VICINITY MAP

N

7 BREW COFFEE

LEE'S SUMMIT, MO

22033 7BLS PERMIT SET APRIL 22, 2022

SHEET INDEX

BUILDING SUPPLIER

CMC CREATIVE MODULAR CONSTRUCTION

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BUILDING CODE INFORMATION

AUTHORITY HAVING JURISDICTION:	CITY OF LEE'S SUMMIT
APPLICABLE BUILDING CODES:	2018 IBC, 2017 NEC, 2010 ADA, 2018 INTERNATIONAL FIRE CODE
CURRENT ZONING:	CP-2, PLANNED COMMUNITY COMMERCIAL
USE GROUPS:	B, BUSINESS
CONSTRUCTION TYPE:	V-B
BUILDING LIMITATIONS:	ALLOWABLE HEIGHT: 2 STORIES, 40' (BASED ON B USE GROUP, IBC 2018, 504.3) ACTUAL HEIGHT: 2 STORIES, 19'-8" ALLOWABLE AREA: 9,000 S.F. (BASED ON B USE GROUP, IBC 2018, 506.2) ACTUAL AREAS: 723 S.F. TOTAL (SERVING AREA - 468 S.F., MECHANICAL ACCESS - 131 S.F., COOLER - 124 S.F.)
OTHER CODE ITEMS:	SEE EGRESS PLAN FOR ADDITIONAL ITEMS

PROJECT DESCRIPTION

PREFABRICATED FREESTANDING BUILDING WITH ACCOMPANYING WALK-IN COOLER DELIVERS COFFEE, TEA, AND ENERGY DRINKS TO CUSTOMERS VIA DRIVE-THROUGH LANES. NO INTERIOR OR EXTERIOR DINING COMPONENT IS PROVIDED; THE INTERIOR IS ONLY OCCUPIED BY STAFF. DRINK ITEMS ARE THE ONLY ITEMS OFFERED ON THE MENU.

GENERAL NOTES

ALL CONSTRUCTION SHALL FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5831. WHERE DISCREPANCIES EXIST BETWEEN THESE PLANS AND THE DESIGN AND CONSTRUCTION MANUAL, THE DESIGN AND CONSTRUCTION MANUAL SHALL PREVAIL

THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.

CONSULTANTS

CIVIL ENGINEER:

KAW VALLEY ENGINEERING
8040 NORTH OAK TRAFICWAY
KANSAS CITY, MO 64118
(816) 468-5858

STRUCTURAL ENGINEER:

J&M ENGINEERING
3045 S. KANSAS EXPY.
SPRINGFIELD, MO 65807
PHONE: 417.708.9315
www.jandmstructural.com

MECHANICAL, ELECTRICAL, PLUMBING ENGINEER:

CJD
Engineering | Energy | Innovation
2225 WEST CHESTERFIELD BOULEVARD, SUITE 200
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TORGERSON DESIGN PARTNERS
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ARCHITECTURAL CORPORATION MISSOURI LICENSE NUMBER: A-2010011427

CMC CREATIVE MODULAR CONSTRUCTION

7 BREW COFFEE
LEE'S SUMMIT, MO
1430 NE DOUGLAS ST.
LEE'S SUMMIT, MO 64086

STATE OF MISSOURI
ADAM JOSEPH KREHER
NUMBER A-2011002764
ARCHITECT
06/17/2022

ARCHITECT OF RECORD:
NAME: ADAM KREHER
LICENSE NO. 2011002764

PROJECT NUMBER:
22033 7BLS

REVISION: 1 ADD 001 6/17/22

G0.0
COVER SHEET

DATE: APRIL 22, 2022

EQUIPMENT AND FIXTURE SCHEDULE

ITEM NO.	QTY.	MANUFACTURER	PRODUCT	PRODUCT NO.	SIZE	NOTES
EQ-1	1	NOLAKE	REMOTE WALK-IN COOLER	KODB77104-C	675 CUBIC SF	
EQ-2	1	BUNN WATER HEATER	HOT WATER MACHINE	H5X - ELEMENT		
EQ-3	2	LA MARZOCCO	ESPRESSO MACHINE	LINEA PB (AV) - 3		
EQ-4	1	LA MARZOCCO	ESPRESSO MACHINE	LINEA PB (AV) - 4		
EQ-5	2	MANITOWOC	ICE MAKER HEADS	IYF 1800 C		REMOTE CONDENSOR - IF 1800C
EQ-6	1	MANITOWOC	ICE MAKER BIN	LB 1760	60"	
EQ-7	27	TORRANI	SYRUP RACK			
EQ-8	3	VITAMIX	BLENDER			
EQ-9	4	EAGLE GROUP	STAINLESS STEEL STORAGE SHELVING	(1) SS 1872 - PZB6S (2) SS 1424 - PZB6S (3) SS 1436 - PZB6S (4) SS 1436 - PZB6S		
EQ-10	2	SPACEMAN	CHILLER MACHINE	6695-C 1		
EQ-11	3	MAZZER	COFFEE BEAN GRINDER	ROBUR S NERO		
EQ-12	1	MAZZER	DECAF COFFEE BEAN GRINDER	SUPER JOLLY PRO V (E) NERO		
EQ-13	1	RUBBERMAID	TRASH CONTAINER			
EQ-14	1	ATOSA	REACH-IN COOLER	MCF8723GR		
EQ-15	3	LA CROSSR	MOBILE ICE BINS	513034 CL-24ICCCAB-31		
EQ-16	1	CONTINENTAL	UNERCOUNTER COOLER	SW36NGD-U		
EQ-17	3	STRONGWAY	AIR CURTAIN	49947		
EQ-18	3		RAPID RINSER			

EQUIPMENT SCHEDULE NOTES:

a. ALL EQUIPMENT TO BE INSTALLED BY A LICENSED INSTALLER AND THE MANUFACTURERS SPECIFICATIONS.

GENERAL SCHEDULE NOTES:

THE ITEMS IDENTIFIED ON THE FINISH MATERIALS SCHEDULE, EQUIPMENT AND FIXTURE SCHEDULES HAVE BEEN SELECTED AND APPROVED FOR THE USE ON 7 BREW COFFEE PROJECTS AS "STANDARDS". ITEMS SPECIFIED MAY OR MAY NOT ACTUALLY APPEAR ON THE DRAWINGS. THE DESCRIPTIONS ARE TO IDENTIFY THE PRODUCTS AND NOT TO DETERMINE THE INCLUSION OR USE OF ANY PARTICULAR ITEM.

FINISH MATERIALS SCHEDULE

SYMBOL	ITEM	DESCRIPTION	REMARKS
FRP-1	MEG-WALLS	WHITE	MEG PANELS
MP-1	METAL SIDING	CUSTOM COLOR: ZINC GRAY FINISH: SMOOTH	EXTERIOR SIDING
MP-2	BRAKE METAL	COLOR: SLATE BLUE FINISH: SMOOTH	METAL ROOF, COPING AND CANOPY COLUMNS
MP-3	BRAKE METAL	COLOR: MATTE BLACK FINISH: SMOOTH	METAL SOFFIT AND COPING
MP-4	BRAKE METAL	COLOR: ZINC GRAY FINISH: SMOOTH	METAL COPING AT SIDE WALLS
MP-5	BRAKE METAL	COLOR: COLONIAL RED FINISH: SMOOTH	METAL COPING
PL-1	DECORATIVE PANEL	NICHIHA MODERNBRICK COLOR: MIDNIGHT FIBER CEMENT PANEL	EXTERIOR FINISH
PL-2	DECORATIVE PANEL	NICHIHA CANYONBRICK COLOR: SHALE BROWN FIBER CEMENT PANEL	EXTERIOR FINISH
WC-1	DECORATIVE WALL COVERING	CUSTOM VINYL WALL COVERING	COOLER WALLS
VT-1	RESILIENT VINYL FLOORING	PROTECT-ALL FLOORING COLOR: LIGHT GRAY	SERVICE AREA AND TOILET
VB-1	RESILIENT VINYL BASE	PROTECT-ALL BASE COLOR: LIGHT GRAY	SERVICE AREA AND TOILET

FINISH MATERIALS SCHEDULE NOTES:

a. PROVIDED BY 7 BREW AND INSTALLED BY GENERAL CONTRACTOR.

b. ALL MATERIALS AND WORK PROVIDED AND INSTALLED BY GENERAL CONTRACTOR.

c. PROVIDE A MINIUM OF TWO (2) COATS PAINT OVER ONE (1) COAT PRIMER ON ALL EXPOSED GYP BD IN SERVICE AREA AND TOILET

d. CEILING AND WALL TO BE SATIN FINISH. DOORS AND DOOR FRAMES TO BE SEMI-GLOSS.

GENERAL CONSTRUCTION PROCEDURES

1. ALL CONSTRUCTION SHALL BE EXECUTED IN STRICT COMPLIANCE WITH ALL LOCAL CODES AND ORDINANCES. GENERAL CONTRACTOR SHALL COMPLY WITH ALL CONSTRUCTION REGULATIONS AND PROCEDURES ESTABLISHED BY THE LANDLORD.
2. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING APPLICATION FOR AND PROCURING ALL PERMITS AND CERTIFICATES AS MIGHT BE REQUIRED BY GOVERNING AGENCIES AND SHALL BEAR THE COST FOR SUCH PERMITS AND CERTIFICATES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS OF THE SITE.
3. EVERY EFFORT HAS BEEN MADE TO ASSURE ACCURATE CONSTRUCTION DOCUMENTS, BUT IF A CONFLICT EXISTS THE GENERAL CONTRACTOR SHALL CONTACT THE ARCHITECT IMMEDIATELY FOR CLARIFICATION. THESE DOCUMENTS INDICATE THE DESIGN INTENT AND IF EXISTING CONDITIONS ARE IN CONFLICT THE GENERAL CONTRACTOR SHALL CONTACT THE ARCHITECT IMMEDIATELY FOR CLARIFICATION.
4. THE GENERAL CONTRACTOR SHALL MAINTAIN DIRECT SUPERVISION OVER ALL SUBCONTRACTORS AND SHARE RESPONSIBILITY FOR THEIR PERFORMANCE AND QUALITY OF WORK. A LIST OF ALL SUBCONTRACTORS SHALL BE PROVIDED TO THE OWNER AND THE ARCHITECT. A COPY OF THIS LIST SHALL BE POSTED ON THE JOB SITE.
5. ALL SIGNAGE AND MOUNTING DEVICES SHALL BE PROVIDED, AND ALL SIGNAGE APPOVALS OBTAINED, BY OWNERS SIGN CONTRACTOR. GENERAL CONTRACTOR SHALL PROVIDE ELECTRICAL POWER AS REQUIRED AND INSURE SUFFICIENT SPACE AND CLEARANCE IS PROVIDED FOR PROPER INSTALLATION. SIGNAGE CONTRACTOR SHALL APPLY FOR AND SECURE ALL APPROVALS REQUIRED BY ALL LOCAL GOVERNING AGENCIES AND SUPPLY ANY DRAWINGS OR GRAPHIC REPRESENTATIONS REQUIRED BY LANDLORD.
6. ALL CONCEALED WOOD BLOCKING USED IN CONSTRUCTION SHALL BE FIRE-RETARDENT TREATED (IF APPLICABLE).
7. GENERAL CONTRACTOR SHALL PERFORM AND/OR CAUSE TO BE PERFORMED ALL WORK IN A FIRST-CLASS WORKMANLIKE MANNER AND IN ACCORDANCE WITH EACH TRADE'S ESTABLISHED PROCEDURES AND MANUFACTURER'S RECOMMENDATIONS FOR PRODUCT USE AND INSTALLATION.
8. ALL PRODUCTS USED ON THIS PROJECT SHALL BE FIRST QUALITY, NEW AND FREE OF ASBESTOS OR OTHER ENVIRONMENTALLY UNSAFE SUBSTANCES.
9. MILLWORK, BASE, DESIGNATED TRIM, ETC. SHALL BE PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR WHERE INDICATED ON THE DRAWINGS AND/OR SCHEDULES.
10. GENERAL CONTRACTOR SHALL CONTACT ARCHITECT PRIOR TO CONSTRUCTION START DATE TO CONFIRM THAT HE/SHE HAS LATEST APPROVED CONSTRUCTION DOCUMENTS FOR THIS LOCATION.

SUSTAINABILITY GUIDELINES

THE FOLLOWING GUIDELINES TO BE USED BY GENERAL CONTRACDTOR ARE VOLUNTARY IN NATURE. IT IS HIGHLY RECOMMENDED THAT THE GENERAL CONTRACTOR FOLLOW THESE GUIDELINES TO THE EXTENT IT IS FEASIBLE..

1. IMPROVE INDOOR AIR QUALITY:
   - A. REDUCE CONSTRUCTION DUST AND AIR PARTICULATES WITH DUST CONTAINMENT SYSTEMS AND/OR SHUT OFF CIRCULATING AIR.
   - B. CHANGE HVAC FILTERS AT THE CONCLUSION OF THE JOB.
   - C. USE LOW V.O.C. PAINTS, ADHESIVES, SEALANTS, ETC

PREFABRICATED BUILDING

THIS BUILDING IS BEING FABRICATED IN A CONTROLLED ENVIRONMENT AND TRANSFERRED TO THE JOB SITE. CJD ENGINEERING GROUP HAS BEEN ENGAGED TO CONDUCT 3rd PARTY INSPECTIONS OF ALL FABRICATION WITHIN THE 7 BREW COFFEE WAREHOUSE. THE INSPECTION WILL INCLUDE STRUCTURAL, FRAMING, BUILDING, PLUMBING AND ELECTRICAL.

TYPICAL SYMBOL LEGEND

DETAIL DESIGNATION	DETAIL NUMBER, SHEET NUMBER 12/A3.4	ELEVATION HEIGHT	T.O. WALL 106'-0"
ROOM TAG	SQUARE FOOTAGE, ROOM NAME 101, ROOM NUMBER, 150 SF	ELEVATION TAG	1 A1.1
DOOR TAG	101	CEILING HEIGHT	0'-0"
SECTION CUT TAG	1 101	WINDOW TAG	W1
ROOF SLOPE	12 2	REVISION DELTA	1
WALL TYPE/ PARTITION TYPE	W1	GRID BUBBLE	0
WALL PARTITION		ENLARGED DETAIL	1 101
EXISTING WALL		FINISH TAG	PT-1

MATERIAL INDICATION

CONCRETE		FINISHED WOOD	
DIMENSIONAL LUMBER		GYPSUM BOARD	
RIGID INSULATION		PLYWOOD	
BATT OR BLOWN INSULATION		GLASS	
EARTH/BACKFILL		CMU	

ABBREVIATIONS

ACCOUST.	ACOUSTICAL	FR	FIRE RETARDANT	RCP	REINFORCED CONCRETE PIPE
ADD'	ADDITIONAL	FRM	FRAME	RE	REFER
A.F.F.	ABOVE FINISH FLOOR	FURN	FURNISHED	R.H.B.	RIGHT HAND BEVEL
AF	AS FURNISHED	F.R.T.	FIRE RETARDANT TREATED	R.H.R.B.	RIGHT HAND REVERSE BEVEL
AI	AS INSTALLED	FTG	FOOTING	RL	RAIN LEADER
ALT.	ALTERNATE	FUR	FURRING	RM	ROOM
ALUM.	ALUMINUM	GA.	GAUGE	R.O.	ROUGH OPENING
ANCH.	ANCHOR	GAL	GALLON	RES.	RESILIENT TILE
ARCH.	ARCHITECT	GALV	GALVANIZED	REQ'D	REQUIRED
@	AT	GC	GENERAL CONTRACTOR	REQM'T	REQUIREMENT
B.B	BOTTOM OF BEAM	G.I.	GALVANIZED IRON	R.T.V.	ROTARY-TURBINE VENT
B.F.	BOTTOM OF FOOTING	GLAZ.	GLAZING	REG	REGULAR
BD	BOARD	GOV'T	GOVERNMENT	SAF	SAFETY
BKT.	BRACKET	G.S.	GRAVEL STOP	SAN	SANITARY
BLDG.	BUILDING	GEN	GENERAL	SCHED	SCHEDULE
BLK'G	BLOCKING	GYP	GYPSUM	S.C.	SOLID CORE
BM	BENCH MARK	HDWR	HARDWARE	SECT	SECTION
B.O.	BOTTOM OF	H.C.	HOLLOW CORE	SHT	SHEET
BRG	BEARING	HOL	HOLLOW	SIM	SIMILAR
BSMT	BASEMENT	HORIZ	HORIZONTAL	SPEC	SPECIFICATION
C.S.	COUNTERSUNK	H	HIGH	STND	STANDARD
CAB.	CABINET	HT.	HEIGHT	STD	STUD
C.C	CENTER-TO-CENTER	HTG.	HEATING	STL	STEEL
CEM.	CEMENT	HTR	HEATER	STOR	STORAGE
CF	CONTRACTOR FURNISHED	H.W.	HOT WATER	STRUCT	STRUCTURE / STRUCTURAL
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED	I.D.	INSIDE DIAMETER	SURF	SURFACE
		INSUL	INSULATION	SUSP	SUSPENDED
CI	CONTRACTOR INSTALLED	INT.	INTERIOR	SYST	SYSTEM
CLG	CEILING	INV	INVERT	S.W.	STORM WATER
C.O.	CLEAN OUT	JNT	JOINT	TYP.	TYPICAL
COL	COLUMN	JSTS	JOISTS	T.O.	TOP OF
CONC	CONCRETE	K.E.S.	KITCHEN EQUIPMENT SUPPLIER	U.N.O	UNLESS NOTED OTHERWISE
CONF	CONFERENCE	LAM	LAMINATE	VCP	VITRIFIED-CLAY-PIPE
CONN	CONNECTION	LAV	LAVATORY	VEST	VESTIBULE
CONST'R	CONSTRUCTION	LG	LONG	VERT	VERTICAL
CONT	CONTINUOUS	L.H.B.	LEFT HAND BEVEL	VOL	VOLUME
CONT'R	CONTRACTOR	L.H.R.B.	LEFT HAND REVERSE BEVEL	V.T.R.	VENT-THRU-ROOF
COORD	COORDINATE	LIN	LINEAR / LINEAL	VCT	VINYL COMPOSITION TILE
CORR	CORRUGATED/ CORRIDOR	LVR	LOUVER	W	WIDE
CTR	CENTER	MAS	MASONRY	W/	WITH
CYL	CYLINDER	MATL	MATERIAL	WD	WOOD
℄	CENTERLINE	MAX	MAXIMUM	W.D.	WINDOW DIMENSION
C.W.	COLD WATER	MEZZ	MEZZANINE	WDW	WINDOW
DP	DEEP	MFRD	MANUFACTURED	WRB	WEATHER RESISTANT BARRIER
DBL	DOUBLE	MFR	MANUFACTURER	WWF	WELDED WIRE FABRIC
DEG	DEGREE	MID	MIDDLE	W.P.	WEATHER PROOF
D.F.	DRINKING FOUNTAIN	MIN	MINIMUM	WT	WEIGHT
DEMO	DEMOLITION	MISC	MISCELLANEOUS		
DIA ∅	DIAMETER	MK	MARK		
DIAG	DIAGONAL	M.O.	MASONRY OPENING		
DIM	DIMENSION	MTD	MOUNTED		
D.O.	DO-OVER	MTL	METAL		
DTL	DETAIL	MULL	MULLION		
DR	DOOR	NOM	NOMINAL		
D.S.	DOWNSPOUT	NTS	NOT TO SCALE		
EA.	EACH	O.A.	OVERALL		
ELEC	ELECTRICAL	O.C.	ON CENTER		
ELEV	ELEVATION (VIEW)	OD	OUTSIDE DIAMETER		
ELEV	ELEVATOR	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED		
E.W.C.	ELECTRIC WATER COOLER	OFOI	OWNER FURNISHED OWNER INSTALLED		
EQUIP.	EQUIPMENT	O/H	OVERHEAD		
EXIST'G	EXISTING	O/	OVER		
EXP	EXPOSED	OPN'G	OPENING		
EXT	EXTERIOR / EXTENSION	OPP	OPPOSITE		
F.B.O.	FURNISHED BY OTHERS	PART	PARTITION		
F.D.	FLOOR DRAIN	P.E.M.B.	PRE-ENGINEERED METAL BUILDING		
F.E.	FIRE EXTINGUISHER	PERIM	PERIMETER		
F.E.C.	FIRE EXTINGUISHER CABINET	P.G.	PRESENT GRADE		
F.E.B.	FIRE EXTINGUISHER BRACKET	PLAM	PLASTIC LAMINATE		
FIN	FINISH	PLAS	PLASTIC		
F.G.	FINISH GRADE	PL	PROPERTY LINE		
F.L.	FLOW LINE	PLUMB'G	PLUMBING		
FLASH'G	FLASHING	PLY	PLYWOOD		
FLR	FLOOR	P.P.	POWERPOLE		
F.O.M	FACE OF MASONRY	PR	PAIR		
FND	FOUNDATION	PVC	POLYVINYL CHLORIDE		
		Q.T.	QUARRY TILE		
		R	RADIUS		

TORGERSON DESIGN PARTNERS
ARCHITECTURE / REAL ESTATE / DEVELOPMENT
116 NORTH 2ND AVENUE · OZARK, MO 65721 · P (417) 581-8889 · F (417) 581-9002
ARCHITECTURAL CORPORATION MISSOURI LICENSE NUMBER: A-2010011427

7 BREW COFFEE
LEE'S SUMMIT, MO

1430 NE DOUGLAS ST.
LEE'S SUMMIT, MO 64086

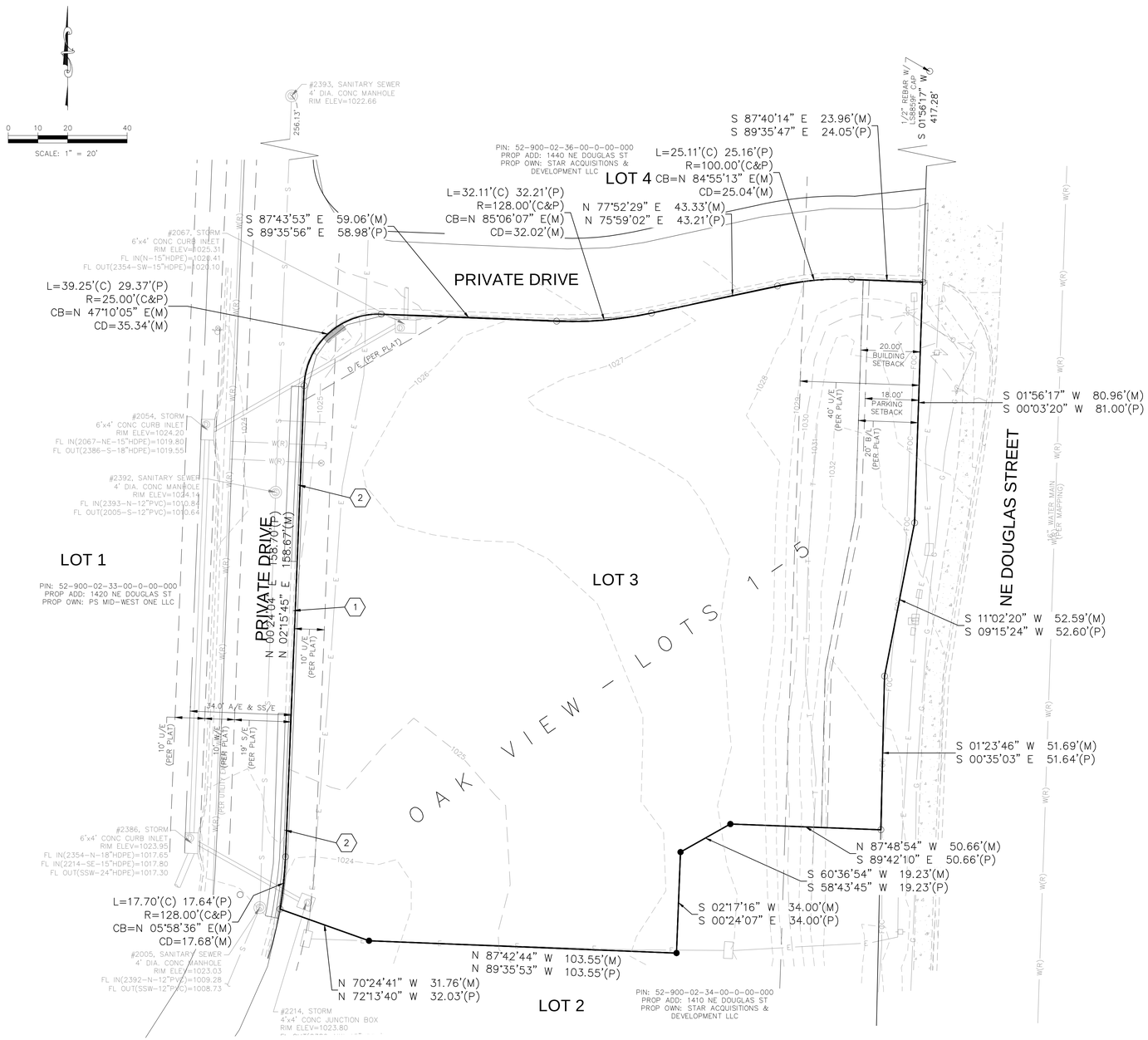
STATE OF MISSOURI · ADAM JOSEPH KREHER · NUMBER A-2011002764 · ARCHITECT · 06/30/2022

ARCHITECT OF RECORD:
NAME: ADAM KREHER
LICENSE NO. 2011002764

PROJECT NUMBER:
22033 7BLS

REVISION: 1 ADD 001 6/17/22

G0.1
GENERAL NOTES & SCHEDULES
DATE: APRIL 22, 2022



DEMOLITION NOTES:

1. CONTRACTOR SHALL VERIFY SITE CONDITIONS PRIOR TO BIDDING. CONTRACTOR SHALL REMOVE AS SHOWN, IN ACCORDANCE WITH THE SPECIFICATIONS AND THE CITY AND STATE REGULATIONS.
2. ALL STRUCTURES AND MATERIAL WITHIN DEMOLITION LIMITS TO BE REMOVED AND DISPOSED OF IN CONFORMANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
3. ALL HAZARDOUS ASBESTOS AND OTHER HAZARDOUS MATERIALS MUST BE IDENTIFIED AND REMOVED PRIOR TO ANY BUILDING DEMOLITION, IN STRICT CONFORMANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
4. DRIVES, PAVING AND OTHER STRUCTURES ON STREET OR HIGHWAY RIGHT-OF-WAY SHALL BE REMOVED AS NECESSARY TO CONSTRUCT IMPROVEMENTS SHOWN ON THESE PLANS. REMOVAL AND DISPOSAL SHALL BE IN CONFORMANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
5. ALL PAVING WITHIN PROPERTY TO BE REMOVED AND DISPOSED OF IN CONFORMANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

FLOOD STATEMENT:

THE ACCURACY OF ANY FLOOD HAZARD DATA SHOWN HEREON IS SUBJECT TO MAP SCALE UNCERTAINTY AND TO ANY OTHER UNCERTAINTY IN LOCATION OR ELEVATION ON THE REFERENCED FLOOD INSURANCE RATE MAP. THE SURVEYED PROPERTY LIES WITHIN FLOOD HAZARD ZONE "X, NON-SHADED" AS SAID PROPERTY PLOTS BY SCALE ON THE FLOOD INSURANCE RATE MAP CITY OF LEE'S SUMMIT, COMMUNITY PANEL NO. 29095C0409G, EFFECTIVE ON 01/20/2017.

DATUM BENCHMARK:

DATUM IS U.S. SURVEY FEET AND REFERS TO NAVD88 DATUM DERIVED FROM CONNECTIONS TO NATIONAL CORS NETWORK VIA GPS STATIC SESSIONS ON PROJECT CONTROL PROCESSED WITH THE NATIONAL GEODETIC SURVEY'S OPUS PROJECTS UTILITY. ORTHOMETRIC HEIGHT WAS CALCULATED USING THE GEOID12B MODEL.

BENCHMARKS:

JA-43: 3" ALUM DISK STAMPED JA-43 ON THE WEST SIDE OF DOUGLAS AND 44'± SOUTH OF THE S.E. BOUNDARY CORNER OF THE SURVEY. ELEV= 1034.77

BS#60: FOUND "SQUARE" CUT ON THE BACK OF CURB ON THE SOUTH SIDE OF A PRIVATE DRIVE ON THE NORTH SIDE OF LOT 3 AND LOCATED NEAR THE NORTHEAST BOUNDARY CORNER, MARKED BY OTHERS 1028.00. ELEV= 1028.03

UTILITY STATEMENT:

THE UNDERGROUND UTILITIES SHOWN HEREON ARE FROM FIELD SURVEY INFORMATION OF ONE-CALL LOCATED UTILITIES, FIELD SURVEY INFORMATION OF ABOVE GROUND OBSERVABLE EVIDENCE, AND/OR THE SCALING AND PLOTTING OF EXISTING UTILITY MAPS AND DRAWINGS AVAILABLE TO THE SURVEYOR AT THE TIME OF SURVEY. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHERMORE, THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES BY EXCAVATION UNLESS OTHERWISE NOTED ON THIS SURVEY.

SAFETY NOTICE TO CONTRACTOR:

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

WARRANTY / DISCLAIMER:

THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER KAW VALLEY ENGINEERING, INC NOR ITS PERSONNEL CAN OR DO WARRANTY THESE DESIGNS OR PLANS AS CONSTRUCTED, EXCEPT IN THE SPECIFIC CASES WHERE KAW VALLEY ENGINEERING PERSONNEL INSPECT AND CONTROL THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.

CAUTION – NOTICE TO CONTRACTOR:

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.

REV	DATE	DESCRIPTION	DSN	DWN	CHK
3	06/22/22	PER CITY COMMENTS	MTA	JNG	MTA
2	05/06/22	PER OWNER COMMENTS	MTA	JNG	
1	04/08/22	CHECK SET	MTA	JNG	
0	03/02/22	INITIAL ISSUE	ARM	JNG	

MARTIN T. ARLING
ENGINEER
MO # 2009002955

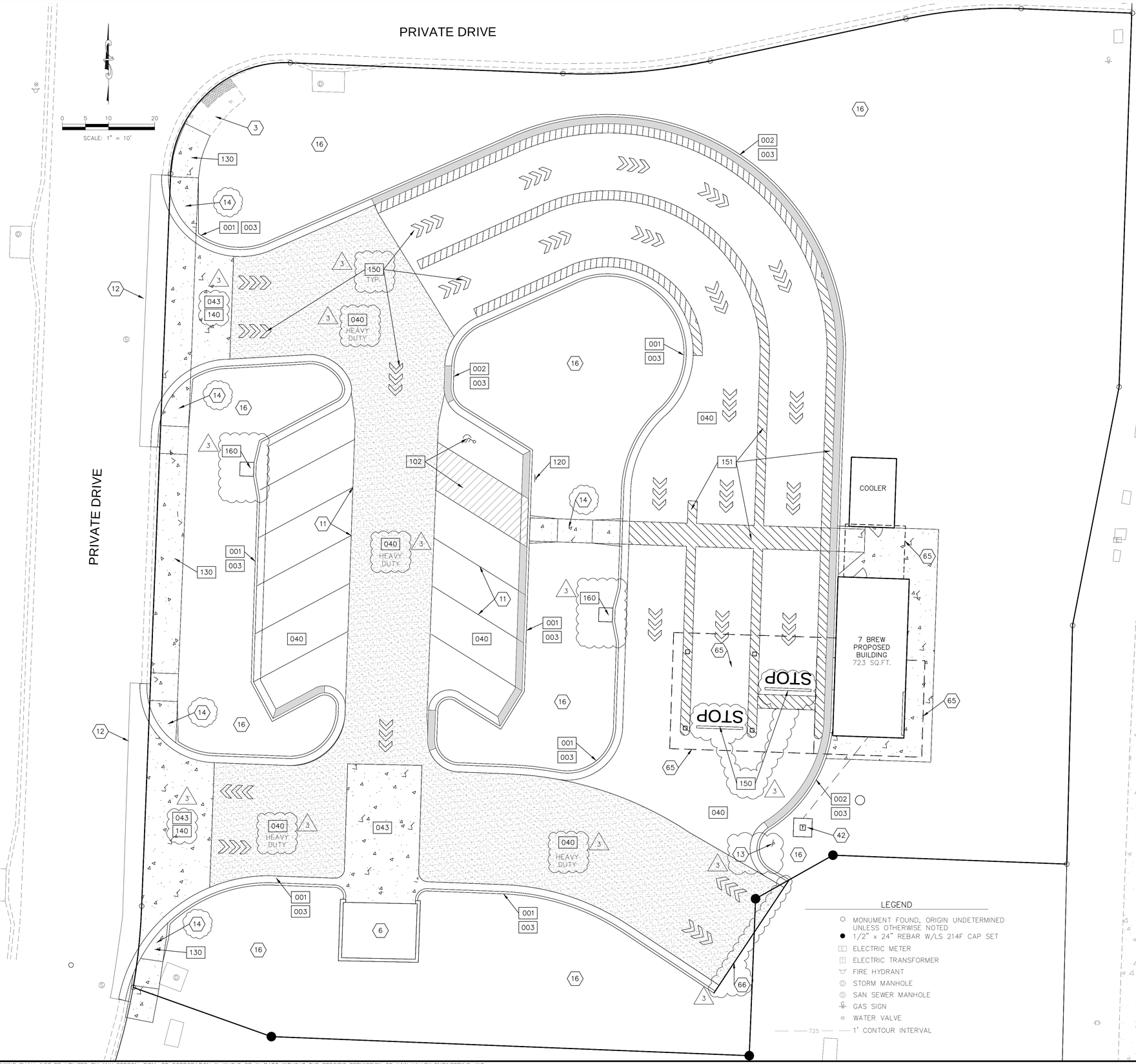
KAW VALLEY ENGINEERING
8040 N. OAK TRAFFICWAY
KANSAS CITY, MISSOURI 64118
PH. (816) 468-5858 | FAX (816) 468-6651
kcb@kaveng.com | www.kaveng.com

KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY MISSOURI STATE CERTIFICATE OF AUTHORITY # 2008042. EXPIRES 12/31/23

7 BREW
1410 N.E. DOUGLAS STREET
LEE'S SUMMIT, MO. 64086

CONSTRUCTION PLANS
EXISTING SITE CONDITIONS / DEMOLITION PLAN

PROJ. NO.	
B21D4397	
DESIGNER	DRAWN BY
MTA	JNG
CFN	
4397DEMO	
SHEET	REV
C100	3



DETAILS – SEE DETAIL SHEET FOR THE FOLLOWING DETAILS

001	"STANDARD" CURB & GUTTER
002	"DRY" CURB & GUTTER
003	CURB BASE
040	REGULAR DUTY ASPHALT PAVEMENT
043	HEAVY DUTY P.C. CONCRETE PAVEMENT
102	ADA ACCESSIBLE SPACE STRIPING
120	ACCESSIBLE PARKING SIGN
130	CONCRETE SIDEWALK
140	COMMERCIAL DRIVEWAY ENTRANCE
150	PAVEMENT MARKINGS (WHITE ON ASPHALT & BLUE ON CONCRETE)
151	BLUE PAVEMENT MARKING
160	CURB INLET

NOTES:

3. EXISTING ADA RAMPS AND LANDING
6. TRASH ENCLOSURE (SEE ARCH. PLANS)
11. WHITE PARKING LOT STRIPING (SHERWIN–WILLIAMS 2160 LEAD–FREE OR APPROVED EQUAL)
12. SAW CUT EXISTING PAVEMENT & MATCH EXISTING CROSS–SLOPE
13. INSTALL "NO LEFT TURN" SIGN (MUTCD R3–2)
14. SIDEWALK RAMP (SEE GRADING PLAN C401
16. LANDSCAPE AREA
42. PROPOSED TRANSFORMER
65. CANOPY (SEE ARCH. PLANS)
66. INSTALL TEMPORARY ASPHALT CURB

NOTE:
1. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRANCE, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
2. THESE PLANS HAVE NOT BEEN VERIFIED WITH FINAL ARCHITECTURAL CONTRACT DRAWINGS. CONTRACTOR SHALL VERIFY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES. CONTRACTOR IS FULLY RESPONSIBLE FOR REVIEW AND COORDINATION OF ALL DRAWINGS AND CONTRACTOR DOCUMENTS.

CONSTRUCTION NOTES:

1. COORDINATE START–UP AND ALL CONSTRUCTION ACTIVITIES WITH OWNER.
2. ALL CONSTRUCTION SHALL FOLLOW THE LEE's SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
3. ALL CONSTRUCTION WORK AND UTILITY WORK OUTSIDE OF PROPERTY BOUNDARIES SHALL BE PERFORMED IN COOPERATION, AND IN ACCORDANCE WITH, REGULATIONS OF THE AUTHORITIES CONCERNED.
4. PUBLIC CONVENIENCE AND SAFETY: THE CONTRACTOR SHALL CONDUCT THE WORK IN A MANNER THAT WILL ENSURE, AS FAR AS PRACTICABLE, THE LEAST OBSTRUCTION TO TRAFFIC, AND SHALL PROVIDE FOR THE CONVENIENCE AND SAFETY OF THE GENERAL PUBLIC AND RESIDENTS ALONG, AND ADJACENT TO, HIGHWAYS IN THE CONSTRUCTION AREA.
5. ALL DIMENSIONS SHOWN ARE TO THE BACK OF CURB UNLESS OTHERWISE NOTED.
6. ACCESSIBLE STALLS SHOWN WITH A "V" SHALL BE 16'–0" MIN. AND SHALL HAVE A SIGN DESIGNATING "VAN–ACCESSIBLE". SEE DETAIL 102 AND 120.
7. CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL. ALL TRAFFIC CONTROL DEVICES, INSTALLATION, AND OPERATIONS, SHALL CONFORM WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
8. THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE–CONSTRUCTION MEETING WITH AN INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969–1200.

REV	DATE	DESCRIPTION	DSN	DWN	CHK
3	06/22/22	PER CITY COMMENTS	MTA	JNG	
2	05/06/22	PER OWNER COMMENTS	MTA	JNG	
1	04/08/22	CHECK SET	MTA	JNG	
0	03/02/22	INITIAL ISSUE	ARM	JNG	MTA

STATE OF MISSOURI
MARTIN T. ARLING
NUMBER PE-2009002955
PROFESSIONAL ENGINEER
04/07/23

MARTIN T. ARLING
ENGINEER
MO # 2009002955

KAW VALLEY ENGINEERING
8040 N. OAK TRAFFICWAY
KANSAS CITY, MISSOURI 64118
PH. (816) 468-5858 | FAX (816) 468-6651
kc@kaveng.com | www.kaveng.com

KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN MISSOURI BY THE MISSOURI STATE CERTIFICATE OF AUTHORITY # 2008242. EXPIRES 12/31/23

7 BREW
1410 N.E. DOUGLAS STREET
LEE'S SUMMIT, MO. 64086

CONSTRUCTION PLANS
SITE PLAN

PROJ. NO.	B21D4397
DESIGNER	MTA
DRAWN BY	JNG
CFN	4397SP
SHEET	C200
REV	3

PRIVATE DRIVE

SCALE: 1" = 10'

NOTE:
1. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRANCE, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.

2. THESE PLANS HAVE NOT BEEN VERIFIED WITH FINAL ARCHITECTURAL CONTRACT DRAWINGS. CONTRACTOR SHALL VERIFY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES. CONTRACTOR IS FULLY RESPONSIBLE FOR REVIEW AND COORDINATION OF ALL DRAWINGS AND CONTRACTOR DOCUMENTS.

3. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS NOTED OTHERWISE.

4. ALL DIMENSIONS ARE PERPENDICULAR TO PROPERTY LINE.

THE COORDINATES PROVIDED IN THESE PLANS ARE FOR INFORMATION AND CHECKING PURPOSES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALCULATE CONSTRUCTION STAKING COORDINATES ACCORDING TO THE DIMENSIONS SHOWN ON THESE PLANS. CONTRACTOR SHALL VERIFY THE ACCURACY OF THE COORDINATES SHOWN IN THE TABLE HEREON BEFORE CONSTRUCTION.

NE DOUGLAS STREET

7 BREW
PROPOSED
BUILDING
723 SQ.FT.

COOLER

STOP

STOP

LEGEND
- MONUMENT FOUND, ORIGIN UNDETERMINED UNLESS OTHERWISE NOTED
- 1/2" x 24" REBAR W/LS 214F CAP SET
- ELECTRIC METER
- ELECTRIC TRANSFORMER
- FIRE HYDRANT
- STORM MANHOLE
- SAN SEWER MANHOLE
- GAS SIGN
- WATER VALVE

COORDINATE TABLE				COORDINATE TABLE			
	NORTHING	EASTING	DESCRIPTION		NORTHING	EASTING	DESCRIPTION
1	1008966.45	2823007.09	PL	61	1009031.62	2823025.07	RP
2	1008955.80	2823037.01	PL	62	1009016.49	2823040.61	BC
3	1008951.67	2823140.48	PL	63	1009026.11	2823050.98	BC
4	1008985.64	2823141.83	PL	64	1009027.11	2823051.02	BC
5	1008995.08	2823158.59	PL	65	1009029.42	2823047.35	BC
6	1008993.15	2823209.21	PL	66	1009027.21	2823048.53	RP
7	1009044.83	2823210.47	PL	67	1009023.99	2823037.17	BC
8	1009096.44	2823220.54	PL	68	1009032.49	2823032.63	BC
9	1009177.36	2823223.28	PL	69	1009084.84	2823034.40	BC
10	1009178.30	2823199.35	PL	70	1009093.71	2823051.03	BC
11	1009176.11	2823174.40	PL	71	1009096.90	2823052.15	BC
12	1009167.01	2823132.03	PL	72	1009095.91	2823049.85	RP
13	1009164.28	2823100.12	PL	73	1009093.93	2823045.26	RP
14	1009166.62	2823041.11	PL	74	1009101.42	2823044.84	BC
15	1009142.59	2823015.20	PL	75	1009100.42	2823027.16	BC
16	1008984.04	2823008.93	PL	76	1009109.72	2823082.46	BC
17	1008959.98	2823005.41	SW	77	1009100.93	2823076.56	BC
18	1008958.84	2823011.30	SW	78	1009096.47	2823076.41	BC
19	1008966.09	2823012.66	SW	79	1009092.06	2823078.76	BC
20	1008971.96	2823014.03	SW	80	1009096.30	2823081.41	RP
21	1008980.19	2823015.08	SW	81	1009082.84	2823093.55	BC
22	1008988.58	2823037.71	BC	82	1009068.58	2823093.07	SW
23	1008988.09	2823050.70	BC	83	1009067.88	2823099.04	SW
24	1008986.02	2823052.63	BC	84	1009067.63	2823106.58	SW
25	1008985.53	2823052.62	BC	85	1009067.89	2823112.60	SW
26	1008986.09	2823050.63	RP	86	1009061.97	2823112.40	SW
27	1008985.33	2823070.69	RP	87	1009062.63	2823106.42	SW
28	1008985.20	2823068.69	BC	88	1009062.89	2823098.88	SW
29	1008985.37	2823068.69	BC	89	1009062.59	2823092.86	SW
30	1008987.33	2823070.77	BC	90	1009030.49	2823091.78	BC
31	1008986.70	2823087.29	BC	91	1009022.31	2823086.68	BC
32	1008978.37	2823113.06	BC	92	1009028.43	2823076.86	BC
33	1008965.24	2823132.83	BC	93	1009026.40	2823073.04	BC
34	1008989.75	2823149.13	BC	94	1009026.31	2823075.54	RP
35	1008992.15	2823145.10	BC	95	1009020.25	2823072.83	BC
36	1009000.58	2823144.84	BC	96	1009015.09	2823077.64	BC
37	1008996.44	2823147.65		97	1009020.08	2823077.83	RP
38	1009024.86	2823158.67	BC	98	1009014.68	2823088.35	BC
39	1009055.33	2823159.70	BC	99	1009013.48	2823099.30	BC
40	1009055.82	2823159.72	SW	100	1009022.98	2823111.08	BC
41	1009060.63	2823165.38	SW	101	1009023.32	2823101.08	RP
42	1009066.14	2823165.57	SW	102	1009074.10	2823112.81	BC
43	1009066.32	2823160.07	SW	103	1009091.72	2823120.94	BC
44	1009102.16	2823161.28	BC	104	1009103.34	2823126.30	BC
45	1009151.08	2823089.17	BC	105	1009118.96	2823103.06	BC
46	1009127.92	2823036.24	BC	106	1009080.09	2823033.24	BC
47	1009129.67	2823021.21	BC	107	1009077.09	2823033.14	BC
48	1009141.66	2823030.22	RP	108	1009048.58	2823110.94	BC
49	1009141.68	2823021.72	SW	109	1009045.58	2823110.84	BC
50	1009145.27	2823021.69	SW				
51	1009147.47	2823022.34	SW				
52	1009150.80	2823023.76	SW				
53	1009153.47	2823018.38	SW				
54	1009098.15	2823020.03	SW				
55	1009087.78	2823019.60	SW				
56	1009081.80	2823018.84	SW				
57	1009034.34	2823017.01	SW				
58	1009028.33	2823017.17	SW				
59	1009019.65	2823016.84	SW				
60	1009017.10	2823024.75	BC				

COORDINATE TABLE LEGEND

BC = BACK OF CURB
SW = EDGE OF SIDEWALK
RP = RADIUS POINT
PL = PROPERTY LINE

REV	DATE	DESCRIPTION	DSN	DWN	CHK
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2	05/06/22	PER OWNER COMMENTS	MTA	JNG	
1	04/08/22	CHECK SET	MTA	JNG	
0	03/02/22	INITIAL ISSUE	ARM	JNG	

MARTIN T. ARLING
NUMBER
PE-2009002955
PROFESSIONAL ENGINEER
06/22/22

MARTIN T. ARLING
ENGINEER
MO # 2009002955

KAW VALLEY ENGINEERING
8040 N. OAK TRAFFICWAY
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kc@kveng.com | www.kveng.com

KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY THE STATE OF MISSOURI. STATE CERTIFICATE OF AUTHORITY # 2008242. EXPIRES 12/31/23

7 BREW
1410 N.E. DOUGLAS STREET
LEE'S SUMMIT, MO. 64086

CONSTRUCTION PLANS
DIMENSION PLAN

PROJ. NO.	B21D4397
DESIGNER	MTA
DRAWN BY	JNG
CFN	4397DIM
SHEET	C300
REV	3

SCALE: 1" = 10'

SEE SHEET C401

SEE SHEET C401

SEE SHEET C401

SEE SHEET C401

COORDINATE WITH TELEPHONE COMPANY FOR LOWERING OF TELEPHONE LINE

COOLER
FF=1028.00

7 BREW PROPOSED BUILDING
FF=1028.00

STOP

STOP

3 EXTENSIVE REVISIONS TO THIS SHEET

IF DISCREPANCIES EXIST BETWEEN THE GRADING NOTES AND THE RECOMMENDATIONS OUTLINED IN THE PROJECT GEOTECHNICAL REPORT, THE RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT SHALL GOVERN.

NOTE:
1. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRANCE, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
2. THESE PLANS HAVE NOT BEEN VERIFIED WITH FINAL ARCHITECTURAL CONTRACT DRAWINGS. CONTRACTOR SHALL VERIFY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES. CONTRACTOR IS FULLY RESPONSIBLE FOR REVIEW AND COORDINATION OF ALL DRAWINGS AND CONTRACT DOCUMENTS.

THE COORDINATES PROVIDED ON THIS PLAN ARE FOR INFORMATION AND CHECKING PURPOSES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALCULATE CONSTRUCTION STAKING COORDINATES ACCORDING TO THE DIMENSIONS SHOWN ON THESE PLANS. CONTRACTOR SHALL VERIFY THE ACCURACY OF THE COORDINATES SHOWN HEREON BEFORE CONSTRUCTION.

LEGEND

(ME)	MATCH EXISTING
82.92	SPOT ELEVATION (ADD 1000), TOP OF PAVEMENT
83.60 / 83.10	TOP OF CURB (ADD 1000) FLOWLINE OF CURB (ADD 1000)
	FLOW DIRECTION
1000	FINISHED 1' CONTOUR INTERVALS
290	EXISTING 1' CONTOUR INTERVALS

UTILITY STATEMENT:
THE UNDERGROUND UTILITIES SHOWN HEREON ARE FROM FIELD SURVEY INFORMATION OF ONE-CALL LOCATED UTILITIES, FIELD SURVEY INFORMATION OF ABOVE GROUND OBSERVABLE EVIDENCE, AND/OR THE SCALING AND PLOTTING OF EXISTING UTILITY MAPS AND DRAWINGS AVAILABLE TO THE SURVEYOR AT THE TIME OF SURVEY. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHERMORE, THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES BY EXCAVATION UNLESS OTHERWISE NOTED ON THIS SURVEY.

SAFETY NOTICE TO CONTRACTOR:
IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

WARRANTY / DISCLAIMER:
THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER KAW VALLEY ENGINEERING, INC NOR ITS PERSONNEL CAN OR DO WARRANTY THESE DESIGNS OR PLANS AS CONSTRUCTED, EXCEPT IN THE SPECIFIC CASES WHERE KAW VALLEY ENGINEERING PERSONNEL INSPECT AND CONTROL THE PHYSICAL CONSTRUCTION ON A

CAUTION – NOTICE TO CONTRACTOR:
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.

811 Know what's below. Call before you dig.

REV	DATE	DESCRIPTION	DSN	DWN	CHK
3	06/22/22	PER CITY COMMENTS	MTA	JNG	
2	05/06/22	PER OWNER COMMENTS	MTA	JNG	
1	04/08/22	CHECK SET	MTA	JNG	
0	03/02/22	INITIAL ISSUE	ARM	JNG	MTA

STATE OF MISSOURI
MARTIN T. ARLING
NUMBER PE-2009002955
PROFESSIONAL ENGINEER
04/27/23

MARTIN T. ARLING
ENGINEER
MO # 2009002955

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KANSAS CITY, MISSOURI 64118
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KAW VALLEY ENGINEERING

KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER ENGINEERING SERVICES UNDER STATE CERTIFICATE OF AUTHORITY # 000842. EXPIRES 12/31/23

7 BREW
1410 N.E. DOUGLAS STREET
LEE'S SUMMIT, MO. 64086

CONSTRUCTION PLANS
GRADING PLAN

PROJ. NO.	B21D4397
DESIGNER	MTA
DRAWN BY	JNG
CFN	4397GP
SHEET	C400
REV	3

GRADING NOTES:

1. THE CONSTRUCTION AREA SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL AND ORGANIC MATTER FROM ALL AREAS TO BE OCCUPIED BY BUILDING AND PAVING. TOPSOIL FOR REPLACEMENT ON SLOPES MAY BE STOCKPILED ON SITE. EXCESS TOPSOIL MAY BE WASTED IN FILL SLOPES PROVIDED THAT NO TOPSOIL WILL BE WASTED WITHIN 10 FEET OF THE EDGE OF THE BUILDING OR PARKING AREA. BURNING OF TIMBER WILL NOT BE PERMITTED UNLESS APPROVAL IS OBTAINED FROM GOVERNING OFFICIALS. STRIPPING EXISTING TOPSOIL AND ORGANIC MATTER SHALL BE TO A MINIMUM DEPTH OF 6 INCHES.

2. AREAS TO RECEIVE FILL SHALL BE SCARIFIED AND THE TOP 8-INCH DEPTH COMPACTED TO 95% STANDARD PROCTOR DENSITY. ANY UNSUITABLE AREAS SHALL BE UNDERCUT AND REPLACED WITH SUITABLE MATERIAL BEFORE ANY FILL MATERIAL CAN BE APPLIED.

3. OFF-SITE FILL MATERIAL SHALL HAVE A PLASTICITY INDEX OF 25 OR LESS, A LIQUID LIMIT OF 45 OR LESS AND CONTAIN NO ROCK LARGER THAN FOUR INCHES. OFF-SITE FILL MATERIAL SHALL BE APPROVED BY THE OWNER PRIOR TO BRINGING ON SITE.

4. EARTHWORK UNDER THE BUILDING SHALL COMPLY WITH THE PROJECT ARCHITECTURAL PLANS. OTHER FILL MATERIAL SHALL BE MADE IN LIFTS NOT TO EXCEED EIGHT INCHES DEPTH COMPACTED TO 95% STANDARD PROCTOR DENSITY. FILL MATERIAL MAY INCLUDE ROCK FROM ON-SITE EXCAVATION IF CAREFULLY PLACED SO THAT LARGE STONES ARE WELL DISTRIBUTED AND VOIDS ARE COMPLETELY FILLED WITH SMALLER STONES, EARTH, SAND OR GRAVEL TO FURNISH A SOLID EMBANKMENT. NO ROCK LARGER THAN THREE INCHES IN ANY DIMENSION NOR ANY SHALE SHALL BE PLACED IN THE TOP 12 INCHES OF EMBANKMENT.

5. AREAS THAT ARE TO BE CUT TO SUBGRADE LEVELS SHALL BE PROOF ROLLED WITH A MODERATELY HEAVY LOADED DUMP TRUCK OR SIMILAR APPROVED CONSTRUCTION EQUIPMENT TO DETECT UNSUITABLE SOIL CONDITIONS.

6. IN ALL AREAS OF EXCAVATION, IF UNSUITABLE SOIL CONDITIONS ARE ENCOUNTERED, A QUALIFIED GEOTECHNICAL ENGINEER SHALL RECOMMEND TO THE OWNER THE METHODS OF UNDERCUTTING AND REPLACEMENT OF PROPERLY COMPACTED, APPROVED FILL MATERIAL. ALL PROOFROLLING AND UNDERCUTTING SHOULD BE PERFORMED DURING A PERIOD OF DRY WEATHER.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.

8. ALL SLOPES ARE TO BE 3:1 OR FLATTER UNLESS OTHERWISE INDICATED.

9. ALL SLOPES EXCEEDING 3:1 SHALL BE PROTECTED BY RIP RAP, CONCRETE PAVING, OR OTHER METHODS INDICATED ON THESE PLANS, THAT WILL PREVENT EROSION AND PLACED SUCH THAT THE SURFACE IS FLUSH WITH SURROUNDING GROUND AND SHAPED TO CHANNEL WATER IN DIRECTIONS INDICATED.

10. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND FOUR INCHES OF TOPSOIL APPLIED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON-SITE, THE CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED. THE AREA SHALL THEN BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.

11. CONTRACTOR SHALL USE SILT FENCE, BALES OF HAY OR OTHER MEANS OF CONTROLLING EROSION ALONG THE EDGE OF THE PROPERTY OR OTHER BOTTOM OF SLOPE LOCATIONS.

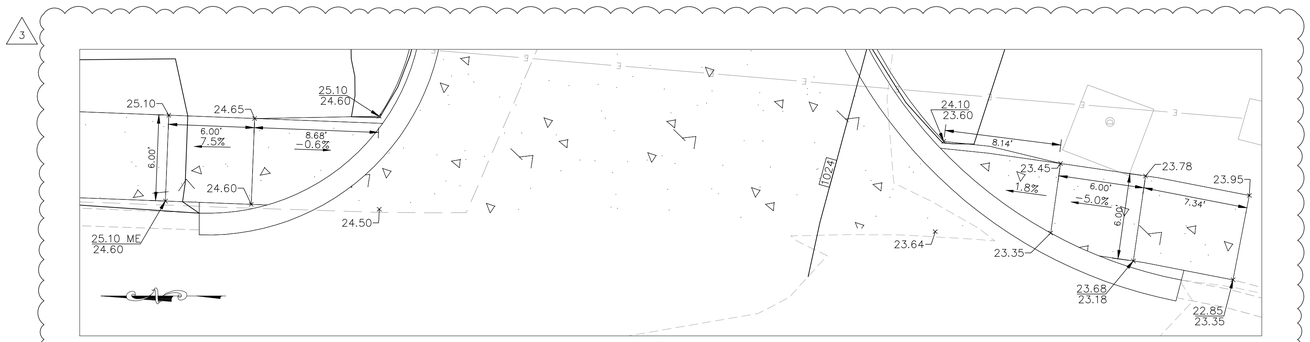
12. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS.

13. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.

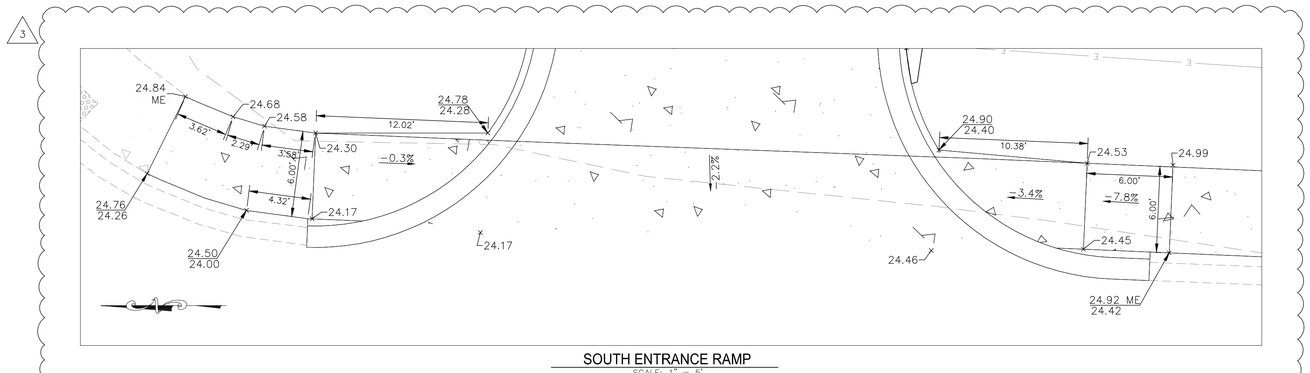
14. IT IS NOT THE DUTY OF THE ENGINEER OR THE OWNER TO REVIEW THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE AT ANY TIME DURING CONSTRUCTION.

