

UNIFORM BUILDING CODE

UNDERWRITERS LABORATORY

UNIFORM MECHANICAL CODE

UL LISTED WEATHERPROOF, NEMA 3R or 4

UNLESS NOTED OTHERWISE

VOLT OR VOLTAGE

VOLT AMPERE

WIRE GUARD

Ш

S

മ

E-001.1

GENERAL PRO

. ALL ELECTRICAL INSTALLATIONS TO CONFORM TO THE LATEST NEC AND LOCAL CODES.

THE ELECTRICAL CONTRACTOR SHALL HAVE A COORDINATION MEETING WITH THE MECHANICAL CONTRACTOR, CONSTRUCTION SUPERINTENDANT AND ANY OTHER TRADES AS REQUIRED WITHIN DAYS OF THE START OF THE JOB TO REVIEW CODE CLEARANCE REQUIREMENTS FOR PANELS, AND OTHER ELECTRICAL GEAR SPECIFICALLY FOR THIS JOB. RECORD THE MEETING IN THE SUN LOG. REPORT UNRESOLVED CONFLICTS TO THE ARCHITECT IMMEDIATELY.

ELECTRICAL CONTRACTOR'S PROJECT MANAGER AND ON-SITE PROJECT FOREMAN MALL REVIEW VE SUBMITTALS FOR ACCURACY PRIOR TO SUBMITTING TO ENGINEER. INACCURACIF PRIOR TO ENGINEER SUBMITTAL.

SUBMITTALS FOR EACH SYSTEM WILL BE REVIEWED BY ENGINEER UP TO S—ONE FULL SUBMITTAL FOR OVERALL COMPLIANCE AND ONE RESUBMITTAL. ADDITIONAL REV BE CHARGED TO CONTRACTOR AT ENGINEER'S STANDARD BILLING RATE.

SUBMITTALS TO ENGINEER SHALL INCLUDE ALL SPECIFIED SYS RST SUBMITTAL. PAR SUBMITTALS WILL BE RETURNED TO CONTRACTOR AS INCO AND WILL BE CONSIDER INCLUDED SUBMITTAL REVIEWS.

THE CLARITY OF RECORD DRAWING CHANGES MADERY THE C ORIGINAL DRAWINGS AS JUDGED BY THE ARCHIT CONTRACTOR FOR CLARIFICATION.

WHEN THE GENERAL CONTRACT CALLS FURNISHED BY THE CONTRACTOR AT JOB COMPLETION, RICAL CONTRACTOR SHALL BE FURNISH A COMPLETE SET OF "BLUE-PRINT RE CAD ELECTRICAL DRAWINGS FOR GENERATED CHANGES FROM T A CLARITY EQUAL TO THE ORIGINA BY THE ENGINEER. CONTACT KS OR REPRODUCIBLE ORIGINAL MED DRAWINGS ON CD IN AUT

TURAL DRAWINGS FOR ACCURATE DIX ZINSIONS DO NOT SCALE ELECTR LOOR PLANS. SEE AND FLOOR PLANS.

S CANNOT BE SHOWN TO SCALE AND S OVERLAP BUILDING ELEMENTS. URAL ELEVATIONS FOR ACCURATE MC OCATIONS.

10. ELECTRICAL CON SHALL CONTACT POWER COMPANY, 1 COMPANY, AND TV COMPANY HE START OF CONSTRUCTION AND NO OF THE PROBABLE DATE WITHIN THE FIRST EPHONE, AND/OR TV SERVICE CONNECTION WILL BE NEEDED. WHEN THE NEW ELECT

TALL TRANSFORMER PAD PER POWER COMPANY SPECIFICATIONS. TOR SHALL LOCAT R CLEARANCES DING AND OTHER EQUIPMENT BEFORE INSTALLATION. THE TRANSFORM ON THE PLANS IS AN APPROXIMATE LOCATION.

AND TV SERVICE WN ON THE DRAWINGS HAVE NOT BEEN COORDINATED WITH THE RESP TILITY COMPANIES DESIGN. THE CONTRACTOR SHALL VERIFY THE NE AS SHOWN OR A MIGES REQUIRED BY THE TELEPHONE COMPANY
NS. NOTIFY THE ARM ITECT IF CHANGES FROM THE DRAWING ARE REQUIRED. TELEPHONE AND T SE AS SHOWN OR BEFORE INSTALLATION

13. THE ELECTRICAL CONT SHALL BE RESPONSIBLE TO FIELD VERIFY ALL PANEL CLEARANCES PER NEC 110.26 AND NOTIFY ALL C TRADES ON THE JOB OF THESE CODE REQUIREMENTS.

4. PANEL INDEXES SHALL I E ALL PERTINENT INFORMATION ON THE PANEL SCHEDULES INCLUDING INFORMATION ON LIGHT OUTLETS. DO NOT SIMPLY COPY THE CIRCUIT DESCRIPTION COLUMN. INDEXES TO BE TYP

N PANEL FROM THE BOTTOM SHALL BE ARRANGED IN STRAIGHT ROWS FASTENED SHALL BE PUNCHED IN PANEL BOTTOM AND CONDUITS FASTENED BY TWO LOCKNUTS HING. CUTTING OUT THE BOTTOM OF THE PANEL IS NOT PERMITTED.

CONDUCTORS TO BE INSTALLED IN ACCORDANCE WITH NEC ARTICLE 310.4. WIRE IS TO BE AT SURFACE FOR MEASUREMENT. USE TORQUE WRENCH ON TERMINATIONS.

. COORDINATE MOUNTING HEIGHT AND LOCATION OF ALL OUTLETS, SWITCHES, AUXILIARY EQUIPMENT, AND NATHER DEVICES WITH THE ARCHITECTURAL DRAWINGS. PRIOR TO INSTALLATION, REVIEW WITH THE SENERAL CONTRACTOR THE LOCATION OF MILLWORK AS A FINAL CHECK TO PREVENT COVERING OF

8. MOUNTING HEIGHT OF GENERAL PURPOSE OUTLETS AND SWITCHES SHALL BE 16" TO BOTTOM AND 48" TO

9. ALL ELECTRICAL EQUIPMENT SHALL BE LOCATED SO AS NOT TO INTERFERE WITH WOOD TRIM AND MOLDINGS. THE ELECTRICAL CONTRACTOR SHALL REVIEW FINISH SCHEDULES AND ARCHITECTURAL DETAILS BEFORE ROUGH-IN OF OUTLET OR SWITCH BOXES TO PREVENT BOXES AND PLATES FROM BEING PLACED BEHIND OR IN TRIMS AND MOLDINGS. REFER SPECIAL CONDITIONS TO ARCHITECT PRIOR TO

20. DO NOT INSTALL DISPOSAL SWITCHES OR GFCI PROTECTION BEHIND SINKS.

21. EMT IS NOT ALLOWED OUT OF DOORS.

22. DO NOT INSTALL FEEDERS OR CIRCUITING EXPOSED ON ROOFTOPS OR RUNNING HORIZONTALLY WITHIN 36"

3. CIRCUIT WIRE SIZES MUST MATCH BRANCH CIRCUIT BREAKERS PER NEC. VERIFY WITH PANEL SCHEDULES BEFORE PULLING WIRE.

4. HOME RUNS MUST BE RUN EXACTLY AS SHOWN ON PLANS UNLESS OTHERWISE NOTED. DO NOT COMBINE HOME RUNS INTO ONE CONDUIT THAT ARE NOT SHOWN COMBINED ON THE DRAWINGS.

25. THE ELECTRICAL CONTRACTOR SHALL RUN BRANCH CIRCUIT CONDUITS IN ATTIC SPACES IN A NEAT AND WORKMANLIKE MANNER SO AS TO CONSERVE OPEN SPACES AS MUCH AS POSSIBLE. HVAC DUCTWORK AND

26. CIRCUIT WIRING SHALL BE INSTALLED AS SHOWN ON THE DRAWINGS. ANY DEVIATIONS SHALL BE INITIATED BY A CHANGE ORDER FROM THE ARCHITECT. OTHERWISE THE RECORD SET SHALL MATCH THE CONSTRUCTION SET.

7. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR, PULLED INTO THE CONDUIT WITH THE PHASE CONDUCTOR, IN ALL SERVICE, FEEDER, AND BRANCH CIRCUITS.

28. PROVIDE A NEUTRAL CONDUCTOR FOR EACH BREAKER TRIP HANDLE. NEUTRALS SHALL NOT BE SHARED BETWEEN BRANCH CIRCUITS.

29. ALL CIRCUITS TO BE MINIMUM #12 CU IN MINIMUM 3/4" CONDUIT UNLESS OTHERWISE NOTED.

30. MC CABLE IS AN APPROVED ALTERNATE TO CONDUCTORS IN CONDUIT FOR BRANCH CIRCUIT WIRING BETWEEN DEVICES, BUT NOT FOR HOME-RUNS. HOME RUNS TO BE RAN IN CONDUIT COMPLETE FROM PANEL TO FIRST DEVICE OR FIXTURE ON CIRCUIT.

31. DO NOT INSTALL MORE THAN THREE PHASE CONDUCTORS IN ANY HOME-RUN CONDUITS UNLESS SPECIFICALLY INDICATED ON DRAWINGS.

32. INCLUDE AS PART OF THE JOB THE INSTALLATION OF AN EXTRA 200 FT OF 3/4" EMT WITH 4 #10 WIRES INSTALLED AND TWO J-BOX TERMINATIONS.

33. IDENTIFY ALL OUTLET COVER PLATES WITH THE PANEL AND CIRCUIT NUMBER.

34. DO NOT INSTALL ELECTRICAL BOXES BACK-TO-BACK IN PARTITION WALLS. LOCATE DEVICES ON OPPOSITE SIDES OF STUD OR PROVIDE MINIMUM 12" HORIZONTAL SEPARATION.

35. A GFI OUTLET SHALL BE INSTALLED AT EACH LOCATION DESIGNATED BY "GFI" ON THE DRAWINGS. DOWNSTREAM PROTECTION BY A GFI OUTLET UPSTREAM IS NOT ALLOWED.

36. ALL CONVENIENCE OUTLETS MUST BE MOUNTED FLUSH WITH THE COVER PLATE AND SECURED FIRMLY TO

37. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO MAKE SURE OUTLET BOXES ARE SET FLUSH WITH FINISH WALL SURFACES WHERE WALL PANELING OR ACOUSTICAL WALLS ARE INSTALLED OR WHERE OUTLETS ARE INSTALLED ON CARPETED RISERS.

8. WHERE EXISTING ELECTRICAL EQUIPMENT IS TO REMAIN BUT THE SURFACE THAT IT IS MOUNTED ON IS TO BE REWORKED UNDER OTHER CONTRACTS, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND INSTALL OR MODIFY THE EXISTING EQUIPMENT AS REQUIRED TO MEET THE DESIGN INTENT. SEE ARCHITECTURAL DRAWINGS FOR ROOF, CEILINGS, WALLS, SOFFITS, FLOORS, ETC.

