CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT

TACO BELL

GIBRALTAR RD. & JUNIPER ST.

BROWNSTOWN, MI 48183

TACO BELL™

LEGAL JURISDICTION:	BROWNSTOWN CHARTER TOWNSHIP, BUILDING DEPARTMENT
BUILDING CODE:	2015 MICHIGAN BUILDING CODE
ACCESSIBILITY:	ICC A117-2009
MECHANICAL:	2015 MICHIGAN MECHANICAL CODE
PLUMBING:	2015 MICHIGAN PLUMBING CODE
ELECTRICAL:	2017 NATIONAL ELECTRIC CODE
FIRE:	NFPA
ENERGY:	2015 MICHIGAN ENERGY CODE
HEALTH:	MICHIGAN PUBLIC HEALTH CODE
BUILDING AREA:	2,090 S.F. GROSS
SEATING:	20 INTERIOR
OCCUPANCY:	A2
TYPE CONSTRUCTION:	TYPE VB - UNPROTECTED

TYPE	AREA		FACTOR			OCCUPANTS
DINING ROOM	447	S.F.	1:15	S.F.	(NET)	30
QUEUING	60	S.F	1:5	S.F.	(NET)	12
KITCHEN	1008	S.F.	1:200	S.F.	(GROSS)	6
OFFICE	72	S.F.	1:100	S.F.	(GROSS)	1
ACCESSORY STORAGE	173	S.F.	1:300	S.F.	(GROSS)	1
ACCESSORY RESTROOMS & PASSAGE	283	S.F.	0		(GROSS)	0
TOTAL						50

PROJECT SUMMARY

# PHONE LINES:	25 PAIR CABLE IN 2" CONDUIT
ELECTRIC SERVICE:	600 AMPS / 3 PHASE / 120-208 VOLT
GAS:	785,000 BTUH
WIND SPEED:	90 M.P.H. / EXPOSURE B
EARTHQUAKE ZONE:	D
ROOF LIVE LOAD:	25 P.S.F.

DESIGN CRITERIA

CURRENT ZONING B-2, COMMUNITY BUSINESS DISTRICT

REFER TO CIVIL DRAWINGS.

FOR TACO BELL USE/APPROVAL ONLY

BUILDING S.F.:	2,090 S.F.
SITE SIZE:	29,974 S.F.
PARKING COUNT:	36
INT. SEATING:	20
EXT. SEATING:	0
KIOSK COUNT:	4
D.M.B.:	YES/NO
DT DMP:	YES/NO
DT DPB:	YES/NO

LEGAL DESCRIPTION

A. ALL WORK SHALL CONFORM TO THE 2015 EDITION OF THE MICHIGAN BUILDING CODE, AND ALL OTHER APPLICABLE CODES, STANDARDS, AND REGULATIONS OF THE CHARTER TOWNSHIP OF BROWNSTOWN AND COUNTY OF WAYNE.

B. IT IS INTENDED THAT A COMPLETE OCCUPIABLE BUILDING PROJECT IS PROVIDED.

C. THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION (A.I.A. A201 LATEST EDITION) ARE A PART OF THESE CONTRACT DOCUMENTS. A COPY IS ON FILE AT THE ARCHITECT'S OFFICE.

D. DRAWINGS ARE BASED ON A SURVEY, DATED JULY 24, 2018 PREPARED BY MERIDIAN LAND SURVEYING AND IS INCLUDED IN THESE DOCUMENTS.

E. THIS BUILDING HAS BEEN DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS OF A GEOTECHNICAL INVESTIGATION DATED OCTOBER 8, 2018 BY TERRACON CONSULTANTS - MI, INC. THE REPORT IS PART OF THESE CONTRACT DOCUMENTS, AND THE CONTRACTOR IS RESPONSIBLE FOR CARRYING OUT ITS RECOMMENDATIONS, THOUGH SOME MAY NOT BE SPECIFICALLY DETAILED ON THE PLANS.

F. DO NOT SCALE THESE DRAWINGS. VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD. ANY DISCREPANCIES IN THESE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO STARTING WORK.

G. ALL PROPOSED SUBSTITUTIONS SHALL BE APPROVED BY THE TACO BELL CORPORATE BRAND DESIGNER OR CONSTRUCTION MANAGER, IN WRITING, PRIOR TO INSTALLATION.

H. RETAIN THE PROJECT GEOTECHNICAL ENGINEER TO PROVIDE OBSERVATION AND TESTING SERVICES DURING THE GRADING (INCLUDING UTILITY TRENCHES) AND FOUNDATION PHASE OF CONSTRUCTION AS RECOMMENDED IN THE GEOTECHNICAL REPORT. ALL TESTING AND INSPECTION REPORTS, INCLUDING FINAL SUMMATION LETTER, SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND OWNER. G.C. SHALL CERTIFY PAD ELEVATION PRIOR TO START OF FOUNDATION WORK.

I. SUBMIT, PAY FEES AND OBTAIN ALL PERMITS ASSOCIATED WITH THE PROJECT EXCEPT GENERAL BUILDING PERMIT. THIS INCLUDES, BUT IS NOT LIMITED TO ELECTRICAL, MECHANICAL, PLUMBING, FIRE SPRINKLER, HOOD ANSUL, OR OTHER RELATED FIRE PERMITS, ENCROACHMENT PERMIT, ETC. YUM BRANDS WILL PAY FOR "CONNECTION FEES" ASSOCIATED WITH UTILITY PERMITS. PAY FOR TEMPORARY FACILITIES FEES AS REQUIRED TO COMPLETE THE WORK IN A TIMELY MANNER.

J. PROVIDE EACH SUBCONTRACTOR WITH A COMPLETE AGENCY-PERMITTED DRAWING SET AT TIME OF CONSTRUCTION.

K. ALL ABBREVIATIONS INCLUDED FOLLOW INDUSTRY STANDARDS. CONTACT ARCHITECT IF ANY ABBREVIATIONS ARE NOT CLEAR.

L. GC SHALL SUPPLY AND INSTALL ALL ASPECTS OF THE PROJECT DESCRIBED IN THIS DRAWING SET UNLESS OTHERWISE NOTED. SEE SCOPE OF WORK FOR EXCEPTIONS.

M. GRAPHIC AND WRITTEN INFORMATION ON DRAWINGS SHALL BE COORDINATED WITH ALL TRADES PRIOR TO INSTALLATION.

N. ALL MATERIALS STAGED TO BE USED FOR CONSTRUCTION SHALL BE PROTECTED FROM EXCESSIVE MOISTURE. IF THEY ARE EXPOSED TO MOISTURE THEY SHOULD BE ADEQUATELY DRIED AND INSPECTED FOR COMPLIANCEWITH MINIMUM QUALITY STANDARDS BEFORE ENCAPSULATED INTO THE BUILDING.

O. ALL PAINTS, ADHESIVES, COATINGS AND SEALANTS USED INSIDE THE BUILDING SHALL HAVE A LOW VOC CONTENT.

PROJECT GENERAL NOTES

SYMBOL	DESCRIPTION
OFFICE	ROOM NAME
A / XX / B / C / D	SHEET NUMBER; ELEVATION NUMBER
8'-4"	CEILING HEIGHT
X / XX	BLDG. SECTION LETTER; BLDG. SECTION SHEET
X / XX	DETAIL NUMBER; DIRECTION OF DETAIL; DETAIL SHEET
X	REVISION NUMBER
0'-0" ELEV.	BLDG. HEIGHT REFERENCE POINT
X / XX	ELEV. LETTER; ELEV. SHEET
X	DOOR NUMBER
X	WINDOW NUMBER / DECOR ITEM NUMBER
X	KEY NOTE NUMBER
X-000	EQUIPMENT NUMBER
X	WALL NUMBER
X	INTERIOR ELEVATION DESIGNATION
X	SHEAR WALL TYPE (STRUCTURAL)
XXX 000	EQUIPMENT / FIXTURE NUMBER (M.E.P)
GREEN	INDICATES SUSTAINABLE DESIGN

REFER TO STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SHEETS FOR SPECIFIC SYMBOLS

GENERAL DRAWING SYMBOLS

VICINITY MAP

OWNER
YUM! BRANDS, INC.
1900 COLONEL SANDERS LANE
LOUISVILLE, KY 40213
CONTACT: STEVE PULCHEON
PHONE: 949.863.3864

ARCHITECT
GPD GROUP, PROFESSIONAL CORP.
520 S. MAIN STREET, SUITE 2531
AKRON, OH 44311
JIM NEIDLINGER
PHONE: 330.572.2100

CONSTRUCTION MANAGER
YUM! BRANDS, INC.
1900 COLONEL SANDERS LANE
LOUISVILLE, KY 40213
CONTACT: STEVE PULCHEON
PHONE: 949.863.3864

STRUCTURAL ENGINEER
GPD GROUP, PROFESSIONAL CORP.
520 S. MAIN STREET, SUITE 2531
AKRON, OH 44311
CONTACT: JIM NEIDLINGER
PHONE: 330.572.2100

CIVIL ENGINEER
GPD GROUP, PROFESSIONAL CORP.
520 S. MAIN STREET, SUITE 2531
AKRON, OH 44311
CONTACT: JIM NEIDLINGER
PHONE: 330.572.2100

M/E/P ENGINEER
GPD GROUP, PROFESSIONAL CORP.
520 S. MAIN STREET, SUITE 2531
AKRON, OH 44311
CONTACT: JIM NEIDLINGER
PHONE: 330.572.2100

GEOTECHNICAL ENGINEER
TERRACON CONSULTANTS - MI, INC.
12460 PLAZA DRIVE
PARMA, OHIO 44130
CONTACT: LYNTON L. PRICE, P.E.
PHONE: 216.459.8378

CIVIL ENGINEER
GPD GROUP, PROFESSIONAL CORP.
520 S. MAIN STREET, SUITE 2531
AKRON, OH 44311
CONTACT: JIM NEIDLINGER
PHONE: 330.572.2100

PROJECT DIRECTORY

SEWER
CHARTER TOWNSHIP OF BROWNSTOWN
21313 TELEGRAPH RD.
BROWNSTOWN, MI 48183
CONTACT: WILLIAM TURNER
PHONE: 734.675.4000

TELEPHONE
AT&T
CONTACT: BRIAN GRIFFIN
PHONE: 316.240.5486

WATER
CHARTER TOWNSHIP OF BROWNSTOWN
21313 TELEGRAPH RD.
BROWNSTOWN, MI 48183
CONTACT: WILLIAM TURNER
PHONE: 734.675.4000

GAS
DTE ENERGY
ONE ENERGY PLAZA
DETROIT, MI 48226
CONTACT: SAMANTHA COOK
PHONE: 313.570.4133

ELECTRIC
DTE ENERGY
ONE ENERGY PLAZA
DETROIT, MI 48226
CONTACT: JACQUELINE YOUNG
PHONE: 313.402.8231

UTILITY CONTACTS

● SHEET ISSUED ON DATE INDICATED, WITH MODIFICATIONS
○ SHEET ISSUED ON DATE INDICATED, NO MODIFICATIONS

ISSUE

TITLE/GEN. CONDITIONS

SHEET	TITLE	04.28.21	06.24.21	07.12.21
G2.0	TRASH ENCLOSURE DETAILS	●	○	○
T1.0	TITLE SHEET	●	○	○
G1.0	GREEN CHECKLIST SHEET	●	○	○
G3.0	PEST PREVENTION GUIDE	●	○	○
G4.0	SIGNAGE PLAN	●	○	○
G4.1	SIGNAGE DETAILS	●	○	○
TITLE/SITE SHEET COUNT: 6		●	○	○

STRUCTURAL

SHEET	TITLE	04.28.21	06.24.21	07.12.21
S1.0	FOUNDATION PLAN	●	○	○
S2.0	WALL FRAMING PLAN	●	○	○
S3.0	ROOF FRAMING PLAN	●	○	○
S4.0	STRUCTURAL DETAILS	●	○	○
S4.1	STRUCTURAL DETAILS	●	○	○
S4.2	STRUCTURAL DETAILS	●	○	○
S4.3	STRUCTURAL DETAILS	●	○	○
S4.4	STRUCTURAL SECTIONS	●	○	○
S5.0	CANOPY/AWNING BLOCKING ELEVATIONS			
STRUCTURAL SHEET COUNT: 9				

CIVIL

SHEET	TITLE	04.28.21	06.24.21	07.12.21
SEE CIVIL DRAWINGS FOR SHEET INDEX.		●	○	○

ARCHITECTURAL

SHEET	TITLE	04.28.21	06.24.21	07.12.21
A1.0	FLOOR PLAN	●	●	●
A1.1	DOOR & WINDOW ELEVATIONS & SCHEDULES	●	○	●
A2.0	EQUIPMENT AND SEATING PLAN	●	●	○
A2.1	EQUIPMENT SCHEDULE	●	●	○
A3.0	ROOF PLAN	●	○	○
A4.0	EXTERIOR ELEVATIONS	●	○	●
A4.1	EXTERIOR ELEVATIONS	●	○	●
A5.0	BUILDING SECTIONS	●	○	○
A5.1	BUILDING SECTIONS	●	○	○
A5.2	WALL SECTIONS	●	○	○
A5.3	WALL SECTIONS	●	○	○
A5.4	WALL SECTIONS	●	○	○
A6.0	CONSTRUCTION DETAILS ROOF	●	○	○
A6.1	CONSTRUCTION DETAILS DOOR/WINDOW	●	○	○
A6.3	FINISH DETAILS	●	○	○
A6.4	CONSTRUCTION DETAILS INTERIOR	●	○	○
A6.5	CEILING DETAILS	●	○	○
A6.6	HARDIE BOARD DETAILS	●	○	○
A7.0	FLOOR FINISH PLAN	●	○	○
A7.1	REFLECTED CEILING PLAN	●	○	○
A7.2	FINISH SCHEDULE	●	○	○
A8.0	INTERIOR ELEVATIONS DINING ROOM	●	○	○
A8.1	INTERIOR ELEV. ENLARGED RESTROOMS & OFFICE PLAN	●	○	○
A8.2	INTERIOR ELEVATIONS KITCHEN	●	●	○
A8.3	INTERIOR ELEVATIONS KITCHEN	●	○	○
ARCHITECTURAL SHEET COUNT: 25				

ACCESSIBILITY

SHEET	TITLE	04.28.21	06.24.21	07.12.21
ADA1.0	ACCESSIBILITY REQUIREMENTS	●	○	○
ADA1.1	ACCESSIBILITY REQUIREMENTS	●	○	○
ACCESSIBILITY SHEET COUNT: 2				

MECHANICAL

SHEET	TITLE	04.28.21	06.24.21	07.12.21
M1.0	MECHANICAL SCHEDULES AND NOTES	●	○	○
M2.0	DUCT AND DIFFUSER PLAN	●	○	○
M2.1	MECHANICAL ROOF PLAN	●	○	○
M3.0	HOOD DETAILS AND SECTIONS	●	○	○
M4.0	MECHANICAL DETAILS	●	○	○
M5.0	CONTROLS DETAILS	●	○	○
MECHANICAL SHEET COUNT: 6				

PLUMBING

SHEET	TITLE	04.28.21	06.24.21	07.12.21
P1.0	PLUMBING SCHEDULES AND NOTES	●	○	○
P2.0	WASTE AND VENT PLAN	●	●	○
P3.0	WATER AND GAS PLAN	●	●	○
P4.0	PLUMBING ROUGH-IN PLAN	●	●	○
P5.0	RISER DIAGRAMS	●	●	○
P6.0	PLUMBING DETAILS	●	○	○
PLUMBING SHEET COUNT: 6				

ELECTRICAL

SHEET	TITLE	04.28.21	06.24.21	07.12.21
E1.0	SITE ELECTRICAL PLAN	●	○	○
E2.0	ELECTRICAL ONE LINE DIAGRAMS AND LEGEND	●	○	○
E2.1	ELECTRICAL SCHEDULES	●	○	○
E2.2	ELECTRICAL SCHEDULES	●	○	○
E3.0	ELECTRICAL POWER PLAN	●	○	○
E3.1	ENLARGED POWER PLAN AND DETAILS	●	○	○
E3.2	ELECTRICAL POWER ROOF PLAN	●	○	○
E4.0	LIGHTING PLAN AND DETAILS	●	○	○
E5.0	COMMUNICATIONS PLAN	●	○	○
E6.0	ELECTRICAL DETAILS - TBCCB	●	○	○
E6.1	ELECTRICAL DETAILS - TBCCB	●	○	○
E7.0	ELECTRICAL DETAILS	●	○	○
E7.1	ELECTRICAL DETAILS	●	○	○
ELECTRICAL SHEET COUNT: 13		●	○	○

SCOPE OF WORK

SHEET	TITLE	04.28.21	06.24.21	07.12.21
SW1.0	SCOPE OF WORK	●	○	○
SW2.0	INSTALLATION START-UP PRE-COMM CHECK LIST	●	○	○
SW2.1	BALANCING AND COMISSIONING SEQUENCE	●	○	○
SCOPE OF WORK SHEET COUNT: 3				

SPECIFICATIONS

SHEET	TITLE	04.28.21	06.24.21	07.12.21
IN BOOK FORMAT		●	○	○

SHEET INDEX

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
330.572.2100 FAX: 330.572.2102

	DATE	REMARKS
	04.28.21	ISSUED FOR PERMIT
2	07.12.21	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RS
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
TITLE SHEET

T1.0

PLOT DATE: 7/12/2021 9:54:44 AM

0275_ARCH_SM20_Rustys1.rvt

CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT

CHECK LIST NUMBER EXPLANATION:

THE CHECKLIST NUMBERS BELOW ALIGN WITH THE CREDIT NUMBERS IN THE YUM BLUELINE SYSTEM WEBSITE. FOR FURTHER DETAIL GO TO THE FOLLOWING WEB ADDRESS. NOTE: FOLLOW THE "REQUIRED" AND "OPTIONAL" DESIGNATION ON THIS SHEET RATHER THAN THE ONES ON THE YUMBLUELINE WEBSITE. THE SYSTEM HAS BEEN SETUP SO THAT IF YOU DO THE "REQUIRED" ITEMS ON THIS LIST YOUR RESTAURANT WILL MEET THE YUMBLUELINE REQUIREMENTS.

1. GO TO THE REFERENCE VERSION OF THE YUM BLUELINE WEBSITEAT: "WWW.YUMBLUELINE.COM"
2. IN THE "USER" SECTION CHOOSE "GENERAL" FROM THE PULL DOWN MENU
3. IN THE "PASSWORD" SECTION TYPE IN "J212J*KLA!"

FEASIBILITY | DESIGN | CONSTRUCTION | COMMISIONING

P = INDICATES THAT SCOPE IS ALREADY IN THE PROTOTYPE DRAWINGS

* = INDICATES OPTIONAL ITEMS

FORMALDEHYDE LIMITS
MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION

PRODUCT	CURRENT LIMIT
• HARDWOOD PLYWOOD VENEER CORE	0.05
• HARDWOOD COMPOSITE CORE	0.05
• PARTICLE BOARD	0.09
• MEDIUM DENSITY FIBER BOARD	0.11
• THIN MEDIUM DENSITY FIBERBOARD	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, AIR TOXIC CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333.
2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/15"

VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS (CONT.)
GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS

SPECIALTY COATINGS	CURRENT VOC LIMIT
• ROOF COATINGS	50
• RUST PREVENTATIVE COATINGS	250
• SHELLACS	
CLEAR	730
OPAQUE	550
• SPECIALTY PRIMERS, SEALERS & UNDER-COATINGS	100
• STAINS	250
• STONE CONSOLIDANTS	450
• TRAFFIC MARKING COATINGS	100
• TUB & TILE REFINISH COATINGS	420
• WATERPROOFING MEBRANES	250
• WOOD COATINGS	275
• WOOD PRESERVATIVES	350
• ZINC-RICH PRIMERS	340

1. GRAMS OF VOC PER LITER OF LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS
2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.
3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AREI RESOURCE BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

COATING CATEGORY	CURRENT VOC LIMIT
• FLAT COATINGS	50
• NON-FLAT COATINGS	100
• NON-FLAT HIGH GLOSS COATINGS	150

SPECIALTY COATINGS	CURRENT VOC LIMIT
• ALUMINUM ROOF COATINGS	400
• BASEMENT SPECIALTY COATINGS	400
• BITUMINOUS ROOF COATINGS	50
• BITUMINOUS ROOF COATINGS PRIMER	350
• BOND BREAKER	350
• CONCRETE CURING COMPOUNDS	350
• CONCRETE / MASONRY SEALERS	100
• DRIVEWAY SEALERS	50
• DRY FOG COATINGS	150
• FIRE RESISTIVE COATINGS	350
• FLOOR COATINGS	100
• FORM-RELEASE COMPOUNDS	250
• HIGH TEMPERATURE COATINGS	420
• INDUSTRIAL MAINTENANCE COATINGS	250
• LOW SOLIDS COATINGS	120
• MAGNESITE CONCRETE COATINGS	450
• MASTIC TEXTURE COATINGS	100
• PRETREATMENT WASH PRIMER	350
• PRIMERS, SEALERS AND UNDERCOATS	100
• REACTIVE PENETRATING SEALERS	350

43.1 CONTROLLED BUILDING MATERIAL (REQUIRED)
A. IF FLUORESCENT LAMPS ARE USED THEY SHALL NOT EXCEED 80 PICOGRAMS PER LUMEN HOUR.
B. MAINTAIN THE TACO BELL LAMPS POLICY OF ONLY USING LED LAMPS IN ALL BUILDING, SITE AND SIGN LIGHTING.

45.1 THERMAL COMFORT (REQUIRED)
INSURE THAT THE HVAC SYSTEM PROVIDES THE FOLLOWING COMFORT CONDITIONS, ON AVERAGE:

STORE OCCUPATION	MODE	TEMP SETPOINTS	MAX RELATIVE HUMIDITY
OCCUPIED	DINING COOLING	73-78 F	60%
	KITCHEN COOLING	68-73 F	
	DINING HEATING	68-73 F	60%
	KITCHEN HEATING	66-71 F	
UNOCCUPIED	COOLING (MINIMUM)	80 F OR OFF	
	HEATING (MAXIMUM)	60 F	

46.1 THERMAL VERIFICATION (REQUIRED)
A. AT THE 11 MONTH WARRANTEE THE CM SHALL ADMINISTER THE "THERMAL COMFORT VERIFICATION SURVEY" WITH A RESPONSE RATE OF 75% MINIMUM.
B. IF 20% OR MORE OF THE RESPONDERS ARE DISSATISFIED THEN CORRECTIVE ACTIONS SHALL TAKE CORRECTIVE ACTION UNTIL LESS THAN 20% ARE DISSATISFIED.
C. IF CORRECTIVE ACTION IS REQUIRED GO BACK AND INSURE THAT THE STORE MEETS #28 THERMAL COMFORT STANDARDS.

48.1 LEED TEAM MEMBER (REQUIRED)
EACH CONSULTANT SHALL HAVE A LEED AP MEMBER ON EACH PROJECTS SITE SPECIFIC TEAM.

49.1 COMMISSIONING (REQUIRED)
COMMISSIONING REQUIRES UNDERSTANDING THE OWNERS DESIGN INTENT PRIOR TO STARTING SITE SPECIFIC DESIGN SO THEY CAN INSURE THAT THEIR DESIGN MEETS WITH THE OWNER'S REQUIREMENTS. COMMISSIONING ALSO IS ALSO INTENDED TO INSURE THAT THE CONTRACTOR EXECUTES THE DESIGN PER THE OWNERS REQUIREMENTS.

A. THE CONSULTANT SHOULD MODIFY THE OWNER'S PROTOTYPE REQUIREMENTS WITH THE SITE SPECIFIC I INFORMATION AND INSURE THAT THE SITE SPECIFIC DESIGN MEETS OR EXCEEDS THE OWNER'S REQUIREMENTS PRIOR TO STARTING DESIGN.
B. THE CONSULTANT, GENERAL CONTRACTOR AND CM SHOULD USE SHEET G1 AS THE CHECKLIST TO INSURE THE SITE SPECIFIC PROJECT RESULTS MEETS OR EXCEEDS THE OWNER'S REQUIREMENTS.

FEASIBILITY | DESIGN | CONSTRUCTION | COMMISIONING

P = INDICATES THAT SCOPE IS ALREADY IN THE PROTOTYPE DRAWINGS

* = INDICATES OPTIONAL ITEMS

P — 37.1 RECYLING (REQUIRED)
A. PROVIDE DEDICATED RECYCLING SPACE IN THE DINING ROOM, KITCHEN AND SITE. RECYCLING SHOULD ACCOMMODATE PLASTIC, PAPER AND OIL.
B. SEE THE "TRASH ENCLOSURE STANDARDS" POSTED ON THE PLANS.YUM.COM. UNLESS APPROVED THE "LARGE" VERSION SHOULD BE USED.

37.2 COOKING OIL RECYCLING (REQUIRED)
COLLECT COOKING OIL AND PROVIDE TO A THIRD PARTY VENDOR FOR RECYCLING.

* 37.3 CARDBOARD RECYCLING (OPTIONAL)
COLLECT USED CORRUGATED CARDBOARD AND PROVIDE TO A THIRD PARTY VENDOR FOR RECYCLING.

38. AIR VENTILATION (REQUIRED)
1. PROVIDE AIR VENTILATION AND EXHAUST RATES PER YUM BLUELINE.
2. PROVIDE FRESH AIR PER YUM BLUELINE.

39.1 NO SMOKING (REQUIRED)
A. MAINTAIN A POLICY OF NOT SMOKING WITHIN THE RESTAURANT
B. PROHIBIT SMOKING WITHIN 25 FEET OF THE RESTAURANT

41.1 PROTECTION OF MATERIALS (REQUIRED)
GC TO PROVIDE A IAQ MANAGEMENT PLAN WITH BID. START WITH THE PROTOTYPE TEMPLATE AND MODIFY AS REQUIRED FOR SITE SPECIFIC CONDITIONS.
A. PROTECT HVAC SYSTEM
B. IMPLEMENT POLLUTION SOURCE CONTROL MEASURES
C. PROTECT STORED MATERIALS
D. PROTECT INSTALLED MATERIALS
E. MAINTAIN CONSTRUCTION SITE HOUSEKEEPING

42. LOW EMITTING MATERIALS (REQUIRED)
FINISH MATERIALS SHALL COMPLY WITH THIS SECTION:
ADHESIVES, SEALANTS AND CAULKS. ADHESIVES, SEALANT AND CAULKS USED ON THE PROJECT SHALL MEET THE REQUIREMENTS OF THE FOLLOWING STANDARDS UNLESS MORE STRINGENT LOCAL OR REGIONAL AIR POLLUTION OR AIR QUALITY MANAGEMENT DISTRICT RULES APPLY:
1. ADHESIVES, ADHESIVE BONDING PRIMERS, ADHESIVE PRIMERS, SEALANTS, SEALANT PRIMERS AND CAULKS SHALL COMPLY WITH LOCAL OR REGIONAL AIR POLLUTION CONTROL OR AIR QUALITY MANAGEMENT DISTRICT RULES WHERE APPLICABLE OR SCAQMD RULE 1168 VOC LIMITS.
2. AEROSOL ADHESIVES, AND SMALLER UNIT SIZES OF ADHESIVES, AND SEALANT OR CAULKING COMPOUNDS (IN UNITS OF PRODUCT, LESS PACKAGING, WHICH DO NOT WEIGH MORE THAN 1 POUND AND DO NOT CONSIST OF MORE THAN 16 FLUID OUNCES) SHALL COMPLY WITH SCAQMD.

PAINTS AND COATINGS. ARCHITECTURAL PAINTS AND COATINGS SHALL COMPLY WITH VOC LIMITS IN SCAQMD.

AEROSOL PAINTS AND COATINGS. AEROSOL PAINTS AND COATINGS SHALL MEET SCAQMD REQUIREMENTS.

VERIFICATION. THE GENERAL CONTRACTOR SHALL PROVIDED DOCUMENTATION TO THE CM. DOCUMENTATION SHALL INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING:
1. MANUFACTURER'S PRODUCT SPECIFICATION.
2. FIELD VERIFICATION OF ON-SITE PRODUCT CONTAINERS.

ADHESIVE VOC LIMITS

ARCHITECTURAL ADHEASIVE APPLICATIONS	CURRENT VOC LIMIT
• CERAMIC TILE	65
• DRYWALL, PANEL & COVE BASE	50
• MULTI-PURPOSE	70
• SINGLE PLY ROOFING	250

SPECIALTY APPLICATIONS	CURRENT VOC LIMIT
• PVC WELDING	510
• CPVC WELDING	490
• ABS WELDING	325
• PLASTIC CEMENT WELDING	250
• ADHESIVE PRIMER FOR WELDING	550
• CONTACT ADHESIVE	80
• SPECIAL PURPOSE CONTACT ADHESIVE	250
• STRUCTURAL WOOD MEMBER ADHESIVE	140
• TOP & TRIM ADHESIVE	250

SUBSTRATE SPECIFIC APPLICATIONS	CURRENT VOC LIMIT
• METAL TO METAL	30
• PLASTIC FOAMS	50
• POROUS MATERIALS (EXCEPT WOOD)	50
• WOOD	30
• FIBERGLASS	80

SEALANT VOC LIMITS
(LESS WATER AND LESS EXEMPT COMPOUNDS IN GRAMS PER LITER)

SEALANT	CURRENT LIMIT
• ARCHITECTURAL	250
• MARINE DECK	760
• NON-MEMBRANE ROOF	300
• ROADWAY	250
• SINGLE PLY ROOF MEMBRANE	450
• OTHER	420

SEALANT PRIMER	CURRENT LIMIT
• ARCHITECTURAL	
NON-POROUS	250
PORUS	775
• MODIFIED BITUMINOUS	500
• MARINE DECK	760
• OTHER	75

FEASIBILITY | DESIGN | CONSTRUCTION | COMMISIONING

* 1.3 CONTAMINATED SITES (OPTIONAL)
IF YOU ARE DEVELOPING A SITE SUCH AS A GAS STATION THAT REQUIRES REMEDIAL WORK CHECK THIS BOX.

1.4 LOCATION COMMITMENT (REQUIRED)
COMMIT TO STAY IN THE SAME LOCATION FOR 10 YEARS OR MORE.

1.5 PAY UTILITIES DIRECTLY (REQUIRED)
IF SITE IS LEASED INSURE THAT TACO BELL WILL PAY THE UTILITIES DIRECTLY RATHER THAN ALLOWING THE LANDLORD TO PAY THEM. THIS WILL ALLOW TACO BELL TO TRACK UTILITY EXPENSES EASILY.

* 2.2 PROXIMITY TO BUS STOP (OPTIONAL)
SITE IS WITHIN 1/4 A MILE OF A BUS STOP.

P — 3.0 BICYCLE FACILITIES (REQUIRED)
PROVIDE DEDICATED BICYCLE LOCKABLE PARKING FOR A MINIMUM OF TWO BICYCLES. PROVIDE CHANGING AREA AND LOCKABLE STORAGE FOR A MINIMUM OF TWO PEOPLE. SINGLE OCCUPANCY TOILET ROOMS WILL SUFFICE AS A CHANGING AREA.

* 5.1 PARKING (OPTIONAL)
DO NOT EXCEED PARKING SPACES REQUIRED BY LOCAL ZONING. SEE CREDIT 5. PROVIDE 5% PREFERRED PARKING FOR CARPOOL.

P — 7.2 WHITE ROOF (REQUIRED)
PROVIDE WHITE PVC SINGLE MEMBRANE ROOF MATERIAL.

9.0 CONSTRUCTION POLLUTION CONTROL (REQUIRED)
A. CONSTRUCTION POLLUTION CONTROL PLAN.
B. SILT FENCING
C. SITE VEHICULAR ACCESS
D. WHEEL WASHING
E. COVERED LOADS
F. EXCAVATED SOIL STORAGE
G. STORM WATER DRAIN, TRENCH AND PIT DRAIN PROTECTION
H. TEMPORARY DIVERSION DITCHES AND BERMS
I. DUST CONTROL
J. EXPOSED SLOPE EROSION CONTROL
K. WEEKLY CONTRACTOR INSPECTION

P — 10.2 BUILDING WATER (REQUIRED)
PROVIDE PLUMBING FIXTURES AS SPECIFIED IN THE PROTOTYPE DRAWINGS, SPECIFICATIONS AND EQUIPMENT MODEL.

P — 11.2 PROCESS WATER (REQUIRED)
ALL WATER USING EQUIPMENT SPECIFIED IN THE PROTOTYPE EQUIPMENT SCHEDULE SHALL BE USED FOR ALL GROUND-UP RESTAURANTS.

12.1 LANDSCAPE DESIGN (REQUIRED)
ALL LANDSCAPE DESIGNS FOR NEW GROUND-UP RESTAURANTS SHALL FOLLOW THE LANDSCAPE STANDARDS POSTED ON THE PLANS.YUM.COM WEBSITE.

13.1 IRRIGATION WATER (REQUIRED) SEE LANDSCAPE SPECIFICATIONS
A. PROGRAMMABLE IRRIGATION CONTROLLER.
B. SEPARATE IRRIGATION ZONES
C. PROGRAM MAXIMUM IRRIGATION TIMING
D. HIGH-EFFICIANCY IRRIGATION SPRINKLER HEADS
E. RAIN SENSOR

P — 15.3 INTERIOR LIGHTING (REQUIRED)
THE CURRENT LIGHTING SPECIFICATIONS SHALL BE USED FOR ALL GROUND-UP PROTOTYPE RESTAURANTS.

P — 16.2 EXTERIOR LIGHTING (REQUIRED)
THE CURRENT LIGHTING SPECIFICATIONS SHALL BE USED FOR ALL GROUND-UP PROTOTYPE RESTAURANTS.

P — 17.2 SIGN ILLUMINATION (REQUIRED)
THE CURRENT SIGNAGE SPECIFICATIONS SHALL BE USED FOR ALL GROUND-UP PROTOTYPE RESTAURANTS.

P — 18.1 EXHAUST HOODS (REQUIRED)
THE CURRENT 6'-3" BACK SHELF HOOD DESIGN AND EQUIPMENT PLACEMENT AS SHOWN IN THE GROUND-UP PROTOTYPE RESTAURANT SHALL BE USED.

P — 19.1 LICENSED HVAC ENGINEER (REQUIRED)
USE A LICENSED HVAC ENGINEER FOR SYSTEM SITE ADAPTATION.

P — 19.2 OPTIMIZE HVAC DESIGN (REQUIRED)
OPTIMIZE HVAC DESIGN SYSTEM PER YUM BLUELINE STANDARDS

P — 20.0 HVAC EFFICIENCY (REQUIRED)
USE THE STANDARD HIGH EFFICENCY (MINIMUM EER 12.0) RTU AS SPECIFIED AND INSTALL PER THE CURRENT PROTOTYPE GROUND UP RESTAURANT.

P — 21.0 ECONOMIZER PERFORMANCE (REQUIRED)
USE A FACTORY PROVIDED ECONOMIZER WITH DIFERENTIAL CONTROLS INTEGRAL TO AND COMPATIBLE WITH THE RTU'S SPECIFIED IN THE PROTOTYPE PLAN.

P — 22.1. HOT WATER EFFICIENCY (REQUIRED)
USE THE WATER HEATER SPECIFIED IN THE TACO BELL PROTOTYPE.

P — 23.1 REFRIGERANTS (REQUIRED)
DO NOT USED BANNED REFRIGERANTS. IF YOU USE ANY MODERN RTU YOU WILL NOT USE BANNED REFRIGERANTS

P — 24.1 REFRIGERATION (REQUIRED)
A. USE THE CURRENT SPECIFIED WALK-IN COOLER/FREEZER. SEE CREDIT 24
B. USE THE CURRENT SPECIFIED REACH-IN FREEZER. SEE CREDIT 24
C. USE THE CURRENT SPECIFIED ICE MAKERS. SEE CREDIT 24

P — 25.1 COOKING & WASHING EQUIPMENT (REQUIRED)
A. USE THE CURRENT SPECIFIED FRYER IN THE PROTOTYPE.
B. USE THE CURRENT SPECIFIED 3-COMP SINKIN THE PROTOTYPE.

P — 28.1 BASIC LIGHTING & THERMAL CONTROLS (REQUIRED)
A. PROVIDE PROGRAMABLE THERMOSTATSSPECIFIED IN THE PROTOTYPE
B. PROVIDE TEMPERATURE SENSOR LOCATIONS AND SPECIFICATIONS ON PLAN
C. INSURE PROPER OPERATION OF VENTILATION EQUIPMENT OPERATIONS
D. PROVIDE LIGHTING CONTROLS FOR INTERIOR ZONES
E. PROVIDE LIGHTING CONTROLS FOR EXTERIOR ZONES.

* 28.3 OCCUPANCY SENSORS (OPTIONAL)
PROVIDE ULTRASONIC/INFARED) OCCUPANCY SENSORS FOR 25% OR MOVE OF INTERIOR LIGHTING.

P — 33.1 RECYCLED CONTENT (REQUIRED)
USE MATERIALS THAT HAVE A MINIMUM OF 10% RECYCLED MATERIALS. (NOTE: GETTING THE CALCULATIONS IN PROCESS)

36.1 CONSTRUCTION WASTE MANAGEMENT (REQUIRED)
A. THE CONTRACTOR SHALL RECYCLE A MINIMUM OF 50% OF ALL CONSTRUCTION WASTE AND PROVIDE RECORDS PER YUM BLUELINE. 75% IS PREFERRED.
B. THE GENERAL CONTRACTOR SHALL PROVIDE A CONSTRUCTION WASTE MANAGEMENT PLAN TO THE CONSTRUCTION MANAGER WITH THEIR BID SUBMITTAL. THEY CAN USE THE STARTER FORM POSTED ON THE PLANS.YUM.COM WEBSITE IN THE GREEN PLAYBOOK SECTION.

GPD GROUP
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520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
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	DATE	REMARKS
	04.28.21	ISSUED FOR PERMIT
2	07.12.21	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RS
JOB NO.:	2018088.64

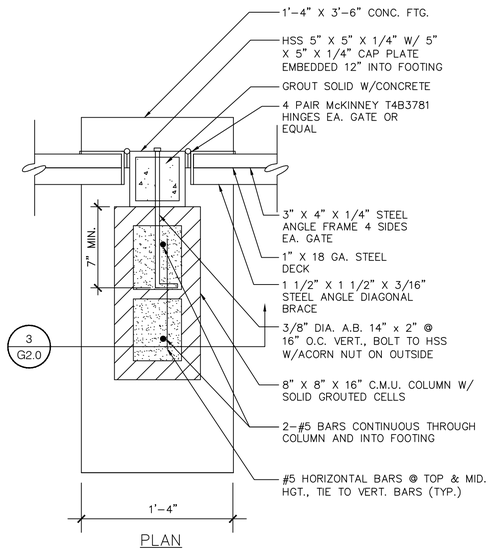
TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
GREEN CHECKLIST SHEET

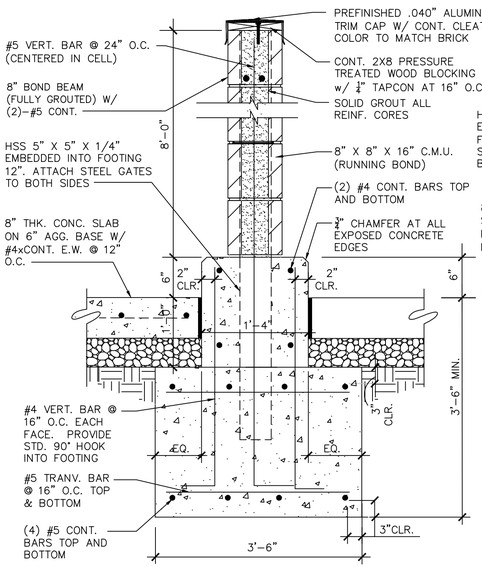
G1.0

PLOT DATE: 7/12/2021 9:54:33 AM



JAMB DETAIL – 5

N.T.S.



SECTION – 4

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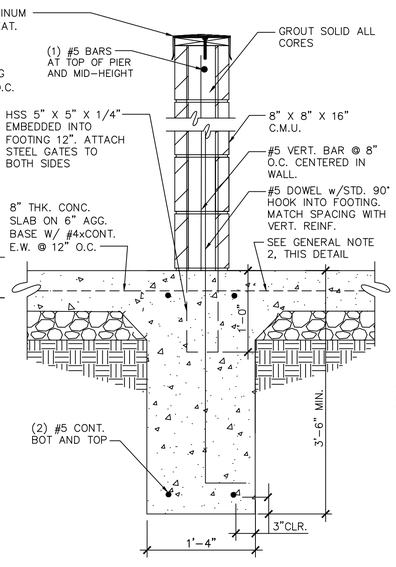
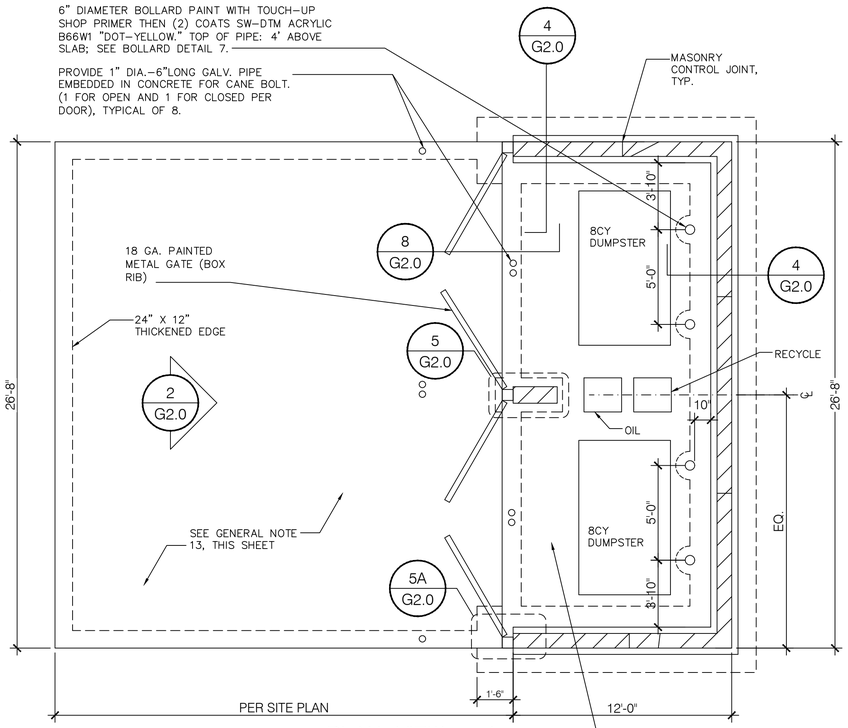


SECTION – 3

N.T.S.

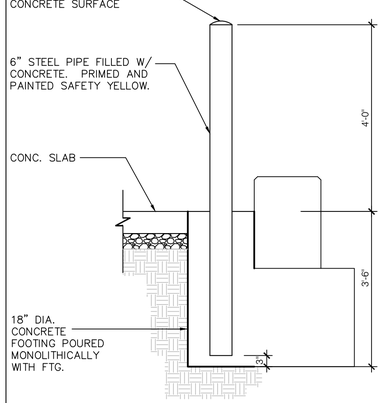
6" DIAMETER BOLLARD PAINT WITH TOUCH-UP SHOP PRIMER THEN (2) COATS SW-DTM ACRYLIC B66W1 "DOT-YELLOW." TOP OF PIPE: 4' ABOVE SLAB; SEE BOLLARD DETAIL 7.

PROVIDE 1" DIA.-6"LONG GALV. PIPE EMBEDDED IN CONCRETE FOR CANE BOLT. (1 FOR OPEN AND 1 FOR CLOSED PER DOOR), TYPICAL OF 8.



PLAN VIEW – 1

N.T.S.



BOLLARD DETAIL – 7

N.T.S.

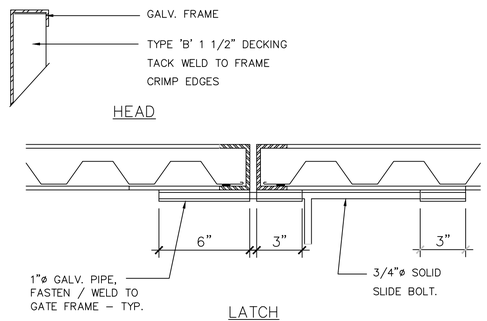
GATE NOTES:

(2) EQUAL (±6'-0") WIDE x 6'-0" HIGH STEEL GATES, TYPE 'B' 1 1/2" GALVANIZED DECKING, 18 GA. W/ STEEL ANGLE DIAGONAL GALVANIZED CROSS BRACING, WELD AND GRIND SMOOTH ALL CONNECTIONS, TYP. PRIME AND PAINT COLOR TO MATCH BUILDING SIDING.

GATE HARDWARE:

ALL HARDWARE AND ACCESSORIES SHALL BE HEAVY GALVANIZED.

GATE STOP – MUSHROOM TYPE OR FLUSH PLATE WITH ANCHORS SET IN CONCRETE TO ENGAGE THE CENTER DROP ROD OR PLUNGER BAR.



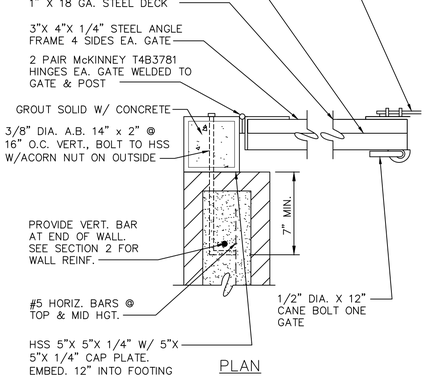
LATCH

NOTE:
PRIME AND PAINT ALL METAL WORK TO MATCH BLOCK WALL

PLAN

GATE DETAILS – 6

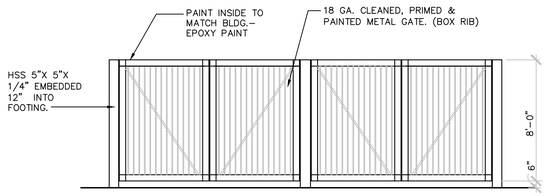
N.T.S.



PLAN

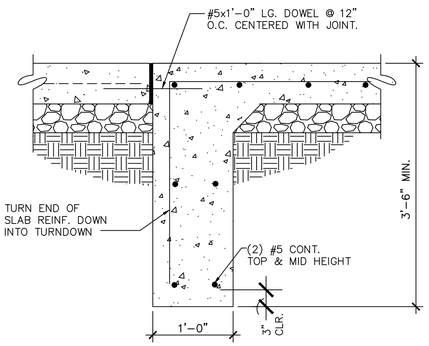
JAMB DETAIL – 5A

N.T.S.



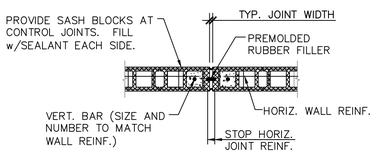
ELEVATION – 2

N.T.S.



SECTION – 8

N.T.S.



NOTES:
1. DO NOT LOCATE JOINT WITHIN REINFORCED ELEMENTS SUCH AS COLUMNS, LINTELS, PIERS, PILASTERS OR OPENING JAMBS UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS.
2. MAX. SPACING OF JOINTS: PANEL LENGTH/HEIGHT = 1.5 MAX., 12'-0" MAX.
3. WALL REINFORCING SHALL NOT CONTINUE THROUGH JOINT.

MASONRY CONTROL JOINT – 9

N.T.S.

NOTES:
1. LOCATION SHALL BE APPROVED BY THE PUBLIC WORKS DEPARTMENT.
2. AREAS SHALL BE ACCESSIBLE FOR DELIVERY AND COLLECTION.
3. GATES SHALL BE CORRUGATED METAL DOORS AND MUST BE APPROVED BY PUBLIC WORKS DEPARTMENT PRIOR TO INSTALLATION.
4. GATE LATCHES SHALL BE OF THE PLUNGER BAR TYPE OR EQUIVALENT AS APPROVED BY THE PUBLIC WORKS DEPARTMENT.

TRASH ENCLOSURE DETAIL MATERIAL SPECIFICATIONS:
1. CONCRETE BLOCK: 8" MINIMUM IN SIZE. ASTM C90.
2. REINFORCING STEEL: ASTM 615. GRADE 60.
3. ACCEPTABLE SOIL TYPES:
A. MIN. ALLOWABLE BEARING: 2000 LBS'/SQ. FT (PRESUMPTIVE)
B. MIN. LATERAL BEARING: 100 LBS'/SQ. FT./FT. (PRESUMPTIVE)
C. MAX EXPANSION INDEX: 20
4.CONCRETE: 4000 LBS'/SQ. IN. IN 28 DAYS.
5. MORTAR: 1: 1/4: 3 (PORTLAND CEMENT: HYDRATED LIME OR LIME PUTTY: SAND. BY VOLUME). MIXED TO PLASTIC CONSISTENCY.
6. GROUT: 1:1/10: 3 (PORTLAND CEMENT: HYDRATED LIME OR LIME PUTTY: SAND BY VOLUME).MIX TO FLOW WITHOUT SEGREGATION. GROUT MAY CONTAIN 2 PARTS PEA GRAVEL (3/8" MAX. SIZE). MINIMUM COMPRESSIVE STRENGTH: 2000 LBS/SQ. IN
7. HSS PIPE SHALL CONFORM TO ASTM A500, GR. B (Fy=46 KSI).

GENERAL NOTES:
1. CONTRACTOR TO FIELD VERIFY SITE CONDITIONS AND UNDERGROUND UTILITIES PRIOR TO ORDERING AND/OR FABRICATING MATERIALS. CONTRACTOR SHALL VERIFY LOCATION OF DUMPSTER ENCLOSURE WITH CIVIL PLANS. NOTIFY ARCHITECT AND CIVIL ENGINEER IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.
2. FOOTINGS SHALL EXTEND 3'-6" MINIMUM BELOW FINISH GRADE AND SHALL BE IN NATURAL SOIL OR CERTIFIED FILL.
3. BLOCKS TO BE STAGGERED (RUNNING BOND).
4. ALL CELLS CONTAINING REINFORCING STEEL SHALL BE GROUTED.
5. APPROVED GROUT STOPS ARE REQUIRED BELOW HORIZONTAL STEEL IN PARTIALLY GROUTED WALLS. BAGS. NEWSPAPERS, ETC. ARE NOT APPROVED GROUT STOPS.
6. INITIAL BED JOINT SHALL BE 1/4"MIN. 1 "MAX. SUBSEQUENT BED JOINTS SHALL BE ¼"– MIN., ⅝" MAX.
7. VERTICAL CONTINUITY OF CELLS SHALL BE UNOBSTRUCTED. MORTAR PROJECTIONS SHALL NOT EXCEED ½" FOR 6" AND LARGER BLOCK. MORTAR DROPPINGS OR OTHER FOREIGN MATTER ARE NOT PERMITTED IN CELLS AND MUST BE REMOVED.
8. CONTROL JOINTS REQUIRED 12' MAX. SPACING AND 6' FROM CORNERS, SEE PLAN.
9. REQUIRED MASONRY BAR LAPS:
A. VERTICAL STEEL : 48 BAR DIAMETERS.
B. HORIZONTAL STEEL: 48 BAR DIAMETERS.
C. WIRE JOINT REINFORCEMENT IN THE MORTARED BED JOINT: 75 WIRE DIAMETERS OR IN ALTERNATE BED JOINTS OF RUNNING BOND. 54 DIAMETERS PLUS TWICE THE BED JOINT SPACING.
10. PLACE HORIZONTAL WIRE JOINT REINFORCEMENT AS FOLLOWS: TWO 3/16' DIAMETER BARS CONNECTED AT 16" INTERVALS BY NO. 9 GAUGE WELDED WIRE.
11. FOR PIPES AND CONDUIT EMBEDDED IN MASONRY, REFER TO CHAPTER 21 OF THE 2017 OBC.
12. 3" MIN. COVER REQUIRED FOR REINFORCEMENT IN CONCRETE WHICH IS CAST AGAINST EARTH.
13. 8" THICK CONCRETE SLAB OVER 6" THICK CRUSHED AGGREGATE. 24"DEEP"X12" WIDE THICKENED EDGE FOR APPROACH SLAB. #4 REBAR @ 1'–0" O.C. EACH WAY. PROVIDE SAWCUTS AT 10'–0" O.C. EACH WAY.

INSPECTION PROCEDURES:
1. FOUNDATION: AFTER TRENCHES ARE DUG, STEEL IS TIED IN PLACE AND BEFORE ANY CONCRETE IS PLACED.
2. PREGROUT: AFTER ALL BLOCKS (EXCEPT CAP) ARE IN PLACE. VERTICAL AND HORIZONTAL STEEL IS IN PLACE, GROUT STOPS (FOR PARTIALLY GROUTED MASONRY) ARE IN PLACE. AND PRIOR TO GROUTING.
3. FINAL: AFTER GROUT IS IN PLACE AND PRIOR TO PLACEMENT OF CAP.

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	DATE	REMARKS
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	07.12.21	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
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PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

TACO BELL

ENDEAVOR 2.0

TRASH ENCLOSURE DETAILS

G2.0

PLOT DATE:

INTEGRATED PEST PREVENTION (IPP) CAN BE DEFINED AS, "THE ART AND SCIENCE OF PREVENTING THE INTRODUCTION OF UNWANTED ORGANISMS INTO COMPLEX MICROENVIRONMENTS AND THE ASSOCIATED MITIGATION EFFORTS REQUIRED WHEN PREVENTION FAILS". IPP ENCOMPASSES THE CONCEPTS, STRATEGIES AND TACTICS NEEDED TO EFFECTIVELY PROTECT HUMAN HEALTH AND PROPERTY FROM THE PRESENCE OF UNWANTED ORGANISMS.

EVERY PEST, WHETHER MICROBIOLOGICAL, INVERTEBRATE OR MAMMALIAN NEED A FOOD SOURCE, WATER, SAFE HARBORAGE (SUITABLE ENVIRONMENT – TEMPERATURE, HUMIDITY, HIDING PLACES). THEY ALSO NEED A WAY INTO THE RESTAURANT. IN MOST CASES, CONTROLLING EVEN 1 OF THE REQUIREMENTS CAN PREVENT AN INTRODUCTION FROM BECOMING AN INFESTATION (ARTHROPODS OR VERTEBRATES) OR THE GROWTH OF PATHOGENIC ORGANISMS (BACTERIA/FUNGI ETC.). WHILE WE CANNOT ELIMINATE ALL INTRODUCTIONS FROM EMPLOYEES, CUSTOMERS AND DELIVERIES, WE CAN VIRTUALLY ELIMINATE INTRUSIONS DUE TO CONSTRUCTION AND DESIGN FAULTS AND, OPERATIONAL BEHAVIOR.

IN GENERAL, WHEN YOU THINK ABOUT EXCLUDING PEST FROM A BUILDING, YOU CAN THINK OF THE PESTS AS WATER. WE DON'T WANT UNNECESSARY WATER GETTING INTO THE BUILDING SO WE ADD APPROPRIATE BARRIERS. FROM VAPOR BARRIERS TO CONCRETE CURBS, WE BLOCK OR REDIRECT WATER. SAME WITH PESTS; FOR INSECTS WE CAN USE MATERIALS LIKE ELASTOMERIC SEALANTS AND HARD SURFACES TO PREVENT INTRUSION, FOR RODENTS, THE SAME CONCEPTS APPLY BUT THE BUILDING MATERIALS/PRACTICES HAD TO BE MORE ROBUST (CEMENTITIOUS MATERIALS WITH METAL REINFORCEMENT).

FOR ALL ASPECTS OF PEST PREVENTION ACTIVITIES, WE ARE MOVING TOWARDS SEASONALLY AND GEOGRAPHICALLY ATTENUATED (SAGA) © AND ENVIRONMENTALLY AND SOCIALLY RESPONSIBLE PEST PREVENTION PROGRAMMING © TO ACHIEVE MANAGEABLE, SITE-SPECIFIC SCOPES OF WORK.

GUIDING PRINCIPLE 1 - SITE SELECTION:
YOU HAVE TO TRY TO LOOK AT EVERY PHYSICAL ASPECT OF THE BUILDING AND ITS ENVIRONMENT. TO THIS END, IT IS PREFERABLE TO ESTABLISH A RELATIONSHIP WITH A LOCAL MEMBER OF YOUR PEST PREVENTION PROVIDER'S MANAGEMENT TEAM AND ASK THEM TO GIVE SOME GENERAL GUIDANCE DURING THE SITE SELECTION PROCESS. THEY MAY BE AWARE OF NEIGHBORHOOD LEVEL PEST PREVENTION CONCERNS AND HAVING THEM INVOLVED FROM THE BEGINNING ALLOWS THEM TO PROPERLY CREATE/MODIFY THE PRE AND POST CONSTRUCTION SERVICE PLANS. FROM BOTH GLOBAL AND LOCAL PERSPECTIVES, LOCATION CHARACTERISTICS ARE CLEARLY THE DRIVING FORCE IN POTENTIALLY PREDICTABLE PEST PROBLEMS. MUCH OF THE RELEVANT INFORMATION NEEDED ABOUT ANY PARTICULAR STORE IS ALREADY IN TACO BELL'S HANDS IN THE FORM OF PEST ACTIVITY DATA. ADDITIONAL INFORMATION CAN BE GATHERED FROM LOCAL EXPERTS (IF AVAILABLE) OR ASSESSED BY TACO BELL CORPORATE QA/FOOD SAFETY STAFF.

QA/FOOD SAFETY RESOURCES ARE AVAILABLE TO COORDINATE OR PERFORM ASSESSMENTS AS NEEDED.

THE CRITICAL FACTORS, IRRESPECTIVE OF BROAD GEOGRAPHICAL LOCATION, WOULD BE; STAND ALONE VS. MALL LOCATION, COMBINATION FACILITY*, THE AGE OF THE FACILITY**, AND GENERAL NEIGHBORHOOD CONDITIONS.

FACTORS THAT WE CANNOT CONTROL, BUT CAN ANTICIPATE/MITIGATE:
a. WEATHER / CLIMACTIC ZONE
b. LOCALIZED SPECIAL PEST ISSUES (PAST PEST HISTORY)
c. BUILDING LOCATION - PARTICULARLY A CONCERN IN URBAN AREAS. LITTER, AGING UTILITIES, SUBWAYS AND FOOT TRAFFIC LEVELS MUST BE ACCOUNTED FOR.
d. BUILDING AGE
e. BUILDING PLACEMENT
f. NEIGHBORHOOD (PHYSICAL AND SOCIOECONOMIC) CONDITIONS
* COMBINATION FACILITY CAN MEAN AN INLINE LOCATION OR MULTI-USE FACILITY (FOR EXAMPLE, ADDING A BAR TO A RESTAURANT OR PLACING A RESTAURANT IN A TRAVEL CENTER ADDS COMPLEXITIES DUE TO INCREASED PEST OPPORTUNITIES.)
**THE AGE OF THE BUILDING INTRODUCES ISSUES LIKE: CONSTRUCTION MATERIALS AND BUILDING STANDARDS.
GUIDING PRINCIPLE 2 – BUILDING DESIGNED FOR EXCLUSION, INSPECTION, CLEANING AND TREATMENT: USING PROPER TECHNIQUES TO KEEP PESTS OUT IS EASY ENOUGH BUT TIME AND USE EVENTUALLY TAKE THEIR TOLL ON THE ENTIRE STRUCTURE. THE RESULTS CAN BE RAPID DETERIORATION AND PEST INTRUSION/INFESTATION. 1. USE HIGH QUALITY CONSTRUCTION MATERIALS TO PREVENT THE INTRUSION OF MOISTURE AND PESTS (SPECIFICS AVAILABLE IF REQUIRED). MOISTURE INVITES THE FULL SPECTRUM OF PESTS TO ENTER AND BECOME ESTABLISHED IN THE BUILDING, RESULTING IN A THREAT TO PUBLIC HEALTH AND DAMAGE TO THE ASSET. THIS APPLIES TO MOISTURE WITHIN THE BUILDING AS WELL AS ENVIRONMENTAL MOISTURE. COUNTERS, BEVERAGE MACHINES, DRAINS, SINKS ALL HAVE TO BE WELL SEALED TO PREVENT MOISTURE FROM PENETRATING INTO CRACKS, CREVICES OR VOIDS.

1. THE PESTS OF PRIMARY FOOD SAFETY/PUBLIC HEALTH CONCERN ARE LARGELY CRYPTIC IN NATURE, THEY EITHER LIKE TO HIDE (RODENTS), MUST HIDE (COCKROACHES) OR SIMPLY REQUIRE QUIET, DARK, OUT OF THE WAY PLACES TO BREED (COCKROACHES AND FLIES). RESTAURANT STAFF AND PEST PREVENTION PARTNERS MUST BE ABLE TO MOVE EQUIPMENT AROUND TO SEE WHAT IS HAPPENING.

2. THE FLOORS, DRAINS AND WALLS HAVE TO BE DURABLE AND EASILY CLEANED A. AVOID TILE WHEN POSSIBLE (GROUT LINES) I. WHEN TILE MUST BE USED, EPOXY GROUT IS PREFERRED B. DRAINS MUST BE POSITIONED TO BE EASILY INSPECTED AND CLEANED C. EQUIPMENT MUST BE EASY TO MOVE TO CLEAN THE FLOOR D. EQUIPMENT MUST BE DESIGNED TO BE EASILY CLEANED.

3. TREAT WALL VOIDS AND DIFFICULT TO INSPECT STRUCTURAL AREAS WITH BORACARE (DISODIUM OCTABORATE TETRAHYDRATE) TO ASSIST IN THE PREVENTION OF ARTHROPOD INFESTATIONS.

4. TREAT AREAS PRONE TO INFECTION WITH MOLD-CARE (DIDECYL DIMETHYL AMMONIUM CHLORIDE).

5. BASEMENTS A. FOLLOW THE SAME EXCLUSION PRINCIPLES IN GENERAL TERMS B. ADDITIONAL PEST DEVICES MUST BE ADDED/ACCOMMODATED C. AIRFLOW IS CRITICAL. SINCE FOOD RELATED ITEMS WILL BE STORED IN THESE AREA, WE MUST NOT ALLOW MOISTURE TO FOSTER THE DEVELOPMENT OF MICROORGANISMS (BOTH PATHOGENIC AND NON-PATHOGENIC).

6. EXTERIOR DESIGN TO ELIMINATE INTRODUCTION POINTS AND HARBORAGE AREAS A. NO TREES OVERHEAD OR TOUCHING THE BUILDING B. NO SHRUBS, BUSHES, VINES TOUCHING OF IN CLOSE PROXIMITY TO THE BUILDING C. STRATEGICALLY PLACE WASTE (COMPOST/RECYCLING/LANDFILL) RECEPTACLES AWAY FROM THE BUILDING WHEREVER POSSIBLE AND HAVE THEM IN WELL-LIT AREAS (IF APPROPRIATE).

7. LIGHTING SHOULD BE INDIRECT WHENEVER POSSIBLE TO PREVENT NIGHT FLIERS FROM BEING DRAWN TO THE BUILDING.

8. AVOID SEMI-ENCLOSED (PARTIAL SOFFIT) AREAS WHERE BIRDS AND MAMMALS CAN HARBOR.

(APPENDIX FOLLOWS)

APPENDIX
PEST MANAGEMENT, IN A STANDALONE SETTING IS ACTUALLY QUITE SIMPLE WHEN PROPERLY EXECUTED BY ALL PARTICIPANTS. AS IT RELATES TO BUILDING DESIGN AND CONSTRUCTION, THERE ARE JUST A FEW PRINCIPLES THAT IF ADDRESSED WITH GREATLY DIMINISH PEST ISSUES.

1. DON'T PROVIDE ANY UNNECESSARY ATTRACTANTS WHEN POSSIBLE AND, MITIGATE WHEN UNAVOIDABLE. 2. IF THE BUILDING IS TIGHT, THEN PESTS CANNOT COME IN EASILY. 3. MAKE SURE THAT THERE IS ENOUGH AIRFLOW INTO THE BUILDING FROM ABOVE TO FACILITATE POSITIVE PRESSURE AT THE DOORS. 4. IF THE PESTS CAN'T GET INTO THE BUILDING, THERE WON'T BE AN INTRODUCTION. 5. IF THEY DO GET IN THE BUILDING BUT, HAVE NOWHERE TO HIDE, THERE WON'T BE AN INFESTATION. A. EQUIPMENT, WHEN POSSIBLE SHOULD BE TIGHTLY SEALED. I. EXAMPLE, MANY TIMES, STAINLESS "CURTAINS" ARE PLACED TO SHIELD THE UNDERSIDE OF EQUIPMENT FROM VIEW. THIS WILL NOT KEEP ANYTHING OUT. B. WHEN NOT POSSIBLE, MAKE IT EASY TO OPEN FOR INSPECTION AND TREATMENT. ALSO, CONSIDER THE NEED FOR MONITORING DEVICES NEAR ENTRY POINTS. I. EXAMPLE, IF A PIECE OF EQUIPMENT MUST HAVE A HOLE AT THE BOTTOM, MAKE SURE THAT A DEVICE CAN BE PLACED APPROPRIATELY IN OR UNDER IT. KEEP VISUAL INSPECTION IN MIND TOO. C. AVOID DIFFICULT TO CLEAN EQUIPMENT. IF IT ISN'T EASY, PEOPLE WON'T CLEAN IT. D. IN SUMMARY, IF YOU CAN, KEEP THEM OUT. IF YOU CAN'T MAKE SURE THE EQUIPMENT CAN BE EASILY CLEANED AND INSPECTED.

I. EXTERIOR SANITARY DESIGN
A. BUILDING PERIMETER:
• THERE ARE NO OUTSIDE PITS OR DEPRESSIONS. THE PERIMETER SLOPES AWAY FROM THE BUILDING. • A 2-FOOT GRAVEL BARRIER IS PRESENT WITH DRAINS IN CRITICAL DRAINAGE AREAS. • EXPANSION JOINTS AROUND PERIMETER ARE FILLED WITH CORRECT JOINT FILLER. • THERE ARE NO OUTSIDE STORAGE AREAS THAT COULD PROVIDE HARBORAGE FOR PESTS. • NO CHAIN LINK FENCES ARE PRESENT NEAR THE FACILITY. • BUILDING DESIGN ALLOWS FOR EASY WEED ACCESS/REMOVAL AND LAWN MAINTENANCE.
• EXTERIOR SMOKING AREA IS PROVIDED FOR EMPLOYEES SUCH THAT THE DEBRIS FOUND IN THESE AREAS DOES NOT ATTRACT PESTS INTO THE FACILITY. • BUILDING DESIGN DETERS BIRDS FROM NESTING OR LOAFING.

B. UTILITY LINES:
• UTILITY LINES, ELECTRICAL CONDUITS, AND PLUMBING ENTRANCES INTO THE BUILDING ARE COMPLETELY SEALED, PREVENTING PEST ENTRY. • PIPES OR WIRING ARE NOT GROUPED INTO GANGS AND ARE NOT HOUSED IN METAL TUBES. • UTILITY SYSTEMS ARE EASILY ACCESSIBLE AND EASILY OPENED FOR THOROUGH CLEANING. • RODENTS ARE DETERRED FROM CLIMBING PIPES ON THE BUILDING EXTERIOR BY FITTED METAL RAT GUARDS. GUARDS ARE MADE OF 26-GAUGE SHEET METAL, FITTED CLOSE TO THE WALL AT THE REAR, AND PROJECTING 12 INCHES OUTWARD FROM THE PIPE. • OUTSIDE VERTICAL PIPES ARE COATED WITH GLOSSY PAINT TO PREVENT RODENTS FROM CLIMBING THEM. • WHERE POSSIBLE, UTILITY LINES ARE TRENCHED, RATHER THAN SUSPENDED.

C. PARKING AND ROADWAYS: • ALL PARKING AND TRAFFIC AREAS ARE PAVED. • DRAINS ARE PLACED IN ALL DOCK AND DUMPSTER AREAS. • DRAINS ARE FREE OF DEBRIS.

D. LANDSCAPING. • PERIMETER FOLIAGE CLEARS BUILDING BY 18" MINIMUM AND NOT TALLER THAN 24 INCHES. • TREES ARE AT LEAST 30 FEET AWAY FROM BUILDING PERIMETER. • GROUND COVER DOES NOT INCLUDE PINE STRAW OR THATCHED GRASS. • GROUND COVER SUCH AS GARDEN STONES AND SPARSE LIVE PLANT COVER ARE USED.

E. EXTERIOR LIGHTING:
• BUILDING PERIMETER IS WELL LIGHTED. • EXTERIOR LIGHTS ARE LOCATED AT LEAST 30-40 FEET AWAY FROM EXTERIOR DOORS, SO THAT THEY DO NOT ATTRACT FLYING INSECTS INTO THE BUILDING. (IF FEASIBLE) • OUTSIDE LIGHTS ARE SHIELDED TO SHINE DOWN ONTO THE BUILDING PERIMETER AND DO NOT SHINE OUT/AWAY FROM THE FACILITY. SHADOW BOX FIXTURES PREFERRED. • BULBS LESS ATTRACTIVE TO INSECTS SUCH AS HIGH PRESSURE SODIUM ARE USED. • INSECT LIGHT TRAPS ARE LOCATED SUCH THAT THEY DO NOT DRAW INSECTS INTO THE FACILITY.

F. SANITARY DUMPSTER AND TRASH STORAGE:
• DRIVE AND STORAGE AREA ARE PAVED.
• TRASH STORAGE IS LOCATED AWAY FROM INCOMING GOODS AND ISOLATED FROM FACILITY. • TRASH STORAGE IS LOCATED IN A WALLED SPACE, WITH OPEN AREA AND MINIMAL AVAILABLE HARBORAGE FOR RODENTS, BIRDS, OR INSECTS. • TRASH STORAGE IS LOCATED DOWNWIND (PREVAILING WINDS) WHEN POSSIBLE. • TRASH STORAGE IS SEPARATED FROM FACILITY BY FIRE-RATED SEPARATION WALLS. • HOT WATER RINSE IS AVAILABLE AND PROPER DRAIN(S) ARE PRESENT. • HAND-SANITIZER PROVIDED FOR RE-ENTRY INTO THE FACILITY. • SANITATION DUMPSTER IS ADEQUATE FOR VOLUME, HAS A RAIN COVER, AND IS SEALED WITH NO LEAKS. • SIGN (FOR EMPLOYEES) IS PRESENT IN DUMPSTER AREA - KEEP THIS AREA CLEAR AND CLEAN. • SIGN (FOR EMPLOYEES) IS PRESENT IN DUMPSTER AREA - DO NOT FEED STRAY ANIMALS/BIRDS.

G. RECYCLING STORAGE:
• OUTSIDE STORAGE IS WELL DRAINED; PAVING IS DESIRABLE. • PLASTIC/GLASS - DEDICATED CONTAINERS ARE PROVIDED; AREA FOR DRY STORAGE IS PROVIDED. • HOT WATER AVAILABLE WITH FLOOR DRAINS FOR CLEANING.

H. ROOF CONSTRUCTION:
• SINGLE MEMBRANE OR SMOOTH ASPHALT IS PREFERRED; AVOID BALLASTED ROOFING OR HOT MOP ROOFS. • ACCESSES TO ROOF ARE CONVENIENTLY LOCATED, COVERED AND SEALED WHEN CLOSED. • CURBING (RUN-OFF STOP) IS DESIGNED TO A 12-18 INCHES HEIGHT MINIMUM. • MINIMAL FLAT SURFACES ARE AVAILABLE FOR NESTING/LOAFING SITES. • ROOF DESIGNED TO DETER STORAGE OF ANY KIND. • NO SKY LIGHTS ARE PRESENT; OR ONLY DOUBLE DOMED SKYLIGHTS ARE USED AND ARE WELL SEALED. • THERE ARE NO BRIGHT COLORS ATTRACTIVE TO INSECTS (YELLOW, RED), OR BIRDS (WHITE). • ONLY QUALITY FLASHING IS USED. • EQUIPMENT AND METAL DUCTWORK ARE PROPERLY MOUNTED WITH ALL JOINTS SEALED.
ROOF DRAINAGE:
• ALL ROOF DRAIN PIPES PROPERLY TREATED WITH NH3 TO AVOID RUSTING. • OPEN PIPES AND VENTS ARE SCREENED WITH 1/4 -INCH SCREENING OR CAPPED TO KEEP PESTS OUT. • ROOF DRAIN PIPES ARE INSULATED TO PREVENT FREEZING. • ROOF DRAINS ARE ROUTED TO THE SANITARY SEWER; DOWN-SPOUTS CARRY WATER AWAY FROM BUILDING. • CANOPY RUNOFF IS ROUTED AND DOES NOT RUN OFF ANY EDGE. • NO DEPRESSIONS OR SITUATIONS EXIST THAT CREATE STANDING WATER.

F. DOORS: • VESTIBULES ARE PRESENT AT EACH EMPLOYEE AND FACILITY ENTRY-WAY WHENEVER POSSIBLE. • PEDESTRIAN DOORS OPEN TO THE (OUTSIDE) OF THE FACILITY ONLY.
• PEDESTRIAN DOORS ARE CONSTRUCTED WITH GALVANIZED OR STAINLESS STEEL FRAME. • PEDESTRIAN DOORS HAVE PROPER DOOR-SWEEPS INSTALLED. BRUSHES ARE USED; RUBBER IS NOT. • PEDESTRIAN DOORS ARE (FOAM) INSULATED. NO FIBERGLASS INSULATION IS USED. • WOODEN DOORS ARE NOT PRESENT. • PEDESTRIAN DOORS HAVE A DOOR CLOSER; THERE ARE NO SCREW-DOWN THRESHOLDS OR "DOOR STOPS". • SWEEP-TYPE WEATHER STRIPPING IS USED AND NO PENETRATING LIGHT DETECTED.

II. INTERIOR SANITARY DESIGN
A. FOUNDATION:
• THE CRAWL SPACE OR BASEMENT IS EASILY ACCESSED. • PRESSURE TREATED WOOD IS USED IN ANY LOCATION NEAR OR BELOW GRADE. • NO VISIBLE CRACKS OR HOLES PRESENT IN THE WALLS. ALL OPENINGS GREATER THAN 1/4 INCH ARE SEALED. • 12-INCH BAND OF HARD GLOSSY PAINT IS APPLIED AROUND OUTSIDE BRICK OR STONE WALLS TO DETER CLIMBING RATS AND MICE. • ALL UTILITIES BELOW GRADE ARE EASILY ACCESSED AND ARE LABELED

B. FLOOR DRAINS:
• ALL FLOOR DRAINS ARE DESIGNED WITH TRAPS WITH AT LEAST 3 INCHES OF WATER SEAL, AND THEY ARE FITTED WITH SECONDARY STRAINERS TO PREVENT PEST ENTRY. • FLOOR DRAINS EXIST IN PRODUCTION AREA EVERY 400 SQ. FT. • FLOOR DRAINS ARE CONSTRUCTED OF STAINLESS STEEL FOR EASIER CLEANING. • OVERHEAD PIPING AND DRAINS (IN CRAWL SPACE) ARE WELL SEALED AND DO NOT LEAK. • WHERE INSECTS MAY BE A PERSISTENT PROBLEM, INSECT SCREENS ARE INSTALLED IN FRONT OF FILTER MEDIA. • SCREENS ARE EASY TO REMOVE FOR CLEANING, AND THEY ARE NON-CORROSIVE, 18- MESH SCREEN. • VENTS ARE COVERED WITH METAL GRILLWORK AND ARE BACKED BY RUST RESISTANT SCREENING. • FLOOR DRAINS INCLUDED ON MASTER SANITATION SCHEDULE - MINIMUM 1 WEEK CLEANING.

C. WALLS:
POURED CONCRETE IS PREFERRED FOR INSIDE WALLS, HIGH DENSITY FILLED CONCRETE BLOCK 1ST 6-8 FT. IS ACCEPTABLE IN OTHER AREAS. • IF METAL SIDING IS UTILIZED THE BOTTOM 8' OF THE WALL IS POURED CONCRETE SO AS TO PROVIDE A SEAL TO THE CONCRETE WITH THE OVERLAPPING SIDING. • NO VOIDS ARE PRESENT; ALL VOIDS INSULATED WITH PROPER MATERIAL THAT DETERS PESTS. • WALL AND FLOOR JUNCTURES ARE SEALED WHERE POSSIBLE. • IF STEEL STUDS ARE USED, OPENINGS EXIST THAT ALLOW EASY FLOW OF DUST APPLICATIONS. • FILLER COAT IS APPLIED TO ALL BLOCK WALLS. FOR SMOOTH BLOCK WALL SURFACES, PAINT FILLER IS USED. SEALING IS ADEQUATE, SUCH THAT THERE ARE NO VISIBLE CRACKS. • WALL FILLERS - AVOID PEARLITE, FIBERGLASS, ROCK WOOL. HIGH DENSITY FOAM PREFERRED.

• PIPES ARE PROPERLY RUST-PROOFED WITH NH3, PRIOR TO FOAM INSULATION OF THE WALLS. • ALL PIPE PENETRATIONS ARE PROPERLY SEALED/CAULKED. PIPE PENETRATIONS ARE CUT AND SEALED ON THE SAME DAY SO THAT OPENINGS OR JUNCTIONS REMAIN CLEAN. • TO DETER BIRD OR RODENT NESTING SITES, EXTERIOR PIPES AND CONDUITS ARE NOT ARRANGED IN GROUPS.

• ITEMS MOUNTED TO WALLS WITH LESS THAN A ¼" GAP SHOULD BE SEALED TO THE WALL. • ACCESS IS ALLOWED TO KEY UTILITY JUNCTIONS BEHIND WALLS; KNOCK OUT PANELS ARE PRESENT. • BUILDING CONSTRUCTION MINIMIZES THERMAL TRANSFER OF STRUCTURAL MEMBERS.

D. CEILINGS:
• CONCRETE CEILINGS ARE SMOOTH AND FREE OF PITS THAT MAY HARBOR INSECTS. • DROP CEILINGS ARE NOT PRESENT, BECAUSE OF POTENTIAL FOR FOOD/MOISTURE ACCUMULATION. (OBVIOUSLY NOT A "MUST" BUT, IT SURE MAKES IT EASIER) MAKING THEM MORE ACCESSIBLE FOR INSPECTION WOULD AT LEAST BE BETTER.

E. INTERIOR LIGHTING:
• HIGH PRESSURE SODIUM BULBS ARE USED WHERE HIGH-INTENSITY LIGHT IS NEEDED. SODIUM LIGHTS LAST LONGER AND ARE LESS ATTRACTIVE TO INSECTS THAN FLUORESCENT LIGHTS. • FLUORESCENT LIGHTING IS AVOIDED - IT'S HARD TO KEEP CLEAN. • SKYLIGHTS ARE AVOIDED BECAUSE THEY CAN LEAK. • WALL SCONCE UNITS ARE STRATEGICALLY PLACED SO THAT THEY DO NOT COLLECT DEBRIS.

F. WINDOWS:
• SKYLIGHTS ARE AVOIDED BECAUSE THEY CAN LEAK. • DOUBLE-PANE AND WELL INSULATED WINDOWS ARE PREFERRED. • CAULKING IS USED FOR SMALL CRACKS AND CREVICES FOUND AROUND WINDOWS. • IF SCREENING IS USED, A MINIMUM OF 18 MESH IS RECOMMENDED; 30 MESH IS PREFERRED. • SCREENS ARE REINFORCED AT POINTS OF STRESS.

G. FANS AND HOODS:
• ALL FAN/HOOD HOUSINGS ARE SEALED. ADEQUATE SEALS EXIST BETWEEN FAN HOUSINGS AND ROOF. ALL FANS ARE ACCESSIBLE FOR CLEANING; ALL FANS MOUNTED HIGH ENOUGH FOR CLEANING. • ALL HOODS HAVE SCREENS AND FILTERS THAT ARE PROPERLY SIZED AND HAVE THE PROPER MESH. • ALL FILTERS ARE EASILY CHANGED AND/OR CLEANED. • ALL FILTERS ARE INCLUDED ON THE MSS. • ALL DUCT WORK IS POSITIVELY PITCHED; THERE ARE NO HORIZONTAL DUCTS FROM HOODS. • ALL DUCT WORK IS ACCESSIBLE. • CONDENSATE DRAINS OR TRAPS ARE PRESENT.
• EXHAUST FANS ARE MAXIMUM DISTANCE FROM AIR INTAKE. • THERE IS NO AIRFLOW DIRECTLY ONTO FOOD PREP AREAS. • INBOUND AIR IS FILTERED AND DEHUMIDIFIED OR AIR-CONDITIONED.

H. FLOORS:
• SOURCES OF WATER DISCHARGE DO NOT CREATE STANDING WATER. • ENTIRE FLOOR IS SEALED.

I. CONSTRUCTION GAPS AND PENETRATIONS
• ALL PIPE PENETRATIONS ARE PROPERLY SEALED THE SAME DAY THEY ARE CUT. • EXPANSION JOINTS PRESENT ARE SEALED WITH PROPER JOINT COMPOUND. • ALL CRAWL SPACES ARE CLEAN AND FREE OF CLUTTER (E.G., WOOD DEBRIS) AFTER CONSTRUCTION. • ALL CRAWL SPACES AND BASEMENTS HAVE PROPER DRAINAGE AND VENTILATION. • ADEQUATE DRAINAGE IS AVAILABLE AND EQUIPPED WITH PUMPS FOR EXCESS WATER REMOVAL.

J. STOREROOMS:
• STOREROOMS HAVE METAL SHELVING; NO WOODEN SHELVING PRESENT. • STOREROOMS HAVE ADEQUATE LIGHTING. • STOREROOMS ORGANIZED & NOT CLUTTERED.

K. BATHROOMS:
• TOILETS ARE FLOOR MOUNTED WITH AUTOMATIC FLUSHING. • HAND WASH HAS AUTOMATIC VALVES. • BATHROOM WALLS ARE MONOLITHIC, SEALED, AND CLEANABLE. • BATHROOM FLOORS ARE MONOLITHIC. TILES AND VINYL SHEETING ARE AVOIDED. • FLOOR DRAINS ARE PRESENT TO ALLOW RINSING.

N. EMPLOYEE FACILITIES:
• OFFICE AREA'S DESIGN PROMOTES ACCESSIBILITY AND MINIMIZES CLUTTER. • OPEN STORAGE SPACES AREA IS PROVIDED FOR EMPLOYEES. • EMPLOYEE LOCKERS ARE AVOIDED, BUT IF INSTALLED ARE ELEVATED WITH ACCESS BEHIND AND UNDER.

III. PEST PROOFING
PEST EXCLUSION: SEALING OR SCREENING ALL POTENTIAL ENTRY POINTS INTO THE BUILDING TO KEEP PESTS FROM COMING INSIDE. PEST ISOLATION (CONCEPT): PEST PROOF INSIDE THE BUILDING TO CONFINE PESTS AND KEEP THEM FROM MOVING INTO NEW AREAS. AN EXAMPLE MIGHT BE COMPARTMENTALIZING A BUILDING (LIKE SHIP BULKHEADS) TO ISOLATE AN INFESTATION IN ONE AREA AND MAKE PESTS EASIER TO ERADICATE.

PEST ISOLATION (CONCEPT): PEST PROOF INSIDE THE BUILDING TO CONFINE PESTS AND KEEP THEM FROM MOVING INTO NEW AREAS. AN EXAMPLE MIGHT BE COMPARTMENTALIZING A BUILDING (LIKE SHIP BULKHEADS) TO ISOLATE AN INFESTATION IN ONE AREA AND MAKE PESTS EASIER TO ERADICATE.

SEALING HARBORAGES: WELL SEALED BUILDINGS ARE LESS ATTRACTIVE TO PESTS, AS FEWER HIDING PLACES ARE AVAILABLE AND MAKE PESTS EASIER TO ELIMINATE.

PEST OPENINGS MUST BE LESS THAN
PIGEON 1.5 - INCH
SPARROW 4/5 - INCH
RAT - YOUNG 1/3 - INCH
MOUSE - ADULT 2/5 - INCH
MOUSE - YOUNG 1/5 - INCH
GERMAN COCKROACH - ADULT 1/5 - INCH
GERMAN COCKROACH 1ST INSTAR NYMPH 1/16 - INCH
HOUSE FLY 1/12 - INCH
MOSQUITO 1/20 - INCH

EXTERIOR PEST PROOFING: PEST EXCLUSION HAS BEEN SHOWN TO BE EFFECTIVE, ESPECIALLY FOR BIRDS AND RODENTS. EXAMPLES OF PEST EXCLUSION ARE INSTALLING METAL KICK PLATES ON DOORS, SCREENING VENTS AND EAVES, SEALING OPENINGS WHERE PIPES AND UTILITY LINES ENTER BUILDINGS, AND INSTALLING METAL RODENT GUARDS ON OVERHEAD LINES OR VERTICAL PIPES.
INTERIOR PEST PROOFING: WHILE INTERIOR SEALING OF OPENINGS AROUND PIPES AND LINES HAS BEEN PROVEN EFFECTIVE FOR MICE AND RATS, MANY STUDIES HAVE SHOWN THAT IT IS NOT VERY EFFECTIVE AGAINST COCKROACHES. IT IS VERY LABOR INTENSIVE AND BUILDING OR MAINTENANCE STAFF MAY NOT HAVE THE KNOWLEDGE OF PEST HABITS TO DO THIS INTERIOR PEST PROOFING CORRECTLY. IN FACT, SEALING OPENINGS INSIDE A STRUCTURE CAN ACTUALLY BE DETRIMENTAL BECAUSE VOIDS MAY NO LONGER BE ACCESSIBLE TO TREATMENT, BUT MAY STILL BE ACCESSIBLE TO COCKROACHES.

IV. INTERIOR PEST PROOFING
A. DOORS:
• ALL DOORS ARE FITTED TO CLOSE AUTOMATICALLY. • ALL DOOR CASINGS ARE PROTECTED WITH SHEET METAL TO PREVENT MICE AND RATS FROM WIDENING CRACKS BY GNAWING.
• ALL WOODEN DOORS HAVE A 12-INCH SHEET METAL (26-GAUGE) KICK PLATE ATTACHED TO THE OUTSIDE OF THE DOOR, WITH THE LOWER EDGE NOT MORE THAN 1/4 -INCH FROM THE FLOOR. • HOLLOW METAL DOOR SEAMS ARE SEALED BY SPOT WELDING TO PREVENT INSECT ENTRY. • ALL SCREEN DOORS OPEN OUTWARDLY AND ARE FITTED WITH A SCREEN MESH OF NO LARGER THAN 1/18 INCH TO PREVENT ENTRY OF SMALL INSECTS INTO THE BUILDING. • DOUBLE DOORS ARE INSTALLED IN REGIONS WHERE FLYING INSECTS ARE PERVASIVE.
• (IF FEASIBLE) • EXTERIOR LIGHTS AROUND DOORS HAVE 'BUG LIGHTS' INSTALLED OR LIGHTING IS AT LEAST 30-40 FEET AWAY FROM EXTERIOR DOORS SO THAT THEY DO NOT ATTRACT FLYING INSECTS ONTO THE PREMISES. (IF FEASIBLE) • AIR DOORS OR PLASTIC CURTAINS (STRIP DOORS) ARE INSTALLED IN DELIVERY ENTRY WAYS TO PREVENT THE ENTRY OF FLYING PESTS. AIR VELOCITY OF AIR DOORS IS A MINIMUM OF 1600 FT/MIN. (IF FEASIBLE)
• ALL EXTERIOR DOORS TO BE STEEL OR STOREFRONT WITH ALUMINUM METAL. WOODEN DOORS TO EXTERIOR NOT ALLOWED.

B. WINDOWS:
• OPERABLE WINDOWS, FITTED WITH AT LEAST 18-INCH MESH SCREENING. SCREENING IS REINFORCED AT POINTS OF STRESS. • ALL CRACKS AND CREVICES AROUND WINDOWS ARE THOROUGHLY CAULKED.

C. FOUNDATION:
• ALL CRACKS AND HOLES ARE PATCHED-UP WITH CEMENT. ALL OPENINGS GREATER THAN 1/4 INCH ARE SEALED TO EXCLUDE MICE; ALL OPENINGS GREATER THAN 1/2 INCH ARE SEALED AGAINST RATS. • CLIMBING BY RATS AND MICE IS DETERRED BY A 12-INCH BAND OF HARD GLOSSY PAINT, OR POLISHED METAL, AROUND THE OUTSIDE OF BRICK WALLS, UP TO ABOUT 3.5 FT. ABOVE THE GROUND. • FOR TEMPORARY EXCLUSION, UNTIL MORE PERMANENT REPAIRS CAN BE MADE, STEEL WOOL IS TIGHTLY PLUGGED INTO CRACKS AND HOLES TO PREVENT ENTRY OF RODENTS.

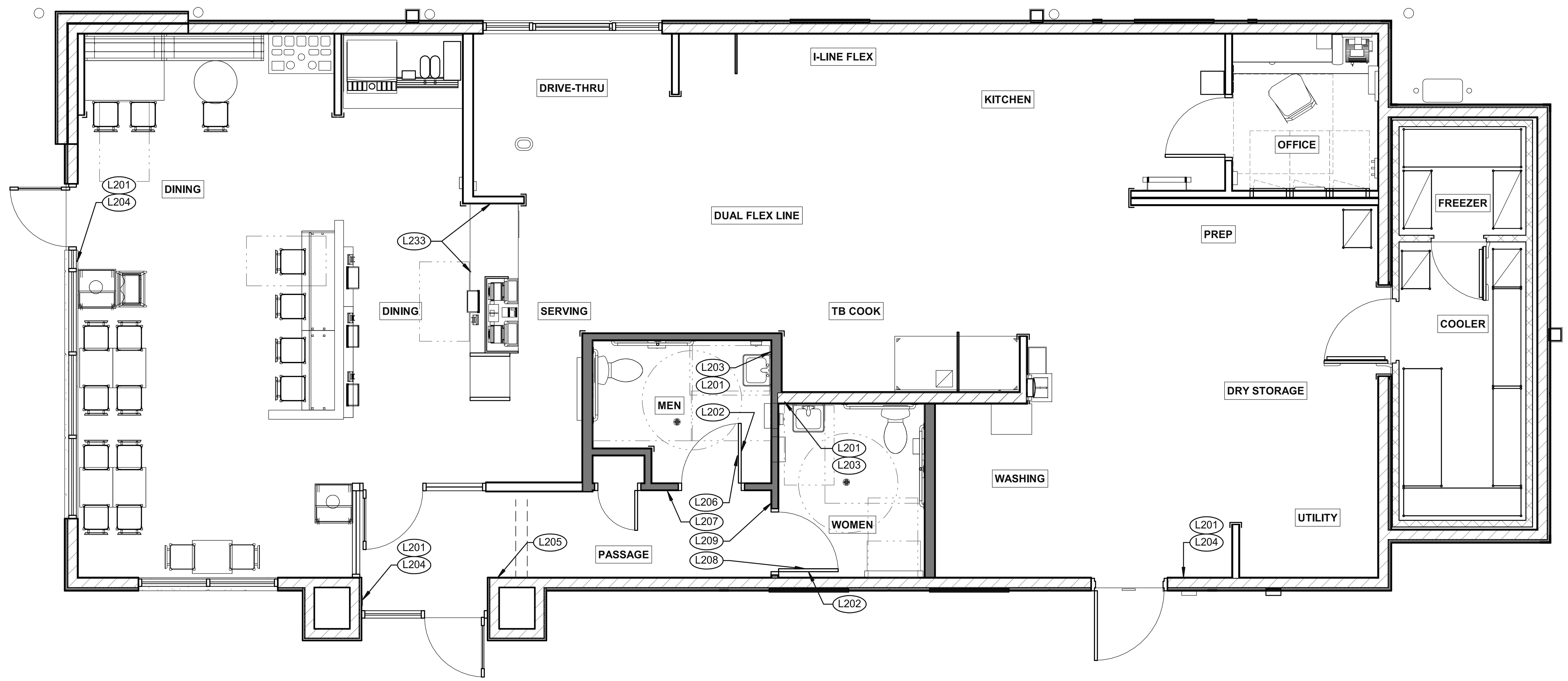
D. PEST PROOFING MATERIALS 1. BACKING/FILLING MATERIALS. • MATERIALS SUCH AS COPPER MESH, PLUMBER'S OAKUM, HARDWARE CLOTH AND/OR FOAM RUBBER ARE (FIRST) USED TO FILL GAPS THAT EXCEED THE MAXIMUM SIZE RECOMMENDED FOR A SEALING PRODUCT. • THESE MATERIALS ARE PLACED IN THE OPENING FIRST, AND THEN CAULKED OR SEALED OVER.

2. SCREENING MATERIALS:
• STEEL WOOL IS USED TO PLUG SMALL OPENINGS WHERE PESTS MAY ENTER OR MOVE WITHIN STRUCTURES. STEEL WOOL IS USEFUL WHERE AIR MOVEMENT IS DESIRED, BUT THERE IS LOW HUMIDITY ONLY. STEEL WOOL WILL RUST, SO IT SHOULD NOT BE USED IN AREAS OF HIGH MOISTURE. • COPPER MESH IS USED IN LOCATIONS WITH HIGH HUMIDITY OR MOISTURE (STEEL WOOL WILL RUST). • WINDOW SCREEN (18 MESH MINIMUM) IS USED TO EXCLUDE INSECTS (NOT WILDLIFE) FROM SOFFIT VENTS IN ATTICS, CRAWL SPACE VENTS, AND FRESHAIR INTAKE VENTS FOR THE STRUCTURE. • HARDWARE CLOTH IS HEAVIER THAN WINDOW SCREENING AND IS USED TO EXCLUDE RODENTS, BATS, BIRDS, AND WILDLIFE FROM ATTICS AND CRAWL SPACES. IT CAN ALSO BE USED TO PREVENT WILDLIFE FROM TUNNELING UNDER STRUCTURES.

CONSTRUCTION CHECKLIST:

DURING CONSTRUCTION 3 MANDATORY AND 1 OPTIONAL VERIFICATION STEPS ARE REQUIRED:

1. (PREFERRED BUT NOT REQUIRED) PEST PROVIDER IS BROUGHT IN DURING SITE SELECTION FOR PRELIMINARY EVALUATION. TACO BELL HAS 4 NATIONAL PROVIDERS OF PEST MANAGEMENT & PREVENTION.
2. AFTER DEMO, PMP ESTABLISHES A PLAN FOR EXCLUSION (SEALING OF BUILDING). IT IS IMPORTANT THIS STEP HAPPENS AFTER ALL OF THE WALLS ARE OPEN TO IDENTIFY ALL PENETRATIONS AND AREAS OF RISK.
3. AFTER EXCLUSION WORK IS COMPLETE, BUT BEFORE WALLS ARE CLOSED UP, PMP CONDUCTS A 2ND EVALUATION.
4. AFTER WALLS ARE CLO



SIGNAGE PLAN 1/4" = 1'-0" **1**

TAG	SIGN DESCRIPTION	SIGN VERBIAGE	SIZE	MOUNTING HEIGHT	QTY	LOCATION IN RESTAURANT
L201	Smoking	No Smoking or electronic cigarette use. This is a smoke free establishment	1/16 x 9 x 6	48" MIN. A.F.F. 60" MAX. A.F.F.	4	1 in each restroom, 1 at each door
L202	Clean Restroom	To our customers:We check our restrooms every 30 minutes to make sure they are always ready for you. If we have missed something, please tell our manager on duty. Thank you	1/16 x 6 x 9	60" A.F.F.	2	1 inside each restroom (back of restroom door)
L203	Hand Wash Notice	Employees must wash hands before returning to work	1/16 x 6 x 6	60" A.F.F.	2	1 inside each restroom near sink
L204	Exit (w/ Braille)	Exit	1/16 x 6 x 6	60" A.F.F.	4	1 at each exit, mounted on wall, according to ADA guidelines
L205	Occupancy	Maximum occupancy xxx persons	1/16 x 6 x 6	8'-0" to center of sign	1	Above customer exit. Only 1 is needed
L206	Men's Restroom Triangle (W/B)	INFOGRAPHIC of male	1/4 x 12 x 12	60" A.F.F.	1	Mounted on men's restroom door
L207	Men's Restroom (w/ Braille)	INFOGRAPHIC of male and braille to read: Men's restroom	1/4 x 10 x 6.5	60" A.F.F.	1	Mounted on wall next to restroom door. refer to plans and ADA guidelines for exact location
L208	Women's Restroom Circle (W/B)	INFOGRAPHIC of female	1/4 x 12 x 12	60" A.F.F.	1	Mounted on women's restroom door
L209	Women's Restroom (w/ Braille)	INFOGRAPHIC of male and braille to read: Women's restroom	1/4 x 10 x 6.5	60" A.F.F.	1	Mounted on wall next to restroom door. refer to plans and ADA guidelines for exact location
L233	If you need assistance? ADA	Please ask if you need assistance. And ADA infographic	1/16 x 3 x 6	60" A.F.F.	1	At front counter

STANDARD REQUIRED SIGNAGE **3**

NOT USED **2**

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
330.572.2100 FAX: 330.572.2102

	DATE	REMARKS
	04.28.21	ISSUED FOR PERMIT
2	07.12.21	ISSUED FOR BID

CONTRACT DATE: 04.08.21
BUILDING TYPE: END. MED20
PLAN VERSION: MARCH 2021
BRAND DESIGNER: DICKSON
SITE NUMBER: 313354
STORE NUMBER: 449523
PA/PM: JN
DRAWN BY.: RS
JOB NO.: 2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
SIGNAGE PLAN

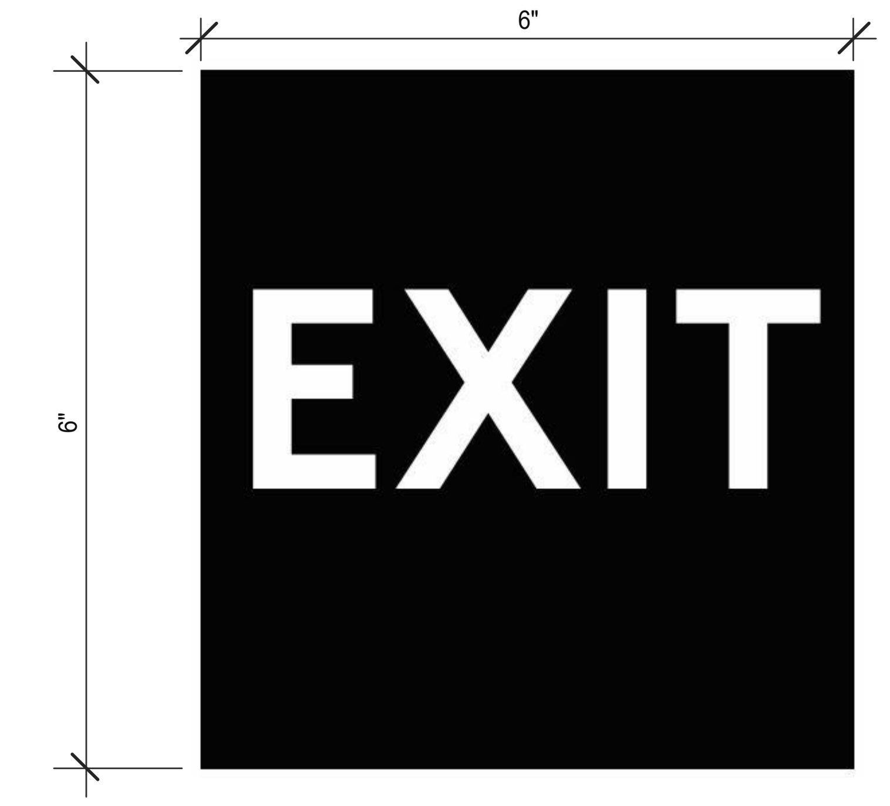
G4.0

PLOT DATE: 7/12/2021 9:54:40 AM

CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT

3 STREAM TRASH 1 - BIN LABELS (L220) | 13

WOMEN RESTROOM WHITE SIGN (L208) | 9

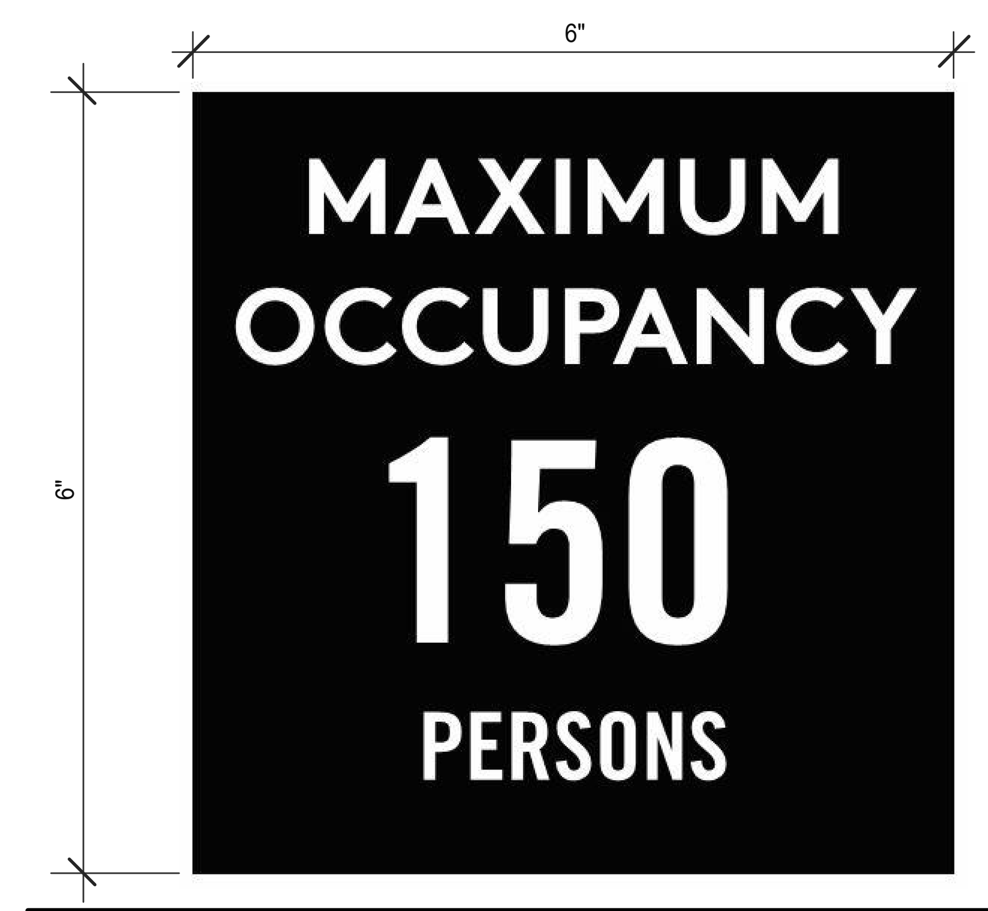


EXIT BRAILE SIGN (L204) | 5

NO SMOKING SIGN (L201) | 1

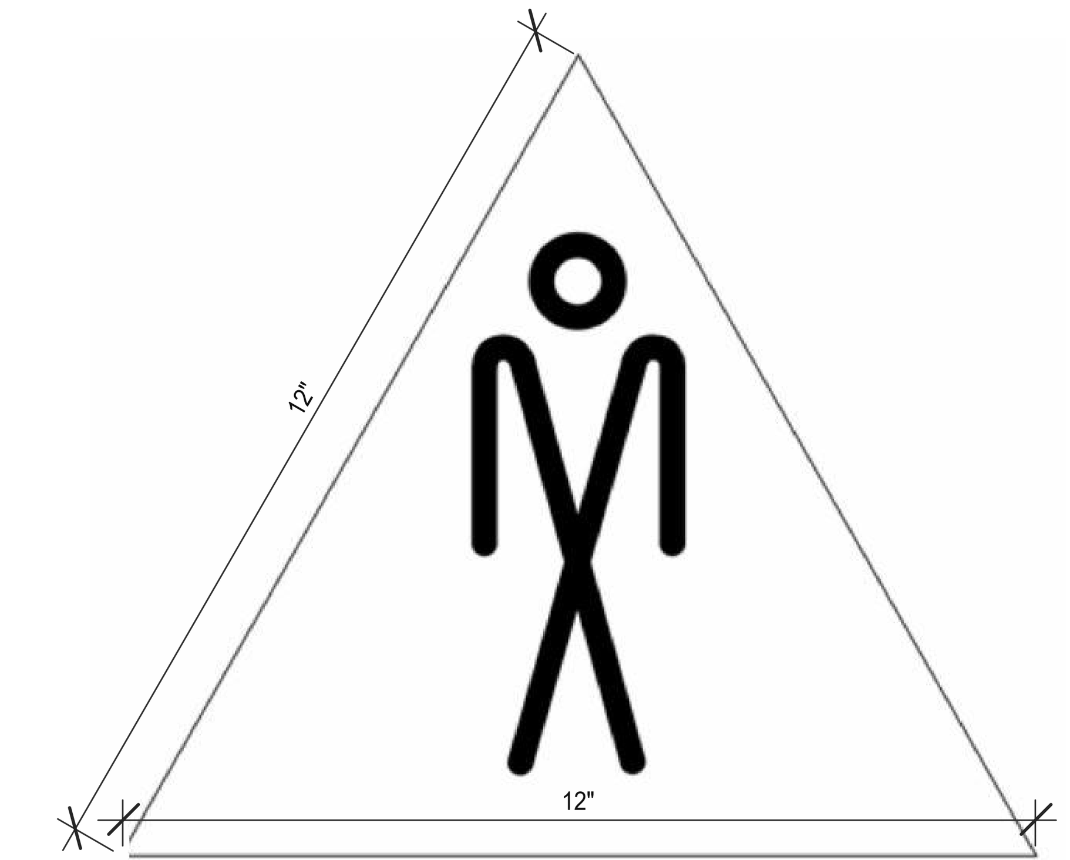
3 STREAM TRASH 2 - LABELS (L221) | 14

WOMEN RESTROOM BRAILLE SIGN (L209) | 10



OCCUPANCY SIGN (L205) | 6

GENDER NEUTRAL RESTROOM SIGNAGE (L228) | 11



MEN RESTROOM WHITE SIGN (L206) | 7

CLEAN RESTROOM SIGN (L202) | 3

IF YOU NEED ASSISTANCE (L233) | 12

MEN RESTROOM BRAILE SIGN (L207) | 8

HAND WASH NOTICE SIGN (L203) | 4

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
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330.572.2100 FAX: 330.572.2102

	DATE	REMARKS
	04.28.21	ISSUED FOR PERMIT
2	07.12.21	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RS
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
SIGNAGE DETAILS

G4.1

PLOT DATE: 7/12/2021 9:54:43 AM

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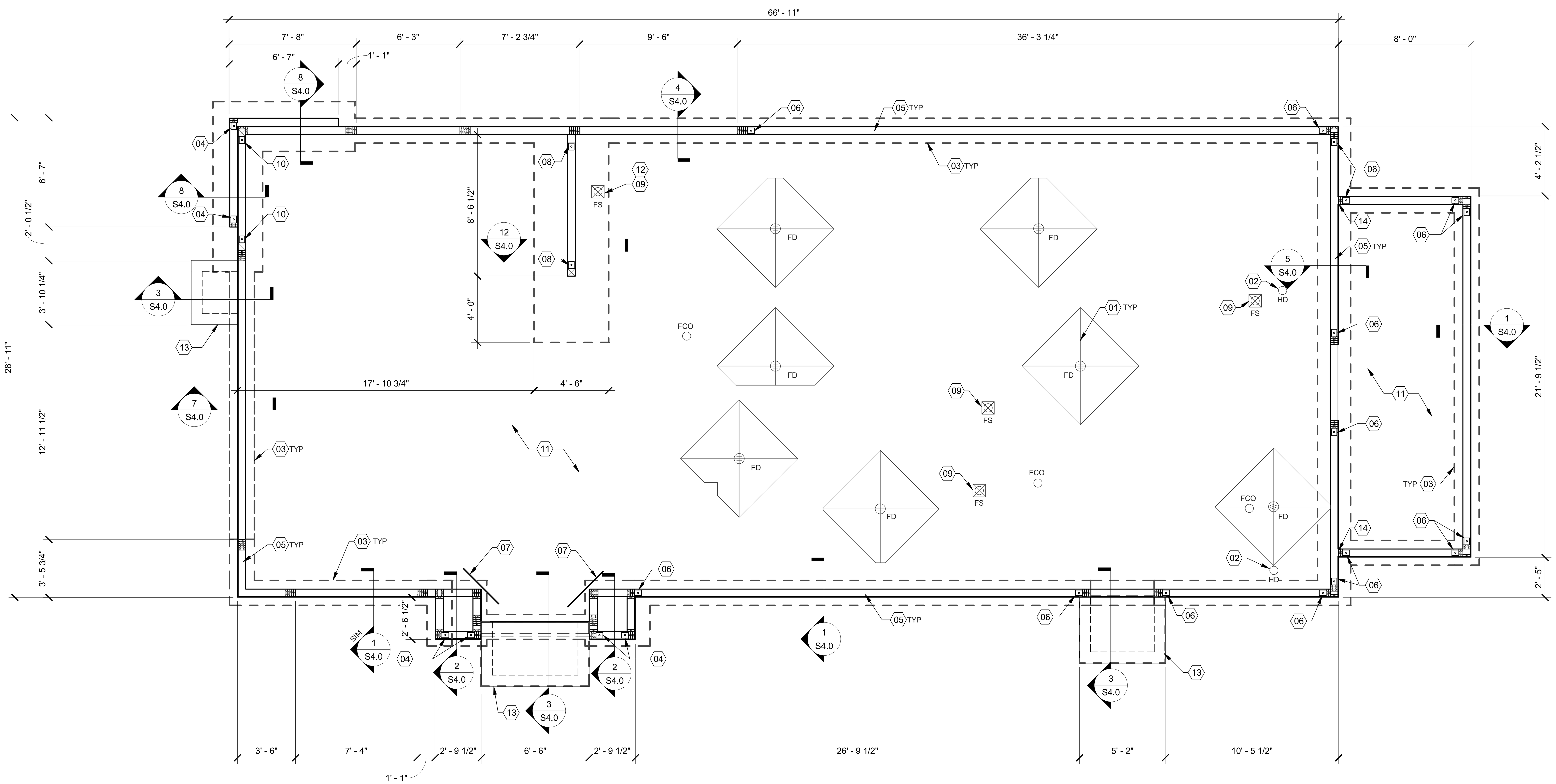

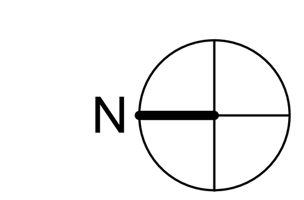

FOUNDATION PLAN 1/4" = 1'-0" **A**

DESIGN CRITERIA:

DESIGN CRITERIA:
2015 MICHIGAN BUILDING CODE (2015 IBC)

ROOF SNOW LOADS:

GROUND SNOW LOAD (Pg):	20 PSF
EXPOSURE FACTOR (Ce):	1.0
IMPORTANCE FACTOR (I):	1.0
THERMAL FACTOR (Ct):	1.0

ROOF LOADS:

LIVE LOAD:	20 PSF
DEAD LOAD:	20 PSF

WIND LOADS:

3 SECOND GUST:	115 MPH
RISK CATEGORY:	II
EXPOSURE CATEGORY (MWFRS):	B
INTERNAL PRESSURE COEFF.:	± 0.18

SEISMIC LOADS:

RISK CATEGORY:	II
SEISMIC IMPORTANCE FACTOR:	1.0
SITE CLASS:	D

MAPPED SPECTRAL RESPONSE ACCEL:

Ss:	0.1026g
S1 :	0.0487g

SPECTRAL RESPONSE COEFF.:

SHORT PERIODS (SDS):	0.109g
1 SEC. PERIODS (SD1)	0.078g
SEISMIC DESIGN CATEGORY:	B

WOOD SHEARWALLS

RESPONSE MOD FACTOR (R):	6.5
DESIGN BASE SHEAR (Cs):	0.0168*W

ANALYSIS BY SIMPLIFIED PROCEDURE

COMPONENT AND CLADDING WIND LOAD SCHEDULE

EFFECTIVE WIND AREA (SQ. FT.)	ROOF			WALL	
	CORNER ZONE (PSF)	END ZONE (PSF)	INTERIOR ZONE (PSF)	END ZONE (PSF)	INTERIOR ZONE (PSF)
<=10	+16.0/-72.7	+16.0/-48.3	+16.0/-28.8	+28.8/-38.6	+28.8/-31.2
20	+16.0/-60.2	+16.0/-43.2	+16.0/-28.0	+27.4/-35.9	+27.4/-29.8
50	+16.0/-43.6	+16.0/-36.4	+16.0/-27.1	+25.7/-32.5	+25.7/-28.1
100	+16.0/-31.2	+16.0/-31.2	+16.0/-26.3	+24.4/-29.8	+24.4/-29.8
>=500	+16.0/-31.2	+16.0/-31.2	+16.0/-26.3	+24.4/-29.8	+24.4/-29.8

DESIGN CRITERIA **E**

FOUNDATION NOTES - TYP U.N.O.:

FOUNDATION

A. FOUNDATION DESIGN IS BASED UPON THE GEOTECHNICAL ENGINEERING REPORT BY TERRACON DATED OCTOBER 8, 2018 PROJECT NO. N6185161.
B. CONTRACTOR TO PROVIDE FOUNDATION & FOOTING AS REQUIRED FOR PYLON OR MONUMENTAL SIGN. SEE ELECTRICAL DRAWINGS FOR DETAIL.
C. COORDINATE STRUCTURAL PLANS AND DETAILS WITH REQUIREMENTS OF GEOTECHNICAL REPORT. FOUNDATION DESIGN IS BASED ON 2,500 PSF ALLOWABLE BEARING CAPACITY.
D. CONTRACTOR SHALL TREAT SOIL BELOW SLAB FOR TERMITES.
E. REFER TO THE GEOTECHNICAL REPORT FOR GENERAL REQUIREMENTS OF EARTHWORK, OVEREXCAVATION, SUBGRADE PREPARATION, FILL AND COMPACTION, WATERPROOFING AND OTHER PERTINENT REQUIREMENTS AND INFORMATION.
F. PROTECT PIPES AND CONDUITS RUNNING THROUGH WALLS AND SLABS WITH 1/2 INCH EXPANSION MATERIAL. LOWER CONTINUOUS FOOTINGS PERPENDICULAR TO PIPE RUNS TO ALLOW PIPES TO PASS ABOVE THE FOOTINGS. ALTERNATIVELY, PROVIDE A CONCRETE JACKET IF PIPES ARE LOW ENOUGH TO BE PLACED BELOW THE FOOTINGS AND GRADE BEAMS. LOWER FOOTINGS AND GRADE BEAMS PARALLEL TO PIPE RUNS TO AVOID SURCHARGE ONTO ADJACENT TRENCH EXCAVATIONS.
G. MAINTAIN SUBGRADE AND FILL MOISTURE CONTENT UNTIL FOUNDATIONS ARE PLACED.
H. ARRANGE FOR OWNER'S INDEPENDENT TESTING AGENCY TO MONITOR CUT AND FILL OPERATIONS AND PERFORM FIELD DENSITY AND MOISTURE CONTENT TESTS TO VERIFY COMPACTION AND APPROVE FOOTING SUBGRADES PRIOR TO PLACING CONCRETE.
I. DO NOT PLACE FOOTINGS OR SLABS AGAINST SUBGRADE CONTAINING FREE WATER, FROST, OR ICE.
J. MAINTAIN PROPER SITE DRAINAGE DURING CONSTRUCTION TO ENSURE SURFACE RUNOFF AWAY FROM STRUCTURES AND TO PREVENT PONDING OF SURFACE RUNOFF NEAR THE STRUCTURES.

CONCRETE:
CONCRETE SHALL BE HARD ROCK CONC. (5 SACK CEMENT PER CU.YD. MIN.) AND MEET THE FOLLOWING MIN. ULTIMATE COMPRESSIVE STRENGTHS AT 28 DAYS:

LOCATION	MIN STRENGTH 28 DAY PSI	AGGREGATE SIZE - INCHES	SLUMP INCHES	TOLERANCE
SLAB ON GRADE	(4000 DESIGN)	1" x 4"	3-1/2"	±1/2"
FOUNDATIONS	(4000 DESIGN)	1" x 4"	3-1/2"	±1/2"

CONCRETE (CONT.):

A. CONCRETE MIX DESIGN AND TESTING SHALL MEET WITH THESE SPECS. CEMENT SHALL BE IN ACCORDANCE WITH ASTM C 150 TYPE II. VERIFY MIN. CONC. STRENGTH AND CEMENT TYPE.
B. REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60. STEEL SHALL BE KEPT CLEAN AND FREE OF RUST.
C. CONCRETE CURING SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF ACI-318-14 SECTION 5.11 AND STANDARD PRACTICE FOR CURING CONCRETE REPORTED BY COMMITTEE 308.
D. ANCHOR BOLTS - A36 OR A307. ANCHOR BOLTS SHALL BE TIED IN PLACE PRIOR TO PLACEMENT OF CONCRETE. SEE SCHEDULE FOR REQUIREMENTS.
E. TO RESIST FREEZE - THAW DETERIORATION W/C. RATIO SHALL NOT EXCEED .50 FOR CONCRETE IN CONTACT WITH SOILS.
F. TOTAL AIR CONTENT TO BE 6% ± 1%.

SLAB:

A. DESIGN IS BASED UPON 4" THICK CONCRETE SLAB REINFORCED WITH WWF 6x6-W2.9xW2.9 OVER 10 MIL VISQUEEN MEMBRANE, OVER 4" AGGREGATE BASE, OVER ENGINEERED SUBGRADE.

MISCELLANEOUS:

A. DIMENSIONS NOTED ARE TO FACE OF CONCRETE. REFER TO DWG. A1.0 FOR DIMENSIONS TO FACE OF STUD AND OTHER DIMENSIONS NOT OTHERWISE NOTED.
B. DRAWINGS SHALL NOT BE SCALED. ALL DIMENSIONS AND FIT SHALL BE DETERMINED AND VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORK.
C. DETAILS NOT FULLY OR SPECIFICALLY SHOWN SHALL BE OF SAME NATURE AS OTHER SIMILAR CONDITIONS.
D. SEE PLUMB. DWGS. FOR PLUMB. LAYOUT DIMENSIONS, U.O.N.
E. SEE ELECT. DWGS. FOR ELECT. LAYOUT DIMENSIONS, U.O.N.
F. COORD. FOUNDATION AND SLAB LAYOUT WITH OTHER TRADES PRIOR TO POURING SLAB.

FOUNDATION NOTES **D**

SPECIAL INSPECTIONS:

SPECIAL INSPECTIONS ARE TO BE PROVIDED IN ACCORDANCE WITH SECTION 1704. SPECIAL INSPECTIONS SHALL BE IN ADDITION TO THE INSPECTIONS CONDUCTED BY THE DEPARTMENT OF BUILDING SAFETY AND SHALL NOT BE CONSTRUED TO RELIEVE THE OWNER OR THEIR AUTHORIZED AGENT FROM REQUESTING THE PERIODIC AND CALLED INSPECTIONS REQUIRED BY THE BUILDING CODE. SPECIAL INSPECTION SHALL BE PAID BY THE OWNER.

REQUIRED SPECIAL INSPECTIONS:

IN ADDITION TO THE REGULAR INSPECTIONS, THE FOLLOWING ITEMS WILL ALSO REQUIRE SPECIAL INSPECTION IN ACCORDANCE WITH THE BUILDING CODE.

A. SOILS COMPLIANCE PRIOR TO FOUNDATION INSPECTION (COMPACTING FILL, SPECIAL GRADING)
B. STRUCTURAL CONCRETE OVER 2,500 PSI

SPECIAL INSPECTOR SHALL MEET THE QUALIFICATIONS AS STATED IN THE BUILDING CODE AND SHALL PERFORM THE DUTIES AND RESPONSIBILITIES AS OUTLINED IN THE BUILDING CODE. THE SPECIAL INSPECTOR SHALL PROVIDE INSPECTION REPORTS TO THE CODE OFFICIAL, ENGINEER AND OWNER.

SPECIAL INSPECTIONS **C**

01. SLAB SHALL BE PITCHED 1/2" FOR 5'-0" x 5'-0" SQUARE AT ALL FLOOR DRAINS U.O.N. REFER TO PLUMBING DRAWINGS FOR LOCATIONS.
02. PROVIDE HUB DRAIN (HD) UNLESS REQUIRED BY LOCAL CODE TO HAVE FLOOR SINK (FS).
03. INDICATES INSIDE SURFACE OF FOOTING. SEE SHEET S4.0.
04. HTT5 HOLDOWN ANCHOR. SEE 6/S4.0 FOR HOLDOWN EMBEDMENT DETAIL.
05. ANCHOR BOLTS LOCATED THROUGHOUT PERIMETER OF BUILDING SHALL BE PROVIDED AS REQUIRED PER THE "PLATE/ANCHOR BOLT" COLUMN OF THE "WALL SHEATHING AND SHEARWALL SCHEDULE." SEE D/S2.0.
06. HDU5 HOLDOWN ANCHOR AT EACH END OF SHEARWALL. SEE 6/S4.0 FOR HOLDOWN EMBEDMENT DETAIL.
07. (2) #4x3'-0" LG. RE-ENTRANT BARS (CENTERED IN SLAB) AT ALL RE-ENTRANT CORNERS.
08. HD19 HOLDOWN ANCHOR AT EACH END OF SHEARWALL. SEE 6/S4.0 FOR HOLDOWN EMBEDMENT DETAIL.
09. FLOOR SINK REFER TO PLUMBING DRAWINGS FOR LOCATION.
10. HD12 HOLDOWN ANCHOR AT EACH END OF FRONT SHEARWALL. SEE 6/S4.0 FOR HOLDOWN EMBEDMENT DETAIL. ENTRANT CORNERS.
11. 4" CONCRETE SLAB - SEE FOUNDATION PLAN NOTES D/S1.0. MODIFY BASE MATERIAL AS REQUIRED BY GEOTECHNICAL ENGINEER. PROVIDE BOND BREAKER BETWEEN SLAB AND BUILDING FOUNDATIONS.
12. FORM FOOTING TO ACCOMMODATE FLOOR SINK AND DRAIN LINE INSTALLATION.
13. FROST SLAB - SEE CIVIL PLANS FOR TOP OF CONCRETE ELEVATION.
14. SHEAR WALL SHEATHING SHALL BE CONTINUOUS AT COOLER WALL INTERSECTION.

FOUNDATION KEYNOTES **B**

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TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
FOUNDATION PLAN

S1.0

PLOT DATE: 7/12/2021 11:01:50 AM

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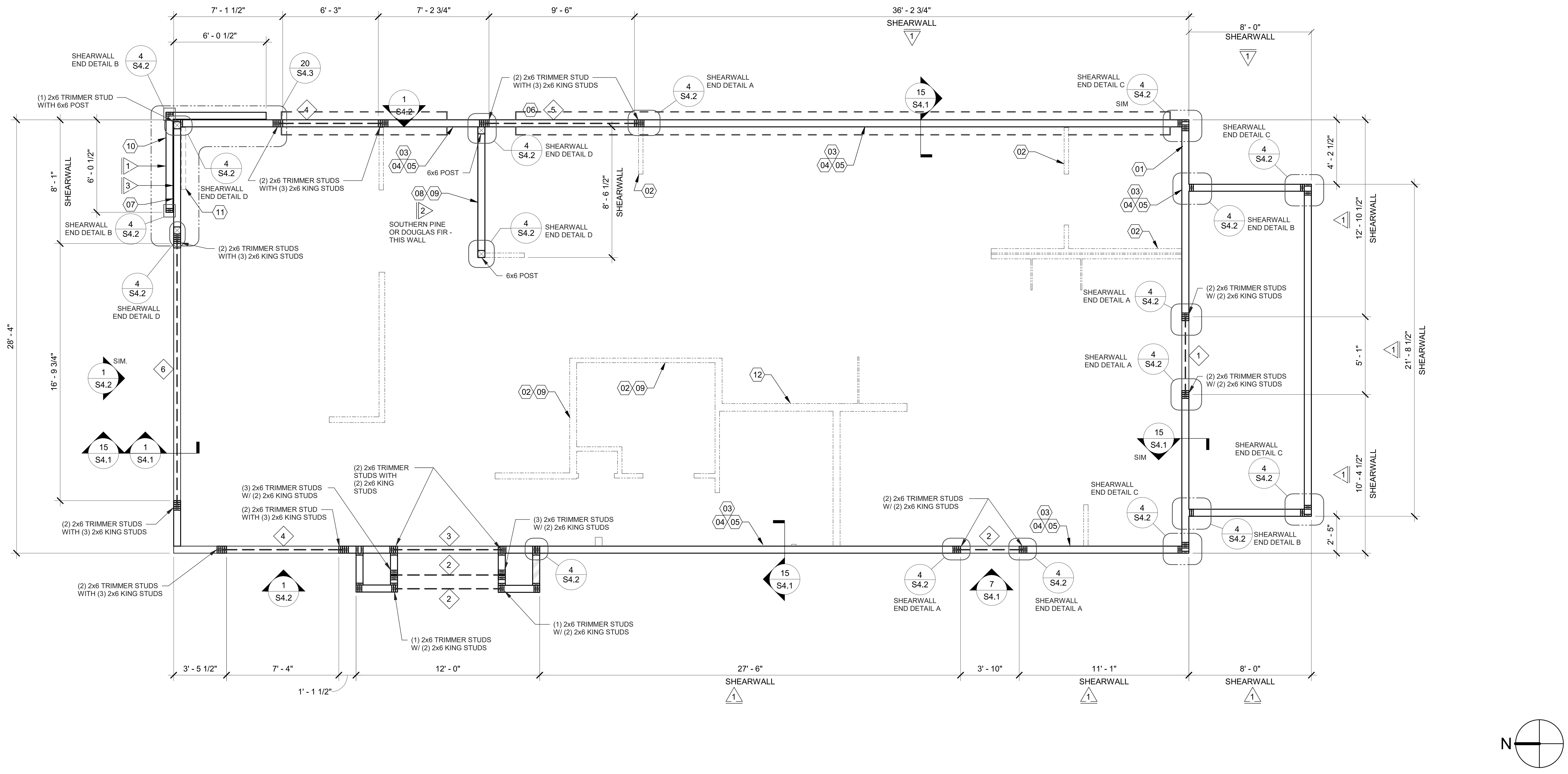

WALL FRAMING PLAN 1/4" = 1'-0" A

HEADER SCHEDULE		
MARK	BUILT-UP SECTION	BUILT-UP MANUF. MEMBER
1	(3) 2x8	--
2	(3) 2x10	--
3	(3) 2x12	--
4	--	5 1/4" x 9 1/4" PSL
5	--	5 1/4" x 11 1/4" PSL
6	--	5 1/4" x 14" PSL

NOTES:
1. BUILT-UP HEADER SECTION SHALL HAVE 1/2" PLYWOOD SANDWICHED PIECES. REF. 14/S4.1
2. PSL BEAMS TO HAVE FOLLOWING MIN. PROPERTIES:
   Fb = 2900 PSI
   Fc = 750 PSI
   Fv = 290 PSI
   E = 2000 KSI

HEADER SCHEDULE E

WALL SHEATHING AND SHEARWALL SCHEDULE					
SW	SHEATHING	EDGE	FIELD	PLATE / ANCHOR BOLT	REMARKS
1	1/2" CDX PLYWD (32/16), PS1 RATING	10d @ 6" O.C.	10d @ 12" O.C.	5/8" DIA. F1554 (22x3) @ 32" O.C. W/ WASHER	PLYWOOD ON EXTERIOR FACE OF STUDS
2	1/2" CDX PLYWD (32/16), PS1 RATING	10d @ 4" O.C.	10d @ 12" O.C.	5/8" DIA. F1554 (18x3) @ 16" O.C. W/ WASHER	PLYWOOD ON BOTH SIDES OF STUDS
3	1/2" CDX PLYWD (32/16), PS1 RATING	10d @ 4" O.C.	10d @ 12" O.C.	5/8" DIA. F1554, (22x3) @ 16" O.C. W/ WASHER	PLYWOOD ON EXTERIOR FACE OF WALL
***	1/2" CDX PLYWD (32/16), PS1 RATING	10d @ 6" O.C.	10d @ 12" O.C.	5/8" DIA. F1554, (22x3) @ 48" O.C. W/ WASHER	NAILING AT HEADERS PER 14/S4.1

*** REQUIREMENTS FOR EXTERIOR NON-SHEARWALL WALLS

1. OSB OF COMPARABLE THICKNESS MAY BE USED IN LIEU OF PLYWOOD WHEN APPROVED IN WRITING BY THE PROJECT ENGINEER AND THE LOCAL JURISDICTION OF COMPARABLE THICKNESS MAY BE USED IN LIEU OF PLYWOOD WHEN APPROVED IN WRITING BY THE PROJECT ENGINEER AND THE LOCAL JURISDICTION.
2. BLOCK ALL UNSUPPORTED EDGES WITH 2x MATERIAL U.O.N. BLOCK EDGES WITH 3x MATERIAL WHERE 10d NAILING IS 3" O.C. OR LESS AND 8d NAILING IS 2" O.C. OR LESS.ALL UNSUPPORTED EDGES WITH 2x MATERIAL U.O.N. BLOCK EDGES WITH 3x MATERIAL WHERE 10d NAILING IS 3" O.C. OR LESS AND 8d NAILING IS 2" O.C. OR LESS.
3. ALL PLYWOOD NAILS SHALL BE COMMON WIRE. SEE SPECIFICATIONS FOR OTHER NAIL REQUIREMENTS.
4. EXTERIOR WALLS NOT DESIGNATED AS SHEARWALLS IN THE WALL FRAMING PLAN SHALL MEET REQUIREMENTS INDICATED FOR NON-SHEARWALL WALLS IN THE SCHEDULE ABOVE.
5. SHEARWALL LENGTHS WHERE NOTED ARE MINIMUM. DO NOT LOCATE HOLDOWNS FROM THESE DIMENSIONS. SEE ARCH DWGS FOR ACTUAL WALL LENGTHS.
6. HD REFERS TO SIMPSON STRONGTIE CO. HOLDOWNS. INSTALL PER 6/S4.0. POST WIDTH SHALL MATCH STUD WALL WIDTH. SEE FOUNDATION PLAN FOR OTHER REQ'S.
7. EDGE NAIL WALL PLY TO STUDS OR POSTS WITH HOLDOWNS.
8. WHERE PANELS ARE APPLIED TO BOTH FACES OF A WALL AND NAIL SPACING IS LESS THAN 6" O.C. ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO WALL ON DIFFERENT FRAMING MEMBERS OR FRAMING SHALL BE 3x OR THICKER AND NAILS ON EACH SIDE SHALL BE STAGGERED.

WALL SHEATHING AND SHEARWALL SCHEDULE D

WALL FRAMING NOTES - TYP U.N.O.:

WALL FRAMING:
A. EXTERIOR WALL NON-BEARING & BEARING STUDS SHALL BE SOUTHERN PINE NO. 2. 6x6 POSTS TO BE SOUTHERN PINE NO. 2. INTERIOR WALL STUDS MAY BE STUD GRADE.
B. ALL BEAMS AND JOISTS SHALL BE SEAT CUT FOR FULL UNIFORM BEARING AT SUPPORTS, BEAM SEATS AND COLUMN CAPS.
C. SEE SHEET A1.0 FOR DIMENSIONS.
D. EXTERIOR STUD WALLS ARE 2x6 AT 16" O.C. U.O.N.
E. ALL WOOD IN CONTACT WITH CONC., STEEL OR GRADE SHALL BE PRESSURE TREATED.
F. ALL BOLTED OR NAILED STRAP CONNECTIONS SHALL HAVE AN EQUAL NUMBER OF BOLTS OR NAILS EACH SIDE OF THE SPLICE JOINT. THE FIRST BOLT OR NAIL FROM EACH SIDE OF THE SPLICED OR TREATED MEMBER SHALL BE EQUAL DISTANCE FROM THE SPLICE. STRAPS USING 16d NAILS ON 2x MATERIAL SHALL BE INSTALLED ON THE 1-1/2" EDGE OF THE MEMBER.
G. THE CONTRACTOR SHALL VERIFY THAT THE MOISTURE CONTENT OF ALL FRAMING LUMBER AND PLYWOOD MEET THE REQUIREMENTS OF THE SPECS. AT THE TIME OF INSTALLATION AND AT CLOSE-IN.
H. USE PRESSURE TREATED LUMBER AT WINDOW JAMBS, SILL AND STUDS UNDER SILL AS WELL AS ALL TOILET PLUMBING WALLS.

STUD LAYOUT:
A. LAYOUT STUDS ON SIDEWALLS (LONG WALLS) STARTING AT REAR OF BUILDING TOWARDS FRONT.
B. LAYOUT STUDS ON ENDWALLS (SHORT WALLS) STARTING AT EACH END AND WORKING TOWARDS CENTER.

WALL FRAMING NOTES C

01 COORDINATE WITH ELECTRICAL POWER PLAN SHEET E3.0.
02 INTERIOR NON-BEARING STUD WALL FRAMING; REFER TO SHEET A1.0 FOR DIMENSIONS AND STUD SIZES. SEE DETAIL 10 & 11/S4.1 AND WALL FRAMING NOTES.
03 (2) 2x6 TOP PLATES - SPLICE PER 16/S4.1. U.O.N. REF. 1/S4.3 FOR PARAPET CAP DETAIL.
04 TOP OF TRUSS BEARING PLATE. SEE DETAIL 2/S4.1.
05 TOP OF PARAPET. SEE S3.0.
06 ENSURE ROUGH OPENING DIMENSION TO PROVIDE TOLERANCE FOR DRIVE THRU WINDOW INSTALLATION. COORDINATE WITH WINDOW MANUFACTURER.
07 EXTERIOR SHEATHING SHALL NOT BE INTERRUPTED WITH TOWER FRAMING - TYPICAL.
08 INTERIOR SHEAR WALL. FRAMING FOR 2x6 STUDS, BLOCKING, & SILL PLATE SHALL BE SOUTHERN PINE OR DOUGLAS FIR AT THIS WALL. PROVIDE 6x6 POST AT EACH END OF WALL.
09 COORDINATE WITH PLUMBING ROUGH IN SHEET P4.0.
10 2x FRAMING ON THICKENED CONCRETE FOUNDATION / PIER; SEE SHEETS S1.0 AND S4.0. DIMENSIONS FOR FRAMING ARE TO FACE OF STUD.
11 2x4 FRAMING FOR ALCOVE. SEE ARCHITECTURAL.
12 COLD-FORMED STUD WALL (NON-LOAD BEARING STUD WALL). SEE ARCH.

WALL FRAMING KEYNOTES B

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BROWNSTOWN, MI 48183

ENDEAVOR 2.0
WALL FRAMING PLAN

S2.0

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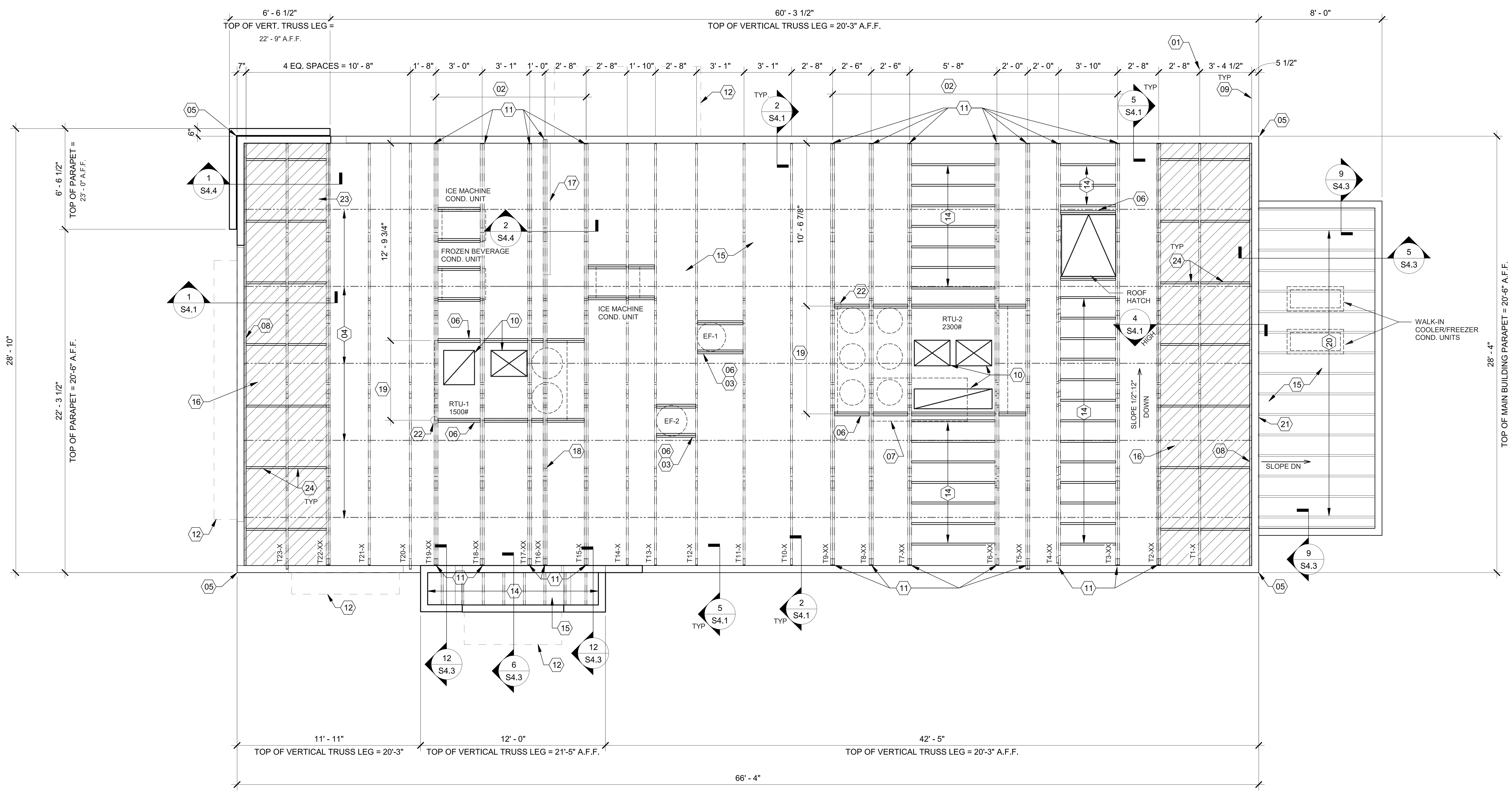

EXTREME CARE SHALL BE USED IN ERECTING ROOF TRUSSES - COMPLY WITH TPI BRACING REQUIREMENTS.

ROOF NOT DESIGNED FOR PONDING. SEE ARCHITECTURAL DRAWINGS FOR DRAIN REQUIREMENTS.

ROOF FRAMING PLAN 1/4" = 1'-0" A

ROOF NAILING SCHEDULE

TYPE	NAILING / SHEATHING	REMARKS
BN	10d @ 6" O.C.	
EN	10d @ 6" O.C.	
FN	10d @ 12" O.C.	
ROOF SHEATHING	19/32" CDX PLYWOOD (40/20), PS1 RATING	

NOTES:
SEE 8/S4.2 FOR DEFINITIONS AND ROOF NAILING PLAN.
SEE 11/S4.2 FOR TYPICAL NAILING SCHEDULE.

ROOF NAILING SCHEDULE D

ROOF FRAMING NOTES:

A. ALL UNSUPPORTED EDGES OF PLYWOOD SHEATHING SHALL BE SUPPORTED WITH SIMPSON PSCL CLIPS, PROVIDE (2) CLIPS EQUALLY SPACED BETWEEN EACH TRUSS/SUPPORT. SEE DETAIL 9/S4.2. OSB OF COMPARABLE THICKNESS MAY BE USED IN LIEU OF PLYWOOD WHEN APPROVED IN WRITING BY THE PROJECT ENGINEER AND THE LOCAL JURISDICTION.
B. ALL MECHANICAL SUPPLY AND RETURN OPENINGS SHALL BE BETWEEN FRAMING U.O.N.

MANUFACTURED ROOF TRUSS NOTES:

A. MFR'D ROOF TRUSSES ARE AT 2'-8" O.C. U.O.N.
B. "T-#" DENOTES ROOF TRUSS TYPE. REFER TO SCHEDULE 7/S4.2.
C. TRUSS DWGS ARE PROVIDED FOR CONCEPTUAL DESIGN ONLY. MFR. SHALL SUBMIT SHOP DWGS. AND CALCS, BOTH SIGNED BY A LICENSED STRUCTURAL ENGINEER (STATE OF MICHIGAN). SUBMIT SHOP DWGS. AND CALCS TO THE ARCHITECT AND ENGINEER FOR REVIEW AND SUBMITTAL AND, IF REQUIRED, TO BLDG OFFICIAL FOR APPROVAL PRIOR TO FABRICATION. SHOP DWGS SHALL INCLUDE LAYOUT PLAN AND CONNECTORS. CALCS SHALL BE BASED ON THE SPECIFIED LOADING CONDITIONS SHOWN HEREIN. MFR SHALL PROVIDE HANGERS AND CONNECTIONS BETWEEN TRUSSES. REVIEW AND APPROVE DIMENSIONS, SHAPES AND DETAILS SHOWN ON SHOP DWGS. PRIOR TO SUBMITTAL TO THE ARCHITECT / ENGINEER FOR REVIEW AND COMMENT.
D. TRUSS MFR SHALL PROVIDE HANGERS AND CONNECTORS ADEQUATE FOR LOADS. ROOF CONNECTORS ARE BASED UPON SIMPSON "STRONG TIE" OR APPROVED EQUAL.
E. TRUSS CHORDS AND PARAPET VERTICALS SHALL BE 2x6 MIN AND CONSISTENTLY SIZED THROUGHOUT PROJECT.
F. REFER TO TRUSS ELEVATIONS FOR SHAPE, OVERHANG, SLOPES, SPAN, ETC. LOCATION OF BEARING POINTS ARE AS INDICATED ON THE DRAWINGS. SEE 2/S4.2.
G. MFR'D ROOF TRUSS DESIGN LOADS: SEE TRUSS DESIGN CRITERIA 3/S4.2.
H. THE POSITIONS, WEIGHTS, AND METHODS OF ATTACHMENT OF ALL MECHANICAL UNITS, ELECT FIXTURES, PLUMBING, ETC. SHALL BE INCLUDED IN THE DESIGN OF THE TRUSSES BY THE TRUSS MFR.
I. DESIGN ROOF TRUSSES TO SUPPORT ALL IMPOSED LOADS, INCLUDING WIND & LATERAL LOADS. COORDINATE SIZE, LOCATION AND WEIGHT OF EQUIPMENT WITH MECHANICAL WORK. PROVIDE MULTIPLE TRUSSES WHERE ONE TRUSS CANNOT SUPPORT THE LOAD. PROVIDE BRIDGING BETWEEN TRUSSES AS SPECIFIED AS MINIMUM STANDARD.
J. INSTALLATION OF ALL TRUSSES SHALL BE DONE USING A SPREADER BAR WITH A THREE POINT VERTICAL PICK. CARE SHALL BE USED IN LIFTING TO PREVENT HORIZONTAL BENDING.
K. IMPROPER HANDLING OF THE TRUSSES AS NOTED ABOVE AND IN THE SPECS SHALL MEAN REMOVAL OF THE TRUSSES FROM THE JOBSITE AND REPLACEMENT AT CONTRACTOR'S EXPENSE.
L. SEE DIV. 6 OF THE SPECS FOR DETAILS ON TRUSS MANUFACTURING AND NAILING.

DELEGATED DESIGN NOTE:

ALL DEFERRED SUBMITTALS SHALL CONTAIN SHOP DRAWING PLANS AND DESIGN CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED (OTHER THAN THE ENGINEER OF RECORD) IN THE STATE OF OHIO. THE DEFERRED SUBMITTALS SHALL BE SUBMITTED TO ENGINEER OF RECORD FOR REVIEW OF GENERAL CONFORMANCE WITH THE BUILDING DESIGN PRIOR TO CONSTRUCTION, FABRICATION, AND/OR ORDERING OF MATERIALS. ENGINEER OF RECORD APPROVED DEFERRED SUBMITTALS SHALL BE REVIEWED AND APPROVED BY THE LOCAL BUILDING OFFICIALS PRIOR TO INSTALLATION. THE FOLLOWING ITEMS SHALL BE SUBMITTED PER THIS SECTION (REFER TO PLANS FOR ADDITIONAL INFORMATION):

- AWNING & CANOPY
- MANUFACTURED WOOD ROOF TRUSSES
- SHORING

ROOF FRAMING NOTES C

01 STARTING POINT OF TRUSS LAYOUT.
02 VERIFY NECESSITY OF DOUBLE TRUSSES WITH TRUSS MFR. DUE TO POINT LOADING AND ADDITIONAL UNIFORM LOADING, TYPICAL.
03 COORDINATE BLOCKING WITH EXHAUST AND SUPPLY DUCT.
04 CONT 2x4 WD BRIDGING ON TOP OF BOTTOM CHORD. ADJUST AS REQUIRED FOR DUCT PLENUMS, MAX SPACING AT 7'-0" O.C. OR TIGHTER SPACING AS REQUIRED BY TRUSS DESIGN. SEE 8 & 9/S4.1 FOR BRIDGING LAP DETAIL.
05 SIMPSON MSTA 24 AT CORNER DBL TOP PLATE. CENTER STRAP ON CORNER.
06 (2) 2x6 BLOCKING W/ U26-2 HANGERS. TYP. AT EDGES OF ALL ROOF TOP EQUIPMENT AND ALL ROOF OPENINGS - SEE DET. 6 & 10/S4.2.
07 LOC. OF HOOD. SEE HOOD DRAWINGS FOR HOOD ATTACHMENT DETAIL 13/S4.1.
08 (2) 2x6 LEDGER REF. 6/S4.1.
09 DIMENSION IS FROM INSIDE FACE OF WALL FRAMING.
10 HVAC ROOF OPENING FOR DUCT. VERIFY SIZE WITH HVAC MFR. & MECHANICAL DWGS.
11 (2) 2x6 BUILT-UP COLUMN AT TRUSS BEARING, TYP. AT GIRDER. TRUSS ONLY. REF. DETAIL 12/S4.2.
12 CANOPY- SEE ARCH. DWGS.
13 CANOPY FRAMING AND COLUMNS PER CANOPY MANUFACTURER. CANOPY SUPPLIER SHALL COORDINATE LOCATION WITH ARCH'L PLANS. SEE S1.0 FOR ADD'L INFO.
14 2x6 @ 16" O.C. WITH SIMPSON LUS26 HANGER EA. END.
15 PLYWOOD ROOF SHEATHING. SEE NAILING SCHEDULE, THIS SHEET.
16 HATCH DENOTES LOCATION OF KICKERS. SEE 1/S4.4 FOR ADDITIONAL INFORMATION REGARDING KICKERS.
17 INTERIOR SHEAR WALL BELOW. ALIGN DINING SIDE OF WALL WITH SIDE OF TRUSS. SEE DTL. 2/S4.4.
18 DRAG TRUSS AT INTERIOR SHEAR WALL. PROVIDE DOUBLE TRUSS AS REQUIRED. DESIGN DRAG TRUSS FOR 375 PLF (ASD, 0.6*W) ALONG TOP CHORD OF TRUSS (10,285 LBS TOTAL). ATTACH ROOF SHEATHING TO DRAG TRUSS WITH 10d NAILS @ 3" O.C. ALONG ENTIRE LENGTH OF TRUSS.
19 SEE MECHANICAL DRAWINGS FOR SIZE OF SELECTED RTU OPTION.
20 2x10 @ 16" O.C. WITH SIMPSON LUS26 HANGER EA. END. PROVIDE CONT. BLOCKING BETWEEN 2x's AT MIDSPAN.
21 PORTION OF PARAPET IS ABOVE ROOF OF WALK-IN COOLER. SEE ELEVATION FOR DETAILS.
22 RTU LOCATION POINT.
23 (2) 2x6 BLOCKING W/ U26-2 HANGERS EACH END AT 24" O.C. BELOW KICKERS.
24 2x BLOCKING AT BRACES. SEE 1 & 4/S4.1

ROOF FRAMING KEYNOTES B

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AKRON, OH 44311
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2	07.12.21	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RB
JOB NO.:	2018088.64

TACO BELL

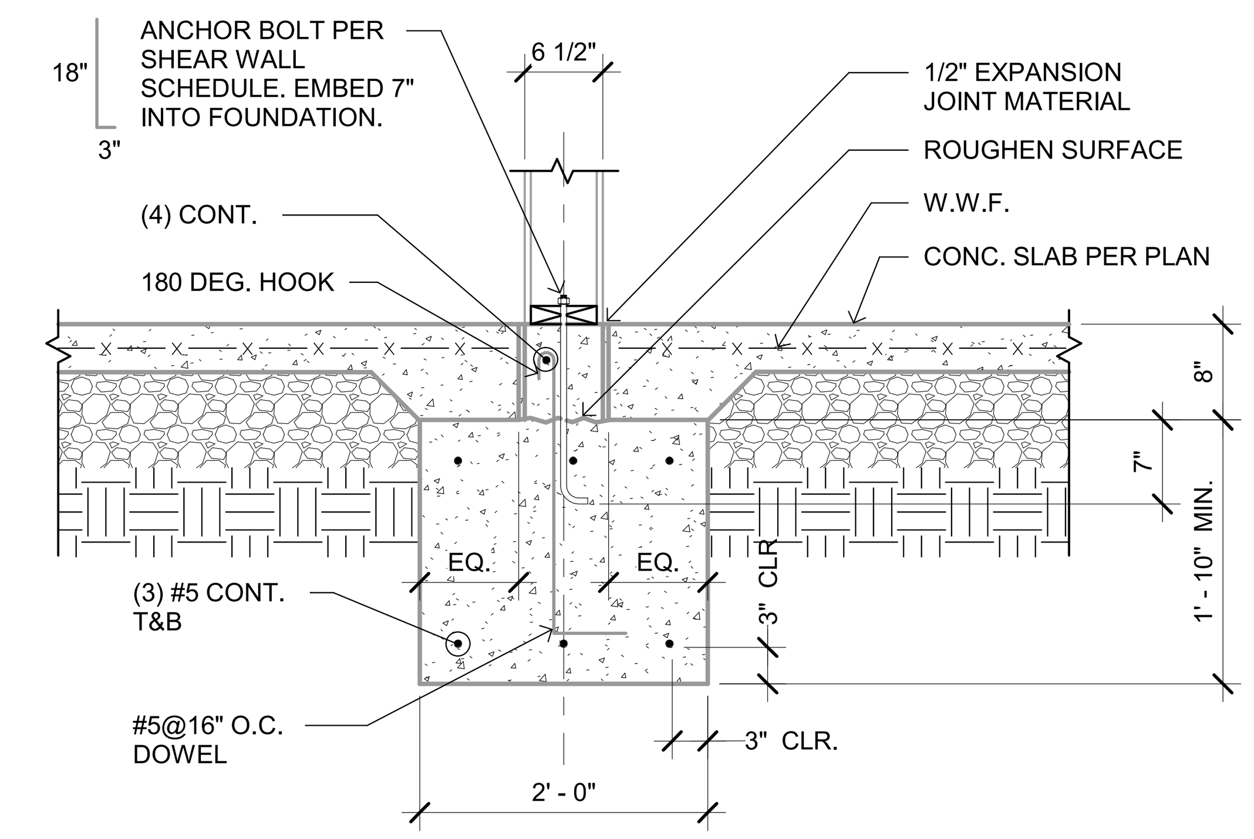
GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
ROOF FRAMING PLAN

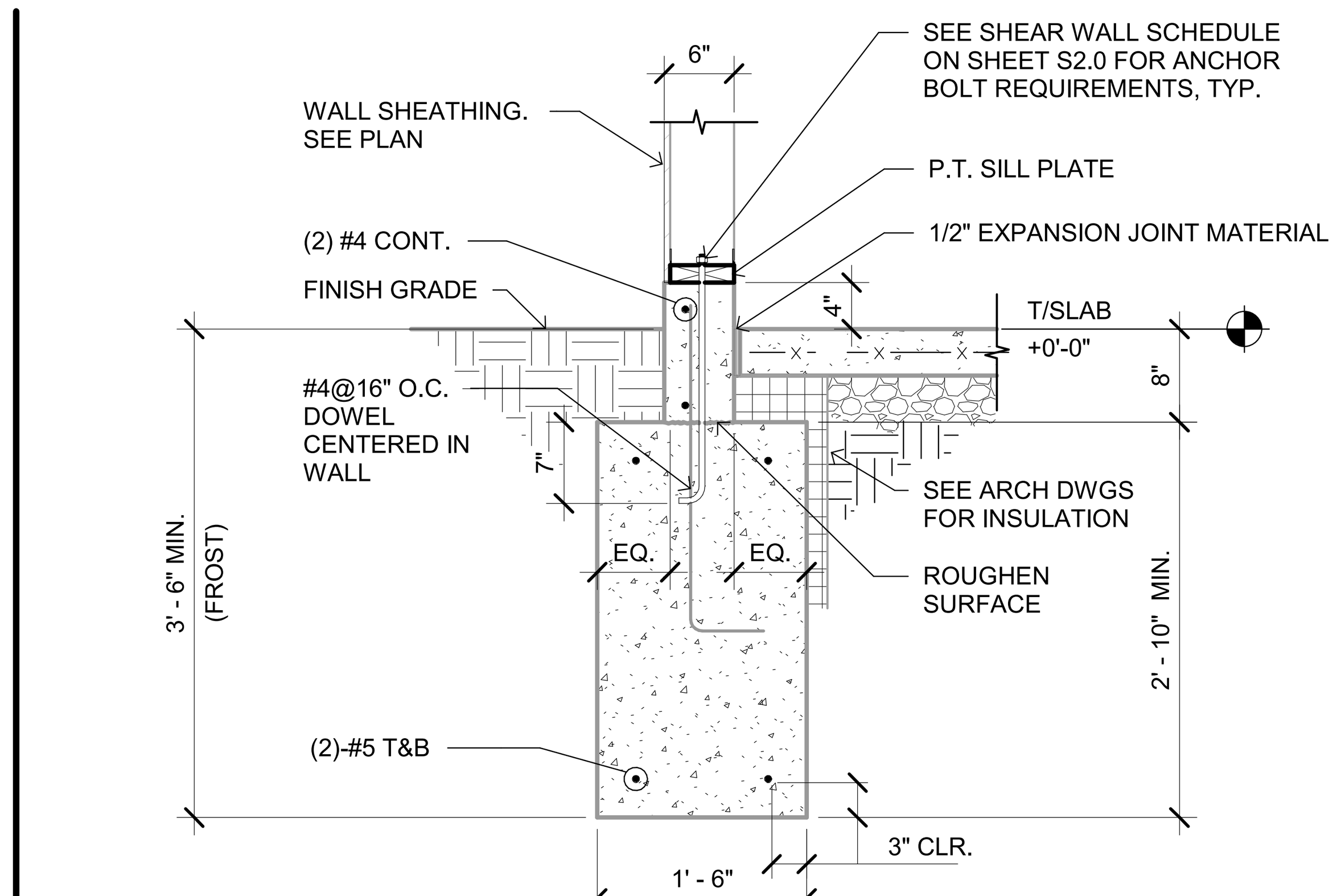
S3.0

PLOT DATE: 7/12/2021 11:01:51 AM

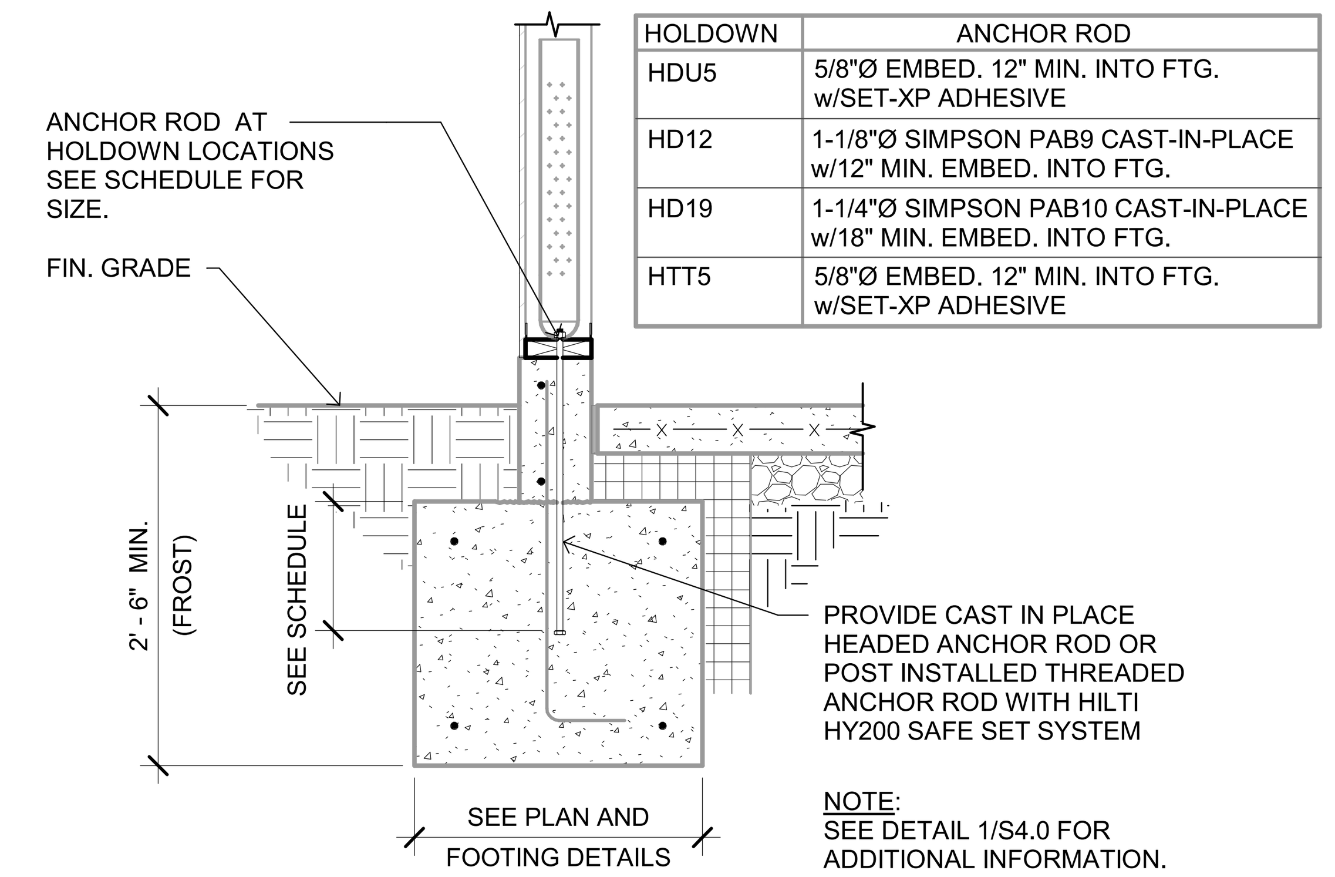
CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT



INTERIOR FOOTING AT COOLER 3/4" = 1'-0" 5

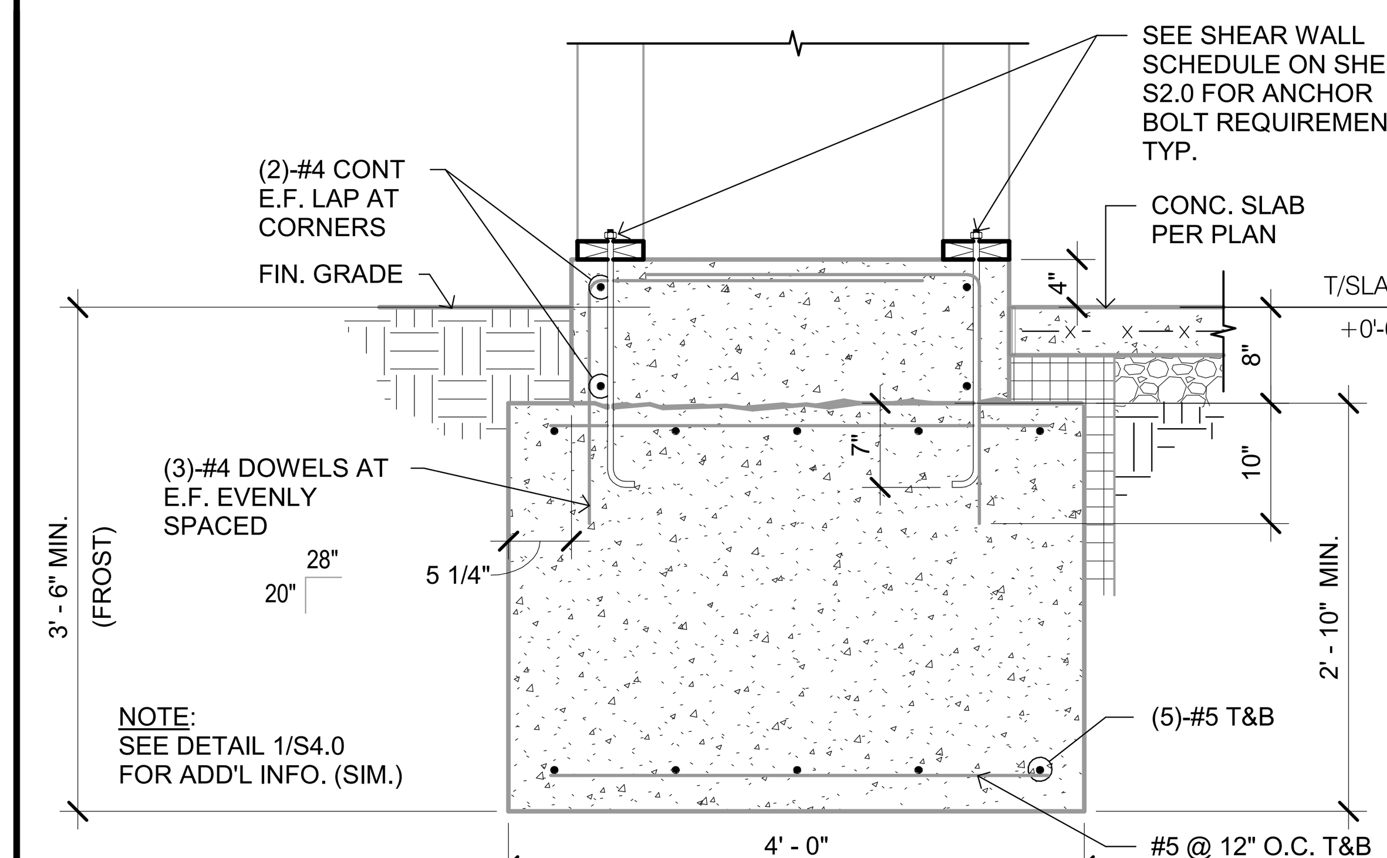


FOOTING AT SIDE AND REAR WALLS 3/4" = 1'-0" 1

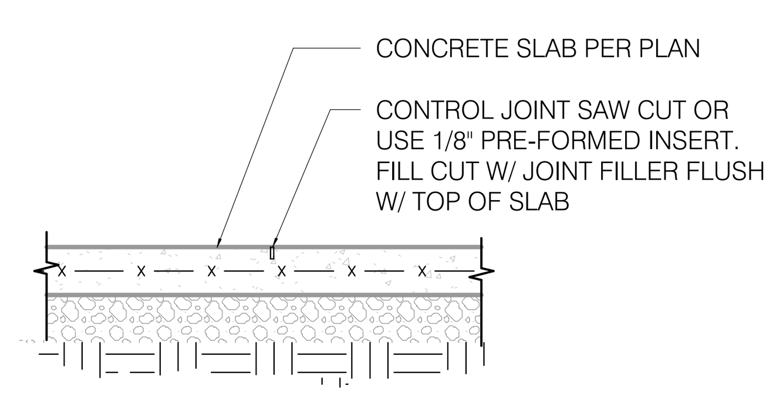


HOLDOWN	ANCHOR ROD
HDU5	5/8"Ø EMBED. 12" MIN. INTO FTG. w/SET-XP ADHESIVE
HD12	1-1/8"Ø SIMPSON PAB9 CAST-IN-PLACE w/12" MIN. EMBED. INTO FTG.
HD19	1-1/4"Ø SIMPSON PAB10 CAST-IN-PLACE w/18" MIN. EMBED. INTO FTG.
HTT5	5/8"Ø EMBED. 12" MIN. INTO FTG. w/SET-XP ADHESIVE

HOLDOWN DETAIL 3/4" = 1'-0" 6



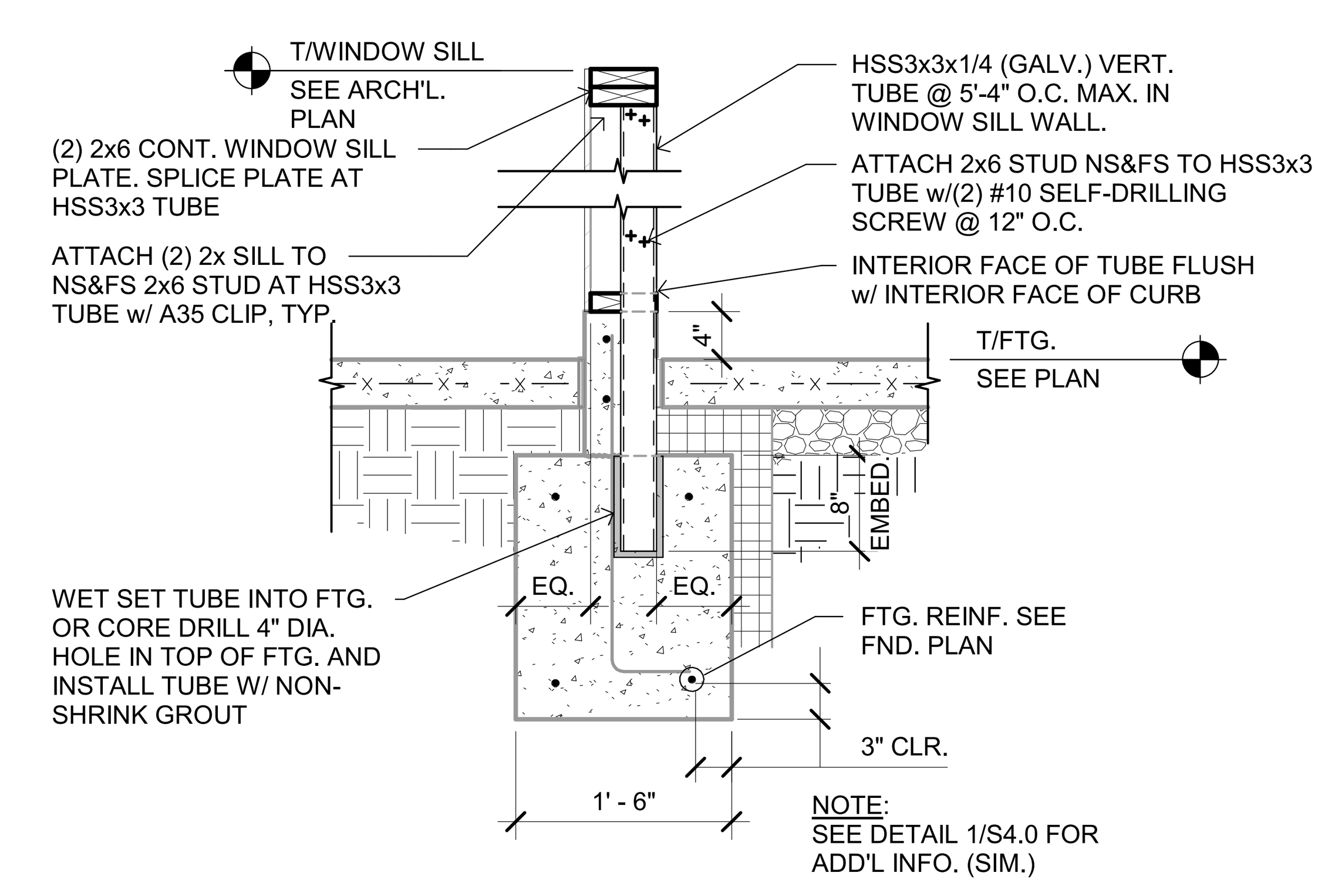
FOOTING AT ENTRY PILASTER 3/4" = 1'-0" 2



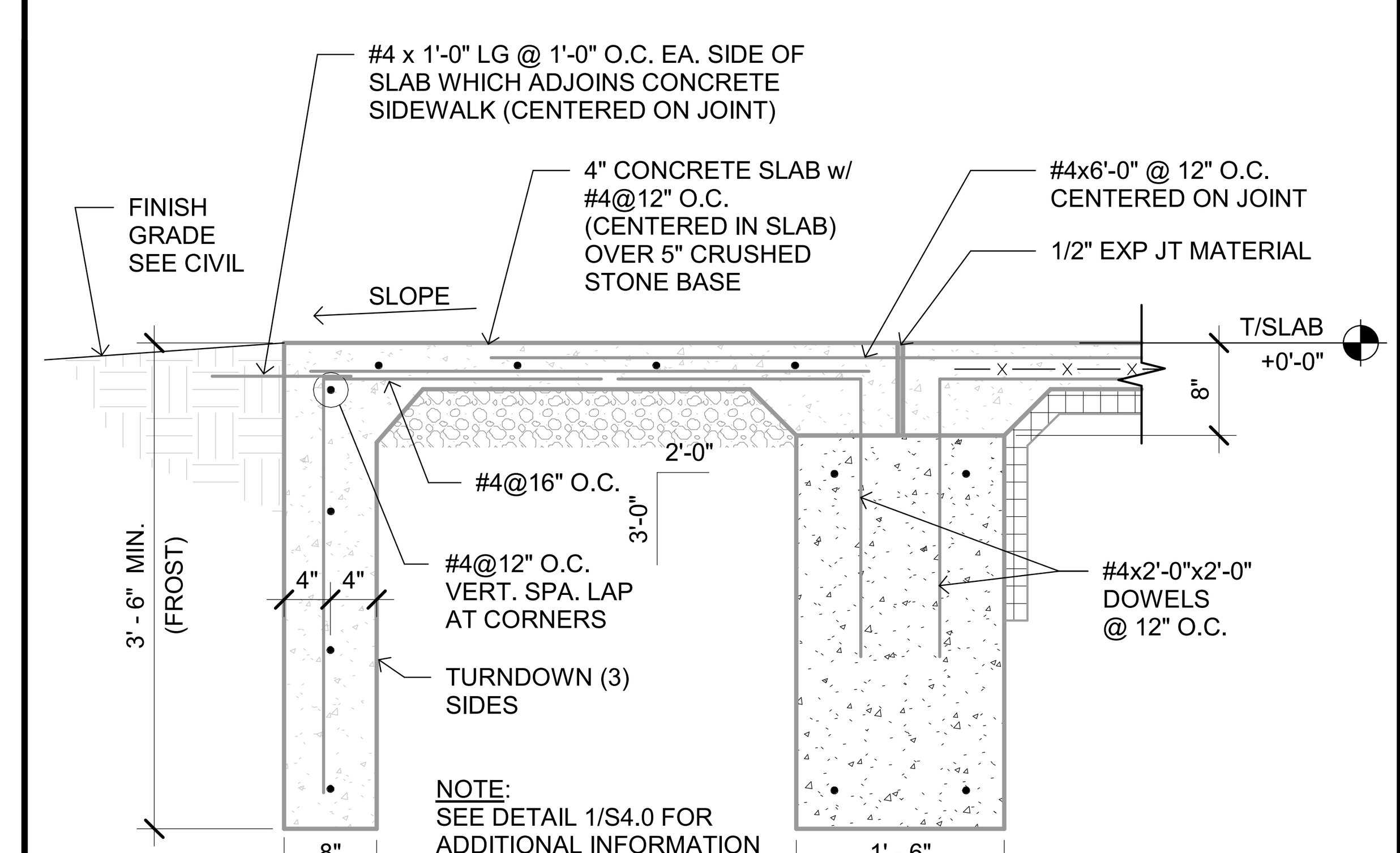
NOTES:

- 12'-0" MAX. SPACING OF CONTROL JOINTS.
- SAW CUT JOINT WITHIN 12 HOURS OF PLACING CONCRETE

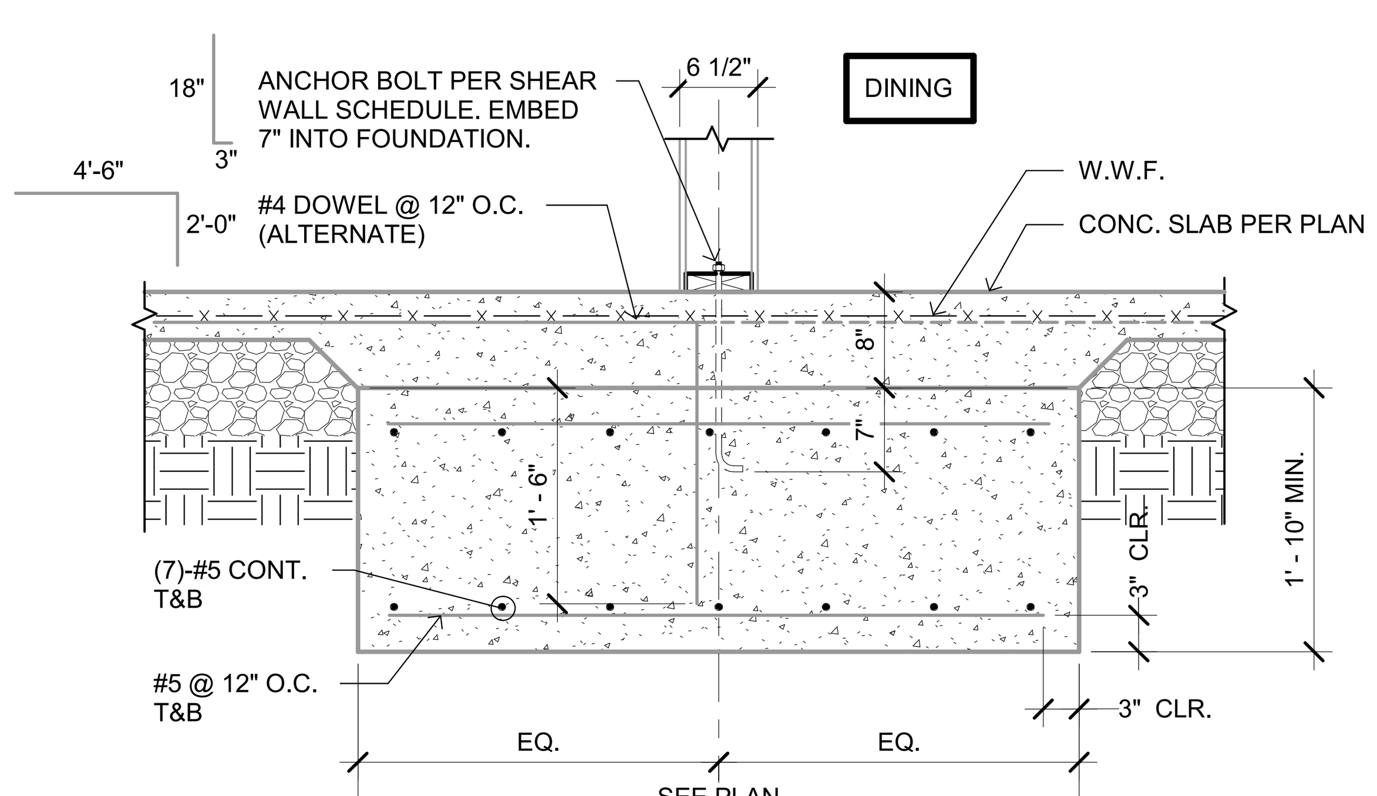
TYP. SLAB JOINT DETAIL 3/4" = 1'-0" 11



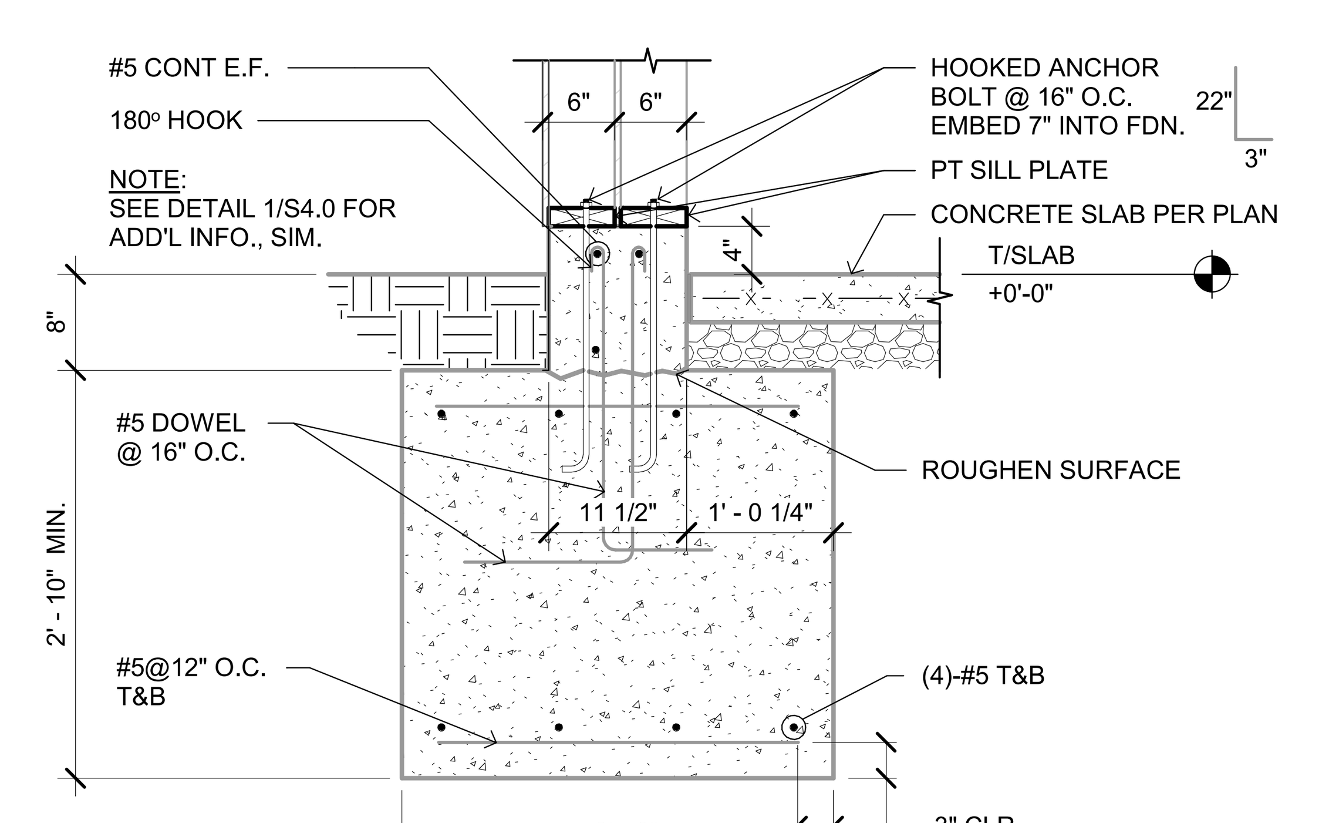
WINDOW SILL BRACING DETAIL 3/4" = 1'-0" 7