15. HANDICAP STALLS SHALL MEET ADA REQUIREMENTS AND SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION AT THE BUILDING ENTRY AND ACCESSIBLE PARKING STALLS. SLOPES EXCEEDING 2.0% WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

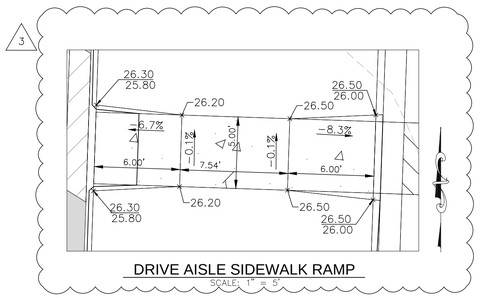
16. PIPE LENGTHS ARE CENTER TO CENTER OF STRUCTURE OR TO END OF END SECTIONS.



NORTH ENTRANCE RAMP
SCALE: 1" = 5'



SOUTH ENTRANCE RAMP
SCALE: 1" = 5'



DRIVE AISLE SIDEWALK RAMP
SCALE: 1" = 5'

UTILITY STATEMENT:

THE UNDERGROUND UTILITIES SHOWN HEREON ARE FROM FIELD SURVEY INFORMATION OF ONE-CALL LOCATED UTILITIES, FIELD SURVEY INFORMATION OF ABOVE GROUND OBSERVABLE EVIDENCE, AND/OR THE SCALING AND PLOTTING OF EXISTING UTILITY MAPS AND DRAWINGS AVAILABLE TO THE SURVEYOR AT THE TIME OF SURVEY. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHERMORE, THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES BY EXCAVATION UNLESS OTHERWISE NOTED ON THIS SURVEY.

SAFETY NOTICE TO CONTRACTOR:

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

WARRANTY / DISCLAIMER:

THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER KAW VALLEY ENGINEERING, INC NOR ITS PERSONNEL CAN OR DO WARRANTY THESE DESIGNS OR PLANS AS CONSTRUCTED, EXCEPT IN THE SPECIFIC CASES WHERE KAW VALLEY ENGINEERING PERSONNEL INSPECT AND CONTROL THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.

CAUTION – NOTICE TO CONTRACTOR:

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.

REV	DATE	DESCRIPTION	DSN	DWN	CHK
3	06/22/22	PER CITY COMMENTS	MTA	JNG	MTA
2	05/06/22	PER OWNER COMMENTS	MTA	JNG	
1	04/08/22	CHECK SET	MTA	JNG	
0	03/02/22	INITIAL ISSUE	ARM	JNG	

STATE OF MISSOURI
MARTIN T. ARLING
NUMBER PE-2009002955
PROFESSIONAL ENGINEER
06/22/22

MARTIN T. ARLING
ENGINEER
MO # 2009002955

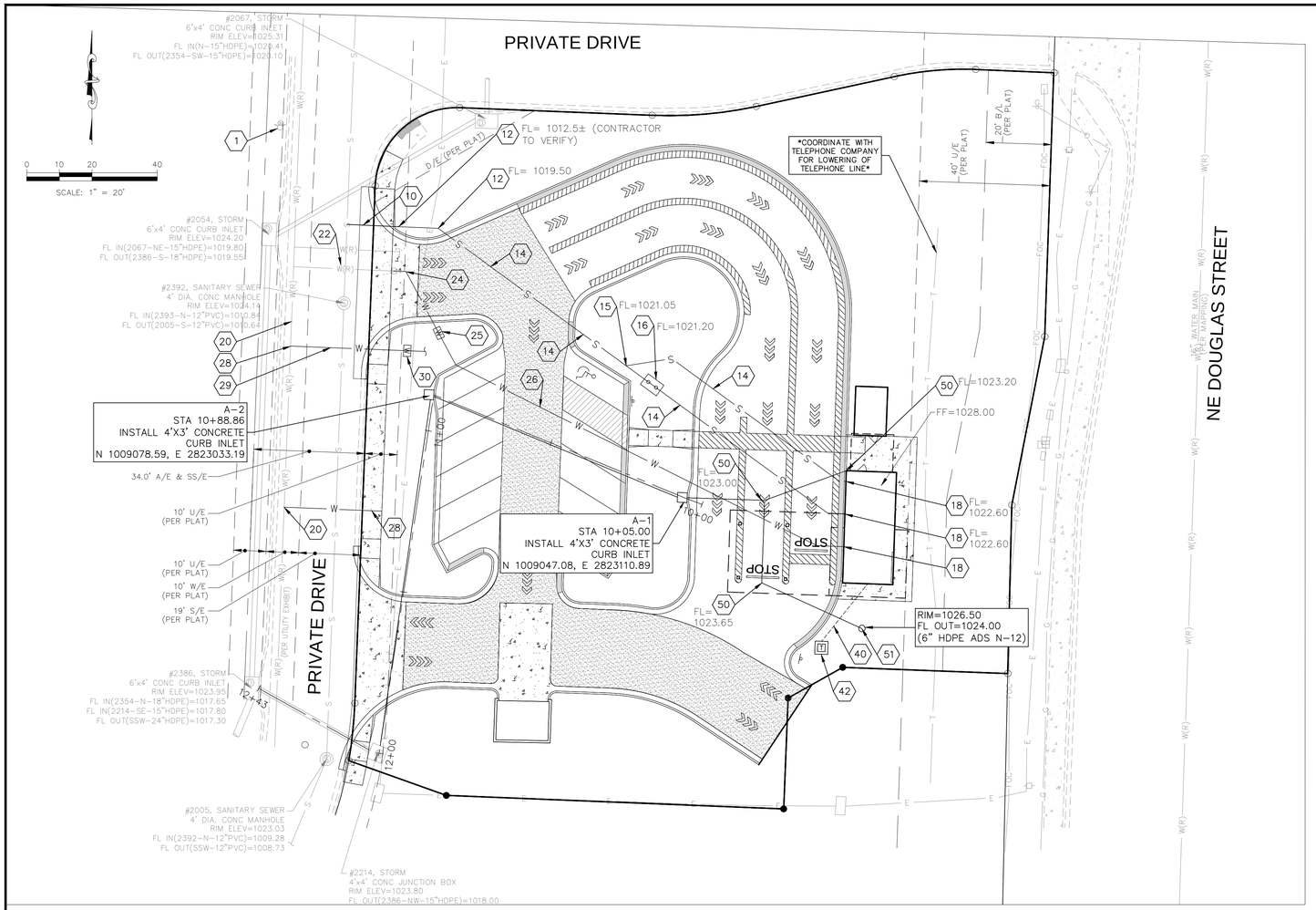
KAW VALLEY ENGINEERING
8040 N. OAK TRAFFICWAY
KANSAS CITY, MISSOURI 64118
PH. (816) 468-5858 | FAX (816) 468-6651
kcb@kveng.com | www.kveng.com

KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN MISSOURI UNDER KAW VALLEY ENGINEERING, INC.'S CERTIFICATE OF AUTHORITY # 2008242. EXPIRES 12/31/23

7 BREW
1410 N.E. DOUGLAS STREET
LEE'S SUMMIT, MO. 64086

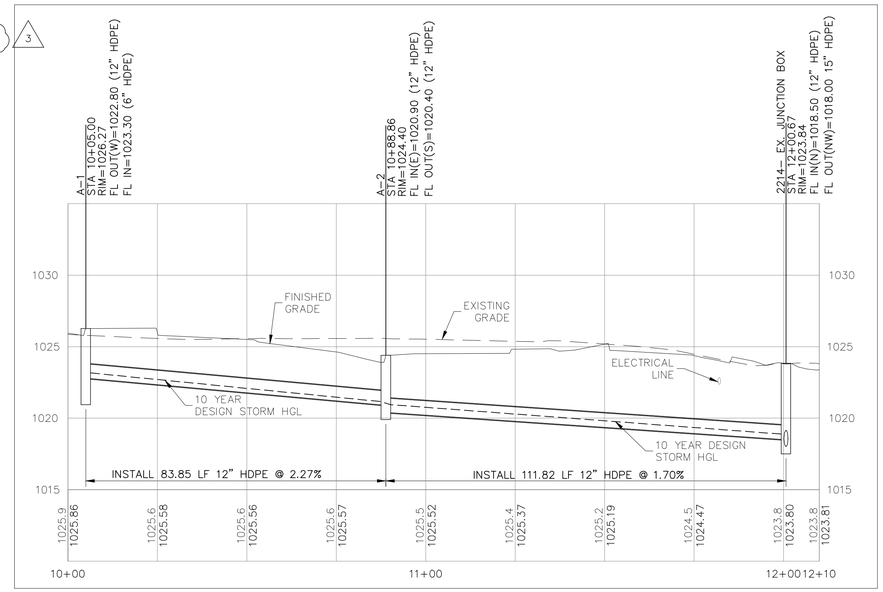
CONSTRUCTION PLANS
GRADING PLAN NOTES

PROJ. NO.	B21D4397
DESIGNER	MTA
DRAWN BY	JNG
CFN	4397GP
SHEET	C401
REV	3



EXTENSIVE REVISIONS TO THIS SHEET (3)

NOTE: 10 YEAR DESIGN STORM (3)



STORM LINE
SCALE:
HOR: 1" = 20'
VER: 1"= 5'

NOTE: HDPE PIPE SHALL BE ADS N-12 OR APPROVED EQUAL

LEGEND

- ○ MONUMENT FOUND, ORIGIN UNDETERMINED UNLESS OTHERWISE NOTED
- ● 1/2" x 24" REBAR W/LS 214F CAP SET
- (P) PLATTED
- (M) MEASURED
- EM ELECTRIC METER
- T ELECTRIC TRANSFORMER
- FIRE HYDRANT
- STORM MANHOLE
- SAN SEWER MANHOLE
- GAS SIGN
- WATER VALVE
- E UNDERGROUND ELECTRIC LINE
- G GAS LINE
- T UNDERGROUND TELEPHONE
- W(R) WATER LINE(RECORDED)
- 725 1' CONTOUR INTERVAL
- 10 YEAR DESIGN STORM

UTILITY NOTES:

1. THE CITY OF LEE'S SUMMIT SHALL BE GIVEN AT LEAST A 48-HOUR NOTICE PRIOR TO PERFORMING ANY INSPECTION, SITE DISTURBANCE OR UTILITY WORK.
2. CONSTRUCTION SHALL NOT START ON ANY PUBLIC WATER OR SANITARY SEWER SYSTEM UNTIL WRITTEN APPROVAL FROM THE OWNER, AND PERMITS FROM THE CITY HAVE BEEN RECEIVED.
3. ALL UTILITY AND STORM SEWER TRENCHES CONSTRUCTED UNDER AREAS THAT RECEIVE PAVING SHALL BE BACKFILLED TO 18 INCHES ABOVE THE TOP OF THE PIPE WITH CRUSHED STONE BASE MATERIAL PLACED ON EIGHT-INCH LIFTS, AND COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
4. CONTRACTOR SHALL NOT OPEN, TURN OFF, INTERFERE WITH, OR ATTACH ANY PIPE OR HOSE TO OR TAP ANY WATER MAIN BELONGING TO THE CITY UNLESS DULY AUTHORIZED TO DO SO BY THE CITY. ANY ADVERSE CONSEQUENCE OF ANY SCHEDULED OR UNSCHEDULED DISRUPTIONS OF SERVICE TO THE PUBLIC ARE TO BE THE LIABILITY OF THE CONTRACTOR. KAW VALLEY ENGINEERING AND OWNER ARE TO BE HELD HARMLESS.
5. DISINFECTION AND PRESSURE TESTING OF WATER LINES SHALL BE PERFORMED AND PAID FOR BY THE CONTRACTOR UNDER SUPERVISION OF A REPRESENTATIVE OF THE CITY WATER DEPARTMENT. CONTRACTOR SHALL NOTIFY THE CITY OF LEE'S SUMMIT 24 HOURS MINIMUM, PRIOR TO ANY TESTING.
6. ALL CONSTRUCTION, INCLUDING SANITARY SEWER AND WATER INFRASTRUCTURE, SHALL BE IN ACCORDANCE WITH THE CITY IF LEE'S SUMMIT'S DESIGN AND CONSTRUCTION MANUAL.
7. LOCATIONS SHOWN FOR PROPOSED WATER LINES ARE APPROXIMATE. VARIATIONS MAY BE MADE, WITH APPROVAL OF THE ENGINEER, TO AVOID CONFLICTS.
8. CONTRACTOR TO INSTALL TRACING TAPE ALONG ALL NON-METALLIC WATER MAINS AND SERVICE LINES PER SECTION 6900 OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.
9. CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF NEW UTILITIES.
10. WATER SERVICE LINES SHALL HAVE A MINIMUM COVER OF 48 INCHES AND A MAXIMUM COVER OF 60 INCHES UNLESS OBSTRUCTIONS REQUIRE DEEPER EXCAVATIONS. ALL VALVES ON MAINS AND FIRE HYDRANT LEADS SHALL BE WITH VALVE BOX ASSEMBLIES. THE SIZE OF VALVE BOX ASSEMBLY TO BE INSTALLED IS DETERMINED BY THE TYPE AND SIZE OF VALVE. VALVE BOX CAPS SHALL HAVE THE WORD "WATER".
11. A MINIMUM HORIZONTAL DISTANCE OF 10 FEET SHALL BE MAINTAINED BETWEEN PARALLEL WATER AND SANITARY SEWER LINES. WHEN IT IS NECESSARY FOR ANY WATER LINE TO CROSS A SANITARY SEWER LINE, THE SEWER LINE SHALL BE ENCASED IN CONCRETE OR CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE WITH NO JOINTS WITHIN 10 FEET OF THE CROSSING UNLESS THE WATER LINE IS AT LEAST 2 FEET CLEAR DISTANCE ABOVE THE SANITARY SEWER LINE.
12. ALL WATER SERVICE INSTALLATIONS INCLUDING BACKFLOW DEVICES ARE SUBJECT TO FIELD VERIFICATION AND APPROVAL BY THE WATER DEPARTMENT INSPECTOR.
13. (3) ALL DRAINAGE PIPE SHALL BE ADS N-12 OR APPROVED EQUAL.

NOTE:
1. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRANCE, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
2. THESE PLANS HAVE NOT BEEN VERIFIED WITH FINAL ARCHITECTURAL CONTRACT DRAWINGS. CONTRACTOR SHALL VERIFY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES. CONTRACTOR IS FULLY RESPONSIBLE FOR REVIEW AND COORDINATION OF ALL DRAWINGS AND CONTRACTOR DOCUMENTS.

NOTES:

1 EXISTING FIRE HYDRANT
10 EXISTING 6" SANITARY SEWER SERVICE LINE (FROM RECORD INFORMATION)
12 CONNECT TO EXISTING 6" SANITARY SEWER SERVICE LINE WITH 4"X6" SDR 26 REDUCER (CONTRACTOR TO VERIFY FLOW LINE PRIOR TO SERVICE LINE INSTALLATION)
14 INSTALL 4" SDR 26 SANITARY SEWER SERVICE LINE @ 2% MIN. SLOPE
15. INSTALL 4"X4" WYE
16 INSTALL GREASE TRAP (SEE MEP PLANS FOR SIZE)
18 CONNECT TO BUILDING
20 EXISTING 8" WATER MAIN
22 EXISTING 1" WATER SERVICE LINE AND VALVE
24 CONNECT TO EXISTING WATER SERVICE
25 PROPOSED 1" WATER METER
26 INSTALL 1" TYPE K COPPER WATER SERVICE LINE PER SECTION 6900 OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL
28 PROPOSED 3/4 WATER SERVICE TAP FOR IRRIGATION PER SECTION 6900 OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL
(3) 29 INSTALL 3/4 TYPE K COPPER WATER SERVICE LINE FOR IRRIGATION (SEE LANDSCAPE PLANS FOR MORE INFORMATION)
30 PROPOSED 3/4" WATER METER
40 PROPOSED SECONDARY ELECTRICAL CONDUITS. CONTRACTOR SHALL COORDINATE NUMBER AND SIZE OF CONDUITS WITH MEP
42 PROPOSED TRANSFORMER
50 INSTALL 6" HDPE ADS N-12 PIPE @ 1% MIN. SLOPE COORDINATE LOCATION WITH ROOF DRAINS. SEE ARCHITECTURAL PLAN FOR CONNECTION DETAIL
(3) 51 INSTALL 18" NYLOPLAST DRAIN BASIN WITH BEEHIVE GRATE

UTILITY STATEMENT:

THE UNDERGROUND UTILITIES SHOWN HEREON ARE FROM FIELD SURVEY INFORMATION OF ONE-CALL LOCATED UTILITIES, FIELD SURVEY INFORMATION OF ABOVE GROUND OBSERVABLE EVIDENCE, AND/OR THE SCALING AND PLOTTING OF EXISTING UTILITY MAPS AND DRAWINGS AVAILABLE TO THE SURVEYOR AT THE TIME OF SURVEY. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHERMORE, THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES BY EXCAVATION UNLESS OTHERWISE NOTED ON THIS SURVEY.

SAFETY NOTICE TO CONTRACTOR:

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

WARRANTY / DISCLAIMER:

THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER KAW VALLEY ENGINEERING, INC NOR ITS PERSONNEL CAN OR DO WARRANTY THESE DESIGNS OR PLANS AS CONSTRUCTED, EXCEPT IN THE SPECIFIC CASES WHERE KAW VALLEY ENGINEERING PERSONNEL INSPECT AND CONTROL THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.

CAUTION – NOTICE TO CONTRACTOR:

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.

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1	04/08/22	CHECK SET	MTA	JNG	
0	03/02/22	INITIAL ISSUE	ARM	JNG	

STATE OF MISSOURI
MARTIN T ARLING
NUMBER PE-2009002955
PROFESSIONAL ENGINEER

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KAW VALLEY ENGINEERING

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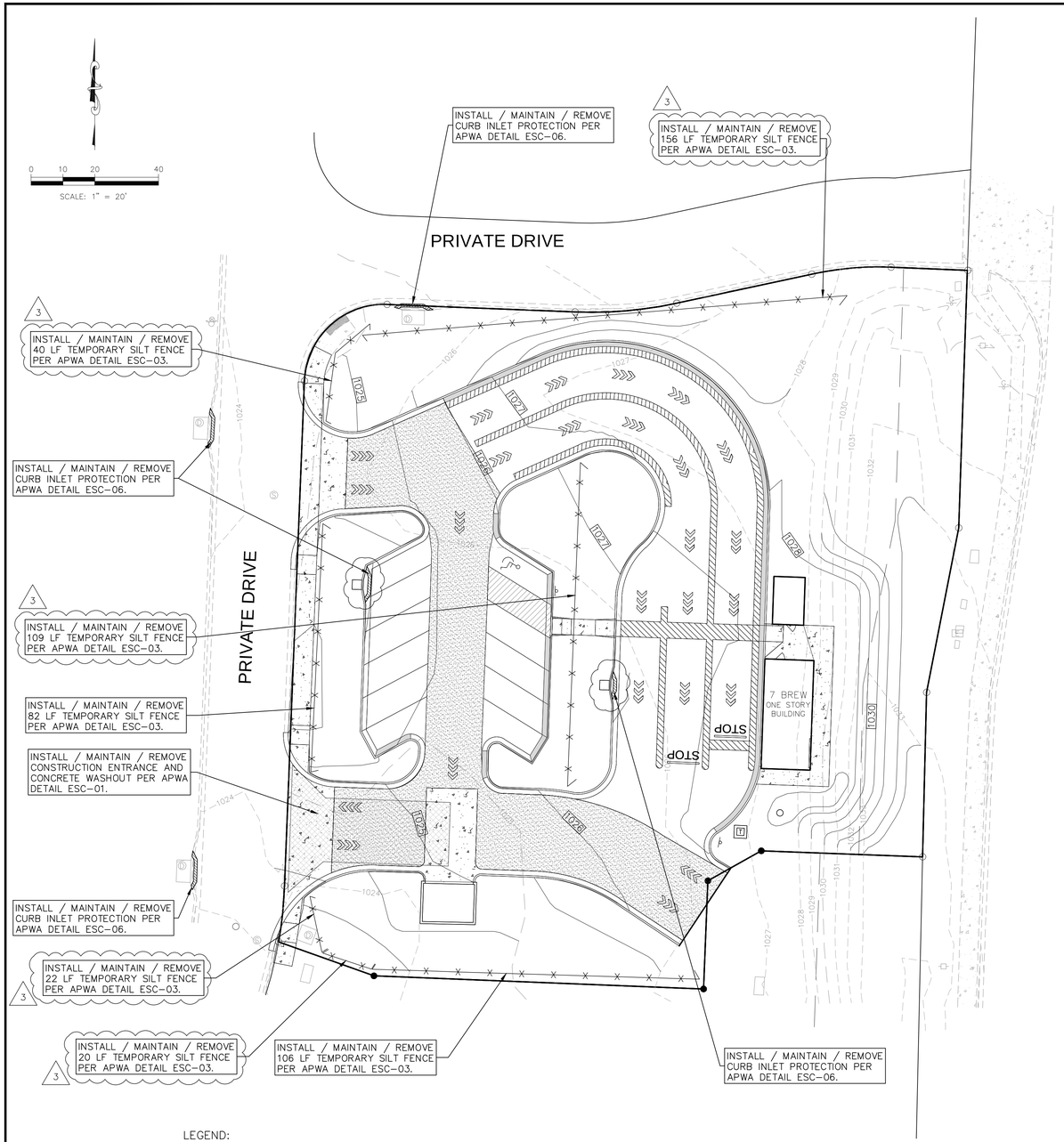
7 BREW
1410 N.E. DOUGLAS STREET
LEE'S SUMMIT, MO. 64086

CONSTRUCTION PLANS
UTILITY PLAN

PROJ. NO.	B21D4397
DESIGNER	MTA
DRAWN BY	JNG
CFN	4397UP
SHEET	C500
REV	3



EROSION CONTROL NOTES:

1. PROPERTY LINE IS LIMITS OF CONSTRUCTION EXCEPT AS SHOWN.
2. THE CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE DRAWINGS PRIOR TO BEGINNING EARTHWORK OPERATIONS AND DURING APPROPRIATE PHASING AS CONSTRUCTION PROGRESSES.
3. THE CONTRACTOR SHALL MAINTAIN ALL SILT CONTROL MEASURES DURING CONSTRUCTION. BUILDERS AND OR DEVELOPER TO MAINTAIN EROSION CONTROL AND SILT CONTROL UPON COMPLETION OF THIS PROJECT.
4. ALL SILT SHALL REMAIN ON SITE AND SURROUNDING STREETS SHALL BE KEPT CLEAR OF ALL MUD AND DEBRIS.
5. SEDIMENTATION BARRIERS ARE TO BE INSTALLED AS SHOWN AND AT ANY ADDITIONAL AREAS OF CONCENTRATED FLOWS NOT SHOWN ON PLANS.
6. ACCUMULATED SEDIMENT SHALL BE REMOVED AND THE SEDIMENTATION BARRIERS MAINTAINED AS NEEDED TO PREVENT SEDIMENTATION BYPASS OF THE BARRIER.
7. SLOPES ARE TO BE LEFT IN A ROUGH CONDITION DURING GRADING.
8. CURB INLET SEDIMENTATION BARRIERS ARE TO BE INSTALLED AROUND INLETS AND WEIRS WHERE SEDIMENTATION IS A CONCERN. INLET BARRIERS SHALL BE FILTERS, OR SILT FENCE, OR STRAW BALES (PRIOR TO PAVING PLACEMENT). AFTER PAVEMENT IS IN PLACE, PROVIDE FILTER PROTECTION THAT CANNOT BE WASHED INTO INLETS OR WASHED AWAY. STRAW/HAY BALES WILL NOT BE ALLOWED ON CONCRETE OR ASPHALT PAVING.
9. SEDIMENT IS TO BE REMOVED FROM STORM WATER DRAINAGE SYSTEMS. ALL SEDIMENT CONTROL MEASURES TO BE INSPECTED AND REPAIRED IMMEDIATELY AND ON A REGULAR BASIS AFTER ALL RAIN STORMS.
10. THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH AN INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.
11. CONTRACTOR IS RESPONSIBLE FOR INSTALLING ANY ADDITIONAL EROSION CONTROL AS HE/SHE DEEMS NECESSARY TO PREVENT SEDIMENT FROM ENTERING STORM DRAINS, STREETS, AND WATERWAYS.
12. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, TOOLS, EQUIPMENT AND LABOR AS NECESSARY TO INSTALL AND MAINTAIN ADEQUATE EROSION AND SILTATION CONTROLS REQUIRED TO PREVENT SOIL EROSION FROM LEAVING THE PROJECT SITE. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THAT METHODS UTILIZED ARE ADEQUATE AND COMPLY WITH REQUIREMENTS OF THE SPECIFICATIONS AND GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.
13. TEMPORARY SEDIMENT FENCE EROSION CONTROL MEASURES TO REMAIN UNTIL ADEQUATE VEGETATION IS ESTABLISHED. ON PROJECTS THAT ARE NOT EXPECTING IMMEDIATE DEVELOPMENT (I.E.- INTERCEPTOR SEWERS, OFFSITE IMPROVEMENTS, ETC.) EROSION CONTROL MEASURES ARE TO BE REMOVED BY CONTRACTOR AS SOON AS ADEQUATE VEGETATION IS ESTABLISHED.
14. MUD, SILT, AND DEBRIS SHALL BE CLEANED UP AT THE CONCLUSION OF EACH WORKING DAY, OR AFTER EACH RAINFALL.
15. INSPECTION, MAINTENANCE AND REPAIR OF EROSION CONTROL DEVICES SHALL BE ON GOING THROUGHOUT THE LIFE OF INFRASTRUCTURE AND BUILDING CONSTRUCTION TO KEEP THE DEVICES IN OPERABLE CONDITION AT ALL TIMES. ADDITIONAL MEASURES SHALL BE INSTALLED AS REQUIRED BY ACTUAL FIELD CONDITIONS AND/OR GOVERNING INSPECTION AGENCIES. NOTE: ALTHOUGH EXTENSIVE EFFORT IS PUT INTO THE DESIGN OF THE EROSION CONTROL PLAN BY THE ENGINEER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR/DEVELOPER TO ENSURE THAT ANY ADDITIONAL REQUIRED EROSION CONTROL MEASURES ARE INSTALLED AND MAINTAINED AT NO ADDITIONAL COST TO THE OWNER.
16. INSTALL AND MAINTAIN CONSTRUCTION ENTRANCE(S) AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING THE SITE AND AS SHOWN ON PLANS.
17. AT COMPLETION OF SITE GRADING AND OTHER RELATED CONSTRUCTION ACTIVITIES, ALL DISTURBED AREAS WITHIN THE PROJECT SITE SHALL BE SEEDED, SODDED, OR LANDSCAPED, FLAT LOTS WILL NOT REQUIRE SEEDING BUT ALL SLOPES, DISTURBED AREAS AND STREET RIGHT-OF-WAYS WILL BE SEEDED.
18. TOPSOIL IS TO BE PLACED IN AREAS UNSUITABLE FOR VEGETATIVE GROWTH.
19. STRIP TOPSOIL PRIOR TO EXCAVATION, STOCKPILE AND SPREAD ONTO DISKED SUBGRADE (4" MIN) A THICKNESS OF 4 INCHES.
20. THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY FOR RESOLVING COMPLAINTS IN THE EVENT THAT COMPLAINTS OR DAMAGE CLAIMS ARE FILED DUE TO DAMAGES OCCURRING, ADJACENT TO OR DOWNSTREAM FROM PROPERTY, BY SEDIMENT RESULTING FROM EROSION ON THE PROJECT SITE.
21. GOOD HOUSEKEEPING PRACTICES SHALL BE MAINTAINED ON SITE TO KEEP SOLID WASTE FROM ENTRY INTO WATERS.
22. ALL FUELING FACILITIES PRESENT ON SITE SHALL ADHERE TO APPLICABLE FEDERAL AND STATE REQUIREMENTS CONCERNING UNDERGROUND STORAGE, ABOVE GROUND STORAGE AND DISPENSERS, INCLUDING SPILL PREVENTION, CONTROL AND COUNTER MEASURES.
23. MINIMAL WASHING OF CONCRETE EQUIPMENT ALLOWED (CHUTE, TOOLS, ETC.) AT A CONTRACTOR DEFINED LOCATION. CONCRETE WASHOUT OF THE DRUM IS NOT ALLOWED. ANY PIT/WASHOUT AREA NEEDS TO BE MAINTAINED IN A NON-DISCHARGING MANNER AND ANY WASTE RESIDUE WILL NEED TO BE CLEANED OUT AND REMOVED AT THE END OF PROJECT.
24. DEVELOPER IS RESPONSIBLE FOR HAVING LOT BUILDERS FOLLOW THE GUIDELINES OF "CONTROLLING EROSION WHEN BUILDING YOUR HOME" PROVIDED BY MISSOURI DEPARTMENT OF HEALTH AND ENVIRONMENT.
25. EROSION CONTROL STRAW/FIBER WATTLES TO BE INSTALLED 1'-0" BEHIND CURB & GUTTER UPON COMPLETION OF BACKFILL OF CURB IN ALL AREAS WHERE SLOPES FROM LOT DRAIN TOWARDS CURB. UPON COMPLETION OF FINAL GRADING THE TOES OF ALL EMBANKMENTS IN EXCESS OF TWO FEET IN HEIGHT WILL HAVE EROSION CONTROL SEDIMENT FENCE INSTALLED.
26. THE CITY OF LEE'S SUMMIT SHALL BE GIVEN AT LEAST A 48-HOUR NOTICE PRIOR TO PERFORMING ANY INSPECTION, SITE DISTURBANCE OR UTILITY WORK.

TEMPORARY SEEDING

TO PROVIDE PROMPT EROSION CONTROL ON PROJECT TEMPORARY SEEDING MAY BE REQUIRED WHICH WILL DEPEND ON THE CONTRACTORS WORK SCHEDULE. TEMPORARY SEEDING WILL BE REQUIRED IN THE FOLLOWING AREAS:
1. IN SLOPES AND AREAS OF CONCENTRATED FLOW WITHIN 28 DAYS OF ROUGH GRADING.
2. IN AREAS THAT REQUIRE SEEDING BUT IS NOT WITHIN THE SEASON FOR PERMANENT SEEDING AS PER THE TECHNICAL SPECIFICATIONS.

PLANT SELECTION – ANNUAL RYE GRASS, WHEAT OR OATS FOR TEMPORARY SEEDING
SEEDING – EVENLY APPLY SEED USING A CYCLONE SEEDER (BROADCAST), DRILL, CULTIPACKER SEEDER OR HYDROSEEDER. ANNUAL RYE GRASS SHOULD BE APPLIED AT A RATE OF 120 LBS/ACRE, WHEAT OR OATS SHOULD BE APPLIED AT A RATE OF 100 LBS/ACRE. BROADCAST SEEDING AND HYDROSEEDING ARE APPROPRIATE FOR STEEP SLOPES WHERE EQUIPMENT CANNOT BE DRIVEN. HAND BROADCASTING IS NOT RECOMMENDED BECAUSE OF THE DIFFICULTY IN ACHIEVING A UNIFORM DISTRIBUTION. SMALL GRAINS SHOULD BE PLANTED NO MORE THAN 1 INCH DEEP, AND GRASSES AND LEGUMES NO MORE THAN 1/2 INCH. BROADCAST SEED MUST BE COVERED BY RAKING OR CHAIN DRAGGING, AND THEN LIGHTLY FIRMED WITH A ROLLER OR CULTIPACKER. HYDROSEEDED MIXTURES SHOULD INCLUDE A WOOD FIBER (CELLULOSE) MULCH.
MULCHING – THE USE OF MULCH WILL HELP ENSURE ESTABLISHMENT UNDER NORMAL CONDITIONS AND IS ESSENTIAL TO SEEDING SUCCESS UNDER HARSH CONDITIONS SUCH AS SEEDING IN FALL OR WINTER COVER (WOOD FIBER MULCHES ARE NOT CONSIDERED ADEQUATE FOR THIS USE), SLOPES STEEPER THAN 3:1, EXCESSIVELY HOT OR DRY WEATHER, ADVERSE SOILS (SHALLOW, ROCKY, HIGH IN CLAY OR SAND), AND AREAS RECEIVING CONCENTRATED FLOW. IF AREA TO BE MULCHED IS SUBJECT TO
CONCENTRATED WATERFLOW, AS IN CHANNELS, ANCHOR MULCH WITH NETTING.
MAINTENANCE – RESEED, REFERTILIZE AND MULCH AREAS OF INSUFFICIENT GROWTH. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

PERMANENT SEEDING

SEE LANDSCAPE PLAN FOR PERMANENT SEEDING REQUIREMENTS.

SAFETY NOTICE TO CONTRACTOR:

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STATE OF MISSOURI
MARTIN T. ARLING
NUMBER PE-2009002955
PROFESSIONAL ENGINEER
04/22/22

MARTIN T. ARLING
ENGINEER
MO # 2009002955

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8040 N. OAK TRAFFICWAY
KANSAS CITY, MISSOURI 64118
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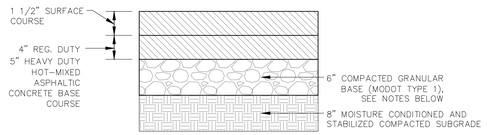
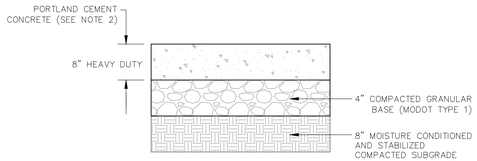
7 BREW
1410 N.E. DOUGLAS STREET
LEE'S SUMMIT, MO. 64086

CONSTRUCTION PLANS
EROSION CONTROL PLAN

PROJ. NO.	
B21D4397	
DESIGNER	DRAWN BY
MTA	JNG
CFN	
4397ECP	
SHEET	REV
C600	3



ASPHALT PAVEMENT 040
NOT TO SCALE

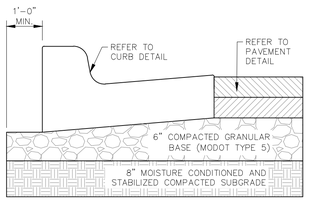


P.C. CONCRETE PAVEMENT 043
NOT TO SCALE

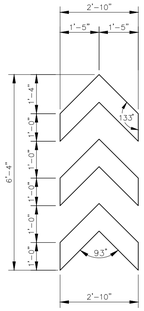
NOTES:
1. FLEXIBLE PAVEMENT SHALL BE IN ACCORDANCE WITH THE LATEST (FEBRUARY 2017) EDITION OF THE KANSAS CITY METROPOLITAN CHAPTER OF APWA SECTION 2200 OR M+E 2021 MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

   HOT-MIXED ASPHALT – MODOT SP125FEEF OR APWA TYPE 6-01

2. PORTLAND CEMENT CONCRETE SHALL BE A KCMMB4K MIX AND SHALL MEET THE LATEST EDITION OF THE KANSAS CITY METROPOLITAN CHAPTER OF APWA SECTION 2200.
3. HEAVY DUTY CONCRETE IS AN OPTIONAL PAVEMENT FOR DETAIL 041 HEAVY DUTY ASPHALT. WHEN PLANS SPECIFY DETAIL 042 NO ALTERNATES ARE ALLOWED.
4. ASPHALT PAVEMENT MAY BE MODIFIED BY REPLACING GRANULAR BASE WITH AN ADDITIONAL ONE INCH OF HOT-MIXED ASPHALT CONCRETE.
5. IF A MARSHALL DESIGNED MIX IS DESIRED, ANY 50-BLOW MARSHALL MIX MAY BE SELECTED MEETING THE AGGREGATE AND GRADATION REQUIREMENTS OF APWA TYPE 2 OR 3, MODOT BP-1 OR 2, OR OTHER LOCALLY PRODUCED MARSHALL MIX THAT IS EQUIVALENT TO KDOT BM-2. ANY SUBMITTED 50-BLOW MARSHALL MIX DESIGN SHOULD ALSO BE CHECKED FOR RESISTANCE TO STRIPPING DURING DESIGN USING AASHTO T 283 TO DETERMINE IF AN ANTISTRIPPING AGENT IS NEEDED FOR THE SAME ASPHALT CONCRETE CHOSEN FOR THE PROJECT. THE INDEX OF RETAINED STRENGTH SHALL EXCEED 75%.



CURB BASE 003
NOT TO SCALE



ASPHALT PAINT COLORS:
WHITE– PANTONE 000C
BLUE– PANTONE 293

CONCRETE PAINT COLORS:
RED– PANTONE 202
BLUE– PANTONE 293

PMS 000C
R: 255
G: 255
B: 255
HEX: ffffff

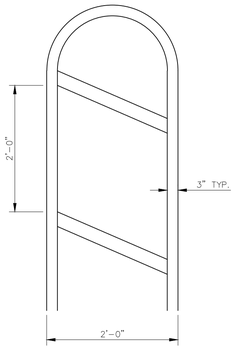
PMS 293
R: 0
G: 82
B: 165
HEX: 0053a5

PMS 202
R: 138
G: 36
B: 50
HEX: 8a2432

TRAFFIC PAINT TYPE:
SHERWIN–WILLIAMS PRO PARK, SETFAST, HOTLINE OR AN APPROVED EQUAL.

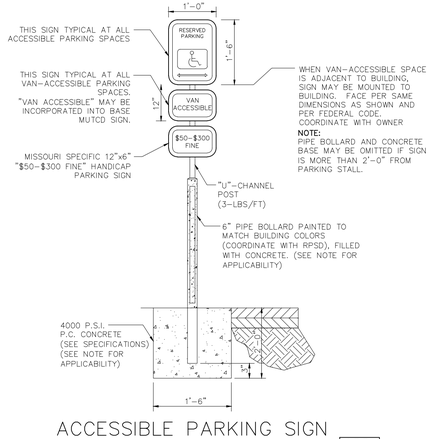
PAVEMENT MARKINGS 150
NOT TO SCALE

NOTES:
1. ASPHALT PAVING SURFACES SHALL HAVE BLUE STRIPING WITH THE REMAINING TRAFFIC SYMBOLS/TEXT TO BE WHITE. REFERENCE PAINT COLOR CHART.
2. CONCRETE PAVING SURFACES SHALL HAVE BLUE STRIPING WITH THE REMAINING TRAFFIC SYMBOLS/TEXT TO BE RED. REFERENCE PAINT COLOR CHART.

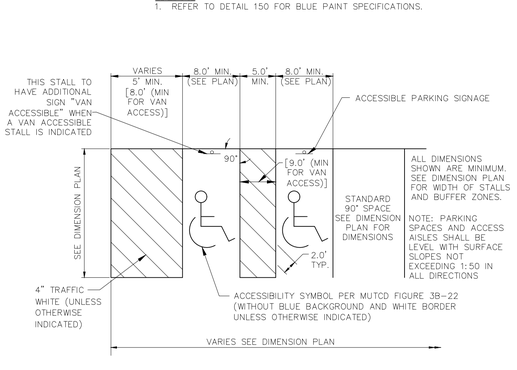


BLUE PAVEMENT MARKINGS 151
NOT TO SCALE

NOTES:
1. REFER TO DETAIL 150 FOR BLUE PAINT SPECIFICATIONS.

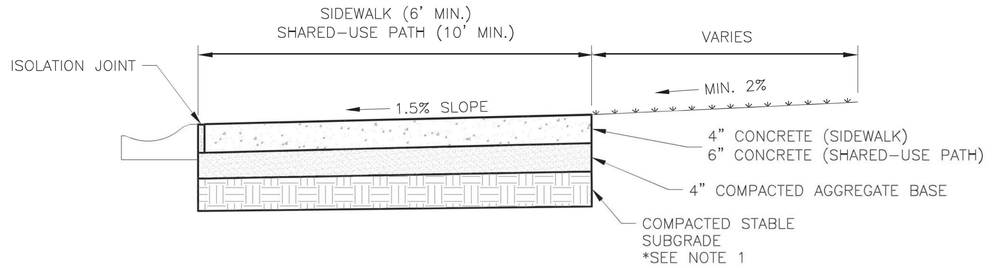


ACCESSIBLE PARKING SIGN 120
THE SIGN SHALL BE MOUNTED A MINIMUM OF 60 INCHES ABOVE FINISHED GRADE, MEASURED TO BOTTOM OF SIGN.

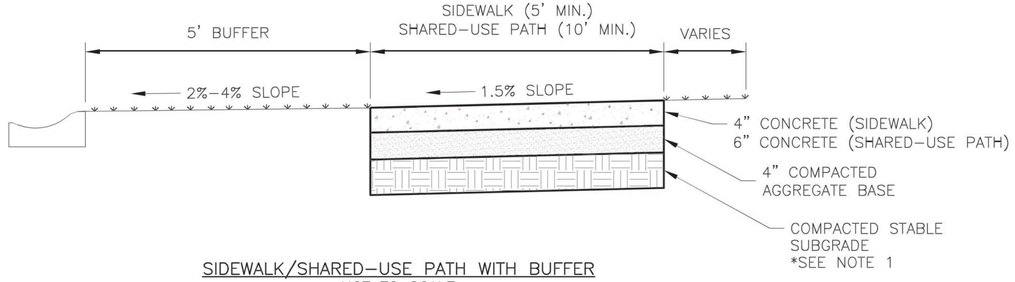


ACCESSIBLE STRIPING 102
NOT TO SCALE

NOTES:
1. PARKING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 1:50 IN ALL DIRECTIONS.
2. ALL DIMENSIONS SHOWN ARE MINIMUM. SEE DIMENSION PLAN FOR WIDTH OF STALLS AND BUFFER ZONES.
3. ADA PARKING SPACES AND ACCESS ISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 1:50 IN ALL DIRECTIONS.



SIDEWALK/SHARED-USE PATH WITHOUT BUFFER
NOT TO SCALE



SIDEWALK/SHARED-USE PATH WITH BUFFER
NOT TO SCALE

CONCRETE SIDEWALK 130
NOT TO SCALE

GENERAL NOTES:

1. SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
2. 1.5% CROSS SLOPE MUST BE MAINTAINED THROUGH DRIVEWAYS.
3. KCMMB 4K CONCRETE MIX SHALL BE REQUIRED FOR ALL SIDEWALKS/SHARED-USE PATHS.
4. ALL SIDEWALK/SHARED-USE PATHS SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).
5. AN ISOLATION JOINT SHALL BE PLACED AT A MAXIMUM OF 100 FT. CONSTRUCTION JOINTS SHALL BE PLACED THE SAME WIDTH OF SIDEWALK/SHARED-USE PATHS, BUT NO GREATER THAN 10 FT.
6. AN ISOLATION JOINT SHALL BE PLACED WHERE THE SIDEWALK/SHARED-USE PATHS MEETS A RESIDENTIAL DRIVEWAY.
7. SHARED-USE PATHS WIDTH SHALL BE 10 FT. WIDE.
8. SIDEWALK/SHARED-USE PATHS FINISHING SHALL BE FULL BROOM FINISH OR AS DIRECTED BY CITY INSPECTOR.
9. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

SIDEWALK/SHARED-USE PATH DETAIL

Date: 05/2021
Drawn By: MJF
Checked By: DL

GEN-2

REV	DATE	DESCRIPTION	DSN	DWN	CHK
3	06/22/22	PER CITY COMMENTS	MTA	JNG	
2	05/06/22	PER OWNER COMMENTS	MTA	JNG	
1	04/08/22	CHECK SET	MTA	JNG	
0	03/02/22	INITIAL ISSUE	ARM	JNG	MTA

STATE OF MISSOURI
MARTIN T. ARLING
NUMBER PE-2009002955
PROFESSIONAL ENGINEER
06/22/22

MARTIN T. ARLING
ENGINEER
MO # 2009002955

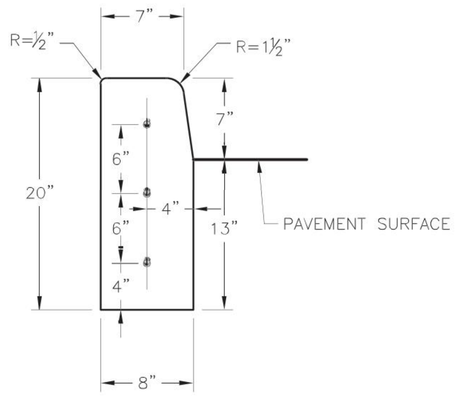
KAW VALLEY ENGINEERING
8040 N. OAK TRAFFICWAY
KANSAS CITY, MISSOURI 64118
PH. (816) 468-5858 | FAX (816) 468-6651
kc@kveng.com | www.kveng.com

KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN THE STATE OF MISSOURI. STATE CERTIFICATE OF AUTHORITY # 2008242. EXPIRES 12/31/23

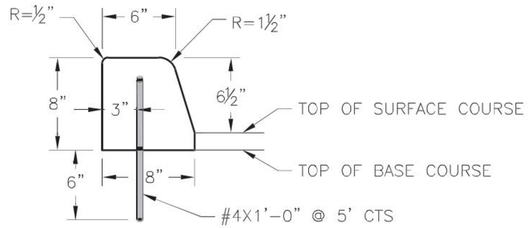
7 BREW
1410 N.E. DOUGLAS STREET
LEE'S SUMMIT, MO. 64086

CONSTRUCTION PLANS
DETAIL SHEET

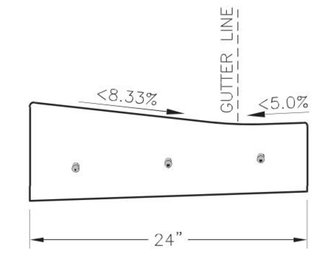
PROJ. NO. B21D4397
DESIGNER MTA | DRAWN BY JNG
CFN 4397DET
SHEET C700 | REV 3



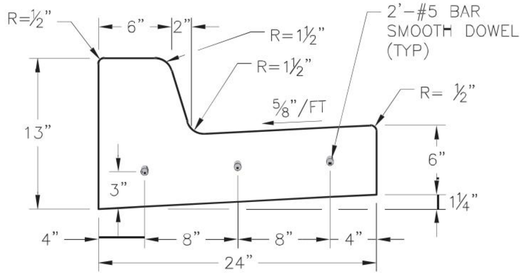
STRAIGHT CURB
(TYPE C-1)



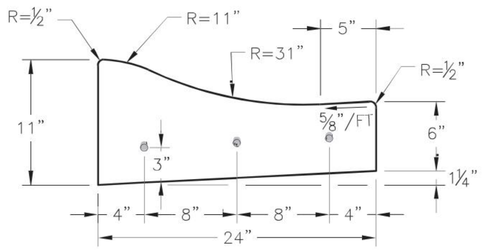
DOWELLED CURB
(TYPE DC)



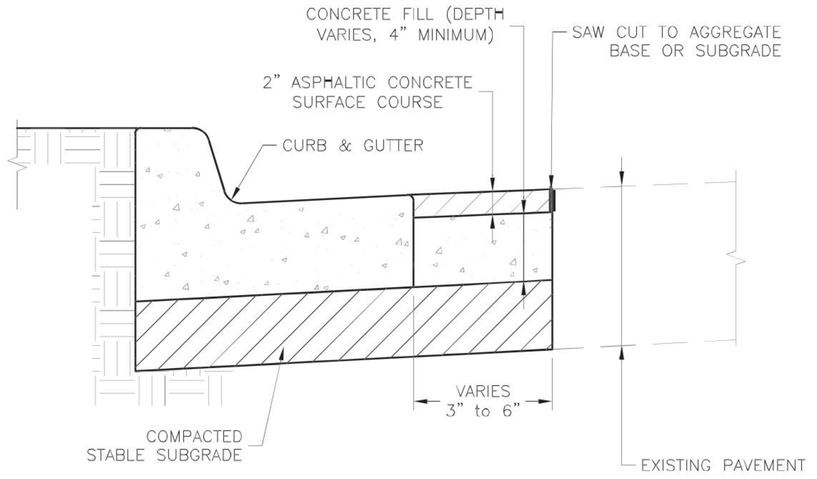
CURB & GUTTER DETAIL AT RAMP
(ADA SLOPE REQUIREMENTS)



STRAIGHT BACK CURB & GUTTER 001
(TYPE CG-1)



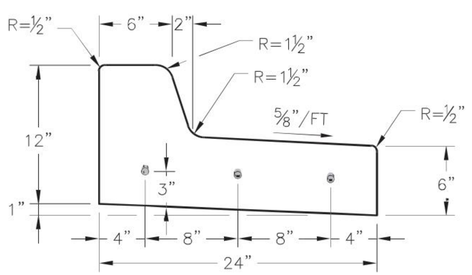
ROLL BACK CURB & GUTTER
(TYPE CG-2)



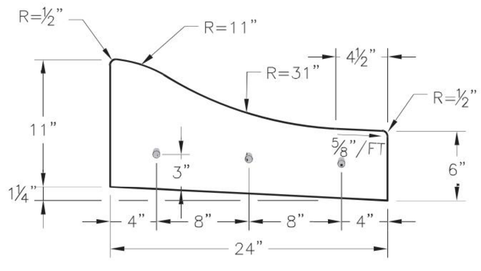
CURB REPLACEMENT DETAIL

GENERAL NOTES

1. ¾" ISOLATION JOINTS WITH 3 (2'-#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
4. KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURB.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
8. ALL DOWELS & TIE BARS SHALL BE EPOXY COATED.



STRAIGHT BACK DRY CURB & GUTTER 002
(TYPE CG-1 DRY)



ROLL BACK DRY CURB & GUTTER
(TYPE CG-2 DRY)

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN ST. | LEE'S SUMMIT, MO 64063

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
Project: LEE'S SUMMIT, JACKSON COUNTY, MO
Sheet Name: CURB & GUTTER DETAIL

Drawn By: MJF
Checked By: DL
Date: 05/2021
Proj. #:

GEN-4

REV	DATE	DESCRIPTION	DSN	DWN	CHK
3	06/22/22	PER CITY COMMENTS	MTA	JNG	
2	05/06/22	PER OWNER COMMENTS	MTA	JNG	
1	04/08/22	CHECK SET	MTA	JNG	
0	03/02/22	INITIAL ISSUE	ARM	JNG	MTA

STATE OF MISSOURI
MARTIN T. ARLING
NUMBER PE-2009002955
PROFESSIONAL ENGINEER

MARTIN T. ARLING
ENGINEER
MO # 2009002955

KAW VALLEY ENGINEERING
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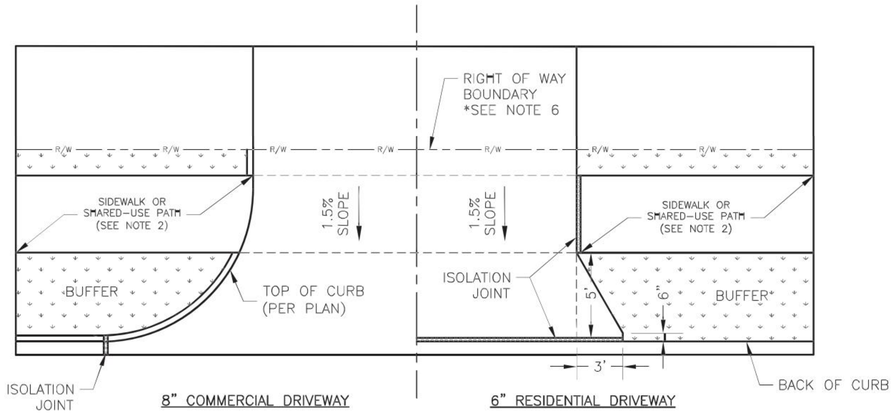
7 BREW
1410 N.E. DOUGLAS STREET
LEE'S SUMMIT, MO. 64086

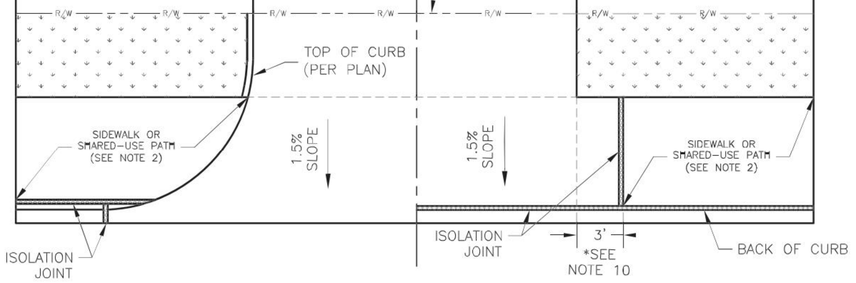
CONSTRUCTION PLANS
DETAIL SHEET

PROJ. NO. B21D4397
DESIGNER MTA | DRAWN BY JNG
CFN 4397DET
SHEET C701 | REV 3



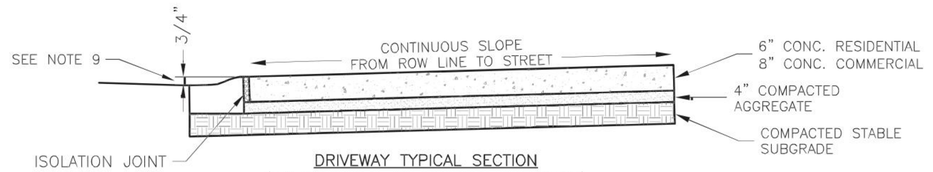
8" COMMERCIAL DRIVEWAY — 6" RESIDENTIAL DRIVEWAY

DRIVEWAY WITH BUFFER
NOT TO SCALE

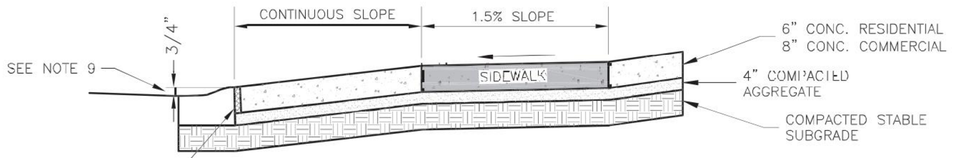


8" COMMERCIAL DRIVEWAY — 6" RESIDENTIAL DRIVEWAY

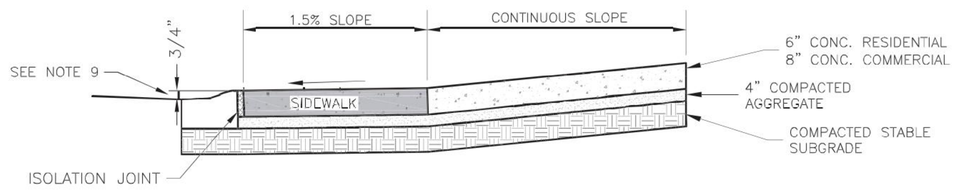
DRIVEWAY WITHOUT BUFFER
NOT TO SCALE



DRIVEWAY TYPICAL SECTION
(NO SIDEWALK OR SHARED–USE PATH)
NOT TO SCALE



DRIVEWAY TYPICAL SECTION
(SIDEWALK OR SHARED–USE PATH WITH BUFFER)
NOT TO SCALE



DRIVEWAY TYPICAL SECTION
(SIDEWALK OR SHARED–USE PATH WITHOUT BUFFER)
NOT TO SCALE

GENERAL NOTES
1. SUBGRADE SHALL BE STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
2. ALL DRIVE APPROACHES SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG) FOR SLOPE REQUIREMENTS WHEN SIDEWALK IS REQUIRED (SEE ADA RAMP RETROFIT DETAIL GEN–3B, SIDEWALK/SHARED USE PATH RAMP AT DRIVEWAY DETAIL).
3. JOINT AT BACK OF CURB LINE SHALL BE AN ISOLATION JOINT FOR RESIDENTIAL DRIVEWAYS.
4. KCMMB 4K CONCRETE MIX IS REQUIRED FOR ALL CURBS.
5. COMMERCIAL DRIVEWAYS, IN THE PUBLIC RIGHT OF WAY, SHALL BE KCMMB 4K CONCRETE MIX.
6. RESIDENTIAL DRIVEWAYS, IN THE PUBLIC RIGHT OF WAY, KCMMB 4K CONCRETE MIX IS RECOMMENDED. OTHER CONCRETE MIXES NEED TO BE APPROVED BY CITY INSPECTOR.
7. A JOINT MUST BE INSTALLED AT THE RIGHT OF WAY BOUNDARY FOR PROPERTY DELINEATION.
8. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
9. ¾" FROM TOP OF CURB TO FLOWLINE AT DRIVEWAY (TYPE CG–1 CURB ONLY). MUST MAINTAIN ORIGINAL FLOWLINE OF CURB.
10. SIDEWALK ADJOINING CURB SHALL BE 6" THICK, EXTENDING 3' FROM THE DRIVEWAY.
11. THE MAXIMUM WIDTH OF A RESIDENTIAL DRIVEWAY IS 36 FEET WITHIN THE RIGHT OF WAY.