REMOVE ALL UNI S AND CIRCUITS IN THE DEMOLTIONED AREA AS THEY ARE IDENTIFIED AS UNUSED OR ABAND

L DEVICES, EQUIPMENT, AND APPARATUS AS THEY ARE IDENTIFIED AS 40. REMOVE ALL EXISITING EL UNUSED OR ABANDONED.

41. RELOCATE EXISTING CONDUITS IRCUITS AS REQUIRED THAT ARE PRESENTLY SERVING EQUIPMENT THAT IS INTENDED TO REMAIN I (ICE BUT SAID CONDUITS ARE CURRENTLY RUNNING THROUGH AREAS TO BE DEMOLITIONED.

PATCH, REPAIR, REPAIN OVER UP REQUIRED AS A RESULT OF ELECTRICAL REMODEL IS TO BE TRICAL CONTRACTOR, BUT ACTUAL WORK IS TO BE PERFORMED BY ESPONSIBILITY OF T

RES MUST CONFORM TO NEC 410

IXTURES THAT PENETRATE THE BUILDING THERMAL ENVELOPE SHALL BE SEALED R CAULK BETWEEN THE HOUSING AND INTERIOR WALL OR CEILING COVERING

45. COORDINATE LOCATION OF CEILING LIGHT FIXTURES WITH THE REFLECTED CEILING PLAN.

COUNTS SHOWN ON DRAWINGS ARE FOR REFERENCE ONLY. CONTRACTOR IS RESPONSIBLE TO FIXTURE COUNTS AS PART OF BIDDING PROCESS.

ELECTRICAL CONTRACTOR SHALL VERIFY CEILING THICKNESSES AND USE CEILING TRIM EXTENDERS ON DOWNLIGHTS AS REQUIRED.

CONTRACTOR PRIOR TO ROUGH-IN OF CEILING OUTLET BOXES. 49. COORDINATE LOCATION OF ALL CLOSET LIGHTS WITH MILLWORK. CENTER OUTLET BOX FOR LIGHT FIXTURE

48. ELECTRICAL CONTRACTOR SHALL REVIEW THE EXACT LOCATION OF ALL SKYLIGHTS WITH THE GENERAL

6" FROM WALL ABOVE DOOR.

50. SUPPORT RECESSED T-BAR MOUNT FIXTURES WITH FOUR EXTRA GALVANIZED WIRE SUPPORTS ON OPPOSITE CORNERS PER IBC. CONNECT WIRES TO BUILDING STRUCTURE.

51. CONNECT EMERGENCY CIRCUIT OF EMERGENCY LIGHT BATTERY PACK TO UNSWITCHED LIGHTING CIRCUIT SERVING FIXTURES IN AREA. INSTALL EXTRA CONDUCTORS AS REQUIRED. WIRE SO LAMPS IN NORMAL MODE ARE CONTROLLED AS NOTED ON LIGHTING PLANS. PROVIDE ADDITIONAL BALLASTS AS REQUIRED.

52. PROVIDE FACTORY RECOMMENDED LAMPS IN ALL HID FIXTURES.

53. WHERE LIGHT FIXTURES AS SPECIFIED AS COLOR PER ARCHITECT, THIS SHALL BE INTERPRETED AS A NON-STANDARD COLOR.

54. THE CONTRACTOR SHALL PROVIDE A WIRE MESH COVER OVER ALL RECESSED LIGHTS TO KEEP BLOWN IN INSULATION AT LEAST THREE INCHES AWAY FROM THE FIXTURE HOUSING.

55. EMERGENCY LIGHT BATTERY PACKS SHALL BE CONNECTED SO AS TO BE ABLE TO OPERATE IN THE TEST MODE WHEN THE NORMAL SWITCH LEG IS TURNED ON, AND SHALL ILLUMINATE ONE FIXTURE LAMP UNLESS

56. OVER-MIRROR WALL LIGHTS ARE TO BE MOUNTED SO THE LENS FACES DOWNARD.

57. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW ALL SWITCH LOCATIONS WITH THE GENERAL CONTRACTOR PRIOR TO ROUGH-IN TO PREVENT ANY SWITCHES FROM BEING LOCATED ON THE WRONG SIDE OF THE DOOR.

58. COORDINATE LOCATION OF EXIT LIGHTS WITH ARCHITECT

59. INSTALL MANUAL OVERRIDE ON PARKING LIGHTS.

60. COORDINATE LOCATION OF LIGHT FIXTURES IN MECHANICAL ROOMS WITH MECHANICAL EQUIPMENT. DETERMINE FINAL FIXTURE LOCATIONS AFTER DUCTWORK INSTALLATION HAS BEEN COMPLETED. CHAIN SUSPEND FIXTURES UNDER DUCTWORK AND CONDUIT RACKS AS REQUIRED.

61. FIELD VERIFY MOUNTING OF SURFACE FIXTURES SHOWN IN CONTINUOUS ROWS. MAKE ADJUSTMENTS SIDEWAYS OR UNDER OBSTRUCTIONS AS REQUIRED AND PROVIDE NECESSARY RACEWAY CONNECTIONS.

62. VERIFY FIXTURE COUNT WITH REFLECTED CEILING PLAN.

63. THE BOTTOM OF WALL MOUNTED FIXTURES MUST BE A MINIMUM OF 6'-8" AFF UNLESS FIXTURES ARE ADA

64. EXHAUST FANS FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR.

65. REFER TO MECHANICAL PLANS FOR EXACT LOCATION OF MECHANICAL EQUIPMENT.

66. ELECTRICAL CONTRACTOR SHALL FURNISH ALL MOTOR DISCONNECTS, STARTERS, AND CONTROL STATIONS FOR MECHANICAL EQUIPMENT UNLESS THE SAME IS FURNISHED AS AN INTEGRAL PART OF THE EQUIPMENT. VERIFY WITH MECHANICAL CONTRACTOR PRIOR TO BID.

67. THERMOSTAT AND CONTROL WIRING FOR MECHANICAL EQUIPMENT BY MECHANICAL CONTRACTOR.

68. ELECTRICAL CONTRACTOR SHALL COORDINATE THE ROUTING OF CONDENSATE LINES ON MECHANICAL PADS WITH THE MECHANICAL CONTRACTOR. WIREWAYS AND DISCONNECTS REQUIRE 3-FEET FRONTAL CLEARANCE AND A MINIMUM 30" WIDTH CLEARANCE, OR THE WIDTH OF THE UNIT, WHICHEVER IS GREATER.

69. PROVIDE SAFETY DISCONNECTS AS REQUIRED AT ALL CONNECTIONS TO MECHANICAL EQUIPMENT. PROVIDE FUSING AND RATINGS PER NAMEPLATE INFORMATION OF EQUIPMENT SERVED.

70. WHERE AUTOMATIC SPRINKLER CONTROLS ARE SHOWN ON THE LANDSCAPE OR ARCHITECTURAL DRAWINGS, PROVIDE A FLUSH SINGLE-GANG J-BOX BEHIND THE CONTROL AND CONNECT TO THE NEAREST OUTLET CIRCUIT WITH AVAILABLE CAPACITY.

71. INSTALL WEATHERPROOF GFI DUPLEX OUTLETS ADJACENT TO EACH ROOFTOP HVAC UNIT (UNLESS OUTLET IS PROVIDED AS PART OF EQUIPMENT). SEE MECHANICAL PLANS AND SPECIFICATIONS.

72. LOCATE OUTLETS FOR ELECTRIC WATER COOLERS SO THAT THE OUTLET AND EXTENSION CORDS ARE CONCEALED FROM VIEW.

73. DISCONNECT SWITCHES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL ELECTRICAL SWITCHES AND MOTOR CONTROL FOR PROPER CODE CLEARANCES. NOTIFY ARCHITECT IMMEDIATELY OF ANY CONFLICTS WITH OTHER TRADES REGARDING PROPER EQUIPMENT CLEARANCES.

74. ALL DISCONNECT SWITCHES FOR MOTORS SHALL B ERATED A MINIMUM OF 22000 AIC UNLESS OTHERWISE

75. COORDINATE LOCATION OF THERMOSTATS, SENSORS, AND ATC JUNCTION BOXES WITH MECHANICAL CONTRACTOR BEFORE INSTALLATION.

76. BEFORE RUNNING CONDUITS, PLACING OUTLETS OR ORDERING EQUIPMENT, THE CONTRACTOR SHALL

CONDUIT, OUTLETS, AND/OR EQUIPMENT. 77. PROVIDE NEUTRAL CONNECTION TO 208/240/480V, SINGLE-PHASE EQUIPMENT. RUN SEPARATE GROUND

REVIEW THE SPECIFICATIONS AND DESIGN AND SHOP DRAWINGS OF THE OTHER TRADES SERVED BY THE

78. WHERE THE MECHANICAL CONTRACTOR HAS INSTALLED SMOKE DETECTORS WITHIN ANY DUCTWORK, THE ELECTRICAL CONTRACTOR SHALL INSTALL ADDITIONAL HARDWARE AND CONTROL WIRING TO THE FIRE-ALARM PANEL AS REQUIRED FOR FIRE-ALARM DETECTION AND NOTIFICATION. PROVIDE ADDITIONAL SMOKE DETECTOR IF FACTORY INSTALLED DETECTOR IS INCOMPATIBLE WITH FIRE-ALARM SYSTEM.

79. FIELD VERIFY THE EXACT LOCATION OF THE DUCT DETECTION AND NOTIFICATION PANEL WITH THE ARCHITECT PRIOR TO INSTALLATION.

80. COORDINATE LOCATION OF ALL DUCT DETECTION AND NOTIFICATION DEVICES WITH NFPA AND ADA REQUIREMENTS. COORDINATE LOCATIONS WITH MILLWORK AS REQUIRED.

WIRE TO ALL OUTDOOR UNITS AND BOND TO THE EQUIPMENT GROUND LUG.

81. WHERE THERE ARE CONFLICTS IN THE DRAWINGS AND/OR SPECIFICATIONS THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO BID. WHERE NO NOTIFICATION IS GIVEN THE MORE STRINGENT INTERPRETATION (GENERALLY INTERPRETED TO BE THE MORE COSTLY) WILL BE ENFORCED.