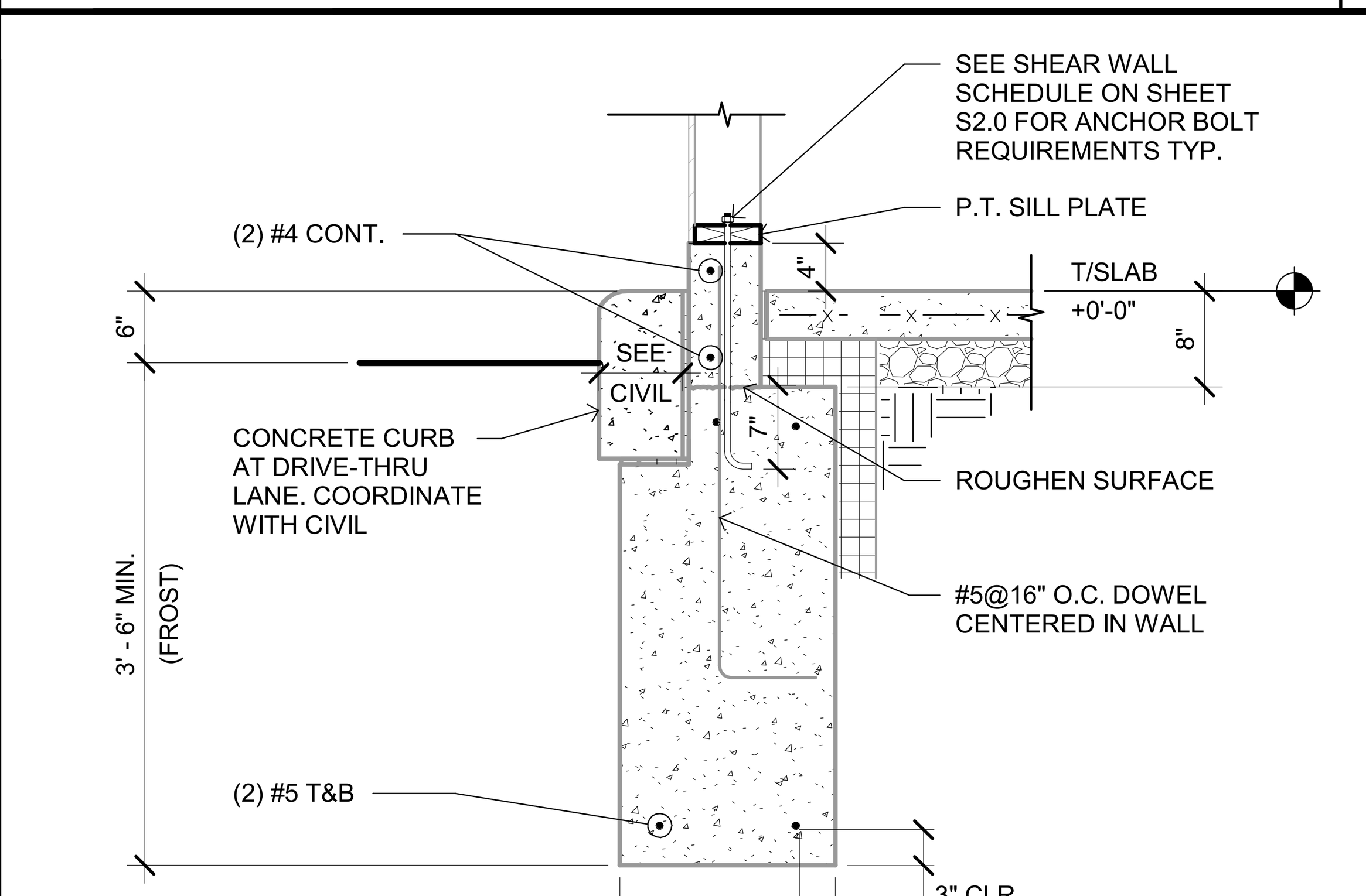
FOOTING AT FULL HEIGHT OPENING 3/4" = 1'-0" 3



FOOTING AT INTERIOR SHEARWALL 3/4" = 1'-0" 12



SECTION AT TOWER LEG 3/4" = 1'-0" 8



FOOTING AT DRIVE THRU 3/4" = 1'-0" 4

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STRUCTURAL DETAILS

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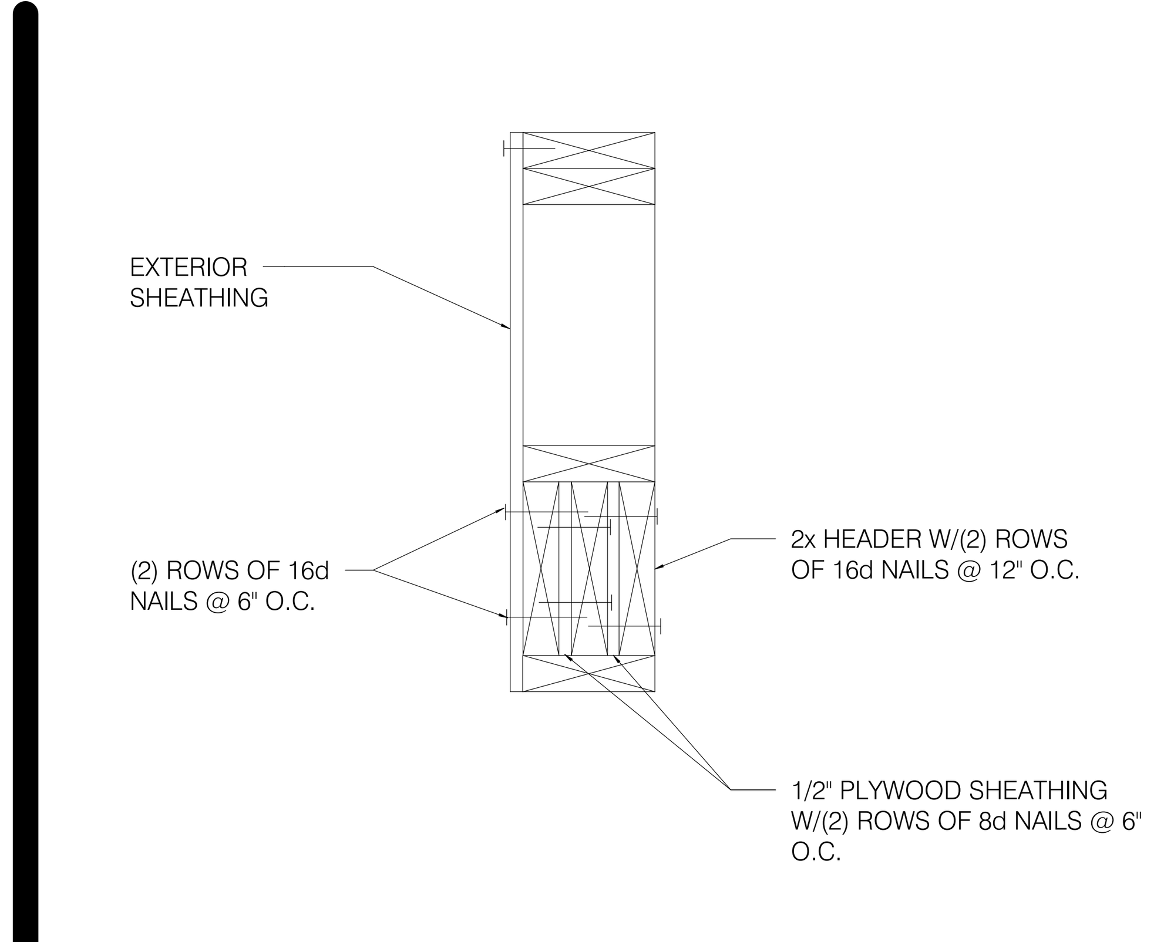
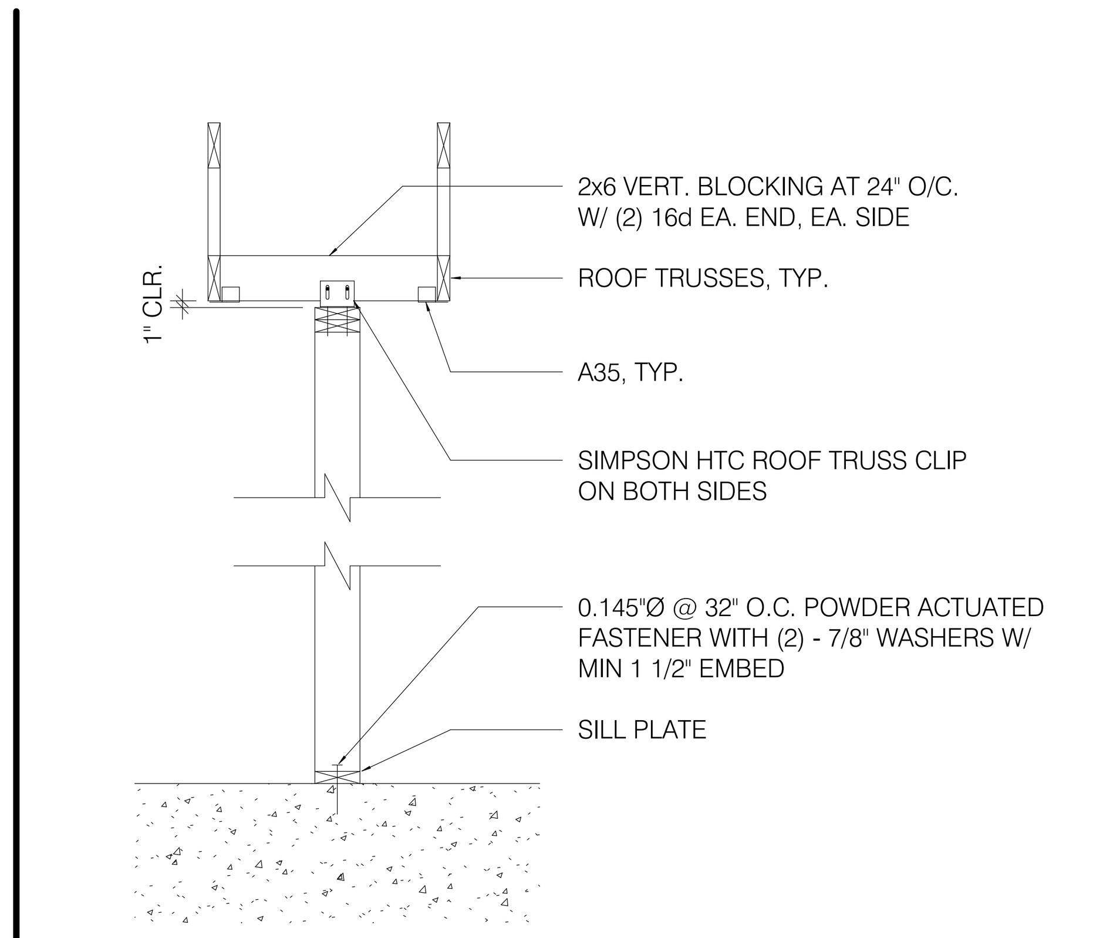
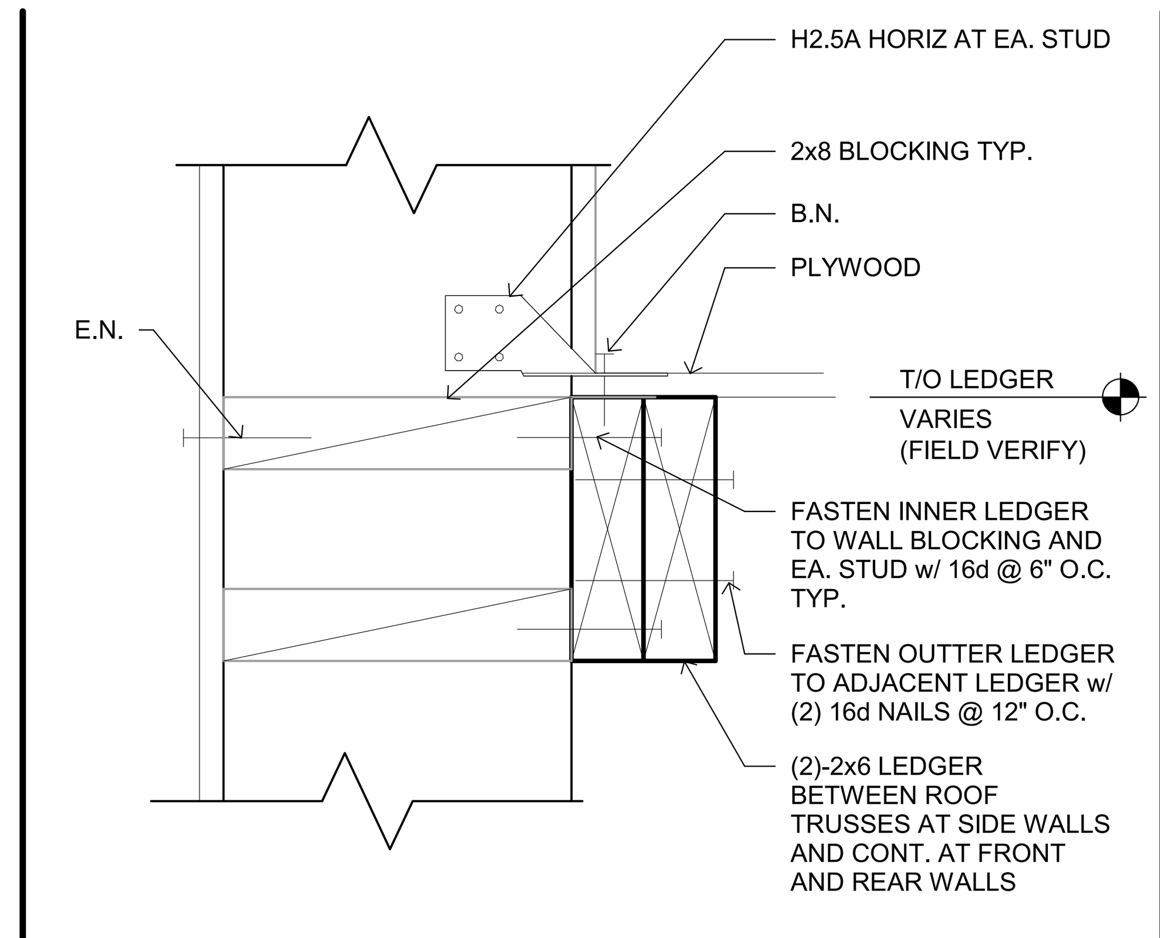


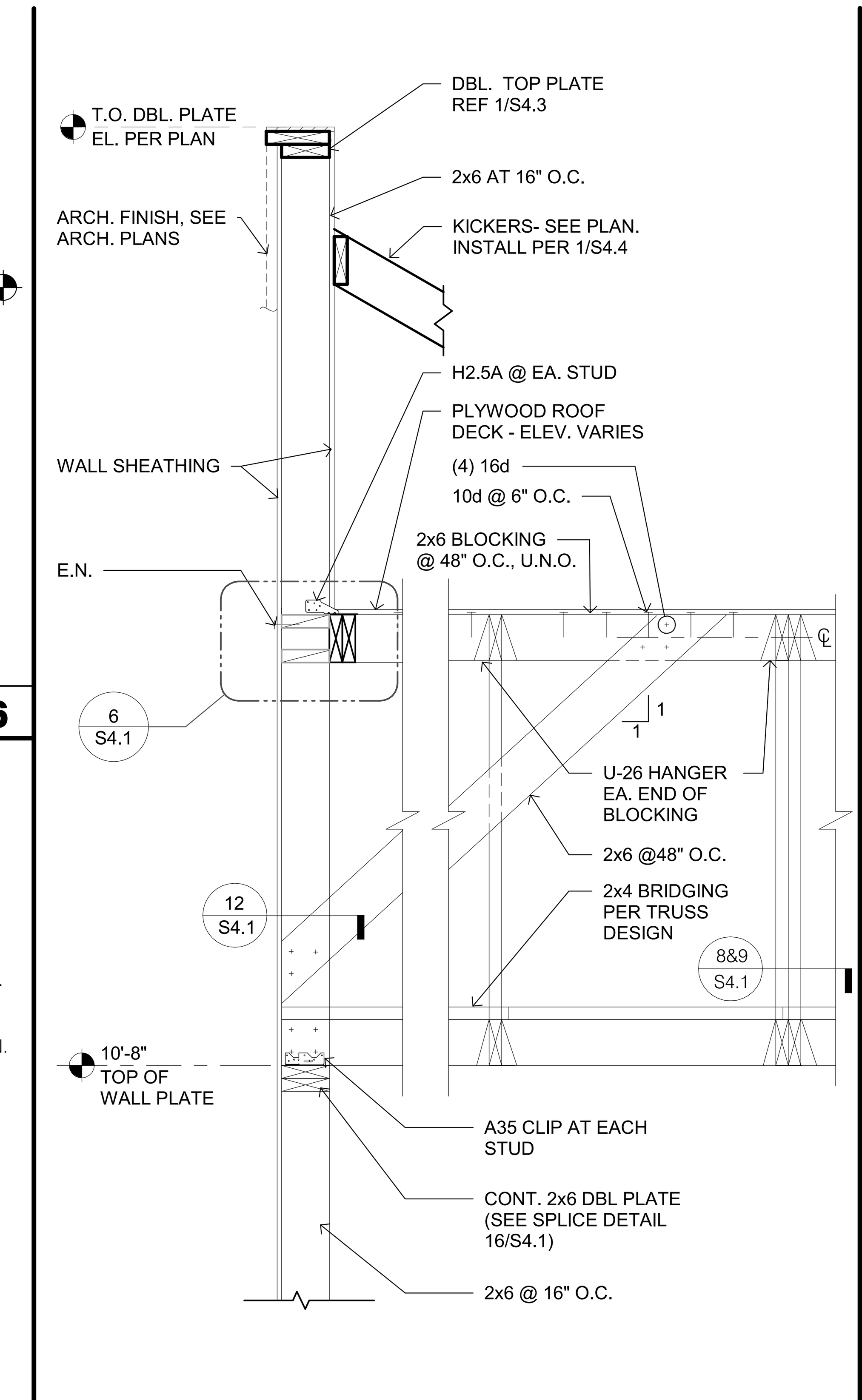
TYP. MULTIPLE HEADER 1-1/2" = 1'-0" **14**



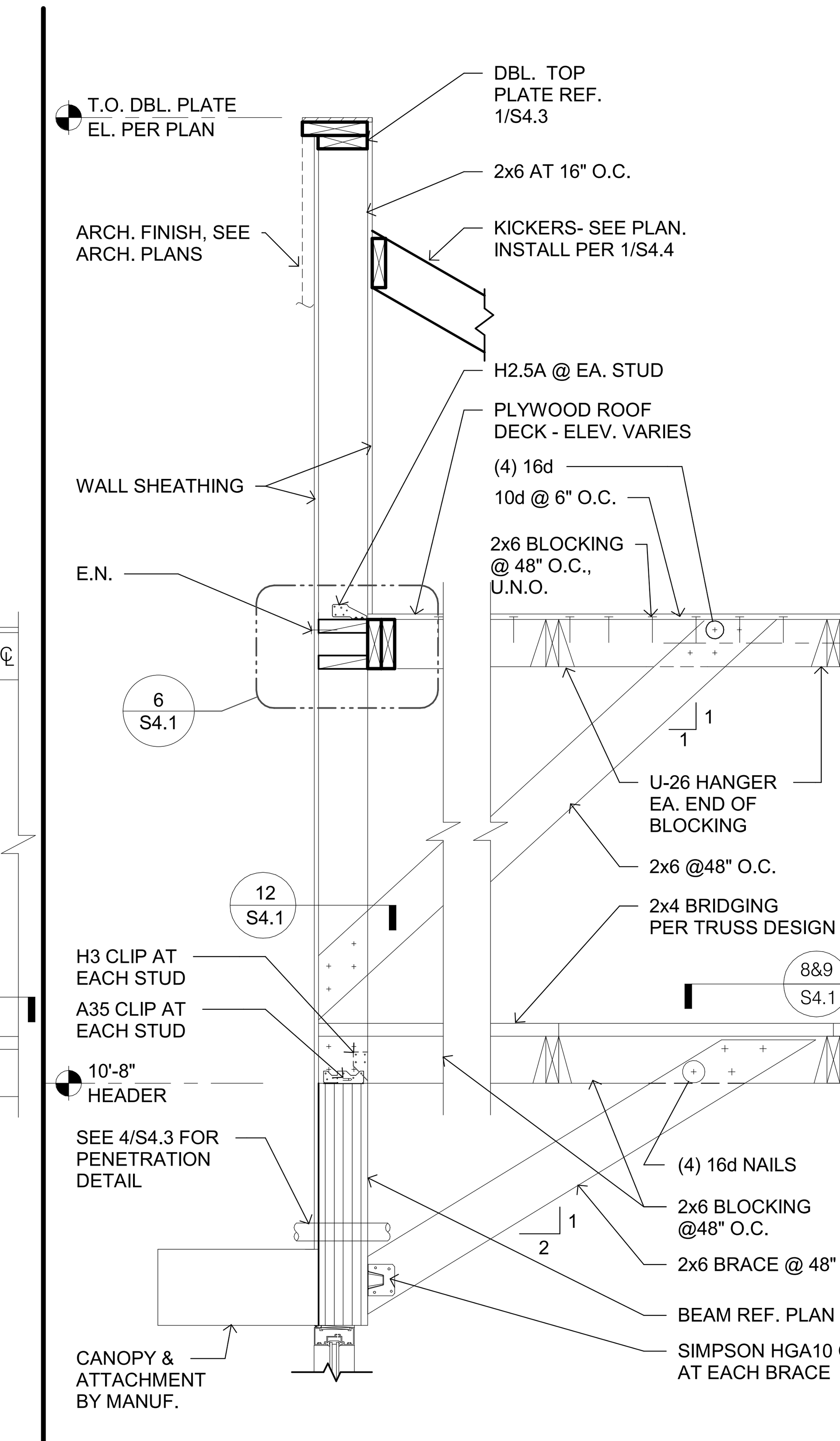
SUPPORT - PARALLEL TO TRUSS 1/2" = 1'-0" **10**



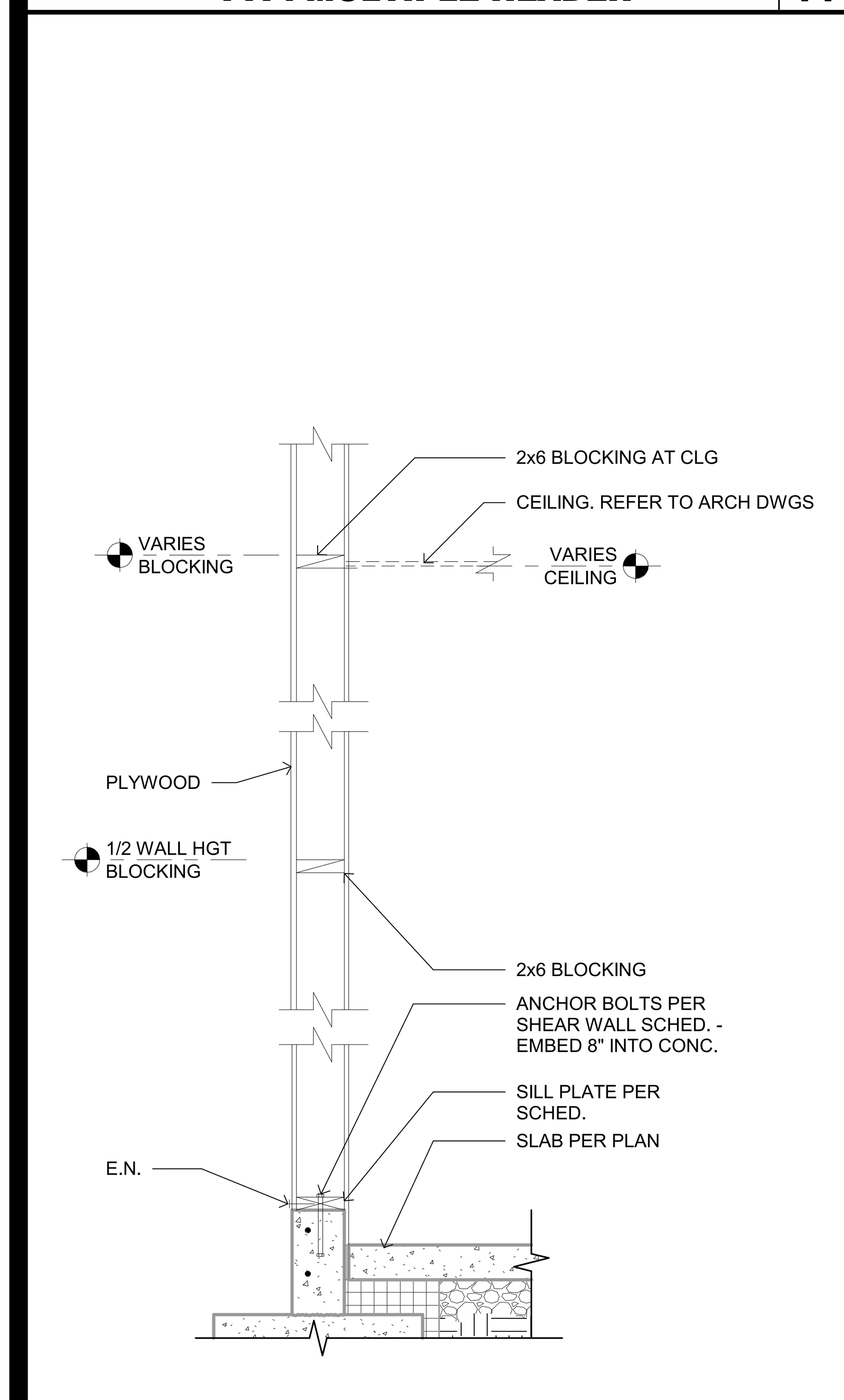
LEDGER DETAIL 3" = 1'-0" **6**



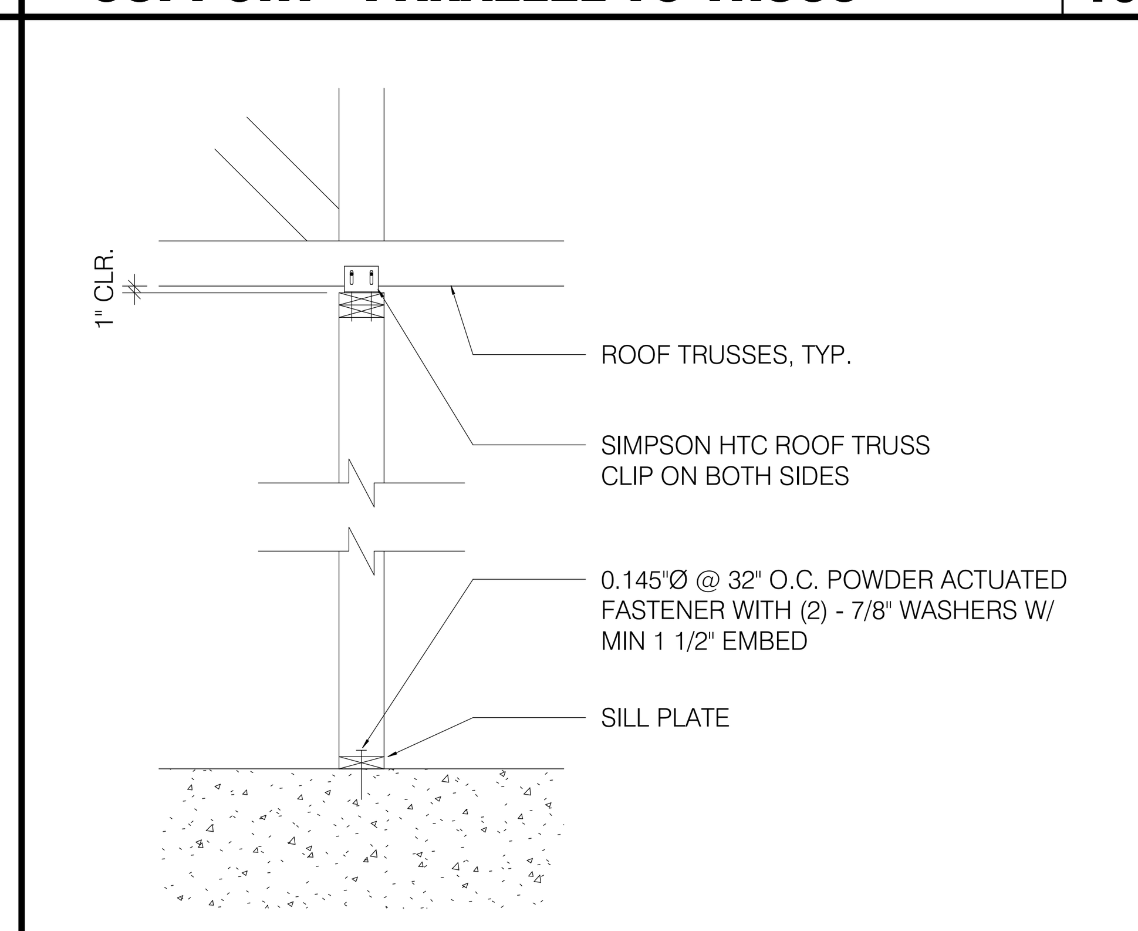
REAR WALL SECTION N.T.S. **4**



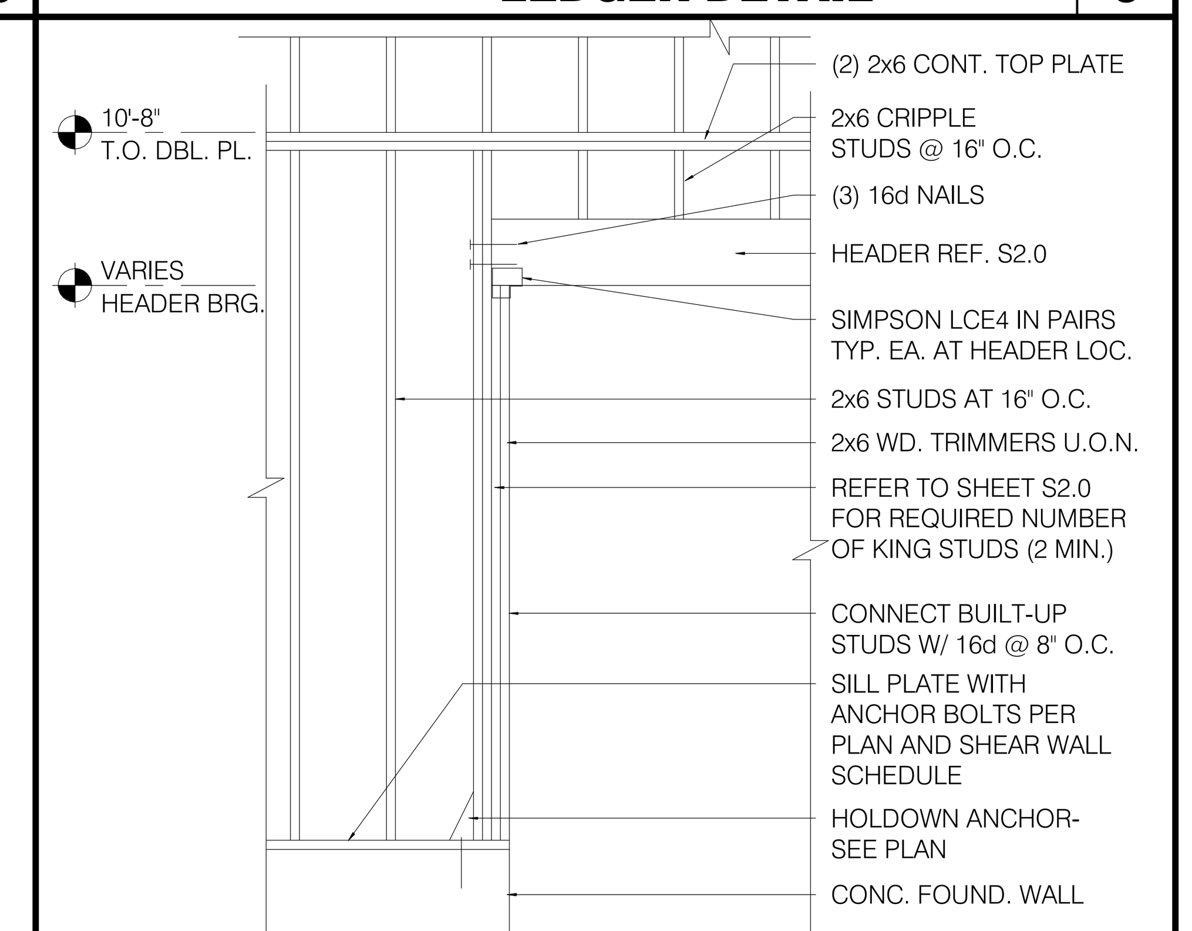
FRONT WALL SECTION N.T.S. **1**



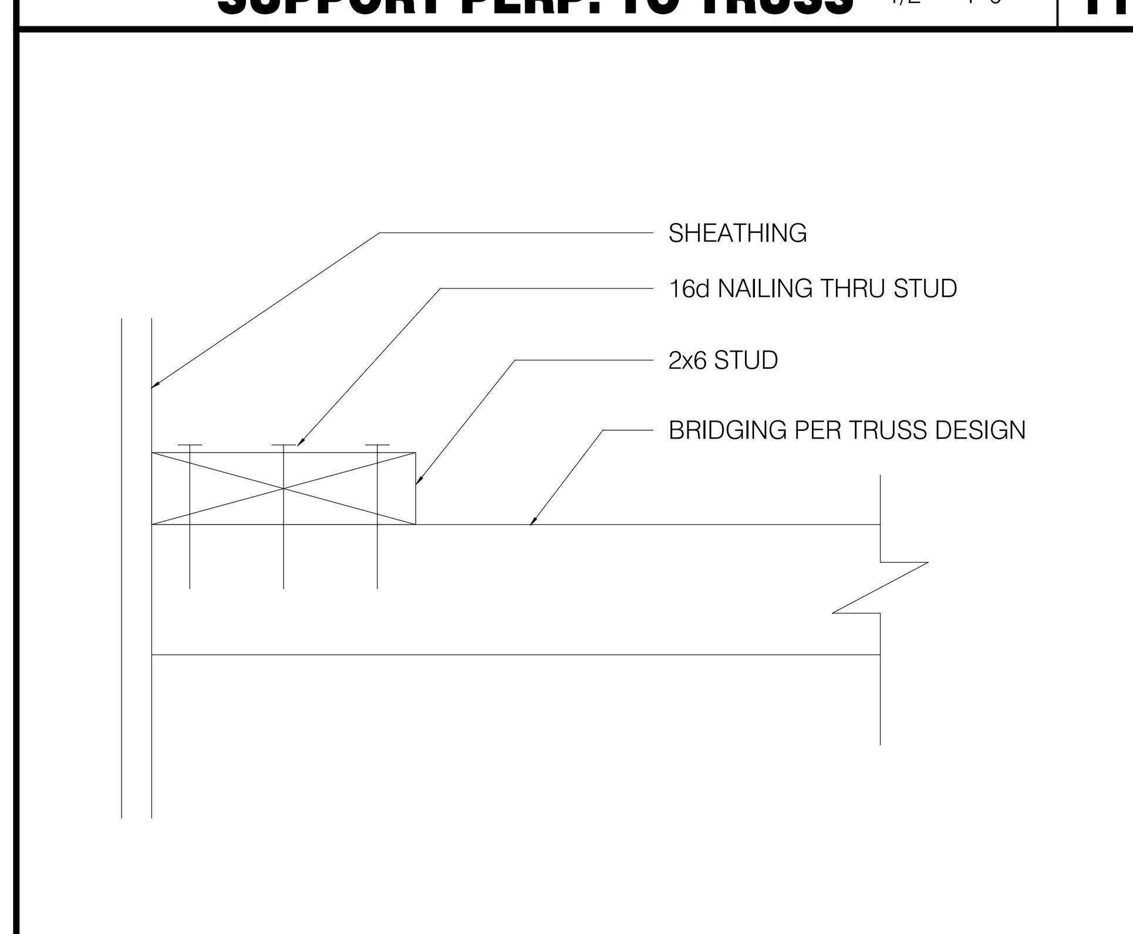
TYPICAL WALL BELOW TRUSS 3/4" = 1'-0" **15**



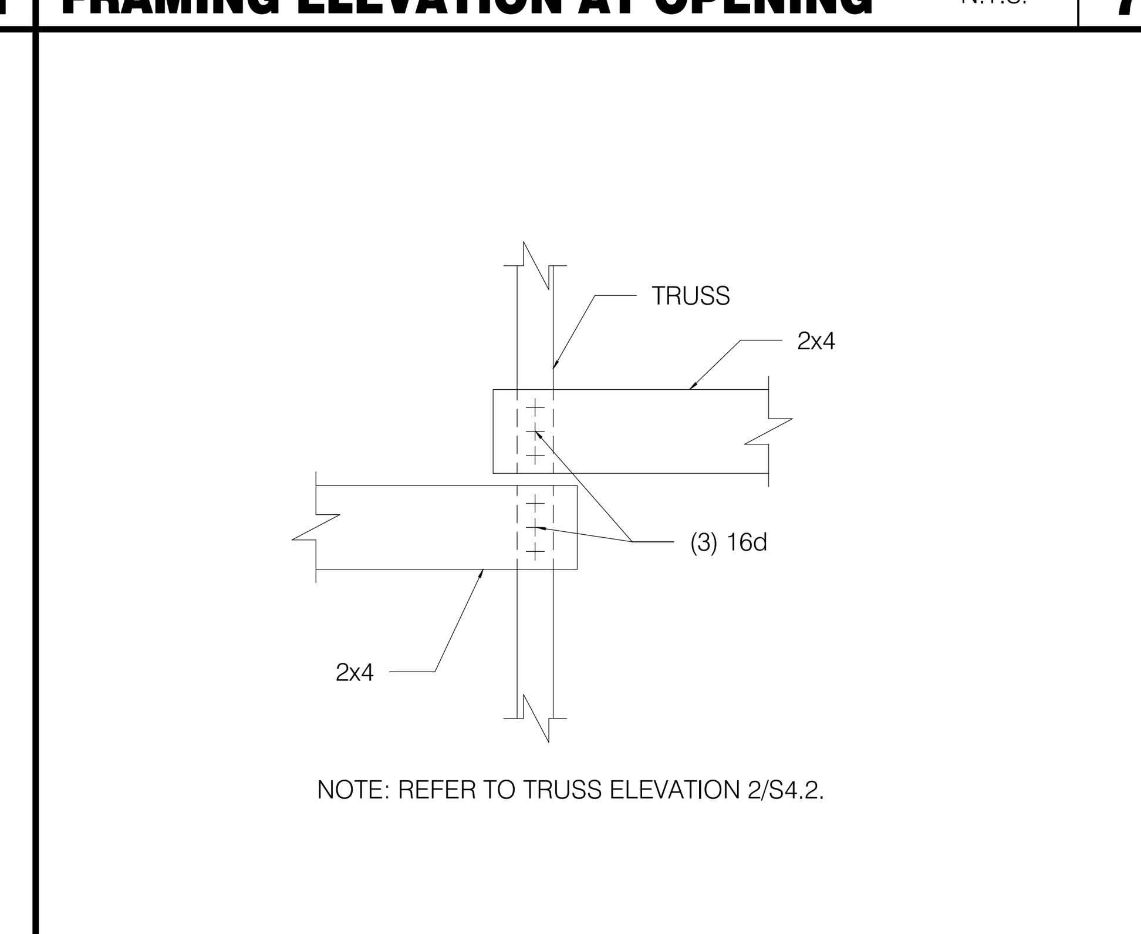
SUPPORT PERP. TO TRUSS 1/2" = 1'-0" **11**



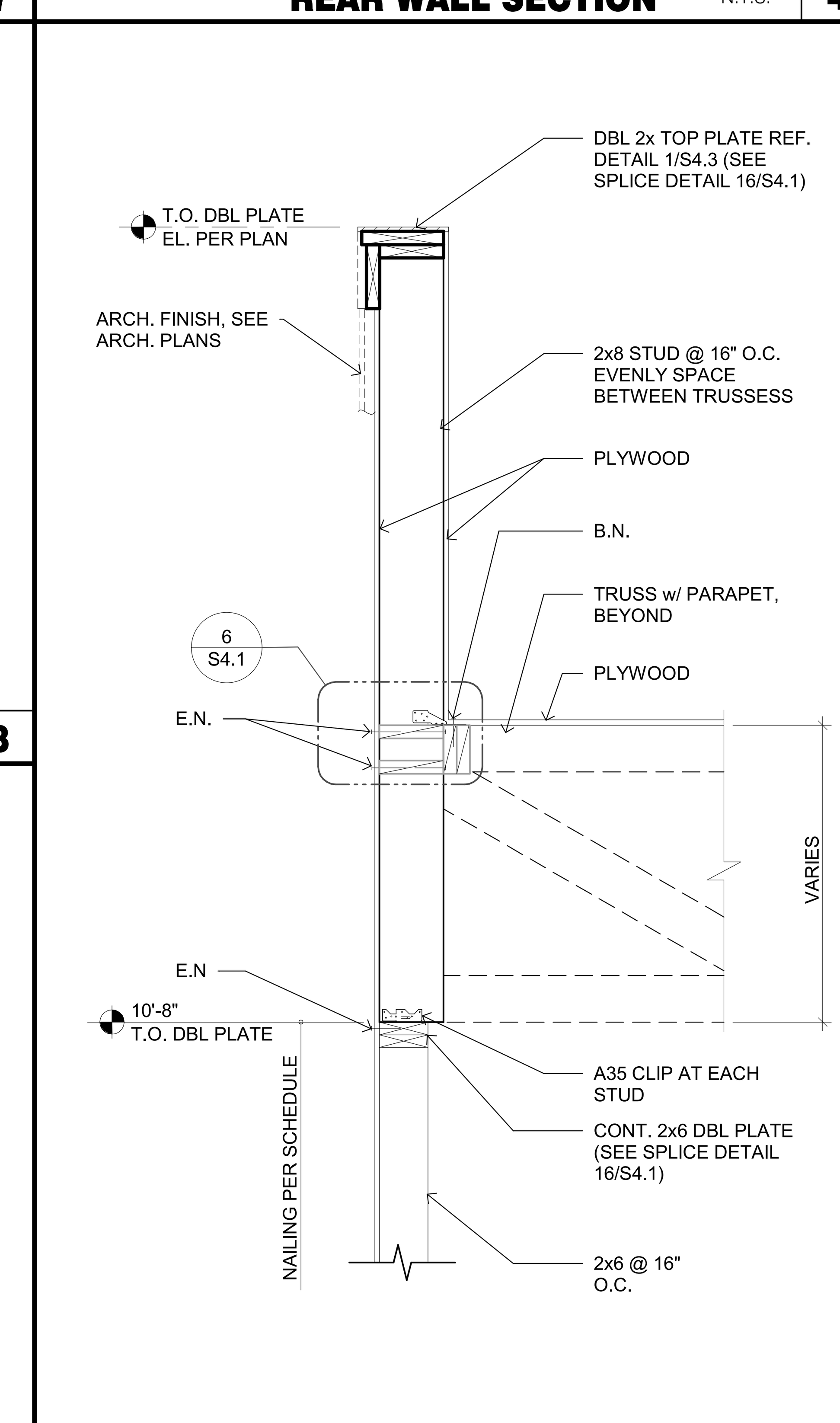
FRAMING ELEVATION AT OPENING N.T.S. **7**



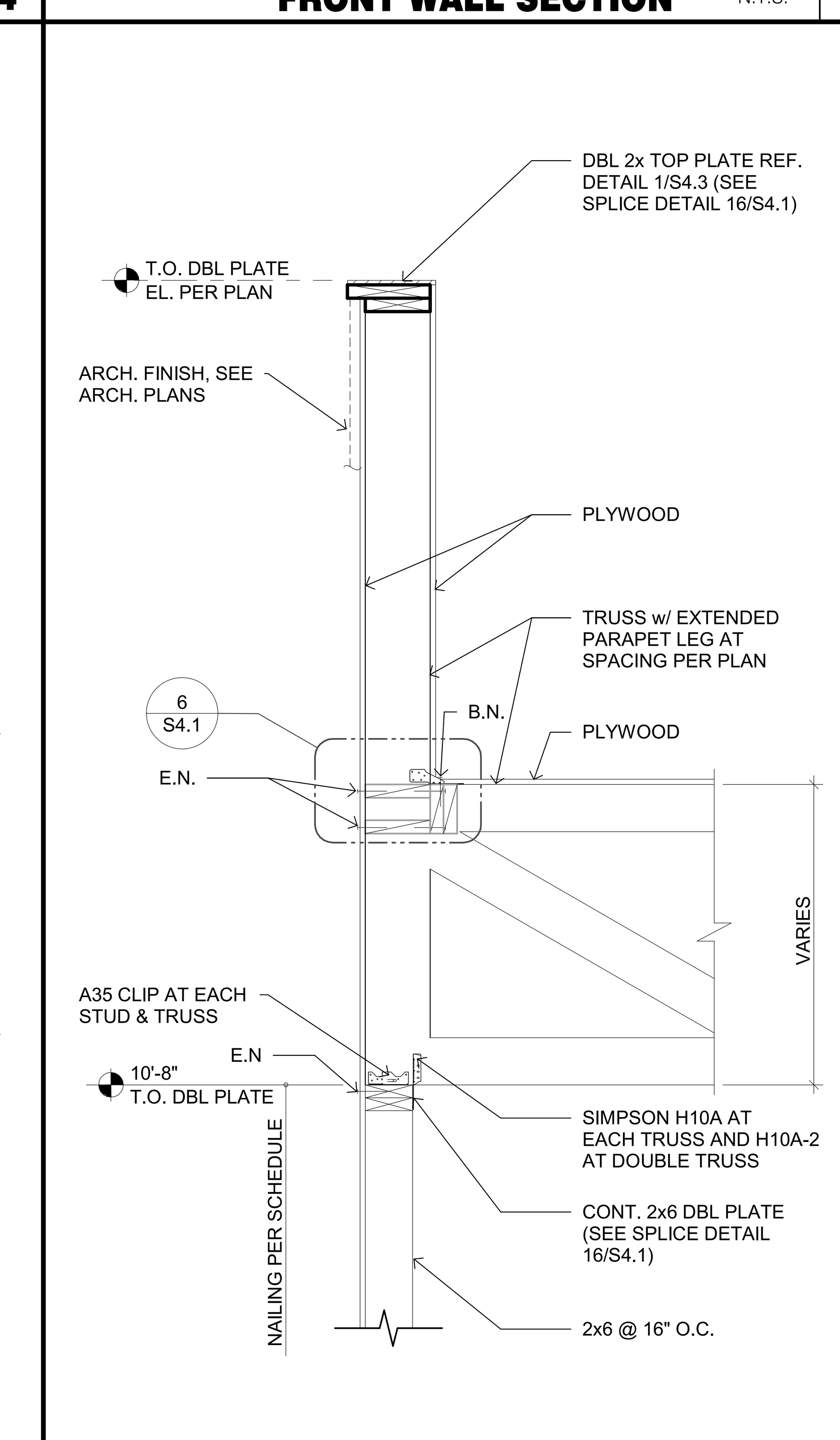
BRIDGING DETAIL 3" = 1'-0" **12**



BRIDGING LAP DETAIL 1/4" = 1'-0" **8**



SIDE WALL AT PARAPET STUD 3/4" = 1'-0" **5**



SIDE WALL AT TRUSS N.T.S. **2**

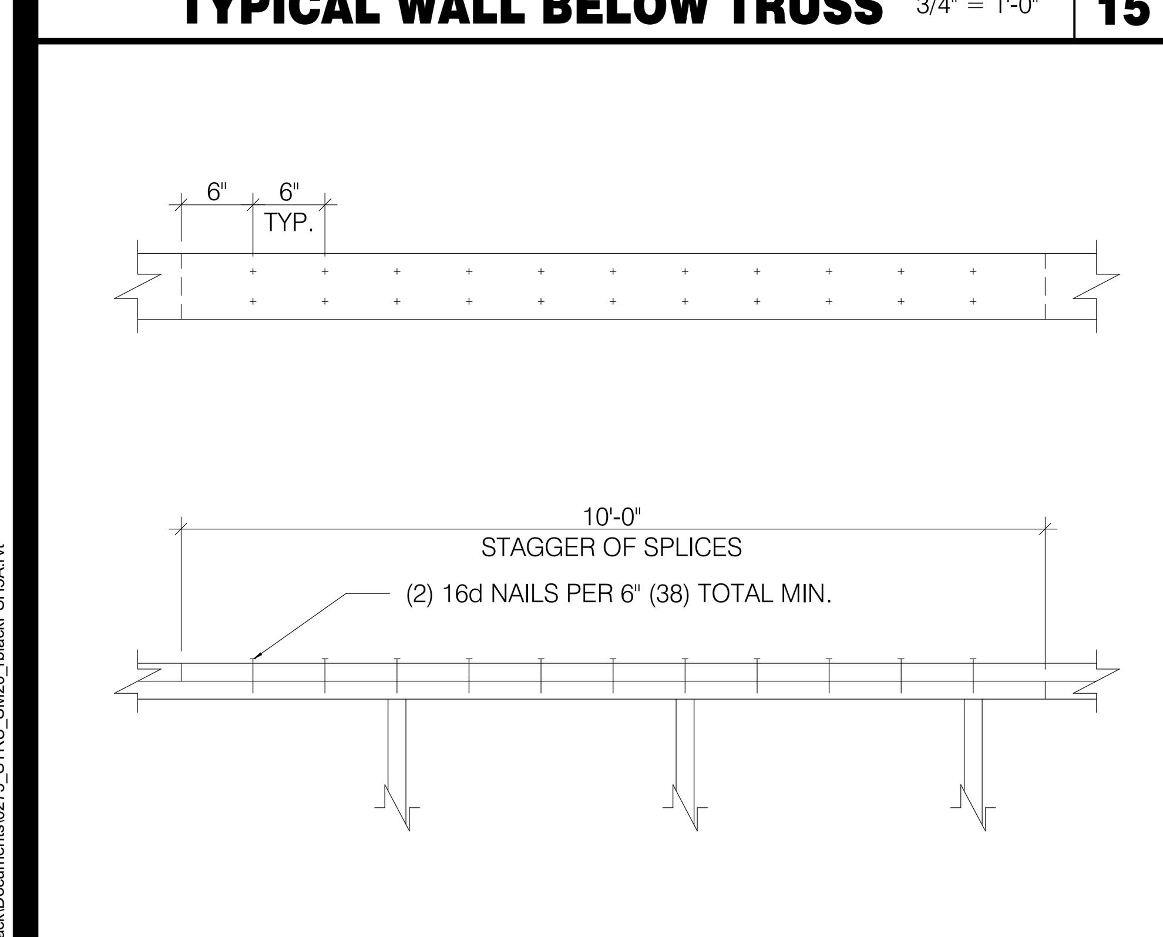
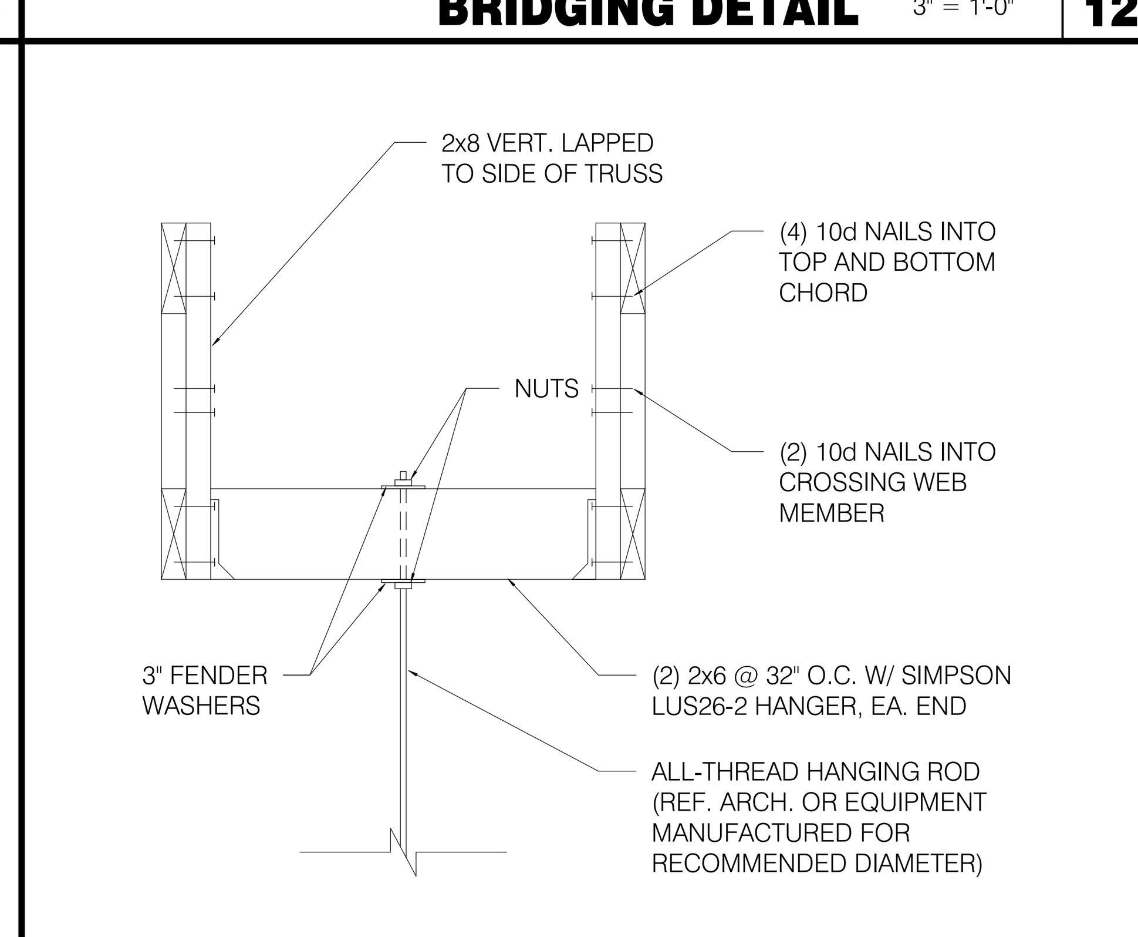
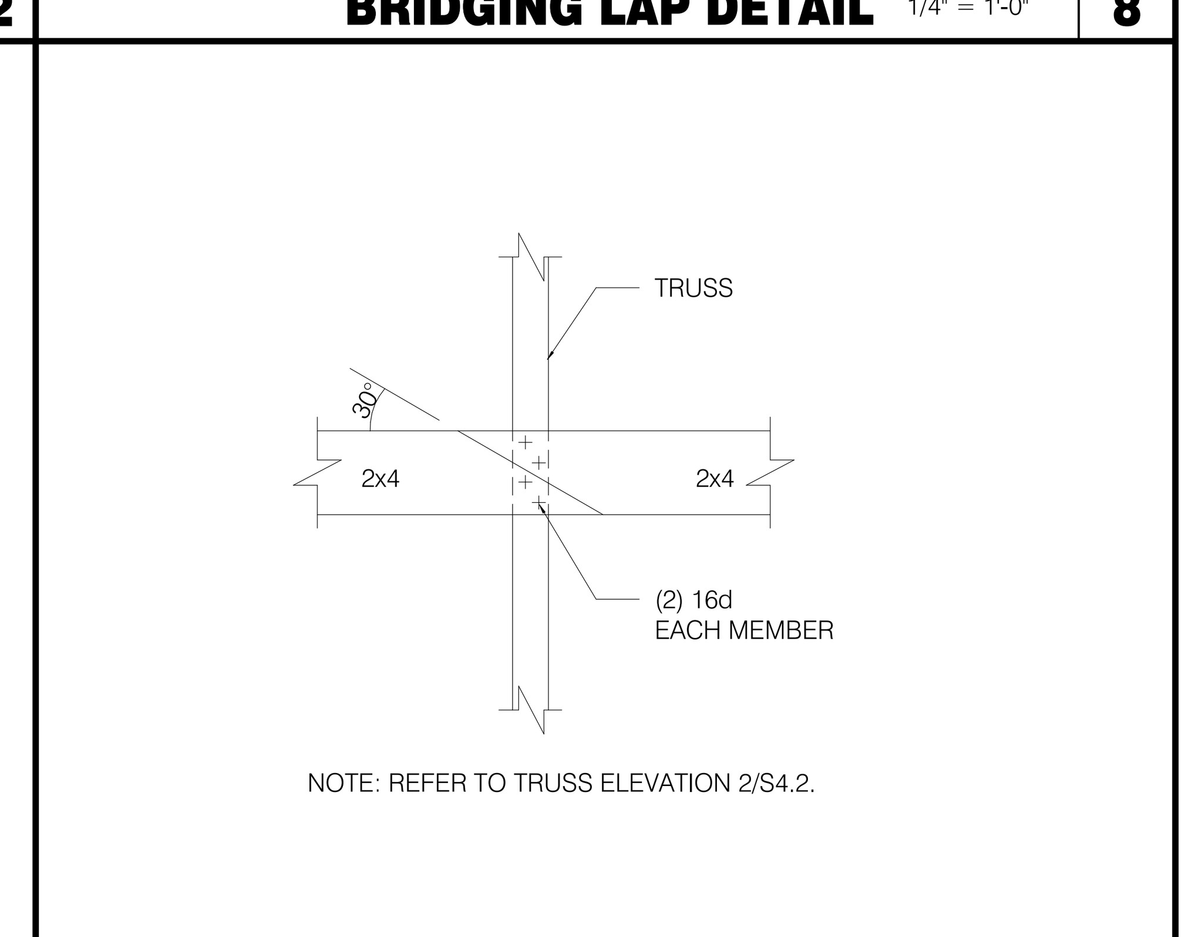


PLATE LAP DETAIL 1" = 1'-0" **16**



HANGING BULKHD. OR HOOD DETL. N.T.S. **13**



BRIDGING LAP DETAIL AT OPEN CLG. N.T.S. **9**

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BROWNSTOWN, MI 48183

ENDEAVOR 2.0
STRUCTURAL DETAILS

S4.1

PLOT DATE: 7/12/2021 11:01:52 AM

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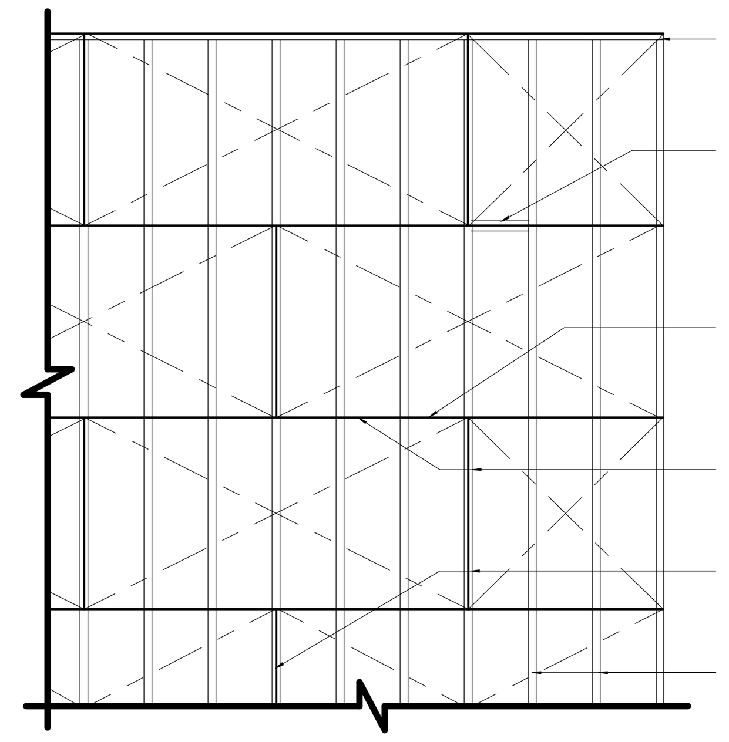
CONNECTION:	NAILING:
1. JOIST TO SILL OR GIRDER, TOENAIL	(3-10d)
2. BRIDGING TO JOIST, TOENAIL EACH END	(2-8d)
3. 1"x6" (25MMx152MM) SUBFLOOR OR LESS TO JOIST, FACE NAIL	(2-8d)
4. WIDER THAN 1" x 6" (25MMx152MM) SUBFLOOR TO JOIST, FACE NAIL	(3-8d)
5. 2" (52MM) SUBFLOOR TO GIRDER, BLIND AND FACE NAIL	(2-16d)
6. SOLE PLATE TO JOIST OR BLOCKING, TYPICAL FACE NAIL	(16d @ 16" O.C.)
7. SOLE PLATE TO JOIST OR BLOCKING, AT BRACED W. PANELS	(3-16d PER 16")
8. TOP PLATE TO STUD, END NAIL	(2-16d)
9. STUD TO SOLE PLATE	(2-16d END NAIL)
10. DOUBLE STUDS, FACE NAIL	(16d @ 16" O.C.)
11. DOUBLE TOP PLATES, TYPICAL FACE NAIL	(16d @ 16" O.C.)
12. DOUBLE TOP PLATES, LAP SPLICE	(8-16d)
13. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL	(3-8d)
14. RIM JOIST TO TOP PLATE, TOENAIL	(8d @ 6" O.C.)
15. TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	(2-16D)
16. CONTINUOUS HEADER, TWO PIECES	(16d @ 16" O.C. ALONG EDGE)
17. CEILING JOISTS TO PLATE, TOENAIL	(3-8d)
18. CONTINUOUS HEADER TO STUD, TOENAIL	(4-8d)
19. CEILING JOISTS, LAP OVER PARTITIONS, FACE NAIL	(3-16d)
20. CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	(3-16d)
21. RAFTER TO PLATE, TOENAIL	(3-8d)
22. 1" (25MM) BRACE TO EACH STUD AND PLATE, FACE NAIL	(2-8d)
23. 1"x8" SHEATHING OR LESS TO EACH BEARING, FACE NAIL	(2-8d)
24. WIDER THAN 1"x8" SHEATHING TO EACH BEARING, FACE NAIL	(3-8d)
25. BUILT-UP CORNER STUDS	(16d @ 24" O.C.)
26. 2" PLANKS	(2-16D AT EACH SPACE)
27. 2x6 BOX BEAM / HEADER	(12d @ 12" O.C.)
28. BUILT-UP GIRDER AND BEAMS	(20d @ 32" O.C. AT TOP & BOTTOM AND STAGGERED 2-20d AT ENDS & AT EACH SPACE)

NAILING SCHEDULE N.T.S. 11



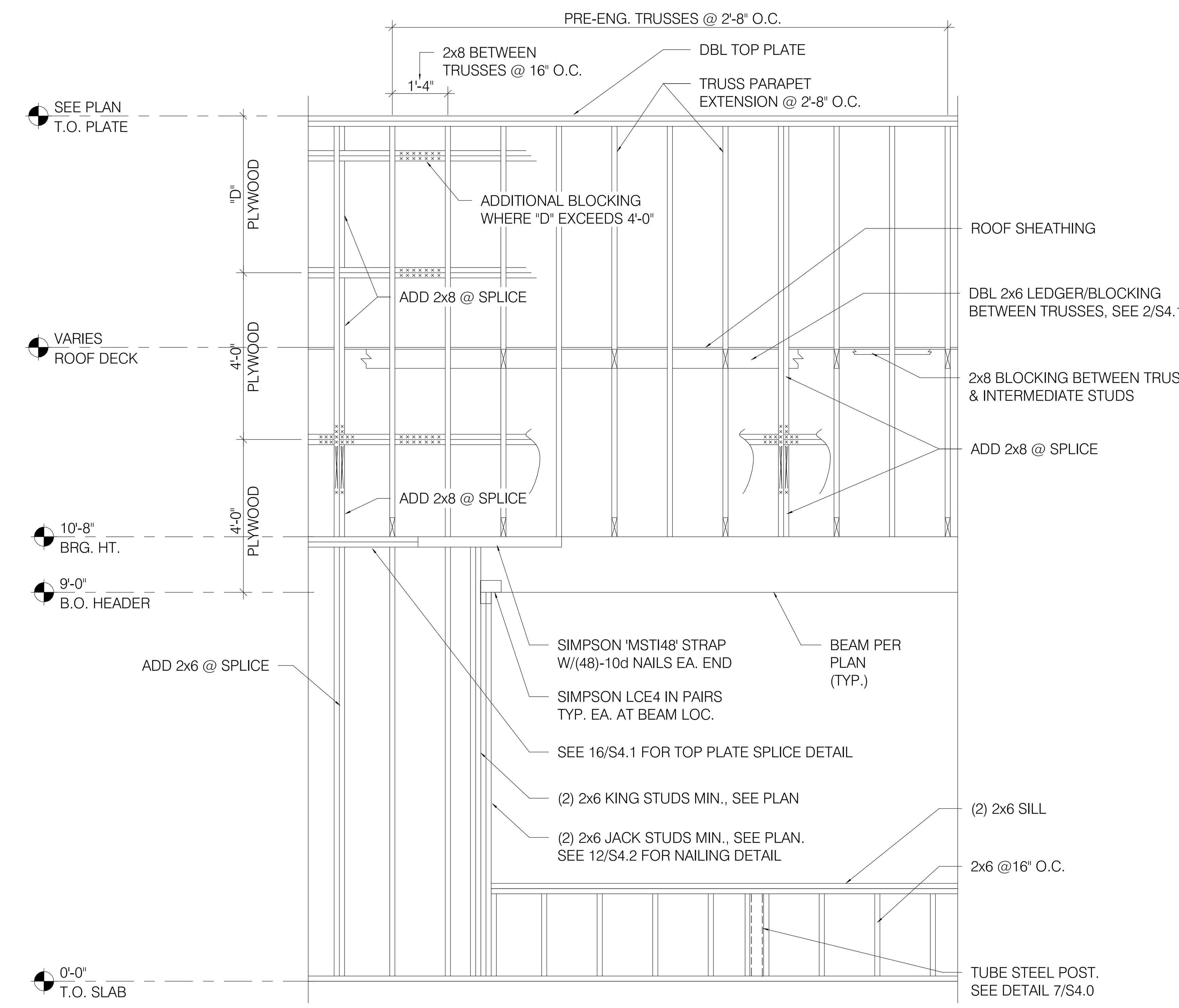
NOTES:
1. MIN. PLYWD. SHT. SIZE SHALL BE 2'-0" X 4'-0".
2. MIN. 3/8" NAILING EDGE DISTANCE.
3. EDGE NAIL (E.N.) O/ BEAMS AND AROUND ALL OPENINGS.

ROOF NAILING PLAN N.T.S. 8

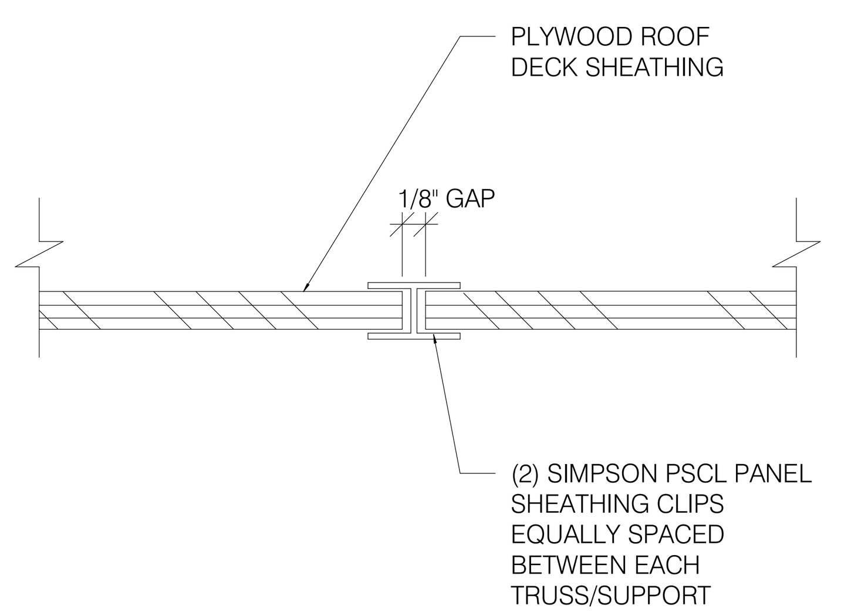
EQUIPMENT		DESIGN WEIGHT
HVAC UNIT - RTU-1	*	SEE PLAN
HVAC UNIT - RTU-2	*	SEE PLAN
EXHAUST FAN - EF-1	*	200 lbs.
EXHAUST FAN - EF-2	*	70 lbs.
HOOD #1 - TACO BELL		400 lbs.
ICE CONDENSERS		200 lbs.
FREEZER CONDENSER		300 lbs.
COOLER CONDENSER		300 lbs.

* A. ALL DESIGN WEIGHTS INCLUDE CURB.
B. COORDINATE WEIGHTS WITH HVAC UNIT SCHEDULE 1/M1.0.

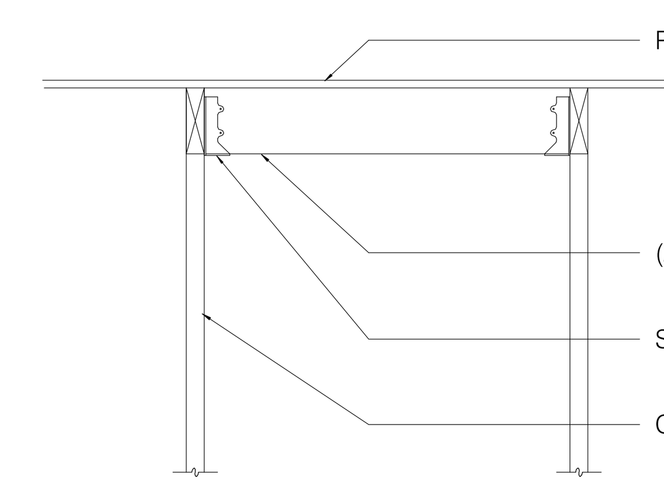
ROOF TOP EQUIPMENT WEIGHTS 1" = 1'-0" 5



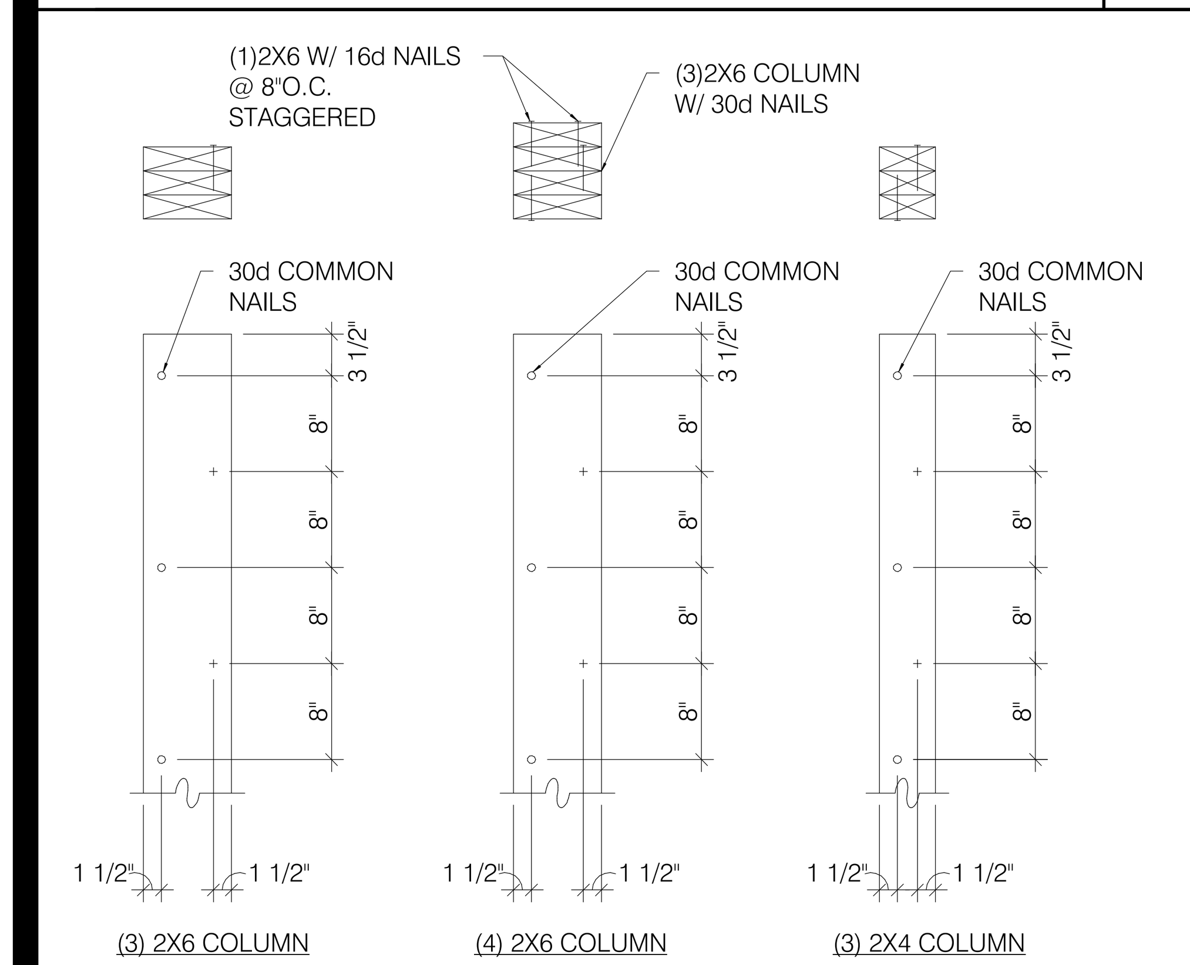
WALL FRAMING DETAIL 1" = 1'-0" 1



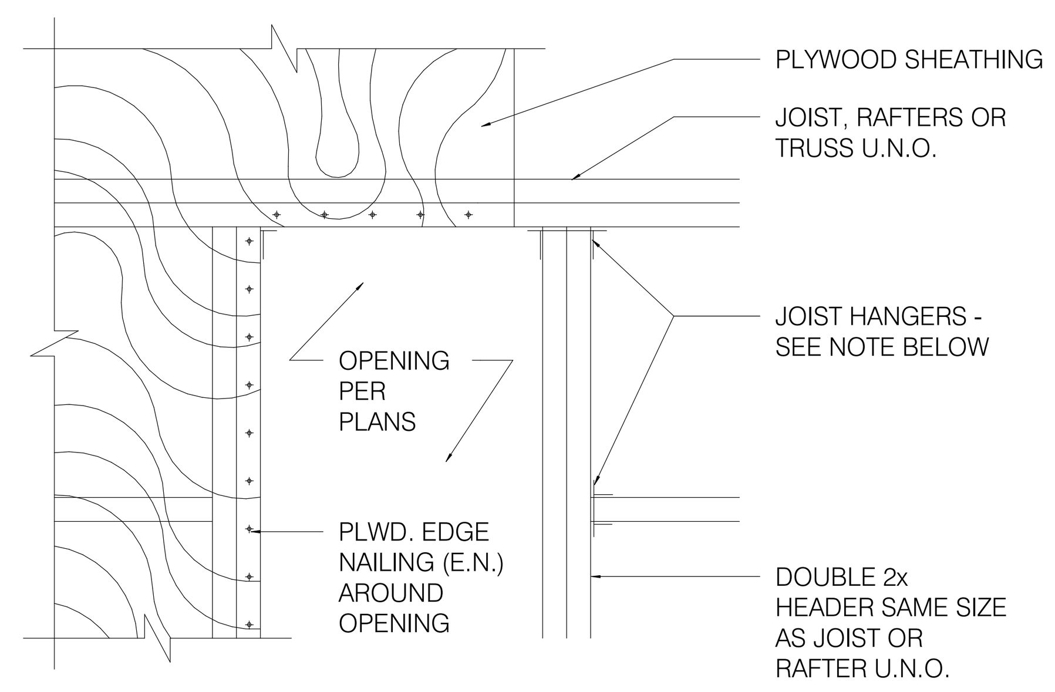
PLYWOOD EDGE BLOCKING 1" = 1'-0" 9



ROOF OPENING DETAIL 1" = 1'-0" 6



BUILT-UP 2X COLUMNS 1" = 1'-0" 12



NOTE:
HANGERS SHALL BE "SIMPSON" STANDARD "U" AT ROOF. DBL. JOIST OR RAFTERS SHALL BE JOINED TOGETHER AS FOLLOWS:
1. 10" OR LESS NOM. DEPTH - 16d @ 12" O.C. STAGGERED
2. MORE THAN 10" - (2)16d @ 12" O.C.

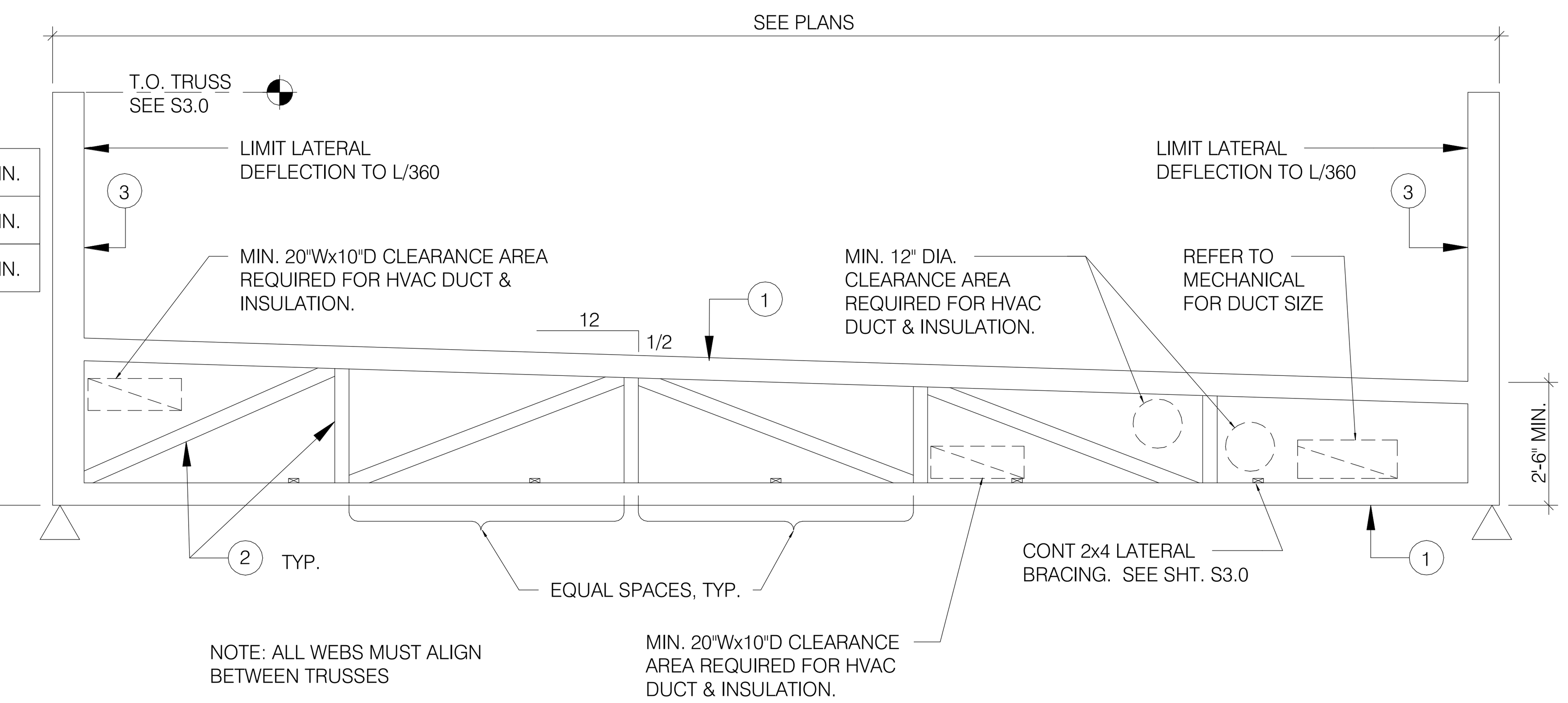
TYPICAL ROOF OPENING 1" = 1'-0" 10

TRUSS TYPES	SINGLE TRUSS DESIGNATION	DOUBLE TRUSS DESIGNATION	BEARING POINT	COMMENTS
T1 - T23	X	XX	△	SEE NOTE 1.

NOTES:
1. HOLDOWN CONNECTORS SHALL BE SPECIFIED BY SITE SPECIFIC ARCHITECT/ ENGINEER BASED UPON LOADING DATA PROVIDED BY TRUSS DESIGNER.
2. PROVIDE SHOP DRAWINGS PRIOR TO FABRICATION.
3. TRUSS MEMBER SIZES ARE FOR REFERENCE ONLY. ACTUAL SIZE SHALL BE DETERMINED BY TRUSS MANUFACTURER BASED ON ACTUAL LOAD CONDITIONS AND CODES.

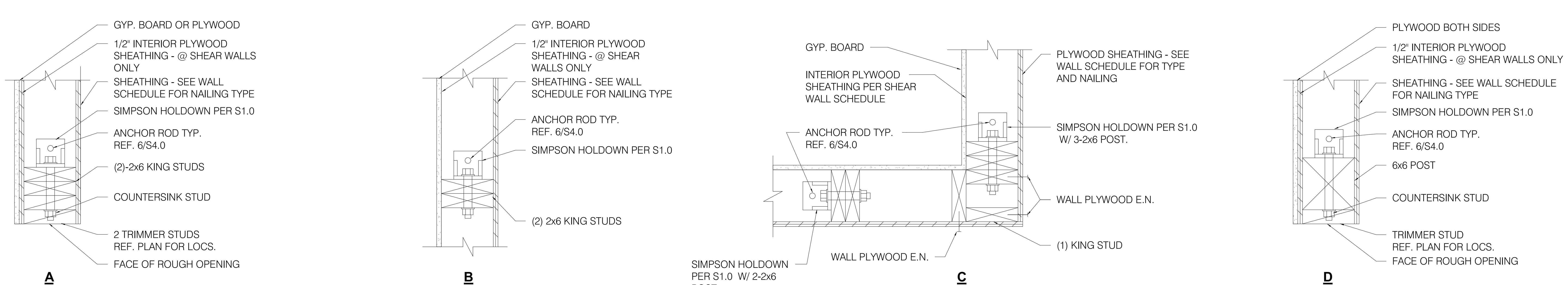
TRUSS SCHEDULE 1" = 1'-0" 7

1	2x6 MIN.
2	2x4 MIN.
3	2x8 MIN.



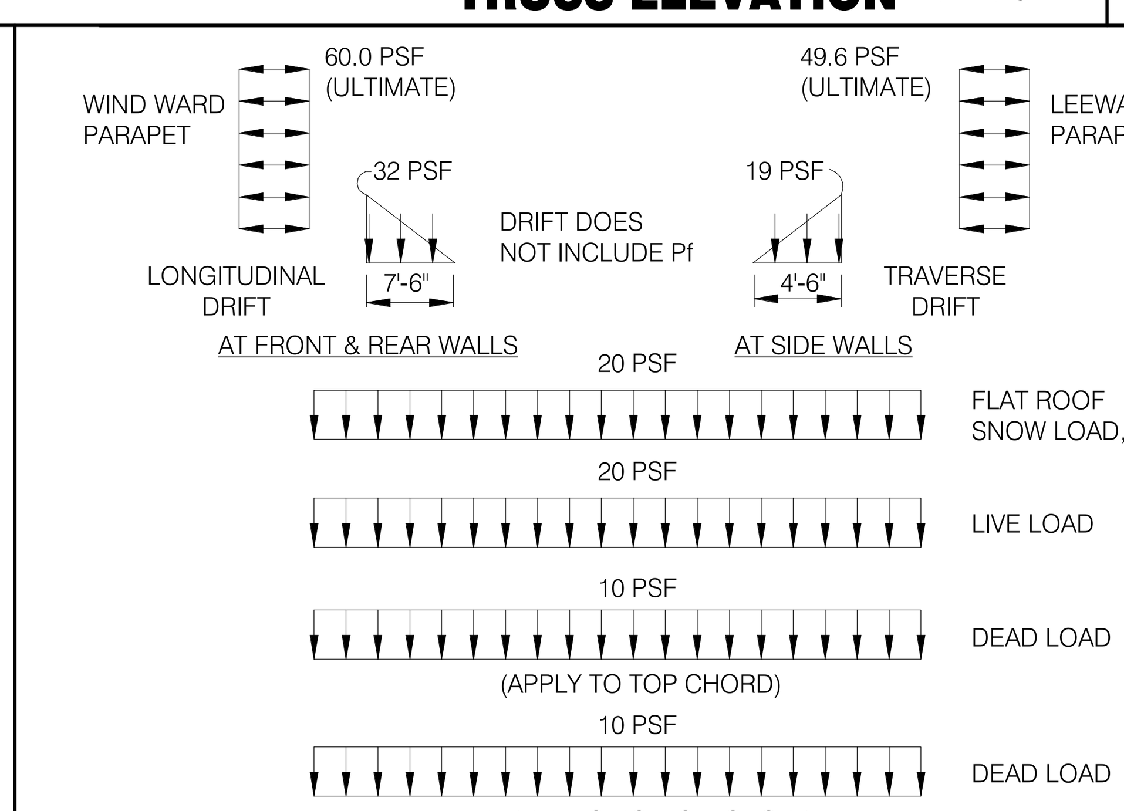
NOTE: ALL WEBS MUST ALIGN BETWEEN TRUSSES

TRUSS ELEVATION 1" = 1'-0" 2



NOTE:
SEE PLAN FOR OREINTATION. TYPICAL FOR DETAILS A - D.

HOLDOWN DETAILS 1" = 1'-0" 4



NOTE:
APPLY ROOF TOP AND SUSPENDED POINT LOADS. WEIGHT AND LOCATION OF UNITS AS SHOWN ON THIS SHEET ARE NOT INCLUDED IN THE ABOVE LOADING DIAGRAM. VERIFY THESE LOADS WITH MECHANICAL SUPPLIER BEFORE DESIGNING TRUSS.

TRUSS LOAD DIAGRAMS 1" = 1'-0" 3

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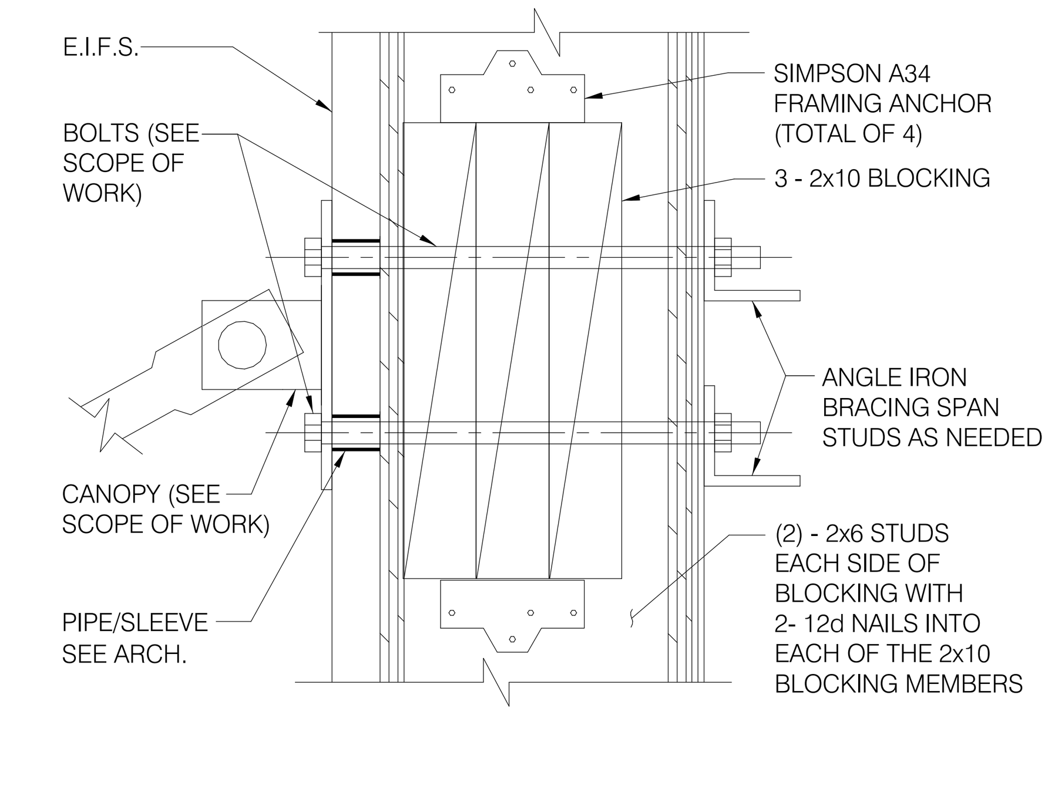
GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
STRUCTURAL DETAILS

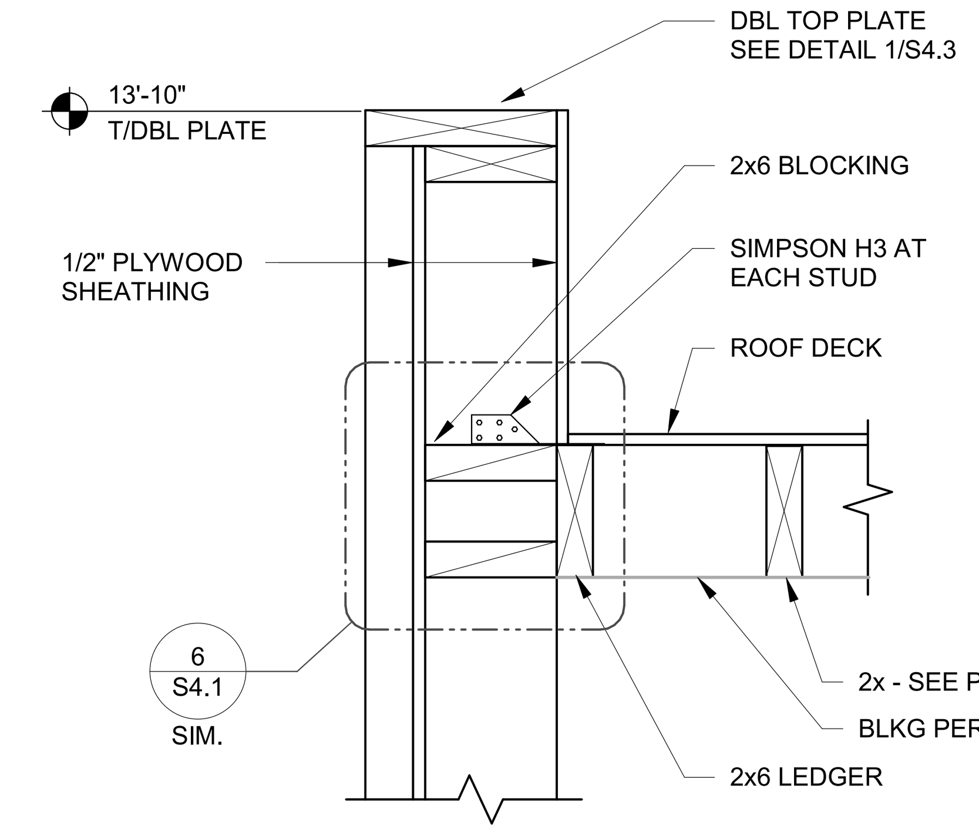
S4.2

PLOT DATE: 7/12/2021 11:01:52 AM

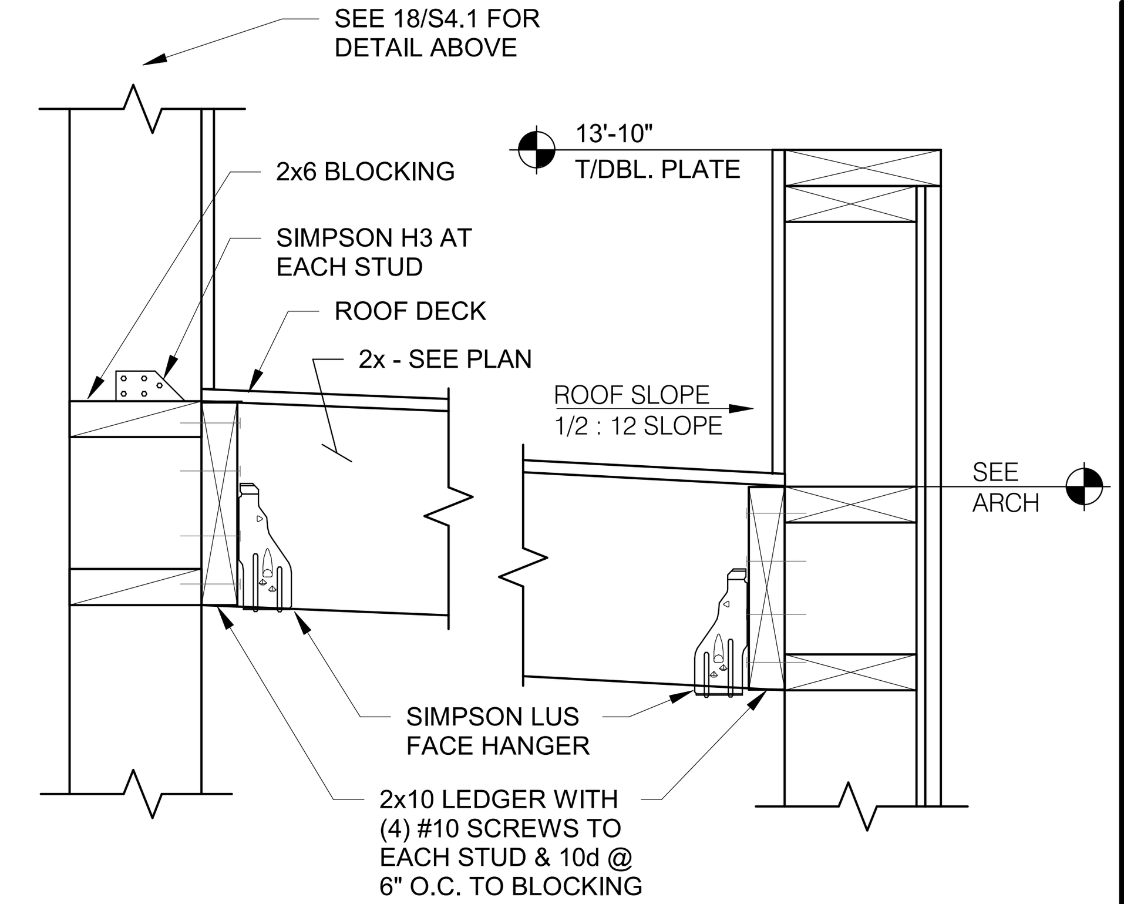
CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT



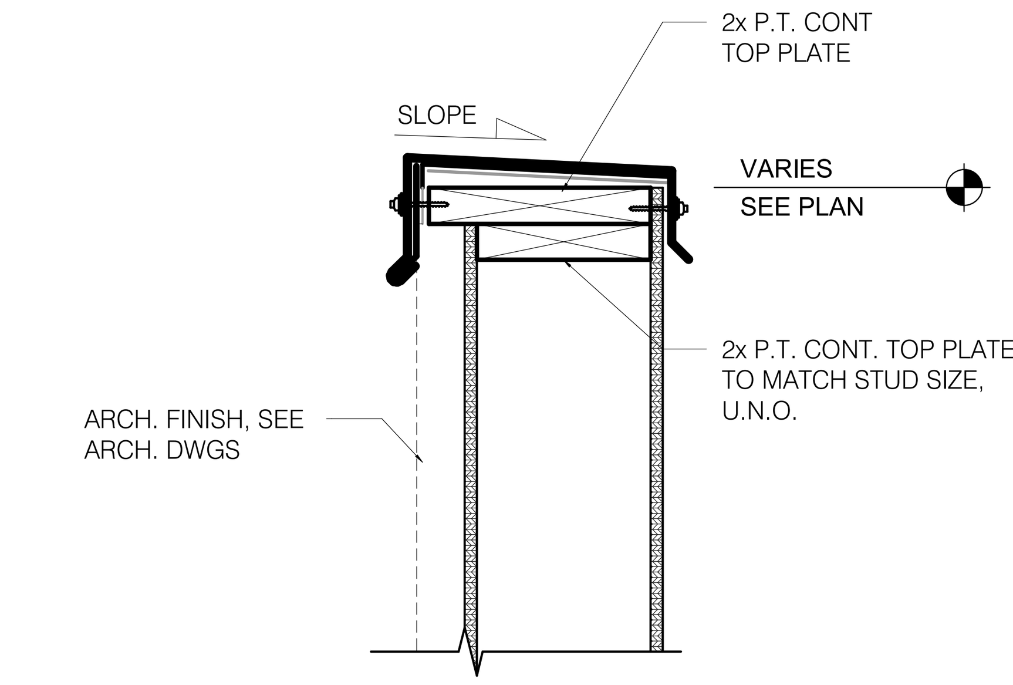
TIE-ROD BLOCKING 3" = 1'-0" 13



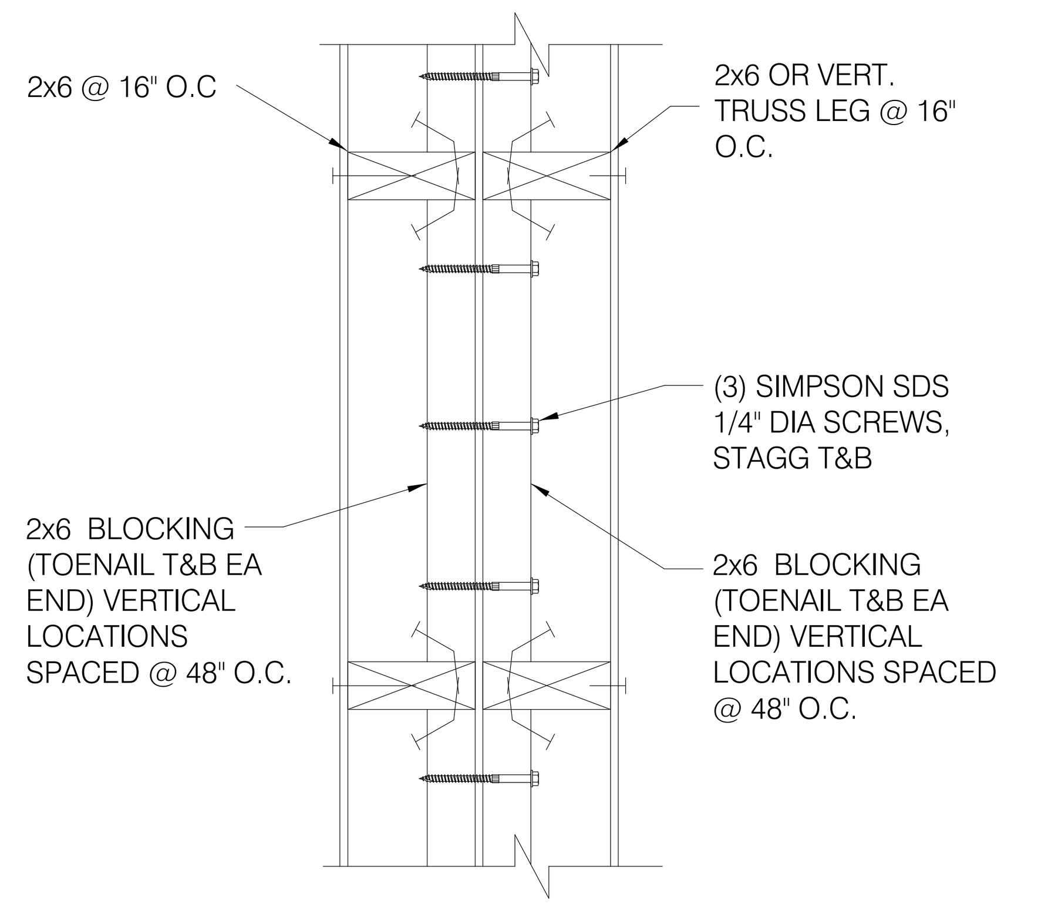
SECTION AT COOLER SIDES 1 1/2" = 1'-0" 9



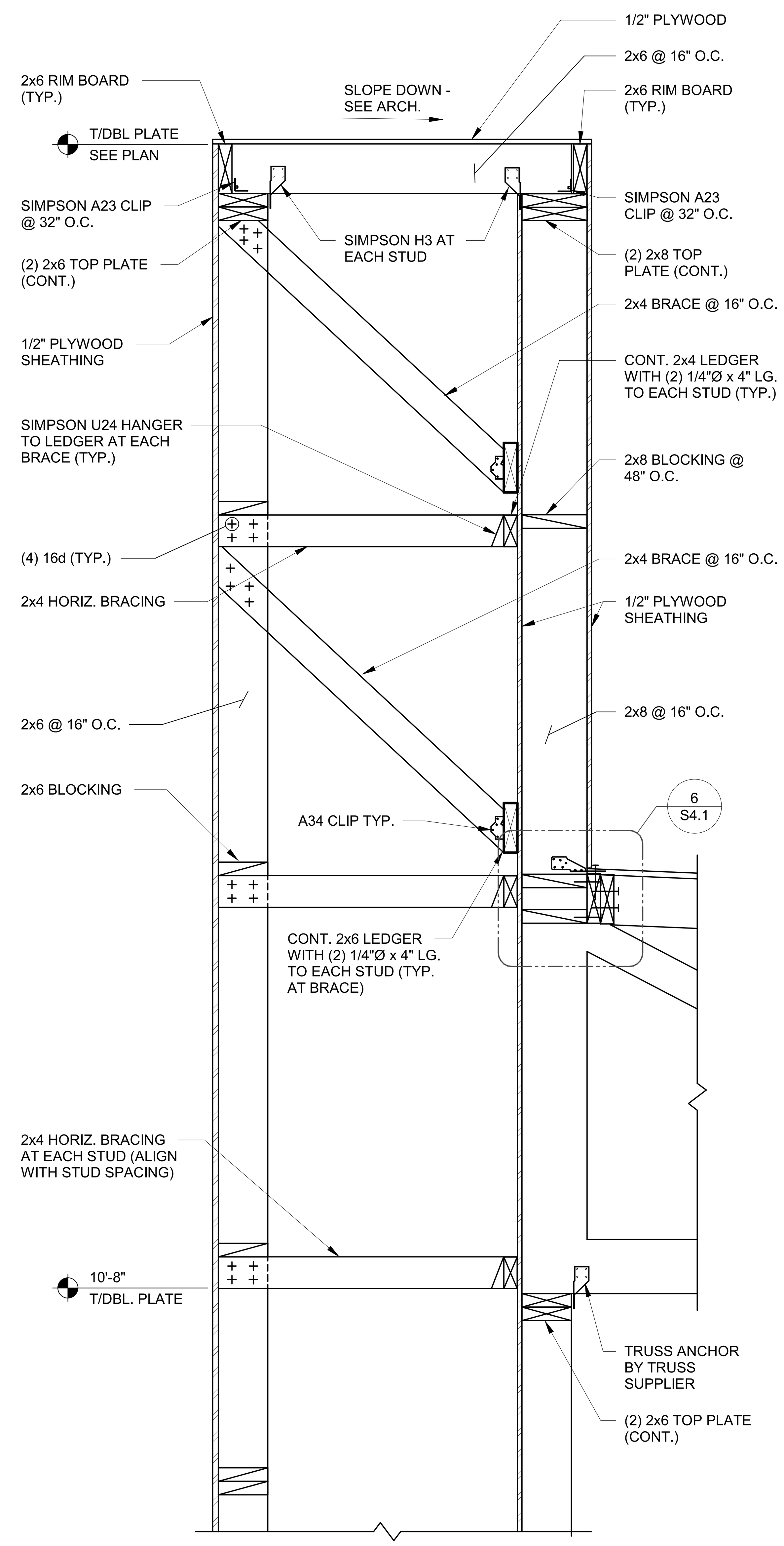
SECTION AT COOLER REAR 1 1/2" = 1'-0" 5



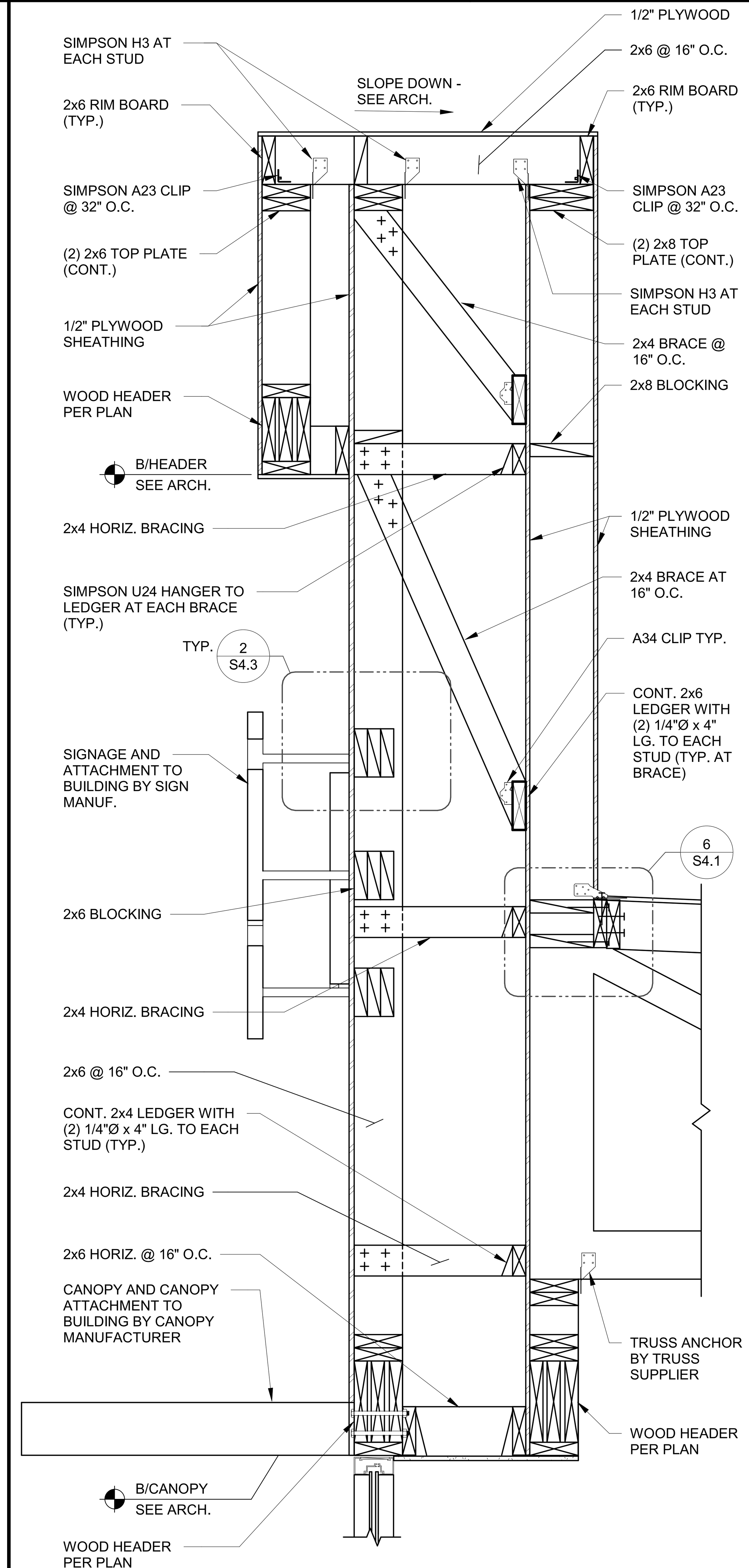
TYPICAL PARAPET CAP 1 1/2" = 1'-0" 1



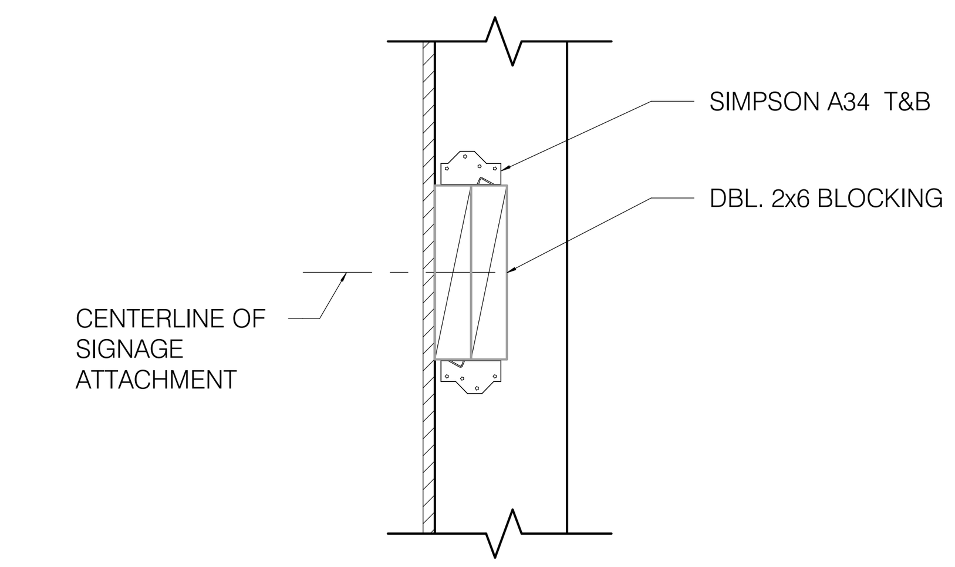
WALL DETAIL (PLAN VIEW) 14



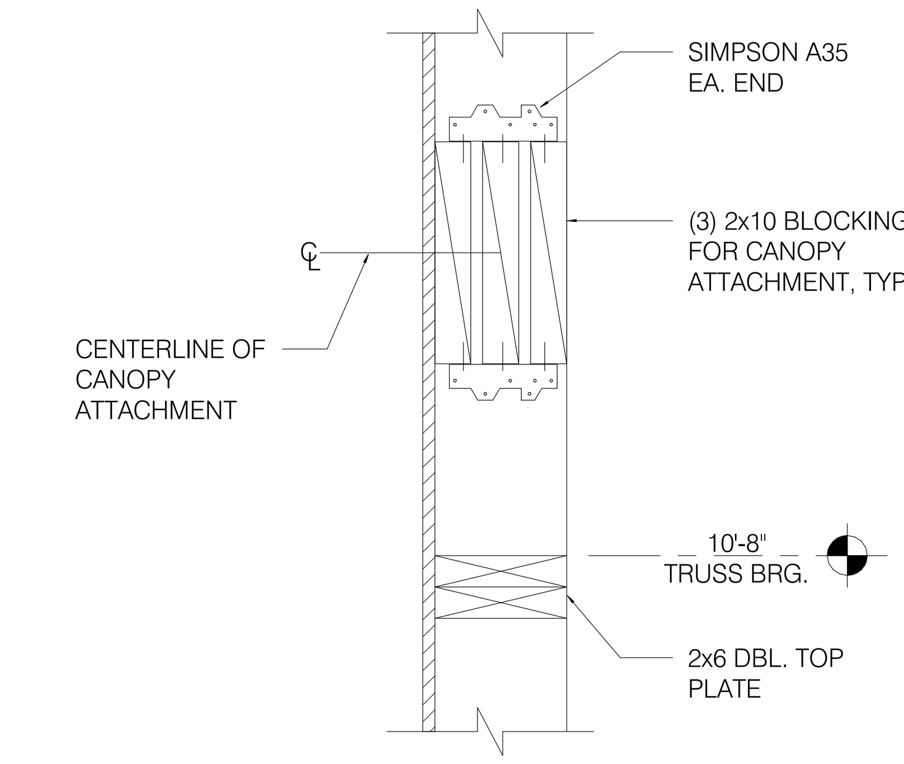
SECTION AT SIDE TOWER 1" = 1'-0" 12



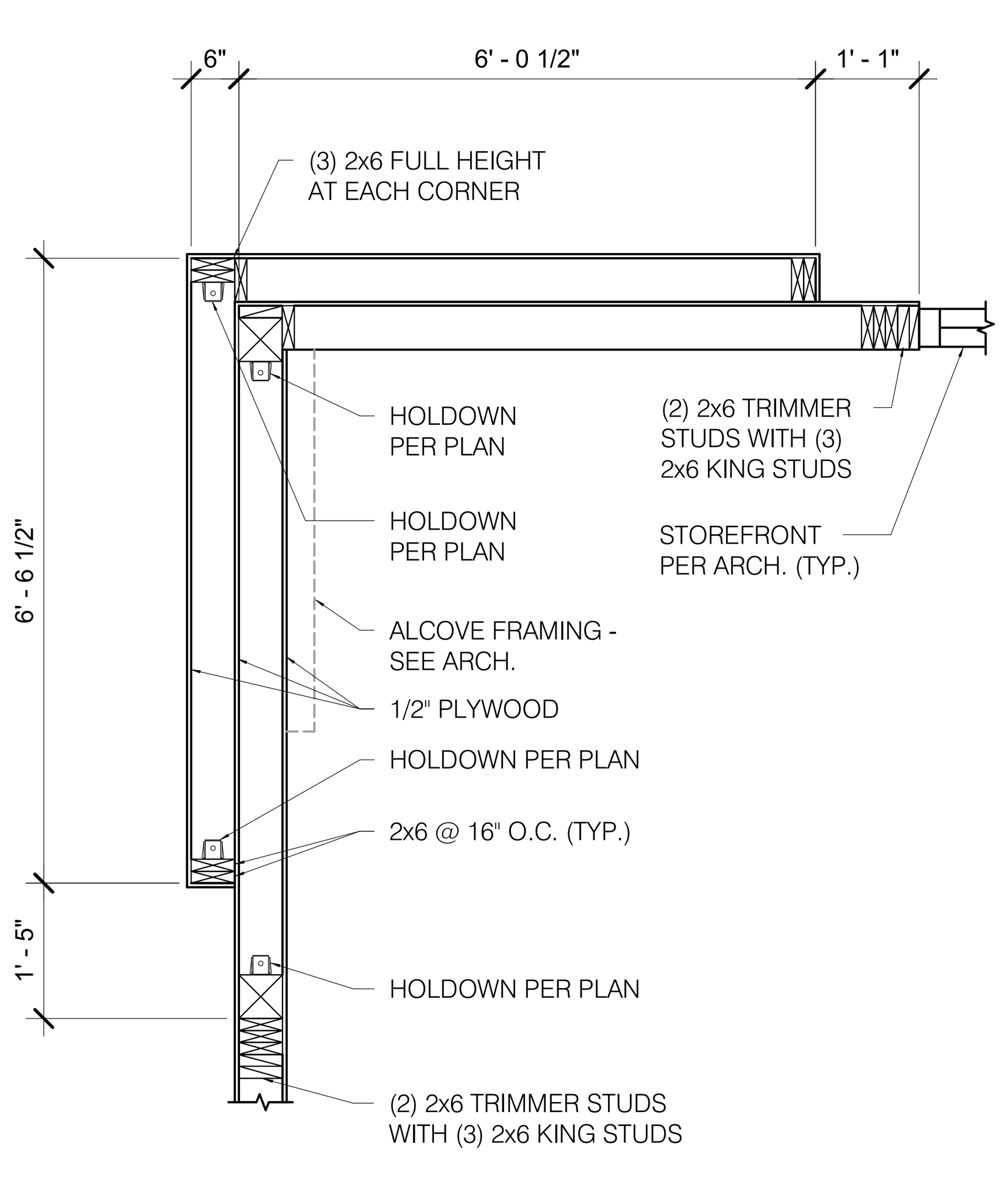
SIDE ENTRY TOWER FRAMING 1" = 1'-0" 6



SIGNAGE & TOWER PANEL ATTACHMENT BLOCKING DETAIL 1 1/2" = 1'-0" 2

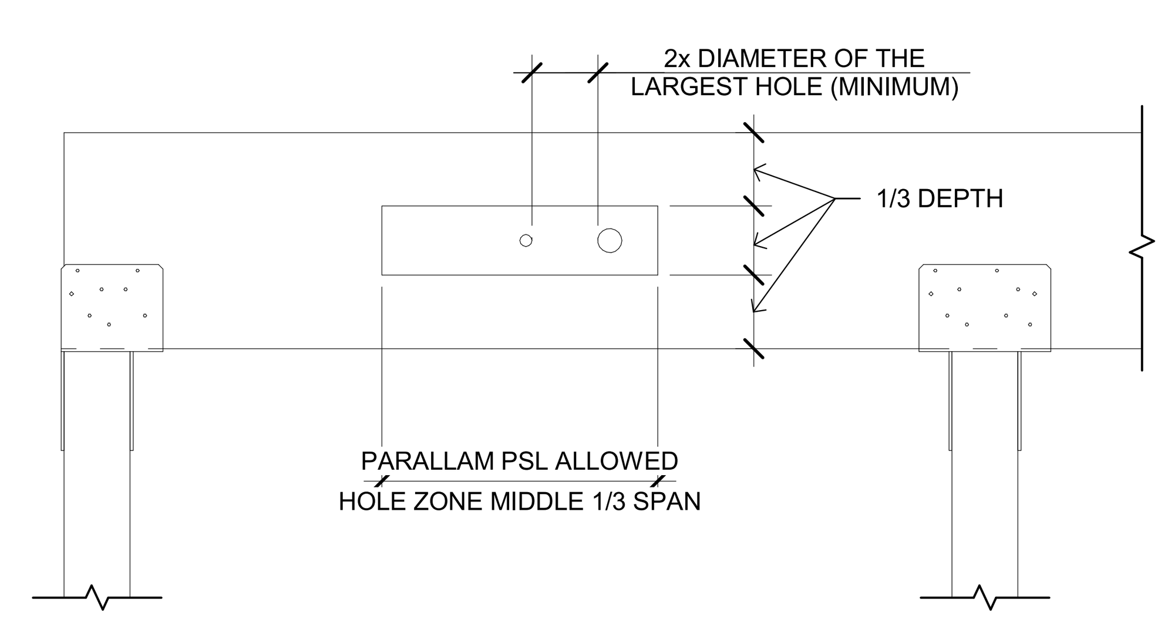


CANOPY TIE BACK BLOCKING DETAIL 12" = 1'-0" 3



PLAN VIEW

FRONT TOWER FRAMING 1/2" = 1'-0" 20



NOTES:

- ALLOWED HOLE SIZE SUITABLE FOR HEADERS AND BEAMS WITH UNIFORM LOADS ONLY.
- ROUND HOLES ONLY.
- NO HOLES IN CANTILEVERS.
- NO HOLES IN HEADERS OR BEAMS ORIENTATED FLATWISE.

HEADER OR BEAM DEPTH	MAXIMUM ROUND HOLE SIZE
4 3/8"	1"
5 1/2"	1 3/4"
7 1/4"-20"	2"

PSL BEAM PENETRATION DETAIL 3/4" = 1'-0" 4

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
330.572.2100 FAX: 330.572.2102

	DATE	REMARKS
1	04.28.21	ISSUED FOR PERMIT
2	07.12.21	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RB
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
STRUCTURAL DETAILS

S4.3

PLOT DATE: 7/12/2021 11:01:52 AM

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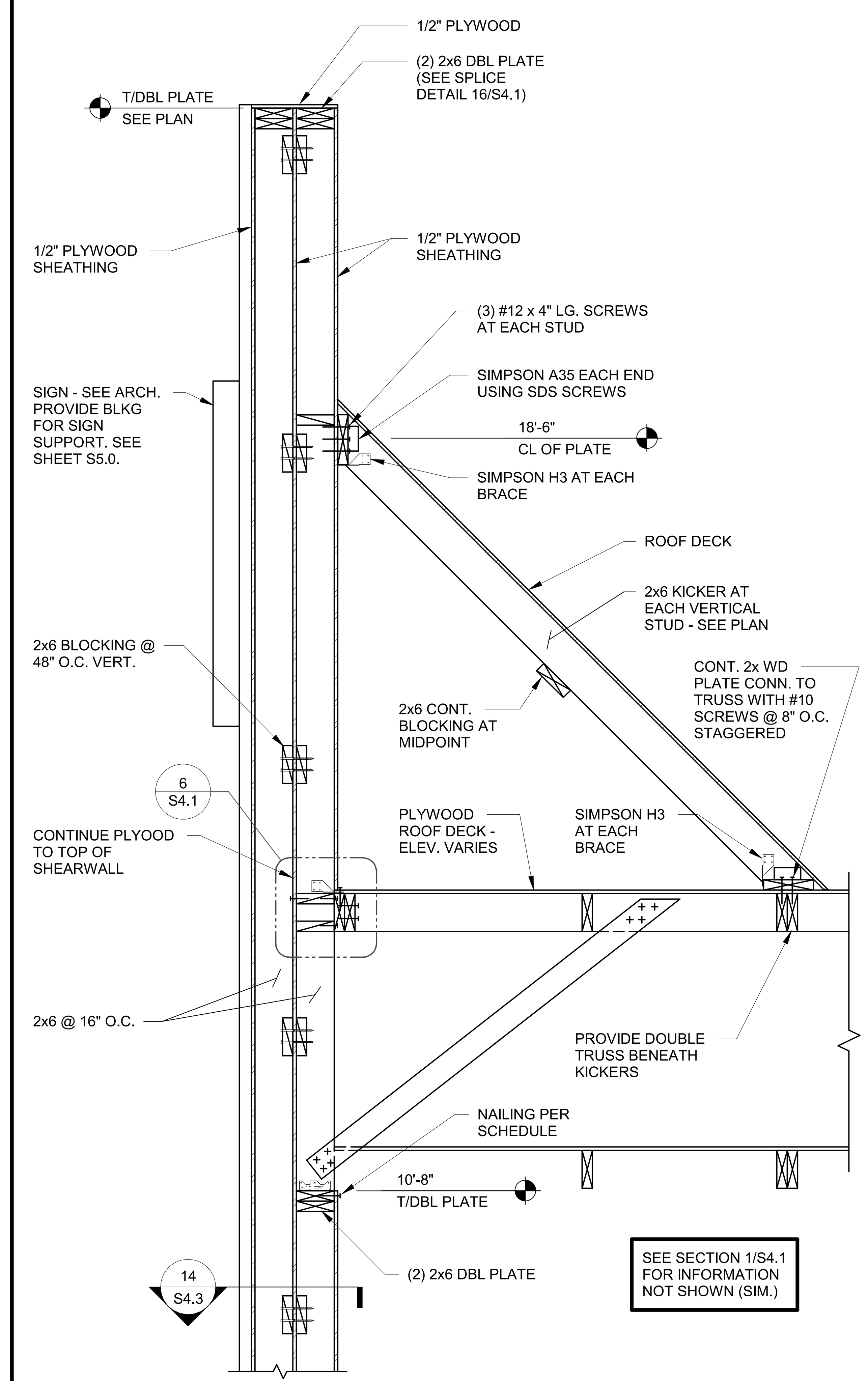
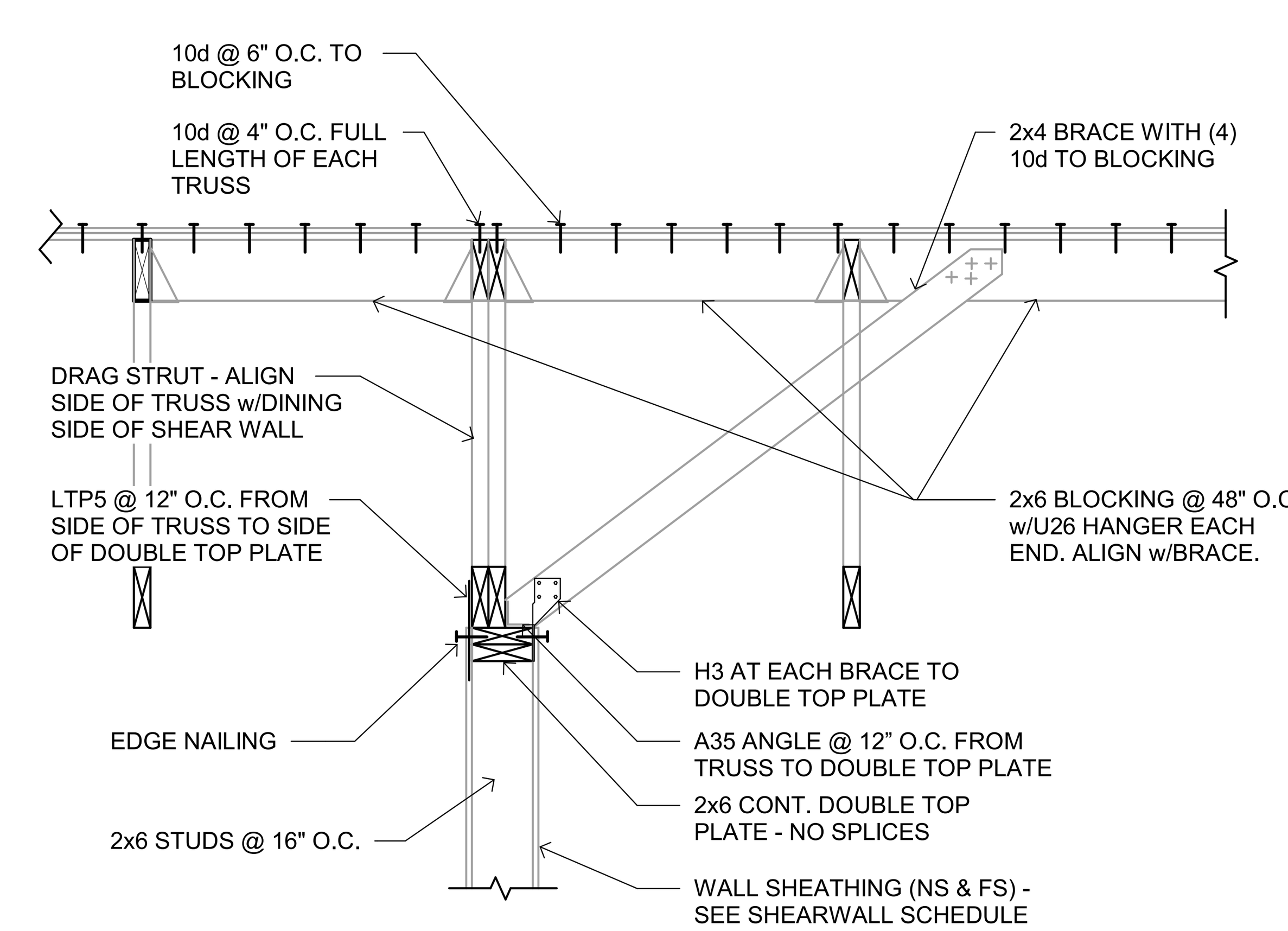


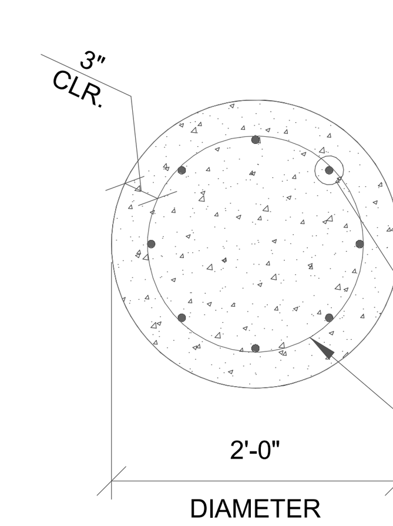
FRONT TOWER SECTION 3/4" = 1'-0" **1**

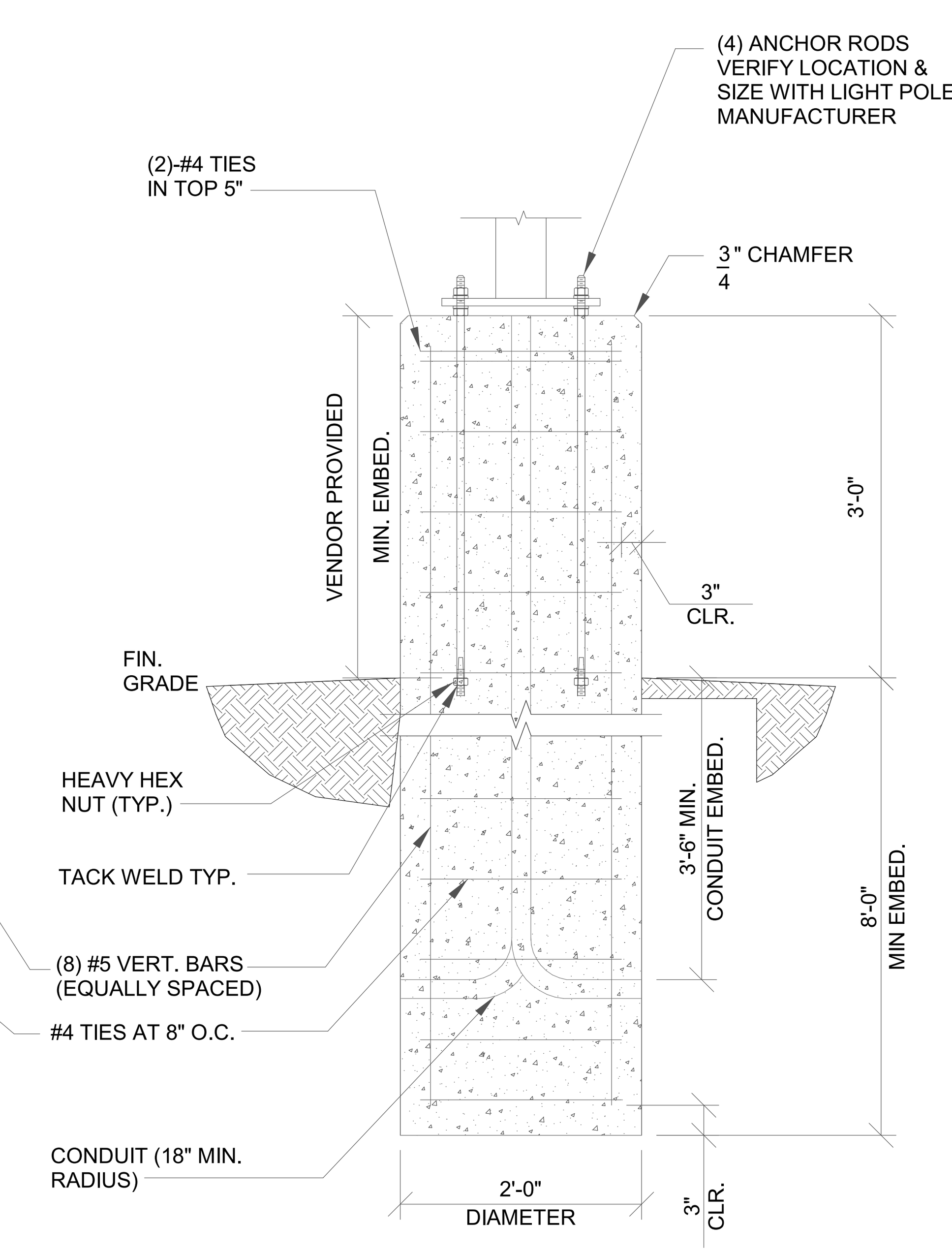


INTERIOR SHEAR WALL 3/4" = 1'-0" **2**

NOTES:

1. VENDOR TO SUPPLY CONTRACTOR WITH ANCHOR BOLT TEMPLATE.
2. ANY BASE LOCATED WITHIN 1'-0" OF A PAVED SURFACE SHALL BE PAINTED WITH 2 COATS OF SAFETY YELLOW TRAFFIC RATED PAINT.





LIGHT POLE FOUNDATION DETAIL 3/4" = 1'-0" **3**

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
330.572.2100 FAX: 330.572.2102

	DATE	REMARKS
1	04.28.21	ISSUED FOR PERMIT
2	07.12.21	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RB
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0

STRUCTURAL SECTIONS

S4.4

PLOT DATE: 7/12/2021 11:01:53 AM

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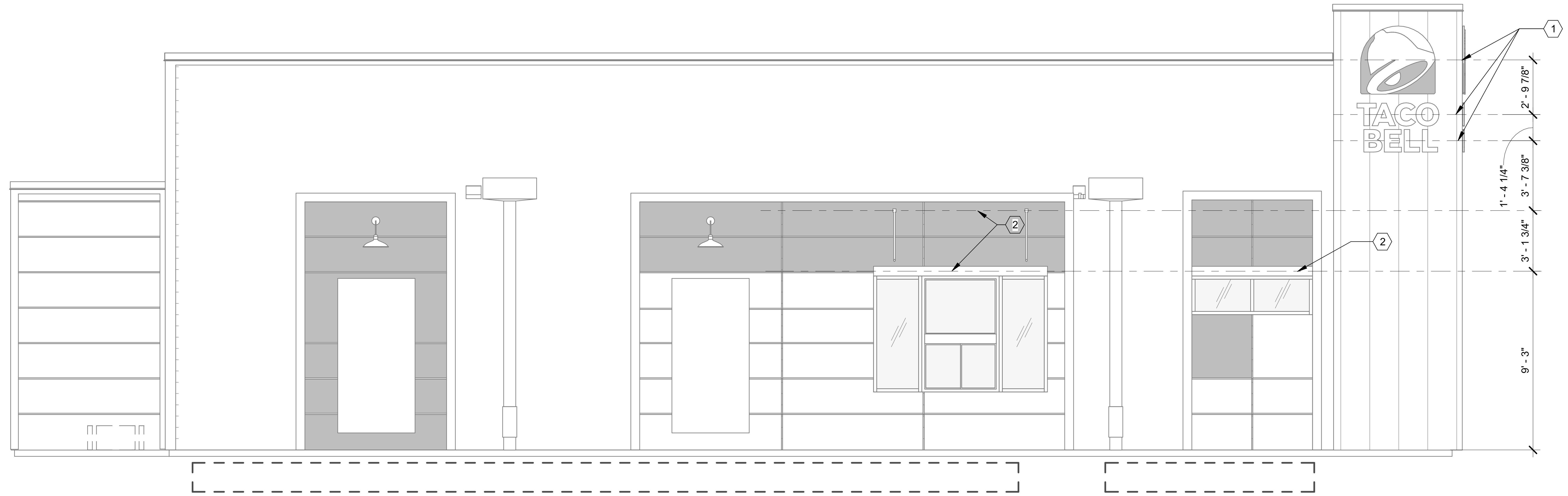
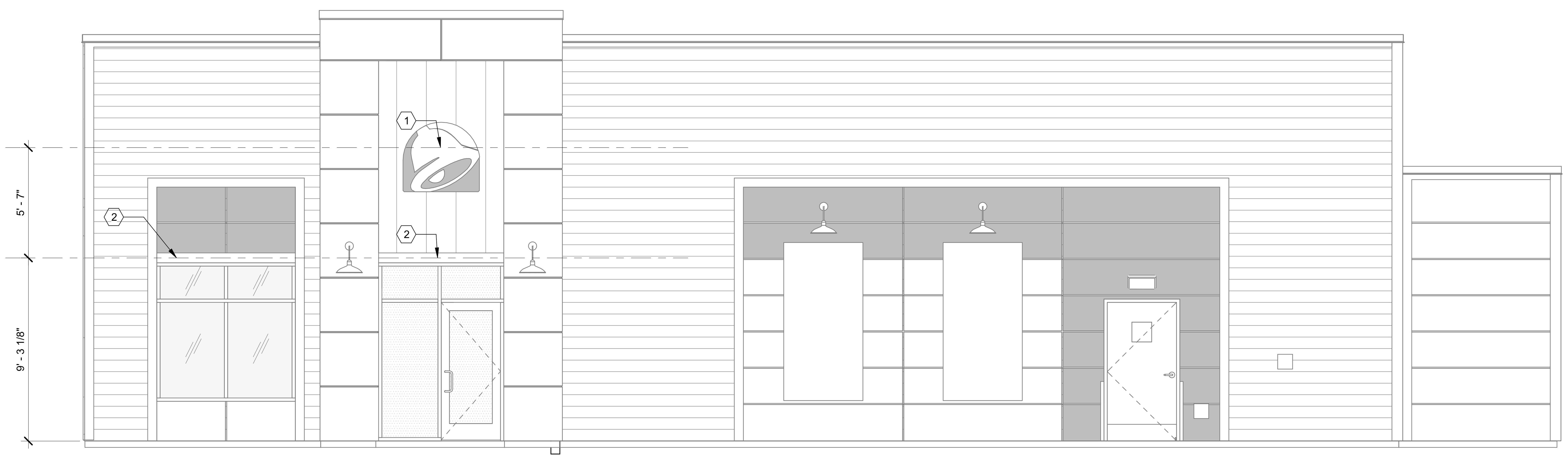
330.572.2100 FAX: 330.572.2102



COORDINATE BLOCKING REQUIREMENTS WITH MANUFACTURER

SOUTH ELEVATION 1/4" = 1'-0" **A**



NORTH ELEVATION 1/4" = 1'-0" **B**

EAST ELEVATION 1/4" = 1'-0" **F**

(1) SOLID BLOCKING FOR FASTENERS AS REQUIRED FOR SIGN MOUNTING.

(2) PROVIDE BLOCKING FOR CANOPY. SEE DETAILS 3/S4.3 AND 13/S4.3.

KEY NOTES **C**

1. EXTEND BLOCKING AS REQUIRED TO FIT BETWEEN STUDS.
2. ELEVATION AT BOTTOM OF CANOPIES SHALL BE 9'-0" A.F.F. U.N.O.
3. COORDINATE SIGNAGE ELEMENTS AND BLOCKING REQUIREMENTS WITH SIGNAGE VENDOR - SEE SCOPE OF WORK.
4. THIS SHEET IS TO INDICATE BLOCKING REQUIREMENTS FOR SIGNS, AWNINGS, AND CANOPIES. ADDITIONAL BLOCKING IS REQUIRED FOR OTHER ITEMS AS SHOWN ON OTHER DRAWINGS.

GENERAL NOTES **D**

	DATE	REMARKS
1	04.28.21	ISSUED FOR PERMIT
2	07.12.21	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RB
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
CANOPY/AWNING BLOCKING ELEVATIONS

S5.0

PLOT DATE: 7/12/2021 11:01:54 AM

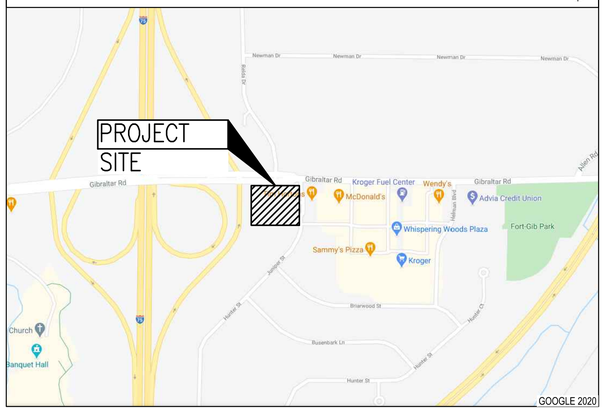
IMPROVEMENT PLANS

TACO BELL

GIBRALTAR ROAD & JUNIPER STREET
BROWNSTOWN, MI 48183
FEBRUARY 2021

VICINITY MAP N.T.S.

NORTH



PROJECT DESCRIPTION

THIS SITE WAS HOME TO VACANT LAND THAT IS PARTIALLY WOODED. PROPOSED IMPROVEMENTS INCLUDE A NEW TACO BELL SITE ALONG WITH PARKING AREAS, SIDEWALKS, UTILITIES, AND AMENITY IMPROVEMENTS.

PLAN REPRODUCTION WARNING
THE PLANS HAVE BEEN PREPARED FOR PRINTING ON ANSI D (22"x34") SHEETS. PRINTING ON OTHER SIZE SHEETS MAY DISTORT SCALES. REFER TO GRAPHIC SCALES.

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SWPP PLAN	C-011
SWPP PLAN NOTES AND DETAILS	C-012
DEMOLITION PLAN	C-101
SITE PLAN	C-111
OVERALL SITE PLAN	C-112
GRADING PLAN	C-121
UTILITY PLAN	C-131
STORM CALCS, DRAINAGE AREA MAP AND STORM SEWER PROFILES	C-132
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LANDSCAPE NOTES	L-001
LANDSCAPE PLAN	L-101
LANDSCAPE DETAILS	L-501

GPD GROUP ENGINEER

GPD GROUP PROFESSIONAL CORPORATION
520 SOUTH MAIN STREET, SUITE 2531
AKRON, OH 44311
CONTACT: JIM NEIDLINGER
PHONE 678.781.5070

OWNER AND DEVELOPER

4Z BROWNSTOWN, LLC.
PETER ZINGAS
18400 TARA DRIVE,
CLINTON TOWNSHIP, MI 48036

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

	DATE	REMARKS
⚠	05.14.2021	TOWNSHIP COMMENTS
⚠	07.12.2021	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

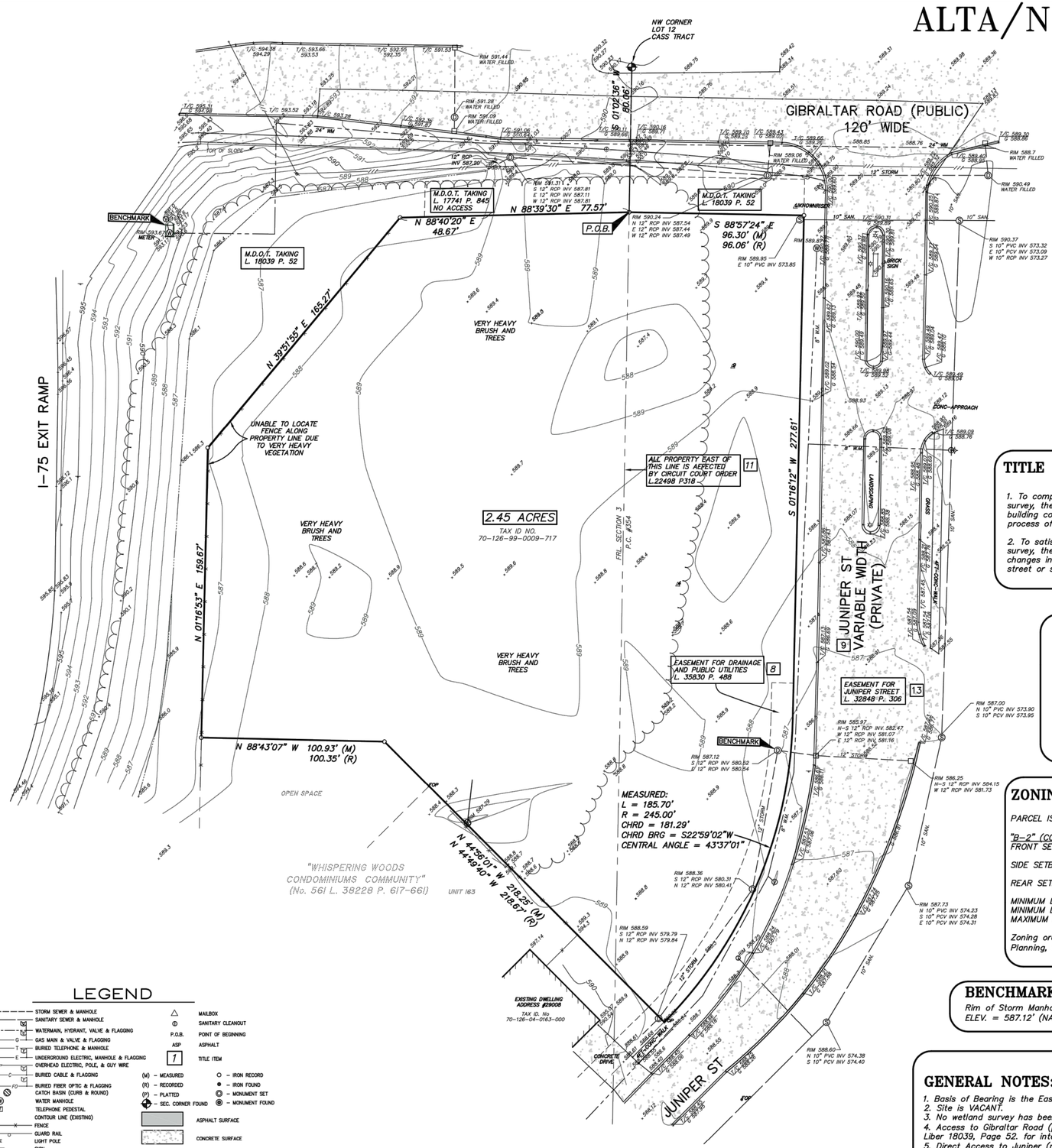
ENDEAVOR 2.0
TITLE SHEET

T-001

PLOT DATE:

ALTA/NSPS LAND TITLE SURVEY FOR:

PART OF FR. SECTION 3, T5N–R10E, TOWNSHIP OF BROWNSTOWN
ALSO BEING PART OF P.C. 354 OF WAYNE COUNTY, MICHIGAN



LEGAL DESCRIPTION PER:

ATA NATIONAL TITLE GROUP
ISSUING OFFICE FILE No. 82–20743398–SCM
EFFECTIVE DATE: SEPTEMBER 02, 2020 AT 8:00AM

The land referred to in this commitment is described as follows:
Township of Brownstown, County of Wayne, State of Michigan

Fee Parcel:
Commencing at a corner which is common to the Southwest corner of Private Claim 355, the Northwest corner of Private Claim 354, and the East end of the North line of Section 3, Town 5 South, Range 10 East, also known as the Northwest corner of Lot 12 of Cass Tract, as recorded in Liber 14 of Deeds, Page 301, of the Wayne County Records, and formerly described as the Northeast corner of Section 3; thence South 01 degrees 02 minutes 36 seconds West 80.06 feet along the East line of said Section and the West line of Private Claim 354, being a part of Lot 12 of said Cass Tract for a place of beginning; thence South 88 degrees 57 minutes 24 seconds East 96.06 feet along the seconds West 277.61 feet; thence 186.51 feet along the arc of a 245.00 foot radius circular curve to the right, with a central angle of 43 degrees 37 minutes 01 seconds and with a cord bearing South 23 degrees 04 minutes 43 seconds West 182.04 feet; thence North 44 degrees 49 minutes 40 seconds West 218.67 feet; thence North 88 degrees 43 minutes 07 seconds West 100.35 feet; thence along the Easterly right–of–way line of I–75 exit ramp (variable width) the following 3 courses: North 01 degrees 16 minutes 53 seconds East 159.67 feet, North 39 degrees 51 minutes 55 seconds East 165.27 feet, and North 88 degrees 40 minutes 20 seconds East 48.67 feet; thence North 88 degrees 39 minutes 30 seconds East 77.57 feet along the Southerly right–of–way line of said Gibraltar Road to the place of beginning, being a part of the Northeast 1/4 of said Section 3 and part of said Private Claim 354, and part of Lot 12 Cass Tract, as recorded in Liber 41 of Deeds, Page 301, Wayne County Records.

Easement Parcel:
The benefit of easement rights created, limited and defined by Declaration of Reciprocal Access Easement and Covenants recorded in Liber 39377, Page 454, Wayne County Records.

LOCATION MAP:

N.T.S.

TITLE NOTES:

1. To comply with Table A Item No. 16: As of the date of survey, there is no evidence of recent earth moving work, building construction, or building additions observed in the process of conduction the fieldwork.

2. To satisfy Table A Item No. 17: As of the date of this survey, there is no information made available of proposed changes in street right of way lines and no evidence of recent street or sidewalk construction.

FLOOD NOTE:

The subject property lies within flood zone "X" as plotted on the Flood Insurance Rate Map, Community Panel No. 26163C0526E, which bears an effective date of FEBUARY 02, 2012 and, based thereon, except as specifically noted on the survey, no part of the subject property lies within any area designated as "flood prone area," "special flood hazard area" or 100–year flood plain by the Federal Emergency Management Agency.

Zone X – Areas determined to be outside of the 0.2% annual chance floodplain.

ZONING:

PARCEL IS ZONED "B–2" (COMMUNITY BUSINESS DISTRICT)

"B–2" (COMMUNITY BUSINESS DISTRICT)
FRONT SETBACK– 75 FEET

SIDE SETBACK– 10 FEET

REAR SETBACK – 20 FEET

MINIMUM LOT AREA – 43,560 SQUARE FEET
MINIMUM LOT WIDTH – 120 FEET
MAXIMUM BUILDING HEIGHT – 30 FEET

Zoning ordinances obtained from Brownstown Township Zoning and Planning, Section/Table 6.03.

BENCHMARK:

Rim of Storm Manhole Southeast corner of site.
ELEV. = 587.12' (NAVD88)

GENERAL NOTES:

1. Basis of Bearing is the East line of Interstate 75.
2. Site is VACANT.
3. No wetland survey has been completed.
4. Access to Gibraltar Road (public) is unclear. See document in Liber 180.39, Page 52. for interpretation.
5. Direct Access to Juniper (private) is granted per Title item No. 13.
6. Boundaries of the Property are contiguous to the boundaries of Juniper Street without gaps or gores. Juniper Street is contiguous to Gibraltar Road without gaps or gores.
7. There are no structural encroachments effecting site.
8. Recent revision is for invert of sanitary manhole at Northeast corner of site. No field work has been completed since October 28, 2020.

SCHEDULE B – SECTION II EXCEPTIONS:

ATA NATIONAL TITLE GROUP
ISSUING OFFICE FILE No. 82–20743398–SCM
EFFECTIVE DATE: SEPTEMBER 02, 2020 AT 8:00AM

8 *Easement for Drainange and Public Utilities granted to the Charter Township of Brownstown 8. recorded in Liber 35830, Page 488, Wayne County Records.*
– AFFECTS SITE SEE SKETCH

9 *Conservation Easement granted to the Michigan Department of Environmental Equality recorded in Liber 35896, Page 13, Wayne County Records.*
– DOES NOT AFFECT SITE

10 *Terms and provisions contained in, and easements created by, Declaration of Reciprocal Access Easement and Covenants recorded in Liber 39377, Page 454, Wayne County Records.*

11 *Easement granted to the Detroit Edison Company, The Ameritech Company, and Comcast Cablevision of Taylor, Inc. for construction, operation and maintenance of underground utility line and telecommunication facilities recorded in Liber 40324, Page 850, Wayne County Records.*

12 *Rights of the public and of any governmental unit in any part of the taken, used or deeded for street, road or highway purposes.*

SURVEYOR'S CERTIFICATION

To:
FIDELITY NATIONAL TITLE INSURANCE COMPANY,
LAWRENCE STEEL INC. A MICHIGAN CORPORATION,
NORMAN STEEL, INC., A MICHIGAN CORPORATION,
4Z BROWNSTOWN, LLC, A MICHIGAN LIMITED LIABILITY COMPANY

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS and includes Table A items: 1, 2, 3, 4, 5, 6(b), 8, 11, 13, 16 and 17. The fieldwork was completed on October 28, 2020.

GREG M. McARDLE
Michigan Professional Land Surveyor No. 46678

May 12, 2021
DATE

LEGEND

- STORM SEWER & MANHOLE
- SANITARY SEWER & MANHOLE
- WATERMAIN, HYDRANT, VALVE & FLAGGING
- GAS MAIN & VALVE & FLAGGING
- BURIED TELEPHONE & MANHOLE
- UNDERGROUND ELECTRIC, MANHOLE & FLAGGING
- OVERHEAD ELECTRIC, POLE, & GUY WIRE
- BURIED CABLE & FLAGGING
- BURIED FIBER OPTIC & FLAGGING
- CATCH BASIN (CURB & ROUND)
- WATER MANHOLE
- TELEPHONE PEDESTAL
- CONTOUR LINE (EXISTING)
- FENCE
- GUARD RAIL
- LIGHT POLE
- SIGN
- STREET SIGN
- BM BENCH MARK

(M) – MEASURED
(R) – RECORDED
(P) – PLATTED
– SEC. CORNER FOUND

- MAILBOX
- SANITARY CLEANOUT
- P.O.B. POINT OF BEGINNING
- ASP ASPHALT
- 1 TITLE ITEM
- – IRON RECORD
- – IRON FOUND
- – MONUMENT SET
- – MONUMENT FOUND

ASPHALT SURFACE
CONCRETE SURFACE
GRAVEL SURFACE

3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1–800–482–7171 (TOLL FREE)

Surveyor does not guarantee that all utilities are shown or their locations. It is the responsibility of the contractor and developer to contact Miss Dig and any other involved agencies to locate all utilities prior to construction. Removal, relocation and/or replacement is the responsibility of the contractor.

DATE: NOVEMBER 11, 2020 | CLIENT: KIMLEY–HORN
REVISED DATE: 5–12–21 | SECTION: 3
JOB NO: 20200111 | CITY: BROWNSTOWN
FIELD: JM/DS | COUNTY: WAYNE
OFFICE: GMM/VG
SHEET 1 OF 1

ALTA / ACSM LAND TITLE SURVEY
PART OF FRL. SECTION 3, T5N–R10E, BROWNSTOWN TOWNSHIP
ALSO PART OF P.C. #354, WAYNE COUNTY, MICHIGAN

MERIDIAN LAND SURVEYING
(810) 339–6605 www.meridianls.com
601 S GRAND TRAVERSE
CITY OF FLINT • MICHIGAN • 48502

NORTH
0 15 30
SCALE: 1" = 30'

STATE OF MICHIGAN
GREG M. McARDLE
PROFESSIONAL SURVEYOR
No. 46678
PROFESSIONAL SURVEYOR
GREG M. McARDLE
PROFESSIONAL SURVEYOR NO. 46678

DEMOLITION NOTES

1. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO ANY DEMOLITION PROCESS. CERTAIN ACTIVITIES ASSOCIATED WITH CONSTRUCTION WILL REQUIRE AIR PERMITS INCLUDING BUT NOT LIMITED TO: MOBILE CONCRETE BATCH PLANTS, MOBILE ASPHALT PLANTS, CONCRETE CRUSHERS, LARGE GENERATORS, ETC. THESE ACTIVITIES WILL REQUIRE SPECIFIC CURRENT STATE'S EPA OR LOCAL GOVERNING AUTHORITIES AIR PERMITS FOR INSTALLATION AND OPERATION. CONTRACTORS MUST SEEK AUTHORIZATION FROM THE CORRESPONDING GOVERNING BODIES. FOR DEMOLITION OF ALL COMMERCIAL SITES, A NOTIFICATION FOR RESTORATION AND DEMOLITION MUST BE SUBMITTED TO THE CURRENT STATE'S EPA AND LOCAL GOVERNING AUTHORITIES TO DETERMINE ANY CORRECTIVE ACTIONS THAT MAY BE REQUIRED.

2. DEMOLITION INCLUDES THE FOLLOWING:
2.A. TRANSFER BENCHMARK CONTROL TO NEW LOCATIONS OUTSIDE THE DISTURBED AREA PRIOR TO COMMENCING DEMOLITION OPERATIONS (WHEN APPLICABLE).
2.B. DEMOLITION AND REMOVAL OF SITE IMPROVEMENTS NECESSARY FOR THE PROPOSED CONSTRUCTION OF NEW IMPROVEMENTS.
2.C. REROUTING, RELOCATING, DISCONNECTING, CAPPING OR SEALING, AND ABANDONING/REMOVING SITE UTILITIES IN PLACE (WHICHEVER IS APPLICABLE).

3. REMOVE AND LEGALLY DISPOSE OF ITEMS CALLED OUT TO BE REMOVED. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS. THOSE ITEMS INDICATED TO BE REINSTALLED, SALVAGED, OR TO REMAIN SHALL BE CLEANED, SERVICED, AND OTHERWISE PREPARED FOR REUSE. CONTRACTOR TO STORE AND PROTECT AGAINST DAMAGE. REINSTALL ITEMS IN LOCATIONS INDICATED.

4. PROTECT ITEMS INDICATED TO REMAIN AGAINST DAMAGE AND SOILING THROUGHOUT CONSTRUCTION. WHEN PERMITTED BY THE CONSTRUCTION MANAGER OR OWNER, ITEMS MAY BE REMOVED TO A SUITABLE, PROTECTED STORAGE LOCATION THROUGHOUT CONSTRUCTION AND THEN CLEANED AND REINSTALLED IN THEIR ORIGINAL LOCATIONS, PROMPTLY REPAIR DAMAGES TO ADJACENT FACILITIES CAUSED BY DEMOLITION OPERATIONS AT THE CONTRACTORS COST.

5. CONTRACTOR SHALL SCHEDULE DEMOLITION ACTIVITIES WITH THE CONSTRUCTION/PROJECT MANAGER INCLUDING THE FOLLOWING:
5.A. DETAILED SEQUENCE OF DEMOLITION AND REMOVAL WORK, WITH STARTING AND ENDING DATES FOR EACH ACTIVITY.
5.B. DATES FOR SHUTOFF, CAPPING, AND CONTINUATION OF UTILITY SERVICES.
5.C. IDENTIFY AND ACCURATELY LOCATE UTILITIES AND OTHER SUBSURFACE STRUCTURAL, ELECTRICAL, OR MECHANICAL CONDITIONS.

6. REGULATORY REQUIREMENTS: COMPLY WITH GOVERNING EPA NOTIFICATION REGULATIONS BEFORE STARTING DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION

7. MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE THROUGHOUT CONSTRUCTION OPERATIONS.
7.A. DO NOT INTERRUPT EXISTING UTILITIES SERVING OCCUPIED OR OPERATING FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY OWNER'S REPRESENTATIVE AND AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO OWNER AND TO GOVERNING AUTHORITIES.

8. LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP OFF INDICATED UTILITY SERVICES SERVING THE SITE. ARRANGE TO SHUT OFF AND CAP UTILITIES WITH UTILITY COMPANIES AND FOLLOW THEIR RESPECTIVE UTILITY KILL AND CAP POLICIES. DO NOT START DEMOLITION WORK UNTIL UTILITY DISCONNECTING AND SEALING HAVE BEEN COMPLETED AND VERIFIED IN WRITING BY THE UTILITY COMPANY.

9. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND DEMOLITION AREA. SAFE PASSAGE INCLUDES THE ERECTION OF TEMPORARY PROTECTION AND/OR BARRICADES AS PER LOCAL GOVERNING AUTHORITIES AND IN ACCORDANCE WITH THE CURRENT ADA REGULATIONS. USE OF EXPLOSIVES WILL NOT BE PERMITTED.

10. CLEAN ADJACENT BUILDINGS AND IMPROVEMENT OF DUST, DIRT, AND DEBRIS CAUSED BY DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF DEMOLITION.

11. PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE. STORAGE OR SALE OF REMOVED ITEMS OR MATERIALS ON-SITE WILL NOT BE PERMITTED. NO BURNING OF ANY MATERIALS ON SITE SHALL BE PERMITTED.

12. IT IS NOT EXPECTED THAT ASBESTOS WILL BE ENCOUNTERED IN THE COURSE OF THIS CONTRACT. IF ANY MATERIALS SUSPECTED OF CONTAINING ASBESTOS ARE ENCOUNTERED, DO NOT DISTURB THE MATERIALS. IMMEDIATELY NOTIFY THE CONSTRUCTION MANAGER AND THE OWNER.

13. SURVEY THE CONDITION OF THE STRUCTURE TO DETERMINE WHETHER REMOVING ANY ELEMENT MIGHT RESULT IN A STRUCTURAL DEFICIENCY OR UNPLANNED COLLAPSE OF ANY PORTION OF THE STRUCTURE OR ADJACENT STRUCTURES THROUGHOUT CONSTRUCTION.

14. DEMOLISH BUILDING AND STRUCTURAL PADS COMPLETELY AND REMOVE FROM THE SITE. USE METHODS REQUIRED TO COMPLETE WORK WITHIN LIMITATIONS OF GOVERNING REGULATIONS AND AS FOLLOWS:
14.A. DISPOSE OF DEMOLISHED ITEMS AND MATERIALS PROMPTLY.
14.B. DEMOLISH CONCRETE AND MASONRY IN SMALL SECTIONS.
14.C. BREAK UP AND REMOVE CONCRETE SLABS ON GRADE.

15. BELOW-GRADE DEMOLITION: DEMOLISH FOUNDATION WALLS, PAVEMENTS, AND OTHER BELOW-GRADE DEMOLITION, AS FOLLOWS:
15.A. COMPLETELY REMOVE BELOW-GRADE DEMOLITION, INCLUDING FOUNDATION WALLS FOOTINGS, KNOWN AND UNKNOWN PAVEMENT SECTIONS INCLUDING UNDERLYING CONCRETE SLABS, AND OTHER BELOW GRADE CONCRETE SLABS FOUND DURING DEMOLITION (INCLUDING ITEMS WHICH MAY NOT BE IDENTIFIED HEREIN).

16. FILLING BELOW-GRADE AREAS: COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION OF BUILDINGS, PAVEMENTS, AND OTHER REMOVED ITEMS WITH SOIL MATERIALS ACCORDING TO REQUIREMENTS PER SOILS REPORT AND ON-SITE GEOTECHNICAL ENGINEER'S REPRESENTATIVE. CONTRACTOR SHALL CONTACT GEOTECHNICAL ENGINEER PRIOR TO FILLING ANY AREAS TO OBSERVE FILL PROCEDURES.

17. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS IF REQUIRED BY GOVERNING REGULATIONS.

18. CONTRACTOR TO WET SAWCUT EXISTING PAVEMENT TO REMAIN AT NEXT NEAREST JOINT PRIOR TO REMOVALS OF CURB, GUTTER, PAVEMENT, ETC.

19. THE CONTRACTOR SHALL REMOVE EXISTING PAVEMENT MARKINGS WITH SMALL HANDHELD GRINDERS OR SCARIFIERS OR OTHER METHODS, WITH THE APPROVAL OF THE CONSTRUCTION MANAGER. TAKE CARE DURING MARKING REMOVAL NOT TO SCAR, DISCOLOR, OR OTHERWISE DAMAGE THE PAVEMENT SURFACE. DO NOT OVERPAINT OR USE OTHER METHODS OF COVERING MARKINGS INSTEAD OF REMOVAL.

20. WHEN NOTED AND ALLOWED BY THE OWNER, THE CONTRACTOR MAY RE-USE EXISTING WHEELSTOPS FOR THE PROPOSED SITE. CONTRACTOR AND CONSTRUCTION MANAGER SHALL COORDINATE WHICH EXISTING WHEELSTOPS MAY BE RE-USED PRIOR TO DEMOLITION. CONTRACTOR SHALL ENSURE THAT ALL RE-USED WHEELSTOPS ARE PROTECTED DURING CONSTRUCTION.

21. IF UNDERGROUND TANKAGE IS CALLED FOR DEMOLITION, THE CONTRACTOR SHALL COORDINATE REMOVAL AND REPLACEMENT WITH THE STATE BUREAU OF UNDERGROUND STORAGE TANK REGULATIONS (BUSTR). UNDERGROUND TANK REMOVAL SHALL ALSO INCLUDE THE REMOVAL OF ANY MONITORING WELLS, OIL/GAS WELLS, AND MINE SHAFTS, IN ACCORDANCE WITH GOVERNING AUTHORITIES HAVING JURISDICTION.

22. CONTRACTOR SHALL FULLY SECURE WORK AREA WITH THE APPROPRIATE SIGNAGE, FENCING, AND BARRICADES WHICH ACCOMMODATE VISUALLY IMPAIRED PERSONS AS AGREED UPON WITH SITE CONSTRUCTION/PROJECT MANAGER AND OWNER TO WARN AND KEEP PEOPLE OUT OF THE SITE WORK AREA FOR THE DURATION OF THE PROJECT.

GENERAL PLAN AND SURVEY NOTES

1. PRIOR TO STARTING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.

2. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE SECTION OF THESE NOTES ENTITLED "GRADING PLAN NOTES" FOR DEFINITIONS AS MAY BE NECESSARY FOR "GEOTECHNICAL ENGINEER" AND "SOILS REPORT".

3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY. THE SOILS REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION/PROJECT MANAGER OF ANY DISCREPANCY BETWEEN SOILS REPORT AND PLANS, ETC.

4. THE CONTRACTOR SHALL, UPON BECOMING AWARE OF SUBSURFACE OR LATENT PHYSICAL CONDITIONS DIFFERING FROM THOSE DISCLOSED BY THE ORIGINAL SOIL EXPLORATION WORK, PROMPTLY NOTIFY THE OWNER VERBALLY TO PERMIT VERIFICATION OF THE CONDITIONS AND IN WRITING, AS TO THE NATURE OF THE DIFFERING CONDITIONS. NO CLAIM BY THE CONTRACTOR FOR ANY CONDITIONS DIFFERING FROM THOSE ANTICIPATED IN THE PLAN AND SPECIFICATIONS AND DISCLOSED BY THE SOIL STUDIES WILL BE ALLOWED UNLESS THE CONTRACTOR HAS SO NOTIFIED THE OWNER, VERBALLY AND IN WRITING AS REQUIRED ABOVE, OF SUCH DIFFERING CONDITIONS.

5. ALL WORK WITHIN THE RIGHTS OF WAY SHALL BE IN ACCORDANCE WITH THE GOVERNING JURISDICTION AND SPECIFICATIONS.

6. CONTRACTOR SHALL COORDINATE ANY MAINTENANCE OF TRAFFIC WITH THE OWNER'S REPRESENTATIVE AND THE LOCAL JURISDICTION PRIOR TO CONSTRUCTION.

7. CONTRACTOR SHALL AT ALL TIMES ENSURE THAT SWPP MEASURES PROTECTING EXISTING DRAINAGE FACILITIES BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY PHASE OF THE SITE CONSTRUCTION OR LAND ALTERATION. (SEE SWPP PLANS).

8. ALL WORK SHALL BE COMPLETED IN A NEAT AND ORDERLY MANNER REMOVING ALL EXCESS MATERIAL AND WASTE FROM THE SITE INCLUDING TIMELY REMOVAL OF ANY CONCRETE SPLATTER. UPON COMPLETION OF PROJECT, CONTRACTOR SHALL CLEAN THE PAVED AREAS PRIOR TO REMOVAL OF TEMPORARY SEDIMENT CONTROLS, AS DIRECTED BY THE CITY AND/OR CONSTRUCTION/PROJECT MANAGER. IF POWER WASHING IS USED, NO SEDIMENT LADEN WATER SHALL BE WASHED INTO THE STORM SYSTEM. ALL SEDIMENT LADEN MATERIAL ON PAVEMENT OR WITHIN THE STORM SYSTEM SHALL BE COLLECTED AND REMOVED FROM THE SITE AT CONTRACTOR'S EXPENSE (SEE SWPP PLANS).

9. THESE PROJECT CONSTRUCTION DOCUMENTS SHALL NOT CONSTITUTE A CONTRACTUAL RELATIONSHIP BETWEEN GPD GROUP AND THE CONTRACTOR / SUBCONTRACTOR / OR OTHER AFFILIATED PARTIES.

10. THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION OR SAFETY, MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES UTILIZED IN CONSTRUCTION BY THE CONTRACTOR OR SUBCONTRACTORS. ANY SEQUENCING OR SUGGESTED NOTATIONS WHICH MAY APPEAR IN THE PLANS IS INTENDED TO ASSIST IN THE UNDERSTANDING OF PROJECT INTENT.

11. DETAILS, NOTES, AND OTHER REFERENCES CONTAIN HEREIN MAY HAVE BEEN ATTAINED FROM OUTSIDE REFERENCE SOURCE LOCATIONS SUCH AS. BUT NOT LIMITED TO, LOCAL AUTHORITY AGENCIES, DESIGN REFERENCE MANUALS, MANUFACTURE'S RECOMMENDED DOCUMENTATION, OR OTHER INDUSTRY SOURCES. GPD DOES NOT WARRANT INFORMATION OR REPRESENTATION OF SAID CONTENT CONTAINED HEREIN, IT IS SHOWN SOLELY FOR REFERENCE ONLY OF DESIGN INTENT AT THE TIME OF PLAN PREPARATION. THE CONSTRUCTION TEAM MEMBERS (CONTRACTOR AND CONSTRUCTION MANAGER, WHERE APPLICABLE) SHALL OBTAIN THE MOST CURRENT DETAILED INFORMATION FROM THE RESPECTIVE SOURCE TO CONSTRUCT THE IMPROVEMENTS UNDER THE AUTHORITY OF THE RESPECTIVE GOVERNING AGENCIES. IF ANY DISCREPANCIES ARE DISCOVERED BETWEEN THE ORIGINAL DESIGN INTENT AND THE CONSTRUCTION TEAM OBTAINED REFERENCE MATERIAL, THE CONSTRUCTION MANAGER OR THE PROJECT'S CONTACT PERSON SHALL BE NOTIFIED PRIOR TO COMMENCING OF ASSOCIATED WORK.

12. CONDUCT CONSTRUCTION OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS.

13. THE A.L.T.A. SURVEY BY MERIDIAN LAND SURVEYIING, DATED 07/24/2018 SHALL BE CONSIDERED A PART OF THESE PLANS. THE G.C. IS RESPONSIBLE FOR LOCATING IMPROVEMENTS PER THESE PLANS.

14. THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THE PLANS ARE BASED ON FIELD SURVEYS, SITE RECORDS, ETC. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO BECOME FAMILIAR WITH THE SITE'S POSSIBLE BELOW GRADE FEATURES, INCLUDING BUT NOT LIMITED TO, ROOMS, VAULTS, UTILITIES, ETC. AND SHALL CONDUCT A WALK THROUGH WITH THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO STARTING CONSTRUCTION. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR REPAIR TO DAMAGE CAUSED BY THEIR WORK FORCE TO FACILITIES WHICH ARE NOT INTENDED TO BE DISTURBED.

15. ALL DIMENSIONS, GRADES, AND UTILITY LOCATIONS SHOWN ON THESE PLANS WERE BASED ON THE SURVEY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY CONSTRUCTION/PROJECT MANAGER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO INFORMATION SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.

16. IN SOME CASES, THE DEVELOPER OR OWNER MAY HAVE PROVIDED THEIR OVERALL DEVELOPMENT PLANS FOR THE PROJECT DESIGN RATHER THAN A FIELD SURVEY. (SEE SITE PLAN FOR NOTES WHEN THIS IS THE CASE). ALL DIMENSIONS, GRADES, AND UTILITY LOCATIONS SHOWN ON THESE PLANS WERE BASED ON SAID DEVELOPMENT PLANS. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY CONSTRUCTION MANAGER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO INFORMATION SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.

17. THE CONTRACTOR SHALL RUN AN INDEPENDENT VERTICAL CONTROL TRAVERSE TO CHECK BENCHMARKS AND A HORIZONTAL CONTROL TRAVERSE THROUGH THE REFERENCED PROJECT CONTROL DATUM TO CONFIRM GEOMETRIC DATA. IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO THE START OF CONSTRUCTION.

CONCRETE NOTES AND SPECIFICATIONS

1. ALL EXTERIOR SITE SPECIFIC PORTLAND CEMENT CONCRETE (PCC) (I.E. SIDEWALK, PAVEMENT OR CURBING) SHALL MEET THE MINIMUM REQUIREMENTS OF THE LATEST EDITIONS OF THE STATE DEPARTMENT OF TRANSPORTATION AND THE AMERICAN CONCRETE INSTITUTE (ACI) SPECIFICATIONS USING THE RESPECTIVE ASTM STANDARDS FOR MATERIALS USED, MIXING, TRANSPORTATION, FORMING, PLACEMENT, CURING, AND SEALING. THE MINIMUM STRENGTH FOR POC ALLOWED IS 4000 PSI AT 28 DAY STRENGTH, NORMAL WEIGHT CONCRETE. CONTRACTOR SHALL REFER TO DETAILS, NOTES, AND SPECIFICATIONS WITHIN THE CONSTRUCTION DOCUMENTS FOR VARIATIONS TO THIS SPECIFICATION. MIX DESIGN SHOP DRAWINGS SHALL BE SUBMITTED TO THE CONSTRUCTION/PROJECT MANAGER IN ACCORDANCE WITH THE PROJECT REQUIREMENTS.

2. ALL EXTERIOR CONCRETE CURBS SHALL HAVE JOINTS PER ACI 330. CURB JOINTS ARE TO ALIGN WITH CONCRETE PAVEMENT JOINTS WHERE APPLICABLE, AND CONTROL JOINTS AT 10'-0" O.C. UNLESS OTHERWISE SPECIFIED. ALL EXTERIOR VEHICULAR CONCRETE PAVEMENT AND FLATWORK SHALL HAVE CONTROL JOINTS PER TABLE BELOW AND EXPANSION JOINTS PER ACI 330 TYPICAL RECOMMENDATIONS.

SLAB THICKNESS - " T "	MAXIMUM JOINT SPACING
LESS THAN 4 INCHES	8 FEET
4 - < 5 INCHES	10 FEET
5 - < 6 INCHES	12.5 FEET
6 INCHES - < 8 INCHES	15 FEET
8 INCHES - 10 INCHES	15 FEET

3. ALL JOINTS, INCLUDING SAWED JOINTS, SHALL BE SEALED. JOINTS SHALL BE CLEANED AND DRIED PRIOR TO SEALING. JOINT SEALING MATERIALS SHALL COMPLY WITH ASTM D 3406 FOR HOT APPLIED ELASTOMERIC, TT-S-001543A FOR SILICONE RUBBER, AND TT-S-00230S FOR SINGLE COMPONENT ELASTOMERIC. SEALER WIDTH, DEPTH, AND PREPARED APPLICATION SURFACES SHALL BE PER MANUFACTURES RECOMMENDATIONS. JOINT FILLER MATERIAL SHALL CONFORM TO ASTM D1751 OR ASTM D8139.

4. ALL CONCRETE PANELS SHALL BE SQUARE WITH A LENGTH TO WIDTH RATIO NO GREATER THAN 1.25 TO 1 AND HAVE A MEDIUM BROOM FINISH (TRANSVERSE FOR PEDESTRIAN WALKWAYS) WHICH SHALL BE TO MINIMUM STRENGTH PRIOR TO OPENING FOR VEHICULAR TRAFFIC AREAS. STAGGERED/OFFSET JOINT, INTERIOR CORNERS, ANGLES LESS THAN 60 DEGREES, SLABS LESS THAN 18-INCHES WIDE, AND ODD SHAPES SHALL NOT BE PERMITTED.

5. ALL JOINTING SHOWN HEREIN THIS PLAN SET IS FOR GENERAL GUIDELINE OF DESIGN INTENT ONLY. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR FINAL LAYOUT OF THE JOINTING TO ENSURE NO UNDESIRED CRACKS FORM THROUGH ANY CONCRETE PANELS. CONTRACTOR SHALL SUBMIT SHOP DRAWING OF THEIR PAVEMENT JOINT LAYOUT TO OWNER / CONSTRUCTION MANAGER PRIOR TO PLACEMENT FOR RECORD. THE CONTRACTOR SHALL REPLACE ANY CRACKED CONCRETE PANELS TO THE NEXT JOINT PAST THE EFFECTED AREA AT NO ADDITIONAL COST TO THE PROJECT WITHIN ONE YEAR OF PROJECT COMPLETION.

6. CONCRETE SHALL CONFORM TO THE FOLLOWING:

a.	STRENGTH	PER MIX DESIGN, MINIMUM 4000 PSI
b.	MIN. PORTLAND CEMENT CONTENT	550 LB / CY (ASTM C150 TYPE I/II)
c.	POZZOLAN MATERIALS	SILICA FUME MAY REPLACE MAX. 7% CEMENT FLY ASH MAY REPLACE MAX. 20% CEMENT
d.	MAX W/C RATIO	PER MIX DESIGN, MAXIMUM 0.45
e.	ENTRAINED AIR	6.5% AVG ± 1.5% (7.0% TARGET) ASTM C260
f.	SLUMP	4" MAX WITHOUT WATER REDUCER
g.	SLUMP WITH HRWR OR MID RANGE WR	6" TO 8"
h.	WATER REDUCER	NORMAL TYPE A (ASTM C494)
i.	RETARDER	NORMAL TYPE B OR D AS NEEDED (REQUIRED IF CONCRETE TEMPERATURE EXCEEDS 85F)
j.	CONCRETE TEMPERATURE AT PLACEMENT	50F-90F
k.	ACCELERATOR	NON-CHLORIDE TYPE ONLY - CALCIUM CHLORIDE IS PROHIBITED
l.	FIBER - CURBS, WALKS, STEPS, RAMPS	POLYPROPYLENE OR POLYETHYLENE MICRO SYNTHETIC FIBERS @ 1.5 LBS / CY (FIBERMESH 300 OR APPROVED EQUAL)
	- VEHICULAR TRAFFIC PAVEMENT	MACRO SYNTHETIC FIBERS @ 4.0 LBS / CY (TUF-STRAND SF OR APPROVED EQUAL)

7. ALL SYNTHETIC FIBERS SHALL BE TYPE III PER ASTM C1116 AND ASTM D7508. MACRO FIBERS SHALL BE 1.5 TO 2.25 INCHES IN LENGTH.

8. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, ASTM A1064, ASTM A307, AND ASTM A775. ALL SLAB REINFORCEMENT W.W.F., WHEN USED, SHALL BE SUPPORTED ON CHAIRS AND BE FLAT SHEETS ONLY. ZINC REPAIR MATERIAL SHALL CONFORM TO ASTM A780.

9. NO WATER SHALL BE ADDED TO CONCRETE ON SITE. CONCRETE SHALL ARRIVE AT JOB SITE WITH APPROPRIATE W/C RATIO. SUPERPLASTICIZER AND/OR OTHER ADMIXTURES MAY BE UTILIZED TO ACHIEVE DESIRED WORKABILITY OR TO ACCOUNT FOR ADVERSE PLACEMENT CONDITIONS. ADMIXTURES SHALL BE UTILIZED ONLY IN ACCORDANCE WITH THE MANUFACTURES WRITTEN INSTRUCTIONS AND MEET THE REQUIREMENTS OF ASTM C494 AND/OR ASTM C1017.

10. FLY ASH SHALL MEET THE REQUIREMENTS OF ASTM C618, CLASS C OR CLASS F, EXCEPT THE LOSS ON IGNITION MUST NOT EXCEED 5%. SILICA FUME SHALL BE DRY DENSIFIED MEETING THE REQUIREMENTS OF ASTM C1240. USE OF MATERIALS SHALL BE IN ACCORDANCE WITH ACI 211.1.

11. AGGREGATES SHALL BE LOW-SHRINKAGE / WELL GRADED PER ASTM C33 AND THE LOCAL STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS WHICH ARE RESISTANT TO FREEZE / THAW, SULFATE ATTACK, AND ARE NOT ALKALI-CARBONATE AGGREGATES OR SUSCEPTIBLE TO ALKALI-AGGREGATE REACTIVITY, SLAG AGGREGATES AND/OR SLAG CEMENT SHALL NOT BE PERMITTED IN ANY CONCRETE MIX.

