

Owner

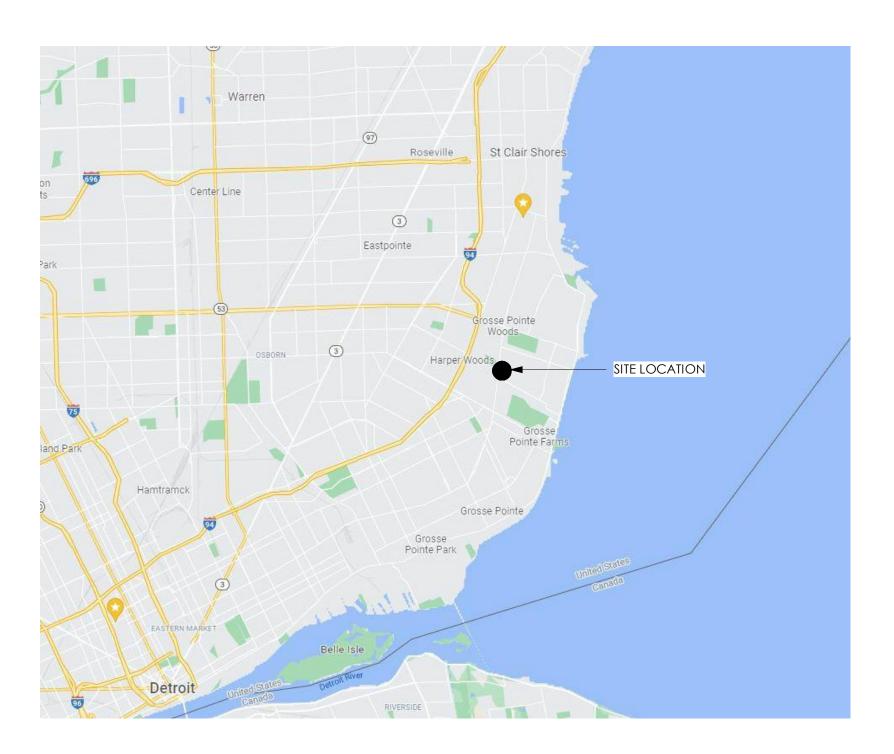
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Architect

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Structural Engineer

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General Scope of Work:

DEMOLITION OF EXISTING EXTERIOR FACADE & INTERIOR WALLS CONSTRUCTION OF NEW FACADE RENOVATE THE EXISTING BUILDING UP TO A 'WHITE-BOX' LEVEL

Project Add

Code Review Analysis

Application Building: Accessibility: Energy: Fire:

Allowable Building area:

Zoning: Constructio Sprinkled: Occupancy

Max. Buildir

Max. Area p Building Hei

Floor area p



General Building Information

9,500 SQ. FT.

(1) STORIES

2,000 SQ. FT.

dress	:

Application Plumbing: Application Mechanical: Application Electrical:

on Type:
y Use:
ng Height:
per Story:
ight Proposed:
proposed:

19876Main Street, Gross Point Woods, MI 48236 See civil documents for parcel location and information

Michigan Building Code 2015 Michigan Plumbing Code 2018 Michigan Mechanical Code 2015 2017 National Electrical Code ICC/ANSI A.117.1-2015 2015 Michigan Energy Code 2021 International Fire Code

C-Commercial IIIB No TBD by future tenant; assuemed (A-2) for most conservative code enforcement. 2 stories (55'-0")

General Sheet Index

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G.001	Cover Sheet
A.001	Architectural Abbreviations & Symbols

Demolition Sheet Index

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D.200	Dem

Demolition Floor Plan Demolition Elevations

Architectural Sheet Index

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A.600	Wall Sections
SP.001	Specifications
SP.002	Specifications
SP.003	Specifications
SP.004	Specifications
SP.005	Specifications
SP.006	Specifications
SP.007	Specifications
SP.008	Specifications

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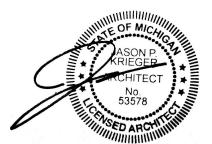
Verus Development Group

Project:

Project Name 19876 Mack Ave Grosse Pointe Woods MI

Issued	Description	By
8/11/2022	Permits	
<u> </u>		
L		

Seal:



Note: Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field. North Arrow:

Sheet Title: Cover Sheet

Project Number:

22-099

Scale:

As indicated



A/C & VENT A/E AB ACC ACI ACOUS INSUL ACOUS INSUL ACOUS PNL ACS DR ACS PNL ACST	AIR CONDITIONING & VENTILATING ARCHITECT-ENGINEER ANCHOR BOLT ACCESSIBLE	E EA EIFS	EAST EACH
AB ACC ACI ACOUS INSUL ACOUS PNL ACS DR ACS PNL ACST	ANCHOR BOLT		
ACI ACOUS INSUL ACOUS PNL ACS DR ACS PNL ACST	ACCESSIBLE		EXTERIOR INSULATION & FINISH SYSTEM
ACOUS INSUL ACOUS PNL ACS DR ACS PNL ACST	AMERICAN CONCRETE INSTITUTE	EJ EL	EXPANSION JOINT ELEVATION
ACS DR ACS PNL ACST	ACOUSTICAL INSULATION	ELEC	ELECTRICAL, ELECTRONIC
ACST	ACOUSTICAL PANEL ACCESS DOOR	EO ELEV	ELECTRICAL OUTLET ELEVATOR
	ACCESS PANEL ACOUSTIC	EMBED ENCL	EMBEDMENT
ACST SLNT	ACOUSTIC SEALANT	ENTR	ENCLOSURE, ENCLOSED ENTRANCE
ADA ADDL	AMERICANS W/ DISABILITIES ACT ADDITIONAL	EQ EQUIP	EQUAL EQUIPMENT
ADDM	ADDENDUM	ETR	EXISTING TO REMAIN
ADDN ADJ	ADDITION ADJACENT	EW EWC	EACH WAY ELECTRIC WATER COOLER
ADJS AFF		EWH EWS	ELECTRIC WATER HEATER
AGGR	ABOVE FINISHED FLOOR AGGREGATE	EXC	EYE WASH STATION EXCAVATE, EXCAVATION
AHU ALT	AIR HANDLING UNIT ALTERNATE	EXH EXIST	EXHAUST EXISTING
ALUM	ALUMINUM	EXIST GR	EXISTING GRADE
anod Ansi	ANODIZED AMERICAN NATIONAL STANDARDS INSTITUTE	EXP EXPS	EXPANSION EXPOSED
APC APPROX	ACOUSTICAL PANEL CEILING APPROXIMATE	EXT EXTNG	EXTERIOR, EXTERNAL EXTINGUISHER
ARCH	ARCHITECTURAL	EXTR	EXTRUDED
ASPH ASTM	ASPHALT AMERICAN SOCIETY FOR TESTING MATERIALS		
ATC	ACOUSTICAL TILE CEILING	FD	FLOOR DRAIN
AUTO AVG	AUTOMATIC AVERAGE	FE FEC	FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET
		FHC FHR	FIRE HOSE CABINET
B PL	BASE PLATE	FIN	FIRE HOSE RACK / REEL FINISH, FINISHED
B/B BC	BACK TO BACK BOTTOM CHORD	FIP FIXT	FOAMED-IN-PLACE FIXTURE
BD	BOARD	FJ	FALSE JOINT
BEV BF	BEVELED BARRIER FREE	FLASH FLG	FLASHING FLANGE
BL	BUILDING LINE	FLR	FLOOR
BLDG BLDG DAT	BUILDING BUILDING DATUM	FND FOC	FOUNDATION FACE OF COLUMN
BLKG BLW	BLOCKING BELOW	FR FRP	FIRE RATED FIRE RETARDANT PLYWOOD
BM	BEAM	FRPP	FIBERGLASS REINFORCED PLASTIC PANEL
BOS BOT	BOTTOM OF STEEL BOTTOM	FRPFG FRW	FIREPROOFING FIRE RETARDANT WOOD
BR	BEDROOM	FT	FOOT, FEET
BRKT BRZ	BRACKET BRONZE	FTG FURN	FOOTING FURNITURE
BSMT BTWN	BASEMENT BETWEEN	FUT	FUTURE
BULLN	BULLETIN		
BUR	BUILT-UP ROOFING	GA GALV	GAUGE GALVANIZED
<u>_</u>		GCW	GLAZED CURTAIN WALL
C C TO C	CHANNEL CENTER TO CENTER	GDR GEN	GUARDRAIL GENERAL
CAB CANTIL	Compressed air Cabinet	GFCI GFRP	GROUND FAULT CIRCUIT INTERRUPTER GLASS-FIBER REINFORCED PLASTIC
СВ	CANTILEVER	GI	GLASS-FIDER REINFORCED FLASTIC GALVANZIED IRON
CEM CER	CATHETERIZE, CATHETER, CATHETERIZATION CATCH BASIN	GL GR	GLASS, GLAZING GRADE
CF/CI	CEMENT	GR BM	GRADE BEAM
CF/OI CFMF	CERAMIC CONTRACTOR FURNISHED / CONTRACTOR INSTALLED	GRAD GRL	GRADIENT GRILLE
CH CHKD	CONTRACTOR FURNSIHED / OWNER INSTALLED COLD-FORMED METAL FRAMING	GRTG GYP	GRATING
Cl	CHECKERED	GIF	GYPSUM
CIR CJ	CAST IRON CIRCLE, CIRCULAR, CIRCULATION	Н	HIGH
CL	CONTROL JOINT	НВ	HOSE BIBB
CLG CLIN	CENTERLINE CEILING	HD HDW	HEAVY DUTY HARDWARE
CLO CLR	CLOSET CLEAR	HEX HM	HEXAGON HOLLOW METAL
CMU	CONCRETE MASONRY UNIT	HNDRL	HANDRAIL
CO CO2	CLEANOUT CARBON DIOXIDE	HORIZ HPT	HORIZONTAL, HORIZONTALLY HIGH POINT
COL COMPO	COLUMN COMPOSTION	HR HSKPG	HOUR
CONC	CONCRETE	HSS	HOUSEKEEPING HOLLOW STRUCTURAL SECTIONS
CONF CONN	CONFERENCE CONNECTION	HT HTG	HEIGHT HEATING
CONSTR	CONSTRUCTION	HTR	HEATER
CONSTR JT CONT	CONSTRUCTION JOINT CONTINUATION, CONTINUE, CONTINUOUS	HVAC HW	HEATING, VENTILATION & AIR CONDITIONING HOT WATER
CONTR COORD	CONTRACTOR COORDINATE	HYD	HYDRANT
CORR	CORRIDOR		
CPS CPT	CARPET (SHEET) CARPET, CARPET TILE	IBC ID	INTERNATIONAL BUILDING CODE INSIDE DIAMETER, INSIDE DIMENSION
CPW CRCMF	CARPET (WALL BASE) CIRCUMFERENCE	IMWP IN.	INSULATED METAL WALL PANEL
CRIT	CRITICAL	INCL	INCH, INCHES INCLUDED, INCLUDING, INCLUSIVE
CRS CT	COURSE, COURSES, CERAMIC TILE	INFO INSUL	INFORMATION INSULATION, INSULATED
CTB	CERAMIC TILE BASE	INV	INVERT
CTR CTRD	CENTER, CENTRAL CENTERED	INV EL	INVERT ELEVATION
CTRL CU	CONTROL CUBIC	JC	JANITOR'S CLOSET
CUH	CABINET UNIT HEATER	TL	JOINT
CW	COLD WATER	JB	JUNCTION BOX
DA	DATA OUTLET	KIT	KITCHEN
dB	DECIBEL	KP	KITCHEN KICKPLATE
DBL ACT DR DEG	DOUBLE ACTING DOOR DEGREE	KS	KEY SWITCH
DEMO	DEMOLISH, DEMOLITION		
DEPT DET	DEPARTMENT DETAIL	L LAM	ANGLE LAMINATED
DF DIA	DRINKNG FOUNTAIN DIAMETER	LAV LBS	LAVATORY
DIAG	DIAGONAL	LG	POUNDS LONG
DIFF DIM	DIFFUSER DIMENSION	LH LHR	LEFT HAND LEFT HAND REVERSE
DIST	DISTANCE	LIN	LINEAR
DL DMPF	DEAD LOAD DAMPPROOFING	LKR LLH	LOCKER LONG LEG HORIZONTAL
DN	DOWN	LLV	LONG LEG VERTICAL
DO DR	DOOR OPENING DOOR	LPT LT	LOW POINT LIGHT
DS DT	DOWNSPOUT DRAIN TILE	LT WT LTG	LIGHTWEIGHT
1.71	DISTILLED WATER	LIG	LIGHTING LOUVER
DW DWG	DRAWING		

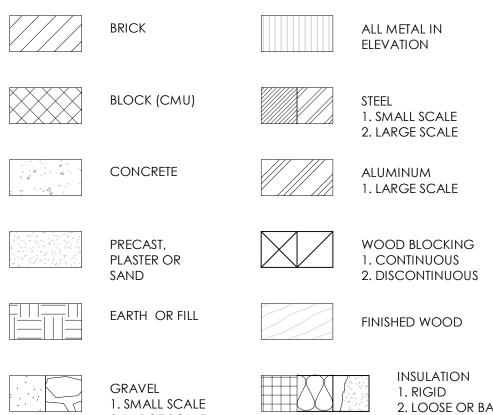
ARCHITECTURAL ABBREVIATION LIST

A DODE: () +						CVI ID CI	
ABBREVIATION	N DESCRIPTION	ABBREVIATION	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
МАСН	MACHINE	S	S-SHAPE STEEL MEMBER	NORTH			
MAR	MARBLE	SAF	SPRAY APPLIED FIREPROOFING		PROJECT NORTH	Room name	3
MAS	MASONRY MATERIAL	SB SCHED	SOIL BORING SCHEDULE		- TRUE NORTH IS	101	ROOM NUMBER
MATL MAX	MAIERIAL MAXIMUM	SDG	SIDING		INDICATED ONLY		
MBC	MICHIGAN BUILDING CODE	SECT	SECTION		ON SITE PLAN		
MECH	MECHANICAL	SH	SHOWER				
MEMB	MEMBRANE	SHT	SHEET			(100A)	DOOR NUMBER
MEZZ	MEZZANINE	SIM	SIMILAR			TUUA	
MFG	MANUFACTURING	SLDG	SLIDING	(0)	— COLUMN CENTER		
MFR	MANUFACTURER	SLDG WDW	SLIDING WINDOW		LINES	A	DOOR NUMBER
MIN	MINIMUM	SLNT	SEALANT				SUFFIX
MISC	MISCELLANEOUS	SLV	SHORT VERTICAL				
MO	MASONRY OPENING MOISTURE RESISTANT	SM SP	Sheet metal Shaft partition	(O)			
MR MT	MOISTORE RESISTANT MARBLE THRESHOLD	SPEC	SPECIFICATION				DOOR - PART OI
MTC	MARDEE THRESHOLD METAL TOILET COMPARTMENTS	SPKLR	SPRINKLER			1 I E	PROJECT
MTL	METALLIC, METAL	SQ	SQUARE				
MULL	MULLION	SSK	SERVICE SINK				
MWP	METAL WALL PANEL	SST	STAINLESS STEEL		— EXIST. COLUMN		EXISTING DOOR
		STA	STATION		CENTER LINES		to remain
		STAG	STAGGERED				
NATL		STC	SOUND TRANSMISSION CLASS				EXISTING WALL T
NC NFPA	NOISE CRITERIA NATIONAL FIRE PROTECTION ASSOCIATION	STD STIF	STANDARD STIFFENER				BE REMOVED
NL	NIGHT LIGHT	STL	STEEL				DE REMOVED
NO.	NUMBER, NUMBERS	STOR	STORAGE	•	FLOOR ELEVATION		
NOM	NOMINAL	STRUCT	STRUCTURAL	$\mathbf{\nabla}$	OR WORK POINT		PARTITION TYPE
NTS	NOT TO SCALE	STRUCT STL	STRUCTURAL STEEL		REFERENCE		
		SUSP	SUSPENDED, SUSPENSION				
		SV	Sheet Vinyl		BUILDING SECTION	<p'-0''></p'-0''>	CEILING HEIGHT
OC	ON CENTER	SW	SWITCH		CUT		INDICATOR
OD	OUTSIDE DIAMETER, OUTSIDE DIMENSION	SWD-FR	SHEATHING WOOD-FIRE RETARDANT				
OF/CI	OWNER FURNISHED / CONTRACTOR INSTALLED	SYM	Symmetrical				
OF/OI OFF	OWNER FURNISHED / OWNER INSTALLED OFFICE				WALL SECTION /		FINISH INDICAT
OH DR	OVERHEAD DOOR	т	TREAD		DETAIL CUT		
OPH	OPPOSITE HAND	T&G	TONGUE & GROOVE		- ie., DETAIL 1 ON		
OPNG	OPENING	T & R	TREAD & RISER		SHEET A101	EQPM ID	EQUIPMENT
OPP	OPPOSITE	TEL	TELEPHONE		- VIEW IS IN		IDENTIFIER
ORIG	ORIGINAL	TEMP	TEMPERATURE		DIRECTION		
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION	TERR	TERRAZZO		OF TAIL		MODEL RM INDE
		THD	THREAD				- MODEL ROOM
		THK	THICKNESS, THICK		DETAIL OR PLAN	MDLRM SHEET	NUMBER ON TO
PB	PUSHBUTTON	THRESH			ENLARGEMENT		SHEET WHERE MC
PC PEND	PIECE, PIECES PENDENT	TOC TOIL	TOP OF CONCRETE (ELEVATION) TOILET	503	- ie., DETAIL 5 ON		ROOM OCCURS
PERF	PERFORATED	TOIL RM	TOILET ROOM		SHEET A-503		
PERM	PERMANENT	TOR	TOP OF RAIL (ELEVATION)				EQUIP BY OWNE
PI	POINT OF INTERSECTION	TOS	TOP OF STEEL (ELEVATION)				UNLESS NOTED
PL	PROPERTY LINE	TOW	TOP OF WALL (ELEVATION)				OTHERWISE
PLAM	PLASTIC LAMINATE	TRAN	TRANSOM				
PLAS	PLASTER	TV	TELEVISION				LIGHT FIXTURES -
PLBG	PLUMBING	TYP	TYPICAL		COMBINED ROOM ELEVATION SYMBOL		
PLT	PLATE, PLATED				ELEVATION STMBOL		TYPES
PLTC	PLASTIC LAMINATE TOILET COMPARTMENTS						
PLYWD	PLYWOOD	UC	UNDERCABINET				
PNL PORC	PANEL PORCELAIN	UG UH	UNDERGROUND UNIT HEATER	<u>1</u> Ref			FIRE ALARM &
PORC	PORCELAIN	UN	UNIT HEATER UNLESS NOTED				COMMUNICATI
POS	POSITION	UNO	UNLESS NOTED OTHERWISE		ROOM		SEE ELEC SYMBC
PP	PANEL POINT	UR	URINAL	(A-201)	ELEVATION SYMBOL		FOR TYPES
PR	PAIR	ÖK					
PREFAB	PREFABRICATED						
PREP	PREPARATION	VAC	VACUUM		REVISION CLOUD		HVAC & FIRE
PROP	PROPERTY	VENT	VENTILATING, VENTILATION		REVISION CLOUD		PROTECTION - S
PRTN	PARTITION	VERT	VERTICAL			\bigcirc	MECH SYMBOL
PSF	POUNDS PER SQUARE FOOT	VEST	VESTIBULE				FOR TYPES
PSI	POUNDS PER SQUARE INCH	VIF	VERIFY IN FIELD				
PT PVC		VOL VWC					
PVC PVG	POLYVINYL CHLORIDE PAVING		VINYL WALL COVERING				CONSTRUCTION
						(AQ1)	KEYNOTE
		W_X_	WIDE FLANGE SHAPES				
QT	QUARRY TILE	W	WIDE, WIDTH				
		W/	WITH				
		W/O	WITHOUT				
R	RADIUS	W/W	WALL TO WALL				
R	RISER	WC	WATER CLOSET		IL NUMBER		
RC	ROOF CONDUCTOR	WD	WOOD				
RCPTR	RECEPTOR	WF					
RCVG	RECEIVING	WG	WALL GUARD		IL TITLE -		
REC		WH	WALL HYDRANT WROUGHT IRON		EN PRESENT, TITLE IDENTIFIE ES INDICATED ARE FOR CO		
REF REF	REFERENCE REFRIGERATOR	WI WO	WROUGHI IRON WINDOW OPENING		SSARILY IDENTIFY ALL LOC		•
REF	REGISTER	WO WP	WINDOW OPENING WORK POINT		JUNILI IDENTIFI ALL'LUC		- DEIVIL OCCURS
REINF	REGISTER REINFORCE, REINFORCED, REINFORCING	WPFG	WATERPROOFING				
REQD	REQUIRED	WR	WATER RESISTANT		XPANSION ASSEMBLY		
RESIL	RESILIENT	WS	WATERSTOP				
REV	REVISION	WT	WEIGHT				
RFG	ROOFING	WT	WT-SHAPE MADE FROM W-SHAPE STEEL MEMBER	1/8" = 1'-0'	•		
RFO	ROOF OPENING	WIG	WAITING	A-204, A-2	05	AIL SCALE	
RH	RIGHT HAND	WTHPRF	WEATHERPROOF	4			
RHR	RIGHT HAND REVERSE	WWR	WELDED WIRE REINFORCEMENT				
RM	ROOM				IL REFERENCE -		
RND	ROUND	I	I		EN PRESENT, REFERENCE IN	DICATION IDENTIFI	IES SHEETS
RO	ROUGH OPENING	YD	YARD	WHE	RE THE DETAIL OCCURS		
RS	ROOF SUMP			- REFE	ERENCES INDICATED ARE F		
	RESILIENT SHEET FLOORING			DO N	OT NECESSARILY INCLUDE		
RSF	RESILIENT TILE FLOORING			DETA	IL OCCURS		
RTF							
rtf rtng	RETAINING						
RTF							

<u>General Notes:</u>

- 1. DIMENSIONS TAKE FIELD MEASUREMENTS TO VERIFY EXISTING CONDITIONS.RECEIVE CERTIFIED OR ACCEPTED EQUIPMENT DWGS PRIOR TO PROCEEDING W/ AFFECTED WORK.REVIEW DIMENSIONS SHOWN ON CONTRACT DRAWINGS, Shop drawings & Submittals. Report INCONSISTENCIES TO A/E AND RECEIVE CLARIFICATION PRIOR TO PROCEEDING. VERIFY SIZES OF OPENINGS, CURBS, BASES, RECESSES, ANCHOR BOLT SIZES & LOCATIONS.
- 2. DIMENSIONS FOR MASONRY CONSTRUCTION ARE NOMINAL & DO NOT INCLUDE SURFACE FINISHES.
- 3. LOCATE STL FRAMES A MIN OF 4" OFF CORNER TO BACK OF FRAME UNLESS OTHERWISE INDICATED.
- 4. SEQUENCING OF CONSTRUCTION SHALL BE COORDINATED WITH OWNER'S EQUIPMENT DELIVERY AND INSTALLATION. SPECIAL ATTENTION to large, unique, and unusually heavy MEDICAL EQUIPMENT.

ARCHITECTURAL SYMBOLS



1. RIGID 2. LOOSE OR BATT 3. FOAMED-IN-PLACE

KRIEGER KLATT Architects

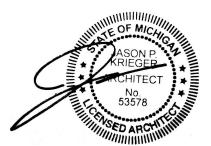
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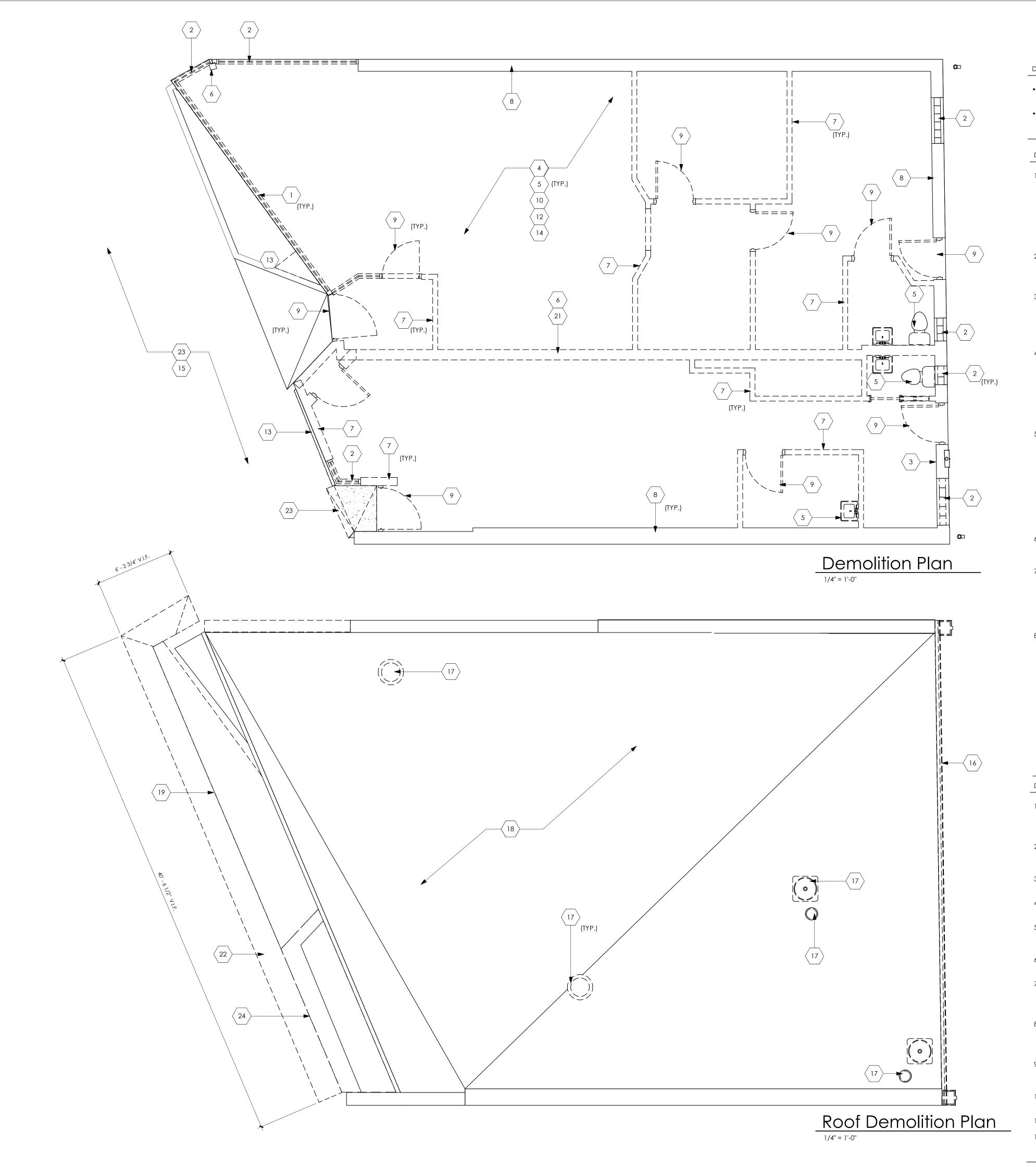
Scale:

12" = 1'-0"

Sheet Number:



GRAVEL 1. SMALL SCALE 2. LARGE SCALE



DEMOLITION SCOPE NOTES:

- MICHIGAN. SUCH WORK WILL BE PART OF THE BUILDING PERMIT PROCESS.
- DEMOLITION WILL CEASE & THE INCIDENT SHALL BE RECTIFIED IMMEDIATLY.

DEMOLITION GENERAL NOTES:

- THE DEMOLITION DRAWINGS HAVE BEEN EXISTING SCANS. PRIOR TO PROCEEDING CONTRACTOR SHALL VERIFY THE ACCURA DRAWINGS IN COMPARISON TO EXISTING AND THEN IMMEDIATELY NOTIFY THE ARCI INCONSISTENCIES BETWEEN THESE DRAWIN CONDITIONS. CONTRACTOR IS TO CONDI OF THE ENTIRE BUILDING PRIOR TO DEMO UNDERSTANDING OF THE COMPLETE SCO
- THE CONTRACTOR SHALL NOTIFY THE ARC DEMOLITION OR NEW CONSTRUCTION W THE CONSTRUCTION DOCUMENTS) THAT (DUE TO EXISTING FIELD CONDITIONS
- CONTRACTOR IS RESPONSIBLE TO INFORM AND/OR ENGINEER OF ANY STRUCTURAL DURING THE DEMOLITION PROCESS THAT DURING INITIAL SITE VISIT BY THE ARCHITE AND MAY NOT BE INCLUDED IN THE CON DOCUMENTS FOR NEW WORK/DEMOLITIC
- IF ANY EXISTING FIREPROOFING AND / OR 4. (WHICH ARE SUPPOSED TO REMAIN) ARE I DEMOLITION, THEY SHALL BE REPAIRED TO ORIGINAL FIRE PROTECTION REQUIREMEN EXISTING RATED FLOOR, WALL, BARRIER, A (WHICH AREA SUPPOSED TO REMAIN) SHA THROUGHOUT ALL PHASES OF CONSTRUC APPLICABLE, CONTACT ARCHITECT TO VE TO BE USED FOR REPAIRS)
- REMOVE EXIST. CONSTRUCTION AS INDIC. REMOVAL SHALL INCLUDE MECHANICAL, ELECTRICAL, COMMUNICATIONS AND SEC CONTAINED THEREIN. REMOVE DOORS, C WINDOWS, FRAMES, FINISHES, FIXTURES AN AS REQUIRED. AFTER REMOVAL, REPAIR H REMAIN FLOORS, WALLS, BARRIERS AND R with original fire, smoke and sound PROTECTION REQUIREMENTS AND STRUCT PREPARE SURFACES TO RECIEVE NEW FINI IS CALLED FOR ON AN EXISTING SURFACE, FINISH AND PREPARE EXISTING SURFACE T
- ANY NECESSARY ELECTRICAL AND PLUMB COORDINATED WITH THE MECHANICAL A CONTRACTORS.
- FOR EXTENT AND LOCATIONS FOR THE CH EXISTING FLOOR SLABS, REFER TO MECHA PROTECTION, ELECTRICAL, COMMUNICA DRAWINGS. IF EXISTING PIPING OR COND DESIRED CONNECTION) IS ENCOUNTERED THE CONTRACTOR SHALL NOTIFY THE ARC CONTINUING WITH ANY WORK)
- AT ALL WALLS/PARTITIONS/BARRIERS, FLOC WHICH ENCLOSE OR TOUCH SPACES WHE PERFORMED AS A PART OF THIS PROJECT, SHALL VERIFY THAT THIS EXISTING CONSTR DAMPERS, DUCT PENETRATIONS, DOORS, ETC.) MEETS THE FIRE, SMOKE AND SOUND DESIGNATED ON THESE DRAWINGS. THE C ALSO MAKE ANY REPAIRS AND/OR MOI NECESSARY TO BRING THE EXISTING CON DAMPERS, DUCT PENETRATIONS, DOORS, ETC.) UP TO THE PROPER INDICATED FIRE, ASSEMBLY RATINGS. DOORS, WINDOWS A NOT MEET THE REQUIREMENTS OF THE DES WALL/PARTITION/BARRIER ASSEMBLIES (IN LABELS) SHALL BE REPLACED. THE GENERA DESIGNATE AN ALLOWANCE FOR THIS

		10	
DESIGN INTENT IS FOR EXISTING G REMOVED AND REPLACED WITH N SYSTEM V.I.F. AS NEEDED FOR EXIS	NEW STOREFRONT	13.	REMOVE EXIST. PLANTERS & PREP FOR NEW CMU PLANTERS AND LANDSCAPING (TYP.)
OPENING SIZE AND LOCATION (TY		14.	EXISTING TILE & CARPETING TO BE REMOVED THROUGHOUT SPACE. PREP. FOR NEW FINISH
EXISTING GLAZING TO BE REMOVE WITH NEW WALL CONFIGURATION (REFER TO ELEVATIONS)		15.	REMOVE EXIST. PLANTERS & TREES AS REQUIRED FOR NEW STREET SCAPE
EXIST. ELECTRICAL PANELS TO REM ELECTRICIAN TO PREP FOR TENAN		16.	EXISTING GUTTER AND DOWNSPOUTS TO BE REMOVED AND REPLACED AS NEEDED, PAINTED TO MATCH ADJACENT MATERIAL (TYP)
REMOVE EXIST. EQUIPMENT & ALL ELEMENTS.	ASSOCIATED MEP	17.	REMOVE EXIST ROOF TOP EQUIPMENT & PREP AREA FOR
PLUMBING FIXTURES TO BE REMOV PLUMBING LINES - DEMO PLUMBI FLOOR, AND/OR CLG. PREP OF FO	NG BACK TO WALL,		ROOF CONSTRUCTION. G.C. TO PROVIDE TEMP. COVERS TO PREVENT ANY PRECIPITATION FROM ENTERING THE BUILDNG. PATCH AND REPAIR WITH LIKE MATERIALS WHERE DEMO HAS OCCURED (TYP)
EXISTING COLUMNS TO REMAIN. V FIELD.	VERIFY LOCATION IN	18.	REMOVE EXISTING ROOFING. INSPECT THE SUBSTRATE & REPAIR AS REQUIRED. INSTALL NEW 60 MIL EPDM ROOFING
EXISTING WALL TO BE DEMOLISHE WHERE DEMO HAS OCCURED. RE PLUMBING WITHIN WALL. PREP FC GLAZING CONFIGURATION	MOVE ELECTRICAL AND	19.	REMOVE EXIST. SHINGLE ROOFING AND SOFFIT DOWN TO SUBROOF - PREP AREA FOR THE CONST. OF STANDING SEAM ROOFING AND SOFFIT
EXISTING INTERIOR PERIMETER WA GYPSUM TO BE REMOVED. PREP.		20.	NOT USED
REMOVE ANY ASSOCIATED ELECT (TYP.)		21.	WALL IS LIKLEY STRUCTURAL BUT COULD NOT BE DETERMINED AT THE TIME OF INSPECTION. ONCE
EXIST. DOOR & HARDWARE TO BE REPAIR WHERE DEMO HAS OCCU CMU INFIL.			EXPOSED, NOTIFY ARCHITECT. G.C. IS TO BUDGET FOR PROPER SHORING OF THE EXISTING STRUCTURE FOR WALL DEMOLITION
REMOVE EXISTING CEILING & ASS	OCIATED LIGHTING,	22.	DEMOLISH EXISTING AWNING
HVAC, ETC. THROUGHOUT (NOT S	HOWN	23.	REMOVE EXIST SIDEWALK - PREP. AREA FOR NEW POUR
NOT USED		24.	REMOVE PORTION OF MANSARD ROOF PREP FOR NEW PARAPET AND ROOF CONSTRUCTION
REMOVE EXISTING MILLWORK, P.C CASEWORK	D.S. & ASSOCIATED		

ANY STRUCTURAL MODIFICATIONS ADDITIONS OR REWORK WILL BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED WITHIN THE STATE OF

NEIGHBORING TENANTS IS UNDER SAME OWNERSHIP/MANAGEMENT AS PROPERTY DESIGNATED FOR DEMOLITION, HOWEVER NO DEMOLITION WILL BE PERMITTED THAT WILL HINDER ACCESS OR UTILITY SERVICES TO SAID TENANTS. IF SUCH AN INCIDENT IS TO OCCURE,