PROJECT GENERAL

PROJECT #:

architects

6

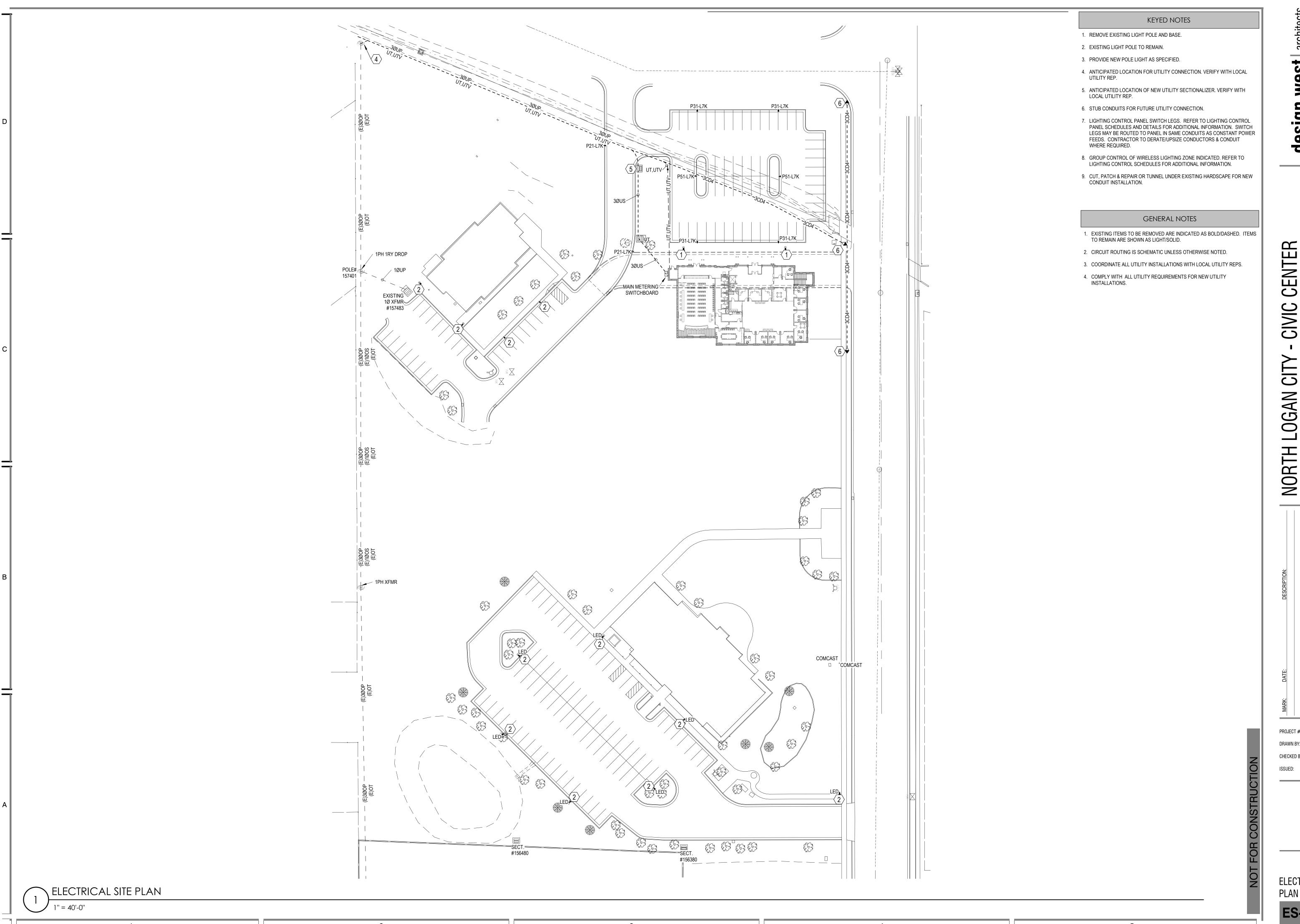
S

Ш

 \mathbf{C}

CIVIC

G



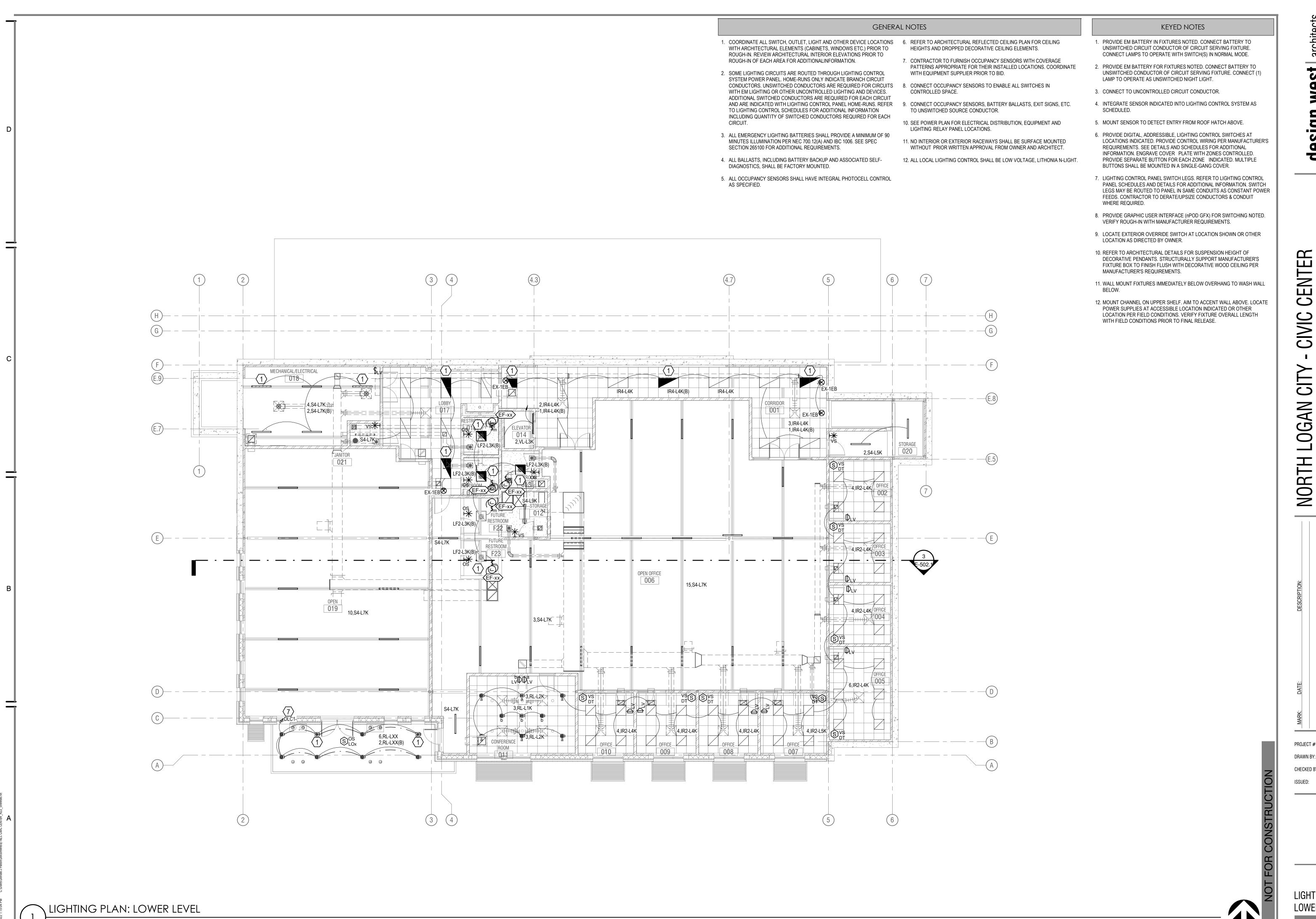
architects LOGAN UT 84321 AKE CITY UT 84103

esign

. E \mathbf{C} AN 9

ELECTRICAL SITE PLAN - NEW

ES-102.1



architects

St

ign

S

B

D

GAN UT

LIGHTING PLAN -LOWER LEVEL

E-200.1

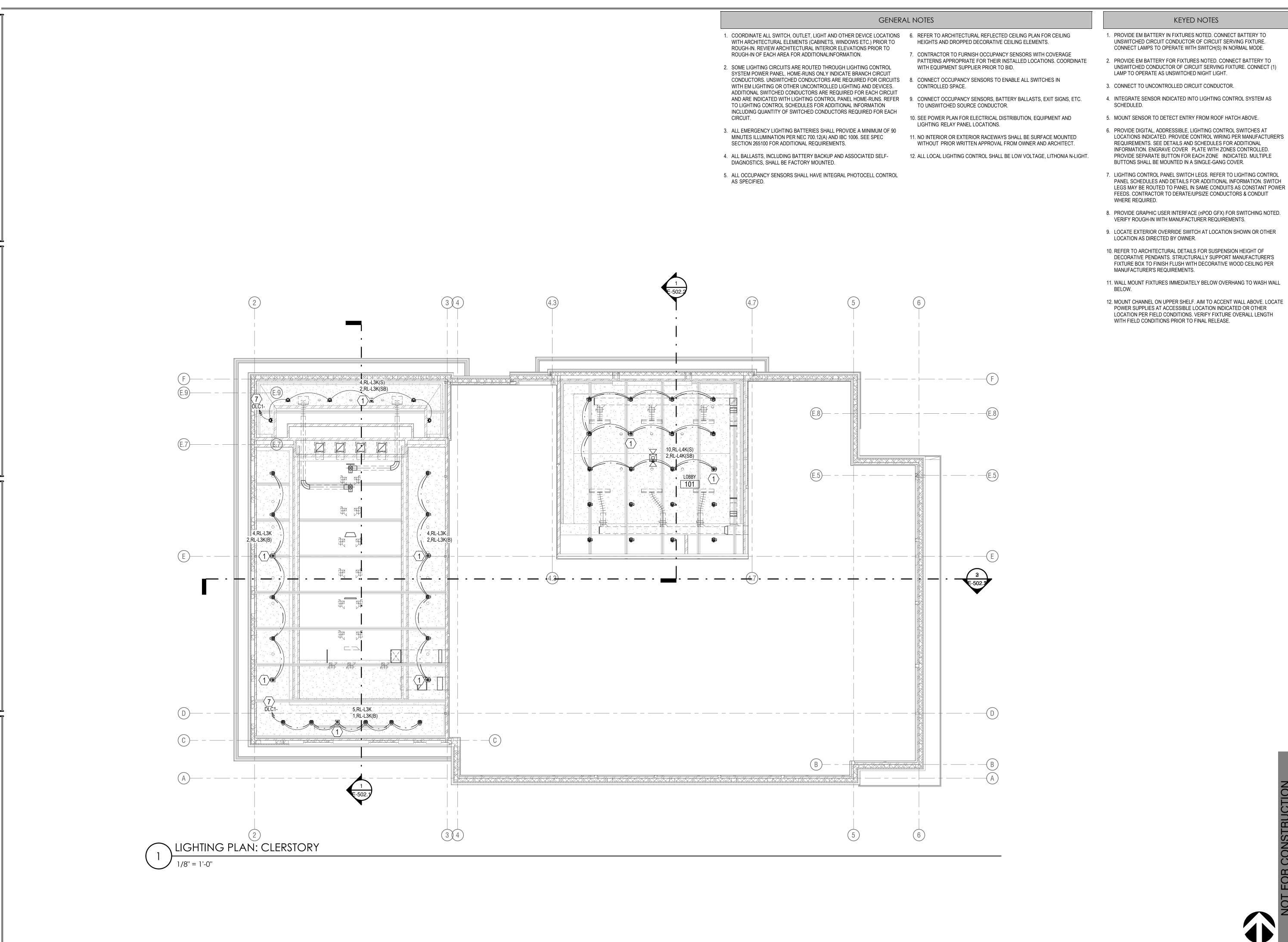
LIGHTING PLAN: MAIN LEVEL

GAN UT

LIGHTING PLAN -MAIN LEVEL

E-201.1

© COPYRIGHT DESIGN WEST ARCHITECTS 202



architects

St

ign

S

(1)