12. LIQUID MEMBRANE FORMING CURING COMPOUNDS SHALL BE PER ASTM C1315 TYPE II CLASS A IN ACCORDANCE WITH ACI 308. LIQUID MEMBRANE FORMING CURING COMPOUNDS SHALL BE WHITE PIGMENTED AND TWO COATS APPLIED IN TWO PERPENDICULAR UNIFORM APPLICATIONS PER MANUFACTURES RECOMMENDATIONS WITHIN THE ALLOWABLE TIME PERIODS. APPLICATIONS SHALL BE PHOTOGRAPH DOCUMENTED FOR EVEN AND CONSISTENT COVERAGE SIMILAR TO THE APPEARANCE OF A BLANK WHITE SHEET OF COPY PAPER. NO POOLING OF MATERIAL SHALL BE ACCEPTED.

15. CONCRETE SEALER SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. A LETTER OF COMPATIBILITY FOR THE SEALER SHALL BE PROVIDED TO WORK WITH THE CURING COMPOUND.

16. REFER TO ACI INDUSTRY STANDARDS FOR CONCRETE PLACEMENT AND INSTALLATION. CONTRACTOR SHALL INCLUDE PROVISIONS IN ACCORDANCE WITH ACI 305R AND 306R FOR HOT AND COLD WEATHER PLACEMENT WHEN PROJECT SCHEDULE TIMING FALLS WITHIN THE REQUIRED TEMPERATURE RANGES PER ACI AND THE LOCAL DOT.

GRADING PLAN NOTES

1. A GEOTECHNICAL REPORT HAS BEEN PREPARED BY TERRACON CONSULTANTS, INC., DATED MARCH 26, 2021 AND SHALL BE CONSIDERED TO BE A PART OF THIS PLAN SET.

2. BEFORE STARTING GRADING OPERATIONS, SEE STORMWATER POLLUTION PREVENTION PLAN, NOTES AND DETAILS (SWPP), LANDSCAPE PLAN AND SOILS REPORT FOR TREATMENT OF EXISTING GRADE.

3. PRIOR TO SITE CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL INSTALL ALL SWPP MEASURES TO PROTECT EXISTING DRAINAGE FACILITIES. CONTRACTOR SHALL PREVENT SILTATION FROM LEAVING THE SITE AT ALL TIMES.

4. STRIP BUILDING AND PAVEMENT AREAS OF ALL ORGANIC TOPSOILS. STOCKPILE SUITABLE TOPSOILS FOR RESPREADING ONTO LANDSCAPE AREAS. ALL EXCESS EXCAVATED MATERIALS SHALL BE REMOVED FROM THE SITE AT THE CONTRACTOR'S EXPENSE. SEE GEOTECHNICAL REPORT FOR STRIPPING AND TOPSOIL REQUIREMENTS.

5. OBTAIN APPROVED BORROW SOIL MATERIALS OFF-SITE WHEN SUFFICIENT SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE ON-SITE.

6. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. UNLESS OTHERWISE SPECIFIED IN THE PLANS, SPECIFICATIONS, OR GEOTECHNICAL REPORT THE SITE GRADING, EXCAVATION, AND EMBANKMENT SHALL BE IN ACCORDANCE WITH THE STATE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS.

7. AT A MINIMUM ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 98% OF STANDARD PROCTOR MAXIMUM DRY DENSITY PER A.S.T.M. TEST D-698. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 3.0% ABOVE NOR 2.0% BELOW OPTIMUM. THE CONTRACTOR SHALL FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND RETAIN A QUALIFIED SOILS ENGINEER REGISTERED WITHIN THE STATE TO ENSURE COMPLIANCE WITH THE GEOTECHNICAL REPORT. MAKE GEOTECHNICAL RECOMMENDATIONS BASED ON FIELD CONDITIONS AND ENSURE THAT ALL SHORING AND DEWATERING MEANS AND METHODS WILL NOT COMPROMISE THE STABILITY OF EXISTING OR PROPOSED FOOTINGS/FOUNDATIONS. THE OWNER SHALL RECEIVE ALL COMPACTION REPORTS PREPARED BY THE CONTRACTOR'S GEOTECHNICAL ENGINEER, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT. NOTIFY PROJECT CONSTRUCTION MANAGER IF ANY UNSUITABLE SOILS ARE FOUND.

8. FOLLOWING GRADING OF SUBSOIL TO SUBGRADE ELEVATIONS THE CONTRACTOR SHALL PLACE TOPSOIL TO A 6" DEPTH (UNLESS OTHERWISE SPECIFIED IN LANDSCAPING DETAILS) IN ALL DISTURBED AREAS WHICH ARE NOT TO BE PAVED. SMOOTHLY FINISH GRADE TO MEET SURROUNDING LAWN AREAS AND ENSURE POSITIVE DRAINAGE. STOCKPILED TOPSOIL SHALL BE SCREENED PRIOR TO RESPREADING. TOPSOIL SHALL BE FREE OF SUBSOIL, DEBRIS, BRUSH AND STONES LARGER THAN 1" IN ANY DIMENSION. ROCK HOUNDING IN PLACE WILL NOT BE PERMITTED. ALL EXCESS TOPSOIL SHALL BE LEGALLY DISPOSED OF OFF SITE.

9. ELEVATIONS GIVEN ARE AT BOTTOM FACE OF CURB AND/OR FINISHED PAVEMENT GRADE UNLESS OTHERWISE SPECIFIED ON GRADING PLAN. ALL PAVEMENT SHALL BE LAID ON A STRAIGHT, EVEN, AND UNIFORM GRADE WITH A MINIMUM OF 1% SLOPE TOWARD THE COLLECTION POINTS UNLESS OTHERWISE SPECIFIED ON THE GRADING PLAN. DO NOT ALLOW NEGATIVE GRADES OR PONDING OF WATER.

10. SLOPE BUILDING SIDEWALK AWAY FROM THE BUILDING AT A MAXIMUM OF 1.5% (UNLESS OTHERWISE INDICATED ON THE GRADING PLA

GENERAL NOTES

1. ALL WORK SPECIFIED AS A DEPARTMENT OF TRANSPORTATION ITEM SHALL BE GOVERNED BY THE CURRENT STATE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS AS WELL AS THE CURRENT EDITION OF THE LOCAL JURISDICTION STORM WATER MANAGEMENT MANUAL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO POSSESS AND TO BE FAMILIAR WITH APPLICABLE SECTIONS.

2. THESE CONTRACT DRAWINGS SHALL BE MADE AVAILABLE ON SITE AT ALL TIMES AND PRESENTED UPON REQUEST. IF UNFORESEEN STORM WATER POLLUTION IS ENCOUNTERED, ADDITIONAL STORM WATER POLLUTION PREVENTION (SWPP) MEASURES SHALL BE IMPLEMENTED TO MANAGE THE CURRENT SITE CONDITIONS WHICH MAY BE REQUESTED BY THE OWNER, COUNTY ENGINEER, PROJECT ENGINEER OR SOIL AND WATER CONSERVATION SERVICE REPRESENTATIVE AT ANYTIME, SUCH REQUESTS AND CHANGE IN SITE CONDITIONS SHALL BE IMPLEMENTED IMMEDIATELY AT CONTRACTOR'S EXPENSE.

3. ALL STORM WATER POLLUTION PREVENTION PRACTICES SHALL BE INSTALLED BEFORE ANY OTHER EARTH MOVING OCCURS.

4. SEDIMENT BARRIERS SHALL BE INSTALLED DOWNSLOPE OF DISTURBED AREAS. SEDIMENT BARRIERS SHALL BE INSTALLED ALONG LEVEL CONTOURS. MAXIMUM CONTRIBUTING DRAINAGE AREA TO SEDIMENT BARRIERS SHALL BE PER THE CURRENT STATE'S EPA OR THE LOCAL AUTHORITY REQUIREMENTS. COMPOSITE FILTER SOCKS USED IN LIEU OF SILT FENCE SHALL BE A MINIMUM OF 12 INCHES IN DIAMETER.

5. SILT BARRIERS SHALL BE INSTALLED AROUND ALL EXISTING AND NEW STORM INLETS, CATCH BASINS AND YARD DRAINS. INSTALL ROCK CHECK DAMS FOR HEADWALL INLETS FOR STORM WATER POLLUTION PREVENTION.

6. STORM WATER POLLUTION PREVENTION MEASURES SHALL BE INSTALLED AROUND ALL DIRT OR TOPSOIL STOCKPILES AND OTHER TEMPORARILY DISTURBED AREAS AS MAY BE SHOWN ON THESE PLANS AND/OR AS DIRECTED BY THE ENGINEER OR THE LOCAL AUTHORITY HAVING JURISDICTION.

7. SILT BARRIERS, CONSTRUCTION ENTRANCES, AND SILT PERIMETER CONTROLS SHALL REMAIN IN PLACE UNTIL A GOOD STAND OF GRASS HAS BEEN OBTAINED AND/OR PAVING OPERATIONS ARE COMPLETE. CONTRACTOR SHALL KEEP SILT FROM ENTERING ANY STORM DRAINAGE SYSTEM. ONCE SITE HAS BEEN COMPLETELY STABILIZED, ANY SILT IN PIPES AND DRAINAGE SWALES SHALL BE REMOVED WITHIN 10 DAYS.

8. ALL EXISTING WATER COURSES WITHIN THE PROJECT LIMITS SHALL BE TEMPORARILY PROTECTED DURING LAND CLEARING AND GRADING OPERATIONS. SOILS WITHIN 50 FEET OF SAID WATER COURSES SHALL BE STABILIZED WITHIN 2 DAYS OF THE INITIAL CLEARING / GRADING OPERATION.

9. CONSTRUCTION ENTRANCE SHALL BE UTILIZED. IF CONDITIONS ARE SUCH THAT MUD IS COLLECTING ON VEHICLE TIRES, THE TIRES MUST BE CLEANED BEFORE THE VEHICLES ENTER THE PUBLIC ROADWAY. THE SITE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT THE TRACKING OR FLOW OF MUD ONTO THE PUBLIC RIGHT-OF-WAY. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO THE ROADWAY MUST BE REMOVED PROMPTLY.

10. IF FOR ANY REASON, THE PROJECT IS SUSPENDED, THE CONTRACTOR SHALL INSURE THAT ALL INSTALLED EROSION MEASURES ARE FUNCTIONING AND PROPERLY MAINTAINED DURING THIS PERIOD, AND THAT ALL BARE SOILS ARE SEEDED AND MULCHED WITH TEMPORARY SEED MIXTURE.

11. CONCRETE WASHOUT FACILITY (IF APPLICABLE) SHALL BE CONSTRUCTED IN ACCORDANCE WITH PLAN DETAILS AND LOCAL GOVERNING AUTHORITY REGULATIONS AND INSTRUCTIONS.

12. IMPLEMENTATION OF EROSION AND SEDIMENT CONTROLS SHALL CONFORM TO STATE OF MICHIGAN CONSTRUCTION GENERAL PERMIT AND BROWNSTOWN TOWNSHIP CODIFIED ORDINANCES. IF A CONFLICT EXISTS BETWEEN THE TWO REGARDING EROSION AND SEDIMENT CONTROL IMPLEMENTATION, THE MORE RESTRICTIVE SHALL APPLY.

INSPECTION NOTES

1. CONTRACTOR SHALL INSPECT ALL SWPP MEASURES DAILY AND LOGGED BY THE CONTRACTOR FOR INSPECTION. LOGGING SHALL BE WEEKLY AND AFTER EVERY 1/2" RAINFALL EVENT. REPAIR AS NECESSARY TO PREVENT EROSION. SILTATION SHALL BE REMOVED FROM AREAS WHERE FAILURES HAVE OCCURRED AND CORRECTIVE ACTION TAKEN WITHIN 24 HOURS TO MAINTAIN ALL SWPP.

2. CONTRACTORS INSPECTOR SHALL BE A QUALIFIED INDIVIDUAL. ONLY A QUALIFIED INSPECTION PERSONNEL IS TO PERFORM THE INSPECTIONS. SITE INSPECTIONS SHALL BE DONE WEEKLY AND WITHIN 24 HRS AFTER EVERY RAINFALL EVENT EXCEEDING 1/2" OF RAINFALL. ALL NECESSARY REPAIRS SHOULD BE IMPLEMENTED IMMEDIATELY AFTER SUCH INSPECTIONS.

3. CONTRACTOR'S INSPECTOR SHALL BE RESPONSIBLE FOR PREPARING AND SIGNING WEEKLY AND ALL INTERMEDIATE EROSION CONTROL INSPECTION REPORTS AFTER EVERY INSPECTION, WHICH INCLUDE BUT NOT LIMITED TO (DISTURBED AREAS, MATERIAL STORAGE AREAS, EROSION AND SEDIMENT CONTROLS; DISCHARGE LOCATIONS AND VEHICLE ENTRANCE/EXIT LOCATIONS). SUCH REPORTS SHALL BE MADE AVAILABLE TO OWNER, ENGINEER AND CITY / STATE OFFICIALS UPON THEIR REQUEST.

4. REPORTS SHALL BE KEPT FOR 3 YEARS AFTER TERMINATION OF THE CONSTRUCTION ACTIVITIES.

5. CONTRACTOR MAY SUBMIT A WAIVER REQUEST TO THE LOCAL AND STATE GOVERNING AUTHORITIES FOR A REDUCTION TO MONTHLY INSPECTIONS IF THE SITE WILL BE STABILIZED AND DORMANT FOR A LONG PERIOD, AND/OR THE RUNOFF IS UNLIKELY DUE TO WEATHER CONDITIONS FOR AN EXTENDED PERIOD OF TIME (FROZEN GROUND).

6. FOR BMPS THAT REQUIRE REPAIR OR MAINTENANCE - NON SEDIMENT POND BMPS ARE TO BE REPAIRED WITHIN 3 DAYS OF INSPECTION AND SEDIMENT PONDS ARE TO BE REPAIRED OR CLEANED OUT WITHIN 10 DAYS OF INSPECTION.

7. FOR BMPS THAT DO NOT MEET THE INTENDED FUNCTION, A NEW BMP SHALL BE INSTALLED WITHIN 10 DAYS OF THE INSPECTION.

8. FOR MISSING BMPS REQUIRED, THE MISSING BMPS SHALL BE INSTALLED WITHIN 10 DAYS OF THE INSPECTION.

SPILLS AND CONTAMINATION

1. CONSTRUCTION PERSONNEL, INCLUDING SUBCONTRACTORS WHO MAY USE OR HANDLE HAZARDOUS OR TOXIC MATERIALS, SHALL BE MADE AWARE OF THE FOLLOWING GENERAL GUIDELINES REGARDING DISPOSAL AND HANDLING OF HAZARDOUS AND CONSTRUCTION WASTES:
   a. PREVENT SPILLS
   a. USE PRODUCTS UP
   b. FOLLOW LABEL DIRECTIONS FOR DISPOSAL
   c. REMOVE LIDS FROM EMPTY BOTTLES AND CANS WHEN DISPOSING IN TRASH
   d. RECYCLE WASTES WHENEVER POSSIBLE
   e. DON'T POUR INTO WATERWAYS, STORM DRAINS OR ONTO THE GROUND
   f. DON'T POUR DOWN THE SINK, DOOR DRAIN OR SEPTIC TANKS
   g. DON'T BURY CHEMICALS OR CONTAINERS
   h. DON'T BURN CHEMICALS OR CONTAINERS
   i. DON'T MIX CHEMICALS TOGETHER

2. ANY DISCHARGE OF PETROLEUM OR PETROLEUM PRODUCTS OF LESS THAN 25 GALLONS ONTO A PERVIOUS SURFACE SHALL BE LEGALLY REMOVED AND PROPERLY TREATED OR PROPERLY DISPOSED OF, OR OTHERWISE REMEDIATED, SO THAT NO CONTAMINATION FROM THE DISCHARGE REMAINS ON-SITE. SPILLS OF 25 GALLONS OR MORE OF PETROLEUM PRODUCTS SHALL BE REPORTED TO THE CURRENT STATE'S EPA, THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN 30 MINUTES OF THE DISCOVERY OF THE RELEASE. ALL SPILLS WHICH CONTACT WATERS OF THE STATE MUST BE REPORTED TO THE CURRENT STATE'S EPA.

3. SPILL REPORTING REQUIREMENTS: SPILLS ON PAVEMENT SHALL BE ABSORBED WITH SAWDUST OR KITTY LITTER AND DISPOSED OF WITH THE TRASH AT A LICENSED SANITARY LAND FILL. HAZARDOUS OR INDUSTRIAL WASTES SUCH AS MOST SOLVENTS, GASOLINE, OIL-BASED PAINTS, AND CEMENT CURING COMPOUNDS REQUIRE SPECIAL HANDLING. SPILLS SHALL BE REPORTED TO THE CURRENT STATE'S EPA.

4. CONTAINERS SHALL BE PROVIDED FOR THE PROPER COLLECTION OF ALL WASTE MATERIAL INCLUDING CONSTRUCTION DEBRIS, TRASH, PETROLEUM PRODUCTS AND ANY HAZARDOUS MATERIALS USED ON-SITE. CONTAINERS SHALL BE COVERED AND NOT LEAKING. ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THAT MATERIAL. CONSTRUCTION DEMOLITION AND DEBRIS (CD&D) WASTE MUST BE DISPOSED OF AT THE CURRENT STATE'S EPA APPROVED CD&D LAND FILL.

5. PROCESS WASTE WATER/LEACHATE MANAGEMENT : EPA'S CONSTRUCTION GENERAL PERMIT ONLY ALLOWS THE DISCHARGE OF STORM WATER AND DOES NOT INCLUDE OTHER WASTE STREAMS/DISCHARGES SUCH AS VEHICLE AND/OR EQUIPMENT WASHING, ON-SITE SEPTIC LEACHATE CONCRETE WASH OUTS, WHICH ARE CONSIDERED PROCESS WASTEWATERS. ALL PROCESS WASTEWATERS MUST BE COLLECTED AND PROPERLY DISPOSED AT AN APPROVED DISPOSAL FACILITY. IN THE EVENT, LEACHATE OR SEPTAGE IS DISCHARGED; IT MUST BE ISOLATED FOR COLLECTION AND PROPER DISPOSAL AND CORRECTIVE ACTIONS TAKEN TO ELIMINATE THE SOURCE OF WASTE WATER.

6. WASTES GENERATED BY CONSTRUCTION ACTIVITIES (I.E. CONSTRUCTION MATERIALS SUCH AS PAINTS, SOLVENTS, FUELS, CONCRETE, WOOD, ETC) MUST BE DISPOSED OF IN ACCORDANCE WITH LOCAL REGULATIONS. HAZARDOUS AND TOXIC SUBSTANCES ARE USED ON VIRTUALLY ALL CONSTRUCTION SITES. GOOD MANAGEMENT OF THESE SUBSTANCES IS ALWAYS NEEDED.

7. NO CONSTRUCTION RELATED WASTE MATERIALS ARE TO BE BURIED OR BURNED ON-SITE.

8. HANDLING CONSTRUCTION CHEMICALS: MIXING, PUMPING, TRANSFERRING OR OTHER HANDLING OF CONSTRUCTION CHEMICALS SUCH AS FERTILIZER, LIME, ASPHALT, CONCRETE DRYING COMPOUNDS, AND ALL OTHER POTENTIALLY HAZARDOUS MATERIALS SHALL BE PERFORMED IN AN AREA AWAY FROM ANY WATERCOURSE, DITCH OR STORM DRAIN.

9. EQUIPMENT FUELING AND MAINTENANCE, OIL CHANGING, ETC,. SHALL BE PERFORMED AWAY FROM WATERCOURSES, DITCHES OR STORM DRAINS, IN AN AREA DESIGNATED FOR THAT PURPOSE. THE DESIGNATED AREA SHALL BE EQUIPPED FOR RECYCLING OIL AND CATCHING SPILLS. SECONDARY CONTAINMENT SHALL BE PROVIDED FOR ALL FUEL OIL STORAGE TANKS. THESE AREAS MUST BE INSPECTED EVERY SEVEN DAYS AND WITHIN 24 HRS. OF A 0.5 INCH OR GREATER RAIN EVENT TO ENSURE THERE ARE NO EXPOSED MATERIALS WHICH WOULD CONTAMINATE STORM WATER. SITE OPERATORS MUST BE AWARE THAT SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) REQUIREMENTS MAY APPLY. AN SPCC PLAN IS REQUIRED FOR SITES WITH ONE SINGLE ABOVE GROUND TANK OF 660 GALLONS OR MORE, ACCUMULATIVE ABOVE GROUND STORAGE OF 1330 GALLONS OR MORE, OR 42,000 GALLONS OF UNDERGROUND STORAGE. CONTAMINATED SOILS MUST BE PROPERLY DISPOSED OF IN ACCORDANCE WITH LOCAL GOVERNING AUTHORITY REGULATIONS. SPCC PLAN AND APPROVALS ARE THE RESPONSIBILITY OF THE CONTRACTOR.

10. CONTAMINATED SOILS: IF SUBSTANCES SUCH AS OIL, DIESEL FUEL, HYDRAULIC FLUID, ANTIFREEZE, ETC. ARE SPILLED, LEAKED, OR RELEASED ONTO THE SOIL, THE SOIL SHOULD BE DUG UP AND DISPOSED OF AT LICENSED SANITARY LAND FILL OR OTHER APPROVED PETROLEUM CONTAMINATED SOIL REMEDIATION FACILITY (NOT A CONSTRUCTION / DEMOLITION DEBRIS LAND FILL). NOTE THOSE STORM WATER RUNOFFS ASSOCIATED WITH CONTAMINATED SOILS ARE NOT BE AUTHORIZED UNDER CURRENT REGULATIONS OF CONSTRUCTION ACTIVITIES.

11. CONTRACTOR SHALL TAKE PREVENTIVE MEASURES FOR WATER DISCHARGES FROM CONTAMINATED SOILS BY ANY MEANS POSSIBLE, INCLUDING THE FOLLOWING:
    11.1. THE USE OF BERMS, TRENCHES, AND PITS TO COLLECT CONTAMINATED RUNOFF AND PREVENT DISCHARGES.
    11.2. PUMPING RUNOFF INTO A SANITARY SEWER (WITH PRIOR WRITTEN APPROVAL OF THE SANITARY SEWER SERVICE OPERATOR) OR INTO A CONTAINER FOR TRANSPORT TO AN APPROPRIATE TREATMENT/DISPOSAL FACILITY.
    11.3. COVERING AREAS OF CONTAMINATION WITH TARPS OR OTHER METHODS THAT PREVENT STORMWATER FROM COMING INTO CONTACT WITH CONTAMINATED MATERIALS.

TEMPORARY SEEDING

1. STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS AND SEDIMENT TRAPS SHALL BE INSTALLED AND STABILIZED WITH TEMPORARY SEEDING PRIOR TO GRADING THE REST OF THE CONSTRUCTION SITE.

2. TEMPORARY SEEDING / STABILIZATION SHALL BE APPLIED WITHIN THE FOLLOWING TIME FRAMES FOR VARIOUS AREAS OF THE SITE:
   2.1. ANY DISTURBED AREA WITHIN 50 FEET OF A WATERCOURSE AND NOT AT FINAL GRADE SHALL BE SEEDED AND MULCHED WITHIN 2 DAYS OF THE MOST RECENT DISTURBANCE, IF THAT AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS.
   2.2. ALL CONSTRUCTION ACTIVITIES IN ANY DISTURBED AREA, INCLUDING SOIL STOCKPILES THAT WILL BE IDLE FOR MORE THAN 14 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FEET OF A WATERCOURSE SHALL BE SEEDED AND MULCHED WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE IN THE AREA.
   2.3. DISTURBED AREAS THAT WILL BE IDLE OVER THE WINTER SHALL BE SEEDED AND MULCHED PRIOR TO NOVEMBER 1.

3. THE SEED BED SHOULD BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION. TEMPORARY SEEDING SHOULD NOT BE POSTPONED IF IDEAL SEED BED PREPARATION IS NOT POSSIBLE.

4. TEMPORARY VEGETATION SEEDING RATES SHALL ESTABLISH ADEQUATE STANDS OF VEGETATION, WHICH MAY REQUIRE USE OF SOIL AMENDMENTS. BASE RATES FOR LIME AND FERTILIZER SHALL BE USED.

5. ALL SEED MIXES AND SEEDING RATES USED SHALL BE APPROVED BY THE LOCAL GOVERNING AUTHORITY AND THE OWNER.

6. SEED SHALL BE APPLIED UNIFORMLY WITH A CYCLONE SPREADER, DRILL, CULTIPACKER, SEEDER, OR HYDROSEEDER. WHEN FEASIBLE, SEED THAT HAS BEEN BROADCAST SHALL BE COVERED BY RAKING OR DRAGGING AND THEN LIGHTLY TAMPED INTO PLACE USING A ROLLER OR CULTIPACKER. IF HYDROSEEDING IS USED, THE SEED AND FERTILIZER WILL BE MIXED ON-SITE AND THE SEEDING SHALL BE DONE IMMEDIATELY AND WITHOUT INTERRUPTION.

7. APPLICATIONS OF TEMPORARY SEEDING SHALL INCLUDE MULCH, WHICH SHALL BE APPLIED DURING OR IMMEDIATELY AFTER SEEDING. SEEDINGS MADE DURING OPTIMUM SEEDING DATES ON FAVORABLE, VERY FLAT SOIL CONDITIONS MAY NOT NEED MULCH TO ACHIEVE ADEQUATE STABILIZATION. IF MULCH IS USED, FOLLOW THE REQUIREMENTS AND INSTRUCTIONS IN THE MULCH APPLICATION.

MULCH

1. MULCH AND OTHER APPROPRIATE VEGETATIVE PRACTICES SHALL BE APPLIED TO DISTURBED AREAS WITHIN 7 DAYS OF GRADING IF THE AREA IS TO REMAIN DORMANT (UNDISTURBED) FOR MORE THAN 21 DAYS OR ON AREAS AND PORTIONS OF THE SITE WHICH CAN BE BROUGHT TO FINAL GRADE.

2. MULCH SHALL CONSIST OF ONE OF THE FOLLOWING:
   2.1. STRAW SHALL BE UNROTTED SMALL GRAIN STRAW APPLIED AT THE RATE OF 2 TONS/AC. OR 90 LB./1,000 SQ. FT. (TWO TO THREE BALES) THE STRAW MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQ. FT. SECTIONS AND PLACE TWO 45-LB BALES OF STRAW IN EACH SECTION.
   2.2. WOOD CELLULOSE FIBER SHOULD BE USED AT 2,000 LB.AC, OR 46 LB/1,000 SQ. FT.
   2.3. ACCEPTABLE MULCHES INCLUDE MULCH MATTINGS AND ROLLED EROSION CONTROL PRODUCTS APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS OR WOOD MULCH/CHIPS APPLIED AT 10-20 TONS/AC.

3. MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR RUNOFF. THE FOLLOWING ARE ACCEPTABLE METHODS FOR ANCHORING MULCH.
   3.1. USE A DISK, CRIMPER, OR SIMILAR TYPE TOOL SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT BE LEFT GENERALLY LONGER THAN 6 INCHES.
   3.2. USE MULCH NETTINGS ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, FOLLOWING ALL PLACEMENT AND ANCHORING REQUIREMENTS. USE IN AREAS OF WATER CONCENTRATION AND STEEP SLOPES TO HOLD MULCH IN PLACE.
   3.3. FOR STRAW MULCH, SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TACK OR EQUAL MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER. ALL APPLICATIONS OF SYNTHETIC BINDERS MUST BE CONDUCTED IN SUCH A MANNER WHERE THERE IS NO CONTACT WITH WATERS OF THE STATE.
   3.4. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. THE FIBER BINDER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 LB/AC. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LB/100 GAL. OF WOOD CELLULOSE FIBER.

DUST CONTROL NOTES

1. DUST CONTROL SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. IF POSSIBLE GRADING SHALL BE DONE BY PHASING IN ORDER TO MINIMIZE THE AMOUNT OF LAND DISTURBANCE AT ONE TIME. IF PHASING IS NOT AN OPTION, DUST SHALL BE CONTROLLED WITH WATER DURING EARTHWORK OPERATIONS. AFTER EARTHWORK OPERATIONS, THE EXPOSED SOILS SHALL BE COVERED WITH STRAW OR MULCH UNTIL SEEDED.

2. DUST CONTROL OR DUST SUPPRESSANTS MAY BE USED TO PREVENT NUISANCE CONDITIONS WHEN APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION. WHEN USED, SUPPRESSANTS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND IN A MANNER, WHICH PREVENTS A DISCHARGE TO WATERS OF THE STATE. SUFFICIENT DISTANCE MUST BE PROVIDED BETWEEN APPLICATIONS AND NEARBY BRIDGES, CATCH BASINS, AND OTHER WATERWAYS. APPLICATION (EXCLUDING WATER) MAY NOT OCCUR WHEN RAIN IS IMMINENT AS NOTED IN THE SHORT TERM FORECAST. OIL MAY NOT BE APPLIED FOR DUST CONTROL.

3. SUGGESTED METHODS OF CONSTRUCTION DUST CONTROL MAY INCLUDE THE FOLLOWING:
   3.1. CONSTRUCTION SEQUENCING AND DISTURBING ONLY SMALL AREAS AT A TIME CAN GREATLY REDUCE PROBLEMATIC DUST FROM THE SITE. IF LAND MUST BE DISTURBED, ADDITIONAL TEMPORARY STABILIZATION MEASURES SHOULD BE CONSIDERED PRIOR TO DISTURBANCES.
   3.2. APPLY TEMPORARY OR PERMANENT SEEDING AND MULCH TO AREAS THAT WILL REMAIN IDLE FOR OVER 14 DAYS. SAVING EXISTING TREES AND LARGE SHRUBS WILL ALSO REDUSE SOIL AND AIR MOVEMENT ACROSS DISTURBED AREAS.
   3.3. SPRAY DISTURBED SITE WITH WATER UNTIL THE SURFACE IS WET BEFORE AND DURING GRADING AND REPEAT AS NEEDED, ESPECIALLY ON HAUL ROADS AND OTHER HEAVY TRAFFIC ROUTES. WATERING SHALL BE DONE AT A RATE THAT PREVENTS DUST BUT DOES NOT CAUSE SOIL EROSION. WETTING AGENTS MAY BE UTILIZED ACCORDING TO MANUFACTURERS INSTRUCTIONS.
   3.4. GRADED ROADWAYS AND OTHER SUITABLE AREAS MAY BE STABALIZED USING CRUSHED STONE OR COARSE GRAVEL AS SOON AS PRACTICABLE AFTER REACHING AN INTERIM OR FINAL GRADE. CRUSHED STONE OR COARSE GRAVEL CAN BE USED AS A PERMANENT COVER TO PROVIDE CONTROL OF SOIL EMISSIONS.
   3.5. EXISTING WINDBREAK VEGETATION SHALL BE MARKED AND PRESERVED TO THE EXTENT POSSIBLE. SNOW FENCING OR OTHER SUITABLE BARRIER MAY BE PLACED PERPENDICULAR TO PREVAILING AIR CURRENTS AT INTERVALS OF ABOUT 15 TIMES THE BARRIER HEIGHTS TO CONTROL AIR CURRENTS AND BLOWING SOIL.
   3.6. WHEN TEMPORARY DUST CONTROL MEASURES ARE USED; REPETITIVE TREATMENT SHOULD BE APPLIED AS NEED TO ACCOMPLISH SATISFACTORY CONTROL.
   3.7. PAVED AREAS THAT HAVE ACCUMULATED SEDIMENT FROM CONSTRUCTION SHOULD BE CLEANED DAILY, OR AS NEEDED, UTILIZING A STREET SWEEPER OR BUCKET-TYPE ENDLOADER OR SCRAPER.

PERMANENT SEEDING

1. REFER TO LANDSCAPE PLANS FOR PERMANENT SEEDING SPECIFICATIONS.

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

	DATE	REMARKS
1	07.12.2021	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

TACO BELL

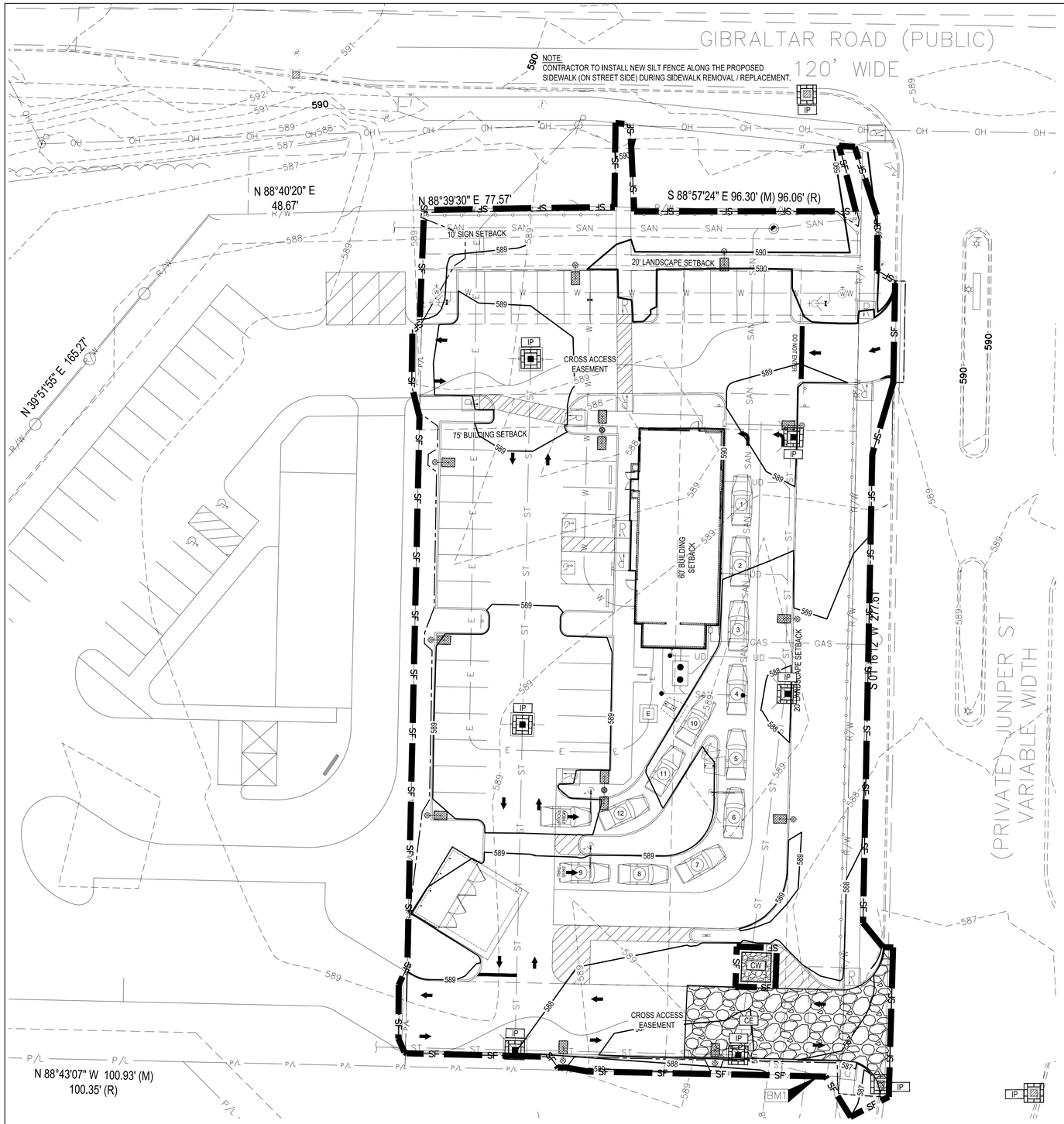
GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0

SWPP PLAN NOTES

C-010

PLOT DATE:



N

0 20

10 40

1"=20'

Horizontal Scale in Feet

LEGEND

(SEE SHEET C-001 FOR GENERAL LEGEND)

- PROPOSED SILT BARRIER — REFER TO SWPP DETAILS
- SF — PROPOSED SILT FENCE — REFER TO SWPP DETAILS / LIMITS OF DISTURBANCE
- PROPOSED CONSTRUCTION ENTRANCE — REFER TO SWPP DETAILS
- PROPOSED CONCRETE WASHOUT FACILITY — REFER TO SWPP DETAILS

SWPP KEYNOTES

- CW CONCRETE WASHOUT AREA
- SF SILT FENCE
- CE CONSTRUCTION ENTRANCE
- IP INLET PROTECTION

MISS DIG 811

BENCHMARKS:

BASIS OF BEARING IS THE EAST LINE OF INTERSTATE 75.

BENCHMARK #1 - RIM OF STORM MANHOLE SE CORNER OF SITE.
N 13429816.3076, E 218634.3816
ELEVATION=587.12' (NAVD88)

CONSTRUCTION SEQUENCE

1. DURING PRE-CONSTRUCTION MEETING ALL EROSION & SEDIMENT CONTROL FACILITIES & PROCEDURES SHALL BE DISCUSSED. A GENERAL CONSTRUCTION SEQUENCE FOLLOWS AND MAY NEED TO BE UPDATED BY THE CONTRACTOR TO SUIT THE SPECIFICS OF THE SITE AND INTENDED CONTRACTOR SPECIFIC SEQUENCING.
   - 1.1. INSTALL CONSTRUCTION ENTRANCE AS DETAILED ON PLANS. TEMPORARY CONSTRUCTION FENCING SHALL BE INSTALLED AROUND PERIMETER OF CONSTRUCTION SITE. WHERE THERE IS EXISTING FENCE ALONG THE PERIMETER OF THE SITE, IT CAN BE UTILIZED. FENCING SHALL BE USED TO RESTRICT OUTSIDE TRAFFIC TO SITE.
   - 1.2. DELIVER CONSTRUCTION TRAILER TO SITE AND INSTALL TEMPORARY POWER AND TELEPHONE, IF REQUIRED. TEMPORARY UTILITY SERVICES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
   - 1.3. STAKE AND/OR FLAG LIMITS OF CLEARING.
   - 1.4. CLEAR & GRUB, AS NECESSARY, FOR INSTALLATION OF PERIMETER CONTROLS. INSTALL SILT PERIMETER CONTROLS AS SHOWN ON PLANS. SILT PERIMETER CONTROLS SHALL BE INSTALLED LEVEL, ALONG THE CONTOURS, WITH ENDS TURNED UPSLOPE TO PREVENT CONCENTRATED FLOW AT THE SILT PERIMETER CONTROLS.
   - 1.5. INSTALL TEMPORARY SILT INLET PROTECTION ON ALL EXISTING CATCH BASINS AND INLETS, AS DESIGNATED IN THE PLANS. REMOVAL OF SILT INLET PROTECTION FROM DESIGNATED INLETS CAN ONLY OCCUR WHEN A STRUCTURE IS REMOVED, AND AS REQUIRED BY THE PROGRESSION OF THE DEMOLITION AND CONSTRUCTION.
   - 1.6. CLEAR & GRUB THE REMAINING SITE AS NECESSARY. TOPSOIL SHALL BE STRIPPED AND STOCKPILED ON SITE FOR REUSE, OR REMOVED TO AN APPROVED OFFSITE SPOIL AREA.
   - 1.7. UTILIZE DUST CONTROL MEASURES AS REQUIRED TO MINIMIZE AIR-BORNE POLLUTION BY METHODS APPROVED BY THE AUTHORIZING EPA OFFICE.
   - 1.8. BEGIN FILLING & GRADING AS REQUIRED TO REACH SUBGRADE.
   - 1.9. ONCE PAVEMENT GRADES HAVE BEEN ESTABLISHED, AS DESIGNATED ON THE PLANS, THE CONTRACTOR SHALL UTILIZE THESE AREAS FOR STRUCTURE CONSTRUCTION.
   - 1.10. CONSTRUCT UNDERGROUND UTILITY WORK INCLUDING STORM DRAINAGE FACILITIES. UPON INSTALLATION OF STORM DRAINAGE CATCH BASINS, YARD DRAINS AND INLETS, INSTALL REQUIRED INLET PROTECTION.
   - 1.11. DO NOT REPLACE ANY TOPSOIL, SEED OR INSTALL FINAL PAVEMENT PRIOR TO COMPLETION OF BUILDING SHELL. SHOULD SITEWORK BE COMPLETED PRIOR TO THIS DATE, MULCH DISTURBED AREAS TO BE PLANTED AND INSTALL STONE SUBBASE IN DISTURBED AREAS TO BE PAVED.
   - 1.12. FOLLOWING COMPLETION OF BUILDING SHELL AND PAVEMENT INSTALLATION, BEGIN LANDSCAPE INSTALLATION.
   - 1.13. COMPLETE SITEWORK, PAVEMENT MARKINGS AND FINAL CLEAN-UP. RESEED ANY AREAS THAT MAY REQUIRE ATTENTION IMMEDIATELY. NOTE THAT LAWN AREAS WILL NOT BE DEEMED STABLE UNTIL A MINIMUM 80% VEGETATIVE DENSITY HAS BEEN ACHIEVED.
   - 1.14. MAINTAIN EROSION & SEDIMENTATION CONTROL MEASURES UNTIL THE SITE HAS BEEN COMPLETELY STABILIZED. ALL AREAS OF VEGETATIVE SURFACE, WHETHER PERMANENT OR TEMPORARY, SHALL BE CONSIDERED TO BE IN PLACE AND FUNCTIONAL WHEN THE REQUIRED UNIFORM RATE OF COVERAGE (80%) IS OBTAINED.
   - 1.15. REMOVE SEDIMENT CONTROLS.

PROJECT DESCRIPTION

THIS SITE WAS HOME TO VACANT LAND THAT IS PARTIALLY WOODED. PROPOSED IMPROVEMENTS INCLUDE A NEW TACO BELL SITE ALONG WITH PARKING AREAS, SIDEWALKS, UTILITIES, AND AMENITY IMPROVEMENTS. THIS SITE IS AN UNDEVELOPED PORTION OF AN ALREADY DEVELOPED AREA WITH A DETENTION SYSTEM AND HENCE WATER QUALITY AND DETENTION WILL NOT BE REQUIRED WITHIN THE SITE BOUNDARIES. VERIFICATION WITH BROWNSTOWN PUBLIC WORKS HAS DETERMINED THAT EXISITING DETENTION FOR THIS DEVELOPMENT HAS BEEN GRANDFATHERED FOR THIS SITE.

PROJECT COMPLETION STATISTICS

PARCEL SIZE :	1.00 ACRES
TOTAL DISTURBED AREA:	1.00± ACRES
EXISTING LAND USE FOR THE SITE IS VACANT LAND.	
ESTIMATED PRE-CONSTRUCTION IMPERVIOUS AREA:	0.00 ACRES
ESTIMATED PRE-CONSTRUCTION IMPERVIOUS PERCENT:	0%
PRE-CONSTRUCTION RUN-OFF COEFFICIENT:	0.40
PROPOSED LAND USE WILL BE TACO BELL DEVELOPMENT.	
ESTIMATED POST-CONSTRUCTION IMPERVIOUS AREA:	0.72 ACRES
ESTIMATED POST-CONSTRUCTION IMPERVIOUS PERCENT:	72%
POST-CONSTRUCTION RUN-OFF COEFFICIENT:	0.80

PROJECT LOCATION:

LATITUDE	LONGITUDE
42.094838°	-83.237838°

EXISTING SITE SOIL TYPES:

ZfsabA: ZIEGENFUSS-CLAY. 0 TO 1 PERCENT SLOPES.
REFERENCE: USDA NATIONAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY.

WETLAND INFORMATION:

THERE ARE NO KNOWN WETLANDS ON THIS SITE.

FIRST AND SUBSEQUENT RECEIVING STREAM:

INITIAL RECEIVING WATER IS TOWNSHIP STORM SEWER AND THE SUBSEQUENT RECEIVING WATER IS TRIBUTARY TO CASS DRAIN AND THEN TO SILVER CREEK RIVER.

OWNER CONTACT:
4Z BROWNSTOWN, LLC.
PETER ZINGAS
18400 TARA DRIVE,
CLINTON TOWNSHIP, MI 48036

ANTICIPATED TIMING:

CONSTRUCTION BEGIN:	TBD
CONSTRUCTION COMPLETE:	TBD

CONTRACTOR: T.B.D. _____
CONTACT: _____
PHONE NUMBER: _____

CONTRACTOR SHALL MAINTAIN A CONSTRUCTION LOG DOCUMENTING ALL GRADING AND STABILIZATION ACTIVITIES.

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520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

	DATE	REMARKS
1	05.19.2021	SE &SC COMMENTS
2	07.12.2021	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

TACO BELL

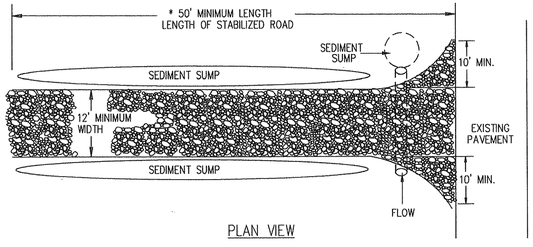
ENDEAVOR 2.0
SWPP PLAN

C-011

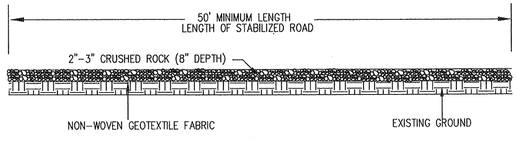
PLOT DATE:

This detail has not been reviewed by the stamping party. Therefore, the stamping party makes no representation(s) with respect to its contents, and shall not be liable for such. Any reliance on this stamp shall be at the relying party(ies)'s own risk and hereby waives any and all claim(s) related to the existence of the stamp or otherwise.

S53 STABILIZED CONSTRUCTION ACCESS



PLAN VIEW



PROFILE

NOTES:
1. Establish stabilized construction entrance prior to the initiation of site construction activities.
2. Care should be taken to prevent material movement into adjacent wetlands/waterbodies.
3. Care should be taken to maintain existing roadside drainage via culvert installation, with sediment sump placed downflow of culvert.

STANDARD SYMBOL

MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET

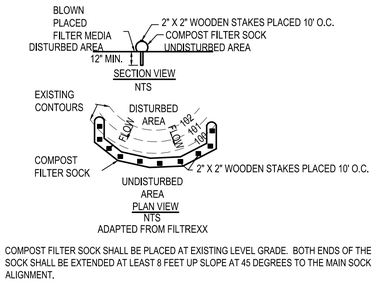
A1 STABILIZED CONSTRUCTION ACCESS
N.T.S.

COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

MATERIAL TYPE	3 mil HDPE	5 mil HDPE	5 mil HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (MFPP)
MATERIAL CHARACTERISTICS	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE	BIO-DEGRADABLE	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE
SOCK DIAMETERS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS
TWO-PLY SYSTEMS					
INNER CONTAINMENT NETTING	HDPE BIAXIAL NET				
	CONTINUOUSLY WOUND				
	FUSION-WELDED JUNCTURES				
	3/4" X 3/4" MAX. APERTURE SIZE				
OUTER FILTRATION MESH	COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER & NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)				
	3/16" MAX. APERTURE SIZE				
SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS					

COMPOST SHALL MEET THE FOLLOWING STANDARDS:

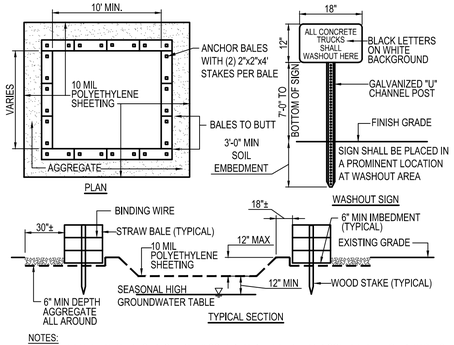
ORGANIC MATTER CONTENT	80% - 100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5 - 8.0
MOISTURE CONTENT	35% - 55%
PARTICLE SIZE	98% PASS THROUGH 1" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 dS MAXIMUM



ADAPTED FROM FILTREXX

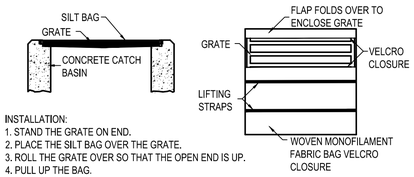
1. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT.
2. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
3. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES ½ THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
4. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH ½ INCH STORM RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
5. BIODEGRADABLE FILTER SOCK SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
6. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

B1 COMPOST FILTER SOCK
N.T.S.



NOTES:
1. CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
2. CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
3. WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL.
4. WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
5. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
6. AT LEAST WEEKLY REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.

A2 CONCRETE WASHOUT AREA
N.T.S.



INSTALLATION:
1. STAND THE GRATE ON END.
2. PLACE THE SILT BAG OVER THE GRATE.
3. ROLL THE GRATE OVER SO THAT THE OPEN END IS UP.
4. PULL UP THE BAG.
5. TUCK THE FLAP IN.
6. PRESS THE VELCRO STRAPS TOGETHER.
7. BE SURE THAT THE END OF THE GRATE IS COMPLETELY COVERED BY THE FLAP OR THE SILT BAG WILL NOT WORK PROPERLY.
8. HOLDING THE HANDLES, CAREFULLY PLACE THE SILT BAG WITH THE GRATE INSERTED INTO THE CATCH BASIN FRAME.

MAINTENANCE:
TO INSURE PROPER OPERATION REMOVE SILT, SEDIMENT, AND DEBRIS FROM THE SURFACE AND THE VICINITY OF THE UNIT WITH A SQUARE POINT SHOVEL OR STIFF BRISTLE BROOM AWAY FROM ENVIRONMENTALLY SENSITIVE AREAS AND WATERWAYS IN MANNER SATISFACTORY TO THE ENGINEER/INSPECTOR. REMOVE FINE MATERIAL FROM INSIDE SILT BAG AS NEEDED. DISPOSE OF SILT BAG NO LONGER IN USE AT AN APPROPRIATE RECYCLING OR SOLID WASTE FACILITY.

INLET INSPECTION:
TO INSPECT INLET, REMOVE SILT BAG WITH GRATE INSIDE, INSPECT CATCH BASIN AND REPLACE SILT BAG BACK INTO GRATE FRAME.
NOTE:
PONDING IS LIKELY IF SEDIMENT IS NOT REMOVED REGULARLY. THE SILT BAG MUST NEVER BE USED WHERE OVERFLOW MAY ENDANGER AN EXPOSED SLOPE.

A3 SILT BAG PROTECTION
N.T.S.

NOTES:
1) SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.

2) ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.

3) TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION.

4) WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.

5) WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FT. (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.

6) THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 IN. ABOVE THE ORIGINAL GROUND SURFACE.

7) THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6 INCH OVERLAP, AND SECURELY SEALED.

8) POSTS SHALL BE A MINIMUM OF 5 FEET LONG, 2 INCHES IN DIAMETER AND SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND. WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 6 FEET.

9) THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICE WHICH WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.

10) THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE AND SO THAT 8 IN. OF CLOTH ARE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6 IN. DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED.

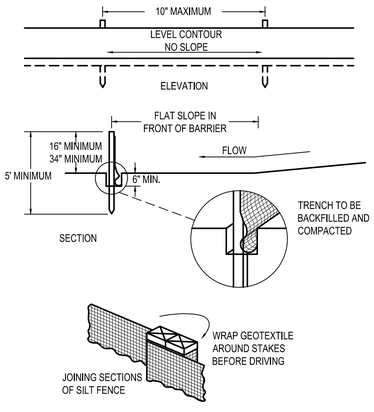
11) WHEN EXTRA STRENGTH FILTER FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS.

12) THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.

13) SEAMS BETWEEN SECTION OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.

14) SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE: A) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, B) ACCUMULATED SEDIMENT SHALL BE REMOVED, OR C) OTHER PRACTICES SHALL BE INSTALLED.

MAINTENANCE:
SILT FENCE SHOULD BE INSPECTED REGULARLY AND FREQUENTLY AS WELL AS AFTER EACH RAINFALL EVENT TO INSURE THAT THEY ARE INTACT AND THERE ARE NO GAPS AT THE FENCE-GROUND INTERFACE OR TEARS ALONG THE LENGTH OF THE FENCE. IF GAPS OR TEARS ARE FOUND, THEY SHOULD BE REPAIRED OR THE FABRIC REPLACED IMMEDIATELY.
ACCUMULATED SEDIMENTS SHOULD BE REMOVED FROM THE FENCE BASE WHEN THE SEDIMENT REACHES ONE-THIRD TO ONE-HALF THE HEIGHT OF THE FENCE. SEDIMENT REMOVAL SHOULD OCCUR MORE FREQUENTLY IF ACCUMULATED SEDIMENT IS CREATING NOTICEABLE STRAIN ON THE FABRIC AND THERE IS THE POSSIBILITY OF THE FENCE FAILING FROM A SUDDEN STORM EVENT. WHEN THE SILT FENCE IS REMOVED, THE ACCUMULATED SEDIMENT SHOULD BE REMOVED.



CRITERIA FOR GEOTEXTILE FABRIC SILT FENCE, PER CURRENT STATE'S DOT SPECIFICATIONS.

FABRIC PROPERTIES	VALUES	TEST METHOD
MINIMUM TENSILE STRENGTH	120 LB. MINIMUM	ASTM D 4632
MINIMUM BURST STRENGTH	200 PSI MINIMUM	
MINIMUM PERMITTNITY	1x10-2sec-1	ASTM D 4491
APPARENT OPENING SIZE	AOS < 0.84 mm	ASTM D 4751
UV EXPOSURE STRENGTH RETENTIOL	70%	ASTM G 4335
MAXIMUM ELONGATION AT 60 LBS.	50%	ASTM D 4632
MINIMUM PUNCTURE STRENGTH	50 LBS (220N)	ASTM D 4833
MINIMUM TEAR STRENGTH	40 LBS (180N)	ASTM D 4533

A4 SILT FENCE
N.T.S.

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

	DATE	REMARKS
1	05.19.2021	SE &SC COMMENTS
2	07.12.2021	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

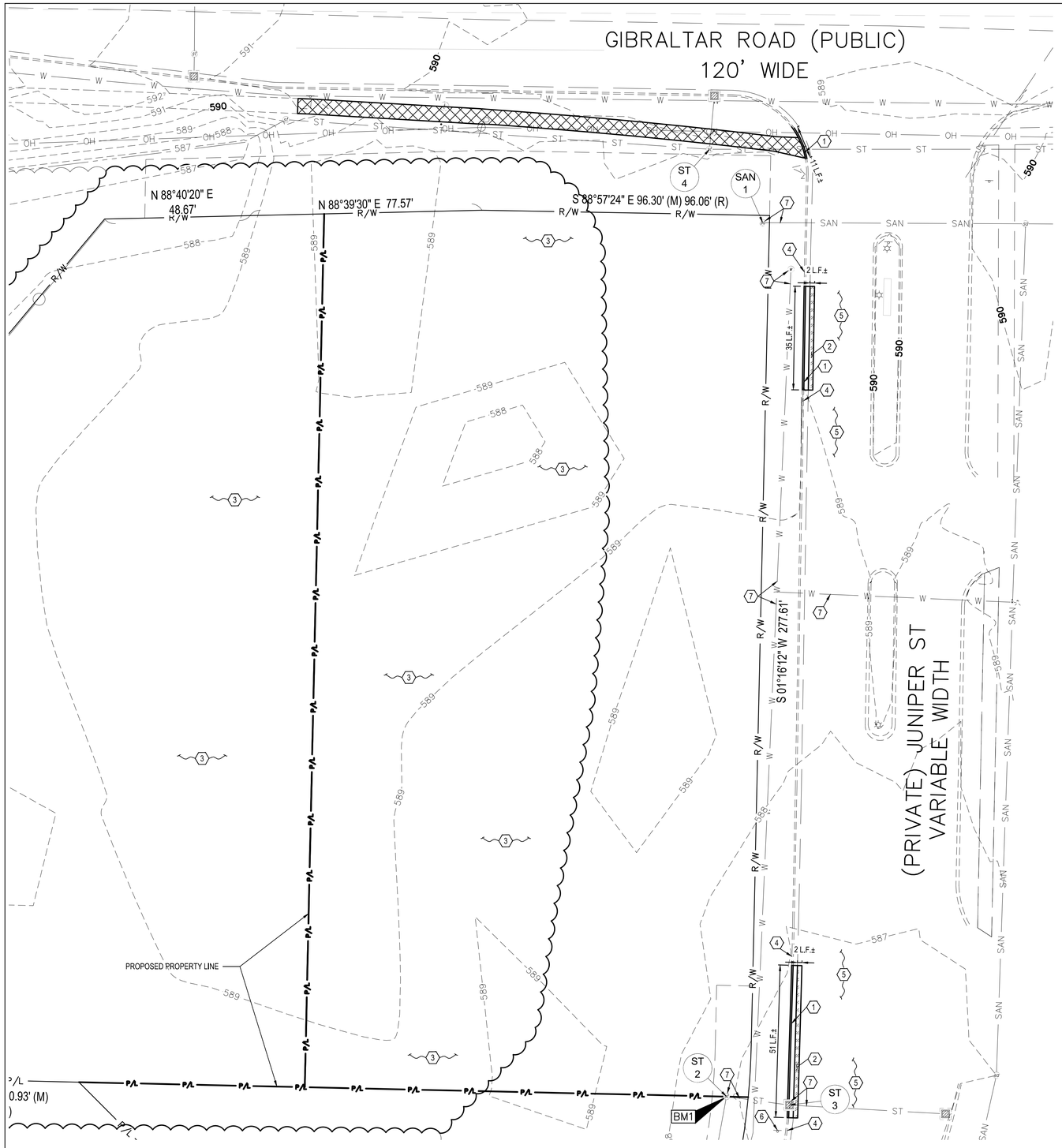
TACO BELL

ENDEAVOR 2.0

SWPP PLAN NOTES AND DETAILS

C-012

PLOT DATE:



N

0 20

10 40

1"=20'
Horizontal Scale in Feet

LEGEND

- EXISTING ASPHALT TO BE REMOVED
- EXISTING CONCRETE TO BE REMOVED
- ##L.F.± — DENOTES LIMITS OF SAWCUT
- (#) — DEMOLITION KEYNOTE
- EXISTING LANDSCAPING (INCLUDING BUSHES, TREES, ETC.) TO BE REMOVED BY LANDLORD.

EXISTING

- EXISTING POWER POLE
- EXISTING CATCH BASIN
- EXISTING CURB INLET
- EXISTING STORM MANHOLE
- *EXISTING SANITARY MANHOLE*
- EXISTING WATER MANHOLE
- EXISTING TELEPHONE MANHOLE
- EXISTING SIGN
- EXISTING GUY WIRE
- P/L — EXISTING PROPERTY LINE
- R/W — EXISTING RIGHT OF WAY LINE
- OH — EXISTING OVERHEAD UTILITY LINES
- GAS — EXISTING UNDERGROUND GAS LINES
- ST — EXISTING UNDERGROUND STORM LINES
- SAN — EXISTING UNDERGROUND SANITARY LINES
- W — EXISTING UNDERGROUND WATER LINES
- EXISTING CURB
- EXISTING CURB & GUTTER
- EXISTING BUSH
- EXISTING DECIDUOUS TREE
- 000 — EXISTING CONTOUR
- BM # — BENCHMARK LOCATION

PLAN KEYNOTES (#)

1. EXISTING CURB & GUTTER TO BE SAWCUT AND REMOVED.
2. EXISTING PAVEMENT TO BE REMOVED AND REPAIRED IN KIND UPON DRIVE APRON INSTALLATION.
3. EXISTING LANDSCAPING (INCLUDING BUSHES, TREES, ETC.) TO BE REMOVED BY LANDLORD.
4. EXISTING CURB TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION.
5. EXISTING PAVEMENT TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION.
6. EXISTING SIGNAGE TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION.
7. EXISTING UTILITIES TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION.

DEMOLITION NOTE:

ALL EXISTING SITE AND SURROUNDING FEATURES SUCH AS UTILITIES, PAVEMENT, CURB, LANDSCAPING, ETC. SHALL REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION UNLESS NOTED OTHERWISE, OR ARE REQUIRED TO BE MODIFIED OR REMOVED FOR THE INSTALLATION OF PROPOSED IMPROVEMENTS. ALL DISTURBED FEATURES SHALL BE RESTORED OR RELOCATED AS REQUIRED TO THE SATISFACTION OF THE OWNER. CONTRACTOR SHALL REPAIR/REPLACE ANY SURROUNDING FEATURES DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST AND TO THE SATISFACTION OF THE OWNER.

EXISTING STRUCTURES	
STRCT. ID	STRUCTURE DETAILS
SAN 1	EXISTING SANITARY SEWER MANHOLE RIM=589.95 INV. 10" (E)=573.85 ⚠
ST 2	EXISTING STORM SEWER MANHOLE RIM=587.12 INV. 12" RCP(S&E)=580.52
ST 3	EXISTING STORM SEWER MANHOLE RIM=585.97 INV. 12" RCP(N&S)=582.47 INV. 12" RCP(E)=581.16 INV. 12" RCP(W)=581.07
ST 4	EXISTING STORM SEWER MANHOLE RIM=590.24 INV. 12" RCP(N)=587.54 INV. 12" RCP(E)=587.44 INV. 12" RCP(W)=587.49

MISS DIG 811

BENCHMARKS:

BASIS OF BEARING IS THE EAST LINE OF INTERSTATE 75.

BENCHMARK #1 - RIM OF STORM MANHOLE SE CORNER OF SITE.
N 13429816.3076, E 218634.3816
ELEVATION=587.12' (NAVD88)

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

	DATE	REMARKS
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⚠2	07.12.2021	ISSUED FOR BID

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TACO BELL

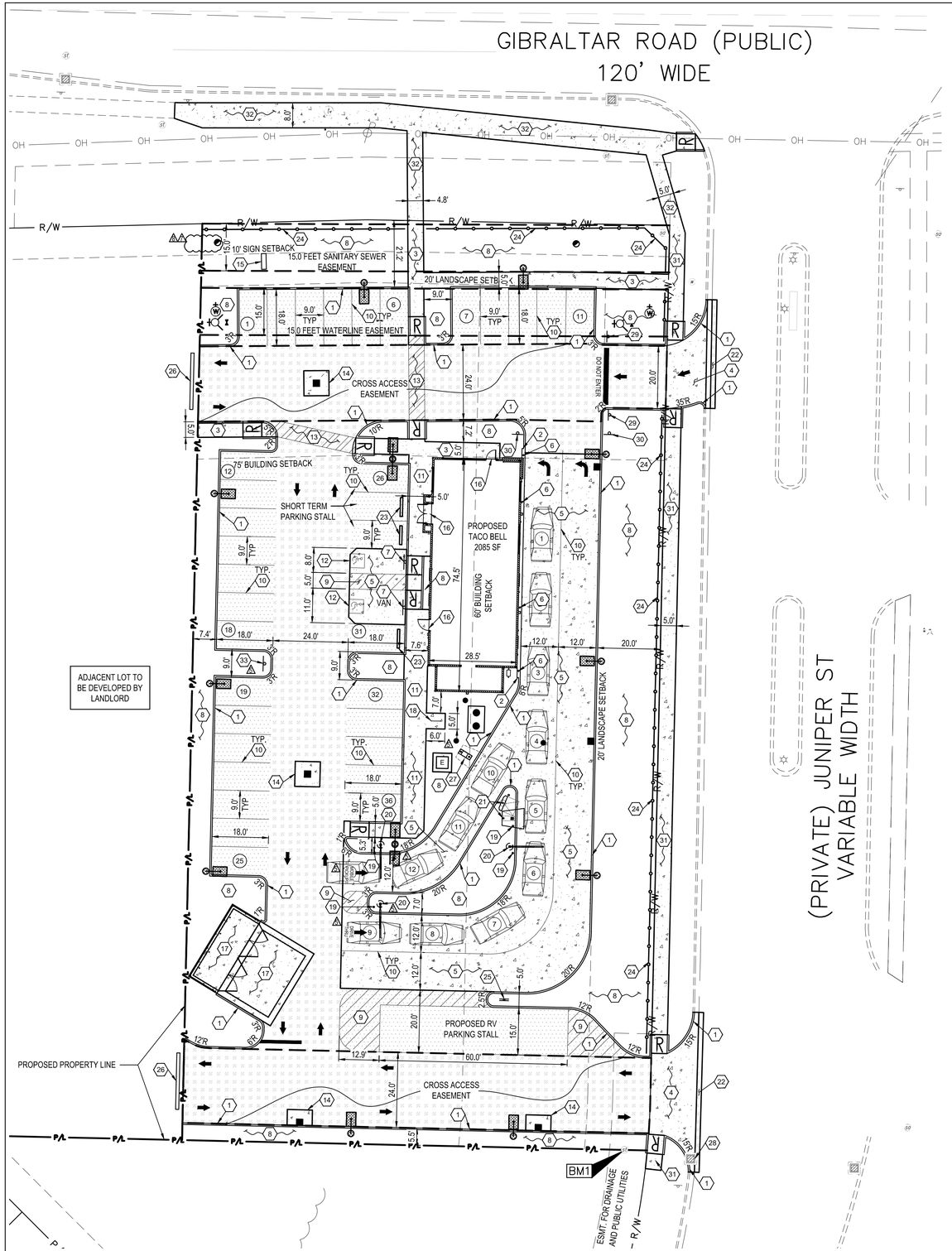
GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

TACO BELL

ENDEAVOR 2.0
DEMOLITION PLAN

C-101

PLOT DATE:



N

0 20

10 40

1"=20'
Horizontal Scale in Feet

LEGEND

- PROPOSED LIGHT DUTY ASPHALT PER ASPHALT PAVEMENT TABLE (SEE SHEET C-503).
- PROPOSED HEAVY DUTY ASPHALT PER ASPHALT PAVEMENT TABLE (SEE SHEET C-503).
- PROPOSED CONCRETE
- PROPOSED PAINTED TRANSVERSE STRIPING (SEE SHEET C-501).
- PROPOSED PAINTED CROSSWALK STRIPING (SEE SHEET C-501).
- (#) CONSTRUCTION KEYNOTE
- (00) PROPOSED PARKING SPACE NUMBER
- PROPOSED DRIVE THRU STACK CAR AND NUMBER
- PROPOSED ADA ACCESSIBLE RAMP PER ADA SPECIFICATIONS (SEE SHEET C-501).
- PROPOSED UTILITY STRUCTURES, REFER TO UTILITY PLANS FOR MORE INFORMATION
- PROPOSED EDGE OF PAVEMENT
- PROPOSED CURB
- PROPOSED CURB & GUTTER
- PROPOSED WHEEL STOP
- PROPOSED TRAFFIC SIGN
- PROPOSED PAINTED INTERNATIONAL ADA SYMBOL PER ADA SPECIFICATIONS (SEE SHEET C-501)
- PROPOSED DIRECTIONAL PAVEMENT MARKINGS - WHITE ON ASPHALT, YELLOW ON CONCRETE (SEE SHEET C-501)

NOTE:

1. CONTRACTOR TO CONTACT ENGINEER OF RECORD TO CONFIRM STAKING PRIOR TO INSTALLATION OF PAVEMENT.
2. ALL STAKING MUST BE PERFORMED BY A PROFESSIONAL SURVEYOR.
3. A PROFESSIONAL SURVEYOR WILL BE REQUIRED TO SUBMIT A LETTER CERTIFYING THAT THE PAVEMENTS HAVE BEEN STAKED PER WADE TRIM APPROVED PLANS.
4. WADE TRIM WILL VERIFY RIM, TOP OF WALK, AND TOP OF GUTTER PAN GRADES PRIOR TO PERMIITTING THE CONTRACTOR TO PERFORM ANY PAVING.

MISS DIG 811

BENCHMARKS:

BASIS OF BEARING IS THE EAST LINE OF INTERSTATE 75.

BENCHMARK #1 - RIM OF STORM MANHOLE SE CORNER OF SITE.
N 13429816.3076, E 218634.3816
ELEVATION=587.12' (NAVD88)

PLAN KEYNOTES (#)

1. PROPOSED P.C.C. CURB PER DETAIL, SHEET C-501.
2. PROPOSED CURB AT DRIVE THRU PER DETAIL, SHEET C-501.
3. PROPOSED P.C.C. WALK PER DETAIL, SHEET C-501.
4. PROPOSED DRIVE APRON PER WAYNE COUNTY STANDARDS AND SPECIFICATIONS, SEE SHEET C-502. ⚠
5. PROPOSED 6" P.C.C. PAVEMENT W/ W.W.F. 6" x 6"-W2.9 x W2.9 (CONTROL JTS. 12'-0" O.C.) OVER 6" CRUSHED AGGREGATE MDOT 21AA, SEE DETAIL SHEET C-503. APPLY LIQUID ASPHALT AT ALL JOINTS BETWEEN CONCRETE AND ASPHALT.
6. PROPOSED BOLLARD IN CURB PER DETAIL, SHEET C-501.
7. PROPOSED HANDICAPPED PARKING SIGN PER DETAIL, SHEET C-501.
8. PROPOSED LANDSCAPING AREA. SOD ALL DISTURBED AREAS EXCEPT WHERE PLANTING BEDS ARE INDICATED. SEE LANDSCAPE PLAN.
9. PROPOSED PAINTED TRANSVERSE STRIPING PER DETAIL, SHEET C-501.
10. PROPOSED PAINTED 4" WIDE SOLID STRIPE - WHITE ON ASPHALT, YELLOW ON CONCRETE, BLUE IN ADA AREAS PER DETAIL, SHEET C-501.
11. PROPOSED P.C.C. CURBED WALK PER DETAIL, SHEET C-501.
12. PROPOSED PAINTED ADA PAVEMENT SYMBOL PER ADA SPECIFICATIONS PER DETAIL, SHEET C-501.
13. PROPOSED PAINTED CROSSWALK STRIPING PER DETAIL, SHEET C-501.
14. PROPOSED CONCRETE COLLAR PER DETAIL, SHEET C-503.
15. PROPOSED 8'-0" O.A.H., 40 S.F. MONUMENT SIGN PER SIGN SUPPLIER SPECIFICATIONS.
16. PROPOSED FROST SLAB AT DOOR. SEE STRUCTURAL PLANS FOR DETAILS.
17. PROPOSED MASONRY DUMPSTER ENCLOSURE ON 8" P.C.C. PAD OVER 6" MDOT 21AA AGGREGATE BASE. SEE ARCHITECTURAL PLANS FOR DETAILS.
18. PROPOSED BIKE RACK PER DETAIL, SHEET C-501.
19. PROPOSED DETERRENT BOLLARD PER DETAIL, SHEET C-501.
20. PROPOSED EVOLUTION PORTAL CLEARANCE BAR. ⚠
21. PROPOSED MENU BOARD AND ORDER CONFIRMATION BOARD PER SIGN SUPPLIER SPECIFICATIONS.
22. PROPOSED PAVEMENT REPLACEMENT. CONTRACTOR SHALL MATCH EXISTING PAVEMENT IN TYPE AND DEPTH, APPLY LIQUID ASPHALT AT ALL JOINTS WHERE PROPOSED ASPHALT MEETS EXISTING ASPHALT INCLUDING SAW CUT JOINTS.
23. PROPOSED WHEEL STOP (COUNT 3) PER DETAIL, SHEET C-503.
24. PROPOSED DECORATIVE FENCE W/ BRICK BASE PER BROWNSTOWN TOWNSHIP STANDARDS AND SPECIFICATIONS. FINAL LOCATION, LENGTHS, ETC. SHALL BE PER CITY OFFICIAL.
25. PROPOSED DUAL SIDED DRIVE THRU SIGN PER SIGN SUPPLIER SPECIFICATIONS.
26. TEMPORARY BARRIER TO BE LEFT IN PLACE AND TO BE COORDINATED WITH ADJACENT OWNER.
27. PROPOSED CANOPY AND SPEAKER POST, PER SIGN SUPPLIER SPECIFICATIONS. ⚠
28. REPLACE AND ADJUST CASTING AS NECESSARY.
29. PROPOSED "DO NOT ENTER" SIGN.
30. PROPOSED "LEFT TURN ONLY" SIGN.
31. PROPOSED SIDEWALK PER WAYNE COUNTY STANDARDS AND SPECIFICATIONS, SEE SHEET C-502.
32. PROPOSED SIDEWALK PER MDOT STANDARDS AND SPECIFICATIONS, SEE SHEET C-508.
33. PROPOSED DIRECTIONAL SIGN, PER SIGN VENDOR SPECIFICATIONS. ⚠

BUILDING SETBACKS	REQUIRED	PROVIDED
FRONT: GIBRALTAR	75	75
REAR: SOUTH	20	47
SIDE: JUNIPER	60	45
SIDE: WEST	10	1
PARKING SETBACKS	**REQUIRED**	**PROVIDED**
FRONT: GIBRALTAR	20	20
REAR: SOUTH	0	49.5
SIDE: JUNIPER	20	21
SIDE: WEST	0	6.9
LANDSCAPE SETBACKS	**REQUIRED**	**PROVIDED**
FRONT: GIBRALTAR	20	21.2
REAR: SOUTH	0	5
SIDE: JUNIPER	20	20
SIDE: WEST	0	6.9

VARIANCES OBTAINED:
CASE # V210002 - DRIVE THRU TO BE ON ROADSIDE OF BUILDING.
CASE # V200007 - BUILDING SETBACK AND PARKING SPACE FOR SEMI / RV.

PARKING SPACES	REQUIRED	PROVIDED
NUMBER OF SPACES	30	33
NUMBER OF SHORT TERM SPACES	3	3
PARKING REQUIREMENTS 1 SPACE PER 70 SF OF USABLE FLOOR AREA OR 0.5 SPACES PER SEAT WHICHEVER IS GREATER PLUS 3 SHORT TERM PARKING STALLS THEREFORE: 2095 SF / 70 SF = 30 SPACES AND 3 SHORT TERM PARKING SPACES REQUIRED.		
	REQUIRED	**PROVIDED**
NUMBER OF RV PARKING SPACES	1	1

LAND USE DATA	% OF SITE AREA	AREA PROVIDED
BUILDING	5.0%	0.05 AC.
PAVEMENT/IMPERVIOUS	67.0%	0.67 AC.
LANDSCAPING	28.0%	0.28 AC.
TOTAL	100%	1.00 AC.

CURRENT ZONING: B-2 COMMUNITY BUSINESS

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

	DATE	REMARKS
⚠	05.14.2021	TOWNSHIP COMMENTS
⚠	07.01.2021	NTP COMMENTS
⚠	07.12.2021	ISSUED FOR BID
⚠	07.14.2021	EGLE COMMENTS
⚠	07.14.2021	REVISED BID SET

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

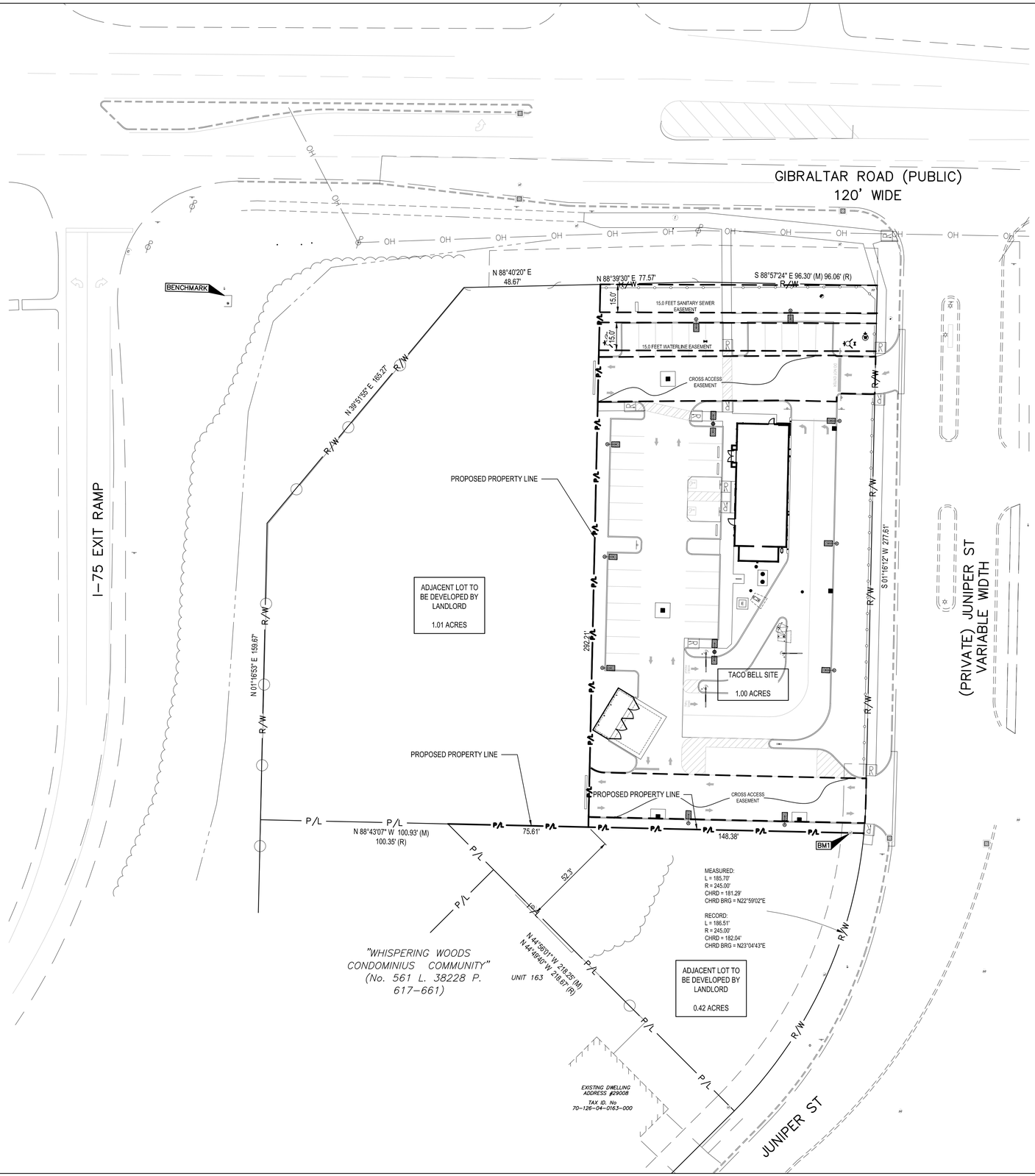
TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
SITE PLAN

C-111

PLOT DATE:



N

0 30

15 60

1"=30'
Horizontal Scale in Feet

MISS DIG 811

BENCHMARKS:

BASIS OF BEARING IS THE EAST LINE OF INTERSTATE 75.

BENCHMARK #1 - RIM OF STORM MANHOLE SE CORNER OF SITE.
N 13429816.3076, E 218634.3816
ELEVATION=587.12' (NAVD88)

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

	DATE	REMARKS
1	07.12.2021	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

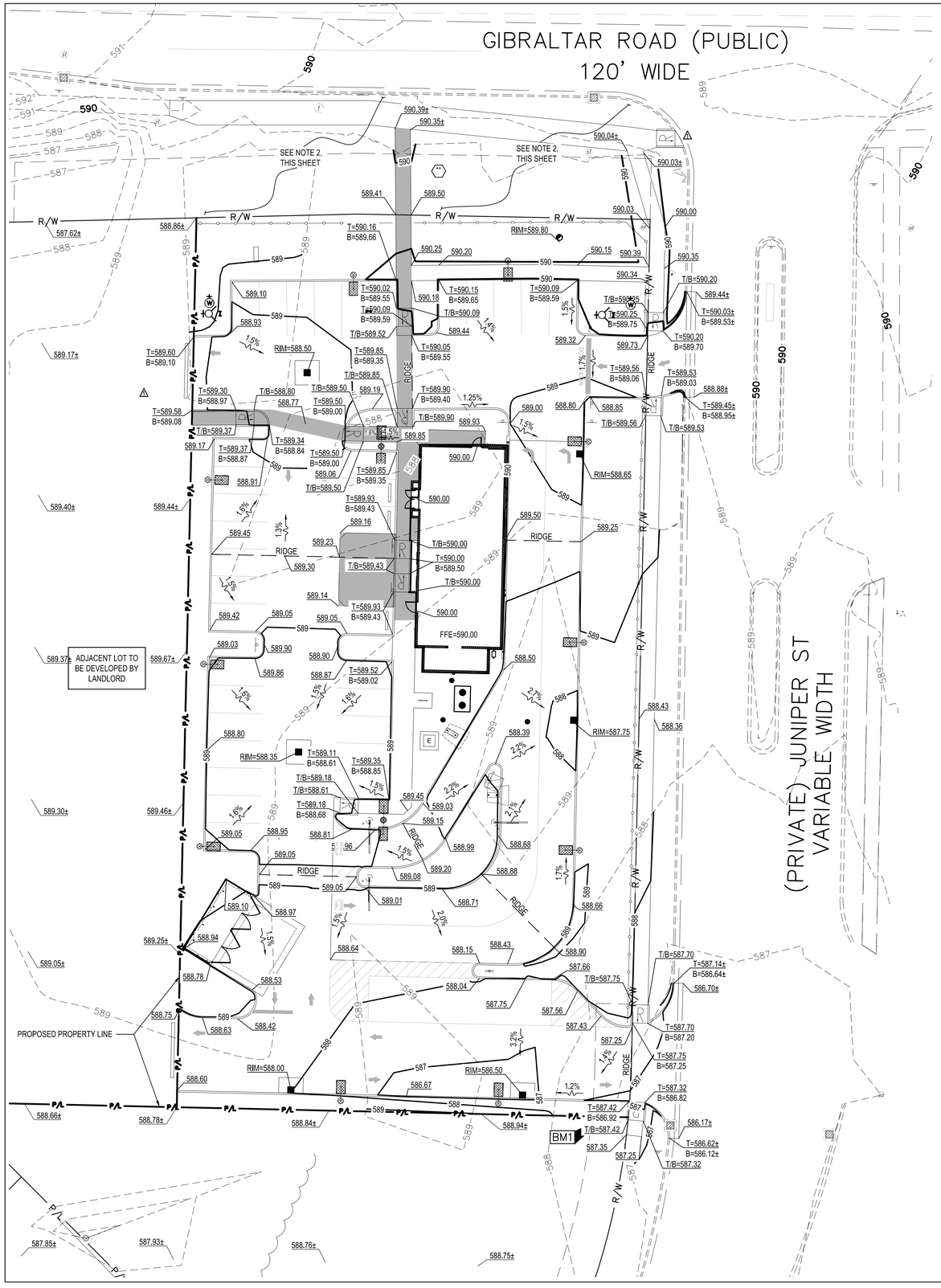
TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
OVERALL SITE PLAN

C-112

PLOT DATE:



N

0 20 10 40

1"=20'
Horizontal Scale in Feet

LEGEND

(SEE SHEET C-001 FOR GENERAL LEGEND)

- 000 — PROPOSED CONTOUR
- 000.00± — EXISTING SPOT ELEVATION
- 000.00 — PROPOSED ELEVATION @ FINISHED GROUND ELEVATION AND/OR BOTTOM OF CURB
- T=000.00 / B=000.00 — TOP OF CURB ELEVATION (SPECIFIC TO AREAS OF ADA & WALKS) BOTTOM OF CURB/FINISHED PAVEMENT ELEVATION
- T/B=000.00 — TOP AND BOTTOM OF CURB/FINISHED PAVEMENT ELEVATION
- 000.0± — MATCH EXISTING ELEVATION
- 0.0% — PROPOSED DRAINAGE SLOPE & DIRECTION
- PROPOSED ADA ROUTE

NOTE:

1. THE PROJECT SPONSOR IS RESPONSIBLE FOR RESOLVING ANY DRAINAGE PROBLEMS ON ADJACENT PROPERTIES, WHICH ARE A RESULT OF THE PROJECT SPONSOR'S ACTIVITIES.
2. ALL WORK WITHIN THE GIBRALTAR ROAD RIGHT-OF-WAY SHOULD BE RESTORED WITH A MINIMUM OF THREE INCHES OF TOPSOIL, SEED, AND MULCH.

MISS DIG 811

BENCHMARKS:

BASIS OF BEARING IS THE EAST LINE OF INTERSTATE 75.

BENCHMARK #1 - RIM OF STORM MANHOLE SE CORNER OF SITE.
N 13429816.3076, E 218634.3816
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330.572.2100 Fax: 330.572.2102

	DATE	REMARKS
1	05.14.2021	TOWNSHIP COMMENTS
2	07.12.2021	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

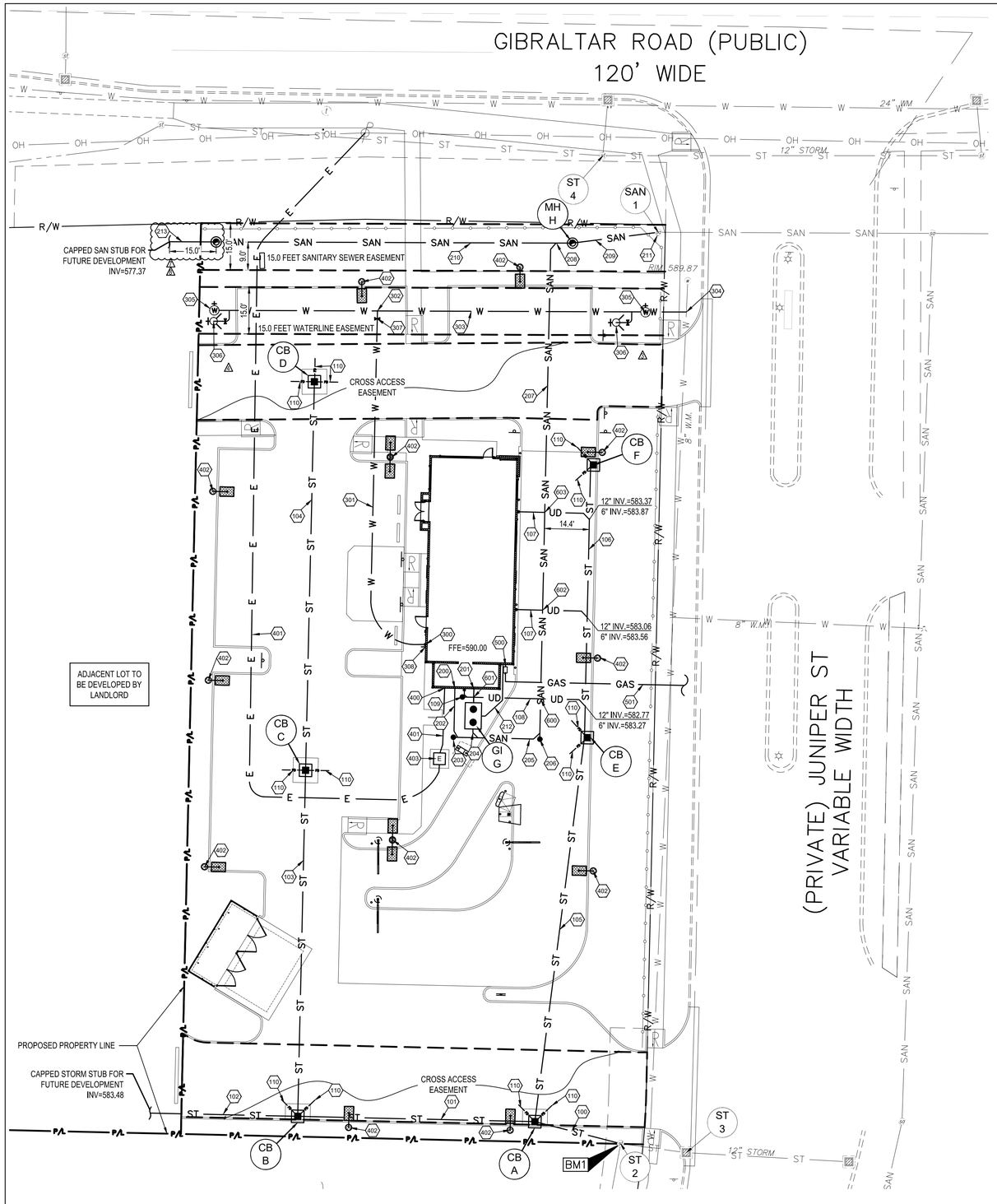
TACO BELL

ENDEAVOR 2.0

GRADING PLAN

C-121

PLOT DATE:



PROPOSED STRUCTURES	
STRCT. ID	STRUCTURE DETAILS
CB A	PROPOSED 2'X2' CATCH BASIN (SEE SHEET C-504) RIM=586.50 INV. 12" (W,N,E)=581.43 4" FINGER DRAIN (NE, NW) INV.=585.00
CB B	PROPOSED 2'X2' CATCH BASIN (SEE SHEET C-504) RIM=588.00 INV. 12" (N,E,W)=582.76 4" FINGER DRAIN (NE, NW) INV.=586.50
CB C	PROPOSED 2'X2' CATCH BASIN (SEE SHEET C-504) RIM=588.35 INV. 12" (N&S)=583.87 4" FINGER DRAIN (E, W) INV.=586.85
CB D	PROPOSED 2'X2' CATCH BASIN (SEE SHEET C-504) RIM=588.25 INV. 12" (S)=585.12 4" FINGER DRAIN (N,E,W) INV.=586.75
CB E	PROPOSED 2'X2' CATCH BASIN (SEE SHEET C-504) RIM=587.75 INV. 12" (N&S)=582.67 4" FINGER DRAIN (NW, SW) INV.=586.25
CB F	PROPOSED 2'X2' CATCH BASIN (SEE SHEET C-504) RIM=588.65 INV. 12" (S)=583.55 4" FINGER DRAIN (NW, SW) INV.=587.15
GI G	PROPOSED 1,000 GALLON EXTERIOR GREASE INTERCEPTOR, SEE DETAIL SHEET C-504 RIM=589.35 INV. 6" PVC INLET=582.83 INV. 6" PVC OUTLET=582.58
MH H	PROPOSED SANITARY MANHOLE, SEE DETAIL SHEET C-509. RIM=589.75 INV. 10" PVC (E)=574.59 INV. 10" PVC (W)=574.69
MH I	PROPOSED SANITARY MANHOLE, SEE DETAIL SHEET C-509. RIM=588.65 INV. 10" PVC (E)=576.97 INV. 10" PVC (W)=577.07

EXISTING STRUCTURES	
STRCT. ID	STRUCTURE DETAILS
SAN 1	EXISTING SANITARY SEWER MANHOLE RIM=589.95, INV. 10" (E)=573.85 (FIELD MEASURED) PROP INV 10" (SW)=573.95
ST 2	EXISTING STORM SEWER MANHOLE RIM=587.12 INV. 12" RCP(S&E)=580.52 PROP INV 12" (W)=580.52
ST 3	EXISTING STORM SEWER MANHOLE RIM=585.97 INV. 12" RCP(N&S)=582.47 INV. 12" RCP(E)=581.16 INV. 12" RCP(W)=581.07
ST 4	EXISTING STORM SEWER MANHOLE RIM=590.24 INV. 12" RCP(N)=587.54 INV. 12" RCP(E)=587.44 INV. 12" RCP(W)=587.49

QUANTITY TABLE

ITEM NO.	ITEM DESCRIPTION	UNIT	QTY.
STORM SEWER			
1	STANDARD CATCH BASIN	EACH	6
2	12" HDPE PIPE	L.F.	600
3	6" PVC PIPE	L.F.	162
4	CLEANOUT	EACH	1
SANITARY SEWER			
1	STANDARD SANITARY MANHOLE	EACH	1
2	10" PVC PIPE	L.F.	157
3	6" PVC PIPE	L.F.	213
4	3" PVC PIPE	L.F.	20
5	CLEANOUT	EACH	1
6	GREASE INTERCEPTOR	EACH	1
WATER			
1	8"X8"X8" TEE	EACH	1
2	GATE VALVE	EACH	2
3	DUCTILE IRON CLASS 54	L.F.	166
4	TAPPING SLEEVE AND VALVE	EACH	1
5	FIRE HYDRANT	EACH	1
6	1-1/2 TYPE K COPPER LINE	L.F.	120
7	SHUTOFF VALVE & BOX	EACH	1

WATER MAIN STRUCTURES COORDINATE PLAN		
STRUCTURE	NORTHING	EASTING
GATE VALVE (EAST)	13429824.2905	218901.0077
SHUTOFF VALVE	13429738.2223	218898.9282
FIRE HYDRANT	13429685.7278	218898.1563
GATE VALVE (WEST)	13429682.8488	218901.6393

N

0 20 10 40

1"=20'
Horizontal Scale in Feet

LEGEND

(SEE SHEET C-001 FOR GENERAL LEGEND)

- ST — PROPOSED STORM SEWER
- SAN — PROPOSED SANITARY SEWER
- W — PROPOSED WATER SERVICE
- GAS — PROPOSED GAS SERVICE
- E — PROPOSED UNDERGROUND ELECTRIC SERVICE
- D.S. ■ — PROPOSED DOWNSPOUT
- A / # — APPURTENANCES
- # — UTILITY CONSTRUCTION KEYNOTE

PLAN KEYNOTES

STORM

100. PROPOSED 28 L.F. OF 12" HDPE STORM SEWER @ 3.25%.
101. PROPOSED 76 L.F. OF 12" HDPE STORM SEWER @ 1.75%.
102. PROPOSED 48 L.F. OF 12" HDPE STORM SEWER @ 1.50%.
103. PROPOSED 111 L.F. OF 12" HDPE STORM SEWER @ 1.00%.
104. PROPOSED 125 L.F. OF 12" HDPE STORM SEWER @ 1.00%.
105. PROPOSED 124 L.F. OF 12" HDPE STORM SEWER @ 1.00%.
106. PROPOSED 88 L.F. OF 12" HDPE STORM SEWER @ 1.00%.
107. PROPOSED 24 L.F. OF 6" PVC SDR 35 STORM SEWER @ 1.00%.
108. PROPOSED 40 L.F. OF 6" PVC SDR 35 STORM SEWER @ 4.00%.
109. PROPOSED STORM CLEANOUT AND WYE CONNECTION, SEE DETAIL, SHEET C-504. RIM=589.87, INV.=584.95.
110. PROPOSED 6" FINGER DRAIN, SEE DETAIL, SHEET C-504.

NOTE:
1. ALL PIPE BEDDING SHALL BE MAXIMUM 3/4TH INCH DIAMETER CRUSHED STONE.

SANITARY

200. PROPOSED SANITARY CONNECTION TO GREASE INTERCEPTOR, INV=582.60, SEE SHEET C-504, COORDINATE WITH PLUMBING PLANS.
201. PROPOSED SANITARY CONNECTION, INV=582.60, COORDINATE WITH PLUMBING PLANS.
202. PROPOSED 16 L.F. OF 6" PVC SDR 35 @ 1.60%.
203. PROPOSED SANITARY CLEANOUT, SEE DETAIL SHEET C-504, RIM=589.50, INV.582.34.
204. PROPOSED 4 L.F. OF 6" PVC SDR 35 @ 1.75%.
205. PROPOSED 28.5 L.F. OF 6" PVC SDR 35 @ 1.75%.
206. PROPOSED SANITARY CLEANOUT, SEE DETAIL SHEET C-504, RIM=588.20, INV.581.84.
207. PROPOSED 160 L.F. OF 6" PVC SDR 35 @ 4.40%.
208. PROPOSED WYE CONNECTION TO THE SEWER MAIN, INV.=574.80.
209. PROPOSED 28 L.F. OF 10" PVC SDR 35 @ 2.24%. ⚠4
210. PROPOSED 114 L.F. OF 10" PVC SDR 35 @ 2.00%.
211. PROPOSED SANITARY CONNECTION INTO EXISTING SANITARY MANHOLE AT INV. 573.95±. CONTRACTOR TO CORE EXISTING SANITARY MANHOLE AND PROVIDE A WATER TIGHT CONNECTION. COORDINATE ALL WORK WITH CHARTER TOWNSHIP OF BROWNSTOWN, DEPARTMENT OF UTILITIES.
212. PROPOSED 20 L.F. OF 3" VENT PIPE FROM GREASE INTERCEPTOR.
213. PROPOSED 15 L.F. OF 10" PVC SDR 35 @ 2.00%. ⚠4

NOTE: ⚠
1. THE REQUIRED PIPE BEDDING IS MAXIMUM 3/4-INCH DIAMETER CRUSHED STONE.
2. TRENCH "A" BACKFILL MATERIAL USED MUST BE FREE OF LARGE LUMPS OF CLAY, DEBRIS, AND ROCKS.
3. TRENCH "B" SAND BACKFILL IS REQUIRED FOR SANITARY SEWER TRENCH LOCATED UNDER OR WITHIN THREE FEET OF PAVEMENT.
4. ALL SANITARY SEWER WORK SHALL BE PER CHARTER TOWNSHIP OF BROWNSTOWN STANDARDS AND SPECIFICATIONS, SEE DETAIL, SHEET C-509.

WATER

300. PROPOSED WATER CONNECTION. COORDINATE WITH PLUMBING PLANS.
301. PROPOSED 120 L.F. OF 1-1/2" TYPE K COPPER WATER SERVICE LINE.
302. PROPOSED WATER SERVICE TAP PER CHARTER TOWNSHIP OF BROWNSTOWN.
303. PROPOSED 166 L.F. 8" DUCTILE IRON CLASS 54 WATER MAIN.
304. PROPOSED TAPPING SLEEVE AND VALVE, PER CHARTER TOWNSHIP OF BROWNSTOWN STANDARDS AND SPECIFICATIONS.
305. PROPOSED GATE VALVE PER CHARTER TOWNSHIP OF BROWNSTOWN STANDARDS AND SPECIFICATIONS. ⚠
306. PROPOSED STANDARD FIRE HYDRANT ASSEMBLY (CLOSE COUPLE TYPE) PER CHARTER TOWNSHIP OF BROWNSTOWN STANDARDS AND SPECIFICATIONS.
307. PROPOSED SHUTOFF VALVE IN MONUMENT BOX (BUFFALO BOX) SIMILAR TO EJ # 6860.
308. PROPOSED 1" TYPE K COPPER IRRIGATION SERVICE LINE.

NOTE:
1. WATER METER AND BACKFLOW PREVENTOR SHALL BE INSTALLED INSIDE THE BUILDING.
2. THE CONTRACTOR SHALL CONTACT BROWNSTOWN TOWNSHIP TO CONDUCT ANY REQUIRED BACTERIOLOGICAL TESTS.
3. TRENCH "A" BACKFILL MATERIAL USED MUST BE FREE OF LARGE LUMPS OF CLAY, DEBRIS, AND ROCKS.
4. ALL BOLTS FOR UNDERGROUND MECHANICAL CONNECTIONS MUST BE EITHER MASTIC-COATED OR CORE-BLUE T-BOLT TYPE.
5. ALL WATER LINE WORK SHALL BE PER CHARTER TOWNSHIP OF BROWNSTOWN STANDARDS AND SPECIFICATIONS.

ELECTRIC AND COMMUNICATIONS

400. PROPOSED ELECTRIC METER PER ELECTRIC COMPANY SPECIFICATIONS. SEE BUILDING DRAWINGS FOR EXACT LOCATION. ELECTRIC SERVICE LINE TO BE COORDINATED WITH THE ELECTRIC COMPANY.
401. PROPOSED ELECTRIC SERVICE LINE TO BE COORDINATED WITH THE UTILITY COMPANIES.
402. PROPOSED LIGHT POLE, SEE ELECTRICAL DRAWINGS FOR SPECIFICATIONS AND DETAILS.
403. PROPOSED ELECTRIC SERVICE CONNECTION TO A PAD MOUNTED TRANSFORMER, ALL WORK TO BE COORDINATED WITH THE UTILITY COMPANIES.

GAS

500. PROPOSED GAS METER PER GAS COMPANY SPECIFICATIONS. SEE BUILDING DRAWINGS FOR EXACT LOCATION. GAS SERVICE LINE TO BE COORDINATED WITH THE GAS COMPANY.
501. PROPOSED GAS SERVICE LINE, CONTRACTOR TO COORDINATE WITH GAS COMPANY FOR EXISTING GAS LINE LOCATION AND SERVICE CONNECTION.

UTILITY CROSSINGS

GENERAL CROSSING NOTES: CONTRACTOR SHALL COORDINATE ALL CROSSINGS WITH THE UTILITY COMPANY. PRESSURIZED AND SECONDARY UTILITIES SHALL DEFLECT TO MAINTAIN 18" CLEAR AT SANITARY OR STORM SEWER CROSSINGS.

600. PROPOSED UTILITY CROSSING: 6" PVC STORM LINE INV=583.87; 6" PVC SANITARY LINE INV=581.26.
601. PROPOSED UTILITY CROSSING: 6" PVC STORM LINE INV=584.73; 6" PVC SANITARY LINE INV=582.55.
602. PROPOSED UTILITY CROSSING: 6" PVC STORM LINE INV=583.66; 6" PVC SANITARY LINE INV=580.01.
603. PROPOSED UTILITY CROSSING: 6" PVC STORM LINE INV=583.95; 6" PVC SANITARY LINE INV=578.63.

NOTE: ⚠
1. CONTRACTOR SHALL PROVIDE ALL FITTINGS AND APPURTENANCES REQUIRED.

MISS DIG 811

BENCHMARKS:

BASIS OF BEARING IS THE EAST LINE OF INTERSTATE 75.

BENCHMARK #1 - RIM OF STORM MANHOLE SE CORNER OF SITE.
N 13429816.3076, E 218634.3816
ELEVATION=587.12' (NAVD88)

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

	DATE	REMARKS
⚠1	05.14.2021	TOWNSHIP COMMENTS
⚠2	05.19.2021	BROWNSTOWN FIRE DEPARTMENT COMMENTS
⚠3	06.17.2021	TOWNSHIP COMMENTS
⚠4	07.12.2021	ISSUED FOR BID
⚠5	07.14.2021	EGLE COMMENTS
⚠6	07.14.2021	REVISED BID SET

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

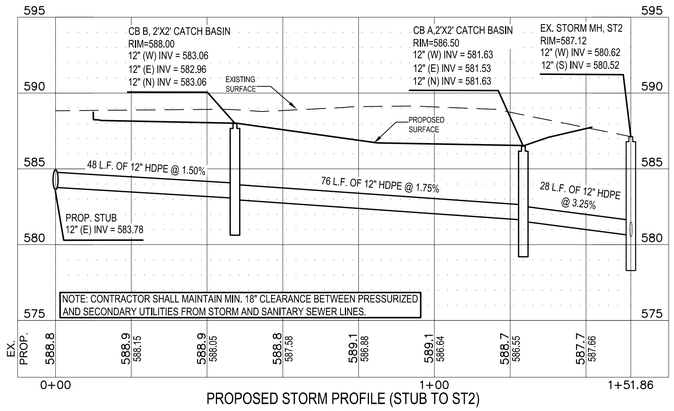
TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

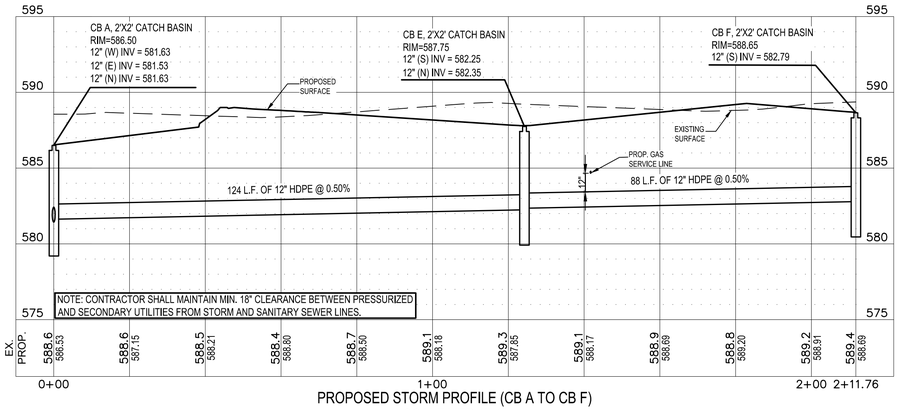
ENDEAVOR 2.0
UTILITY PLAN

C-131 ⚠6

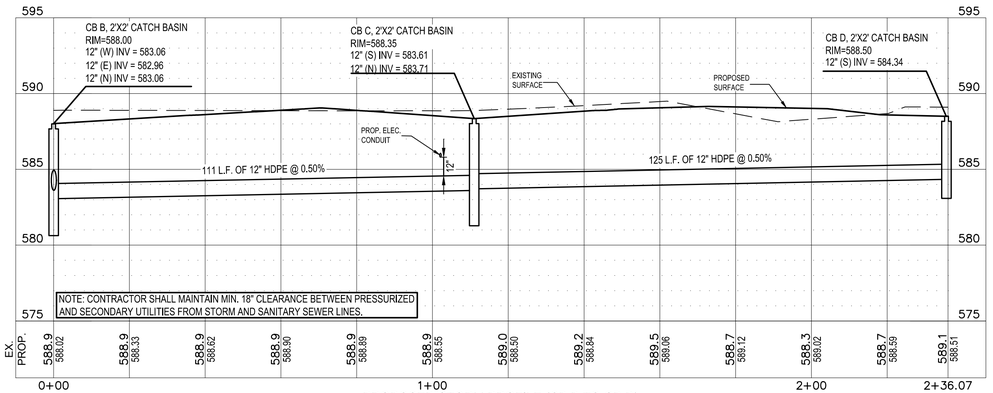
PLOT DATE:



PROPOSED STORM PROFILE (STUB TO ST2)
SCALE VER:1"=5'
SCALE HOR:1"=20'

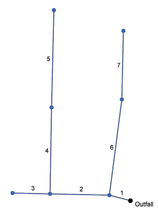


PROPOSED STORM PROFILE (CB A TO CB F)
SCALE VER:1"=5'
SCALE HOR:1"=20'



PROPOSED STORM PROFILE (CB B TO CB D)
SCALE VER:1"=5'
SCALE HOR:1"=20'

Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan



Project File: Brownstown.stm | Number of lines: 7 | Date: 4/22/2021

Storm Sewers v2020.00

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line	(ft)	incr (ac)	Total (ac)	(C)	incr	Total	Inlet (min)	Syst (min)	(in/hr)	(cfs)	(cfs)	(ft/s)	Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
7	6	88.000	0.16	0.16	0.80	0.13	0.13	10.0	10.0	5.1	0.65	2.73	2.22	12	0.50	582.35	582.79	582.86	583.13	587.75	588.65	106
6	1	124.000	0.21	0.37	0.80	0.17	0.30	10.0	11.8	4.8	1.42	2.73	2.74	12	0.50	581.63	582.25	582.50	582.76	586.50	587.75	105
5	4	125.000	0.15	0.15	0.80	0.12	0.12	10.0	10.0	5.1	0.61	2.74	2.27	12	0.50	583.71	584.34	584.16	584.66	588.35	588.25	104
4	2	111.000	0.17	0.32	0.80	0.14	0.26	10.0	12.7	4.7	1.19	2.72	2.55	12	0.50	583.06	583.61	583.87	584.07	588.00	588.35	103
3	2	48.000	1.01	1.01	0.80	0.81	0.81	10.0	10.0	5.1	4.10	4.73	5.87	12	1.50	583.06	583.78	583.87	584.64	588.00	589.00	102
2	1	76.000	0.03	1.36	0.80	0.02	1.09	10.0	13.8	4.5	4.90	5.10	6.62	12	1.75	581.63	582.96	582.50	583.87	586.50	588.00	101
1	End	28.000	0.21	1.94	0.80	0.17	1.55	10.0	14.0	4.5	6.95	6.96	9.12	12	3.25	580.62	581.53	581.52	582.50	587.12	586.50	100

Project File: Brownstown.stm | Number of lines: 7 | Run Date: 5/7/2021

NOTES:Intensity = 151.80 / (inlet time + 19.90) ^ 1.00; Return period =Yrs. 10 ; c = cir e = ellip b = box

Storm Sewers v2020.00

UTILITY CROSSINGS TABLE

AT PROFILE CB-A TO CB-F:
PROPOSED UTILITY CROSSING: GAS PIPE TOP= 584.90±, INV.=584.70±;
12" STORM TOP=583.40, INV.=582.40

AT PROFILE CB-B TO CB-D:
PROPOSED UTILITY CROSSING: ELECTRIC CONDUIT TOP= 586.10±, INV.=585.85±;
12" STORM TOP=584.50, INV.=583.50

N

MISS DIG 811

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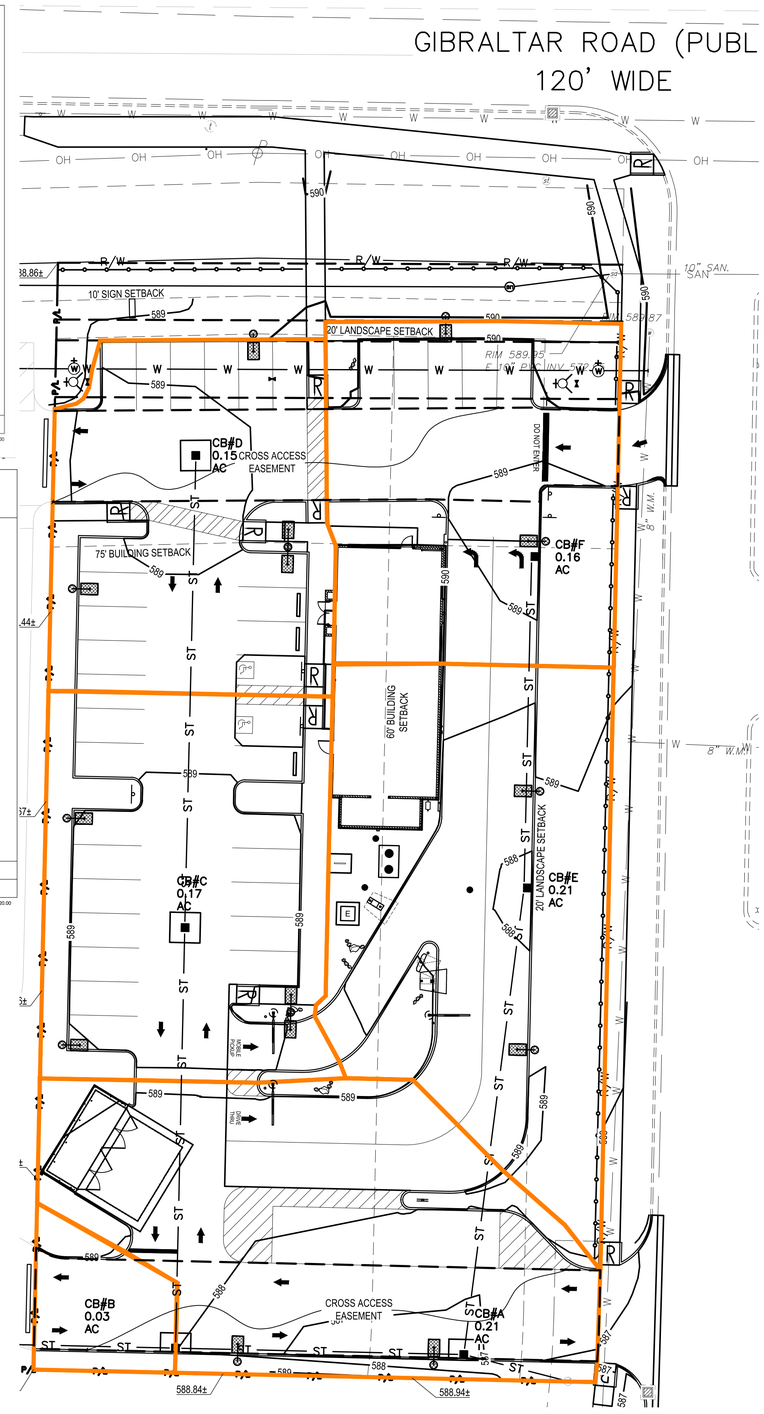


NOTE: EMERGENCY OVERLAND OVERFLOW FROM STORM SYSTEM WILL FLOW TO APRONS / TOP OF CURB AND OUT TO PUBLIC ROADS.

DRAINAGE AREA MAP

0 20 10 40
1"=20'
Horizontal Scale in Feet

LEGEND
(SEE SHEET C-001 FOR GENERAL LEGEND)

000 PROPOSED CONTOUR

DRAINAGE AREAS TO CATCH BASINS

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

	DATE	REMARKS
1	06.17.2021	TOWNSHIP COMMENTS
2	07.12.2021	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

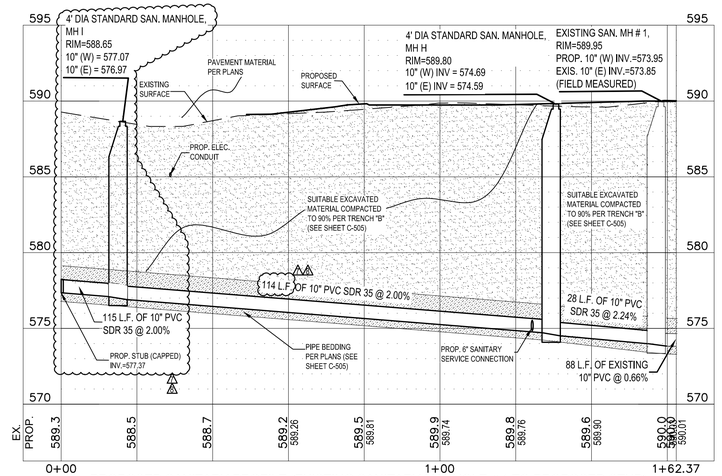
TACO BELL

ENDEAVOR 2.0

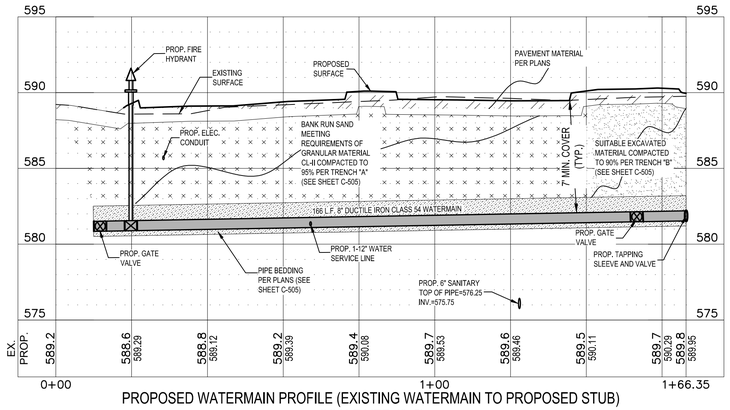
STORM CALCS, DA MAP & UTILITY PROFILES

C-132

PLOT DATE:



PROPOSED SANITARY PROFILE (EXISTING SANITARY MANHOLE # 1 TO PROPOSED STUB)
SCALE VER:1"=5'
SCALE HOR:1"=20'



PROPOSED WATERMAIN PROFILE (EXISTING WATERMAIN TO PROPOSED STUB)
SCALE VER:1"=5'
SCALE HOR:1"=20'

UTILITY CROSSINGS TABLE

AT SANITARY PROFILE:
PROPOSED UTILITY CROSSING: ELECTRIC CONDUIT TOP= 585.25±, INV.=585.00±;
6" PVC SANITARY LINE TOP=577.35, INV.=576.85

AT WATERMAIN PROFILE:
PROPOSED UTILITY CROSSING: ELECTRIC CONDUIT TOP= 585.85±, INV.=585.60±;
8" DI WATERLINE TOP=581.67, INV.=581.00

PROPOSED UTILITY CROSSING: 6" PVC SANITARY LINE TOP=576.25, INV.=575.75
8" DI WATERLINE TOP=582.00, INV.=581.33

N

0 20
10 40
1"=20'
Horizontal Scale in Feet

MISS DIG 811

BENCHMARKS:

BASIS OF BEARING IS THE EAST LINE OF INTERSTATE 75.

BENCHMARK #1 - RIM OF STORM MANHOLE SE CORNER OF SITE.
N 13429816.3076, E 218634.3816
ELEVATION=587.12' (NAVD88)

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

	DATE	REMARKS
1	05.14.2021	TOWNSHIP COMMENTS
2	06.17.2021	TOWNSHIP COMMENTS
3	07.12.2021	ISSUED FOR BID
4	07.14.2021	EGLE COMMENTS
5	07.14.2021	REVISED BID SET

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

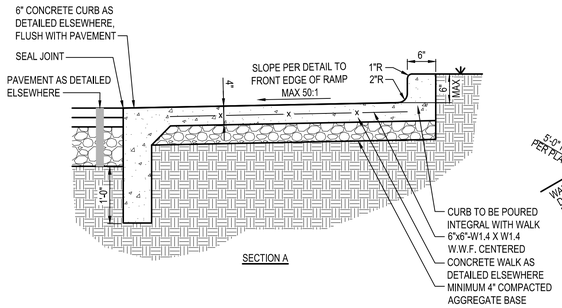
TACO BELL

ENDEAVOR 2.0 3

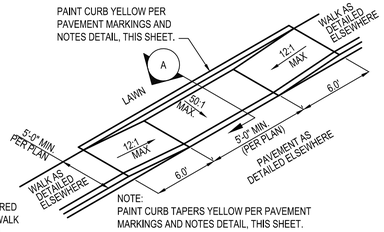
SANITARY AND WATERMAIN PROFILES

C-133

PLOT DATE:

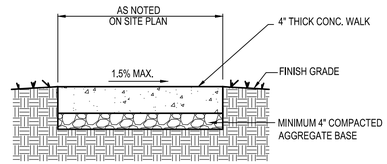


SECTION A



NOTE:
PAINT CURB TAPERS YELLOW PER PAVEMENT MARKINGS AND NOTES DETAIL, THIS SHEET.

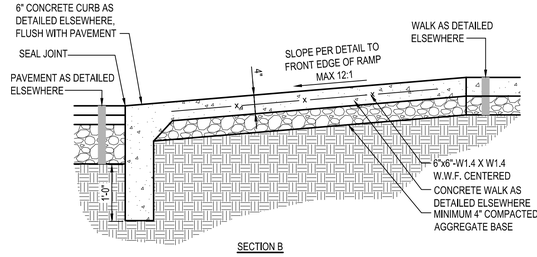
TYPE 1



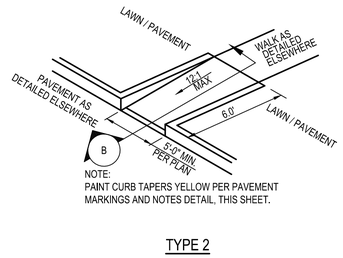
NOTES:

1. CONTRACTOR SHALL INSTALL 1/2" PRE-FORMED EXPANSION JOINT MATERIAL AND JOINT SEALER WHERE PAVEMENT ABUTS BUILDING.

D1 P.C.C. WALK
N.T.S.

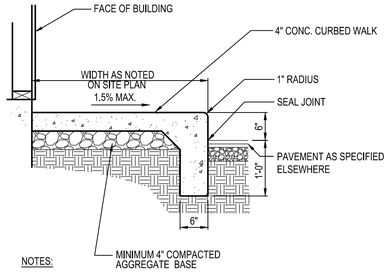


SECTION B



NOTE:
PAINT CURB TAPERS YELLOW PER PAVEMENT MARKINGS AND NOTES DETAIL, THIS SHEET.

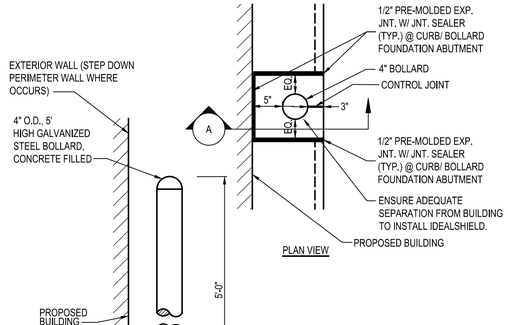
TYPE 2



NOTES:

1. CONTRACTOR SHALL INSTALL 1/2" PRE-FORMED EXPANSION JOINT MATERIAL AND JOINT SEALER WHERE PAVEMENT ABUTS BUILDING.

C2 P.C.C CURBED WALK
N.T.S.



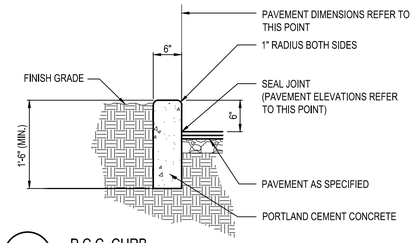
SECTION A

* VARIES, SEE ARCHITECTURAL DRAWINGS

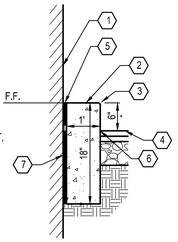
NOTE:
1. CONTRACTOR TO PRIME STEEL POST AND PROVIDE A YELLOW BOLLARD COVER. COVER SHALL BE A STREET SMART SOLUTIONS POST GUARD, DOME-TOP COVER BY US-POSTMAN.COM OR APPROVED EQUAL.

C3 DETERRENT BOLLARD (IN CURB)
N.T.S.

PLAN VIEW



D2 P.C.C. CURB
N.T.S.



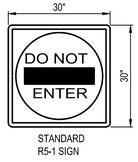
KEYED NOTES

1. FACE OF BUILDING
2. CONCRETE CURB
3. 1" RADIUS
4. PAVEMENT AS SPECIFIED
5. 1/2" PRE MOLDED EXP. JNT. CUT BACK AND PROVIDE SEALANT, TYPICAL, AT ALL JOINTS WITH FILLER.
6. SEAL JOINT
7. 15LB BOND BREAK MATERIAL BELOW EXP. JNT. MATERIAL

* SEE GRADING PLAN FOR ANY VARIATIONS TO EXPOSED CURB HEIGHT.

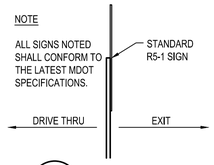
C4 CURB AT DRIVE THRU
N.T.S.

C1 ADA ACCESSIBLE RAMP
N.T.S.

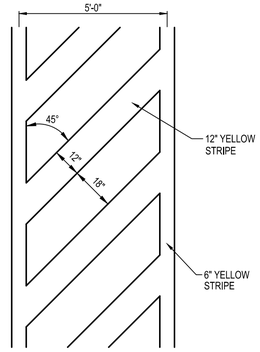


STANDARD R5-1 SIGN

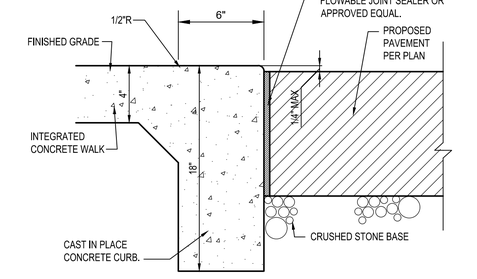
NOTE
ALL SIGNS NOTED SHALL CONFORM TO THE LATEST MDOT SPECIFICATIONS.



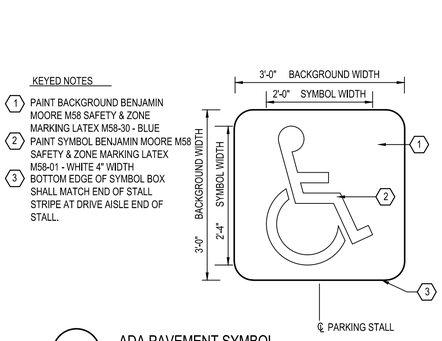
B2 DO NOT ENTER SIGN
N.T.S.



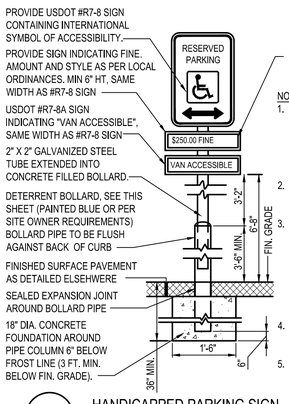
B3 CROSSWALK STRIPING
N.T.S.



B4 FLUSH CURB
N.T.S.



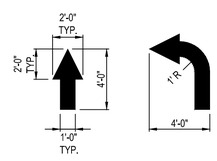
B1 ADA PAVEMENT SYMBOL
N.T.S.



NOTES:

1. CONTRACTOR SHALL VERIFY SIGN WITH LOCAL AND ADA REQUIREMENTS AND SPECIFICATIONS BEFORE INSTALLATION. LOCAL JURISDICTION SIGN REQUIREMENTS SHALL TAKE PRECEDENCE OVER THIS DETAIL.
2. SIGNS SHALL BE LOCATED SO THAT THEY CANNOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE.
3. BOLLARD TO BE DELETED IF SIGN POST IS OUT OF VEHICULAR PATH OR PARKING SPACE. WHEN NOT USING BOLLARD FOUNDATION THE SIGN POST SHALL BE EMBEDDED 3'-6" IN A 12" DIA. CONCRETE FOOTING 4'-0" DEEP (0.12 CU. YDS. OF CONCRETE REQUIRED).
4. SIGN TO BE PROVIDED AT ALL ACCESSIBLE PARKING SPACES AS PER ADA REGULATIONS.
5. IF SIGN IS MOUNTED TO BUILDING, THE BOTTOM OF THE VAN ACCESSIBLE SIGN SHALL BE 5'-0" FROM THE FINISH GRADE.

XX HANDICAPPED PARKING SIGN
N.T.S.



NOTES:

ALL PAVEMENT MARKINGS TO BE WHITE PAVEMENT PAINT, UNLESS STATED OTHERWISE. ALL PAVEMENT MARKINGS WITHIN ADA AREAS SHALL BE PAINTED BLUE EXCEPT FOR COLORS DEFINED ON THE ADA PAVEMENT SYMBOL.

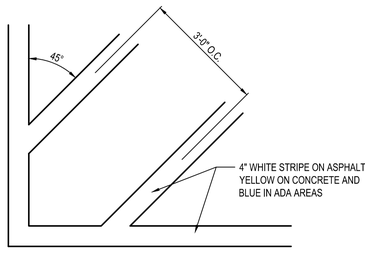
MARKING (STRIPING) PAINT FOR PARKING SPACES, TRAFFIC ARROWS, ADA PARKING AND SYMBOLS, ETC., PER LOCAL REQUIREMENTS AND AS FOLLOWS:

PAVEMENT MARKINGS SHALL BE WATER BASE FAST DRYING 100% ACRYLIC TYPE: WATER BASE TO MEET FEDERAL SPECIFICATION TTP-01952B. FOR COLD WEATHER APPLICATION PAINT PRODUCT SHALL BE IN ACCORDANCE WITH ASTM-D2369, D1394, D3723, D1475, D562 AND D711.

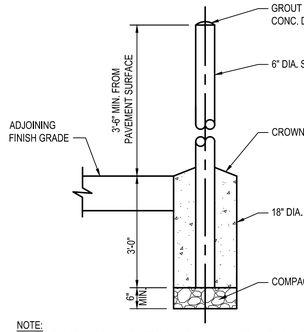
PROVIDE A NON-SLIP AGGREGATE ADDITIVE TO MARKING PAINT USED AT ADA ACCESS RAMPS.

APPLY 2 COATS WITH STRAIGHT EDGES, YELLOW ON CONCRETE/WHITE ON ASPHALT EXCEPT WHEN MATCHING ADJACENT OR EXISTING COLOR WHEN THE PAVING IS AN EXPANSION OR SEGMENT OF A LARGER LOT. CONTRACTOR SHALL APPLY THE SECOND COAT NO SOONER THAN 30 DAYS OF APPLYING THE FIRST COAT.

A2 PAVEMENT MARKINGS & NOTES
N.T.S.

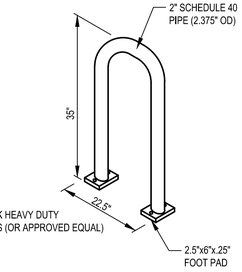


A3 TRANSVERSE STRIPING
N.T.S.



NOTE:
1. CONTRACTOR TO PRIME STEEL POST AND PROVIDE A YELLOW (BLUE FOR ADA) BOLLARD COVER. COVER SHALL BE A STREET SMART SOLUTIONS POST GUARD, DOME-TOP COVER BY US-POSTMAN.COM OR APPROVED EQUAL.
2. WHEN OWNER SPECIFIED ALTERNATE, CONTRACTOR SHALL PAINT BOLLARDS IN LIEU OF BOLLARD COVER, PER CONSTRUCTION MANAGER SPECIFICATIONS.
3. WHERE UTILIZED FOR PEDESTRIAN PROTECTION CONTRACTOR SHALL INSTALL A CRASH RATED BOLLARD PER ASTM F3016/3016M. UTILIZATION OF CRASHCORE BOLLARD BY MCCUE.COM OR APPROVED EQUAL SHALL BE IN ACCORDANCE WITH MANUFACTURE SPECIFICATIONS.

A4 DETERRENT BOLLARD
N.T.S.



PRODUCT: DERO HOOP RACK HEAVY DUTY
DERO BIKE RACKS (OR APPROVED EQUAL)
WWW.DERO.COM
1-800-298-4915

CAPACITY: 2 BIKES

MATERIALS: 2" SCHEDULE 40 PIPE (2.375" OD)

CONTRACTOR SHALL COORDINATE FINISH AND PREFERRED INSTALLATION METHOD WITH CONSTRUCTION MANAGER.

A5 BIKE RACK DETAIL
N.T.S.

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

	DATE	REMARKS
1	07.12.2021	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

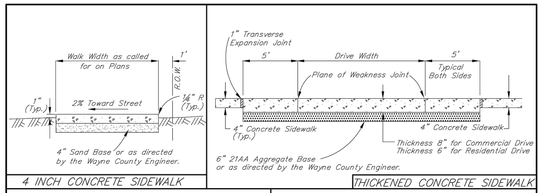
TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
DETAILS

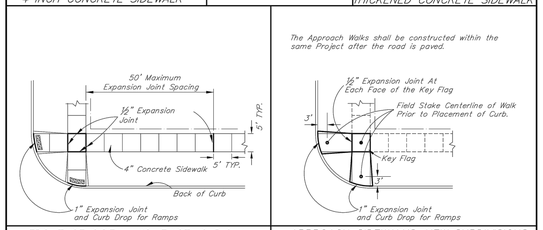
C-501

PLOT DATE:



4 INCH CONCRETE SIDEWALK

THICKENED CONCRETE SIDEWALK



FRONTAGE SIDEWALKS–EXISTING R.O.W.

APPROACH SIDEWALKS–NEW SUBDIVISIONS

Notes:
Sidewalk transverse slope may vary from 0% to 4% to meet site conditions. When transverse slope is less than 2% longitudinal drainage must be provided.

Sidewalk Ramps shall conform to the current ADA requirements. See MDOT R-28 series or as approved by the Wayne County Engineer.

Sidewalk intersections shall be cast monolithically with joint lines placed as near to perpendicular as possible with sidewalks edge, to avoid narrow or pointed pieces of concrete.

½" Expansion Joint

Where permanent structure is located in sidewalks, place ½" expansion material around structure and adjust joint pattern to intersect structure as shown.

TYPICAL SIDEWALK JOINT LAYOUTS

Work this Sheet with the General Notes on RS–1

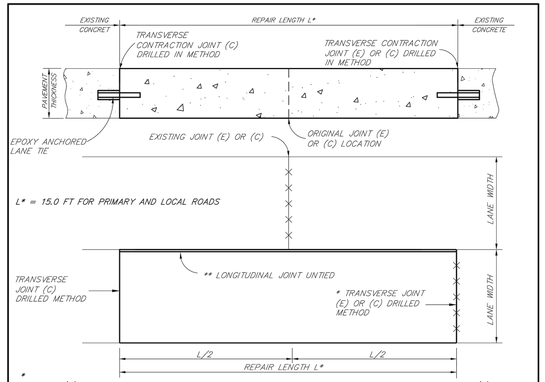
REVISION DATE: 08/01/07	WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES ENGINEERING DIVISION/PERMIT OFFICE PERMIT STANDARDS	SCALE NOT TO SCALE
DIRECTOR OF ENGINEERING	CONCRETE SIDEWALK	RS–5
DIVISION PERMIT ENGINEER		SHEET 1 OF 1

NOTE: THIS IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL SIGNED COPY FOR PUBLICATION IS KEPT ON FILE AT THE WAYNE COUNTY ENGINEERING OFFICES.

1. All materials and workmanship shall be in accordance with Wayne County Specifications which are defined as the current Michigan Department of Transportation (MDOT) Standard Specifications for Construction as modified by Wayne County Special Provisions.
2. Paving Standard Plan Details may be shown with wire fabric reinforcement. Use of reinforcement shall be required as called for on the plans.
3. A Transverse End of Pour Joint, Symbol (H), shall be constructed when there is an interruption in concrete paving for more than ½ hour. Transverse End of Pour Joint, Symbol (H), shall be constructed in accordance with current MDOT Standard Plan, R–39 series (Reinforced Concrete Pavement) and R–39P series (Plain Concrete Pavement). This note applies to both concrete base and finished concrete pavement.
4. When it is anticipated that construction traffic will be using the pavement, endings will be protected by means of a temporary concrete header as shown on RS–4.
5. The Expansion Joint Foam Rod shall be a solid round heat resistant Polyurethane foam capable of withstanding the temperature of the sealant. Density of the foam shall be 2–4 Lb/Cft.
6. Wire Fabric Reinforcement shall lay flat when delivered to the work area. The use of spreader bars will be required for lifting bundles of reinforcement.
7. Where the lane width of the pavement differs from wire fabric reinforcement standards, special sheets of the required width may be used or standard sheets may be cut to the required size or split sheets may be added to standard sheets to obtain the required size. Side laps shall not be less than the spacing of the longitudinal wires.
8. The ends of the Wire Fabric Reinforcement sheets shall be fastened in at least two places at each lap to prevent horizontal and vertical displacement.
9. When Concrete Pavement Repairs are longer than 20 feet, Transverse Plane of Weakness Joints (WT) shall be placed in–line with existing transverse joints, working cracks, or at 15 feet maximum and 6 feet minimum spacings.
10. Existing concrete pavements with HMA surface requiring saw–cutting for removal shall have the saw cuts extend completely thru the concrete pavement. Sawed over–cuts occurring in adjacent slab, gutter or shoulder, which will remain in place, shall be sealed.

REVISION DATE: 08/01/07	WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES ENGINEERING DIVISION/PERMIT OFFICE PERMIT STANDARDS	SCALE NOT TO SCALE
DIRECTOR OF ENGINEERING	GENERAL NOTES	RS–1
DIVISION PERMIT ENGINEER		SHEET 1 OF 1

NOTE: THIS IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL SIGNED COPY FOR PUBLICATION IS KEPT ON FILE AT THE WAYNE COUNTY ENGINEERING OFFICES.



* Joint (C) shall be installed at this location. unless the original joint was an expansion, then a joint (E) should be installed.

* * When constructing a longitudinal untied joint, apply a heavy coat of white curing compound along the existing pavements vertical edge to provide a bond breaker. If vertical edge is not smooth from saw cutting, additional surface grinding may be required.

Pavement removal shall be in accordance with 2003 MDOT Standard Specifications for Construction.

This detail is for finished concrete pavement repairs on class "A" roads and industrial subdivisions.

Pavement thickness shall match the existing pavement thickness with a minimum section of (9) nine inches of non–reinforced concrete.

See Wayne County permit standard RS–2 for pavement joint details.

If concrete pavement has been resurfaced with HMA, see standard detail PR–2.

For finished concrete pavement on class "A" County roads and industrial subdivisions less than 20 years old, minimum patch size shall be full width of lane (including the curb and gutter) with a minimum length of 15.0 feet with no less than 6 feet remaining to any pavement joints, cracks, or edge of pavement.

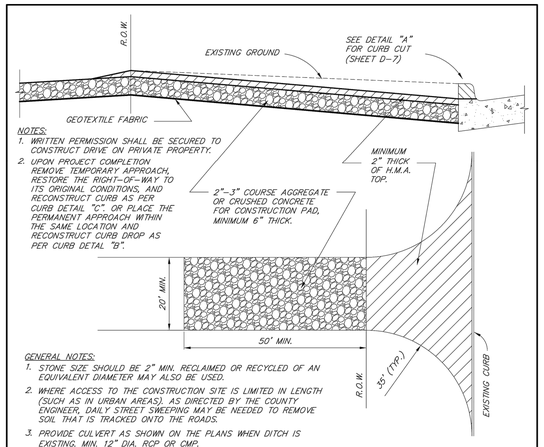
Saw cut must extend completely through the pavement section. Any over–cuts except at the outside corners of the pavement patch area will be required to be removed (this will increase the size of the patch).

All sawed over–cuts located at the outside corners of the patch location shall be cleaned and sealed with hot poured rubber asphalt.

CLASS "A" ROAD UNDER 20 YEARS OLD.

REVISION DATE:	WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES ENGINEERING DIVISION/PERMIT OFFICE PERMIT STANDARDS	SCALE NOT TO SCALE
DIRECTOR OF ENGINEERING	PAVEMENT REMOVAL AND REPAIR (PATCHING) CLASS "A" ROAD UNDER 20 YEARS OLD	PR–1
DIVISION PERMIT ENGINEER		SHEET 1 OF 2

NOTE: THIS IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL SIGNED COPY FOR PUBLICATION IS KEPT ON FILE AT THE WAYNE COUNTY ENGINEERING OFFICES.



NOTES:
1. WRITTEN PERMISSION SHALL BE SECURED TO CONSTRUCT DRIVE ON PRIVATE PROPERTY.
2. UPON PROJECT COMPLETION REMOVE TEMPORARY APPROACH, RESTORE THE RIGHT–OF–WAY TO ITS ORIGINAL CONDITIONS, AND RECONSTRUCT CURB AS PER CURB DETAIL "C", OR PLACE THE PERMANENT APPROACH WITHIN THE SAME LOCATION AND RECONSTRUCT CURB DROP AS PER CURB DETAL "B".

GENERAL NOTES:
1. STONE SIZE SHOULD BE 2" MIN. RECLAIMED OR RECYCLED OF AN EQUIVALENT DIAMETER MAY ALSO BE USED.
2. WHERE ACCESS TO THE CONSTRUCTION SITE IS LIMITED IN LENGTH (SUCH AS IN URBAN AREAS), AS DIRECTED BY THE COUNTY ENGINEER, DAILY STREET SWEEPING MAY BE NEEDED TO REMOVE SOIL THAT IS TRACKED ONTO THE ROADS.
3. PROVIDE CULVERT AS SHOWN ON THE PLANS WHEN DITCH IS EXISTING. MIN. 12" DIA. RCP OR CMP.

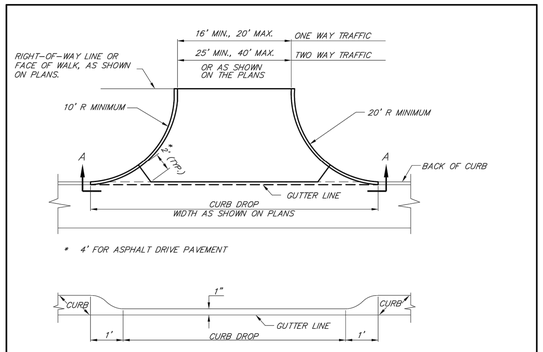
CONSTRUCTION CONSIDERATIONS
1. SAW–CUT HORIZONTALY THE EXISTING CONCRETE CURB AS PER WAYNE COUNTY DETAIL "A" AND PREPARE THE EDGE OF PAVEMENT.
2. REMOVE AND DISPOSE OF UNWANTED TREES, OTHER VEGETATION, OR FOREIGN OBJECTS AND DEBRIS FROM THE AREA.
3. APPLY THE STONE IN LAYERS AND COMPACT IT AS DIRECTED BY THE WAYNE COUNTY ENGINEER.
4. PLACE H.M.A. TOP AND COMPACT IT TO ITS 97% OF THE UNIT WEIGHT OF THE MATERIALS OR AS DIRECTED BY THE WAYNE COUNTY ENGINEER.

AFTER CONSTRUCTION
IF MUD AND SOIL ATTACHED TO TRUCK TIRES DOES NOT FALL OFF ONTO THE ASPHALT, THEN TRUCK TIRES SHOULD BE WASHED ON AN AREA STABILIZED WITH CRUSHED STONE. WASH RACKS MAY BE USED.

MAINTENANCE
PROPER MAINTENANCE MAY INCLUDE ADDITIONAL LAYERS OF STONE OR H.M.A. WHEN THE ORIGINAL LAYERS BECOME'S COVERED WITH MUD OR BECOMES COMPLETELY OR PARTIALLY DETERIORATED DUE TO MOVEMENT OF HEAVY TRUCKS AND VEHICLES. AFTER EACH STORM EVENT, INSPECT THE ROAD FOR DEBRIS AND ALL SEDIMENT DROPPED OR ERODED ONTO PUBLIC R.O.W. SHOULD BE REMOVED IMMEDIATELY BY SWEEPING EFFECTIVELY.

REVISION DATE:	WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES ENGINEERING DIVISION/PERMIT OFFICE PERMIT STANDARDS	SCALE NOT TO SCALE
DIRECTOR OF ENGINEERING	TEMPORARY ASPHALT ACCESS DRIVE	CD–1
DIVISION PERMIT ENGINEER		SHEET 1 OF 2

NOTE: THIS IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL SIGNED COPY FOR PUBLICATION IS KEPT ON FILE AT THE WAYNE COUNTY ENGINEERING OFFICES.



SECTION A–A
NOT TO SCALE

NOTES:

CONSTRUCT THE DRIVE APPROACH WITH 8" NON–REINFORCED CONCRETE ON 6" OF 21AA AGGREGATE BASE COURSE COMPACTED IN PLACE (CIP) OR 6" HMA LEVELING ON 9" OF 21AA AGGREGATE BASE COURSE (CIP).

CURBS SHALL BE CONSTRUCTED WITH HEIGHT VARYING FROM 6" AT BACK OF CURB TO 0" HEIGHT AT FACE OF SIDEWALK OR RIGHT–OF–WAY LINE.

AT ALL CONCRETE DRIVES, PLACE A 1" EXPANSION JOINT AT BACK OF CURB AND ½" EXPANSION JOINT AT FACE OF SIDEWALK OR RIGHT–OF–WAY LINE. MAINTAIN NORMAL SIDEWALK GRADE ACROSS DRIVE, 2% SLOPE UP FROM FACE OF SIDEWALK.

INBOUND OR OUTBOUND RADIUS SHALL BE REDUCED TO 5' FOR ONE–WAY TRAFFIC DRIVE APPROACH.

DRIVE APPROACH SHALL NOT ENCROACH ACROSS PROPERTY LINE EXTENDED WITHOUT WRITTEN APPROVAL FROM THE ADJOINING PROPERTY OWNER.

WORK THIS SHEET WITH THE GENERAL NOTES ON RS–1 AND D–6 SHEET 2–2.

REVISION DATE: 08/01/07	WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES ENGINEERING DIVISION/PERMIT OFFICE PERMIT STANDARDS	SCALE NOT TO SCALE
DIRECTOR OF ENGINEERING	COMMERCIAL DRIVE APPROACH	D–6
DIVISION PERMIT ENGINEER		SHEET 1 OF 2

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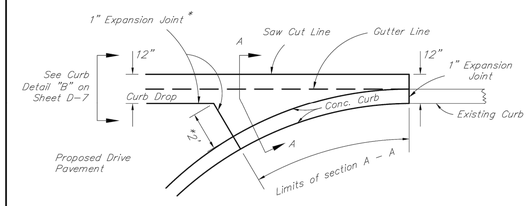
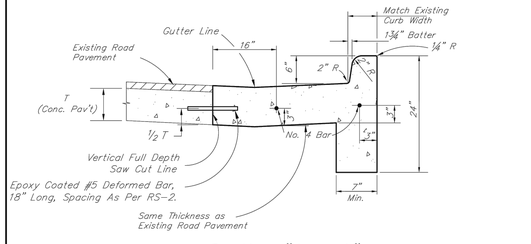
CURB RETURN JOINING EXISTING PAVEMENT



* 4' for HMA Drive Pavement. No Expansion Joint Required.



Section "A – A"

WORK THIS SHEET WITH THE GENERAL NOTES ON RS–1.

REVISION DATE: 08/01/07	WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES ENGINEERING DIVISION/PERMIT OFFICE PERMIT STANDARDS	SCALE NOT TO SCALE
DIRECTOR OF ENGINEERING	COMMERCIAL DRIVE APPROACH	D–6
DIVISION PERMIT ENGINEER		SHEET 2 OF 2

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GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

FOR REFERENCE ONLY

	DATE	REMARKS
1	07.12.2021	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

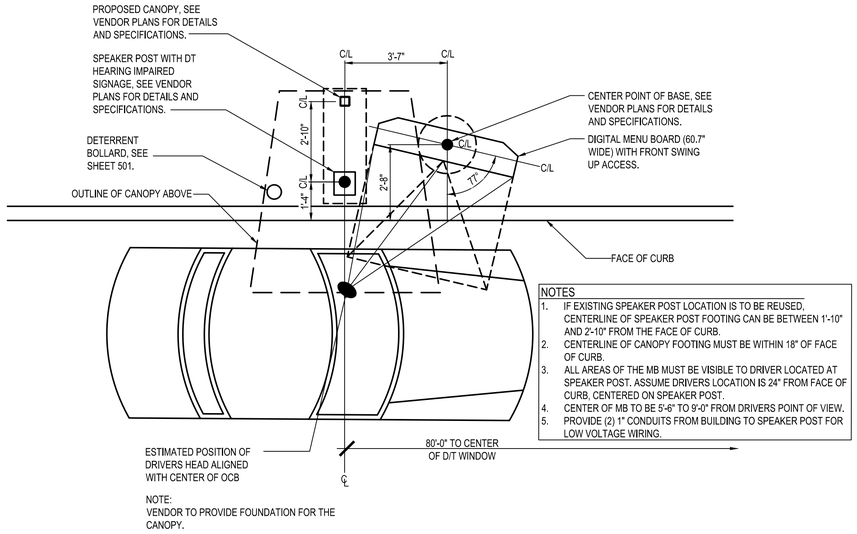
TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
WAYNE COUNTY DETAILS

C-502

PLOT DATE:

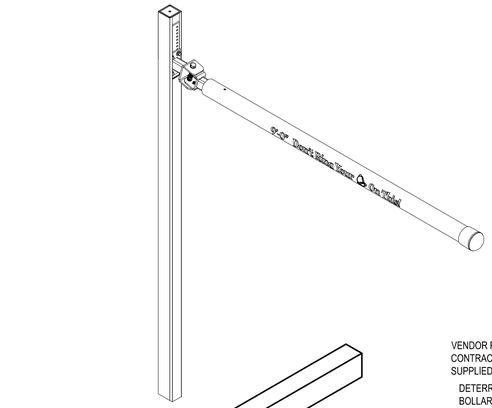


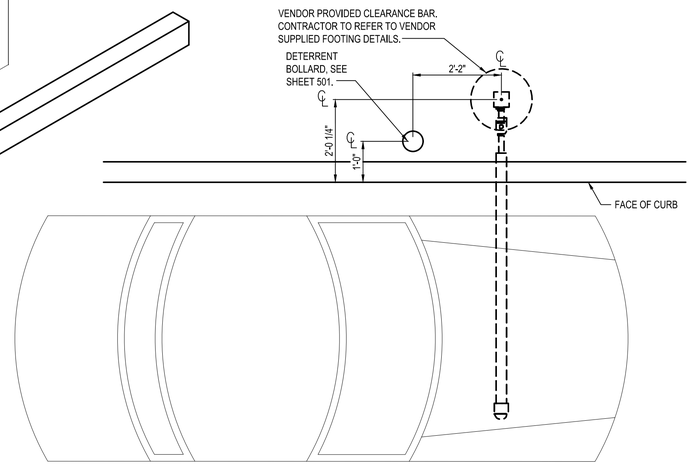
NOTES

1. IF EXISTING SPEAKER POST LOCATION IS TO BE REUSED, CENTERLINE OF SPEAKER POST FOOTING CAN BE BETWEEN 1'-10" AND 2'-10" FROM THE FACE OF CURB.
2. CENTERLINE OF CANOPY FOOTING MUST BE WITHIN 18" OF FACE OF CURB.
3. ALL AREAS OF THE MB MUST BE VISIBLE TO DRIVER LOCATED AT SPEAKER POST. ASSUME DRIVERS LOCATION IS 24" FROM FACE OF CURB, CENTERED ON SPEAKER POST.
4. CENTER OF MB TO BE 5'-6" TO 9'-0" FROM DRIVERS POINT OF VIEW.
5. PROVIDE (2) 1" CONDUITS FROM BUILDING TO SPEAKER POST FOR LOW VOLTAGE WIRING.

B1 ENLARGED MENU BOARD DETAIL @ STRAIGHT CURB

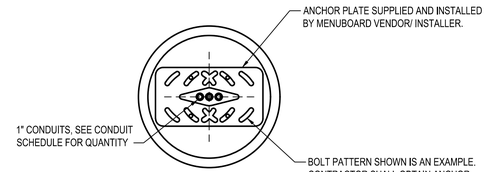
N.T.S.



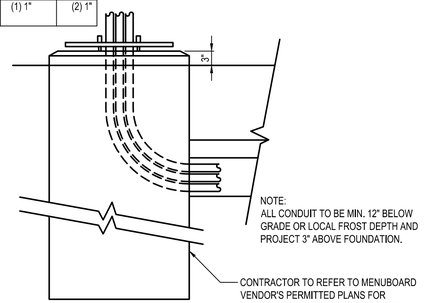


B2 PORTAL PLACEMENT DETAIL

N.T.S.

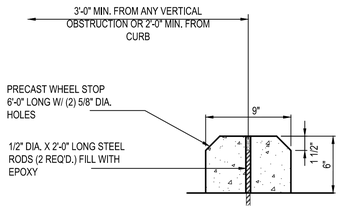


CONDUIT SCHEDULE		
DEVICE	POWER	DATA
DIRECTIONAL	(1) 3/4"	-
SPEAKER POST	(1) 1"	(1) 1"
MENU BOARD	(1) 1"	(2) 1"
PREVIEW BOARD (OPTIONAL)	(1) 1"	(2) 1"



A1 FOUNDATION CONDUIT DETAIL

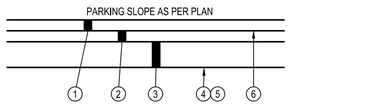
N.T.S.



NOTE:
1. SEE SITE PLAN FOR LOCATION AND QUANTITY OF WHEELSTOPS.
2. WHEN APPLICABLE IN CONCRETE PAVEMENTS, WHEEL STOPS SHALL BE ANCHORED TO CONCRETE WITH HDI+ 1/4" DROP-IN ANCHORS, 1" EMBEDMENT W/ 1/4" THREADED ROD.

A2 P.C.C. WHEELSTOP

N.T.S.



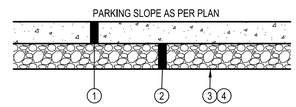
1. ASPHALT SURFACE COURSE - MDOT 5E03 - STD DUTY - 1.5" HVY DUTY - 2"
2. ASPHALT INTERMEDIATE COURSE - MDOT 4E03 - STD DUTY - 2.5" HVY DUTY - 3"
3. AGGREGATE BASE - MDOT 21AA - STD DUTY - 8" HVY DUTY - 8"
4. SUBGRADE COMPACTION
5. PROOF ROLLING
6. TACK COAT

NOTES:

1. APPLY LIQUID ASPHALT AT ALL JOINTS BETWEEN CONCRETE AND ASPHALT AND WHERE PROPOSED ASPHALT MEETS EXISTING ASPHALT INCLUDING SAW CUT JOINTS.
2. NO RAP SHALL BE PERMITTED IN ASPHALT SURFACE COURSE.

A3 TYPICAL PAVEMENT SECTION

N.T.S.



1. 6" P.C.CONCRETE PAVEMENT
2. 6" AGGREGATE BASE - MDOT 21AA
3. SUBGRADE COMPACTION
4. PROOF ROLLING

NOTES:

1. APPLY LIQUID ASPHALT AT ALL JOINTS BETWEEN CONCRETE AND ASPHALT, APPLY CONCRETE SEALANT CONFORMING TO ASTM D6690 WHERE PROPOSED CONCRETE MEETS EXISTING CONCRETE.
2. SEE SITE PLAN FOR PAVEMENT THICKNESSES AND REINFORCEMENT.
3. CONCRETE PAVEMENT SHALL HAVE CONTROL JOINTS AT 12'-0" O.C.

A4 TYPICAL CONCRETE PAVEMENT SECTION

N.T.S.

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

	DATE	REMARKS
1	05.14.2021	TOWNSHIP COMMENTS
2	07.12.2021	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

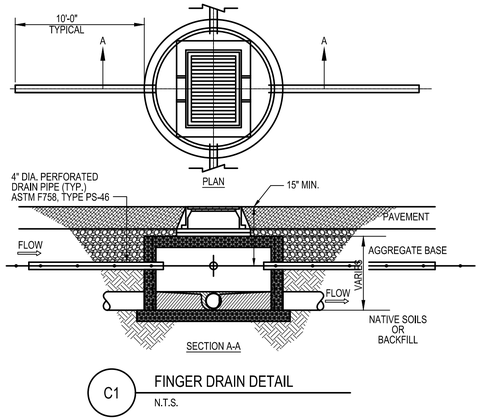
TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
DETAILS

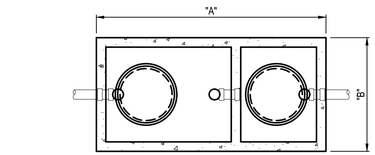
C-503

PLOT DATE:

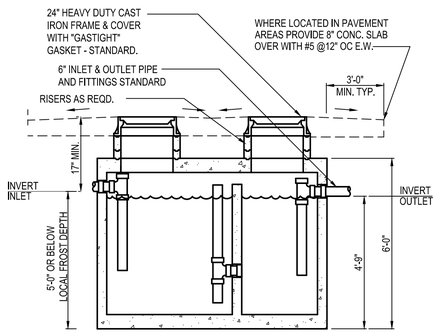


C1 FINGER DRAIN DETAIL

N.T.S.



TOP VIEW



SECTION

G.T. SIZE	DIM. "A"	DIM. "B"
500 GALLON	6'-2"	4'-2"
750 GALLON	8'-1"	4'-0"
1000 GALLON	8'-2"	5'-1"
1250 GALLON	8'-6"	5'-9"
1500 GALLON	*	*

* PER MANUFACTURER SPECIFICATIONS.

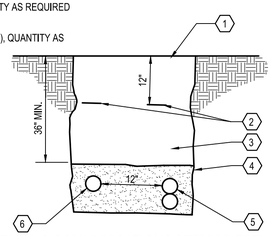
GC SHALL INSTALL GREASE INTERCEPTOR, (G.I.) AS APPROVED BY LOCAL WASTEWATER JURISDICTION INSTALLATION SHALL INCLUDE VENT, SAMPLING PORT/ MANHOLE, REINF. CONCRETE TRAFFIC LID, ETC. AS REQUIRED PER WASTEWATER DEPARTMENT STANDARDS. G.I. SHALL BE DESIGNED FOR H20 VEHICLE LOADS.

B2 EXTERIOR GREASE INTERCEPTOR

N.T.S.

KEYED NOTES

1. TOPSOIL & SOD, OR PAVEMENT AS DETAILED ELSEWHERE.
2. CONTINUOUS METALLIC WARNING TAPE
3. CLEAN SELECT GRANULAR BACKFILL
4. 6" CLEAN SAND ENVELOPE
5. 4" PVC ELECTRICAL CONDUITS (SCHEDULE 40), QUANTITY AS REQUIRED
6. 4" PVC TELEPHONE CONDUIT (SCHEDULE 40), QUANTITY AS REQUIRED

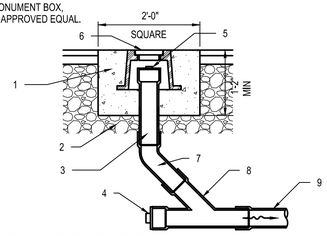


B1 ELECTRICAL & COMMUNICATIONS SERVICE TRENCH

N.T.S.

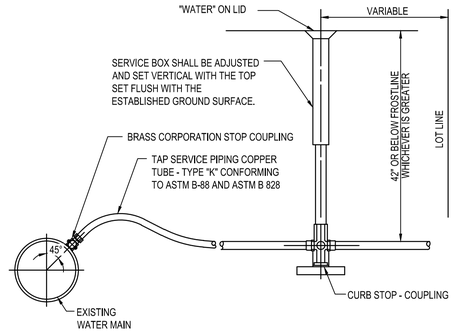
KEYED NOTES

1. CONCRETE, MATCH PAVEMENT SPEC.
2. 6" (MIN.) AGGREGATE BASE
3. 6" DIA. CLEAN-OUT PIPE
4. CAP AND SEAL CONDUIT
5. THREADED CLEAN-OUT CAP
6. CAST-IRON MONUMENT BOX, EJIW 1565 OR APPROVED EQUAL.
7. 45° BEND
8. WYE
9. SEWER



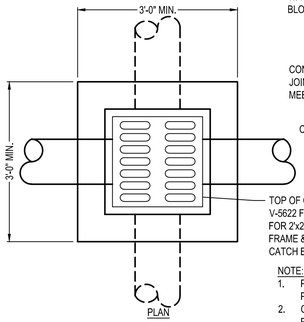
B3 CLEAN OUT (PAVEMENT AREA)

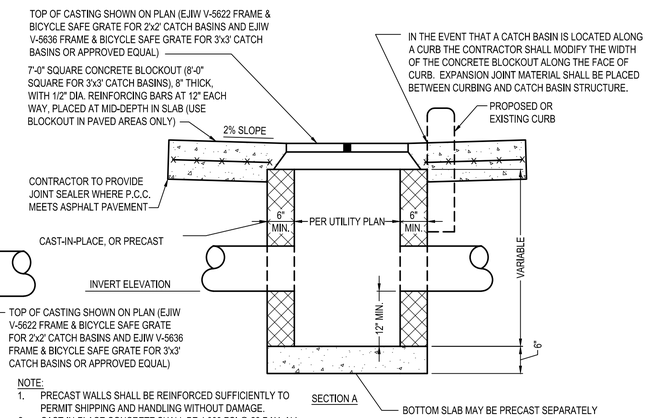
N.T.S.



B4 WATER SERVICE TAP

N.T.S.





NOTE:

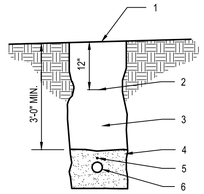
1. PRECAST WALLS SHALL BE REINFORCED SUFFICIENTLY TO PERMIT SHIPPING AND HANDLING WITHOUT DAMAGE.
2. CAST-IN-PLACE CONCRETE SHALL BE 4,000 PSI @ 28 DAY. ALL PRECAST CONCRETE SHALL MEET STATE REQUIREMENTS WITH 6% +/- 2% AIR VOID CONTENT IN THE CURED CONCRETE.
3. ALL STORM SEWER GRATES TO HAVE NOTATION: 'DUMP NO WASTE, DRAINS TO WATERWAY'. CONTRACTOR TO VERIFY WITH LOCAL JURISDICTION EXACT WORDING.

A1 CATCH BASIN

N.T.S.

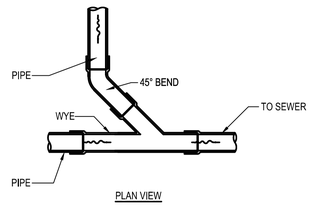
KEYED NOTES

1. TOPSOIL & SOD, OR PAVEMENT AS DETAILED ELSEWHERE.
2. CONTINUOUS METALLIC WARNING TAPE
3. CLEAN SELECT GRANULAR BACKFILL
4. 6" CLEAN SAND ENVELOPE
5. TRACKER WIRE
6. GAS SERVICE LINE PER COLUMBIA GAS STANDARDS



A2 GAS SERVICE TRENCH

N.T.S.



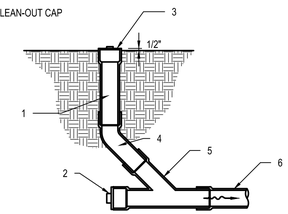
PLAN VIEW

A3 WYE CONNECTION

N.T.S.

KEYED NOTES

1. 6" DIA. CLEAN-OUT PIPE
2. CAP AND SEAL CONDUIT
3. THREADED CLEAN-OUT CAP
4. 45° BEND
5. WYE
6. SEWER



A4 CLEAN OUT (LAWN AREA)

N.T.S.

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

	DATE	REMARKS
1	07.12.2021	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
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PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

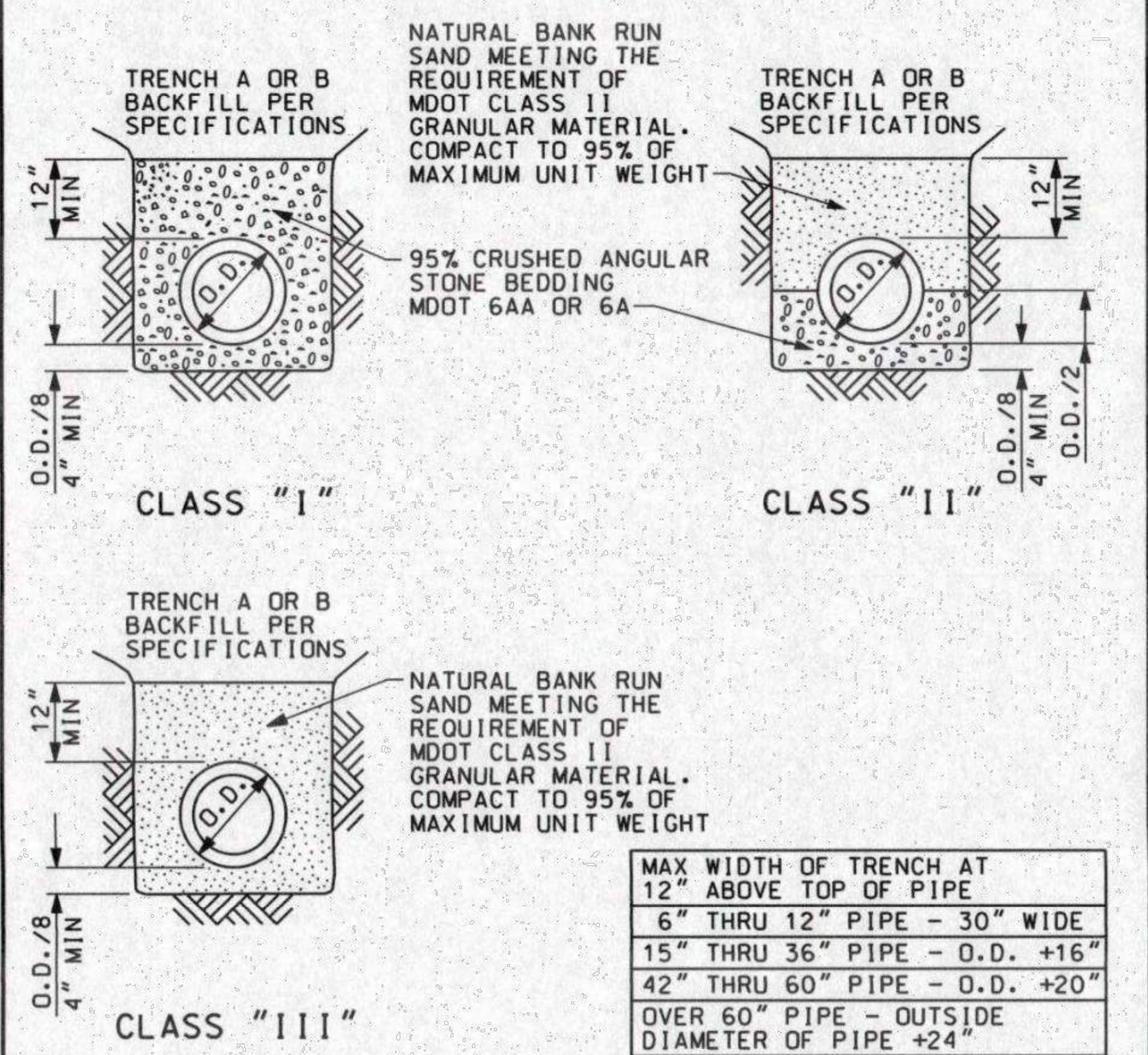
TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
DETAILS

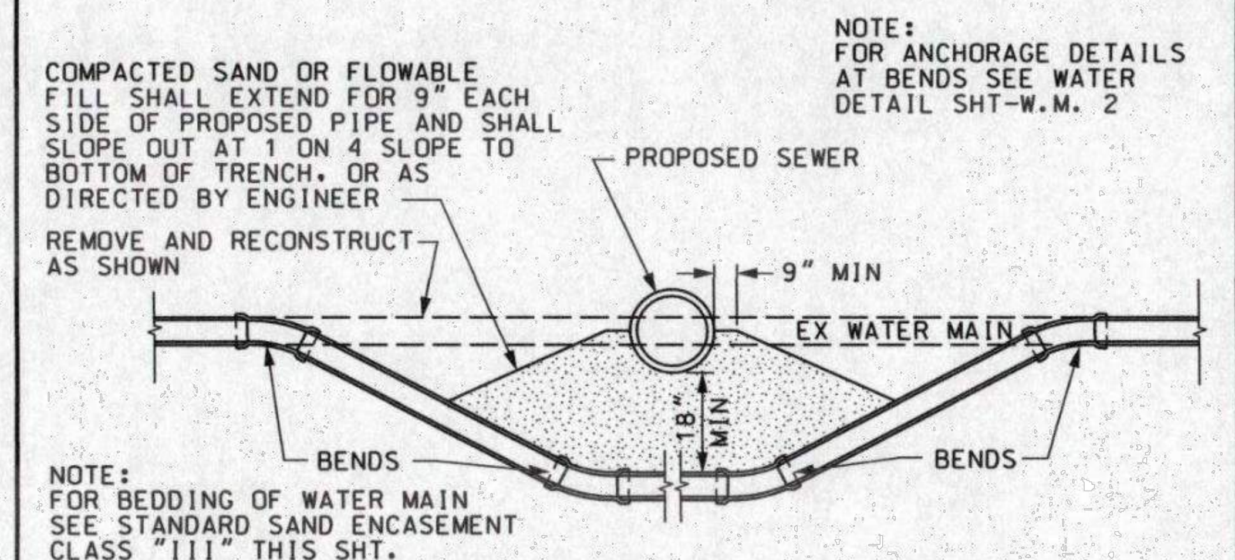
C-504

PLOT DATE:

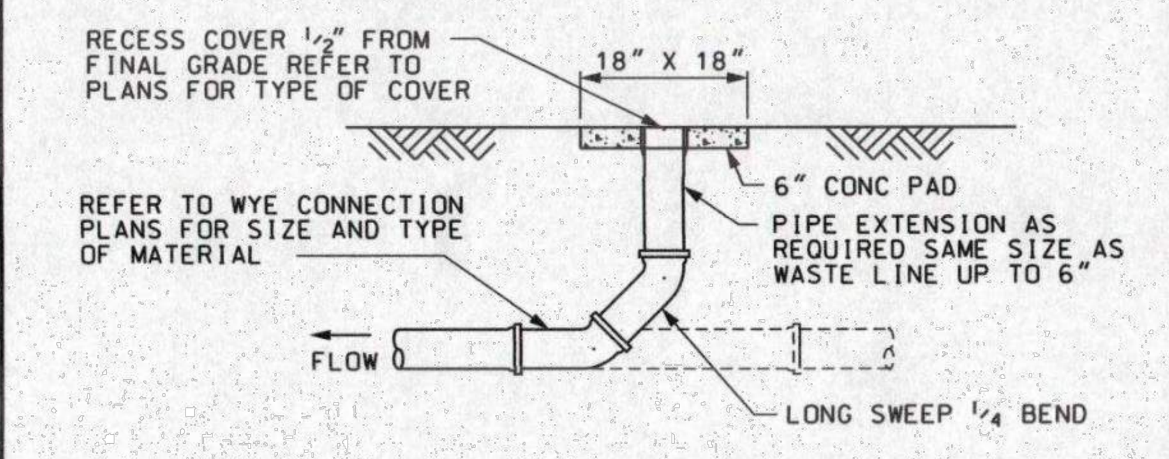


MAX WIDTH OF TRENCH AT 12" ABOVE TOP OF PIPE
6" THRU 12" PIPE - 30" WIDE
15" THRU 36" PIPE - O.D. +16"
42" THRU 60" PIPE - O.D. +20"
OVER 60" PIPE - OUTSIDE DIAMETER OF PIPE +24"
MIN WIDTH OF TRENCH 12" ABOVE THE TOP OF PIPE SHALL BE 6" ON EACH SIDE OF PIPE

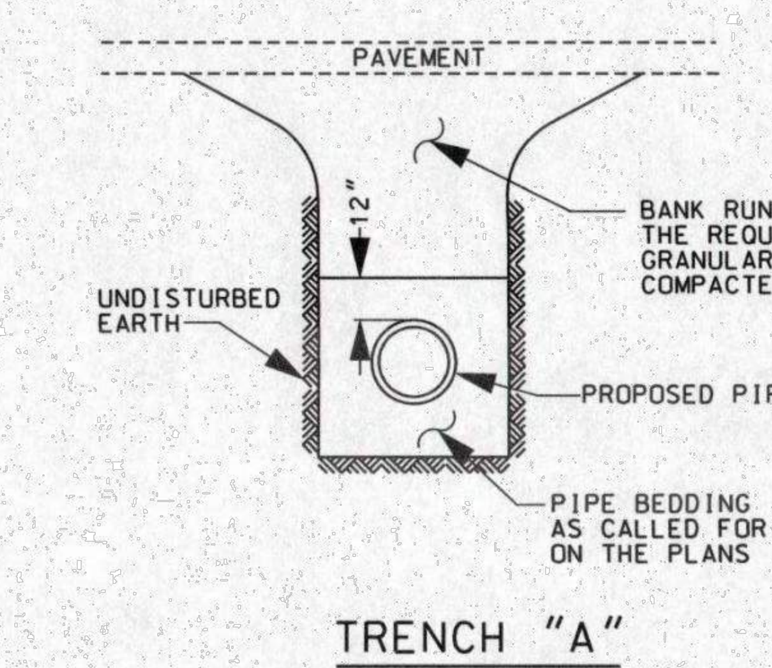
FLEXIBLE PIPE BEDDING DETAILS
(PVC & DUCTILE)



RELOCATION OF WATER MAIN

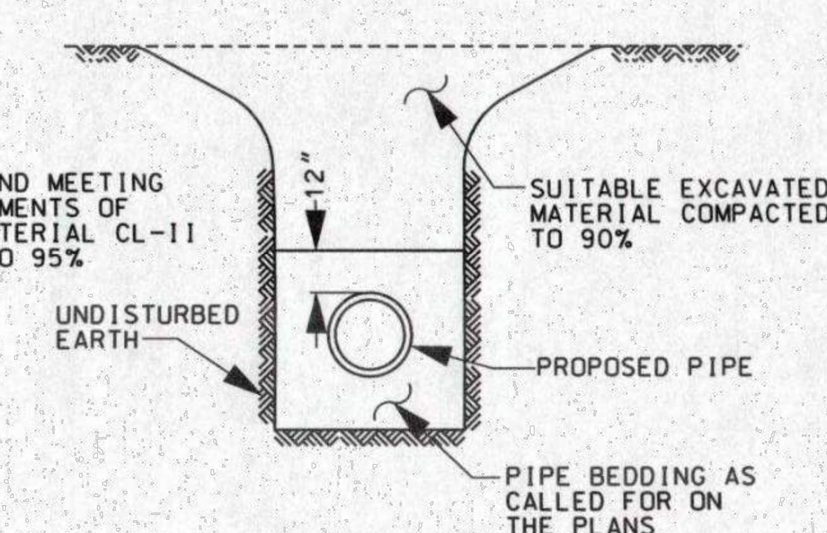


CLEAN - OUT

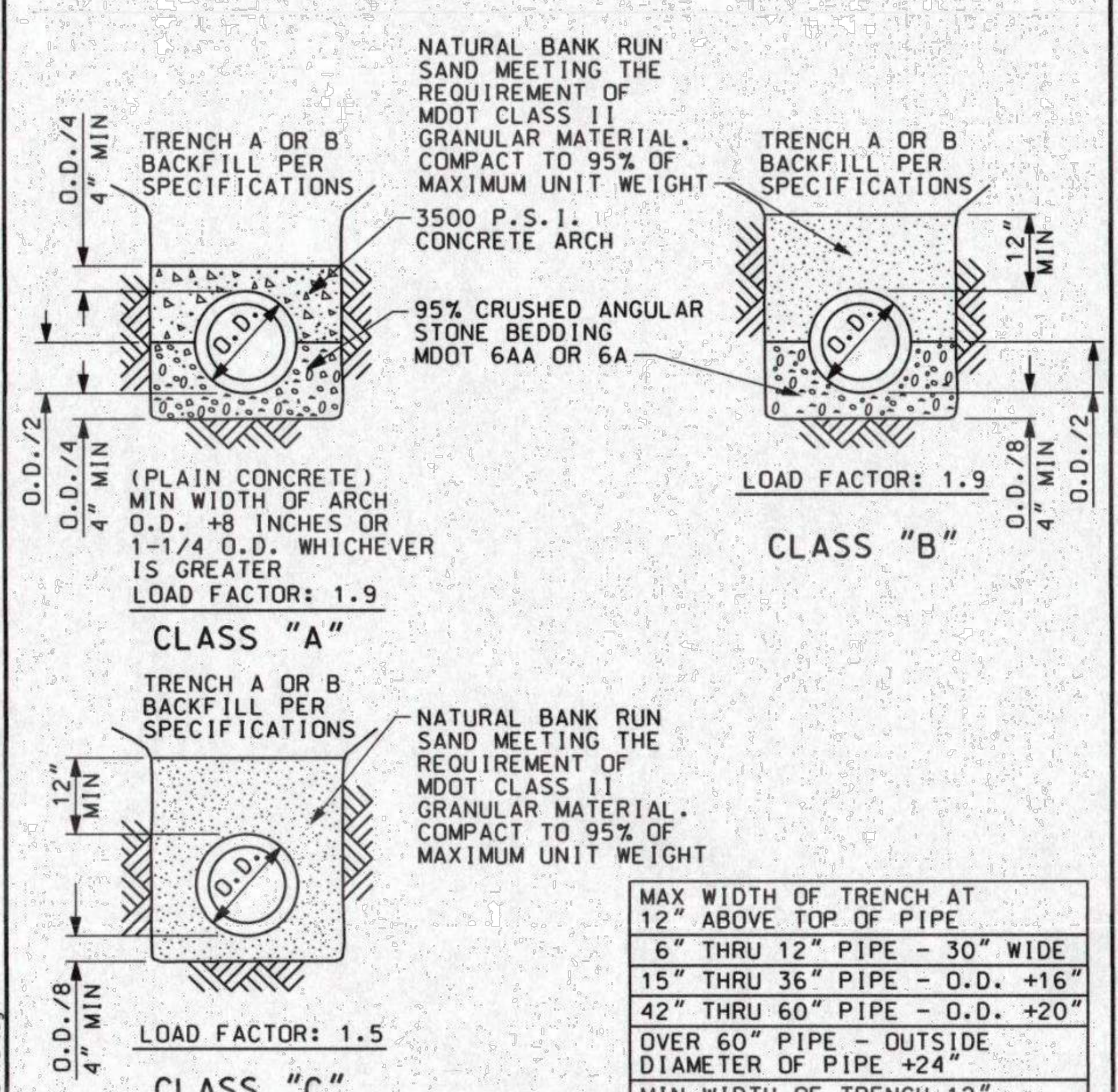


TRENCH "A"

NOTE: ALL TRENCHES UNDER ROAD SURFACES, PAVEMENT, CURB, DRIVEWAY, SIDEWALK, AND WHERE THE TRENCH EDGE IS WITHIN THREE (3) FEET OF THE PAVEMENT AS NOTED HEREIN SHALL BE BACKFILLED PER TRENCH "A"

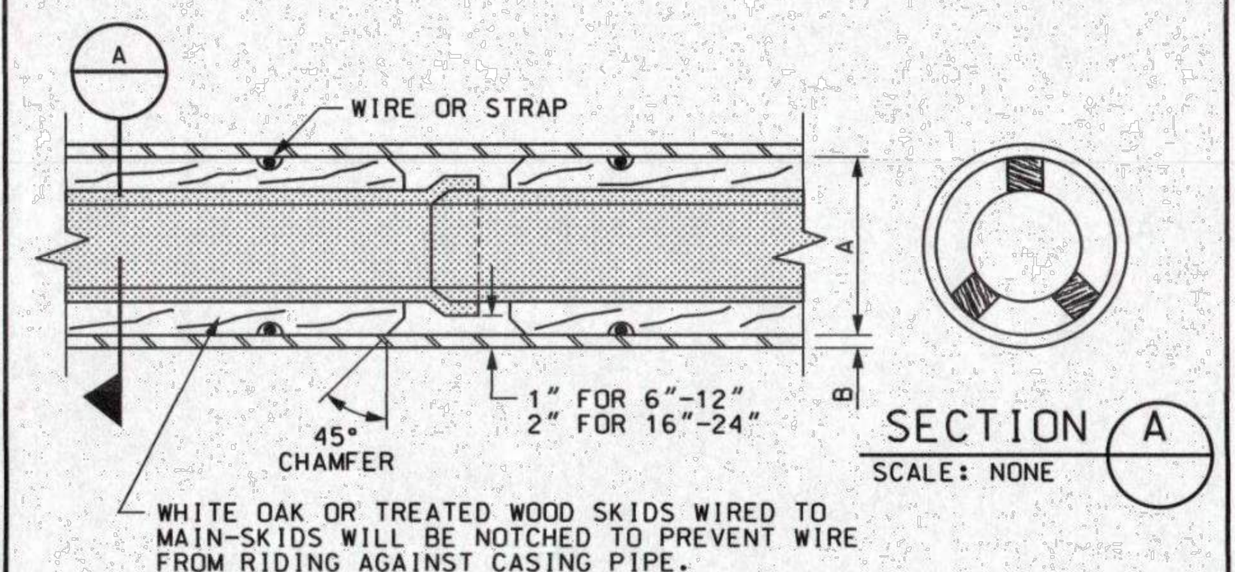


TRENCH "B"



MAX WIDTH OF TRENCH AT 12" ABOVE TOP OF PIPE
6" THRU 12" PIPE - 30" WIDE
15" THRU 36" PIPE - O.D. +16"
42" THRU 60" PIPE - O.D. +20"
OVER 60" PIPE - OUTSIDE DIAMETER OF PIPE +24"
MIN WIDTH OF TRENCH 12" ABOVE THE TOP OF PIPE SHALL BE 6" ON EACH SIDE OF PIPE

RIGID PIPE BEDDING DETAILS
(CONCRETE)



SECTION A
SCALE: NONE

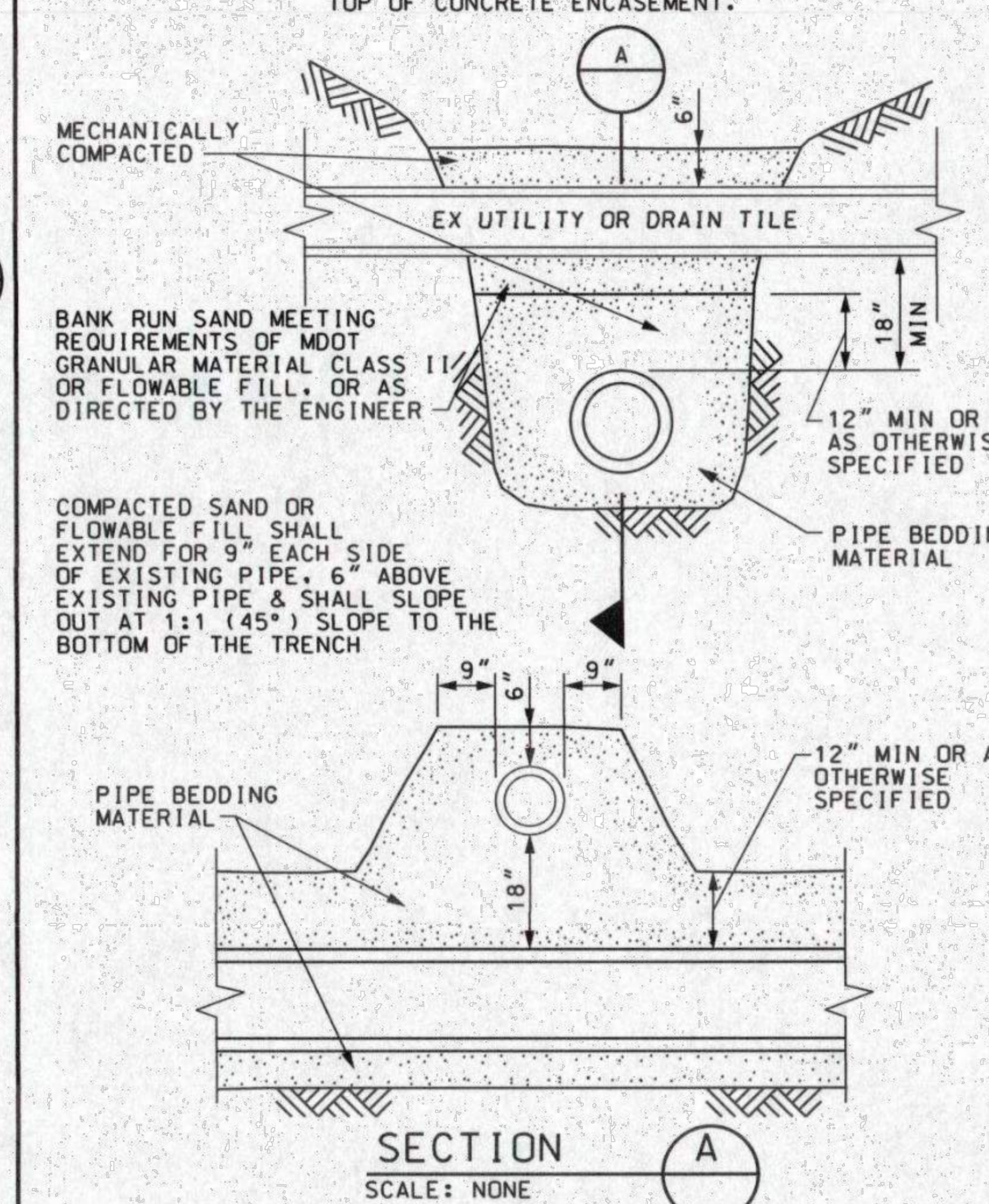
DIA OF SEWER		DIA OF MAIN	MIN "A"	ROAD CROSSING MIN "B"	RAILROAD CROSSING MIN "B"
PVC OR TRUSS	CONCRETE				
		6"	16"	.375	.375
8"		8"	16"	.375	.375
10"		12"	20"	.375	.438
12" & 15"	10"	16"	24"	.375	.500
	12" & 15"	20"	30"	.375	.500
	18"	24"	36"	.375	.500

CASING PIPE SHALL BE WELDED STEEL PIPE A.S.T.M. A-252, GR 2 UNLESS OTHERWISE SPECIFIED.