N DEVELOPED FROM G WITH ANY WORK, THE RACY OF THESE	8.	DEMOLITION WORK SHALL BE EXECUTED IN CONFORMANCE WITH ALL CODES AND ORDINANCES AS SET FORTH BY ALL AUTHORITIES HAVING JURISDICTION (AHJ)
G FIELD CONDITIONS CHITECT OF ANY /INGS AND ACTUAL DUCT A WALK-THROUGH OLITION TO GAIN AN OPE OF DEMOLITION	9.	THE CONTRACTOR SHALL NOT CUT EXISTING OR NEW STRUCTURAL WORK IN ANY MANNER THAT MAY RESULT IN A REDUCTION OF LOAD CARRYING CAPACITY OR LOAD/DEFLECTION RATIO. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ALL STRUCTURAL CUTS PRIOR TO EXECUTION SO THAT APPROVAL CAN BE OBTAINED IN ADVANCE FROM THE ARCHITECT AND STRUCTURAL ENGINEER
WORK (AS INDICATED IN CANNOT BE PERFORMED	10.	WHERE EXISTING CONSTRUCTION IS FOUND TO CONTAIN ANY HAZARDOUS MATERIAL, THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ARCHITECT IN WRITING. NOTE: REMOVAL, DISPOSAL AND REPLACEMENT OF THE HAZARDOUS MATERIAL IS
l Damage revealed T Could not be Seen ECT and/or engineer		THE SOLE RESPONSIBILITY OF THE OWNER, AND SHALL BE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS
NSTRUCTION ION WORK. DR RATED ASSEMBLIES E DAMAGED DURING	11.	THE CONTRACTOR SHALL REPLACE OR REPAIR ANY EXISTING-TO- REMAIN MATERIALS AND FINISHES (CEILING GRID, CEILING TILE, GYPSUM BOARD, FINISHES, DOORS, WINDOWS, FRAMES, WALL PROTECTION, ETC.) WHICH ARE DAMAGED DURING DEMOLITION OR CONSTRUCTION
O CONFORM TO THE ENTS. THE INTEGRITY OF AND ROOF ASSEMBLIES HALL BE MAINTAINED	12.	CONTRACTOR IS TO MAINTAIN REQUIRED MEANS OF EGRESS DURING DEMOLITION AND CONSTRUCTION
CTION (NOTE: AS 'ERIFY TESTED ASSEMBLIES	13.	LIMIT THE SPREAD OF DUST, DIRT AND DEBRIS. BROOM CLEAN ALL WORK AREAS ON A DAILY BASIS
CATED. TYPICAL WALL L, PLUMBING, ECURITY SYSTEMS CABINETRY, CASEWORK, AND THEIR ATTACHMENTS HOLES IN EXISTING-TO-	14.	THE OWNER HAS FIRST SALVAGABLE RIGHTS TO ALL ITEMS AND EQUIPMENT THAT ARE BEING DEMOLISHED. THE DEMOLITION CONTRACTOR SHALL VERIFY WITH THE OWNER WHICH ITEMS THEY WISH TO KEEP PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION WORK. THESE SALVAGED ITEMS ARE TO BE REMOVED IN GOOD CONDITION AND TURNED OVER TO THE OWNER.
ROOFS TO COMPLY D ASSEMBLIES, FIRE	15.	INSTALL TEMPORARY LIGHTING AS REQUIRED FOR WORK.
CTURAL INTEGRITY. NISH (WHERE NEW FINISH E, REMOVE THE EXISTING TO RECIEVE NEW FINISH). NBING DEMOLITION TO BE	16.	THE CONTRACTOR SHALL PROVIDE ALL STRUCTURAL SHORING, TEMPORARY SUPPORTS, AND BRACING REQUIRED FOR THE SAFE DEMOLITION AND ERECTION OF ARCHITECTURAL AND STRUCTURAL COMPONENTS. ALL SHORING, BRACING, AND TEMPORARY SUPPORTS ARE THE CONTRACTORS RESPONSIBILITY
AND ELECTRICAL		AND MUST COMPLY WITH ALL APPLICABLE SAFETY CODES, RULES, REGULATIONS, AND GUIDELINES.
Channeling Of Anical, plumbing, fire Ations and security	17.	PATCH/REPAIR & TUCKPOINT ALL EXIST. MASONRY TO REAMIN. CLEAN/SCRAPE EXIST. PAINT FOR NEW FINISHES.
DORS AND ROOFS	18.	ALL ROOF REPAIRS ARE TO BE PERFORMED BY A QUALIFIED ROOFING CONTRACTOR (APPROVED BY THE OWNER) AND/OR VERIFY ROOFING MANUFACTURERS WARRANTIES PRIOR TO ANY WORK. G.C. IS TO COORDINATE WORK AS REQUIRED. FLASH AND SEAL ALL ROOF PENETRATIONS
THE WORK IS BEING T, THE CONTRACTOR RUCTION (INCLUDING S, WINDOWS, FRAMES, ID ASSEMBLY RATINGS CONTRACTOR SHALL DDIFICATIONS NSTRUCTION (INCLUDING S, WINDOWS, FRAMES, S, SMOKE AND SOUND	19.	TO MAINTAIN ROOF WARRANTY ELECTRICAL METER, GAS METER AND WATER METER TO REMAIN
AND FRAMES WHICH DO ESIGNATED NCLUDING PROPER AL CONTRACTOR SHALL		

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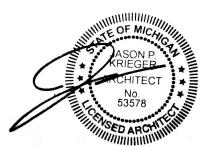
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Project: Project Name 19876 Mack Ave Grosse Pointe Woods MI			
Issued 8/11/2022	Description Permits	Bγ	

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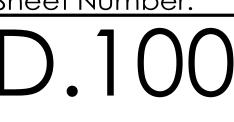
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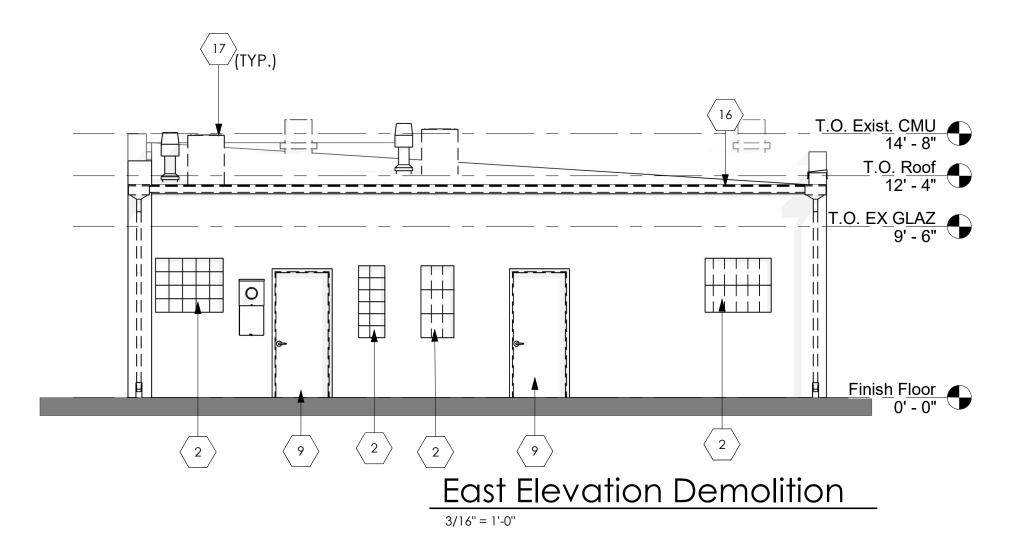
Demolition Floor Plan

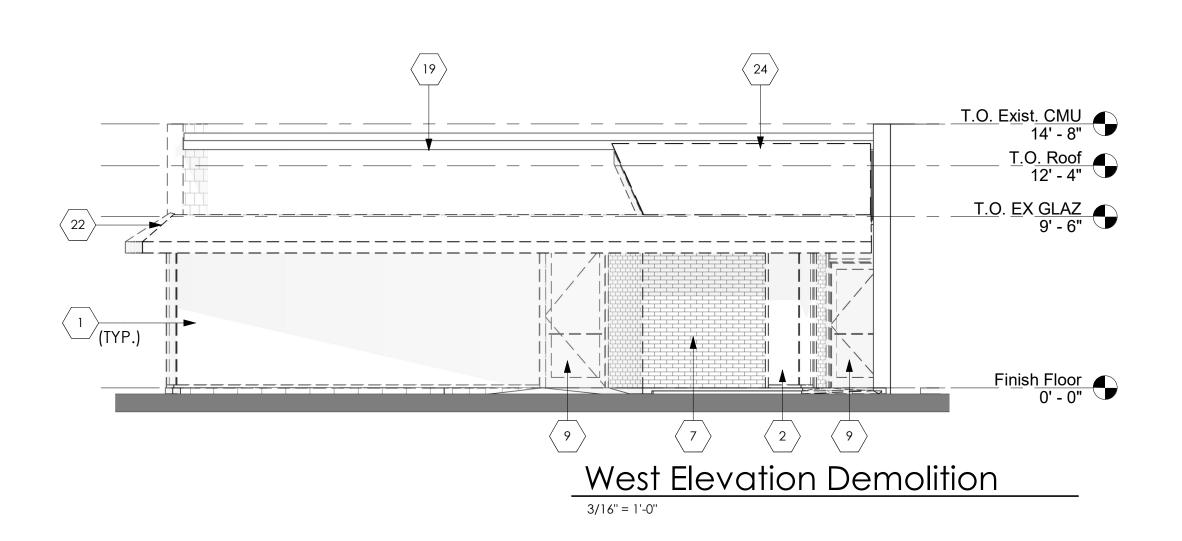
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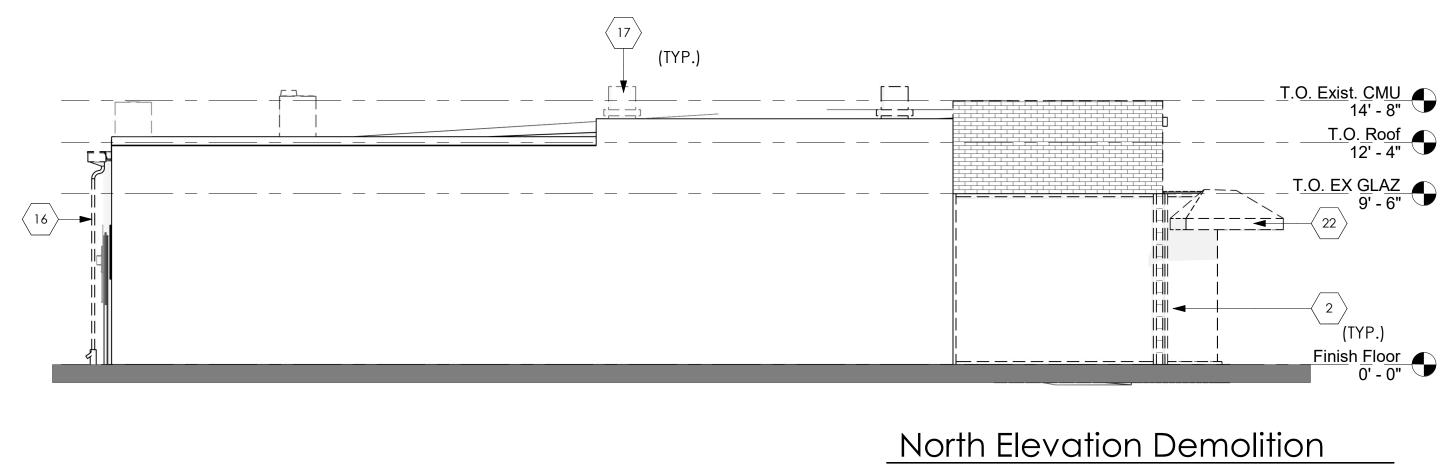
22-099 Scale:

1/4" = 1'-0"









D E M	OLITION SCOPE NOTES:
•	MICHIGAN. SUCH WORK WILL BE PART OF TH NEIGHBORING TENANTS IS UNDER SAME OWI DEMOLITION WILL BE PERMITTED THAT WILL H DEMOLITION WILL CEASE & THE INCIDENT SH.
D E M	OLITION GENERAL NOTES:
1.	THE DEMOLITION DRAWINGS HAVE BEEN DE EXISTING SCANS. PRIOR TO PROCEEDING WI CONTRACTOR SHALL VERIFY THE ACCURAC DRAWINGS IN COMPARISON TO EXISTING FI AND THEN IMMEDIATELY NOTIFY THE ARCHIT INCONSISTENCIES BETWEEN THESE DRAWING CONDITIONS. CONTRACTOR IS TO CONDUC OF THE ENTIRE BUILDING PRIOR TO DEMOLITI UNDERSTANDING OF THE COMPLETE SCOPE
2.	THE CONTRACTOR SHALL NOTIFY THE ARCHI DEMOLITION OR NEW CONSTRUCTION WOR THE CONSTRUCTION DOCUMENTS) THAT CAI DUE TO EXISTING FIELD CONDITIONS
3.	CONTRACTOR IS RESPONSIBLE TO INFORM TH AND/OR ENGINEER OF ANY STRUCTURAL DA DURING THE DEMOLITION PROCESS THAT CO DURING INITIAL SITE VISIT BY THE ARCHITECT AND MAY NOT BE INCLUDED IN THE CONSTR DOCUMENTS FOR NEW WORK/DEMOLITION
4.	IF ANY EXISTING FIREPROOFING AND / OR R. (WHICH ARE SUPPOSED TO REMAIN) ARE DA DEMOLITION, THEY SHALL BE REPAIRED TO C ORIGINAL FIRE PROTECTION REQUIREMENTS EXISTING RATED FLOOR, WALL, BARRIER, AND (WHICH AREA SUPPOSED TO REMAIN) SHALL THROUGHOUT ALL PHASES OF CONSTRUCTIO APPLICABLE, CONTACT ARCHITECT TO VERIF TO BE USED FOR REPAIRS)
5.	REMOVE EXIST. CONSTRUCTION AS INDICATI REMOVAL SHALL INCLUDE MECHANICAL, PL ELECTRICAL, COMMUNICATIONS AND SECU CONTAINED THEREIN. REMOVE DOORS, CAE WINDOWS, FRAMES, FINISHES, FIXTURES AND AS REQUIRED. AFTER REMOVAL, REPAIR HOL REMAIN FLOORS, WALLS, BARRIERS AND ROO WITH ORIGINAL FIRE, SMOKE AND SOUND AS PROTECTION REQUIREMENTS AND STRUCTUR PREPARE SURFACES TO RECIEVE NEW FINISH IS CALLED FOR ON AN EXISTING SURFACE, RE FINISH AND PREPARE EXISTING SURFACE TO F
6.	ANY NECESSARY ELECTRICAL AND PLUMBING COORDINATED WITH THE MECHANICAL AND CONTRACTORS.
7.	FOR EXTENT AND LOCATIONS FOR THE CHA EXISTING FLOOR SLABS, REFER TO MECHANIC PROTECTION, ELECTRICAL, COMMUNICATIC DRAWINGS. IF EXISTING PIPING OR CONDUT DESIRED CONNECTION) IS ENCOUNTERED W THE CONTRACTOR SHALL NOTIFY THE ARCHI CONTINUING WITH ANY WORK)
8.	AT ALL WALLS/PARTITIONS/BARRIERS, FLOOR WHICH ENCLOSE OR TOUCH SPACES WHERE PERFORMED AS A PART OF THIS PROJECT, TH SHALL VERIFY THAT THIS EXISTING CONSTRUC DAMPERS, DUCT PENETRATIONS, DOORS, WI ETC.) MEETS THE FIRE, SMOKE AND SOUND A DESIGNATED ON THESE DRAWINGS. THE CON ALSO MAKE ANY REPAIRS AND/OR MODIF NECESSARY TO BRING THE EXISTING CONSTR DAMPERS, DUCT PENETRATIONS, DOORS, WI ETC.) UP TO THE PROPER INDICATED FIRE, SM ASSEMBLY RATINGS. DOORS, WINDOWS AND NOT MEET THE REQUIREMENTS OF THE DESIG WALL/PARTITION/BARRIER ASSEMBLIES (INCL LABELS) SHALL BE REPLACED. THE GENERAL O DESIGNATE AN ALLOWANCE FOR THIS WC
DEM	OLITION KEYED NOTES:
1.	DESIGN INTENT IS FOR EXISTING GLAZING TO REMOVED AND REPLACED WITH NEW STORE SYSTEM V.I.F. AS NEEDED FOR EXISTING ROU OPENING SIZE AND LOCATION (TYP.)
2.	EXISTING GLAZING TO BE REMOVED AND RE WITH NEW WALL CONFIGURATION - CMU IN

	DESIGN INTENT IS FOR EXISTING GLAZING TO BE REMOVED AND REPLACED WITH NEW STOREFRONT	13.	REMOVE EXIST. PLANTERS & PREP FOR NEW CMU PLANTERS AND LANDSCAPING (TYP.)
	SYSTEM V.I.F. AS NEEDED FOR EXISTING ROUGH OPENING SIZE AND LOCATION (TYP.)	14.	EXISTING TILE & CARPETING TO BE REMOVED THROUGHOUT SPACE. PREP. FOR NEW FINISH
	EXISTING GLAZING TO BE REMOVED AND REPLACED WITH NEW WALL CONFIGURATION - CMU INFIL. or BRICK (REFER TO ELEVATIONS)	15.	REMOVE EXIST. PLANTERS & TREES AS REQUIRED FOR NEW STREET SCAPE
	EXIST. ELECTRICAL PANELS TO REMAIN. G.C. & ELECTRICIAN TO PREP FOR TENANT	16.	EXISTING GUTTER AND DOWNSPOUTS TO BE REMOVED AND REPLACED AS NEEDED, PAINTED TO MATCH ADJACENT MATERIAL (TYP)
	REMOVE EXIST. EQUIPMENT & ALL ASSOCIATED MEP ELEMENTS.	17.	REMOVE EXIST ROOF TOP EQUIPMENT & PREP AREA FOR ROOF CONSTRUCTION, G.C. TO PROVIDE TEMP, COVERS
	PLUMBING FIXTURES TO BE REMOVED. CAP ALL PLUMBING LINES - DEMO PLUMBING BACK TO WALL, FLOOR, AND/OR CLG. PREP OF FOR FUTURE TIE-IN		TO PREVENT ANY PRECIPITATION FROM ENTERING THE BUILDNG. PATCH AND REPAIR WITH LIKE MATERIALS WHERE DEMO HAS OCCURED (TYP)
	EXISTING COLUMNS TO REMAIN. VERIFY LOCATION IN FIELD.	18.	REMOVE EXISTING ROOFING. INSPECT THE SUBSTRATE & REPAIR AS REQUIRED. INSTALL NEW 60 MIL EPDM ROOFING
	EXISTING WALL TO BE DEMOLISHED. PATCH AND REPAIR WHERE DEMO HAS OCCURED. REMOVE ELECTRICAL AND PLUMBING WITHIN WALL. PREP FOR NEW WALL OR GLAZING CONFIGURATION	19.	REMOVE EXIST. SHINGLE ROOFING AND SOFFIT DOWN TO SUBROOF - PREP AREA FOR THE CONST. OF STANDING SEAM ROOFING AND SOFFIT
	EXISTING INTERIOR PERIMETER WALLCOVERING AND GYPSUM TO BE REMOVED. PREP. FOR NEW FINISH.	20.	NOT USED
	REMOVE ANY ASSOCIATED ELECTRICAL WITHIN WALL (TYP.)	21.	WALL IS LIKLEY STRUCTURAL BUT COULD NOT BE DETERMINED AT THE TIME OF INSPECTION. ONCE
	EXIST. DOOR & HARDWARE TO BE REMOVED. PATCH AND REPAIR WHERE DEMO HAS OCCURED - PREP. AREA FOR CMU INFIL.		EXPOSED, NOTIFY ARCHITECT. G.C. IS TO BUDGET FOR PROPER SHORING OF THE EXISTING STRUCTURE FOR WALL DEMOLITION
~		22.	DEMOLISH EXISTING AWNING
).	REMOVE EXISTING CEILING & ASSOCIATED LIGHTING, HVAC, ETC. THROUGHOUT (NOT SHOWN	23.	REMOVE EXIST SIDEWALK - PREP. AREA FOR NEW POUR
۱.	NOT USED	24.	REMOVE PORTION OF MANSARD ROOF PREP FOR NEW
2.	REMOVE EXISTING MILLWORK, P.O.S. & ASSOCIATED CASEWORK		PARAPET AND ROOF CONSTRUCTION

3/16" = 1'-0"

ons or rework will be designed by a structural engineer licensed within the state of the building permit process.

WNERSHIP/MANAGEMENT AS PROPERTY DESIGNATED FOR DEMOLITION, HOWEVER NO HINDER ACCESS OR UTILITY SERVICES TO SAID TENANTS. IF SUCH AN INCIDENT IS TO OCCURE, SHALL BE RECTIFIED IMMEDIATLY.

DEVELOPED FROM WITH ANY WORK, THE CY OF THESE	8.	DEMOLITION WORK SHALL BE EXECUTED IN CONFORMANCE WITH ALL CODES AND ORDINANCES AS SET FORTH BY ALL AUTHORITIES HAVING JURISDICTION (AHJ)
FIELD CONDITIONS HITECT OF ANY NGS AND ACTUAL JCT A WALK-THROUGH LITION TO GAIN AN PE OF DEMOLITION HITECT IF ANY	9.	THE CONTRACTOR SHALL NOT CUT EXISTING OR NEW STRUCTURAL WORK IN ANY MANNER THAT MAY RESULT IN A REDUCTION OF LOAD CARRYING CAPACITY OR LOAD/DEFLECTION RATIO. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ALL STRUCTURAL CUTS PRIOR TO EXECUTION SO THAT APPROVAL CAN BE OBTAINED IN ADVANCE FROM THE ARCHITECT AND STRUCTURAL ENGINEER
ORK (AS INDICATED IN CANNOT BE PERFORMED THE ARCHITECT DAMAGE REVEALED COULD NOT BE SEEN	10.	WHERE EXISTING CONSTRUCTION IS FOUND TO CONTAIN ANY HAZARDOUS MATERIAL, THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ARCHITECT IN WRITING. NOTE: REMOVAL, DISPOSAL AND REPLACEMENT OF THE HAZARDOUS MATERIAL IS THE SOLE RESPONSIBILITY OF THE OWNER, AND SHALL BE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS
CT AND/OR ENGINEER STRUCTION ON WORK. RATED ASSEMBLIES	11.	THE CONTRACTOR SHALL REPLACE OR REPAIR ANY EXISTING-TO- REMAIN MATERIALS AND FINISHES (CEILING GRID, CEILING TILE, GYPSUM BOARD, FINISHES, DOORS, WINDOWS, FRAMES, WALL PROTECTION, ETC.) WHICH ARE DAMAGED DURING DEMOLITION
DAMAGED DURING CONFORM TO THE TS. THE INTEGRITY OF ND ROOF ASSEMBLIES	12.	OR CONSTRUCTION CONTRACTOR IS TO MAINTAIN REQUIRED MEANS OF EGRESS DURING DEMOLITION AND CONSTRUCTION
ll be maintained tion (note: as rify tested assemblies	13.	limit the spread of dust, dirt and debris. Broom clean all Work areas on a daily basis
ATED. TYPICAL WALL PLUMBING, CURITY SYSTEMS ABINETRY, CASEWORK, ND THEIR ATTACHMENTS OLES IN EXISTING	14.	THE OWNER HAS FIRST SALVAGABLE RIGHTS TO ALL ITEMS AND EQUIPMENT THAT ARE BEING DEMOLISHED. THE DEMOLITION CONTRACTOR SHALL VERIFY WITH THE OWNER WHICH ITEMS THEY WISH TO KEEP PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION WORK. THESE SALVAGED ITEMS ARE TO BE REMOVED IN GOOD CONDITION AND TURNED OVER TO THE OWNER.
OOFS TO COMPLY ASSEMBLIES, FIRE	15.	INSTALL TEMPORARY LIGHTING AS REQUIRED FOR WORK.
URAL INTEGRITY. SH (WHERE NEW FINISH REMOVE THE EXISTING O RECIEVE NEW FINISH).	16.	THE CONTRACTOR SHALL PROVIDE ALL STRUCTURAL SHORING, TEMPORARY SUPPORTS, AND BRACING REQUIRED FOR THE SAFE DEMOLITION AND ERECTION OF ARCHITECTURAL AND STRUCTURAL COMPONENTS. ALL SHORING, BRACING, AND
ING DEMOLITION TO BE ND ELECTRICAL		TEMPORARY SUPPORTS ARE THE CONTRACTORS RESPONSIBILITY AND MUST COMPLY WITH ALL APPLICABLE SAFETY CODES, RULES, REGULATIONS, AND GUIDELINES.
HANNELING OF NICAL, PLUMBING, FIRE TIONS AND SECURITY	17.	PATCH/REPAIR & TUCKPOINT ALL EXIST. MASONRY TO REAMIN. CLEAN/SCRAPE EXIST. PAINT FOR NEW FINISHES.
UIT (OTHER THAN THE WHILE CHANNELING, HITECT (PRIOR TO	18.	ALL ROOF REPAIRS ARE TO BE PERFORMED BY A QUALIFIED ROOFING CONTRACTOR (APPROVED BY THE OWNER) AND/OR VERIFY ROOFING MANUFACTURERS WARRANTIES PRIOR TO ANY WORK. G.C. IS TO COORDINATE WORK AS REQUIRED. FLASH AND SEAL ALL ROOF PENETRATIONS
DRS AND ROOFS RE WORK IS BEING THE CONTRACTOR UCTION (INCLUDING WINDOWS, FRAMES, ASSEMBLY RATINGS	19.	TO MAINTAIN ROOF WARRANTY ELECTRICAL METER, GAS METER AND WATER METER TO REMAIN
Assembly ratings ONTRACTOR SHALL DIFICATIONS TRUCTION (INCLUDING WINDOWS, FRAMES, SMOKE AND SOUND ND FRAMES WHICH DO GNATED		
CLUDING PROPER L CONTRACTOR SHALL VORK		

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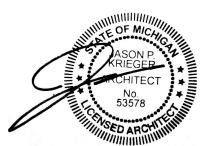
Verus Development Group

Project:

Project Name 19876 Mack Ave Grosse Pointe Woods MI

Issued	Description	Ву
8/11/2022	Permits	

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North Arrow:

Sheet Title:

Demolition Elevations

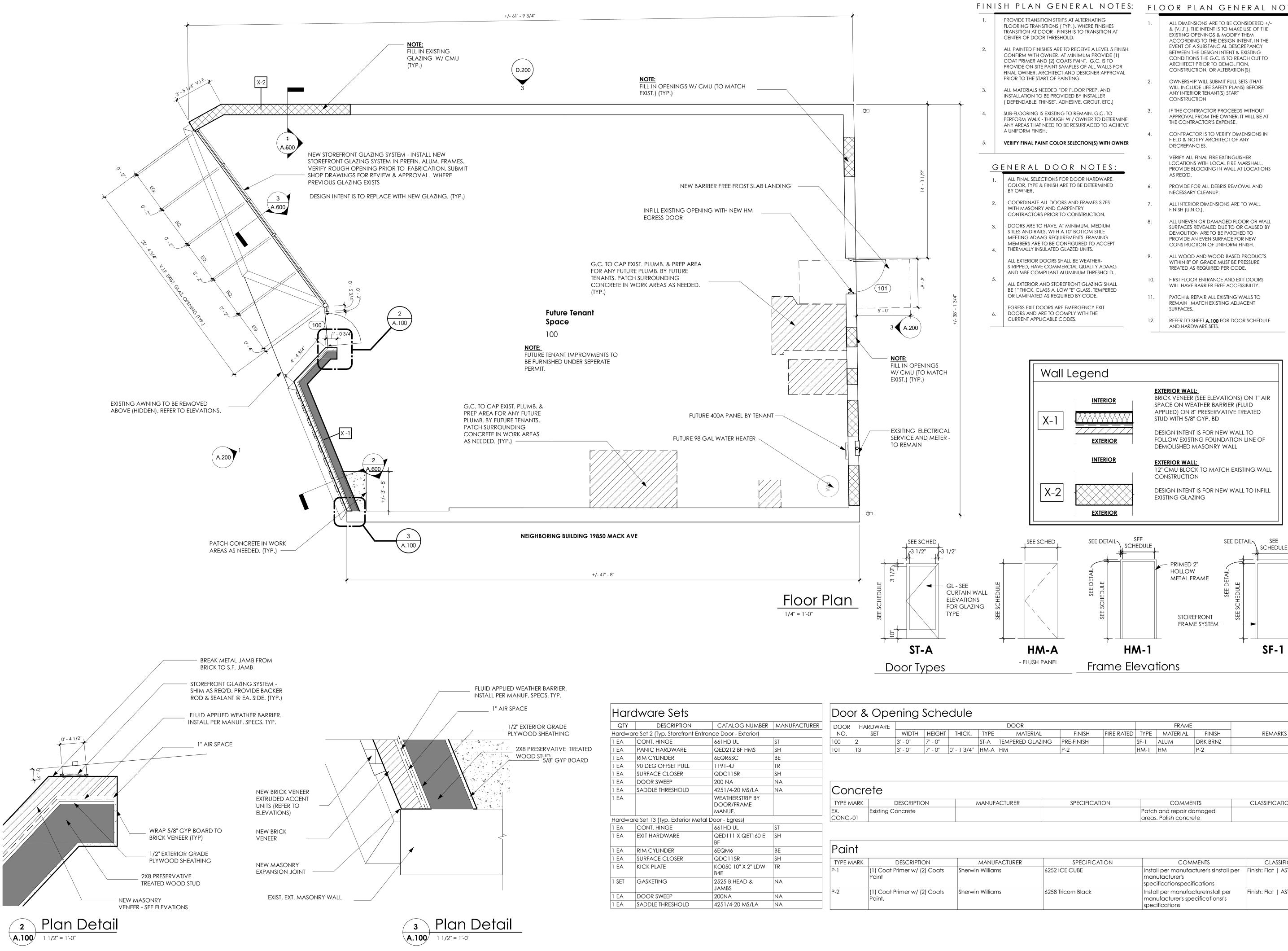
Project Number:

22-099

Scale:

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AN GENERAL NOTES:	FL
RANSITION STRIPS AT ALTERNATING TRANSITIONS (TYP.). WHERE FINISHES A AT DOOR - FINISH IS TO TRANSITION AT 5 DOOR THRESHOLD.	1.
D FINISHES ARE TO RECEIVE A LEVEL 5 FINISH. WITH OWNER. AT MINIMUM PROVIDE (1) MER AND (2) COATS PAINT. G.C. IS TO DN-SITE PAINT SAMPLES OF ALL WALLS FOR NER, ARCHITECT AND DESIGNER APPROVAL HE START OF PAINTING.	2.
IALS NEEDED FOR FLOOR PREP. AND ON TO BE PROVIDED BY INSTALLER BLE, THINSET, ADHESIVE, GROUT, ETC.)	2.
RING IS EXISTING TO REMAIN. G.C. TO WALK - THOUGH W / OWNER TO DETERMINE 5 THAT NEED TO BE RESURFACED TO ACHIEVE 4 FINISH.	3.
AL PAINT COLOR SELECTION(S) WITH OWNER	4.
AL DOOR NOTES:	5.
- SELECTIONS FOR DOOR HARDWARE, TYPE & FINISH ARE TO BE DETERMINED ER.	6.
NATE ALL DOORS AND FRAMES SIZES SONRY AND CARPENTRY CTORS PRIOR TO CONSTRUCTION.	7.
ARE TO HAVE, AT MINIMUM, MEDIUM D RAILS, WITH A 10" BOTTOM STILE ADAAG REQUIREMENTS. FRAMING S ARE TO BE CONFIGURED TO ACCEPT LY INSULATED GLAZED UNITS.	8.
RIOR DOORS SHALL BE WEATHER- , HAVE COMMERCIAL QUALITY ADAAG 5 COMPLIANT ALUMINUM THRESHOLD.	9.
RIOR AND STOREFRONT GLAZING SHALL CK, CLASS A, LOW "E" GLASS, TEMPERED NATED AS REQUIRED BY CODE.	10. 11.
XIT DOORS ARE EMERGENCY EXIT	

- LOOR PLAN GENERAL NOTES:

					FRAME		
rial		FINISH	FIRE RATED	TYPE	MATERIAL	FINISH	REMARKS
SLAZ	ING	PRE-FINISH		SF-1	ALUM	DRK BRNZ	
		P-2		HM-1	НМ	P-2	
		SPECIFICATIO	NC		COMMEN	NTS	CLASSIFICATION

 SPECIFICATION	COMMENTS	CLASSIFICATION
6252 ICE CUBE	Install per manufacturer's sInstall per manufacturer's specificationspecifications	Finish: Flat ASTM D523

Finish: Flat | ASTM D523

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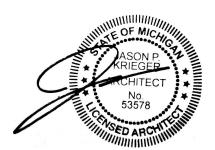
Verus Development Group

Project:

Project Name 19876 Mack Ave Grosse Pointe Woods MI

Description	Ву
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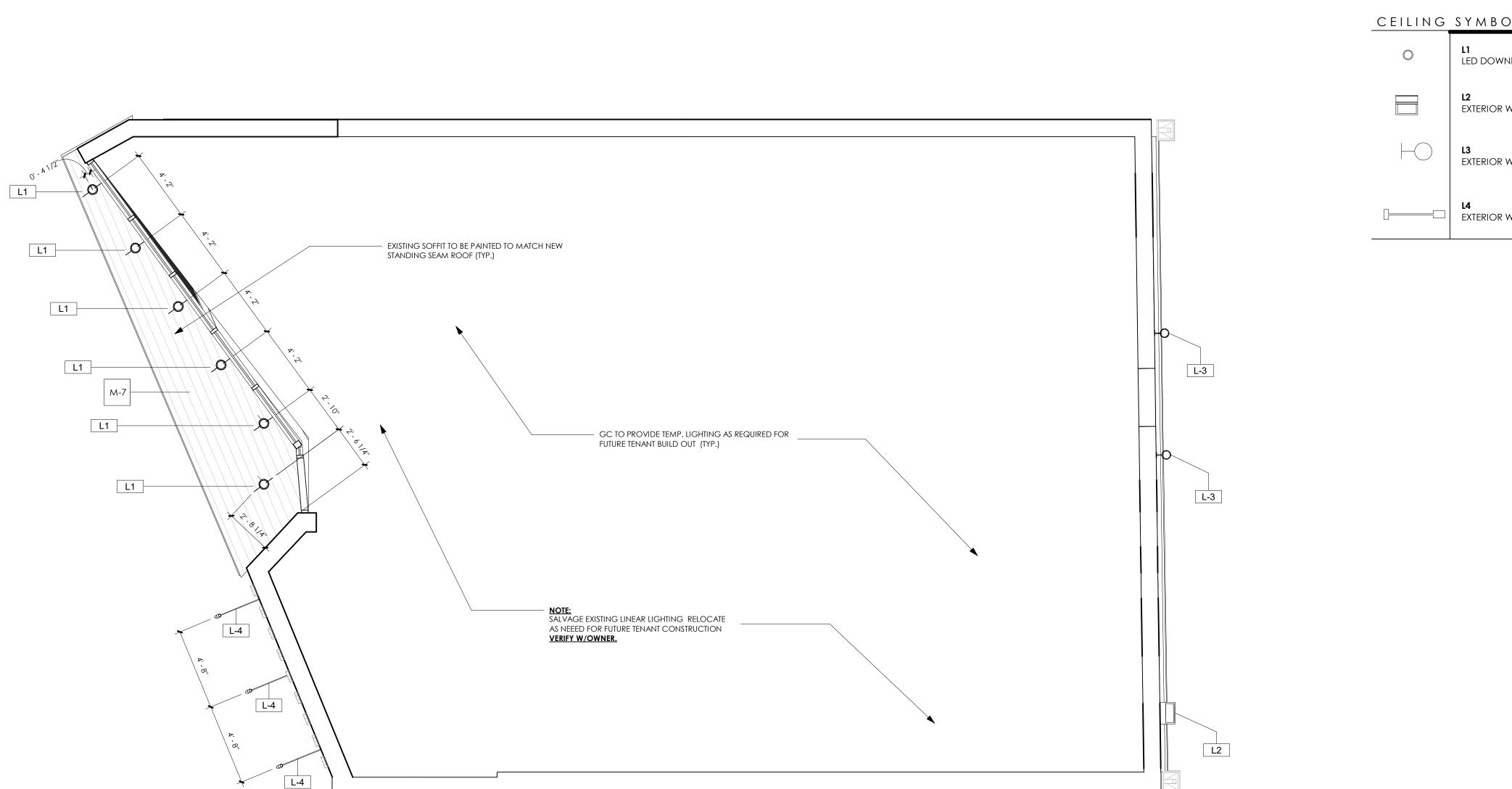
North Arrow:



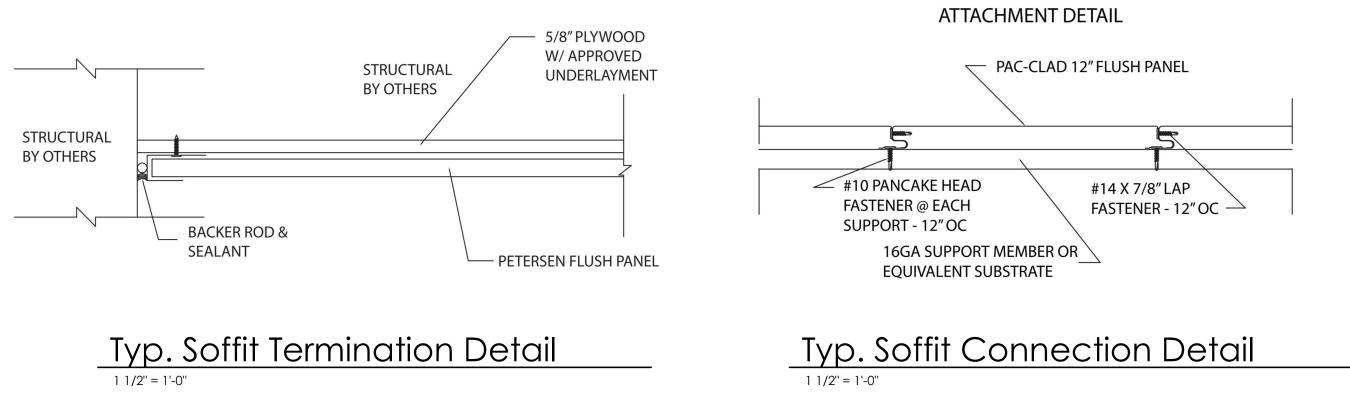
Project Number: 22-099 Scale: As indicated







A.101 - Lighting Fixture Schedule						
MARK	DESCRIPTION	MANUFACTURER	MODEL	LAMP	FINISH	COMMENT
L1	RECESSED DOWNLIGHT	LITHONIA	LDN6	LED	PRE-FIN. CLEAR AN,	Exterior
L2	WALL PACK	LITHONIA	WPX	LED	BLACK POWDER	Exterior
L-3	WALL MOUNTED EXTERIOR SCONCE FIXTURE	luminis	SY602	LED	BLACK POWDER	Exterior
L-4	GOOSENECK LIGHT FIXTURE	HYDREL	PLACER	LED	BLACK POWDER	Exterior