D

ш

CIVIC

GAN UT

LIGHTING PLAN -CLERESTORY

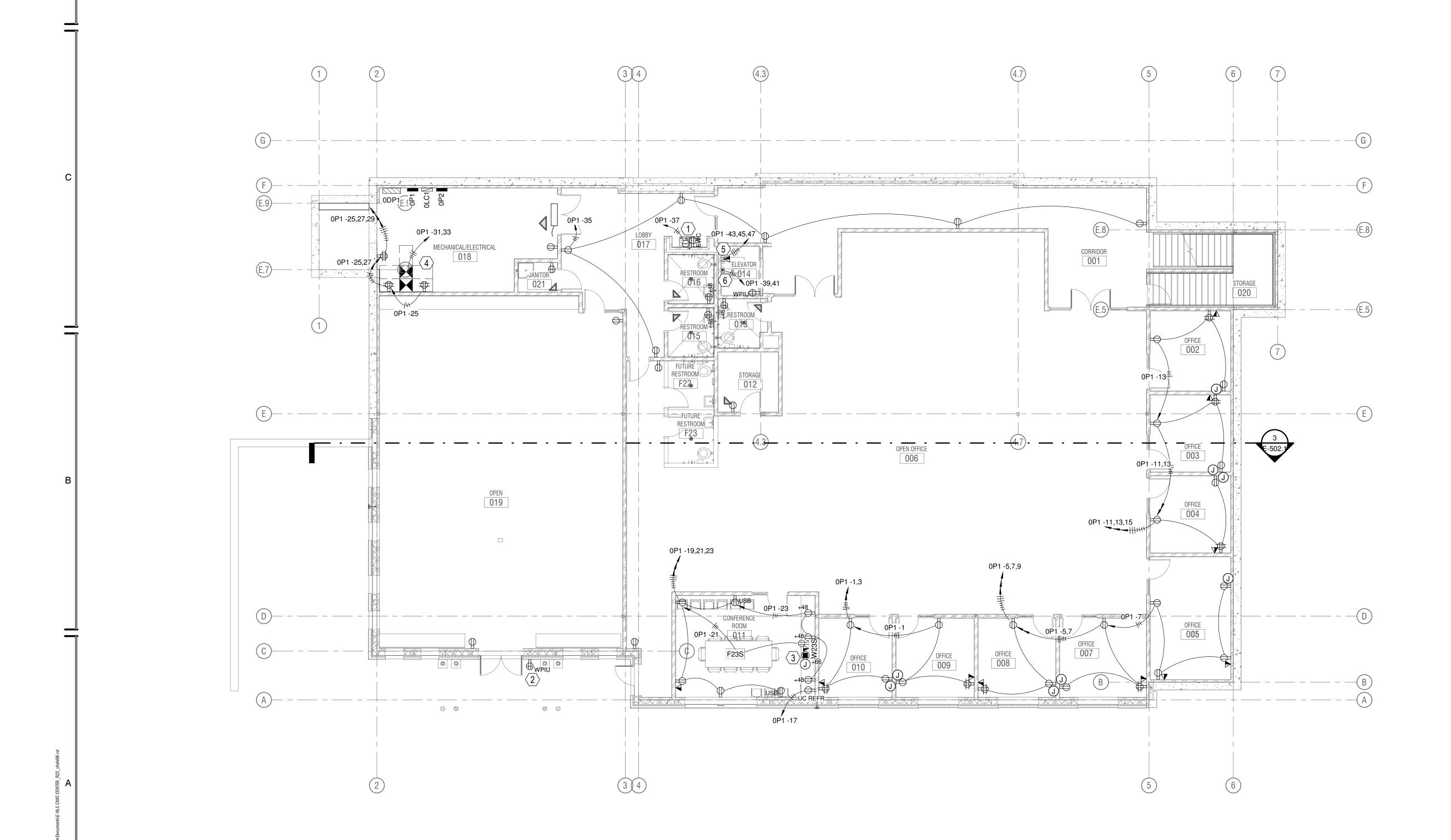
E-202.1

BUILDING ACCENT TRIM COLOR.

1. COORDINATE ALL SWITCH, OUTLET, LIGHT AND OTHER DEVICE LOCATIONS WITH ARCHITECTURAL ELEMENTS (CABINETS, WINDOWS ETC.) PRIOR TO ROUGH IN. REVIEW ARCHITECTURAL INTERIOR ELEVATIONS PRIOR TO ROUGH-IN OF EACH AREA FOR ADDITIONAL INFORMATION.

GENERAL NOTES

- 2. NO INTERIOR OR EXTERIOR RACEWAYS SHALL BE SURFACE MOUNTED WITHOUT PRIOR WRITTEN APPROVAL FROM OWNER AND ARCHITECT.
- 3. FIELD VERIFY FLOOR BOX LOCATION WITH OWNER PRIOR TO ROUGH-IN
- 2. MOUNT EWC OUTLET BEHIND COOLER COVER. ROUTE CIRCUIT THROUGH FACELESS GFCI (LEVITON 7590 OR EQUIVALENT) MOUNTED BELOW COOLER COVER. SEE DETAIL 4/EP501 FOR ADDITIONAL INFORMATION.
- 3. PROVIDE POWER TO FLAT SCREEN TV. VERIFY MOUNTING LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- 4. COORDINATE ALL INSTALLATIONS IN ROOM WITH OWNER'S IT PERSONNEL PRIOR TO ROUGH-IN.
- 5. PROVIDE SHUNT-TRIP, FUSIBLE DISCONNECT FOR ELEVATOR WITH FIRE ALARM MONITORING PROVISIONS. VERIFY LOCATION WITH ELEVATOR DRAWINGS PRIOR TO ROUGH-IN.
- 6. PROVIDE CIRCUIT BREAKER DISCONNECT WITH CONNECTIONS TO ELEVATOR LIGHT AND POWER AS REQUIRED. VERIFY LOCATION WITH ELEVATOR DRAWINGS PRIOR TO ROUGH-IN.



POWER PLAN -LOWER LEVEL

E-300.1

YPOWER PLAN: LOWER LEVEL

ENTER $\overline{\mathbb{S}}$ CIVIC

AN 9 0

POWER PLAN - MAIN LEVEL

E-301.1

1. COORDINATE ALL SWITCH, OUTLET, LIGHT AND OTHER DEVICE LOCATIONS WITH ARCHITECTURAL ELEMENTS (CABINETS, WINDOWS ETC.) PRIOR TO ROUGH IN. REVIEW ARCHITECTURAL INTERIOR ELEVATIONS PRIOR TO

GENERAL NOTES

ROUGH-IN OF EACH AREA FOR ADDITIONAL INFORMATION. 2. NO INTERIOR OR EXTERIOR RACEWAYS SHALL BE SURFACE MOUNTED

WITHOUT PRIOR WRITTEN APPROVAL FROM OWNER AND ARCHITECT.

3. FIELD VERIFY FLOOR BOX LOCATION WITH OWNER PRIOR TO ROUGH-IN

0P2 -37,39 -0P2 -10,12 0P2 -10 101 OP2 -10,12,14 CORRIDOR 0P2 -5 _- W12 ⊁66 OPEN OFFICE 117 LAYOUT TBD 0P2 -11,13,15 0P2 -17,19,21

POWER PLAN: MAIN LEVEL

1. MOUNT EWC OUTLET BEHIND COOLER COVER. ROUTE CIRCUIT THROUGH FACELESS GFCI (LEVITON 7590 OR EQUIVALENT) MOUNTED BELOW COOLER COVER. SEE DETAIL 4/EP501 FOR ADDITIONAL INFORMATION.

BUILDING ACCENT TRIM COLOR.

2. PROVIDE LOCKABLE, WP-IN-USE COVER FOR EXTERIOR OUTLETS AS SPECIFIED. USE ARLINGTON IN-BOX OR EQUIVALENT. FIELD PAINT BOX AND

3. PROVIDE POWER TO FLAT SCREEN TV. VERIFY MOUNTING LOCATION WITH OWNER PRIOR TO ROUGH-IN.

4. PROVIDE POWER AND 3' CORD/PLUG FOR DISPOSAL. ROUTE CIRCUIT THROUGH FACELESS GFCI (LEVITON 7590 OR EQUIVALENT) MOUNTED ABOVE COUNTER LEVEL IN BOX WITH DISPOSAL SWITCH. LABEL GFCI FOR APPLIANCE SERVED. DO NOT LOCATE SWITCH/GFCI BEHIND SINK.