NOTES:
1. NO WATER SHALL BE USED IN BORING UNDER RAILROADS.
2. MAINTAIN MINIMUM OF 5'-6" OF COVER BETWEEN BASE OF RAIL AND TOP OF CASING.
3. THE ENDS OF THE CASING SHALL BE SUITABLY PROTECTED AGAINST THE ENTRANCE OF FOREIGN MATERIAL, BUT SHALL NOT BE TIGHTLY SEALED.
4. WHEN BORING ALL VOIDS OUTSIDE OF CASING PIPE SHALL BE FILLED BY MEANS OF PRESSURE GROUTING WITH 1:3 CEMENT-SAND MORTAR. THIS WORK MUST BE ACCOMPLISHED WITHIN 24 HOURS AFTER THE CROSSING HAS BEEN COMPLETED. BORING SHALL EXTEND A MINIMUN OF 10 FEET OUTSIDE THE EDGES OF THE PAVEMENT.
5. SKIDS ARE TO BE MINIMUM OF 80% OF PIPE LENGTH.

STANDARD CASING SECTION

NOTE:
WHERE CONCRETE ENCASEMENT IS SPECIFIED FOR NEW UTILITY A 6" MINIMUM LAYER OF MECHANICALLY COMPACTED SAND SHALL BE MAINTAINED BETWEEN EXISTING UTILITY & TOP OF CONCRETE ENCASEMENT.



SECTION A
SCALE: NONE

STANDARD PIPE SUPPORT

GENERAL NOTES

1. AS HEREIN SPECIFIED, THE OWNER SHALL BE UNDERSTOOD TO MEAN BROWNSTOWN TOWNSHIP.

2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION MEETING, AT A TIME AND PLACE AS ARRANGED BY THE OWNER, AT WHICH VARIOUS UTILITY COMPANIES AND GOVERNMENTAL AGENCY REPRESENTATIVES WILL BE PRESENT.

3. PRIOR TO THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR MUST HAVE IN HIS POSSESSION A COPY OF ALL PERMITS NECESSARY TO CONSTRUCT THE IMPROVEMENTS. THE CONTRACTOR SHALL NOTIFY THE PERMIT AGENCY(S), 72 HOURS PRIOR TO ANY CONSTRUCTION.

4. THE CONTRACTOR SHALL MAINTAIN HIS CONSTRUCTION OPERATIONS WITHIN THE PRESENTLY EXISTING ROAD RIGHTS-OF-WAY AND EASEMENTS AS NOTED ON THE PLANS. SHOULD THE CONTRACTOR DEEM IT NECESSARY TO OPERATE BEYOND THE LIMITS OF THE EXISTING RIGHTS-OF-WAY OR EASEMENTS, HE SHALL BE RESPONSIBLE FOR MAKING SPECIAL WRITTEN AGREEMENTS WITH THE PROPERTY OWNERS AND SHALL FURNISH COPIES OF SUCH AGREEMENTS TO THE OWNER AND ENGINEER.

5. THE CONTRACTOR SHALL NOTIFY "MISS DIG" (800) 482-7171) 3 DAYS (NOT INCLUDING HOLIDAYS OR WEEKENDS) NOTICE BEFORE STARTING CONSTRUCTION.

6. THE CONTRACTOR SHALL MAKE ANY NECESSARY ARRANGEMENTS WITH UTILITY COMPANIES FOR RELOCATION OF EXISTING UTILITIES. THESE ARRANGEMENTS SHALL BE MADE IN SUFFICIENT TIME TO ALLOW THE RELOCATION WORK TO BE COMPLETED WITHOUT INTERFERING WITH OR DELAYING THIS CONSTRUCTION.

7. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND THE ENGINEER 48 HOURS PRIOR TO UNCOVERING ANY EXISTING UTILITIES.

8. THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER 72 HOURS PRIOR TO THE START OF ANY CONSTRUCTION.

9. THE CONTRACTOR SHALL MAINTAIN ALL TRAFFIC AT ALL TIMES AS PER THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

10. THE CONTRACTOR SHALL AT ALL TIMES PROVIDE EMERGENCY ACCESS TO PROPERTY IN THE VICINITY OF THE CONSTRUCTION FOR POLICE AND FIRE EQUIPMENT, AMBULANCES OR OTHER EMERGENCY VEHICLES TO PROTECT LIFE, HEALTH AND PROPERTY.

11. THE CONTRACTOR SHALL MAINTAIN PUBLIC ROADS AFFECTED BY THE CONSTRUCTION OPERATIONS IN A PASSABLE CONDITION UNTIL FINAL RESTORATION OF THESE IMPROVEMENTS CAN BE MADE. IF THE PUBLIC SAFETY IS IN DANGER OR THE NECESSITY EXISTS FOR MAINTAINING TRAFFIC, BACKFILLING SHALL BE COMPLETED IMMEDIATELY. IN THE EVENT THAT THE NECESSARY BACKFILL MATERIAL AND EQUIPMENT IS NOT AVAILABLE, THE TRENCH SHALL BE TEMPORARILY BACKFILLED WITH NATIVE MATERIAL. HOWEVER, THE NATIVE MATERIAL SHALL BE REMOVED WITHIN 48 HOURS AND THE TRENCH PROPERLY BACKFILLED.

12. NO STREET, ROAD OR SECTION THEREOF SHALL BE CLOSED TO THROUGH TRAFFIC UNLESS AUTHORIZED BY THE AGENCY HAVING JURISDICTION. PRIOR TO CLOSING A ROAD, THE CONTRACTOR SHALL SUBMIT A DETOUR PLAN FOR REVIEW AND APPROVAL.

FIRE DEPARTMENT, POLICE DEPARTMENT, LOCAL ROAD AUTHORITY(S), SCHOOL SYSTEM(S), LOCAL TRASH HAULER(S), AND PUBLIC AND PRIVATE UTILITIES DAILY AS TO WHAT ROADS WILL BE CLOSED OR PARTIALLY CLOSED, THE LENGTH OR TIME OF THE CLOSURE, AND WHEN THE ROAD WILL BE RE-OPENED.

14. PAVED STREETS AND DRIVEWAYS SHALL BE MAINTAINED IN A REASONABLE STATE OF CLEANLINESS AND THE CONTRACTOR SHALL REMOVE ACCUMULATIONS OF DEBRIS CAUSED BY HIS OPERATIONS. THE PAVEMENTS SHALL BE CLEANED AT THE CLOSE OF EACH DAYS OPERATION AND AS OFTEN AS NECESSARY BEFORE THAT TIME. FAILURE TO COMPLY SHALL BE CAUSE TO STOP CONSTRUCTION. CONTRACTOR SHALL ALSO COMPLY WITH THE LOCAL AIR POLLUTION CONTROL ORDINANCES.

15. ALL GRAVEL AND DIRT ROADS OR DRIVEWAYS SHALL BE MAINTAINED BY GRADING, PLACING DUST PALLIATIVES, AND MAINTENANCE GRAVEL IN SUFFICIENT QUANTITY TO ELIMINATE DUST AND MAINTAIN TRAFFIC.

16. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SHEETING, SHORING, DEWATERING, BRACING, TRENCH BOXES, ETC. TO PERFORM THE WORK SAFELY AND PROTECT EXISTING UTILITIES AND IMPROVEMENTS.

17. THE FLOW IN THE EXISTING SEWERS SHALL BE MAINTAINED AT ALL TIMES.

18. CULVERTS, DITCHES, DRAIN TILES, FIELD TILE, DRAINAGE STRUCTURES, ETC. THAT ARE DISTURBED BY CONSTRUCTION SHALL BE IMMEDIATELY RESTORED.

19. ALL PROPERTY IRONS AND MONUMENTS, IF DISTURBED OR DESTROYED BY CONSTRUCTION SHALL BE REPLACED BY A MICHIGAN LICENSED PROFESSIONAL SURVEYOR AT THE CONTRACTOR'S EXPENSE.

20. AFTER ALL PIPE, STRUCTURES, ETC. HAVE BEEN LAID, CONSTRUCTED AND BACKFILLED, THE SYSTEM SHALL BE TESTED AND INSPECTED. THE INSPECTION AND TESTING SHALL CONSIST OF A FIRST INSPECTION, TELEVISION INSPECTION (IF APPLICABLE), TESTING, FINAL INSPECTION AND MEASUREMENT. THE CONTRACTOR SHALL PROVIDE THE NECESSARY LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR THE TESTING AND INSPECTION. ALL TESTING AND INSPECTION SHALL BE CONDUCTED IN THE PRESENCE OF THE ENGINEER. TWO (2) WORKING DAYS NOTICE IS REQUIRED IN ADVANCE OF ALL TESTING AND INSPECTION.

21. THE CONTRACTOR SHALL HAVE THE UNDERGROUND PORTION OF THE UTILITY READY FOR THE FIRST INSPECTION WITHIN TWO (2) WEEKS AFTER COMPLETION OF THE UTILITY.

22. THE FIRST INSPECTION SHALL CONSIST OF A VISIBLE AND AUDIBLE CHECK OF SEWERS, MANHOLES, GATE WELLS, AND OTHER STRUCTURES TO ASCERTAIN THAT THE STEPS HAVE BEEN PLACED, ALL LIFT HOLES PLUGGED, CHANNELS COMPLETED, ALL VISIBLE OR AUDIBLE LEAKS STOPPED, ALL PIPE IS STRAIGHT AND TRUE TO LINE AND GRADE, ADJUSTING RINGS AND FRAME AND COVER PROPERLY INSTALLED, ALL BACKFILL COMPLETED, AND THE SYSTEM HAS BEEN THOROUGHLY CLEANED.

23. THE FIRST INSPECTION SHALL BE CONSIDERED COMPLETE WHEN ALL REPAIRS HAVE BEEN MADE AND THE SYSTEM IS READY FOR TELEVISION INSPECTION OR SUBSEQUENT TESTING.

24. THE FIRST INSPECTION SHALL BE COMPLETED AND ALL REPAIRS MADE SO THAT THE TELEVISION INSPECTION, AIR TESTING, PRESSURE TESTING, ETC. CAN BE COMPLETED WITHIN FOUR (4) WEEKS OF THE COMPLETION OF THE LINE. WHEN RE-TELEVISING IS NECESSARY, AN ADDITIONAL TWO (2) WEEKS WILL BE ALLOWED. TESTING OF THE SYSTEM SHALL IMMEDIATELY FOLLOW THE TELEVISION INSPECTION AND SHALL BE COMPLETED WITHIN A TWO (2) WEEK PERIOD.

25. FAILURE TO MAINTAIN A SCHEDULE IN COMPLIANCE WITH THESE TERMS MAY CAUSE STOPPAGE OF THE WORK UNTIL FINAL INSPECTION OF THE COMPLETED WORK HAS PROGRESSED TO ACCEPTABLE LIMITS.

26. AFTER ALL TESTING, TELEVISION INSPECTION, FINAL RESTORATION AND CLEANUP HAS BEEN COMPLETED, A FINAL INSPECTION AND MEASUREMENT WILL BE DONE. THE FINAL INSPECTION SHALL BE REQUESTED BY THE CONTRACTOR AND CONSIST OF, CHECKING FOR PROPER ALIGNMENT, GRADE, CLEANLINESS, LEAKS, CONFORMANCE TO PLANS AND SPECIFICATIONS, PROPER STRUCTURAL AND MECHANICAL ADJUSTMENTS, RESTORATION, ETC. FINAL MEASUREMENT INCLUDES STRUCTURE ELEVATIONS, DISTANCE BETWEEN STRUCTURES, AND CONFIRMATION UTILITIES ARE LOCATED WITHIN EASEMENTS AND RIGHT-OF-WAY.

27. SUCCESSFUL COMPLETION OF ANY TEST OR INSPECTION SHALL NOT RELIEVE CONTRACTOR FROM THEIR RESPONSIBILITY TO CORRECT ANY DEFECTS IN MATERIALS OR WORKMANSHIP WHICH MAY LATER BECOME KNOWN.

28. SAND BACKFILL SHALL BE USED UNDER ALL PAVEMENTS (INCLUDING GRAVEL SURFACED PAVEMENTS), (ROADS, SHOULDERS, PROPOSED PAVEMENTS, SIDEWALKS, CURBS, DRIVEWAYS, ETC.) OR WHERE THE EXCAVATION IS WITHIN 3-FEET OF THE PAVEMENT.

REV#	DATE	DESCRIPTION	BY

NOT VALID FOR CONSTRUCTION UNLESS SIGNED AND DATED:

WADETRIM

CHARTER TWP OF BROWNSTOWN
MISCELLANEOUS DETAILS

ISSUED FOR: DATE: BY:

JOB NO.: -

SHEET MD1

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GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

FOR REFERENCE ONLY

	DATE	REMARKS
1	05.14.2021	TOWNSHIP COMMENTS
6	07.12.2021	ISSUED FOR BID

CONTRACT DATE: 04.08.21
BUILDING TYPE: END. MED20
PLAN VERSION: MARCH 2021
BRAND DESIGNER: DICKSON
SITE NUMBER: 313354
STORE NUMBER: 449523
PA/PM: JN
DRAWN BY.: EA
JOB NO.: 2018088.64

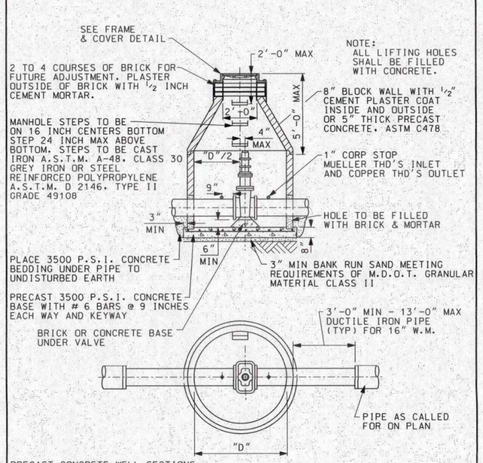
TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
BROWNSTOWN MISC DETAILS

C-505

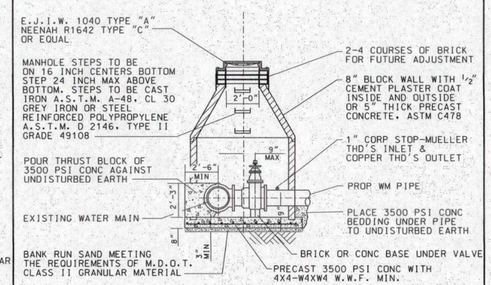
PLOT DATE:

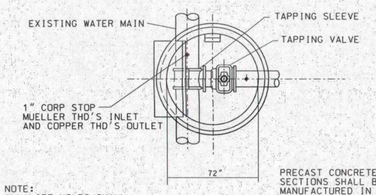


PRECAST CONCRETE WELL SECTIONS SHALL BE MANUFACTURED IN ACCORDANCE WITH A.S.T.M. C478 UNLESS OTHERWISE SPECIFIED

"D"= 5'-0" FOR 8" W.M.
"D"= 6'-0" FOR 12" & 16" W.M.

PRECAST GATE WELL

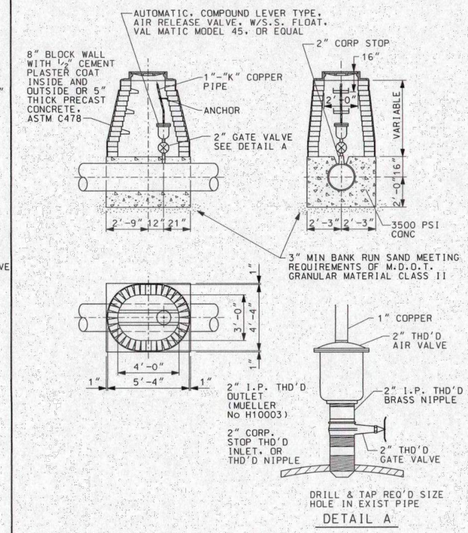




NOTE: ALL LIFT HOLES SHALL BE FILLED WITH CONCRETE

PRECAST CONCRETE WELL SECTIONS SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM C478 UNLESS OTHERWISE SPECIFIED.

STANDARD PRECAST TAPPING SLEEVE, VALVE & WELL



STANDARD AIR RELEASE & WELL FOR 16" & 20" WATER MAIN

WATER MAIN NOTES

1. ALL WATER SYSTEM CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND GENERAL SPECIFICATIONS OF THE AGENCY OR AGENCIES HAVING JURISDICTION OF THE WATER SUPPLY SYSTEM AND CONSTRUCTION AREA. ALL WORK WITHIN THE WAYNE COUNTY ROAD RIGHT-OF-WAY SHALL CONFORM TO THE WAYNE COUNTY GENERAL NOTES GN-1)

2. WATER MAINS SHALL NOT BE CONSTRUCTED UNDER SIDEWALKS OR ROAD PAVEMENT AREAS.

3. GATE WELLS AND OTHER WATER MAIN STRUCTURES SHALL NOT BE CONSTRUCTED UNDER DRIVEWAYS, DRIVE APPROACHES, OR SIDEWALKS.

4. ALL SURFACE STRUCTURES, SUCH AS HYDRANTS, GATE WELLS AND VALVE BOXES SHALL BE SET TO GRADE AS FURNISHED BY THE ENGINEER OR AS INDICATED ON THE PLANS.

5. FIRE HYDRANTS ARE TO BE INSTALLED PLUMB AND HAVE THEIR NOZZLES ALIGNED AS DETERMINED BY THE ENGINEER.

6. HYDRANT LOCATION: HYDRANTS ARE TO BE LOCATED AS FOLLOWS UNLESS OTHERWISE NOTED ON THE PLANS:

SECTION LINE ROADS	-	40 FEET OFF SECTION LINE
1/4 LINE ROADS	-	33 FEET OFF THE 1/4 LINE
RESIDENTIAL STREETS	-	22 FEET OFF CENTERLINE

7. PROVIDE 7-FOOT MINIMUM COVER BELOW EXISTING PAVEMENT CENTERLINE OR GROUND, WHICHEVER IS LOWER. WHEN THE PROPOSED WATER MAIN IS WITHIN 32 FEET OF CENTERLINE ON SECTION LINE ROADS, OR WITHIN 19 FEET OF CENTERLINE ON 1/4 LINE ROADS, SEVEN FEET OF COVER SHALL ALSO BE REQUIRED AT OTHER LOCATIONS AS NOTED ON THE PLANS. PROVIDE 6 FOOT MINIMUM COVER BELOW EXISTING ROAD CENTER LINE OR GROUND AT WATER MAIN, WHICHEVER IS LOWER, AT ALL OTHER LOCATIONS UNLESS OTHERWISE SPECIFICALLY NOTED ON THE PLANS.

8. PLACE SAND BACKFILL WITHIN 3 FEET OF ALL STRUCTURES INCLUDING VALVE WELLS, FIRE HYDRANTS, ETC.

9. ALL WATER MAIN PIPE SHALL HAVE CLASS III BEDDING UNLESS OTHERWISE NOTED ON THE PLANS. SEE SHEET MD-1.

10. ALL PRECAST PRODUCTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478.

11. WATER MAIN TO BE PLACED LEVEL THROUGH ALL GATE WELLS.

12. WHEN JACKING OR BORING, ALL VOIDS SHALL BE FILLED BY MEANS OF PRESSURE GROUTING WITH 1:3 CEMENT:SAND MORTAR. THIS WORK MUST BE ACCOMPLISHED WITHIN 24 HOURS AFTER THE WATER MAIN HAS BEEN INSTALLED. WATER MAIN JACKING OR BORING SHALL EXTEND A MINIMUM OF 10 FEET OUTSIDE THE EDGES OF THE PAVEMENT.

13. ALL WATER MAIN INSTALLATION/REPLACEMENT SHALL BE SUBJECT TO PRESSURE AND BACTERIOLOGICAL TESTS PERFORMED IN ACCORDANCE WITH THE OWNERS REQUIREMENTS. THE CONTRACTOR SHALL ARRANGE FOR, PERFORM, PAY APPLICABLE FEES, AND COORDINATE THIS TESTING. THE CONTRACTOR SHALL KEEP THE OWNER AND THE ENGINEER APPRISED OF THE SCHEDULE AND TEST RESULTS.

14. CONNECTION TO EXISTING WATER MAIN SHALL BE MADE ONLY AFTER HYDROSTATIC AND BACTERIOLOGICAL TESTS HAVE BEEN SUCCESSFULLY COMPLETED AND REVIEWED BY THE ENGINEER.

BROWNSTOWN NOTES

1. FIRE HYDRANTS SHALL BE EAST JORDAN IRON WORKS 5-BR BREAK-AWAY TYPE CONFORMING TO AWWA C502 SPECIFICATION. HYDRANTS SHALL OPEN IN A COUNTER-CLOCKWISE DIRECTION WITH A DIRECTIONAL ARROW CAST IN THE BONNET. OPERATING NUT SHALL BE 2-INCH SQUARE. HYDRANTS SHALL HAVE 5-1/4 INCH SEAT VALVE, A 6-INCH MECHANICAL JOINT HUB, AND DOUBLE OPERATING STEM O-RING SEALS. HYDRANT SHALL BE EQUIPPED WITH TWO 4-INCH PUMPER NOZZLES, WITH DETROIT STANDARD THREAD, AND DETROIT FIRE DEPARTMENT STANDARD OPERATING NUT. HYDRANTS SHALL BE SUITABLE FOR 6.5 FOOT BURY PAINTED YELLOW.

2. GATE VALVES FOR SIZES 4-INCH THROUGH 16-INCH DIAMETER SHALL BE EAST JORDAN IRON WORKS, TYPE DWS, SOLID WEDGE, CONFORMING TO DETROIT WATER SYSTEM SPECIFICATION. VALVES SHALL BE DESIGNED FOR A WORKING PRESSURE OF 200 PSI AND A TEST PRESSURE OF 400 PSI, AND OPEN IN A CLOCKWISE DIRECTION AND SHALL HAVE A 2-INCH SQUARE OPERATING NUT. VALVES SHALL HAVE MECHANICAL JOINT INLET AND OUTLET CONNECTIONS.

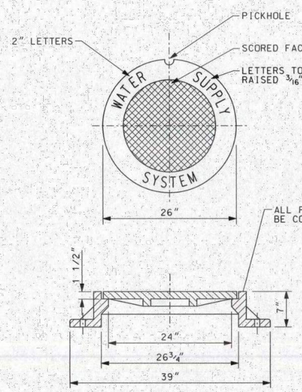
3. WATER SERVICE AND WATER MAIN PIPE SHALL BE:

A. 1-INCH THROUGH 2-INCH DIAMETER - TYPE "K" COPPER. WATER SERVICES SHALL BE MINIMUM 1-INCH.

B. 4-INCH THROUGH 12-INCH DIAMETER WATER MAIN - DUCTILE IRON CLASS 54, MIN. THICKNESS COAL TAR ENAMEL COATING INSIDE AND OUTSIDE. WATER MAIN SHALL BE MINIMUM 8-INCH DIAMETER.

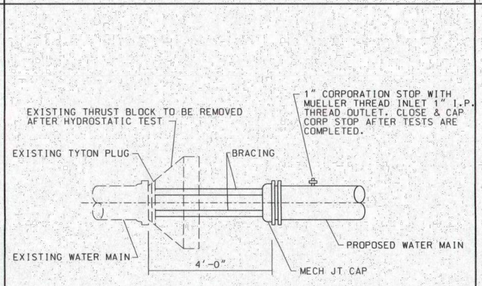
C. 16-INCH AND LARGER - DUCTILE IRON CLASS 54 OR CONCRETE CYLINDER PIPE DESIGNED FOR A MAXIMUM PRESSURE OF 250 PSI.

4. ALL FITTINGS SHALL BE DUCTILE IRON, PRESSURE RATING 350 PSI MINIMUM, CONFORMING TO ANSI/AWWA C153/A21.53. COMPACT FITTINGS, WITH DOUBLE THICKNESS CEMENT MORTAR LINING AND COAL TAR ENAMEL COATING INSIDE AND OUTSIDE.

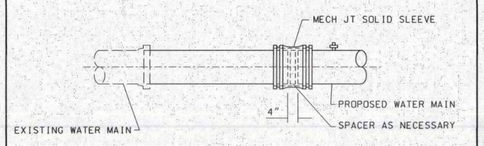


STANDARD FRAME AND COVER

E.J.I.W. #1040, TYPE "A" OR EQUAL

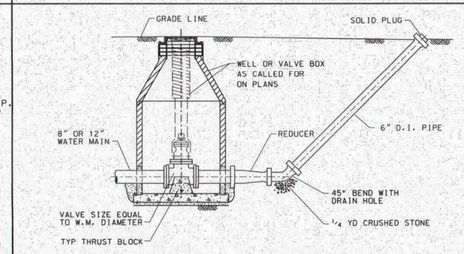


TEMPORARY ARRANGEMENT FOR HYDROSTATIC TEST

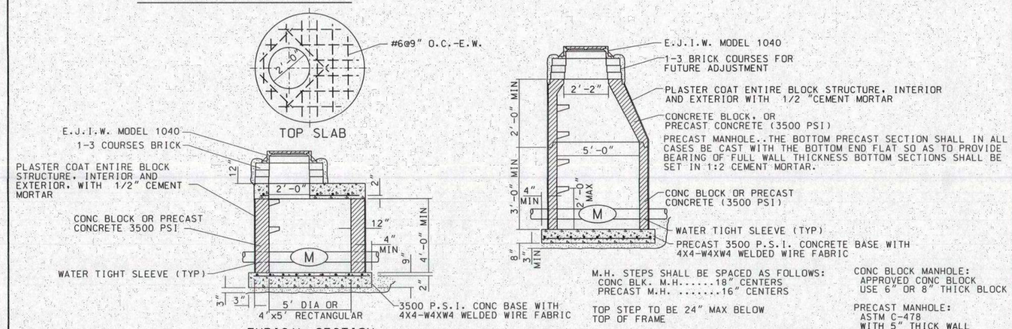


NOTE: ALL JOINTS NOT SUBJECTED TO HYDROSTATIC TEST SHALL BE OBSERVED UNDER LINE PRESSURE TO ASSURE WATER TIGHTNESS.

COMPLETED CONNECTION TO EXISTING WATER MAIN



STANDARD BLOW-OFF DETAIL



WATER SERVICE METER PIT DETAIL

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

BY	DESCRIPTION	DATE	REV'*

Building relationships on a foundation of excellence

NOT VALID FOR CONSTRUCTION UNLESS SIGNED AND DATED

WADETRIM
28261 Northline Rd., PO Box 19
Taylor, MI 48180
734.947.9700/800.482.2864
Fax: 734.947.9705
www.wadetrim.com

CHARTER TWP OF BROWNSTOWN

STANDARD WATER MAIN DETAILS
WM1

ISSUED FOR: | DATE: | BY:

JOB NO.

SHEET

FOR REFERENCE ONLY

	DATE	REMARKS
1	05.14.2021	TOWNSHIP COMMENTS
2	07.12.2021	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
BROWNSTOWN WATER DETAILS

2

C-506

PLOT DATE:

PROJECT MANAGER: FIELD BOOK INFORMATION: -
C:\pw_work\dms38634\CDT_PLTS_WM1.dgn
PLOTTED: 7/16/2012 10:13:23 AM BY: mfisher

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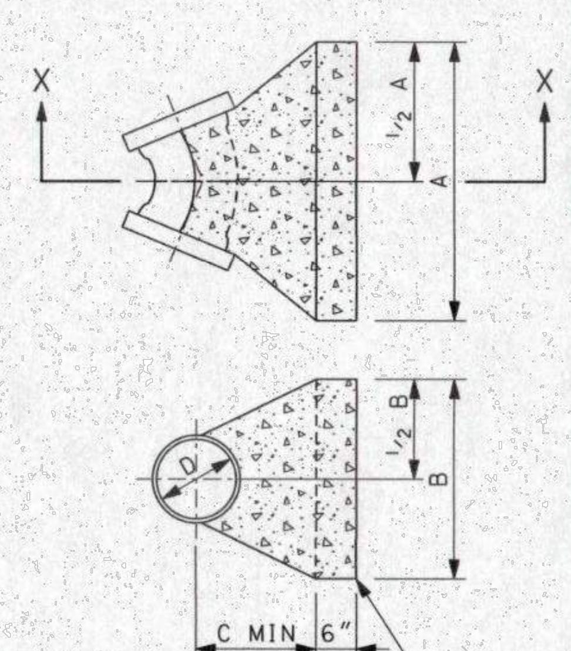
DIA OF WATER MAIN	THRUST BLOCK		
D	A	B	C
6"	2'-0"	1'-6"	1'-0"
8"	2'-0"	2'-0"	1'-3"
10" & 12"	3'-6"	2'-6"	1'-6"
14" & 16"	5'-6"	3'-0"	1'-9"
18" & 20"	6'-6"	4'-0"	1'-9"
24"	7'-0"	5'-0"	2'-0"

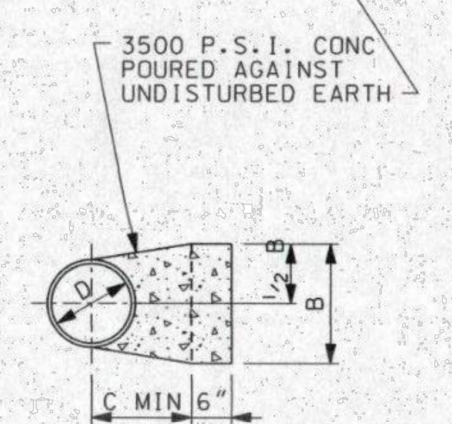
NOTE:
WHEN "A" DIMENSION IS 6'-0" OR GREATER, USE #4 BARS AT 12" CENTERS EACH WAY.

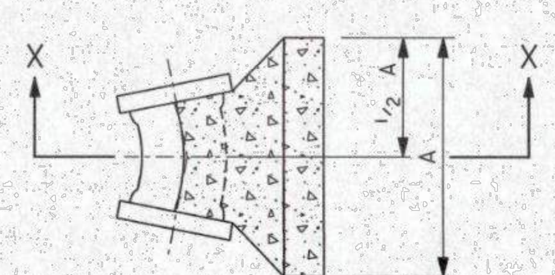


THRUST BLOCK AT 45° BEND

DIA OF WATER MAIN	THRUST BLOCK		
D	A	B	C
6"	1'-6"	1'-0"	1'-0"
8"	1'-9"	1'-3"	1'-0"
10" & 12"	3'-0"	1'-6"	1'-3"
14" & 16"	4'-0"	2'-0"	1'-6"
18" & 20"	4'-0"	3'-0"	1'-9"
24"	4'-0"	4'-6"	2'-0"

3500 P.S.I. CONC POURED AGAINST UNDISTURBED EARTH



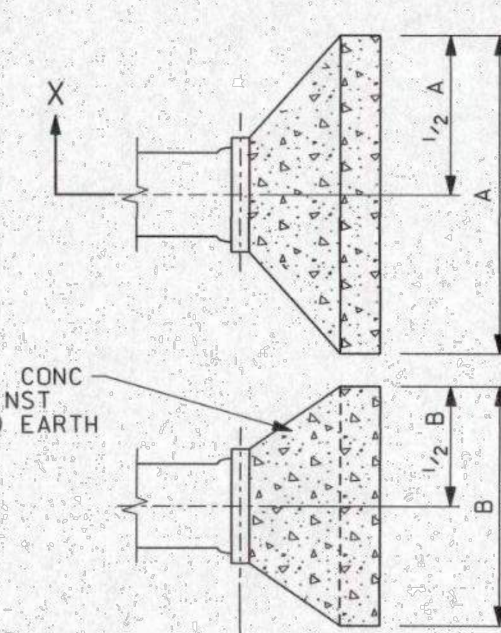


THRUST BLOCK AT 22 1/2° BEND

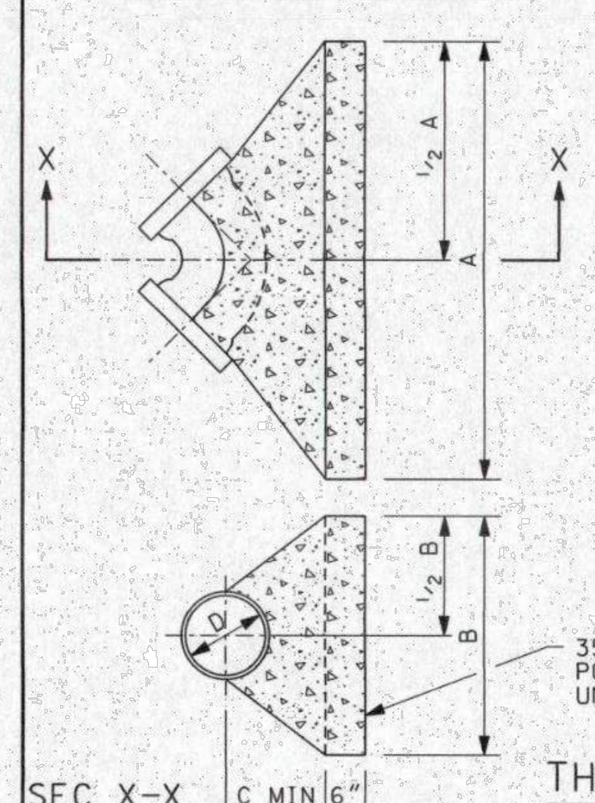
DIA OF WATER MAIN	THRUST BLOCK		
D	A	B	C
6"	2'-0"	1'-6"	9"
8"	2'-6"	2'-0"	1'-0"
10" & 12"	4'-0"	3'-0"	1'-3"
14" & 16"	5'-0"	4'-0"	1'-6"
18" & 20"	8'-0"	4'-0"	1'-9"
24"	9'-0"	5'-0"	2'-0"

3500 P.S.I. CONC POURED AGAINST UNDISTURBED EARTH

NOTE:
WHEN "A" DIMENSION IS 6'-0" OR GREATER, USE #4 BARS AT 12" CENTERS EACH WAY.



THRUST BLOCK AT PLUG



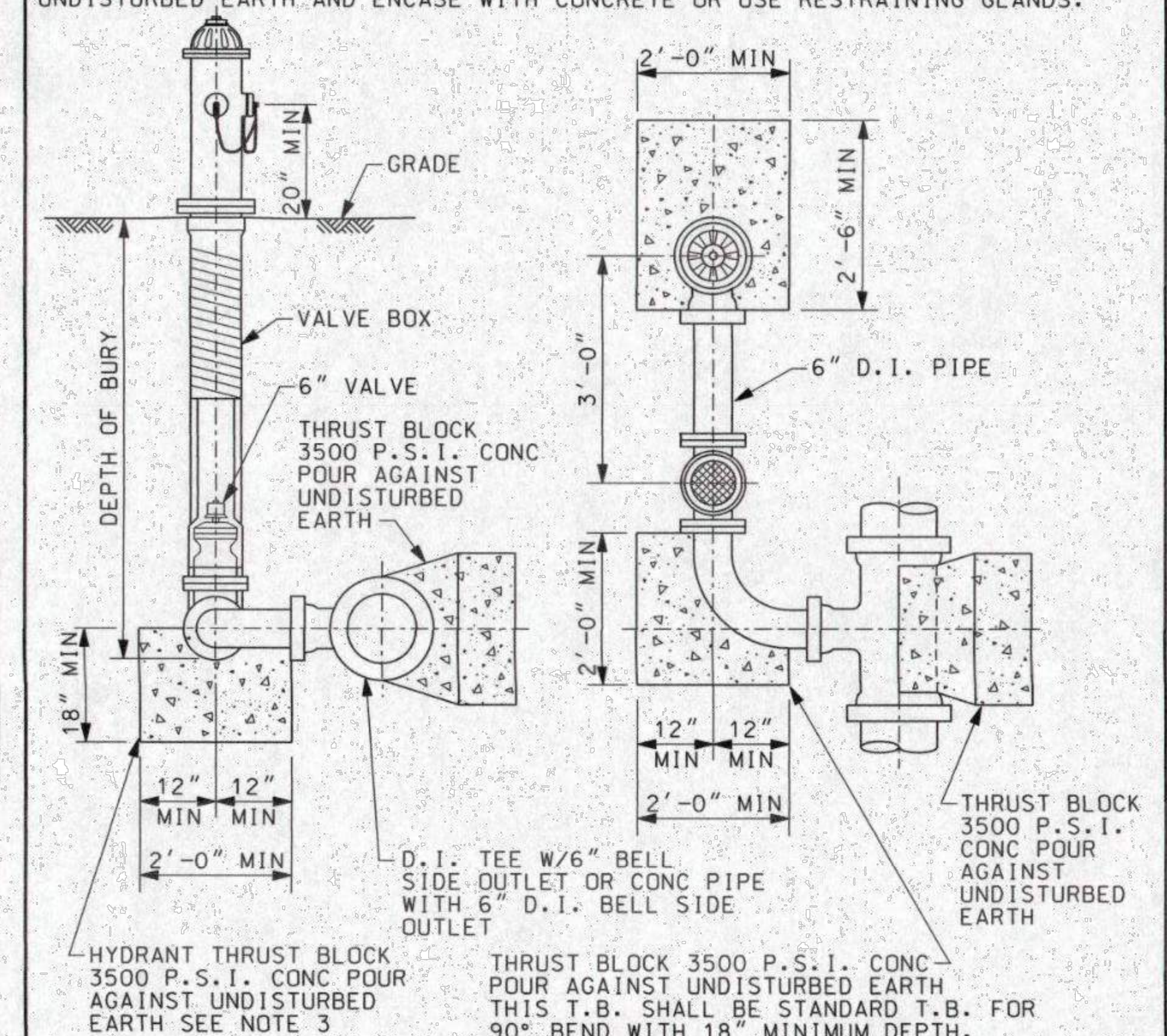
DIA OF WATER MAIN	THRUST BLOCK		
D	A	B	C
6"	2'-9"	1'-6"	9"
8"	3'-0"	2'-6"	1'-0"
10" & 12"	5'-6"	3'-0"	1'-3"
14" & 16"	6'-0"	5'-0"	1'-6"
18" & 20"	9'-0"	5'-0"	1'-9"
24"	11'-0"	6'-0"	2'-0"

NOTE:
WHEN "A" DIMENSION IS 6'-0" OR GREATER, USE #4 BARS AT 12" CENTERS EACH WAY.

3500 P.S.I. CONC POURED AGAINST UNDISTURBED EARTH

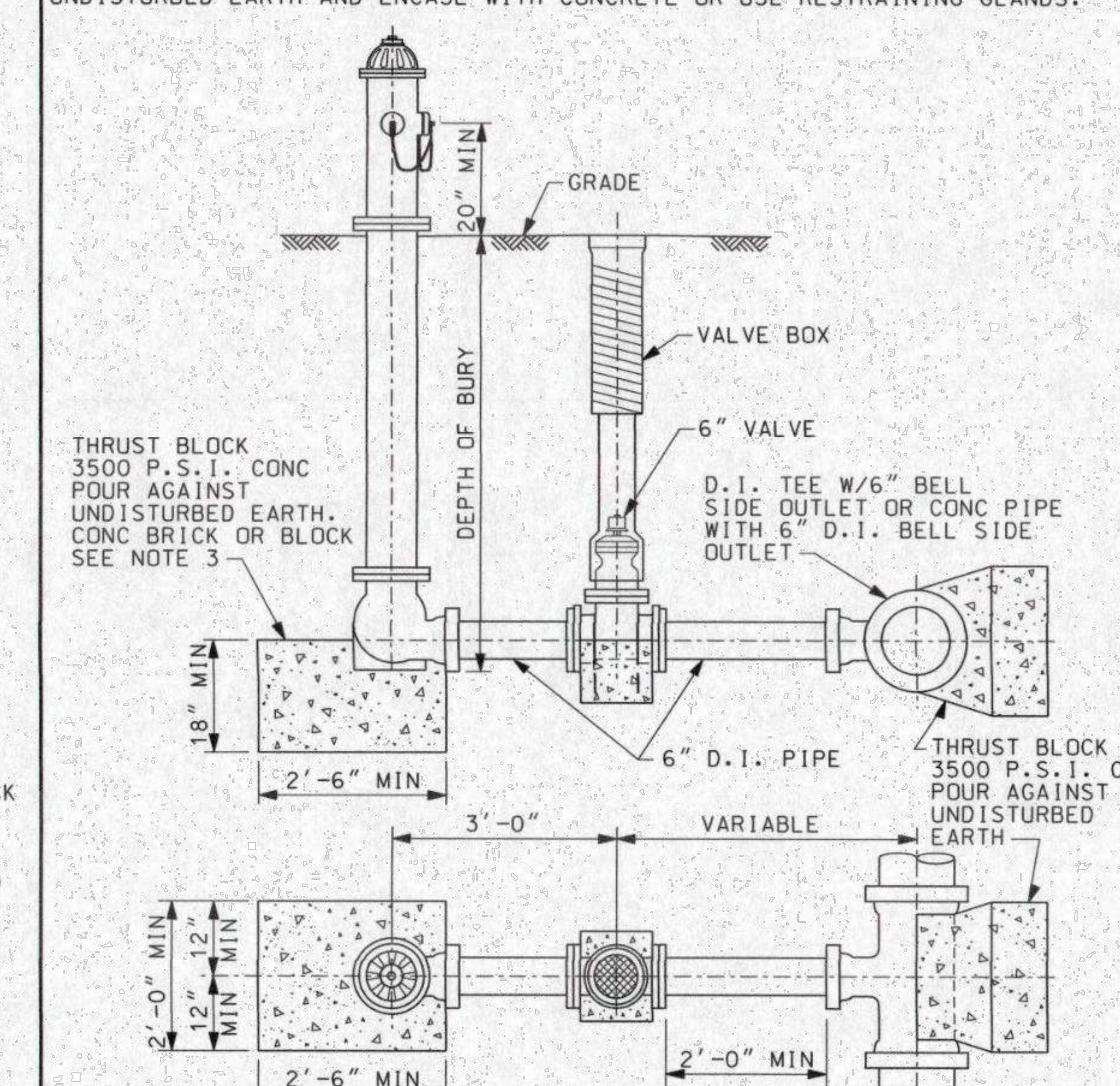
THRUST BLOCK AT 90° BEND

NOTES:
1. INSTALL ADDITIONAL FITTINGS & SPIGOT PIPE AS NECESSARY BETWEEN WATER MAIN & VALVE BOX TO ADJUST FOR PROPER LOCATION AND GRADE OF HYDRANT. IF THE DISTANCE FROM THE MAIN TO THE HYDRANT VALVE EXCEEDS 5 FEET, THEN A 8-INCH TEE AND 8-INCH MAIN SHOULD BE UTILIZED FOLLOWED BY A 6-INCH BY 8-INCH REDUCER JUSTPRIOR TO THE HYDRANT VALVE.
2. VERTICAL ANCHORAGES WILL BE REQUIRED ON ALL VERTICAL HYDRANT BENDS IN EXCESS OF 11 1/4°.
3. WHERE HYDRANTS ARE INSTALLED ON EXISTING MAINS THAT ARE TO BE PLACED BACK INTO SERVICE IMMEDIATELY, PLACE CONCRETE BRICK OR BLOCK TO UNDISTURBED EARTH AND ENCASE WITH CONCRETE OR USE RESTRAINING GLANDS.



STANDARD FIRE HYDRANT ASSEMBLY
CLOSE COUPLE TYPE

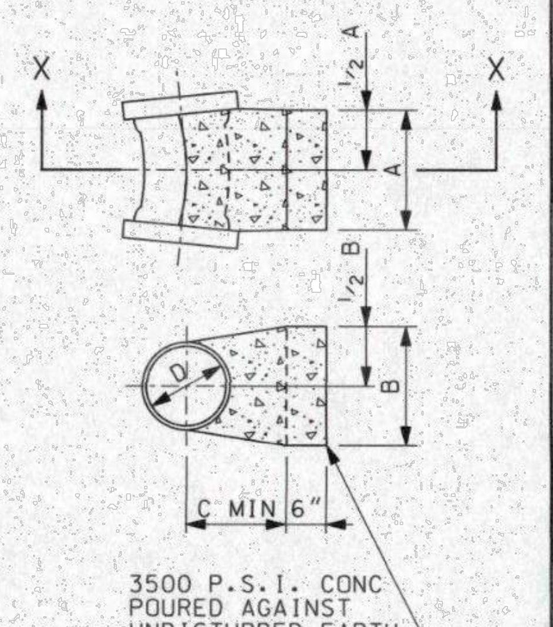
NOTES:
1. INSTALL ADDITIONAL FITTINGS, BENDS & SPIGOT PIPE AS NECESSARY BETWEEN WATER MAIN & VALVE BOX TO ADJUST FOR PROPER LOCATION AND GRADE OF HYDRANT. IF THE DISTANCE FROM THE MAIN TO THE HYDRANT VALVE EXCEEDS 5 FEET, THEN A 8-INCH TEE AND 8-INCH MAIN SHOULD BE UTILIZED FOLLOWED BY A 6-INCH BY 8-INCH REDUCER JUST PRIOR TO THE HYDRANT VALVE.
2. VERTICAL ANCHORAGES WILL BE REQUIRED ON ALL VERTICAL HYDRANT BENDS IN EXCESS OF 11 1/4°.
3. WHERE HYDRANTS ARE INSTALLED ON EXISTING MAINS THAT ARE TO BE PLACED BACK INTO SERVICE IMMEDIATELY, PLACE CONCRETE BRICK OR BLOCK TO UNDISTURBED EARTH AND ENCASE WITH CONCRETE OR USE RESTRAINING GLANDS.



STANDARD FIRE HYDRANT ASSEMBLY "T" TYPE

DIA OF WATER MAIN	THRUST BLOCK		
D	A	B	C
6"	1'-0"	1'-0"	1'-0"
8"	1'-3"	1'-3"	1'-0"
10" & 12"	1'-6"	1'-6"	1'-3"
14" & 16"	2'-0"	2'-0"	1'-6"
18" & 20"	3'-1"	2'-0"	1'-9"
24"	3'-0"	3'-0"	2'-0"

NOTE:
THESE TABLES ARE BASED ON SOIL BEARING OF 1500 P.S.F. IN MUCK, PEET OR OTHER UNSUITABLE SOILS HAVING A SOIL BEARING LESS THAN 1500 P.S.F., THE CONTRACTOR SHALL PROVIDE SUITABLE ADDITIONAL BLOCKING, ENCASEMENTS OR RESTRAINTS. BLOCKING IN BORE PIT EXCAVATIONS SHALL BE AGAINST UNDISTURBED SOIL OR SHALL BE PROVIDED WITH RESTRAINTS AS REQUIRED.

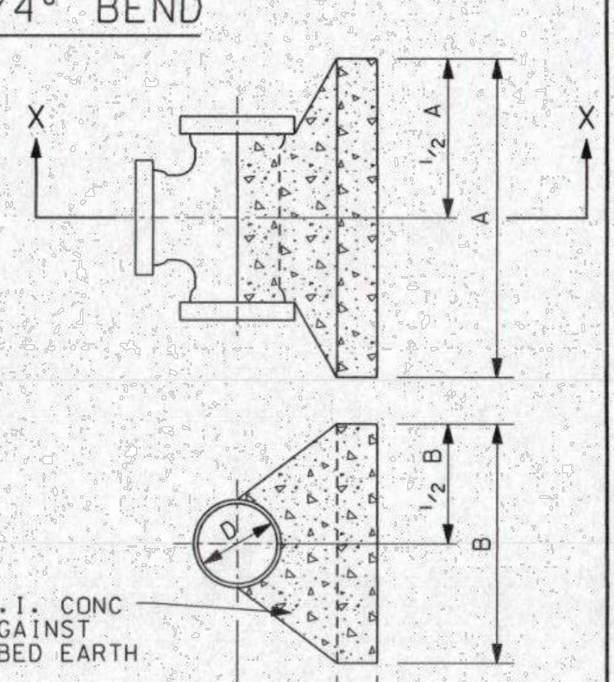


THRUST BLOCK AT 11 1/4° BEND

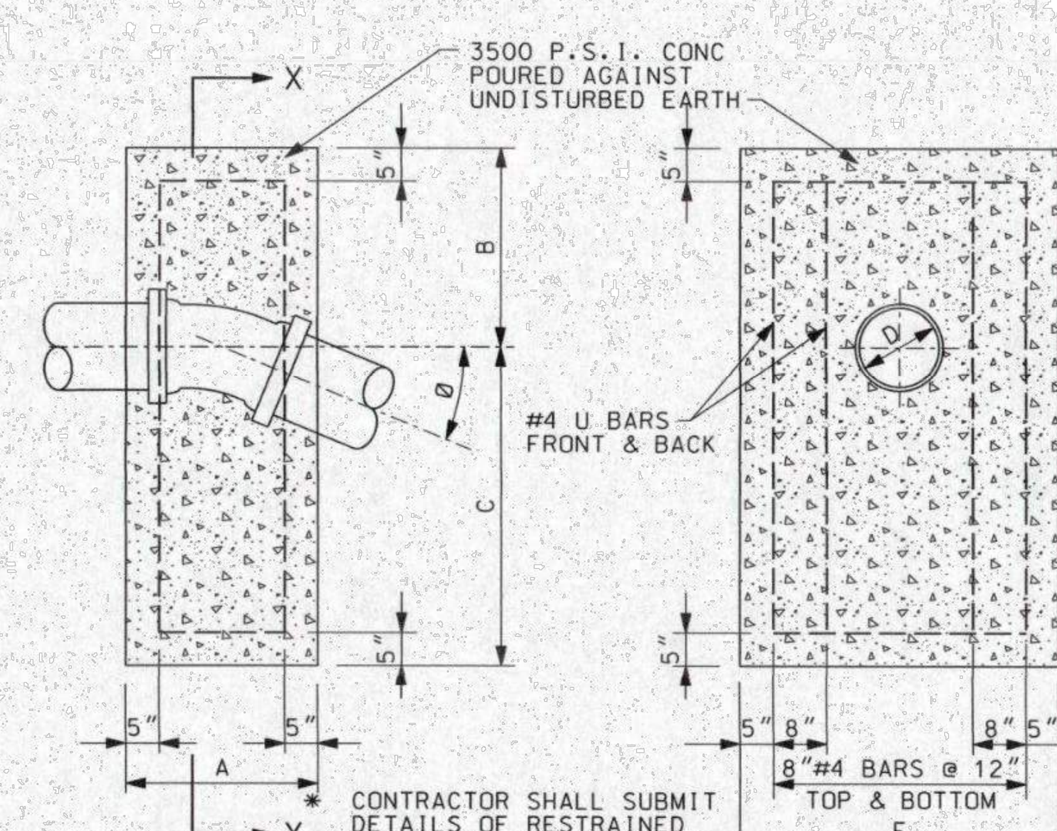
DIA OF WATER MAIN	THRUST BLOCK		
D	A	B	C
6"	2'-0"	1'-6"	9"
8"	2'-6"	2'-0"	1'-0"
10" & 12"	4'-0"	3'-0"	1'-3"
14" & 16"	5'-0"	4'-0"	1'-6"
18" & 20"	8'-0"	4'-0"	1'-9"
24"	9'-0"	5'-0"	2'-0"

NOTE:
WHEN "A" DIMENSION IS 6'-0" OR GREATER, USE #4 BARS AT 12" CENTERS EACH WAY.

3500 P.S.I. CONC POURED AGAINST UNDISTURBED EARTH



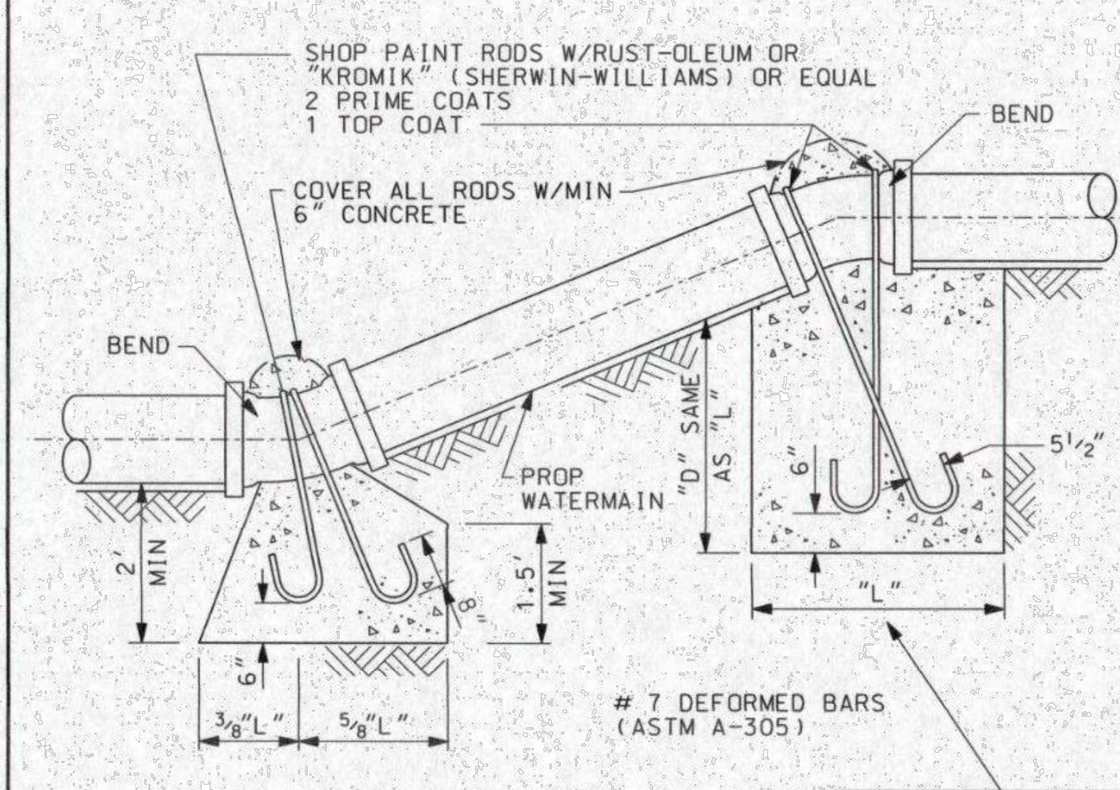
THRUST BLOCK AT TEE



* CONTRACTOR SHALL SUBMIT DETAILS OF RESTRAINED JOINTS TO ENGINEER PRIOR TO USE.

D	Ø	A	B	C	E
6"	22 1/2°	1'-6"	1'-6"	1'-9"	3'-0"
	45°	1'-8"	1'-6"	2'-6"	4'-0"
8"	22 1/2°	2'-0"	1'-6"	2'-6"	4'-0"
	45°	2'-0"	2'-6"	3'-0"	4'-0"
10"	22 1/2°	2'-0"	2'-6"	3'-0"	4'-0"
	45°	2'-3"	2'-6"	4'-0"	5'-0"
12"	22 1/2°	2'-0"	2'-6"	4'-0"	4'-0"
	45°	2'-4"	3'-0"	4'-6"	5'-0"
16"	22 1/2°	2'-2"	3'-0"	4'-6"	5'-0"
	45°	*	*	*	*

ANCHORAGE DETAILS FOR VERTICAL BENDS

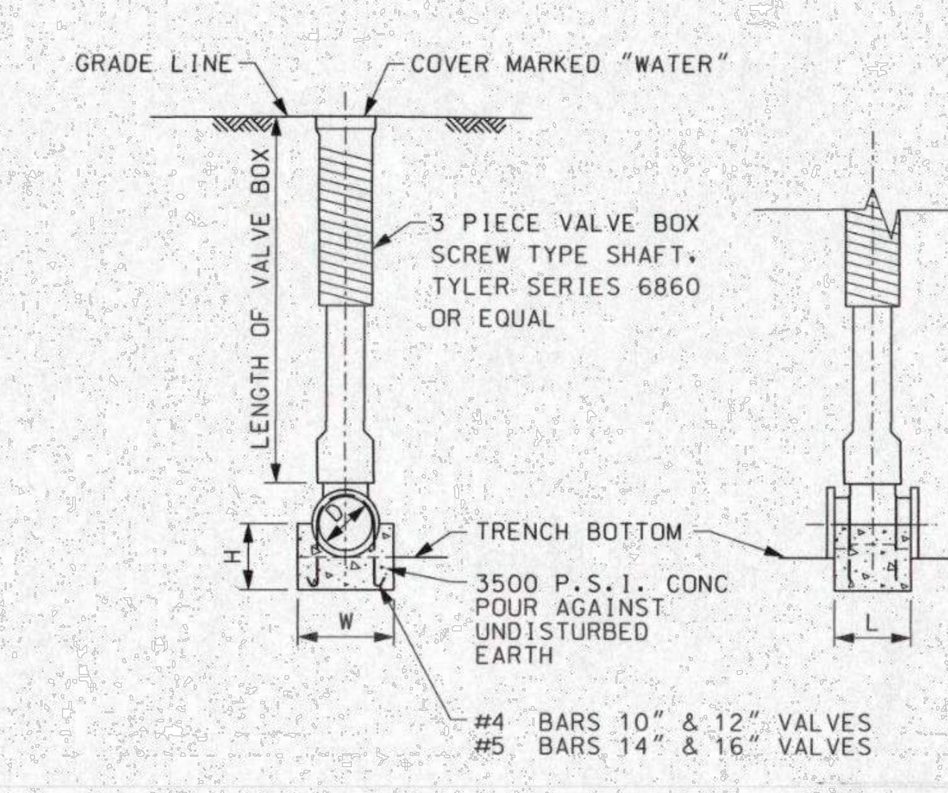


BLOCK WIDTH TO BE 1.5' OUTSIDE EDGES OF DISTURBED EARTH (TUNNEL INTO TRENCH SIDES) MIN 6.0' WIDE

6" & 8" - "L"	= 2.5'
10" - "L"	= 3.0'
12" - "L"	= 3.0'
14" - "L"	= 4.5'
16" - "L"	= 5.5'
18" - "L"	= 5.5'
20" - "L"	= 6.5'
24" - "L"	= 7.5'

NOTE:
4' MIN COVER ON ALL DITCH CROSSINGS.
BENDS IF REQUIRED TO BE PLACED PER VERTICAL
CONCRETE TO BE 3500 P.S.I.

VERTICAL REACTION BLOCKING



SIZE OF PIPE	H
6"	6"
8"	8"
10"	10"
12"	12"

W= WIDTH OF TRENCH
L= LENGTH OF VALVE

VALVE BLOCK AND BOX DETAIL

CHARTER TWP OF BROWNSTOWN
STANDARD WATER MAIN DETAILS
WM2

NOT VALID FOR CONSTRUCTION UNLESS SIGNED AND DATED

WADETRIM

REV. | DATE | DESCRIPTION | BY

JOB NO.
SHEET

© Wade Trim Group, Inc.

PROJECT MANAGER: - FIELD BOOK INFORMATION: - PLOTTED 7/16/2012 10:12:33 AM BY wfisher
c:\pw_work\dms38634\CDT-PLTS-WM2.dgn

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

FOR REFERENCE ONLY

	DATE	REMARKS
1	05.14.2021	TOWNSHIP COMMENTS
6	07.12.2021	ISSUED FOR BID

CONTRACT DATE: 04.08.21
BUILDING TYPE: END. MED20
PLAN VERSION: MARCH 2021
BRAND DESIGNER: DICKSON
SITE NUMBER: 313354
STORE NUMBER: 449523
PA/PM: JN
DRAWN BY.: EA
JOB NO.: 2018088.64

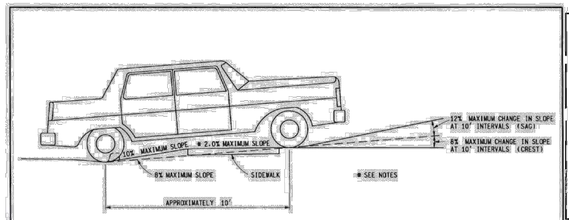
TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

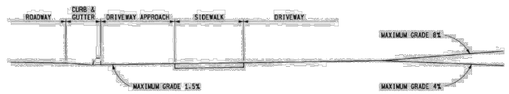
ENDEAVOR 2.0
BROWNSTOWN WATER DETAILS

C-507

PLOT DATE:



LOW VOLUME COMMERCIAL OR RESIDENTIAL DRIVEWAY SLOPES



COMMERCIAL DRIVEWAY PROFILE FOR MAJOR TRAFFIC GENERATORS

NOTES:

FOR DRIVEWAY DESIGN REFER ALSO TO "ADMINISTRATIVE RULES REGULATING DRIVEWAYS, BANNERS, AND PARADES ON OR OVER HIGHWAYS" AND GEOMETRIC DESIGN G-680-SERIES, COMMERCIAL DRIVEWAYS.

FOR CURB AND GUTTER DETAILS, SEE STANDARD PLAN R-30-SERIES.

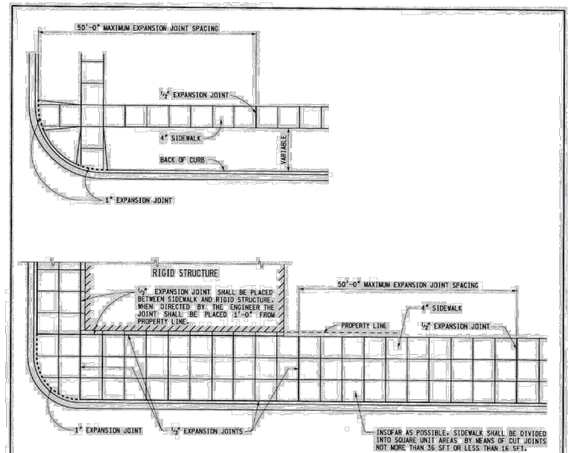
TRANSVERSE SIDEWALK SLOPES ARE TYPICALLY 1.5% (2.0% MAXIMUM). IN ORDER TO MEET SITE CONDITIONS, IF THE TRANSVERSE SLOPE IS REQUIRED TO BE LESS THAN 1.5%, LONGITUDINAL DRAINAGE MUST BE PROVIDED.

WHEN SETTING GRADES FOR COMMERCIAL DRIVES, THE TYPES OF VEHICLES USING THE DRIVE SHOULD BE CONSIDERED.

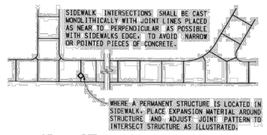
MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR:

DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALK

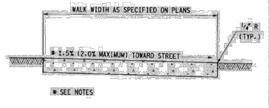
9-30-2014 F.H.W.A. APPROVAL	7-1-2014 PLAN DATE	R-29-I	SHEET 4 OF 4



LOCATION OF JOINTS IN CONCRETE SIDEWALK



TYPICAL SIDEWALK JOINT LAYOUTS



4" CONCRETE SIDEWALK

MDOT Michigan Department of Transportation

PREPARED BY DESIGN DIVISION
DRAWN BY: B.L.T.
CHECKED BY: W.K.F.

DEPARTMENT DIRECTOR
Kirk T. Steudle

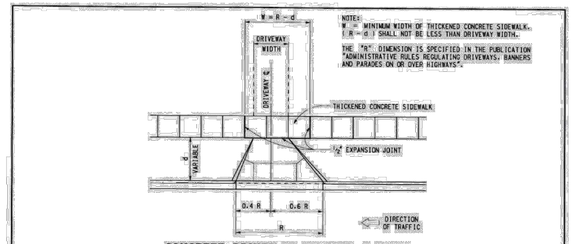
APPROVED BY: Randy V. Riffel
DIRECTOR, BUREAU OF FIELD SERVICES

APPROVED BY: Mark A. Van Port Fleet
DIRECTOR, BUREAU OF HIGHWAY DEVELOPMENT

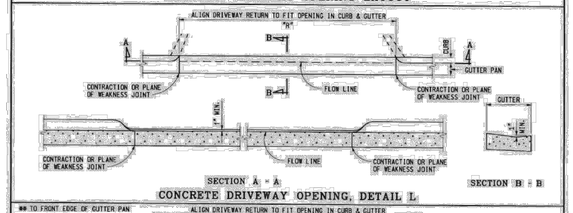
MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR:

DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALK

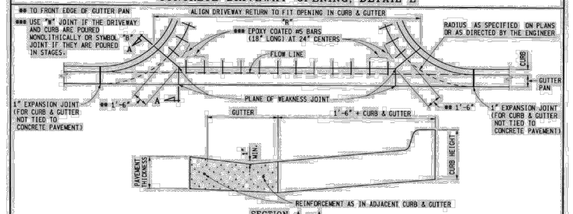
9-30-2014 F.H.W.A. APPROVAL	7-1-2014 PLAN DATE	R-29-I	SHEET 1 OF 4



CONCRETE DRIVEWAY OPENING LAYOUT



CONCRETE DRIVEWAY OPENING, DETAIL L



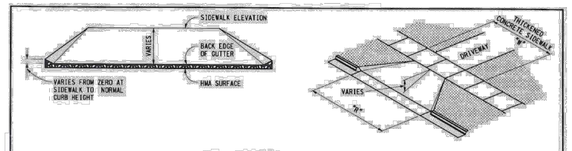
CONCRETE DRIVEWAY OPENING, DETAIL M

NOTE:
FOR ROADWAYS WITH CONCRETE PAVEMENTS, LONGITUDINAL LANE TIES WILL BE CONTINUOUS THROUGH THE DRIVEWAY OPENING AND THE SPACING OF THE #5 BARS IN CONCRETE DRIVEWAYS SHALL BE ADJUSTED TO AVOID CONFLICT WITH THE LONGITUDINAL LANE TIES.

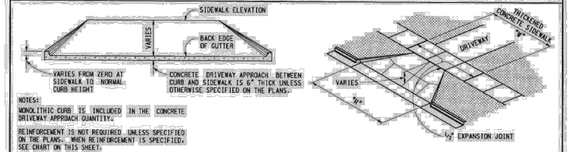
MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR:

DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALK

9-30-2014 F.H.W.A. APPROVAL	7-1-2014 PLAN DATE	R-29-I	SHEET 2 OF 4

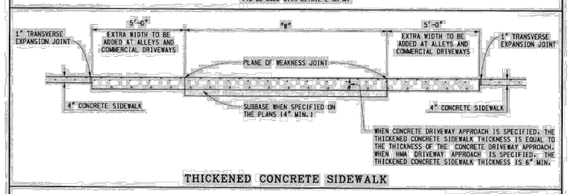


HMA DRIVEWAY APPROACH
(TO BE USED WITH DETAIL L)



NOTES:
MONOLITHIC CURB IS INCLUDED IN THE CONCRETE DRIVEWAY APPROACH QUANTITY.
REINFORCEMENT IS NOT REQUIRED UNLESS SPECIFIED ON THE PLANS. WHEN REINFORCEMENT IS SPECIFIED, SEE CHART ON THIS SHEET.

CONCRETE DRIVEWAY APPROACH
(TO BE USED WITH DETAIL L OR M)



THICKENED CONCRETE SIDEWALK

ADJUST DRIVEWAY JOINTS AS NEEDED TO ALIGN WITH ANY COINCIDING TRANSVERSE PAVEMENT JOINTS.
JOINT LAYOUT IS AS INDICATED OR AS DIRECTED BY THE ENGINEER.

INTERMEDIATE DRIVEWAY JOINT DETAILS

REINFORCEMENT FOR CONCRETE DRIVEWAYS		
CONCRETE DRIVEWAY THICKNESS	WIRE SIZE (6" x 6" MESH)	AVERAGE WEIGHT (LBS/100 SFT)
LESS THAN 6"	W1.4	21
	W2.9	42
6" OR GREATER	USE WIRE FABRIC REINFORCEMENT SPECIFIED ON STANDARD PLAN R-37-SERIES	

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR:

DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALK

9-30-2014 F.H.W.A. APPROVAL	7-1-2014 PLAN DATE	R-29-I	SHEET 3 OF 4

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

FOR REFERENCE ONLY

	DATE	REMARKS
1	07.12.2021	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

TACO BELL

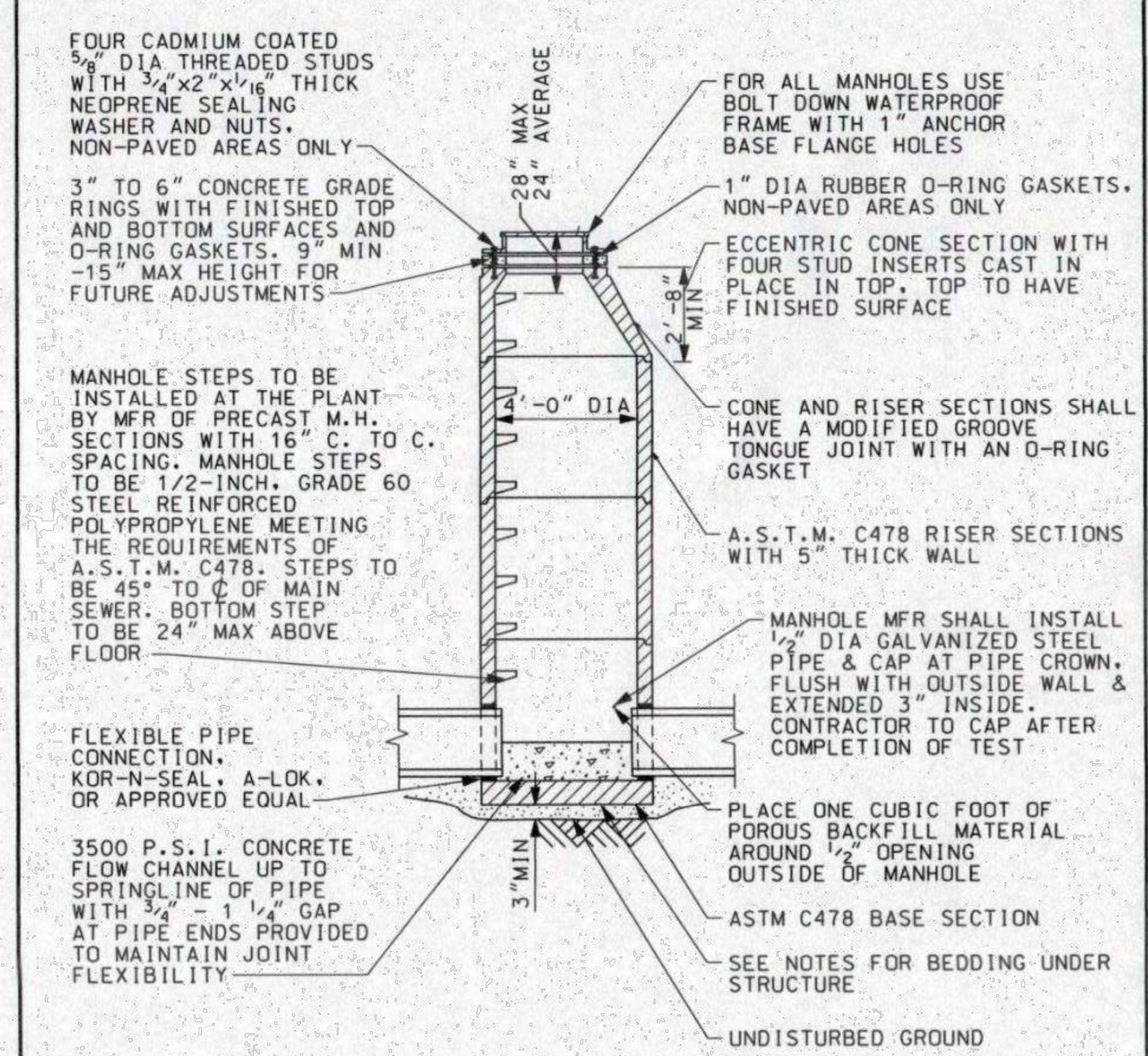
GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

TACO BELL

ENDEAVOR 2.0
MDOT DETAILS

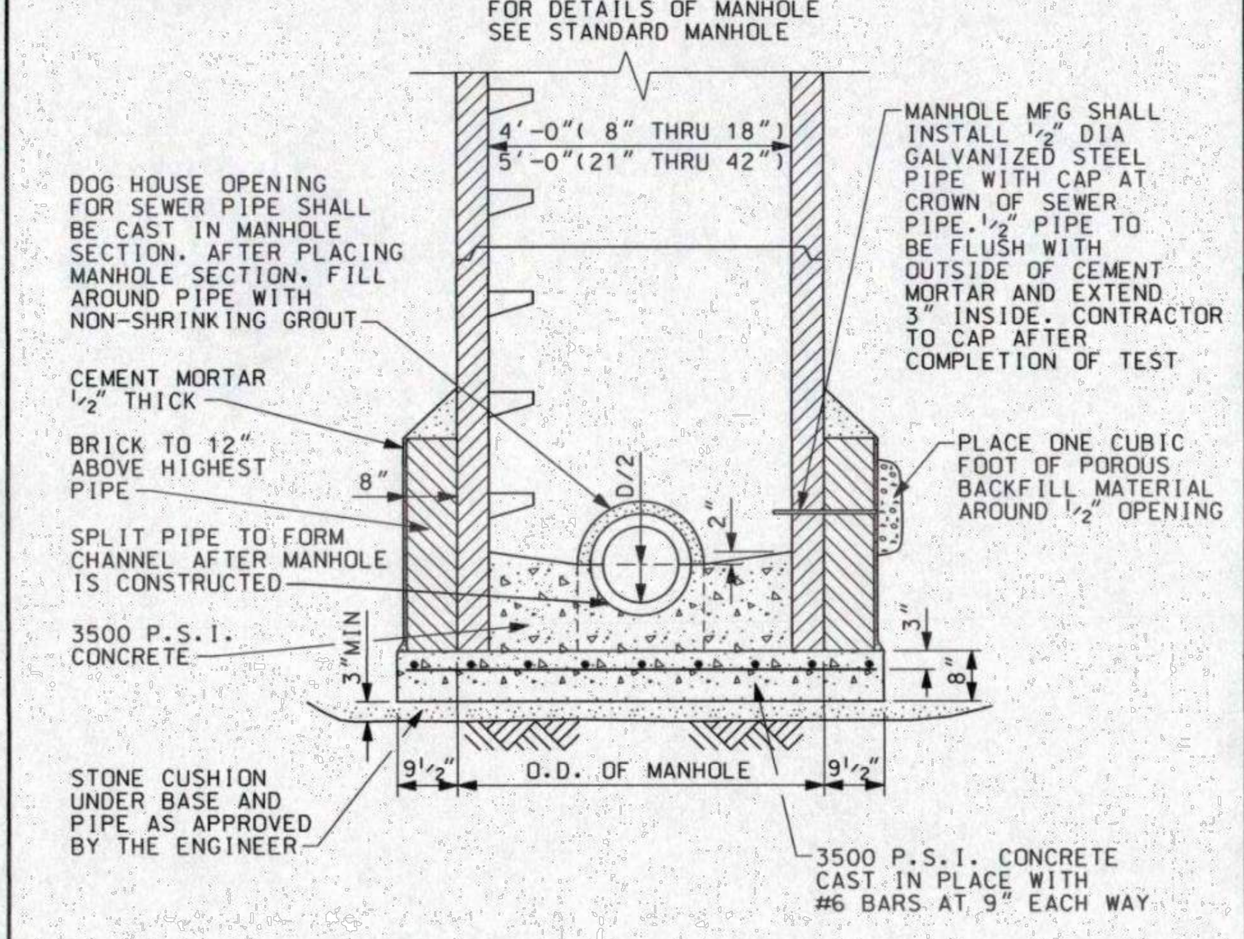
C-508

PLOT DATE:

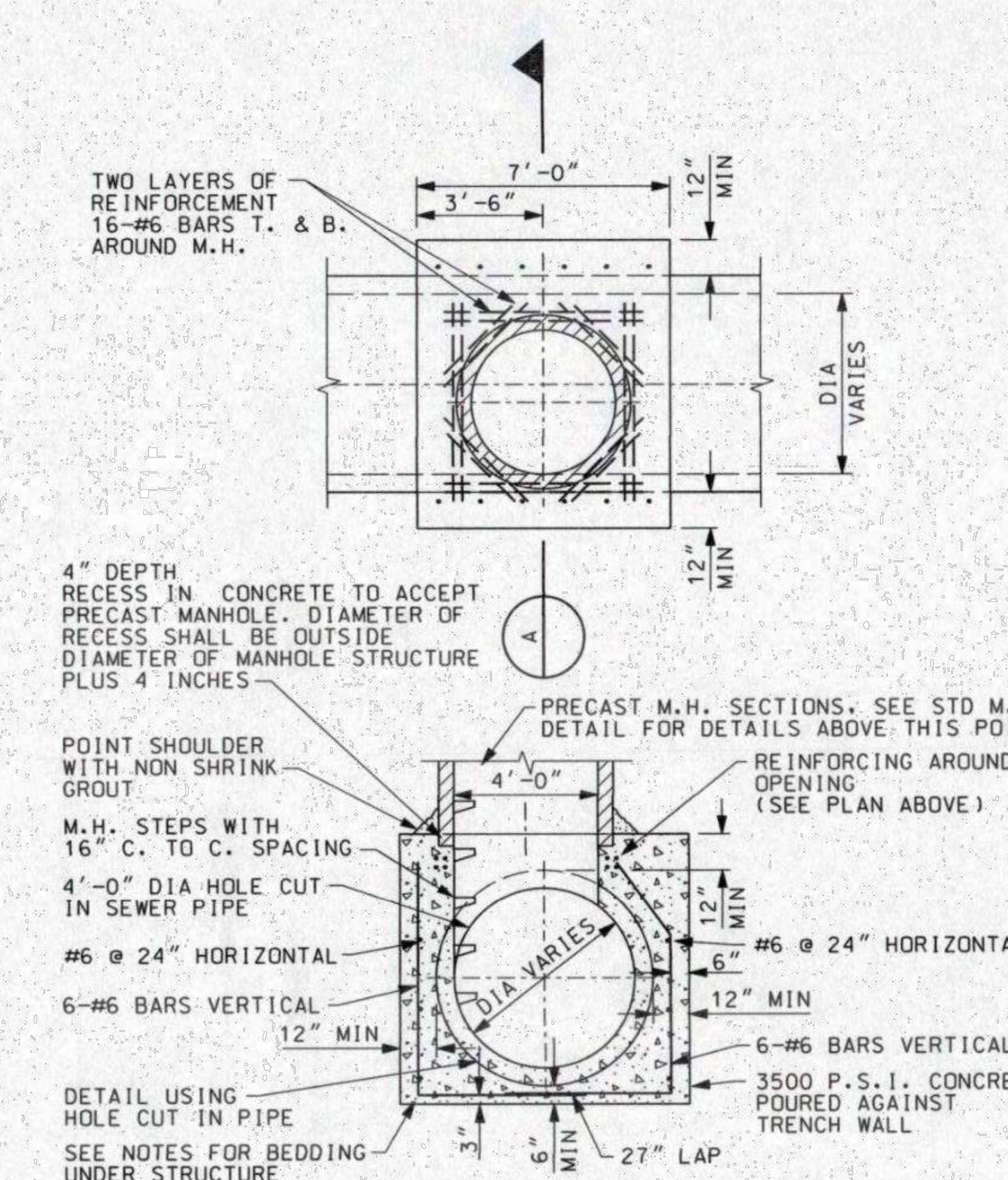


STANDARD SANITARY MANHOLE
FOR SEWERS 8" THROUGH 18"

DOG HOUSE CUT OUT SIZES	
SEWER SIZE	MAX CUT OUT SIZE
8" THRU 10"	17 1/2"
12" THRU 15"	20"

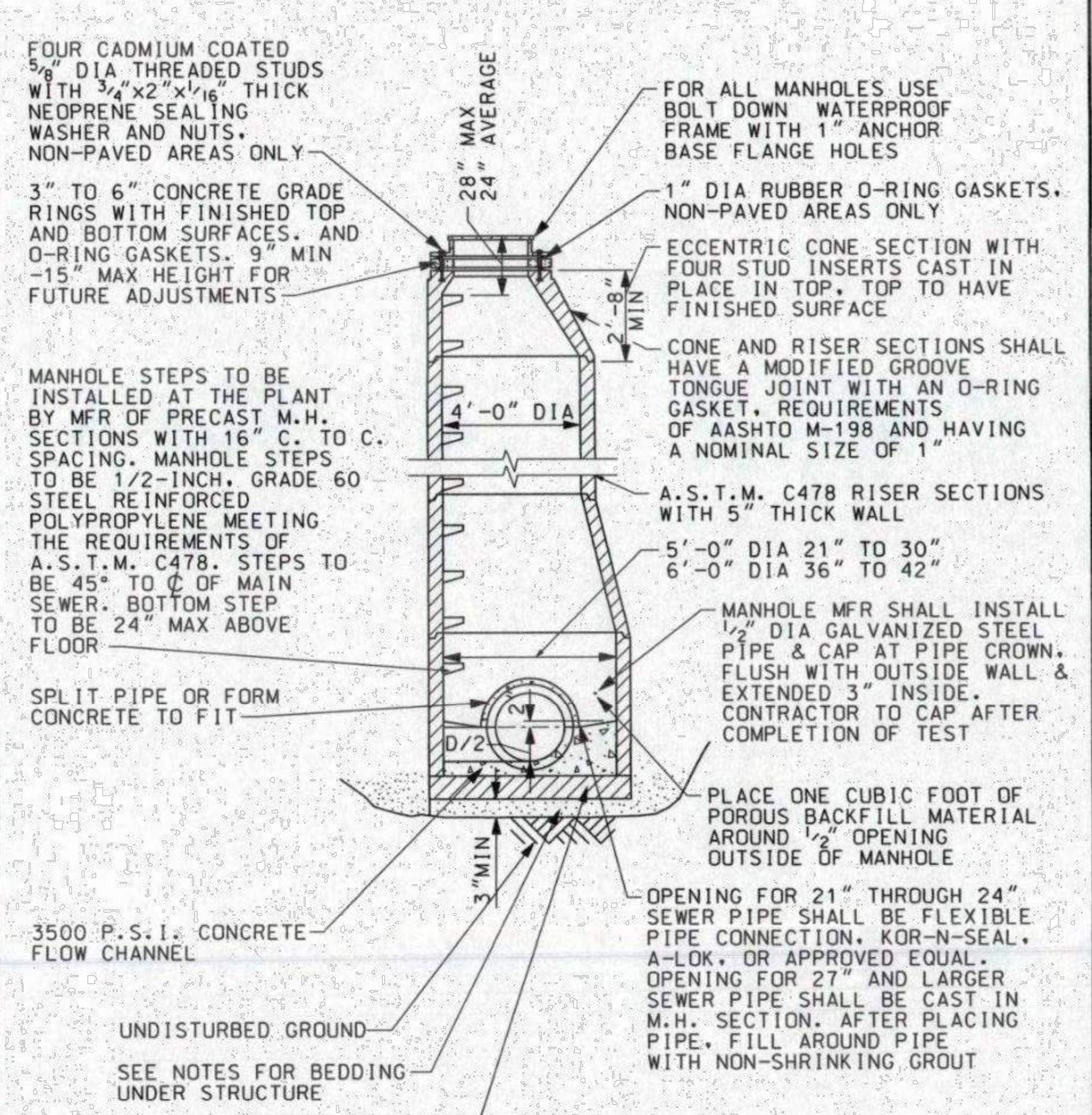


STANDARD SANITARY MANHOLE ON
EXISTING SEWERS 8" THROUGH 42"



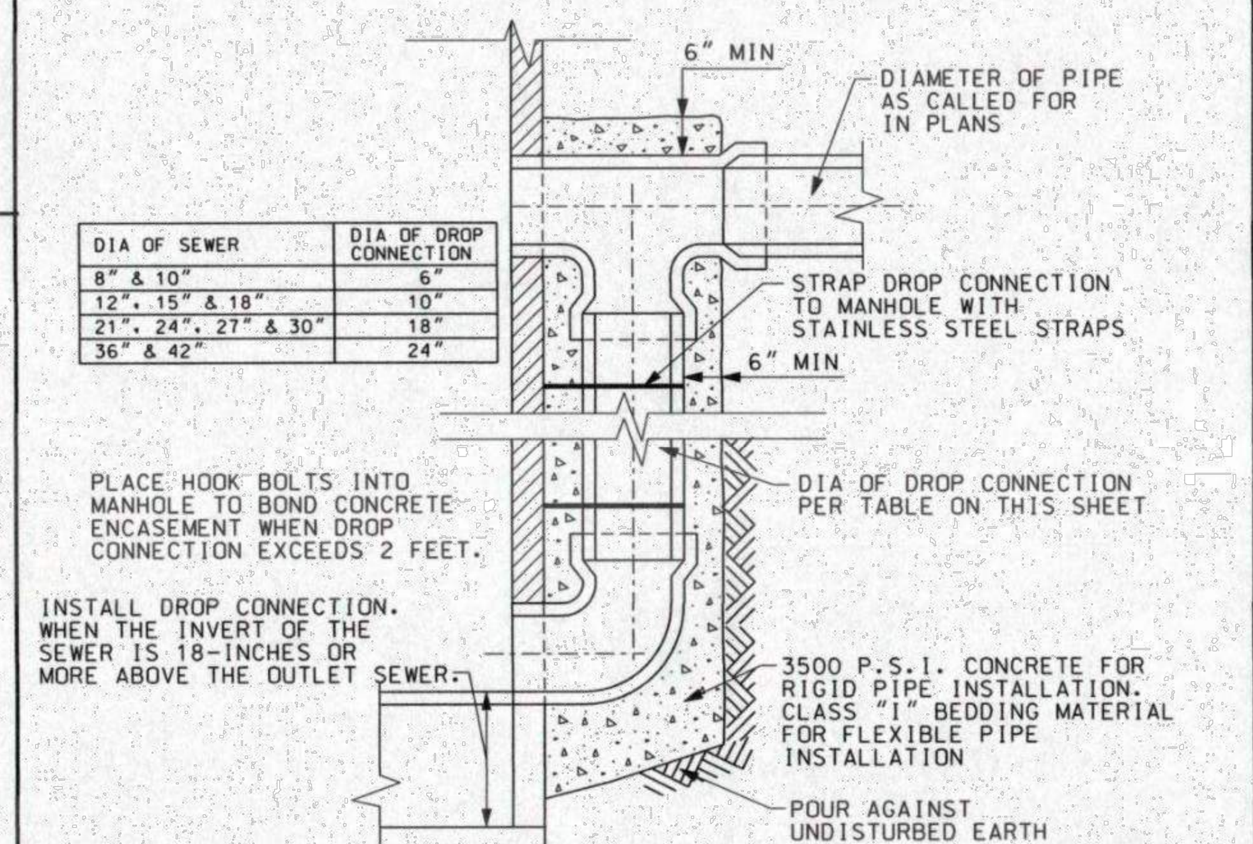
SECTION A

STANDARD SANITARY MANHOLE
FOR 48" & LARGER SEWERS

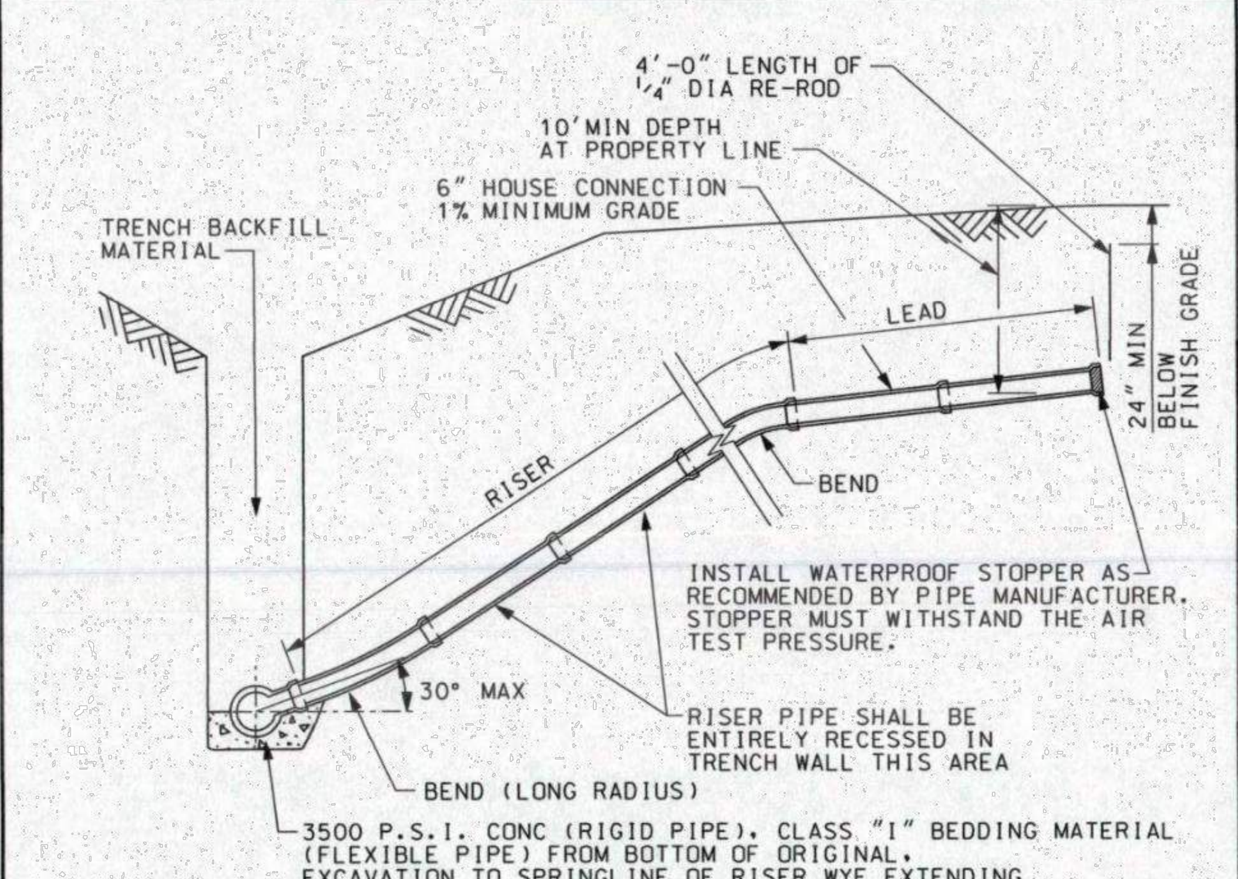


STANDARD SANITARY MANHOLE
FOR SEWERS 21" THROUGH 42"

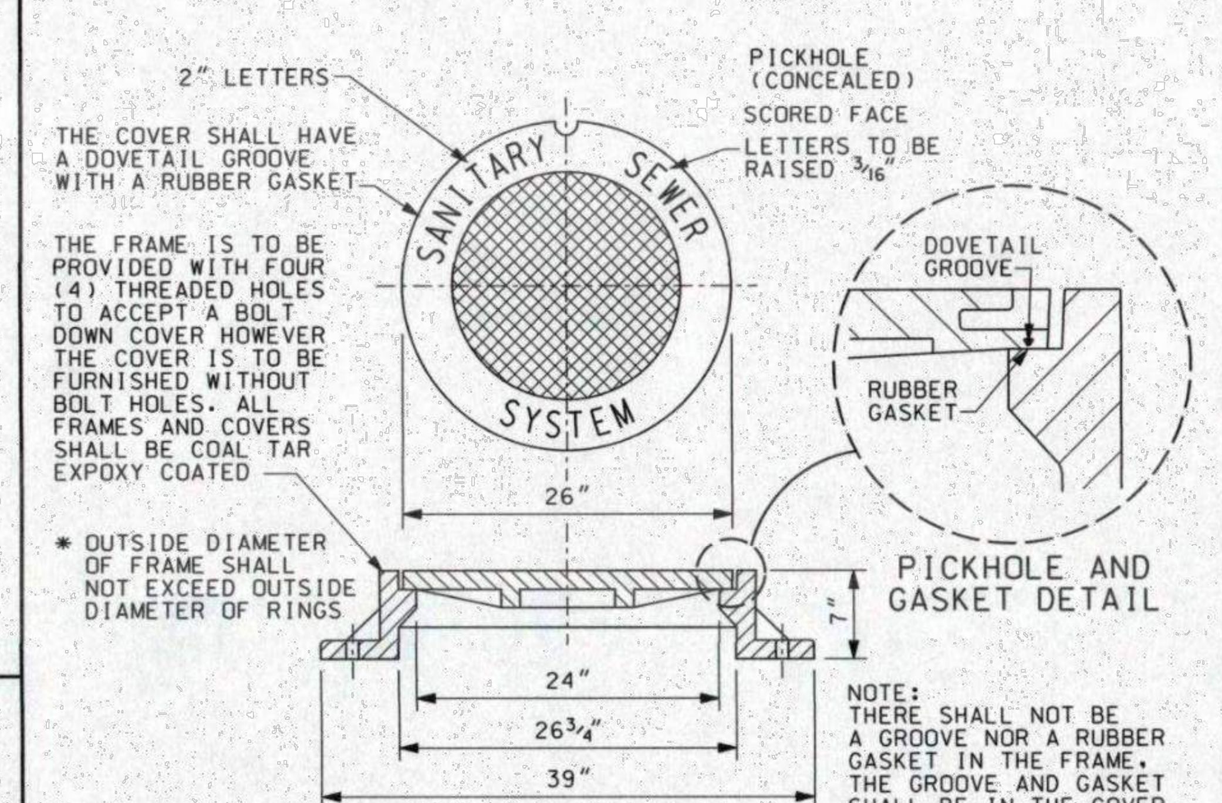
DIA OF SEWER	DIA OF DROP CONNECTION
8" & 10"	6"
12", 15" & 18"	10"
21", 24", 27" & 30"	18"
36" & 42"	24"



EXTERIOR DROP CONNECTION

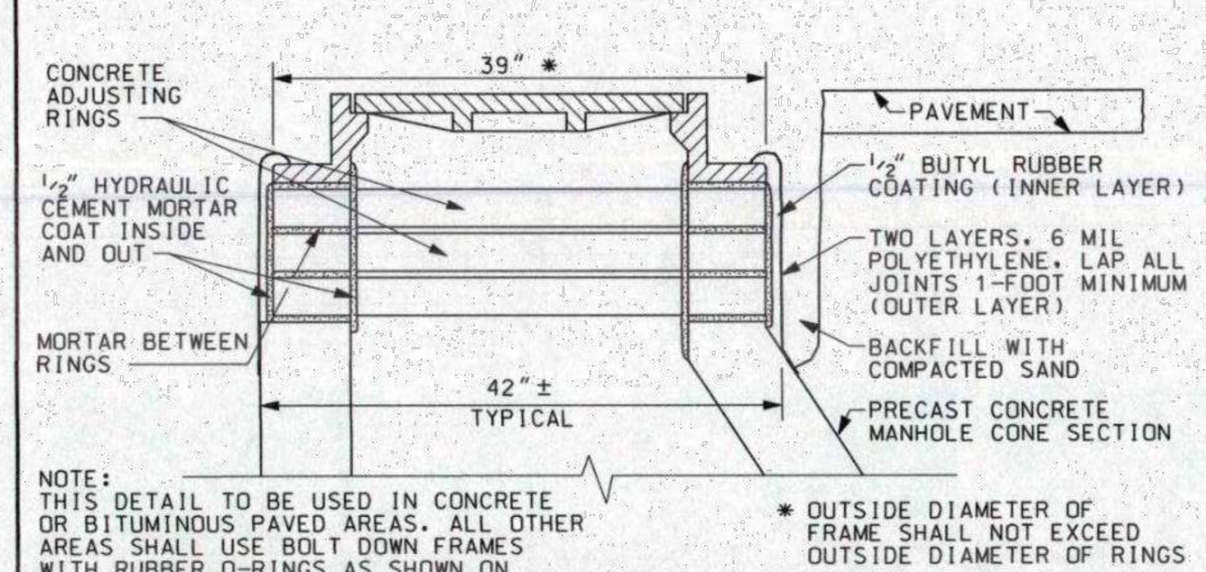


RISER/LEAD DETAIL



STANDARD FRAME AND COVER

E.J.I.W. #1040-1 ZPT FRAME WITH 1040 AGS (NARROW SKIRT) LID (SPECIAL ORDER), NEENAH R-1916-F FRAME WITH R-1642 TS7 LID OR EQUAL



EXTERNAL FRAME SEAL DETAIL
FOR PAVED AREAS ONLY

SANITARY SEWER NOTES

1. AS HEREIN SPECIFIED, THE OWNER SHALL BE UNDERSTOOD TO MEAN BROWNSTOWN TOWHSHIP.

2. ALL SEWER SYSTEM CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND GENERAL SPECIFICATION OF THE OWNER AND ANY OTHER AGENCY HAVING JURISDICTION OF THE CONSTRUCTION AREA. ALL WORK WITHIN THE WAYNE COUNTY RIGHT-OF-WAY SHALL CONFORM TO THE WAYNE COUNTY GENERAL NOTES GN1.

3. DETAILS ARE FOR STRUCTURES WITH NO MORE THAN TWO PIPES ENTERING 90° APART. LARGER DIAMETER STRUCTURES MAY BE REQUIRED FOR DIFFERENT CONFIGURATIONS.

4. THE MANHOLE STRUCTURE REQUIRES A MINIMUM OF 8 INCHES OF CONCRETE WALL BETWEEN PIPE OPENINGS. LARGER DIAMETER STRUCTURES MAY BE REQUIRED WHEREVER PIPE ENTERING THE STRUCTURES ARE LESS THAN 90° APART IN ANY DIRECTION.

5. CONSTRUCTION SHALL NOT COMMENCE WITHOUT A REPRESENTATIVE OF THE OWNER PRESENT.

6. ALL MANHOLES SHALL USE ECCENTRIC CONES PLACED WITH STEPS AWAY FROM THE ROAD UNLESS DIRECTED OTHERWISE.

7. ALL MANHOLE COVERS SHALL BE SET TO GRADE OR AS INDICATED ON THE PLANS OR AS DETERMINED BY THE ENGINEER.

8. ALL PRECAST PRODUCTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478.

9. DIFFERENTIAL OF EXCAVATION AROUND EXISTING MANHOLES SHALL NOT EXCEED SIX FEET.

10. ALL STRUCTURES SHALL HAVE 95% CRUSHED ANGULAR STONE BEDDING (MDOT 6AA OR 6A) TO THE SPRING LINE OF PIPE. PLACE SAND BACKFILL WITHIN (3) THREE FEET OF ALL STRUCTURES.

11. EXTERIOR DROP CONNECTIONS ARE REQUIRED WHENEVER THE INVERT OF THE SEWER IS 18 INCHES OR GREATER ABOVE THE SPRING LINE OF THE EXISTING SEWER. INTERIOR DROP CONNNECTIONS ARE NOT ALLOWED.

12. NO SEWERS SHALL BE CONSTRUCTED LESS THAN 10-INCH DIAMETER WITHOUT SPECIFIC APPROVAL OF THE OWNER.

13. ALL RIGID SANITARY SEWER PIPE SHALL BE CLASS "B" BEDDING, ALL FLEXIBLE PIPE SHALL BE CLASS "I" BEDDING, UNLESS OTHERWISE NOTED ON THE PLANS. SEE SHEET MD-1.

14. PLACE ONE 6-INCH WYE FOR EACH LOT OR PARCEL 100 FEET OR LESS IN WIDTH OR EVERY 100 FEET FOR LOTS OR PARCELS IN EXCESS OF 100 FEET ON SANITARY SEWERS UNLESS OTHERWISE NOTED.

15. NO CONNECTION RECEIVING STORM WATER, SURFACE WATER, OR GROUND WATER SHALL BE MADE TO SANITARY SEWERS.

16. NO FOOTING DRAINS SHALL BE CONNECTED TO THE BUILDINGS SANITARY SEWER.

17. RISERS ON SANITARY SEWERS LEADS SHALL BE INSTALLED TO A DEPTH OF 10 FEET WHERE THE SEWER IS OVER 12 FEET DEEP.

18. PRIOR TO THE BACKFILLING OF A SERVICE LEAD, A 2* X 2* WOODEN STAKE SHALL BE PLACED FROM A POINT IMMEDIATELY IN FRONT OF THE SERVICE CONNECTION TO 2-FOOT BELOW THE FINISH GROUND SURFACE. DO NOT REST THE MARKER ON ANY PORTION OF THE SERVICE CONNECTION OR STOPPER.

19. ALL STUBS SHALL HAVE A WATER TIGHT BULKHEAD.

20. INFILTRATION FOR ANY SECTION OF SEWERS BETWEEN MANHOLES SHALL NOT EXCEED 200 GALLONS PER INCH DIAMETER PER MILE OF SEWER PER 24 HOURS AND SHALL INCLUDE THE INFILTRATION FROM ALL MANHOLES AND OTHER APPURTENANCES.

21. ALL SEWERS SHALL BE SUBJECTED TO AIR, INFILTRATIONS, OR EXFILTRATION TESTS, OR A COMBINATION OF SAME, PRIOR TO ACCEPTANCE. ALL SEWERS OVER 24-INCH DIAMETER SHALL BE SUBJECTED TO INFILTRATION TESTS. ALL SEWERS OF 24-INCH DIAMETER OR SMALLER, WHERE THE GROUND WATER LEVEL ABOVE THE TOP OF THE SEWER IS OVER SEVEN FEET, SHALL BE SUBJECTED TO INFILTRATION TESTS. ALL SEWERS OF 24-INCH DIAMETER OR LESS, WHERE THE GROUND WATER LEVEL ABOVE THE TOP OF THE SEWER IS SEVEN FEET OR LESS, SHALL BE SUBJECTED TO AIR TESTS OR EXFILTRATION TESTS.

22. THE PROCEDURE FOR AIR TESTING OF SEWERS SHALL BE IN ACCORDANCE WITH THE NCPI PUBLICATION TITLED "LOW PRESSURE AIR TEST FOR SANITARY SEWERS."

23. NINE POINT MANDREL TEST IS REQUIRED FOR ALL FLEXIBLE PIPES.

24. IF A SEWER FAILS TO PASS ANY OF THE PREVIOUSLY DESCRIBED TESTS, THE CONTRACTOR SHALL DETERMINE THE LOCATION OF THE LEAKS, REPAIR THEM, AND RETEST THE SEWER. THE TEST SHALL BE REPEATED UNTIL SATISFACTORY RESULTS ARE OBTAINED. TELEVISION INSPECTION SHALL BE CONSIDERED COMPLETED WHEN THE NECESSARY CONSTRUCITON REPAIRS HAVE BEEN MADE AND THE INSTALLATION RETELEVISED AND THE SYSTEM IS ACCEPTABLE FOR THE TESTING PHASE.

25. ALL SEWER SHALL BE TELEVISED, WITH RESULTS APPROVED BY THE OWNER PRIOR TO PLACING THE SEWER IN SERVICE. COPIES OF THE TELEVISION INSPECTION MUST BE WITNESSED BY THE OWNERS REPRESENTATIVE. ANY ITEM THAT, IN THE OPINION OF THE ENGINEER, REQUIRE REPAIR, SHALL BE PRECEISELY LOCATED AND PHOTOGRAPHED ALONG WITH A DETAILED STATEMENT OF THE CONDITION. THE CONTRACTOR SHALL TAKE IMMEDIATE ACTION TO REPAIR ALL SUCH DEFECTS, INCLUDING SOURCES OF INFILTRATION REGARDLESS OF RESULTS OF PREVIOUSLY CONDUCTED TESTS. THE ENGINEER, AT HIS DESCRETION, MAY REQUIRE A SECOND TELEVISION INSPECTION OF ANY REPAIRED AREAS. ALL COSTS OF TELEVISION INSPECTION AND RE-INSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.

26. BULKHEADS ARE TO BE PLACED IN THE EXISTING SEWERS AND WHERE THE NEW SEWER WILL CONNECT TO IT. THE BULKHEADS ARE NOT TO BE REMOVED UNTIL THE SEWERS HAVE BEEN ACCEPTED BY THE AGENCY HAVING JURISDICTION.

BROWNSTOWN NOTES

1. SANITARY SEWER SHALL BE ASDTM C76, CL-IV CONCRETE, ASTM D3034, SDR 26 PVC SOLID WALL, OR ASTM D2680, PVC TRUSS PIPE UNLESS OTHERWISE NOTED.

2. SANITARY SEWER LEADS AND RISERS SHALL BE ASTM D3034, SDR 23.5 PVC SOLID WALL UNLESS OTHERWISE NOTED. ALL SANITARY SEWER BUILDING LEADS SHALL BE LAID WITH A UNIFORM SLOPE OF 1/8 INCH PER FOOT (1.0%).

CHARTER TWP OF BROWNSTOWN
STANDARD SANITARY SEWER DETAILS
SS1

NOT VALID FOR CONSTRUCTION UNLESS SIGNED AND DATED:

WADETRIM

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

FOR REFERENCE ONLY

	DATE	REMARKS
1	05.14.2021	TOWNSHIP COMMENTS
6	07.12.2021	ISSUED FOR BID

CONTRACT DATE: 04.08.21
BUILDING TYPE: END. MED20
PLAN VERSION: MARCH 2021
BRAND DESIGNER: DICKSON
SITE NUMBER: 313354
STORE NUMBER: 449523
PA/PM: JN
DRAWN BY.: EA
JOB NO.: 2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
BROWNSTOWN SANITARY DETAILS

C-509

PLOT DATE:

LANDSCAPE NOTES & PLANTING SPECIFICATIONS

SCOPE OF WORK

1. THIS WORK SHALL CONSIST OF PERFORMING CLEARING AND GRUBBING, SOIL PREPARATION, FINISH GRADING, PLANTING AND DRAINAGE, INCLUDING ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT.

2. QUANTITY TAKEOFF IS SUPPLIED FOR CONTRACTOR'S ASSISTANCE ONLY. CONTRACTOR IS RESPONSIBLE FOR SUPPLYING ALL PLANT MATERIALS AS PER PLAN.

3. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR WITHIN EASEMENT OR RIGHT-OF-WAY LIMITS.

PRESERVATION/PROTECTION (IF APPLICABLE)

1. CONTRACTOR SHALL MAINTAIN AND PRESERVE TREES AND SHRUBS NOT BEING REMOVED, INCLUDING THEIR ROOTS. TREE PROTECTION FENCING SHALL BE USED AT THE DRIP LINE OF ALL TREES AND SHRUBS WITHIN 50 FEET OF CONSTRUCTION EXCEPT AS SHOWN ON PLAN. FENCING SHALL REMAIN IN PLACE UNTIL FINAL PLANT INSPECTION FOLLOWING CONSTRUCTION. MATERIALS SHALL NOT BE STOCKPILED WITHIN THIS DEFINED AREA AND VEHICLES AND OTHER EQUIPMENT SHALL BE OPERATED TO AVOID SOIL COMPACTION.

2. FEEDER ROOTS SHOULD NOT BE CUT IN AN AREA EQUAL TO TWICE THE TREE CIRCUMFERENCE (MEASURED 6" ABOVE THE GROUND LINE IN INCHES) EXPRESSED IN FEET. (EXAMPLE: A CIRCUMFERENCE OF 10" WOULD HAVE A 'NO CUT' ZONE OF 20 FEET IN ALL DIRECTIONS FROM THE TREE). THIS SHOULD APPLY TO UTILITY SERVICES, IF FEASIBLE. THE ONLY EXCEPTION TO THIS REQUIREMENT WILL BE THOSE SPECIFICALLY ALLOWED BY THE LANDSCAPE ARCHITECT, SPECIFICATIONS OR AS INDICATION ON THE PLANS.

3. TREE TRUNKS AND EXPOSED ROOTS DAMAGED DURING EQUIPMENT OPERATIONS SHALL BE TREATED IN ACCORDANCE WITH THE ARBOR CULTURAL STANDARDS OF THE CITY.

PLANT MATERIALS

1. GENERAL - ALL MATERIALS SHALL BE OF ITS KIND AVAILABLE AND SHALL HAVE BEEN GROWN IN A CLIMATE SIMILAR TO THAT ON SITE.

2. PLANTS - ALL PLANTS SHALL BE HEALTHY, OF NORMAL GROWTH, WELL ROOTED, FREE FROM DISEASE AND INSECTS. QUALITY AND SIZE OF PLANT MATERIAL SHALL CONFORM TO ANSI Z60.1 "AMERICAN STANDARDS FOR NURSERY STOCK".

3. VARIETIES AND SIZES OF PLANTS SHALL BE AS SHOWN ON DRAWINGS.

4. PLANTS SHALL BE IN A HEALTHY, VIGOROUS CONDITION, FREE OF DEAD OR BROKEN BRANCHES, SCARS THAT ARE NOT COMPLETELY HEALED, FROST CRACKS, DISFIGURING KNOTS, BROKEN OR ABRADED BARK, REDUNDANT LEADERS OR BRANCHES, OR ABERRATIONS OF ANY KIND. PLANTS SHALL NOT HAVE MULTIPLE LEADERS, UNLESS THIS IS THE NATURAL FORM.

5. BALLED AND BURLAPPED (B&B) PLANTS SHALL BE DUG WITH A FIRM ROOT BALL OF NATURAL EARTH, OF A SIZE IN PROPORTION TO THE PLANT'S SIZE, AS MEASURED BY CALIPER, HEIGHT, OR SPREAD. BALLED AND BURLAPPED PLANTS SHALL BE HANDLED ONLY BY THE ROOT BALL, NOT BY THE TRUNK OR BRANCHES, AS THIS MAY BREAK OR LOOSEN THE ROOT BALL AND DAMAGE THE ROOT SYSTEM. CONTAINER PLANTS SHALL HAVE BEEN ESTABLISHED FOR A MINIMUM OF ONE FULL GROWING SEASON IN THEIR CONTAINERS BEFORE INSTALLATION. CONTAINER PLANTS SHALL BE HANDLED ONLY BY THE CONTAINER, NOT BY THE STEMS OR BRANCHES, AS THIS MAY PULL THE PLANT OUT OF THE CONTAINER AND BREAK OR LOOSEN THE ROOT BALL AND DAMAGE THE ROOT SYSTEM.

6. PLANTS SHALL BE PROTECTED FROM DRYING OUT DURING SHIPPING WITH TARPAULINS OR OTHER COVERINGS. PLANTS SHALL BE PROTECTED FROM DRYING OUT AFTER DELIVERY BY PLANTING IMMEDIATELY; IF THIS IS NOT POSSIBLE, THE ROOT BALL SHALL BE COVERED WITH PEAT MOSS OR EARTH, AND WATERED FREQUENTLY TO KEEP IT MOIST UNTIL PLANTING.

7. DO NOT HANDLE, MOVE, BIND, TIE OR OTHERWISE TREAT PLANTS SO AS TO DAMAGE THE ROOT BALL, ROOTS, TRUNK, OR BRANCHES IN ANY WAY.

TOPSOIL

1. TOPSOIL HAS BEEN (OR WILL BE) STOCKPILED FOR REUSE IN LANDSCAPE WORK. IF QUANTITY OF STOCKPILED TOPSOIL IS INSUFFICIENT, PROVIDE ADDITIONAL TOPSOIL AS REQUIRED TO COMPLETE LANDSCAPE WORK. IMPORTED TOPSOIL SHALL CONSIST OF LOOSE, FRIABLE, LOAMY TOPSOIL WITHOUT ADMIXTURE OF SUBSOIL OR REFUSE. ACCEPTABLE TOPSOIL SHALL CONTAIN NOT LESS THAN 3 PERCENT NOR MORE THAN 20 PERCENT ORGANIC MATTER.

2. PLANTING BACKFILL FOR PARKING LOT ISLANDS SHALL CONSIST OF A HOMOGENEOUS MIXTURE OF 3 PARTS TOPSOIL TO ONE PART SPHAGNUM PEAT INSTALLED OVER A 6" THICKNESS OF NO. 57 AGGREGATE.

SOIL CONDITIONING

1. OBTAIN LABORATORY ANALYSIS OF STOCKPILED AND IMPORTED TOPSOIL COMPLETE WITH RECOMMENDATIONS FOR SOIL AMENDMENT.

2. BEFORE MIXING, CLEAN TOPSOIL OF ROOTS, PLANTS, SOD, STONES, CLAY LUMPS, AND OTHER EXTRANEOUS MATERIALS HARMFUL OR TOXIC TO PLANT GROWTH.

3. MIX SPECIFIED SOIL AMENDMENTS AND FERTILIZERS WITH TOPSOIL AT RATES SPECIFIED BY THE LAB REPORT. DELAY MIXING OF FERTILIZER IF PLANTING WILL NOT FOLLOW PLACING OF PLANTING SOIL WITHIN A FEW DAYS.

4. FOR PLANTING BEDS AND LAWNS, MIX PLANTING SOIL EITHER PRIOR TO PLANTING OR APPLY ON SURFACE OF TOPSOIL AND MIX THOROUGHLY BEFORE PLANTING. MIX LIME WITH DRY SOIL PRIOR TO MIXING OF FERTILIZER.

5. PREVENT LIME FROM CONTACTING ROOTS OF ACID-LOVING PLANTS.

6. APPLY PHOSPHORIC ACID FERTILIZER (OTHER THAN THAT CONSTITUTING A PORTION OF COMPLETE FERTILIZERS) DIRECTLY TO SUBGRADE BEFORE APPLYING PLANTING SOIL AND TILLING.

PLANTING SOIL

1. PLANTING SOIL MIX SHALL BE CLEAR OF ALL STONES AND DEBRIS 1" OR LARGER, AND CONSIST OF THE FOLLOWING: 25% ORGANIC COMPOST, 75% ACCEPTABLE TOPSOIL.

2. PLANTING SOIL FOR PROPOSED PLANTER BOXES, SEE ARCHITECTURAL SHEETS. SHALL BE FILLED WITH PRO-MIX BX PLANTING MEDIUM, OR APPROVED OTHER, MIXED WITH 2" OF ORGANIC COMPOST.

OTHER MATERIALS

1. BED EDGING - EDGING SHALL BE 4" STEEL EDGING WITH THREE (3) METAL ANCHOR STAKES PER 20 FOOT SECTION. ALL MASS PLANTING BEDS SHALL HAVE EDGING PLACED BETWEEN MULCH AREA AND ANY ADJACENT TURF AREA.

2. MULCH: ORGANIC MULCH FREE FROM DELETERIOUS MATERIALS AND SUITABLE FOR TOP DRESSING OF TREES, SHRUBS, OR PLANTS AND CONSISTING OF THE FOLLOWING:

   a. RIVER ROCK MULCH AREA: AGGREGATE MULCH, 3/4"-2" IN SIZE, WASHED AND ROUNDED, SHALL BE INSTALLED WITHIN THE RIVER ROCK MULCH AREA PER THE PLAN. RIVER ROCK MULCH SHALL BE INSTALLED AT 3" INCHES DEPTH.

   b. NON-DRYED, DOUBLE SHREDDED HARDWOOD SHALL BE INSTALLED IN ALL OTHER LANDSCAPE BEDS OUTSIDE OF THE RIVER ROCK MULCH AREA AT A DEPTH OF 3 INCHES.

3. WEED BARRIER - POLYETHYLENE FILTER FABRIC DESIGNED TO PERMIT WATER INFILTRATION WHILE PREVENTING WEED GROWTH-TO BE INSTALLED IN ALL PLANTING BEDS.

GENERAL WORK PROCEDURES

1. LANDSCAPE WORK SHALL BE ACCORDING TO THE WORKMANLIKE STANDARDS ESTABLISHED FOR LANDSCAPE CONSTRUCTION AND PLANTING IN THE MICHIGAN STANDARDIZED LANDSCAPE SPECIFICATIONS (ASLA) AND ANY LOCAL LANDSCAPE ORDINANCES.

2. CONTRACTOR SHALL OBTAIN A COPY OF LOCAL ORDINANCES REGARDING ACCEPTABLE PLANT AND PLANTING DETAILS AND ABIDE BY THOSE ORDINANCES AND DETAILS.

3. ENGINEER RESERVES THE RIGHT TO REJECT ALL PLANT MATERIAL DEEMED NOT ACCEPTABLE.

4. ANY PROPOSED PLANT SUBSTITUTIONS SHALL BE EQUIVALENT IN FORM, HABIT, STRUCTURE, BRANCHING AND LEAF TYPE AND MUST BE ISSUED TO THE LANDSCAPE ARCHITECT FOR APPROVAL, IN WRITING, PRIOR TO INSTALLATION.

WEEDING

1. BEFORE AND DURING PRELIMINARY GRADING AND FINISH GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE.

PLANTING

1. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE OWNER BEFORE EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

2. PLANTING PITS SHALL BE AS PER DETAILS.

3. PREPARED SOIL SHALL BE TAMPED FIRMLY AT BOTTOM OF PIT. FILL WITH PLANTING SOIL AROUND BALL OF PLANT. COMPLETE BACKFILLING AND WATER THOROUGHLY.

4. EACH TREE AND SHRUB SHALL RECEIVE THE LANDSCAPER'S BIONUTRITION (3-0-3) GRANULAR WITH MYCORRHIZAL TECHNOLOGY FERTILIZER OR APPROVED OTHER. APPLY FERTILIZER PER MANUFACTURER'S SPECIFICATIONS.

5. WATER IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED.

6. INSTALL BED EDGING AND MULCH PER MATERIALS SPECIFICATION AND DETAILS.

7. REMOVE ALL SALES TAGS, STRINGS, STRAPS, WIRE, ROPE OR OTHER MATERIALS THAT MAY INHIBIT PLANT GROWTH BOTH ABOVE AND BELOW THE SURFACE OF THE SOIL.

8. REMOVE ANY BROKEN, SUCKERING, DISEASED, CRISSCROSSED OR AESTHETICALLY DISPLEASING BRANCHES BACK TO LIVE LEADER OR SIDE LATERAL WITH A FLUSH CUT.

FINISH GRADING

1. ALL AREAS WILL BE GRADED BY THE CONTRACTOR TO SUBSTANTIALLY PLUS/MINUS 0.1 FOOT OF FINISH GRADE.

2. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN, UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE. SOIL AREAS ADJACENT TO THE BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS.

3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER.

4. PARKING LOT ISLAND SHALL BE BACKFILLED AS PART OF THIS CONTRACT.

GROUND COVER

1. SPACING AND VARIETY OF GROUND COVER SHALL BE AS SHOWN ON DRAWINGS.

2. MULCH GROUND COVER WITH 2" THICKNESS OF SPHAGNUM PEAT.

3. IMMEDIATELY AFTER PLANTING GROUND COVER, CONTRACTOR SHALL THOROUGHLY WATER GROUND COVER.

4. ALL GROUND COVER AREAS SHALL BE TREATED WITH A PRE-EMERGENT BEFORE FINAL LANDSCAPE INSPECTION. GROUND COVER AREAS SHALL BE WEEDED PRIOR TO APPLYING PRE-EMERGENT. PRE-EMERGENT TO BE APPLIED AS PER MANUFACTURER'S RECOMMENDATION.

GUARANTEE

1. CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF PROJECT ACCEPTANCE BY THE OWNER.

CLEANUP

1. UPON THE COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. AN 'ACCEPTABLE CONDITION' SHALL BE AS DEFINED AND APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

IRRIGATION

1. CONTRACTOR SHALL PROVIDE & INSTALL AN IRRIGATION SYSTEM TO PROVIDE 100% COVERAGE OF THE SITE. AREAS WITHIN 5 FEET OF BUILDING WALLS SHALL BE IRRIGATED BY DRIP IRRIGATION OR SIMILAR. CONTRACTOR SHALL ENSURE BUILDING WALLS AND WINDOWS WILL NOT BE DAMAGED OR STAINED BY IMPROPER IRRIGATION INSTALLATION OR POOR SELECTION OF FIXTURES. SYSTEM SHALL INCLUDE ALL APPURTENANCES & BE APPROVED BY OWNER.

2. IRRIGATION CONTRACTOR SHALL PROVIDE A METHOD FOR WINTERIZATION. WINTERIZATION SHALL BE PERFORMED BY CONTRACTOR UPON COMPLETION IF SYSTEM IS INSTALLED BETWEEN NOVEMBER 1 AND MARCH 31.

MAINTENANCE

(MAINTENANCE PERIOD TO COMMENCE AFTER FINAL INSPECTION.)

1. MAINTENANCE PERIOD FOR THIS CONTRACT SHALL BE 90 CALENDAR DAYS COMMENCING AFTER FINAL INSPECTION OF CONSTRUCTION.

2. MAINTAIN TREES, SHRUBS AND OTHER PLANTS BY PRUNING, CULTIVATING AND WEEDING AS REQUIRED FOR HEALTHY GROWTH. RESTORE PLANTING SAUCERS, RESET TREES AND SHRUBS TO PROPER GRADES OR VERTICAL POSITION AS REQUIRED.

3. MAINTAIN LAWNS BY WATERING, MOWING, TRIMMING, AND OTHER OPERATIONS SUCH AS ROLLING, REGRADING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

4. MAINTAIN THE LANDSCAPING BY KEEPING ALL PLANTS DISEASE-FREE AND PLANTING BEDS GROOMED, EXCEPT IN NATURALLY OCCURRING VEGETATION AREAS.

5. REPLACE ANY REQUIRED PLANTING(S), WHICH SEVERELY DECLINE OR DIE AFTER THE DATE OF PLANTING. SUCH REPLACEMENT SHALL OCCUR DURING THE NEXT APPROPRIATE PLANTING SEASON.

SODDING

1. SOD SHALL BE FIRST GRADE CERTIFIED BLENDS OF THE FOLLOWING SPECIES PER HARDINESS ZONE CONTAINING NOT MORE THAN 30 PERCENT OF OTHER GRASSES AND CLOVERS, AND FREE FROM ALL NOXIOUS WEEDS.

   ZONES 3, 4 & 5: APPROVED BLUE GRASS BLEND
   ZONE 6: APPROVED FESCUE BLEND
   ZONES 7 & 8: APPROVED BERMUDA BLEND
   ZONES 9 & 10: APPROVED ST AUGUSTINE FLORATAM BLEND

2. SOD SHALL BE RECENTLY MOWED TO A HEIGHT OF NOT LESS THAN 3 INCHES. IT SHALL BE CUT INTO STRIPS OF NOT LESS THAN 3 FEET AND NOT OVER 6 FT. WITH A UNIFORM WIDTH OF NOT OVER 24 INCHES.

3. SOD SHALL BE CUT TO A DEPTH EQUAL TO THE GROWTH OF THE FIBROUS ROOTS BUT IN NO CASE LESS THAN 1 INCH.

4. SOD SHALL BE DELIVERED TO THE JOB WITHIN 24 HOURS AFTER BEING CUT AND SHALL BE INSTALLED WITHIN 48 HOURS AFTER BEING CUT.

5. BEFORE SOD IS PLACED, THE SOD BED WILL HAVE BEEN EXCAVATED TO SUCH A DEPTH THAT WHEN THE SOD IS IN PLACE THE TOP OF THE SOD WILL BE FLUSH WITH THE SURROUNDING GRADE.

6. NO SOD SHALL BE PLACED WHEN THE TEMPERATURE IS BELOW 32 DEGREES F. NO FROZEN SOD SHALL BE PLACED NOR SHALL ANY SOD BE PLACED ON FROZEN SOIL. WHEN SOD IS PLACED BETWEEN THE DATES OF JUNE 1ST AND OCTOBER 15TH, IT SHALL BE COVERED IMMEDIATELY WITH A STRAW MULCH 1 INCH THICK (LOOSE MEASUREMENT).

7. AFTER LAYING, THE SOD SHALL BE WATERED THOROUGHLY AND TAMPED WITH APPROVED SOD TAMPERS SUFFICIENTLY TO BRING THE SOD INTO CLOSE CONTACT WITH THE SOD BED AND INSURE TIGHT JOINTS BETWEEN THE SECTIONS OR STRIPS.

8. THE CONTRACTOR SHALL KEEP ALL SODDED AREAS INCLUDING SUBGRADE, THOROUGHLY MOIST FOR 30 DAYS AFTER SODDING.

9. THE CONTRACTOR SHALL REPAIR ANY AREAS DAMAGED FOLLOWING INSTALLATION AS DIRECTED BY THE ENGINEER. SOD SHALL BE IN PLACE AT LEAST 30 DAYS BEFORE FINAL ACCEPTANCE.

SEEDING

1. GRASS SEED SHALL BE FRESH, CLEAN, DRY, NEW-CROP SEED COMPLYING WITH THE ASSOCIATION OF OFFICIAL SEED ANALYSTS' "RULES FOR TESTING SEEDS" FOR PURITY AND GERMINATION TOLERANCES.

2. ALL AREAS TO BE SEEDED SHALL RECEIVE NO LESS THAN FIVE POUNDS OF SEED PER ONE THOUSAND SQUARE FEET. APPLY SEED AND PROTECT WITH STRAW MULCH AS REQUIRED FOR NEW LAWNS. GRASS SEED MIX SHALL CONSIST OF THE FOLLOWING:

PROPORTION	NAME	MIN.% GERM.	MIN.% PURE SEED	MAX.% WEED SEED
30%	KENTUCKY BLUEGRASS (POA PRATENSIS)	80	85	0.50
30%	CREEPING RED FESCUE (FESTUCA RUBRA)	85	98	0.50
20%	PERENNIAL RYE GRASS (LOLIUM PERENNE)	90	98	0.50
20%	ANNUAL RYEGRASS (LOLIUM MULTIFLORUM)	85	92	1.00

PLANTING SCHEDULE

1. ALL PLANTING IS RECOMMENDED TO BE DONE WITHIN THE FOLLOWING DATES. WHEN PLANTING OUTSIDE THESE DATES, WRITTEN DOCUMENTATION SHALL BE PROVIDED THAT SURVIVAL OR REPLACEMENT WILL BE ENSURED. NO PLANTING SHALL BE DONE IN FROZEN SOIL.

NORMAL PLANTING SEASONS	SPRING	FALL
ALL TREES AND SHRUBS	MARCH 15-MAY 15	OCTOBER 1-DECEMBER 1
EVERGREENS	APRIL 1-MAY 15	OCTOBER 1-NOVEMBER 15
GROUNDCOVERS	APRIL 1-JUNE1	WHEN SOD IS WORKABLE
SEED AND MULCH	APRIL 1-MAY 15	OCTOBER 1-NOVEMBER 15

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

	DATE	REMARKS
1	07.12.2021	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

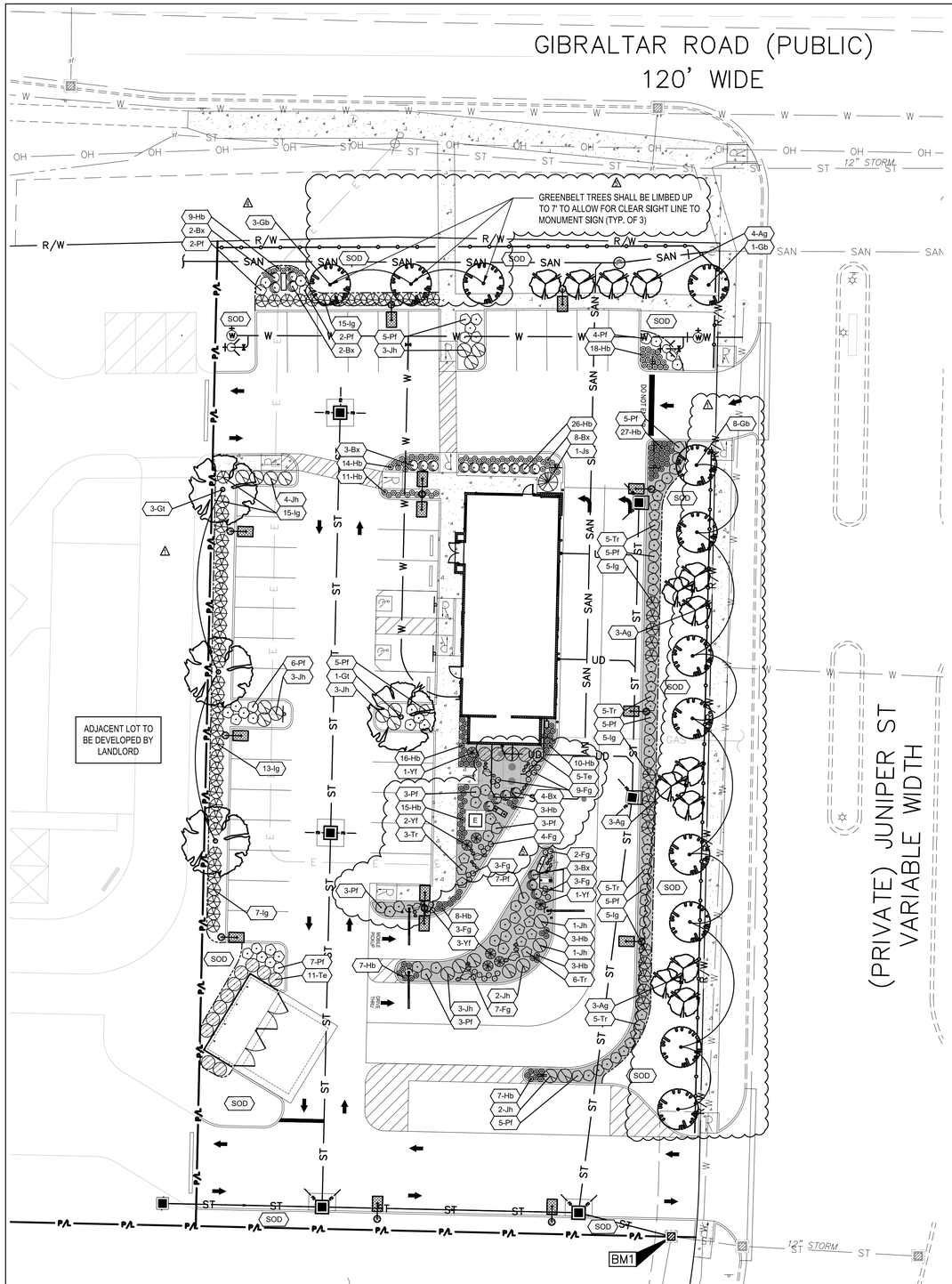
TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
LANDSCAPE NOTES

L-001

PLOT DATE:



N

0 20

10 40

1"=20'

Horizontal Scale in Feet

LANDSCAPE NOTES

1. MULCH PER LANDSCAPE SPECIFICATIONS.
2. ALL DISTURBED AREAS NOT TO BE PAVED OR MULCHED SHALL BE SODDED PER SPECIFICATIONS.
3. ALL DISTURBED AREAS WITHIN THE R.O.W. NOT TO BE PAVED, SHALL BE SEEDED PER THE SPECIFICATIONS.

LANDSCAPE LEGEND

- PROPOSED LANDSCAPE BED EDGE
- PROPOSED TREE
- PROPOSED SHRUB / PERENNIAL
- PROPOSED LIMESTONE BOULDER, DESERT SAND, 12"-36"
- ##-Xx — PROPOSED PLANT QUANTITY AND SYMBOL
- SOD — PROPOSED LAWN AREA
- PROPOSED RIVER ROCK MULCH AREA
- PROPOSED DECORATIVE FENCE, SEE CIVIL PLANS

LANDSCAPE CALCULATIONS

PARKING LOT LANDSCAPING CALCULATION: 33 PARKING SPACES	REQUIRED	PROVIDED
CANOPY TREES	4	4

GREENBELT CALCULATION: GIBRALTAR RD 149 LF	REQUIRED	PROVIDED
CANOPY TREES	4	4
ORNAMENTAL TREES	4	4
SHRUBS	23	23+

GREENBELT CALCULATION: JUNIPER ST 295 LF	REQUIRED	PROVIDED
CANOPY TREES	8	8
ORNAMENTAL TREES	8	8
SHRUBS	45	45

MISS DIG 811

BENCHMARKS:

BASIS OF BEARING IS THE EAST LINE OF INTERSTATE 75.

BENCHMARK #1 - RIM OF STORM MANHOLE SE CORNER OF SITE.
N 13429816.3076, E 218634.3816
ELEVATION=587.12' (NAVD88)

PLANT LIST

Symbol	Botanical Name	Common Name	Qty.	Min. Size	Condition	Remarks
Ag	Amelanchier x grandiflora 'Robin Hill'	Robin Hill Serviceberry	13	1.75" Cal.	B&B	Single-Stem
Bx	Buxus 'Green Velvet'	Green Velvet Boxwood	22	24" H Min.	B&B	3' o/c
Gb	Ginkgo biloba 'Princeton Sentry'	Princeton Sentry Ginkgo	12	2.5" Cal.	B&B	Specimen
Gt	Gleditsia triacanthos f. inermis 'Skycole'	Skyline Thornless Honeylocust	4	2.5" Cal.	B&B	Specimen
Fg	Festuca gluaca	Blue Fescue	31	No. 2	Cont.	Per Plan
Hb	Hemerocallis 'Going Bananas'	Going Bananas Daylily	177	No. 1	Cont.	1.5' o/c
Ig	Ilex Glabra 'Chamzin'	Nordic Inkberry	65	24" Ht.	B&B	3.5' o/c
Jh	Juniperus horizontalis 'Blue Chip'	Blue Chip Juniper	22	24" Spread, No. 3	Cont.	4' o/c
Js	Juniperus scopulorum 'Wichita Blue'	Wichita Blue Juniper	1	5' H	B&B	Specimen
Pf	Potentilla fruticosa 'Abbotswood'	Abbotswood Potentilla	75	24" H Min.	Cont.	3' o/c
Te	Thuja occidentalis 'Smaragd'	Emerald Arborvitae	16	5' H	B&B	4' o/c
Tr	Thuja occidentalis 'Rheingold'	Rheingold Arborvitae	29	24" H Min.	B&B	3' o/c
Yf	Yucca filamentosa 'Color Guard'	Color Guard Yucca	7	No. 5	Cont.	Per Plan

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1 PLANNING COMMENTS 11.09.20

	DATE	REMARKS
1	05.14.2021	TOWNSHIP COMMENTS
2	06.17.2021	TOWNSHIP COMMENTS
3	07.01.2021	NTP COMMENTS
4	07.12.2021	ISSUED FOR BID

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PLAN VERSION:	MARCH 2021
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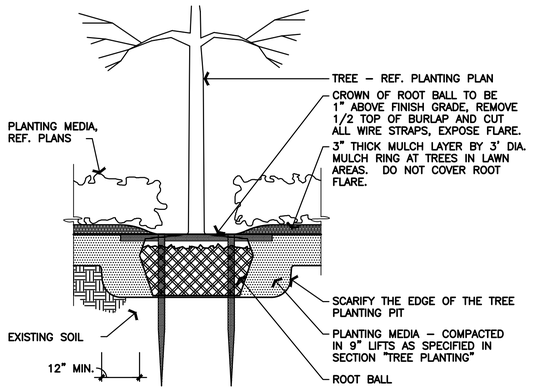
TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
LANDSCAPE PLAN

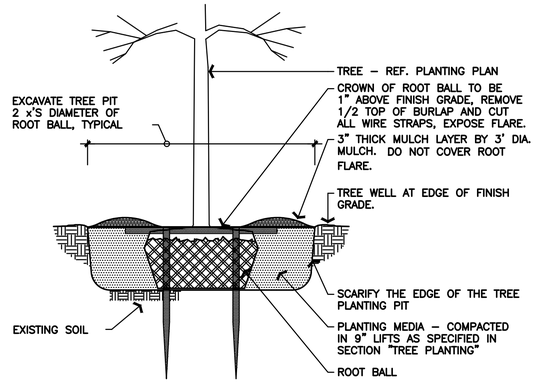
L-101

PLOT DATE:



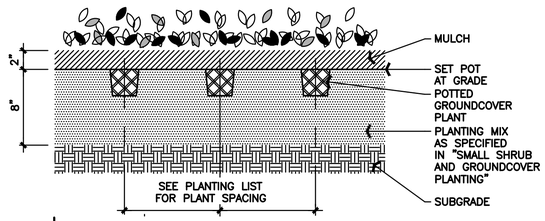
TREE PLANTING IN PLANTER – SECTION

1/2" = 1'–0"



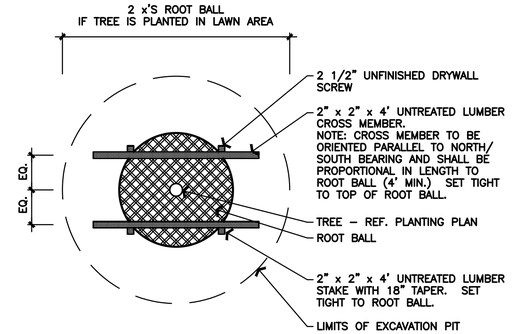
TREE PLANTING IN LAWN – SECTION

1/2" = 1'–0"



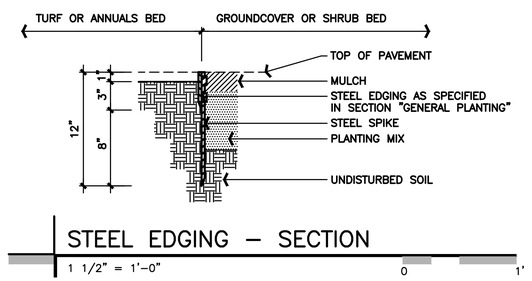
GROUNDCOVER PLANTING – SECTION

1 1/2" = 1'–0"



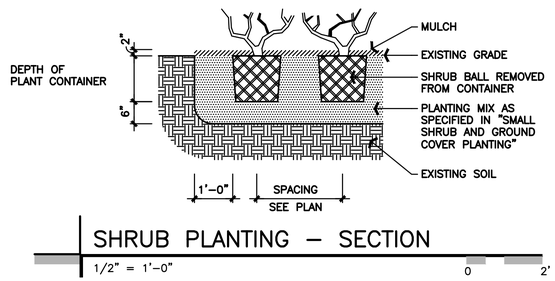
TYPICAL TREE STAKING – PLAN

1/2" = 1'–0"



STEEL EDGING – SECTION

1 1/2" = 1'–0"



SHRUB PLANTING – SECTION

1/2" = 1'–0"

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

	DATE	REMARKS
1	07.12.2021	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	EA
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

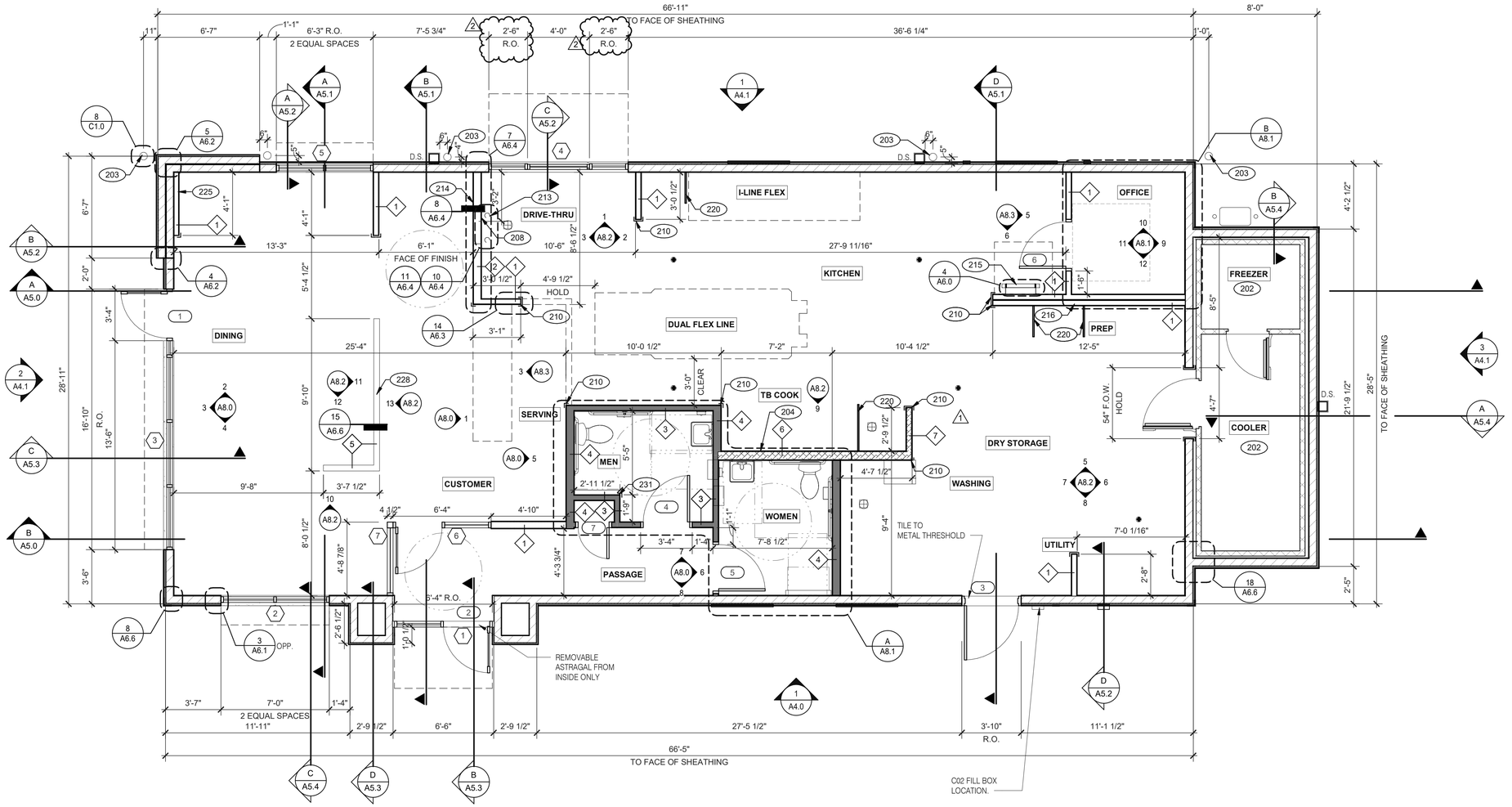
ENDEAVOR 2.0

LANDSCAPE DETAILS

L-501

PLOT DATE:

CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT



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

TYPICAL EXTERIOR WALL:
2X6 WD STUDS AT 16" O.C. W/ SHEATHING AS SCHEDULED (SEE STRUCT. DWGS.) AND R-19 KRAFT-FACED FIBERGLASS BATT INSULATION U.O.N. GC SHALL PROVIDE 2 LAYERS OF GRADE 'D' 60 lb BUILDING PAPER.

TYPICAL INTERIOR WALL:
WD STUDS AT 16" O.C. AS INDICATED

1 2X4 WOOD STUDS

2 2X6 WOOD STUDS

INTERIOR SOUND-RATED WALL:
TYPICAL INTERIOR WALL W/ 3-1/2" UNFACED FIBERGLASS BATT INSULATION.

3 2X4 WOOD STUDS 4 2X6 WOOD STUDS

LOW WALL:
2X4 WD STUDS AT 16" O.C. AS SCHEDULED (SEE DETAIL 15/A6.6)

5 2X6 WOOD STUDS

HOODWALL:
INTERIOR NON-COMBUSTIBLE WALL WITH 20 GA. S.S. PANEL BEHIND HOOD. EXTEND MIN. 18" BEYOND END OF HOOD. M. STUD FRAMING. REFER TO DETAIL 2/M3.0 FOR EXTENT OF S.S. PANEL.

6 6" METAL STUD 7 3 5/8" METAL STUD 1

DASHED LINE INDICATES INTERIOR SUBSTRATE LOCATION.

WALL HEIGHTS:
ALL INTERIOR NON-BEARING WALLS GO TO BOTTOM OF TRUSS, U.O.N. REFER TO STRUCTURE.

WALL SUBSTRATES:
- DINING ROOM:
1/2" GYPSUM WALLBOARD FROM FLOOR SLAB TO 6" ABOVE CEILING HEIGHT U.O.N. SEE 6 & 8/A6.3 (NOTE: THE CEMENT BOARD SPECIFICATION IS DESIGNED TO ALLOW THE G.C. FLEXIBILITY.)
- KITCHEN WALLS AND DINING ROOM CLOSET:
1/2" CEMENT WALLBOARD FROM T.O. SLAB T.O. 12" A.F.F. AT 12" A.F.F., USE 1/2" CDX PLYWOOD W/FRP SURFACE FINISH TO 6" ABOVE CEILING HEIGHT U.O.N. IF DOUBLE SIDE SHEAR WALL PLYWD IS SPECIFIED THE PLYWOOD SHALL BE CONTINUOUS FROM SILL PLATE TO TOP PLATE. SEE 4/A6.3.
- RESTROOM WALLS:
5/8" CEMENT WALLBOARD FROM T.O. SLAB OR T.O. CONCRETE CURB TO 48" A.F.F., WITH 5/8" HI-IMPACT BRAND XP WALLBOARD, TYPE X CORE FROM T.O. CEMENT BOARD TO 6" ABOVE CEILING HEIGHT U.O.N. NO SUBSTITUTIONS ALLOWED. FINISH AS SCHEDULED.
- ALL OTHER FRAME WALL CONDITIONS:
1/2" CEMENT WALLBOARD FROM T.O. SLAB OR T.O. CONCRETE CURB TO 48" A.F.F., WITH 1/2" GYPSUM WALLBOARD FROM T.O. CEMENT BOARD TO 6" ABOVE CEILING HEIGHT U.O.N. FINISH AS SCHEDULE

WALL LEGEND | E

DIMENSIONS:
A. ALL DIMENSIONS NOTED ARE TO FACE OF CONCRETE FOUNDATION, FACE OF SHEATHING ON EXTERIOR WALLS, AND FACE OF FINISH ON INTERIOR WALLS U.N.O.
B. DIMENSIONS NOTED AS "CLEAR" OR "HOLD" ARE MIN. REQUIRED. NET CLEARANCE FROM FACE OF WALL / WAINSCOT FINISH. VERIFY FINAL EQUIPMENT SIZES W/ VENDOR PRIOR TO INT. WALL FRAMING.

WINDOWS / DOORS:
A. SEE SHEET A1.1 FOR WINDOW TYPES AND DOOR SCHEDULE.
B. ALL DOOR AND WINDOW OPENING DIMENSIONS ARE TO ROUGH OPENING.

FINISH SUBSTRATES:
A. PROVIDE 1/2" THICK CEMENTITOUS BD. FROM FLOOR SLAB TO 12" A.F.F. MIN. IN LIEU OF GYP. BD. AT ALL WALLS EXCEPT SHEARWALL SURFACES, U.O.N.
B. ALL JOINTS, GAPS OR SPACES LEADING TO ALL HOLLOW OR INACCESSIBLE SPACES SHALL BE SEALED WITH "NSF INTERNATIONAL" APPROVED SEALANTS.
C. ALL BACK OF HOUSE AND OFFICE WALLS SHALL HAVE 1/2" CDX PLYWOOD SUBSTRATE, U.O.N.

DECOR:
A. SEE A2.0 FOR SEATING PLAN AND DETAILS.
B. SEE A7.0 FOR FLOOR FINISHES.
C. SEE A8.0 - A8.3 FOR WALL FINISHES.
D. SEE A7.1 FOR CEILING FINISHES.

GENERAL:
A. PROVIDE THREE FIRE EXTINGUISHERS - (2) 10 lb. BC AND (1) 10 lb. ABC - TO COMPLY WITH LOCAL FIRE CODE. LOCATE PER DIRECTION OF FIRE MARSHALL OR LOCAL AUTHORIZING AGENT. FOR ADDITIONAL INFORMATION SEE SHEET A2.0
B. DRAWINGS ARE BASED UPON WOOD FRAMING. UTILIZATION OF METAL STUDS ON NON-BEARING INTERIOR PARTITONS, BULKHEADS AND SOFFITS IS ACCEPTABLE.

FLOOR PLAN NOTES | D

202 NO FRP BEHIND W-059 WALK-IN COOLER/FREEZER.
203 PIPE BOLLARD. SEE CIVIL DRAWINGS.
204 HOOD WALL. SEE WALL LEGEND.
208 KEEP CLEAR FOR UTILITIES & SYRUP LINES.
210 S.S. CORNER GUARD/WALL CAP [TM-2], TYP. ALL CORNERS IN BACK OF HOUSE FROM REAR WALL TO THE KITCHEN SIDE OF THE SERVICE COUNTER. SEE DETAIL 14/A6.3.
213 SYRUP LINE CHASE (ABOVE).
214 14"x14" HORIZONTAL OPENING FOR SYRUP TUBES. COORDINATE WALL PENETRATION WITH COUNTER INSTALLER. SEAL CHASE TO COUNTER.
215 ROOF LADDER.
216 ADD SECOND 2X4 WALL ON KITCHEN SIDE.
220 SPLASH GUARD. SEE DETAIL 9/A6.3.
225 FUR OUT WALL AS INDICATED WITH 2X4 WOOD STUDS AT 16" O.C.
228 LOW WALL, BY G.C. COORDINATE WITH STRUCTURAL DRAWINGS
231 CORNER GUARD TILE SCHLUTER. SEE DETAIL 15/A6.3.

KEY NOTES | B

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
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JOB NO.:	2018088.64

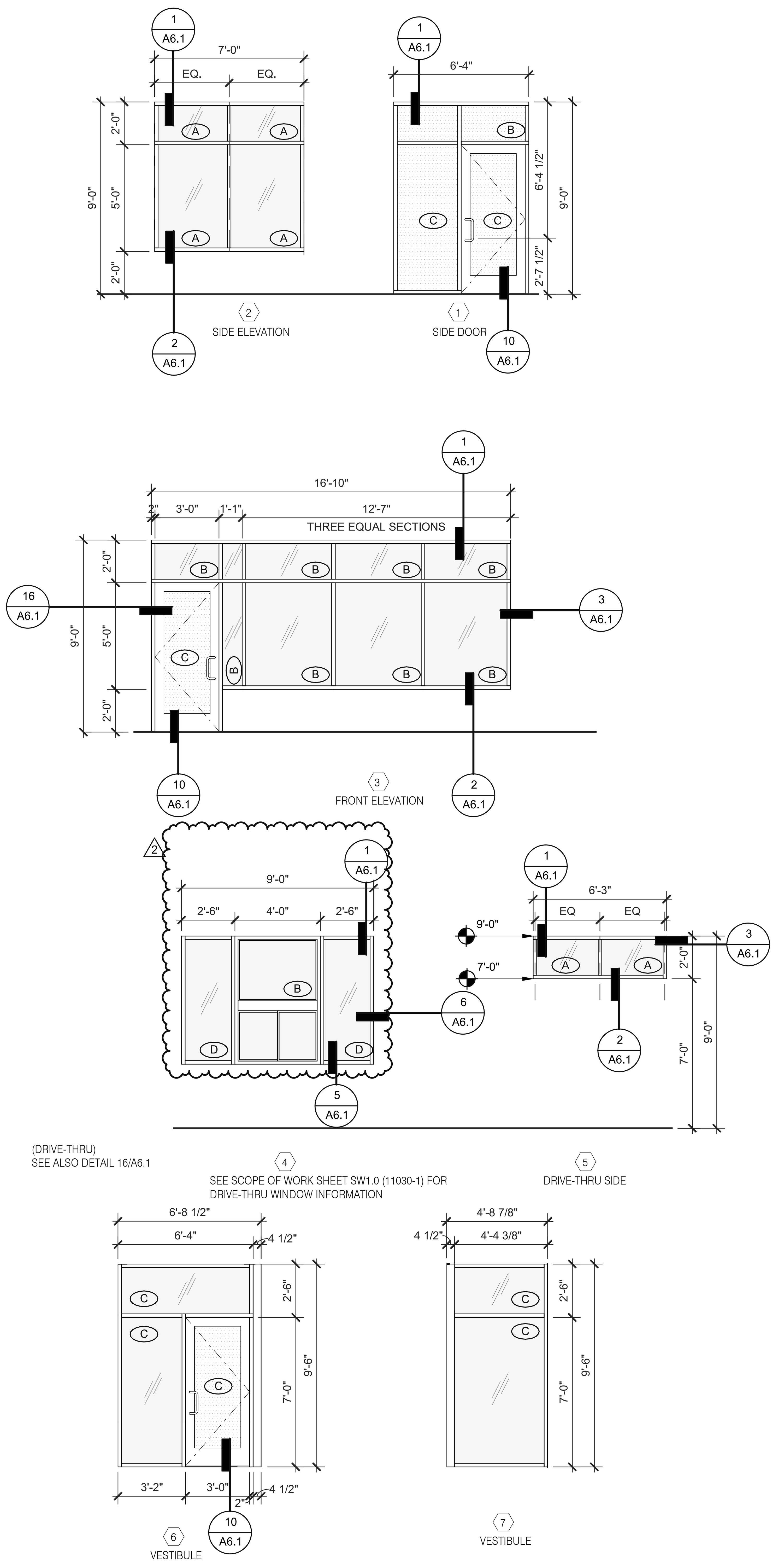
TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
FLOOR PLAN

A1.0

PLOT DATE: 7/12/2021 9:52:04 AM



NOTE: ELEVATIONS DRAWN AS VIEWED FROM EXTERIOR OF BUILDING.

WINDOW TYPES 1/4" = 1'-0" 9

1. DIMENSIONS ON THIS DRAWING ARE TO FRAME EDGE. REFER TO SHEETS A1.0 FOR ROUGH OPENING DIMENSION
2. SEE SCHEDULE FOR GLASS TYPES.
3. REFER TO FLOOR PLAN, ELEVATIONS AND WALL SECTIONS FOR ROUGH OPENING DIMENSIONS.
4. ALL STOREFRONT MATERIAL AND GLAZING SHALL BE SUPPLIED AND INSTALLED BY G.C., U.O.N.

NATIONAL ACCOUNTS SUPPLIER

INTERIOR DOORS, FRAMES & HARDWARE	HAMILTON PARKER
LOCKNET CONSTRUCTION@LOCKNET.COM 800 JOHN C. WATTS DR. NICHOLASVILLE, KY 40356 855-432-4613 FAX: 877-887	JIM CAMPBELL D. 614-358-7806 E-MAIL: JIM CAMPBELL@HAMILTON PARKER.COM

STOREFRONT SPECIFICATION

STOREFRONT	GLAZING
OLD CASTLE FG-3000	VITROGLAZINGS SOLARBAN 70 SOLAR CONTROL LOW-E GLASS

SEE EXTERIOR ELEVATIONS FOR STOREFRONT COLOR

GLASS SCHEDULE

- (A) 1" INSULATED GLASS
- (B) 1" INSULATED TEMPERED GLASS
- (C) 1/4" TEMPERED GLASS
- (D) SAFETY GLASS BY MFR.

NOTE:
SHADING COEFFICIENT SPECIFICATION PER LOCAL CODE REQUIREMENTS. DAYTIME VISIBILITY INTO DINING ROOM SHALL BE MAINTAINED.

****ALL STOREFRONT GLAZING SHALL BE LOW "E" SOLAR GLASS****

GREEN

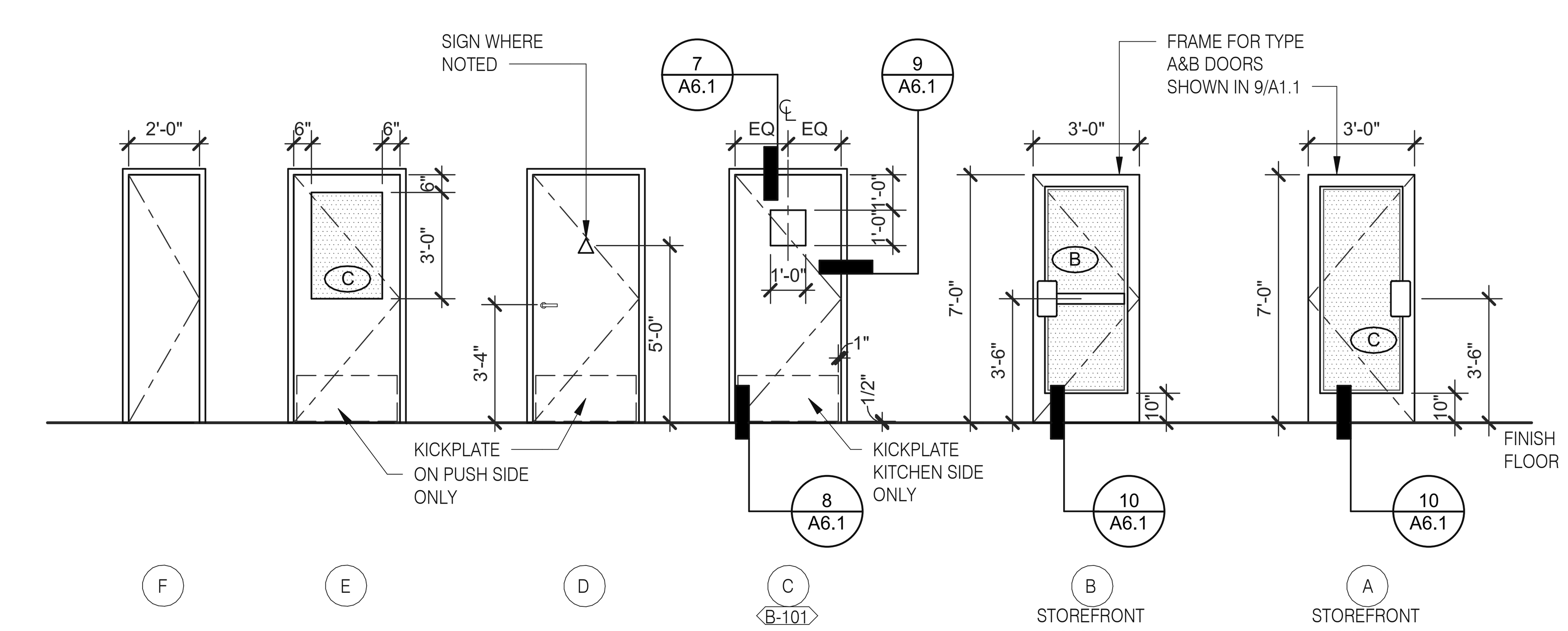
NOTES 4

1. LAMINATE DOORS 4, 5, 6 & 7 AND PAINT FRAMES 3, 4, 5, 6 & 7. SEE INTERIOR ELEVATION, SHEET A8.0, A8.1 & A8.2.
2. ALL HARDWARE SHALL BE US32D U.O.N.
3. ALL HM FRAMES SHALL BE 16 GA. STEEL U.O.N.
4. ALL LOCKS SHALL BE FALCON 6 PIN INTERCHANGEABLE CORE SUPPLIED AND INSTALLED BY THE G.C. ALL EXTERIOR LOCKS SHALL BE PROVIDED WITH CONSTRUCTION CORES. ALL PERMANENT CORES SHALL BE KEYED ALIKE.
5. PERMANENT CORES SHALL BE SHIPPED TO THE RESTAURANT GENERAL MANAGER.
6. MOUNT DOOR CLOSERS ON RESTROOM OR KITCHEN SIDE ONLY.
7. LOCKNET SECURITY DOOR. COMPLETE DOOR, FRAME, AND HARDWARE PACKAGE PROVIDED BY RSCS FACILITIES CONNECTIONS.
8. PROVIDE PUSH/PULL PLATES. IF REQUIRED BY LOCAL CODE, STOREFRONT DOOR PANIC HARDWARE SHALL BE: DOR-O-MATIC 2092 RIM PANIC HARDWARE AND EXTERIOR PULLS WITH QUALITY #520 DOOR PULL.
9. MOUNT KICKPLATE ON PUSH SIDE ONLY.
10. MAXIMUM DOOR OPERATING PRESSURE: 5 LBS INTERIOR, 8.5 LBS EXTERIOR.
11. ADA COMPLIANT ACCESSIBILITY SIGNAGE, INCLUDE BRAILLE AS REQUIRED BY LOCAL JURISDICTION - (1) MEN, (1) WOMEN. SEE G4.0.
12. RESTROOM SIGN REQUIRED. SEE G4.0.
13. INSTALL WITH APPLIED DOORS STOPS AND WEATHER STRIPS.
14. FRAMES SHALL BE PAINTED. SEE INTERIOR OR EXTERIOR ELEVATIONS.
15. PROVIDE LATCH AND STRIKE PLATE HARDWARE BY DOOR MFR. TO BE COMPATIBLE WITH LOCK.
16. NOT USED.
17. NOT USED.
18. GC TO TRIM DOOR SWEEP TO FIT DOOR.

DOOR SCHEDULE NOTES 1

DOOR NO.	ROOM NAME	DOOR SIZE			TYPE	DOOR	FRAME	BUTTS				LOCKS							CLOSERS			KICK PLATE			THRESHOLD				DOOR STOP			PUSH	PULL	MISCELLANEOUS						DETAIL LOCATIONS			DOOR NOTES
		WIDTH	HEIGHT	THICK				1	2	3	4	1	2	3	4	5	6	7	1	2	3	1	2	3	1	2	3	4	1	2	3			1	2	3	4	5	6				
					SEE DOOR TYPE ELEVATIONS			ONE PAIR OFSET PIVOTS PER DOOR MANUFACTURER, TOP & BOTTOM	1 1/2 PR McKinney #TA2731, 4-1/2" X 4-1/2"	CONT. HINGE INCLUDED IN PACKAGE	H.D. TYPE 304 S.S. BOBRICK SPRING LOADED	YALE B-PB5405LN	YALE B-PB5407LNIC	FULL LENGTH LATCH PROTECTION INCL. IN PACKAGE	PANIC HARDWARE INCLUDED IN PACKAGE	FALCON C953-7 OR C987-7 AS REQUIRED	FALCON D271 OCCUPANCY INDICATING DEADBOLT	FALCON 1690 CONCEAL VERTICAL PANIC HARDWARE	DORMA 8616 x 689	CLOSER INCLUDED IN PACKAGE	DORMA 7414 ARP SNB 689	STAINLESS STEEL 10" X .050 X 2" L.T.D.W. *	KICKPLATE INCLUDED IN PACKAGE		ACCESSIBLE ALUMINUM THRESHOLD BY DOOR MFR.	THRESHOLD INCLUDED IN PACKAGE			FLOOR STOP - ROCKWOOD 441 CU	HINGE STOP - ROCKWOOD 532.NP	WALL STOP - ASA 0714 COAT HOOK W/ BUMPER	PUSH PLATE ROCKWOOD 70F - 8" X 16"	PULL PLATE TRIMCO 1017-3B - 4" X 16"	XCLUDER PEST CONTROL DOOR SWEEP #162622	SWEEP (VISTA 231 STD) NGP 101VA	UNDERCUT 3/4"	PROVIDE A SIGN STATING "THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS" GREEN	COAT HOOK - BOBRICK	DOOR SIGN	HEAD	JAMB	SILL	* LESS THAN DOOR WIDTH
1	DINING	3'-0"	7'-0"	1 3/4"	A	AL	AL	X								X		X	X						X										X		X					10/A6.1	8, 10, 13, 15
2	ENTRANCE	3'-0"	7'-0"	1 3/4"	A	AL	AL	X								X		X	X						X										X		X					10/A6.1	8, 10, 13, 15
3	KITCHEN	3'-6"	7'-0"	1 3/4"	C	HM	HM			X				X	X					X			X			X								X						7/A6.1	11/A6.1	8/A6.1	6, 7, 10, 14, 18
4	MEN	3'-0"	7'-0"	1 3/4"	D	WD	HM		X								X				X	X									X		X	X			X		X	X	6/A6.4	6/A6.4		6, 9, 10, 11, 12, 14
5	WOMEN	3'-0"	7'-0"	1 3/4"	D	WD	HM		X								X				X	X									X		X	X			X		X	X	6/A6.4	6/A6.4		6, 9, 10, 11, 12, 14
6	OFFICE	3'-0"	7'-0"	1 3/4"	E	WD	HM		X				X									X			X				X							X				6/A6.4	6/A6.4		9 OPTIONAL
7	CLOSET	2'-0"	7'-0"	1 3/4"	F	WD	HM		X				X																							X				6/A6.4	6/A6.4		9 BOTH SIDES, 14
8	PASSAGE	3'-0"	7'-0"	1 3/4"	A	AL	AL	X										X	X																								10, 13

DOOR SCHEDULE 2



NOTE: ELEVATIONS DRAWN AS VIEWED FROM EXTERIOR OF BUILDING OR OUTSIDE ROOM.

DOOR TYPES 3

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
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TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0

DOOR & WINDOW ELEVATIONS & SCHEDULES

A1.1

PLOT DATE: 7/12/2021 9:52:05 AM

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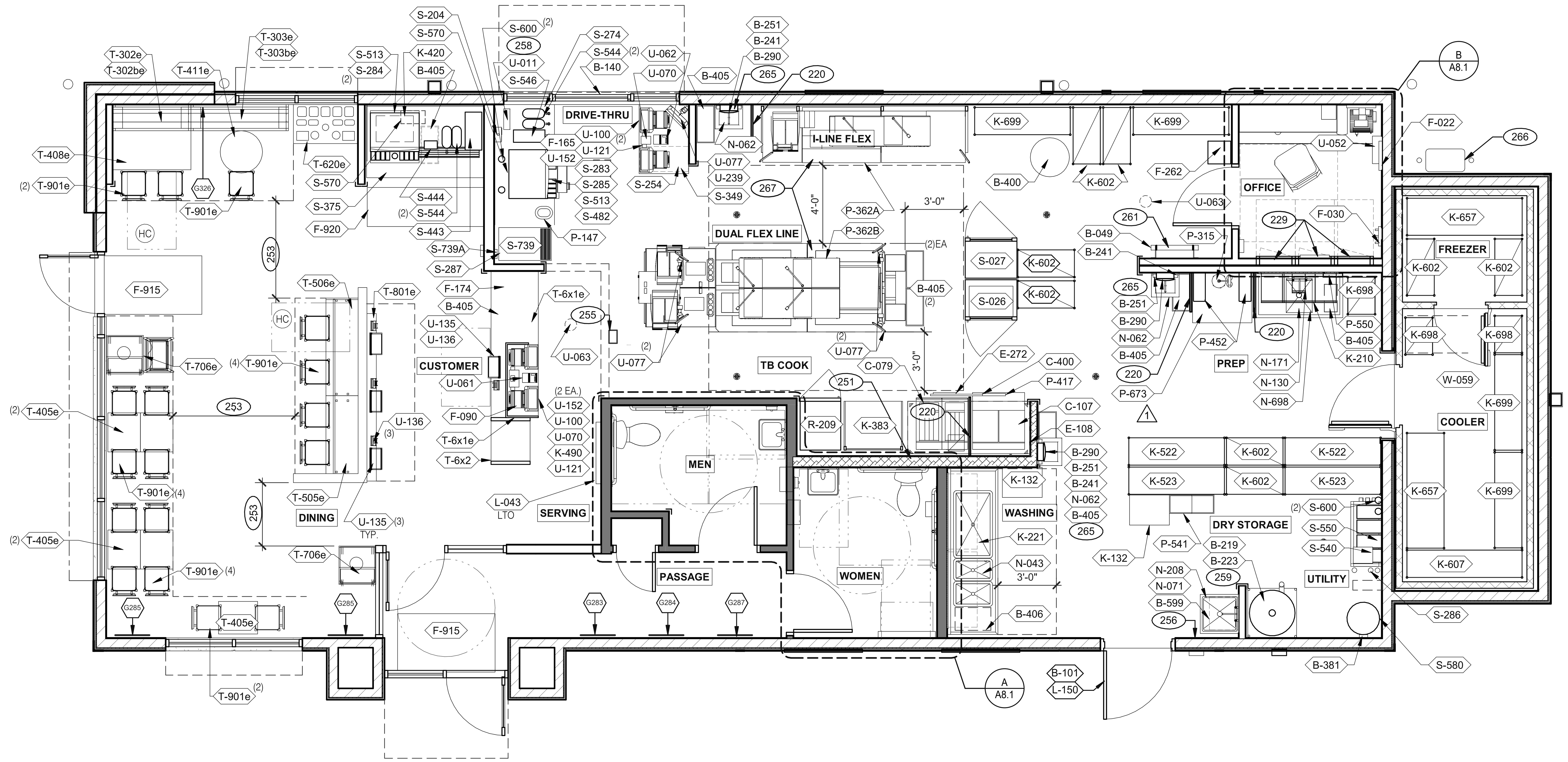

EQUIPMENT AND SEATING PLAN 1/4" = 1'-0" A

TAG	QTY	ITEM DESCRIPTION
T-6x1e	1	GO MOBILE COUNTER
T-6x2	1	25in. TOGO Cubby
T-302be	1	BENCH BACK REST - 60"
T-302e	1	BENCH SEAT - 48"
T-303be	1	BENCH BACK REST - 60"
T-303e	1	BENCH SEAT - 60"
T-405e	5	LAMINATE TABLE - 24 X 20 X 30 - 2 TOP
T-408e	1	LAMINATE TABLE ADA - 24 X 48 X 30 - 4 TOP
T-411e	1	SS TABLE - 24 DIA X 30 - 2 TOP
T-505e	1	COUNTER TOP - 48" X 20" X 30"
T-506e	1	COUNTER TOP - 60" X 20" X 30"
T-620e	1	CONDIMENT COUNTER - RECTANGLE
T-706e	2	WASTE ENCLOSURE - SINGLE
T-801e	1	KIOSK 1/2 TOWER
T-901e	17	CHAIR - LAMINATE SEAT

TAG	QTY	ITEM DESCRIPTION

FURNITURE PACKAGE - BY FURNITURE VENDOR U.O.N. E

X	QTY.	NAME	FAMILY	FRAME OR MURAL	SIZE	LOCATION
G326	1	GM - LP MURAL	E	M01	CUSTOM	SEE A8.0
G283	1	GM - CW	E	F01	28x40	SEE A8.0
G284	1	GM - BELL	E	F02	28x40	SEE A8.0
G285	1	GM - ORG	E	F01	28x40	SEE A8.0
G286	1	GM - LP	E	F01	28x40	SEE A8.0
G287	1	GM - CW2	E	F01	28x40	SEE A8.0
G608	1	GM - EXT1	E	M03	TBD	SEE A4.0
		THIS MURAL WILL BE PRINTED ON THREE SECTIONS OF EXPRESSION PANEL MATERIAL AND ASSEMBLED INTO ONE LARGE FRAME AND MOUNTED ON WALL.				
G522		GM - HOT	E	M02	48x96	SEE A4.1
G523		GM - SKIP THE LINE	E	M02	48x96	SEE A4.1

ARTWORK SCHEDULE D

DECOR
1. REFER TO SC SHEETS FOR SCOPE OF WORK RESPONSIBILITY
2. (HC)- SYMBOL DENOTES A HANDICAP ACCESSIBLE TABLE.

GENERAL NOTES C1

STORAGE TYPE	LINEAR FT.
DRY STORAGE (revision 1)	50
COLD STORAGE	26
FROZEN STORAGE	12

SHELVING QUANTITIES C2

220 SPLASH GUARD. SEE DETAIL 9/A6.3.
229 ELECTRICAL PANELS.
251 HOOD FIRE SUPPRESSION SYSTEM (ANSUL R-102 OR EQUAL).
253 MAINTAIN 36" MIN. CLEAR ACCESSIBLE AISLE EGRESS PATHS TO EXIT DOORS, 32" AT DOORWAYS AND CASED OPENINGS. (42" AISLE REQUIRED WHEN AISLE SERVES MORE THAN 50 SEATS).
255 ALERT LIGHT BOX FOR 3-COMP POWER SOAK.
256 PULL STATION @ 3'-8" A.F.F.
258 COORDINATE LOCATION OF HORIZONTAL PVC SYRUP CHASE THRU WALL TO COUNTER.
259 6" HIGH WATER HEATER PLATFORM.
261 ROOF LADDER WITH BILCO LADDER UP SAFETY POST.
265 AUTOMATIC HAND SOAP AND SANITIZER DISPENSERS PROVIDED BY ECOLAB.
266 GAS METER.
267 FOR DUAL-FLEX LINE AND I-FLEX LINE SUB-EQUIPMENT SEE SHEET A8.3.