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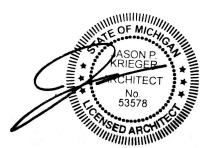
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North Arrow:



Reflected Ceiling Plan

Project Number: 22-099

Scale:

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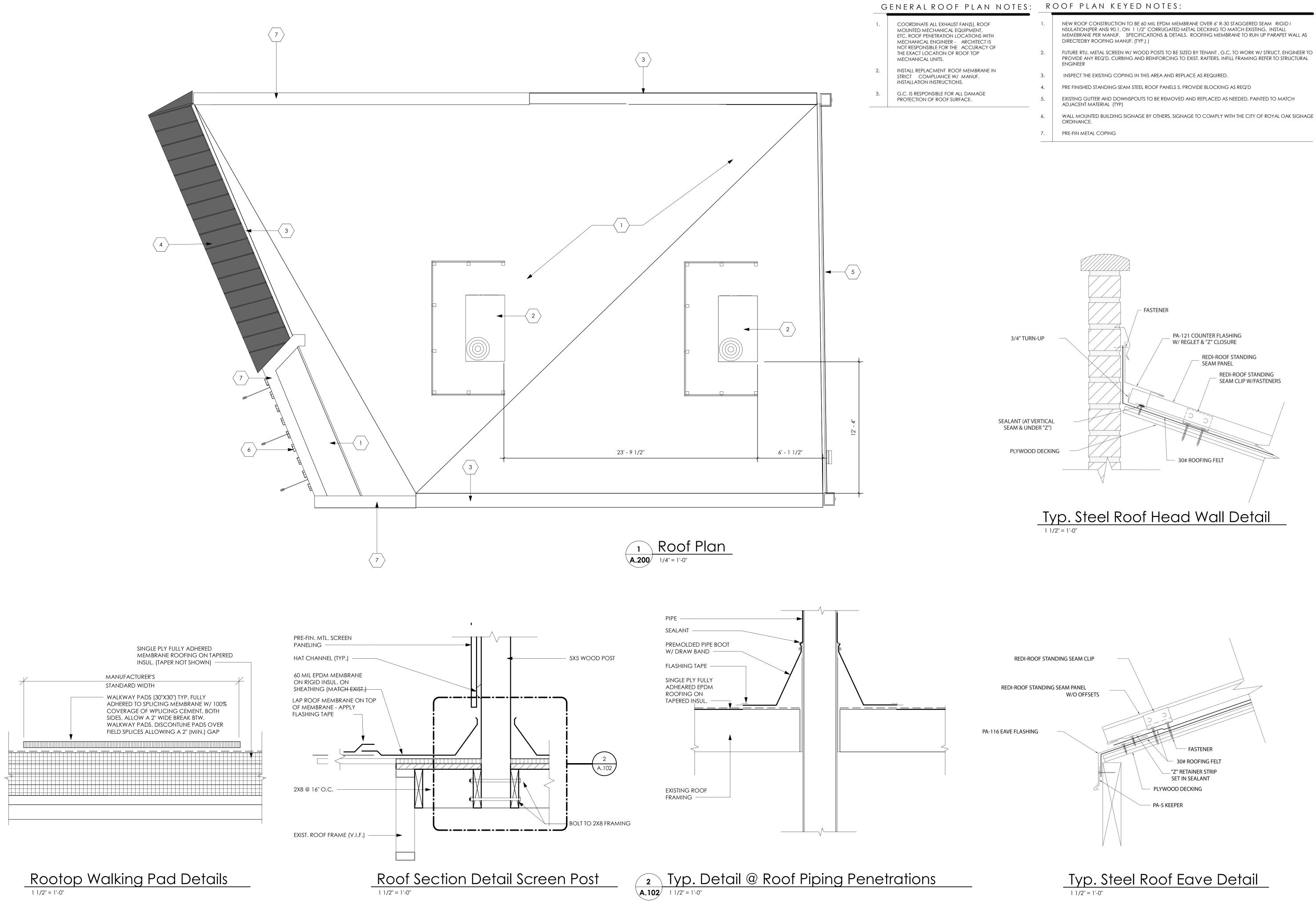
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OL LEGEND:	GE	NERAL NOTES:
WNLIGHT	1.	SEE ELECTRICAL DOCUMENTS FOR ALL LIGHT FIXTURE SPECIFICATIONS
	2.	ROOM FINISH AND INTERIOR MATERIALS TO BE FURNISHED BY FUTURE TENANT
OR WALL PACK	3.	COORDINATE INSTALLATION OF CEILING SYSTEM WITH MECHANICAL AND ELECTRICAL SYSTEMS. PROVIDE SUPPORT PER MANUFACTURER RECOMMENDATIONS TO SUPPORT FINISHES.
PR WALL WASH SCONCE FIXTURE	4.	ALL DIMENSIONAL LOCATIONS OR DEVICES SHALL BE TO THE CENTERLINE OF THE DEVICE UNLESS OTHERWISE NOTED.
R WALL WASH FIXTURE	5.	G.C. IS TO PROVIDE ALL UNISTRUT, THREADED ROD, CLAMPS AND OTHER MISC. ITEMS REQUIRED TO SUSPEND ALL CEILING MOUNTED ITEMS.
	6.	EXISTING HVAC DUCTING TO BE DEMOLISHED TO SOURCE. FUTURE HVAC SYSTEM IS TO BE DESIGNED BY MECHANICAL ENGINEER LICENSED IN THE STATE OF MICHIGAN AS NEEDED FOR FUTURE TENANT SPACE. CONTRACTOR IS TO PULL REQUIRED PERMITS AND PROVIDE ANY REQUIRED DOCUMENTS.
	7.	CLEAN, SCRAPE, PREP. EXIST. CEILING DECK AND JOISTS AS REQUIRED @ EXPOSED CEILING AREAS.
	8.	AT EXPOSED CEILING AREAS, RUN ALL NEW WIRING, CONDUIT AND MECHANICAL DUCT WORK IN A NEAT AND CLEAN MANNER.
	9.	PATCH ANY OPENINGS IN ROOF FRAMING NEEDED FOR NEW ROOF TOP EQUIPMENT.
	10.	CONTRACTOR IS TO FIELD VERIFY HEIGHT OF ALL SUSPENDED,

WALL MOUNTED LIGHT FIXTURES.

30# ROOFING FELT - FLUSH/REVEAL PANEL FASTENER PLYWOOD DECKING — SOFFIT PANEL PA-305 FASCIA TO SOFFIT FLASHING U CLOSURE FOR SOFFIT Typ. Soffit To Roofing Detail

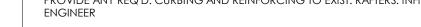


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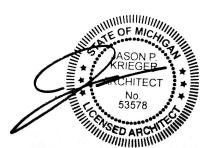
- WALL MOUNTED BUILDING SIGNAGE BY OTHERS. SIGNAGE TO COMPLY WITH THE CITY OF ROYAL OAK SIGNAGE

Project:

Project Name 19876 Mack Ave Grosse Pointe Woods MI

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Seal:



Note:

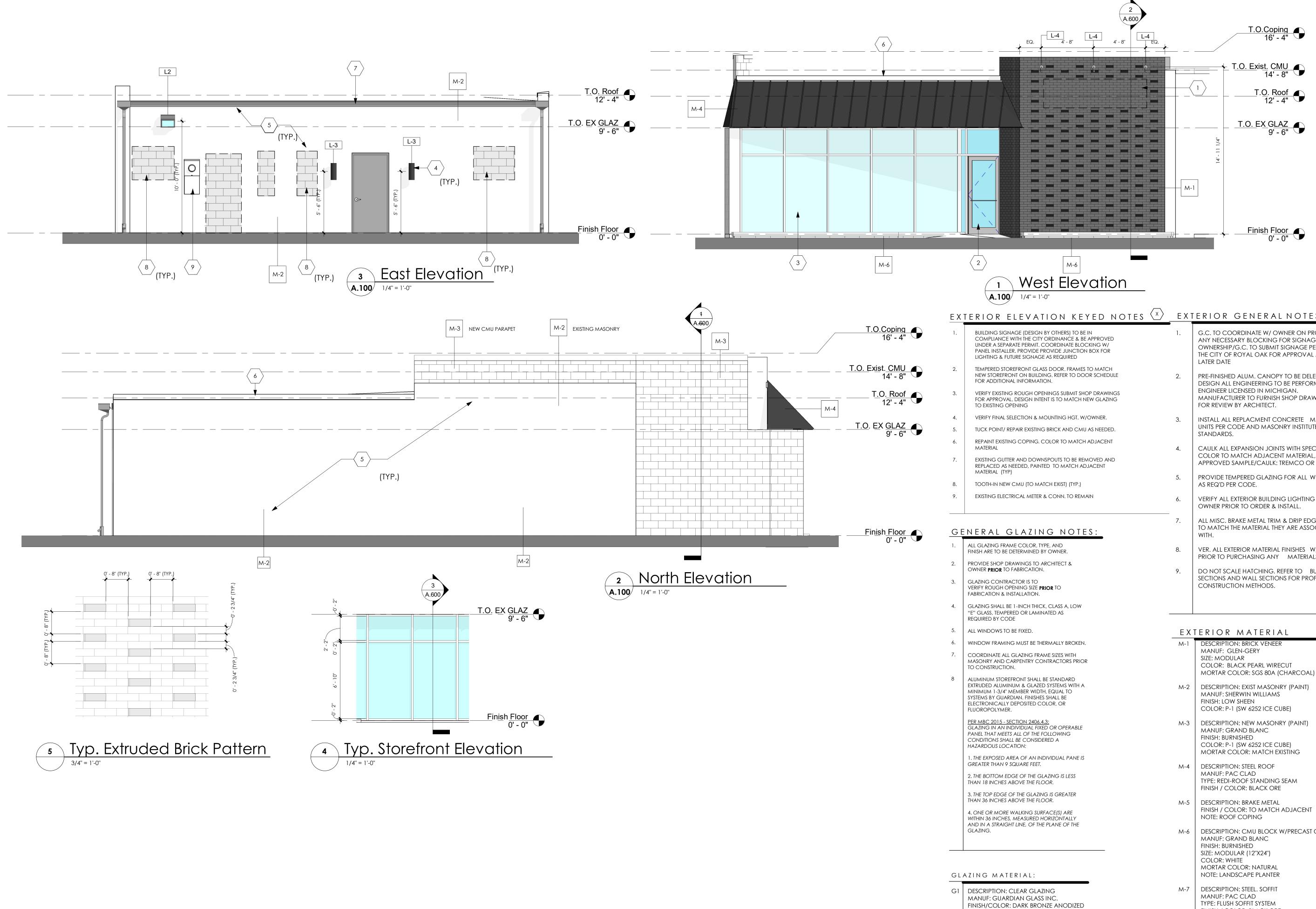
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North Arrow:



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KEYED NOTES 🗴	EXT	ERIOR GENERAL NOTES
S) TO BE IN CE & BE APPROVED ATE BLOCKING W/ JNCTION BOX FOR IRED	1.	G.C. TO COORDINATE W/ OWNER ON PROVIDING ANY NECESSARY BLOCKING FOR SIGNAGE. OWNERSHIP/G.C. TO SUBMIT SIGNAGE PERMIT TO THE CITY OF ROYAL OAK FOR APPROVAL AT A LATER DATE
FRAMES TO MATCH 2 TO DOOR SCHEDULE	2.	PRE-FINISHED ALUM. CANOPY TO BE DELEGATED DESIGN ALL ENGINEERING TO BE PERFORMED BY
BMIT SHOP DRAWINGS 1ATCH NEW GLAZING		ENGINEER LICENSED IN MICHIGAN. MANUFACTURER TO FURNISH SHOP DRAWINGS FOR REVIEW BY ARCHITECT.
HGT. W/OWNER.	3.	INSTALL ALL REPLACMENT CONCRETE MASONRY
ND CMU AS NEEDED.		UNITS PER CODE AND MASONRY INSTITUTE STANDARDS.
MATCH ADJACENT	4.	CAULK ALL EXPANSION JOINTS WITH SPECIFIED COLOR TO MATCH ADJACENT MATERIAL, OR
ATCH ADJACENT	5.	APPROVED SAMPLE/CAULK: TREMCO OR EQ.) PROVIDE TEMPERED GLAZING FOR ALL WINDOWS
(TYP.)	0.	AS REQ'D PER CODE.
TO REMAIN	6.	VERIFY ALL EXTERIOR BUILDING LIGHTING WITH OWNER PRIOR TO ORDER & INSTALL.
OTES:	7.	ALL MISC. BRAKE METAL TRIM & DRIP EDGES ARE TO MATCH THE MATERIAL THEY ARE ASSOCIATED WITH.
•	8.	VER. ALL EXTERIOR MATERIAL FINISHES W/ OWNER PRIOR TO PURCHASING ANY MATERIALS.
&	9.	DO NOT SCALE HATCHING. REFER TO BUILDING SECTIONS AND WALL SECTIONS FOR PROPER CONSTRUCTION METHODS.
IOW		
, LOW		
, LOW	F X	TERIOR MATERIAL X
, LOW	E X M-1	TERIOR MATERIAL X DESCRIPTION: BRICK VENEER
BROKEN.		
BROKEN.		DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT
BROKEN. VITH RS PRIOR	M-1	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL)
BROKEN. VITH RS PRIOR		DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT) MANUF: SHERWIN WILLIAMS
BROKEN. VITH RS PRIOR ARD WITH A	M-1	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT)
BROKEN. VITH RS PRIOR WITH A TO	M-1	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT) MANUF: SHERWIN WILLIAMS FINISH: LOW SHEEN
SROKEN. VITH RS PRIOR WITH A TO	M-1 M-2	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT) MANUF: SHERWIN WILLIAMS FINISH: LOW SHEEN COLOR: P-1 (SW 6252 ICE CUBE) DESCRIPTION: NEW MASONRY (PAINT) MANUF: GRAND BLANC
BROKEN. VITH RS PRIOR ARD WITH A	M-1 M-2	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT) MANUF: SHERWIN WILLIAMS FINISH: LOW SHEEN COLOR: P-1 (SW 6252 ICE CUBE) DESCRIPTION: NEW MASONRY (PAINT) MANUF: GRAND BLANC FINISH: BURNISHED COLOR: P-1 (SW 6252 ICE CUBE)
SROKEN. VITH RS PRIOR WITH A TO	M-1 M-2	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT) MANUF: SHERWIN WILLIAMS FINISH: LOW SHEEN COLOR: P-1 (SW 6252 ICE CUBE) DESCRIPTION: NEW MASONRY (PAINT) MANUF: GRAND BLANC FINISH: BURNISHED
BROKEN. VITH RS PRIOR ARD WITH A TO	M-1 M-2	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT) MANUF: SHERWIN WILLIAMS FINISH: LOW SHEEN COLOR: P-1 (SW 6252 ICE CUBE) DESCRIPTION: NEW MASONRY (PAINT) MANUF: GRAND BLANC FINISH: BURNISHED COLOR: P-1 (SW 6252 ICE CUBE) MORTAR COLOR: MATCH EXISTING DESCRIPTION: STEEL ROOF MANUF: PAC CLAD TYPE: REDI-ROOF STANDING SEAM
BROKEN. VITH RS PRIOR ARD WITH A TO ERABLE G	M-1 M-2 M-3	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT) MANUF: SHERWIN WILLIAMS FINISH: LOW SHEEN COLOR: P-1 (SW 6252 ICE CUBE) DESCRIPTION: NEW MASONRY (PAINT) MANUF: GRAND BLANC FINISH: BURNISHED COLOR: P-1 (SW 6252 ICE CUBE) MORTAR COLOR: MATCH EXISTING DESCRIPTION: STEEL ROOF MANUF: PAC CLAD
BROKEN. VITH RS PRIOR ARD WITH A TO ERABLE G PANE IS LESS	M-1 M-2 M-3	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT) MANUF: SHERWIN WILLIAMS FINISH: LOW SHEEN COLOR: P-1 (SW 6252 ICE CUBE) DESCRIPTION: NEW MASONRY (PAINT) MANUF: GRAND BLANC FINISH: BURNISHED COLOR: P-1 (SW 6252 ICE CUBE) MORTAR COLOR: MATCH EXISTING DESCRIPTION: STEEL ROOF MANUF: PAC CLAD TYPE: REDI-ROOF STANDING SEAM FINISH / COLOR: BLACK ORE DESCRIPTION: BRAKE METAL
ROKEN. VITH RS PRIOR WITH A TO ERABLE G PANE IS LESS NTER RE ALLY	M-1 M-2 M-3 M-4	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT) MANUF: SHERWIN WILLIAMS FINISH: LOW SHEEN COLOR: P-1 (SW 6252 ICE CUBE) DESCRIPTION: NEW MASONRY (PAINT) MANUF: GRAND BLANC FINISH: BURNISHED COLOR: P-1 (SW 6252 ICE CUBE) MORTAR COLOR: MATCH EXISTING DESCRIPTION: STEEL ROOF MANUF: PAC CLAD TYPE: REDI-ROOF STANDING SEAM FINISH / COLOR: BLACK ORE
BROKEN. VITH RS PRIOR ARD WITH A TO ERABLE G PANE IS LESS ATER RE	M-1 M-2 M-3 M-4	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT) MANUF: SHERWIN WILLIAMS FINISH: LOW SHEEN COLOR: P-1 (SW 6252 ICE CUBE) DESCRIPTION: NEW MASONRY (PAINT) MANUF: GRAND BLANC FINISH: BURNISHED COLOR: P-1 (SW 6252 ICE CUBE) MORTAR COLOR: MATCH EXISTING DESCRIPTION: STEEL ROOF MANUF: PAC CLAD TYPE: REDI-ROOF STANDING SEAM FINISH / COLOR: BLACK ORE DESCRIPTION: BRAKE METAL FINISH / COLOR: TO MATCH ADJACENT NOTE: ROOF COPING DESCRIPTION: CMU BLOCK W/PRECAST CONCRETE CAF
ROKEN. VITH RS PRIOR WITH A TO ERABLE G PANE IS LESS NTER RE ALLY	M-1 M-2 M-3 M-4 M-5	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT) MANUF: SHERWIN WILLIAMS FINISH: LOW SHEEN COLOR: P-1 (SW 6252 ICE CUBE) DESCRIPTION: NEW MASONRY (PAINT) MANUF: GRAND BLANC FINISH: BURNISHED COLOR: P-1 (SW 6252 ICE CUBE) MORTAR COLOR: MATCH EXISTING DESCRIPTION: STEEL ROOF MANUF: PAC CLAD TYPE: REDI-ROOF STANDING SEAM FINISH / COLOR: BLACK ORE DESCRIPTION: BRAKE METAL FINISH / COLOR: TO MATCH ADJACENT NOTE: ROOF COPING DESCRIPTION: CMU BLOCK W/PRECAST CONCRETE CAF MANUF: GRAND BLANC
ROKEN. VITH RS PRIOR WITH A TO ERABLE G PANE IS LESS NTER RE ALLY	M-1 M-2 M-3 M-4 M-5	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT) MANUF: SHERWIN WILLIAMS FINISH: LOW SHEEN COLOR: P-1 (SW 6252 ICE CUBE) DESCRIPTION: NEW MASONRY (PAINT) MANUF: GRAND BLANC FINISH: BURNISHED COLOR: P-1 (SW 6252 ICE CUBE) MORTAR COLOR: MATCH EXISTING DESCRIPTION: STEEL ROOF MANUF: PAC CLAD TYPE: REDI-ROOF STANDING SEAM FINISH / COLOR: BLACK ORE DESCRIPTION: BRAKE METAL FINISH / COLOR: TO MATCH ADJACENT NOTE: ROOF COPING DESCRIPTION: CMU BLOCK W/PRECAST CONCRETE CAF MANUF: GRAND BLANC FINISH: BURNISHED SIZE: MODULAR (12"X24")
ROKEN. VITH RS PRIOR WITH A TO ERABLE G PANE IS LESS NTER RE ALLY	M-1 M-2 M-3 M-4 M-5	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT) MANUF: SHERWIN WILLIAMS FINISH: LOW SHEEN COLOR: P-1 (SW 6252 ICE CUBE) DESCRIPTION: NEW MASONRY (PAINT) MANUF: GRAND BLANC FINISH: BURNISHED COLOR: P-1 (SW 6252 ICE CUBE) MORTAR COLOR: MATCH EXISTING DESCRIPTION: STEEL ROOF MANUF: PAC CLAD TYPE: REDI-ROOF STANDING SEAM FINISH / COLOR: BLACK ORE DESCRIPTION: BRAKE METAL FINISH / COLOR: TO MATCH ADJACENT NOTE: ROOF COPING DESCRIPTION: CMU BLOCK W/PRECAST CONCRETE CAF MANUF: GRAND BLANC FINISH: BURNISHED
ROKEN. VITH RS PRIOR WITH A TO ERABLE G PANE IS LESS NTER RE ALLY	M-1 M-2 M-3 M-4 M-5	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT) MANUF: SHERWIN WILLIAMS FINISH: LOW SHEEN COLOR: P-1 (SW 6252 ICE CUBE) DESCRIPTION: NEW MASONRY (PAINT) MANUF: GRAND BLANC FINISH: BURNISHED COLOR: P-1 (SW 6252 ICE CUBE) MORTAR COLOR: MATCH EXISTING DESCRIPTION: STEEL ROOF MANUF: PAC CLAD TYPE: REDI-ROOF STANDING SEAM FINISH / COLOR: BLACK ORE DESCRIPTION: BRAKE METAL FINISH / COLOR: TO MATCH ADJACENT NOTE: ROOF COPING DESCRIPTION: CMU BLOCK W/PRECAST CONCRETE CAF MANUF: GRAND BLANC FINISH: BURNISHED SIZE: MODULAR (12"X24") COLOR: WHITE
ROKEN. VITH RS PRIOR WITH A TO ERABLE G PANE IS LESS NTER RE ALLY	M-1 M-2 M-3 M-4 M-5	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT) MANUF: SHERWIN WILLIAMS FINISH: LOW SHEEN COLOR: P-1 (SW 6252 ICE CUBE) DESCRIPTION: NEW MASONRY (PAINT) MANUF: GRAND BLANC FINISH: BURNISHED COLOR: P-1 (SW 6252 ICE CUBE) MORTAR COLOR: MATCH EXISTING DESCRIPTION: STEEL ROOF MANUF: PAC CLAD TYPE: REDI-ROOF STANDING SEAM FINISH / COLOR: BLACK ORE DESCRIPTION: BRAKE METAL FINISH / COLOR: TO MATCH ADJACENT NOTE: ROOF COPING DESCRIPTION: CMU BLOCK W/PRECAST CONCRETE CAF MANUF: GRAND BLANC FINISH J COLOR: NATURAL NOTE: LANDSCAPE PLANTER DESCRIPTION: STEEL. SOFFIT
ROKEN. VITH RS PRIOR WITH A TO ERABLE G PANE IS LESS NTER RE ALLY	M-1 M-2 M-3 M-4 M-5 M-6	DESCRIPTION: BRICK VENEER MANUF: GLEN-GERY SIZE: MODULAR COLOR: BLACK PEARL WIRECUT MORTAR COLOR: SGS 80A (CHARCOAL) DESCRIPTION: EXIST MASONRY (PAINT) MANUF: SHERWIN WILLIAMS FINISH: LOW SHEEN COLOR: P-1 (SW 6252 ICE CUBE) DESCRIPTION: NEW MASONRY (PAINT) MANUF: GRAND BLANC FINISH: BURNISHED COLOR: P-1 (SW 6252 ICE CUBE) MORTAR COLOR: MATCH EXISTING DESCRIPTION: STEEL ROOF MANUF: PAC CLAD TYPE: REDI-ROOF STANDING SEAM FINISH / COLOR: BLACK ORE DESCRIPTION: BRAKE METAL FINISH / COLOR: TO MATCH ADJACENT NOTE: ROOF COPING DESCRIPTION: CMU BLOCK W/PRECAST CONCRETE CAF MANUF: GRAND BLANC FINISH: BURNISHED SIZE: MODULAR (12"X24") COLOR: WHITE MORTAR COLOR: NATURAL NOTE: LANDSCAPE PLANTER

KRIEGER KLATT Architects

2120 E. 11 Mile Rd. | Royal Oak, MI 48067 **P:** 248.414.9270 **F:** 248.414.9275 www.kriegerklatt.com

Client:

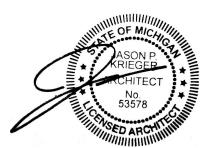
Verus Development Group

Project:

Project Name 19876 Mack Ave Grosse Pointe Woods MI

Issued	Description	Ву
8/11/2022	Permits	

Seal:



Note: Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field. North Arrow:

Sheet Title:

Elevations

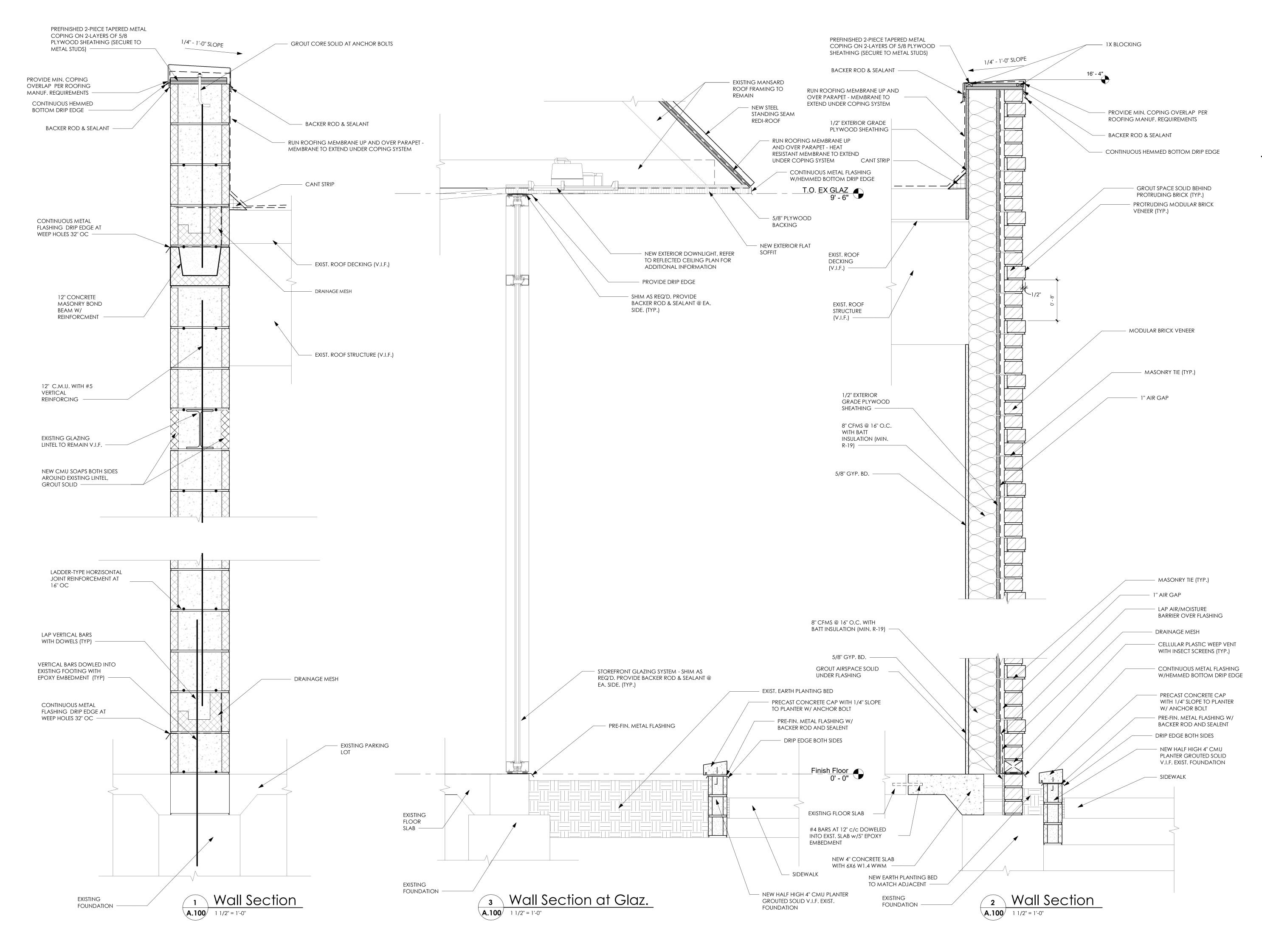
Project Number:

22-099

Scale:

As indicated





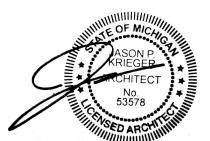
KRIEGER KLATT Architects

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Client: Verus Development Group

Project Name 19876 Mack Ave Grosse Pointe Woods MI

Seal:



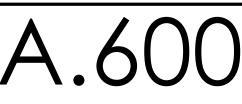
Note: Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field. North Arrow:

Sheet Title: Wall Sections

Project Number: 22-099

Scale:

1 1/2" = 1'-0"



DIVISION 01 - GENERAL REQUIREMENTS **SECTION 01 2500**

		G.
		Н.
	RELATED DOCUMENTS:	
1.02	DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND OTHER DIVISION 1 SPECIFICATION SECTIONS, APPLY TO WORK OF THIS SECTION.	I. J.
1.03	SUBMITTALS	J.
1.04	SUBSTITUTION REQUEST SUBMITTAL: REQUESTS FOR SUBSTITUTION WILL BE CONSIDERED IF PRESENTED TO THE ARCHITECT AT	К.
	LEAST 10 DAYS IN ADVANCE OF BID DUE DATE. A. Identify the product, or the fabrication to be replaced in each request. Include related Specification Section and Drawing numbers. Provide complete	L.
	documentation showing compliance with the requirements for substitutions, and the following information, as appropriate:	М.
	 Product Data, including Drawings and descriptions of products, fabrication and installation procedures. Samples, where applicable or requested 	3.02 GE
	 Samples, where applicable or requested. A detailed comparison of significant qualities of the proposed substitution with those of the Work specified. Significant qualities may include 	A.
	elements such as size, weight, durability, performance and visual effect.	В.
	 Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Owner and separate Contractors that will become necessary to accommodate the proposed substitution. 	
	 A Statement indicating the substitution's effect on the Contractor's Construction Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time. 	
	6. Cost information, including all related costs under this Contract and excluding Architect's redesign costs, net change, if any, in the Contract	
	Sum, and waiving all claims for additional costs related to the substitution which subsequently became apparent. 7. Certification by the Contractor that the substitution proposed is appropriate in every significant respect to that required by the Contract	
	Documents, and that it will perform adequately in the application indicated. Include the Contractor's waiver of rights to additional payment or	
	time that may subsequently become necessary because of the failure of the substitution to perform adequately.	
	 B. Product Presentation: Conduct a presentation at the Architect's office if required by the Architect to prove appropriateness to the specified product. C. Architect's Action: Within one (1) week of receipt of Bids, the Architect may request additional information or documentation necessary for evaluation 	0
	of the request. Within two (2) weeks of receipt of the request, or one (1) week of receipt of the additional information or documentation, which ever is	C. D.
	later, the Architect will notify the Contractor of acceptance or rejection of the proposed substitution. If a decision on use of a proposed substitute is not made or obtained within the time allocated, use the product specified by name. If acceptance is made prior to award, it will be included in the	D.
	Contract Amount. If acceptance is made after Award, it will be in the form of a Change Order.	
	D.	E.
	GENERAL REQUIREMENTS FOR SUBSTITUTIONS	3.03 EX
	E. Substitutions During Bidding:	A.
	 Substitutions shall be included in the proposal under the following conditions only and shall follow all requirements of "Acceptance of Substitutions." 	В.
	a. When the Contractor is unable to obtain competitive prices from more than one of the specified manufacturers.	C.
	 b. When the Contractor knows of another product of equal or better quality and performance. c. When the Contractor has had unsatisfactory experience with one or more of the specified products or has reason to believe that the 	D.
	c. When the Contractor has had unsatisfactory experience with one or more of the specified products or has reason to believe that the specified Manufacturer will not provide the necessary guarantees or assume responsibility for performance.	E.
	F. Substitutions After Contract:	F.
	 Substitutions proposed after Award of the contract will only be considered for the following reasons. A substantial advantage is offered the Owner, in terms of cost, time, energy conservation or other considerations of merit, after deducting 	G.
	offsetting responsibilities the Owner may be required to bear. Additional responsibilities for the Owner may include additional compensation to	3.04 DE
	the Architect for redesign and evaluation services, increased cost of other construction by the Owner or separate Contractors, and similar considerations.	А.
	G. Acceptance of Substitutions:	В.
	1. Substitutions will be considered for any manufacturer except those followed by the words "No Substitutions" in the Specifications.	C.
	 In all cases where substitutions are proposed by the Contractor, it shall be the sole responsibility of the Contractor to provide adequate data and samples as required by the Architect to evaluate the substitution. 	
	3. The Architect shall not be obliged to justify his reason for rejecting a proposed substitution.	
	4. In the event that a substitution is accepted conditionally on the Contractor's agreement to assume full responsibility for equality and performance, the Contract shall provide a full value warranty and agree to make good all damages resulting from the failure of the substitute	
	product.	PART 1
	H. ACCEPTANCE OF MATERIALS AND MANUFACTURERS	1.01 SU
	 Standard Materials: Architect's acceptance applies to the Manufacturer only and shall not act to permit any deviation from other requirements of the Specifications. 	А.
	2. Acceptance will be based on the Manufacturer's specifications at time of issuance of Bidding Documents. Deviations from such specifications	1.02 AC
	shall be considered as a substitution. 3. Requests for acceptance shall be in tabular form stating Specification paragraph and material selected, except as otherwise provided.	A.
	4. Shop Drawings shall not indicate any material for which acceptance has not been received, unless accompanied by a separate request for	В.
	approval. In no case shall Architect's review and return of Shop Drawings constitute and acceptance of either specified or substitute manufacturers or materials.	C.
	J. Materials Involving Supplementary Warranty of Maintenance Contract:	1.03 INF
	 These materials shall be submitted as a request for acceptance over the signature of a qualified technical representative in the direct employ of the Manufacturer of such other person as the manufacturer may authorize in writing. Request for acceptance shall contain the following 	A.
	information.	В.
	 Name of project. Name of Contractor, Subcontractor or other party to whom material is furnished. 	
	c. Reference to Specification Section and Article where material is specified and other Contract Documents necessary for identification.	
	 d. Statement of acceptance of documents, conditions, and performance requirements: 1) Statement that documents as issued are in accordance with manufacturer's recommendations for use of specified materials, or 	1.04 QU
	2) Recommended modification of detail, use, application or for substitution of different product by same manufacturer as being more	А.
	suitable for the performance requirements of the warranty. e. Statement that detailed installation instructions will be provided.	1.05 PR
	f. Extent of job site technical services, consultants or instructors proposed, if any.	А.
	 g. Statement that warranty will be provided. h. Special provisions required to keep warranty in force. 	
	2. Requests for acceptance may be in the form of a letter including the above items and addressed to the subcontractor responsible for installation	B.
	of the material, or may be according to a sample form of Material Proposal, provided by the Architect. 3. Upon receipt of the manufacturer's proposal, the subcontractor shall add his own statement agreeing to comply with the manufacturer's	PART 2 2.01 MA
	requirements and warranting his own workmanship.	2.01 MA A.
	4. The Contractor shall submit letter of endorsement of copies of all documents, including letters of comment, to the Architect for approval. In the event that the request for approval recommends a change in the work, modification of detail, or substitution of material, the Contractor shall	
	indicate his concurrence with the change as being within the scope of the Contract or indicate the change in the Contract Sum for making such change, or state his objections to the change.	В.
	END OF SECTION 01 2500	2.02 CO
	DIVISION 02 - EXISTING CONDITIONS	A.
	SECTION 02 4100	_
	DEMOLITION	B.
	T 1 GENERAL SECTION INCLUDES	C.
1.01	A. Building demolition excluding removal of hazardous materials and toxic substances.	
	 Belective demolition of built site elements. 	2.03 CO
	C. Abandonment and removal of existing utilities and utility structures.	А. В.
1.02	RELATED REQUIREMENTS	D.
	A. Section 01 1000 - Summary: Limitations on Contractor's use of site and premises.	C.
	B. Section 01 1000 - Summary: Description of items to be salvaged or removed for re-use by Contractor.	~
	C. Section 01 5000 - Temporary Facilities and Controls: Site fences, security, protective barriers, and waste removal. D. Section 01 5713 - Temporary Erosion and Sediment Control	D.
	 D. Section 01 5713 - Temporary Erosion and Sediment Control. E. Section 01 6000 - Product Requirements: Handling and storage of items removed for salvage and relocation. 	E.
	 F. Section 01 5000 - Froduct Requirements. Franding and storage of terms removed for savage and relocation. F. Section 01 7000 - Execution and Closeout Requirements: Project conditions; protection of bench marks, survey control points, and existing 	-
	construction to remain; reinstallation of removed products; temporary bracing and shoring.	F.
	G. Section 01 7419 - Construction Waste Management and Disposal: Limitations on disposal of removed materials; requirements for recycling.	G.
	H. Section 31 2200 - Grading: Topsoil removal.	Н.
1 02	 Section 31 2323 - Fill: Fill material for filling holes, pits, and excavations generated as a result of removal operations. REFERENCE STANDARDS 	١.
	A. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations 2022.	
	r 2 PRODUCTS	
2.01	MATERIALS	

A. Fill Material: As specified in the Geotechnical report.

PART 3 EXECUTION

3.01 SCOPE

- A. The Contractor (Bidder) shall visit the site with the appropriate trades in order to fully understand the scope of work entailed. The contractor will incldue the demolision and/or relocation of all items required to complete the project regardles of what is shown on the drawings.
- B. The intent is to maintain as much of the existing public Right Of Way construction as possible.
- C. Remove the entire building and dispose of waste per code.
- D. Remove paving and curbs as required to accomplish new work.