COMMERICIAL DRIVEWAY ENTRANCE
NOT TO SCALE

140

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

REV	DATE	DESCRIPTION	DSN	DWN	CHK
3	06/22/22	PER CITY COMMENTS	MTA	JNG	
2	05/06/22	PER OWNER COMMENTS	MTA	JNG	
1	04/08/22	CHECK SET	MTA	JNG	
0	03/02/22	INITIAL ISSUE	ARM	JNG	MTA

STATE OF MISSOURI
MARTIN T. ARLING
NUMBER PE-2009002955
PROFESSIONAL ENGINEER
06/23/22

MARTIN T. ARLING
ENGINEER
MO # 2009002955

Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: DRIVEWAY DETAIL

Drawn By: MJF
Checked By: DL
Date: 05/2021
Proj. #:

GEN-1

KAW VALLEY ENGINEERING
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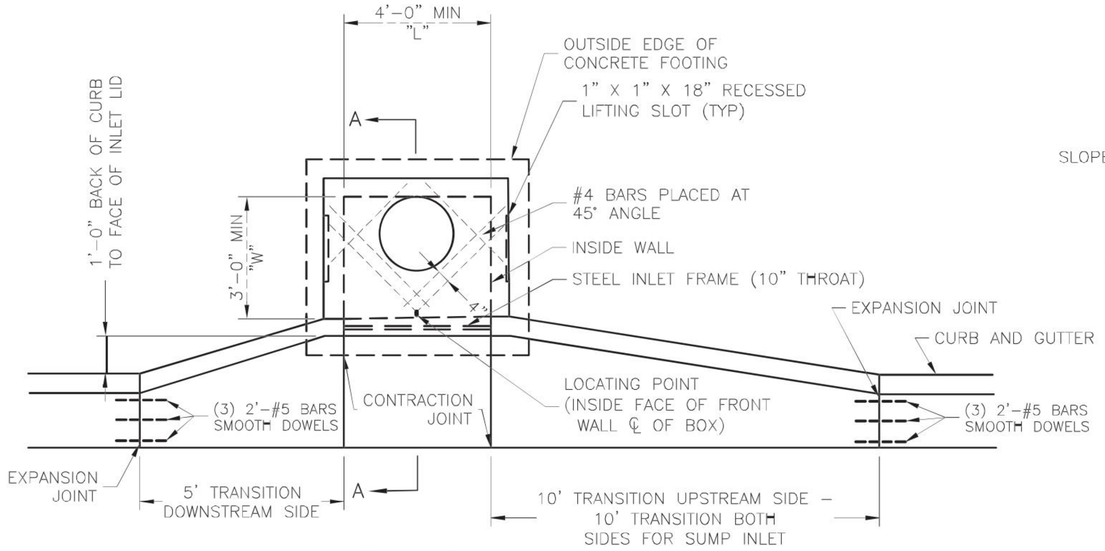
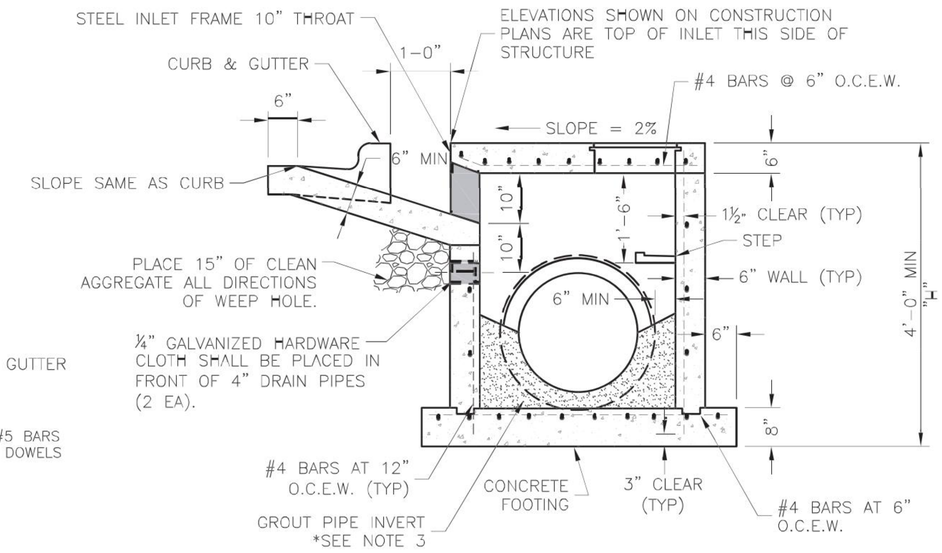
7 BREW
1410 N.E. DOUGLAS STREET
LEE'S SUMMIT, MO. 64086

CONSTRUCTION PLANS
DETAIL SHEET

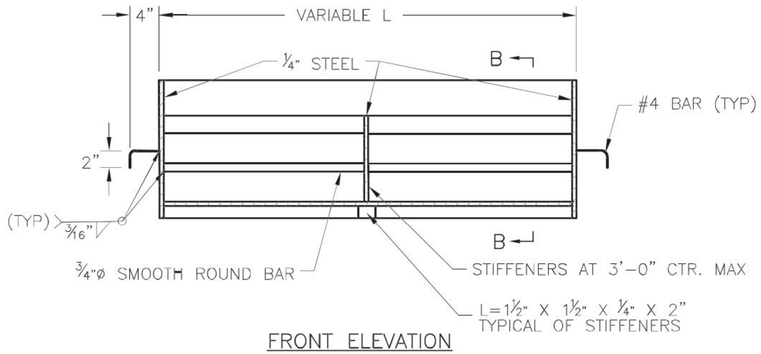
PROJ. NO. B21D4397
DESIGNER MTA | DRAWN BY JNG
CFN 4397DET
SHEET C702 | REV 3



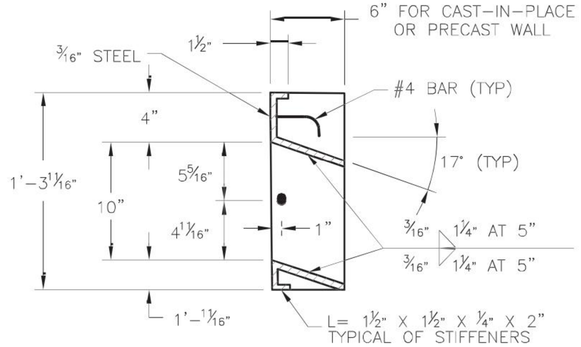
PLAN VIEW



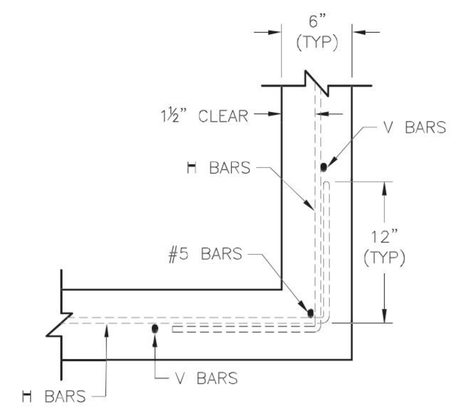
SECTION A–A



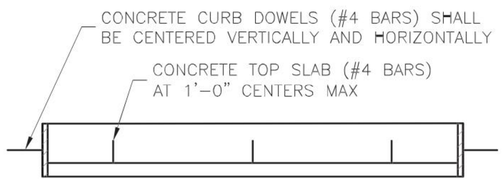
FRONT ELEVATION



SECTION B–B



WALL CORNER DETAIL



PLAN VIEW

CURB INLET
NOT TO SCALE
160

STEEL FRAME NOTES:
1. ALL WELDS SHALL BE PERFORMED IN ACCORDANCE WITH APPROPRIATE AWS SPECIFICATIONS AND PROCEDURES.
2. ALL WELDS ON EXPOSED SURFACES SHALL BE DRESSED SO AS TO PROVIDE A PLEASING FINISHED APPEARANCE.
3. THE ENTIRE FRAME SHALL BE PAINTED A SINGLE COAT OF CHEM–PRIME #37H–78 PRIMER (GRAY) OR EQUAL.

GENERAL NOTES:
1. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
2. FLOW LINES LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
4. LOCATE MH RING AND COVER ON BLANK WALL IF POSSIBLE.
5. STEPS SHALL BE SPACED AT 1'–4" O.C. VERTICALLY ON BLANK WALL IF POSSIBLE.
6. BEVEL ALL EXPOSED EDGES WITH ¾"CHAMFER OR ½" TOOLED EDGE.
7. ON–GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON–SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. LIFTING RINGS SHALL BE REMOVED AND SEALED WITH NON–SHRINKABLE GROUT
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

REV	DATE	DESCRIPTION	DSN	DWN	CHK
3	06/22/22	PER CITY COMMENTS	MTA	JNG	
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1	04/08/22	CHECK SET	MTA	JNG	
0	03/02/22	INITIAL ISSUE	ARM	JNG	MTA

LEE'S SUMMIT MISSOURI

Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: CURB INLET DETAIL

Drawn By: MJF
Checked By: DL
Date: 05/2021
Proj. #:

STM-1

State of Missouri
MARTIN T. ARLING
NUMBER PE-2009002955
PROFESSIONAL ENGINEER

MARTIN T. ARLING
ENGINEER
MO # 2009002955

KAW VALLEY ENGINEERING
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kc@kveng.com | www.kveng.com
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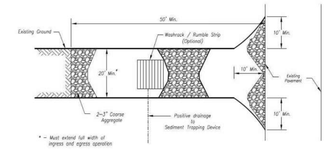
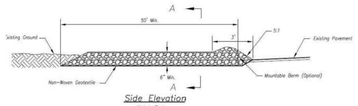
7 BREW
1410 N.E. DOUGLAS STREET
LEE'S SUMMIT, MO. 64086

CONSTRUCTION PLANS
DETAIL SHEET

PROJ. NO. B21D4397
DESIGNER MTA | DRAWN BY JNG
CFN 4397DET
SHEET C703 | REV 3



Plan View
Not to Scale



Side Elevation
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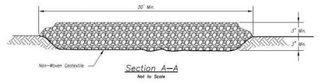


Section A-A
Not to Scale

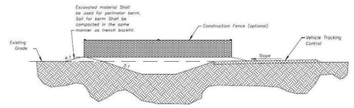
CONSTRUCTION ENTRANCE

NOTES FOR CONCRETE WASHOUT:
1. AVOID LOCATING ON STEEP SLOPES, AT CURVES ON PUBLIC ROADS, OR DOWNHILL OF DISTURBED AREA.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. IF SLOPE TOWARDS THE PUBLIC ROAD EXCEEDS 2%, CONSTRUCT A 6- TO 8-INCH HIGH RIDGE WITH 3H:1V SIDE SLOPES ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE EDGE OF THE PUBLIC ROAD TO DIVERT RUNOFF FROM IT.
4. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES ALONG PUBLIC ROADS.
5. PLACE STONE TO DIMENSIONS AND GRADE AS SHOWN ON PLANS, LEAVE SURFACE SLOPED FOR DRAINAGE.
6. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO SEDIMENT CONTROL DEVICE.
7. IF CONDITIONS WARRANT, PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY.

MAINTENANCE FOR CONCRETE WASHOUT:
1. RESHAPE ENTRANCE AS NEEDED TO MAINTAIN FUNCTION AND INTEGRITY OF INSTALLATION. TOP DRESS WITH CLEAN AGGREGATE AS NEEDED.

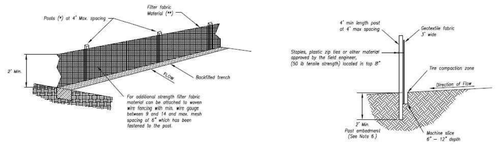
NOTES FOR CONCRETE WASHOUT:
1. CONCRETE WASHOUT AREAS SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
2. CONCRETE WASHOUT AREA SHALL INCLUDE A FLAT SUBSURFACE PIT SIZED RELATIVE TO THE AMOUNT OF CONCRETE TO BE PLACED ON SITE. THE SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1. THE VEHICLE TRACKING PAD SHALL BE SLOPED TOWARDS THE CONCRETE WASHOUT AREA.
3. VEHICLE TRACKING CONTROL IS REQUIRED AT THE ACCESS POINT TO ALL CONCRETE WASHOUT AREAS.
4. SIGNS SHALL BE PLACED AT THE CONSTRUCTION SITE ENTRANCE, WASHOUT AREA AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION(S) OF THE CONCRETE WASHOUT AREA(S) TO OPERATORS OF CONCRETE TRUCK AND PUMP RIGS.
5. A ONE-PIECE IMPERVIOUS LINER MAY BE REQUIRED ALONG THE BOTTOM AND SIDES OF THE SUBSURFACE PIT IN SANDY OR GRAVELLY SOILS.

MAINTENANCE FOR CONCRETE WASHOUT:
1. CONCRETE WASHOUT MATERIALS SHALL BE REMOVED ONCE THE MATERIALS HAVE FILLED THE WASHOUT TO APPROXIMATELY 75% FULL.
2. CONCRETE WASHOUT AREAS SHALL BE ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
3. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY.
4. CONCRETE WASHOUT AREAS SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
5. WHEN CONCRETE WASHOUT AREAS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACKFILL AND TOPSOIL. ANY DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE CONCRETE WASHOUT AREAS SHALL BE STABILIZED.



CONCRETE WASHOUT

AMERICAN PUBLIC WORKS ASSOCIATION
KANSAS CITY METRO CHAPTER
CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT
STANDARD DRAWING NUMBER: ESC-04
ADOPTED: 10/24/2016



(*) POSTS
- MIN. LENGTH 4'
- HARDWOOD 1 ½" x 1 ½"
- HOLE SOUTHERN PINE 2 ½" x 2 ½"
- STEEL 1.33 LB/FT

(**) - Geotextile Fabric shall meet the requirements of AASHTO M288

SILT FENCE DETAILS
Not to Scale

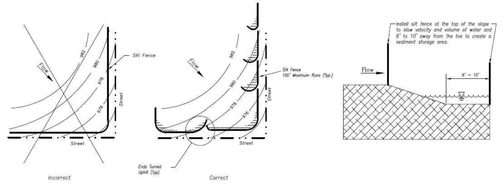
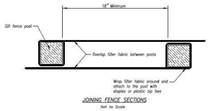


Figure A

SILT FENCE LAYOUT
Not to Scale

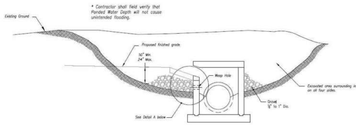


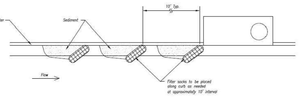
JOINING FENCE SECTIONS
Not to Scale

NOTES:
1. IN ORDER TO CONTAIN WATER, THE ENDS OF THE SILT FENCE MUST BE TURNED UPHILL (FIGURE A).
2. LONG PERIMETER RUNS OF SILT FENCE MUST BE LIMITED TO 100'. RUNS SHOULD BE BROKEN UP INTO SEVERAL SMALLER SEGMENTS TO MINIMIZE WATER CONCENTRATIONS (FIGURE A).
3. LONG SLOPES SHOULD BE BROKEN UP WITH INTERMEDIATE ROWS OF SILT FENCE TO SLOW RUNOFF VELOCITIES.
4. ATTACH FABRIC TO UPSTREAM SIDE OF POST.
5. INSTALL POSTS A MINIMUM OF 2" INTO THE GROUND.
6. TRENCHING WILL ONLY BE ALLOWED FOR SMALL OR DIFFICULT INSTALLATION, WHERE SLICING MACHINE CANNOT BE REASONABLY USED.

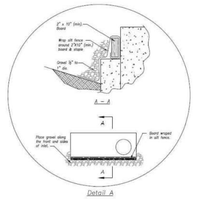
MAINTENANCE:
1. REMOVE AND DISPOSE OF SEDIMENT DEPOSITS WHEN THE DEPOSIT APPROACHES 1/3 THE HEIGHT OF SILT FENCE.
2. REPAIR AS NECESSARY TO MAINTAIN FUNCTION AND STRUCTURE.

AMERICAN PUBLIC WORKS ASSOCIATION
KANSAS CITY METRO CHAPTER
SILT FENCE
STANDARD DRAWING NUMBER: ESC-03
ADOPTED: 10/24/2016





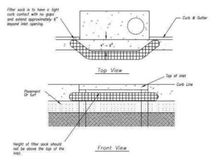
On Grade Curb Inlet Protection



EARLY STAGE CURB INLET
(Open Box and Prior to Pouring Curb and Inlet Throat)

NOTES:
1. IMMEDIATELY FOLLOWING INLET CONSTRUCTION AND PRIOR TO CONSTRUCTION OF CURB AND INLET THROAT, PROTECT INLET OPENING BY INSTALLING 2" X 10" (MIN.) BOARD WRAPPED IN SILT FENCE. STRUCTURES SHALL HAVE EXCAVATED STORAGE AREA ON ALL FOUR SIDES TO ALLOW SETTLING OF SEDIMENT (EARLY STAGE CURB INLET).
2. WHEN INLET IS COMPLETED AND CURB POURED, FILTER SOCKS OR APPROVED EQUAL SHOULD BE USED (LATE STAGE CURB INLET). STRAW WATTLES ARE NOT APPROVED FOR CURB INLET USE.
3. CONTRACTOR TO FIELD VERIFY PONDING WATER SHALL NOT CREATE A TRAFFIC HAZARD.

MAINTENANCE:
1. REMOVE DEPOSITED SEDIMENT FROM EXCAVATED STORAGE AREAS WHEN AVAILABLE STORAGE HAS BEEN REDUCED BY 20%.
2. REMOVE DEPOSITED SEDIMENT FROM FILTER SOCKS OR SIMILAR WHEN ANY ACCUMULATION OF SEDIMENT IS VISIBLE.
3. REPAIR OR REPLACE AS NECESSARY TO MAINTAIN FUNCTION AND INTEGRITY OF INSTALLATION.



Sump Inlet Sediment Filter

LATE STAGE CURB INLET
(After Pouring Curb and Inlet Throat)

AMERICAN PUBLIC WORKS ASSOCIATION
KANSAS CITY METRO CHAPTER
CURB INLET PROTECTION
STANDARD DRAWING NUMBER: ESC-06
ADOPTED: 10/24/2016

REV	DATE	DESCRIPTION	DSN	DWN	CHK
3	06/22/22	PER CITY COMMENTS	MTA	JNG	
2	05/06/22	PER OWNER COMMENTS	MTA	JNG	
1	04/08/22	CHECK SET	MTA	JNG	
0	03/02/22	INITIAL ISSUE	ARM	JNG	MTA

STATE OF MISSOURI
MARTIN T. ARLING
NUMBER PE-2009002955
PROFESSIONAL ENGINEER
03/24/23

MARTIN T. ARLING
ENGINEER
MO # 2009002955

8040 N. OAK TRAFFICWAY
KANSAS CITY, MISSOURI 64118
PH: (816) 468-5858 | FAX (816) 468-6651
kcdk.kveng.com | www.kveng.com

KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN MISSOURI BY CERTIFICATE OF AUTHORITY # 2008242.
EXPIRES 12/31/23

7 BREW
1410 N.E. DOUGLAS STREET
LEE'S SUMMIT, MO. 64086

CONSTRUCTION PLANS
DETAIL SHEET

PROJ. NO.	B21D4397
DESIGNER	MTA
DRAWN BY	JNG
CFN	4397DET
SHEET	C704
REV	3

LANDSCAPING NOTES:

1. LOCATE ALL UTILITIES BEFORE LANDSCAPE CONSTRUCTION BEGINS.
2. NOTIFY OWNER REPRESENTATIVE OF ANY LAYOUT DISCREPANCIES.
3. ALL EXTERIOR GROUND WITHIN THE LIMITS OF THE CONTRACT, EXCEPT FOR SURFACES OCCUPIED BY BUILDINGS, STRUCTURES,PAVING, AND AS DIRECTED ON THE DRAWINGS AS UNDISTURBED, SHALL BE FILLED WITH SIX INCHES (6") OF TOPSOIL.
4. ALL DISTURBED AREAS NOT DESIGNATED FOR OTHER PLANTING SHALL BE SODDED. SOD SHALL CONSIST OF 90% TURF TYPE TALL FESCUE 10% BLUEGRASS.
5. QUANTITIES INDICATED IN PLANT LIST ARE FOR CONVENIENCE ONLY. CONTRACTOR IS RESPONSIBLE FOR PLANT QUANTITIES AS ILLUSTRATED ON THE PLAN.
6. SHREDDED HARDWOOD MULCH SHALL BE USED AS THREE INCH (3") TOP DRESSING IN ALL PLANT BEDS AND AROUND ALL TREES. SINGLE TREES OR SHRUBS SHALL BE MULCHED TO THE OUTSIDE EDGE OF SAUCER OR LANDSCAPE ISLAND (SEE PLANTING DETAILS).
7. FERTILIZE ALL PLANTS AT THE TIME OF PLANTING WITH TIME-RELEASE FERTILIZER(3-4 SLOW-RELEASE TABLETS/PELLETS).
8. IF LEANING OCCURS WITHIN ONE YEAR, TREES SHALL BE RE-STAKED (SEE PLANTING DETAILS).
9. CONTRACTOR SHALL STAKE ALL PLANT MATERIALS PRIOR TO INSTALLATION FOR THE PURPOSE OF DETERMINING CONFLICTS WITH ROCK, UTILITIES, ETC. NO PLANTS CAN BE PLANTED DIRECTLY ON ROCK OR UTILITIES. NOTIFY ARCHITECT/ENGINEER/OWNER AT ONCE IF ANY CONFLICTS OCCUR. CONTRACTOR WILL BE REQUIRED TO ADJUST PLANT LOCATIONS AT NO ADDITIONAL COST.
10. CONTRACTOR IS RESPONSIBLE FOR WATERING ALL SOD UNTIL ROOTS HAVE KNITTED INTO SOIL AND OWNER HAS OCCUPIED THE BUILDING.
11. PROVIDE "GATOR" BAGS ON ALL TREES. REFILL AS NECESSARY UNTIL OWNER OCCUPIES THE BUILDING.
12. ALL TREES SHALL BE 3" CALIPER, EVERGREEN TREES SHALL BE 8' TALL AND SHRUBS SHALL BE 18" HEIGHT AT TIME OF PLANTING

IRRIGATION PERFORMANCE SPECIFICATION:

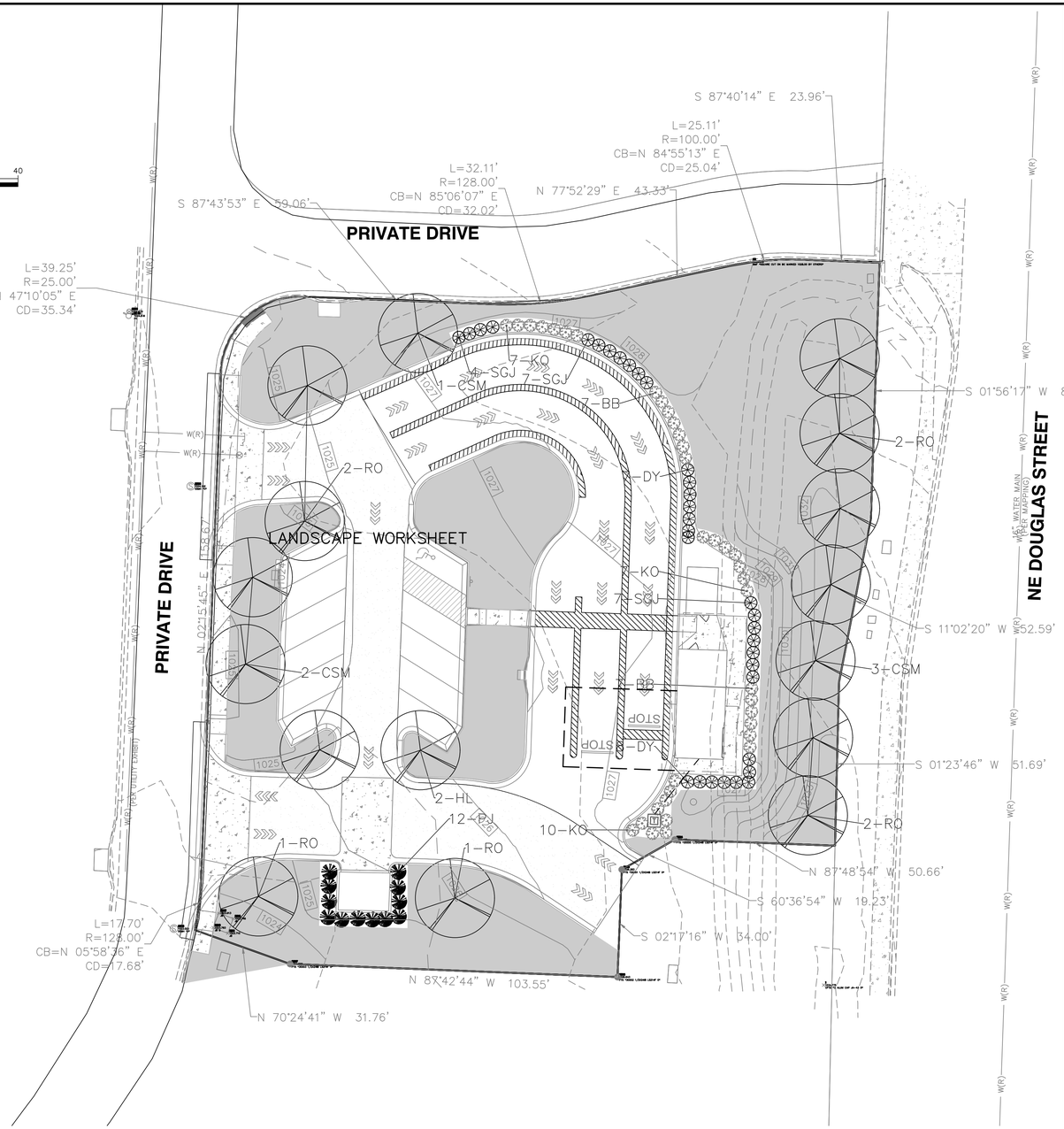
THE FOLLOWING CRITERIA SHALL BE CONSIDERED MINIMUM STANDARDS FOR DESIGN AND INSTALLATION OF LANDSCAPE IRRIGATION SYSTEM:

1. GENERAL – IRRIGATION SYSTEM TO INCLUDE DRIP IRRIGATION OF SHRUB BEDS ADJACENT TO BUILDINGS, SPRAY HEADS IN THE PARKING ISLANDS, AND ROTORS AROUND THE PERIMETER OF THE PARKING LOTS. HEADS SHALL THROW AWAY FROM BUILDING AND AVOID SPRAYING OVER SIDEWALKS.
2. IRRIGATION SYSTEM SHALL CONFORM TO ALL INDUSTRY STANDARDS AND ALL FEDERAL, STATE AND LOCAL LAWS GOVERNING DESIGN AND INSTALLATION.
3. WATER LINE TYPE, SIZE LOCATION, PRESSURE AND FLOW SHALL BE FIELD VERIFIED PRIOR TO SYSTEM DESIGN AND INSTALLATION.
4. ALL MATERIALS SHALL BE FROM NEW STOCK FREE OF DEFECTS AND CARRY A MINIMUM ONE YEAR WARRANTY FROM THE DATE OF SUBSTANTIAL COMPLETION.
5. THE IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED IN SUCH A WAY THAT ALL SYSTEM COMPONENTS OPERATE WITHIN THE GUIDELINES ESTABLISHED BY THE MANUFACTURER.
6. LAWN AREA AND SHRUB BEDS SHALL BE ON SEPARATE CIRCUITS.
7. PROVIDE WATER TAP, METER SET, METER VAULT AND ALL OTHER OPERATIONS NECESSARY TO PROVIDE WATER FOR IRRIGATION SHALL CONFORM TO LOCAL WATER GOVERNING AUTHORITY GUIDELINES AND STANDARDS.
8. BACKFLOW PREVENTION SHALL BE PROVIDED IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
9. IRRIGATION CONTROLLER TO BE LOCATED IN UTILITY ROOM INSIDE BUILDING, AS IDENTIFIED BY OWNER.
10. IRRIGATION CONTROLLER STATIONS SHALL BE LABELED TO CORRESPOND WITH THE CIRCUIT IT CONTROLS.
11. CONTRACTOR SHALL PROVIDE TO THE OWNER WRITTEN OPERATION INFORMATION FOR ALL SYSTEM COMPONENTS.
12. CONTRACTOR SHALL PROVIDE TO THE OWNER ALL KEYS, ACCESS TOOLS, WRENCHES AND ADJUSTING TOOLS NECESSARY TO GAIN ACCESS, ADJUST AND CONTROL THE SYSTEM.
13. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
14. AN AUTOMATIC RAIN SHUT-OFF OR MOISTURE DEVICE SHALL BE INSTALLED.
15. INSTALL SCHEDULE 40 PVC SLEEVES UNDER ALL CURBS, PAVING AND SIDEWALKS. SLEEVES TO BE TWICE THE SIZE OF THE LINE IT HOUSES.
16. INSTALL MANUAL DRAIN VALVES AT LOWEST POSSIBLE ELEVATION ON IRRIGATION MAIN TO ALLOW GRAVITY DRAINING OF MAIN DURING WINTER MONTHS. PROVIDE QUICK COUPLERS AT MULTIPLE LOCATIONS TO ALLOW FOR EASY "BLOWING OUT" OF LATERAL AND MAIN LINES.
17. ZONES OR NOZZLES SHALL BE DESIGNED WITH MATCHED PRECIPITATION RATES.
18. MINIMUM LATERAL DEPTH IS 15" AND MAIN DEPTH IS 18".
19. SUBMIT DESIGN DRAWING WITH BID TO ALLOW OWNER TO EVALUATE SYSTEM. INCLUDE CUT SHEETS OF ALL COMPONENTS AND ZONE TABLE ILLUSTRATING FLOWS AND ANTICIPATED PRESSURE AT FURTHEST HEAD.
20. AN "AS-BUILT" SCALED DRAWING SHALL BE PROVIDED TO THE OWNER BY THE CONTRACTOR AND SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
    - AS CONSTRUCTED LOCATION OF ALL COMPONENTS
    - COMPONENT NAME, MANUFACTURER, MODEL INFORMATION, SIZE AND QUANTITY
    - PIPE SIZE AND QUANTITY
    - INDICATION OF SPRINKLER HEAD SPRAY PATTERN
    - CIRCUIT IDENTIFICATION SYSTEM
    - DETAILED METHOD OF WINTERIZING SYSTEM

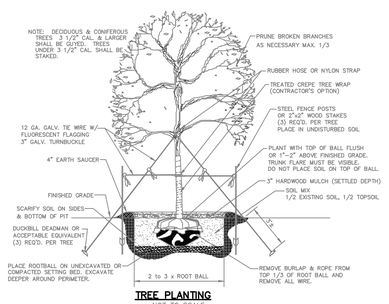
SUBMIT AS-BUILT DRAWING IN FULL SIZE DRAWING FORM AS WELL AS PDF ELECTRONIC FORMAT. (SCANNING FULL SIZE COPY OF PLAN IS ACCEPTABLE IF IT CAN BE PRINTED TO SCALE)

0 10 20 40

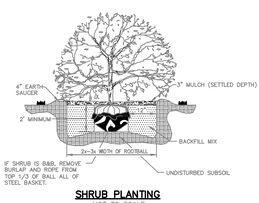
SCALE: 1" = 20'



PLANT SCHEDULE				
KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE/REMARKS
TREES				
CSM	6	ACER SACHARUM 'AUTUMN SPLENDOR'	CADDO SUGAR MAPLE	3" CAL. B&B
HL	2	GLEDITISA TRIACANTHOS 'SKYLINE'	SKYLINE HONEYLOCUST	3" CAL. B&B
RO	8	QUERCUS RUBRA	RED OAK	3" CAL. B&B
PJ	12	JUNIPEROUS CHINENSIS 'PERFECTA'	PERFECTA JUNIPER	6' HT. B&B
SHRUBS/GRASSES/GROUNDCOVER				
BB	14	EUONYMUS ALATUS	DWARF BURNING BUSH	5 GAL/18" HT. MIN.
KO	24	ROSA KNOCKOUT RADRAZZ	KNOCK OUT ROSE	5 GAL/18" HT. MIN.
SGJ	18	JUNIPEROUS CHINENSIS 'SEA GREEN'	SEA GREEN JUNIPER	5 GAL/18" HT. MIN.
DY	14	TAXUS x MEDIA 'DENSIFORMIS'	DENSIFORMIS YEW	5 GAL/18" HT. MIN.



TREE PLANTING
NOT TO SCALE



SHRUB PLANTING
NOT TO SCALE

REV	DATE	DESCRIPTION	
			MTA
			MTA
			JNG
			VSR
			VSR
			ARM
2	06/22/22	PER CITY COMMENTS	VSR
2	05/05/22	OWNER CHANGES	VSR
0	03/02/22	INITIAL ISSUE	VSR

STATE OF MISSOURI
VANCE S. RZEPKA
NUMBER
LA-000144
LANDSCAPE ARCHITECT
6/22/22

VANCE S. RZEPKA
LANDSCAPE ARCHITECT
MO: LA 000141

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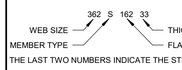
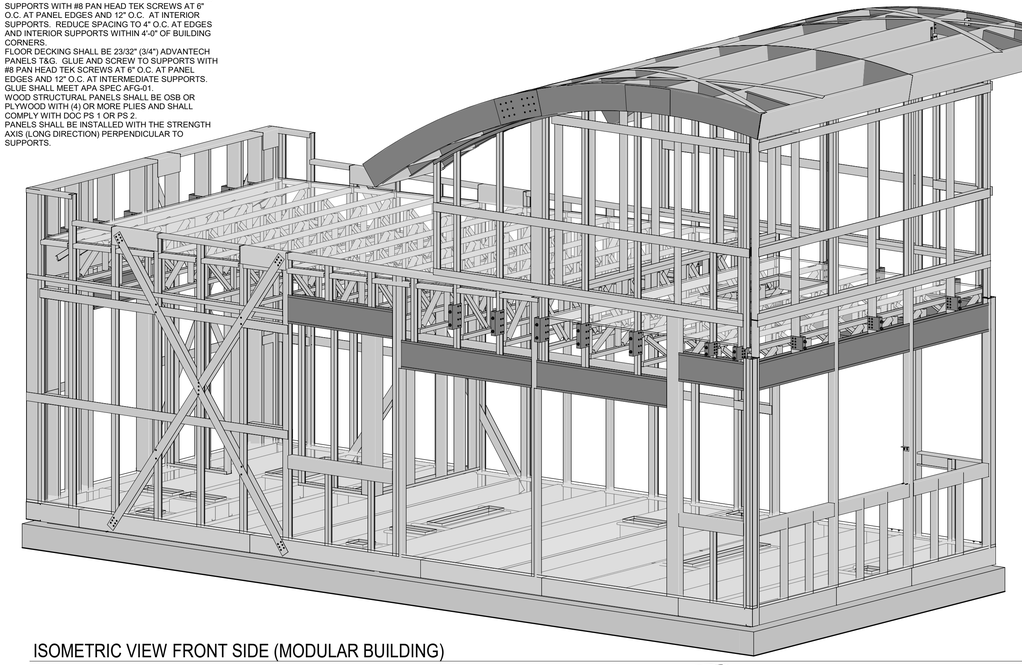
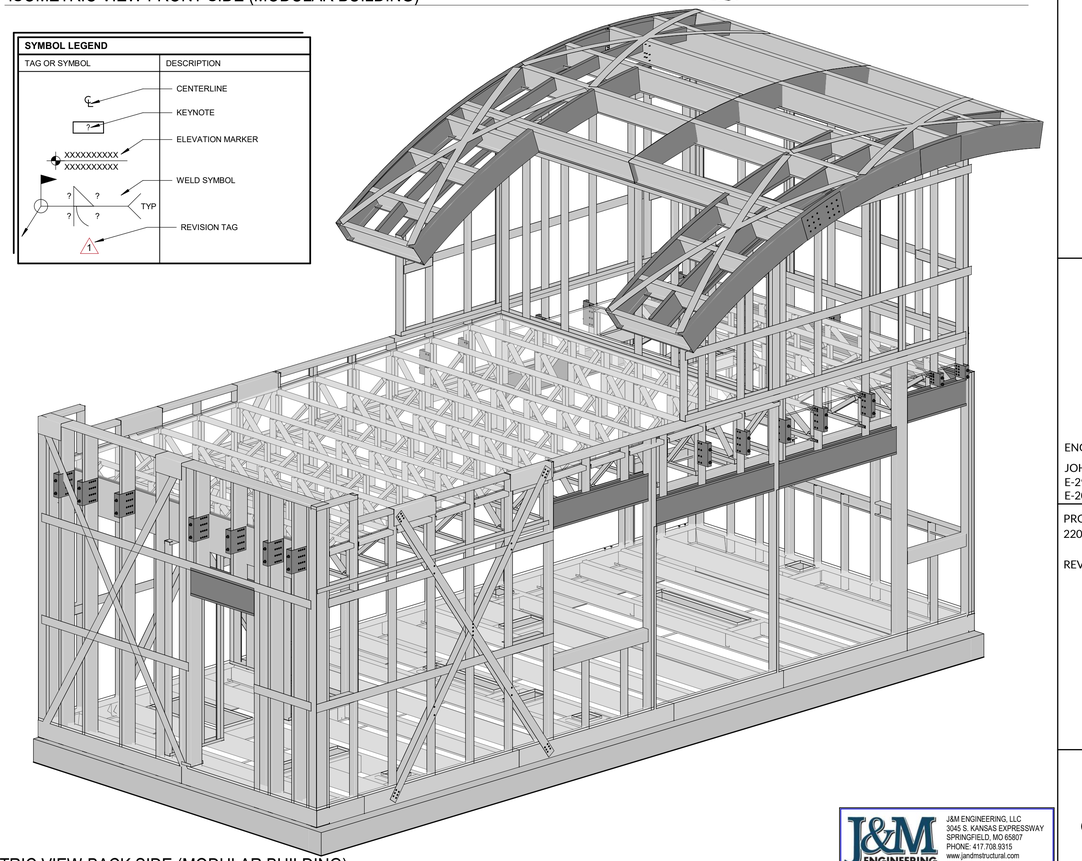
7 BREW
1410 N.E. DOUGLAS STREET
LEE'S SUMMIT, MO. 64086

CONSTRUCTION PLANS
LANDSCAPE PLAN

PROJ. NO. B21D4397
DESIGNER MTA | DRAWN BY JNG
CFN 4397LSP
SHEET L100 | REV 2







LOADING TABLE AND CODE INFORMATION					
BUILDING CODE 2018 IBC					
1. DEAD LOADS					
A. ROOF DEAD LOAD					20 PSF
B. TYPICAL ATTIC / FLOOR DEAD LOAD					50 PSF
2. COLLATERAL LOADS (NON-REDUCIBLE)					
A. ROOF COLLATERAL LOAD					10 PSF
3. LIVE LOADS					
A. ROOF LIVE LOAD (W/ TRIBUTARY REDUCTION)					20 PSF
B. TYPICAL FLOOR LIVE LOAD					40 PSF
C. STAIRS AND CORRIDORS FLOOR LIVE LOAD					100 PSF
4. SNOW LOAD					
A. GROUND SNOW LOAD, Pg					20 PSF
B. FLAT ROOF SNOW LOAD, Pf					20 PSF
C. SNOW EXPOSURE FACTOR, Ce					1.0
D. SNOW LOAD IMPORTANCE FACTOR					1.0
E. THERMAL FACTOR, Ct					1.0
F. SNOW DRIFT					PER CODE
5. WIND LOAD					
A. ULTIMATE WIND SPEED, Vult					109 MPH
B. RISK CATEGORY					II
C. WIND IMPORTANCE FACTOR					1.0
D. WIND EXPOSURE CATEGORY					C
E. INTERNAL PRESSURE COEFFICIENT					±0.18
6. SEISMIC DESIGN CRITERIA					
A. RISK CATEGORY					II
B. SEISMIC IMPORTANCE FACTOR, Ie					1.0
C. SPECTRAL RESPONSE ACCELERATIONS AND COEFFICIENTS					
	i. Ss	0.100	ii. Sds	0.106	
	iii. S1	0.068	iv. Sd1	0.109	
D. SITE CLASS					D
E. SEISMIC DESIGN CATEGORY					B
F. BASIS SEISMIC FORCE-RESISTING SYSTEM					LFWS FSB
G. ANALYSIS PROCEDURE					ELF
H. RESPONSE MODIFICATION COEFFICIENT, R					4
I. SYSTEM OVERSTRENGTH FACTOR,					3
J. DEFLECTION AMPLIFICATION FACTOR, Cd					4

COLD-FORMED STEEL NOTES

PRODUCT IDENTIFICATION

THE AMERICAN IRON AND STEEL INSTITUTE STANDARDS ARE USED IN THIS PACKAGE. ANY MANUFACTURER WHOSE PRODUCT GEOMETRIES MEETS OR EXCEED AISI STANDARDS ARE ACCEPTABLE.

362 S 162 33

WEB SIZE — 362

MEMBER TYPE — S

FLANGE SIZE — 162

THICKNESS (MILS) — 33

THE LAST TWO NUMBERS INDICATE THE STEEL THICKNESS

1. COLD-FORMED STEEL FABRICATION AND INSTALLATION SHALL BE IN ACCORDANCE WITH AISI "STANDARD FOR COLD-FORMED STEEL FRAMING - GENERAL PROVISIONS."
2. WELDING OF COLD-FORMED STEEL SHALL BE IN ACCORDANCE WITH THE STANDARD CODE OF ARC AND GAS WELDING IN BUILDING CONSTRUCTION.
3. AXIALLY LOADED STUDS SHALL BE POSITIONED DIRECTLY UNDER JOIST BEARING POINTS WHENEVER POSSIBLE.
4. STUDS SHALL NOT BE SPLICED.
5. PROVIDE MANUFACTURER'S STANDARD BRIDGING AS NOTED ON STUD TABLES (4' MAX U.N.O.).
6. PROVIDE DOUBLE STUDS, MINIMUM, AT ALL PARTITION ENDS, EACH SIDE OF OPENINGS, AND WHERE INDICATED ON DRAWINGS.
7. PROVIDE DEFLECTION TRACK OR CLIPS AT HEADS OF ALL NON LOAD-BEARING WALLS.
8. MINIMUM TRACK SIZE SHALL MATCH STUD SIZE U.N.O.
9. SEE STANDARD LIGHT GAGE DETAILS AND STUD CHARTS FOR ADDITIONAL INFORMATION.
10. ALIGN WEB PUNCHOUTS IN STUD WALLS. WEB PUNCHOUTS MUST BE LOCATED A MINIMUM OF 10" AWAY FROM THE STUD END.
11. MINIMUM YIELD STRENGTH FOR 18 AND 20 GA COLD-FORMED MEMBERS SHALL BE 33 KSI. MINIMUM YIELD STRENGTH FOR 16 GA AND HEAVIER COLD-FORMED MEMBERS SHALL BE 50 KSI.
12. HEADERS AND BUILT-UP BEAMS SHALL BE FORMED FROM UNPUNCHED MEMBERS.
13. STUDS SHALL NOT BE NOTCHED, SPLICED, OR COPED WITHOUT WRITTEN APPROVAL OF ENGINEER.
14. CUTTING OF STUDS SHALL BE DONE BY SAWING, SHEARING, OR PLASMA CUTTING. OTHER METHODS OF CUTTING ARE NOT PERMITTED WITHOUT APPROVAL OF ENGINEER.
15. SEE SPECIFICATIONS FOR ADDITIONAL STRUCTURAL COLD-FORMED FRAMING REQUIREMENTS. SEE SPECIFICATION SECTION 09260 FOR ADDITIONAL REQUIREMENTS FOR COLD-FORMED DRYWALL COMPONENTS. ALL MATERIALS AND WORK SHALL CONFORM TO THE CODE LISTED IN THESE DRAWINGS. THESE NOTES GIVE MINIMUM REQUIREMENTS. WHERE CONFLICTS ARISE BETWEEN THE CODE, THE DRAWINGS, AND THE STRUCTURAL NOTES, THE MORE STRINGENT REQUIREMENT SHALL CONTROL.

ADDITIONAL COLD-FORMED STEEL NOTES

1. CONTRACTOR SHALL PROVIDE LIGHT GAGE FRAMING SHOP DRAWING SUBMITTAL. SUBMITTAL SHALL INCLUDE LIGHT GAGE FRAMING PLANS, DETAILS, SECTIONS AND ACCESSORIES.
2. LIMIT STUD/HEADER DEFLECTIONS TO L/600 FOR MEMBERS SUPPORTING BRICK VENEER AND L/360 FOR ALL OTHERS.
3. SUBMITTAL SHALL INCLUDE INTERIOR AND EXTERIOR STUDS AND CEILING/SOFFIT MEMBERS.
4. COOR'D DEFLECTION TRACK AT NON-LOADING BEARING WALLS AND FIREPROOFING REQUIREMENTS W/ ARCH. TRACK (OR CLIPS) SHALL ALLOW 3/4" VERTICAL MOVEMENT UP OR DOWN.
5. PROVIDE DEFLECTION CLIPS AT TOP OF ALL EXTERIOR NON-LOAD BEARING JAMB MEMBERS.
6. PUNCHOUTS SHALL ALIGN AND SHALL NOT BE LOCATED WITHIN 10" OF BASE.

STATEMENT OF SPECIAL INSPECTIONS

1. SPECIAL INSPECTIONS ARE REQUIRED FOR THIS STRUCTURE IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE FOR THE ITEMS NOTED IN THE TABLE ON THIS SHEET.
2. TESTING SHALL BE PERFORMED BY A QUALIFIED TESTING LABORATORY RETAINED BY THE OWNER AND APPROVED BY THE ENGINEER.
3. A LETTER OF SUBSTANTIAL COMPLETION SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT BY THE SPECIAL INSPECTION PROVIDER PRIOR TO THE FINAL INSPECTION.

IBC TABLE 1705.6 REQUIRED VERIFICATION AND INSPECTION OF SOILS

VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	—	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	—	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	—	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	—
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	—	X

REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD
1. MATERIAL VERIFICATION OF COLD-FORMED STEEL DECK:			
A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	—	X	APPLICABLE ASTM MATERIAL STANDARDS
B. MANUFACTURER'S CERTIFIED TEST REPORTS	—	X	
2. INSPECTION OF WELDING:			
A. COLD-FORMED STEEL DECK:			
a. FLOOR AND ROOF DECK WELDS.	—	X	AWS D1.3
B. REINFORCING STEEL:			
a. VERIFICATION OF WELDABILITY OF REINF STEEL OTHER THAN ASTM A 706.	—	X	AWS D1.4 ACI 318: SECTION 3.5.2
b. REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL STRUCTURAL WALLS OF CONCRETE AND SHEAR REINFORCEMENT.	X	—	
c. SHEAR REINFORCEMENT.	X	—	
d. OTHER REINFORCING STEEL.	—	X	

SCHEDULE - SPECIAL INSPECTIONS

ABBREVIATIONS

1. A.B.= ANCHOR BOLT
2. ACI= AMERICAN CONCRETE INSTITUTE
3. AISC= AMERICAN INSTITUTE OF STEEL CONSTRUCTION
4. AISI= AMERICAN IRON AND STEEL INSTITUTE
5. ARCH= ARCHITECTURE/ARCHITECT
6. ASTM= AMERICAN SOCIETY FOR TESTING AND MATERIALS
7. A.W.= AFTER WELDING
8. AWS= AMERICAN WELDING SOCIETY
9. BAR= REBAR
10. B.O.= BOTTOM OF
11. B.O.A.= BACK OF ANGLE
12. B.O.F.= BOTTOM OF FOOTING
13. B.O.S.= BOTTOM OF STEEL
14. BRG= BEARING
15. BTM= BOTTOM
16. CANT= CANTILEVERED
17. C.I.P.= CAST-IN-PLACE
18. C.J.P.= COMPLETE JOINT PENETRATION WELD
19. CL= CENTERLINE
20. CLR= CLEAR
21. CMU= CONCRETE MASONRY UNIT
22. COL= COLUMN
23. CONC= CONCRETE
24. CONN= CONNECTION
25. CONT= CONTINUOUS
26. D.B.= DECK BEARING
27. D.B.A.= DEFORMED BAR ANCHOR
28. D.E.= DECK EDGE
29. DIA= DIAMETER
30. DL= DEAD LOAD
31. DTL= DETAIL
32. DWG= DRAWING
33. E= EXISTING
34. EA= EACH
35. E.F.= EACH FACE
36. EL= ELEVATION
37. EPS= EXPANDED POLYSTYRENE
38. EQ= EQUAL
39. E.W.= EACH WAY
40. EXT= EXTERIOR
41. f'c= CONCRETE COMPRESSIVE STRENGTH
42. F.F.= FINISHED FLOOR
43. FND= FOUNDATION
44. F.O.W.= FACE OF WALL
45. F.S.= FAR SIDE
46. FTG= FOOTING
47. F.V.= FIELD VERIFY
48. GA= GAGE / GAUGE
49. GALV= GALVANIZED
50. G.B.= GRADE BEAM
51. G.C.= GENERAL CONTRACTOR
52. (H)= HIGH
53. H&L= HIGH & LOW
54. H.A.S.= HEADED ANCHOR STUD
55. HORIZ= HORIZONTAL
56. IBC= INTERNATIONAL BUILDING CODE
57. I.D.= INSIDE DIAMETER
58. INFO= INFORMATION
59. INT= INTERIOR
60. J.B.= JOIST BEARING
61. J.B.E.= JOIST BEARING ELEVATION
62. KIP= 1000 POUNDS
63. KSI= KIPS PER SQUARE INCH
64. (L)= LOW
65. L= LENGTH
66. LB= POUND
67. LGSF= LIGHT-GAGE STEEL FRAMING
68. LL= LIVE LOAD
69. LLH= LONG LEG HORIZONTAL
70. LLV= LONG LEG VERTICAL
71. LONG= LONGITUDINAL
72. L.P.= LAYOUT POINT
73. LVL= LAMINATED VENEER LUMBER
74. LW= LIGHTWEIGHT
75. MAX= MAXIMUM
76. MECH= MECHANICAL
77. MEP= MECHANICAL, ELECTRICAL, PLUMBING
78. MFR= MANUFACTURER
79. MIL= THOUSANDS OF AN INCH
80. MIN= MINIMUM
81. MISC= MISCELLANEOUS
82. MTL= METAL
83. N.I.C.= NOT IN CONTRACT
84. N.S.= NEAR SIDE
85. N.T.S.= NOT TO SCALE
86. N.W.= NORMAL WEIGHT
87. O.C.= ON CENTER
88. O.D.= OUTSIDE DIAMETER
89. OPP= OPPOSITE / OPPOSITE HAND
90. PAF= POWDER ACTUATED FASTENER
91. P.C.F.= POUNDS PER CUBIC FOOT
92. PEMB= PRE-ENGINEERED METAL BUILDING
93. PLF= POUNDS PER LINEAR FOOT
94. PPT= PRESERVATIVE PRESSURE TREATED
95. PSF= POUNDS PER SQUARE FOOT
96. PSI= POUNDS PER SQUARE INCH
97. PT= POST TENSIONED
98. REINF= REINFORCING
99. REQ= REQUIRE
100. RTU= ROOF TOP UNIT
101. S.C.= SLIP CRITICAL
102. SCH= SCHEDULE
103. SDI= STEEL DECK INSTITUTE
104. SIM= SIMILAR
105. SJI= STEEL JOIST INSTITUTE
106. SL= SNOW LOAD
107. S.O.G.= SLAB ON GRADE
108. SPECS= SPECIFICATIONS
109. STD= STANDARD
110. STL= STEEL
111. T= THICKNESS
112. T&B= TOP AND BOTTOM
113. T.O.= TOP OF
114. T.O.F.= TOP OF FOOTING
115. T.O.P.= TOP OF PEDESTAL
116. T.O.S.= TOP OF STEEL
117. T.O.W.= TOP OF WALL
118. TYP= TYPICAL
119. UL= ULTIMATE LOAD
120. U.N.O.= UNLESS NOTED OTHERWISE
121. VERT= VERTICAL
122. VLD= VERTICAL LEG DOWN
123. W= WIDTH
124. WL= WIND LOAD
125. W.P.= WORK POINT
126. WWF= WELDED WIRE FABRIC
127. (#)= QUANTITY

POST-INSTALLED ANCHOR NOTES

1. CONTINUOUS INSPECTIONS ARE REQUIRED FOR POST INSTALLED ANCHOR BOLTS INCLUDING TYPE, SIZE, LENGTH, DRILLING METHOD, HOLE CLEANING PROCEDURES, AND ANCHOR INSTALLATION AND SETTING PROCEDURES.
2. ADHESIVE ANCHORS SHALL BE INSTALLED BY AN ADHESIVE ANCHOR INSTALLER WHO HAS BEEN CERTIFIED BY ACI AND TRAINED BY THE MANUFACTURER.
3. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.

CONCRETE NOTES

1. CONCRETE FOR FOUNDATIONS, FOOTINGS AND INTERIOR SLABS ON GRADE SHALL BE AS FOLLOWS:
   - 28-DAY COMPRESSIVE STRENGTH: 3000 PSI
   - MAXIMUM WATER TO CEMENT RATIO: 0.52
   - SLUMP: 4" ±1"
2. CONCRETE FOR EXTERIOR USES, SIDEWALKS, RETAINING WALLS, BASEMENT WALLS, AND EXTERIOR SLABS ON GRADE SHALL BE AS FOLLOWS:
   - 28-DAY COMPRESSIVE STRENGTH: 4000 PSI
   - MAXIMUM WATER TO CEMENT RATIO: 0.45
   - SLUMP: 4" ±1"
   - AIR-ENTRAINMENT: 6% ±1%
     AIR-ENTRAINING ADMIXTURE SHALL CONFORM TO ASTM C260.
3. CONCRETE FOR ELEVATED SLABS ON METAL DECK SHALL BE AS FOLLOWS:
   - 28-DAY COMPRESSIVE STRENGTH: 4000 PSI
   - MAXIMUM WATER TO CEMENT RATIO: 0.45
   - SLUMP: 4" ±1"
4. NO LIME SAND FINE AGGREGATE MAY BE USED IN CONCRETE EXPOSED TO WEATHER, VIEW, OR IN HORIZONTAL APPLICATIONS.
5. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60.
6. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. LAP FABRIC 9" ON SIDES AND ENDS. MAINTAIN WIRE 1" TO 2" BELOW TOP SURFACE OF SLABS ON GRADE. PROVIDE CHAIRS, BOLSTERS OR OTHER APPROVED MEANS TO PROPERLY LOCATE REINFORCING.
7. IF ADDITIONAL FLOWABILITY IS REQUIRED FOR PLACEMENT OF ANY CONCRETE MIX, A WATER-REDUCING ADDITIVE CONFORMING TO ASTM C494, TYPE A, D, E OR F SHALL BE USED. NO ADDITIONAL WATER MAY BE ADDED TO THE MIX AT THE SITE. SLUMP FOR CONCRETE CONTAINING WATER-REDUCING OR HIGH-RANGE WATER-REDUCING ADMIXTURE SHALL NOT EXCEED 8" AFTER ADMIXTURE IS ADDED TO CONCRETE WITH A 2"-4" SLUMP.
8. INTERIOR SLABS SHALL HAVE SMOOTH TROWELED FINISH AND EXTERIOR SLABS SHALL HAVE LIGHT BROOM FINISH, UNO. ALL SLABS SHALL HAVE A CURING COMPOUND COMPLYING WITH ASTM C309 APPLIED TO SURFACE. EXCEPTIONS ARE WHERE FLOOR FINISHES REQUIRE SCRATCH FINISH AND WHERE CURING COMPOUNDS ARE NOT COMPATIBLE WITH ADHESIVES, ETC.
9. CONTRACTOR SHALL COORDINATE ALL CONCRETE SEALERS, CURING COMPOUNDS, ETC TO ENSURE COMPATIBILITY WITH FLOORING ADHESIVES FOR FLOORING INDICATED IN THE FLOOR PLANS AND FLOOR FINISH PLANS AS APPLICABLE.
10. TESTING OF FRESH CONCRETE SHALL BE DONE BY A QUALIFIED TESTING LABORATORY RETAINED BY THE OWNER AND APPROVED BY THE ENGINEER. TESTING SHALL INCLUDE:
    - SLUMP
    - AIR CONTENT
    - CONCRETE TEMPERATURE
    - 28 DAY COMPRESSIVE STRENGTH
    - NOTE ANY WATER OR ADMIXTURES ADDED ON-SITE
11. REFER TO ASTM C172 AND C94. PERFORM ONE SLUMP AND ONE AIR CONTENT TEST FOR EACH DAYS POUR AND ADDITIONAL TESTS WHEN THE CONCRETE CONSISTENCY SEEMS TO HAVE CHANGED IN THE OPINION OF THE INSPECTOR. REFER TO ASTM C143, C173 AND C231. PERFORM TEMPERATURE TESTS HOURLY WHEN THE AMBIENT AIR TEMPERATURE IS BELOW 40 DEGREES F OR ABOVE 80 DEGREES F AND ONE TEMPERATURE TEST FOR EACH SET OF COMPRESSIVE-STRENGTH SPECIMENS. REFER TO ASTM C1064. PERFORM ONE COMPRESSIVE-STRENGTH TEST FOR EACH DAYS POUR AND AN ADDITIONAL TEST FOR EACH 50 CUBIC YARD MORE THAN THE FIRST 25 CUBIC YARD. TEST ONE SPECIMEN AT 7 DAYS AND 2 SPECIMENS AT 28 DAYS. REFER TO ASTM C31 AND C39.
12. CONCRETE FOR GROUTING MASONRY UNITS IS SPECIFIED IN CONCRETE MASONRY UNIT NOTES.
13. WHERE FOOTINGS, WALLS, OR OTHER STRUCTURAL ELEMENTS INTERSECT, CORNER OR TEE, PROVIDE CORNER BARS WITH REQUIRED LAP LENGTHS TO PROVIDE CONTINUITY OF HORIZONTAL STEEL REINFORCING UNO.
14. PROVIDE A MINIMUM OF 3" COVER FOR ANCHOR BOLTS AND LOCATE HORIZONTAL REINFORCEMENT TO THE OUTSIDE FOR ANCHOR BOLT CONTAINMENT, UNO.
15. PROVIDE TEMPORARY SHORING AND BRACING OF ALL STRUCTURAL AND MISCELLANEOUS ELEMENTS UNTIL CONCRETE HAS OBTAINED 80% OF DESIGN STRENGTH AND ALL PERMANENT BRACING ELEMENTS ARE INSTALLED.
16. UNLESS NOTED OTHERWISE, PROVIDE CONSTRUCTION JOINTS IN SLABS ON GRADE AT APPROXIMATELY 50 FEET IN EACH DIRECTION. PROVIDE CONTROL JOINTS IN SLABS ON GRADE AT APPROXIMATELY 10 FEET ON CENTER IN EACH DIRECTION. JOINTS SHALL FORM NEARLY SQUARE SHAPES. CONTRACTOR SHALL COORDINATE JOINT LOCATIONS WITH TILE LAYOUT AS SHOWN IN THE FLOOR PLANS AND FLOOR FINISH PLANS AS APPLICABLE.
17. WHERE DOWELS, BOLTS OR INSERTS ARE CALLED TO BE ANCHORED TO CAST IN PLACE OR PRECAST CONCRETE ELEMENTS USING EPOXY ADHESIVES, USE ANCHORAGE SYSTEM EQUAL TO "HILTI" HIT RE 500 INJECTION ADHESIVE. FOLLOW ALL MANUFACTURERS RECOMMENDATIONS. ALTERNATE ANCHORAGE SYSTEMS MAY BE USED WITH ENGINEER'S PRIOR APPROVAL.
18. SAWN CONTROL JOINTS SHALL BE PLACED AS SOON AS CONCRETE IS ABLE TO BE SAWN WITHOUT PULLING OUT AGGREGATE FROM FLOOR. SLABS SHALL NOT BE LEFT OVERNIGHT, OR ANY REASONABLE AMOUNT OF TIME, WITHOUT SAWING JOINTS. WEATHER IS CRITICAL TO SCHEDULE OF SAWN JOINTS. IF LARGE AREAS OF SLAB ARE POURED AT ONE TIME, SEVERAL SAWS MAY BE REQUIRED TO PROVIDE JOINTS IN TIME TO PREVENT SHRINKAGE CRACKING. PROPER JOINTING OF SLAB IS CRITICAL. REFER TO ACI MANUAL OF CONCRETE PRACTICE FOR PROPER JOINTING TECHNIQUES.
19. DETAILING, MATERIALS AND INSTALLATION OF CONCRETE REINFORCING STEEL SHALL MEET REQ. AS SET FORTH BY CRSI AND THE AMERICAN CONCRETE INSTITUTE AND THE APPLICABLE BUILDING CODE.
20. SHOP DRAWINGS SHALL BE SUBMITTED INDICATING COMPLETE INFORMATION REQUIRED FOR CONSTRUCTION OF THE REINFORCED CONCRETE ELEMENTS. SHOP DRAWINGS SHALL INCLUDE LAYOUT AND DIMENSIONS OF REINFORCING INCLUDING ANY OPENINGS, CONVENTIONAL REINFORCEMENT DETAILS, CONNECTION DETAILS, PROCEDURES AND SEQUENCES ETC.
21. WHEN PLACING CONCRETE IN HOT WEATHER, REFER TO ACI 301, WHEN PLACING CONCRETE IN COLD WEATHER, REFER TO ACI 306.1.