(XXX) KEY NOTES B

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TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
EQUIPMENT AND SEATING PLAN

A2.0

PLOT DATE: 7/12/2021 9:52:12 AM

CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT

EQUIPMENT SCHEDULE

TAG	#	G.C. INSTALL	ITEM DESCRIPTION	MFR. & MODEL NUMBER	PLUMBING	ELECTRICAL	GAS	REMARKS
B CONTRACTOR BUILDING ELEMENTS								
B-049	1	X	ROOF LADDER	PRECISION LADDER #PH-G2-6X3-0				
B-050	1	X	ROOF HATCH	PRECISION LADDER #PH-G-2-6X3-0				
B-101	1		SECURITY DOOR	RSBS FACILITIES CONNECTION				SECURITY DOOR PER QUOTE LOCKNET TAN STEEL. INCLUDES: STEEL FRAME
B-140	1	X	DT WINDOW	QUICKSERV#SC4030BR - SELF CLOSING, R/H HANDLE, OPENS RIGHT				FINISH TO MATCH STOREFRONT, DARK BRONZE
B-219	1	X	WATER HEATER DUNNAGE RACK	NEW AGE INDUSTRIAL CORP., INC #98147				
B-223	1	X	98% HIGH EFFICIENCY 199 MBH, 100 GAL. GAS WATER HEATER	A.O. SMITH BTH-199 100 CYCLONE HE	X		X	△1
△1 B-241	5	X	SOAP DISPENSER (WALL MOUNT)	KAY 3741				
B-251	3	X	SANITIZER DISPENSER (WALL MOUNT)	KAY 3741				
B-253	2	X	PAPER TOWEL DISPENSER/TRASH 12 GAL.	BOBRICK #B-3944				
B-265	2	X	MIRROR, 18 x 36	BOBRICK #B-165-1836				
B-275	2	X	TOILET PAPER DISPENSER	BOBRICK #B-2890				
△1 B-290	3	X	PAPER TOWEL DISPENSER	BOBRICK #B-262				
B-300	2	X	GRAB BAR 1-1/2 DIA. X 42 S.S. FIN.	BOBRICK #B6806X42				
B-305	2	X	GRAB BAR 1-1/2 DIA. X 48 S.S. FIN.	BOBRICK #B6806X48				
B-310	2	X	GRAB BAR VERTICAL 1-1/2 DIA. X 18 S.S. FIN.	BOBRICK #B6806X18				
B-320	1		CHANGING STATION					
B-381	1	X	CO2 CARBON DIOXIDE SENSOR/WARNING	LogiCO2 CO2 MK9 SENSOR		X		
B-400	1	X	WASTE BASKET - 32 GALLON	RUBBERMAID #2632 (GREY)				
△1 B-405	8	X	WASTE BASKET					
B-406	1	X	WASTE BASKET	RUBBERMAID 28 QT #2956 (BLACK)				
B-410	1	X	SANITARY NAPKIN RECEPTACLE	RUBBERMAID #6140				
B-599	1	X	MOP SINK SHELVING	SPG #WST806Y				
C COOKING EQUIPMENT								
C-079	1	X	DUAL FRYER	FRYMASTER #2FQG30U		X	X	COMES WITH GAS HOSE KIT (OPTIONAL: PITCO #TB-SSHLV14-2/FD VS7)
C-107	1	X	RETHERMALIZER	PITCO #TB-SRTG14-2	X	X	X	
C-197	3	X	TOASTER, SPLIT LID	PROLUXE SL1266TB		X		POWERED BY PRODUCTION LINE - (OPTIONAL: STAR #PSC14DTB)
C-254	3	X	CHEESE MELTER (SINGLE)	A.J.ANTUNES #CM-100	X	X		POWERED BY PRODUCTION LINE
C-400	2	X	RETHERMALIZER TIMER	FAST #TBZAP12120V		X		
E EXHAUST HOODS/FIRE SUPPORT								
E-108	1	X	STROTEVENT 106 IN. H X 111 IN. L BACK SPLASH	STROTEVENT MODEL #BACKSPLASH106X111FLA		X		
E-272	1	X	TIMER OUTLET			X		
F OFFICE/EMPLOYEE/MUSIC/MISCELLANEOUS								
F-014	1	X	FILE CABINET (2 DRAWER HIGH) 18X36X27H	HON #582LL				
F-021	1	X	CHAIR - OFFICE	HON #4609AB10				IN OFFICE AREA, SEE SHEET A8.2
F-022	1	X	LICENSE FRAME (BLACK)	CREATIVE PALETTE TB30		X		IN OFFICE AREA
F-026	1	X	DESK LAMP	TBD				IN OFFICE AREA, SEE SHEET A8.2
F-030	1	X	COAT HOOK	ISS #HOOK246R2Y		X		IN OFFICE AREA
F-040	1		OFFICE COMPUTER	POS PROVIDED		X		IN OFFICE AREA, SEE SHEET A8.2
F-050	1		CREDIT CARD SATELLITE ROUTER JUNCTION					
F-060	1		MONITOR - OFFICE	YUM				
F-080	1		OFFICE PRINTER/COPIER/FAX/SCANNER	POS PROVIDED		X		
F-090	4		UPS (UN-INTERUPTABLE POWER SUPPLY)	POS PROVIDED		X		
F-102	1	X	MONEY COUNTER	TELLERMATE #TIXR3000		X		IN OFFICE AREA
F-131	1		SPEAKERS	MOOD MEDIA LOCAL LEASE		X		
F-165	2	X	FRONT LOAD SAFE	PERMA VAULT #PRO-10TM				
F-174	1		SAFE WITH TOUCH SCREEN CONTROLS			X		
F-211	1	X	CLOCK	B&B SYSTEMS #02100100				IN OFFICE AREA, SEE SHEET A8.2
F-262	1	X	6 COUNT EMPLOYEE LOCKERS E76000235	LYON WORKPLACE 12" X 18" X 78" GREY		X		IN OFFICE AREA
F-270	1	X	FIRST AID KIT	PROSTAT FIRST AID LCC #2617		X		IN OFFICE AREA
F-500	1		STACKABLE HIGH CHAIR					
F-504	1		DVR & MONITOR					
F-915	2		FLOOR MAT	CREWSAFE, ENTRANCE I #41150012				RUBBERIZED - 3'-5', RIBBED, CHARCOAL, WSM #800503
F-920	1		RUBBER MAT	CREWSAFE, WSM#800507				RUBBERIZED - BLACK 2X8, 1/4 NON SLIP CORRUGATED TOP & RUBBER NO-SLIP BACK ENTRANCE
K WORKSTATIONS/SHELVING/CARTS								
△1 K-132	2		CART, CLOSING MADE SIMPLE	SPG / ISS (Alternate: METRO)				#WST1434Y
K-210	1		PREP SINK WORKSTATION 50 TRACK	SPG / ISS (Alternate: METRO)				#WST255E, Wall Trax System for 1-Comp Sink, 16X50X40 + ACC
K-221	1	X	3 COMP SINK WORKSTATION 96 TRACK	SPG / ISS (Alternate: METRO)				#DS1F, Wall Trax System for 3 Comp Sink, (3) 18X24 GRIDS + ACC
K-383	1		FRY WORKSTATION 30D x 78H x 36 in.	SPG / ISS (Alternate: METRO)				#WST1724E, 36 in. Crispy Frystation
K-420	1		SHELF, BEV PLATFORM 18X24	SPG / ISS (Alternate: METRO)				#WST34Y: F/CARBONATOR, &/OR RECIRC PUMP
K-490	2		SHELVING 18x24x24, 2-TIER	SPG / ISS (Alternate: METRO)				#WST440Y
K-522	2		SHELVING, 18x60x76, 5-TIER, SMALL PACKAGING	SPG / ISS (Alternate: METRO)				#WST1548Y
K-523	2		SHELVING, 18x60x76, 3-TIER, CUP & LID	SPG / ISS (Alternate: METRO)				#WST1580Y
△1 K-602	8		SHELVING, 18x36x86, 5-TIER, DRY STORAGE	SPG / ISS (Alternate: METRO)				#WST238Y
K-607	1		SHELVING	SPG / ISS (Alternate: METRO)				
K-657	2	X	SHELVING 24x72x86, 5-TIER	SPG / ISS (Alternate: METRO)				#SU247285Y: WALK-IN COOLER 24X72X86
K-698	3		SHELVING 18X24X74, 5-TIER	SPG / ISS (Alternate: METRO)				#SU186075Y
K-699	4		SHELVING 18x60x74, 5-TIER	SPG / ISS (Alternate: METRO)				#SU186075Y
L LIGHTING/SIGNAGE/MENUBOARDS								
L-043	1		DIGITAL MENU BOARD	STRATACACHE, LG 43" DISPLAY		X		
L-150	1	X	SECURITY DOOR DANGER SIGN	ADVERCO#ADVCUSTOM				ORDERED DIRECT FROM YRFS
N SINKS/DISHWASHER								
N-043	1	X	3-COMP POWER SOAK 102	UNIFIED #PS6750	X	X		GEN IV POWERSOAK INCLUDES T&S FAUCET #B-2475-PS-OH (FRANCHISE OPTION: GEN III)
△1 N-062	3	X	STAINLESS STEEL WALL MOUNTED SINK WITH FAUCET	AERO #HS-MOD	X			
N-071	1	X	MOP SINK FAUCET	T&S B-2465	X			
N-130	1	X	1 COMP PREP SINK FAUCET	T&S B-0831-WA	X			FRANCHISE OPTION N-134: T&S B-2465
N-141	2	X	WALL MOUNTED LAVATORY	AMERICAN STANDARDS BRAND	X			WHITE VITREOUS CHINA WALL MOUNTED LAVATORY WITH ACCESSORIES. N-141 IS METERED FAUCET.FAUCET, LAVATORY, CENTERSET MIXING, #B-0890-WS
N-146	2	X	FAUCET (RESTROOMS)	T&S FAUCET B-0831-WA	X			2" TWIST TYPE FOR N-698
N-171	1		LEVER WASTE DRAIN		X			
N-208	1	X	MOP SINK	AERO #3MP-2121-6/1P	X			INCLUDES (2) 24X36 WALL PANELS
N-698	1	X	1 COMP PREP SINK 53W X 27D X 35 1/2H	AERO #2F1211617LR	X			
P FOOD PREPARATION								
P-147	1		BUNN COFFEE BREWER	MCA BLK Single Serve #35400.0005		X		
P-315	1	X	REVERSE OSMOSIS SYSTEM	3M #56123-06, FSTM-075	X			INSTALL OVER FLOOR SINK
P-362A	1	X	FLEX I LINE, L-R	FRANKE	X	X		
P-362B	1	X	FLEX DUAL LINE	FRANKE	X	X		
P-417	1	X	8-CHANNEL TIMER	FAST #KTRACK2X4TB		X		
P-452	2	X	HOT WATER SYSTEM	BUNN-MACHINE #43600.0014	X	X		Each System= Water Heater #43600.0014, Bracket #13125.0003, Shelf#12599.0000, Scale Inhibitor #39000.0001
P-541	1		STORAGE BINS	B4B SYSTEMS #03070100				
P-550	1	X	KNIFE RACK	EDLUND #KR-699				
P-673	1		WORK TABLE					

TAG	#	G.C. INSTALL	ITEM DESCRIPTION	MFR. & MODEL NUMBER	PLUMBING	ELECTRICAL	GAS	REMARKS
S SERVING/DRIVE-THRU								
S-023	1	X	WARMER, EVO	CARTER HOFFMAN		X		MOUNT ON PRODUCTION LINE OVER SHELF
S-024	2	X	WARMER, EVO	CARTER HOFFMAN		X		MOUNT ON PRODUCTION LINE OVER SHELF
S-026	1	X	HEAT CABINET - FULL HEIGTH - (1) RH	CRESCOR #H137S27D1TB		X		W/8 SHELVES EACH
S-027	1	X	HEAT CABINET - FULL HEIGHT - (1) RH	CRESCOR #H137S27D1TB		X		W/ 8 RACKS
S-065	1	X	DESSERT TOWER	HATCO #GRBW-24D				
S-204	1	X	DRIVE-THRU TIMER SYSTEM	HME #C11422TB		X		
S-254	1		CONDIMENT RACK	PRONTO #CHPWO446				
S-274	1	X	DRIVE-THRU BEVERAGE WORKSTATION	SPG WST1242YA				OPTIONAL: METRO
S-283	1	X	DRINK STAGER WITHOUT STRAW HOLDER	WST788E				
S-284	1		BEVERAGE DISPENSER - SELF-SERVE	CORNELIUS 611057625	X	X		SEE SCOPE OF WORK (PEPSI)
S-285	1		BEVERAGE DISPENSER - DRIVE THRU	SERVEND	X	X		SEE SCOPE OF WORK (PEPSI)
S-286	1	X	WATER FILTER SYSTEM	SHURFLO #WB6-M3-22-003				FRANCHISEES CAN USE SELECTO #TB5/620-5
S-287	1	X	ISS-TABLE, D/T, TB, 24 IN X36 IN PREASSEMBLED	FBD #1273610021	X	X		
S-349	1		DRIVE-THRU PICK-UP WORKSTATION 30X42	SPG				OPTIONAL:METRO
S-375	1	X	DRINK STATION	CARTER-HOFFMAN	X			S/S, INSULATED DRAIN TROUGH, WEIGHT RATED
S-443	1	X	LID DISPENSER	CAL-MIL ADA TB103				
S-444	1	X	NAPKIN DISPENSER	TOR XPRESSNAP #5555100				
S-482	1		CUP DISPENSER	A.J. ATUNES #DACS60				W/ ANGLED MOUNTING BRICKET OMNITEAM CDB-DTA
S-489	2		SCALE	EDLUND				10#X.1OZ, ELECTRONIC, EDLUND #DS-10 CSTM; WSM #113464
S-513	2		ICE MAKER (PLACED ON TOP OF DRINK MACHINES)	MANITOWOC, KMS-1401MLJ	X	X		W/ROOF MOUNTED CONDENSERS HOSHIZAKI FRANCHISEES CAN USE HOSHISAKI KMS-1230
S-540	1		PEPSI BOOSTER TANK		X	X		SEE SCOPE OF WORK (PEPSI)
S-544	4		ICE TEA URN	BUNN/TDO-N-3.5				
S-546	1	X	ICED TEA BREWER	TETLEY TB3Q	X	X		
S-550	1		BAG-IN-BOX SYRUP RACK	CORNELIUS/REMCOR BNP12B8P	X			FLO-3REG-2CRB (BY PEPSI)
S-570	2		CARBONATOR	CORNELIUS/REMCOR	X	X		SHELF MOUNTED BELOW EACH DRINK (BY PEPSI)
S-580	1		CO2 BULK TANK	MVE #11805373				
S-600	4		BUNDLED SYRUP LINES	CORNELIUS/REMCOR TUBE BUNDLE	X			SEE SCOPE OF WORK (PEPSI)
S-739	1	X	FROZEN BEVERAGE DISPENSER, REMOTE	FBD #12-7362-00021	X	X		MUST ORDER REMOTE CONDENSER S-739A FREEZE TRANSFORMER
S-739A	1	X	FREEZE TRANSFORMER			X		
S-740	1	X	FROZEN BEVERAGE CONDENSER, REMOTE	FBD #12-3003-0006	X	X		40 IN X 17 IN X 21 IN 208 SINGLE PHASE 2 WIRE 15 AMP, 105LB
U SECURITY/COMMUNICATIONS/FIRE PROTECTION/POS								
U-011	1		BASE STATION - D/T COMM. SYSTEM	HME #C40000-5-HS3-TB				
U-052	1	X	SECURITY SYSTEM	ADT #3BCZTB		X		
U-061	1		CREDIT CARD READER			X		
U-062	1		DRIVE-THRU CREDIT CARD READER	VERIFONE P400		X		
U-063	2		ALARM SENSOR			X		
U-070	3		RECIEPT PRINTER	EPSON		X		2 FOR F/C AND 1 D/T 5.71 IN X 7.68 IN X 5.83 IN
U-076	2		ATOM SERVER	EN POINTE TECHNOLOGIES		X		12V DC 60W SYSE3029ARS011-CSP
U-077	7		TABLET 10.1"	EN POINTE TECHNOLOGIES - TABLET E611101				
U-100	4		POS/ORDER ENTRY TERMINAL			X		2 FOR F/C AND 1 D/T
U-121	3		CASH DRAWER BRACKETS	#SU186075Y				2 PER CASH DRAWER
U-135	4		KIOSK TABLET	SSP		X		
U-136	4		VERIFONE (CREDIT CARD MACHINE	SSP		X		
U-152	3		CASH DRAWER	IBM, NCR & PAR				2 FOR F/C AND D/T
U-239	1		MONITOR CEILING MOUNTED BRACKET	IBM, NCR & PAR				
W WALK-IN COOLERS/FREEZERS								
W-059	1	X	WALK-IN	ICS/NORLAKE #105181	X	X		COMBO, TB, #105181, BUDGETARY 19-4X7X9-2 OAD, MEDIUM BUILDING PROTOTYPE, INCLUDES LED
R REFRIGERATION								
R-209	1		FRY STATION REACH-IN FREEZER (RIGHT HINGED)	DELFIELD #GBF1P-SH-TB2		X		OPTION: LEFT HINGED VERSION - DELFIELD #GBF1P-SH-IK-TB2

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	04.28.21	ISSUED FOR PERMIT
1	06.24.21	HEALTH COMMENTS
2	07.12.21	ISSUED FOR BID

CONTRACT DATE: 04.08.21
BUILDING TYPE: END. MED20
PLAN VERSION: MARCH 2021
BRAND DESIGNER: DICKSON
SITE NUMBER: 313354
STORE NUMBER: 449523
PA/PM: JN
DRAWN BY.: RS
JOB NO.: 2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
EQUIPMENT SCHEDULE

A2.1

PLOT DATE: 7/12/2021 9:52:28 AM

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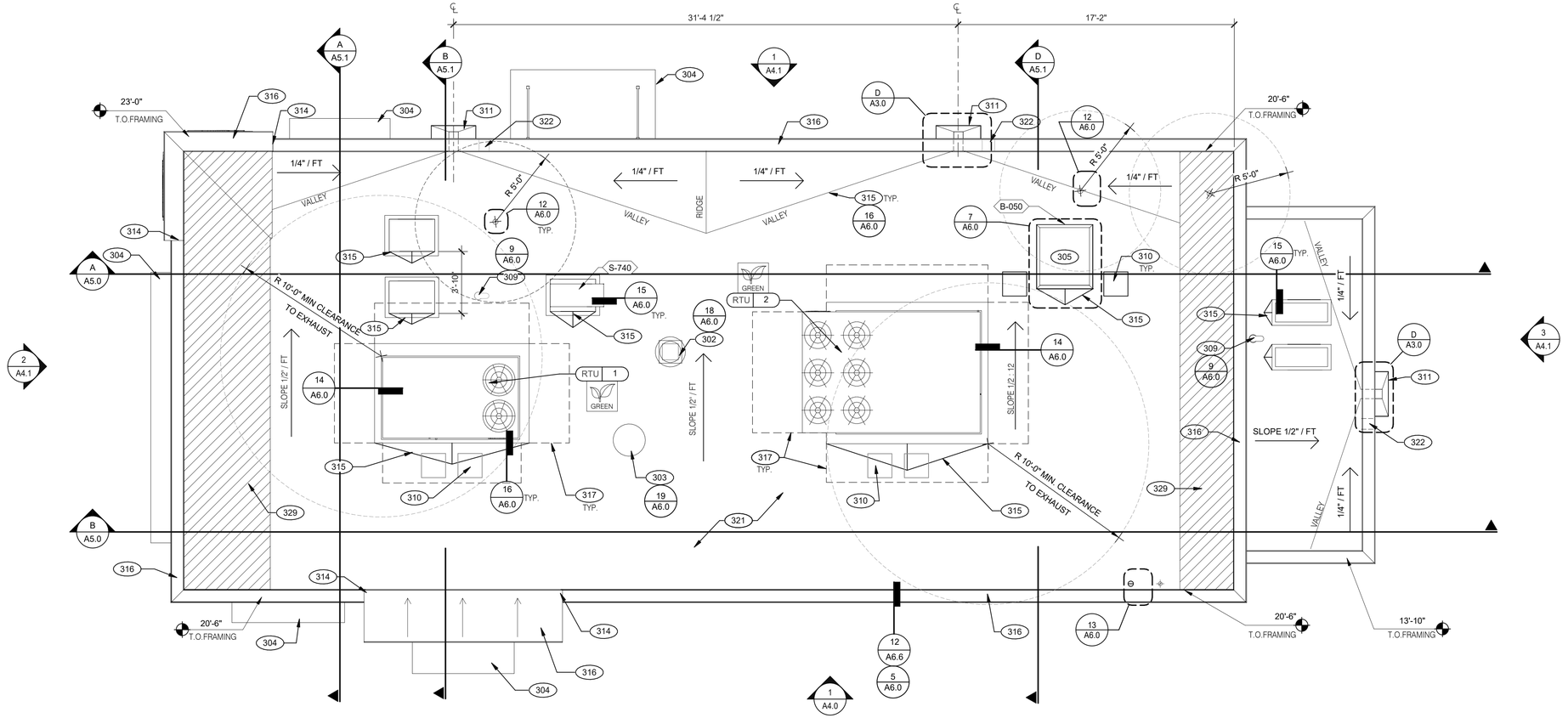

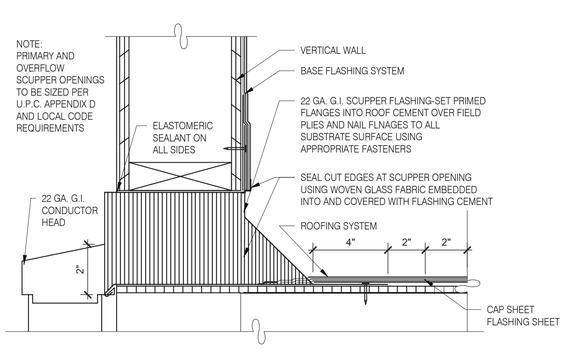

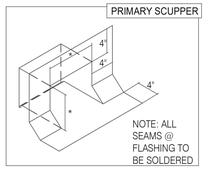

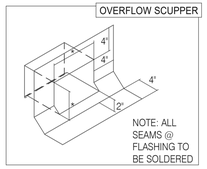

* DESIGN AND SIZE PER LOCAL REQUIREMENTS

SCUPPER FLASHING | D

WATERPROOFING:

A. PAINT UNDERSIDE OF PARAPET CAP FLASHING WITH FACTORY BONDED PAINT GRIP OR PRIMER
B. TOP NAILING AT PARAPET CAP FLASHING WILL NOT BE ACCEPTED
C. PENETRATIONS IN ROOFING MEMBRANE AND FLASHING SHALL ONLY BE MADE AS INDICATED ON THE DRAWINGS OR SPECS.
D. SEE SPECIFICATIONS FOR SEALANT SPECS.
E. ALL SHEETS MTL FLASHONG SHALL BE 22 GA MIN.

MISCELLANEOUS:

A. ROOF PENETRATIONS CLOSER THAN 12" FROM ANOTHER WILL NOT BE ALLOWED.
B. EXHAUST FANS MIN. 10'-0" AWAY FROM ALL AIR INTAKE / SUPPLY.
C. LOCATE WALK-IN CONDENSERS ON ROOF ONLY IF REQUIRED BY CODE.

ROOF PLAN NOTES | C

302 KITCHEN HOOD EXHAUST FAN. SEE SHEETS M3.0 AND DETAIL 19/A6.0.
303 RESTROOM EXHAUST FAN. SEE MECHANICAL DRAWINGS AND DETAIL 18/A6.0
304 CANOPY, BY SIGNAGE VENDOR. SEE SCOPE OF WORK.
305 ROOF HATCH. SEE DETAIL 7/A6.0.
309 PIPE HOOD FOR UTILITIES. SEE DETAIL 9/A6.0.
310 24x36 WALK MATS. SEE ROOF SPECS.
311 SCUPPER AND DOWNSPOUT. SEE DETAIL D/A3.0.
314 CHANGE IN PARAPET ELEVATION. SEE SECTION 13/A6.1.
315 ROOF CRICKET.
316 METAL PARAPET CAP.
317 MAINTAIN MANUFACTURERS ROOFTOP UNIT MAINTENANCE CLEARANCE.
321 'DURO-LAST' SINGLE PLY ROOF MEMBRANE OVER MINIMUM R-35 RIGID INSULATION BOARD OVER 5/8" APA RATED EXTERIOR GRADE PLYWOOD OVER TRUSSES. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
322 OVERFLOW SCUPPER. SEE DETAIL D/A3.0.
329 KICKERS, SEE STRUCTURAL DRAWINGS

KEY NOTES | B

ROOF PLAN 1/4" = 1'-0" | A

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2	07.12.21	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RS
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
ROOF PLAN

A3.0

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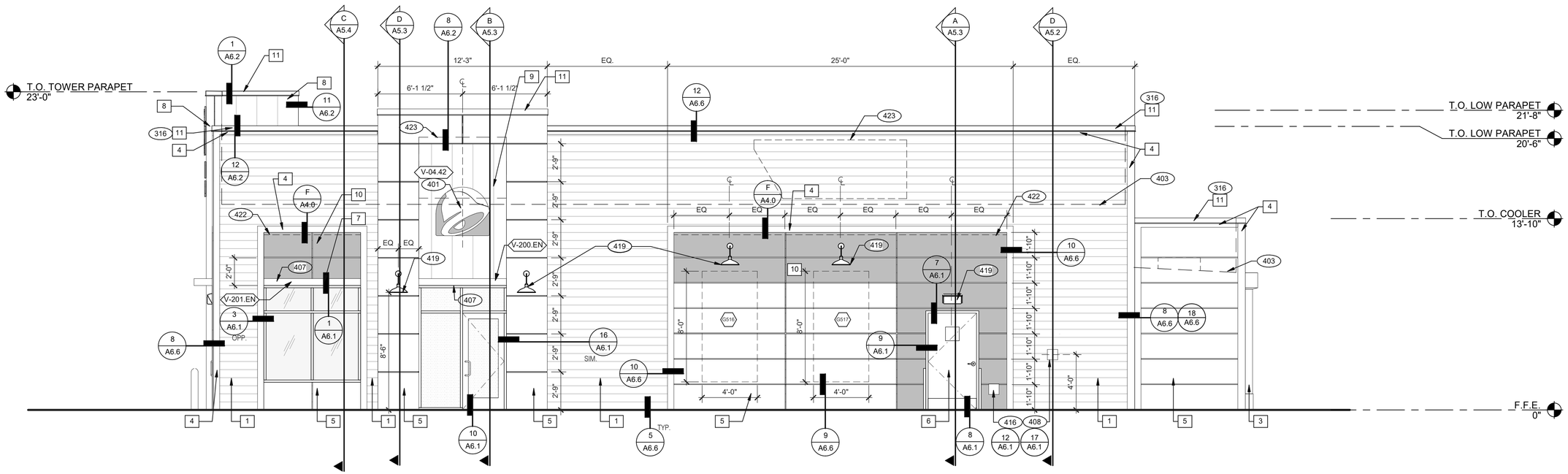
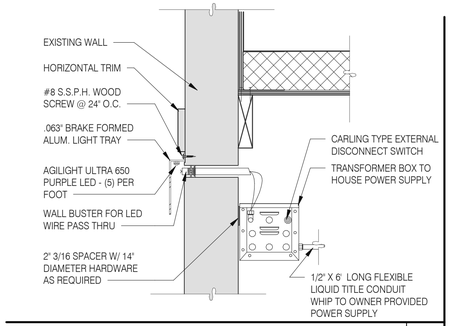


FRONT ELEVATION 1/4" = 1'-0" | **1**



LED WALL WASHER DETAIL | **F**

TYPE MARK	QTY	ITEM DESCRIPTION	LOC
TOWER			
V-09.14W	2	14" WHITE CHANNEL LETTERS VERTICAL	A4.1
V-04.42	2	42" SWINGING BELL PURPLE LOGO FACE LIT	A4.1
SIDE ENTRY			
V-04.42	1	42" SWINGING BELL PURPLE LOGO FACE LIT	A4.0
V-200.EN	1	SIDE ENTRY AWNING 6' 2" L X 6' H X 4' 0" D BLACK	A4.0
DRIVE THRU			
V-101.DT	1	DT AWNING (OVER DT) 9' 0" X 4' 0" BLACK	A4.1
EYEBROW AWNINGS			
V-201.EN	1	SIDE ENTRY EYEBROW (WINDOW) 6' 11" L 6' H X 1' 4" D BLACK	A4.0
V-202.EN	1	FRONT EYEBROW (WINDOW) 16' 9" X 6' H X 1' 4" D BLACK	A4.1
V-203.EN	1	DT EYEBROW (WINDOW) 6' 2" L X 6' H X 1' 4" D BLACK	A4.1

SIGNAGE | **E**

MISCELLANEOUS
A. SEE SHEET A1.1 "WINDOW TYPES" FOR WINDOW ELEVATIONS.

SEALERS (REFER TO SPECS)
A. SEALANT AT ALL WALL AND ROOF PENETRATIONS.
B. SEALANT AT ALL WINDOW AND DOOR FRAMES AND JAMB. DO NOT SEAL SILL @ WINDOWS.
C. APPLY NEOPRENE GASKET (CONT.) BETWEEN BUILDING AND CANOPY.

CRITICAL DIMENSIONS
A. REQUIRED CLEAR OPENING WIDTH TO ENSURE COORDINATION WITH STANDARD SIGNAGE/BUILDING ELEMENTS DIMENSIONS.

NOTE: NO EXTERIOR SIGNS ARE WITHIN THE SCOPE OF WORK COVERED BY THE BUILDING PERMIT APPLICATION. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL EXTERIOR SIGNS AND INSTALLATION OF REQUIRED BLOCKING AND ELECTRICAL CONNECTIONS FOR FINAL APPROVED SIGNS.

GENERAL NOTES | **C**

X	NAME	FAMILY	FRAME OR MURAL	SIZE	LOCATION
G516	HIPNOTIZE ME BELL	D	M02	48x96	A4.0
G517	HIPNOTIZE ME BELL	D	M02	48x96	A4.0
G516	HIPNOTIZE ME BELL	D	M02	48x96	A4.1
G517	HIPNOTIZE ME BELL	D	M02	48x96	A4.1

PAINTING
APPLICATOR MUST DO THEIR DUE DILIGENCE WITH PREPARATION.
PRIMER: 1 COAT SW A24W8300
FINISH: 2 COATS SW A82-100 SERIES, MATCH COLORS FROM MATERIAL SCHEDULE.
A-100 EXTERIOR LATEX SATIN.

PAINT NOTES | **A**

SYMBOL	ITEM/MATERIAL	MANUFACTURER	MATERIAL SPEC	COLOR	CONTACT INFORMATION
1	SIDING	JAMES HARDIE	ARTISAN V-GROOVE 144"L X 8.25"W; 7" EXPOSURE COMES PRIMED FOR PAINT	WORLDLY GRAY (SW7043), SEMI-GLOSS	SEE C / A 7.2
2	SCUPPERS	-	-	WORLDLY GRAY (SW7043), SEMI-GLOSS	
3	DOWN SPOUTS	-	-	WORLDLY GRAY (SW7043), SEMI-GLOSS	
4	HARDIE TRIM	JAMES HARDIE	HARDIE TRIM 5/4 SMOOTH 1"x5.5"	CYBERSPACE (SW7076), SEMI-GLOSS	SEE C / A 7.2
5	HARDIE REVEAL PANEL	JAMES HARDIE	REVEAL PANEL SYSTEM	CYBERSPACE (SW7076), SEMI-GLOSS	SEE C / A 7.2
6	HOLLOW METAL DOOR	-	-	SW PURPLE TB2603C, SEMI-GLOSS	
7	AWNINGS	SIGNAGE VENDOR	-	BLACK BY THE SIGNAGE VENDOR	
8	CORNER TOWER	WESTERN STATE	T-GROOVE 24GA PAINTED 18" PANEL	WEATHERED RUSTIC	SEE C / A 7.2
9	RECESS OF SIDE ENTRY PORTAL	WESTERN STATE	T-GROOVE 24GA PAINTED 18" PANEL	WEATHERED RUSTIC	SEE C / A 7.2
10	HARDIE REVEAL PANEL	JAMES HARDIE	REVEAL PANEL SYSTEM	SW PURPLE TB2603C, SEMI-GLOSS	SEE C / A 7.2
11	METAL PARAPET CAP	-	24GA GALVANIZED	CYBERSPACE (SW7076) KYNAR 500 COATING	

EXTERIOR FINISH SCHEDULE | **D**

316 METAL PARAPET CAP.
401 BUILDING SIGN BY VENDOR. REQUIRES ELECTRICAL, SEE ELECTRICAL PLANS.
403 DASHED LINE INDICATES ROOF BEYOND.
407 METAL CANOPIES BY VENDOR. REQUIRES ELECTRICAL, SEE ELECTRICAL PLANS.
408 CO2 FILLER VALVE & COVER.
416 HOSE BIBB BOX AT 18" A.F.F. SEE PLUMBING DRAWINGS.
419 EXTERIOR LIGHT FIXTURE. SEE ELECTRICAL DRAWINGS.
422 PURPLE LIGHT WALL WASHER, PROVIDED BY SIGNAGE VENDOR, REQUIRES ELECTRICAL, SEE ELECTRICAL PLANS.
423 OUTLINE OF RTU BEYOND.

KEY NOTES | **B**

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ENDEAVOR 2.0
EXTERIOR ELEVATIONS

A4.0

PLOT DATE: 7/12/2021 9:52:33 AM

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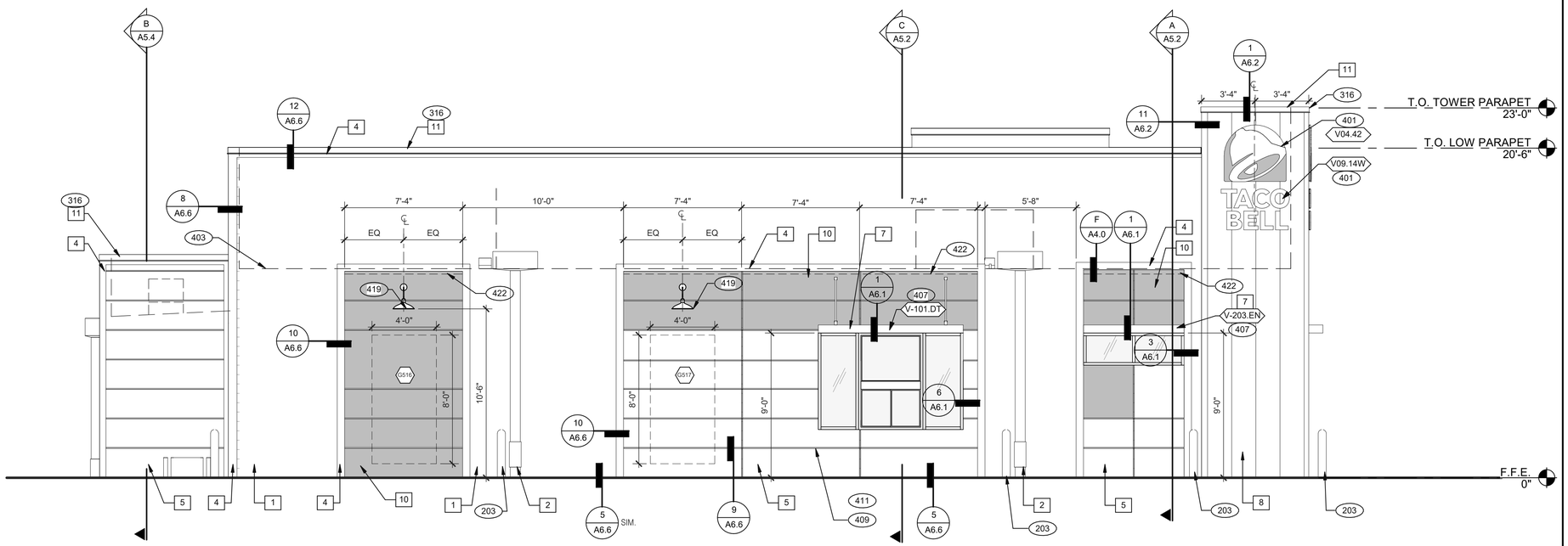
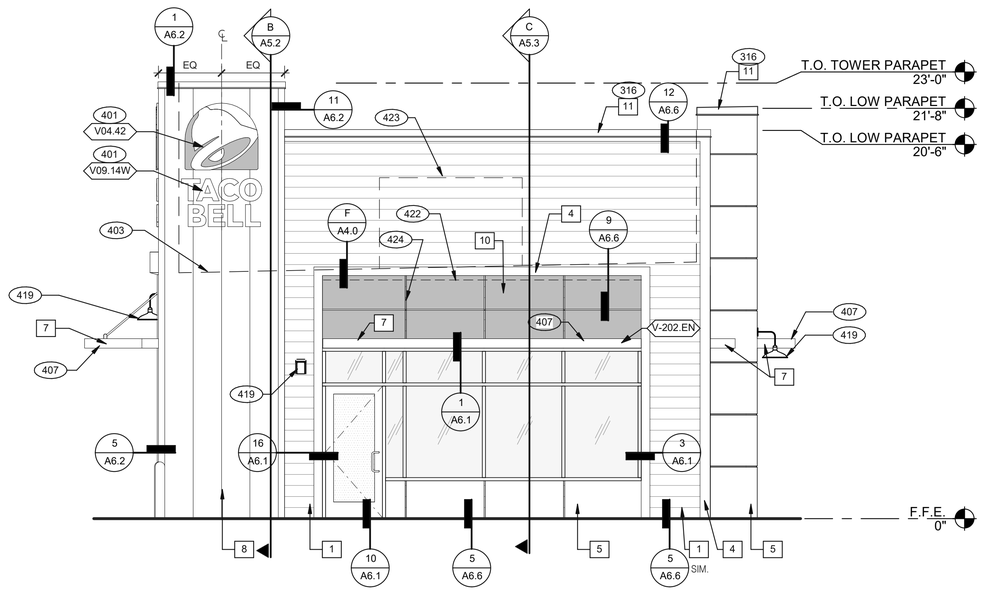


REAR ELEVATION 1/4" = 1'-0" | **1**

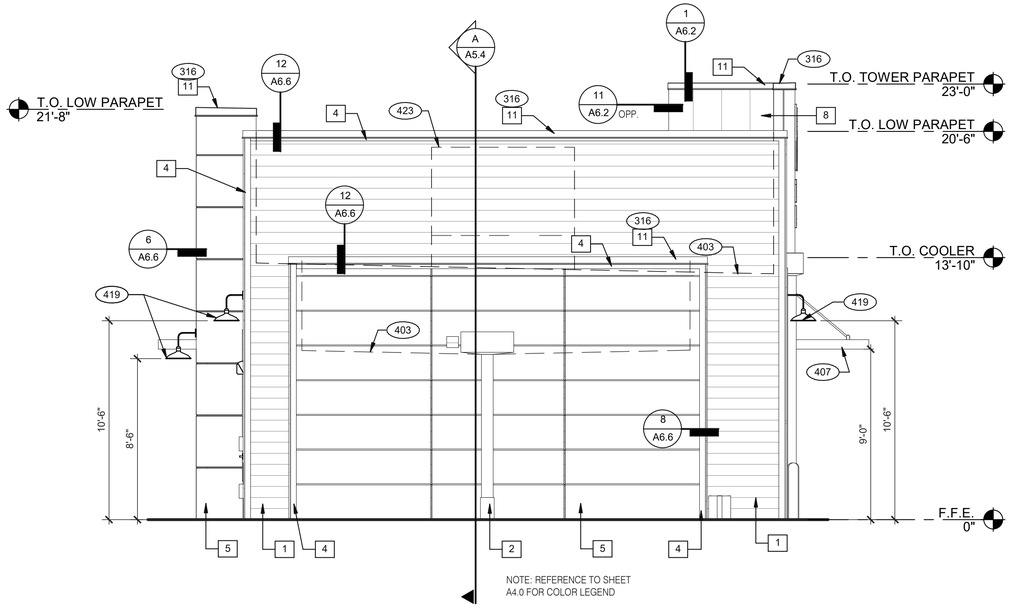
SEE SHEET A4.0 FOR FINISH SCHEDULE

203 PIPE BOLLARD. SEE CIVIL DRAWINGS.
316 METAL PARAPET CAP.
401 BUILDING SIGN BY VENDOR. REQUIRES ELECTRICAL, SEE ELECTRICAL PLANS.
403 DASHED LINE INDICATES ROOF BEYOND.
407 METAL CANOPIES BY VENDOR. REQUIRES ELECTRICAL, SEE ELECTRICAL PLANS.
409 ASSUME D/T LANE SURFACE IS 6" BELOW THE FINISH FLOOR. REFER TO GRADING & SITE PLAN.
411 CONCRETE CURB.
419 EXTERIOR LIGHT FIXTURE. SEE ELECTRICAL DRAWINGS.
422 PURPLE LIGHT WALL WASHER, PROVIDED BY SIGNAGE VENDOR, REQUIRES ELECTRICAL, SEE ELECTRICAL PLANS.
423 OUTLINE OF RTU BEYOND.
424 ALIGN REVEAL WITH VERTICAL MULLION.

KEY NOTES | **A**



FRONT ELEVATION 1/4" = 1'-0" | **2**



NOTE: REFERENCE TO SHEET A4.0 FOR COLOR LEGEND

REAR ELEVATION 1/4" = 1'-0" | **3**

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
330.572.2100 FAX: 330.572.2102

	DATE	REMARKS
	04.28.21	ISSUED FOR PERMIT
2	07.12.21	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RS
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

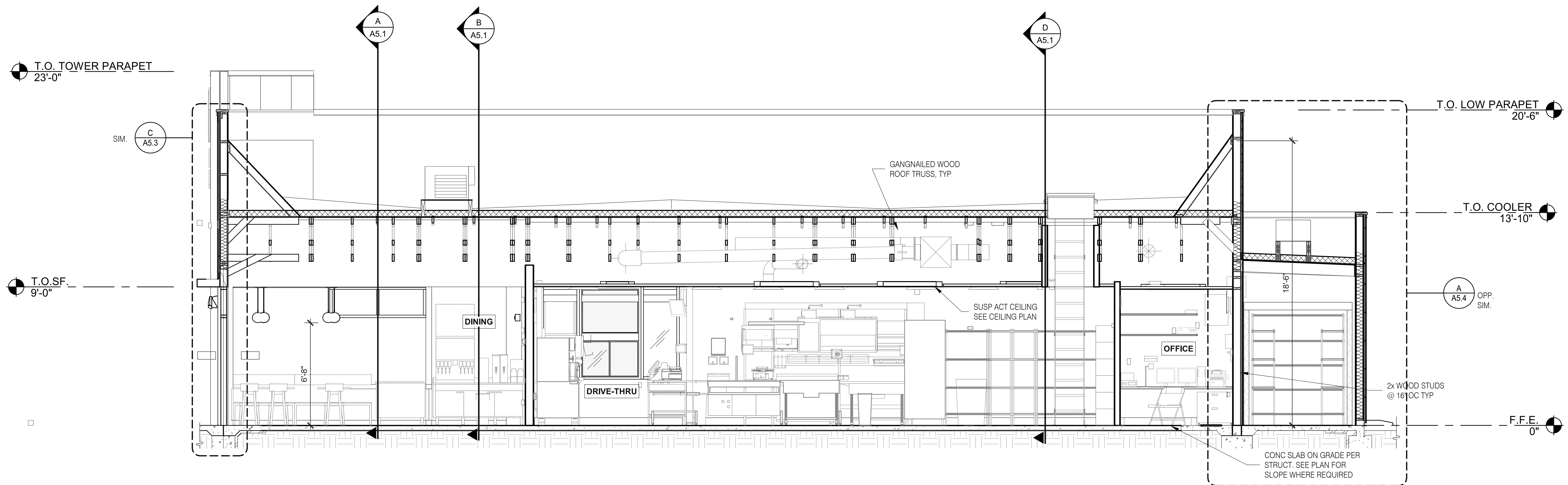
ENDEAVOR 2.0
EXTERIOR ELEVATIONS

A4.1

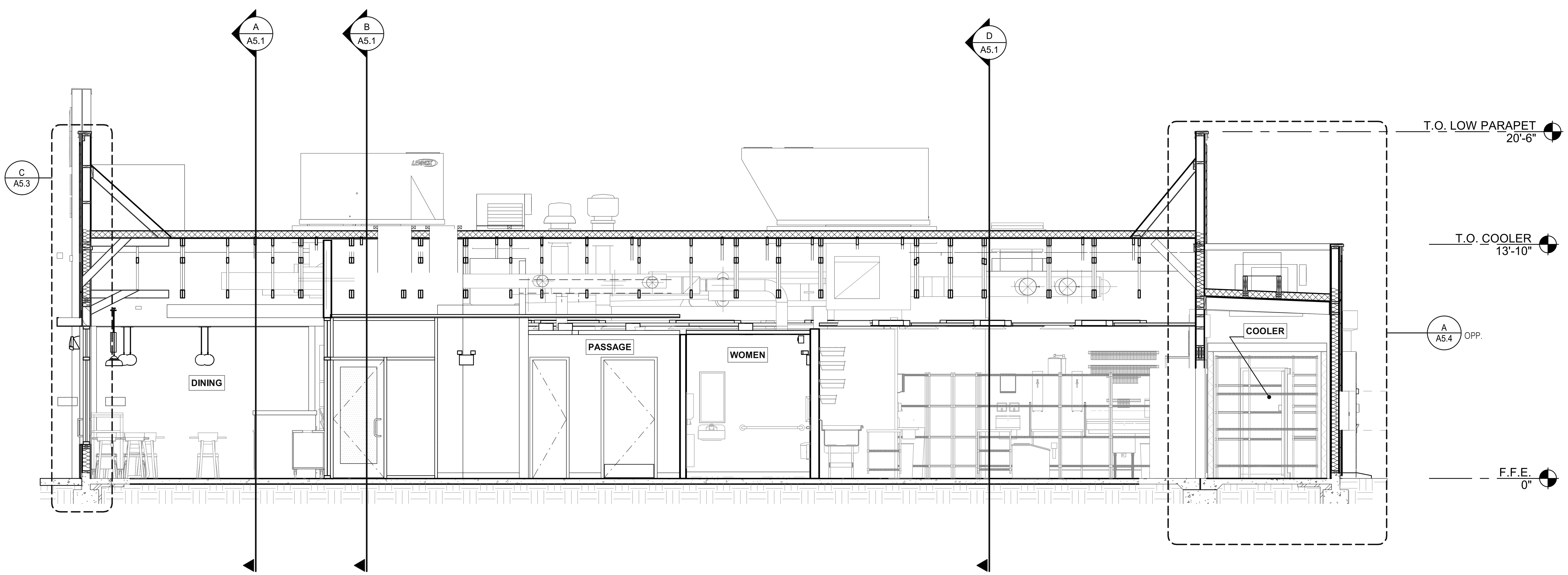
PLOT DATE: 7/12/2021 9:52:37 AM

C:\Users\smith\Documents\0273_ARCH_SM20_Rusty1.rvt

CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT



EAST/WEST BUILDING SECTION 2 1/4" = 1'-0" **A**



DESIGNER NOTE:
- PARAPET HEIGHT MAY VARY DUE TO SITE CONDITIONS, HVAC EQUIPMENT SCREENING, ETC. PLEASE ADJUST HEIGHT AND RE-ADJUST THE FRONT AND SIDE TOWER PROPORTIONALLY.
- 6" BUILDING PERIMETER CURB CAN BE REMOVED BY SITE ADAPT ARCHITECT FOR SITE SPECIFIC CONSTRAINTS

EAST/WEST BUILDING SECTION 1 1/4" = 1'-0" **B**

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TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
BUILDING SECTIONS

A5.0

PLOT DATE: 7/12/2021 9:52:55 AM

C:\Users\rsmith\Documents\0275_ARCH_SM20_Rustys1.rvt

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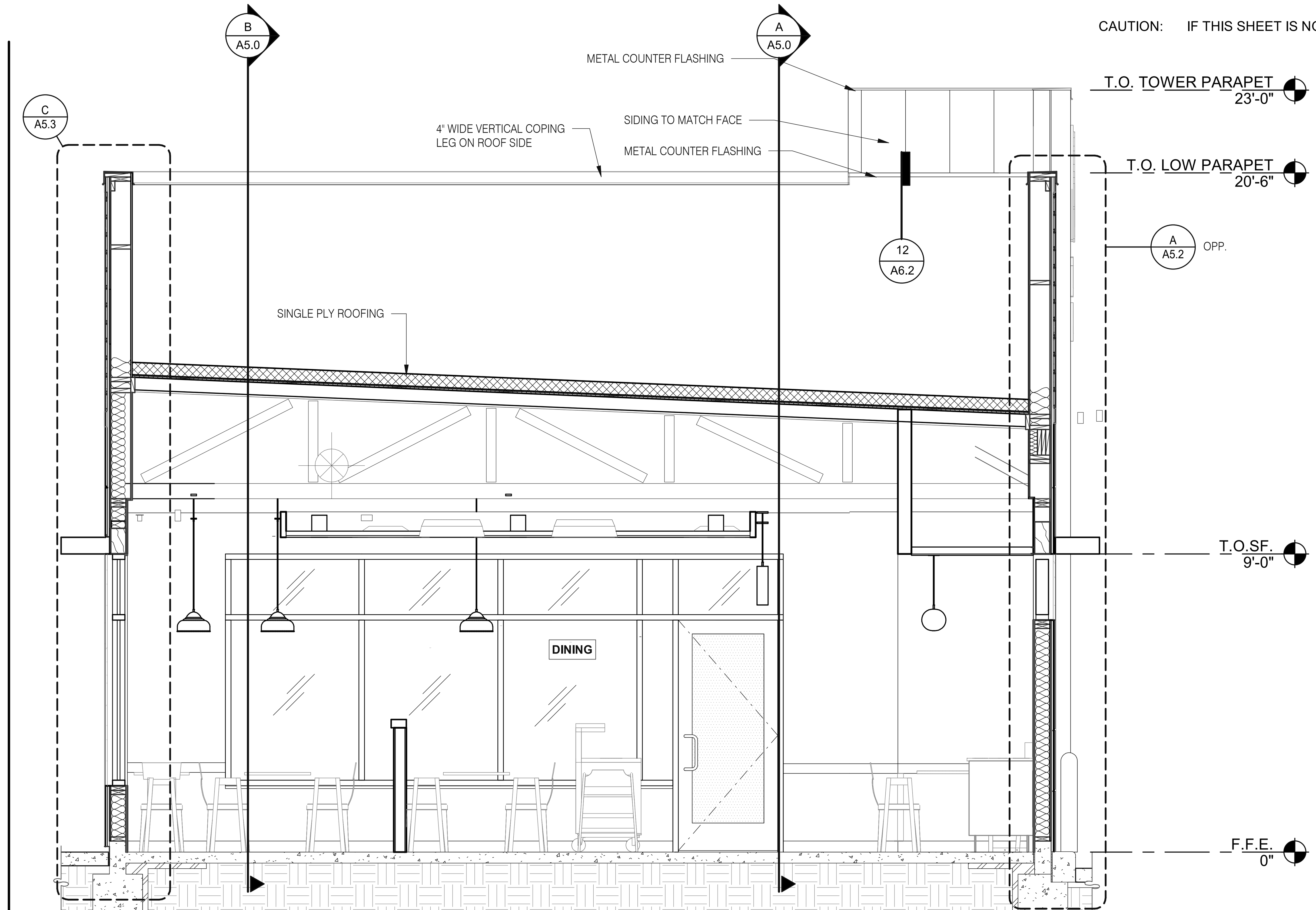
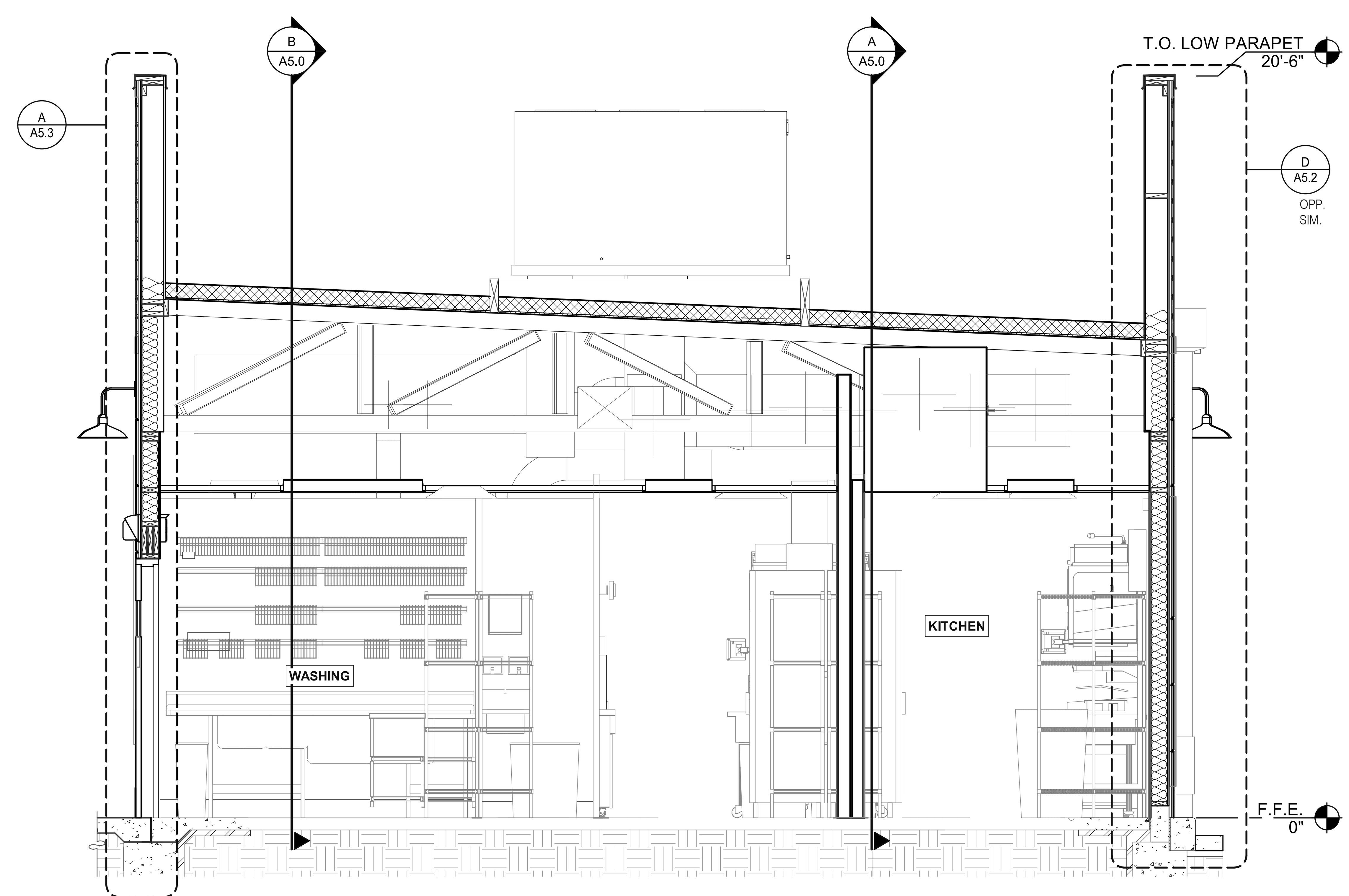
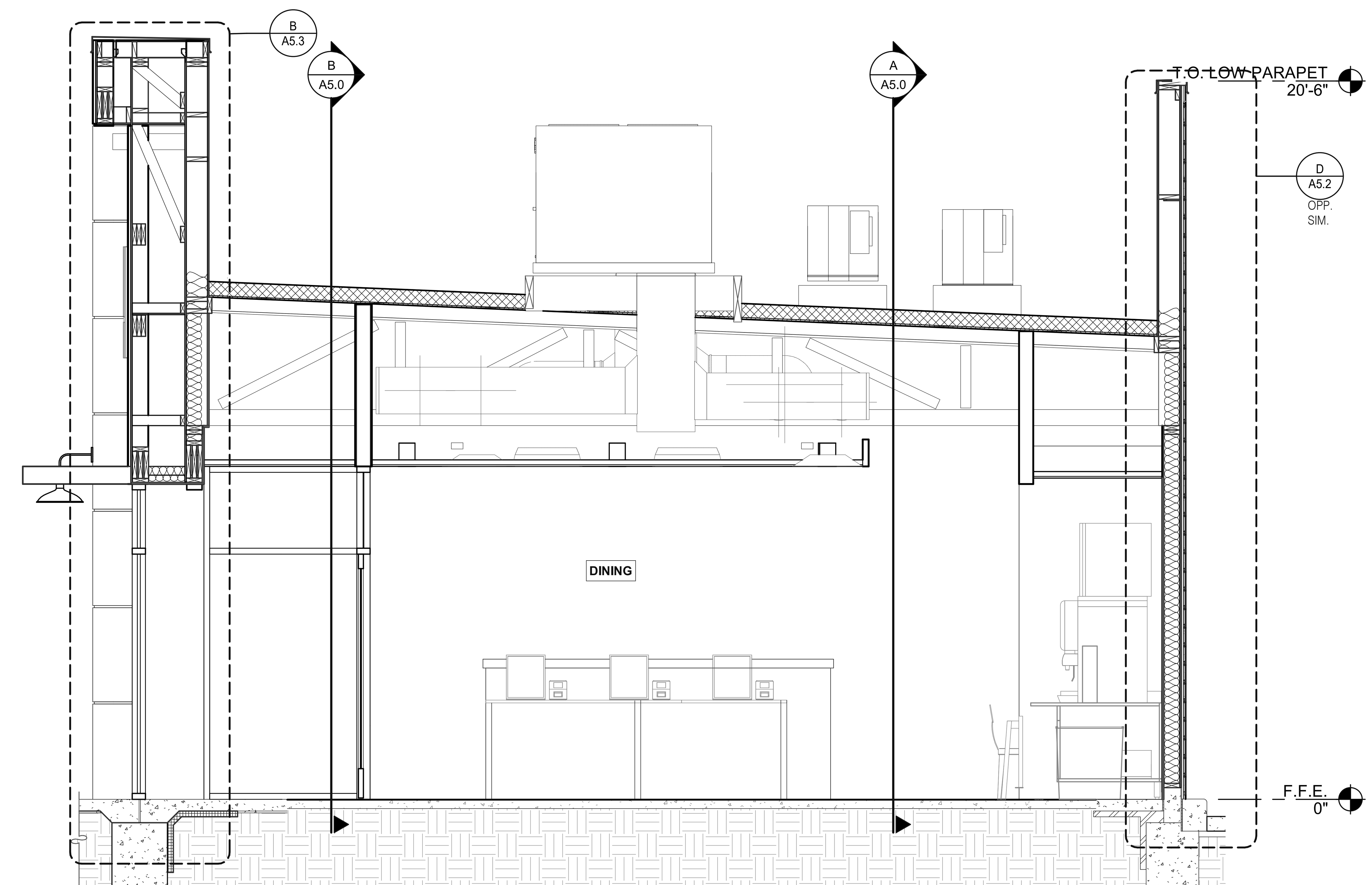


LEFT TO RIGHT BUILDING SECTION 5 3/8" = 1'-0" **A**



LEFT TO RIGHT BUILDING SECTION 4 3/8" = 1'-0" **D**



LEFT TO RIGHT BUILDING SECTION 3 3/8" = 1'-0" **B**

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SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RS
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
BUILDING SECTIONS

A5.1

PLOT DATE: 7/12/2021 9:53:03 AM

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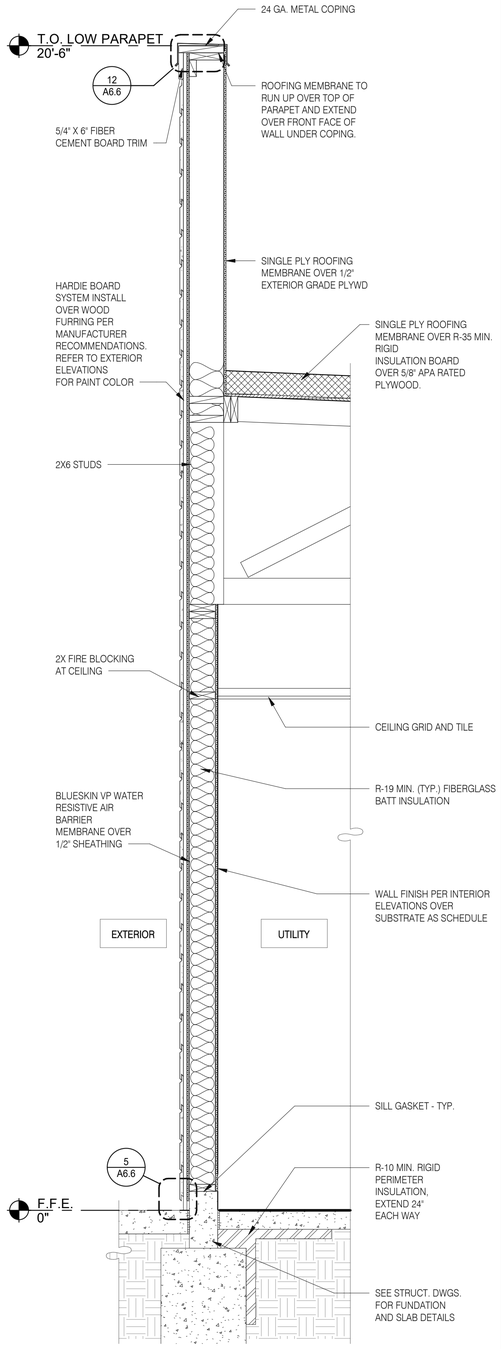
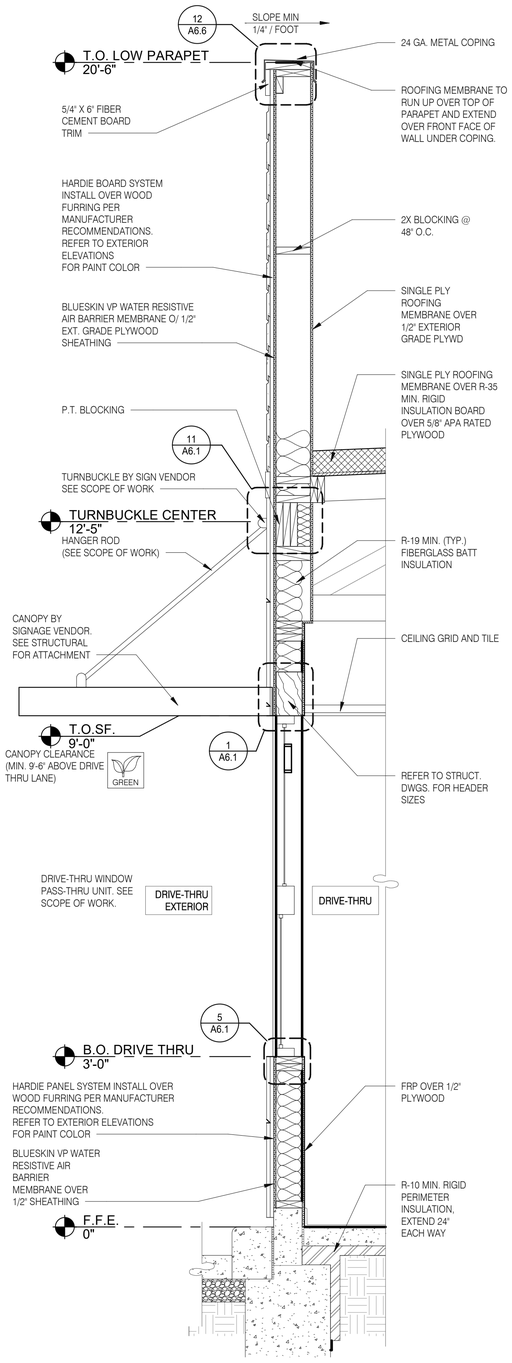
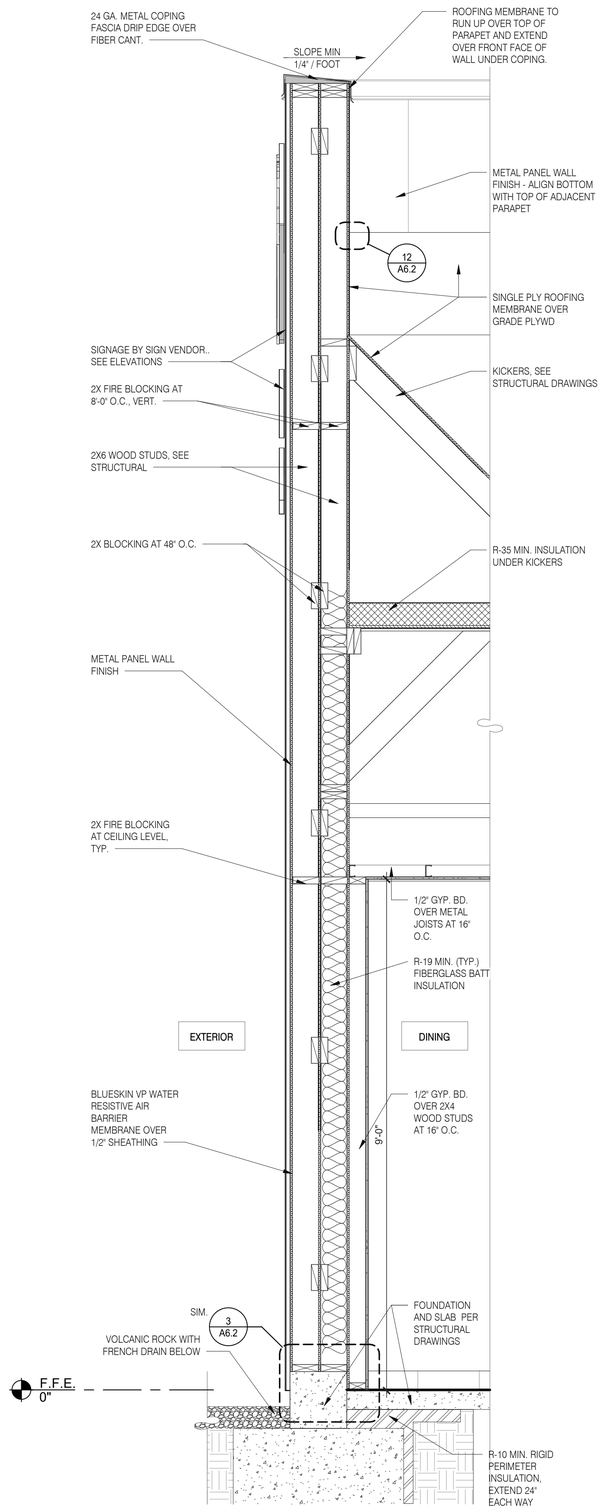


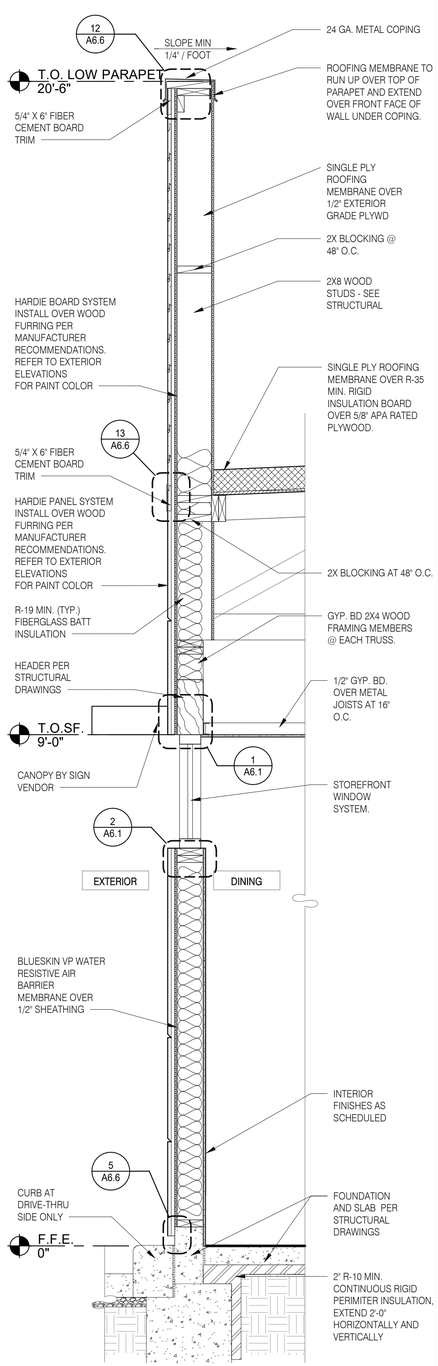
TYPICAL WALL SECTION 3/4" = 1'-0" | **D**



WALL SECTION AT DRIVE THRU 3/4" = 1'-0" | **C**



SECTION AT DINING - TOWER 3/4" = 1'-0" | **B**



WALL SECTION AT DINING 3/4" = 1'-0" | **A**

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	DATE	REMARKS
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SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RS
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
WALL SECTIONS

A5.2

PLOT DATE: 7/12/2021 9:53:06 AM

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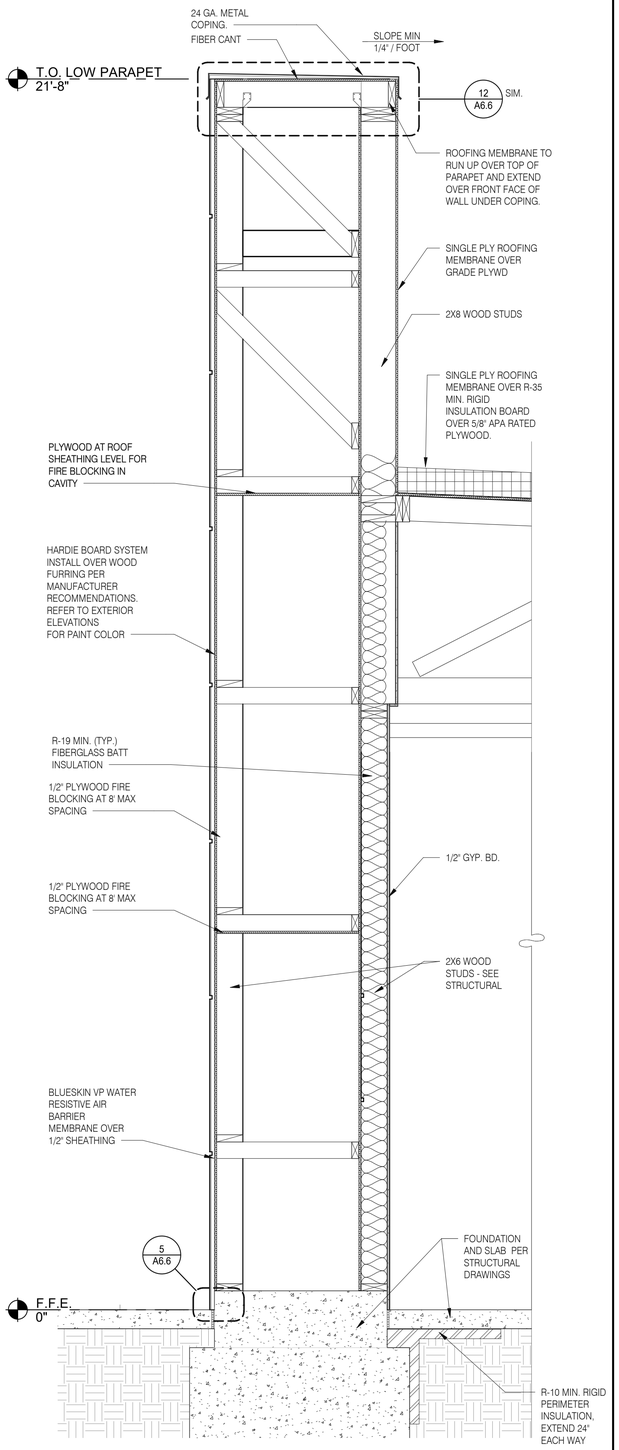
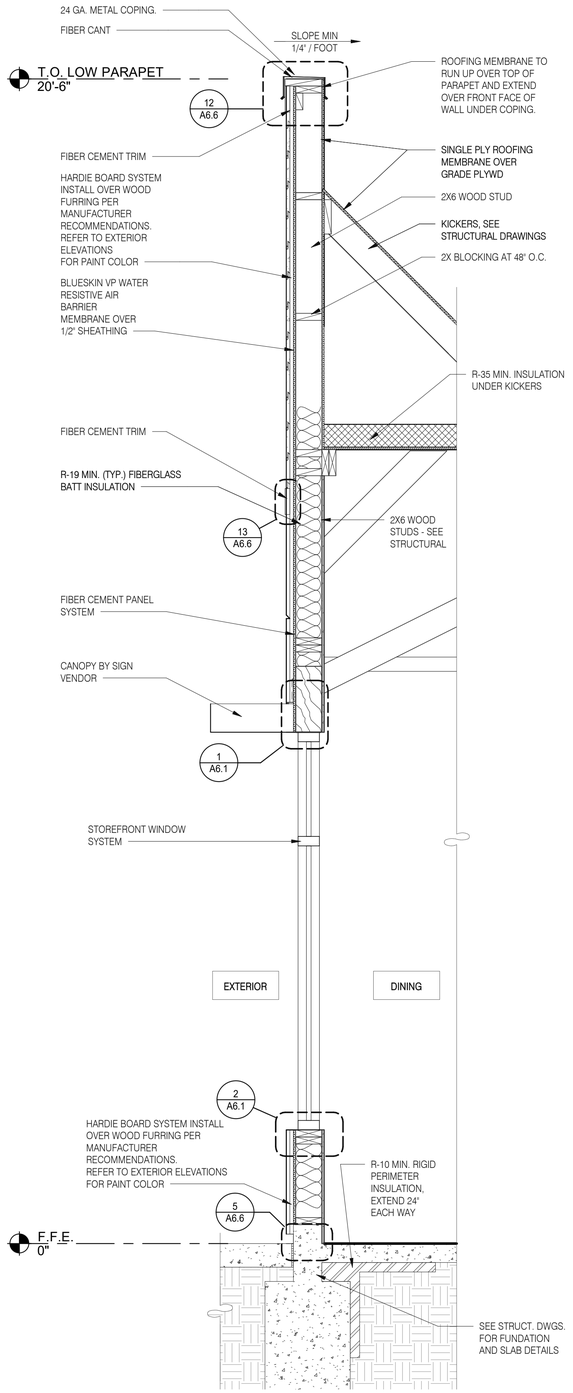
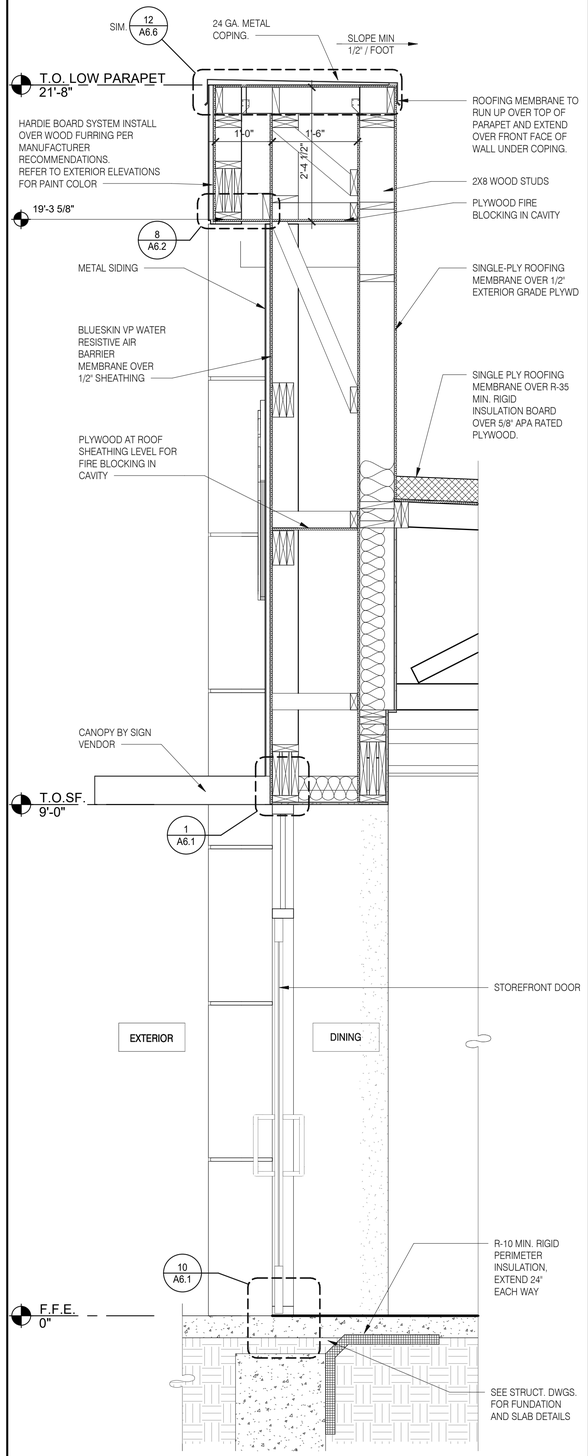
CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT



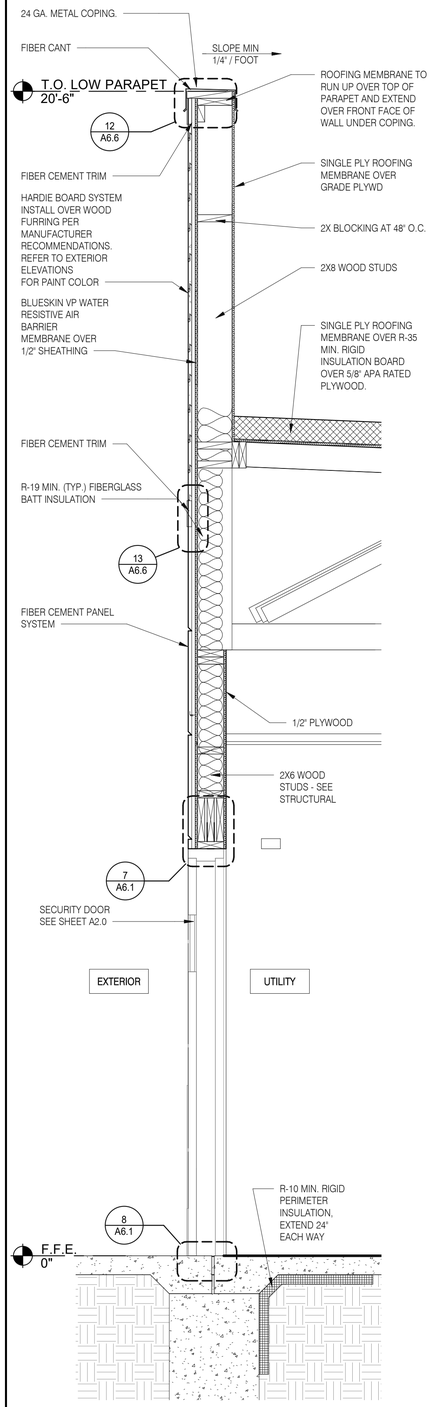
FRONT WALL SECTION 3/4" = 1'-0" | **D**



FRONT WALL SECTION 3/4" = 1'-0" | **C**



WALL SECTION AT DINING DOOR 3/4" = 1'-0" | **B**



WALL SECTION AT SERVICE DOOR 3/4" = 1'-0" | **A**

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BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RS
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
WALL SECTIONS

A5.3

PLOT DATE: 7/12/2021 9:53:09 AM

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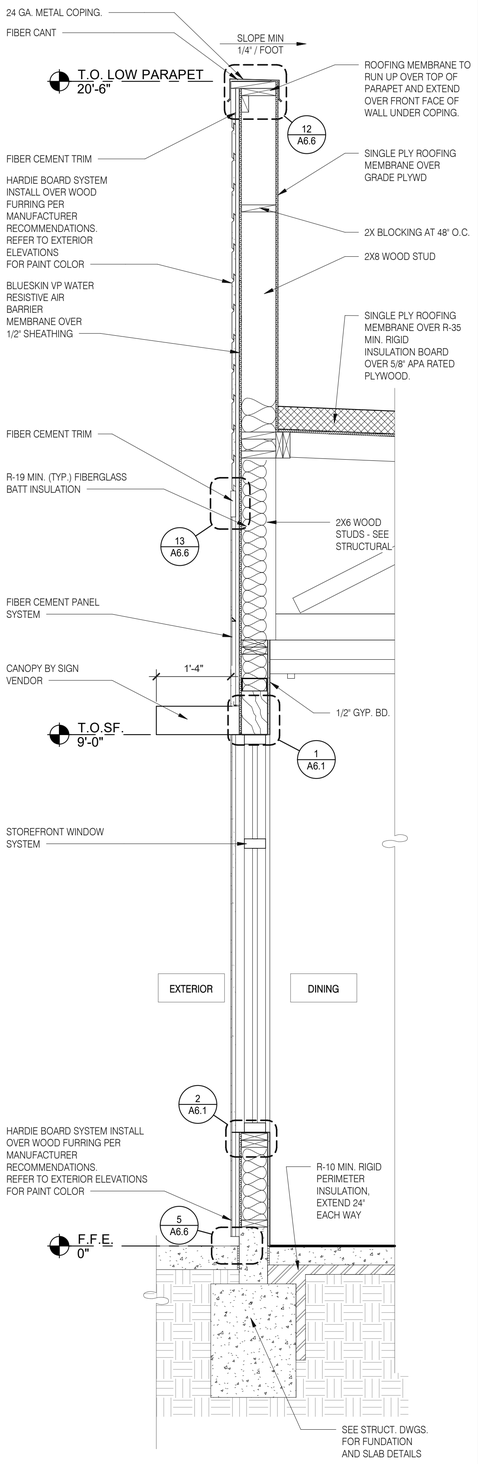
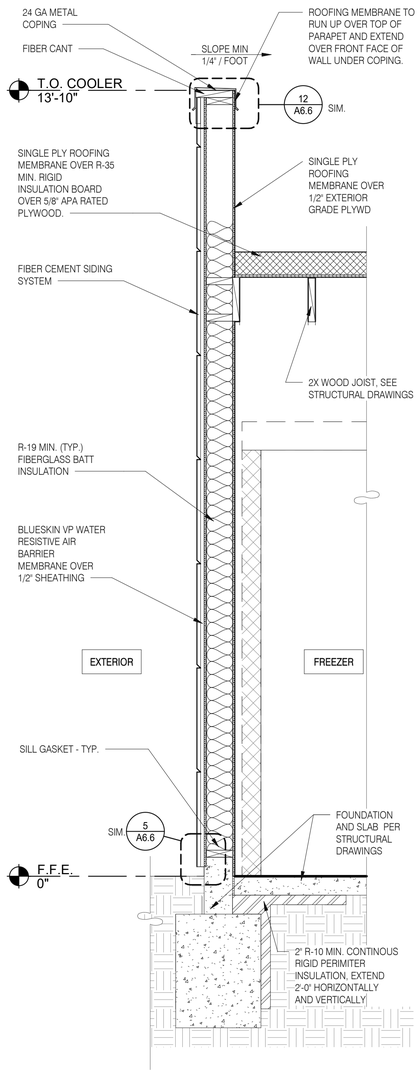
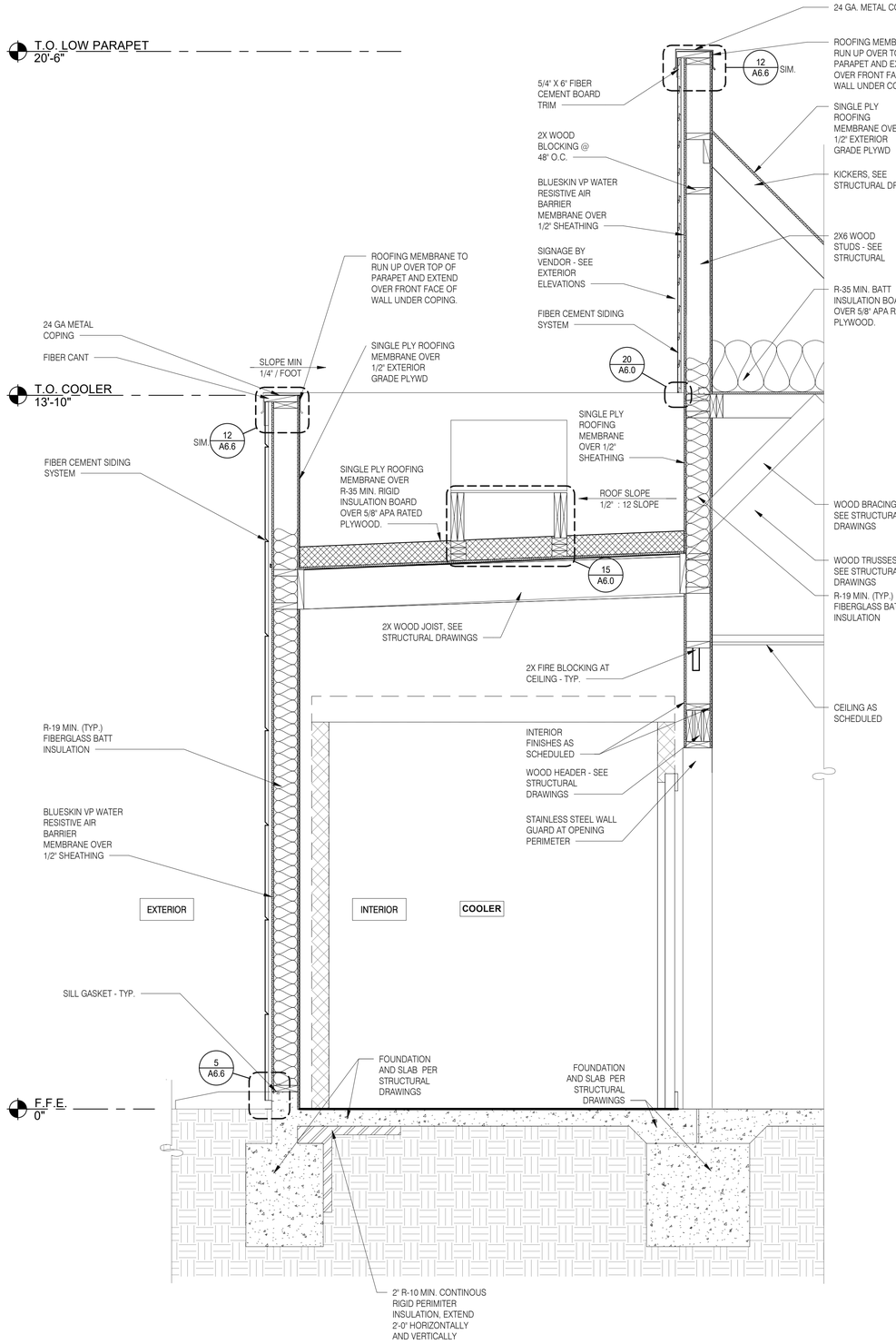


WALL SECTION AT STOREFRONT 3/4" = 1'-0" **C**



WALL SECTION 3/4" = 1'-0" **B**



WALL SECTION AT COOLER 3/4" = 1'-0" **A**

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TACO BELL

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BROWNSTOWN, MI 48183

ENDEAVOR 2.0
WALL SECTIONS

A5.4

PLOT DATE: 7/12/2021 9:53:12 AM

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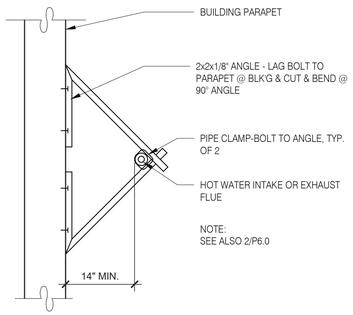
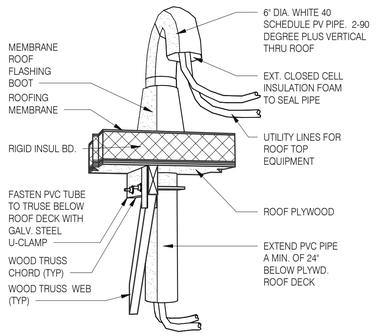
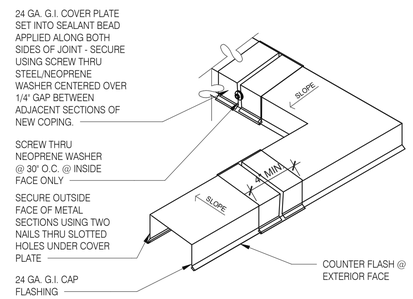


W.H. FLU / INTAKEN PIPE SUPPORT 3" = 1'-0" **13**

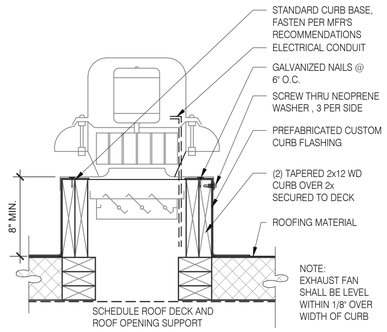


PIPE HOOD N.T.S. **9**

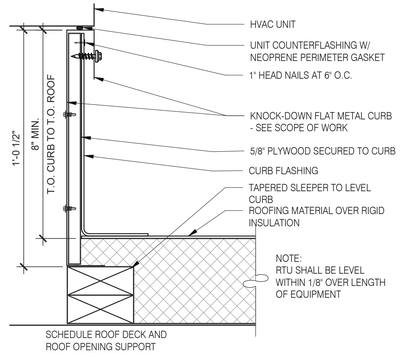


NOTE: JOINTS ARE TO OCCUR AT 10'-0" MAX.

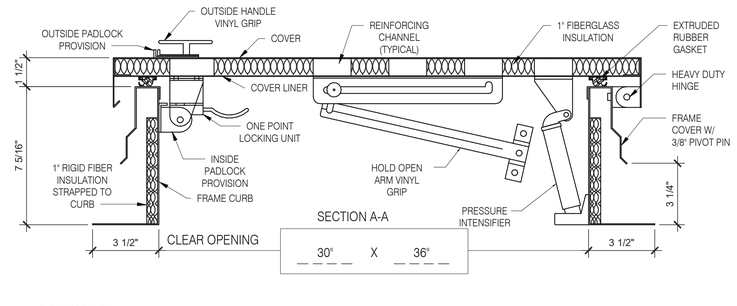
COPING JOINT N.T.S. **5**

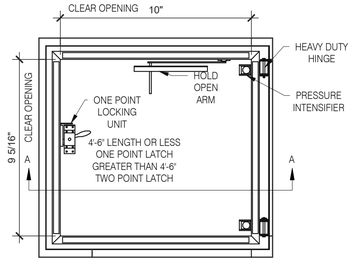


EXHAUST FAN CURB 3" = 1'-0" **18**



HVAC CURB 3" = 1'-0" **14**





NOTES:

(1) ALL MOUNTING HARDWARE TO BE SUPPLIED BY OTHERS.

(2) FOR OPERATING EFFICIENCY, HATCH HARDWARE VARIES BY SIZE. EXAMPLE MODEL#: PH- A/G OPENING SIZE IN FEET-INCHES (PH-G2630)

HATCH MATERIAL:

GALVANIZED STEEL (PRIME PAINTED)
COVER - 14 GA. GALV STEEL
FRAME COVER - 14 GA. GALV STEEL
FRAME CURB - 14 GA. GALV STEEL
COVER LINER - 22 GA. GALV STEEL

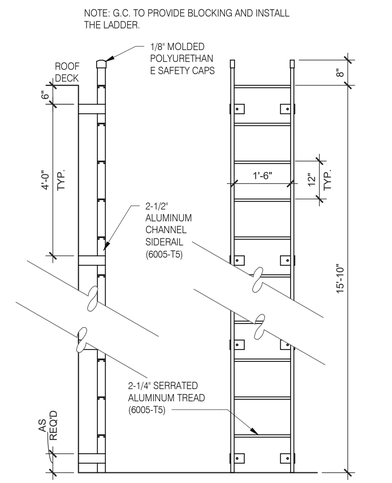
HATCH FINISH:

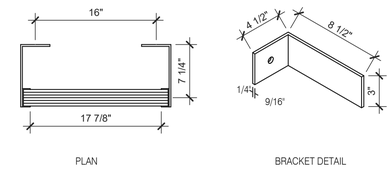
GALV - PRIME PAINTED

MANUFACTURER:

PRECISION LADDERS, LLC OR EQUAL

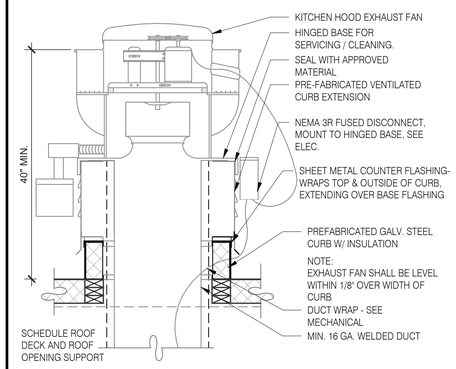
ROOF LADDER AND HATCH 3" = 1'-0" **7**



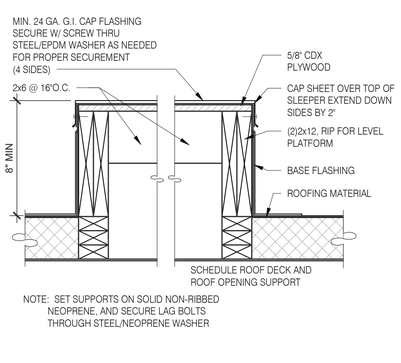


PLAN BRACKET DETAIL

ROOF LADDER N.T.S. **4**

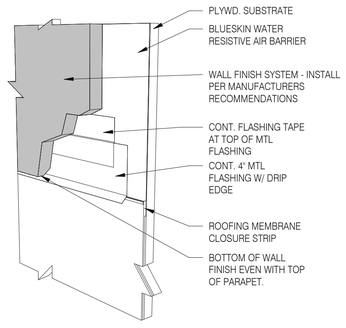


EXHAUST FAN CURB 3" = 1'-0" **19**

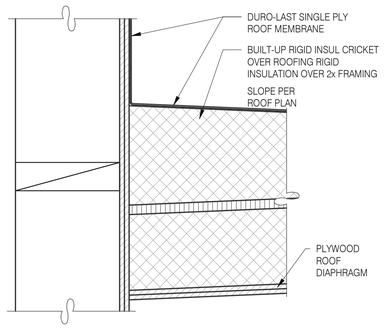


NOTE: SET SUPPORTS ON SOLID NON-RIBBED NEOPRENE, AND SECURE LAG BOLTS THROUGH STEEL/NEOPRENE WASHER

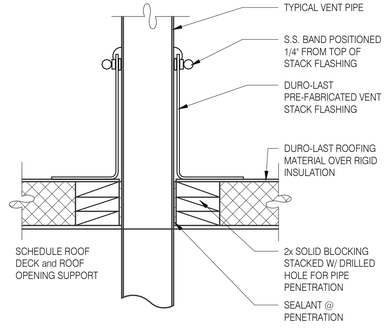
EQUIPMENT PLATFORM SUPPORT 3" = 1'-0" **15**



WALL FINISH TO BASE FLASHING 3" = 1'-0" **20**



CRICKET 3" = 1'-0" **16**



SEALED PIPE FLASHING 3" = 1'-0" **12**

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STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RS
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0

CONSTRUCTION DETAILS ROOF

A6.0

PLOT DATE: 7/12/2021 9:53:16 AM

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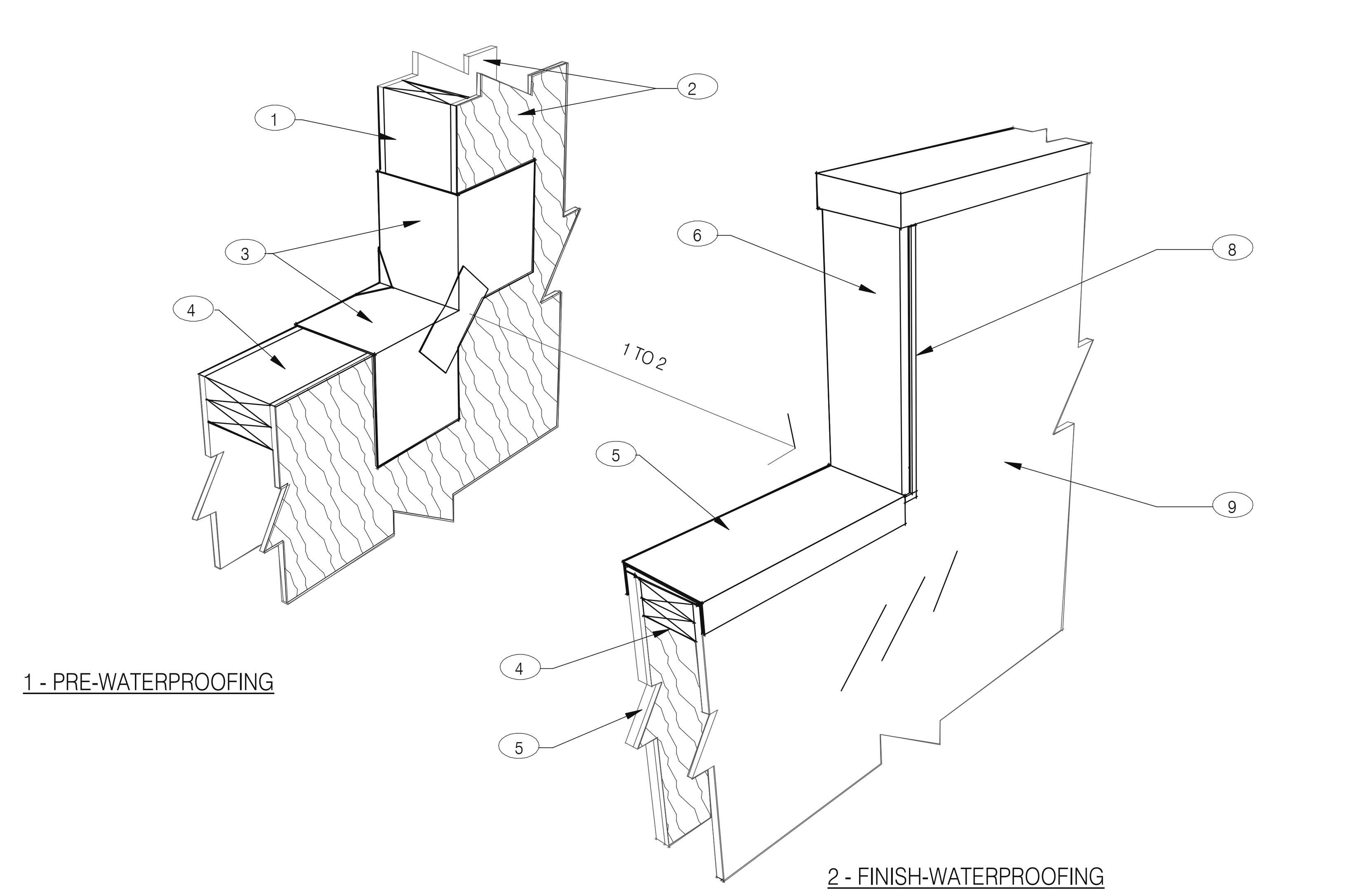
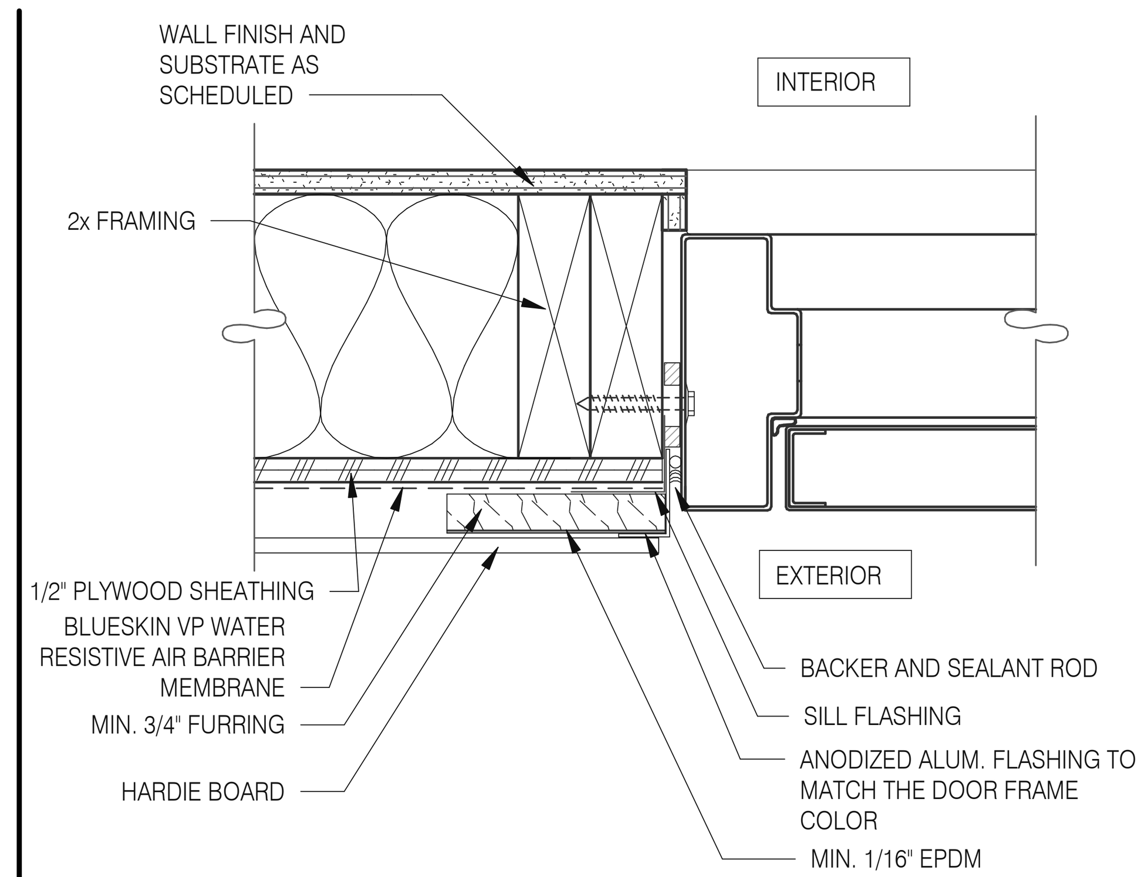


NOTES

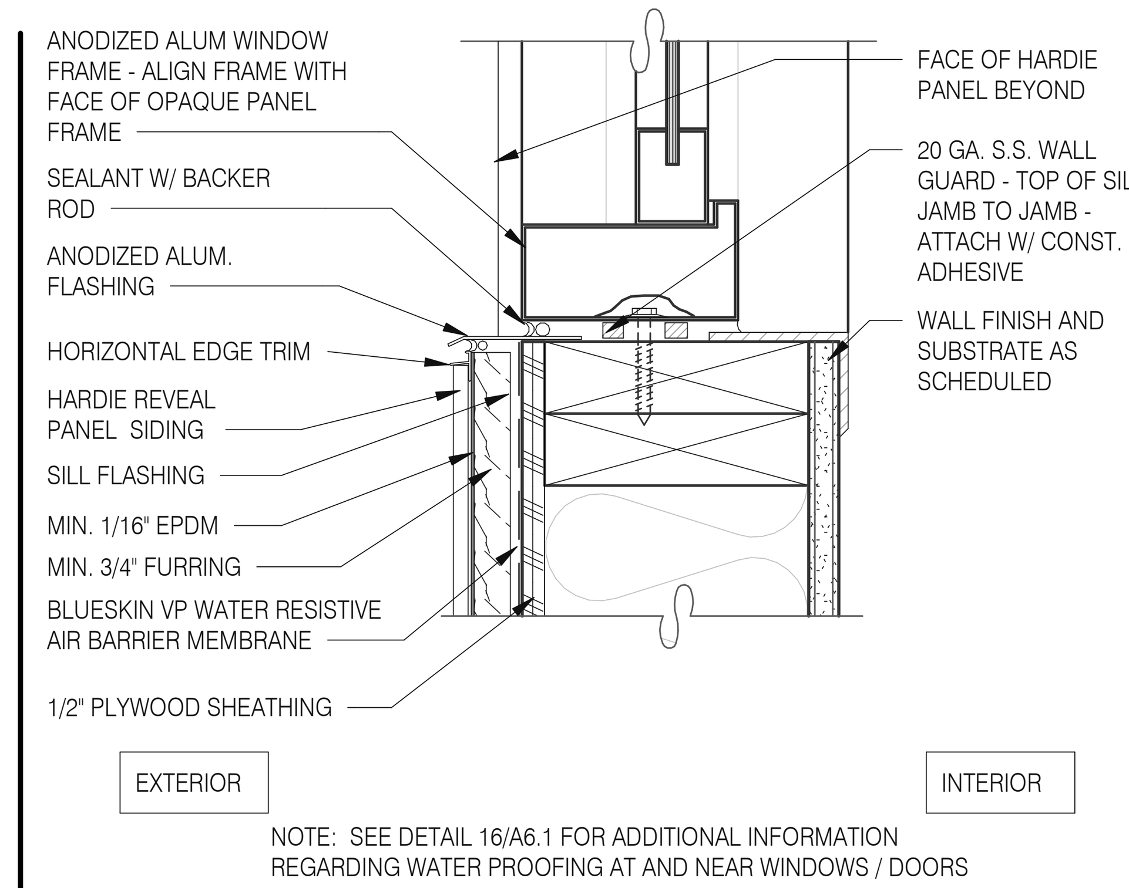
1. 2X WOOD STUDS
2. PLYWOOD SUBSTRATE FOR EXTERIOR WALLS
3. FLASHING TAPE AT ALL VERTICAL PARAPET TRANSITIONS. EXTEND TAPE 12" OUTWARD AND UPWARD FROM CORNER AS SHOWN. LAP CORNERS WITH ANGLED TAPE AS SHOWN TO INSURE FULL COVERAGE AT CORNERS
4. DOUBLE 2X TOP PLATE.
5. PAINTED 24 GAUGE PARAPET COPING. SLOPE 1/4:1 TOWARDS ROOF WITH FIBER CANT STRIPS UNDER COPING. LAP FRONT AND BACK EDGE 2" DOWN VERTICAL FACE. LAP EXPOSED COPING EDGE EXPOSED ENDS AT VERTICAL PARAPET TRANSITION.
6. WRAP EXTERIOR FINISH MATERIAL ONTO VERTICAL FACE OF PARAPET TRANSITION, SEE EXTERIOR ELEVATIONS.
7. EXTERIOR FINISH MATERIAL AS NOTED ON EXTERIOR ELEVATIONS ON SHEET A4.0
8. TERMINATION BAR AT VERTICAL TRANSITION OF EXTERIOR FINISH MATERIAL AND MEMBRANE ROOFING. SEAL VERTICAL GAP BETWEEN TERMINATION BAR AND EXTERIOR FINISH PER ROOFING MANUFACTURER SPECIFICATIONS.
9. PVC ROOFING MEMBRANE ON BACKSIDE OF PARAPET.

IMPORTANT : ONLY FASTEN PARAPET COPING ALONG THE FRONT AND BACK VERTICAL EDGE. NEVER ON TOP OF COPING.

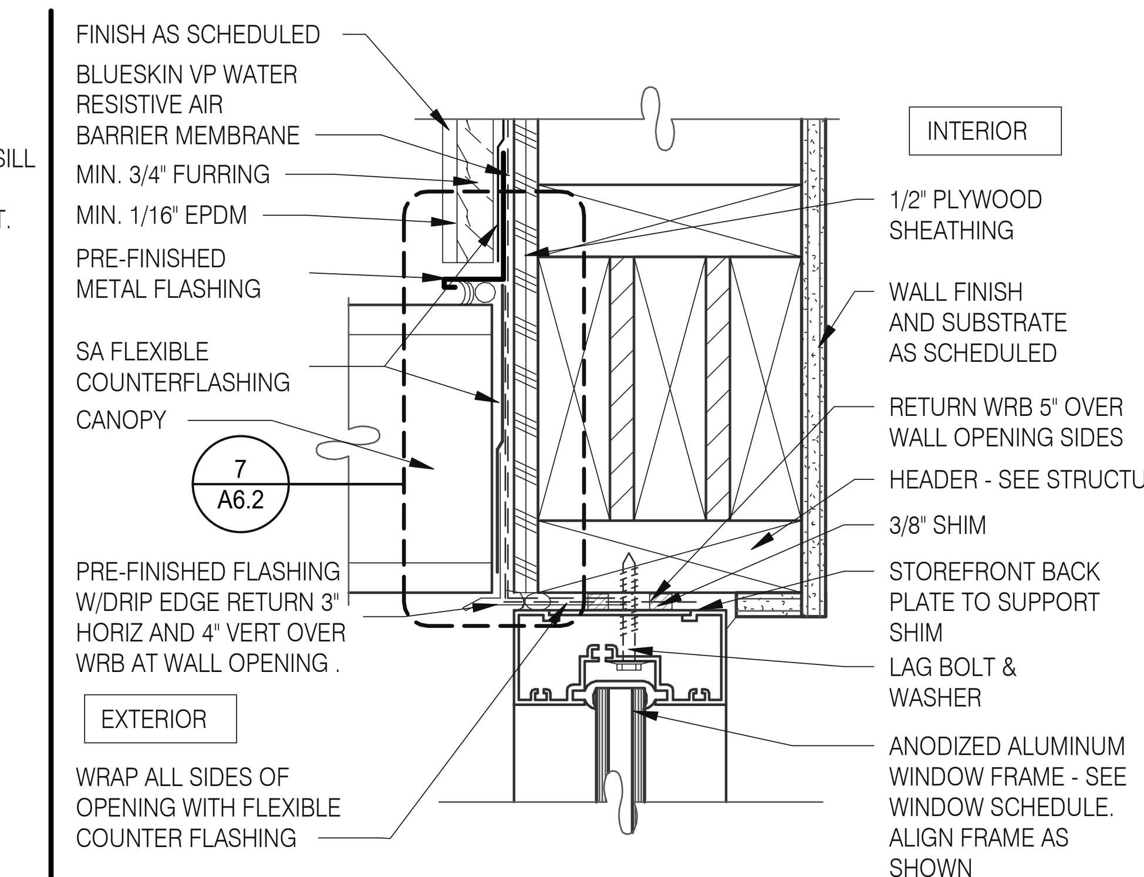
PARAPET CAP & TRANSITION 1" = 1'-0" 13



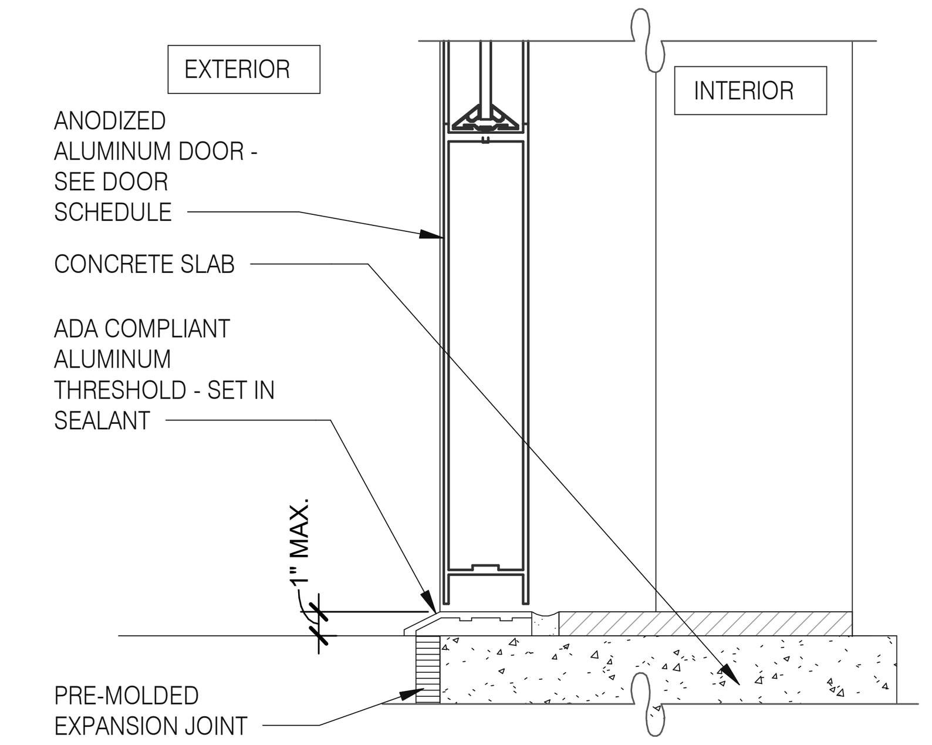
JAMB SERVICE DOOR 3" = 1'-0" 9



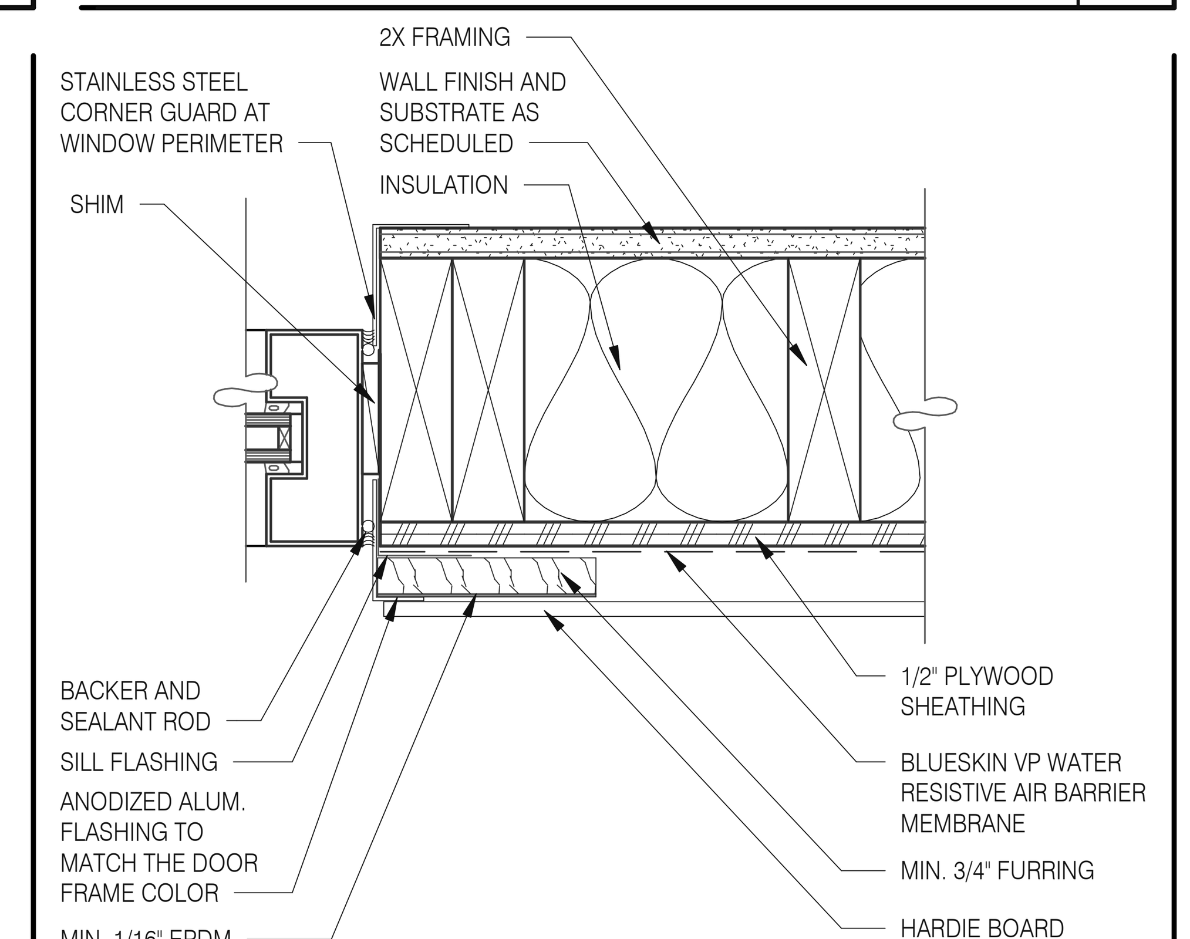
WINDOW SILL @ DRIVE THRU 3" = 1'-0" 5



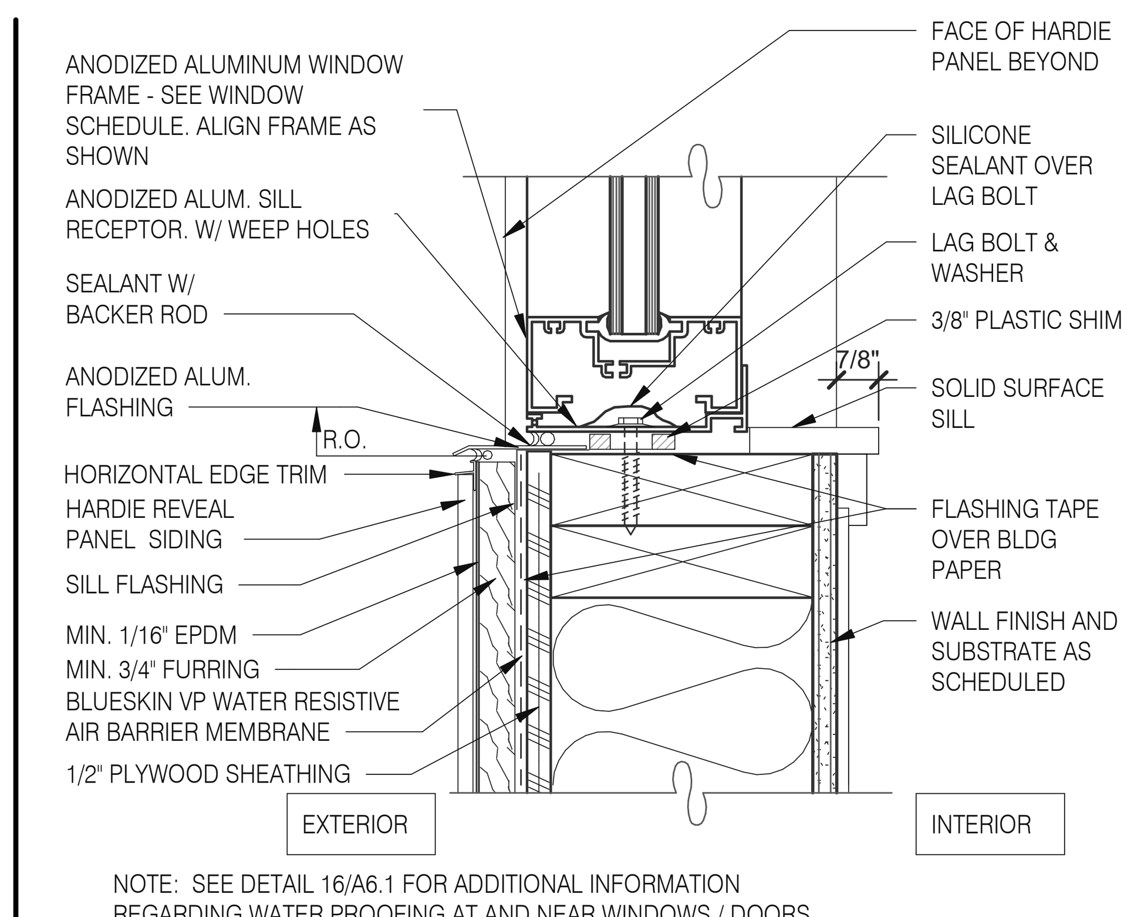
TYPICAL WINDOW HEAD W/ CANOPY 3" = 1'-0" 1



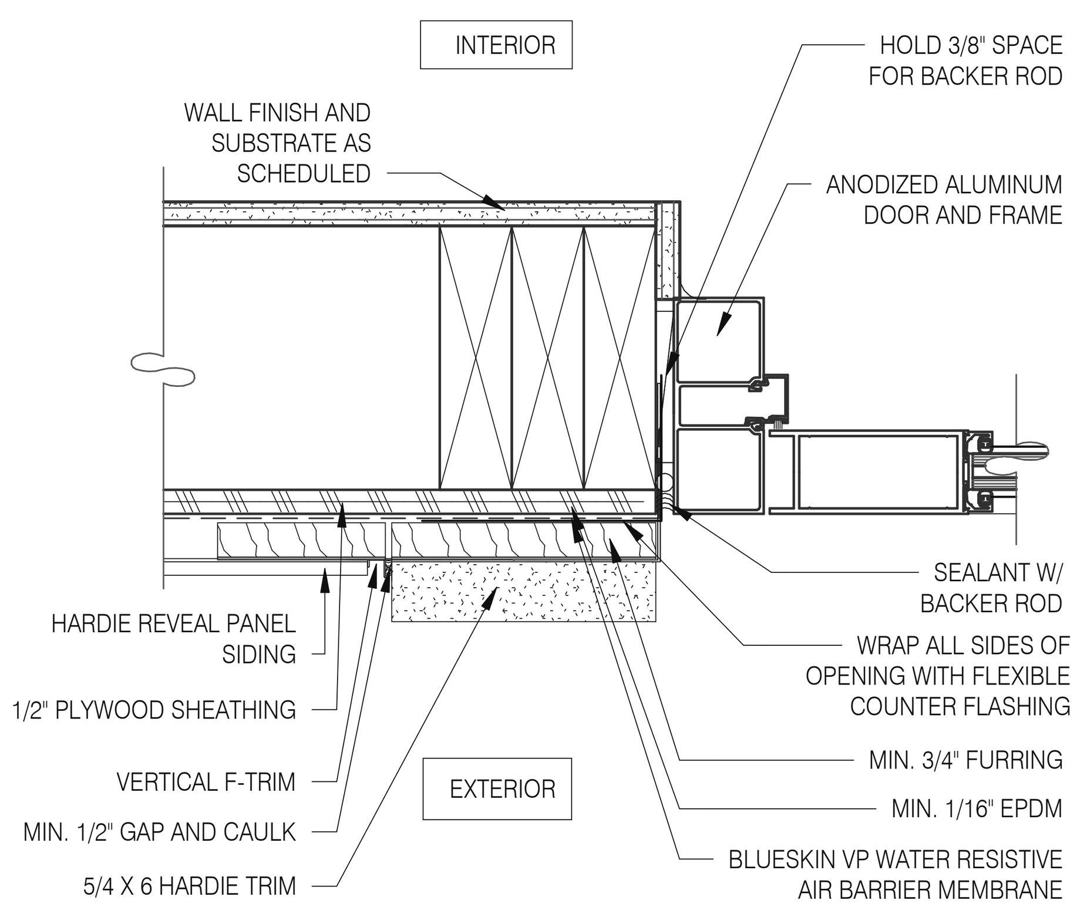
STOREFRONT DOOR SILL 3" = 1'-0" 10



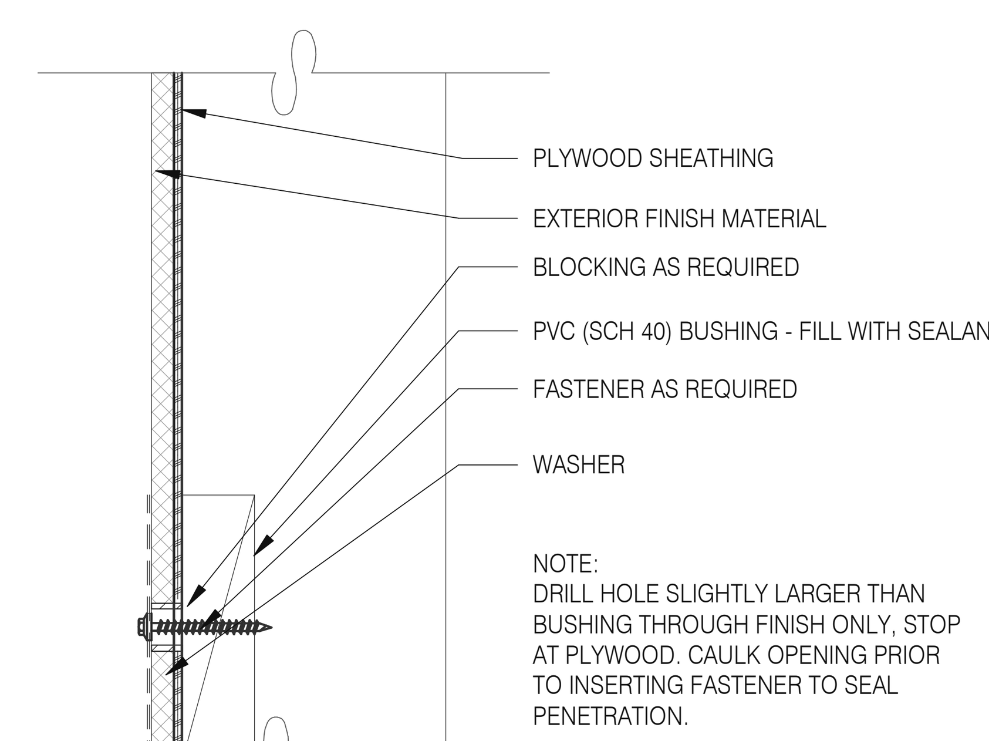
WINDOW JAMB @ DRIVE THRU 3" = 1'-0" 6



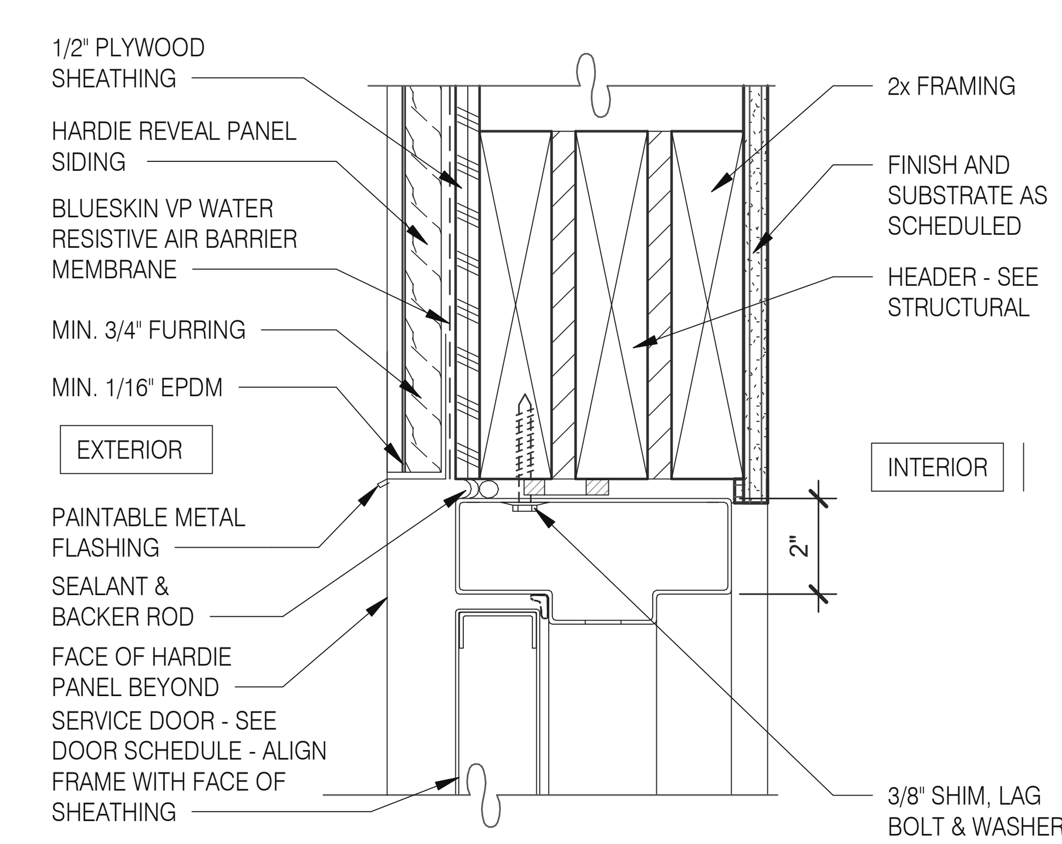
TYPICAL WINDOW SILL 3" = 1'-0" 2



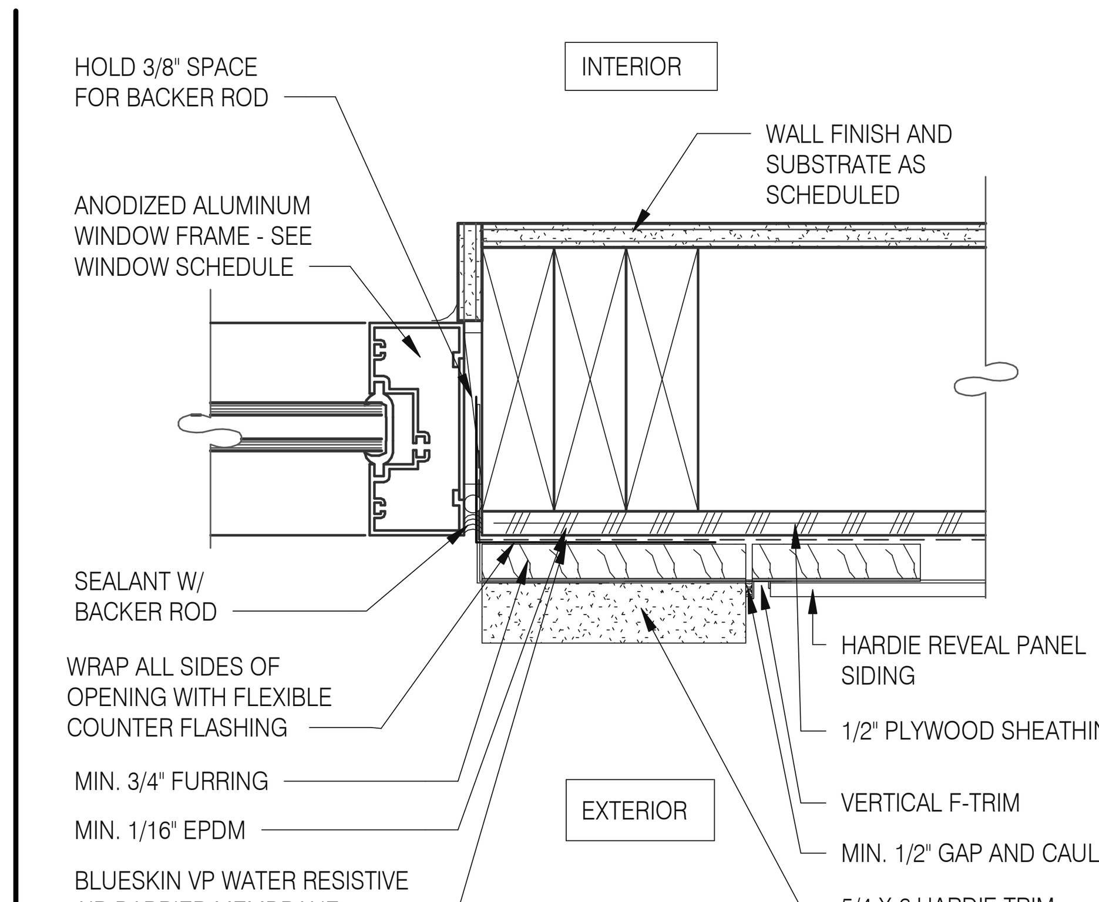
DOOR JAMB 3" = 1'-0" 16



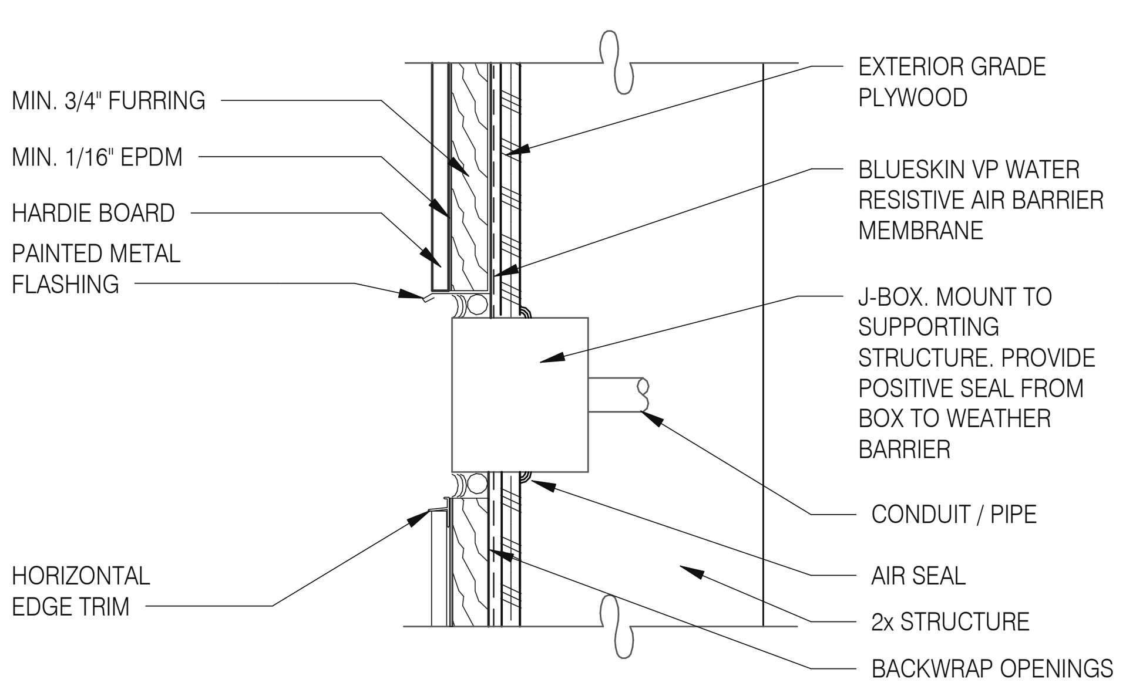
CONNECTION THRU EXT. FINISH 1" = 1'-0" 11



HEAD/ JAMB @ SERVICE DOOR 3" = 1'-0" 7

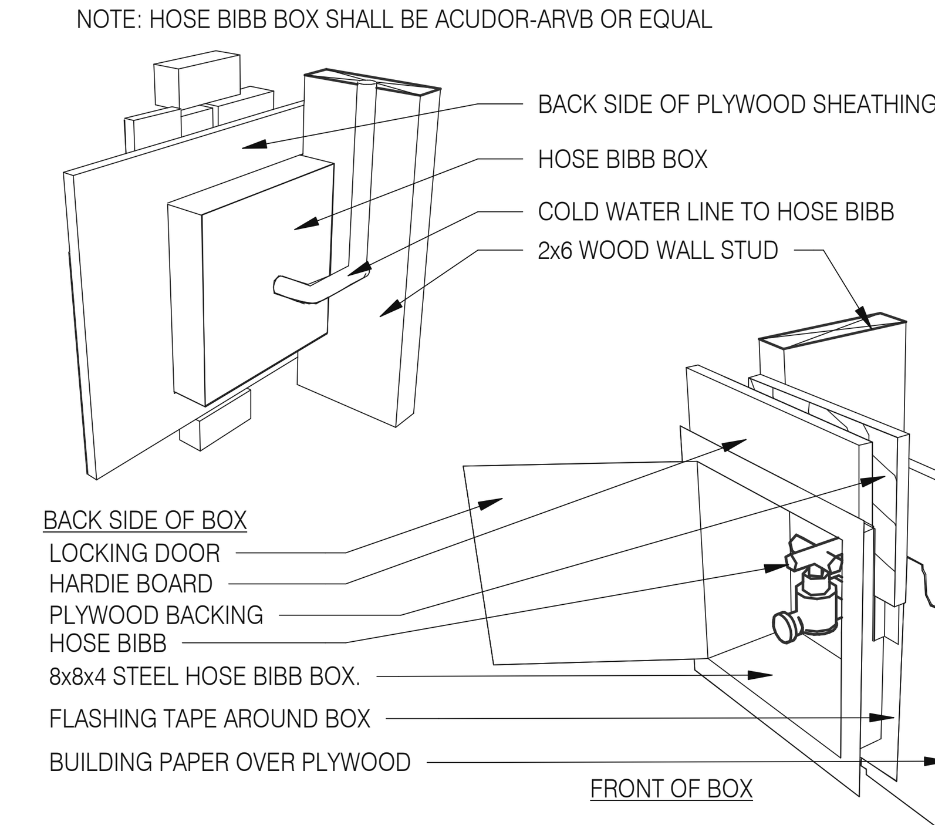


TYPICAL WINDOW JAMB 3" = 1'-0" 3

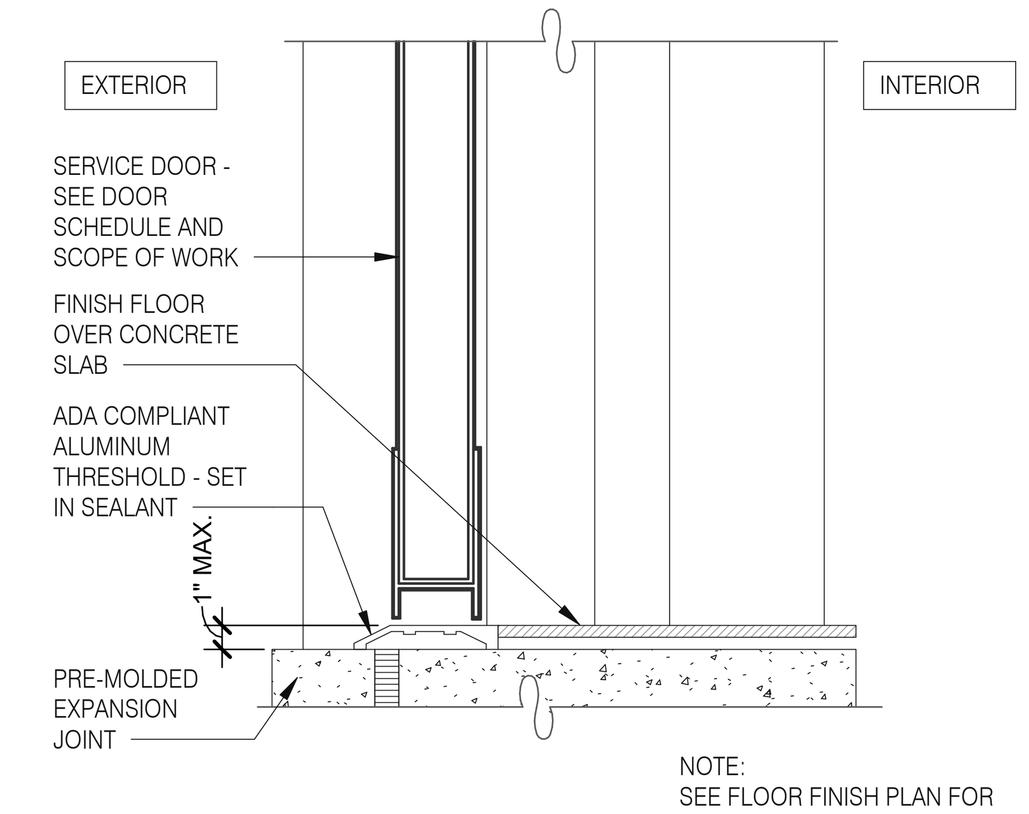


CO2 FILL / J-BOX 3" = 1'-0" 17

NOTE: HOSE BIBB BOX SHALL BE ACUDOR-ARVB OR EQUAL



HOSE BIBB BOX 3" = 1'-0" 12



THRESHOLD @ SERVICE DOOR 3" = 1'-0" 8

GENERAL NOTES:

HARDIE BOARD TO BE ATTACHED WITH CONCEALED FASTENERS PER MANUFACTURERS SPECIFICATIONS

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Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
330.572.2100 FAX: 330.572.2102

	DATE	REMARKS
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2	07.12.21	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RS
JOB NO.:	2018088.64

TACO BELL

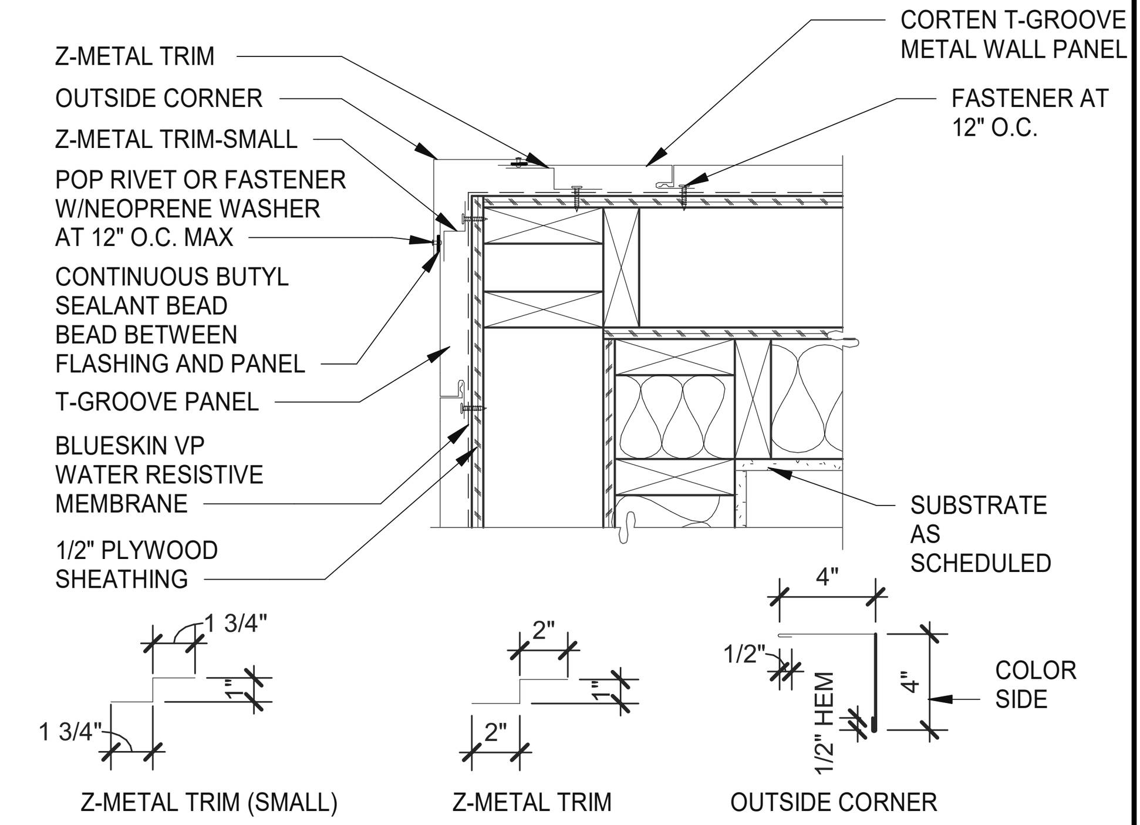
GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
CONSTRUCTION DETAILS DOOR/WINDOW

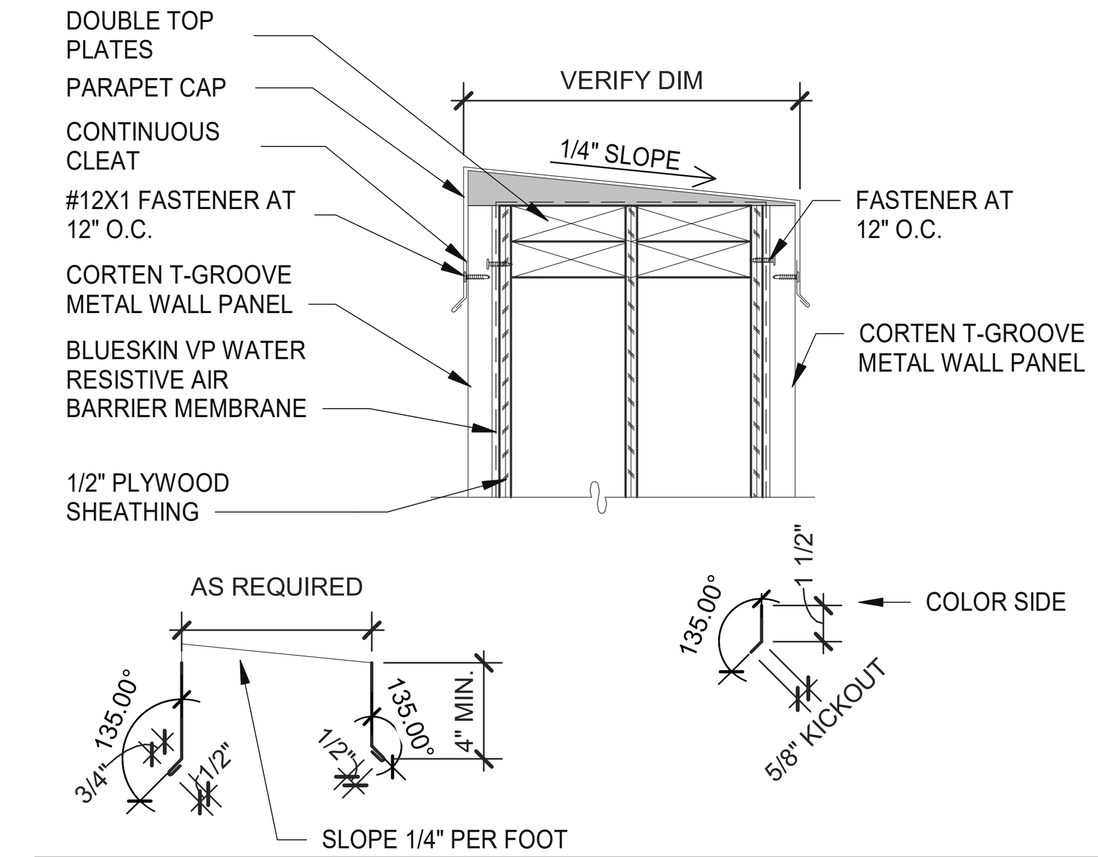
A6.1

PLOT DATE: 7/12/2021 9:53:20 AM

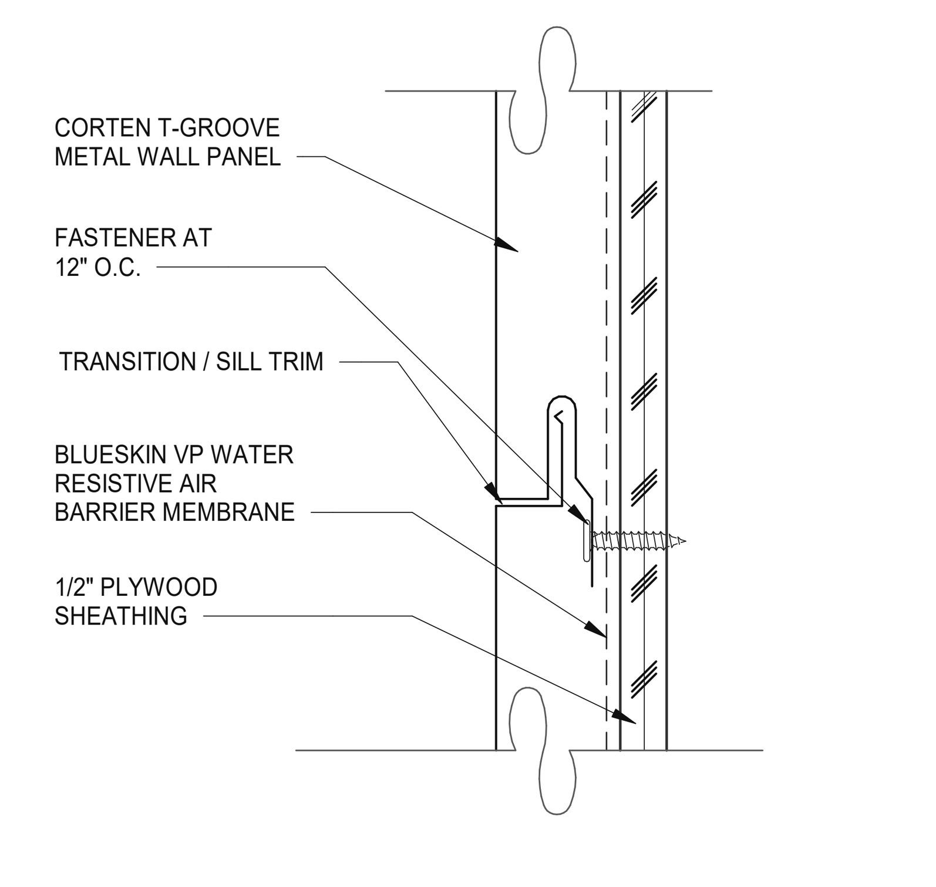
CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT



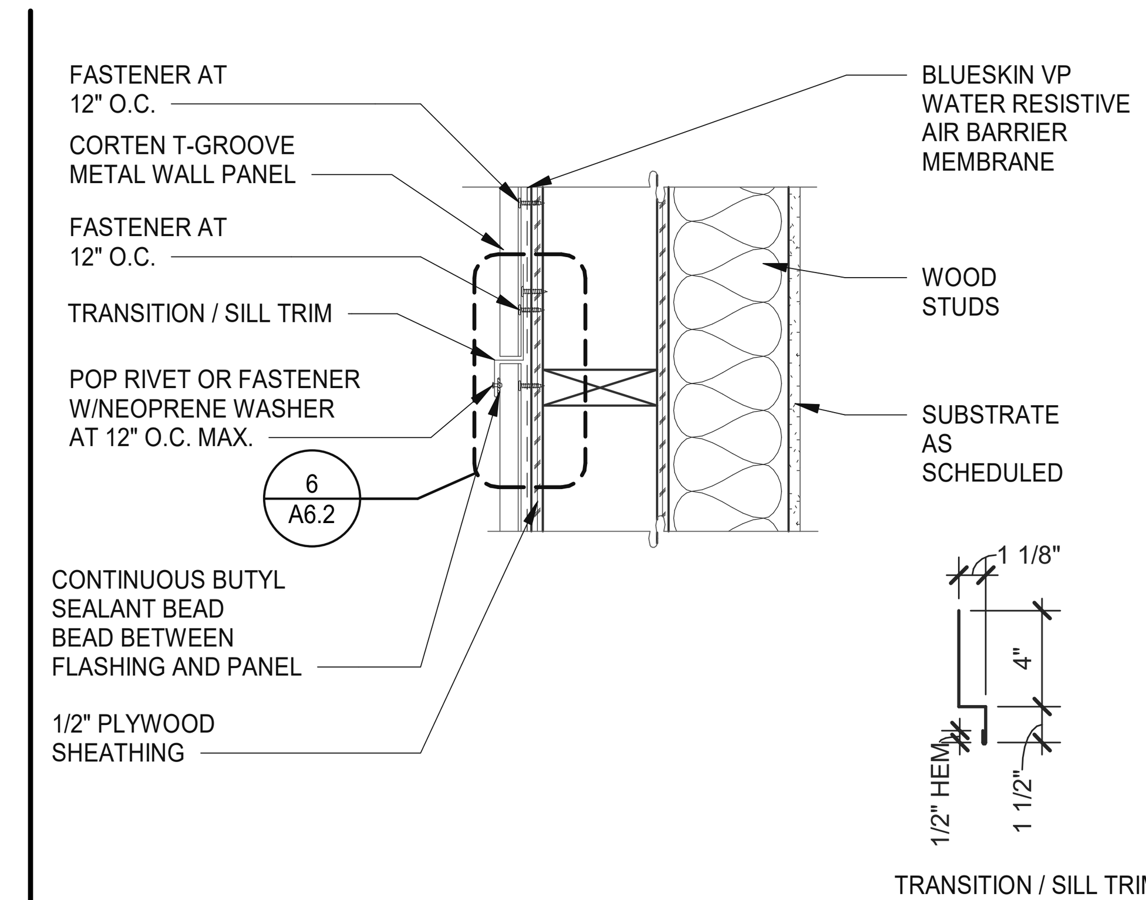
OUTSIDE CORNER 1 1/2" = 1'-0" **5**



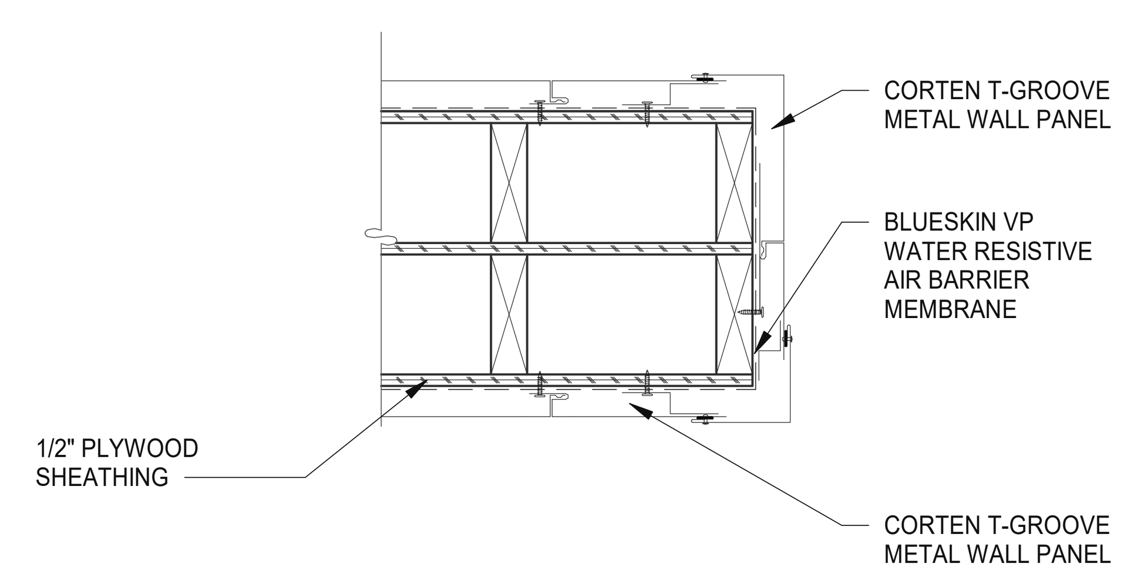
PARAPET 1 1/2" = 1'-0" **1**



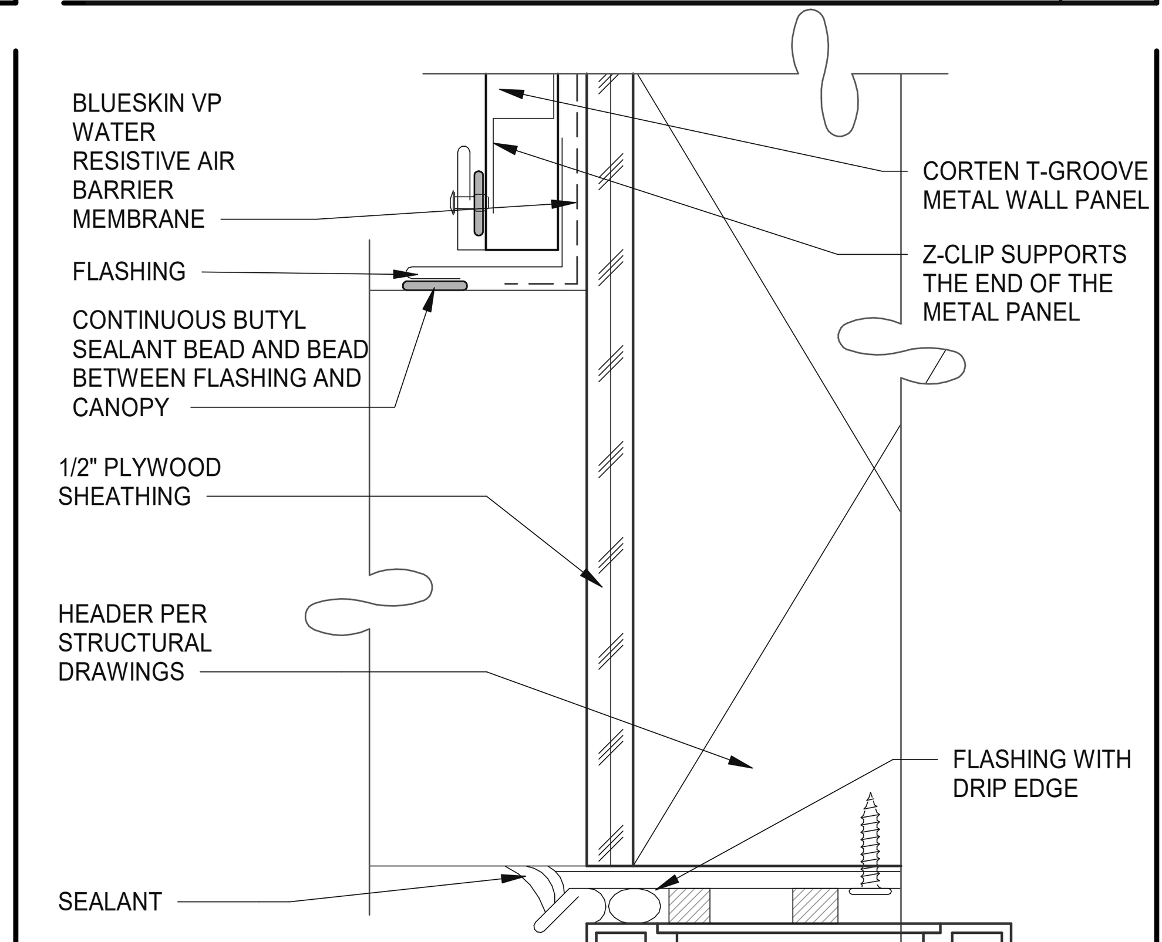
PANEL JOINT 6" = 1'-0" **6**



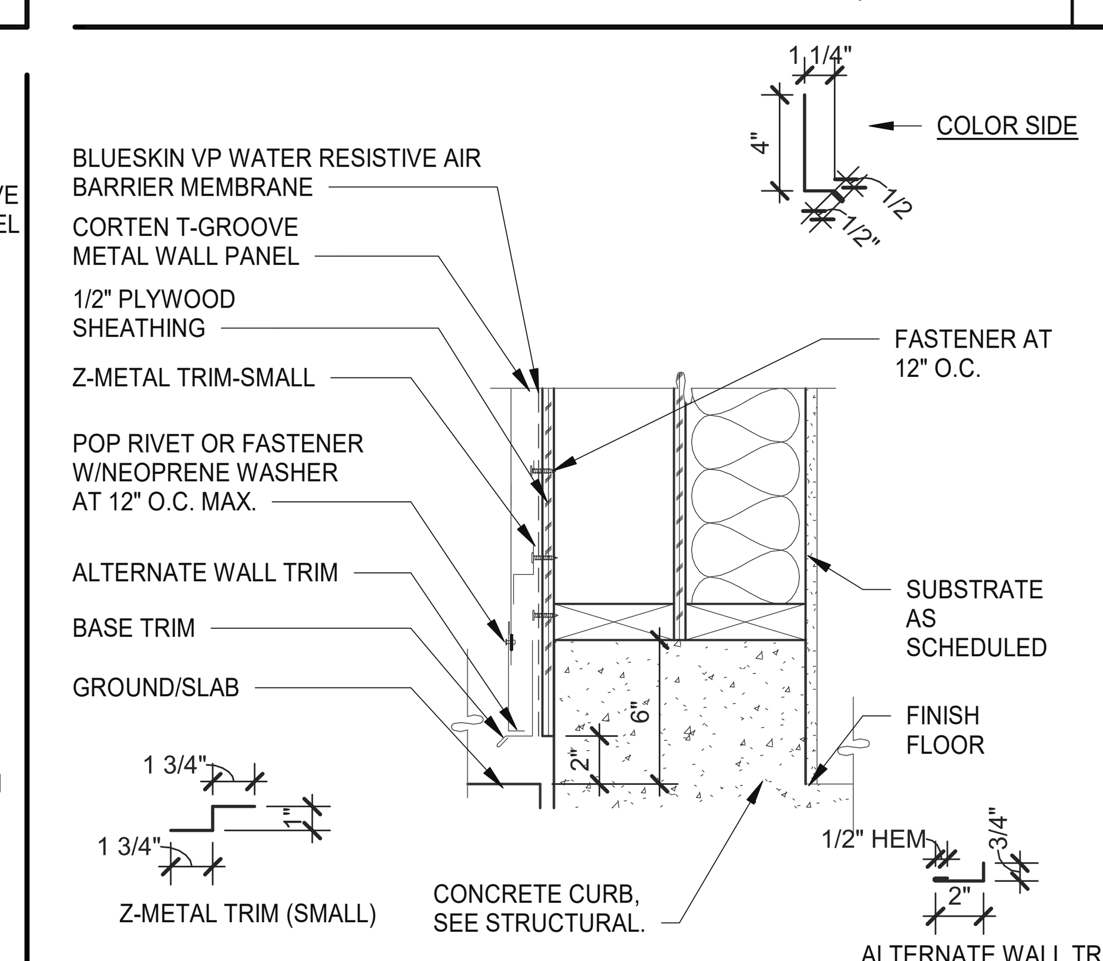
VERTICAL PANEL JOINT 1 1/2" = 1'-0" **2**



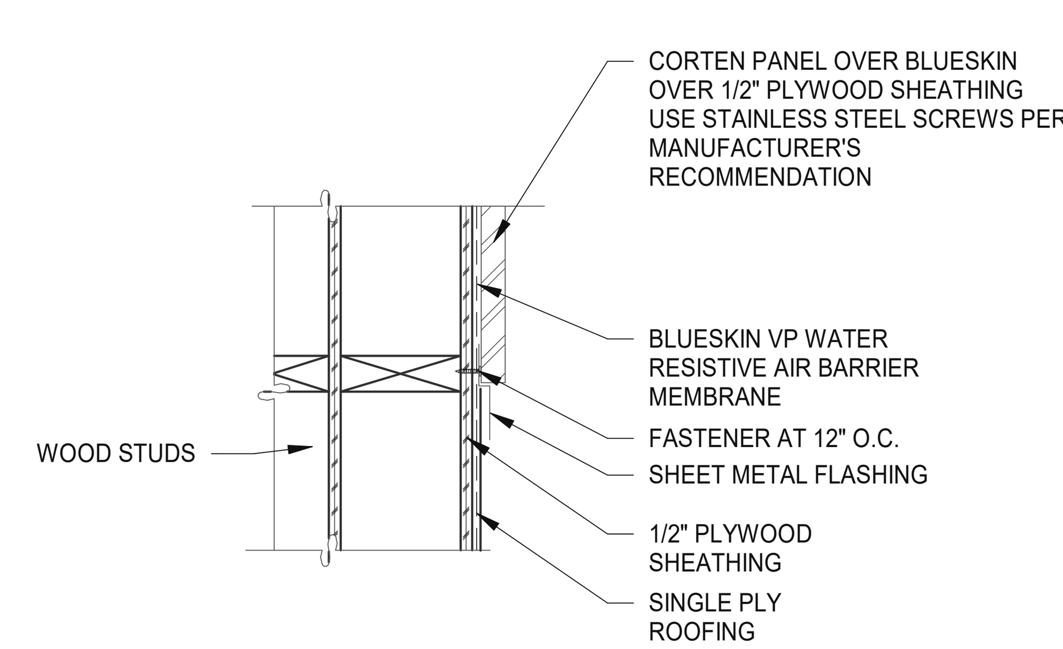
CORTEN T-GROOVE METAL PANEL 1 1/2" = 1'-0" **11**



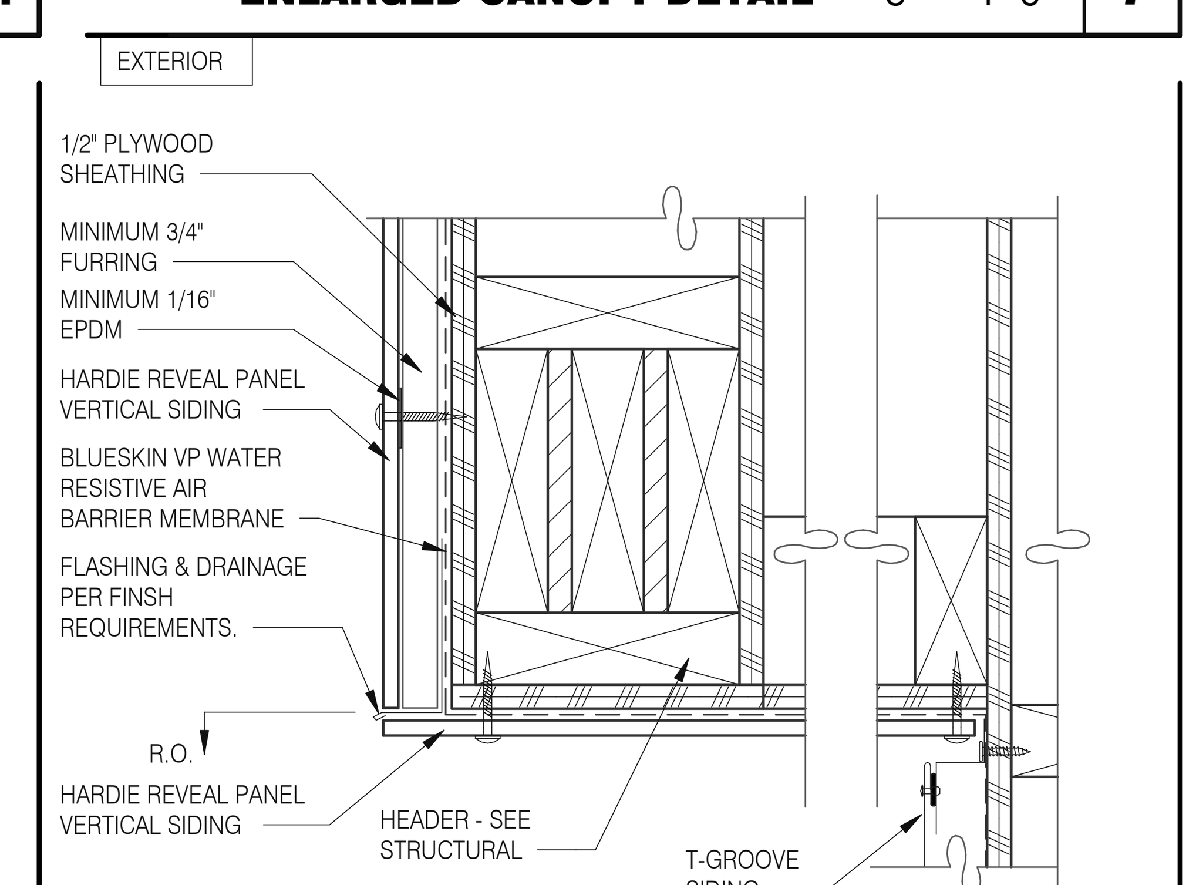
ENLARGED CANOPY DETAIL 6" = 1'-0" **7**



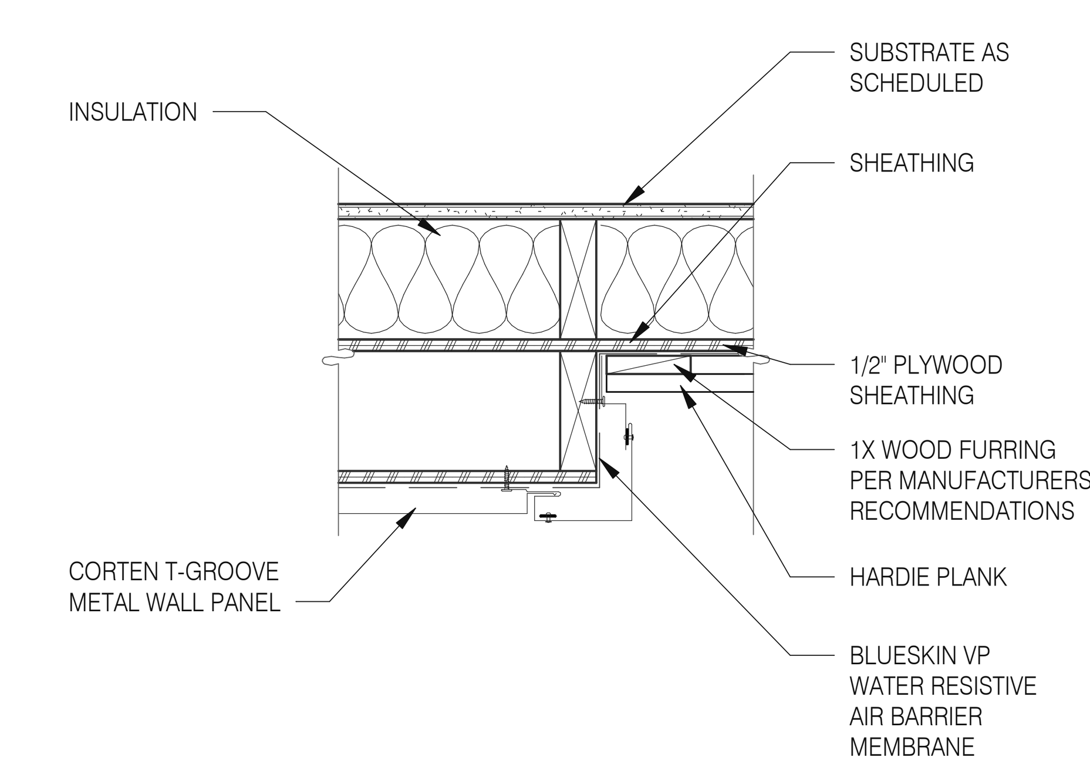
BASE TRIM HORIZONTAL 1 1/2" = 1'-0" **3**



METAL PANEL @ ROOFING 1 1/2" = 1'-0" **12**



PARAPET CORNER 3" = 1'-0" **8**



VERTICAL OUTSIDE CORNER 1 1/2" = 1'-0" **4**

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BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RS
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
CONSTRUCTION DETAILS WALL

A6.2

PLOT DATE: 7/12/2021 9:53:23 AM

C:\Users\rsmith\Documents\0275_ARCH_SM20_Rustys1.rvt

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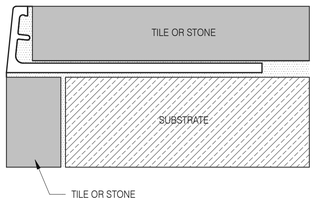
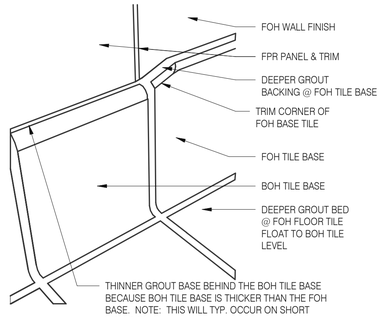
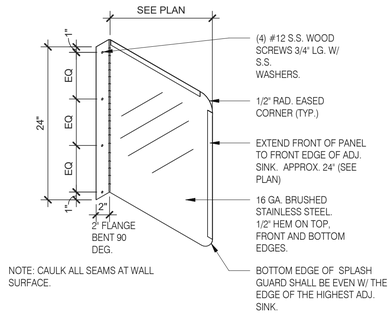


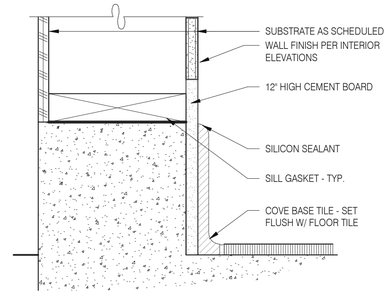
SCHLUTER JOLLY CORNER GUARD 1 1/2" = 1'-0" | 17



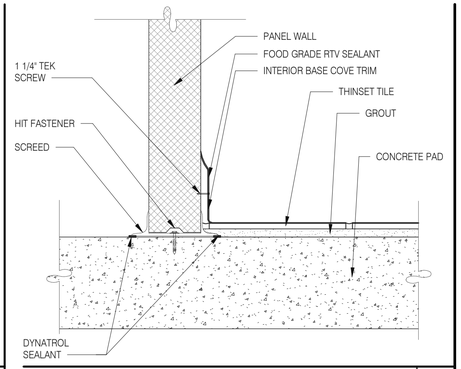
TILE BASE TRANSITION 12" = 1'-0" | 13



SPLASH GUARD 1" = 1'-0" | 9

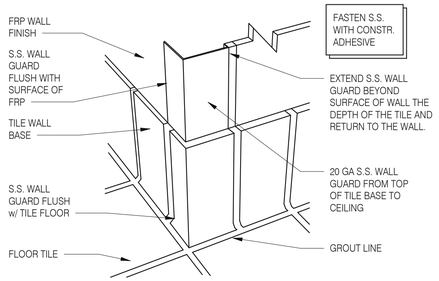


BASE @ DINING EXT. SIDE WALLS 3" = 1'-0" | 5



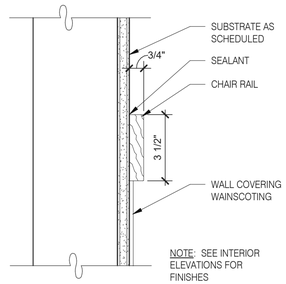
WALK-IN TILE/BASE 1 1/2" = 1'-0" | 1

NOT USED | 18



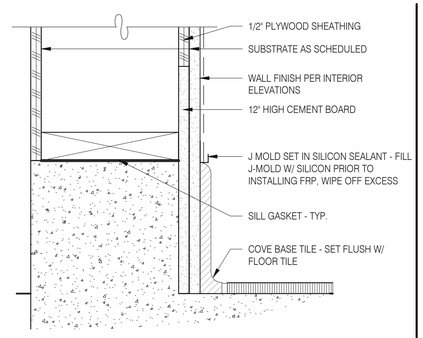
NOTE : THIS DETAIL SHOW A 90 DEGREE CORNER. ADAPT THIS DETAIL AND APPLY WHERE WALLS EXTEND INTO SPACE.

S.S. CORNER & END WALL GUARD 12" = 1'-0" | 14

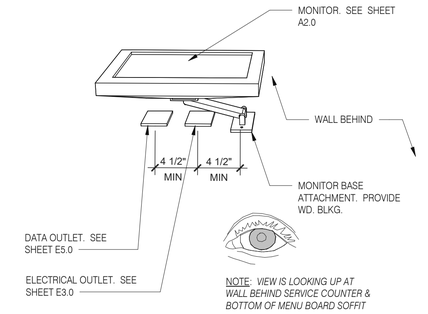


NOTE: SEE INTERIOR ELEVATIONS FOR FINISHES

CHAIR RAIL DETAIL 3" = 1'-0" | 10



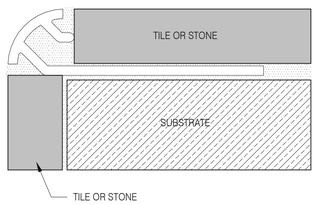
BASE @ EXT. WALL 3" = 1'-0" | 6



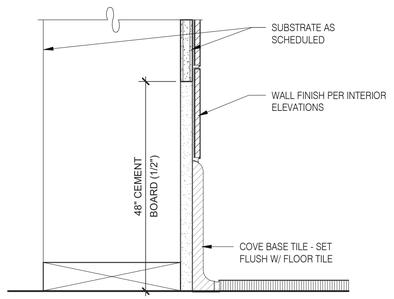
NOTE: *VIEW IS LOOKING UP AT WALL BEHIND SERVICE COUNTER & BOTTOM OF MENU BOARD SOFFIT*

WALL MOUNT MONITOR 1 1/2" = 1'-0" | 2

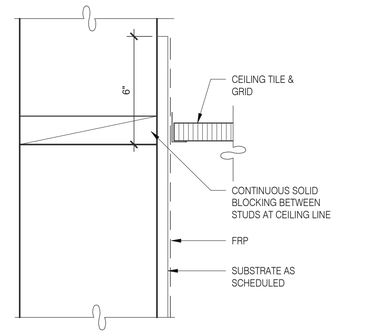
NOT USED | 19



SCHLUTER CORNER GUARD 1 1/2" = 1'-0" | 15

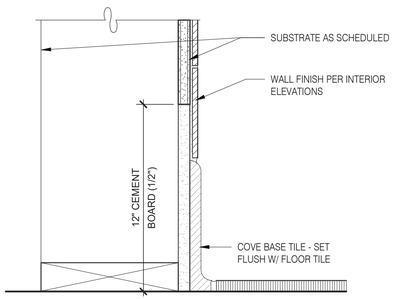


BASE IN RESTROOM 3" = 1'-0" | 7

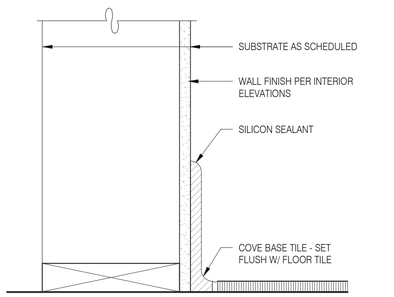


KITCHEN FINISH @ CEILING 3" = 1'-0" | 3

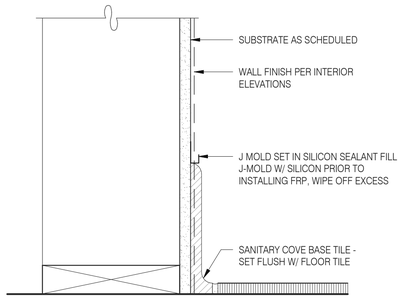
NOT USED | 20



BASE @ KITCHEN WALL 3" = 1'-0" | 16



BASE @ DINING ROOM INT. WALL 3" = 1'-0" | 8



BASE @ DINING ROOM INT. WALL 3" = 1'-0" | 4

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PA/PM:	JN
DRAWN BY.:	RS
JOB NO.:	2018088.64

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ENDEAVOR 2.0
FINISH DETAILS

A6.3

PLOT DATE: 7/12/2021 9:53:26 AM

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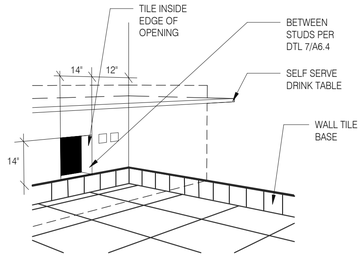
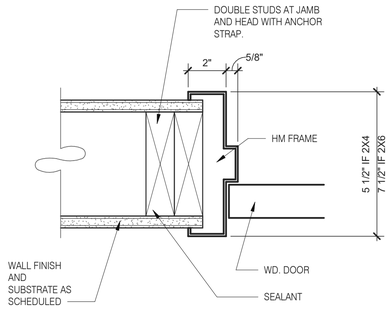
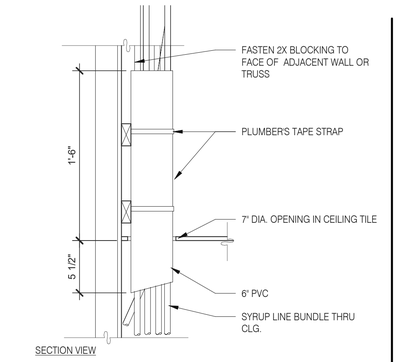


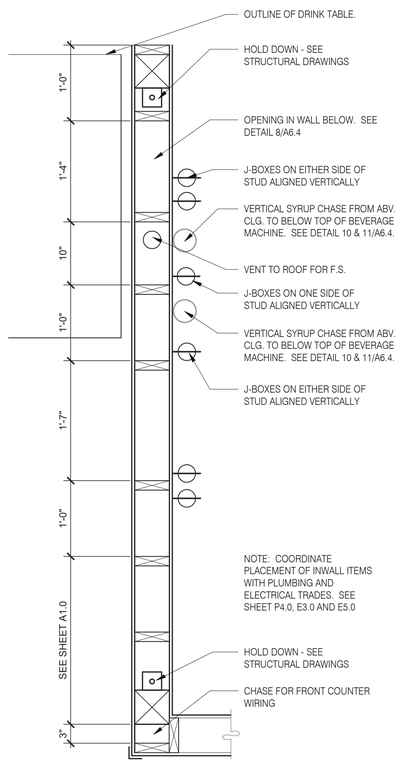
WALL PASS THRU N.T.S. **8**



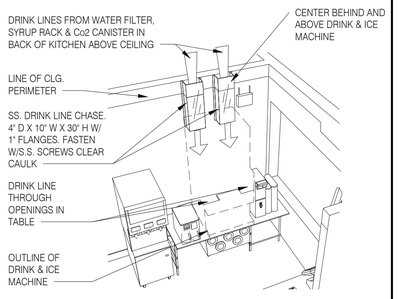
HEAD/JAMB @ H.M. DOOR N.T.S. **6**



SYRUP BUNDLE CLG. 1 1/2" = 1'-0" **10**



INTERIOR CHASE WALL N.T.S. **7**



NOTE: SEE DETAIL 8/P6.0 DRINK SYSTEM SCHEMATIC & DETAIL 6/P6.0 AND 7/P6.0 FOR DRINK LINES

SYRUP CHASE ON WALL 1 1/2" = 1'-0" **11**

C:\Users\rsmith\Documents\0275_ARCH_SM20_Rusty1.rvt

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DRAWN BY.:	RS
JOB NO.:	2018088.64

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ENDEAVOR 2.0
CONSTRUCTION DETAILS INTERIOR

A6.4

PLOT DATE: 7/12/2021 9:53:28 AM

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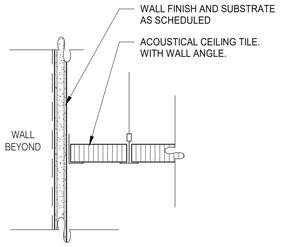
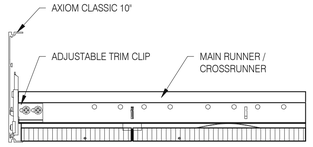
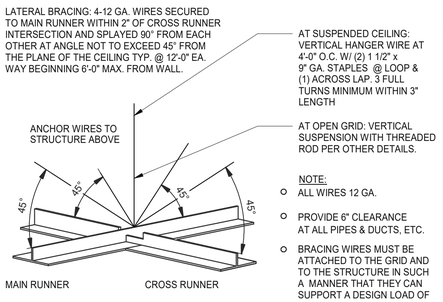


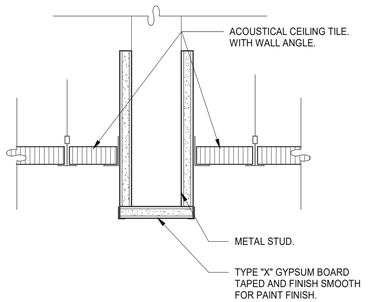
GYPSUM BOARD TRANSITION 3" = 1'-0" **17**



ASSEMBLY CLIP-ON 3" = 1'-0" **13**



SUSPENDED ACOUSTICAL CEILING 3" = 1'-0" **9**



CEILING HEADER TRANSITION 3" = 1'-0" **5**

MEMBER DEPTH:

(EXAMPLE: 6" = 600 X 1/100 INCHES) ALL MEMEBER DEPTHS ARE TAKEN IN 1/100 INCHES. FOR ALL "T" SECTIONS MEMBER DEPTH IS THE INSIDE DIMENSION.

STYLE:

(EXAMPLE: STUD OR JOIST SECTION = S) THE FOUR ALPHA CHARACTERS UTILIZED BY THE DESIGNATOR SYSTEM ARE:

S = STUD OR JOIST, T = TRACK, U = CHANNEL, F = FURRING

600 S 162 - 54

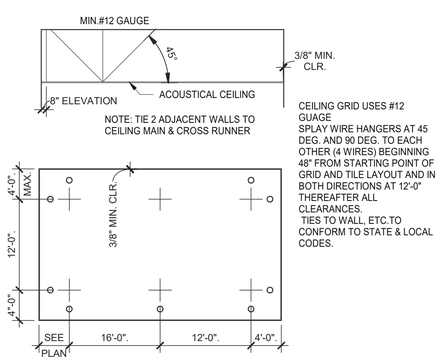
FLANGE WIDTH:

(EXAMPLE: 1 5/8" = 1.625" ~ 162 X 1/100 INCHES) ALL FLANGE WIDTHS ARE TAKEN IN 1/100 INCHES.