	E. Break up paving within site boundaries to permit natural moisture drainage; leave pieces not larger than 1 square yard (1 square meter).	a. Grace Construction Products, W. R. Gra b. Sonneborn Products, BASF Aktiengesel
	 F. Within area of new construction, remove foundation walls and footings to a minimum of 5 feet ([] mm) below finished grade. G. Outside area of new construction, remove foundation walls and footings to a minimum of 5 feet ([] mm) below finished grade. 	M. Water: Potable.
	 Break up concrete slabs on grade within site boundaries to permit natural moisture drainage; leave pieces not larger than 1 square yard (1 square 	2.04 REINFORCEMENT
	meter).	 A. Uncoated Steel Reinforcing Bars: ASTM A 615/ G B. Masonry Joint Reinforcement, General: ASTM A15
	Remove existing fences and gates as required.Verify the extend of any off site work with the drawing or as required to complete the project. if any additional work is required that is not indicated in	1. Interior Walls: Hot-dip galvanized, carbon ste
	the contract documents, provide a clarification in the bid submission.	 Exterior Walls: Hot-dip galvanized, carbon ster Wire Size for Side Rods: 0.148-inch diameter
	K. Confirm existing materials on site can be used as fill or sub-base with a written report from the Geotechnical Engineer.	 Wire Size for Cross Rods: 0.148-inch diameter Wire Size for Veneer Ties: 0.148-inch diameter
	L. Remove other items indicated, for salvage, relocation, and recycling.M. Fill excavations, open pits, and holes in ground areas generated as result of removals, using specified fill; compact fill as specified in Section 31	6. Spacing of Cross Rods, Tabs, and Cross Tie
	2200.	7. Provide in lengths of not less than 10 feet.
	GENERAL PROCEDURES AND PROJECT CONDITIONS	C. Masonry Joint Reinforcement for Single-Wythe Ma and intersections of walls.
	 A. Comply with other requirements specified in Section 01 7000. B. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public. 	2.05 TIES AND ANCHORS
	1. Obtain required permits.	 A. Materials: Provide ties and anchors specified in thi 1. Hot-Dip Galvanized, Carbon-Steel Wire: with
	 Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures. 	B. Wire Ties, General: Unless otherwise indicated, size
	 Provide, erect, and maintain temporary barriers and security devices. Conduct operations to minimize effects on and interference with adjacent structures and occupants. 	face. Outer ends of wires are bent 90 degrees and
	5. Do not close or obstruct roadways or sidewalks without permit.	C. Individual Wire Ties: Rectangular units with closed 1. Wire: Fabricate from .148 inch diameter, hot-
	 Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations. 	D. Adjustable Anchors for Connecting to Structural St
	 Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property. 	compression forces perpendicular to plane of wall. 1. Anchor Section for Welding to Steel Frame: 0
	C. Do not begin removal until receipt of notification to proceed from Owner.	 Tie Section: Triangular-shaped wire tie, sized wire.
	D. Protect existing structures and other elements that are not to be removed.	E. Adjustable Anchors for Connecting to Concrete: P
	 Provide bracing and shoring. Prevent movement or settlement of adjacent structures. 	forces perpendicular to plane of wall. 1. Connector Section: Dovetail tabs for inserting
	3. Stop work immediately if adjacent structures appear to be in danger.	sheet, galvanized after fabrication.
	 E. Partial Removal of Paving and Curbs: Neatly saw cut at right angle to surface. EXISTING UTILITIES 	 Tie Section: Triangular-shaped wire tie, sized wire.
13	A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.	F. Partition Top anchors: 0.105-inch- thick metal plate
	B. Protect existing utilities to remain from damage.	fitted over rod that allows rod to move in and out o G. Rigid Anchors: Fabricate from steel bars 1-1/2 incl
	C. Do not disrupt public utilities without permit from authority having jurisdiction.	otherwise indicated.
	D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to Owner.	Corrosion Protection: Hot-dip galvanized to c 2.06 EMBEDDED FLASHING MATERIALS
	 E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to Owner. F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent 	A. Metal Flashing: Provide metal flashing complying v
	construction, using substantial barricades if necessary.	Trim" and as follows: 1. Provide Veneer Metal Drip Edge: Fabricate fr
	G. Remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.	ASTM A-167. Extend at least 3 inches into w
	DEBRIS AND WASTE REMOVAL A. Remove debris, junk, and trash from site.	wall flexible flashing to drip edge- see installa B. Flexible Flashing: Use one of the following unless
	B. Leave site in clean condition, ready for subsequent work.	1. Rubberized-Asphalt Flashing: Composite flas
	C. Clean up spillage and wind-blown debris from public and private lands.	density, cross-laminated polyethylene film to a. Products: Subject to compliance with rec
	END OF SECTION 02 4100	 Advanced Building Products Inc.; P Carlisle Coatings & Waterproofing;
	DIVISION 04 - MASONRY SECTION 04 2000	3) Dayton Superior Corporation, Dur-
	UNIT MASONRY	 Fiberweb, Clark Hammerbeam Cor Grace Construction Products, W. R
	T 1 GENERAL SUMMARY	 6) Heckmann Building Products Inc.; 1 7) Hohmann & Barnard, Inc.; Textrofla
	A. Section Includes:	 8) W. R. Meadows, Inc.; Air-Shield Th 9) Polyguard Products, Inc.; Polyguard
2	1. Concrete masonry units (CMU's). ACTION SUBMITTALS	10) Sandell Manufacturing Co., Inc.; Sa
	A. Product Data: For each type of product indicated.	11) Williams Products, Inc.; Everlastic I C. Adhesives, Primers, and Seam Tapes for Flashing
	B. Shop Drawings: For reinforcing steel. Detail bending and placement of unit masonry reinforcing bars. Comply with ACI 315, "Details and Detailing of	for bonding flashing sheets to each other and to su
	Concrete Reinforcement. C. Samples for Verification: For each type and color of exposed masonry unit and colored mortar.	2.07 MISCELLANEOUS MASONRY ACCESSORIES
	INFORMATIONAL SUBMITTALS	A. Compressible Filler: Premolded filler strips complyB. Preformed Control-Joint Gaskets: Made from styre
	A. Material Certificates: For each type and size of product indicated. For masonry units include data on material properties.	designed to fit standard sash block and to maintain
	 B. Mix Designs: For each type of mortar and grout. Include description of type and proportions of ingredients. 1. Include test reports for mortar mixes required to comply with property specification. Test according to ASTM C 109/C 109M for compressive 	C. Bond-Breaker Strips: Asphalt-saturated, organic ro
	strength, ASTM C 1506 for water retention, and ASTM C 91 for air content.	D. Weep/Vent Products: Use one of the following unleE. Single Wythe CMU wall high-density polyethylene
4	 Include test reports, according to ASTM C 1019, for grout mixes required to comply with compressive strength requirement. QUALITY ASSURANCE 	designed to direct moisture to the integrated weep Weeps per each unit. Install per manufacturer's in
	A. Masonry Standard: Comply with ACI 530.1/ASCE 6/TMS 602 unless modified by requirements in the Contract Documents.	F. Products: Subject to compliance with requirements
	PROJECT CONDITIONS	G. Blok-Flash by Mortar Net Solutions.
	A. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Remove and replace unit masonry damaged by frost or by freezing conditions. Comply with cold-weather construction requirements contained in Masonry	2.08 MASONRY CLEANERS
	Standards Joint Committee's specification pertaining to ACI 530.1/ASCE 6, Article 1.8C/TMS 602.	A. Proprietary Acidic Cleaner: Manufacturer's standar construction stains from new masonry without disc
	 B. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602. T 2 PRODUCTS 	cleaner manufacturer and manufacturer of mason 1. Manufacturers: Subject to compliance with re
	MASONRY UNITS, GENERAL	a. Diedrich Technologies, Inc.b. EaCo Chem, Inc.
	A. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to contain chips, cracks, or other defects exceeding limits stated in the standard. Do not use units where such defects will be exposed in the completed Work.	c. ProSoCo, Inc.
	B. Fire-Resistance Ratings: Where indicated, provide units that comply with requirements for fire-resistance ratings indicated as determined by testing	2.09 MORTAR AND GROUT MIXES
	according to ASTM E 119, by equivalent masonry thickness, or by other means, as acceptable to authorities having jurisdiction.	 A. General: Do not use admixtures, including pigmen other admixtures, unless otherwise indicated.
	CONCRETE MASONRY UNITS A. Regional Materials: CMUs shall be manufactured within 500 miles of Project site from aggregates and cement that have been extracted, harvested,	 Do not use calcium chloride in mortar or grou Use masonry cement mortar unless otherwise
	or recovered, as well as manufactured, within 500 miles of Project site.	3. For exterior masonry, use masonry cement n
	B. Shapes: Provide shapes indicated and for lintels, corners, jambs, sashes, movement joints, headers, bonding, and other special conditions.	 For reinforced masonry, use masonry cemen Add cold-weather admixture (if used) at same
	 C. CMUs: ASTM C 90, or Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 2150 psi. 1. Density Classification: medium weight, grade N, Type I units. Singe face sizes of 7 5/8" x 7 5/8" x 15 5/8", 3 5/8" x 7 5/8" x 15 5/8", 5 5/8" x 7 	mortar color is consistent.
	5/8" x 15 5/8" as detailed on drawings.	B. Preblended, Dry Mortar Mix: Furnish dry mortar ing proportions, and thoroughly blend ingredients before
	A. General: Provide one of the following:	C. Mortar for Unit Masonry: Comply with ASTM C 270
	 B. Concrete Lintels: ASTM C 1623, matching CMUs in color, texture, and density classification; and with reinforcing bars indicated. Provide lintels with 	Provide the following types of mortar for applicatio 1. For masonry below grade or in contact with e
	net-area compressive strength not less than CMUs.	 For reinforced masonry, use Type S For exterior, above-grade, load-bearing and r
	C. Concrete Lintels: Precast or formed-in-place concrete lintels complying with requirements in Section 033000 "Cast-in-Place Concrete and with reinforcing bars indicated.	bearing partitions; and for other applications
	D. Masonry Lintels: Prefabricated or built-in-place masonry lintels made from bond beam CMUs with reinforcing bars placed as indicated and filled with	 For interior non-load-bearing partitions, Type For Veneers Type N
	coarse grout. E. Regional Materials: Aggregate for mortar and grout cement, and lime shall be extracted, harvested, or recovered, as well as manufactured, within 500	D. Grout for Unit Masonry: Comply with ASTM C 476
	miles of Project site.	1. Use grout of type indicated or, if not otherwis ACI 530.1/ASCE 6/TMS 602 for dimensions of
	F. Portland cement: ASTM C 150, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.	2. Proportion grout in accordance with ASTM C psi.
	G. Hydrated Lime: ASTM C 207, Type S.	3. Provide grout with a slump of 8 to 11 inches a
	H. Portland Cement-Lime Mix: Packaged blend of Portland cement and hydrated lime containing no other ingredients.	PART 3 EXECUTION
	 Masonry Cement: ASTM C 91/ ASTM C 270. Products: Subject to compliance with requirements, provide one of the following: 	3.01 INSTALLATION, GENERAL A. Use full-size units without cutting if possible. If cutt
	a. Lafarge North America Inc.; Lafarge Masonry Cement	driven saws; provide clean, sharp, unchipped edge
	 b. St. Marys Masonry Cement 1) OR 	surfaces and, where possible, cut edges concealeB. Select and arrange units for exposed unit masonry
	c. Spec-Mix Masonry Cement and Sand Mortar	C. Masonry protection: Cover top of unfinished maso
	 J. Aggregate for Mortar: ASTM C 144. 1. For joints less than 1/4 inch thick, use aggregate graded with 100 percent passing the No. 16 sieve. 	3.02 TOLERANCES
	 Colored-Mortar Aggregates: Natural sand or crushed stone of color necessary to produce required mortar color. Use standard grey mortor for standard cmu and color 1 split face cmu. Use colored mortor equal to True Tone cement colors MC58 blond for color 2 splitface area. 	 A. Dimensions and Locations of Elements: 1. For dimensions in cross section or elevation
	K. Aggregate for Grout: ASTM C 404.	2. For location of elements in plan do not vary fi

L. Cold-Weather Admixture: No chloride, noncorrosive, accelerating admixture complying with ASTM C 494/C 494M, ASTM C1384.02A, Type C, and recommended by manufacturer for use in masonry mortar of composition indicated. Alternative to cold weather protection must be preapproved by Architect. Contractor shall provide verification their acceptability by Laboratory testing with mortar mix used.

1. Products: Subject to compliance with requirements, provide one of the following:

: ASTM A 615/ Grade 60. eneral: ASTM A153/ A153M-B2. anized, carbon steel. anized, carbon steel.

148-inch diameter.

.148-inch diameter.

).148-inch diameter. abs, and Cross Ties: Not more than 16 inches o.c.

or Single-Wythe Masonry: ladder type with single pair of side rods. Provide prefabricated corner pieces at all corners

ors specified in this article that are made from materials that comply with the following unless otherwise indicated. n-Steel Wire: with ASTM A 153/A 153M, Class B-2 coating.

rwise indicated, size wire ties to extend at least halfway through veneer but with at least 5/8-inch cover on outside ent 90 degrees and extend 2 inches parallel to face of veneer. r units with closed ends and not less than 4 inches wide.

inch diameter, hot-dip galvanized steel wire.

ing to Structural Steel Framing: Provide anchors that allow vertical or horizontal adjustment but resist tension and ar to plane of wall.

g to Steel Frame: Crimped 1/4-inch- diameter, hot-dip galvanized steel wire. ped wire tie, sized to extend within 1 inch of masonry face, made from 0.187-inch diameter, hot-dip galvanized steel

ing to Concrete: Provide anchors that allow vertical or horizontal adjustment but resist tension and compression

I tabs for inserting into dovetail slots in concrete and attached to tie section; formed from 0.060-inch- thick, steel catior ped wire tie, sized to extend within 1 inch of masonry face, made from 0.187-inch diameter, hot-dip galvanized steel

n- thick metal plate with 3/8-inch- diameter metal rod 6 inches long welded to plate and with closed-end plastic tube move in and out of tube. Fabricate from steel, hot-dip galvanized after fabrication.

teel bars 1-1/2 inches wide by 1/4 inch thick by 24 inches long, with ends turned up 2 inches or with cross pins unless

dip galvanized to comply with ASTM A 153/A 153M.

ashing complying with SMACNA's "Architectural Sheet Metal Manual" Section 076200 "Sheet Metal Flashing and

Edge: Fabricate from 8 foot long pieces of 28 gauge Type 304 grade, dull finish stainless steel which complies with ast 3 inches into wall and 1/2 inch out from wall, with outer edge bent down 30 degrees and hemmed. Apply the thru edge- see installation.

e following unless otherwise indicated:

ng: Composite flashing product consisting of a pliable, adhesive rubberized-asphalt compound, bonded to a highlyethylene film to produce an overall thickness of not less than 0.040 inch. ompliance with requirements, provide one of the following:

ng Products Inc.; Peel-N-Seal.

& Waterproofing; CCW-705-TWF Thru-Wall Flashing. Corporation, Dur-O-Wal Division; Dur-O-Barrier Thru-Wall Flashing.

Hammerbeam Corp.; Aquaflash 500.

ion Products, W. R. Grace & Co. - Conn.; Perm-A-Barrier Wall Flashing. ing Products Inc.; No. 82 Rubberized-Asphalt Thru-Wall Flashing.

ard, Inc.; Textroflash.

Inc.; Air-Shield Thru-Wall Flashing.

icts, Inc.; Polyguard 400.

turing Co., Inc.; Sando-Seal. , Inc.; Everlastic MF-40.

Tapes for Flashings: Flashing manufacturer's standard products or products recommended by flashing manufacturer ach other and to substrates.

CESSORIES

filler strips complying with ASTM D 1056, Grade 2A1; compressible up to 35 percent; formulated from neoprene. Made from styrene-butadiene-rubber compound, complying with ASTM D 2000, Designation M2AA-805 and ock and to maintain lateral stability in masonry wall; size and configuration as indicated.

turated, organic roofing felt complying with ASTM D 226, Type I (No. 15 asphalt felt) for an Alternative Control Joint. f the following unless otherwise indicated:

nsity polyethylene composition Molded flashing. 0625 inch thick flashing pan with .3125 inch perimeter flanges, e integrated weep concave spouts with 45 degree drip edge extensions. Drainage mattes and bug guards included. manufacturer's installation of drainage systems directions.

with requirements, provide the following:

ons.

ufacturer's standard-strength cleaner designed for removing mortar/grout stains, efflorescence, and other new isonry without discoloring or damaging masonry surfaces. Use product expressly approved for intended use by Ifacturer of masonry units being cleaned. compliance with requirements, provide products by one of the following:

, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or ise indicated.

e in mortar or grout.

r unless otherwise indicated. nasonry cement mortar.

masonry cement mortar.

e (if used) at same rate for all mortar that will be exposed to view, regardless of weather conditions, to ensure that

nish dry mortar ingredients in form of a preblended mix. Measure quantities by weight to ensure accurate d ingredients before delivering to Project site.

/ with ASTM C 270, Proportion by volume Specification, or ASTM C91 Standard Specification for Masonry Cement. ortar for applications stated unless another type is indicated. r in contact with earth, use Type M

oad-bearing and non-load-bearing walls and parapet walls; for interior load-bearing walls; for interior non-loadother applications where another type is not indicated, use Type N. ng partitions, Type N.

d or, if not otherwise indicated, of type (fine or coarse) that will comply with Table 1.15.1 in

2 for dimensions of grout spaces and pour height. ance with ASTM C 476, paragraph 4.2.2 for specified 28-day compressive strength indicated, but not less than 3000

of 8 to 11 inches as measured according to ASTM C 143/C 143M.

g if possible. If cutting is required to provide a continuous pattern or to fit adjoining construction, cut units with motoro, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut edges concealed.

osed unit masonry to produce a uniform blend of colors and textures.

f unfinished masonry work to protect it from the weather.

ments:

B. Lines and Levels:

ection or elevation do not vary by more than plus 1/2 inch or minus 1/4 inch. For location of elements in plan do not vary from that indicated by more than plus or minus 1/2 inch. 3. For location of elements in elevation do not vary from that indicated by more than plus or minus 1/4 inch in a story height or 1/2 inch total.

1. For bed joints and top surfaces of bearing walls do not vary from level by more than 1/4 inch in 10 feet, or 1/2 inch maximum.

KRIEGER KLATT

2120 E. 11 Mile Rd. | Royal Oak, MI 48067 **P:** 248.414.9270 **F:** 248.414.9275 www.kriegerklatt.com

Client:

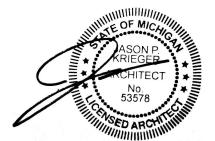
Verus Development Group

Project:

Project Name 19876 Mack Ave Grosse Pointe Woods MI

Issued	Description	Ву
8/11/2022	Permits	

Seal



Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field.

Sheet Title: **Specifications**

Project Number: 22-099

Scale:

Sheet Number:

Note:

North Arrow:



		2. For conspicuous horizontal lines, such as lintels, sills, parapets, and reveals, do not vary from level by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2 inch maximum.	
		 For vertical lines and surfaces do not vary from plumb by more than 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2 inch maximum. For conspicuous vertical lines, such as external corners, door jambs, reveals, and expansion and control joints, do not vary from plumb by more than 1/2 inch in 20 feet, or 1/2 inch maximum. 	
		 than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2 inch maximum. For lines and surfaces do not vary from straight by more than 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2 inch maximum. 	1.03
	C.	Joints: 1. For bed joints, do not vary from thickness indicated by more than plus or minus 1/8 inch, with a maximum thickness limited to 1/2 inch.	
		 For head and collar joints, do not vary from thickness indicated by more than plus 3/8 inch or minus 1/4 inch. For exposed head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch. 	
3.03	L	AYING MASONRY WALLS	1.04
	Α.	Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets. Avoid using less-than-half-size units, particularly at corners, jambs, and, where possible, at other	
	В.	locations.	
	Б.	horizontal face dimensions at corners or jambs.	
	C. D.	Built-in Work: As construction progresses, build in items specified in this and other Sections. Fill in solidly with masonry around built-in items. Fill space between steel frames and masonry solidly with mortar unless otherwise indicated.	1.05
	E.	Fill cores in hollow CMUs with grout 24 inches under bearing plates, beams, lintels, posts, and similar items unless otherwise indicated.	
2.04	F.	Refer to 3.10 also for erection and MIOSHA wall bracing requirements.	1.06
5.04	A.	Lay CMUs as follows:	1.00
		 With face shells fully bedded in mortar and with head joints of depth equal to bed joints. With webs fully bedded in mortar in all courses of piers, columns, and pilasters. 	
		 With webs fully bedded in mortar in grouted masonry, including starting course on footings. With entire units, including areas under cells, fully bedded in mortar at starting course on footings where cells are not grouted. 	PAR
	В.	Lay solid masonry units with completely filled bed and head joints; butter ends with sufficient mortar to fill head joints and shove into place. Do not	2.01
	C.	deeply furrow bed joints or slush head joints. Tool exposed joints 3/8 inch slightly concave when thumbprint hard, using a jointer larger than joint thickness unless otherwise indicated.	
	D.		2.02
3.05	М А.	ASONRY JOINT REINFORCEMENT General: Install entire length of longitudinal side rods in mortar with a minimum cover of 5/8 inch on exterior side of walls, 1/2 inch elsewhere. Lap	
		reinforcement a minimum of 6 inches. 1. Space reinforcement not more than 16 inches o.c.	
		 Provide reinforcement not more than 8 inches above and below wall openings and extending 12 inches beyond openings in addition to continuous reinforcement. 	
	В.		
	C.		2.03
3.06	A.	NCHORING MASONRY TO STRUCTURAL STEEL AND CONCRETE Anchor masonry to structural steel and concrete where masonry abuts or faces structural steel or concrete to comply with the following:	
		1. Provide an open space not less than 1 inch wide between masonry and structural steel or concrete unless otherwise indicated. Keep open space free of mortar and other rigid materials.	
		 Anchor masonry with anchors embedded in masonry joints and attached to structure. Space anchors as indicated, but not more than 16 inches o.c. vertically and 24 inches o.c. horizontally. 	
3.07	FI	LASHING, WEEP HOLES, CAVITY DRAINAGE, AND VENTS	2.04
	A.	General: Install embedded flashing and weep holes in masonry at shelf angles, lintels, ledges, other obstructions to downward flow of water in wall, and where indicated.	
	В.	Install flashing as follows unless otherwise indicated:	
		1. Prepare masonry surfaces so they are smooth and free from projections that could puncture flashing. Where flashing is within mortar joint, place through-wall flashing on sloping bed of mortar and cover with mortar. Before covering with mortar, seal penetrations in flashing with adhesive,	
		sealant, or tape as recommended by flashing manufacturer.At lintels and shelf angles, extend flashing a minimum of 6 inches into masonry at each end. At heads and sills, extend flashing 6 inches at ends	
		and turn up not less than 2 inches to form end dams.Install metal drip edges beneath flexible flashing at exterior face of wall. Stop flexible flashing 1/2 inch back from outside face of wall and adhere	
		flexible flashing to top of metal drip edge. 4. Install metal flashing termination beneath flexible flashing at exterior face of wall. Stop flexible flashing 1/2 inch back from outside face of wall	
	C.	and adhere flexible flashing to top of metal flashing termination. Install weep holes in head joints in exterior wythes of first course of masonry immediately above embedded flashing and as follows:	
	0.	 Use specified weep/vent products to form weep holes. 	
	D.	 Space weep holes 24 inches o.c. unless otherwise indicated. Place cavity drainage material in cavities to comply with configuration requirements for cavity drainage material in "Miscellaneous Masonry" 	
3 08	R	Accessories" Article. EINFORCED UNIT MASONRY INSTALLATION	2.05
	A.	Temporary Formwork and Shores: Construct formwork and shores as needed to support reinforced masonry elements during construction.	
		1. Construct formwork to provide shape, line, and dimensions of completed masonry as indicated. Make forms sufficiently tight to prevent leakage of mortar and grout. Brace, tie, and support forms to maintain position and shape during construction and curing of reinforced masonry.	
		 Do not remove forms and shores until reinforced masonry members have hardened sufficiently to carry their own weight and other loads that may be placed on them during construction. 	
		 Refer to OSHA standard no 1926.706 for MASONRY WALL BRACING prior to erection and implement all measures required, but not limited to, lateral support due to winds, restricted zones, signage, and training requirements, and inspections. 	
	В.	Placing Reinforcement: Comply with requirements in ACI 530.1/ASCE 6/TMS 602. Lap splices in walls shall be a minimum of 48 bar diameters, unless noted otherwise.	
	C.	Reinforce all masonry walls as shown on schedules and details. Place bar on centerline of wall in fully grouted cell height of wall. Lap reinforcement	2.06
	D.	with typical footing dowel, see details for dowel requirements. Grouting: Do not place grout until entire height of masonry to be grouted has attained enough strength to resist grout pressure.	
		1. Comply with requirements in ACI 530.1/ASCE 6/TMS 602 for cleanouts and for grout placement, including minimum grout space and maximum pour height.	
	_	2. Limit height of vertical grout pours to not more than 60 inches.	
3.09		IELD QUALITY CONTROL Testing and Inspecting: Owner will engage special inspectors to perform tests and inspections and prepare reports. Allow inspectors access to	
		scaffolding and work areas, as needed to perform tests and inspections. Retesting of materials that fail to comply with specified requirements shall be done at Contractor's expense.	
		 Begin masonry construction only after inspectors have verified proportions of site-prepared mortar. Place grout only after inspectors have verified compliance of grout spaces and of grades, sizes, and locations of reinforcement. 	
	_	3. Place grout only after inspectors have verified proportions of site-prepared grout.	
	В. С.	5	
	D.	Clay Masonry Unit Test: For each type of unit provided, according to ASTM C 67 for compressive strength.	
	E. F.	Concrete Masonry Unit Test: For each type of unit provided, according to ASTM C 140 for compressive strength. Mortar Aggregate Ratio Test (Proportion Specification): For each mix provided, according to ASTM C 780.	
	G.		
2 10	H.	Grout Test (Compressive Strength): For each mix provided, according to ASTM C 1019. EPAIRING, POINTING, AND CLEANING	
3.10	A.		
	В.	Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows: 1. Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes.	
		2. Protect surfaces from contact with cleaner.	
		 Wet wall surfaces with water before applying cleaners; remove cleaners promptly by rinsing surfaces thoroughly with clear water. Clean brick by bucket-and-brush hand-cleaning method described in BIA Technical Notes 20. Clean concrete massanty by cleaning method indicated in NCMA TEK 8.24 applicable to type of stain on exposed surfaces. 	
3.11	м	 Clean concrete masonry by cleaning method indicated in NCMA TEK 8-2A applicable to type of stain on exposed surfaces. ASONRY WASTE DISPOSAL 	
	A.	Excess Masonry Waste: Remove excess clean masonry waste and other masonry waste, and legally dispose of off Owner's property.	
		END OF SECTION 04 20 00 04 2000 SECTION 04 2613	
	от 4	MASONRY VENEER GENERAL	2.07
		ECTION INCLUDES	6
		Concrete block.	
	В. С.		
	D.	Reinforcement and anchorage.	
	E. F	Flashings. Installation of lintels.	

- G. Accessories.

1.02 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data for masonry units, fabricated wire reinforcement, mortar, and masonry ties .

C. Samples: Submit four samples of facing brick units to illustrate color, texture, and extremes of color range

QUALITY ASSURANCE

A. Single source responsibility for Masonry Units: Obtain exposed masonry units of uniform texture and color, or a uniform blend within the ranges

accepted for these characteristics, from one manufacturer for each different product required for each continuous serface or visually related surfaces. B. Single source responsibility for Mortar Materials: Obtain mortar ingredients of uniform quality, including color for exposed masonry, from one manufacturer for each cementitious component and from one source and producer for each aggregate.

MOCK-UP

A. Construct a masonry wall as a mock-up panel sized 8 feet (2.4 m) long by 6 feet (1.8 m) high; include mortar and accessories and structural backup in mock-up. Once the project is complete, demolish the mock-up and remove from site. the Mock-up shall serve as a basis of construction for the final product.

B. Locate where directed. Verify location with Owner and Architect.

C. Mock-up may remain as part of the Work.

D. note: coordinate final size and location of mock-up with Owner and Architect. combine the mock-up with the limestone and granite veneers.

DELIVERY, STORAGE, AND HANDLING

A. Deliver, handle, and store masonry units by means that will prevent mechanical damage and contamination by other materials.

B. Handle and store ceramic glazed masonry units in protective cartons or trays. Do not remove from protective packaging until ready for installation.

FIELD CONDITIONS A. Maintain materials and surrounding air temperature to minimum 40 degrees F (5 degrees C) prior to, during, and 48 hours after completion of

masonry work.

B. Maintain materials and surrounding air temperature to maximum 90 degrees F (32 degrees C) prior to, during, and 48 hours after completion of masonry work

RT 2 PRODUCTS

UNIT MASONRY - GENERAL

A. Conform to applicable code for see the drawings for requirements for fire rated masonry construction.

BRICK UNITS

A. Manufacturers:

1. Glen Gery or approved equal. 2. Substitutions: See Section 01 6000 - Product Requirements.

B. Facing Brick: ASTM C216, Type as specified on the drawings, Grade SW.

- Color and Texture: as indicated on the drawings.
- Nominal Size: Modular.

Special Shapes: Molded units as required by conditions indicated, unless standard units can be sawn to produce equivalent effect. Compressive Strength: Grade SW, measured in accordance with ASTM C67.

MORTAR AND GROUT MATERIALS

A. Masonry Cement: ASTM C91/C91M Type N.

1. Colored Mortar: Premixed cement as required to match Architect's color sample.

B. Portland Cement: ASTM C150/C150M, Type I; color as required to produce approved color sample.

C. Water: Clean and potable.

D. Accelerating Admixture: Nonchloride type for use in cold weather. (if required based on project schedule)

- REINFORCEMENT AND ANCHORAGE
- A. Joint Reinforcement: Truss type; {\rs\#1} steel wire, hot dip galvanized after fabrication to 16 CFR 1201 Class B; 0.1483 inch (3.8 mm) side rods with 0.1483 inch (3.8 mm) cross rods; width as required to provide not more than 1 inch (25 mm) and not less than 1/2 inch (13 mm) of mortar coverage on each exposure.
- 1. Manufacturers:
- a. Hohmann & Barnard, Inc; HB 213 Veneer Anchor: www.h-b.com/#sle.
- b. or approved equal.

B. Masonry Veneer Anchors: 2-piece anchors that permit differential movement between masonry veneer and structural backup, hot dip galvanized to ASTM A 153/A 153M, Class B. 1. Anchor plates: Not less than 0.075 inch (1.91 mm) thick, designed for fastening to structural backup through sheathing by two fasteners;

- provide design with legs that penetrate sheathing and insulation to provide positive anchorage.
- Wire ties: Manufacturer's standard shape, 0.1875 inch (4.75 mm) thick.
- Vertical adjustment: Not less than 3-1/2 inches (89 mm).
- Install masonry anchors at 16" O.C. vert and horizontally or as required by the current code.
- C. Metal-to-Metal Fasteners: Self-drilling, self-tapping screws; corrosion resistant finish or hot dip galvanized to ASTM A153/A153M.

1. Manufacturers: a. ITW Commercial Construction North America; Teks Select Series; [____]: www.ITWBuildex.com/#sle.

FLASHINGS

A. Rubberized Asphalt Flashing: Self-adhering polymer-modified asphalt sheet; 0.040 inch (1.0 mm) total thickness; with cross-linked polyethylene top and bottom surfaces.

1. Manufacturers:

- a. York Manufacturing, Inc; York Seal: www.yorkmfg.com/#sle.
- b. Grace Applied Technologies GRACE PERM-A-BARRIER.
- c. or approved equal.

b. or approved equal.

B. Stainless Steel: ASTM A666, Type 304, soft temper; 26 gage, 0.0187 inch (0.48 mm) thick; finish 2B to 2D.

C. Flashing Sealant/Adhesives: Silicone, polyurethane, or silyl-terminated polyether/polyurethane, or other type required or recommended by flashing manufacturer; type capable of adhering to type of flashing used.

ACCESSORIES

A. Preformed Control Joints: Rubber material. Provide with corner and tee accessories, fused joints.

- 1. Manufacturers:
- Blok-Lok Limited; []: www.blok-lok.com/#sle.
- b. Hohmann & Barnard, Inc; [____]: www.h-b.com/#sle.
- c. WIRE-BOND; [____]: www.wirebond.com/#sle. d. or approved equal.

B. Joint Filler: Closed cell rubber; oversized 50 percent to joint width; self expanding; in maximum lengths available.

1. Manufacturers:

- a. Hohmann & Barnard, Inc; [____]: www.h-b.com/#sle.
- b. WIRE-BOND; [____]: www.wirebond.com/#sle.
- c. or approved equal.

d. Substitutions: See Section 01 6000 - Product Requirements.

C. Building Paper: ASTM D226/D226M, Type I ("No. 15") asphalt felt.

D. Weeps: Molded PVC grilles, insect resistant.

- 1. Manufacturers:
- a. Blok-Lok Limited; [_____]: www.blok-lok.com/#sle.
- b. Hohmann & Barnard, Inc; [____]: www.h-b.com/#sle. c. WIRE-BOND; [____]: www.wirebond.com/#sle.
- d. or approved equal.

E. Cavity Vents: Molded PVC grilles, insect resistant.

- Manufacturers:
- a. Blok-Lok Limited; [____]: www.blok-lok.com/#sle.
- b. Hohmann & Barnard, Inc; [____]: www.h-b.com/#sle.
- c. WIRE-BOND; [____]: www.wirebond.com/#sle. d. or approved equal.
- F. Drainage Fabric: Polyester mesh bonded to a water and vapor-permeable fabric.

G. Cavity Mortar Control: Semi-rigid polyethylene or polyester mesh panels, sized to thickness of wall cavity, and designed to prevent mortar droppings from clogging weeps and cavity vents and allow proper cavity drainage.

- Mortar Diverter: Panels installed at flashing locations.
- H. Termination Bars: Stainless steel; compatible with membrane and adhesives.
- I. Drip Edge: Stainless steel; compatible with membrane and adhesives.
- J. Lap Sealants and Tapes: As recommended by flashing manufacturer; compatible with membrane and adhesives.

K. Cleaning Solution: Non-acidic, not harmful to masonry work or adjacent materials.

MORTAR AND GROUT MIXING

- A. Mortar for Unit Masonry: ASTM C270, Proportion Specification.
- Masonry below grade and in contact with earth; Type S. Exterior, non-loadbearing masonry; Type N.
- Interior, non-loadbearing masonry; Type O.
- B. Colored Mortar: Proportion selected pigments and other ingredients to match Architect's sample, without exceeding manufacturer's recommended
- pigment-to-cement ratio.
- C. Grout: ASTM C476; consistency as required to fill volumes completely for grouting; fine grout for spaces with smallest horizontal dimension of 2 inches (50 mm) or less; coarse grout for spaces with smallest horizontal dimension greater than 2 inches (50 mm).