GENERAL FOUNDATION & SLAB ON GRADE NOTES (NO SPECS, NO GEOTECH)

1. IN AREA OF THE STRUCTURE, EXISTING ORGANIC MATERIAL, UNSUITABLE SOIL, ABANDONED FOOTINGS AND ANY OTHER EXISTING UNSUITABLE MATERIALS SHALL BE REMOVED. ANY FILL MATERIAL REQUIRED AT THE SITE SHALL BE OF A SIMILAR TYPE SOIL THAT IS PRESENT AT THIS SITE EXHIBITING LIQUID LIMIT VALUES BELOW 50 AND PLASTIC INDEX VALUES BELOW 10. ROCKS GREATER THAN 6 IN. SHALL BE EXCLUDED FROM STRUCTURAL FILL LIFTS. FILL MATERIAL SHALL BE PLACED IN LOOSE LIFTS NO GREATER THAN 8 INCHES IN DEPTH AND SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY BASED ON STANDARD PROCTOR DENSITIES (ASTM D-698). ADEQUATE FIELD DENSITY AND MOISTURE CONTENT TESTS SHALL BE PERFORMED TO ENSURE COMPLIANCE WITH REQUIREMENTS.
2. TESTING OF CONTROLLED STRUCTURAL FILL SHALL BE DONE BY A QUALIFIED TESTING LABORATORY RETAINED BY THE OWNER. SEE STRUCTURAL DRAWINGS FOR REQUIRED TESTING. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WORK WITH INSPECTOR.
   - AFTER STRIPPING SITE AND PRIOR TO PLACEMENT OF ANY FILL, NOTIFY SPECIAL INSPECTOR/TESTING AGENCY FOR INSPECTION OF SOIL CONDITIONS. INSPECTION SHALL INCLUDE PROOF ROLLING SITE WITH HEAVY EQUIPMENT PROVIDED BY THE CONTRACTOR.
   - AFTER EXCAVATION FOR FOUNDATIONS AND PRIOR TO PLACEMENT OF STEEL REINFORCEMENT OR CONCRETE, NOTIFY SPECIAL INSPECTOR/TESTING AGENCY FOR INSPECTION OF SOIL CONDITIONS. WHEN SOIL OF INADEQUATE STRENGTH IS NOTED, CONTRACTOR SHALL FURTHER DEEPEN EXCAVATIONS UNTIL SUITABLE BEARING CONDITIONS ARE VERIFIED BY TESTING. OVEREXCAVATIONS MAY BE BACKFILLED WITH SUITABLE COMPACTED ENGINEERED FILL, SUITABLE GRANULAR BASE, OR STRUCTURAL CONCRETE BACKFILL.
3. EXTERIOR FOOTINGS SHALL BEAR AT MIN. DEPTHS AS NOTED IN FOOTING SECTIONS AND PLANS, 30" BELOW EXTERIOR FINISH GRADE, OR INTO APPROVED BEARING STRATA, WHICHEVER DEPTH IS GREATER. NOTE THAT FOOTING BEARING ELEVATIONS GIVEN ON THE PLANS ARE ESTIMATED DEPTHS ONLY. WHERE UNSUITABLE SOIL IS ENCOUNTERED, FOOTING DEPTHS MAY VARY.
4. EXCAVATION FOR FOOTINGS SHALL BE CUT TO ACCURATE SIZE AND DIMENSIONS AS SHOWN ON PLANS. ALL SOIL BELOW SLABS AND FOOTINGS SHALL BE PROPERLY COMPACTED AND SUBGRADE BROUGHT TO A REASONABLE TRUE AND LEVEL PLANE BEFORE PLACING CONCRETE.
5. CONTINUOUS FOOTINGS AND INDIVIDUAL FOOTINGS ARE DESIGNED FOR A NET ALLOWABLE SOIL BEARING OF
   - CONTINUOUS FOOTINGS: 1500 PSF
   - INDIVIDUAL FOOTINGS: 1500 PSF
   - FOR EITHER NATURALLY OCCURRING SOIL OR COMPACTED ENGINEERED FILL.
6. TYPICAL SLABS ON GRADE
   - THICKNESS: 4" THICK NORMAL WEIGHT CONCRETE
   - REINFORCING: 6x6-W1.4xW1.4 WELDED WIRE FABRIC (WWF)
   - VAPOR BARRIER: 15 MIL., (ASTM E1745 CLASS A)
   - SUBGRADE: A MINIMUM OF 4" OF FREE-DRAINING GRANULAR BASE, COMPACTED PER RECOMMENDATIONS OF GEOTECHNICAL ENGINEER.
   - MAINTAIN REINFORCING 1"-2" BELOW TOP SURFACE OF SLABS ON GRADE. PROVIDE BOLSTERS, CHAIRS OR OTHER MEANS APPROVED IN WRITING BY THE ENGINEER TO PROPERLY LOCATE REINFORCING. GRANULAR BASE SHALL BE #57 STONE OR APPROVED EQUAL UNLESS OTHERWISE INDICATED IN GEOTECHNICAL REPORT. REFER TO ASTM D448 FOR GRADATION.
   - IN SOME CASES 1.5 POUNDS (MIN) OF POLYPROPYLENE FIBRILLATED FIBERS PER CUBIC YARD REINFORCING MAY BE SUBSTITUTED FOR THE WWF REINFORCING. ANY VISIBLE FIBERS REMAINING AFTER CONCRETE HAS CURED SHALL BE TORCHED OFF. THIS SUBSTITUTION IS NOT ALWAYS APPROPRIATE AND SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
7. DRAINAGE FILL SHALL BE A FREE-DRAINING GRANULAR MATERIAL. USE #57 STONE OR EQUAL. REFER TO ASTM D448 FOR GRADATION.
8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN EXCAVATIONS AND BACKFILL MATERIALS AT AN APPROPRIATE MOISTURE CONTENT FOR PROPER SOIL BEARING CAPACITY AND COMPACTION.
9. CONTRACTOR SHALL COORDINATE WITH THE CIVIL / SITE DRAWINGS TO DETERMINE WHETHER FOUNDATION DRAINS AROUND PERIMETER OF BUILDING AND/OR UNDER THE SLAB-ON-GRADE SHALL BE REQUIRED AND, IF SO, SHALL RUN TO DAYLIGHT OR EXTENDED TO THE STORM SEWER.
10. AT RETAINING WALLS FILTER FABRIC SHALL BE PLACED AT THE INTERFACE BETWEEN THE DRAINAGE FILL AND EITHER NATURAL OR COMPACTED SUBGRADE. PERFORATED DRAINS SHALL ALSO BE WRAPPED WITH FILTER FABRIC.

COMPONENTS AND CLADDING WIND PRESSURE

1. BUILDING ELEMENTS SHALL BE DESIGNED FOR THE APPROPRIATE COMPONENTS AND CLADDING WIND PRESSURES GIVEN IN THE TABLES BELOW BASED ON THE ELEMENT'S ZONE AND EFFECTIVE WIND AREA. PRESSURES PROVIDED ARE ULTIMATE AND ARE UNFACTORED.
2. ZONE 2, 3 AND 5 PRESSURES SHALL BE APPLIED WITHIN 11'-6" OF ALL WALL AND ROOF EDGES AND CORNERS PER ASCE 7-10 FIGURES 30.4-1 & 30.4-2A.
3. ELEMENTS WITH TRIBUTARY AREAS GREATER THAN 700 SQUARE FEET SHALL BE PERMITTED TO BE DESIGNED USING THE PROVISIONS FOR MWFRS.

ROOF C&C PRESSURES		
GROSS UPLIFT		
OPEN WEB JOISTS	ZONE 1	27 PSF
	ZONE 2	32 PSF
	ZONE 3	32 PSF
METAL DECK	ZONE 1	29 PSF
	ZONE 2	49 PSF
	ZONE 3	73 PSF
NET UPLIFT		
OPEN WEB JOISTS	ZONE 1	24 PSF
	ZONE 2	29 PSF
	ZONE 3	29 PSF
METAL DECK	ZONE 1	27 PSF
	ZONE 2	47 PSF
	ZONE 3	71 PSF

WALL C&C PRESSURES		
EFFECTIVE WIND AREA (FT²)	ZONE 4 NEG. PRESSURE	ZONE 5 NEG. PRESSURE
10	41 PSF	50 PSF
20	39 PSF	47 PSF
50	37 PSF	42 PSF
100	34 PSF	39 PSF
500+	31 PSF	31 PSF

WOOD SHEATHING & DECKING NOTES ANCHORED TO LIGHT GAUGE

1. TYPICAL WALL SHEATHING SHALL BE 7/16" (1/2") APA RATED 24/16 STRUCTURAL 1 EXPOSURE 1 PANELS. SCREW TO SUPPORTS WITH #8 PAN HEAD TEK SCREWS AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. PROVIDE LIGHT GAUGE BLOCKING AT ALL PANEL EDGES. SEE SHEAR WALL SCHEDULE FOR REQUIREMENTS AT SHEAR WALLS.
2. ROOF DECKING SHALL BE 19/32" (5/8") STRUCTURAL I EXPOSURE I APA RATED 40/20 TONGUE AND GROOVE PANELS. "H" CLIPS MAY BE USED AT THE CONTRACTOR'S OPTION IN LIEU OF T&G. SCREW TO SUPPORTS WITH #8 PAN HEAD TEK SCREWS AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERIOR SUPPORTS. REDUCE SPACING TO 4" O.C. AT EDGES AND INTERIOR SUPPORTS WITHIN 4'-0" OF BUILDING CORNERS.
3. FLOOR DECKING SHALL BE 23/32" (3/4") ADVANTECH PANELS T&G. GLUE AND SCREW TO SUPPORTS WITH #8 PAN HEAD TEK SCREWS AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. GLUE SHALL MEET APA SPEC AFG-01.
4. WOOD STRUCTURAL PANELS SHALL BE OSB OR PLYWOOD WITH (4) OR MORE PLIES AND SHALL COMPLY WITH DOC PS 1 OR PS 2.
5. PANELS SHALL BE INSTALLED WITH THE STRENGTH AXIS (LONG DIRECTION) PERPENDICULAR TO SUPPORTS.

BUILDING SUPPLIER / ERECTOR
CREATIVE MODULAR CONSTRUCTION

ISOMETRIC VIEWS FOR REFERENCE ONLY

ISOMETRIC VIEW FRONT SIDE (MODULAR BUILDING)

SYMBOL LEGEND	
TAG OR SYMBOL	DESCRIPTION
℄	CENTERLINE
?	KEYNOTE
XXXXXXXXXX XXXXXXXXXX	ELEVATION MARKER
? ? TYP	WELD SYMBOL
1	REVISION TAG

ISOMETRIC VIEW BACK SIDE (MODULAR BUILDING)

TORGERSON
DESIGN PARTNERS
ARCHITECTURE / REAL ESTATE / DEVELOPMENT
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ARCHITECTURAL CORPORATION MISSOURI LICENSE NUMBER: A-2010011427

CMC
CREATIVE MODULAR CONSTRUCTION

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LEE'S SUMMIT, MO
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JOHN CHARLES MILLER
NUMBER
E-29518
6.22.2022

ENGINEER OF RECORD:
JOHN C. MILLER
E-29518
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PROJECT NUMBER:
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GENERAL NOTES

DATE: 04/22/2022

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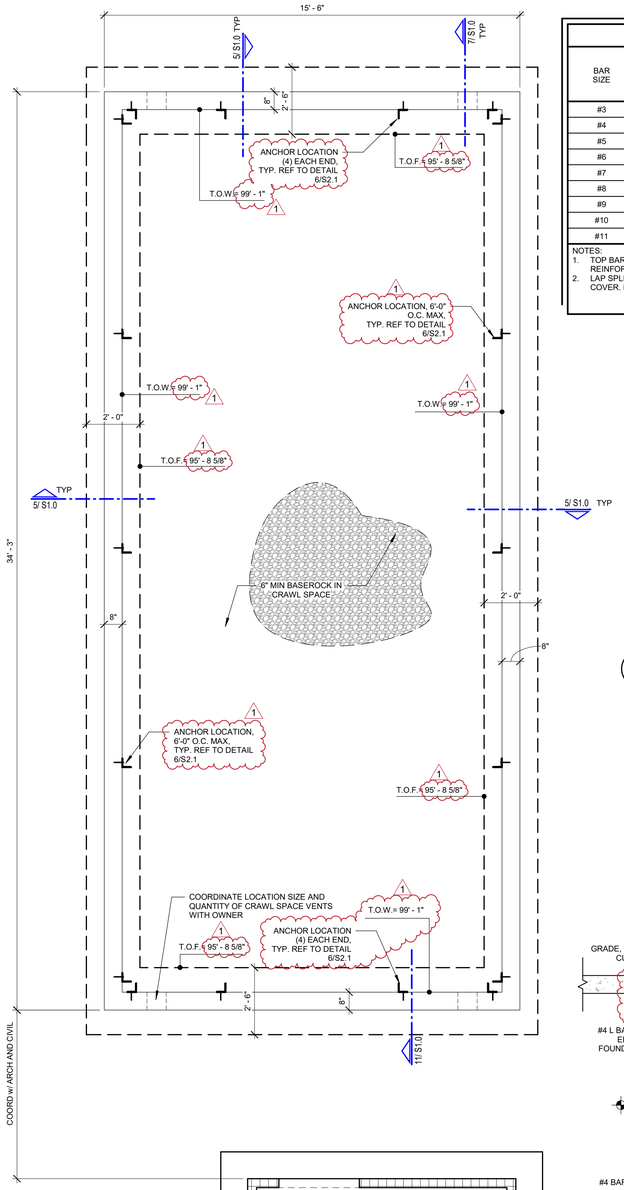
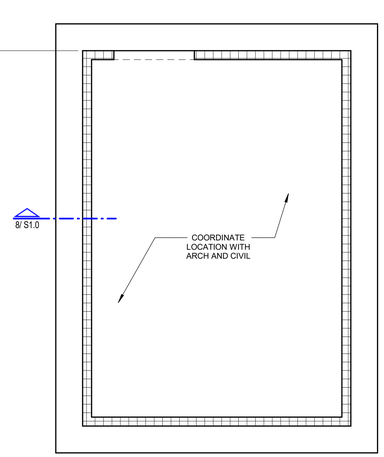




1 FLOOR PLAN
3/8" = 1'-0"

STRAIGHT DOWEL DEVELOPMENT LENGTHS (INCHES)

BAR SIZE	TENSION						COMPRESSION		
	OTHER BARS			TOP BARS					
	3000 PSI CONCRETE	4000 PSI CONCRETE	5000 PSI CONCRETE	3000 PSI CONCRETE	4000 PSI CONCRETE	5000 PSI CONCRETE	3000 PSI CONCRETE	4000 PSI CONCRETE	5000 PSI CONCRETE
#3	17	15	13	22	19	17	9	8	8
#4	22	19	17	29	25	22	11	10	9
#5	28	24	22	36	31	28	14	12	12
#6	33	29	26	43	37	33	17	15	14
#7	48	42	37	63	54	49	20	17	16
#8	55	48	43	72	62	55	22	19	18
#9	62	54	48	81	70	63	25	22	21
#10	70	61	54	91	79	70	28	25	23
#11	78	67	60	101	87	78	31	27	25

NOTES:
1. TOP BARS ARE HORIZONTAL REINFORCEMENT PLACED SO THAT MORE THAN 12" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE REINFORCEMENT.
2. LAP SPLICE LENGTHS ARE BASED ON BARS SPACED AT (2) BAR DIAMETERS OR MORE ON CENTER W/ (1) BARS DIAMATER MINIMUM ON CONCRETE COVER. NOTIFY ENGINEER IF SPACING IS LESS THAN (2) BAR DIAMETERS.

LAP SPLICE LENGTHS (INCHES)

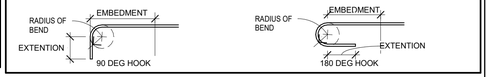
BAR SIZE	TENSION (CLASS B SPLICE)						COMPRESSION
	OTHER BARS			TOP BARS			
	3000 PSI CONCRETE	4000 PSI CONCRETE	5000 PSI CONCRETE	3000 PSI CONCRETE	4000 PSI CONCRETE	5000 PSI CONCRETE	3000 PSI 4000 PSI 5000 PSI CONCRETE
#3	22	19	17	28	24	22	12
#4	29	25	22	37	32	29	15
#5	36	31	28	47	40	36	19
#6	43	37	33	56	48	43	23
#7	63	54	49	81	70	63	27
#8	72	62	55	93	80	72	30
#9	81	70	63	105	91	81	34
#10	91	79	70	118	102	91	38
#11	101	87	78	131	113	101	43

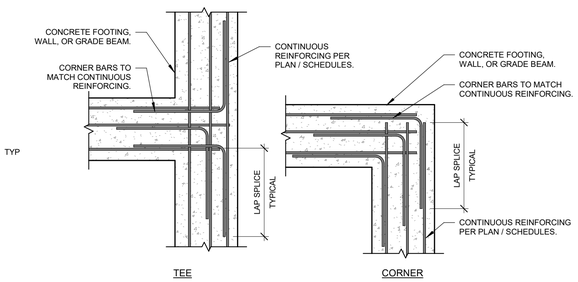
NOTES:
1. TOP BARS ARE HORIZONTAL REINFORCEMENT PLACED SO THAT MORE THAN 12" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE REINFORCEMENT.
2. LAP SPLICE LENGTHS ARE BASED ON BARS SPACED AT (2) BAR DIAMETERS OR MORE ON CENTER W/ (1) BAR DIAMETER MINMUM OF CONCRETE COVER. NOTIFY ENGINEER IF SPACING IS LESS THAN (2) BAR DIAMETERS.

HOOKED DOWEL DEVELOPMENT LENGTHS IN TENSION (INCHES)

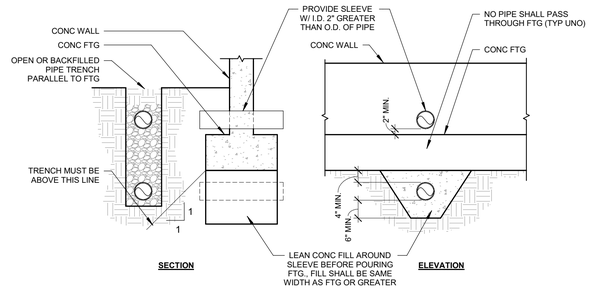
BAR SIZE	EMBEDMENT			EXTENSION		MINIMUM RADIUS OF BEND (INCHES)
	3000 PSI CONCRETE	4000 PSI CONCRETE	5000 PSI CONCRETE	90 DEG HOOK	180 DEG HOOK	
#3	8	7	6	4.5	2.5	1.50
#4	11	9	8	6.0	2.5	2.00
#5	14	12	11	7.5	2.5	2.50
#6	16	14	13	9.0	3.0	3.00
#7	19	17	15	10.5	3.5	3.50
#8	22	19	17	12.0	4.0	4.00
#9	25	21	19	13.5	4.5	5.64
#10	28	24	22	15.2	5.1	6.35
#11	31	27	24	16.9	5.6	7.05

NOTES:

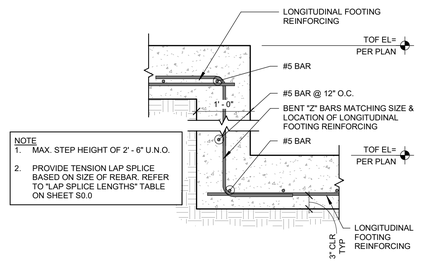




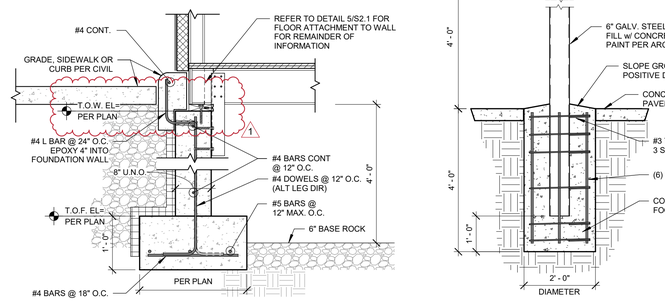
2 TYPICAL CORNER BAR REINFORCING
3/4" = 1'-0"



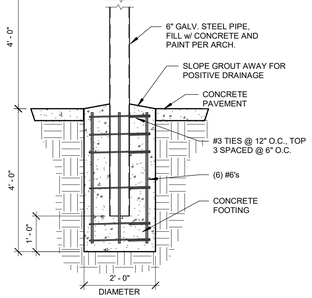
3 PIPE PENETRATION DETAIL
1/2" = 1'-0"



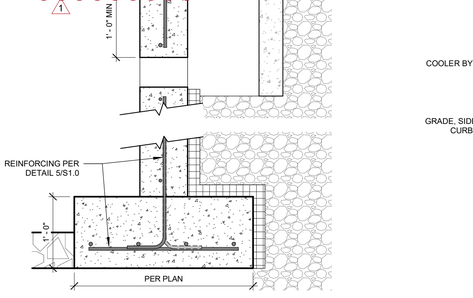
4 TYPICAL FOOTING STEP
3/4" = 1'-0"



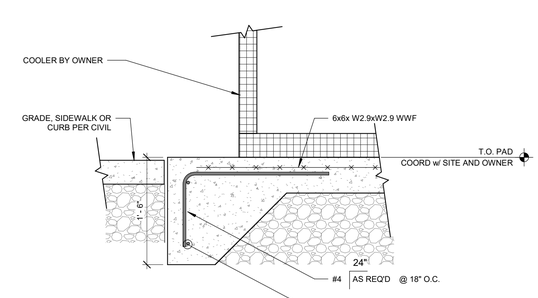
5 TYPICAL EXTERIOR STEM WALL
3/4" = 1'-0"



6 BOLLARD DETAIL
1/2" = 1'-0"

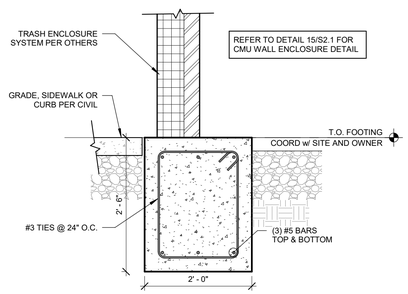


7 SECTION FOR CRAWSPACE VENT
1" = 1'-0"

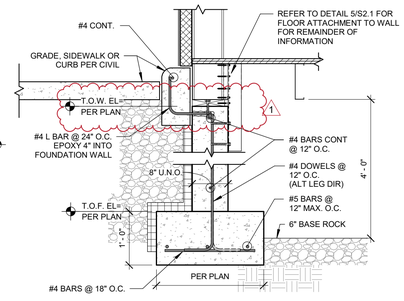


8 COOLER PAD DETAIL
1" = 1'-0"

9 TRASH ENCLOSURE PLAN
1/4" = 1'-0"



10 TRASH ENCLOSURE FOUNDATION
3/4" = 1'-0"



11 EXTERIOR STEM WALL NO OVERHANG
3/4" = 1'-0"

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116 NORTH 2ND AVENUE · OZARK, MO 65721 · P (417) 581-8889 · F (417) 581-9002
ARCHITECTURAL CORPORATION MISSOURI LICENSE NUMBER: A-2010011427

CMC CREATIVE MODULAR CONSTRUCTION

7 BREW COFFEE
LEE'S SUMMIT, MO

1410 NE DOUGLAS STREET
LEE'S SUMMIT, MISSOURI 64086

STATE OF MISSOURI
JOHN CHARLES MILLER
NUMBER E-29518
REGISTERED PROFESSIONAL ENGINEER
6.22.2022

ENGINEER OF RECORD:
JOHN C. MILLER
E-29518
E-2011011004

PROJECT NUMBER:
22033 7BLS

REVISION:

1	06/22/2022	ADD 001

S1.0
FOUNDATION & DETAILS
DATE: 04/22/2022

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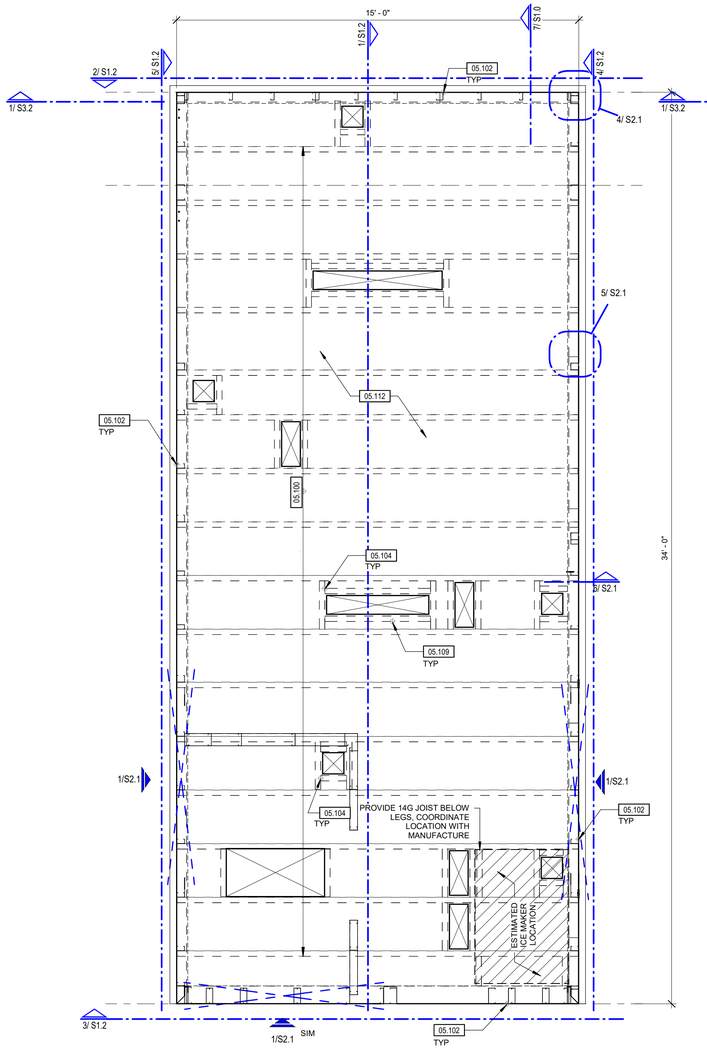
PLAN NOTES - FRAMING

1. MECHANICAL EQUIPMENT WEIGHTS AND LOCATIONS ARE ESTIMATED ONLY. COORDINATE ALL RTU EQUIPMENT LOCATIONS AND CURBS WITH MEP AND ARCH.
2. COORDINATE ROOF OPENINGS WITH MEP AND ARCH. PROVIDE SUPPLEMENTAL FRAMING PER NOTES AND DETAILS AT OPENINGS.
3. MECHANICAL HANGERS AND OTHER ITEMS SUPPORTED FROM TRUSS FRAMING ARE TO BE SUPPORTED AT PANEL POINTS ONLY.
4. PROVIDE (2) 3/4" BOLTS AT EACH LIFTING POINT LOCATION.

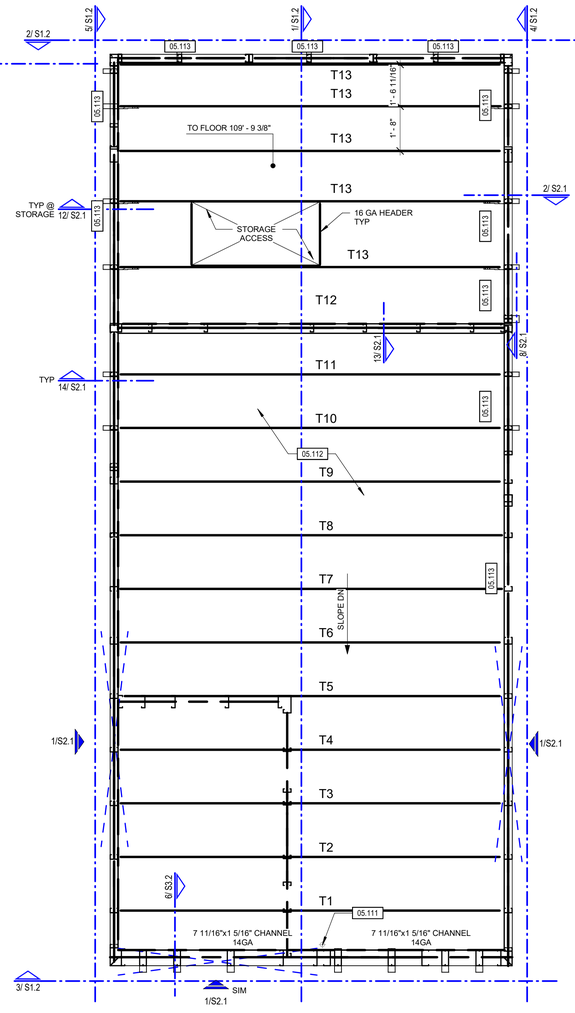
KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
05.100	7.840" x 2 1/2" 14 GA FLOOR JOIST SPACING @ 24" O.C. MAX.
05.102	16 GA STUD WITH A TOP AND BOTTOM 16 GA TRACK WITH 2" VERTICAL LEGS.
05.104	12 GA CLIP.
05.108	12" x 2 1/2" 14 GA ROOF JOIST SPACED @ 24" O.C. MAX.
05.109	PROVIDE FLOOR JOIST BOX FRAME AT ALL OPENINGS, MATCH GA OF FLOOR JOIST.
05.111	18 1/8" x 2 1/2" 14 GA JOIST, @ ROOF DECK BEARING.
05.112	ALL EXACT MEMBER SIZES PER MODULAR BUILDING SUPPLIERS ENGINEERING.
05.113	HEADER PER MODULAR BUILDING SUPPLIERS ENGINEERING.

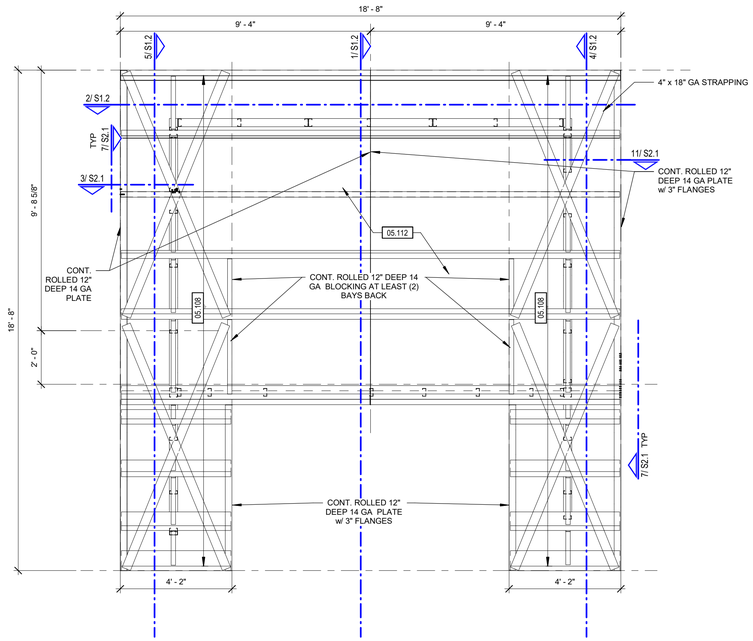
THESE DRAWINGS INDICATE THE GENERAL REQUIREMENTS FOR A CUSTOM FABRICATED STRUCTURAL SYSTEM, BY CREATIVE MODULAR CONSTRUCTION



1 FLOOR PLAN
3/8" = 1'-0"



2 ROOF AND STORAGE
3/8" = 1'-0"



3 ARC ROOF CANOPY
3/8" = 1'-0"

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E-2011011004

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REVISION:

S1.1
FRAMING PLANS

DATE: 04/22/2022

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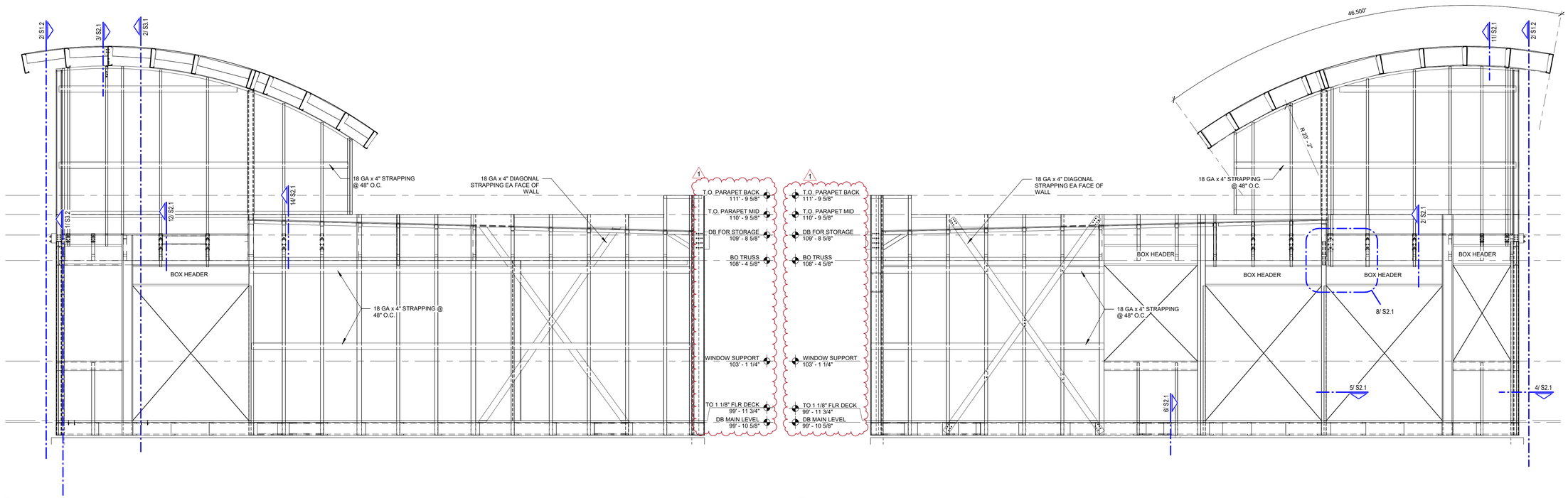
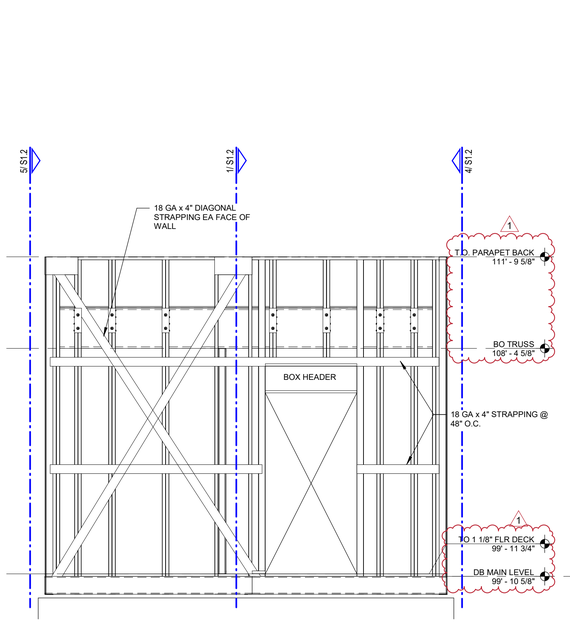
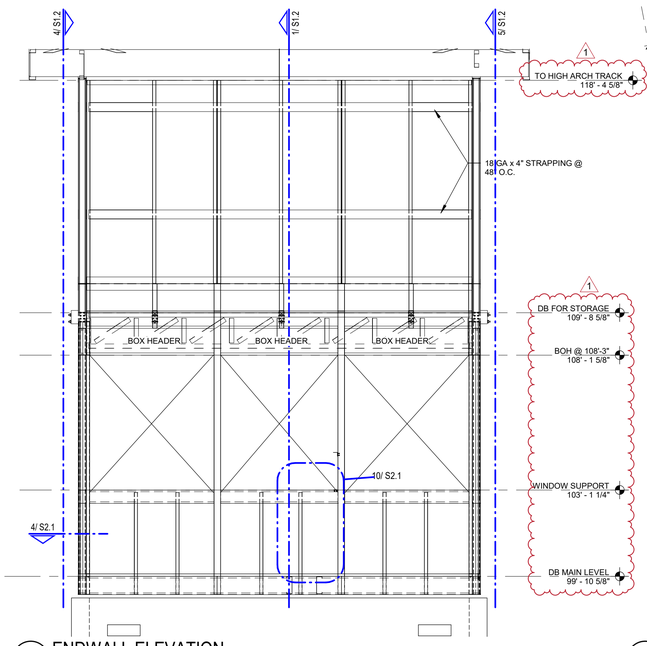


5 MILK SIDE ELEVATION
3/8" = 1'-0"

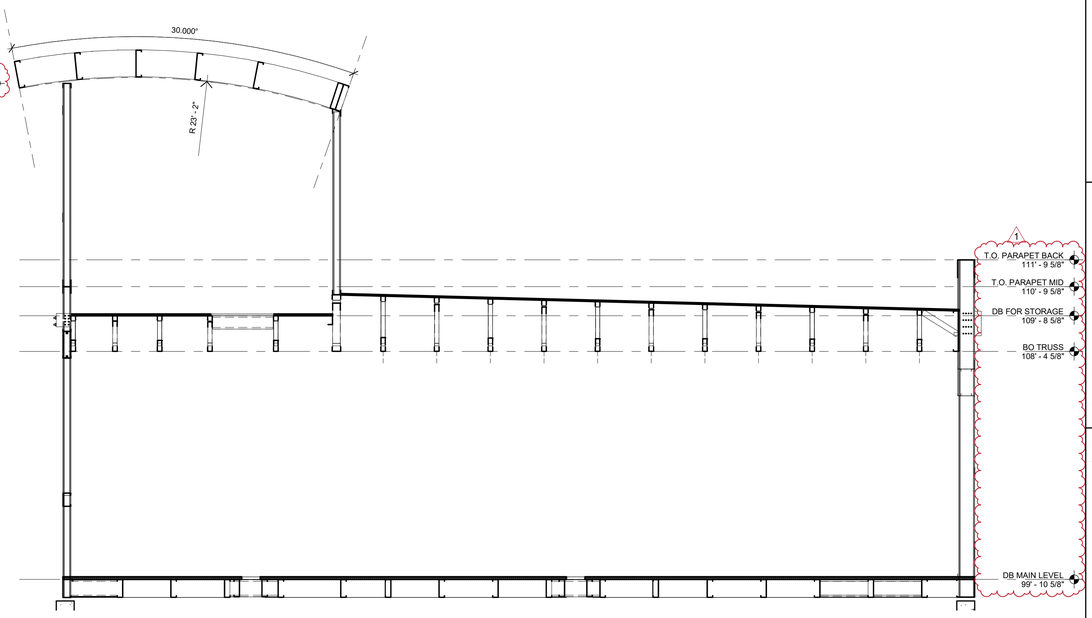
4 SHOT SIDE ELEVATION
3/8" = 1'-0"



3 SHORT ENDWALL ELEVATION
3/8" = 1'-0"



2 ENDWALL ELEVATION
3/8" = 1'-0"



1 LONGITUDINAL MIDDLE SECTION
3/8" = 1'-0"

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REVISION:

1	06/22/2022	ADD 001

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S1.2
ELEVATIONS & SECTIONS
DATE: 04/22/2022

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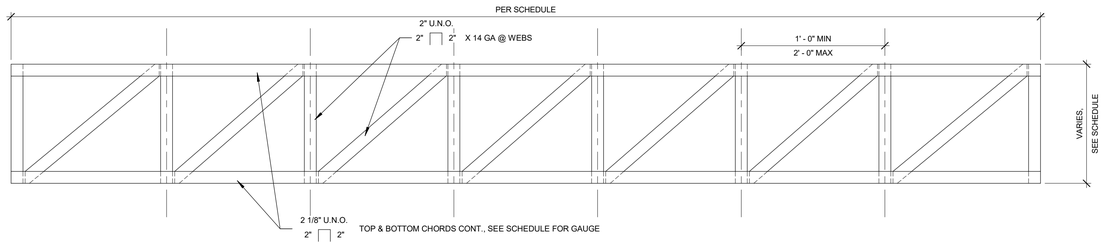
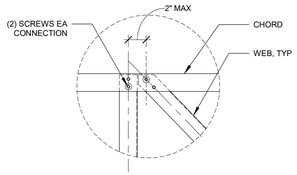
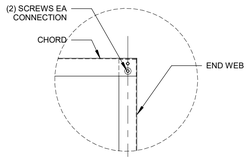


TRUSS	DEPTH	WEB WIDTH	LENGTH	CHORD GAUGE
T1	18 9/16"	2.5"	14' - 4 5/8"	14
T2	19 3/16"	2.5"	14' - 4 5/8"	14
T3	19 13/16"	2.5"	14' - 4 5/8"	14
T4	20 7/16"	2.5"	14' - 4 5/8"	14
T5	21 1/16"	2.5"	14' - 4 5/8"	14
T6	21 11/16"	2.5"	14' - 4 5/8"	14
T7	22 5/16"	2.5"	14' - 4 5/8"	14
T8	22 15/16"	2.5"	14' - 4 5/8"	14
T9	23 1/2"	2.5"	14' - 4 5/8"	14
T10	24 1/8"	2.5"	14' - 4 5/8"	14
T11	24 3/4"	2.5"	14' - 4 5/8"	14
T12	25 3/8"	3.5"	14' - 4 5/8"	14
T13	16"	2.5"	14' - 11 3/4"	14

1 TYPICAL LONG TRUSS ELEVATION
1" = 1'-0"



2 TYPICAL TRUSS MEMBER CONNECTION
1 1/2" = 1'-0"



3 TYPICAL TRUSS END MEMBER CONNECTION
1 1/2" = 1'-0"

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ENGINEER OF RECORD:
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E-2011011004

PROJECT NUMBER:
22033 7BLS

REVISION:

S1.3
TRUSS SHEET
DATE: 04/22/2022

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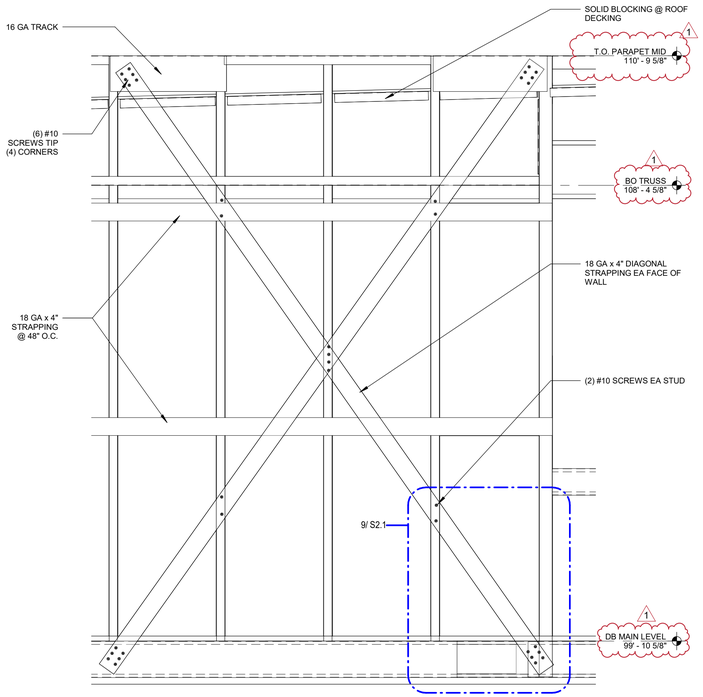
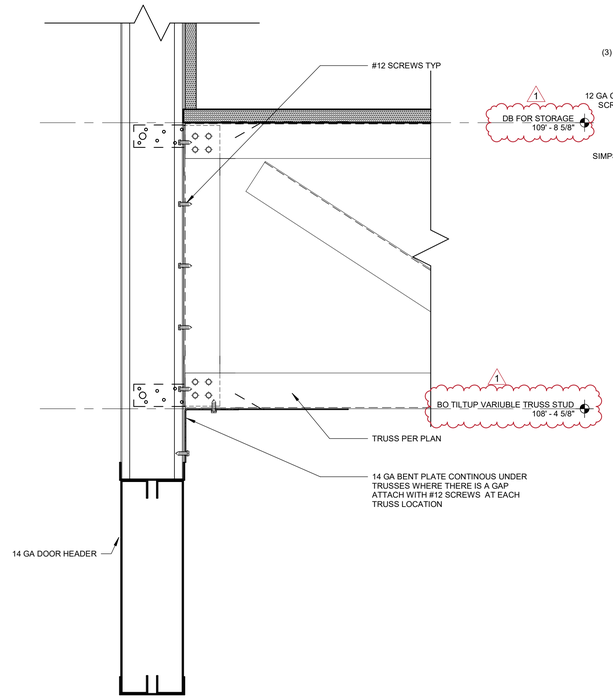
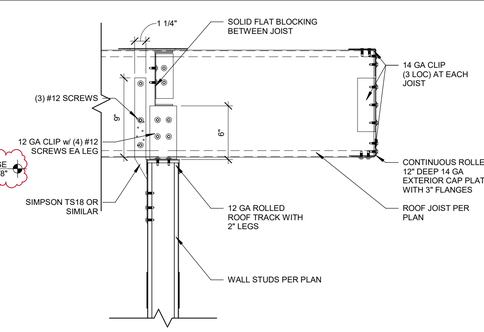


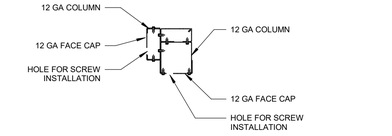
1 STRAP BRACING ELEVATION
3/4" = 1'-0"



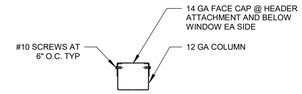
2 SECTION AT TRUSS TO HEADER
3" = 1'-0"



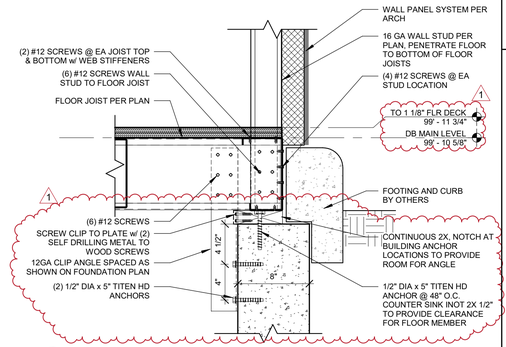
3 ROLLED ROOF ATTACHMENT TO STUDS
1 1/2" = 1'-0"



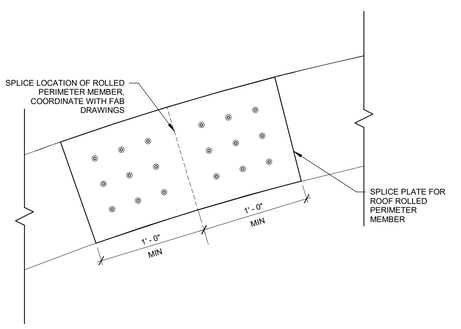
4 CORNER BUILT UP COLUMN PANEL ATTACHMENT
1 1/2" = 1'-0"



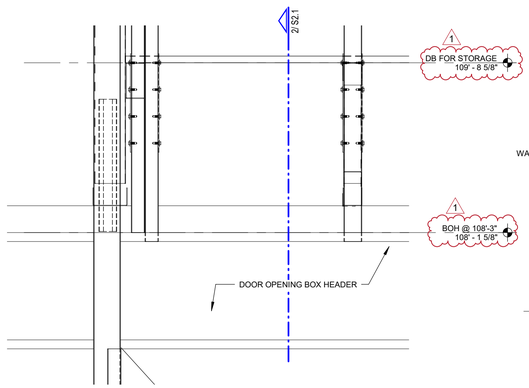
5 COLUMN BTW WINDOW PANEL ATTACHMENT
1 1/2" = 1'-0"



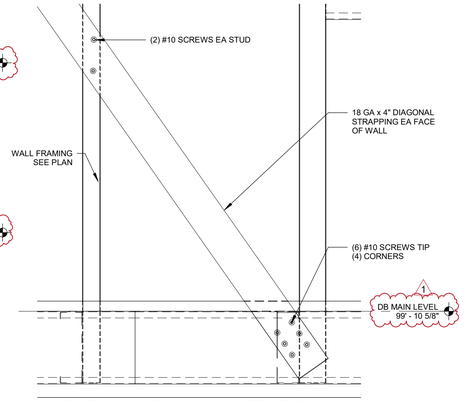
6 FLOOR ATTACHMENT TO WALL
1 1/2" = 1'-0"



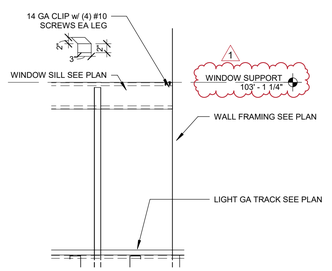
7 SPLICE DETAIL
1 1/2" = 1'-0"



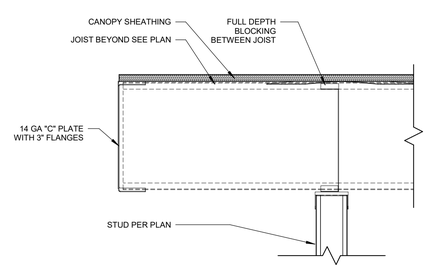
8 DETAIL AT HEADER SUPPORT
1 1/2" = 1'-0"



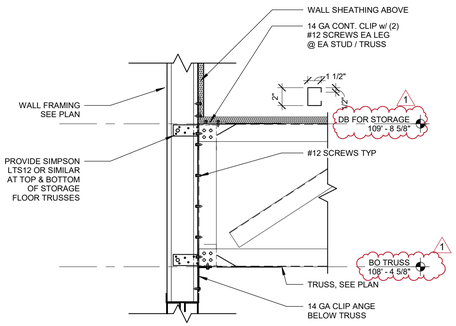
9 SECTION @ DIAGONAL STRAPPING
1 1/2" = 1'-0"



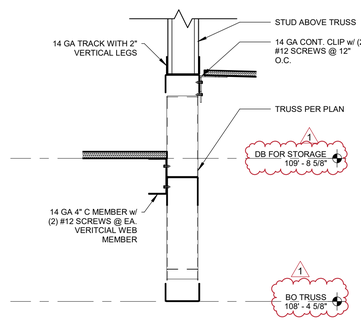
10 SECTION @ SILL TO JAMB
3/4" = 1'-0"



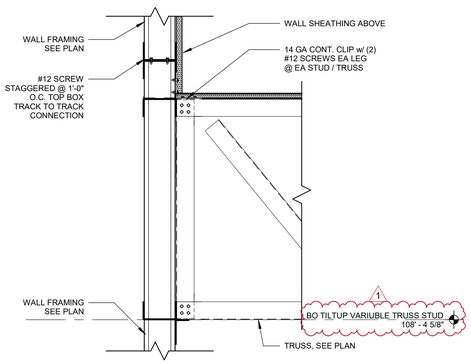
11 SECTION AT CANOPY BLOCKING
1 1/2" = 1'-0"



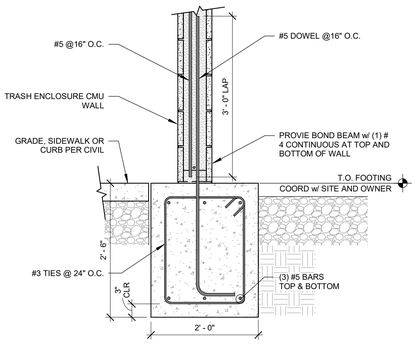
12 SECTION @ TOP BOX TO LOWER BOX CONNECTION
1 1/2" = 1'-0"



13 SECTION AT FLOOR TRANSITION TO ROOF
1 1/2" = 1'-0"



14 TYPICAL TRUSS TO WALL CONNECTION
1 1/2" = 1'-0"



15 CMU TRASH ENCLOSURE FOUNDATION (ALT)
3/4" = 1'-0"

TORGERSON DESIGN PARTNERS
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ARCHITECTURAL CORPORATION MISSOURI LICENSE NUMBER: A-2010011427

CMC CREATIVE MODULAR CONSTRUCTION

7 BREW COFFEE
LEE'S SUMMIT, MO

1410 NE DOUGLAS STREET
LEE'S SUMMIT, MISSOURI 64086

STATE OF MISSOURI
JOHN CHARLES MILLER
NUMBER E-29518
REGISTERED PROFESSIONAL ENGINEER
6.22.2022

ENGINEER OF RECORD:
JOHN C. MILLER
E-29518
E-2011011004

PROJECT NUMBER:
22033 7BLS

REVISION:

1	06/22/2022	ADD 001

S2.1
DETAILS
DATE: 04/22/2022

J&M ENGINEERING
J&M ENGINEERING, LLC
3045 S. KANSAS EXPRESSWAY
SPRINGFIELD, MO 65807
PHONE: 417.708.9315
www.jandmstructural.com
E-2011011004

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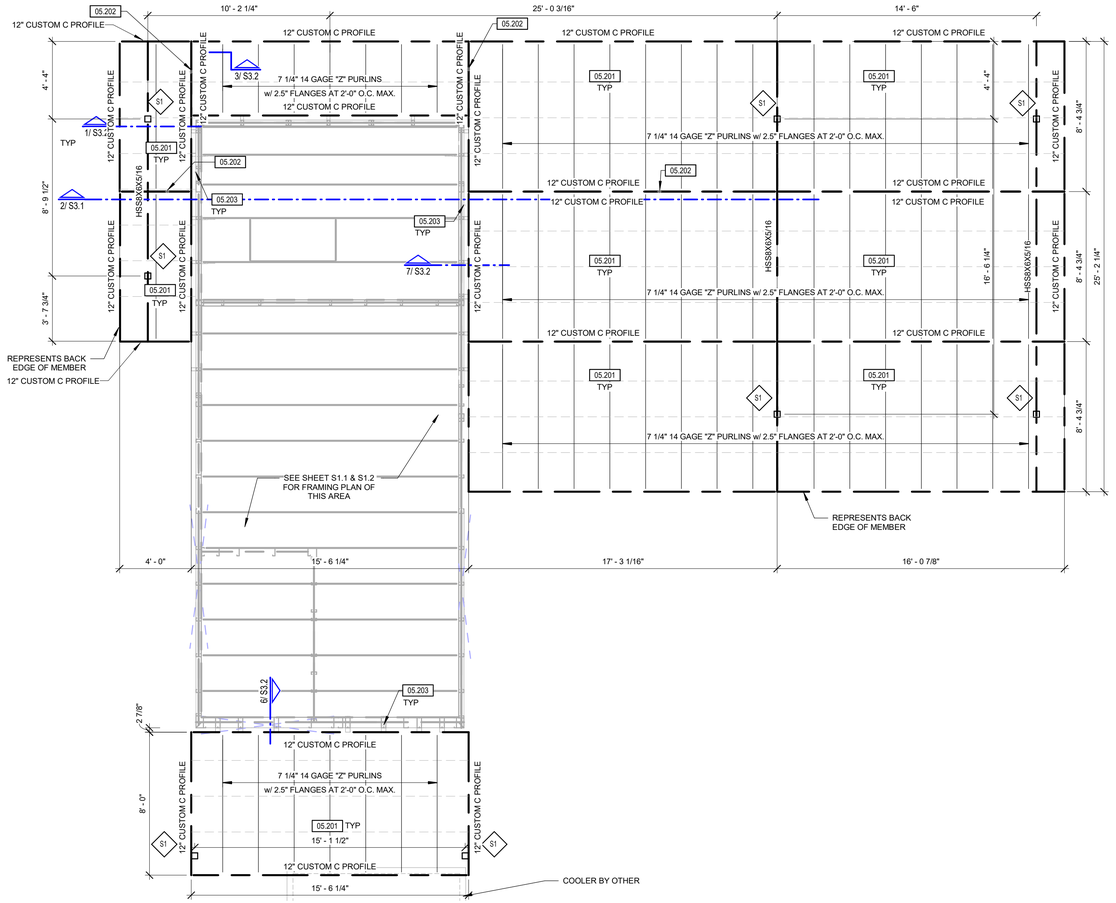
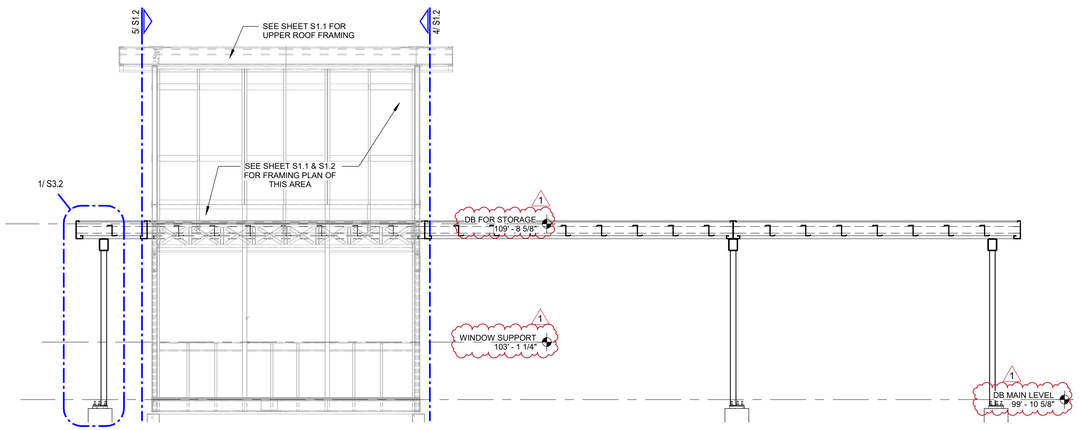


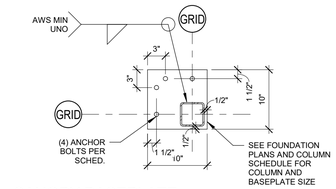
1 ROOF AND STORAGE WITH BASE CANOPY ADDITION

1/4" = 1'-0"



2 CROSS SECTION WITH CANOPY

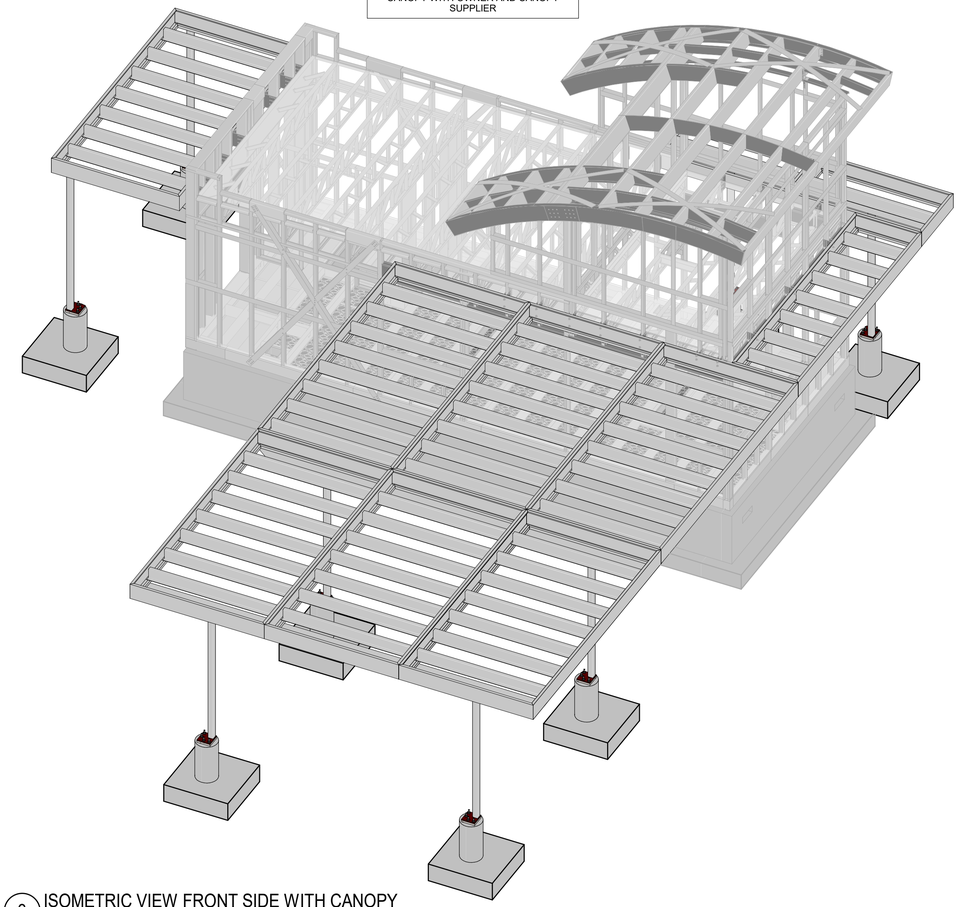
1/4" = 1'-0"



CANOPY BASEPLATE

ISOMETRIC VIEWS FOR REFERENCE ONLY

COORDINATE EXACT SIZE AND SHAPE OF CANOPY WITH OWNER AND CANOPY SUPPLIER



3 ISOMETRIC VIEW FRONT SIDE WITH CANOPY

KEYNOTE LEGEND

KEYNOTE	DESCRIPTION
05.201	PROVIDE STRAP BRIDGING @ 24" O.C. w/ BLOCKING PIECES EACH END.
05.202	PLACE "C" PROFILE BACK TO BACK, ATTACH w/ (3) SCREWS AT 12" MAX. ON CENTER.
05.203	ANCHOR CHANNEL TO WALL w/ (4) #12 GALV. TEK SCREWS @ EACH STUD.