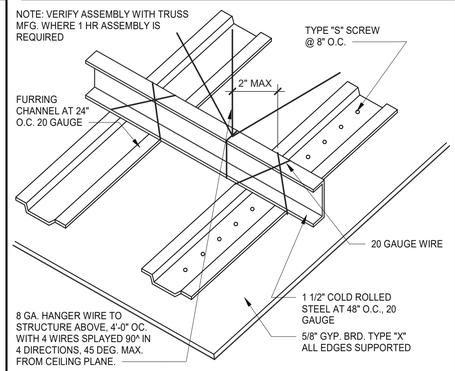
MATERIAL THICKNESS:

(EXAMPLE: 0.054 IN. = 54 MILS; 1 MIL =1/1000 IN.) MATERIAL THICKNESS IS THE MINIMUM BASE METAL THICKNESS IN MILS. MINIMUM BASE METAL THICKNESS REPRESENTS 95% OF THE DESIGN THICKNESS.

CEILING HEADER TRANSITION 3" = 1'-0" **14**



SUSPENDED CEILING GRID 12" = 1'-0" **10**



GYPSUM BOARD CEILING 3" = 1'-0" **6**

CEILING SPAN TABLE NOTES:

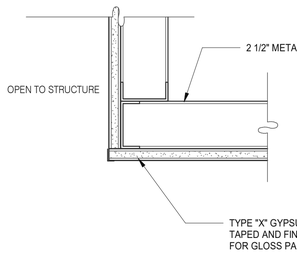
1. VALUES ARE FOR SINGLE SPANS.
2. ALLOWABLE CEILING SPAN CALCULATIONS BASED ON 33KSI YIELD STRENGTH STEEL.
3. FOR FULLY BRACED CEILINGS, USE MID-SPAN BRACED VALUES.
4. END BEARING LENGTH = 1" MINIMUM.

SECTION:	(MIL)	4 PSF LATERAL SUPPORT OF COMPRESSION FLANGE UNSUPPORTED JOIST SPACING (IN.) O.C. 12"	16"	24"	MID-SPAN JOIST SPACING (IN.) O.C. 12"	16"	24"
362S125	18	9'-3"	8'-7"	7'-7"	12'-8"	11'-7"	10'-0"
362S125	27	10'-8"	9'-10"	8'-10"	15'-0"	13'-11"	12'-4"
362S125	30	11'-0"	10'-2"	9'-1"	15'-6"	14'-4"	12'-10"
362S125	33	11'-5"	10'-7"	9'-5"	16'-2"	14'-10"	13'-3"
362S125	43	12'-8"	11'-8"	10'-5"	17'-9"	16'-5"	14'-8"
362S137	27	12'-0"	11'-2"	10'-0"	17'-2"	15'-11"	14'-3"
362S137	33	12'-11"	11'-11"	10'-8"	18'-4"	16'-11"	15'-2"
362S137	43	14'-3"	13'-2"	11'-8"	20'-0"	18'-6"	16'-7"
362S162	33	14'-8"	13'-7"	12'-2"	20'-10"	18'-11"	16'-6"
362S162	43	16'-2"	14'-11"	13'-4"	22'-8"	20'-7"	18'-0"
400S125	27	10'-11"	10'-1"	9'-1"	15'-5"	14'-3"	12'-9"
400S125	30	11'-4"	10'-5"	9'-4"	16'-0"	14'-9"	13'-2"
400S125	33	11'-9"	10'-10"	9'-8"	16'-7"	15'-3"	13'-8"
400S125	43	13'-0"	12'-0"	10'-8"	18'-3"	16'-10"	15'-0"
400S137	27	12'-4"	11'-5"	10'-3"	17'-7"	16'-4"	14'-8"
400S137	33	13'-3"	12'-3"	10'-11"	18'-9"	17'-4"	15'-7"
400S137	43	14'-7"	13'-6"	12'-0"	20'-7"	19'-0"	17'-0"
400S162	33	15'-0"	13'-11"	12'-6"	21'-5"	19'-10"	17'-9"
400S162	43	16'-7"	15'-3"	13'-8"	23'-4"	21'-7"	19'-4"
600S125	27	12'-5" ●	11'-6" ●	10'-4" ●	17'-11" ●	16'-6" ●	14'-9" ●
600S125	30	12'-9"	11'-10"	10'-8"	18'-5"	17'-1"	15'-3"
600S125	33	13'-2"	12'-3"	11'-0"	18'-11"	17'-7"	15'-10"
600S125	43	14'-6"	13'-4"	11'-11"	20'-6"	19'-0"	17'-0"
600S137	33	14'-11"	13'-9"	12'-5"	21'-5"	19'-10"	17'-10"
600S137	43	16'-3"	15'-0"	13'-5"	23'-1"	21'-5"	19'-3"
600S162	33	16'-11"	15'-8"	14'-1"	24'-5"	22'-8"	20'-5"
600S162	43	18'-5"	17'-0"	15'-3"	26'-4"	24'-4"	21'-11"

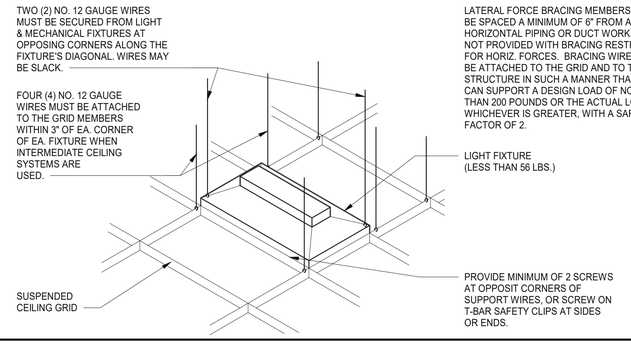
● INDICATES THAT WEB STIFFENERS ARE REQUIRED AT ENDS

NOTE: ALL JOIST INFORMATION IS BASED ON STEEL STUD MANUFACTURERS ASSOCIATION (SSMA) **ICC ESR-3064P**

ALLOWABLE CEILING SPANS-L/240 12" = 1'-0" **3**



CEILING TRANSITION 3" = 1'-0" **11**



LIGHT FIXTURE @ SUSP. CLNG. 12" = 1'-0" **8**

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	DATE	REMARKS
	04.28.21	ISSUED FOR PERMIT
2	07.12.21	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RS
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
CEILING DETAILS

A6.5

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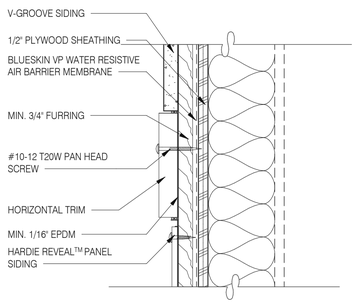
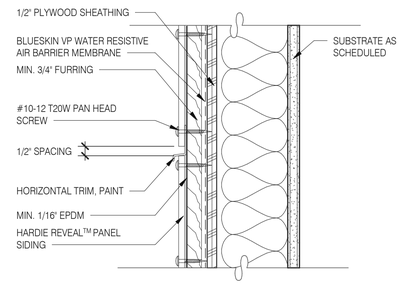
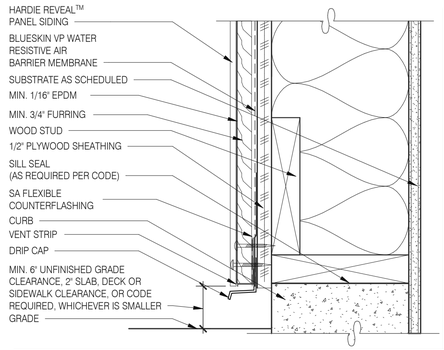


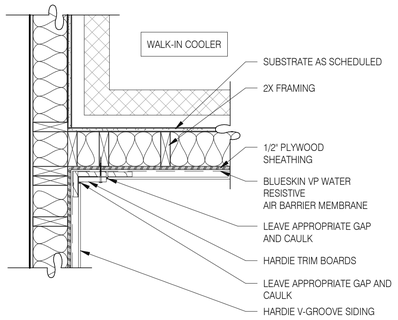
PANEL WITH HORIZONTAL TRIM 3" = 1'-0" **13**



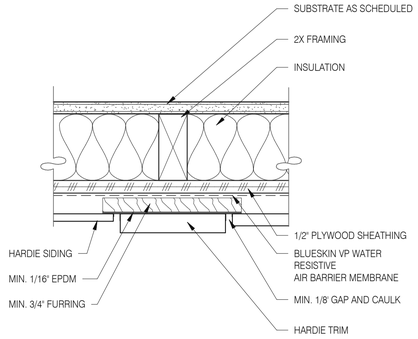
PANEL WITH HORIZONTAL TRIM 3" = 1'-0" **9**



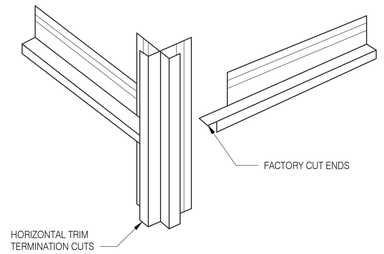
FOUNDATION @ GRADE 3" = 1'-0" **5**



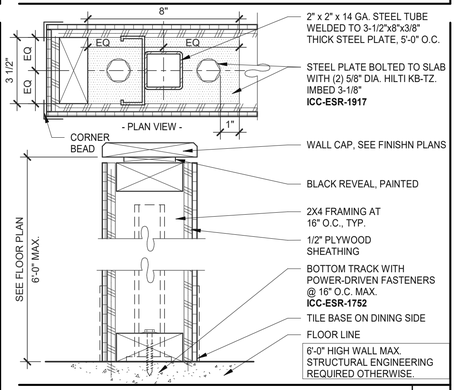
WALK-IN COOLER DETAIL 1" = 1'-0" **18**



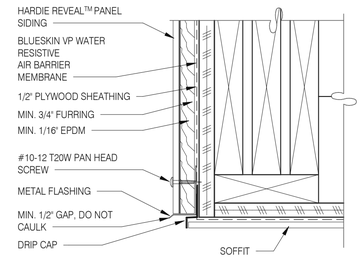
PANEL WITH VERTICAL TRIM 3" = 1'-0" **10**



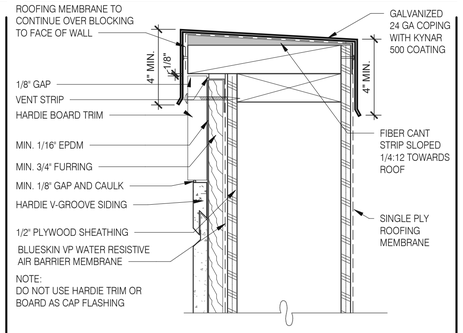
HOR. TRIM - TERMINATION N.T.S. **6**



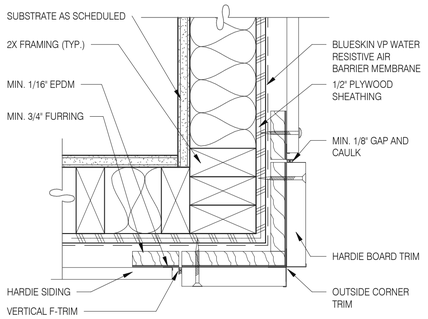
LOW WALL 3" = 1'-0" **15**



SOFFIT FLASHING INTERSECTION 3" = 1'-0" **11**



VENTED PARAPET WALL 3" = 1'-0" **12**



OUTSIDE CORNER TRIM 3" = 1'-0" **8**

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STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RS
JOB NO.:	2018088.64

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ENDEAVOR 2.0
HARDIE BOARD DETAILS

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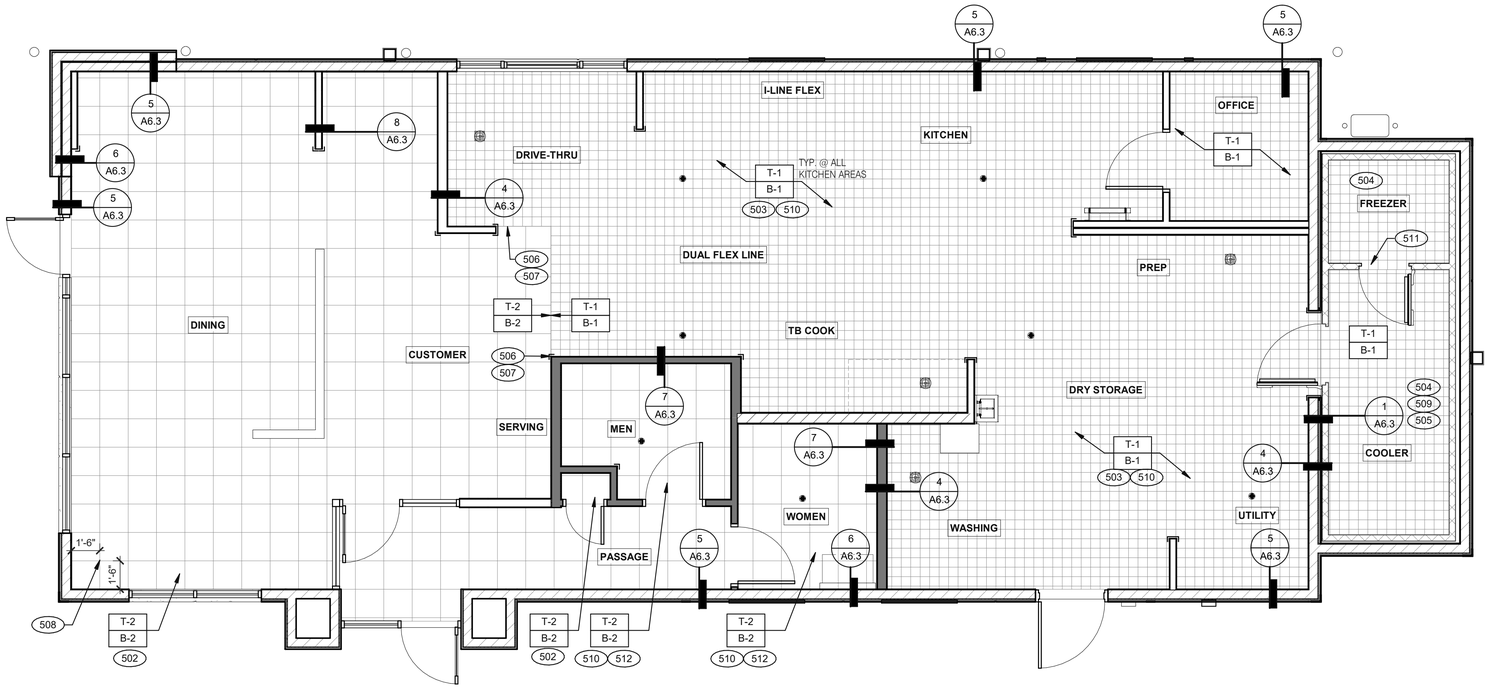

N

FLOOR FINISH PLAN 1/4" = 1'-0" | **A**

A. ▭ DENOTES FINISH MATERIAL. REFER TO SHT A7.2 FOR FINISHES

B. TILE JOINT (U.O.N.):
1. QUARRY FLOOR TILE: 1/4"
2. PORCELAIN FLOOR TILE: 3/16"
3. GLAZED WALL TILE: 1/8"
4. BASE, TRIM AND ACCESSORIES: MATCH ADJOINING TILE UNITS

C. TILE INSTALLATIONS REQUIRE MANUFACTURERS STANDARD MOLDED CORNERS AT BOTH INSIDE AND OUTSIDE CORNERS.

D. ALL BASE TILE SHALL BE SANITARY COVE STYLE WITH 3/8" MIN RADIUS UNLESS NOTED OTHERWISE.

E. SEE SCOPE OF WORK SHEETS FOR RESPONSIBILITIES.

F. PROVIDE CLEAR SILICONE CAULK WHERE FRP STOPS AT TOP OF COVE BASE.

G. TILE CHIPPING AROUND CORE DRILL HOLES FOR SEATING FIXTURE WILL NOT BE ACCEPTED.

FLOOR FINISH NOTES | **C**

502 6" COVE TILE BASE. SEE DETAILS 5 & 8/A6.3.
503 6" SANITARY COVE TILE BASE. SEE DETAILS 4, 6/A6.3.
504 PROVIDE FLOOR TILE INSIDE WALK-IN COOLER (NO TILE OR BASE IN FREEZER). FLOAT FLOOR TILE IN COOLERS TO DRAIN TO KITCHEN. COORDINATE WITH COOLER WALL CONFIGURATION.
505 NO BASE TILE BEHIND W-059 FOR WALK-IN COOLER/FREEZER.
506 ALIGN FLOOR TILE TRANSITION WITH FACE OF WALL.
507 FLOAT FLOOR TILE FOR FLUSH TRANSITION.
508 START POINT FOR FLOOR TILE.
509 METAL BASE IN COOLER; SEE SCOPE OF WORK. SEE DETAIL 1/A6.3.
510 REFER TO STRUCTURAL DRAWINGS FOR CONCRETE FLOOR SLOPES AROUND FLOOR DRAINS.
511 STEP-UP AT FREEZER THRESHOLD.
512 SANITARY TILE BASE IN RESTROOM.

KEY NOTES | **B**

NOT USED | **D**

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ENDEAVOR 2.0
FLOOR FINISH PLAN

A7.0

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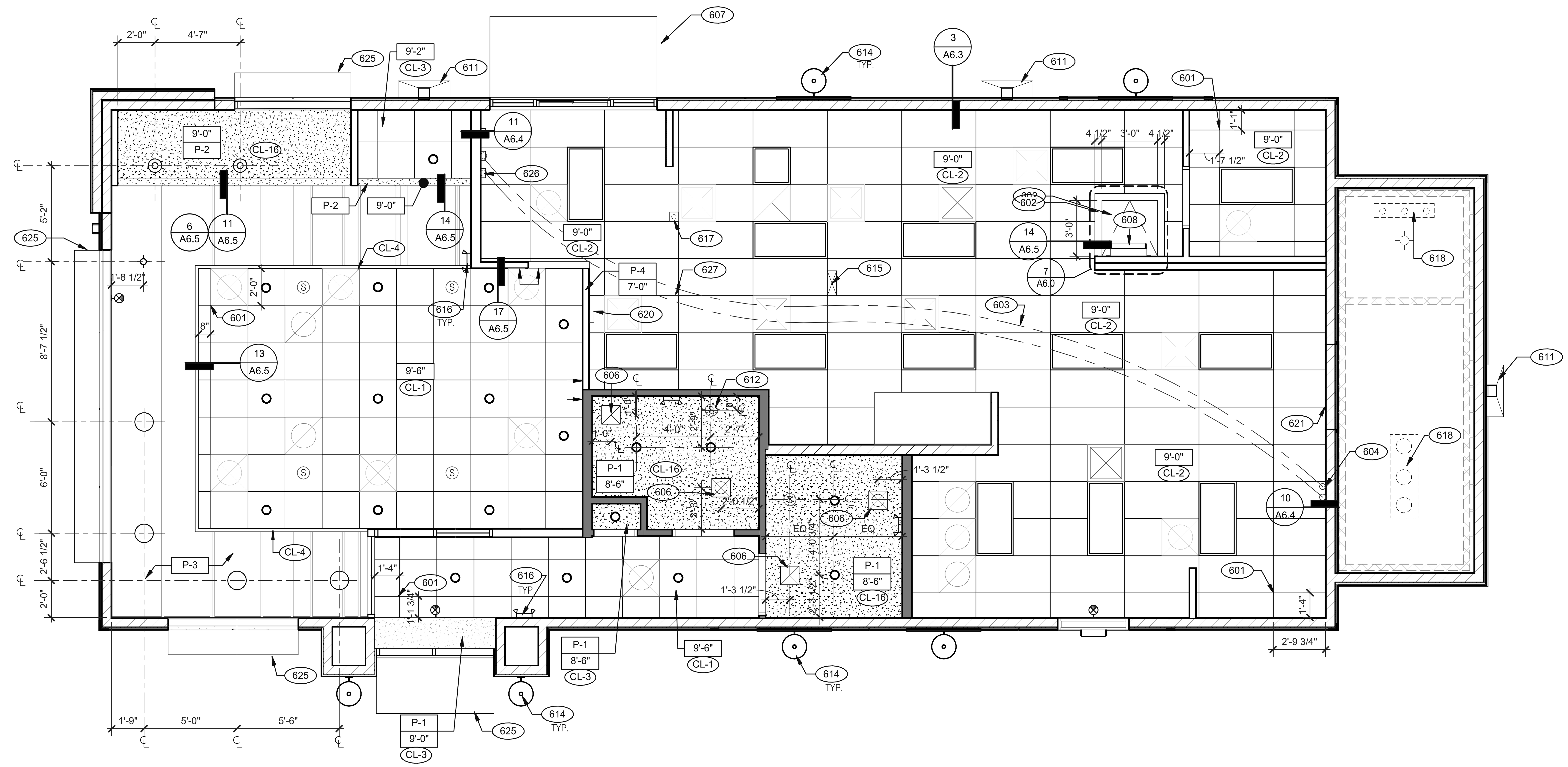

N

REFLECTED CEILING PLAN 1/4" = 1'-0" A

CEILING SYMBOL LEGEND D

Symbol	Description	Symbol	Description
	1'-0" x 4'-0" LED TROFFER		EXIT LIGHT (WALL MOUNTED)
	2'-0" x 4'-0" LED TROFFER		EXIT LIGHT (CEILING MOUNTED)
			EXTERIOR WALL FIXTURE
→	2'-0" x 4'-0" LED LIGHT FIXTURE	S	SPEAKER - CENTER ON CEILING TILE
			12" EXHAUST FAN
	DOWNLIGHT @ WALK-IN (BY WALK-IN MFR.)		HVAC RETURN GRILLE
	PENDANT FIXTURE.		HVAC SUPPLY DIFFUSER
	DOWNLIGHT - CENTER ON CEILING TILE		BACK DOOR SECURITY STROBE LIGHT
	EMERGENCY LIGHT	OC	OCCUPANCY SENSOR, CEILING MOUNTED

REFLECTED CEILING PLAN NOTES C

DIMENSIONS:
A. ALL DIMENSIONS ARE TO FACE OF FINISH U.O.N.

CEILING FINISHES:
A. REFER TO ROOM FINISH SCHEDULE (SHT A7.2) FOR CLG. FINISHES.

SUSPENDED CEILING:
A. ACOUSTICAL PANEL INSTALLATION: INSTALL ACOUSTICAL PANELS WITH EDGES IN CLOSE CONTACT WITH METAL SUPPORTS AND IN TRUE ALIGNMENT.
B. ALLOWABLE VARIATIONS FROM FLAT AND LEVEL SURFACE: 1/8" IN 10'-0" MAX.
C. ALLOWABLE VARIATIONS FROM PLUMB OF GRID MEMBERS: AS CAUSED BY ECCENTRIC LOADS, 2^{o} MAX.
D. INSTALL SYSTEM AFTER MAJOR ABOVE CLG. WORK IS COMPLETE. COORD LOCATIONS OF HANGERS WITH RELATED WORK.
E. SEE SPECS FOR ADDITIONAL INFORMATION.

GYPSUM BOARD CEILING:
A. SUBSTRATE SHALL BE 1/2" THICK GYP BD.
B. ACOUSTICAL SEALANT: APPLY TO GYP. BD. PANELS AS INDICATED IN SPECS. GYP. BD. FINISHING AND DECORATING: REFER TO DWGS FOR TEXTURE AND FINISHES.

ELECTRICAL:
A. SEE ELECT. DWGS. FOR FIXTURE SCHED.

KEY NOTES B

601 CEILING GRID AT STARTING POINT.
602 BULKHEAD @ 8'-0" A.F.F.
603 NON-INSULATED BUNDLED SYRUP LINES FOR DRINK SYSTEM. SEE SCOPE OF WORK.
604 6" DIAMETER PVC STUB THROUGH CEILING, SEE DETAIL 10/A6.4.
606 FOR ROUGH FRAMING OPENINGS SEE AIR DEVICE SCHEDULE (TYP. ALL RESTROOMS).
607 DRIVE-THRU CANOPY.
608 ROOF HATCH.
611 VERTICAL DOWNSPOUT.
612 SPEAKER. CENTER ON CEILING TILE, UON.
614 EXTERIOR WALL LIGHT FIXTURES, SEE ELEVATIONS AND ELECTRICAL DRAWINGS.
615 UTILITY CHASE BY 3RD PARTY VENDOR TO CEILING.
616 EMERGENCY DUAL HEAD FIXTURE. SEE ELECTRICAL DRAWINGS.
617 SECURITY STROBE LIGHT, REFER TO ELECTRICAL DRAWINGS.
618 FAN COIL FOR WALK-IN.
620 ALERT LIGHT BOX FOR 3-COMP POWER SOAK MOUNTED AT CENTERLINE OF BOX 7'-11" A.F.F.
621 30"X30" ACCESS OPENING IN REAR WALL ABOVE CEILING. FINISH WITH GYP. BD.
625 AWNING, SEE SCOPE OF WORK.
626 STAINLESS STEEL SYRUP CHASE ON WALL. SEE DETAIL 11/A6.4.
627 WATER INLET CHASE FOR CHEESE MELTER SCREWED TO HEATED AIR SCREEN.

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ENDEAVOR 2.0
REFLECTED CEILING PLAN

A7.1

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FINISH LEGEND						
SYMBOL	MANUFACTURER	STYLE	COLOR	SIZE	GROUT	COMMENTS
CEILING						
CL-1	USG	ACT SYSTEM, USG RADAR, CLIMAPLUS PERFORMANCE, SQ EDGE	#107 TAUPE	2X2	N/A	USG DONN BRAND DX/DXL 15/16 TEE SYSTEM, INTERMEDIATE DUTY #107 TAUPE
CL-2	USG	ACT SYSTEM, USG CLEAN ROOM ACOUSTICAL PANELS, CLIMAPLUS PERFORMANCE, SQ EDGE	#050 WHITE	2x4	N/A	CLASS 100 (ISO 5) PANELS, USG DONN BRAND DX/DXL 15/16 TEE SYSTEM, INTERMEDIATE DUTY #050 WHITE
CL-3	USG	ACT SYSTEM, USG CLEAN ROOM ACOUSTICAL PANELS, CLIMAPLUS PERFORMANCE, SQ EDGE	#050 WHITE	2X2	N/A	CLASS 100 (ISO 5) PANELS, USG DONN BRAND DX/DXL 15/16 TEE SYSTEM, INTERMEDIATE DUTY #050 WHITE
CL-4	USG	USG COMPASSO STANDARD	#002 SILVER SATIN	10"H PROFILE		SEE PLANS AND DETAILS FOR MORE INFO
CL-16	N/A	GYPSUM BOARD	PAINTED PER RCP			
CHAIR RAIL						
CR-1	SW	SW7043	WORLDLY GRAY	3 1/2" X 3/4"		SEMI-GLOSS
FLOOR BASE						
B-1	CMC	QUARRY	PURITAN GREY #507	6X6	MAPEI #9 GRAY, 1/8" JOINT WIDTH	KERAPOXY GROUT IEG CQ
B-2	CMC	MOTIF GREY	GREY	6X12	MAPEI, #2 PEWTER, 1/8" JOINT WIDTH	
FLOORING						
T-1	CMC	QUARRY	PURITAN GREY #507	6X6	MAPEI #9 GRAY, 1/8" JOINT WIDTH	KERAPOXY GROUT IEG CQ
T-2	CMC	MOTIF GREY	GREY	18X18	MAPEI, #2 PEWTER, 1/8" JOINT WIDTH	
FRP/LAMINATE						
FRP-1	MARLITE	SMOOTH SURFACE	S100 S/2/S WHITE	4' X 9' X .90		COORDINATE ALL TRIM PIECES WITH FRP MFG
L-1	WILSONART	4783K FINISH 7	WHITE TIGRIS			OFFICE SHELVING LAMINATE
L-2	WILSONART	Y0664K-12	MOCHA ASH			SOFTGRAIN FINISH, RR/UTILITY DOORS VERTICAL GRADE PRODUCT CODE #362 IS .028" AND HORIZONTAL GRADE PRODUCT CODE #372 IS .039"
CORNER GUARDS						
CG-1	C.S GROUP	ACROVYN VA SERIES	VA-034N #934 PEARL	3/4" X 3/4"		FOR PAINT MATCH P-1
CG-2	C.S GROUP	ACROVYN VA SERIES	VA-034N #262 DRIFTWOOD	3/4" X 3/4"		FOR PAINT MATCH CR-1 & WC-1
METAL TRANSITION						
MT-1	SCHLUTER	JOLLY	A 100 AT - SATIN NICKEL ANODIZED ALUMINUM	3/8"	N/A	TILE EDGE TRIM DETAIL 17/A6.3
MT-3	SCHLUTER	RONDEC - ALUMINUM		3/8"	N/A	TILE EDGE TRIM DETAIL 17/A6.3
SOLID SURFACE						
SS-1	CORIAN	LAVA ROCK	LAVA ROCK			COUNTERTOPS/24" DIAMETER TABLE TOP
WALL COVERING						
WC-1	WOLF GORDON	'RAMPART' HIGH IMPACT WALL COVERING	FOUNDATION/ PIGMENT (GOH 12172606)		RAILROAD INSTALLATION: THERE SHOULD BE NO SEAMS ALONG WALLS	1 ROLL: 80 L.F.
WALL PAINT						
P-1	SHERWIN WILLIAMS	SW7021	SIMPLE WHITE	N/A	N/A	PAINT FINISH: WALLS: EGGSHELL TRIM/BOH: SEMI-GLOSS (CHAIR RAIL) CEILING: FLAT
P-2	SHERWIN WILLIAMS	TB2603C	PURPLE	N/A	N/A	
P-3	SHERWIN WILLIAMS	SW7076	CYBER SPACE	N/A	N/A	
P-4	SHERWIN WILLIAMS	SW7005	PURE WHITE	N/A	N/A	
WALL TILE						
W-1	CMC	FORM	ICE DECO MIX	8X8	MAPEI #47 CHARCOAL, 1/8" JOINT WIDTH	RESTROOM ACCENT WALL TILE
W-2	CMC	FORM	ICE	8X8	MAPEI #47 CHARCOAL, 1/8" JOINT WIDTH	RESTROOM WALL TILE
W-3	CMC	SALVAGEWOOD	WHITEWASH	3X36	MAPEI #01 ALABASTER, 1/8" JOINT WIDTH	RUNNING BOND INSTALLATION OFFSET 25%

FINISH LEGEND D

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(909) 247-5324
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FINISH CONTACTS N.T.S. C

NOT USED A

NOT USED B

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
330.572.2100 FAX: 330.572.2102

	DATE	REMARKS
	04.28.21	ISSUED FOR PERMIT
2	07.12.21	ISSUED FOR BID

CONTRACT DATE: 04.08.21
BUILDING TYPE: END. MED20
PLAN VERSION: MARCH 2021
BRAND DESIGNER: DICKSON
SITE NUMBER: 313354
STORE NUMBER: 449523
PA/PM: JN
DRAWN BY.: RS
JOB NO.: 2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
FINISH SCHEDULE

A7.2

PLOT DATE: 7/12/2021 9:53:45 AM

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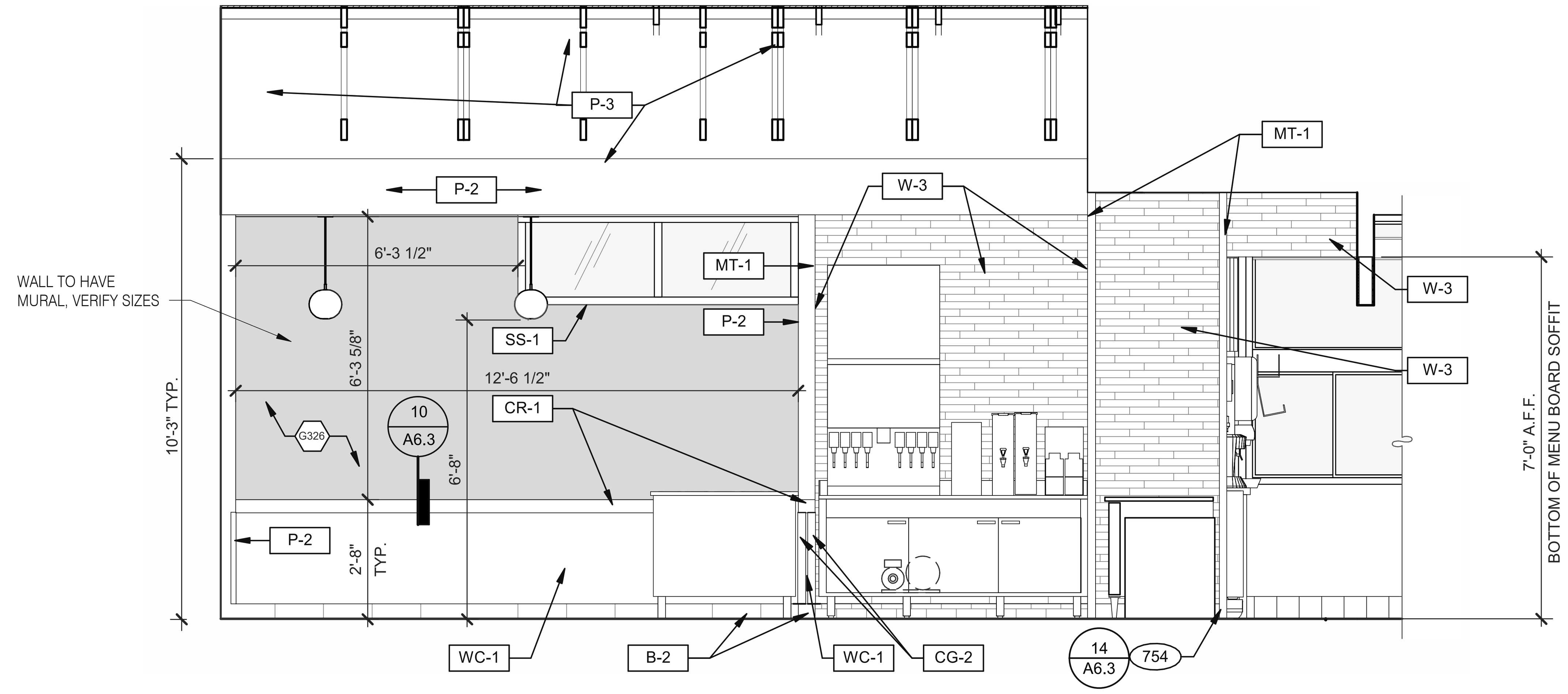

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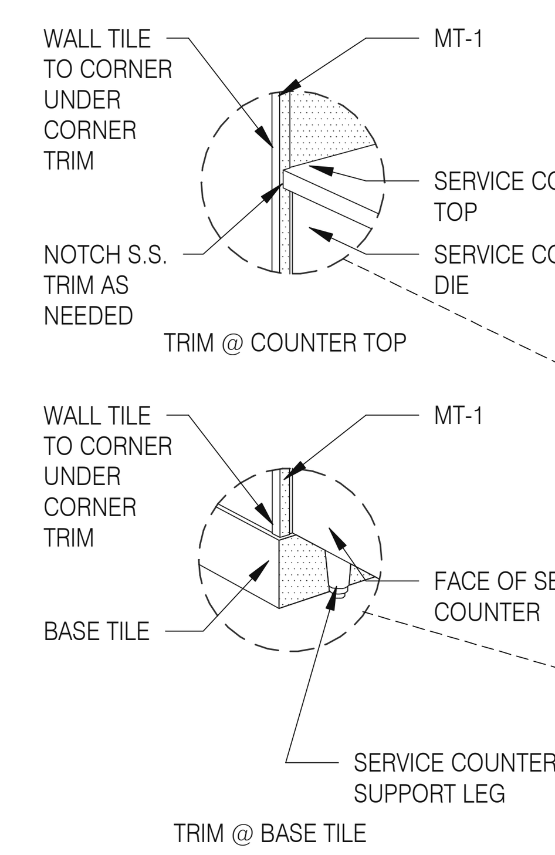

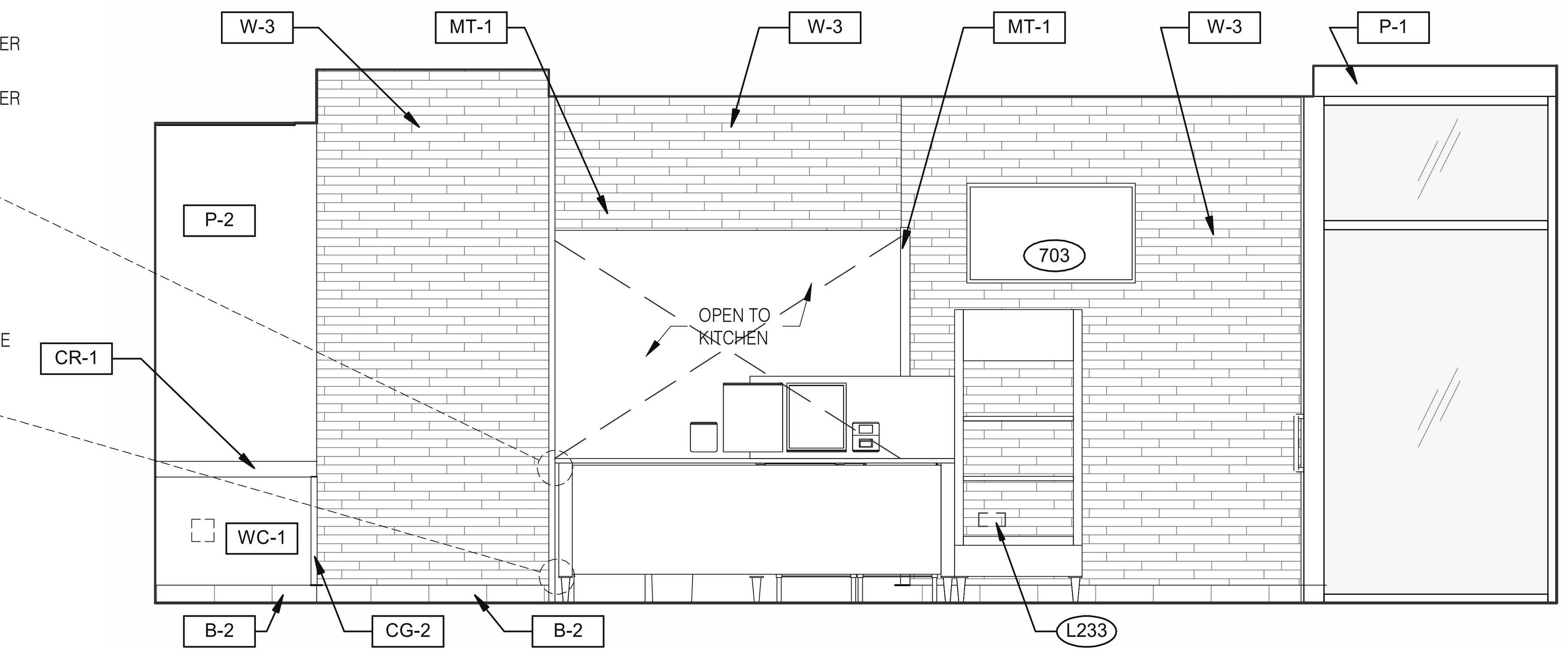

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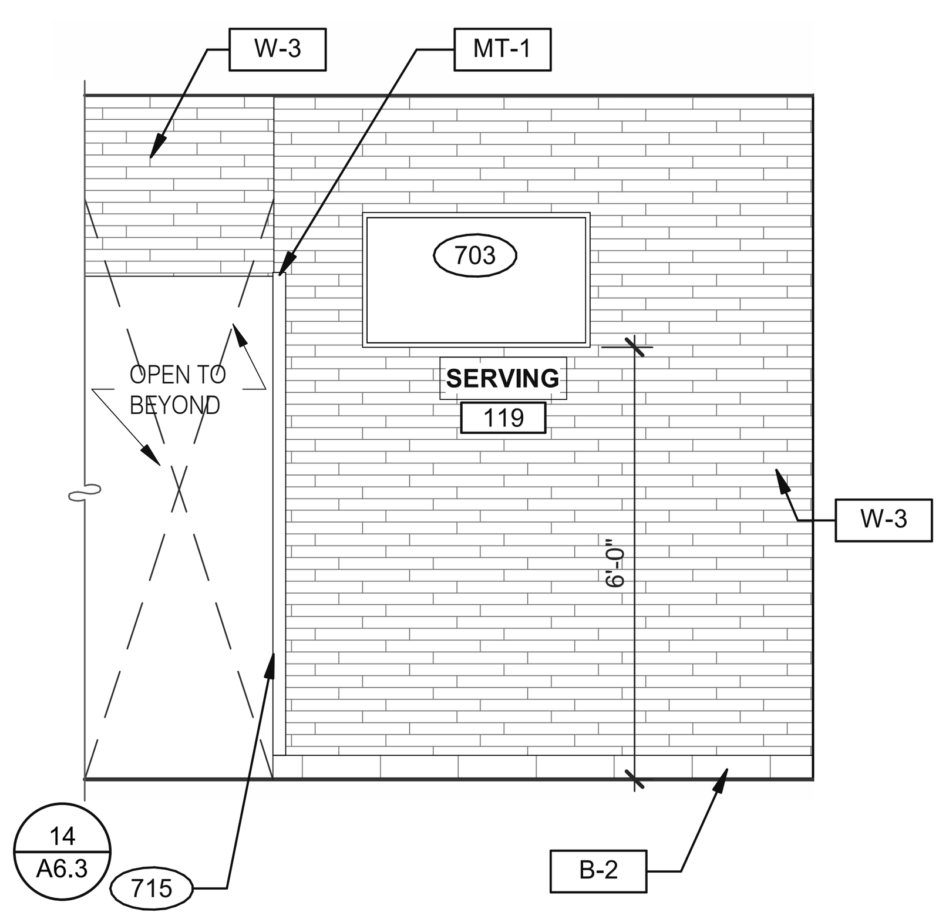
DINING 3/8" = 1'-0"



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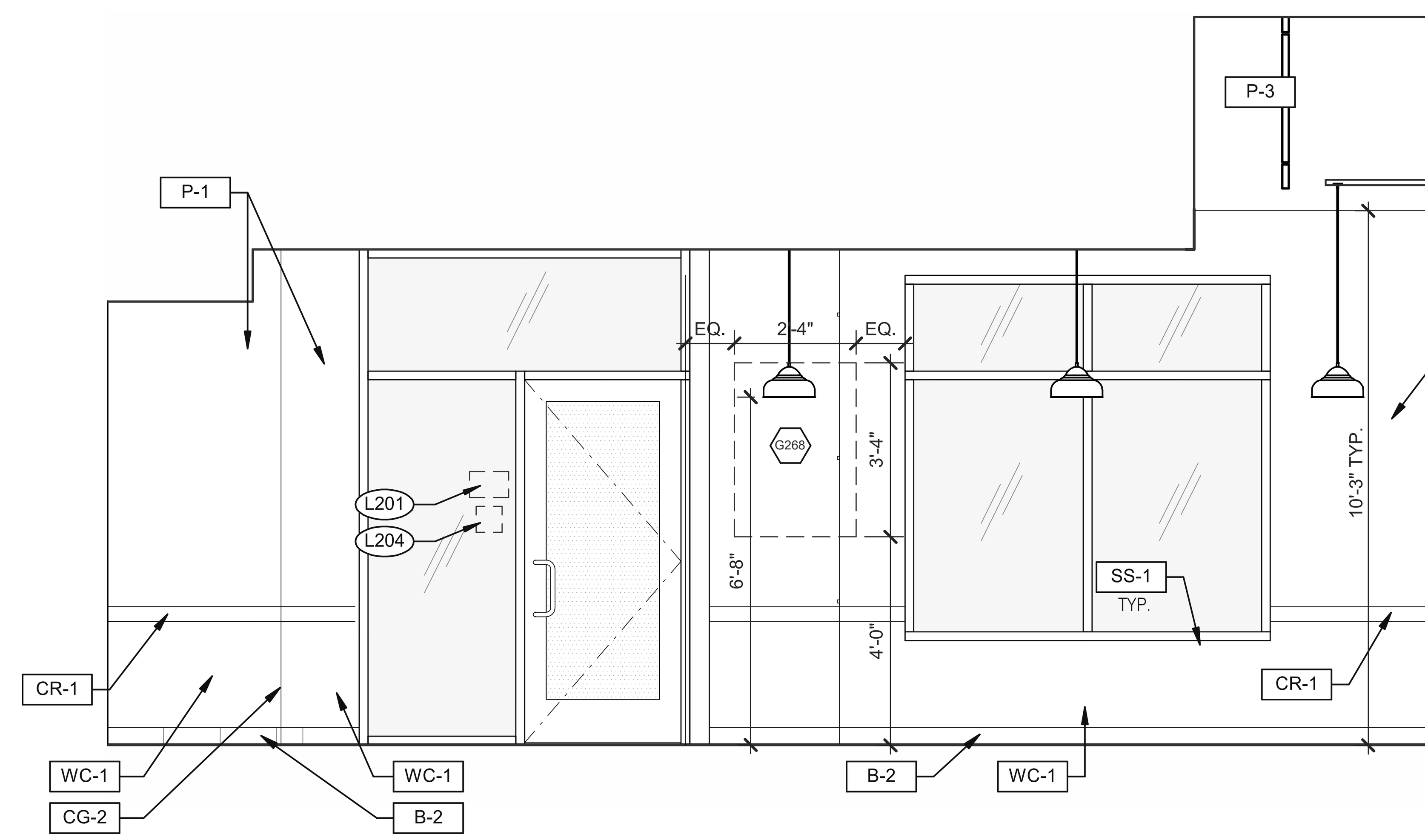

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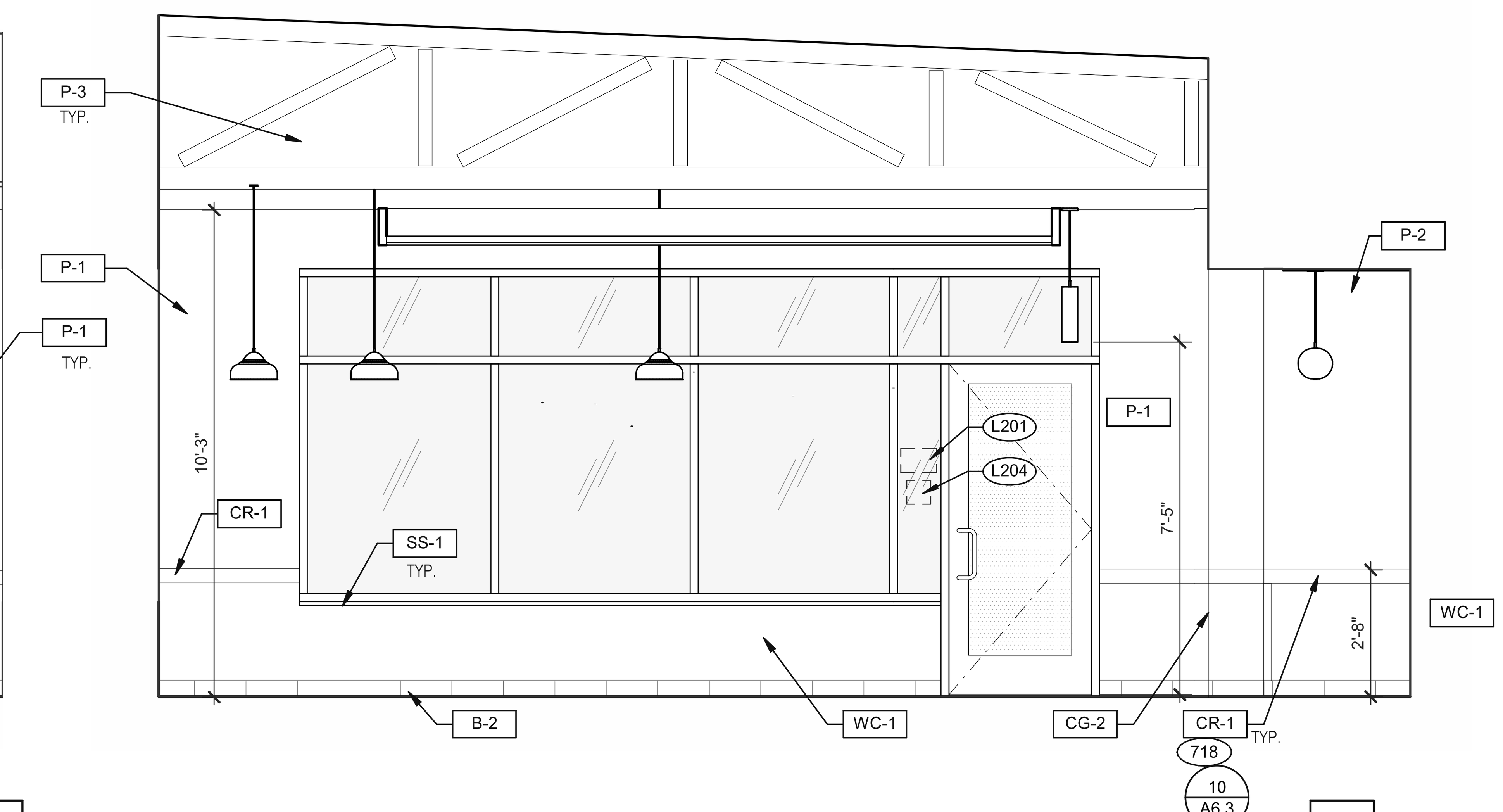
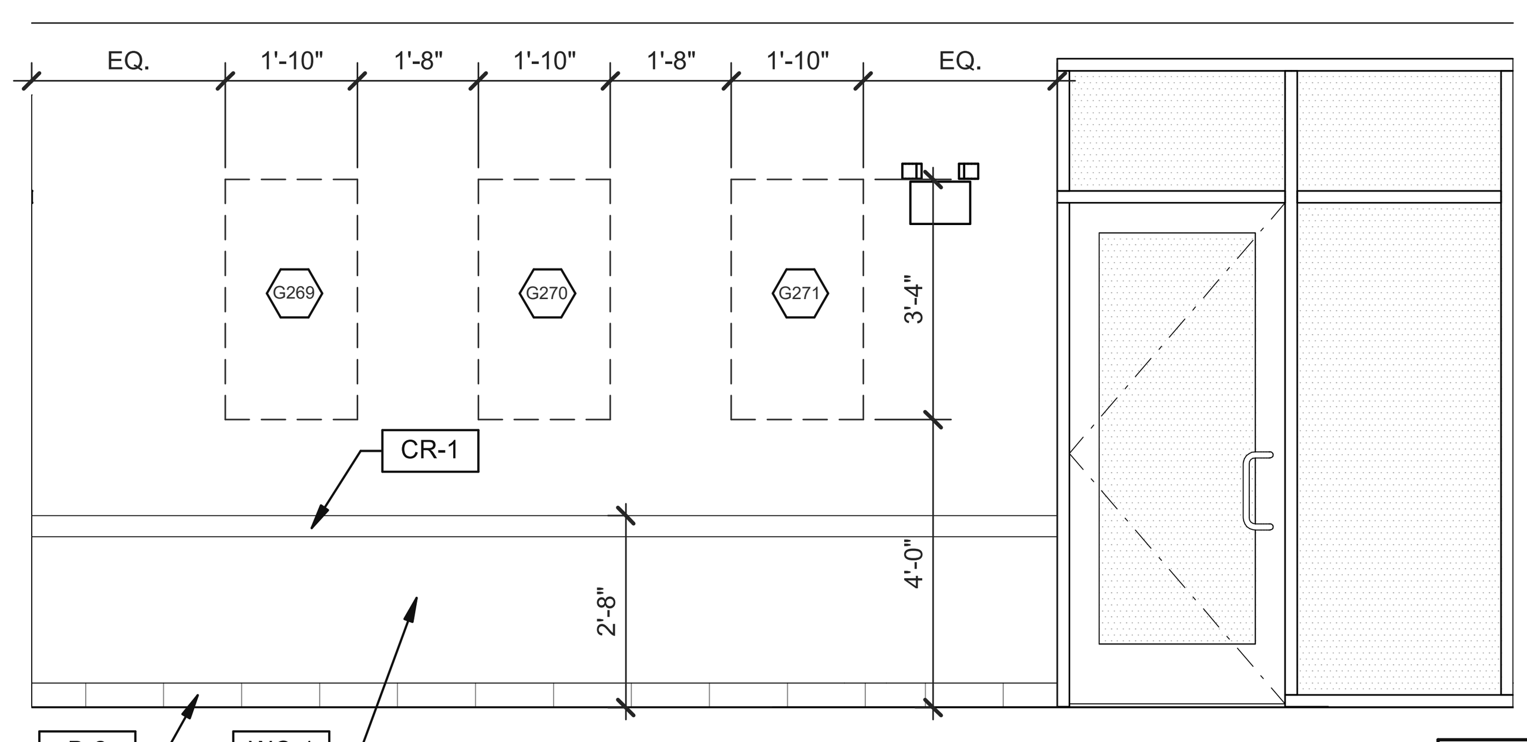


3

DINING 3/8" = 1'-0"

DESIGNER NOTE: CALIFORNIA ADA RESTROOM SIGNAGE SIGNS MUST BE 1/4" THICK, AND IN CONTRASTING COLOR TO THE SURFACE ON WHICH THEY ARE INSTALLED.
DOOR: GENDER NEUTRAL SIGN
(E#: E7000974)
WALL SIGN: FAMILY RESTROOM SIGN WITH BRAILLE
(E#: E76000972)



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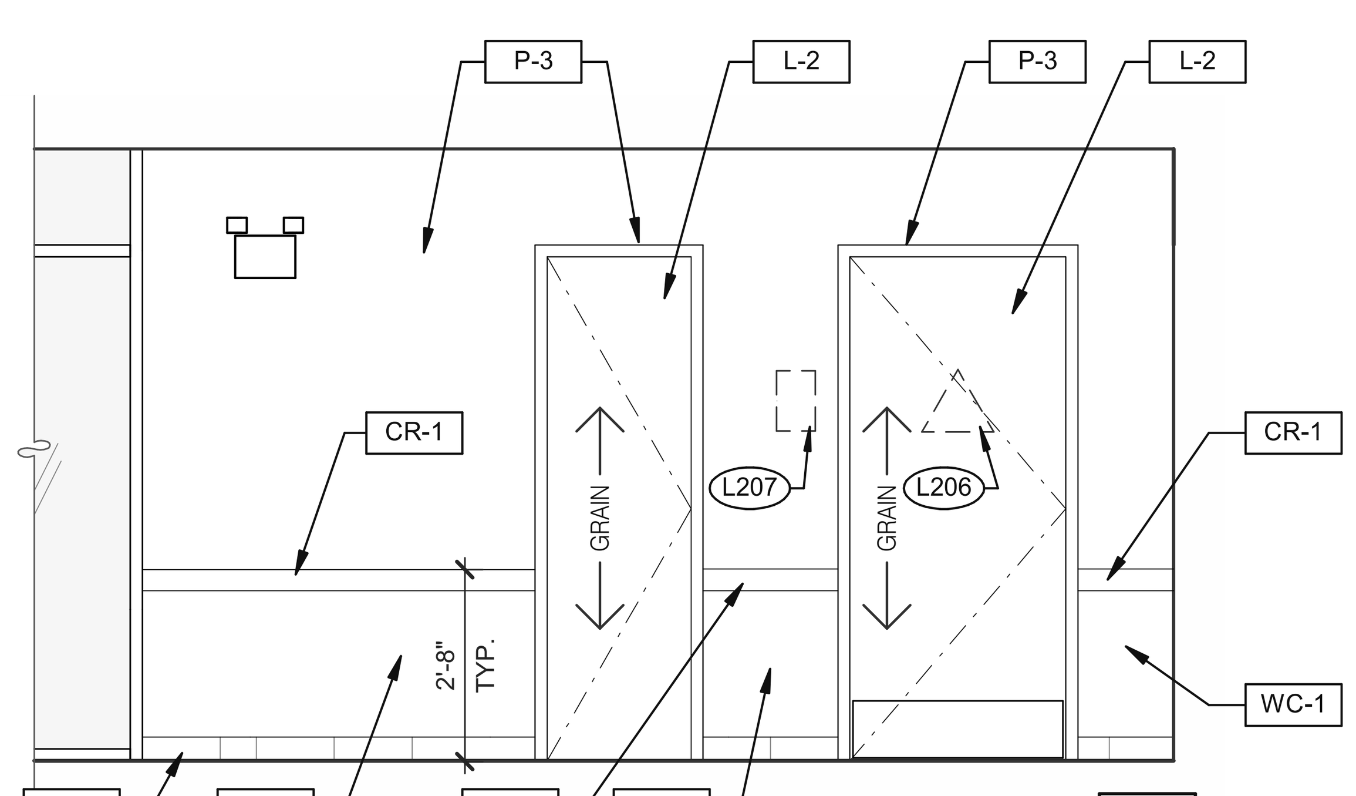

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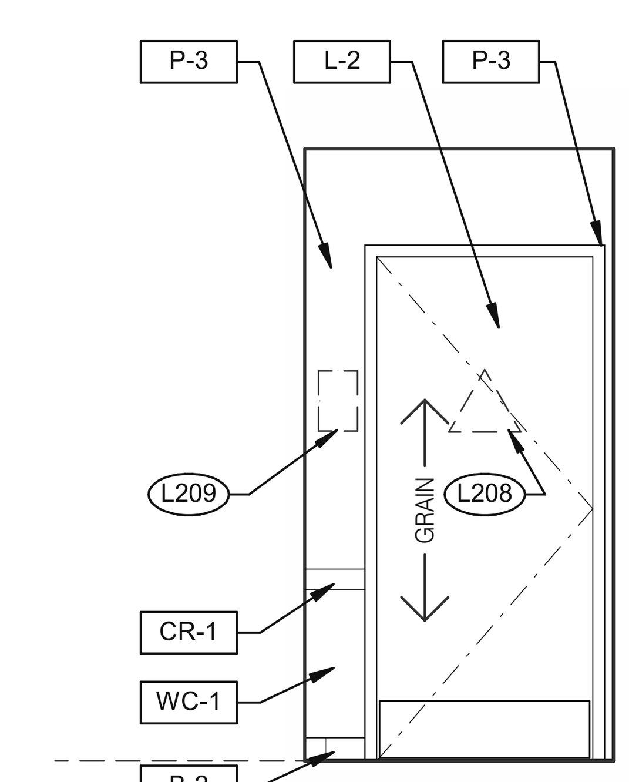


6

PASSAGE 3/8" = 1'-0"

703	LTO MENUBOARD.
715	SS CORNER/END WALL CHANNEL GUARD, FULL HEIGHT. SEE DETAIL 14/A6.3 AND
718	CHAIR RAIL.
754	SS CORNER/END WALL CHANNEL GUARD, FULL HEIGHT.

KEYNOTES A

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
330.572.2100 FAX: 330.572.2102

	DATE	REMARKS
	04.28.21	ISSUED FOR PERMIT
2	07.12.21	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RS
JOB NO.:	2018088.64

TACO BELL

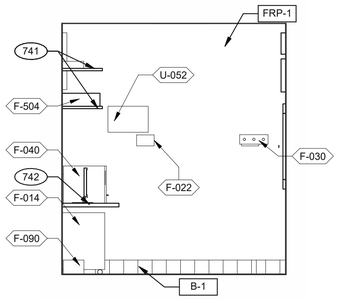
GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
INTERIOR ELEVATIONS DINING ROOM

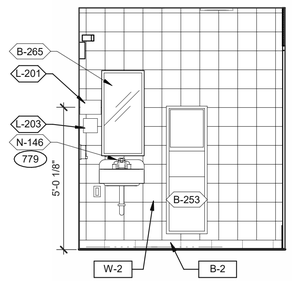
A8.0

PLOT DATE: 7/12/2021 9:53:51 AM

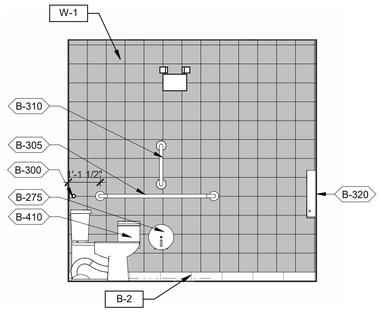
CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT



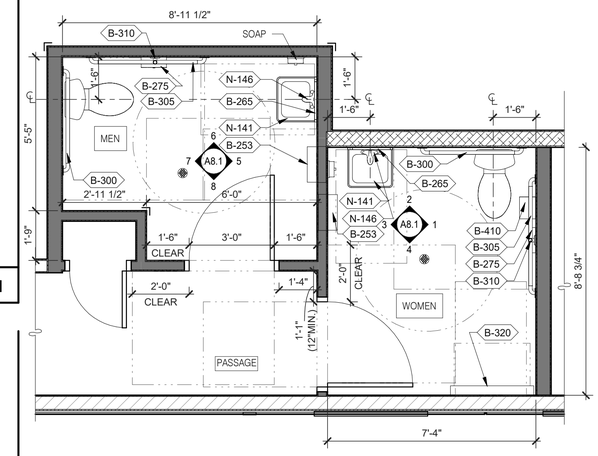
OFFICE ELEVATION 3/8" = 1'-0" **9**



MEN'S RESTROOM 3/8" = 1'-0" **5**



WOMEN'S RESTROOM 3/8" = 1'-0" **1**



ENLARGED RESTROOM / GENERAL NOTES 3/8" = 1'-0" **A**

A. PROVIDE PROPER 2x BLOCKING AT WALL RECESSED MOUNTED ACCESORIES.

B. GRAB BARS, FASTENERS AND MOUNTING DEVICES SHALL BE INSTALLED PER ADA REQUIREMENTS. REFER TO SHEET ADA1.0

C. REFER TO FLOOR PLAN NOTE FOR BLOCKING AND SUBSTRATE NOTES.

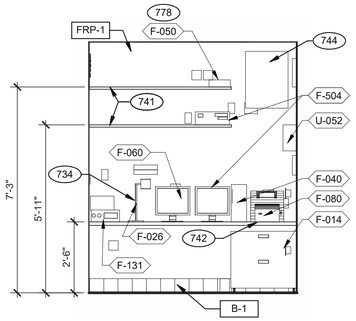
D. REFER TO SHEET ADA1.0 FOR MOUNTING HEIGHTS AND CLEARANCES OF ACCESORIES AND FIXTURE.

ALL DIMENSIONS THIS DRAWING ARE TO FINISH SURFACE.

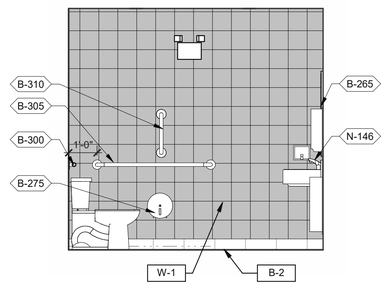
* ABSOLUTE DIMENSION

DESIGNER NOTE:
REFER TO G4.0 & G4.1
REFER TO SHEET A-2.1 FOR FIXTURE LIST.

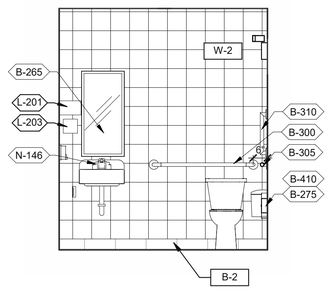
N



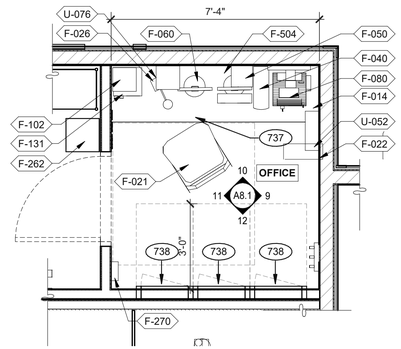
OFFICE ELEVATION 3/8" = 1'-0" **10**



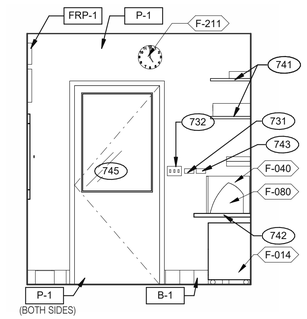
MEN'S RESTROOM 3/8" = 1'-0" **6**



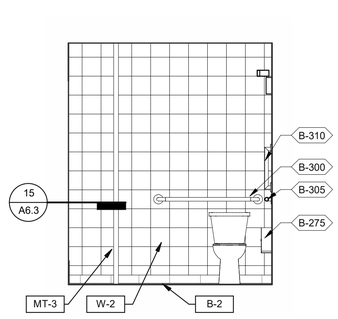
WOMEN'S RESTROOM 3/8" = 1'-0" **2**



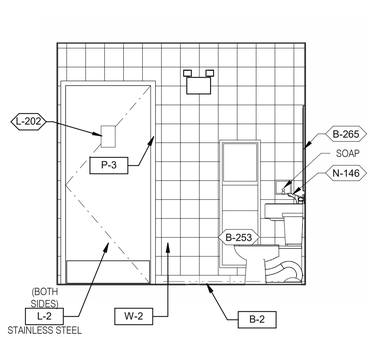
OFFICE PLAN 3/8" = 1'-0" **B**



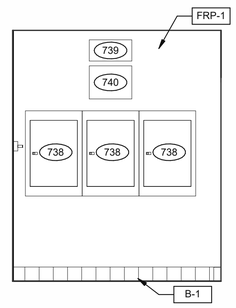
OFFICE ELEVATION 3/8" = 1'-0" **11**



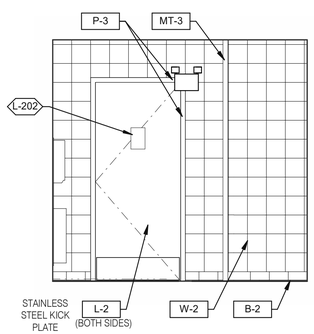
MEN'S RESTROOM 3/8" = 1'-0" **7**



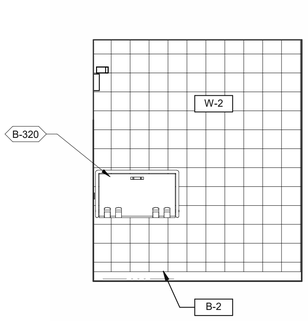
WOMEN'S RESTROOM 3/8" = 1'-0" **3**



OFFICE ELEVATION 3/8" = 1'-0" **12**



MEN'S RESTROOM 3/8" = 1'-0" **8**



WOMEN'S RESTROOM 3/8" = 1'-0" **4**

731 THERMOSTATS.
732 LIGHTING CONTROL RELAY SWITCHES. SEE DETAIL 3/E3.1.
734 DESK LAMP.
737 UNDER COUNTER KEYBOARD TRAY.
738 ELECTRIC PANELS.
739 FAN & LIGHT CONTROL BOX; REFER TO SHEET E6.0.
740 EXTERIOR LIGHTING CONTROL PANEL (GREEN GATE).
741 SHELF BY GC - FINISH WITH PLASTIC LAMINATED, L-1.
742 COUNTER BY GC - FINISH WITH PLASTIC LAMINATED, L-1.
743 DUCT SMOKE DETECTOR RESET SWITCH.
744 TECH-IN-A-BOX (WALL MOUNT RACK ENCLOSURE CABINETS): REFER TO SHEET E3.1. GC TO PROVIDE BLOCKING WHERE REQUIRED.
745 DOOR IS OPTIONAL.
778 PROVIDE POWER FOR F-050.
779 PROVIDE POWER FOR N-146.

KEYNOTES **C**

GPD GROUP
Professional Corporation
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JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0

INTERIOR ELEV. ENLARGED RESTROOMS & OFFICE PLAN

A8.1

PLOT DATE: 7/12/2021 9:54:05 AM

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CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT

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Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
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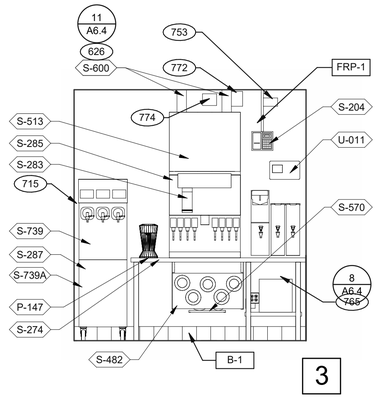

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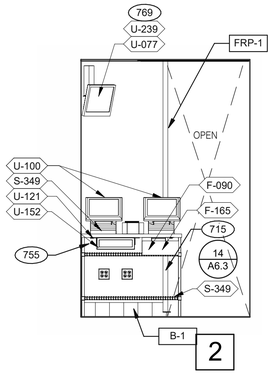
DRIVE-THRU 3/8" = 1'-0"



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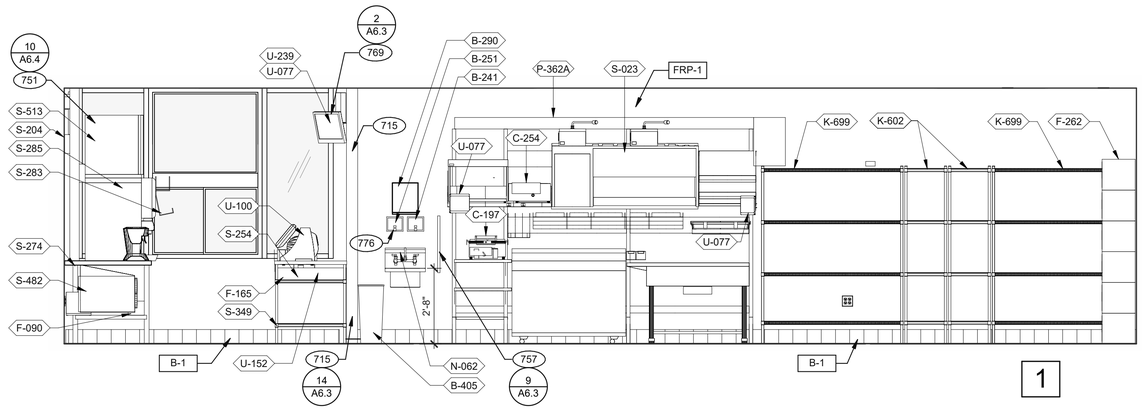
DRIVE-THRU 3/8" = 1'-0"



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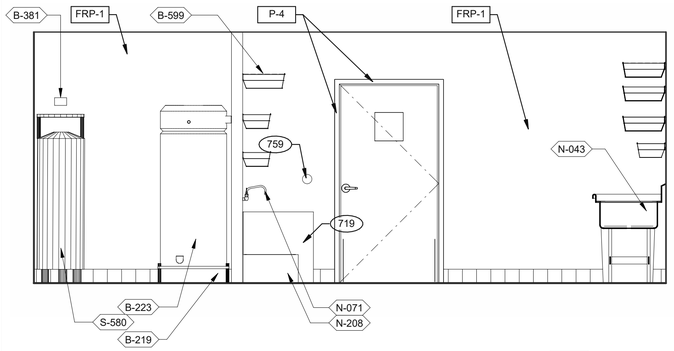
DRIVE-THRU AND TB COOK 3/8" = 1'-0"



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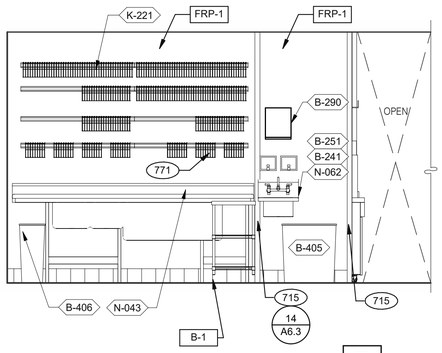
UTILITY 3/8" = 1'-0"



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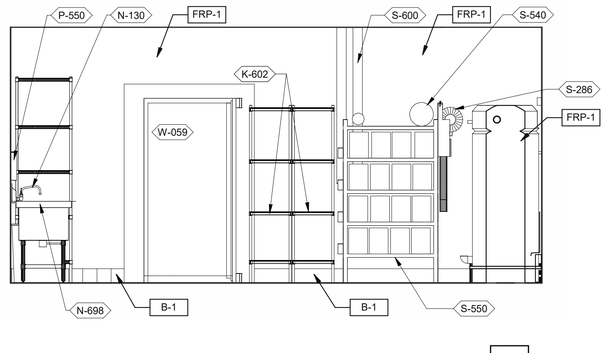
WARE WASHING 3/8" = 1'-0"



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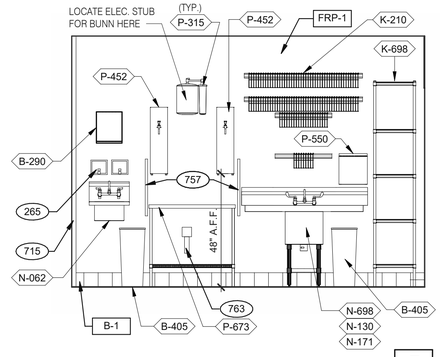
UTILITY 3/8" = 1'-0"



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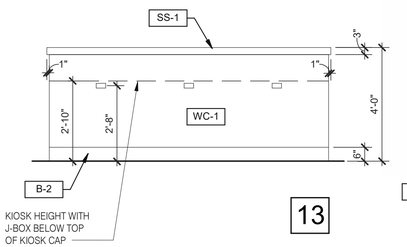
WARE WASHING 3/8" = 1'-0"



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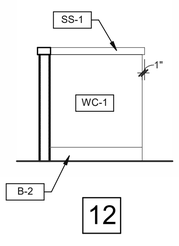

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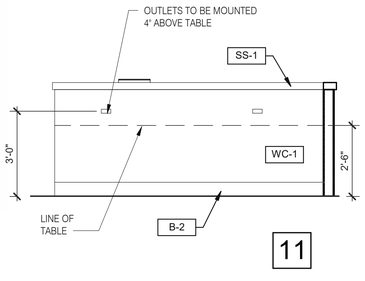

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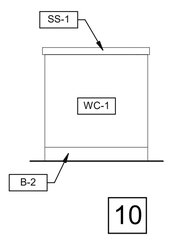

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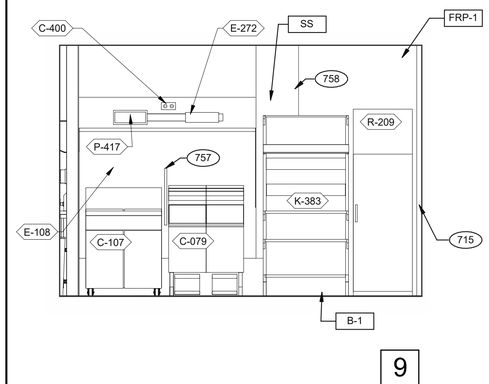
DINING PANEL ELEVATION 3/8" = 1'-0"



9

COOK LINE 3/8" = 1'-0"

265	AUTOMATIC HAND SOAP AND SANITIZER DISPENSERS PROVIDED BY ECOLAB.
626	STAINLESS STEEL SYRUP CHASE ON WALL. SEE DETAIL 11/A6.4.
715	SS CORNER/END WALL CHANNEL GUARD, FULL HEIGHT. SEE DETAIL 14/A6.3 AND
719	STAINLESS STEEL CLOSURE WITH FLASHING AND END CAP.
751	STAINLESS STEEL CHASE FOR SYRUP LINES & ICE MACHINE REFRIGERANT LINES.
753	DRIVE-THRU TIMER DISPLAY UNIT.
755	HOLD-UP BUTTON.
757	SPLASHGUARD. SEE DETAIL 9/A6.3.
758	EDGE OF SS PANEL BEHIND HOOD.
759	ANSUL PULL STATION.
763	FILTER FOR HOT WATER SYSTEM.
765	OPENING FINISHED WITH FRP FOR SYRUP TUBES. SEE DETAIL.
769	CEILING MOUNT MONITOR BRACKET.
771	CUT WALL-HANGING TRACK TO ALLOW SPACE FOR CLICK & CLEAN SYSTEM.
772	DT TIMER SIGNAL PROCESSOR.
774	DT TIMER ETHERNET SWITCH.
776	AUTOMATIC HAND SOAP AND SANITIZER DISPENSER BY ECO-LAB.

KEY NOTES B

	DATE	REMARKS
	04.28.21	ISSUED FOR PERMIT
1	06.24.21	HEALTH COMMENTS
2	07.12.21	ISSUED FOR BID

CONTRACT DATE: 04.08.21
BUILDING TYPE: END. MED20
PLAN VERSION: MARCH 2021
BRAND DESIGNER: DICKSON
SITE NUMBER: 313354
STORE NUMBER: 449523
PA/PM: JN
DRAWN BY.: RS
JOB NO.: 2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
INTERIOR ELEVATIONS KITCHEN

A8.2

PLOT DATE: 7/12/2021 9:54:19 AM

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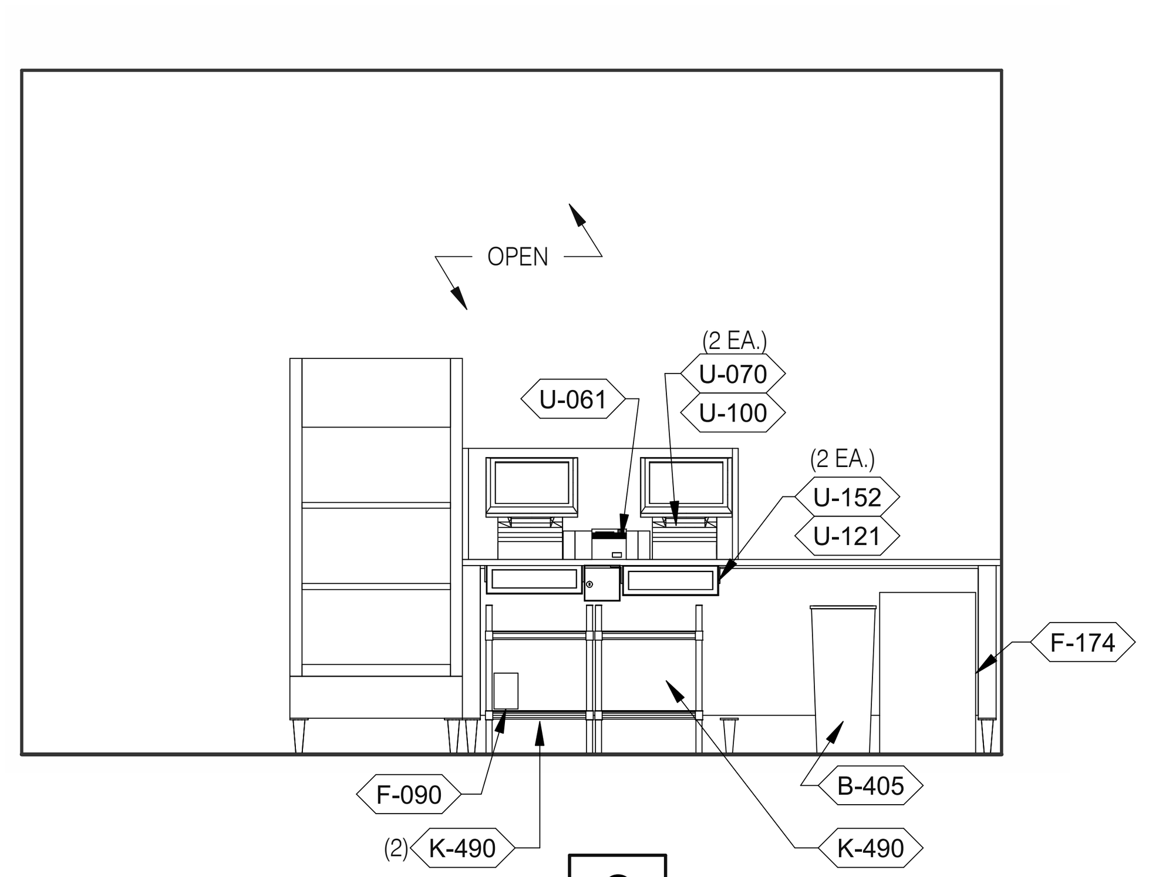

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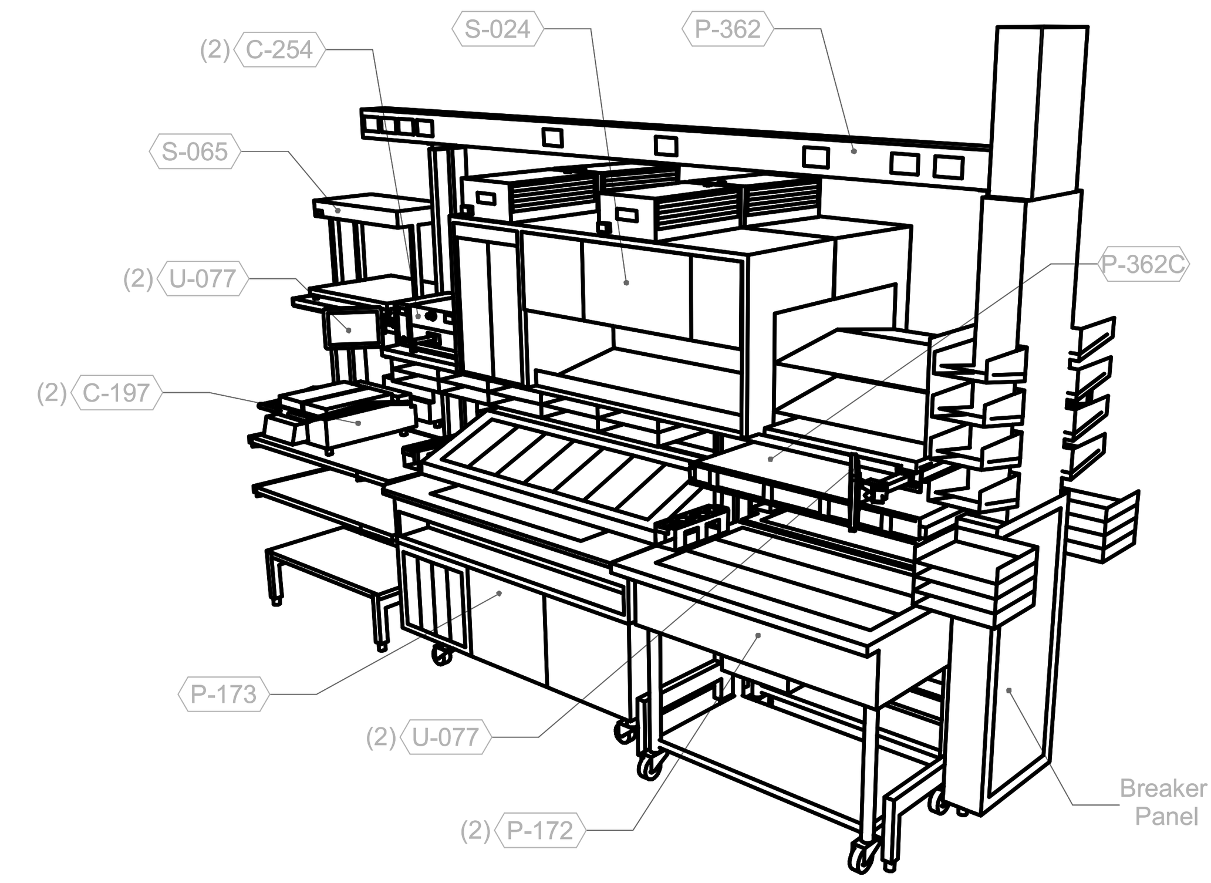

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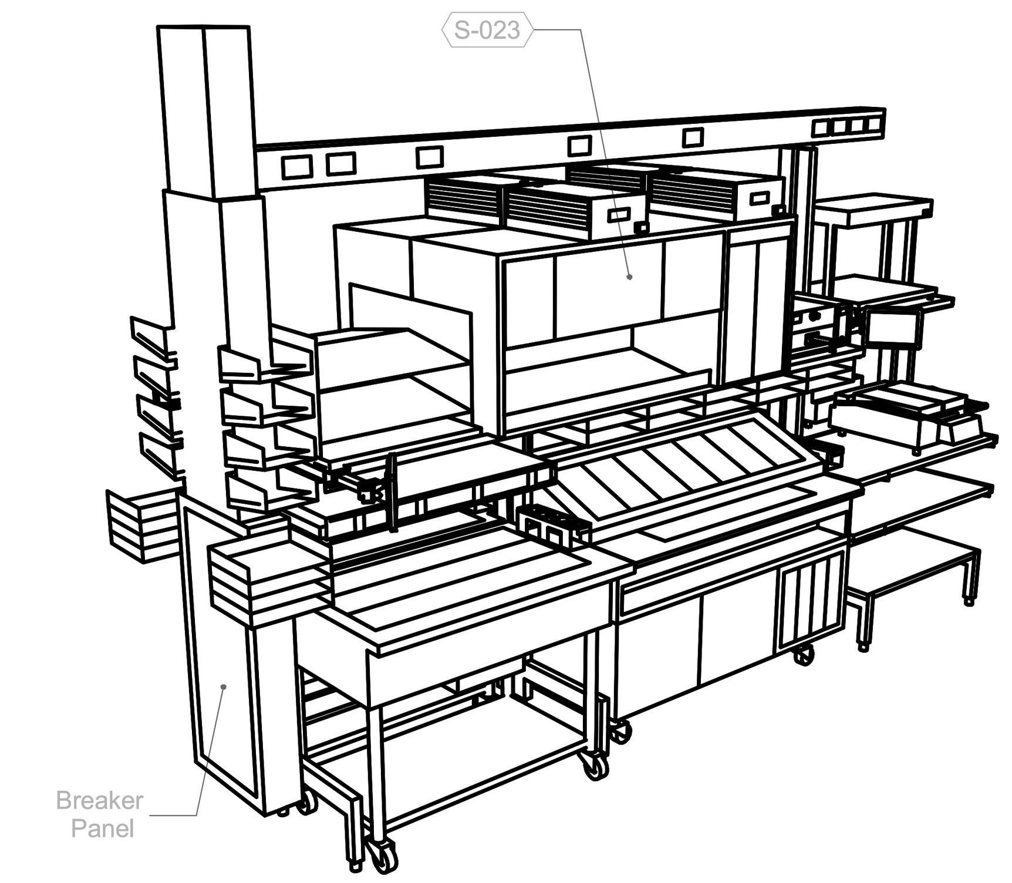
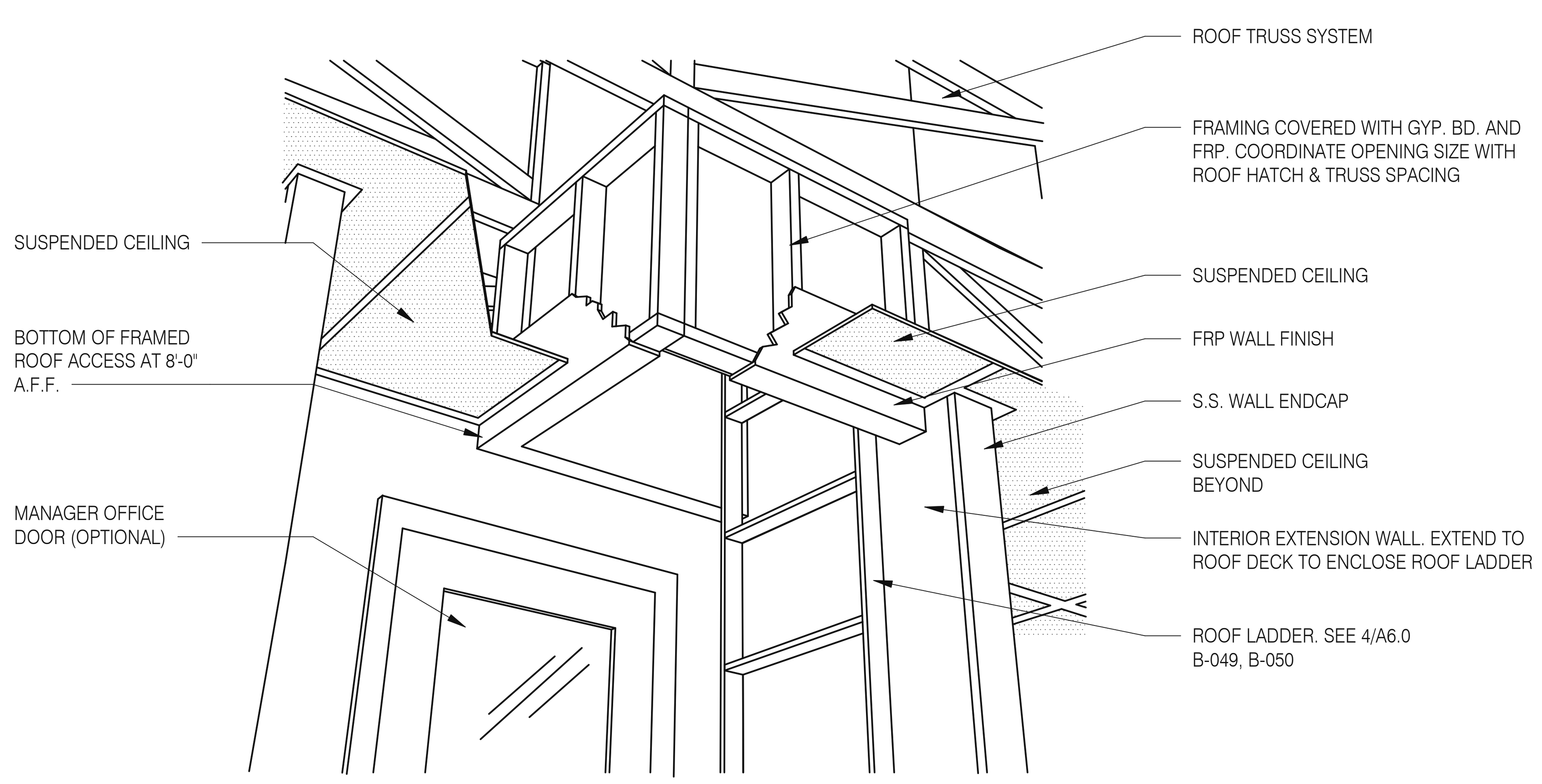


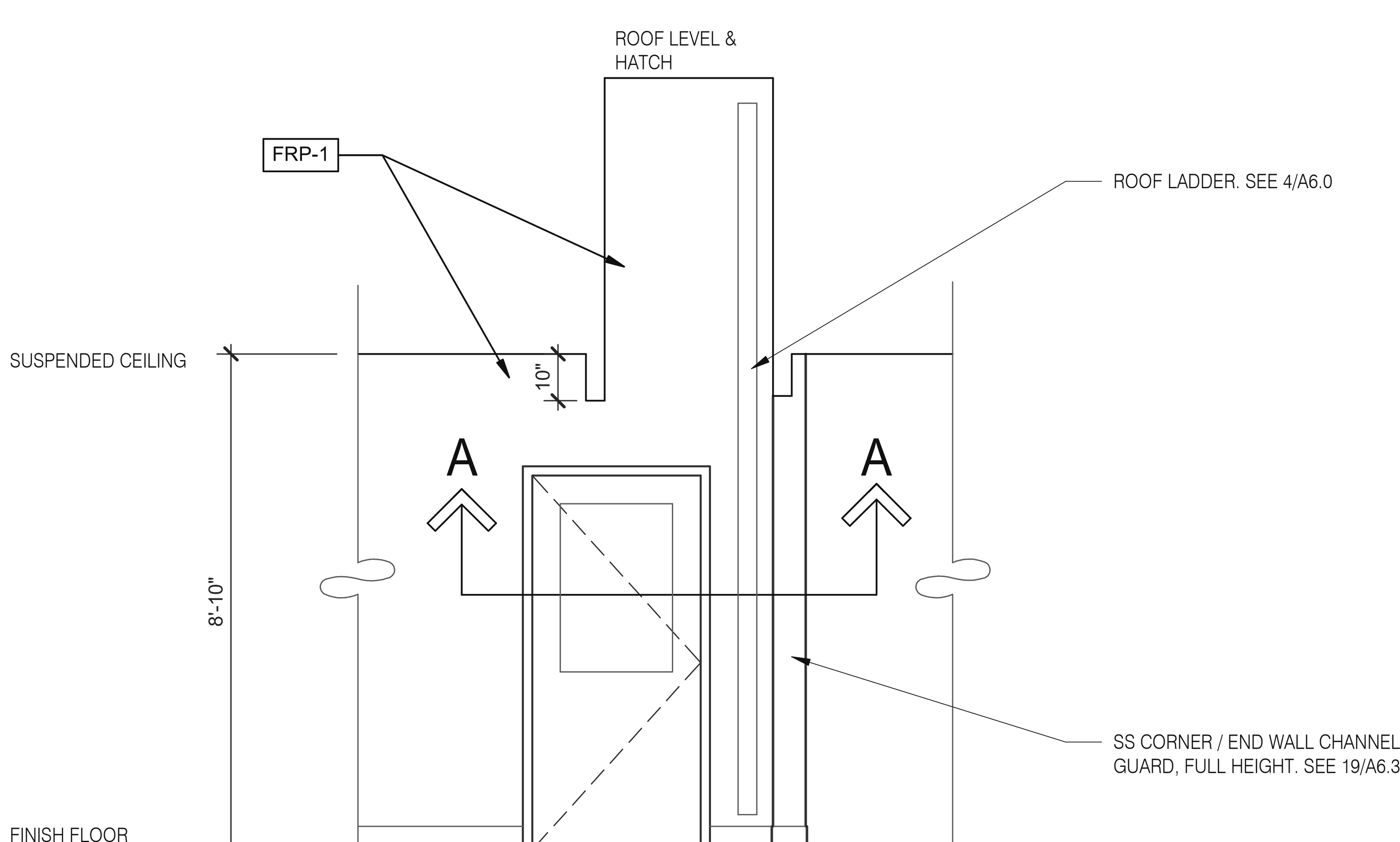
1

SERVING 3/8" = 1'-0"

P-362B FLEX DUAL-LINE 3/8" = 1'-0"



A - ROOF LADDER VIEW



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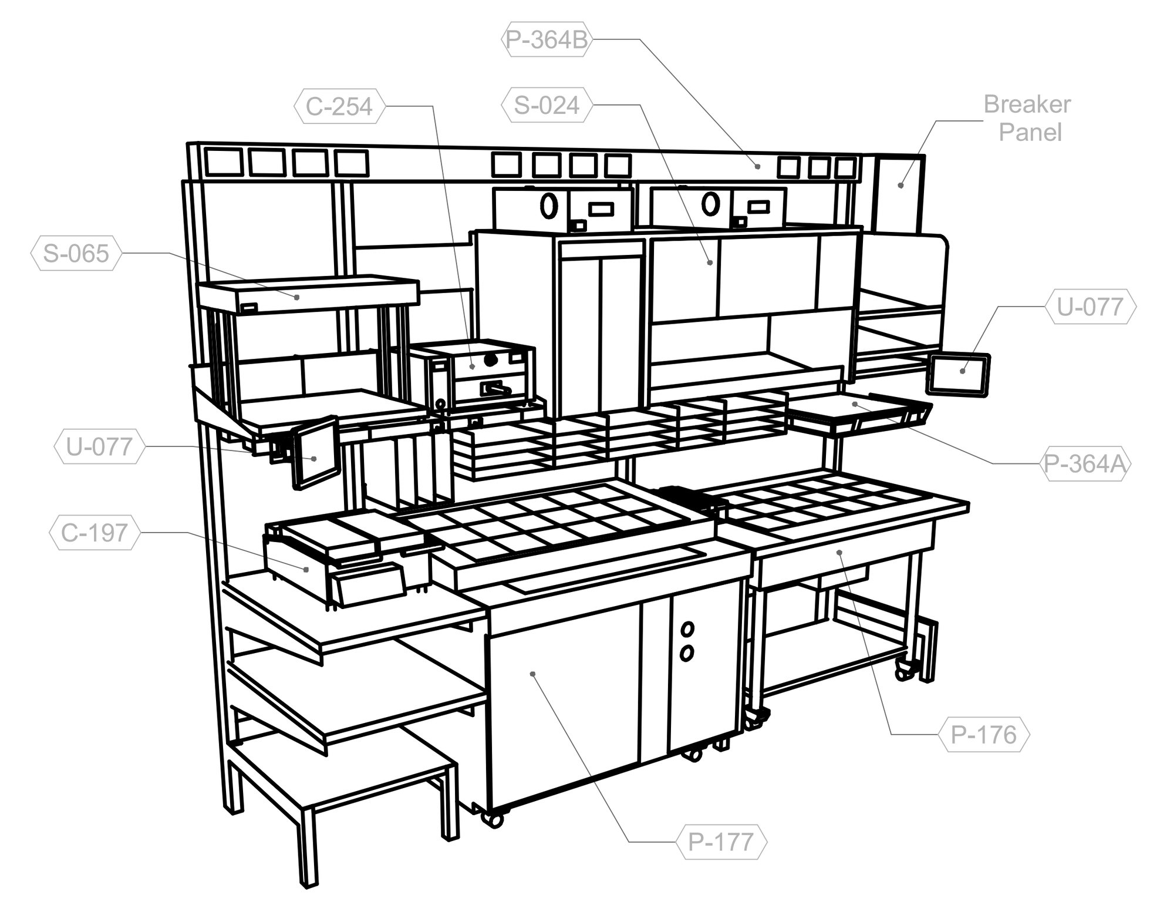
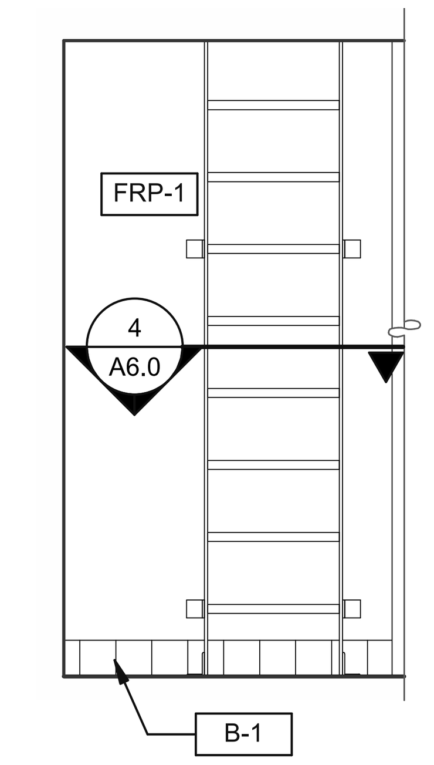
ROOF ACCES PASSAGEWAY 3/8" = 1'-0" **B**



P-362A FLEX I-LINE, L-R N.T.S. **7**



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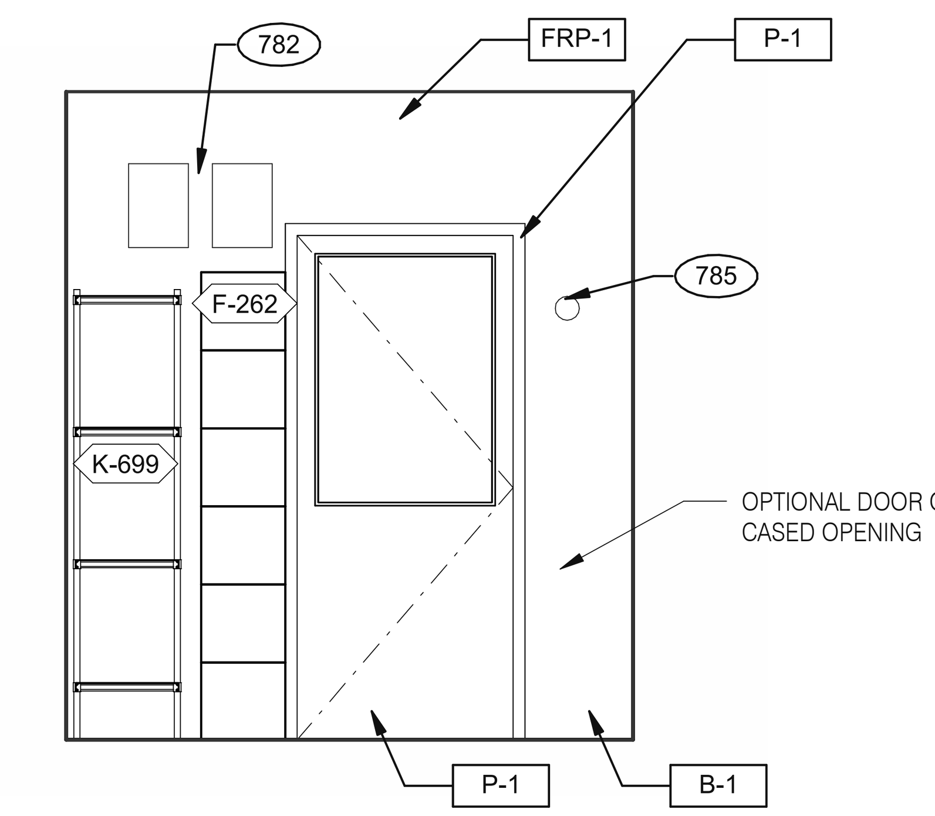
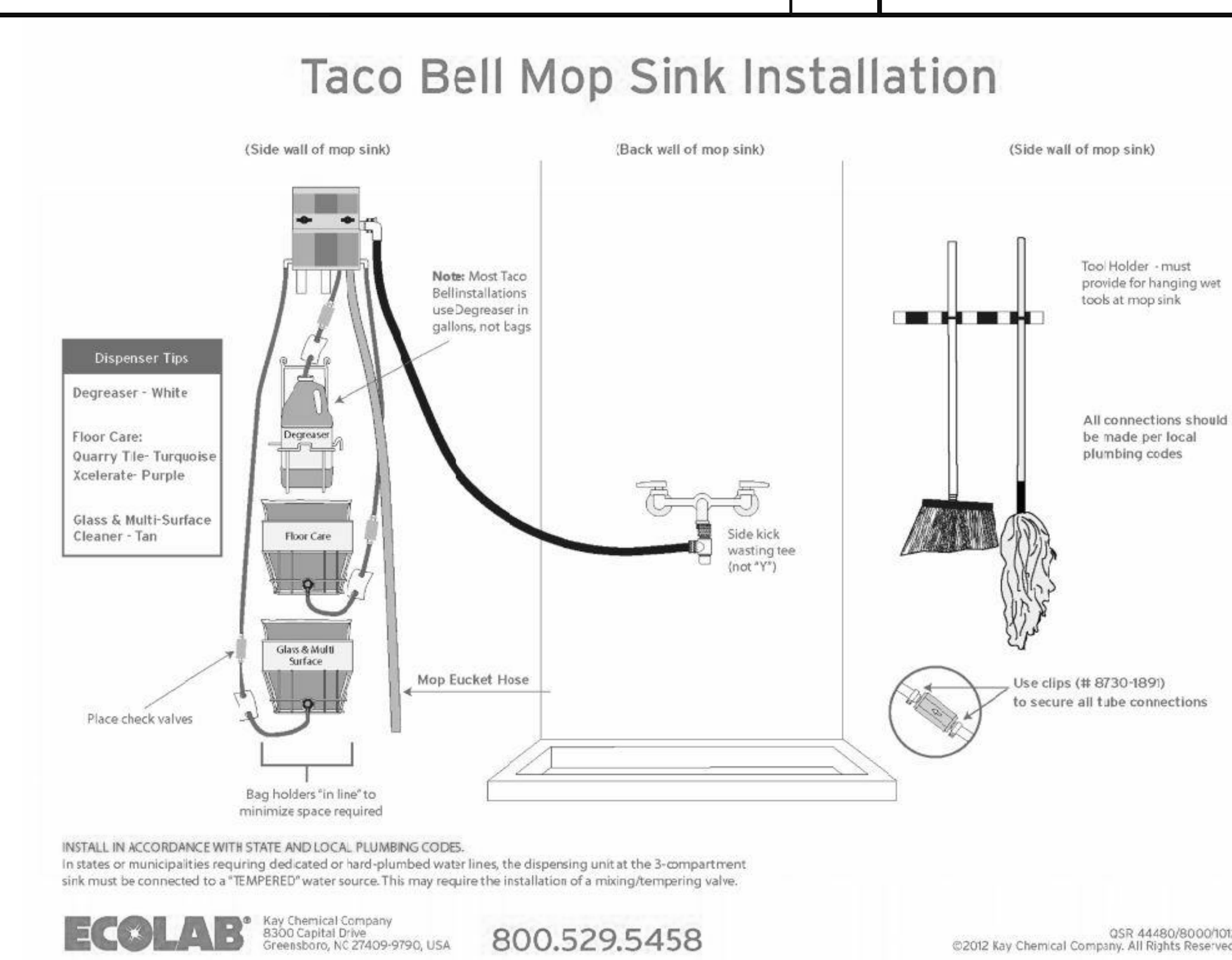


5

EMPLOYEE / STORAGE 3/8" = 1'-0"



MOP SINK INSTALLATION **C**

782 FAN MOTOR STARTERS, SURFACE MOUNTED. TYP. OF 2.
785 TEMPERATURE SENSOR, SEE MECHANICAL DRAWINGS.

KEYNOTE **A**

GPD GROUP
Professional Corporation
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AKRON, OH 44311
330.572.2100 FAX: 330.572.2102

	DATE	REMARKS
	04.28.21	ISSUED FOR PERMIT
2	07.12.21	ISSUED FOR BID

CONTRACT DATE:	04.08.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	313354
STORE NUMBER:	449523
PA/PM:	JN
DRAWN BY.:	RS
JOB NO.:	2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
INTERIOR ELEVATIONS KITCHEN

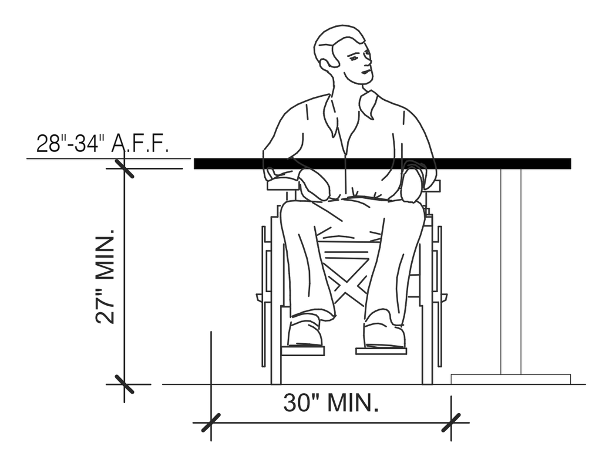
A8.3

PLOT DATE: 7/12/2021 9:54:24 AM

C:\Users\rsmith\Documents\0275_ARCH_SM20_Rustys1.rvt

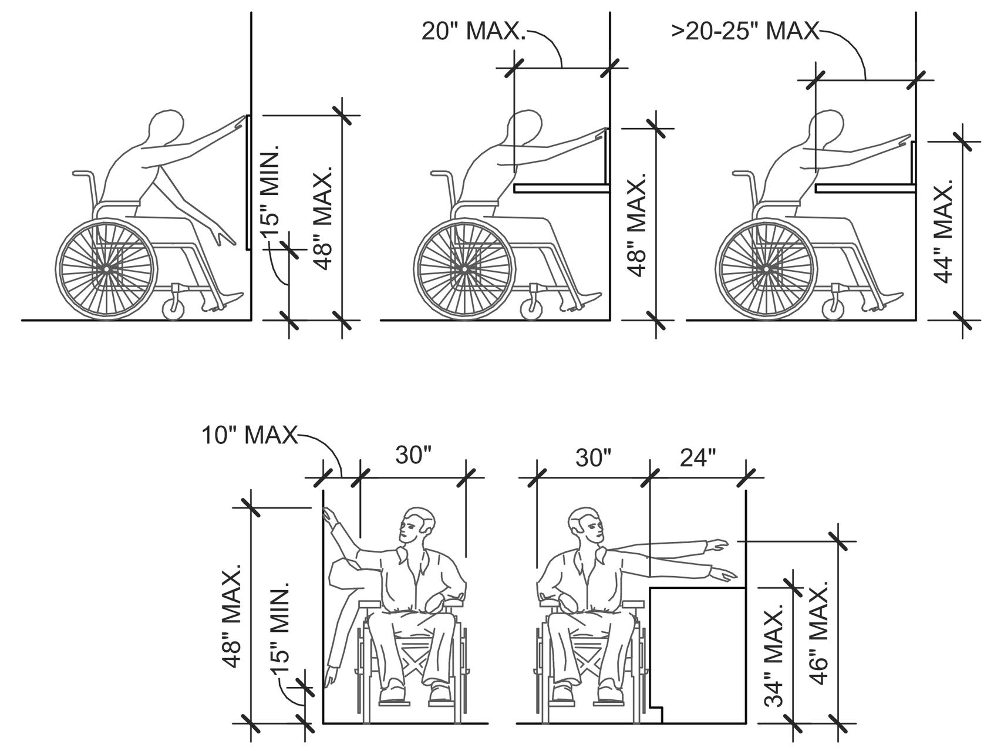
TOTAL SEATS	ACCESSIBLE SEATS
1 - 20 1	1
21 - 40	2
41 - 60	3
61 - 80	4
81 - 100	5
101 - 120	6
121 - 140	7

NUMBER OF ACCESSIBLE SEATS



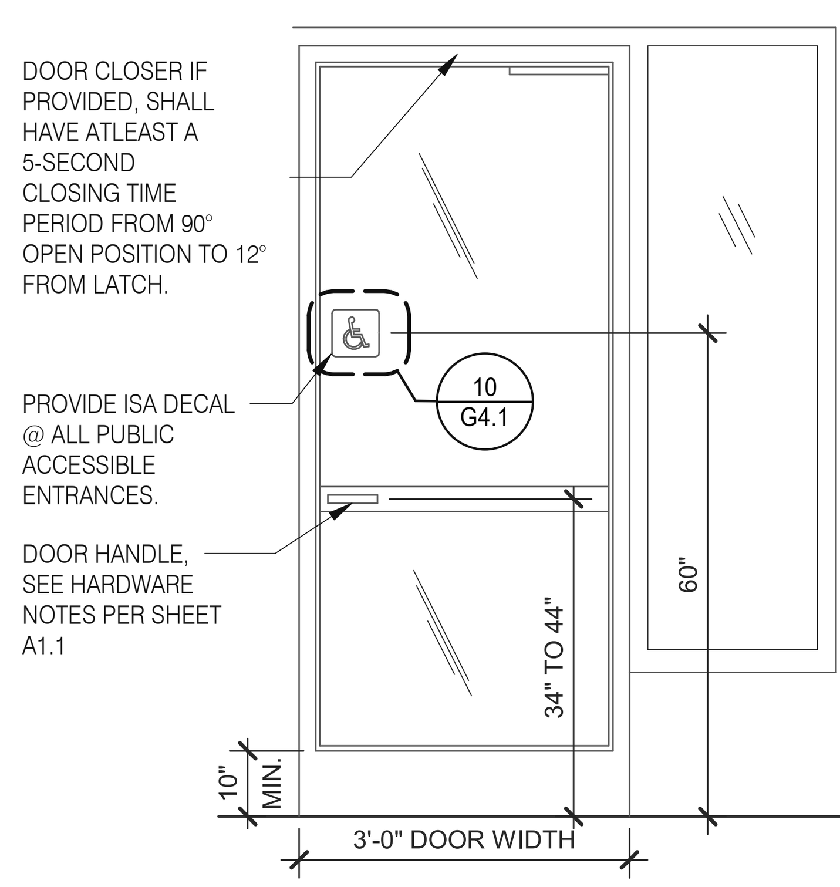
ELEVATION

SEATING AND TABLES 1/2" = 1'-0" 18

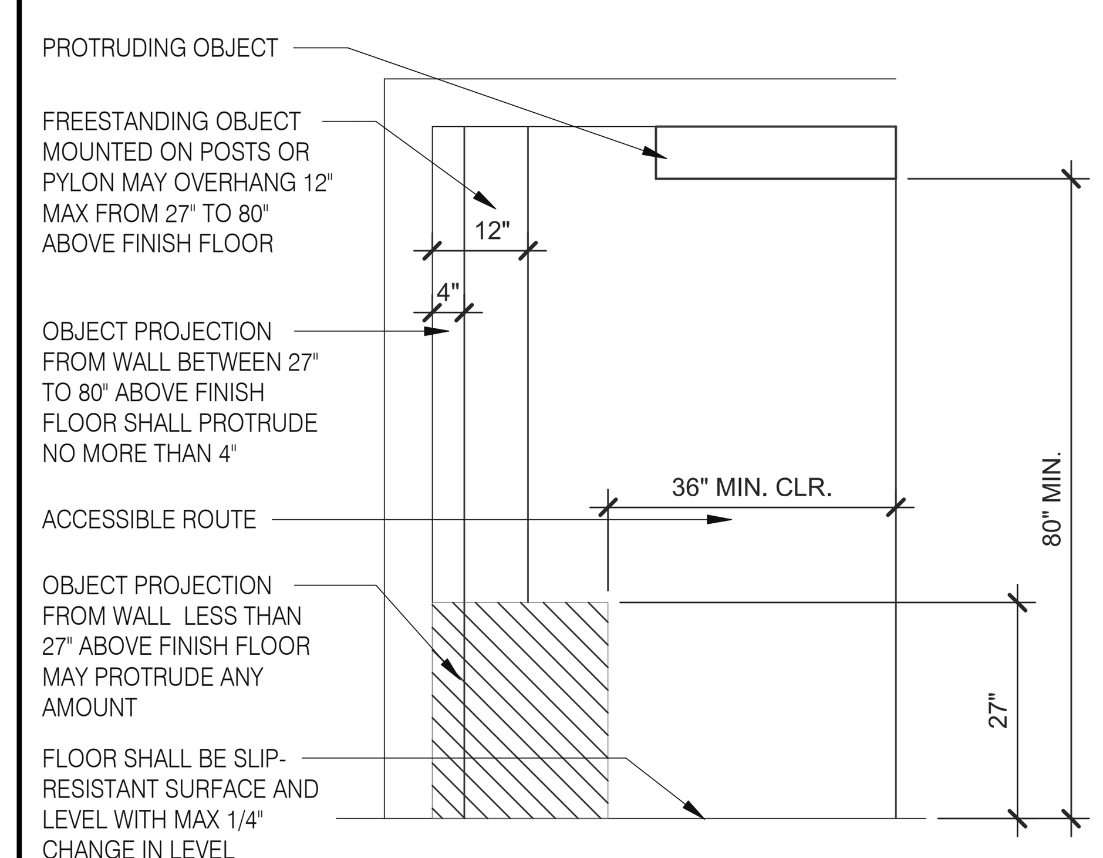


SIDE APROACH

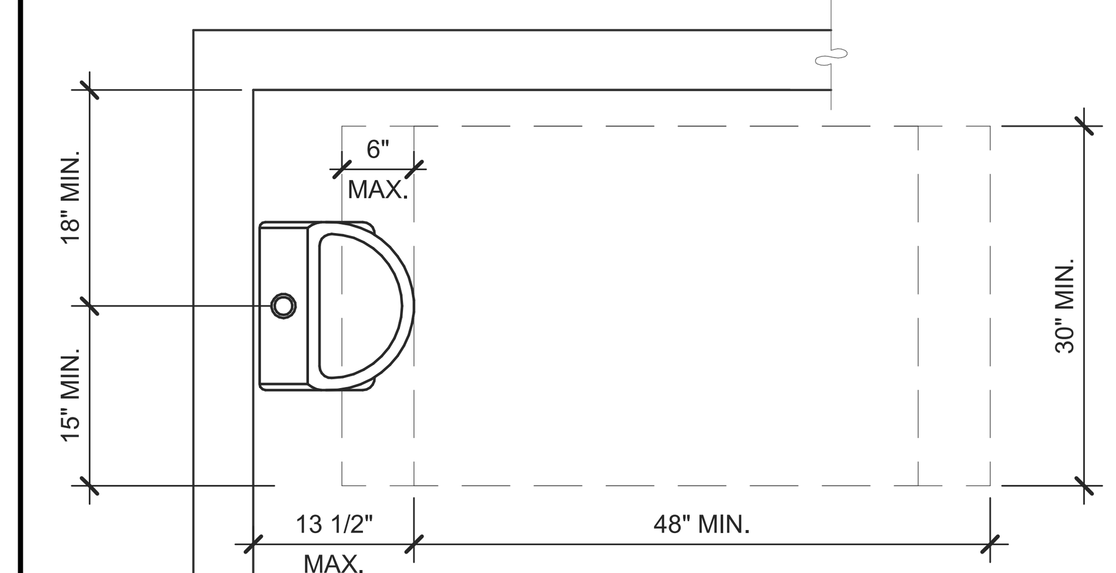
REACH RANGES 1/4" = 1'-0" 13



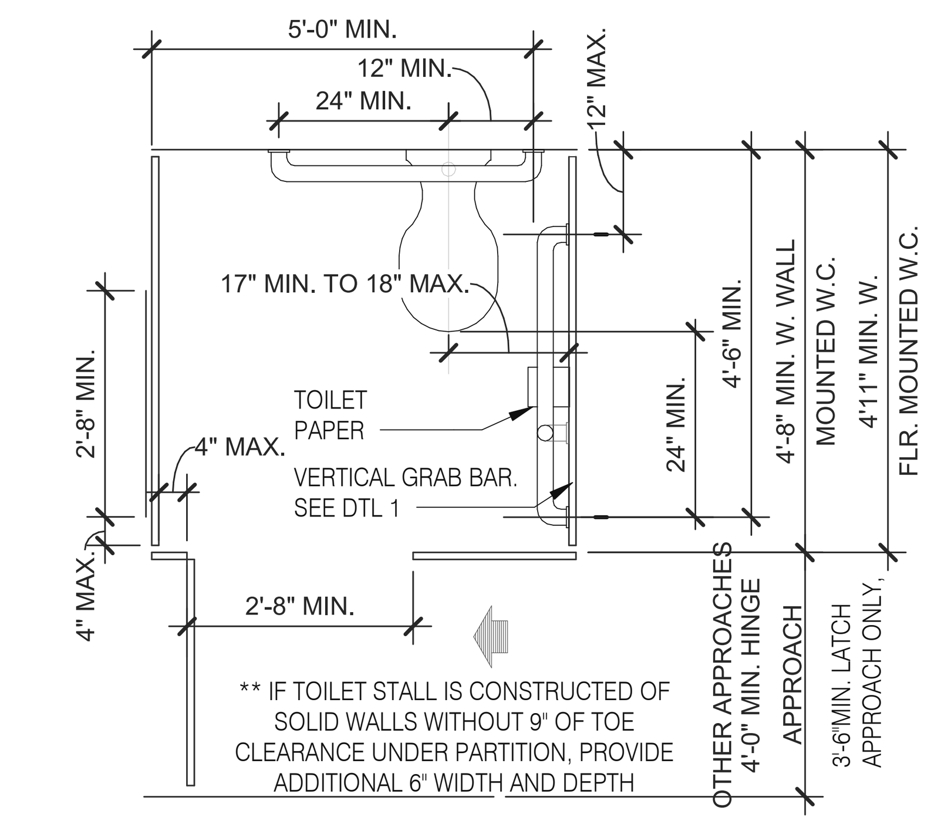
TYP. ENTRANCE / EXIT DOOR 3/8" = 1'-0" 14



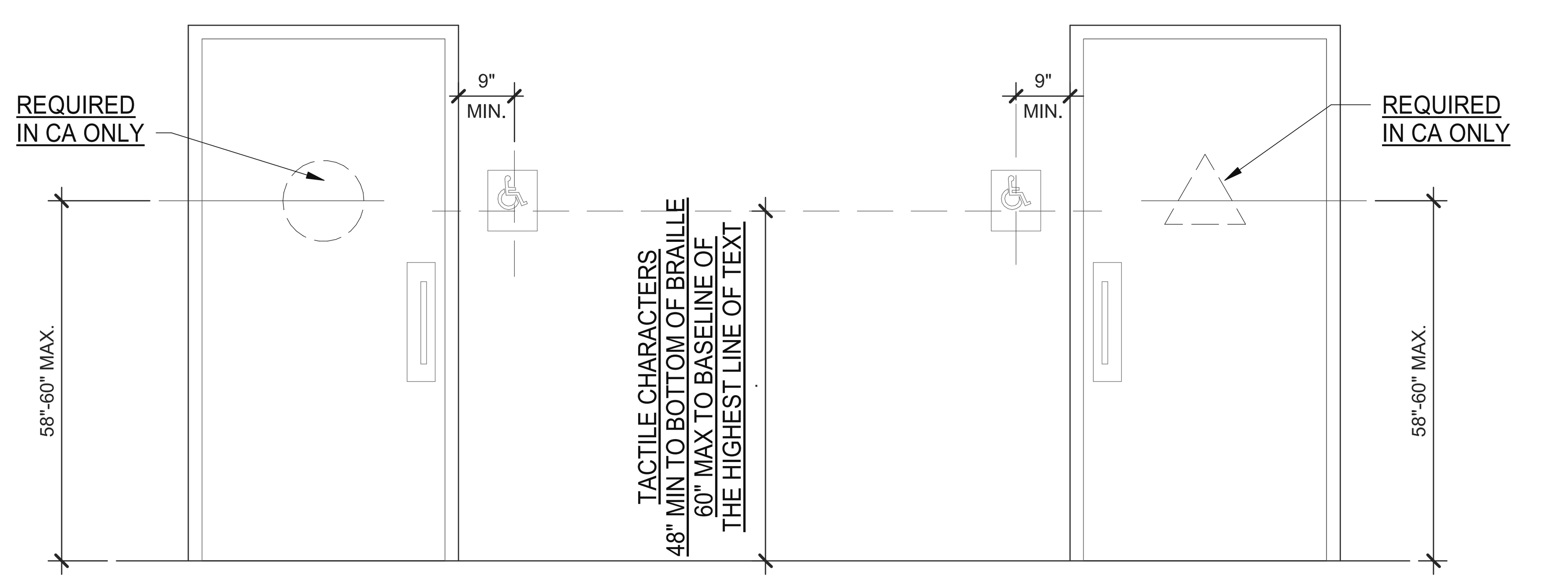
INT. ACCESS. ROUTE CLEARANCES 1/2" = 1'-0" 10



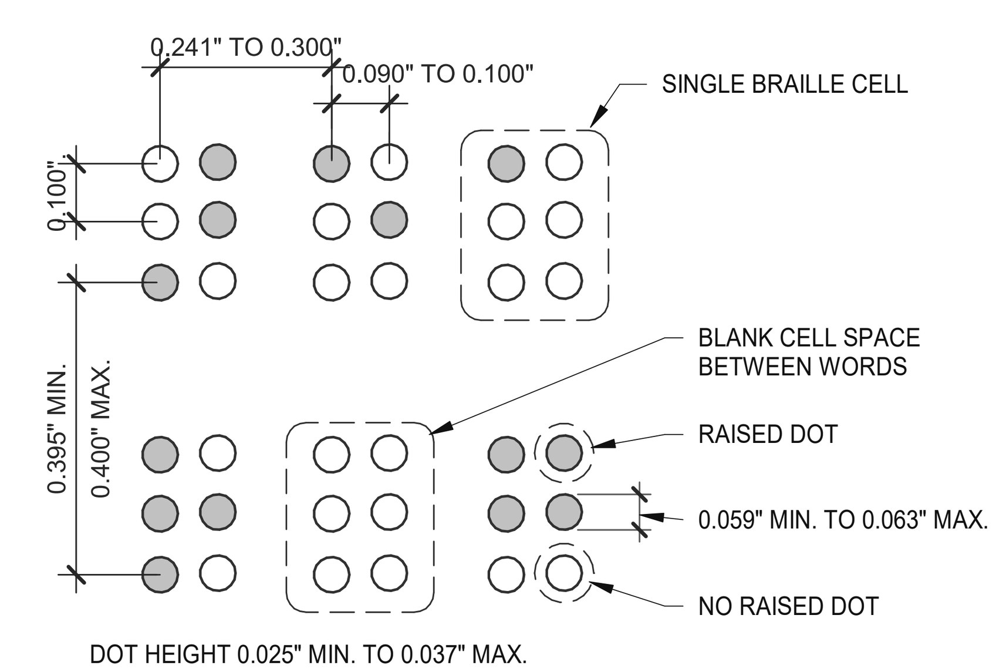
ACCESSIBLE URINAL 3/4" = 1'-0" 6



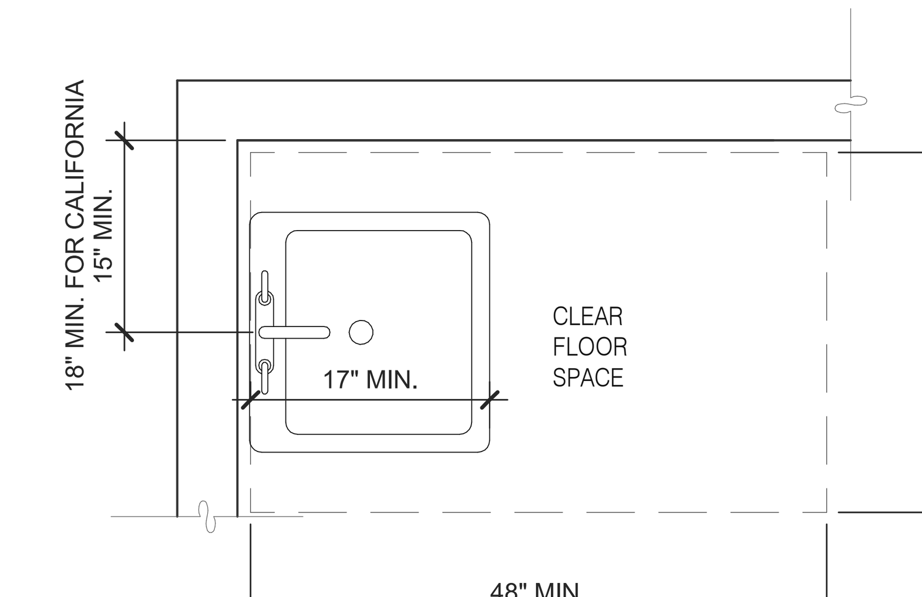
STANDARD TOILET STALL 1/2" = 1'-0" 2



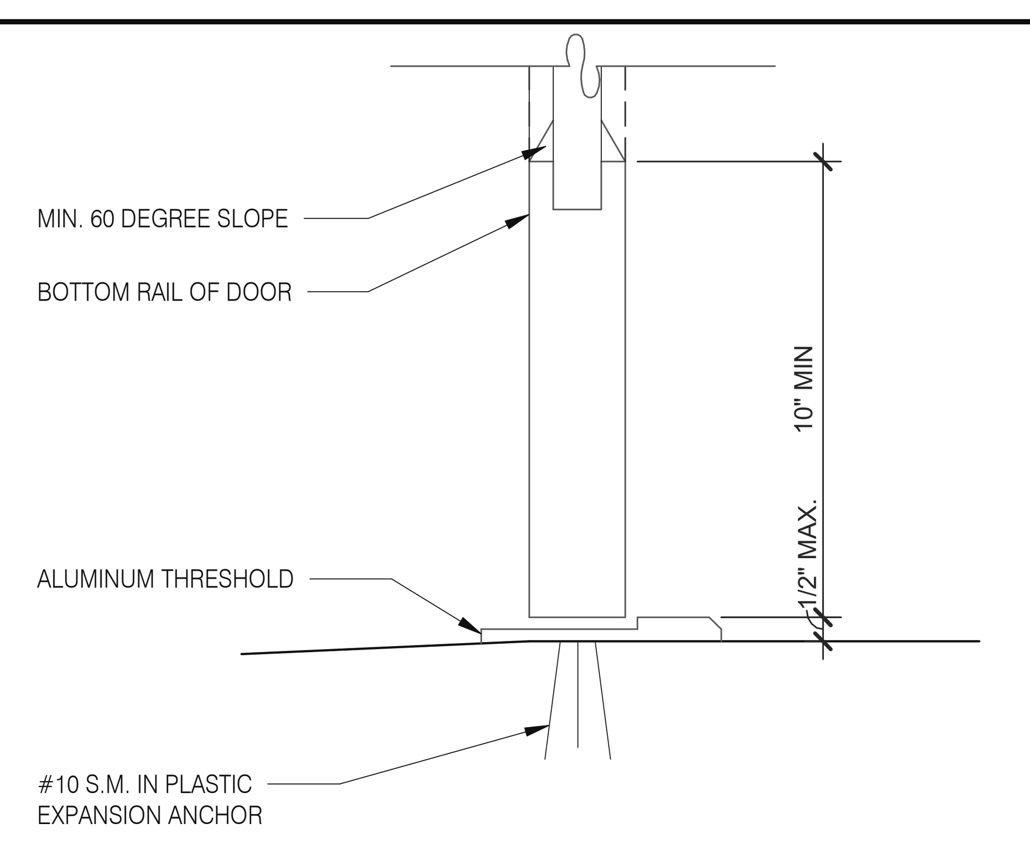
ACCESSIBLE RESTROOM DOORS 1/2" = 1'-0" 15



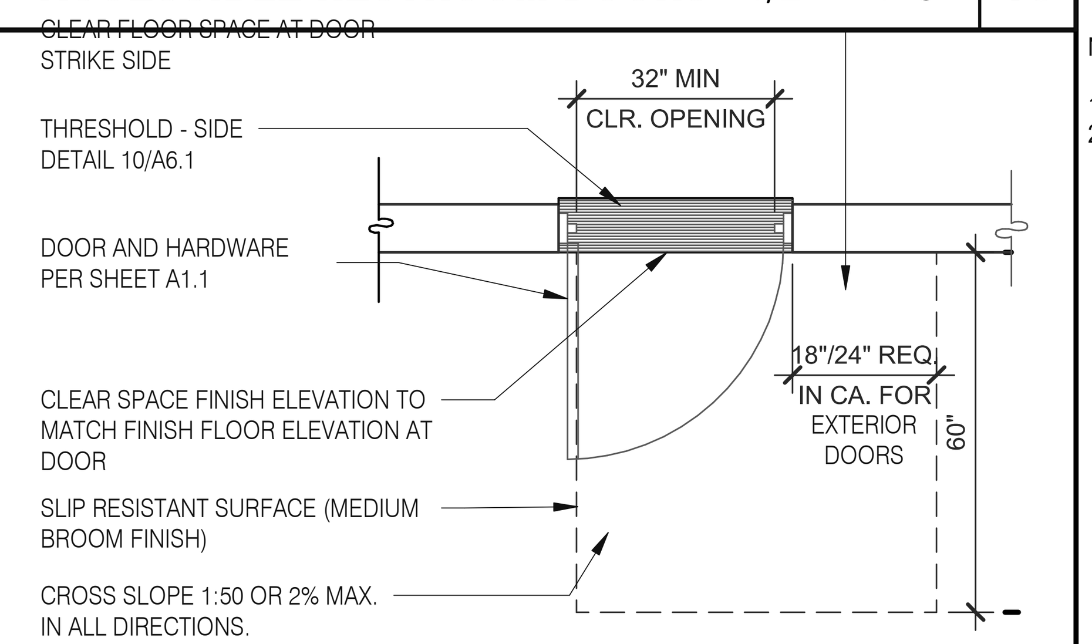
BRAILLE MEASUREMENT 1/4" = 1'-0" 11



ACCESSIBLE LAVATORY 3/4" = 1'-0" 3



BOTTOM RAIL (EXTERIOR DOOR) 3" = 1'-0" 20

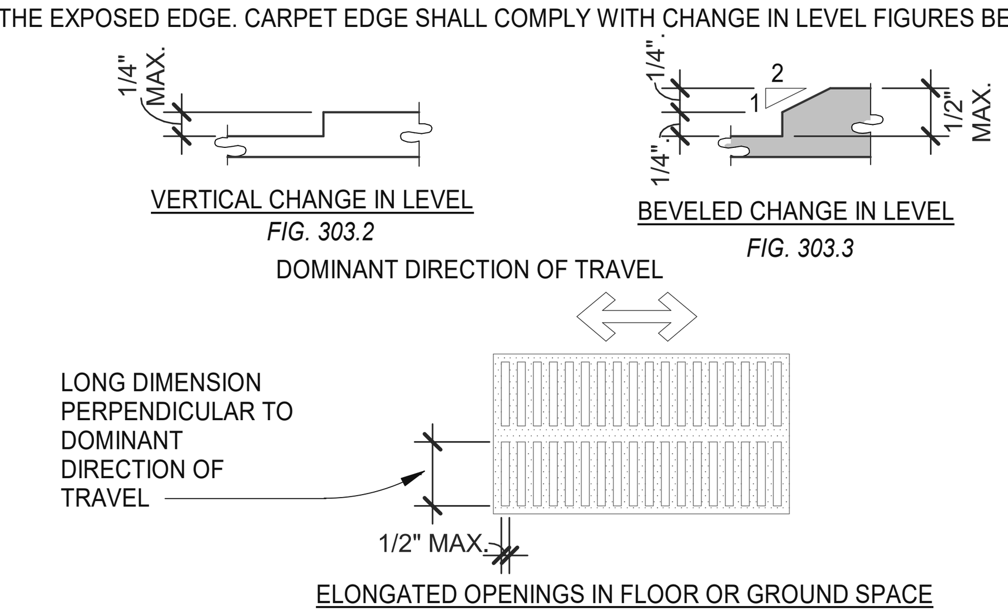


NOTE:
1. EXTERIOR DOOR PRESSURE CANNOT EXCEED 8.5 LBS (GC TO DOOR PRESSURE TO MINIMUM ALLOWABLE BY AHJ).
2. INTERIOR DOOR PRESSURE CANNOT EXCEED 5 LBS.
3. 60% OF PUBLIC ENTRANCES MUST BE ACCESSIBLE (100% IN CA)

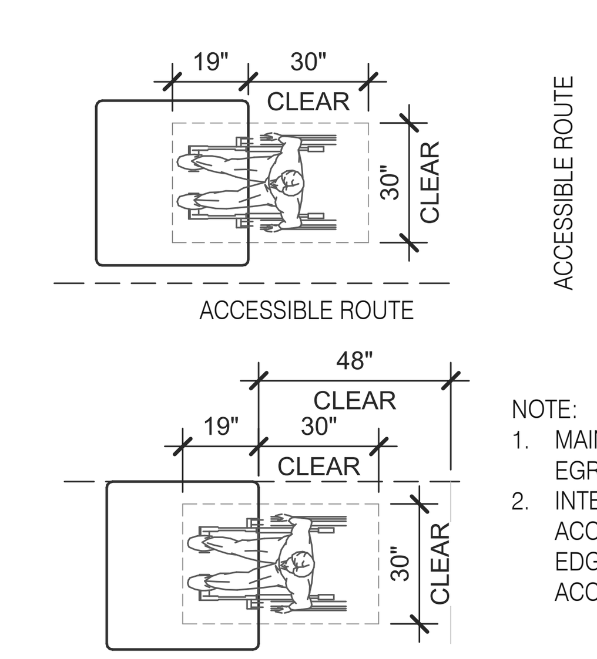
EXTERIOR DOOR REQUIREMENTS 3/8" = 1'-0" 16

NOTES:

1. FLOOR AND GROUND SURFACES SHALL BE STABLE, FIRM AND SLIP RESISTANT.
2. CARPET OR CARPET TILE SHALL BE SECURELY ATTACHED AND SHALL HAVE A FIRM CUSHION, PAD OR BACKING OR NO CUSHION OR PAD. CARPET OR CARPET TILE SHALL HAVE A LEVEL LOOP, TEXTURED LOOP, LEVEL CUT PILE, LEVEL CUT/UNCUT PILE TEXTURE. PILE HEIGHT SHALL COMPLYWITH CARPET PILE HEIGHT FIGURE BELOW. EXPOSED EDGES OF CARPET SHALL BE FASTENED TO FLOOR SURFACES AND SHALL HAVE TRIM ON THE ENTIRE LENGTH OF THE EXPOSED EDGE. CARPET EDGE SHALL COMPLY WITH CHANGE IN LEVEL FIGURES BELOW.



CHANGES IN LEVEL 1/2" = 1'-0" 12



NOTE:
1. MAINTAIN 36" MIN. CLEAR AISLE EGRESS PATHS TO EXIT DOORS.
2. INTERNATIONAL SYMBOL OF ACCESSIBILITY REQUIRED ON TOP EDGE OR FRONT OF ALL ACCESSIBLE TABLES.

DINING SEATING CLEARANCES N.T.S. 8

1. INDICATED DIMENSIONS, HEIGHTS, DEPTHS, AREAS AND OTHER GRAPHIC INFORMATION ARE PROVIDED AS MINIMUMS THAT MUST BE MAINTAINED. THESE MINIMUMS ARE BASED UPON YUM STANDARDS AND MAY EXCEED ADA REQUIREMENTS.

   THE DETAILS SHOWN ARE CONCEPTUAL ONLY AND INTENDED TO SHOW ABSOLUTE MINIMUMS AND SHALL BE COORDINATED WITH THE OTHER CONSTRUCTION DOCUMENTS ASSOCIATED WITH THIS PROJECT.
2. 60" TURNING SPACE
   - PERMITTED OVERLAP LIMITED TO 1 ARM OF T-SHAPED SPACE
   - CAN OVERLAP FIXTURE & DOOR CLEARANCE
   - DOOR CAN SWING INTO TURNING SPACE A MAXIMUM OF 12"
3. RESTROOM, IN GENERAL, DOOR SWING MUST BE OUTSIDE OF THE FIXTURE CLEAR FLOOR SPACE HOWEVER A DOOR CAN SWING INTO FIXTURE CLEAR FLOOR SPACE IF WHEELCHAIR SPACE 30"X48" IS PROVIDED BEYOND THE DOOR SWING.
4. TOILET ROOM MUST ALLOW FOR SIDE TRANSFER - 42" BETWEEN FIXTURES.
5. ADAPT TEAM TO VERIFY LOCAL CODE REQUIREMENTS.

GENERAL NOTES 4

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
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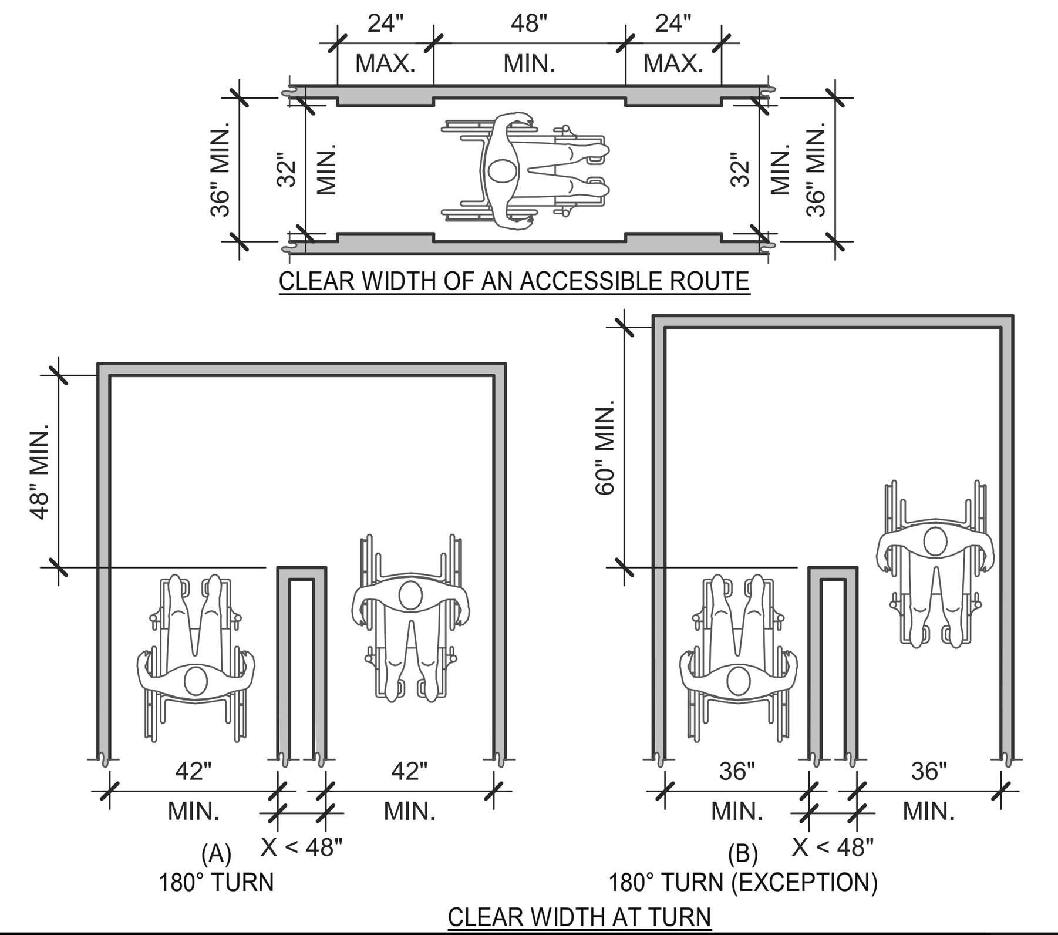
TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

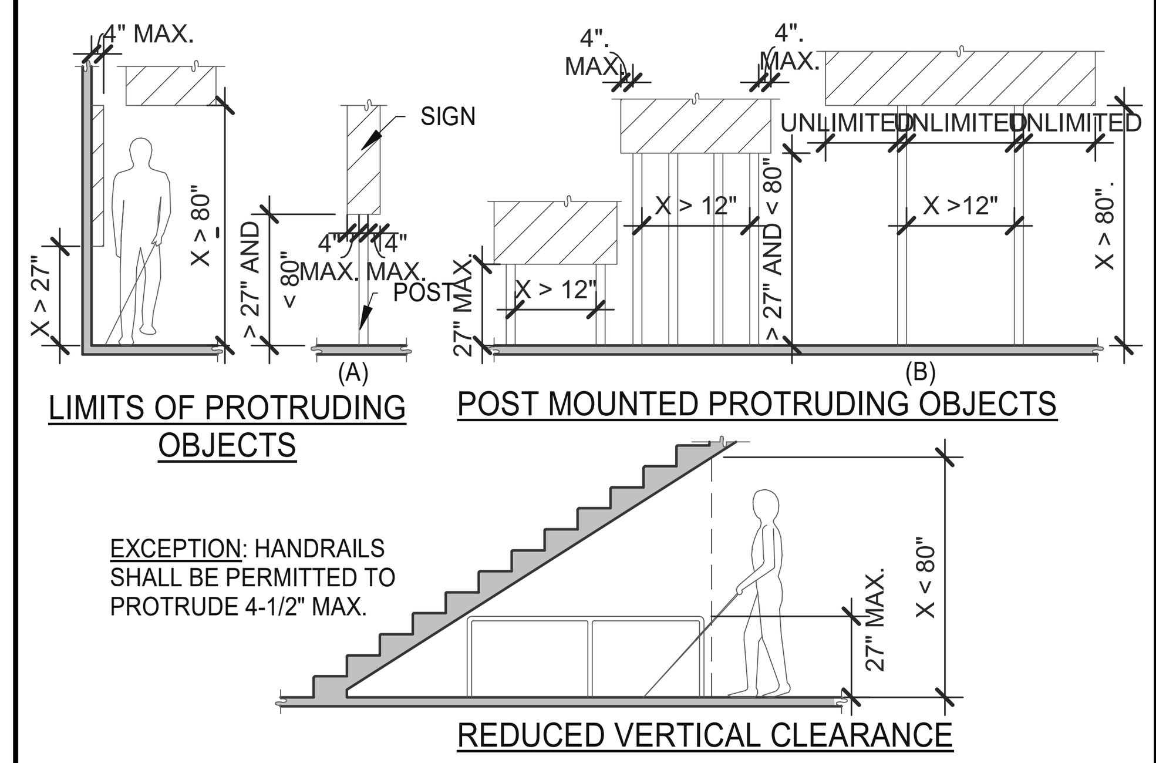
ENDEAVOR 2.0
ACCESSIBILITY REQUIREMENTS

ADA1.0

PLOT DATE: 7/12/2021 9:54:27 AM



CLEAR WIDTH 1/4" = 1'-0" | 17



PROTRUDING OBJECTS 3/16" = 1'-0" | 13

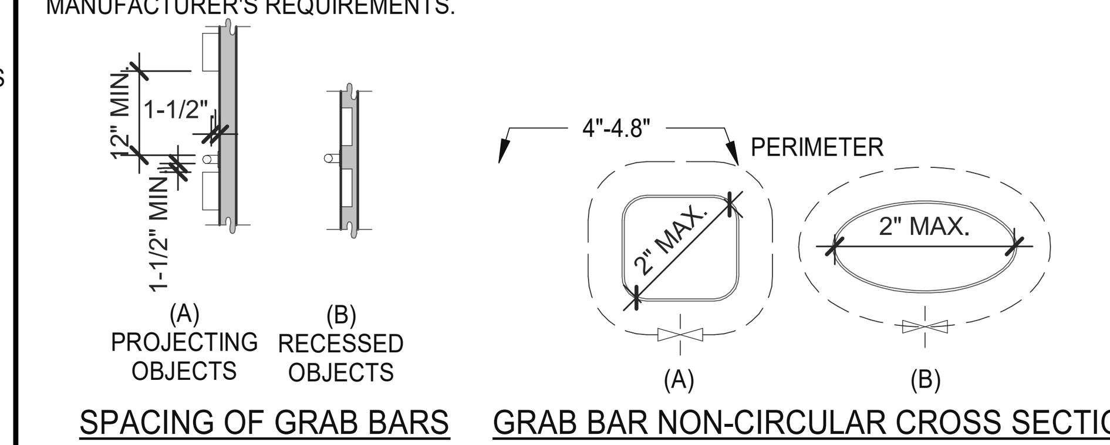
NOTES:
1. FLOOR OR GROUND SURFACE WITHIN REQUIRED MANEUVERING CLEARANCES SHALL COMPLY WITH [FLOOR OR GROUND SURFACES & CHANGES IN LEVEL] DETAIL AND SHALL HAVE A SLOPE NOT STEEPER THAN 1:48. CHANGES IN LEVEL ARE NOT PERMITTED AT DOOR LANDINGS.
2. THRESHOLDS, IF PROVIDED AT DOORWAYS SHALL BE 1/2" HIGH MAX. RAISED THRESHOLDS AND CHANGES IN LEVEL AT DOORWAYS SHALL COMPLY WITH [FLOOR OR GROUND SURFACES & CHANGES IN LEVEL] DETAIL.
3. HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERABLE PARTS ON DOORS AND GATES SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OR THE WRIST.
4. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 LBS (22.5 N) MAX.
5. OPERABLE PARTS OF DOOR HARDWARE SHALL BE 34" MIN. AND 48" MAX. ABOVE THE FINISH FLOOR OR GROUND.
6. WHERE SLIDING DOORS ARE IN THE FULLY OPEN POSITION, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES.
7. DOOR AND GATE CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90° THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12° FROM THE LATCH IS 5 SECONDS MIN.
8. DOOR AND GATE SPRING HINGES SHALL BE ADJUSTED SO THAT FROM THE OPEN POSITION OF 70° THE DOOR OR GATE SHALL MOVE TO THE CLOSED POSITION IN 1.5 SECONDS MIN.
9. THE FORCE FOR PUSHING OR PULLING OPEN A DOOR OR GATE SHALL BE AS FOLLOWS:
9.1. INTERIOR HINGED DOORS AND GATES: 5 LBS (22.5 N) MAX.
9.2. SLIDING OR FOLDING DOORS: 5 LBS (22.5 N) MAX.
9.3. REQUIRED FIRE DOORS: THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY, NOT TO EXCEED 15 LBS (66.7N).
9.4. EXTERIOR HINGED DOORS: 5 LBS (22.5 N) MAX.
10. SWINGING DOOR AND GATE SURFACES WITHIN 10" OF THE FINISH FLOOR OR GROUND MEASURED VERTICALLY SHALL HAVE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING THE FULL WIDTH OF THE DOOR OR GATE. PARTS CREATING HORIZONTAL OR VERTICAL JOINTS IN THESE SURFACE SHALL BE WITHIN 1/16" OF THE SAME PLANE AS THE OTHER AND BE FREE OF SHARP OR ABRASIVE EDGES. CAVITIES CREATED BY ADDED KICK PLATES SHALL BE CAPPED.
11. WHERE AUTOMATIC AND POWER-ASSISTED DOORS AND GATES WITHOUT STANDBY POWER ARE PART OF A MEANS OF EGRESS THE CLEAR BREAK OUT OPENING AT SWINGING OR SLIDING DOORS AND GATES SHALL BE 32" MIN. WHEN OPERATED IN EMERGENCY MODE.

CIRCULAR CROSS SECTION. GRAB BARS WITH CIRCULAR CROSS SECTIONS SHALL HAVE AN OUTSIDE DIAMETER OF 1-1/4 INCHES MINIMUM AND 2 INCHES MAXIMUM.

SPACING. THE SPACE BETWEEN THE WALL AND THE GRAB BAR SHALL BE 1-1/2 INCHES. THE SPACE BETWEEN THE GRAB BAR AND PROJECTING OBJECTS BELOW AND AT THE ENDS SHALL BE 1-1/2 INCHES MINIMUM. THE SPACE BETWEEN THE GRAB BAR AND PROJECTING OBJECTS ABOVE SHALL BE 12 INCHES MINIMUM.

POSITION OF GRAB BARS. GRAB BARS SHALL BE INSTALLED IN A HORIZONTAL POSITION, 33 INCHES MINIMUM AND 36 INCHES MAXIMUM ABOVE THE FINISH FLOOR MEASURED TO THE TOP OF THE GRIPPING SURFACE, EXCEPT THAT AT WATER CLOSETS FOR CHILDREN'S USE, GRAB BARS SHALL BE INSTALLED IN A HORIZONTAL POSITION 18 INCHES MINIMUM AND 27 INCHES MAXIMUM ABOVE THE FINISH FLOOR MEASURED TO THE TOP OF THE GRIPPING SURFACE.

BACKING. PROVIDE MIN. 6 INCHES x 16 GA CONTINUOUS SHEET METAL BACKING ATTACHED TO MIN. 3 STUD BAYS WITH #10 FLAT HEAD SHEET METAL SCREWS. INSTALL GRAB BARS PER MANUFACTURER'S REQUIREMENTS.



GRAB BARS 3/16" = 1'-0" | 5

ACCESSIBILITY NOTES

1. "THE ACCESSIBILITY GUIDELINES AND CODES" MENTIONED BELOW REFER TO ALL APPLICABLE LOCAL/STATE BUILDING CODES REFERENCED ON THE PROJECT DATA SHEET OF THIS SET IN ADDITION TO THE FEDERAL REQUIREMENTS OF THE ADA (THE AMERICANS WITH DISABILITIES ACT).
2. DETAILS ON THIS SHEET ARE FOR REFERENCE ONLY, REFER TO THE ACCESSIBILITY GUIDELINES AND CODES FOR ALL ACCESSIBILITY REQUIREMENTS.
3. THE GENERAL CONTRACTOR SHALL BECOME FAMILIAR WITH THE ACCESSIBILITY GUIDELINES AND CODES.
4. ANY DISCREPANCY CONTAINED HEREIN DOES NOT RELIEVE THE GENERAL CONTRACTOR OR OWNER FROM COMPLYING WITH THE ACCESSIBILITY GUIDELINES AND CODES.

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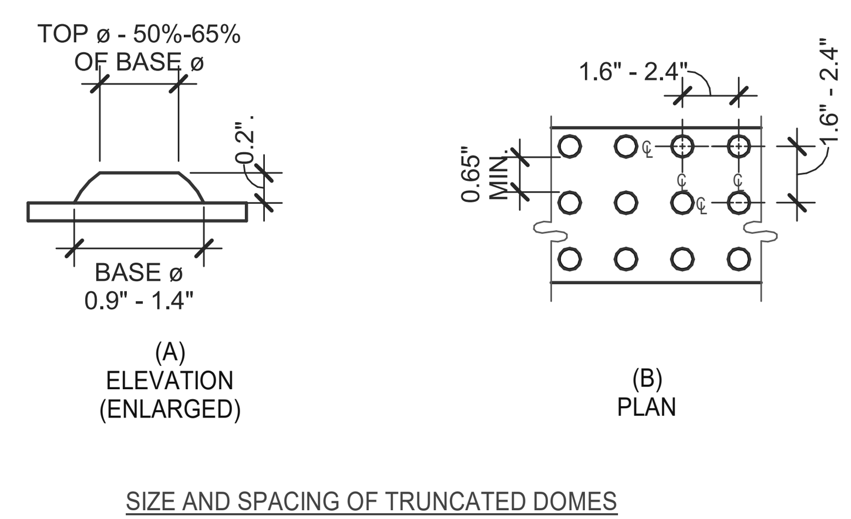
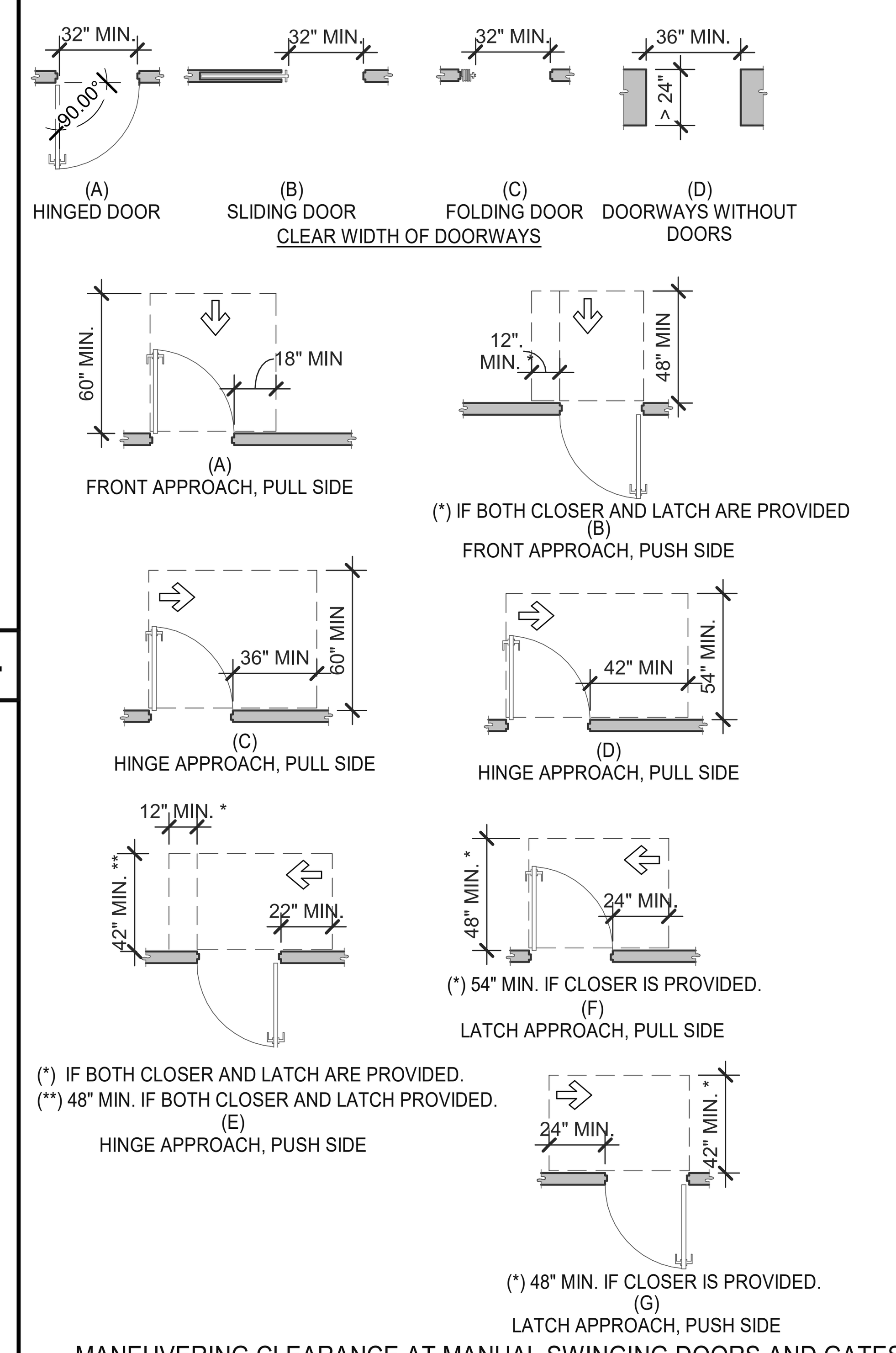
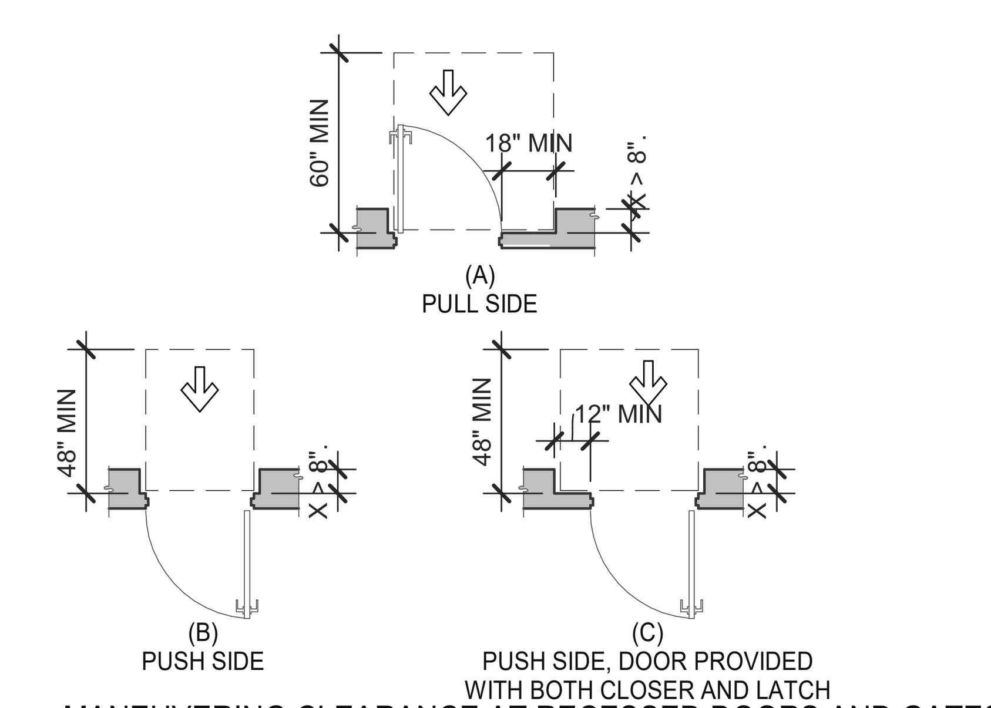
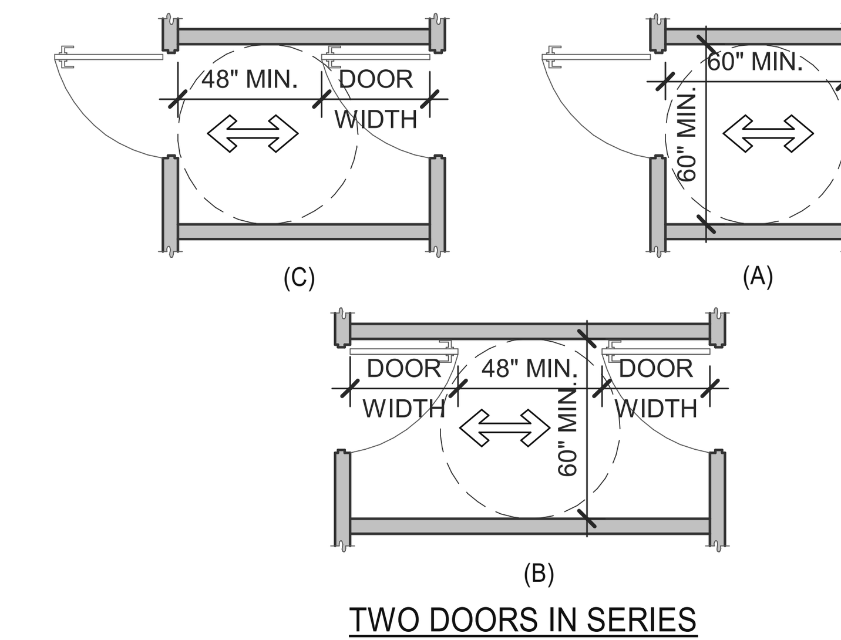


DETECTABLE WARNINGS 3" = 1'-0" | 14





DOORS, DOORWAYS & GATES 3/16" = 1'-0" | 12

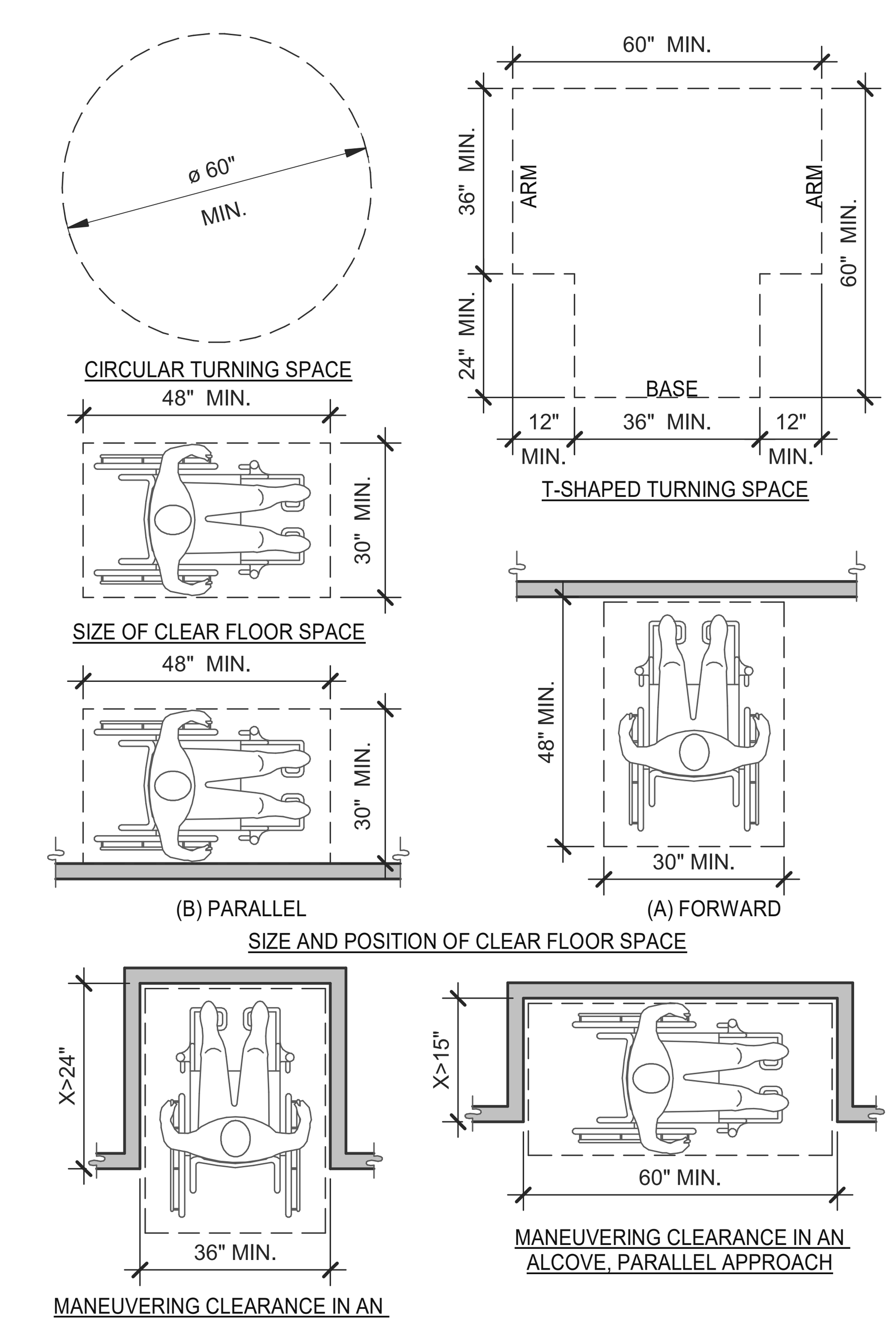


DOORS, DOORWAYS & GATES 3/16" = 1'-0" | 6

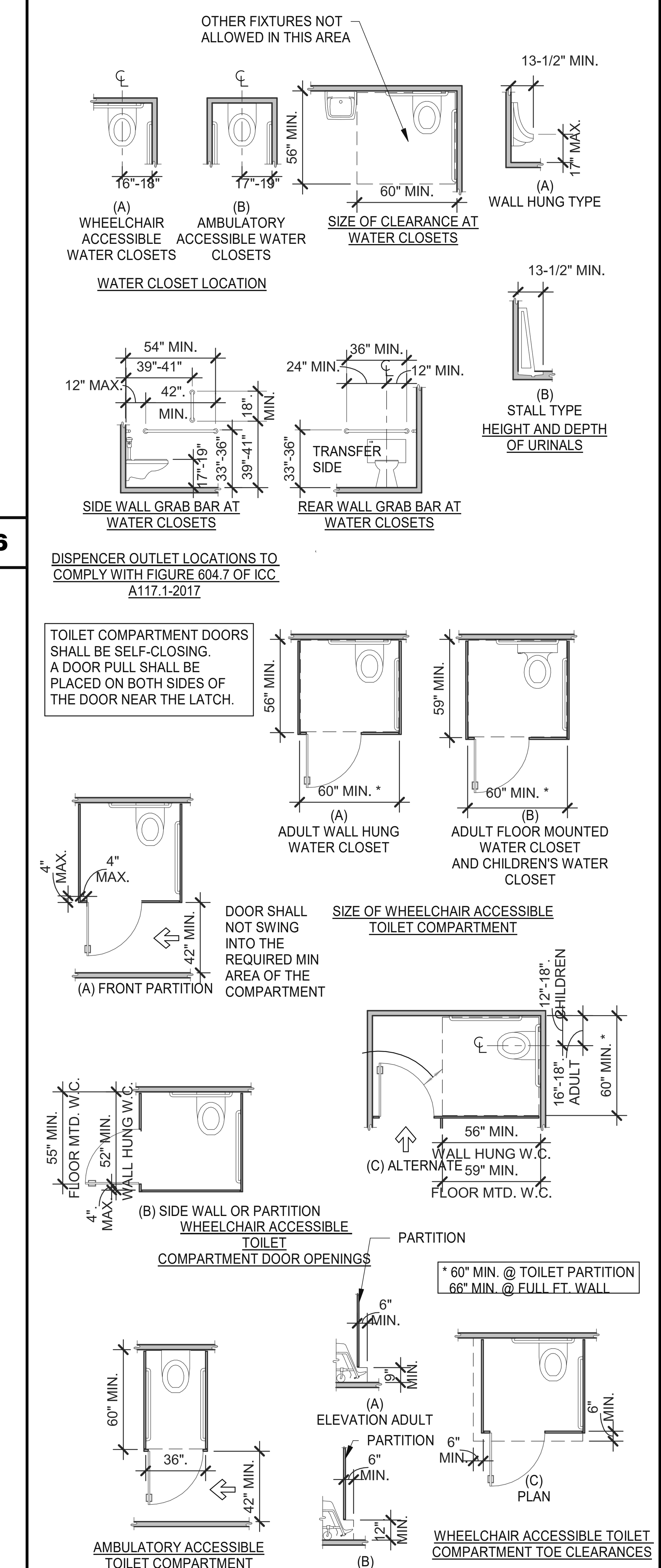
PARKING SPACES

TOTAL NUMBER OF PARKING SPACES PROVIDED IN PARKING FACILITY	MINIMUM NUMBER OF REQUIRED ACCESSIBLE PARKING SPACES
1 TO 25	1
26 TO 50	2
51 TO 75	3
76 TO 100	4
101 TO 150	5
151 TO 200	6
201 TO 300	7
301 TO 400	8
401 TO 500	9
501 TO 1000	2 PERCENT OF TOTAL
1001 AND OVER	20, PLUS 1 FOR EACH 100, OR FRACTION THEREOF, OVER 1000

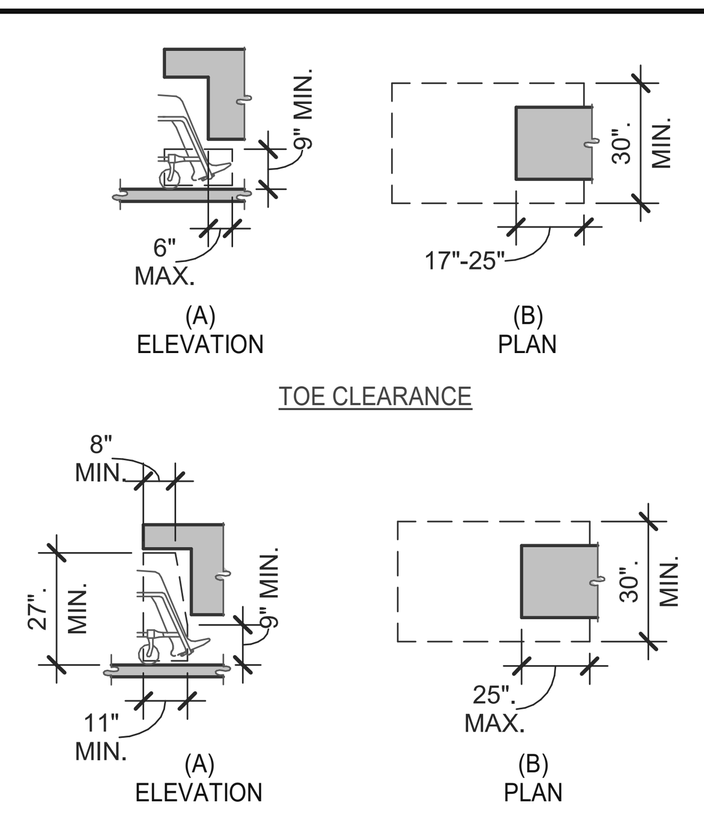
PARKING SPACES 6" = 1'-0" | 15



CLEAR FLOOR OR GROUND SPACE 3/8" = 1'-0" | 8



WC AND TOILET COMPARTMENTS 3/16" = 1'-0" | 4



KNEE AND TOE CLEARANCE 1/4" = 1'-0" | 16

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TACO BELL

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BROWNSTOWN, MI 48183

ENDEAVOR 2.0
ACCESSIBILITY REQUIREMENTS

ADA1.1

PLOT DATE: 7/12/2021 9:54:31 AM

CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT

GENERAL:

1. LOCATE, CUT AND FRAME ROOF OPENINGS AS SHOWN FOR ALL HVAC EQUIPMENT AND EXHAUST FANS.
2. IT IS VERY IMPORTANT THAT ACCURATE MEASUREMENTS ARE USED WHEN LOCATING EXHAUST FAN ROOF OPENINGS TO ENSURE THAT NO ADDITIONAL OFF-SETS ARE REQUIRED IN THE EXHAUST DUCTWORK. COORDINATE ROOF OPENINGS WITH KITCHEN EQUIPMENT.
3. PROVIDE FRAMING REQUIRED FOR DIFFUSER INSTALLATION IN HARD CEILING.

REFER TO SCOPE OF WORK IN DIV 23 SPECIFICATION FOR HVAC FOR TEST & BALANCE & COMMISSIONING REQUIREMENTS WHICH WILL BE SUPPLIED BY THE OWNER AND COORDINATED BY THE GC.

HVAC:

1. INSTALLATION SHALL CONFORM TO MECHANICAL AND ENERGY CODES FOR NEW NONRESIDENTIAL BUILDINGS.
2. ALL WORK AND MATERIALS SHALL COMPLY WITH GOVERNING CODES, SAFETY ORDERS AND REGULATIONS.
3. OBTAIN AND PAY FOR ALL NECESSARY PERMITS, FEES AND INSPECTIONS REQUIRED BY GOVERNING AUTHORITIES.
4. E.C. SHALL PROVIDE CONDUIT FOR LINE AND LOW VOLTAGE WIRING, LINE VOLTAGE WIRING SWITCHES, AND FINAL CONNECTIONS. REFER TO SHEETS E3.0 - ELECTRICAL POWER PLAN, SHEET E3.2-ELECTRICAL POWER ROOF PLAN, E6.0 - ELECTRICAL DETAILS - TBCCB, E6.1 - ELECTRICAL DETAILS - TBCCB, E7.0 - ELECTRICAL DETAILS, E7.1 - ELECTRICAL DETAILS.
5. PROVIDE 24V CONTROL WIRING AND FINAL CONNECTIONS. EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN SPACE PROVIDED WITH ADEQUATE ROOM FOR SERVICING, INCLUDING SUBSTITUTE EQUIPMENT NAMED IN SPECIFICATIONS. SUBMIT A 1/4" SCALE DRAWING OF ALL EQUIPMENT SUBSTITUTED FOR APPROVAL PRIOR TO INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STRUCTURAL AND ARCHITECTURAL IMPACT, CLEARANCE REQUIREMENTS AND UTILITY REQUIREMENTS. REFER TO ELECTRICAL DRAWINGS SHEETS E6.1 AND E7.1 FOR ADDITIONAL LOW VOLTAGE WIRING AND CONNECTIONS.
6. PROVIDE ALL REFRIGERANT LINES FROM ICE MACHINE TO CONDENSER ON ROOF AND CHARGE LINES PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.
7. HVAC UNITS SHALL BE MOUNTED LEVEL ON ROOF CURBS.
8. SUPPLY / RETURN DUCTWORK SHALL BE EXTERNALLY INSULATED. ALL RETURN AND SUPPLY DUCT RISERS SHALL BE LINED (NOT WRAPPED).
9. SUPPLY / RETURN DUCTS SHALL BE RIGID (EXCEPT AS NOTED/INDICATED AS RIGID ON THE DUCT PLAN), WITH THE EXCEPTION OF THE LAST 5'-0", WHICH MAY UTILIZE FLEXIBLE DUCT. ALL EXHAUST DUCT SHALL BE RIGID.
10. ROOFTOP UNITS SHALL BE ORDERED WITH FACTORY SUPPLIED AND INSTALLED RETURN SMOKE DETECTORS. WHEN REQUIRED BY MANUFACTURER, SAMPLE TUBE SHALL BE LOCATED PER FIELD INSTALLATION INSTRUCTIONS. DETECTOR SHALL DEACTIVATE ROOFTOP UNIT UPON SENSING SMOKE. INCLUDE SUPPLY SMOKE DETECTOR ONLY IF REQUIRED BY LOCAL CODE.
11. HOOD EXHAUST DUCTS SHALL BE RIGID 16 GA MINIMUM, WELDED DUCT. GRIND ALL WELDS SMOOTH. PROVIDE 3M FIRE BARRIER DUCT WRAP FOR ALL HOOD EXHAUST DUCTS. PROVIDE TRANSITION AT TERMINATION OF TYPE 1 EXHAUST DUCT TO TOP OF FAN BASE. TRANSITION SHALL BE CENTERED AND HAVE MINIMUM OF 1" PER FOOT SLOPE.
12. BRANCH DUCTS FEEDING INDIVIDUAL DIFFUSERS SHALL HAVE DAMPERS AT BRANCH FEEDER. DAMPER SHALL BE MINIMUM 26 GAUGE LOCATED IN DEDICATED SLEEVE WITH AXLE AND LOCKING QUADRANT. DAMPERS SHALL NOT BE INSTALLED IN STARTER COLLARS. ALL DAMPER HANDLES SHALL HAVE A FLAG ON THE HANDLE FOR LOCATION PURPOSES.
13. OUTSIDE AIR INTAKES SHALL BE A MINIMUM OF 10'-0" FROM EXHAUST FANS AND VENTS.
14. SEE M1.0 AND SCOPE OF WORK FOR DESCRIPTION OF HVAC PACKAGE TO BE PURCHASED THROUGH YUM! BRANDS NATIONAL CONTRACT.
15. CONTRACTOR IS RESPONSIBLE FOR PROVIDING HVAC TEST & BALANCE REQUIRED FOR LOCAL AUTHORITY HAVING JURISDICTION, CERTIFICATE OF OCCUPANCY, BUILDING FINAL, ETC.
16. FINAL HVAC SYSTEM TESTING AND BALANCING, AND COMMISSIONING SHALL BE PERFORMED BY INDEPENDENT AGENT. INDEPENDENT AGENT CONTRACTED DIRECTLY BY THE OWNER IS SCHEDULED AND PAID FOR (FRANCHISEE STORES) BY GENERAL CONTRACTOR (CORPORATE STORES ARE DIRECT BILLED TO TACO BELL)". CONTRACTOR SHALL CERTIFY COMPLETION OF INSTALLATION, START UP AND PRE-COMMISSIONING CHECKLIST SHOWN ON SHEET SW2.0 BEFORE SCHEDULING OWNER'S INDEPENDENT AGENT. A RE-TEST IS MANDATORY FOR A FALSE START (I.E. NO POWER UPON AGENT'S ARRIVAL, EQUIPMENT NOT WIRED, COMPLETED, STARTED, ETC.) AND SHALL BE A COST INCURRED BY THE G.C. IN THE EVENT A SYSTEM / STORE RECEIVES A GRADE OF 5 OR BELOW AS A RESULT OF THE HVAC SYSTEM PERFORMANCE OR OPERATIONAL DEFICIENCIES, OWNER WILL REQUEST A RE-TEST AND THE COST SHALL BE INCURRED BY THE GENERAL CONTRACTOR.

    INDEPENDENT AGENTS:
    Air Care Experts
    TAB@ACE-IAQ.COM
    949 770-2222
17. WIRE ALL SMOKE DETECTORS IN RTU TO ITS RESPECTIVE REMOTE ANNUCIATOR/RESET SWITCH. INSTALL "SYSTEM SENSOR" MODEL RTS2AOS. MOUNT NEXT TO THERMOSTATS @ 48" A.F.F. - INSTALL PER MANUFACTURER SPECIFICATIONS.
18. REFERENCE RTU TO TBCCB CONNECTIONS PER E6.1.
19. RTU MANUFACTURER FURNISHED THERMOSTATS SHALL BE CAPABLE OF RECIEVING AN EXTERNAL "OCCUPIED" SIGNAL.
20. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR LOW VOLTAGE CONNECTIONS.
21. REFERENCE RTU TO TBANS CONNECTIONS PER E7.1. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR LOW VOLTAGE CONNECTIONS.
22. LOW VOLTAGE CONNECTIONS TO SMOKE DETECTORS, REMOTE ANNUCIATORS AND RESETS, HUMIDISTATS, THERMOSTATS, REMOTE SENSORS, TBCCB AND TBANS REQUIRE VISUAL INSTALLATION VERIFICATION CERTIFICATE. CONTACT CERTIFY@ACE-BCX.COM OR 949 770 2222 FOR CERTIFICATE. SEE SHEET SW2.0 CERTIFICATE.

MECHANICAL NOTES 6

SYMBOL & ABBREV.		DESCRIPTION
	SA/SUP	SUPPLY AIR (RISE/DROP)
	RA/RET	RETURN AIR DUCT (RISE/DROP)
	EA/EXH	EXHAUST AIR DUCT (RISE/DROP)
	CD/SR	CEILING DIFFUSER/SUPPLY REGISTER (ARROWHEAD REPRESENTS NUMBER OF THROW)
	RR/RG	RETURN REGISTER/GRILLE
	ER/EG	EXHAUST REGISTER/GRILLE
	FLEX	FLEXIBLE DUCT (14'-0" MAXIMUM)
		ROUND DUCT ELBOW
		ROUND DUCTWORK
	MCD	MANUAL VOLUME DAMPER
		DUCT TRANSITION (RECTANGULAR TO ROUND)
T	T-STAT	PROGRAMMABLE THERMOSTAT, PROVIDED WITH HVAC PACKAGE
TS		THERMOSTAT SENSOR (REMOTE), PROVIDED WITH HVAC PACKAGE
H		HUMIDITY SENSOR (REMOTE), PROVIDED WITH HVAC PACKAGE
SD		SMOKE DETECTOR, PROVIDED WITH HVAC PACKAGE, MOUNTED IN UNIT
— D —	D	CONDENSATE DRAIN
Ø	DIA.	DIAMETER
0000 X-X		MECHANICAL EQUIPMENT DESIGNATION
R	RESET	SMOKE DETECTOR RESET

SYMBOL & ABBREV.	DESCRIPTION
A/C, AC	AIR CONDITIONING
A.F.F.	ABOVE FINISHED FLOOR
BDD	BACK DRAFT DAMPER
CB	CIRCUIT BREAKER
CLG.	CEILING
CONN.	CONNECT/CONNECTION
CONT.	CONTINUATION
CFM	CUBIC FEET PER MINUTE
DISC.	DISCONNECT
EA	EXHAUST AIR
EF	EXHAUST FAN
(E)	EXISTING
GA.	GAGE/GAUGE
GC	GENERAL CONTRACTOR
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
MFR.	MANUFACTURER
MECH.	MECHANICAL
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
RA	RETURN AIR
SA	SUPPLY AIR
S/S	STAINLESS STEEL
TYP.	TYPICAL

MECHANICAL SYMBOLS 7

	MARK	AREA SERVED	FAN DATA: SUPPLY CFM	MIN. OA CFM	ESP	HP	RPM	COOLING CAPACITY: NOMINAL TONS	MIN CAP (MBH) TOT/SEN	MIN EER	HEATING CAPACITY: INPUT (MBH)	OUTPUT (MBH)	HEATING STAGES	AFUE %	ELECTRICAL DATA: VOLTS/PH	MCA (A)	MOCP (A)	WEIGHT (LBS.)	MODEL	NOTES
GREEN	RTU-1	DINING	3000	750	0.8	2	979	7.5	90.7/64.4	12.5	180	144	2	80	208/3	42	50	1443	LGH102H4M	1,2,3,4,5,6,7,8,9,10,11,13,14,15
	RTU-2	KITCHEN	5000	1050	1.0	5	1045	13.0	140.4/110.4	12.3	260	208	2	80	208/3	72	80	2255	LGH156H4B	1,2,3,4,5,6,7,8,9,12,13,14,15

SCHEDULE NOTES:
1. LISTED CAPACITY IS THE UNIT'S NET COOLING CAPACITY AT THE FOLLOWING CONDITIONS: RTU-1 - 80.6°F DB / 68.2F WB EAT AND 90°F AMBIENT / RTU-2 - 79.1°F DB / 67.5°F WB EAT AND 90°F AMBIENT. OUTDOOR DESIGN CONDITION, SUMMER 90°F & 73°F WB, WINTER 0°F. THERMOSTAT SHALL BE PROGRAMMED FOR 73°F IN SUMMER AND 68°F IN WINTER WITH 2°F ADJ. FUNCTION UP OR DOWN. THE UNOCCUPIED TEMP SHALL BE SET TO THE STORE SCHEDULE AND 60°F MINIMUM. SPECIFIED UNITS INCLUDE MINIMUM 2 STAGE COOLING, LOW AMBIENT CONTROL TO 0 DEG. F AND THROUGH THE ROOF CURB CURB GAS AND POWER CONNECTIONS..
2. HINGED ACCESS DOORS (FACTORY PROVIDED).
3. 2 INCH MERV 8 FILTER (FACTORY PROVIDED).
4. SINGLE ENTHALPY ECONOMIZER/W HOOD (FACTORY PROVIDED).
5. HIGH PERF ECONOMIZER (FACTORY PROVIDED).
6. STANDARD STATIC POWER RELIEF/W HOOD (FACTORY PROVIDED).
7. CIRCUIT BREAKER (FACTORY PROVIDED).
8. RETURN AIR SMOKE DETECTOR (FACTORY PROVIDED).
9. STANDARD CAP (FACTORY PROVIDED).
10. PHASE MONITOR (FACTORY PROVIDED).
11. MULTI-STAGE AIR VOLUME (FACTORY PROVIDED).
12. CONSTANT AIR VOLUME (FACTORY PROVIDED).
13. 14" ROOF CURB (FIELD INSTALLED).
14. COMFORT SENSE 7500 THERMOSTAT (FIELD INSTALLED).
15. GFCI (FIELD WIRED, FACTORY INSTALLED).

HVAC UNIT SCHEDULE 1

	Mark	FAN DATA: CFM	ESP	RPM	HP	VOLTS/PH	DRIVE TYPE	MANUFACTURER	MODEL	NOTES
GREEN	EF-1	1050	0.9	1344	1/2	120/1	DIRECT	STRATOVENT	#SVDU50HFA	1,3,5,6,7,8,10
	EF-2	570	0.375	1025	1/4	120/1	DIRECT	STRATOVENT	#SVDR30HFA	2,4,7,8,9,10,11

REMARKS:
1. UL 762 LISTED (GREASE)
2. UL 705 LISTED (HEAT OR STEAM)
3. FLAT ROOF CURB, 19.5" X 19.5" X 26"H, VENTED
4. FLAT ROOF CURB, 19.5" X 19.5" X 14"H
5. GREASE CUP WITH DRAIN
6. FACTORY ATTACHED HINGES
7. WEATHERPROOF PRE-WIRED DISCONNECT SWITCH
8. PROVIDE PRE-WIRED SOLID STATE SPEED CONTROLLER
9. GRAVITY BACKDRAFT DAMPER
10. FURNISHED BY OWNER WITH HOOD PACKAGE
11. FURNISHED WITH DAMPER TRAY

EXHAUST FAN SCHEDULE 2

MARK	NECK SIZE	FACE SIZE OR GRID SIZE	(NO.) & AIR PATTERN	TYPE	MAX FLOW (CFM)	MOUNTING	MATERIAL	MANUFACTURER	MODEL NUMBER	REMARKS
E-1	8"X8"	12"x12"	-	EXHAUST	200	SURFACE	ALUMINUM	METAL-AIRE / TITUS	CC5S-1/ 50F	FRN SQR TO RND ADAPTER
E-2	8"DIA	24"x24"	-	EXHAUST	300	SURFACE	ALUMINUM	METAL-AIRE / TITUS	CC5-FB-TB/50F-NT	FRN SQR TO RND ADAPTER
R-1	22"X22"	24"x24"	-	RETURN	2000	LAY-IN	ALUMINUM	METAL-AIRE / TITUS	RHE-6/50FF	HINGED/FULLY REMOVABLE FACE
S-1	15"X15"	24"x24"	4W	SUPPLY	600	LAY-IN	ALUMINUM	METAL-AIRE / TITUS	5000-6 / TDC-AA-NT	FRN SQR TO RND ADAPTER
S-2	9"X9"	14"x14"	4W	SUPPLY	250	SURFACE	ALUMINUM	METAL-AIRE / TITUS	5000-1 / TDC-AA	FRN SQR TO RND ADAPTER
S-4	22"X22"	24"x24"	4W	SUPPLY	600	LAY-IN	MODULAR PLASTIC CORE	HART & COOLEY	RZMCDST	FRN SQR TO RND ADAPTER
T-1	24"X16"		VERT	RETURN	0	DUCT	ALUMINUM	Titus	350RL	RETURN/TRANSFER AIR GRILLE

NOTES:
1. SURFACE MOUNTED DIFFUSERS IN HARD CEILINGS SHALL BE PROVIDED WITH OPPOSED BLADE DAMPERS. SEE ARCHITECTURAL DRAWINGS FOR CEILING TYPES.

AIR DEVICE SCHEDULE 3

TACO BELL HAS A NATIONAL HVAC AGREEMENT WITH LENNOX NATIONAL ACCOUNTS. FOR QUOTES & TECHNICAL SPECIFICATIONS CONTACT BY EMAIL AT YUM!@LENNOXIND.COM OR 800-367-6285 ACCOUNT MANAGER BRAD SMITH.

LENNOX HAS AGREED TO SUPPLY AN HVAC PACKAGE CONSISTING OF THE ROOF-TOP UNITS, CURBS, THERMOSTATS, TEMPERATURE SENSORS (REMOTE), AND HUMIDITY SENSORS (REMOTE). RTUS AS SPECIFIED INCLUDE AN UNPOWERED CONVENIENCE OUTLET (SEE ELECTRICAL) AND AN HACR CIRCUIT BREAKER WHICH SERVES AS UNIT DISCONNECT.

FOR HVAC TEST AND BALANCE, GC TO SCHEDULE WITH TACO BELL'S PREFERRED VENDOR PER SCOPE OF WORK WORKSHEETS. BE PREPARED AT TIME OF ORDER OR QUOTE REQUEST TO PROVIDE ALL PROJECT DETAILS REGARDING SPECIFICATIONS AND QUANTITIES AS SITE SPECIFIC DESIGN MAY NOT MATCH NATIONAL DESIGN.

SEE THE SCOPE OF WORK SHEETS FOR ADDITIONAL INFORMATION.

HVAC NATIONAL ACCOUNT NOTES 5

ITEM	OA	RA	SA	EA	PRESSURE
EF-1	--	--	--	-1050	-1050
EF-2	--	--	--	-570	-570
RTU-1	750	2250	3000	--	+750
RTU-2	1050	5075	5000	--	+1050
TOTAL	1800	7325	8000	-1620	+180

NOTES:
- OUTSIDE PERCENTAGE OF TOTAL SUPPLY AIR IS 25% FOR RTU-1 AND 17.1% FOR RTU-2.
- ADJUST OUTSIDE AIR INTAKES TO MAINTAIN VALUES AT ALL EVAPORATOR FAN SPEEDS.

AIR BALANCE SCHEDULE 4

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
330.572.2100 FAX: 330.572.2102

	DATE	REMARKS
	04.21.21	ISSUED FOR PERMIT
1	07.12.21	ISSUED FOR BID

CONTRACT DATE: 06.22.21
BUILDING TYPE: END. MED20
PLAN VERSION: MARCH 2021
BRAND DESIGNER: DICKSON
SITE NUMBER: 315089
STORE NUMBER: 456336
PA/PM: SM
DRAWN BY.: TH
JOB NO.: 2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
MECHANICAL SCHEDULES AND NOTES

M1.0

PLOT DATE: 7/12/2021 10:55:32 AM

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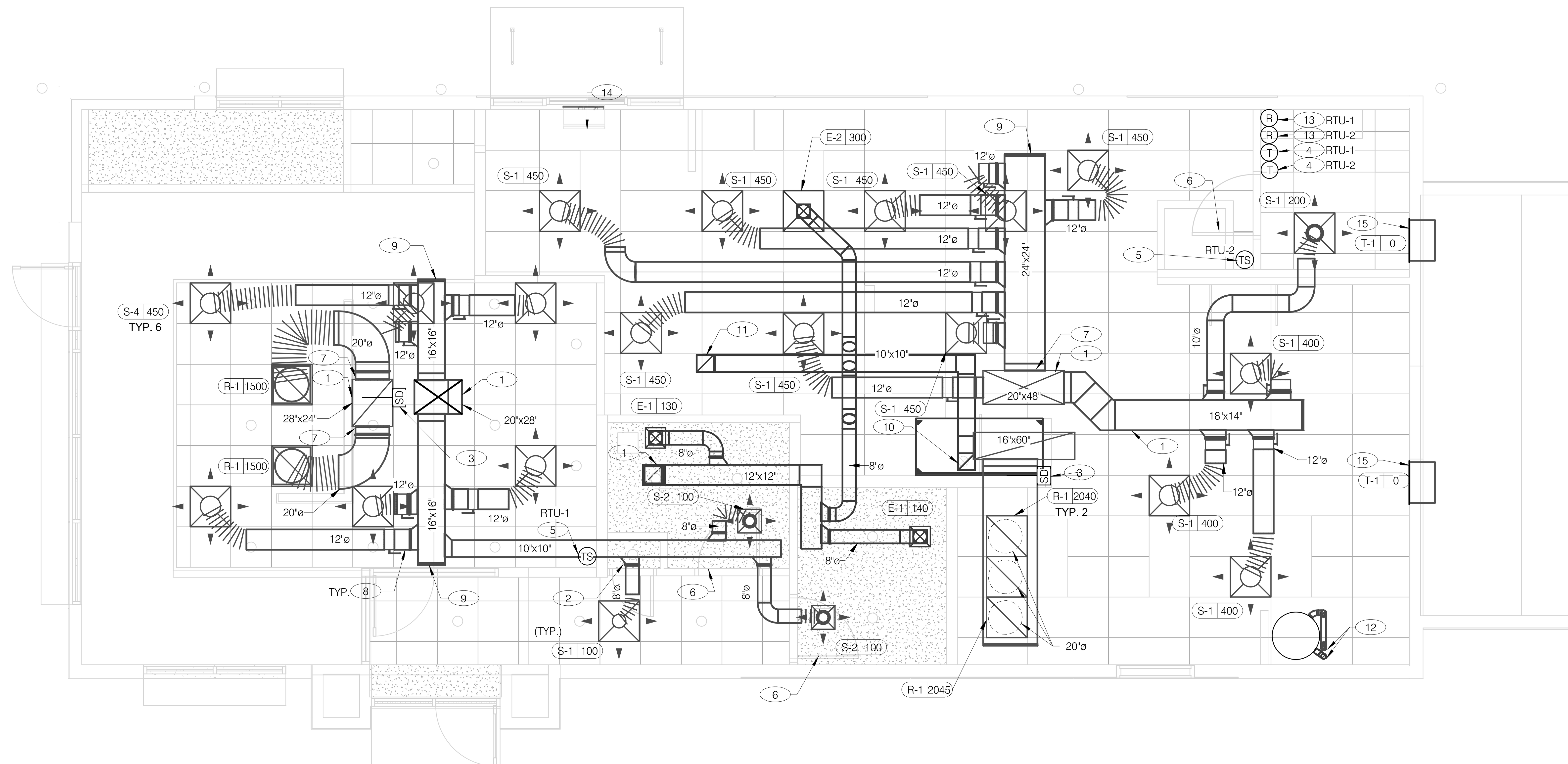
CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
330.572.2100 FAX: 330.572.2102



COVER ALL HVAC DUCT SYSTEMS OPENINGS TO PROTECT FROM CONSTRUCTION DUST AND DEBRIS UNTIL CONSTRUCTION IS COMPLETE. IF HVAC SYSTEM IS OPERATED BEFORE CONSTRUCTION IS COMPLETE, PROVIDE MERV8 FILTERS AT ALL AIR INTAKES INSIDE THE BUILDING.

N

DUCT AND DIFFUSER PLAN 1/4" = 1'-0" **A**

GENERAL NOTES - MECHANICAL (NTS) C

1. DINING ROOM LIGHT FIXTURE LOCATIONS ARE CRITICAL. COORDINATE DUCTWORK LOCATIONS WITH LIGHTING AND STRUCTURAL.
2. THERMOSTATS SHALL BE PROGRAMMABLE THERMOSTAT WITH SUBBASE AND REMOTE TEMPERATURE SENSOR (PROVIDED WITH RTU PACKAGE).
3. HUMIDITY SENSOR APPLICATION IS VARIABLE PER SITE SPECIFIC CONDITIONS. REFER TO HVAC UNIT SCHEDULE FOR APPLICATION CONDITIONS.

KEYNOTES - DUCT AND DIFFUSER (NTS) B

1. AIR DUCT UP TO UNIT.
2. SEE DETAIL 4 ON DRAWING M4.0 FOR SUPPLY AIR TAKE-OFF TO CEILING DIFFUSERS AND GRILLES.
3. FACTORY INSTALLED SMOKE DETECTOR MOUNTED IN ROOFTOP UNIT.
4. LOCATE THERMOSTAT CONTROLS ON WALL IN OFFICE AT 48" A.F.F. COORDINATE LOCATION WITH LIGHT SWITCHES AND OTHER WALL MOUNTED ACCESSORIES. RUN 24 VAC POWER AND SIGNAL CONDUCTORS IN TWO (2) SEPARATE TWO (2) CONDUCTOR CABLES, 18 AWG.
5. MOUNT THERMOSTAT REMOTE SENSOR AT 60" ABOVE FINISHED FLOOR. CONNECT TO THERMOSTAT WITH 18 AWG 2 CONDUCTOR CABLE PER MANUFACTURER INSTALLATION INSTRUCTIONS. ENSURE THAT TEMPERATURE SENSOR IN DINING AREA IS NOT LOCATED ON TILE WALL.
6. UNDERCUT RESTROOM DOORS MINIMUM 3/4" FOR MAKE-UP AIR.
7. PROVIDE SHOE TAP AT CONNECTION TO DUCT DROP FROM ROOFTOP UNIT.
8. RUN DUCT THROUGH OPEN WEBBING OF ROOF TRUSSES (WHERE POSSIBLE). COORDINATE WITH TRUSS DESIGN PRIOR TO DUCTWORK FABRICATION.
9. RUN DUCTWORK BETWEEN TRUSSES AS HIGH AS POSSIBLE UNDER ROOF JOISTS.
10. 10"X10" EXHAUST AIR DUCT DOWN AND TRANSITION TO FIELD CUT EXHAUST CONNECTION AT HOOD.
11. EXHAUST DUCT SHALL RUN BETWEEN ROOF JOISTS TO CONNECT TO ROOF EXHAUST FAN EF-1. SEE HOOD DETAILS ON DRAWING M3.0. SEE DETAIL 10 ON SHEET M4.0 FOR FIRE PROTECTION OF DUCT WORK. SEE DETAIL 11 ON SHEET M4.0 FOR EXHAUST DUCT TRANSITION.
12. PROVIDE 3" PVC WATER HEATER INTAKE AND FLUE VENT. TERMINATION ON ROOF. COORDINATE WORK WITH ALL TRADES.
13. PROVIDE SMOKE DETECTOR RESET SWITCH WITH KEY. RESET SWITCH SHALL BE "SYSTEM SENSOR" MODEL # RT5151 KEY. MOUNT NEXT TO THERMOSTATS @ 48" A.F.F. - INSTALL PER MANUFACTURER'S REQUIREMENTS.
14. PROVIDE AIR CURTAIN IN LOCATION AS SHOWN ON PLAN. MOUNT AIR CURTAIN ON MULLION DIRECTLY ABOVE SERVICE OPENING DOORS AT DRIVE-THRU WINDOW. AIR CURTAIN SHALL BE BERNER MODEL DTU03-2026A, WITH 120/1/60 POWER CONNECTION. REFER TO MANUFACTURERS INSTALLATION INSTRUCTIONS FOR MORE DETAILS.
15. TRANSFER AIR GRILLE MOUNTED ABOVE CEILING TO ALLOW TRANSFER AIR TO PREVENT FREEZING ABOVE WALK-IN COOLER/FREEZER. COORDINATE IN FIELD WITH OTHER TRADES TO ENSURE NO OBSTRUCTIONS.

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CONTRACT DATE:	06.22.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	315089
STORE NUMBER:	456336
PA/PM:	SM
DRAWN BY.:	TH
JOB NO.:	2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
DUCT AND DIFFUSER PLAN

M2.0

PLOT DATE: 7/12/2021 10:55:32 AM

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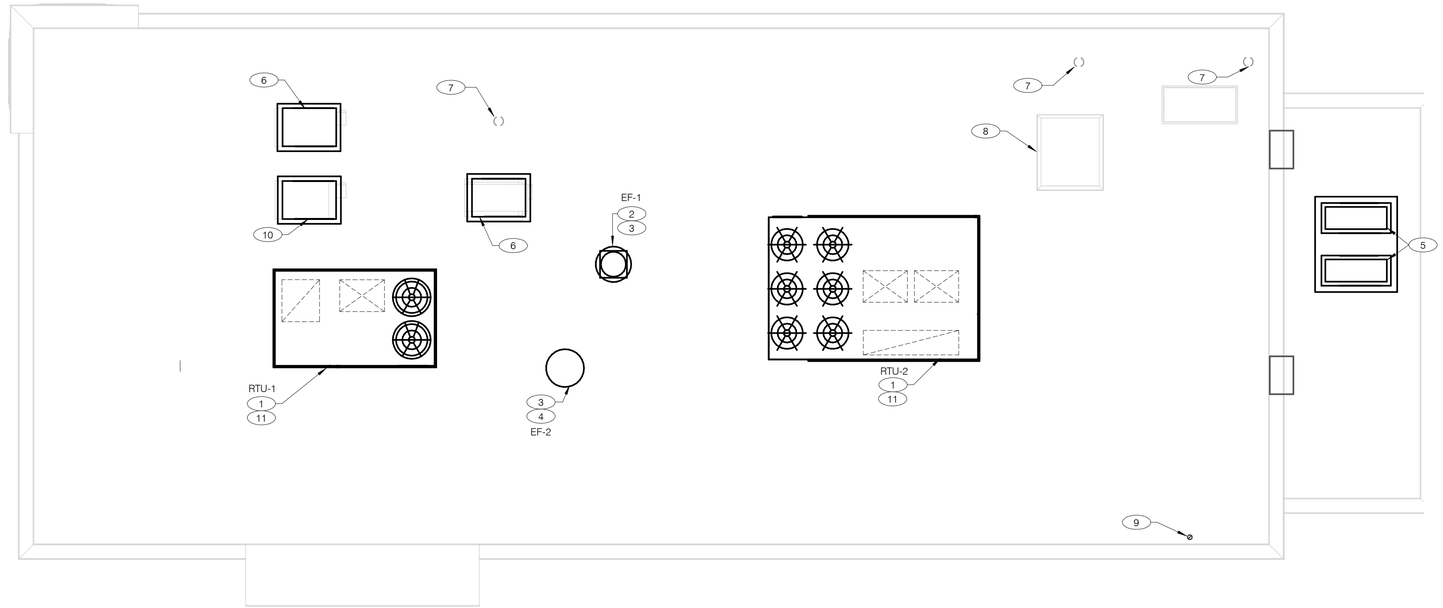

COVER ALL HVAC DUCT SYSTEMS OPENINGS TO PROTECT FROM CONSTRUCTION DUST AND DEBRIS UNTIL CONSTRUCTION IS COMPLETE. IF HVAC SYSTEM IS OPERATED BEFORE CONSTRUCTION IS COMPLETE, PROVIDE MERV8 FILTERS AT ALL AIR INTAKES INSIDE THE BUILDING.

N

MECHANICAL ROOF PLAN 1/4" = 1'-0" A

1. PROVIDE RTU IN LOCATION AS SHOWN ON PLANS. COORDINATE EXACT RTU LOCATION AND DUCT DROPS WITH STRUCTURAL TRUSS LAYOUT. MAINTAIN MINIMUM 10'-0" CLEARANCE BETWEEN OUTSIDE AIR INTAKES AND EXHAUST TERMINATIONS.
2. PROVIDE TYPE I EXHAUST FAN IN LOCATION AS SHOWN PLANS. CONNECT 10"x10" EXHAUST DUCT FROM EXHAUST HOOD UP TO EF-1 ON ROOF. COORDINATION EXHAUST DUCT ROUTING WITH STRUCTURAL TRUSS LAYOUT.
3. COORDINATE EXHAUST FAN LOCATION WITH ROOFTOP UNIT. MAINTAIN ROOFTOP UNIT MANUFACTURER'S REQUIRED CLEARANCE AND MINIMUM 10 FT TO ROOFTOP UNIT'S OUTSIDE AIR INTAKE.
4. PROVIDE EXHAUST FAN IN LOCATION AS SHOWN PLANS. CONNECT 10"x10" EXHAUST DUCT FROM RESTROOM EXHAUST GRILLES TO EF-2 ON ROOF. COORDINATION EXHAUST DUCT ROUTING WITH STRUCTURAL TRUSS LAYOUT.
5. CONDENSING UNIT SERVING WALK-IN COOLER/FREEZER. COORDINATE EXACT LOCATION WITH ROOF LAYOUT. CONTRACTOR TO FIELD VERIFY EXACT REFRIGERANT PIPING. PROVIDE ALL NECESSARY PIPING ACCESSORIES INCLUDING PIPING INSULATION AND INSTALL ON APPROPRIATE EQUIPMENT SUPPORTS.
6. CONDENSING UNIT SERVING ICE MAKER. COORDINATE EXACT LOCATION WITH ROOF LAYOUT. CONTRACTOR TO FIELD VERIFY EXACT REFRIGERANT PIPING. PROVIDE ALL NECESSARY PIPING ACCESSORIES INCLUDING PIPING INSULATION AND INSTALL ON APPROPRIATE EQUIPMENT SUPPORTS.
7. PLUMBING VENT. REFERENCE 1/P2.0.
8. ROOF HATCH. REFER TO ARCHITECTURAL DRAWINGS FOR MORE INFORMATION.
9. PROVIDE MANUFACTURER'S CONCENTRIC TERMINATION VENT KIT SERVING HOT WATER HEATER BELOW. INSTALL IN STRICT ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. ENSURE AT LEAST 10'-0" DISTANCE BETWEEN OUTDOOR AIR INTAKES.
10. CONDENSING UNIT SERVING FROZEN BEVERAGE MACHINE. COORDINATE EXACT LOCATION WITH ROOF LAYOUT. FIELD VERIFY EXACT REFRIGERANT PIPING. PROVIDE ALL NECESSARY PIPING ACCESSORIES INCLUDING PIPING INSULATION AND INSTALL ON APPROPRIATE EQUIPMENT SUPPORTS.
11. ALL UTILITY PIPING FOR RTU'S SHALL RUN UP THROUGH ROOF INSIDE EACH UNIT'S ROOF CURB.

KEYNOTES - MECHANICAL ROOF PLAN NTS B

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DRAWN BY.: TH
JOB NO.: 2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
MECHANICAL ROOF PLAN

M2.1

PLOT DATE: 7/12/2021 10:55:33 AM

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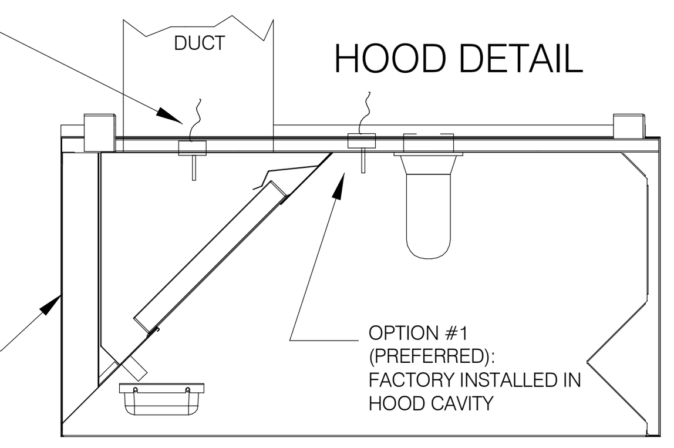
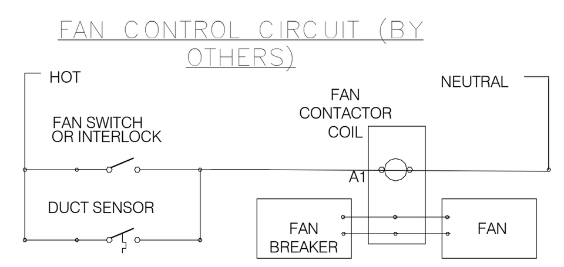
INSTALLATION: DUCT TEMPERATURE SWITCH



NOTE: IF SENSOR IS FIELD INSTALLED, THE KIT SHIPS WITH UL-LISTED QUICK SEALS MUST BE USED TO SEAL ANY HOOD OR DUCT PENETRATIONS (SEE EXPLODED PARTS VIEW).

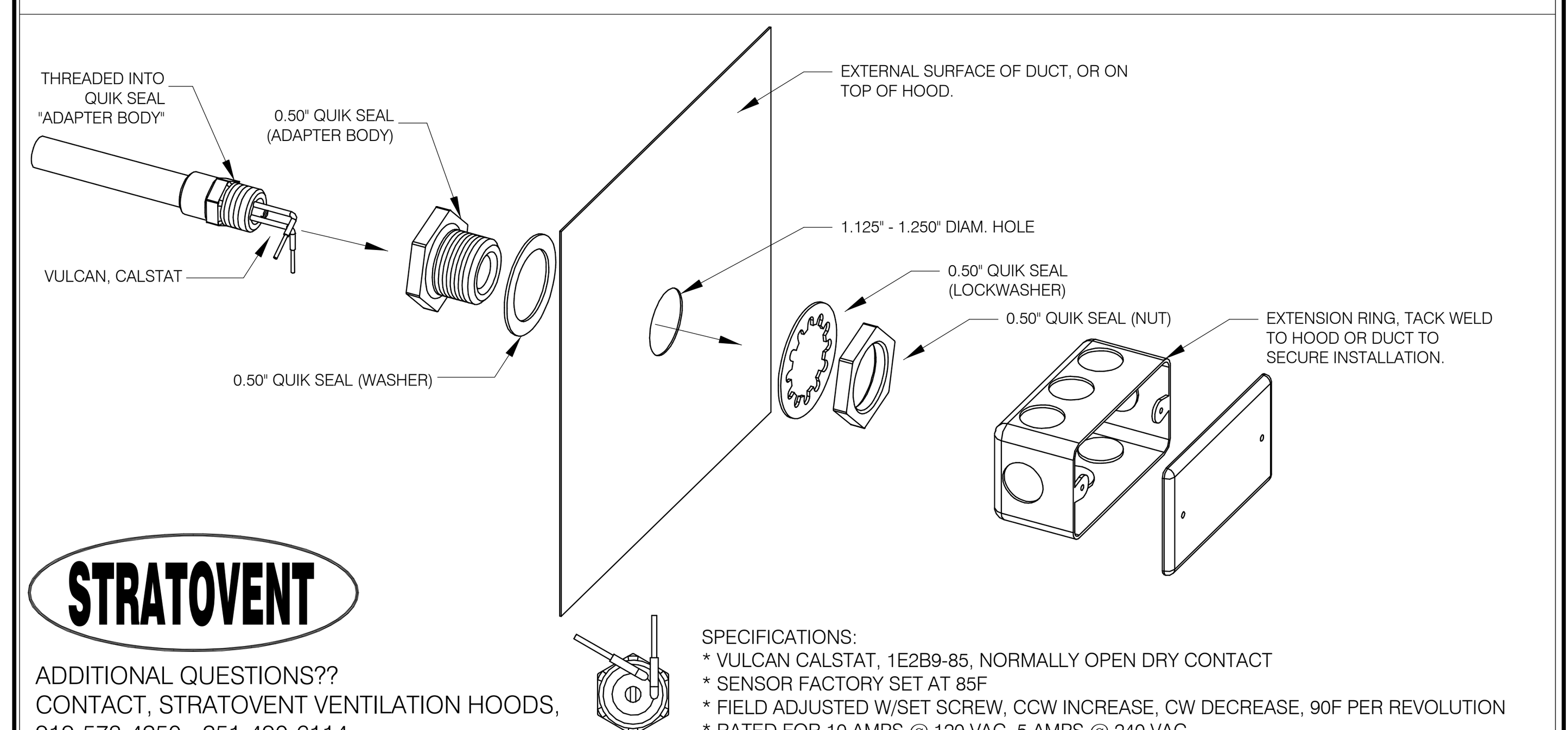
INSTALLATION: DUCT TEMPERATURE SENSOR

SENSOR DETAIL



NOTE: GENERIC WIRING DEPICTION. SEE PLANS FOR PROPER INTEGRATION.

(1) NORMALLY OPEN DRY CONTACT, CLOSES ON TEMPERATURE RISE ABOVE 85F. WIRED IN PARALLEL TO NORMAL CONTROL CIRCUIT. WHEN ORDERED, SENSOR IS FACTORY INSTALLED IN HOOD CAVITY WITH J-BOX ON TOP OF THE HOOD.
(2) DO NOT USD SENSOR AS THE PRIMARY MEANS OF FAN CONTROL. USED ONLY AS A SAFETY DEVICE PER INTERNATIONAL MECHANICAL CODE TO ENERGIZE HOOD EXHAUST FAN WHEN COOKING EQUIPMENT GENERATES HEAT.
(3) FAN CONTACTOR AND CONTROLS BY OTHERS, SEE ELECTRICAL SHEETS FOR DETAILS.
(4) SEE SPECS ABOVE FOR TEMP SET POINT ADJUSTMENT



STRATOVENT

ADDITIONAL QUESTIONS??
CONTACT, STRATOVENT VENTILATION HOODS,
919-573-4250 - 251-490-6114
JEFF.JOHNSON@STRATOVENT.COM

SPECIFICATIONS:
* VULCAN CALSTAT, 1E2B9-85, NORMALLY OPEN DRY CONTACT
* SENSOR FACTORY SET AT 85F
* FIELD ADJUSTED W/SET SCREW, CCW INCREASE, CW DECREASE, 90F PER REVOLUTION
* RATED FOR 10 AMPS @ 120 VAC, 5 AMPS @ 240 VAC
* SHIPPED FACTORY INSTALLED IN HOOD CAVITY

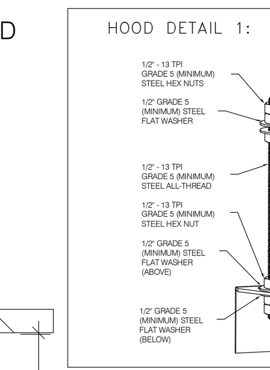
MODIFIED: 04-11-2020

HEAT SENSOR ATTACHMENT NTS 5

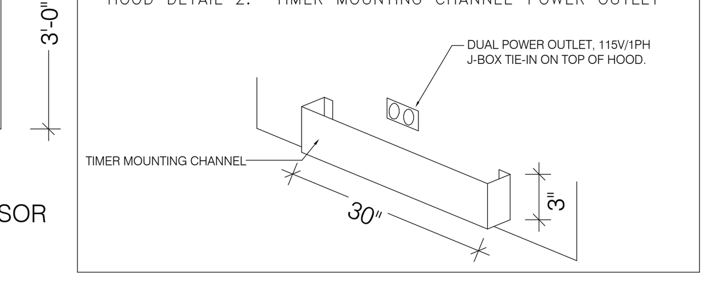
HOOD #	1 OF 1	MODEL #	STRATOVENT SVBD2		
LENGTH (IN):	6'-3"	WIDTH (IN):	36"	HEIGHT (IN):	14"H
EXHAUST CFM:	1050	SUPPLY CFM:	BY RTU-SEE M1.0		
EXHAUST SP:	0.9" (HOOD+DUCT)	SUPPLY SP:	NA		
EXHAUST FPM:	1512	SUPPLY FPM:	NA		
EXH. SIZE:	10"X10"	SUP SIZE:	NA		
FILTERS: (4)	16" X 16"	HOOD WEIGHT:	300 LBS		
FIRE SUPPRESSION:	ANSUL-R102	FILTER TYPE:	STAINLESS BAFFLE		
LIGHT QTY: (3)	A19/ CFL	CONTROL SWITCH:	BY OTHERS		

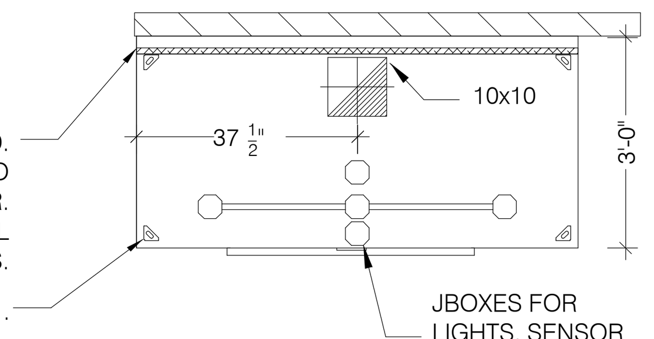
DESIGN NOTES:
- STRATOVENT HOODS ARE ETL LISTED TO UL-710 STANDARDS, 3054804-001
- MODEL SVBD2 IS A NON-CANOPY HOOD, "LISTED" VALUES ARE UTILIZED FOR AIRFLOW, OVERHANGS AND TEMPERATURE RATINGS.
- 18/20 GAUGE MINIMUM S/S ON EXPOSED SURFACES PER NFPA.
- HOOD IS PRE-PIPED FOR ANSUL R102, FIELD HOOKUP BY OTHERS
- INSTALLER TO REVIEW ELECTRICAL SHEETS FOR HOOD AND FAN WIRING. STRATOVENT DOES NOT PROVIDE A CONTROL BOX IN THE "BASE" PACKAGE.

HOOD DETAIL 1: CORNER HANGING ANGLE (4) TYPICAL



HOOD DETAIL 2: TIMER MOUNTING CHANNEL–POWER OUTLET

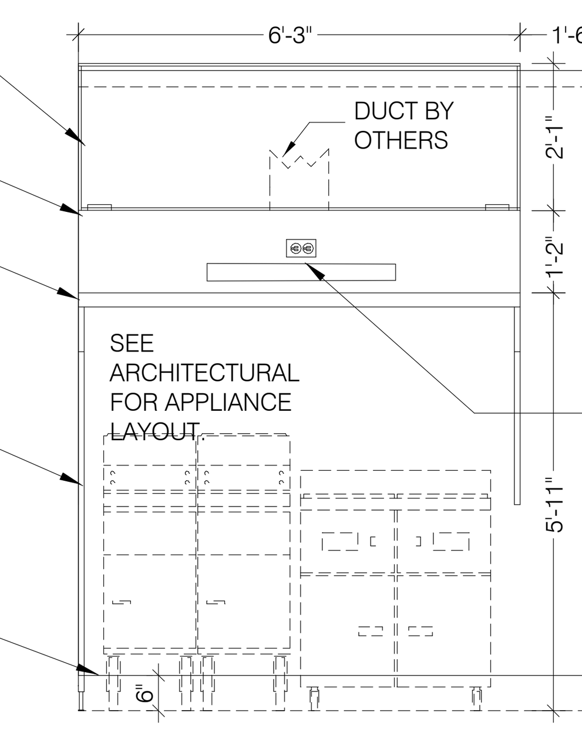




3" INTEGRAL REAR STAND-OFF. FACTORY INSULATED. HOOD ASSEBMLY IS LISTED AND LABELED FOR ZERO CLEARANCE TO COMBUSTIBLE IN THE REAR. ARCHITECT MUST VERIFY COMPLIANCE WITH ALL LOCAL CODES CONCERNING CLEARANCES.

HOOD DETAIL 1.

PLAN VIEW



25" TALL DUCT ENCLOSURE PANELS, FRONT, LEFT & RIGHT SIDES (PROVIDED WITH HOOD, GC INSTALLED).

TOP EDGE OF HOOD.

LOWER, LEADING EDGE OF HOOD, 71" ABOVE FINISHED FLOOR.

END PANELS , PROVIDED BY STRATOVENT, SEE SIDE VIEW DETAIL, FIELD INSTALLED BY GC.

106"H X 95"L, BACKSPLASH, COVERING REAR WALL AND 18" BEYOND THE HOOD. ADJUST SIZE TO SUIT SITE CONDITIONS. MINIMUM 20 GA. STAINLESS STEEL PROVIDED BY HOOD VENDOR.

TOP OF S/S BACKSPLASH, SLIGHTLY ABOVE DROP CEILING.

8'-10" HIGH, DROP CEILING (TYPICAL). HOOD PROVIDER MUST BE NOTIFIED IF CEILING HEIGHT VARIES TO ADJUST TRIM HEIGHT. VERIFY WITH ARCHITECTURAL SHEETS

HOOD DETAIL 2: 30"L x 3"H, FACTORY ATTACHED MOUNTING CHANNEL FOR CUSTOMER SUPPLIED TIMERS. DUAL 115V/1PH OUTLET FACE MOUNTED ABOVE CHANNEL WITH J-BOX ON TOP OF HOOD.

STRATOVENT
REDDING, CA - RALEIGH, NC
800-474-0037 - WWW.STRATOVENT.COM - 251-490-6114
(UL/ULC-710 Standard) (NSF/ANSI Standard 2)
ETL-LISTED FILE #3054804-001 / TESTED TO UL-710

FRONT VIEW

UPDATED: 6FT-3IN LONG VERSION, 04-11-2020

TACO BELL HOOD DETAIL NTS 2

STRATOVENT MODEL# SVDU50HFA

TAG	HOOD	STRATOVENT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	MCA/MOP	WEIGHT (LBS.) FAN/CURB	SONES
EF-1	FRYER	SVDU50HFA	1050	0.9"	1429	0.50	0.33	1	115	8.4	10.5/15	85/40	14.5

SIZING NOTE: THE SELECTED FAN IS SUITABLE FOR MOST SINGLE STORY BUILDINGS. FOR LONGER DUCT RUNS, OR MULTI-STORY STRUCTURES, REQUEST A SITE ADAPT SELECTION.

SELECTED OPTIONS
- RESTAURANT MODEL
- UL762, GREASE RATED
- DIRECT DRIVEN
- SPEED CONTROLLER
- WEATHERPROOF DISCONNECT
- FLAT CURB, VENTED
- FACTORY ATTACHED HINGES

STRATOVENT
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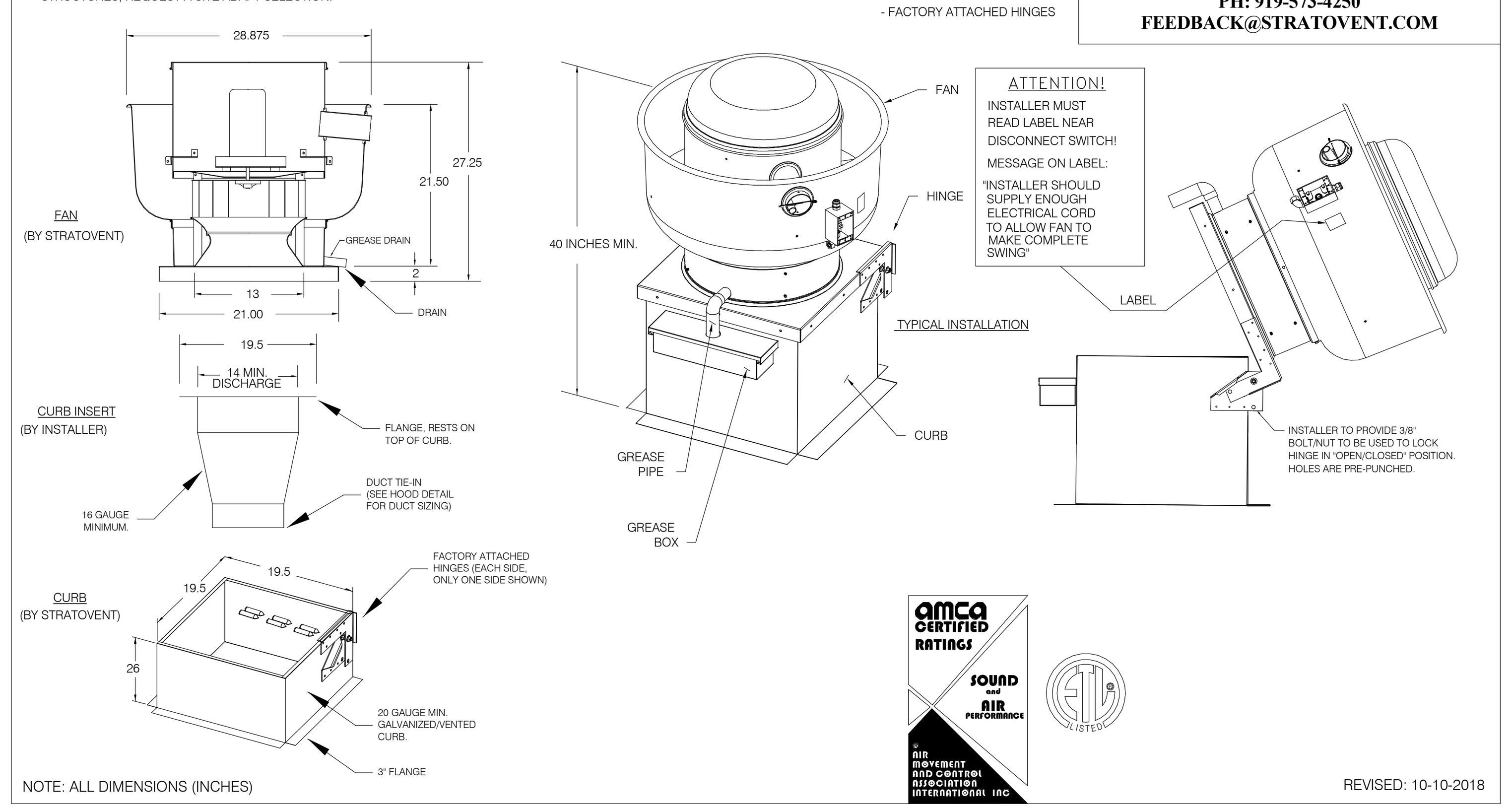
PH: 919-573-4250
FEEDBACK@STRATOVENT.COM



ATTENTION!
INSTALLER MUST READ LABEL NEAR DISCONNECT SWITCH!
MESSAGE ON LABEL:
"INSTALLER SHOULD SUPPLY ENOUGH ELECTRICAL CORD TO ALLOW FAN TO MAKE COMPLETE SWING"

NOTE: ALL DIMENSIONS (INCHES)

REVISED: 10-10-2018

HOOD EXHAUST FAN DETAIL NTS 7

1. Hoods shall be constructed of minimum 20 gauge stainless steel with # 3 polish. All unexposed surfaces shall be constructed of minimum 18 gauge aluminized steel.
2. UL classified aluminum or stainless steel baffle-type filters shall be easily removed for cleaning. Filter housing shall terminate in a pitched grease trough that drains into a removable stainless steel grease cup.
3. UL listed and NSF approved vapor proof incandescent light fixtures pre-wired to junction box at top of hood in accordance with NEC 70.
4. Pre-piped fire suppression systems shall be located on the top of the hood and provided with the hood or by a certified technician. Final location of all nozzles and fire suppression drops to be locally approved and inspected.
5. Hood(s) shall be fabricated in accordance with NFPA Bulletin #96 and shall bear the NSF Seal of Approval. Hoods shall be listed under UL 710 EXHAUST HOODS FOR COMMERCIAL COOKING EQUIPMENT, Certified by ETL under FILE# 3054804-001.

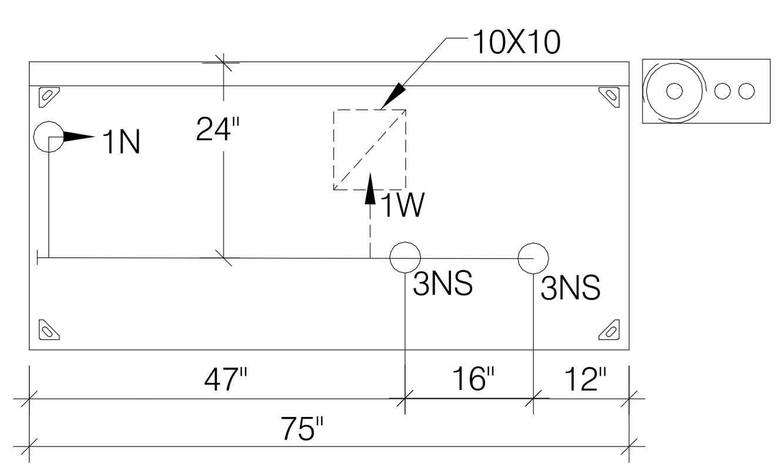
5. Hood(s) shall be fabricated in accordance with NFPA Bulletin #96 and shall bear the NSF Seal of Approval. Hoods shall be listed under UL 710 EXHAUST HOODS FOR COMMERCIAL COOKING EQUIPMENT, Certified by ETL under FILE# 3054804-001.

NSF LISTED NAPA INTERNATIONAL

THIS HOOD DESIGN IS BASED UPON STRATOVENT, MODEL SVND2.
MANUFACTURED BY:

STRATOVENT VENTILATION HOODS
RALEIGH, NC 27616
CONTACT: JEFF JOHNSON, 251-490-6114

HOOD NOTES AND SPECS (TYP.) NTS 4



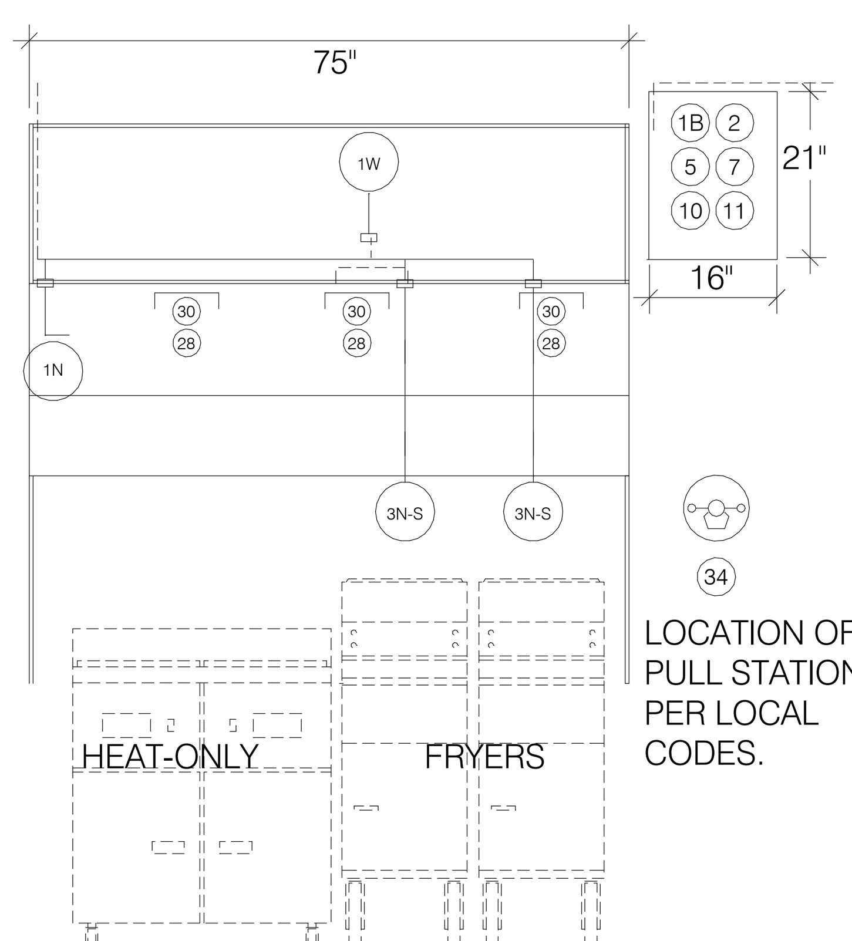
PLAN VIEW

PROJECT: TACO BELL

System Size: ANSUL-3.0 Gallons Total, R102
Flow Points: 8 Design, 11 (max)

Hood #1: 6'-3" L x 36" W x 14" H
Exhaust Riser Size: 10" x 10"

NOTES
- FIELD PIPE DROPS AS SHOWN: SLEEVING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY STRATOVENT FOR HOOD-BASED PIPING.
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED.
- MAXIMUM 9 ELBOWS IN SUPPLY LINE, MINIMUM 72 INCHES OF AGENT LINE FROM TANK TO FIRST NOZZLE.
- ALL NOZZLE HEIGHT AND PLACEMENT TO BE DETERMINED BY INSTALLER AND AHJ PER ANSUL GUIDELINES.
- ALL PIPING TO BE 3/8" SCH 40 BLACK IRON.
- THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS.
- SYSTEM INSTALLATION AND FINAL HOOKUP SOURCED BY GEN CONTRACTOR. SYSTEM PARTS OPTIONALLY PURCHASED FROM STRATOVENT BY OWNER OR G.C..



LEGEND – WALL MOUNTED ANSUL SYSTEM

LOCATION OF PULL STATION PER LOCAL CODES.

1B 3.0 GALLON TANK
2 AUTOMAN RELEASE
5 ANSULEX LIQUID AGENT (3.0 GAL.)
7 CARTRIDGE (101-20)
10 TEST LINK
11 DOUBLE MICROSWITCH
1W NOZZLE ASSEMBLY (419336)
1N NOZZLE ASSEMBLY (419335)
3N NOZZLE ASSEMBLY (419338)
28 DETECTOR BRACKET
30 HIGH TEMP FUSIBLE LINK
MGV MECHANICAL GAS VALVE
34 REMOTE MANUAL PULL STATION
S SWIVEL ADAPTOR

FRONT VIEW

DESIGN NOTE:
1) ABOVE DEPICTION SHOWS DUAL FRYERS ON RIGHT END OF THE HOOD. HOOD SUPPLIER WILL VERIFY EQUIP LAYOUT PER PLANS AND PLACE FRYER NOZZLES ON THE LEFT END WHEN APPROPRIATE TO SUIT SITE CONDITIONS

TACO BELL HOOD FIRE SUPPRESSION SYSTEM PLAN 12" = 1'-0" 6

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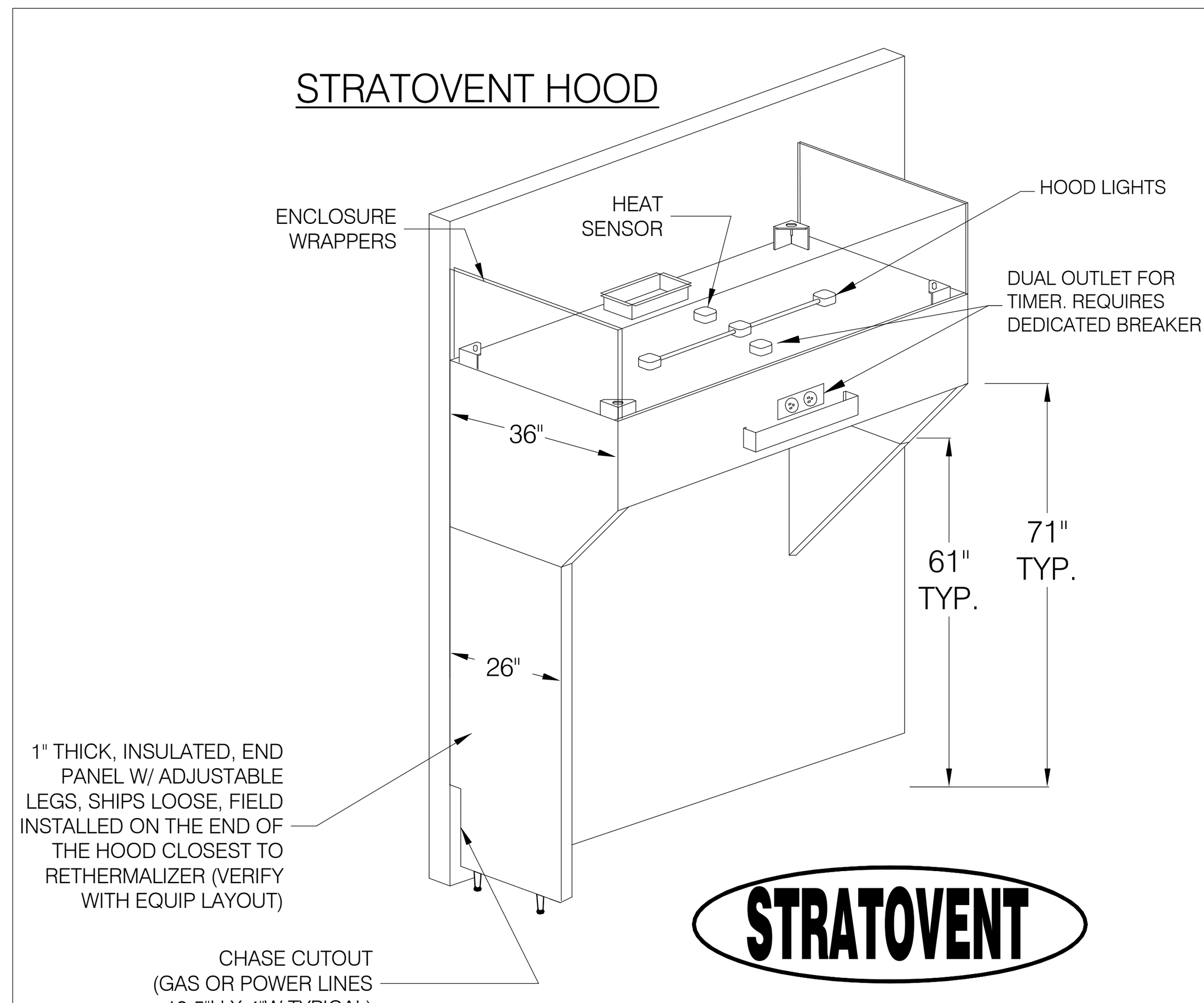
STRATOVENT HOOD



STRATOVENT-BRAND HOODS ARE CERTIFIED BY ETL-INTERTEK TO NATIONALLY RECOGNIZED UL-710 AND NSF STANDARDS.

CONTACT US:
WWW.STRATOVENT.COM
919-573-4250
FEEDBACK@STRATOVENT.COM

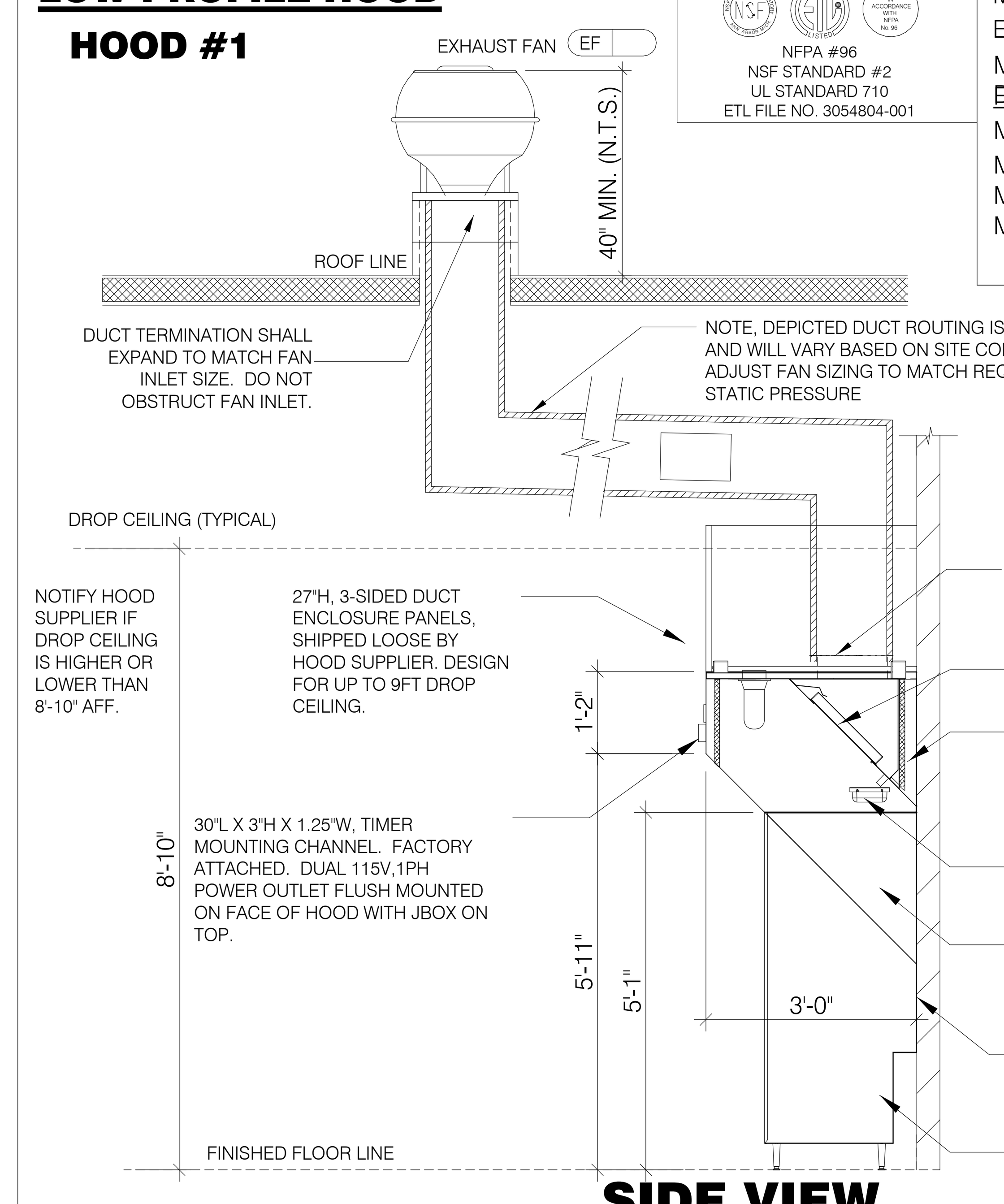
HOOD ISOMETRIC 12" = 1'-0" 3

LOW-PROFILE HOOD
HOOD #1

STRATOVENT HOODS BUILT IN COMPLIANCE WITH
NFPA #96
NSF STANDARD #2
UL STANDARD 710
ETL FILE NO. 3054804-001

NON-CANOPY HOOD DESIGN BASED ON:
MANUFACTURER: STRATOVENT, MODEL SVBD2
ETL LISTED UL/ULC-710, ULC-S646: # 3054804-001
MIN. "LISTED" AIRFLOW: 150 CFM PER LINEAR FT
DESIGN AIRFLOW: 168 CFM PER LINEAR FT
MAX. DIST. ABOVE COOK SURFACE: 47"
MAX. COOK SURFACE FRONT UNDERHANG: - 3"
MIN. SIDE COOK SURFACE OVERHANG: 0"
MAX. APPLIANCE COOKING TEMPERATURE: 450 F

HOOD DESIGN QUESTIONS?
STRATOVENT KITCHEN VENTILATION
PHONE: 251.490.6114
JEFF.JOHNSON@STRATOVENT.COM



SIDE VIEW

UPDATED: 6FT-3IN LONG VERSION, 04-11-2020

TACO BELL HOOD SECTION 12" = 1'-0" 1

	DATE	REMARKS
	04.21.21	ISSUED FOR PERMIT
1	07.12.21	ISSUED FOR BID

CONTRACT DATE:	06.22.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	315089
STORE NUMBER:	456336
PA/PM:	SM
DRAWN BY.:	TH
JOB NO.:	2019088.31

TACO BELL

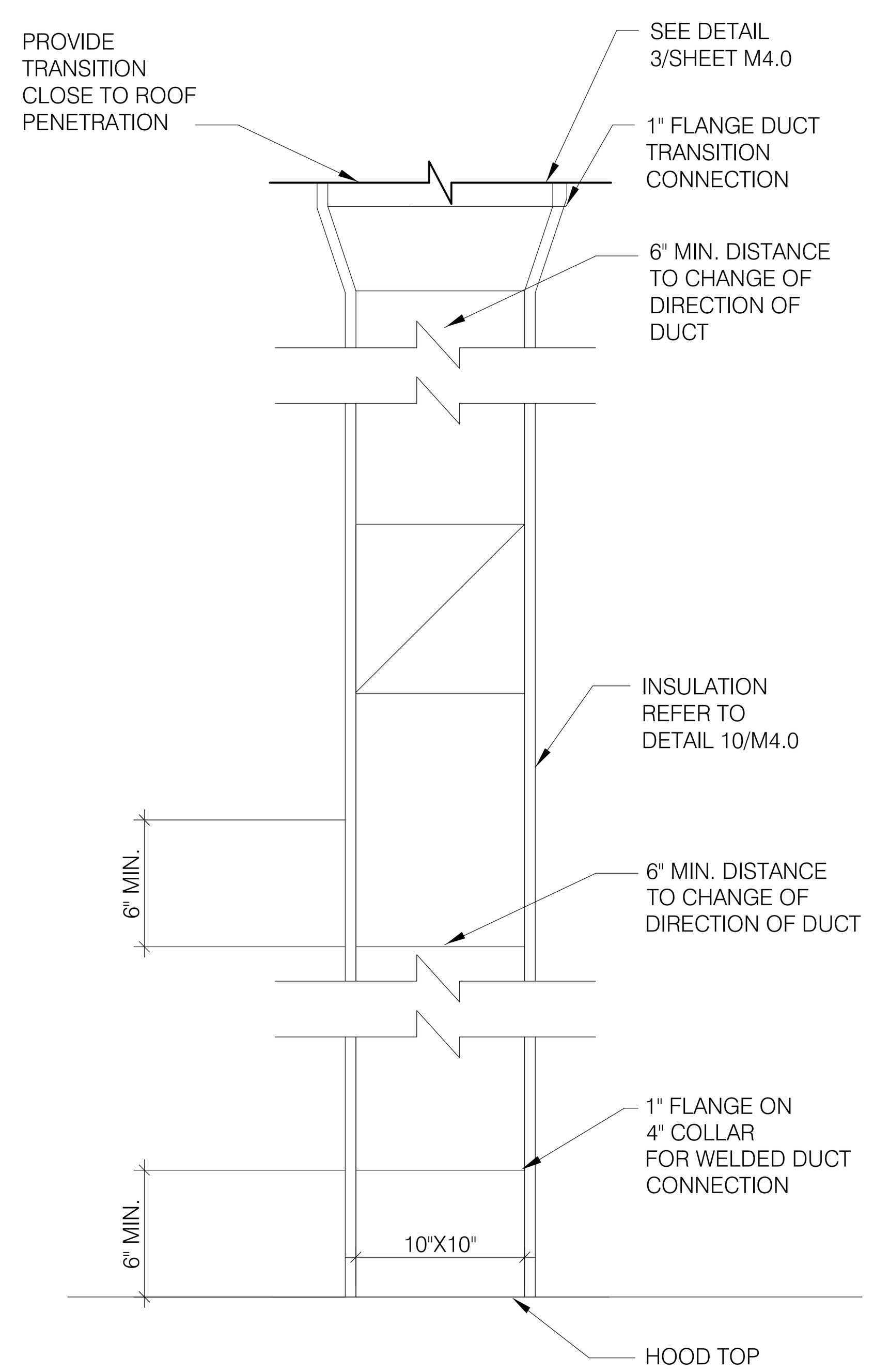
18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
HOOD DETAILS AND SECTIONS

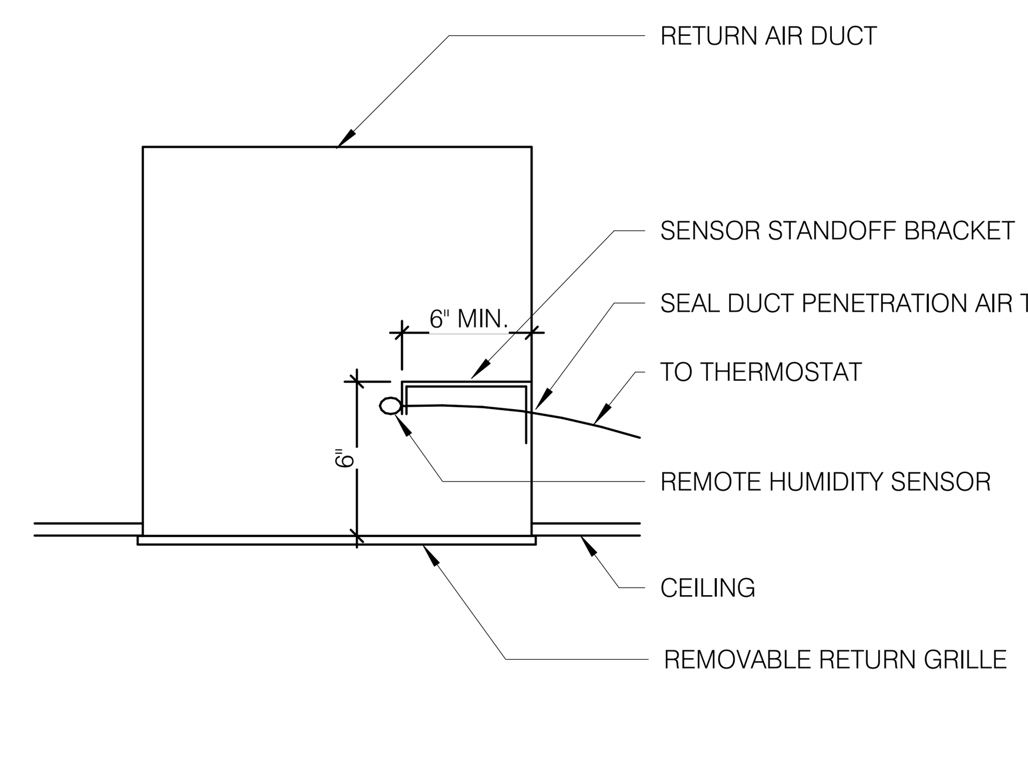
M3.0

PLOT DATE: 7/12/2021 10:55:33 AM

CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT

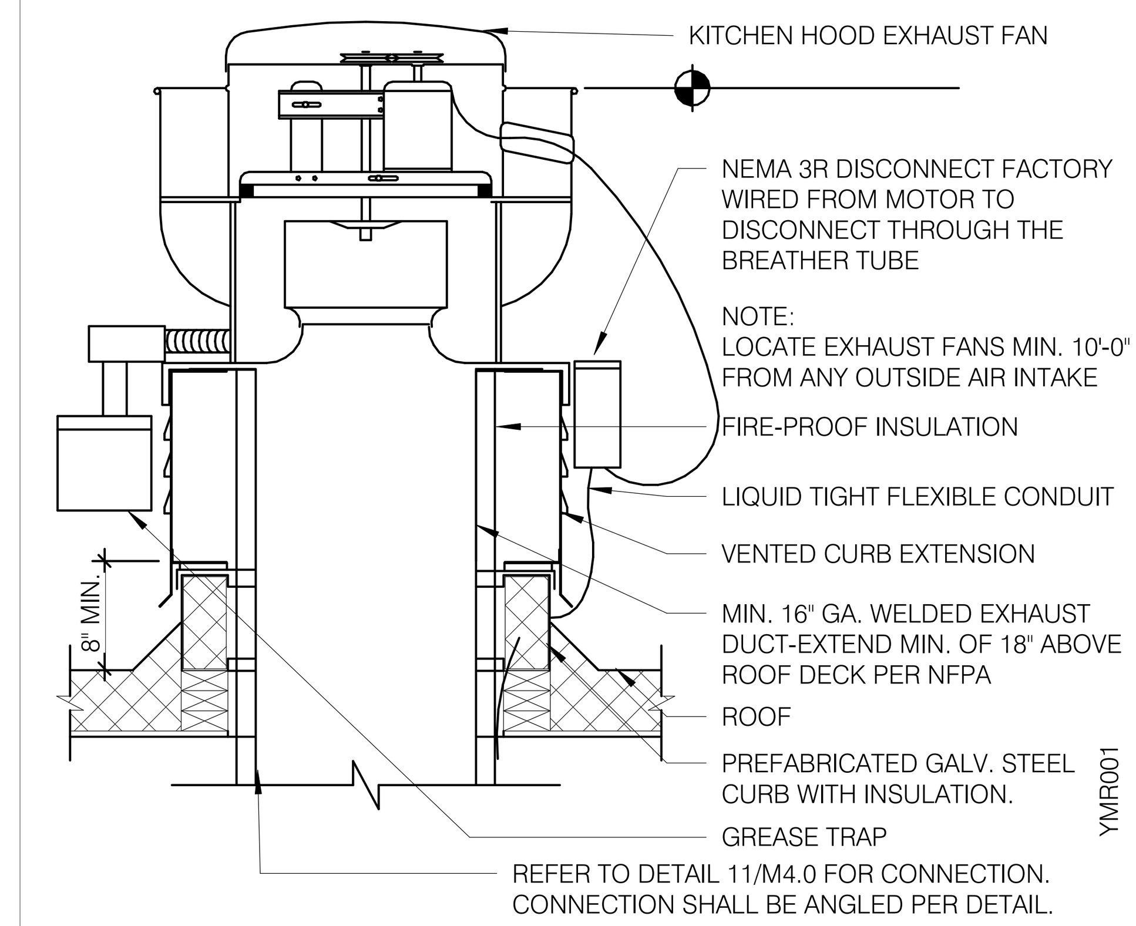


TB HOOD DUCT TRANSITION NTS 11

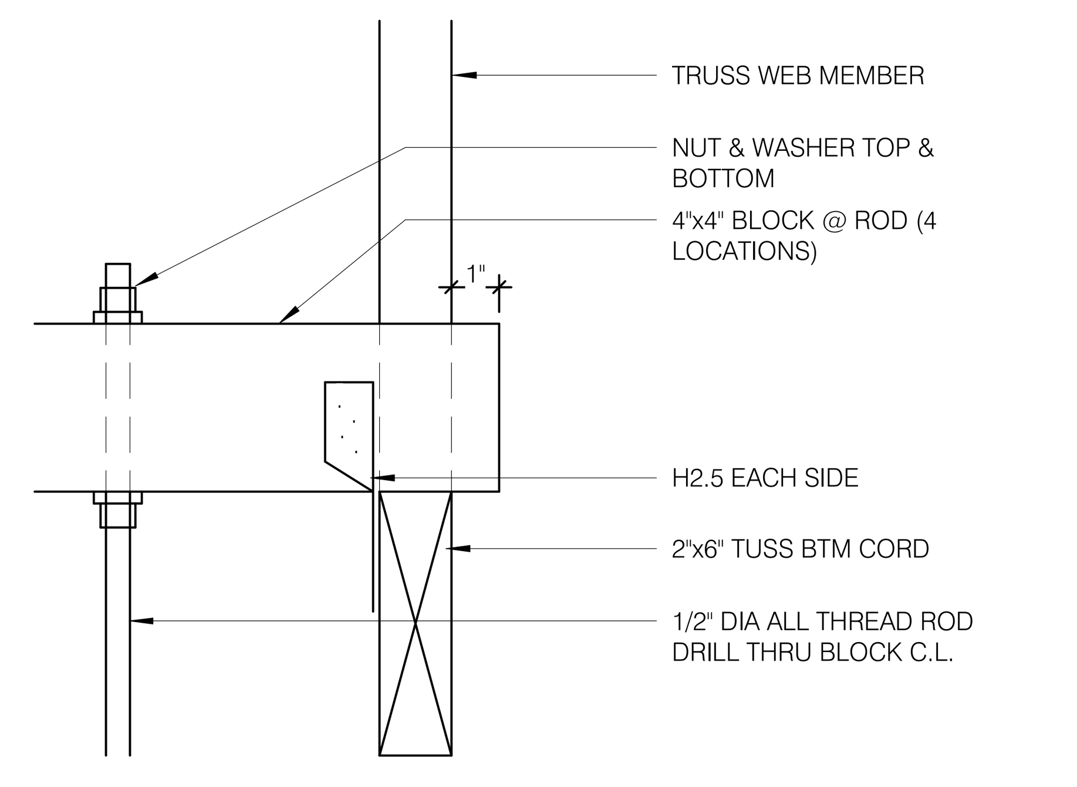


REMOTE HUMIDITY SENSOR NTS 8

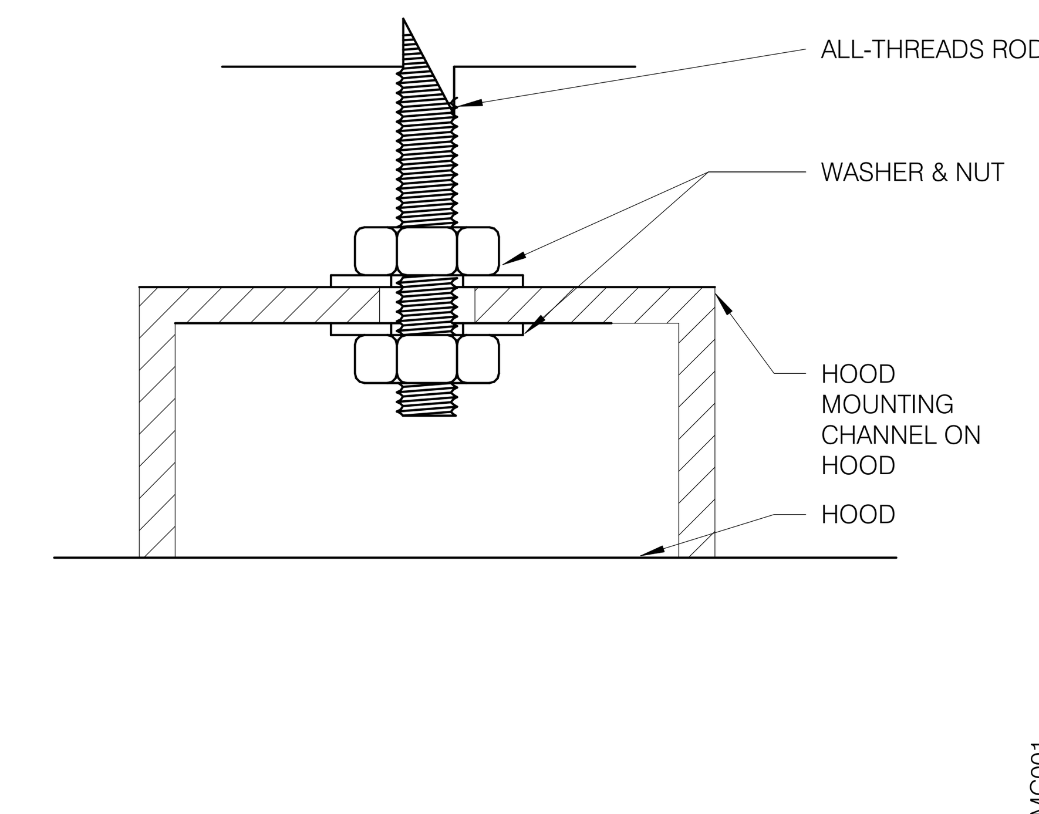
NOT USED NTS 6



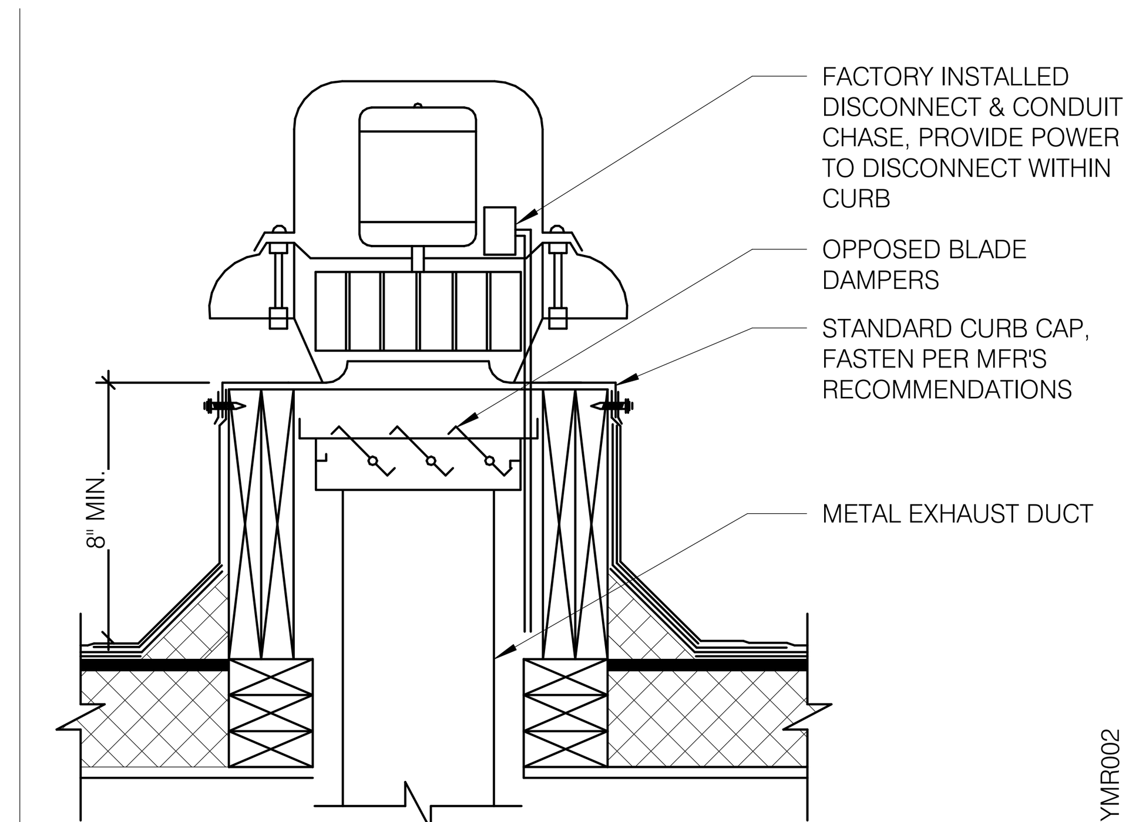
EXHAUST FAN (EF-1) NTS 3



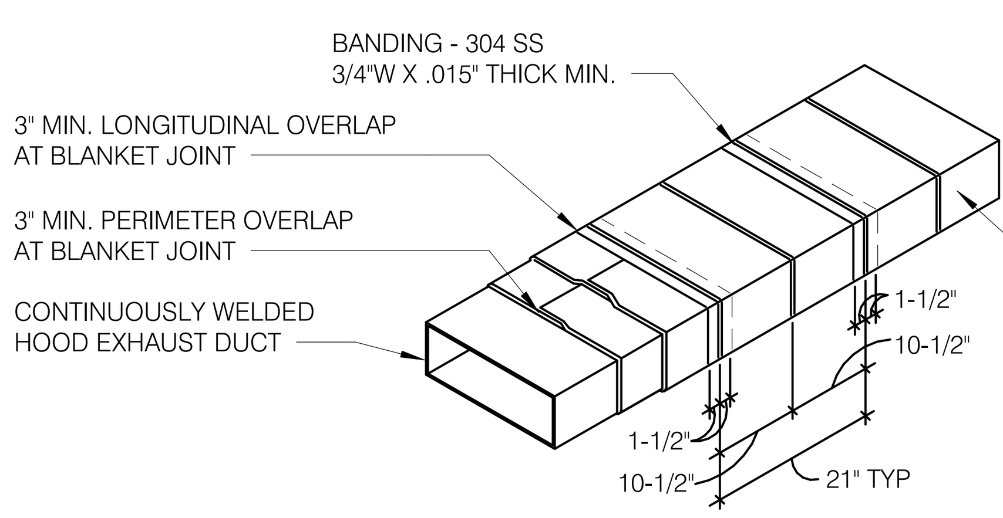
ROD ATTACHMENT NTS 7



BOLT CONNECTION TO HOOD NTS 5



RESTROOM FAN (EF-2) NTS 2

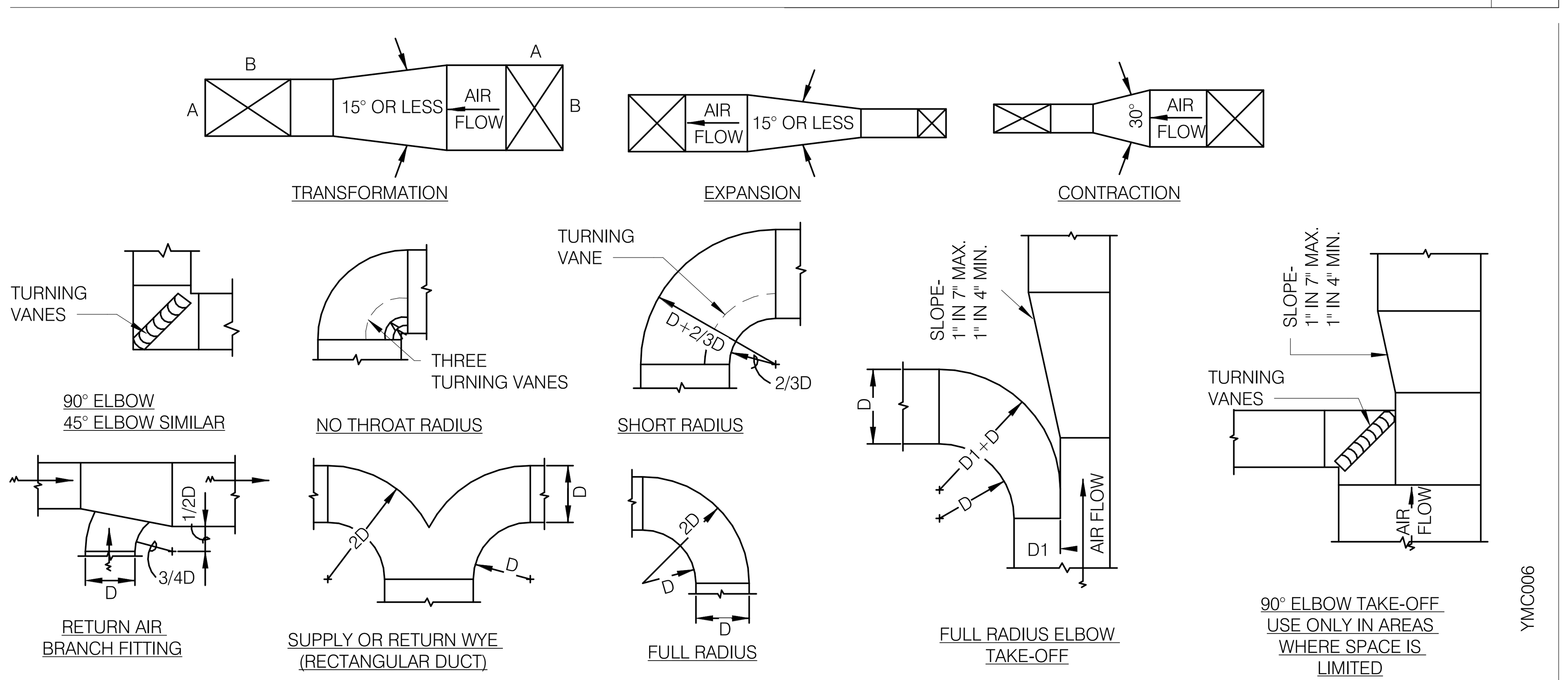


BANDING REQUIREMENTS: USE 304 STAINLESS STEEL BANDS A MAXIMUM 1-1/2" FROM BLANKET EDGE AND SPACED A MAXIMUM OF 10-1/2" ON CENTER.

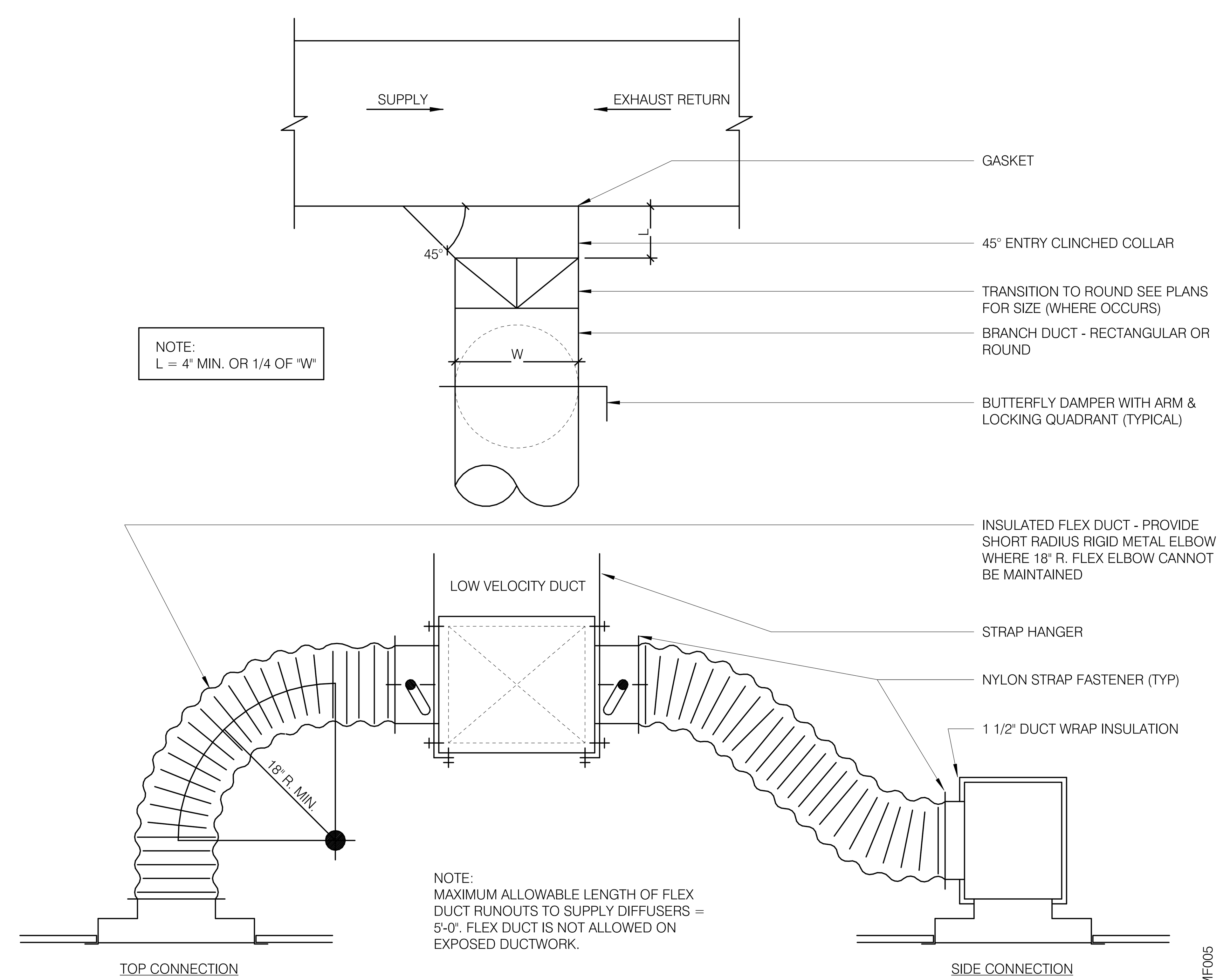
NOTES:

1. WRAP GREASE DUCT CONTINUOUS AS SHOWN FROM CONNECTION AT FAN THROUGH CURB AND EXTEND 18" MIN. BELOW ROOF DECK.
2. FOR HORIZONTAL RUNS OF EXHAUST DUCTS PROVIDE TYPICAL TRAPEZE SUPPORT SYSTEM WITH 1/2" HANGER RODS A MAXIMUM OF 6" FROM INSULATION EDGE. TRAPEZE SUPPORTS SHALL BE SPACED A MAXIMUM OF 60" ON CENTER FROM CENTERLINE OF VERTICAL EXHAUST DUCT.
3. SLOPE HORIZONTAL EXHAUST DUCT RUNS A MINIMUM OF 1/4" PER FOOT (2% SLOPE) TOWARDS EXHAUST HOOD.
4. PROVIDE INSULATED ACCESS DOOR OR PANEL NEAR MID POINT OF EXHAUST DUCT RUN FOR CLEANING AND INSPECTION OF DUCT. PROVIDE AN APPROVED SIGN ON ACCESS DOOR OR PANEL WHICH READS "ACCESS PANEL DO NOT OBSTRUCT."

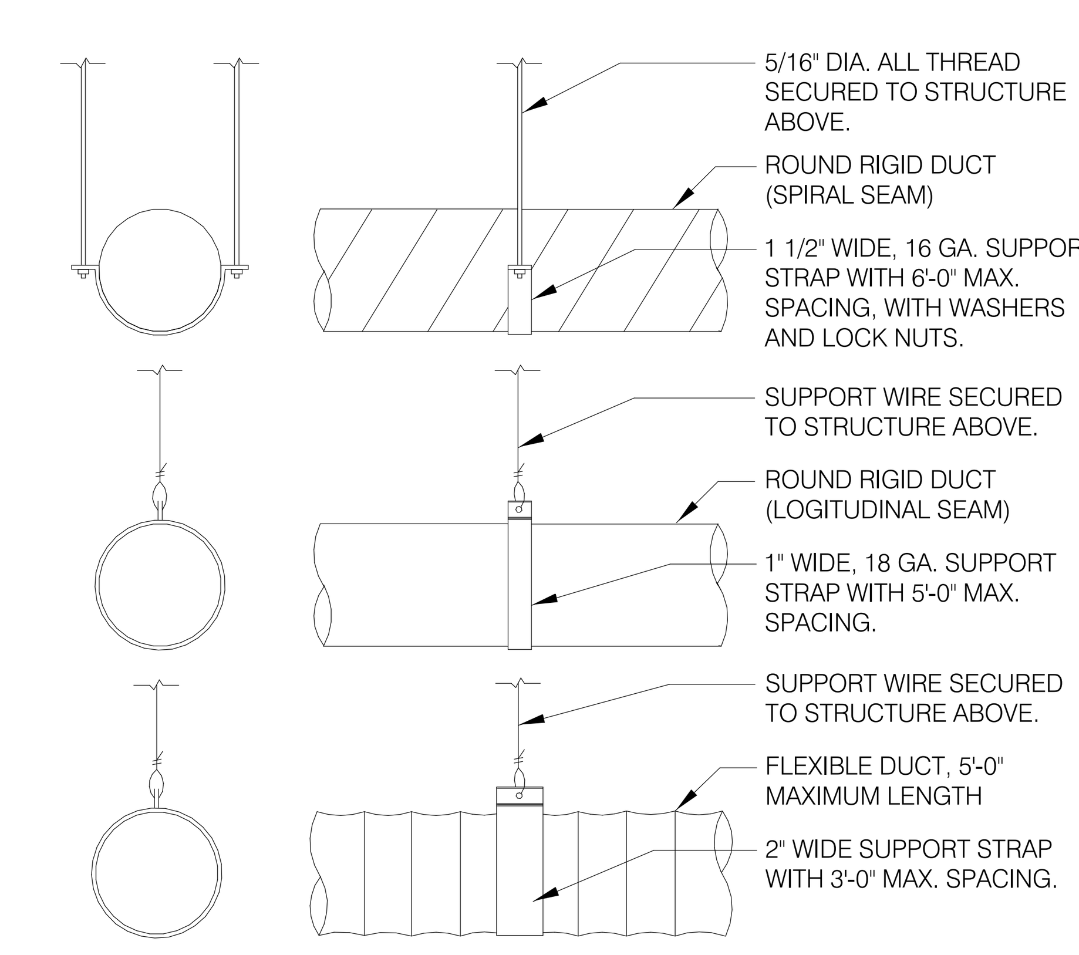
KITCHEN HOOD EXHAUST DUCT SYSTEM DETAIL NTS 10



TYPICAL DUCTWORK DETAILS NTS 9



CEILING DIFFUSER CONNECTIONS NTS 4



DUCT SUPPORT DETAIL NTS 1

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
330.572.2100 FAX: 330.572.2102

	DATE	REMARKS
	04.21.21	ISSUED FOR PERMIT
1	07.12.21	ISSUED FOR BID

CONTRACT DATE:	06.22.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	315089
STORE NUMBER:	456336
PA/PM:	SM
DRAWN BY.:	TH
JOB NO.:	2019088.31

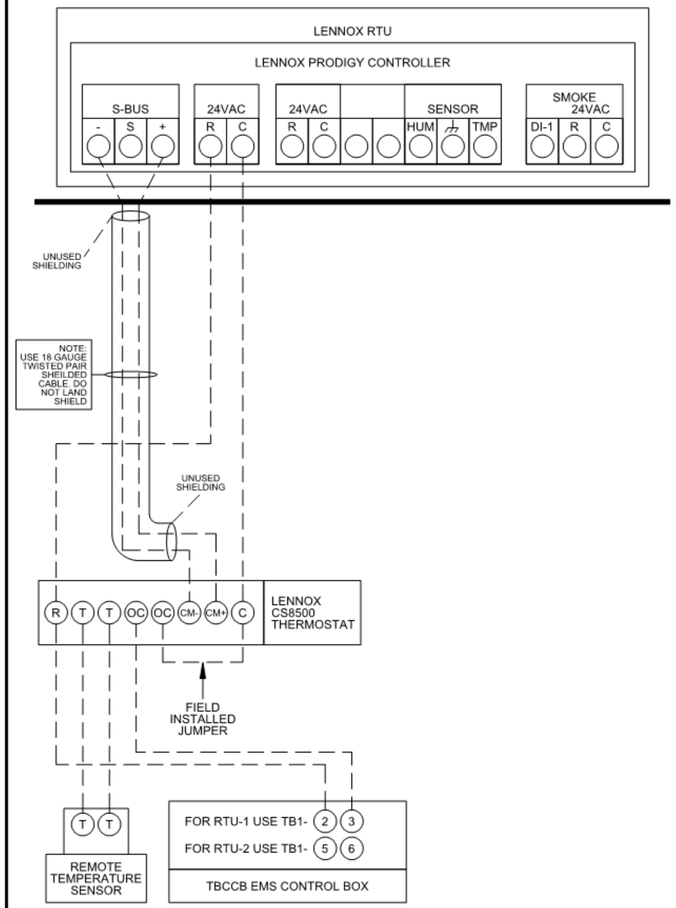
TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

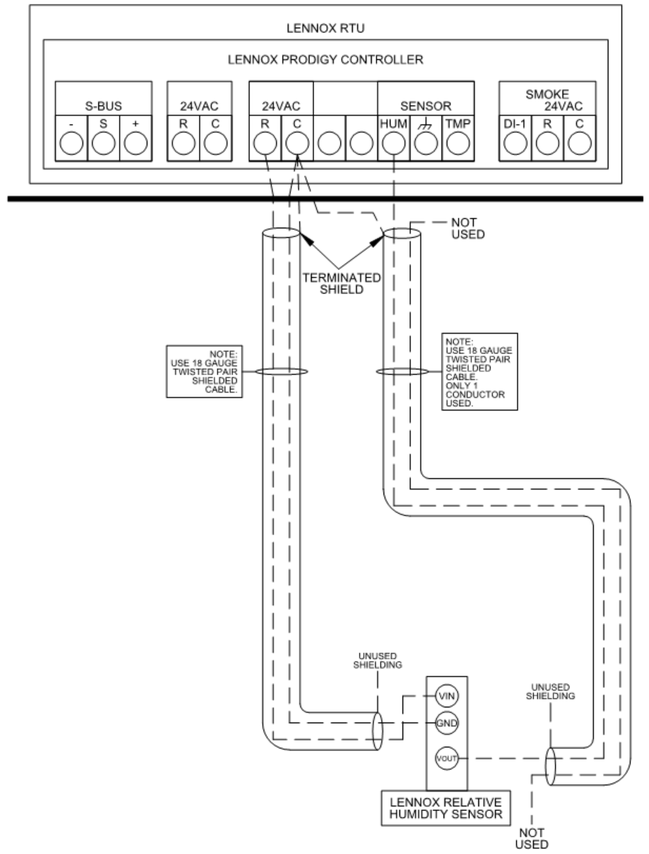
ENDEAVOR 2.0
MECHANICAL DETAILS

M4.0

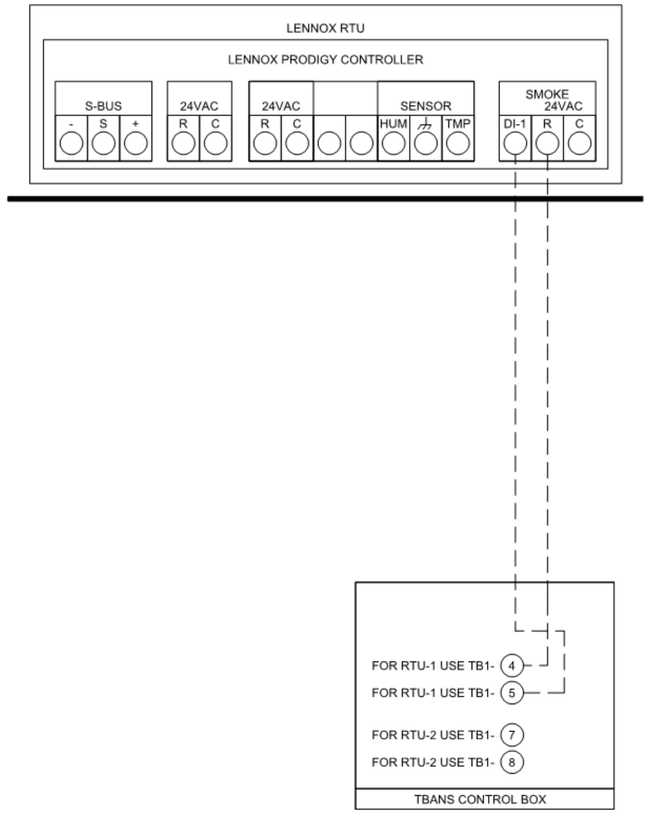
PLOT DATE: 7/12/2021 10:55:34 AM



1 LENNOX PRODIGY TO THERMOSTAT AND TO TBCCB CONNECTION NTS



2 LENNOX PRODIGY TO OPTIONAL HUMIDITY SENSOR CONNECTION NTS



3 LENNOX PRODIGY TO TBANS CONNECTION NTS

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
330.572.2100 FAX: 330.572.2102

26227 Enterprise Ct.
Lake Forest, CA. 92630
949-770-2222

Air Care Experts

DRAWING TYPE
LENNOX RTU
LOW VOLTAGE
FIELD CONNECTIONS
DETAIL

LENNOX LOW VOLTAGE CONNECTIONS

Modell#

Revisions

Rev	Date	Change

Job # T7647
Designed By: JL
Drawing By: EM
Approved By:
Date: 08-07-20
Sheet: 1 OF 1

	DATE	REMARKS
	04.21.21	ISSUED FOR PERMIT
1	07.12.21	ISSUED FOR BID

CONTRACT DATE: 06.22.21
BUILDING TYPE: END. MED20
PLAN VERSION: MARCH 2021
BRAND DESIGNER: DICKSON
SITE NUMBER: 315089
STORE NUMBER: 456336
PA/PM: SM
DRAWN BY.: TH
JOB NO.: 2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

TACO BELL

ENDEAVOR 2.0
CONTROLS DETAILS

M5.0

PLOT DATE: 7/12/2021 10:55:34 AM

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CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT

1. SOIL AND WASTE PIPE SHALL SLOPE 2% MINIMUM, UNLESS OTHERWISE NOTED OR REQUIRED BY CODE.

2. ALL DRAWN WATER & GAS LINES SHALL BE KEPT TIGHT TO UNDERSIDE OF EQUIPMENT & SECURED IN PLACE.

3. VERIFY LOCATION OF SANITARY SEWER ON SITE PLAN AND REVISE SEWER SYSTEM AS REQUIRED.

4. PROVIDE TRAP PRIMERS FOR FLOOR DRAINS IN RESTROOMS, WHERE REQUIRED BY CODE. PROVIDE DEEP SEAL TRAPS FOR FLOOR DRAINS WITHOUT TRAP PRIMERS.

5. CLEANOUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE. COORDINATE ALL CLEANOUT LOCATIONS WITH EQUIPMENT, CABINETS, ETC. AND OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.

6. VALVES, TRAP PRIMERS, WATER HAMMER ARRESTORS AND OTHER EQUIPMENT SHOWN IN WALLS OR ABOVE NON-ACCESSIBLE CEILING SHALL BE INSTALLED BEHIND AN ACCESS PANEL.

7. PLUMBING FIXTURE VENTS SHALL TERMINATE MINIMUM OF 12 INCHES FROM VERTICAL SURFACES AND 10 FEET FROM OUTSIDE AIR INTAKES.

8. PROVIDE GAS PIPING TO UNITS AND MAKE FINAL CONNECTIONS REQUIRED FOR OPERATION.

9. PROVIDE SHUT-OFF VALVES ON HOT & COLD WATER LINES TO FIXTURES AND APPLIANCES. ALL EXPOSED WATER AND WASTE LINES SHALL BE CHROME PLATED.

10. PROVIDE LEVER HANDLE GAS SHUT-OFF VALVE IN BRACH PIPING OF EACH APPLIANCE. INSTALL OWNER FURNISHED QUICK DISCONNECT, FLEXIBLE PIPE (IF ALLOWED BY CODE) AND RESTRAINING DEVICE. PROVIDE PRESSURE REDUCING VALVES AT EACH PIECE OF EQUIPMENT OR APPLICANCE IF GAS PRESSURE IS GREATER THAN 10" WC DOWSTREAM OF THE GAS METER.

11. VALVES, UNIONS, ETC. SHALL BE SAME SIZE AS PIPE UNLESS OTHERWISE INDICATED.

12. REFER TO KITCHEN EQUIPMENT DRAWINGS FOR PLUMBING ROUGH-IN REQUIREMENTS. MAKE ALL ROUGH-IN AND FINAL CONNECTIONS TO KITCHEN EQUIPMENT UNLESS OTHERWISE NOTED.

13. REFER TO MECHANICAL DRAWINGS FOR HVAC AND HOOD PLUMBING REQUIREMENTS.

14. GAS LINES SHALL BE SUPPORTED.

15. FLOOR SINKS AND FLOOR DRAINS IN TRAFFIC AREAS SHALL BE INSTALLED FLUSH WITH FLOOR SURFACE.

16. PROVIDE WATER HAMMER ARRESTOR FOR ALL HAND SINKS AND URINAL WATER LINES.

17. PROVIDE AIR GAPS FOR INDIRECT DRAINS AS REQUIRED BY CODE. AIR SHALL BE MINIMUM 2 TIMES DIAMETER OF INDIRECT DRAIN.

18. VERIFY DEPTH, SIZE, LOCATION, AND CONDITION OF ALL EXISTING UTILITIES IN THE FIELD PRIOR TO COMMENCING WORK ON PROJECT. NOTIFY OWNER IMMEDIATELY OF CONDITIONS THAT EXIST WHICH WOULD CAUSE THE DESIGN TO BE ALTERED..

19. COORDINATE INSTALLATION OF PLUMBING WORK WITH OTHER TRADES SO AS TO AVOID UNNECESSARY DELAY OR INTERFERENCES.REVIEW ARCHITECTURAL AND EQUIPMENT SHEETS.

20. PROVIDE BACKFLOW PROTECTION DEVICES REQUIRED BY AGENCIES HAVING JURISDICTION. BACKFLOW DEVICES REQUIRING TESTING SHALL BE INSTALLED NO HIGHER THAN 5'-0" A.F.F.

21. PROVIDE CONDENSATE DRAIN FROM A/C UNITS TO APPROVED DRAIN. PROVIDE GAS PIPING TO UNITS. MAKE FINAL CONNECTIONS REQUIRED FOR OPERATION.

22. THE OWNER OR KITCHEN EQUIPMENT SUPPLIER MAY SUBSTITUTE EQUIPMENT OR EQUIPMENT MAY VARY FROM WHAT IS SHOWN. THEREFORE, VERIFY ALL CRITICAL DIMENSIONS WITH OWNER PRIOR TO CONSTRUCTION. FAILURE OF CONTRACTOR TO VERIFY THESE DIMENSIONS SHALL PLACE RESPONSIBILITY FOR SUBSEQUENT RELOCATION DIRECTLY UPON CONTRACTOR.

23. ALL WATER LINES SHALL BE RUN OVERHEAD UNLESS OTHERWISE NOTED.

24. ALL WATER LINES SHALL BE FLUSHED PRIOR TO CONNECTING FIXTURES OR EQUIPMENT.

25. PROVIDE ESCUTCHEON PLATES AND SILICONE SEALANT AT UTILITY PENETRATIONS INTO WALLS, CEILINGS, AND FLOORS. DO NOT USE CAULKS OR EXPANDING FOAMS FOR SEALANT.

26. CPVC SCHEDULE 40 WASTE PIPE CAN BE SUBSTITUTED FOR BLACK IRON WASTE PIPE WHERE ALLOWED BY LOCAL MUNICIPALITIES.

GENERAL NOTES - PLUMBING NTS 4

SYMBOLS	ABBREV.	DESCRIPTION
	Y.B.	YARD BOX
	R.D.	ROOF DRAIN
	A.P.	ACCESS PANEL
	V.T.R.	VENT THRU ROOF
	V.B.F.	VENT BELOW FLOOR
	U.T.R.	UP THRU ROOF
	V.C.P.	VITRIFIED CLAY PIPE
	C.I.	CAST IRON
	(TYP.)	TYPICAL
	(N)	NEW
	(E)	EXISTING
	F.D.	FLOOR DRAIN
	H.D.	HUB DRAIN
	O.F.D.	OVERFLOW DRAIN
	F.S.	FLOOR SINK
	G.L.	GAS LINE
	A.F.F.	ABOVE FINISHED FLOOR
X 00		PLUMBING EQUIPMENT DESIGNATION
XXX		KITCHEN EQUIPMENT NUMBER: REFER TO KITCHEN EQUIPMENT DRAWINGS FOR DESCRIPTION.
SS	SS	SOIL OR WASTE (SANITARY)/WASTE STUB
GW	GW	SOIL OR WASTE (GREASE WASTE)/WASTE STUB
G	G	GAS / GAS STUB
CW	CW	COLD WATER/ CW STUB
HW	HW	HOT WATER / HW STUB
HWR	HWR	HOT WATER RETURN
	V	SANITARY VENT
SD	S.D.	STORM DRAIN
CD	C.D.	CONDENSATE DRAIN
	F.C.O.	FLOOR CLEANOUT
	W.C.O.	WALL CLEANOUT
FW	FW	FILTERED WATER
TW	TW	PREMIXED TEMPERATURE WATER
	H.B.	HOSE BIBB
	S.O.V.	SHUT-OFF GATE VALVE
	S.O.C.	SHUT-OFF GAS COCK
	C.V.	CHECK VALVE
	P.T.R.V.	PRESS-TEMPERATURE RELIEF VALVE
	B.V.	BALL VALVE
	C.W.	COLD WATER BELOW GRADE
	E.C.O.	EXTERIOR CLEAN OUT
	BFP	BACK FLOW PREVENTER
	FU	FIXTURE UNIT

PLUMBING LEGEND NTS 3

FIXTURE	NO.	DRAIN		COLD WATER		HOT WATER	
		D.F.U.	TOTAL D.F.U.	F.U. C.W.	TOTAL C.W.	F.U. H.W.	TOTAL H.W.
WATER CLOSET	2	4	8	5	10	--	--
URINAL	0	5	--	5	--	--	--
LAVATORY	2	1	2	1.5	3	1.5	3
HAND SINK	2	2	4	1.5	3	1.5	3
PREP SINK *	1	--	--	2	2	2	2
3 - COMPARTMENT SINK *	1	--	--	3	3	3	3
HOSE BIBB/WATER FILTRATION UNIT	2/1	--	--	5/0.5	12	--	--
FLOOR DRAIN	7	2	14	--	--	--	--
HUB DRAIN	2	2	4	--	--	--	--
FLOOR SINK	3	3	9	--	--	--	--
MOP SINK	1	3	3	2.25	2.25	2.25	2.25
RETHERMALIZER *	1	--	--	--	--	1.0	1.0
TOTAL	--	--	44	--	35.25	--	14.25

PROBABLE DEMANDS/ AND PIPE SIZING REQUIREMENTS:
COLD WATER: 35.25 FU = 25 GPM — USE 1-1/2" CW SERVICE
DRAIN: GW 22 DFU — USE 4" SANITARY (MIN)
DRAIN: SAN 18 DFU — USE 4" SANITARY (MIN)
HOT WATER: 14.25 FU = 17 GPM — USE 1-1/4" HW SERVICE

BASED ON 2015 IPC (COMBINATION DRAIN & VENT). *FIXTURE HAS INDIRECT WASTE TO FLOOR SINK

PLUMBING FIXTURE COUNT NTS 2

ITEM	FIXTURE	SOIL OR WASTE	VENT	COLD WATER	HOT WATER	TEMP'D WATER	WASTE FU	WATER FU	DESCRIPTION	MANUFACTURER / MODEL NUMBER
ECO 1	EXTERIOR CLEANOUT	--	--	--	--	--	--	--	CAST IRON CLEANOUT WITH THREADED ADJUSTABLE HOUSING, ROUND SCORIATED HEAVY CAST IRON COVER.	JOSAM / MODEL: 56000 WADE / MODEL: 6000Z ZURN / MODEL: Z-1400
FS 1	FLOOR SINK	4"	2"	--	--	--	6	--	PVC 12" SQUARE FLOOR SINK, 8" DEEP, WITH ALUMINUM OR PVC DOME STRAINER AND LOOSE SET PVC SLOTTED TOP GRATE. SET FLOOR SINK LIP FLUSH WITH FLOOR TILE.	JOSAM / MODEL: JPFS4-PVC ZURN / MODEL: FD-2370-PV4-DS-F
FS 2	FLOOR SINK	3"	2"	--	--	--	6	--	CAST IRON 12" SQUARE FLOOR SINK, 8" DEEP, WITH ALUMINUM DOME STRAINER AND NICKEL BRONZE HINGED TOP.	JOSAM / MODEL: 49034AS WADE / MODEL: 9144 ZURN / MODEL: Z-1900-32
FD 1	FLOOR DRAIN	3"	2"	--	--	--	2	--	PVC FLOOR DRAIN, 5" DIA. IF PVC OR ABS DRAINS ARE USED, SCHEDULE 80 PVC DRAIN PIPE SHALL BE USED FOR THE FIRST 10'-0" FROM THE DRAIN.	ZURN / MODEL: FD-2210 JOSAM / MODEL: 30003-A WADE / MODEL:1103
HD 1	HUB DRAIN	3"	2"	--	--	--	2	--	CAST IRON DEEP SEAL P-TRAP WITH FUNNEL, NO-HUB OUTLET AND BRASS GASKETED CLEANOUT PLUG.	JOSAM / MODEL: 88213 WADE / MODEL: 2453EF ZURN / MODEL: Z-1019
FCO 1	FLOOR CLEANOUT	--	--	--	--	--	--	--	CAST IRON CLEANOUT WITH THREADED ADJUSTABLE HOUSING, ROUND SCORIATED HEAVY CAST IRON COVER.	JOSAM / MODEL: 56000 WADE / MODEL: 6000Z ZURN / MODEL: Z-1400
WCO 1	WALL CLEANOUT	--	--	--	--	--	--	--	CAST IRON CLEANOUT TEE WITH INLET/OUTLET SPIGOT AND THREADED BRASS PLUG, WITH STAINLESS STEEL ACCESS COVER.	JOSAM / MODEL: 58510 WADE / MODEL: 8560E ZURN / MODEL: Z-1446-BP
HB 1	HOSE BIBB	--	--	3/4"	--	--	--	2.5/1	NON-FREEZE WALL HYDRANT WITH INTEGRAL VACUUM BREAKER, BRONZE CASING AND NICKEL BRONZE BOX. PROVIDE WITH ASSE 1013 BACKFLOW PREVENTER.	JOSAM / MODEL: 71000 WADE / MODEL: 8600L ZURN / MODEL: Z-1300
GREEN WC 1	WATER CLOSET	4"	2"	1/2"	--	--	4	2	WHITE VITREOUS CHINA FLOOR MOUNTED FLUSHOMETER TANK (PRESSURE ASSISTED) TYPE, ELONGATED BOWL, ADA COMPLIANT, 1.1 GPF, WITH OPEN FRONT SEAT LESS COVER, OLSONITE #95 OR EQUIVALENT. FLUSHOMETER TANK: SLOAN FLLUSHMATE OR EQUAL. PROVIDE TANK COVER LOCKS. FLUSH VALVES SHALL BE RIGHT HAND OR LEFT HAND AS REQUIRED TO CORRESPOND WITH ACCESS FROM WIDE SIDE OF STALL. VERIFY FLUSH SIDE REQUIREMENTS.	AM. STD. "CADET" / MODEL: 2467.100 KOHLER "HIGHLINE" / MODEL: K-3519 CRANE "ECONMISER" / MODEL: 31888
GREEN L 1	LAVATORY	1-1/4"	1-1/2"	1/2"	--	1/2"	1	1.5	WHITE VITREOUS CHINA, WALL HUNG, WITH CONCEALED ARMS SUPPORT, 4" CENTERS, WITH INTEGRAL BACKSPLASH, ADA ACCESSIBLE. FLAT GRID STRAINER. BRAIDED WATER LINES. FAUCET: FURNISHED BY OWNER-INSTALLED BY G.C. ELECTRONIC SENSOR TYPE FAUCET. SLOAN SF-2300, ADA COMPLIANT. SEE 5/P6.0 FOR LAV SUPPORT DETAIL, 0.5 GPM AERATOR	A.S. COMRADE/ MODEL: 0124.131 CRANE "HARWICH" / MODEL: 1412V
GREEN S 1	HAND SINK	1-1/2"	1-1/2"	1/2"	--	1/2"	2	1.5	S-1: STAINLESS STEEL HAND SINK, WALL HUNG, INCLUDES A 6" GOOSENECK STAINLESS. FAUCET W/SINGLE KNEE PEDAL. BRAIDED WATER LINES, 0.5 GPM AERATOR.	--
S 2	MOP SINK	3"	2"	1/2"	1/2"	--	3	2.25	MOP SINK: AERO - 3MP-2121-6 W/ 48" HIGH S.S. LEFT SIDE AND BACK-SPLASH. FURNISHED BY OWNER, INSTALLED BY CONTRACTOR. FAUCET: T&S #B2465, WITH VACUUM BREAKER, FURNISHED BY OWNER, INSTALLED BY CONTRACTOR.	--
S 3	3-COMP. SINK	INDIRECT	--	1/2"	1/2"	--	--	3	SINK, FAUCET & DRAIN, GEN IV POWER SOAK STANDARD, GEN III IS AN OPTION FOR FRANCHISES	--
S 4	PREP SINK	INDIRECT	--	1/2"	1/2"	--	--	3	SINK, FAUCET AND DRAIN	--
GI 1	GREASE INTERCEPTOR	4"	--	--	--	--	--	--	PRECAST 1,000 GALLON GREASE INTERCEPTOR WITH SAMPLING BOX. SEE SITE PLAN FOR EXTERIOR GREASE INTERCEPTOR LOCATION.	JENSEN / JP1000G
MV 1	MIXING VALVE	--	--	1/2"	1/2"	--	--	--	THERMOSTATIC, 125 P516, 200VF BRONZE BODY, STAINLESS STEEL PISTON LINER, CHECK VALVES SIZE PER PIPE CONNECTIONS.	POWERS SERIES LFLM495 LAWLER SERIES 310 LEONARD SERIES 170
WH 1	WATER HEATER	--	--	1-1/4"	1-1/4"	--	--	--	GAS FIRED WATER HEATER, 95% THERMAL EFF., 199,000 BTUH INPUT, 60 GAL. STORAGE TANK, 235GPH @ 100 DEG. RISE REC. RATE, 3" PVC FLUE & INTAKE, ASME RATED TEMPERATURE AND PRESSURE RELIEF. VALVE. ELECTRONIC IGNITION SYSTEM AND ELECTRONIC CONTROLS. Call 800-477-1953 Option #1 for National Account Price & Service	AO SMITH / CYCLONE MXI BTH-199
ET 1	EXPANSION TANK	--	--	3/4"	--	--	--	--	EXPANSION TANK, STEEL, EXPANSION MEMBRANE 150 PSI, 160° F, 12 GALLON CAPACITY.	WATTS SERIES DETA AMTROL SERIES ST WILKINS SERIES WXTP
BFP 1	BACKFLOW PREVENTOR	--	--	VERIFY	--	--	--	1	REDUCED PRESSURE ZONE BACKFLOW PREVENTER, CAST BRONZE CONSTRUCTION WITH QUARTER TURN FULL-PORT BALL VALVES AND BRONZE STRAINER.	WATTS / MODEL: LF009M2QTS WILKINS / MODEL: 975XLS FEBCO / MODEL: 860
RO 1	REVERSE OSMOSIS	INDIRECT	--	1/2"	--	--	--	--	REVERSE OSMOSIS FILTER SYSTEM BY OWNER. SEE DETAIL 9/P6.0	--

PLUMBING FIXTURE SCHEDULE NTS 1

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1	06.24.21	HEALTH COMMENTS
2	07.12.21	ISSUED FOR BID

CONTRACT DATE: 06.22.21
BUILDING TYPE: END. MED20
PLAN VERSION: MARCH 2021
BRAND DESIGNER: DICKSON
SITE NUMBER: 315089
STORE NUMBER: 456336
PA/PM: SM
DRAWN BY.: TH
JOB NO.: 2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

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PLUMBING SCHEDULES AND NOTES

P1.0

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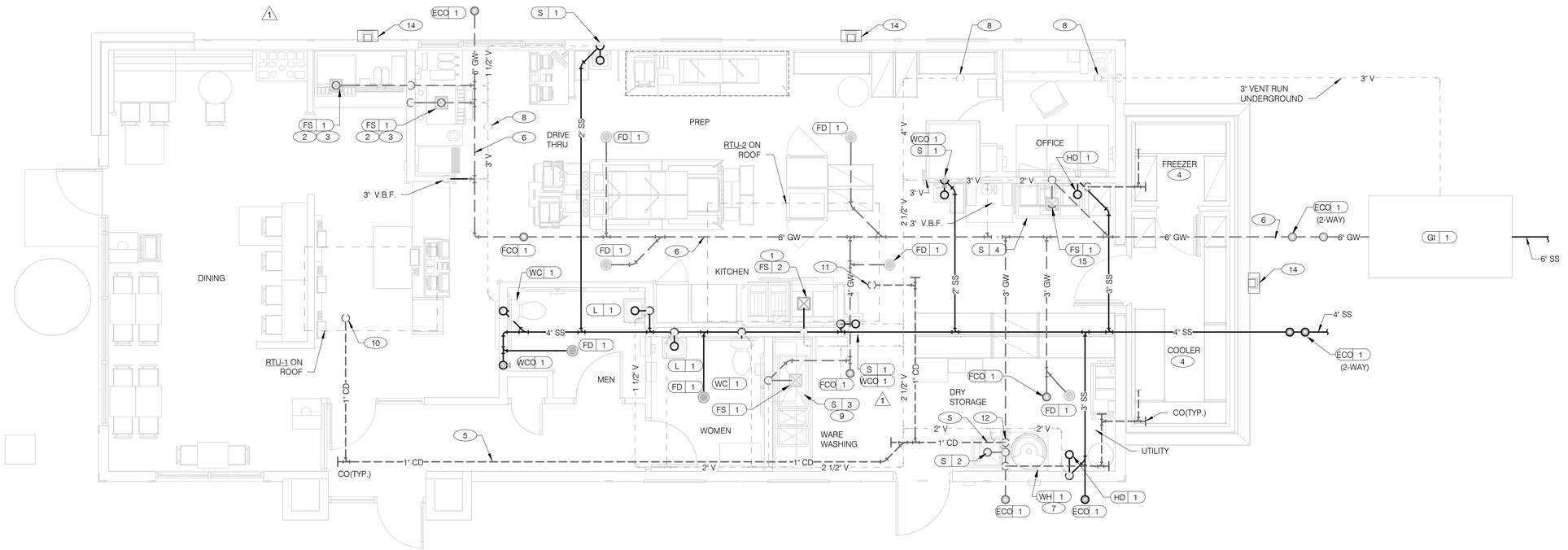

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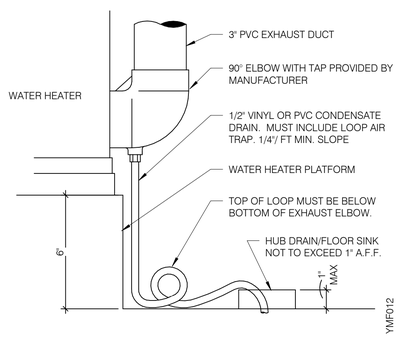
WASTE & VENT PIPING PLAN 1/4" = 1'-0" | 1



WATER HEATER CONDENSATE DETAIL NTS | 4

A. NO ROOF PENETRATIONS PERMITTED WITHIN ROOF WATER PLY. REFER TO ROOF PLAN FOR LOCATIONS.

B. REFER TO RISER DIAGRAM ON SHEET P5.0 FOR ALL WASTE AND VENT SIZES.

C. SEE ARCHITECTURAL PLANS FOR DOWNSPOUT LOCATIONS

D. VERIFY WITH THE LOCAL BUILDING AUTHORITY THAT CONDENSATE DRAINAGE CAN BE ROUTED TO THE MOP SINK.

WASTE & VENT PLAN NOTES NTS | 3

1. UNDERGROUND SANITARY PIPE SHALL BE NO HUB CAST IRON PIPE FOR THE FIRST 10 FEET FROM CONNECTION TO FLOOR SINK FS-2, OUTWARD.
2. PROVIDE CONDENSATE LINE AND DRAIN LINE FROM ICE MACHINE TO HD / FS, PROVIDE AIR GAP PER LOCAL CODE.
3. PROVIDE WASTE LINES FROM BEVERAGE UNIT TO HD / FS, PROVIDE AIR GAP PER LOCAL CODE.
4. PROVIDE 3/4" COPPER CONDENSATE FROM DRAIN PROVIDED BY VENDOR TO OUTFALL AT HUB DRAIN/MOP SINK (HEAT ROPE IS SUPPLIED WITH FREEZER CONDENSATE). CONCEAL CONDENSATE PIPE IN WALL.
5. PVC OR COPPER CONDENSATE DRAIN FROM HVAC UNITS ON ROOF. RUN TO MOP SINK. PIPING SHALL SLOPE 1/4" PER FOOT AND SHALL BE INSULATED WITH 1" CLOSED CELLULAR INSULATION. REFER TO RISER DIAGRAM ON SHEET P5.0 FOR PIPE SIZES.
6. ENTIRE RUN OF DRAIN LINES TO INLET OF EXTERIOR GREASE INTERCEPTOR AND OUTBOUND FROM INTERCEPTOR TO CONNECTION AT SANITARY MAIN SHALL BE SCHEDULE 40 PVC DWV OR AS REQUIRED BY AUTHORITY HAVING JURISDICTION.
7. ROUTE INDIRECT WASTE FROM WH-1 TO HD-1. REFERENCE DETAIL 2/P6.1 AND DETAIL 4/P2.0.
8. 4" VENT UP THROUGH ROOF.
9. PIPE 3-COMPARTMENT SINK TO FLOOR SINK WITH AIR GAP PER CODE.
10. 1" CONDENSATE DRAIN DOWN FROM RTU-1. SEE DETAIL 10/P6.0.
11. 1" CONDENSATE DRAIN DOWN FROM RTU-2. SEE DETAIL 10/P6.0.
12. CONDENSATE DRAIN PIPE DOWN TO MOP SINK. PROVIDE AIR GAP AS REQUIRED BY CODE. IF REQUIRED RUN CONDENSATE PIPING TO EXTERIOR DRYWELL, RETENTION AREA OR STORM SEWER AS DIRECTED BY AUTHORITY HAVING JURISDICTION.
13. NOT USED.
1. DOWN SPOUT. SEE CIVIL PLANS FOR CONTINUATION.
14. ROUTE DRAIN FOR REVERSE OSMOSIS DISCHARGE TO FLOOR SINK. ENSURE PROPER AIR GAP.
15. PROVIDE AIR GAP PER LOCAL CODE.

KEYNOTES - WASTE AND VENT NTS | 2

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BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	315089
STORE NUMBER:	456336
PA/PM:	SM
DRAWN BY.:	TH
JOB NO.:	2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0

WASTE AND VENT PLAN

P2.0

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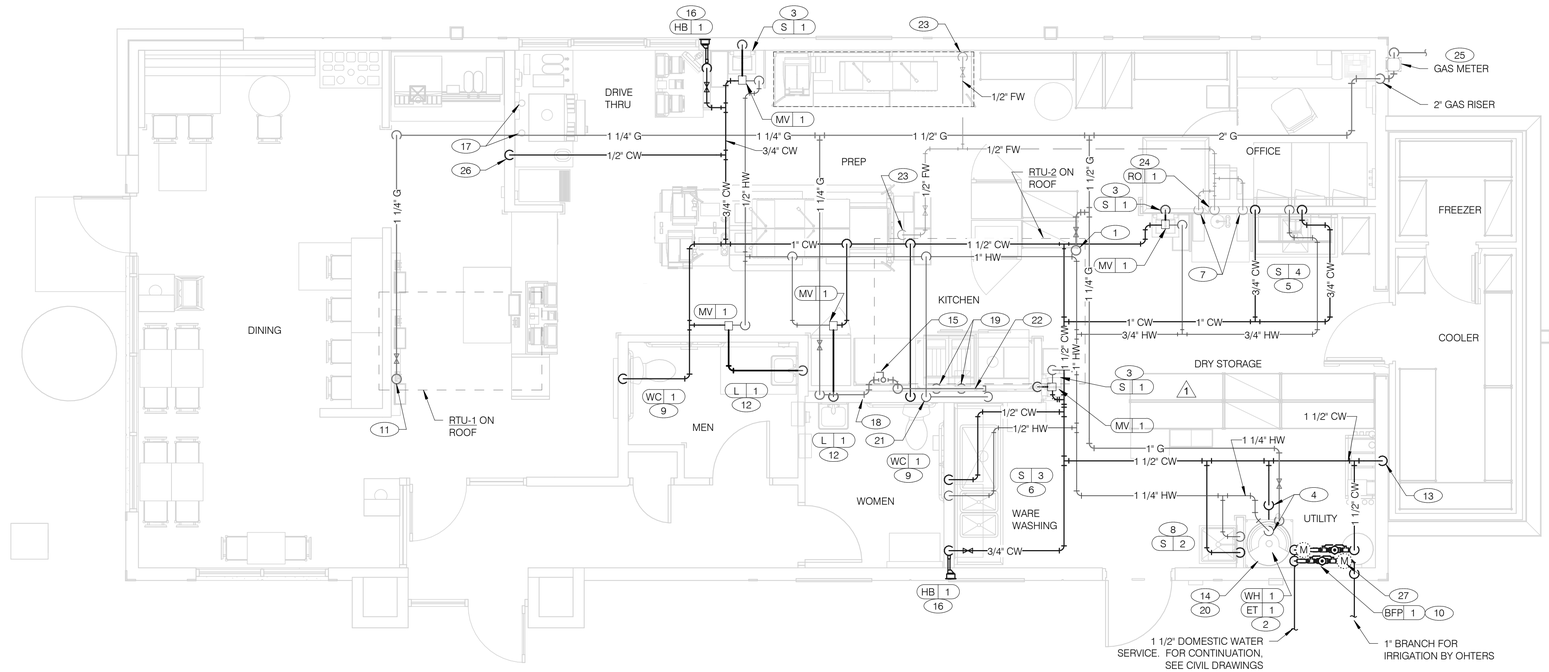

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WATER & GAS PLAN 1/4" = 1'-0" 1

KEYNOTES - WATER AND GAS NTS 2

1. 1-1/4" (360 CFH) GAS UP TO RTU-2 WITH DIRT LEG, GAS COCK AND UNION.
2. 1" (120 CFH) GAS DOWN TO WATER HEATER WITH GAS COCK, DIRT LEG AND UNION.
3. 1/2" TEMPERED WATER DOWN IN WALL TO HAND SINK.
4. 1-1/4" HOT AND 1-1/4" COLD WATER LINES DOWN TO WATER HEATER.
5. 1/2" HOT AND COLD WATER LINES DOWN IN WALL TO PREP SINK.
6. 1/2" COLD AND HOT WATER LINES DOWN IN WALL TO THREE COMPARTMENT SINK.
7. 1/2" COLD WATER 2'-0" A.F.F. . CONNECT TO WATER FILTER FOR HOT WATER SYSTEM P-452. PROVIDE SHUT-OFF VALVE PRIOR TO CONNECTION TO WATER FILTER.
8. 1/2" COLD AND HOT WATER DOWN IN WALL TO MOP SINK.
9. 3/4" CW DOWN IN WALL TO FLUSH TANK WATER CLOSET .
10. WATER METER AND REDUCED PRESSURE BACKFLOW PREVENTER LOCATED PER LOCAL UTILITY REQUIREMENTS. PIPE RELIEF TO HUB SINK.
11. 1-1/4" (240 CFH) GAS UP TO RTU-1 WITH DIRT LEG, GAS COCK AND UNION.
12. 1/2" TEMPERED WATER LINES DOWN IN WALL TO LAVATORY.
13. 3/4" CW DOWN ALONG WALL TO WATER FILTER S-540.
14. WATER HEATER (WH-1). PIPE CONDENSATE LINE. T&P DISCHARGE AND DRAIN PAN TO HUB DRAIN. SEE WATER HEATER DETAIL 2/P6.1.
15. EMERGENCY GAS SHUT OFF VALVE LOCATED BELOW CEILING.
16. 3/4" CW DOWN IN WALL TO EXTERIOR HOSE BIBB.
17. BUNDLED SYRUP LINES TO BEVERAGE DISPENSERS S-284 & S-285 AND FILTERED WATER LINES TO ICE MAKERS S-513 AND FROZEN BEVERAGE DISPENSER S-546. SEE DRAWINGS A2.0 AND P5.0.
18. 1-1/4" GAS DOWN IN WALL TO COOKING EQUIPMENT. VERTICAL GAS PIPING IN WALL SHALL NOT BE RIGIDLY SECURED AND ADEQUATE PIPE PROTECTION SHALL BE PROVIDED.
19. 3/4" GAS DIRT LEG W/ GAS COCK TO COOKING EQUIPMENT. PROVIDE FLEXIBLE GAS HOSE KIT FOR CONNECTION TO COOKING EQUIPMENT.
20. 3" PVC EXHAUST AND INTAKE FLUES FROM WATER HEATER, PIPE THROUGH ROOF AS RECOMMENDED BY MANUFACTURER TO LOCATIONS SHOWN ON SHEET M2.0. SEE DETAIL 1/P6.1.
21. 1/2" HOT WATER DOWN IN WALL TO RETHERMALIZER C-107. PROVIDE SHUT-OFF VALVE OUTSIDE OF WALL FOR CONNECTION TO RETHERMALIZER.
22. RUN GAS PIPE 18" A.F.F. WITH DIRT LEGS FOR GAS HOSE KITS TO COOKING EQUIPMENT C-026 AND C-107.
23. 1/2" RO WATER PIPE DOWN IN WALL AND ROUTED IN LOW WALL OF DRY PRODUCTION LINE. PROVIDE SHUT-OFF VALVE ON RO PIPING IN CEILING NEAR CHASE.
24. 1/2" COLD WATER TO REVERSE OSMOSIS FILTER P-315 AND 1/2" FILTER WATER FROM REVERSE OSMOSIS FILTER. PROVIDE SHUT-OFF VALVE ON CW PIPE PRIOR TOCONNECTION TO FILTER. SEE DETAIL 9/P6.0.
25. GAS METER, REGULATOR VALVES, BRACKETS, ETC. AS REQUIRED BY LOCAL GAS COMPANY. SEE CIVIL DRAWINGS FOR CONTINUATION.
26. 1/2" COLD WATER. CONNECT TO WATER FILTER FOR BUNN POD BREWER S-547. PROVIDE SHUT-OFF VALVE PRIOR TO CONNECTION TO WATER FILTER.
27. 1" DEDUCT METER FOR IRRIGATION SYSTEM.

WATER & GAS PLAN NOTES NTS 3

A. NO ROOF PENETRATIONS PERMITTED WITHIN ROOF "WATER VALLEYS". REFER TO ROOF PLAN FOR LOCATIONS.

B. REFER TO SHEET P4.0 FOR ROUGH-IN LOCATIONS.

C. REFER TO SHEET P5.0 FOR WATER AND GAS ISOMETRIC DRAWINGS.

D. FLUSH ALL WATER SUPPLY LINES OF ALL DEBRIS AND IMPURITIES PRIOR TO CONNECTING TO WATER FILTERS.

E. PROVIDE REDUCED PRESSURE BACKFLOW PREVENTER TO SERVE CARBONATOR. DRAIN RELIEF TO FLOOR SINK WITH AIR GAP

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BRAND DESIGNER: DICKSON
SITE NUMBER: 315089
STORE NUMBER: 456336
PA/PM: SM
DRAWN BY.: TH
JOB NO.: 2019088.31

TACO BELL

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ENDEAVOR 2.0
WATER AND GAS PLAN

P3.0

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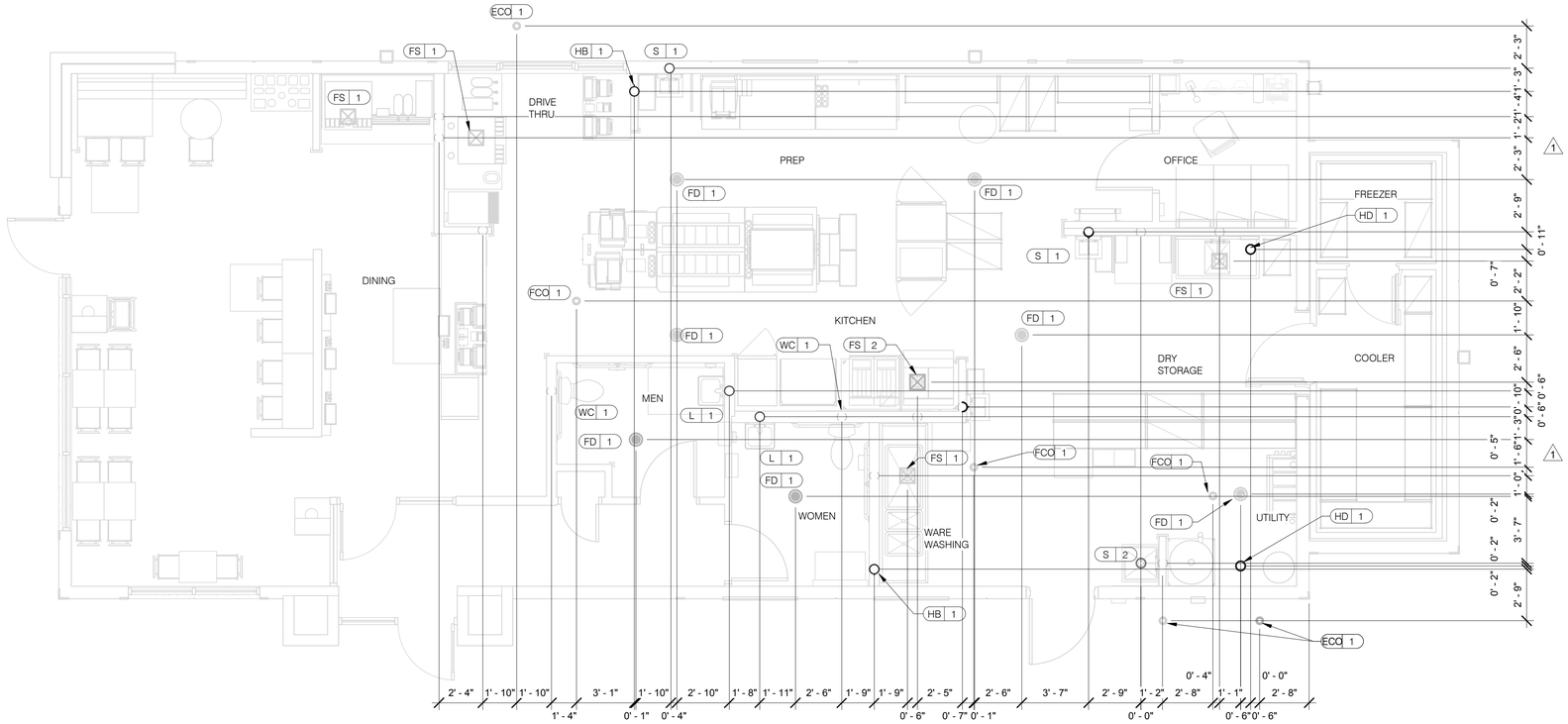

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PLUMBING ROUGH-IN PLAN 1/4" = 1'-0" 1

EQUIP #	EQUIPMENT ITEM	TYPE	ELEVATION	REMARKS
FS 1	FLOOR SINK			--
FS 2	FLOOR SINK			EPOXY COATED CAST IRON
HD 1	HUB DRAIN			--
WH 1	WATER HEATER	CW		--
WH 1	WATER HEATER	G	+15" A.F.F.	--
WC 1	WATER CLOSET	CW	+29" A.F.F	BOTH HANDICAP AND REGULAR
UR 1	URINAL FLUSH VALVE	CW	+47" A.F.F.	WALL MOUNTED
UR 1	URINAL WASTE STUB	W	+16-1/2" A.F.F.	WALL MOUNTED
L 1	LAVATORY	TW	+20" A.F.F.	--
L 1	LAVATORY WASTE LINE	W	+16-1/2" A.F.F.	--
RO 1	REVERSE OSMOSIS	CW	+84" A.F.F	--
S 1	HAND SINK	TW	+18" A.F.F	RIM OF LAV @ +2'-8" A.F.F.
S 2	MOP SINK	W	-6" A.F.F.	RECESSED IN FLOOR
S 2	MOP SINK FAUCET	CW/HW	+36" A.F.F	--
S 2	MOP SINK FAUCET	CW/HW	+42" A.F.F	CLOSET MOP SINK ONLY
S 3	3-COMPARTMENT SINK	W	+19" A.F.F	--

EQUIP #	EQUIPMENT ITEM	TYPE	ELEVATION	REMARKS
S 3	3-COMPARTMENT SINK FAUCET	CW/HW	+38" A.F.F	--
S 4	PREP SINK	W	+19" A.F.F	--
S 4	PREP SINK FAUCET	CW/HW	+38" A.F.F	--
WCO 1	WALL CLEAN OUT			--
FCO 1	FLOOR CLEAN OUT			--
HB 1	HOSE BIB			--
C-107	RETHERMALIZER	HW	+8" A.F.F.	
C-107	RETHERMALIZER	G	+12" A.F.F.	
C-026	DUAL VAT FRYER	G	+12" A.F.F.	
S-286	WATER FILTER SYSTEM	CW	+94" A.F.F.	INLET TO & OUTLET FROM FILTER
P-452	HOT WATER SYSTEM	CW	+24" A.F.F.	

PLUMBING ROUGH-IN SCHEDULE NTS 3

1. ALL DIMENSIONS TO FLOOR SINKS, FLOOR DRAINS AND HUB DRAINS ARE TO CENTER OF FIXTURE.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THIS DATA ON LOCATION OF ALL PLUMBING ROUGH-INS WITH INFORMATION PROVIDED ON ARCHITECTURAL AND STRUCTURAL DRAWINGS AND EQUIPMENT ACTUALLY SUPPLIED AND TO CONFIRM CORRECTNESS OF DIMENSIONS INDICATED HEREIN.

PLUMBING ROUGH-IN NOTES NTS 2

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PLUMBING ROUGH-IN PLAN

P4.0

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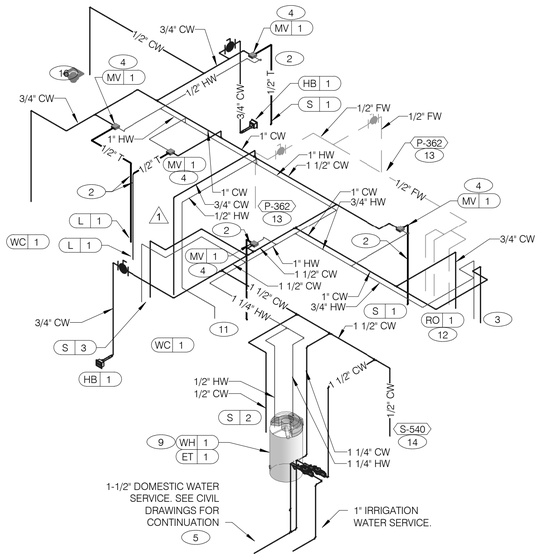
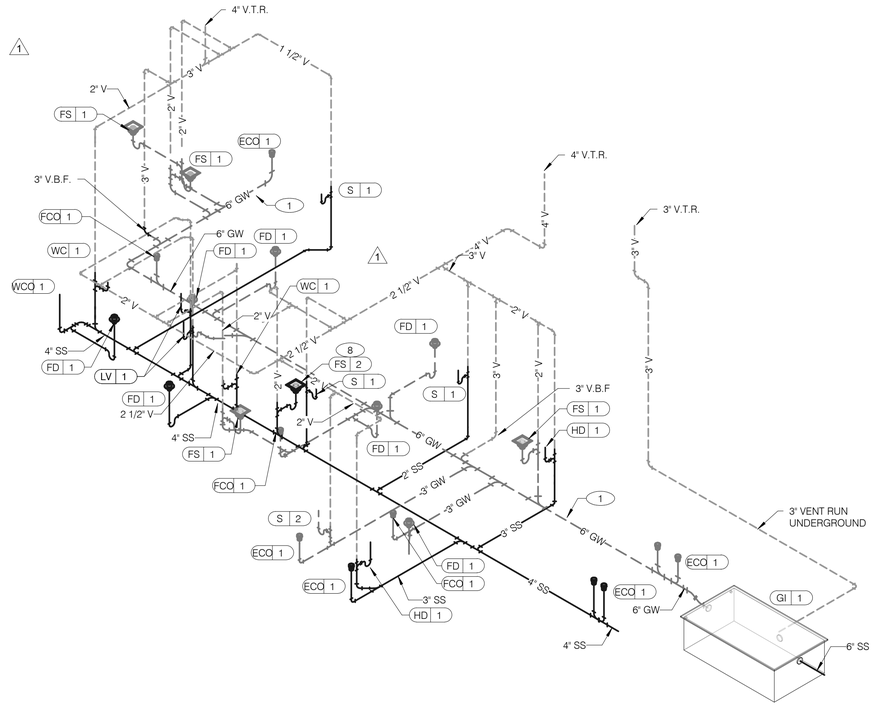


WATER ISOMETRIC NTS 4

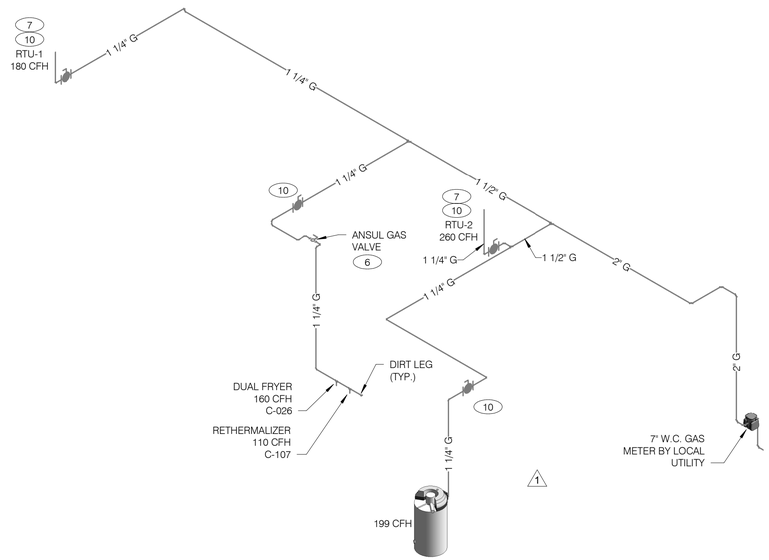


WASTE AND VENT ISOMETRIC NTS 1

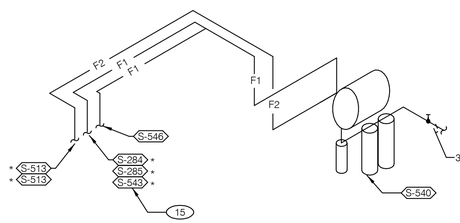
GAS DEMAND SCHEDULE	
RTU-1	180 CFH
RTU-2	260 CFH
WH-1	199 CFH
DUAL FRYER	160 CFH
RETHERMALIZER	110 CFH
TOTAL DEMAND	909.0 CFH = 909,000 BTUH

NOTE:
COORDINATE GAS DEMAND REQUIREMENTS WITH SITE-SPECIFIC RTU DESIGN.

PIPE SIZE BASED ON 120' OF PIPE AND 7" W.C. OPERATING PRESSURE



GAS ISOMETRIC NTS 5



FILTERED EQUIPMENT AND LINES:

S-540 - WATER FILTER

FILTERED LINE (COLD WATER)

S-513 - ICE MAKER - ABOVE SELF-SERVE BEVERAGE DISPENSER *
S-513 - ICE MAKER - ABOVE DRIVE-THRU BEVERAGE DISPENSER *
S-285 - DRIVE-THRU BEVERAGE DISPENSER *
S-284 - SELF-SERVE BEVERAGE DISPENSER *
S-546 - ICED TEA BREWER
S-543 - FROZEN BEVERAGE DISPENSER

* FILTERED WATER SUPPLIED VIA SYRUP BUNDLE. REFER TO 11/P6.0. SEE SCOPE OF WORK FOR RESPONSIBILITIES.

FILTERED WATER ISOMETRIC NTS 2

1. ENTIRE RUN OF DRAIN LINES ON INLET TO GREASE TRAP SHALL BE SCHEDULE 40 PVC OR NO HUB CAST IRON AS REQUIRED BY CODE.
2. 1/2" TEMPERED WATER DOWN IN WALL TO HAND SINK / LAVATORY.
3. 1/2" HOT AND COLD WATER LINES DOWN IN WALL TO PREP SINK.
4. THERMOSTATIC MIXING VALVE.
5. METER AND REDUCED PRESSURE BACKFLOW PREVENTER PER LOCAL UTILITY REQUIREMENTS. PROVIDE SHUT-OFF VALVES AT BOTH SIDES OF BACKFLOW PREVENTER. VERIFY LOCATIONS WITH CIVIL DRAWINGS.
6. EMERGENCY GAS SHUT-OFF VALVE (NORMALLY CLOSED) SHALL BE ELECTRIC SOLENOID TYPE WITH SPRING RETURN AND 24 VOLT ACTUATOR, SUITABLE FOR USE ON GAS PIPING SYSTEMS. VALVE SHALL BE ACTIVATED BY ANY OF THE EXHAUST HOOD FIRE SUPPRESSION SYSTEM. PROVIDE RELAYS AS REQUIRED TO ACTIVATE SHUT-OFF VALVE.
7. GAS PIPING AT ROOF TOP UNIT FOR THROUGH THE BASE PIPE CONNECTION. SHUT-OFF VALVE SHALL BE LOCATED OUTSIDE OF THE UNIT.
8. PROVIDE NO HUB CAST IRON PIPE FOR FIRST 10 FEET OF PIPE FROM CONNECTION TO FLOOR SINK FS-2
9. PIPE T&P RELIEF VALVE TO OUTSIDE OF BUILDING OR TO HUB DRAIN. RUN FULL SIZE PIPE FROM VALVE WITH TYPE "K" COPPER TUBING.
10. PROVIDE GAS SHUT-OFF VALVE IN CEILING SPACE.
11. 1/2" HOT WATER PIPE DOWN IN WALL. PROVIDE SHUT-OFF VALVE OUTSIDE OF WALL FOR CONNECTION TO RETHERMALIZER.
12. 1/2" COLD WATER CONNECT TO REVERSE OSMOSIS FILTER AND 1/2" FILTERED WATER FROM REVERSE OSMOSIS FILTER. PROVIDE SHUT-OFF ON CW PIPE PRIOR TO CONNECTION TO FILTER.
13. 1/2" RO WATER FROM REVERSE OSMOSIS FILTER DOWN IN UTILITY CHASE OF M.A.P.S. LINE. PROVIDE SHUT-OFF VALVE ON FW PIPE IN CEILING NEAR UTILITY CHASE.
14. 1/2" COLD WATER TO HOT WATER SYSTEM FILTER.
15. TEE OFF 3/8" LINE FROM DRIVE THRU BEVERAGE DISPENSER FILTERED WATER SUPPLY. SEE DETAIL 8/P6.0.
16. 1/2" COLD WATER. CONNECT TO WATER FILTER FOR BUNN POD BREWER S-547. PROVIDE SHUT-OFF VALVE PRIOR TO CONNECTION TO THE WATER FILTER.

KEYNOTES - ISOMETRICS NTS 3

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	DATE	REMARKS
	04.21.21	ISSUED FOR PERMIT
1	06.24.21	HEALTH COMMENTS
2	07.12.21	ISSUED FOR BID

CONTRACT DATE: 06.22.21
BUILDING TYPE: END. MED20
PLAN VERSION: MARCH 2021
BRAND DESIGNER: DICKSON
SITE NUMBER: 315089
STORE NUMBER: 456336
PA/PM: SM
DRAWN BY.: TH
JOB NO.: 2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
RISER DIAGRAMS

P5.0

PLOT DATE: 7/12/2021 10:55:42 AM

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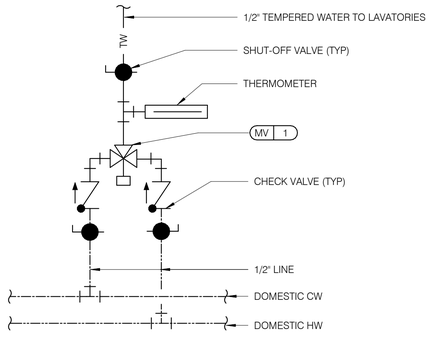
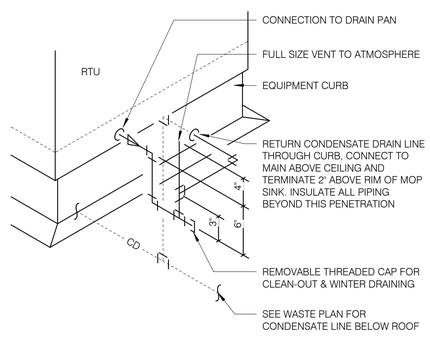
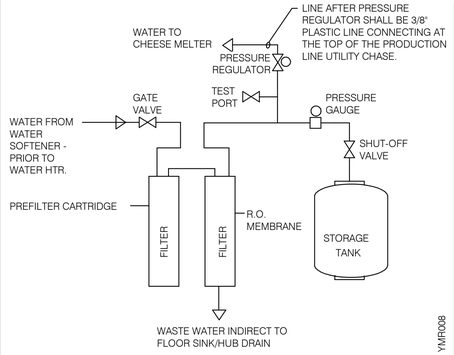
CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT



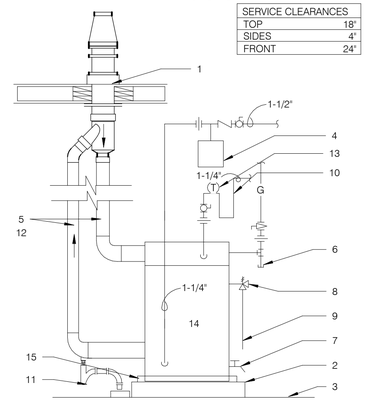
TEMPERING VALVE NTS 11



RTU CONDENSATE NTS 10



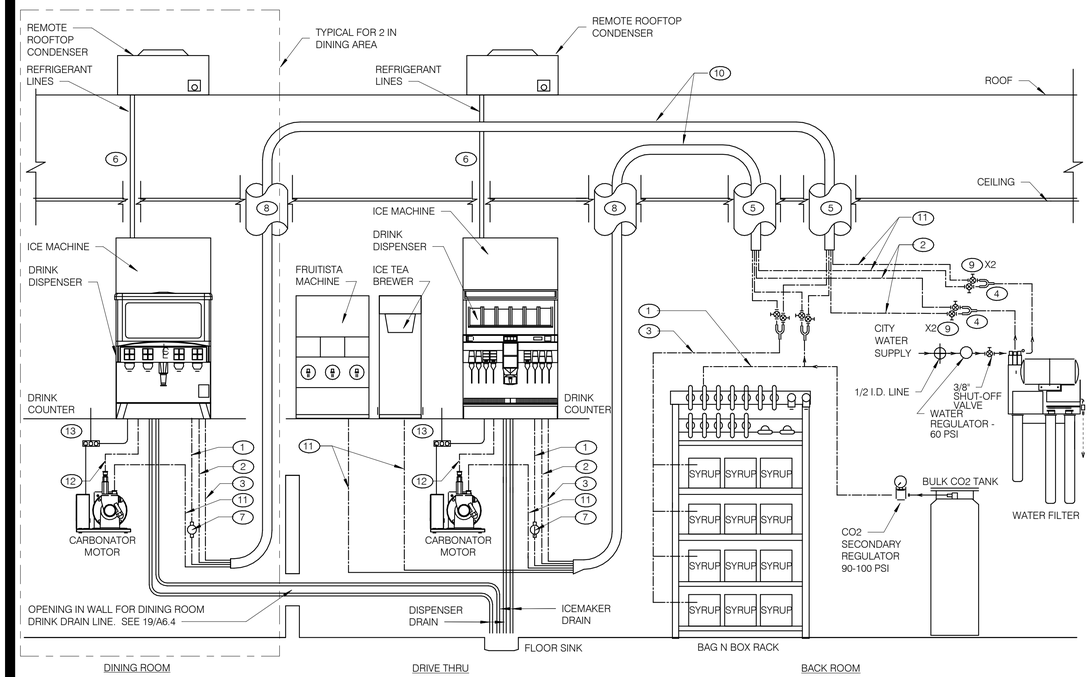
REVERSE OSMOSIS SYSTEM NTS 9



SERVICE CLEARANCES	
TOP	18"
SIDES	4"
FRONT	24"

1. FLUE THRU ROOF
2. 4" CONCRETE PAD
3. FINISHED FLOOR
4. THERMAL EXPANSION TANK BY WATTS - SEE PLUMBING SCHEDULE - STRAP AND SUPPORT TO WALL
5. SCHEDULE 40 PVC, MINIMIZE TURNS AND TRANSITIONS.
6. GAS COCK VALVE WITH FULL SIZE DIRT LEG
7. 3/4" DRAIN WITH VALVE & CAP
8. COMBINATION TEMPERATURE AND PRESSURE RELIEF PER LOCAL CODE
9. RUN T&P DISCHARGE FULL SIZE TO HUB DRAIN
10. 22" DEEP HEAT TRAP
11. P-TRAP AND LINE TO DRAIN PROVIDED BY MANUFACTURER. LEAVE AIR GAP BETWEEN BOTTOM OF TRAP AND DRAIN. SEE DETAIL 4/P2.0
12. SUPPORT VENT PIPE RUNS EVERY 5'-0" VERTICALLY AND EVERY 3'-0" HORIZONTALLY.
13. OUTLET THERMOMETER PROVIDED BY MFR. LOCATE WITHIN 12" OF W.H. OUTLET.
14. SEE DETAIL 2/P6.1 FOR SCHEDULE OF ITEMS PROVIDED BY W.H. MFR.
15. DRAIN PAN TO HUB DRAIN.

WATER HEATER NTS 2



KEY NOTES:

1. 3/8" CO_2 LINE
2. 3/8" FILTERED WATER LINE - ICE MACHINES
3. 3/8" SYRUP LINES
4. 1/2 X 3/8 X 3/8 "Y"
5. BUNDLED TUBING CEILING PENETRATION.
6. STAINLESS CHASE SURFACE MOUNTED FROM CEILING TO TOP OF ICE MACHINE
7. PRE-SET CO_2 REGULATOR
8. RECESSED 4" DIA. PVC VERTICAL CHASE FOR DRINK SYSTEM BUNDLED TUBING SYSTEM.
9. 3/8" SHUT OFF VALVES BARB FITTINGS
10. DRINK SYSTEM BUNDLED TUBING. SEE DETAIL 6/P6.0
11. 3/8" FILTERED WATERLINE - ICE TEA, FRUITISTA & DRINK MACHINES
12. 3/8" LINE FOR PRESSURIZE FILTERED WATER
13. ELECTRICAL FOR DRINK SYSTEM. SEE SHEET E3.0

TPS030

DRINK SYSTEM SCHEMATIC NTS 8

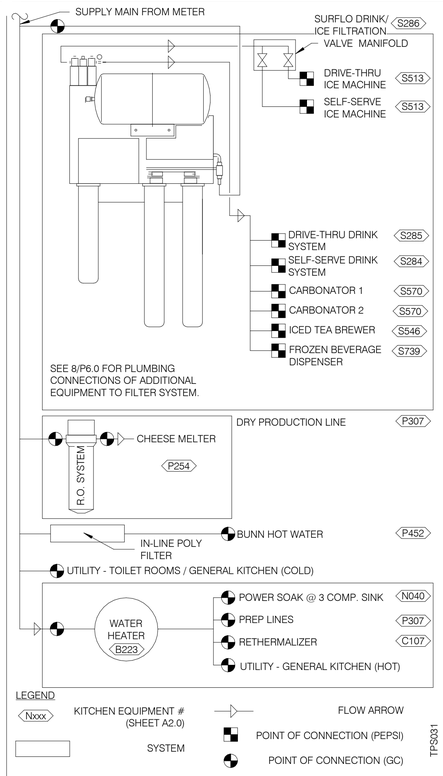
GENERAL NOTES:

1. OVERALL FILTER DIMENSIONS: 21" WIDE x 12" DEEP x 48 1/2" HIGH
2. SEE DETAIL SCOPE OF WORK FOR SCOPE DEFINITIONS.
3. ROUGH-INS SHALL BE PROVIDED BY CONTRACTOR.
4. INSTALLATION SHALL COMPLY WITH STATE AND LOCAL PLUMBING CODES.
5. FILTER SHALL BE PROTECTED AGAINST FREEZING.
6. USE ONLY TEFLON (HIGH-LOW TEMPERATURE) TAPE TO SEAL THREADED PARTS; NO PIPE DOPE.
7. DO NOT INSTALL WHERE LINE PRESSURE EXCEEDS 125 PSI OR WHERE TEMPERATURE EXCEEDS 100 F.
8. SEE EQUIPMENT PLAN FOR LOCATION.
9. SEE DETAIL 3 THIS SHEET FOR BUNDLE DETAILS
10. "Y" FOR ICE MACHINES SUPPLY LINES SHALL BE INSTALLED @ FILTER OUTLET.
11. BACKFLOW PREVENTERS FOR FILTER ASSEMBLY ARE PROVIDED.

THERE ARE TWO SELF-SERVE DRINK/ICE SYSTEMS WHICH SHARE A COMMON FLOOR SINK WITH THE D/T DRINK/ICE SYSTEM.

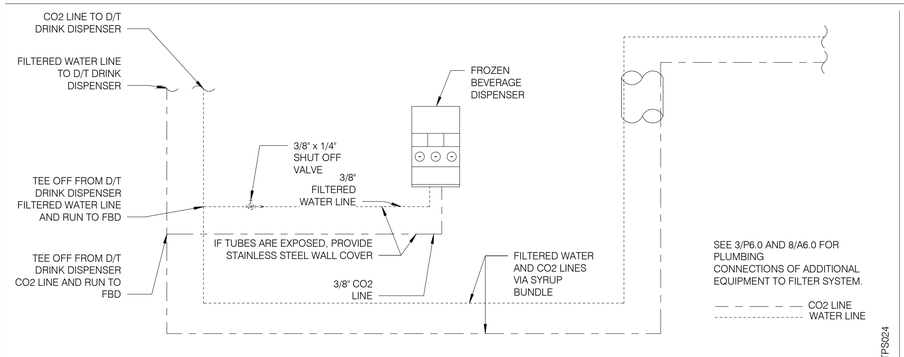
INSTALL ELECTRICAL, WATER, AND DRAIN IN ACCORDANCE WITH ALL LOCAL, STATE & FEDERAL CODES.

EQUIPMENT RATING:
ED250 DISPENSER - 115V, 3.5 AMPS
ED300 DISPENSER - 115V, 4.0 AMPS
CARBONATOR - 115V, 60 Hz, 7.0 AMPS
BOOSTER ASSEMBLY - 115V. 60 Hz, 6.5 AMPS



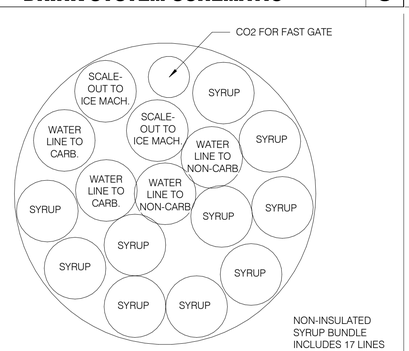
TPS031

WATER FILTRATION SCHEMATIC NTS 3

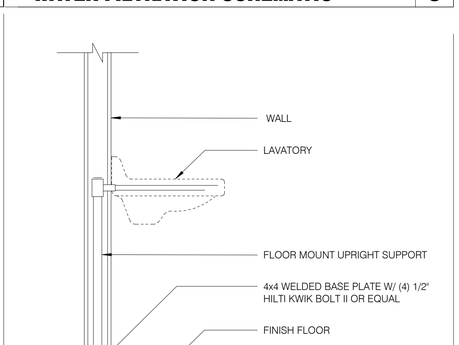


TPS024

FBD DRINK SYSTEM DETAIL NTS 7



SYRUP BUNDLE CONFIGURATION NTS 6



LAVATORY SUPPORT NTS 5

ALL WORK THIS DETAIL PER DETAILS 6, 11 & 12/P6.0

FILTER LINE F1 SUPPLIES
BUNDLED TUBE BY PEPSI

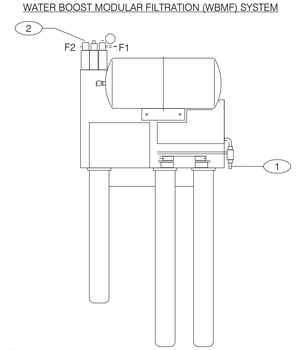
1. DRIVE THRU DRINK STATION
2. SELF SERVE DRINK STATION

FILTER LINE F2 SUPPLIES
BUNDLED TUBE BY PEPSI

1. ICE MACHINES

WB2-M3-22-003

WATER BOOST MODULAR FILTRATION (WBMF) SYSTEM



KEY NOTES:

1. 3/4" COLD WATER INLET TO 1/2" COPPER LINE AND FITTINGS AT FILTER.
2. 3/4" OUTLET W/ INTEGRAL BACKFLOW PREVENTER, EQUAL TO WATTS REGULATOR CO. SERIES 007 AND SERVICE BALL VALVE.

GENERAL NOTES:

1. OVERALL DIMENSIONS 21" WIDE x 12" DEEP x 48 1/2" HIGH
2. SEE SCOPE OF WORK FOR ADDITIONAL INFORMATION.
3. INSTALLATION SHALL COMPLY WITH STATE AND LOCAL PLUMBING CODES.
4. THE UNIT SHALL BE PROTECTED AGAINST FREEZING.
5. USE ONLY TEFLON (HIGH-LOW TEMPERATURE) TAPE TO SEAL THREADED PARTS; NO PIPE DOPE.
6. DO NOT INSTALL WHERE LINE PRESSURE EXCEEDS 125 PSI OR WHERE TEMPERATURE EXCEEDS 100 F.
7. SEE SHT. A2.0 FOR LOCATION.

TPW001

WATER FILTER SYSTEM NTS 1

GPD GROUP
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AKRON, OH 44311
330.572.2100 FAX: 330.572.2102

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DRAWN BY.:	TH
JOB NO.:	2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
PLUMBING DETAILS

P6.0

PLOT DATE: 7/12/2021 10:55:44 AM

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CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT

Installation, Start Up and Pre-Commissioning Checklist

☐ = Responsible Party
Initial When Completed

Standard RTU	Multi-Speed RTU	Reference #	PROCESS	GC - General Contractor	EC - Electrical Contractor	MC-Mechanical Contractor	PC-Plumbing Contractor	AB-Air Balance Agency	Remarks	CA-Commissioning Agent Functional Verification (CA Contracted by Owner)
		1	**Package Units**							
X	X	2	Reference and abide to all instructions in manufacturers Installation, Startup, Operation and Maintenance literature							
X	X	3	Units are set level							
X	X	4	Unit and plenums align to each other							
X	X	5	Units and plenums are properly sealed to each other							
X	X	6	All loose shipped components are relocated and installed per manufacturers instructions							
X	X	7	a) economizer eyebrow, skirts and mist eliminator installed							
X	X	8	b) economizer dampers and linkage installed and operable							
X	X	9	c) economizer wiring connected and completed							
X	X	10	d) relief damper or power exhauster installed and operable							
X	X	11	e) smoke detectors and sample tubes relocated and installed per manufacurers instructions							
X	X	12	Utilities are installed and ON to the units							
X	X	13	a) power on and breakers sized to unit rating							
X	X	14	b) phases correct							
X	X	15	c) gas on							
X	X	16	d) gas gooseneck or pipe capacity meets or exceeds unit capacity							
X	X	17	e) condensate line is piped per plan							
X	X	18	f) condensate vent is on leaving side of trap							
		19								
X	X	20	No thermostat, smoke detector, remote enunciator or any other wiring runs though the plenums							
X	X	21	Manufacturers start up procedure has been followed and all units evaporator fan operates through all fan stages per manufacturers instructions							
X	X	22	Manufacturers start up procedure has been followed and all units cycle through all heating stages per manufacturers instructions							
X	X	23	Manufacturers start up procedure has been followed and all units cycle through all cooling stages per manufacturers instructions							
X	X	24	Manufacturers start up procedure has been followed and all units cycle through all economizer stages per manufacturers instructions							
		25								
		26								
		27								
		28	**Ductwork**							
X	X	29	All ductwork and registers are installed per plan							
X	X	30	All starters and or take offs are radiused per plan.							
X	X	31	Ductwork from the exhaust register over production line to EF-2 fan base is 100% rigid per plan							
X	X	32	Balance dampers are in sleeves on axles with locking quadrant, not located in any starter collars, "T"s or "Y"s and located per plan							
X	X	33	Balance damper handles are flagged to identify their location							
		34								
		35								
		36	**Economizer**							
X	X	37	All mechanical components related to the economizer have been installed							
X	X	38	"Blank off" plate under economizer eyebrow has been installed							
X	X	39	Barometric relief damper operates freely							
X	X	40	Input sensors for the Economizer have been properly located and connected to the Economizer							
X	X	41	Economizer has been tested to perform "Free" cooling when ambient conditions are below 55 degrees							
X	X	42	Mechanical cooling stages on when Economizer cooling is not available							
X	X	43	Mechanical cooling stages on with the Economizer cooling when conditioned space temperature rises and requires two stage cooling							
X	X	44	Economizer damper positions to minimum damper position when set							
		45								
		46	**Smoke Detectors**							
X	X	47	Smoke detector option has been included in package unit							
X	X	48	Return side smoke detector has been relocated from its shipping position to the factory provided installation location in the return section of the package unit							
X	X	49	All smoke detector sample tubes are properly located per manufacturers design							
X	X	50	The return smoke detector in each unit has been tested for unit shutdown							
X	X	51	The supply smoke detector in each unit has been tested for unit shutdown							
X	X	52	Visual Verification installation certification document has been requested (certify@ace-bcx.com)and completed							
		53								
		54	**Remote Smoke Detector Enunciators and Resets**							
X	X	55	A remote smoke detector enunciator and reset has been installed in the managers office for each package unit							
X	X	56	RTU 1 supply side smoke detector alarm sets off the visual and audible remote							
X	X	57	After triggering RTU 1 supply side smoke detector alarm, resetting the remote smoke detector reset for RTU 1 returns RTU 1 to normal operation							
X	X	58	RTU 1 return side smoke detector alarm sets off the visual and audible remote enunciator alarms and shuts down RTU 1							
X	X	59	After triggering RTU 1 return side smoke detector alarm, resetting the remote smoke detector reset for RTU 1 returns RTU 1 to normal operation							
X	X	60	RTU 2 supply side smoke detector alarm sets off the visual and audible remote enunciator alarms and shuts down RTU 2							
X	X	61	After triggering RTU 2 supply side smoke detector alarm, resetting the remote smoke detector reset for RTU 2 returns RTU 2 to normal operation							
X	X	62	RTU 2 return side smoke detector alarm sets off the visual and audible remote enunciator alarms and shuts down RTU 2							
X	X	63	After triggering RTU 2 return side smoke detector alarm, resetting the remote smoke detector reset for RTU 2 returns RTU 2 to normal operation							
X	X	64	Visual Verification installation certification document has been requested (certify@ace-bcx.com)and completed							
		65								
		66	**Power Exhauster**							
X	X	67	Power Exhauster has been installed							
X	X	68	Power Exhauster "On" setpoint has been set and turns on and off at correct economizer opening percentage							

Installation, Start Up and Pre-Commissioning Checklist

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Initial When Completed

Standard RTU	Multi-Speed RTU	Reference #	PROCESS	GC - General Contractor	EC - Electrical Contractor	MC-Mechanical Contractor	PC-Plumbing Contractor	AB-Air Balance Agency	Remarks	CA-Commissioning Agent Functional Verification (CA Contracted by Owner)
		69								
		70	**Fire Supression System Shutdown**							
X	X	71	TBANS-1 has been installed per plan location							
X	X	72	TBANS-1 has dedicated power to terminals TB-PWR							
X	X	73	TBANS terminals TB1-1 and TB1-2 are wired to "Closed when Cocked" terminals of fire suppression system microswitch per detail							
X	X	74	RTU 1 and RTU 2 low voltage control power is wired through terminals in TBANS-1							
X	X	75	If present, electronic gas valve is wired through TBANS							
X	X	76	If required, TBANS to hoodstat has been wired for EF-1 on during supressant discharge event							
X	X	77	Visual Verification installation certification document has been requested (certify@ace-bcx.com)and completed							
		78								
		79								
		80	**Thermostat**							
X	X	81	Thermostats are wired to package units per thermostat and unit wiring diagrams							
X	X	82	Package units equiped with two stage cooling have each cooling stage individualy wired and controled from their thermostat.							
X	X	83	Package units equiped with two stage heating have each heating stage individualy wired and controled from their thermostat.							
X	X	84	Thermostats are wired to TBCCB Control Box per Detail on plan sheet E-6							
X	X	85	Thermostats are programmed to Taco Bell parameters							
X	X	86	Visual Verification installation certification document has been requested (certify@ace-bcx.com)and completed							
X		87								
		88	**Hoodstat**							
X	X	89	Hoodstat has been installed in duct or hood per plan							
X	X	90	Hoodstat is wired to terminals TB2 of the TBCCB Control Box							
X	X	91	Hoodstat microswitch closes at 85 degrees							
		92								
		93								
		94	**TBCCB & Interlock**							
X	X	95	Unswitched power is provided to H=HOT and N=Neutral and G=Ground terminals in the TBCCB Control Box							
X	X	96	Hoodstat wires are landed on terminals TB2 of the TBCCB Control Box							
X	X	97	Low voltage wiring has been completed between RTU 1 and TB-1 of the TBCCB Control Box							
X	X	98	Low voltage wiring has been completed between RTU 2 and TB-1 of the TBCCB Control Box							
X	X	99	Photocell is wired to the TBCCB per detail							
X	X	100	Any optional switches, if used, have been installed to TBCCB per schematic							
X	X	101	"Occupied" and "Unoccupied" times for the building have been programmed into Channel/Switch 1 of the Timeclock in TBCCB Control Box							
X	X	102	"Open" and "Closed" times for Taco Bell sales have been programmed into Channel/Switch 2 of the Timeclock in TBCCB Control Box							
X	X	103	Visual Verification installation certification document has been requested (certify@ace-bcx.com)and completed							
		104								
		105	**Visual Verification**							
X	X	106	Visual Verification installation certificate has been received for Smoke Detectors							
X	X	107	Visual Verification installation certificate has been received for Remote Smoke Detectors Ennunciators and Resets							
X	X	108	Visual Verification installation certificate has been received for Thermostat and Remote Sensors installation							
X	X	109	Visual Verification installation certificate has been received for TBANS-1 installation							
X	X	110	Visual Verification installation certificate has been received for TBCCB							
X	X	111	Visual Verification installation certificate has been provided to designated authority (Owner, GC, Air Balancing Agency, Commissioning Agency)							
		112								
		113								
		114	**Lighting**							
X	X	115	Interior lights are wired through the TBCCB per plan and schematic							
X	X	116	Occupancy sensor controlled lighting installed in restrooms							
X	X	117	Daylighting and dimming box (DDCB-ACI) is installed in jurisdictions requiring daylight harvesting and or dimming of interior lights							
X	X	118	Photocell is wired to the TBCCB control box per plan and schematic							
X	X	119	Exterior lights are wired to the TBCCB control box per plan and schematic							
X	X	120	Sign lights are wired to the TBCCB control box per plan and schematic							
X	X	121	TBCCB timeclock is programmed to Taco Bell parameters							
X	X	122	Manual override of TBCCB control box timeclock activates lighting circuits							
		123								
		124	**Commissioning**							
X	X	125	All Visual Verification installation certificates have been received							
		126								
		127	**Air Balance Supplement**							
X	X	128	Balancing performed in accordance to ASHRAE Standard 111-2008, NEBB, TABB or AABC standards							
X	X	129	Perform full fan speed adjustments after exhaust fan adjustments and supply air distribution adjustments have been made							
X	X	130	Perform outside air adjustment after all other balance adjustments are complete							
X	X	131	Perform outside air adjustment at full evaporator fan speed operating point							
	X	132	Perform outside air adjustment at medium fan speed operating point							
	X	133	Perform outside air adjustment at low fan speed operating point							
X	X	134	Verify lobby doors closures have been adjusted for ADA compliance							
X	X	135	Verify lobby doors closure operation during full economizer function of both package units and note result in air balance report							
X	X	136	Verify pressure relief system operation in full economizer operation							
X	X	137	Adjust power exhauster "ON" and "OFF" positions to mitigate door closure issues. Note if no power exhauster is available.							
X	X	138	Provide copy of air balance report to Commissioning Agent							

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JOB NO.: 2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
INSTALLATION START-UP PRE-COMM CHECK LIST

SW2.0

PLOT DATE: 7/12/2021 10:55:44 AM

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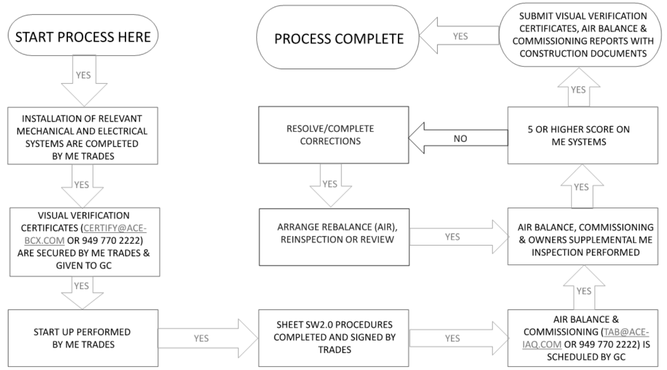
CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT

MECHANICAL – ELECTRICAL (ME) BALANCING & COMMISSIONING SEQUENCE & PROCEDURE



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BROWNSTOWN, MI 48183

ENDEAVOR 2.0

BALANCING AND COMISSIONING SEQUENCE

SW2.1

PLOT DATE: 7/12/2021 10:55:44 AM

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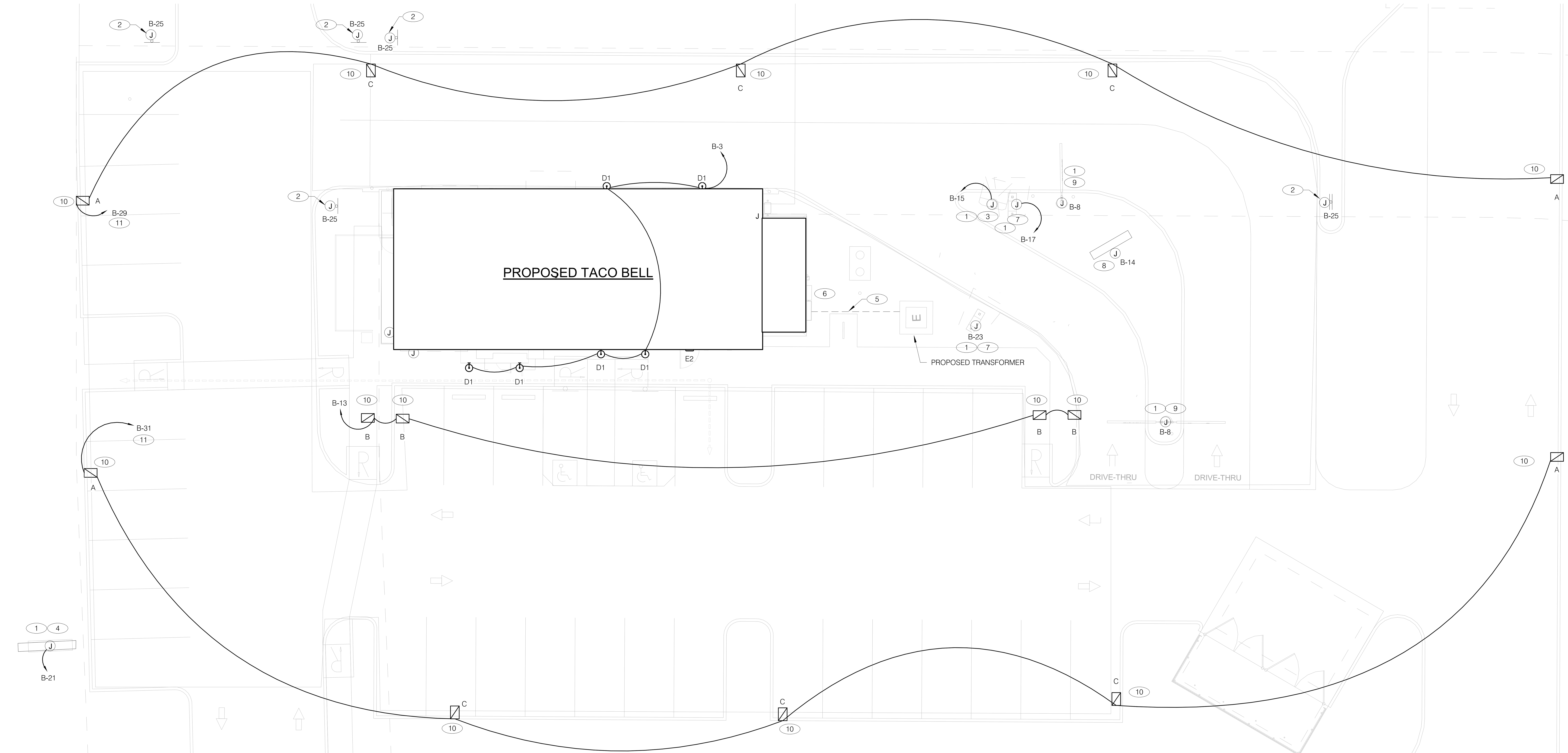

CONDUIT SCHEDULE

DEVICE	POWER	DATA
DIRECTIONAL	(1) 1"	-
SPEAKER POST	(1) 1"	(1) 1"
MENUBOARD	(1) 1"	(2) 1"
PREVIEW BOARD	(1) 1"	(2) 1"

N

1. 3/4" C. - (2) #8, #8 GRD. (TYP. FOR ENTIRE CIRCUIT.)
2. DIRECTIONAL SIGN. REFER TO CONDUIT SCHEDULE FOR CONDUIT SIZE AND QUANTITY. PROVIDE (2) #8AWG., #8 GND. IN 1"C.
3. DIGITAL MENU BOARD. REFER TO CONDUIT SCHEDULE FOR CONDUIT SIZE AND QUANTITY. PROVIDE (2) #8AWG., #8 GND. IN 1"C. REFER TO CIVIL DRAWINGS.
4. LED PYLON SIGN.
5. UNDERGROUND ELECTRIC SERVICE TO UTILITY CO. TRANSFORMER. REFER TO CIVIL SHEETS FOR LOCATION AND ROUTING. VERIFY AND COORDINATE ALL REQUIREMENTS WITH UTILITY CO.
6. PROVIDE SEPARATE 2" TELEPHONE AND CABLE CONDUITS TO CONNECTION ON SITE . REFER TO CIVIL SHEETS FOR LOCATION AND ROUTING. VERIFY AND COORDINATE ALL REQUIREMENTS WITH UTILITY CO.
7. SPEAKER POST AND CANOPY. REFER TO CONDUIT SCHEDULE FOR CONDUIT SIZE AND QUANTITY.
8. PREVIEW BOARD. REFER TO CONDUIT SCHEDULE FOR CONDUIT SIZE AND QUANTITY. PROVIDE (2) #8AWG., #8 GND. IN 1"C.
9. CLEARANCE BAR. REFER TO CIVIL DRAWINGS.
10. LED SITE LIGHTING, REFER TO CIVIL DRAWINGS, TYP. REFER TO DETAIL 12/C1.1.
11. 1" C. - (2) #8, #8 GND.