PART 3 EXECUTION 3.01 EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive masonry.

	co	URSING
	Α.	Establish lines, levels, and coursing indicated. Protect from displacement.
	В.	Maintain masonry courses to uniform dimension. Form vertical and horizontal joints
	C.	Brick Units:
		1. Bond: Running.
		 Coursing: Three units and three mortar joints to equal 8 inches (200 mm). Mortar Joints: Concave.
3.03	PL	ACING AND BONDING
	• – . А.	Lay solid masonry units in full bed of mortar, with full head joints, uniformly jointed v
	В.	Lay hollow masonry units with face shell bedding on head and bed joints.
	С.	Buttering corners of joints or excessive furrowing of mortar joints is not permitted.
	D.	Remove excess mortar as work progresses.
	E.	Interlock intersections and external corners, except for units laid in stack bond.
	F.	Do not shift or tap masonry units after mortar has achieved initial set. Where adjust
	G.	Perform job site cutting of masonry units with proper tools to provide straight, clean,
		edges.
	Н.	Isolate top joint of masonry veneer from horizontal structural framing members or su
3.04	WE	EPS/CAVITY VENTS
5	Α.	Install weeps in veneer walls at 32 inches (800 mm) on center horizontally above the
	D	of walls. Install cavity vents in veneer walls at 32 inches (800 mm) on center horizontally below
	B.	VITY MORTAR CONTROL
	са А.	Do not permit mortar to drop or accumulate into cavity air space or to plug weep/cav
	А. В.	For cavity walls, build inner wythe ahead of outer wythe to accommodate accessorie
	С.	Install cavity mortar control panels continuously throughout full height of exterior ma
	0.	with manufacturer's installation instructions. Verify that airspace width is no more th
		horizontally between joint reinforcement. Stagger end joints in adjacent rows. Fit to
	D.	Install cavity mortar diverter at base of cavity and at other flashing locations as reco blocking weep/cavity vents.
3.06	RF	INFORCEMENT AND ANCHORAGE - MASONRY VENEER
	A.	Install horizontal joint reinforcement 16 inches (400 mm) on center.
	В.	Place masonry joint reinforcement in first and second horizontal joints above and be
	υ.	opening.
	C.	Place continuous joint reinforcement in first and second joint below top of walls.
	D.	Lap joint reinforcement ends minimum 6 inches (150 mm).
	Е.	Masonry Back-Up: Embed anchors to bond veneer at maximum 16 inches (400 mm
	100	horizontally. Place additional anchors at perimeter of openings and ends of panels,
	F.	Stud Back-Up: Secure veneer anchors to stud framed back-up and embed into mar and 24 inches (600 mm) on center horizontally. Place additional anchors at perime
		anchors is 8 inches (200 mm) on center.
3.07	MA	SONRY FLASHINGS
8	A.	Whether or not specifically indicated, install masonry flashing to divert water to exte
		interrupted.
	B.	Extend metal flashings to within 1/4 inch (6 mm) of exterior face of masonry.
	C.	Extend plastic, laminated, and [] flashings to within 1/4 inch (6 mm) of exteri
	D.	Lap end joints of flashings at least 6 inches (152 mm), minimum, and seal watertigh
	12	TELS
	A.	Install loose steel lintels over openings See structural drawings and specifications NTROL AND EXPANSION JOINTS
	А. В.	Do not continue horizontal joint reinforcement through control or expansion joints. Install preformed control joint device in continuous lengths. Seal butt and corner joi
	Ь.	Form expansion joint as detailed on drawings.
	C	i onn capansion joint as uctalicu on urawings.
	С. то	
3.10	то	LERANCES
3.10	то А.	LERANCES Maximum Variation From Unit to Adjacent Unit: 1/16 inch (1.6 mm).
3.10	то А. В.	LERANCES Maximum Variation From Unit to Adjacent Unit: 1/16 inch (1.6 mm). Maximum Variation from Plane of Wall: 1/4 inch in 10 ft (6 mm in 3 m) and 1/2 inch
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3.10 3.11 3.12	TO A. B. C. D. E. CU A. B.	LERANCES Maximum Variation From Unit to Adjacent Unit: 1/16 inch (1.6 mm). Maximum Variation from Plane of Wall: 1/4 inch in 10 ft (6 mm in 3 m) and 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Level Coursing: 1/8 inch in 3 ft (3 mm in 1 m) and 1/4 inch Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 in TTING AND FITTING Cut and fit for pipes and conduit. Coordinate with other sections of work to provide Obtain approval prior to cutting or fitting masonry work not indicated or where appear
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3.10 3.11 3.12 3.13	TO A. B. C. E. CU A. B. C. D. PR A.	LERANCES Maximum Variation From Unit to Adjacent Unit: 1/16 inch (1.6 mm). Maximum Variation from Plane of Wall: 1/4 inch in 10 ft (6 mm in 3 m) and 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Level Coursing: 1/8 inch in 3 ft (3 mm in 1 m) and 1/4 inch Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 it TTING AND FITTING Cut and fit for pipes and conduit. Coordinate with other sections of work to provide Obtain approval prior to cutting or fitting masonry work not indicated or where appear EANING Remove excess mortar and mortar smears as work progresses. Replace defective mortar. Match adjacent work. Clean soiled surfaces with cleaning solution. Use non-metallic tools in cleaning operations. OTECTION Without damaging completed work, provide protective boards at exposed external of END OF SECTION 04 2613 DIVISION 05 - METALS SECTION 05 4000 COLD-FORMED METAL FRAM
3.10 3.11 3.12 3.13	TO A. B. C. E. CU A. B. CL A. B. C. D. PR A.	LERANCES Maximum Variation From Unit to Adjacent Unit: 1/16 inch (1.6 mm). Maximum Variation from Plane of Wall: 1/4 inch in 10 ft (6 mm in 3 m) and 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Level Coursing: 1/8 inch in 3 ft (3 mm in 1 m) and 1/4 inch Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 it TTING AND FITTING Cut and fit for pipes and conduit. Coordinate with other sections of work to provide Obtain approval prior to cutting or fitting masonry work not indicated or where appeared EANING Remove excess mortar and mortar smears as work progresses. Replace defective mortar. Match adjacent work. Clean soiled surfaces with cleaning solution. Use non-metallic tools in cleaning operations. OTECTION Without damaging completed work, provide protective boards at exposed external of END OF SECTION 04 2613 DIVISION 05 - METALS SECTION 05 4000 COLD-FORMED METAL FRAM
3.10 3.11 3.12 3.13 PART 1.01	TO A. B. C. E. CU A. B. C. D. PR A. FR	LERANCES Maximum Variation From Unit to Adjacent Unit: 1/16 inch (1.6 mm). Maximum Variation from Plane of Wall: 1/4 inch in 10 ft (6 mm in 3 m) and 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Level Coursing: 1/8 inch in 3 ft (3 mm in 1 m) and 1/4 inch Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 intite and fit for pipes and conduit. Coordinate with other sections of work to provide Obtain approval prior to cutting or fitting masonry work not indicated or where appearements EANING Remove excess mortar and mortar smears as work progresses. Replace defective mortar. Match adjacent work. Clean soiled surfaces with cleaning operations. OTECTION Without damaging completed work, provide protective boards at exposed external of END OF SECTION 04 2613 DIVISION 05 - METALS SECTION 05 4000 COLD-FORMED METAL FRAM PRODUCTS AMING SYSTEM
3.10 3.11 3.12 3.13 PART 1.01	TO A. B. C. E. CU A. B. CL A. B. C. D. PR A.	LERANCES Maximum Variation From Unit to Adjacent Unit: 1/16 inch (1.6 mm). Maximum Variation from Plane of Wall: 1/4 inch in 10 ft (6 mm in 3 m) and 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Level Coursing: 1/8 inch in 3 ft (3 mm in 1 m) and 1/4 inch Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 i TTING AND FITTING Cut and fit for pipes and conduit. Coordinate with other sections of work to provide Obtain approval prior to cutting or fitting masonry work not indicated or where appear EANING Remove excess mortar and mortar smears as work progresses. Replace defective mortar. Match adjacent work. Clean soiled surfaces with cleaning solution. Use non-metallic tools in cleaning operations. OTECTION Without damaging completed work, provide protective boards at exposed external of END OF SECTION 04 2613 DIVISION 05 - METALS SECTION 05 4000 COLD-FORMED METAL FRAM PRODUCTS AMING SYSTEM Provide primary and secondary framing members, bridging, bracing, plates, gussets
3.10 3.11 3.12 3.13 PART 1.01	TO A. B. C. D. E. CU A. B. C. D. PR A.	LERANCES Maximum Variation From Unit to Adjacent Unit: 1/16 inch (1.6 mm). Maximum Variation from Plane of Wall: 1/4 inch in 10 ft (6 mm in 3 m) and 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Level Coursing: 1/8 inch in 3 ft (3 mm in 1 m) and 1/4 inch Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 intite and fit for pipes and conduit. Coordinate with other sections of work to provide Obtain approval prior to cutting or fitting masonry work not indicated or where appearements EANING Remove excess mortar and mortar smears as work progresses. Replace defective mortar. Match adjacent work. Clean soiled surfaces with cleaning operations. OTECTION Without damaging completed work, provide protective boards at exposed external of END OF SECTION 04 2613 DIVISION 05 - METALS SECTION 05 4000 COLD-FORMED METAL FRAM PRODUCTS AMING SYSTEM
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3.10 3.11 3.12 3.13 PART 1.01	TO A. B. C. D. E. CU A. B. C. D. PR A.	LERANCES Maximum Variation From Unit to Adjacent Unit: 1/16 inch (1.6 mm). Maximum Variation from Plane of Wall: 1/4 inch in 10 ft (6 mm in 3 m) and 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Level Coursing: 1/8 inch in 3 ft (3 mm in 1 m) and 1/4 inch Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 i TTING AND FITTING Cut and fit for pipes and conduit. Coordinate with other sections of work to provide Obtain approval prior to cutting or fitting masonry work not indicated or where appear EANING Remove excess mortar and mortar smears as work progresses. Replace defective mortar. Match adjacent work. Clean soiled surfaces with cleaning solution. Use non-metallic tools in cleaning operations. OTECTION Without damaging completed work, provide protective boards at exposed external of END OF SECTION 04 2613 DIVISION 05 - METALS SECTION 05 4000 COLD-FORMED METAL FRAM PRODUCTS AMING MATERIALS END OF SECTION 05 4000 SECTION 05 5000
3.10 3.11 3.12 3.13 PART 1.01	TO A. B. C. E. CU A. B. C. A. B. C. D. PR A. FR. A.	LERANCES Maximum Variation From Unit to Adjacent Unit: 1/16 inch (1.6 mm). Maximum Variation from Plane of Wall: 1/4 inch in 10 ft (6 mm in 3 m) and 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Level Coursing: 1/8 inch in 3 ft (3 mm in 1 m) and 1/4 inch Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 it TTING AND FITTING Cut and fit for pipes and conduit. Coordinate with other sections of work to provide Obtain approval prior to cutting or fitting masonry work not indicated or where appeaded to the component of th
3.10 3.11 3.12 3.13 9ART 1.01 1.02 PART	TO A. B. C. E. CU A. B. CL A. B. C. D. PR A. FR. A.	LERANCES Maximum Variation From Unit to Adjacent Unit: 1/16 inch (1.6 mm). Maximum Variation from Plane of Wall: 1/4 inch in 10 ft (6 mm in 3 m) and 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Level Coursing: 1/8 inch in 3 ft (3 mm in 1 m) and 1/4 inch Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 it TTING AND FITTING Cut and fit for pipes and conduit. Coordinate with other sections of work to provide Obtain approval prior to cutting or fitting masonry work not indicated or where appeare EANING Remove excess mortar and mortar smears as work progresses. Replace defective mortar. Match adjacent work. Clean soiled surfaces with cleaning solution. Use non-metallic tools in cleaning operations. OTECTION Without damaging completed work, provide protective boards at exposed external of END OF SECTION 04 2613 DIVISION 05 - METALS SECTION 05 4000 COLD-FORMED METAL FRAM PRODUCTS AMING SYSTEM Provide primary and secondary framing members, bridging, bracing, plates, gussets provide a complete framing system. AMING MATERIALS END OF SECTION 05 4000 SECTION 05 5000
3.10 3.11 3.12 3.13 9ART 1.01 1.02 PART 1.01	TO A. B. C. D. E. CU A. B. C. D. PR A. FR A. FR	LERANCES Maximum Variation From Unit to Adjacent Unit: 1/16 inch (1.6 mm). Maximum Variation from Plane of Wall: 1/4 inch in 10 ft (6 mm in 3 m) and 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Level Coursing: 1/8 inch in 3 ft (3 mm in 1 m) and 1/4 inch Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 TTING AND FITTING Cut and fit for pipes and conduit. Coordinate with other sections of work to provide Obtain approval prior to cutting or fitting masonry work not indicated or where appearements EANING Remove excess mortar and mortar smears as work progresses. Replace defective mortar. Match adjacent work. Clean soiled surfaces with cleaning operations. OTECTION Without damaging completed work, provide protective boards at exposed external of END OF SECTION 04 2613 DIVISION 05 - METALS SECTION 05 4000 COLD-FORMED METAL FRAM Provide primary and secondary framing members, bridging, bracing, plates, gussets provide a complete framing system. AMING MATERIALS END OF SECTION 05 4000 SECTION 05 5000 METAL FABRICATIONS GENERAL CTION INCLUDES
3.10 3.11 3.12 3.13 3.13 9ART 1.01 1.02 PART 1.01	TO A. B. C. D. E. CU A. B. CL A. B. CL A. D. PR A. FR A. FR	LERANCES Maximum Variation From Unit to Adjacent Unit: 1/16 inch (1.6 mm). Maximum Variation from Plane of Wall: 1/4 inch in 10 ft (6 mm in 3 m) and 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Level Coursing: 1/8 inch in 3 ft (3 mm in 1 m) and 1/4 inch Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 TTING AND FITTING Cut and fit for pipes and conduit. Coordinate with other sections of work to provide Obtain approval prior to cutting or fitting masonry work not indicated or where appearements EANING Remove excess mortar and mortar smears as work progresses. Replace defective mortar. Match adjacent work. Clean soiled surfaces with cleaning solution. Use non-metallic tools in cleaning operations. OTECTION Without damaging completed work, provide protective boards at exposed external of END OF SECTION 04 2613 DIVISION 05 - METALS SECTION 05 4000 COLD-FORMED METAL FRAM Provide primary and secondary framing members, bridging, bracing, plates, gussets provide a complete framing system. AMING MATERIALS END OF SECTION 05 4000 SECTION 05 5000 METAL FABRICATIONS GENERAL <
3.10 3.11 3.12 3.13 9ART 1.01 1.02 PART 1.01	TO A. B. C. D. E. CU A. B. C. D. PR A. FR A. FR A. FR A. B.	LERANCES Maximum Variation From Unit to Adjacent Unit: 1/16 inch (1.6 mm). Maximum Variation from Plane of Wall: 1/4 inch in 10 ft (6 mm in 3 m) and 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Level Coursing: 1/8 inch in 3 ft (3 mm in 1 m) and 1/4 inch Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 it TING AND FITTING Cut and fit for pipes and conduit. Coordinate with other sections of work to provide Obtain approval prior to cutting or fitting masonry work not indicated or where appeatents EANING Remove excess mortar and mortar smears as work progresses. Replace defective mortar. Match adjacent work. Clean solied surfaces with cleaning solution. Use non-metallic tools in cleaning operations. OTECTION Without damaging completed work, provide protective boards at exposed external of END OF SECTION 04 2613 DIVISION 05 - METALS SECTION 05 4000 COLD-FORMED METAL FRAM Provide primary and secondary framing members, bridging, bracing, plates, gussets provide a complete framing system. AMING MATERIALS END OF SECTION 05 4000 SECTION 05 5000 METAL FABRICATIONS GENERAL <
3.10 3.11 3.12 3.12 3.13 7 3.13 7 1.01 1.02 7 1.01	TO A. B. C. D. E. CU A. B. C. D. PR A. FR. A. FR. A. B. FR. A. B. FR. A. B. FR. A. B. FR. FR. FR. FR. FR. FR. FR. FR. FR. FR	LERANCES Maximum Variation From Unit to Adjacent Unit: 1/16 inch (1.6 mm). Maximum Variation from Plane of Wall: 1/4 inch in 10 ft (6 mm in 3 m) and 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Level Coursing: 1/8 inch in 3 ft (3 mm in 1 m) and 1/4 inch Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 it TING AND FITTING Cut and fit for pipes and conduit. Coordinate with other sections of work to provide Obtain approval prior to cutting or fitting masonry work not indicated or where appear EANING Remove excess mortar and mortar smears as work progresses. Replace defective mortar. Match adjacent work. Clean solied surfaces with cleaning solution. Use non-metallic tools in cleaning operations. OTECTION Without damaging completed work, provide protective boards at exposed external of END OF SECTION 05 4000 COLD-FORMED METAL FRAM PRODUCTS AMING SYSTEM Provide primary and secondary framing members, bridging, bracing, plates, gussets provide a complete framing system. AMING MATERIALS END OF SECTION 05 4000 SECTION 05 4000 SECTION 05 5000 METAL FABRICATIONS GENERAL CTION INCLUDES Shop fabricated steel and aluminum items.<
3.10 3.11 3.12 3.12 3.13 7 3.13 1.01 1.02 PART 1.01 1.02	TO A. B. C. D. E. CU A. B. C. D. PR A. FR A. FR A. FR A. B.	LERANCES Maximum Variation From Unit to Adjacent Unit: 1/16 inch (1.6 mm). Maximum Variation from Plane of Wall: 1/4 inch in 10 ft (6 mm in 3 m) and 1/2 inch Maximum Variation from Plumb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch Maximum Variation from Level Coursing: 1/8 inch in 3 ft (3 mm in 1 m) and 1/4 inch Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 it TING AND FITTING Cut and fit for pipes and conduit. Coordinate with other sections of work to provide Obtain approval prior to cutting or fitting masonry work not indicated or where appeatents EANING Remove excess mortar and mortar smears as work progresses. Replace defective mortar. Match adjacent work. Clean solied surfaces with cleaning solution. Use non-metallic tools in cleaning operations. OTECTION Without damaging completed work, provide protective boards at exposed external of END OF SECTION 04 2613 DIVISION 05 - METALS SECTION 05 4000 COLD-FORMED METAL FRAM Provide primary and secondary framing members, bridging, bracing, plates, gussets provide a complete framing system. AMING MATERIALS END OF SECTION 05 4000 SECTION 05 5000 METAL FABRICATIONS GENERAL <

- C. Section 09 9113 Exterior Painting: Paint finish.
- 1.03 SUBMITTALS

B. Plates: ASTM A283/A283M.

erection drawings, elevations, and details where applicable.

PART 2 PRODUCTS 2.01 MATERIALS - STEEL

B. Verify that related items provided under other sections are properly sized and located. C. Verify that built-in items are in proper location, and ready for roughing into masonry work.

> ursing indicated. Protect from displacement. uniform dimension. Form vertical and horizontal joints of uniform thickness

bed of mortar, with full head joints, uniformly jointed with other work.

nits after mortar has achieved initial set. Where adjustment must be made, remove mortar and replace. sonry units with proper tools to provide straight, clean, unchipped edges. Prevent broken masonry unit corners or

eneer from horizontal structural framing members or support angles with compressible joint filler.

at 32 inches (800 mm) on center horizontally above through-wall flashing, above shelf angles and lintels, and at bottom

walls at 32 inches (800 mm) on center horizontally below shelf angles and lintels and at top of walls.

accumulate into cavity air space or to plug weep/cavity vents.

ythe ahead of outer wythe to accommodate accessories.

anels continuously throughout full height of exterior masonry cavities during construction of exterior wythe, complying i instructions. Verify that airspace width is no more than 3/8 inch (9 mm) greater than panel thickness. Install forcement. Stagger end joints in adjacent rows. Fit to perimeter construction and penetrations without voids. t base of cavity and at other flashing locations as recommended by manufacturer to prevent mortar droppings from

ement 16 inches (400 mm) on center.

ment in first and second horizontal joints above and below openings. Extend minimum 16 inches (400 mm) each side of

nchors to bond veneer at maximum 16 inches (400 mm) on center vertically and 36 inches (900 mm) on center anchors at perimeter of openings and ends of panels, so maximum spacing of anchors is 8 inches (200 mm) on center. r anchors to stud framed back-up and embed into masonry veneer at maximum 16 inches (400 mm) on center vertically enter horizontally. Place additional anchors at perimeter of openings and ends of panels, so maximum spacing of

dicated, install masonry flashing to divert water to exterior at all locations where downward flow of water will be

[] flashings to within 1/4 inch (6 mm) of exterior face of masonry. least 6 inches (152 mm), minimum, and seal watertight with flashing sealant/adhesive.

openings. - See structural drawings and specifications for sizes, bearing conditions and locations.

device in continuous lengths. Seal butt and corner joints in accordance with manufacturer's instructions. led on drawings.

of Wall: 1/4 inch in 10 ft (6 mm in 3 m) and 1/2 inch in 20 ft (13 mm in 6 m) or more.

nb: 1/4 inch (6 mm) per story non-cumulative; 1/2 inch (13 mm) in two stories or more.

el Coursing: 1/8 inch in 3 ft (3 mm in 1 m) and 1/4 inch in 10 ft (6 mm in 3 m); 1/2 inch in 30 ft (13 mm in 9 m). Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 inch (minus 6.4 mm, plus 9.5 mm).

uit. Coordinate with other sections of work to provide correct size, shape, and location. g or fitting masonry work not indicated or where appearance or strength of masonry work may be impaired.

work, provide protective boards at exposed external corners that are subject to damage by construction activities. END OF SECTION 04 2613

DIVISION 05 - METALS SECTION 05 4000 COLD-FORMED METAL FRAMING

y framing members, bridging, bracing, plates, gussets, clips, fittings, reinforcement, and fastenings as required to

D. Section 09 9123 - Interior Painting: Paint finish.

E. Section 32 3300 - Site Furnishings: Steel pipe bollards to match other site furnishings.

A. See Section 01 3000 - Administrative Requirements, for submittal procedures. B. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include

A. Steel Sections: ASTM A36/A36M.

C. Pipe: ASTM A53/A53M, Grade B Schedule 40, black finish.

D. Welding Materials: AWS D1.1/D1.1M; type required for materials being welded. E. Shop and Touch-Up Primer: SSPC-Paint 15, complying with VOC limitations of authorities having jurisdiction.

F. Touch-Up Primer for Galvanized Surfaces: SSPC-Paint 20, Type I - Inorganic, complying with VOC limitations of authorities having jurisdiction.

KRIEGER KLATT ARCHITECTS

2120 E. 11 Mile Rd. | Royal Oak, MI 48067 **P:** 248.414.9270 **F:** 248.414.9275 www.kriegerklatt.com

Client:

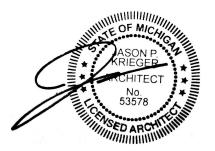
Verus Development Group

Project:

Project Name 19876 Mack Ave Grosse Pointe Woods MI

ssued	Description	Ву
3/11/2022	Permits	

Seal:



Note: Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field. North Arrow:

Sheet Title: **Specifications**

Project	Number:
22-099	

Scale:

2.02 MATERIALS - ALUMINUM

- A. Extruded Aluminum: ASTM B221 (ASTM B221M), 6063 alloy, T6 temper.
- 2.03 FABRICATION
- A. Fit and shop assemble items in largest practical sections, for delivery to site.
- B. Fabricate items with joints tightly fitted and secured.
- C. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.
- D. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise.

2.04 FINISHES - STEEL

- A. Prime paint steel items.
 - 1. Exceptions: Do not prime surfaces in direct contact with concrete, where field welding is required, and items to be covered with sprayed fireproofing.
- B. Prepare surfaces to be primed in accordance with SSPC-SP2.
- C. Clean surfaces of rust, scale, grease, and foreign matter prior to finishing.
- D. Prime Painting: One coat.
- E. Galvanizing of Structural Steel Members: Galvanize after fabrication to ASTM A123/A123M requirements. Provide minimum 1.7 oz/sq ft galvanized coating. (Provide minimum 530 g/sq m galvanized coating.)
- F. Galvanizing of Non-structural Items: Galvanize after fabrication to ASTM A123/A123M requirements.

2.05 FINISHES - ALUMINUM

- A. Exterior Aluminum Surfaces: high performance organic coating.
- B. Interior Aluminum Surfaces: high performance organic coating.
- C. Class I Color Anodized Finish: AAMA 611 AA-M12C22A42 Integrally colored anodic coating not less than 0.7 mils (0.018 mm) thick; light bronze. D. Class I Color Anodized Finish: AAMA 611 AA-M12C22A44 Electrolytically deposited colored anodic coating not less than 0.7 mils (0.018 mm) thick;
- light bronze. E. High Performance Organic Coating System: AAMA 2604 multiple coat, thermally cured fluoropolymer system; color as selected from manufacturer's standard colors.

2.06 FABRICATION TOLERANCES

- A. Squareness: 1/8 inch (3 mm) maximum difference in diagonal measurements.
- B. Maximum Offset Between Faces: 1/16 inch (1.5 mm).
- C. Maximum Misalignment of Adjacent Members: 1/16 inch (1.5 mm).
- D. Maximum Bow: 1/8 inch (3 mm) in 48 inches (1.2 m).
- E. Maximum Deviation From Plane: 1/16 inch (1.5 mm) in 48 inches (1.2 m).

PART 3 EXECUTION

3.01 EXAMINATION

Verify that field conditions are acceptable and are ready to receive work.

3.02 PREPARATION

A. Clean and strip primed steel items to bare metal where site welding is required.

B. Supply setting templates to the appropriate entities for steel items required to be cast into concrete or embedded in masonry.

3.03 INSTALLATION

- A. Install items plumb and level, accurately fitted, free from distortion or defects.
- B. Provide for erection loads, and for sufficient temporary bracing to maintain true alignment until completion of erection and installation of permanent attachments.

C. Obtain approval prior to site cutting or making adjustments not scheduled.

- 3.04 TOLERANCES
- A. Maximum Variation From Plumb: 1/4 inch (6 mm) per story, non-cumulative.
- B. Maximum Offset From True Alignment: 1/4 inch (6 mm).
- C. Maximum Out-of-Position: 1/4 inch (6 mm).

END OF SECTION 05 5000 DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

SECTION 06 1000 ROUGH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Rough opening framing for doors, windows, and roof openings
- B. Roof-mounted curbs.
- C. Roofing nailers.
- D. Roofing cant strips.
- E. Preservative treated wood materials.
- F. Fire retardant treated wood materials.
- G. Concealed wood blocking, nailers, and supports.
- 1.02 SUBMITTALS
- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide technical data on insulated sheathing, wood preservative materials, and application instructions.
- 1.03 DELIVERY, STORAGE, AND HANDLING
- A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.
- B. Fire Retardant Treated Wood: Prevent exposure to precipitation during shipping, storage, or installation.
- C. Stack panels flat with spacers beneath and between each bundle to provide air circulation. Protect sheathing from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

PART 2 PRODUCTS

- 2.01 GENERAL REQUIREMENTS
- A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
- 1. If no species is specified, provide any species graded by the agency specified; if no grading agency is specified, provide lumber graded by any grading agency meeting the specified requirements.
- 2. Grading Agency: Any grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee (www.alsc.org) and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.
- 3. Lumber of other species or grades is acceptable provided structural and appearance characteristics are equivalent to or better than products specified.
- B. Lumber fabricated from old growth timber is not permitted.
- C. Fire-Test-Response Characteristics: For assemblies with fire-resistance ratings, provide materials and construction identical to those of assemblies
- tested for fire-resistance per ASTM E 119 by a testing and inspecting agency acceptable to authorities having juridiction. D. Fire-Resistance Ratings: Indicated by design designations from [UL's "Fire Resistance Directory."] [GA-600, "Fire Resistance Design Manual."] [Insert

listing organization and publication]. 2.02 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

- A. Sizes: Nominal sizes as indicated on drawings, S4S.
- B. Moisture Content: Kiln-dry or MC15.
- C. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
- 1. Lumber: S4S, No. 2 or Standard Grade. 2. Boards: Standard or No. 3.
- 2.03 ACCESSORIES

A. Fasteners and Anchors:

- Metal and Finish: Stainless steel for high humidity and preservative-treated wood locations, unfinished steel elsewhere.
- 2. Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
- a. For wall sheathing, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- 3. Screws for Fastening Gypsum Sheathing to Cold-Formed Metal Framing: Steel drill screws, in length recommended by sheathing manufacturer for thickness of sheathing to be attached, with organic-polymer or other corrosion-protective coating having a salt-spray resistance of more than 800 hours according to ASTM B 117. a. For steel framing less than 0.0329 inch (0.835 mm) thick, use screws that comply with ASTM C 1002.
 - b. For steel framing from 0.033 to 0.112 inch (0.84 to 2.84mm) thick, use screws that comply with ASTM C 954.
- B. Sill Gasket on Top of Foundation Wall: 1/4 inch (6 mm) thick, plate width, closed cell plastic foam from continuous rolls.
- C. Sill Flashing: As specified in Section 07 6200.

2.04 FACTORY WOOD TREATMENT

- A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications. 1. Fire-Retardant Treated Wood: Mark each piece of wood with producer's stamp indicating compliance with specified requirements.
- B. Fire Retardant Treatment: 1. Manufacturers:

- 3.01 PR A
- 3.02 INS
- C
- 3.03 BL

- 3.04 RC B
- 3.05 INS 3.06 SIT
- 3.07 TO
- 3.08 CL

 a. Lonza Group; []: www.wolmanizedwood.com/#sle. b. Hoover Treated Wood Products, Inc; []: www.frtw.com/#sle. 2. Exterior Type: AWPA U1, Category UCFB, Commodity Specification H, chemically treated and pressure impregnated; capable of providing a 	A. General: Where fire-retardant-trea authorities having jurisdiction and indicated by a qualified testing ag
maximum flame spread index of 25 when tested in accordance with ASTM E84, with no evidence of significant combustion when test is extended for an additional 20 minutes both before and after accelerated weathering test performed in accordance with ASTM D2898. a. Kiln dry wood after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.	B. Fire-Retardant-Treated Plywood I with no evidence of significant pro
 b. Treat all exterior rough carpentry items. c. Do not use treated wood in direct contact with the ground. 	more than 10.5 feet (3.2 m) beyon 1. Use treatment that does not
 Interior Type A: AWPA U1, Use Category UCFA, Commodity Specification H, low temperature (low hygroscopic) type, chemically treated and pressure impregnated; capable of providing a maximum flame spread index of 25 when tested in accordance with ASTM E84, with no evidence 	2. Exterior Type: Treated mate being subjected to accelerat
of significant combustion when test is extended for an additional 20 minutes. a. Kiln dry wood after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.	3. Interior Type A: Treated mat percent relative humidity. Us
 All interior rough carpentry items are to be fire retardant treated. Treat rough carpentry items as indicated . 	 Design Value Adjustment Fa be calculated according to A where high-temperature fire-
 d. Do not use treated wood in applications exposed to weather or where the wood may become wet. PART 3 EXECUTION 	span ratings specified.
3.01 PREPARATION	C. Kiln-dry material after treatment to requirements for untreated material
A. Where wood framing bears on cementitious foundations, install full width sill flashing continuous over top of foundation, lap ends of flashing minimum of 4 inches (100 mm) and seal.	 D. Identify fire-retardant-treated plyw E. Application: Treat all plywood unlocation
 B. Install sill gasket under sill plate of framed walls bearing on foundations; puncture gasket cleanly to fit tightly around protruding anchor bolts. C. Coordinate installation of rough carpentry members specified in other sections. 	 Roof and wall sheathing with Roof sheathing.
3.02 INSTALLATION - GENERAL	3. Subflooring and underlayme 2.04 WALL SHEATHING
 A. Select material sizes to minimize waste. B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking. 	A. DensGlass Sheathing: 5/8"
C. Where treated wood is used on interior, provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.	2.05 ROOF SHEATHING A. Plywood Sheathing: DOC PS 1, s
3.03 BLOCKING, NAILERS, AND SUPPORTS	 Span Rating: Not less than 3 Nominal Thickness: Not less
 A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim. B. In framed assemblies that have concealed spaces, provide solid wood fireblocking as required by applicable local code, to close concealed draft 	2.06 PARAPET SHEATHING A. Plywood Sheathing: DOC PS 1 sl
openings between floors and between top story and roof/attic space; other material acceptable to code authorities may be used in lieu of solid wood blocking.	1. Span Rating: Not less than 3 2. Nominal Thickness: Not less
 C. In metal stud walls, provide continuous blocking around door and window openings for anchorage of frames, securely attached to stud framing. D. In walls, provide blocking attached to studs as backing and support for wall-mounted items, unless item can be securely fastened to two or more 	2.07 FASTENERS
studs or other method of support is explicitly indicated. E. Where ceiling-mounting is indicated, provide blocking and supplementary supports above ceiling, unless other method of support is explicitly	A. General: Provide fasteners of size 1. For roof parapet and wall sh
indicated.	2. For roof, parapet and wall sh of more than 800 hours acco
 F. Provide the following specific non-structural framing and blocking: 1. Cabinets and shelf supports. 2. Wall brackets. 	B. Nails, Brads, and Staples: ASTMC. Power-Driven Fasteners: Fastener
 Wair brackets. Handrails. Grab bars. 	D. Screws for Fastening Sheathing t
 Towel and bath accessories. Wall-mounted door stops. 	E. Screws for Fastening Wood Struct recommended by screw manufac
 7. Chalkboards and marker boards. 8. Wall paneling and trim. 	F. Screws for Fastening Gypsum Sh thickness of sheathing to be attac
9. Joints of rigid wall coverings that occur between studs. 3.04 ROOF-RELATED CARPENTRY	 For steel framing less than 0 For steel framing from 0.033
A. Coordinate installation of roofing carpentry with deck construction, framing of roof openings, and roofing assembly installation.	G. Screws for Fastening Composite sheathing manufacturer for thickn
B. Provide wood curb at all roof openings except where prefabricated curbs are specified and where specifically indicated otherwise. Form corners by alternating lapping side members.	resistance of more than 800 hour 2.08 SHEATHING JOINT-AND-PENETRA
3.05 INSTALLATION OF CONSTRUCTION PANELS 3.06 SITE APPLIED WOOD TREATMENT	A. Sealant for Paper-Surfaced Gyps formed by gypsum sheathing and
A. Apply preservative treatment compatible with factory applied treatment at site-sawn cuts, complying with manufacturer's instructions.	requirements for elastomeric seal B. Sealant for Glass-Mat Gypsum S
B. Allow preservative to dry prior to erecting members.3.07 TOLERANCES	recommended by tape and sheat 1. Sheathing Tape: Self-adheri
 A. Framing Members: 1/4 inch (6 mm) from true position, maximum. B. Variation from Plane (Other than Floors): 1/4 inch in 10 feet (2 mm/m) maximum, and 1/4 inch in 30 feet (7 mm in 10 m) maximum. 	threads/m), of type recomme gypsum sheathing and with
 B. Variation from Plane (Other than Floors): 1/4 inch in 10 feet (2 mm/m) maximum, and 1/4 inch in 30 feet (7 mm in 10 m) maximum. 3.08 CLEANING 	C. Sheathing Tape for Foam-Plastic penetrations in sheathing.
 A. Waste Disposal: Comply with the requirements of Section 01 7419 - Construction Waste Management and Disposal. 1. Comply with applicable regulations. 	2.09 MISCELLANEOUS MATERIALS A. Adhesives for Field Gluing Panels
 Do not burn scrap on project site. Do not burn scraps that have been pressure treated. 	panel indicated by manufacturers PART 3 EXECUTION
 Do not send materials treated with pentachlorophenol, CCA, or ACA to co-generation facilities or "waste-to-energy" facilities. B. Do not leave any wood, shavings, sawdust, etc. on the ground or buried in fill. 	3.01 INSTALLATION, GENERAL
C. Prevent sawdust and wood shavings from entering the storm drainage system. END OF SECTION 06 1000	A. Do not use materials with defects arrangement. Arrange joints so th
SECTION 06 1600 SHEATHING	B. Cut panels at penetrations, edgesC. Securely attach to substrate by fa
RELATED DOCUMENTS	 Table 2304.10.1, "Fastening ICC-ES evaluation report for
1.01 DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 01 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.	D. Use common wire nails unless of to view or will receive finish mater
1.02 SUMMARY A. Section Includes:	E. Coordinate wall, parapet and roof manner that prevent exterior mois
 Wall sheathing. Roof sheathing. 	F. Do not bridge building expansion
 Parapet sheathing. Composite nail base insulated roof sheathing. 	G. Coordinate sheathing installation end of the workday when rain is f
 Subflooring. Underlayment. 	3.02 WOOD STRUCTURAL PANEL INST A. General: Comply with applicable
 Sheathing joint and penetration treatment. B. Related Requirements: 	and applications indicated. B. Fastening Methods: Fasten panel
1. Section 061000 "Rough Carpentry" for plywood backing panels. 1.03 ACTION SUBMITTALS	1. Combination Subfloor-Under a. Glue and screw to wood
A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and	 b. Screw to cold-formed m c. Space panels 1/8 inch (
 application details. 1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated plywood complies with requirements. Indicate type of preservative used and net amount of preservative retained. 	2. Subflooring: a. Glue and screw to wood
 Include data for fire-retardant treatment from chemical treatment manufacturer and certification by treating plant that treated plywood complies with requirements. Include physical properties of treated materials. 	 b. Screw to cold-formed m c. Space panels 1/8 inch (
 For fire-retardant treatments, include physical properties of treated plywood both before and after exposure to elevated temperatures, based on testing by a qualified independent testing agency according to ASTM D 5516. 	 Wall and Roof Sheathing: a. Nail or staple to wood find
 For products receiving waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to Project site. 	b. Screw to cold-formed m c. Space panels 1/8 inch (
1.04 INFORMATIONAL SUBMITTALS A. Evaluation Reports: For the following, from ICC-ES:	4. Underlayment: a. Nail or staple to subfloo
 A. Evaluation Reports: For the following, from ICC-ES: 1. Wood-preservative-treated plywood. 2. Fire-retardant-treated plywood. 	b. Space panels 1/32 inch c. Fill and sand edge joint
3. Foam-plastic sheathing.	3.03 GYPSUM SHEATHING INSTALLATI A. Comply with GA-253 and with ma
 1.05 QUALITY ASSURANCE A. Testing Agency Qualifications: For testing agency providing classification marking for fire-retardant-treated material, an inspection agency acceptable 	1. Fasten gypsum sheathing to 2. Fasten gypsum sheathing to
to authorities having jurisdiction that periodically performs inspections to verify that the material bearing the classification marking is representative of the material tested.	 Install panels with a 3/8-inch Install panels with a 1/4-inch
1.06 DELIVERY, STORAGE, AND HANDLING A. Stack panels flat with spacers beneath and between each bundle to provide air circulation. Protect sheathing from weather by covering with	B. Apply fasteners so heads bear tig
waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings. PART 2 PRODUCTS	C. Horizontal Installation: Install she with edges of adjacent panels wit spacing. Attach at perimeter and
2.01 PERFORMANCE REQUIREMENTS	1. Space fasteners approximat

A. Fire-Resistance Ratings: As tested according to ASTM E 119; testing by a qualified testing agency. Identify products with appropriate markings of

applicable testing agency. 1. Fire-Resistance Ratings: Indicated by design designations from UL's "Fire Resistance Directory" or from the listings of another qualified testing agency.