5. PROVIDE POWER TO MICROWAVE. MOUNT OUTLET HORIZONTALLY IN UPPER CORNER OF UPPER CABINET.

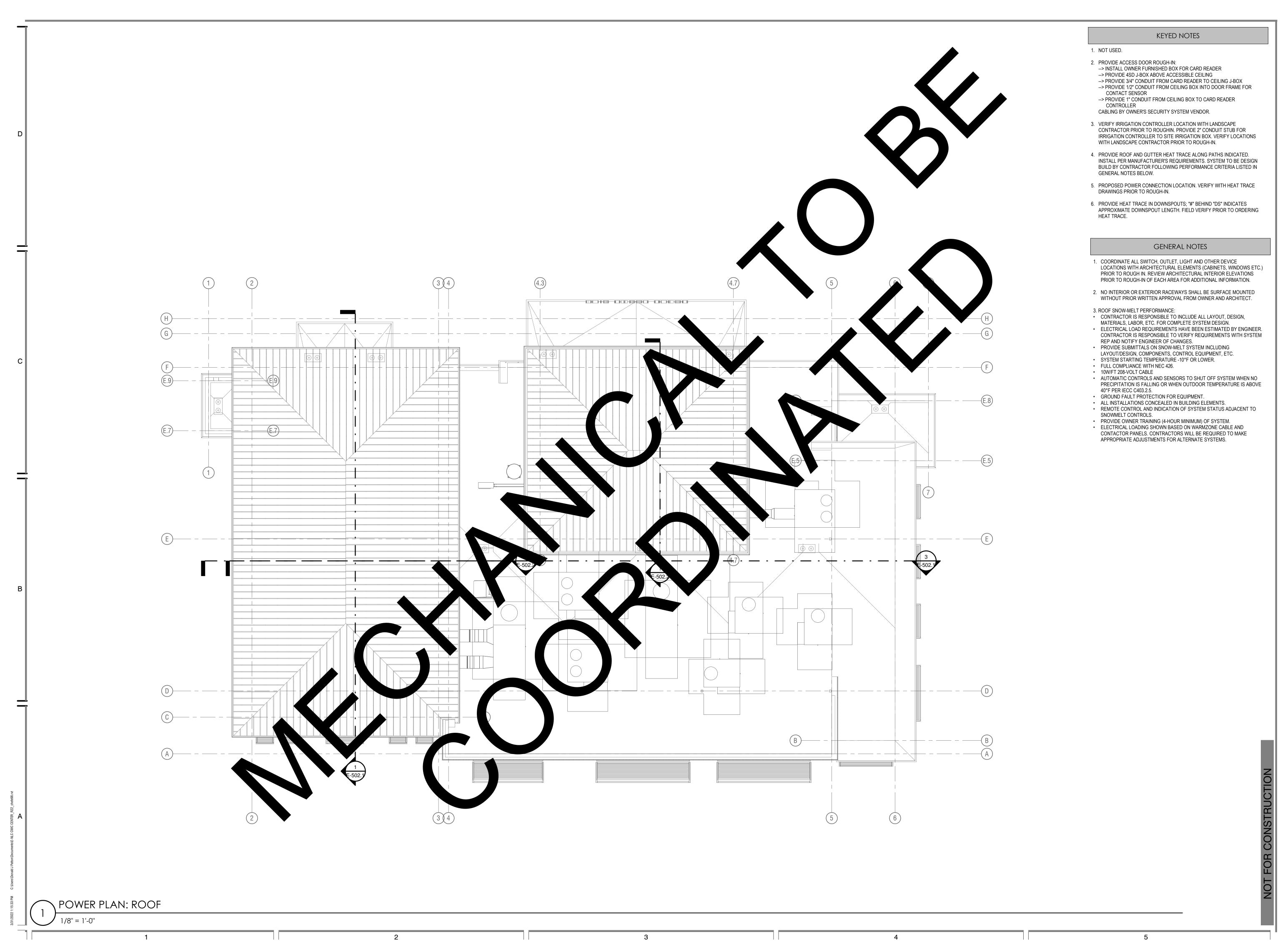
6. PROVIDE POWER TO AUTOMATIC DOOR CONTROLLER PER EQUIPMENT REQUIREMENTS. PROVIDE 3/4" CONDUIT WITH FLEX CONNECTION INTO BUTTON ASSEMBLY (BUTTONS FURNISHED BY OTHERS). PROVIDE CONTROL WIRING PER EQUIPMENT REQUIREMENTS. REFER TO ARCHITECTURAL DETAILS FOR EXACT BUTTON LOCATIONS. INTERLOCK DOOR WITH ACCESS CONTROL SYSTEM TO RELEASE ON APPROVED CARD READ. EXTEND POWER TO DOOR RELEASE POWER SUPPLY AS REQUIRED.

7. VERIFY OUTLET LOCATION WITH FURNITURE SUPPLIER AND ARCHITECT PRIOR TO ROUGH-IN. VERIFY ALL POWER AND COMMUNICATIONS DEVICE LOCATIONS WITH FURNITURE SUPPLIER DRAWINGS. NOTIFY ARCHITECT OF DISCREPANCIES.

8. PROVIDE POWER FOR EXTERIOR BUILDING SIGN. LOCATE J-BOX ABOVE ACCESSIBLE CEILING. MACHINE LABEL BOX "SIGN POWER". EXTEND CIRCUIT TO SIGN PER EQUIPMENT REQUIREMENTS. ROUTE CIRCUIT THROUGH LIGHTING CONTROL AS SCHEDULED.

9. PROVIDE POWER TO DOOR HARDWARE POWER SUPPLY (POWER SUPPLY BY OTHERS) POWER SUPPLY SHOWN AT DOOR, FOR DRAWING CLARITY, POWER SUPPLY TO BE LOCATED IN ELECTRICAL ROOM. PROVIDE 3/4" CONDUIT FROM POWER SUPPLY INTO DOOR FRAME AS REQUIRED. COORDINATE WITH DOOR HARDWARE SUPPLER AS REQUIRED. PROVIDE ADDITIONAL ACCESS CONTROL ROUGH-IN WHERE APPLICABLE, SEE ET SERIES SHEETS FOR ADDITIONAL INFORMATION.

10. PROVIDE POWER TO POWERED BLINDS PER EQUIPMENT REQUIREMENTS. PROVIDE 3/4" CONDUIT TO OVERRIDE OPEN/CLOSE CONTROL SWITCH LOCATION AS DIRECTED BY OWNER.



9

architects

St

sign

ENTE

 \mathbf{C}

CIVIC

 \forall

0

LOGAN UT 84321 LAKE CITY UT 84103

POWER PLAN - ROOF

E-303.1

SYSTEMS PLAN -LOWER LEVEL E-400.1

ELECTRONICS

© COPYRIGHT DESIGN WEST ARCHITECTS 2022

Checker

03.8.2022

ELECTRONIC SYSTEMS PLAN: LOWER LEVEL

18LR6

(TO ABOVE)

15

√(TO ABOVE)