ELECTRICAL SITE PLAN 1" = 10'-0" **1**

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1	07.12.21	ISSUED FOR BID

CONTRACT DATE: 06.22.21
BUILDING TYPE: END. MED20
PLAN VERSION: MARCH 2021
BRAND DESIGNER: DICKSON
SITE NUMBER: 315089
STORE NUMBER: 456336
PA/PM: SM
DRAWN BY.: AJR
JOB NO.: 2019088.31

TACO BELL

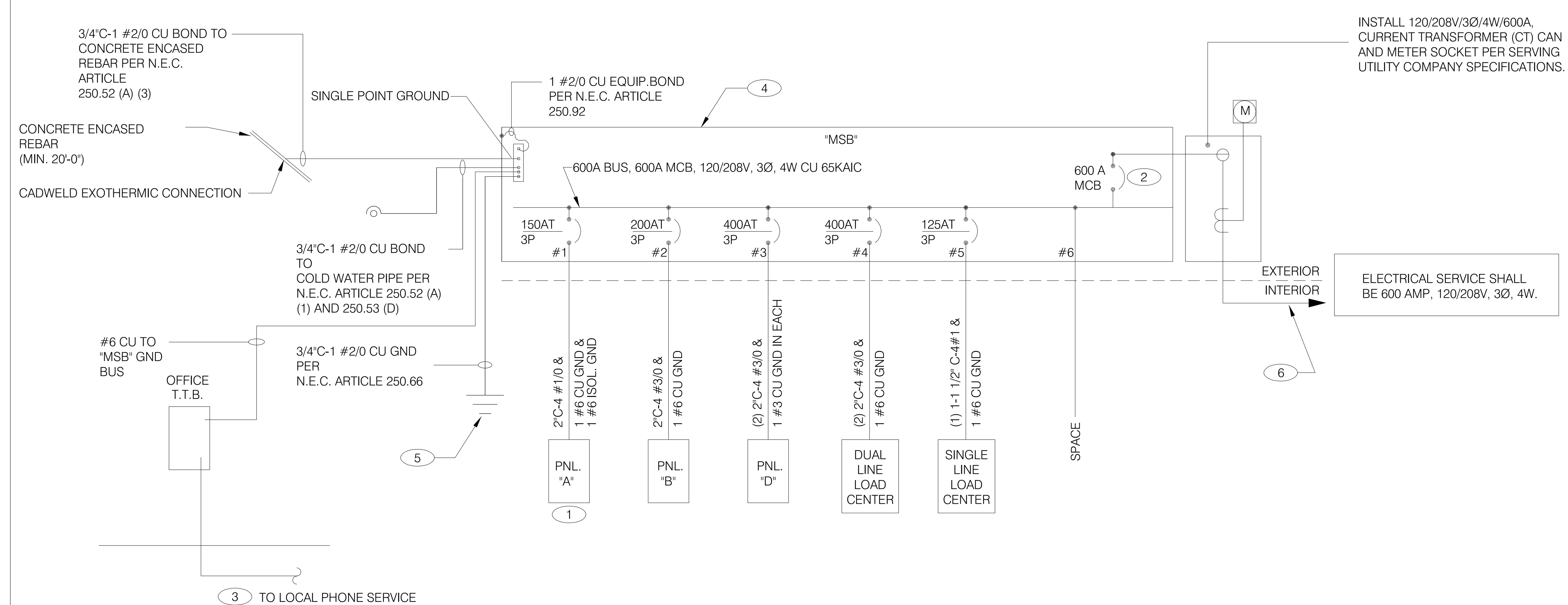
18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
SITE ELECTRICAL PLAN

E1.0

PLOT DATE: 7/12/2021 11:19:58 AM

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
330.572.2100 FAX: 330.572.2102



SINGLE LINE DIAGRAM NTS A

	DATE	REMARKS
	04.21.21	ISSUED FOR PERMIT
1	07.12.21	ISSUED FOR BID

CONTRACT DATE:	06.22.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
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SITE NUMBER:	315089
STORE NUMBER:	456336
PA/PM:	SM
DRAWN BY.:	AJR
JOB NO.:	2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
ELECTRICAL ONE LINE DIAGRAMS AND LEGEND

E2.0

PLOT DATE: 7/12/2021 11:19:59 AM

ELECTRICAL LEGEND NTS D

- 2X4 LED FIXTURE
- 2X4 LED FIXTURE WITH BATTERY PACK
- 1X4 LED FIXTURE
- 1X4 LED FIXTURE WITH BATTERY PACK
- DOWNLIGHT FIXTURE
- SUSPENDED DOWNLIGHT FIXTURE
- PENDANT MOUNTED LIGHT FIXTURE
- TRACK MOUNTED PENDANT LIGHT FIXTURE
- COOLER FIXTURE
- EXIT SIGN (WALL MOUNTED)
- EXIT SIGN (CEILING MOUNTED)
- SECURITY STROBE
- NL NIGHTLIGHT
- S CEILING MOUNTED SPEAKER
- S WALL MOUNTED SPEAKER
- J JUNCTION BOX
- J WALL MOUNTED JUNCTION BOX
- TELEPHONE OUTLET
- DEDICATED GROUNDED OUTLET
- DUPLEX GROUNDED OUTLET
- DOUBLE DUPLEX GROUNDED OUTLET
- GROUND FAULT DUPLEX OUTLET
- GROUND FAULT DUPLEX W/ BOTT. HALF SWITCHED
- GROUND FAULT DEDICATED OUTLET
- CEILING DUPLEX OUTLET
- DUPLEX ISOLATED GROUND OUTLET
- DOUBLE DUPLEX ISOLATED GROUND OUTLET
- DEDICATED ISOLATED GROUND
- SPECIAL PURPOSE OUTLET
- CEILING SPECIAL PURPOSE OUTLET
- ELECTRICAL PANEL. SEE SHEET E2.1 FOR PANEL SCHED.
- HOLD UP EMERGENCY BUTTON
- ELECTRICAL MOTOR
- SD DUCT MOUNTED SMOKE DETECTOR
- C CONNECTION TO EQUIPMENT
- FUSIBLE DISCONNECT SWITCH WITH STARTER
- FUSIBLE DISCONNECT SWITCH
- NON-FUSIBLE DISCONNECT SWITCH
- PC PHOTOCELL
- RS RAIN SENSOR
- FLUORESCENT WALL MOUNT FIXTURE
- EMERGENCY LIGHT
- S_{OS} SINGLE POLE, SINGLE THROW TOGGLE SWITCH
- S_P SINGLE POLE, SINGLE THROW TOGGLE SWITCH W/ PILOT LIGHT
- S_{OS} WALL MOUNTED OCCUPANCY SENSOR
- R RELAY
- CONDUIT RUN, UNDERGROUND
- SMOKE DETECTOR
- EXTERIOR WALL FIXTURE
- EXTERIOR DECORATIVE WALL FIXTURE
- EXTERIOR DECORATIVE WALL FIXTURE
- WPG WEATHERPROOF GROUND FAULT

ONE LINE DIAGRAM GENERAL NOTES NTS C

1. THERE SHALL BE U.L. LISTED SERIES RATING BETWEEN CKT. BREAKERS LOCATED AT THE DISTRIBUTION PANEL AND THE DOWNSTREAM 10k A.I.C. RATED CIRCUIT BREAKERS AT PANELS "A", "B" DUAL-LINE EQUIPMENT CABINET BASED ON THE MAXIMUM FAULT CURRENT AS DETERMINED AT THE SERVICE ENTRANCE AND DOWNSTREAM 22K A.I.C. RATED CIRCUIT BREAKERS AT PANEL "D."
2. SEE SCOPE OF WORK FOR DETAILS REGARDING OWNER SUPPLIED AND/OR INSTALLED PRODUCTS. GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL OTHER ASPECTS OF THE PROJECT
3. IF UTILITY COMPANY PROPOSES A SERVICE DIFFERENT FROM THAT ILLUSTRATED, CONTACT THE CONSTRUCTION ENGINEER FOR A DECISION BEFORE PROCEEDING. COORDINATE AVAILABLE SHORT CIRCUIT CURRENT W/ LOCAL UTILITY AND PROVIDE CIRCUIT BREAKERS W/ SUFFICIENT INTERRUPTING CAPACITY.
4. COORDINATE CT METERING COMPARTMENT SIZE WITH LOCAL UTILITY COMPANY, THE LOCAL ELECTRICAL INSPECTOR AND THE NATIONAL ELECTRICAL CODE TO MEET ALL REQUIREMENTS BEFORE PURCHASE AND INSTALLATION. NEW METER BY LOCAL UTILITY COMPANY.
5. ALL WIRING SHOWN SHALL BE COPPER TYPE "THHN/THWN" EXCEPT FEEDERS FROM UTILITY TRANSFORMER TO SWITCH BOARD MAY BE ALUMINUM.
6. ARMOR CABLE ACCEPTABLE FOR THE LAST 6'-0" FROM A JUNCTION BOX TO LIGHT FIXTURES. ARMOR CABLE IS NOT ALLOWED FOR NON-ACCESSIBLE FLOORS, WALLS AND CEILINGS.

ONE LINE DIAGRAM KEY NOTES NTS B

1. WIRE ISOLATED GROUND TO ISOLATION GROUND BUS IN PANEL AND LAND ISOLATED GROUND TO SINGLE POINT GROUND. "DO NOT COMBINE COMMON GND TO ISOLATED GROUND". REF DETAIL 6/E3.1.
2. PROVIDE 100% RATED MAIN CIRCUIT BREAKER IN MDP.
3. PROVIDE 2" CONDUIT STUBBED INTO BULDING FROM LATERAL POLE FOR TELEPHONE.
4. VERIFY AVAILABLE FAULT CURRENT AT SERVICE ENTRANCE WITH THE UTILITY COMPANY. IF THE AIC RATING AS INDICATED IS NOT SUFFICIENT, CONTACT PROJECT MANAGER AND ENGINEER PRIOR TO BID/PRICING TO UPDATE EQUIPMENT RATING.
5. (3) 5/8" DIA. x 10'-0" COPPER CLAD GROUND RODS. INSTALL 10'-0" APART AND CONNECT GROUND SYSTEM PER N.E.C. ARTICLE 250
6. PROVIDE UNDERGROUND SERVICE LATERAL TO UTILITY TRANSFORMER PER SERVING UTILITY COMPANY SPECIFICATIONS. 4#350 KCMIL IN EACH OF (2) 3"C. TO PAD MOUNT TRANSFORMER. GC/ELECT. CONTRACTOR SHALL COORDINATE SERVICE POLES PER LOCAL UTILITY CODE. IF ALUMINUM CONDUCTORS ARE USED PROVIDE 4#500 KCMIL IN EACH (2) 3-1/3"C.

CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT

Switchboard: MSB

Location:		Volts:	120/208 Wye	A.I.C. Rating:	65 KAIC
Supply From:		Phases:	3	Mains Type:	MCB
Mounting:	SURFACE	Wires:	4	Mains Rating:	600 A
Enclosure:	NEMA-3R			MCB Rating:	600 A

Notes: 100% RATED CIRCUIT BREAKER

CKT	Circuit Description	WIRE SIZE	# of Poles	Frame Size	Trip Rating	Load	Remarks
1	PANELBOARD A	1/0	3	225 A	150 A	28600 VA	--
2	PANELBOARD B	3/0	3	225 A	200 A	18785 VA	--
3	PANELBOARD D	3/0	3	400 A	400 A	75037 VA	--
4	DUAL COOK LINE PANEL	3/0	3	400 A	400 A	52000 VA	
5	SINGLE COOK LINE	1	3	225 A	125 A	28800 VA	
6	Space		--	--	--	0 VA	--
					Total Conn. Load:	203222 VA	
					Total Amps:	564 A	

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	16900 VA	100.00%	16900 VA		
Kitchen	11958 VA	65.00%	7773 VA	Total Conn. Load:	203222 VA
Lighting	9499 VA	125.00%	11874 VA	Total Est. Demand:	201411 VA
Other	26750 VA	100.00%	26750 VA	Total Conn. Current:	564 A
Power	113712 VA	100.00%	113712 VA	Total Est. Demand Current:	559 A
Receptacle	6524 VA	100.00%	6524 VA		
Refrigeration	17379 VA	100.00%	17379 VA		
Spare	500 VA	100.00%	500 VA		

Notes:

Panel: B

Location:		Volts:	120/208 Wye	A.I.C. Rating:	SERIES
Supply From:	MSB	Phases:	3	Mains Type:	M.L.O.
Mounting:	Recessed	Wires:	4	Mains Rating:	200 A
Enclosure:	Type 1			MCB Rating:	N/A

Notes:

Key Note	NOTES	CKT	Load Name	Trip	Poles	A		B		C		Poles	Trip	Load Name	CKT	NOTES	Key Note
		1	DINING LTS	20 A	1	508 VA	1500...					1	20 A	EXTERIOR SIGNAGE	2		2
2		3	EXTERIOR SCONCE LTS.	20 A	1			360 VA	216 VA			1	20 A	UTILITY RECEPT	4		
		5	KITCHEN/ BOH/ RESTROOM LTS	20 A	1					1252...	91 VA	1	20 A	EMERGENCY LTS INT/EXT, EXIT SIGNS	6		
		7	LTG - SHOW WINDOW	20 A	1	600 VA	1000...					1	20 A	CLEARANCE BARS	8		
		9	LTG - SHOW WINDOW	20 A	1			600 VA	500 VA			1	20 A	TBCCB	10		
		11	LTG - COOLER & FREEZER	20 A	1					800 VA	500 VA	1	20 A	E1AN TBANS	12		2
2		13	LTG - SITE LIGHITNG	20 A	1	748 VA	500 VA					1	20 A	PREVIEW BOARD	14		2
2		15	DIGITAL MENU BOARD	20 A	1			360 VA	0 VA			1	20 A	Spare	16		
2		17	SPEAKER POST	20 A	1					500 VA	0 VA	1	20 A	Spare	18		
2		19	CANOPY LIGHTING	20 A	1	200 VA	0 VA					--	--	Space	20		
2		21	LTG - PYLON SIGN	20 A	1			500 VA	0 VA			--	--	Space	22		
2		23	SPEAKER POST	20 A	1					500 VA	0 VA	--	--	Space	24		
2		25	DIRECTIONAL SIGNS	20 A	1	900 VA	0 VA					1	20 A	Spare	26		
		27	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	28		
2		29	LTG - SITE LIGHTING	20 A	1					935 VA	0 VA	1	20 A	Spare	30		
2		31	LTG - SITE LIGHTING	20 A	1	935 VA	0 VA					1	20 A	Spare	32		
		33	EF-1	20 A	1			1120...	1500...			1	20 A	PURPLE WALLWASH LIGHTS	34		
		35	EF-2	20 A	1					660 VA	1500...	1	20 A	PURPLE WALLWASH LIGHTS	36		
		37	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	38		
		39	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	40		
		41	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	42		
					Total Load:	6891 VA		5156 VA		6738 VA							
					Total Amps:	59 A		43 A		58 A							

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	830 VA	100.00%	830 VA		
Power	4760 VA	100.00%	4760 VA	Total Conn. Load:	18785 VA
Lighting	9499 VA	125.00%	11874 VA	Total Est. Demand:	21160 VA
HVAC	1780 VA	100.00%	1780 VA	Total Conn. Current:	52 A
Receptacle	1416 VA	100.00%	1416 VA	Total Est. Demand Current:	59 A

Notes:

CIRCUIT BREAKER/MISC. ACC. ABBREVIATIONS:

GF - GROUND FAULT CIRCUIT INTERRUPTER
AF - ARC-FAULT CIRCUIT INTERRUPTER
ST - SHUNT TRIP
HL-ON - HANDLE-LOCK ON DEVICE
HL-OFF - HANDLE-LOCK OFF DEVICE
EPD - EQUIPMENT PROTECTION DEVICE
IG - ISOLATED GROUND

Panel: A

Location:		Volts:	120/208 Wye	A.I.C. Rating:	SERIES
Supply From:	MSB	Phases:	3	Mains Type:	M.L.O.
Mounting:	Recessed	Wires:	4	Mains Rating:	150 A
Enclosure:	Type 1			MCB Rating:	N/A

Notes:
PROVIDE ISOLATED GROUND BAR

Key Note	NOTES	CKT	Load Name	Trip	Poles	A		B		C		Poles	Trip	Load Name	CKT	NOTES	Key Note
1		1	P-417 TIMER	20 A	1	180 VA	300 VA					1	20 A	F-040 OFFICE COMPUTER	2	IG	
	GF	3	S-546 ICED TEA	20 A	1			480 VA	720 VA			1	20 A	DRIVE THRU POS/ORDER ENTRY 1	4		
1		5	OFFICE QUAD RECEPTACLE	20 A	1					180 VA	480 VA	1	20 A	S-546 BREWER	6	GF	
		7	J-BOX SECURITY SYSTEM / DVR	20 A	1	1180...	180 VA					1	20 A	U-011	8		
		9	S-026 HEAT CABINET	20 A	1			1800...	540 VA			1	20 A	RECEPTACLES - OFFICE	10		
	IG	11	U-052 SECURITY SYSTEM	20 A	1					860 VA	648 VA	1	20 A	S-204 D/T TIMING SYSTEM	12		
		13	F-090	20 A	1	1540...	1140...					1	20 A	R-009 FULL HEIGHT FREEZER	14	GF	
	GF	15	BEVERAGE DISPENSER D/T	15 A	1			1428...	2013...			2	30 A	P-452 HOT WATER SYSTEM	16		
		17	P-452 HOT WATER SYSTEM	20 A	2					2013...	2013...				18		
		19				2013...	240 VA					1	20 A	C-107 RETHERMALIZER	20	GF	3
		21	SECURITY CAMERA POWER	20 A	1			600 VA	0 VA			1	0 A	SHUNT TRIP SPACE	22	ST	
3	GF	23	C-026 FRYER	20 A	1					972 VA	100 VA	1	20 A	C-400 COOK TIMER	24		
	ST	25	SHUNT TRIP SPACE	0 A	1	0 VA	500 VA					1	20 A	INTERIOR DIGITAL MENUBOARD	26		
		27	INTERIOR DIGITAL MENUBOARD	20 A	1			500 VA	500 VA			1	20 A	OCB SWITCH	28		
		29	DINING POS ENTRY 2	20 A	1					680 VA	1800...	1	20 A	L-045 WARMER	30	GF	
	IG	31	DRIVE THRU MONITORS	20 A	1	180 VA	360 VA					1	20 A	SAFE W/TOUCHSCREEN CONTROLS	32		
		33	RECIRCULATION PUMP	20 A	1			200 VA	1180...			1	20 A	DINING POS ENTRY 1	34	IG	
	IG	35	KIOSK POWER - FRONT COUNTER	20 A	1					200 VA	700 VA	1	20 A	AUTO FAUCET POWER	36		
		37	MAINTENANCE RECEPTACLE	20 A	1	180 VA	0 VA					1	20 A	Spare	38		
		39	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	40		
		41	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	42		
					Total Load:	7993 VA		9961 VA		10646 VA							
					Total Amps:	67 A		86 A		91 A							

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Power	23224 VA	100.00%	23224 VA		
Receptacle	2808 VA	100.00%	2808 VA	Total Conn. Load:	28600 VA
				Total Est. Demand:	28600 VA
				Total Conn. Current:	79 A
				Total Est. Demand Current:	79 A

Notes:

CIRCUIT BREAKER/MISC. ACC. ABBREVIATIONS:

GF - GROUND FAULT CIRCUIT INTERRUPTER
AF - ARC-FAULT CIRCUIT INTERRUPTER
ST - SHUNT TRIP
HL-ON - HANDLE-LOCK ON DEVICE
HL-OFF - HANDLE-LOCK OFF DEVICE
EPD - EQUIPMENT PROTECTION DEVICE
IG - ISOLATED GROUND

NOTE

PARKING LOT LIGHTING AND SIGNAGE SHALL PASS THROUGH TBCCB

NOTE TO CONTRACTORS

ALL CONTRACTORS PRIOR TO BID SUBMISSION PROCESS SHALL VISIT PROPOSED WORK SITE AND FIELD VERIFY ALL EXISTING CONDITIONS. ANY CONDITION THAT DIFFERS FROM THAT SHOWN ON THESE PLANS SHALL BE REPORTED TO THE TENANT'S ARCHITECT/ENGINEER SO THAT NEW AND REVISED BID DRAWINGS OR INFORMATION MAY BE ISSUED. MODIFICATION TO THE SCOPE OF WORK WHICH RESULTS FROM THE CONTRACTORS NEGLECT TO VISIT THE SITE PRIOR TO SUBMITTING BID, SHALL BE THE CONTRACTORS SOLE RESPONSIBILITY.

GENERAL NOTE:

FOR PARKING LOT (SITE) LIGHTS AND OUTSIDE SIGNS: PROVIDE (5) 1"C FROM PANEL "B" AND STUB OUT 10'-0" AWAY FROM THE BUILDING. VERIFY EXACT LOCATION OF STUB PRIOR TO ROUGH-IN. LOADS MAY VARY WITH LOCATION. VERIFY OUTDOOR VOLTAGE DROP FOR ALL PARKING LIGHTING (SITE) CIRCUITS.

KEY NOTES:

1. PROVIDE LOCK-ON BREAKER.
2. CIRCUITS TO BE WIRED THROUGH COMBINED CONTROL BOX CONTACTOR. SEE SHEETS 6.0 AND 6.1.
3. PROVIDE GFI BREAKER. CIRCUIT TO BE WIRED THROUGH TBANS. SEE SHEETS E7.0 AND E7.1.

GPD GROUP
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TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
ELECTRICAL SCHEDULES

E2.1

PLOT DATE: 7/12/2021 11:20:00 AM

GENERAL NOTES & KEY NOTES - ELECTRICAL SCHEDULES NTS **A**

CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT

COMMERCIAL KITCHEN EQUIPMENT SCHEDULE

EQUIPMENT IDENTIFICATION			EQUIPMENT ELECTRICAL CHARACTERISTICS					EQUIPMENT CIRCUIT				EQUIPMENT DISCONNET					
TAG	TYPE	EQUIPMENT NAME	V/Ph - WATTS	FLA/RLA	MCA	TIME DELAY FUSE	INVERSE-TIME BREAKER	SETS	BRANCH CIRCUIT	WIRE TYPE	CONDUIT TYPE	TYPE	SIZE	NEMA	SUPPLIED BY	INSTALLED BY	NOTES
B-223	O	B-223 WATER HEATER IGNITION	120 V/1-744 VA	6.2	7.2	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
B-381	O	CO2 CARBON DIOXIDE SENSOR / WARNING	120 V/1-156 VA	1.0	1.3	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
C-026	KR	FRYER	120 V/1-972 VA	8.1	9.8	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	1,2
C-107	O	RETHERMALIZER	120 V/1-240 VA	2.0	2.5	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	1,2
C-400	O	COOK TIMER	120 V/1-100 VA	0.3	0.4	15	15	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	15	5-15	ES	ES	2
DCL	O	DUAL COOK LINE	208 V/3-52000 VA	145	145	200	200	1	4#3/0 W/#6 G IN 2"C	CU	ST	DIRECT	200	J-BOX	ES	ES	8
E1AN	O	TBANS SHUNT PANEL	120 V/1-500 VA	6.3	7.9	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	DIRECT	20	1	ES	ES	8
F-040	O	OFFICE COMPUTER	120 V/1-300 VA	2.5	3.1	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
F-050	O	CREDIT CARD SATELLITE ROUTER JUNCTION	120 V/1-500 VA	4.0	5.0	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
F-090	O	UPS	120 V/1-500 VA	4.0	5.0	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
F-174	O	SAFE W/TOUCHSCREEN CONTROLS	120 V/1-360 VA	3.0	3.8	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
IR-01	O	IRRIGATION TIMER	120 V/1-500 VA	2.0	3.0	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	DIRECT	20	1	ES	ES	8
L-043	O	INTERIOR ROTATING MENU BOARD & REMOTE ALARM LT	120 V/1-500 VA	9.0	11.8	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
L-044	KR	WARMER R TO L	120 V/1-1800 VA	16.0	16.0	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
L-045	KR	WARMER R TO L	120 V/1-1800 VA	16.0	16.0	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
N-043	KR	POWER SOAK	208 V/2-4740 VA	11.4	14.25	15	15	1	#12 W/#12 G IN 3/4"C	CU	ST	DIRECT	20	J-BOX	ES	ES	8
N-044	O	S-204 D/T TIMING SYSTEM	120 V/1-216 VA	7.2	9.0	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
P-417	O	TIMER - 8 CHANNEL	120 V/1-180 VA	0.5	0.7	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
P-452	KR	HOT WATER SYSTEM	208 V/2-4026 VA	19.6	24.5	30	30	1	#10 W/#10 G IN 3/4"C	CU	ST	C&P	30	6-30	ES	ES	2
R-009	KM	R-009 FULL HEIGHT FREEZER	120 V/1-1140 VA	9.5	11.9	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
S-204	O	S-204 D/T TIMING SYSTEM	120 V/1-216 VA	7.2	9.0	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
S-284	KM	BEVERAGE DISPENSER S/S	120 V/1-1116 VA	9.3	12	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
S-285	KM	S-284 BEVERAGE DISPENSER (D/T)	120 V/1-1428 VA	11.9	14.9	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
S-289	O	CREDIT CARD SATELLITE ROUTER JUNCTION	120 V/1-200 VA	4.0	5.0	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
S-513	KM	CARBONATOR	120 V/1-138 VA	2.3	2.9	15	15	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	15	5-15	ES	ES	2
S-544	O	ICED TEA	120 V/1-240 VA	2.0	2.5	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
S-546	O	BREWER	120 V/1-480 VA	4.0	5.0	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
S-570	KM	CARBONATOR	120 V/1-138 VA	2.3	2.9	15	15	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	15	5-15	ES	ES	2
S-739	KM	S-739 FROZEN BEVERAGE DISPENSER	208 V/2-3120 VA	31.6	39.5	30	30	1	#10 W/#10 G IN 3/4"C	CU	ST	C&P	30	6-30	ES	ES	2
SCL	O	SINGLE COOK LINE (OPTIONAL)	208 V/3-28800 VA	80	80	125	125	1	4#1 W/#6 G IN 2"C	CU	ST	DIRECT	200	J-BOX	ES	ES	8
U-011	O	BASE STATION - D/T COMM. SYSTEM	120 V/1-180 VA	2	.24	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
U-050	O	CREDIT CARD SATELLITE ROUTER JUNCTION		1.5	1.9	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
U-061	O	RECEIPT PRINTER		1.5	1.9	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
U-070	O	CREDIT CARD READER	120 V/1-180 VA	1.5	1.9	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	C&P	20	5-20	ES	ES	2
W-XX1	KM	W-075-2 WALK-IN FREEZER	208 V/3-0 VA	11.6	14.5	20	20	1	#12 W/#12 G IN 3/4"C	CU	ST	DIRECT	20	J-BOX	ES	ES	2

TYPE: H-HEATING, C-COOLING, KR-KITCHEN RESISTIVE, KM-KITCHEN MOTOR, WH-WATER HEATER, OM-OTHER MOTORS, O-OTHER
DISCONNECT TYPE: HP-HP RATED SWITCH, C&P-CORD & PLUG, LC&P-LOCKING CORD & PLUG, F-FUSED, NF-NON-FUSED, MCCB-MOLDED CASE CIRCUIT BREAKER
SUPPLIED/INSTALLED BY: EC-ELECTRICAL CONTRACTOR, HC-HVAC CONTRACTOR, PC-PLUMBING CONTRACTOR, ES-EQUIPMENT SUPPLIER
VOLTAGE DROP CALCULATION FORMULAS COURTESY OF COOPER BUSSMANN.

NOTES: 1 - REQUIRES SHUNT TRIP PROTECTION
2 - CORD & PLUG SUPPLIED AND INSTALLED BY ES. EC SHALL PROVIDE RECEPTACLE.
3 - CORD & PLUG SUPPLIED AND INSTALLED BY ES. RECEPTACLE SUPPLIED BY ES AND INSTALLED BY EC.
4 - CORD, PLUG & RECEPTACLE SUPPLIED AND INSTALLED BY EC.
5 - SINGLE PHASE, THREE WIRE EQUIPMENT. PROVIDE NEUTRAL CONDUCTOR AND GROUND.
6 - THREE PHASE, FOUR WIRE EQUIPMENT. PROVIDE NEUTRAL CONDUCTOR AND GROUND.
7 - OUTLETS SUPPLIED AND INSTALLED BY ES. CONDUIT & WIRING PROVIDED BY EC.
8 - HARDWIRED CONNECTION BY E.C.

REFER TO ARCHITECTURAL EQUIPMENT SCHEDULE FOR ALL KITCHEN EQUIPMENT AND FINAL COORDINATION

Panel: D

Location:
Supply From: MSB
Mounting: Recessed
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: SERIES
Mains Type: M.L.O.
Mains Rating: 400 A
MCB Rating: N/A

Notes:

NOTES	CKT	Load Name	Trip	Poles	A		B		C		Poles	Trip	Load Name	CKT	NOTES
GF	1	CARBONATOR	15 A	1	276 VA	0 VA					1	20 A	Spare	2	
GF	3	B-223 WATER HEATER IGNITION	20 A	1			744 VA	1000...			1	20 A	ALTERNATE PAYMENT ROUTER BOX...	4	
	5	OC SWITCHED RECEPTACLE	20 A	1					180 VA	680 VA	1	20 A	IRRIGATION TIMER AND RECEPTACLE	6	GF
GF	7	S-540 PEPSI BOOSTER TANK	20 A	1	564 VA	500 VA					1	20 A	MUSIC SYSTEM J-BOX AND...	8	
	9	RECEPTACLES - ROOF	20 A	1			540 VA	1560...			2	30 A	S-739 FROZEN BEV. DISP.	10	GF
	11	CONVIENCE RECEPTACLES	20 A	1					360 VA	1560...				12	
	13	GENERAL PURPOSE RECEPTACLES	20 A	1	1440...	1600...					2	20 A	ICE MAKER CONDENSER D/T	14	
GF	15	DRINK FOUNTAIN - S-284 AND R-XX1	20 A	1			1254...	1600...						16	
	17	ICE MAKER CONDENSER	20 A	2					1600...	1600...	2	20 A	ICE MAKER CONDENSER	18	
	19				1600...	1600...								20	
GF	21	S-550 BAG IN BOX RACK	20 A	1			564 VA	2370...			2	20 A	POWER SOAK	22	GF
	23	S-381 AMPROBE CO2 MONITOR	20 A	1					156 VA	2370...				24	
	25	RTU-1	50 A	3	5040...	500 VA					1	20 A	MUSIC SYSTEM (MUZAK)	26	
	27						5040...	1200...			3	15 A	WALK-IN COOLER	28	
	29								5040...	1200...				30	
	31	RTU-2	80 A	3	8640...	1200...								32	
	33						8640...	1393...			3	20 A	WALK-IN FREEZER	34	
	35								8640...	1393...				36	
	37	Spare	20 A	1	0 VA	1393...								38	
	39	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	40	
	41	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	42	
				Total Load:	24353 VA		25905 VA		24779 VA						
				Total Amps:	203 A		216 A		207 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	25920 VA	100.00%	25920 VA		
Power	4928 VA	100.00%	4928 VA	**Total Conn. Load:**	75037 VA
HVAC	15120 VA	100.00%	15120 VA	**Total Est. Demand:**	71751 VA
Receptacle	2300 VA	100.00%	2300 VA	**Total Conn. Current:**	208 A
				Total Est. Demand Current:	199 A

Notes:

CIRCUIT BREAKER/MISC. ACC. ABBREVIATIONS:

GF - GROUND FAULT CIRCUIT INTERRUPTER
AF - ARC-FAULT CIRCUIT INTERRUPTER
ST - SHUNT TRIP
HL-ON - HANDLE-LOCK ON DEVICE
HL-OFF - HANDLE-LOCK OFF DEVICE
EPD - EQUIPMENT PROTECTION DEVICE
IG - ISOLATED GROUND

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CONTRACT DATE: 06.22.21
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PLAN VERSION: MARCH 2021
BRAND DESIGNER: DICKSON
SITE NUMBER: 315089
STORE NUMBER: 456336
PA/PM: SM
DRAWN BY.: AJR
JOB NO.: 2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
ELECTRICAL SCHEDULES

E2.2

PLOT DATE: 7/12/2021 11:20:02 AM

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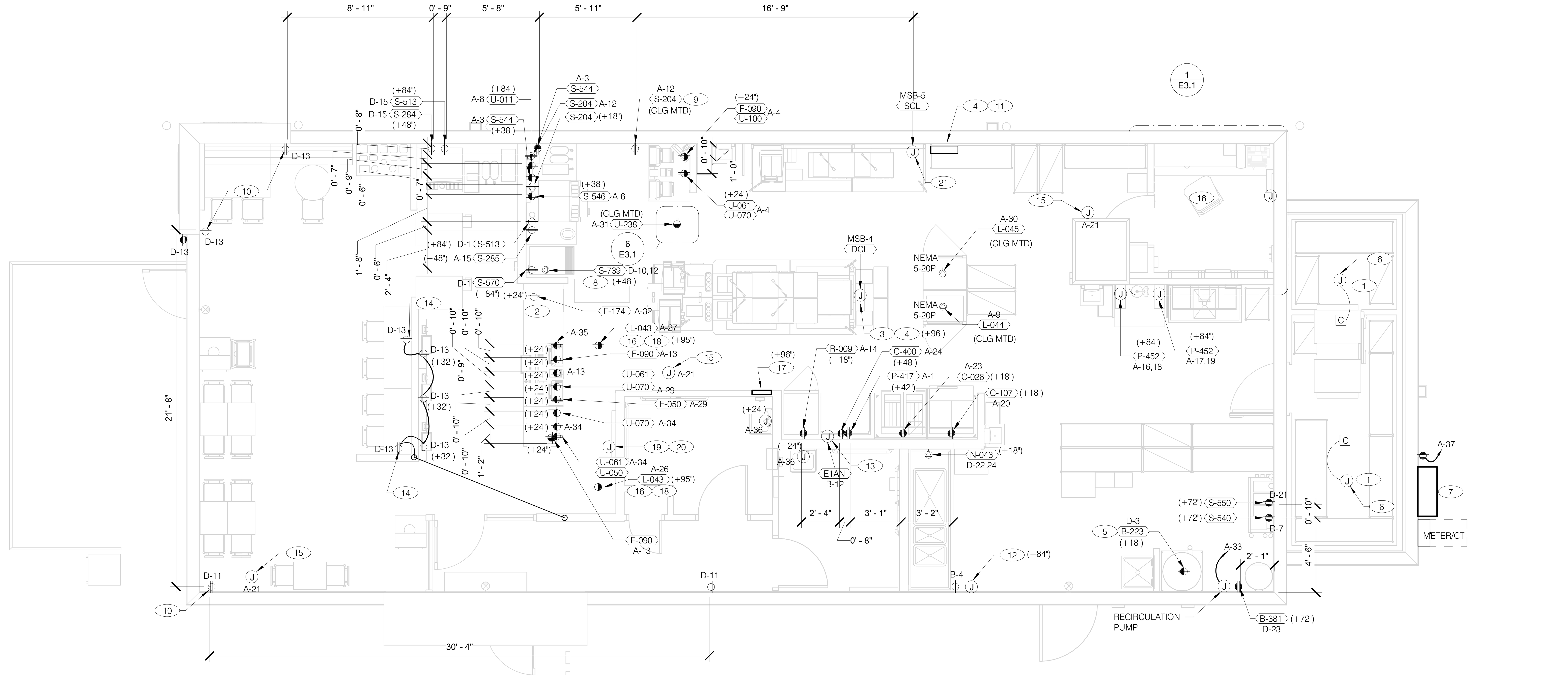

RECEPTACLE NOTE:

ALL RECEPTACLES IN PUBLIC AREAS SHALL BE TAMPER RESISTANT.

NOTE

5mA GFCI BREAKERS MUST BE USED WHERE OUTLETS REQUIREING GFCI PROTECTION ARE NOT ACCESSIBLE FOR COMPLIANCE WITH NEC 210.8. WHERE GFCI PROTECTION AND SHUNT TRIP IS REQUIRED, THE CIRCUIT SHALL HAVE A GFCI BREAKER AND PASS THROUGH THE TBANS PANEL.REFER TO DETAILS IN E7.0 AND E7.1.

N

POWER PLAN 1/4" = 1'-0" A

GENERAL NOTES - ELECTRICAL POWER PLAN NTS C

A. ALL DIMENSIONS TO J-BOXES ARE FROM FACE OF STUD TO CENTER OF BOX, U.O.N.

B. ALL CONDUIT DROPS ARE INSIDE WALLS U.O.N. SEE ARCH. DWGS FOR WALL DIMS.

C. ALL J-BOX CIRCUITS, CONDUITS, FIXTURES, ETC. SHALL BE AS INDICATED ON THE ELECT. DWGS AND SPECS.

D. CONTRACTOR SHALL VERIFY UNDERGROUND CONDUIT LOCATIONS PRIOR TO POURING SLAB.

E. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THIS DATA ON THE LOCATION OF ELECT. ROUGH-INS WITH INFO PROVIDED ON THE ARCH. AND STRUCT. DWGS AND THE EQUIPMENT ACTUALLY SUPPLIED, AND TO CONFIRM THE CORRECTNESS OF ANY DIMENSIONS HEREIN.

F. LOCATIONS OF ALL OUTLETS MAY BE RELOCATED TO NEAREST STUD. DO NOT CUT INTO STUDS.

G. FOR EXACT LOCATIONS OF KITCHEN & MECHANICAL EQUIPMENT AND POINTS OF CONNECTION, REFER TO KITCHEN & MECHANICAL EQUIPMENT DRAWINGS AND MANUFACTURER'S SHOP DRAWINGS.

H. ALL CIRCUIT FEEDERS AND DISCONNECTS SHALL BE SIZED BY NEC.

I. CONTRACTOR SHALL VERIFY CIRCUIT BREAKER, DISCONNECT SWITCH, STARTER AND FUSE SIZES WITH SELECTED EQUIPMENT MANUFACTURER'S SHOP DRAWINGS PRIOR TO PLACING ORDER AND PROVIDE EVERYTHING AS REQUIRED.

J. ELECTRICAL EQUIPMENT ENCLOSURES SHALL BE NEMA-1 FOR INTERIOR AND NEMA 3R FOR EXTERIOR. IN COASTAL REGIONS THE STANDARD FOR OUTSIDE SHALL BE NEMA-4X.

K. PER SECTION 210.8 NEC 2017, ALL SINGLE PHASE RECEPTACLE RATED 150 VOLTS TO GROUND OR LESS, 50 AMPERS OR LESS AND THREE-PHASE RECEPTACLES RATED 150 VOLTS TO GOUND OR LESS, 100 AMPERERS OR LESS.

L. DO NOT MEASURE/LOCATE OUTLETS ON DRAWINGS. USE DIMENSIONS PROVIDED.

M. CONDUIT MAY RUN UNDER SLAB AT G.C.'S DISCRETION.

N. E.C. SHALL PROVIDE A PREPRINTED SELF-ADHESIVE LABEL ON ALL POS RECEPTACLES STATING "POS USE ONLY".

O. PROVIDE ESCUTCHEON PLATES AND SEALANT AT ALL UTILITY PENETRATIONS INTO WALLS, CEILING, AND FLOORS. DO NOT USE CAULKS OR EXPANSION FOAM FOR SEALANT.

P. ARMOR CABLE (BX) ALLOWED WHERE ACCEPTABLE BY CODE. ALL WIRE SHALL BE CONCEALED O.N.U.

Q. FOR ALL CIRCUITS NOT SHOWN ON EQUIPMENT SCHEDULE, CONTRACTOR SHALL PROVIDE CONDUCTOR AND CONDUIT SIZES AS SHOWN ON BRANCH CIRCUIT WIRING SCHEDULE SHOWN ON E2.2. IF SIZES DIFFER FROM N.E.C., THE MORE STRINGENT (LARGER) SIZE SHALL BE PROVIDED.

R. OUTLETS WITHIN FOH TO BE AT 18" AFF FOR ADA ACCESS.

S. CONDUITS NEAR DRIVE THRU WINDOW AREA TO BE ROUTED FROM ABOVE CEILING OR STUBBED UP FROM UNDER SLAB SO AS TO NOT INTERFERE WITH WINDOW FRAMING.

KEY NOTES - ELECTRICAL POWER PLAN NTS B

1. REFER TO ROOF PLAN.
2. INSTALL IN CONDUIT RUNNING ON SURFACE OF KITCHEN SIDE OF CABINETRY REAR WALL.
3. CONNECT PRODUCTION LINE CIRCUIT BREAKER PANEL VIA UTILITY CHASE IN CEILING TO A 3 POLE, 200 AMP CIRCUIT BREAKER IN MAIN SWITCHBOARD. SEE SHEET E2.0. VERIFY ALL REQUIREMENTS WITH ACTUAL EQUIPMENT SPECIFIED. THE MANUFACTURER WILL FULLY PRE-WIRE THE COMPLETE MAPS LINE AT THE FACTORY. THE UNITS WILL THEN BE PULLED APART FOR SHIPPING PURPOSES. ALL CONNECTION POINTS WILL BE MARKED. THE CONDUIT RUNS WILL BE COILED UP FOR FIELD INSTALLATION. SOME ELECTRICAL COMPONENTS MAY BE REMOVED FOR EASE OF DISASSEMBLING THE LINE-UP. THE ELECTRICAL CONTRACTOR WILL BE FULLY RESPONSIBLE FOR MAKING THE PROPER FIELD CONNECTIONS FROM THE ROUGH-IN LOCATION TO THE MANUFACTURER PROVIDED BREAKER PANEL BOX. IN ADDITION, THE ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR ANY SPLICE POINTS AND/OR JUNCTION BOXES THAT NEED TO BE RECONNECTED. SOME ELECTRICAL COMPONENT ASSEMBLY MAY ALSO BE REQUIRED.
4. EQUIPMENT CABINET.
5. LOCATED INSIDE SHELL OF HEATER.
6. INSTALL CONTROL CABLE FROM FREEZER/COOLER FAN COIL TO ROOF MOUNTED CONDENSOR.
7. LOCATE SWITCHGEAR PER GUIDELINES ON SHEET A4.1.
8. PROVIDE BOOST TRANSFORMER (208V, 1-PHASE IN, 240V, 1-PHASE OUT) FOR FROZEN BEVERAGE DISPENSER.
9. CEILING MOUNTED FOR WALL MOUNTED HME. SEE 7/E3.1
10. PROVIDE DUPLEX RECEPTACLE WITH TWO (2) USB CHARGING PORTS.
11. VERIFY PANEL LOCATION OF COOK LINE WITH TACO BELL CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
12. PROVIDE J-BOX FOR POWER SOAK INDICATOR LIGHT. (OPTIONAL)
13. VERIFY LOCATION OF JUNCTION BOX WITH CONSTRUCTION MANAGER.
14. E.C. SHALL PROVIDE, INSTALL AND WIRE A DUPLEX RECEPTACLE WITH (2) USB POWER PORTS IN SINGLE-GANG BOX PROVIDED WITH TABLE, AT EACH END OF THE TABLE. PROVIDE GALVANIZED COVER PLATE TO MATCH BOX.
15. PROVIDE POWER FOR SECURITY CAMERAS. COORDINATE WITH CAMERA VENDOR, SECURITY, AND CONSTRUCTION SUPERVISOR PRIOR TO ROUGH-IN.
16. QUAD RECEPTACLE FOR FUTURE DIGITAL MENUBOARD. TYPICAL OF 2.
17. 2-GANG FLUSH BOX WITH DEAD-FRONT GFCI DEVICES. MOUNT CENTER OF BOX AT 48" A.F.F.. REFER TO E7.0.
18. EC / GC TO INSTALL A TOTAL OF (2) QUAD OUTLETS IN (2) QUAD BOXES ON FRONT OF VALANCE WALL AS SHOWN. OUTLETS TO BE STRAIGHT BLADE. OUTLETS TO BE ON AN ISOLATED/DEDICATED GROUNDED CIRCUIT THAT IS NOT CONNECTED TO ANY RESTAURANT POWER MANAGEMENT SYSTEM.
19. EC / GC TO INSTALL (1) OPEN DATA JUNCTION BOX (JB) IN VALANCE WALL. CONDUIT TERMINATED ABOVE CEILING TO HAVE BUSHING.
20. EC / GC TO RUN (3) ORANGE CAT 6 LINES FROM NETWORK SWITCH TO DATA JUNCTION BOX. CAT6 LINES SHOULD HAVE BOTH ENDS PROPERLY TERMINATED WITH RJ-45 CONNECTORS. EXCESS CAT6 CABLE TO BE COILED INTO SERVICE LOOPS AT EACH END AND LEFT ACCESSIBLE FOR DMB INSTALL TEAM. CAT6 TO BE RUN IN ACCORDANCE WITH ALL LOCAL MUNICIPALITY CODE REQUIREMENTS.
21. CONNECT PRODUCTION LINE CIRCUIT BREAKER PANEL VIA UTILITY CHASE IN CEILING TO A 3 POLE, 125 AMP CIRCUIT BREAKER IN MAIN SWITCHBOARD. SEE SHEET E2.0. VERIFY ALL REQUIREMENTS WITH ACTUAL EQUIPMENT SPECIFIED. THE MANUFACTURER WILL FULLY PRE-WIRE THE COMPLETE MAPS LINE AT THE FACTORY. THE UNITS WILL THEN BE PULLED APART FOR SHIPPING PURPOSES. ALL CONNECTION POINTS WILL BE MARKED. THE CONDUIT RUNS WILL BE COILED UP FOR FIELD INSTALLATION. SOME ELECTRICAL COMPONENTS MAY BE REMOVED FOR EASE OF DISASSEMBLING THE LINE-UP. THE ELECTRICAL CONTRACTOR WILL BE FULLY RESPONSIBLE FOR MAKING THE PROPER FIELD CONNECTIONS FROM THE ROUGH-IN LOCATION TO THE MANUFACTURER PROVIDED BREAKER PANEL BOX. IN ADDITION, THE ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR ANY SPLICE POINTS AND/OR JUNCTION BOXES THAT NEED TO BE RECONNECTED. SOME ELECTRICAL COMPONENT ASSEMBLY MAY ALSO BE REQUIRED.

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1	07.12.21	ISSUED FOR BID

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JOB NO.:	2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
ELECTRICAL POWER PLAN

E3.0

PLOT DATE: 7/12/2021 11:20:06 AM

THE DEDICATED POS POWER CIRCUIT REQUIRES AN ISOLATED GROUND IN ADDITION TO THE NORMAL COMMON BUILDING GROUND. THE ISOLATED GROUND WIRE SERVES TWO PURPOSES:
* AS A SAFETY PATH TO GROUND.
* AS A ZERO REFERENCE POINT FOR ALL POS DIGITAL LOGIC.

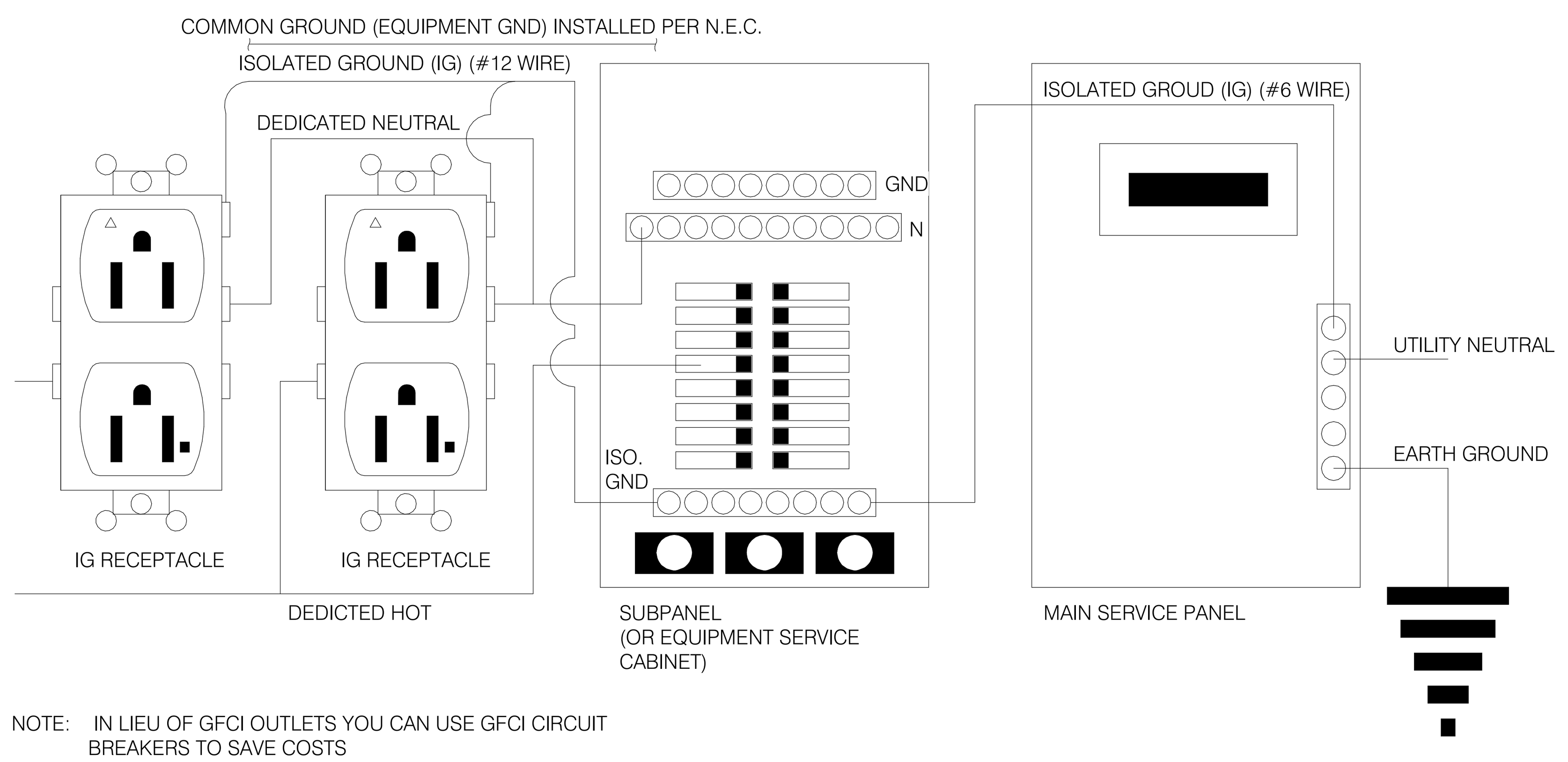
THE GROUND MUST EXHIBIT THE LOWEST POSSIBLE IMPEDANCE TO MINIMIZE VOLTAGE TRANSIENTS AND NOISE.

BE SURE TO:

* USE AN INSULATED CONDUCTOR FOR THE ISOLATED GROUND WIRE.
* RUN THE ISOLATED GROUND WIRE THROUGH THE SAME CONDUIT AS THE HOT AND NEUTRAL WIRES.
* INSTALL ONLY ISOLATED GROUND (IG) TYPE RECEPTACLES.
* CONNECT THE ISOLATED GROUND WIRE TO BUILDING GROUND ONLY AT THE MAIN SERVICE PANEL.
* VERIFY THAT IG RECEPTACLES PRE-WIRED IN OWNER SUPPLIED EQUIPMENT HAVE A TRUE ISOLATED GROUND THAT CAN BE TRACED BACK TO THE BUILDING GROUND AT THE MAIN SERVICE PANEL.

DO NOT CONNECT THE ISOLATED GROUND WIRE TO THE CONDUIT, JUNCTION BOXES, THE FRAME ON A SUBPANEL, OR ANY OTHER METAL SURFACE.

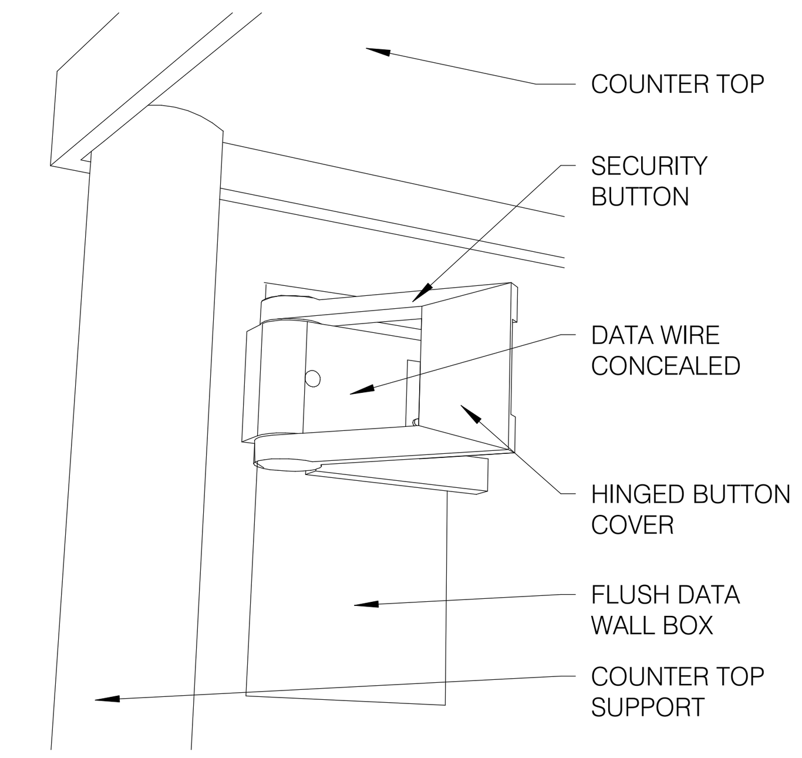
DEDICATED CIRCUITS: DEDICATED CIRCUITS REQUIRE A DEDICATED HOT AND A DEDICATED NEUTRAL THAT ARE NOT SHARED WITH ANY OTHER CIRCUITS. IG RECEPTACLES MUST BE "PHASE ALIGNED" WITH THE "B" PHASE OF BUILDING SUBPANEL "A".



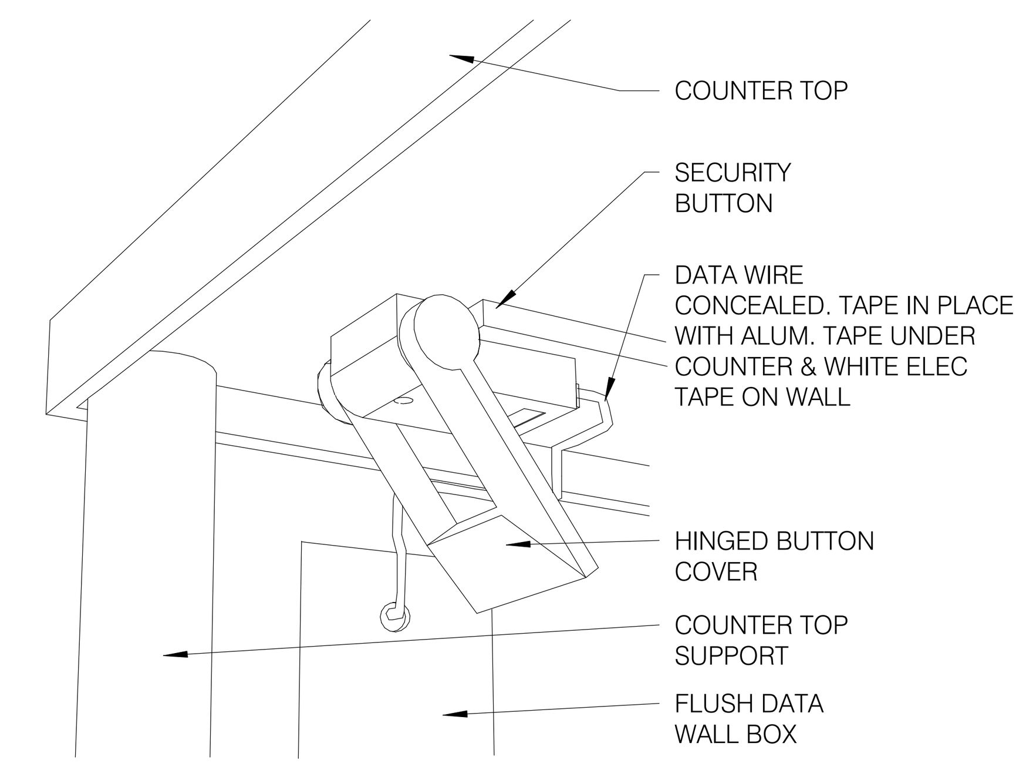
NOTE: IN LIEU OF GFCI OUTLETS YOU CAN USE GFCI CIRCUIT BREAKERS TO SAVE COSTS

YEW011

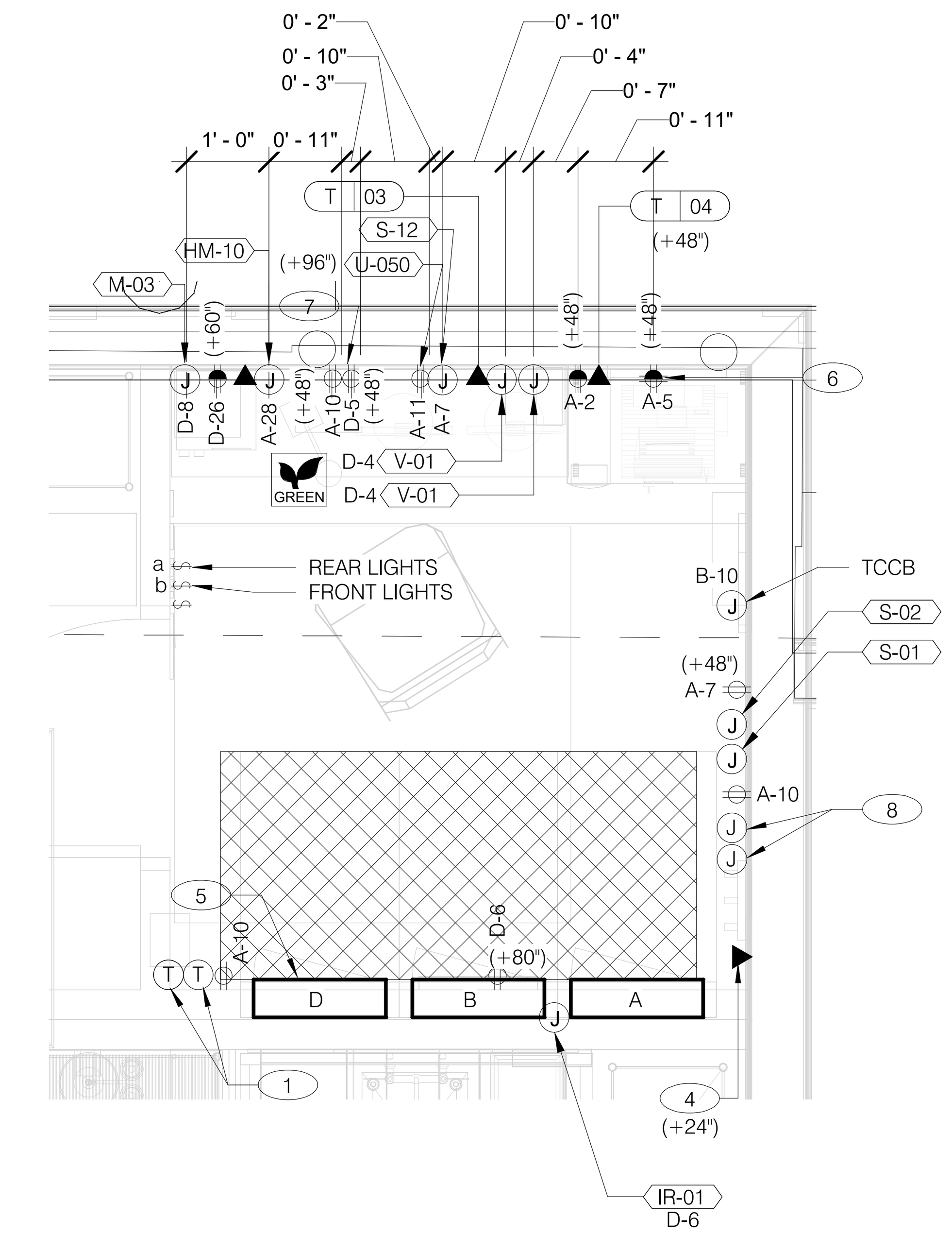
P.O.S. ISOLATED GROUND SYSTEM NTS 6



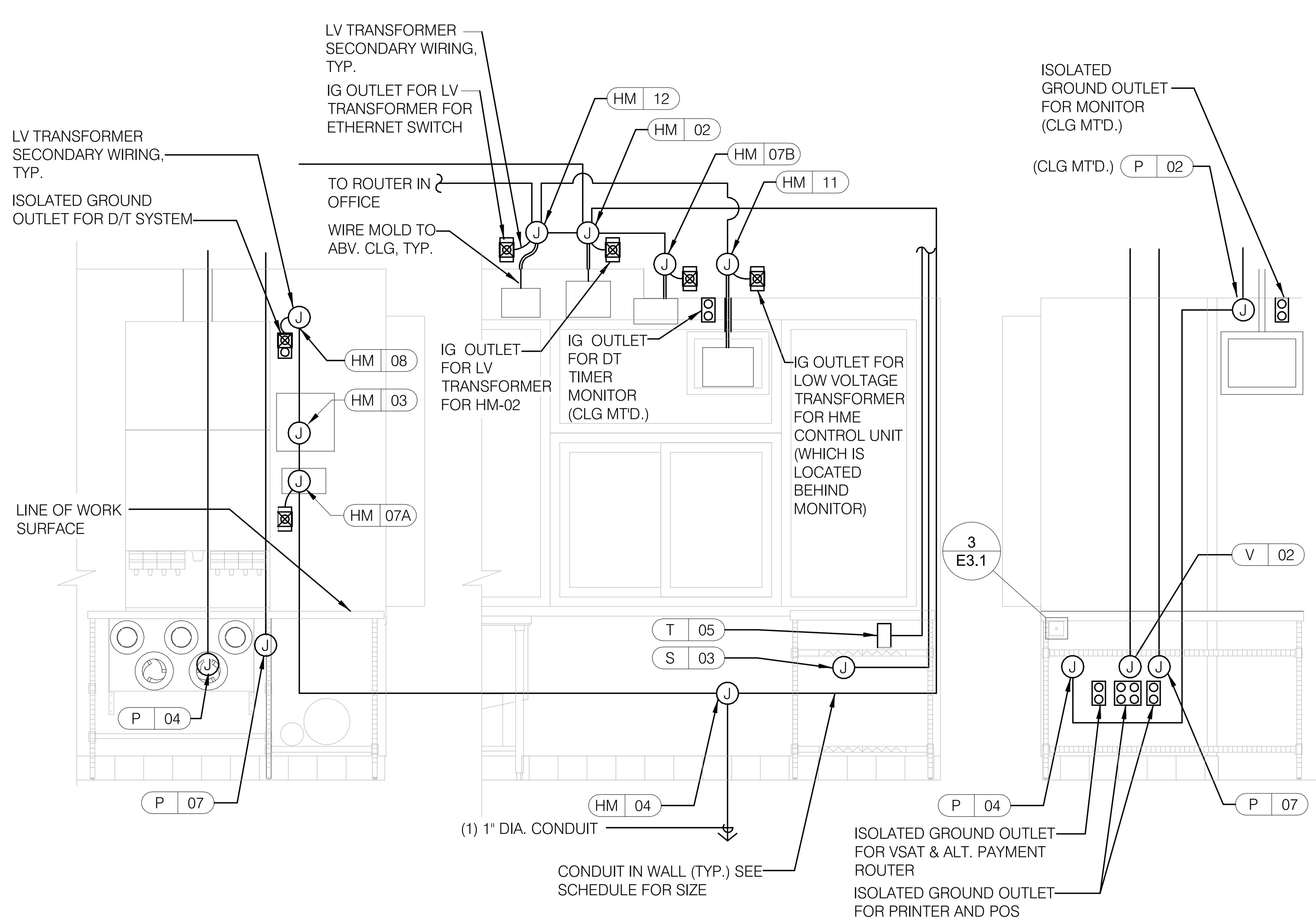
SECURITY BUTTON ON WALL NTS 3



SECURITY BUTTON UNDER COUNTER NTS 4



ENLARGED POWER AND COMMUNICATIONS PLAN (OFFICE) 1/2" = 1'-0" 1



REFER TO COMMUNICATIONS SCHEDULE ON SHEET E5.0 FOR EQUIPMENT DESCRIPTIONS/MOUNTING HTS.

ENLARGED INTERIOR ELEVATION (D/T WINDOW) NTS 7

NOTE

TBCCB AND TBANS REQURE VISUAL INSTALLATION VERIFICATION CERTIFICATE. CONTACT CERTIFY@ACE-BCX.COM OR CALL 949 770 2222 FOR CERTIFICATE. SEE SHEET SW2.0

1. THERMOSTATS CONTROLS.
2. NOT USED.
3. NOT USED.
4. PHONE JACK FOR MODEM.
5. LOCATION OF TBCCB COMBINED CONTROL BOX. COORDINATE EXACT LOCATION IN THE FIELD. CONSIDER OPERATOR NEED TO ACCESS SWITCHES ON THE FRONT OF THE CONTROL BOX AND BUILT IN OCCUPANCY SENSOR FOR MANAGERS OFFICE.
6. DATA JACK FOR TECH-IN-A-BOX WITH 2 PORTS.
7. ROUTE CIRCUIT THROUGH TBCCB OCCUPANCY SENSOR FOR CONTROLLED RECEPTACLE.
8. PROVIDE BACK-BOX AND CONDUIT WITH PULLSTRING FOR REMOTE TEST STATIONS PROVIDED BY MECHANICAL. COORDINATE REQUIREMENTS WITH MECHANICAL.

KEY NOTES - ELECTRICAL ENLARGED DETAILS NTS 2

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PA/PM:	SM
DRAWN BY.:	AJR
JOB NO.:	2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
ENLARGED POWER PLAN AND DETAILS

E3.1

PLOT DATE: 7/12/2021 11:20:08 AM

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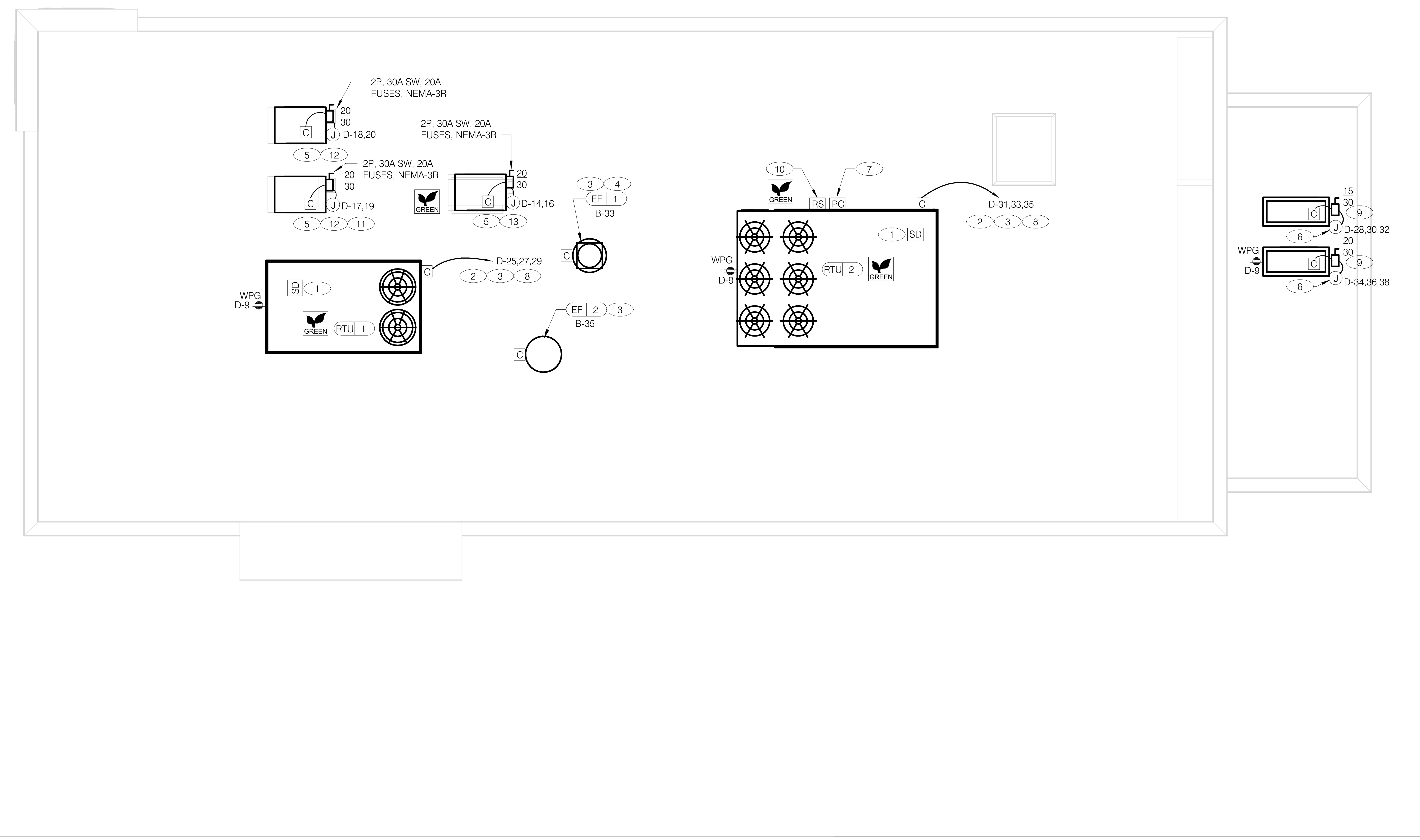

POWER ROOF PLAN 1/4" = 1'-0" A

A. NO CONDUIT SHALL BE FASTENED DIRECTLY TO OR THROUGH ROOFING MEMBRANE.

B. ALL CUTS IN ROOFING MEMBRANE SHALL BE MINIMAL AND IN ACCORDANCE WITH ROOFING MFR'S AND INSTALLER'S REQ'S.

C. REFER TO MECH. DWGS FOR MECHANICAL EQUIPMENT ELECTRICAL REQ'S.

D. ALL EXPOSED ELECTRICAL CONDUITS SHALL PENETRATE ROOF MEMBRANE AT PIPE HOODS U.O.N.

E. REFER TO ELECT. EQUIP. SCHEDULE AND ELECT. ROUGH-IN PLAN.

F. ALL CONDUITS FROM EXHAUST FANS SHALL BE ROUTED INSIDE OF CURB.

G. ALL CONDUITS TO AND FROM RTU SHALL BE ROUTED INSIDE OF RTU CURB. COORDINATE WITH RTU MFR RECOMMENDATIONS.

H. REFER TO GENERAL NOTES SHEET E2.0 FOR IMPORTANT INFORMATION.

I. ALL WIRING AND CONDUITS SHALL BE CONCEALED. NO CONDUITS PERMITTED TO RUN EXPOSED ACROSS ROOF DECK. ROUTE ALL CONDUITS THROUGH EQUIPMENT ROOF CURBS OR ARCHITECT SPECIFIED ROOF PENETRATIONS.

J. ARMOR CABLE (BX) IS ONLY TO BE ALLOWED WHERE ACCEPTABLE BY AUTHORITY HAVING JURISDICTION.

GENERAL NOTES - ELECTRICAL POWER ROOF PLAN NTS C

1. MECHANICAL CONTRACTOR SHALL PROVIDE CONNECTIONS BETWEEN RTU FACTORY SMOKE DETECTORS AND REMOTE ENNUNCIATOR, TEST AND RESET DEVICE IN MANAGER OFFICE. ELECTRICAL CONTRACTOR SHALL PROVIDE ANY NECESSARY CONDUITS FOR LOW VOLTAGE WIRING.

2. SPECIFIED RTU IS SUPPLIED WITH UNPOWERED, WEATHERPROOF GFCI CONVIENENCE OUTLET AND FACTORY INSTALLED HACR CIRCUIT BREAKER WITH WEATHER TIGHT ENCLOSURES AND ACCESS THRU SWINGING DOOR.

3. POWER AND CONTROL IN FLEXIBLE WATERPROOF CONDUIT (LFMC CONDUIT) TO ENTER FROM SIDE OF THE CURB AND UP TO FACTORY PROVIDED DISCONNECT SWITCH. COORDINATE WITH MECHANICAL CONTRACTOR.

4. CONNECT TO APPROPRIATE TERMINALS OF TBCCB CONTROL BOX. SEE E6.1 FOR DETAILS.

5. 1/2" C, WITH REQ'D CONDUCTORS TO J-BOX IN CEILING ABOVE ICE MACHINE. MAKE CONNECTION TO ICE MACHINE AND CONDENSING UNIT.

6. REFER TO POWER PLAN FOR CONTINUATION TO COOLER / FREEZER.

7. CONNECT TO APPROPRIATE PHOTOCELL TERMINALS OF TBCCB CONTROL BOX. SEE E6.1 FOR DETAILS.

8. RTU'S SHALL BE PROVIDED WITH BUILT-IN DISCONNECT AND SINGLE POINT WIRING.

9. CONTRACTOR SHALL VERIFY CIRCUIT BREAKER TYPE, STARTER, DISCONNECT SWITCH, AND FUSE SIZE (IF REQUIRED) WITH SELECTED EQUIPMENT MANUFACTURER'S SHOP DRAWINGS PRIOR TO PLACING ORDER AND FURNISH AND INSTALL EVERYTHING AS REQUIRED.

10. RAIN SENSOR. ← GREEN

11. PIPE HOOD. SEE 9/A6.0

12. ELECTRICAL CONTRACTOR SHALL MAKE ALL ELEC. CONNECTIONS INCLUDING ALL NECESSARY INTERCONNECTIONS BETWEEN THE COMPRESSOR ON THE ROOF & THE EVAPORATOR IN THE ICE MACHINE AS REQ'D, REFER TO THE MFR'S SHOP DWGS FOR EXACT INSTALL. & INTERCONNECTION RQMTS, PRIOR TO ROUGH-IN INSTALL.

13. 1/2" C, WITH REQ'D CONDUCTORS TO J-BOX IN CEILING ABOVE FROZEN BEVERAGE MACHINE. MAKE CONNECTION TO BEVERAGE MACHINE AND ASSOCIATED CONDENSING UNIT.

KEY NOTES - ELECTRICAL POWER ROOF PLAN NTS B

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18708 TELEGRAPH ROAD
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ENDEAVOR 2.0

ELECTRICAL POWER ROOF PLAN

E3.2

PLOT DATE: 7/12/2021 11:20:09 AM

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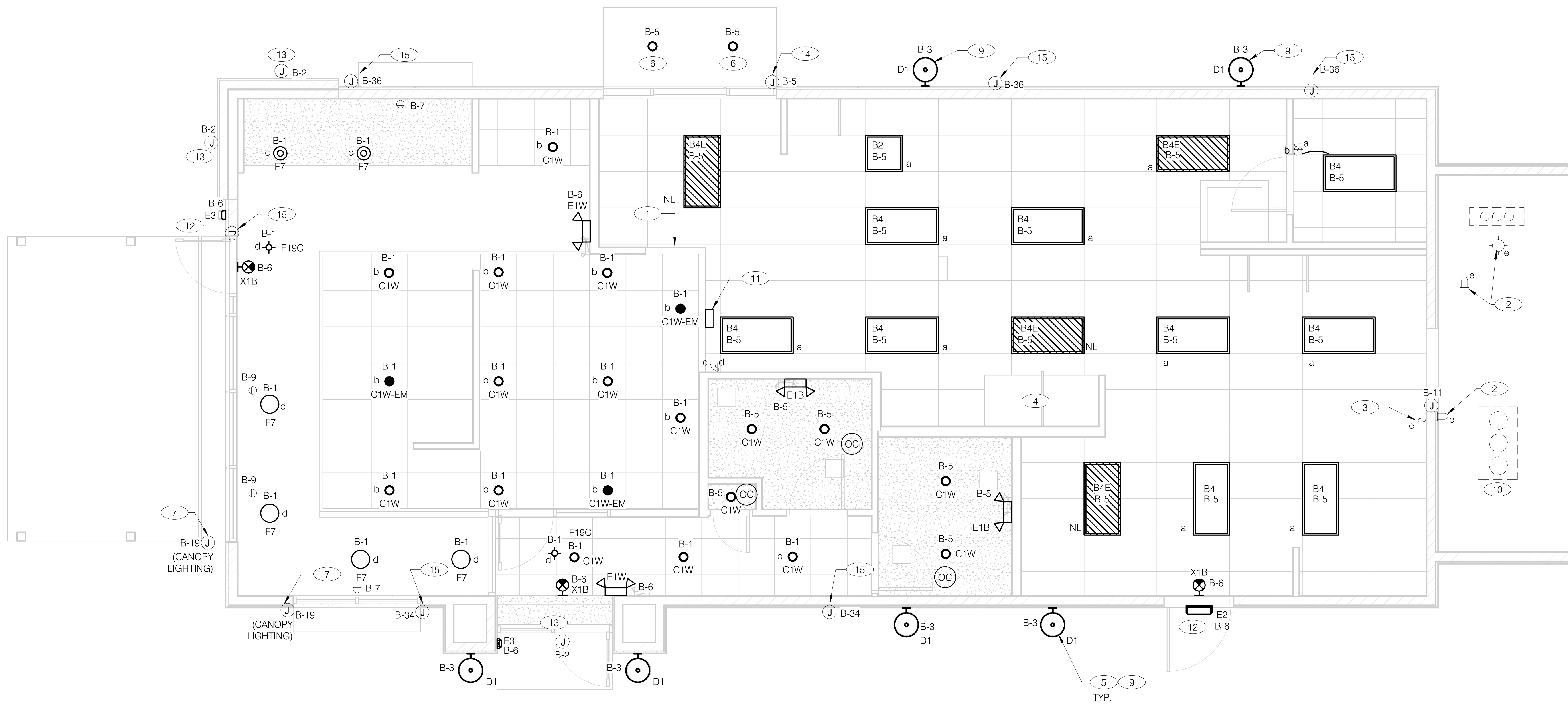
CAUTION: IF THIS SHEET IS NOT 22"x34" IT IS A REDUCED PRINT



GENERAL NOTES:

A. CONFIRM LIGHTING FIXTURE QUANTITIES WITH SUPPLIER.

B. EMERGENCY AND NORMAL LIGHTING MARKED WITH "NL" SUBSCRIPT SHALL OPERATE CONTINUOUSLY. PROVIDE UNSWITCHED HOT TO NORMAL AND EMERGENCY BALLAST.

C. EMERGENCY LIGHTING NOT MARKED WITH "NL" SUBSCRIPT SHALL OPERATE UNDER CONTROL OF LIGHTING SWTICH AS INDICATED. PROVIDE UNSWITCHED CONSTANT HOT TO EMERGENCY BALLAST AND SWITCHED HOT TO NORMAL BALLAST.

D. ALL CONDUITS ENTERING OR LEAVING COOLER/FREEZER SHALL BE PROVIDED WITH SEAL-OFF FITTING WITH COMPOUND PER NEC 300-(7a).

E. ALL INTERIOR LIGHTING CIRCUITS TO BE WIRED THROUGH TBCCB . SEE E6.0 AND E6.1.

F. CONTRACTOR TO FIELD VERIFY CEILING TYPE AND PROVIDE PROPER MOUNTING HARDWARE.

G. ALL FIXTURES SUPPLIED WITH LAMPS.

H. ALL EXTERIOR NON-EMERGENCY LIGHT FIXTURES, BUILDING SIGNS, AND EXTERIOR SIGNS SHALL BE CONTROLLED THROUGH PHOTOCELL AND LIGHTING CONTROL RELAYS. SEE E6.0 AND E6.1 FOR ADDITIONAL DETAILS.

N

ELECTRICAL LIGHTING PLAN 1/4" = 1'-0" A

NO.	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	MOUNTING	LAMP #/TYPE	BALLAST TYPE	ELECTRICAL DATA	REMARKS
A	LSI INDUSTRIES	MRM-LED-12L-SIL-FT-40-70CRI	LED POLE LIGHT	22' LIGHT POLE	LED	NA	120 V/1-187 VA	-
A4	LSI INDUSTRIES	4SQB3-SO7G-25-BRZ	LIGHT POLE	22' LIGHT POLE	NA	NA	0 V/1-0 VA	-
B	LSI INDUSTRIES	MRM-LED-24L-SIL-FT-40-70CRI	LED POLE LIGHT		LED		120 V/1-187 VA	-
B2	ABB	FLP22-D53W40	2X2 LED TROFFER		LED		120 V/1-45 VA	-
B4	ABB	FLP24-D53W40	2X4 LED TROFFER		LED		120 V/1-45 VA	-
B4E	ABB	FLP24-D53W40-EM	2X4 LED TROFFER		LED		120 V/1-45 VA	PROVIDE 90 MIN. BACK UP BATTERY
C	LSI INDUSTRIES	MRM-LED-24L-SIL-FT-40-70CRI	LED POLE LIGHT	22' LIGHT POLE	LED	NA	120 V/1-187 VA	-
C1W	MAXLITE	B6IC-AT-W- LED14DR5630KB95	LED TRIM 14W 6" RECESSED 30K 80CRI WHITE TRIM, W/ ELITE B6IC-AT-W 6" IC AIR SHUT HOUSING		LED		120 V/1-14 VA	-
C1W-EM	MAXLITE	B6IC-AT-W- LED14DR5630KB95	LED TRIM 14W 6" RECESSED 30K 80CRI WHITE TRIM, W/ ELITE B6IC-AT-W 6" IC AIR SHUT HOUSING		LED		120 V/1-14 VA	PROVIDE 90 MIN. BACK UP BATTERY
D1	TROY	B2772	17"X14" WALL MOUNT SCONCE, OLD SILVER FINISH, MEDIUM BASE SOCKET, 100 WATT MAX		LED9A19D2527K		120 V/1-60 VA- 0 V/1-0 VA	ALIGN BOTTOM OF FIXTURE'S MOUNTING WITH CHANGE IN EIFS THICKNESS
E1B	ELITE	ELM-809-B	EMERGENCY LIGHT FROG EYE - BLACK	WALL, TOP @ 9'-4" U.O.N.	-	EM	120 V/1-12 VA	-
E1W	ELITE	ELM-809-W	EMERGENCY LIGHT FROG EYE - WHITE	WALL, TOP @ 9'-4" U.O.N.	-	EM	120 V/1-12 VA	-
E2	ELITE	ELM-807-SDT-BZ	CAMRAY LED EM WALL MNT, DRK BRNZ, CLD WEATHER	UNIVERSAL	-	EM	120 V/1-16 VA	-
E3	LITHONIA	AFF-PEL-DDBTXD-UVOLT-LTP-SDRT-WT-CW	SELF-POWERED EMERGENCY WALLPACK W/ PHOTOCELL	8'-6"	LED	EM	120 V/1-20 VA	
F7	HI-LITES	H24212-96-CB15-20WLBL-6OP	12" GALVANIZED PENDANT WITH BLACK CORD AND CANOPY MED BASE SOCKET	PENDANT, 6'-0" A.F.F.	1/LED 10A19D0D27K	NA		-
F19C	SPECTRUM LIGHTING	SPCO304INC-MWL(25W)PAR20-CM-180"-MB	LED PENDANT - 3"	PENDANT, 6'-0" A.F.F.	1/LED LR20/40/27K/975/BK	NA	120 V/1-9 VA	-
X1B	LIGHTALARMS	GRANNRB	LED UNIVERSAL MNTG THERMOPLASTIC EXIT, RED LETTERS, BLACK HSNG	UNIVERSAL	-/LED	EM	120 V/1-3 VA	-

1. PRE-FABRICATED & PRE-FINISHED SOFFIT. REFER TO A7.1 FOR SPECIFICS. (OPTIONAL).
2. FOR LIGHTING FIXTURES, CONDUIT, CONDUCTORS AND INSTALLATION RESPONSIBILITIES, REFER TO SCOPE OF WORK.
3. FIXTURE AND SWITCH FACTORY INSTALLED WITH UNIT. G.C. TO COMPLETE CIRCUITING.
4. EXHAUST HOOD LIGHT FIXTURES SUPPLIED WITH HOOD AND MTD IN PRE-WIRED J-BOX. COMPLETE CIRCUITING PER SHEET E6.1.
5. COORD. J-BOX LOCATION WITH WOOD FRAMING SO IT REMAINS CONCEALED BEHIND FIXTURE. VERIFY MOUNTING HEIGHT WITH ARCH. DWGS.
6. PROVIDE POWER TO DRIVE THRU CANOPY LIGHTING FIXTURES. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH CANOPY VENDOR AND CONSTRUCTION SUPERVISOR PRIOR TO CONNECTIONS.
7. PROVIDE POWER CONNECTION TO CANOPY AT FACTORY INSTALLED DISCONNECT SWITCH FOR CANOPY LIGHTS. LIGHTS ARE FURNISHED WITH CANOPY. PROVIDE ALL REQUIRED FIELD WIRING. COORDINATE REQUIREMENTS WITH MANUFACTURUER.
8. NOT USED.
9. REFER TO ARCHITECTURAL EXTERIOR ELEVATIONS ON A4.0 AMD A4.1 FOR DIMENSIONED LOCATION OF FIXTURE.
10. SEAL ALL ELECTRICAL CONDUITS INTO THE WALK-IN COOLER.
11. ALERT LIGHT : ONLY APPLIES WHEN A GEN IV POWER SOAK IS USED. DISREGARD IF GEN III POWER SOAK IS USED. SEE SHEET E3.0 FOR POWER REQUIREMENTS.
12. MOUNT "E3" AT 8'-6" A.F.G. TO CENTER OF FIXTURE.
13. VERIFY MOUNTING HEIGHT FOR SIGN POWER WITH ARCHITECTURAL ELEVATIONS AND SIGN VENDOR.
14. PROVIDE POWER CONNECTION TO CANOPY AT FACTORY INSTALLED DISCONNECT SWITCH FOR CANOPY LIGHTS. LIGHTS ARE FURNISHED WITH CANOPY. PROVIDE ALL REQUIRED FIELD WIRING. COORDINATE REQUIREMENTS WITH MANUFACTURUER.
15. PROVIDE POWER CONNECTION TO PURPLE WALLWASH LIGHTS FURNISHED BY SIGN VENDOR. PROVIDE ALL REQUIRED FIELD WIRING. COORDINATE EXACT LOCATIONS WITH ARCHITECTURAL ELEVATIONS. COORDINATE REQUIREMENTS WITH VENDOR.

KEY NOTES - ELECTRICAL LIGHTING PLAN AND SCHEDULE NTS B

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
330.572.2100 FAX: 330.572.2102

	DATE	REMARKS
	04.21.21	ISSUED FOR PERMIT
1	07.12.21	ISSUED FOR BID

CONTRACT DATE: 06.22.21
BUILDING TYPE: END. MED20
PLAN VERSION: MARCH 2021
BRAND DESIGNER: DICKSON
SITE NUMBER: 315089
STORE NUMBER: 456336
PA/PM: SM
DRAWN BY.: AJR
JOB NO.: 2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
LIGHTING PLAN AND DETAILS

E4.0

PLOT DATE: 7/12/2021 11:20:12 AM

GPD GROUP
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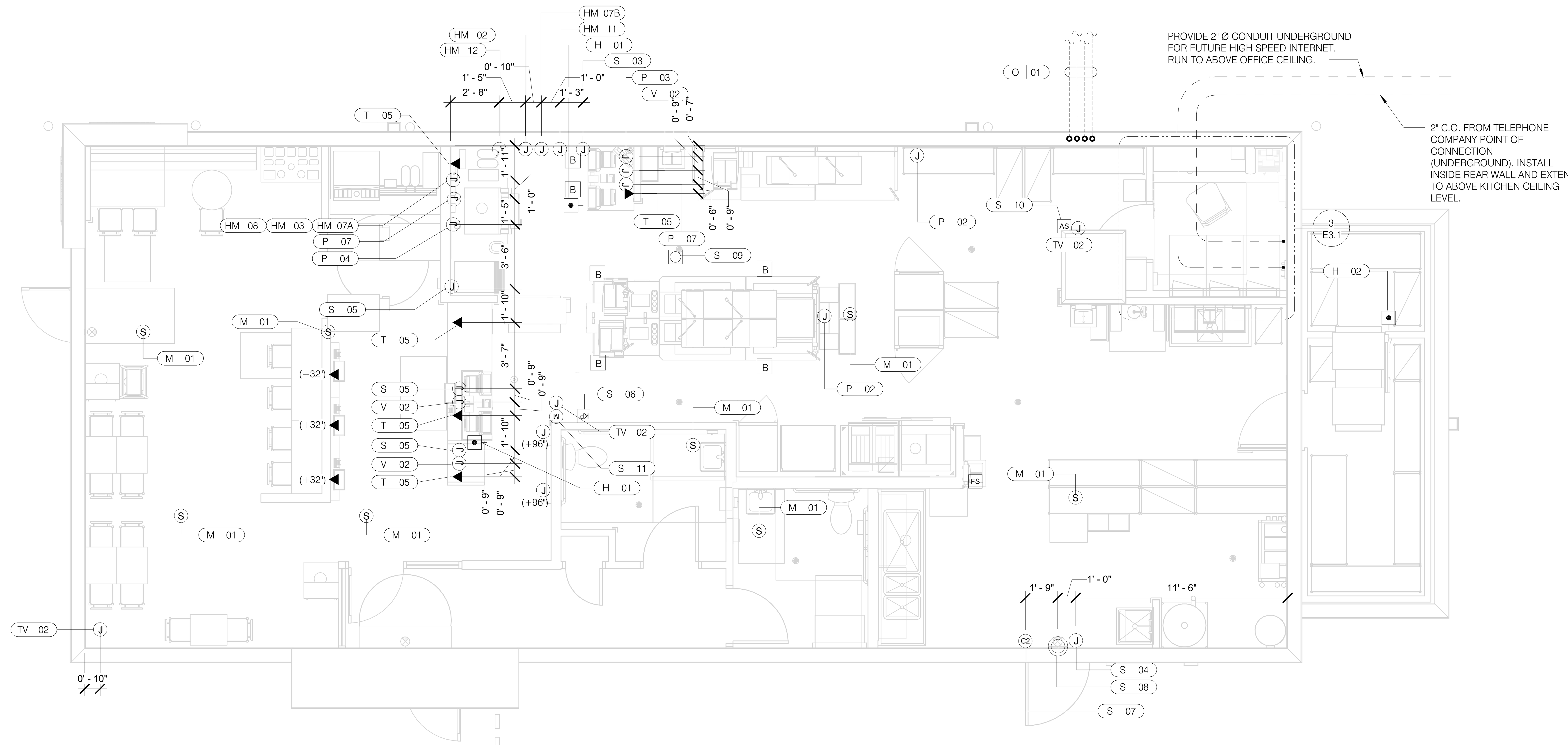

VOLUME CONTROL NOTES:
1) PATIO SPEAKER: DEDICATED WALL-MOUNT VOLUME CONTROL IN LOCATION OF HEAD-END (TYP. MANAGER'S OFFICE).
2) DINING ROOM SPEAKERS: DEDICATED WALL-MOUNT VOLUME CONTROL IN LOCATION OF HEAD-END (TYP. MANAGER'S OFFICE).
3) KITCHEN SPEAKERS: IF CONNECTED TO THE SOUND SYSTEM, CAN EITHER HAVE VOLUME CONTROL BUILT INTO THE SPEAKER ITSELF, OR HAVE A THIRD DEDICATED WALL-MOUNT VOLUME CONTROL IN LOCATION OF HEAD-END (TYP. MANAGER'S OFFICE).
4) RESTROOM SPEAKERS: VOLUME CONTROL BUILT INTO SPEAKER.

COMMUNICATIONS PLAN 1/4" = 1'-0" A

HOLD-UP BUTTON (MOUNT 2-1/2" BEHIND COUNTER EDGE)	C2 DOOR CONTACT (LINKED TO AUDIO / VISUAL ALARM)
S MUSIC SYSTEM SPEAKERS	"SOUND ALERT" DEVICE
SECURITY STROBE	KP KEYPAD (MTD AT 48" A.F.F.)
J J-BOX	AS ALARM SIREN ABOVE CLG
2" x 4" J-BOX W/ DATA PORTS	B BUMP PAD (MOUNT AT FRONT COUNTER)
M MOTION DETECTOR	FS HOOD FIRE SUPPRESSION SYSTEM PULL STATION
OC OCCUPANCY SENSOR. CEILING MOUNTED. SEE DETAILS 1 & 2 / E7.0	USB OUTLET

COMMUNICATIONS LEGEND NTS C

A. SUPPLY AND INSTALL OUTLETS AND CONDUIT FOR OWNER SUPPLIED AND INSTALLED CABLE AND LOW VOLTAGE WIRING (U.O.N.). TELEPHONE AND MUSIC SYSTEM WIRING SHALL BE SUPPLIED AND INSTALLED. SEE SCOPE OF WORK SHEETS.

B. SEE SHEETS E3.0 AND E3.1 FOR ELECT. INFO ON POS, SECURITY SYSTEM, CCTV SYSTEM, (OFFICE) COMPUTER, DRIVE-THRU TIMER AND DRIVE-THRU COMMUNICATION SYSTEM.

C. THIS PLAN INCLUDES CONDUITS AND J-BOXES FOR POS, SECURITY SYSTEM, CCTV SYSTEM, (OFFICE) COMPUTER, TELEPHONE SYSTEM, MUSIC SYSTEM, DRIVE-THRU TIMER AND DRIVE-THRU COMMUNICATION SYSTEM.

D. ALL OUTLETS AND BOXES MOUNTED IN THE SERVING COUNTER CABINETRY ARE TO BE 24" AFF. INSTALL JUNCTION BOXES WITH CONDUIT UNDER CABINET TO NEAREST WALL AND TO ABOVE CEILING.

COMMUNICATIONS NOTES NTS B

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COMMUNICATIONS ROUGH-IN SCHEDULE

COMM. TYPE	COMM. #	EQUIPMENT ITEM	ELEVATION	REMARKS
H	01	UNDER COUNTER HOLD-UP BUTTON		SEE DETAIL 6/E3.1.
H	02	WALL MOUNTED HOLD-UP BUTTON	+18" A.F.F.	SURFACE MTD. 2X4 J-BOX ON INSIDE OF WALK-IN FREEZER HINGE WALL W/ (1) 1/2" CONDUIT TO ABOVE KITCHEN CEILING. BUTTON FACING DOWN. SEE DETAIL 3/E3.1
HM	02	D/T TIMER SIGNAL PROCESSOR J-BOX	+126" A.F.F	4X4X4" DEEP (MIN.) J-BOX ABV. CLG. W/ (1) 1" CONDUIT TO HM-07B, (1) 1" CONDUIT TO HM-04, (1) 1-1/2" CONDUIT TO HM-08 & (1) 1" CONDUIT TO HM-12. SEE DET. 5/E3.1.
HM	03	D/T BASE STATION J-BOX	+72" A.F.F.	4X4 J-BOX @ D/T BASE STATION W/ (1) 1-1/2" C TO HM-08 & (1) 1-1/2" C TO HM-07A. SEE DETAIL 7/E3.1.
HM	07A	D/T TIMER DISPLAY J-BOX	+62" A.F.F.	2X4 J-BOX W/ (1) 1-1/2" CONDUIT TO HM-03 & (1) 1" C TO HM-04. SEE DETAIL 7/E3.1.
HM	07B	D/T TIMER DISPLAY J-BOX	+126" A.F.F.	2X4 J-BOX ABV. CEILING W/ (1) 1" CONDUIT TO HM-02. SEE DETAIL 7/E3.1
HM	08	D/T J-BOX	+96" A.F.F.	4X4X4" DEEP (MIN.) J-BOX W/ (1) 1-1/2" CONDUIT TO HM-03 & (1) 1-1/2" CONDUIT TO HM-02. SEE DETAIL 7/E3.1.
HM	11	D/T CONTROL UNIT J-BOX	+126" A.F.F.	2X4 J-BOX ABV. CEILING W/ (1) 1" CONDUIT TO HM-12. SEE DETAIL 7/E3.1.
HM	12	D/T/ ETHERNET SWITCH J-BOX	+126" A.F.F.	2X4 J-BOX ABV. CEILING W/ (1) 1" CONDUIT TO HM-11, (1) 1" CONDUIT TO HM-02 & (1) 1" CONDUIT TO OFFICE ROUTER.
M	01	SPEAKER, CEILING MOUNTED	CEILING	SPEAKER WIRING FROM SPEAKERS IN DINING ROOM TO AMPLIFIER IN OFFICE. FOR EXACT LOCATION OF SPEAKERS, SEE LIGHTING PLAN SHEET E4.0.
P	02		CEILING	2X4 J-BOX FLUSH @ CEILING. FOR M.A.P.S. LINE MONITOR J-BOX.
P	03	KITCHEN MONITOR J-BOX	+84" A.F.F.	2X4 J-BOX W/ (1) 3/4" CONDUIT TO ABOVE CIELING
P	04	BUMP PAD J-BOX	+24" A.F.F.	2X4 J-BOX W/ (1) 3/4" CONDUIT TO P-03.
P	07	POS J-BOX W/ 2-1/2" DIA HOLE IN COVER PLATE	+24" A.F.F.	6X6X4" DEEP J-BOX W/ 2-1/2" CONDUIT IN WALL TO ABV. CEILING, WITH PULL STRING FOR POS.
S	03	J-BOX SECURITY SYSTEM	+30" A.F.F.	2X4 J-BOX W/ (1) 1/2" CONDUIT TO ABV. CLG. FOR HOLD-UP BUTTON SIGNAL WIRE.
S	04	J-BOX SECURITY SYSTEM	+84" A.F.F.	2X4 J-BOX W/ COVER & (1) 1/2" CONDUIT TO ABOVE CEILING.
S	05		+24" A.F.F.	2X4 J-BOX W/ 3/4" CONDUIT TO S-05 AND TO ABOVE CEILING.
S	06	J-BOX SECURITY SYSTEM	+48" A.F.F.	2X4 J-BOX W/ (1) 1/2" CONDUIT TO ABOVE CEILING FOR SECURITY SYSTEM KEYPAD.
S	07	J-BOX SECURITY SYSTEM	TOP OF JAMB	2X4 J-BOX W/ (1) 1/2" CONDUIT TO ABOVE CEILING FOR DOOR CONTACT.
S	08	"SOUND ALERT" DEVICE	CEILING	CONNECT TO SECURITY SYSTEM.
S	09	SECURITY STROBE LIGHT	CEILING	CONNECT TO SECURITY SYSTEM.
S	10	ALARM SIREN	ABV. CEILING	CONNECT TO SECURITY SYSTEM.
S	11	MOTION / HEAT DETECTOR	+78" A.F.F.	STUB 1/2" CONDUIT. D5835 OR D5820. MOUNT 90" A.F.F. FOR OFFICE

COMMUNICATIONS ROUGH-IN SCHEDULE

COMM. TYPE	COMM. #	EQUIPMENT ITEM	ELEVATION	REMARKS
T	03	VOICE LINE PHONE JACK	+42" A.F.F.	2X4 J-BOX W/ DOUBLE RJ-11 PHONE JACK & 1" CONDUIT TO ABOVE CEILING.
T	04	COMPUTER LINE PHONE JACK	+42" A.F.F.	2X4 J-BOX W/ RJ-11 PHONE JACK AND 1" CONDUIT TO ABOVE CEILING.
T	05	P.O.S. PHONE JACK	+24" A.F.F.	2X4 J-BOX W/ 1" CONDUIT TO ABOVE CEILING.
TV	02	SECURITY CAMERA	+96" A.F.F.	MINI-DOME CAMERA MTD. TO BTM. OF MENU BOARD BULKHEAD. 2X4 J-BOX W/ (1) 1/2" CONDUIT TO ABOVE CEILING MTD. ON BACK SIDE OF BULKHEAD (6 TOTAL).
V	02	CREDIT CARD READER (VSAT)	+24" A.F.F.	2X4 J-BOX W/ 1/2" CONDUIT TO ABOVE CEILING FOR ETHERNET CABLES.
S	01	J-BOX SECURITY SYSTEMS	+48" A.F.F.	4X4 J-BOX AT SECUIRTY SYSTEM CONTROL PANEL W/ (1) 2" CONDUIT TO S-02
S	02	J-BOX SECURITY SYSTEMS	+106" A.F.F.	4X4 J-BOX ADJACENT TO T-02 W/ (1) 2" CONDUIT TO S-01
S	12	J-BOX SECURITY DVR	+42" A.F.F.	2X4 J-BOX FOR SECURITY DVR
T	02	SECURITY SYSTEM PHONE JACK	+106" A.F.F.	2X4 J-BOX ADJACENT TO S-02 W/ RJ-31X PHONE JACK
V	01	ALTERNATE PAYMENT ROUTER BOX	+90" A.F.F.	4X4 J-BOX W/ 1/2" CONDUIT TO ABOVE CEILING FOR ETHERNET CABLES (DOUBLE JACK)
HM	10	OCB SWITCH	+52" A.F.F.	2X4 J-BOX W/ 1" CONDUIT TO ABOVE CEILING
IR	01	IRRIGATION TIMER	+80" A.F.F.	4X4 J-BOX W/ 1" CONDUIT TO IRRIGATION VALVES
O	01	(4) 1" DATA CONDUITS	CEILING	FROM MENU BOARD/SPEAKER POST TO ABOVE CEILING FOR OCB AND D/T COMM. SYST. SEE DETAIL 3/7.0
HM	04	OCB SWITCH	+80" A.F.F.	4X4 J-BOX W/ 1" CONDUIT TO IRRIGATION VALVES
T	01	TELEPHONE SERVICE BOX PER LOCAL TELEPHONE COMPANY. PROVIDE 24"X24"X3/4" PLYWOOD PANEL AT CLG. PROVIDE PULL STRING IN 2" CONDUIT.	+24" A.F.F.	PROVIDE (1) 25 PAIR TELEPHONE CABLE. ONLY (2) LINES TO BE USED. LINE ONE FOR VOICE/FAX. LINE (2) FOR COMPUTER MODEM.
TV	01	CLOSED CIRCUIT TELEVISION (CCTV)		CCTV INSTALLATION IS BASED ON THE CRIME INDEX AS DETERMINED BY YUM! LOSS PREVENTION MANAGER. THE STANDARD CCTV PACKAGE WILL CONSIST OF (1) CCTV MONITOR W/ WALL BRACKET AND (1) MINI DOME CAMERA MTD. ON BACK SIDE OF BULKHEAD (7 TOTAL)

	DATE	REMARKS
	04.21.21	ISSUED FOR PERMIT
1	07.12.21	ISSUED FOR BID

CONTRACT DATE:	06.22.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	315089
STORE NUMBER:	456336
PA/PM:	SM
DRAWN BY.:	AJR
JOB NO.:	2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
COMMUNICATIONS PLAN

E5.0

PLOT DATE: 7/12/2021 11:20:15 AM

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TBCCB-3-WOS SEQUENCE OF OPERATION

The intent of the BMS Control Box (TBCCB-3-WOS) is to activate or deactivate the following:

- Kitchen Lighting
- Dining Room Lighting
- Exterior Lighting
- Exterior Signs
- Exhaust hood exhaust fan
- Exhaust hood lighting
- Make up air / replacement air fan
- Rest room / cook line exhaust fan
- Managers Office lighting & at least one duplex outlet

Sequence of Operation

(Building) Occupied Mode

When the Occupied/Unoccupied selector switch on the front of the TBCCB-3-WOS panel is in the "Auto" position, Channel 1 of the Timeclock in the Control Box is programmed to place the building in Occupied mode 15 minutes before the first Team Member arrives on the premises. This commands on the following:

- The Parking Lot Lights, provided the photo cell indicates it is dark enough for them to be on
- The restroom and cook line exhaust fan marked "EF-2"
- Dining Room Lights, provided their local switch is in the ON position
- Kitchen and rest room lights, provided their local switch and or occupancy sensors are in the ON position
- The exhaust hood exhaust fan marked "EF-1"
- The make up air replacement air fan (evaporator fan) in RTU 1 and RTU 2.

Occupied mode may also be invoked when any of the following occur:

- an Occupancy sensor on the front of the TBCCB-3-WOS panel senses motion
- when an optional remote Occupancy sensor senses motion
- when a remote Occupied switch is in the Occupied position
- when the Occupied/Unoccupied switch on the front of the TBCCB-3-WOS is placed in the MANUAL OCCUPIED position

(Building) Unoccupied Mode

When the Occupied/Unoccupied selector switch on the front of the TBCCB-3-WOS panel is in the "Auto" position, Channel 1 of the Timeclock in the Control Box is programmed to place the building in Unoccupied mode 15 minutes after the last Team Member leaves the premises. This commands OFF the following:

- The Parking Lot Lights
- The restroom and cook line exhaust fan marked "EF-2"
- Dining Room Lights
- Kitchen room lights
- The exhaust hood exhaust fan marked "EF-1"
- The make up air - replacement air fan (evaporator fan) in RTU 1 and RTU 2.

In the event of a rise in temperature above 85 degrees in the exhaust hood, the exhaust fan (EF-1) and the make up air source (RTU 1 and 2) will be activated. When in Unoccupied mode and the temperature under the hood drops below 85 degrees, the exhaust fan and make up air source will turn off fifteen minutes after the I85 degree setting is achieved.

Any detection by the Occupancy sensor in the TBCCB-3-WOS or the optional Remote Occupancy Sensor or the optional Remote Occupancy Switch or ON position of the Manual Occupied switch will override the Timeclock and keep the building in OCCUPIED mode.

(Sales) OPEN mode

When the OPEN/CLOSED selector switch on the front of the TBCCB-3-WOS panel is in the "Auto" position, Channel 2 of the Timeclock in the Control Box is programmed to place the building in OPEN (FOR SALES) mode. This commands on the following:

- The Exterior Building Lights, provided the photo cell indicates it is dark enough for them to be on
- The Exterior Signs, provided the photo cell indicates it is dark enough for them to be on

OPEN for sales mode may also be invoked when any of the following occur:

- when an optional remote OPEN (for sales) switch is in the OPEN position
- when the OPEN/CLOSED switch on the front of the TBCCB-3-WOS is placed in the MANUAL OPEN position

(Sales) CLOSED mode

When the OPEN/CLOSED selector switch on the front of the TBCCB-3-WOS panel is in the "Auto" position, Channel 2 of the Timeclock in the Control Box is programmed to place the building in CLOSED (FOR SALES) mode. This commands OFF the following:

- The Exterior Building Lights
- The Exterior Signs,

Manual CLOSED Mode

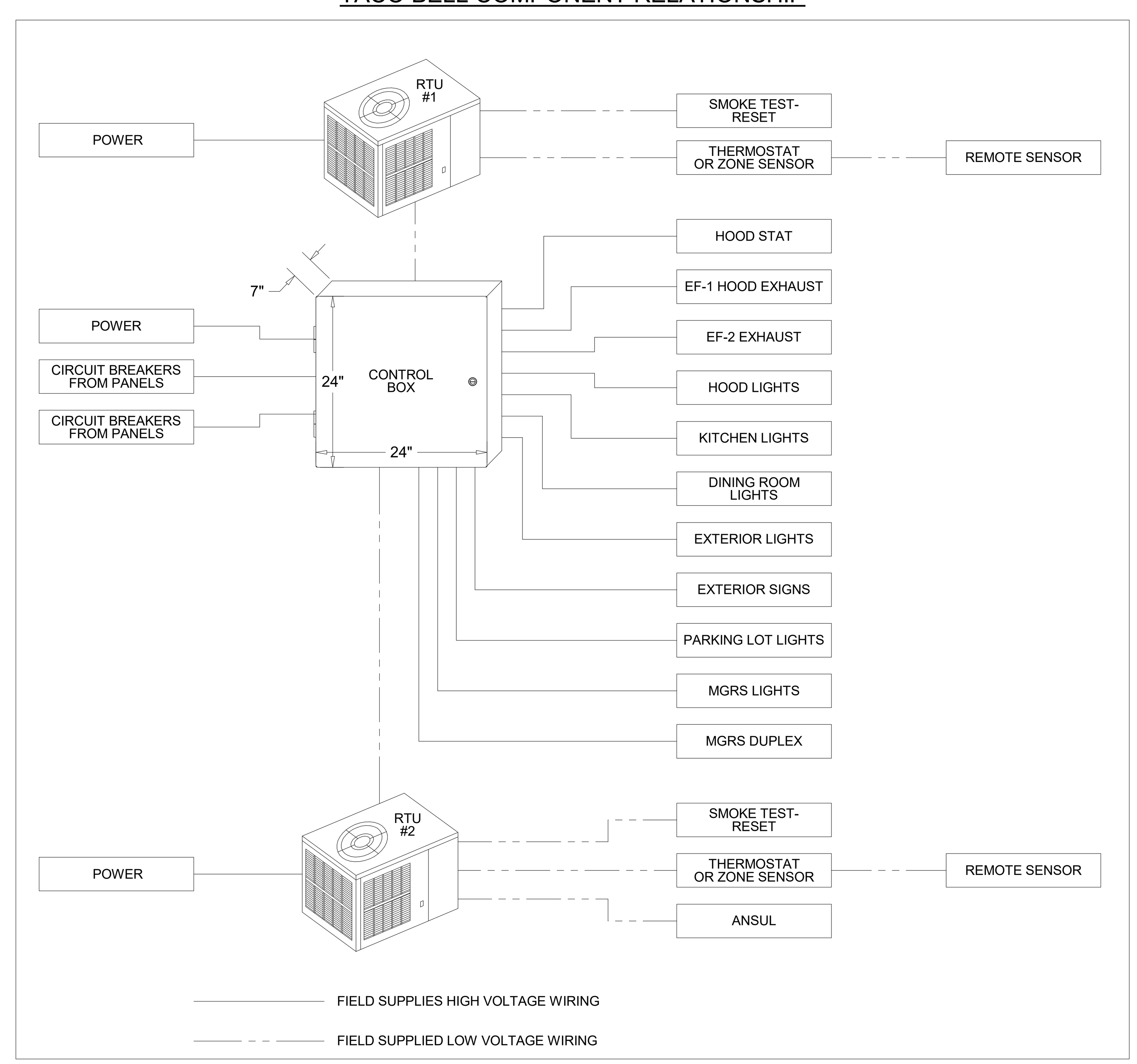
When a Team Member places the OPEN/CLOSED switch in the MANUALCLOSED position it turns off the Signs and Exterior Lights until the switch is placed back in AUTOMATIC or MANUAL OPEN position

External Operations Not Part Of The Control Box Operation But Required To Be Installed

The following operations should take place between the package units and various components:

- Control voltage for RTU 2 shall pass through contacts in the fire suppression system for the exhaust hood so that RTU 2 evaporator fan shuts down upon an activation of the fire suppressant into the hood. The system shall be wired directly between the fire suppression system and RTU 2 or TBANS control box. See sheet E-7.1.
- A remote smoke detector system featuring testing, annunciation and remote unit reset shall be installed in the manager's office for each RTU. The system shall be wired directly between each RTU and its respective testing, annunciation and reset device.

TACO BELL COMPONENT RELATIONSHIP

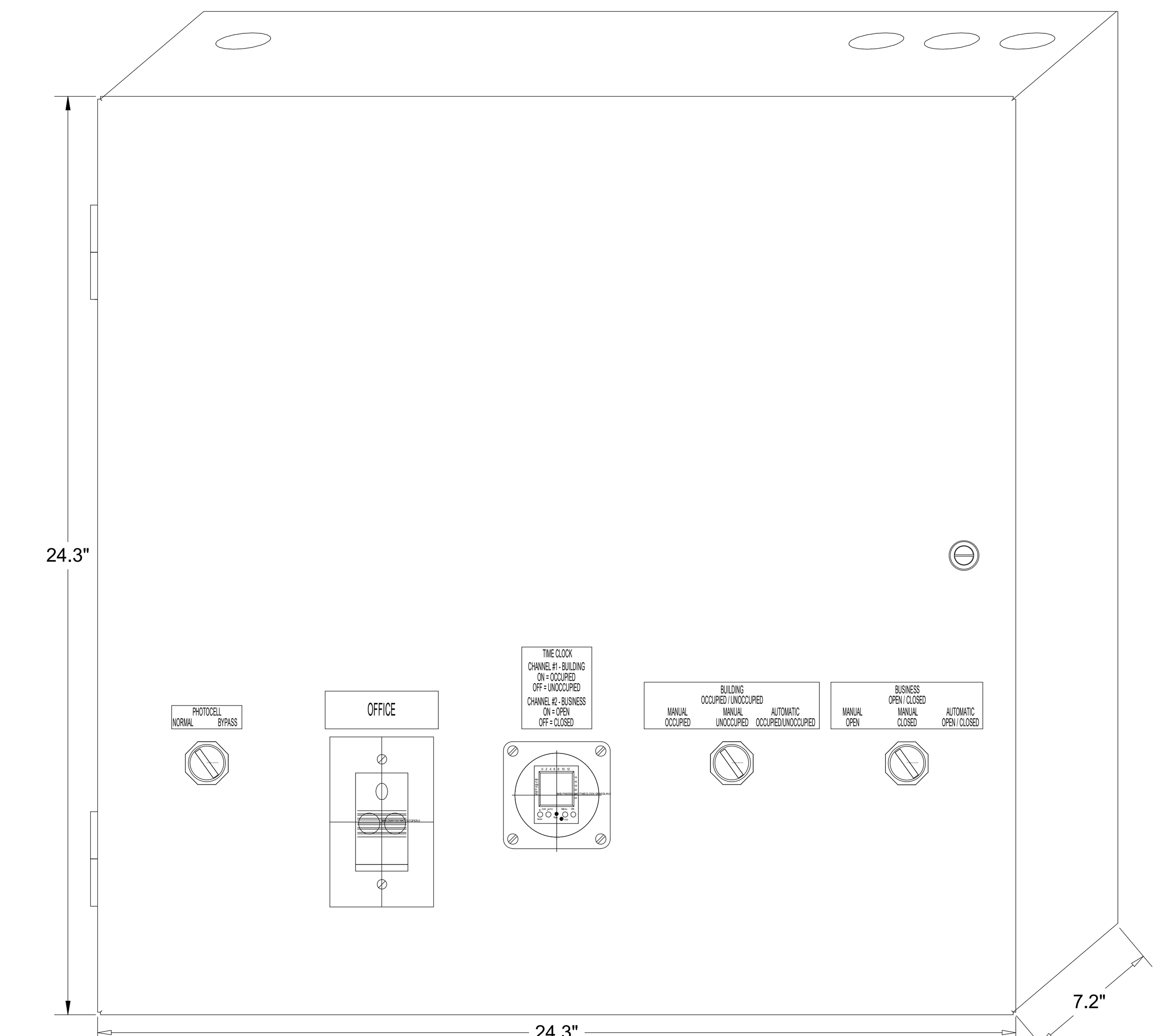


FIELD WIRE BY OTHERS

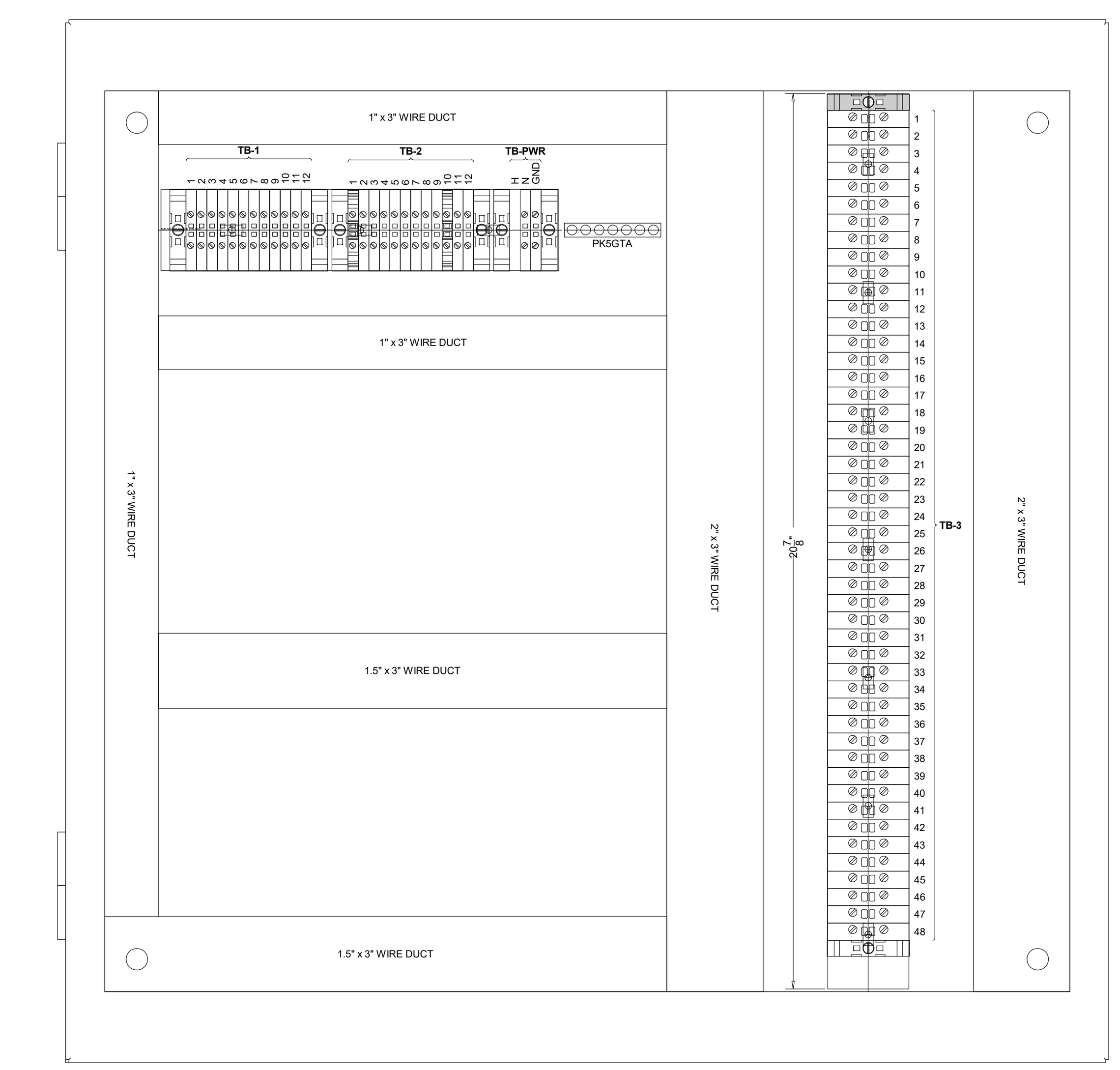
THIS PANEL ENCLOSURE IS RATED TYPE 1. TO PRESERVE RATING USE TYPE 1 CONDUIT ENTRY HUBS

This panel is Listed to applicable UL Standards and requirements by UL. Field wiring or field components are not Listed under this mark.

TBCCB-3-WOS



PANEL FRONT



SUBPANEL LAYOUT

CONTROL BOX

TACO BELL'S SUPPLIER OF THE CONTROL BOX IS AIR CARE EXPERTS. UNLESS NOTED OTHERWISE, TBCCB-3-WOS CONTROL BOX TO BE PURCHASED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
NOTE: TBCCB-3 WOS MAY BE INCLUDED IN THE LIGHTING PACKAGE. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO VERIFY.
TBCCB-3-WOS INCLUDES ALL WIRING AND COMPONENTS SHOWN FACTORY INSTALLED WITHIN THE BOX.
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STORE NUMBER:	456336
PA/PM:	SM
DRAWN BY.:	AJR
JOB NO.:	2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

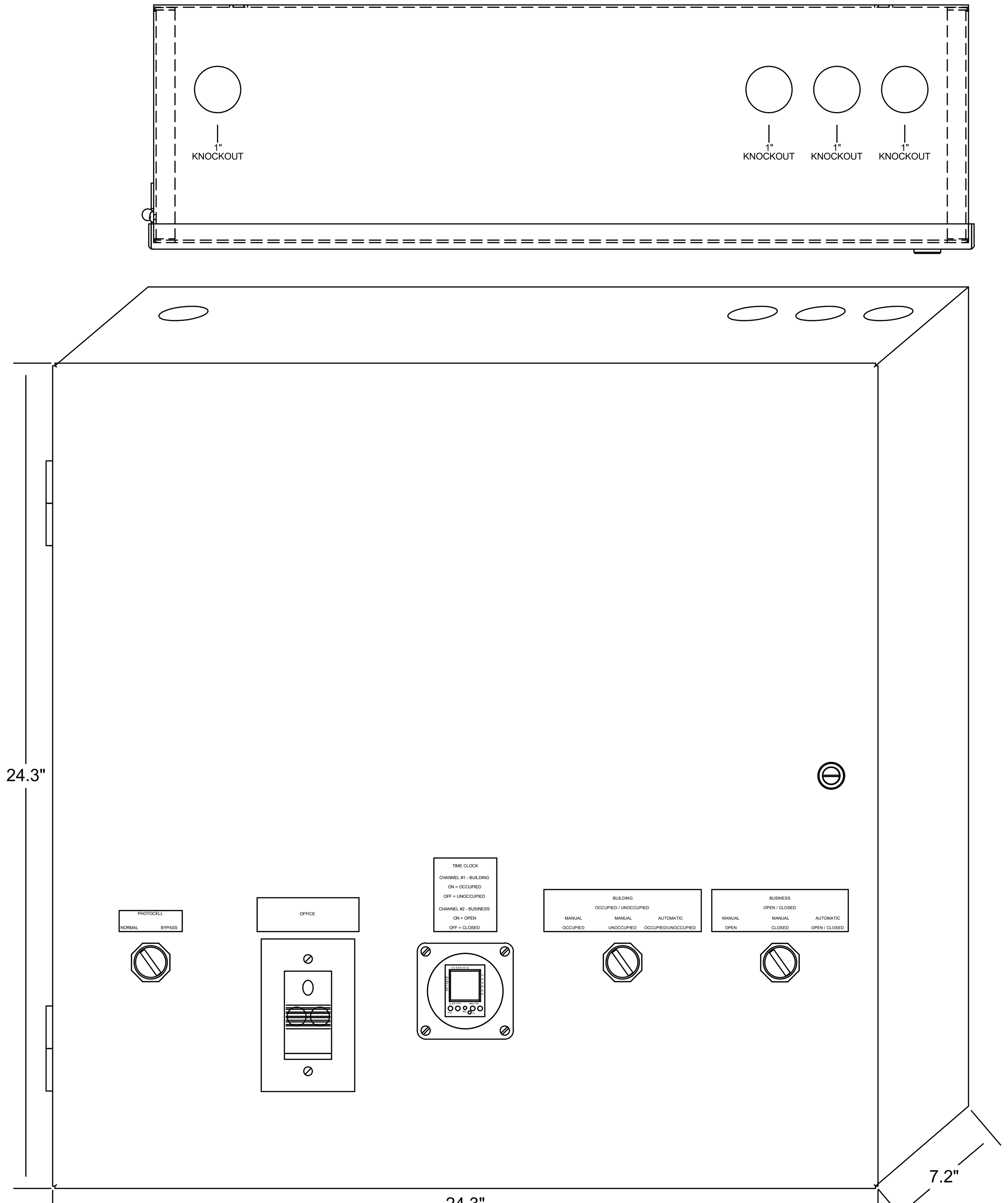
ENDEAVOR 2.0

ELECTRICAL DETAILS - TBCCB

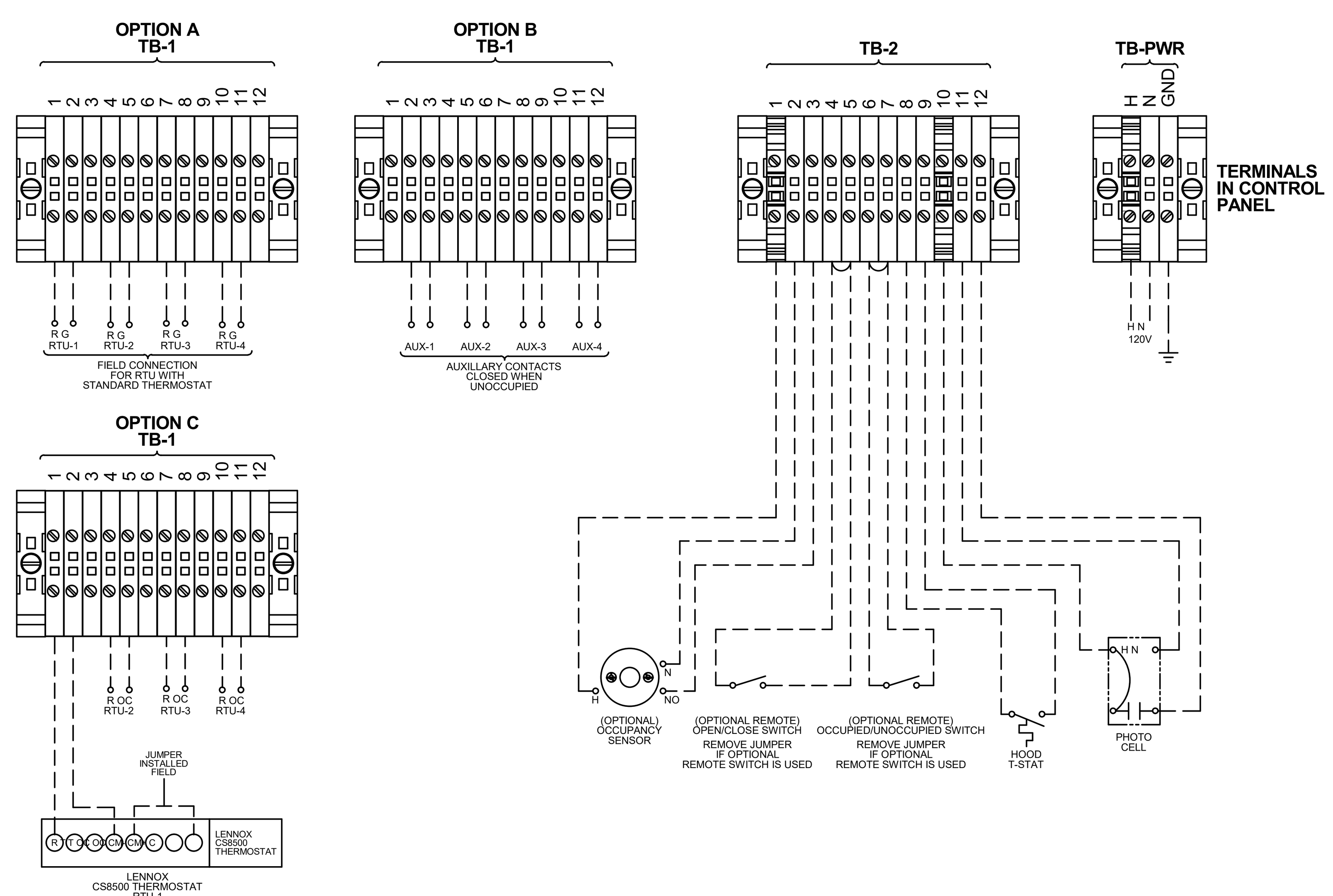
E6.0

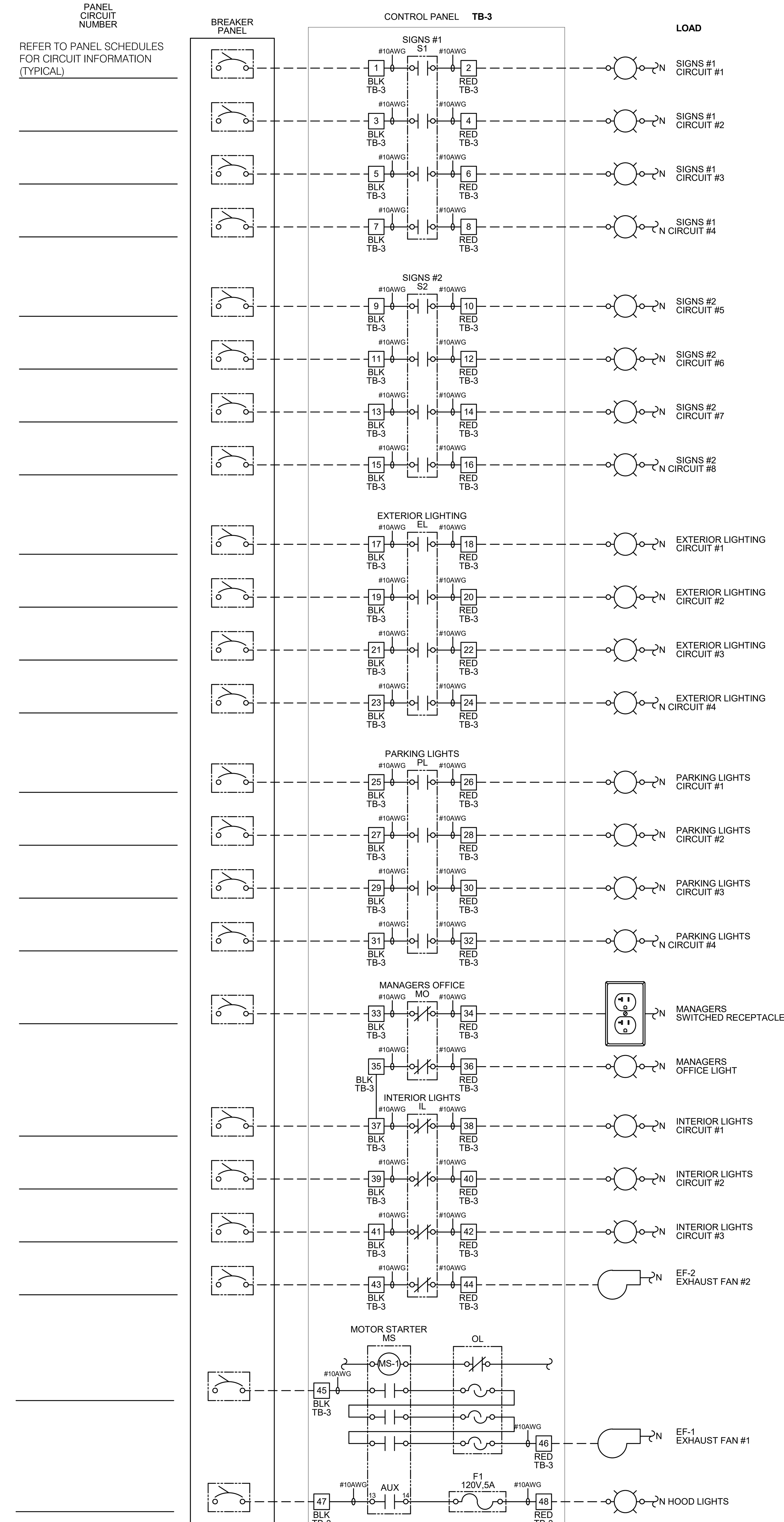
PLOT DATE: 7/12/2021 11:20:16 AM

TBCCB-3-WOS



PANEL FRONT





— — — FIELD WIRE BY OTHERS

THIS PANEL ENCLOSURE IS RATED TYPE 1. TO PRESERVE RATING USE TYPE 1 CONDUIT ENTRY HUBS

This panel is Listed to applicable UL Standards and requirements by UL. Field wiring or field components are not Listed under this mark.

NOTES:

1. VISUAL VERIFICATION OF THIS INSTALLATION IS REQUIRED. SEE SHEET M5.0
2. PANEL IS SURFACE MOUNT
3. PROTECT INTERIOR FROM METAL SHAVINGS & DEBRIS

CONTROL BOX

TACO BELL'S SUPPLIER OF THE CONTROL BOX IS AIR CARE EXPERTS. UNLESS NOTED OTHERWISE, TBCCB-3-WOS CONTROL BOX TO BE PURCHASED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.

NOTE: TBCCB-3 WOS MAY BE INCLUDED IN THE LIGHTING PACKAGE. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO VERIFY.

TBCCB-3-WOS INCLUDES ALL WIRING AND COMPONENTS SHOWN FACTORY INSTALLED WITHIN THE BOX.

PRIMARY CONTACT: CHUCK MCCABE

PHONE: 949 770 2222

EMAIL: INFO@ACE-EMS.COM

GPD GROUP
Professional Corporation
520 S. MAIN STREET, SUIT 2531
AKRON, OH 44311
330.572.2100 FAX: 330.572.2102

	DATE	REMARKS
	04.21.21	ISSUED FOR PERMIT
1	07.12.21	ISSUED FOR BID

CONTRACT DATE:	06.22.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	315089
STORE NUMBER:	456336
PA/PM:	SM
DRAWN BY.:	AJR
JOB NO.:	2019088.31

TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0

ELECTRICAL DETAILS - TBCCB

E6.1

PLOT DATE: 7/12/2021 11:20:16 AM

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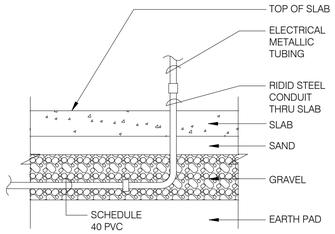
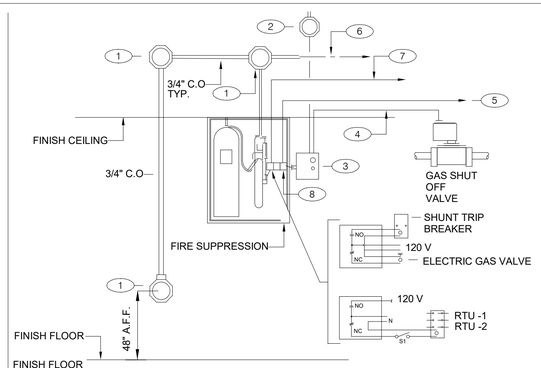


NOTE: GREEN GROUND WIRE REQUIRED IN ALL CONDUITS. SIZED PER N.E.C. REQUIREMENTS.

YES001

UNDER SLAB CONDUIT N.T.S. 7



GENERAL NOTES:

1. REFER TO SHEET M3.0

KEY NOTES:

(1) PROVIDE 4" OCTAGONAL J-BOX.

(2) PROVIDE J-BOX , AND 110 V CIRCUIT. REFER TO EQUIPMENT SCHEDULE/FLOOR PLAN FOR CIRCUIT ASSIGNMENT. CONNECT TO TBANS. SEE SHEET 7.1.

(3) TBANS INSTALLED BY ELECTRICAL CONTRACTOR.

(4) PROVIDE CONNECTIONS TO TBANS BOX FOR HOOD SHUTDOWN. SEE SHEET E7.1 FOR TBANS WIRING DIAGRAM.

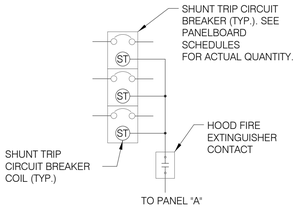
(5) PROVIDE 1/2" C WITH CONTROL CABLE. MAKE INTERCONNECTIONS TO EXHAUST & SUPPLY FAN INTERFACE THROUGH MICROSWITCH ON HOOD.

(6) CABLE AND CONNECTION TO FUSIBLE LINKS AT EXHAUST HOOD BY K.E.C.

(7) PROVIDE INTERCONNECTION BETWEEN FIRE SUPPRESSION MICROSWITCH AND TBANS. SEE SHEET E7.1.

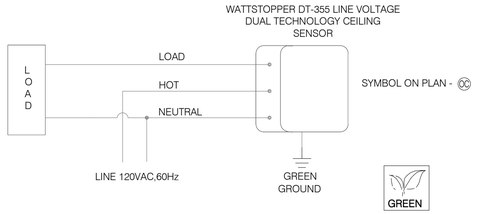
(8) FIRE SUPPRESSION SYSTEM TO INCLUDE TWO MICROSWITCHES. EACH MICROSWITCH SHALL HAVE A COMMON, NORMALLY OPEN AND NORMALLY CLOSED POLE.

FIRE SUPPRESSION SYSTEM WIRING DIAGRAM N.T.S. 4

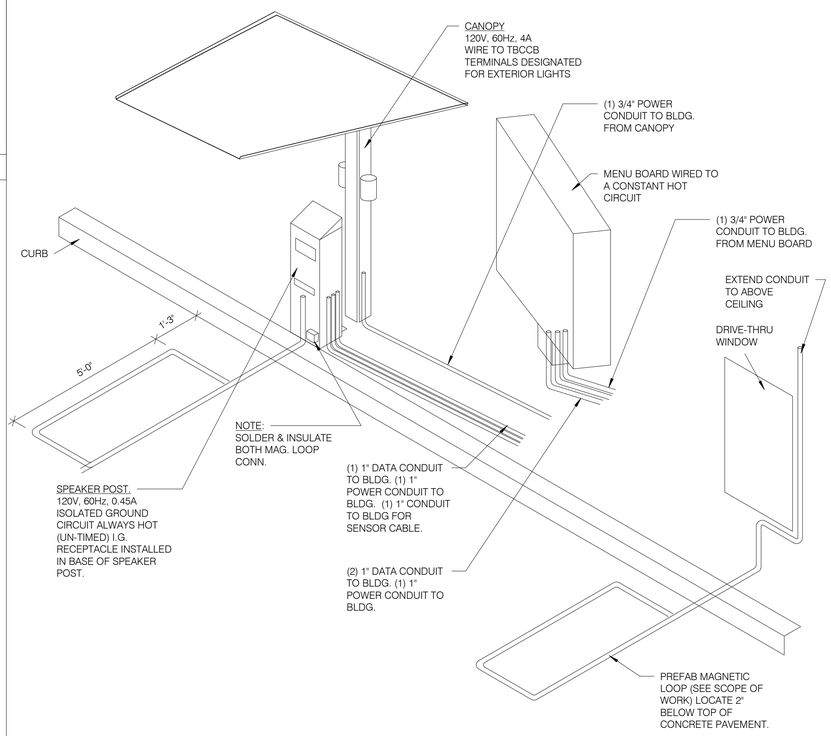


SEQUENCE OF OPERATION:
UPON ACTIVATION OF ANY HOOD FIRE SUPPRESSION SYSTEM RELAY, A RELAY IN THAT FIRE SUPPRESSION SYSTEM SHALL CAUSE ALL SHUNT TRIP CIRCUIT BREAKERS TO OPERATE, THUS REMOVING POWER FROM ALL DEVICES CONNECTED TO EQUIPMENT LOCATED UNDER THE GREASE HOOD. EXHAUST FANS SHALL NOT BE AFFECTED BY THIS ACTION AND SHALL CONTINUE TO BE CONTROLLED AS INDICATED IN THE SEQUENCE OF OPERATIONS INDICATED ON CONTROLS SHEETS E6.0 AND E6.1

SHUNT TRIP DETAIL N.T.S. 1

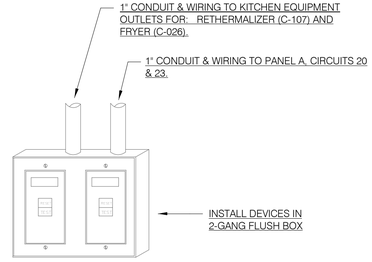


CEILING OCCUPANCY SENSOR WIRING DIAGRAM N.T.S. 2



YES006A

DRIVE-THRU COMMUNICATIONS ISOMETRIC N.T.S. 3



NOTES:
1. DEAD FRONT GFCI DEVICES ARE REQUIRED FOR KITCHEN EQUIPMENT REQUIRING BOTH A SHUNT TRIP BREAKER AND GFCI PROTECTION.
2. REFER TO SHEET E3.0 FOR LOCATION OF DEAD FRONT GFCI DEVICES.
3. PROVIDE LABEL ON DEVICES WITH CIRCUIT NUMBER AND LOAD DESIGNATION.

DEAD FRONT GFCI DEVICE DETAIL N.T.S. 5

NOT USED N.T.S. 6

NOT USED N.T.S. 8

NOT USED N.T.S. 9

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1	07.12.21	ISSUED FOR BID

CONTRACT DATE:	06.22.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	315089
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TACO BELL

18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
ELECTRICAL DETAILS

E7.0

PLOT DATE: 7/12/2021 11:20:17 AM

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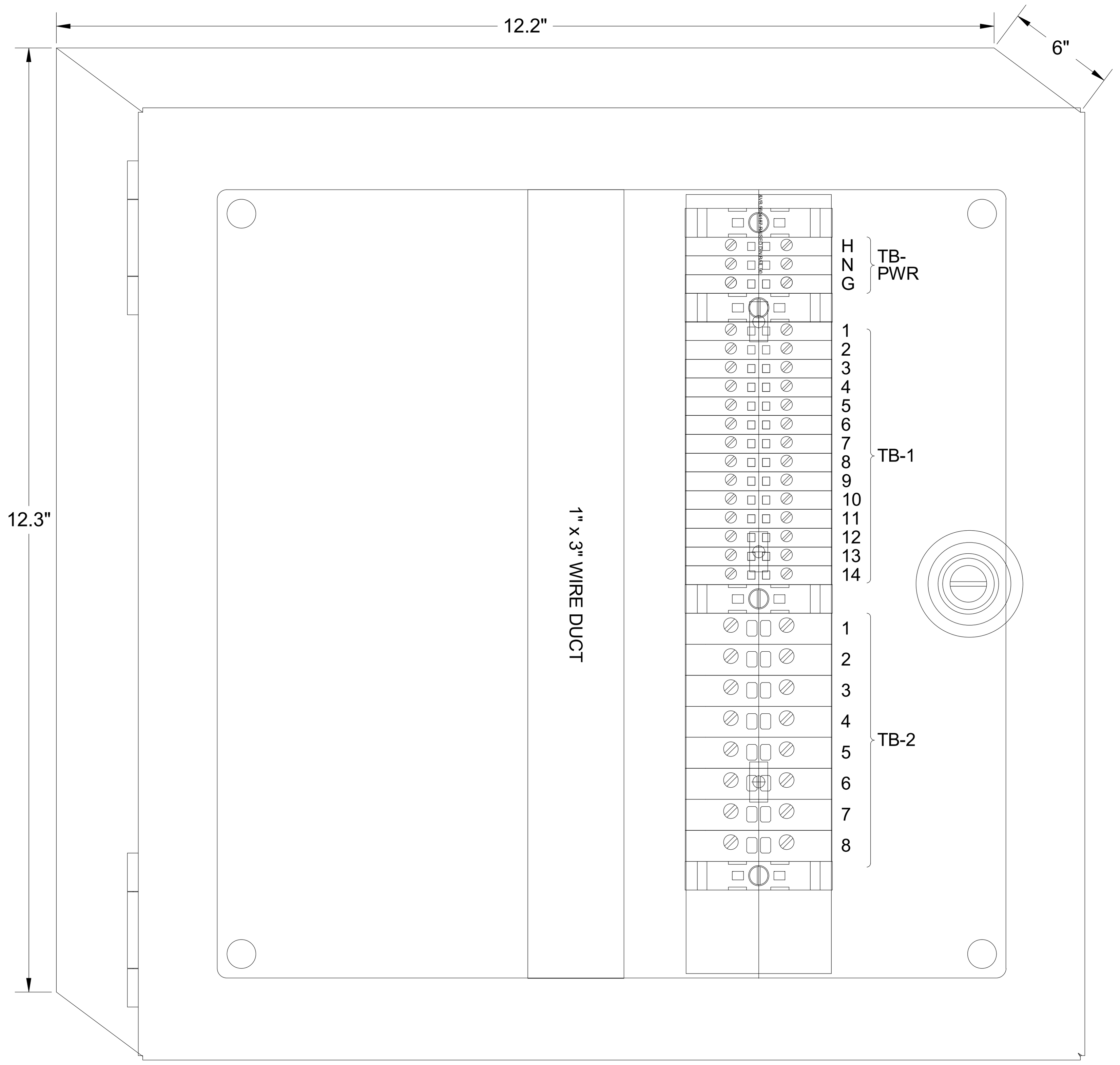
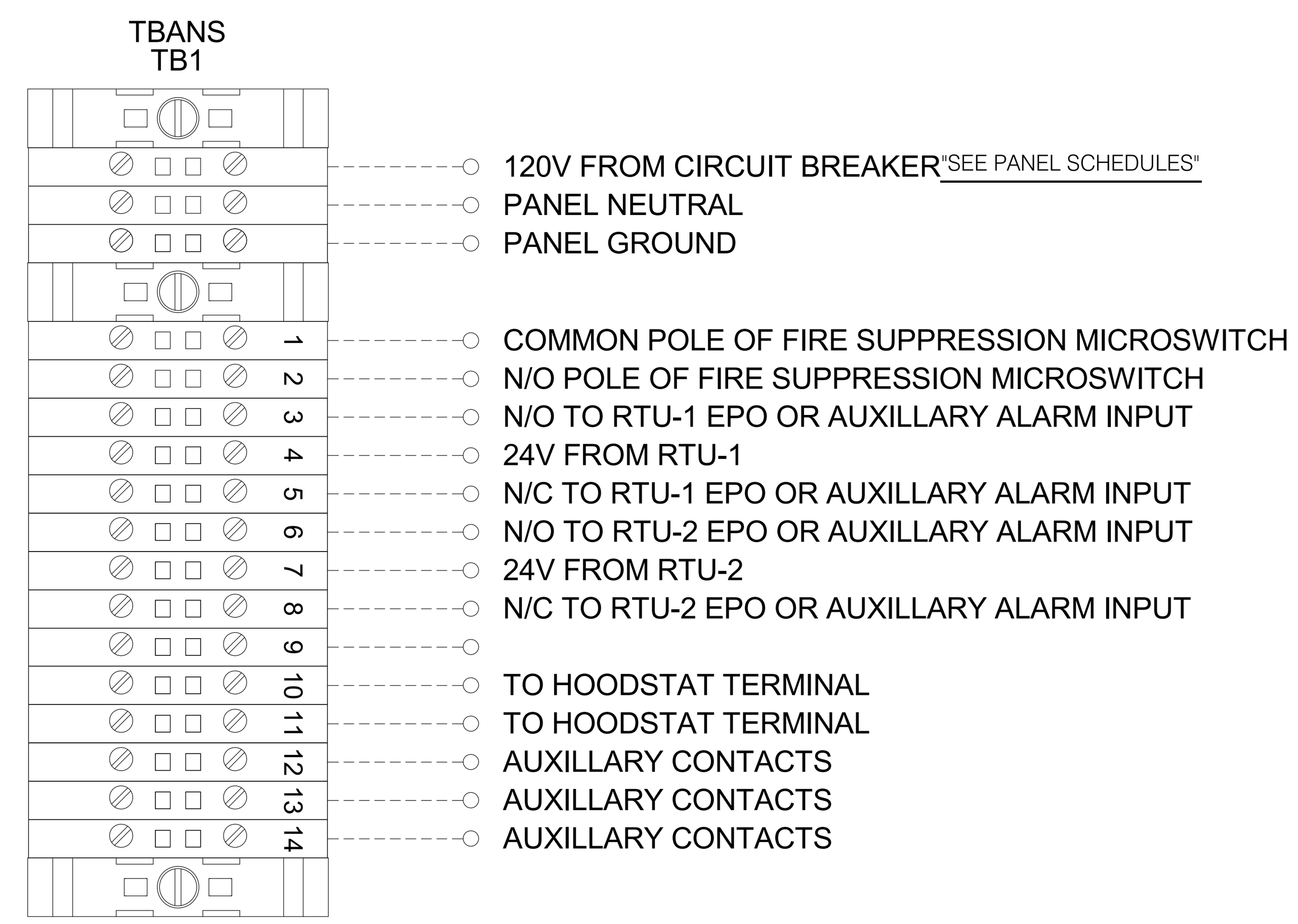
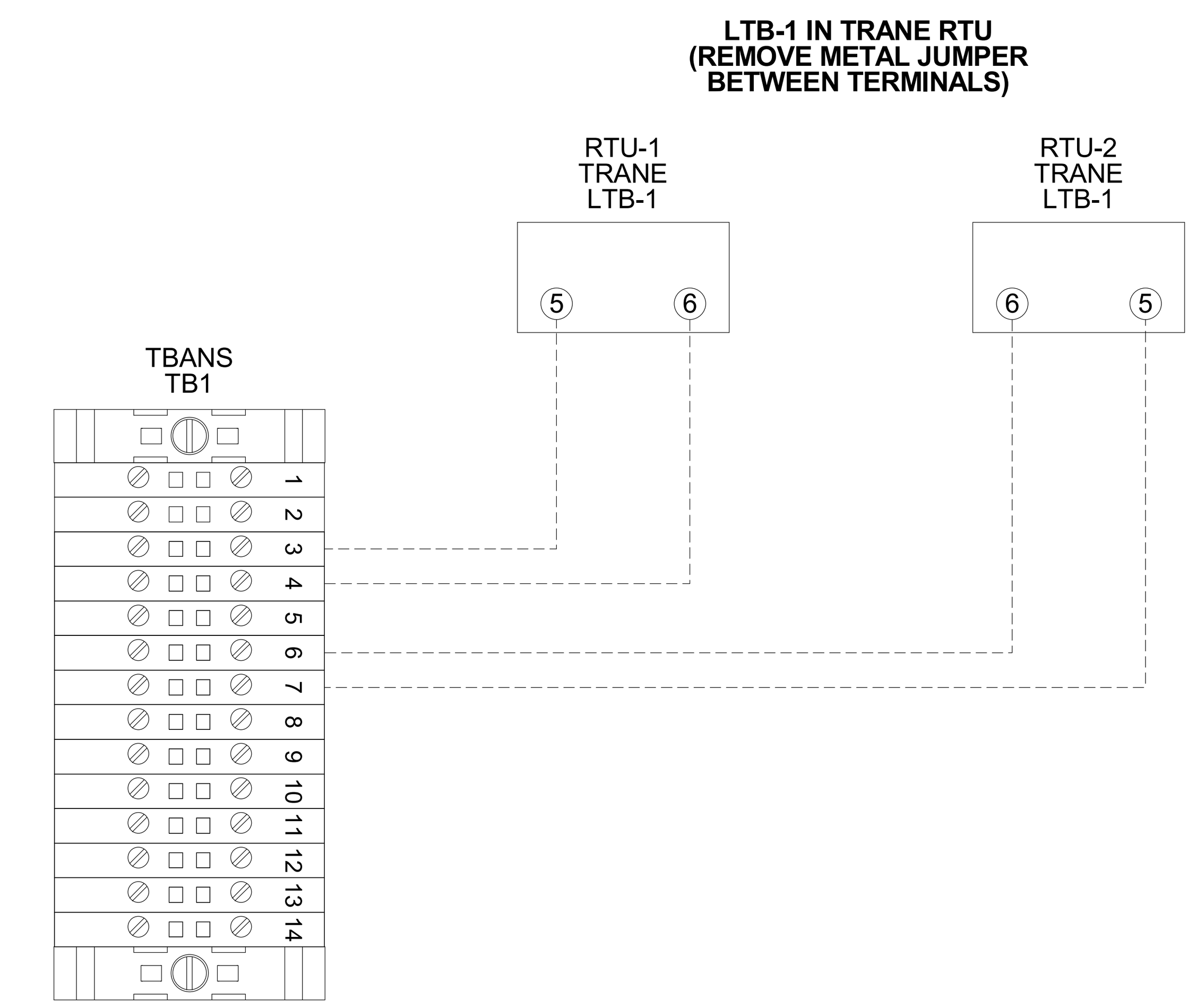


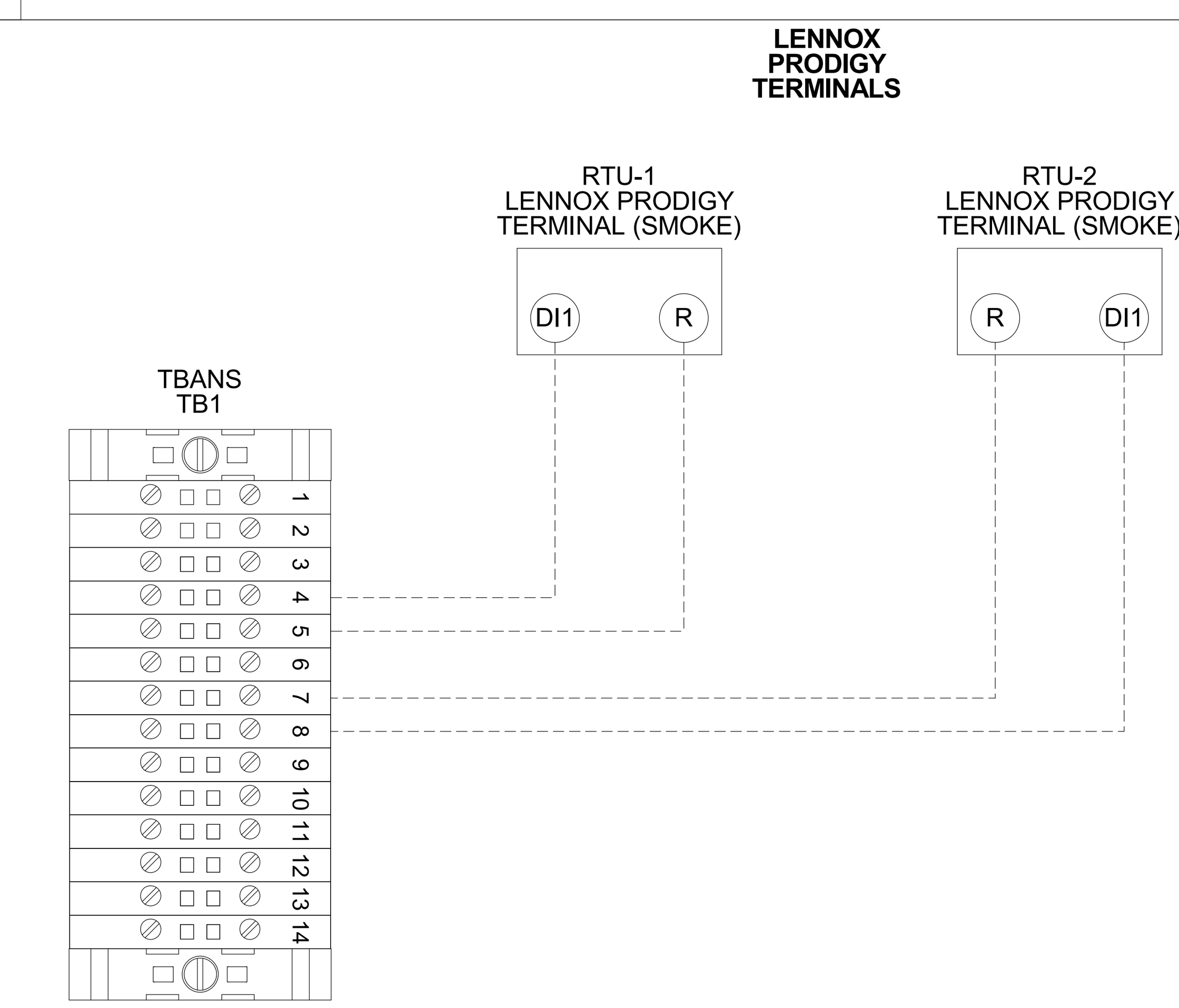
1 TBANS PANEL DIMENSIONS NTS



2 TBANS FIELD CONNECTIONS - VARIOUS NTS



6 TBANS TO TRANE RTU SHUTDOWN NTS

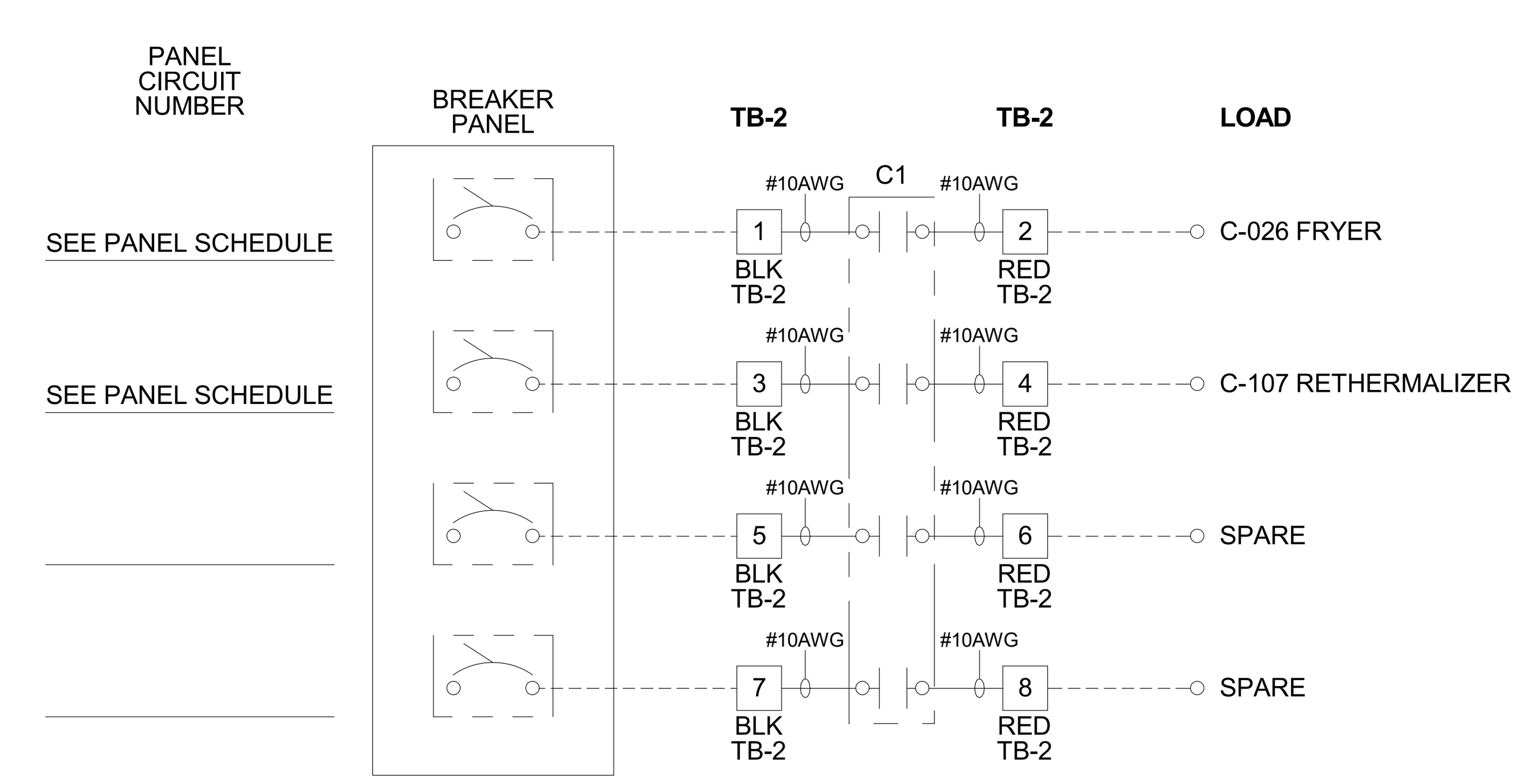


5 TBANS TO LENNOX PRODIGY SHUTDOWN NTS

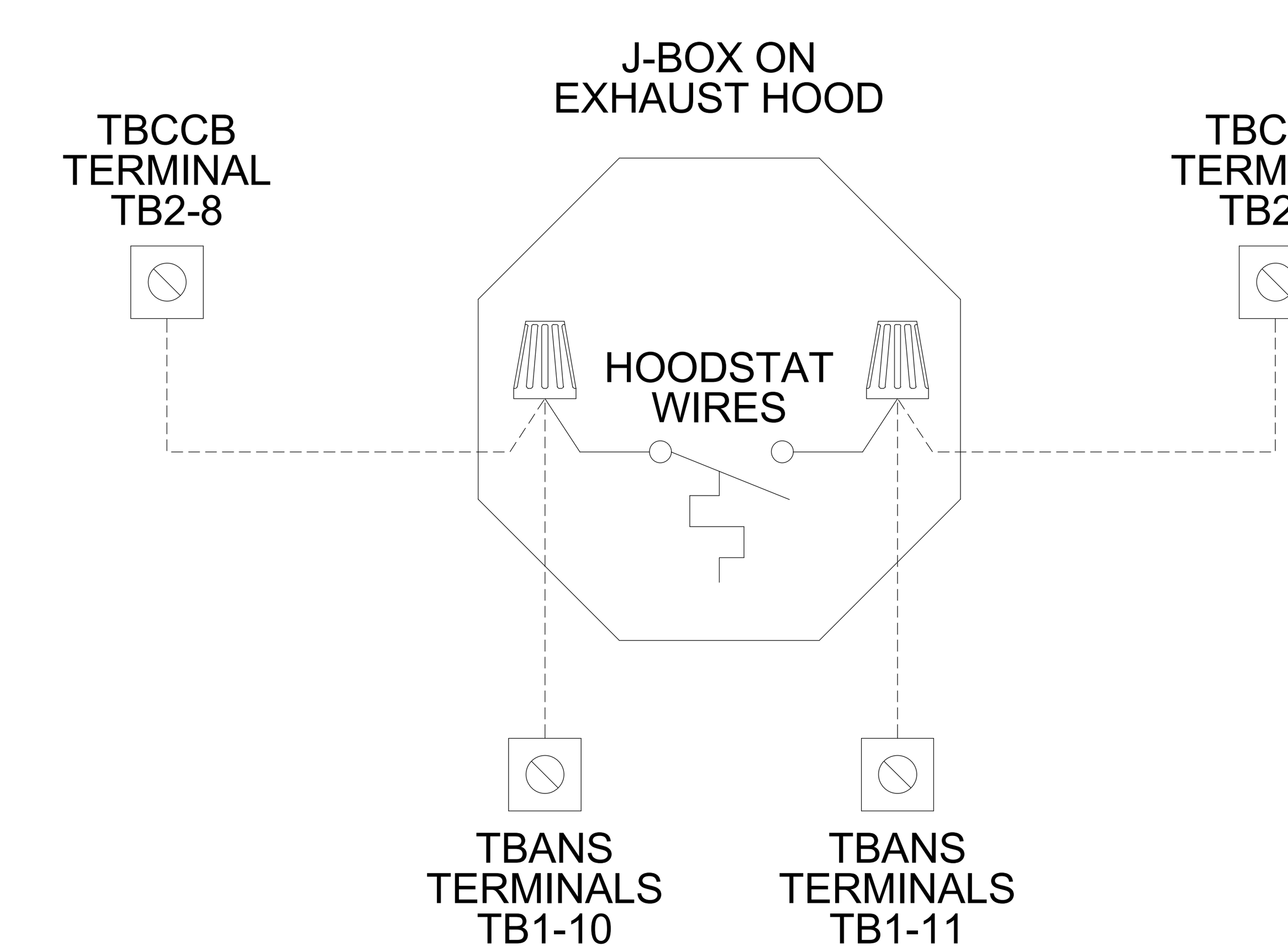
SEQUENCE OF OPERATION:
ACTIVATION OF HOOD FIRE SUPPRESSION SYSTEM RELAY SHALL CAUSE TBANS TO DE-ENERGIZE LOAD, THUS REMOVING POWER FROM ALL DEVICES CONNECTED TO EQUIPMENT LOCATED UNDER THE GREASE HOOD.

CONTROL BOX
TACO BELL'S SUPPLIER OF THE CONTROL BOX IS AIR CARE EXPERTS. UNLESS NOTED OTHERWISE, TBANS CONTROL BOX TO BE PURCHASED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
NOTE: TBANS MAY BE INCLUDED IN THE LIGHTING PACKAGE. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO VERIFY.
TBANS INCLUDES ALL WIRING AND COMPONENTS SHOWN FACTORY INSTALLED WITHIN THE BOX.
PRIMARY CONTACT: CHUCK MCCABE
PHONE: 949 770 2222
EMAIL: INFO@ACE-EMS.COM

TACO BELL REQUIRES VISUAL CERTIFICATION OF THIS INSTALLATION SEE SHEET M5.0
CONTACT CERTIFY@ACE-BCX.COM OR (949)-770-2222



3 TBANS FIELD CONNECTIONS - APPLIANCES NTS



4 TBANS TO HOODSTAT TO TBCCB NTS

GPD GROUP
Professional Corporation
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AKRON, OH 44311
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	DATE	REMARKS
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1	07.12.21	ISSUED FOR BID

CONTRACT DATE:	06.22.21
BUILDING TYPE:	END. MED20
PLAN VERSION:	MARCH 2021
BRAND DESIGNER:	DICKSON
SITE NUMBER:	315089
STORE NUMBER:	456336
PA/PM:	SM
DRAWN BY.:	AJR
JOB NO.:	2019088.31

TACO BELL
18708 TELEGRAPH ROAD
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
ELECTRICAL DETAILS

E7.1

PLOT DATE: 7/12/2021 11:20:17 AM

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TITLE	DESCRIPTION	SUPPLIER	MANUFACTURER'S MODEL	A&D ITEM #	ORDERED BY	SHIPPED BY	INSTALLED BY	SHOP DRAWINGS
6200	Roof Access Ladder & Hatch	Precision	FL 184 (Ladder) & PLHG (Hatch)	B-049 (Ladder) & B-050 (Hatch)	DIS	DIS	GC	
8341	Door - Security	LockNet	DU3670L52VED	-	RSCS	RSCS	GC	
10290-1	Air Curtain (D/T Window)	Marley	E2400-1115FG	B-151	DIS	DIS	GC	
10290-2	Air Curtain (Service Door)	Marley	E4200-1175	B-150	DIS	DIS	GC	
	Exterior Digital Menu Board & Optional Digital Preview Board	Everbrite		-	CM (Company), CM or DIS (Franchise)	Manufacturer	GC - Foundation and Conduit Sign Vendor DMB Ins	X
		Stratacache						
	Interior Menuboard	VGS			DIS	Manufacturer	GC	
	Digital Menu Board	Stratacache	-	-				
10430	Signage (Bldg Signs, Road Signs, Directional Signs)	Cummings Signs	VARIES	VARIES	CM (Company), CM or DIS (Franchise)	Manufacturer	Manufacturer (Local Installer)	X
		Everbrite (Preferred Supplier)	VARIES	VARIES				
		AGI						
10536	Canopies	Cummings Signs	VARIES	VARIES	CM (Company), CM or DIS (Franchise)	Manufacturer	Manufacturer (Local Installer)	X
		Everbrite (Preferred Supplier)	VARIES	VARIES				
		AGI						
10810	Restroom Accessories	Accuserv	VARIES	F-452 (if indicated in plan set), B-241, B-265, B-275, B-290 (where occurs), B-291 (where occurs), B-300, B-305, B-405, B-410	DIS	DIS	GC	
11020-1	Safe	Brinks	Tidel Series 4 (duel single note validator, standard side vault)	F-174	CM	BRINKS	BRINKS	
11020-2	Security System	Tyco	-	-	CM	Manufacturer	GC	X
11030-1	Drive-thru Window	Quikserv	QKSRVSC4030BR	B-140	RSCS	Manufacturer	GC	
11030-3	Drive-thru Clearance Bar	Cummings Signs	-	-	CM	Manufacturer	GC	
		Everbrite (Preferred Supplier)	-	-				
		AGI	-	-				
11030-4	Drive-thru Sensor Loops	ERC Parts Inc.	WX8171	-	Manufacturer	Manufacturer	GC	
11100-3	P.O.S.	IBM	-	VARIES	TB / IT	Manufacturer	SSP	X
		NCR	-	VARIES				
		PAR	-	VARIES				
11100-4	Credit Card Payment System	Hughes Network Systems	-	-	TB / IT	Manufacturer	SSP	
11300-1	Order Confirmation Board (OCB)	Delphi Display Systems	P6YUC5STDUSVV1S; P6YOCSSTDUSEN1S	-	DIS	DIS	GC (see Scope of Work notes)	
		Hyperactive	TDMHX2H01TCB;TDMHX1H26	L-090				
		Texas Digital	AVNGE60	L-095				
11300-2	Drive-thru Speaker & Microphone	HME	C400005HS3TB; C11422TB	U-011; S-204	DIS	Manufacturer	GC	
		3M Food Services Trad Dept	78691149153; G55HSSINGLE	-				
11300-4	DT Canopy	Cummings Signs		V-350	CM, Franchisee or DIS on behalf of Franchisee	Manufacturer	GC (see Scope of Work notes)	X
		Everbrite (Preferred Supplier)						
		AGI						
11400-1	Kitchen Equipment	N. Wasserstrom (Franchise only)	VARIES	VARIES	DIS	DIS	GC (see General Comments)	X
		RSCS (Preferred Supplier)	VARIES	VARIES				
11400-5	GTO with EVO Production Line	Delfield	VARIES	VARIES	DIS	DIS	GC / Manufacturer (Local Installer)	X
		Duke	VARIES	VARIES				
		Carter Hoffman (EvO cabinets)	VARIES	VARIES				
11405-3	Kitchen Shelving / Workstations	I.S.S.	VARIES	VARIES	DIS	DIS	GC	
11405-4	Walk-In Cooler / Freezer (Panelized)	I.C.S.	VARIES	VARIES	GC	Manufacturer	GC or Manufacturer (up to CM's discretion)	X
		Norlake	VARIES	VARIES				
11425	Exhaust Hoods	Stratovent (preferred supplier)	VARIES	VARIES	DIS	DIS	GC	X
		Gaylord Industries (Boiler hood)	VARIES	VARIES				
		Randell (alternate supplier)	VARIES	VARIES				
11430-2	Drink Dispensers / Line Sets	Pepsi	-	-	RSCS	Pepsi	Pepsi (Local installer)	
11435-6	Ice Machines	Manitowoc Ice Inc & Hoshisaki	Manitowac SY-1474C	S-513	DIS	Manufacturer	Manufacturer (Local Installer)	
11680	Office Computer (Taco System)	En Pointe Global Services	VARIES	F-040, F-060	TB / IT	SSP	SSP	
12100-1	Artwork	GFX	VARIES	-	DIS	DIS	GC	
		VGS						
		Creative Pallete						
12400-5	Décor	Custom Seating (Company Supplier, base décor)	VARIES	-	DIS	DIS	GC	X
		FCI (Company Supplier, base décor)	VARIES	-				
		IDX	VARIES	-				
12430	Fruitista Machine	Equipment Delivery, Install and Activation	VARIES	VARIES	DIS - Equipment; GC - Installation & Setup (notify vendor 2 weeks from install date)	DIS	Service Agents - ICEE (East) or RepTec (West)	
		FBD Equipment Manufacturer	VARIES	VARIES				
		Cornelius	VARIES	VARIES				
		Taco Bell Engineering	VARIES	VARIES				
12440	Iced Tea	Pepsi	E56150000	S-546	DIS	Supplier	GC / Supplier	
13200	CO2 - Bulk	MVE (bulk tank)	VARIES	S-580	DIS	DIS	Manufacturer (Local Installer)	
		NU CO2 (CO2 and service)	VARIES	S-580				
13700-4	CCTV	MARTCO	-	-	RSCS	MARTCO	MARTCO	X
13800-1	Energy/Building Management System	Air Care Experts	TBCCB-Varies	-	DIS	DIS	GC	
		Air Care Experts	TBCCB-Varies	-	DIS	DIS	GC	
13800-2	Hood Shutdown System	Air Care Experts	TBANS	-	Contractor	Air Care	GC	
13900-1	Fire Suppression System	Ansul	-	-	GC	GC	GC (Local Installer)	
15410	Hand Sinks	Aero	HS-Mod	N-053	DIS	DIS	GC	
15470-5	Water Filter	Shurflo	WB6-M3-22-003	-	DIS	Manufacturer	GC (see Vendor Scope - Pepsi Drink System)	
15480-3	Water Heater	AO Smith (standard)	AO Smith BTH-120 (standard)	B-215	RSCS	RSCS	GC	
		Bradford White (alternate)	-	B-215				
	Water softener	-	-	-	RSCS	RSCS	GC	
15500-1	HVAC - Test and Balance	-	-	-	Determined by CM or RCM; Approved options - GC CM/RCM	Determine by CM or RCM; Approved options - GC CM/RCM	Determined by GC / CM / RCM	X
		Melink Corp/	-	-				
		Air Care Experts	-	-				
15500-2	Commissioning	Air Care Experts	-	-				
15500-3	Visual Verification	Air Care Experts	-	-	GC	Air Care Experts	GC	
15700-1	HVAC	Trane (Franchisee Only)	VARIES	-	GC	Manufacturer	GC	X
		Lennox (Company and Franchisee Stores)	VARIES	-				
		York international (Franchisee Only)	VARIES	-				
16300-1	Switchgear - Franchisee	Accuserv	Square-D and Cutler Hammer	VARIES	DIS	DIS	GC	X
		Capital Lighting	Square-D and Cutler Hammer	VARIES	DIS	DIS	GC	
16300-2	Switchgear - Company	Capital Lighting	Square-D and Cutler Hammer	VARIES	GC or RSCS (confirm with CM at time of bid)	GC	GC	X
		Accuserv	Square-D and Cutler Hammer	VARIES	GC or RSCS (confirm with CM at time of bid)	GC	GC	
16500	Light Fixtures - Interior and Building	Capital Lighting	VARIES	-	DIS	DIS	GC	X
		Accuserv (all lighting except BOH & restrooms)	VARIES	-				
16520	Light Fixtures - Site	Capital Lighting	VARIES	-	DIS	DIS	GC	
		Accuserv	VARIES	-	DIS	DIS	GC	
16720	Telephone Communications	YUM! Telecom (Company stores)	-	-	TB	Manufacturer	Manufacturer (Local Installer)	X
		By owner through local phone service provider (franchise)	-	-	Franchisee	Manufacturer	Manufacturer (Local Installer)	
16820-3	Music System	Mood Media	-	F-131	TB	Manufacturer	Manufacturer (Local Installer)	X
	Coffee Brewer	Bunn	42300.0008	S-547	RSCS	RSCS	GC	
	Floor and Wall Tile	Creative Materials	-	-	GC	Manufacturer	GC	X

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CONTRACT DATE: 04.08.21
BUILDING TYPE: END. MED20
PLAN VERSION: MARCH 2021
BRAND DESIGNER: DICKSON
SITE NUMBER: 313354
STORE NUMBER: 449523
PA/PM: JN
DRAWN BY.: RS
JOB NO.: 2018088.64

TACO BELL

GIBRALTAR RD. & JUNIPER ST.
BROWNSTOWN, MI 48183

ENDEAVOR 2.0
SCOPE OF WORK

SW1.0

PLOT DATE: 7/12/2021 9:54:44 AM