2.02 WOOD PANEL PRODUCTS

A. Thickness: As needed to comply with requirements specified, but not less than thickness indicated.

B. Factory mark panels to indicate compliance with applicable standard.

2.03 FIRE-RETARDANT-TREATED PLYWOOD

eated materials are indicated, use materials complying with requirements in this article that are acceptable to and with fire-test-response characteristics specified as determined by testing identical products per test method agency

bd by Pressure Process: Products with a flame-spread index of 25 or less when tested according to ASTM E 84, and progressive combustion when the test is extended an additional 20 minutes, and with the flame front not extending yond the centerline of the burners at any time during the test. not promote corrosion of metal fasteners.

aterials shall comply with requirements specified above for fire-retardant-treated plywood by pressure process after rated weathering according to ASTM D 2898. Use for exterior locations and where indicated. aterials shall have a moisture content of 28 percent or less when tested according to ASTM D 3201/D 3201M at 92 Jse where exterior type is not indicated.

Factors: Treated lumber plywood shall be tested according to ASTM D 5516 and design value adjustment factors shall ASTM D 6305. Span ratings after treatment shall be not less than span ratings specified. For roof sheathing and ire-retardant treatment is indicated, span ratings for temperatures up to 170 deg F (76 deg C) shall be not less than

t to a maximum moisture content of 15 percent. Do not use material that is warped or does not comply with

lywood with appropriate classification marking of qualified testing agency.

inless otherwise indicated: vithin 48 inches (1220 mm) of fire walls.

ment for raised platforms.

sheathing. n 32/16. ess than 23/32 inch

sheathing. n 32/16.

ess than 15/32 inch.

ize and type indicated that comply with requirements specified in this article for material and manufacture.

sheathing, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M. sheathing, provide fasteners with organic-polymer or other corrosion-protective coating having a salt-spray resistance cording to ASTM B 117.

TM F 1667.

ener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC70. ng to Wood Framing: ASTM C 1002.

ructural Panels to Cold-Formed Metal Framing: ASTM C 954, except with wafer heads and reamer wings, length as facturer for material being fastened.

Sheathing to Cold-Formed Metal Framing: Steel drill screws, in length recommended by sheathing manufacturer for tached.

an 0.0329 inch (0.835 mm) thick, use screws that comply with ASTM C 1002. 033 to 0.112 inch (0.84 to 2.84 mm) thick, use screws that comply with ASTM C 954.

ite Nail Base Insulated Roof Sheathing to Metal Roof Deck: Steel drill screws, in type and length recommended by ckness of sheathing to be attached, with organic-polymer or other corrosion-protective coating having a salt-spray burs according to ASTM B 117. Provide washers or plates if recommended by sheathing manufacturer.

RATION TREATMENT MATERIALS

psum Sheathing: Elastomeric, medium-modulus, neutral-curing silicone joint sealant compatible with joint substrates nd other materials, recommended by sheathing manufacturer for application indicated and complying with ealants specified in Section 079200 "Joint Sealants."

Sheathing: Silicone emulsion sealant complying with ASTM C 834, compatible with sheathing tape and sheathing and athing manufacturers for use with glass-fiber sheathing tape and for covering exposed fasteners. ering glass-fiber tape, minimum 2 inches (50 mm) wide, 10 by 10 or 10 by 20 threads/inch (390 by 390 or 390 by 780 mended by sheathing and tape manufacturers for use with silicone emulsion sealant in sealing joints in glass-mat with a history of successful in-service use.

stic Sheathing: Pressure-sensitive plastic tape recommended by sheathing manufacturer for sealing joints and

nels to Wood Framing: Formulation complying with ASTM D 3498 that is approved for use with type of construction ers of both adhesives and panels.

cts that impair quality of sheathing or pieces that are too small to use with minimum number of joints or optimum joint that pieces do not span between fewer than three support members.

ges, and other obstructions of work; fit tightly against abutting construction unless otherwise indicated.

fastening as indicated, complying with the following:

ng Schedule," in the ICC's International Building Code. for fastener.

otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed terials. Make tight connections. Install fasteners without splitting wood.

oof sheathing installation with flashing and joint-sealant installation so these materials are installed in sequence and oisture from passing through completed assembly.

ion joints; cut and space edges of panels to match spacing of structural support elements.

ion with installation of materials installed over sheathing so sheathing is not exposed to precipitation or left exposed at s forecast.

STALLATION

ble recommendations in APA Form No. E30, "Engineered Wood Construction Guide," for types of structural-use panels

nels as indicated below: derlayment:

ood framing.

metal framing. ch (3 mm) apart at edges and ends.

ood framing.

metal framing.

ch (3 mm) apart at edges and ends.

framing. metal framing.

ch (3 mm) apart at edges and ends.

nch (0.8 mm) apart at edges and ends. ints of underlayment receiving resilient flooring immediately before installing flooring

TION

field of panel to each stud.

nanufacturer's written instructions.

to wood framing with nails or screws. to cold-formed metal framing with screws.

nch (9.5-mm) gap where non-load-bearing construction abuts structural elements. nch (6.4-mm) gap where they abut masonry or similar materials that might retain moisture, to prevent wicking.

tightly against face of sheathing, but do not cut into facing. neathing with V-grooved edge down and tongue edge up. Interlock tongue with groove to bring long edges in contact without forcing. Abut ends over centers of studs, and stagger end joints of adjacent panels not less than one stud

nd within field of panel to each stud. Space fasteners approximately 8 inches (200 mm) o.c. and set back a minimum of 3/8 inch (9.5 mm) from edges and ends of panels. 2. For sheathing under stucco cladding, panels may be initially tacked in place with screws if overlying self-furring metal lath is screw-attached

through sheathing to studs immediately after sheathing is installed. D. Vertical Installation: Install vertical edges centered over studs. Abut ends and edges with those of adjacent panels. Attach at perimeter and within

Space fasteners approximately 8 inches (200 mm) o.c. and set back a minimum of 3/8 inch (9.5 mm) from edges and ends of panels. For sheathing under stucco cladding, panels may be initially tacked in place with screws if overlying self-furring metal lath is screw-attached through sheathing to studs immediately after sheathing is installed.

Seal sheathing joints according to sheathing manufacturer's written instructions.

Apply elastomeric sealant to joints and fasteners and trowel flat. Apply sufficient amount of sealant to completely cover joints and fasteners after troweling. Seal other penetrations and openings.

KRIEGER KLATT ARCHITECTS

2120 E. 11 Mile Rd. | Royal Oak, MI 48067 **P:** 248.414.9270 **F:** 248.414.9275 www.kriegerklatt.com

Client:

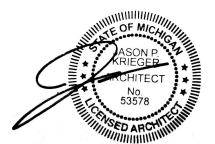
Verus Development Group

Project:

Project Name 19876 Mack Ave Grosse Pointe Woods MI

Issued	Description Permits	By
8/11/2022	Permits	

Seal:



Note:

Do not scale drawings. Use calculated dimensions only Verify existing conditions in field. North Arrow:

Sheet Title:

Specifications

Project Number

22-099 Scale:

	CEMENTITIOUS BACKER UNIT INSTALLATION A Install papels and treat joints according to ANSI A108 11 and manufacturer's written instructions for type of application indicated	
	A. Install panels and treat joints according to ANSI A108.11 and manufacturer's written instructions for type of application indicated. END OF SECTION 061600 06 1600	
	DIVISION 07 - THERMAL AND MOISTURE PROTECTION	
	SECTION 07 1400 FLUID-APPLIED WATERPROOFING	3.0
AR	T 1 GENERAL	
01	RELATED REQUIREMENTS	
	A. Refer to Section 07 2400 - Exterior Insulation and Finish Systems for Water Resistive Barrier Coating requirements. Use continuous system under one warranty for new facade. Follow manufacturer requirements for tie-in to existing system.	
AR	T 2 PRODUCTS	PA
	END OF SECTION 07 1400	1.0
	SECTION 07 2100 THERMAL INSULATION	1.0
٩R	T 1 GENERAL	
01	SECTION INCLUDES	1.0
	 A. Board insulation at over roof deck and exterior wall behind masonry wall finish. Batt insulation in exterior wall construction. 	
	 C. Batt insulation for filling perimeter window and door shim spaces and crevices in exterior wall and roof. 	
02	SUBMITTALS	
	A. See Section 01 3000 - Administrative Requirements, for submittal procedures.	1.0
	B. Product Data: Provide data on product characteristics, performance criteria, and product limitations.	
	 C. ABAA Field Quality Control Submittals: Submit third-party reports of testing and inspection required by ABAA QAP. D. ABAA Manufacturer Qualification: Submit documentation of current evaluation of proposed manufacturer and materials. 	
	E. ABAA Installer Qualification: Submit documentation of current contractor accreditation and current installer certification. Keep copies of contractor	
יו	accreditation and installer certification on project site during and after installation. Present on-site documentation upon request.	
50	QUALITY ASSURANCE A. Air Barrier Association of America (ABAA) Quality Assurance Program (QAP); www.airbarrier.org/#sle:	1.0
	1. Installer Qualification: Use accredited contractors, certified installers, evaluated materials, and third-party field quality control audit.	PA
	 Manufacturer Qualification: Use evaluated materials from a single manufacturer regularly engaged in air barrier material manufacture. Use secondary materials approved in writing by primary material manufacturer. 	2.0
)4	FIELD CONDITIONS	
-	A. Do not install insulation adhesives when temperature or weather conditions are detrimental to successful installation.	
	T 2 PRODUCTS APPLICATIONS	2.0
1	APPLICATIONS A. Insulation Over Metal Stud Framed Walls, Continuous: Extruded polystyrene (XPS) carbon black board.	
	 B. Insulation in Metal Framed Walls: Batt insulation with integral vapor retarder. 	
	C. Insulation Over Roof Deck: Polyisocyanurate board.	
	D. Insulation over concrete roof deck: Polyisocyanurate board	
)2	E. Protection Board placed over the Rigid Insulation: 1/2" Cover Board FOAM BOARD INSULATION MATERIALS	
	A. Extruded Polystyrene (XPS) Continuous Insulation (CI) Board: Complies with ASTM C578, and manufactured using carbon black technology.	
	 Flame Spread Index (FSI): Class A - 0 to 25, when tested in accordance with ASTM E84. Smoke Developed Index (SDI): 450 or less, when tested in accordance with ASTM E84. 	
	3. Type and Thermal Resistance, R-value (RSI-value): Type IV, 5.0 (0.88), minimum, per 1 inch (25.4 mm) thickness at 75 degrees F (24 degrees	
	C) mean temperature.Board Size: 48 inch by 96 inch (1220 mm by 2440 mm).	2.0
	5. Board Edges: Shiplap, at long edges.	
)3	BATT INSULATION MATERIALS	2.0
	 A. Where batt insulation is indicated, either glass fiber or mineral fiber batt insulation may be used, at Contractor's option. B. Glass Fiber Batt Insulation: Flexible preformed batt or blanket, complying with ASTM C665; friction fit. 	
	1. Flame Spread Index: 25 or less, when tested in accordance with ASTM E84.	
	 Smoke Developed Index: 450 or less, when tested in accordance with ASTM E84. Combustibility: Non-combustible, when tested in accordance with ASTM E136, except for facing, if any. 	14 ° *
	4. Formaldehyde Content: Zero.	2.0
	 Thermal Resistance: R-value (RSI-value) of [as depicted on drawings] ([]). Manufacturers: 	
	 a. CertainTeed Corporation; []: www.certainteed.com/#sle. b. Johns Manville; []: www.jm.com/#sle. 	
	c. Owens Corning Corporation; EcoTouch PINK FIBERGLAS Insulation: www.ocbuildingspec.com/#sle.	
	 d. Substitutions: See Section 01 6000 - Product Requirements. C. Mineral Fiber Batt Insulation: Flexible or semi-rigid preformed batt or blanket, complying with ASTM C665; friction fit; unfaced flame spread index of 	2.0
	0 (zero) when tested in accordance with ASTM E84.	2.0
	 Flame Spread Index: 25 or less, when tested in accordance with ASTM E84. Smoke Developed Index: 0 (zero), when tested in accordance with ASTM E84. 	
	3. Thermal Resistance: R-value (RSI-value) of [] ().	
	 Thickness: [_] inch ([_] mm). Manufacturers: 	
	 a. Johns Manville; MinWool Sound Attenuation Fire Batts: www.jm.com/#sle. b. ROCKWOOL (ROXUL, Inc); COMFORTBATT: www.rockwool.com/#sle. 	
)4	ACCESSORIES	
1	A. Flashing Tape: Special reinforced film with high performance adhesive.	
	 Application: Window and door opening flashing tape. Width: As required for application. 	
	3. Primer: Tape manufacturer's recommended product.	
	B. Tape: Bright aluminum self-adhering type, mesh reinforced, 2 inch (50 mm) wide.	
	 C. Tape joints of rigid insulation in accordance with roofing and insulation manufacturers' instructions. D. Insulation Fasteners: Appropriate for purpose intended and approved by roofing manufacturer. 	
	 Insulation Fasteners. Appropriate for purpose intended and approved by rooning manufacturer. Length as required for thickness of insulation material and penetration of deck substrate. 	PA
	E. Adhesive: Type recommended by insulation manufacturer for application.	3.0
	T 3 EXECUTION	
1	EXAMINATION A. Verify that substrate, adjacent materials, and insulation materials are dry and that substrates are ready to receive insulation.	3.0
	 B. Verify substrate surfaces are flat, free of honeycomb, fins, irregularities, or materials or substances that may impede adhesive bond. 	2.0
)2	BOARD INSTALLATION AT EXTERIOR WALLS	
	 A. Adhere 6 inches (152 mm) wide strip of polyethylene sheet over expansion joints with double beads of adhesive each side of joint. 1. Tape seal joints between sheets. 	
	2. Extend sheet full height of joint.	
	B. Install rigid insulation directly to steel studs or exterior grade sheathing at 16 inches (406 mm) on center with manufacturer recommended mechanical fasteners, and tape joints with manufacturer's minimum 4 inches (102 mm) wide sealant tape; comply with ASTM E2357.	
	C. Install boards horizontally on walls.	
	1. Place boards to maximize adhesive contact.	94040 ·····
	 Install in running bond pattern. Butt edges and ends tightly to adjacent boards and protrusions. 	3.0
	D. Extend boards over expansion joints, unbonded to wall on one side of joint.	
	E. Cut and fit insulation tightly to protrusions or interruptions to the insulation plane.	
03	BOARD INSTALLATION OVER LOW SLOPE ROOF DECK - INSET BALCONIES AND EXTERIOR TERRACES	
	 A. Board Installation Over Roof Deck, General: 1. See applicable roofing specification section for specific board installation requirements. 	
	 Fasten insulation to deck in accordance with roofing manufacturer's written instructions and applicable Factory Mutual requirements. Do not apply more insulation than can be covered with roofing on the same day. 	
	3. Do not apply more insulation than can be covered with rooting on the same day. BATT INSTALLATION	
)4	A. Install insulation in accordance with manufacturer's instructions.	3.0
04		
04	B. Install in exterior wall and roof spaces without gaps or voids. Do not compress insulation.	
)4	B. Install in exterior wall and roof spaces without gaps or voids. Do not compress insulation.C. Trim insulation neatly to fit spaces. Insulate miscellaneous gaps and voids.	3.0
04	B. Install in exterior wall and roof spaces without gaps or voids. Do not compress insulation.	3.0

Do not permit storage of materials or roof traffic on installed roof panels. Provide temporary walkways or planks as necessary to avoid damage to completed work. Protect roofing until completion of project. Touch-up, repair, or replace damaged roof panels or accessories before Date of Substantial Completion. END OF SECTION 07 4113

See Section 01 4000 - Quality Requirements, for additional requirements.	
Coordination of Air Barrier Association of America (ABAA) Tests and Inspections: 1. Provide testing and inspection required by ABAA Quality Assurance Program (QAP).	PART 1 GENERAL
 Notify ABAA in writing of schedule for air barrier work, and allow adequate time for testing and inspection. Cooperate with ABAA testing agency. 	1.01 SECTION INCLUDES
 Allow access to air barrier work areas and staging. Do not cover air barrier work until tested, inspected, and accepted. 	A. Adhered roof system with ethylB. Insulation, flat and tapered.
ROTECTION	C. Flashings.
Do not permit installed insulation to be damaged prior to its concealment.	D. Roofing cant strips, stack boots
END OF SECTION 07 2100 SECTION 07 4113	1.02 SUBMITTALS A. See Section 01 3000 - Adminis
GENERAL METAL ROOF PANELS	 B. Product Data: Provide manufa 1. Product data indicating m
ECTION INCLUDES	C. Shop Drawings: Indicate joint
Architectural roofing system of preformed steel panels.	1.03 QUALITY ASSURANCE
ELATED REQUIREMENTS Section 07 9200 - Joint Sealants: Sealing joints between metal roof panel system and adjacent construction.	A. Installer Qualifications: Compa 1. Approved by membrane n
EFERENCE STANDARDS	2. Extend manufacturer's lab B. Single Source Responsibility:
AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix) 2020, with Errata (2022).	1.04 DELIVERY, STORAGE, AND HAN
ASTM D1970/D1970M - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing	A. Deliver products in manufactur
Underlayment for Ice Dam Protection 2021. ICC-ES AC188 - Acceptance Criteria for Roof Underlayments 2012, with Editorial Revision (2015).	 B. Store products in weather prote C. Protect foam insulation from dia
JBMITTALS	D. Keep Material Safety Data She
See Section 01 3000 - Administrative Requirements, for submittal procedures. Shop Drawings: Include layouts of roof panels, details of edge and penetration conditions, spacing and type of connections, flashings,	E. Comply with all requirements o 1.05 FIELD CONDITIONS
underlayments, and special conditions. 1. Show work to be field-fabricated or field-assembled.	A. Do not apply roofing membrane
Selection Samples: For each roofing system specified, submit color chips representing manufacturer's full range of available colors and patterns.	B. Do not apply roofing membrane
ELIVERY, STORAGE, AND HANDLING	C. Do not apply roofing membrane D. Do not expose materials vulner
Store roofing panels on project site as recommended by manufacturer to minimize damage to panels prior to installation. PRODUCTS	E. Proceed with work so new roof
ANUFACTURERS	F. Do not allow grease, oil, fats, o PART 2 PRODUCTS
Metal Roof Panels: 1. Petersen Aluminum Corporation; Snap-Clad Panel: www.pac-clad.com/#sle.	2.01 MANUFACTURER
2. Substitutions: See Section 01 6000 - Product Requirements.	A. Carlisle SynTec: www.carlisle-
RCHITECTURAL METAL ROOF PANELS Architectural Metal Roofing: Provide complete engineered system complying with specified requirements and capable of remaining weathertight	B. Johns ManvilleC. Substitutions: See Section 01
while withstanding anticipated movement of substrate and thermally induced movement of roofing system.	2.02 ROOFING APPLICATIONS
Metal Panels: Factory-formed panels with factory-applied finish. 1. Steel Panels:	A. EPDM Membrane Roofing: Or
 a. Steel Thickness: Minimum 24 gage (0.024 inch) (0.61 mm). 2. Profile: Standing seam, with minimum 1.0 inch (25 mm) seam height; concealed fastener system lapped seam in standing seam profile. 	B. Roofing Assembly Performance 1. Roof Covering External Fi
 Texture: Smooth. Width: Maximum panel coverage of 24 inches (610 mm). 	 Wind Uplift: a. Designed to withstan
Metal Soffit Panels:	 Insulation Thermal Resist Drainage: No standing was
 Profile: Style as indicated, with venting provided. Material: Precoated steel sheet, 22 gage, 0.0299 inch (0.76 mm) minimum thickness. 	2.03 ROOFING MEMBRANE AND ASS
3. Color: As indicated on drawings.	A. Membrane: 1. Material: Ethylene propyl
Concealed System: Provide manufacturer's standard stainless steel or nylon-coated aluminum concealed anchor clips designed for specific roofing	 Thickness: 60 mils (0.06 Sheet Width: Factory fab
system and engineered to meet performance requirements, including anticipated thermal movement.	4. Color: Black.
Panels: Provide factory fabricated panels with applied finish and accessory items, using manufacturer's standard processes as required to achieve	B. Seaming Materials: As recommond C. Flexible Flashing Material: Sar
specified appearance and performance requirements. Joints: Provide captive gaskets, sealants, or separator strips at panel joints to ensure weathertight seals, eliminate metal-to-metal contact, and	D. Base Flashing: Provide waterp
minimize noise from panel movements.	2.04 DECK SHEATHING AND COVER
NISHES Fluoropolymer Coil Coating System: Manufacturer's standard multi-coat aluminum coil coating system complying with AAMA 2605, including at least	A. Cover Board: High Density Pol 1. Board Thickness: 1/4"
70 percent polyvinylidene fluoride (PVDF) resin, and at least 80 percent of coil coated aluminum surfaces having minimum total dry film thickness (DFT) of 0.9 mil, 0.0009 inch (0.023 mm); color and gloss to match sample.	 Board Size: 4' x 4' Fully Adhered
Fluoropolymer Coil Coating System: Polyvinylidene fluoride (PVDF) multi-coat superior performing organic coatings system complying with AAMA	 Compressive Strength: 15 Product: Johns Manville -
2605, including at least 70 percent PVDF resin, and at least 80 percent of coil coated aluminum surfaces having minimum total dry film thickness (DFT) of 0.9 mil, 0.0009 inch (0.023 mm); color and gloss as selected by Architect from manufacturer's standard line.	2.05 INSULATION
CESSORIES Missellenseus Sheet Metal Itama, Bravida flashinga, guttara, daunanauta, trim, maldinga, alagura atrina, prefermad ariakata, appa, and aguinment	A. Polyisocyanurate Board Insulat 1. Compressive Strength: 25
Miscellaneous Sheet Metal Items: Provide flashings, gutters, downspouts, trim, moldings, closure strips, preformed crickets, caps, and equipment curbs of the same material, thickness, and finish as used for the roofing panels. Items completely concealed after installation may optionally be made	 Tapered Board: Slope as Product: Johns Manville -
of stainless steel. Rib and Ridge Closures: Provide prefabricated, close-fitting components of steel with corrosion resistant finish or combination steel and closed-cell	2.06 ACCESSORIES
foam. Sealants:	A. Prefabricated Flashing Access 1. Corners and Seams: San
1. Exposed Sealant: Elastomeric; silicone, polyurethane, or silyl-terminated polyether/polyurethane.	 Penetrations: Same mate Sealant Pockets: Same n
 Concealed Sealant: Non-curing butyl sealant or tape sealant. Seam Sealant: Factory-applied, non-skinning, non-drying type. 	4. Sure-Seal Pressure-Sens
Underlayment: Self-adhering rubber-modified asphalt sheet complying with ASTM D1970/D1970M; 22 mil (0.55 mm) total thickness; with strippable release film and woven polypropylene sheet top surface.	B. Insulation Fasteners: AppropriC. Membrane Adhesive: As record
 Minimum Requirements: Comply with requirements of ICC-ES AC188 for non-self-adhesive sheet. Self Sealability: Passing nail sealability test specified in ASTM D1970/D1970M. 	D. Surface Conditioner for Adhesi
3. Manufacturers:	E. Sealants: As recommended byF. Cleaner: Manufacturer's stand
 Polyglass USA, Inc; Polystick MTS Self-Adhered High Temperature Roof Underlayment: www.polyglass.us/#sle. b. GCP Applied Technologies; Grace ULTRA Membrane. 	G. Edgings and Terminations: Ma
EXECUTION	 Product: Anchor bar fasc Product: Drip edge.
Do not begin installation of preformed metal roof panels until substrates have been properly prepared.	2.07 INTERNAL PATIOS AND ROOFT
If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.	A. Hardscape: 1. Concrete Plaza Pavers: 2
REPARATION Broom clean wood sheathing prior to installation of roofing system.	a minimum compressive s a. Manufacturer: Hanov
Coordinate roofing work with provisions for roof drainage, flashing, trim, penetrations, and other adjoining work to assure that the completed roof will	b. Color: to be selected c. Usage: pedestrians
be free of leaks. Coordinate installation of waterproof membrane over roof sheathing with 06 1000.	2. Paver Pedestals: Rubber a. Manufacturer: Hanov
Remove protective film from surface of roof panels immediately prior to installation. Strip film carefully, to avoid damage to prefinished surfaces.	b. Provide all componen
Separate dissimilar metals by applying a bituminous coating, self-adhering rubberized asphalt sheet, or other permanent method approved by roof panel manufacturer.	B. Not In Contract: Concrete curb PART 3 EXECUTION
Where metal will be in contact with wood or other absorbent material subject to wetting, seal joints with sealing compound and apply one coat of heavy-bodied bituminous paint.	3.01 EXAMINATION
STALLATION	A. Verify that surfaces and site co
Overall: Install roofing system in accordance with approved shop drawings and panel manufacturer's instructions and recommendations, as applicable to specific project conditions. Anchor all components of roofing system securely in place while allowing for thermal and structural	B. Verify deck is supported and seC. Verify deck is clean and smoot
movement. 1. Install roofing system with concealed clips and fasteners, except as otherwise recommended by manufacturer for specific circumstances.	D. Verify deck surfaces are dry an
2. Minimize field cutting of panels. Where field cutting is absolutely required, use methods that will not distort panel profiles. Use of torches for field	E. Verify that roof openings, curbs
cutting is absolutely prohibited. Accessories: Install all components required for a complete roofing assembly, including flashings, gutters, downspouts, trim, moldings, closure strips,	3.02 PREPARATION, GENERAL A. Clean substrate thoroughly price
preformed crickets, caps, equipment curbs, rib closures, ridge closures, and similar roof accessory items.	B. Do not begin work until other w

Roof Panels: Install panels in strict accordance with manufacturer's instructions, minimizing transverse joints except at junction with penetrations. LEANING

Clean exposed sheet metal work at completion of installation. Remove grease and oil films, excess joint sealer, handling marks, and debris from installation, leaving the work clean and unmarked, free from dents, creases, waves, scratch marks, or other damage to the finish. ROTECTION

SECTION 07 5323 EPDM THERMOSET SINGLE-PLY ROOFING - CARLISLE

ylene propylene diene terpolymer (EPDM) roofing membrane.

ts, roofing expansion joints, and walkway pads.

istrative Requirements, for submittal procedures. acturer's written information listed below. nembrane materials, flashing materials, insulation, vapor retarder, surfacing, and fasteners. t or termination detail conditions, conditions of interface with other materials, and paver layout.

pany specializing in performing the work of this section:

manufacturer. abor and materials guarantee.

Provide and install products from single source. NDLING

irer's original containers, dry, undamaged, with seals and labels intact.

tected environment, clear of ground and moisture.

lirect exposure to sunlight.

eets (MSDS) at the project site at all times during transportation, storage, and installation of materials. of Owner to prevent overloading or disturbance of the structure when loading materials onto the roof.

ne during unsuitable weather. Refer to manufacturer's written instructions.

ne when ambient temperature is below 40 degrees F (5 degrees C) or above [____] degrees F ([____] degrees C). ne to damp or frozen deck surface or when precipitation is expected or occurring.

erable to water or sun damage in quantities greater than can be weatherproofed the same day. ofing materials are not subject to construction traffic as work progresses.

or other contaminants to come into direct contact with membrane.

e-syntec.com/#sle.

1 6000 - Product Requirements.

One ply membrane, fully adhered, over insulation. ce Requirements and Design Criteria: Fire Resistance Classification: Class A when tested per UL 790. and wind uplift forces calculated with ASCE 7.

stance (R-Value): 5.0 per inch, minimum; provide insulation of thickness required. water within 48 hours after precipitation. SOCIATED MATERIALS

lene diene terpolymer (EPDM); ASTM D4637/D4637M, Type I (non-reinforced). 60 inch) (1.5 mm), minimum. bricated into largest sheets possible.

nmended by membrane manufacturer. ame material as membrane. rproof, fully adhered base flashing system at all penetrations, plane transitions, and terminations. R BOARDS

olyisocyanurate foam core, complying with ASTM C1289; Type II, Grade 3.

50 PSI - INVINSA Roof Board (or approved equal)

ation: ASTM C1289, Type II, Class 1, fiber reinforced felt both faces; Grade 3 and with the following characteristics: 25 pounds per square inch (172 kPa). s indicated; minimum thickness 5 inch ([____] mm); fabricate of fewest layers possible. - ENRGY 3 (or approved equal)

sories:

ame material as membrane, in manufacturer's standard thicknesses.

terial as membrane, with manufacturer's standard cut-outs, rigid inserts, clamping rings, and flanges. material as membrane, with manufacturer's standard accessories, in manufacturer's standard configuration. sitive Reinforced Universal Securement Strip (RUSS):

riate for purpose intended and approved by roofing manufacturer.

ommended by membrane manufacturer. sives: Compatible with membrane and adhesives.

by membrane manufacturer.

dard, clear, solvent-based cleaner. lanufacturer's standard edge and termination accessories.

cia system.

TOP TERRACES

3.03 CONCRETE DECK PREPARATION

3.04 INSTALLATION - GENERAL

2 feet (609 mm) square, 2 inch (51 mm) thick, precast concrete pavers weighing a minimum of 18 pounds (8.2 kg) and strength of 6,500 pounds per square inch (44.8 MPa). over - roof and plaza pavers (or approved equal) d by Architect from manuf. full range

r; elevate pavers above membrane to allow free drainage. over - Pedestal and Shims (or approved equal) ents necessary for a complete installation

rbs, landscape lumber, plants, growth medium, and other landscape products.

conditions are ready to receive work.

secure. oth, flat, free of depressions, waves, or projections, properly sloped and suitable for installation of roof system. and free of snow or ice. os, and penetrations through roof are solidly set, and cant strips are in place.

rior to roof application. work that requires foot or equipment traffic on roof is complete.

A. Fill surface honeycomb and variations with latex filler. B. Confirm dry deck by moisture meter with 12 percent moisture maximum when tested per ASTM D4263.

A. Perform work in accordance with manufacturer's instructions and NRCA (RM) applicable requirements.

B. Do not apply roofing membrane during unsuitable weather. C. Do not apply roofing membrane when ambient temperature is outside the temperature range recommended by manufacturer. D. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.

KRIEGER KLATT ARCHITECTS

2120 E. 11 Mile Rd. | Royal Oak, MI 48067 **P:** 248.414.9270 **F:** 248.414.9275 www.kriegerklatt.com

Client:

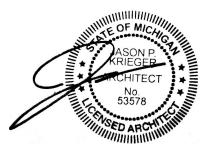
Verus Development Group

Project:

Project Name 19876 Mack Ave Grosse Pointe Woods MI

Issued	Description	Ву
8/11/2022	Permits	

Seal:



Note: Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field. North Arrow:

Sheet Title:

Specifications

Project	Number:
22-099	
Scale:	