COLUMN SCHEDULE

TYPE MARK	COLUMN SIZE	BASE PLATE TYPE & SIZE	ANCHOR BOLT SIZE	NOTES
S1	HSS4X4X1/4	5/8"x10" SQ	(4) 3/4" DIA w/ 18" EMBEDMENT	

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S3.1

DRIVE THRU CANOPY

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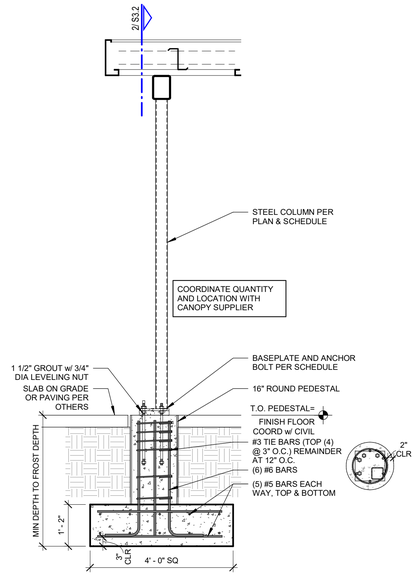
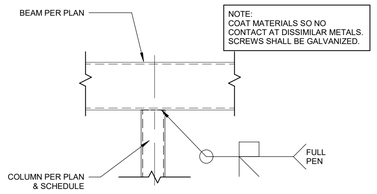
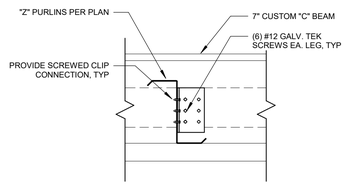


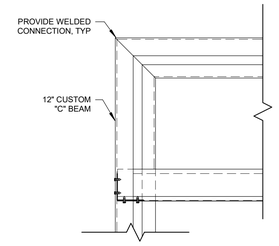
1 SECTION AT COLUMN
1/2" = 1'-0"



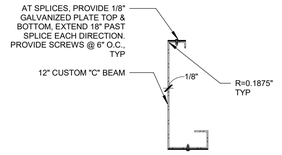
2 SECTION AT COLUMN CAP
1" = 1'-0"



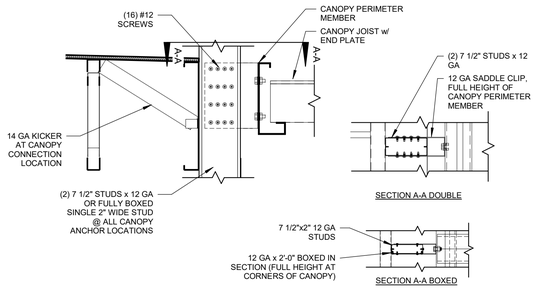
3 "Z" PURLIN ATTACHMENT
1 1/2" = 1'-0"



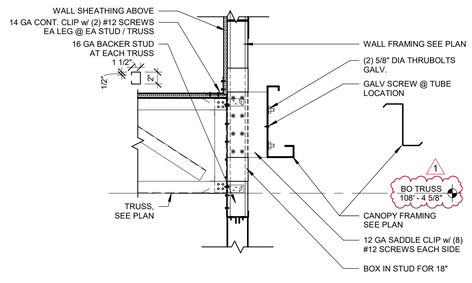
4 DETAIL AT CORNER
1 1/2" = 1'-0"



5 CUSTOM SECTION @ CANOPY
1 1/2" = 1'-0"



6 BACK CANOPY CONNECTION
1" = 1'-0"



7 SECTION @ LOW CANOPY
1" = 1'-0"

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CMC
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S3.2
CANOPY DETAILS
DATE: 04/22/2022

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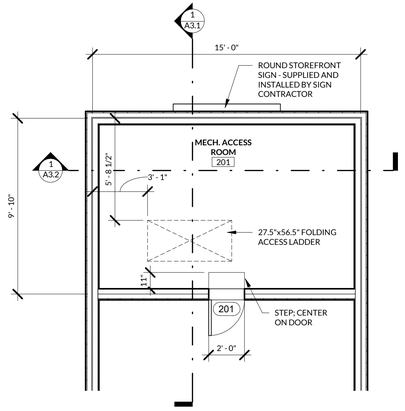
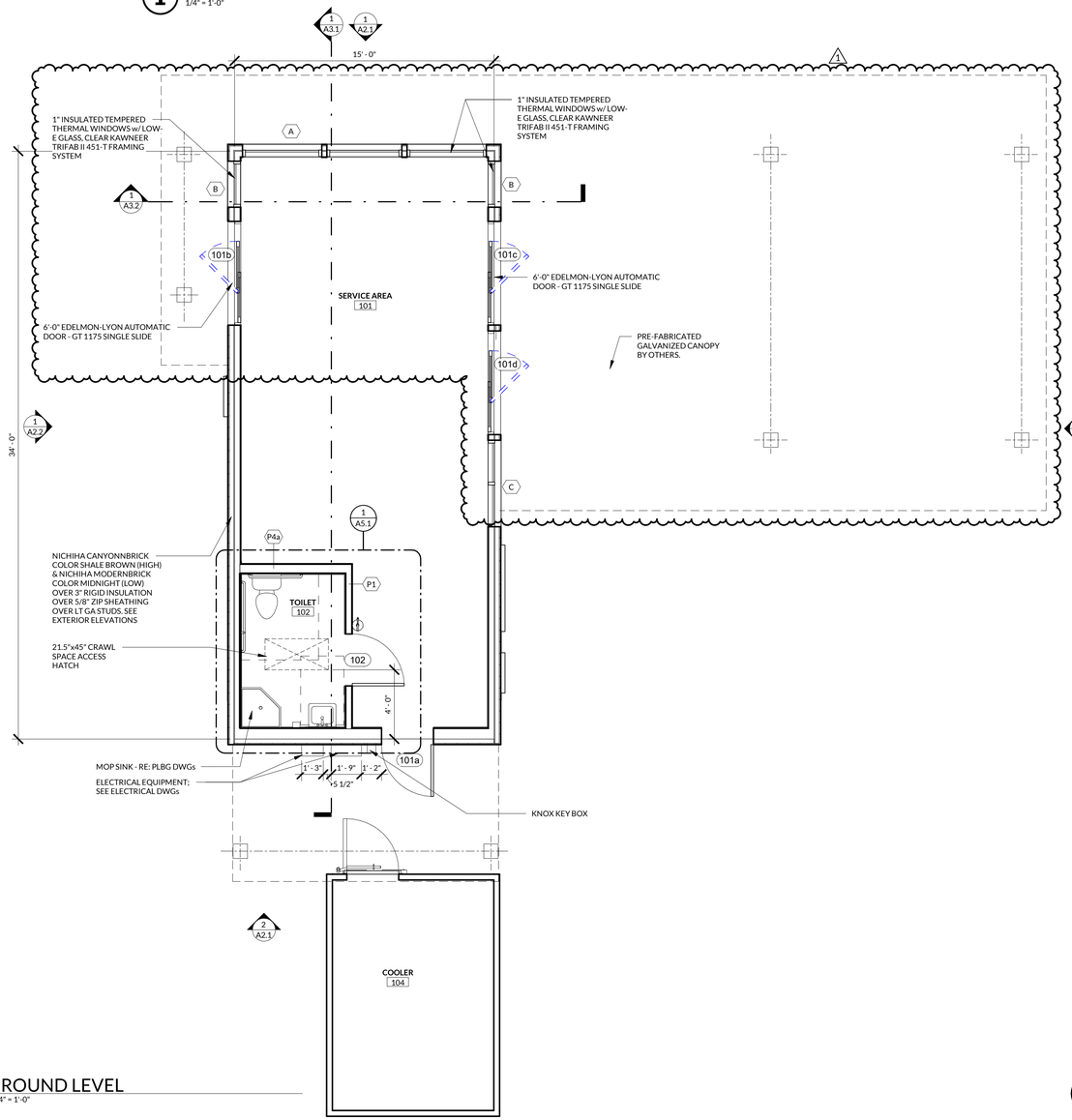
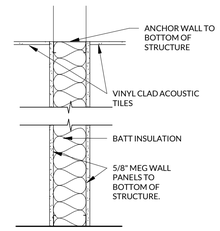


1 ATTIC FLOOR
1/4" = 1'-0"



2 GROUND LEVEL
1/4" = 1'-0"

PARTITION TYPES



P4a USES 6" METAL STUDS

P1 USES 3-5/8" METAL STUDS

ROOM FINISH SCHEDULE

RM NO.	RM NAME	FLR	BASE	WALLS TOP	WALLS RT	WALLS BOT	WALLS LT	CLG	CLG HGT	NOTE
101	SERVICE AREA	F1	B1	W1/2	W1/2	W1	W1/2	C1	VERIFY	-
102	TOILET	F1	B1	W1	W1	W1	W1	C1	VERIFY	-
201	MECH ACCESS RM	F2	B2	W3	W3	W3	W3	C2	VARIES	-

FINISH LEGEND:

FLOORS	BASE	WALLS	CEILINGS
F1 PROTECT-ALL VINYL	B1 PROTECT-ALL VINYL COVE BASE	W1 MEG WALL PANELS	C1 VINYL CLAD ACOUSTICAL TILES
F2 UNFINISHED PLYWOOD	B2 NONE	W2 ALUM STOREFRONT SYSTEM	C2 EXPOSED STRUCTURE
		W3 EXPOSED STRUCTURE	

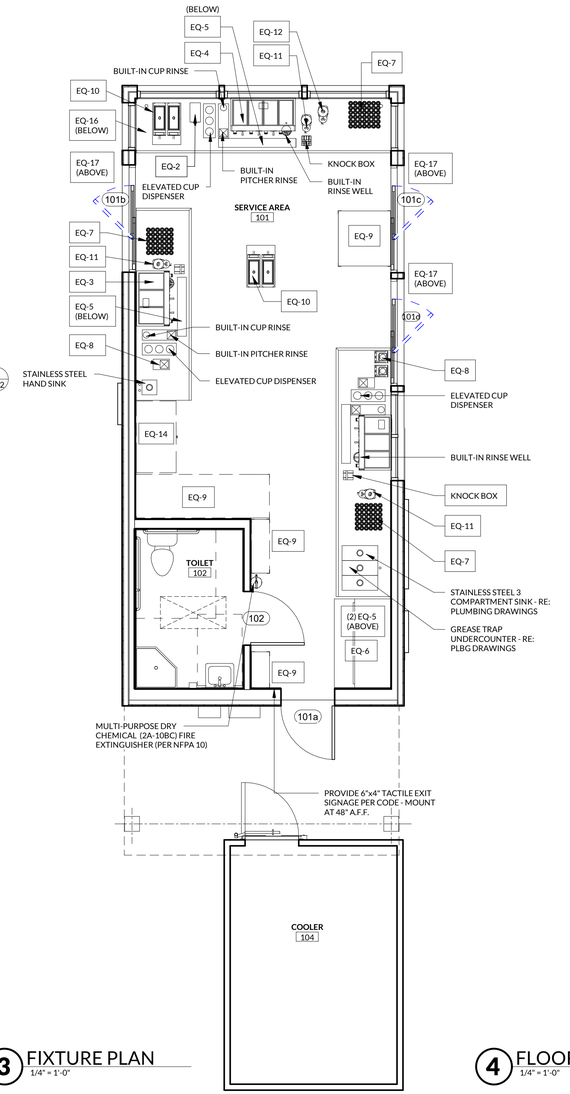
ROOM FINISH SCHEDULE NOTES:

FRP PANELS PROVIDED AND INSTALLED BY CONTRACTOR

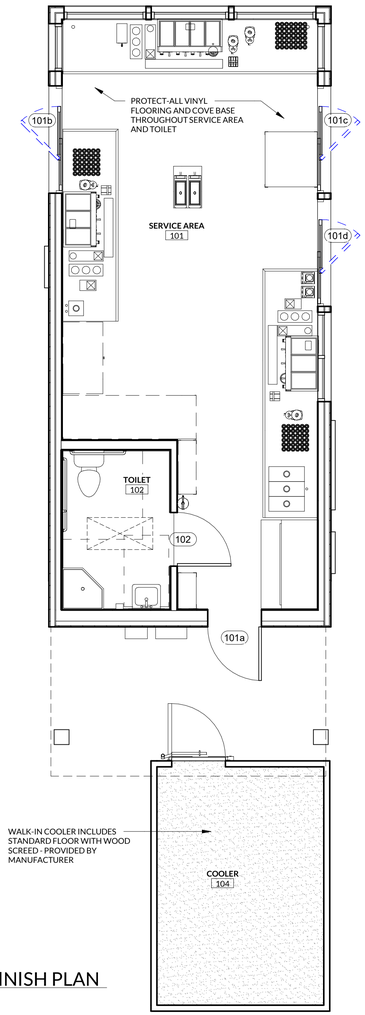
NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF THE LANDLORDS CRITERIA PRIOR TO CONSTRUCTION. FAILURE TO ACCOUNT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE HIM FROM ANY RESPONSIBILITY.

2. CONTRACTOR SHALL THOROUGHLY VERIFY ALL EXISTING CONDITIONS PRIOR TO BIDDING AND CONSTRUCTION. ALL DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THESE DOCUMENTS SHALL BE REPORTED IMMEDIATELY TO THE ARCHITECT.



3 FIXTURE PLAN
1/4" = 1'-0"



4 FLOOR FINISH PLAN
1/4" = 1'-0"

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7 BREW COFFEE
LEE'S SUMMIT, MO

1430 NE DOUGLASS ST.
LEE'S SUMMIT, MO 64086

STATE OF MISSOURI
ADAM JOSEPH KREHER
NUMBER
A-2011002764
ARCHITECT
06/17/2022

ARCHITECT OF RECORD:
NAME: ADAM KREHER
LICENSE NO. 2011002764

PROJECT NUMBER:
22033 7BLS

REVISION: 1 ADD 001 6/17/22

A1.1
FLOOR PLANS

DATE: APRIL 22, 2022

EGRESS LEGEND

PATH OF EGRESS TRAVELED:

SPACE OCCUPANCY:

ROOM NAME
101
SF
FUNCTION
100 OCC.

- ROOM NAME AND NUMBER
- ROOM AREA, SQUARE FOOTAGE
- USE GROUP PER IBC SECTION 3
- OCCUPANCY: AREA OF SPACE/AREA ALLOWANCES PER IBC TABLE 1004.1.2

DOOR EXIT CAPACITY:

DOOR EXIT
000 OCC.
00" REQD.
00" PROVIDED

- EXIT TYPE (DOOR, STAIR, ETC)
- NUMBER OF OCCUPANTS USING THE EXIT.
- EGRESS WIDTH REQUIRED FOR NUMBER OF OCCUPANTS USING THE EXIT PER IBC SECTION 1005.
- EGRESS WIDTH PROVIDED.

EGRESS LOADING INFORMATION

OCCUPANCY LOADING CALCULATIONS
PER IBC 2018: TABLE 1004.1.2

KITCHENS: 200 S.F. PER OCCUPANT
STORAGE: 300 S.F. PER OCCUPANT

#	ROOM	OCCUPANCY	CALCULATION	OCUPPANTS
101	SERVICE AREA	KITCHEN	468 SF/200 SF	3
104	COOLER	STORAGE	124 SF/300 SF	1
201	MECH. ACCESS ROOM	STORAGE	131 SF/300 SF	1
				5

EXIT CAPACITY:
EGRESS WIDTH REQUIRED: 5 OCCUPANTS X 0.2" PER OCCUPANT REQUIRED = 1.0"
EGRESS WIDTH PROVIDED: 36"
EGRESS WIDTH OF 0.2" PER OCCUPANT USED FOR DOORS PER IBC TABLE 1005.

NUMBER OF EXITS REQUIRED:
(1) EXIT REQUIRED FOR PER STORY FOR LESS THAN 49 OCCUPANTS PER IBC TABLE 1006.2.1.
(1) EXIT PROVIDED.

MAXIMUM TRAVEL DISTANCE:
200'-0" PER IBC TABLE 1017.2
ACTUAL MAX TRAVEL DISTANCE TO EXIT: 32'-0"

DEAD END CORRIDOR:
20'-0" MAX LENGTH OF DEAD END CORRIDOR PER IBC SECTION 1018

RESTROOM LOADING

OCCUPANCY:
5 OCCUPANTS

RESTROOM FIXTURES REQUIRED/PROVIDED - USE GROUP: BUSINESS

TOILET COUNT: = 1 PER 25 FOR THE FIRST 50 AND 1 PER 50 FOR THE REMAINDER EXCEEDING 50

LAVATORY COUNT: = 1 PER 40 FOR THE FIRST 80 AND 1 PER 80 FOR THE REMAINDER EXCEEDING 80

TUB/ SHOWERS: = NOT REQUIRED

DRINKING FOUNTAINS: = 1 PER 100

OTHER: = 1 SERVICE SINK

PLUMBING FIXTURE COUNT PER IBC TABLE 2902.1

TOILET COUNT:
WATER CLOSETS REQUIRED: 5 OCCUPANTS / 25 = 1 WATER CLOSET REQUIRED
WATER CLOSETS PROVIDED: = 1 UNISEX WATER CLOSET PROVIDED

LAVATORY COUNT:
SINKS REQUIRED: 5 OCCUPANTS / 40 = 1 REQUIRED
SINKS PROVIDED: = 1 PROVIDED

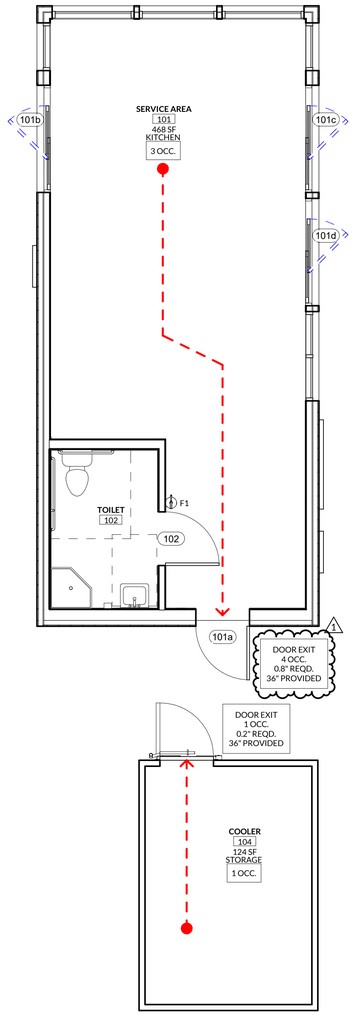
DRINKING FOUNTAIN COUNT:
DRINKING FOUNTAINS REQUIRED: 5 OCCUPANTS / 100 = 1 REQUIRED
DRINKING FOUNTAIN PROVIDED: = WATER WILL BE PROVIDED FOR FREE UPON REQUEST.

SERVICE SINK COUNT:
SERVICE SINKS REQUIRED: = 1 REQUIRED
SERVICE SINK PROVIDED: = 1 PROVIDED

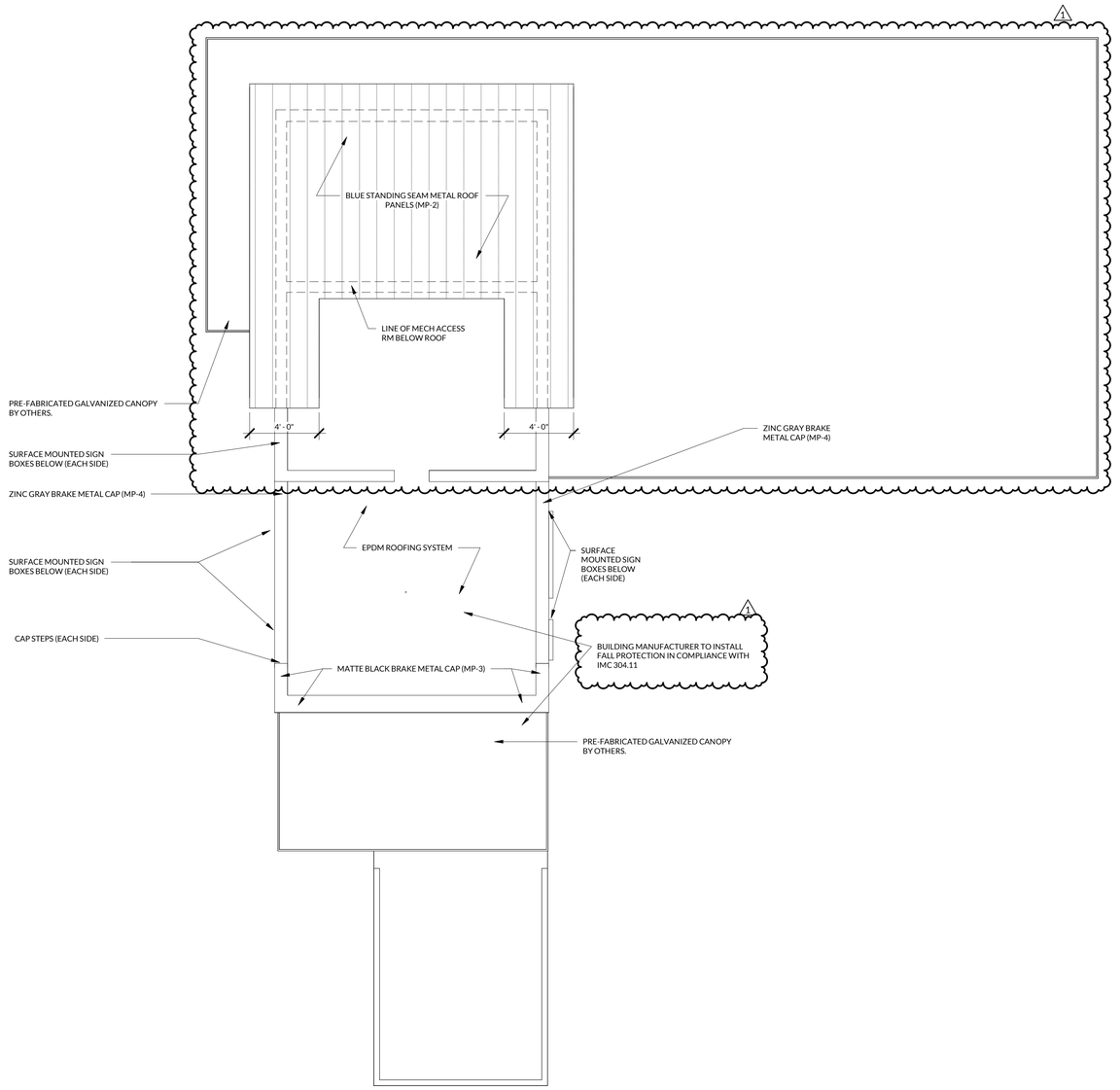
FIRE EXTINGUISHER NOTES

F1 — 10 LBS, ABC FIRE EXTINGUISHER ON WALL MOUNTED BRACKET. MOUNT HANDLE @ 4'-0".

75'-0" RADIUS FROM FIRE EXTINGUISHER @ F1 (NOT SHOWN, ENCOMPASSES ENTIRE BUILDING)



1 EGRESS PLAN
1/4" = 1'-0"



2 ROOF PLAN
1/4" = 1'-0"

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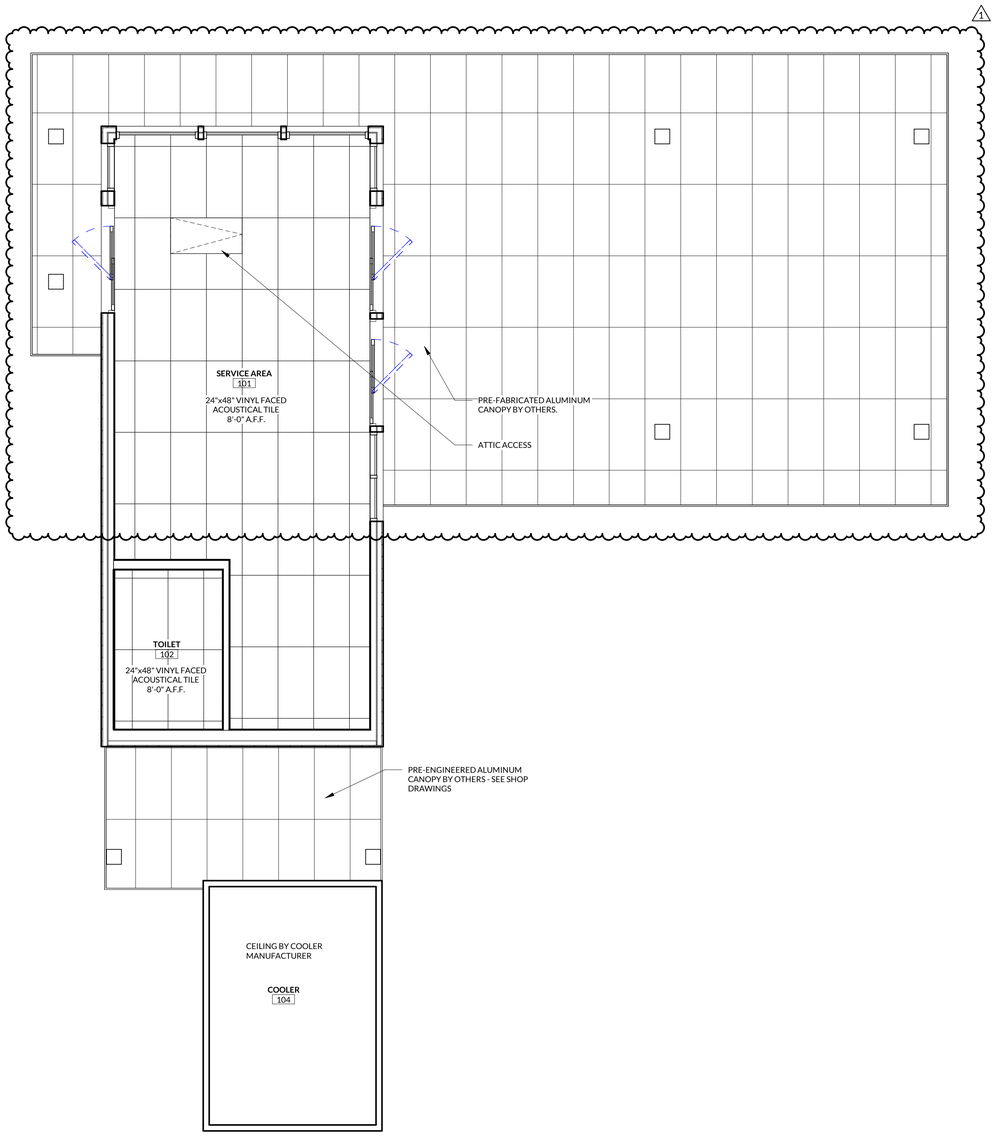
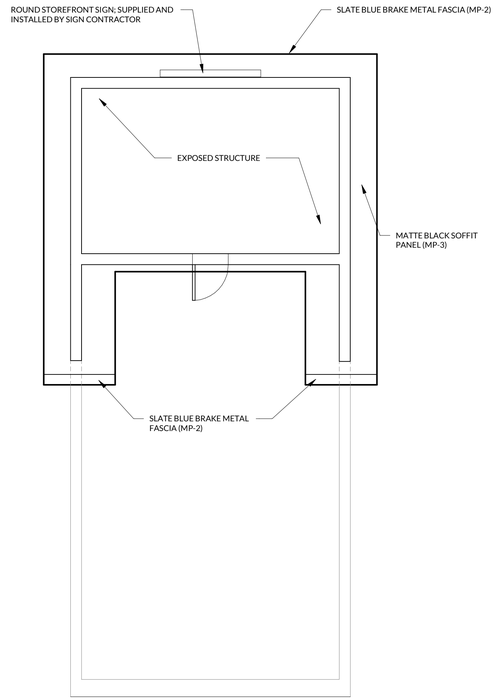
A1.2

ROOF PLAN / EGRESS PLAN

DATE: APRIL 22, 2022



1 RCP - GROUND LEVEL
1/4" = 1'-0"



2 RCP - ATTIC FLOOR
1/4" = 1'-0"

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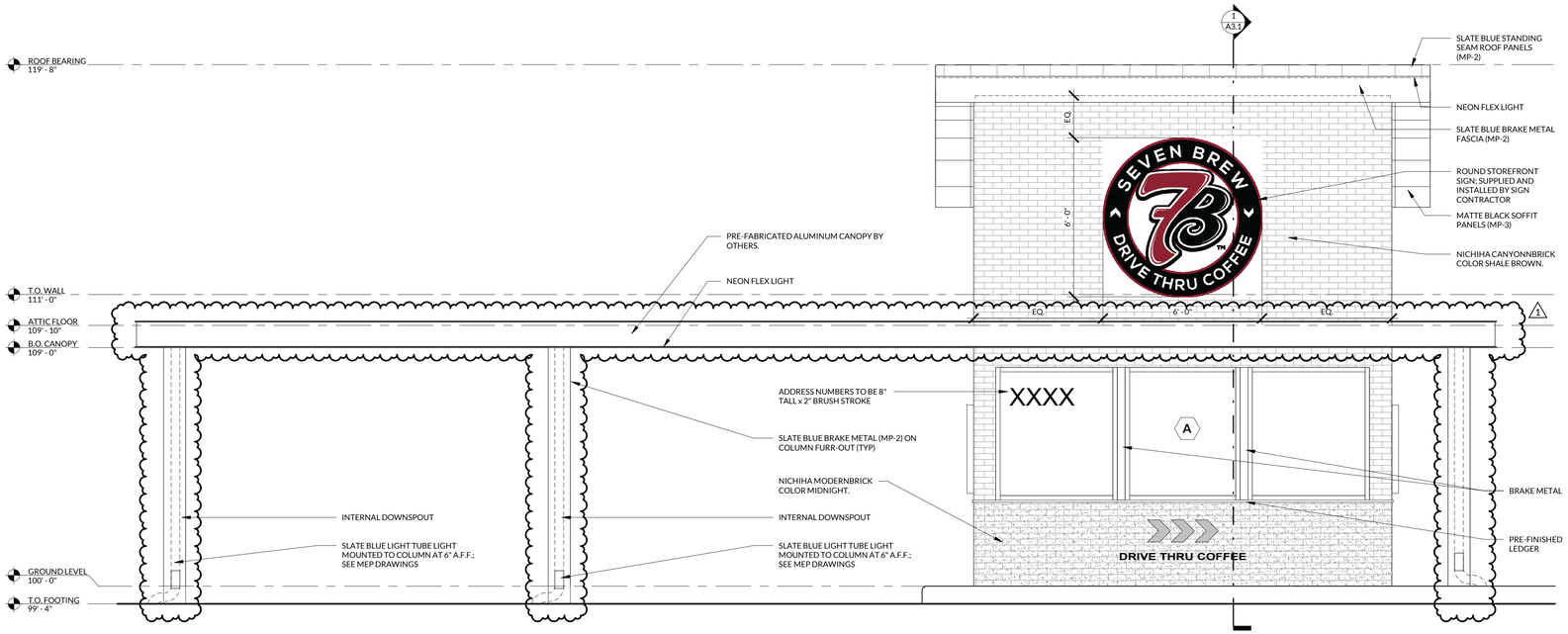
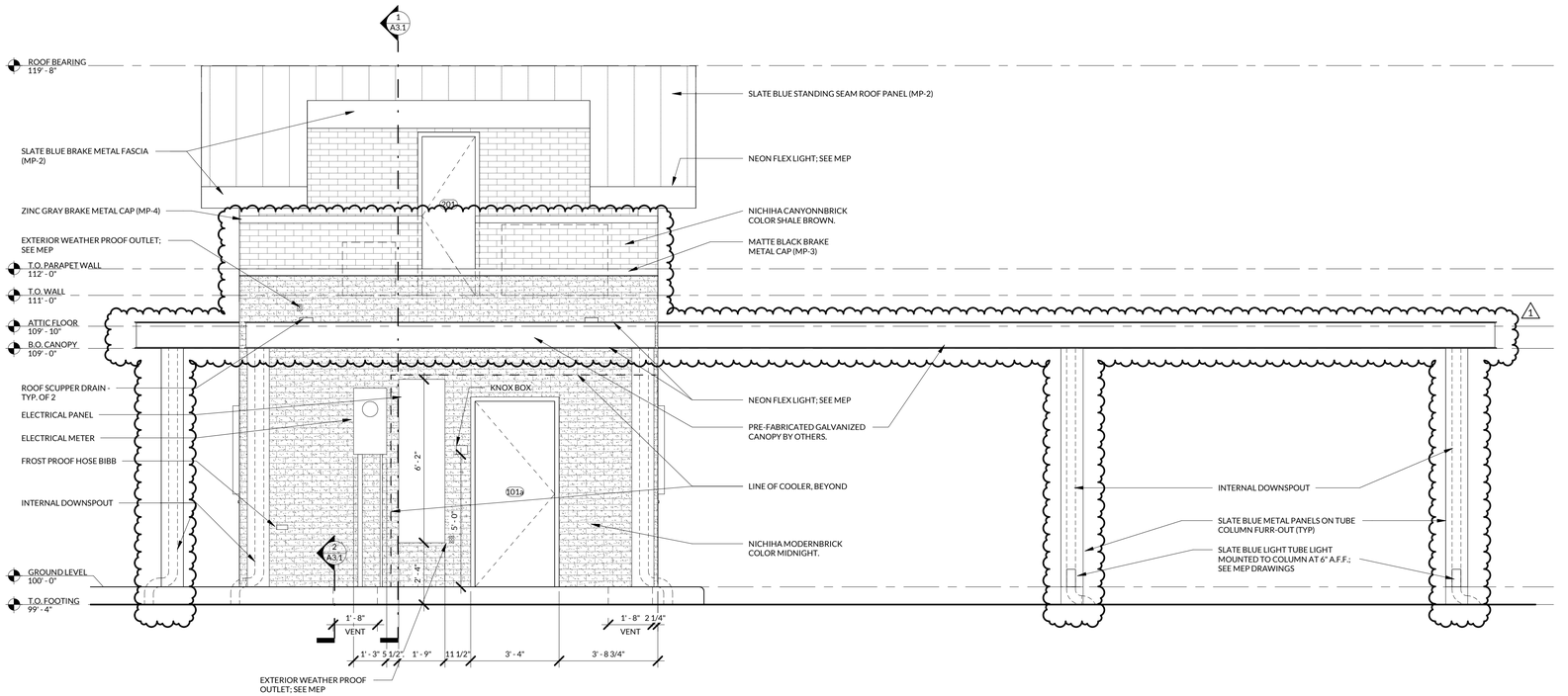
A1.3
REFLECTED CEILING PLANS
DATE: APRIL 22, 2022



1 EXTERIOR ELEVATION - FRONT
3/8" = 1'-0"



2 EXTERIOR ELEVATION - BACK
3/8" = 1'-0"

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A2.1
EXTERIOR ELEVATIONS
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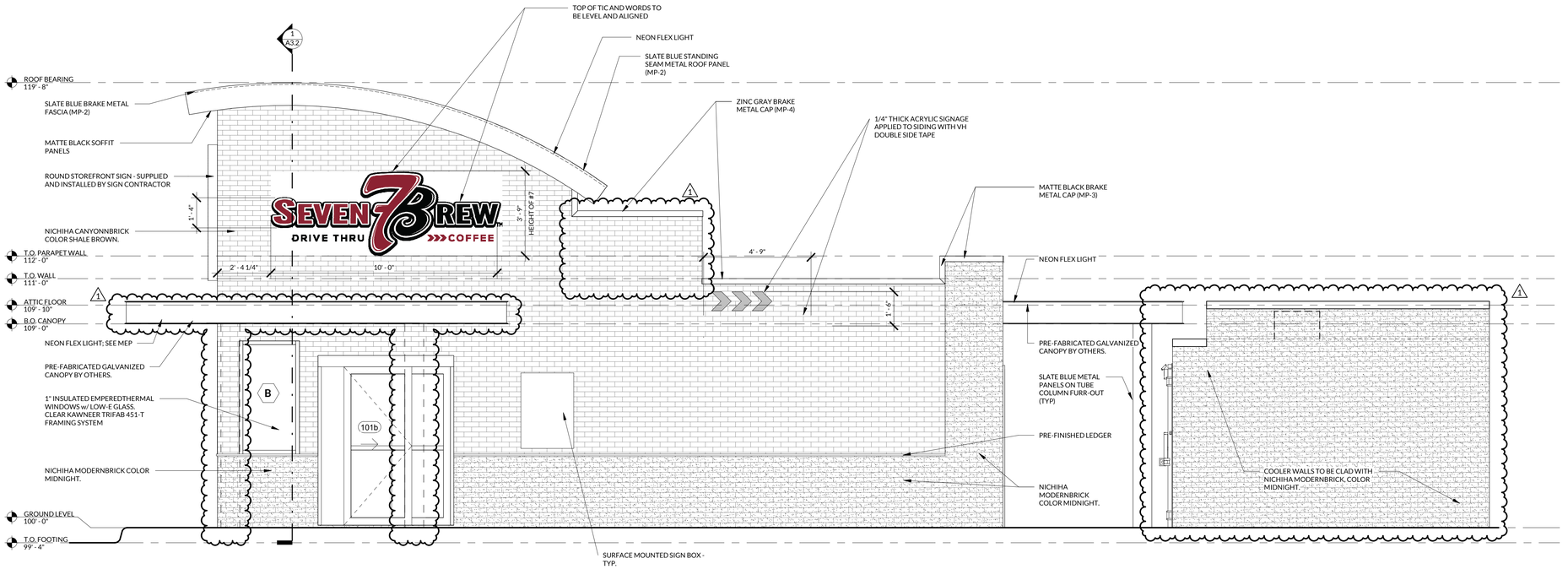
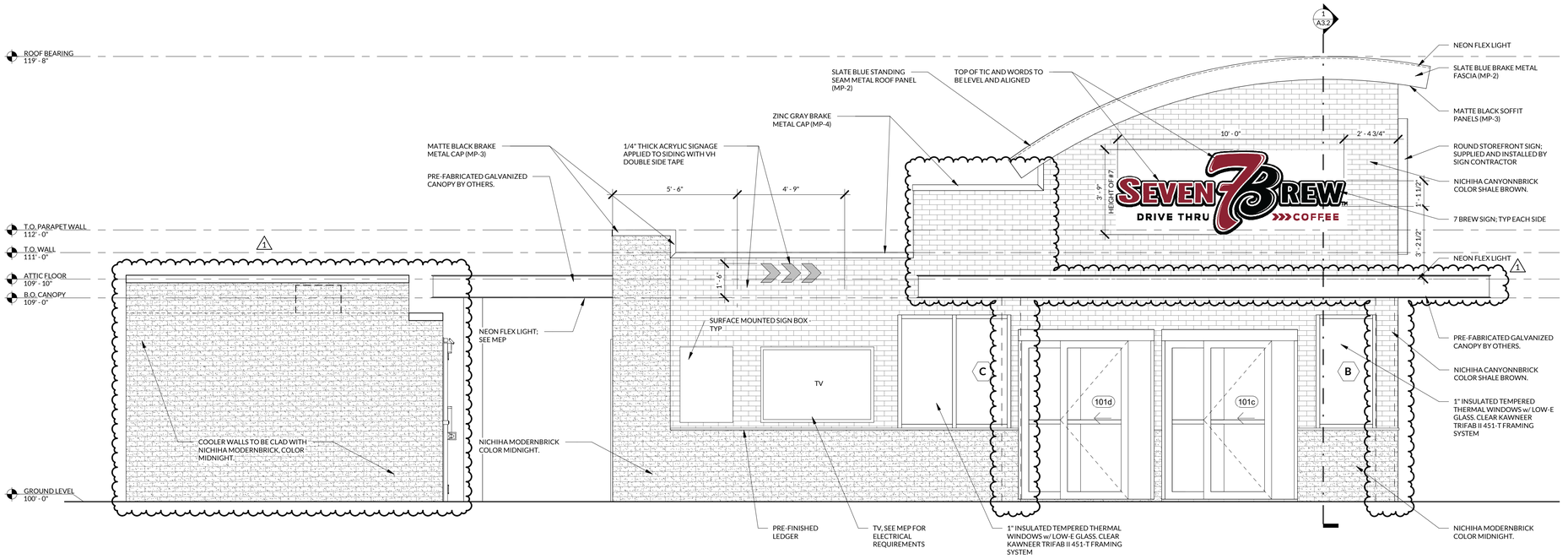


1 EXTERIOR ELEVATION - RIGHT SIDE
3/8" = 1'-0"



2 EXTERIOR ELEVATION - LEFT SIDE
3/8" = 1'-0"

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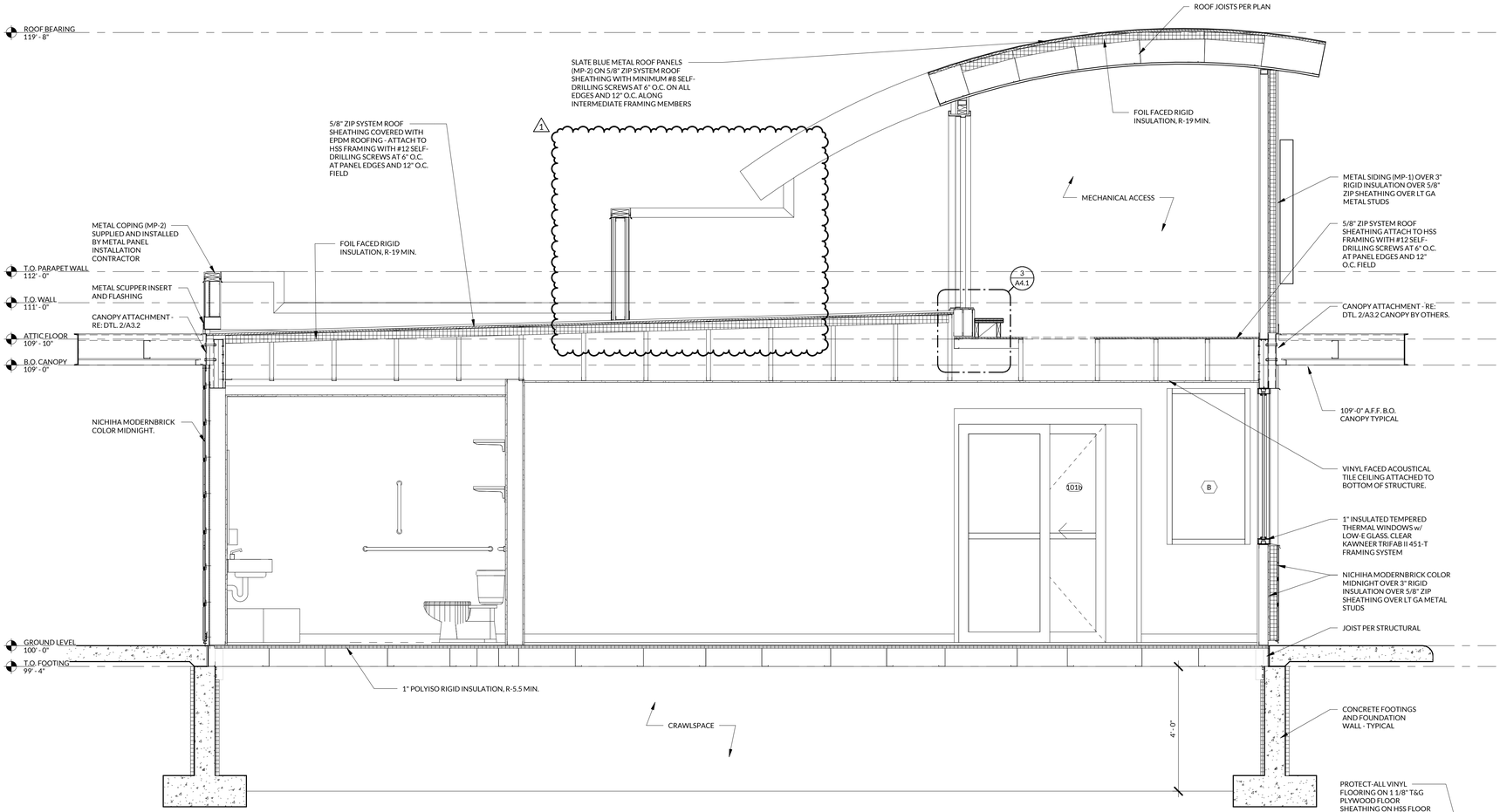
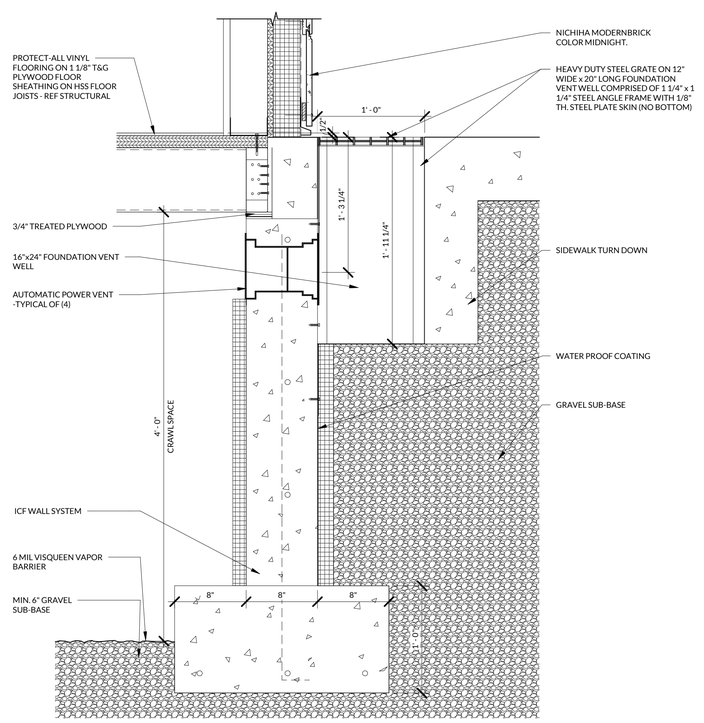
EXTERIOR ELEVATIONS
DATE: APRIL 22, 2022



1 BUILDING SECTION
1/2" = 1'-0"



2 FOUNDATION VENT WELL DETAIL
1 1/2" = 1'-0"

TORGERSON DESIGN PARTNERS
ARCHITECTURE / REAL ESTATE / DEVELOPMENT
116 NORTH 2ND AVENUE · OZARK, MO 65721 · P (417) 581-8889 · F (417) 581-9002
ARCHITECTURAL CORPORATION MISSOURI LICENSE NUMBER: A-2010011427

7 BREW COFFEE
LEE'S SUMMIT, MO

1 ADD 001 6/17/22

1430 NE DOUGLAS ST.
LEE'S SUMMIT, MO 64086

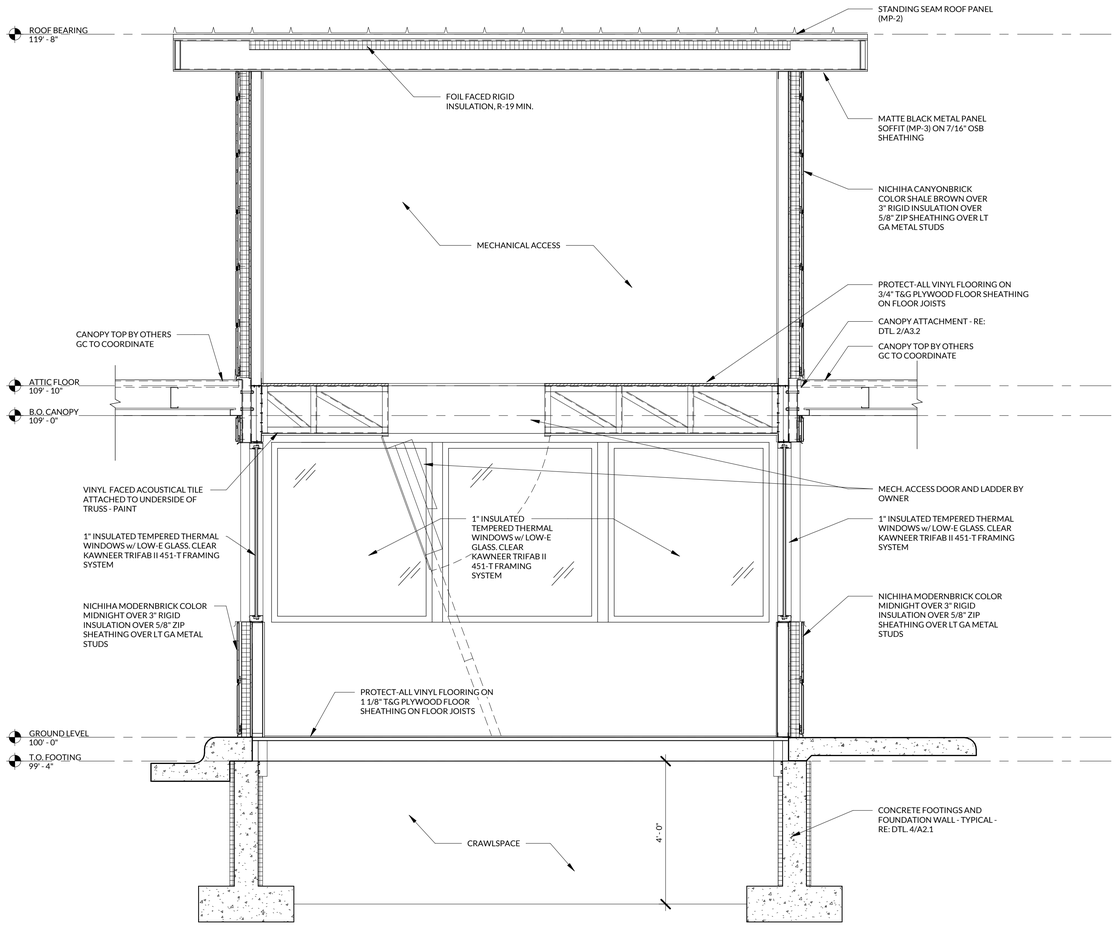
STATE OF MISSOURI
ADAM JOSEPH KREHER
NUMBER A-2011002764
ARCHITECT 06/30/2022

ARCHITECT OF RECORD:
NAME: ADAM KREHER
LICENSE NO. 2011002764

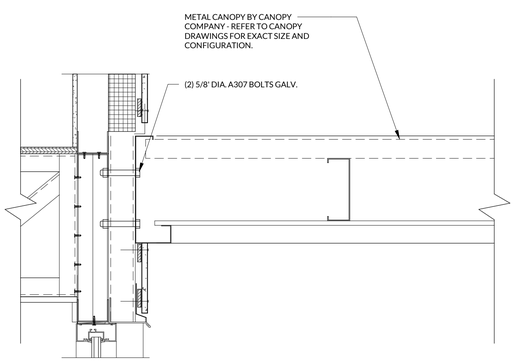
PROJECT NUMBER:
22033 7BLS

REVISION: 1 ADD 001 6/17/22

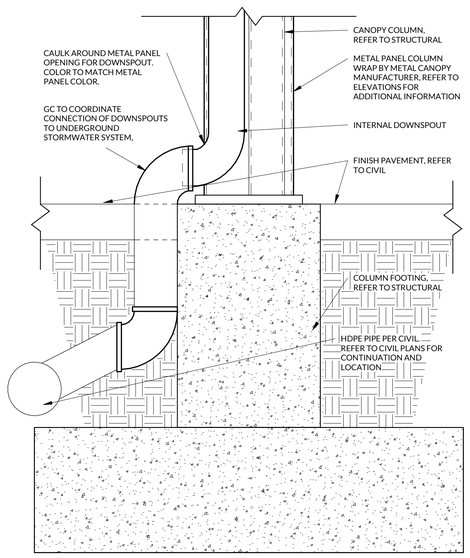
A3.1
SECTIONS AND DETAILS
DATE: APRIL 22, 2022



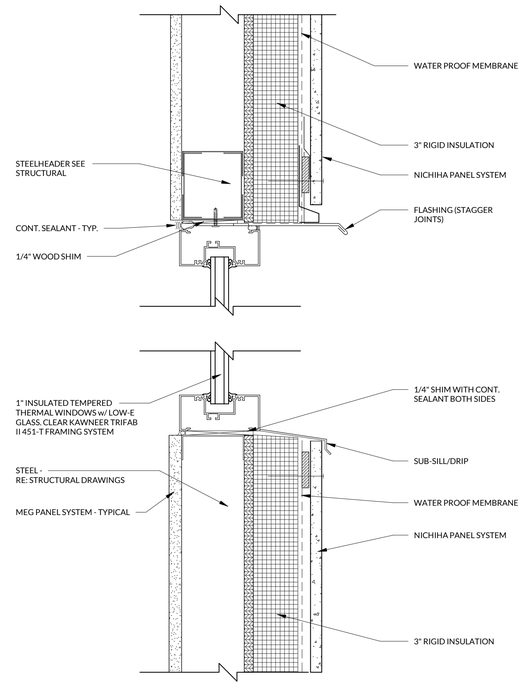
1 BUILDING SECTION
1/2" = 1'-0"

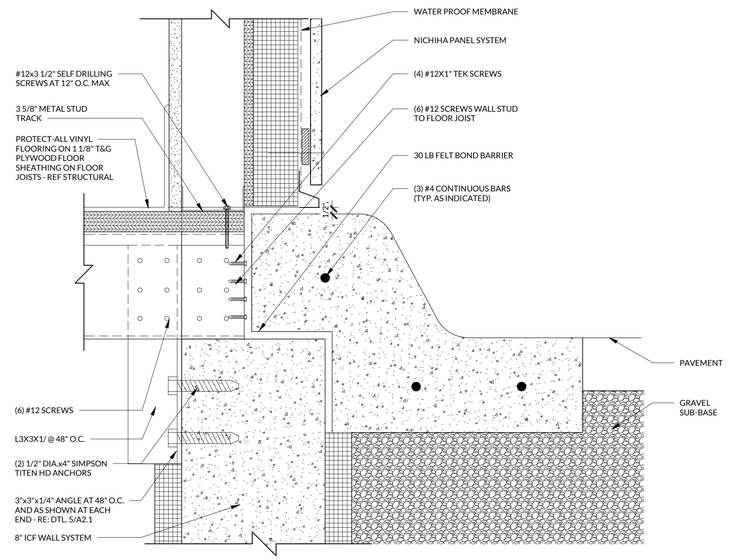


2 DETAIL - CANOPY CONNECTION DETAIL
1 1/2" = 1'-0"



3 DETAIL - DOWNSPOUT COLLECTION CONNECTION
1 1/2" = 1'-0"





4 ENLARGED WALL SECTION AT WINDOW
3" = 1'-0"

TORGERSON DESIGN PARTNERS
ARCHITECTURE / REAL ESTATE / DEVELOPMENT
116 NORTH 2ND AVENUE. OZARK, MO 65721 · P (417) 581-8889 · F (417) 581-9002
ARCHITECTURAL CORPORATION MISSOURI LICENSE NUMBER: A-2010011427

7 BREW COFFEE
LEE'S SUMMIT, MO
NW CORNER OF NE DOUGLAS ST AND NE VICTORIA DR
LEE SUMMIT, MO 64086

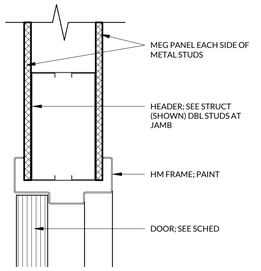
STATE OF MISSOURI
ADAM JOSEPH KREHER
NUMBER A-2011002764
ARCHITECT
05/02/2022

ARCHITECT OF RECORD:
NAME: ADAM KREHER
LICENSE NO. 2011002764

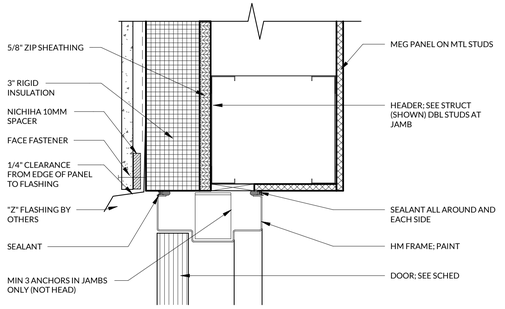
PROJECT NUMBER:
22033 7BLS

REVISION:

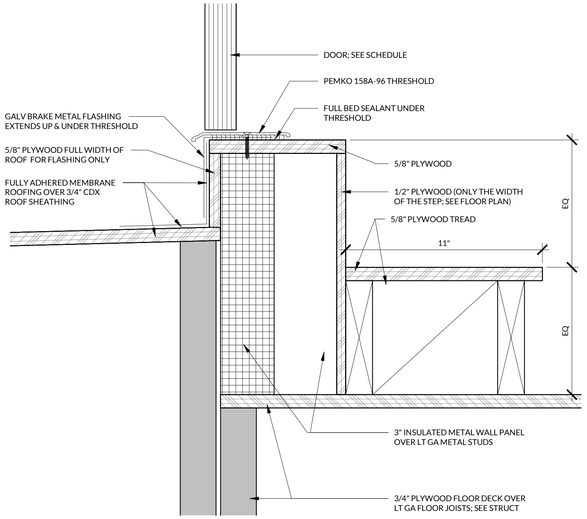
A3.2
SECTIONS AND DETAILS
DATE: APRIL 22, 2022



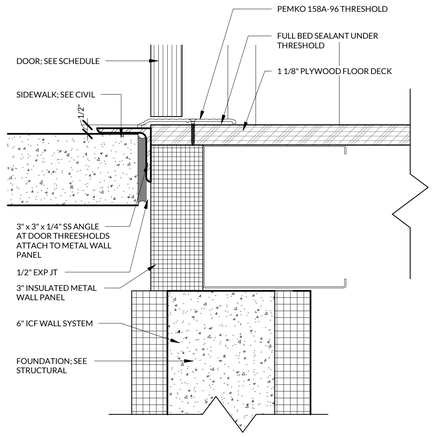
1 DOOR HEAD @ HM FRAME
3" = 1'-0"



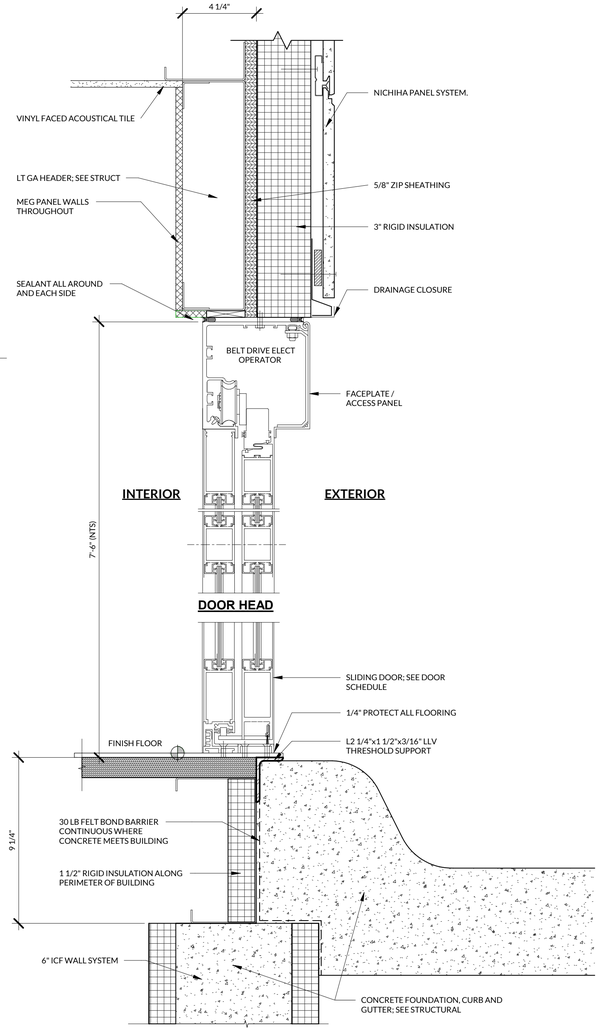
2 DOOR HEAD @ 3" INSUL PANEL
3" = 1'-0"



3 DOOR THRESHOLD @ MECH ACCESS RM DOOR
3" = 1'-0"

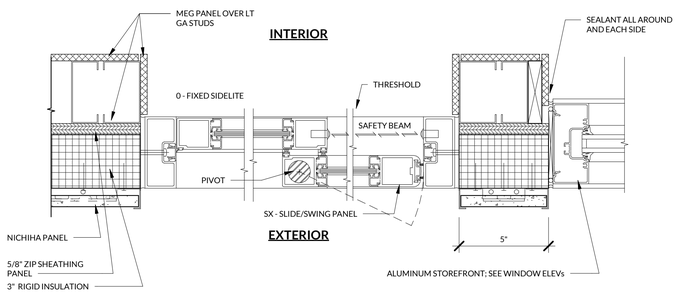


4 DOOR THRESHOLD @ MAIN FLOOR EXTERIOR DOOR
3" = 1'-0"



DOOR THRESHOLD

5 SLIDING DOOR HEAD/THRESHOLD
3" = 1'-0"

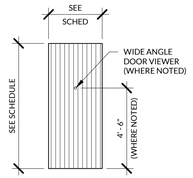


6 SLIDING DOOR JAMB
3" = 1'-0"

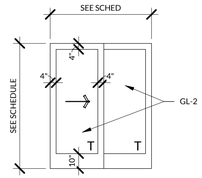
DOOR SCHEDULE

DOOR NUMBER	ROOM	SIZE	DOOR TYPE	DOOR MATERIAL	FRAME TYPE	FRAME MATERIAL	DETAILS HEAD	DETAILS JAMB	DETAILS THRESHOLD	FIRE RATING	HARDWARE SET	COMMENTS
101a	SERVICE AREA	3'-0"x7'-0"	D1	HM	F1	HM	2/A4.1	2/A4.1 SIM.	--		1	
101b	SERVICE AREA	6'-0"x7'-6"	D2	ALUM	F2	ALUM	3/A2.2	3/A2.2	--		4	
101c	SERVICE AREA	6'-0"x7'-6"	D2	ALUM	F2	ALUM	3/A2.2	3/A2.2	--		4	
101d	SERVICE AREA	6'-0"x7'-6"	D2	ALUM	F2	ALUM	3/A2.2	3/A2.2	--		4	
102	TOILET	3'-0"x7'-0"	D1	HM	F1	HM	1/A4.1	1/A4.1 SIM.	--		2	
201	MECH. ACCESS ROOM	2'-0"x6'-0"	D1	IHM	F1	HM	2/A4.1	2/A4.1 SIM.	--		3	

DOOR ELEVATIONS

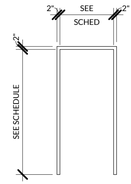


D1
HOLLOW METAL OR INSULATED HM (IHM)

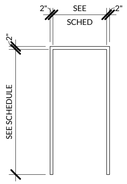


D2
SLIDING ALUMINUM & GLASS

FRAME ELEVATIONS



F1
HOLLOW METAL FRAME



F2
ALUMINUM FRAME

DOOR SCHEDULE NOTES:

a. REFER TO DOOR SCHEDULE FOR HARDWARE SETS

b. PAINT TO MATCH ADJACENT FINISHES

c. REFER TO CODE COMPLIANCE DOOR NOTES (BELOW) FOR ADDITIONAL REQUIREMENTS.

CODE COMPLIANCE DOOR NOTES:

ALL EXIT DOORS SHALL CONFORM TO THE FOLLOWING PROVISIONS OF THE INTERNATIONAL BUILDING CODE (IBC) AND THE STATE OF MISSOURI ACCESSIBILITY CODE:

1. THE EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF ANY SPECIAL KNOWLEDGE OR EFFORT WHEN THE BUILDING IS OCCUPIED.
2. ALL HAND-ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 34" TO 48" A.F.F. AND SHALL BE OPERATED WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE.
3. DOOR LEADING TO UNISEX TOILET ROOM SHALL BE IDENTIFIED WITH A 12" DIAMETER CIRCLE WITH A TRIANGLE SUPERIMPOSED ON THE CIRCLE AND WITHIN THE 12" DIAMETER. SIGN/SYMBOL SHALL BE MOUNTED ON THE WAL ON THE LATCH SIDE OF THE DOOR AND 60" A.F.F. AND NO MORE THAN 8" FROM THE EDGE OF THE DOOR TO THE EDGE OF THE SIGN.

GENERAL NOTES

ALL GLAZING FOR EXTERIOR DOOR OR WINDOW FRAMES SHALL BE INSULATED

ALL GLAZING FOR INTERIOR DOOR OR WINDOW FRAMES SHALL BE UNINSULATED, SINGLE PANE

DOOR & FRAME FINISH LEGEND

AL = ALUM DOOR OR FRAME

HM = HOLLOW METAL DOOR OR FRAME

F1 = PAINTED

F2 = PRE-FINISHED; CLEAN & PROTECT

HARDWARE SETS:

SET #1:

- CLOSER
- SEALS
- PANIC HARDWARE: "DETEX" ECL-600 (OR EQUAL)
- 1 1/2 PAIR STANLEY #CB0700 TWO KNUCKLE HINGES
- STANLEY #803969 (OR EQUAL) STEEL-BRIGHT BRASS
- 170 DEGREE, WIDE ANGLE DOOR VIEWER; SEE ELEV FOR LOCATION
- KEYED LOCK ON EXTERIOR
- THUMB TURN DEADBOLT KNOB ON INTERIOR

SET #2:

- CLOSER
- SCHLAGE PRIVACY LOCK
- "SATURN" LEVER HANDLE (BRUSHED ALUMINUM)
- 1 1/2 PAIR BUTT HINGES

SET #3

- SEALS
- 1 1/2 PAIR STANLY #CB0700 TWO KNUCKLE HINGES
- THUMB TURN DEADBOLT KNOB ON INTERIOR
- KEYED LOCK ON EXTERIOR

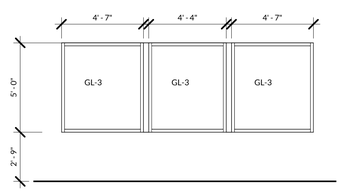
SET #4

- EDELMON-LYON AUTOMATIC DOOR - GT 1175 SINGLE SLIDE DOOR SYSTEM
- KEYED LOCK ON SLIDING DOORS

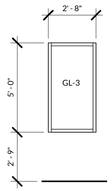
GLAZING SCHEDULE

GL-1	1/4" FULLY TEMPERED GLASS
GL-2	1" INSULATED SAFETY GLASS
GL-3	1" INSULATED TEMPERED GLASS
GL-4	5/8" INSUL SAFETY DOOR GLASS

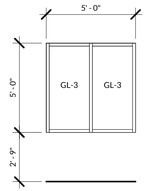
WINDOW ELEVATIONS



A
ALUMINUM STOREFRONT



B
ALUMINUM STOREFRONT



C
ALUMINUM STOREFRONT

TORGERSON DESIGN PARTNERS
ARCHITECTURE / REAL ESTATE / DEVELOPMENT
116 NORTH 2ND AVENUE · OZARK, MO 65721 · P (417) 581-8889 · F (417) 581-9002
ARCHITECTURAL CORPORATION MISSOURI LICENSE NUMBER: A-2010011427

7 BREW COFFEE
LEE'S SUMMIT, MO
NW CORNER OF NE DOUGLAS ST AND NE VICTORIA DR
LEE'S SUMMIT, MO 64086

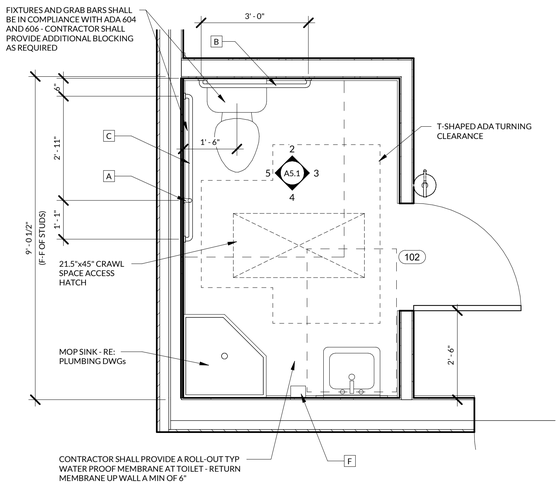
STATE OF MISSOURI · ADAM JOSEPH KREHER · NUMBER A-2011002764 · ARCHITECT · 05/05/2022

ARCHITECT OF RECORD:
NAME: ADAM KREHER
LICENSE NO. 2011002764

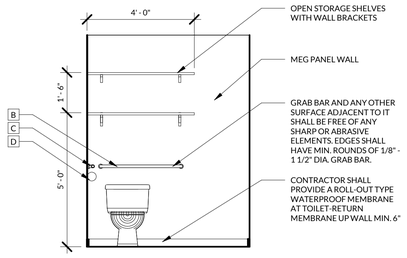
PROJECT NUMBER:
22033 7BLS

REVISION:

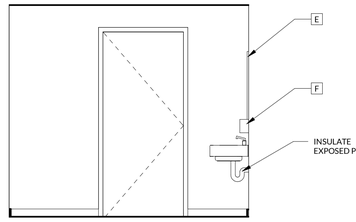
A4.1
DOORS AND WINDOWS
DATE: APRIL 22, 2022



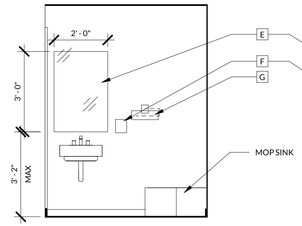
1 ENLARGED RESTROOM PLAN
1/2" = 1'-0"



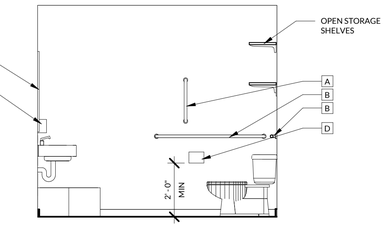
2 RR 102 - NORTH ELEVATION
3/8" = 1'-0"



3 RR 102 - EAST ELEVATION
3/8" = 1'-0"

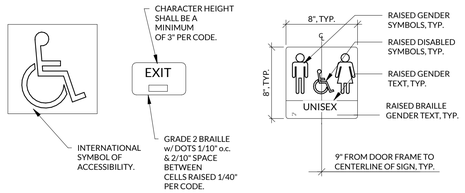


4 RR 102 - SOUTH ELEVATION
3/8" = 1'-0"



5 RR 102 - WEST ELEVATION
3/8" = 1'-0"

RESTROOM SIGNAGE



NOTES:

1. SIGNS SHALL CONFORM TO ANSI OR LOCAL ACCESSIBILITY GUIDELINES WHICHEVER IS MORE STRINGENT.
2. ALL BUILDINGS AND ENTRANCES THAT ARE ACCESSIBLE AND USABLE BY PERSONS WITH DISABILITIES SHALL BE IDENTIFIED WITH A MINIMUM OF ONE INTERNATIONAL SYMBOL OF ACCESSIBILITY.
3. G.C. TO PROVIDE TACTILE "EXIT" SIGNS AT ALL GRADE LEVEL EXIT DOORS PER CODE.
4. SIGNS TO BE INSTALLED ON THE LATCH SIDE OF THE DOOR, OR IF NO SPACE ON THE NEAREST WALL PREFERABLY ON THE RIGHT. SIGNAGE SHALL HAVE NON GLARE FINISH W/ A CONTRASTING BACKGROUND.

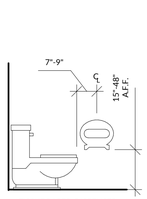
RESTROOM SCHEDULE

MARK	ITEM	DESCRIPTION	NOTES
A	18" STRAIGHT GRAB BAR	EQ. TO BOBBRICK B-5806x18, VERTICAL	FINISH TO BE STAINLESS STEEL
B	36" STRAIGHT GRAB BAR	EQ. TO BOBBRICK B-5806x36, HORIZONTAL	FINISH TO BE STAINLESS STEEL
C	48" STRAIGHT GRAB BAR	EQ. TO BOBBRICK B-5806x48, HORIZONTAL	FINISH TO BE STAINLESS STEEL
D	TOILET PAPER DISPENSER		FINISH TO BE STAINLESS STEEL
E	MIRROR	EQ. TO BOBBRICK B-165 2436	FINISH TO BE STAINLESS STEEL
F	SOAP DISPENSER		FINISH TO BE STAINLESS STEEL
G	PAPER TOWEL DISPENSER		FINISH TO BE STAINLESS STEEL

NOTES:

A. MOUNTING HEIGHT TO COMPLY WITH ADA REQUIREMENTS. CONTRACTOR IS TO PROVIDE ALL BLOCKING NECESSARY FOR PROPER INSTALLATION. INSTALL PER MANF. RECOMMENDATIONS.
B. EQUIPMENT SHOWN MAY NOT REFLECT APPEARANCE OF FINAL EQUIPMENT SELECTION.
C. ALL EQUIPMENT SHALL BE EQUAL TO THAT SPECIFIED. CONTRACTOR TO SUBMIT SHOP DRAWINGS/ CUT SHEETS FOR APPROVAL ON FINAL SELECTION.
D. ALL DIMENSIONS TO BE VERIFIED WITH PRODUCT REQUIREMENTS. INSTALL PER MANF. RECOMMENDATIONS.

RESTROOM CLEARANCE AND MOUNTING HEIGHTS



TISSUE PAPER DISPENSER

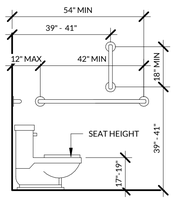


FIG. 604.5.1
TYPICAL CLEARANCES FOR SIDE WALL GRAB BAR AT TOILETS

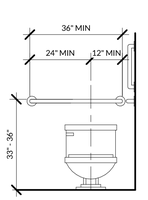
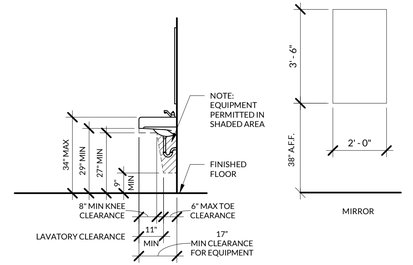
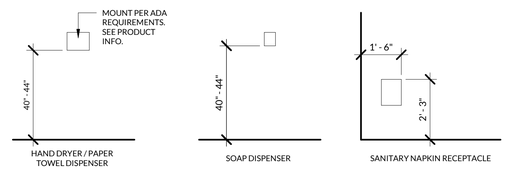


FIG. 604.5.2
TYPICAL CLEARANCES FOR REAR WALL GRAB BAR AT TOILETS





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ARCHITECTURAL CORPORATION MISSOURI LICENSE NUMBER: A-2010011427

7 BREW COFFEE
LEE'S SUMMIT, MO
NW CORNER OF NE DOUGLAS ST AND NE VICTORIA DR
LEE SUMMIT, MO 64086

STATE OF MISSOURI
ADAM JOSEPH KREHER
NUMBER A-2011002764
ARCHITECT
05/03/2022

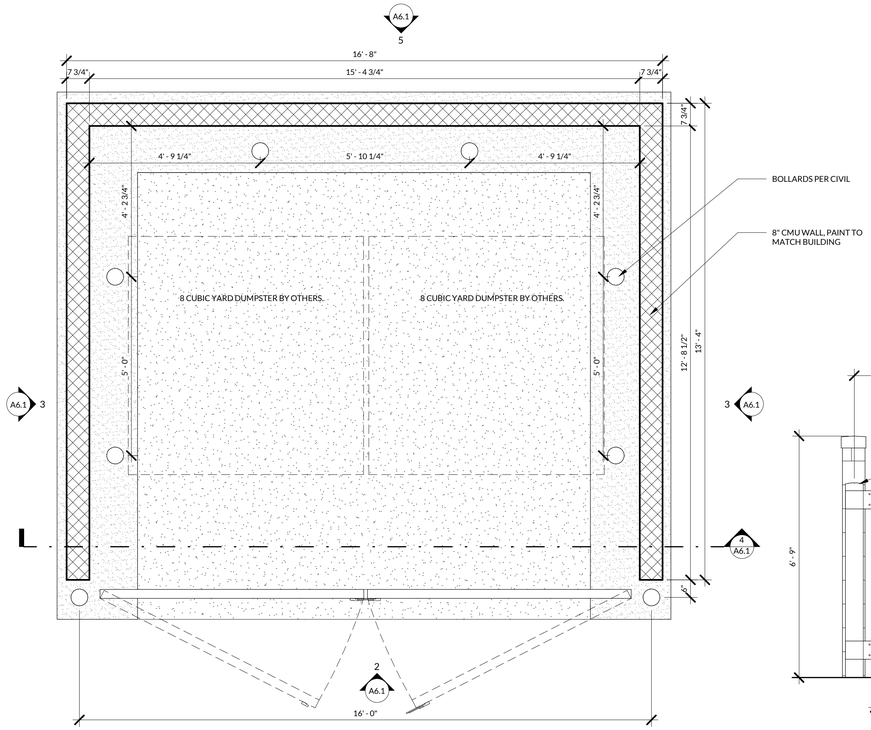
ARCHITECT OF RECORD:
NAME: ADAM KREHER
LICENSE NO. 2011002764

PROJECT NUMBER:
22033 7BLS

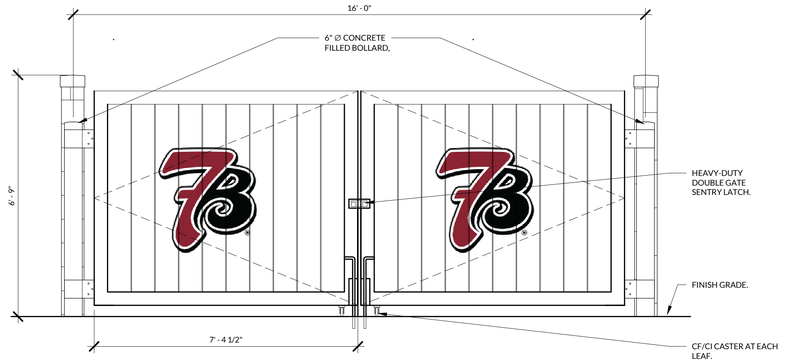
REVISION:

A5.1
RESTROOMS

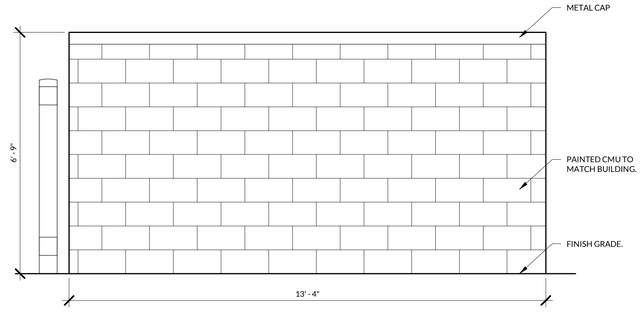
DATE: APRIL 22, 2022



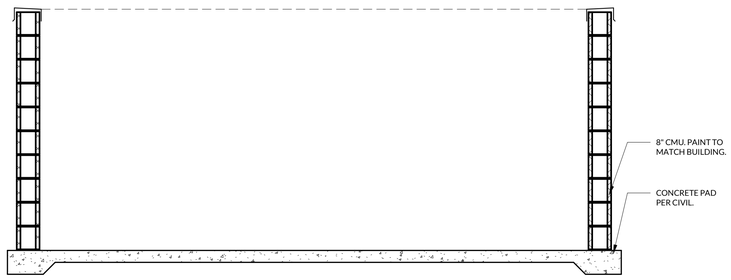
1 TRASH ENCLOSURE
1/2" = 1'-0"



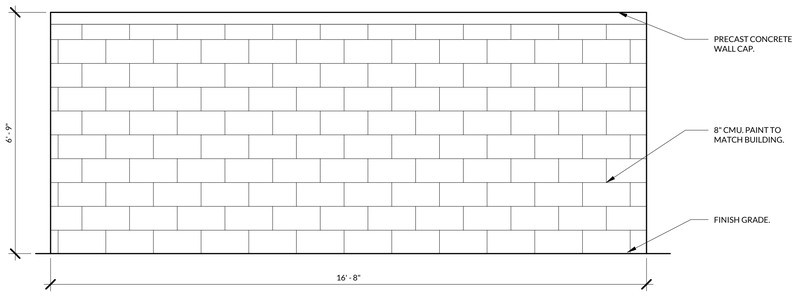
2 TRASH ENCLOSURE - FRONT ELEVATION
1/2" = 1'-0"



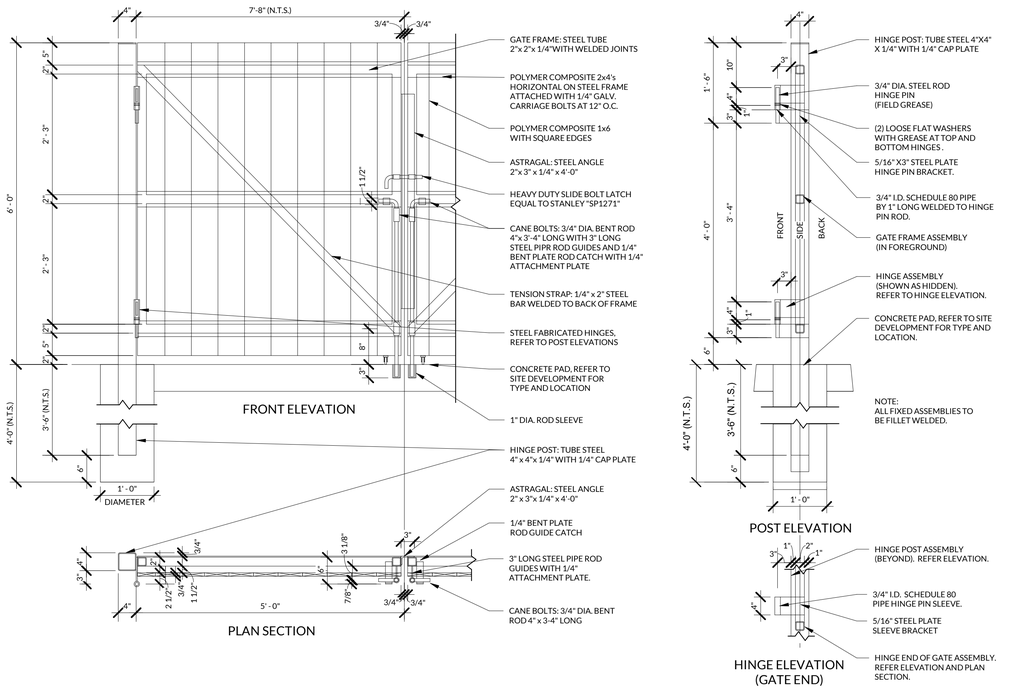
3 TRASH ENCLOSURE - SIDE ELEVATION
1/2" = 1'-0"



4 TRASH ENCLOSURE - SECTION DETAIL
1/2" = 1'-0"



5 TRASH ENCLOSURE - BACK ELEVATION
1/2" = 1'-0"



6 TRASH ENCLOSURE GATE DETAILS
3/4" = 1'-0"

TORGERSON DESIGN PARTNERS
ARCHITECTURE / REAL ESTATE / DEVELOPMENT
116 NORTH 2ND AVENUE · OZARK, MO 65721 · P (417) 581-8889 · F (417) 581-9002
ARCHITECTURAL CORPORATION MISSOURI LICENSE NUMBER: A-2010011427

7 BREW COFFEE
LEE'S SUMMIT, MO
NW CORNER OF NE DOUGLAS ST AND NE VICTORIA DR
LEE SUMMIT, MO 64086

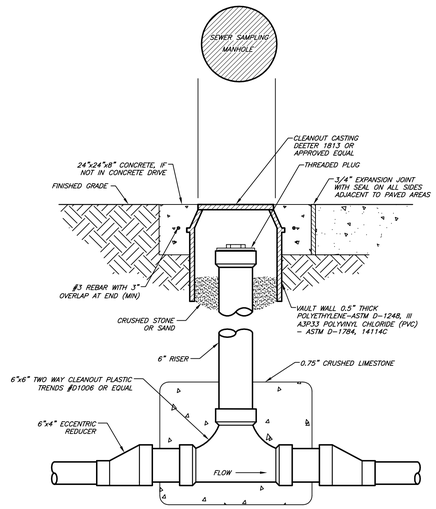
STATE OF MISSOURI
ADAM JOSEPH KREHER
NUMBER A-2011002764
ARCHITECT
05/06/2022

ARCHITECT OF RECORD:
NAME: ADAM KREHER
LICENSE NO. 2011002764

PROJECT NUMBER:
22033 7BLS

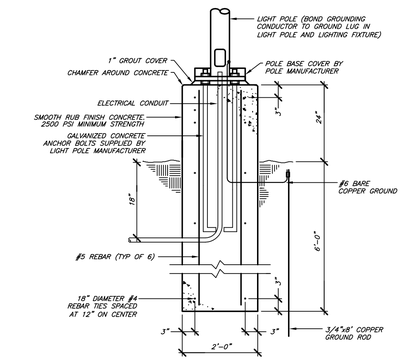
REVISION:

A6.1
TRASH ENCLOSURE DETAILS
DATE: APRIL 22, 2022



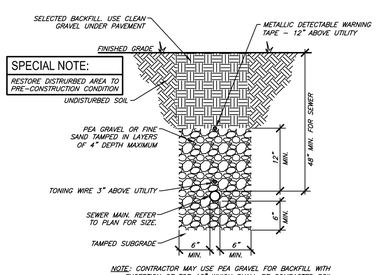
4 FINISH GRADE SAMPLING MANHOLE DETAIL

NO SCALE



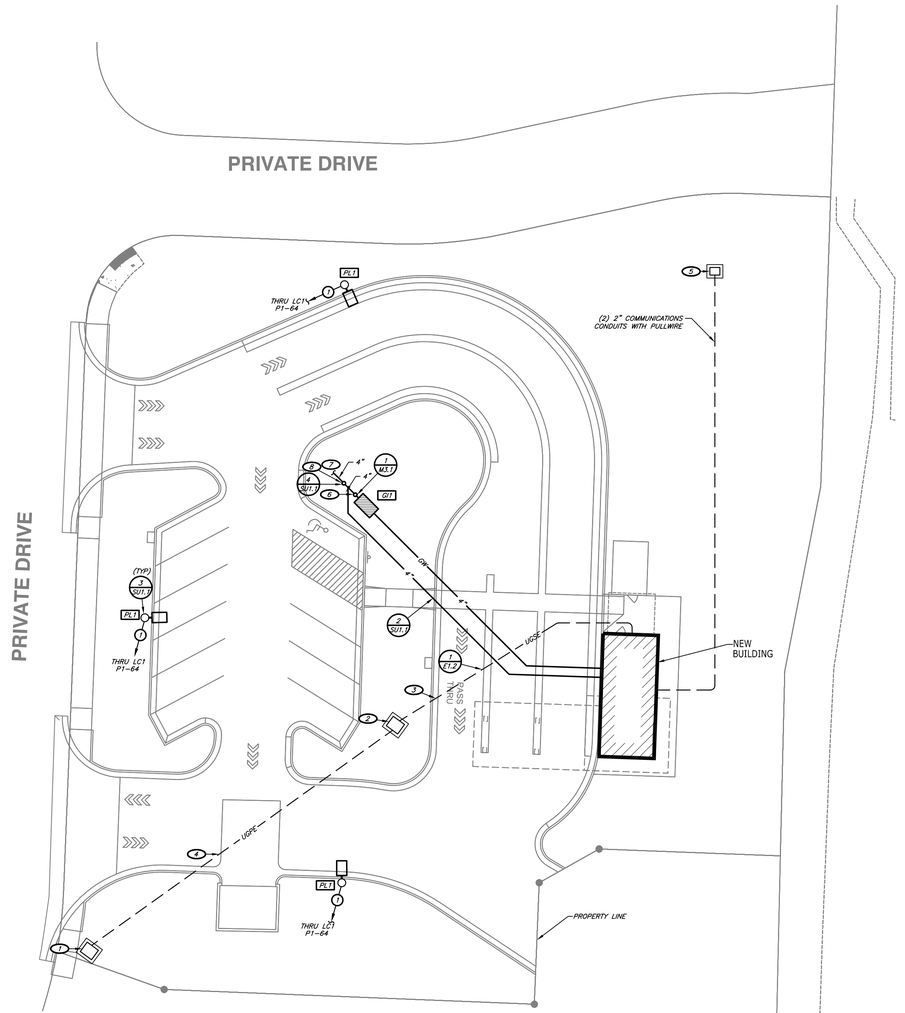
3 LIGHT POLE CONCRETE BASE

NO SCALE



2 SEWER TRENCH DETAIL

NO SCALE



1 SITE PLAN

1" = 20'-0"

NORTH

KEYNOTES:

1. EXISTING PRIMARY JUNCTION BOX IN THIS AREA. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH UTILITY COMPANY.
2. PADMOUNT 120/240-VOLT SINGLE-PHASE TRANSFORMER BY UTILITY COMPANY. CONCRETE PAD BY CONTRACTOR. EXACT LOCATION SHALL BE FIELD DETERMINED/COORDINATED.
3. SECONDARY CONDUIT AND CONDUCTORS BY CONTRACTOR. FIELD COORDINATE EXACT ROUTINGS.
4. PRIMARY CONDUITS AND CONDUCTORS BY UTILITY COMPANY. VERIFY EXACT ROUTING, TERMINATION LOCATION, AND REQUIREMENTS WITH THE UTILITY COMPANY. COORDINATE WITH UTILITY COMPANY FOR CONDUCTOR/CONDUIT SIZES.
5. PROVIDE 18x18 2-BOLT, OPEN BOTTOM, HEAVY DUTY PULL BOX EQUIVALENT TO HUBBELL-QUAZITE MODEL DT121212GSN. "COMMUNICATIONS" SHALL BE INSCRIBED ON THE LID. INSTALL TOP OF BOX FLUSH WITH FINISH GRADE. PROVIDE EXTENSION AS REQUIRED TO MATCH CONDUIT BURIAL DEPTH. VERIFY/COORDINATE EXACT SERVICE LOCATION AND ALL REQUIREMENTS WITH SERVICE PROVIDER(S) PRIOR TO CONDUIT AND COMMUNICATION BOX INSTALLATION.
6. 4" WASTE UP TO FINISH GRADE CLEANOUT.
7. REFER TO CIVIL PLAN FOR CONTINUATION.
8. 4" WASTE UP TO SAMPLING MANHOLE.

CONDUIT & CONDUCTOR SCHEDULE:

1. (2) #10 AND (1) #10 GROUND IN 0.75" CONDUIT.

GENERAL NOTES:

1. UTILITY ROUTINGS ARE DIAGRAMMATIC. ADJUST EXACT ROUTING TO ACCOMMODATE FIELD CONDITIONS. REFER TO CIVIL AND PUBLIC IMPROVEMENT PLANS FOR NEW SEWER, WATER AND STORMWATER PIPING.
2. REFER TO CIVIL AND PUBLIC IMPROVEMENT PLANS FOR LOCATION AND COORDINATION OF ALL EASEMENTS.
3. REVIEW ALL CIVIL AND PUBLIC IMPROVEMENT PLANS AND COORDINATE ALL WORK WITH DIFFERENT DISCIPLINES. REVIEW AND OBTAIN APPROVAL FROM CITY UTILITIES AND CITY OF SPRINGFIELD PRIOR TO PERFORMING ANY UTILITY WORK.
4. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID. NO EXTRAS WILL BE PAID DUE TO UNANTICIPATED EXISTING CONDITIONS. PLANS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR DIMENSIONS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING TEMPORARY TELEPHONE, ELECTRICAL AND WATER SERVICES REQUIRED DURING CONSTRUCTION, AND SHALL PAY ALL ASSOCIATED COSTS.
6. THE CONTRACTOR SHALL CONTACT EVERCY AT (888) 471-5275 AND ARRANGE FOR ELECTRICAL SERVICES AS INDICATED ON DRAWINGS. THE CONTRACTOR SHALL INCLUDE ALL FEES, CHARGES, ETC. INCURRED BY THE UTILITY COMPANY INTO BID. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AS REQUIRED BY THE LOCAL AUTHORITIES FOR SERVICE INSTALLATION. ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF LOCAL AUTHORITIES.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH TELECOMMUNICATIONS AND CABLE TELEVISION SERVICE PROVIDERS TO FACILITATE AND SCHEDULE INSTALLATION OF SERVICES. CONTRACTOR SHALL COORDINATE WITH OWNER FOR SERVICE PROVIDER CONTACT. THE OWNER SHALL BE RESPONSIBLE FOR ALL COSTS, CHARGES, FEES, ETC. INCURRED BY SERVICE PROVIDERS. PROVIDE ALL MATERIALS AS REQUIRED BY LOCAL AUTHORITIES FOR SERVICE INSTALLATION. ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF LOCAL AUTHORITIES.
8. ALL SITE ELECTRICAL INSTALLATIONS AND CONSTRUCTION SHALL BE PER THE MOST RECENT REVISIONS OF THE NATIONAL ELECTRIC SAFETY CODE (NESC) AND THE NATIONAL ELECTRIC CODE (NEC) STANDARDS AND SPECIFICATIONS.
9. COORDINATE ALL TRANSFORMER LOCATIONS WITH OTHER UTILITIES INDICATED ON CIVIL PLANS.
10. REFER TO CIVIL PLANS FOR ALL SITE SANITARY SEWER WORK.

SITE UTILITIES SYMBOLS:

- OHE — OVERHEAD ELECTRIC
- UGPE — UNDERGROUND PRIMARY ELECTRIC
- UGSE — UNDERGROUND SECONDARY ELECTRIC
- UGT — UNDERGROUND TELECOMMUNICATIONS
- UGC — UNDERGROUND CABLE TV

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7 BREW COFFEE

LEE'S SUMMIT, MO

1410 NE DOUGLAS STREET
LEE'S SUMMIT, MO 64086

STATE OF MISSOURI
RYAN S. JONES
NOTARY PUBLIC
PE-2004017193
PROFESSIONAL ENGINEER

04-26-22

ENGINEER OF RECORD:
NAME: RYAN JONES
LICENSE NO.PE-2004017193

PROJECT NUMBER:
21334 7BSM

REVISION:

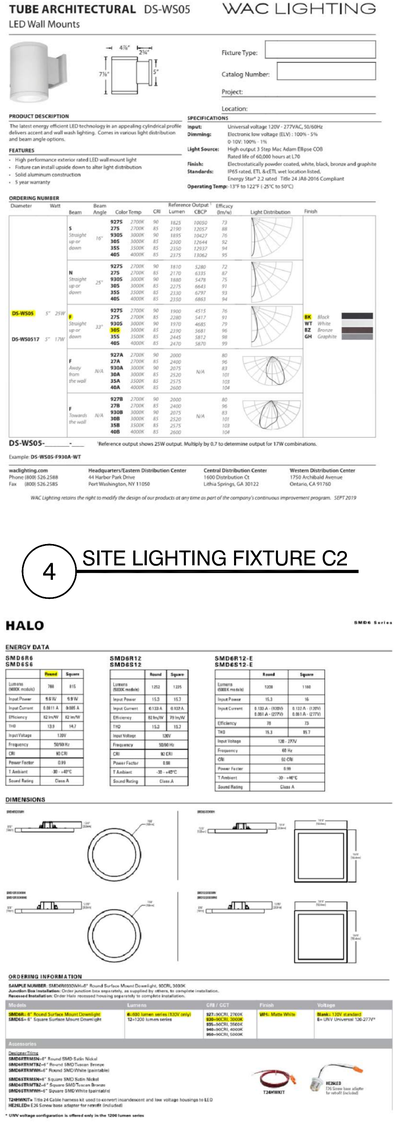
MISSOURI ONE CALL SYSTEM INC.
DIAL 811 OR 1-800-344-7483
STOP! CALL BEFORE YOU DIG!

CJD LLC
Engineering | Energy | Innovation
2225 West Chesterfield Boulevard, Suite 200, Springfield, MO 65807
P: 417.877.1700 F: 417.324.7735 www.cjd-eng.com
Missouri State Certificate of Authority #2005026903

SU1.1

SITE UTILITIES PLAN

DATE: APRIL 26, 2022



TUBE ARCHITECTURAL DS-WS05
LED Wall Mounts

WAC LIGHTING

Fixture Type:
Catalog Number:
Project:
Location:

PRODUCT DESCRIPTION
The latest energy efficient LED technology in an appealing cylindrical profile delivers accent and wall wash lighting. Comes in various light distribution and beam angle options.

FEATURES
- High performance exterior rated LED wall-mount light
- Fixture can install upside down to alter light distribution
- Solid aluminum construction
- 5 year warranty

SPECIFICATIONS
Input: Universal voltage 120V - 277VAC, 50/60Hz
Dimming: Electronic low voltage (ELV) ; 100% - 5%
0-10V; 100% - 1%
Light Source: High output 3 Step Mac Adam Ellipse COB
Rated life of 60,000 hours at L70
Finish: Electrostatically powder coated, white, black, bronze and graphite
Standards: IP65 rated, ETL & cETL wet location listed,
Energy Star® 2.2 rated. Title 24 JA8-2016 Compliant
Operating Temp: -13°F to 122°F (-25°C to 50°C)

ORDERING NUMBER

Diameter	Watt	Beam	Beam Angle	Color Temp	CRI	Reference Output Lumen	Reference Output CBCP	Efficacy (lm/w)	Light Distribution	Finish
DS-WS05	5"	25W	S		9275	2700K	90	1825	10050	73		
			Straight up or down	16°	275	3000K	85	2190	12057	88		
					9305	3000K	90	1895	10427	76		
					305	3500K	85	2450	13494	98		
					355	3500K	85	2320	12767	94		
					405	4000K	85	2175	11962	95		
			N		9275	2700K	90	1810	5280	72		
			Straight up or down	25°	275	3000K	85	2170	6335	87		
					9305	3000K	90	1880	5478	75		
					305	3000K	85	2175	6643	91		
					355	3500K	85	2130	6797	93		
					405	4000K	85	2350	6863	94		
DS-WS05	5"	25W	F		9275	2700K	90	1900	4513	76		
			Straight up or down	33°	275	3000K	85	2280	5417	91		
					9305	3000K	90	1970	4685	79		
DS-WS0517	5"	17W			305	3000K	85	2290	5681	96		
					355	3500K	85	2445	5872	98		
					405	4000K	85	2430	5870	99		
			F		9278	2700K	90	2000		80		
			Away from the wall	N/A	278	2700K	85	2400		96		
					308	3000K	90	2075	N/A	83		
					30A	3000K	85	2520		101		
					35A	3500K	85	2575		103		
					40A	4000K	85	2600		104		
			F		9278	2700K	90	2000		80		
			Towards the wall	N/A	278	2700K	85	2400		96		
					308	3000K	90	2075	N/A	83		
					30B	3000K	85	2520		101		
					35B	3500K	85	2575		103		
					40B	4000K	85	2600		104		

Finish	
BK	Black
WT	White
BZ	Bronze
GH	Graphite

DS-WS05-_____-_____
Example: **DS-WS05-F930A-WT**

*Reference output shows 25W output. Multiply by 0.7 to determine output for 17W combinations.

waclighting.com
Phone (800) 526.2588
Fax (800) 526.2585

Headquarters/Eastern Distribution Center
44 Harbor Park Drive
Port Washington, NY 11050

Central Distribution Center
1600 Distribution Ct
Lithia Springs, GA 30122

Western Distribution Center
1750 Archibald Avenue
Ontario, CA 91760

4 SITE LIGHTING FIXTURE C2

HALO SMD6 Series

ENERGY DATA

	SMD6R5 SMD6S5 Round	SMD6R5 SMD6S5 Square
Lumens (6000K models)	786	815
Input Power	9.9 W	9.9 W
Input Current	0.861 A	0.885 A
Efficiency	82 lm/W	83 lm/W
THD	13.0	14.7
Input Voltage	120V	
Frequency	50/60 Hz	
CRI	90 CRI	
Power Factor	0.99	
T Ambient	35° - 40°C	
Sound Rating	Class A	

	SMD6R12 SMD6S12 Round	SMD6R12 SMD6S12 Square
Lumens (6000K models)	1,052	1,095
Input Power	15.3	15.7
Input Current	0.133 A - (120V) 0.064 A - (277V)	0.133 A - (120V) 0.064 A - (277V)
Efficiency	83 lm/W	89 lm/W
THD	15.2	15.2
Input Voltage	120 - 277V	
Frequency	50/60 Hz	
CRI	90 CRI	
Power Factor	0.98	
T Ambient	35° - 40°C	
Sound Rating	Class A	

	SMD6R12-E SMD6S12-E Round	SMD6R12-E SMD6S12-E Square
Lumens (6000K models)	1008	1166
Input Power	15.3	16
Input Current	0.133 A - (120V) 0.064 A - (277V)	
Efficiency	78	73
THD	15.3	15.7
Input Voltage	120 - 277V	
Frequency	60 Hz	
CRI	90 CRI	
Power Factor	0.96	
T Ambient	35° - 40°C	
Sound Rating	Class A	

DIMENSIONS

ORDERING INFORMATION

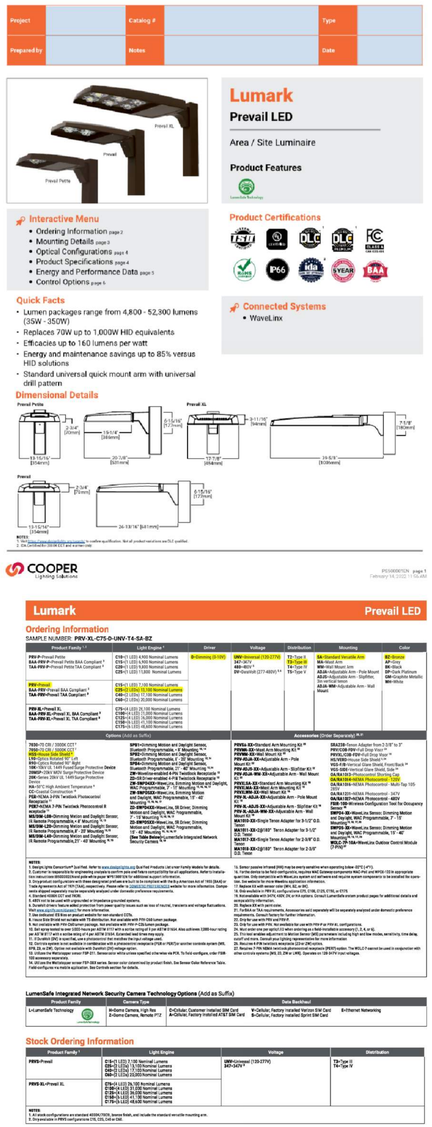
SAMPLE NUMBER: SMD6R6S6WH-8" Round Surface Mount Downlight, 600lm, 3000K
Junction Box Installation: Order junction box separately, as supplied by others, to complete installation.
Recessed Installation: Order Halo recessed housing separately to complete installation.

Housing	Aperture	CRI (CCT)	Finish	Voltage
SMD6R6= 6" Round Surface Mount Downlight **SMD6S**= 6" Square Surface Mount Downlight	**6**= 600 lumen series (6500K only) **12**=1200 lumen series	**927**=90CRI, 2700K **930**=90CRI, 3000K **935**=90CRI, 3500K **940**=90CRI, 4000K **950**=90CRI, 5000K	**WH**= Matte White	**Blank**= 120V standard **E**= 120V Universal 120-277V*

Accessories
Decorative Trims **SMD6WHTRIMRD**=6" Round SMD Trim in Nickel **SMD6WHTRIMTRD**=6" Round SMD Trim in Bronze **SMD6WHTRIMWH**=6" Round SMD White Specialties **SMD6WHTRIMSN**=6" Square SMD Satin Nickel **SMD6WHTRIMTS**=6" Square SMD Trim in Bronze **SMD6WHTRIMWH**=6" Square SMD White Specialties **TJWHWIRE**= 36in 24 Cable harness kit used to extend incandescent and low voltage housings to 6.0 ft **HEJNL22in** 22in Screw base adapter for retrofit (included).

* 120V voltage configuration is offered only in the 1200 lumen series

3 SITE LIGHTING FIXTURE C1



Project		Catalog #		Type	
Prepared by		Notes		Date	

Lumark
Prevail LED
Area / Site Luminaire

Product Features

Interactive Menu
- Ordering Information page 2
- Mounting Details page 3
- Optical Configurations page 4
- Product Specifications page 4
- Energy and Performance Data page 5
- Control Options page 5

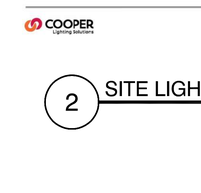
Product Certifications

Quick Facts
- Lumen packages range from 4,800 - 52,300 lumens (35W - 350W)
- Replaces 70W up to 1,000W HID equivalents
- Efficacies up to 160 lumens per watt
- Energy and maintenance savings up to 85% versus HID solutions
- Standard universal quick mount arm with universal drill pattern

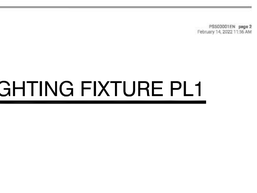
Connected Systems
- WaveLinx

Dimensional Details

Prevail Petite



Prevail XL



Prevail

NOTES
1. See
2. EM-Certified for 1000 lm and 4,000K CCT.

2 SITE LIGHTING FIXTURE PL1

Lumark **Prevail LED**

Ordering Information
SAMPLE NUMBER: **PRV-XL-C75-D-UNV-T4-SA-BZ**

Product Family [1]	Light Engine [2]	Driver	Voltage	Distribution	Mounting	Color
PRV-P Prevail Petite **SAA-PRV-P** Prevail Petite SAA Compliant [3] **TAA-PRV-P** Prevail Petite TAA Compliant [3]	C10=(1) LED 4,900 Nominal Lumens C15=(1) LED 6,900 Nominal Lumens C20=(1) LED 9,800 Nominal Lumens C25=(1) LED 13,000 Nominal Lumens	**B**=Dimming (0-10V)	**UNV**=Universal (120-277V) **347-347V** **480-480V** **SW**=Overlit (277-480V) [4]	**T2**=Type II **T3**=Type III **T4**=Type IV	**SA**=Standard Versatile Arm **WA**=Wall Arm **WM**=Wall Mount Arm **PM**=Pole Mount Adapter - Pole Mount **AS**=Adjustable Arm - Slipfitter, 3in vertical tenon **AW**=Adjustable Arm - Wall Mount	**BZ**=Bronze **AP**=Grey **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White
PRV-Prevail **SAA-PRV**=Prevail SAA Compliant [3] **TAA-PRV-Prevail TAA Compliant** [3]	C15=(1) LED 7,100 Nominal Lumens C20=(1) LED 10,100 Nominal Lumens C30=(1) LED 17,100 Nominal Lumens C40=(1) LED 20,000 Nominal Lumens					
PRV-XL-Prevail XL **SAA-PRV-XL**=Prevail XL SAA Compliant [3] **TAA-PRV-XL**=Prevail XL TAA Compliant [3]	C25=(1) LED 13,100 Nominal Lumens C30=(1) LED 15,900 Nominal Lumens C35=(1) LED 21,500 Nominal Lumens C40=(1) LED 25,000 Nominal Lumens C50=(1) LED 32,300 Nominal Lumens					

Options (Order Separately) [5]	Accessories (Order Separately) [6, 7]
SPD=Dimming Motion and Daylight Sensor, Standard Programmable, 8'-0" Mounting [8,9] **SPSD**=Dimming Motion and Daylight Sensor, Stanford Programmable, 8'-0" Mounting [8,9] **SPBD**=Dimming Motion and Daylight Sensor, Bluetooth Programmable, 8'-0" Mounting [8,9] **CM**=Wavelinx-enabled 4-Pin Twistlock Receptacle, 20-30 Crew-enabled 4-Pin Twistlock Receptacle [10] **CMR**=Wavelinx-enabled 4-Pin Twistlock Receptacle, SPD Programmable, 8'-0" Mounting [8,9,10] **CM-DMTD22**=WaveLinx, Dimming Motion and Daylight Sensor, Programmable, 7'-10" Mounting [8,9,10] **CM-DMTD422**=WaveLinx, IR Driver, Dimming Motion and Daylight Sensor, Programmable, 7'-10" Mounting [8,9,10] **CM-DMTD222**=WaveLinx, IR Driver, Dimming Motion and Daylight Sensor, Programmable, 12'-0" Mounting [8,9,10] **(See Table Below)** LumenSafe Integrated Network Security Camera [11]	**DSA228**=Screw Adapter from 2 3/8" to 3" **PRV10W-PRV**=Pull Drop Wire [12] **PRV5PL-C30-PRV**=Pull Drop Wire [12] **HS1000**=House Side Shield [13] **VGS-KIT**=Vertical Glare Shield, Front/Back [14] **DSA1024**=Photocontrol Mounting Cup **DA/BA1424**=NEMA Photocontrol - Low **DA/BA1836**=NEMA Photocontrol - Multi Tap 105-285V **DA/BA1221**=NEMA Photocontrol - 347V **DA/BA1480**=NEMA Photocontrol - 480V **FSIR-100**=Wireless Configuration Tool for Occupancy Sensors **SPD-BZ-WaveLinx**=Sensor, Dimming Motion and Daylight, WAC Programmable, 7'-10" Mounting [8,9,10] **SPD-WH-WaveLinx**=Sensor, Dimming Motion and Daylight, WAC Programmable, 7'-10" Mounting [8,9,10] **WSLC-IR-10ak-WaveLinx**=Outdoor Control Module (7-Pack) [15]

NOTES
1. Designlights Consortium® Qualified. Refer to www.designlights.org QLs for Part Products List or most family models for details.
2. Customer is responsible for ensuring compatibility between luminaire and selected lighting controls. Refer to interactive menu or visit www.WACLighting.com/DLC for DLC-qualified luminaire/control combinations.
3. Not DLC qualified. Refer to www.designlights.org QLs for Part Products List or most family models for details. Customer is responsible for ensuring compatibility between luminaire and selected lighting controls. Refer to interactive menu or visit www.WACLighting.com/DLC for DLC-qualified luminaire/control combinations.
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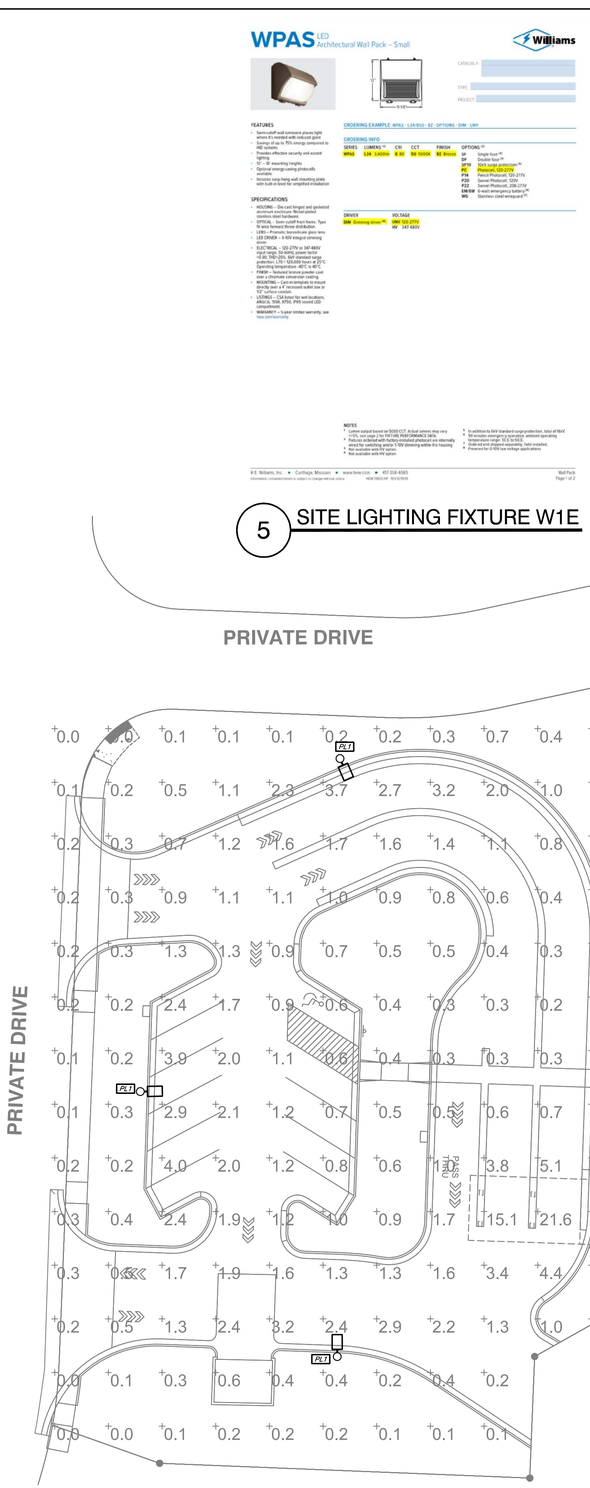
LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

Security Technology	Housing	Lens	Data Backhaul
LS=LumenSafe Technology	**H**=Dome Camera, High Res **D**=Dome Camera, Remote PTZ	**2**=Cellular Customer-Installed SIM Card **A**=Cellular, Factory-Installed AT&T SIM Card	**V**=Cellular, Factory-Installed Verizon SIM Card **S**=Cellular, Factory-Installed Sprint SIM Card	**E**=Ethernet Networking

Stock Ordering Information

Product Family [1]	Light Engine	Voltage	Distribution
PRV5-Prevail	**C15**=(1) LED 7,100 Nominal Lumens **C20**=(1) LED 10,100 Nominal Lumens **C30**=(1) LED 17,100 Nominal Lumens **C40**=(1) LED 20,000 Nominal Lumens	**UNV**=Universal (120-277V) **347-347V**	**T2**=Type II **T4**=Type IV
PRV5 XL-Prevail XL	**C15**=(1) LED 7,100 Nominal Lumens **C20**=(1) LED 10,100 Nominal Lumens **C30**=(1) LED 17,100 Nominal Lumens **C40**=(1) LED 20,000 Nominal Lumens **C50**=(1) LED 41,100 Nominal Lumens **C75**=(1) LED 48,600 Nominal Lumens		

NOTES
1. All stock configurations are standard 4000K/70CRI, bronze finish, and include the standard versatile mounting arm.
2. Dimensions in [MM] and [centimeters] for C75, C25, C40 or C50.



WPAS LED Architectural Wall Pack – Small

Williams

CATALOG #
TYPE
PROJECT

FEATURES
- Semi-cutoff wall luminaire places light where it's needed with reduced glare
- Delivers up to 75% energy compared to HID sources
- Provides effortless security and accent lighting
- 12' – 18' mounting heights
- Optional energy-saving photocells available
- Includes easy-hang wall mounting plate with built-in level for simplified installation

ORDERING EXAMPLE WPAS - L14/850 - BZ - OPTIONS - DIM - UNV

ORDERING INFO

SERIES	LUMENS [1]	CRI	CCT	FINISH	OPTIONS [2]
WPAS	**L14** 2,400lm	**8** 80	**50** 5000K	**BZ** Bronze	**SF** Single fuse [3] **DF** Double fuse [3] **PCT** Wall mount photocell [4] **P7** Shorting cap (120-277V) **P7R** Raised Photocell, 120-277V **P2D** Swivel Photocell, 120V **P2DR** Swivel Photocell, 347-480V **EM10W** 5-watt emergency battery [5] **WG** Stainless steel wireguard [6]

SPECIFICATIONS
- HOUSING – Die-cast hinged and gasketed housing and mounting plate are painted stainless steel hardware
- OPTICAL – Semi-cutoff front fixture. Type II, III and IV distributions available
- LENS – Prismatic borosilicate glass lens
- LED DRIVER – 0-10V integral dimming driver
- ELECTRICAL – 120-277V or 347-480V input range; 50-60Hz; power factor >0.90; THD<20%. 6kV standard surge protection. 10kV surge protection optional. Operating temperature -40°C to 40°C.
- FINISH – Textured bronze powder coat over a chromate conversion coating provides a durable finish that withstands directly over a 4' recessed outlet box or 1/2" surface conduit
- LISTINGS – Suitable for wet locations. ANSI C136, TUV, ETL2, IP65 rated LED compartment.
- WARRANTY – 5-year limited warranty, see

DRIVER
DIM Dimming driver [4]

VOLTAGE
UNV 120-277V
HV 347-480V

NOTES
1. Lumen output based on 5000 CCT. Actual lumens may vary +/- 10% based on CCT, CRI, and finish.
2. Fixtures ordered with factory-installed photocell are internally wired for switching and/or 0-10V dimming within the housing.
3. Not available with DIM option.
4. Not available with HV option.
5. In addition to 6kV standard surge protection, total of 10kV surge protection. Operating ambient operating temperature range: 10°C to 55°C.
6. Ordered and shipped separately, field installed.
7. Prewired for 0-10V low voltage applications.

5 SITE LIGHTING FIXTURE W1E

1 SITE PHOTOMETRIC PLAN
1" = 20'-0"

NORTH

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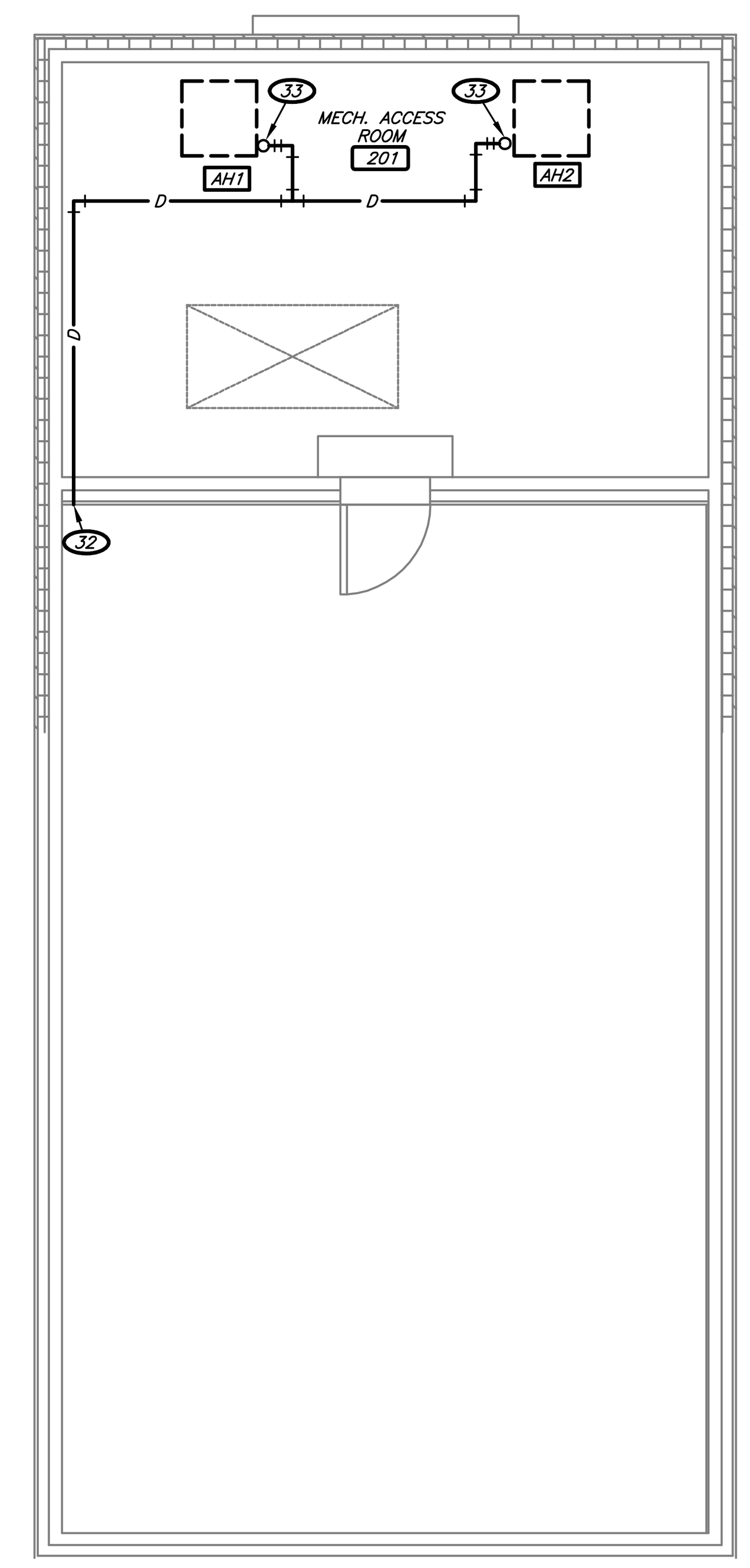
STATE OF MISSOURI
RYAN S. JONES
NUMBER PE-2004017193
PROFESSIONAL ENGINEER
04-26-22

ENGINEER OF RECORD:
NAME: RYAN JONES
LICENSE NO.PE-2004017193

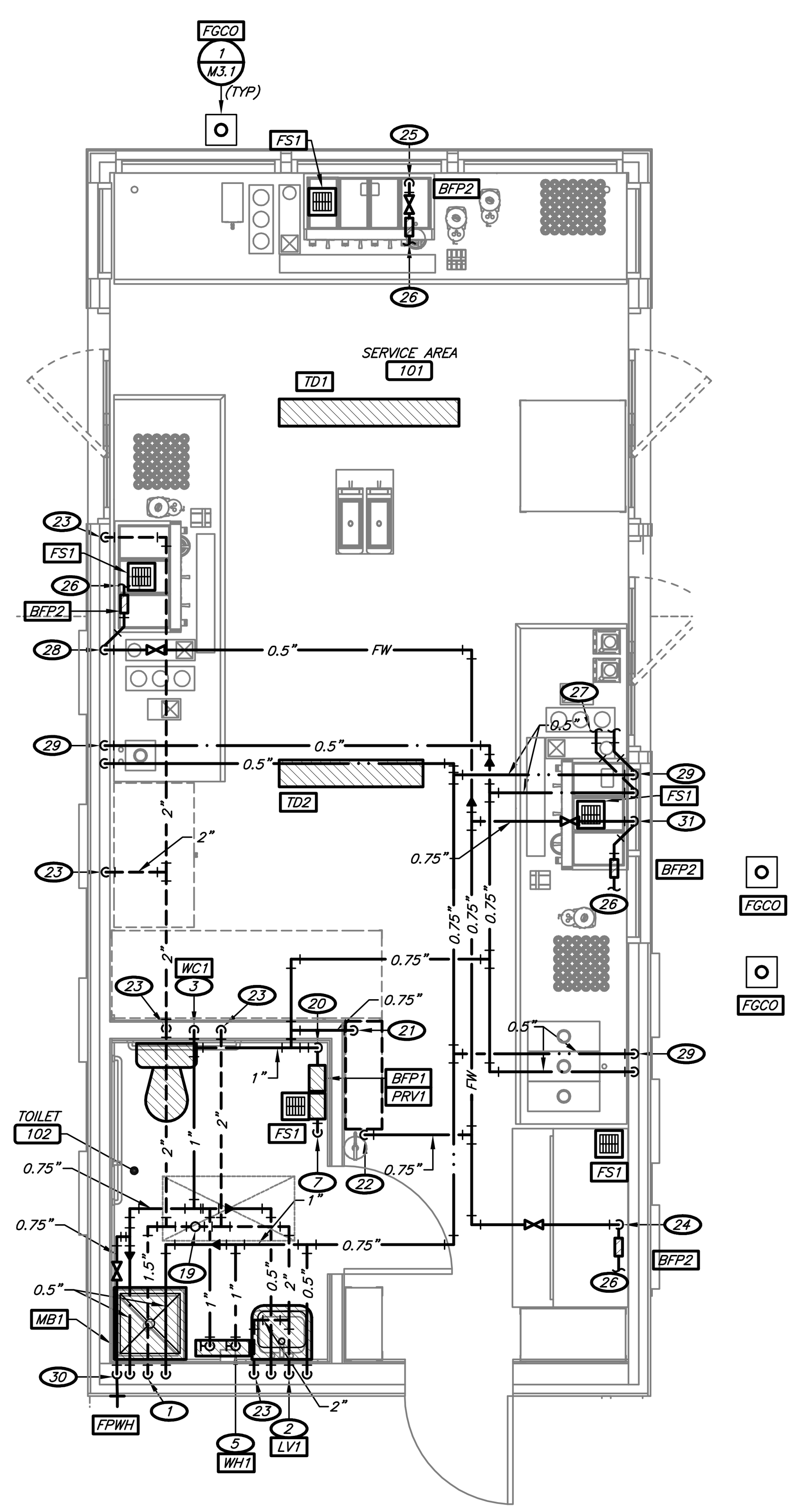
PROJECT NUMBER:
21334 7BSM

REVISION:

SU1.2
SITE PHOTOMETRIC PLAN
DATE: APRIL 26, 2022



3 ROOF AND ATTIC PLUMBING PLAN
1/4" = 1'-0"
NORTH



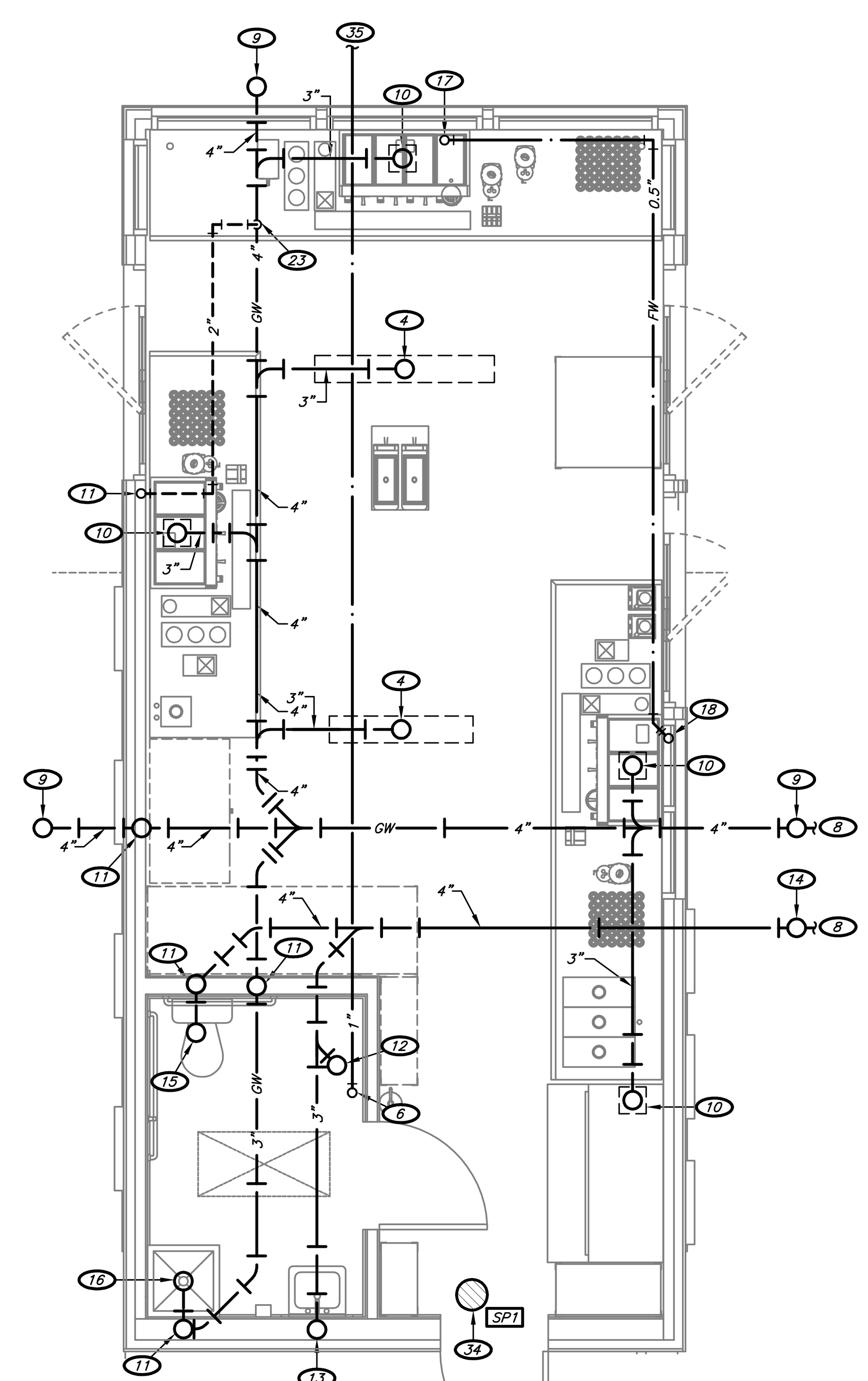
2 GROUND LEVEL PLUMBING PLAN
1/4" = 1'-0"
NORTH

GREASE INTERCEPTOR CALCULATION

VOLUME OF 3-COMPARTMENT SINK: 7800 CUBIC IN.
VOLUME OF MOP BASIN: 5760 CUBIC IN.
VOLUME OF RINSER SINK: 770 CUBIC IN.
VOLUME OF RINSER SINK: 1000 CUBIC IN.
VOLUME OF RINSER SINK: 770 CUBIC IN.
TOTAL: 16100 CUBIC IN.

– CONVERSIONS TO GALLONS: 70 GALLONS

GREASE INTERCEPTOR IS SIZED FOR 75-GPM



1 UNDERSLAB PLUMBING PLAN
1/4" = 1'-0"
NORTH

KEYNOTES:

1. 1.5" VENT, 0.5" HOT AND COLD WATER DOWN TO MOP BASIN.
2. 1.5" VENT, 0.5" HOT AND COLD WATER DOWN TO LAVATORY.
3. 0.5" COLD WATER DOWN TO WATER CLOSET.
4. 3" TRAPPED GREASE WASTE UP TO TRENCH DRAIN.
5. 1" HOT AND COLD WATER DOWN TO TANKLESS WATER HEATER.
6. 1" WATER SERVICE UP. REFER TO 2/M1.1 FOR CONTINUATION.
7. 1" WATER SERVICE DOWN. REFER TO 1/M1.1 FOR CONTINUATION.
8. REFER TO SU1.1 DRAWINGS FOR CONTINUATION.
9. 4" GREASE WASTE UP TO FINISH GRADE CLEANOUT.
10. 3" TRAPPED GREASE WASTE UP TO FLOOR SINK.
11. 2" VENT UP.
12. 3" TRAPPED WASTE UP TO FLOOR SINK.
13. 2" WASTE UP TO LAVATORY.
14. 4" WASTE UP TO FINISH GRADE CLEANOUT.
15. 4" WASTE UP TO WATER CLOSET.
16. 3" TRAPPED GREASE WASTE UP TO MOP BASIN.
17. 0.5" FILTERED WATER UP TO BEVERAGE EQUIPMENT.
18. 0.5" FILTERED WATER UP.
19. 2" VENT UP TO 3" VENT THROUGH ROOF.
20. 1" COLD WATER DOWN TO BACKFLOW PREVENTER AND PRESSURE REDUCING VALVE.
21. 0.75" COLD WATER DOWN TO WATER FILTER. COORDINATE CONNECTION REQUIREMENTS WITH EQUIPMENT PROVIDER.
22. 0.75" FILTERED WATER DOWN TO WATER FILTER. COORDINATE CONNECTION REQUIREMENTS WITH EQUIPMENT PROVIDER.
23. 2" VENT DOWN.
24. PROVIDE 0.5" FILTERED WATER WITH SHUT-OFF VALVE TO ICE MAKER WITH BACKFLOW PREVENTER. PROVIDE 0.75" INDIRECT DRAIN FROM iCE-MAKER TO FLOOR SINK AS REQUIRED.
25. 0.5" FILTERED WATER DOWN.
26. CONNECT FILTERED WATER PIPING TO KITCHEN EQUIPMENT. PROVIDE BACKFLOW PREVENTER AS REQUIRED.
27. 0.5" HOT AND COLD WATER ROUTED IN OWNER PROVIDED COUNTER TO SINK.
28. PROVIDE 0.5" FILTERED WATER WITH SHUT-OFF VALVE TO ESPRESSO MAKER WITH BACKFLOW PREVENTER.
29. 0.5" HOT AND COLD WATER DOWN TO SINK. TERMINATE WASTE PIPING AT ADJACENT FLOOR SINK.
30. 0.75" COLD WATER DOWN TO FREEZE-PROOF WALL HYDRANT.
31. 0.75" COLD WATER DOWN. TEE OFF 0.5" FILTERED WATER WITH SHUT-OFF VALVE TO ESPRESSO MAKER WITH BACKFLOW PREVENTER. CONTINUE 0.5" FILTERED WATER UNDERSLAB. REFER TO 1/M1.1 FOR CONTINUATION. SHOWN OFF-SET FOR CLARITY.
32. CONDENSATE SHALL PENETRATE THROUGH WALL AND DISCHARGE ONTO ROOF SURFACE.
33. CONDENSATE UP TO AIR HANDLER.
34. COORDINATE SUMP PUMP LOCATION WITH OWNER.
35. REFER TO CIVIL DRAWINGS FOR CONTINUATION.

PLUMBING SYMBOLS:

- GW — GREASE WASTE PIPING BELOW SLAB
- GW — GREASE COMBINATION WASTE AND VENT PIPING
- GW — GREASE WASTE PIPING ABOVE SLAB
- GW — GREASE COMBINATION WASTE AND VENTING PIPING ABOVE SLAB
- RD — ROOF DRAIN PIPING ABOVE SLAB
- ORD — OVERFLOW ROOF DRAIN PIPING ABOVE SLAB
- SANITARY WASTE PIPING BELOW SLAB
- SANITARY COMBINATION WASTE AND VENT PIPING
- SANITARY WASTE PIPING ABOVE SLAB
- SANITARY COMBINATION WASTE AND VENT PIPING ABOVE SLAB
- DOMESTIC COLD WATER PIPING
- FW — DOMESTIC FILTERED COLD WATER PIPING
- DOMESTIC HOT WATER PIPING
- PLUMBING VENT PIPING
- D — CONDENSATE DRAIN PIPING
- SHUT-OFF VALVE
- UNION
- TEE / ELBOW DOWN WITH VALVE IN VERTICAL PIPE
- FPH1 HB1 — FREEZEPROOF WALL HYDRANT / HOSE BIBB
- BACKFLOW PREVENTER
- FD1 — FLOOR DRAIN / FLOOR SINK
- FGCO — FINISH GRADE CLEANOUT
- FFCO — FINISH FLOOR CLEANOUT

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M1.1
PLUMBING PLAN

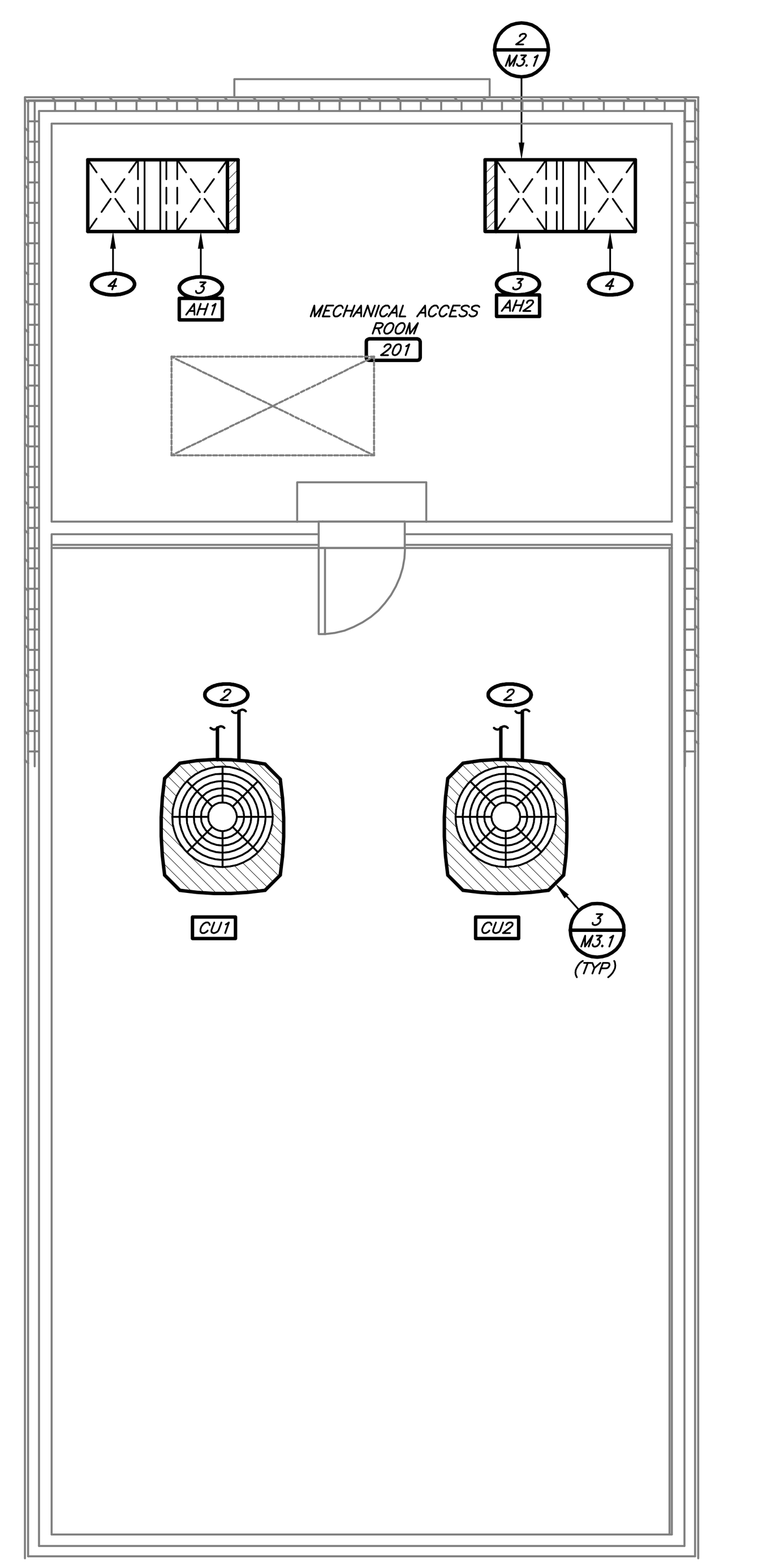
DATE: APRIL 26, 2022

KEYNOTES:

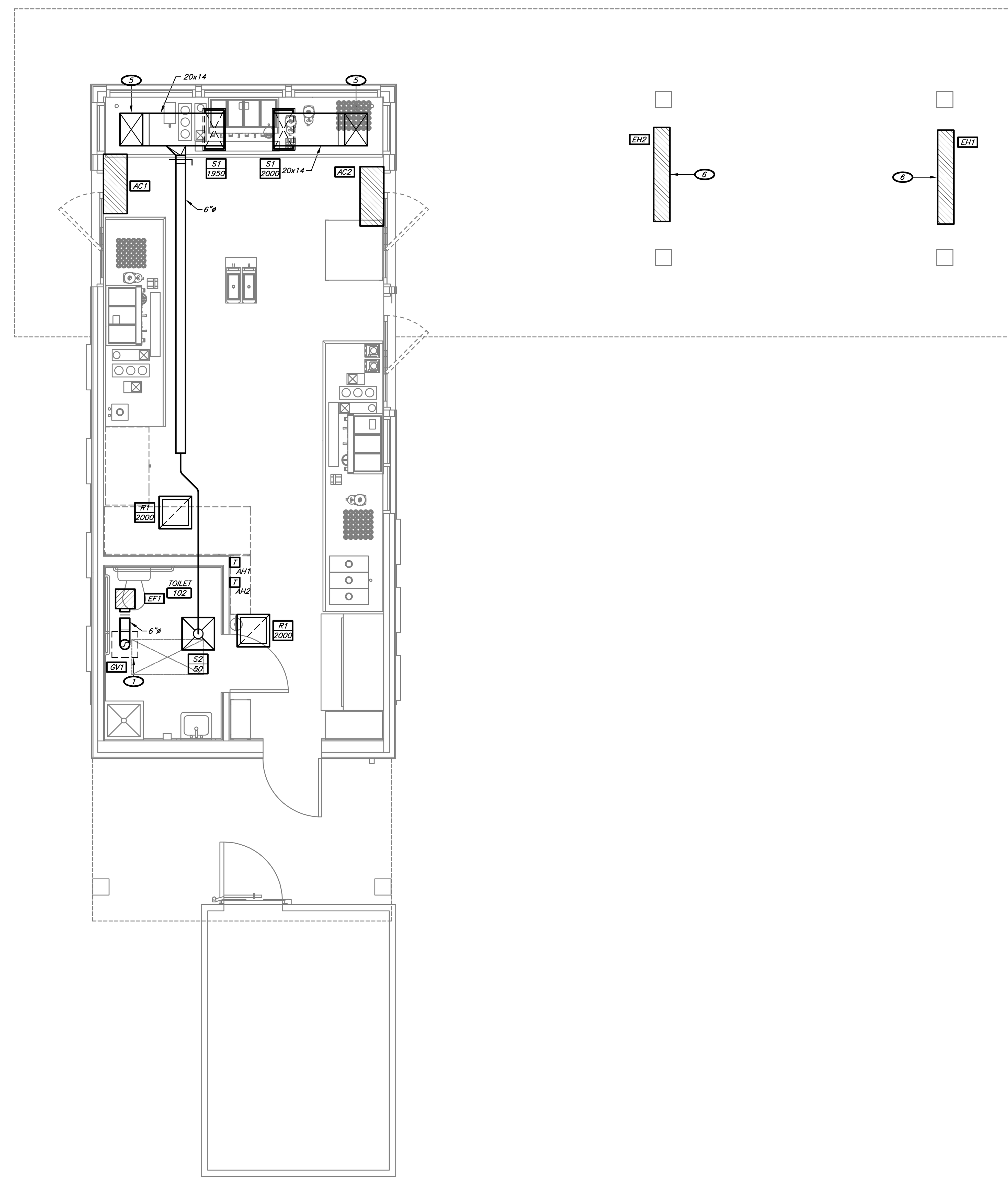
1. 6"ø EXHAUST DUCT UP TO GRAVITY VENTILATOR (WITH 8" CURB).
2. PROVIDE REFRIGERANT LINE ASSOCIATED AIR HANDLER. SIZE AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
3. 20x14 SUPPLY DOWN TO AIR HANDLER TRANSITION AS REQUIRED AND PROVIDE FLEXIBLE CONNECTION. 20x16 RETURN DUCT UP TO BOTTOM OF AIR HANDLER FROM BELOW TRANSITION TO UNIT AS REQUIRED.
4. 20x14 SUPPLY DOWN. REFER TO 1/M2.1 FOR CONTINUATION.
5. 20x14 SUPPLY UP. REFER TO 2/M2.1 FOR CONTINUATION.
6. ELECTRIC HEATER. COORDINATE MOUNTING HEIGHT WITH OWNER.

HVAC SYMBOLS:

- FLEXIBLE DUCTWORK
- CEILING RETURN/EXHAUST GRILLE
- CEILING SUPPLY DIFFUSER
- T — TEMPERATURE SENSOR
- 14x18 — DUCTWORK (WIDTH/HEIGHT) WITH DAMPER
- FLEXIBLE CONNECTION
- S1 / 100 — DIFFUSER TYPE AND CFM
- RECTANGULAR TO ROUND TAKE-OFF



2 PARTIAL ROOF AND ATTIC HVAC PLAN
1/4" = 1'-0"
NORTH



1 GROUND LEVEL HVAC PLAN
1/4" = 1'-0"
NORTH

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M2.1
HVAC PLAN

DATE: APRIL 26, 2022

PIPING MATERIAL SCHEDULE

SYSTEM	PIPING						FITTINGS		MAXIMUM WORKING		FIELD TEST		NOTES
	SIZE	TYPE	SCHEDULE	GRADE	ASTM	MATERIAL	MATERIAL	TYPE	PRESSURE (PSI)	TEMP (DEG. F)	PRESSURE (PSI)	TIME (HOURS)	
DOMESTIC WATER ABOVE AND BELOW GRADE	0.5"-2"	PEX	-	-	A877	PEX	BRONZE	MJ	120	40-180	150	1	-
GREASE WASTE AND VENT ABOVE GRADE	ALL	DWV	40	-	2665	PVC	PVC	DR/SW	10 FT	50-180	10 FT	1	1
GREASE WASTE BELOW GRADE	ALL	DWV	40	-	2665	PVC	PVC	DR/SW	10 FT	50-180	10 FT	1	1
SANITARY WASTE BELOW GRADE	ALL	DWV	40	-	2665	PVC	PVC	DR/SW	10 FT	50-180	10 FT	1	1
SANITARY WASTE & VENT ABOVE GRADE	ALL	DWV	40	-	2665	PVC	PVC	DR/SW	10 FT	50-180	10 FT	1	1
TEMPERATURE & PRESSURE RELIEF DRAIN	ALL	M	-	-	B88	COPPER	COPPER	DR/SJ	10 FT	40-70	10 FT	1	-

NOTES:
1. USE OF CELLULAR CORE DWV PIPING IS STRICTLY PROHIBITED.

ABBREVIATIONS:

CI	- CAST IRON	DR	- DRAINAGE FITTING	NH	- NO-HUB
CS	- CARBON STEEL	DWV	- DRAINAGE WASTE AND VENT	SJ	- 95-5 TIN-ANTIMONY SOLDER JOINT
CW	- CONTINUOUS WELD	MI	- MALLEABLE IRON	SS	- STANDARD STRENGTH / SERVICE WEIGHT
DI	- DUCTILE IRON	MJ	- MECHANICAL JOINT	SW	- SOLVENT WELD

PLUMBING FIXTURE & EQUIPMENT SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL NUMBER	ACCESSORIES	PIPING CONNECTION SIZES				NOTES	EQUIVALENT MANUFACTURERS
					COLD WATER	HOT WATER	WASTE	VENT		
BFP1	BACK FLOW PREVENTER	WATTS	LF009	LEAD FREE BNRONZE CONSTRUCTION, TWO IN LINE INDEPENDENT CHECK VALVES, REPLACEABLE CHECK SEATS WITH AN INTERMEDIATE RELIEF VALVE, AND BALL VALVE TEST COCKS.	1"	-	-	-	-	FEBCO
BFP2	BACKFLOW PREVENTER	WATTS	SD-3	DUAL CHECK VALVE WITH ATMOSPHERIC PORT AND STRAINER FOR CARBONATED BEVERAGE MACHINES	0.5"	-	-	-	-	FEBCO
TD1	FLOOR DRAIN	-	-	CUSTOM STAINLESS STEEL TRENCH DRAIN BY OWNER	-	-	SEE PLAN	SEE PLAN	2	ZURN
TD2	FLOOR DRAIN	-	-	CUSTOM STAINLESS STEEL TRENCH DRAIN BY OWNER	-	-	SEE PLAN	SEE PLAN	2	ZURN
FGCO	FINISH GRADE CLEANOUT	ZURN	ZN1400-HD	-	-	-	SEE PLAN	-	-	SIOUX CHIEF, SMITH, WADE
FPWH	FREEZE-PROOF WALL HYDRANT	JAY R. SMITH	#5609	NICKEL BRONZE-FACE, KEY OPERATED, INTEGRAL VACUUM BREAKER	0.75"	-	-	-	3	SMITH, WOODFORD
FS1	FLOOR SINK	JAY R. SMITH	#3161	CAST IRON RECEPTOR, A.R.E. INTERIOR 12"x12" NICKEL BRONZE STRAINER, SEDIMENT BUCKET.	-	-	3"	SEE PLAN	1	-
GI1	GREASE INTERCEPTOR	SCHIER	GB-75	75 GPM, 125 GALLON CAPACITY, 616 lbs. GREASE CAPACITY, PEDESTRIAN RATED COVER, PROVIDE 24" COVER RISER.	-	-	4"	-	-	SUBMIT FOR APPROVAL
LV1	WALL HUNG ADA LAVATORY	AMERICAN STANDARD	#355.012	#2385.130 FAUCET, WITH SINGLE METAL LEVER HANDLE #7723.018, 1.25" TAILPIECE AND TRAP, SUPPLIES AND STOP VALVES, INSULATE WITH PROWRAP SEAMLESS MOLDED CLOSED CELL VINYL INSULATION. PROVIDE WATTS LFUSG-B MIXING VALVE.	0.5"	0.5"	2"	1.5"	1,3,	CRANE, KOHLER, TOTO, ZURN
MB1	MOP BASIN	FIAT	MSB-2424	830-AA FAUCET, 838-AA HOSE AND BRACKET, 889-CC MOP HANGER, MSG2424 WALL GUARD	0.5"	0.5"	3"	1.5"	1	STERN WILLIAMS
PRV1	PRESSURE REDUCING VALVE	CASH ACME	EB25	SET TO MAX DELIVERY PRESSURE OF 80-PSI.	SEE PLAN	-	-	-	-	FEBCO, WILKINS
WC1	ADA FLUSH TANK WATER CLOSET	AMERICAN STANDARD	2467.016	1.6 GALLON FLUSH, 16.5" HIGH ELONGATED BOWL, FLOOR MOUNTED, TANK TYPE, VITREOUS CHINA, OPEN FRONT SEAT WITH CHECK HINGE AND LESS COVER. CHROME PLATED ANGLE STOP AND RISER. HANDLE ON WIDE SIDE OF FIXTURE.	0.5"	-	4"	2"	1,4	ELJER, KOHLER, TOTO

NOTES:
1. ACCESSORIES SHALL BE SAME MANUFACTURER AS FIXTURE / EQUIPMENT UNLESS NOTED OTHERWISE.
2. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
4. INSTALL ACCESSORIES AS RECOMMENDED BY MANUFACTURER FOR ADA COMPLIANCE.
5. FIELD COORDINATE/VERIFY FRAMING ROUGH-IN DIMENSIONS WITH ASSOCIATED CONTRACTOR BEFORE ORDERING.
6. PROVIDE WALL CARRIER OR BRACKET AS RECOMMENDED BY MANUFACTURER FOR WALL MOUNTED INSTALLATION.

PUMP SCHEDULE

MARK	MANUFACTURER	SERIES	INLET	DISCH.	GPM	HEAD (FT.)	NPSH	TYPE	WORKING CLASS	H.P.	RPM	VOLTAGE/ PHASE	CONST.	FLUID TYPE	FLUID TEMP.	NOTES/ ACCESS.	EQUIVALENT MANUFACTURERS
SP1	ZOELLER	1043-0006	-	1"	35	20	-	SUMP	-	1/3	-	115/1	CI	WATER	40-140	1	LITTLE GIANT, WEIL

NOTES/ACESSORIES:
1. PROVIDE ZOELLER 30-0152 CHECK VALVE INSTALLED ON PUMP DISCHARGE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

ABBREVIATIONS:

NPSH	- NET POSITIVE SUCTION HEAD	CDW	- CONDENSER WATER	BFCI	- BRONZE FITTED CAST IRON	AS	- AQUASTAT KIT
CW	- CHILLED WATER	HW	- HEATING HOT WATER	AB	- ALL BRONZE	BMES	- BASE MOUNTED END SUCTION
CHW	- CHILLED/HOT WATER	DHW	- DOMESTIC HOT WATER	AI	- ALL IRON	IL	- IN-LINE

WATER HEATER SCHEDULE

MARK	MANUFACTURER	MODEL #	TYPE	GALLON CAPACITY	RECOVERY GPH @ 85F	KW	VOLTAGE/ PHASE	ACCESSORIES
WH1	RHEEM	RTEX-18	ELEC	-	-	18.0	240/1	1,2,3

ACCESSORIES:
1. THERMAL EXPANSION TANK EQUIVALENT TO AMTROL MODEL ST-5
2. DRAIN VALVE WITH THREADED HOSE CONNECTION
3. PRESSURE & TEMPERATURE RELIEF VALVE

GRAVITY VENTILATOR SCHEDULE

MARK	MANUFACTURER	MODEL #	SERVICE	CFM	DELTA P (STATIC)	THROAT AREA MIN (SQ.FT.)	FACE AREA MIN (SQ.FT.)	FACE VELOCITY (FPM)	NOTES AND ACCESSORIES
GV1	COOK	PR8	EXHAUST	75	0.1"	0.394	1.38	54.3	1,2,3,4

NOTES AND ACCESSORIES:
1. FACTORY FABRICATED INSULATED ROOF CURB WITH CUSTOM HEIGHT OF 14" MINIMUM ABOVE FINISH ROOF SURFACE.
2. PROVIDE COUNTER BALANCE BACKDRAFT DAMPER.
3. PROVIDE ANTI-CONDENSATE COATING.
4. PROVIDE BIRD SCREEN.

AIR HANDLER/COIL/CONDENSING UNIT SCHEDULE

AIR HANDLER

MARK	MANUFACTURER	MODEL #	SA (CFM)	OA (CFM)	EXTERNAL STATIC	ELEC HEAT (KW/STAGES)	VOLTAGE/ PHASE	MCA	MOCP	NOTES
AH1	OMNIGUARD	BCE5E60	1810	-	0.5"	14.4/1	240/1	96	100	1,2,3,4,5
AH2	OMNIGUARD	BCE5E60	1810	-	0.5"	14.4/1	240/1	96	100	1,2,3,4,5

AIR HANDLER NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES WET COIL, EXCLUDES FILTER LOSS.
2. PROVIDE FRONT ACCESSIBLE FILTER RACK AND 2" FILTER EQUAL TO FARR 30/30 WITH MERV 7 MINIMUM RATING.
3. PROVIDE SINGLE POINT POWER CONNECTION WITH CIRCUIT BREAKER DISCONNECTING MEANS.
4. PROVIDE ENERGY STAR RATED 7-DAY PROGRAMMABLE THERMOSTAT.
5. PROVIDE WATER LEVEL MONITORING DEVICE IN DRAIN CONNECTED TO FAN SHUT DOWN RELAY IN AIR HANDLER.

COIL / CONDENSING UNIT

MARK	MANUF	EVAP. COIL MODEL #	COND. UNIT MODEL #	ENTERING AIR DB/WB	SENSIBLE MBH	TOTAL MBH	VOLTAGE/ PHASE	MCA	MOCP	NOTES
CU1	OMNIGUARD	W/ AHU	4AC16L60P-50	80 / 67	45.4	60.5	240/1	29.6	50	1,2,3
CU2	OMNIGUARD	W/ AHU	4AC16L60P-50	80/ 67	45.4	60.5	240/1	29.6	50	1,2,3

COIL / CONDENSING UNIT NOTES:
1. PROVIDE REFRIGERANT LINE SET(S) SIZED PER MANUFACTURER'S RECOMMENDATIONS.
2. PROVIDE ALL REFRIGERATION SYSTEM ACCESSORIES REQUIRED BY MANUFACTURER FOR GIVEN LINE SET ROUTING.
3. PROVIDE LOW AMBIENT CRANK CASE HEATER (10 DEG. F)

AIR CURTAIN SCHEDULE

MARK	MANUFACTURER	MODEL #	MOUNTING	HEATING (KW)	AMCA LAB AIRFLOW (SCFM)	NOZZLE WIDTH	MAX. VELOCITY @ NOZZLE (FPM)	VOLTAGE/ PHASE	MCA	MOCP	NOTES
AC1	STRONGWAY	49947	WALL	-	816	36"	3,937	120/1	2.9	15	1 THRU 8
AC2	STRONGWAY	49947	WALL	-	816	36"	3,937	120/1	2.9	15	1 THRU 8

NOTES:
1. PROVIDE FACTORY INSTALLED DISCONNECT.
2. FACTORY INSTALLED UNIT MOUNTED CONTROLS WITH TWO SPEED CONTROL.
3. MAGNETIC DOOR LIMIT SWITCH.
4. FACTORY MOUNTED MOTOR CONTROL PANEL.
5. CLEANABLE FILTER.
6. FIELD COORDINATE EXACT MOUNTING REQUIREMENTS AND PROVIDE ALL REQUIRED ACCESSORIES
7. UNIT SHALL BE RATED FOR OUTDOOR CONDITIONS
8. COORDINATE FINISH WITH OWNER.

FAN SCHEDULE

MARK	MANUFACTURER	MODEL #	CFM	ESP (IN. W.C.)	MOUNTING	FINISH	DAMPER	VOLTAGE/ PHASE	MOTOR HP/WATTS	NOTES
EF1	COOK	GC-146	75	0.25"	CEILING	STD	-	120/1	31W	1,2,3

NOTES:
1. FACTORY MOUNTED DISCONNECTING MEANS.
2. GRAVITY BACKDRAFT DAMPER.
3. PROVIDE BIRD SCREEN.

ELECTRIC HEATER SCHEDULE

MARK	MANUFACTURER	MODEL #	MOUNTING	FINISH	CFM	HEATING (WATTS)	VOLTAGE/ PHASE	MCA	MOCP	NOTES
EH1	INFRATECH	CL3024SS	SUSPENDED	ARCH	-	3000	240/1	12.5	20	1
EH2	INFRATECH	CL3024SS	SUSPENDED	ARCH	-	3000	240/1	12.5	20	1
EH3	INFRATECH	CL3024SS	SUSPENDED	ARCH	-	3000	240/1	12.5	20	1

NOTES:
1. PROVIDE FACTORY MOUNTED DISCONNECTING MEANS.

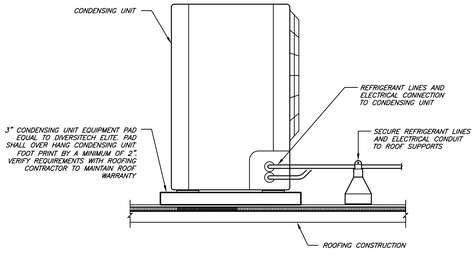
AIR DEVICE SCHEDULE

MARK	MANUFACTURER	MODEL #	DUCT CONNECTION SIZE	SERVICE	MODULE SIZE	FRAME	FINISH	DAMPER	MAX. NC	THROW (FT)	DELTA P (STATIC)	NOTES
S1	OWNER PROVIDED		12x24: 0-2000 CFM	SUPPLY	-	SURFACE	WHITE	-	30	20	0.1"	-
S2	OWNER PROVIDED		6": 0-75 CFM	SUPPLY	-	SURFACE	WHITE	-	30	20	0.1"	-
R1	OWNER PROVIDED		22x22: 0-2000 CFM	RETURN	-	SURFACE	WHITE	-	30	-	0.1"	-

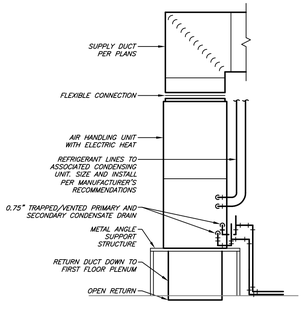
NOTES:

SPECIAL NOTE:

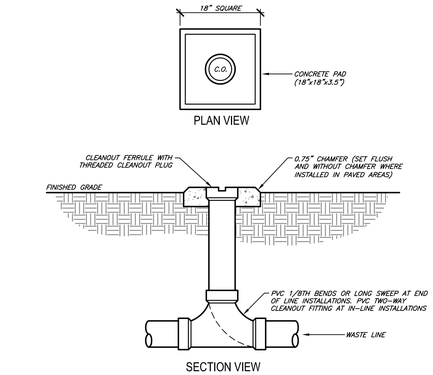
1. CONDENSATE DRAIN PIPING SHALL BE COPPER OR PEX (COMPLYING WITH IMC 602.2.1) WHEN AIR HANDLER IS INSTALLED IN A ROOM/CLOSET THAT'S CONSIDERED A RETURN AIR PLENUM.
2. PROVIDE WATER LEVEL MONITORING DEVICE IN DRAIN PAN. CONNECTED TO FAN SHUT DOWN RELAY IN AIR HANDLER.



3 ROOF MOUNTED CONDENSING UNIT DETAIL
NO SCALE



2 AIR HANDLER DETAIL
NO SCALE



PLAN VIEW

SECTION VIEW

1 FINISH GRADE CLEANOUT DETAIL
NO SCALE

GENERAL MECHANICAL NOTES:

GENERAL

1. GENERAL MECHANICAL NOTES APPLY TO ALL MECHANICAL SHEETS.
2. CJD ENGINEERING LLC, BEING THE AUTHOR OF THESE CONSTRUCTION DOCUMENTS RESERVES THE RIGHT OF FINAL INTERPRETATION AS TO THEIR INTENT AND MEANING. ANY ADDITIONAL WORK OR COSTS RESULTING FROM THE CONTRACTOR'S OWN INTERPRETATION AS TO THE INTENT OR MEANING WITHOUT CONSULTATION WITH CJD ENGINEERING LLC SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO COST TO OWNER OR A/E.
3. THE INTENT OF THE WORK INDICATED ON THESE CONSTRUCTION DOCUMENTS IS TO PROVIDE A FULLY FUNCTIONING SYSTEM IN COMPLETE WORKING ORDER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THE CONTRACTOR'S SUPPLIERS TO INCLUDE ALL ACCESSORIES, COMPONENTS, PARTS, ETC. THAT MAY NOT BE INDICATED ON THESE CONSTRUCTION DOCUMENTS TO PROVIDE BUILDING CODE COMPLIANT SYSTEMS AND EQUIPMENT THAT OPERATE SATISFACTORILY AS DESIGNED AND INTENDED.
4. DRAWINGS ARE NOT SET UP SPECIFICALLY ACCORDING TO TRADE AND EACH CONTRACTOR AND SUB-CONTRACTOR OR TRADE IS REQUIRED TO REVIEW THE CONSTRUCTION DOCUMENTS AS A WHOLE AND PROVIDE ANY MISC. ITEMS, MATERIALS, WORK, ETC. REQUIRED TO COMPLETE THE WORK AS SHOWN ON ALL DOCUMENTS. THIS REQUIREMENT APPLIES TO ALL TRADES. STRUCTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING REQUIREMENTS AND RELATED WORK ARE INDICATED THROUGHOUT THE DOCUMENTS AND SHOULD BE REVIEWED WITH EACH FOR OVERALL SCOPE OF WORK.
5. ALL MECHANICAL WORK SHALL BE PERFORMED BY LICENSED PLUMBING AND MECHANICAL CONTRACTORS AND SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING, PLUMBING, FUEL GAS AND MECHANICAL CODES, AND ALL APPLICABLE LOCAL CODES AS ADOPTED BY LOCAL AUTHORITIES.
6. THE CONTRACTOR SHALL INCLUDE ALL PERMIT AND INSPECTION FEES IN BID.
7. THE PLANS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO CIVIL, STRUCTURAL, AND ARCHITECTURAL DRAWINGS AND EXISTING CONDITIONS FOR DIMENSIONS. FIELD VERIFY ALL DIMENSIONS.
8. PIPING AND DUCTWORK LAYOUTS ARE DIAGRAMMATIC. FIELD COORDINATE EXACT LOCATIONS AND ROUTINGS WITH STRUCTURE, LIGHT FIXTURES, CONDUITS, ETC. FINAL RESULT SHALL BE EQUIVALENT TO THAT INDICATED ON DRAWINGS.
9. COOPERATE CLOSELY WITH ALL OTHER TRADES TO EXPEDITE CONSTRUCTION AND AVOID INTERFERENCES AND CONFLICTS. BEFORE ANY PIPING, DUCTWORK, CONDUIT, ETC. IS INSTALLED, IT SHALL BE COORDINATED CAREFULLY BETWEEN ALL TRADES.
10. MAINTAIN ALL CLEARANCES REQUIRED BY PLUMBING AND HVAC EQUIPMENT. COORDINATE WITH ELECTRICAL CONTRACTOR TO MAINTAIN ALL CLEARANCES REQUIRED FOR EQUIPMENT. DO NOT ROUTE PIPING, DUCTWORK, ETC. ABOVE ELECTRICAL PANELS.
11. DRAWINGS REPRESENT FINAL RESULT. REMOVE, RELOCATE, MODIFY EXISTING EQUIPMENT, DUCTWORK, PIPING, ETC. AS REQUIRED. FIELD VERIFY EXISTING CONDITIONS AND EXACT REQUIREMENTS. NO EXTRAS WILL BE PAID DUE TO UNANTICIPATED EXISTING CONDITIONS.
12. IF CONTRACTOR WISHES TO INCORPORATE PRODUCTS OTHER THAN THOSE NAMED IN SPECIFICATIONS IN HIS BID OR PRODUCTS BY MANUFACTURERS OTHER THAN THOSE LISTED AS APPROVED MANUFACTURERS, THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR REVIEW AND APPROVAL OF PROPOSED SUBSTITUTIONS TO CJD ENGINEERING LLC NOT LESS THAN FIVE WORKING DAYS PRIOR TO BID DATE. APPROVAL OR ACCEPTANCE OF PROPOSED SUBSTITUTION OF MANUFACTURERS OR ITEMS IS FOR THE PURPOSES OF BIDDING ONLY AND DOES NOT RELIEVE THE PROPOSED SUBSTITUTION FROM THE SUBMITTAL/SHOP DRAWING REVIEW AND DOES NOT CONSTITUTE PRIOR APPROVAL OF PROPOSED SUBSTITUTIONS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COSTS OF LARGER WIRING, CONDUIT, ENCLOSURES, CONTROL AND OVERCURRENT PROTECTIVE DEVICES, ETC. RESULTING FROM SUBSTITUTION OF EQUIPMENT OTHER THAN THAT WHICH WAS THE BASIS OF DESIGN AT NO COST TO OWNER OR A/E.
14. THE CONTRACTOR SHALL PROVIDE ELECTRONIC SHOP DRAWINGS/SUBMITTALS OF ALL FIXTURES AND EQUIPMENT FURNISHED UNDER THIS CONTRACT.
15. THE CONTRACTOR SHALL PERFORM A PRELIMINARY FUNCTIONAL TEST AND BALANCE FOR ALL EQUIPMENT INSTALLED UNDER THIS CONTRACT. THE CONTRACTOR SHALL THEN OBTAIN THE SERVICES OF AN INDEPENDENT FIRM CERTIFIED WITH ASSOCIATED AIR BALANCING COUNCIL OR NATIONAL ENVIRONMENTAL BALANCING BUREAU TO PERFORM THE HVAC SYSTEM TESTING AND BALANCING IN ACCORDANCE WITH AABC OR NEBB NATIONAL STANDARDS.
16. THE CONTRACTOR SHALL GUARANTEE ALL EQUIPMENT, ACCESSORIES, AND MATERIAL FURNISHED BY HIM FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE AGAINST ALL DEFECTS.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING COSTS TO CUT, PATCH AND REPAIR EXISTING WALL, FLOOR AND CEILING CONSTRUCTION AS REQUIRED TO INSTALL NEW PLUMBING FIXTURES, DUCTWORK, EQUIPMENT, PIPING, ETC. ARE INCLUDED IN THE BID PRICE.

GENERAL MECHANICAL NOTES:

PRODUCTS

1. ALL SHUTOFF VALVES ON DOMESTIC WATER SHALL BE BRONZE FULL-PORT BALL VALVE TYPE.
2. P-TRAPS SHALL INCLUDE INTEGRAL CLEANOUT.
3. DUCT CONSTRUCTION:

   ALL DUCTWORK SHALL BE FABRICATED OF G90 GALVANIZED STEEL AND INSTALLED IN ACCORDANCE WITH THE SMACNA HVAC DUCT CONSTRUCTION STANDARDS – METAL AND FLEXIBLE MANUAL. ALL SUPPLY AND RETURN AIR DUCT PRESSURE CLASSES SHALL BE THE SAME AS THE EXTERNAL STATIC PRESSURE OF THE EQUIPMENT SUPPLYING THE DUCT. THE EQUIPMENT ESP SHALL BE THE PRESSURE CLASS FOR THE ENTIRE SUPPLY DUCT SYSTEM.

   CONCEALED ROUND SUPPLY AIR DUCT – 3" PRESSURE CLASS OR LESS: GALVANIZED SNAP-LOCK PIPE WITH TRANSVERSE JOINTS AND CONNECTIONS SEALED. WRAP SUPPLY AND OUTSIDE AIR DUCTS WITH SPECIFIED INSULATION.

   CONCEALED ROUND RETURN AND EXHAUST DUCT – 3" PRESSURE CLASS OR LESS: GALVANIZED SNAP-LOCK PIPE WITH TRANSVERSE JOINTS AND CONNECTIONS SEALED WITH SPECIFIED INSULATION.

   RECTANGULAR SUPPLY AND RETURN AIR DUCT: – 3" PRESSURE CLASS OR LESS: GALVANIZED SHEET METAL. LINE SUPPLY, RETURN, OUTDOOR AIR AND MAKE-UP AIR DUCTWORK WITH SPECIFIED INSULATION.

   FLEXIBLE DUCTWORK: FLEXMASTER USA TYPE 8B, UL 181 CLASS 1 RATED PRE-INSULATED ACOUSTICAL FLEX DUCT WITH MECHANICAL LOCK HELIX CONSTRUCTION, 25/50 FLAME SMOKE RATING, AND R-6.0 THERMAL BARRIER. RUNS OF FLEXIBLE DUCT SHALL NOT EXCEED 5 LINEAR FEET. FLEXIBLE DUCT SHALL NOT BE USED ON SYSTEMS WITH PRESSURE CLASS GREATER THAN 1".

   EXTERIOR DUCTWORK SHALL HAVE FLANGED AND GASKETED JOINTS BY DUCTMATE OR EQUIVALENT.

   ALL METAL DUCTWORK SPECIFIED TO RECEIVE INTERIOR THERMAL AND ACOUSTICAL LINER IS NOT SIZED ON PLANS TO INCLUDE THE PROPER THICKNESS OF INSULATION. PROVIDE ADDITIONAL HEIGHT AND WIDTH OF DUCTWORK TO ACCOMMODATE THICKNESS OF INSULATION.
4. DUCT INSULATION:

   RECTANGULAR DUCT (LOCATED WITHIN CONDITIONED SPACE): 1.0" THICK, 2.0 LB. DENSITY DUCT LINER. MINIMUM R-VALUE OF 6.0.

   ROUND DUCT: WRAP WITH 2", 1.0 LB DENSITY FIBERGLASS DUCT WRAP WITH FOIL-SCRIM-KRAFT FACING. MINIMUM R-VALUE OF 6.0.

   ALL DUCTWORK LOCATED WITHIN AN ATTIC OR UNCONDITIONED SPACE SHALL BE WRAPPED TO PROVIDE A MINIMUM INSULATION VALUE OF R-8.
5. ROUND TAKE-OFF FITTINGS FROM RECTANGULAR DUCTWORK SHALL BE MADE WITH BUCKLEY AIR PRODUCTS MODEL 3300 AND 3300D RECTANGULAR TO ROUND BOOT FITTINGS FITTINGS WITH INTEGRAL VOLUME DAMPERS AND INSULATION STAND-OFFS WHERE INDICATED. EQUIVALENT BY AIR-TITE AND CROWN.
6. PROVIDE AERO-DYNE OR EQUIVALENT DOUBLE WALL TURNING VANES IN ALL RECTANGULAR ELBOWS.
7. BRANCH DUCTS SHALL BE THE SAME SIZE AS DIFFUSER NECK UNLESS NOTED OTHERWISE.
8. EQUIVALENT WATER HEATERS BY A.O. SMITH, BRADFORD WHITE, LOCHINVAR, RHEEM, STATE, OR OTHERS WITH PRIOR APPROVAL.
9. EQUIVALENT GRILLES, DIFFUSERS AND REGISTERS BY CARNES, KRUEGER, NAILOR, PRICE, TITUS, HART & COOLEY, TUTTLE & BAILEY, OR OTHERS WITH PRIOR APPROVAL.
10. EQUIVALENT EXHAUST FANS BY ACME, COOK, GREENHECK, PENN, OR OTHERS WITH PRIOR APPROVAL.
11. EQUIVALENT FURNACES, EVAPORATOR COILS AND CONDENSING UNITS BY CARRIER, TRANE AND YORK, AND SHALL BE THE PRODUCT OF A SINGLE MANUFACTURER.

EXECUTION

1. PROVIDE ALL ACCESSORIES, COMPONENTS, ETC. REQUIRED FOR COMPLETE INSTALLATION OF SPECIFIED EQUIPMENT.
2. PROVIDE UNISTRUTS AND ACCESSORIES AS REQUIRED FOR SUPPORT OF PIPING, EQUIPMENT, ETC.
3. CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO EQUIPMENT. PROVIDE ADAPTERS, FITTINGS, ETC. FOR ALL EQUIPMENT AS REQUIRED. COORDINATE SPECIFIC REQUIREMENTS WITH EQUIPMENT SUPPLIERS. REFER TO SPECIAL EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION.
4. INSULATE ALL DOMESTIC WATER AND REFRIGERANT PIPING WITH 1/2" THICK ARMACELL AP/ARMAFLEX FLEXIBLE ELASTOMERIC THERMAL PIPE INSULATION. EQUIVALENT BY RUBATEX. THE USE OF TUBOLIT OR EQUIVALENT CLOSED CELL POLYETHYLENE FOAM INSULATION IS STRICTLY PROHIBITED.
5. INSTALL TRAPS AT WASTE CONNECTIONS TO ALL FLOOR DRAINS AND OTHER PLUMBING FIXTURES WITHOUT A TRAP INTEGRAL TO THE FIXTURE.
7. INSTALL WATER AND WASTE PIPING BELOW SLAB AND BELOW GRADE ON TOP OF A 6" BED OF PEA GRAVEL, WITH 6" PEA GRAVEL ON SIDES AND TOP OF PIPING.
8. PROVIDE TRAPPED AND VENTED CONDENSATE DRAIN CONNECTION TO ALL HVAC EQUIPMENT WHERE REQUIRED. EXTEND FULL SIZE TO NEAREST ROOF DRAIN, FLOOR DRAIN, OR MOP BASIN.
9. SEAL ALL DUCTWORK IN ACCORDANCE WITH THE LATEST SMACNA METAL AND FLEXIBLE DUCT CONSTRUCTION STANDARDS MANUAL. AT A MINIMUM, LOW STATIC PRESSURE DUCTS SHALL BE SEALED WITH WATER, SOLVENT OR SILICONE BASED SEALANT IN ACCORDANCE WITH SMACNA DUCT SEAL CLASS C. THE USE OF DUCT TAPE IS STRICTLY PROHIBITED.
10. ALL THERMOSTATS, SENSORS, DAMPER CONTROLS, ASSOCIATED ACCESSORIES, AND FINAL WIRING CONNECTIONS SHALL BE PROVIDED BY HVAC CONTRACTOR. ROUGH-IN AND WIRE INSTALLATION SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR.
11. PROVIDE HVAC EQUIPMENT WITH NEW FILTERS DURING CONSTRUCTION AND UPON SUBSTANTIAL COMPLETION.
12. COORDINATE CEILING DIFFUSER/GRILLE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS.
13. PROVIDE FLEXIBLE CONNECTION AND TRANSITION TO UNIT OPENING SIZES FOR ALL HVAC EQUIPMENT.
14. INSTALL ALL ROOF EQUIPMENT, PIPE, CONDUIT AND DUCTWORK SUPPORTS, CURBS AND PENETRATIONS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ROOFING SYSTEM MANUFACTURER.
15. PROVIDE FACTORY FABRICATED PIPE CURB ASSEMBLIES FOR MULTIPLE CONDUIT AND PIPING PENETRATIONS THROUGH THE ROOF. PIPE CURB ASSEMBLIES SHALL BE FACTORY FABRICATED, 8" TALL (MINIMUM) GALVANIZED STEEL ROOF CURBS WITH INTEGRAL BASE PLATE, 3 LB. DENSITY INSULATION, WOOD NAILER, ACRYLIC CLAD THERMOPLASTIC COVER, FASTENING SCREWS, AND GRADUATED STEP BOOTS WITH STAINLESS STEEL CLAMPS AS MANUFACTURED BY PATE, THYBAR OR APPROVED EQUIVALENT. PROVIDE PIPE SEAL ASSEMBLIES FOR INDIVIDUAL CONDUIT OR PIPE PENETRATIONS. ALL WORK SHALL BE IN ACCORDANCE WITH ROOFING MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.
16. SUPPORT PIPING ON ROOF WITH PREMANUFACTURERED PIPING SUPPORTS EQUIVALENT TO B-LINE C-SERIES. FIELD FABRICATED SUPPORTS CONSISTING OF LUMBER, ETC. ARE NOT ACCEPTABLE.
17. PROVIDE SLEEVES AT PIPE PENETRATIONS OF EXTERIOR OR FOUNDATION WALLS. SEAL PENETRATIONS WEATHERTIGHT.
18. SEAL ALL PENETRATIONS THROUGH FIRE-RATED ASSEMBLIES AS NECESSARY TO RESTORE FIRE-RESISTANCE RATING OF ASSEMBLY. REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR RATED ASSEMBLIES, FIRESTOPPING MATERIALS AND REQUIREMENTS.
19. ALL EXPOSED PIPING, DUCTWORK AND EQUIPMENT SHALL BE PRIMED AND PAINTED. REFER TO ARCHITECTURAL DRAWINGS FOR REQUIREMENTS AND COORDINATE WITH GENERAL CONTRACTOR.
20. THE MECHANICAL/PLUMBING CONTRACTOR SHALL SEAL ALL NECESSARY PENETRATIONS OF RATED WALL AND CEILING CONSTRUCTION WITH FIRE CAULK. PROVIDE FIRE PUTTY PAD AROUND LAUNDRY AND ICE-MAKER ROUGH-IN BOXES INSTALLED IN RATED WALL AND CEILING CONSTRUCTION. FIRE CAULK AND PUTTY PADS SHALL BE MANUFACTURED BY 3M OR HILTI, AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
21. PROVIDE SIOUX CHIEF WATER HAMMER ARRESTERS ON ALL PLUMBING FIXTURES SIZED IN ACCORDANCE WITH PLUMBING AND DRAINAGE INSTITUTE STANDARD P.D.I. WH201. EQUIVALENT BY JONESPEC, J.R. SMITH, OR WADE.

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RYAN S. JONES
NUMBER PE-2004017193
04-26-22

ENGINEER OF RECORD:
NAME: RYAN JONES
LICENSE NO.PE-2004017193

PROJECT NUMBER:
21334 7BSM

REVISION:

M3.1

SCHEDULES AND DETAILS

DATE: APRIL 26, 2022

ELECTRICAL SYMBOLS:

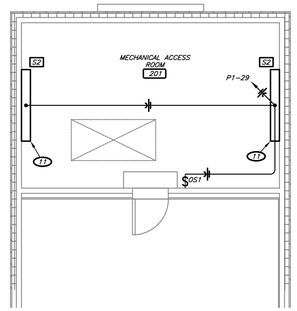
- SIMPLEX RECEPTACLE; 2P, 3W, 20A, 125V
- 14-30 SIMPLEX RECEPTACLE; NEMA CONFIGURATION AS INDICATED
- DUPLEX RECEPTACLE; 2P, 3W, 20A, 125V
- 42" DUPLEX RECEPTACLE; MOUNTED @ 42" ABOVE FINISHED FLOOR
- AC DUPLEX RECEPTACLE; MOUNTED 6" ABOVE COUNTERTOP BACKSPLASH
- GF DUPLEX RECEPTACLE W/ GROUND FAULT INTERRUPTER
- WP DUPLEX RECPTACLE; WEATHERPROOF
- DOUBLE DUPLEX RECEPTACLE WITH COMMON FACEPLATE
- TELECOMMUNICATIONS OUTLET; ROUGH-IN JUNCTION BOX OR PLASTER RING ONLY. MAY BE USED FOR VOICE, DATA, FAX, MODEM, OR ANY COMBINATION THEREOF. CABLE, COVER PLATE & JACKS PROVIDED BY OTHERS.
- TV CABLE TV OUTLET; ROUGH-IN JUNCTION BOX OR PLASTER RING ONLY. CABLE, COVER PLATE & JACKS PROVIDED BY OTHERS.
- 9 EXIT LIGHT; WALL MOUNTED / CEILING MOUNTED
- EMERGENCY LIGHT
- EXIT/EMERGENCY LIGHT
- LED LIGHT FIXTURE
- NL NIGHT LIGHT FIXTURE
- $ LIGHT SWITCH
- $3 3-WAY LIGHT SWITCH
- $OS OCCUPANCY SENSOR LIGHT SWITCH
- OS CEILING MOUNTED OCCUPANCY SENSOR
- J JUNCTION BOX
- PANEL LIGHTING & POWER PANELBOARD
- CONDUIT CONCEALED IN CEILING OR WALL
- CONDUIT BELOW GRADE
- HOME RUN: TICK MARKS INDICATE NUMBER OF WIRES, ARROWS INDICATE NUMBER OF CIRCUITS
- GROUND WIRE
- 7 FEEDER PER SCHEDULE
- DISCONNECT SWITCH

KEYNOTES:

1. INSTALL RECEPTACLE IN CRAWL SPACE FOR SUMP PUMP. VERIFY LOCATION AND MOUNTING HEIGHT WITH OWNER PRIOR TO ROUGH-IN.
2. RECEPTACLE TO BE MOUNTED ABOVE CANOPY. VERIFY LOCATION AND MOUNTING HEIGHT WITH OWNER PRIOR TO ROUGH-IN.
3. PROVIDE JUNCTION BOX AND POWER FOR HORTON SLIDING DOOR.
4. RECEPTACLES FOR SECURITY AND AUDIO.
5. PROVIDE JUNCTION BOX AND POWER FOR COOLER CONTROLS/LIGHTS. FIELD VERIFY EXACT LOCATION AND REQUIREMENTS.
6. PROVIDE JUNCTION BOX AND POWER FOR COOLER EVAPORATOR. FIELD VERIFY EXACT LOCATION AND REQUIREMENTS.
7. PROVIDE JUNCTION BOX FOR OUTDOOR HEATER CONTROLS 6" ABOVE SLIDING GLASS DOOR. COORDINATE ROUGH-IN AND WIRING REQUIREMENTS WITH OWNER.
8. PROVIDE JUNCTION BOX FOR POWER CONNECTION TO BUILDING LED TAPE LIGHT. REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT LOCATION AND LINEAR FOOTAGE OF FIXTURE. CONNECT POWER TO LED STRIPS PER MANUFACTURE'S INSTRUCTION.
9. PROVIDE WEATHER PROOF JUNCTION BOX AND TOGGLE SWITCH LOCATED ON SIGN IN CONCEALED LOCATION FOR EXTERIOR SIGNAGE PER NEC. COORDINATE EXACT LOCATION OF JUNCTION BOX WITH THE SIGNAGE PROVIDER PRIOR TO INSTALLATION. CONTRACTOR SHALL PULL ALL WIRING TO THE JUNCTION BOXES AND MAKE FINAL CONNECTIONS. COORDINATE ALL REQUIREMENTS WITH THE SIGNAGE PROVIDER.
10. INSTALL FIXTURE 12" ABOVE TOP OF DOOR. FIELD VERIFY EXACT LOCATION WITH OWNER.
11. INSTALL FIXTURE 7" ABOVE FINISH FLOOR. FIELD VERIFY MOUNTING HEIGHT WITH OWNER.
12. RECEPTACLE FOR ESPRESSO MACHINE. PROVIDE CORD AND PLUG CONNECTION.
13. POWER CONNECTION FOR AIR CURTAIN. COORDINATE ROUGH-IN, WIRING REQUIREMENTS, AND MOUNTING HEIGHT WITH OWNER.
14. CT CABINET AND METER.
15. COORDINATE INSTALLATION HEIGHT WITH ARCHITECT.
16. POWER CONNECTION FOR ELECTRIC HEATER. COORDINATE INSTALLATION HEIGHT WITH OWNER.
17. RECEPTACLE FOR IPAD. COORDINATE INSTALLATION HEIGHT WITH OWNER.
18. REFER TO 1/SU1.1 FOR CONTINUATION.
19. (2) 2" COMMUNICATION CONDUITS WITH PULL-WIRE. COORDINATE TERMINATION WITH OWNER PRIOR TO INSTALLATION.
20. COORDINATE LOCATION AND RECEPTACLE TYPE WITH EQUIPMENT PROVIDER.

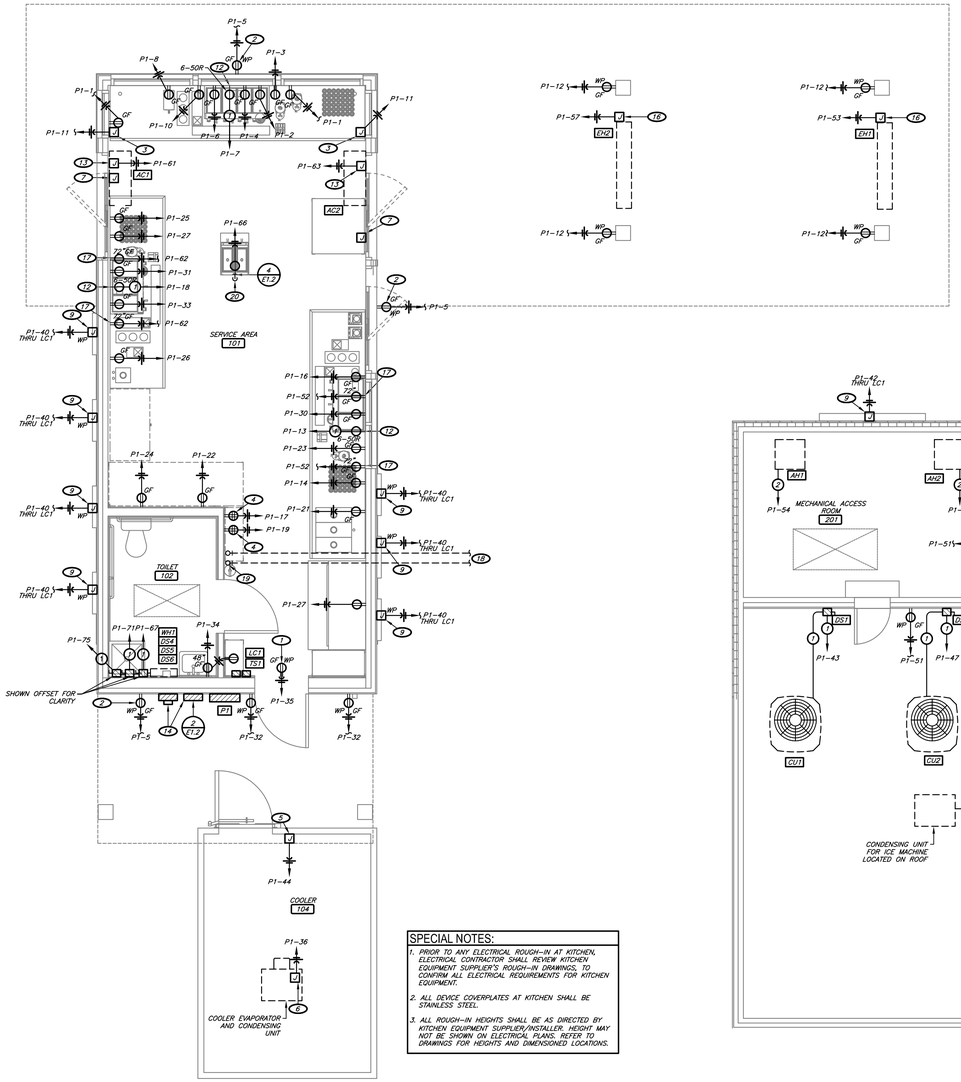
CONDUIT & CONDUCTOR SCHEDULE:

1. (2) #8 AND (1) #10 GROUND, IN 0.75" CONDUIT.
2. (2) #3 AND (1) #8 GROUND IN 1.25" CONDUIT.



4 PARTIAL ROOF AND ATTIC LIGHTING PLAN
1/4" = 1'-0"

NORTH

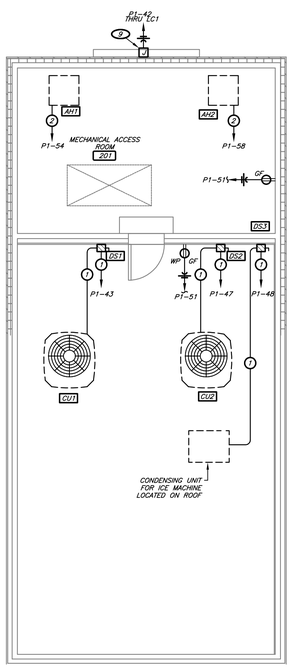


3 GROUND LEVEL POWER PLAN
1/4" = 1'-0"

NORTH

SPECIAL NOTES:

1. PRIOR TO ANY ELECTRICAL ROUGH-IN AT KITCHEN, ELECTRICAL CONTRACTOR SHALL REVIEW KITCHEN EQUIPMENT SUPPLIER'S ROUGH-IN DRAWINGS, TO CONFIRM ALL ELECTRICAL REQUIREMENTS FOR KITCHEN EQUIPMENT.
2. ALL DEVICE COVERPLATES AT KITCHEN SHALL BE STAINLESS STEEL.
3. ALL ROUGH-IN HEIGHTS SHALL BE AS DIRECTED BY KITCHEN EQUIPMENT SUPPLIER/INSTALLER. HEIGHT MAY NOT BE SHOWN ON ELECTRICAL PLANS. REFER TO DRAWINGS FOR HEIGHTS AND DIMENSIONED LOCATIONS.



2 ROOF AND ATTIC POWER PLAN
1/4" = 1'-0"

NORTH

1 GROUND LEVEL LIGHTING PLAN
1/4" = 1'-0"

NORTH

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STATE OF MISSOURI
RYAN S. JONES
NUMBER
PE-2004017193
PROFESSIONAL ENGINEER

04-26-22

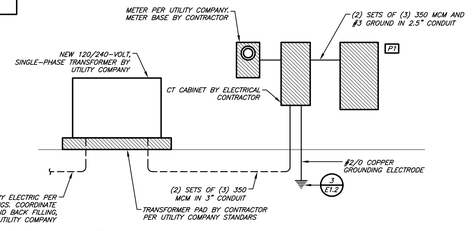
ENGINEER OF RECORD:
NAME: RYAN JONES
LICENSE NO.PE-2004017193

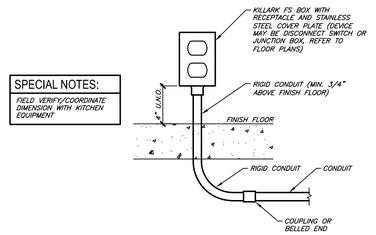
PROJECT NUMBER:
21334 7BSM

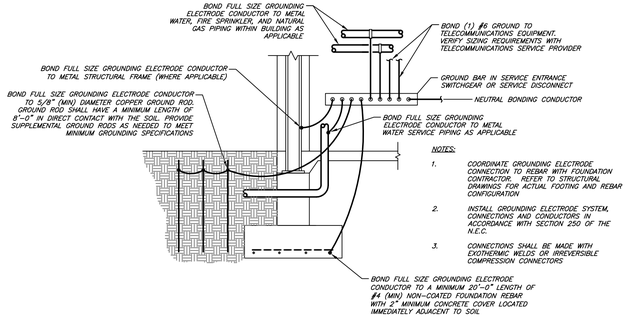
REVISION:

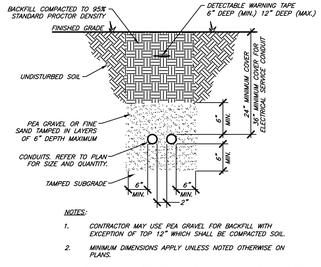
E1.1
ELECTRICAL PLAN

DATE: APRIL 26, 2022









LIGHTING FIXTURE SCHEDULE

MARK	MANUFACTURER	MODEL #	FINISH	MOUNTING	LAMPS TYPE	LAMPS CODE	LAMPS QTY.	FIXTURE WATTS	VOLTAGE	APPROVED MANUFACTURERS	NOTES
T1	WILLIAMS	LP-24-L50/835-DIM-UNV	WHITE	RECESSED	LED	WITH FIXTURE	-	50	UNV	SUBMIT	-
T1E	WILLIAMS	LP-24-L50/835-EM/10WRM-DIM-UNV	WHITE	RECESSED	LED	WITH FIXTURE	-	50	UNV	SUBMIT	-
C1	HALO	SMD6R69SWH	WHITE	SURFACE	LED	WITH FIXTURE	-	10	UNV	SUBMIT	1,2,3,4,6
C2	WAC LIGHTING	DS-WS05-F-B-CC-BK	BLACK	SURFACE	LED	WITH FIXTURE	-	35	UNV	SUBMIT	1,2,4,6
S1	LED NEONFLEX	LN-11X29-24-RGB	WHITE	SURFACE	LED	WITH FIXTURE	-	1.88/FT	UNV	SUBMIT	1,2,6
S2	WILLIAMS	78-4-L53/830-DIM-UNV	WHITE	SURFACE	LED	WITH FIXTURE	-	35	UNV	SUBMIT	-
PL1	LUMARK	PRV-C25-D-UNV-T3-SA-BZ-HSS	BRONZE	POLE	LED	WITH FIXTURE		96	UNV	SUBMIT	1,4,6,7,8,9
W1E	WILLIAMS	WPAS-L34/850-BZ-PC-EM/6W-UNV	BRONZE	SURFACE	LED	WITH FIXTURE	-	45	UNV	SUBMIT	1,3,6
X1	WILLIAMS	EXIT/EM/LED-R-WHT	WHITE	SURFACE	LED	WITH FIXTURE	-	10	120	SUBMIT	3

NOTES:

1. FIXTURE SHALL BE LISTED FOR OUTDOOR USE AND SHALL BE LISTED FOR DAMP OR WET LOCATION AS REQUIRED.
2. COORDINATE WITH ARCHITECT FOR EXACT MOUNTING HEIGHT AND LOCATION.
3. PROVIDE FIXTURE WITH EMERGENCY BATTERY BACK-UP FOR MINIMUM 90-MINUTES OPERATION.
4. COORDINATE WITH ARCHITECT/OWNER FOR EXACT FINISH.
5. REFER TO PLANS AND COORDINATE WITH OWNER/ARCHITECT FOR MOUNTING TYPE, FACE ORIENTATION, AND CHEVRON DIRECTION AS APPLICABLE.
6. FIXTURE LAMP AND BALLAST SHALL BE CAPABLE OF OPERATING DOWN TO 0 DEGREES F AND UP TO 110 DEGREES F AS REQUIRED.
7. PROVIDE 20' STRAIGHT STEEL POLE AND ACCESSORIES AS REQUIRED FOR COMPLETE INSTALLATION.
8. PROVIDE ALL ACCESSORIES AS REQUIRED FOR COMPLETE INSTALLATION. POLE AND ACCESSORIES SHALL BE SAME COLOR AS FICTURE HEAD.
9. PROVIDE FIXTURE WITH LUMARK NEMA PHOTOCONTROL OA/RA1014

ABBREVIATIONS:

OSFCI - OWNER FURNISHED, CONTRACTOR INSTALLED

TBD - TO BE DETERMINED

GENERAL NOTES (APPLY TO ALL LIGHT FIXTURES):

1. PROVIDE INSULATION BARRIER, WHERE NON IC-RATED LIGHT FIXTURES ARE INSTALLED WHERE THEY MAY BE IN DIRECT CONTACT WITH INSULATION. INSULATION BARRIER SHALL BE EQUAL TO PRODUCTS BY 'E.Z. BARRIER'

DISCONNECT SWITCH SCHEDULE

MARK	EQUIPMENT SERVED	SWITCH VOLTAGE	SWITCH DUTY	SWITCH AMP	SWITCH POLE	OVERCURRENT PROTECTION AMP	OVERCURRENT PROTECTION TYPE	NEMA ENCLOSURE	NOTES & ACCESSORIES
DS1	CONDENSING UNIT CU1	240	GD	60	2	-	-	3R	1
DS2	CONDENSING UNIT CU2	240	GD	60	2	-	-	3R	1
DS3	REMOTE CONDENSING UNIT	240	GD	30	3	-	-	3R	1
DS4	WATER HEATER WH1	240	GD	100	2	-	-	1	1

ACCESSORIES:

1. GROUND LUG KIT
2. SOLID NEUTRAL
3. SERVICE ENTRANCE RATED

ABBREVIATIONS:

C/B - CIRCUIT BREAKER

GD - GENERAL DUTY

HD - HEAVY DUTY

CONTACTOR SCHEDULE

MARK	LOAD EQUIPMENT SERVED	LOAD VOLTAGE	CONTACTOR TYPE	CONTACTOR AMP	CONTACTOR POLE	CONTACTOR ENCLOSURE	CONTACTOR CONTROLLED BY	NOTES
LC1	EXTERIOR LIGHTING	120/240	NOEH	20A	8	NEMA 1	TIME SWITCH TS1	1

NOTES:

1. PROVIDE WITH 120 VOLT CONTROL COIL.

TIME SWITCH SCHEDULE

MARK	MANUFACTURER	MODEL #	EQUIPMENT SERVED	VOLTAGE	AMP	POLE	ENCLOSURE	NOTES
TS1	TORK	DTS200B	EXTERIOR LIGHTING	120	30	1	NEMA 1	1

NOTES:

1. CONTRACTOR SHALL SUPPLY SS403 OVERRIDE SWITCH SET AT 2 HOUR OVERRIDE.

PANELBOARD SCHEDULE

P1

VOLTAGE:	120/240	POLES:	84	MOUNTING:	SURFACE	ENCLOSURE:	NEMA 3R
PHASE / WIRE:	1 /3	KAIC AMPS (RMS):	22K	LOCATION:	EXTERIOR	MANUFACTURER:	SQUARE D
AMPS:	600	MAIN BREAKER / MLO:	MLO	FED FROM:	UTILITY XFMR	MODEL:	NQ

CIRC. NO.	EQUIPMENT SERVED	C/B AMPS	C/B POLES	C/B ACC.	LOAD (VA)	PHASE LOADS (VA) A	PHASE LOADS (VA) B	LOAD (VA)	C/B ACC.	C/B POLES	C/B AMPS	EQUIPMENT SERVED	CIRC. NO.
1	POINT OF SALE RECEPTACLES	20	1	-	400	1050		650	-	1	20	GRINDER	2
3	FRONT BAR RECEPTACLE	20	1	-	180		830	650	-	1	20	GRINDER	4
5	EXTERIOR RECEPTACLES	20	1	-	540	720		180	-	1	20	FRONT BAR RECEPTACLE	6
7	ESPRESSO MACHINE 4 GROUP	50	2	-	4000		5800	1800	-	1	20	HOT WATER RECEPTACLE	8
9	"			-	4000	5284		1284	-	1	20	ICE MAKER	10
11	HORTON SLIDING DOOR	20	1	-	500		1220	720	-	1	20	EXTERIOR RECEPTACLES	12
13	ESPRESSO MACHINE 3 GROUP	50	2	-	3050	4334		1284	-	1	20	BLENDER	14
15	"			-	3050		4334	1284	-	1	20	ICE MAKER	16
17	SECURITY RECEPTACLES	20	1	-	360	3410		3050	-	2	50	ESPRESSO MACHINE 3 GROUP	18
19	SECURITY RECEPTACLES	20	1	-	360		3410	3050	-			"	20
21	SIDE BAR RECEPTACLE	20	1	-	180	360		180	-	1	20	SERVICE AREA RECEPTACLE	22
23	SIDE BAR RECEPTACLE	20	1	-	180		360	180	-	1	20	SERVICE AREA RECEPTACLE	24
25	SIDE BAR RECEPTACLE	20	1	-	180	1464		1284	-	1	20	BLENDER	26
27	ICE MAKER	20	1	-	1284		1554	270	-	1	20	EXTERIOR LIGHTS	28
29	INTERIOR LIGHTS	20	1	-	700	1984		1284	-	1	20	BLENDER	30
31	SIDE BAR RECEPTACLE	20	1	-	180		540	360	-	1	20	EXTERIOR RECEPTACLES	32
33	BLENDER	20	1	-	1284	1644		360	-	1	20	BATHROOM RECEPTACLE	34
35	CRAWL SPACE RECEPTACLE	20	1	-	180		970	790	HACR	2	20	WALK IN COOLER	36
37	EXTERIOR LED LIGHTS	20	1	-	500	1290		790				"	38
39	SPARE	20	1	-			1200	1200	-	1	20	BUILDING SIGNAGE	40
41	SPARE	20	1	-		1200		1200	-	1	20	BUILDING SIGNAGE	42
43	CONDENSING UNIT CU1	50	2	HACR	3078		3278	200	-	1	20	COOLER LIGHT	44
45	"				3078	3218		140	HACR	1	15	ICE MACHINE	46
47	CONDENSING UNIT CU2	50	2	HACR	3078		6918	3840	HACR	2	40	REMOTE CONDENSING UNIT	48
49	"				3078	6918		3840				"	50
51	MECHANICAL ACCESS RECEPTACLE	20	1	-	360		720	360	-	1	20	IPAD RECEPTACLES	52
53	ELECTRIC HEATER EH1	20	2	-	1500	11484		9984	HACR	2	100	AIR HANDLER AH1	54
55	"				1500		11484	9984				"	56
57	ELECTRIC HEATER EH2	20	2	-	1500	11484		9984	HACR	2	100	AIR HANDLER AH2	58
59	"	20	1	-	1500		11484	9984				"	60
61	AIR CURTAIN AC1	15	1	HACR	768	1128		360	-	1	20	IPAD RECEPTACLES	62
63	AIR CURTAIN AC2	15	1	HACR	768		1068	300	-	1	20	SITE LIGHTING	64
65	SPARE	20	1	-		0			-	1	20	SPARE	66
67	WATER HEATER WH1	40	2	-	4000		4000		-	1	20	SPARE	68
69	"				4000	4000			-	1	20	SPARE	70
71	WATER HEATER WH1	40	2	-	4000		4000		-	1	20	SPARE	72
73	"				4000	4000			-	1	20	SPARE	74
75	WATER HEATER WH1	40	2	-	4000		4000		-	1	20	SPARE	76
77	"				4000	4000			-	1	20	SPARE	78
79	SPARE	20	1	-			0		-	1	20	SPARE	80
81	SPARE	20	1	-		0			-	1	20	SPARE	82
83	SPARE	20	1	-			0		-	1	20	SPARE	84

ENCLOSURE ACCESSORIES: **CH, FL**

PANELBOARD ACCESSORIES: **GB, CBB**

CIRCUIT BREAKER ACCESSORIES:

AC	- AUXILLIARY CONTACTS
EO	- ELECTRICAL OPERATOR
GFCI	- GROUND-FAULT INTERRUPTING
HACR	- HACR RATING
HLF	- HANDLE LOCK-OFF
HLN	- HANDLE LOCK-ON
SR	- SWITCH RATING
ST	- SHUNT TRIP

ENCLOSURE ACCESSORIES:

CH	- CONCEALED HINGE
CW	- COLUMN WIDTH PANEL
DWD	- HINDGED DOOR WITHIN HINGED DOOR
EGT	- EXTENDED GUTTER TOP
EGB	- EXTENDED GUTTER BOTTOM
EGSL	- EXTENDED GUTTER LEFT HAND SIDE
EGSR	- EXTENDED GUTTER RIGHT HAND SIDE
FL	- FLUSH LOCK(S)

PANELBOARD ACCESSORIES

CL	- COMPRESSION LUGS
FTL	- FEED-THRU LUGS
GB	- EQUIPMENT GROUND BAR KIT
IGB	- INSULATED GROUND BAR KIT
NBK	- NEUTRAL BONDING KIT
PS	- PREPARED CIRCUIT BREAKER SPACE
SB	- SPLIT BUS
SER	- SERVICE ENTRANCE RATING
SFB	- SUB-FEED CIRCUIT BREAKER
SFL	- SUB-FEED LUGS
CBB	- SILVER PLATED COPPER BUS BARS
ABB	- TIN PLATED ALUMINUM BUS BARS
TRN	- 200% RATED NEUTRAL BUS BAR
TVSS	- TRANSIENT VOLTAGE SURGE SUPPRESSION

OCCUPANCY SENSOR SCHEDULE

MARK	CONTROL TYPE	LOAD EQUIPMENT SERVED	LOAD VOLTAGE	SENSOR MANUF	SENSOR MODEL #	SENSOR VOLTAGE	SENSOR TYPE	SENSOR TIME DELAY	SENSOR MOUNTING	SENSOR INTERLOCK	SENSOR ACCESS.
OS1	WALL MOUNTED OCCUPANCY	RESTROOMS	120	WATTSTOPPER	DW-100	120	IR/US	AUTO	WALL BOX	-	1

NOTES/ACCESSORIES:

1. WALL SWITCH SHALL BE CAPABLE OF MANUAL ON-OFF CONTROL

GENERAL NOTES (APPLIES TO ALL SENSORS):

1. EACH SENSOR TYPE MAY BE SHOWN IN MULTIPLE LOCATIONS ON ELECTRICAL PLANS
2. EQUIPMENT SUBMITTAL: PRIOR TO APPROVAL, WITH OCCUPANCY SENSOR SPECIFICATION INFORMATION, CONTRACTOR SHALL SUBMIT PLAN (PROVIDED BY MANUFACTURER'S REPRESENTATIVE) WITH OCCUPANCY SENSOR LOCATIONS, OCCUPANCY SENSOR TYPE, MOUNTING HEIGHT AND SENSOR COVERAGE FOR EACH SPACE.
3. WHERE SWITCHING IS SHOWN, WIRE OCCUPANCY SENSOR CONTROL IN SERIES WITH LOCAL SWITCHES
4. PROVIDE CONTROL UNIT(S)/POWER PACK(S) AS REQUIRED.
5. FINISH/COLOR SHALL MATCH ALL OTHER DEVICES.

ABBREVIATIONS:

PIR - PASSIVE INFRARED

US - ULTRASONIC

IR/US -DUAL TECHNOLOGY

APPROVED MANUFACTURERS:

GREENGATE/NOVITAS

WATTSTOPPER

HUBBELL

SPECIAL NOTES:

1. CONTRACTOR SHALL COORDINATE AND VERIFY ALL ELECTRIC SERVICE RESPONSIBILITIES WITH ELECTRIC UTILITY COMPANY.
2. PROVIDE EXCAVATION, TRENCHING AND BACKFILL ON PRIMARY, AS REQUIRED BY UTILITY COMPANY.
3. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR ALL RESPONSIBILITIES ON PRIMARY, FOR METERING, JUNCTION ENCLOSURES AND TRANSFORMER.

AVAILABLE FAULT CURRENT NOTE:

THE FOLLOWING ASSUMPTIONS WERE MADE TO CALCULATE THE AVAILABLE FAULT CURRENT: 167KVA TRANSFORMER, 3% IMPEDANCE AND 80 FEET OF SECONDARY CONDUCTOR TO WIREWAY. CONTRACTOR SHALL CONTACT ENGINEER IF MODIFICATIONS ARE MADE TO CONSTRUCTION–DOCUMENT SPECIFIED CONDUCTOR TYPE, CONDUCTOR QUANTITY AND/OR TRANSFORMER LOCATION/INFORMATION. IF NO MODIFICATIONS HAVE BEEN MADE AFTER LISTED CALCULATION DATE, CONTRACTOR SHALL PROVIDE A PERMANENT PLACARD AT SERVICE DISCONNECTING MEANS, OR SWITCHBOARD MAIN CIRCUIT BREAKER. PLACARD SHALL MEET REQUIREMENTS OF AUTHORITY HAVING JURISDICTION. PLACARD SHALL READ: "MAXIMUM AVAILABLE FAULT CURRENT: 17,309 AMPS, CALCULATED ON APRIL 26, 2022".

2 ELECTRICAL RISER DIAGRAM

NO SCALE

SPECIAL NOTES:

FIELD VERIFY/COORDINATE DIMENSION WITH KITCHEN EQUIPMENT

4 KITCHEN FLOOR RECEPTACLE

NO SCALE

NOTES:

1. COORDINATE GROUNDING ELECTRODE CONNECTION TO REBAR WITH FOUNDATION CONTRACTOR. REFER TO STRUCTURAL DRAWINGS FOR ACTUAL FOOTING AND REBAR CONFIGURATION
2. INSTALL GROUNDING ELECTRODE SYSTEM, CONNECTIONS AND CONDUCTORS IN ACCORDANCE WITH SECTION 250 OF THE N.E.C.
3. CONNECTIONS SHALL BE MADE WITH EXOTHERMIC WELDS OR IRREVERSIBLE COMPRESSION CONNECTORS

3 GROUNDING ELECTRODE DETAIL

NO SCALE

NOTES:

1. CONTRACTOR MAY USE PEA GRAVEL FOR BACKFILL WITH EXCEPTION OF TOP 12" WHICH SHALL BE COMPACTED SOIL.
2. MINIMUM DIMENSIONS APPLY UNLESS NOTED OTHERWISE ON PLANS.

1 ELECTRICAL CONDUIT TRENCH DETAIL

NO SCALE

GENERAL ELECTRICAL NOTES:

GENERAL

1. GENERAL ELECTRICAL NOTES APPLY TO ALL ELECTRICAL SHEETS.
2. CJD ENGINEERING LLC, BEING THE AUTHOR OF THESE CONSTRUCTION DOCUMENTS RESERVES THE RIGHT OF FINAL INTERPRETATION AS TO THEIR INTENT AND MEANING. ANY ADDITIONAL WORK OR COSTS RESULTING FROM THE CONTRACTOR'S OWN INTERPRETATION AS TO THE INTENT OR MEANING WITHOUT CONSULTATION WITH CJD ENGINEERING LLC SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO COST TO OWNER OR A/E.
3. THE INTENT OF THE WORK INDICATED ON THESE CONSTRUCTION DOCUMENTS IS TO PROVIDE A FULLY FUNCTIONING SYSTEM IN COMPLETE WORKING ORDER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THE CONTRACTORS SUPPLIERS TO INCLUDE ALL ACCESSORIES, COMPONENTS, PARTS, ETC. THAT MAY NOT BE INDICATED ON THESE CONSTRUCTION DOCUMENTS TO PROVIDE BUILDING CODE COMPLIANT SYSTEMS AND EQUIPMENT THAT OPERATE SATISFACTORILY AS DESIGNED AND INTENDED.
4. ALL ELECTRICAL WORK SHALL BE PERFORMED BY LICENSED CONTRACTORS IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODES, THE 2017 NATIONAL ELECTRICAL CODE, AND ALL LOCAL CODES AS ADOPTED BY THE AUTHORITIES HAVING JURISDICTION.
5. THE CONTRACTOR SHALL INCLUDE ALL PERMIT AND INSPECTION FEES IN BID.
6. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID. NO EXTRAS WILL BE PAID DUE TO UNANTICIPATED EXISTING CONDITIONS.
7. PLANS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO CIVIL, STRUCTURAL AND ARCHITECTURAL DRAWINGS AND EXISTING CONDITIONS FOR DIMENSIONS. FIELD VERIFY ALL DIMENSIONS.
8. EQUIPMENT AND CONDUIT/CONDUCTOR LAYOUTS ARE DIAGRAMMATIC. FIELD COORDINATE EXACT LOCATIONS AND ROUTINGS WITH STRUCTURE, PIPING, DUCTWORK, LIGHT FIXTURES, ETC. FINAL RESULT SHALL BE EQUIVALENT TO THAT INDICATED ON DRAWINGS.
9. COOPERATE CLOSELY WITH ALL OTHER TRADES TO EXPEDITE CONSTRUCTION AND AVOID INTERFERENCES AND CONFLICTS. BEFORE ANY PIPING, DUCTWORK, CONDUIT, ETC. IS INSTALLED, IT SHALL BE COORDINATED CAREFULLY BETWEEN ALL TRADES.
10. MAINTAIN ALL CLEARANCES REQUIRED BY ELECTRICAL EQUIPMENT. COORDINATE WITH PLUMBING, HVAC, AND SPRINKLER CONTRACTORS TO MAINTAIN ALL CLEARANCES REQUIRED FOR EQUIPMENT. DO NOT ROUTE PIPING, DUCTWORK, ETC. ABOVE ELECTRICAL PANELS.
11. DRAWINGS REPRESENT FINAL RESULT. REMOVE, RELOCATE, MODIFY EXISTING EQUIPMENT, DUCTWORK, PIPING, ETC. AS REQUIRED. FIELD VERIFY EXISTING CONDITIONS AND EXACT REQUIREMENTS.
12. COORDINATE INFORMATION OUTLET, RECEPTACLE, AND OTHER DEVICE LOCATIONS WITH OWNER AND WITH MILLWORK AND WITH OTHER TRADES PRIOR TO ROUGH–IN.
13. INFORMATION OUTLET (DATA AND TELEPHONE) DEVICES, WALL PLATES, AND ASSOCIATED WIRING SHALL BE SUPPLIED AND INSTALLED BY OTHERS UNDER A SEPARATE CONTRACT WITH THE OWNER.
14. THE CONTRACTOR SHALL PROVIDE ELECTRONIC SHOP DRAWINGS/SUBMITTALS OF ALL FIXTURES AND EQUIPMENT FURNISHED UNDER THIS CONTRACT.
15. IF CONTRACTOR WISHES TO INCORPORATE PRODUCTS OTHER THAN THOSE NAMED IN SPECIFICATIONS IN HIS BID OR PRODUCTS BY MANUFACTURERS OTHER THAN THOSE LISTED AS APPROVED MANUFACTURERS, THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR REVIEW AND APPROVAL OF PROPOSED SUBSTITUTIONS TO CJD ENGINEERING LLC NOT LESS THAN FIVE WORKING DAYS PRIOR TO BID DATE. APPROVAL OR ACCEPTANCE OF PROPOSED SUBSTITUTION OF MANUFACTURERS OR ITEMS IS FOR THE PURPOSES OF BIDDING ONLY AND DOES NOT RELIEVE THE PROPOSED SUBSTITUTION FROM SUBMITTAL/SHOP DRAWING REVIEW AND DOES NOT CONSTITUTE PRIOR APPROVAL OF PROPOSED SUBSTITUTIONS.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COSTS OF LARGER WIRING, CONDUIT, ENCLOSURES, CONTROL AND OVERCURRENT PROTECTIVE DEVICES, ETC. RESULTING FROM SUBSTITUTION OF EQUIPMENT OTHER THAN THAT WHICH WAS THE BASIS OF DESIGN AT NO COST TO OWNER OR A/E.
17. THE CONTRACTOR SHALL GUARANTEE ALL EQUIPMENT, ACCESSORIES, AND MATERIAL FURNISHED BY HIM FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE AGAINST ALL DEFECTS.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING COSTS TO CUT, PATCH AND REPAIR EXISTING WALL, FLOOR AND CEILING CONSTRUCTION AS REQUIRED TO INSTALL NEW FIXTURES, CONDUIT, WIRING, ETC. ARE INCLUDED IN THE BID PRICE.

PRODUCTS

1. LIGHT SWITCHES SHALL BE EQUIVALENT TO HUBBELL 1220 SERIES, 20–AMP, 120/277–VOLT, IN COLOR SELECTED BY THE ARCHITECT/INTERIOR DESIGNER.
2. DUPLEX RECEPTACLES SHALL BE EQUIVALENT TO HUBBELL 5300 SERIES, 20A, 125V, NEMA CONFIGURATION 5–20R, IN COLOR SELECTED BY THE ARCHITECT/INTERIOR DESIGNER.
3. ALL RECEPTACLES THROUGHOUT SHALL BE TAMPER–RESISTANT TYPE, TO COMPLY WITH N.E.C.
4. ELECTRICAL DEVICE WALL PLATES SHALL BE HIGH IMPACT NYLON PLASTIC IN COLOR AS SELECTED BY THE ARCHITECT/INTERIOR DESIGNER.
5. FEEDER AND BRANCH CIRCUIT WIRING SHALL BE COPPER, 600V WITH THHN/THWN INSULATION. BRANCH CIRCUIT WIRING SHALL BE #12 AWG MINIMUM. HOMERUNS FOR BRANCH CIRCUITS OVER 75 FEET LONG SHALL BE #10 AWG; OVER 100 FEET LONG, #8 AWG UNLESS INDICATED OTHERWISE.
6. EQUIVALENT WIRING DEVICES BY BRYANT, COOPER, HUBBELL, LEVITON, OR AS APPROVED BY OWNER.
7. EQUIVALENT PANELBOARDS, LIGHTING CONTACTORS AND DISCONNECT SWITCHES BY CUTLER HAMMER, GENERAL ELECTRIC, SIEMENS, SQUARE D, OR AS APPROVED BY OWNER.

EXECUTION

1. PROVIDE ALL ACCESSORIES, COMPONENTS, ETC. REQUIRED FOR COMPLETE INSTALLATION OF SPECIFIED EQUIPMENT.
2. PROVIDE UNISTRUTS AND ACCESSORIES AS REQUIRED FOR SUPPORT OF PIPING, EQUIPMENT, ETC.
3. COORDINATE LIGHTING AND CEILING DEVICE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS.
4. ALL WIRING SHALL BE INSTALLED IN EMT CONDUIT AND SHALL BE CONCEALED UNLESS OTHERWISE NOTED. PVC CONDUIT WILL BE ALLOWED BELOW SLAB. ALL TRANSITIONS FROM PVC TO STEEL CONDUIT SHALL BE MADE BELOW GRADE. MINIMUM CONDUIT SIZE FOR LIGHTING AND POWER BRANCH CIRCUITS ABOVE GRADE SHALL BE 1/2". MINIMUM CONDUIT SIZE FOR LIGHTING AND POWER BRANCH CIRCUITS BELOW GRADE SHALL BE 3/4". CONTRACTOR SHALL HAVE THE OPTION TO USE METALLIC CLAD (M/C) CABLE FOR CONCEALED BRANCH CIRCUIT WIRING.
5. MINIMUM CONDUIT SIZE FOR INFORMATION OUTLETS SHALL BE 3/4". CONDUIT STUBS SHALL BE TERMINATED WITH INSULATING BUSHINGS.
6. ALL LIGHTING AND POWER CIRCUITS SHALL HAVE A GROUNDING CONDUCTOR.
7. ALL RECEPTACLES, TELECOMMUNICATIONS OUTLETS, AND TELEVISION OUTLETS SHALL BE INSTALLED AT 18" AFF TO CENTER UNLESS NOTED OTHERWISE. ALL SWITCHES SHALL BE INSTALLED AT 48" AFF TO CENTER UNLESS NOTED OTHERWISE.
8. PROVIDE TYPED CIRCUIT DIRECTORIES FOR ALL PANELBOARDS. DIRECTORY INFORMATION SHALL INCLUDE CIRCUIT NUMBER AND EQUIPMENT SERVED.
9. INSTALL ALL ROOF EQUIPMENT, PIPE, AND CONDUIT SUPPORTS, CURBS AND PENETRATIONS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ROOFING SYSTEM MANUFACTURER.
10. SUPPORT CONDUIT ON ROOF WITH PREMANUFACTURERED PIPING SUPPORT EQUIVALENT TO B–LINE C–SERIES. FIELD FABRICATED SUPPORTS CONSISTING OF LUMBER, ETC. ARE NOT ACCEPTABLE.
11. PROVIDE FACTORY FABRICATED PIPE CURB ASSEMBLIES FOR MULTIPLE CONDUIT AND PIPING PENETRATIONS THROUGH THE ROOF. PIPE CURB ASSEMBLIES SHALL BE FACTORY FABRICATED, 8" TALL (MINIMUM) GALVANIZED STEEL ROOF CURBS WITH INTEGRAL BASE PLATE, 3 LB. DENSITY INSULATION, WOOD NAILER, ACRYLIC CLAD THERMOPLASTIC COVER, FASTENING SCREWS, AND GRADUATED STEP BOOTS WITH STAINLESS STEEL CLAMPS AS MANUFACTURED BY PATE, THYBAR OR APPROVED EQUIVALENT. PROVIDE PIPE SEAL ASSEMBLIES FOR INDIVIDUAL CONDUIT OR PIPE PENETRATIONS. ALL WORK SHALL BE IN ACCORDANCE WITH ROOFING MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.
12. PROVIDE SLEEVES AT CONDUIT PENETRATIONS OF EXTERIOR OR FOUNDATION WALLS. SEAL PENETRATIONS WEATHERTIGHT.
13. SEAL ALL PENETRATIONS THROUGH FIRE–RATED ASSEMBLIES AS NECESSARY TO RESTORE FIRE–RESISTANCE RATING OF ASSEMBLY. REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR RATED ASSEMBLIES, FIRESTOPPING MATERIALS AND REQUIREMENTS.
14. CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO SPECIAL EQUIPMENT. PROVIDE ADAPTERS, FITTINGS, ETC. FOR ALL EQUIPMENT AS REQUIRED. COORDINATE SPECIFIC REQUIREMENTS WITH EQUIPMENT SUPPLIERS. REFER TO SPECIAL EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION.
15. ELECTRICAL CONTRACTOR SHALL PROVIDE ROUGH–IN FOR THERMOSTATS AND SENSORS. PROVIDE SINGLE–GANG BOX WITH 0.75" CONDUIT TO ABOVE ACCESSIBLE CEILING OR TO ASSOCIATED EQUIPMENT. THERMOSTATS, SENSORS, AND WIRING SHALL BE PROVIDED BY MECHANICAL CONTRACTOR. REFER TO HVAC PLANS FOR THERMOSTAT AND CONTROL LOCATIONS.
16. BRANCH CIRCUIT WIRING SERVING EQUIPMENT, LIGHTING, AND RECEPTACLES IN PATIENT CARE AREAS SHALL COMPLY WITH NEC SECTION 517.13. METAL RACEWAYS, ARMORED CABLING AND ASSOCIATED FITTINGS SHALL BE LISTED AS A GROUND RETURN PATH AND SHALL CONTAIN A SEPARATE EQUIPMENT GROUNDING CONDUCTOR AS SPECIFIED.

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REVISION:

E1.2

SCHEDULES AND DETAILS

DATE: APRIL 26, 2022