ELECTRONICS SYSTEMS PLAN -MAIN LEVEL

E-401.1 © COPYRIGHT DESIGN WEST ARCHITECTS 2022

ELECTRONIC SYSTEMS PLAN: MAIN LEVEL

1. DEVICE INDICATED TO BE INSTALLED WITHIN 15'-0" OF END OF CORRIDOR PER NFPA 72.

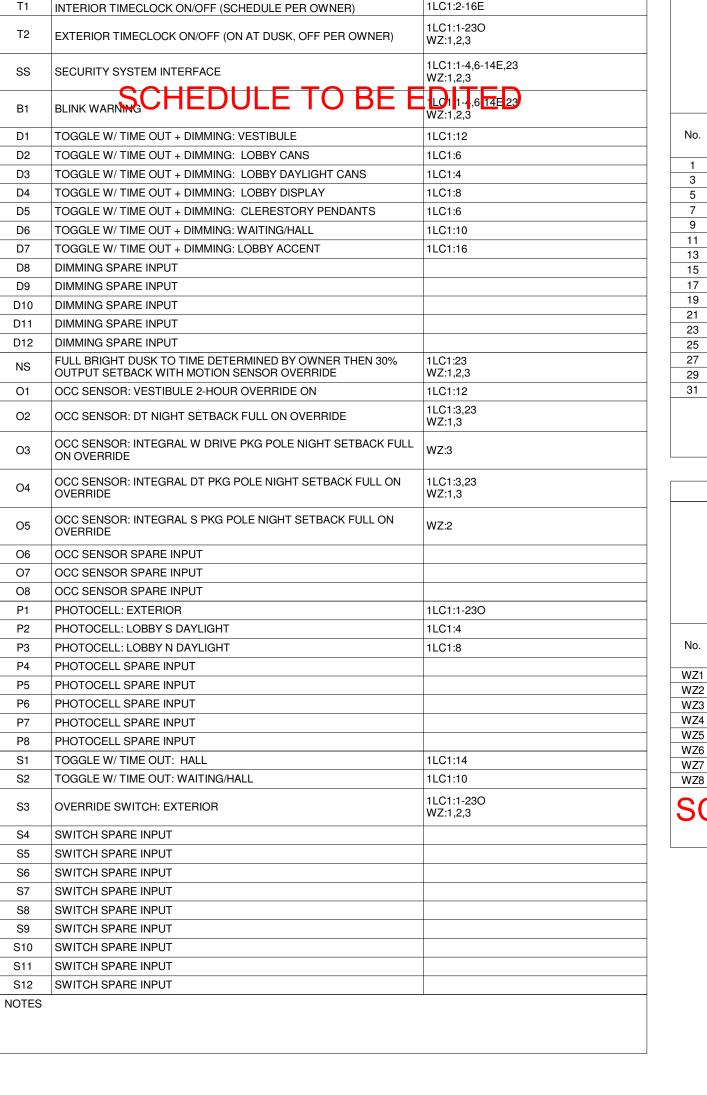
KEYED NOTES

GAN UT CITY UT

821239 PROJECT #: Author DRAWN BY: Checker 03.8.2022 ISSUED:

LIGHTING CONTROL RISER DIAGRAM & **DETAILS**

E-501.1 © COPYRIGHT DESIGN WEST ARCHITECTS 2022



LIGHTING CONTROL INPUT SCHEDULE

CONTROLLED RELAYS

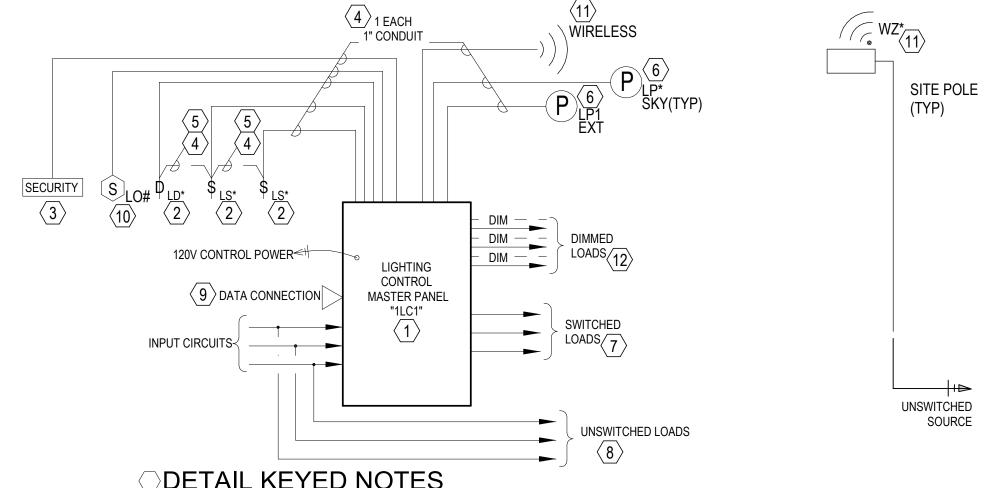
DESCRIPTION

						RELAY	PANE	L SCH	EDULE						
RELAY PANEL FEEDS 1LC1 X INDIVIDUAL			EDS	REMARKS					LOCATION	N	TOUNT	ΓING			
			C1	X INDIVIDUAL											
					MAIN LUGS		-LITHON	IIA N-LIG	HT SYSTEM			ELECTRICAL		FLUS	ίН
	X	NEW			MAIN BKR		-PROVIE	E WITH	WIRELESS CONTI	ROL INTEGRATION		ROOM	Х	SURF	-AC
		EXIST	ING				-PROVID	DE DIMM	NG CONTROL CA	BLING AS REQUIRED)			•	
		•		MAX VOLTAGE	208										
				MAX PHASE	1	SCHEL	וו וכ	F	TO RE	EDITEI					
			T							I	1				_
lo.	REL	۸٧	CONTROLLED CKT	CONTROL ZONE	CONTROL TYPE	DIMMING	No.	No.	DIMMING	CONTROL TYPE	CONTROL ZONE	CONTROLLED CKT	DE	LAY	
NO.	A	P	CONTROLLED CKT	CONTROL ZONE	(SEE SCHEDULE)	(SEE SCHED)	INO.	NO.	(SEE SCHED)	(SEE SCHEDULE)	CONTROL ZONE	CONTROLLED CKT	A	P	+
1	20	1	1P1- 1	SITE BOLLARD	T2,SS,B1,P1,S3	NS	1	2	D2	T1,B1,SS	LBY CANS	1P1- 7	20	1	+
3	20	1	1P1- 3	BLDG EXT	T2,SS,B1,P1,S3	NS,02,04	3	4	D3,P2	T1,B1,SS	LBY CANS (DL)	1P1- 7	20	1	+
5 5	20	1	1P1- 3	BLDG HI CNPS	T2.P1.S3	N/A	5	6	D4	T1.B1.SS	LBY PENDANTS	1P1- 25	20	1	+
	20	1	1P1- 19	SIGNS: SITE	T2.P1.S3	N/A	7	8	D5,P3	T1.B1.SS	LBY DISPLAY	1P1- 7	20	1	+
9	20	1	1P1- 11	SIGN: BLDG	T2,P1,S3	N/A	9	10	D6	T1,B1,SS,S2	WAITING/HALL	1P1- 7	20	1	+
<u></u>	20	1	1P1- 13	SIGN: BLDG	T2,P1,S3	N/A	11	12	D1	T1,B1,SS,O1	VESTIBULE	1P1- 7	20	1	+
3	20	1	1P1- 15	SIGN: BLDG	T2,P1,S3	N/A	13	14	N/A	T1,B1,SS,S1	CORR	1P1- 9	20	1	+
5	20	1	1P1- 17	SIGN: BLDG	T2,P1,S3	N/A	15	16	D7	T1	LOBBY ACCENT	1P1- 7	20	1	\dagger
7	20	1	1P1- 21	SIGN: MNMT	T2,P1,S3	N/A	17	18				SPA RE	20	1	T
9	30	1	1P1- 41	SIGN: PYLON	T2,P1,S3	N/A	19	20				SPA RE	20	1	T
1	20	1	SPA RE				21	22				SPA RE	20	1	T
:3	20	1	1P1- 3	DRIVE-THRU	T2,SS,B1,P1,S3	NS,O2,O4	23	24				SPA RE	20	1	T
:5	20	1	SPA RE				25	26				SPA RE	20	1	T
27	20	1	SPA RE				27	28				SPA RE	20	1	I
9	20	1	SPA RE				29	30				SPA RE	20	1	
31	20	1	SPA RE				31	32				SPA RE	20	1	

SEE LIGHTING CONTROL INPUTS SCHEDULE

	WIRELESS CONT	ROL SCHEDULE						
	NOTES							
	INTO MAIN LIGHTING CONTRO	E WIRELESS CONTROL ACCESSORIES LIGHTING CONTROL SYSTEM DIMMING CONTROL WIRING AS REQUIRED						
No.	CONTROL ZONE	SWITCHING (SEE SCHEDULE)	DIMMING* (SEE SCHED)					
WZ1	PKG: DRIVE ENTRY	T2,P1,O2,O4,S3	NS					
WZ2	PKG: SOUTH	T2,P1,O5,S3	NS					
WZ3	PKG: WEST	T2,P1,O2,O3,O4,S3	NS					
WZ4	SPARE							
WZ5	SPARE							
WZ6	SPARE							
WZ7	SPARE							
WZ8	SPARE							

SCHEDULE TO BE EDITED



DETAIL KEYED NOTES

- 1. PROVIDE LIGHTING CONTROL PANEL WITH ALL OPTIONS NECESSARY TO PROVIDE CONTROLS AS SHOWN AND SPECIFIED.
- 2. SEE LIGHTING PLANS ON EL2XX SERIES SHEETS FOR DIGITAL, ADDRESSABLE SWITCH LOCATIONS. PROGRAM FOR CONTROL AS SCHEDULED. PROVIDE ENGRAVED COVER PLATES AS DESCRIBED ON EL2XX SHEETS. (*) INDICATES CONTROL TYPE.
- 3. COORDINATE CONNECTIONS WITH OWNER'S SECURITY SYSTEM PROVIDER.
- 4. PROVIDE CONTROL WIRING PER EQUIPMENT REQUIREMENTS.
- 5. PROVIDE HOME-RUN OR DAISY CHAIN WIRING PER
- EQUIPMENT REQUIREMENTS.
- 6. PROVIDE INTERIOR AND/OR EXTERIOR PHOTOCELLS. REFER TO LIGHTING PLAN FOR INTERIOR COUNTS AND LOCATIONS. PROVIDE (1) EXTERIOR SENSOR ROOF MOUNTED PER MANUFACTURER RECOMMENDATIONS. (*) INDICATES CONTROL TYPE.

- 7. REFER TO LIGHTING PLANS FOR SWITCHING GROUPS/HOME RUNS.
- 8. PROVIDE CONSTANT POWER TO EXIT SIGNS, EM BALLASTS, NIGHT-LIGHTS, OCCUPANCY SENSORS, ETC.
- 9. PROVIDE LAN CONNECTION TO CONTROL PANEL FOR REMOTE OWNER CONTROL. PROVIDE ALL HARDWARE/PROGRAMMING REQUIRED FOR SYSTEM INTERFACES AS SPECIFIED.
- 10. PROVIDE OCCUPANCY SENSORS/RELAYS COMPATIBLE WITH LIGHTING CONTROL SYSTEM. SENSORS MY BE USED FOR LOCAL AND SYSTEM CONTROL. (*)INDICATES CONTROL TYPE.
- 11. PROVIDE WIRELESS ACCESSORIES AS REQUIRED TO CONTROL SITE FIXTURES. INTEGRATE INTO MAIN SYSTEM.
- 12. REFER TO LIGHTING PLANS FOR DIMMING GROUPS/HOME-RUNS. INCLUDE DIMMING CONTROL WIRE PER SYSTEM/FIXTURE REQUIREMENTS.

SEISMIC SUPPORT DETAIL

GRID CLIP

(TYPICAL 2 LOCATIONS)

OR EQUIVALENT

CADDÝ 515 SERIES COOPER BA15

RECESSED

FIXTURE

LIGHTING CONTROL RISER DIAGRAM

#10 GALVANIZED STEEL

LOCATIONS)-

(TYPICAL 4 LOCATIONS)

515 SERIES COOPER BA15 OR EQUIVALENT

CADDÝ

TO STRUCTURE (TYPICAL 4

- CONDUIT BY E.C.

STAINLESS STEEL CLAMPS BY E.C.

SPUN ALUMINUM FLASHING BASE BY E.C.

CONDUIT BY E.C.

DETAIL KEYED NOTES

1. VERIFY OUTLET LOCATION WITH MANUFACTURER'S REQUIREMENTS AND FIELD CONDITIONS TO BE CONCEALED WITH COVER INSTALLED.

2. FACELESS GFCI - HORIZONTAL, FLUSH-MOUNT IMMEDIATELY BELOW

OUTLETS TO LOAD-SIDE OF GFCI.

DUPLEX OUTLET _(ALTERNATE LOCATION)

—BI LEVEL MODEL

COOLER COVER TO BE ACCESSIBLE WITH COVER IN PLACE. CONNECT

STEPPED PVC-

BOOT BY E.C.

CONDUIT/ROOF PENETRATION DETAIL

ROOFING -

ROOF DECK-

 \mathbf{C}

PROJECT #:

DRAWN BY:

821239

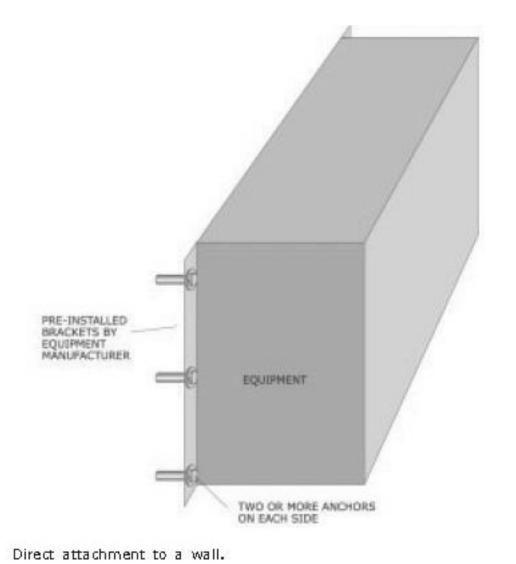
Checker

03.8.2022

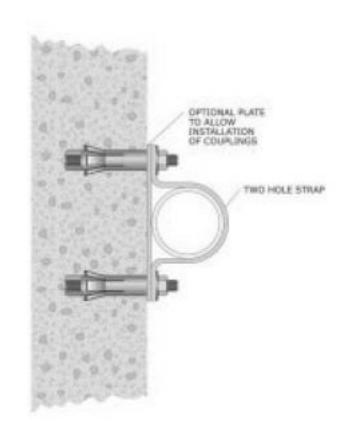
Author

ELECTRICAL

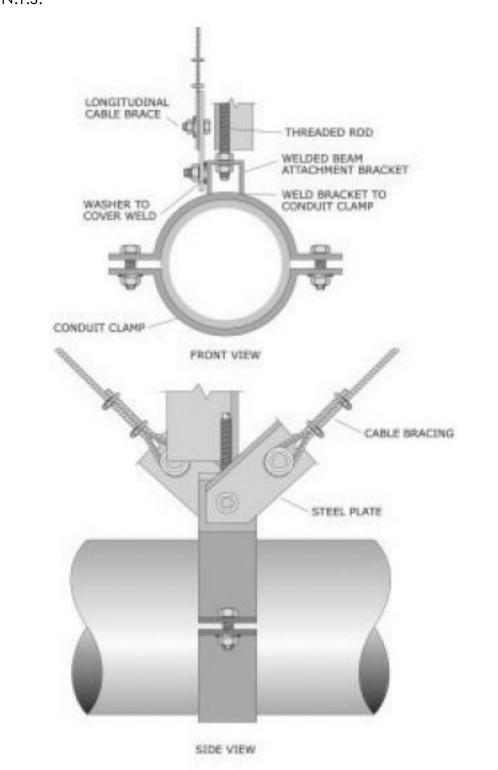
DETAILS E-501.2 © COPYRIGHT DESIGN WEST ARCHITECTS 2022



SEISMIC SUPPORT: EQUIPMENT TO WALL

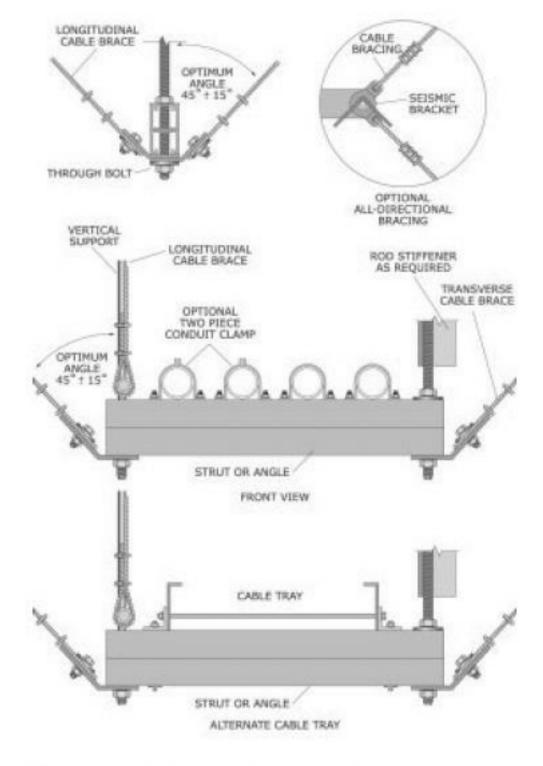


Direct attachment SEISMIC SUPPORT: RACEWAY TO WALL



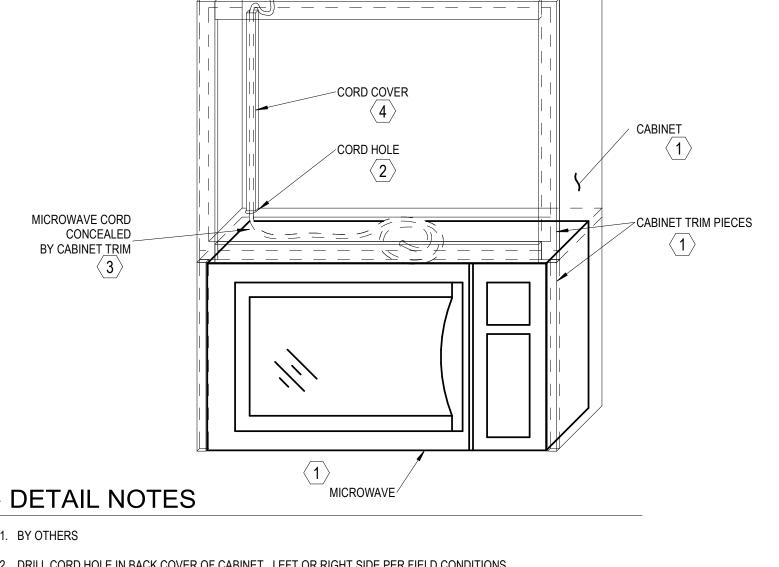
Conduit damp supports with longitudinal cable lateral support and hanger rod.

SEISMIC SUPPORT_SUSPENDED RACEWAY



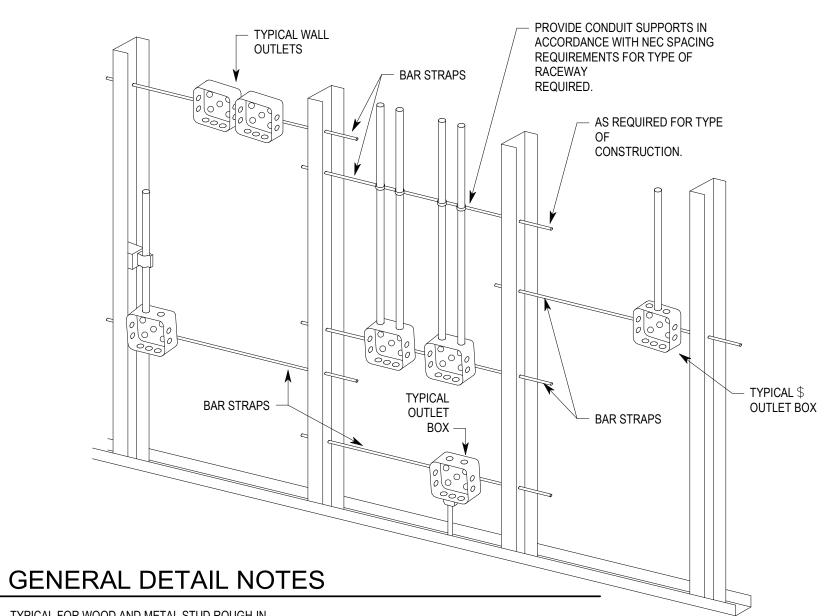
Trapeze support with cable lateral supports.

SEISMIC SUPPORT: RACEWAY TRAPEZE



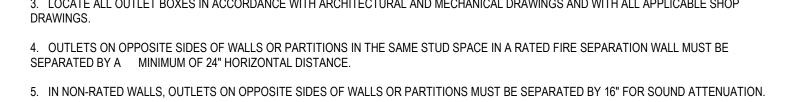
- 2. DRILL CORD HOLE IN BACK COVER OF CABINET. LEFT OR RIGHT SIDE PER FIELD CONDITIONS.
- 3. COIL CORD ON TOP OF MICROWAVE BETWEEN APPLIANCE AND CABINET.
- 4. PROVIDE CORD COVER AND MOUNT IN BACK CORNER OF CABINET.

MICROWAVE INSTALLATION DETAIL



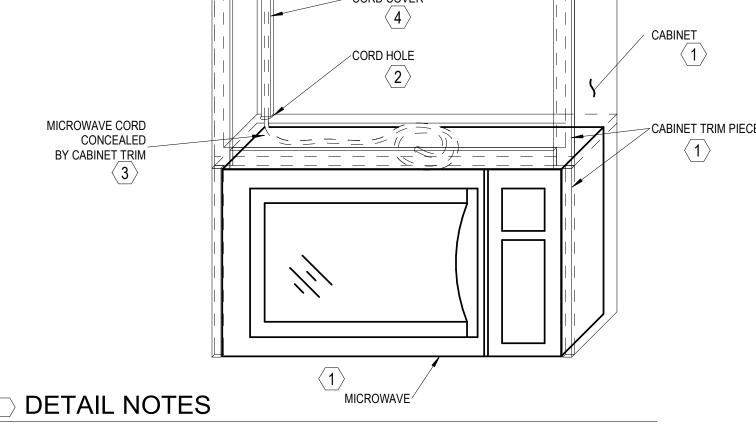
- 1. TYPICAL FOR WOOD AND METAL STUD ROUGH-IN.
- 2. PLASTER RINGS NOT SHOWN.
- 3. LOCATE ALL OUTLET BOXES IN ACCORDANCE WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND WITH ALL APPLICABLE SHOP

TYPICAL ROUGH-IN REQUIREMENTS DETAIL



PANEL TO STRAIGHTEN/ORGANIZE CONDUITS PRIOR TO FINAL RISE INTO PANEL.

EQUIPMENT CONDUIT RISER DETAIL



Drinking Fountain Electrical Detail

DUPLEX OUTLET

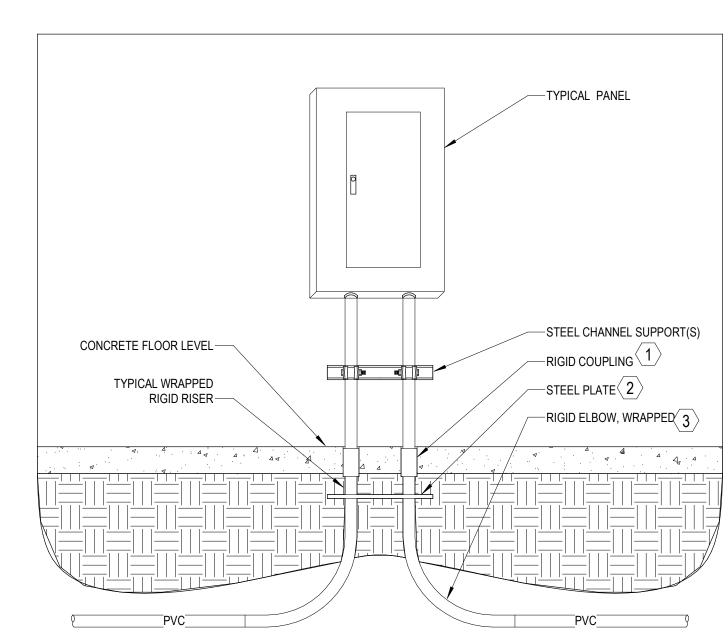
FACELESS GFCI

FINISHED

FLOOR

(PREFERRED

LOCATION)

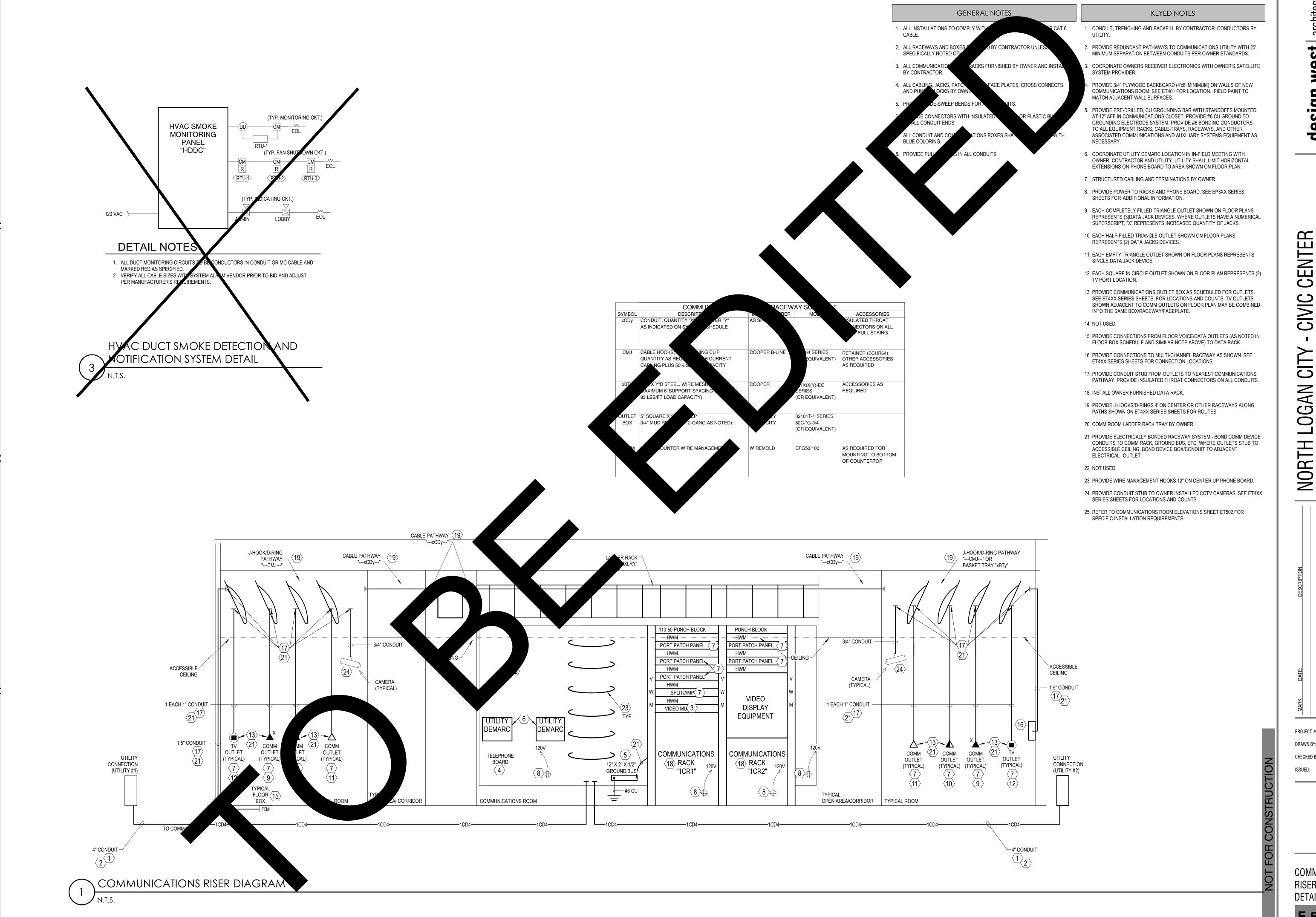


DETAIL KEYED NOTES

1. SET COUPLING FLUSH WITH FINISH FLOOR.

2. PROVIDE STEEL PLATE WITH SAME DIMENSIONS AS PANEL BOTTOM PLATE. PUNCH PLATE PER CONDUITS ENTERING

3. TRANSITION TO WRAPPED RIGID CONDUIT PRIOR TO RISING ABOVE FLOOR AS SPECIFIED.



architects

55 St

sign

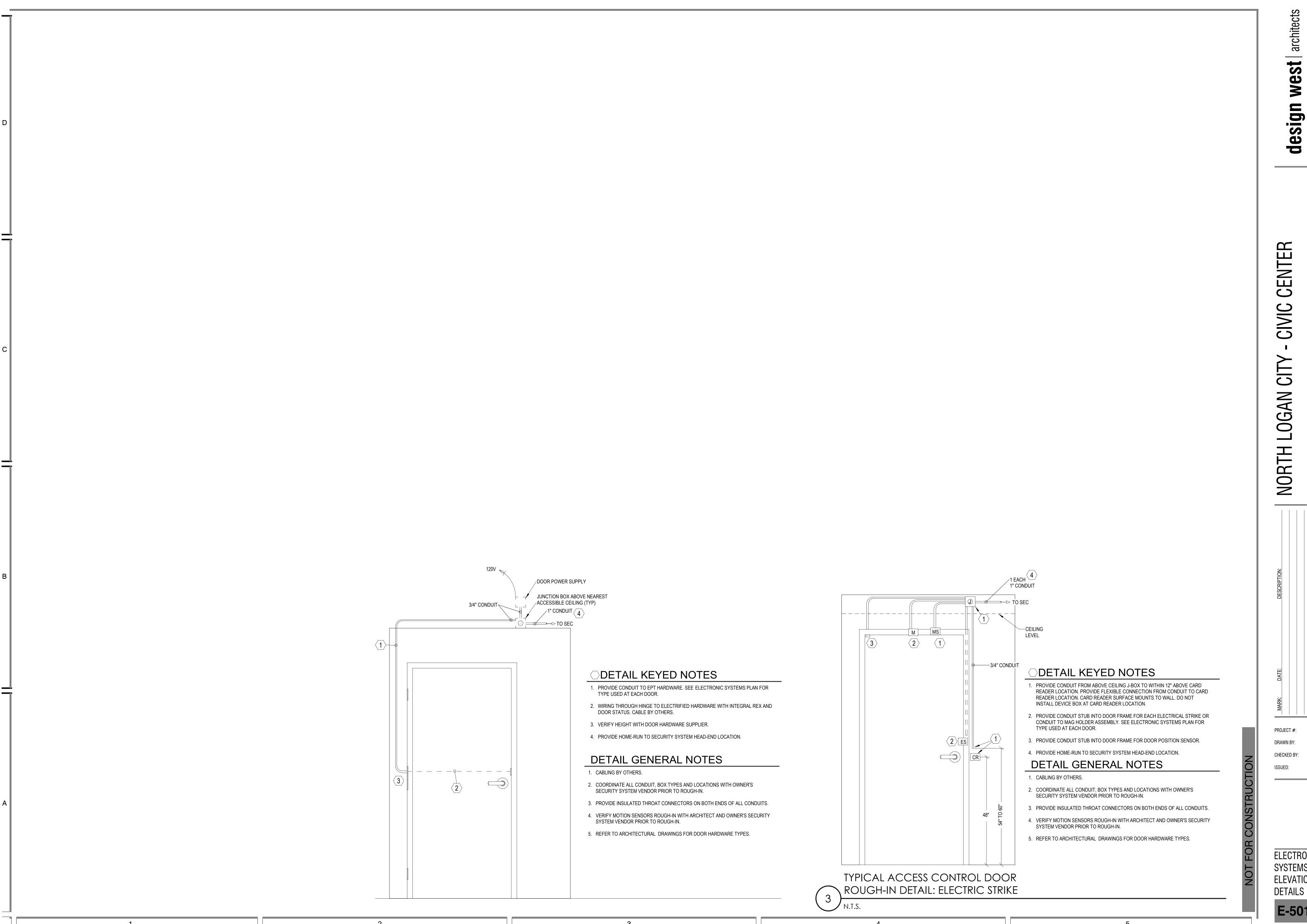
Ш ш CIVIC

821239 PROJECT #: Author DRAWN BY: Checker 03.8.2022

COMMUNICATIONS RISER DIAGRAM & **DETAILS**

E-501.3

© COPYRIGHT DESIGN WEST ARCHITECTS 2022

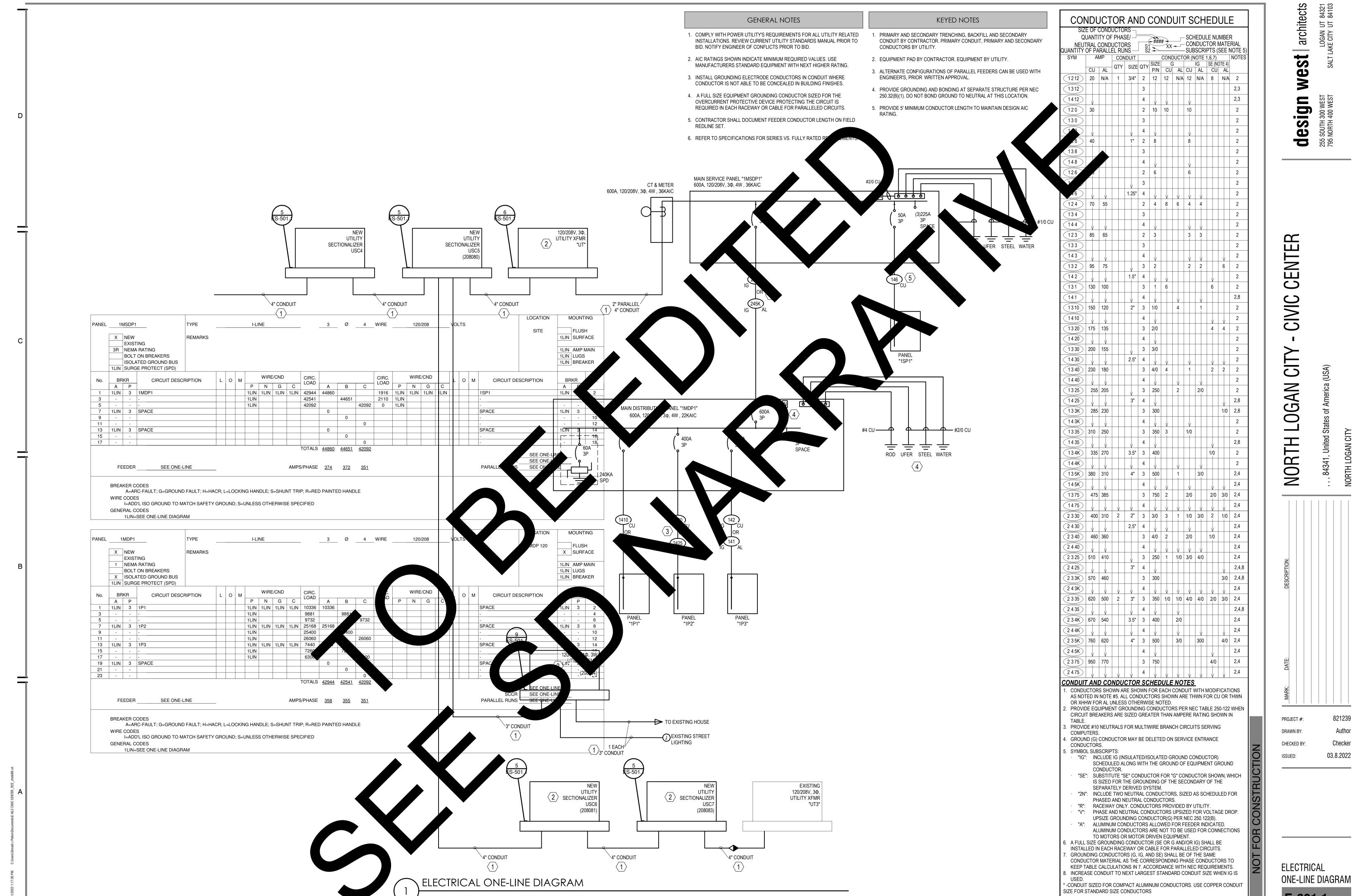


design west architects
255 SOUTH 300 WEST SALT LAKE CITY UT 84103

CIVIC CENTER

821239 PROJECT #: DRAWN BY: Checker 03.8.2022 ISSUED:

ELECTRONIC SYSTEMS **ELEVATIONS &**



E-601.1

© COPYRIGHT DESIGN WEST ARCHITECTS 2022

architects ゖゖ 6 S

ш G

LIGHTING SCHEDULE E-602.1

03.8.2022