	E. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.	ĺ
	INSULATION APPLICATION A. Attachment of Insulation:	
	1. Mechanically fasten insulation to deck in accordance with roofing manufacturer's instructions and Factory Mutual requirements.	
	 Lay subsequent layers of insulation with joints staggered minimum 6 inch (152 mm) from joints of preceding layer. Lay boards with edges in moderate contact without forcing, and gap between boards no greater than 1/4 inch (6 mm). Cut insulation to fit neatly to 	2.01
	perimeter blocking and around penetrations through roof.	2.01
]	D. Do not apply more insulation than can be completely waterproofed in the same day.	
	MEMBRANE APPLICATION A. Roll out membrane, free from wrinkles or tears. Place sheet into place without stretching.	
	 Shingle joints on sloped substrate in direction of drainage. 	2.02
(C. Fully Adhered Application: Apply adhesive at manufacturer's recommended rate. Fully embed membrane in adhesive except in areas directly over	
r	or within 3 inches (75 mm) of expansion joints. Fully adhere one roll before proceeding to adjacent rolls. D. Overlap edges and ends and seal seams by contact adhesive, minimum 3 inches (75 mm). Seal permanently waterproof.	
	E. At intersections with vertical surfaces:	
	1. Extend membrane over cant strips and up a minimum of 4 inches (100 mm) onto vertical surfaces.	
F	 Fully adhere flexible flashing over membrane and up to nailing strips. Install roofing expansion joints where indicated. Make joints watertight. 	
5	G. Install prefabricated joint components in accordance with manufacturer's instructions.	
ł	H. Coordinate installation of roof drains and sumps and related flashings. Locate all field splices away from low areas and roof drains. Lap upslope	
ĩ	sheet over downslope sheet. Daily Seal: Install daily seal per manufacturers instructions at the end of each work day. Prevent infiltration of water at incomplete flashings,	
	terminations, and at unfinished membrane edges.	
	FIELD QUALITY CONTROL	
	 See Section 01 4000 - Quality Requirements, for general requirements for field quality control and inspection. Require site attendance of roofing and insulation material manufacturers daily during installation of the Work. 	PART
	 Require site attendance of roofing and insulation material manufacturers daily during installation of the Work. CLEANING 	3.01
	A. See Section 01 7419 - Construction Waste Management and Disposal, for additional requirements.	3.02
E	3. Remove bituminous markings from finished surfaces.	
(In areas where finished surfaces are soiled by work of this section, consult manufacturer of surfaces for cleaning advice and conform to their documented instructions. 	
[Repair or replace defaced or damaged finishes caused by work of this section. 	
	PROTECTION	PART
	A. Protect installed roofing and flashings from construction operations.	1.01
E	3. Where traffic must continue over finished roof membrane, protect surfaces using durable materials. END OF SECTION 07 5323	
	END OF SECTION 07 5323 SECTION 07 6200	
	SHEET METAL FLASHING AND TRIM	1.02
	1 GENERAL	1.02
	SECTION INCLUDES A. Fabricated sheet metal items, including flashings, counterflashings, and other items indicated in Schedule.	
	3. Sealants for joints within sheet metal fabrications.	
	SUBMITTALS	
/	 See Section 01 3000 - Administrative Requirements, for submittal procedures. 	
	A. Perform work in accordance with SMACNA (ASMM) and CDA A4050 requirements and standard details, except as otherwise indicated. DELIVERY, STORAGE, AND HANDLING	
	A. Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.	
	 Prevent contact with materials that could cause discoloration or staining. 	
ART	2 PRODUCTS	1.03
	MANUFACTURERS	8
1	 Sheet Metal Flashing and Trim Manufacturers: all qualified manufacturers are allowed . 	PART
02	SHEET MATERIALS	2.01
1	A. Pre-Finished Galvanized Steel: ASTM A653/A653M, with G90/Z275 zinc coating; minimum 24 gage, (0.0239) inch (0.61 mm) thick base metal, shop pre-coated with PVDF coating.	
	1. PVDF (Polyvinylidene Fluoride) Coating: Superior Performance Organic Finish, AAMA 2605; multiple coat, thermally cured fluoropolymer finish	
	system. 2. Color: Match adjacent material.	
E	 Aluminum: ASTM B209 (ASTM B209M); 20 gage, (0.032 inch) (0.81 mm) thick; anodized finish of color as selected. 	
(C. Pre-Finished Aluminum: ASTM B209 (ASTM B209M); 20 gage, (0.032 inch) (0.81 mm) thick; plain finish shop pre-coated with modified silicone	
	coating. 1. Modified Silicone Polyester Coating: Pigmented Organic Coating System, AAMA 2603; baked enamel finish system.	
	2. Color: Match adjacent material.	
	D. Stainless Steel: ASTM A666, Type 304 alloy, soft temper, 28 gage, (0.0156 inch) (0.40 mm) thick; smooth No. 4 - Brushed finish. EARBIGATION	
	FABRICATION A. Form sections true to shape, accurate in size, square, and free from distortion or defects.	
	3. Form pieces in longest possible lengths.	
3	C. Hem exposed edges on underside 1/2 inch (13 mm); miter and seam corners.	
[D. Form material with flat lock seams, except where otherwise indicated; at moving joints, use sealed lapped, bayonet-type or interlocking hooked	
Ē	seams.	1
	E. Fabricate corners from one piece with minimum 18 inch (450 mm) long legs; seam for rigidity, seal with sealant.	
	 Fabricate corners from one piece with minimum 18 inch (450 mm) long legs; seam for rigidity, seal with sealant. Fabricate flashings to allow toe to extend 2 inches (50 mm) over roofing []. Return and brake edges. 	
F		
F 94 /	 Fabricate flashings to allow toe to extend 2 inches (50 mm) over roofing []. Return and brake edges. ACCESSORIES A. Fasteners: Galvanized steel, with soft neoprene washers. 	
14 14 14	 Fabricate flashings to allow toe to extend 2 inches (50 mm) over roofing []. Return and brake edges. ACCESSORIES A. Fasteners: Galvanized steel, with soft neoprene washers. B. Primer: Zinc chromate type. 	
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604 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	 Fabricate flashings to allow toe to extend 2 inches (50 mm) over roofing []. Return and brake edges. ACCESSORIES A Fasteners: Galvanized steel, with soft neoprene washers. Primer: Zinc chromate type. C concealed Sealants: Non-curing butyl sealant. D Exposed Sealants: ASTM C320; elastomeric sealant, with minimum movement capability as recommended by manufacturer for substrates to be sealed; color to match adjacent material. Plastic Cement: ASTM D4586/D4586M, Type I. 3 EXECUTION EXAMINATION A Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located. Verify roofing termination and base flashings are in place, sealed, and secure. PREPARATION A Install starter and edge strips, and cleats before starting installation. Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil (0.4 mm). INSTALLATION A Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted Apply plastic cement compound between metal flashings and felt flashings. Fit flashings tight in place; make corners square, surfaces true and straight in planes, and lines accurate to profiles. Seal metal joints watertight. SCHEDULE A Through-Wall Flashing in Masonry: at masonry veneer and CMU walls 	PART 3.01 3.02 3.03 3.04 3.05
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6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	 Fabricate flashings to allow toe to extend 2 inches (50 mm) over roofing]. Return and brake edges. ACCESSORIES A. Fasteners: Galvanized steel, with soft neoprene washers. Primer: Zinc chromate type. C. Concealed Sealants: Non-curing butyl sealant. D. Concealed Sealants: Non-curing butyl sealant. D. Styposed Sealants:: ASTM C920; elastomeric sealant, with minimum movement capability as recommended by manufacturer for substrates to be sealed; color to match adjacent material. Plastic Cement: ASTM D4586/D4586M, Type I. 3 EXECUTION EXAMINATION A. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located. 3. Verify roofing termination and base flashings are in place, sealed, and secure. PREPARATION A. Install starter and edge strips, and cleats before starting installation. 3. Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil (0.4 mm). INSTALLATION A. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted 3. Apply plastic cement compound between metal flashings and felt flashings. 5. Fit flashings tip hi place; make corners square, surfaces true and straight in planes, and lines accurate to profiles. 5. Seal metal joints watertight. SCHEDUEL A. Through-Wall Flashing in Masonry: at masonry veneer and CMU walls 5. Fascia and Cornicesat overhangs and cornices : as depicted on the drawings Coping, Cap, Parapet, Sill and Ledge Flashings: at all parapet caps, window sills and material edge flashing as shown on the drawings. Coping, Cap, Parapet, Sill and Ledge Flashings: at all parapet caps, window sills and material edge flashing as shown on the drawings. Coping, Cap, Parapet, Sill and Ledge Flashings: at all parapet caps, window sills and material edge f	PART 3.01 3.02 3.03 3.04 3.05
6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	 Fabricate flashings to allow toe to extend 2 inches (50 mm) over roofing []. Return and brake edges. ACCESSORIES ACCESSORIES Fasteners: Galvanized steel, with soft neoprene washers. Primer: Zinc chromate type. Concealed Sealants: Non-curing butyl sealant. Exposed Sealants: ASTM C920; elastomeric sealant, with minimum movement capability as recommended by manufacturer for substrates to be sealed; color to match adjacent material. Plastic Cement: ASTM D4586/D4586M, Type I. 3 EXECUTION EXAMINATION A. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located. BerPARATION A. Install starter and edge strips, and cleats before starting installation. Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil (0.4 mm). INSTALLATION A. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted Back paint compound between metal flashings and felt flashings. Fit flashings tight in place; make corners square, surfaces true and straight in planes, and lines accurate to profiles. Seal metal joints watertight. SCHEDULE A. Through-Wall Flashing in Masonry: at masonry veneer and CMU walls Bacia and Cornicesat overhangs and cornices : as depicted on the drawings Concent Compound tedge Flashings: at all parapet caps, window sills and material edge flashing as shown on the drawings. Conterflashings at Curb-Mounted Roof Items, including skylights and roof hatches: at all roof curbs for mechancial items.	PART 3.01 3.02 3.03 3.04 3.05
F F F F F F F F F F F F F F F F F F F	 Fabricate flashings to allow toe to extend 2 inches (50 mm) over roofing]. Return and brake edges. ACCESSORIES A. Fasteners: Galvanized steel, with soft neoprene washers. Primer: Zinc chromate type. Concealed Sealants: Non-curing butyl sealant. Exposed Sealants: ASTM C920; elastomeric sealant, with minimum movement capability as recommended by manufacturer for substrates to be sealed; color to match adjacent material. Plastic Cement: ASTM D4586/D4586M, Type I. 3 EXECUTION EXAMINATION A. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located. Verify roof genings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located. Verify roof genings, curbs, and cleats before starting installation. Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil (0.4 mm). INSTALLATION A. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted A. Apply plastic cement compound between metal flashings and felt flashings. Fit flashings tight in place; make corners square, surfaces true and striaight in planes, and lines accurate to profiles. Seal metal joints watertight. SCHEDULE A. Through-Wall Flashing in Masonry: at masonry veneer and CMU walls Fascia and Cornicesat overhangs and contices : as depicted on the drawings Coping, Cap, Parapet, Sill and Ledge Flashings: at all parapet caps, window sills and materia	PART 3.01 3.02 3.03 3.04 3.05
F F F F C C C C C C C C C C C C C	 Fabricate flashings to allow toe to extend 2 inches (50 mm) over roofing]. Return and brake edges. ACCESSORIES A. Fasteners: Galvanized steel, with soft neoprene washers. Primer: Zinc chromate type. C. Concealed Sealants: Non-curing butyl sealant. D. Exposed Sealants: XSTM C920; elastomeric sealant, with minimum movement capability as recommended by manufacturer for substrates to be sealed; color to match adjacent material. P. Plastic Cement: ASTM C920; elastomeric sealant, with minimum movement capability as recommended by manufacturer for substrates to be sealed; color to match adjacent material. P. Plastic Cement: ASTM C926/04586/M, Type I. 3 EXECUTION EXAMINATION A. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located. Werify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located. Werify roof openings, curbs, pipes, sleeves ducts, and vents through roof are solidly set, reglets in place, and nailing strips located. Werify roof openings, curbs, pipes, sleeves ducts, and vents through roof are solidly set, reglets in place, and nailing strips located. Werify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located. Werify roofing termination and base flashings are in place, sealed, and secure. PREPARATION A. Install starter and edge strips, and cleats before starting installation. B. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted. A. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted. B. Apply plastic cement compound between metal flashings and felt flashings. F. Fidashings tight in place; make corners square, surfaces true	PART 3.01 3.02 3.03 3.04 3.05 PART

1.02 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

1.02 SUBMITTALS

B. Product Data: Provide data on shape of components, materials and finishes, anchor types and locations.	A. See Section 01 3000 - Administrati
 C. Samples: Submit two appropriately sized samples of coping. D. Manufacturer's Installation Instructions: Indicate special procedures, fasteners, supporting members, and perimeter conditions requiring special 	 B. Product Data for Sealants: Submit 1. Physical characteristics, include
attention.	 List of backing materials appre Substrates that product is known
12 PRODUCTS MANUFACTURERS	4. Substrates the product should
A. Roof Edge Flashings and Copings:	C. Color Cards for Selection: Where s
B. Pipe and Penetration Flashings:	D. Samples for Verification: Where cu verification of color of each required
1. Portals Plus; []: www.portalsplus.com/#sle. C. Roof Vents:	E. Preconstruction Laboratory Test Re
COMPONENTS	F. Preinstallation Field Adhesion Test include bagged test samples and p
 Roof Edge Flashings: Factory fabricated to sizes required; mitered, welded corners; concealed fasteners. Configuration: Fascia, cant, and edge securement for roof membrane. 	1.03 QUALITY ASSURANCE
2. Pull-Off Resistance: Tested in accordance with ANSI/SPRI/FM 4435/ES-1 using test methods RE-1 and RE-2 to positive and negative design	 A. Field Adhesion Tests of Joints: Test recommended by manufacturer.
wind pressure as defined by applicable local building code.3. Material: Formed aluminum sheet, 0.063 inch (1.6 mm) thick, minimum.	1.04 WARRANTY
 Finish: Mill finish. Color: Match adjacent material color. 	 A. See Section 01 7800 - Closeout Su B. Correct defective work within a five
B. Copings: Factory fabricated to sizes required; mitered, welded corners; concealed fasteners.	C. Warranty: Include coverage for ins
 Configuration: Concealed continuous hold down cleat at both legs; internal splice piece at joints of same material, thickness and finish as cap; concealed stainless steel fasteners. 	cure.
 Pull-Off Resistance: Tested in accordance with ANSI/SPRI/FM 4435/ES-1 using test method RE-3 to positive and negative design wind pressure as defined by applicable local building code. 	PART 2 PRODUCTS 2.01 MANUFACTURERS
3. Material: Formed steel sheet, galvanized, 24 gage, 0.024 inch (0.6 mm) thick, minimum.	A. Non-Sag Sealants: Permits applica
 Color: Match adjacent material color Manufacturers: 	 Tremco Commercial Sealants Substitutions: See Section 01
3 EXECUTION	2.02 JOINT SEALANT APPLICATIONS
EXAMINATION	A. Scope:
A. Verify that deck, curbs, roof membrane, base flashing, and other items affecting work of this Section are in place and positioned correctly. INSTALLATION	1. Exterior Joints in vertical surfa sealed. Exterior joints to be se
A. Install components in accordance with manufacturer's instructions and NRCA (RM) applicable requirements.	 a. Wall expansion and control b. Control and expansion jo
END OF SECTION 07 7100	 c. Joints between door, win d. Joints between different et
SECTION 07 7200 ROOF ACCESSORIES	e. Openings below ledge an
1 GENERAL	f. Control and expansion jo g. Other joints indicated bel
	2. Interior Joints: Do not seal int
A. Curbs. B. Equipment rails.	following items.
C. Roof penetrations mounting curbs.	a. Joints between door, winb. Control and expansion jo
SUBMITTALS	c. Other joints indicated bel
 A. See Section 01 3000 - Administrative Requirements, for submittal procedures. B. Product Data: Manufacturer's data sheets on each product to be used. 	3. Do not seal the following type
1. Preparation instructions and recommendations.	a. Intentional weepholes inb. Joints indicated to be treat
 Storage and handling requirements and recommendations. Installation methods. 	c. Joints where sealant is s d. Joints where installation
 Maintenance requirements. For smoke hatches, submit evidence of approval by evaluation agency specified. 	e. Joints between suspende
C. Shop Drawings: Submit detailed layout developed for this project and provide dimensioned location and number for each type of roof accessory.	 B. Exterior Joints: Use non-sag silyl-t 1. Joints in Stone and Masonry:
D. Warranty Documentation:	2. Glazing Sealant: Type EXT-E
 Submit manufacturer warranty. Ensure that forms have been completed in Owner's name and registered with manufacturer. 	3. Lap Joints in Sheet Metal Fab 2.03 JOINT SEALANTS - GENERAL
3. Submit documentation that roof accessories are acceptable to roofing manufacturer, and do not limit the roofing warranty.	A. Sealants and Primers: Provide pro
DELIVERY, STORAGE, AND HANDLING A. Store products in manufacturer's unopened packaging until ready for installation.	B. Colors: As indicated on the drawin
B. Store products under cover and elevated above grade.	2.04 NONSAG JOINT SEALANTS
2 PRODUCTS	A. Type EXT-B - Silicone Sealant: AS 1. GLAZING SEALANT (MAY AI
	a. Movement Capability: Pl b. non-staining
 Manufacturers: B. Roof Curbs Mounting Assemblies: Factory fabricated hollow sheet metal construction, internally reinforced, and capable of supporting superimposed 	c. Color: To be selected by
live and dead loads and designated equipment load with fully mitered and sealed corner joints welded or mechanically fastened, and integral	d. Manufacturers: 1) TREMCO "Spectrum
counterflashing with top and edges formed to shed water. 1. Roof Curb Mounting Substrate: Curb substrate consists of standing seam metal roof panel system.	2) Substitutions: See
 Sheet Metal Material: a. Aluminum: 0.080 inch (2.03 mm) minimum thickness, with 3003 alloy, and H14 temper. 	B. Type [] - Hybrid Urethane Seala immersion or traffic.
 Galvanized Steel: Hot-dip zinc coated steel sheet complying with ASTM A653/A653M, SS Grade 33 (230); G60 (Z180) coating designation; 18 gage, 0.048 inch (1.21 mm) thick. 	1. Movement Capability: Plus an 2.05 ACCESSORIES
4. Roofing Cants: Provide integral sheet metal roofing cants dimensioned to begin slope at top of roofing system at 1:1 slope; minimum cant	A. Backer Rod: Cylindrical cellular for
height 4 inches (102 mm). 5. Fabricate curb bottom and mounting flanges for installation directly on metal roof panel system to match slope and configuration of system.	backing and sealant manufacturers 1. Type for Joints Not Subject to
a. Extend side flange to next adjacent roof panel seam and comply with seam configurations and seal connection, providing at least 6 inch (152 mm) clearance between curb and metal roof panel flange allowing water to properly flow past curb.	2. Type for Joints Subject to Per
b. Where side of curb aligns with metal roof panel flange, attach fasteners on upper slope of flange to curb connection allowing water to flow	 Open Cell: 40 to 50 percent la Closed Cell and Bi-Cellular: 2
past below fasteners, and seal connection. c. Maintain at least 12 inch (305 mm) clearance from curb, and lap upper curb flange on underside of down sloping metal roof panel, and seal	5. Manufacturers:
connection. d. Lap lower curb flange overtop of down sloping metal roof panel and seal connection.	 B. Backing Tape: Self-adhesive polye specific application.
Provide layouts and configurations indicated on drawings.	C. Masking Tape: Self-adhesive, non
 Curbs Adjacent to Roof Openings: Provide curb on each side of opening, with top of curb horizontal for equipment mounting. Provide preservative treated wood nailers along top of curb. 	Sealants. D. Joint Cleaner: Non-corrosive and r
Insulate inside curbs with 1-1/2 inch (38 mm) thick fiberglass insulation.	E. Primers: Type recommended by se
 Height Above Finished Roof Surface: 8 inches (203 mm), minimum. Height Above Roof Deck: 14 inches (356 mm), minimum. 	PART 3 EXECUTION
 Equipment Rail Curbs: Straight curbs on each side of equipment, with top of curbs horizontal and level with each other for equipment mounting. Provide preservative treated wood nailers along top of rails. 	3.01 EXAMINATION A. Verify that joints are ready to rece
2. Height Above Finished Roof Surface: 8 inches (203 mm), minimum.	B. Verify that backing materials are co
 Height Above Roof Deck: 14 inches (356 mm), minimum. Pipe, Duct, or Conduit Mounting Curbs: Vertical posts, minimum 8 inches (400 mm) square unless otherwise indicated. 	C. Verify that backer rods are of the co
1. Provide sliding channel welded along top edge with adjustable height steel bracket, fabricated to fit item supported.	 D. Preinstallation Adhesion Testing: I 1. Test each sample as specified
 Height Above Finished Roof Surface: 8 inches (203 mm), minimum. Height Above Roof Deck: 14 inches (356 mm), minimum. 	2. Notify Architect of date and tin
3 EXECUTION	 Record each test on Preinstal If any sample fails, review pro
EXAMINATION	ensure adhesion; re-test in a c 5. After completion of tests, remo
 A. Do not begin installation until substrates have been properly prepared. B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding. 	3.02 PREPARATION
PREPARATION	A. Remove loose materials and foreig
A. Clean surfaces thoroughly prior to installation.	B. Clean joints, and prime as necessa
B. Prepare surfaces using methods recommended by manufacturer for achieving acceptable results for applicable substrate under project conditions.	C. Perform preparation in accordanceD. Mask elements and surfaces adjac
INSTALLATION A. Install in accordance with manufacturer's instructions, in manner that maintains roofing system weather-tight integrity.	be completely removable.
CLEANING	3.03 INSTALLATION A. Perform work in accordance with se
A. Clean installed work to like-new condition.	 B. Perform installation in accordance
PROTECTION	C. Perform acoustical sealant applicat
 Protect installed products until completion of project. Touch-up, repair or replace damaged products before Date of Substantial Completion. 	 D. Measure joint dimensions and size manufacturer, except where specifi
END OF SECTION 07 7200	E. Install bond breaker backing tape w
SECTION 07 9200 JOINT SEALANTS	F. Install sealant free of air pockets, for
JOINT SEALANTS	G. Do not install sealant when ambien entire curing period, unless manufa
SECTION INCLUDES	H. Nonsag Sealants: Tool surface co
A. Nonsag gunnable joint sealants.	3.04 FIELD QUALITY CONTROL
B. Self-leveling pourable joint sealants.	A. Perform field quality control inspect

 B. Self-leveling pourable joint sealants. C. Joint backings and accessories.

rative Requirements, for submittal procedures.

mit manufacturer's technical data sheets for each product to be used, that includes the following. cluding movement capability, VOC content, hardness, cure time, and color availability.

pproved for use with the specific product. known to satisfactorily adhere to and with which it is compatible.

ould not be used on.

re sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection. e custom sealant color is specified, obtain directions from Architect and submit at least two physical samples for uired sealant.

t Reports: Submit at least four weeks prior to start of installation.

est Reports: Submit filled out Preinstallation Field Adhesion Test Reports log within 10 days after completion of tests; d photographic records.

Test for adhesion using most appropriate method in accordance with ASTM C1521, or other applicable method as

t Submittals, for additional warranty requirements.

five year period after Date of Substantial Completion. installed sealants and accessories that fail to achieve watertight seal, exhibit loss of adhesion or cohesion, or do not

plication in joints on vertical surfaces without sagging or slumping. ants & Waterproofing: www.tremcosealants.com/#sle. n 01 6000 - Product Requirements.

urfaces: Seal open joints, whether or not the joint is indicated on the drawings, unless specifically indicated not to be e sealed include, but are not limited to, the following items. ontrol joints.

n joints in unit masonry. window, and other frames and adjacent construction.

ent exposed materials. e angles in masonry.

n joints in ceiling and overhead surfaces. below.

I interior joints unless specifically indicated to be sealed. Interior joints to be sealed include, but are not limited to, the window, and other frames and adjacent construction.

n joints between as indicated. below.

pes of joints.

in masonry. treated with manufactured expansion joint cover or some other type of sealing device.

s specified to be provided by manufacturer of product to be sealed. on of sealant is specified in another section.

nded panel ceilings/grid and walls.

lyl-terminated polyether/polyurethane sealant, Type EXT-A, unless otherwise indicated. ry: Type EXT-A

Fabrication:

products with levels of volatile organic compound (VOC) content as indicated in Section 01 6116. wings. Provide the Architect with a color chart for selections.

ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic. ALSO BE USED FOR MOST GENERAL CONDITIONS) Plus and minus 50 percent, minimum.

by Architect from manufacturer's standard range.

trum 2" Type S, Grade-NS, Class 50 or approved equal.

ee Section 01 6000 - Product Requirements. ealant: ASTM C920, Grade NS, Uses M and A; single component; not expected to withstand continuous water

s and minus 35 percent, minimum.

r foam rod with surface that sealant will not adhere to, compatible with specific sealant used, and recommended by rers for specific application. t to Pedestrian or Vehicular Traffic: ASTM C1330; Type O - Open Cell Polyurethane. Pedestrian or Vehicular Traffic: ASTM C1330; Type B - Bi-Cellular Polyethylene.

nt larger in diameter than joint width. : 25 to 33 percent larger in diameter than joint width.

olyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for

nonabsorbent, non-staining, removable without adhesive residue, and compatible with surfaces adjacent to joints and

nd non-staining type, type recommended by sealant manufacturer; compatible with joint forming materials.

sealant manufacturer to suit application; non-staining.

eceive work.

e compatible with sealants.

e correct size.

Install a sample for each test location indicated in the test plan.

ified in PART 1 under QUALITY ASSURANCE article. d time that tests will be performed, at least seven days in advance.

stallation Adhesion Test Log as indicated. products and installation procedures, consult manufacturer, or take whatever other measures are necessary to a different location; if unable to obtain satisfactory adhesion, report to Architect. emove remaining sample material and prepare joint for new sealant installation.

reign matter that could impair adhesion of sealant.

ssary, in accordance with manufacturer's instructions.

nce with manufacturer's instructions and ASTM C1193.

ljacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not

sealant manufacturer's requirements for preparation of surfaces and material installation instructions.

ce with ASTM C1193.

3.05 POST-OCCUPANCY

ication work in accordance with ASTM C919.

size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by ecific dimensions are indicated.

where backer rod cannot be used.

, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces. bient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the nufacturer's approval is obtained and instructions are followed.

concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

A. Perform field quality control inspection/testing as specified in PART 1 under QUALITY ASSURANCE article. B. Remove and replace failed portions of sealants using same materials and procedures as indicated for original installation.

KRIEGER KLATT ARCHITECTS

2120 E. 11 Mile Rd. | Royal Oak, MI 48067 **P:** 248.414.9270 **F:** 248.414.9275 www.kriegerklatt.com

Client:

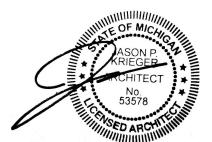
Verus Development Group

Project:

Project Name 19876 Mack Ave Grosse Pointe Woods MI

lssued 8/11/2022	Description Permits	Ву
5, 1 1/ <i>L</i> 0 <i>L</i> L		

Seal:



Note: Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field. North Arrow:

Sheet Title: **Specifications**

Project Number:

Scale:

22-099

	A. Post-Occupancy Inspection: Perform visual inspection of entire length of project sealant joints at a time that joints have opened to their greatest width; i.e. at low temperature in thermal cycle. Report failures immediately and repair.	A
	END OF SECTION 07 9200	1.04 0
	DIVISION 08 - OPENINGS	A
	SECTION 08 1113 HOLLOW METAL DOORS AND FRAMES	В
PAR	RT 1 GENERAL	1.05 F
1.01		A
	 A. Non-fire-rated hollow metal doors and frames. B. Hollow metal frames for wood doors. 	1.06 V
	C. Thermally insulated hollow metal doors with frames.	A
1.02	2 SUBMITTALS	В
	 A. See Section 01 3000 - Administrative Requirements, for submittal procedures. B. Product Data: Materials and details of design and construction, hardware locations, reinforcement type and locations, anchorage and fastening 	c
	methods, and finishes; and one copy of referenced standards/guidelines.	PART
4.00	C. Shop Drawings: Details of each opening, showing elevations, glazing, frame profiles, and any indicated finish requirements.	2.01 E
1.03	3 QUALITY ASSURANCE A. Maintain at project site copies of reference standards relating to installation of products specified.	A
1.04	DELIVERY, STORAGE, AND HANDLING	
	A. Comply with NAAMM HMMA 840 or ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements.	2.02 E
	B. Protect with resilient packaging; avoid humidity build-up under coverings; prevent corrosion and adverse effects on factory applied painted finish. RT 2 PRODUCTS	A
	MANUFACTURERS	
	A. Hollow Metal Doors and Frames:	2.03
	 Curries, an Assa Abloy Group company; []: www.assaabloydss.com/#sle. De La Fontaine Inc; Hollow Metal Door Model []: www.delafontaine.com. 	A
	 Steelcraft, an Allegion brand; []: www.allegion.com/#sle. Substitutions: See Section 01 6000 - Product Requirements. 	
2.02	PERFORMANCE REQUIREMENTS	
	A. Requirements for Hollow Metal Doors and Frames:	
	1. Steel Sheet: Comply with one or more of the following requirements; galvannealed steel complying with ASTM A653/A653M, cold-rolled steel complying with ASTM A1008/A1008M, or hot-rolled pickled and oiled (HRPO) steel complying with ASTM A1011/A1011M, commercial steel	
	(CS) Type B, for each.Accessibility: Comply with ICC A117.1 and ADA Standards.	
	 Typical Door Face Sheets: Flush. Refer to the door schedule and Typical Door Types on the drawings. Glazed Lights: Non-removable stops on non-secure side; sizes and configurations as indicated on drawings. Style: Manufacturers standard. 	
	5. Hardware Preparations, Selections and Locations: Comply with NAAMM HMMA 830 and NAAMM HMMA 831 or BHMA A156.115 and	
	ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements. B. Combined Requirements: If a particular door and frame unit is indicated to comply with more than one type of requirement, comply with the specifie	d
	requirements for each type; for instance, an exterior door that is also indicated as being sound-rated must comply with the requirements specified fo exterior doors and for sound-rated doors; where two requirements conflict, comply with the most stringent.	
2.03	B HOLLOW METAL DOORS	в
	A. Type HM-A and HM-B,Exterior Doors: Thermally insulated.	
	 Based on SDI Standards: ANSI/SDI A250.8 (SDI-100). a. Level 3 - Extra Heavy-duty. 	
	 b. Physical Performance Level A 1 000 000 cycles; in accordance with ANSI/SDI A250.4. c. Model 1 - Full Flush. 	
	d. Door Face Metal Thickness: 16 gage, 0.053 inch (1.3 mm), minimum.	
	 Door Core Material: Manufacturers standard core material/construction and in compliance with requirements. Door Thermal Resistance: R-Value of 6.0 minimum, for installed thickness of polystyrene. 	
	 Door Thickness: 1-3/4 inch (44.5 mm), nominal. Weatherstripping: As noted on the hardware schedule . 	
	6. Door Finish: Factory primed and field finished.	2.04
	 B. Type HM-A and HM-B,Interior Doors, Non-Fire Rated: 1. Based on SDI Standards: ANSI/SDI A250.8 (SDI-100). 	A
	a. Level 2 - Heavy-duty.	
	c. Model 1 - Full Flush.	
	 d. Door Face Metal Thickness: 18 gage, 0.042 inch (1.0 mm), minimum. 2. Door Core Material: Manufacturers standard core material/construction and in compliance with requirements. 	в
	3. Door Thickness: 1-3/4 inch (44.5 mm), nominal.	C
2.04	HOLLOW METAL FRAMES A. Comply with standards and/or custom guidelines as indicated for corresponding door in accordance with applicable door frame requirements.	
	B. Exterior Door Frames: Full profile/continuously welded type.	
	 Galvanizing: Components hot-dipped zinc-iron alloy-coated (galvannealed) in accordance with ASTM A653/A653M, with A40/ZF120 coating. Frame Metal Thickness: 14 gage, 0.067 inch (1.7 mm), minimum. 	
	 Frame Finish: Factory primed and field finished. Weatherstripping: Integral, recessed into door edge or frame. 	2.05
	C. Interior Door Frames, Non-Fire Rated: Knock-down type.	A
	 Terminated Stops: Provide at interior doors; closed end stop terminated 6 inch (150 mm), maximum, above floor at 45 degree angle. Frame Metal Thickness: 16 gage, 0.053 inch (1.3 mm), minimum. 	B
	3. Frame Finish: Factory primed and field finished.	
2.05	 D. Frames for Wood Doors: Comply with frame requirements in accordance with corresponding door. ACCESSORIES 	E
2.05	A. Silencers: Resilient rubber, fitted into drilled hole; provide three on strike side of single door, three on center mullion of pairs, and two on head of	2.06
	pairs without center mullions.	A 2.07 H
PAR	 B. Temporary Frame Spreaders: Provide for factory- or shop-assembled frames. RT 3 EXECUTION 	A
	EXAMINATION	B
	A. Verify existing conditions before starting work.	
	 B. Verify that opening sizes and tolerances are acceptable. C. Verify that finished walls are in plane to ensure proper door alignment. 	PART
3.02	2 INSTALLATION	3.01 I
	A. Install doors and frames in accordance with manufacturer's instructions and related requirements of specified door and frame standards or custom guidelines indicated	E
	guidelines indicated. B. Install fire rated units in accordance with NFPA 80.	3.02
	C. Coordinate frame anchor placement with wall construction.	A B
	D. Install door hardware as specified in Section 08 7100.	
3 03	 E. Coordinate installation of electrical connections to electrical hardware items. TOLERANCES 	
0.00	A. Maximum Diagonal Distortion: 1/16 inch (1.6 mm) measured with straight edge, corner to corner.	E F
3.04	ADJUSTING	G
	A. Adjust for smooth and balanced door movement. END OF SECTION 08 1113	E
	SECTION 08 4313	I.
 -	ALUMINUM-FRAMED STOREFRONTS	l k
	RT 1 GENERAL	3.03
	A. Aluminum-framed storefront, with vision glass.	A
	B. Aluminum doors and frames.	3.04
	C. Weatherstripping.	B
1.02	D. Door hardware. 2 SUBMITTALS	~
-	A. See Section 01 3000 - Administrative Requirements, for submittal procedures.	3.05 F
	B. Product Data: Provide component dimensions, describe components within assembly, anchorage and fasteners, glass and infill, door hardware, and internal drainage details.	
	C. Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, affected related work, expansion and contraction joint	
	location and details, and field welding required.D. Hardware Schedule: Complete itemization of each item of hardware to be provided for each door, cross-referenced to door identification numbers in	
	Contract Documents.	PART

A. Designer Qualifications: Design structural support framing components under direct supervision of a Professional Structural Engineer experienced in design of this Work and licensed in the State in which the Project is located.	B. Glazing units.
1.04 DELIVERY, STORAGE, AND HANDLING	C. Glazing compounds and accessories. 1.02 SUBMITTALS
 A. Handle products of this section in accordance with AAMA CW-10. B. Protect finished aluminum surfaces with wrapping. Do not use adhesive papers or sprayed coatings that bond to aluminum when exposed to sunlight 	A. See Section 01 3000 - Administrative Requirements,
or weather.	 B. Product Data on Insulating Glass Unit and Glazing Ur limitations, special handling and installation requirement
1.05 FIELD CONDITIONS A. Do not install sealants when ambient temperature is less than 40 degrees F (5 degrees C). Maintain this minimum temperature during and 48 hours	C. Product Data on Glazing Compounds and Accessorie application requirements, and identify available colors
after installation.	D. Samples: Submit two samples [12"] by [12"] inch ([
1.06 WARRANTY A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.	 E. Warranty Documentation: Submit manufacturer warra manufacturer.
 B. Provide five year manufacturer warranty against failure of glass seal on insulating glass units, including interpane dusting or misting. Include 	1.03 FIELD CONDITIONS
provision for replacement of failed units.	A. Do not install glazing when ambient temperature is less
C. Provide five year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking.	B. Maintain minimum ambient temperature before, during
ART 2 PRODUCTS	1.04 WARRANTY A. See Section 01 7800 - Closeout Submittals, for additi
.01 BASIS OF DESIGN FRAMING FOR INSULATING GLAZING A. Center-Set Style, Thermally-Broken:	B. Insulating Glass Units: Provide a five (5) year manufa
1. Basis of Design: Subject to compliance with requirements, provide Kawneer Co. "451UT" System or approved equal from on of the listed	providing products to replace failed units. PART 2 PRODUCTS
vendors 2. Vertical Mullion Dimensions: 2 inches wide by 4-1/2 inches deep (51 mm wide by 114 mm deep).	2.01 MANUFACTURERS
02 BASIS OF DESIGN SWINGING DOORS	 A. Float Glass Manufacturers: 1. Guardian Glass, LLC; []: www.guardiangla
 A. Medium Stile, Insulating Glazing, Not Thermally-Broken: 1. Basis of Design: Kawneer Co 350 Medium Stile Entrance with 10" high bottom rail. 	 2. Vitro Architectural Glass (formerly PPG Glass); [
2. Thickness: 1-3/4 inches (43 mm).	2.02 PERFORMANCE REQUIREMENTS - EXTERIOR GLAZI
03 ALUMINUM-FRAMED STOREFRONT A. Aluminum-Framed Storefront: Factory fabricated, factory finished aluminum framing members with infill, and related flashings, anchorage and	 Provide type and thickness of exterior glazing assemine negative wind pressure acting normal to plane of glas
attachment devices.	 Design Pressure: Calculated in accordance with Comply with ASTM E1300 for design load resistance
 Glazing Rabbet: For 1 inch (25 mm) insulating glazing. Finish: Class II color anodized. 	 Seismic Loads: Design and size glazing compor ASCE 7
 a. Factory finish all surfaces that will be exposed in completed assemblies. b. Touch-up surfaces cut during fabrication so that no natural aluminum is visible in completed assemblies, including joint edges. 	4. Provide glass edge support system sufficiently s
 Finish Color: As indicated on the drawings. Fabrication: Joints and corners flush, hairline, and weatherproof, accurately fitted and secured; prepared to receive anchors and hardware; 	under specified design load. 5. Glass thicknesses listed are minimum.
fasteners and attachments concealed from view; reinforced as required for imposed loads.	B. Vapor Retarder and Air Barrier Seals: Provide compl
5. Construction: Eliminate noises caused by wind and thermal movement, prevent vibration harmonics, and prevent "stack effect" in internal spaces.	 In conjunction with vapor retarder and joint seale C. Thermal and Optical Performance: Provide exterior g
 System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system. 	accordance with manufacturer's published data as de 1. Center of Glass U-Value: Comply with NFRC 10
 Expansion/Contraction: Provide for expansion and contraction within system components caused by cycling temperature range of 170 degrees F (95 degrees C) over a 12 hour period without causing detrimental effect to system components, anchorages, and other building elements. 	2. Center of Glass Solar Heat Gain Coefficient (SH
8. Movement: Allow for movement between storefront and adjacent construction, without damage to components or deterioration of seals.	6.3 computer program.3. Solar Optical Properties: Comply with NFRC 30
 Perimeter Clearance: Minimize space between framing members and adjacent construction while allowing expected movement. B. Performance Requirements: 	2.03 GLASS MATERIALS
 Wind Loads: Design and size components to withstand the specified load requirements without damage or permanent set, when tested in accordance with ASTM E330/E330M, using loads 1.5 times the design wind loads and 10 second duration of maximum load. 	 A. Float Glass: Provide float glass based glazing unless 1. Annealed Type: ASTM C1036, Type I - Transparent
a. Positive Design Wind Load: 25 lbf/sq ft ([] Pa).	 Kind HS - Heat-Strengthened Type: Complies w Fully Tempered Safety Glass: Complies with AN
 b. Negative Design Wind Load: 25 lbf/sq ft ([] Pa). c. Member Deflection: Limit member deflection to flexure limit of glass in any direction, with full recovery of glazing materials. 	4. Thicknesses: As indicated; provide greater thick
 Water Penetration Resistance on Manufactured Assembly: No uncontrolled water on interior face, when tested in accordance with ASTM E331 at pressure differential of 8 psf (390 Pa). 	 B. Laminated Glass: Float glass laminated in accordance 1. Laminated Safety Glass: Complies with ANSI Z
3. Air Leakage Laboratory Test: Maximum of 0.06 cu ft/min sq ft (0.3 L/sec sq m) of wall area, when tested in accordance with ASTM E283 at 6.27	2.04 BASIS OF DESIGN - INSULATING GLASS UNITS
 psf (300 Pa) pressure differential across assembly. Condensation Resistance Factor of Framing: 50, minimum, measured in accordance with AAMA 1503. 	A. Basis of Design - Insulating Glass Units: Vision glazi
 Overall U-value Including Glazing: [] Btu/(hr sq ft deg F) ([] W/(sq m K)), maximum. COMPONENTS 	B. Insulated Glass: (GL-1)1. Product: Subject to compliance with requirement
A. Aluminum Framing Members: Tubular aluminum sections, thermally broken with interior section insulated from exterior, drainage holes and internal	above listed primary glass manufacturers. 2. Color: Clear
weep drainage system. 1. Framing members for interior applications need not be thermally broken.	Comply with the following properties for one-incl
2. Glazing Stops: Flush.	a. Space between lites filled with air.b. Total Thickness: 1 inch (25.4 mm)
 Cross-Section: As indicated on drawings. B. Glazing: As specified in Section 08 8000. 	c. Visible Light Transmittance (VLT): 51% d. Summer U-Value: 0.24
C. Swing Doors: Glazed aluminum.	e. Winter U-Value: 0.24 f. Solar Heat Gain Coefficient (SHGC): 0.23
 Thickness: 1-3/4 inches (43 mm). Top Rail: 4 inches (100 mm) wide. 	g. Visible Light Reflectance Outside: 14 perc
 Vertical Stiles: 4-1/2 inches (115 mm) wide. Bottom Rail: 10 inches (254 mm) wide. 	h. Glazing Method: Dry Glazing method, gas C. Structural Glass: (GL-2)
 Glazing Stops: Square. Finish: Same as storefront. 	1. Product: Subject to compliance with requirement
6. Finish: Same as storefront. 15 MATERIALS	above listed primary glass manufacturers. 2. Color: Clear
A. Extruded Aluminum: ASTM B221 (ASTM B221M).	 Comply with the following properties for one-incl a. Space between lites filled with air
B. Sheet Aluminum: ASTM B209 (ASTM B209M).	 b. Total Thickness: 1 inch (25.4 mm) c. Visible Light Transmittance (VLT): 51%
 C. Fasteners: Stainless steel. D. Glazing Gaskets: Type to suit application to achieve weather, moisture, and air infiltration requirements. 	d. Summer U-Value: 0.24
E. Glazing Accessories: As specified in Section 08 8000.	e. Winter U-Value: 0.24f. Solar Heat Gain Coefficient (SHGC): 0.23
06 FINISHES	g. Visible Light Reflectance Outside: 14 perch. Glazing Method: Dry Glazing method, gas
 A. Class II Natural Anodized Finish: AAMA 611 AA-M12C22A31 Clear anodic coating not less than 0.4 mils (0.01 mm) thick. D7 HARDWARE 	D. Insulated Tinted Spandrel Glass: (SP-1)
A. For each door, include weatherstripping, sill sweep strip, and threshold.	1. Product: Subject to compliance with requiremer Spandrel Glass as manufacturered by ICD High
B. Other Door Hardware: Storefront manufacturer's standard type to suit application.	2.
 Finish on Hand-Contacted Items: Polished stainless steel. For each door, include pivots, push handle, pull handle, exit device, narrow stile handle latch, and closer. 	 Comply with the following properties for one-incl a. Space between lites filled with air.
	b. Total Thickness: 1 inch (25.4 mm).c. Visible Light Transmittance (VLT): 2 percer
 01 EXAMINATION A. Verify dimensions, tolerances, and method of attachment with other work. 	 Glazing Method: Dry Glazing method, gask e. Spacer Color: Black.
 Verify that wall openings and adjoining air and vapor seal materials are ready to receive work of this section. 	f. Edge Seal:
02 INSTALLATION	g. Color: Black.h. Purge interpane space with dry air, hermeti
 Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities 	E. Glass at Interior Storefront and frameless glass (GL-3
 B. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities. C. Provide alignment attachments and shims to permanently fasten system to building structure. 	 5/8" clear Tempered glass - See interior elevation F. Glass Railing (GL-4)
 D. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work. 	1. 5/8" clear laminated tempered glass - See "Dec
E. Provide thermal isolation where components penetrate or disrupt building insulation.	2.05 ACCESSORIES
 F. Install sill flashings. Turn up ends and edges; seal to adjacent work to form water tight dam. G. Where fasteners penetrate sill flashings, make watertight by seating and sealing fastener heads to sill flashing. 	 A. Setting Blocks: Silicone, with 80 to 90 Shore A duron square meter) of glazing or minimum 4 inch (100 mm
 G. Where fasteners penetrate sill flashings, make watertight by seating and sealing fastener heads to sill flashing. H. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier. 	and pane weight and area.
I. Set thresholds in bed of sealant and secure.	 B. Glazing Splines: Resilient silicone extruded shape to PART 3 EXECUTION
J. Install hardware using templates provided.	3.01 VERIFICATION OF CONDITIONS
 K. Touch-up minor damage to factory applied finish; replace components that cannot be satisfactorily repaired. ADJUSTING 	A. Verify that openings for glazing are correctly sized an
A. Adjust operating hardware and sash for smooth operation.	B. Verify that the minimum required face and edge clearC. Verify that surfaces of glazing channels or recesses a
04 CLEANING	c. Verify that surfaces of glazing channels of recesses a support framing is ready to receive glazing system.
 Remove protective material from pre-finished aluminum surfaces. Wash down surfaces with a solution of mild determent in warm water, applied with soft, clean wining cleths, and take care to remove dirt from corports. 	3.02 PREPARATION
B. Wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths, and take care to remove dirt from corners and to wipe surfaces clean.	 Clean contact surfaces with appropriate solvent and v bonded to substrates.
C. Upon completion of installation, thoroughly clean aluminum surfaces in accordance with AAMA 609 & 610.	B. Seal porous glazing channels or recesses with substr
05 PROTECTION A Protect installed products from damage until Date of Substantial Completion	C. Prime surfaces scheduled to receive sealant where re
 Protect installed products from damage until Date of Substantial Completion. END OF SECTION 08 4313 	3.03 INSTALLATION, GENERAL A. Install glazing sealants in accordance with ASTM C11
SECTION 08 8000	3.04 INSTALLATION - DRY GLAZING METHOD (GASKET G
GLAZING ART 1 GENERAL	A. Application - Exterior and/or Interior Glazed: Set glaz
.01 SECTION INCLUDES	B. Place setting blocks at 1/4 points with edge block no i

1.01 SECTION INCLUDES

A. Insulating glass units.

cessories.

nistrative Requirements, for submittal procedures.

Glass Unit and Glazing Unit Glazing Types: Provide structural, physical and environmental characteristics, size and installation requirements.

mpounds and Accessories: Provide chemical, functional, and environmental characteristics, limitations, special d identify available colors.

bles [12"] by [12"] inch ([___] by [___] mm) in size of glass units. Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with

ambient temperature is less than 40 degrees F (4 degrees C).

emperature before, during and 24 hours after installation of glazing compounds.

eout Submittals, for additional warranty requirements. vide a five (5) year manufacturer warranty to include coverage for seal failure, interpane dusting or misting, including e failed units.

]: www.guardianglass.com/#sle. s (formerly PPG Glass); [____]: www.vitroglazings.com/#sle. NTS - EXTERIOR GLAZING ASSEMBLIES

of exterior glazing assemblies to support assembly dead loads, and to withstand live loads caused by positive and ng normal to plane of glass.

ulated in accordance with ASCE 7. 300 for design load resistance of glass type, thickness, dimensions, and maximum lateral deflection of supported glass. n and size glazing components to withstand seismic loads and sway displacement in accordance with the requirements of

oport system sufficiently stiff to limit the lateral deflection of supported glass edges to less than 1/175 of their lengths load. d are minimum.

rier Seals: Provide completed assemblies that maintain continuity of building enclosure vapor retarder and air barrier. or retarder and joint sealer materials described in other sections.

mance: Provide exterior glazing products with performance properties as indicated. Performance properties are in rer's published data as determined with the following procedures and/or test methods: ue: Comply with NFRC 100 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 6.3 computer program.

Heat Gain Coefficient (SHGC): Comply with NFRC 200 using Lawrence Berkeley National Laboratory (LBNL) WINDOW : Comply with NFRC 300 test method.

ass based glazing unless otherwise indicated. / C1036, Type I - Transparent Flat, Class 1 - Clear, Quality - Q3. hened Type: Complies with ASTM C1048.

Glass: Complies with ANSI Z97.1 or 16 CFR 1201 criteria for safety glazing used in hazardous locations. ated; provide greater thickness as required for exterior glazing wind load design.

as laminated in accordance with ASTM C1172. s: Complies with ANSI Z97.1 - Class B or 16 CFR 1201 - Category I impact test requirements.

Glass Units: Vision glazing, with Low-E coating.

mpliance with requirements of "SNX 51/23 on #2" as manufacturered by Guardian Glass Inc. or equal by one of the ass manufacturers.

ing properties for one-inch insulating glass with Low-E Coating: es filled with air. 1 inch (25.4 mm)

smittance (VLT): 51% 0.24 0.24

oefficient (SHGC): 0.23 ctance Outside: 14 percent, normal Dry Glazing method, gasket glazing

mpliance with requirements of "SNX 51/23 on #2" as manufacturered by Guardian Glass, Inc. or equal by one of the ass manufacturers.

ng properties for one-inch insulating glass with Low-E Coating: es filled with air 1 inch (25.4 mm) smittance (VLT): 51%

.24 oefficient (SHGC): 0.23 ctance Outside: 14 percent, normal Dry Glazing method, gasket glazing

Blass: (SP-1) mpliance with requirements, SNX 51/23 on #2 with 2-3609 Luscious Garden on #4 surface. intent is to be matching nufacturered by ICD High Performance Coatings or equal by one of the above listed primary glass manufacturers.

ng properties for one-inch insulating glass with Low-E Coating: es filled with air.

1 inch (25.4 mm). smittance (VLT): 2 percent. Dry Glazing method, gasket glazing.

pace with dry air, hermetically sealed. and frameless glass (GL-3) lass - See interior elevations and doors schedule

mpered glass - See "Decorative Metal Railings"

n 80 to 90 Shore A durometer hardness; ASTM C864 Option II. Length of 0.1 inch for each square foot (25 mm for each minimum 4 inch (100 mm) by width of glazing rabbet space minus 1/16 inch (1.5 mm) by height to suit glazing method

ilicone extruded shape to suit glazing channel retaining slot; ASTM C864 Option II; color black.

ring are correctly sized and within tolerances, including those for size, squareness, and offsets at corners. uired face and edge clearances are being provided. g channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and

appropriate solvent and wipe dry within maximum of 24 hours before glazing. Remove coatings that are not tightly

Is or recesses with substrate compatible primer or sealer. preceive sealant where required for proper sealant adhesion.

cordance with ASTM C1193, GANA (SM), and manufacturer's instructions.

G METHOD (GASKET GLAZING) Interior Glazed: Set glazing infills from either the exterior or the interior of the building. B. Place setting blocks at 1/4 points with edge block no more than 6 inch (152 mm) from corners.

C. Rest glazing on setting blocks and push against fixed stop with sufficient pressure on gasket to attain full contact.

KRIEGER KLATT ARCHITECTS

2120 E. 11 Mile Rd. | Royal Oak, MI 48067 **P:** 248.414.9270 **F:** 248.414.9275 www.kriegerklatt.com

Client:

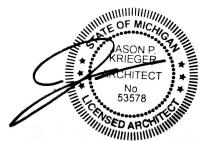
Verus Development Group

Project:

Project Name 19876 Mack Ave Grosse Pointe Woods MI

Issued	Description	By
8/11/2022	Permits	,





Note: Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field. North Arrow:

Sheet Title: **Specifications**

Project	Number:
22-099	

Scale:

		LD QUALITY CONTROL	
		See Section 01 4000 - Quality Requirements, for additional requirements.	
	B.	Glass and Glazing product manufacturers to provide field surveillance of the installation of their products.	
3 06	C.	Monitor and report installation procedures and unacceptable conditions. EANING	
		See Section 01 7419 - Construction Waste Management and Disposal, for additional requirements.	
	В.	Remove excess glazing materials from finish surfaces immediately after application using solvents or cleaners recommended by manufacturers.	
	C.	Remove non-permanent labels immediately after glazing installation is complete.	
	D.	Clean glass and adjacent surfaces after sealants are fully cured.	
	E.	Clean glass on both exposed surfaces not more than 4 days prior to Date of Substantial Completion in accordance with glass manufacturer's written	
2 07	DD		
3.07		OTECTION After installation, mark pane with an 'X' by using removable plastic tape or paste; do not mark heat absorbing or reflective glass units.	
	А. В.	Remove and replace glass that is damaged during construction period prior to Date of Substantial Completion.	
	υ.	END OF SECTION 08 8000	
		DIVISION 09 - FINISHES	
		SECTION 09 2116	
		GYPSUM BOARD ASSEMBLIES	
		CTION INCLUDES	
	А. В.	Performance criteria for gypsum board assemblies. Metal stud wall framing.	
	D. С.	Metal stud wai harming. Metal channel ceiling framing.	
	D.	Acoustic insulation.	
	E.	Cementitious backing board.	
	F.	Gypsum wallboard.	
	G.	Joint treatment and accessories.	
	Н.	Water-resistive barrier over exterior wall sheathing.	
1.02		LATED REQUIREMENTS	
	_	Section 06 1000 - Rough Carpentry: Building framing and sheathing.	
	B.	Section 06 1000 - Rough Carpentry: Wood blocking product and execution requirements.	
	C.	Section 07 2100 - Thermal Insulation: Acoustic insulation.	
	D. E.	Section 07 2500 - Weather Barriers: Water-resistive barrier over sheathing. Section 07 8400 - Firestopping: Top-of-wall assemblies at fire-resistance-rated walls.	
	E. F.	Section 07 9200 - Joint Sealants: Sealing acoustical gaps in construction other than gypsum board or plaster work.	
	г. G.	Section 09 2216 - Non-Structural Metal Framing.	
		FERENCE STANDARDS	
	Α.	ANSI A108.11 - American National Standard Specifications for Interior Installation of Cementitious Backer Units 2018.	
	В.	ANSI A118.9 - American National Standard Specifications for Test Methods and Specifications for Cementitious Backer Units 2019.	
	C.	ASTM C475/C475M - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board 2017 (Reapproved 2022).	
	D.	ASTM C645 - Standard Specification for Nonstructural Steel Framing Members 2018.	
	E.	ASTM C665 - Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing 2017.	
	F.	ASTM C754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products 2020.	
	G.	ASTM C840 - Standard Specification for Application and Finishing of Gypsum Board 2020.	
	H.	ASTM C954 - Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness 2022.	
	I.	ASTM C1047 - Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base 2019.	
	J.	ASTM C1178/C1178M - Standard Specification for Coated Glass Mat Water-Resistant Gypsum Backing Panel 2018.	
	K.	ASTM C1278/C1278M - Standard Specification for Fiber-Reinforced Gypsum Panel 2017.	
	L.	ASTM C1325 - Standard Specification for Fiber-Mat Reinforced Cementitious Backer Units 2022.	
	M.	ASTM C1396/C1396M - Standard Specification for Gypsum Board 2017.	
	N.	ASTM D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber 2021. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements 2009	
	0.	(Reapproved 2016).	
	Ρ.	ASTM E413 - Classification for Rating Sound Insulation 2022.	
	Q.	GA-216 - Application and Finishing of Gypsum Panel Products 2021.	
		GA-600 - Fire Resistance and Sound Control Design Manual 2021.	
		See Section 01 3000 - Administrative Requirements for submittal procedures. Shop Drawings: Indicate special details associated with fireproofing and acoustic seals.	
		Product Data: Provide data on metal framing, gypsum board, accessories, and joint finishing system.	
PAR		PRODUCTS	
		PSUM BOARD ASSEMBLIES	
		Provide completed assemblies complying with ASTM C840 and GA-216.	
		1. See PART 3 for finishing requirements.	
	Β.	Interior Partitions, Indicated as Sound-Rated: Provide completed assemblies with the following characteristics: 1. Acoustic Attenuation: STC of 50 - 59 calculated in accordance with ASTM E413, based on tests conducted in accordance with ASTM E90.	
	C	Shaft Walls at HVAC Shafts: Provide completed assemblies with the following characteristics:	
		1. Air Pressure Within Shaft: Sustained loads of 5 lbf/sq ft (0.24 kPa) with maximum mid-span deflection of L/240.	
	-	2. Acoustic Attenuation: STC of 50-54 calculated in accordance with ASTM E413, based on tests conducted in accordance with ASTM E90.	
		Fire Rated Assemblies: Provide completed assemblies as indicated on drawings	
		TAL FRAMING MATERIALS	
	A.	Manufacturers - Metal Framing, Connectors, and Accessories: 1. ClarkDietrich; []: www.clarkdietrich.com/#sle.	
		2. Substitutions: See Section 01 6000 - Product Requirements.	
	В.	Non-structural Framing System Components: ASTM C645; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 for the spacing indicated with maximum deflection of wall framing of L/120 at 5 psf (L/120 at 240 Pa)	
		 the spacing indicated, with maximum deflection of wall framing of L/120 at 5 psf (L/120 at 240 Pa). Studs: "C" shaped with knurled or emobossed faces. 	
		2. Runners: U shaped, sized to match studs.	
		 Ceiling Channels: C-shaped. Furring Members: Hat-shaped sections, minimum depth of 7/8 inch (22 mm). 	
		 Resilient Furring Channels: 1/2 inch (12 mm) depth, for attachment to substrate through one leg only. 	
	C.	Shaft Wall Studs and Accessories: ASTM C645; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 and specified	
	Р	performance requirements. Partition Head To Structure Connections: Provide track fastened to structure with leas of sufficient length to accommodate deflection, for friction fit of	
	U.	Partition Head To Structure Connections: Provide track fastened to structure with legs of sufficient length to accommodate deflection, for friction fit of studs cut short and fastened as indicated on drawings.	
	E.	Preformed Top Track Firestop Seal:	
		 Provide components UL-listed for use in UL-listed fire-resistance-rated head of partition joint systems indicated on drawings. Products: 	
		a. Hilti, Inc; Top Track Seal CFS TTS: www.us.hilti.com/#sle.	
2.03	во	ARD MATERIALS	
	A.	Manufacturers - Gypsum-Based Board:	
		 American Gypsum Company; []: www.americangypsum.com/#sle. National Gypsum Company; []: www.nationalgypsum.com/#sle. 	
		 National Gypsum Company; []: www.nationalgypsum.com/#sie. USG Corporation; []: www.usg.com/#sle. 	
	В.	Gypsum Wallboard: Paper-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.	
		 Application: Use for vertical surfaces and ceilings, unless otherwise indicated. Unfaced fiber-reinforced gypsum panels as defined in ASTM C1278/C1278M, suitable for paint finish, of the same core type and thickness may 	
		be substituted for paper-faced board.	
		3. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.	
		 a. Mold-resistant board is required whenever board is being installed before the building is enclosed and conditioned. 4. At Assemblies Indicated with Fire-Resistance Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use 	
		Type X board, UL or WH listed.	
		5. Thickness:	1
		a. Vertical Surfaces: 5/8 inch (16 mm).	

	g Board For Wet Areas: One of the following products:	B. Non-Loadbearing Framing System Compor
2. A	oplication: Surfaces behind tile in wet areas including tub and shower surrounds and shower ceilings. oplication: Horizontal surfaces behind tile in wet areas including countertops.	for the spacing indicated, with maximum de 1. Studs: C shaped with knurled or ember 2. Burneray, Licharad, sized to match of
4. A	old Resistance: Score of 10, when tested in accordance with ASTM D3273. NSI Cement-Based Board: Non-gypsum-based; aggregated Portland cement panels with glass fiber mesh embedded in front and back Irfaces complying with ANSI A118.9 or ASTM C1325.	2. Runners: U shaped, sized to match st 2.03 FABRICATION
a. b.	Thickness: 1/2 inch (12.7 mm) on walls and 5/8 inch on ceilings	A. Fabricate assemblies of framed sections toB. Fit, reinforce, and brace framing members t
Ы.	 National Gypsum Company; PermaBase Cement Board: www.nationalgypsum.com/#sle. USG Corporation; []: www.usg.com/#sle. 	PART 3 EXECUTION
	lass Mat Faced Board: Coated glass mat water-resistant gypsum backing panel as defined in ASTM C1178/C1178M. Fire-Resistance-Rated Type: Type X core, thickness 5/8 inch (16 mm).	3.01 EXAMINATION A. Verify existing conditions before starting wo
D. Backin	g Board For Non-Wet Areas: Water-resistant gypsum backing board as defined in ASTM C1396/C1396M; sizes to minimum joints in place;	B. Verify that rough-in utilities are in proper loc
1. A	quare cut. oplication: Vertical surfaces behind thinset tile, except in wet areas.	3.02 INSTALLATION OF STUD FRAMING A. Comply with requirements of ASTM C754.
	egular Board Thickness: 5/8 inch (16 mm). dges: Tapered.	B. Extend partition framing to structure where
	all and Coreboard: Type X; 1 inch (25 mm) thick by 24 inches (610 mm) wide, beveled long edges, ends square cut. aper-Faced Type: Gypsum shaftliner board or gypsum coreboard as defined ASTM C1396/C1396M; water-resistant faces.	C. Partitions Terminating at Ceiling: Attach ceD. Partitions Terminating at Structure: Attach
.04 GYPSUM	VALLBOARD ACCESSORIES	using specified mechanical devices in acco studs unattached to track.
	ic Insulation: ASTM C665; preformed glass fiber, friction fit type, unfaced. Thickness: [] inch ([] mm). note: the thickness is ed on the drawings	E. Align and secure top and bottom runners at
	ic Sealant: Acrylic emulsion latex or water-based elastomeric sealant; do not use solvent-based non-curing butyl sealant. Joint Accessories, and Other Trim: ASTM C1047, rigid plastic, galvanized steel, or rolled zinc, unless noted otherwise.	F. Fit runners under and above openings; second.G. Align stud web openings horizontally.
1. C	orner Beads: Low profile, for 90 degree outside corners. all Mounted Deflection Beads: Flexible gasket and bead with 1-1/8 inch (29 mm) flange.	H. Secure studs to tracks using crimping meth
D. Joint M	aterials: ASTM C475/C475M and as recommended by gypsum board manufacturer for project conditions.	I. Fabricate corners using a minimum of threeJ. Install double studs at wall openings, door a
	berglass Tape: 2 inch (50 mm) wide, coated glass fiber tape for joints and corners, except as otherwise indicated. int Compound: Setting type, field-mixed.	K. Coordinate installation of bucks, anchors, a
	for Fastening of Gypsum Panel Products to Steel Members from 0.033 to 0.112 inch (0.84 to 2.84 mm) in Thickness: ASTM C954; steel drill , corrosion-resistant.	L. Blocking: Use wood blocking secured to stu hardware, and opening frames. All blocking
ART 3 EXECU	TION	3.03 CEILING AND SOFFIT FRAMING A. Install furring after work above ceiling or sof
A. Verify t	TON hat project conditions are appropriate for work of this section to commence.	A. Install furring after work above ceiling or solB. Install furring independent of walls, columns
.02 SHAFT WA		C. Securely anchor hangers to structural mem Use rigid hangers at exterior soffits.
	Vall Framing: Install in accordance with manufacturer's installation instructions. stall studs at spacing required to meet performance requirements.	 D. Space main carrying channels at maximum securely.
	Vall Liner: Cut panels to accurate dimensions and install sequentially between special friction studs.	E. Securely fix carrying channels to hangers to
	Framing: Install in accordance with ASTM C754 and manufacturer's instructions.	 F. Place furring channels perpendicular to carr securely.
	nded Ceilings and Soffits: Space framing and furring members as indicated. Space studs at 16 inches on center (at 406 mm on center).	3.04 TOLERANCES
1. E	Attend partition framing to structure where indicated and to ceiling in other locations. Attitions Terminating at Ceiling: Attach ceiling runner securely to ceiling track in accordance with manufacturer's instructions.	A. Maximum Variation From True Position: 1/8B. Maximum Variation From Plumb: 1/8 inch i
3. P	artitions Terminating at Structure: Attach extended leg top runner to structure, maintain clearance between top of studs and structure, and ace both flanges of studs with continuous bridging.	
D. Standa	rd Wall Furring: Install at concrete and masonry walls scheduled to receive gypsum board, not more than 4 inches (100 mm) from floor and	
	lines and abutting walls. Secure in place on alternate channel flanges at maximum 24 inches (600 mm) on center. ic Furring: Install resilient channels at maximum 24 inches (600 mm) on center. Locate joints over framing members.	PART 1 GENERAL 1.01 SECTION INCLUDES
and the second s	for Fire-Resistance Ratings: Install as required for fire-resistance ratings indicated and to GA-600 requirements.	A. Surface preparation.
1. F	g: Install wood blocking for support of: amed openings.	B. Field application of paints.C. Scope: Finish exterior surfaces exposed to
3. P	all-mounted cabinets. umbing fixtures.	 D. Do Not Paint or Finish the Following Items: 1. Items factory-finished unless otherwise
	bilet accessories. /all-mounted door hardware.	2. Items indicated to receive other finishe
	C ACCESSORIES INSTALLATION	4. Fire rating labels, equipment serial nur
to item	s passing through partitions.	 Floors, unless specifically indicated. Glass. Generaled pipes ducts and conduits
B. Acoust .05 BOARD IN	ic Sealant: Install in accordance with manufacturer's instructions. STALLATION	 Concealed pipes, ducts, and conduits. 1.02 REFERENCE STANDARDS
	with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.	A. MPI (APSM) - Master Painters Institute Arch 1.03 SUBMITTALS
	esistance-Rated Construction: Install gypsum board in strict compliance with requirements of assembly listing. In Gypsum Board in Interior Wet Areas: Seal joints, cut edges, and holes with water-resistant sealant.	A. See Section 01 3000 - Administrative Requ
	titious Backing Board: Install over steel framing members and plywood substrate where indicated, in accordance with ANSI A108.11 and acturer's instructions.	PART 2 PRODUCTS 2.01 PAINTS AND FINISHES - GENERAL
.06 INSTALLA	TION OF TRIM AND ACCESSORIES	A. Paints and Finishes: Ready mixed, unless
	Joints: Place control joints consistent with lines of building spaces and as indicated. ot more than 30 feet (10 meters) apart on walls and ceilings over 50 feet (16 meters) long.	 Provide paints and finishes of a soft pa flow and brushing properties, and capa
B. Corner	Beads: Install at external corners, using longest practical lengths.	 Supply each paint material in quantity Do not reduce, thin, or dilute paint or fi
A. Finish	gypsum board in accordance with levels defined in ASTM C840, as follows:	instructions. 2.02 PAINT SYSTEMS - EXTERIOR
2. Le	evel 5: Walls and ceilings to receive semi-gloss or gloss paint finish and other areas specifically indicated. evel 4: Walls and ceilings to receive paint finish or wall coverings, unless otherwise indicated.	 A. Paint E-OP - Exterior Surfaces to be Painte 1. Two top coats and one coat primer.
	evel 3: Walls to receive textured wall finish. evel 2: In utility areas, behind cabinetry, and on backing board to receive tile finish.	 Top Coat(s): Exterior Pigmented Elas a. Products:
	evel 1: Fire-resistance-rated wall areas above finished ceilings, whether or not accessible in the completed construction. ill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.	1) Behr Premium Elastomeric M
1. F	eather coats of joint compound so that camber is maximum 1/32 inch (0.8 mm). aping, filling, and sanding are not required at surfaces behind adhesive applied ceramic tile and fixed cabinetry.	2.03 PRIMERS A. Primers: Provide the following unless other
C. Where	Level 5 finish is indicated, spray apply high build drywall surfacer over entire surface after joints have been properly treated; achieve a flat and	 Alkali Resistant Water Based Primer; I a. Products:
tool ma	rk-free finish. CES	1) Behr Concrete and Masonry 2.04 ACCESSORY MATERIALS
A. Maxim	um Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet (3 mm in 3 m) in any direction.	A. Accessory Materials: Provide primers, seal
	END OF SECTION 09 2116 SECTION 09 2216	completion of painted surfaces. B. Patching Material: Latex filler.
ART 1 GENER	NON-STRUCTURAL METAL FRAMING	C. Fastener Head Cover Material: Latex filler.
.01 SECTION		PART 3 EXECUTION 3.01 EXAMINATION
	artition, ceiling, and soffit framing. g accessories.	A. Verify that surfaces are ready to receive wo
	REQUIREMENTS	B. Examine surfaces scheduled to be finishedC. Test shop-applied primer for compatibility w
	05 4000 - Cold-Formed Metal Framing: Requirements for structural, load-bearing, metal stud framing and exterior wall stud framing. 05 5100 - Metal Stairs: Execution requirements for anchors for attaching work of this section.	 D. Measure moisture content of surfaces using following maximums:
C. Section	06 1000 - Rough Carpentry: Wood blocking within stud framing.	1. Exterior Plaster and Stucco: 12 perce
	09 2116 - Gypsum Board Assemblies: Metal studs for gypsum board partition framing. CE STANDARDS	3.02 PREPARATION A. Clean surfaces thoroughly and correct defe
	C645 - Standard Specification for Nonstructural Steel Framing Members 2018.	B. Prepare surfaces using the methods recom
B. ASTM	C754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products 2020.	 C. Remove or mask surface appurtenances, in for finishing.
	ction 01 3000 - Administrative Requirements for submittal procedures.	D. Seal surfaces that might cause bleed throug
	rawings: dicate prefabricated work, component details, stud layout, framed openings, anchorage to structure, acoustic details, type and location of	 Remove mildew from impervious surfaces to surface to dry.
fa	steners, accessories, and items of other related work. escribe method for securing studs to tracks, splicing, and for blocking and reinforcement of framing connections.	F. Exterior Plaster: Fill hairline cracks, small h Wash and neutralize high alkali surfaces.

2 PRODUCTS

MANUFACTURERS

Metal Framing, Connectors, and Accessories:

1. ClarkDietrich; [____]: www.clarkdietrich.com/#sle.

2. Substitutions: See Section 01 6000 - Product Requirements.

FRAMING MATERIALS

Fire Rated Assemblies: Comply with applicable code and as follows: fire rated assemblies are described in the drawings.

ng Framing System Components: ASTM C645; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 indicated, with maximum deflection of wall framing of L/240 at 5 psf (L/240 at 240 Pa). shaped with knurled or embossed faces. U shaped, sized to match studs.

mblies of framed sections to sizes and profiles required. and brace framing members to suit design requirements.

conditions before starting work.

h-in utilities are in proper location. F STUD FRAMING

n framing to structure where indicated and to ceiling in other locations.

inating at Ceiling: Attach ceiling runner securely to ceiling track in accordance with manufacturer's instructions. inating at Structure: Attach top runner to structure, maintain clearance between top of studs and structure, and connect studs to track

mechanical devices in accordance with manufacturer's instructions; verify free movement of top of stud connections; do not leave ure top and bottom runners at 24 inches (600 mm) on center.

der and above openings; secure intermediate studs to same spacing as wall studs. openings horizontally.

tracks using crimping method. Do not weld.

ers using a minimum of three studs. tuds at wall openings, door and window jambs, not more than 2 inches (50 mm) from each side of openings.

allation of bucks, anchors, and blocking with electrical, mechanical, and other work to be placed within or behind stud framing. wood blocking secured to studs. Provide blocking for support of plumbing fixtures, toilet partitions, wall cabinets, toilet accessories, opening frames. All blocking is to be fire retardant.

fter work above ceiling or soffit is complete. Coordinate the location of hangers with other work. dependent of walls, columns, and above-ceiling work.

r hangers to structural members or embed them in structural slab. Space hangers as required to limit deflection to criteria indicated. ers at exterior soffits.

rrying channels at maximum 72 inch (1 800 mm) on center, and not more than 6 inches (150 mm) from wall surfaces. Lap splice rrying channels to hangers to prevent turning or twisting and to transmit full load to hangers.

nannels perpendicular to carrying channels, not more than 2 inches (50 mm) from perimeter walls, and rigidly secure. Lap splices

ation From True Position: 1/8 inch in 10 feet (3 mm in 3 m).

ation From Plumb: 1/8 inch in 10 feet (3 mm in 3 m). END OF SECTION 09 2216 **SECTION 09 9113**

EXTERIOR PAINTING

exterior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated, including the following:

Finish the Following Items: ory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished. cated to receive other finishes.

cated to remain unfinished. labels, equipment serial number and capacity labels, and operating parts of equipment.

Master Painters Institute Architectural Painting Specification Manual Current Edition.

3000 - Administrative Requirements, for submittal procedures.

shes: Ready mixed, unless required to be a field-catalyzed paint.

aints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good rushing properties, and capable of drying or curing free of streaks or sags.

ach paint material in quantity required to complete entire project's work from a single production run. duce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product

xterior Surfaces to be Painted, Unless Otherwise Indicated: Including cementitious stucco.

oats and one coat primer. (s): Exterior Pigmented Elastomeric, Water Based; MPI #113.

Behr Premium Elastomeric Masonry, Stucco and Brick Paint [No. 68]. (MPI #113)

de the following unless other primer is required or recommended by manufacturer of top coats.

istant Water Based Primer; MPI #3.

Behr Concrete and Masonry Bonding Primer [No. 880].

erials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final

3.03 APPLICATION

3.04 CLEANING

aces are ready to receive work as instructed by the product manufacturer.

ces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application. ied primer for compatibility with subsequent cover materials.

ure content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the laster and Stucco: 12 percent.

s thoroughly and correct defects prior to application.

es using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions. ask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces

hat might cause bleed through or staining of topcoat.

v from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow

: Fill hairline cracks, small holes, and imperfections with exterior patching plaster. Make smooth and flush with adjacent surfaces. Wash and neutralize high alkali surfaces.

A. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual". B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied. C. Apply each coat to uniform appearance.

D. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat. E. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

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Client:

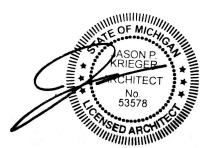
Verus Development Group

Project:

Project Name 19876 Mack Ave Grosse Pointe Woods MI

Issued	Description	Ву
8/11/2022	Permits	

Seal:



Note: Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field. North Arrow:

Sheet Title:

Specifications

Project Number:

Scale:

22-099

3.05 PROTECTION

A. Touch-up damaged finishes after Substantial Completion.

END OF SECTION 09 9113

SECTION 09 9123 INTERIOR PAINTING

PART 1 GENERAL

- 1.01 SECTION INCLUDES
- A. Surface preparation.
- B. Field application of paints.
- C. Scope: Finish interior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.
- 1. Prime surfaces to receive wall coverings. 2. Mechanical and Electrical:
 - a. In finished areas, paint insulated and exposed pipes, conduit, boxes, insulated and exposed ducts, hangers, brackets, collars and supports, mechanical equipment, and electrical equipment, unless otherwise indicated. b. Paint dampers exposed behind louvers, grilles, and convector and baseboard cabinets to match face panels.
- D. Do Not Paint or Finish the Following Items:
- Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished. Items indicated to receive other finishes. Items indicated to remain unfinished. 3.
- 4. Fire rating labels, equipment serial number and capacity labels, bar code labels, and operating parts of equipment.
- Stainless steel, anodized aluminum, bronze, terne coated stainless steel, and lead items.
- Marble, granite, slate, and other natural stones. 7. Floors, unless specifically indicated.
- 8. Ceramic and other tiles.
- 9. Brick, architectural concrete, cast stone, integrally colored plaster and stucco.
- 10. Glass. 11. Concrete masonry units in utility, mechanical, and electrical spaces.
- 12. Acoustical materials, unless specifically indicated.
- 13. Concealed pipes, ducts, and conduits.

1.02 REFERENCE STANDARDS

- A. MPI (APSM) Master Painters Institute Architectural Painting Specification Manual Current Edition.
- B. SSPC-SP 1 Solvent Cleaning 2015, with Editorial Revision (2016).
- C. SSPC-SP 2 Hand Tool Cleaning 2018.
- D. SSPC-SP 6 Commercial Blast Cleaning 2007.
- 1.03 SUBMITTALS
- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches (216 by 279 mm) in size, illustrating range of colors available for each finishing product specified.
- Where sheen is specified, submit samples in only that sheen.
- Where sheen is not specified, submit each color in each sheen available. 3. Paint color submittals will not be considered until color submittals for major materials not to be painted, such as masonry, have been approved.
- 1.04 DELIVERY, STORAGE, AND HANDLING
- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time,
- cleanup requirements, color designation, and instructions for mixing and reducing. C. Paint Materials: Store at minimum ambient temperature of 45 degrees F (7 degrees C) and a maximum of 90 degrees F (32 degrees C), in ventilated

area, and as required by manufacturer's instructions. 1.05 FIELD CONDITIONS

- A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer. B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and
- temperature limitations.
- C. Provide lighting level of 80 ft candles (860 lx) measured mid-height at substrate surface.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Provide paints and finishes used in any individual system from the same manufacturer; no exceptions.
- B. Paints:
- 1. Behr Process Corporation: www.behr.com/#sle.
- 2. Cloverdale Paint, Brand Products of Rodda Paint Company: www.cloverdalepaint.com/#sle.
- 3. Diamond Vogel Paints: www.diamondvogel.com/#sle. 4. PPG Paints: www.ppgpaints.com/#sle.
- 5. Rodda Paint Co: www.roddapaint.com/#sle.
- 6. Sherwin-Williams Company: www.sherwin-williams.com/#sle.
- 2.02 PAINTS AND FINISHES GENERAL
- A. Paints and Finishes: Ready mixed, unless intended to be a field-catalyzed paint. 1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
- 2. Supply each paint material in quantity required to complete entire project's work from a single production run.
- 3. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

2.03 PAINT SYSTEMS - INTERIOR

- A. Interior Surfaces to be Painted, Unless Otherwise Indicated: Including gypsum board, shop primed steel, and galvanized steel.
- 1. [____] and one coat primer. 2.04 ACCESSORY MATERIALS
- A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.
- B. Patching Material: Latex filler.
- C. Fastener Head Cover Material: Latex filler.

PART 3 EXECUTION

- 3.01 EXAMINATION
- A. Verify that surfaces are ready to receive work as instructed by the product manufacturer.
- B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application. C. Test shop-applied primer for compatibility with subsequent cover materials.
- D. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums: 1. Gypsum Wallboard: 12 percent.
- 3.02 PREPARATION
- A. Clean surfaces thoroughly and correct defects prior to application.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions. C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces
- or finishing.
- D. Seal surfaces that might cause bleed through or staining of topcoat.
- E. Gypsum Board: Fill minor defects with filler compound. Spot prime defects after repair.
- F. Galvanized Surfaces:
- 1. Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.
- 2. Prepare surface according to SSPC-SP 2.
- G. Ferrous Metal: 1. Solvent clean according to SSPC-SP 1.
- 2. Shop-Primed Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean
- surfaces with solvent. Prime bare steel surfaces. Re-prime entire shop-primed item. Remove rust, loose mill scale, and other foreign substances using using methods recommended in writing by paint manufacturer and blast 3. cleaning according to SSPC-SP 6 "Commercial Blast Cleaning". Protect from corrosion until coated.
- 3.03 APPLICATION
- A. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.
- B. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".
- C. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- D. Apply each coat to uniform appearance in thicknesses specified by manufacturer.
- E. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- F. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.
- 3.04 CLEANING
- A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.05 PROTECTION

A. Protect finishes until completion of project.

B. Touch-up damaged finishes after Substantial Completion.

3.06 SCHEDULE - PAINT SYSTEMS - SEE DRAWINGS FOR PAINT SCHEDULES AND IDENTIFICATION

END OF SECTION 09 9123

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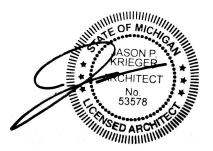
Verus Development Group

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Issued	Description	Ву
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Sheet Title: **Specifications**

Project Number: 22-099

Scale:

